Meeting: 1003, Atlanta, Georgia, SS 16A, AMS Special Session on Inverse Spectral Geometry, I

1003-53-1600 Elizabeth Stanhope* (estanhop@willamette.edu) and Alejandro Uribe. The Trace Formula on Orbifolds. Preliminary report.

In this talk we construct and study the trace of the fundamental solution to the wave equation on a Riemannian orbifold. A proof of the trace formula for orbifolds will be discussed. As an application, we will seek conditions on an orbifold that imply the orbifold's Laplace spectrum determines its length spectrum. (Received October 05, 2004)