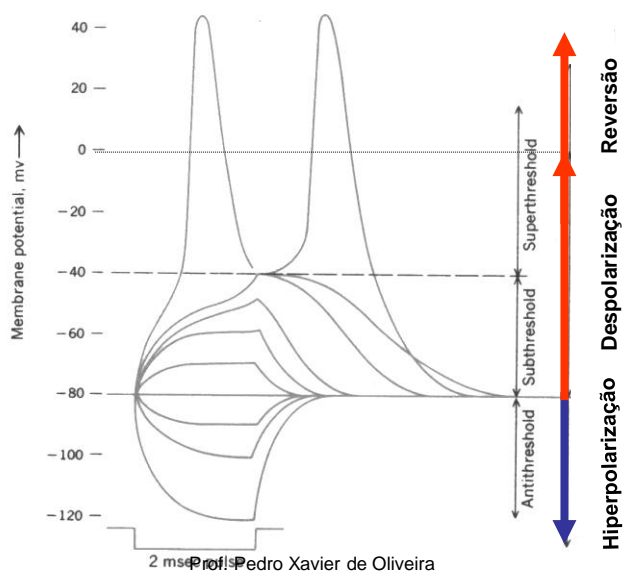


Parâmetros da estimulação elétrica

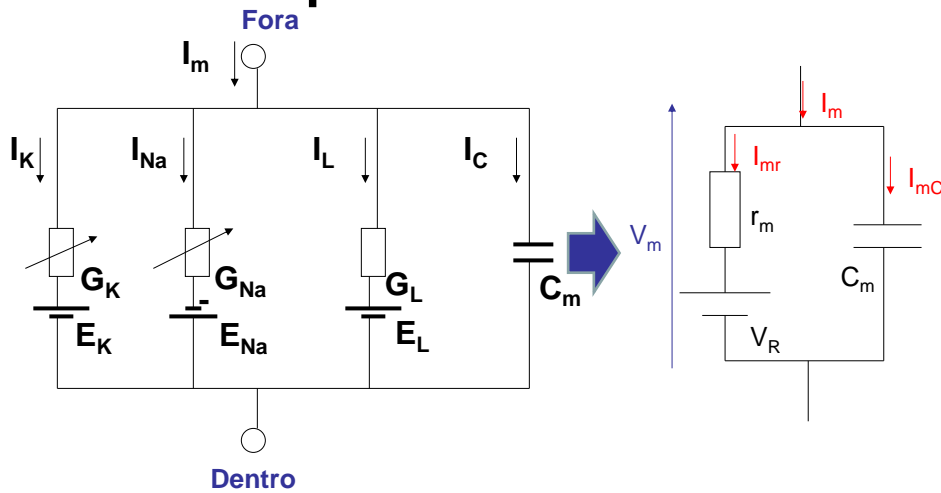
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1



