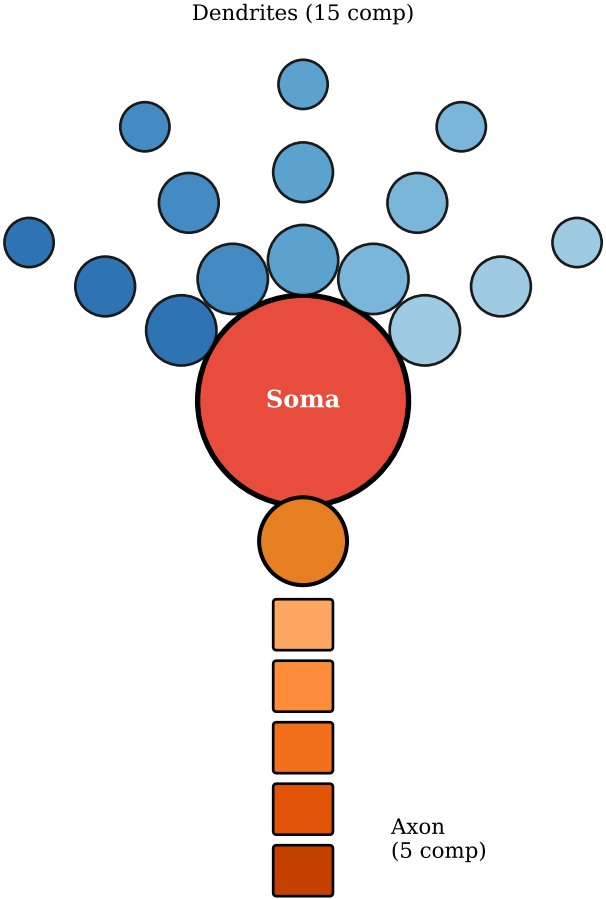


# Multi-Compartmental Neuron Model (152 compartments/neuron)



Cable Equation:

$$\frac{\partial V}{\partial t} = \frac{1}{\tau}(V_{\text{rest}} - V) + \frac{d}{4R_i}(\frac{\partial^2 V}{\partial x^2}) + I_{\text{syn}}/C_m$$

- Soma (1)
- Axon Hillock (1)
- Axon Segments (5)
- Dendritic Tree (145)