

s = 14.134725142
0.5+si = (0.5+14.134725142j)
le cos((0.5 + 1j*s)*pi*0.5) = (1552377653.3785648-1552377653.3785648j)
la valeur de zeta par mpmath est : (-3.30837177700281e-11 + 2.07813922434745e-10j)
u(s) = (-0.950564420053128 + 0.310527427659872j)

s = 21.022039639
0.5+si = (0.5+21.022039639j)
le cos((0.5 + 1j*s)*pi*0.5) = (77525022863903.48-77525022863903.48j)
la valeur de zeta par mpmath est : (5.68208436213105e-11 + 2.53411986062046e-10j)
u(s) = (-0.904261286362284 - 0.426979538135515j)

s = 25.01085758
0.5+si = (0.5+25.01085758j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.079118690732051e+16-4.079118690732051e+16j)
la valeur de zeta par mpmath est : (6.55654265160747e-11 - 1.88783247477696e-10j)
u(s) = (-0.784724741017776 + 0.619844400502721j)

s = 30.424876126
0.5+si = (0.5+30.424876126j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.013472878096727e+20-2.013472878096727e+20j)
la valeur de zeta par mpmath est : (9.37768690744111e-11 + 1.57364604426574e-10j)
u(s) = (-0.475882080201416 - 0.879509093610273j)

s = 32.935061588
0.5+si = (0.5+32.935061588j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.0383998769677638e+22-1.0383998769677638e+22j)
la valeur de zeta par mpmath est : (-1.95754884228338e-10 + 3.026926960643e-10j)
u(s) = (-0.410202611710304 + 0.91199441738754j)

s = 37.586178159
0.5+si = (0.5+37.586178159j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.5463270824839915e+25-1.5463270824839915e+25j)
la valeur de zeta par mpmath est : (9.77987772933804e-11 + 3.23111059877631e-10j)
u(s) = (-0.832148978949123 - 0.554552140771208j)

s = 40.918719012
0.5+si = (0.5+40.918719012j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.9021598612498257e+27-2.9021598612498257e+27j)
la valeur de zeta par mpmath est : (-4.4672668213468e-11 - 2.15276398663108e-10j)
u(s) = (-0.917432154463171 - 0.397892249179437j)

s = 43.327073281
0.5+si = (0.5+43.327073281j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.2754755543853489e+29-1.2754755543853489e+29j)
la valeur de zeta par mpmath est : (-9.38139069931091e-11 + 1.24443749030768e-10j)
u(s) = (-0.275254914228019 + 0.961371276975403j)

s = 48.005150881
0.5+si = (0.5+48.005150881j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.981533271273009e+32-1.981533271273009e+32j)
la valeur de zeta par mpmath est : (-1.97059496182276e-10 - 1.72832748036447e-10j)
u(s) = (0.130434005539049 - 0.991456993620511j)

s = 49.773832478
0.5+si = (0.5+49.773832478j)
le cos((0.5 + 1j*s)*pi*0.5) = (3.1884164640852186e+33-3.1884164640852186e+33j)
la valeur de zeta par mpmath est : (-2.13261321858653e-10 + 4.13195584430969e-10j)
u(s) = (-0.579296195808325 + 0.815117118898875j)

s = 52.970321478
0.5+si = (0.5+52.970321478j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.8326133188886015e+35-4.8326133188886015e+35j)
la valeur de zeta par mpmath est : (-1.78183286029802e-10 + 6.69587166829831e-10j)
u(s) = (-0.867737842433297 + 0.497022169333722j)

s = 56.446247697
0.5+si = (0.5+56.446247697j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.136103288554269e+38-1.136103288554269e+38j)
la valeur de zeta par mpmath est : (-5.27718897604577e-11 - 1.40541037639854e-10j)
u(s) = (-0.752858419003555 - 0.658182498198996j)

s = 59.347044003
0.5+si = (0.5+59.347044003j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.0821980836627741e+40-1.0821980836627741e+40j)
la valeur de zeta par mpmath est : (2.34962595046576e-10 + 5.01096124606246e-10j)
u(s) = (-0.639526180501978 - 0.768769318100397j)

s = 60.831778525
0.5+si = (0.5+60.831778525j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.114743881543562e+41-1.114743881543562e+41j)
la valeur de zeta par mpmath est : (-5.52301698567417e-10 + 3.33975567034732e-10j)
u(s) = (0.464494099712826 + 0.885576214298894j)

s = 65.112544048
0.5+si = (0.5+65.112544048j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.2781785378624e+43-9.2781785378624e+43j)
la valeur de zeta par mpmath est : (-1.29185704126552e-10 - 1.34773943123525e-10j)
u(s) = (-0.0423226467531508 - 0.999103995373754j)

s = 67.079810529
0.5+si = (0.5+67.079810529j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.039429323786669e+45-2.039429323786669e+45j)
la valeur de zeta par mpmath est : (5.52176582913716e-11 - 8.79667661835222e-10j)
u(s) = (-0.992150520397526 + 0.125049369750186j)

s = 69.546401711
0.5+si = (0.5+69.546401711j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.821730225365428e+46-9.821730225365428e+46j)
la valeur de zeta par mpmath est : (9.83145559355855e-11 - 3.67444229828273e-10j)
u(s) = (-0.866385344622433 + 0.499376045304005j)

s = 72.067157674
0.5+si = (0.5+72.067157674j)
le cos((0.5 + 1j*s)*pi*0.5) = (5.150126730895443e+48-5.150126730895443e+48j)
la valeur de zeta par mpmath est : (4.90377889861868e-10 - 1.34183160051896e-9j)
u(s) = (-0.764358123967549 + 0.644791949643302j)

s = 75.704690699

$0.5+si = (0.5+75.704690699j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.5606299558424955e+51-1.5606299558424955e+51j)$
 la valeur de zeta par mpmath est : $(-1.24913483013558e-10 - 8.19014852548133e-11j)$
 $u(s) = (0.398701655779606 - 0.917080688750226j)$

$s = 77.144840069$
 $0.5+si = (0.5+77.144840069j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.4988315007563905e+52-1.4988315007563905e+52j)$
 la valeur de zeta par mpmath est : $(-6.29298545786825e-11 + 1.71277493801281e-10j)$
 $u(s) = (-0.762124629060977 + 0.647430343572685j)$

$s = 79.33737502$
 $0.5+si = (0.5+79.33737502j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (4.693255881671456e+53-4.693255881671456e+53j)$
 la valeur de zeta par mpmath est : $(4.38207291101612e-10 - 4.9060608563521e-10j)$
 $u(s) = (-0.112471588202902 + 0.993654941036938j)$

$s = 82.910380854$
 $0.5+si = (0.5+82.910380854j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.285098951091125e+56-1.285098951091125e+56j)$
 la valeur de zeta par mpmath est : $(-1.45466165298013e-10 - 1.72962385789377e-10j)$
 $u(s) = (-0.171421302162206 - 0.985197816260786j)$

$s = 84.735492981$
 $0.5+si = (0.5+84.735492981j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.2594695022426364e+57-2.2594695022426364e+57j)$
 la valeur de zeta par mpmath est : $(-8.14305489207517e-11 + 1.0408353069299e-9j)$
 $u(s) = (-0.987832802824919 + 0.155519624687901j)$

$s = 87.425274613$
 $0.5+si = (0.5+87.425274613j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.5450541737439268e+59-1.5450541737439268e+59j)$
 la valeur de zeta par mpmath est : $(-6.67152931552292e-11 - 2.15373635591392e-10j)$
 $u(s) = (-0.824893140979883 - 0.565288692584895j)$

$s = 88.809111208$
 $0.5+si = (0.5+88.809111208j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.3582530078666087e+60-1.3582530078666087e+60j)$
 la valeur de zeta par mpmath est : $(-6.75411047881234e-10 + 4.20439850543594e-10j)$
 $u(s) = (0.441441702135125 + 0.897289932862304j)$

$s = 92.491899271$
 $0.5+si = (0.5+92.491899271j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (4.419113439620957e+62-4.419113439620957e+62j)$
 la valeur de zeta par mpmath est : $(9.13272312077283e-10 + 9.624251820362e-10j)$
 $u(s) = (-0.0523742656856326 - 0.998627526304925j)$

$s = 94.651344041$
 $0.5+si = (0.5+94.651344041j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.3136595910132959e+64-1.3136595910132959e+64j)$
 la valeur de zeta par mpmath est : $(3.61364416050155e-10 + 6.11487575086228e-10j)$
 $u(s) = (-0.48232346553893 - 0.875993193232969j)$

$s = 95.870634228$
 $0.5+si = (0.5+95.870634228j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (8.918014841128276e+64-8.918014841128276e+64j)$

la valeur de zeta par mpmath est : (3.38023783328051e-10 - 2.4152792582532e-10j)

$u(s) = (0.324019087473094 + 0.946050543550984j)$

$s = 98.831194218$

$0.5+si = (0.5+98.831194218j)$

le $\cos((0.5 + 1j*s)*\pi*0.5) = (9.330979021029762e+66-9.330979021029762e+66j)$

la valeur de zeta par mpmath est : (2.41130973522465e-11 - 6.80573799334799e-10j)

$u(s) = (-0.997492501364251 + 0.0707722383570443j)$

$s = 101.317851006$

$0.5+si = (0.5+101.317851006j)$

le $\cos((0.5 + 1j*s)*\pi*0.5) = (4.637619076802185e+68-4.637619076802185e+68j)$

la valeur de zeta par mpmath est : (2.21550820414569e-10 + 8.17883387213535e-10j)

$u(s) = (-0.863277060043693 - 0.504730341471857j)$

$s = 103.72553804$

$0.5+si = (0.5+103.72553804j)$

le $\cos((0.5 + 1j*s)*\pi*0.5) = (2.0360606104740298e+70-2.0360606104740298e+70j)$

la valeur de zeta par mpmath est : (-4.82680530069077e-10 - 9.17537187523422e-10j)

