

Brainstorm Workshop Program

Requirements

The participants are required to bring a laptop (an external mouse will add to your comfort). In order to make the session as efficient as possible, we ask all the attendees to download, install and test the software <http://neuroimage.usc.edu/brainstorm/> and sample dataset on their laptops prior to the workshop. The web site where to download the sample data will be announced soon. Please check frequently the congress website for an update where to download the sample data. Please read carefully the following instructions (instructions for a former workshop in Florence, Italy, but the installing instructions are the same): [How to prepare your laptop for the training \(http://neuroimage.usc.edu/brainstorm/WorkshopFlorence2013Install\)](http://neuroimage.usc.edu/brainstorm/WorkshopFlorence2013Install)

Brainstorm session

09:00-10:00: Laptop clinic and breakfast

- Bring your laptop if you are not sure you were successful in installing the material for the training session

10:00-10:45: Brainstorm overview

- Introduction
- Software architecture
- Typical data workflow

10:45-11:15: Hands-on training begins

- Database explorer
- Working with template phantom brains (if you don't have individual MRIs)
- Introduction to anatomical atlases

11:15-12:00: Coffee break

12:00-14:00: Hands-on training

- Co-registration EEG/ MRI
- Reviewing continuous recordings
- Artifact detection and correction
- Filtering and epoching
- Averaging, observation of a typical visual evoked potential
- Head modeling, cortical source reconstruction

14:00-16:00: Lunch break

16:00-18:00: Hands-on training resumes

- Definition of ROIs, tracking the processing of the visual information millisecond by millisecond at the cortex level
- Frequency and time-frequency analysis
- Export of source level data to SPM12 for statistics
- If time:
 - Advanced scripting interface
 - Other topics can be discussed depending on the audience specific requests