

## GENERAL CONTRIBUTIONS

### Wednesday 12 December AM

CO 228

- 9.50–10.15 Winston L. Sweatman  
*Full Ionisation in Binary-Binary Encounters at High Velocity*
- 10.15–10.40 John Harper  
*Electrophoresis of Gas Bubbles*
- 11.00–11.25 Ratneesh Suri  
*A Real Options Approach to Fisheries*
- 11.25–11.50 Nick Depree  
*Mathematical Modelling of an Annealing Furnace*
- 11.50–12.15 Celine Cattoen  
*Cosmography: Extracting the Hubble Series from the Supernova Data*

### Wednesday 12 December PM

CO 228

- 14.50–15.15 Robert McKibbin  
*Modelling Turbulent Dispersion of Pollen in a Forest Canopy*
- 15.15–15.40 Neil Watson  
*Recent Progress on the Heat Equation*
- 16.00–16.25 ChungChun Yang  
*On Entire Solutions of Certain Type of Nonlinear Differential Equations*
- 16.25–16.50 Yuncheng You  
*Regularity Asymptotics of Vorticity for the 2D Navier-Stokes Equation*
- 16.50–17.15 Petarpa Boonserm  
*Buchdahl-like Transformations in General Relativity*

### Thursday 13 December AM

CO 228

- 9.50–10.15 Irwin Pressman  
*Steiner Triples and a Solution of the Kirkman School Girl Problem using Matrices with Multiple Symmetry Properties*
- 10.15–10.40 Bill Taylor  
*A Note on Strategies for Win/Loss Symmetric Games*
- 11.00–11.25 E. F. Cornelius, Jr.  
*Module-Building with Polynomials and Power Series*
- 11.25–11.50 Kevin Byard  
*Qualified Residue Difference Sets from Unions of Cyclotomic Classes*
- 11.50–12.15 Daniel Lond  
*Külshammer's Second Problem*

### Thursday 13 December PM

CO 228

- 14.50–15.15 Michael Tuite  
*Vertex Operator Algebras on Genus Two Riemann Surfaces*
- 15.15–15.40 V.Lakshmana Gomathi Nayagam  
*Fuzzy Translation Invariant Topological Spaces*

- 16.00–16.25 Andrew Percy  
*Cohomology Cross-Cap Products*
- 16.25–16.50 Driss Drissi  
*On Bounded Sequences and Applications to Invariant Subspace Problem*
- 16.50–17.15 Jacek Krawczyk  
*A Viability Theory Approach to a Two-Stage Optimal Control Problem*

**Friday 14 December AM** CO 228

- 9.50–10.15 Peter Donelan  
*Genericity of Serial Manipulator Singularities*
- 10.15–10.40 Avinesh Prasad  
*A Lyapunov-based Path Planning and Obstacle Avoidance for a Two-link Manipulator on a Wheeled Platform*
- 11.00–11.25 Krishna Sami Raghuwaiya  
*Potential Field Functions for Motion Planning and Posture Control of 3-Trailer Systems*
- 11.25–11.50 Bibhya Sharma  
*A Navigation and Collision Avoidance Scheme for Heterogeneous Robot Collectives*
- 11.50–12.15 Agnes Radl  
*Transport Processes in Networks with Scattering Ramification Nodes*

**Saturday 15 December AM** CO 119

- 9.50–10.15 Mareli Korostenski  
*Regular Martingales in Riesz Spaces*
- 10.15–10.40 Muni V. Reddy  
*Some Recent Developments on the Structure of Lattice Rules*
- 11.00–11.25 S. K. Sunanda  
*Generalized Opial type  $L(p)$ -Inequalities for Fractional Derivatives*
- 11.25–11.50 Stephen Joe  
*Lattice rules for integration over  $\mathbb{R}^s$*
- 11.50–12.15 Alastair McNaughton  
*Loci of Zeros in Fractional Calculus*

**Saturday 15 December AM** CO 228

- 9.50–10.15 Sun Young Jang  
 *$C^*$ -Algebras Like the Toeplitz Algebra*
- 10.15–10.40 R.K. Beatson  
*Preconditioning Radial Basis Function Interpolation Problems Using Mean Value Coordinates*
- 11.00–11.25 Alexey L. Sadovskii  
*On Spacial Statistics Models of the Determination of the Geoid*
- 11.25–11.50 Gloria Cravo  
*Snapshot-Based Theory: An Interdisciplinary Approach*
- 11.50–12.15 Igor Boglaev  
*Robust Monotone Iterates*