



## BESA<sup>®</sup> Research Workshop

From raw data to source images and source coherence

Barcelona, June 4/5, 2010

### Day 1

09:00 - 09:45	<b>Introduction:</b> EEG/MEG source imaging and localization using multiple sources
09:45 - 10:30	<b>Introduction to source analysis:</b> Hands on simulated data I
10:30 - 11:00	- Coffee break -
11:00 - 11:45	<b>Working with regional sources:</b> Hands on simulated data II
11:45 - 12:30	<b>Multiple conditions</b> analyzed with regional sources: Hands on auditory evoked potentials
12:30 - 13:30	- Lunch break -
13:30 - 14:30	<b>Data review, preprocessing and ERP module:</b> Hands on auditory RT-Experiment I
14:30 - 15:30	<b>Sequential fitting strategy with regional sources:</b> Hands on auditory RT-Experiment II
15:30 - 16:00	- Coffee break -
16:00 - 17:00	<b>Using MRI &amp; fMRI to create a seeded multiple source model:</b> Hands on auditory RT-Experiment III
17:00 - 17:30	<b>Concluding discussion</b>

### Day 2

09:00 - 09:45	<b>Time-frequency analysis and source coherence:</b> Introduction
09:45 - 10:45	<b>Source Coherence:</b> Hands on simulated data
10:45 - 11:15	- Coffee break -
11:15 - 12:00	<b>Multiple Source Beamforming (MSBF):</b> Hands on simulated and real data.
12:00 - 12:45	<b>Distributed 3D Source Images:</b> CLARA, LORETA, sLORETA, swLORETA, LAURA, sSLOFO, minimum norm etc.
12:45 - 13:45	- Lunch break -
13:45 - 14:45	<b>Batch scripting and statistics:</b> Fast analysis of multiple subject studies using grand averages; MATLAB <sup>®</sup> interface.
14:45 - 15:15	- Coffee break -
15:15 - 16:30	<b>Artifact correction:</b> Advanced methods contrasting brain and artifact topographies
16:30 - 17:00	<b>Advanced Topics:</b> Digital filters, Density Spectral Arrays (DSA), FFT, correlation analysis, pattern detection and averaging
17:00 - 17:30	<b>Concluding discussion</b>

Venue: New Horizons Computer Learning, c/ Lucà 1, 08022 Barcelona, Spain.