

MSRI/Evans Talk

Monday, September 13,2010 4:10PM; 60 Evans Hall University of California, Berkeley

"BEYOND THE GAUSSIAN UNIVERSALITY CLASS."

Ivan Corwin (Courant Institute, NYU)

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, PDEs and matrices, 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.

The full scope and structure of this new universality class is just one of many important open questions being studied at MSRI this fall.

Refreshments at a nearby establishment immediately following the talk! Graduate students and Postdoctoral Fellows are particularly welcome.

http://www.msrl.org