

**JOINT INVERSE PROBLEM AND DIFFERENTIAL
GEOMETRY/PDE SEMINAR**

TUESDAY, MAY 3, 2005

GUGGENHEIM 317

2:30 PM

(NOTE: SPECIAL PLACE, DAY AND TIME!)

On Highly Oscillatory Partial Differential Equations

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We present classical WKB asymptotics and the modern phase space approach for semiclassical limit and homogenization problems. The important feature of the phase space approach, which is based on Wigner functions and Wigner measures, lies in the fact that caustics are 'unfolded' and thus can be crossed without difficulty. Typical examples are the Schrödinger equation, the Dirac equation, the Maxwell equations etc.

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**).

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