【original article 】

Simulation of nontribial point of Riemann zeta function Ver.4

Toshiro Takami*

【Abstract】

Tried to simulate the nontribial point of the Riemann zeta function.
At the beginning, we tried to be exactly the same value as the nontribial point of the Riemann Zeta function only with the degree of increase of the circle going up like wrapping x = 0.5, but the degree of increase varies from moment to moment extremely difficult It was judged impossible.
Then I created an expression that can take approximate values, but always take lower values than the nontribial zeros of the Riemann zeta function except for the initial values. However, by increasing the degree of increase of the circle going up like winding x = 0.5, it became possible to take a value which can be said to be an approximate value.
The degree of increase in circle was based on the formula of the nuclear energy value of uranium.
Since the degree of increase of the zero point changes from moment to moment, satisfactory approximate values can not be obtained yet.

【Introduction】

$$2\pi \ln(x!) = Dn \tag{1}$$

$$+1.7(1-(\frac{sin\pi 1.3 \mod (An-0.9,3.51)}{\pi 1.3 \mod (An-0.9,3.51)})^2) = En \tag{2}$$

$$14.1347+1.7(1-(\frac{sin\pi 1.3 \mod (A1-0.9,3.51)}{\pi 1.3 \mod (A1-0.9,3.51)})^2) = E1 \tag{3}$$

$$D2+1.7(1-(\frac{sin\pi 1.3 \mod (A2-0.9,3.51)}{\pi 1.3 \mod (A2-0.9,3.51)})^2) = E2 \tag{4}$$

$$D3+1.7(1-(\frac{sin\pi 1.3 \mod (A3-0.9,3.51)}{\pi 1.3 \mod (A3-0.9,3.51)})^2) = E3 \tag{5}$$

$$Dn+1.7(1-(\frac{sin\pi 1.3 \mod (An-0.9,3.51)}{\pi 1.3 \mod (An-0.9,3.51)})^2) = En \tag{6}$$

In equation (1) I can give a value that approximates the nontrivial zero of the Riemann zeta function. However, except for the initial value, the value is a little lower than the nontribial zero point of the Riemann zeta function. It is also necessary to add the degree of increase of the circle ascending around x = 0.5

At the beginning, efforts were made to have exactly the same value as the nontribial point of the Riemann zeta function only with the degree of increase of the circle going up like winding x = 0.5, but since the degree of increase varies from moment to moment I tried, but judged impossible.

The degree of increase in circle was based on the formula of the nuclear energy value of uranium.
Expression of the circle's degree of increase was the result of various sought-after, and it became the expression from(2) to(6).

3.51 in the above equation is a value under the assumption that it will make a round at 3.51 times.

Also, An in the above equations (2) to (6)
A1, A2, A3, A4, A5 ...An... = 1, 2, 3, 4, 5, 6 ....n....

I simulated the nontrivial zeros of Riemann's hypothesis. Looking at every other degree of increase, there is a maximum point of increase in every fourth, third or fifth place. For that reason, I did not only change one another but I looked at differences from two, three, four, five, six, seven and so on, but the degree of increase has changed variously Was observed. This is reminiscent of the dragon which rises x = 0.5 while changing the degree of freedom freely while drawing a circle.
Initially I tried to simulate a nontrivial point with only the degree of increase of the circle, but I thought that it was impossible without increasing regularity and I adopted ln(x!). And averaged the increase.
Dn is an approximation obtained by simulating the nontribial point of the Riemann zeta function.
The first Dn(=D1) are larger than the nontribial zero of the Riemann zeta function, but all others are slightly small.
The average increase is $2\pi \ln(x!) = Dn$ (n is an integer starting from 1).
Bn are nontrivial zeros of Riemann's hypothesis. n = 1,2,3,4,5,6.....

