PROBABILITY SEMINAR SERIES

TOPIC: Renormalization in Regularity Structures

SPEAKER: Ajay Chandra, Imperial College London

TIME: 3:00pm-4:00pm, Friday, February 9, 2018

VENUE: Room 204, Pudong Campus, 1555 Century Avenue

HOST: Weijun Xu, NYU Shanghai

ABSTRACT OF THE TALK

The inception of the theory of regularity structures transformed the study of singular SPDE by generalizing the notion of "taylor expansion" and classical notions of regularity in a way flexible enough to accommodate the renormalization. In the years since then our understanding of how to implement renormalization in regularity structures has developed rapidly. I will sketch the overall framework of the theory of regularity structures and then summarize these recent developments in order to give an idea of the current state of the theory.

BIOGRAPHY

Ajay Chandra is a Leverhulme Early Career Fellow at Imperial College London. He graduated from the University of California, Santa Barbara before going to the University of Virginia to complete a Ph.D. in mathematics and then taking up a postdoctoral position at the University of Warwick. His research interests include singular stochastic partial differential equations, the Wilson renormalization group, statistical mechanics, and constructive quantum field theory.