DAVID ITKIN

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PROFESSIONAL EXPERIENCE

London School of Economics and Political Science (LSE)
Assistant Professor (Tenure-Track), Statistics Department — *2024-Present*
Data Science Institute (DSI) Affiliate — *2025-Present*

Imperial College London
Honorary Lecturer, Mathematics Department — *2024-Present*
Chapman Fellow, Mathematics Department — *2022-2024*

EDUCATION

Carnegie Mellon University — *August 2017 - May 2022*
PhD in Mathematical Sciences
Advisor: Prof. Martin Larsson

University of Western Ontario — *Sept 2013 - May 2017*
Honours Bachelor of Science, Financial Modelling and Mathematics
J.B. Bancroft Science Prize – Highest graduating average in the faculty of science

PUBLICATIONS/ACCEPTED PAPERS

[1] X. Brokmann, L. Gonon, G. He, D. Itkin, J. Muhle-Karbe. Efficient trading with price impact. Accepted at *Mathematical Finance*, 2026.
[2] D. Itkin. Consumption-investment problem in rank-based models. Accepted at *SIAM Journal on Financial Mathematics*, 2026.
[3] D. Itkin, M. Larsson. Calibrated rank-based volatility stabilized models for large equity markets. Accepted at *Finance and Stochastics*, 2026.
[4] D. Itkin, B. Koch, M. Larsson, J. Teichmann. Ergodic robust maximization of asymptotic growth with stochastic factor processes. *Finance and Stochastics*, 2026, vol: 30, pg. 1225–1268.
[5] Brokmann, X., Itkin, D., Muhle-Karbe, J., Schmidt, P. Tackling nonlinear price impact with linear strategies. *Mathematical Finance*, 2025, vol. 35, no 2, pg. 422–440.
[6] D. Itkin, M. Larsson. Open markets and hybrid Jacobi processes. *Annals of Applied Probability*, 2024, vol. 34, no. 3, pg. 2940–2985.
[7] D. Itkin. Generalized Rank Dirichlet distributions. *Statistics and Probability Letters*, 2024, vol. 205, article no. 109950.
[8] D. Itkin, M. Larsson. Robust asymptotic growth in stochastic portfolio theory under long-only constraints. *Mathematical Finance*, 2022, vol. 32, no 1, pg. 114–171.
[9] T. Barron, D. Itkin. Toeplitz operators with discontinuous symbols on the sphere. In "Lie theory and its applications in physics", *Springer Proceedings in Mathematics and Statistics 191*, Springer, 2016.

PREPRINTS/SUBMITTED

[10] U. Çetin, D. Itkin, J. Muhle-Karbe. Insider competition across auctions and continuous trading. Preprint, 2026.
[11] D. Itkin, L. Sánchez-Betancourt. When hedging changes the payoff: option replication with price impact and execution costs arXiv: 2609.36257 (2026). (Submitted to *Operations Research*).
[12] D. Itkin, I. Karatzas. Folding representations of reflected diffusions. arXiv: 2607.28004 (2026). (Submitted to *Stochastic Processes and their Applications*).

[13] B. Binkert, D. Itkin, P. Mangers Bastian, J.Teichmann. Stochastic factors can matter: improving robust growth under ergodicity. arXiv: 2512.24906 (2025). (Minor Revision at *Mathematical Finance*).

[14] D. Itkin. Stochastic portfolio theory with price impact. arXiv: 2506.07993 (2025). (Submitted to *Mathematical Finance*).

TECHNICAL REPORTS

[15] D. Itkin, M. Larsson. On a class of rank-based continuous semimartingales. arXiv: 2104.04396 (2021).

AWARDS

2026 Rising Star in Quant Finance, awarded by Risk.net	2026
Bachelier Junior Travel Award (USD 1250)	2024
Cecilia Tanner Workshop Support (GBP 5000, with I. Gasteratos)	2023
Cecilia Tanner Research Impulse Award (GBP 1500 × 2)	2022-23
NSERC Postgraduate Scholarships: PGS-D (CAD 21,000 per annum x 3)	2019-2021

PRESENTATIONS

Invited Talks

2026: Volatility and Liquidity workshop (as discussant), Pavia; Columbia–NYU Financial Engineering Colloquium; Columbia Optimal Stopping and Related Fields Seminar; Cambridge University Algorithmic Trading Society Quant Conference; Birmingham Math Finance Seminar; Vienna Seminar in Math Finance and Probability; Paris Citè Math Finance Seminar; Bank of America Quant Speaker Series.

