

Neurobiology & Biophysics I

Membranes, Neurons, Networks and Brains

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WinterSemester 2007-2008

Topics		
1. Introduction	AA	31 Oct 2007
2. Signaling in the nervous system	AA	07 Nov 2007
3. Ion channels and signaling, currents and membrane potential, action potential generation	AA	14 Nov 2007
4. Action potential propagation, synapses	AA	21 Nov 2007
5. Networks in the brain	AA	28 Nov 2007
6. Synaptic plasticity – Learning and memory	FM	05 Dec 2007
7. Synaptic plasticity – Synaptogenesis and molecular mechanisms	FM	12 Dec 2007
8. Synaptic plasticity – Rules of plasticity and learning	FM	19 Dec 2007
9. Genetic programming of inborn behaviour	KF	09 Jan 2008
10. Neural circuits of learning in Drosophila	KF	16 Jan 2008
11. Neural circuits of aggression in invertebrates	KF	23 Jan 2008
12. Neural coding	AA	30 Jan 2008
13. Neural coding and decoding – Towards neuronal prostheses	AA	06 Feb 2008
14. Cortical network dynamics – Variability and precision	AA	13 Feb 2008