DIFFERENTIAL GEOMETRY/PDE SEMINAR

Wednesday, December 8, 2004

Padelford C-36

3:50 pm

Local solvability/nonsolvability of Monge-Ampere equations in the plane

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The most basic question that one can ask of a PDE is whether or not it admits local solutions. However, even for the most well-studied nonlinear equations this question remains largely unanswered. Here we will present degenerate hyperbolic and mixed type Monge-Ampere equations in the plane which do not admit local solutions. We will also discuss conditions under which these equations are locally solvable, and give some applications to differetial geometry.

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**).