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*Thursday, November 21st, 2013  
13h45, Room SG 0213*

*Computational Neuroscience Seminar*

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**What is the most realistic single-compartment  
neuron model?**

The integrate-and-fire model is often used in computational neuroscience because it is a simple phenomenological model, despite general agreement that the single-compartment Hodgkin-Huxley model is more realistic.

However, on closer examination, it appears that the latter model is also phenomenological, because spikes are initiated in the axon initial segment, not in the soma. In this talk I will show that, contrary to popular belief, the simpler model is in fact also the more realistic.