## **Loughborough University**

## **Department of Mathematical Sciences**

## Mathematical Physics Seminars 2009

## Wednesdays 4 pm Room W 002

February 4 Boris Doubrov (Minsk) Geometry of 2-distributions

February 11 Alexey Bolsinov Singularities in bi-Hamiltonian systems

February 13 Sergei Novikov (Maryland and Cambridge) New discretisation of complex analysis

February 18 Alexander Molev (Sydney and Cambridge) Littlewood-Richardson polynomials

February 25 Oleg Lisovyi (Tours) Algebraic solutions of Painleve-VI equation

March 2, 4pm, W190 Velimir Jurdjevic (Toronto) Hamiltonian systems on Lie groups and symmetric spaces

March 4 Fabien Piotet (Bristol) Statistical properties of the energy eigenfunctions on graphs

March 11 Yang Chen (Imperial) Orthogonal polynomials and Painleve equations

March 13 Mini-workshop on Geometry and Quantisation:

Valentin Ovsienko (Lyon) Equivariant quantisation and symbol calculus Hovik Khudaverdyan (Manchester) Differential forms and odd symplectic geometry Ted Voronov (Manchester) Higher Poisson brackets and differential forms

March 18 East Midlands Math Physics seminar in Nottingham

- H. Schomerus (Lancaster) Graphene: the role of chemical disorder
- I. Krasovsky (Brunel) Emergence of a singularity for a Toeplitz determinant
- D. Savin (Brunel) Statistics of complex modes in chaotic cavities with absorption
- G. Tanner (Nottingham) Wave transport in complex structures

I. Smolyarenko (Brunel) TBA

March 25 Chris Hughes (York) Modelling the Riemann Zeta Function".

April 23 Mini-workshop on Geometry and Nonlinear Equations:

S. Gindikin (Rutgers) Varieties of rational curves and nonlinear equations

H. Sakai (Tokyo and INI) Monodromy preserving deformation and 4-dimensional Painleve type equations

T. Takenawa (Tokyo and INI) Tropical analogue of Fay's trisecant identity and ultradiscrete periodic Toda lattice

T. Tsuda (Kyushu and INI) From KP/UC hierarchies to Painleve equations

April 29 (W003) Marta Mazzocco New Poisson algebras arising in Teichmueller theory

May 6 Dmitri Panov (Imperial) Polyhedral Kahler manifolds

May 13 Tom Coates (Imperial) An introduction to mirror symmetry

May 27 Konstantin Khanin (Toronto) On dynamics of Lagrangian particles on the shock manifolds

Dmitri Dolgopyat (Maryland) Dynamics of bouncing balls

June 3 Igor Krichever (Columbia, NY and INI, Cambridge) Whitham theory and moduli spaces

Organiser: A.P. Veselov