Yoann POTIRON
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Nationality: French

Employment

Keio University.

04/2020 – Faculty Business and Commerce Keio University, Tokyo, Japan.
Associate professor.

04/2018 – 03/2020 Faculty Business and Commerce Keio University, Tokyo, Japan.
Tenured Assistant professor.

04/2016 – 03/2018 Faculty Business and Commerce Keio University, Tokyo, Japan.
Assistant professor.

University of Macau.

10/2024 and 12/2024 Faculty of Business Administration.
Visiting Faculty.

University of Geneva.

04/2022 – 02/2023 Geneva Finance Research Institute.
Visiting Faculty.

University of Cambridge.

12/2019 Faculty of Economics.
Visiting Faculty.

Hong Kong University of Science and Technology.

06/2016 Department of Information Systems.
Visiting Faculty.

Education

09/2013 – 03/2016 The University of Chicago, Department of Statistics.
M.S. and Ph.D (Committee: Per Aslak Mykland, Dacheng Xiu, Dan Nicolae, Greg Lawler).

09/2010 – 08/2013 Ecole Polytechnique, France.
B.S. (Diplome d'Ingenieur) in Applied Mathematics.

09/2007 – 06/2010 Universite Lyon 1, France.
Licence in Applied Mathematics.

2007 Lycee Vaugelas, Chambery, France.
French scientific Baccalaureat.

Published/accepted papers

Mutually exciting point processes with latency, with Vladimir Volkov. *Journal of the American Statistical Association*, 2025.

Non-explicit formula of boundary crossing probabilities by the Girsanov theorem. *Annals of the Institute of Statistical Mathematics*, 2025, 77(3), 353-385.

Estimation for high-frequency data under parametric market microstructure noise, with Simon Clinet. *Annals of the Institute of Statistical Mathematics*, 2021, 73, 649-669.

Cointegration in high frequency data, with Simon Clinet. *Electronic Journal of Statistics*, 2021, 15(1), 1263-1327.

Disentangling sources of high frequency market microstructure noise, with Simon Clinet. *Journal of Business & Economic Statistics*, 2021, 39(1), 18-39.

Local Parametric Estimation in High-Frequency Data, with Per Aslak Mykland. *Journal of Business & Economic Statistics*, 2020, 38(3), 679-692.
Testing if the market microstructure noise is fully explained by the informational content of some variables from the limit order book, with Simon Clinet. *Journal of Econometrics*, 2019, 209, 289-337.
Efficient Asymptotic Variance Reduction when Estimating Volatility in High Frequency Data, with Simon Clinet. *Journal of Econometrics*, 2018, 206, 103-142.
Statistical Inference for the Doubly Stochastic Self-exciting Process, with Simon Clinet. *Bernoulli*, 2018, 24(4B), 3469-3493.
Classifying Patents Based on their Semantic Content, with Antonin Bergeaud and Juste Raimbault. *PLoS ONE*, 2017, 12(4), e0176310.
Estimation of Integrated Quadratic Covariation with Endogenous Sampling Times, with Per Aslak Mykland, *Journal of Econometrics*, 2017, 197, 20-41.

Papers in revision

Parametric inference for Hawkes processes with general kernel. Revise and Resubmit for the *Annals of the Institute of Statistical Mathematics*.
Nonparametric estimation of hitting-time variance, with Julian Kota Kikuchi and Chang Yuan Li. Reject and Resubmit for the *Annals of the Institute of Statistical Mathematics*.
First passage time and inverse problem for continuous local martingales. Revise and Resubmit for the *Journal of Statistical Planning and Inference*.

