



SFB 803

LIST OF GUESTS – SFB 803 Colloquium

Summer term 2009			
18/06/09	Hans Jürgen Steinhoff	University of Osnabrück	Watching membrane proteins at work: site directed spin labeling EPR spectroscopy
24/06/09	Christoph A. Naumann	Indiana University Purdue University Indianapolis	From quantum dot imaging probes to biomembrane-mimicking cell substrates
16/07/09	D. J. Müller	TU Dresden	Quantifying receptor crosstalk of living cells to molecular resolution
Winter term 2009/2010			
13/10/09	Thomas Walz	Havard Medical School Boston	Electron microscopic studies of the aquaporin-0 membrane junction
29/10/09	Robert Tampé	University of Frankfurt	Best friends, worst enemies - modulation of the antigen processing machinery by host and viral factors
26/11/09	Klaus Gerwert	University of Bochum	Protontransfer via protein-bound water molecules
02/12/09	Tobias Weidner	Dept. of Bioengineering, University Washington	Proteins at interfaces: a challenge of molecular surface analysis
03/12/09	Peter H. Seeberger	Max-Planck-Institute of Colloids and Interfaces/Golm	Synthetic GPI anchors as tools to elucidate fundamental invasion processes in infectious and neurogenerative diseases
12/01/10	Daniel Potts	TU Chemnitz	Fast fourier transform for nonequispaced data with applications in MRI and NMR
Summer term 2010			
22/04/10	Rumiana Dimova	Max-Planck-Institute of Colloids and Interfaces/Golm	Giant vesicles: a handy tool for exploring membrane processes
26/05/10	Gunnar von Heijne	University of Stockholm	The 'molecular code' for membrane protein insertion into the ER

17/06/10	Niels Fertig	CEO, Nanion Technologies GmbH, München	Chip based patch clamp for automated ion channel recordings from cells and lipid bilayers
24/06/10	Thomas Hellweg	University of Bayreuth	Dynamics of the interfacial film in microemulsions, lamellar phases and lipid vesicles
08/07/10	Roland Winter	University of Dortmund	Exploring the free energy and conformational landscape of peptides upon amyloid formation
20/09/10	Ralf Richter	CIC biomaGUNE/ San Sebastian	Surface-based model systems to investigate structure-function interrelationships in disordered biomolecular assemblies
30/09/10	Peter Tielemann	University of Calgary	Computer simulations of helix-helix and lipid-protein interactions in membrane proteins
Winter term 2010/2011			
11/11/10	Kirsten Bacia	University of Halle	Reconstitution of transport vesicle formation: membrane curvature and fission
18/11/10	S.-J. Marrink	University of Groningen	The power of coarse-grained methods to simulate biomolecular processes
02/12/10	Lars Schäfer	University of Groningen	Proteins moving lipids moving proteins
13/01/11	Martin Korte	TU Braunschweig	Keeping the balance between change and stability: Cellular correlates of learning and memory and the role of neurotrophin
27/01/11	Christian Becker	TU München	(Semi-)synthesis of membrane-associated proteins
03/02/11	Norbert Dencher	TU Darmstadt	From protons to OXPHOS supercomplexes, ageing and Alzheimer's disease: structure-dynamics-function relationships of energy-converting membranes

Summer term 2011			
28/04/11	Ilya Reviakine	University of the Basque Country/San Sebastian	Phosphatidyl serine containing liposomes on titania: phase behaviour, bilayer formation, and lipid asymmetry
12/05/11	Jacob Piehler	University of Osnabrück	Diffusion and interaction dynamics of type I interferon receptor assembly
09/06/11	Blanche Schwappach	University of Göttingen, Dept. of Biochemistry I	Tail-anchored protein biogenesis - the beginning of the end?
07/07/11	Thomas Prisner	University of Frankfurt am Main	Structure and dynamics of bio-molecular complexes investigated by EPR spectroscopy
14/07/11	Thomas Gutsmann	Forschungszentrum Borstel	Structure, function and activity of bacterial glycolipid membranes
Winter term 2011/2012			
20/10/11	Volker Knecht	Max-Planck-Institute of Colloids and Interfaces/ Golm	Binding of ions and peptides to lipid membranes
03/11/11	Annette Beck-Sickinger	University of Leipzig	Peptide drugs to target G-protein coupled receptors
24/11/11	Clemens Glaubitz	University of Frankfurt am Main	Resolving details of the functional mechanism of membrane proteins by solid-state NMR
12/01/12	Peter Pohl	University of Linz/Austria	Proton migration along the membrane surface
19/01/12	Mark Samson	University of Oxford/UK	Protein/lipid interactions in membranes via multiscale simulations
Summer term 2012			
10/05/12	Helmut Kirchhoff	Washington State University	Molecular architecture and dynamics of photosynthetic membranes
24/05/12	Matthias Weiss	University of Bayreuth	Sorting out membrane and protein traffic
21/06/12	Michael M. Kozlov	University of Tel Aviv	Modeling membrane fission by proteins: interplay between insertions and scaffolds

