Title: Conformal geometry of random surfaces in 2D quantum gravity

Speakers: Xin Sun

Series: Mathematical Physics

Date: February 20, 2020 - 1:30 PM

URL: http://pirsa.org/20020072

Abstract: From a probabilistic perspective, 2D quantum gravity is the study of natural probability measures on the space of all possible geometries on a topological surface. One natural approach is to take scaling limits of discrete random surfaces. Another approach, known as Liouville quantum gravity (LQG), is via a direct description of the random metric under its conformal coordinate. In this talk, we review both approaches, featuring a joint work with N. Holden proving that uniformly sampled triangulations converge to the so called pure LQG under a certain discrete conformal embedding.