Submitted/working papers

Approximation convergence in the inverse first-passage time problem, with Leonard Vimont. Submitted to the *Journal of Statistical Planning and Inference*.
High-frequency estimation of Ito semimartingale baseline for Hawkes processes, with Olivier Scaillet, Vladimir Volkov and Seunghyeon Yu. In revision to be submitted to the *Journal of Business & Economic Statistics*.
Parametric inference for nonlinear Hawkes processes with general kernel. Submitted to the *Journal of Statistical Planning and Inference*.
Nonparametric inference for Hawkes processes with a stochastic time-dependent baseline. Submitted to the *Journal of Statistical Planning and Inference*.
Nonparametric local estimation of the partial area under the receiver operating characteristic curve, with Chang Yuan Li. To be submitted to the *Journal of American and Statistical Association*.
The realized copula of stochastic volatility, with Kim Christensen, Zhi Liu and Liu Wenjing. To be submitted to the *Journal of Econometrics*.
Estimation of latency for Hawkes processes with a polynomial periodic kernel, with Deniz Erdemlioglu, Vladimir Volkov and Taiyu Xu. To be submitted to the *Journal of American and Statistical Association*.
Estimation of time-dependent latency with locally stationary Hawkes processes, with Deniz Erdemlioglu, Vladimir Volkov and Taiyu Xu.
Estimation of branching ratio for Hawkes processes with Ito semimartingale baseline, with with Olivier Scaillet, Vladimir Volkov and Seunghyeon Yu. To be submitted to the *Journal of American and Statistical Association*.
Estimation of time-dependent latency with locally stationary Hawkes processes, with Deniz Erdemlioglu, Vladimir Volkov and Taiyu Xu.
Testing the Ito semimartingale assumption with bipower variation, with Kim Christensen, Ulrich Hounyo, Mark Podolskij and Gregoire Szymanski..
What drives latency in high-frequency trading?, with Olivier Scaillet and Vladimir Volkov.
Noncausal Hawkes processes, with Kim Christensen and Aleksei Kolokolov.

Brownian motion conditioned to spend limited time outside a monotone function, with Martin Kolb and Dominic Schickentanz.
Kaplan-Meier estimation for cumulative functionals of distribution function with censored data, with Chang Yuan Li.
High-dimensional Hawkes processes with high-frequency data, with Yi Ding.
Estimation of branching ratio high dimensional matrix for Hawkes processes with Ito semimartingale baseline, with Olivier Scaillet and Vladimir Volkov and Wenying Yao.
Estimation of Hawkes processes with structural changes, with Benjamin Poignard.

Reviewer services

Econometrics:	Journal of Business & Economic Statistics, Econometric Theory, Journal of Econometrics, Journal of Financial Econometrics, Journal of Forecasting.
Statistics:	Annals of Applied Statistics, Annals of Statistics, Annals of the Institute of Statistical Mathematics, Electronic Journal of Statistics, Journal of the American Statistical Association, Metrika, Statistica Sinica.
Applied probability:	Journal of Applied Probability, Science China Mathematics, Stochastic Processes and their Applications.
Finance:	International Journal of Theoretical and Applied Finance, Journal of Financial and Quantitative Analysis, Journal of Futures Markets, Quantitative Finance.
Management:	Financial Management, Research Policy.
Research agency:	Dutch Research Council.

Grants and fellowships

04/2023 – 03/2028	JSPS Grants-in-Aid for Scientific Research (B) "Duration models related problems in econometrics" (23H00807, sole investigator). *JPY17,290,000.*
04/2022 – 03/2023	Fukuzawa fund (sabbatical abroad). *JPY3,000,000.*
04/2020 – 03/2023	JSPS Grants-in-Aid for Early-Career Scientists "Econometric methods for high frequency data" (20K13470, sole investigator). *JPY4,290,000.*
04/2020 – 03/2021	Internal grant from Keio University "Econometric methods for high frequency data". *JPY1,000,000.*
04/2017 – 03/2020	JSPS Grants-in-Aid for Young Scientists B "Forecasting and model selection in time-varying parameter models" (17K13718, sole investigator). *JPY4,290,000.*
04/2018 – 03/2019	Internal grant from Keio University "An empirical analysis to disentangle sources of high frequency market microstructure noise". *JPY1,000,000.*
04/2016 – 03/2017	Internal grant from Keio University "Forecasting with time-varying parameter models". *JPY1,000,000.*
2015	The Stevanovich Student Fellowship in Quantitative Finance by The Stevanovich Center for Financial Mathematics at the University of Chicago. *USD5,000.*
09/2013 – 03/2016	Grant from The University of Chicago, Department of Statistics.
04/2013 – 08/2013	Student Exchange Support Program from Japan Student Services Organization (JASSO).
09/2010 – 08/2014	Ecole Polytechnique's fellowship from French government.

