

Program

	WEDNESDAY SEPT. 4	THURSDAY SEPT. 5	FRIDAY SEPT. 6	SATURDAY SEPT. 7	SUNDAY SEPT. 8
08:00 - 08:30		REGISTRATION			
08:30 - 09:00		WELCOME	S5 MCG	S6 tEEG in Psychiatry	
09:00 - 09:30		OPENING LECTURE Fernando Lopes da Silva		KEYNOTE 3 Ken Nagata	KEYNOTE 5 Mark S. George
09:30 - 10:00					
10:00 - 10:30		COFFEE	COFFEE	COFFEE	COFFEE
10:30 - 11:00		S1 EEG-fMRI	S7 Oscillations	S11 Inverse Modelling	S15 Connectivity
11:00 - 11:30		S2 Resting State	S8 Soft Signs	S12 Functional Selectivity	S16 Interactions
11:30 - 12:00					
12:00 - 12:30		LUNCH	LUNCH	LUNCH	
12:30 - 13:00					
13:00 - 13:30		POSTER 1 EEG/MEG/ MCG/fMRI Analysis and Combination	POSTER 3 Network Analysis, Oscillations	POSTER 5 Perception & Cognition	POSTER 6 Schizophre- nia & Other Psychiatric Diseases
13:30 - 14:00		POSTER 2 Epilepsy	POSTER 4 Dementia & Mood Disorders	POSTER 6 Schizophre- nia & Other Psychiatric Diseases	
14:00 - 14:30		FC1 EEG/MEG Modeling	FC3 Network Analysis	FC5 Perception & Cognition	FC6 Schizophre- nia & Other Psychiatric Diseases
14:30 - 15:00		FC2 Epilepsy	FC4 Dementia & Mood Disorders		
15:00 - 15:30		COFFEE	COFFEE	COFFEE	
15:30 - 16:00		S3 EEG-fMRI in Epilepsy	S9 Forward Modelling	S13 Decoding	S14 Psychosis
16:00 - 16:30		S4 Biological Psychopathol.	S10 BCI		
16:30 - 17:00					
17:00 - 17:30	GET TOGETHER				
17:30 - 18:00		KEYNOTE 1 Biyu Jade He	KEYNOTE 2 Guido Nolte	KEYNOTE 4 Stephan Heckers	
18:00 - 18:30					
18:30 - 19:00	PUBLIC LECTURE Niels Birbaumer				
19:00 - 19:30					

Symposia

Thursday Sept. 5 10:30 – 12:00

	Symposium 1	Symposium 2
	Simultaneous EEG-fMRI: challenges and opportunities <i>Chair: Christoph Michel, Geneva, CH</i>	Resting state and Modulation of Brain Activity <i>Susanne Karch & Oliver Pogarell, Munich</i>
10:30	Jan de Munck, Amsterdam, NL <i>Artifacts in EEG/fMRI</i>	Daniel Keeser, Munich, D <i>Modulation of brain functional connectivity under ECT in patients with major depression</i>
10:50	Karen Mullinger, Nottingham, UK <i>Moving simultaneous EEG-fMRI to higher field strengths: advantages and disadvantages</i>	Frank Scharnowski, Geneva, CH <i>Real-time fMRI for training of brain functional connectivity</i>
11:10	Andrew Bagshaw, Birmingham, UK <i>Investigating thalamocortical networks with EEG-fMRI</i>	Susanne Karch, Munich, D <i>Craving related brain responses and real-time fMRI in patients with substance use disorder</i>
11:30	Christoph Mulert, Hamburg, D <i>Simultaneous EEG-fMRI for the characterization of connectivity mechanisms in the brain</i>	Nadja Razavi Bern, CH <i>Decoupling of EEG driving frequencies and fMRI resting state networks in schizophrenia spectrum disorders</i>
11:50	Discussion	Discussion

