

## NEW TRENDS IN SPECTRAL ANALYSIS AND PDE

### Wednesday 12 December AM

CO 118

- 9.50–10.15 Graeme Wake  
*Spectral Properties of non-Local Eigenvalue Problems*
- 10.15–10.40 Florina Halasan  
*Absolutely Continuous Spectrum for the Anderson Model on More General Trees*
- 11.00–11.50 **Keynote:** Colin Fox  
*Semi-analytic Spectral Methods*
- 11.50–12.15 David Wall  
*The Mathematics of Imaging in Magnetic Resonance Elastography*

### Wednesday 12 December PM

CO 118

- 14.50–15.15 Yulia Karpeshina  
*Quasi-intersections of Isoenergetic Surfaces: Description in Terms of Determinants*
- 15.15–15.40 Gunter Stolz  
*Bubbles Tend to the Boundary*
- 16.00–16.25 William Desmond Evans  
*Inequalities of Hardy-Sobolev and Hardy-Gagliardo-Nirenberg Type*

### Thursday 13 December AM

CO 118

- 9.50–10.15 Boris Pavlov  
*An ill-Posed Problem in Scattering Theory*
- 10.15–10.40 Annalisa Calini  
*Cable Formation for Finite-Gap Solutions of the Vortex Filament Flow*
- 11.00–11.50 **Keynote:** Jochen Brüning  
*The Equivariant Index Theorem for Dirac Operators*
- 11.50–12.15 Anjan Biswas  
*Quasi-Stationary Solitons for Langmuir Waves in Plasmas*

### Friday 14 December PM

CO 118

- 14.50–15.15 Stephen McDowall  
*Optical Tomography in Media with Varying Index of Refraction*
- 15.15–15.40 Boris P Belinskiy  
*Stochastic Wave Equation Driven by a Fractional Brownian Motion*
- 16.00–16.25 Sergei Avdonin  
*Control and Inverse Problems for Partial Differential Equations on Graphs*
- 16.25–16.50 Georgi Raikov  
*Spectral Properties of a Magnetic Quantum Hamiltonian on a Strip*
- 16.50–17.15 Felipe Leitner  
*On Unitary Conformal Holonomy*