

#### **BESA Statistics**

**CE**-certified software for cross-subject statistics of **EEG/MEG** data



#### **Intuitive Workflow**



Optimized for data type

#### Data Input Prelin

- Event-related potentials / fields (ERP/F)
- Image data, e.g. LORETA, beamforming
- Time-frequency data, e.g. temporal-spectral evolution, coherence, inter-trial phase-locking
- Source waveforms

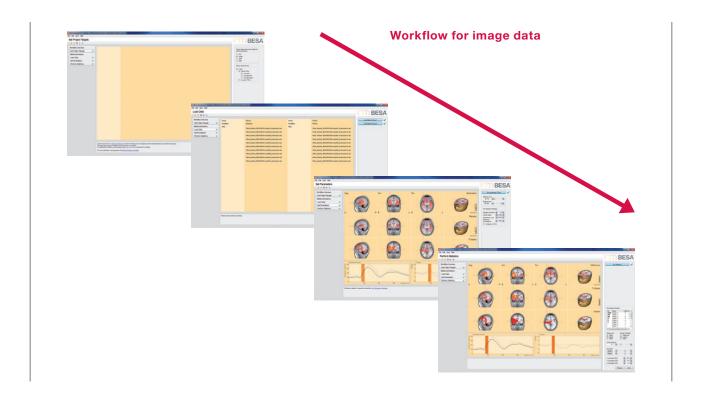
## Total Total

**Preliminary Statistics** 

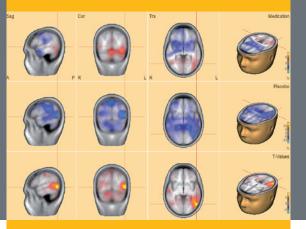
For defining regions of interest

#### **Preliminary Statistics**

- Two groups (e.g. patients, controls) or conditions within the same group of subjects (e.g. time 1, time 2) can be compared
- Paired or unpaired Student's T-tests are calculated and visualized
- Based on these preliminary T-tests regions of interest can be defined that are passed on to permutation testing



### **Cross-Subject Statistics based on Permutation Tests**



Significant clusters in time, space and frequency are determined

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**Visualization of Significant** 

Suitable for publications

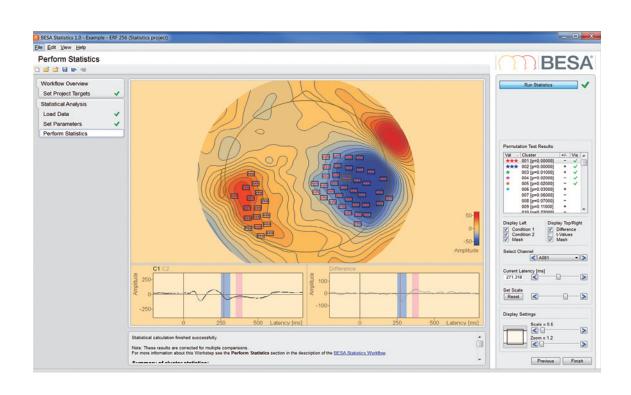
**Data Clusters** 

#### **Cluster Permutation Statistics**

- BESA® Statistics will determine significant clusters in time and if applicable space and frequency that show robust differences between groups / conditions
- Clusters will be probed for significance by permutation testing
- Significant data clusters are visualized in categories (highly significant, significant, trend)
- Results are corrected for multiple comparisons

#### **Exporting Data**

- Statistical values can be directly used in scientific reports without further analysis
- **NEW** All statistical results can be exported
- **NEW** Detailed cluster information per person can be exported
- **NEW** All images can be saved as vector graphics (eps)





For sales and product enquiries, please contact:

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The CE marking certifies that this product fulfills the basic requirements of the Medical Devices Directive MDD 93/42/EEC. The number represents the identification number of the Notified Body which carried out testing and certification.

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