PDE seminar
University of Minnesota
Wednesday, November 7, 2012

Speaker: **Jeremy Marzuola, University of North Carolina**
Title: **Dispersive equations on (and outside) polygons.**

Abstract: We discuss some recent work of the speaker with Matt Blair, Austin Ford and Sebastian Herr establishing local in time Strichartz estimates for the wave and Schrdinger equations on manifolds with conic singularities and relate them to analysis on wedge and polygonal domains. Given time, we will also applications including Morawetz estimates for the wave equation, existence of nonlinear solutions and a recent extension of such results to domains exterior to polygons domain problems with Dean Baskin and Jared Wunsch using a new local smoothing estimate proved by them, where the estimates are sharper.