Geometry, Groups and Dynamics/GEAR Seminar (held at the Illinois hub of GEAR )

## 12:00 pm, Tuesday, May 2, 2017, 243 Altgeld Hall

Matthew Durham (Michigan)

Convex cocompactness in finitely generated groups

Abstract: Stability is a strong quasiconvexity property which generalizes to finitely generated groups the classical notion of convex cocompactness from Kleinian groups, as well as the analogous notion in mapping class groups developed by Farb-Mosher, Kent-Leininger, and Hamenstädt. In this talk, I will discuss what is currently known about stability, including various characterizes of stability and tools for identifying stable subgroups of important groups, such as mapping class groups, Out(Fn), and relatively hyperbolic groups. This talk involves joint work (in various combinations) with Tarik Aougab, Matthew Cordes, and Samuel Taylor.

<u>Video</u>