

**MONTE CARLO SIMULATION OF THE NUCLEAR TO
QUARK MATTER DECONFINEMENT TRANSITION OF
THREE QUARK NUCLEONS**

by

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Submitted to the Department of Physics on June 2, 1986 in partial fulfillment of the requirements for the degree of Bachelor of Science.

Abstract

The **Potential String-Flip** quark model was simulated in a C program using **Monte Carlo** techniques and the **Metropolis Algorithm**. By using a **variational wavefunction**, values for the **clustering parameter**, **average energy per quark**, the **quark correlation function**, and statistics on the **spin of a nucleon** were determined. These were calculated for up to forty-eight quarks having three colors, one or two spin states, and one flavor state over a range of quark densities.

Thesis Supervisor: Charles J. Horowitz
Title: Professor of Physics

Dedication

To Mom and Dad whose loving kept me going.

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Chapter 1

Introduction

1.1 Purpose of Thesis

The purpose of this thesis is to explore properties of nuclear matter. Using a simple quark model of nucleons and a high powered Cyber 830 computer, the energy per quark in a periodic potential at various densities was determined. Also determined were such quantities as the clustering parameter, the pair correlation function, and the spin correlation function at various densities. **Quark density** (usually called ρ) is defined to be the number of quarks divided by the volume to which they are confined. The **clustering parameter** (usually called λ) is a measure of the degree to which the quarks behave as individual entities as opposed to acting in groups of three as nucleons. Values of λ / ρ^2 near zero correspond to free quarks; higher values correspond to a more correlated behavior. The **pair correlation function** describes the spatial distribution of the quarks. The **spin correlation function** describes the distribution of the values of spin of the nucleon.

At low densities, and hence at low energies, there will be no individual quark behavior. The nucleons are the dominant entity. At high densities, and hence at high energies, the quarks have enough energy to break out of their nucleons and distribute themselves uniformly over available space. Low densities correspond to a collection of nucleons, and high densities correspond to a fermi gas of quarks. This thesis explores the middle ground where the behavior of matter will be a mixture of the low and high density limits.

The variation of the ground state energy, clustering parameter, and the pair

and spin correlation functions with density in this intermediate zone describes in some detail the transition between nuclear and quark matter.

1.2 Note on units

All numerical results in this thesis are unitless. This is the case because certain physical constants were chosen to be one for simplicity. Precisely, the value of the **quark mass**, m , and the value of the **spring constant**, k , (see Section 2.1) were chosen to be unity. Also the value of Plank's constant was chosen to be 2π .

Therefore, energies are given in units of $\hbar \sqrt{k/m}$. Also, distance is measured in units of $\sqrt{\hbar} \sqrt{k/m}$.

Chapter 2

The Model and the Method

2.1 The Potential String Flip Model

The essence of the **Potential String Flip Model** is that the quarks are bound together by a three body harmonic oscillator potential. That is, if a red, a blue, and a green quark are at the positions x , y , and z then the total potential energy will be

$$V = \frac{1}{2} k [(x-y)^2 + (x-z)^2 + (y-z)^2]$$

This is where the word "String" applies.

The word "Flip" comes from the behavior of the quarks when there are more than three. For more than three quarks complications arise in the calculation of the potential. The potential is still a three particle interaction, but there is an ambiguity as to how the quarks are to be partitioned into triplets. The partition which minimizes the potential energy but still keeps all the nucleons colorless is the one that is used. Because a small displacement of one quark can change the minimum energy partition drastically (that is, cause the "strings" to "flip" around) the calculation of the potential energy can be tricky.

In three dimensions finding the best partition is hard. The number of partitions is large so trying them all is not a solution. In a one dimensional periodic box it is much easier. List the green quarks in order by position and likewise with the red and the blue quarks. If the partition is set up so that the first green quark is matched to the first red and first blue quark, the second green quark is matched to the second red and second blue quark, etc. then the energy will be

quite low. In fact trying just a few selected partitions will give the lowest energy almost all of the time.

2.2 The Ritz Variational Method and the Trial WaveFunction

Given the "flippy" nature of the potential, Schroedinger's equation for the quantum mechanical wavefunction cannot be solved. There are techniques, however, for finding the ground state energy of a system of quarks despite this unsolvability of the wavefunction. The Ritz Variational Method is one such way.

The **Ritz Variational Method** relies on the fact that any arbitrary quantum state can be decomposed into the sum of energy eigenstates. Since each of the energy eigenstates has an energy at least as great as the ground state energy, the energy of the arbitrary state will be greater as well. If several wavefunctions are tried the ground state energy is guaranteed to be smaller than the smallest of their energies.

The closer the trial wavefunctions matches the ground state wavefunction, the closer the estimate of the ground state energy will be. For this thesis a continuum of wavefunctions were tried.

The Schroedinger Equation is solvable in the limit of low density where the nucleons are kept apart. For an isolated nucleon, the (unnormalized) ground state wavefunction is:

$$\exp(-V/\sqrt{3})$$

where V is given by the formula in the previous section. For several nucleons which are kept isolated from each other the wavefunction comes from the product of the wavefunctions for the individual nucleons. If V_{total} is the sum of the potentials over all the nucleons, it is easily seen that (if antisymmetrization concerns are ignored) the total wavefunction of many nucleons is just

$$\exp(-V_{\text{total}}/\sqrt{3}),$$

The Schroedinger Equation is also solvable in the high density limit. In this case the potential can be ignored because the high density will cause the kinetic energy to completely dominate the ground state energy. The wavefunction is completely determined by antisymmetrization considerations. Since quarks are fermions, and quarks of a given kind (green quark, spin up for instance) are indistinguishable, the wavefunction must be antisymmetrized. Therefore the wavefunction in the high energy limit is just the product of the free fermi gas wavefunctions of each kind of indistinguishable quark. Call the total wavefunction Φ_{fg} .

In order to get information about intermediate density collections of quarks, some sort of mixture of these two wavefunctions must be selected. The wavefunction used in this thesis is:

$$\Psi = \exp(-\lambda V_{\text{total}})\Phi_{\text{fg}}$$

where λ is called the **clustering parameter** and will be varied to minimize the energy.

It is expected that at low densities, the wavefunction giving the lowest upper bound on the ground state energy will have a λ near $1/\sqrt{3}$. This is the situation where the wavefunction is nearly the same as the isolated nucleon wavefunction.

At high densities, the true wavefunction will resemble Φ_{fg} , so the the value of λ that gives the best estimate on the ground state energy should be near zero.

Chapter 3

The Correlation Functions

3.1 The Pair Correlation Function

The Pair Correlation Function is a measure of the spatial distribution of the quarks. Suppose P is the pair correlation function. Suppose there is a quark at the location y . The probability that there will be another quark at the location $y + x$ is given by $P(x)$.

The pair correlation function can be restricted. To be specific, suppose we are only concerned with the positions of the green quarks. The pair correlation function restricted to green quarks gives the probability, $P(x)$, that there will be a green quark at $y + x$ given that there is a green quark at y .

The correlation functions give graphic information about the location of quarks. At low densities, for instance, it is expected that quarks will cluster into isolated nucleons. Therefore it is expected that there will be no other green quarks near any given green quark. A graph of the correlation function will show a valley near $x = 0$. On the other hand, it is expected that there will be one red quark and one blue quark very near any given green quark. A graph of the correlation function indicating the distances of quarks of a different color will show a peak about $x = 0$.

At high densities it is expected that the quarks will behave as a free fermi gas. That is, the spatial distribution will be very nearly uniform. The fact that Pauli Exclusion principle applies means that two quarks with the same quantum numbers will not be near each other. Therefore the correlation of a green quark

with other green quarks will have a valley near $\mathbf{x} = \mathbf{0}$. However, the valley will be very thin since the high energy of the quarks will allow neighboring quarks to approach rather closely. The correlation with quarks of a different color will not have this valley and hence the distribution should be nearly flat.

As the density goes from low to high, some kind of transition must occur. This thesis explores this transition. In particular, the question "When do the nucleons break apart?" can be answered by visual inspection.

3.2 The Spin Correlation Function

If the quarks in the model have spin then so will the nucleons they form. The spin of nucleon is simply the sum of the spins of the quarks it is composed of. If there were no antisymmetrization requirements and no influence by the string flip potential then the distribution of spins for a nucleon would be easy to predict. Each quark would be spin up half the time and spin down half the time. The chance that all three were spin up would be $1/8$; the chance that two would be up and one down would be $3/8$; etc.

Spin Probability	
3/2	12.5%
1/2	37.5%
-1/2	37.5%
-3/2	12.5%

The above is an example of the spin correlation function.

Since the quarks in one nucleon all have different colors, antisymmetrization will not influence the spin correlation function. If they could have the same color then two quarks with the same spin would stay away from each other by the Pauli Exclusion principle. Therefore nucleons which are groups of three quarks near each other would tend to contain quarks whose spins were not aligned.

At higher densities, the concept of nucleon is not well defined because the quarks behave as a free fermi gas. However, there still will be a partition of the quarks into groups of three that minimizes the potential energy. If these groups of three are called nucleons then the spin correlation function can be measured even at these densities.

In the very high density limit it is expected that the spin correlation function will be as it is in the low density limit. The total randomness of the fermi gas is the reason. In the intermediate range of densities it may be different. If this were the case, it would be very interesting.

Chapter 4

The Computational Techniques

4.1 Computing the Potential Energy Using the Metropolis Algorithm

Since the chosen wavefunction, Ψ , is not normalized the expectation of the potential energy is given by:

$$\frac{\int \Psi^* V \Psi}{\int \Psi^* \Psi}$$

Because of the complexity of our chosen wavefunction, these integrals cannot be evaluated analytically. This is where the computer programs become necessary.

There is a "brute force" method for doing these integrals. It involves generating configurations of quarks randomly. For each configuration, the potential energy and the wavefunction amplitude are computed. The expectation of the potential energy is then the mean over all randomly generated configurations of the potential energy, each weighted by the square of the amplitude.

$$\langle V \rangle = \frac{\sum \Psi^2 V}{\sum \Psi^2}$$

The problem with the "brute force" approach is that most of the configurations generated will contribute very little to the calculation of the potential energy. This is especially true at low quark densities. A configuration of quarks generated randomly rarely has a low potential energy because the quarks in any given nucleon may be quite far apart. Because of the exponential dependence of the wavefunction on the potential energy, the weight associated with most configurations will be small. Only a handful of the generated quark configurations determine the expectation of the potential energy. Therefore error can be high.

An algorithm which does not generate every configuration with equal likelihood but rather gives a configuration with probability proportional to its weight will not suffer from this problem. Since the weight is already incorporated into the generation of a configuration, the expectation of the potential energy will be

$$\langle V \rangle = \frac{\sum V}{\sum 1}$$

Every configuration generated will contribute equally. Since many configurations are averaged over, error is minimized.

The **Metropolis** algorithm which is implemented in the computer code is such an algorithm. Given a configuration, the Metropolis algorithm generates a new candidate configuration nearby. That is each quark is moved slightly. If the candidate configuration has a higher probability (a higher weight) then it is accepted as the next configuration. If the candidate configuration has a lower weight then it is accepted with a probability equal to the ratio of the weight of the candidate to the weight of the original state. If the candidate is not accepted then the original configuration is accepted as the next configuration.

The Metropolis algorithm generates configurations with a probability proportional to their weight. The expectation value of the potential energy is the mean of the potential energy of all the accepted configurations.

4.2 Computing the Total Energy

Although neither the expectation of the potential energy, nor the kinetic energy, nor the total energy per quark can be evaluated analytically, if the potential energy is computed the other two can be found quite easily.

A little mathematics gives the formula for the kinetic energy.

$$T(\lambda, \rho) = 3\lambda^2 V(\lambda, \rho) + T_0(\rho)$$

where T is the expectation of the kinetic energy, V is the expectation of the potential energy and T_0 is ground state kinetic energy of a free fermi gas,

$$T_0 = \frac{\pi^2(N^2-1)}{6L^2}$$

N is the number of indistinguishable quarks of a given type and L is the length of the periodic potential.

The total energy per quark, E , is

$$E(\lambda, \rho) = V(\lambda, \rho) + T(\lambda, \rho)$$

4.3 Change of Scale Length

Considerable computation time is saved because the energies change predictably with a change in the length of the periodic box. If the size of the periodic box is increased by a factor b then the following changes for a given configuration of quarks will also occur.

$$\begin{aligned} \rho & \implies \rho/b \\ \lambda & \implies \lambda/b^2 \\ V & \implies b^2 V \\ T & \implies T/b^2 \end{aligned}$$

Using the formula for T in terms of V we get the following formula for E :

$$E(\lambda/b^2, \rho/b) = \frac{T_0(\rho) + 3\lambda^2 V(\lambda, \rho)}{b^2} + b^2 V(\lambda, \rho)$$

With the substitutions:

$$\begin{aligned} \rho & \implies 1 \\ b & \implies 1/\rho \\ \lambda & \implies \lambda/\rho^2 \end{aligned}$$

the previous formula for E becomes:

$$E(\lambda, \rho) = \rho^2 T_0(1) + \frac{(3\lambda^2 + 1) V(\lambda/\rho^2, 1)}{\rho^2}$$

Therefore, the total energy per quark at any density can be computed from the behavior of the potential at a quark density of 1. Instead of varying both λ and ρ it is sufficient to vary just one of them. In this case, λ is varied and ρ is fixed.

4.4 The Slater Determinant

The total antisymmetrization of the wavefunction involves taking a Slater determinant. Normally, an N by N matrix will take order N^3 operations to compute. In this situation the Slater determinant can be computed using order N^2 operations if the periodic boundary conditions are chosen wisely. If there are an even number of indistinguishable quarks of each kind then choose the periodic boundary condition to be odd. That is,

$$\phi(x+L) = -\phi(x)$$

where L is the length of the periodic potential. If there are an odd number of indistinguishable quarks of each kind then choose the periodic boundary condition to be even.

$$\phi(x+L) = \phi(x)$$

With these choices, Φ_{fg} is proportional to,

$$1 \leq j < k \leq N \prod_{j,k} \text{sine } \frac{\pi(x_i - x_j)}{L}$$

This short cut saves tremendous amounts of time.

Chapter 5

Results

5.1 Best Partition

A typical configuration of quarks has three colors and eight quarks of each color. The number of all possible partitions of these 24 quarks into colorless nucleons is $(8!)^2$. If every partition had to be checked to minimize the potential energy, program execution time would be prohibitively large.

The most likely partition is the ordered partition. Sort the green quarks by position. Call the quark with the lowest value for position quark #1; call the quark with the second lowest position quark #2; etc. Similarly order the red and the blue quarks. The partition is then that which groups the quarks labeled #1 together, the quarks labeled #2 together, etc.

The program called **bpairings** tests configurations generated at random. Every possible partition is checked. If the partition that minimizes the potential energy is the ordered partition a counter is incremented, otherwise the minimizing partition is printed.

The program was executed with three colors of four quarks each. Only 258 out of 10,000 configurations had their minimizing partition different from their ordered partition. The computer code and the output from a run of 1000 configurations is in Section A.

5.2 The Clustering Parameter and the Ground State Energy

The main program can compute the clustering parameter and the ground state energy under different basic assumptions about the quarks. The number of spin state, colors, and flavors can be varied. This thesis explores two of the many possible choices. First, quarks are assumed to come in three colors and one flavor. They are assumed to be spin zero (although still fermions). In the second run of the main program quarks are supposed to be spin one-half.

5.2.1 Spinless Fermions

Here are the clustering parameter and the ground state energy as a function of density.

Density (ρ)	Clustering Parm. (λ)	Ground State Energy
.10	.4	.63
.11	.5	.60
.13	.65	.59
.14	.5	.60
.16	.65	.59
.18	.5	.58
.20	.5	.56
.22	.65	.56
.25	.5	.57
.28	.65	.57
.32	.5	.58
.36	.65	.58
.40	.5	.58
.45	.65	.59
.50	.5	.58
.56	.65	.59
.63	.5	.60
.71	.5	.61
.80	.5	.62
.90	.5	.62
1.00	.5	.65
1.12	.4	.67
1.26	.5	.70
1.41	.4	.75

1.58	.4	.81
1.78	.3	.90
2.0	.4	1.01
2.2	.4	1.17
2.5	.3	1.38
2.8	.3	1.65
3.1	.3	2.0
3.6	.25	2.4
4.0	.3	3.0
4.5	.2	3.7
5.0	.25	4.6
5.6	.3	5.8
6.3	.2	7.3
7.1	.2	9.1

The raw data output whence this is derived can be found in Section C.

5.2.2 Spin One-Half Quarks

Here are the clustering parameter and the ground state energy as a function of density for spin one-half quarks.

Density (ρ)	Clustering Parm. (λ)	Ground State Energy
.22	.5	.58
.25	.65	.57
.28	.5	.57
.32	.65	.57
.36	.65	.59
.40	.5	.57
.45	.65	.57
.50	.5	.56
.56	.65	.56
.63	.5	.56
.71	.65	.56
.80	.5	.57
.89	.5	.57
1.00	.5	.56
1.12	.5	.57
1.26	.5	.56
1.41	.5	.57
1.59	.5	.57
1.78	.4	.58

2.0	.4	.59
2.2	.4	.61
2.5	.4	.64
2.8	.3	.68
3.2	.3	.74
3.6	.3	.82
4.0	.3	.94
4.5	.25	1.09
5.0	.25	1.30
5.6	.3	1.57
6.3	.25	1.92
7.1	.25	2.4
8.0	.25	2.9
8.9	.2	3.7
10.0	.2	4.6
11.2	.2	5.7
12.6	.2	7.2

5.3 The Pair Correlation Function

What follows are the graphs of the pair correlation function produced by the main program. The first six graphs are for the spinless quark. They are plots corresponding to the values of λ/ρ^2 of 2., .1, and .05. Given the results from Section 5.2.1 these correspond to densities around .5, 2, and 5 respectively. The first graph on each page is the correlation between quarks of different colors. The second graph on each page is the correlation between quarks of the same color. Notice how the graphs depend on density.

Lambda = 2.000000 * (density)^2
Graph: spin 1, color 0, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 480000)

1	13102	*****
2	9489	*****
3	4966	*****
4	1877	*****
5	688	***
6	527	**
7	762	***
8	1223	*****
9	1885	*****
10	2719	*****
11	3583	*****
12	4204	*****
13	5021	*****
14	5398	*****
15	5674	*****
16	5585	*****
17	5316	*****
18	4505	*****
19	3997	*****
20	3263	*****
21	2867	*****
22	2719	*****
23	2719	*****
24	2860	*****
25	3310	*****
26	3761	*****
27	4147	*****
28	4729	*****
29	5054	*****
30	5167	*****
31	4886	*****
32	4642	*****
33	4425	*****
34	3942	*****
35	3193	*****
36	3265	*****
37	3047	*****
38	3178	*****
39	3333	*****
40	3606	*****
41	3939	*****
42	4473	*****
43	4502	*****
44	4797	*****
45	4691	*****
46	4689	*****
47	4534	*****
48	4106	*****
49	3888	*****
50	3574	*****
51	3501	*****
52	3242	*****
53	3321	*****
54	3351	*****
55	3620	*****
56	3786	*****
57	4092	*****
58	4186	*****
59	4597	*****
60	4587	*****
61	4761	*****
62	4699	*****
63	4484	*****
64	4168	*****
65	3711	*****
66	3413	*****
67	3224	*****
68	3396	*****
69	3180	*****
70	3526	*****
71	3738	*****
72	3945	*****
73	4196	*****
74	4405	*****
75	4523	*****
76	4802	*****
77	4865	*****
78	4543	*****
79	4354	*****
80	4001	*****
81	3523	*****
82	3360	*****
83	3109	*****
84	3054	*****
85	3178	*****
86	3484	*****
87	4008	*****
88	4355	*****
89	4646	*****
90	4885	*****
91	5059	*****
92	4927	*****
93	4547	*****
94	4290	*****
95	3780	*****
96	3214	*****
97	3032	*****
98	2655	*****
99	2804	*****
100	2985	*****
101	3211	*****
102	3972	*****
103	4674	*****
104	5087	*****
105	5490	*****
106	5622	*****
107	5502	*****
108	5028	*****
109	4303	*****
110	3557	*****
111	2548	*****
112	1918	*****
113	1187	*****
114	674	***
115	475	**
116	757	**
117	2099	*****
118	9269	*****
119	2870	*****

Lambda = 2.000000 * (density)^2
Graph: spin 1, color 1, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 210000)

1	3	*****
2	25	*****
3	70	*****
4	154	*****
5	334	*****
6	542	*****
7	995	*****
8	1283	*****
9	1632	*****
10	2204	*****
11	2556	*****
12	2829	*****
13	2773	*****
14	2933	*****
15	2706	*****
16	2378	*****
17	2050	*****
18	1587	*****
19	1456	*****
20	1259	*****
21	1327	*****
22	1502	*****
23	1672	*****
24	1973	*****
25	2211	*****
26	2502	*****
27	2476	*****
28	2539	*****
29	2482	*****
30	2318	*****
31	2163	*****
32	1798	*****
33	1568	*****
34	1545	*****
35	1444	*****
36	1481	*****
37	1580	*****
38	1805	*****
39	1855	*****
40	2115	*****
41	2298	*****
42	2262	*****
43	2306	*****
44	2281	*****
45	2387	*****
46	2134	*****
47	2021	*****
48	1891	*****
49	1824	*****
50	1721	*****
51	1788	*****
52	1916	*****
53	2018	*****
54	2142	*****
55	2226	*****
56	2290	*****
57	2350	*****
58	2371	*****
59	2320	*****
60	2219	*****
61	2139	*****
62	1872	*****
63	1564	*****
64	1459	*****
65	1496	*****
66	1542	*****
67	1466	*****
68	1658	*****
69	1698	*****
70	1936	*****
71	2057	*****
72	2134	*****
73	2383	*****
74	2357	*****
75	2416	*****
76	2408	*****
77	2213	*****
78	2068	*****
79	1921	*****
80	1782	*****
81	1570	*****
82	1602	*****
83	1617	*****
84	1840	*****
85	2125	*****
86	2281	*****
87	2440	*****
88	2441	*****
89	2387	*****
90	2441	*****
91	2185	*****
92	2076	*****
93	1776	*****
94	1539	*****
95	1541	*****
96	1330	*****
97	1385	*****
98	1528	*****
99	1654	*****
100	1913	*****
101	2324	*****
102	2513	*****
103	2691	*****
104	2709	*****
105	2566	*****
106	2417	*****
107	2220	*****
108	1717	*****
109	1390	*****
110	993	*****
111	654	*****
112	325	*****
113	199	*****
114	93	*****
115	20	*****
116	6	*****
117	3	*****
118	3	*****
119	3	*****

Lambda = 0.100000 * (density)^1
 Graph: spin 1, color 0, flavor 1 (1 = same, 0 = different)
 Col Counts (Total counts = 480000)

4755 *****
 1 4676 *****
 2 4428 *****
 3 4284 *****
 4 4030 *****
 5 3732 *****
 6 3637 *****
 7 3621 *****
 8 3632 *****
 9 3709 *****
 10 3829 *****
 11 3893 *****
 12 4152 *****
 13 4188 *****
 14 4249 *****
 15 4196 *****
 16 4275 *****
 17 4021 *****
 18 4128 *****
 19 3785 *****
 20 3700 *****
 21 3814 *****
 22 3718 *****
 23 3815 *****
 24 3804 *****
 25 3962 *****
 26 4020 *****
 27 4057 *****
 28 4031 *****
 29 4143 *****
 30 4092 *****
 31 4115 *****
 32 4249 *****
 33 4017 *****
 34 3960 *****
 35 3867 *****
 36 3727 *****
 37 3899 *****
 38 3947 *****
 39 3816 *****
 40 3991 *****
 41 4012 *****
 42 4277 *****
 43 3968 *****
 44 4093 *****
 45 4164 *****
 46 3956 *****
 47 4075 *****
 48 4017 *****
 49 3898 *****
 50 3905 *****
 51 3731 *****
 52 3984 *****
 53 3805 *****
 54 3854 *****
 55 3990 *****
 56 4047 *****
 57 4065 *****
 58 4134 *****
 59 4005 *****
 60 4342 *****
 61 4178 *****
 62 3933 *****
 63 3988 *****
 64 3889 *****
 65 3936 *****
 66 3750 *****
 67 3791 *****
 68 3798 *****
 69 3788 *****
 70 3962 *****
 71 4122 *****
 72 4131 *****
 73 4061 *****
 74 4072 *****
 75 4129 *****
 76 4082 *****
 77 4073 *****
 78 4061 *****
 79 4056 *****
 80 3980 *****
 81 3797 *****
 82 3696 *****
 83 4035 *****
 84 3896 *****
 85 3758 *****
 86 4012 *****
 87 4080 *****
 88 4159 *****
 89 4251 *****
 90 4198 *****
 91 4126 *****
 92 4064 *****
 93 3929 *****
 94 4039 *****
 95 3774 *****
 96 3725 *****
 97 3566 *****
 98 3799 *****
 99 3900 *****
 100 3874 *****
 101 4021 *****
 102 4260 *****
 103 4208 *****
 104 4260 *****
 105 4230 *****
 106 4263 *****
 107 4070 *****
 108 3930 *****
 109 3630 *****
 110 3614 *****
 111 3442 *****
 112 3661 *****
 113 3721 *****
 114 3790 *****
 115 3924 *****
 116 4295 *****
 117 4451 *****
 118 4768 *****
 119 4666 *****

Lambda = 0.100000 * (density)^2
 Graph: spin 1, color 1, flavor 1 (1 = same, 0 = different)
 Col Counts (Total counts = 210000)

1 1
 2 23
 3 108 **
 4 203 ****
 5 418 *****
 6 540 *****
 7 687 *****
 8 1067 *****
 9 1292 *****
 10 1614 *****
 11 1726 *****
 12 2047 *****
 13 2067 *****
 14 2409 *****
 15 2362 *****
 16 2253 *****
 17 2199 *****
 18 2137 *****
 19 2005 *****
 20 1989 *****
 21 1896 *****
 22 1971 *****
 23 1852 *****
 24 1835 *****
 25 1975 *****
 26 2059 *****
 27 2300 *****
 28 2307 *****
 29 2128 *****
 30 2167 *****
 31 2164 *****
 32 2159 *****
 33 1964 *****
 34 2081 *****
 35 1960 *****
 36 1999 *****
 37 1976 *****
 38 2038 *****
 39 2001 *****
 40 2001 *****
 41 2140 *****
 42 2168 *****
 43 2130 *****
 44 2123 *****
 45 2160 *****
 46 1978 *****
 47 2053 *****
 48 2132 *****
 49 2009 *****
 50 1930 *****
 51 1872 *****
 52 1846 *****
 53 2021 *****
 54 2004 *****
 55 2045 *****
 56 1938 *****
 57 2103 *****
 58 2144 *****
 59 2080 *****
 60 2046 *****
 61 1938 *****
 62 1953 *****
 63 1985 *****
 64 1969 *****
 65 1917 *****
 66 1873 *****
 67 1929 *****
 68 1814 *****
 69 1960 *****
 70 1994 *****
 71 1992 *****
 72 1981 *****
 73 2055 *****
 74 1999 *****
 75 2054 *****
 76 1862 *****
 77 2052 *****
 78 1878 *****
 79 1793 *****
 80 1921 *****
 81 1769 *****
 82 1972 *****
 83 1843 *****
 84 1834 *****
 85 1802 *****
 86 1910 *****
 87 1778 *****
 88 2048 *****
 89 2023 *****
 90 2038 *****
 91 1933 *****
 92 1976 *****
 93 1886 *****
 94 1916 *****
 95 1779 *****
 96 1810 *****
 97 1641 *****
 98 1615 *****
 99 1747 *****
 100 1841 *****
 101 1838 *****
 102 2044 *****
 103 1935 *****
 104 2118 *****
 105 2065 *****
 106 2177 *****
 107 2044 *****
 108 1782 *****
 109 1606 *****
 110 1151 *****
 111 1227 *****
 112 900 *****
 113 693 *****
 114 522 *****
 115 352 *****
 116 172 *****
 117 59 *****
 118 37 *****
 119 2 *****

lambda = 0.005000 * (density)**2
Graph: spin 1, color 0, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 480000)

```
0 4090 *****
1 3954 *****
2 4151 *****
3 4055 *****
4 3996 *****
5 3901 *****
6 4074 *****
7 4000 *****
8 4091 *****
9 4007 *****
10 3812 *****
11 3851 *****
12 4085 *****
13 4069 *****
14 4007 *****
15 3978 *****
16 4107 *****
17 3982 *****
18 4170 *****
19 3819 *****
20 3997 *****
21 3872 *****
22 4088 *****
23 3913 *****
24 4110 *****
25 4013 *****
26 4036 *****
27 3966 *****
28 4066 *****
29 4040 *****
30 4000 *****
31 3901 *****
32 3911 *****
33 3997 *****
34 4004 *****
35 3973 *****
36 4074 *****
37 4008 *****
38 4131 *****
39 4073 *****
40 3938 *****
41 3822 *****
42 4008 *****
43 3942 *****
44 3910 *****
45 3979 *****
46 4066 *****
47 3957 *****
48 3959 *****
49 4089 *****
50 3964 *****
51 4217 *****
52 4052 *****
53 3967 *****
54 4031 *****
55 4000 *****
56 3858 *****
57 4104 *****
58 3900 *****
59 3993 *****
60 3929 *****
61 4125 *****
62 4085 *****
63 3946 *****
64 3879 *****
65 4042 *****
66 3854 *****
67 4105 *****
68 3960 *****
69 3996 *****
70 3890 *****
71 4087 *****
72 4116 *****
73 4033 *****
74 3892 *****
75 4109 *****
76 3875 *****
77 4019 *****
78 3839 *****
79 4169 *****
80 3899 *****
81 4086 *****
82 3958 *****
83 4094 *****
84 3935 *****
85 3924 *****
86 4099 *****
87 4093 *****
88 3892 *****
89 3880 *****
90 3980 *****
91 4114 *****
92 4016 *****
93 4112 *****
94 3961 *****
95 3973 *****
96 4072 *****
97 4026 *****
98 4017 *****
99 3982 *****
100 3954 *****
101 3934 *****
102 4013 *****
103 3950 *****
104 3927 *****
105 4000 *****
106 4013 *****
107 3933 *****
108 4169 *****
109 3909 *****
110 4014 *****
111 4095 *****
112 4021 *****
113 4147 *****
114 3973 *****
115 4019 *****
116 3898 *****
117 3988 *****
118 3911 *****
119 4019 *****
```

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lambda = 0.005000 * (density)**2
Graph: spin 1, color 1, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 210000)

```
1 12
2 163 ***
3 334 *****
4 516 *****
5 716 *****
6 940 *****
7 1179 *****
8 1403 *****
9 1619 *****
10 1821 *****
11 1900 *****
12 1901 *****
13 1862 *****
14 2020 *****
15 2008 *****
16 2104 *****
17 2049 *****
18 1979 *****
19 1943 *****
20 1757 *****
21 1949 *****
22 1910 *****
23 1877 *****
24 1955 *****
25 1926 *****
26 2063 *****
27 1943 *****
28 2043 *****
29 1964 *****
30 1964 *****
31 1987 *****
32 2031 *****
33 1957 *****
34 1963 *****
35 1929 *****
36 1875 *****
37 1989 *****
38 1878 *****
39 1979 *****
40 2122 *****
41 2038 *****
42 2016 *****
43 1971 *****
44 1966 *****
45 2050 *****
46 1885 *****
47 2018 *****
48 1901 *****
49 2083 *****
50 1968 *****
51 2010 *****
52 1936 *****
53 2008 *****
54 1926 *****
55 2043 *****
56 1950 *****
57 1942 *****
58 1975 *****
59 2176 *****
60 1992 *****
61 1858 *****
62 2037 *****
63 2033 *****
64 1939 *****
65 2079 *****
66 1956 *****
67 2040 *****
68 1881 *****
69 1874 *****
70 1976 *****
71 1977 *****
72 2015 *****
73 1945 *****
74 1889 *****
75 2109 *****
76 1990 *****
77 2061 *****
78 1919 *****
79 1905 *****
80 1988 *****
81 1993 *****
82 1839 *****
83 1918 *****
84 1864 *****
85 2049 *****
86 2147 *****
87 2077 *****
88 1960 *****
89 1946 *****
90 2055 *****
91 1976 *****
92 1917 *****
93 2015 *****
94 1900 *****
95 1974 *****
96 1906 *****
97 1846 *****
98 1896 *****
99 1886 *****
100 1966 *****
101 1925 *****
102 1907 *****
103 1997 *****
104 2015 *****
105 1980 *****
106 1978 *****
107 1849 *****
108 1798 *****
109 1663 *****
110 1536 *****
111 1450 *****
112 1203 *****
113 867 *****
114 676 *****
115 484 *****
116 300 *****
117 152 *****
118 65 *****
119 8 *****
```

The remaining graphs are for spin one-half quarks. The graphs come in groups of four. The first of each four is the correlation function for quarks of a different spin and color. In the second it is same spin but different color; the third is different spin, same color; and the fourth is for quarks of the same spin and color.

Lambda = 0.005000 * (density)^2
Graph: spin 0, color 0, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 960000)

1 8105 *****
2 8085 *****
3 8091 *****
4 8068 *****
5 8004 *****
6 8077 *****
7 8074 *****
8 8119 *****
9 8159 *****
10 8012 *****
11 8021 *****
12 7698 *****
13 7998 *****
14 8159 *****
15 7975 *****
16 8068 *****
17 8015 *****
18 8065 *****
19 8105 *****
20 8046 *****
21 7972 *****
22 7897 *****
23 7927 *****
24 8005 *****
25 7904 *****
26 7979 *****
27 7956 *****
28 7992 *****
29 8007 *****
30 8020 *****
31 8061 *****
32 8110 *****
33 8092 *****
34 8131 *****
35 7947 *****
36 7977 *****
37 7807 *****
38 7898 *****
39 7964 *****
40 8108 *****
41 8044 *****
42 7916 *****
43 7850 *****
44 7895 *****
45 8106 *****
46 7947 *****
47 8094 *****
48 8139 *****
49 8101 *****
50 7865 *****
51 7921 *****
52 8067 *****
53 8191 *****
54 7889 *****
55 7915 *****
56 8072 *****
57 8012 *****
58 7985 *****
59 7840 *****
60 7986 *****
61 8009 *****
62 8001 *****
63 7891 *****
64 7767 *****
65 8128 *****
66 8043 *****
67 8045 *****
68 8048 *****
69 8025 *****
70 7957 *****
71 8081 *****
72 7867 *****
73 8009 *****
74 7852 *****
75 7926 *****
76 7886 *****
77 8086 *****
78 8042 *****
79 8084 *****
80 7958 *****
81 7900 *****
82 7859 *****
83 7977 *****
84 8030 *****
85 8078 *****
86 8020 *****
87 8184 *****
88 7830 *****
89 7930 *****
90 7977 *****
91 7938 *****
92 7893 *****
93 8087 *****
94 8001 *****
95 8075 *****
96 8123 *****
97 7977 *****
98 7878 *****
99 8059 *****
100 7862 *****
101 8051 *****
102 8051 *****
103 7939 *****
104 7860 *****
105 8004 *****
106 7943 *****
107 7989 *****
108 8065 *****
109 8119 *****
110 8116 *****
111 7957 *****
112 8006 *****
113 7998 *****
114 8044 *****
115 7947 *****
116 8009 *****
117 8219 *****
118 7951 *****
119 7919 *****

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Lambda = 0.005000 * (density)^2
Graph: spin 0, color 1, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 480000)

1 3825 *****
2 3916 *****
3 3778 *****
4 4078 *****
5 3951 *****
6 4032 *****
7 4010 *****
8 3989 *****
9 4043 *****
10 4062 *****
11 4035 *****
12 4067 *****
13 3945 *****
14 4198 *****
15 3995 *****
16 3978 *****
17 3919 *****
18 3992 *****
19 4043 *****
20 3979 *****
21 4055 *****
22 4026 *****
23 3890 *****
24 3979 *****
25 4070 *****
26 4007 *****
27 4066 *****
28 3995 *****
29 4075 *****
30 3811 *****
31 3978 *****
32 3985 *****
33 4008 *****
34 4085 *****
35 4069 *****
36 4010 *****
37 3885 *****
38 4052 *****
39 4035 *****
40 4052 *****
41 3968 *****
42 3978 *****
43 4044 *****
44 4091 *****
45 4061 *****
46 3967 *****
47 4017 *****
48 4024 *****
49 3941 *****
50 3931 *****
51 3905 *****
52 4055 *****
53 3979 *****
54 4018 *****
55 4037 *****
56 4046 *****
57 3926 *****
58 4068 *****
59 4108 *****
60 3976 *****
61 4010 *****
62 4057 *****
63 3957 *****
64 3918 *****
65 4042 *****
66 3965 *****
67 3980 *****
68 3983 *****
69 4079 *****
70 4024 *****
71 4026 *****
72 4114 *****
73 4043 *****
74 4076 *****
75 3907 *****
76 4073 *****
77 4126 *****
78 4029 *****
79 3961 *****
80 3927 *****
81 4066 *****
82 4087 *****
83 4006 *****
84 3928 *****
85 3943 *****
86 3919 *****
87 3914 *****
88 4095 *****
89 3977 *****
90 4140 *****
91 4013 *****
92 3926 *****
93 4055 *****
94 3926 *****
95 3995 *****
96 4051 *****
97 3986 *****
98 4101 *****
99 4020 *****
100 3907 *****
101 3945 *****
102 3915 *****
103 4095 *****
104 3937 *****
105 4015 *****
106 3878 *****
107 3925 *****
108 4041 *****
109 4146 *****
110 4084 *****
111 3984 *****
112 3979 *****
113 4090 *****
114 3982 *****
115 3945 *****
116 4038 *****
117 4026 *****
118 3902 *****
119 3736 *****

Lambda = 0.005000 * (density)^2
Graph: spin 1, color 0, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 960000)

1	8105
2	8117
3	8031
4	8096
5	8085
6	7994
7	7959
8	8025
9	7791
10	8215
11	7824
12	8042
13	7919
14	8101
15	8015
16	8132
17	7932
18	8066
19	8148
20	7739
21	8088
22	8083
23	7798
24	7961
25	7891
26	8039
27	8008
28	8081
29	8193
30	7978
31	8050
32	8020
33	7748
34	7969
35	8068
36	8096
37	8009
38	7960
39	7920
40	8032
41	7938
42	7930
43	8003
44	7898
45	8185
46	8071
47	7940
48	7907
49	7858
50	8039
51	7972
52	8039
53	8070
54	8003
55	7879
56	8049
57	7934
58	8091
59	8051
60	8124
61	7877
62	7876
63	8023
64	7911
65	8079
66	7973
67	7934
68	8086
69	8178
70	7989
71	8085
72	8108
73	8000
74	7996
75	7953
76	7933
77	8069
78	7987
79	7855
80	7955
81	7967
82	8035
83	7976
84	7876
85	8090
86	7975
87	8100
88	7900
89	8115
90	7878
91	8185
92	7840
93	8153
94	8011
95	8069
96	7874
97	7852
98	8042
99	7942
100	7912
101	8105
102	7984
103	7946
104	8139
105	8020
106	7866
107	8052
108	8152
109	7831
110	7935
111	8052
112	7988
113	7840
114	8243
115	7982
116	7939
117	8020
118	8097
119	8069

Lambda = 0.005000 * (density)^2
Graph: spin 1, color 1, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 420000)

1	19
2	122
3	231
4	628
5	1025
6	1325
7	1835
8	2237
9	2751
10	3229
11	3474
12	3518
13	3853
14	3874
15	4042
16	3944
17	3937
18	3931
19	3861
20	3786
21	3856
22	3695
23	3586
24	3686
25	3716
26	3814
27	3841
28	3857
29	3991
30	3774
31	3881
32	3901
33	3914
34	3763
35	3887
36	3927
37	3759
38	3785
39	3688
40	3757
41	3749
42	3804
43	3904
44	3723
45	3770
46	3894
47	3911
48	3844
49	3898
50	3994
51	3731
52	3773
53	3843
54	3914
55	3877
56	3853
57	3927
58	4033
59	4000
60	3967
61	3950
62	4041
63	4066
64	4052
65	4056
66	4002
67	4053
68	3990
69	3980
70	3933
71	3947
72	4050
73	4116
74	4174
75	4094
76	4133
77	4193
78	4162
79	4238
80	4121
81	4068
82	4073
83	4148
84	3996
85	3967
86	4044
87	4051
88	4067
89	4122
90	4167
91	4190
92	4224
93	4200
94	4011
95	3901
96	3954
97	3908
98	4000
99	3945
100	3731
101	3886
102	3826
103	3955
104	4025
105	4190
106	4027
107	4041
108	3957
109	3768
110	3486
111	3197
112	2797
113	2200
114	1791
115	1351
116	917
117	618
118	294
119	119

Lambda = 0.100000 * (density)^2
Graph: spin 0, color 0, flavor 1 (1 = same, 0 = different)
Col counts (Total counts = 960000)

1	9964
2	9451
3	8914
4	8249
5	7737
6	7151
7	7085
8	7138
9	7260
10	7577
11	7743
12	7921
13	8013
14	8338
15	8167
16	8310
17	8346
18	8249
19	7969
20	7930
21	7899
22	7778
23	7549
24	7561
25	7705
26	7792
27	8122
28	8051
29	8119
30	8194
31	8203
32	8174
33	8097
34	8024
35	7712
36	7803
37	7681
38	7907
39	7948
40	7910
41	7976
42	8117
43	8064
44	8130
45	8116
46	8068
47	7958
48	7662
49	7954
50	8131
51	7872
52	7894
53	8111
54	7843
55	7970
56	7932
57	7776
58	8051
59	7917
60	8045
61	7944
62	8213
63	8119
64	8167
65	7956
66	8033
67	7722
68	7927
69	7854
70	7759
71	8074
72	7988
73	7993
74	8033
75	8104
76	7956
77	8169
78	8155
79	8195
80	8083
81	8099
82	7637
83	7826
84	7790
85	7924
86	7868
87	8006
88	7777
89	8147
90	8161
91	8061
92	8365
93	8378
94	8163
95	7793
96	7751
97	7669
98	7557
99	7792
100	7850
101	7684
102	7778
103	8077
104	8198
105	8165
106	8354
107	8427
108	8064
109	7953
110	7866
111	7453
112	7155
113	7092
114	7171
115	7355
116	7644
117	8402
118	8967
119	9578
120	9971

Lambda = 0.100000 * (density)^2
Graph: spin 0, color 1, flavor 1 (1 = same, 0 = different)
Col counts (Total counts = 960000)

1	2572
2	3111
3	3439
4	3864
5	3992
6	4271
7	4269
8	4373
9	4336
10	4208
11	4227
12	4227
13	4124
14	4099
15	4003
16	3982
17	3987
18	3860
19	3974
20	3926
21	3950
22	4039
23	3958
24	3958
25	4041
26	4281
27	4096
28	4115
29	4049
30	4033
31	3988
32	3834
33	4035
34	4096
35	3884
36	4044
37	4038
38	3979
39	4100
40	4040
41	3931
42	3991
43	3892
44	4032
45	4003
46	4032
47	4093
48	3880
49	3987
50	3978
51	4050
52	4040
53	4105
54	4087
55	4030
56	3856
57	4044
58	3956
59	3857
60	4251
61	3969
62	3944
63	3925
64	4041
65	4000
66	4173
67	3868
68	3953
69	3890
70	4104
71	3967
72	4069
73	4054
74	4048
75	4027
76	3937
77	4078
78	4030
79	3980
80	4081
81	4048
82	3912
83	4058
84	4053
85	4028
86	4004
87	3960
88	4075
89	3962
90	4026
91	3944
92	3949
93	3973
94	4103
95	4005
96	4137
97	3877
98	4219
99	4079
100	4124
101	4025
102	4174
103	4050
104	4056
105	4001
106	3944
107	4090
108	4029
109	4095
110	4103
111	4361
112	4399
113	4465
114	4366
115	4246
116	3960
117	3614
118	3032
119	2609

Lambda = 0.100000 * (density)^2
 Graph: spin 1, color 0, flavor 1 (1 = same, 0 = different)
 Col Counts (Total counts = 960000)

1	9696
2	9410
3	8916
4	8343
5	7679
6	7496
7	7275
8	7291
9	7244
10	7533
11	7809
12	7883
13	7972
14	8139
15	8275
16	8305
17	8290
18	7929
19	8076
20	7701
21	7811
22	7597
23	7595
24	7859
25	7917
26	7965
27	8018
28	8034
29	8437
30	8121
31	8282
32	8031
33	8038
34	7771
35	7845
36	7993
37	7818
38	7863
39	7745
40	8089
41	8020
42	7952
43	8049
44	7941
45	8271
46	8061
47	8220
48	8135
49	8085
50	7778
51	7970
52	7883
53	7752
54	7922
55	7755
56	8033
57	8047
58	8238
59	7962
60	8170
61	8143
62	7845
63	8242
64	7828
65	7928
66	7996
67	8077
68	7994
69	8045
70	8107
71	7627
72	7945
73	7857
74	8052
75	8146
76	8039
77	7950
78	7977
79	8033
80	7624
81	8009
82	7774
83	8011
84	7919
85	7868
86	7830
87	7976
88	8067
89	8173
90	8227
91	8135
92	8284
93	8284
94	8034
95	8038
96	7681
97	7805
98	7911
99	7872
100	7553
101	7780
102	7994
103	8042
104	8051
105	8128
106	8153
107	8244
108	8244
109	8332
110	8150
111	7922
112	7834
113	7671
114	7224
115	7182
116	7244
117	7125
118	7845
119	8369
120	8631
121	9236
122	9827

-28-

Lambda = 0.100000 * (density)^2
 Graph: spin 1, color 1, flavor 1 (1 = same, 0 = different)
 Col Counts (Total counts = 420000)

1	4
2	57
3	169
4	372
5	671
6	1120
7	1531
8	2004
9	2503
10	3010
11	3351
12	3825
13	4065
14	4045
15	4207
16	4224
17	4392
18	4073
19	3983
20	3839
21	3581
22	3599
23	3602
24	3593
25	3733
26	3782
27	3915
28	4153
29	4427
30	4176
31	4231
32	4039
33	4033
34	4022
35	3725
36	3809
37	3804
38	3764
39	3899
40	3947
41	4145
42	4261
43	4309
44	4020
45	4346
46	4154
47	4139
48	4046
49	4071
50	4056
51	4024
52	3961
53	3939
54	3961
55	3964
56	4038
57	4079
58	4134
59	3951
60	4174
61	4236
62	4025
63	4085
64	3873
65	3834
66	3866
67	3722
68	3786
69	3923
70	3831
71	3959
72	3725
73	3871
74	4035
75	4010
76	4056
77	3857
78	3914
79	3851
80	3920
81	3937
82	3859
83	3701
84	3765
85	3939
86	3790
87	3980
88	4099
89	4227
90	4099
91	4262
92	4176
93	4036
94	3938
95	3903
96	3782
97	3716
98	3582
99	3555
100	3779
101	3887
102	4094
103	4129
104	4396
105	4485
106	4485
107	4327
108	4267
109	3862
110	3561
111	3177
112	2695
113	2101
114	1599
115	1102
116	757
117	403
118	161
119	64
120	7

Lambda = 2.000000 * (density)^2
Graph: spin 0, color 0, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 960000)

1	24014
2	10703
3	4937
4	4341
5	4263
6	4622
7	5098
8	5679
9	6561
10	7266
11	8246
12	8838
13	9225
14	9371
15	9582
16	9243
17	9059
18	8554
19	7896
20	7221
21	6385
22	6303
23	6122
24	6247
25	7075
26	7452
27	7861
28	8655
29	9177
30	9191
31	8998
32	8913
33	8546
34	7995
35	7806
36	7407
37	7423
38	7196
39	6878
40	7162
41	7802
42	7838
43	8251
44	8753
45	8928
46	8554
47	9254
48	8884
49	8307
50	7427
51	6972
52	6848
53	6885
54	7055
55	7420
56	7814
57	8000
58	8705
59	9128
60	9409
61	9107
62	8954
63	8634
64	7947
65	7540
66	7079
67	7159
68	7060
69	6748
70	7022
71	7841
72	8153
73	9002
74	9208
75	9071
76	8947
77	8530
78	8012
79	7941
80	7754
81	7339
82	7069
83	7287
84	7335
85	7378
86	7487
87	7760
88	8151
89	8424
90	8689
91	8860
92	9106
93	8710
94	8472
95	7716
96	6965
97	6608
98	6300
99	6766
100	7113
101	7183
102	7940
103	8423
104	9193
105	9151
106	9048
107	9157
108	9075
109	8653
110	7963
111	7109
112	6217
113	5790
114	5602
115	5591
116	4698
117	4661
118	5025
119	10507
120	24029

Lambda = 2.000000 * (density)^2
Graph: spin 0, color 1, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 480000)

1	2206
2	3457
3	3835
4	4200
5	3996
6	3939
7	3818
8	3742
9	3816
10	4090
11	4390
12	4685
13	4545
14	4266
15	4318
16	4489
17	4639
18	4457
19	4062
20	3912
21	3889
22	3832
23	3565
24	3396
25	3689
26	3688
27	3994
28	4188
29	4336
30	4484
31	4453
32	4411
33	4397
34	4001
35	3916
36	3590
37	3399
38	3424
39	3484
40	3653
41	4071
42	4101
43	4360
44	4549
45	4555
46	4583
47	4408
48	4003
49	3791
50	3639
51	3447
52	3592
53	3623
54	3396
55	3718
56	3999
57	4384
58	4522
59	4632
60	4593
61	4577
62	4446
63	4037
64	4018
65	3547
66	3486
67	3332
68	3580
69	3664
70	3825
71	4082
72	4437
73	4638
74	4537
75	4659
76	4506
77	4155
78	3897
79	3851
80	3623
81	3431
82	3438
83	3524
84	3621
85	3517
86	3953
87	4162
88	4664
89	4770
90	4560
91	4702
92	4478
93	4224
94	3655
95	3445
96	3219
97	3399
98	3663
99	3499
100	3838
101	4166
102	4361
103	4389
104	4444
105	4699
106	4816
107	4631
108	4592
109	4554
110	3950
111	3823
112	3785
113	3688
114	3544
115	3457
116	3709
117	3904
118	3492
119	2252

Lambda 2.00000 # (Density) 4
Graph: spin 1, color 0, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 960000)

1 24525 *****
2 10660 *****
3 5225 *****
4 4585 *****
5 4614 *****
6 4868 *****
7 5205 *****
8 5457 *****
9 5623 *****
10 6560 *****
11 7710 *****
12 8104 *****
13 8592 *****
14 8970 *****
15 8837 *****
16 9161 *****
17 9010 *****
18 8617 *****
19 7953 *****
20 7808 *****
21 7629 *****
22 7458 *****
23 7395 *****
24 8946 *****
25 7360 *****
26 8112 *****
27 8589 *****
28 9076 *****
29 9211 *****
30 8890 *****
31 8725 *****
32 8316 *****
33 7866 *****
34 7697 *****
35 7418 *****
36 7033 *****
37 7208 *****
38 6985 *****
39 6960 *****
40 7432 *****
41 7906 *****
42 8388 *****
43 8412 *****
44 8929 *****
45 8579 *****
46 9031 *****
47 8700 *****
48 8509 *****
49 8171 *****
50 7651 *****
51 7104 *****
52 7055 *****
53 6959 *****
54 7144 *****
55 7337 *****
56 7158 *****
57 7774 *****
58 8633 *****
59 9380 *****
60 9417 *****
61 9586 *****
62 9372 *****
63 9094 *****
64 8262 *****
65 7500 *****
66 7194 *****
67 6832 *****
68 7027 *****
69 7006 *****
70 7055 *****
71 7436 *****
72 8128 *****
73 8220 *****
74 8486 *****
75 8915 *****
76 8921 *****
77 8996 *****
78 8463 *****
79 8224 *****
80 7789 *****
81 7290 *****
82 7087 *****
83 6850 *****
84 7029 *****
85 7398 *****
86 7590 *****
87 7810 *****
88 8624 *****
89 8613 *****
90 8869 *****
91 9053 *****
92 8947 *****
93 8926 *****
94 8413 *****
95 7679 *****
96 7113 *****
97 6961 *****
98 6764 *****
99 7101 *****
100 7405 *****
101 7563 *****
102 8227 *****
103 8248 *****
104 9055 *****
105 9188 *****
106 9319 *****
107 9050 *****
108 8835 *****
109 8659 *****
110 7816 *****
111 6675 *****
112 5988 *****
113 5124 *****
114 4609 *****
115 4227 *****
116 4165 *****
117 4065 *****
118 5069 *****
119 10596 *****
120 24367 *****

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Lambda 2.00000 # (Density) 4
Graph: spin 1, color 1, flavor 1 (1 = same, 0 = different)
Col Counts (Total counts = 420000)

1 62
2 217 **
3 329 ****
4 552 *****
5 798 *****
6 1193 *****
7 1508 *****
8 2079 *****
9 2678 *****
10 3303 *****
11 4150 *****
12 4417 *****
13 4863 *****
14 4994 *****
15 4969 *****
16 4696 *****
17 4234 *****
18 4063 *****
19 3676 *****
20 3382 *****
21 3364 *****
22 3160 *****
23 3529 *****
24 3824 *****
25 4310 *****
26 4218 *****
27 4554 *****
28 4598 *****
29 4326 *****
30 4037 *****
31 3966 *****
32 3944 *****
33 3750 *****
34 3801 *****
35 3599 *****
36 3674 *****
37 3473 *****
38 3471 *****
39 3589 *****
40 3909 *****
41 3925 *****
42 3885 *****
43 3727 *****
44 3749 *****
45 4023 *****
46 3930 *****
47 4023 *****
48 3587 *****
49 3351 *****
50 3040 *****
51 3036 *****
52 3211 *****
53 3169 *****
54 3194 *****
55 3483 *****
56 3635 *****
57 4086 *****
58 4184 *****
59 4567 *****
60 4253 *****
61 5127 *****
62 4739 *****
63 4298 *****
64 3944 *****
65 4011 *****
66 3902 *****
67 3697 *****
68 3757 *****
69 3872 *****
70 4244 *****
71 4487 *****
72 4668 *****
73 4666 *****
74 4691 *****
75 4705 *****
76 4859 *****
77 4607 *****
78 4159 *****
79 4259 *****
80 3985 *****
81 3882 *****
82 3657 *****
83 3723 *****
84 3564 *****
85 3654 *****
86 3762 *****
87 3984 *****
88 4248 *****
89 4337 *****
90 4673 *****
91 4524 *****
92 4412 *****
93 4215 *****
94 3781 *****
95 3479 *****
96 3345 *****
97 3113 *****
98 3160 *****
99 3226 *****
100 3578 *****
101 3597 *****
102 3962 *****
103 4338 *****
104 4492 *****
105 4561 *****
106 4355 *****
107 4110 *****
108 3783 *****
109 3669 *****
110 3062 *****
111 2473 *****
112 1883 *****
113 1636 *****
114 1338 *****
115 869 *****
116 615 *****
117 344 *****
118 73 *****
119 3 *****

5.4 The Spin Correlation Function

Here is the output from the spin correlation function for three values of λ/ρ^2 . The intermediate density plot ($\lambda/\rho^2 = .1$) shows a slight tendency for the nucleons to have spin $\pm 1/2$ over the expected 37.5%. This is small so that it may simply be due to error from the calculations.

