

Workshop on Spectrum and Dynamics  
*Atelier sur la dynamique et théorie spectrale*  
07–11 April/*Avril*, 2008

## Semiclassical second microlocal propagation of regularity and integrable systems

Andras VASY  
*Department of Mathematics*  
*Stanford University*  
*Building 380, 450 Serra Mall*  
*Stanford, CA 94305-2125*  
*USA*

`andras@math.stanford.edu`

### **Abstract**

I will discuss semiclassical second microlocalization at a Lagrangian submanifold of  $T^*X$ , a precise way of measuring the failure of a distribution to be a Lagrangian distribution in the sense of Hormander (translated into the semiclassical setting). One application is to the propagation of local Lagrangian regularity on invariant tori of systems with classically integrable hamiltonian.

*Joint with Jared Wunsch.*