

CURRICULUM VITAE

Name: Miklós Rásonyi

Birth year: 1975

Citizenship: Hungarian

Family: Married, two children.

Degrees:

MSc in Mathematics, Eötvös Loránd University, Budapest, 1998.

Joint PhD in Applied Mathematics, Eötvös Loránd University, Budapest and Université de Franche-Comté, Besançon, 2002. (Supervisors: L. Gerencsér and Yu. Kabanov.)

DSc, Hungarian Academy of Sciences, 2017.

Work history:

1998–2009: Institute for Computer Science and Control, Hungarian Academy of Sciences, Budapest

2003–2016: Associate professor at the Faculty of Information Technology, Pázmány Péter Catholic University, Budapest (on leave 2009–2013)

2006–2008: Research fellow (part-time), Research Group on Financial and Actuarial Mathematics, Vienna University of Technology

2009–2013: School of Mathematics, University of Edinburgh, Scotland, Lecturer and then Reader (tenured)

2013–: Rényi Institute, Hungarian Academy of Sciences, Budapest, Senior Research Fellow then Research Professor

Research areas:

Probability and its applications. Financial mathematics: optimal investment, markets with friction, non-Markovian models, large financial markets. Machine learning: stochastic approximation, stochastic gradient Langevin dynamics. Markov chains in random environment.

Citations:

1798 Google Scholar citations, h-index: 21. Retrieved in December 2024.

Teaching and administrative experience:

Various BSc and MSc courses, supervision of more than 25 MSc dissertations and at least 8 BSc projects.

Project coordinator of the Financial Mathematics and Financial Modelling and Optimisation MSc programmes, University of Edinburgh, 2010–2013.

Supervision experience:

Postdocs: Dr. Ngoc Huy Chau, 2015–2019, Dr. Attila Lovas, 2018–2023.

PhD students: Martin L. D. Mbele Bidima, Central European University, Budapest, 2007–2010; András Horváth, Pázmány Péter Catholic University, Budapest, 2009–2012; Andrea Sofia Meireles Rodrigues, University of Edinburgh, 2010–2014; José Gregorio Rodríguez Villarreal, University of Edinburgh 2011–2015; Zsolt Nika, Pázmány Péter Catholic University, Budapest, 2015–2021; Kinga Tikosi, Central European University, Budapest, 2016–2021; Lóránt Nagy, Central European University, Budapest, 2018–2022; Iván Ivkovic, Eötvös Loránd University, Budapest, 2022–; Balázs Hoffmann, Eötvös Loránd University, Budapest, 2024–.

Languages:

Native Hungarian, fluent English and French.

Editing:

Co-editor (together with F. Delbaen and Ch. Stricker) of the volume “Optimality and Risk: Modern Trends in Mathematical Finance. The Kabanov Festschrift”, Springer, 2009.

Co-editor (together with J. Jakubowski, M. Nieweglowski and L. Stettner) of the volume “Stochastic modeling and control, Simons Semester no. 10”, Banach Center Publications, vol. 122, 2020.

Associate editor of *Applicationes Mathematicae* (Warsaw), 2014–

Associate editor of *Annals of Applied Probability*, 2015–2021

Associate editor of *Modern Stochastics: Theory and Applications*, 2018–

Associate editor of *Studia Mathematica Hungarica*, 2018–2020

Associate editor of *Periodica Mathematica Hungarica*, 2018–

Selected research visits:

2002–2003: 4 months postdoc in the Mathematical Institute of the Polish Academy of Sciences, Warsaw, Poland

2004, 2005, 2010: 3×1 months at Université Paris VII

2005–2006: 3 months at Université Paris VII and CREST, Paris

2007: 1 month at Boston University

2009: 2–2 weeks at the University of Texas in Austin and at Boston University

2013: 3 weeks at Université Paris IX (Dauphine)

2017: 2 weeks at Dublin City University

2019: 2 months, “junior leader” at the 19th Simons Semester, Mathematical Institute of the Polish Academy of Sciences, Warsaw, Poland

Grants, prizes:

PI of Hungarian National Science Foundation junior grant F 049094, “Arbitrage and pricing functionals in financial markets”, 2005–2008.

3-year Bolyai Fellowship of the Hungarian Academy, 2008, renounced after 1 year because of moving to Scotland.

PI of “Lendület” Grant LP2015-6 of the Hungarian Academy of Sciences, 2015–2020.

PI of Hungarian National Science Foundation Grant KH 126505, 2017–2019.

Co-investigator of two grants of Alan Turing Institute, London, 2016 and 2017–2018.

Gyires Béla Prize, Hungarian Academy of Sciences, 2014

PI of Hungarian National Science Foundation Grant K 143529, 2022–2026.

Selected seminar presentations

Boston University; University of Texas in Austin; Séminaire Bachelier (joint seminar of École Polytechnique, Université Paris Dauphine, CREST, Université de Paris VI-VII, Université d’Evry, Université de Marne La Vallée), Paris; Mathematical Institute of the Polish Academy of Sciences, Warsaw; London School of Economics; University of Murcia; Oxford University; University of Warwick; King’s College, London; ETH, Zürich; Technical University of Vienna; University of Bristol; Technical University of Budapest; ELTE University, Budapest; University of Szeged; Durham University; Dublin City University; Hebrew University, Jerusalem; Technical University, Berlin; Imperial College, London; LUISS, Rome; VEGA Institute webinar, Moscow; SIAM Activity Group on FME webinar.

