

TEN SELECTED PUBLICATIONS

LASSI ROININEN

Date of the publication list: August 30, 2024

Journal articles

- [1] Neil K Chada, Marco A Iglesias, Lassi Roininen, and Andrew M Stuart. “Parameterizations for ensemble Kalman inversion”. In: *Inverse Problems* 34.5 (2018), p. 055009. URL: <http://stacks.iop.org/0266-5611/34/i=5/a=055009>.
- [2] Lassi Roininen, Mark Girolami, Sari Lasanen, and Markku Markkanen. “Hyperpriors for Matérn fields with applications in Bayesian inversion”. In: *Inverse Problems & Imaging* 13 (2019), pp. 1–29. ISSN: 1930-8337. DOI: 10.3934/ipi.2019001. URL: <http://aimsciences.org/article/id/d17bde6b-3e5f-438d-af0a-b712cf433748>.
- [3] Karla Monterrubio-Gómez, Lassi Roininen, Sara Wade, Theodoros Damoulas, and Mark Girolami. “Posterior inference for sparse hierarchical non-stationary models”. In: *Computational Statistics & Data Analysis* 148 (2020), p. 106954. ISSN: 0167-9473. DOI: <https://doi.org/10.1016/j.csda.2020.106954>. URL: <http://www.sciencedirect.com/science/article/pii/S0167947320300451>.
- [4] Muhammad Fuady Emzir, Sari J Lasanen, Zenith Purisha, Lassi Roininen, and Simo Särkkä. “Non-Stationary Multi-layered Gaussian Priors for Bayesian Inversion”. In: *Inverse Problems* (2020). URL: <http://iopscience.iop.org/article/10.1088/1361-6420/abc962>.
- [5] Jarkko Suuronen, Neil K. Chada, and Lassi Roininen. “Cauchy Markov random field priors for Bayesian inversion”. In: *Statistics and Computing* 32 (2022). DOI: <https://doi.org/10.1007/s11222-022-10089-z>.
- [6] J. Norberg, S. Käki, L. Roininen, J. Mielich, and I. I. Virtanen. “Model-Free Approach for Regional Ionospheric Multi-Instrument Imaging”. In: *Journal of Geophysical Research: Space Physics* 128.1 (2023). e2022JA030794 2022JA030794, e2022JA030794. DOI: <https://doi.org/10.1029/2022JA030794>. eprint: <https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2022JA030794>. URL: <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2022JA030794>.
- [7] Jarkko Suuronen, Tomás Soto, Neil K Chada, and Lassi Roininen. “Bayesian inversion with α -stable priors”. In: *Inverse Problems* 39.10 (Aug. 2023), p. 105007. DOI: 10.1088/1361-6420/acf154. URL: <https://dx.doi.org/10.1088/1361-6420/acf154>.
- [8] Angelina Senchukova, Jarkko Suuronen, Jere Heikkinen, and Lassi Roininen. “Geometry Parameter Estimation for Sparse X-Ray Log Imaging”. In: *Journal of Mathematical Imaging and Vision* (2023). DOI: <https://doi.org/10.1007/s10851-023-01167-6>.
- [9] Teemu Härkönen, Erik M. Vartiainen, Lasse Lensu, Matthew T. Moores, and Lassi Roininen. “Log-Gaussian Gamma Processes for Training Bayesian Neural Networks in Raman and CARS Spectroscopies”. In: *Physical Chemistry Chemical Physics* 26 (2024), pp. 3389–3399.
- [10] Angelina Senchukova, Felipe Uribe, and Lassi Roininen. “Bayesian inversion with Student’s t priors based on Gaussian scale mixtures”. In: *Inverse Problems, to appear* (2024).