Valentina Ros: Dynamics in high-dimensional non-convex landscapes: from slow descent to activation

In this short talk I will discuss how to gain information on activated dynamics in highly nonconvex landscapes from the analysis of their geometrical properties. I will discuss how local minima are connected with each other through low-rank saddles in the landscape of the spherical p-spin model, and present some results on the instantonic solution of Langevin dynamics describing the escape from a local minimum through barrier-crossing.