On Highly Oscillatory Partial Differential Equations

Peter A. Markowich

(University of Vienna & Wolfgang Pauli Institute)

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).

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.