13/09/12	Michael Schick	University of Washington Seattle WA/USA	Rafts in the plasma membrane: current and competing Ideas
Winter term 2012/2013			
08/11/12	Winfried Römer	University of Freiburg	The bacterial lectin LecA and the glycosphingolipid Gb3 trigger the cellular invasion of the bacterium pseudomonas aeruginosa
29/11/12	Antoinette Killian	Utrecht University	Designed peptides as model for membrane proteins
Summer term 2013			
02/05/13	Olav Schiemann	University of Bonn	Probing conformational states of MscS with PELDOR
23/05/13	Aurélien Roux	University of Geneva	The physics of endocytosis
13/06/13	Volker Haucke	Leibnitz Institute for Molecular Pharmacology Berlin (FMP)	Spatiotemporal control of endocytosis
04/07/13	Daniel Huster	University of Leipzig	Structure and dynamics of G protein-coupled receptors – Is there anything left for NMR?
11/07/13	Vadim Frolov	University of the Basque Country, Bilbao	Nanoscale quantification and mechanistic analysis of membrane fission mediated by dynamin 1
Winter term 2013/2014			
31/10/13	Oliver Daumke	Max-Delbrück-Centrum für Molekulare Medizin, Berlin	Structure, function and mechanism of dynamin superfamily proteins
28/11/13	Daniel Wüstner	University of Southern Denmark/Odense	Fluorescence studies of cholesterol organization in the plasma membrane
05/12/13	Martin Hof	J. Heyrovský Institute of Physical Chemistry of the ASCR, Prag	Hydration, mobility, aggregation, and nanodomain formation in model lipid membranes characterized by fluorescence techniques
09/01/14	Thomas Friedrich	TU Berlin	New protein sensors and detectors for fluorescence lifetime imaging microscopy
30/01/14	Patricia Bassereau	Institut Curie/Paris	Transmembrane proteins shaping lipid bilayers: Curvature-induced sorting

			and lateral diffusion
19/02/14	Harald Paulsen	Johannes-Gutenberg-University of Mainz	Folding, assembly, and stabilization <i>in vitro</i> of the light-harvesting chlorophyll <i>a/b</i> protein (LHCII)
06/03/14	Alexander Kros	University of Leiden	Targeted membrane fusion using a pair of lipidated coiled coil peptides
Summer term 2014			
15/05/14	Syma Khalid	University of Southampton	Bacterial membranes: complexities of proteins and lipids studied by molecular dynamics simulations
22/05/14	Ana-Jesus Garcia-Sáez	University of Tübingen	Advanced microscopy of study apoptosis regulation
19/06/14	Christiane Helm	University of Greifswald	Interaction of model membranes with polyelectrolytes and hydroxyl radicals
25/06/14	Idris Eckley	University of Lancaster	Aliasing and spectral correction for locally stationary wavelet time series
24/07/14	Rasmus Linser	Max Planck Institute for Biophysical Chemistry, Göttingen	Proton detection in biological solid-state NMR spectroscopy
Winter term 2014/15			
30/10/14	Peter Hildebrandt	TU Berlin	Vibrational spectroscopic approaches for analysing structure-dynamics-function relationships in proteins
20/11/14	Ulrich Zachariae	University of Dundee	Border traffic, border control, and entrance barriers: The mechanism of biological processes at membranes and interfaces
04/12/14	Ünal Coskun	Paul Langerhans Institute, TU Dresden	Pas de deux: Allosteric regulation of growth factor receptors by lipids
05/02/15	Georg Pabst	University of Graz	Structure and Interactions of Lipid Domains
12/02/15	Benjamin Podbilewicz	Israel Institute of Technology, Haifa	How EFF-1 fusion protein oligomerizes on plasma membrane protrusions during cell-cell fusion