The low density plot ($\lambda/\rho^2 = 2$) has too much error to be of any use.

$$\text{Lambda} = 2.000000 * (\text{density})^2$$

Spin Counts		%		(Total Counts = 40000)
====	=====	=====		
-1.5	4666	11.7	*****	
-0.5	16200	40.5	*****	
0.5	13602	34.0	*****	
1.5	5532	13.8	*****	

$$\text{Lambda} = 0.100000 * (\text{density})^2$$

Spin Counts		%		(Total Counts = 40000)
====	=====	=====		
-1.5	4816	12.0	*****	
-0.5	15173	37.9	*****	
0.5	15206	38.0	*****	
1.5	4805	12.0	*****	

$$\text{Lambda} = 0.005000 * (\text{density})^2$$

Spin Counts		%		(Total Counts = 40000)
====	=====	=====		
-1.5	4963	12.4	*****	
-0.5	15032	37.6	*****	
0.5	15047	37.6	*****	
1.5	4958	12.4	*****	

Appendix A

Best Partition

A.1 Computer Code

This is the code used to check that the best partition is almost always the ordered partition.

```
#include "definitions.h"
main ()
{
    int    num_quarks,
          num_iters,
          iter,
          color,
          quark,
          next_perm (),
          sort ();
    long int    seed;
    double    position[3][ARRAY_SIZE],
             best_position[3][ARRAY_SIZE],
             boundary = 1.0,
             pot,
             best_pot,
             normal_pot,
             random (),
             V_total ();
    printf ("Num_quarks: \n");
    scanf ("%d", &num_quarks);
    printf ("Num_quarks is %d\n\n", num_quarks);
    printf ("Num_iters: \n");
    scanf ("%d", &num_iters);
    printf ("Num_iters is %d\n\n", num_iters);
    printf ("Random number seed: \n");
    scanf ("%ld", &seed);
    if (seed < 0)
        seed *= -1;
    seed %= 2147483648L;
    printf ("Random number seed is %ld \n\n", seed);
    random (-seed);
    for (iter = 0; iter < num_iters; iter++) {
        for (color = 0; color < 3; color++) {
            for (quark = 0; quark < num_quarks; quark++) {
                position[color][quark] = random (0L);
            }
            sort (position, color, num_quarks);
        }
        best_pot = 10000.0;
        normal_pot = V_total (position, boundary, num_quarks);
        do {
            do {
                pot = V_total (position, boundary, num_quarks);
                if (pot < best_pot) {
                    best_pot = pot;
                    for (color = 0; color < 3; color++) {
                        for (quark = 0; quark < num_quarks; quark++) {
                            best_position[color][quark] =
                                position[color][quark];
                        }
                    }
                }
            } while (next_perm (position, 2, num_quarks));
        } while (next_perm (position, 1, num_quarks));
        if (best_pot < normal_pot) {
```

```
for (color = 0; color < 3; color++) {
    for (quark = 0; quark < num_quarks; quark++) {
        printf ("%lf ", best_position[color][quark]);
    }
    printf ("\n");
}
printf ("Best: %lf Normal: %lf\n\n", best_pot, normal_pot);
}
printf ("Finished !\n\n\n\n");
return (0);
}
```

```
/* If the argument is 0, this program returns a random number between
0 and 1.  If the argument is negative it is used as the new seed for
the random number generator.  If the argument is positive the program
returns an interger value (in a double) between 0 and the argument
minus one inclusive.
*/
double random (new_seed)
    long    new_seed;
{
    static long seed;
    double  random_number;
    if (new_seed < 0) {
        seed = -new_seed;
        if (seed % 2 == 0) {
            seed++;
        }
    }
    seed = (65539 * seed) % 2147483648;
    random_number = ((double) seed) / 2147483648.0;
    if (new_seed > 0)
        random_number = ((double) ((int) (new_seed * random_number)));
    return (random_number);
}
```

```
#include "definitions.h"
sort (position, color, num_nucleons)
    int    color,
          num_nucleons;
    double position[3][ARRAY_SIZE];
{
    int    nucleon,
          ready = FALSE;
    double temp;
    while (ready == FALSE) {
        ready = TRUE;
        num_nucleons--;
        for (nucleon = 0; nucleon < num_nucleons; nucleon++) {
            if (position[color][nucleon] > position[color][nucleon + 1]) {
                ready = FALSE;
                temp = position[color][nucleon];
                position[color][nucleon] = position[color][nucleon + 1];
                position[color][nucleon + 1] = temp;
            }
        }
    }
    return (0);
}

clip (position, color, boundary, num_nucleons)
    int    color,
          num_nucleons;
    double boundary,
          position[3][ARRAY_SIZE];
{
    int    nucleon;
    for (nucleon = 0; nucleon < num_nucleons; nucleon++) {
        if (position[color][nucleon] < 0.0)
            position[color][nucleon] += boundary;
        if (position[color][nucleon] > boundary)
            position[color][nucleon] -= boundary;
    }
    return (0);
}
```

```
#include "definitions.h"
next_perm (position, color, num_quarks)
double position[3][ARRAY_SIZE];
int color,
    num_quarks;
{
int quark,
    num_fix,
    best_index = 0,
    status = 1;
double best_value = -1.0;
for (quark = 1; position[color][quark - 1] > position[color][quark] &&
    quark < num_quarks ; quark++);
if (quark == num_quarks)
{
    sort (position, color, num_quarks);
    status = 0;
}
else
{
    num_fix = quark;
    for (quark = 0; quark < num_fix; quark++)
    {
        if (position[color][quark] < position[color][num_fix] &&
            position[color][quark] > best_value )
        {
            best_index = quark;
            best_value = position[color][best_index];
        }
    }
    position[color][best_index] = position[color][num_fix];
    position[color][num_fix] = best_value;
    sort (position, color, num_fix);
}
return (status);
}
```

```
#include "definitions.h"
double V_total (position, boundary, num_quarks)
double position[3][ARRAY_SIZE],
        boundary;
int num_quarks;
{
    int color1,
        color2,
        quark;
    double distance[3],
        V = 0,
        temp;
    for (quark = 0; quark < num_quarks; quark++) {
        for (color1 = 0; color1 < 3; color1++) {
            color2 = (color1 + 1) % 3;
            distance[color1] = position[color1][quark] -
                position[color2][quark];
        }
        for (color1 = 0; color1 < 2; color1++) {
            for (color2 = 0; color2 < 3; color2++) {
                if (distance[color1] > distance[color2]) {
                    temp = distance[color1];
                    distance[color1] = distance[color2];
                    distance[color2] = temp;
                }
            }
        }
        if (distance[2] - distance[0] > boundary) {
            distance[0] += boundary;
            distance[2] -= boundary;
        }
        for (color1 = 0; color1 < 3; color1++) {
            V += square (distance[color1]);
        }
    }
    return (V / 2.0);
}
```

```
#define FALSE          0
#define TRUE           1
#define ARRAY_SIZE    16
#define square(x)     ((x) * (x))
```

```
bpairings:      bpairings.o next_perm.o random.o sort.o V_total.o
                cc -o bpairings bpairings.o next_perm.o random.o sort.o V_total.o

permute:        perm.o next_perm.o sort.o
                cc -o permute perm.o next_perm.o sort.o

apairings:      apairings.o random.o sort.o
                cc -o apairings apairings.o random.o sort.o -lm
```

A.2 Output of the computer code

This is the output of a sample run of the previous code. Although the main run of this program was for 10,000 configurations, this output is from a run of only 1000 configurations.

Num_quarks:
Num_quarks is 4

Num_iters:
Num_iters is 1000

Random number seed:
Random number seed is 1437496998

0.008900 0.080776 0.326414 0.878383
0.470177 0.089955 0.332567 0.546628
0.948399 0.098828 0.176840 0.901405
Best: 0.403094 Normal: 0.462617

0.084196 0.136491 0.149043 0.477557
0.523542 0.408913 0.636926 0.741601
0.941924 0.727046 0.769388 0.884966
Best: 0.986191 Normal: 1.198667

0.072020 0.126148 0.129055 0.144785
0.263624 0.595393 0.437026 0.648507
0.274004 0.978172 0.402991 0.518428
Best: 0.640989 Normal: 0.678958

0.121412 0.131585 0.204048 0.953074
0.534180 0.094401 0.627412 0.956852
0.954743 0.172736 0.680391 0.878846
Best: 0.489630 Normal: 0.595989

0.038538 0.057798 0.367584 0.711041
0.513148 0.117082 0.427814 0.919409
0.989698 0.228562 0.461176 0.753040
Best: 0.318490 Normal: 0.354382

0.036170 0.075726 0.535481 0.824243
0.042672 0.504815 0.712704 0.887357
0.167360 0.938687 0.602590 0.892170
Best: 0.311211 Normal: 0.357310

0.013188 0.311750 0.314637 0.974153
0.464326 0.440066 0.705099 0.751807
0.902030 0.461463 0.695951 0.808186
Best: 0.474750 Normal: 0.546029

0.148540 0.167483 0.192173 0.816173
0.510326 0.448691 0.659339 0.758091
0.899126 0.239138 0.817709 0.841894
Best: 0.697247 Normal: 0.740442

0.195734 0.216017 0.217599 0.534495
0.501975 0.233334 0.262817 0.766448
0.953257 0.498686 0.513000 0.911838
Best: 0.631796 Normal: 0.655737

0.168541 0.285122 0.346760 0.977271
0.589893 0.423836 0.530530 0.973261

0.978031 0.768242 0.794929 0.855399
Best: 0.646381 Normal: 0.660914

0.070182 0.096362 0.454582 0.860237
0.442127 0.273513 0.542109 0.678961
0.842900 0.110969 0.762098 0.806937
Best: 0.433724 Normal: 0.498276

0.052223 0.184593 0.228371 0.652000
0.441993 0.299200 0.725801 0.783957
0.943846 0.262987 0.696985 0.885121
Best: 0.603217 Normal: 0.666421

0.164400 0.194868 0.486369 0.742538
0.567431 0.174851 0.609075 0.830923
0.981419 0.793678 0.854087 0.878665
Best: 0.771043 Normal: 0.881872

0.004842 0.311796 0.827205 0.968584
0.497514 0.157059 0.571552 0.951686
0.894962 0.566149 0.831717 0.884317
Best: 0.509426 Normal: 0.548728

0.113462 0.208948 0.232526 0.274647
0.514625 0.075686 0.338471 0.995016
0.925581 0.407876 0.658793 0.766077
Best: 0.919426 Normal: 0.947575

0.108338 0.262416 0.491808 0.589101
0.548868 0.113651 0.270353 0.348115
0.993219 0.660657 0.682306 0.823189
Best: 0.798627 Normal: 0.834455

0.016772 0.090827 0.206962 0.321519
0.276362 0.517472 0.617572 0.682300
0.048181 0.952000 0.133558 0.730938
Best: 0.682837 Normal: 0.754047

0.030947 0.067478 0.228308 0.439708
0.493189 0.091327 0.137191 0.384444
0.971653 0.071941 0.182446 0.349799
Best: 0.273691 Normal: 0.290460

0.030588 0.051112 0.384718 0.721068
0.442367 0.300643 0.817062 0.822552
0.908809 0.229527 0.779428 0.974195
Best: 0.559530 Normal: 0.675662

0.036619 0.359292 0.474619 0.948143
0.501143 0.404704 0.622461 0.917940
0.930344 0.393052 0.794357 0.865301
Best: 0.360206 Normal: 0.396445

0.147909 0.338884 0.837497 0.876155
0.507643 0.418162 0.625300 0.693795
0.940186 0.804268 0.877658 0.926690

Best: 0.606251 Normal: 0.675235

0.000054 0.051542 0.091251 0.478800
0.481163 0.218198 0.536447 0.923194
0.943450 0.203393 0.208699 0.782407
Best: 0.601877 Normal: 0.761426

0.072715 0.170849 0.287175 0.637547
0.498577 0.185409 0.240574 0.527877
0.956249 0.572328 0.815445 0.827733
Best: 0.806798 Normal: 0.952601

0.025331 0.072439 0.553223 0.667389
0.145480 0.556543 0.560118 0.644907
0.298201 0.998077 0.780314 0.965636
Best: 0.478209 Normal: 0.733451

0.080721 0.123760 0.370489 0.496447
0.587390 0.397650 0.644279 0.945489
0.979974 0.377042 0.386423 0.809142
Best: 0.617561 Normal: 0.622095

0.027066 0.044803 0.809000 0.881400
0.424810 0.336221 0.614102 0.658622
0.867494 0.621262 0.834341 0.904283
Best: 0.640129 Normal: 0.671206

0.067245 0.102879 0.175338 0.446819
0.533810 0.595899 0.357502 0.649484
0.894474 0.925335 0.340726 0.826834
Best: 0.829144 Normal: 1.007468

Finished !

Appendix B

The Main Program

Here is the code listings of the main computer program.

```

#include "definitions.h"
#include <math.h>
main ()
{
    PQUARK color_table[MAX_COLORS][MAX_QUARKS];
    ENERGY2 dE_by_dlambda;
    DENSITY density;
    ENERGY2 energy;
    INT histogram[2][2][2][MAX_COLUMNS];
    INT i;
    DENSITY inc_density;
    LAMBDA inc_lambda;
    INT j;
    ENERGY2 kinetic;
    LAMBDA lambda;
    DENSITY min_density;
    LAMBDA min_lambda;
    INT num_densities;
    INT num_lambdas;
    PARAMETER_LIST parms;
    ENERGY2 potential;
    QUARK quark_table[MAX_QUARKS];
    LAMBDA rho1_lambda;
    ENERGY2 rho1_potential;
    ENERGY2 rho1_square_potential;
    PQUARK spcolflav_table[MAX_SPINS][MAX_COLORS][MAX_FLAVORS][MAX_INDISTS];
    INT spin_stats[MAX_SPINS * MAX_COLORS];
    input_values (&parms, &min_lambda, &inc_lambda, &num_lambdas,
                 &min_density, &inc_density, &num_densities);
    init_arrays (&parms, quark_table, color_table, spcolflav_table);
    for (i = 0; i < num_lambdas; i++) {
        rho1_lambda = exp (i * inc_lambda) * min_lambda;
        expectation (&parms, quark_table, color_table, spcolflav_table,
                    histogram, spin_stats, rho1_lambda, &rho1_potential,
                    &rho1_square_potential);
        print_header (&parms);
        for (j = 0; j < num_densities; j++) {
            density = exp (j * inc_density) * min_density;
            energies (&parms, rho1_lambda, density, rho1_potential,
                    rho1_square_potential, &potential, &kinetic, &energy,
                    &lambda, &dE_by_dlambda);
            print_data (&parms, lambda, density, potential, kinetic, energy,
                       dE_by_dlambda);
        }
        print_histogram (&parms, histogram, rho1_lambda);
        print_spin_stats (&parms, spin_stats, rho1_lambda);
    }
    return (0);
}

```

```

#include "definitions.h"
#include <math.h>
energies (pparms, rho1_lambda, density, rho1_potential, rho1_square_potenti
    ppotential, pkinetic, penergy, plambda, pdE_by_dlambda)
    DENSITY      density;
    PENERGY2     pdE_by_dlambda;
    PENERGY2     penergy;
    PENERGY2     pkinetic;
    PLAMBDA      plambda;
    PPARAMETER_LIST pparms;
    PENERGY2     ppotential;
    LAMBDA       rho1_lambda;
    ENERGY2    rho1_potential;
    ENERGY2    rho1_square_potential;
{
    pkinetic -> value = square (M_PI) * (square (pparms -> indists) - 1) /
        (6.0 * square (pparms -> boundary)) + 3 * square (rho1_lambda) *
        rho1_potential.value;
    pkinetic -> value *= square (density);
    pkinetic -> error = 3 * square (rho1_lambda) * square (density) *
        rho1_potential.error;

    ppotential -> value = rho1_potential.value / square (density);
    ppotential -> error = rho1_potential.error / square (density);

    penergy -> value = pkinetic -> value + ppotential -> value;
    penergy -> error = pkinetic -> error + ppotential -> error;

    *plambda = square (density) * rho1_lambda;

    pdE_by_dlambda -> value = (square (rho1_potential.value) -
        rho1_square_potential.value) * (6 * square (rho1_lambda) +
        2 / square (square (density))) + 6 * rho1_lambda *
        rho1_potential.value;

    pdE_by_dlambda -> error = 0.0;

    return;
}

```

```

#include "definitions.h"
#include <math.h>
expectation (pparms, quark_table, color_table, spcolflav_table, histogram,
             spin_stats, lambda, ppotential, psquare_potential)
PQUARK color_table[MAX_COLORS][MAX_QUARKS];
INT histogram[2][2][2][MAX_COLUMNS];
PPARAMETER_LIST pparms;
PENERGY2 ppotential;
PENERGY2 psquare_potential;
QUARK quark_table[MAX_QUARKS];
LAMBDA lambda;
INT spin_stats[MAX_SPINS * MAX_COLORS];
PQUARK spcolflav_table[MAX_SPINS][MAX_COLORS][MAX_FLAVORS][MAX_INDISTS];
{
  INT color;
  static POSITION dx_metr = 1.0;
  INT num_iters;
  PERCENT percent_accepted;
  INT quark;
  RND_NUMBER random ();
  INT run;
  ENERGY1 sum_V;
  ENERGY1 sum_V2;
  ENERGY1 sum_V_squared;
  ENERGY1 sum_V2_squared;

  for (color = 0; color < pparms -> colors; color++) {
    for (quark = 0; quark < pparms -> quarks / pparms -> colors;
         quark++) {
      color_table[color][quark] -> position = random () * pparms -> boundary;
    }
    sort_color_table (pparms, color_table, color);
  }

  num_iters = pparms -> iters;
  pparms -> iters = START_UP_ITERATIONS;
  do {
    metropolis (pparms, quark_table, color_table, spcolflav_table,
               histogram, spin_stats, lambda, dx_metr, ppotential,
               psquare_potential, &percent_accepted);
    if (percent_accepted > 55.0)
      dx_metr *= 1.05;
    if (percent_accepted < 45.0)
      dx_metr /= 1.05;
  } while (percent_accepted < 45.0 || percent_accepted > 55.0);
  pparms -> iters = num_iters;

  sum_V = 0.0;
  sum_V_squared = 0.0;
  sum_V2 = 0.0;
  sum_V2_squared = 0.0;
  init_histogram (pparms, histogram);
  init_spin_stats (pparms, spin_stats);
  for (run = 0; run < pparms -> runs; run++) {
    metropolis (pparms, quark_table, color_table, spcolflav_table,
               histogram, spin_stats, lambda, dx_metr, ppotential,

```

```
        psquare_potential, &percent_accepted);
    sum_V += ppotential -> value;
    sum_V_squared += square (ppotential -> value);
    sum_V2 += psquare_potential -> value;
    sum_V2_squared += square (psquare_potential -> value);
}

ppotential -> value = sum_V / pparms -> runs;
ppotential -> error = squareroot (sum_V_squared / pparms -> runs -
    square (ppotential -> value));
psquare_potential -> value = sum_V2 / pparms -> runs;
psquare_potential -> error = squareroot (sum_V2_squared / pparms -> runs)/
    square (psquare_potential -> value));

return;
}
```

```

#include "definitions.h"
init_arrays (pparms, quark_table, color_table, spcolflav_table)
PQUARK color_table[MAX_COLORS][MAX_QUARKS];
PPARAMETER_LIST pparms;
QUARK quark_table[MAX_QUARKS];
PQUARK spcolflav_table[MAX_SPINS][MAX_COLORS][MAX_FLAVORS][MAX_INDISTS];
{
    INT color;
    INT color_number;
    INT flavor;
    INT quark;
    INT quark_number = 0;
    INT spin;
    for (color = 0; color < pparms -> colors; color++) {
        color_number = 0;
        for (flavor = 0; flavor < pparms -> flavors; flavor++) {
            for (spin = 0; spin < pparms -> spins; spin++) {
                for (quark = 0; quark < pparms -> indists; quark++) {
                    quark_table[quark_number].color = color;
                    quark_table[quark_number].flavor = flavor;
                    quark_table[quark_number].spin = spin;
                    spcolflav_table[spin][color][flavor][quark] =
                        &(quark_table[quark_number]);
                    color_table[color][color_number] =
                        &(quark_table[quark_number]);
                    color_number++;
                    quark_number++;
                }
            }
        }
    }
    return;
}

init_histogram (pparms, histogram)
INT histogram[2][2][2][MAX_COLUMNS];
PPARAMETER_LIST pparms;
{
    INT color;
    INT column;
    INT flavor;
    INT spin;
    for (spin = 0; spin < 2; spin++) {
        for (color = 0; color < 2; color++) {
            for (flavor = 0; flavor < 2; flavor++) {
                for (column = 0; column < pparms -> columns; column++)
                    histogram[spin][color][flavor][column] = 0;
            }
        }
    }
    return;
}

init_spin_stats (pparms, spin_stats)
PPARAMETER_LIST pparms;
INT spin_stats[MAX_SPINS * MAX_COLORS];

```

```
{  
  INT spin;  
  for (spin = 0; spin <= (pparms -> spins - 1) * pparms -> colors; spin++)  
    spin_stats[spin] = 0;  
  return;  
}
```

```

#include "definitions.h"
#include <math.h>
#include <stdio.h>
input_values (pparms, pmin_lambda, pinc_lambda, pnum_lambdas,
              pmin_density, pinc_density, pnum_densities)
    PDENSITY pinc_density;
    PLAMBDA pinc_lambda;
    PDENSITY pmin_density;
    PLAMBDA pmin_lambda;
    PINT pnum_densities;
    PINT pnum_lambdas;
    PPARAMETER_LIST pparms;
{
    DENSITY max_density;
    LAMBDA max_lambda;
    SEED seed;

    fprintf (stderr, "\nDo you want data on energies?");
    fprintf (stderr, " (%d = no, %d = yes)\n", FALSE, TRUE);
    scanf ("%d", &(pparms -> print_energy));
    printf ("Data on the energies %s requested.\n", pparms -> print_energy ?
           "is" : "is not");

    fprintf (stderr, "\nDo you want histograms of pair correlation?");
    fprintf (stderr, " (%d = no, %d = yes)\n", FALSE, TRUE);
    scanf ("%d", &(pparms -> print_hist));
    printf ("Histograms %s requested.\n", pparms -> print_hist ?
           "are" : "are not");

    fprintf (stderr, "\nDo you want data on spin correlation?");
    fprintf (stderr, " (%d = no, %d = yes)\n", FALSE, TRUE);
    scanf ("%d", &(pparms -> print_spin));
    printf ("Data on spin correlation %s requested.\n",
           pparms -> print_spin ? "is" : "is not");

    fprintf (stderr, "\nEnter the number of spins:\n");
    scanf ("%d", &(pparms -> spins));
    printf ("The number of spins allowed is %d.\n", pparms -> spins);

    fprintf (stderr, "\nEnter the number of colors:\n");
    scanf ("%d", &(pparms -> colors));
    printf ("The number of colors allowed is %d.\n", pparms -> colors);

    fprintf (stderr, "\nEnter the number of flavors:\n");
    scanf ("%d", &(pparms -> flavors));
    printf ("The number of flavors allowed is %d.\n", pparms -> flavors);

    fprintf (stderr, "\nEnter the number of indistinguishable quarks:\n");
    scanf ("%d", &(pparms -> indists));
    printf ("The number of indistinguishables allowed is %d.\n",
           pparms -> indists);

    fprintf (stderr, "\nEnter smallest lambda");
    fprintf (stderr, " (actual value is lambda*(rho)^2):\n");
    scanf ("%lf", pmin_lambda);
    printf ("Smallest lambda is %.10lg.\n", *pmin_lambda);

```

```

fprintf (stderr, "\nEnter largest lambda:\n");
scanf ("%lf", &max_lambda);
printf ("Largest lambda is %.10lg.\n", max_lambda);

fprintf (stderr, "\nEnter the number of lambdas:\n");
scanf ("%d", &pnum_lambdas);
printf ("The number of lambdas is %d.\n", *pnum_lambdas);

if (pparms -> print_energy) {
    fprintf (stderr, "\nEnter smallest density (rho):\n");
    scanf ("%lf", &pmin_density);
    printf ("Smallest density is %.10lg.\n", *pmin_density);

    fprintf (stderr, "\nEnter largest density:\n");
    scanf ("%lf", &max_density);
    printf ("Largest density is %.10lg.\n", max_density);

    fprintf (stderr, "\nEnter the number of densities:\n");
    scanf ("%d", &pnum_densities);
    printf ("The number of densities is %d.\n", *pnum_densities);
}
else {
    *pmin_density = 1.0;
    max_density = 1.0;
    *pnum_densities = 1;
}

fprintf (stderr, "\nEnter the number of runs per lambda:\n");
scanf ("%d", &(pparms -> runs));
printf ("The number of runs is %d.\n", pparms -> runs);

fprintf (stderr, "\nEnter the number of iterations per run:\n");
scanf ("%d", &(pparms -> iters));
printf ("The number of iterations is %d.\n", pparms -> iters);

if (pparms -> print_hist) {
    fprintf (stderr, "\nEnter the number of columns in the quark ");
    fprintf (stderr, " correlation histogram:\n");
    scanf ("%d", &(pparms -> columns));
    printf ("The number of columns is %d.\n", pparms -> columns);
}
else {
    pparms -> columns = 1;
}

fprintf (stderr, "\nEnter an integer between 1 and 2147483647 as a ");
fprintf (stderr, "random number seed:\n");
scanf ("%ld", &seed);
printf ("The seed entered is %ld\n", seed);

pparms -> quarks = pparms -> spins * pparms -> colors *
    pparms -> flavors * pparms -> indists;
pparms -> boundary = (POSITION) pparms -> quarks;

if (*pnum_lambdas != 1)

```

```
*pinc_lambda = log (max_lambda / *pmin_lambda) /  
    (*pnum_lambdas - 1);  
if (*pnum_densities != 1)  
    *pinc_density = log (max_density / *pmin_density) /  
        (*pnum_densities - 1);  
randomize (seed);  
return;  
}
```

```

#include "definitions.h"
#include <math.h>
metropolis (pparms, quark_table, color_table, spcolflav_table, histogram,
  spin_stats, lambda, dx_metr, ppotential, psquare_potential,
  ppercent_accepted)
PQUARK color_table[MAX_COLORS][MAX_QUARKS];
POSITION dx_metr;
INT histogram[2][2][2][MAX_COLUMNS];
LAMBDA lambda;
PPARAMETER_LIST pparms;
PPERCENT ppercent_accepted;
PENERGY2 ppotential;
PENERGY2 psquare_potential;
QUARK quark_table[MAX_QUARKS];
PQUARK spcolflav_table[MAX_SPINS][MAX_COLORS][MAX_FLAVORS][MAX_INDISTS];
INT spin_stats[MAX_SPINS * MAX_COLORS];
{
  LOGAMPLITUDE amplitude_log[MAX_SPINS][MAX_COLORS][MAX_FLAVORS];
  INT color1;
  INT color2;
  INT flavor1;
  INT flavor2;
  INT iter;
  BOOLEAN move_acceptable();
  LOGAMPLITUDE new_amplitude_log;
  LOGAMPLITUDE new_probability_log;
  ENERGY1 new_potential;
  INT num_accepted;
  LOGAMPLITUDE old_amplitude_log;
  LOGAMPLITUDE old_probability_log;
  ENERGY1 old_potential;
  ENERGY1 potential();
  INT quark1;
  INT quark2;
  RND_NUMBER random();
  INT spin1;
  INT spin2;
  LOGAMPLITUDE temp_amplitude_log;
  POSITION temp_position[MAX_INDISTS];
  ENERGY1 V_fourth_total;
  ENERGY1 V_squared_total;
  ENERGY1 V_total;
  AMPLITUDE wave_fun();
  old_potential = potential (pparms, color_table);
  old_amplitude_log = -lambda * old_potential * pparms -> quarks;
  for (spin2 = 0; spin2 < pparms -> spins; spin2++) {
    for (color2 = 0; color2 < pparms -> colors; color2++) {
      for (flavor2 = 0; flavor2 < pparms -> flavors; flavor2++) {
        amplitude_log[spin2][color2][flavor2] = log (
          wave_fun (pparms, spcolflav_table, spin2, color2, flavor2));
        old_amplitude_log += amplitude_log[spin2][color2][flavor2];
      }
    }
  }
  old_probability_log = 2 * old_amplitude_log;
}

```

```

V_total = 0.0;
V_squared_total = 0.0;
V_fourth_total = 0.0;
num_accepted = 0;
for (iter = 0; iter < pparms -> iters; iter++) {
  for (spin1 = 0; spin1 < pparms -> spins; spin1++) {
    for (color1 = 0; color1 < pparms -> colors; color1++) {
      for (flavor1 = 0; flavor1 < pparms -> flavors; flavor1++) {
        for (quark1 = 0; quark1 < pparms -> indists; quark1++) {
          temp_amplitude_log = amplitude_log[spin1][color1][flavor1];
          for (quark2 = 0; quark2 < pparms -> indists; quark2++) {
            temp_position[quark2] =
              spcolflav_table[spin1][color1][flavor1][quark2] -> position;
          }
          move_quark(pparms, dx_metr,
            &(spcolflav_table[spin1][color1][flavor1][quark1]->position);
          sort_color_table(pparms, color_table, color1);
          amplitude_log[spin1][color1][flavor1] = log (
            wave_fun(pparms, spcolflav_table, spin1, color1, flavor1));
          new_potential = potential(pparms, color_table);
          new_amplitude_log = -lambda * new_potential * pparms -> quarks;
          for (spin2 = 0; spin2 < pparms -> spins; spin2++) {
            for (color2 = 0; color2 < pparms -> colors; color2++) {
              for (flavor2 = 0; flavor2 < pparms -> flavors; flavor2++)
                new_amplitude_log += amplitude_log[spin2][color2][flavor2];
            }
          }
          new_probability_log = 2 * new_amplitude_log;
          if (move_acceptable(new_probability_log, old_probability_log))
            old_potential = new_potential;
            old_probability_log = new_probability_log;
            num_accepted++;
          }
          else {
            amplitude_log[spin1][color1][flavor1] = temp_amplitude_log;
            for (quark2 = 0; quark2 < pparms -> indists; quark2++) {
              spcolflav_table[spin1][color1][flavor1][quark2] -> position;
              temp_position[quark2];
            }
          }
        }
      }
    }
  }
}
pair_corr(pparms, quark_table, histogram);
spin_corr(pparms, color_table, spin_stats);
V_total += old_potential;
V_squared_total += square(old_potential);
V_fourth_total += square(square(old_potential));
}
*ppercnt_accepted = 100.0 * num_accepted /
  (pparms -> iters * pparms -> quarks);
V_total /= pparms -> iters;
V_squared_total /= pparms -> iters;
V_fourth_total /= pparms -> iters;
ppotential -> value = V_total;

```

```
ppotential -> error = squareroot ((V_squared_total - square (V_total)) /  
  pparms -> iters);  
psquare_potential -> value = V_squared_total;  
psquare_potential -> error = squareroot ((V_fourth_total - square  
  (V_squared_total)) / pparms -> iters);  
return;  
}
```

```
#include "definitions.h"
#include <math.h>
move_quark (pparms, dx_metr, pposition)
    POSITION dx metr;
    PPARAMETER_LIST pparms;
    PPOSITION pposition;
{
    RND_NUMBER random();
    *pposition += (2.0 * random () - 1.0) * dx_metr;
    if (*pposition < 0)
        *pposition += pparms -> boundary;
    if (*pposition > pparms -> boundary)
        *pposition -= pparms -> boundary;
    return;
}

BOOLEAN move_acceptable (new_probability_log, old_probability_log)
    LOGAMPLITUDE new_probability_log;
    LOGAMPLITUDE old_probability_log;
{
    LOGAMPLITUDE probability_log;
    probability_log = new_probability_log - old_probability_log;
    if (probability_log > 0)
        return (TRUE);
    if (probability_log < -100.0)
        return (FALSE);
    if (random () < exp (probability_log))
        return (TRUE);
    return (FALSE);
}
```

```
#include "definitions.h"
move_quark (pparms, dx_metr, pposition)
    POSITION dx_metr;
    PPARAMETER_LIST pparms;
    PPOSITION pposition;
{
    RND_NUMBER random();
    *pposition += (2.0 * random () - 1.0) * dx_metr;
    if (*pposition < 0)
        *pposition += pparms -> boundary;
    if (*pposition > pparms -> boundary)
        *pposition -= pparms -> boundary;
    return;
}
```

```
#include "definitions.h"
#include <math.h>
pair_corr (pparms, quark_table, histogram)
    INT histogram[2][2][2][MAX_COLUMNS];
    PPARAMETER_LIST pparms;
    QUARK quark_table[MAX_QUARKS];
{
    INT column;
    POSITION distance;
    INT quark1;
    INT quark2;
    BOOLEAN same_color;
    BOOLEAN same_flavor;
    BOOLEAN same_spin;
    for (quark1 = 0; quark1 < pparms -> quarks - 1; quark1++) {
        for (quark2 = quark1 + 1; quark2 < pparms -> quarks; quark2++) {
            distance = (quark_table[quark2].position -
                quark_table[quark1].position) / pparms -> boundary;
            if (distance < 0.0)
                distance += 1.0;
            column = (int) floor (pparms -> columns * distance);
            same_spin = quark_table[quark1].spin == quark_table[quark2].spin;
            same_color = quark_table[quark1].color == quark_table[quark2].color;
            same_flavor = quark_table[quark1].flavor == quark_table[quark2].flavor;
            histogram[same_spin][same_color][same_flavor][column]++;
        }
    }
    return;
}
```

```
#include "definitions.h"
ENERGY1 potential (pparms, color_table)
  PPARAMETER_LIST pparms;
  PQUARK color_table[MAX_COLORS][MAX_QUARKS];
{
  INT color1;
  INT color2;
  INT nucleon;
  ENERGY1 V;
  V = 0.0;
  for (nucleon = 0; nucleon < pparms -> quarks / pparms -> colors;
       nucleon++) {
    for (color1 = 0; color1 < pparms -> colors - 1; color1++) {
      for (color2 = 0; color2 < pparms -> colors; color2++) {
        V += square (color_table[color1][nucleon] -> position -
                    color_table[color2][nucleon] -> position);
      }
    }
  }
  V /= 2.0 * pparms -> quarks;
  return (V);
}
```

```

#include "definitions.h"
print_header(pparms)
  PPARAMETER_LIST pparms;
{
  if (pparms -> print_energy) {
    printf ("\n");
    printf ("Density Lambda   Kinetic energy           Potential energy   ");
    printf (" Energy per quark       dE/dlambda\n");
    printf ("===== ===== =====");
    printf (" =====\n");
  }
  return;
}

print_data (pparms, lambda, density, potential, kinetic, energy,
            dE_by_dlambda)
  ENERGY2    dE_by_dlambda;
  DENSITY     density;
  ENERGY2    energy;
  ENERGY2    kinetic;
  LAMBDA      lambda;
  ENERGY2    potential;
  PPARAMETER_LIST pparms;
{
  if (pparms -> print_energy) {
    printf ("%7.4lf %7.3lf %8.4lf +- %8.4lf %8.4lf +- ", density,
            lambda, kinetic.value, kinetic.error, potential.value);
    printf ("%8.4lf %8.4lf +- %8.4lf %8.4lf\n", potential.error,
            energy.value, energy.error, dE_by_dlambda.value);
  }
  return;
}

print_histogram (pparms, histogram, lambda)
  INT histogram[2][2][2][MAX_COLUMNS];
  LAMBDA lambda;
  PPARAMETER_LIST pparms;
{
  BOOLEAN color;
  INT column;
  BOOLEAN flavor;
  INT highest_count;
  INT i;
  INT num_stars;
  BOOLEAN spin;
  INT total_counts;
  if (pparms -> print_hist) {
    for (spin = 0; spin < 2; spin++) {
      for (color = 0; color < 2; color++) {
        for (flavor = 0; flavor < 2; flavor++) {
          total_counts = 0;
          highest_count = 1; /* to prevent division by zero */
          for (column = 0; column < pparms -> columns; column++) {
            total_counts += histogram[spin][color][flavor][column];
            if (histogram[spin][color][flavor][column] > highest_count)
              highest_count = histogram[spin][color][flavor][column];
          }
        }
      }
    }
  }
}

```

```

    }
    printf ("\nLambda = %lf * (density)^2 \n", lambda);
    printf ("Graph: spin %d, color %d, flavor %d", spin,
           color, flavor);
    printf (" (%d = same, %d = different)", TRUE, FALSE);
    printf ("\nCol Counts      (Total counts = %d)\n", total_counts);
    printf ("==== =====\n");
    for (column = 0; column < pparms -> columns; column++) {
        printf ("%3.d %6.d ", column,
              histogram[spin][color][flavor][column]);
        num_stars = (65 * histogram[spin][color][flavor][column]) /
            highest_count;
        for (i = 0; i < num_stars; i++)
            printf ("*");
        printf ("\n");
    }
}
}
}
}
return;
}

print_spin_stats (pparms, spin_stats, rho1_lambda)
PPARAMETER_LIST pparms;
LAMBDA rho1_lambda;
INT spin_stats[MAX_SPINS * MAX_COLORS];
{
    INT i;
    INT max_spin;
    INT num_stars;
    INT spin;
    INT total_counts;
    if (pparms -> print_spin) {
        max_spin = (pparms -> spins - 1) * pparms -> colors;
        total_counts = 0;
        for (spin = 0; spin <= max_spin; spin++)
            total_counts += spin_stats[spin];
        printf ("\nLambda = %lf * (density)^2 \n", rho1_lambda);
        printf ("\nSpin Counts      %%              (Total Counts = %d)\n",
              total_counts);
        printf ("==== ===== =====\n");
        for (spin = 0; spin <= max_spin; spin++) {
            printf ("%4.1lf %7.d %4.1lf      ", spin - max_spin / 2.0,
                  spin_stats[spin], 100.0 * (double) spin_stats[spin] /
                  (double) total_counts);
            num_stars = (60 * spin_stats[spin]) / total_counts;
            for (i = 0; i < num_stars; i++)
                printf ("*");
            printf ("\n");
        }
    }
}
return;
}

```

```
#include "definitions.h"
static SEED seed;
```

```
randomize (new_seed)
    SEED new_seed;
```

```
{
    INT      i;
    RND_NUMBER random ();
/* if (new_seed < 0L)
    new_seed = -new_seed;
new_seed %= 2147483648L;
if (new_seed % 2L == 0L)
    new_seed++;
seed = new_seed;
for (i = 0; i < 100; i++)
    random ();
return;
```

Not needed when SEED is unsigned */

```
}
RND_NUMBER random ()
{
    RND_NUMBER random_number;
    seed = (65539L * seed) % 2147483648L;
    random_number = ((RND_NUMBER) seed) / 2147483648.0;
    return (random_number);
}
```

```
#include "definitions.h"
sort_color_table (pparms, color_table, color)
    INT color;
    PQUARK color_table[MAX_COLORS][MAX_QUARKS];
    PPARAMETER_LIST pparms;
{
    INT end_of_table;
    INT quark;
    BOOLEAN sorted;
    PQUARK temp;
    end_of_table = pparms -> quarks / pparms -> colors;
    do {
        sorted = TRUE;
        end_of_table--;
        for (quark = 0; quark < end_of_table; quark++) {
            if (color_table[color][quark] -> position >
                color_table[color][quark + 1] -> position) {
                sorted = FALSE;
                temp = color_table[color][quark];
                color_table[color][quark] = color_table[color][quark + 1];
                color_table[color][quark + 1] = temp;
            }
        }
    } while (sorted == FALSE);
    return;
}
```

```
#include "definitions.h"
spin_corr (pparms, color_table, spin_stats)
    PQUARK color_table[MAX_COLORS][MAX_QUARKS];
    PPARAMETER_LIST pparms;
    INT spin_stats[MAX_SPINS * MAX_COLORS];
{
    INT color;
    INT nucleon;
    INT total_spin;
    for (nucleon = 0; nucleon < pparms -> quarks / pparms -> colors;
         nucleon++) {
        total_spin = 0;
        for (color = 0; color < pparms -> colors; color++) {
            total_spin += color_table[color][nucleon] -> spin;
        }
        spin_stats[total_spin]++;
    }
    return;
}
```

```
#include "definitions.h"
#include <math.h>
AMPLITUDE wave_fun (pparms, spcolflav_table, spin, color, flavor)
    INT color;
    INT flavor;
    PPARAMETER_LIST pparms;
    PQUARK spcolflav_table[MAX_SPINS][MAX_COLORS][MAX_FLAVORS][MAX_INDISTS];
    INT spin;
{
    INT quark1;                /* Indices for double product */
    INT quark2;
    AMPLITUDE amplitude = 1.0; /* value to be returned */
    /* Double product (short cut) that computes the Slater determinant. */
    for (quark1 = 0; quark1 < pparms -> indists - 1; quark1++) {
        for (quark2 = quark1 + 1; quark2 < pparms -> indists; quark2++) {
            amplitude *= sin (M_PI / pparms -> boundary *
                (spcolflav_table[spin][color][flavor][quark2] -> position -
                 spcolflav_table[spin][color][flavor][quark1] -> position));
        }
    }
    return (fabs(amplitude));
}
```

```

#define FALSE 0
#define MAX_COLORS 3
#define MAX_COLUMNS 200
#define MAX_FLAVORS 3
#define MAX_INDISTS 16
#define MAX_SPINS 2
#define MAX_QUARKS 48
#define square(x) ((x) * (x))
#define squareroot(x) (x < 0.0 ? 0.0 : sqrt (x))
#define START_UP_ITERATIONS 25
#define TRUE 1
typedef double AMPLITUDE, *PAMPLITUDE;
typedef int BOOLEAN, *PBOOLEAN;
typedef double DENSITY, *PDENSITY;
typedef double ENERGY1, *PENERGY1;
typedef int INT, *PINT;
typedef double LAMBDA, *PLAMBDA;
typedef double LOGAMPLITUDE, *PLOGAMPLITUDE;
typedef float PERCENT, *PPERCENT;
typedef double POSITION, *PPOSITION;
typedef double RND_NUMBER, *PRND_NUMBER;
typedef unsigned long int SEED, *PSEED;
typedef struct {
    ENERGY1 error;
    ENERGY1 value;
} ENERGY2, *PENERGY2;
typedef struct {
    POSITION boundary;
    INT colors;
    INT columns;
    INT flavors;
    INT indists;
    INT iters;
    BOOLEAN print_energy;
    BOOLEAN print_hist;
    BOOLEAN print_spin;
    INT runs;
    INT spins;
    INT quarks;
} PARAMETER_LIST, *PPARAMETER_LIST;
typedef struct {
    INT color;
    INT flavor;
    POSITION position;
    INT spin;
} QUARK, *PQUARK;

```

CFLAGS = -O

```
thesis: \  
aamain.o initialize.o input_values.o print.o potential.o wave_fun.o \  
random.o energies.o expectation.o sort.o metropolis.o move.o \  
pair_corr.o spin_corr.o \  
cc ${CFLAGS} -o thesis \  
aamain.o initialize.o input_values.o print.o potential.o wave_fun.o \  
random.o energies.o expectation.o sort.o metropolis.o move.o \  
pair_corr.o spin_corr.o -lm
```

lint:

```
lint aamain.c initialize.c input_values.c print.c potential.c \  
wave_fun.c random.c energies.c expectation.c sort.c metropolis.c \  
move.c pair_corr.c spin_corr.c -lm
```

Appendix C

Output for Spinless Fermions

Here is output from the main program. Actually, due to the short cut of scaling by λ/ρ^2 the data is not printed in this order. This data has been sorted by density, (ρ), and the clustering parameter, (λ), using the UNIX sort command.