$u(s) = (-0.566489438209433 - 0.824068999779238j)$

$s = 105.446623052$

$0.5+si = (0.5+105.446623052j)$

le $\cos((0.5 + 1j*s)*\pi*0.5) = (3.0401467570263094e+71-3.0401467570263094e+71j)$

la valeur de zeta par mpmath est : (1.43669791147536e-10 - 5.93854151089687e-10j)

$u(s) = (-0.889414407200569 + 0.457101752637257j)$

$s = 107.168611184$

$0.5+si = (0.5+107.168611184j)$

le $\cos((0.5 + 1j*s)*\pi*0.5) = (4.545843637091742e+72-4.545843637091742e+72j)$

la valeur de zeta par mpmath est : (6.67526798927193e-10 - 4.83756467413237e-10j)

$u(s) = (0.311312336275299 + 0.95030764980759j)$

$s = 111.029535543$

$0.5+si = (0.5+111.029535543j)$

le $\cos((0.5 + 1j*s)*\pi*0.5) = (1.956552216993838e+75-1.956552216993838e+75j)$

la valeur de zeta par mpmath est : (-2.67066589564165e-10 - 3.92466375402052e-11j)

$u(s) = (0.957721773713627 - 0.287696027353237j)$

$s = 111.874659177$

$0.5+si = (0.5+111.874659177j)$

le $\cos((0.5 + 1j*s)*\pi*0.5) = (7.379463586902966e+75-7.379463586902966e+75j)$

la valeur de zeta par mpmath est : (-4.81709731409654e-12 + 8.78544596675861e-12j)

$u(s) = (-0.537707417449351 + 0.843131504108315j)$

$s = 114.320220915$

$0.5+si = (0.5+114.320220915j)$

le $\cos((0.5 + 1j*s)*\pi*0.5) = (3.438413455776848e+77-3.438413455776848e+77j)$

la valeur de zeta par mpmath est : (1.25250329167113e-10 - 1.14592577948171e-9j)

$u(s) = (-0.976388848536374 + 0.216020407493852j)$

$s = 116.226680321$

$0.5+si = (0.5+116.226680321j)$

le $\cos((0.5 + 1j*s)*\pi*0.5) = (6.869453122926582e+78-6.869453122926582e+78j)$

la valeur de zeta par mpmath est : (-2.04032333591704e-10 + 3.94680725519543e-

$10j$
 $u(s) = (-0.578229412483074 + 0.81587422225456j)$

$s = 118.790782866$
 $0.5+si = (0.5+118.790782866j)$
le cos($(0.5 + 1j*s)*\pi*0.5$) = $(3.8558719670815885e+80-3.8558719670815885e+80j)$
la valeur de zeta par mpmath est : $(1.25285238589866e-11 + 9.16078936293596e-11j)$
 $u(s) = (-0.963278872539167 - 0.268502911938902j)$

$s = 121.370125002$
 $0.5+si = (0.5+121.370125002j)$
le cos($(0.5 + 1j*s)*\pi*0.5$) = $(2.2167632565357707e+82-2.2167632565357707e+82j)$
la valeur de zeta par mpmath est : $(-6.91971953425824e-10 - 6.73136347434968e-10j)$
 $u(s) = (0.0275905152843536 - 0.999619309270441j)$

$s = 122.946829294$
 $0.5+si = (0.5+122.946829294j)$
le cos($(0.5 + 1j*s)*\pi*0.5$) = $(2.638325291926723e+83-2.638325291926723e+83j)$
la valeur de zeta par mpmath est : $(-2.10373430260225e-12 + 6.97572186267122e-10j)$
 $u(s) = (-0.999981810133543 + 0.00603153397156909j)$

$s = 124.256818554$
 $0.5+si = (0.5+124.256818554j)$
le cos($(0.5 + 1j*s)*\pi*0.5$) = $(2.0653208331825935e+84-2.0653208331825935e+84j)$
la valeur de zeta par mpmath est : $(7.44368422294761e-10 - 2.9518500573854e-10j)$
 $u(s) = (0.728223116584622 + 0.685340129039426j)$

$s = 127.51668388$
 $0.5+si = (0.5+127.51668388j)$
le cos($(0.5 + 1j*s)*\pi*0.5$) = $(3.458032810285737e+86-3.458032810285737e+86j)$
la valeur de zeta par mpmath est : $(8.31766482997672e-10 + 1.35412550058204e-9j)$
 $u(s) = (-0.452118114551002 - 0.891958076646446j)$

$s = 129.5787042$
 $0.5+si = (0.5+129.5787042j)$
le cos($(0.5 + 1j*s)*\pi*0.5$) = $(8.820942527878277e+87-8.820942527878277e+87j)$
la valeur de zeta par mpmath est : $(5.13019971782096e-11 + 8.93421884800529e-11j)$
 $u(s) = (-0.504067389156467 - 0.863664325527539j)$

$s = 131.087688531$
 $0.5+si = (0.5+131.087688531j)$
le cos($(0.5 + 1j*s)*\pi*0.5$) = $(9.43900600197461e+88-9.43900600197461e+88j)$
la valeur de zeta par mpmath est : $(-5.09971444339762e-11 + 1.47648345643521e-10j)$
 $u(s) = (-0.786833640997953 + 0.617165149205552j)$

$s = 133.497737203$
 $0.5+si = (0.5+133.497737203j)$
le cos($(0.5 + 1j*s)*\pi*0.5$) = $(4.15942188056924e+90-4.15942188056924e+90j)$
la valeur de zeta par mpmath est : $(1.09152963620951e-12 + 5.44907201357633e-12j)$
 $u(s) = (-0.922843946086328 - 0.385174053087418j)$

$s = 134.756509753$
 $0.5+si = (0.5+134.756509753j)$
le cos($(0.5 + 1j*s)*\pi*0.5$) = $(3.0043652019946583e+91-3.0043652019946583e+91j)$
la valeur de zeta par mpmath est : $(8.96197709142036e-10 - 5.53656632767619e-10j)$

$$u(s) = (0.44753715531083 + 0.894265337926221j)$$

$$s = 138.116042055$$

$$0.5+si = (0.5+138.116042055j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (5.8828251379245155e+93-5.8828251379245155e+93j)$$

$$\text{la valeur de zeta par mpmath est : } (1.24941473286007e-9 + 7.82537704761482e-10j)$$

$$u(s) = (0.43649160433932 - 0.899708330149982j)$$

$$s = 139.736208952$$

$$0.5+si = (0.5+139.736208952j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (7.4962600019903e+94-7.4962600019903e+94j)$$

$$\text{la valeur de zeta par mpmath est : } (-8.06511039381521e-11 - 2.03269552747694e-10j)$$

$$u(s) = (-0.727972507715427 - 0.685606321448764j)$$

$$s = 141.123707404$$

$$0.5+si = (0.5+141.123707404j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (6.627956978072351e+95-6.627956978072351e+95j)$$

$$\text{la valeur de zeta par mpmath est : } (2.43851976812573e-11 - 3.50003370235871e-11j)$$

$$u(s) = (-0.346430223681124 + 0.938075743274622j)$$

$$s = 143.111845808$$

$$0.5+si = (0.5+143.111845808j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.505442575065387e+97-1.505442575065387e+97j)$$

$$\text{la valeur de zeta par mpmath est : } (-8.60710706867922e-10 + 1.13259210054659e-9j)$$

$$u(s) = (-0.267812421456572 + 0.963471072172681j)$$

$$s = 146.000982487$$

$$0.5+si = (0.5+146.000982487j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.407988403815083e+99-1.407988403815083e+99j)$$

$$\text{la valeur de zeta par mpmath est : } (5.12602481740474e-10 + 5.63189059976061e-10j)$$

$$u(s) = (-0.0938378292361003 - 0.995587495805473j)$$

$$s = 147.422765343$$

$$0.5+si = (0.5+147.422765343j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.3137796559772138e+100-1.3137796559772138e+100j)$$

$$\text{la valeur de zeta par mpmath est : } (-2.01900930503973e-10 + 1.22417453611093e-9j)$$

$$u(s) = (-0.94703799898525 + 0.321121516684865j)$$

$$s = 150.053520421$$

$$0.5+si = (0.5+150.053520421j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (8.188277323349563e+101-8.188277323349563e+101j)$$

$$\text{la valeur de zeta par mpmath est : } (2.63493191706703e-10 + 2.28135696178927e-10j)$$

$$u(s) = (0.143097999263358 - 0.989708524064935j)$$

$$s = 150.925257612$$

$$0.5+si = (0.5+150.925257612j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (3.22018889626019e+102-3.22018889626019e+102j)$$

$$\text{la valeur de zeta par mpmath est : } (2.99295285127262e-10 - 2.37469527360629e-10j)$$

$$u(s) = (0.227348206150401 + 0.973813531000774j)$$

$$s = 153.024693811$$

$$0.5+si = (0.5+153.024693811j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (8.711479145783569e+103-8.711479145783569e+103j)$$

$$\text{la valeur de zeta par mpmath est : } (5.41906305380901e-10 - 6.46719840452352e-10j)$$

$$u(s)$$

$$u(s) = (-0.175000047688599 + 0.984568424899438j)$$

$$s = 156.112909294$$

$$0.5+si = (0.5+156.112909294j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.113873807174776e+106-1.113873807174776e+106j)$$

la valeur de zeta par mpmath est : $(-6.58394896884048e-10 - 3.29860242688459e-10j)$

$$u(s) = (0.598711188949123 - 0.800964988140611j)$$

$$s = 157.597591818$$

$$0.5+si = (0.5+157.597591818j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.1472785025645233e+107-$$

$$1.1472785025645233e+107j)$$

la valeur de zeta par mpmath est : $(2.44763259041992e-10 + 6.63948434280297e-10j)$

$$u(s) = (-0.760716289540543 - 0.64908452980153j)$$

$$s = 158.849988171$$

$$0.5+si = (0.5+158.849988171j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (8.204249151113659e+107-8.204249151113659e+107j)$$

la valeur de zeta par mpmath est : $(6.24026463016982e-10 - 6.45860318607301e-10j)$

$$u(s) = (-0.0343769276622227 + 0.999408938745537j)$$

$$s = 161.188964138$$

$$0.5+si = (0.5+161.188964138j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (3.233408618537105e+109-3.233408618537105e+109j)$$

