BESA® Research Workshop Munich, March 20-22, 2017

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 – *optionally* 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: Ambiance Rivoli Hotel, Albert-Rosshaupter-Strasse 22, 81369 München