Paolo Perrone

Mathematician & Computer Scientist

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Curriculum Vitae

▬▬▬▬ Personal data

Name	Paolo Perrone
Date of birth	10th November 1989
Place of birth	Bergamo (Italy)
Nationality	Italian

▬▬▬▬ Current position

Institution	University of Oxford, England (U.K.)
Department	Computer Science
Position	Research associate
Group leader	Sam Staton

▬▬▬▬ Past positions

2020 **Postdoctoral associate, Mathematics**, *Massachusetts Institute of Technology (MIT)*, Cambridge, MA (U.S.A.)
Group leader: David Spivak.

2019 **Postdoctoral visitor, Mathematics**, *York University*, Toronto, ON (Canada)
Group leader: Walter Tholen.

2019 **Postdoctoral researcher, Mathematics**, *Max Planck Institute for Mathematics in the Sciences*, Leipzig (Germany)
Group leader: Jürgen Jost. Official German name: Wissenschaftlischer Mitarbeiter im Fachbereich Mathematik.

Education

2018   **PhD in Mathematics**, *Max Planck Institute for Mathematics in the Sciences and University of Leipzig*, Leipzig (Germany), *Magna cum laude*
Supervisor: Jürgen Jost. Official German name: Doktor der Naturwissenschaften (Dr. Rer. Nat.) im Fachbereich Mathematik.

2013   **Master of Science in Physics**, *Università degli Studi di Milano*, Milan (Italy), *110/110 cum laude*
Supervisor: Guido Parravicini. Official Italian name: Laurea Magistrale in Fisica.

2012–2013   **Exchange year, Physics**, *KU Leuven*, Leuven (Belgium)

2011   **Bachelor of Science in Physics**, *Università degli Studi di Milano-Bicocca*, Milan (Italy), *110/110 cum laude*
Supervisor: Diego Noja. Official Italian name: Laurea Triennale in Fisica.

2008   **Scientific High School Diploma**, *Liceo Scientifico Mascheroni*, Bergamo (Italy), *100/100*
Official Italian name: Diploma di Liceo Scientifico.

Publications

Books:

2024   **P. Perrone**, *Starting Category Theory*, World Scientific
ISBN: 978-981-12-8600-1

Published articles:

2025   **P. Perrone**, *Lifting couplings in Wasserstein spaces*, Compositionality, vol. 7, art. 2

2024   **P. Perrone**, *Markov Categories and Entropy*, IEEE Transactions of Information Theory, vol. 70, issue 3

2023   **C. Constantin, T. Fritz, P. Perrone, B. Shapiro**, *Weak cartesian properties of simplicial sets*, Journal of Homotopy and Related Structures

2023   **T. Fritz, T. Gonda, N. Gauguin Houghton-Larsen, P. Perrone and D. Stein**, *Dilations and information flow axioms in categorical probability*, Mathematical Structures in Computer Science

2023   **T. Fritz, F. Gadducci, P. Perrone and D. Trotta**, *Weakly Markov categories and weakly affine monads*, Proceedings of CALCO 10, LIPIcs

2023   **T. Fritz, T. Gonda, P. Perrone and E. F. Rischel**, *Representable Markov Categories and Comparison of Statistical Experiments in Categorical Probability*, Theoretical Computer Science, vol. 961

2023 **C. Constantin, T. Fritz, P. Perrone and B. Shapiro**, *Partial evaluations and the compositional structure of the bar construction*, Theory and Application of Categories, vol. 39, n. 11

2023 **S. Moss und P. Perrone**, *A category-theoretic proof of the ergodic decomposition theorem*, Ergodic Theory and Dynamical Systems

2022 **S. Moss and P. Perrone**, *Probability monads with submonads of deterministic states*, Proceedings of LICS

2022 **P. Perrone and W. Tholen**, *Kan extensions are partial colimits*, Applied Categorical Structures, vol. 30