la valeur de zeta par mpmath est : $(-1.78954740798523e-10 + 1.43942296094718e-9j)$

$$u(s) = (-0.969557644025701 + 0.244863175898949j)$$

$$s = 163.030709687$$

$$0.5+si = (0.5+163.030709687j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (5.835494042246828e+110-5.835494042246828e+110j)$$

la valeur de zeta par mpmath est : $(2.01212632923008e-10 - 7.21178180727684e-10j)$

$$u(s) = (-0.855556034013618 + 0.517710220744084j)$$

$$s = 165.537069188$$

$$0.5+si = (0.5+165.537069188j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.991482376772555e+112-2.991482376772555e+112j)$$

la valeur de zeta par mpmath est : $(2.11580722544306e-10 + 2.6361417955864e-10j)$

$$u(s) = (-0.216403684694507 - 0.976303971747822j)$$

$$s = 167.184439978$$

$$0.5+si = (0.5+167.184439978j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (3.978353083477994e+113-3.978353083477994e+113j)$$

la valeur de zeta par mpmath est : $(-9.91171663853344e-11 - 4.16998370534047e-10j)$

$$u(s) = (-0.89304759083845 - 0.449962221189301j)$$

$$s = 169.094515416$$

$$0.5+si = (0.5+169.094515416j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (7.993448945933399e+114-7.993448945933399e+114j)$$

la valeur de zeta par mpmath est : $(1.51572330542178e-10 + 6.44757378725371e-10j)$

$$u(s) = (-0.895259213394523 - 0.445545666382464j)$$

$$s = 169.911976479$$

$$0.5+si = (0.5+169.911976479j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.886665606142069e+115-2.886665606142069e+115j)$$

la valeur de zeta par mpmath est : $(8.14700738434611e-10 - 5.58859559889156e-12j)$

$u(s) = (0.999905893697718 + 0.0137187371336478j)$
 $s = 173.41153652$
 $0.5+si = (0.5+173.41153652j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (7.042955788188926e+117-7.042955788188926e+117j)$
 la valeur de zeta par mpmath est : $(1.25733054785378e-9 + 6.68547856790935e-10j)$
 $u(s) = (0.559179182997771 - 0.829046826965729j)$

$s = 174.754191523$
 $0.5+si = (0.5+174.754191523j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (5.803611476883072e+118-5.803611476883072e+118j)$
 la valeur de zeta par mpmath est : $(-1.46064493315253e-10 - 8.48779284195828e-10j)$
 $u(s) = (-0.942475182550351 - 0.334276128786739j)$

$s = 176.441434298$
 $0.5+si = (0.5+176.441434298j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (8.21704004680623e+119-8.21704004680623e+119j)$
 la valeur de zeta par mpmath est : $(-1.23922478490878e-10 + 7.59920653652182e-10j)$
 $u(s) = (-0.948192161072706 + 0.317697380663217j)$

$s = 178.377407776$
 $0.5+si = (0.5+178.377407776j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.7195452986345755e+121-1.7195452986345755e+121j)$
 la valeur de zeta par mpmath est : $(1.96108964307702e-11 - 2.81275679496069e-10j)$
 $u(s) = (-0.99032492126316 + 0.138767972980453j)$

$s = 179.91648402$
 $0.5+si = (0.5+179.91648402j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.9290933242520965e+122-1.9290933242520965e+122j)$
 la valeur de zeta par mpmath est : $(5.33021584807101e-10 - 7.26467210999725e-10j)$
 $u(s) = (-0.300101757142996 + 0.953907194311744j)$

$s = 182.207078484$
 $0.5+si = (0.5+182.207078484j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (7.046439047613409e+123-7.046439047613409e+123j)$
 la valeur de zeta par mpmath est : $(-1.37037953890155e-10 - 1.83111305875474e-9j)$
 $u(s) = (-0.988860754144504 - 0.148843571956424j)$

$s = 184.874467848$
 $0.5+si = (0.5+184.874467848j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (4.651908747484085e+125-4.651908747484085e+125j)$
 la valeur de zeta par mpmath est : $(-5.73645102804586e-10 - 7.91260412437333e-11j)$
 $u(s) = (0.962658054873552 - 0.270720278861768j)$

$s = 185.598783678$
 $0.5+si = (0.5+185.598783678j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.4512789046648092e+126-1.4512789046648092e+126j)$
 la valeur de zeta par mpmath est : $(-1.67347672617128e-10 + 3.19559733384411e-10j)$
 $u(s) = (-0.569559570004176 + 0.821950057008725j)$

$s = 187.228922584$
 $0.5+si = (0.5+187.228922584j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.8785050674440644e+127-$

1.8785050674440644e+127j)
la valeur de zeta par mpmath est : $(-1.07132487196449e-9 + 9.20736554523122e-10j)$
 $u(s) = (0.150329372692857 + 0.988635969255517j)$

$s = 189.416158656$
 $0.5+si = (0.5+189.416158656j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (5.8333624190185805e+128 - 5.8333624190185805e+128j)$
la valeur de zeta par mpmath est : $(2.39477972284474e-11 - 8.20919716174381e-11j)$
 $u(s) = (-0.843148026514329 + 0.537681509245965j)$

$s = 192.026656361$
 $0.5+si = (0.5+192.026656361j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (3.5218400640634895e+130 - 3.5218400640634895e+130j)$
la valeur de zeta par mpmath est : $(6.79283494310972e-10 + 4.08579483826483e-10j)$
 $u(s) = (0.468660231540883 - 0.883378507420224j)$

$s = 193.079726604$
 $0.5+si = (0.5+193.079726604j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (1.8414574952880744e+131 - 1.8414574952880744e+131j)$
la valeur de zeta par mpmath est : $(-1.12612979819482e-10 + 3.51259560154926e-10j)$
 $u(s) = (-0.813593697395441 + 0.581433827325536j)$

$s = 195.26539668$
 $0.5+si = (0.5+195.26539668j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (5.704268812618368e+132 - 5.704268812618368e+132j)$
la valeur de zeta par mpmath est : $(3.93352709500721e-10 + 1.28281448807204e-9j)$
 $u(s) = (-0.82811423547166 - 0.56055937509698j)$

$s = 196.876481841$
 $0.5+si = (0.5+196.876481841j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (7.165776067533748e+133 - 7.165776067533748e+133j)$
la valeur de zeta par mpmath est : $(-6.58467785741349e-12 + 9.06440580892489e-11j)$
 $u(s) = (-0.989501321978507 + 0.144523817423873j)$

$s = 198.015309676$
 $0.5+si = (0.5+198.015309676j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (4.287045736347182e+134 - 4.287045736347182e+134j)$
la valeur de zeta par mpmath est : $(7.55223170776906e-10 - 2.50097575253218e-10j)$
 $u(s) = (0.802345626885894 + 0.59685969458247j)$

$s = 201.264751944$
 $0.5+si = (0.5+201.264751944j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (7.061373991228215e+136 - 7.061373991228215e+136j)$
la valeur de zeta par mpmath est : $(9.43272408274395e-10 + 3.38017917020795e-10j)$
 $u(s) = (0.77240247825116 - 0.635133380945682j)$

$s = 202.493594514$
 $0.5+si = (0.5+202.493594514j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (4.86621268145427e+137 - 4.86621268145427e+137j)$
la valeur de zeta par mpmath est : $(-6.75777313949429e-11 - 3.06477053148937e-10j)$
 $u(s) = (-0.907269346750846 - 0.420550035603655j)$

s = 204.189671803
0.5+si = (0.5+204.189671803j)
le cos((0.5 + 1j*s)*pi*0.5) = (6.986102605567655e+138-6.986102605567655e+138j)
la valeur de zeta par mpmath est : (-5.22409400698168e-12 - 2.17004827609778e-10j)
u(s) = (-0.998841591985626 - 0.0481193736406862j)

s = 205.394697202
0.5+si = (0.5+205.394697202j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.637554644475133e+139-4.637554644475133e+139j)
la valeur de zeta par mpmath est : (3.89209262405808e-10 - 2.39965416670969e-10j)
u(s) = (0.449139921399348 + 0.893461432298775j)

s = 207.906258888
0.5+si = (0.5+207.906258888j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.396882407230915e+141-2.396882407230915e+141j)
la valeur de zeta par mpmath est : (1.967744444629878e-10 + 8.52949138078122e-10j)
u(s) = (-0.898934902737129 - 0.438082230455593j)

s = 209.576509717
0.5+si = (0.5+209.576509717j)
le cos((0.5 + 1j*s)*pi*0.5) = (3.304243891466219e+142-3.304243891466219e+142j)
la valeur de zeta par mpmath est : (6.3708003274539e-12 + 5.91858174948955e-10j)
u(s) = (-0.999768296622083 - 0.0215256374893757j)

s = 211.690862595
0.5+si = (0.5+211.690862595j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.150790886917215e+143-9.150790886917215e+143j)
la valeur de zeta par mpmath est : (-6.65007973442198e-10 - 1.01010471160437e-9j)
u(s) = (-0.395252850702886 - 0.918572361880796j)

s = 213.34791936
0.5+si = (0.5+213.34791936j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.2356149792485679e+145-1.2356149792485679e+145j)
la valeur de zeta par mpmath est : (2.09943820663171e-10 + 5.61149992448104e-10j)
u(s) = (-0.754425533410844 - 0.656385644676812j)

s = 214.547044783
0.5+si = (0.5+214.547044783j)
le cos((0.5 + 1j*s)*pi*0.5) = (8.126664874533795e+145-8.126664874533795e+145j)
la valeur de zeta par mpmath est : (6.72890174573925e-10 - 8.52106374432809e-10j)
u(s) = (-0.231836340666952 + 0.972754805254723j)

s = 216.169538508
0.5+si = (0.5+216.169538508j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.039341783544951e+147-1.039341783544951e+147j)
la valeur de zeta par mpmath est : (9.41990664768021e-10 - 6.84049325874633e-10j)
u(s) = (0.309475577172679 + 0.9509073914602j)

