

## Mini-Symposium “Excitable cell networks in heart and brain” via ZOOM

This mini symposium focuses on cross-scale analysis of information processing in cardiac and/or neural networks by means of imaging, optogenetics and/or electrophysiology as well as computational modelling. Such cross-scale analysis propagates insights from the structural and functional studies of molecular machines of cells to the level of excitable cell networks. This is of fundamental importance for understanding both cardiac and neural networks and will help to develop innovative therapeutic strategies for disorders affecting the heart, the brain, or both.

Monday, November 23 <sup>rd</sup> , 2020	
1:00 pm - 1:05 pm	Opening remarks by Tobias Moser
1:05 pm – 1:35 pm	<p><b>“Illuminating front limb control in rat frontal cortex – electrophysiological and optogenetic approaches”</b></p> <p><b>Ilka Diester</b> Research Group "Optophysiology" Institute of Biology III, University of Freiburg</p>
1:40 pm – 2:10 pm	<p><b>“Cells and circuits for olfactory computations in zebrafish”</b></p> <p><b>Thomas Frank</b> Research Group "Olfactory Memory" Max Planck Institute of Neurobiology, Martinsried</p>
2:15 pm – 2:45 pm	<p><b>“Visual feature extraction across the early visual system of mice”</b></p> <p><b>Katrin Franke</b> Research Group "Neural Circuits of Vision" Werner Reichardt Centre for Integrative Neuroscience, University of Tübingen</p>
2:50 pm – 3:05 pm	Break
3:05 pm – 3:35 pm	<p><b>“Hijacking the degenerated retina optogenetically”</b></p> <p><b>Sonja Kleinlogel</b> "Translational Optogenetics" Group Department of Physiology, University of Bern</p>
3:40 pm – 4:10 pm	<p><b>“Bridging scales – combining functional ultrasound imaging, optogenetics, and electrophysiology to study neuronal networks underlying behavior”</b></p> <p><b>Emelie Macé</b> Research Group "Brain-Wide Circuits for Behavior" Max Planck Institute of Neurobiology, Martinsried</p>
4:15 pm	Closing remarks by André Fischer

### ZOOM link:

<https://uni-goettingen.zoom.us/j/93446594426?pwd=bGcvYkISNFE1MXhYTIRrODhLVWFDZz09>

Meeting-ID: 934 4659 4426

Kenncode: 151414

**Monday, November 30<sup>th</sup>, 2020**

1:00 pm - 1:05 pm	Opening remarks by Wolfram-Hubertus Zimmermann
1:05 pm – 1:35 pm	<p><b>“Circuits optogenetics and wave front shaping”</b></p> <p><b>Valentina Emiliani</b></p> <p>“Wave front engineering microscopy” Group Photonics Department, Institut de la Vision, Paris</p>
1:40 pm – 2:10 pm	<p><b>“Across-scales analysis of synapses, circuit and system in mouse and human models of psychiatric disease”</b></p> <p><b>Volker Scheuss</b></p> <p>Research Group “Neurophysiology of Psychiatric Disease” Clinic for Psychiatry and Psychotherapy, LMU Munich</p>
2:15 pm – 2:45 pm	<p><b>“Optogenetic Control of Cardiac Arrhythmias”</b></p> <p><b>Stefan Luther</b></p> <p>Institute of Pharmacology and Toxicology, University Medical Center / “Biomedical Physics” Group, Max Planck Institute for Dynamics and Self-Organization, Göttingen</p>
2:50 pm – 3:05 pm	Break
3:05 pm – 3:35 pm	<p><b>“Modeling development and function of the cardiac conduction system for biological pacemaker applications”</b></p> <p><b>Stephanie Protze</b></p> <p>McEwen Stem Cell Institute, University Health Network Toronto</p>
3:40 pm – 4:10 pm	<p><b>“Atrial Arrhythmopathy: From bench to bedside and back”</b></p> <p><b>Constanze Schmidt</b></p> <p>Research Group “Atrial Arrhythmopathy and Cellular Electrophysiology” Clinic for Cardiology, Angiology and Pneumology, University Hospital Heidelberg</p>
4:15 pm – 4:45 pm	<p><b>“Illuminating the heterocellular heart”</b></p> <p><b>Franziska Schneider-Warme</b></p> <p>“Cardiac Optogenetics” Group, Institute for Experimental Cardiovascular Medicine, University Heart Center Freiburg</p>
4:50 pm	Closing remarks by Stephan Lehnart

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