2

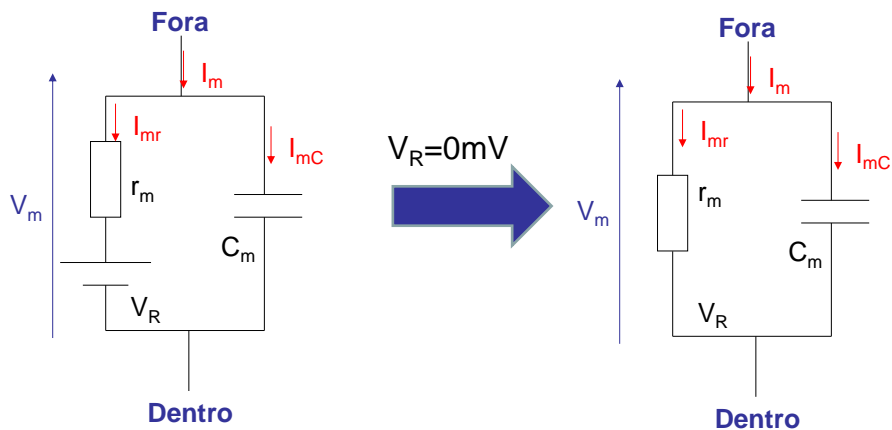
Modelo passivo da membrana



$$I_m = C_m \cdot \frac{dV}{dt} + I_k + I_{Na} + I_L$$

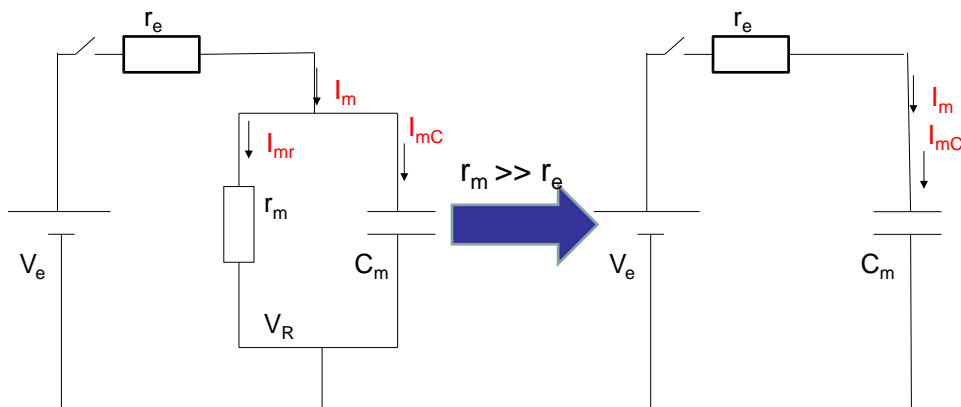
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Modelo passivo da membrana



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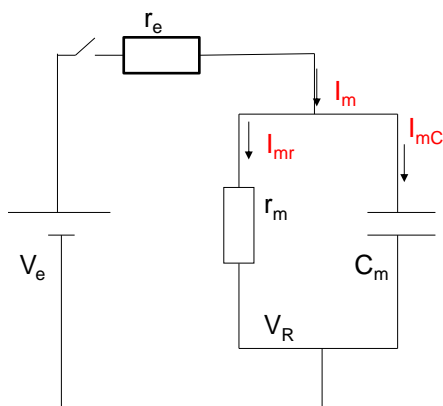
Modelo de estimulação por fonte de tensão



$$V_m = V_e \left(1 - \exp\left(\frac{-t}{r_e C_m}\right) \right) + V_{Ci}$$

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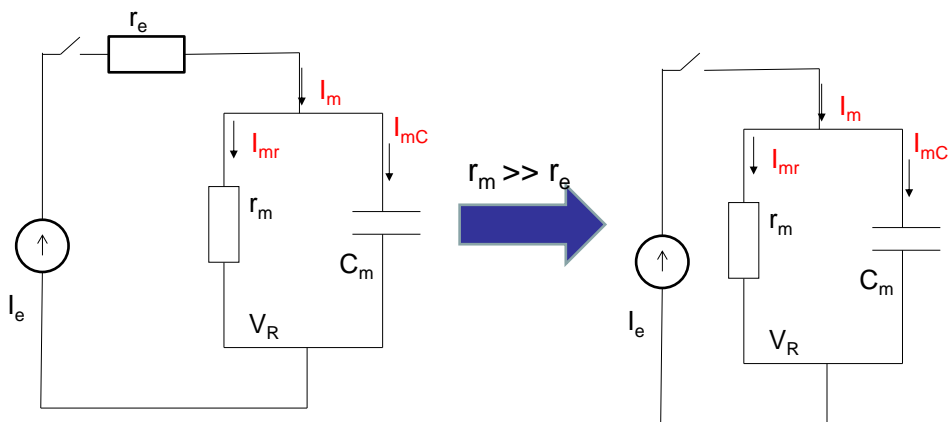
Modelo de estimulação por fonte de tensão



Para casa:

- 1) Determine V_m .
- 2) Justifique a aproximação para o modelo simplificado.

