Publications et Travaux

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1 Articles soumis pour publication ou en révision

[1] Boucher, M., Chauveau D. and Zani, M. (2025), Largest magnitude for off-diagonal auto-correlation coefficients in high dimensional framework.
Statistical Papers (en révision).

2 Articles publiés ou à paraître

Ordre à partir du plus récent.

[2] Chauveau D. and Vandekerkhove, P. (2024), Entropy-Based Burn-in Time Analysis and Ranking for (A)MCMC Algorithms in High Dimension. *SIAM/ASA Journal on Uncertainty Quantification*, `https://doi.org/10.1137/23M1611932` (to appear, DOI not valid yet).

[3] D. Chauveau, B. Garel, and S. Mercier. (2019) Testing for univariate two-component Gaussian mixture in practice. *Journal de la Société Française de Statistique*, **Vol. 160**, n°1, 86–113.

[4] Le Gac A.-L., Lafon-Placette C., Chauveau D., Ségura V., Delaunay A., Fichot R., Marron N., Le Jan I., Berthelot A., Bodineau G., Bastien J.-C., Brignolas F., Maury S. (2018). Winter-dormant shoot apical meristem in poplar trees shows environmental epigenetic memory, *Journal of Experimental Botany*, **69**, 20, Pages 4821–4837, `https://doi.org/10.1093/jxb/ery271`

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69, 3, 537–551 `dx.doi.org/10.1093/jxb/erx409`

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[10] D. Chauveau, N. P. A. Saby, T. G. Orton, B. Lemercier, C. Walter, and D. Arrouays (2014). Large-scale simultaneous hypothesis testing in monitoring carbon content from french soil database : A semi-parametric mixture approach. *Geoderma* 219–220, 117–124.

[11] Chauveau D. and Vandekerkhove, P. (2014), Simulation Based Nearest Neighbor Entropy Estimation for (Adaptive) MCMC Evaluation, In *JSM Proceedings*, Statistical Computing Section. Alexandria, VA : American Statistical Association. 2816–2827.

[12] Didier Chauveau et Stéphane Cordier (2013), Le recrutement local dans les universités : variable suivant les disciplines et stable dans le temps. *Images des Mathématiques*, CNRS. http://images.math.cnrs.fr/recrutement-local.html

[13] Chauveau, D. and Vandekerkhove, P. (2013), Smoothness of Metropolis-Hastings algorithm and application to entropy estimation. *ESAIM : Probability and Statistics*, **17** (2013) 419-–431. DOI : http://dx.doi.org/10.1051/ps/2012004

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3 Développement de logiciels

[34] Didier Chauveau and Houssam Alrachid (2019). **EntropyMCMC** : An R Package for MCMC Simulation and Convergence Evaluation using Entropy and Kullback Divergence Estimation.

`https://CRAN.R-project.org/package=EntropyMCMC`

[35] Young, D. S., Benaglia, T., Chauveau, D., Elmore, R. T., Hettmansperger, T. P., Hunter, D. R., Thomas, H., and Xuan, F. (2007) **mixtools** : Tools for mixture models, R package version 0.3.0.
`https://CRAN.R-project.org/package=mixtools`

[36] Réalisation et publication en ligne d'une boîte à outil logicielle pour le diagnostique automatique de la convergence des algorithmes MCMC (1998). Codes en `C` et `Mathematica`.

Articles en préparation

[37] Didier Chauveau, F. Gosselin, Thierno Diallo, *Extended Sampled Posterior Internal Goodness-of-fit p-value for Bayesian Checking of Hierarchical Models*

[38] Boucher, M., Chauveau D. and Zani, M. (2024), Coherence of high-dimensional random matrix in a Gaussian case : GP-GPU implementation .

4 Discussions d'articles

[39] Bordes, L. and Chauveau, D. (2014), Discussion of : EM-based likelihood inference for some lifetime distributions based on left truncated and right censored data and associated model discrimination, by N. Balakrishnan an D. Mitra, *South African Statistical Journal*, **48**, 197–200.

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5 Rapports techniques et prépublications de travaux soumis ou incomplètement publiés

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- Foki, J., Chauveau, D. et Delmas, J.-F. (2009). *Analyse de signaux mesurant le développement du système perceptif d'un bébé*
- Foki, J., Chauveau, D. et Delmas, J.-F. (2009). *Test of agreement between several partitions*
- Chauveau D. and Hunter D. R. (2013), ECM and MM algorithms for mixtures with constrained parameters, Preprint HAL `http://hal.archives-ouvertes.fr/hal-00625285`
- Chauveau D. and Vandekerkhove, P. (2014), The Nearest Neighbor entropy estimate : an adequate tool for adaptive MCMC evaluation ; Preprint HAL `http://hal.archives-ouvertes.fr/hal-01068081`
- Chauveau, D. and Hunter, D. R. (2019). *Doubly Smoothed MLE and MM algorithm for multivariate nonparametric mixtures consistent estimation.*