when ln(x!) = 1	x=2.31244088	D1=14.52949456	B1=14.1347
when ln(x!) = 2	x=3.16283047	D2=19.87264994	B2=21.0220
when ln(x!) = 3	x=3.88072502	D3=24.38331443	B3=25.0108
when ln(x!) = 4	x=4.52614251	D4=28.43859212	B4=30.4248
when ln(x!) = 5	x=5.12374886	D5=32.19346355	B5=32.9350
when ln(x!) = 6	x=5.68660830	D6=35.73001370	B6=37.5862
when ln(x!) = 7	x=6.22265528	D7=39.09809623	B7=40.9187
when ln(x!) = 8	x=6.73714810	D8=42.33074995	B8=43.3270
when ln(x!) = 9	x=7.233790221	D9=45.45124443	B9=48.0051
when ln(x!) = 10	x=7.715310138	D10=48.47672333	B10=49.7738
when ln(x!) = 11	x=8.183789082	D11=51.42026332	B11=52.9703
when ln(x!) = 12	x=8.640858975	D12=54.29211816	B12=52.9703
when ln(x!) = 13	x=9.087828540	D13=57.10051076	B13=56.4462
when ln(x!) = 14	x=9.525767092	D14=59.85215983	B14=60.8318
when ln(x!) = 15	x=9.955562217	D15=62.55264225	B15=65.1125
when ln(x!) = 16	x=10.37796067	D16=65.20664998	B16=67.0798

when ln(x!) = 17	x=10.79359806	D17=67.81817674	B17=69.5464
when ln(x!) = 18	x=11.20302101	D18=70.39065701	B18=72.0671
when ln(x!) = 19	x=11.60670377	D19=72.92707062	B19=75.7047
when ln(x!) = 20	x=12.00506117	D20=75.43002393	B20=77.1448
when ln(x!) = 21	x=12.39845860	D21=77.90181290	B21=79.3373
when ln(x!) = 22	x=12.78722004	D22=80.34447305	B22=82.9104
when ln(x!) = 23	x=13.17163436	D23=82.75981949	B23=84.7354
when ln(x!) = 24	x=13.55196054	D24=85.14947938	B24=87.4253
when ln(x!) = 25	x=13.92843186	D25=87.51491840	B25=88.8091
when ln(x!) = 26	x=14.30125934	D26=89.85746259	B26=92.4919
when ln(x!) = 27	x=14.67063473	D27=92.17831657	B27=94.6513
when ln(x!) = 28	x=15.03673282	D28=94.47857870	B28=95.8706
when ln(x!) = 29	x=15.39971356	D29=96.75925398	B29=98.8312
when ln(x!) = 30	x=15.75972378	D30=99.02126488	B30=101.3178
when ln(x!) = 31	x=16.11689864	D31=101.2654607	B31=103.7255
when ln(x!) = 32	x=16.47136294	D32=103.4926256	B32=105.4466
when ln(x!) = 33	x=16.82323220	D33=105.7034854	B33=107.1686
when ln(x!) = 34	x=17.17261360	D34=107.8987134	B34=111.0295
when ln(x!) = 35	x=17.51960683	D35=110.0789362	B35=111.8747
when ln(x!) = 36	x=17.86430481	D36=112.2447375	B36=114.3202
when ln(x!) = 37	x=18.20679432	D37=114.3966625	B37=116.2267
when ln(x!) = 38	x=18.54715655	D38=116.5352215	B38=118.7908
when ln(x!) = 39	x=18.88546764	D39=118.6608928	B39=121.3701
when ln(x!) = 40	x=19.22179906	D40=120.7741254	B40=122.9468
when ln(x!) = 41	x=19.55621806	D41=122.8753420	B41=124.2568
when ln(x!) = 42	x=19.88878797	D42=124.9649403	B42=127.5166
when ln(x!) = 43	x=20.21956855	D43=127.0432961	B43=129.5787
when ln(x!) = 44	x=20.52588245	D44=129.1107638	B44=131.0877
when ln(x!) = 45	x=20.87598453	D45=131.1676793	B45=133.4977
when ln(x!) = 46	x=21.20172393	D46=133.2143603	B46=134.7567
when ln(x!) = 47	x=21.52588245	D47=135.2511084	B47=138.1160
when ln(x!) = 48	x=21.84850565	D48=137.2782097	B48=139.7362
when ln(x!) = 49	x=22.16963685	D49=139.2959365	B49=141.1237
when ln(x!) = 50	x=22.48931724	D50=141.3045476	B50=143.1118
when ln(x!) = 51	x=22.80758604	D51=143.3042898	B51=146.0010
when ln(x!) = 52	x=23.12448081	D52=145.2953981	B52=147.4228
when ln(x!) = 53	x=23.44003716	D53=147.2780971	B53=150.0535

