SNPD Prizes 2019

The 2019 EPS-SNPD Early Career Prize is awarded to

• Valentina Ros "for her outstanding research contributions in quantum and classical disordered systems, explaining new ways in which those systems can break ergodicity and fail to equilibrate, and her investigations of rough, high-dimensional landscapes emerging in this context."

Valentina Ros is a Postdoctoral Researcher at the Laboratoire de Physique of the École Normale Supérieure in Paris since November 2018. She obtained her PhD in Statistical Physics in October 2016 at the International School of Advanced Studies (SISSA) in Trieste, under the supervision of Markus Mueller and Antonello Scardicchio. After that, she moved to the Institut de Physique Théorique in Saclay, where she worked for two years as a PostDoc together with Giulio Biroli, within the Simons Collaboration on Cracking the Glass Problem.

She has a strong research interest in out-of-equilibrium dynamics, localization phenomena, random and complex land-scapes and glasses. Her main contribution to the field of quantum disordered systems is the investigation of integrability and emergent conservation laws in many-body systems that break ergodicity and do not equilibrate due to localization. More recently, she focused on the problem of characterizing the geometrical properties of rugged, high-dimensional land-scapes emerging in classical glassy and complex systems, with the goal of understanding how the landscapes structure affects their dynamical behavior.