

Subject to

$$\mathbf{S}\vec{v} = \vec{0} = \left\{ \begin{array}{ll} \frac{dA}{dt} = -v_1 + v_3 + v_5 & 0 \leq v_1 < \infty \\ \frac{dB}{dt} = v_1 - 2v_2 - v_4 & -\infty < v_2 < \infty \\ \frac{dC}{dt} = 2v_4 & 0 \leq v_3 < \infty \\ \frac{dD}{dt} = -v_1 + v_6 & 0 \leq v_4 < \infty \\ \frac{dE}{dt} = 2v_2 - v_3 - v_4 + v_7 & 0 \leq v_5 \leq \infty \\ & -\infty < v_6 < \infty \\ & 0 \leq v_7 \leq \infty \end{array} \right.$$

(Steady state system) (Reaction bounds)