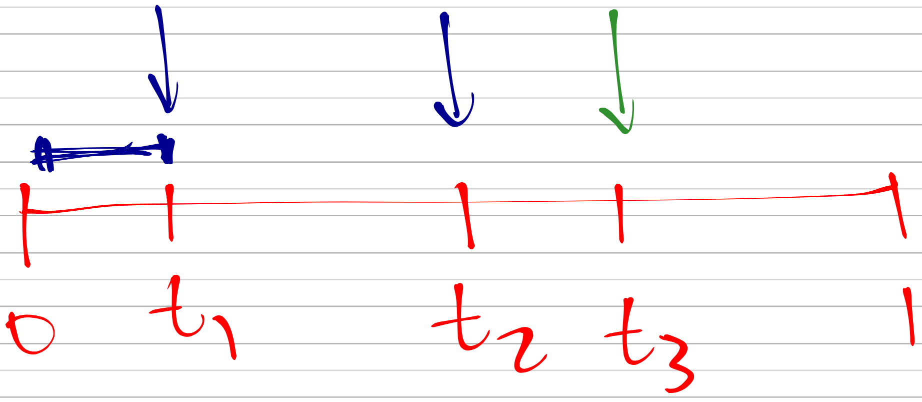
$$P(\underline{t}_n , \underline{J}_n)$$

$$T = \begin{cases} \lambda(t_1)^{1-J_1} \, e^{-\lambda(t_1)[t_1 - t_0]} \times \\ \mu(t_1)^{J_1} \, e^{-\mu(t_1)[t_1 - t_0]} \\ \vdots \end{cases}$$

home

$$T = \begin{cases} \underline{\lambda(t_1) \, e^{-\lambda(t_1)[t_1 - t_0]}} , \quad \text{if } J_1 = 0 \end{cases}$$

$$t = \begin{bmatrix} t_1 \\ \sim \\ t_3 \\ \sim \\ t_5 \end{bmatrix} \qquad \cancel{J = \begin{bmatrix} 1 \\ \sim \\ 1 \\ \sim \\ 1 \end{bmatrix}}$$



t_1^{λ} $\qquad$ t_2^{λ} $\qquad$ t_1^{μ}

$$\begin{cases} \lambda(t_1)\, e^{-\lambda(t_1)[t_1-t_0]}, & \overbrace{\text{if } J_1 = 0}^{\text{home}} \\ \mu(t_1)\, e^{-\mu(t_1)[t_1-t_0]}, & \text{if } J_1 = 1 \end{cases}$$

$$\hookrightarrow \left[\lambda e^{-\lambda(t_1-t_0)}\right]^{1-J}\left[\mu e^{-\mu(t_1-t_0)}\right]^{J}$$

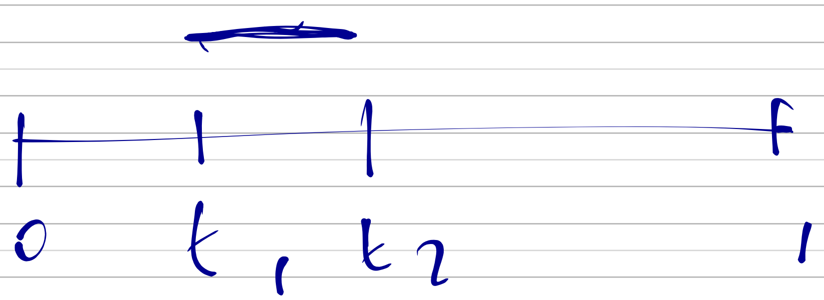
$$\exp\{-\Delta\}\exp\{-\gamma\}$$

$$\exp\left\{-\int_{t_1}^{t_2}\lambda(t)+\mu(t)\,dt\right\}x$$

$$\left[\lambda_{t_2t_1}+\mu_{t_2t_1}\right]=P(t)$$

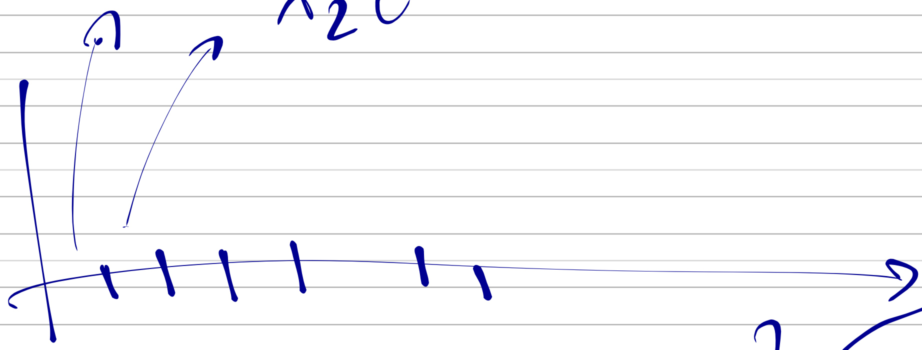
$$\boxed{P(J\,|\,t)}=\frac{\lambda}{\lambda+\mu}\qquad(\text{Poi dist.})$$

$$P(J,t)=P(t)\,P(J\,|\,t)$$



$\lambda_1 e^{-\lambda_1 \varepsilon}$

$\lambda_2 e^{-\lambda_2 \varepsilon}$



$$\prod_{i=1}^{+\infty} \lambda_i e^{-\lambda_i \varepsilon} = \lambda_i^{\square ?} e^{-\varepsilon \sum_i \lambda_i}$$

$$\prod e^{-\lambda \varepsilon} =$$

$$P(T > s) = e^{-\int_0^s \lambda(t)\,dt}$$

$$F(s) = 1 - e^{-\int_0^s \lambda(t)\,dt}$$

$$f(s) = \frac{d}{ds} F(s) = \lambda(s)\, e^{-\int_0^s \lambda(t)\,dt}$$