Data on the energies is requested.
 Histograms are not requested.
 Data on spin correlation is not requested.
 The number of spins allowed is 1.
 The number of colors allowed is 3.
 The number of flavors allowed is 1.
 The number of indistinguishables allowed is 8.
 Smallest lambda is 0.001.
 Largest lambda is 0.01.
 The number of lambdas is 11.
 Smallest density is 0.1.
 Largest density is 20.
 The number of densities is 47.
 The number of runs is 4.
 The number of iterations is 1000.
 The seed entered is 8756876

Density	Lambda	Kinetic energy	Potential energy	Energy per quark
=====	=====	=====	=====	=====

0.1000	0.000	0.0018 +-	0.0000	505.3276 +-	47.5511	505.3294 +-	47.
0.1000	0.000	0.0018 +-	0.0000	144.4684 +-	2.7376	144.4702 +-	2.7
0.1000	0.000	0.0018 +-	0.0000	159.0947 +-	1.6600	159.0965 +-	1.6
0.1000	0.000	0.0018 +-	0.0000	172.3243 +-	6.1109	172.3261 +-	6.1
0.1000	0.000	0.0018 +-	0.0000	188.7156 +-	1.4883	188.7175 +-	1.4
0.1000	0.000	0.0018 +-	0.0000	205.2784 +-	4.9163	205.2802 +-	4.9
0.1000	0.000	0.0018 +-	0.0000	217.1555 +-	5.9454	217.1573 +-	5.9
0.1000	0.000	0.0018 +-	0.0000	222.7457 +-	3.8729	222.7476 +-	3.8
0.1000	0.000	0.0018 +-	0.0000	241.1382 +-	3.8815	241.1400 +-	3.8
0.1000	0.000	0.0018 +-	0.0000	267.5017 +-	7.5107	267.5035 +-	7.5
0.1000	0.000	0.0018 +-	0.0000	276.2933 +-	13.6334	276.2951 +-	13.6
0.1000	0.000	0.0018 +-	0.0000	289.5093 +-	9.2635	289.5111 +-	9.2
0.1000	0.000	0.0018 +-	0.0000	328.9669 +-	10.5388	328.9687 +-	10.5
0.1000	0.000	0.0018 +-	0.0000	356.8155 +-	25.9065	356.8173 +-	25.9
0.1000	0.000	0.0018 +-	0.0000	410.3083 +-	28.2947	410.3101 +-	28.2
0.1000	0.000	0.0018 +-	0.0000	440.4502 +-	48.6083	440.4520 +-	48.6
0.1000	0.000	0.0018 +-	0.0000	444.1247 +-	58.1015	444.1265 +-	58.1
0.1000	0.000	0.0019 +-	0.0000	131.6824 +-	1.9622	131.6843 +-	1.9
0.1000	0.001	0.0019 +-	0.0000	105.3881 +-	3.1570	105.3900 +-	3.1
0.1000	0.001	0.0019 +-	0.0000	119.2872 +-	2.5891	119.2891 +-	2.5
0.1000	0.001	0.0020 +-	0.0000	79.2905 +-	1.6686	79.2926 +-	1.6
0.1000	0.001	0.0020 +-	0.0000	82.8472 +-	3.1854	82.8493 +-	3.1
0.1000	0.001	0.0020 +-	0.0000	90.7424 +-	1.9427	90.7444 +-	1.9
0.1000	0.001	0.0021 +-	0.0000	70.8407 +-	0.6943	70.8428 +-	0.6
0.1000	0.002	0.0023 +-	0.0000	60.8904 +-	1.3744	60.8927 +-	1.3
0.1000	0.002	0.0024 +-	0.0000	52.4765 +-	0.4697	52.4789 +-	0.4
0.1000	0.003	0.0027 +-	0.0000	45.4529 +-	0.5874	45.4556 +-	0.5
0.1000	0.003	0.0029 +-	0.0000	37.6400 +-	0.5204	37.6429 +-	0.5
0.1000	0.004	0.0033 +-	0.0000	32.2333 +-	0.1564	32.2367 +-	0.1
0.1000	0.005	0.0038 +-	0.0000	26.5362 +-	0.5404	26.5400 +-	0.5
0.1000	0.006	0.0044 +-	0.0000	21.5488 +-	0.2005	21.5532 +-	0.2
0.1000	0.008	0.0052 +-	0.0001	18.0692 +-	0.3640	18.0744 +-	0.3
0.1000	0.010	0.0063 +-	0.0001	14.8463 +-	0.2040	14.8525 +-	0.2
0.1000	0.010	0.0063 +-	0.0001	14.9275 +-	0.2575	14.9338 +-	0.2
0.1000	0.013	0.0075 +-	0.0002	12.0042 +-	0.3157	12.0117 +-	0.3
0.1000	0.016	0.0091 +-	0.0003	9.6870 +-	0.3967	9.6961 +-	0.3
0.1000	0.020	0.0110 +-	0.0001	7.7021 +-	0.0525	7.7130 +-	0.0
0.1000	0.025	0.0138 +-	0.0002	6.3664 +-	0.1295	6.3802 +-	0.1
0.1000	0.032	0.0168 +-	0.0003	5.0115 +-	0.1077	5.0283 +-	0.1
0.1000	0.040	0.0210 +-	0.0002	4.0325 +-	0.0480	4.0535 +-	0.0
0.1000	0.050	0.0260 +-	0.0003	3.2170 +-	0.0462	3.2431 +-	0.0
0.1000	0.063	0.0327 +-	0.0005	2.5905 +-	0.0390	2.6233 +-	0.0
0.1000	0.079	0.0398 +-	0.0011	2.0102 +-	0.0606	2.0500 +-	0.0
0.1000	0.100	0.0505 +-	0.0006	1.6239 +-	0.0205	1.6745 +-	0.0
0.1000	0.100	0.0505 +-	0.0008	1.6231 +-	0.0267	1.6736 +-	0.0
0.1000	0.126	0.0619 +-	0.0009	1.2640 +-	0.0191	1.3259 +-	0.0
0.1000	0.158	0.0801 +-	0.0005	1.0394 +-	0.0066	1.1196 +-	0.0
0.1000	0.200	0.1054 +-	0.0102	0.8677 +-	0.0853	0.9731 +-	0.0
0.1000	0.251	0.1294 +-	0.0067	0.6742 +-	0.0354	0.8036 +-	0.0
0.1000	0.316	0.2530 +-	0.1603	0.8372 +-	0.5342	1.0901 +-	0.6
0.1000	0.398	0.2042 +-	0.0024	0.4257 +-	0.0051	0.6299 +-	0.0
0.1000	0.501	0.3579 +-	0.1858	0.4725 +-	0.2465	0.8304 +-	0.4
0.1000	0.631	2.6701 +-	4.0776	2.2341 +-	3.4141	4.9042 +-	7.4
0.1000	0.794	0.8149 +-	0.7240	0.4296 +-	0.3825	1.2445 +-	1.1
0.1000	1.000	1.5730 +-	1.8544	0.5237 +-	0.6181	2.0967 +-	2.4
0.1122	0.000	0.0023 +-	0.0000	114.7435 +-	2.1743	114.7458 +-	2.1
0.1122	0.000	0.0023 +-	0.0000	126.3604 +-	1.3185	126.3627 +-	1.3
0.1122	0.000	0.0023 +-	0.0000	136.8680 +-	4.8535	136.8703 +-	4.8
0.1122	0.000	0.0023 +-	0.0000	149.8867 +-	1.1820	149.8890 +-	1.1
0.1122	0.000	0.0023 +-	0.0000	163.0416 +-	3.9048	163.0439 +-	3.9
0.1122	0.000	0.0023 +-	0.0000	172.4749 +-	4.7221	172.4772 +-	4.7
0.1122	0.000	0.0023 +-	0.0000	176.9150 +-	3.0760	176.9173 +-	3.0
0.1122	0.000	0.0023 +-	0.0000	191.5231 +-	3.0828	191.5254 +-	3.0
0.1122	0.000	0.0023 +-	0.0000	212.4622 +-	5.9654	212.4645 +-	5.9
0.1122	0.000	0.0023 +-	0.0000	219.4450 +-	10.8283	219.4472 +-	10.8
0.1122	0.000	0.0023 +-	0.0000	229.9417 +-	7.3575	229.9440 +-	7.3

0.1122	0.000	0.0023 +-	0.0000	261.2807 +-	8.3704	261.2830 +-	8.3
0.1122	0.000	0.0023 +-	0.0000	283.3994 +-	20.5761	283.4017 +-	20.5
0.1122	0.000	0.0023 +-	0.0000	325.8859 +-	22.4730	325.8882 +-	22.4
0.1122	0.000	0.0023 +-	0.0000	349.8260 +-	38.6070	349.8282 +-	38.6
0.1122	0.000	0.0023 +-	0.0000	352.7444 +-	46.1469	352.7467 +-	46.1
0.1122	0.000	0.0023 +-	0.0000	401.3546 +-	37.7673	401.3568 +-	37.7
0.1122	0.001	0.0023 +-	0.0000	104.5883 +-	1.5585	104.5906 +-	1.5
0.1122	0.001	0.0024 +-	0.0000	83.7041 +-	2.5074	83.7065 +-	2.5
0.1122	0.001	0.0024 +-	0.0000	94.7435 +-	2.0564	94.7458 +-	2.0
0.1122	0.001	0.0025 +-	0.0000	72.0718 +-	1.5429	72.0743 +-	1.5
0.1122	0.001	0.0026 +-	0.0000	62.9762 +-	1.3253	62.9788 +-	1.3
0.1122	0.001	0.0026 +-	0.0000	65.8011 +-	2.5300	65.8037 +-	2.5
0.1122	0.002	0.0027 +-	0.0000	56.2649 +-	0.5514	56.2676 +-	0.5
0.1122	0.002	0.0028 +-	0.0000	48.3620 +-	1.0916	48.3649 +-	1.0
0.1122	0.003	0.0031 +-	0.0000	41.6793 +-	0.3730	41.6823 +-	0.3
0.1122	0.003	0.0033 +-	0.0000	36.1008 +-	0.4666	36.1042 +-	0.4
0.1122	0.004	0.0037 +-	0.0000	29.8954 +-	0.4133	29.8991 +-	0.4
0.1122	0.005	0.0042 +-	0.0000	25.6012 +-	0.1242	25.6054 +-	0.1
0.1122	0.006	0.0048 +-	0.0001	21.0763 +-	0.4292	21.0811 +-	0.4
0.1122	0.008	0.0055 +-	0.0000	17.1151 +-	0.1593	17.1206 +-	0.1
0.1122	0.010	0.0066 +-	0.0001	14.3514 +-	0.2891	14.3580 +-	0.2
0.1122	0.013	0.0079 +-	0.0001	11.7916 +-	0.1620	11.7995 +-	0.1
0.1122	0.013	0.0079 +-	0.0001	11.8561 +-	0.2045	11.8640 +-	0.2
0.1122	0.016	0.0095 +-	0.0002	9.5343 +-	0.2507	9.5437 +-	0.2
0.1122	0.020	0.0115 +-	0.0004	7.6939 +-	0.3151	7.7054 +-	0.3
0.1122	0.025	0.0138 +-	0.0001	6.1173 +-	0.0417	6.1312 +-	0.0
0.1122	0.032	0.0174 +-	0.0003	5.0565 +-	0.1029	5.0739 +-	0.1
0.1122	0.040	0.0212 +-	0.0004	3.9804 +-	0.0856	4.0016 +-	0.0
0.1122	0.050	0.0264 +-	0.0003	3.2028 +-	0.0381	3.2292 +-	0.0
0.1122	0.063	0.0328 +-	0.0004	2.5551 +-	0.0367	2.5879 +-	0.0
0.1122	0.079	0.0412 +-	0.0006	2.0575 +-	0.0310	2.0987 +-	0.0
0.1122	0.100	0.0502 +-	0.0014	1.5966 +-	0.0482	1.6468 +-	0.0
0.1122	0.126	0.0636 +-	0.0008	1.2898 +-	0.0163	1.3534 +-	0.0
0.1122	0.126	0.0636 +-	0.0010	1.2892 +-	0.0212	1.3527 +-	0.0
0.1122	0.159	0.0779 +-	0.0011	1.0039 +-	0.0151	1.0819 +-	0.0
0.1122	0.200	0.1009 +-	0.0006	0.8256 +-	0.0053	0.9264 +-	0.0
0.1122	0.251	0.1327 +-	0.0128	0.6892 +-	0.0678	0.8219 +-	0.0
0.1122	0.316	0.1629 +-	0.0084	0.5355 +-	0.0281	0.6984 +-	0.0
0.1122	0.398	0.3185 +-	0.2018	0.6649 +-	0.4243	0.9834 +-	0.6
0.1122	0.501	0.2571 +-	0.0030	0.3381 +-	0.0040	0.5952 +-	0.0
0.1122	0.631	0.4506 +-	0.2339	0.3753 +-	0.1958	0.8259 +-	0.4
0.1122	0.794	3.3617 +-	5.1339	1.7744 +-	2.7117	5.1362 +-	7.8
0.1122	1.000	1.0260 +-	0.9115	0.3412 +-	0.3038	1.3672 +-	1.2
0.1122	1.259	1.9804 +-	2.3347	0.4160 +-	0.4909	2.3964 +-	2.8
0.1259	0.000	0.0029 +-	0.0000	100.3613 +-	1.0472	100.3642 +-	1.0
0.1259	0.000	0.0029 +-	0.0000	108.7069 +-	3.8549	108.7098 +-	3.8
0.1259	0.000	0.0029 +-	0.0000	119.0470 +-	0.9388	119.0498 +-	0.9
0.1259	0.000	0.0029 +-	0.0000	129.4952 +-	3.1014	129.4980 +-	3.1
0.1259	0.000	0.0029 +-	0.0000	136.9876 +-	3.7505	136.9904 +-	3.7
0.1259	0.000	0.0029 +-	0.0000	140.5141 +-	2.4431	140.5169 +-	2.4
0.1259	0.000	0.0029 +-	0.0000	152.1165 +-	2.4485	152.1194 +-	2.4
0.1259	0.000	0.0029 +-	0.0000	168.7473 +-	4.7380	168.7502 +-	4.7
0.1259	0.000	0.0029 +-	0.0000	174.2934 +-	8.6003	174.2962 +-	8.6
0.1259	0.000	0.0029 +-	0.0000	182.6304 +-	5.8437	182.6332 +-	5.8
0.1259	0.000	0.0029 +-	0.0000	207.5213 +-	6.6482	207.5241 +-	6.6
0.1259	0.000	0.0029 +-	0.0000	225.0889 +-	16.3425	225.0918 +-	16.3
0.1259	0.000	0.0029 +-	0.0000	258.8337 +-	17.8491	258.8365 +-	17.8
0.1259	0.000	0.0029 +-	0.0000	277.8480 +-	30.6635	277.8508 +-	30.6
0.1259	0.000	0.0029 +-	0.0000	280.1659 +-	36.6520	280.1688 +-	36.6
0.1259	0.000	0.0029 +-	0.0000	318.7744 +-	29.9965	318.7773 +-	29.9
0.1259	0.001	0.0029 +-	0.0000	91.1346 +-	1.7269	91.1375 +-	1.7
0.1259	0.001	0.0030 +-	0.0000	75.2496 +-	1.6333	75.2526 +-	1.6
0.1259	0.001	0.0030 +-	0.0000	83.0688 +-	1.2378	83.0718 +-	1.2
0.1259	0.001	0.0031 +-	0.0000	57.2428 +-	1.2255	57.2459 +-	1.2
0.1259	0.001	0.0031 +-	0.0000	66.4817 +-	1.9915	66.4847 +-	1.9
0.1259	0.002	0.0032 +-	0.0000	50.0186 +-	1.0526	50.0219 +-	1.0

0.1259	0.002	0.0032 +-	0.0000	52.2623 +-	2.0094	52.2655 +-	2.0
0.1259	0.002	0.0034 +-	0.0000	44.6882 +-	0.4380	44.6916 +-	0.4
0.1259	0.003	0.0036 +-	0.0000	38.4114 +-	0.8670	38.4149 +-	0.8
0.1259	0.003	0.0038 +-	0.0000	33.1036 +-	0.2963	33.1075 +-	0.2
0.1259	0.004	0.0042 +-	0.0000	28.6729 +-	0.3706	28.6772 +-	0.3
0.1259	0.005	0.0046 +-	0.0000	23.7443 +-	0.3283	23.7489 +-	0.3
0.1259	0.006	0.0053 +-	0.0000	20.3337 +-	0.0987	20.3390 +-	0.0
0.1259	0.008	0.0060 +-	0.0001	16.7398 +-	0.3409	16.7458 +-	0.3
0.1259	0.010	0.0069 +-	0.0000	13.5936 +-	0.1265	13.6005 +-	0.1
0.1259	0.013	0.0083 +-	0.0001	11.3985 +-	0.2296	11.4068 +-	0.2
0.1259	0.016	0.0099 +-	0.0001	9.3654 +-	0.1287	9.3754 +-	0.1
0.1259	0.016	0.0100 +-	0.0001	9.4167 +-	0.1624	9.4266 +-	0.1
0.1259	0.020	0.0119 +-	0.0002	7.5726 +-	0.1991	7.5845 +-	0.1
0.1259	0.025	0.0144 +-	0.0005	6.1109 +-	0.2502	6.1253 +-	0.2
0.1259	0.032	0.0174 +-	0.0001	4.8587 +-	0.0331	4.8761 +-	0.0
0.1259	0.040	0.0220 +-	0.0004	4.0161 +-	0.0817	4.0381 +-	0.0
0.1259	0.050	0.0267 +-	0.0005	3.1614 +-	0.0680	3.1881 +-	0.0
0.1259	0.063	0.0332 +-	0.0004	2.5438 +-	0.0303	2.5771 +-	0.0
0.1259	0.079	0.0413 +-	0.0006	2.0294 +-	0.0291	2.0707 +-	0.0
0.1259	0.100	0.0519 +-	0.0007	1.6342 +-	0.0246	1.6861 +-	0.0
0.1259	0.126	0.0632 +-	0.0018	1.2681 +-	0.0382	1.3312 +-	0.0
0.1259	0.159	0.0800 +-	0.0013	1.0239 +-	0.0169	1.1040 +-	0.0
0.1259	0.159	0.0801 +-	0.0010	1.0244 +-	0.0129	1.1045 +-	0.0
0.1259	0.200	0.0981 +-	0.0014	0.7974 +-	0.0120	0.8955 +-	0.0
0.1259	0.251	0.1270 +-	0.0008	0.6557 +-	0.0042	0.7827 +-	0.0
0.1259	0.316	0.1671 +-	0.0162	0.5474 +-	0.0538	0.7145 +-	0.0
0.1259	0.398	0.2051 +-	0.0106	0.4253 +-	0.0223	0.6304 +-	0.0
0.1259	0.501	0.4010 +-	0.2540	0.5281 +-	0.3370	0.9291 +-	0.5
0.1259	0.631	0.3237 +-	0.0038	0.2686 +-	0.0032	0.5923 +-	0.0
0.1259	0.794	0.5673 +-	0.2945	0.2981 +-	0.1555	0.8654 +-	0.4
0.1259	1.000	4.2326 +-	6.4639	1.4093 +-	2.1537	5.6420 +-	8.6
0.1259	1.259	1.2918 +-	1.1477	0.2710 +-	0.2413	1.5628 +-	1.3
0.1259	1.585	2.4935 +-	2.9396	0.3304 +-	0.3899	2.8239 +-	3.3
0.1413	0.000	0.0036 +-	0.0000	86.3400 +-	3.0617	86.3437 +-	3.0
0.1413	0.000	0.0036 +-	0.0000	94.5526 +-	0.7457	94.5562 +-	0.7
0.1413	0.000	0.0036 +-	0.0000	102.8511 +-	2.4632	102.8547 +-	2.4
0.1413	0.000	0.0036 +-	0.0000	108.8019 +-	2.9788	108.8055 +-	2.9
0.1413	0.000	0.0036 +-	0.0000	111.6028 +-	1.9404	111.6064 +-	1.9
0.1413	0.000	0.0036 +-	0.0000	120.8180 +-	1.9447	120.8216 +-	1.9
0.1413	0.000	0.0036 +-	0.0000	134.0269 +-	3.7631	134.0305 +-	3.7
0.1413	0.000	0.0036 +-	0.0000	138.4319 +-	6.8308	138.4355 +-	6.8
0.1413	0.000	0.0036 +-	0.0000	145.0535 +-	4.6413	145.0571 +-	4.6
0.1413	0.000	0.0036 +-	0.0000	164.8230 +-	5.2803	164.8266 +-	5.2
0.1413	0.000	0.0036 +-	0.0000	178.7761 +-	12.9800	178.7797 +-	12.9
0.1413	0.000	0.0036 +-	0.0000	205.5777 +-	14.1766	205.5813 +-	14.1
0.1413	0.000	0.0036 +-	0.0000	220.6797 +-	24.3543	220.6833 +-	24.3
0.1413	0.000	0.0036 +-	0.0000	222.5208 +-	29.1107	222.5244 +-	29.1
0.1413	0.000	0.0036 +-	0.0000	253.1854 +-	23.8246	253.1890 +-	23.8
0.1413	0.001	0.0037 +-	0.0000	65.9771 +-	0.9831	65.9808 +-	0.9
0.1413	0.001	0.0037 +-	0.0000	72.3833 +-	1.3716	72.3870 +-	1.3
0.1413	0.001	0.0037 +-	0.0000	79.7116 +-	0.8317	79.7152 +-	0.8
0.1413	0.001	0.0038 +-	0.0000	52.8028 +-	1.5817	52.8067 +-	1.5
0.1413	0.001	0.0038 +-	0.0000	59.7667 +-	1.2972	59.7705 +-	1.2
0.1413	0.002	0.0039 +-	0.0000	45.4649 +-	0.9733	45.4688 +-	0.9
0.1413	0.002	0.0041 +-	0.0000	39.7271 +-	0.8360	39.7312 +-	0.8
0.1413	0.002	0.0041 +-	0.0000	41.5091 +-	1.5960	41.5132 +-	1.5
0.1413	0.003	0.0043 +-	0.0000	35.4935 +-	0.3479	35.4977 +-	0.3
0.1413	0.003	0.0045 +-	0.0000	30.5081 +-	0.6886	30.5126 +-	0.6
0.1413	0.004	0.0048 +-	0.0000	26.2924 +-	0.2353	26.2973 +-	0.2
0.1413	0.005	0.0053 +-	0.0000	22.7734 +-	0.2943	22.7787 +-	0.2
0.1413	0.006	0.0058 +-	0.0000	18.8588 +-	0.2607	18.8647 +-	0.2
0.1413	0.008	0.0066 +-	0.0000	16.1499 +-	0.0784	16.1566 +-	0.0
0.1413	0.010	0.0076 +-	0.0001	13.2955 +-	0.2707	13.3031 +-	0.2
0.1413	0.013	0.0087 +-	0.0000	10.7967 +-	0.1005	10.8054 +-	0.1
0.1413	0.016	0.0104 +-	0.0001	9.0532 +-	0.1824	9.0637 +-	0.1
0.1413	0.020	0.0125 +-	0.0001	7.4385 +-	0.1022	7.4509 +-	0.1

0.1413	0.020	0.0125 +-	0.0002	7.4792 +-	0.1290	7.4917 +-	0.1
0.1413	0.025	0.0150 +-	0.0003	6.0145 +-	0.1582	6.0295 +-	0.1
0.1413	0.032	0.0182 +-	0.0006	4.8535 +-	0.1988	4.8717 +-	0.1
0.1413	0.040	0.0220 +-	0.0001	3.8590 +-	0.0263	3.8809 +-	0.0
0.1413	0.050	0.0276 +-	0.0005	3.1898 +-	0.0649	3.2174 +-	0.0
0.1413	0.063	0.0336 +-	0.0006	2.5109 +-	0.0540	2.5445 +-	0.0
0.1413	0.079	0.0419 +-	0.0005	2.0204 +-	0.0240	2.0623 +-	0.0
0.1413	0.100	0.0520 +-	0.0007	1.6118 +-	0.0232	1.6638 +-	0.0
0.1413	0.126	0.0653 +-	0.0009	1.2979 +-	0.0196	1.3633 +-	0.0
0.1413	0.159	0.0795 +-	0.0023	1.0072 +-	0.0304	1.0867 +-	0.0
0.1413	0.200	0.1008 +-	0.0012	0.8136 +-	0.0103	0.9145 +-	0.0
0.1413	0.200	0.1008 +-	0.0016	0.8132 +-	0.0134	0.9140 +-	0.0
0.1413	0.251	0.1235 +-	0.0018	0.6333 +-	0.0095	0.7569 +-	0.0
0.1413	0.316	0.1599 +-	0.0010	0.5208 +-	0.0033	0.6807 +-	0.0
0.1413	0.398	0.2104 +-	0.0203	0.4347 +-	0.0427	0.6452 +-	0.0
0.1413	0.501	0.2583 +-	0.0134	0.3378 +-	0.0177	0.5961 +-	0.0
0.1413	0.631	0.5049 +-	0.3199	0.4195 +-	0.2676	0.9243 +-	0.5
0.1413	0.795	0.4076 +-	0.0048	0.2133 +-	0.0025	0.6209 +-	0.0
0.1413	1.000	0.7143 +-	0.3708	0.2367 +-	0.1235	0.9510 +-	0.4
0.1413	1.259	5.3291 +-	8.1384	1.1194 +-	1.7106	6.4485 +-	9.8
0.1413	1.585	1.6265 +-	1.4450	0.2152 +-	0.1916	1.8417 +-	1.6
0.1413	1.996	3.1394 +-	3.7011	0.2624 +-	0.3097	3.4018 +-	4.0
0.1585	0.000	0.0045 +-	0.0000	81.6891 +-	1.9564	81.6936 +-	1.9
0.1585	0.000	0.0045 +-	0.0000	86.4155 +-	2.3659	86.4200 +-	2.3
0.1585	0.000	0.0045 +-	0.0000	88.6401 +-	1.5412	88.6446 +-	1.5
0.1585	0.000	0.0045 +-	0.0000	95.9593 +-	1.5446	95.9638 +-	1.5
0.1585	0.000	0.0045 +-	0.0000	106.4504 +-	2.9888	106.4549 +-	2.9
0.1585	0.000	0.0045 +-	0.0000	109.9490 +-	5.4253	109.9535 +-	5.4
0.1585	0.000	0.0045 +-	0.0000	115.2082 +-	3.6863	115.2127 +-	3.6
0.1585	0.000	0.0045 +-	0.0000	130.9101 +-	4.1938	130.9146 +-	4.1
0.1585	0.000	0.0045 +-	0.0000	141.9922 +-	10.3093	141.9968 +-	10.3
0.1585	0.000	0.0045 +-	0.0000	163.2793 +-	11.2597	163.2839 +-	11.2
0.1585	0.000	0.0045 +-	0.0000	175.2741 +-	19.3434	175.2786 +-	19.3
0.1585	0.000	0.0045 +-	0.0000	176.7363 +-	23.1211	176.7408 +-	23.1
0.1585	0.000	0.0045 +-	0.0000	201.0916 +-	18.9226	201.0961 +-	18.9
0.1585	0.000	0.0046 +-	0.0000	75.0981 +-	0.5922	75.1026 +-	0.5
0.1585	0.001	0.0046 +-	0.0000	57.4902 +-	1.0894	57.4948 +-	1.0
0.1585	0.001	0.0046 +-	0.0000	63.3106 +-	0.6606	63.3152 +-	0.6
0.1585	0.001	0.0046 +-	0.0000	68.5753 +-	2.4318	68.5798 +-	2.4
0.1585	0.001	0.0047 +-	0.0000	47.4695 +-	1.0303	47.4743 +-	1.0
0.1585	0.001	0.0047 +-	0.0000	52.4021 +-	0.7808	52.4068 +-	0.7
0.1585	0.002	0.0048 +-	0.0000	41.9385 +-	1.2563	41.9433 +-	1.2
0.1585	0.002	0.0050 +-	0.0000	36.1103 +-	0.7731	36.1153 +-	0.7
0.1585	0.003	0.0051 +-	0.0000	31.5531 +-	0.6640	31.5582 +-	0.6
0.1585	0.003	0.0051 +-	0.0000	32.9685 +-	1.2676	32.9736 +-	1.2
0.1585	0.003	0.0054 +-	0.0000	28.1905 +-	0.2763	28.1959 +-	0.2
0.1585	0.004	0.0057 +-	0.0000	24.2309 +-	0.5469	24.2366 +-	0.5
0.1585	0.005	0.0061 +-	0.0000	20.8827 +-	0.1869	20.8888 +-	0.1
0.1585	0.006	0.0067 +-	0.0000	18.0877 +-	0.2338	18.0944 +-	0.2
0.1585	0.008	0.0074 +-	0.0000	14.9786 +-	0.2071	14.9859 +-	0.2
0.1585	0.010	0.0084 +-	0.0000	12.8270 +-	0.0622	12.8354 +-	0.0
0.1585	0.013	0.0095 +-	0.0001	10.5599 +-	0.2150	10.5695 +-	0.2
0.1585	0.016	0.0110 +-	0.0001	8.5752 +-	0.0798	8.5862 +-	0.0
0.1585	0.020	0.0131 +-	0.0002	7.1905 +-	0.1449	7.2036 +-	0.1
0.1585	0.025	0.0157 +-	0.0002	5.9080 +-	0.0812	5.9237 +-	0.0
0.1585	0.025	0.0158 +-	0.0002	5.9403 +-	0.1025	5.9561 +-	0.1
0.1585	0.032	0.0189 +-	0.0004	4.7770 +-	0.1256	4.7958 +-	0.1
0.1585	0.040	0.0229 +-	0.0008	3.8549 +-	0.1579	3.8778 +-	0.1
0.1585	0.050	0.0276 +-	0.0002	3.0650 +-	0.0209	3.0926 +-	0.0
0.1585	0.063	0.0348 +-	0.0006	2.5335 +-	0.0515	2.5683 +-	0.0
0.1585	0.079	0.0423 +-	0.0008	1.9943 +-	0.0429	2.0366 +-	0.0
0.1585	0.100	0.0527 +-	0.0006	1.6047 +-	0.0191	1.6574 +-	0.0
0.1585	0.126	0.0654 +-	0.0009	1.2802 +-	0.0184	1.3456 +-	0.0
0.1585	0.159	0.0823 +-	0.0012	1.0309 +-	0.0155	1.1131 +-	0.0
0.1585	0.200	0.1001 +-	0.0029	0.7999 +-	0.0241	0.9001 +-	0.0
0.1585	0.251	0.1269 +-	0.0015	0.6462 +-	0.0082	0.7732 +-	0.0

0.1585	0.251	0.1269 +-	0.0020	0.6459 +-	0.0106	0.7728 +-	0.0
0.1585	0.316	0.1555 +-	0.0023	0.5030 +-	0.0076	0.6586 +-	0.0
0.1585	0.398	0.2014 +-	0.0013	0.4136 +-	0.0026	0.6150 +-	0.0
0.1585	0.501	0.2649 +-	0.0256	0.3453 +-	0.0340	0.6102 +-	0.0
0.1585	0.631	0.3252 +-	0.0168	0.2683 +-	0.0141	0.5935 +-	0.0
0.1585	0.795	0.6356 +-	0.4027	0.3331 +-	0.2126	0.9688 +-	0.6
0.1585	1.000	0.5132 +-	0.0061	0.1694 +-	0.0020	0.6826 +-	0.0
0.1585	1.259	0.8993 +-	0.4669	0.1880 +-	0.0981	1.0874 +-	0.5
0.1585	1.586	6.7096 +-	10.2467	0.8891 +-	1.3586	7.5987 +-	11.6
0.1585	1.996	2.0478 +-	1.8193	0.1709 +-	0.1522	2.2188 +-	1.9
0.1585	2.513	3.9527 +-	4.6599	0.2084 +-	0.2460	4.1611 +-	4.9
0.1779	0.000	0.0057 +-	0.0000	64.8813 +-	1.5539	64.8870 +-	1.5
0.1779	0.000	0.0057 +-	0.0000	68.6352 +-	1.8791	68.6409 +-	1.8
0.1779	0.000	0.0057 +-	0.0000	70.4021 +-	1.2241	70.4078 +-	1.2
0.1779	0.000	0.0057 +-	0.0000	76.2153 +-	1.2268	76.2210 +-	1.2
0.1779	0.000	0.0057 +-	0.0000	84.5478 +-	2.3739	84.5535 +-	2.3
0.1779	0.000	0.0057 +-	0.0000	87.3266 +-	4.3090	87.3323 +-	4.3
0.1779	0.000	0.0057 +-	0.0000	91.5037 +-	2.9279	91.5094 +-	2.9
0.1779	0.000	0.0057 +-	0.0000	103.9748 +-	3.3309	103.9805 +-	3.3
0.1779	0.000	0.0057 +-	0.0000	112.7768 +-	8.1881	112.7825 +-	8.1
0.1779	0.000	0.0057 +-	0.0000	129.6840 +-	8.9430	129.6897 +-	8.9
0.1779	0.000	0.0057 +-	0.0000	139.2108 +-	15.3634	139.2165 +-	15.3
0.1779	0.000	0.0057 +-	0.0000	140.3722 +-	18.3638	140.3779 +-	18.3
0.1779	0.000	0.0057 +-	0.0000	159.7162 +-	15.0292	159.7219 +-	15.0
0.1779	0.001	0.0057 +-	0.0000	59.6464 +-	0.4704	59.6521 +-	0.4
0.1779	0.001	0.0058 +-	0.0000	45.6614 +-	0.8652	45.6672 +-	0.8
0.1779	0.001	0.0058 +-	0.0000	50.2842 +-	0.5247	50.2900 +-	0.5
0.1779	0.001	0.0058 +-	0.0000	54.4656 +-	1.9314	54.4714 +-	1.9
0.1779	0.001	0.0059 +-	0.0000	41.6202 +-	0.6202	41.6261 +-	0.6
0.1779	0.002	0.0060 +-	0.0000	37.7025 +-	0.8183	37.7085 +-	0.8
0.1779	0.002	0.0061 +-	0.0000	33.3095 +-	0.9978	33.3156 +-	0.9
0.1779	0.003	0.0062 +-	0.0000	28.6805 +-	0.6140	28.6867 +-	0.6
0.1779	0.003	0.0064 +-	0.0000	25.0609 +-	0.5274	25.0674 +-	0.5
0.1779	0.003	0.0065 +-	0.0000	26.1851 +-	1.0068	26.1916 +-	1.0
0.1779	0.004	0.0068 +-	0.0000	22.3902 +-	0.2194	22.3970 +-	0.2
0.1779	0.005	0.0071 +-	0.0000	19.2453 +-	0.4344	19.2525 +-	0.4
0.1779	0.006	0.0077 +-	0.0000	16.5860 +-	0.1485	16.5937 +-	0.1
0.1779	0.008	0.0084 +-	0.0000	14.3661 +-	0.1857	14.3745 +-	0.1
0.1779	0.010	0.0093 +-	0.0000	11.8967 +-	0.1645	11.9059 +-	0.1
0.1779	0.013	0.0105 +-	0.0000	10.1878 +-	0.0494	10.1984 +-	0.0
0.1779	0.016	0.0120 +-	0.0001	8.3872 +-	0.1708	8.3992 +-	0.1
0.1779	0.020	0.0138 +-	0.0001	6.8108 +-	0.0634	6.8247 +-	0.0
0.1779	0.025	0.0165 +-	0.0002	5.7110 +-	0.1151	5.7275 +-	0.1
0.1779	0.032	0.0198 +-	0.0002	4.6924 +-	0.0645	4.7122 +-	0.0
0.1779	0.032	0.0199 +-	0.0002	4.7181 +-	0.0814	4.7379 +-	0.0
0.1779	0.040	0.0238 +-	0.0005	3.7941 +-	0.0998	3.8178 +-	0.1
0.1779	0.050	0.0288 +-	0.0009	3.0617 +-	0.1254	3.0905 +-	0.1
0.1779	0.063	0.0348 +-	0.0002	2.4343 +-	0.0166	2.4691 +-	0.0
0.1779	0.079	0.0438 +-	0.0008	2.0122 +-	0.0409	2.0560 +-	0.0
0.1779	0.100	0.0533 +-	0.0010	1.5840 +-	0.0340	1.6372 +-	0.0
0.1779	0.126	0.0664 +-	0.0007	1.2745 +-	0.0152	1.3409 +-	0.0
0.1779	0.159	0.0824 +-	0.0011	1.0168 +-	0.0146	1.0992 +-	0.0
0.1779	0.200	0.1036 +-	0.0015	0.8188 +-	0.0123	0.9224 +-	0.0
0.1779	0.251	0.1261 +-	0.0036	0.6353 +-	0.0192	0.7614 +-	0.0
0.1779	0.316	0.1598 +-	0.0019	0.5133 +-	0.0065	0.6731 +-	0.0
0.1779	0.316	0.1598 +-	0.0025	0.5130 +-	0.0085	0.6728 +-	0.0
0.1779	0.398	0.1958 +-	0.0029	0.3995 +-	0.0060	0.5954 +-	0.0
0.1779	0.501	0.2535 +-	0.0016	0.3285 +-	0.0021	0.5820 +-	0.0
0.1779	0.631	0.3336 +-	0.0322	0.2743 +-	0.0270	0.6078 +-	0.0
0.1779	0.795	0.4095 +-	0.0212	0.2131 +-	0.0112	0.6225 +-	0.0
0.1779	1.001	0.8003 +-	0.5070	0.2646 +-	0.1688	1.0649 +-	0.6
0.1779	1.260	0.6461 +-	0.0076	0.1346 +-	0.0016	0.7807 +-	0.0
0.1779	1.586	1.1323 +-	0.5878	0.1493 +-	0.0779	1.2816 +-	0.6
0.1779	1.996	8.4478 +-	12.9011	0.7061 +-	1.0791	9.1539 +-	13.9
0.1779	2.513	2.5783 +-	2.2906	0.1358 +-	0.1209	2.7141 +-	2.4
0.1779	3.164	4.9767 +-	5.8670	0.1655 +-	0.1954	5.1422 +-	6.0

0.1996	0.000	0.0072 +-	0.0000	54.5132 +-	1.4925	54.5204 +-	1.4
0.1996	0.000	0.0072 +-	0.0000	55.9166 +-	0.9722	55.9238 +-	0.9
0.1996	0.000	0.0072 +-	0.0000	60.5337 +-	0.9744	60.5409 +-	0.9
0.1996	0.000	0.0072 +-	0.0000	67.1518 +-	1.8854	67.1590 +-	1.8
0.1996	0.000	0.0072 +-	0.0000	69.3588 +-	3.4224	69.3660 +-	3.4
0.1996	0.000	0.0072 +-	0.0000	72.6765 +-	2.3254	72.6837 +-	2.3
0.1996	0.000	0.0072 +-	0.0000	82.5816 +-	2.6456	82.5888 +-	2.6
0.1996	0.000	0.0072 +-	0.0000	89.5726 +-	6.5034	89.5797 +-	6.5
0.1996	0.000	0.0072 +-	0.0000	103.0010 +-	7.1029	103.0082 +-	7.1
0.1996	0.000	0.0072 +-	0.0000	110.5677 +-	12.2023	110.5748 +-	12.2
0.1996	0.000	0.0072 +-	0.0000	111.4901 +-	14.5854	111.4972 +-	14.5
0.1996	0.000	0.0072 +-	0.0000	126.8540 +-	11.9369	126.8612 +-	11.9
0.1996	0.001	0.0072 +-	0.0000	43.2591 +-	1.5340	43.2664 +-	1.5
0.1996	0.001	0.0072 +-	0.0000	47.3739 +-	0.3736	47.3811 +-	0.3
0.1996	0.001	0.0072 +-	0.0000	51.5317 +-	1.2342	51.5389 +-	1.2
0.1996	0.001	0.0073 +-	0.0000	36.2664 +-	0.6872	36.2737 +-	0.6
0.1996	0.001	0.0073 +-	0.0000	39.9381 +-	0.4167	39.9454 +-	0.4
0.1996	0.002	0.0074 +-	0.0000	33.0567 +-	0.4926	33.0641 +-	0.4
0.1996	0.002	0.0075 +-	0.0000	29.9451 +-	0.6500	29.9526 +-	0.6
0.1996	0.003	0.0077 +-	0.0000	26.4559 +-	0.7925	26.4636 +-	0.7
0.1996	0.003	0.0079 +-	0.0000	22.7794 +-	0.4877	22.7872 +-	0.4
0.1996	0.004	0.0081 +-	0.0000	19.9046 +-	0.4189	19.9127 +-	0.4
0.1996	0.004	0.0082 +-	0.0000	20.7974 +-	0.7996	20.8056 +-	0.7
0.1996	0.005	0.0085 +-	0.0000	17.7834 +-	0.1743	17.7919 +-	0.1
0.1996	0.006	0.0090 +-	0.0000	15.2855 +-	0.3450	15.2945 +-	0.3
0.1996	0.008	0.0097 +-	0.0000	13.1734 +-	0.1179	13.1830 +-	0.1
0.1996	0.010	0.0106 +-	0.0000	11.4102 +-	0.1475	11.4208 +-	0.1
0.1996	0.013	0.0117 +-	0.0001	9.4489 +-	0.1306	9.4605 +-	0.1
0.1996	0.016	0.0133 +-	0.0000	8.0916 +-	0.0393	8.1049 +-	0.0
0.1996	0.020	0.0151 +-	0.0002	6.6615 +-	0.1357	6.6766 +-	0.1
0.1996	0.025	0.0174 +-	0.0001	5.4095 +-	0.0503	5.4269 +-	0.0
0.1996	0.032	0.0208 +-	0.0003	4.5360 +-	0.0914	4.5568 +-	0.0
0.1996	0.040	0.0249 +-	0.0002	3.7269 +-	0.0512	3.7518 +-	0.0
0.1996	0.040	0.0250 +-	0.0003	3.7473 +-	0.0646	3.7723 +-	0.0
0.1996	0.050	0.0299 +-	0.0006	3.0134 +-	0.0792	3.0433 +-	0.0
0.1996	0.063	0.0362 +-	0.0012	2.4318 +-	0.0996	2.4680 +-	0.1
0.1996	0.079	0.0438 +-	0.0002	1.9335 +-	0.0132	1.9773 +-	0.0
0.1996	0.100	0.0552 +-	0.0010	1.5982 +-	0.0325	1.6533 +-	0.0
0.1996	0.126	0.0671 +-	0.0013	1.2581 +-	0.0270	1.3251 +-	0.0
0.1996	0.159	0.0835 +-	0.0009	1.0123 +-	0.0120	1.0958 +-	0.0
0.1996	0.200	0.1037 +-	0.0014	0.8076 +-	0.0116	0.9113 +-	0.0
0.1996	0.251	0.1304 +-	0.0019	0.6503 +-	0.0098	0.7807 +-	0.0
0.1996	0.316	0.1587 +-	0.0046	0.5046 +-	0.0152	0.6634 +-	0.0
0.1996	0.398	0.2011 +-	0.0032	0.4075 +-	0.0067	0.6086 +-	0.0
0.1996	0.398	0.2012 +-	0.0025	0.4077 +-	0.0052	0.6089 +-	0.0
0.1996	0.501	0.2466 +-	0.0036	0.3173 +-	0.0048	0.5639 +-	0.0
0.1996	0.631	0.3192 +-	0.0020	0.2609 +-	0.0017	0.5801 +-	0.0
0.1996	0.795	0.4200 +-	0.0406	0.2178 +-	0.0214	0.6378 +-	0.0
0.1996	1.001	0.5155 +-	0.0267	0.1692 +-	0.0089	0.6848 +-	0.0
0.1996	1.260	1.0076 +-	0.6384	0.2102 +-	0.1341	1.2178 +-	0.7
0.1996	1.586	0.8135 +-	0.0096	0.1069 +-	0.0013	0.9204 +-	0.0
0.1996	1.996	1.4256 +-	0.7401	0.1186 +-	0.0619	1.5442 +-	0.8
0.1996	2.513	10.6362 +-	16.2432	0.5608 +-	0.8571	11.1971 +-	17.1
0.1996	3.164	3.2463 +-	2.8840	0.1078 +-	0.0960	3.3541 +-	2.9
0.1996	3.984	6.2659 +-	7.3869	0.1315 +-	0.1552	6.3974 +-	7.5
0.2240	0.000	0.0090 +-	0.0000	48.0787 +-	0.7739	48.0877 +-	0.7
0.2240	0.000	0.0090 +-	0.0000	53.3351 +-	1.4975	53.3441 +-	1.4
0.2240	0.000	0.0090 +-	0.0000	55.0880 +-	2.7183	55.0970 +-	2.7
0.2240	0.000	0.0090 +-	0.0000	57.7230 +-	1.8470	57.7321 +-	1.8
0.2240	0.000	0.0090 +-	0.0000	65.5902 +-	2.1013	65.5992 +-	2.1
0.2240	0.000	0.0090 +-	0.0000	71.1427 +-	5.1653	71.1517 +-	5.1
0.2240	0.000	0.0090 +-	0.0000	81.8082 +-	5.6415	81.8172 +-	5.6
0.2240	0.000	0.0090 +-	0.0000	87.8180 +-	9.6916	87.8270 +-	9.6
0.2240	0.000	0.0090 +-	0.0000	88.5506 +-	11.5844	88.5596 +-	11.5
0.2240	0.000	0.0090 +-	0.0000	100.7534 +-	9.4808	100.7624 +-	9.4
0.2240	0.001	0.0091 +-	0.0000	34.3584 +-	1.2184	34.3675 +-	1.2

