

Minerva Foundation Lecture Series

Vladas Sidoravicius (IMPA)



"Phase transitions in stochastic processes with long-range interactions: a multiscale analysis approach"

During my lectures, I will focus on three classical one-dimensional models: long-range percolation, Ising model and Markov chains with complete connections. Processes with long-range interaction even in one dimensional case present very rich and complex behavior, and undergo phase transitions.

One of the aims of this course is to introduce and explain some very powerful multi-scale analysis techniques (with their roots in Renormalization Group approach), which are remarkably efficient in the present situation.

Lecture Info

Thursdays ,
Sept 22 - Oct 27

9:10 - 10:40am

Room 507
Mathematics Hall

Dates:

9/22, 9/29 10/6,
10/13, 10/20,
and 10/27

Columbia University

Department of Mathematics

2990 Broadway at 117th St
New York, NY 10027