

EPSRC Gregynog Workshop 2008



Timetable of Talks

Saturday	19.00	DINNER	(Alternatively, a cold meal will be available for late arrivals by arrangement).
Sunday	EARLY MORNING SESSION.		
	9.20	Introduction by B M Brown	
	9.30	M Dauge	How one can compute wrong eigenvalues and believe they are correct, and how to remedy them
	10.30	COFFEE	
	LATE MORNING SESSION.		
	11.30-12.30	C A Stuart	Buckling of a tapered column under its own weight. (Lecture 1)
	13.00	LUNCH	
	EARLY AFTERNOON SESSION.		
	14.30	G Stolz	Random Schrödinger operators and the integrated density of states (Introductory talk)
	15.30	TEA	
	LATE AFTERNOON SESSION.		
	16.30	M S P Eastham	Leaky graphs: corners and asymptotic straightness
	17.00	W Reichel	A-priori bounds for discrete and continuous boundary value problems
	17.30	A Iantchenko	An inverse problem for the semi-classical resonances generated by a critical point of the potential
	18.30	SHERRY RECEPTION	
	19.00	DINNER	
Monday	EARLY MORNING SESSION.		
	9.00	A Kirsch	Recent developments in inverse scattering theory
	10.00	H Heck	Stability estimates for the inverse conductivity problem
	10.30	M Solomyak	Counting the bound states of a Schrödinger operator: Rozenblum – Lieb – Cwikel estimate and beyond
	11.00	COFFEE	
	LATE MORNING SESSION.		
	11.30	I Wood	Spectral theory of non-selfadjoint operators via boundary triplets
	12.00	G Grubb	M-functions and Krein resolvent formulas for nonselfadjoint elliptic boundary problems
	12.30	R Hempel	On open scattering channels for manifolds with ends
	13.00	LUNCH	
	EARLY AFTERNOON SESSION.		
	14.30	J Janus	Spectral properties of some classes of unbounded Jacobi matrices
	15.00	J S Christiansen	Spectral properties of a q-Sturm-Liouville operator
	15.30	M Muzzolini	Titchmarsh-Sims-Weyl theory for complex Hamiltonian systems of arbitrary order
	16.00	TEA	
	LATE AFTERNOON SESSION.		
	16.30	M Strauss	Spectral pollution and the quadratic projection method
	17.00	M Hieber	Spectral problems related to boundary layers in fluids
	17.30	V Moroz	“Boundary blowup” type sub-solutions to semilinear elliptic equations with Hardy potential
	19.00	DINNER	

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Tuesday	EARLY MORNING SESSION.		
	9.00	M Dauge	Two methods for spectrally correct approximation of Maxwell cavity eigenfrequencies: weighted regularization and discrete commuting diagrams
	10.00	K M Schmidt	A Hardy-Littlewood-type inequality for the p-Laplacian
	10.30	R Haller-Dintelmann	Optimal elliptic regularity near heterogeneous vertices
	11.00	COFFEE	
	LATE MORNING SESSION.		
	11.30	P Binding	A comparison of spectra for some nonlinear eigenvalue problems
	12.00	A Luger	On counting eigenvalues
	12.30	LUNCH	
	AFTERNOON.		
13.15	EXCURSION TO THE NATIONAL LIBRARY OF WALES, ABERYSTWYTH		
20.00	DINNER		
Wednesday	EARLY MORNING SESSION.		
	9.00	G Stolz	The random displacement model. (Scientific talk)
	10.00	M M Chipot	On anisotropic singular perturbations problems
	10.30	H Siedentop	The Scott correction for atoms according to Brown and Ravenhall
	11.00	COFFEE	
	LATE MORNING SESSION.		
	11.30	K Nagatou	Eigenvalue excluding on 1-D Schrödinger operators
	12.00	P J McKenna	Semilinear elliptic equations: conjectures, verification and experiments
	12.30	S Oishi	Numerical uniqueness and existence theorem for solution of Lippmann-Schwinger equation to two dimensional sound scattering problem
	13.00	LUNCH	
	EARLY AFTERNOON SESSION.		
	14.30	C Bennowitz	Spectral theory and the Camassa-Holm equation
	15.00	A A Shkalikov	On global stability for inverse Sturm-Liouville problems
	15.30	N Roehr	A least squares functional for solving inverse Sturm-Liouville problems
	16.00	TEA	
	LATE AFTERNOON SESSION.		
	16.30	D B Pearson	Dirichlet and Neumann densities for the Schrödinger operator in one dimension
	17.00	G Rozenblum	On the spectral properties of the perturbed Landau Hamiltonian and related problems in analysis
	17.30	V Kostrykin	On indefinite quadratic forms
19.00	DINNER		
20.00	MUSICAL EVENT		
21.00	WINE RECEPTION		

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Thursday	EARLY MORNING SESSION.		
	9.00	C A Stuart	Buckling of a tapered column under its own weight. (Lecture 2)
	10.00	C Engström	Nonlinear spectral problems and Bloch waves in crystals
	10.30	V Hoang	Spectral Floquet-Bloch theory for equations with discontinuous coefficients and unbounded periodicity cell
	11.00	COFFEE	
	LATE MORNING SESSION.		
	11.30	M Plum	A computer-assisted proof for photonic band gaps
	12.00	M Langer	Eigenvalue enclosures and exclosures for non-self-adjoint problems in hydrodynamics
	12.30	R Weikard	On the stability of inverse problems
	13.00	LUNCH	
Thursday	EARLY AFTERNOON SESSION.		
	14.30	R Carlson	Spectral asymptotics for quantum graphs
	15.00	P Kurasov	On the inverse problem for magnetic Schrödinger operators on graphs
	15.30	U Smilansky	The interior-exterior duality for discrete graphs
	16.00	TEA	
	LATE AFTERNOON SESSION.		
16.30	A V Kiselev	On spectral properties of nonself-adjoint operators with almost Hermitian spectrum	
17.00	D J Gilbert	Higher derivatives of spectral functions associated with a class of one-dimensional Schrödinger operators	
17.30	E Korotyaev	Sharpness in two-sided estimates for Hill operators	
19.30	CONFERENCE DINNER		
Friday	EARLY MORNING SESSION.		
	9.00	A Kirsch	The interior transmission eigenvalue problem
	10.00	M T Nakao	Numerical verification of solutions for elliptic problems with very high accuracy by using a spectral method
	10.30	F Pacella	Uniqueness of positive solutions of semilinear elliptic equations: theoretical and numerical approach
	11.00	COFFEE	
	12.00	LUNCH	(Packed lunch will be available by arrangement for those who leave early).