

$$\ddot{x} = x \cdot (y^2 - z^2), x(0) = 1, \dot{x}(0) = 1;$$

$$\ddot{y} = y \cdot (z^2 + x^2), y(0) = 1, \dot{y}(0) = 1;$$

$$\ddot{z} = z \cdot (x^2 + y^2), z(0) = 1, \dot{z}(0) = 1;$$