Free Communications

Thursday Sept. 5 14:00 – 15:10		
	Free Communication 1	Free Communication 2
	EEG/MEG modeling Chair: Seppo Ahlfors, Boston	Epilepsy Chair: Jean Gotman, Montreal
14:00	Fiederer Lukas, Freiburg, D <i>High-Resolution Forward Modelling using Finite Element Method Head Models based on 7T MRI Data</i>	Ümit Aydin, Münster, D <i>Combined EEG/MEG Source Analysis of Epileptic Activity: Effects of Volume Conduction and Spike Averaging</i>
14:10	Manfred Fuchs, Hamburg, D <i>Sensitivity of EEG and MEG for Extended Cortical Sources</i>	Silvia Francesca Storti, Verona, I <i>Combining ESI, ASL and PET for quantitative assessment of drug-resistant focal epilepsy</i>
14:20	Christoph Dinh, Ilmenau, D <i>Online Monitoring of Brain Activity</i>	Laurent Koessler, Nancy, F <i>The dark side of the temporal lobe : mesial source contribution on simultaneous EEG-SEEG recordings</i>
14:30	Stephan Lau, Fitzroy, AU <i>Clustering of interictal events for improved source imaging and fMRI regressor design in high density EEG-fMRI investigations</i>	Ivan Rektor, Brno, CZR <i>Multi-modal studies of the role of the basal ganglia (BG) in temporal lobe epilepsy (TLE)</i>
14:40	Anna Custo, Geneva, CH <i>EEG time-resolved source imaging based on general linear modeling and non-parametric statistical testing</i>	Pieter Van Mierlo, Ghent, B <i>Feasibility of using effective connectivity to localize the seizure onset zone from ictal scalp EEG recordings</i>
14:50	Jaakko Malmivuo, Helsinki, FIN <i>Independence of Bioelectric and Biomagnetic Signals</i>	Thomas Thesen, New York, USA <i>Detection of structural brain abnormalities in single patients: Focal Epilepsy</i>
15:00	Discussion	Discussion

Thursday Sept. 5 15:30 – 17:20		
	Symposium 3	Symposium 4
	Simultaneous EEG-fMRI in Epilepsy Chair: Margitta Seeck, Geneva, CH	Biological Psychopathology Thomas Dierks & Werner Strik, Bern, CH
15:30	Jean Gotman, Montreal, Canada <i>EEG-fMRI to understand the role of DMN and positive/negative BOLD in focal and generalized epilepsy</i>	Werner Strik, Bern, CH <i>Biological psychopathology and neurophysiological domains in psychiatry</i>
15:50	Christian Benar, Marseille, F <i>EEG-fMRI in epilepsy to understand neurovascular coupling</i>	Oliver Gruber, Göttingen, D <i>Neuroimaging of symptoms and endophenotypic brain dysfunctions: future psychopathophysiology?</i>
16:10	Serge Vulliemoz, Geneva, CH <i>Clinical contribution and added value of EEG-fMRI in presurgical assessment</i>	Camille Piguet, Geneva, CH <i>Cognitive symptoms in mood disorders: a dimensional approach</i>
16:30	Yunfeng Lu, Minneapolis, USA <i>Localization of epileptogenic brain from high density scalp EEG and fMR</i>	Stephan Heckers, Nashville, USA <i>The future of psychopathology research</i>
16:50	Louis Lemieux, London, UK <i>Simultaneous intracranial EEG-fMRI and advanced fMRI analysis to characterize epileptic networks</i>	Daniela Hubl, Thomas Dierks, Bern, CH <i>Neurobiology of psychiatric symptomatology: from origin to treatment of auditory verbal hallucinations</i>
17:10	Discussion	Discussion

Friday Sept. 6 8:30 – 10:00		
	Symposium 5	Symposium 6
	Cardioelectric Source Interpretation in Clinical MCG Chair: Kiwoong Kim, Daejeon, South Korea	Topographic and tomographic analysis of the EEG signal in psychiatry: are we ready for translation to clinical practice? Silvana Gladerisi, Naples, I
8:30	Uwe Steinhoff, Berlin, Germany <i>Cardiac excitation currents reflected in the MCG – diagnostic opportunities</i>	Thomas König, Bern, CH <i>Electrical neuroimaging in psychiatry: methodological challenges and clinical applications</i>
8:50	Kiwoong Kim, Daejeon, South Korea <i>Cardiac source imaging: Realistic conductor model vs simplified conductor model</i>	Armida Mucci, Naples, I <i>ERP topography and tomography in schizophrenia: translational aspects.</i>
9:10	Ronald Wakai, Wisconsin, USA <i>Fetal Magnetocardiography: An Effective and Practical Tool for Fetal Cardiology</i>	David Linden, Cardiff, UK <i>The challenges and promise of electrical neuroimaging in psychiatry</i>
9:30	Discussion	Daniel Brandeis, Heidelberg, D <i>Electrical and multimodal neuroimaging in ADHD: translational aspects.</i>
9:50		Discussion