s = 219.067596349
0.5+si = (0.5+219.067596349j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.857781377166161e+148-9.857781377166161e+148j)
la valeur de zeta par mpmath est : (-7.66079978940723e-11 - 4.37109109532409e-11j)
u(s) = (0.5087958981879 - 0.860887178431166j)

s = 220.714918839
0.5+si = (0.5+220.714918839j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.3108805161941847e+150-
1.3108805161941847e+150j)
la valeur de zeta par mpmath est : (-3.44806519094783e-10 - 3.09676749157584e-
10j)
u(s) = (0.107042765300168 - 0.994254417338349j)

s = 221.430705555
0.5+si = (0.5+221.430705555j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.035193296170766e+150-4.035193296170766e+150j)
la valeur de zeta par mpmath est : (-4.25219698936481e-10 + 2.56363129299649e-
10j)
u(s) = (0.466831390360516 + 0.88434634220653j)

s = 224.007000255
0.5+si = (0.5+224.007000255j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.308777747719959e+152-2.308777747719959e+152j)
la valeur de zeta par mpmath est : (4.33202279272239e-10 + 9.53871122926893e-
10j)
u(s) = (-0.658025796611345 - 0.752995385772016j)

s = 224.98332467
0.5+si = (0.5+224.98332467j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.070087031279763e+153-1.070087031279763e+153j)
la valeur de zeta par mpmath est : (-9.94509136489416e-10 + 6.82076615291725e-
10j)
u(s) = (0.360192685462852 + 0.932877928423129j)

s = 227.42144428
0.5+si = (0.5+227.42144428j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.9280541652274154e+154-
4.9280541652274154e+154j)
la valeur de zeta par mpmath est : (4.19942217527474e-10 + 1.59573617264964e-
9j)
u(s) = (-0.870459601881578 - 0.492239861746469j)

s = 229.337413306
0.5+si = (0.5+229.337413306j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.993713374879329e+155-9.993713374879329e+155j)
la valeur de zeta par mpmath est : (9.33818366954923e-10 + 1.49644182324131e-
9j)
u(s) = (-0.439461727697198 - 0.898261314924213j)

s = 231.2501887
0.5+si = (0.5+231.2501887j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.0165066027382366e+157-
2.0165066027382366e+157j)
la valeur de zeta par mpmath est : (-5.59826553711542e-10 - 4.81268698808318e-
10j)
u(s) = (0.150059465463546 - 0.988676972941511j)

s = 231.987235253
0.5+si = (0.5+231.987235253j)
le cos((0.5 + 1j*s)*pi*0.5) = (6.418064726646767e+157-6.418064726646767e+157j)
la valeur de zeta par mpmath est : (2.15324779190224e-10 - 1.53481378202033e-
10j)
u(s) = (0.3261985838301 + 0.945301266214728j)

s = 233.693404179
0.5+si = (0.5+233.693404179j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.361218060291138e+158-9.361218060291138e+158j)
la valeur de zeta par mpmath est : (-3.3562097536657e-10 + 2.10141785055858e-
10j)

$$u(s) = (0.43674380506669 + 0.899585931824127j)$$

$$s = 236.524229666$$

$$0.5+si = (0.5+236.524229666j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (7.988919407040291e+160-7.988919407040291e+160j)$$

$$\text{la valeur de zeta par mpmath est : } (6.0727669657306e-10 + 4.12717707105335e-10j)$$

$$u(s) = (0.368097551778345 - 0.929787175849806j)$$

$$s = 237.769820481$$

$$0.5+si = (0.5+237.769820481j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (5.652171973382166e+161-5.652171973382166e+161j)$$

$$\text{la valeur de zeta par mpmath est : } (2.05291244064513e-11 + 2.1884504239006e-10j)$$

$$u(s) = (-0.98255413599759 - 0.185976799182147j)$$

$$s = 239.555477573$$

$$0.5+si = (0.5+239.555477573j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (9.340487067076052e+162-9.340487067076052e+162j)$$

$$\text{la valeur de zeta par mpmath est : } (-1.88301477994475e-10 - 9.32221914359244e-10j)$$

$$u(s) = (-0.921597264858048 - 0.38814749954897j)$$

$$s = 241.049157796$$

$$0.5+si = (0.5+241.049157796j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (9.757543850481089e+163-9.757543850481089e+163j)$$

$$\text{la valeur de zeta par mpmath est : } (1.38445778074197e-10 - 6.16844442890063e-10j)$$

$$u(s) = (-0.904083334651191 + 0.427356202723123j)$$

$$s = 242.823271934$$

$$0.5+si = (0.5+242.823271934j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.5835077787910239e+165-$$

$$1.5835077787910239e+165j)$$

$$\text{la valeur de zeta par mpmath est : } (8.32177882818011e-11 - 6.68140661334423e-10j)$$

$$u(s) = (-0.969447902586337 + 0.245297297520695j)$$

$$s = 244.070898497$$

$$0.5+si = (0.5+244.070898497j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.1239223087643139e+166-$$

$$1.1239223087643139e+166j)$$

$$\text{la valeur de zeta par mpmath est : } (2.73593764761868e-10 - 1.81837572142814e-10j)$$

$$u(s) = (0.387224290002862 + 0.921985547192436j)$$

$$s = 247.136990075$$

$$0.5+si = (0.5+247.136990075j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.3879944050285648e+168-$$

$$1.3879944050285648e+168j)$$

$$\text{la valeur de zeta par mpmath est : } (2.85106725843567e-10 + 2.19113125904151e-11j)$$

$$u(s) = (0.988256588100332 - 0.15280352115156j)$$

$$s = 248.10199006$$

$$0.5+si = (0.5+248.10199006j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (6.319741231340195e+168-6.319741231340195e+168j)$$

$$\text{la valeur de zeta par mpmath est : } (-3.4544585258209e-11 - 2.74441971953952e-10j)$$

$$u(s) = (-0.968806653333523 - 0.247817813033391j)$$

$$s = 249.573689645$$

$$0.5+si = (0.5+249.573689645j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (6.37786544854199e+169-6.37786544854199e+169j)$$

la valeur de zeta par mpmath est : $(-2.06215019780266e-10 + 6.45440252246734e-10j)$
 $u(s) = (-0.81475499891268 + 0.579805391270902j)$

$s = 251.014947795$
 $0.5+si = (0.5+251.014947795j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (6.135989710587494e+170-6.135989710587494e+170j)$
la valeur de zeta par mpmath est : $(3.95238497907813e-11 - 3.87337832347018e-11j)$
 $u(s) = (0.0201893670571877 + 0.999796173956347j)$

$s = 253.069986748$
 $0.5+si = (0.5+253.069986748j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (1.5481316859239606e+172-1.5481316859239606e+172j)$
la valeur de zeta par mpmath est : $(-4.03980643043094e-13 + 2.79042469782098e-12j)$
 $u(s) = (-0.958941603097036 + 0.28360359985311j)$

$s = 255.306256455$
 $0.5+si = (0.5+255.306256455j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (5.192358307393555e+173-5.192358307393555e+173j)$
la valeur de zeta par mpmath est : $(2.13878234009644e-10 + 1.87150407259429e-10j)$
 $u(s) = (0.132706867303423 - 0.991155329587893j)$

$s = 256.380713694$
 $0.5+si = (0.5+256.380713694j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (2.8076739922162347e+174-2.8076739922162347e+174j)$
la valeur de zeta par mpmath est : $(3.826172967722e-10 - 1.24435955359283e-9j)$
 $u(s) = (-0.827243698400219 + 0.561843273037161j)$

$s = 258.610439492$
 $0.5+si = (0.5+258.610439492j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (9.320500976065398e+175-9.320500976065398e+175j)$
la valeur de zeta par mpmath est : $(8.03201008716942e-10 + 9.54130434157385e-10j)$
 $u(s) = (-0.170513391107409 - 0.985355358971103j)$

$s = 259.87440699$
 $0.5+si = (0.5+259.87440699j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (6.787392112472552e+176-6.787392112472552e+176j)$
la valeur de zeta par mpmath est : $(-5.11960389162392e-11 + 5.61269559051954e-10j)$
 $u(s) = (-0.983497060588132 + 0.180924105122808j)$

$s = 260.805084505$
 $0.5+si = (0.5+260.805084505j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (2.9281959571055307e+177-2.9281959571055307e+177j)$
la valeur de zeta par mpmath est : $(-1.06943384646652e-9 + 7.62866652659214e-11j)$
 $u(s) = (0.98987453199886 + 0.141945098189453j)$

$s = 263.573893905$
 $0.5+si = (0.5+263.573893905j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (2.2669877507571375e+179-2.2669877507571375e+179j)$
la valeur de zeta par mpmath est : $(3.94125213389517e-10 + 6.81549616896039e-10j)$
 $u(s) = (-0.498794721061001 - 0.866720154514526j)$

