

**Meeting:** 1005, Newark, Delaware, SS 2A, Special Session on Singular Analysis and Spectral Theory of Partial Differential Equations

1005-58-147      **Paul Loya** and **Patrick McDonald\*** (ptm@virtu.sar.usf.edu), Department of Mathematics, New College of Florida, 5700 N. Tamiami Trail, Sarasota, FL 34243, and **Jinsung Park**. *Zeta regularized determinants for conic manifolds*. Preliminary report.

We study relative zeta regularized determinants of Laplace type operators on compact conic manifolds. We establish gluing formulae for such determinants. For self adjoint extensions of the Laplace-Beltrami operator corresponding to Dirichlet and Neumann conditions, we express the corresponding relative zeta regularized determinants as a ratio of determinants of certain finite matrices. (Received February 07, 2005)