Resource Summary Report

Generated by NIF on May 12, 2025

Forward: Accurate finite element electromagnetic head models

RRID:SCR_014109

Type: Tool

Proper Citation

Forward: Accurate finite element electromagnetic head models (RRID:SCR_014109)

Resource Information

URL: http://www.nitrc.org/projects/forward/

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Description: A project which aims to simplify the preparation of accurate electromagnetic head models for EEG forward modeling. It builds off of the seminal SimNIBS tool for electromagnetic field modelling of transcranial magnetic stimulation and transcranial direct current stimulation. Human skin, skull, cerebrospinal fluid, and brain meshing pipelines have been rewritten with Nipype to ease access parallel processing and to allow users to start/stop the workflows. Conductivity tensor mapping from diffusion-weighted imaging is also included.

Synonyms: Forward

Resource Type: software application, simulation software, software resource

Keywords: model, simulation software, electromagnetic head model, eeg forward modeling, mapping

Funding: Belgian National Fund for Scientific Research;

Marie Curie Initial Training Network in Neurophysics PITN-GA-2009-238593

Resource Name: Forward: Accurate finite element electromagnetic head models

Resource ID: SCR_014109

License: GNU GPL v2

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Ratings and Alerts

No rating or validation information has been found for Forward: Accurate finite element electromagnetic head models.

No alerts have been found for Forward: Accurate finite element electromagnetic head models.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 4 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Martínez-Molina MP, et al. (2024) Lateral prefrontal theta oscillations causally drive a computational mechanism underlying conflict expectation and adaptation. Nature communications, 15(1), 9858.

Grob AM, et al. (2024) Causal role of the angular gyrus in insight-driven memory reconfiguration. eLife, 12.

Ahn B, et al. (2022) Scavenging mitochondrial hydrogen peroxide by peroxiredoxin 3 overexpression attenuates contractile dysfunction and muscle atrophy in a murine model of accelerated sarcopenia. Aging cell, 21(3), e13569.

Wang J, et al. (2020) Inhibition of PLK4 might enhance the anti-tumour effect of bortezomib on glioblastoma via PTEN/PI3K/AKT/mTOR signalling pathway. Journal of cellular and molecular medicine, 24(7), 3931.