

# BI-CO MATHEMATICS COLLOQUIUM

Nalini Anantharaman  
Université Paris-Sud (Orsay) and  
Institute for Advanced Study

*“Order and chaos in wave  
propagation”*

**Monday, March 25, 2013**

Talk at 4:00 – Park 328  
Tea at 3:30 – Park 355, Math Lounge

Abstract:

The vibration of a membrane can be described by a simple partial differential equation : the 2-dimensional D'Alembert equation. A membrane produces harmonics, which mathematically correspond to eigenfunctions of the laplacian. The relation between the geometry of the membrane and the vibrations it produces is still not fully understood, and I will present a few classical results, but also recent research, on the subject.

**BRYN MAWR COLLEGE**