Membership

The Institute of Mathematical Statistics (IMS), The American Statistical Association, The Society for Financial Econometrics (SoFIE), The Econometric Society.

Lectures

2025 09/18 Seminar at the Geneva Finance Research Institute 08/18 World Congress of the Econometric Society (Seoul) 08/04 Joint Statistical Meetings (Nashville).

2024 12/11-12 First Macau International Conference on Business Intelligence and Analytics at the University of Macau 12/10 Seminar at the Faculty of Mathematics of the University of Macau 10/18 Seminar at the Faculty of Business Administration of the University of Macau 08/12 World Congress in Probability and Statistics in Ruhr University Bochum, Germany (presentation in session entitled "Stochastic Processes") 08/06 Joint Statistical Meetings 2024 in Portland Oregon (presentation in session entitled "New Methods in Nonparametric Time Series Analysis") 06/14 Sixteenth Annual SoFiE Conference at Pontifical Catholic Univerity of Rio de Janeiro (Rapid Fire Poster Presentation).

2023 12/18 The 16th International Conference of the ERCIM WG on CFE and Computational and Methodological Statistics (CFE-CMStatistics 2023), HTW Berlin University of Applied Sciences (organizer of a session entitled Duration data)10/11 Seminar at City University of Hong Kong College Business 08/02-03 The 6th International Conference on Econometrics and Statistics (EcoSta 2023), Waseda University, Tokyo (organizer of a session entitled Hawkes processes in econometrics and statistics, chair of a session on survival analysis) 07/01 (virtual) 2023 Asia Meeting of the Econometric Society at Tsinghua University, Beijing, China 06/15& 17 Fifteenth Annual SoFiE Conference at Sungkyunkwan University, Seoul (one talk in the pre-conference presented by Seunghyeon Yu and one flash poster session presented by Vladimir Volkov).

2022 12/18 The 15th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2022), King's College London12/09 33rd EC2 Conference, Econometrics of High Frequency Data & Factor Models, ESSEC Business School Paris (poster session) 12/08 Capital Fund Management (CFM) Paris seminar 12/06 Laboratoire Manceau de Mathematiques (LMM) Le Mans University seminar 07/01 (virtual) Statistical Methods in Finance 2022 jointly hosted by Chennai Mathematical Institute, Indian Statistical Institute, and North Dakota State University 06/20 (virtual) The 5th International Conference on Econometrics and Statistics (EcoSta 2022), Ryukoku University, Kyoto.

2021 12/19 (virtual) 14th International Conference of the ERCIM WG on Computational and Methodological Statistics at King's College London 09/17 (virtual) Research Webinar Series at Decision Sciences Area, Indian Institute of Management Bangalore.

2019 12/18 Mini workshop on Financial Econometrics at the University of Cambridge INET Institute 12/16 13th International Conference on Computational and Financial Econometrics at Senate House and Birkbeck University of London 06/27 The 3rd International Conference on Econometrics and Statistics (EcoSta 2019) at National Chung Hsing University, Taiwan 06/23 Nippon Finance Association 27th annual conference at Keio University 01/10 Mathematisches Seminar at Kiel University, Germany 07/04 Econometric Society Australasian Meeting at Auckland University of Technology.