$s = 265.557851839$

0.5+si = (0.5+265.557851839j)
le cos((0.5 + 1j*s)*pi*0.5) = (5.115426153889088e+180-5.115426153889088e+180j)
la valeur de zeta par mpmath est : (2.77683956147414e-10 + 1.4381951309042e-10j)
u(s) = (0.576980509536905 - 0.816757914938371j)

s = 266.614973782
0.5+si = (0.5+266.614973782j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.691769765074278e+181-2.691769765074278e+181j)
la valeur de zeta par mpmath est : (-6.42671029120823e-11 + 9.33704314379228e-10j)
u(s) = (-0.990569471026977 + 0.137011397589024j)

s = 267.921915083
0.5+si = (0.5+267.921915083j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.0970935965556758e+182-2.0970935965556758e+182j)
la valeur de zeta par mpmath est : (-3.44354709874858e-10 + 3.62629791828993e-10j)
u(s) = (-0.0516641563385155 + 0.998664515715788j)

s = 269.970449024
0.5+si = (0.5+269.970449024j)
le cos((0.5 + 1j*s)*pi*0.5) = (5.237251727798899e+183-5.237251727798899e+183j)
la valeur de zeta par mpmath est : (-5.31679488928859e-13 + 9.95568245410955e-12j)
u(s) = (-0.994312114182059 + 0.106505490895128j)

s = 271.494055642
0.5+si = (0.5+271.494055642j)
le cos((0.5 + 1j*s)*pi*0.5) = (5.734424904553734e+184-5.734424904553734e+184j)
la valeur de zeta par mpmath est : (-5.2049203698936e-10 + 1.52909900221445e-9j)
u(s) = (-0.792329494091307 + 0.610093413169632j)

s = 273.459609188
0.5+si = (0.5+273.459609188j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.2570925713244014e+186-1.2570925713244014e+186j)
la valeur de zeta par mpmath est : (-4.83926413045817e-10 - 2.02062492686866e-9j)
u(s) = (-0.891508541414766 - 0.453003885838231j)

s = 275.587492649
0.5+si = (0.5+275.587492649j)
le cos((0.5 + 1j*s)*pi*0.5) = (3.556183797629066e+187-3.556183797629066e+187j)
la valeur de zeta par mpmath est : (-6.81924620046898e-10 - 3.36711329727201e-10j)
u(s) = (0.607969014304277 - 0.793960753215055j)

s = 276.452049503
0.5+si = (0.5+276.452049503j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.3828486912468283e+188-1.3828486912468283e+188j)
la valeur de zeta par mpmath est : (9.68540045301749e-11 - 2.32764663106156e-10j)
u(s) = (-0.704824247487366 + 0.709381970558765j)

s = 278.25074353
0.5+si = (0.5+278.25074353j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.3325043487612005e+189-2.3325043487612005e+189j)
la valeur de zeta par mpmath est : (-4.92897023045876e-11 + 3.77862983280901e-10j)

$$u(s) = (-0.966538443940808 + 0.256521804890736j)$$

$$s = 279.229250928$$

$$0.5+si = (0.5+279.229250928j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.0847974111064905e+190 - 1.0847974111064905e+190j)$$

$$\text{la valeur de zeta par mpmath est : } (-8.68125802227608e-10 + 1.35593408699769e-10j)$$

$$u(s) = (0.952370709518671 + 0.304942669449327j)$$

$$s = 282.465114765$$

$$0.5+si = (0.5+282.465114765j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.749108264400431e+192 - 1.749108264400431e+192j)$$

$$\text{la valeur de zeta par mpmath est : } (-1.36365697658413e-10 + 2.69737870205608e-12j)$$

$$u(s) = (0.999217771429157 + 0.0395454834349521j)$$

$$s = 283.211185733$$

$$0.5+si = (0.5+283.211185733j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (5.646475984048286e+192 - 5.646475984048286e+192j)$$

$$\text{la valeur de zeta par mpmath est : } (6.06686994626423e-11 - 4.60917895676259e-10j)$$

$$u(s) = (-0.965939395218416 + 0.258768399857856j)$$

$$s = 284.835963981$$

$$0.5+si = (0.5+284.835963981j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (7.247396071115964e+193 - 7.247396071115964e+193j)$$

$$\text{la valeur de zeta par mpmath est : } (-5.34967512945024e-11 + 3.00280212054396e-10j)$$

$$u(s) = (-0.938473630613214 + 0.34535090074243j)$$

$$s = 286.667445363$$

$$0.5+si = (0.5+286.667445363j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.287054511504402e+195 - 1.287054511504402e+195j)$$

$$\text{la valeur de zeta par mpmath est : } (-1.51298504892155e-12 - 8.42413534329141e-12j)$$

$$u(s) = (-0.937502747076959 - 0.347977871743481j)$$

$$s = 287.911920501$$

$$0.5+si = (0.5+287.911920501j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (9.089985006665091e+195 - 9.089985006665091e+195j)$$

$$\text{la valeur de zeta par mpmath est : } (7.39020985042769e-10 - 1.11501816837679e-9j)$$

$$u(s) = (-0.389575650710006 + 0.920994469241722j)$$

$$s = 289.579854929$$

$$0.5+si = (0.5+289.579854929j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.248556826605491e+197 - 1.248556826605491e+197j)$$

$$\text{la valeur de zeta par mpmath est : } (5.86692086965878e-10 - 9.90493004983568e-10j)$$

$$u(s) = (-0.480552688372266 + 0.876965856631934j)$$

$$s = 291.846291329$$

$$0.5+si = (0.5+291.846291329j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (4.390807823597919e+198 - 4.390807823597919e+198j)$$

$$\text{la valeur de zeta par mpmath est : } (-2.13482113344052e-10 - 2.70056076466799e-10j)$$

$$u(s) = (-0.230840010629361 - 0.972991721183987j)$$

$$s = 293.558434139$$

$$0.5+si = (0.5+293.558434139j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (6.464694576848946e+199 - 6.464694576848946e+199j)$$

$$\text{la valeur de zeta par mpmath est : } (-7.03252429964199e-10 - 6.61817312061742e-10j)$$

$$u(s) = (0.0606518118090314 - 0.998158984192547j)$$

$$s = 294.965369619$$

$$0.5+si = (0.5+294.965369619j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (5.8930857656921775e+200 - 5.8930857656921775e+200j)$$

$$\text{la valeur de zeta par mpmath est : } (-1.22708250364479e-10 - 3.07129663906652e-10j)$$

$$u(s) = (-0.724693795249288 - 0.689071043599377j)$$

$$s = 295.573254879$$

$$0.5+si = (0.5+295.573254879j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.531210501595543e+201 - 1.531210501595543e+201j)$$

$$\text{la valeur de zeta par mpmath est : } (-6.49265137028191e-11 - 1.33188891271668e-12j)$$

$$u(s) = (0.999158722804393 - 0.0410103236255239j)$$

$$s = 297.979277062$$

$$0.5+si = (0.5+297.979277062j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (6.7049382983096625e+202 - 6.7049382983096625e+202j)$$

$$\text{la valeur de zeta par mpmath est : } (-3.15405943623219e-11 + 3.30398316939007e-10j)$$

$$u(s) = (-0.981938481366148 + 0.189200472547705j)$$

$$s = 299.840326054$$

$$0.5+si = (0.5+299.840326054j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.247327233636674e+204 - 1.247327233636674e+204j)$$

$$\text{la valeur de zeta par mpmath est : } (4.90938890326557e-10 + 1.31559782934572e-9j)$$

$$u(s) = (-0.755534318596051 - 0.655109069868208j)$$

$$s = 301.649325462$$

$$0.5+si = (0.5+301.649325462j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.1382496659407784e+205 - 2.1382496659407784e+205j)$$

$$\text{la valeur de zeta par mpmath est : } (-3.70572645590588e-10 - 4.27211203006005e-10j)$$

$$u(s) = (-0.141277654305137 - 0.989970011866014j)$$

$$s = 302.69674959$$

$$0.5+si = (0.5+302.69674959j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.1081505572774717e+206 - 1.1081505572774717e+206j)$$

$$\text{la valeur de zeta par mpmath est : } (-4.34626342951471e-10 + 1.0318123489683e-9j)$$

$$u(s) = (-0.698612660147102 + 0.715500070637455j)$$

$$s = 304.864371341$$

$$0.5+si = (0.5+304.864371341j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (3.336757918446181e+207 - 3.336757918446181e+207j)$$

$$\text{la valeur de zeta par mpmath est : } (1.99199053350019e-10 + 2.54967028452078e-10j)$$

$$u(s) = (-0.241936174584797 - 0.970292166013541j)$$

$$s = 305.728912602$$

$$0.5+si = (0.5+305.728912602j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.2974915151046254e+208 - 1.2974915151046254e+208j)$$

$$\text{la valeur de zeta par mpmath est : } (5.67231654884611e-11 - 5.5124270250932e-11j)$$

$$u(s) = (0.0285848048226505 + 0.999591370977783j)$$

$$s = 307.219496128$$

$0.5+si = (0.5+307.219496128j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (1.3488479139772683e+209 - 1.3488479139772683e+209j)$
la valeur de zeta par mpmath est : $(7.45019340067342e-10 - 4.3317379800579e-10j)$
 $u(s) = (0.494705216699596 + 0.869060842847141j)$

$s = 310.109463147$
 $0.5+si = (0.5+310.109463147j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (1.263177311997494e+211 - 1.263177311997494e+211j)$
la valeur de zeta par mpmath est : $(1.05896616123406e-9 + 1.37616235758572e-10j)$
 $u(s) = (0.966785164408776 - 0.255590386906628j)$

$s = 311.16514153$
 $0.5+si = (0.5+311.16514153j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (6.631864254440693e+211 - 6.631864254440693e+211j)$
la valeur de zeta par mpmath est : $(-2.67372319970624e-10 - 7.12621043917815e-10j)$
 $u(s) = (-0.753199048856446 - 0.657792667032507j)$

$s = 312.427801181$
 $0.5+si = (0.5+312.427801181j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (4.8195569181568105e+212 - 4.8195569181568105e+212j)$
la valeur de zeta par mpmath est : $(-3.03710726209785e-10 + 9.23770628351672e-10j)$
 $u(s) = (-0.804904931001207 + 0.593403784997998j)$

$s = 313.985285731$
 $0.5+si = (0.5+313.985285731j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (5.565506051805626e+213 - 5.565506051805626e+213j)$
la valeur de zeta par mpmath est : $(2.11631098537715e-10 - 4.8015247778971e-10j)$
 $u(s) = (-0.674666392595895 + 0.738122793782712j)$

$s = 315.475616089$
 $0.5+si = (0.5+315.475616089j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (5.783495596671459e+214 - 5.783495596671459e+214j)$
la valeur de zeta par mpmath est : $(1.36005150660009e-9 - 1.82562897619575e-9j)$
 $u(s) = (-0.286181362027057 + 0.958175468287667j)$

$s = 317.734805942$
 $0.5+si = (0.5+317.734805942j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (2.010865469079842e+216 - 2.010865469079842e+216j)$
la valeur de zeta par mpmath est : $(-9.4457927625933e-10 - 1.25319652413565e-9j)$
 $u(s) = (-0.275414314839603 - 0.961325623907652j)$