2021 **T. Fritz, P. Perrone and S. Rezagholi**, *Probability, valuations, hyperspace: Three monads on Top and the support as a morphism*, Mathematical Structures in Computer Science, vol. 31, n. 8

2021 **T. Fritz, T. Gonda and P. Perrone**, *De Finetti's Theorem in Categorical Probability*, Journal of Stochastic Analysis, vol. 2, n. 4, art. 6

2020 **T. Fritz and P. Perrone**, *Stochastic order on metric spaces and the ordered Kantorovich monad*, Advances in Mathematics, vol. 366

2020 **T. Fritz and P. Perrone**, *Monads, partial evaluations, and rewriting*, Proceedings of MFPS 36, ENTCS

2019 **T. Fritz and P. Perrone**, *A Probability Monad as the Colimit of Spaces of Finite Samples*, Theory and Application of Categories, vol. 34, n. 7

2018 **T. Fritz and P. Perrone**, *Bimonoidal Structure of Probability Monads*, Proceedings of MFPS 34, ENTCS

2016 **P. Perrone and N. Ay**, *Hierarchical Quantification of Synergy in Channels*, Frontiers in Robotics and AI

Submitted articles:

2025 **T. Fritz, T. Gonda, A. Lorenzin, P. Perrone and A. Shah Mohammed**, *Empirical Measures and Strong Laws of Large Numbers in Categorical Probability*, preprint at arXiv:2503.21576

2025 **M. Bohinen and P. Perrone**, *Categorical algebra of conditional probability*, preprint at arXiv:2502.14941

2024 **P. Perrone**, *How to Represent Non-Representable Functors*, preprint at arXiv:2410.08019

2024 **P. Perrone and R. Van Belle**, *Convergence of martingales via enriched dagger categories*, preprint at arXiv:2404.15191

2023 **N. Ensarguet and P. Perrone**, *Categorical probability spaces, ergodic decompositions, and transitions to equilibrium*, preprint at arXiv:2310.04267

2023 **T. Fritz, T. Gonda, A. Lorenzin, P. Perrone and D. Stein**, *Absolute continuity, supports and idempotent splitting in categorical probability*, preprint at arXiv:2308.00651

PhD Thesis:

2018 **P. Perrone**, *Categorical Probability and Stochastic Dominance in Metric Spaces*, University of Leipzig, Germany, Available online at www.paoloperrone.org/phdthesis.pdf

Lecture notes, conference papers and other material:

2023 **P. Perrone**, *Categorical Information Geometry*, Proceedings of Geometric Science of Information (GSI 2023), Lecture Notes in Computer Science 14071

2019 **P. Perrone**, *Notes on Category Theory with examples from basic mathematics*, lecture notes, arXiv:1912.10642

2018 **T. Fritz and P. Perrone**, *A Criterion for Kan Extensions of Lax Monoidal Functors*

2016 **P. Perrone and N. Ay**, *Iterative Scaling Algorithm for Channels*

2016 **P. Perrone and N. Ay**, *Decomposition of Markov Kernels*, Proceedings of WUPES 10

2015 **P. Perrone**, *Dual Connections and Holonomy*

Teaching and community work

Courses:

2024 **Mentor**, *Applied Category Theory*, summer school and online seminars, University of Oxford (U.K.)

2023 **College Tutor**, *Integral Transforms*, undergraduate course, Mansfield College, University of Oxford (U.K.)

2023 **College Tutor**, *Integration*, undergraduate course, Mansfield College, University of Oxford (U.K.)

2022 **College Tutor**, *Probability I*, undergraduate course, Mansfield College, University of Oxford (U.K.)

2022 **College Tutor**, *Probability II*, undergraduate course, Mansfield College, University of Oxford (U.K.)

2022 **Tutor**, *Quantum Computing and Modelling: an Applied Category Theory Perspective*, undergraduate course, Cambridge Center for International Research (U.K.)