when ln(x!) = 54	x=23.75428923	D54=149.2526011	B54=150.9252
when ln(x!) = 55	x=24.06726967	D55=151.2191152	B55=153.0247
when ln(x!) = 56	x=24.37900969	D56=153.1778355	B56=156.1129
when ln(x!) = 57	x=24.68953919	D57=155.1289499	B57=157.5976
when ln(x!) = 58	x=24.99888684	D58=157.0726385	B58=158.8500
when ln(x!) = 59	x=25.30708011	D59=159.0090739	B59=161.1890
when ln(x!) = 60	x=25.61414539	D60=160.9384220	B60=163.0307
when ln(x!) = 61	x=25.92010803	D61=162.8608419	B61=165.5371
when ln(x!) = 62	x=26.22499237	D62=164.7764868	B62=167.1844
when ln(x!) = 63	x=26.52882186	D63=166.6855037	B63=169.0945
when ln(x!) = 64	x=26.83161903	D64=168.5880345	B64=173.4115
when ln(x!) = 65	x=27.13340561	D65=170.4842155	B65=173.4115
when ln(x!) = 66	x=27.43420251	D66=172.3741781	B66=174.7542
when ln(x!) = 67	x=27.73402991	D67=174.2580492	B67=176.4414
when ln(x!) = 68	x=28.03290727	D68=176.1359511	B68=178.3774
when ln(x!) = 69	x=28.33085337	D69=178.0080016	B69=179.9165
when ln(x!) = 70	x=28.62788636	D70=179.8743149	B70=182.2071
when ln(x!) = 71	x=28.92402376	D71=181.7350011	B71=184.8745
when ln(x!) = 72	x=29.21928252	D72=183.5901666	B72=185.5988
when ln(x!) = 73	x=29.51367903	D73=185.4399144	B73=187.2289
when ln(x!) = 74	x=29.80722913	D74=187.2843441	B74=189.4162
when ln(x!) = 75	x=30.09994819	D75=189.1235522	B75=192.0266
when ln(x!) = 76	x=30.39185107	D76=190.9576321	B76=193.0797
when ln(x!) = 77	x=30.68295218	D77=192.7866743	B77=195.2654
when ln(x!) = 78	x=30.97326548	D78=194.6107665	B78=196.8765
when ln(x!) = 79	x=31.26280450	D79=196.4299939	B79=198.0153
when ln(x!) = 80	x=31.55158239	D80=198.2444389	B80=201.2648
when ln(x!) = 81	x=31.83961189	D81=200.0541816	B81=202.4936
when ln(x!) = 82	x=32.12690538	D82=201.8592999	B82=204.1896
when ln(x!) = 83	x=32.41347489	D83=203.6598692	B83=205.3947
when ln(x!) = 84	x=32.69933207	D84=205.4559628	B84=207.9063
when ln(x!) = 85	x=32.9844883	D85=207.2476523	B85=209.5765
when ln(x!) = 86	x=33.2689546	D86=209.0353367	B86=211.6908
when ln(x!) = 87	x=33.55274171	D87=210.8180937	B87=213.3479
when ln(x!) = 88	x=33.83586006	D88=212.5969788	B88=214.5470
when ln(x!) = 89	x=34.11831982	D89=214.3717258	B89=216.1695
when ln(x!) = 90	x=34.40013088	D90=216.1423969	B90=219.0676
when ln(x!) = 91	x=34.68130288	D91=217.9090527	B91=220.7149

