



Complex map of combination of natural ArcTetration and growing superexponential to base $\sqrt{2}$:

$$f(z) = \text{ate}(\text{SuExq2}(z))$$

The map is shown in the top picture with lines $u = \Re(f(x+iy))$ and lines $v = \Im(f(x+iy))$ in the x, y plane.

References

<https://mizugadro.mydns.jp/BOOK/468.tex> D.Kouznetsov. Superfunctions. Lambert Academic Publishing, 2020

<http://www.ams.org/journals/mcom/2010-79-271/S0025-5718-10-02342-2/home.html>

<https://mizugadro.mydns.jp/PAPERS/2010sqrt2.pdf> D.Kouznetsov, H.Trappmann. Portrait of the four regular super-exponentials to base $\sqrt{2}$. Mathematics of Computation, 2010, v.79, p.1727-1756.

http://www.vmj.ru/articles/2010_2_4.pdf D.Kouznetsov. Tetration as special function. Vladikavkaz Mathematical Journal, 2010, v.12, issue 2, p.31-45, In Russian. English version: <https://mizugadro.mydns.jp/PAPERS/2009vladie.pdf>