

Mikolaj KASPRZAK

Professeur assistant

mikolaj.kasprzak@essec.edu

Département: Systèmes d'Information, Data
Analytics et Opérations
Campus de Cergy

DIPLÔMES

DIPLÔMES

- | | |
|------|--|
| 2019 | Doctor of Philosophy, Statistique
(University of Oxford Royaume-Uni) |
| 2015 | Master of Science, Mathematics, Operational Research, Statistics and
Economics
(University of Warwick Royaume-Uni) |

CARRIÈRE

POSITIONS ACADÉMIQUES PRINCIPALES

- | | |
|-------------------|--|
| 2024 - Présent | Professeur assistant (ESSEC Business School France) |
| 2015 - 2019-02-26 | DPhil student (University of Oxford Royaume-Uni) |
| 2018 - 2021-08-31 | Research Associate (Université du Luxembourg Luxembourg) |
| 2021 - 2022-08-31 | Marie Skłodowska-Curie Individual Fellow (Massachusetts Institute of
Technology États-Unis) |
| 2022 - 2022-11-30 | Marie Skłodowska-Curie Individual Fellow (Secondment) (University College
London Royaume-Uni) |
| 2022 - 2023-11-30 | Marie Skłodowska-Curie Individual Fellow (Université du Luxembourg
Luxembourg) |

AUTRES POSITIONS

- | | |
|-------------------|---|
| 2023 - 2024-08-31 | Visiting Researcher (Université du Luxembourg Luxembourg) |
|-------------------|---|

AUTRES POSITIONS ACADÉMIQUES

2024 - 2028-08-31 Titulaire de la Chaire d'Excellence « Data Science »(ESSEC Business School France)

PUBLICATIONS

PRÉSENTATIONS DANS UN SÉMINAIRE DE RECHERCHE

[KASPRZAK, M., DÖBLER, C. et PECCATI, G. \(2022\). Stein's method and Gaussian process approximations. Dans: Probability and Statistics Seminar, University of Manchester. Manchester.](#)

[KASPRZAK, M., DÖBLER, C. et PECCATI, G. \(2021\). Functional limit theorems via Stein's method. Dans: Probability and Statistics Seminar, University of Boston. Boston.](#)

[KASPRZAK, M., DÖBLER, C. et PECCATI, G. \(2020\). Infinite-dimensional Stein's method with applications. Dans: Statistics Seminar, Imperial College London. London.](#)

[KASPRZAK, M. \(2017\). Diffusion approximations via time changes and Stein's method. Dans: Probability Seminar, University of Liège. Liège.](#)

[KASPRZAK, M. \(2017\). Functional approximations with Stein's method. Dans: Machine Learning Seminar, Gatsby Unit, University College London. London.](#)

[KASPRZAK, M. \(2017\). Diffusion approximations via time changes and Stein's method. Dans: Probability Seminar, University of Luxembourg. Luxembourg.](#)

[KASPRZAK, M., GIORDANO, R. et BRODERICK, T. \(2023\). How good is your Laplace approximation of the Bayesian posterior? Finite-sample error bounds for a variety of useful divergences. Dans: Stochastics Seminar, Karlsruhe Institute of Technology. Karlsruhe.](#)

[KASPRZAK, M., GIORDANO, R. et BRODERICK, T. \(2022\). How good is your Laplace approximation? Finite-sample error bounds for a variety of useful divergences. Dans: Mathematical Statistics seminar, Weierstrass Institute. Berlin.](#)

[KASPRZAK, M., GIORDANO, R. et BRODERICK, T. \(2022\). How good is your Laplace approximation? Finite-sample error bounds for a variety of useful divergences. Dans: Statistics seminar, Université Catholique de Louvain. Louvain-la-Neuve.](#)

[KASPRZAK, M., GIORDANO, R. et BRODERICK, T. \(2022\). How good is your Laplace approximation? Finite-sample error bounds for a variety of useful divergences. Dans: Research](#)

[Seminar, Centre for Mathematical and Statistical Modelling, Brunel University. London.](#)

[KASPRZAK, M., HUGGINS, J.H., CAMPBELL, T. et BRODERICK, T. \(2019\). Scalable Gaussian Process Inference with Finite-data Mean and Variance Guarantees. Dans: Probability seminar, University of Luxembourg. Luxembourg.](#)