when ln(x!) = 92	x=34.96184519	D92=219.671752	B92=221.4307
when ln(x!) = 93	x=35.24176696	D93=221.4305524	B93=224.0070
when ln(x!) = 94	x=35.5210771	D94=223.1855097	B94=224.9833
when ln(x!) = 95	x=35.7997843	D95=224.9366787	B95=227.4214
when ln(x!) = 96	x=36.07789704	D96=226.6841126	B96=229.3374
when ln(x!) = 97	x=36.35542357	D97=228.4278632	B97=231.2502
when ln(x!) = 98	x=36.63237195	D98=230.1679812	B98=231.9872
when ln(x!) = 99	x=36.90875007	D99=231.9045161	B99=233.6934
when ln(x!) = 100	x=37.1845656	D100=233.6375162	B100=236.5242
when ln(x!) = 101	x=37.45982604	D101=235.3670286	B101=237.7698
when ln(x!) = 102	x=37.73453872	D102=237.0930993	B102=239.5555
when ln(x!) = 103	x=38.0087108	D103=238.8157732	B103=241.0492
when ln(x!) = 104	x=38.28234927	D104=240.5350945	B104=242.8233
when ln(x!) = 105	x=38.55546097	D105=242.2511059	B105=244.0709
when ln(x!) = 106	x=38.82805257	D106=243.9638494	B106=247.1370
when ln(x!) = 107	x=39.10013062	D107=245.6733662	B107=248.1020
when ln(x!) = 108	x=39.3717015	D108=247.3796964	B108=249.5737
when ln(x!) = 109	x=39.64277147	D109=249.0828792	B109=251.0149
when ln(x!) = 110	x=39.91334663	D110=250.7829531	B110=253.0670
when ln(x!) = 111	x=40.18343299	D111=252.4799557	B111=255.3063
when ln(x!) = 112	x=40.45303638	D112=254.1739238	B112=256.3807
when ln(x!) = 113	x=40.72216256	D113=255.8648937	B113=258.6104
when ln(x!) = 114	x=40.99081713	D114=257.5528999	B114=259.8744
when ln(x!) = 115	x=41.25900559	D115=259.2379777	B115=260.8051
when ln(x!) = 116	x=41.52673334	D116=260.9201608	B116=263.5739
when ln(x!) = 117	x=41.79400565	D117=262.5994822	B117=265.5578
when ln(x!) = 118	x=42.0608277	D118=264.2759746	B118=266.6150
when ln(x!) = 119	x=42.32720454	D119=265.9496697	B119=267.9219
when ln(x!) = 120	x=42.59314116	D120=267.6205987	B120=269.9704
when ln(x!) = 121	x=42.85864243	D121=269.2887924	B121=271.4941
when ln(x!) = 122	x=43.12371312	D122=270.9542806	B122=273.4596
when ln(x!) = 123	x=43.38835791	D123=272.6170929	B123=275.5875
when ln(x!) = 124	x=43.65258141	D124=274.2772581	B124=276.4521
when ln(x!) = 125	x=43.91638812	D125=275.9348046	B125=248.2507
when ln(x!) = 126	x=44.17978247	D126=277.5897601	B126=279.2292
when ln(x!) = 127	x=44.44276879	D127=279.2421519	B127=282.4651
when ln(x!) = 128	x=44.70535135	D128=280.8920068	B128=283.2112