Friday Sept. 6 10:30 – 12:00		
	Symposium 7	Symposium 8
	Multimodal approaches to understand oscillatory activity <i>Chair: Charles Schroeder, New York, USA</i>	ISNIP Symposium: Important clinical concepts in neuroimaging <i>Johannes Schröder, Heidelberg, D and Konrad Maurer, Frankfurt, D</i>
10:30	Charles Schroeder, New York, USA <i>Mechanisms and functional significance of excitability oscillations in neuronal ensembles</i>	Lawrence Whalley, Aberdeen, UK <i>Cerebral Correlates of Cognitive Reserve</i>
10:50	Christoph Kayser, Glasgow, UK <i>Oscillatory phase: a signature and mechanism for sensory encoding?</i>	Monte S. Buchsbaum, San Diego, USA <i>Wisdom, Resilience, and Decay: Three facets of the frontal lobe life trajectory</i>
11:10	Andreas Kleinschmidt, Geneva, CH <i>Alpha oscillations and attention</i>	Sebastian Walther, Bern, CH <i>Imaging psychiatric symptoms in the cerebral motor system in schizophrenia</i>
11:30	Petra Ritter, Berlin, D <i>Integrating Full Brain Modeling and Multimodal Neuroimaging</i>	
11:50	Discussion	Discussion

Friday Sept. 6 14:00 – 15:10		
	Free Communication 3	Free Communication 4
	Network analysis <i>Chair: Biyu Jade He, Bethesda</i>	Dementia and mood disorders <i>Monte S. Buchsbaum, San Diego</i>
14:00	Damien Benis, La Tronche, F <i>Subthalamic nucleus activity dissociates proactive and reactive inhibition in patients with Parkinson's disease</i>	Zoltan Koles, Edmonton, CAN <i>Phase Anomalies in the Cortical Source-Current Activity in Depression</i>
14:10	Kay Jann, Los Angeles, USA <i>Reliability of Resting Brain Networks in BOLD and ASL fMRI across Time and Platforms</i>	Miranka Wirth, Berkeley, USA <i>Neuroprotective Pathways? Cognitive and physical activity, Alzheimer's disease pathological biomarkers and cognitive functioning in cognitively normal older adults</i>
14:20	Joanne Hale, Birmingham, UK <i>Investigating the effect of functional connectivity definition on graph theoretical metrics</i>	Lana Kambeitz-Ilankovic, München, D <i>Association between white matter hyperintensities and resting state fMRI in early-stage Alzheimer's disease.</i>
14:30	Gijs Plomp, Geneva, CH <i>Evaluating the physiological plausibility of time-varying connectivity methods using large-scale evoked potentials in an animal model</i>	Tobias Bracht, Bern, CH <i>White matter microstructure alterations of the medial forebrain bundle in major depressive disorder</i>
14:40	Stephen Mayhew, Birmingham, UK <i>Trial-by-trial global modulation of BOLD responses to simple, sensory stimuli: implications for functional brain imaging and understanding positive and negative BOLD responses</i>	Irena Rektorova, Brno, CZR <i>Functional imaging of the default mode network in cognitively impaired patients with Parkinson's disease</i>
14:50	Alfred Schouten, Delft, Netherland <i>Time delays cannot be estimated from the phase-frequency relationship of coherence</i>	Tanju Surmeli, Istanbul, Turkey <i>Qeeg-neurometric analysis guided neurofeedback (nf) treatment in dementia: 20 cases</i>
15:00	Discussion	Discussion