[KASPRZAK, M., WYNNE, G. et DUNCAN, A.B. \(2025\). A Fourier Representation of Kernel Stein Discrepancy with Application to Goodness-of-Fit Tests for Functional Data. Dans: Functional Data Analysis Seminar, Université Paris Cité. Paris.](#)

[KASPRZAK, M., GIORDANO, R., BRODERICK, T., POMPE, E. et JACOB, P. \(2026\). Quality of the Laplace approximation of Bayesian posteriors and cut posteriors. Dans: Statistics Seminar, LPSM, Sorbonne Université. Paris.](#)

ARTICLES

[KASPRZAK, M., DUNCAN, A.B. et VOLLMER, S.J. \(2017\). Note on A. Barbour's paper on Stein's method for diffusion approximations. *Electronic Communications in Probability*, 22, pp. 1-8.](#)

[KASPRZAK, M. \(2020\). Stein's method for multivariate Brownian approximations of sums under dependence. *Stochastic Processes and their Applications*, 130\(8\), pp. 4927-4967.](#)

[KASPRZAK, M. \(2020\). Functional approximations via Stein's method of exchangeable pairs. *Annales de l'Institut Henri Poincaré-Probabilités et Statistiques*, 56\(4\).](#)

[DÖBLER, C. et KASPRZAK, M. \(2021\). Stein's method of exchangeable pairs in multivariate functional approximations. *Electronic Journal of Probability*, 26, pp. 1-50.](#)

[DÖBLER, C., KASPRZAK, M. et PECCATI, G. \(2022\). Functional convergence of sequential U-processes with size-dependent kernels. *Annals of Applied Probability*, 32\(1\), pp. 551-601.](#)

[DÖBLER, C., KASPRZAK, M. et PECCATI, G. \(2022\). The multivariate functional de Jong CLT. *Probability Theory and Related Fields*, 184\(1-2\), pp. 367-399.](#)

[KASPRZAK, M. et PECCATI, G. \(2023\). Vector-valued statistics of binomial processes: Berry–Esseen bounds in the convex distance. *Annals of Applied Probability*, 33\(5\).](#)

[WYNNE, G., KASPRZAK, M. et DUNCAN, A.B. \(2025\). A Fourier Representation of Kernel Stein Discrepancy with Application to Goodness-of-Fit Tests for measures on infinite dimensional Hilbert spaces. *Bernoulli: A Journal of Mathematical Statistics and Probability*, 31\(2\), pp. 868-893.](#)

[KASPRZAK, M., GIORDANO, R. et BRODERICK, T. \(2025\). How good is your Laplace approximation of the Bayesian posterior? Finite-sample computable error bounds for a variety of useful divergences. *Journal of Machine Learning Research*, 26\(87\), pp. 1?81.](#)

ACTES D'UNE CONFÉRENCE

[HUGGINS, J.H., CAMPBELL, T., KASPRZAK, M. et BRODERICK, T. \(2019\). Scalable Gaussian Process Inference with Finite-data Mean and Variance Guarantees. Dans: *22nd International Conference on Artificial Intelligence and Statistics \(AISTATS\)*. Proceedings of Machine Learning Research.](#)

[HUGGINS, J.H., KASPRZAK, M., CAMPBELL, T. et BRODERICK, T. \(2020\). Validated Variational Inference via Practical Posterior Error Bounds. Dans: *23rd International Conference on Artificial Intelligence and Statistics \(AISTATS\)*. Palermo: Proceedings of Machine Learning Research.](#)

[WANG, Y., KASPRZAK, M. et HUGGINS, J.H. \(2023\). A Targeted Accuracy Diagnostic for Variational Approximations. Dans: *26th International Conference on Artificial Intelligence and Statistics \(AISTATS\)*. Valencia: Proceedings of Machine Learning Research.](#)

COMMUNICATIONS DANS UNE CONFÉRENCE

[WYNNE, G., KASPRZAK, M. et DUCAN, A. \(2024\). A Fourier Representation of Kernel Stein Discrepancy with Application to Goodness-of-Fit Tests for Measures on Infinite Dimensional Hilbert Spaces. Dans: *2024 Meeting in Mathematical Statistics: New challenges in high-dimensional statistics*. Marseille.](#)