Matthias Morzfeld, List of Publications

Journal Publications


11. D. Hodyss, C.H. Bishop, and M. Morzfeld, To what extent is your data assimilation scheme designed to find the posterior mean, the posterior mode or something else?, Tellus A: Dynamic Meteorology and Oceanography, 68:1, 30625 (2016).

12. A.J. Chorin, F. Lu, R.N. Miller, M. Morzfeld, and X. Tu, Sampling, feasibility, and priors in data assimilation, Discrete and Continuous Dynamical Systems 36(8), special issue dedicated to Peter D. Lax on the occasion of his ninetieth birthday, (2016).


Book Chapters


Conference Proceedings


5. A.J. Chorin, M. Morzfeld, and X. Tu, Implicit sampling, with application to data assimilation, Conference in honor of J.L. Lions, Fudan University, Shanghai (2012).


8. F. Ma and M. Morzfeld, A general methodology for decoupling linear dynamical systems, 12th East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-12), Hong Kong, China (2011).


CONFERENCE PRESENTATIONS


M. Morzfeld, A. Fournier, G. Hulot Understanding and Predicting Geomagnetic Dipole Reversals Via Low Dimensional Models and Data Assimilation, American Geophysical Union: General Assembly, San Francisco (2014).


one-dimensional sparsely observed MHD system, European Geosciences Union: General Assembly, Vienna (2011).


M. Morzfeld and F. Ma, The decoupling of second-order linear dynamical systems, 82nd Annual Meeting International Association of Applied Mathematics and Mechanics (GAMM), Graz, Austria, (2011).

M. Morzfeld, A.J. Chorin, and X. Tu, Implicit filters for data assimilation, American Geophysical Union: Meeting of the Americas, Foz do Iguacu, Brazil (2010).

**Poster-Presentations**


S. Lunderman, M. Morzfeld, More data is not always better: why and how feature-based data assimilation can be useful, American Geophysical Union: General Assembly, New Orleans (2017).

T.M. Harty, A. Lorenzo, W. Holmgren, M. Morzfeld, Forecasting Global Horizontal Irradiance Using the LETKF and a Combination of Advected Satellite Images and Sparse Ground Sensors, American Geophysical Union: General Assembly, New Orleans (2017).

J. Adams, M. Morzfeld, B.A. Buffett, Studying the geomagnetic polarity time scale and superchrons by scalar models and feature based data assimilation, American Geophysical Union: General Assembly, San Francisco (2016).


A. Leach, K. Lin, M. Morzfeld, Symmetrized importance samplers for uncertainty quantification and data assimilation, American Geophysical Union: General Assembly, San Francisco (2016).


