

0.1 — 3 nodi chiuso

$$\begin{aligned}\langle \dot{S}_1 \rangle &= -\tau \langle S_1 I_2 \rangle, \\ \langle \dot{I}_1 \rangle &= \tau \langle S_1 I_2 \rangle - \gamma \langle I_1 \rangle, \\ \langle \dot{S}_2 \rangle &= -\tau (\langle I_1 S_2 \rangle + \langle S_2 I_3 \rangle), \\ \langle \dot{I}_2 \rangle &= \tau (\langle I_1 S_2 \rangle + \langle S_2 I_3 \rangle) - \gamma \langle I_2 \rangle, \\ \langle \dot{S}_3 \rangle &= -\tau \langle I_2 S_3 \rangle, \\ \langle \dot{I}_3 \rangle &= \tau \langle I_2 S_3 \rangle - \gamma \langle I_3 \rangle, \\ \langle \dot{S}_1 I_2 \rangle &= \tau \langle S_1 S_2 I_3 \rangle - (\tau + \gamma) \langle S_1 I_2 \rangle, \\ \langle \dot{I}_1 S_2 \rangle &= -\tau \langle I_1 S_2 I_3 \rangle - (\tau + \gamma) \langle I_1 S_2 \rangle, \\ \langle \dot{S}_2 I_3 \rangle &= -\tau \langle I_1 S_2 I_3 \rangle - (\tau + \gamma) \langle S_2 I_3 \rangle, \\ \langle \dot{I}_2 S_3 \rangle &= \tau \langle I_1 S_2 S_3 \rangle - (\tau + \gamma) \langle I_2 S_3 \rangle, \\ \langle \dot{S}_1 \dot{S}_2 I_3 \rangle &= -(\tau + \gamma) \langle S_1 S_2 I_3 \rangle, \\ \langle \dot{I}_1 \dot{S}_2 I_3 \rangle &= -(2\tau + 2\gamma) \langle I_1 S_2 I_3 \rangle, \\ \langle \dot{I}_1 \dot{S}_2 S_3 \rangle &= -(\tau + \gamma) \langle I_1 S_2 S_3 \rangle.\end{aligned}$$

0.2 — 3 nodi cut-vertex

$$\begin{aligned}
\langle \dot{S}_1 \rangle &= -\tau \langle S_1 I_2 \rangle, \\
\langle \dot{I}_1 \rangle &= \tau \langle S_1 I_2 \rangle - \gamma \langle I_1 \rangle, \\
\langle \dot{S}_2 \rangle &= -\tau (\langle I_1 S_2 \rangle + \langle S_2 I_3 \rangle), \\
\langle \dot{I}_2 \rangle &= \tau (\langle I_1 S_2 \rangle + \langle S_2 I_3 \rangle) - \gamma \langle I_2 \rangle, \\
\langle \dot{S}_3 \rangle &= -\tau \langle I_2 S_3 \rangle, \\
\langle \dot{I}_3 \rangle &= \tau \langle I_2 S_3 \rangle - \gamma \langle I_3 \rangle, \\
\langle \dot{S}_1 I_2 \rangle &= \tau \frac{\langle S_1 S_2 \rangle \langle S_2 I_3 \rangle}{\langle S_2 \rangle} - (\tau + \gamma) \langle S_1 I_2 \rangle, \\
\langle \dot{I}_1 S_2 \rangle &= -\tau \frac{\langle I_1 S_2 \rangle \langle S_2 I_3 \rangle}{\langle S_2 \rangle} - (\tau + \gamma) \langle I_1 S_2 \rangle, \\
\langle \dot{S}_2 I_3 \rangle &= -\tau \frac{\langle I_1 S_2 \rangle \langle S_2 I_3 \rangle}{\langle S_2 \rangle} - (\tau + \gamma) \langle S_2 I_3 \rangle, \\
\langle \dot{I}_2 S_3 \rangle &= \tau \frac{\langle I_1 S_2 \rangle \langle S_2 S_3 \rangle}{\langle S_2 \rangle} - (\tau + \gamma) \langle I_2 S_3 \rangle, \\
\langle \dot{S}_1 S_2 \rangle &= -\tau \frac{\langle S_1 S_2 \rangle \langle S_2 I_3 \rangle}{\langle S_2 \rangle}, \\
\langle \dot{S}_2 S_3 \rangle &= -\tau \frac{\langle I_1 S_2 \rangle \langle S_2 S_3 \rangle}{\langle S_3 \rangle},
\end{aligned}$$