

The Trivial Notions Seminar Proudly Announces

Limits of Random Structures

A talk by Konstantin Matveev

Abstract

We are all familiar with the notion of the limit of a sequence of numbers or functions, but what should be viewed as the limit as n tends to infinity of the sequence of random trees on n vertices or random domino tilings of $2n \times 2n$ square scaled by a factor of 2n? Or what is the limit of the random self-avoiding walk on a plane hexagonal lattice as the mesh of the lattice tends to zero? In each of these and many other questions correct understanding of the notion and properties of the limiting object sheds light on the asymptotic properties of the involved random structures and unveils a variety of interesting phenomena. I will talk about several instances of limits of random structures including the Brownian motion, Schramm-Loewner evolution, continuum random tree and Gaussian free field.

Thursday October 25th, at 1:30 pm Science Center 507