2022 **College Tutor**, *Integral Transforms*, undergraduate course, Mansfield College, University of Oxford (U.K.)

2022 **College Tutor**, *Integration*, undergraduate course, Mansfield College, University of Oxford (U.K.)

2022 **College Tutor**, *Groups and Group Actions*, undergraduate course, Mansfield College, University of Oxford (U.K.)

2022 **College Tutor**, *Linear Algebra II*, undergraduate course, Mansfield College, University of Oxford (U.K.)

2022 **Lecturer**, *Teoria delle categorie*, online, in Italian
Collaboration with the ItaCa Project.

2021 **Lecturer**, *Bayesian Statistical Probabilistic Programming*, graduate course, University of Oxford (U.K.)
Together with Hugo Paquet and Sam Staton.

2021 **College Tutor**, *Linear Algebra I*, undergraduate course, Mansfield College, University of Oxford (U.K.)

2021 **Lecturer**, *Applied Category Theory*, graduate course, University of Oxford (U.K.)

2021 **College Tutor**, *Groups and Group Actions*, undergraduate course, Mansfield College, University of Oxford (U.K.)

2020 **Teacher**, *Categories and gauge theory*, reading seminar, Massachusetts Institute of Technology, Cambridge, MA (U.S.A.)

2019 **Lecturer**, *Applied Linear Algebra*, undergraduate course, University of York, Toronto, ON (Canada)

2019 **Teaching assistant**, *Applied Category Theory*, summer school and online seminars, University of Oxford (U.K.)

2019 **Lecturer**, *Category theory and applications*, graduate course, Max Planck Institute, Leipzig (Germany)

Student supervision:

2024 **Master thesis**, *Mika Bohinen*, Mathematical Foundations of Computer Science (MFocS), University of Oxford (U.K.)

2023 **Master thesis**, *Noé Ensarguet*, Mathematical Foundations of Computer Science (MFocS), University of Oxford (U.K.)

Organizing and supporting events:

2023-24 **Organizer**, *Oxford Advanced Seminar on Informatic Structures (OASIS)*, research seminar, University of Oxford (U.K.)
Together with Sam Staton and Nobuko Yoshida

2024 **Co-organizer**, *Applied Category Theory (ACT)*, conference, University of Oxford (U.K.)
Leading organizer: Sam Staton

2024 **Co-organizer**, *Mathematical Foundations of Programming Semantics (MFPS)*, conference, University of Oxford (U.K.)
Leading organizer: Sam Staton

2023 **Co-organizer**, *Compositional Robotics: Mathematics and Tools*, ICRA 2023 Workshop, ExCeL London (U.K.)
(co-organized by Andrea Censi, Gioele Zardini et al.)

2022 **Co-organizer**, *Compositional Robotics: Mathematics and Tools*, ICRA 2022 Workshop, Philadelphia, PA (U.S.A.)
(co-organized by Andrea Censi, Gioele Zardini et al.)

2021 **Co-organizer**, *Compositional Robotics: Mathematics and Tools*, ICRA 2021 Workshop, ETH Zürich (Switzerland) – Moved online due to CoViD-19 outbreak
(co-organized by Andrea Censi, Gioele Zardini et al.)

2020 **Co-organizer and technical support**, *MIT Categories Seminar*, research and graduate seminar, Massachusetts Institute of Technology, Cambridge, MA (U.S.A.) – Moved online due to CoViD-19 outbreak
(co-organized by Brendan Fong and David Spivak)

2020 **Local organizer and technical support**, *Applied Category Theory (ACT)*, conference, Massachusetts Institute of Technology, Cambridge, MA (U.S.A.) – Moved online due to CoViD-19 outbreak
(other local organizers: Brendan Fong, David Myers and David Spivak)

2020 **Organizer**, *Applied Category Theory*, summer school and online seminars, Massachusetts Institute of Technology, Cambridge, MA (U.S.A.) – Moved online due to CoViD-19 outbreak
(together with Carmen Constantin and Eliana Lorch)

