**Discussion topics for the Hodgkin-Huxley model.**

1. How is the HH model different from / similar to the IF and LIF models?
2. What are the ion species simulated in the HH model?  
   Which ion species is fastest / slowest?
3. How many variables are in the HH model? Define each.
4. Sketch the model equations, in schematic form, to capture the “essence” of the behavior (don’t worry about the detailed values for parameters).
5. Which gating variables are depolarization activated / depolarization inactivated?
6. Sketch the steady-state curves for the gating variables.
7. Consider the current:

Define each term. How does this current behave for different values of V?

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1. Describe an action potential.
2. Describe how the HH model behaves when the input current I is really small, really big …