# Transport and localization in random media: theory and applications

May 1 - 3, 2018

Department of Applied Physics and Applied Mathematics and Department of Mathematics Columbia University

#### **Organizers**

Ivan CorwinColumbia UniversityAlexis DrouotColumbia UniversityHao ShenColumbia UniversityMichael I. WeinsteinColumbia University

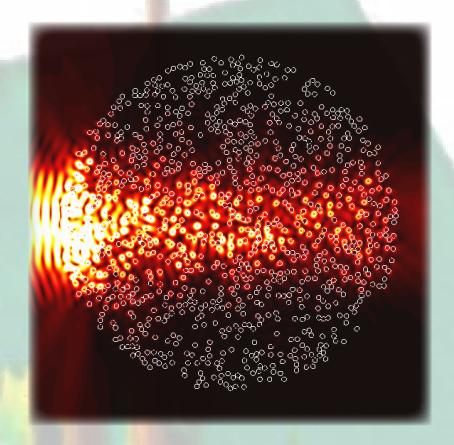
### **Confirmed Speakers**

**Scott Armstrong New York University Guillame Bal** University of Chicago Liliana Borcea University of Michigan **Maury Bramson** University of Minnesota **Josselin Garnier Ecole Polytechnique Svetlana Jitomirskaya** University of California, Irvine Jianfeng Lu Duke University **Jonathan Mattingly** Duke University **James Nolen Duke University George Papanicolaou** Stanford University Lenya Ryzhik Stanford University New York University **Sylvia Serfaty** Sasha Sodin Queen Mary University of London **Thomas Spencer** Institute for Advanced Study Simone Warzel Technical University of Munich

A limited amount of funding for travel and lodging is available for young researchers from Ki-Net nodes. To apply, complete the online application before March 31, 2018.

For more information and to apply: www.ki-net.umd.edu





Wave scattering in disordered media

LP2N, Bordeaux, France

## **Scientific Background**

Mathematical models of random media are central to our understanding of many physical systems, with applications to atmospheric science, wireless communications in urban environments, physiological imaging and electronic transport in nano-structures. A central question is how disordered environments affect energy transport.

#### Goals

This workshop will present recent developments on wave propagation, scattering and diffusion in random medias at the interface of probability theory, mathematical physics and PDEs. Accessible lectures by leading mathematicians will catalyze interactions among both junior and senior researchers in fundamental and applied fields.