Modelo de estimulação por fonte de corrente



Para casa:

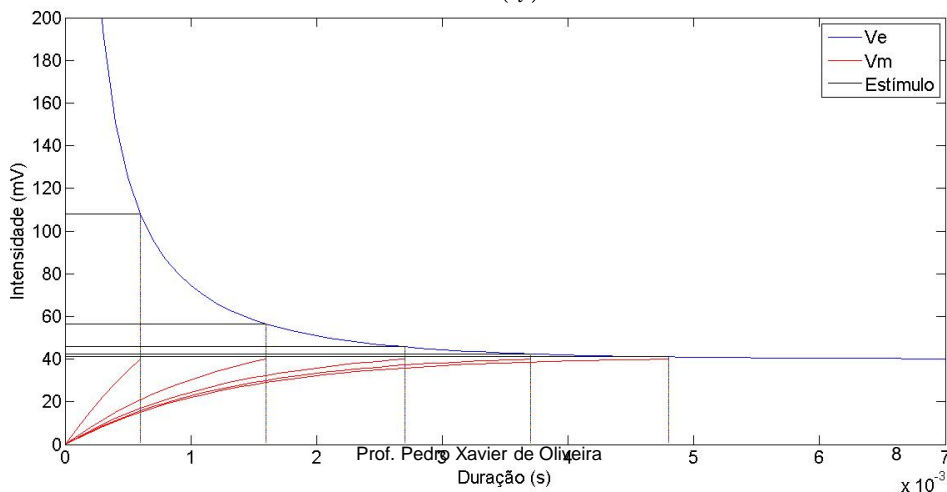
- 1) Determine V_m .
- 2) Justifique a aproximação para o modelo simplificado.

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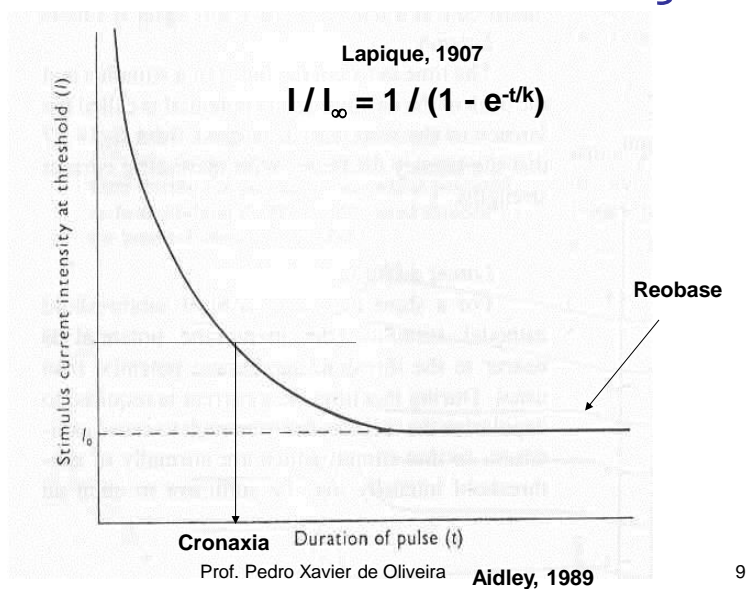
7

Curva intensidade - duração

- Premissa: o limiar (V_L) é fixo.
- $V_L = V_e \left(1 - \exp\left(\frac{-t}{\tau}\right)\right) \Rightarrow V_e = \frac{V_L}{1 - \exp\left(\frac{-t}{\tau}\right)}$

