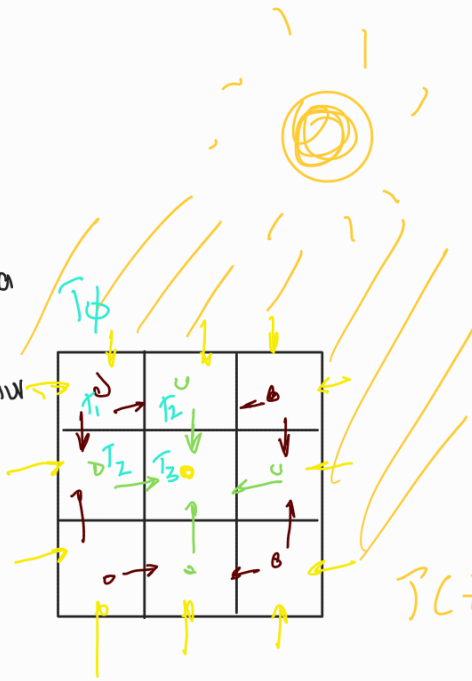


R_i = pared interna
 R_o = pared externa



$$T_o > T_1 > T_2 > T_3$$

$$T(t) = T_{env} + (T(0) - T_{env})e^{-rt}$$



$$\frac{dT}{dt} = K \left[\underset{\substack{\uparrow \\ \text{outside}}}{M(t)} - \underset{\substack{\uparrow \\ \text{inside}}}{T(t)} \right]$$

✓ Cuarto

$$q_{tot} = \frac{2(T_1 - T_2) + q}{R_i}$$

$$q_{in} = \frac{2}{R_o}(T_o - T_1)$$

$$\frac{dT_1}{dt} = \frac{2}{CR_o}(T_o - T_1) - \frac{2}{CR_i}(T_1 - T_2) - \frac{q}{C}$$

$$\dot{T}_1 = \frac{1}{C}(H_i - H_o)$$

$$\frac{2}{CR_o}T_o - \frac{2}{CR_o}T_1 - \frac{2}{CR_i}T_1$$

$$\dot{T}_1 = \frac{1}{C} \left(\frac{2}{R_o}(T_o - T_1) - \left(\frac{2}{R_i}(T_1 - T_2) + q \right) \right)$$

$$+ \frac{2}{CR_i}T_2 - \frac{q}{C}$$

$$\frac{dT_1}{dt} = \frac{1}{C} \left(\frac{2}{R_o}(T_o - T_1) - \left(\frac{2}{R_i}(T_1 - T_2) + q \right) \right)$$

Cuanto ●

$$q_{\text{out}} = \frac{1}{R_i} (T_2 - T_3) + q$$

$$q_{\text{in}} = \frac{1}{R_o} (T_o - T_2) + \frac{2}{R_1} (T_1 - T_2)$$

$$\dot{T}_2 = \frac{1}{C} \left[\frac{1}{R_o} (T_o - T_2) + \frac{2}{R_1} (T_1 - T_2) - \left(\frac{1}{R_i} (T_2 - T_3) + q \right) \right]$$

Cuanto ●

$$q_{\text{out}} = q$$

$$q_{\text{in}} = \frac{4}{R_1} (T_2 - T_3)$$

$$\dot{T}_3 = \frac{1}{C} \left[\frac{4}{R_1} (T_2 - T_3) - q \right]$$