Julia Caserto PS2

$$\dot{m}_i = r_{x,i} u_i - (\mu + \theta_{m,i}) m_i + \lambda_i \qquad i = 1, 2 \dots N$$
$$\dot{p}_i = r_{L,i} w_i - (\mu + \theta_{p,i}) p_i$$

Abstract volume Basis B, where $B = V_L$

$V_L = 15\,\mu L$ ⇐ constant working volume.

* We are running / modeling a cell-free reaction so we don't have the μ term ($\mu = 0$)

No cells ⇒ so there's no cell growth

$$\dot{m}_i = r_{x,i} u_i - \theta_{m,i} m_i + \lambda_i$$
$$\dot{p}_i = r_{L,i} w_i - \theta_{p,i} p_i$$

we are considering one gene (deGFP), so one species i

$$\dot{m} = r_x u - \theta_m m + \lambda$$
$$\dot{p} = r_L w - \theta_p p$$