0.2240	0.001	0.0091 +-	0.0000	37.6266 +-	0.2967	37.6356 +-	0.2
0.2240	0.001	0.0091 +-	0.0000	40.9289 +-	0.9802	40.9379 +-	0.9
0.2240	0.001	0.0091 +-	0.0000	43.2969 +-	1.1854	43.3060 +-	1.1
0.2240	0.001	0.0091 +-	0.0000	44.4116 +-	0.7722	44.4206 +-	0.7
0.2240	0.001	0.0092 +-	0.0000	31.7207 +-	0.3310	31.7298 +-	0.3
0.2240	0.002	0.0092 +-	0.0000	28.8044 +-	0.5458	28.8137 +-	0.5
0.2240	0.002	0.0093 +-	0.0000	26.2551 +-	0.3912	26.2645 +-	0.3
0.2240	0.003	0.0095 +-	0.0000	23.7838 +-	0.5162	23.7932 +-	0.5
0.2240	0.003	0.0097 +-	0.0000	21.0125 +-	0.6294	21.0222 +-	0.6
0.2240	0.004	0.0099 +-	0.0000	18.0924 +-	0.3873	18.1023 +-	0.3
0.2240	0.005	0.0102 +-	0.0000	15.8091 +-	0.3327	15.8193 +-	0.3
0.2240	0.005	0.0103 +-	0.0000	16.5183 +-	0.6351	16.5285 +-	0.6
0.2240	0.006	0.0107 +-	0.0000	14.1244 +-	0.1384	14.1351 +-	0.1
0.2240	0.008	0.0113 +-	0.0001	12.1405 +-	0.2740	12.1518 +-	0.2
0.2240	0.010	0.0122 +-	0.0000	10.4629 +-	0.0936	10.4751 +-	0.0
0.2240	0.013	0.0133 +-	0.0001	9.0625 +-	0.1171	9.0758 +-	0.1
0.2240	0.016	0.0147 +-	0.0001	7.5047 +-	0.1038	7.5194 +-	0.1
0.2240	0.020	0.0167 +-	0.0000	6.4268 +-	0.0312	6.4435 +-	0.0
0.2240	0.025	0.0191 +-	0.0002	5.2909 +-	0.1077	5.3099 +-	0.1
0.2240	0.032	0.0219 +-	0.0001	4.2965 +-	0.0400	4.3184 +-	0.0
0.2240	0.040	0.0262 +-	0.0003	3.6027 +-	0.0726	3.6289 +-	0.0
0.2240	0.050	0.0314 +-	0.0003	2.9601 +-	0.0407	2.9914 +-	0.0
0.2240	0.050	0.0315 +-	0.0004	2.9763 +-	0.0513	3.0078 +-	0.0
0.2240	0.063	0.0376 +-	0.0008	2.3934 +-	0.0629	2.4311 +-	0.0
0.2240	0.079	0.0456 +-	0.0015	1.9314 +-	0.0791	1.9771 +-	0.0
0.2240	0.100	0.0552 +-	0.0003	1.5357 +-	0.0105	1.5908 +-	0.0
0.2240	0.126	0.0695 +-	0.0012	1.2693 +-	0.0258	1.3388 +-	0.0
0.2240	0.159	0.0844 +-	0.0016	0.9992 +-	0.0215	1.0836 +-	0.0
0.2240	0.200	0.1052 +-	0.0011	0.8040 +-	0.0096	0.9092 +-	0.0
0.2240	0.251	0.1306 +-	0.0017	0.6414 +-	0.0092	0.7720 +-	0.0
0.2240	0.316	0.1642 +-	0.0023	0.5165 +-	0.0078	0.6807 +-	0.0
0.2240	0.398	0.1999 +-	0.0058	0.4008 +-	0.0121	0.6007 +-	0.0
0.2240	0.502	0.2532 +-	0.0040	0.3236 +-	0.0053	0.5769 +-	0.0
0.2240	0.502	0.2534 +-	0.0031	0.3238 +-	0.0041	0.5772 +-	0.0
0.2240	0.631	0.3105 +-	0.0045	0.2520 +-	0.0038	0.5625 +-	0.0
0.2240	0.795	0.4019 +-	0.0025	0.2072 +-	0.0013	0.6091 +-	0.0
0.2240	1.001	0.5288 +-	0.0511	0.1730 +-	0.0170	0.7018 +-	0.0
0.2240	1.260	0.6491 +-	0.0336	0.1344 +-	0.0070	0.7835 +-	0.0
0.2240	1.586	1.2687 +-	0.8038	0.1669 +-	0.1065	1.4356 +-	0.9
0.2240	1.997	1.0242 +-	0.0121	0.0849 +-	0.0010	1.1091 +-	0.0
0.2240	2.514	1.7949 +-	0.9318	0.0942 +-	0.0492	1.8891 +-	0.9
0.2240	3.165	13.3916 +-	20.4511	0.4454 +-	0.6807	13.8371 +-	21.1
0.2240	3.984	4.0872 +-	3.6311	0.0856 +-	0.0763	4.1729 +-	3.7
0.2240	5.015	7.8891 +-	9.3005	0.1044 +-	0.1232	7.9936 +-	9.4
0.2513	0.000	0.0114 +-	0.0000	42.3612 +-	1.1894	42.3726 +-	1.1
0.2513	0.000	0.0114 +-	0.0000	43.7534 +-	2.1590	43.7648 +-	2.1
0.2513	0.000	0.0114 +-	0.0000	45.8463 +-	1.4670	45.8577 +-	1.4
0.2513	0.000	0.0114 +-	0.0000	52.0947 +-	1.6689	52.1061 +-	1.6
0.2513	0.000	0.0114 +-	0.0000	56.5048 +-	4.1025	56.5162 +-	4.1
0.2513	0.000	0.0114 +-	0.0000	64.9759 +-	4.4807	64.9872 +-	4.4
0.2513	0.000	0.0114 +-	0.0000	69.7491 +-	7.6976	69.7605 +-	7.6
0.2513	0.000	0.0114 +-	0.0000	70.3310 +-	9.2009	70.3423 +-	9.2
0.2513	0.000	0.0114 +-	0.0000	80.0230 +-	7.5301	80.0343 +-	7.5
0.2513	0.001	0.0114 +-	0.0000	32.5076 +-	0.7785	32.5190 +-	0.7
0.2513	0.001	0.0114 +-	0.0000	34.3884 +-	0.9415	34.3998 +-	0.9
0.2513	0.001	0.0114 +-	0.0000	35.2737 +-	0.6133	35.2851 +-	0.6
0.2513	0.001	0.0114 +-	0.0000	38.1863 +-	0.6147	38.1977 +-	0.6
0.2513	0.001	0.0115 +-	0.0000	27.2890 +-	0.9677	27.3005 +-	0.9
0.2513	0.001	0.0115 +-	0.0000	29.8848 +-	0.2357	29.8962 +-	0.2
0.2513	0.002	0.0116 +-	0.0000	22.8778 +-	0.4335	22.8894 +-	0.4
0.2513	0.002	0.0116 +-	0.0000	25.1940 +-	0.2629	25.2056 +-	0.2
0.2513	0.003	0.0118 +-	0.0000	20.8530 +-	0.3107	20.8648 +-	0.3
0.2513	0.003	0.0119 +-	0.0000	18.8902 +-	0.4100	18.9021 +-	0.4
0.2513	0.004	0.0122 +-	0.0000	16.6891 +-	0.4999	16.7013 +-	0.5
0.2513	0.005	0.0124 +-	0.0000	14.3698 +-	0.3076	14.3823 +-	0.3
0.2513	0.006	0.0129 +-	0.0000	12.5563 +-	0.2642	12.5692 +-	0.2

0.2513	0.006	0.0129 +-	0.0001	13.1196 +-	0.5044	13.1325 +-	0.5
0.2513	0.008	0.0135 +-	0.0000	11.2182 +-	0.1099	11.2317 +-	0.1
0.2513	0.010	0.0143 +-	0.0001	9.6425 +-	0.2177	9.6568 +-	0.2
0.2513	0.013	0.0153 +-	0.0000	8.3101 +-	0.0744	8.3254 +-	0.0
0.2513	0.016	0.0168 +-	0.0001	7.1979 +-	0.0930	7.2147 +-	0.0
0.2513	0.020	0.0185 +-	0.0001	5.9606 +-	0.0824	5.9791 +-	0.0
0.2513	0.025	0.0210 +-	0.0000	5.1044 +-	0.0248	5.1255 +-	0.0
0.2513	0.032	0.0240 +-	0.0003	4.2022 +-	0.0856	4.2262 +-	0.0
0.2513	0.040	0.0276 +-	0.0002	3.4124 +-	0.0318	3.4401 +-	0.0
0.2513	0.050	0.0330 +-	0.0004	2.8614 +-	0.0576	2.8944 +-	0.0
0.2513	0.063	0.0395 +-	0.0004	2.3510 +-	0.0323	2.3905 +-	0.0
0.2513	0.063	0.0396 +-	0.0005	2.3639 +-	0.0408	2.4035 +-	0.0
0.2513	0.079	0.0474 +-	0.0009	1.9010 +-	0.0500	1.9484 +-	0.0
0.2513	0.100	0.0575 +-	0.0019	1.5340 +-	0.0628	1.5915 +-	0.0
0.2513	0.126	0.0694 +-	0.0004	1.2197 +-	0.0083	1.2891 +-	0.0
0.2513	0.159	0.0875 +-	0.0015	1.0082 +-	0.0205	1.0956 +-	0.0
0.2513	0.200	0.1063 +-	0.0020	0.7936 +-	0.0171	0.8999 +-	0.0
0.2513	0.251	0.1324 +-	0.0014	0.6386 +-	0.0076	0.7710 +-	0.0
0.2513	0.316	0.1644 +-	0.0022	0.5094 +-	0.0073	0.6739 +-	0.0
0.2513	0.398	0.2067 +-	0.0029	0.4102 +-	0.0062	0.6170 +-	0.0
0.2513	0.502	0.2516 +-	0.0072	0.3183 +-	0.0096	0.5700 +-	0.0
0.2513	0.631	0.3189 +-	0.0051	0.2570 +-	0.0042	0.5759 +-	0.0
0.2513	0.631	0.3190 +-	0.0039	0.2572 +-	0.0033	0.5762 +-	0.0
0.2513	0.795	0.3909 +-	0.0057	0.2002 +-	0.0030	0.5910 +-	0.0
0.2513	1.001	0.5060 +-	0.0031	0.1646 +-	0.0010	0.6706 +-	0.0
0.2513	1.260	0.6658 +-	0.0643	0.1374 +-	0.0135	0.8032 +-	0.0
0.2513	1.586	0.8172 +-	0.0423	0.1068 +-	0.0056	0.9240 +-	0.0
0.2513	1.997	1.5973 +-	1.0120	0.1326 +-	0.0846	1.7299 +-	1.0
0.2513	2.514	1.2896 +-	0.0152	0.0674 +-	0.0008	1.3570 +-	0.0
0.2513	3.165	2.2599 +-	1.1732	0.0748 +-	0.0390	2.3347 +-	1.2
0.2513	3.984	16.8608 +-	25.7490	0.3538 +-	0.5407	17.2146 +-	26.2
0.2513	5.016	5.1460 +-	4.5718	0.0680 +-	0.0606	5.2141 +-	4.6
0.2513	6.315	9.9329 +-	11.7099	0.0829 +-	0.0979	10.0158 +-	11.8
0.2820	0.000	0.0143 +-	0.0000	34.7510 +-	1.7147	34.7653 +-	1.7
0.2820	0.000	0.0143 +-	0.0000	36.4133 +-	1.1651	36.4276 +-	1.1
0.2820	0.000	0.0143 +-	0.0000	41.3761 +-	1.3255	41.3904 +-	1.3
0.2820	0.000	0.0143 +-	0.0000	44.8787 +-	3.2584	44.8931 +-	3.2
0.2820	0.000	0.0143 +-	0.0000	51.6068 +-	3.5588	51.6212 +-	3.5
0.2820	0.000	0.0143 +-	0.0000	55.3980 +-	6.1138	55.4123 +-	6.1
0.2820	0.000	0.0143 +-	0.0000	55.8601 +-	7.3078	55.8744 +-	7.3
0.2820	0.000	0.0143 +-	0.0000	63.5580 +-	5.9808	63.5723 +-	5.9
0.2820	0.001	0.0143 +-	0.0000	30.3293 +-	0.4882	30.3437 +-	0.4
0.2820	0.001	0.0143 +-	0.0000	33.6452 +-	0.9447	33.6596 +-	0.9
0.2820	0.001	0.0144 +-	0.0000	23.7359 +-	0.1872	23.7503 +-	0.1
0.2820	0.001	0.0144 +-	0.0000	25.8190 +-	0.6184	25.8334 +-	0.6
0.2820	0.001	0.0144 +-	0.0000	27.3129 +-	0.7478	27.3273 +-	0.7
0.2820	0.001	0.0144 +-	0.0000	28.0160 +-	0.4871	28.0304 +-	0.4
0.2820	0.002	0.0145 +-	0.0000	20.0103 +-	0.2088	20.0248 +-	0.2
0.2820	0.002	0.0145 +-	0.0000	21.6742 +-	0.7686	21.6887 +-	0.7
0.2820	0.003	0.0146 +-	0.0000	18.1706 +-	0.3443	18.1853 +-	0.3
0.2820	0.003	0.0148 +-	0.0000	16.5625 +-	0.2468	16.5773 +-	0.2
0.2820	0.004	0.0150 +-	0.0000	15.0034 +-	0.3256	15.0185 +-	0.3
0.2820	0.005	0.0153 +-	0.0000	13.2553 +-	0.3971	13.2706 +-	0.3
0.2820	0.006	0.0157 +-	0.0000	11.4132 +-	0.2443	11.4289 +-	0.2
0.2820	0.008	0.0162 +-	0.0000	9.9728 +-	0.2099	9.9890 +-	0.2
0.2820	0.008	0.0163 +-	0.0001	10.4202 +-	0.4006	10.4365 +-	0.4
0.2820	0.010	0.0170 +-	0.0000	8.9100 +-	0.0873	8.9270 +-	0.0
0.2820	0.013	0.0180 +-	0.0001	7.6585 +-	0.1729	7.6765 +-	0.1
0.2820	0.016	0.0193 +-	0.0000	6.6003 +-	0.0591	6.6196 +-	0.0
0.2820	0.020	0.0211 +-	0.0001	5.7169 +-	0.0739	5.7380 +-	0.0
0.2820	0.025	0.0233 +-	0.0001	4.7342 +-	0.0655	4.7575 +-	0.0
0.2820	0.032	0.0265 +-	0.0001	4.0542 +-	0.0197	4.0807 +-	0.0
0.2820	0.040	0.0302 +-	0.0003	3.3376 +-	0.0680	3.3678 +-	0.0
0.2820	0.050	0.0348 +-	0.0002	2.7103 +-	0.0252	2.7451 +-	0.0
0.2820	0.063	0.0415 +-	0.0005	2.2727 +-	0.0458	2.3142 +-	0.0
0.2820	0.080	0.0497 +-	0.0005	1.8673 +-	0.0257	1.9170 +-	0.0

0.2820	0.080	0.0499 +-	0.0006	1.8775 +-	0.0324	1.9274 +-	0.0
0.2820	0.100	0.0597 +-	0.0012	1.5098 +-	0.0397	1.5695 +-	0.0
0.2820	0.126	0.0723 +-	0.0024	1.2184 +-	0.0499	1.2907 +-	0.0
0.2820	0.159	0.0874 +-	0.0005	0.9687 +-	0.0066	1.0562 +-	0.0
0.2820	0.200	0.1101 +-	0.0019	0.8007 +-	0.0163	0.9109 +-	0.0
0.2820	0.251	0.1338 +-	0.0026	0.6303 +-	0.0135	0.7642 +-	0.0
0.2820	0.317	0.1667 +-	0.0018	0.5072 +-	0.0060	0.6739 +-	0.0
0.2820	0.398	0.2070 +-	0.0028	0.4046 +-	0.0058	0.6117 +-	0.0
0.2820	0.502	0.2603 +-	0.0037	0.3258 +-	0.0049	0.5861 +-	0.0
0.2820	0.632	0.3168 +-	0.0091	0.2528 +-	0.0076	0.5697 +-	0.0
0.2820	0.795	0.4015 +-	0.0064	0.2041 +-	0.0034	0.6056 +-	0.0
0.2820	0.795	0.4016 +-	0.0049	0.2043 +-	0.0026	0.6059 +-	0.0
0.2820	1.001	0.4921 +-	0.0072	0.1590 +-	0.0024	0.6511 +-	0.0
0.2820	1.260	0.6371 +-	0.0040	0.1307 +-	0.0008	0.7678 +-	0.0
0.2820	1.586	0.8382 +-	0.0810	0.1091 +-	0.0107	0.9474 +-	0.0
0.2820	1.997	1.0289 +-	0.0532	0.0848 +-	0.0044	1.1137 +-	0.0
0.2820	2.514	2.0111 +-	1.2741	0.1053 +-	0.0672	2.1164 +-	1.3
0.2820	3.165	1.6236 +-	0.0192	0.0535 +-	0.0006	1.6772 +-	0.0
0.2820	3.985	2.8453 +-	1.4771	0.0594 +-	0.0310	2.9048 +-	1.5
0.2820	5.017	21.2287 +-	32.4195	0.2810 +-	0.4294	21.5097 +-	32.8
0.2820	6.315	6.4791 +-	5.7562	0.0540 +-	0.0481	6.5332 +-	5.8
0.2820	7.951	12.5060 +-	14.7434	0.0659 +-	0.0777	12.5719 +-	14.8
0.3164	0.000	0.0180 +-	0.0000	28.9211 +-	0.9254	28.9391 +-	0.9
0.3164	0.000	0.0180 +-	0.0000	32.8628 +-	1.0528	32.8808 +-	1.0
0.3164	0.000	0.0180 +-	0.0000	35.6448 +-	2.5880	35.6628 +-	2.5
0.3164	0.000	0.0180 +-	0.0000	40.9885 +-	2.8266	41.0066 +-	2.8
0.3164	0.000	0.0180 +-	0.0000	43.9996 +-	4.8558	44.0176 +-	4.8
0.3164	0.000	0.0180 +-	0.0000	44.3667 +-	5.8042	44.3847 +-	5.8
0.3164	0.000	0.0180 +-	0.0000	50.4807 +-	4.7502	50.4987 +-	4.7
0.3164	0.001	0.0180 +-	0.0000	26.7226 +-	0.7503	26.7406 +-	0.7
0.3164	0.001	0.0180 +-	0.0000	27.6009 +-	1.3619	27.6189 +-	1.3
0.3164	0.001	0.0181 +-	0.0000	20.5067 +-	0.4911	20.5248 +-	0.4
0.3164	0.001	0.0181 +-	0.0000	21.6932 +-	0.5939	21.7112 +-	0.5
0.3164	0.001	0.0181 +-	0.0000	22.2516 +-	0.3869	22.2697 +-	0.3
0.3164	0.001	0.0181 +-	0.0000	24.0890 +-	0.3877	24.1070 +-	0.3
0.3164	0.002	0.0182 +-	0.0000	17.2147 +-	0.6105	17.2329 +-	0.6
0.3164	0.002	0.0182 +-	0.0000	18.8521 +-	0.1487	18.8703 +-	0.1
0.3164	0.003	0.0183 +-	0.0000	15.8931 +-	0.1658	15.9114 +-	0.1
0.3164	0.003	0.0184 +-	0.0000	14.4319 +-	0.2735	14.4504 +-	0.2
0.3164	0.004	0.0186 +-	0.0000	13.1547 +-	0.1960	13.1733 +-	0.1
0.3164	0.005	0.0189 +-	0.0000	11.9164 +-	0.2586	11.9353 +-	0.2
0.3164	0.006	0.0193 +-	0.0000	10.5279 +-	0.3154	10.5472 +-	0.3
0.3164	0.008	0.0197 +-	0.0000	9.0649 +-	0.1941	9.0846 +-	0.1
0.3164	0.010	0.0204 +-	0.0001	7.9209 +-	0.1667	7.9413 +-	0.1
0.3164	0.010	0.0205 +-	0.0001	8.2762 +-	0.3182	8.2967 +-	0.3
0.3164	0.013	0.0214 +-	0.0000	7.0768 +-	0.0694	7.0981 +-	0.0
0.3164	0.016	0.0226 +-	0.0001	6.0828 +-	0.1373	6.1054 +-	0.1
0.3164	0.020	0.0243 +-	0.0001	5.2422 +-	0.0469	5.2665 +-	0.0
0.3164	0.025	0.0266 +-	0.0001	4.5406 +-	0.0587	4.5672 +-	0.0
0.3164	0.032	0.0293 +-	0.0002	3.7601 +-	0.0520	3.7894 +-	0.0
0.3164	0.040	0.0334 +-	0.0001	3.2200 +-	0.0156	3.2534 +-	0.0
0.3164	0.050	0.0380 +-	0.0004	2.6509 +-	0.0540	2.6889 +-	0.0
0.3164	0.063	0.0438 +-	0.0002	2.1527 +-	0.0200	2.1964 +-	0.0
0.3164	0.080	0.0522 +-	0.0007	1.8051 +-	0.0364	1.8573 +-	0.0
0.3164	0.100	0.0626 +-	0.0006	1.4831 +-	0.0204	1.5457 +-	0.0
0.3164	0.100	0.0628 +-	0.0008	1.4912 +-	0.0257	1.5541 +-	0.0
0.3164	0.126	0.0751 +-	0.0015	1.1992 +-	0.0315	1.2743 +-	0.0
0.3164	0.159	0.0911 +-	0.0030	0.9677 +-	0.0396	1.0588 +-	0.0
0.3164	0.200	0.1101 +-	0.0006	0.7694 +-	0.0052	0.8795 +-	0.0
0.3164	0.251	0.1386 +-	0.0025	0.6360 +-	0.0129	0.7746 +-	0.0
0.3164	0.317	0.1685 +-	0.0032	0.5006 +-	0.0108	0.6691 +-	0.0
0.3164	0.399	0.2099 +-	0.0023	0.4028 +-	0.0048	0.6128 +-	0.0
0.3164	0.502	0.2607 +-	0.0035	0.3214 +-	0.0046	0.5821 +-	0.0
0.3164	0.632	0.3277 +-	0.0047	0.2588 +-	0.0039	0.5865 +-	0.0
0.3164	0.795	0.3989 +-	0.0115	0.2008 +-	0.0061	0.5997 +-	0.0
0.3164	1.001	0.5054 +-	0.0080	0.1621 +-	0.0027	0.6676 +-	0.0

0.3164	1.001	0.5057 +-	0.0062	0.1622 +-	0.0021	0.6679 +-	0.0
0.3164	1.260	0.6196 +-	0.0091	0.1263 +-	0.0019	0.7459 +-	0.0
0.3164	1.587	0.8021 +-	0.0050	0.1038 +-	0.0007	0.9059 +-	0.0
0.3164	1.997	1.0554 +-	0.1020	0.0867 +-	0.0085	1.1421 +-	0.1
0.3164	2.514	1.2955 +-	0.0670	0.0673 +-	0.0035	1.3628 +-	0.0
0.3164	3.166	2.5321 +-	1.6042	0.0836 +-	0.0534	2.6158 +-	1.6
0.3164	3.985	2.0442 +-	0.0242	0.0425 +-	0.0005	2.0868 +-	0.0
0.3164	5.017	3.5824 +-	1.8597	0.0472 +-	0.0246	3.6297 +-	1.8
0.3164	6.316	26.7281 +-	40.8179	0.2232 +-	0.3411	26.9512 +-	41.1
0.3164	7.951	8.1576 +-	7.2473	0.0429 +-	0.0382	8.2005 +-	7.2
0.3164	10.010	15.7458 +-	18.5627	0.0523 +-	0.0617	15.7981 +-	18.6
0.3550	0.000	0.0227 +-	0.0000	26.1011 +-	0.8362	26.1238 +-	0.8
0.3550	0.000	0.0227 +-	0.0000	28.3107 +-	2.0555	28.3334 +-	2.0
0.3550	0.000	0.0227 +-	0.0000	32.5550 +-	2.2450	32.5777 +-	2.2
0.3550	0.000	0.0227 +-	0.0000	34.9465 +-	3.8567	34.9692 +-	3.8
0.3550	0.000	0.0227 +-	0.0000	35.2381 +-	4.6099	35.2608 +-	4.6
0.3550	0.000	0.0227 +-	0.0000	40.0941 +-	3.7728	40.1168 +-	3.7
0.3550	0.001	0.0227 +-	0.0000	19.1326 +-	0.3080	19.1553 +-	0.3
0.3550	0.001	0.0227 +-	0.0000	21.2243 +-	0.5959	21.2470 +-	0.5
0.3550	0.001	0.0227 +-	0.0000	21.9219 +-	1.0817	21.9446 +-	1.0
0.3550	0.001	0.0227 +-	0.0000	22.9705 +-	0.7350	22.9932 +-	0.7
0.3550	0.001	0.0228 +-	0.0000	17.2297 +-	0.4717	17.2525 +-	0.4
0.3550	0.001	0.0228 +-	0.0000	17.6733 +-	0.3073	17.6960 +-	0.3
0.3550	0.002	0.0228 +-	0.0000	16.2874 +-	0.3901	16.3102 +-	0.3
0.3550	0.002	0.0229 +-	0.0000	14.9732 +-	0.1181	14.9961 +-	0.1
0.3550	0.003	0.0229 +-	0.0000	13.6727 +-	0.4849	13.6956 +-	0.4
0.3550	0.003	0.0231 +-	0.0000	12.6230 +-	0.1317	12.6461 +-	0.1
0.3550	0.004	0.0232 +-	0.0000	11.4625 +-	0.2172	11.4857 +-	0.2
0.3550	0.005	0.0235 +-	0.0000	10.4480 +-	0.1557	10.4715 +-	0.1
0.3550	0.006	0.0238 +-	0.0000	9.4646 +-	0.2054	9.4884 +-	0.2
0.3550	0.008	0.0243 +-	0.0000	8.3618 +-	0.2505	8.3860 +-	0.2
0.3550	0.010	0.0248 +-	0.0000	7.1998 +-	0.1541	7.2246 +-	0.1
0.3550	0.013	0.0257 +-	0.0001	6.2911 +-	0.1324	6.3168 +-	0.1
0.3550	0.013	0.0258 +-	0.0001	6.5733 +-	0.2527	6.5991 +-	0.2
0.3550	0.016	0.0269 +-	0.0000	5.6207 +-	0.0551	5.6476 +-	0.0
0.3550	0.020	0.0285 +-	0.0001	4.8312 +-	0.1091	4.8597 +-	0.1
0.3550	0.025	0.0306 +-	0.0001	4.1636 +-	0.0373	4.1942 +-	0.0
0.3550	0.032	0.0335 +-	0.0001	3.6064 +-	0.0466	3.6399 +-	0.0
0.3550	0.040	0.0369 +-	0.0002	2.9865 +-	0.0413	3.0234 +-	0.0
0.3550	0.050	0.0420 +-	0.0001	2.5575 +-	0.0124	2.5995 +-	0.0
0.3550	0.063	0.0479 +-	0.0005	2.1055 +-	0.0429	2.1533 +-	0.0
0.3550	0.080	0.0551 +-	0.0003	1.7097 +-	0.0159	1.7649 +-	0.0
0.3550	0.100	0.0658 +-	0.0009	1.4337 +-	0.0289	1.4994 +-	0.0
0.3550	0.126	0.0788 +-	0.0008	1.1779 +-	0.0162	1.2568 +-	0.0
0.3550	0.126	0.0791 +-	0.0010	1.1844 +-	0.0204	1.2635 +-	0.0
0.3550	0.159	0.0946 +-	0.0019	0.9524 +-	0.0250	1.0471 +-	0.0
0.3550	0.200	0.1147 +-	0.0038	0.7686 +-	0.0315	0.8833 +-	0.0
0.3550	0.251	0.1386 +-	0.0008	0.6111 +-	0.0042	0.7497 +-	0.0
0.3550	0.317	0.1746 +-	0.0031	0.5051 +-	0.0103	0.6797 +-	0.0
0.3550	0.399	0.2122 +-	0.0041	0.3976 +-	0.0085	0.6098 +-	0.0
0.3550	0.502	0.2643 +-	0.0029	0.3200 +-	0.0038	0.5843 +-	0.0
0.3550	0.632	0.3282 +-	0.0044	0.2552 +-	0.0037	0.5835 +-	0.0
0.3550	0.795	0.4126 +-	0.0059	0.2055 +-	0.0031	0.6182 +-	0.0
0.3550	1.001	0.5022 +-	0.0145	0.1595 +-	0.0048	0.6617 +-	0.0
0.3550	1.260	0.6364 +-	0.0101	0.1288 +-	0.0021	0.7652 +-	0.0
0.3550	1.260	0.6367 +-	0.0078	0.1288 +-	0.0016	0.7655 +-	0.0
0.3550	1.587	0.7801 +-	0.0114	0.1003 +-	0.0015	0.8804 +-	0.0
0.3550	1.998	1.0099 +-	0.0063	0.0825 +-	0.0005	1.0924 +-	0.0
0.3550	2.515	1.3288 +-	0.1284	0.0688 +-	0.0068	1.3977 +-	0.1
0.3550	3.166	1.6311 +-	0.0843	0.0535 +-	0.0028	1.6846 +-	0.0
0.3550	3.986	3.1881 +-	2.0198	0.0664 +-	0.0424	3.2545 +-	2.0
0.3550	5.018	2.5738 +-	0.0304	0.0338 +-	0.0004	2.6076 +-	0.0
0.3550	6.317	4.5105 +-	2.3415	0.0375 +-	0.0196	4.5480 +-	2.3
0.3550	7.952	33.6521 +-	51.3920	0.1773 +-	0.2709	33.8294 +-	51.6
0.3550	10.011	10.2709 +-	9.1248	0.0341 +-	0.0303	10.3050 +-	9.1
0.3550	12.604	19.8248 +-	23.3715	0.0416 +-	0.0490	19.8664 +-	23.4

0.3984	0.000	0.0286 +-	0.0000	22.4857 +-	1.6326	22.5143 +-	1.6
0.3984	0.000	0.0286 +-	0.0000	25.8567 +-	1.7831	25.8852 +-	1.7
0.3984	0.000	0.0286 +-	0.0000	27.7562 +-	3.0632	27.7847 +-	3.0
0.3984	0.000	0.0286 +-	0.0000	27.9877 +-	3.6614	28.0163 +-	3.6
0.3984	0.000	0.0286 +-	0.0000	31.8446 +-	2.9966	31.8731 +-	2.9
0.3984	0.001	0.0286 +-	0.0000	15.1960 +-	0.2446	15.2246 +-	0.2
0.3984	0.001	0.0286 +-	0.0000	16.8573 +-	0.4733	16.8859 +-	0.4
0.3984	0.001	0.0286 +-	0.0000	17.4114 +-	0.8591	17.4400 +-	0.8
0.3984	0.001	0.0286 +-	0.0000	18.2442 +-	0.5838	18.2728 +-	0.5
0.3984	0.001	0.0286 +-	0.0000	20.7307 +-	0.6641	20.7593 +-	0.6
0.3984	0.002	0.0287 +-	0.0000	12.9362 +-	0.3098	12.9649 +-	0.3
0.3984	0.002	0.0287 +-	0.0000	13.6846 +-	0.3747	13.7133 +-	0.3
0.3984	0.002	0.0287 +-	0.0000	14.0369 +-	0.2441	14.0656 +-	0.2
0.3984	0.003	0.0288 +-	0.0000	11.8924 +-	0.0938	11.9212 +-	0.0
0.3984	0.003	0.0289 +-	0.0000	10.8595 +-	0.3851	10.8884 +-	0.3
0.3984	0.004	0.0290 +-	0.0000	10.0258 +-	0.1046	10.0548 +-	0.1
0.3984	0.005	0.0292 +-	0.0000	9.1041 +-	0.1725	9.1333 +-	0.1
0.3984	0.006	0.0295 +-	0.0000	8.2983 +-	0.1237	8.3279 +-	0.1
0.3984	0.008	0.0300 +-	0.0000	7.5172 +-	0.1632	7.5472 +-	0.1
0.3984	0.010	0.0305 +-	0.0001	6.6413 +-	0.1989	6.6719 +-	0.1
0.3984	0.013	0.0313 +-	0.0001	5.7184 +-	0.1224	5.7497 +-	0.1
0.3984	0.016	0.0323 +-	0.0001	4.9967 +-	0.1052	5.0290 +-	0.1
0.3984	0.016	0.0325 +-	0.0002	5.2208 +-	0.2007	5.2533 +-	0.2
0.3984	0.020	0.0339 +-	0.0001	4.4642 +-	0.0438	4.4981 +-	0.0
0.3984	0.025	0.0358 +-	0.0002	3.8372 +-	0.0866	3.8730 +-	0.0
0.3984	0.032	0.0385 +-	0.0001	3.3069 +-	0.0296	3.3454 +-	0.0
0.3984	0.040	0.0422 +-	0.0002	2.8643 +-	0.0370	2.9065 +-	0.0
0.3984	0.050	0.0465 +-	0.0002	2.3720 +-	0.0328	2.4185 +-	0.0
0.3984	0.063	0.0529 +-	0.0001	2.0313 +-	0.0099	2.0841 +-	0.0
0.3984	0.080	0.0603 +-	0.0006	1.6723 +-	0.0341	1.7325 +-	0.0
0.3984	0.100	0.0694 +-	0.0004	1.3580 +-	0.0126	1.4273 +-	0.0
0.3984	0.126	0.0828 +-	0.0011	1.1387 +-	0.0229	1.2215 +-	0.0
0.3984	0.159	0.0992 +-	0.0010	0.9356 +-	0.0129	1.0348 +-	0.0
0.3984	0.159	0.0996 +-	0.0012	0.9407 +-	0.0162	1.0403 +-	0.0
0.3984	0.200	0.1191 +-	0.0024	0.7565 +-	0.0199	0.8756 +-	0.0
0.3984	0.251	0.1444 +-	0.0047	0.6105 +-	0.0250	0.7548 +-	0.0
0.3984	0.317	0.1745 +-	0.0010	0.4854 +-	0.0033	0.6599 +-	0.0
0.3984	0.399	0.2198 +-	0.0039	0.4012 +-	0.0082	0.6210 +-	0.0
0.3984	0.502	0.2671 +-	0.0051	0.3158 +-	0.0068	0.5829 +-	0.0
0.3984	0.632	0.3328 +-	0.0036	0.2541 +-	0.0030	0.5869 +-	0.0
0.3984	0.795	0.4132 +-	0.0055	0.2027 +-	0.0029	0.6160 +-	0.0
0.3984	1.001	0.5195 +-	0.0074	0.1632 +-	0.0025	0.6828 +-	0.0
0.3984	1.260	0.6324 +-	0.0182	0.1267 +-	0.0038	0.7590 +-	0.0
0.3984	1.587	0.8012 +-	0.0127	0.1023 +-	0.0017	0.9035 +-	0.0
0.3984	1.587	0.8016 +-	0.0098	0.1023 +-	0.0013	0.9040 +-	0.0
0.3984	1.998	0.9823 +-	0.0144	0.0797 +-	0.0012	1.0619 +-	0.0
0.3984	2.515	1.2715 +-	0.0079	0.0655 +-	0.0004	1.3370 +-	0.0
0.3984	3.166	1.6730 +-	0.1617	0.0547 +-	0.0054	1.7277 +-	0.1
0.3984	3.986	2.0536 +-	0.1062	0.0425 +-	0.0022	2.0961 +-	0.1
0.3984	5.018	4.0140 +-	2.5430	0.0528 +-	0.0337	4.0667 +-	2.5
0.3984	6.317	3.2406 +-	0.0383	0.0268 +-	0.0003	3.2674 +-	0.0
0.3984	7.953	5.6790 +-	2.9481	0.0298 +-	0.0155	5.7087 +-	2.9
0.3984	10.012	42.3699 +-	64.7054	0.1408 +-	0.2152	42.5106 +-	64.9
0.3984	12.605	12.9316 +-	11.4886	0.0271 +-	0.0241	12.9587 +-	11.5
0.3984	15.869	24.9605 +-	29.4260	0.0330 +-	0.0390	24.9935 +-	29.4
0.4470	0.000	0.0359 +-	0.0000	25.2924 +-	2.3800	25.3284 +-	2.3
0.4470	0.000	0.0360 +-	0.0000	20.5366 +-	1.4162	20.5725 +-	1.4
0.4470	0.000	0.0360 +-	0.0000	22.0452 +-	2.4329	22.0812 +-	2.4
0.4470	0.000	0.0360 +-	0.0000	22.2291 +-	2.9081	22.2651 +-	2.9
0.4470	0.001	0.0360 +-	0.0000	13.3889 +-	0.3759	13.4249 +-	0.3
0.4470	0.001	0.0360 +-	0.0000	13.8289 +-	0.6824	13.8649 +-	0.6
0.4470	0.001	0.0360 +-	0.0000	14.4904 +-	0.4637	14.5264 +-	0.4
0.4470	0.001	0.0360 +-	0.0000	16.4653 +-	0.5275	16.5013 +-	0.5
0.4470	0.001	0.0360 +-	0.0000	17.8592 +-	1.2967	17.8951 +-	1.2
0.4470	0.002	0.0360 +-	0.0000	12.0693 +-	0.1943	12.1054 +-	0.1
0.4470	0.002	0.0361 +-	0.0000	10.8690 +-	0.2976	10.9051 +-	0.2

0.4470	0.002	0.0361 +-	0.0000	11.1488 +-	0.1938	11.1849 +-	0.1
0.4470	0.003	0.0361 +-	0.0000	10.2745 +-	0.2461	10.3106 +-	0.2
0.4470	0.003	0.0362 +-	0.0000	9.4455 +-	0.0745	9.4817 +-	0.0
0.4470	0.004	0.0364 +-	0.0000	8.6251 +-	0.3059	8.6615 +-	0.3
0.4470	0.005	0.0365 +-	0.0000	7.9629 +-	0.0831	7.9995 +-	0.0
0.4470	0.006	0.0368 +-	0.0000	7.2309 +-	0.1370	7.2677 +-	0.1
0.4470	0.008	0.0372 +-	0.0000	6.5909 +-	0.0982	6.6281 +-	0.0
0.4470	0.010	0.0377 +-	0.0000	5.9705 +-	0.1296	6.0083 +-	0.1
0.4470	0.013	0.0385 +-	0.0001	5.2748 +-	0.1580	5.3133 +-	0.1
0.4470	0.016	0.0394 +-	0.0001	4.5418 +-	0.0972	4.5812 +-	0.0
0.4470	0.020	0.0407 +-	0.0001	3.9686 +-	0.0835	4.0093 +-	0.0
0.4470	0.020	0.0409 +-	0.0002	4.1466 +-	0.1594	4.1875 +-	0.1
0.4470	0.025	0.0427 +-	0.0001	3.5457 +-	0.0348	3.5884 +-	0.0
0.4470	0.032	0.0451 +-	0.0002	3.0477 +-	0.0688	3.0928 +-	0.0
0.4470	0.040	0.0485 +-	0.0001	2.6265 +-	0.0235	2.6750 +-	0.0
0.4470	0.050	0.0531 +-	0.0002	2.2750 +-	0.0294	2.3281 +-	0.0
0.4470	0.063	0.0585 +-	0.0003	1.8839 +-	0.0260	1.9424 +-	0.0
0.4470	0.080	0.0666 +-	0.0001	1.6133 +-	0.0078	1.6799 +-	0.0
0.4470	0.100	0.0759 +-	0.0008	1.3282 +-	0.0270	1.4041 +-	0.0
0.4470	0.126	0.0874 +-	0.0005	1.0786 +-	0.0100	1.1659 +-	0.0
0.4470	0.159	0.1043 +-	0.0014	0.9044 +-	0.0182	1.0087 +-	0.0
0.4470	0.200	0.1249 +-	0.0012	0.7431 +-	0.0102	0.8680 +-	0.0
0.4470	0.200	0.1254 +-	0.0015	0.7471 +-	0.0129	0.8726 +-	0.0
0.4470	0.252	0.1500 +-	0.0030	0.6008 +-	0.0158	0.7508 +-	0.0
0.4470	0.317	0.1818 +-	0.0060	0.4849 +-	0.0199	0.6666 +-	0.0
0.4470	0.399	0.2197 +-	0.0013	0.3855 +-	0.0026	0.6052 +-	0.0
0.4470	0.502	0.2767 +-	0.0049	0.3186 +-	0.0065	0.5954 +-	0.0
0.4470	0.632	0.3363 +-	0.0065	0.2508 +-	0.0054	0.5872 +-	0.0
0.4470	0.795	0.4190 +-	0.0046	0.2018 +-	0.0024	0.6208 +-	0.0
0.4470	1.001	0.5203 +-	0.0070	0.1610 +-	0.0023	0.6813 +-	0.0
0.4470	1.261	0.6541 +-	0.0093	0.1297 +-	0.0020	0.7837 +-	0.0
0.4470	1.587	0.7962 +-	0.0229	0.1006 +-	0.0030	0.8968 +-	0.0
0.4470	1.998	1.0088 +-	0.0160	0.0812 +-	0.0013	1.0901 +-	0.0
0.4470	1.998	1.0093 +-	0.0123	0.0813 +-	0.0010	1.0906 +-	0.0
0.4470	2.515	1.2367 +-	0.0181	0.0633 +-	0.0010	1.3000 +-	0.0
0.4470	3.167	1.6009 +-	0.0100	0.0520 +-	0.0003	1.6529 +-	0.0
0.4470	3.986	2.1065 +-	0.2036	0.0434 +-	0.0043	2.1499 +-	0.2
0.4470	5.019	2.5856 +-	0.1337	0.0337 +-	0.0018	2.6193 +-	0.1
0.4470	6.318	5.0538 +-	3.2018	0.0419 +-	0.0267	5.0957 +-	3.2
0.4470	7.954	4.0800 +-	0.0482	0.0213 +-	0.0003	4.1013 +-	0.0
0.4470	10.013	7.1501 +-	3.7118	0.0237 +-	0.0123	7.1738 +-	3.7
0.4470	12.606	53.3460 +-	81.4676	0.1118 +-	0.1709	53.4578 +-	81.6
0.4470	15.870	16.2816 +-	14.4648	0.0215 +-	0.0191	16.3031 +-	14.4
0.4470	19.979	31.4267 +-	37.0489	0.0262 +-	0.0309	31.4529 +-	37.0
0.5015	0.000	0.0453 +-	0.0000	17.5093 +-	1.9323	17.5546 +-	1.9
0.5015	0.000	0.0453 +-	0.0000	17.6554 +-	2.3097	17.7007 +-	2.3
0.5015	0.000	0.0453 +-	0.0000	20.0884 +-	1.8903	20.1337 +-	1.8
0.5015	0.001	0.0453 +-	0.0000	10.9836 +-	0.5420	11.0289 +-	0.5
0.5015	0.001	0.0453 +-	0.0000	11.5089 +-	0.3683	11.5542 +-	0.3
0.5015	0.001	0.0453 +-	0.0000	13.0775 +-	0.4190	13.1228 +-	0.4
0.5015	0.001	0.0453 +-	0.0000	14.1846 +-	1.0299	14.2299 +-	1.0
0.5015	0.001	0.0453 +-	0.0000	16.3111 +-	1.1248	16.3564 +-	1.1
0.5015	0.002	0.0453 +-	0.0000	10.6341 +-	0.2986	10.6794 +-	0.2
0.5015	0.002	0.0454 +-	0.0000	9.5860 +-	0.1543	9.6314 +-	0.1
0.5015	0.003	0.0454 +-	0.0000	8.6326 +-	0.2363	8.6781 +-	0.2
0.5015	0.003	0.0454 +-	0.0000	8.8549 +-	0.1540	8.9003 +-	0.1
0.5015	0.003	0.0455 +-	0.0000	8.1605 +-	0.1954	8.2060 +-	0.1
0.5015	0.004	0.0456 +-	0.0000	7.5021 +-	0.0592	7.5477 +-	0.0
0.5015	0.005	0.0458 +-	0.0000	6.8505 +-	0.2429	6.8962 +-	0.2
0.5015	0.006	0.0460 +-	0.0000	6.3245 +-	0.0660	6.3706 +-	0.0
0.5015	0.008	0.0463 +-	0.0000	5.7431 +-	0.1088	5.7894 +-	0.1
0.5015	0.010	0.0468 +-	0.0000	5.2348 +-	0.0780	5.2816 +-	0.0
0.5015	0.013	0.0475 +-	0.0000	4.7421 +-	0.1029	4.7896 +-	0.1
0.5015	0.016	0.0484 +-	0.0001	4.1895 +-	0.1255	4.2379 +-	0.1
0.5015	0.020	0.0496 +-	0.0001	3.6073 +-	0.0772	3.6569 +-	0.0
0.5015	0.025	0.0512 +-	0.0001	3.1521 +-	0.0663	3.2033 +-	0.0

0.5015	0.025	0.0515 +-	0.0002	3.2934 +-	0.1266	3.3450 +-	0.1
0.5015	0.032	0.0537 +-	0.0001	2.8161 +-	0.0276	2.8699 +-	0.0
0.5015	0.040	0.0568 +-	0.0003	2.4206 +-	0.0546	2.4774 +-	0.0
0.5015	0.050	0.0610 +-	0.0001	2.0861 +-	0.0187	2.1471 +-	0.0
0.5015	0.063	0.0669 +-	0.0003	1.8069 +-	0.0234	1.8738 +-	0.0
0.5015	0.080	0.0737 +-	0.0004	1.4963 +-	0.0207	1.5700 +-	0.0
0.5015	0.100	0.0838 +-	0.0002	1.2814 +-	0.0062	1.3652 +-	0.0
0.5015	0.126	0.0956 +-	0.0010	1.0549 +-	0.0215	1.1505 +-	0.0
0.5015	0.159	0.1100 +-	0.0006	0.8566 +-	0.0080	0.9666 +-	0.0
0.5015	0.200	0.1313 +-	0.0017	0.7183 +-	0.0145	0.8496 +-	0.0
0.5015	0.252	0.1573 +-	0.0015	0.5902 +-	0.0081	0.7475 +-	0.0
0.5015	0.252	0.1579 +-	0.0019	0.5934 +-	0.0102	0.7513 +-	0.0
0.5015	0.317	0.1888 +-	0.0038	0.4772 +-	0.0125	0.6660 +-	0.0
0.5015	0.399	0.2289 +-	0.0075	0.3851 +-	0.0158	0.6140 +-	0.0
0.5015	0.502	0.2767 +-	0.0016	0.3062 +-	0.0021	0.5828 +-	0.0
0.5015	0.632	0.3484 +-	0.0062	0.2531 +-	0.0051	0.6015 +-	0.0
0.5015	0.795	0.4235 +-	0.0081	0.1992 +-	0.0043	0.6227 +-	0.0
0.5015	1.001	0.5276 +-	0.0057	0.1603 +-	0.0019	0.6879 +-	0.0
0.5015	1.261	0.6551 +-	0.0088	0.1279 +-	0.0018	0.7830 +-	0.0
0.5015	1.587	0.8235 +-	0.0117	0.1030 +-	0.0016	0.9265 +-	0.0
0.5015	1.998	1.0024 +-	0.0289	0.0799 +-	0.0024	1.0823 +-	0.0
0.5015	2.516	1.2702 +-	0.0202	0.0645 +-	0.0011	1.3347 +-	0.0
0.5015	2.516	1.2708 +-	0.0155	0.0646 +-	0.0008	1.3353 +-	0.0
0.5015	3.167	1.5571 +-	0.0228	0.0502 +-	0.0008	1.6073 +-	0.0
0.5015	3.987	2.0156 +-	0.0125	0.0413 +-	0.0003	2.0569 +-	0.0
0.5015	5.019	2.6521 +-	0.2563	0.0345 +-	0.0034	2.6866 +-	0.2
0.5015	6.319	3.2554 +-	0.1683	0.0268 +-	0.0014	3.2822 +-	0.1
0.5015	7.955	6.3630 +-	4.0313	0.0333 +-	0.0212	6.3963 +-	4.0
0.5015	10.014	5.1370 +-	0.0607	0.0169 +-	0.0002	5.1539 +-	0.0
0.5015	12.607	9.0024 +-	4.6734	0.0188 +-	0.0098	9.0212 +-	4.6
0.5015	15.872	67.1655 +-	102.5722	0.0888 +-	0.1357	67.2544 +-	102.7
0.5015	19.981	20.4994 +-	18.2120	0.0171 +-	0.0152	20.5165 +-	18.2
0.5015	25.155	39.5679 +-	46.6466	0.0208 +-	0.0246	39.5887 +-	46.6
0.5628	0.000	0.0570 +-	0.0000	13.9067 +-	1.5348	13.9637 +-	1.5
0.5628	0.000	0.0570 +-	0.0000	15.9552 +-	1.5014	16.0122 +-	1.5
0.5628	0.001	0.0570 +-	0.0000	9.1409 +-	0.2925	9.1980 +-	0.2
0.5628	0.001	0.0570 +-	0.0000	10.3868 +-	0.3328	10.4438 +-	0.3
0.5628	0.001	0.0570 +-	0.0000	11.2661 +-	0.8180	11.3231 +-	0.8
0.5628	0.001	0.0570 +-	0.0000	12.9550 +-	0.8934	13.0120 +-	0.8
0.5628	0.001	0.0570 +-	0.0000	14.0227 +-	1.8345	14.0797 +-	1.8
0.5628	0.002	0.0570 +-	0.0000	8.7237 +-	0.4305	8.7807 +-	0.4
0.5628	0.002	0.0571 +-	0.0000	8.4461 +-	0.2371	8.5032 +-	0.2
0.5628	0.003	0.0571 +-	0.0000	7.6137 +-	0.1226	7.6708 +-	0.1
0.5628	0.003	0.0572 +-	0.0000	6.8564 +-	0.1877	6.9136 +-	0.1
0.5628	0.003	0.0572 +-	0.0000	7.0330 +-	0.1223	7.0901 +-	0.1
0.5628	0.004	0.0573 +-	0.0000	6.4814 +-	0.1552	6.5387 +-	0.1
0.5628	0.005	0.0574 +-	0.0000	5.9585 +-	0.0470	6.0159 +-	0.0
0.5628	0.006	0.0576 +-	0.0000	5.4410 +-	0.1929	5.4986 +-	0.1
0.5628	0.008	0.0579 +-	0.0000	5.0232 +-	0.0524	5.0812 +-	0.0
0.5628	0.010	0.0584 +-	0.0000	4.5614 +-	0.0864	4.6198 +-	0.0
0.5628	0.013	0.0590 +-	0.0000	4.1577 +-	0.0620	4.2167 +-	0.0
0.5628	0.016	0.0598 +-	0.0001	3.7664 +-	0.0817	3.8262 +-	0.0
0.5628	0.020	0.0610 +-	0.0001	3.3275 +-	0.0997	3.3885 +-	0.0
0.5628	0.025	0.0624 +-	0.0001	2.8651 +-	0.0613	2.9275 +-	0.0
0.5628	0.032	0.0645 +-	0.0002	2.5035 +-	0.0527	2.5680 +-	0.0
0.5628	0.032	0.0649 +-	0.0003	2.6158 +-	0.1006	2.6807 +-	0.1
0.5628	0.040	0.0676 +-	0.0001	2.2367 +-	0.0219	2.3044 +-	0.0
0.5628	0.050	0.0715 +-	0.0003	1.9225 +-	0.0434	1.9941 +-	0.0
0.5628	0.063	0.0768 +-	0.0002	1.6569 +-	0.0148	1.7337 +-	0.0
0.5628	0.080	0.0842 +-	0.0004	1.4351 +-	0.0185	1.5194 +-	0.0
0.5628	0.100	0.0927 +-	0.0005	1.1884 +-	0.0164	1.2812 +-	0.0
0.5628	0.126	0.1055 +-	0.0002	1.0177 +-	0.0049	1.1233 +-	0.0
0.5628	0.159	0.1203 +-	0.0013	0.8379 +-	0.0171	0.9582 +-	0.0
0.5628	0.200	0.1385 +-	0.0008	0.6804 +-	0.0063	0.8189 +-	0.0
0.5628	0.252	0.1653 +-	0.0022	0.5705 +-	0.0115	0.7358 +-	0.0
0.5628	0.317	0.1980 +-	0.0019	0.4688 +-	0.0064	0.6668 +-	0.0

