

# Complexity Workshop

Friday, September 16th, 2005

Hamilton Institute, National University of Ireland Maynooth

Venue: Lecture Theatre 2, Hume Building, NUIM

- 09.30 Coffee
- 10.00 *Financial Mathematics with Stable Fluctuations.*  
Przemyslaw Repetowicz, Trinity College Dublin
- 10.40 *Information Rate Requirements for Feedback Stabilization.*  
Richard Middleton, University of Newcastle, Australia
- 11.00 *Dynamics Phases and Criticality in the Burridge-Knopoff Model of an Earthquake Fault.*  
Ian Clancy and David Corcoran, University of Limerick
- 11.20 Coffee
- 11.40 *Measuring Software Complexity.*  
Michel Schellekens, University College Cork
- 12.20 *Computational Complexity, Satisfiability and Verification.*  
David Sinclair, Dublin City University
- 12.40 *To be announced.*  
Damien Woods, University College Cork
- 13.00 Lunch
- 14.30 *Policy Analysis: Implications of the New Sciences of Complexity & Governance.*  
Linda F. Dennard, University College Cork
- 15.10 *Using System Dynamics Modelling and Policy Simulation to Find Solutions to Environmental Problems Through Increased Understanding of Complex Dynamic Systems.*  
Bernadette O'Reagan and Richard Moles, University of Limerick
- 15.30 *Mathematical Modelling of Randomness*  
Renata Retkute, University College Cork
- 15.50 Coffee
- 16.10 *A System-of-Systems Approach to Formalising Complex Systems.*  
Gregory Provan, University College Cork

- 16.30      *Internet Congestion Control.*  
                Fabian Wirth, NUI Maynooth
- 16.50      *On the Identification & Control of Underwater Vehicle Dynamics:  
                A Neural Network Approach.*  
                P.W.J. van de Ven, M.J. Hayes, C. Flanagan & D. Toal, University of Limerick
- 17.10      *Analysis of Robust Performance in Interconnected Systems Using the Structured  
                Singular Value.*  
                Martin Hayes and Mark K. Halton, University of Limerick
- 17.30      *Discussion – how we should proceed with this initiative*  
                All participants
- 18.10      End