

q2 Math

Colin Dassow

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1 Q2 Model Equations

$$\frac{dA_1}{dt} = -qE_1A_1 + m1A_1 + s_1J_1$$

$$\frac{dA_2}{dt} = -qE_2A_2 + m2A_2 + s_2J_2$$

$$\frac{dJ_1}{dt} = -c_{J_1,A_1}J_1A_1 - c_{J_1,J_2}J_1J_2 - \frac{c_{J_1,A_2}v_1J_1A_2}{h_1 + v_1 + c_{J_1,A_2}} - \frac{c_{J_1,A_1}v_1J_1A_1}{h_1 + v_1 + c_{J_1,A_1}} + f_1A_1 + S_1$$

$$\frac{dJ_2}{dt} = -c_{J_2,A_2}J_2A_2 - c_{J_2,J_1}J_2J_1 - \frac{c_{J_2,A_1}v_2J_2A_1}{h_2 + v_2 + c_{J_2,A_1}} - \frac{c_{J_2,A_2}v_2J_2A_2}{h_2 + v_2 + c_{J_2,A_2}} + f_2A_2 + S_2$$