



**Winterschool 2010**  
**09.02.2010 – 10.02.2010**  
**Ev. Tagungsstätte in Hofgeismar**

## Schedule

### 09.02.2010

**08:00**    **Departure by bus, Tammannstr. 2**

**10:00**    **Arrival in Hofgeismar**

**10:30**    **1. Session**

Welcome	Prof. Dr. Steinem
Efficient signal reconstruction for ion channel recordings	Dr. Thomas Hotz
Non-uniform sampling designs for multi-dimensional NMR	Leona Schild
Mechanosensing across the cell membranes: Mechanically activated TRP channels coupled	Christopher Battle
Mechanosensing across the cell membranes: Local electrical recording of substrate supported lipid bilayers	Theresa Kaufeld

**12:00**    **Lunch**

**14:00**    **2. Session**

The native conformation of the human VDAC 1N-terminus	Robert Schneider
Investigation of VDAC with solid-state NMR	Zrinka Gattin
Electrophysiological investigation of human VDAC in pore-spanning membranes	Conrad Weichbrodt
Molecular dynamics of the phospholipid effects on VDAC and AQP channels	Rodolfo Briones

**15:30**    **Coffee Break**

**16:00**    **3. Session**

Towards the gating mechanism of the voltage- dependent anion channel 1	Saskia Villinger
Laser driven non equilibrium dynamics in lipid membranes	Tobias Reusch
Membrane fusion assay based on pore suspending lipid bilayers	Ines Höfer
Investigation of small synaptic vesicles via FCS	Wensi Gao

**18:00**    **Dinner**



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**19:30**      **4. Session**

Molecular mechanism of SNARE mediated membrane fusion	Jelger Risselada
Construction of novel hybrid biooligomers as artificial SNAREs to dissect the mechanism of SNAREs in membrane docking and fusion	Antonia Lygina
SNARE derived peptides: synthesis and fusogenicity	Karsten Meyenberg
Synthesis of SNARE analogues to analyse the alpha-SNAP/NSF mediated disassembly process	Annika Groschner

**21:00**      **Get-together, Weinschänke**



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**9:00      1.Session**

Hard X-ray phase contrast imaging of black lipid membranes	André Beerlink
Membrane fusion intermediates probed by X-ray-scattering	Sebastian Aeffner
Mechanical properties of bilayer membrane and inclusion	Giovanni Marelli

**10:00      Coffee Break**

**10:30      2. Session**

Synthesis of modified gramicidin: A derivatives for analysis of membrane-peptide-interactions	Tatjana Polupanow
Organization of transmembrane peptide helices by recognition at the membrane-water interface	Philipp Schneggenburger
Conformational changes in bio-macromolecules detected by pulsed EPR methods	Dr. Giuseppe Sicoli

**12:00      Lunch**

**13:00      3. Session**

Synthesis of glycosphingolipids	Annika Holkenbrink
Synthesis of chemical probes to elucidate function and inhibition of the bacterial membrane protein MraY	Anatol Spork
Analysis of the membrane binding mechanism of the peripheral membrane enzyme pyruvate oxidase from <i>E. coli</i>	Astrid Sitte

**14:30      Departure by bus**

**15:00      Bowling**

**17:00      Departure to Göttingen**