when ln(x!) = 129 x=44.96753433 D129=282.539351 B129=284.8360
when ln(x!) = 130 x=45.22932185 D130=284.1842105 B130=286.6674
when ln(x!) = 131 x=45.49071792 D131=285.7266105 B131=287.9119
when ln(x!) = 132 x=45.75172652 D132=287.4665758 B132=289.5798
when ln(x!) = 133 x=46.01235152 D133=289.104131 B133=291.8463
when ln(x!) = 134 x=46.27259676 D134=290.7393001 B134=293.5584
when ln(x!) = 135 x=46.53246599 D135=292.3721066 B135=294.9657
when ln(x!) = 136 x=46.79196289 D136=294.0025738 B136=295.5732
when ln(x!) = 137 x=47.05109111 D137=295.6307243 B137=297.9793
when ln(x!) = 138 x=47.30985418 D138=297.2565807 B138=299.8403
when ln(x!) = 139 x=47.56825562 D139=298.8801648 B139=301.6493
when ln(x!) = 140 x=47.82629888 D140=300.5014984 B140=302.6967
when ln(x!) = 141 x=48.08398733 D141=302.1206027 B141=304.8644
when ln(x!) = 142 x=48.34132431 D142=303.7374987 B142=305.7289
when ln(x!) = 143 x=48.59831309 D143=305.3522068 B143=307.2195
when ln(x!) = 144 x=48.85495691 D144=306.9647474 B144=310.1095
when ln(x!) = 145 x=49.11125891 D145=308.5751404 B145=311.1651
when ln(x!) = 146 x=49.36722222 D146=310.1834053 B146=312.4278
when ln(x!) = 147 x=49.62284991 D147=311.7895614 B147=313.9853
when ln(x!) = 148 x=49.87814499 D148=313.3936278 B148=315.4756
when ln(x!) = 149 x=50.13311044 D149=314.9956229 B149=317.7348
when ln(x!) = 150 x=50.38774918 D150=316.5955653 B150=318.8531
when ln(x!) = 151 x=50.64206409 D151=318.193473 B151=321.1601
when ln(x!) = 152 x=50.89605799 D152=319.7893638 B152=322.1446
when ln(x!) = 153 x=51.14973369 D153=321.3832552 B153=323.4667
when ln(x!) = 154 x=51.40309393 D154=322.9751645 B154=324.8629
when ln(x!) = 155 x=51.65614141 D155=324.5651087 B155=327.4439
when ln(x!) = 156 x=51.9088788 D156=326.1531046 B156=329.0331
when ln(x!) = 157 x=52.16130872 D157=327.7391686 B157=329.9532
when ln(x!) = 158 x=52.41343375 D158=329.3233168 B158=331.4745
when ln(x!) = 159 x=52.66525645 D159=330.9055655 B159=333.6454
when ln(x!) = 160 x=52.91677933 D160=332.4859304 B160=334.2113
when ln(x!) = 161 x=53.16800485 D161=334.0644269 B161=336.8418
when ln(x!) = 162 x=53.41343375 D162=335.6410704 B162=338.3340
when ln(x!) = 163 x=53.66924756 D163=337.2158759 B163=339.8582
when ln(x!) = 164 x=53.91992148 D164=338.7888584 B164=341.0423
when ln(x!) = 165 x=54.16998160 D165=340.3600325 B165=342.0549
when ln(x!) = 166 x=54.41975621 D166=341.9294126 B166=344.6617

when ln(x!) = 167 x=54.66924756 D167=343.4970130 B167=346.3479
when ln(x!) = 168 x=54.91845791 D168=345.0628478 B168=347.2727
when ln(x!) = 169 x=55.16738944 D169=346.6269308 B169=349.3163
when ln(x!) = 170 x=55.41604435 D170=348.1892756 B170=350.4084
when ln(x!) = 171 x=55.66442476 D171=349.7498958 B171=351.1939
when ln(x!) = 172 x=55.91845791 D172=351.3088046 B172=353.4889
when ln(x!) = 173 x=56.16037055 D173=352.8660151 B173=356.0176
when ln(x!) = 174 x=56.40794007 D174=354.4215402 B174=357.1513
when ln(x!) = 175 x=56.65524339 D175=355.9753928 B175=357.9527
when ln(x!) = 176 x=56.90228251 D176=357.5275854 B176=359.7437
when ln(x!) = 177 x=57.14905941 D177=359.0781304 B177=361.2894
when ln(x!) = 178 x=57.39557604 D178=360.6270401 B178=363.3313
when ln(x!) = 179 x=57.64183433 D179=362.1743265 B179=364.7360
when ln(x!) = 180 x=57.88783616 D180=363.7200017 B180=366.2127
when ln(x!) = 181 x=58.13358343 D181=365.2640773 B181=367.9936
when ln(x!) = 182 x=58.37907798 D182=366.806565 B182=368.9684
when ln(x!) = 183 x=58.62432163 D183=368.3474763 B183=370.0509
when ln(x!) = 184 x=58.86931619 D184=369.8868225 B184=373.0619
when ln(x!) = 185 x=59.11406345 D185=371.4246149 B185=373.8649
when ln(x!) = 186 x=59.35856515 D186=372.9608644 B186=375.8259
when ln(x!) = 187 x=59.60282303 D187=374.4955819 B187=376.3241
when ln(x!) = 188 x=59.84683882 D188=376.0287783 B188=378.4367
when ln(x!) = 189 x=60.09061419 D189=377.5604642 B189=379.8730
when ln(x!) = 190 x=60.33415083 D190=379.0905600 B190=381.4845
when ln(x!) = 191 x=60.57745039 D191=380.6193462 B191=383.4453
when ln(x!) = 192 x=60.82051449 D192=382.1465630 B192=384.9561
when ln(x!) = 193 x=61.06334476 D193=383.6723106 B193=385.8613
when ln(x!) = 194 x=61.30594277 D194=385.1965988 B194=387.2229
when ln(x!) = 195 x=61.54831010 D195=386.7194377 B195=388.8461
when ln(x!) = 196 x=61.79044832 D196=388.2408370 B196=391.4561
when ln(x!) = 197 x=62.03235894 D197=389.7608063 B197=392.2451
when ln(x!) = 198 x=62.27404349 D198=391.2793551 B198=393.4277
when ln(x!) = 199 x=62.51550348 D199=392.7964929 B199=395.5828
when ln(x!) = 200 x=62.75674037 D200=394.3122290 B200=396.3819
when ln(x!) = 201 x=62.99775564 D201=395.8265726 B201=397.9187
when ln(x!) = 202 x=63.23855074 D202=397.3395328 B202=399.9851
when ln(x!) = 203 x=63.47912708 D203=398.8511186 B203=401.8392
when ln(x!) = 204 x=63.71948610 D204=400.3613388 B204=402.8619