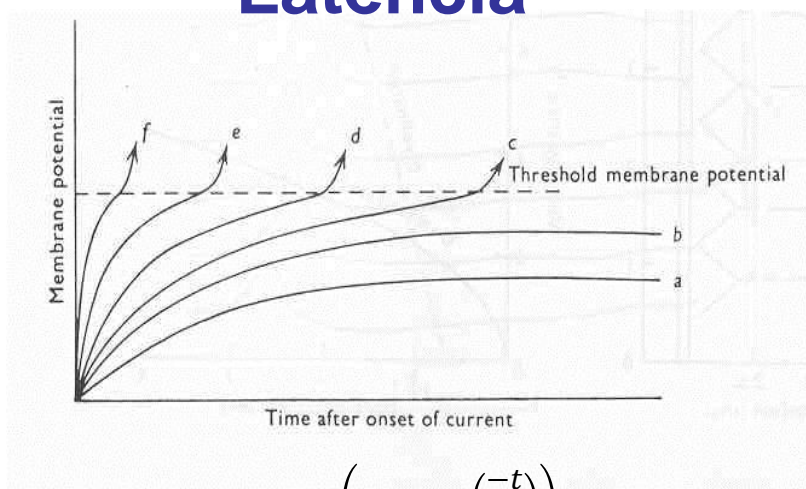


Curva intensidade - duração



9

Latência

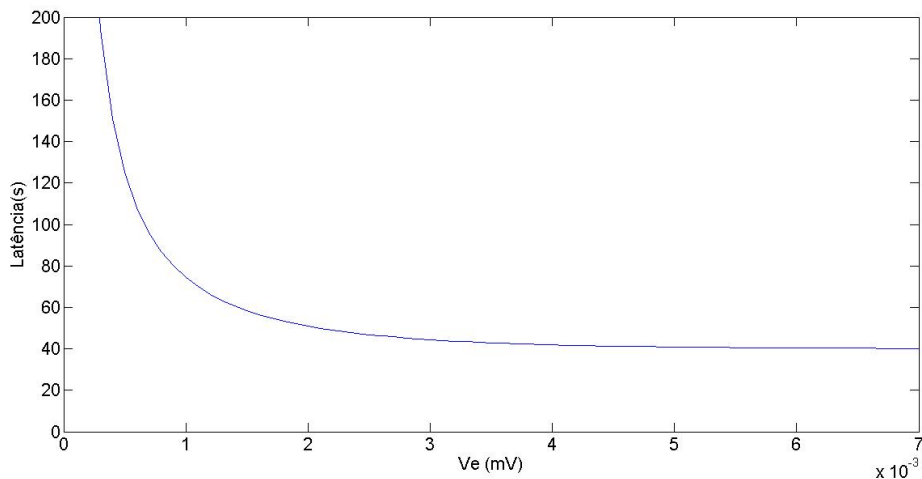


$$V_L = V_e \left(1 - \exp\left(\frac{-t}{\tau}\right) \right)$$

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10

Latência

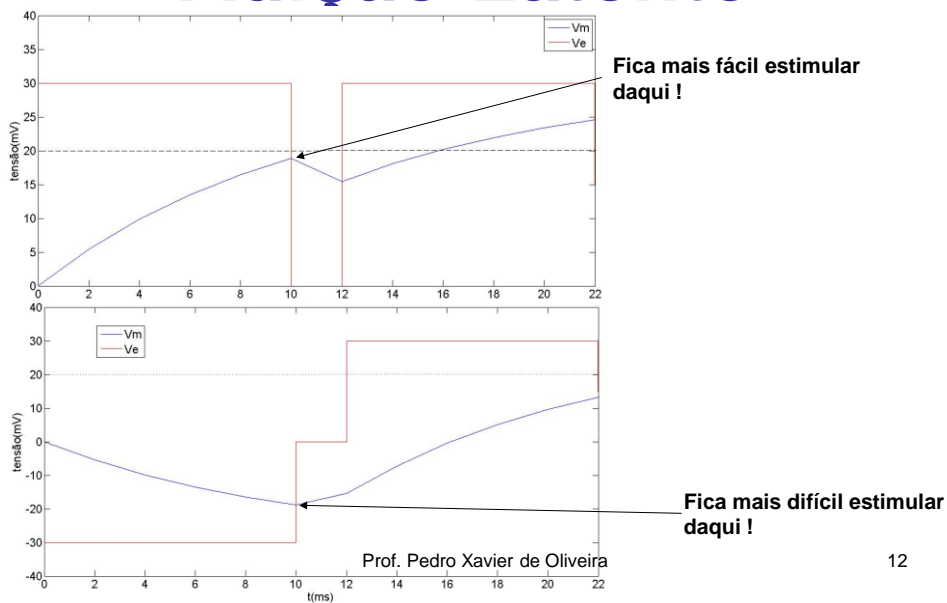


$$V_L = V_e \left(1 - \exp\left(\frac{-t}{\tau}\right) \right) \rightarrow t = -\tau \ln\left(1 - \frac{V_L}{V_e}\right)$$

