BESA®

NEUROSPEC
Research Neurosciences

Why choose BESA Research?

Why BESA Research?

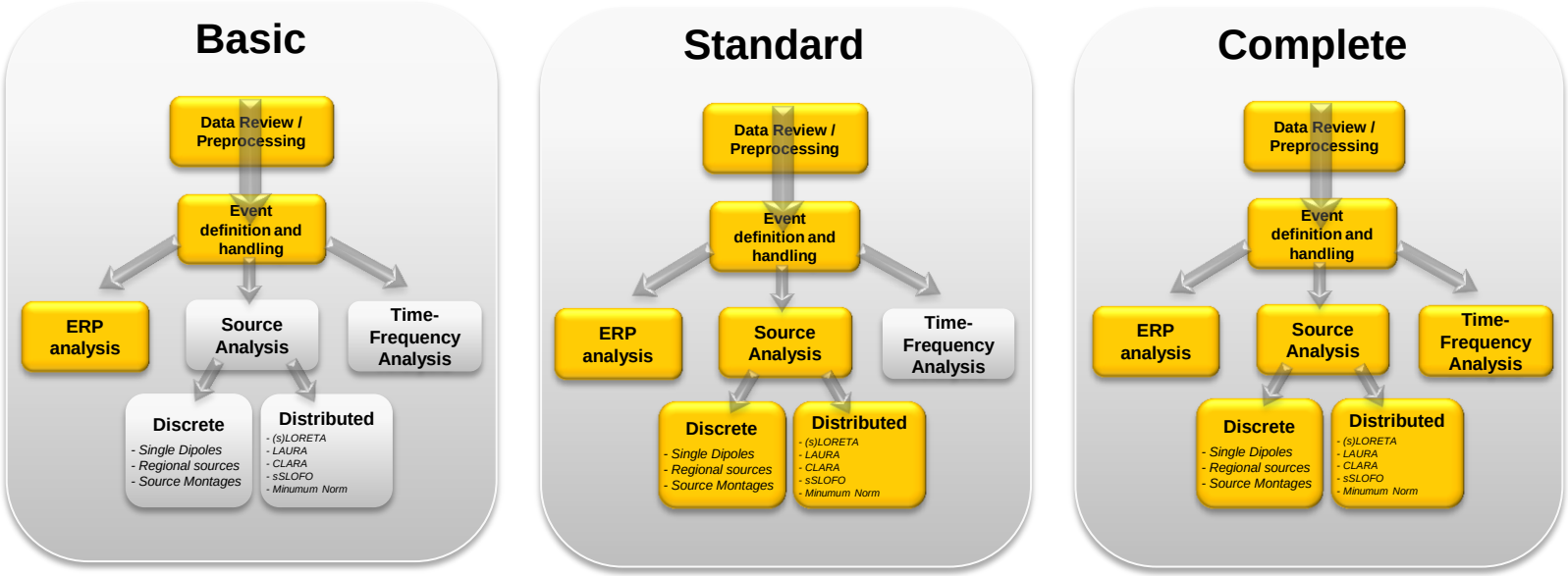
Is this you? Then BESA will be perfect for you!

- I want to use the most advanced methods for data analysis without having to program.
- I want a program that allows me everything from preprocessing to source analysis, time-frequency analysis and source coherence.
- I want a program that is easy to use.
- I want to analyze a large number of datasets quickly.
- I want to be able to compute cross-subjects statistics of my EEG analysis results without having to switch programs.
- I want to be able to use realistic head models (FEM).

Coming in Autumn

BESA Research offers…

A modular system fitted to your needs



+ BESA **Statistics**: **Cross-subject statistics** of ERPs, Source Waveforms, Images, Time-Frequency Data

+ BESA **MRI**: **Coregistration** of EEG/MEG with individual MRI, creating **FEM** models