$s = 318.853104256$
 $0.5+si = (0.5+318.853104256j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (1.1648577795512568e+217 - 1.1648577795512568e+217j)$
la valeur de zeta par mpmath est : $(3.74311191220601e-10 - 1.20581689209521e-9j)$
 $u(s) = (-0.824216068439019 + 0.566275438745954j)$

$s = 321.160134309$
 $0.5+si = (0.5+321.160134309j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (4.36617893921348e+218 - 4.36617893921348e+218j)$
la valeur de zeta par mpmath est : $(-2.67152283289972e-10 - 1.38923465879477e-10j)$
 $u(s) = (0.574286664147945 - 0.81865427830175j)$

$s = 322.144558672$
 $0.5+si = (0.5+322.144558672j)$
 $\text{le } \cos((0.5 + 1j*s)*\pi*0.5) = (2.0495767786645057e+219 - 2.0495767786645057e+219j)$
 la valeur de zeta par mpmath est : $(1.0594423547496e-10 - 9.32058249931976e-10j)$
 $u(s) = (-0.974489244218357 + 0.224434206177915j)$

$s = 323.466969558$
 $0.5+si = (0.5+323.466969558j)$
 $\text{le } \cos((0.5 + 1j*s)*\pi*0.5) = (1.6360526039267782e+220 - 1.6360526039267782e+220j)$
 la valeur de zeta par mpmath est : $(-7.89971273942077e-10 + 1.03878665241607e-9j)$
 $u(s) = (-0.267168375273619 + 0.963649863411836j)$

$s = 324.862866052$
 $0.5+si = (0.5+324.862866052j)$
 $\text{le } \cos((0.5 + 1j*s)*\pi*0.5) = (1.465754876789825e+221 - 1.465754876789825e+221j)$
 la valeur de zeta par mpmath est : $(-1.10913617959938e-9 + 6.51805008569298e-10j)$
 $u(s) = (0.486596567220363 + 0.873626797190484j)$

$s = 327.443901262$
 $0.5+si = (0.5+327.443901262j)$
 $\text{le } \cos((0.5 + 1j*s)*\pi*0.5) = (8.449150622101991e+222 - 8.449150622101991e+222j)$
 la valeur de zeta par mpmath est : $(4.07958450009071e-10 + 3.13361822784031e-10j)$
 $u(s) = (0.257852723675222 - 0.966184233411669j)$

$s = 329.03307168$
 $0.5+si = (0.5+329.03307168j)$
 $\text{le } \cos((0.5 + 1j*s)*\pi*0.5) = (1.025477940654878e+224 - 1.025477940654878e+224j)$
 la valeur de zeta par mpmath est : $(-8.73554867483065e-10 - 6.68670632254667e-10j)$
 $u(s) = (0.261091436460598 - 0.965314074178387j)$

$s = 329.953239728$
 $0.5+si = (0.5+329.953239728j)$
 $\text{le } \cos((0.5 + 1j*s)*\pi*0.5) = (4.351651278457431e+224 - 4.351651278457431e+224j)$
 la valeur de zeta par mpmath est : $(1.91527010083047e-10 - 4.50072795069745e-10j)$
 $u(s) = (-0.69335101872479 + 0.72060000335362j)$

$s = 331.474467583$
 $0.5+si = (0.5+331.474467583j)$
 $\text{le } \cos((0.5 + 1j*s)*\pi*0.5) = (4.746983725417871e+225 - 4.746983725417871e+225j)$
 la valeur de zeta par mpmath est : $(-6.25832558242157e-10 + 1.06977256609118e-9j)$
 $u(s) = (-0.490044192034517 + 0.871697590826777j)$

$s = 333.645378525$
 $0.5+si = (0.5+333.645378525j)$
 $\text{le } \cos((0.5 + 1j*s)*\pi*0.5) = (1.4367708908831236e+227 - 1.4367708908831236e+227j)$
 la valeur de zeta par mpmath est : $(1.63772923811868e-10 + 2.21260324846413e-10j)$
 $u(s) = (-0.292098601769155 - 0.956388209277158j)$

$s = 334.211354833$
 $0.5+si = (0.5+334.211354833j)$
 $\text{le } \cos((0.5 + 1j*s)*\pi*0.5) = (3.495343535707612e+227 - 3.495343535707612e+227j)$
 la valeur de zeta par mpmath est : $(5.55498908734683e-10 - 1.07246783126143e-10j)$

$$u(s) = (0.928131468462771 + 0.372252571850188j)$$

$$s = 336.841850428$$

$$0.5+si = (0.5+336.841850428j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.1776238311464516e+229 - 2.1776238311464516e+229j)$$

$$\text{la valeur de zeta par mpmath est : } (-1.39611203140013e-9 - 1.62378653828712e-9j)$$

$$u(s) = (-0.149930696843258 - 0.988696508613229j)$$

$$s = 338.339992851$$

$$0.5+si = (0.5+338.339992851j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.290856622756943e+230 - 2.290856622756943e+230j)$$

$$\text{la valeur de zeta par mpmath est : } (3.52525155673547e-10 + 5.71356361022069e-10j)$$

$$u(s) = (-0.448556031234616 - 0.89375471290675j)$$

$$s = 339.858216725$$

$$0.5+si = (0.5+339.858216725j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.4872090297137385e+231 - 2.4872090297137385e+231j)$$

$$\text{la valeur de zeta par mpmath est : } (-3.59840772530016e-10 - 7.66568535788477e-10j)$$

$$u(s) = (-0.638870204695514 - 0.769314540062905j)$$

$$s = 341.042261111$$

$$0.5+si = (0.5+341.042261111j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.5975459803167806e+232 - 1.5975459803167806e+232j)$$

$$\text{la valeur de zeta par mpmath est : } (3.06493247333222e-11 - 8.6886212737027e-11j)$$

$$u(s) = (-0.778672183384721 + 0.627430976939072j)$$

$$s = 342.05487751$$

$$0.5+si = (0.5+342.05487751j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (7.838776860719794e+232 - 7.838776860719794e+232j)$$

$$\text{la valeur de zeta par mpmath est : } (1.20206254293083e-9 - 1.36523835093049e-10j)$$

$$u(s) = (0.97453013769724 + 0.224256573415062j)$$

$$s = 344.66170294$$

$$0.5+si = (0.5+344.66170294j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (4.705370112405877e+234 - 4.705370112405877e+234j)$$

$$\text{la valeur de zeta par mpmath est : } (-9.03135415177491e-10 - 1.27712248965799e-9j)$$

$$u(s) = (-0.333261044615122 - 0.942834596385826j)$$

$$s = 346.347870566$$

$$0.5+si = (0.5+346.347870566j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (6.65085390949008e+235 - 6.65085390949008e+235j)$$

$$\text{la valeur de zeta par mpmath est : } (-2.14594512933454e-11 - 1.87655086200294e-11j)$$

$$u(s) = (0.133345746481054 - 0.991069579744675j)$$

$$s = 347.272677584$$

$$0.5+si = (0.5+347.272677584j)$$

$$\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.8429539297631567e+236 - 2.8429539297631567e+236j)$$

$$\text{la valeur de zeta par mpmath est : } (4.92187629502783e-10 - 1.06010223553267e-9j)$$

$$u(s) = (-0.645333729362144 + 0.763900764332322j)$$

$$s = 349.316260871$$

$$0.5+si = (0.5+349.316260871j)$$

le cos((0.5 + 1j*s)*pi*0.5) = (7.044954278910672e+237-7.044954278910672e+237j)
la valeur de zeta par mpmath est : (4.50618385226602e-10 + 7.75458787743933e-10j)
u(s) = (-0.495130207942292 - 0.86881878270619j)

s = 350.408419349
0.5+si = (0.5+350.408419349j)
le cos((0.5 + 1j*s)*pi*0.5) = (3.9168395367560186e+238-3.9168395367560186e+238j)
la valeur de zeta par mpmath est : (2.08739211983086e-10 - 4.67258293713358e-10j)
u(s) = (-0.667264879332279 + 0.744820502409556j)

s = 351.878649025
0.5+si = (0.5+351.878649025j)
le cos((0.5 + 1j*s)*pi*0.5) = (3.9437473273071637e+239-3.9437473273071637e+239j)
la valeur de zeta par mpmath est : (8.18894722488168e-10 - 1.18644198153611e-9j)
u(s) = (-0.35465511261163 + 0.934997193096472j)

s = 353.488900489
0.5+si = (0.5+353.488900489j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.9477026685063786e+240-4.9477026685063786e+240j)
la valeur de zeta par mpmath est : (-8.66297625340482e-10 + 1.57480579417892e-9j)
u(s) = (-0.535381463142465 + 0.844610376992432j)

s = 356.017574977
0.5+si = (0.5+356.017574977j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.6268509540168276e+242-2.6268509540168276e+242j)
la valeur de zeta par mpmath est : (-9.00825192808038e-10 - 1.04555127335887e-10j)
u(s) = (0.973415520391678 - 0.229046337365441j)

s = 357.151302252
0.5+si = (0.5+357.151302252j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.5590167265802188e+243-1.5590167265802188e+243j)
la valeur de zeta par mpmath est : (-3.488580188794e-11 - 5.06609301851748e-11j)
u(s) = (-0.356678522314061 - 0.934227184211584j)

s = 357.952685102
0.5+si = (0.5+357.952685102j)
le cos((0.5 + 1j*s)*pi*0.5) = (5.489650301856764e+243-5.489650301856764e+243j)
la valeur de zeta par mpmath est : (-5.36349676676824e-10 + 4.09093138718934e-10j)
u(s) = (0.264409517866423 + 0.964410497071446j)

s = 359.743754953
0.5+si = (0.5+359.743754953j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.14937349259701e+244-9.14937349259701e+244j)
la valeur de zeta par mpmath est : (1.99107738574564e-10 - 4.24771576192391e-10j)
u(s) = (-0.639723452818613 + 0.76860516776424j)

s = 361.289361696
0.5+si = (0.5+361.289361696j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.0370173030359319e+246-1.0370173030359319e+246j)
la valeur de zeta par mpmath est : (-4.64994677988288e-10 + 9.61799400149861e-

