



Nalini Anantharaman

Université Paris-Sud, France

Nalini.Anantharaman@math.u-psud.fr

<http://www.math.u-psud.fr/~anantharaman/>

Nalini Anantharaman is a Professor at the Department of Mathematics (Université Paris-Sud, Orsay, France). She obtained her PhD in Paris 6, then she moved to the École Normale Supérieure de Lyon as Maître de Conférences, to Ecole Polytechnique as a CNRS researcher and Hadamard Professor, and finally to Paris-Sud as a Full Professor. She was awarded the Prix Gabrielle Sand et Marie Guido Triossi de l'Académie des Sciences, 2007, the 2010 Salem Prize and the 2012 Henri Poincaré Prize. She has

been invited speaker at the ICMP 2006, the ECM 2008 and the ICM 2010. Prof. N. Anantharaman is a member of the Editorial Board of Annales Sci. ENS. She has made original contributions to the area of quantum chaos, dynamical systems and Schrödinger equations, including a remarkable advance in the problem of quantum unique ergodicity.

Dispersion and controllability for linear Schrödinger equations on compact Riemannian manifolds

Abstract

I will review recent results related to the controllability and dispersive properties of the linear Schrödinger equation on a compact Riemannian manifolds, putting the emphasis on the role of the geometry. I will discuss, in particular, the case of negatively curved manifolds, where the classical propagation of rays is chaotic, and of flat tori and of the 2-dimensional disk, where the classical propagation is completely integrable. Joint work with Gabriel Rivière, Fabricio Macià, Matthieu Léautaud, Clotilde Fermanian.