

Online Symposium on Cellular Biophysics

September 2022

Program

Thursday, September 15, 2022

3:00 pm – 4:00 pm **Developmental Regulation of Nuclear Pore Complex Assembly**
Dr. Bernhard Hampölz
Max Planck Institute of Biophysics, Frankfurt am Main

Friday, September 16, 2022

8:30 am – 9:30 am **From Cargo to Structure**
Dr. Florian Wilfling
Max Planck Institute of Biophysics, Frankfurt am Main

9:30 am – 10:30 am **The Mechanism How a Single Phosphate Group Decides about Life and Death in Oocytes**
Prof. Dr. Volker Dötsch
Institute of Biophysical Chemistry, Goethe University Frankfurt am Main

Monday, September 19, 2022

11:00 am – 12:00 pm **TBA**
Dr. Martin Beck
Max Planck Institute of Biophysics, Frankfurt am Main

12:00 pm – 1:00 pm **Potassium Transporters and Channels in Bacterial Survival**
Prof. Dr. Inga Hänel
Institute of Biochemistry, Goethe University Frankfurt am Main

3:00 pm – 4:00 pm **NMR-Spectroscopy: RNAs, Proteins and their Complexes**
Dr. Andreas Schlundt
Institute for Molecular Bio Science, Goethe University Frankfurt am Main

Tuesday, September 20, 2022

11:00 am – 12:00 pm **Solid-state NMR of Membrane Proteins**
Prof. Dr. Clemens Glaubitz
Institute of Biophysical Chemistry, Goethe University Frankfurt am Main

12:00 pm – 1:00 pm **Simulation-based Interference in Molecular Biology**
PD Dr. Jürgen Köfinger
Max Planck Institute of Biophysics, Frankfurt am Main

2:00 pm – 3:00 pm **TBA**
Prof. Dr. Nina Morgner
Institute of Physical and Theoretical Chemistry, Goethe University Frankfurt am Main

3:00 pm – 4:00 pm **Membrane Mass Spectrometry and Proteomics**
Dr. Julian Langer
Max Planck Institute of Biophysics, Frankfurt am Main

Program

Wednesday, September 21, 2022

11:00 am – 12:00 pm **Cool Things in Small Worms (and Some Fish) – Optogenetic Analysis of Cell Physiology and Neural Circuit Function**
Prof. Dr. Alexander Gottschalk
Institute of Biophysical Chemistry, Goethe University Frankfurt am Main

~~12:00 pm – 1:00 pm **TBA**~~
~~Prof. Dr. Amparo Acker-Palmer~~
~~Institute of Cell Biology & Neuroscience, Goethe University Frankfurt am Main~~
~~Streaming cancelled~~

2:00 pm – 3:00 pm **Structural Plasticity of Protein Kinases**
Prof. Dr. Stefan Knapp
Institute of Pharmaceutical Chemistry, Goethe University Frankfurt am Main

3:00 pm – 4:00 pm **The Role of Subcellular Architecture in the Regulation of Gene Expression**
Prof. Dr. Michaela Müller-McNicoll
Institute for Molecular Bio Science, Goethe University Frankfurt am Main

Thursday, September 22, 2022

8:30 am – 9:30 am **The Background of Cryo-Electron Microscopy**
Prof. Dr. Werner Kühlbrandt
Max Planck Institute of Biophysics, Frankfurt am Main

9:30 am – 10:30 am **The Basics of Image Processing**
Prof. Dr. Werner Kühlbrandt
Max Planck Institute of Biophysics, Frankfurt am Main

11:00 am – 12:00 pm **Cryo-Electron Tomography Processing**
Dr. Beata Turoniová
Max Planck Institute of Biophysics, Frankfurt am Main

12:00 pm – 1:00 pm **Studies of Redox and Metalloenzymes: Understanding Mechanism through Structure**
Dr. Bonnie Murphy
Max Planck Institute of Biophysics, Frankfurt am Main

2:00 pm – 3:00 pm **Insights in Membrane Protein Function by Single-Particle Cryo-Electron Microscopy**
Dr. Janet Vonck
Max Planck Institute of Biophysics, Frankfurt am Main

3:00 pm – 4:00 pm **Sticky Spots!**
Prof. Dr. Achilleas Frangakis
Institute of Biophysics, Goethe University Frankfurt am Main

Program

Friday, September 23, 2022

18:30 am – 9:30 am

TBA

Dr. Eugene Kim

Max Planck Institute of Biophysics, Frankfurt am Main

9:30 am – 10:30 am

Biomolecular Simulations and Modeling

Prof. Dr. Gerhard Hummer

Max Planck Institute of Biophysics, Frankfurt am Main

11:00 am – 12:00 pm

**Unraveling Specific Regulation by Phase-separated Condensates
by Multi-scale Simulations**

Dr. Lukas Stelzl

Institute of Molecular Biology (IMB), Johannes Gutenberg University Mainz

12:00 pm – 1:00 pm

**Principles of Self-organization in Cells:
Learning from Simple Models**

Prof. Dr. Friederike Schmid

Institute of Physics, Johannes Gutenberg University Mainz

2:00 pm – 3:00 pm

Network Dynamics of Cellular Stress Responses

Dr. Christian Münch

Institute of Biochemistry II, Goethe University Frankfurt am Main

3:00 pm – 4:00 pm

Introduction to Machine Learning

Dr. Roberto Covino

Frankfurt Institute of Advanced Studies (FIAS), Frankfurt am Main