

THE UNIVERSITY OF BRITISH COLUMBIA



UBC - PIMS Mathematical Sciences Young Faculty Award Colloquium





January 22, 2021 3:00 PM PST Liam Watson, UBC What is Khovanov homology, and when is it boring?

Abstract: A random planar map is a canonical model for a discrete random surface which is studied in probability, combinatorics, mathematical physics, and geometry. Liouville quantum gravity is a canonical model for a random 2d Riemannian manifold with roots in the physics literature. After introducing these objects, I will present a joint work with Xin Sun where we prove convergence of random planar maps to Liouville quantum gravity under a discrete conformal embedding which we call the Cardy embedding.

Bio: Dr. Watson is an Associate Professor of Mathematics at UBC, with a research focus on Low Dimensional Topology. Dr. Watson received his PhD in 2009, from the University of Quebec at Montreal (and is also an alum of UBC). He has won teaching awards from UBC, the University of Glasgow and UCLA; held a tier 2 Canada Research Chair award, and a CRM- Simons professorship. Dr. Watson's research and distinctive partnership with other topologists has resulted in a successful PIMS Collaborative Research Group Award.

REGISTER <u>HERE</u>