2020 **Technical support**, *Categorical Probability and Statistics*, conference, University of Ottawa, ON (Canada) – Moved online due to CoViD-19 outbreak
(organized by Tobias Fritz and Rory Lucyshyn-Wright)

2015-2018	**Co-organizer**, *LikBez seminar, Mathematics*, reading seminar, Max Planck Institute, Leipzig (Germany) (together with Rostislav Matveev and Sharwin Rezagholi)

Reviews:

2025	Symposium on Compositional Structures (SYCO), conference
2024	Theory and Applications of Categories (TAC), journal
2024	Applied Category Theory (ACT), conference and proceedings
2024	Logical Methods in Computer Science (LMCS), journal
2024	Foundations of Software Science and Computation Structures (FoSSaCS), conference and proceedings
2023	MDPI Entropy, journal
2023	Compositionality, journal
2023	Logical Methods in Computer Science (LMCS), journal
2022	Journal of the London Mathematical Society
2022	Applied Category Theory (ACT), conference and proceedings
2022	Theory and Applications of Categories (TAC), journal
2022	Master Thesis review for Macquarie University, Sydney (Australia)
2021	Compositionality, journal
2020	Logic In Computer Science (LICS), conference and proceedings
2020	Applied Category Theory (ACT), conference and proceedings
2020	Compositionality, journal
2019	Applied Category Theory (ACT), conference and proceedings

Other activities:

2020	Obtained Kaufman Teaching Certificate Program at MIT
Current	Editor of the International Journal of Mathematics
Current	Member of European COST Action CaLISTA – Cartan geometry, Lie, Integrable Systems, quantum group Theories for Applications (CA21109)
Current	Scientific committee of ItaCa, association of Italian category theorists
Current	ItaCa online course, in Italian, on category theory
Current	Applied Category Theory Ethics and Values committee
Current	(Co-)author of nLab, category theory wiki
Current	(Co-)moderator of Zulip Category Theory Community Server, collaboration, learning, and discussion forum

Industry collaboration

2022 **Consulting**, Cavenwell AI, Ottawa (Canada)

Other skills

Languages:

Italian	native
English	fully proficient
German	fluent
Spanish	fluent

Emergency knowledge:

First aid	certified 2023, St. John's Ambulance, London (UK)
Mental Health First Aid	certified 2023, Siendo and Mental Health First Aid England (UK)

Conference and invited talks

2025:

Mar. 2025 **Invited talk**, *Markov Categories*, Quantitative Reasoning Workshop, Bellairs Research Institute (Barbados)

Feb. 2025 **Invited talk**, *Categorical probability with additional geometry*, 10th Workshop on Information Geometry, Quantum Mechanics and Applications, Universidad Autónoma de Madrid (Spain)

Feb. 2025 **Seminar talk**, *Notions of expectations and probability monads*, PUDDLE Seminar, University of Oxford (United Kingdom)

Jan. 2025 **Invited talk**, *A Categorical Theory of Conditional Expectations*, AMS Special Session, Joint Mathematics Meetings, Seattle, WA (U.S.A.)

2024:

Dec. 2024 **ItaCa Live**, *The Formal Theory of Random Variables*, Università degli Studi di Padova (Italy)

Nov. 2024 **Invited lecture**, *Markov categories, symmetries, and generative AI*, Applied Category Theory for Engineering Design, Massachusetts Institute of Technology (MIT), Cambridge, MA (U.S.A.)
Together with Rob Cornish. (Held online.)

Nov. 2024 **Distinguished lecture**, *Notions of Expectation and Probability Monads*, Peripatetic Seminar on Sheaves and Logic, Universiteit Leiden (Netherlands)

June 2024 **Category Theory 2024**, *When limits are limits: topological enrichment with and application to probability*, Universidade de Santiago de Compostela (Spain)

June 2024 **Keynote talk, Applied Category Theory 2024**, *Convergence of martingales via enriched dagger categories*, University of Oxford (United Kingdom)
Speaker: Ruben Van Belle (joint work).

