



# SENSORY ENCODING AND THE EMERGENCE OF MEMORY

26<sup>th</sup> - 27<sup>th</sup> of April 2022

Veranstaltungszentrum, Ruhr Universität Bochum

## Programme

<b>April 26<sup>th</sup></b>	<b>14:00</b>	<p><b>Welcome</b> - opening of the conference  <b>Denise Manahan-Vaughan</b> Director IGSN / Speaker SFB 874</p>
	<b>14:10</b>	<p><b>Factors influencing brain function: evolutionary, attention and stress perspectives</b></p>
	<b>14:15</b>	<p><b>Jens Prüssner</b>                  Neuropsychology, University of Konstanz, Konstanz, Germany  <b>Factors determining the stress response in humans and its contribution to health and disease</b></p>
	<b>14:50</b>	<p><b>Simon Hanslmayr</b>                  Centre for Cognitive Neuroimaging (CCNi), College of Medical, Veterinary and Life Sciences, University of Glasgow, UK  <b>The utility of neural synchronization and synaptic plasticity for human episodic memory formation</b></p>
	<b>15:25</b>	<p>Coffee break / <b>Brainstorming Session (1)</b></p>
	<b>16:15</b>	<p><b>Jan Theeuwes</b>                  Institute Brain and Behavior Amsterdam (iBBA), Vrije Universiteit, Amsterdam, The Netherlands  <b>What to expect when you are not expecting it: How implicit regularities drive attentional selection</b></p>
	<b>16:50</b>	<p>Individual meetings with RUB scientists</p>



# IGSN / SFB 874 Conference: SENSORY ENCODING AND THE EMERGENCE OF MEMORY

April 27<sup>th</sup> - Morning

**Session 2**      **9:15**      **Microcircuit control of sensory information processing and behavior**

**9:20**      **Sage Boettcher**  
Department of Experimental Psychology, University of Oxford, UK  
**Memory in action: Action plans are encoded early into working memory**

**9:55**      **David Burr**  
Department of Neuroscience, Psychology, Pharmacology and Child Health, University of Florence, Italy  
**Predictive perception: serial dependence, optimality and neural oscillations**

**10:30**      **Coffee break / Poster Session / Brainstorming Session (2)**

**11:25**      **Jennifer Raymond**  
Department of Neurobiology, School of Medicine, Stanford University, USA  
**Learning and meta-learning rules in the cerebellum**

**12:00**      **Lunch break**



# IGSN / SFB 874 Conference: SENSORY ENCODING AND THE EMERGENCE OF MEMORY

April 27<sup>th</sup> - Afternoon

**Session 3**    13:10    **Neuromodulation of sensory processing and cognition**

**13:15**    **Daniel Senkowski**

Clinical Neuropsychology, Department of Psychiatry and Psychotherapy, Charité –  
Universitätsmedizin; Berlin, Germany

**Neural signatures of crossmodal illusions and multisensory integration**

**13:50**    **Coffee break / Brainstorming Session (3)**

**14:40**    **Oxana Eschenko**

Department Computational Neuroscience, Max Planck Institute for Biological Cybernetics,  
Tübingen, Germany

**The locus coeruleus saliency signaling affects sensory perception by  
increasing arousal**

**15:15**    **Friedhelm Hummel**

Clinical Neuroengineering, Brain Mind Institute, Institute of Technology EPFL, Geneva,  
Switzerland

**Non-invasive brain stimulation to enhance motor skill acquisition in healthy  
older and stroke patients**

**16:00**    **FAREWELL – end of conference**

