

Institute for Analysis and Scientific Computing, and  
Doctoral Program "Dissipation and Dispersion in Nonlinear PDEs"

Course Announcement:

# Blow-Up in Nonlinear PDEs Theory and Methods

by

Nikos Kavallaris

University of Chester, United Kingdom

**Aim: Blow-up theory for nonlinear deterministic and stochastic partial differential equations**

**Content:**

- 1/ Introduction to the concept of blow-up.
- 2/ Finite-time Blow-up: ODEs vs PDEs
- 3/ Main methods for proving the existence of finite-time blow-up for some key nonlinear PDEs.
- 4/ Some techniques for proving finite-time blow-up for some stochastic partial differential equations (SPDEs)

**Location and Times:**

**07.06. - 07.07.2019**

**Mon: 15:00 - 16:30**

**Tue: 16:30 - 18:00, June 18 + 25**

**Wed: 10:30 - 12:00,  
except July 3: 12:00 - 13:30**

**Thu: 15:00 - 16:30**

**Fri: 15:00-16:30, June 7, 14 + 21**

**Room: Library 101,  
6th fl., green area**

**3.0 ECTS**