$e1 = 7$

$e2 = 5$

$e3 = 12$

$R = 113000$

$c = 0.000470$

$a = R * c$

Differential equations

$$x' = \frac{1}{2a}(e1 * c - x - au')$$

$$y' = \frac{1}{3a}(e3 * c - y - ax' + az' + au')$$

$$z' = \frac{1}{3a}(e2 * c - z + 2ax' + ay' - 2au')$$

$$u' = \frac{1}{2a}(-e2 * c + x + z - u + ax' + az')$$