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

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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.
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