0.5628	0.317	0.1988 +-	0.0024	0.4713 +-	0.0081	0.6701 +-	0.0
0.5628	0.399	0.2378 +-	0.0048	0.3790 +-	0.0100	0.6168 +-	0.0
0.5628	0.502	0.2882 +-	0.0095	0.3059 +-	0.0125	0.5940 +-	0.0
0.5628	0.632	0.3483 +-	0.0020	0.2432 +-	0.0017	0.5915 +-	0.0
0.5628	0.796	0.4387 +-	0.0078	0.2010 +-	0.0041	0.6397 +-	0.0
0.5628	1.002	0.5331 +-	0.0102	0.1582 +-	0.0034	0.6914 +-	0.0
0.5628	1.261	0.6642 +-	0.0072	0.1273 +-	0.0015	0.7916 +-	0.0
0.5628	1.587	0.8248 +-	0.0110	0.1016 +-	0.0015	0.9264 +-	0.0
0.5628	1.998	1.0369 +-	0.0148	0.0818 +-	0.0012	1.1187 +-	0.0
0.5628	2.516	1.2621 +-	0.0363	0.0635 +-	0.0019	1.3256 +-	0.0
0.5628	3.167	1.5992 +-	0.0254	0.0512 +-	0.0008	1.6504 +-	0.0
0.5628	3.167	1.6000 +-	0.0195	0.0513 +-	0.0006	1.6512 +-	0.0
0.5628	3.987	1.9605 +-	0.0287	0.0399 +-	0.0006	2.0004 +-	0.0
0.5628	5.020	2.5378 +-	0.0158	0.0328 +-	0.0002	2.5706 +-	0.0
0.5628	6.319	3.3392 +-	0.3227	0.0274 +-	0.0027	3.3666 +-	0.3
0.5628	7.956	4.0987 +-	0.2119	0.0213 +-	0.0011	4.1200 +-	0.2
0.5628	10.015	8.0114 +-	5.0756	0.0264 +-	0.0169	8.0378 +-	5.0
0.5628	12.609	6.4678 +-	0.0764	0.0134 +-	0.0002	6.4812 +-	0.0
0.5628	15.873	11.3345 +-	5.8840	0.0149 +-	0.0078	11.3495 +-	5.8
0.5628	19.984	84.5651 +-	129.1441	0.0705 +-	0.1078	84.6357 +-	129.2
0.5628	25.158	25.8099 +-	22.9299	0.0136 +-	0.0121	25.8235 +-	22.9
0.5628	31.672	49.8182 +-	58.7307	0.0165 +-	0.0195	49.8347 +-	58.7
0.6315	0.000	0.0717 +-	0.0000	12.6723 +-	1.1925	12.7441 +-	1.1
0.6315	0.001	0.0718 +-	0.0000	8.2497 +-	0.2643	8.3214 +-	0.2
0.6315	0.001	0.0718 +-	0.0000	8.9480 +-	0.6497	9.0198 +-	0.6
0.6315	0.001	0.0718 +-	0.0000	10.2895 +-	0.7096	10.3613 +-	0.7
0.6315	0.001	0.0718 +-	0.0000	11.0454 +-	1.2190	11.1171 +-	1.2
0.6315	0.001	0.0718 +-	0.0000	11.1375 +-	1.4570	11.2093 +-	1.4
0.6315	0.002	0.0718 +-	0.0000	6.9287 +-	0.3419	7.0006 +-	0.3
0.6315	0.002	0.0718 +-	0.0000	7.2602 +-	0.2323	7.3320 +-	0.2
0.6315	0.003	0.0719 +-	0.0000	6.0471 +-	0.0973	6.1191 +-	0.0
0.6315	0.003	0.0719 +-	0.0000	6.7083 +-	0.1883	6.7801 +-	0.1
0.6315	0.004	0.0720 +-	0.0000	5.4457 +-	0.1491	5.5177 +-	0.1
0.6315	0.004	0.0720 +-	0.0000	5.5859 +-	0.0971	5.6579 +-	0.0
0.6315	0.005	0.0721 +-	0.0000	5.1479 +-	0.1233	5.2200 +-	0.1
0.6315	0.006	0.0723 +-	0.0000	4.7325 +-	0.0373	4.8048 +-	0.0
0.6315	0.008	0.0726 +-	0.0000	4.3215 +-	0.1532	4.3940 +-	0.1
0.6315	0.010	0.0729 +-	0.0000	3.9897 +-	0.0416	4.0626 +-	0.0
0.6315	0.013	0.0735 +-	0.0000	3.6229 +-	0.0687	3.6964 +-	0.0
0.6315	0.016	0.0742 +-	0.0000	3.3023 +-	0.0492	3.3765 +-	0.0
0.6315	0.020	0.0753 +-	0.0001	2.9914 +-	0.0649	3.0667 +-	0.0
0.6315	0.025	0.0768 +-	0.0002	2.6429 +-	0.0792	2.7196 +-	0.0
0.6315	0.032	0.0786 +-	0.0001	2.2756 +-	0.0487	2.3542 +-	0.0
0.6315	0.040	0.0812 +-	0.0002	1.9884 +-	0.0418	2.0696 +-	0.0
0.6315	0.040	0.0817 +-	0.0004	2.0776 +-	0.0799	2.1593 +-	0.0
0.6315	0.050	0.0852 +-	0.0001	1.7765 +-	0.0174	1.8617 +-	0.0
0.6315	0.063	0.0900 +-	0.0004	1.5270 +-	0.0345	1.6170 +-	0.0
0.6315	0.080	0.0967 +-	0.0002	1.3160 +-	0.0118	1.4127 +-	0.0
0.6315	0.100	0.1061 +-	0.0004	1.1398 +-	0.0147	1.2459 +-	0.0
0.6315	0.126	0.1168 +-	0.0006	0.9439 +-	0.0131	1.0607 +-	0.0
0.6315	0.159	0.1329 +-	0.0003	0.8083 +-	0.0039	0.9412 +-	0.0
0.6315	0.200	0.1515 +-	0.0016	0.6655 +-	0.0136	0.8169 +-	0.0
0.6315	0.252	0.1744 +-	0.0010	0.5404 +-	0.0050	0.7148 +-	0.0
0.6315	0.317	0.2081 +-	0.0027	0.4531 +-	0.0091	0.6613 +-	0.0
0.6315	0.399	0.2493 +-	0.0024	0.3723 +-	0.0051	0.6217 +-	0.0
0.6315	0.399	0.2503 +-	0.0031	0.3743 +-	0.0065	0.6247 +-	0.0
0.6315	0.502	0.2993 +-	0.0060	0.3010 +-	0.0079	0.6004 +-	0.0
0.6315	0.632	0.3628 +-	0.0119	0.2429 +-	0.0099	0.6058 +-	0.0
0.6315	0.796	0.4386 +-	0.0025	0.1931 +-	0.0013	0.6317 +-	0.0
0.6315	1.002	0.5523 +-	0.0098	0.1597 +-	0.0032	0.7119 +-	0.0
0.6315	1.261	0.6713 +-	0.0129	0.1257 +-	0.0027	0.7969 +-	0.0
0.6315	1.588	0.8363 +-	0.0091	0.1011 +-	0.0012	0.9374 +-	0.0
0.6315	1.999	1.0385 +-	0.0139	0.0807 +-	0.0012	1.1191 +-	0.0
0.6315	2.516	1.3055 +-	0.0186	0.0650 +-	0.0010	1.3704 +-	0.0
0.6315	3.167	1.5890 +-	0.0458	0.0504 +-	0.0015	1.6395 +-	0.0
0.6315	3.988	2.0135 +-	0.0320	0.0407 +-	0.0007	2.0542 +-	0.0

0.6315	3.988	2.0144 +-	0.0246	0.0407 +-	0.0005	2.0552 +-	0.0
0.6315	5.020	2.4683 +-	0.0361	0.0317 +-	0.0005	2.5000 +-	0.0
0.6315	6.320	3.1952 +-	0.0199	0.0261 +-	0.0002	3.2212 +-	0.0
0.6315	7.956	4.2042 +-	0.4063	0.0218 +-	0.0021	4.2260 +-	0.4
0.6315	10.017	5.1605 +-	0.2669	0.0169 +-	0.0009	5.1775 +-	0.2
0.6315	12.610	10.0868 +-	6.3905	0.0210 +-	0.0134	10.1078 +-	6.4
0.6315	15.875	8.1433 +-	0.0962	0.0107 +-	0.0001	8.1539 +-	0.0
0.6315	19.986	14.2708 +-	7.4083	0.0118 +-	0.0062	14.2827 +-	7.4
0.6315	25.160	106.4722 +-	162.5996	0.0560 +-	0.0856	106.5282 +-	162.6
0.6315	31.675	32.4961 +-	28.8700	0.0108 +-	0.0096	32.5069 +-	28.8
0.6315	39.876	62.7239 +-	73.9452	0.0131 +-	0.0155	62.7370 +-	73.9
0.7086	0.001	0.0903 +-	0.0000	8.7727 +-	0.9682	8.8631 +-	0.9
0.7086	0.001	0.0903 +-	0.0000	8.8459 +-	1.1572	8.9363 +-	1.1
0.7086	0.001	0.0903 +-	0.0000	10.0650 +-	0.9471	10.1553 +-	0.9
0.7086	0.001	0.0904 +-	0.0000	7.1069 +-	0.5160	7.1973 +-	0.5
0.7086	0.001	0.0904 +-	0.0000	8.1724 +-	0.5636	8.2627 +-	0.5
0.7086	0.002	0.0904 +-	0.0000	5.7664 +-	0.1845	5.8568 +-	0.1
0.7086	0.002	0.0904 +-	0.0000	6.5523 +-	0.2099	6.6426 +-	0.2
0.7086	0.003	0.0904 +-	0.0000	5.5031 +-	0.2715	5.5936 +-	0.2
0.7086	0.003	0.0905 +-	0.0000	5.3280 +-	0.1496	5.4185 +-	0.1
0.7086	0.004	0.0906 +-	0.0000	4.8029 +-	0.0773	4.8935 +-	0.0
0.7086	0.005	0.0907 +-	0.0000	4.3252 +-	0.1184	4.4159 +-	0.1
0.7086	0.005	0.0907 +-	0.0000	4.4366 +-	0.0771	4.5272 +-	0.0
0.7086	0.006	0.0908 +-	0.0000	4.0887 +-	0.0979	4.1795 +-	0.0
0.7086	0.008	0.0910 +-	0.0000	3.7588 +-	0.0296	3.8498 +-	0.0
0.7086	0.010	0.0914 +-	0.0000	3.4323 +-	0.1217	3.5237 +-	0.1
0.7086	0.013	0.0918 +-	0.0000	3.1688 +-	0.0331	3.2606 +-	0.0
0.7086	0.016	0.0925 +-	0.0000	2.8775 +-	0.0545	2.9700 +-	0.0
0.7086	0.020	0.0935 +-	0.0000	2.6228 +-	0.0391	2.7163 +-	0.0
0.7086	0.025	0.0948 +-	0.0001	2.3759 +-	0.0516	2.4708 +-	0.0
0.7086	0.032	0.0966 +-	0.0002	2.0991 +-	0.0629	2.1957 +-	0.0
0.7086	0.040	0.0990 +-	0.0002	1.8074 +-	0.0387	1.9063 +-	0.0
0.7086	0.050	0.1023 +-	0.0003	1.5793 +-	0.0332	1.6816 +-	0.0
0.7086	0.050	0.1028 +-	0.0005	1.6501 +-	0.0634	1.7529 +-	0.0
0.7086	0.063	0.1072 +-	0.0002	1.4110 +-	0.0138	1.5182 +-	0.0
0.7086	0.080	0.1134 +-	0.0005	1.2128 +-	0.0274	1.3262 +-	0.0
0.7086	0.100	0.1218 +-	0.0003	1.0452 +-	0.0094	1.1670 +-	0.0
0.7086	0.126	0.1335 +-	0.0006	0.9053 +-	0.0117	1.0388 +-	0.0
0.7086	0.159	0.1470 +-	0.0008	0.7497 +-	0.0104	0.8967 +-	0.0
0.7086	0.200	0.1673 +-	0.0004	0.6420 +-	0.0031	0.8093 +-	0.0
0.7086	0.252	0.1907 +-	0.0020	0.5285 +-	0.0108	0.7193 +-	0.0
0.7086	0.317	0.2195 +-	0.0012	0.4292 +-	0.0040	0.6487 +-	0.0
0.7086	0.399	0.2620 +-	0.0035	0.3599 +-	0.0073	0.6219 +-	0.0
0.7086	0.502	0.3139 +-	0.0031	0.2957 +-	0.0041	0.6096 +-	0.0
0.7086	0.502	0.3152 +-	0.0039	0.2973 +-	0.0051	0.6125 +-	0.0
0.7086	0.632	0.3769 +-	0.0075	0.2391 +-	0.0063	0.6160 +-	0.0
0.7086	0.796	0.4568 +-	0.0150	0.1929 +-	0.0079	0.6498 +-	0.0
0.7086	1.002	0.5522 +-	0.0031	0.1534 +-	0.0010	0.7056 +-	0.0
0.7086	1.261	0.6954 +-	0.0123	0.1268 +-	0.0026	0.8222 +-	0.0
0.7086	1.588	0.8452 +-	0.0162	0.0998 +-	0.0021	0.9450 +-	0.0
0.7086	1.999	1.0530 +-	0.0115	0.0803 +-	0.0010	1.1333 +-	0.0
0.7086	2.516	1.3075 +-	0.0175	0.0641 +-	0.0009	1.3715 +-	0.0
0.7086	3.168	1.6437 +-	0.0234	0.0516 +-	0.0008	1.6953 +-	0.0
0.7086	3.988	2.0007 +-	0.0576	0.0400 +-	0.0012	2.0407 +-	0.0
0.7086	5.021	2.5351 +-	0.0403	0.0323 +-	0.0005	2.5674 +-	0.0
0.7086	5.021	2.5363 +-	0.0309	0.0323 +-	0.0004	2.5686 +-	0.0
0.7086	6.321	3.1077 +-	0.0455	0.0252 +-	0.0004	3.1329 +-	0.0
0.7086	7.957	4.0229 +-	0.0250	0.0207 +-	0.0001	4.0436 +-	0.0
0.7086	10.018	5.2934 +-	0.5116	0.0173 +-	0.0017	5.3106 +-	0.5
0.7086	12.611	6.4974 +-	0.3360	0.0134 +-	0.0007	6.5108 +-	0.3
0.7086	15.877	12.6999 +-	8.0460	0.0167 +-	0.0106	12.7165 +-	8.0
0.7086	19.988	10.2528 +-	0.1211	0.0085 +-	0.0001	10.2613 +-	0.1
0.7086	25.163	17.9677 +-	9.3275	0.0094 +-	0.0049	17.9771 +-	9.3
0.7086	31.678	134.0543 +-	204.7219	0.0445 +-	0.0680	134.0988 +-	204.7
0.7086	39.881	40.9144 +-	36.3489	0.0086 +-	0.0076	40.9230 +-	36.3
0.7086	50.207	78.9728 +-	93.1011	0.0104 +-	0.0123	78.9833 +-	93.1

0.7951	0.001	0.1137 +-	0.0000	6.9677 +-	0.7690	7.0815 +-	0.7
0.7951	0.001	0.1137 +-	0.0000	7.9941 +-	0.7522	8.1078 +-	0.7
0.7951	0.001	0.1138 +-	0.0000	6.4909 +-	0.4476	6.6047 +-	0.4
0.7951	0.001	0.1138 +-	0.0000	7.0258 +-	0.9191	7.1396 +-	0.9
0.7951	0.002	0.1138 +-	0.0000	5.2041 +-	0.1667	5.3179 +-	0.1
0.7951	0.002	0.1138 +-	0.0000	5.6447 +-	0.4098	5.7584 +-	0.4
0.7951	0.003	0.1138 +-	0.0000	4.5799 +-	0.1465	4.6937 +-	0.1
0.7951	0.003	0.1139 +-	0.0000	4.3708 +-	0.2157	4.4847 +-	0.2
0.7951	0.004	0.1139 +-	0.0000	4.2318 +-	0.1188	4.3457 +-	0.1
0.7951	0.005	0.1140 +-	0.0000	3.8147 +-	0.0614	3.9287 +-	0.0
0.7951	0.006	0.1141 +-	0.0000	3.4353 +-	0.0941	3.5494 +-	0.0
0.7951	0.006	0.1142 +-	0.0000	3.5237 +-	0.0613	3.6379 +-	0.0
0.7951	0.008	0.1143 +-	0.0000	3.2474 +-	0.0778	3.3618 +-	0.0
0.7951	0.010	0.1146 +-	0.0000	2.9854 +-	0.0235	3.1000 +-	0.0
0.7951	0.013	0.1150 +-	0.0000	2.7261 +-	0.0967	2.8411 +-	0.0
0.7951	0.016	0.1156 +-	0.0000	2.5168 +-	0.0263	2.6324 +-	0.0
0.7951	0.020	0.1165 +-	0.0001	2.2854 +-	0.0433	2.4019 +-	0.0
0.7951	0.025	0.1177 +-	0.0001	2.0832 +-	0.0310	2.2008 +-	0.0
0.7951	0.032	0.1194 +-	0.0001	1.8871 +-	0.0410	2.0065 +-	0.0
0.7951	0.040	0.1217 +-	0.0002	1.6672 +-	0.0499	1.7889 +-	0.0
0.7951	0.050	0.1246 +-	0.0002	1.4355 +-	0.0307	1.5601 +-	0.0
0.7951	0.063	0.1288 +-	0.0003	1.2543 +-	0.0264	1.3831 +-	0.0
0.7951	0.063	0.1294 +-	0.0006	1.3106 +-	0.0504	1.4400 +-	0.0
0.7951	0.080	0.1350 +-	0.0002	1.1207 +-	0.0110	1.2557 +-	0.0
0.7951	0.100	0.1427 +-	0.0007	0.9633 +-	0.0217	1.1060 +-	0.0
0.7951	0.126	0.1533 +-	0.0004	0.8302 +-	0.0074	0.9835 +-	0.0
0.7951	0.159	0.1681 +-	0.0007	0.7190 +-	0.0093	0.8872 +-	0.0
0.7951	0.200	0.1851 +-	0.0010	0.5954 +-	0.0082	0.7806 +-	0.0
0.7951	0.252	0.2106 +-	0.0005	0.5099 +-	0.0025	0.7205 +-	0.0
0.7951	0.317	0.2401 +-	0.0026	0.4198 +-	0.0085	0.6599 +-	0.0
0.7951	0.399	0.2764 +-	0.0015	0.3409 +-	0.0032	0.6173 +-	0.0
0.7951	0.502	0.3299 +-	0.0044	0.2858 +-	0.0058	0.6158 +-	0.0
0.7951	0.632	0.3953 +-	0.0039	0.2349 +-	0.0032	0.6301 +-	0.0
0.7951	0.632	0.3968 +-	0.0049	0.2361 +-	0.0041	0.6330 +-	0.0
0.7951	0.796	0.4745 +-	0.0095	0.1899 +-	0.0050	0.6644 +-	0.0
0.7951	1.002	0.5752 +-	0.0189	0.1532 +-	0.0063	0.7284 +-	0.0
0.7951	1.261	0.6952 +-	0.0040	0.1218 +-	0.0008	0.8171 +-	0.0
0.7951	1.588	0.8755 +-	0.0155	0.1007 +-	0.0020	0.9762 +-	0.0
0.7951	1.999	1.0641 +-	0.0204	0.0793 +-	0.0017	1.1434 +-	0.0
0.7951	2.517	1.3257 +-	0.0144	0.0638 +-	0.0008	1.3895 +-	0.0
0.7951	3.168	1.6462 +-	0.0220	0.0509 +-	0.0007	1.6971 +-	0.0
0.7951	3.988	2.0695 +-	0.0295	0.0410 +-	0.0006	2.1105 +-	0.0
0.7951	5.021	2.5190 +-	0.0725	0.0318 +-	0.0010	2.5508 +-	0.0
0.7951	6.321	3.1918 +-	0.0507	0.0257 +-	0.0004	3.2175 +-	0.0
0.7951	6.321	3.1933 +-	0.0389	0.0257 +-	0.0003	3.2190 +-	0.0
0.7951	7.958	3.9128 +-	0.0573	0.0200 +-	0.0003	3.9328 +-	0.0
0.7951	10.019	5.0650 +-	0.0315	0.0164 +-	0.0001	5.0815 +-	0.0
0.7951	12.613	6.6646 +-	0.6441	0.0137 +-	0.0013	6.6783 +-	0.6
0.7951	15.878	8.1806 +-	0.4230	0.0107 +-	0.0006	8.1913 +-	0.4
0.7951	19.990	15.9898 +-	10.1303	0.0132 +-	0.0085	16.0031 +-	10.1
0.7951	25.166	12.9089 +-	0.1525	0.0067 +-	0.0001	12.9156 +-	0.1
0.7951	31.682	22.6224 +-	11.7438	0.0075 +-	0.0039	22.6299 +-	11.7
0.7951	39.885	168.7818 +-	257.7561	0.0353 +-	0.0540	168.8172 +-	257.8
0.7951	50.212	51.5135 +-	45.7653	0.0068 +-	0.0061	51.5203 +-	45.7
0.7951	63.213	99.4311 +-	117.2194	0.0083 +-	0.0098	99.4394 +-	117.2
0.8921	0.001	0.1432 +-	0.0000	5.5341 +-	0.6107	5.6773 +-	0.6
0.8921	0.001	0.1432 +-	0.0000	5.5803 +-	0.7300	5.7235 +-	0.7
0.8921	0.001	0.1432 +-	0.0000	6.3492 +-	0.5975	6.4924 +-	0.5
0.8921	0.002	0.1432 +-	0.0000	4.4832 +-	0.3255	4.6265 +-	0.3
0.8921	0.002	0.1432 +-	0.0000	5.1554 +-	0.3555	5.2986 +-	0.3
0.8921	0.003	0.1433 +-	0.0000	3.6376 +-	0.1164	3.7809 +-	0.1
0.8921	0.003	0.1433 +-	0.0000	4.1333 +-	0.1324	4.2766 +-	0.1
0.8921	0.004	0.1434 +-	0.0000	3.4715 +-	0.1713	3.6149 +-	0.1
0.8921	0.005	0.1434 +-	0.0000	3.3611 +-	0.0944	3.5045 +-	0.0
0.8921	0.006	0.1436 +-	0.0000	3.0298 +-	0.0488	3.1734 +-	0.0
0.8921	0.008	0.1437 +-	0.0000	2.7285 +-	0.0747	2.8722 +-	0.0

0.8921	0.008	0.1437 +-	0.0000	2.7987 +-	0.0487	2.9424 +-	0.0
0.8921	0.010	0.1440 +-	0.0000	2.5792 +-	0.0618	2.7232 +-	0.0
0.8921	0.013	0.1443 +-	0.0000	2.3711 +-	0.0187	2.5155 +-	0.0
0.8921	0.016	0.1448 +-	0.0001	2.1652 +-	0.0768	2.3100 +-	0.0
0.8921	0.020	0.1456 +-	0.0000	1.9990 +-	0.0209	2.1446 +-	0.0
0.8921	0.025	0.1466 +-	0.0001	1.8152 +-	0.0344	1.9618 +-	0.0
0.8921	0.032	0.1482 +-	0.0001	1.6545 +-	0.0247	1.8027 +-	0.0
0.8921	0.040	0.1503 +-	0.0002	1.4988 +-	0.0325	1.6491 +-	0.0
0.8921	0.050	0.1532 +-	0.0003	1.3242 +-	0.0397	1.4774 +-	0.0
0.8921	0.063	0.1569 +-	0.0003	1.1401 +-	0.0244	1.2970 +-	0.0
0.8921	0.080	0.1621 +-	0.0004	0.9963 +-	0.0210	1.1584 +-	0.0
0.8921	0.080	0.1630 +-	0.0008	1.0409 +-	0.0400	1.2039 +-	0.0
0.8921	0.100	0.1700 +-	0.0003	0.8901 +-	0.0087	1.0601 +-	0.0
0.8921	0.126	0.1797 +-	0.0008	0.7651 +-	0.0173	0.9448 +-	0.0
0.8921	0.159	0.1931 +-	0.0004	0.6593 +-	0.0059	0.8524 +-	0.0
0.8921	0.200	0.2117 +-	0.0009	0.5711 +-	0.0074	0.7828 +-	0.0
0.8921	0.252	0.2331 +-	0.0012	0.4729 +-	0.0065	0.7060 +-	0.0
0.8921	0.317	0.2652 +-	0.0006	0.4050 +-	0.0020	0.6702 +-	0.0
0.8921	0.399	0.3023 +-	0.0032	0.3334 +-	0.0068	0.6358 +-	0.0
0.8921	0.502	0.3480 +-	0.0019	0.2708 +-	0.0025	0.6188 +-	0.0
0.8921	0.632	0.4154 +-	0.0055	0.2270 +-	0.0046	0.6424 +-	0.0
0.8921	0.796	0.4977 +-	0.0049	0.1865 +-	0.0026	0.6842 +-	0.0
0.8921	0.796	0.4996 +-	0.0061	0.1876 +-	0.0032	0.6872 +-	0.0
0.8921	1.002	0.5975 +-	0.0119	0.1508 +-	0.0040	0.7483 +-	0.0
0.8921	1.261	0.7242 +-	0.0238	0.1217 +-	0.0050	0.8459 +-	0.0
0.8921	1.588	0.8753 +-	0.0050	0.0968 +-	0.0007	0.9721 +-	0.0
0.8921	1.999	1.1023 +-	0.0195	0.0800 +-	0.0016	1.1823 +-	0.0
0.8921	2.517	1.3398 +-	0.0257	0.0630 +-	0.0014	1.4027 +-	0.0
0.8921	3.168	1.6692 +-	0.0182	0.0507 +-	0.0006	1.7198 +-	0.0
0.8921	3.989	2.0726 +-	0.0277	0.0404 +-	0.0006	2.1130 +-	0.0
0.8921	5.022	2.6056 +-	0.0371	0.0325 +-	0.0005	2.6381 +-	0.0
0.8921	6.322	3.1715 +-	0.0913	0.0253 +-	0.0008	3.1968 +-	0.0
0.8921	7.959	4.0187 +-	0.0639	0.0204 +-	0.0003	4.0391 +-	0.0
0.8921	7.959	4.0206 +-	0.0490	0.0204 +-	0.0003	4.0410 +-	0.0
0.8921	10.020	4.9265 +-	0.0721	0.0159 +-	0.0002	4.9423 +-	0.0
0.8921	12.614	6.3772 +-	0.0396	0.0131 +-	0.0001	6.3902 +-	0.0
0.8921	15.880	8.3911 +-	0.8110	0.0109 +-	0.0011	8.4020 +-	0.8
0.8921	19.992	10.2998 +-	0.5326	0.0085 +-	0.0004	10.3083 +-	0.5
0.8921	25.168	20.1321 +-	12.7546	0.0105 +-	0.0067	20.1426 +-	12.7
0.8921	31.685	16.2530 +-	0.1920	0.0053 +-	0.0001	16.2583 +-	0.1
0.8921	39.889	28.4828 +-	14.7861	0.0059 +-	0.0031	28.4888 +-	14.7
0.8921	50.217	212.5056 +-	324.5292	0.0281 +-	0.0429	212.5337 +-	324.5
0.8921	63.219	64.8583 +-	57.6210	0.0054 +-	0.0048	64.8637 +-	57.6
0.8921	79.589	125.1893 +-	147.5857	0.0066 +-	0.0078	125.1959 +-	147.5
1.0010	0.001	0.1803 +-	0.0000	4.3954 +-	0.4851	4.5757 +-	0.4
1.0010	0.001	0.1803 +-	0.0000	5.0429 +-	0.4745	5.2232 +-	0.4
1.0010	0.002	0.1803 +-	0.0000	4.0946 +-	0.2824	4.2750 +-	0.2
1.0010	0.002	0.1803 +-	0.0000	4.4321 +-	0.5798	4.6124 +-	0.5
1.0010	0.003	0.1804 +-	0.0000	3.2829 +-	0.1052	3.4633 +-	0.1
1.0010	0.003	0.1804 +-	0.0000	3.5608 +-	0.2585	3.7412 +-	0.2
1.0010	0.004	0.1804 +-	0.0000	2.8891 +-	0.0924	3.0696 +-	0.0
1.0010	0.005	0.1805 +-	0.0000	2.7572 +-	0.1361	2.9377 +-	0.1
1.0010	0.006	0.1806 +-	0.0000	2.6695 +-	0.0750	2.8501 +-	0.0
1.0010	0.008	0.1807 +-	0.0000	2.4064 +-	0.0387	2.5872 +-	0.0
1.0010	0.010	0.1809 +-	0.0000	2.1671 +-	0.0593	2.3480 +-	0.0
1.0010	0.010	0.1810 +-	0.0000	2.2229 +-	0.0386	2.4038 +-	0.0
1.0010	0.013	0.1813 +-	0.0000	2.0486 +-	0.0491	2.2298 +-	0.0
1.0010	0.016	0.1817 +-	0.0000	1.8833 +-	0.0149	2.0650 +-	0.0
1.0010	0.020	0.1823 +-	0.0001	1.7197 +-	0.0610	1.9020 +-	0.0
1.0010	0.025	0.1833 +-	0.0000	1.5877 +-	0.0166	1.7710 +-	0.0
1.0010	0.032	0.1846 +-	0.0001	1.4417 +-	0.0273	1.6263 +-	0.0
1.0010	0.040	0.1866 +-	0.0001	1.3141 +-	0.0196	1.5007 +-	0.0
1.0010	0.050	0.1893 +-	0.0002	1.1904 +-	0.0258	1.3797 +-	0.0
1.0010	0.063	0.1929 +-	0.0004	1.0517 +-	0.0315	1.2446 +-	0.0
1.0010	0.080	0.1975 +-	0.0004	0.9056 +-	0.0194	1.1031 +-	0.0
1.0010	0.100	0.2041 +-	0.0005	0.7913 +-	0.0167	0.9954 +-	0.0

1.0010	0.100	0.2052 +- 0.0010	0.8268 +- 0.0318	1.0320 +- 0.0
1.0010	0.126	0.2140 +- 0.0003	0.7069 +- 0.0069	0.9210 +- 0.0
1.0010	0.159	0.2263 +- 0.0010	0.6076 +- 0.0137	0.8339 +- 0.0
1.0010	0.200	0.2431 +- 0.0006	0.5237 +- 0.0047	0.7668 +- 0.0
1.0010	0.252	0.2665 +- 0.0011	0.4536 +- 0.0059	0.7201 +- 0.0
1.0010	0.317	0.2934 +- 0.0016	0.3756 +- 0.0052	0.6691 +- 0.0
1.0010	0.399	0.3339 +- 0.0007	0.3217 +- 0.0016	0.6555 +- 0.0
1.0010	0.502	0.3807 +- 0.0041	0.2648 +- 0.0054	0.6455 +- 0.0
1.0010	0.632	0.4382 +- 0.0024	0.2150 +- 0.0020	0.6532 +- 0.0
1.0010	0.796	0.5230 +- 0.0069	0.1803 +- 0.0036	0.7033 +- 0.0
1.0010	1.002	0.6266 +- 0.0061	0.1482 +- 0.0020	0.7748 +- 0.0
1.0010	1.002	0.6290 +- 0.0077	0.1490 +- 0.0026	0.7780 +- 0.0
1.0010	1.262	0.7522 +- 0.0150	0.1198 +- 0.0032	0.8720 +- 0.0
1.0010	1.588	0.9118 +- 0.0300	0.0967 +- 0.0040	1.0084 +- 0.0
1.0010	1.999	1.1021 +- 0.0063	0.0769 +- 0.0005	1.1789 +- 0.0
1.0010	2.517	1.3879 +- 0.0246	0.0635 +- 0.0013	1.4514 +- 0.0
1.0010	3.169	1.6868 +- 0.0324	0.0500 +- 0.0011	1.7368 +- 0.0
1.0010	3.989	2.1016 +- 0.0229	0.0402 +- 0.0005	2.1418 +- 0.0
1.0010	5.022	2.6095 +- 0.0349	0.0321 +- 0.0005	2.6416 +- 0.0
1.0010	6.323	3.2806 +- 0.0467	0.0259 +- 0.0004	3.3064 +- 0.0
1.0010	7.960	3.9932 +- 0.1150	0.0201 +- 0.0006	4.0132 +- 0.1
1.0010	10.021	5.0597 +- 0.0804	0.0162 +- 0.0003	5.0759 +- 0.0
1.0010	10.021	5.0622 +- 0.0617	0.0162 +- 0.0002	5.0784 +- 0.0
1.0010	12.615	6.2027 +- 0.0908	0.0126 +- 0.0002	6.2153 +- 0.0
1.0010	15.882	8.0292 +- 0.0499	0.0104 +- 0.0001	8.0396 +- 0.0
1.0010	19.994	10.5649 +- 1.0211	0.0087 +- 0.0009	10.5736 +- 1.0
1.0010	25.171	12.9681 +- 0.6706	0.0067 +- 0.0004	12.9748 +- 0.6
1.0010	31.688	25.3474 +- 16.0588	0.0084 +- 0.0053	25.3557 +- 16.0
1.0010	39.893	20.4634 +- 0.2418	0.0042 +- 0.0001	20.4676 +- 0.2
1.0010	50.222	35.8614 +- 18.6166	0.0047 +- 0.0025	35.8662 +- 18.6
1.0010	63.226	267.5563 +- 408.6002	0.0223 +- 0.0341	267.5786 +- 408.6
1.0010	79.597	81.6602 +- 72.5480	0.0043 +- 0.0038	81.6645 +- 72.5
1.0010	100.206	157.6203 +- 185.8186	0.0052 +- 0.0062	157.6255 +- 185.8
1.1232	0.001	0.2270 +- 0.0000	4.0053 +- 0.3769	4.2323 +- 0.3
1.1232	0.002	0.2270 +- 0.0000	3.4911 +- 0.3853	3.7181 +- 0.3
1.1232	0.002	0.2270 +- 0.0000	3.5202 +- 0.4605	3.7472 +- 0.4
1.1232	0.003	0.2271 +- 0.0000	2.8282 +- 0.2053	3.0552 +- 0.2
1.1232	0.003	0.2271 +- 0.0000	3.2521 +- 0.2243	3.4792 +- 0.2
1.1232	0.004	0.2271 +- 0.0000	2.6074 +- 0.0835	2.8345 +- 0.0
1.1232	0.005	0.2272 +- 0.0000	2.2947 +- 0.0734	2.5218 +- 0.0
1.1232	0.006	0.2273 +- 0.0000	2.1899 +- 0.1081	2.4172 +- 0.1
1.1232	0.008	0.2274 +- 0.0000	2.1202 +- 0.0595	2.3476 +- 0.0
1.1232	0.010	0.2276 +- 0.0000	1.9113 +- 0.0308	2.1389 +- 0.0
1.1232	0.013	0.2278 +- 0.0000	1.7212 +- 0.0471	1.9490 +- 0.0
1.1232	0.013	0.2278 +- 0.0000	1.7655 +- 0.0307	1.9933 +- 0.0
1.1232	0.016	0.2282 +- 0.0000	1.6271 +- 0.0390	1.8553 +- 0.0
1.1232	0.020	0.2288 +- 0.0000	1.4958 +- 0.0118	1.7246 +- 0.0
1.1232	0.025	0.2296 +- 0.0001	1.3659 +- 0.0484	1.5954 +- 0.0
1.1232	0.032	0.2308 +- 0.0000	1.2610 +- 0.0132	1.4918 +- 0.0
1.1232	0.040	0.2325 +- 0.0001	1.1451 +- 0.0217	1.3775 +- 0.0
1.1232	0.050	0.2349 +- 0.0001	1.0437 +- 0.0156	1.2786 +- 0.0
1.1232	0.063	0.2383 +- 0.0002	0.9455 +- 0.0205	1.1838 +- 0.0
1.1232	0.080	0.2429 +- 0.0005	0.8353 +- 0.0250	1.0782 +- 0.0
1.1232	0.100	0.2487 +- 0.0005	0.7192 +- 0.0154	0.9679 +- 0.0
1.1232	0.126	0.2570 +- 0.0006	0.6285 +- 0.0132	0.8855 +- 0.0
1.1232	0.126	0.2583 +- 0.0012	0.6567 +- 0.0252	0.9150 +- 0.0
1.1232	0.159	0.2695 +- 0.0004	0.5615 +- 0.0055	0.8310 +- 0.0
1.1232	0.200	0.2849 +- 0.0013	0.4826 +- 0.0109	0.7675 +- 0.0
1.1232	0.252	0.3061 +- 0.0007	0.4159 +- 0.0037	0.7220 +- 0.0
1.1232	0.317	0.3355 +- 0.0014	0.3603 +- 0.0047	0.6958 +- 0.0
1.1232	0.399	0.3695 +- 0.0020	0.2983 +- 0.0041	0.6678 +- 0.0
1.1232	0.502	0.4204 +- 0.0009	0.2555 +- 0.0012	0.6758 +- 0.0
1.1232	0.632	0.4793 +- 0.0051	0.2103 +- 0.0043	0.6896 +- 0.0
1.1232	0.796	0.5517 +- 0.0030	0.1708 +- 0.0016	0.7225 +- 0.0
1.1232	1.002	0.6585 +- 0.0087	0.1432 +- 0.0029	0.8017 +- 0.0
1.1232	1.262	0.7889 +- 0.0077	0.1177 +- 0.0016	0.9066 +- 0.0

1.1232	1.262	0.7920 +-	0.0097	0.1183 +-	0.0020	0.9103 +-	0.0
1.1232	1.588	0.9471 +-	0.0189	0.0951 +-	0.0025	1.0422 +-	0.0
1.1232	2.000	1.1480 +-	0.0377	0.0768 +-	0.0031	1.2248 +-	0.0
1.1232	2.517	1.3876 +-	0.0079	0.0610 +-	0.0004	1.4486 +-	0.0
1.1232	3.169	1.7474 +-	0.0309	0.0505 +-	0.0010	1.7978 +-	0.0
1.1232	3.990	2.1238 +-	0.0408	0.0397 +-	0.0009	2.1635 +-	0.0
1.1232	5.023	2.6460 +-	0.0288	0.0320 +-	0.0004	2.6780 +-	0.0
1.1232	6.323	3.2856 +-	0.0439	0.0255 +-	0.0004	3.3111 +-	0.0
1.1232	7.961	4.1304 +-	0.0588	0.0205 +-	0.0003	4.1510 +-	0.0
1.1232	10.022	5.0276 +-	0.1448	0.0159 +-	0.0005	5.0435 +-	0.1
1.1232	12.617	6.3705 +-	0.1012	0.0129 +-	0.0002	6.3833 +-	0.1
1.1232	12.617	6.3735 +-	0.0777	0.0129 +-	0.0002	6.3864 +-	0.0
1.1232	15.883	7.8095 +-	0.1143	0.0100 +-	0.0002	7.8196 +-	0.1
1.1232	19.996	10.1092 +-	0.0629	0.0082 +-	0.0001	10.1175 +-	0.0
1.1232	25.173	13.3018 +-	1.2856	0.0069 +-	0.0007	13.3087 +-	1.2
1.1232	31.691	16.3275 +-	0.8443	0.0053 +-	0.0003	16.3328 +-	0.8
1.1232	39.897	31.9138 +-	20.2189	0.0066 +-	0.0042	31.9204 +-	20.2
1.1232	50.227	25.7646 +-	0.3044	0.0034 +-	0.0000	25.7679 +-	0.3
1.1232	63.233	45.1515 +-	23.4393	0.0037 +-	0.0020	45.1553 +-	23.4
1.1232	79.605	336.8682 +-	514.4502	0.0177 +-	0.0271	336.8859 +-	514.4
1.1232	100.217	102.8147 +-	91.3419	0.0034 +-	0.0030	102.8181 +-	91.3
1.1232	126.165	198.4526 +-	233.9559	0.0042 +-	0.0049	198.4568 +-	233.9
1.2604	0.002	0.2858 +-	0.0000	2.7728 +-	0.3060	3.0586 +-	0.3
1.2604	0.002	0.2858 +-	0.0000	3.1812 +-	0.2993	3.4670 +-	0.2
1.2604	0.003	0.2858 +-	0.0000	2.7959 +-	0.3658	3.0817 +-	0.3
1.2604	0.003	0.2859 +-	0.0000	2.5830 +-	0.1781	2.8689 +-	0.1
1.2604	0.004	0.2859 +-	0.0000	2.2463 +-	0.1631	2.5322 +-	0.1
1.2604	0.005	0.2859 +-	0.0000	2.0709 +-	0.0663	2.3569 +-	0.0
1.2604	0.006	0.2860 +-	0.0000	1.8225 +-	0.0583	2.1086 +-	0.0
1.2604	0.008	0.2861 +-	0.0000	1.7393 +-	0.0858	2.0255 +-	0.0
1.2604	0.010	0.2863 +-	0.0000	1.6840 +-	0.0473	1.9703 +-	0.0
1.2604	0.013	0.2865 +-	0.0000	1.5180 +-	0.0244	1.8045 +-	0.0
1.2604	0.016	0.2868 +-	0.0000	1.3671 +-	0.0374	1.6539 +-	0.0
1.2604	0.016	0.2869 +-	0.0000	1.4022 +-	0.0244	1.6891 +-	0.0
1.2604	0.020	0.2873 +-	0.0000	1.2923 +-	0.0309	1.5796 +-	0.0
1.2604	0.025	0.2881 +-	0.0000	1.1880 +-	0.0094	1.4761 +-	0.0
1.2604	0.032	0.2891 +-	0.0001	1.0848 +-	0.0385	1.3739 +-	0.0
1.2604	0.040	0.2906 +-	0.0000	1.0015 +-	0.0105	1.2921 +-	0.0
1.2604	0.050	0.2927 +-	0.0001	0.9095 +-	0.0172	1.2021 +-	0.0
1.2604	0.063	0.2957 +-	0.0001	0.8290 +-	0.0124	1.1247 +-	0.0
1.2604	0.080	0.3001 +-	0.0003	0.7509 +-	0.0163	1.0510 +-	0.0
1.2604	0.100	0.3058 +-	0.0006	0.6634 +-	0.0199	0.9692 +-	0.0
1.2604	0.126	0.3131 +-	0.0006	0.5712 +-	0.0122	0.8843 +-	0.0
1.2604	0.159	0.3236 +-	0.0008	0.4992 +-	0.0105	0.8227 +-	0.0
1.2604	0.159	0.3253 +-	0.0015	0.5215 +-	0.0201	0.8468 +-	0.0
1.2604	0.200	0.3393 +-	0.0005	0.4460 +-	0.0044	0.7853 +-	0.0
1.2604	0.252	0.3587 +-	0.0016	0.3833 +-	0.0087	0.7420 +-	0.0
1.2604	0.317	0.3854 +-	0.0009	0.3304 +-	0.0030	0.7157 +-	0.0
1.2604	0.399	0.4225 +-	0.0018	0.2861 +-	0.0037	0.7086 +-	0.0
1.2604	0.502	0.4652 +-	0.0025	0.2370 +-	0.0033	0.7021 +-	0.0
1.2604	0.632	0.5292 +-	0.0012	0.2029 +-	0.0010	0.7322 +-	0.0
1.2604	0.796	0.6034 +-	0.0065	0.1671 +-	0.0034	0.7705 +-	0.0
1.2604	1.002	0.6946 +-	0.0038	0.1357 +-	0.0013	0.8303 +-	0.0
1.2604	1.262	0.8291 +-	0.0109	0.1138 +-	0.0023	0.9429 +-	0.0
1.2604	1.588	0.9933 +-	0.0097	0.0935 +-	0.0013	1.0868 +-	0.0
1.2604	1.588	0.9972 +-	0.0123	0.0940 +-	0.0016	1.0911 +-	0.0
1.2604	2.000	1.1924 +-	0.0238	0.0756 +-	0.0020	1.2680 +-	0.0
1.2604	2.518	1.4454 +-	0.0475	0.0610 +-	0.0025	1.5063 +-	0.0
1.2604	3.169	1.7470 +-	0.0100	0.0485 +-	0.0003	1.7955 +-	0.0
1.2604	3.990	2.2001 +-	0.0389	0.0401 +-	0.0008	2.2401 +-	0.0
1.2604	5.023	2.6740 +-	0.0513	0.0315 +-	0.0007	2.7056 +-	0.0
1.2604	6.324	3.3315 +-	0.0362	0.0254 +-	0.0003	3.3568 +-	0.0
1.2604	7.961	4.1367 +-	0.0553	0.0203 +-	0.0003	4.1570 +-	0.0
1.2604	10.023	5.2004 +-	0.0741	0.0163 +-	0.0002	5.2167 +-	0.0
1.2604	12.618	6.3300 +-	0.1823	0.0127 +-	0.0004	6.3427 +-	0.1
1.2604	15.885	8.0208 +-	0.1274	0.0102 +-	0.0002	8.0310 +-	0.1

1.2604	15.885	8.0246	+-	0.0978	0.0102	+-	0.0001	8.0349	+-	0.0
1.2604	19.998	9.8326	+-	0.1440	0.0080	+-	0.0001	9.8406	+-	0.1
1.2604	25.176	12.7281	+-	0.0791	0.0065	+-	0.0000	12.7346	+-	0.0
1.2604	31.695	16.7477	+-	1.6187	0.0055	+-	0.0005	16.7531	+-	1.6
1.2604	39.901	20.5572	+-	1.0630	0.0042	+-	0.0002	20.5615	+-	1.0
1.2604	50.233	40.1812	+-	25.4567	0.0053	+-	0.0034	40.1864	+-	25.4
1.2604	63.239	32.4390	+-	0.3833	0.0027	+-	0.0000	32.4417	+-	0.3
1.2604	79.613	56.8483	+-	29.5113	0.0030	+-	0.0016	56.8513	+-	29.5
1.2604	100.227	424.1356	+-	647.7212	0.0141	+-	0.0215	424.1497	+-	647.7
1.2604	126.178	129.4494	+-	115.0046	0.0027	+-	0.0024	129.4521	+-	115.0
1.2604	158.849	249.8628	+-	294.5633	0.0033	+-	0.0039	249.8661	+-	294.5
1.4142	0.002	0.3599	+-	0.0000	2.5266	+-	0.2378	2.8865	+-	0.2
1.4142	0.003	0.3599	+-	0.0000	2.2023	+-	0.2430	2.5621	+-	0.2
1.4142	0.003	0.3599	+-	0.0000	2.2206	+-	0.2905	2.5805	+-	0.2
1.4142	0.004	0.3599	+-	0.0000	2.0515	+-	0.1415	2.4115	+-	0.1
1.4142	0.005	0.3600	+-	0.0000	1.7841	+-	0.1295	2.1440	+-	0.1
1.4142	0.006	0.3600	+-	0.0000	1.6448	+-	0.0527	2.0049	+-	0.0
1.4142	0.008	0.3601	+-	0.0000	1.4475	+-	0.0463	1.8077	+-	0.0
1.4142	0.010	0.3602	+-	0.0000	1.3815	+-	0.0682	1.7417	+-	0.0
1.4142	0.013	0.3605	+-	0.0000	1.3375	+-	0.0376	1.6980	+-	0.0
1.4142	0.016	0.3607	+-	0.0000	1.2057	+-	0.0194	1.5664	+-	0.0
1.4142	0.020	0.3611	+-	0.0000	1.0858	+-	0.0297	1.4469	+-	0.0
1.4142	0.020	0.3612	+-	0.0000	1.1137	+-	0.0194	1.4749	+-	0.0
1.4142	0.025	0.3618	+-	0.0000	1.0264	+-	0.0246	1.3882	+-	0.0
1.4142	0.032	0.3627	+-	0.0000	0.9436	+-	0.0074	1.3063	+-	0.0
1.4142	0.040	0.3639	+-	0.0001	0.8616	+-	0.0306	1.2256	+-	0.0
1.4142	0.050	0.3659	+-	0.0001	0.7955	+-	0.0083	1.1613	+-	0.0
1.4142	0.063	0.3685	+-	0.0002	0.7223	+-	0.0137	1.0908	+-	0.0
1.4142	0.080	0.3724	+-	0.0002	0.6584	+-	0.0098	1.0308	+-	0.0
1.4142	0.100	0.3778	+-	0.0004	0.5964	+-	0.0129	0.9742	+-	0.0
1.4142	0.126	0.3850	+-	0.0008	0.5269	+-	0.0158	0.9119	+-	0.0
1.4142	0.159	0.3942	+-	0.0007	0.4537	+-	0.0097	0.8479	+-	0.0
1.4142	0.200	0.4074	+-	0.0010	0.3965	+-	0.0083	0.8039	+-	0.0
1.4142	0.200	0.4095	+-	0.0019	0.4142	+-	0.0159	0.8238	+-	0.0
1.4142	0.252	0.4272	+-	0.0007	0.3542	+-	0.0035	0.7814	+-	0.0
1.4142	0.317	0.4516	+-	0.0021	0.3045	+-	0.0069	0.7561	+-	0.0
1.4142	0.399	0.4852	+-	0.0011	0.2624	+-	0.0023	0.7476	+-	0.0
1.4142	0.502	0.5319	+-	0.0022	0.2273	+-	0.0029	0.7592	+-	0.0
1.4142	0.632	0.5857	+-	0.0031	0.1882	+-	0.0026	0.7739	+-	0.0
1.4142	0.796	0.6663	+-	0.0015	0.1612	+-	0.0008	0.8275	+-	0.0
1.4142	1.002	0.7598	+-	0.0081	0.1327	+-	0.0027	0.8924	+-	0.0
1.4142	1.262	0.8746	+-	0.0048	0.1077	+-	0.0010	0.9823	+-	0.0
1.4142	1.589	1.0439	+-	0.0138	0.0903	+-	0.0018	1.1342	+-	0.0
1.4142	2.000	1.2506	+-	0.0122	0.0742	+-	0.0010	1.3248	+-	0.0
1.4142	2.000	1.2555	+-	0.0154	0.0746	+-	0.0013	1.3301	+-	0.0
1.4142	2.518	1.5013	+-	0.0300	0.0600	+-	0.0016	1.5614	+-	0.0
1.4142	3.170	1.8198	+-	0.0598	0.0484	+-	0.0020	1.8682	+-	0.0
1.4142	3.991	2.1996	+-	0.0125	0.0385	+-	0.0003	2.2381	+-	0.0
1.4142	5.024	2.7700	+-	0.0490	0.0318	+-	0.0006	2.8018	+-	0.0
1.4142	6.325	3.3667	+-	0.0646	0.0251	+-	0.0005	3.3918	+-	0.0
1.4142	7.962	4.1945	+-	0.0456	0.0202	+-	0.0002	4.2146	+-	0.0
1.4142	10.024	5.2083	+-	0.0696	0.0161	+-	0.0002	5.2244	+-	0.0
1.4142	12.619	6.5476	+-	0.0933	0.0130	+-	0.0002	6.5606	+-	0.0
1.4142	15.887	7.9699	+-	0.2295	0.0101	+-	0.0003	7.9799	+-	0.2
1.4142	20.000	10.0986	+-	0.1605	0.0081	+-	0.0001	10.1067	+-	0.1
1.4142	20.000	10.1035	+-	0.1232	0.0081	+-	0.0001	10.1116	+-	0.1
1.4142	25.179	12.3798	+-	0.1812	0.0063	+-	0.0001	12.3862	+-	0.1
1.4142	31.698	16.0253	+-	0.0996	0.0052	+-	0.0000	16.0305	+-	0.0
1.4142	39.905	21.0863	+-	2.0380	0.0043	+-	0.0004	21.0906	+-	2.0
1.4142	50.238	25.8827	+-	1.3384	0.0034	+-	0.0002	25.8860	+-	1.3
1.4142	63.246	50.5903	+-	32.0514	0.0042	+-	0.0027	50.5945	+-	32.0
1.4142	79.621	40.8425	+-	0.4826	0.0021	+-	0.0000	40.8446	+-	0.4
1.4142	100.237	71.5751	+-	37.1564	0.0024	+-	0.0012	71.5775	+-	37.1
1.4142	126.191	534.0102	+-	815.5168	0.0112	+-	0.0171	534.0214	+-	815.5
1.4142	158.866	162.9839	+-	144.7971	0.0021	+-	0.0019	162.9861	+-	144.7
1.4142	200.000	314.5911	+-	370.8715	0.0026	+-	0.0031	314.5937	+-	370.8

