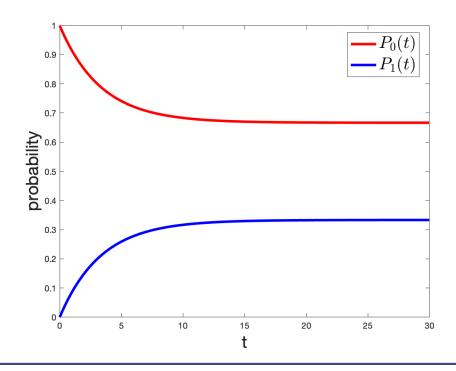
## Solution (4)

• We can solve these equations (assuming  $P_0(t) = 1$ ) to get

$$P_0(t) = \frac{\mu}{\lambda + \mu} + \frac{\lambda}{\lambda + \mu} e^{-(\lambda + \mu)t}$$

$$P_1(t) = \frac{\lambda}{\lambda + \mu} - \frac{\lambda}{\lambda + \mu} e^{-(\lambda + \mu)t}$$



Correction: Should be  $P_0(0)$  not  $P_0(t)$ 

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