when ln(x!) = 205 x=63.95962917 D205=401.8702023 B205=404.2364
when ln(x!) = 206 x=64.19955770 D206=403.3777177 B206=405.1344
when ln(x!) = 207 x=64.43927304 D207=404.8838936 B207=407.5815
when ln(x!) = 208 x=64.67877655 D208=406.3887385 B208=408.9472
when ln(x!) = 209 x=64.91806956 D209=407.8922608 B209=410.5139
when ln(x!) = 210 x=65.15715339 D210=409.3944688 B210=411.9723
when ln(x!) = 211 x=65.39602935 D211=410.8953707 B211=413.2627
when ln(x!) = 212 x=65.63469873 D212=412.3949747 B212=415.0188
when ln(x!) = 213 x=65.87316280 D213=413.8932887 B213=415.4552
when ln(x!) = 214 x=66.11142284 D214=415.3903206 B214=418.3877
when ln(x!) = 215 x=66.34948009 D215=416.8860784 B215=419.8614
when ln(x!) = 216 x=66.58733579 D216=418.3805699 B216=420.6438
when ln(x!) = 217 x=66.82499006 D217=419.8737957 B217=422.0767
when ln(x!) = 218 x=67.06244740 D218=421.3657842 B218=423.7166
.....
.....
And so on.

E1=16.2294969
E2=22.1213224
E3=25.8248827
E4=29.3103324
E5=34.39978221
E6=37.60106032
E7=40.2163513
E8=44.61075331
E9=47.1088519
E10=49.9335178
.....
.....
.....
E97=230.126959
E98=231.44602
E99=234.203986
E100=235.928929
E101=237.035398
.....

.....
E137=295.7531594
E138=298.3289741
E139=299.5367919
E140=302.4005669
.....
.....
And so on.

Even if you change the formula so that E1 becomes 14.1347, which is the first of the nontrivial zero of the Riemann zeta function, the simulation has become extremely difficult.

