Lehrseminar Selected Topics in Physics Ana-Nicoleta Bondar & Joachim Heberle Plan of the seminars

For each topic the presenter prepares a literature review from two papers that have been agreed upon in advance with A-NB or JH.

October 30 – general discussion

November 6

Membrane proteins. Physical-chemical principles of ion channels and ion pumps

November 13

Current views on the mechanism of the voltage-gated potassium channel

November 20

Computational electrophysiology

November 27

Structural and dynamical asymmetry in trimeric assemblies of membrane transporters

December 4

Lipid bilayers: composition and phase diagrams

December 11

Role of lipids in membrane protein function

December 18

Protein dynamics in enzyme reactions: experiments

January 8

Protein dynamics in enzyme reactions: theory

January 15

Kinetic isotope effects in proton-transfer biosystems

January 22

Membrane protein insertion: experiments and theory

January 29

Protein folding: experiments

February 5

Protein folding: theory

February 12: Summary