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Emily Proctor* (eproctor@middlebury.edu) and **Elizabeth Stanhope** (stanhope@lclark.edu). *Spectral and geometric bounds on orbifold homotopy type*. Preliminary report.

Consider an isospectral set of Riemannian orbifolds with sectional curvature bounded below. In this talk, I will describe our work to prove that such a set contains orbifolds of only finitely many orbifold category homotopy types. A previous result by Stanhope shows that the spectral bounds can be replaced with bounds on diameter and volume. From there our work is to generalize a similar result for manifolds by Grove and Petersen. (Received September 18, 2009)