

BNMRZ Symposium, Fri Oct 13, 2023, TUM IAS

Future Perspectives of Biomolecular NMR

08:30	Welcome Michael Sattler
08:35	Prof. Dr. Johannes Barth TUM Dean School of Natural Sciences
08:45	Prof. Dr. Eleftheria Zeggini Helmholtz Munich, Program Speaker
SESSION 1 Chair: Franz Hagn	
09:00	Christian Griesinger (MPI Göttingen) <i>Highest field NMR for biophysics and structural biology in neurodegeneration</i>
09:25	Stephan Grzesiek (Biozentrum Basel, Switzerland) <i>New NMR assignment methods give unprecedented insights into G protein-coupled receptor functional dynamics</i>
09:50	Rina Rosenzweig (Weizmann, Rehovot, Israel) <i>Molecular Chaperones in Health and Disease - What Can We Learn by NMR?</i>
10:15	Coffee Break
SESSION 2 Chair: Bernd Reif	
10:45	Hartmut Oschkinat (FMP Berlin, Germany) <i>Structural rearrangements of biofilm proteins, pitfalls of AlphaFold, and new applications of MAS NMR</i>
11:10	Manuel Etzkorn (FZ Jülich, Uni Düsseldorf, Germany) <i>Exploring the dynamic world of membrane systems and biocatalysis</i>
11:35	Jochen Balbach (Uni Halle, Germany) <i>Protein NMR: from basic research to biomedical applications</i>
12:00	Lucia Banci (CERM, University of Florence, Italy) <i>Future Perspective of in-cell NMR</i>
12:25	LUNCH Break
13:00	Optional tour to the BNMRZ with NMR hall and 1.2 GHz NMR spectrometer
SESSION 3 Chair: Anne Schütz	
14:00	Harald Schwalbe (JWG University Frankfurt, Germany) <i>Targeting RNA - Integrated Structural Biology of RNA</i>
14:25	Teresa Carlomagno (University of Birmingham, UK) <i>Exploiting the power of high-field NMR spectroscopy to study low-affinity functional interactions in a molecular assembly chain.</i>
14:50	Martin Blackledge (IBS Grenoble, France) <i>High field NMR provides unique insight into the functional dynamics and interactions of viral replication assemblies</i>
15:15	Angela Gronenborn (University of Pittsburgh, USA) <i>The awesome power of fluorine NMR – from drugs to cells</i>
15:40	Coffee Break
SESSION 4 Chair: Steffen Glaser	
16:15	Dominik Bucher (TUM IAS) <i>Using spin defects in diamond for nano- and microscale NMR spectroscopy</i>
16:40	Roland Riek (ETH Zürich, Switzerland) <i>On the versatility of NMR in protein allostery and drug screening e</i>
17:05	Anja Böckmann (University Lyon, MMSB CNRS) <i>Investigation of viral (membrane) proteins with high field and fast MAS solid-state NMR</i>
17:30	Robert G Griffin (MIT, Cambridge, USA) <i>Atomic Resolution Structures of Aβ ¹H Detection, ¹⁷O MQMAS, and DNP</i>
17:55	Concluding Remarks
18:30	Get-together, dinner & party Location: TUM-IAS, 4 th floor