2015 MICHALIK LECTURE



Martin Hairer is an Austrian mathematician working in the field of stochastic analysis, in particular stochastic partial differential equations. He is Regius Professor of Mathematics at the University of Warwick and a Fellow of the Royal Society of UK. He was awarded the Fields Medal in 2014.

4:00 P.M. Wednesday, December 2, 2015

Ballroom, O'Hara Student Center

Free and Open to the Public

The DIETRICH School of Arts & Sciences

The University of Pittsburgh Department of Mathematics

Presents

The Edmund R. Michalik Distinguished Lecture in the Mathematical Sciences

Martin Hairer

Regius Professor of Mathematics, University of Warwick, UK

Taming Infinities

Abstract: Some physical and mathematical theories have the unfortunate feature that if one takes them at face value, many quantities of interest appear to be infinite! Various techniques, usually going under the common name of "renormalisation" have been developed over the years to address this, allowing mathematicians and physicists to tame these infinities. We will tip our toes into some of the mathematical aspects of these techniques and we will see how they have recently been used to make precise analytical statements about the solutions of some equations whose meaning was not even clear until now.

Reception Immediately Following the Lecture

This public lecture is part of an annual series in honor of Professor Edmund R. Michalik, established through a gift from the Michalik family.

> For further information, email: **math@pitt.edu** Phone: **412-624-8375** or visit **http://www.mathematics.pitt.edu**