Summer term 2015			
23/04/15	Salvatore Chiantia	Humboldt University of Berlin	Protein-membrane interaction characterized by quantitative microscopy: Examples from Influenza virus assembly
07/05/15	Franz Hagn	TU München	Structure and dynamics of membrane proteins in a native environment
21/05/15	Enrica Bordignon	FU Berlin	EPR structural model of active Bax at the membrane
02/06/15	Krishna Kumar	Tufts University Medford, MA/USA	Membrane anchored molecules to modulate and visualize biological systems
11/06/15	Ilpo Vattulainen	Tampere University of Technology/Finland	Molecular simulations revealing the secrets of receptor function and lipid trafficking
25/06/15	Dirk Trauner	Ludwig-Maximilians-University, München	Controlling biological function with photopharmacology
Winter term 2015/16			
05/11/15	Stefan Bibow	ETH Zürich/Switzerland	The 3D solution of discoidal high-density lipoprotein particles
19/11/15	Alexander Stein	Max-Planck Institute for Biophysical Chemistry, Göttingen	On the mechanism of protein translocation in ER-associated protein degradation
03/12/15	Sascha Martens	University of Vienna	Molecular mechanisms of selective autophagy
07/01/16	Thorsten Hugel	University of Freiburg	Polymer friction and adhesion at solid supports and lipid bilayers
21/01/16	Maikel C. Rheinstaedter	McMaster University, Hamilton/Canada	Frontiers in membrane biophysics
28/01/16	Rainer Böckmann	University of Erlangen-Nürnberg	(Membrane-)Protein aggregation in multiscale molecular dynamics simulations

Summer term 2016			
14/04/16	Jürgen Klingauf	University of Münster	Single vesicle recordings in hippocampal 'xenapses' reveal diffusional dispersion of synaptic vesicle proteins after fusion
28/04/16	Thomas Baukrowitz	University of Kiel	Insights into the structural gating mechanisms that regulate two-pore domain (K2P) K ⁺ channels
12/05/16	Mikko Karttunen	University of Eindhoven/NL	Hydration: Water's critical role in simulations of soft and biological matter
26/05/16	Andrey S. Klymchenko	University of Strasbourg/France	Fluorogenic and solvatochromic probes for biomembranes: from lipids to proteins
14/07/16	Loren Andreas	University de Lyon/France	Structure of fully protonated proteins by proton-detected magic-angle spinning NMR
Winter term 2016/17			
03/11/16	Emanuel Schneck	MPI Potsdam	Structural investigation of single and interacting soft interfaces with X-rays and neutrons. Molecular dynamics simulations elucidate the tight cohesion between glycolipid membranes
22/12/16	Heiko Heerklotz	University of Freiburg	Asymmetric membranes
12/01/17	Roy Beck-Barkai	Tel-Aviv University / Israel	On the relation between physics, biology and multiple sclerosis
18/01/17	James J. Chou	Harvard Medical School, Boston / USA	A functional NMR for transmembrane proteins
26/01/17	Félix A. Rey	Institute Pasteur / Paris	Viral membrane fusion proteins and interaction with lipids
09/03/17	Martin Hof	J. Heyrovsky Institute of Physical Chemistry of the ASCR / Prag	Does ganglioside GM1 promote neuro-degeneration or does it act neuroprotective? Molecular insights from single molecule fluorescence

Summer term 2017			
21/04/17	Lukas K. Tamm	University of Virginia, Charlottesville/USA	Controlling the opening of the exocytotic fusion pore by cholesterol and calcium
18/05/17	Burkhard Bechinger	University of Strasbourg	Biophysical investigations of histidine-rich designer peptides with a wide range of biomedical applications
01/06/17	Gerhard Hummer	MPI Frankfurt	Modeling membrane sensing and remodeling dynamics
22/06/17	Tristan Bereau	MPI Mainz	Modeling structure formation and thermodynamics of (macro)molecules in and out of the membrane
06/07/17	Joachim P. Spatz	MPI Heidelberg	Sequential bottom-up assembly of synthetic cells
Winter term 2017/18			
02/11/17	Gerhard Schütz	TU Wien	Protein-protein interactions at the plasma membrane: new techniques & new views
09/11/17	Annette Meister	Martin-Luther-University Halle-Wittenberg, Halle/Saale	Lipid dependent insertion of the human N-BAR domain into 2D and 3D sarcolemma model membranes
23/11/17	Maria Hoernke	Albert-Ludwigs-University, Freiburg i. Br.	Lipid selectivity in antimicrobial activity and structural changes in membrane bound proteins
07/12/17	Marcus Taylor	MPI for Infection Biology, Berlin	A DNA based T cell receptor reveals the mechanistic role of spatial organization in ligand discrimination
18/01/18	Marc Baaden	Institut de Biology Physico- Chimique, Paris	Atomic-scale insights into membrane and membrane protein structure and function from molecular simulations
Summer term 2018			
26/04/18	Mei Hong	Massachusetts Institute of Technology, Cambridge/MA/USA	Structural basis of virus-cell fusion and virus budding studied by Solid-State NMR
31/05/18	Alf Honigmann	MPI of Molecular Cell Biology and Genetics, Dresden	Membrane scaffolding at the tight junction: super-resolution and reconstitution
14/06/18	Erdinc Sezgin	University of Oxford/UK	Elucidating the signaling at the plasma membrane with

