

Nonlinear Diffusion: Algorithms, Analysis and Applications

PROGRAMME

Monday 6th June 2011

09.30 – 10.15	G Dziuk (Frieberg)	<i>Time discretizations for ESFEM</i>
10.15 – 11.00	S Larsson (Chalmers)	<i>Finite element approximation of the Cahn-Hilliard-Cook equation</i>
11.00 – 11.30	Tea/coffee in the Mathematics Institute Common Room	
11.30 – 12.15	R Kornhuber (Berlin)	<i>Time discretizations of anisotropic Allen-Cahn equations</i>
12.15 – 13.00	B Niethammer (Oxford)	<i>Self-similar solutions for a kinetic model for grain growth</i>
13.00 – 14.00	Lunch in the Mathematics Institute Common Room	
14.00 – 14.45	K Deckelnick (Magdeburg)	<i>Identification of matrix parameters in elliptic PDEs</i>
14.45 – 15.30	J Rodrigues (Lisbon)	<i>Remarks on the variational inequality approach to constrained Cahn-Hilliard type systems</i>
15.30 – 16.00	Tea/coffee in the Mathematics Institute Common Room	
16.00 – 16.45	J Blowey (Durham)	<i>Analysis of a Nonlinear Parabolic Cross Diffusion Population Model</i>
16.45 - 17.30	A Bertozzi (California)	<i>Diffuse Interface Methods in Image Processing and Data Analysis</i>
17.30	Drinks & Snacks in the Mathematics Institute Common Room	

Tuesday 7th June 2011

09.30 – 10.15	Y Giga (Tokyo)	<i>Hamilton-Jacobi equations with discontinuous source terms</i>
10.15 – 11.00	M Hinze (Hamburg)	<i>A residual-based a posteriori approach to simulation and control of the Cahn-Hilliard Navier Stokes system</i>
11.00 – 11.30	Tea/coffee in the Mathematics Institute Common Room	
11.30 – 12.15	J Ockendon (Oxford)	<i>The Perennial Problem of Alloy Solidification</i>
12.15 – 13.00	A Novick-Cohen (Technion)	<i>Upper bounds for coarsening for various Cahn-Hilliard type equations</i>
13.00 – 14.00	Lunch in the Mathematics Institute Common Room	
14.00 – 14.45	D French (Cincinnati)	<i>Numerical Approximation of Solutions to Nonlinear Inverse Problems Arising in Olfaction Experimentation</i>
14.45 – 15.30	D Kay (Oxford)	<i>Numerical methods for fractional diffusion</i>
15.30 – 16.00	Tea/coffee in the Mathematics Institute Common Room	
16.00 – 16.45	B Stinner (Warwick)	<i>On a surface finite element method for biomembranes with phase separation</i>
16.45 - 17.30	J Sprekels (Berlin)	<i>Technological and mathematical problems in the industrial growth of semiconductor bulk single crystals</i>
19.00	Conference Dinner at Loch Fyne Restaurant Kenilworth	

Wednesday 8th June 2011

09.30 – 10.15	M Turner (Warwick)	<i>Diffusion and patterning on living membranes</i>
10.15 – 11.00	S Luckhaus (Leipzig)	<i>Blow up in chemotaxis and beyond</i>
11.00 – 11.30	Tea/coffee in the Mathematics Institute Common Room	
11.30 – 12.15	M Ainsworth (Strathclyde)	<i>Rigorous numerical enclosures on the limit load in the Analysis of multibody structures</i>
12.15 – 13.00	G Richardson (Southampton)	<i>The Reversing of Interfaces in Slow Diffusion Processes with Strong Absorption</i>
13.00 – 14.00	Lunch in the Mathematics Institute Common Room	
14.00 – 14.45	H Garcke (Regensburg)	<i>On a thermodynamically consistent Cahn-Hilliard/Navier-Stokes model for incompressible two-phase flows with different densities</i>
14.45 – 15.30	J Barrett (Imperial)	<i>Parametric Approximation of Elastic Flow for Curves and Curve Networks</i>
15.30 – 16.00	Tea/coffee in the Mathematics Institute Common Room	