

A symmetry-based structural SI analysis of the SEI model

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ODE for S :

$$\frac{d}{dt}S(t) = -\beta I(t)S(t) + c - \mu_S S(t) \quad (1)$$

ODE for E :

$$\frac{d}{dt}E(t) = \beta(1 - \epsilon)I(t)S(t) - \delta E(t) - \mu_E E(t) \quad (2)$$

ODE for I :

$$\frac{d}{dt}I(t) = \beta\epsilon I(t)S(t) + \delta E(t) - \mu_I I(t) \quad (3)$$