			biophysical tools
05/07/18	Thomas Weikl	MPI of Colloids and Interfaces / Potsdam	Membrane-mediated cooperativity of proteins and particles
12/07/18	Doru Constantin	Université Paris Sud Orsay	Why do proteins remain well dispersed in membranes?
Winter term 2018/19			
18/10/18	Marta Bally	Umeå University/Schweden	Cell surface mimics to study virus-membrane interactions
22/11/18	Yang Chen	University of Michigan/USA	Delineating protein transportation processes: Hierarchical models for single-molecule data
28/11/18	Sajal Kumar Ghosh	Shiv Nadar University (SNU), Uttar Pradesh/India	Effect of imidazolium-based ionic liquids on the structure and dynamics of cellular membrane: From model to the mammalian membranes
10/01/19	Adam Lange	Leibniz-Forschungsinstitut für Molekulare Pharmakologie (FMP), Berlin	A single NaK channel conformation is not enough for non-selective ion conduction
18/01/19	John Seddon	Faculty of Natural Science, Imperial College London/UK	Structure and lyotropic liquid-crystalline phase behaviour of lipid membranes
Summer term 2019			
25/04/19	Thomas Becker	Albert-Ludwigs-Universität, Freiburg	Molecular cooperation of mitochondrial protein translocases
16/05/19	Gudula Kreykenbohm	Georg-August-Universität, Göttingen	Die „Bologna“-Studienreform: Stimmt die Chemie zwischen Anspruch und Wirklichkeit?
	Matthias Ducci	PH Karlsruhe	Eine „bärchenstarke“ Reduktion - Die reduktive Spaltung von Azofarbstoffen
27/06/19	Christian Eggeling	Friedrich-Schiller-Universität, Jena	Advanced fluorescence spectroscopy for studying molecular membrane organization
11/07/19	John Katsaras	Neutron Sciences Directorate, Oak Ridge, TN/USA	Neutron Scattering Studies of Biological Membranes
18/07/19	Bert Nickel	Ludwig-Maximilians-Universität, München	Membrane organization studied by x-ray and neutron scattering: Photo-switchable lipids and cellular adhesion

Winter term 2019/20			
28/11/19	Stephan Block	FU Berlin, Berlin	Mobility-based quantification of single virus-receptor interactions
05/12/19	Gilad Haran	Weizmann-Institut für Wissenschaften, Rehovot/Israel)	Understanding microsecond dynamics of protein machines
09/01/20	Tom Robinson	MPI für Kolloid- und Grenzflächenforschung, Potsdam-Golm	Microfluidic tools for membrane biophysics and bottom-up synthetic biology
23/01/20	Himanshu Khandelia	Memphys: Center for Biomembrane Physics, University of Southern Denmark (SDU)	Electromechanical coupling in lipid membranes and temperature spikes in neurons from molecular simulations
06/02/20	Kaori Sugihara	Universität Genf/Schweiz	Development of membrane analytical tools for studying peptide-lipid interactions
13/02/20	Jan Steinkühler	MPI für Kolloid- und Grenzflächenforschung, Potsdam-Golm	Understanding and engineering biomembranes for synthetic biology
Summer term 2020 Due to the Corona crisis the following lectures were cancelled			
30/04/20	Martin Michael Müller	Université de Lorraine, Metz/France	
07/05/20	Rikhia Gosh	MPI Potsdam-Golm	
11/06/20	Arne Gericke	Worcester Polytechnic Institute, Worcester, MA/USA	
18/06/20	Susanne Fenz	Universität Würzburg	