1.5869	0.003	0.4531 +-	0.0000	1.7491 +-	0.1930	2.2022 +-	0.1
1.5869	0.003	0.4531 +-	0.0000	2.0068 +-	0.1888	2.4599 +-	0.1
1.5869	0.004	0.4531 +-	0.0000	1.7637 +-	0.2307	2.2169 +-	0.2
1.5869	0.005	0.4532 +-	0.0000	1.6294 +-	0.1124	2.0826 +-	0.1
1.5869	0.006	0.4532 +-	0.0000	1.4170 +-	0.1029	1.8702 +-	0.1
1.5869	0.008	0.4533 +-	0.0000	1.3064 +-	0.0419	1.7597 +-	0.0
1.5869	0.010	0.4534 +-	0.0000	1.1497 +-	0.0368	1.6031 +-	0.0
1.5869	0.013	0.4536 +-	0.0000	1.0972 +-	0.0541	1.5508 +-	0.0
1.5869	0.016	0.4538 +-	0.0000	1.0623 +-	0.0298	1.5162 +-	0.0
1.5869	0.020	0.4542 +-	0.0000	0.9576 +-	0.0154	1.4118 +-	0.0
1.5869	0.025	0.4547 +-	0.0000	0.8624 +-	0.0236	1.3171 +-	0.0
1.5869	0.025	0.4547 +-	0.0000	0.8846 +-	0.0154	1.3393 +-	0.0
1.5869	0.032	0.4555 +-	0.0001	0.8152 +-	0.0195	1.2707 +-	0.0
1.5869	0.040	0.4566 +-	0.0000	0.7494 +-	0.0059	1.2061 +-	0.0
1.5869	0.050	0.4582 +-	0.0002	0.6843 +-	0.0243	1.1426 +-	0.0
1.5869	0.063	0.4606 +-	0.0001	0.6318 +-	0.0066	1.0924 +-	0.0
1.5869	0.080	0.4640 +-	0.0002	0.5737 +-	0.0109	1.0377 +-	0.0
1.5869	0.100	0.4688 +-	0.0002	0.5229 +-	0.0078	0.9918 +-	0.0
1.5869	0.126	0.4757 +-	0.0005	0.4737 +-	0.0103	0.9494 +-	0.0
1.5869	0.159	0.4847 +-	0.0009	0.4185 +-	0.0125	0.9033 +-	0.0
1.5869	0.200	0.4963 +-	0.0009	0.3604 +-	0.0077	0.8567 +-	0.0
1.5869	0.252	0.5129 +-	0.0013	0.3149 +-	0.0066	0.8278 +-	0.0
1.5869	0.252	0.5156 +-	0.0024	0.3290 +-	0.0126	0.8446 +-	0.0
1.5869	0.317	0.5379 +-	0.0008	0.2813 +-	0.0028	0.8192 +-	0.0
1.5869	0.399	0.5686 +-	0.0026	0.2418 +-	0.0055	0.8104 +-	0.0
1.5869	0.502	0.6109 +-	0.0014	0.2084 +-	0.0019	0.8193 +-	0.0
1.5869	0.633	0.6697 +-	0.0028	0.1805 +-	0.0023	0.8502 +-	0.0
1.5869	0.796	0.7374 +-	0.0039	0.1495 +-	0.0021	0.8869 +-	0.0
1.5869	1.002	0.8390 +-	0.0019	0.1280 +-	0.0006	0.9670 +-	0.0
1.5869	1.262	0.9566 +-	0.0103	0.1054 +-	0.0021	1.0620 +-	0.0
1.5869	1.589	1.1011 +-	0.0060	0.0856 +-	0.0008	1.1867 +-	0.0
1.5869	2.000	1.3143 +-	0.0174	0.0718 +-	0.0014	1.3861 +-	0.0
1.5869	2.518	1.5746 +-	0.0154	0.0590 +-	0.0008	1.6335 +-	0.0
1.5869	2.518	1.5807 +-	0.0194	0.0593 +-	0.0010	1.6400 +-	0.0
1.5869	3.170	1.8903 +-	0.0378	0.0477 +-	0.0013	1.9380 +-	0.0
1.5869	3.991	2.2912 +-	0.0753	0.0385 +-	0.0016	2.3297 +-	0.0
1.5869	5.024	2.7694 +-	0.0158	0.0306 +-	0.0002	2.8000 +-	0.0
1.5869	6.325	3.4876 +-	0.0617	0.0253 +-	0.0005	3.5128 +-	0.0
1.5869	7.963	4.2389 +-	0.0814	0.0199 +-	0.0004	4.2588 +-	0.0
1.5869	10.025	5.2811 +-	0.0574	0.0160 +-	0.0002	5.2971 +-	0.0
1.5869	12.620	6.5576 +-	0.0877	0.0128 +-	0.0002	6.5704 +-	0.0
1.5869	15.888	8.2438 +-	0.1174	0.0103 +-	0.0002	8.2541 +-	0.1
1.5869	20.002	10.0345 +-	0.2890	0.0080 +-	0.0002	10.0425 +-	0.2
1.5869	25.181	12.7147 +-	0.2020	0.0064 +-	0.0001	12.7211 +-	0.2
1.5869	25.181	12.7208 +-	0.1551	0.0064 +-	0.0001	12.7273 +-	0.1
1.5869	31.701	15.5869 +-	0.2282	0.0050 +-	0.0001	15.5919 +-	0.2
1.5869	39.909	20.1768 +-	0.1254	0.0041 +-	0.0000	20.1809 +-	0.1
1.5869	50.243	26.5488 +-	2.5660	0.0034 +-	0.0003	26.5522 +-	2.5
1.5869	63.252	32.5877 +-	1.6851	0.0027 +-	0.0001	32.5904 +-	1.6
1.5869	79.630	63.6960 +-	40.3544	0.0033 +-	0.0021	63.6993 +-	40.3
1.5869	100.248	51.4229 +-	0.6076	0.0017 +-	0.0000	51.4246 +-	0.6
1.5869	126.204	90.1170 +-	46.7820	0.0019 +-	0.0010	90.1189 +-	46.7
1.5869	158.882	672.3483 +-	1026.7807	0.0089 +-	0.0136	672.3572 +-	1026
1.5869	200.021	205.2058 +-	182.3075	0.0017 +-	0.0015	205.2075 +-	182.3
1.5869	251.811	396.0875 +-	466.9477	0.0021 +-	0.0025	396.0896 +-	466.9
1.7806	0.003	0.5705 +-	0.0000	1.5939 +-	0.1500	2.1643 +-	0.1
1.7806	0.004	0.5705 +-	0.0000	1.3892 +-	0.1533	1.9597 +-	0.1
1.7806	0.005	0.5705 +-	0.0000	1.4008 +-	0.1833	1.9713 +-	0.1
1.7806	0.006	0.5706 +-	0.0000	1.2942 +-	0.0892	1.8647 +-	0.0
1.7806	0.008	0.5706 +-	0.0000	1.1254 +-	0.0817	1.6961 +-	0.0
1.7806	0.010	0.5707 +-	0.0000	1.0376 +-	0.0332	1.6083 +-	0.0
1.7806	0.013	0.5708 +-	0.0000	0.9132 +-	0.0292	1.4840 +-	0.0
1.7806	0.016	0.5711 +-	0.0000	0.8715 +-	0.0430	1.4425 +-	0.0
1.7806	0.020	0.5714 +-	0.0000	0.8437 +-	0.0237	1.4152 +-	0.0
1.7806	0.025	0.5719 +-	0.0000	0.7606 +-	0.0122	1.3324 +-	0.0
1.7806	0.032	0.5725 +-	0.0000	0.7026 +-	0.0122	1.2751 +-	0.0

1.7806	0.032	0.5725 +-	0.0001	0.6849 +-	0.0188	1.2574 +-	0.0
1.7806	0.040	0.5735 +-	0.0001	0.6475 +-	0.0155	1.2210 +-	0.0
1.7806	0.050	0.5749 +-	0.0000	0.5952 +-	0.0047	1.1702 +-	0.0
1.7806	0.063	0.5769 +-	0.0002	0.5435 +-	0.0193	1.1205 +-	0.0
1.7806	0.080	0.5800 +-	0.0001	0.5018 +-	0.0052	1.0818 +-	0.0
1.7806	0.100	0.5841 +-	0.0003	0.4557 +-	0.0086	1.0398 +-	0.0
1.7806	0.126	0.5903 +-	0.0003	0.4153 +-	0.0062	1.0056 +-	0.0
1.7806	0.159	0.5989 +-	0.0006	0.3762 +-	0.0082	0.9752 +-	0.0
1.7806	0.200	0.6103 +-	0.0012	0.3324 +-	0.0100	0.9427 +-	0.0
1.7806	0.252	0.6249 +-	0.0012	0.2862 +-	0.0061	0.9111 +-	0.0
1.7806	0.317	0.6458 +-	0.0016	0.2501 +-	0.0053	0.8959 +-	0.0
1.7806	0.317	0.6492 +-	0.0030	0.2613 +-	0.0100	0.9105 +-	0.0
1.7806	0.399	0.6772 +-	0.0010	0.2234 +-	0.0022	0.9006 +-	0.0
1.7806	0.502	0.7159 +-	0.0033	0.1921 +-	0.0043	0.9079 +-	0.0
1.7806	0.633	0.7691 +-	0.0018	0.1655 +-	0.0015	0.9346 +-	0.0
1.7806	0.796	0.8432 +-	0.0035	0.1434 +-	0.0019	0.9865 +-	0.0
1.7806	1.003	0.9284 +-	0.0049	0.1187 +-	0.0016	1.0471 +-	0.0
1.7806	1.262	1.0563 +-	0.0024	0.1017 +-	0.0005	1.1580 +-	0.0
1.7806	1.589	1.2044 +-	0.0129	0.0837 +-	0.0017	1.2881 +-	0.0
1.7806	2.000	1.3864 +-	0.0076	0.0680 +-	0.0006	1.4543 +-	0.0
1.7806	2.518	1.6548 +-	0.0218	0.0570 +-	0.0011	1.7118 +-	0.0
1.7806	3.170	1.9825 +-	0.0194	0.0468 +-	0.0006	2.0293 +-	0.0
1.7806	3.170	1.9902 +-	0.0245	0.0471 +-	0.0008	2.0373 +-	0.0
1.7806	3.991	2.3800 +-	0.0476	0.0379 +-	0.0010	2.4178 +-	0.0
1.7806	5.025	2.8848 +-	0.0948	0.0306 +-	0.0013	2.9153 +-	0.0
1.7806	6.326	3.4868 +-	0.0199	0.0243 +-	0.0002	3.5111 +-	0.0
1.7806	7.964	4.3910 +-	0.0777	0.0201 +-	0.0004	4.4111 +-	0.0
1.7806	10.026	5.3370 +-	0.1025	0.0158 +-	0.0003	5.3528 +-	0.1
1.7806	12.622	6.6492 +-	0.0723	0.0127 +-	0.0002	6.6619 +-	0.0
1.7806	15.890	8.2564 +-	0.1104	0.0101 +-	0.0001	8.2665 +-	0.1
1.7806	20.004	10.3794 +-	0.1479	0.0082 +-	0.0001	10.3876 +-	0.1
1.7806	25.184	12.6340 +-	0.3638	0.0063 +-	0.0002	12.6403 +-	0.3
1.7806	31.704	16.0085 +-	0.2544	0.0051 +-	0.0001	16.0136 +-	0.2
1.7806	31.704	16.0162 +-	0.1953	0.0051 +-	0.0001	16.0213 +-	0.1
1.7806	39.913	19.6248 +-	0.2873	0.0040 +-	0.0001	19.6287 +-	0.2
1.7806	50.248	25.4037 +-	0.1579	0.0033 +-	0.0000	25.4070 +-	0.1
1.7806	63.259	33.4264 +-	3.2307	0.0027 +-	0.0003	33.4291 +-	3.2
1.7806	79.638	41.0297 +-	2.1217	0.0021 +-	0.0001	41.0319 +-	2.1
1.7806	100.258	80.1968 +-	50.8085	0.0026 +-	0.0017	80.1994 +-	50.8
1.7806	126.217	64.7443 +-	0.7650	0.0013 +-	0.0000	64.7457 +-	0.7
1.7806	158.898	113.4623 +-	58.9011	0.0015 +-	0.0008	113.4638 +-	58.9
1.7806	200.041	846.5237 +-	1292.7736	0.0070 +-	0.0108	846.5307 +-	1292
1.7806	251.837	258.3654 +-	229.5353	0.0014 +-	0.0012	258.3668 +-	229.5
1.7806	317.044	498.6961 +-	587.9130	0.0017 +-	0.0019	498.6977 +-	587.9
1.9979	0.004	0.7182 +-	0.0000	1.2659 +-	0.1191	1.9842 +-	0.1
1.9979	0.005	0.7183 +-	0.0000	1.1034 +-	0.1218	1.8217 +-	0.1
1.9979	0.006	0.7183 +-	0.0000	1.1126 +-	0.1456	1.8309 +-	0.1
1.9979	0.008	0.7184 +-	0.0000	1.0279 +-	0.0709	1.7463 +-	0.0
1.9979	0.010	0.7184 +-	0.0000	0.8939 +-	0.0649	1.6123 +-	0.0
1.9979	0.013	0.7186 +-	0.0000	0.8241 +-	0.0264	1.5427 +-	0.0
1.9979	0.016	0.7187 +-	0.0000	0.7253 +-	0.0232	1.4440 +-	0.0
1.9979	0.020	0.7190 +-	0.0000	0.6922 +-	0.0342	1.4112 +-	0.0
1.9979	0.025	0.7195 +-	0.0000	0.6701 +-	0.0188	1.3896 +-	0.0
1.9979	0.032	0.7200 +-	0.0000	0.6041 +-	0.0097	1.3241 +-	0.0
1.9979	0.040	0.7208 +-	0.0000	0.5580 +-	0.0097	1.2789 +-	0.0
1.9979	0.040	0.7208 +-	0.0001	0.5440 +-	0.0149	1.2648 +-	0.0
1.9979	0.050	0.7221 +-	0.0001	0.5143 +-	0.0123	1.2363 +-	0.0
1.9979	0.063	0.7239 +-	0.0000	0.4728 +-	0.0037	1.1966 +-	0.0
1.9979	0.080	0.7264 +-	0.0003	0.4317 +-	0.0153	1.1581 +-	0.0
1.9979	0.100	0.7302 +-	0.0001	0.3986 +-	0.0042	1.1288 +-	0.0
1.9979	0.126	0.7355 +-	0.0003	0.3619 +-	0.0069	1.0974 +-	0.0
1.9979	0.159	0.7432 +-	0.0004	0.3299 +-	0.0049	1.0731 +-	0.0
1.9979	0.200	0.7541 +-	0.0008	0.2988 +-	0.0065	1.0529 +-	0.0
1.9979	0.252	0.7684 +-	0.0015	0.2640 +-	0.0079	1.0324 +-	0.0
1.9979	0.317	0.7867 +-	0.0015	0.2273 +-	0.0049	1.0141 +-	0.0
1.9979	0.399	0.8131 +-	0.0020	0.1986 +-	0.0042	1.0118 +-	0.0

1.9979	0.399	0.8174	+-	0.0038	0.2075	+-	0.0080	1.0249	+-	0.0
1.9979	0.503	0.8526	+-	0.0013	0.1775	+-	0.0017	1.0301	+-	0.0
1.9979	0.633	0.9013	+-	0.0041	0.1525	+-	0.0034	1.0539	+-	0.0
1.9979	0.796	0.9684	+-	0.0022	0.1315	+-	0.0012	1.0998	+-	0.0
1.9979	1.003	1.0616	+-	0.0044	0.1139	+-	0.0015	1.1755	+-	0.0
1.9979	1.262	1.1689	+-	0.0062	0.0943	+-	0.0013	1.2632	+-	0.0
1.9979	1.589	1.3299	+-	0.0030	0.0807	+-	0.0004	1.4107	+-	0.0
1.9979	2.001	1.5164	+-	0.0163	0.0665	+-	0.0014	1.5829	+-	0.0
1.9979	2.519	1.7455	+-	0.0096	0.0540	+-	0.0005	1.7995	+-	0.0
1.9979	3.171	2.0835	+-	0.0275	0.0453	+-	0.0009	2.1287	+-	0.0
1.9979	3.992	2.4961	+-	0.0244	0.0372	+-	0.0005	2.5333	+-	0.0
1.9979	3.992	2.5058	+-	0.0308	0.0374	+-	0.0006	2.5432	+-	0.0
1.9979	5.025	2.9965	+-	0.0599	0.0301	+-	0.0008	3.0266	+-	0.0
1.9979	6.327	3.6321	+-	0.1193	0.0243	+-	0.0010	3.6564	+-	0.1
1.9979	7.965	4.3901	+-	0.0250	0.0193	+-	0.0001	4.4094	+-	0.0
1.9979	10.027	5.5286	+-	0.0979	0.0159	+-	0.0003	5.5445	+-	0.0
1.9979	12.623	6.7196	+-	0.1290	0.0126	+-	0.0003	6.7321	+-	0.1
1.9979	15.891	8.3717	+-	0.0910	0.0101	+-	0.0001	8.3818	+-	0.0
1.9979	20.006	10.3952	+-	0.1390	0.0081	+-	0.0001	10.4033	+-	0.1
1.9979	25.186	13.0683	+-	0.1862	0.0065	+-	0.0001	13.0748	+-	0.1
1.9979	31.708	15.9069	+-	0.4581	0.0050	+-	0.0002	15.9119	+-	0.4
1.9979	39.918	20.1555	+-	0.3203	0.0041	+-	0.0001	20.1596	+-	0.3
1.9979	39.918	20.1653	+-	0.2458	0.0041	+-	0.0001	20.1693	+-	0.2
1.9979	50.253	24.7087	+-	0.3617	0.0032	+-	0.0000	24.7118	+-	0.3
1.9979	63.265	31.9847	+-	0.1989	0.0026	+-	0.0000	31.9873	+-	0.1
1.9979	79.646	42.0856	+-	4.0677	0.0022	+-	0.0002	42.0878	+-	4.0
1.9979	100.268	51.6587	+-	2.6713	0.0017	+-	0.0001	51.6604	+-	2.6
1.9979	126.231	100.9722	+-	63.9707	0.0021	+-	0.0013	100.9743	+-	63.9
1.9979	158.915	81.5167	+-	0.9632	0.0011	+-	0.0000	81.5177	+-	0.9
1.9979	200.062	142.8553	+-	74.1597	0.0012	+-	0.0006	142.8565	+-	74.1
1.9979	251.863	1065.8201	+-	1627.6733	0.0056	+-	0.0086	1065.8257	+-	16
1.9979	317.077	325.2963	+-	288.9976	0.0011	+-	0.0010	325.2974	+-	288.9
1.9979	399.176	627.8859	+-	740.2149	0.0013	+-	0.0015	627.8872	+-	740.2
2.2418	0.005	0.9043	+-	0.0000	1.0055	+-	0.0946	1.9098	+-	0.0
2.2418	0.006	0.9043	+-	0.0000	0.8764	+-	0.0967	1.7807	+-	0.0
2.2418	0.008	0.9044	+-	0.0000	0.8837	+-	0.1156	1.7881	+-	0.1
2.2418	0.010	0.9045	+-	0.0000	0.8164	+-	0.0563	1.7209	+-	0.0
2.2418	0.013	0.9046	+-	0.0000	0.7100	+-	0.0515	1.6145	+-	0.0
2.2418	0.016	0.9047	+-	0.0000	0.6546	+-	0.0210	1.5593	+-	0.0
2.2418	0.020	0.9049	+-	0.0000	0.5760	+-	0.0184	1.4810	+-	0.0
2.2418	0.025	0.9053	+-	0.0001	0.5497	+-	0.0271	1.4550	+-	0.0
2.2418	0.032	0.9058	+-	0.0000	0.5323	+-	0.0149	1.4381	+-	0.0
2.2418	0.040	0.9065	+-	0.0000	0.4798	+-	0.0077	1.3863	+-	0.0
2.2418	0.050	0.9075	+-	0.0001	0.4321	+-	0.0118	1.3396	+-	0.0
2.2418	0.050	0.9076	+-	0.0001	0.4432	+-	0.0077	1.3508	+-	0.0
2.2418	0.063	0.9091	+-	0.0001	0.4084	+-	0.0098	1.3176	+-	0.0
2.2418	0.080	0.9114	+-	0.0001	0.3755	+-	0.0030	1.2869	+-	0.0
2.2418	0.100	0.9146	+-	0.0004	0.3429	+-	0.0122	1.2574	+-	0.0
2.2418	0.126	0.9194	+-	0.0002	0.3166	+-	0.0033	1.2359	+-	0.0
2.2418	0.159	0.9260	+-	0.0004	0.2875	+-	0.0054	1.2135	+-	0.0
2.2418	0.200	0.9357	+-	0.0005	0.2620	+-	0.0039	1.1977	+-	0.0
2.2418	0.252	0.9494	+-	0.0010	0.2373	+-	0.0052	1.1867	+-	0.0
2.2418	0.317	0.9675	+-	0.0019	0.2097	+-	0.0063	1.1772	+-	0.0
2.2418	0.399	0.9905	+-	0.0018	0.1806	+-	0.0039	1.1711	+-	0.0
2.2418	0.503	1.0238	+-	0.0025	0.1578	+-	0.0033	1.1815	+-	0.0
2.2418	0.503	1.0291	+-	0.0048	0.1648	+-	0.0063	1.1940	+-	0.0
2.2418	0.633	1.0735	+-	0.0017	0.1410	+-	0.0014	1.2145	+-	0.0
2.2418	0.797	1.1348	+-	0.0052	0.1212	+-	0.0027	1.2560	+-	0.0
2.2418	1.003	1.2192	+-	0.0028	0.1044	+-	0.0009	1.3236	+-	0.0
2.2418	1.262	1.3366	+-	0.0056	0.0904	+-	0.0012	1.4271	+-	0.0
2.2418	1.589	1.4717	+-	0.0078	0.0749	+-	0.0010	1.5466	+-	0.0
2.2418	2.001	1.6745	+-	0.0037	0.0641	+-	0.0003	1.7386	+-	0.0
2.2418	2.519	1.9092	+-	0.0205	0.0528	+-	0.0011	1.9620	+-	0.0
2.2418	3.171	2.1977	+-	0.0120	0.0429	+-	0.0004	2.2406	+-	0.0
2.2418	3.992	2.6232	+-	0.0346	0.0360	+-	0.0007	2.6591	+-	0.0
2.2418	5.026	3.1427	+-	0.0308	0.0295	+-	0.0004	3.1722	+-	0.0

2.2418	5.026	3.1549 +-	0.0388	0.0297 +-	0.0005	3.1846 +-	0.0
2.2418	6.327	3.7728 +-	0.0754	0.0239 +-	0.0006	3.7967 +-	0.0
2.2418	7.965	4.5730 +-	0.1502	0.0193 +-	0.0008	4.5923 +-	0.1
2.2418	10.028	5.5274 +-	0.0315	0.0153 +-	0.0001	5.5427 +-	0.0
2.2418	12.624	6.9608 +-	0.1232	0.0127 +-	0.0003	6.9734 +-	0.1
2.2418	15.893	8.4603 +-	0.1624	0.0100 +-	0.0002	8.4703 +-	0.1
2.2418	20.008	10.5404 +-	0.1146	0.0080 +-	0.0001	10.5484 +-	0.1
2.2418	25.189	13.0881 +-	0.1750	0.0064 +-	0.0001	13.0946 +-	0.1
2.2418	31.711	16.4537 +-	0.2344	0.0052 +-	0.0001	16.4589 +-	0.2
2.2418	39.922	20.0276 +-	0.5767	0.0040 +-	0.0001	20.0316 +-	0.5
2.2418	50.258	25.3769 +-	0.4032	0.0032 +-	0.0001	25.3802 +-	0.4
2.2418	50.258	25.3892 +-	0.3095	0.0032 +-	0.0000	25.3924 +-	0.3
2.2418	63.272	31.1096 +-	0.4554	0.0025 +-	0.0000	31.1121 +-	0.4
2.2418	79.654	40.2705 +-	0.2504	0.0021 +-	0.0000	40.2725 +-	0.2
2.2418	100.279	52.9881 +-	5.1214	0.0017 +-	0.0002	52.9899 +-	5.1
2.2418	126.244	65.0412 +-	3.3633	0.0013 +-	0.0001	65.0425 +-	3.3
2.2418	158.931	127.1296 +-	80.5426	0.0017 +-	0.0011	127.1312 +-	80.5
2.2418	200.083	102.6340 +-	1.2127	0.0008 +-	0.0000	102.6349 +-	1.2
2.2418	251.889	179.8628 +-	93.3712	0.0009 +-	0.0005	179.8637 +-	93.3
2.2418	317.109	1341.9264 +-	2049.3306	0.0044 +-	0.0068	1341.9308 +-	20
2.2418	399.217	409.5661 +-	363.8639	0.0009 +-	0.0008	409.5669 +-	363.8
2.2418	502.585	790.5430 +-	931.9715	0.0010 +-	0.0012	790.5440 +-	931.9
2.5155	0.006	1.1386 +-	0.0000	0.7986 +-	0.0751	1.9371 +-	0.0
2.5155	0.008	1.1386 +-	0.0000	0.6961 +-	0.0768	1.8347 +-	0.0
2.5155	0.010	1.1387 +-	0.0000	0.7019 +-	0.0918	1.8405 +-	0.0
2.5155	0.013	1.1388 +-	0.0000	0.6484 +-	0.0447	1.7872 +-	0.0
2.5155	0.016	1.1389 +-	0.0000	0.5639 +-	0.0409	1.7028 +-	0.0
2.5155	0.020	1.1391 +-	0.0000	0.5199 +-	0.0167	1.6590 +-	0.0
2.5155	0.025	1.1393 +-	0.0000	0.4575 +-	0.0146	1.5969 +-	0.0
2.5155	0.032	1.1398 +-	0.0001	0.4366 +-	0.0215	1.5764 +-	0.0
2.5155	0.040	1.1405 +-	0.0001	0.4227 +-	0.0119	1.5632 +-	0.0
2.5155	0.050	1.1414 +-	0.0000	0.3811 +-	0.0061	1.5224 +-	0.0
2.5155	0.063	1.1426 +-	0.0001	0.3432 +-	0.0094	1.4858 +-	0.0
2.5155	0.063	1.1427 +-	0.0001	0.3520 +-	0.0061	1.4947 +-	0.0
2.5155	0.080	1.1446 +-	0.0001	0.3244 +-	0.0078	1.4690 +-	0.0
2.5155	0.100	1.1475 +-	0.0001	0.2982 +-	0.0024	1.4457 +-	0.0
2.5155	0.126	1.1515 +-	0.0005	0.2723 +-	0.0097	1.4238 +-	0.0
2.5155	0.159	1.1575 +-	0.0002	0.2514 +-	0.0026	1.4089 +-	0.0
2.5155	0.200	1.1659 +-	0.0005	0.2283 +-	0.0043	1.3942 +-	0.0
2.5155	0.252	1.1781 +-	0.0006	0.2081 +-	0.0031	1.3862 +-	0.0
2.5155	0.317	1.1953 +-	0.0012	0.1885 +-	0.0041	1.3839 +-	0.0
2.5155	0.399	1.2181 +-	0.0024	0.1665 +-	0.0050	1.3847 +-	0.0
2.5155	0.503	1.2472 +-	0.0023	0.1434 +-	0.0031	1.3906 +-	0.0
2.5155	0.633	1.2890 +-	0.0032	0.1253 +-	0.0026	1.4143 +-	0.0
2.5155	0.633	1.2957 +-	0.0060	0.1309 +-	0.0050	1.4267 +-	0.0
2.5155	0.797	1.3516 +-	0.0021	0.1120 +-	0.0011	1.4636 +-	0.0
2.5155	1.003	1.4288 +-	0.0066	0.0962 +-	0.0022	1.5250 +-	0.0
2.5155	1.263	1.5351 +-	0.0035	0.0829 +-	0.0007	1.6180 +-	0.0
2.5155	1.589	1.6829 +-	0.0070	0.0718 +-	0.0009	1.7547 +-	0.0
2.5155	2.001	1.8530 +-	0.0099	0.0595 +-	0.0008	1.9125 +-	0.0
2.5155	2.519	2.1083 +-	0.0047	0.0509 +-	0.0002	2.1592 +-	0.0
2.5155	3.171	2.4038 +-	0.0258	0.0419 +-	0.0009	2.4458 +-	0.0
2.5155	3.993	2.7670 +-	0.0152	0.0341 +-	0.0003	2.8011 +-	0.0
2.5155	5.026	3.3027 +-	0.0436	0.0286 +-	0.0006	3.3313 +-	0.0
2.5155	6.328	3.9568 +-	0.0387	0.0235 +-	0.0003	3.9803 +-	0.0
2.5155	6.328	3.9722 +-	0.0489	0.0236 +-	0.0004	3.9958 +-	0.0
2.5155	7.966	4.7501 +-	0.0950	0.0190 +-	0.0005	4.7691 +-	0.0
2.5155	10.029	5.7577 +-	0.1892	0.0153 +-	0.0006	5.7730 +-	0.1
2.5155	12.626	6.9593 +-	0.0397	0.0122 +-	0.0001	6.9714 +-	0.0
2.5155	15.895	8.7640 +-	0.1551	0.0101 +-	0.0002	8.7740 +-	0.1
2.5155	20.010	10.6520 +-	0.2045	0.0079 +-	0.0002	10.6599 +-	0.2
2.5155	25.191	13.2710 +-	0.1443	0.0064 +-	0.0001	13.2773 +-	0.1
2.5155	31.714	16.4787 +-	0.2203	0.0051 +-	0.0001	16.4838 +-	0.2
2.5155	39.926	20.7161 +-	0.2951	0.0041 +-	0.0001	20.7202 +-	0.2
2.5155	50.264	25.2159 +-	0.7261	0.0032 +-	0.0001	25.2191 +-	0.7
2.5155	63.278	31.9510 +-	0.5077	0.0026 +-	0.0000	31.9535 +-	0.5

2.5155	63.278	31.9664 +-	0.3897	0.0026 +-	0.0000	31.9690 +-	0.3
2.5155	79.662	39.1687 +-	0.5734	0.0020 +-	0.0000	39.1707 +-	0.5
2.5155	100.289	50.7027 +-	0.3152	0.0016 +-	0.0000	50.7044 +-	0.3
2.5155	126.257	66.7150 +-	6.4481	0.0014 +-	0.0001	66.7164 +-	6.4
2.5155	158.948	81.8904 +-	4.2346	0.0011 +-	0.0001	81.8915 +-	4.2
2.5155	200.103	160.0631 +-	101.4076	0.0013 +-	0.0008	160.0645 +-	101.4
2.5155	251.915	129.2219 +-	1.5269	0.0007 +-	0.0000	129.2226 +-	1.5
2.5155	317.142	226.4571 +-	117.5595	0.0007 +-	0.0004	226.4579 +-	117.5
2.5155	399.258	1689.5594 +-	2580.2204	0.0035 +-	0.0054	1689.5629 +-	25
2.5155	502.636	515.6663 +-	458.1247	0.0007 +-	0.0006	515.6670 +-	458.1
2.5155	632.782	995.3373 +-	1173.4035	0.0008 +-	0.0010	995.3381 +-	1173
2.8226	0.008	1.4335 +-	0.0000	0.6343 +-	0.0597	2.0678 +-	0.0
2.8226	0.010	1.4336 +-	0.0000	0.5528 +-	0.0610	1.9864 +-	0.0
2.8226	0.013	1.4337 +-	0.0000	0.5575 +-	0.0729	1.9911 +-	0.0
2.8226	0.016	1.4338 +-	0.0000	0.5150 +-	0.0355	1.9488 +-	0.0
2.8226	0.020	1.4339 +-	0.0000	0.4479 +-	0.0325	1.8818 +-	0.0
2.8226	0.025	1.4342 +-	0.0000	0.4129 +-	0.0132	1.8471 +-	0.0
2.8226	0.032	1.4345 +-	0.0000	0.3634 +-	0.0116	1.7979 +-	0.0
2.8226	0.040	1.4351 +-	0.0001	0.3468 +-	0.0171	1.7818 +-	0.0
2.8226	0.050	1.4359 +-	0.0001	0.3358 +-	0.0094	1.7717 +-	0.0
2.8226	0.063	1.4370 +-	0.0001	0.3027 +-	0.0049	1.7397 +-	0.0
2.8226	0.080	1.4386 +-	0.0001	0.2726 +-	0.0075	1.7111 +-	0.0
2.8226	0.080	1.4387 +-	0.0001	0.2796 +-	0.0049	1.7183 +-	0.0
2.8226	0.100	1.4412 +-	0.0002	0.2577 +-	0.0062	1.6988 +-	0.0
2.8226	0.126	1.4447 +-	0.0001	0.2369 +-	0.0019	1.6816 +-	0.0
2.8226	0.159	1.4498 +-	0.0006	0.2163 +-	0.0077	1.6661 +-	0.0
2.8226	0.200	1.4574 +-	0.0003	0.1997 +-	0.0021	1.6571 +-	0.0
2.8226	0.252	1.4679 +-	0.0007	0.1813 +-	0.0034	1.6493 +-	0.0
2.8226	0.317	1.4833 +-	0.0007	0.1653 +-	0.0025	1.6486 +-	0.0
2.8226	0.399	1.5050 +-	0.0016	0.1497 +-	0.0032	1.6547 +-	0.0
2.8226	0.503	1.5337 +-	0.0030	0.1323 +-	0.0040	1.6660 +-	0.0
2.8226	0.633	1.5702 +-	0.0029	0.1139 +-	0.0024	1.6841 +-	0.0
2.8226	0.797	1.6229 +-	0.0040	0.0995 +-	0.0021	1.7224 +-	0.0
2.8226	0.797	1.6314 +-	0.0076	0.1040 +-	0.0040	1.7354 +-	0.0
2.8226	1.003	1.7017 +-	0.0026	0.0889 +-	0.0009	1.7907 +-	0.0
2.8226	1.263	1.7990 +-	0.0083	0.0764 +-	0.0017	1.8754 +-	0.0
2.8226	1.590	1.9327 +-	0.0045	0.0659 +-	0.0006	1.9986 +-	0.0
2.8226	2.001	2.1189 +-	0.0089	0.0571 +-	0.0007	2.1759 +-	0.0
2.8226	2.519	2.3330 +-	0.0124	0.0472 +-	0.0007	2.3803 +-	0.0
2.8226	3.172	2.6544 +-	0.0059	0.0405 +-	0.0002	2.6949 +-	0.0
2.8226	3.993	3.0266 +-	0.0324	0.0333 +-	0.0007	3.0599 +-	0.0
2.8226	5.027	3.4838 +-	0.0191	0.0270 +-	0.0003	3.5109 +-	0.0
2.8226	6.328	4.1583 +-	0.0549	0.0227 +-	0.0005	4.1810 +-	0.0
2.8226	7.967	4.9818 +-	0.0488	0.0186 +-	0.0003	5.0005 +-	0.0
2.8226	7.967	5.0013 +-	0.0615	0.0187 +-	0.0003	5.0200 +-	0.0
2.8226	10.030	5.9807 +-	0.1196	0.0151 +-	0.0004	5.9957 +-	0.1
2.8226	12.627	7.2492 +-	0.2382	0.0122 +-	0.0005	7.2614 +-	0.2
2.8226	15.896	8.7621 +-	0.0499	0.0097 +-	0.0001	8.7718 +-	0.0
2.8226	20.012	11.0343 +-	0.1953	0.0080 +-	0.0002	11.0423 +-	0.1
2.8226	25.194	13.4115 +-	0.2575	0.0063 +-	0.0001	13.4177 +-	0.2
2.8226	31.717	16.7089 +-	0.1817	0.0051 +-	0.0001	16.7139 +-	0.1
2.8226	39.930	20.7476 +-	0.2774	0.0040 +-	0.0001	20.7516 +-	0.2
2.8226	50.269	26.0828 +-	0.3715	0.0033 +-	0.0000	26.0860 +-	0.3
2.8226	63.285	31.7482 +-	0.9142	0.0025 +-	0.0001	31.7507 +-	0.9
2.8226	79.671	40.2280 +-	0.6392	0.0020 +-	0.0000	40.2301 +-	0.6
2.8226	79.671	40.2475 +-	0.4907	0.0020 +-	0.0000	40.2495 +-	0.4
2.8226	100.299	49.3155 +-	0.7220	0.0016 +-	0.0000	49.3171 +-	0.7
2.8226	126.270	63.8375 +-	0.3969	0.0013 +-	0.0000	63.8388 +-	0.3
2.8226	158.964	83.9979 +-	8.1186	0.0011 +-	0.0001	83.9989 +-	8.1
2.8226	200.124	103.1046 +-	5.3316	0.0008 +-	0.0000	103.1054 +-	5.3
2.8226	251.941	201.5283 +-	127.6777	0.0011 +-	0.0007	201.5294 +-	127.6
2.8226	317.175	162.6975 +-	1.9224	0.0005 +-	0.0000	162.6980 +-	1.9
2.8226	399.299	285.1221 +-	148.0139	0.0006 +-	0.0003	285.1226 +-	148.0
2.8226	502.688	2127.2486 +-	3248.6400	0.0028 +-	0.0043	2127.2514 +-	32
2.8226	632.847	649.2523 +-	576.8044	0.0005 +-	0.0005	649.2529 +-	576.8
2.8226	796.707	1253.1846 +-	1477.3799	0.0007 +-	0.0008	1253.1853 +-	14

3.1672	0.010	1.8049 +-	0.0000	0.5038 +-	0.0474	2.3086 +-	0.0
3.1672	0.013	1.8049 +-	0.0000	0.4391 +-	0.0485	2.2440 +-	0.0
3.1672	0.016	1.8051 +-	0.0000	0.4428 +-	0.0579	2.2478 +-	0.0
3.1672	0.020	1.8052 +-	0.0000	0.4090 +-	0.0282	2.2143 +-	0.0
3.1672	0.025	1.8054 +-	0.0000	0.3557 +-	0.0258	2.1611 +-	0.0
3.1672	0.032	1.8057 +-	0.0000	0.3280 +-	0.0105	2.1337 +-	0.0
3.1672	0.040	1.8061 +-	0.0000	0.2886 +-	0.0092	2.0947 +-	0.0
3.1672	0.050	1.8068 +-	0.0001	0.2754 +-	0.0136	2.0822 +-	0.0
3.1672	0.063	1.8079 +-	0.0001	0.2667 +-	0.0075	2.0746 +-	0.0
3.1672	0.080	1.8093 +-	0.0001	0.2404 +-	0.0039	2.0497 +-	0.0
3.1672	0.100	1.8113 +-	0.0002	0.2165 +-	0.0059	2.0277 +-	0.0
3.1672	0.100	1.8114 +-	0.0001	0.2221 +-	0.0039	2.0335 +-	0.0
3.1672	0.126	1.8145 +-	0.0002	0.2046 +-	0.0049	2.0192 +-	0.0
3.1672	0.159	1.8190 +-	0.0001	0.1881 +-	0.0015	2.0071 +-	0.0
3.1672	0.200	1.8254 +-	0.0007	0.1718 +-	0.0061	1.9972 +-	0.0
3.1672	0.252	1.8349 +-	0.0003	0.1586 +-	0.0017	1.9935 +-	0.0
3.1672	0.317	1.8482 +-	0.0008	0.1440 +-	0.0027	1.9922 +-	0.0
3.1672	0.399	1.8675 +-	0.0009	0.1313 +-	0.0020	1.9988 +-	0.0
3.1672	0.503	1.8949 +-	0.0020	0.1189 +-	0.0026	2.0138 +-	0.0
3.1672	0.633	1.9310 +-	0.0038	0.1051 +-	0.0031	2.0360 +-	0.0
3.1672	0.797	1.9770 +-	0.0037	0.0905 +-	0.0019	2.0675 +-	0.0
3.1672	1.003	2.0433 +-	0.0050	0.0790 +-	0.0017	2.1224 +-	0.0
3.1672	1.003	2.0540 +-	0.0096	0.0826 +-	0.0032	2.1366 +-	0.0
3.1672	1.263	2.1426 +-	0.0033	0.0706 +-	0.0007	2.2132 +-	0.0
3.1672	1.590	2.2650 +-	0.0104	0.0607 +-	0.0014	2.3257 +-	0.0
3.1672	2.001	2.4334 +-	0.0056	0.0523 +-	0.0005	2.4857 +-	0.0
3.1672	2.520	2.6678 +-	0.0112	0.0453 +-	0.0006	2.7131 +-	0.0
3.1672	3.172	2.9374 +-	0.0157	0.0375 +-	0.0005	2.9749 +-	0.0
3.1672	3.993	3.3421 +-	0.0075	0.0321 +-	0.0002	3.3742 +-	0.0
3.1672	5.027	3.8106 +-	0.0408	0.0265 +-	0.0005	3.8371 +-	0.0
3.1672	6.329	4.3863 +-	0.0240	0.0215 +-	0.0002	4.4078 +-	0.0
3.1672	7.968	5.2356 +-	0.0691	0.0180 +-	0.0004	5.2536 +-	0.0
3.1672	10.031	6.2724 +-	0.0614	0.0148 +-	0.0002	6.2872 +-	0.0
3.1672	10.031	6.2969 +-	0.0775	0.0149 +-	0.0003	6.3117 +-	0.0
3.1672	12.628	7.5300 +-	0.1506	0.0120 +-	0.0003	7.5420 +-	0.1
3.1672	15.898	9.1272 +-	0.2999	0.0097 +-	0.0004	9.1368 +-	0.3
3.1672	20.014	11.0319 +-	0.0629	0.0077 +-	0.0001	11.0396 +-	0.0
3.1672	25.197	13.8928 +-	0.2459	0.0063 +-	0.0001	13.8992 +-	0.2
3.1672	31.721	16.8858 +-	0.3242	0.0050 +-	0.0001	16.8908 +-	0.3
3.1672	39.934	21.0374 +-	0.2288	0.0040 +-	0.0000	21.0414 +-	0.2
3.1672	50.274	26.1224 +-	0.3493	0.0032 +-	0.0000	26.1256 +-	0.3
3.1672	63.291	32.8396 +-	0.4678	0.0026 +-	0.0000	32.8422 +-	0.4
3.1672	79.679	39.9728 +-	1.1511	0.0020 +-	0.0001	39.9748 +-	1.1
3.1672	100.310	50.6493 +-	0.8048	0.0016 +-	0.0000	50.6509 +-	0.8
3.1672	100.310	50.6738 +-	0.6178	0.0016 +-	0.0000	50.6754 +-	0.6
3.1672	1003.098	1577.8287 +-	1860.1029	0.0005 +-	0.0006	1577.8292 +-	1
3.1672	126.283	62.0909 +-	0.9090	0.0013 +-	0.0000	62.0922 +-	0.9
3.1672	158.980	80.3750 +-	0.4997	0.0010 +-	0.0000	80.3760 +-	0.4
3.1672	200.144	105.7579 +-	10.2217	0.0009 +-	0.0001	105.7588 +-	10.2
3.1672	251.967	129.8143 +-	6.7128	0.0007 +-	0.0000	129.8150 +-	6.7
3.1672	317.208	253.7353 +-	160.7533	0.0008 +-	0.0005	253.7361 +-	160.7
3.1672	399.341	204.8451 +-	2.4204	0.0004 +-	0.0000	204.8455 +-	2.4
3.1672	502.740	358.9844 +-	186.3577	0.0005 +-	0.0002	358.9849 +-	186.3
3.1672	632.912	2678.3235 +-	4090.2172	0.0022 +-	0.0034	2678.3257 +-	40
3.1672	796.789	817.4446 +-	726.2285	0.0004 +-	0.0004	817.4450 +-	726.2
3.5538	0.013	2.2724 +-	0.0000	0.4001 +-	0.0377	2.6725 +-	0.0
3.5538	0.016	2.2725 +-	0.0000	0.3487 +-	0.0385	2.6213 +-	0.0
3.5538	0.020	2.2727 +-	0.0001	0.3517 +-	0.0460	2.6243 +-	0.0
3.5538	0.025	2.2729 +-	0.0000	0.3249 +-	0.0224	2.5977 +-	0.0
3.5538	0.032	2.2731 +-	0.0001	0.2825 +-	0.0205	2.5556 +-	0.0
3.5538	0.040	2.2735 +-	0.0000	0.2605 +-	0.0083	2.5340 +-	0.0
3.5538	0.050	2.2740 +-	0.0001	0.2292 +-	0.0073	2.5032 +-	0.0
3.5538	0.063	2.2749 +-	0.0001	0.2188 +-	0.0108	2.4936 +-	0.0
3.5538	0.080	2.2763 +-	0.0001	0.2118 +-	0.0059	2.4881 +-	0.0
3.5538	0.100	2.2780 +-	0.0001	0.1909 +-	0.0031	2.4689 +-	0.0
3.5538	0.126	2.2805 +-	0.0002	0.1719 +-	0.0047	2.4524 +-	0.0

