

Call for Participation

Autumn School 2008: Magnetoencephalography

The "Autumn School 2008: Magnetoencephalography" is a joint project of the Integrated Research Training Group (IGK) of the Collaborative Research Center 550 (SFB 550), the MEG-Center and the Graduate School of Neural & Behavioural Sciences / International Max Planck Research School in Tübingen and addresses PhD students of Neurosciences and related fields.

The aim of this course is to provide basic and advanced knowledge of Magnetoencephalography, giving an introduction into the basic principles, the methodology and experimental procedure, state-of-the-art developments, as well as lectures in special and advanced data analysis. Additionally, the course offers the opportunity to put knowledge to work in hands-on sessions.

We are happy to announce that all speakers confirmed participation, all leading specialists in their fields. Please find the detailed program below.

General Information

Date and location

The Autumn School is scheduled from Wednesday, October 15th, to Friday, October 17th, 2008 and will be held at the Conference Center of the University Hospital (Otfried-Müller-Str. 6) and at the MEG-Center (Otfried-Müller-Str. 47) in Tübingen.

Certificate of Attendance

Confirmations of attendance will be issued at the registration desk.

Credits

Members of the Integrated Research Training Group are kindly asked to actively participate by presenting a poster of their research project. Members of the Graduate School of Neural & Behavioural Sciences / International Max Planck Research School as well as external participants applying for credits will also have to present their work that way.

What is covered by the registration fee?

During the session breaks refreshments and snacks will be served. Lunch is provided on Thursday, Oct 16th and Friday, Oct 17th. On Wednesday, Oct 15th, a dinner will be offered after the poster session at the conference venue. Furthermore, the registration fee includes an Abstract book.

Language

The official language of the Autumn School will be English.

Accommodation

http://www.tuebingen-info.de/hotels/hotel_en.htm

Registration

Deadline for registration

August 1st, 2008

Registration fee

100 Euro. Attendance certificates will be provided.

Number of participants

The number of participants is restricted. There will be a selection procedure according to scientific background and interests. Please fill out the form provided with this announcement.

Posters

Active participation is mandatory for members of the IGK and possible for all other participants by presenting their work in form of a poster.

Application

Please fill out the application form which is provided with this announcement and register via e-mail to: gabi.walker@med.uni-tuebingen.de

Account information

Account holder: Universitätsklinikum Tübingen
Account number: 1 208 075 000
Bank: Baden-Württembergische Bank Tübingen
BLZ: 641 200 30
Purpose: Projekt D.33.00099.2, Kostenstelle 9312900,
Catchword 'D.33.00099.2-IGK-AutumnSchool'

PROGRAM



Wednesday, October 15, 2008

13:00-13:30 Registration

13:30-14:00 Welcome

Hanspeter Mallot
University of Tübingen

MEG Basics

14:00-15:00 Magnetoencephalography
Lecture

- Basic principles
- Applications
- Multimodal integration with fMRI

Gian Luca Romani
University of Chieti

15:00-16:00 The physics of SQUIDS
Lecture

Reinhold Kleiner
University of Tübingen

16:00-16:30 - Coffee break -

16:30-17:30 Forward modeling in MEG data analysis
Lecture

Jens Hauelsen
Technical University
Ilmenau

17:30-18:00 Concluding discussion

18:00-18:30 - Break -

18:30 Poster Session

Dinner

Thursday, October 16, 2008

Hands-on in the MEG lab

09:00-13:00 Experimental design & stimulation
Data acquisition with an adult whole-head MEG system
Fetal MEG
Data handling

4 Rotating groups

13:00-14:00 - Lunch break -

Special Analysis Approaches

14:00-15:00 Beamformer source-localisation of task-related oscillatory power changes and their relation to the haemodynamic response
Lecture

Krish Singh
Cardiff University

15:00-16:00	Time-frequency analysis applied to understand human memory processing Lecture	Ole Jensen F.C. Donders Centre, Nijmegen
16:00-16:30	- Coffee break -	
16:30-17:30	Machine learning approaches Lecture	Johanna Zumer University of Nottingham
17:30-18:00	Concluding discussion	

Friday, October 17, 2008

Hands-on in Advanced Analysis

09:00-12:00	Analysis on the sensor level using FieldTrip (Group A) <ul style="list-style-type: none"> • Spectral analysis, wavelets and multitapers • Statistical analysis, multiple comparison correction and clustering Analysis on the source level using BESA (Group B) <ul style="list-style-type: none"> • Appropriate preparation of data for source analysis • Multiple source analysis and distributed source imaging • Multiple source beamforming in the time-frequency domain 	Robert Oostenveld F.C. Donders Centre, Nijmegen Michael Scherg MEGIS Software GmbH, Munich
12:00-13:00	- Lunch break -	
13:00-16:00	Analysis on the sensor level using FieldTrip (Group B) <ul style="list-style-type: none"> • Spectral analysis, wavelets and multitapers • Statistical analysis, multiple comparison correction and clustering Analysis on the source level using BESA (Group A) <ul style="list-style-type: none"> • Appropriate preparation of data for source analysis • Multiple source analysis and distributed source imaging • Multiple source beamforming in the time-frequency domain 	Robert Oostenveld F.C. Donders Centre, Nijmegen Michael Scherg MEGIS Software GmbH, Munich
16:00-16:30	Concluding discussion and Evaluation	