

Symposium „Biological Solid-State NMR and Beyond“

MDC.C, Axon I, 02.-03. March 2017

Thursday, 02.03.2017

15:00 – 15:05 Opening Dorothea Fiedler

Session I: DNP and Large Protein Assemblies

Chair: Adam Lange

15:05 – 15:30 Bob Griffin Amyloid, Microwaves, and the Magic Angle
15:30 – 15:55 Tatyana Polenova Magic Angle Spinning NMR of Microtubule- and Actin-Protein Assemblies
15:55 – 16:20 Huub de Groot Responsive Matrices for Artificial Photosynthesis: Trading Time for Efficiency
16:20 Summary
16:25 – 16:40 Coffee Break

Session II: DNP and Large Protein Assemblies

Chair: Adam Lange

16:40 – 17:05 Marc Baldus From SH3 to EGFR
17:05 – 17:30 Clemens Glaubitz GPCR Subtype Specificity and ABC Transporter Mechanisms seen by Solid-State NMR
17:30 – 17:55 Shimon Vega Some Spin Dynamics during DNP
17:55 – 18:20 Horst Kessler My Time with Hartmut in Frankfurt (1982-86)
18:20 – 18:45 Bernd Reif Biomolecular NMR between Solids and Solution
18:45 Summary

Friday, 03.03.2017

Session III: RNA and Dynamics

Chair: Phil Selenko

09:00 – 09:25 Michael Sattler Studying Dynamic Molecular Interactions by NMR
09:25 – 09:50 Harald Schwalbe Dynamics Matter: RNA Based Regulation
09:50 – 10:15 Lyndon Emsley Protein Dynamics from Solid-State NMR
10:15 – 10:40 Teresa Carlomagno ssNMR Meets the RNA World
10:40 – 10:45 Summary
10:45 – 11:10 Coffee Break

Session IV: Very Fast Spinning and Large Protein Assemblies

Chair: Barth van Rossum

- 11:10 – 11:35 Beat Meier Ball rund muß in Tor eckig; Sensitivity and Resolution in Protein NMR
- 11:35 – 12:00 Anja Böckmann Ball rund muß in Tor eckig; Membrane Protein Reconstitution and Spectroscopy
- 12:00 – 12:25 Maria Macias New DNA Motifs for the Ancient Smad Protein Family
- 12:25 – 12:30 Summary
- 12:30 – 13:15 *Lunch Break*

Session V: Technical Developments

Chair: Christian Freund

- 13:15 – 13:40 Michael Nilges Structure Calculation Methods for Solution and Solid-State NMR
- 13:40 – 14:05 Norbert Müller Nonlinear Effects in Nuclear Spin Noise Spectroscopy
- 14:05 – 14:30 Rachel Martin Protein-Protein Interactions in the Crystallin Proteins of the Eye Lens
- 14:30 – 14:55 Lucio Frydman Solid and Solution State ^{13}C NMR Experiments with Enhanced Sensitivity via Optically-Pumped and Micro-Wave-Driven Electron \rightarrow Nuclear Polarization Transfer in Diamonds
- 14:55 – 15:00 Summary
- 15:00 – 15:20 *Coffee Break*

Session VI: Structural Biology of the Immune System

Chair: Peter Schmieder

- 15:20 – 15:45 Angela Gronenborn The Awesome Power of F-NMR
- 15:45 – 16:10 Christian Freund The Mechanisms of MHC Class II Peptide Exchange
- 16:10 – 16:35 Guido Pintacuda Structural Investigations of Proteins at Super Fast MAS: Viruses etc.
- 16:35 – 17:00 Christian Griesinger NMR Spectroscopy in Immunology and in Neurodegeneration

17:00

Barbecue