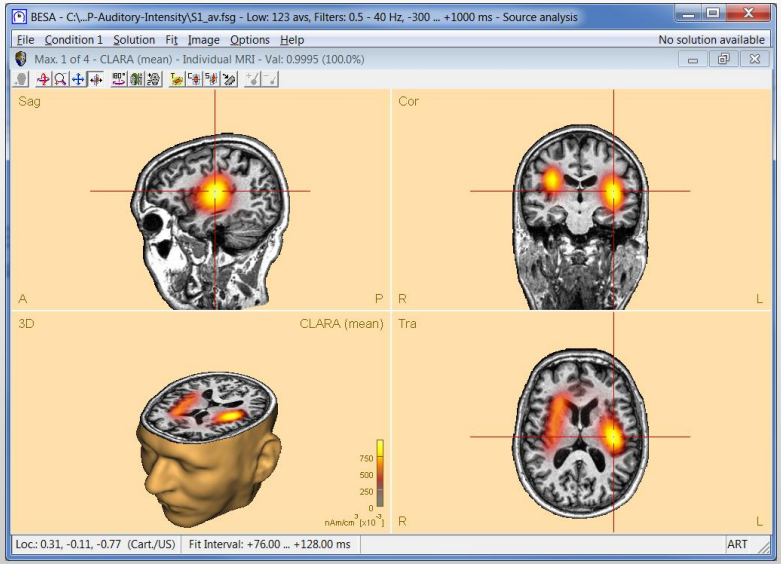
+ BESA **MEG**: Tools for MEG analysis

Coming in Autumn

More than Dipoles…

Besides BESA‘s well known discrete source analysis techniques, BESA Research offers a wide range of distributed source models (LORETA, sLORETA, LAURA, Minumum Norm, sSLOFO, **CLARA**) and a **multiple source beamformer**.

CLARA



CLARA is an iterative distributed source analysis technique developed by BESA yielding much **more focal** results than classic distributed techniques.

More than Dipoles…

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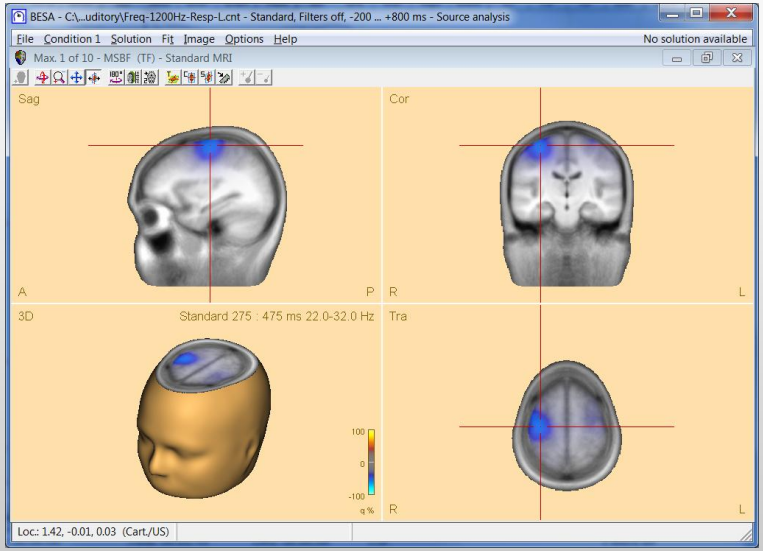
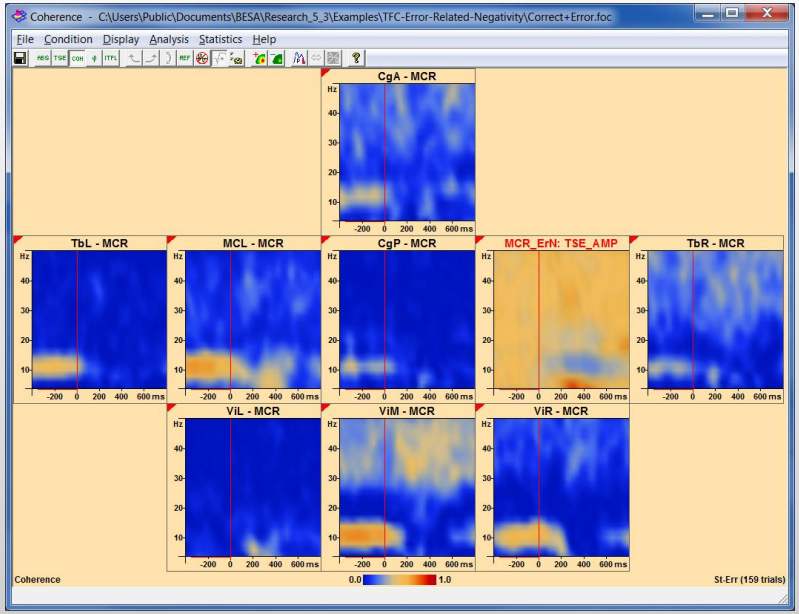
Multiple Source Beamforming



In contrast to single source beamformers, BESA‘s multiple source beamformer is able to **image highly correlated sources** in the time-frequency domain.

