

Irish Mathematics Summer School for Undergraduates UCD, School of Mathematical Sciences, June 8th - 12th, 2009

<http://mathsci.ucd.ie/~ottewill/SummerSchool09/>

Theme: *Probability, Risk, Prediction & Estimation*
(Room Q004, Quinn Building, UCD, Belfield)

Aims:

To introduce students to ideas of probability, risk and modelling
To indicate research and career opportunities in mathematics and related areas in Ireland
To give students a flavour of the beauty, unity and power of mathematics

Lecturers: 9am-12am. No of lectures given in brackets; * indicates discussion session

- Professor Philip Boland (UCD School of Mathematical Sciences)
'Probability & Risk' (3)
- Dr Conall O'Sullivan (Smurfit Business School)
'Mathematical Modelling in Finance' (2 *)
- Professor Govindan Rangarajan (IISc, Bangalore)
'Granger Causality' (2)
- Professor Peter Richmond (TCD School of Physics)
'Financial dynamics: a physics perspective.' (1 *)
- Professor Alan Newell (Regent Professor, University of Arizona, USA)
'Approximations & asymptotic expansions of integrals: Applications from water waves to the central limit theorem' (4)

Seminars: (2- 3pm)

- Professor Richard Timoney (TCD, School of Mathematics) 'Wavelets'
- Dr Rodrigo Caballero (UCD School of Mathematical Sciences) 'Climate Risk'
- Professor Siddhartha Sen (UCD School of Mathematical Sciences) 'Modeling Complex Systems'

Special Public Seminar: (Friday 12th June, 3.30 pm (Quinn Building).

Professor Nigel Boston (UCD School of Mathematical Sciences and UCD Claude Shannon Institute)
'Distributions in number theory'

Discussion sessions : (3-4.30pm)

Dr David Edelman, (CASL & Smurfit Business school), will conduct a discussion session on "The Mathematics of Fortune's Formula."

Applications are invited from undergraduates in mathematics, business studies, economics, physics, statistics, actuarial studies and computer science. They should be submitted by email to rhona.preston@ucd.ie giving your name, contact details, course details, grade received in last year examination and the name of one referee or delivered to: UCD School of Mathematics, Science Lecture Building, UCD, Belfield, Dublin 4. Applications should be in by April 20th, 2009. Those selected will be informed by April 30th. A limited number of stipends for €300 are available for the summer school. Applications for these are invited from penultimate year University students of Irish Universities in the above mentioned disciplines.

A conference on "Understanding the Financial Crisis: Did Mathematical Models Fail?" will be held on Wednesday, June 10th (Room Q014, Quinn School, UCD). Students of the summer school are expected to attend. Organising Committee: Anthony Brabazon (UCD Business School), Adrian Ottewill & Siddhartha Sen (UCD School of Mathematical Sciences).

