

Paolo Perrone

PhD in Mathematics

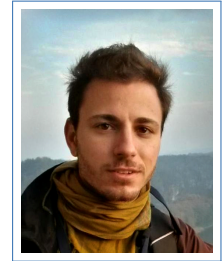
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Curriculum Vitae

Personal data

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

Current position

Research institute Max Planck Institute for Mathematics in the Sciences, Leipzig, Germany
(www.mis.mpg.de)
Group leader Prof. Jürgen Jost (www.mis.mpg.de/jjost/juergen-jost.html)

Education

- 2018 **PhD in Mathematics**, *Universität Leipzig, (Germany), Magna cum laude.*
Official German name: Doktor der Naturwissenschaften (Dr. Rer. Nat.) im Fachbereich Mathematik.
- 2014–2018 **PhD studies**, *Max Planck Institute for Mathematics in the Sciences, Leipzig (Germany).*
- 2013 **Master of Science in Physics**, *Università degli Studi di Milano, Milan (Italy), 110/110 cum laude.*
Official Italian name: Laurea Magistrale in Fisica.
- 2012–2013 **Exchange year in Physics**, *KU Leuven, Leuven (Belgium).*
- 2011–2013 **Master studies in Physics**, *Università degli Studi di Milano, Milan (Italy).*
- 2011 **Bachelor of Science in Physics**, *Università degli Studi di Milano-Bicocca, Milan (Italy), 110/110 cum laude.*
Official Italian name: Laurea Triennale in Fisica.
- 2008–2011 **Bachelor studies in Physics**, *Università degli Studi di Milano-Bicocca, Milan (Italy).*

- 2008 **Diploma di Liceo Scientifico**, *Liceo Scientifico Mascheroni*, Bergamo (Italy), 100/100.
Italian scientific high school diploma.

Articles

Published

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

Submitted

- 2018 **T. Fritz and P. Perrone**, *Stochastic order on metric spaces and the ordered Kantorovich monad*, arXiv:1808.09898.
2017 **T. Fritz and P. Perrone**, *A Probability Monad as the Colimit of Finite Powers*, arXiv:1712.05363.

Conference papers

- 2018 **T. Fritz and P. Perrone**, *Bimonoidal Structure of Probability Monads*, Proceedings of MFPS 34, ENTCS.
2016 **P. Perrone and N. Ay**, *Decomposition of Markov Kernels*, Proceedings of WUPES 10.

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.

Other articles

- 2018 **T. Fritz and P. Perrone**, *Monads, partial evaluations, and rewriting*, Notes for the Applied Category Theory 2019 School.
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*.
2015 **P. Perrone**, *Dual Connections and Holonomy*.

Conference and invited talks

- 2018 **Invited talk**, *Monads, Partial Evaluations, and Martingales*, Massachusetts Institute of Technology, Cambridge, MA (U.S.A.).
2018 **SYCO 1**, *Monads, Partial Evaluations, and Rewriting*, University of Birmingham (United Kingdom).
2018 **Category Theory 2018**, *On the Operational Meaning of the Bar Construction*, University of Azores, Ponta Delgada, Azores (Portugal).
2018 **MFPS 34**, *Bimonoidal Structure of Probability Monads*, Dalhousie University, Halifax, NS (Canada).

- 2018 **FMCS 26**, *A Kantorovich Monad for Ordered Spaces*, Mount Allison University, Sackville, NB (Canada).
- 2017 **Category Theory 2017**, *The Wasserstein Monad in Categorical Probability*, University of British Columbia, Vancouver, BC (Canada).
- 2016 **Invited talk**, *A Conceptual Viewpoint on Information Decomposition*, Perimeter Institute for Theoretical Physics, Waterloo, ON (Canada).
- 2015 **WUPES 10**, *Decomposition of Markov Kernels*, Moníec (Czech Republic).
- 2014 **GSO 2014**, *Synergy as a Linear Operator*, Albert-Ludwig-Universität, Freiburg (Germany).

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