

# DIFFERENTIAL GEOMETRY/PDE SEMINAR

WEDNESDAY, MARCH 28, 2007

PADELFORD C-36

3:50-5PM

Stable and outermost marginally trapped surfaces

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Marginally trapped surfaces are the quasi-local analogy to black holes in general relativity and thus have important applications in mathematical and numerical relativity. In this talk I will present curvature estimates for stable marginally outer trapped surfaces and an area estimate for outermost marginally outer trapped surfaces. Important tools are well known techniques for stable minimal surfaces and a theorem by Schoen, which roughly speaking ensures the existence of a marginally trapped surface between a strictly trapped and a strictly untrapped one.

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

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