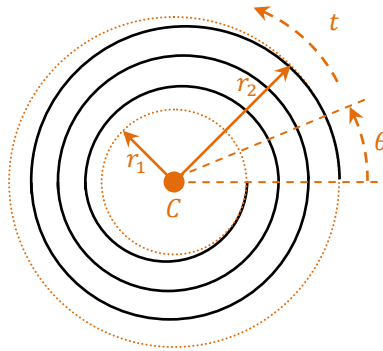


Parametric Spiral

An Archimedean spiral can be created from a parametric equation with a single parameter t , an inner radius r_1 , an outer radius r_2 , and a centerpoint C . t is used to drive the rotation of the spiral as well as its offset from the center point.



$$\begin{aligned}x &= x_C + (r_1 \cdot (1 - t) + r_2 \cdot t) \cdot \cos(2\pi N \cdot t + \theta) \\y &= y_C + (r_1 \cdot (1 - t) + r_2 \cdot t) \cdot \sin(2\pi N \cdot t + \theta) \\z &= z_C\end{aligned}$$

The quantity N represents the number of turns the spiral will make between the first and second radii. An example spiral is shown below, sampled evenly in t .

