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Teresa Arias-Marco, Emily Dryden, Carolyn Gordon, Asma Hassannezhad, Allie Ray
and **Elizabeth Stanhope*** (stanhope@clark.edu). *Upper bounds on the Steklov eigenvalues of an orbifold*. Preliminary report.

The Steklov spectrum of a Riemannian orbifold with boundary is the eigenvalue spectrum of the Dirichlet-to-Neumann operator associated to the orbifold. This operator has applications in electrical impedance tomography, for example. We discuss two approaches to obtaining upper bounds on Steklov eigenvalues in terms of the geometry and topology of the orbifold. The first generalizes work of B. Colbois, A. El Soufi, A. Girouard and A. Hassannezhad to the orbifold setting, and the second examines extensions of Weinstock's inequality to orbifolds. (Received February 03, 2018)