Source Coherence

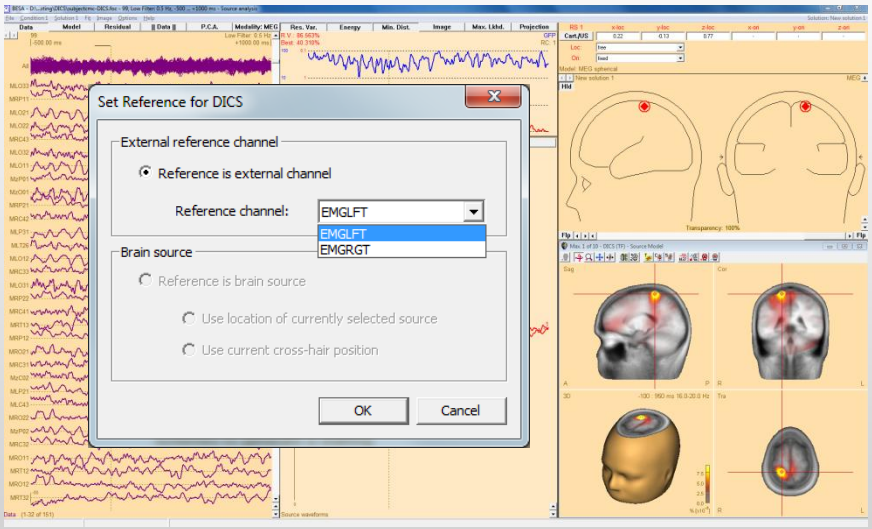


Using BESA‘s unique source montages approach it is possible to compute coherence in source space even without prior source fitting.

More than Dipoles…

Coming in Autumn

DICS (Dynamic Imaging of Coherent Sources)



DICS allows to compute coherence between any pair of locations in the brain or between an external channel and a brain source.

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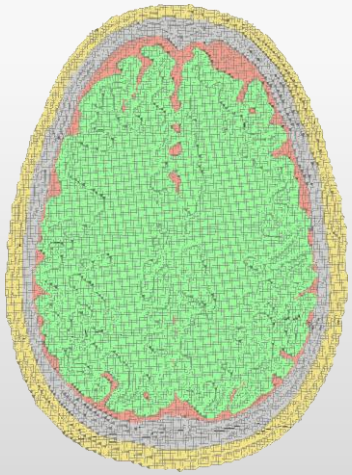
Realistic Head Modelling using FEM (Finite Elements Method)

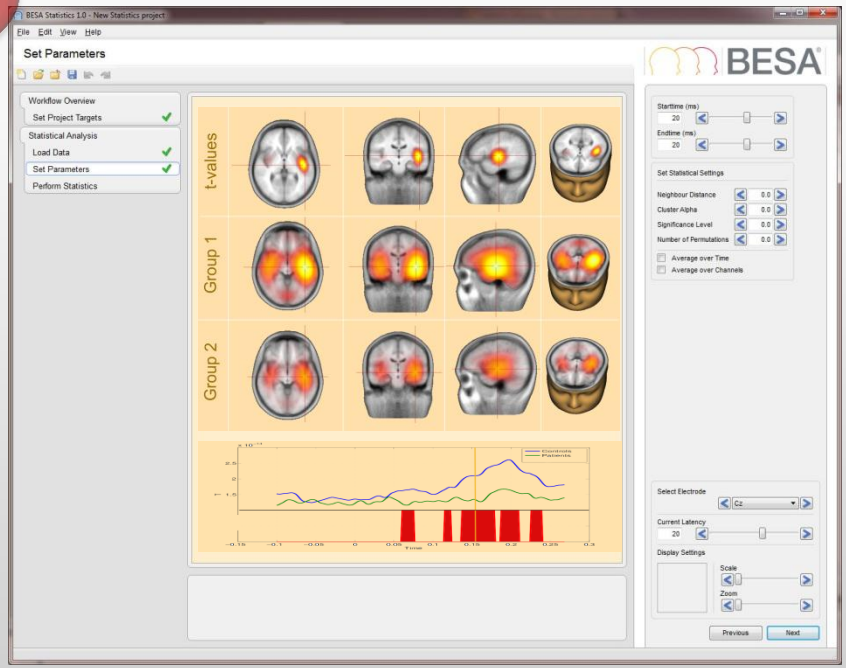


In combination with BESA MRI it is possible to coregister EEG and MRI data and to create realistic head models based on FEM. FEM models allow you to reconstruct the individual brain, CSF (including ventricles), skin and skull. FEM models are the most precise approach to realistic head modelling. Thus, FEM is the method of choice if you are interested in **source analysis in infants, children or patients with brain lesions.**

More than Dipoles…

Coming in Autumn

BESA Statistics



BESA Research is the only software that comes with a **workflow-guided statistics toolbox** for cross-subject analysis of ERPs, source waveforms, images and time-frequency data. BESA Statistics calculates parameter-free permutation tests and creates high-quality graphics ready for publishing. **No switching programs anymore!**

BESA Research – a full circle…