1049-05-136 **Karsten Gimre**, **Indra Shottland** and **Elizabeth Stanhope*** (stanhope@lclark.edu), 0615 SW Palatine Hill Rd, MSC 110, Portland, OR 97219. *What is an orbifold graph, and what do they sound like?* Preliminary report.

Questions in the spectral geometry of Riemannian orbifolds examine the relationship of the singular set of an orbifold to its Laplace spectrum. Recent interest in orbifolds in the mathematics and mathematical physics communities has led to a burst of energy in this area. One may ask if spectral questions about orbifolds can be transferred to the setting of graph theory. There already are nice results linking manifold spectral geometry to spectral graph theory. To do this for orbifolds one first needs to define an orbifold graph. Finding such a definition is the topic of this talk. (Received March 01, 2009)