2018	06/22 Asian meeting of the Econometric Society at Sogang University, Seoul 06/21 The 2nd International Conference on Econometrics and Statistics (EcoSta 2018) at the City University of Hong Kong.
2017	12/18 CMAP Ecole Polytechnique Seminar, Paris 11/28 Seminar at the Faculty of Business and Commerce (joint with the Econometrics workshop), Keio University 08/03 Joint Statistical Meetings in Baltimore, Maryland 07/26 SoFiE Financial Econometrics Summer School 2017 at Kellogg School of Management, Northwestern University, Chicago 06/20 Tenth Annual SoFiE Conference at NYU Stern School of Business 06/04 Asian meeting of the Econometric Society at The Chinese University of Hong Kong 03/15 Special Lecture and Workshop on Theory and Practice in Econometrics at Keio University 02/22 Workshop on Stochastic Models, Statistics and Their Applications, Humboldt-Universitat zu Berlin.
2016	12/15 The Quantitative Methods in Finance Conference, Sydney 12/12 Workshop on Portfolio dynamics and limit order books, Ecole Centrale Paris 09/09 Seminar at the Center for Mathematical Modeling and Data Science, Osaka University 07/08 6th International IMS-FIPS Workshop at the University of Alberta in Edmonton, Canada 06/13 Ninth Annual SoFiE Conference at City University of Hong Kong and GRU 04/25 ICS Hitotsubashi University Seminar 02/21 The Fourth Asian Quantitative Finance Conference (AQFC), the Osaka University Nakanoshima Center (Bachelier Finance conference) 01/21 IMES Bank of Japan Seminar 01/18 Hitotsubashi University Department of Economics Seminar 01/16 Keio University Department of Business and Commerce Seminar.
2015	12/18 HU Berlin Statistics Seminar 11/10 Institute of Economic Studies, Keio University Econometrics Workshop 10/25 Conference on new developments of statistical science in various fields, Toyama Syposium 08/10 Hong Kong University Science and Technology Business School Seminar 08/07 The University of Tokyo Seminar on Probability and Statistics 08/04 Conference Frontiers in Financial Econometrics. Hosted by Hitotsubashi Institute for Advanced Studies and CFEE (Center for Financial Engineering Education) 07/31 Seminar Center for the Study of Finance and Insurance Osaka 07/30 Math-fi Seminar. Department of Mathematical Sciences, Ritsumeikan University.

Teaching

Estimating Volatility in High-Frequency Data (2025 Spring, 2024 Spring, 2023 Fall, 2021 Spring, 2020 Fall, 2019 Fall, 2018 Fall, 2017 Fall, 2016 Fall). Keio University.
Essentials of Regression Analysis Using R (2025 Spring, 2024 Fall, 2023 Fall, 2021 Spring, 2020 Spring, 2019 Spring, 2018 Spring). Keio University.
Seminar. (2025, 2024, 2023, 2020, 2019) Keio University.
Brownian motion (2025 Fall, 2024 Fall, 2020 Spring, 2019 Spring, 2018 Spring, 2017 Spring, 2016 Spring). Keio University.
Special research topics in business and commerce on time series (2024 Spring, 2019 Fall, 2018 Fall). Keio University.
Time Series Analysis (2025 Fall, 2017 Fall, 2016 Fall). Keio University.

2016 Winter	TA STAT 33970/FINM 33170. The University of Chicago.
2015 Spring	Instructor STAT 234. The University of Chicago.
2014 Fall	TA STAT 220. The University of Chicago.
2014 Spring	TA STAT 33970/FINM 33170. The University of Chicago.
2014 Winter	TA STAT 234. The University of Chicago.

Students

(expected) 08/2026)	Liu Wenjing (Ph.D.).
08/2025)	Leonard Vimont (M.S.).
02/2023	Seunghyeon Yu (Ph.D.).
	Chang Yuan Li.
02/2023	Seunghyeon Yu (Ph.D., graduated).
08/2022	Julian Kota Kikuchi (B.S., graduated).
08/2022	Renyi Qu (B.S., graduated).
08/2021	Taro Tsuchiya (B.S., graduated).
08/2020	Meihuazi Chen (B.S., graduated).
08/2020	Kentaro Asaba (B.S., graduated).

Language

French:	native speaker.
English:	fluent.
Japanese:	very good level.
Italian:	able to communicate.