$10j$
 $u(s) = (-0.621091399885239 + 0.783738140572826j)$

$s = 363.331330579$
 $0.5+si = (0.5+363.331330579j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.5632621961216606e+247 - 2.5632621961216606e+247j)$
 $\text{la valeur de zeta par mpmath est : } (6.86825463472301e-11 + 1.12583486624728e-10j)$
 $u(s) = (-0.457543504848982 - 0.889187236284028j)$

$s = 364.736024114$
 $0.5+si = (0.5+364.736024114j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.32840409395302e+248 - 2.32840409395302e+248j)$
 $\text{la valeur de zeta par mpmath est : } (-8.65208569778381e-11 - 3.28845051860514e-10j)$
 $u(s) = (-0.870514794735003 - 0.492142247878929j)$

$s = 366.212710288$
 $0.5+si = (0.5+366.212710288j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (2.3682972088421448e+249 - 2.3682972088421448e+249j)$
 $\text{la valeur de zeta par mpmath est : } (-1.42067428567273e-10 - 1.2212963734841e-9j)$
 $u(s) = (-0.973298255471271 - 0.229544126251626j)$

$s = 367.993575482$
 $0.5+si = (0.5+367.993575482j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (3.8843770827161795e+250 - 3.8843770827161795e+250j)$
 $\text{la valeur de zeta par mpmath est : } (3.44314739634486e-10 + 5.07320621319375e-10j)$
 $u(s) = (-0.36927815045146 - 0.929318915980457j)$

$s = 368.968438096$
 $0.5+si = (0.5+368.968438096j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.796226637568577e+251 - 1.796226637568577e+251j)$
 $\text{la valeur de zeta par mpmath est : } (-2.85289836682732e-10 + 4.54308719184962e-10j)$
 $u(s) = (-0.434370733617332 + 0.900734181530158j)$

$s = 370.050919212$
 $0.5+si = (0.5+370.050919212j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (9.83596447818845e+251 - 9.83596447818845e+251j)$
 $\text{la valeur de zeta par mpmath est : } (4.22741033747001e-10 - 3.11918289841961e-11j)$
 $u(s) = (0.989170587390519 + 0.146770395657113j)$

$s = 373.061928372$
 $0.5+si = (0.5+373.061928372j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (1.114016956240417e+254 - 1.114016956240417e+254j)$
 $\text{la valeur de zeta par mpmath est : } (-3.97955893137077e-10 - 2.68410925140678e-11j)$
 $u(s) = (0.990942897113052 - 0.134283932997163j)$

$s = 373.864873911$
 $0.5+si = (0.5+373.864873911j)$
 $\text{le cos}((0.5 + 1j*s)*\pi*0.5) = (3.9323462806282885e+254 - 3.9323462806282885e+254j)$
 $\text{la valeur de zeta par mpmath est : } (4.50915719044432e-13 + 2.4355028517241e-10j)$
 $u(s) = (-0.999993144455167 - 0.00370284249381473j)$

$s = 375.825912767$

0.5+si = (0.5+375.825912767j)
le cos((0.5 + 1j*s)*pi*0.5) = (8.559517351738185e+255-8.559517351738185e+255j)
la valeur de zeta par mpmath est : (2.84051946387913e-10 + 2.40007934593912e-10j)
u(s) = (0.166908768473293 - 0.985972343936072j)

s = 376.324092231
0.5+si = (0.5+376.324092231j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.8719809160075433e+256-1.8719809160075433e+256j)
la valeur de zeta par mpmath est : (-4.75049568822088e-10 + 1.56215607724243e-10j)
u(s) = (0.804832340770311 + 0.593502235252775j)

s = 378.43668025
0.5+si = (0.5+378.43668025j)
le cos((0.5 + 1j*s)*pi*0.5) = (5.169921945608036e+257-5.169921945608036e+257j)
la valeur de zeta par mpmath est : (-1.08570654426503e-11 + 1.57632496666266e-10j)
u(s) = (-0.990557042604469 + 0.137101222994341j)

s = 379.872975347
0.5+si = (0.5+379.872975347j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.93523139536923e+258-4.93523139536923e+258j)
la valeur de zeta par mpmath est : (-5.80686273273285e-10 + 2.13208067385915e-9j)
u(s) = (-0.861888594656996 + 0.507097673431927j)

s = 381.484468617
0.5+si = (0.5+381.484468617j)
le cos((0.5 + 1j*s)*pi*0.5) = (6.203676974037067e+259-6.203676974037067e+259j)
la valeur de zeta par mpmath est : (1.07783780001986e-10 - 1.06722754229308e-9j)
u(s) = (-0.979806319648586 + 0.199948933422023j)

s = 383.44352945
0.5+si = (0.5+383.44352945j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.3461619602243202e+261-1.3461619602243202e+261j)
la valeur de zeta par mpmath est : (1.43887594772338e-9 + 1.44751250746939e-9j)
u(s) = (-0.00598428281794034 - 0.999982094019272j)

s = 384.956116815
0.5+si = (0.5+384.956116815j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.4486602082107065e+262-1.4486602082107065e+262j)
la valeur de zeta par mpmath est : (1.96745115201879e-10 + 2.10487720397024e-10j)
u(s) = (-0.0674158443856955 - 0.99772496406856j)

s = 385.861300846
0.5+si = (0.5+385.861300846j)
le cos((0.5 + 1j*s)*pi*0.5) = (6.004438140751945e+262-6.004438140751945e+262j)
la valeur de zeta par mpmath est : (-2.54498715170055e-11 + 4.37497284316627e-11j)
u(s) = (-0.494330181244248 + 0.869274221354258j)

s = 387.222890222
0.5+si = (0.5+387.222890222j)
le cos((0.5 + 1j*s)*pi*0.5) = (5.097210265726076e+263-5.097210265726076e+263j)
la valeur de zeta par mpmath est : (1.05047886034597e-9 - 8.97047665356707e-10j)
u(s) = (0.156593264495834 + 0.98766317614587j)

s = 388.846128354
0.5+si = (0.5+388.846128354j)
le cos((0.5 + 1j*s)*pi*0.5) = (6.526591200416557e+264-6.526591200416557e+264j)
la valeur de zeta par mpmath est : (9.52713308404735e-10 - 1.2297644271048e-9j)
u(s) = (-0.249860370771961 + 0.968281877924808j)

s = 391.456083564
0.5+si = (0.5+391.456083564j)
le cos((0.5 + 1j*s)*pi*0.5) = (3.9370143489330245e+266-3.9370143489330245e+266j)
la valeur de zeta par mpmath est : (1.0576121252353e-9 - 1.72227027621303e-11j)
u(s) = (0.999469769613627 + 0.0325603996987877j)

s = 392.24508334
0.5+si = (0.5+392.24508334j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.359606763673598e+267-1.359606763673598e+267j)
la valeur de zeta par mpmath est : (7.21073260226802e-11 + 9.47503735313968e-10j)
u(s) = (-0.988483542189095 - 0.151328407185672j)

s = 393.427743844
0.5+si = (0.5+393.427743844j)
le cos((0.5 + 1j*s)*pi*0.5) = (8.713855012562412e+267-8.713855012562412e+267j)
la valeur de zeta par mpmath est : (7.95424368630898e-10 - 1.11375494211086e-9j)
u(s) = (-0.324453538555461 + 0.945901634060791j)

s = 395.582870011
0.5+si = (0.5+395.582870011j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.572834913187417e+269-2.572834913187417e+269j)
la valeur de zeta par mpmath est : (1.04496612846355e-11 + 1.24296601996109e-11j)
u(s) = (-0.17179532719635 - 0.985132663935958j)

s = 396.381854223
0.5+si = (0.5+396.381854223j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.025463275802118e+269-9.025463275802118e+269j)
la valeur de zeta par mpmath est : (-7.05493659953465e-10 + 7.02916526359041e-10j)
u(s) = (0.00365962272979499 + 0.999993303558262j)

s = 397.91873621
0.5+si = (0.5+397.91873621j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.009048925515238e+271-1.009048925515238e+271j)
la valeur de zeta par mpmath est : (-1.39679537208277e-9 + 1.52199956402865e-9j)
u(s) = (-0.0856341300728373 + 0.996326651137377j)

s = 399.985119876
0.5+si = (0.5+399.985119876j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.591640333444542e+272-2.591640333444542e+272j)
la valeur de zeta par mpmath est : (-5.08320028385596e-10 - 1.18697329314578e-9j)
u(s) = (-0.690049721830656 - 0.723761964599746j)

s = 401.839228601
0.5+si = (0.5+401.839228601j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.768983074921023e+273-4.768983074921023e+273j)
la valeur de zeta par mpmath est : (1.2778515939217e-9 + 6.25263328047075e-10j)
u(s) = (0.613654662905523 - 0.789574540302763j)

s = 402.861917764
0.5+si = (0.5+402.861917764j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.377345140858701e+274-2.377345140858701e+274j)

la valeur de zeta par mpmath est : $(2.51005962789963e-11 + 2.4753629805907e-10j)$
 $u(s) = (-0.979644698251703 - 0.20073929656994j)$

$s = 404.2364418$
 $0.5+si = (0.5+404.2364418j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (2.0595686998513182e+275 - 2.0595686998513182e+275j)$
la valeur de zeta par mpmath est : $(7.86989192441199e-11 - 4.32821083268445e-10j)$
 $u(s) = (-0.935993423473354 + 0.352017487086304j)$

$s = 405.13438746$
 $0.5+si = (0.5+405.13438746j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (8.440033993502918e+275 - 8.440033993502918e+275j)$
la valeur de zeta par mpmath est : $(-2.83223295366466e-10 + 3.3983383024513e-11j)$
 $u(s) = (0.971614452799661 + 0.236569979310122j)$

$s = 407.581460387$
 $0.5+si = (0.5+407.581460387j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (3.941925523228781e+277 - 3.941925523228781e+277j)$
la valeur de zeta par mpmath est : $(3.02583351306066e-10 + 5.43001306252409e-10j)$
 $u(s) = (-0.526112828891119 - 0.850414776021772j)$

