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Emily B. Proctor* (eproctor@middlebury.edu). *Orbifold homeomorphism finiteness based on geometric constraints.*

I will present a new result that any collection of n -dimensional orbifolds with sectional curvature and volume uniformly bounded below, diameter bounded above, and with only isolated singular points contains orbifolds of only finitely many orbifold category homeomorphism types. This is a generalization to the orbifold category of a similar result for manifolds proven by Grove, Petersen, and Wu. An immediate corollary is that any Laplace isospectral collection of orbifolds with sectional curvature uniformly bounded below and having only isolated singular points also contains only finitely many orbifold homeomorphism types. (Received February 01, 2011)