Friday Sept. 6 15:30 – 17:20		
	Symposium 9	Symposium 10
	Forward modeling in EEG/MEG and brain stimulation <i>Chair: Jens Haueisen, Ilmenau, D</i>	Recent success and remaining obstacles in clinical applications of brain-computer interface technology <i>Eric W. Sellers, Tennessee, USA</i>
15:30	Jens Haueisen, Ilmenau & Jena, D <i>Skull defects influence MEG source reconstruction</i>	Cuntai Guan, Singapore <i>Clinical Studies and Neuroimaging Analyses of Brain-Computer Interface for Stroke Rehabilitation</i>
15:50	Thomas Knösche, Leipzig, D <i>Skull modeling using FEM</i>	Ander Ramos & Niels Birbaumer, Tübingen, Brain-Machine-Interfaces in Complete Paralysis and Chronic Stroke
16:10	Matti Stenroos, Helsinki, F & Cambridge, UK <i>Modeling the skull fine-structure with boundary element method</i>	Leslie Collins, Duke, USA <i>Statistical methods for improving Brain-Computer Interface P300 speller speed and accuracy in disabled and non-disabled population</i>
16:30	Carsten H. Wolters, Münster, D <i>Influence of volume conduction on presurgical epilepsy diagnosis and brain stimulation</i>	Andrea Kübler, Würzburg, D <i>Bridging gaps: independent home use of Brain-Computer Interface</i>
16:50	Ceon Ramon, Washington, USA & Reykjavik, Iceland <i>Forward modeling in EEG/MEG and brain stimulation</i>	Eric W. Sellers, Tennessee, USA <i>The Challenge of Communication in Complete Paralysis</i>
17:10	Discussion	Discussion

Saturday Sept. 7 10:30 – 12:00		
	Symposium 11	Symposium 12
	Validation and clinical application of inverse EEG, MEG and ECG <i>Chair: Geertjan Huiskamp Utrecht, NL</i>	Functional selectivity: reality or wishful thinking? <i>Micah Murray, Lausanne, CH</i>
10:30	Richard Wennberg, Toronto, Canada <i>Electromagnetic source imaging of extended cortical sources: Reliability and validity of inverse EEG/MEG applied to human K-complexes and temporal lobe spikes</i>	Gregg H. Recanzone, Davis, USA <i>Spatial and Temporal processing in the core and belt auditory cortex of macaque monkeys</i>
10:50	Seppo Ahlfors, Boston, USA <i>Complementary properties of EEG and MEG</i>	Bruno Rossion, Louvain-la-Neuve, B <i>The non-hierarchical view of face perception in the human brain</i>
11:10	Christophe Grova, Montreal, Canada <i>Evaluation of the spatial extent of the sources of epileptic spikes in MEG</i>	Kalanit Grill-Spector, Stanford, USA <i>Corresponding electrocartography and functional magnetic resonance imaging responses in human ventral temporal cortex arise within 120ms</i>
11:30	Thom Oostendorp, Nijmegen, NL <i>Clinical validation of inverse ECG</i>	Micah Murray, Lausanne, CH <i>A multi-modal approach to revealing the multisensory properties of primary cortices in humans</i>
11:50	Discussion	Discussion

Saturday Sept. 7 14:00 – 15:10		
	Free Communication 5	Free Communication 6
	Perception & Cognition <i>Chair: Thomas König, Bern</i>	Schizophrenia & other psychiatric diseases <i>Chair: Dean F Salisbury, Pittsburgh</i>
14:00	Wolfgang Skrandies, Giessen, D <i>Mathematical Problem Solving: Effects of Learning on Evoked EEG Frequencies</i>	Pierre Flor-Henry, Edmonton, Canada <i>EEG Studies of Various Manifestations of Affective Disorders (Source Localization: LORETA and BEAMFORMER)</i>
14:10	Lorena Gianotti, Basel, CH <i>Why some people discount more than others: baseline activation in the dorsal PFC mediates the link between COMT genotype and impatient choice</i>	Steffen Bollmann, Zürich, CH <i>Spatial Working Memory in Attention-Deficit/Hyperactivity Disorder</i>
14:20	Juliane Britz, Geneva, CH <i>Micro-state dependent perceptual awareness</i>	Dean Salisbury, Pittsburgh, USA <i>Intact top-down modulation of the n400 ERP by expectancy in schizophrenia</i>
14:30	Agatha Lenartowicz, Los Angeles, USA <i>Concurrent EEG-fMRI Study of the Neural Substrates of Spatial Encoding in ADHD</i>	Daniel Mathalon, San Francisco, USA <i>Deficient Default Mode Network Suppression During Working Memory Performance in Individuals at Clinical High Risk for Psychosis and in Early Schizophrenia</i>
14:40	Di Lorenzo Giorgio, Rome, Italy <i>EEG functional connectivity during Eye Movement Desensitization and Reprocessing is related with psychological tests</i>	Umberto Volpe, Naples, Italy <i>Neural circuits involved in reward anticipation in deficit and non-deficit schizophrenia</i>
14:50	Johanna Zumer, Nijmegen, The Netherlands <i>Control of sensory alpha modulations and their effect on gating downstream processing</i>	Gianluca Mingoia, Jena, D <i>Frequency domains of resting state default mode network activity in schizophrenia</i>
15:00	Discussion	Discussion