June 2024 **Invited talk**, *Markov categories, Bayesian inversions, and statistical experiments*, Tweag, Paris (France)

May 2024 **Invited talk**, *Markov categories: Towards user-friendly probability theory*, Finance and Stochastics Seminar, Imperial College London (United Kingdom)

May 2024 **Seminar talk**, *Conditional expectation for category theorists*, PUDDLE Seminar, University of Oxford (United Kingdom)

May 2024 **Guest lecture**, *Monoidal preorders and enrichment*, Applied Category Theory course, University of Oxford (United Kingdom)
(Held online.)

Apr. 2024 **Invited talk**, *Martingales and their convergence, categorically*, Four Decades of Probabilistic Semantics, Bellairs Research Institute (Barbados)

Jan. 2024 **Invited talk**, *Higher abstraction for probability and statistics*, Logic, Uncertainty, Computation and Information (LUCI) Lab, Università degli Studi di Milano (Italy)
(Held online.)

2023:

Dec. 2023 **ItaCa Live**, *Conditional expectations as split idempotents*, Università degli Studi di Torino (Italy)

Oct. 2023 **Invited talk**, *Probability Theory with Markov categories*, University College London (UCL), London (United Kingdom)

Sept. 2023 **Invited talk**, *Information Theory with Markov categories*, Geometry of Information Theory workshop, Universidad Carlos III, Madrid (Spain)

Aug. 2023 **Geometric Science of Information 2023**, *Categorical information geometry*, Saint-Malo (France)

Aug. 2023 **Applied Category Theory 2023**, *Markov categories and entropy*, University of Maryland, College Park, MD (U.S.A.)

Aug. 2023   **Applied Category Theory 2023**, *Absolute continuity, supports and idempotent splitting in Markov categories*, University of Maryland, College Park, MD (U.S.A.)
Speaker: Tomáš Gonda (joint work).

July 2023   **Tutorial talk for ACT 2023**, *Markov categories: a tutorial*, University of Maryland, College Park, MD (U.S.A.)

July 2023   **Keynote talk, Category Theory 2023**, *Universal properties in probability theory*, Université Catholique de Louvain, Louvain-la-Neuve (Belgium)

June 2023   **CALCO 2023**, *Weakly Markov categories and weakly affine monads*, University of Indiana, Bloomington, IN (U.S.A.)
(Held online.)

May 2023   **Invited talk**, *Probability, Symmetry, and Entropy with Markov Categories*, Computational Statistics and Machine Learning Seminar (OxCSML), University of Oxford (United Kingdom)

May 2023   **Invited talk**, *Categorical probability and information theory*, Q-Math Seminar, Universidad Carlos III, Madrid (Spain)

Apr. 2023   **Invited event**, *Probabilistic programming: its challenges and opportunities*, Alan Turing Institute, London (United Kingdom)

Jan. 2023   **Invited event**, *Research week on Markov categories*, Universität Innsbruck (Austria)

2022:

Dec. 2022   **SYCO 10**, *Dilations and information flow axioms in categorical probability*, University of Edinburgh (Scotland)
Speaker: Tomáš Gonda (joint work).

Dec. 2022   **Invited talk**, *GS-monoidal structures and thunkability in Kleisli categories*, Università di Pisa (Italy)

Nov. 2022   **Invited talk**, *Introduction to Markov categories*, Sheaf Talk Seminar, University of Oxford (United Kingdom)

Nov. 2022   **Invited talk**, *When measurable spaces don't have enough points*, Theoretical Computer Science Seminar, University of Birmingham (United Kingdom)

Sept. 2022   **SYCO 9**, *Lifting weights: enriched lenses between transport plans*, Università dell'Insubria, Como (Italy)

Aug. 2022   **Logic in Computer Science (LICS)**, *Probability monads with submonads of deterministic states*, Technion, Haifa (Israel)
Speaker: Sean Moss (joint work).

