

Stanford Department of Mathematics Colloquium

January 6
4:15 p.m.
Bldg. 380, Room 380-W.

Semiclassical scattering and applications

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Abstract

I will illustrate various aspects of semiclassical scattering using 2D numerical simulations and relate them to recent mathematical results. In particular I will describe hyperbolic dispersive estimates and resolvent estimates obtained in joint work with Nonnenmacher and Wunsch, the work of Vasy on resolvents in general geometric situations, of Datchev-Vasy on "gluing techniques", and of Dyatlov on quasinormal modes for rotating black holes. Despite the diversity of settings the common underlying themes will be highlighted.

<http://math.stanford.edu/coll/0910/>