λ

λ

1   2   3

π_1

π_2

π_3

μ

μ

flow in = flow out

λ, μ are rates

balance equations for CTMC steady-state:

State 1 $\lambda \pi_1 = \mu \pi_2$

State 2 $\lambda \pi_1 + \mu \pi_3 = \lambda \pi_2 + \mu \pi_2$

State 3 $\lambda \pi_2 = \mu \pi_3$

$\pi_1 + \pi_2 + \pi_3 = 1$