July 2022	**Invited talk**, *When measurable spaces don't have enough points*, Seminário de Teoria das Categorias, Universidade de Coimbra (Portugal) (Held online.)
July 2022	**Applied Category Theory 2022**, *A category-theoretic prood of the ergodic decomposition theorem*, University of Strathclyde (Scotland)
June 2022	**Guest lecture**, *Introduction to categorical probability*, Applied Category Theory course, University of Oxford (United Kingdom) (Held online.)

2021 (most events held online):

Nov. 2021	**Invited talk**, *The rise of quantitative category theory*, Topos Colloquium, Topos Institute, Berkeley. CA (U.S.A.)
Aug. 2021	**Category Theory 2021**, *Kan extensions are partial colimits*, Università degli Studi di Genova (Italy) (Held in person.)
July 2021	**Applied Category Theory 2021**, *De Finetti's theorem in categorical probability*, University of Cambridge (U.K.) Speaker: Tobias Fritz (joint work).
June 2021	**Keynote talk, Categories and Companions 2021**, *An invitation to categorical probability and statistics with Markov categories*, Macquarie University, Sydney (Australia) Speaker: Tobias Fritz (joint work).
June 2021	**Categories and Companions 2021**, *Compositional structure of partial evaluations*, Macquarie University, Sydney (Australia) Speaker: Brandon Shapiro (joint work).
May 2021	**Seminar talk**, *Weighted limits in metric geometry*, Metric Geometry seminar, Max Planck Institute for Mathematics in the Sciences, Leipzig (Germany)
May 2021	**Seminar talk**, *Markov categories: towards a syntax for probability*, Logic and Semantics for Dummies, University of Cambridge (U.K.)
May 2021	**Invited talk**, *The law of large numbers in categorical probability*, Topos Colloquium, Topos Institute, Berkeley, CA (U.S.A.) Speaker: Tobias Fritz (joint work).
Apr. 2021	**Invited talk**, *The de Finetti theorem in categorical probability*, Cohomology in algebra, geometry, physics and statistics, Institute of Mathematics, Czech Academy of Sciences (Czech Republic) Speaker: Tobias Fritz (joint work).

Mar. 2021	**Invited talk**, *Categorical probability, Markov categories and the de Finetti theorem*, New York City Category Theory Seminar, CUNY, New York, NY (U.S.A.) Speaker: Tobias Fritz (joint work).
Mar. 2021	**Impromptu seminar talk**, *Categorical probability, Markov categories and the de Finetti theorem*, New York City Category Theory Seminar, CUNY, New York, NY (U.S.A.)
Feb. 2021	**Invited talk**, *Partial evaluations: the results so far*, Seminario de categorías UNAM, Mexico City (Mexico)
Feb. 2021	**Invited talk**, *Partial evaluations for monads and 2-monads*, Seminário de Teoria das Categorias, Universidade de Coimbra (Portugal)
Feb. 2021	**Invited talk**, *Kan extensions are partial colimits*, Masaryk University Algebra Seminar, Brno (Czech Republic)
Jan. 2021	**Invited lecture**, *An introduction to monads*, Applied Compositional Thinking for Engineers, ETH, Zürich (Switzerland)
Jan. 2021	**Oxford Quantum Group Workshop**, *Markov categories: randomness and information flow*, University of Oxford (United Kingdom)
	2020 (all events held online):
Sept. 2020	**Invited talk**, *Colimits as algebraic operations*, ItaCa Fest III, ItaCa (Italy)
Sept. 2020	**Invited talk**, *Compositional structure of partial evaluations*, Massachusetts Institute of Technology (MIT), Cambridge, MA (U.S.A.) Speaker: Brandon Shapiro (joint work).
July 2020	**Applied Category Theory 2020**, *Distribution functors, second-order stochastic dominance and the Blackwell–Sherman–Stein Theorem in Categorical Probability*, Massachusetts Institute of Technology (MIT), Cambridge, MA (U.S.A.) Speaker: Tomáš Gonda (joint work).
July 2020	**Tutorial talk for ACT 2020**, *Monads and Comonads*, Massachusetts Institute of Technology (MIT), Cambridge, MA (U.S.A.)
June 2020	**Invited talk**, *Monads, Partial Evaluations, and Rewriting*, POPV Seminar, University of Boston, Boston, MA (U.S.A.)
June 2020	**Invited talk**, *Kan extensions are partial colimits*, Massachusetts Institute of Technology (MIT), Cambridge, MA (U.S.A.)
June 2020	**Categorical Probability and Statistics workshop**, *Probability monads and stochastic dominance*, University of Ottawa, ON (Canada)

