

## Selection of Symposia 2021

### **Advanced optics for neuroscience**

*Chair:* Marcel Lauterbach, Homburg

### **Challenges in autism: beyond species and brain regions – common mechanisms for neuronal dysfunction?**

*Chairs:* Tobias M. Boeckers and Kim Chi Le, Ulm and Aachen

### **Emerging views on microglia and oligodendrocytes in Alzheimer's disease**

*Chair:* Klaus-Armin Nave, Göttingen

### **FAIR data management and data sharing in neuroscience**

*Chairs:* Esther Kühn and Hansjörg Scherberger, Magdeburg and Göttingen

### **From sensation to action: shaping neuronal representations during learning**

*Chair:* Janelle Pakan, Magdeburg

### **Functions of motor cortex circuits for movement control**

*Chair:* Christian Leukel, Freiburg

### **Gene and cell based therapies to counteract neuroretinal degeneration**

*Chairs:* Stefanie Hauck and Knut Stieger, Neuherberg and Giessen

### **Genetic and environmental aspects in chronic pain**

*Chairs:* Daniela Mauceri and Heike Tost, Heidelberg and Mannheim

### **Genetic and environmental factors shaping neuronal network defects and cognitive impairment**

*Chairs:* Ute Häussler and Jonas-Frederic Sauer, Freiburg

### **How microglia fulfill distinctive functions throughout development, during adulthood and under disease conditions**

*Chairs:* Thomas Blank and Christine Stadelmann-Nessler, Freiburg and Göttingen

### **Hypothalamic neuron-glia network in obesity and type 2 diabetes**

*Chairs:* Cristina García-Cáceres and Chun-Xia Yi, Neuherberg and Amsterdam (Netherlands)

### **Modulation and plasticity of inhibition in neocortical circuits**

*Chairs:* Laura Busse and Johannes Letzkus, Planegg-Martinsried and Frankfurt

### **MultiSenses – MultiScales: deciphering neural processing in multisensory integration**

*Chairs:* Bjoern Kampa and Marc Spehr, Aachen

### **Neuronal autophagy - implications for disease and therapy**

*Chairs:* Christian Behl and Michael Sendtner, Mainz and Würzburg

### **Neuronal circuit mechanisms of socio-sexual behavior**

*Chairs:* Constanze Lenschow and Jean Simonnet, Lisbon (Portugal) and Berlin

### **Odor spaces: from odor molecules to behavior**

*Chairs:* Michael Schmuker and Silke Sachse, Hatfield (UK) and Jena

### **Odors and metabolism - neuromodulation in sensory processing**

*Chairs:* Ilona Grunwald Kadow and Markus Rothermel, Freising and Aachen

### **Optical imaging to assess the plasticity function of sleep**

*Chairs:* Jan Born and Niels Niethard, Tübingen

### **Post-translational modifications of proteome in neuronal development**

*Chairs:* Mateusz Ambrozkiwicz and Victor Tarabykin, Berlin

### **Principles of decision-making across species**

*Chairs:* Tihana Jovanic and Michael Schleyer, Gif-sur-Yvette (France) and Magdeburg

### **Regulation of synaptic vesicle recycling: from physiology to disease**

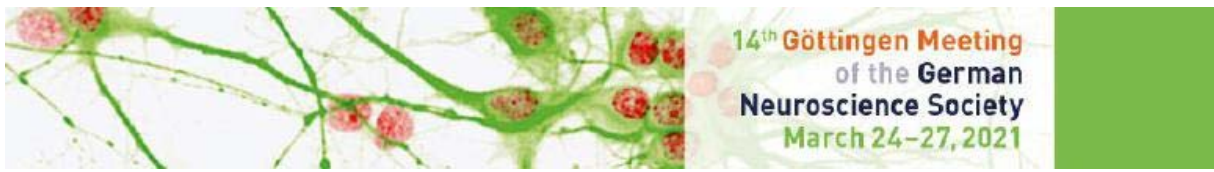
*Chair:* Anna Fejtova, Erlangen

### **Revealing the evolutionary trajectory of the first nervous systems: genomics, structure and dynamics**

*Chairs:* Pawel Burkhardt and Fred Wolf, Bergen (Norway) and Göttingen

### **Same, same but different – emergence of individuality in the nervous system**

*Chairs:* Ayse Maraslioglu and Andreas Ritzau-Jost, Kaiserslautern and Leipzig



**Sino-German joint symposium on cutting-edge neurotechnology in behavioral and systems neuroscience**

*Chairs:* Pascal Fries and Liping Wang, Frankfurt and Shenzhen (China)

**Sound processing, adaptation, and perception in the auditory system – from midbrain to cortical networks**

*Chairs:* Jan Hirtz and Nicole Rosskothen-Kuhl, Kaiserslautern and Freiburg

**Store-operated calcium entry in neurons and glia**

*Chairs:* Barbara Niemeyer and Frank Kirchhoff, Homburg

**Structure and dynamics of inhibitory synapses in health and disease**

*Chairs:* Andrea Barberis and Christian Werner, Genova (Italy) and Würzburg

**Tanycytes – walk between worlds**

*Chairs:* Vincent Prévot and Markus Schwaninger, Lille (France) and Lübeck

**The choice is yours: multicircuit regulation of motivated behaviors**

*Chairs:* Nadine Gogolla and Tatiana Korotkova, München and Köln

**The entorhinal micronetwork – how connectivity determines function**

*Chairs:* Andreas Draguhn and Alexei V. Egorov, Heidelberg

**The impact of the immune system on psychiatric disorders**

*Chairs:* Andreas Heinz and Albert Ludolph, Berlin and Ulm

**The undiscovered country – plasticity in the enteric nervous system**

*Chairs:* Gemma Mozzuoli-Weber and Peter Neckel, Hannover and Tübingen

**Tools for the future of synaptic neuroscience: superresolution imaging meets artificial intelligence**

*Chairs:* Tobias Moser, Silvio Rizzoli, Christin Wiemuth and Claudia Steinem, Göttingen

**Translational aspects in neurological diseases: from pathophysiology to new therapeutic approaches**

*Chairs:* Ralf Linker and Mathias Bähr, Göttingen and Regensburg