

Program SFB 803 Symposium 2011

Thursday, September 29th 2011

09:30 – 09:40	Claudia Steinem Welcome
09:40 – 10:20	Thomas Söllner (University of Heidelberg) Calcium-dependent membrane fusion of giant unilamellar vesicles requires the combined function of synaptotagmin 1 and complexin
10:20 – 10:40	Ulf Diederichsen Artificial peptide and peptide/peptide nucleic acid model systems for SNARE mediated membrane fusion
10:40 – 11:00	Claudia Steinem Fusion of vesicles with pore-spanning membranes: Influence of SNARE-derived transmembrane helices and off-membrane molecular recognition
11:00 – 11:30	Coffee Break
11:30 – 12:10	Dieter Langosch (Technical University, Munich) The backbone dynamics of transmembrane helices
12:10- 12:30	Guiseppe Sicoli Distances and orientations between rigid nitroxide spin-labels in peptides by high-field pulsed electron-electron double resonance
12:30 – 12:50	Axel Munk Statistical challenges in ion channel recordings and NMR spectroscopy
13:00 – 14:00	Lunch
14:00 – 14:40	Martin Hof (Heyrovsky Institute of Physical Chemistry, Prague) Hydration and mobility in membranes and enzymes characterized by fluorescence techniques
14:40 – 15:00	Kerstin Weiß Quantifying the diffusion of membrane proteins and peptides
15:00 – 15:20	Daniel Werz Defined glycosphingolipids to investigate domain formation
15:20 – 15:40	Kai Tittmann Structural basis for interphase electron transfer in the peripheral membrane enzyme pyruvate oxidase from <i>E. coli</i>
15:40 – 17:00	Poster Session
17:00 – 17:40	Giovanna Fragneto (Institute Laue-Langevin, Grenoble) Neutrons and model membranes
17:40 – 18:00	Tim Salditt Structures and interactions in membrane fusion by x-ray diffraction: from lipid model systems to synaptic vesicles
18:00 – 18:20	Adam Lange/Christian Griesinger Solid-state NMR as a tool in structural biology: VDAC1 and the type three secretion system needle
19:00	Conference Dinner

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08:30 – 09:10	John Fricks (Pennsylvania State University, PA, USA) Multiple scales in molecular motor models
09:10 – 09:30	Christoph Schmidt Mechanosensing by primary cilia in kidney epithelial cells and characterization of PC1/PC2 channels in supported lipid model membranes
09:30 – 09:50	Christian Ducho Structural insights into protein-ligand-membrane interactions for the bacterial membrane protein MraY: synthesis and application of chemical probes
09:50 – 11:10	Coffee Break / Poster Session
11:10 – 11:50	Christoph Zaba (University of Natural Resources and Life Sciences, Vienna) Proteopolymerosomes: in vitro production of a membrane protein in polymerosome membranes
11:50 – 12:10	Bert de Groot The dynamics of protein membrane interactions
12:10 – 12:30	Markus Zweckstetter The human voltage-dependent anion channel: Structure, dynamics and membrane interactions
12:30 – 12:50	Marcus Müller Coarse-grained simulation of collective phenomena in membranes
13:00 – 14:00	Lunch
14:00 – 14:40	Carsten Schultz (EMBL, Heidelberg) Tools for imaging and manipulating membrane biology
14:40 – 15:00	Jomo Walla Synaptotagmin-1 activity is modulated by cis- and trans-membrane interactions
15:00 – 15:20	Gregory Bubnis Forcing membranes to bend and fuse
15:20 – 15:30	Claudia Steinem Concluding remarks
15:30	Departure