

Symposium Programme

Monday 16th December 2013

09.00 – 09.30 Registration, Tea & Coffee

09.30 – 10.05 Prof EB Davies (*King's College London*)
A non-self-adjoint spectral problem

10.05 – 10.40 Prof LE Fraenkel (*University of Bath*)
A singular initial-value problem for the Navier-Stokes equations (L.E. Fraenkel and M.D. Preston)

10.40 – 11.05 Prof AV Sobolev (*University College London*)
Multidimensional Wiener-Hopf operators and Quantum Information

11.05 – 11.30 Prof J Björn (*Linköping University*)
Metrics, Prime ends and the Dirichlet problem on bad domains

11.30 – 11.55 Prof SN Chandler-Wilde (*University of Reading*)
Scattering by fractal screens: fun with integral equations and Sobolev spaces (S.N. Chandler-Wilde, D.P. Hewett and A. Moiola)

11.55 – 12.20 Prof A Cialdea (*University of Basilicata*)
The L^p -dissipativity of partial differential operators

12.20 – 13.00 Lunch

13.00 – 13.35 Prof G Dal Maso (*Scuola Internazionale Superiore di Studi Avanzati*)
Generalised functions of bounded deformation

13.35 – 14.10 Prof JR Ockendon (*University of Oxford*)
Perturbed Hyperbolic Systems in Plasticity and Plasma Physics

14.10 – 14.35 Prof A Cianchi (*Università de Firenze*)
Global boundedness of the gradient for a class of nonlinear elliptic systems

14.35 – 15.00 Prof M Costabel (*IRMAR, Université de Rennes 1*)
On the inf-sup constant of the divergence

15.00 – 15.25 Prof F Lanzara (*University of Rome "La Sapienza"*)
Fast computation of volume potentials by approximate approximations

15.25 – 15.50 Prof J Rossmann (*University of Rostock*)
Asymptotics of solutions of the heat equation near conical points and edges (joint work with V.A.Kozlov)

Monday 16th December 2013**15.50 – 16.20 Tea & Coffee Break**

16.20 – 16.45 Prof R Hurri-Syrjänen (*University of Helsinki*)
On fractional Sobolev-Poincaré and Hardy inequalities in domains in \mathbb{R}^n

16.45 – 17.10 Prof N Jacob (*Swansea University*)
Dirichlet Spaces as Function Spaces

17.10 – 17.35 Prof C Kiselman (*Uppsala University*)
Discrete convolution operators, the Fourier transformation, and its tropical counterpart: the Fenchel transformation

17.35 – 18.00 Dr M Dindos (*University of Edinburgh*)
 L^p Solvability of the Stationary Stokes Problem in domains with conical singularity in any dimension

19.00 Symposium Dinner**Tuesday 17th December 2013**

09.00 – 09.35 Prof WL Wendland (*Universität Stuttgart*)
Potential methods for Stokes and Brinkman systems on Lipschitz domains

09.35 – 10.10 Prof M Dauge (*IRMAR, Université de Rennes 1*)
Ground energy of the magnetic Laplacian in polyhedral bodies

10.10 – 10.45 Prof T Lyons (*University of Oxford*)
Reading and learning from time ordered data

10.45 – 11.15 Tea & Coffee Break

11.15 – 11.40 Prof M Levitin (*University of Reading*)
Eigenvalues of a one-dimensional Dirac operator pencil

11.40 – 12.05 Dr A Pushnitski (*King's College London*)
Analysis of Hankel operators with continuous spectrum

12.05 – 12.30 Prof S Mikhailov (*Brunel University London*)
Spectral Properties and Perturbations of Boundary-Domain Integro-Differential Equations for Variable-Coefficient BVPs

12.30 – 12.55 Prof F Pacella (*University of Rome "La Sapienza"*)
Blow up in finite time for some semilinear heat equations

12.55 – 13.35 Lunch

Tuesday 17th December 2013

- 13.35 – 14.10 Prof VG Maz'ya** (*University of Liverpool & Linköping*)
Differentiability of solutions to elliptic equations with non-Dini coefficients
- 14.10 – 14.35 Prof G Schmidt** (*Weierstrass Institute*)
On an integral equation formulation for scattering by bi-periodic structures (joint work with B. Bugert)
- 14.35 – 15.00 Prof E Shargorodsky** (*King's College London*)
Negative eigenvalues of two-dimensional Schroedinger operators

15.00 – 15.30 Tea & Coffee Break

- 15.30 – 15.55 Prof T Shaposhnikova** (*Royal Institute of Technology, Stockholm*)
Logarithmic interpolation-embedding inequalities on irregular domains
- 15.55 – 16.20 Prof MA Vivaldi** (*University of Rome "La Sapienza"*)
PDEs in the Koch snowflake domain
- 16.20 – 16.45 Prof JR Whiteman** (*Brunel University London*)
High Order Space-Time Finite Element Schemes for Acoustic and Viscodynamic Wave Equations with Application to Stenosis diagnosis
- 16.45 – 17.10 Dr Y Netrusov** (*University of Bristol*)
Estimates of entropy numbers in some classes of functions

17.10 – 17.35 Discussion & Closing