$s = 408.947245502$
 $0.5+si = (0.5+408.947245502j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (3.3684559498380656e+278 - 3.3684559498380656e+278j)$
la valeur de zeta par mpmath est : $(-3.4387983097471e-10 - 1.55817009526937e-9j)$
 $u(s) = (-0.907111945759828 - 0.420889436621735j)$

$s = 410.513869193$
 $0.5+si = (0.5+410.513869193j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (3.9460540721953575e+279 - 3.9460540721953575e+279j)$
la valeur de zeta par mpmath est : $(-4.95310978329301e-10 - 1.36537851647864e-9j)$
 $u(s) = (-0.767411870898033 - 0.641154443488291j)$

$s = 411.972267804$
 $0.5+si = (0.5+411.972267804j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (3.900006417760735e+280 - 3.900006417760735e+280j)$
la valeur de zeta par mpmath est : $(-2.25519985632822e-10 - 8.63674065717174e-10j)$
 $u(s) = (-0.872339948240564 - 0.488899800269518j)$

$s = 413.26273607$
 $0.5+si = (0.5+413.26273607j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (2.9607893876479297e+281 - 2.9607893876479297e+281j)$
la valeur de zeta par mpmath est : $(1.09412547237731e-10 - 5.81107964952853e-10j)$
 $u(s) = (-0.931526691042077 + 0.363672962805957j)$

$s = 415.018809755$
 $0.5+si = (0.5+415.018809755j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (4.670681155639158e+282 - 4.670681155639158e+282j)$
la valeur de zeta par mpmath est : $(-8.60876459464237e-11 - 2.35977608873163e-10j)$
 $u(s) = (-0.765087411788746 - 0.643926433936608j)$

s = 415.455214996
0.5+si = (0.5+415.455214996j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.270234429789943e+282-9.270234429789943e+282j)
la valeur de zeta par mpmath est : (5.38181940068385e-10 + 1.70323194317773e-10j)
u(s) = (0.817919287384492 - 0.575332981258957j)

s = 418.38770579
0.5+si = (0.5+418.38770579j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.28113875489823e+284-9.28113875489823e+284j)
la valeur de zeta par mpmath est : (2.4774898224103e-9 + 1.16261633990465e-9j)
u(s) = (0.639053921413247 - 0.769161937127809j)

s = 419.861364818
0.5+si = (0.5+419.861364818j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.395373103509152e+285-9.395373103509152e+285j)
la valeur de zeta par mpmath est : (-2.81517432107396e-10 - 1.48520005009839e-10j)
u(s) = (0.564541781710429 - 0.825404492781035j)

s = 420.643827625
0.5+si = (0.5+420.643827625j)
le cos((0.5 + 1j*s)*pi*0.5) = (3.2114480943672354e+286-3.2114480943672354e+286j)
la valeur de zeta par mpmath est : (3.15140827383944e-11 - 7.21288340455225e-11j)
u(s) = (-0.679411065357675 + 0.733757864877397j)

s = 422.076710059
0.5+si = (0.5+422.076710059j)
le cos((0.5 + 1j*s)*pi*0.5) = (3.049273380151387e+287-3.049273380151387e+287j)
la valeur de zeta par mpmath est : (-3.03790556238475e-10 + 5.06296009581594e-10j)
u(s) = (-0.470555044735877 + 0.882370642005648j)

s = 423.716579627
0.5+si = (0.5+423.716579627j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.007707279520951e+288-4.007707279520951e+288j)
la valeur de zeta par mpmath est : (4.79559659815431e-10 - 2.04151719897297e-9j)
u(s) = (-0.895411778966932 + 0.445238976379188j)

s = 425.069882494
0.5+si = (0.5+425.069882494j)
le cos((0.5 + 1j*s)*pi*0.5) = (3.35817410989296e+289-3.35817410989296e+289j)
la valeur de zeta par mpmath est : (1.26338927258588e-9 - 2.19774053313392e-9j)
u(s) = (-0.503237215286613 + 0.864148312010471j)

s = 427.208825084
0.5+si = (0.5+427.208825084j)
le cos((0.5 + 1j*s)*pi*0.5) = (9.666395383971671e+290-9.666395383971671e+290j)
la valeur de zeta par mpmath est : (-2.27548435086897e-10 - 2.01303384077575e-10j)
u(s) = (0.121940131464741 - 0.992537457398097j)

s = 428.127914077
0.5+si = (0.5+428.127914077j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.095021626163508e+291-4.095021626163508e+291j)
la valeur de zeta par mpmath est : (-5.06035447406089e-10 + 1.36264359624075e-9j)
u(s) = (-0.757607480472204 + 0.652710430077924j)

s = 430.328745431
0.5+si = (0.5+430.328745431j)

le cos((0.5 + 1j*s)*pi*0.5) = (1.299084283786073e+293-1.299084283786073e+293j)
la valeur de zeta par mpmath est : (1.48857242170007e-10 + 6.64201648149101e-11j)
u(s) = (0.667924810377575 - 0.744228760316384j)

s = 431.301306931
0.5+si = (0.5+431.301306931j)
le cos((0.5 + 1j*s)*pi*0.5) = (5.985594411523079e+293-5.985594411523079e+293j)
la valeur de zeta par mpmath est : (3.04348626986366e-11 + 4.64613129868594e-10j)
u(s) = (-0.991454644082494 - 0.130451863639934j)

s = 432.138641735
0.5+si = (0.5+432.138641735j)
le cos((0.5 + 1j*s)*pi*0.5) = (2.230114640361499e+294-2.230114640361499e+294j)
la valeur de zeta par mpmath est : (-8.97683624839431e-10 + 2.44133467047949e-10j)
u(s) = (0.862263464641659 + 0.506459986123506j)

s = 433.889218481
0.5+si = (0.5+433.889218481j)
le cos((0.5 + 1j*s)*pi*0.5) = (3.487786944583936e+295-3.487786944583936e+295j)
la valeur de zeta par mpmath est : (-3.30470466005643e-10 + 3.60583115060584e-10j)
u(s) = (-0.0869848039750829 + 0.996209638518582j)

s = 436.161006433
0.5+si = (0.5+436.161006433j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.2369063782785679e+297-1.2369063782785679e+297j)
la valeur de zeta par mpmath est : (1.63660113289008e-9 + 1.22071089292486e-9j)
u(s) = (0.285066606002284 - 0.958507710006753j)

s = 437.581698168
0.5+si = (0.5+437.581698168j)
le cos((0.5 + 1j*s)*pi*0.5) = (1.1521683305888742e+298-1.1521683305888742e+298j)
la valeur de zeta par mpmath est : (6.77880456645603e-10 + 6.5644569367999e-10j)
u(s) = (0.0321199326356646 - 0.999484021847008j)

s = 438.621738656
0.5+si = (0.5+438.621738656j)
le cos((0.5 + 1j*s)*pi*0.5) = (5.902272523171785e+298-5.902272523171785e+298j)
la valeur de zeta par mpmath est : (8.82668659724515e-11 - 6.6040828238594e-10j)
u(s) = (-0.964899704062078 + 0.262618660991445j)

s = 439.918442214
0.5+si = (0.5+439.918442214j)
le cos((0.5 + 1j*s)*pi*0.5) = (4.5249636457199805e+299-4.5249636457199805e+299j)
la valeur de zeta par mpmath est : (6.4665322586625e-10 - 1.12742405958614e-9j)
u(s) = (-0.504914569108705 + 0.863169321687105j)

s = 441.683199201
0.5+si = (0.5+441.683199201j)
le cos((0.5 + 1j*s)*pi*0.5) = (7.236214734110357e+300-7.236214734110357e+300j)
la valeur de zeta par mpmath est : (-6.60073511148012e-11 - 7.4482539402142e-10j)
u(s) = (-0.984414951786158 - 0.175861316666723j)

s = 442.904546303
0.5+si = (0.5+442.904546303j)

le $\cos((0.5 + 1j*s)*\pi*0.5) = (4.928332479887231e+301-4.928332479887231e+301j)$
la valeur de zeta par mpmath est : $(-6.91167182338837e-10 + 1.41153755776469e-9j)$
 $u(s) = (-0.613212148188726 + 0.789918262425789j)$

$s = 444.319336278$
 $0.5+si = (0.5+444.319336278j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (4.548340742096448e+302-4.548340742096448e+302j)$
la valeur de zeta par mpmath est : $(-1.54110423406954e-9 + 2.32424432101958e-9j)$
 $u(s) = (-0.389233002509899 + 0.921139332434104j)$

$s = 446.860622696$
 $0.5+si = (0.5+446.860622696j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (2.463136848053914e+304-2.463136848053914e+304j)$
la valeur de zeta par mpmath est : $(-9.96422716071006e-10 + 1.17100608864486e-10j)$
 $u(s) = (0.972753922832068 + 0.231840043164901j)$

$s = 447.441704194$
 $0.5+si = (0.5+447.441704194j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (6.136142956285409e+304-6.136142956285409e+304j)$
la valeur de zeta par mpmath est : $(1.98099793422818e-10 - 9.08679068351272e-10j)$
 $u(s) = (-0.909257347947388 + 0.416234399351538j)$

$s = 449.148545685$
 $0.5+si = (0.5+449.148545685j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (8.959474836254863e+305-8.959474836254863e+305j)$
la valeur de zeta par mpmath est : $(-1.58963666300377e-11 - 5.40992003028693e-11j)$
 $u(s) = (-0.841043564351064 - 0.540967395379512j)$

$s = 450.12694578$
 $0.5+si = (0.5+450.12694578j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (4.1661560311740454e+306-4.1661560311740454e+306j)$
la valeur de zeta par mpmath est : $(5.4524811375662e-10 - 5.6609882938752e-10j)$
 $u(s) = (-0.0375101202918484 + 0.999296247804274j)$

$s = 451.403308445$
 $0.5+si = (0.5+451.403308445j)$
le $\cos((0.5 + 1j*s)*\pi*0.5) = (3.093535119061664e+307-3.093535119061664e+307j)$
la valeur de zeta par mpmath est : $(1.88794093508895e-9 - 7.75071496764075e-10j)$
 $u(s) = (0.711535350408185 + 0.702650300732451j)$