

IBB workshop on multi-channel TES and epilepsy



Goal

Goal of this workshop is to exchange our knowledge on the reconstruction and transcranial stimulation of epilepsy networks using EEG, MEG, MRI and TES. We will present new methodology on which our improved reconstruction and stimulation methods are relying and discuss experimental and clinical setups and results. The workshop will be interdisciplinary, including experts from the fields of Neurosciences, Medicine, Engineering, Mathematics, Physics and other disciplines.

Venue

The workshop will take place in the seminarroom of the Institute for Biomagnetism and Biosignalanalysis, University of Münster, Malmedyweg 15, 48149 Münster



For further information please contact

Prof. Dr. Carsten Wolters,
Tel. +49 251 83-56904,
carsten.wolters@wwu.de

<http://biomag.uni-muenster.de>

Time schedule

Participants:

- Walter Paulus and Niels Focke (Clin.Neurophysiol., Göttingen)
- Lyubomir Zagorchev, Goran Lantz, Sergei Turovets, Catherine Paulsen, Viral Sheth and Paul Holman (Philips-Neuro)
- Kuo Min-Fang (IfADo, Dortmund)
- Philipp Küpper (Epilepsy center Münster-Osnabrück, Klinikum Osnabrück)
- Gabriel Möddel (Epilepsy center Münster-Osnabrück, UKM)
- Christian Engwer (Applied Maths, WWU)
- IBB Münster & Collaborators

11:00-11:30

Carsten Wolters (IBB, WWU):

"EEG and combined EEG/MEG source analysis in presurgical epilepsy diagnosis using calibrated realistic head models"

11:30-12:00

Gabriel Möddel (Epilepsiezentrum Münster-Osnabrück):

"Application of realistic head models for localization of the epileptogenic zone as a prerequisite for targeted neurostimulation"

12:00-12:30

Christian Engwer (Applied Maths, WWU):

"DUNEuro: Modern finite element methods (FEM) for the EEG/MEG and TES forward problems"

12:30-14:00

Lunch break

14:00-14:30

Carsten Wolters (IBB, WWU):

"Targeted multi-channel TES optimization methods for short-time (intensity-based) and long-time (focality-based) stimulation"

14:30-15:00

Lyubomir Zagorchev (Philips-Neuro):

"Utility of HD EEG for pre-surgical epilepsy planning"

15:00 to 15:30

Niels Focke

(Georg-August-Universität Göttingen, Klinik für Klinische Neurophysiologie)
"Multimodal Imaging Approaches for the Localization of the Epileptogenic Focus"

15:30-16:00 Coffee pause

16:00 to 17:15 (IBB Institute Colloquium)

Walter Paulus

(Georg-August-Universität Göttingen, Klinik für Klinische Neurophysiologie)
"Which method of transcranial stimulation for which purpose"

18:00 Dinner in A2 restaurant