Saturday Sept. 7 15:30 – 17:20		
	Symposium 13	Symposium 14
	Brain Decoding <i>Chair: Dimitri Van De Ville, Geneva & Lausanne</i>	Multimodal imaging of the psychosis high-risk state <i>Stefan Borgwardt & Paolo Fusar-Poli Basel, CH & London, GB</i>
15:30	John-Dylan Haynes, Berlin, D <i>Decoding and predicting intentions: Lessons for the architecture of prefrontal cortex</i>	Renata Smieskova, Basel, CH <i>Brain functional and structural abnormalities associated with ongoing psychosis: A multimodal approach</i>
15:50	Jonas Richardi, Stanford, USA <i>Clinical applications of inference at the individual level with brain graphs</i>	Paola Fusar-Poli, London, GB <i>Multimodal Imaging in people at clinical high risk for psychosis</i>
16:10	Marzia de Lucia, Lausanne, CH <i>Multivariate decoding of auditory stimuli in comatose patients</i>	Stephan Eliez, Geneva, CH <i>22q11.2 deletion syndrome: a neuro-developmental model to understand psychosis</i>
16:30	Klaus-Robert Müller, Berlin, D <i>Multimodal Imaging and BCI</i>	André Schmidt, Basel, CH <i>Dysconnectivity in emerging psychosis</i>
16:50	Elia Formisano, Maastricht, NL <i>The computational architecture of the human auditory cortex</i>	Nikolaos Koutsouleris, Munich, CH <i>Multivariate pattern recognition in the psychosis high-risk state</i>
17:10	Discussion	Discussion

Sunday Sept. 8 10:30 – 12:00

Symposium 15		Symposium 16	
	Controversial Issues in EEG/MEG Connectivity Analysis <i>Chair: Kensuke Sekihara, Tokyo, and Adrian Guggisberg, Geneva</i>	The clinical use of electrophysiological analysis of large scale cerebral interactions <i>Ivan Bodis-Wollner, New York, USA</i>	
10:30	Kensuke Sekihara, Tokyo, Japan <i>Difficulties and pitfalls in estimating brain connectivity</i>	Susanna Balazs, Vienna, Austria <i>Gamma Band Coherence in the EEG as Expression of Brain Connectivity in unresponsive wakefulness syndrome (UWS) .</i>	
10:50	Jan-Mathijs Schoffelen, Nijmegen, NL <i>Estimating spurious connectivity in MEG source space</i>	Andrea Antal, Göttingen, D <i>Transcranial near-infrared stimulation induces neuroplastic changes in the intact human cortex</i>	
11:10	Adrian G. Guggisberg, Geneva, CH <i>Behavioral and clinical relevance of EEG/MEG functional connectivity</i>	Ivan Bodis-Wollner, New York, USA <i>Voluntary Saccades in the scalp EEG and frontal modulation of posterior perisaccadic parietal gamma EEG</i>	
11:30	Guido Nolte, Hamburg, Germany <i>Estimating causal relations in the presence of mixed and colored noise</i>	Konrad Maurer, Frankfurt, D <i>Gamma Activity Reveals higher cognitive abilities in man and Enables abstract thinking.</i>	
11:50	Discussion	George Fein, Honolulu, USA <i>Resting State Connectivity Neurofeedback Treatment for Addiction</i>	
11:50		Discussion	