

METODO AXIOMATIKOA

CARATHEODORY-REN ENUNTZIATUA

EDOZEIN SISTEMAREN, EDOZEIN OREKA-EGOKERAREN INGURUAN,
PROZESU ADIABATIKO ITZULGARRIEN BIDEZ LOTU EZIN DIREN
OREKA-EGOKERAK DAUDE


EZ (ADIABATIKO ITZULGARRI)

(2) - GAINAZAL ADIABATIKO ITZULGARRIEN EXISTENTZIA : (GAIEN EXISTENTZIA)

(i) - OSAGAI BAKARRERAKO SISTEMA :

$$\{t, Y, X\} \Rightarrow f(t, Y, X) = 0 \Rightarrow Y = Y(t, X)$$

$$\delta Q = dU - \delta W$$
$$\delta W = Y dX$$

$$\delta Q = dU - Y dX$$
$$dU = \left(\frac{\partial U}{\partial t}\right)_X dt + \left(\frac{\partial U}{\partial X}\right)_t dX$$

$$\delta Q = \left(\frac{\partial U}{\partial t}\right)_X dt + \left[\left(\frac{\partial U}{\partial X}\right)_t - Y\right] dX$$

$$\delta Q = 0$$

$$\left(\frac{\partial U}{\partial t}\right)_X dt + \left[\left(\frac{\partial U}{\partial X}\right)_t - Y\right] dX = 0$$

$$\left(\frac{\partial U}{\partial t}\right)_X dt = \left[Y - \left(\frac{\partial U}{\partial X}\right)_t\right] dX$$

$$\left[\frac{dt}{dX}\right] = \left[\frac{Y - \left(\frac{\partial U}{\partial X}\right)_t}{\left(\frac{\partial U}{\partial t}\right)_X}\right]$$

$$\sigma = \sigma(t, X) = Kt$$

inorkin :

lehenguz printzipiaren
adierazpena prozesu
itzulgarriaren kasuan.
eta annezkoetan ?