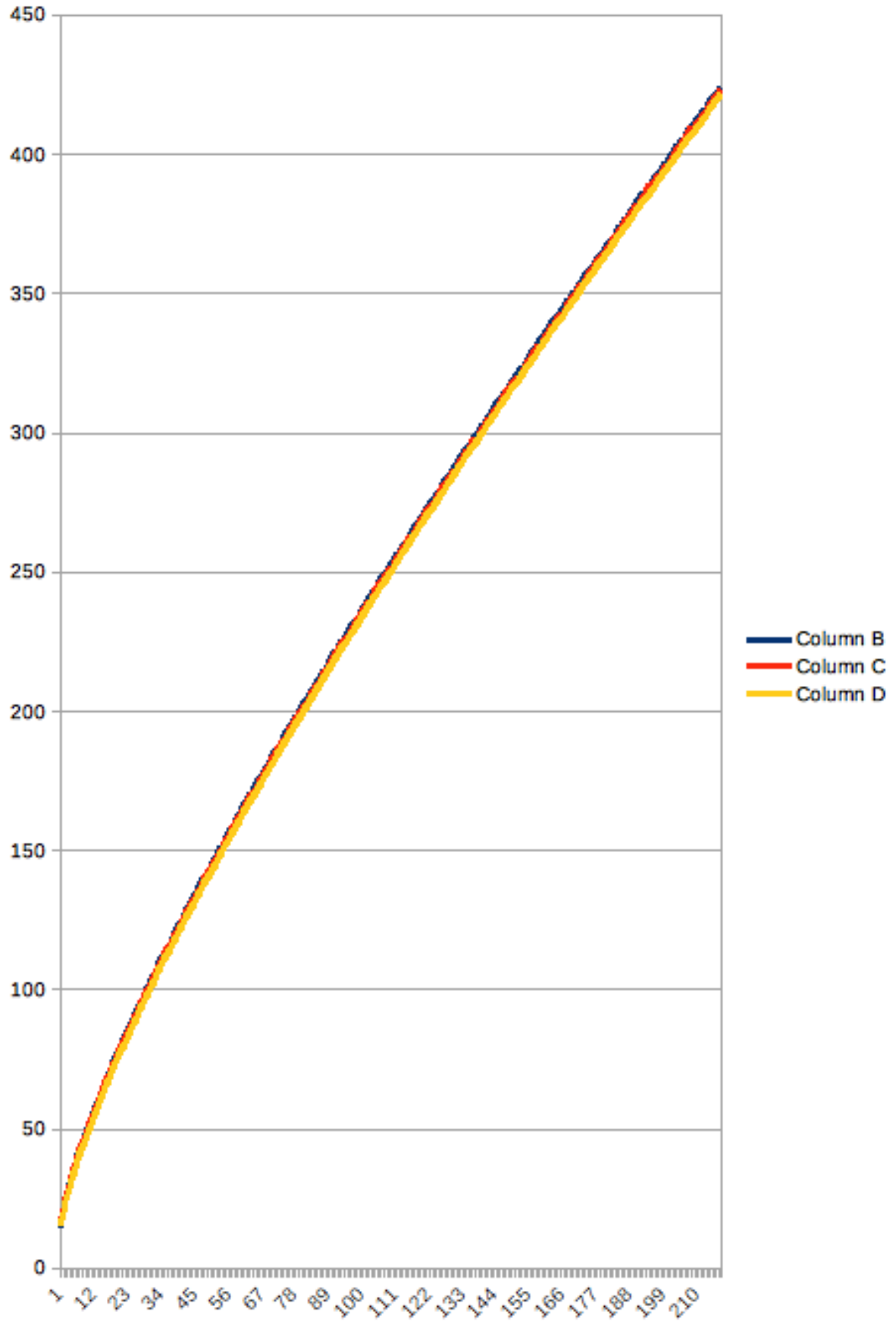
【Discussion】

It is considered that the reason why the degree of increase at the beginning of the nontrivial point of the Riemann Zeta function is large is because the radius of the circle (dragon) surrounding x = 0.5 is large. When n = 200 or more, the degree of increase is small, which is thought to be because the radius of the circle (dragon) surrounding x = 0.5 is small.

As shown in the figure below, the nontrivial zero point of the Riemann zeta function and its simulated numerical value are up to n = 217, they are almost on the same line(Figure 1 and Figure 2).

However, it is inferred from the graph that the approximate value obtained by equation (1) has a somewhat lower value(Figure 1).

The approximate value obtained by equation (1) is Column D.
Next page is Figure 1.


450
400
350
300
250
200
150
100
50
0
1
12
23
34
45
56
67
78
89
100
111
122
133
144
155
166
177
188
199
210
Column B
Column C
Column D

It seems that it can be said that it is on almost the same line.

Next page is Figure 2.

