$$x := -1000$$
$$y := 2000$$
$$u := 0.8$$
$$v := 0.5$$

$$\Omega := \frac{\pi}{12 \cdot 60 \cdot 60}$$

$$z := \begin{bmatrix} x \\ y \\ u \\ v \end{bmatrix}$$

.

$$d(x,y) := \sqrt{x^2 + y^2}$$

$$D(t,z) := \begin{bmatrix} z_2 \\ z_3 \\ 2 \cdot \Omega \cdot z_3 \\ -2 \cdot \Omega \cdot z_2 \end{bmatrix}$$

$$Z := \mathrm{rkfixed}(z, 0, 50000, 5000, D) =$$

$$\begin{bmatrix}
0 & -1 \cdot 10^3 & 2 \cdot 10^3 & 0.8 & 0.5 \\
10 & -991.996 & 2.005 \cdot 10^3 & 0.801 & 0.499 \\
20 & -983.985 & 2.01 \cdot 10^3 & 0.801 & 0.498 \\
30 & -975.967 & 2.015 \cdot 10^3 & 0.802 & 0.497 \\
40 & -967.942 & 2.02 \cdot 10^3 & 0.803 & 0.495 \\
50 & -959.909 & 2.025 \cdot 10^3 & 0.804 & 0.494 \\
60 & -951.87 & 2.03 \cdot 10^3 & 0.804 & 0.493 \\
70 & -943.823 & 2.035 \cdot 10^3 & 0.805 & 0.492 \\
 & & & & \vdots
\end{bmatrix}$$

$$i := 0 \,..\, \mathrm{rows}(Z) - 1$$

$$\left(Z^{\langle 2 \rangle} \right)_i$$

$$\left(Z^{\langle 1 \rangle} \right)$$
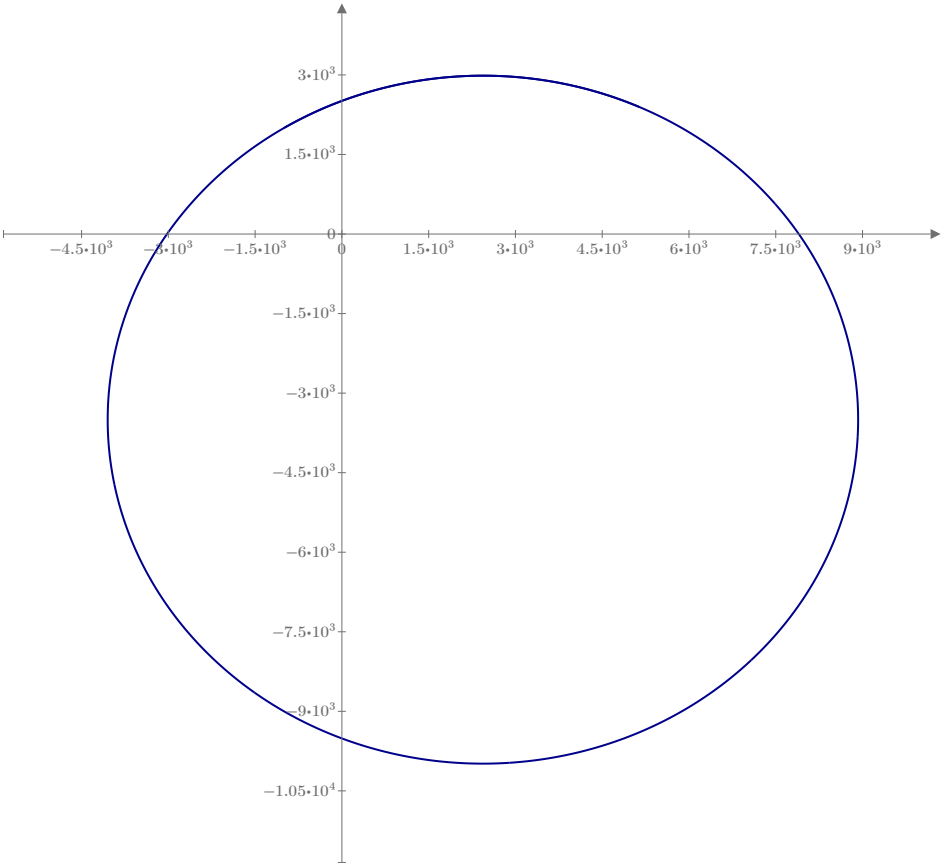
$$\left(Z \right)_i$$

$$\left(Z^{(0)} \right)_i$$
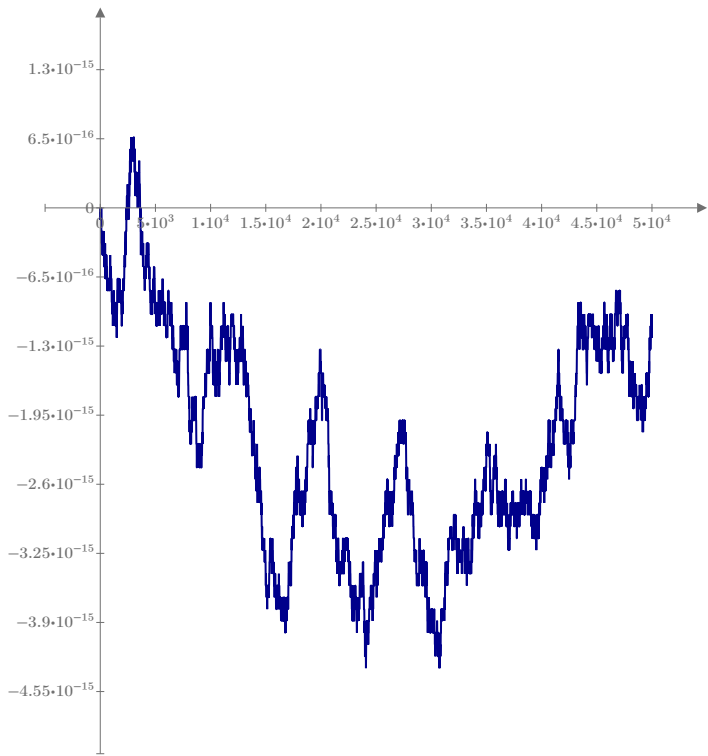
$$\left(\left(Z^{(3)} \right)_i \right)^2 + \left(\left(Z^{(4)} \right)_i \right)^2 - u^2 - v^2$$

$$\max \left(\left(\left(Z^{(3)} \right) \right)^2 + \left(\left(Z^{(4)} \right) \right)^2 \right) - u^2 - v^2 = 6.66133814775094 \cdot 10^{-16}$$

$$\min \left(\left(\left(Z^{(3)} \right) \right)^2 + \left(\left(Z^{(4)} \right) \right)^2 \right) - u^2 - v^2 = -4.32986979603811 \cdot 10^{-15}$$