

# Paolo Perrone

Graduate student

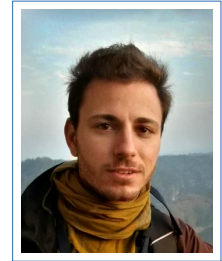
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## Curriculum Vitae

### Personal data

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

### Current position

Graduate school International Max Planck Research School ([www.imprs-mis.mpg.de](http://www.imprs-mis.mpg.de))  
Research institute Max Planck Institute for Mathematics in the Sciences, Leipzig, Germany  
([www.mis.mpg.de](http://www.mis.mpg.de))  
Supervisor Prof. Jürgen Jost ([www.mis.mpg.de/jjost/juergen-jost.html](http://www.mis.mpg.de/jjost/juergen-jost.html))

### Education

- 2014– **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.

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## 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 (submitted)

- 2018 **P. Perrone**, *Categorical Probability and Stochastic Dominance in Metric Spaces*, University of Leipzig, Germany (submitted), Available online at [www.paoloperrone.org/phdthesis.pdf](http://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*.

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## 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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