



## Mathematics and CS Seminar

# Geometric stochastic heat equations

**Yvain Bruned (University of Edinburgh)**

**Host: Jan Maas**

We will explain how to solve a class of one-dimensional stochastic PDEs driven by space-time white noise using the theory of Regularity Structures invented by Martin Hairer. This class of equations is invariant under the action of the diffeomorphism group and covers many singular stochastic PDEs as the stochastic heat equation, rough Burgers equations and the KPZ equation. The main point is to find solutions satisfying different symmetry properties as the invariance under the action of diffeomorphisms and Itô's isometry. This is a joint work with Franck Gabriel, Martin Hairer and Lorenzo Zambotti.

**Thursday, April 18, 2019 02:45pm - 03:45pm**  
IST Austria Campus Erwin Schrödinger Institute in Vienna



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: <https://ist.ac.at/en/campus/how-to-get-here/> The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.