Mathematics, Statistics, and Computer Science **@ UIC**

Special Colloquium

Gromov's surface subgroup question

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Abstract: Gromov asked whether every one-ended hyperbolic group contains a subgroup isomorphic to the fundamental group of a closed surface. This question is open in general, but the answer is known to be "yes" for several notable classes of hyperbolic groups. I'll give some background on the question and describe the construction of surface subgroups of random groups, including why one might care about the case of random groups. I'll also explain some (interestingly superficial) similarities with the construction of surface subgroups of closed hyperbolic 3-manifold groups due to Kahn and Markovic. This is joint work with Danny Calegari.

Meet and greet Tea afterwards in SEO 300.

Monday, November 24 at 3:00 PM in SEO 636