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11

Adição Latente

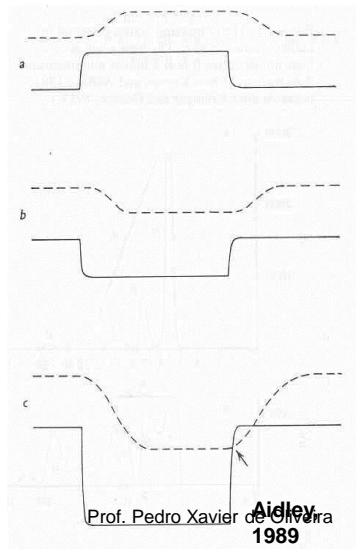


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12

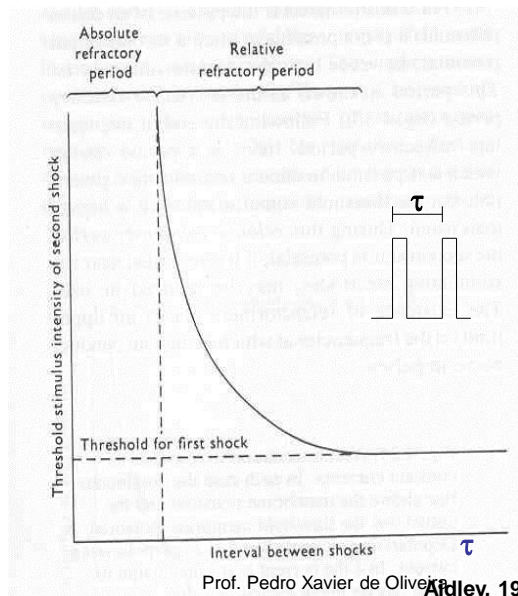
Acomodação

Anode-break excitation



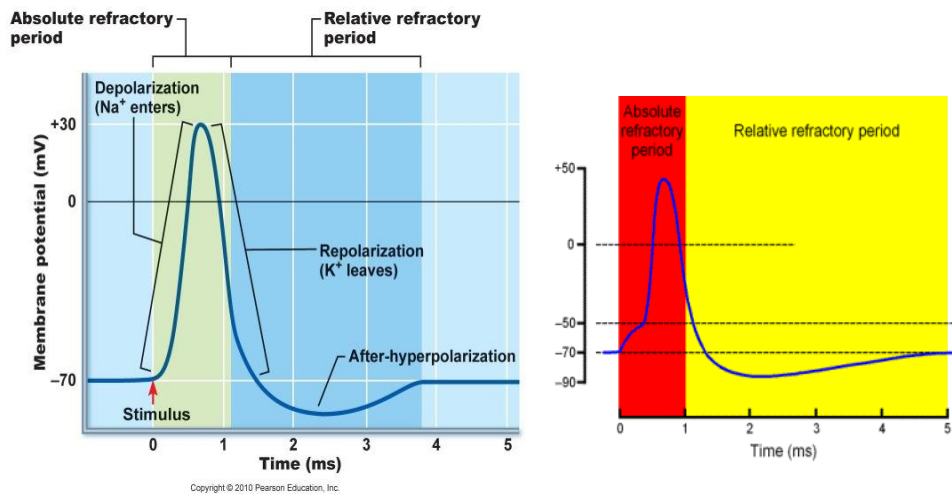
13

Refratariedade



14

Refratariedade



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15