

Chilean Probability Seminar

Orador: Andrés Contreras (Universidad de Chicago, USA)

Título: "Gaussian curvature for LQG surfaces and random planar maps"

Abstract:

Liouville quantum gravity is a canonical model for random surfaces conjectured to be the scaling limit of various planar maps. Given that curvature is a central concept in Riemannian geometry, it is natural to ask whether this can be extended to LQG surfaces. Here, we define the Gaussian curvature for LQG surfaces (despite their low regularity) and study the relations with its discrete counterparts. We conjecture that this definition of Gaussian curvature is the scaling limit of the discrete curvature, we prove that the discrete curvature on the ϵ -CRT map with a Poisson vertex set integrated with a smooth test function is of order $\epsilon^{o(1)}$, and show the convergence of the total discrete curvature on a CRT map cell when scaled by $\epsilon^{1/4}$. Joint work with E. Gwynne.

El enlace para conectarse al seminario es:

Unirse a la reunión Zoom

<https://reuna.zoom.us/j/84521834914?pwd=OTZ6Y0NWM3pYTGtTbEt3c0luTG96UT09>

ID de reunión: 845 2183 4914

Código de acceso: 997973

Modalidad híbrida en la sala Multimedia CMM, Beauchef 851, Torre Norte Piso 6.

Miércoles 28 de agosto 2024 a las 16:15 hrs.

