## **Loughborough University**

## **Department of Mathematical Sciences**

## Mathematical Physics Seminars 2008

## Wednesdays 4 pm Room W 190

January 19 Alexander Mikhailov (Leeds)
"One-soliton solutions of 2D periodic Volterra systems"

February 12, 1pm Andy Hone (Kent) "Peakon equations with cubic nonlinearity"

February 13, 4pm Galina Filipuk "Quasi-Painleve property for second order nonlinear differential equations"

June 4 Jozsef Lorinczi "QFT and stochastic analysis"

September 10 Barbara Keyfitz (Fields Institute, Toronto) Hyperbolic conservation laws - past and future

September 17 Fumio Hiroshima (Kyushu) The study of ground states in QFT by functional integration

September 24 Colin Rogers (Polytechnic University of Hong Kong & University of New South Wales) On a nonlinear shell membrane system in liquid crystal theory

October 1 Eugene Ferapontov Integrable deformations of 2D dispersionless systems

October 8 Alexander Veselov Calogero-Moser systems with infinite number of particles and symmetric functions

October 15 Alexey Bolsinov Geometry of 3-manifolds

October 22 East Midlands Math Physics seminar Random Matrix Theory: Tom Spencer (Princeton), Jon Warren (Warwick)

October 29 Alexander Pukhlikov (Liverpool) From the rationality problem to birational rigidity

November 5 Brian Winn Quantum ergodicity theorems for maps

November 12 Boris Doubrov (Minsk) Linearisation and invariants of differential equations of finite type

November 19 Marta Mazzocco Frobenius manifold structure on Teichmuller spaces

November 25 Victor Buchstaber (Manchester) Ring of polytopes and differential equations

November 26 East Midlands Math Physics seminar **Patterns in wave-functions:** Timo Betcke (Manchester), Roman Schubert (Bristol), Ian G. Williams (Brunel)

November 27 Special Math Physics Day

Anatol Odzijewicz (Białystok) Integrable systems related to algebra of trace class operators

Georgi Grahovski (Dublin and Sofia)

Fordy-Kulish type models and spinor Bose-Einstein condensates

November 28 Integrable Day: Sergey Cherkis (Dublin), Leonid Chekhov (Moscow and Loughborough), Andrew Dancer (Oxford), Rossen Ivanov (Dublin), Ian McIntosh (York)

December 3 Joerg Seiler H-infinity calculus for Douglis-Nirenberg systems

December 10 Gabriele Mondello (Imperial) Riemann surfaces, triangulations and Weil-Petersson form

December 11 Ari Laptev (Imperial) On some functional and spectral inequalities

Organisers: A.P. Veselov