3.5538	0.126	2.2807 +-	0.0001	0.1764 +-	0.0031	2.4571 +-	0.0
3.5538	0.159	2.2846 +-	0.0003	0.1625 +-	0.0039	2.4471 +-	0.0
3.5538	0.200	2.2902 +-	0.0001	0.1494 +-	0.0012	2.4396 +-	0.0
3.5538	0.252	2.2982 +-	0.0009	0.1364 +-	0.0048	2.4347 +-	0.0
3.5538	0.317	2.3103 +-	0.0004	0.1260 +-	0.0013	2.4362 +-	0.0
3.5538	0.399	2.3270 +-	0.0010	0.1144 +-	0.0022	2.4414 +-	0.0
3.5538	0.503	2.3513 +-	0.0012	0.1043 +-	0.0016	2.4556 +-	0.0
3.5538	0.633	2.3858 +-	0.0025	0.0945 +-	0.0021	2.4802 +-	0.0
3.5538	0.797	2.4312 +-	0.0048	0.0834 +-	0.0025	2.5147 +-	0.0
3.5538	1.003	2.4892 +-	0.0046	0.0718 +-	0.0015	2.5610 +-	0.0
3.5538	1.263	2.5727 +-	0.0063	0.0628 +-	0.0013	2.6354 +-	0.0
3.5538	1.263	2.5861 +-	0.0121	0.0656 +-	0.0025	2.6517 +-	0.0
3.5538	1.590	2.6976 +-	0.0042	0.0561 +-	0.0005	2.7537 +-	0.0
3.5538	2.002	2.8518 +-	0.0131	0.0482 +-	0.0011	2.9000 +-	0.0
3.5538	2.520	3.0638 +-	0.0071	0.0416 +-	0.0004	3.1053 +-	0.0
3.5538	3.172	3.3588 +-	0.0140	0.0360 +-	0.0005	3.3948 +-	0.0
3.5538	3.994	3.6984 +-	0.0197	0.0298 +-	0.0004	3.7282 +-	0.0
3.5538	5.028	4.2078 +-	0.0094	0.0255 +-	0.0001	4.2334 +-	0.0
3.5538	6.330	4.7978 +-	0.0514	0.0210 +-	0.0004	4.8188 +-	0.0
3.5538	7.969	5.5226 +-	0.0302	0.0171 +-	0.0002	5.5397 +-	0.0
3.5538	10.032	6.5919 +-	0.0870	0.0143 +-	0.0003	6.6062 +-	0.0
3.5538	12.630	7.8973 +-	0.0773	0.0118 +-	0.0002	7.9091 +-	0.0
3.5538	12.630	7.9281 +-	0.0976	0.0118 +-	0.0002	7.9399 +-	0.0
3.5538	15.900	9.4807 +-	0.1896	0.0095 +-	0.0002	9.4902 +-	0.1
3.5538	20.017	11.4916 +-	0.3775	0.0077 +-	0.0003	11.4993 +-	0.3
3.5538	25.199	13.8898 +-	0.0791	0.0061 +-	0.0000	13.8959 +-	0.0
3.5538	31.724	17.4918 +-	0.3096	0.0050 +-	0.0001	17.4969 +-	0.3
3.5538	39.938	21.2601 +-	0.4082	0.0040 +-	0.0001	21.2641 +-	0.4
3.5538	50.279	26.4873 +-	0.2880	0.0032 +-	0.0000	26.4905 +-	0.2
3.5538	63.298	32.8895 +-	0.4398	0.0025 +-	0.0000	32.8921 +-	0.4
3.5538	79.687	41.3469 +-	0.5890	0.0021 +-	0.0000	41.3490 +-	0.5
3.5538	100.320	50.3279 +-	1.4493	0.0016 +-	0.0000	50.3295 +-	1.4
3.5538	1003.202	1029.2079 +-	914.3619	0.0003 +-	0.0003	1029.2082 +-	91
3.5538	126.296	63.7703 +-	1.0132	0.0013 +-	0.0000	63.7716 +-	1.0
3.5538	126.296	63.8011 +-	0.7778	0.0013 +-	0.0000	63.8024 +-	0.7
3.5538	1262.956	1986.5735 +-	2341.9722	0.0004 +-	0.0005	1986.5739 +-	2
3.5538	158.997	78.1759 +-	1.1445	0.0010 +-	0.0000	78.1769 +-	1.1
3.5538	200.165	101.1965 +-	0.6292	0.0008 +-	0.0000	101.1974 +-	0.6
3.5538	251.993	133.1551 +-	12.8697	0.0007 +-	0.0001	133.1558 +-	12.8
3.5538	317.240	163.4434 +-	8.4518	0.0005 +-	0.0000	163.4440 +-	8.4
3.5538	399.382	319.4668 +-	202.3973	0.0007 +-	0.0004	319.4674 +-	202.3
3.5538	502.792	257.9113 +-	3.0474	0.0003 +-	0.0000	257.9117 +-	3.0
3.5538	632.977	451.9812 +-	234.6346	0.0004 +-	0.0002	451.9816 +-	234.6
3.5538	796.871	3372.1572 +-	5149.8094	0.0018 +-	0.0027	3372.1590 +-	51
3.9876	0.016	2.8611 +-	0.0000	0.3178 +-	0.0299	3.1789 +-	0.0
3.9876	0.020	2.8612 +-	0.0000	0.2770 +-	0.0306	3.1382 +-	0.0
3.9876	0.025	2.8614 +-	0.0001	0.2793 +-	0.0365	3.1407 +-	0.0
3.9876	0.032	2.8617 +-	0.0001	0.2580 +-	0.0178	3.1197 +-	0.0
3.9876	0.040	2.8620 +-	0.0001	0.2244 +-	0.0163	3.0863 +-	0.0
3.9876	0.050	2.8624 +-	0.0001	0.2069 +-	0.0066	3.0693 +-	0.0
3.9876	0.063	2.8631 +-	0.0001	0.1821 +-	0.0058	3.0451 +-	0.0
3.9876	0.080	2.8642 +-	0.0002	0.1738 +-	0.0086	3.0379 +-	0.0
3.9876	0.100	2.8660 +-	0.0001	0.1682 +-	0.0047	3.0342 +-	0.0
3.9876	0.126	2.8681 +-	0.0001	0.1516 +-	0.0024	3.0198 +-	0.0
3.9876	0.159	2.8712 +-	0.0003	0.1366 +-	0.0037	3.0078 +-	0.0
3.9876	0.159	2.8715 +-	0.0002	0.1401 +-	0.0024	3.0116 +-	0.0
3.9876	0.200	2.8764 +-	0.0004	0.1291 +-	0.0031	3.0055 +-	0.0
3.9876	0.252	2.8835 +-	0.0002	0.1187 +-	0.0009	3.0022 +-	0.0
3.9876	0.317	2.8936 +-	0.0012	0.1084 +-	0.0038	3.0020 +-	0.0
3.9876	0.399	2.9088 +-	0.0005	0.1001 +-	0.0010	3.0088 +-	0.0
3.9876	0.503	2.9298 +-	0.0013	0.0909 +-	0.0017	3.0206 +-	0.0
3.9876	0.633	2.9604 +-	0.0015	0.0828 +-	0.0012	3.0433 +-	0.0
3.9876	0.797	3.0038 +-	0.0031	0.0750 +-	0.0016	3.0788 +-	0.0
3.9876	1.003	3.0610 +-	0.0060	0.0663 +-	0.0020	3.1273 +-	0.0
3.9876	1.263	3.1340 +-	0.0058	0.0571 +-	0.0012	3.1911 +-	0.0
3.9876	1.590	3.2391 +-	0.0080	0.0499 +-	0.0010	3.2890 +-	0.0

3.9876	1.590	3.2561 +-	0.0152	0.0521 +-	0.0020	3.3082 +-	0.0
3.9876	2.002	3.3965 +-	0.0052	0.0446 +-	0.0004	3.4410 +-	0.0
3.9876	2.520	3.5905 +-	0.0165	0.0383 +-	0.0009	3.6288 +-	0.0
3.9876	3.173	3.8575 +-	0.0089	0.0330 +-	0.0003	3.8905 +-	0.0
3.9876	3.994	4.2290 +-	0.0177	0.0286 +-	0.0004	4.2576 +-	0.0
3.9876	5.028	4.6565 +-	0.0248	0.0237 +-	0.0003	4.6801 +-	0.0
3.9876	6.330	5.2979 +-	0.0118	0.0203 +-	0.0001	5.3182 +-	0.0
3.9876	7.970	6.0406 +-	0.0648	0.0167 +-	0.0003	6.0573 +-	0.0
3.9876	10.033	6.9533 +-	0.0381	0.0136 +-	0.0001	6.9668 +-	0.0
3.9876	12.631	8.2996 +-	0.1096	0.0114 +-	0.0002	8.3109 +-	0.1
3.9876	15.901	9.9431 +-	0.0973	0.0093 +-	0.0001	9.9525 +-	0.0
3.9876	15.901	9.9819 +-	0.1228	0.0094 +-	0.0002	9.9913 +-	0.1
3.9876	20.019	11.9367 +-	0.2387	0.0075 +-	0.0002	11.9443 +-	0.2
3.9876	25.202	14.4686 +-	0.4753	0.0061 +-	0.0002	14.4747 +-	0.4
3.9876	31.727	17.4881 +-	0.0996	0.0048 +-	0.0000	17.4929 +-	0.0
3.9876	39.942	22.0232 +-	0.3898	0.0040 +-	0.0001	22.0272 +-	0.3
3.9876	50.284	26.7677 +-	0.5139	0.0032 +-	0.0001	26.7708 +-	0.5
3.9876	63.304	33.3489 +-	0.3627	0.0025 +-	0.0000	33.3515 +-	0.3
3.9876	79.695	41.4097 +-	0.5537	0.0020 +-	0.0000	41.4117 +-	0.5
3.9876	100.331	52.0580 +-	0.7416	0.0016 +-	0.0000	52.0597 +-	0.7
3.9876	1003.305	4245.7322 +-	6483.8944	0.0014 +-	0.0021	4245.7336 +-	6
3.9876	126.309	63.3656 +-	1.8247	0.0013 +-	0.0000	63.3669 +-	1.8
3.9876	1263.086	1295.8295 +-	1151.2321	0.0003 +-	0.0002	1295.8298 +-	1
3.9876	159.013	80.2903 +-	1.2757	0.0010 +-	0.0000	80.2913 +-	1.2
3.9876	159.013	80.3291 +-	0.9793	0.0010 +-	0.0000	80.3301 +-	0.9
3.9876	1590.131	2501.2057 +-	2948.6724	0.0003 +-	0.0004	2501.2061 +-	2
3.9876	200.186	98.4278 +-	1.4410	0.0008 +-	0.0000	98.4286 +-	1.4
3.9876	252.019	127.4120 +-	0.7921	0.0007 +-	0.0000	127.4127 +-	0.7
3.9876	317.273	167.6496 +-	16.2037	0.0005 +-	0.0001	167.6501 +-	16.2
3.9876	399.423	205.7843 +-	10.6412	0.0004 +-	0.0000	205.7847 +-	10.6
3.9876	502.844	402.2263 +-	254.8294	0.0005 +-	0.0003	402.2268 +-	254.8
3.9876	633.043	324.7246 +-	3.8369	0.0003 +-	0.0000	324.7249 +-	3.8
3.9876	796.954	569.0693 +-	295.4179	0.0003 +-	0.0002	569.0696 +-	295.4
4.4744	0.020	3.6023 +-	0.0000	0.2524 +-	0.0238	3.8547 +-	0.0
4.4744	0.025	3.6024 +-	0.0000	0.2200 +-	0.0243	3.8224 +-	0.0
4.4744	0.032	3.6027 +-	0.0001	0.2218 +-	0.0290	3.8245 +-	0.0
4.4744	0.040	3.6030 +-	0.0001	0.2049 +-	0.0141	3.8079 +-	0.0
4.4744	0.050	3.6034 +-	0.0001	0.1782 +-	0.0129	3.7816 +-	0.0
4.4744	0.063	3.6040 +-	0.0001	0.1643 +-	0.0053	3.7683 +-	0.0
4.4744	0.080	3.6048 +-	0.0001	0.1446 +-	0.0046	3.7494 +-	0.0
4.4744	0.100	3.6062 +-	0.0002	0.1380 +-	0.0068	3.7442 +-	0.0
4.4744	0.126	3.6084 +-	0.0002	0.1336 +-	0.0038	3.7420 +-	0.0
4.4744	0.159	3.6111 +-	0.0001	0.1204 +-	0.0019	3.7316 +-	0.0
4.4744	0.200	3.6150 +-	0.0004	0.1085 +-	0.0030	3.7235 +-	0.0
4.4744	0.200	3.6154 +-	0.0002	0.1113 +-	0.0019	3.7266 +-	0.0
4.4744	0.252	3.6215 +-	0.0005	0.1025 +-	0.0025	3.7241 +-	0.0
4.4744	0.317	3.6305 +-	0.0002	0.0943 +-	0.0007	3.7247 +-	0.0
4.4744	0.399	3.6432 +-	0.0015	0.0861 +-	0.0031	3.7293 +-	0.0
4.4744	0.503	3.6623 +-	0.0006	0.0795 +-	0.0008	3.7418 +-	0.0
4.4744	0.633	3.6888 +-	0.0016	0.0722 +-	0.0014	3.7609 +-	0.0
4.4744	0.797	3.7274 +-	0.0019	0.0658 +-	0.0010	3.7931 +-	0.0
4.4744	1.003	3.7820 +-	0.0039	0.0596 +-	0.0013	3.8416 +-	0.0
4.4744	1.263	3.8540 +-	0.0075	0.0526 +-	0.0016	3.9066 +-	0.0
4.4744	1.590	3.9459 +-	0.0074	0.0453 +-	0.0010	3.9912 +-	0.0
4.4744	2.002	4.0782 +-	0.0100	0.0396 +-	0.0008	4.1178 +-	0.0
4.4744	2.002	4.0996 +-	0.0191	0.0414 +-	0.0016	4.1410 +-	0.0
4.4744	2.520	4.2763 +-	0.0066	0.0354 +-	0.0003	4.3117 +-	0.0
4.4744	3.173	4.5207 +-	0.0207	0.0304 +-	0.0007	4.5511 +-	0.0
4.4744	3.995	4.8568 +-	0.0112	0.0262 +-	0.0002	4.8830 +-	0.0
4.4744	5.029	5.3245 +-	0.0223	0.0227 +-	0.0003	5.3472 +-	0.0
4.4744	6.331	5.8627 +-	0.0313	0.0188 +-	0.0003	5.8815 +-	0.0
4.4744	7.970	6.6704 +-	0.0149	0.0161 +-	0.0001	6.6865 +-	0.0
4.4744	10.034	7.6055 +-	0.0815	0.0133 +-	0.0003	7.6187 +-	0.0
4.4744	12.632	8.7546 +-	0.0479	0.0108 +-	0.0001	8.7653 +-	0.0
4.4744	15.903	10.4496 +-	0.1379	0.0090 +-	0.0002	10.4586 +-	0.1
4.4744	20.021	12.5190 +-	0.1225	0.0074 +-	0.0001	12.5264 +-	0.1

4.4744	20.021	12.5678 +-	0.1546	0.0075 +-	0.0001	12.5752 +-	0.1
4.4744	25.204	15.0290 +-	0.3005	0.0060 +-	0.0002	15.0350 +-	0.3
4.4744	31.731	18.2167 +-	0.5985	0.0048 +-	0.0002	18.2216 +-	0.5
4.4744	39.946	22.0184 +-	0.1255	0.0038 +-	0.0000	22.0223 +-	0.1
4.4744	50.290	27.7284 +-	0.4908	0.0032 +-	0.0001	27.7316 +-	0.4
4.4744	63.311	33.7020 +-	0.6470	0.0025 +-	0.0001	33.7045 +-	0.6
4.4744	79.704	41.9881 +-	0.4566	0.0020 +-	0.0000	41.9902 +-	0.4
4.4744	100.341	52.1371 +-	0.6971	0.0016 +-	0.0000	52.1387 +-	0.6
4.4744	1003.409	716.4897 +-	371.9475	0.0002 +-	0.0001	716.4899 +-	371.
4.4744	126.322	65.5439 +-	0.9337	0.0013 +-	0.0000	65.5452 +-	0.9
4.4744	1263.217	5345.6114 +-	8163.5812	0.0011 +-	0.0017	5345.6125 +-	8
4.4744	159.030	79.7808 +-	2.2974	0.0010 +-	0.0000	79.7818 +-	2.2
4.4744	1590.295	1631.5210 +-	1449.4648	0.0002 +-	0.0002	1631.5212 +-	1
4.4744	200.206	101.0899 +-	1.6062	0.0008 +-	0.0000	101.0907 +-	1.6
4.4744	200.206	101.1388 +-	1.2330	0.0008 +-	0.0000	101.1396 +-	1.2
4.4744	2002.063	3149.1562 +-	3712.5414	0.0003 +-	0.0003	3149.1564 +-	3
4.4744	252.045	123.9260 +-	1.8143	0.0006 +-	0.0000	123.9267 +-	1.8
4.4744	317.306	160.4188 +-	0.9973	0.0005 +-	0.0000	160.4193 +-	0.9
4.4744	399.464	211.0801 +-	20.4013	0.0004 +-	0.0000	211.0805 +-	20.4
4.4744	502.896	259.0938 +-	13.3979	0.0003 +-	0.0000	259.0941 +-	13.3
4.4744	633.108	506.4251 +-	320.8443	0.0004 +-	0.0003	506.4256 +-	320.8
4.4744	797.036	408.8462 +-	4.8309	0.0002 +-	0.0000	408.8464 +-	4.8
5.0207	0.025	4.5355 +-	0.0000	0.2005 +-	0.0189	4.7360 +-	0.0
5.0207	0.032	4.5357 +-	0.0001	0.1747 +-	0.0193	4.7104 +-	0.0
5.0207	0.040	4.5360 +-	0.0001	0.1762 +-	0.0230	4.7122 +-	0.0
5.0207	0.050	4.5364 +-	0.0001	0.1628 +-	0.0112	4.6991 +-	0.0
5.0207	0.063	4.5368 +-	0.0001	0.1416 +-	0.0103	4.6784 +-	0.0
5.0207	0.080	4.5376 +-	0.0001	0.1305 +-	0.0042	4.6681 +-	0.0
5.0207	0.100	4.5386 +-	0.0001	0.1149 +-	0.0037	4.6534 +-	0.0
5.0207	0.126	4.5404 +-	0.0003	0.1096 +-	0.0054	4.6500 +-	0.0
5.0207	0.159	4.5432 +-	0.0002	0.1061 +-	0.0030	4.6493 +-	0.0
5.0207	0.200	4.5466 +-	0.0002	0.0957 +-	0.0015	4.6423 +-	0.0
5.0207	0.252	4.5515 +-	0.0004	0.0861 +-	0.0024	4.6377 +-	0.0
5.0207	0.252	4.5520 +-	0.0003	0.0884 +-	0.0015	4.6403 +-	0.0
5.0207	0.317	4.5597 +-	0.0006	0.0814 +-	0.0020	4.6412 +-	0.0
5.0207	0.400	4.5710 +-	0.0003	0.0749 +-	0.0006	4.6458 +-	0.0
5.0207	0.503	4.5870 +-	0.0018	0.0684 +-	0.0024	4.6554 +-	0.0
5.0207	0.633	4.6110 +-	0.0008	0.0631 +-	0.0007	4.6741 +-	0.0
5.0207	0.797	4.6444 +-	0.0021	0.0573 +-	0.0011	4.7017 +-	0.0
5.0207	1.004	4.6929 +-	0.0024	0.0522 +-	0.0008	4.7452 +-	0.0
5.0207	1.263	4.7617 +-	0.0049	0.0473 +-	0.0010	4.8090 +-	0.0
5.0207	1.590	4.8524 +-	0.0095	0.0418 +-	0.0013	4.8942 +-	0.0
5.0207	2.002	4.9681 +-	0.0093	0.0360 +-	0.0008	5.0041 +-	0.0
5.0207	2.521	5.1347 +-	0.0126	0.0315 +-	0.0007	5.1662 +-	0.0
5.0207	2.521	5.1616 +-	0.0241	0.0329 +-	0.0013	5.1945 +-	0.0
5.0207	3.173	5.3842 +-	0.0083	0.0281 +-	0.0003	5.4123 +-	0.0
5.0207	3.995	5.6918 +-	0.0261	0.0242 +-	0.0005	5.7159 +-	0.0
5.0207	5.029	6.1149 +-	0.0141	0.0208 +-	0.0002	6.1358 +-	0.0
5.0207	6.332	6.7039 +-	0.0280	0.0180 +-	0.0002	6.7219 +-	0.0
5.0207	7.971	7.3815 +-	0.0394	0.0149 +-	0.0002	7.3964 +-	0.0
5.0207	10.035	8.3983 +-	0.0187	0.0128 +-	0.0001	8.4111 +-	0.0
5.0207	12.633	9.5757 +-	0.1026	0.0105 +-	0.0002	9.5863 +-	0.1
5.0207	15.905	11.0225 +-	0.0604	0.0085 +-	0.0001	11.0310 +-	0.0
5.0207	20.023	13.1566 +-	0.1737	0.0072 +-	0.0001	13.1638 +-	0.1
5.0207	25.207	15.7621 +-	0.1543	0.0059 +-	0.0001	15.7680 +-	0.1
5.0207	25.207	15.8235 +-	0.1947	0.0059 +-	0.0001	15.8294 +-	0.1
5.0207	31.734	18.9223 +-	0.3783	0.0048 +-	0.0001	18.9271 +-	0.3
5.0207	39.951	22.9359 +-	0.7535	0.0038 +-	0.0002	22.9397 +-	0.7
5.0207	50.295	27.7224 +-	0.1580	0.0031 +-	0.0000	27.7255 +-	0.1
5.0207	63.317	34.9116 +-	0.6180	0.0025 +-	0.0001	34.9141 +-	0.6
5.0207	79.712	42.4326 +-	0.8147	0.0020 +-	0.0000	42.4346 +-	0.8
5.0207	100.351	52.8654 +-	0.5749	0.0016 +-	0.0000	52.8670 +-	0.5
5.0207	1003.512	514.7600 +-	6.0823	0.0002 +-	0.0000	514.7601 +-	6.
5.0207	126.335	65.6435 +-	0.8777	0.0013 +-	0.0000	65.6448 +-	0.8
5.0207	1263.347	902.1001 +-	468.3024	0.0002 +-	0.0001	902.1003 +-	468.
5.0207	159.046	82.5234 +-	1.1755	0.0010 +-	0.0000	82.5245 +-	1.1

5.0207	1590.459	6730.4200	+-	10278.3997	0.0009	+-	0.0014	6730.4208	+-
5.0207	200.227	100.4484	+-	2.8926	0.0008	+-	0.0000	100.4492	+- 2.8
5.0207	2002.270	2054.1750	+-	1824.9562	0.0002	+-	0.0002	2054.1752	+- 1
5.0207	252.071	127.2778	+-	2.0223	0.0006	+-	0.0000	127.2784	+- 2.0
5.0207	252.071	127.3393	+-	1.5524	0.0006	+-	0.0000	127.3399	+- 1.5
5.0207	2520.708	3964.9615	+-	4674.2947	0.0002	+-	0.0002	3964.9617	+- 4
5.0207	317.338	156.0297	+-	2.2843	0.0005	+-	0.0000	156.0302	+- 2.2
5.0207	399.505	201.9761	+-	1.2557	0.0004	+-	0.0000	201.9765	+- 1.2
5.0207	502.947	265.7615	+-	25.6864	0.0003	+-	0.0000	265.7619	+- 25.6
5.0207	633.173	326.2134	+-	16.8687	0.0003	+-	0.0000	326.2137	+- 16.8
5.0207	797.118	637.6172	+-	403.9607	0.0003	+-	0.0002	637.6176	+- 403.9
5.6336	0.032	5.7105	+-	0.0000	0.1592	+-	0.0150	5.8697	+- 0.0
5.6336	0.040	5.7106	+-	0.0001	0.1388	+-	0.0153	5.8494	+- 0.0
5.6336	0.050	5.7110	+-	0.0001	0.1399	+-	0.0183	5.8510	+- 0.0
5.6336	0.063	5.7115	+-	0.0001	0.1293	+-	0.0089	5.8408	+- 0.0
5.6336	0.080	5.7121	+-	0.0002	0.1124	+-	0.0082	5.8245	+- 0.0
5.6336	0.100	5.7131	+-	0.0001	0.1037	+-	0.0033	5.8168	+- 0.0
5.6336	0.126	5.7143	+-	0.0001	0.0912	+-	0.0029	5.8056	+- 0.0
5.6336	0.159	5.7166	+-	0.0003	0.0871	+-	0.0043	5.8036	+- 0.0
5.6336	0.200	5.7201	+-	0.0003	0.0843	+-	0.0024	5.8044	+- 0.0
5.6336	0.252	5.7245	+-	0.0002	0.0760	+-	0.0012	5.8004	+- 0.0
5.6336	0.317	5.7306	+-	0.0006	0.0684	+-	0.0019	5.7991	+- 0.0
5.6336	0.317	5.7312	+-	0.0004	0.0702	+-	0.0012	5.8014	+- 0.0
5.6336	0.400	5.7409	+-	0.0007	0.0647	+-	0.0015	5.8056	+- 0.0
5.6336	0.503	5.7551	+-	0.0004	0.0595	+-	0.0005	5.8146	+- 0.0
5.6336	0.633	5.7753	+-	0.0023	0.0543	+-	0.0019	5.8296	+- 0.0
5.6336	0.797	5.8055	+-	0.0010	0.0501	+-	0.0005	5.8557	+- 0.0
5.6336	1.004	5.8475	+-	0.0026	0.0455	+-	0.0009	5.8930	+- 0.0
5.6336	1.263	5.9087	+-	0.0030	0.0415	+-	0.0006	5.9502	+- 0.0
5.6336	1.591	5.9953	+-	0.0062	0.0376	+-	0.0008	6.0328	+- 0.0
5.6336	2.002	6.1094	+-	0.0120	0.0332	+-	0.0010	6.1426	+- 0.0
5.6336	2.521	6.2551	+-	0.0117	0.0286	+-	0.0006	6.2837	+- 0.0
5.6336	3.174	6.4649	+-	0.0159	0.0250	+-	0.0005	6.4899	+- 0.0
5.6336	3.174	6.4988	+-	0.0303	0.0261	+-	0.0010	6.5249	+- 0.0
5.6336	3.995	6.7790	+-	0.0105	0.0223	+-	0.0002	6.8013	+- 0.0
5.6336	5.030	7.1662	+-	0.0329	0.0192	+-	0.0004	7.1854	+- 0.0
5.6336	6.332	7.6991	+-	0.0178	0.0165	+-	0.0001	7.7156	+- 0.0
5.6336	7.972	8.4405	+-	0.0353	0.0143	+-	0.0002	8.4548	+- 0.0
5.6336	10.036	9.2937	+-	0.0495	0.0119	+-	0.0002	9.3056	+- 0.0
5.6336	12.635	10.5740	+-	0.0236	0.0102	+-	0.0000	10.5841	+- 0.0
5.6336	15.906	12.0564	+-	0.1292	0.0084	+-	0.0002	12.0647	+- 0.1
5.6336	20.025	13.8779	+-	0.0760	0.0068	+-	0.0001	13.8847	+- 0.0
5.6336	25.210	16.5649	+-	0.2187	0.0057	+-	0.0001	16.5706	+- 0.2
5.6336	31.737	19.8453	+-	0.1942	0.0047	+-	0.0001	19.8500	+- 0.1
5.6336	31.737	19.9227	+-	0.2451	0.0047	+-	0.0001	19.9274	+- 0.2
5.6336	39.955	23.8242	+-	0.4763	0.0038	+-	0.0001	23.8280	+- 0.4
5.6336	50.300	28.8775	+-	0.9487	0.0031	+-	0.0001	28.8806	+- 0.9
5.6336	63.324	34.9041	+-	0.1989	0.0024	+-	0.0000	34.9065	+- 0.1
5.6336	79.720	43.9557	+-	0.7781	0.0020	+-	0.0000	43.9577	+- 0.7
5.6336	100.362	53.4250	+-	1.0257	0.0016	+-	0.0000	53.4266	+- 1.0
5.6336	1003.616	802.7953	+-	508.6089	0.0003	+-	0.0002	802.7956	+- 508.
5.6336	126.348	66.5604	+-	0.7238	0.0013	+-	0.0000	66.5617	+- 0.7
5.6336	1263.477	648.1112	+-	7.6580	0.0001	+-	0.0000	648.1113	+- 7.
5.6336	159.062	82.6488	+-	1.1051	0.0010	+-	0.0000	82.6498	+- 1.1
5.6336	1590.623	1135.7938	+-	589.6186	0.0001	+-	0.0001	1135.7940	+- 58
5.6336	200.248	103.9016	+-	1.4801	0.0008	+-	0.0000	103.9024	+- 1.4
5.6336	2002.476	8473.9705	+-	12941.0729	0.0007	+-	0.0011	8473.9712	+- 4
5.6336	252.097	126.4701	+-	3.6419	0.0006	+-	0.0000	126.4708	+- 3.6
5.6336	2520.968	2586.3198	+-	2297.7207	0.0001	+-	0.0001	2586.3199	+- 2
5.6336	317.371	160.2498	+-	2.5462	0.0005	+-	0.0000	160.2503	+- 2.5
5.6336	317.371	160.3272	+-	1.9545	0.0005	+-	0.0000	160.3277	+- 1.9
5.6336	3173.711	4992.1056	+-	5885.1952	0.0002	+-	0.0002	4992.1057	+- 5
5.6336	399.547	196.4500	+-	2.8760	0.0004	+-	0.0000	196.4504	+- 2.8
5.6336	502.999	254.2991	+-	1.5810	0.0003	+-	0.0000	254.2994	+- 1.5
5.6336	633.239	334.6084	+-	32.3405	0.0003	+-	0.0000	334.6087	+- 32.3
5.6336	797.200	410.7207	+-	21.2386	0.0002	+-	0.0000	410.7209	+- 21.2

6.3213	0.040	7.1898 +-	0.0001	0.1265 +-	0.0119	7.3162 +-	0.0
6.3213	0.050	7.1900 +-	0.0001	0.1102 +-	0.0122	7.3002 +-	0.0
6.3213	0.063	7.1905 +-	0.0002	0.1111 +-	0.0145	7.3017 +-	0.0
6.3213	0.080	7.1911 +-	0.0001	0.1027 +-	0.0071	7.2938 +-	0.0
6.3213	0.100	7.1919 +-	0.0002	0.0893 +-	0.0065	7.2812 +-	0.0
6.3213	0.126	7.1931 +-	0.0001	0.0823 +-	0.0026	7.2754 +-	0.0
6.3213	0.159	7.1947 +-	0.0002	0.0725 +-	0.0023	7.2671 +-	0.0
6.3213	0.200	7.1975 +-	0.0004	0.0691 +-	0.0034	7.2666 +-	0.0
6.3213	0.252	7.2019 +-	0.0004	0.0669 +-	0.0019	7.2689 +-	0.0
6.3213	0.317	7.2074 +-	0.0003	0.0603 +-	0.0010	7.2678 +-	0.0
6.3213	0.400	7.2152 +-	0.0007	0.0543 +-	0.0015	7.2695 +-	0.0
6.3213	0.400	7.2159 +-	0.0005	0.0557 +-	0.0010	7.2716 +-	0.0
6.3213	0.503	7.2282 +-	0.0009	0.0514 +-	0.0012	7.2795 +-	0.0
6.3213	0.633	7.2460 +-	0.0004	0.0472 +-	0.0004	7.2932 +-	0.0
6.3213	0.797	7.2714 +-	0.0029	0.0431 +-	0.0015	7.3145 +-	0.0
6.3213	1.004	7.3095 +-	0.0013	0.0398 +-	0.0004	7.3493 +-	0.0
6.3213	1.264	7.3624 +-	0.0033	0.0362 +-	0.0007	7.3985 +-	0.0
6.3213	1.591	7.4394 +-	0.0037	0.0330 +-	0.0005	7.4723 +-	0.0
6.3213	2.003	7.5484 +-	0.0078	0.0299 +-	0.0006	7.5782 +-	0.0
6.3213	2.521	7.6921 +-	0.0151	0.0264 +-	0.0008	7.7185 +-	0.0
6.3213	3.174	7.8755 +-	0.0147	0.0227 +-	0.0005	7.8982 +-	0.0
6.3213	3.996	8.1397 +-	0.0200	0.0198 +-	0.0004	8.1595 +-	0.0
6.3213	3.996	8.1823 +-	0.0382	0.0207 +-	0.0008	8.2030 +-	0.0
6.3213	5.031	8.5351 +-	0.0132	0.0177 +-	0.0002	8.5528 +-	0.0
6.3213	6.333	9.0227 +-	0.0414	0.0152 +-	0.0003	9.0379 +-	0.0
6.3213	7.973	9.6935 +-	0.0224	0.0131 +-	0.0001	9.7067 +-	0.0
6.3213	10.037	10.6271 +-	0.0444	0.0114 +-	0.0001	10.6385 +-	0.0
6.3213	12.636	11.7013 +-	0.0624	0.0094 +-	0.0001	11.7107 +-	0.0
6.3213	15.908	13.3132 +-	0.0297	0.0081 +-	0.0000	13.3213 +-	0.0
6.3213	20.027	15.1796 +-	0.1627	0.0066 +-	0.0001	15.1863 +-	0.1
6.3213	25.212	17.4731 +-	0.0957	0.0054 +-	0.0001	17.4784 +-	0.0
6.3213	31.740	20.8561 +-	0.2753	0.0045 +-	0.0001	20.8607 +-	0.2
6.3213	39.959	24.9863 +-	0.2446	0.0037 +-	0.0001	24.9901 +-	0.2
6.3213	39.959	25.0837 +-	0.3086	0.0037 +-	0.0001	25.0875 +-	0.3
6.3213	50.305	29.9960 +-	0.5997	0.0030 +-	0.0001	29.9990 +-	0.5
6.3213	63.330	36.3584 +-	1.1945	0.0024 +-	0.0001	36.3608 +-	1.1
6.3213	79.728	43.9462 +-	0.2504	0.0019 +-	0.0000	43.9481 +-	0.2
6.3213	100.372	55.3426 +-	0.9797	0.0016 +-	0.0000	55.3442 +-	0.9
6.3213	1003.719	517.1200 +-	26.7406	0.0002 +-	0.0000	517.1202 +-	26.
6.3213	126.361	67.2650 +-	1.2914	0.0013 +-	0.0000	67.2663 +-	1.2
6.3213	1263.607	1010.7636 +-	640.3666	0.0002 +-	0.0001	1010.7638 +-	64
6.3213	159.079	83.8033 +-	0.9113	0.0010 +-	0.0000	83.8043 +-	0.9
6.3213	1590.787	816.0078 +-	9.6418	0.0001 +-	0.0000	816.0079 +-	9.
6.3213	200.268	104.0594 +-	1.3914	0.0008 +-	0.0000	104.0602 +-	1.3
6.3213	2002.683	1430.0271 +-	742.3624	0.0001 +-	0.0001	1430.0273 +-	74
6.3213	252.123	130.8178 +-	1.8635	0.0006 +-	0.0000	130.8185 +-	1.8
6.3213	2521.228	10669.1969 +-	16293.5255	0.0006 +-	0.0009	10669.1974 +	
6.3213	317.404	159.2329 +-	4.5854	0.0005 +-	0.0000	159.2334 +-	4.5
6.3213	3174.038	3256.3194 +-	2892.9572	0.0001 +-	0.0001	3256.3196 +-	2
6.3213	399.588	201.7633 +-	3.2058	0.0004 +-	0.0000	201.7637 +-	3.2
6.3213	399.588	201.8608 +-	2.4609	0.0004 +-	0.0000	201.8612 +-	2.4
6.3213	3995.878	6285.3366 +-	7409.7859	0.0001 +-	0.0002	6285.3368 +-	7
6.3213	503.051	247.3415 +-	3.6211	0.0003 +-	0.0000	247.3418 +-	3.6
6.3213	633.304	320.1766 +-	1.9906	0.0003 +-	0.0000	320.1769 +-	1.9
6.3213	797.282	421.2905 +-	40.7185	0.0002 +-	0.0000	421.2907 +-	40.7
7.0930	0.050	9.0523 +-	0.0001	0.1004 +-	0.0095	9.1528 +-	0.0
7.0930	0.063	9.0526 +-	0.0001	0.0875 +-	0.0097	9.1402 +-	0.0
7.0930	0.080	9.0532 +-	0.0002	0.0883 +-	0.0115	9.1415 +-	0.0
7.0930	0.100	9.0540 +-	0.0002	0.0816 +-	0.0056	9.1356 +-	0.0
7.0930	0.126	9.0550 +-	0.0002	0.0709 +-	0.0051	9.1259 +-	0.0
7.0930	0.159	9.0565 +-	0.0002	0.0654 +-	0.0021	9.1219 +-	0.0
7.0930	0.200	9.0585 +-	0.0002	0.0575 +-	0.0018	9.1160 +-	0.0
7.0930	0.252	9.0620 +-	0.0005	0.0549 +-	0.0027	9.1170 +-	0.0
7.0930	0.317	9.0676 +-	0.0005	0.0532 +-	0.0015	9.1208 +-	0.0
7.0930	0.400	9.0745 +-	0.0004	0.0479 +-	0.0008	9.1225 +-	0.0
7.0930	0.503	9.0843 +-	0.0009	0.0432 +-	0.0012	9.1275 +-	0.0

7.0930	0.503	9.0852 +-	0.0006	0.0443 +-	0.0008	9.1295 +-	0.0
7.0930	0.633	9.1007 +-	0.0012	0.0408 +-	0.0010	9.1415 +-	0.0
7.0930	0.797	9.1231 +-	0.0006	0.0375 +-	0.0003	9.1606 +-	0.0
7.0930	1.004	9.1551 +-	0.0037	0.0343 +-	0.0012	9.1894 +-	0.0
7.0930	1.264	9.2031 +-	0.0016	0.0316 +-	0.0003	9.2347 +-	0.0
7.0930	1.591	9.2696 +-	0.0041	0.0287 +-	0.0005	9.2983 +-	0.0
7.0930	2.003	9.3666 +-	0.0047	0.0262 +-	0.0004	9.3927 +-	0.0
7.0930	2.521	9.5038 +-	0.0098	0.0237 +-	0.0005	9.5275 +-	0.0
7.0930	3.174	9.6848 +-	0.0190	0.0209 +-	0.0006	9.7058 +-	0.0
7.0930	3.996	9.9157 +-	0.0185	0.0180 +-	0.0004	9.9337 +-	0.0
7.0930	5.031	10.2483 +-	0.0252	0.0158 +-	0.0003	10.2641 +-	0.0
7.0930	5.031	10.3020 +-	0.0481	0.0165 +-	0.0006	10.3184 +-	0.0
7.0930	6.334	10.7461 +-	0.0166	0.0141 +-	0.0001	10.7602 +-	0.0
7.0930	7.974	11.3600 +-	0.0521	0.0121 +-	0.0003	11.3722 +-	0.0
7.0930	10.038	12.2047 +-	0.0282	0.0104 +-	0.0001	12.2151 +-	0.0
7.0930	12.637	13.3801 +-	0.0559	0.0090 +-	0.0001	13.3891 +-	0.0
7.0930	15.910	14.7326 +-	0.0785	0.0075 +-	0.0001	14.7401 +-	0.0
7.0930	20.029	16.7621 +-	0.0374	0.0064 +-	0.0000	16.7685 +-	0.0
7.0930	25.215	19.1120 +-	0.2049	0.0053 +-	0.0001	19.1173 +-	0.2
7.0930	31.744	21.9995 +-	0.1205	0.0043 +-	0.0000	22.0038 +-	0.1
7.0930	39.963	26.2590 +-	0.3466	0.0036 +-	0.0001	26.2626 +-	0.3
7.0930	50.310	31.4592 +-	0.3079	0.0030 +-	0.0000	31.4621 +-	0.3
7.0930	50.310	31.5818 +-	0.3886	0.0030 +-	0.0001	31.5848 +-	0.3
7.0930	63.337	37.7666 +-	0.7551	0.0024 +-	0.0001	37.7690 +-	0.7
7.0930	79.736	45.7772 +-	1.5039	0.0019 +-	0.0001	45.7791 +-	1.5
7.0930	100.382	55.3306 +-	0.3153	0.0015 +-	0.0000	55.3322 +-	0.3
7.0930	1003.823	530.4280 +-	51.2669	0.0002 +-	0.0000	530.4282 +-	51.
7.0930	126.374	69.6794 +-	1.2334	0.0013 +-	0.0000	69.6807 +-	1.2
7.0930	1263.738	651.0827 +-	33.6679	0.0001 +-	0.0000	651.0828 +-	33.
7.0930	159.095	84.6904 +-	1.6260	0.0010 +-	0.0000	84.6914 +-	1.6
7.0930	1590.952	1272.6072 +-	806.2570	0.0002 +-	0.0001	1272.6074 +-	80
7.0930	200.289	105.5129 +-	1.1474	0.0008 +-	0.0000	105.5138 +-	1.1
7.0930	2002.889	1027.3989 +-	12.1396	0.0001 +-	0.0000	1027.3990 +-	1
7.0930	252.149	131.0165 +-	1.7518	0.0006 +-	0.0000	131.0172 +-	1.7
7.0930	2521.488	1800.4832 +-	934.6753	0.0001 +-	0.0000	1800.4833 +-	93
7.0930	317.437	164.7069 +-	2.3462	0.0005 +-	0.0000	164.7074 +-	2.3
7.0930	3174.366	13433.1081 +-	20514.4486	0.0004 +-	0.0007	13433.1086 +	
7.0930	399.629	200.4830 +-	5.7733	0.0004 +-	0.0000	200.4834 +-	5.7
7.0930	3996.290	4099.8860 +-	3642.3929	0.0001 +-	0.0001	4099.8861 +-	3
7.0930	503.103	254.0311 +-	4.0363	0.0003 +-	0.0000	254.0315 +-	4.0
7.0930	503.103	254.1539 +-	3.0984	0.0003 +-	0.0000	254.1542 +-	3.0
7.0930	5031.030	7913.5860 +-	9329.3297	0.0001 +-	0.0001	7913.5861 +-	9
7.0930	633.369	311.4165 +-	4.5592	0.0003 +-	0.0000	311.4168 +-	4.5
7.0930	797.365	403.1200 +-	2.5062	0.0002 +-	0.0000	403.1203 +-	2.5
7.9589	0.063	11.3974 +-	0.0001	0.0798 +-	0.0075	11.4772 +-	0.0
7.9589	0.080	11.3977 +-	0.0001	0.0695 +-	0.0077	11.4673 +-	0.0
7.9589	0.100	11.3985 +-	0.0003	0.0701 +-	0.0092	11.4686 +-	0.0
7.9589	0.126	11.3995 +-	0.0002	0.0648 +-	0.0045	11.4643 +-	0.0
7.9589	0.159	11.4007 +-	0.0003	0.0563 +-	0.0041	11.4570 +-	0.0
7.9589	0.200	11.4027 +-	0.0002	0.0519 +-	0.0017	11.4546 +-	0.0
7.9589	0.252	11.4051 +-	0.0003	0.0457 +-	0.0015	11.4508 +-	0.0
7.9589	0.317	11.4096 +-	0.0007	0.0436 +-	0.0022	11.4532 +-	0.0
7.9589	0.400	11.4167 +-	0.0006	0.0422 +-	0.0012	11.4589 +-	0.0
7.9589	0.503	11.4253 +-	0.0005	0.0381 +-	0.0006	11.4634 +-	0.0
7.9589	0.633	11.4377 +-	0.0011	0.0343 +-	0.0009	11.4720 +-	0.0
7.9589	0.633	11.4387 +-	0.0007	0.0352 +-	0.0006	11.4739 +-	0.0
7.9589	0.797	11.4582 +-	0.0015	0.0324 +-	0.0008	11.4906 +-	0.0
7.9589	1.004	11.4865 +-	0.0007	0.0298 +-	0.0002	11.5163 +-	0.0
7.9589	1.264	11.5268 +-	0.0046	0.0272 +-	0.0010	11.5540 +-	0.0
7.9589	1.591	11.5872 +-	0.0020	0.0251 +-	0.0003	11.6123 +-	0.0
7.9589	2.003	11.6709 +-	0.0052	0.0228 +-	0.0004	11.6938 +-	0.0
7.9589	2.522	11.7930 +-	0.0059	0.0208 +-	0.0003	11.8138 +-	0.0
7.9589	3.175	11.9658 +-	0.0124	0.0188 +-	0.0004	11.9846 +-	0.0
7.9589	3.997	12.1937 +-	0.0239	0.0166 +-	0.0005	12.2103 +-	0.0
7.9589	5.032	12.4844 +-	0.0233	0.0143 +-	0.0003	12.4988 +-	0.0
7.9589	6.334	12.9032 +-	0.0317	0.0125 +-	0.0003	12.9157 +-	0.0

7.9589	6.334	12.9708 +-	0.0605	0.0131 +-	0.0005	12.9838 +-	0.0
7.9589	7.974	13.5300 +-	0.0209	0.0112 +-	0.0001	13.5412 +-	0.0
7.9589	10.039	14.3029 +-	0.0656	0.0096 +-	0.0002	14.3125 +-	0.0
7.9589	12.639	15.3664 +-	0.0355	0.0083 +-	0.0001	15.3747 +-	0.0
7.9589	15.911	16.8463 +-	0.0704	0.0072 +-	0.0001	16.8534 +-	0.0
7.9589	20.031	18.5491 +-	0.0989	0.0059 +-	0.0001	18.5551 +-	0.0
7.9589	25.217	21.1044 +-	0.0471	0.0051 +-	0.0000	21.1095 +-	0.0
7.9589	31.747	24.0631 +-	0.2579	0.0042 +-	0.0001	24.0673 +-	0.2
7.9589	39.967	27.6986 +-	0.1517	0.0034 +-	0.0000	27.7020 +-	0.1
7.9589	50.315	33.0616 +-	0.4364	0.0029 +-	0.0001	33.0644 +-	0.4
7.9589	63.343	39.6089 +-	0.3877	0.0023 +-	0.0000	39.6112 +-	0.3
7.9589	63.343	39.7632 +-	0.4893	0.0024 +-	0.0000	39.7656 +-	0.4
7.9589	79.745	47.5503 +-	0.9507	0.0019 +-	0.0000	47.5522 +-	0.9
7.9589	100.393	57.6360 +-	1.8935	0.0015 +-	0.0001	57.6376 +-	1.8
7.9589	1003.926	507.5504 +-	3.1555	0.0002 +-	0.0000	507.5506 +-	3.
7.9589	126.387	69.6643 +-	0.3969	0.0012 +-	0.0000	69.6655 +-	0.3
7.9589	1263.868	667.8381 +-	64.5478	0.0001 +-	0.0000	667.8383 +-	64.
7.9589	159.112	87.7302 +-	1.5530	0.0010 +-	0.0000	87.7312 +-	1.5
7.9589	1591.116	819.7490 +-	42.3897	0.0001 +-	0.0000	819.7491 +-	42.
7.9589	200.310	106.6299 +-	2.0472	0.0008 +-	0.0000	106.6307 +-	2.0
7.9589	2003.096	1602.2828 +-	1015.1221	0.0001 +-	0.0001	1602.2829 +-	1
7.9589	252.175	132.8466 +-	1.4446	0.0006 +-	0.0000	132.8473 +-	1.4
7.9589	2521.748	1293.5520 +-	15.2844	0.0001 +-	0.0000	1293.5520 +-	1
7.9589	317.469	164.9570 +-	2.2057	0.0005 +-	0.0000	164.9576 +-	2.2
7.9589	3174.693	2266.9078 +-	1176.8078	0.0001 +-	0.0000	2266.9078 +-	1
7.9589	399.670	207.3750 +-	2.9541	0.0004 +-	0.0000	207.3754 +-	2.9
7.9589	3996.702	16913.0251 +-	25828.8238	0.0004 +-	0.0005	16913.0255 +	
7.9589	503.155	252.4192 +-	7.2689	0.0003 +-	0.0000	252.4195 +-	7.2
7.9589	5031.549	5161.9830 +-	4585.9739	0.0001 +-	0.0001	5161.9830 +-	4
7.9589	633.435	319.8392 +-	5.0819	0.0003 +-	0.0000	319.8395 +-	5.0
7.9589	633.435	319.9938 +-	3.9010	0.0003 +-	0.0000	319.9941 +-	3.9
7.9589	6334.345	9963.6419 +-	11746.1413	0.0001 +-	0.0001	9963.6419 +-	
7.9589	797.447	392.0906 +-	5.7402	0.0002 +-	0.0000	392.0908 +-	5.7
8.9304	0.080	14.3499 +-	0.0001	0.0634 +-	0.0060	14.4133 +-	0.0
8.9304	0.100	14.3504 +-	0.0002	0.0552 +-	0.0061	14.4056 +-	0.0
8.9304	0.126	14.3514 +-	0.0003	0.0557 +-	0.0073	14.4071 +-	0.0
8.9304	0.159	14.3526 +-	0.0003	0.0514 +-	0.0035	14.4041 +-	0.0
8.9304	0.200	14.3541 +-	0.0004	0.0447 +-	0.0032	14.3988 +-	0.0
8.9304	0.252	14.3566 +-	0.0003	0.0412 +-	0.0013	14.3978 +-	0.0
8.9304	0.318	14.3597 +-	0.0004	0.0363 +-	0.0012	14.3960 +-	0.0
8.9304	0.400	14.3653 +-	0.0008	0.0346 +-	0.0017	14.4000 +-	0.0
8.9304	0.503	14.3742 +-	0.0007	0.0335 +-	0.0009	14.4077 +-	0.0
8.9304	0.633	14.3851 +-	0.0006	0.0302 +-	0.0005	14.4154 +-	0.0
8.9304	0.798	14.4007 +-	0.0014	0.0272 +-	0.0007	14.4279 +-	0.0
8.9304	0.798	14.4020 +-	0.0009	0.0279 +-	0.0005	14.4299 +-	0.0
8.9304	1.004	14.4266 +-	0.0019	0.0257 +-	0.0006	14.4523 +-	0.0
8.9304	1.264	14.4621 +-	0.0009	0.0237 +-	0.0002	14.4858 +-	0.0
8.9304	1.591	14.5129 +-	0.0058	0.0216 +-	0.0008	14.5345 +-	0.0
8.9304	2.003	14.5889 +-	0.0025	0.0199 +-	0.0002	14.6088 +-	0.0
8.9304	2.522	14.6944 +-	0.0065	0.0181 +-	0.0003	14.7125 +-	0.0
8.9304	3.175	14.8481 +-	0.0074	0.0165 +-	0.0002	14.8646 +-	0.0
8.9304	3.997	15.0656 +-	0.0156	0.0150 +-	0.0003	15.0806 +-	0.0
8.9304	5.032	15.3525 +-	0.0301	0.0132 +-	0.0004	15.3658 +-	0.0
8.9304	6.335	15.7186 +-	0.0293	0.0114 +-	0.0002	15.7300 +-	0.0
8.9304	7.975	16.2458 +-	0.0399	0.0099 +-	0.0002	16.2558 +-	0.0
8.9304	7.975	16.3309 +-	0.0762	0.0104 +-	0.0004	16.3413 +-	0.0
8.9304	10.040	17.0350 +-	0.0263	0.0089 +-	0.0001	17.0439 +-	0.0
8.9304	12.640	18.0082 +-	0.0826	0.0076 +-	0.0002	18.0158 +-	0.0
8.9304	15.913	19.3471 +-	0.0447	0.0066 +-	0.0001	19.3537 +-	0.0
8.9304	20.033	21.2104 +-	0.0887	0.0057 +-	0.0001	21.2161 +-	0.0
8.9304	25.220	23.3544 +-	0.1245	0.0047 +-	0.0001	23.3591 +-	0.1
8.9304	31.750	26.5716 +-	0.0593	0.0040 +-	0.0000	26.5756 +-	0.0
8.9304	39.971	30.2967 +-	0.3248	0.0033 +-	0.0001	30.3001 +-	0.3
8.9304	50.321	34.8741 +-	0.1910	0.0027 +-	0.0000	34.8768 +-	0.1
8.9304	63.350	41.6263 +-	0.5495	0.0023 +-	0.0000	41.6286 +-	0.5
8.9304	79.753	49.8697 +-	0.4881	0.0019 +-	0.0000	49.8716 +-	0.4

