

- Biological Neurons “spike”
 - If sufficient spikes are received by the dendrites within a time period the neuron fires its “action potential”
 - Some inputs are inhibitory - they reduce the potential of the neuron to fire
 - Once it has fired there is a short refractory period which inhibits firing again
- There are also a number of other interesting dynamical properties
 - e.g. short-term synaptic depression

A Formalism for Approaching the Operation of a Single Neuron