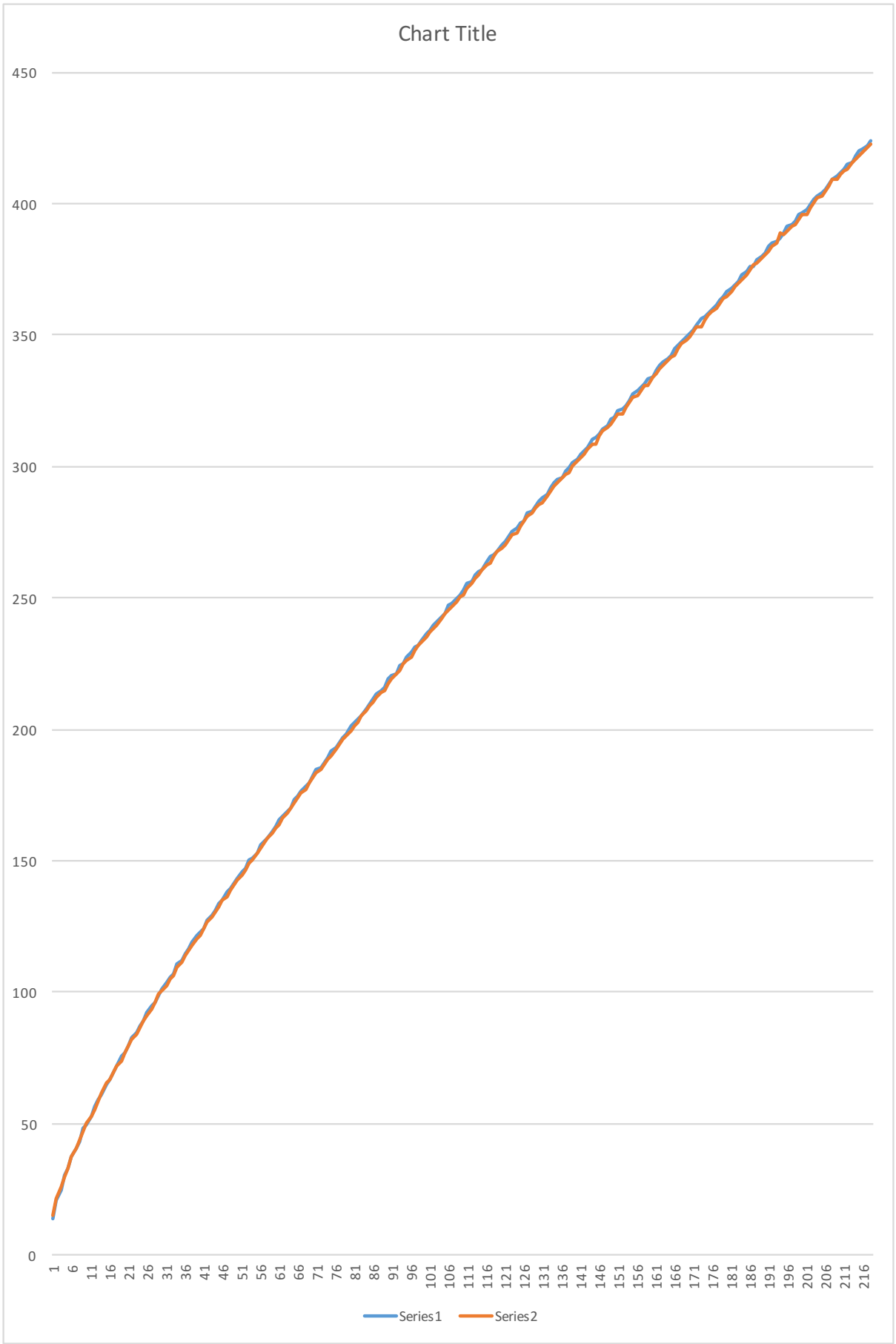


Chart Title
450
400
350
300
250
200
150
100
50
0
1
6
11
16
21
26
31
36
41
46
51
56
61
66
71
76
81
86
91
96
101
106
111
116
121
126
131
136
141
146
151
156
161
166
171
176
181
186
191
196
201
206
211
216
Series1
Series2

【Postscript】

I got tired of finding a pattern where the degree of increase was changeable freely, I gave up finding that pattern and decided to make it public here.
This is reminiscent of the dragon which rises x = 0.5 while changing the degree of freedom freely while drawing a circle.

【*References*】

1) https://en.wikipedia.org/wiki/Riemann_hypothesis

☃～☃～☃～☃～☃～
☃～☃～☃～☃～☃～
☃～☃～☃～☃～☃～

【Re-Postscript】

http://fish008.ninpou.jp/14.17-0033.xlsx

There is an excel file in the above.

🐷～🐷～🐷～🐷～🐷～

I am a psychiatrist now and also a doctor of brain surgery before.

(home)
〒854-0067
47-8 kuyamadai, Isahaya City, Nagasaki Prefecture, Japan

mmm82889@yahoo.co.jp
I would like to receive an email. I will not answer the phone.

Currently 56 years old
Born on November 26, 1961
（I am very poor of English. Almost all document are google-translation.）