

1109-20-106

**Matthew Durham** and **Samuel J Taylor\*** ([s.taylor@yale.edu](mailto:s.taylor@yale.edu)). *Stability and convex cocompactness in mapping class groups.*

Convex cocompact subgroups of mapping class groups were introduced by Farb and Mosher and have important connections to the geometry of Teichmüller space, the curve complex, and surface group extensions. In this talk, I will discuss a new characterization of such subgroups that involves only the geometry of the mapping class group. This characterization involves a strong notion of quasiconvexity, which we call stability, and captures the intuition that convex cocompact subgroups are "highly hyperbolic" subgroups of mapping class groups. (Received January 26, 2015)