

1009-58-5

Christopher Sogge*, Johns Hopkins University, Department of Mathematics, 3400 N Charles Street, Baltimore, MD 21218. *Estimates for eigenfunctions of the Laplacian.*

I shall present various L^p estimates for eigenfunctions of the Laplacian in manifolds with and without boundary. A common theme is to try to see how the underlying geometry, as measured by the long-term properties of the geodesic flow, does or does not lead to blowup of L^p norms. In the case where $p = \infty$ we shall also discuss blowup and non-blowup results for quasimodes.

This is joint work with Hart Smith, and joint work with John Toth and Steve Zelditch. (Received October 14, 2004)