

$x:=100$
 $y:=200$
 $u:=0.9$
 $v:=0.5$

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

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

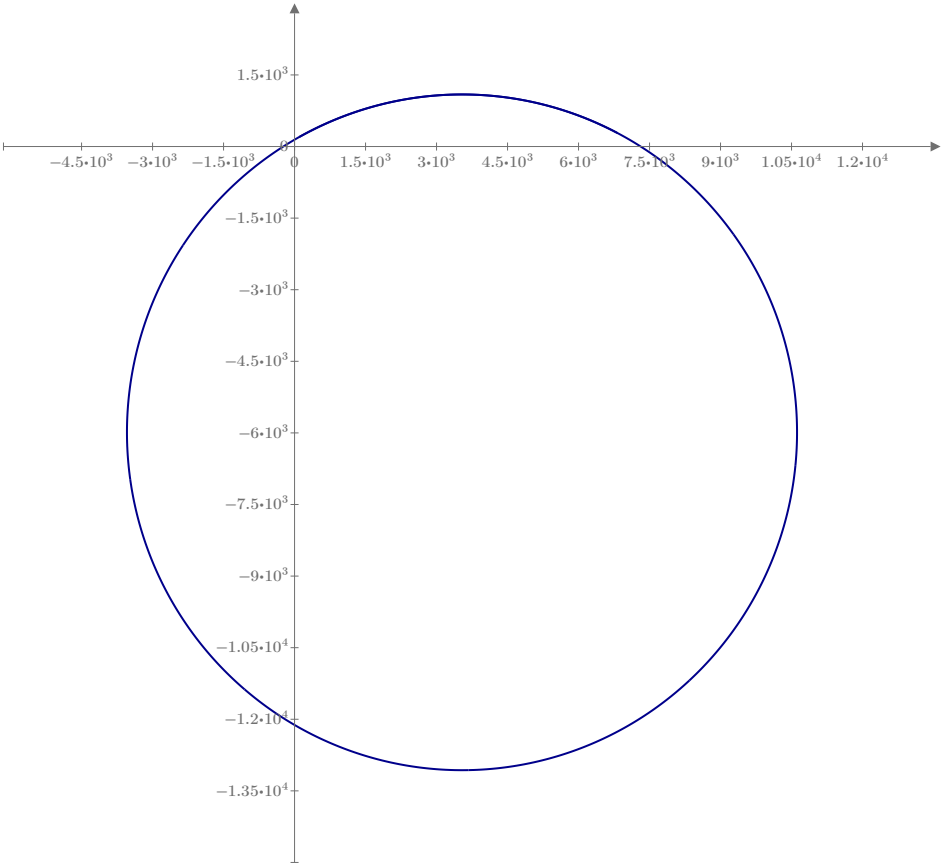
$Z:=\text{rkfixed}(z,0,50000,5000,D)=$

$i:=0\ldots\text{rows}(Z)-1$

$$\Omega:=\frac{\textcolor{brown}{\pi}}{12\cdot60\cdot60}$$

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

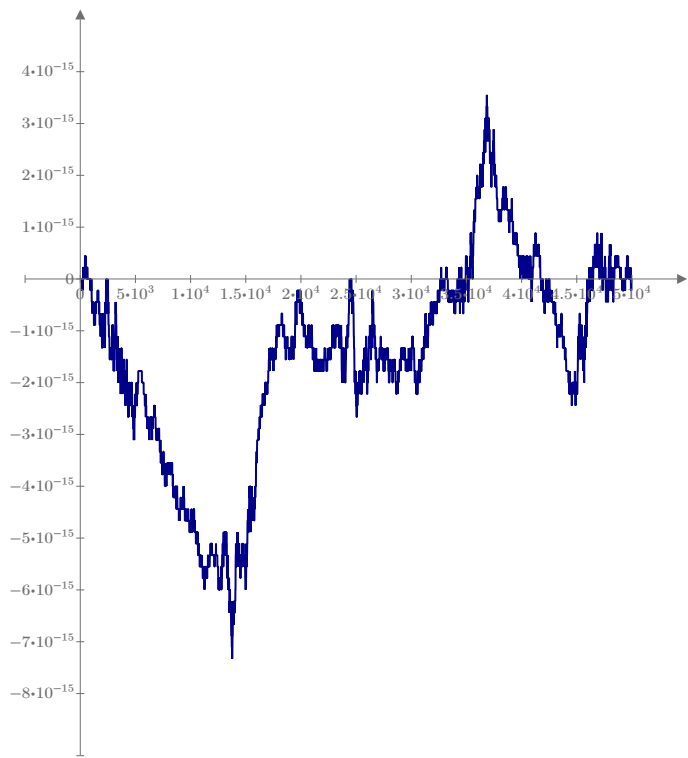
$$\begin{bmatrix}0&100&200&0.9&0.5\\10&109.004&204.993&0.901&0.499\\20&118.015&209.974&0.901&0.497\\30&127.033&214.941&0.902&0.496\\40&136.058&219.895&0.903&0.495\\50&145.091&224.836&0.904&0.493\\60&154.13&229.764&0.904&0.492\\70&163.177&234.679&0.905&0.491\\&&&&\vdots\end{bmatrix}$$



$$\underline{\left\langle Z^{(2)}\right\rangle_i}$$

$$(\mathcal{A}^{(1)})\backslash$$

$$\frac{\langle Z^{(3)} \rangle_i}{\langle Z^{(0)} \rangle_i}$$



$$\frac{\left(\langle Z^{(3)} \rangle_i\right)^2 + \left(\langle Z^{(4)} \rangle_i\right)^2 - u^2 - v^2}{\left(\langle Z^{(3)} \rangle_i\right)^2 + \left(\langle Z^{(4)} \rangle_i\right)^2 - u^2 - v^2}$$

$$\frac{\langle Z^{(0)} \rangle_i}{\langle Z^{(0)} \rangle_i}$$

$$\max \left(\left(\langle Z^{(3)} \rangle \right)^2 + \left(\langle Z^{(4)} \rangle \right)^2 \right) - u^2 - v^2 = 3.5527136788005 \cdot 10^{-15}$$

$$\min \left(\left(\langle Z^{(3)} \rangle \right)^2 + \left(\langle Z^{(4)} \rangle \right)^2 \right) - u^2 - v^2 = -7.32747196252603 \cdot 10^{-15}$$