



BESA® Research Workshop Munich, May 02-04, 2016

What can you expect?

- A workshop program catered to the needs of beginners through to advanced source analysis – choose the program customized to your needs
- Hands-on analysis of a real dataset from raw data to source images and source coherence – step by step.
- Introductory presentations to help understanding the methodological background of BESA Research features.
- Please note: The program is subject to changes.

Day 1 Getting started and ERP

Introductory level	13:00-13:15	Introduction
	13:15-14:30	Data Review (FFT, DSA, re-montaging), Preprocessing (interpolation, artifact handling, filtering)
	14:30-15:00	- Coffee break -
	15:00-16:15	Artifact Correction (automatic and manual), Trigger Handling (using attributes, defining conditions), Artifact Rejection , Averaging , Classic ERP Analysis (peak analysis, mean amplitudes)
	16:15-17:00	Batch Processing (creating grand averages, combining conditions)

Day 2 Source Analysis and Source Imaging

Advanced level	09:00-10:30	Discrete Source Analysis (single dipoles vs. regional sources)
	10:30-11:00	- Coffee break -
	11:00-12:30	Coregistration of EEG and MRI data (using BESA MRI)
	12:30-13:30	- Lunch break -
	13:30-15:00	Distributed Source Analysis I (Comparison of different volume techniques, e.g. LAURA, sLORETA)
	15:00-15:30	- Coffee break -
	15:30-17:00	Distributed Source Analysis II (cortical imaging, template head models)



Day 3 Source Coherence and Statistics – <i>optionally</i> Clinical Epilepsy Pipeline			
Advanced level	09:00-10:30	Source Montages (creating source montages), Artifact Correction (understanding the background and different techniques including PCA and ICA)	
	10:30-11:00	- Coffee break -	
	11:00-12:30	Time-Frequency Analysis (complex demodulation), Coherence (sensor and source space), Beamforming (multiple source vs. single source), Dynamic Imaging of Coherent Sources (DICS)	
	12:30-13:30	- Lunch break -	
		BESA Statistics	Clinical Epilepsy Pipeline
	13:30-15:00	Cross-subject Statistics (using batch scripting and BESA Statistics)	Find interictal spikes and analyse onset (using BESA Epilepsy, BESA Research and BESA MRI)
	15:00-15:30	- Coffee break -	- Coffee break -
	15:30-17:00	ANOVA, ANCOVA, and Correlation	Find seizures and mark onset (automatic and manually using BESA Epilepsy)

Venue: Maritim Hotel, Goethestraße 7, 80336 München