# Felix Lucka

## Publications


[1] M. Burger and F. Lucka. Maximum a posteriori estimates in linear inverse problems with log-concave priors are proper bayes estimators. *Inverse Problems*, 30(11):114004, 2014.

[2] S.M. Rampersad, A.M. Janssen, F. Lucka, U. Aydin, B. Lanfer, S. Lew, C.H. Wolters, D.F. Stegeman, and T.F. Oostendorp. Simulating transcranial direct current stimulation with a detailed anisotropic human head model. *Neural Systems and Rehabilitation Engineering, IEEE Transactions on*, 22(3):441–452, May 2014.

[3] A.M. Janssen, S.M. Rampersad, F. Lucka, B. Lanfer, S. Lew, Ü. Aydin, C.H. Wolters, D.F. Stegeman, and T.F. Oostendorp. The influence of sulcus width on simulated electric fields induced by transcranial magnetic stimulation. *Physics in Medicine and Biology*, 58(14):4881, 2013.

[4] F Lucka. Fast markov chain monte carlo sampling for sparse bayesian inference in high-dimensional inverse problems using l1-type priors. *Inverse Problems*, 28(12):125012, 2012.

[5] F. Lucka, S. Pursiainen, M. Burger, and C.H. Wolters. Hierarchical Bayesian inference for the EEG inverse problem using realistic FE head models: Depth localization and source separation for focal primary currents. *NeuroImage*, 61(4):1364–1382, 2012.

[6] S. Pursiainen, F. Lucka, and C.H. Wolters. Complete electrode model in EEG: relationship and differences to the point electrode model. *Physics in Medicine & Biology*, 57(4):999–1017, 2012.

[7] F. Lucka, S. Pursiainen, M. Burger, and C.H. Wolters. Hierarchical Bayesian Models for EEG Inversion: Depth Localization and Source Separation for Focal Sources in Realistic FE Head Models. In *Biomedical Engineering*, volume 56. De Gruyter, 2011.

[8] F. Lucka. Hierarchical Bayesian Approaches to the Inverse Problem of EEG/MEG Current Density Reconstruction. Diploma thesis, University of Münster., March 2011.


Last updated: November 5, 2014