Invited speaker at conferences:

- Workshop on Analysis of random markets: products and prices, Warsaw, October 2003
- 2nd Bachelier Colloquium, Metabief, France, January 2005
- Workshop on Foundations, Developments in Quantitative Finance thematic programme, Isaac Newton Institute, Cambridge, April 2005
- Advances in Mathematical Finance, 2nd general AMAmef conference, Bedlewo, Poland, May 2007
- Workshop on Further Developments in Quantitative Finance, Edinburgh, July 2007
- 3rd Bachelier Colloquium, Metabief, France, January 2008
- Advances in Mathematical Finance, 4th general AMAmef conference, Pitesti, Romania, May 2008
- Advanced Modelling in Finance and Insurance, Special semester on stochastics with emphasis on finance, Linz, Austria, September 2008
- PRISMA Workshop on Portfolio Risk Management, Technical University of Vienna, September 2008
- Workshop on Foundations of Mathematical Finance, Thematic programme on Quantitative Finance, Fields Institute, Toronto, January 2010
- Workshop on Robust Techniques in Quantitative Finance, Oxford-Man Institute, Oxford, March 2010
- Conference on Analysis, Stochastics and Applications, Vienna, July 2010
- Conference on Stochastic Filtrations, IRMA, Strasbourg, September 2011
- UT Austin–Portugal Workshop in Mathematics: Mathematical Finance and Stochastic Control, July 2012
- UK Mathematical Finance Workshop, King’s College, London, June 2013
- 29th European Meeting of Statisticians, Budapest, July 2013
- Workshop on Modeling Market Dynamics and Equilibrium, Hausdorff Institute, Bonn, August 2013
- Stochastic Analysis in Finance and Insurance workshop, Oberwolfach, May 2014
- Stochastic analysis for risk modeling, CIRM, Luminy, France, September 2014
- 2nd Bar Ilan Conference on Mathematical Finance, Ramat Gan, Israel, June 2016
- 10th Bachelier Colloquium, Métabief, France, January 2016
- 2nd Bar Ilan Conference on Mathematical Finance, Ramat Gan, Israel, June 2016
- Workshop on Stochastic Models and Control, Trier, March 2017
- Conference on Stochastic Analysis and Applications, Bedlewo, May 2017
- Workshop of Convex Analysis, King’s College, June 2017
- 8th Advanced Mathematical Methods for Finance Conference, Amsterdam, June 2017
- 2nd Conference on Mathematical Economics and Finance, Manchester, December 2017
- Princeton-Rutgers Mathematical Finance Day, New Brunswick, April 2018
- Workshop on Analysis of Adaptive Stochastic gradient and MCMC algorithms, Alan Turing Institute, London, June 2018
- Lecture series at the Simons Semester on Stochastic Modeling and Control, Mathematical Institute, Warsaw, 7th January–1st March 2019
- Workshop on Recent problems of stochastic control theory, Warsaw, 28th January– 2nd February, 2019
- Conference on Stochastic modeling (in finance and insurance), Bedlewo, 11th–15th February, 2019
- Workshop on SDEs/SPDEs and their relationship to machine learning, Crete, 27th–30th June, 2019
- “Modern Stochastics: Theory and Applications, V.” 1st–4th June 2021, Kyiv, Ukraine (online)
- “Accelerating generative models and non-convex optimisers”, Theory and Methods Challenges Fortnight, Turing Institute, London, 6–10th June, 2022
- “Stochastic modeling and control”, Bedlewo, Poland, 8th–13th May, 2023
- “Advances in Stochastic Analysis for Handling Risks in Finance and Insurance”, CIRM, Luminy, France, 10–15 September, 2023
- “Workshop on Stochastic Models and Control 2024”, TU Graz, Austria, 27–28 February, 2024
- “International workshop on diffusions in machine learning: foundations, generative models, and optimisation”, organized by Isaac Newton Institute and Alan Turing Institute, London, 15th–19th June, 2024

Refereeing:

Finance and Stochastics, Mathematical Finance, IEEE Transactions on Automatic Control, SIAM Journal of Financial Mathematics, SIAM Journal on Control and Optimization, Stochastic Processes and their Applications, Stochastics, Annals of Probability, Annals of Applied Probability, Decisions in Economics and Finance, Proceedings of the Royal Society, Applied Mathematical Finance, Stochastic Analysis and its Applications, International Journal of Theoretical and Applied Finance, Electronic Communications in Probability, Electronic Journal of Probability, Statistics and Probability Letters, International Journal of Adaptive Control and Signal Processing, Mathematical Programming, Journal of Optimization Theory and Applications, Mathematics of Operations Research, Periodica Mathematica Hungarica, Studia Mathematica Hungarica, Modern Stochastics: Theory and Applications, Journal of Functional Analysis, Journal of Mathematical Analysis and Applications, Special Matrices, Operations Research Forum.