June 2020   **Tutorial talk for the CPS workshop**, *What is a probability monad?*, University of Ottawa, ON (Canada)

June 2020   **MFPS 36**, *Monads, Partial Evaluations, and Rewriting*, Université Paris VII, Paris (France)

May 2020   **Seminar talk**, *The support as a morphism from probability to possibility*, Tallinn Institute of Technology (TalTech), Tallinn (Estonia)
Speaker: Sharwin Rezagholi (joint work).

April 2020   **Seminar talk**, *Stochastic orders and Kantorovich duality*, Metric Geometry seminar, Max Planck Institute for Mathematics in the Sciences, Leipzig (Germany)

March 2020   **Seminar talk**, *Composing partial evaluations*, Massachusetts Institute of Technology (MIT), Cambridge, MA (U.S.A.)

2019:

Nov. 2019   **Invited talk**, *The compositional structure of partial evaluations*, University of Ottawa, ON (Canada)

July 2019   **Applied Category Theory 2019**, *The support is a morphism of monads*, University of Oxford (United Kingdom)

May 2019   **SYCO 4**, *Categorical Probability: Results and Challenges*, Chapman University, CA (U.S.A.)
Speaker: Tobias Fritz (joint work).

March 2019   **SYCO 3**, *The support is a morphism of monads*, University of Oxford (United Kingdom)
Speaker: Sharwin Rezagholi (joint work).

Feb. 2019   **Invited talk**, *Towards probability theory without measure theory*, Massachusetts Institute of Technology (MIT), Cambridge, MA (U.S.A.)
Speaker: Tobias Fritz (joint work).

2018:

Oct. 2018   **Invited talk**, *Monads, Partial Evaluations, and Martingales*, Massachusetts Institute of Technology (MIT), Cambridge, MA (U.S.A.)

Sept. 2018   **SYCO 1**, *Monads, Partial Evaluations, and Rewriting*, University of Birmingham (United Kingdom)

July 2018   **Category Theory 2018**, *On the Operational Meaning of the Bar Construction*, Universidade dos Açores, Ponta Delgada, Azores (Portugal)

June 2018   **MFPS 34**, *Bimonoidal Structure of Probability Monads*, Dalhousie University, Halifax, NS (Canada)

May-June 2018   **FMCS 26**, *A Kantorovich Monad for Ordered Spaces*, Mount Allison University, Sackville, NB (Canada)

Earlier:

July 2017   **Category Theory 2017**, *The Wasserstein Monad in Categorical Probability*, University of British Columbia, Vancouver, BC (Canada)

Nov. 2016   **Invited talk**, *A Conceptual Viewpoint on Information Decomposition*, Perimeter Institute for Theoretical Physics, Waterloo, ON (Canada)

Sept. 2015   **WUPES 10**, *Decomposition of Markov Kernels*, Monínec (Czech Republic)

Dec. 2014   **GSO 2014**, *Synergy as a Linear Operator*, Albert-Ludwig-Universität, Freiburg (Germany)

For further information or material about any of the above, please contact me directly.

Last update: 2025-04-03.