Source Information Flow Toolbox

RRID:SCR_002561
Type: Tool

Proper Citation

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Resource Information

URL: http://sccn.ucsd.edu/wiki/SIFT

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Description: A GUI-enabled EEGLAB plugin for modeling and visualizing dynamical interactions between electrophysiological signals (EEG, ECoG, MEG, etc), preferably after transforming signals into the source domain. The toolbox consists of four modules: (1) Data Preprocessing, (2) Model Fitting and Connectivity Estimation, (3) Statistical Analysis, (4) Visualization, with a fifth Group Analysis module in development. Module 2 currently includes several adaptive multivariate autoregressive modeling (AMVAR) algorithms, including segmentation AMVAR and Kalman filtering. This subsequently allows the user to validate the model and estimate (in the time-frequency domain) a wide range of multivariate Granger-causal and coherence measures published to date. Module 3 includes routines for parametric and non-parametric significance testing. Module 4 contains routines for interactive visualization of dynamical interactions across time, frequency and anatomical source location.

Abbreviations: SIFT

Resource Type: segmentation software, software toolkit, data visualization software, image analysis software, software resource, software application, data processing software

Keywords: connectivity analysis, directed transfer analysis, eeg, meg, electrocorticography, granger causality, partial directed coherence

Availability: GNU General Public License

Resource Name: Source Information Flow Toolbox
Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 3 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.


Kaminski M, et al. (2014) Directed Transfer Function is not influenced by volume conduction-inexpedient pre-processing should be avoided. Frontiers in computational neuroscience, 8, 61.