

Friday, April 14, 2017, 4:10 pm

COLLOQUIUM TALK

Speaker: Mark Bell (UIUC)

Old Main 2231

Manifolds of dimensions 1, 2 and 3

Abstract:

Abstract: In this talk we look at the classification of manifolds, which aims to build a periodic table of all manifolds up to homeomorphism. In dimension two this is a classical result, known as the classification of surfaces, while in dimension four this is uncomputable. Thus we focus on three dimensional manifolds where we will take advantage of two recently solved major conjectures of Thurston. First, the Geometrization Conjecture, which controls the geometric structures that can appear on these manifolds. Second the Virtually Fibered conjecture, which for generic 3-manifolds will allow us to reduce this problem back to studying surfaces. Parts of the talk are joint work with Webb (Cambridge).

SNACKS IN FACULTY LOUNGE AT 3:30 PM.
EVERYONE WELCOME (EVEN IF YOU ARE UNABLE TO ATTEND THE TALK)