2025: Imperial College London, Oxford, The 2nd ETH-HK-Imperial Joint Workshop on Quantitative Finance, Pisa Stochastic Analysis Workshop, Bridging Theory and Practice in Finance: Stochastic Analysis and Machine Learning at BIRS Hangzhou

2024: Florida State University, Waterloo, NUS Singapore Young Mathematicians Forum, London-Paris Bachelier Workshop, UCLA (Online)

2023: University of York, Warwick, King's College London, SIAM FME Early Career Talk (Online), ETH, Oxford, Berlin

2022: Columbia, Boston University, LSE, Imperial, Michigan (Online), Waterloo (Online)

2021: 5th Eastern Conference on Math Finance (Online), Two Sigma PhD Symposium (Online), Intech Meeting (Online), Princeton (Online)

Other Presentations

Bachelier World Congress, Bologna 2026; SIAM FME, Miami 2025; Bachelier World Congress 2024; Junior Researchers in Stochastic Optimal Control, Berlin 2023; AMaMeF, Bielefeld 2023; Stochastic Control and Financial Engineering Conference, Princeton 2023; SIAM FME, Philadelphia 2023; Bachelier World Congress, 2022 (Virtual), 2nd Waterloo Student Conference of Stats, Act. Sci and Finance (Online), 2021;

TEACHING EXPERIENCE

LSE

ST213 – Introduction to Pricing, Hedging and Optimization	Winter 2025–2027
ST302 – Stochastic Processes *(seminars only)*	Autumn 2025
ST303 – Stochastic Simulation	Autumn 2026

Imperial College London, Business School

BUSI70615 – Mathematics for Finance (MSc Finance stream)	Autumn 2026

Imperial College London, Mathematics

MATH70126 – Stochastic Control in Finance — Spring 2023, 2024
MATH70122 – Convex Optimization — Spring 2023

Carnegie Mellon University (as a Teaching Assistant)

46-944 Stochastic Calculus for Finance I; 46-915 Advanced Derivative Models; 46-950 Numerical Methods, 46-956 Fixed Income; 21-217 Concepts of Mathematics

Certificates

Postgraduate Certificate in Higher Education (PGCertHE) — 2025

STUDENT SUPERVISION

LSE

PhD Students:

- Paul Mangers Bastian (with Kostas Kardaras) — 2025-2029 (Expected)
- Federico La Penna (with Umut Cetin) — 2026-2030 (Expected)
- Yuxuan Shen (with Kostas Kalogeropoulos) — 2026-2030 (Expected)

Master's Thesis Supervision: Zeyad Issa (2027 expected), Paul Mangers Bastian (with Josef Teichmann, 2025)

Capstone project supervision: Athicha Rianloetrattana, Heran Du, Melissa Monafred (2026)

Imperial

Master's Thesis Supervision: Yinbai Li (with BNP Paribas, 2024), Hellen Xu (2024), Matthieu Baboulène (with Velador Associates, 2023), Tommaso Ludovici (with Gresham Investment Management, 2023), Tingqu Zhou (with Bainbridge Partners, 2023)

Undergraduate Thesis Supervision: Zhenyu Lu (2026), Pedro Urbina (2023)

EVENTS (CO)-ORGANIZED

- JRSFM Seminar (joint with LSE Mathematics) — 2024-Present
- ETH – Hong Kong – Imperial Math Finance Workshop (with many) — June 2024
- Finance & Stochastics Seminar at Imperial (with J. Muhle-Karbe, Y. Zhang) — 2022-2024
- Bachelier London–Paris 2023 Workshop (with I. Gasteratos) — Sep 2023
- Stochastic Portfolio Theory Workshop (with J. Muhle-Karbe) — March 2023

SERVICE

Service at the LSE

- Deputy Director for the PhD Program — 2026-Present
- Deputy Director for the MSc in Financial Statistics — 2025-2026
- Staff Advisor for BSc Practitioners Challenge at LSE — 2024-Present
- Departmental research committee member — 2024-Present
- London Mathematical Finance Graduate School co-ordinator (with Kostas Kardaras) — 2025-Present
- Internal examiner for Maths PhD Defense (Hengjian Zhang) — Autumn 2026

Outside Service

- External examiner for MSc in Mathematical Finance at King's College London — 2025-Present
- External examiner for MRes Defense (Olivia Priscillia) at Oxford — Summer 2026
- Late stage reviewer for PhD candidates (Owen Futter, Joseph Mulligan) at Imperial — 2025
- Referee for the following journals

  - Mathematical Finance, Finance and Stochastics, Annals of Applied Probability, Quantitative Finance, Frontiers of Mathematical Finance, Applied Mathematics and Optimization, International Journal of Theoretical & Applied Finance, SIAM Journal on Financial Mathematics, Applied Mathematical Finance, Advances in Applied Probability.
- Participation and Engagement Reviewer for BIRS proposals 2026–2028