

abstract

ANALYSIS/MATHEMATICAL PHYSICS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

The Gaussian central limit theorem says that for a wide class of stochastic systems, the bell curve (Gaussian distribution) describes the statistics for random fluctuations of important observables. In this talk I will look beyond this class of systems to a collection of probabilistic models which include random growth models, polymers, particle systems, matrices and stochastic PDEs, as well as certain asymptotic problems in combinatorics and representation theory. I will explain in what ways these different examples all fall into a single new universality class with a much richer mathematical structure than that of the Gaussian.