IAN BIRINGER, Boston College

Growth of Betti numbers and a probabilistic take on geometric convergence

We will describe an asymptotic relationship between the volume and the Betti numbers of certain locally symmetric spaces. The proof uses a synthesis of Gromov-Hausdorff convergence of Riemannian manifolds and Benjamini-Schramm convergence from graph theory. Joint with Abert, Bergeron, Gelander, Nikolov, Raimbault, Samet.