Seminar of Probability and Stochastic Process

Tuesday, 19th April, from 16h15
MA B2 485, EPFL, Ecublens

Prof. Davar Khoshnevisan

Univsrsity of Utah

A macroscopic multifractal analysis of parabolic stochastic PDEs

Abstract:

We will show that the solutions to a large family of stochastic PDEs that behave as the linear heat equation develop large-scale space-time peaks on infinitely-many different scales. We formalize this assertion by appealing to the Barlow-Taylor theory of macroscopic fractals. We will also present some earlier work on fixed-time results for comparison purposes. This talk is based on a paper and a work in progress with Kunwoo Kim (Technion) and Yimin Xiao (Michigan State University).

Date of last change: Fri, 8 April 2016 10:08:37, by Carlo Ciccarella