



**cni** | combinatorial  
neuroimaging



**LIN** LEIBNIZ-INSTITUT  
FÜR NEUROBIOLOGIE  
MAGDEBURG

# Imaging Techniques in Cell Biology

## From single molecules to subcellular compartments

September 27, 2019, 9:00 a.m. – 2:30 p.m.

LIN, Brenneckestr. 6, 39118 Magdeburg / Ebbinghaus lecture hall

Organized by: R. Herrera-Molina, O. Kobler, M. Prigge, T. Stöter, A. Weber, W. Zuschratter

Registration free of charge: [www.lin-magdeburg.de/cni](http://www.lin-magdeburg.de/cni)

09:00 – 09:05 a.m.

**Welcome**

*CNI, Leibniz Institute for Neurobiology*

09:05 – 09:40 a.m.

**Imaging 3D nuclear genome nanostructure at single molecule resolution**

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

09:40 – 10:15 a.m.

**Metabolic FLIM and oxygen PLIM: Basics and applications in biomedical imaging**

*Angelika Rück, Core Facility Confocal and Multiphoton Microscopy, Ulm University*

10:15 – 10:50 a.m.

**Biophysics and dynamics of neurexin/neurologin adhesions**

*Olivier Thoumine, CNRS – Université de Bordeaux*

10:50 – 11:20

**Coffee break**

11:20 – 11:55 a.m.

**State-of-the-art in vivo hippocampal imaging techniques**

*Falko Fuhrmann, German Center for Neurodegenerative Diseases (DZNE), Bonn*

11:55 – 12:30 a.m.

**Analysis of in-vivo experiments integrating 2P calcium imaging with behavioral tracking**

*Pavol Bauer, German Center for Neurodegenerative Diseases (DZNE), Bonn*

12:30 – 1:20 p.m.

**Lunch break**

1:20 – 1:55 p.m.

**Nanoscale dynamics of voltage gated calcium channels modulate synaptic transmission**

*Martin Heine, Johannes Gutenberg University, Mainz*

1:55 – 2:30 p.m.

**Deep learning – Recent advances and potential bridges to neuroscience**

*Sebastian Stober, Otto von Guericke University, Magdeburg*

2:30 p.m.

**Discussion and concluding remarks**



GERMAN NEUROSCIENCE  
SOCIETY (GNS)

