

DIFFERENTIAL GEOMETRY/PDE SEMINAR

FRIDAY, FEBRUARY, 2014

LOW 112

2:30PM–3:30PM

L^p norms of eigenfunctions and Kakeya-Nikodym averages

Matt Blair

(U OF NEW MEXICO, ALBUQUERQUE)

We consider the problem of determining upper bounds on the growth of L^p norms of eigenfunctions of the Laplacian on a compact Riemannian manifold. After an introduction to the problem, we will discuss recent work of C. Sogge and the speaker with C. Sogge relating such growth to mass concentration in frequency dependent tubes about geodesic segments. We then show that this yields improved L^p bounds for manifolds with nonpositive sectional curvatures, extending a result of Sogge-Zelditch to higher dimensions.

For more information about this seminar, visit the DG/PDE Seminar Web page (from the Math Department home page, www.math.washington.edu, follow the link **Seminars, Colloquia, and Conferences**).

The University of Washington is committed to providing access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation contact the Disability Services Office at least ten days in advance at: 206-543-6450/V, 206-543-6452/TTY, 206-685-7264 (FAX), or dso@u.washington.edu.