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**Summary**

Bayesian methods, sequential inference, particle filtering, Monte Carlo methods

**Memberships**

**Organisations**

[School of Mathematics](#)

**Statistical Science**

- [Statistical Science](#)

**Recent publications**

- Bernton, E, Jacob, PE, Gerber, M & Robert, CP, 2019, '[Approximate Bayesian computation with the Wasserstein distance](#)'. *Journal of the Royal Statistical Society: Series B*.
- Bernton, E, Jacob, PE, Gerber, M & Robert, CP, 2019, '[On parameter estimation with the Wasserstein distance](#)'. *Information and Inference: A Journal of the IMA*.
- Gerber, M, Chopin, N & Whiteley, N, 2018, '[Negative association, ordering and convergence of resampling methods](#)'. *Annals of Statistics*.
- Gerber, M & Heine, K, 2018, '[Perturbed Bayesian Inference for Online Parameter Estimation](#)'. *arXiv*.
- Chopin, N & Gerber, M, 2018, '[Sequential Quasi-Monte Carlo: Introduction for Non-experts, Dimension Reduction, Application to Partly Observed Diffusion Processes](#)'. in: *Monte Carlo and Quasi-Monte Carlo Methods: MCQMC 2016, Stanford, CA, August 14-19*. Springer International Publishing AG
- Gerber, M & Whiteley, N, 2017, '[Stability with respect to initial conditions in V-norm for nonlinear filters with ergodic observations](#)'. *Journal of Applied Probability*, vol 54., pp. 118-133
- Gerber, M & Bornn, L, 2017, '[Improving simulated annealing through derandomization](#)'. *Journal of Global Optimization*, vol 68., pp. 189-217
- Gerber, M & Bornn, L, 2017, '[Convergence Results for a Class of Time-Varying Simulated Annealing Algorithms](#)'. *Stochastic Processes and their Applications*.
- Gerber, M & Chopin, N, 2017, '[Convergence of sequential quasi-Monte Carlo smoothing algorithms](#)'. *Bernoulli*, vol 23., pp. 2951-2987
- Schretter, C, He, Z, Gerber, M, Chopin, N & Niederreiter, H, 2016, '[Van der Corput and Golden Ratio sequences along the Hilbert space filling curve](#)'. in: *Monte Carlo and Quasi-Monte Carlo Methods: MCQMC, Leuven, Belgium, April 2014*. Springer International Publishing AG

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