Stefano Crotti

Email: stefano.crotti@polito.it url: https://stecrotti.github.io/

About

I'm a PhD student at the Statistical Physics and Interdisciplinary Applications group at Politecnico di Torino, Italy. We use techniques from the statistical physics of complex systems to study optimization and inference problems across various domains: biology, computer science, epidemic modelling, and more. During my Master's thesis and first year of PhD I have been working on approximate solutions to the Closest Vector Problem. I am now focusing on the study of atypical trajectories in stochastic dynamics on graphs.

Education

- PHD in Physics, Politecnico di Torino
- 2021 DIPLOMA from Alta Scuola Politecnica (multidisciplinary honour program)
- 2020 MSc in Mathematical Engineering, Politecnico di Milano (double degree)
- 2020 MSc in Physics of Complex Systems, Politecnico di Torino
- 2018 BSc in Electronic Engineering, Politecnico di Torino

Publications

- **S. Crotti**, A. Braunstein, Large deviations in stochastic dynamics over graphs through Matrix Product Belief Propagation, atXiv:2303.17403
- A. Braunstein, L. Budzynski, **S. Crotti**, F. Ricci-Tersenghi, *Closest-vector problem and the zero-temperature p-spin landscape for lossy compression*, Physical Review E 106 (5) (APS, arxiv)