8.9304	79.753	50.0641 +-	0.6160	0.0019 +-	0.0000	50.0660 +-	0.6
8.9304	100.403	59.8684 +-	1.1970	0.0015 +-	0.0000	59.8699 +-	1.1
8.9304	1004.030	493.6638 +-	7.2273	0.0002 +-	0.0000	493.6639 +-	7.
8.9304	126.400	72.5669 +-	2.3841	0.0012 +-	0.0000	72.5682 +-	2.3
8.9304	1263.998	639.0340 +-	3.9730	0.0001 +-	0.0000	639.0341 +-	3.
8.9304	159.128	87.7112 +-	0.4998	0.0010 +-	0.0000	87.7122 +-	0.4
8.9304	1591.280	840.8451 +-	81.2693	0.0001 +-	0.0000	840.8452 +-	81.
8.9304	200.330	110.4572 +-	1.9553	0.0008 +-	0.0000	110.4580 +-	1.9
8.9304	2003.302	1032.1093 +-	53.3710	0.0001 +-	0.0000	1032.1094 +-	5
8.9304	252.201	134.2529 +-	2.5775	0.0006 +-	0.0000	134.2536 +-	2.5
8.9304	2522.008	2017.3625 +-	1278.0947	0.0001 +-	0.0001	2017.3626 +-	1
8.9304	317.502	167.2612 +-	1.8189	0.0005 +-	0.0000	167.2618 +-	1.8
8.9304	3175.020	1628.6534 +-	19.2439	0.0001 +-	0.0000	1628.6534 +-	1
8.9304	399.711	207.6900 +-	2.7771	0.0004 +-	0.0000	207.6904 +-	2.7
8.9304	3997.114	2854.1621 +-	1481.6660	0.0001 +-	0.0000	2854.1621 +-	1
8.9304	503.207	261.0966 +-	3.7193	0.0003 +-	0.0000	261.0970 +-	3.7
8.9304	5032.068	21294.4328 +-	32519.9158	0.0003 +-	0.0004	21294.4330 +	
8.9304	633.500	317.8097 +-	9.1519	0.0003 +-	0.0000	317.8100 +-	9.1
8.9304	6334.998	6499.2217 +-	5773.9944	0.0001 +-	0.0000	6499.2217 +-	5
8.9304	797.529	402.6952 +-	6.3984	0.0002 +-	0.0000	402.6955 +-	6.3
8.9304	797.529	402.8899 +-	4.9116	0.0002 +-	0.0000	402.8901 +-	4.9
8.9304	7975.291	12544.7754 +-	14789.0407	0.0001 +-	0.0001	12544.7755 +	
10.0206	0.100	18.0673 +-	0.0001	0.0503 +-	0.0047	18.1177 +-	0.0
10.0206	0.126	18.0679 +-	0.0002	0.0439 +-	0.0048	18.1118 +-	0.0
10.0206	0.159	18.0692 +-	0.0004	0.0442 +-	0.0058	18.1134 +-	0.0
10.0206	0.200	18.0707 +-	0.0003	0.0409 +-	0.0028	18.1116 +-	0.0
10.0206	0.252	18.0726 +-	0.0005	0.0355 +-	0.0026	18.1081 +-	0.0
10.0206	0.318	18.0757 +-	0.0003	0.0328 +-	0.0010	18.1085 +-	0.0
10.0206	0.400	18.0796 +-	0.0004	0.0288 +-	0.0009	18.1085 +-	0.0
10.0206	0.503	18.0867 +-	0.0010	0.0275 +-	0.0014	18.1142 +-	0.0
10.0206	0.634	18.0979 +-	0.0009	0.0266 +-	0.0007	18.1245 +-	0.0
10.0206	0.798	18.1117 +-	0.0007	0.0240 +-	0.0004	18.1357 +-	0.0
10.0206	1.004	18.1312 +-	0.0018	0.0216 +-	0.0006	18.1529 +-	0.0
10.0206	1.004	18.1329 +-	0.0012	0.0222 +-	0.0004	18.1551 +-	0.0
10.0206	1.264	18.1638 +-	0.0023	0.0204 +-	0.0005	18.1843 +-	0.0
10.0206	1.591	18.2086 +-	0.0011	0.0188 +-	0.0001	18.2274 +-	0.0
10.0206	2.004	18.2725 +-	0.0073	0.0172 +-	0.0006	18.2897 +-	0.0
10.0206	2.522	18.3682 +-	0.0032	0.0158 +-	0.0002	18.3841 +-	0.0
10.0206	3.175	18.5010 +-	0.0082	0.0144 +-	0.0003	18.5154 +-	0.0
10.0206	3.998	18.6945 +-	0.0094	0.0131 +-	0.0002	18.7076 +-	0.0
10.0206	5.033	18.9685 +-	0.0196	0.0119 +-	0.0003	18.9803 +-	0.0
10.0206	6.336	19.3297 +-	0.0379	0.0105 +-	0.0003	19.3402 +-	0.0
10.0206	7.976	19.7906 +-	0.0369	0.0090 +-	0.0002	19.7996 +-	0.0
10.0206	10.041	20.4544 +-	0.0503	0.0079 +-	0.0002	20.4623 +-	0.0
10.0206	10.041	20.5615 +-	0.0960	0.0083 +-	0.0003	20.5698 +-	0.0
10.0206	12.641	21.4480 +-	0.0331	0.0071 +-	0.0001	21.4551 +-	0.0
10.0206	15.914	22.6733 +-	0.1040	0.0061 +-	0.0001	22.6794 +-	0.1
10.0206	20.035	24.3591 +-	0.0563	0.0052 +-	0.0000	24.3643 +-	0.0
10.0206	25.223	26.7050 +-	0.1117	0.0045 +-	0.0001	26.7096 +-	0.1
10.0206	31.753	29.4045 +-	0.1568	0.0037 +-	0.0001	29.4082 +-	0.1
10.0206	39.975	33.4551 +-	0.0747	0.0032 +-	0.0000	33.4583 +-	0.0
10.0206	50.326	38.1453 +-	0.4089	0.0026 +-	0.0001	38.1479 +-	0.4
10.0206	63.357	43.9084 +-	0.2405	0.0021 +-	0.0000	43.9106 +-	0.2
10.0206	79.761	52.4098 +-	0.6919	0.0018 +-	0.0000	52.4116 +-	0.6
10.0206	100.413	62.7888 +-	0.6145	0.0015 +-	0.0000	62.7902 +-	0.6
10.0206	100.413	63.0335 +-	0.7756	0.0015 +-	0.0000	63.0350 +-	0.7
10.0206	1004.133	507.0156 +-	8.0559	0.0002 +-	0.0000	507.0157 +-	8.
10.0206	1004.133	507.2606 +-	6.1839	0.0002 +-	0.0000	507.2608 +-	6.
10.0206	10041.331	15794.5651 +-	18620.2191	0.0001 +-	0.0001	15794.5652	
10.0206	126.413	75.3777 +-	1.5071	0.0012 +-	0.0000	75.3789 +-	1.5
10.0206	1264.129	621.5499 +-	9.0995	0.0001 +-	0.0000	621.5501 +-	9.
10.0206	159.144	91.3658 +-	3.0017	0.0010 +-	0.0000	91.3668 +-	3.0
10.0206	1591.444	804.5791 +-	5.0022	0.0001 +-	0.0000	804.5792 +-	5.
10.0206	200.351	110.4333 +-	0.6292	0.0008 +-	0.0000	110.4340 +-	0.6
10.0206	2003.509	1058.6704 +-	102.3225	0.0001 +-	0.0000	1058.6705 +-	10
10.0206	252.227	139.0717 +-	2.4618	0.0006 +-	0.0000	139.0723 +-	2.4

10.0206	2522.268	1299.4826	+-	67.1970	0.0001	+-	0.0000	1299.4827	+-	6
10.0206	317.535	169.0319	+-	3.2452	0.0005	+-	0.0000	169.0324	+-	3.2
10.0206	3175.348	2539.9709	+-	1609.1919	0.0001	+-	0.0001	2539.9709	+-	1
10.0206	399.753	210.5911	+-	2.2901	0.0004	+-	0.0000	210.5915	+-	2.2
10.0206	3997.526	2050.5646	+-	24.2292	0.0000	+-	0.0000	2050.5646	+-	2
10.0206	503.259	261.4932	+-	3.4965	0.0003	+-	0.0000	261.4935	+-	3.4
10.0206	5032.587	3593.5477	+-	1865.4993	0.0000	+-	0.0000	3593.5477	+-	1
10.0206	633.565	328.7351	+-	4.6828	0.0003	+-	0.0000	328.7353	+-	4.6
10.0206	6335.652	26810.8670	+-	40944.3702	0.0002	+-	0.0003	26810.8672	+	
10.0206	797.611	400.1400	+-	11.5228	0.0002	+-	0.0000	400.1402	+-	11.5
10.0206	7976.113	8182.8791	+-	7269.7779	0.0000	+-	0.0000	8182.8791	+-	7
11.2439	0.126	22.7478	+-	0.0002	0.0400	+-	0.0038	22.7878	+-	0.0
11.2439	0.159	22.7485	+-	0.0003	0.0348	+-	0.0038	22.7834	+-	0.0
11.2439	0.200	22.7501	+-	0.0006	0.0351	+-	0.0046	22.7852	+-	0.0
11.2439	0.252	22.7521	+-	0.0004	0.0325	+-	0.0022	22.7845	+-	0.0
11.2439	0.318	22.7544	+-	0.0006	0.0282	+-	0.0020	22.7826	+-	0.0
11.2439	0.400	22.7584	+-	0.0004	0.0260	+-	0.0008	22.7844	+-	0.0
11.2439	0.503	22.7633	+-	0.0006	0.0229	+-	0.0007	22.7862	+-	0.0
11.2439	0.634	22.7722	+-	0.0013	0.0219	+-	0.0011	22.7941	+-	0.0
11.2439	0.798	22.7863	+-	0.0011	0.0212	+-	0.0006	22.8074	+-	0.0
11.2439	1.004	22.8036	+-	0.0009	0.0191	+-	0.0003	22.8227	+-	0.0
11.2439	1.264	22.8282	+-	0.0023	0.0172	+-	0.0005	22.8454	+-	0.0
11.2439	1.264	22.8304	+-	0.0015	0.0176	+-	0.0003	22.8480	+-	0.0
11.2439	1.592	22.8693	+-	0.0030	0.0162	+-	0.0004	22.8855	+-	0.0
11.2439	2.004	22.9257	+-	0.0014	0.0149	+-	0.0001	22.9406	+-	0.0
11.2439	2.523	23.0061	+-	0.0092	0.0136	+-	0.0005	23.0197	+-	0.0
11.2439	3.176	23.1266	+-	0.0040	0.0126	+-	0.0001	23.1392	+-	0.0
11.2439	3.998	23.2938	+-	0.0104	0.0114	+-	0.0002	23.3052	+-	0.0
11.2439	5.033	23.5374	+-	0.0118	0.0104	+-	0.0002	23.5479	+-	0.0
11.2439	6.336	23.8823	+-	0.0247	0.0094	+-	0.0002	23.8918	+-	0.0
11.2439	7.977	24.3372	+-	0.0477	0.0083	+-	0.0002	24.3455	+-	0.0
11.2439	10.042	24.9174	+-	0.0465	0.0072	+-	0.0002	24.9246	+-	0.0
11.2439	12.643	25.7532	+-	0.0633	0.0063	+-	0.0001	25.7595	+-	0.0
11.2439	12.643	25.8881	+-	0.1208	0.0066	+-	0.0003	25.8946	+-	0.1
11.2439	15.916	27.0042	+-	0.0417	0.0056	+-	0.0001	27.0098	+-	0.0
11.2439	20.037	28.5469	+-	0.1309	0.0048	+-	0.0001	28.5517	+-	0.1
11.2439	25.225	30.6695	+-	0.0709	0.0042	+-	0.0000	30.6736	+-	0.0
11.2439	31.757	33.6231	+-	0.1406	0.0036	+-	0.0000	33.6267	+-	0.1
11.2439	39.979	37.0219	+-	0.1974	0.0030	+-	0.0000	37.0248	+-	0.1
11.2439	50.331	42.1218	+-	0.0940	0.0025	+-	0.0000	42.1244	+-	0.0
11.2439	63.363	48.0270	+-	0.5148	0.0021	+-	0.0000	48.0291	+-	0.5
11.2439	79.769	55.2831	+-	0.3028	0.0017	+-	0.0000	55.2848	+-	0.3
11.2439	100.424	65.9869	+-	0.8711	0.0014	+-	0.0000	65.9883	+-	0.8
11.2439	1004.237	503.7983	+-	14.5078	0.0002	+-	0.0000	503.7985	+-	14.
11.2439	10042.367	10302.6967	+-	9153.0519	0.0000	+-	0.0000	10302.6967	+	
11.2439	126.426	79.0545	+-	0.7737	0.0012	+-	0.0000	79.0557	+-	0.7
11.2439	126.426	79.3626	+-	0.9765	0.0012	+-	0.0000	79.3638	+-	0.9
11.2439	1264.259	638.3606	+-	10.1429	0.0001	+-	0.0000	638.3607	+-	10.
11.2439	1264.259	638.6691	+-	7.7859	0.0001	+-	0.0000	638.6692	+-	7.
11.2439	12642.591	19886.2299	+-	23443.8843	0.0000	+-	0.0000	19886.2299		
11.2439	159.161	94.9046	+-	1.8975	0.0009	+-	0.0000	94.9056	+-	1.8
11.2439	1591.608	782.5657	+-	11.4568	0.0001	+-	0.0000	782.5658	+-	11.
11.2439	200.372	115.0346	+-	3.7793	0.0008	+-	0.0000	115.0353	+-	3.7
11.2439	2003.716	1013.0095	+-	6.2980	0.0001	+-	0.0000	1013.0096	+-	
11.2439	252.253	139.0416	+-	0.7923	0.0006	+-	0.0000	139.0422	+-	0.7
11.2439	2522.528	1332.9246	+-	128.8297	0.0001	+-	0.0000	1332.9246	+-	12
11.2439	317.568	175.0989	+-	3.0996	0.0005	+-	0.0000	175.0994	+-	3.0
11.2439	3175.675	1636.1204	+-	84.6047	0.0001	+-	0.0000	1636.1205	+-	8
11.2439	399.794	212.8205	+-	4.0859	0.0004	+-	0.0000	212.8209	+-	4.0
11.2439	3997.938	3197.9636	+-	2026.0614	0.0001	+-	0.0000	3197.9637	+-	2
11.2439	503.311	265.1459	+-	2.8833	0.0003	+-	0.0000	265.1462	+-	2.8
11.2439	5033.106	2581.7740	+-	30.5059	0.0000	+-	0.0000	2581.7741	+-	3
11.2439	633.631	329.2344	+-	4.4022	0.0003	+-	0.0000	329.2347	+-	4.4
11.2439	6336.305	4524.4750	+-	2348.7667	0.0000	+-	0.0000	4524.4751	+-	2
11.2439	797.694	413.8956	+-	5.8959	0.0002	+-	0.0000	413.8958	+-	5.8
11.2439	7976.935	33756.3624	+-	51551.2235	0.0002	+-	0.0003	33756.3626	+	

12.6165	0.159	28.6407 +-	0.0002	0.0317 +-	0.0030	28.6725 +-	0.0
12.6165	0.200	28.6416 +-	0.0004	0.0277 +-	0.0031	28.6693 +-	0.0
12.6165	0.252	28.6436 +-	0.0007	0.0279 +-	0.0037	28.6715 +-	0.0
12.6165	0.318	28.6461 +-	0.0005	0.0258 +-	0.0018	28.6719 +-	0.0
12.6165	0.400	28.6491 +-	0.0008	0.0224 +-	0.0016	28.6715 +-	0.0
12.6165	0.503	28.6540 +-	0.0005	0.0207 +-	0.0007	28.6747 +-	0.0
12.6165	0.634	28.6602 +-	0.0007	0.0182 +-	0.0006	28.6784 +-	0.0
12.6165	0.798	28.6715 +-	0.0016	0.0174 +-	0.0009	28.6888 +-	0.0
12.6165	1.004	28.6892 +-	0.0014	0.0168 +-	0.0005	28.7060 +-	0.0
12.6165	1.264	28.7110 +-	0.0012	0.0151 +-	0.0002	28.7261 +-	0.0
12.6165	1.592	28.7420 +-	0.0028	0.0136 +-	0.0004	28.7557 +-	0.0
12.6165	1.592	28.7447 +-	0.0018	0.0140 +-	0.0002	28.7587 +-	0.0
12.6165	2.004	28.7937 +-	0.0037	0.0129 +-	0.0003	28.8066 +-	0.0
12.6165	2.523	28.8647 +-	0.0018	0.0119 +-	0.0001	28.8765 +-	0.0
12.6165	3.176	28.9659 +-	0.0116	0.0108 +-	0.0004	28.9767 +-	0.0
12.6165	3.998	29.1177 +-	0.0050	0.0100 +-	0.0001	29.1277 +-	0.0
12.6165	5.034	29.3282 +-	0.0131	0.0091 +-	0.0002	29.3373 +-	0.0
12.6165	6.337	29.6349 +-	0.0149	0.0083 +-	0.0001	29.6432 +-	0.0
12.6165	7.978	30.0692 +-	0.0311	0.0075 +-	0.0002	30.0767 +-	0.0
12.6165	10.043	30.6418 +-	0.0600	0.0066 +-	0.0002	30.6485 +-	0.0
12.6165	12.644	31.3724 +-	0.0585	0.0057 +-	0.0001	31.3781 +-	0.0
12.6165	15.918	32.4247 +-	0.0797	0.0050 +-	0.0001	32.4297 +-	0.0
12.6165	15.918	32.5945 +-	0.1521	0.0052 +-	0.0002	32.5997 +-	0.1
12.6165	20.039	33.9998 +-	0.0525	0.0045 +-	0.0000	34.0042 +-	0.0
12.6165	25.228	35.9422 +-	0.1649	0.0038 +-	0.0001	35.9460 +-	0.1
12.6165	31.760	38.6146 +-	0.0893	0.0033 +-	0.0000	38.6179 +-	0.0
12.6165	39.984	42.3334 +-	0.1770	0.0029 +-	0.0000	42.3362 +-	0.1
12.6165	50.336	46.6126 +-	0.2485	0.0024 +-	0.0000	46.6149 +-	0.2
12.6165	63.370	53.0337 +-	0.1184	0.0020 +-	0.0000	53.0357 +-	0.1
12.6165	79.778	60.4687 +-	0.6482	0.0017 +-	0.0000	60.4703 +-	0.6
12.6165	100.434	69.6045 +-	0.3812	0.0014 +-	0.0000	69.6059 +-	0.3
12.6165	1004.340	521.1174 +-	7.4233	0.0002 +-	0.0000	521.1176 +-	7.
12.6165	10043.402	42501.1247 +-	64905.8378	0.0001 +-	0.0002	42501.1249	
12.6165	126.439	83.0811 +-	1.0968	0.0011 +-	0.0000	83.0823 +-	1.0
12.6165	1264.389	634.3099 +-	18.2661	0.0001 +-	0.0000	634.3100 +-	18.
12.6165	12643.894	12971.6642 +-	11524.1979	0.0000 +-	0.0000	12971.6642	
12.6165	159.177	99.5340 +-	0.9742	0.0009 +-	0.0000	99.5349 +-	0.9
12.6165	159.177	99.9219 +-	1.2295	0.0009 +-	0.0000	99.9229 +-	1.2
12.6165	1591.772	803.7312 +-	12.7704	0.0001 +-	0.0000	803.7313 +-	12.
12.6165	1591.772	804.1197 +-	9.8029	0.0001 +-	0.0000	804.1198 +-	9.
12.6165	15917.720	25037.8618 +-	29517.1452	0.0000 +-	0.0000	25037.8618	
12.6165	200.392	119.4902 +-	2.3891	0.0008 +-	0.0000	119.4909 +-	2.3
12.6165	2003.922	985.2935 +-	14.4248	0.0001 +-	0.0000	985.2935 +-	14.
12.6165	252.279	144.8349 +-	4.7583	0.0006 +-	0.0000	144.8355 +-	4.7
12.6165	2522.789	1275.4349 +-	7.9295	0.0001 +-	0.0000	1275.4350 +-	
12.6165	317.600	175.0611 +-	0.9975	0.0005 +-	0.0000	175.0615 +-	0.9
12.6165	3176.003	1678.2256 +-	162.2037	0.0001 +-	0.0000	1678.2257 +-	16
12.6165	399.835	220.4592 +-	3.9025	0.0004 +-	0.0000	220.4596 +-	3.9
12.6165	3998.350	2059.9660 +-	106.5221	0.0000 +-	0.0000	2059.9660 +-	10
12.6165	503.363	267.9527 +-	5.1444	0.0003 +-	0.0000	267.9530 +-	5.1
12.6165	5033.625	4026.4128 +-	2550.9232	0.0001 +-	0.0000	4026.4128 +-	2
12.6165	633.696	333.8333 +-	3.6303	0.0003 +-	0.0000	333.8336 +-	3.6
12.6165	6336.958	3250.5961 +-	38.4086	0.0000 +-	0.0000	3250.5961 +-	3
12.6165	797.776	414.5243 +-	5.5427	0.0002 +-	0.0000	414.5245 +-	5.5
12.6165	7977.758	5696.5640 +-	2957.2270	0.0000 +-	0.0000	5696.5640 +-	2
14.1567	0.200	36.0603 +-	0.0003	0.0252 +-	0.0024	36.0855 +-	0.0
14.1567	0.252	36.0614 +-	0.0005	0.0220 +-	0.0024	36.0834 +-	0.0
14.1567	0.318	36.0639 +-	0.0009	0.0222 +-	0.0029	36.0861 +-	0.0
14.1567	0.400	36.0670 +-	0.0007	0.0205 +-	0.0014	36.0875 +-	0.0
14.1567	0.503	36.0708 +-	0.0010	0.0178 +-	0.0013	36.0886 +-	0.0
14.1567	0.634	36.0770 +-	0.0006	0.0164 +-	0.0005	36.0934 +-	0.0
14.1567	0.798	36.0848 +-	0.0009	0.0144 +-	0.0005	36.0993 +-	0.0
14.1567	1.004	36.0989 +-	0.0021	0.0138 +-	0.0007	36.1127 +-	0.0
14.1567	1.265	36.1212 +-	0.0018	0.0133 +-	0.0004	36.1346 +-	0.0
14.1567	1.592	36.1487 +-	0.0015	0.0120 +-	0.0002	36.1607 +-	0.0
14.1567	2.004	36.1878 +-	0.0036	0.0108 +-	0.0003	36.1986 +-	0.0

14.1567	2.004	36.1911 +-	0.0023	0.0111 +-	0.0002	36.2023 +-	0.0
14.1567	2.523	36.2528 +-	0.0047	0.0102 +-	0.0002	36.2631 +-	0.0
14.1567	3.176	36.3422 +-	0.0022	0.0094 +-	0.0001	36.3516 +-	0.0
14.1567	3.999	36.4697 +-	0.0146	0.0086 +-	0.0003	36.4783 +-	0.0
14.1567	5.034	36.6608 +-	0.0063	0.0079 +-	0.0001	36.6687 +-	0.0
14.1567	6.338	36.9258 +-	0.0165	0.0072 +-	0.0001	36.9330 +-	0.0
14.1567	7.979	37.3120 +-	0.0187	0.0066 +-	0.0001	37.3186 +-	0.0
14.1567	10.044	37.8587 +-	0.0391	0.0060 +-	0.0001	37.8647 +-	0.0
14.1567	12.645	38.5798 +-	0.0756	0.0053 +-	0.0002	38.5850 +-	0.0
14.1567	15.919	39.4996 +-	0.0737	0.0045 +-	0.0001	39.5041 +-	0.0
14.1567	20.041	40.8245 +-	0.1003	0.0040 +-	0.0001	40.8284 +-	0.1
14.1567	20.041	41.0383 +-	0.1915	0.0041 +-	0.0002	41.0424 +-	0.1
14.1567	25.230	42.8076 +-	0.0662	0.0035 +-	0.0000	42.8112 +-	0.0
14.1567	31.763	45.2532 +-	0.2076	0.0030 +-	0.0001	45.2562 +-	0.2
14.1567	39.988	48.6179 +-	0.1124	0.0026 +-	0.0000	48.6205 +-	0.1
14.1567	50.341	53.3000 +-	0.2228	0.0023 +-	0.0000	53.3023 +-	0.2
14.1567	63.376	58.6878 +-	0.3129	0.0019 +-	0.0000	58.6897 +-	0.3
14.1567	79.786	66.7723 +-	0.1490	0.0016 +-	0.0000	66.7739 +-	0.1
14.1567	100.444	76.1334 +-	0.8161	0.0013 +-	0.0000	76.1347 +-	0.8
14.1567	1004.444	521.9090 +-	6.9785	0.0002 +-	0.0000	521.9092 +-	6.
14.1567	10044.438	7172.2887 +-	3723.3121	0.0000 +-	0.0000	7172.2887 +-	
14.1567	126.452	87.6359 +-	0.4799	0.0011 +-	0.0000	87.6370 +-	0.4
14.1567	1264.520	656.1156 +-	9.3464	0.0001 +-	0.0000	656.1158 +-	9.
14.1567	12645.198	53511.2635 +-	81720.0347	0.0001 +-	0.0002	53511.2636	
14.1567	159.194	104.6037 +-	1.3809	0.0009 +-	0.0000	104.6046 +-	1.3
14.1567	1591.936	798.6312 +-	22.9980	0.0001 +-	0.0000	798.6313 +-	22.
14.1567	15919.361	16332.0417 +-	14509.6016	0.0000 +-	0.0000	16332.0417	
14.1567	200.413	125.3188 +-	1.2265	0.0007 +-	0.0000	125.3195 +-	1.2
14.1567	200.413	125.8072 +-	1.5480	0.0007 +-	0.0000	125.8080 +-	1.5
14.1567	2004.129	1011.9420 +-	16.0787	0.0001 +-	0.0000	1011.9421 +-	1
14.1567	2004.129	1012.4311 +-	12.3424	0.0001 +-	0.0000	1012.4312 +-	1
14.1567	20041.289	31524.0509 +-	37163.7161	0.0000 +-	0.0000	31524.0509	
14.1567	252.305	150.4448 +-	3.0080	0.0006 +-	0.0000	150.4454 +-	3.0
14.1567	2523.049	1240.5389 +-	18.1616	0.0001 +-	0.0000	1240.5389 +-	1
14.1567	317.633	182.3551 +-	5.9909	0.0005 +-	0.0000	182.3556 +-	5.9
14.1567	3176.330	1605.8430 +-	9.9837	0.0001 +-	0.0000	1605.8431 +-	
14.1567	399.876	220.4115 +-	1.2559	0.0004 +-	0.0000	220.4119 +-	1.2
14.1567	3998.763	2112.9788 +-	204.2234	0.0000 +-	0.0000	2112.9788 +-	20
14.1567	503.414	277.5703 +-	4.9135	0.0003 +-	0.0000	277.5706 +-	4.9
14.1567	5034.144	2593.6109 +-	134.1171	0.0000 +-	0.0000	2593.6110 +-	13
14.1567	633.761	337.3673 +-	6.4771	0.0003 +-	0.0000	337.3675 +-	6.4
14.1567	6337.612	5069.4761 +-	3211.7533	0.0000 +-	0.0000	5069.4761 +-	3
14.1567	797.858	420.3146 +-	4.5707	0.0002 +-	0.0000	420.3148 +-	4.5
14.1567	7978.581	4092.6801 +-	48.3585	0.0000 +-	0.0000	4092.6801 +-	4
15.8849	0.252	45.4019 +-	0.0004	0.0200 +-	0.0019	45.4219 +-	0.0
15.8849	0.318	45.4033 +-	0.0006	0.0175 +-	0.0019	45.4208 +-	0.0
15.8849	0.400	45.4065 +-	0.0011	0.0176 +-	0.0023	45.4241 +-	0.0
15.8849	0.503	45.4104 +-	0.0009	0.0163 +-	0.0011	45.4267 +-	0.0
15.8849	0.634	45.4151 +-	0.0012	0.0141 +-	0.0010	45.4292 +-	0.0
15.8849	0.798	45.4229 +-	0.0008	0.0130 +-	0.0004	45.4360 +-	0.0
15.8849	1.005	45.4328 +-	0.0011	0.0115 +-	0.0004	45.4442 +-	0.0
15.8849	1.265	45.4506 +-	0.0026	0.0109 +-	0.0005	45.4615 +-	0.0
15.8849	1.592	45.4786 +-	0.0023	0.0106 +-	0.0003	45.4892 +-	0.0
15.8849	2.004	45.5132 +-	0.0019	0.0096 +-	0.0002	45.5228 +-	0.0
15.8849	2.523	45.5624 +-	0.0045	0.0086 +-	0.0002	45.5710 +-	0.0
15.8849	2.523	45.5666 +-	0.0029	0.0088 +-	0.0002	45.5755 +-	0.0
15.8849	3.177	45.6443 +-	0.0059	0.0081 +-	0.0002	45.6524 +-	0.0
15.8849	3.999	45.7569 +-	0.0028	0.0075 +-	0.0001	45.7643 +-	0.0
15.8849	5.035	45.9174 +-	0.0184	0.0068 +-	0.0002	45.9242 +-	0.0
15.8849	6.338	46.1579 +-	0.0079	0.0063 +-	0.0001	46.1642 +-	0.0
15.8849	7.979	46.4916 +-	0.0207	0.0057 +-	0.0001	46.4974 +-	0.0
15.8849	10.045	46.9779 +-	0.0235	0.0052 +-	0.0001	46.9831 +-	0.0
15.8849	12.647	47.6663 +-	0.0492	0.0047 +-	0.0001	47.6710 +-	0.0
15.8849	15.921	48.5740 +-	0.0951	0.0042 +-	0.0001	48.5782 +-	0.0
15.8849	20.043	49.7322 +-	0.0928	0.0036 +-	0.0001	49.7358 +-	0.0
15.8849	25.233	51.4003 +-	0.1263	0.0031 +-	0.0001	51.4034 +-	0.1

15.8849	25.233	51.6695	+-	0.2411	0.0033	+-	0.0001	51.6728	+-	0.2
15.8849	31.767	53.8972	+-	0.0833	0.0028	+-	0.0000	53.9000	+-	0.0
15.8849	39.992	56.9762	+-	0.2613	0.0024	+-	0.0001	56.9786	+-	0.2
15.8849	50.347	61.2126	+-	0.1415	0.0021	+-	0.0000	61.2147	+-	0.1
15.8849	63.383	67.1077	+-	0.2806	0.0018	+-	0.0000	67.1095	+-	0.2
15.8849	79.794	73.8912	+-	0.3940	0.0015	+-	0.0000	73.8927	+-	0.3
15.8849	100.455	84.0701	+-	0.1876	0.0013	+-	0.0000	84.0713	+-	0.1
15.8849	1004.547	529.1993	+-	5.7548	0.0002	+-	0.0000	529.1994	+-	5.
15.8849	10045.474	5152.9102	+-	60.8861	0.0000	+-	0.0000	5152.9103	+-	
15.8849	126.465	95.8561	+-	1.0275	0.0011	+-	0.0000	95.8572	+-	1.0
15.8849	1264.650	657.1122	+-	8.7863	0.0001	+-	0.0000	657.1124	+-	8.
15.8849	12646.502	9030.3076	+-	4687.8556	0.0000	+-	0.0000	9030.3076	+-	
15.8849	159.210	110.3385	+-	0.6043	0.0009	+-	0.0000	110.3393	+-	0.6
15.8849	1592.100	826.0858	+-	11.7676	0.0001	+-	0.0000	826.0859	+-	11.
15.8849	15921.003	67373.6364	+-	102890.0373	0.0001	+-	0.0001	67373.6364	+-	
15.8849	200.434	131.7019	+-	1.7386	0.0007	+-	0.0000	131.7026	+-	1.7
15.8849	2004.336	1005.5208	+-	28.9558	0.0001	+-	0.0000	1005.5209	+-	2
15.8849	20043.355	20562.9426	+-	18268.3898	0.0000	+-	0.0000	20562.9426	+-	
15.8849	252.331	157.7833	+-	1.5443	0.0006	+-	0.0000	157.7839	+-	1.5
15.8849	252.331	158.3982	+-	1.9490	0.0006	+-	0.0000	158.3988	+-	1.9
15.8849	2523.309	1274.0909	+-	20.2440	0.0001	+-	0.0000	1274.0910	+-	2
15.8849	2523.309	1274.7067	+-	15.5398	0.0001	+-	0.0000	1274.7067	+-	1
15.8849	25233.089	39690.5213	+-	46791.1712	0.0000	+-	0.0000	39690.5213	+-	
15.8849	317.666	189.4183	+-	3.7873	0.0005	+-	0.0000	189.4187	+-	3.7
15.8849	3176.658	1561.9070	+-	22.8664	0.0001	+-	0.0000	1561.9070	+-	2
15.8849	399.918	229.5952	+-	7.5429	0.0004	+-	0.0000	229.5955	+-	7.5
15.8849	3999.175	2021.8451	+-	12.5701	0.0000	+-	0.0000	2021.8451	+-	1
15.8849	503.466	277.5103	+-	1.5813	0.0003	+-	0.0000	277.5106	+-	1.5
15.8849	5034.663	2660.3570	+-	257.1285	0.0000	+-	0.0000	2660.3570	+-	25
15.8849	633.827	349.4763	+-	6.1864	0.0003	+-	0.0000	349.4766	+-	6.1
15.8849	6338.265	3265.4994	+-	168.8609	0.0000	+-	0.0000	3265.4995	+-	16
15.8849	797.940	424.7640	+-	8.1550	0.0002	+-	0.0000	424.7642	+-	8.1
15.8849	7979.403	6382.7504	+-	4043.7748	0.0000	+-	0.0000	6382.7504	+-	4
17.8241	0.318	57.1634	+-	0.0005	0.0159	+-	0.0015	57.1793	+-	0.0
17.8241	0.400	57.1653	+-	0.0007	0.0139	+-	0.0015	57.1791	+-	0.0
17.8241	0.504	57.1693	+-	0.0014	0.0140	+-	0.0018	57.1832	+-	0.0
17.8241	0.634	57.1742	+-	0.0011	0.0129	+-	0.0009	57.1871	+-	0.0
17.8241	0.798	57.1801	+-	0.0016	0.0112	+-	0.0008	57.1913	+-	0.0
17.8241	1.005	57.1900	+-	0.0010	0.0104	+-	0.0003	57.2003	+-	0.0
17.8241	1.265	57.2024	+-	0.0014	0.0091	+-	0.0003	57.2115	+-	0.0
17.8241	1.592	57.2248	+-	0.0033	0.0087	+-	0.0004	57.2335	+-	0.0
17.8241	2.005	57.2601	+-	0.0028	0.0084	+-	0.0002	57.2685	+-	0.0
17.8241	2.524	57.3036	+-	0.0023	0.0076	+-	0.0001	57.3112	+-	0.0
17.8241	3.177	57.3656	+-	0.0057	0.0068	+-	0.0002	57.3724	+-	0.0
17.8241	3.177	57.3709	+-	0.0037	0.0070	+-	0.0001	57.3779	+-	0.0
17.8241	4.000	57.4687	+-	0.0074	0.0065	+-	0.0002	57.4752	+-	0.0
17.8241	5.035	57.6104	+-	0.0036	0.0059	+-	0.0000	57.6164	+-	0.0
17.8241	6.339	57.8125	+-	0.0232	0.0054	+-	0.0002	57.8179	+-	0.0
17.8241	7.980	58.1154	+-	0.0100	0.0050	+-	0.0001	58.1204	+-	0.0
17.8241	10.047	58.5355	+-	0.0261	0.0045	+-	0.0001	58.5401	+-	0.0
17.8241	12.648	59.1478	+-	0.0296	0.0041	+-	0.0001	59.1519	+-	0.0
17.8241	15.923	60.0144	+-	0.0620	0.0038	+-	0.0001	60.0182	+-	0.0
17.8241	20.045	61.1574	+-	0.1198	0.0033	+-	0.0001	61.1607	+-	0.1
17.8241	25.236	62.6155	+-	0.1168	0.0029	+-	0.0001	62.6184	+-	0.1
17.8241	31.770	64.7158	+-	0.1590	0.0025	+-	0.0001	64.7183	+-	0.1
17.8241	31.770	65.0548	+-	0.3036	0.0026	+-	0.0001	65.0574	+-	0.3
17.8241	39.996	67.8595	+-	0.1049	0.0022	+-	0.0000	67.8617	+-	0.1
17.8241	50.352	71.7362	+-	0.3290	0.0019	+-	0.0000	71.7381	+-	0.3
17.8241	63.389	77.0700	+-	0.1782	0.0017	+-	0.0000	77.0717	+-	0.1
17.8241	79.802	84.4923	+-	0.3533	0.0014	+-	0.0000	84.4937	+-	0.3
17.8241	100.465	93.0331	+-	0.4960	0.0012	+-	0.0000	93.0343	+-	0.4
17.8241	1004.651	534.8014	+-	10.2676	0.0002	+-	0.0000	534.8015	+-	10.
17.8241	10046.510	8036.2353	+-	5091.3358	0.0000	+-	0.0000	8036.2353	+-	
17.8241	126.478	105.8488	+-	0.2362	0.0010	+-	0.0000	105.8499	+-	0.2
17.8241	1264.781	666.2911	+-	7.2456	0.0001	+-	0.0000	666.2912	+-	7.
17.8241	12647.806	6487.7986	+-	76.6589	0.0000	+-	0.0000	6487.7986	+-	

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17.8241	159.226	120.6882	+-	1.2937	0.0008	+-	0.0000	120.6890	+-	1.2
17.8241	1592.264	827.3406	+-	11.0625	0.0001	+-	0.0000	827.3407	+-	11.
17.8241	15922.645	11369.6560	+-	5902.2692	0.0000	+-	0.0000	11369.6560	+	
17.8241	200.454	138.9222	+-	0.7608	0.0007	+-	0.0000	138.9229	+-	0.7
17.8241	2004.542	1040.0877	+-	14.8160	0.0001	+-	0.0000	1040.0878	+-	1
17.8241	20045.422	84827.1294	+-	129544.2399	0.0001	+-	0.0001	84827.1295		
17.8241	252.357	165.8200	+-	2.1890	0.0006	+-	0.0000	165.8205	+-	2.1
17.8241	2523.569	1266.0062	+-	36.4569	0.0001	+-	0.0000	1266.0063	+-	3
17.8241	25235.691	25889.8804	+-	23000.9118	0.0000	+-	0.0000	25889.8804		
17.8241	317.699	198.6579	+-	1.9443	0.0005	+-	0.0000	198.6584	+-	1.9
17.8241	317.699	199.4321	+-	2.4539	0.0005	+-	0.0000	199.4326	+-	2.4
17.8241	3176.985	1604.1508	+-	25.4883	0.0001	+-	0.0000	1604.1509	+-	2
17.8241	3176.985	1604.9261	+-	19.5654	0.0001	+-	0.0000	1604.9261	+-	1
17.8241	31769.853	49972.5585	+-	58912.6690	0.0000	+-	0.0000	49972.5585		
17.8241	399.959	238.4880	+-	4.7684	0.0004	+-	0.0000	238.4884	+-	4.7
17.8241	3999.588	1966.5271	+-	28.7901	0.0000	+-	0.0000	1966.5272	+-	2
17.8241	503.518	289.0730	+-	9.4970	0.0003	+-	0.0000	289.0733	+-	9.4
17.8241	5035.182	2545.6146	+-	15.8264	0.0000	+-	0.0000	2545.6146	+-	1
17.8241	633.892	349.4008	+-	1.9909	0.0002	+-	0.0000	349.4010	+-	1.9
17.8241	6338.919	3349.5364	+-	323.7390	0.0000	+-	0.0000	3349.5364	+-	32
17.8241	798.023	440.0100	+-	7.7890	0.0002	+-	0.0000	440.0102	+-	7.7
17.8241	7980.226	4111.4441	+-	212.6052	0.0000	+-	0.0000	4111.4442	+-	21
20.0000	0.400	71.9719	+-	0.0006	0.0126	+-	0.0012	71.9846	+-	0.0
20.0000	0.504	71.9742	+-	0.0009	0.0110	+-	0.0012	71.9853	+-	0.0
20.0000	0.634	71.9793	+-	0.0018	0.0111	+-	0.0015	71.9904	+-	0.0
20.0000	0.798	71.9855	+-	0.0014	0.0103	+-	0.0007	71.9957	+-	0.0
20.0000	1.005	71.9929	+-	0.0020	0.0089	+-	0.0006	72.0018	+-	0.0
20.0000	1.265	72.0053	+-	0.0013	0.0082	+-	0.0003	72.0136	+-	0.0
20.0000	1.592	72.0209	+-	0.0018	0.0072	+-	0.0002	72.0282	+-	0.0
20.0000	2.005	72.0491	+-	0.0041	0.0069	+-	0.0003	72.0561	+-	0.0
20.0000	2.524	72.0937	+-	0.0036	0.0067	+-	0.0002	72.1003	+-	0.0
20.0000	3.177	72.1484	+-	0.0029	0.0060	+-	0.0001	72.1545	+-	0.0
20.0000	4.000	72.2265	+-	0.0071	0.0054	+-	0.0001	72.2319	+-	0.0
20.0000	4.000	72.2332	+-	0.0046	0.0056	+-	0.0001	72.2387	+-	0.0
20.0000	5.036	72.3563	+-	0.0094	0.0051	+-	0.0001	72.3614	+-	0.0
20.0000	6.340	72.5347	+-	0.0045	0.0047	+-	0.0000	72.5394	+-	0.0
20.0000	7.981	72.7891	+-	0.0292	0.0043	+-	0.0002	72.7934	+-	0.0
20.0000	10.048	73.1704	+-	0.0126	0.0040	+-	0.0000	73.1744	+-	0.0
20.0000	12.649	73.6995	+-	0.0329	0.0036	+-	0.0001	73.7031	+-	0.0
20.0000	15.924	74.4703	+-	0.0373	0.0033	+-	0.0000	74.4736	+-	0.0
20.0000	20.047	75.5615	+-	0.0780	0.0030	+-	0.0001	75.5645	+-	0.0
20.0000	25.238	77.0006	+-	0.1508	0.0026	+-	0.0001	77.0032	+-	0.1
20.0000	31.773	78.8364	+-	0.1471	0.0023	+-	0.0000	78.8387	+-	0.1
20.0000	40.000	81.4807	+-	0.2002	0.0020	+-	0.0000	81.4827	+-	0.2
20.0000	40.000	81.9075	+-	0.3822	0.0021	+-	0.0001	81.9096	+-	0.3
20.0000	50.357	85.4389	+-	0.1320	0.0018	+-	0.0000	85.4406	+-	0.1
20.0000	63.396	90.3199	+-	0.4143	0.0015	+-	0.0000	90.3214	+-	0.4
20.0000	79.810	97.0354	+-	0.2244	0.0013	+-	0.0000	97.0367	+-	0.2
20.0000	100.475	106.3805	+-	0.4448	0.0011	+-	0.0000	106.3816	+-	0.4
20.0000	1004.755	553.9969	+-	9.8067	0.0002	+-	0.0000	553.9971	+-	9.
20.0000	10047.546	5176.5353	+-	267.6817	0.0000	+-	0.0000	5176.5353	+-	2
20.0000	126.491	117.1338	+-	0.6245	0.0009	+-	0.0000	117.1348	+-	0.6
20.0000	1264.911	673.3445	+-	12.9275	0.0001	+-	0.0000	673.3446	+-	12.
20.0000	12649.111	10118.0641	+-	6410.2729	0.0000	+-	0.0000	10118.0641	+	
20.0000	159.243	133.2695	+-	0.2974	0.0008	+-	0.0000	133.2704	+-	0.2
20.0000	1592.429	838.8973	+-	9.1226	0.0001	+-	0.0000	838.8974	+-	9.
20.0000	15924.287	8168.4968	+-	96.5178	0.0000	+-	0.0000	8168.4968	+-	
20.0000	200.475	151.9531	+-	1.6288	0.0007	+-	0.0000	151.9537	+-	1.6
20.0000	2004.749	1041.6675	+-	13.9283	0.0001	+-	0.0000	1041.6676	+-	1
20.0000	20047.489	14315.0249	+-	7431.2829	0.0000	+-	0.0000	14315.0249	+	
20.0000	252.383	174.9108	+-	0.9579	0.0005	+-	0.0000	174.9113	+-	0.9
20.0000	2523.829	1309.5279	+-	18.6542	0.0001	+-	0.0000	1309.5279	+-	1
20.0000	25238.294	106802.0412	+-	163103.3532	0.0001	+-	0.0001	106802.04		
20.0000	317.731	208.7765	+-	2.7561	0.0005	+-	0.0000	208.7769	+-	2.7
20.0000	3177.313	1593.9718	+-	45.9013	0.0001	+-	0.0000	1593.9718	+-	4
20.0000	31773.129	32596.7894	+-	28959.4184	0.0000	+-	0.0000	32596.7894		

20.0000	400.000	250.1212 +- 2.4480	0.0004 +- 0.0000	250.1216 +- 2.4
20.0000	400.000	251.0961 +- 3.0896	0.0004 +- 0.0000	251.0965 +- 3.0
20.0000	4000.000	2019.7145 +- 32.0911	0.0000 +- 0.0000	2019.7145 +- 3
20.0000	4000.000	2020.6906 +- 24.6339	0.0000 +- 0.0000	2020.6906 +- 2
20.0000	40000.000	62918.2113 +- 74174.3042	0.0000 +- 0.0000	62918.2113
20.0000	503.570	300.2696 +- 6.0036	0.0003 +- 0.0000	300.2699 +- 6.0
20.0000	5035.702	2475.9663 +- 36.2484	0.0000 +- 0.0000	2475.9663 +- 3
20.0000	633.957	363.9589 +- 11.9572	0.0002 +- 0.0000	363.9591 +- 11.9
20.0000	6339.573	3205.0694 +- 19.9263	0.0000 +- 0.0000	3205.0694 +- 1
20.0000	798.105	439.9149 +- 2.5066	0.0002 +- 0.0000	439.9151 +- 2.5
20.0000	7981.049	4217.2513 +- 407.6053	0.0000 +- 0.0000	4217.2513 +- 40