## **Loughborough University**

## **Department of Mathematical Sciences**

## Mathematical Physics Seminars 2004

## Tuesdays 4pm Room W 145

February 3 Sasha Veselov Quantum problems on Sol-manifolds and arithmetic

February 10 Holger Dullin Semi-global symplectic invariants

February 17 Sasha Pushnitski *Trace formula and high energy spectral asymptotics for the perturbed Landau Hamiltonian* 

February 26 Dmitri Alekseevski (Hull) Geometry of flag manifolds

March 2 Udo Hertrich-Jeromin (Bath) *Nonstandard analysis methods in differential geometry*?

March 9 Slava Kurylev Inverse problem for anisotropic Maxwell's system

March 16 Yuri Netrusov (Bristol) Covering properties of compacts cannot be characterized in terms of Hausdorff measures

March 23 Rod Halburd Movable singularities of solutions of differential equations

April 27 Mark Gross (Warwick) Tropical geometry and applications

April 28 Leonid Bogdanov (Moscow) *Quasi-classical d-bar method and dispersionless integrable hierarchies* 

May 4 Burt Totaro (Cambridge) Flat Hessian metrics and the equations of associativity

May 18 Mikhail Levitin (Heriot-Watt) Spectral pollution

May 25 Peter Shiu Egyptian fractions

May 26 Oleg Chalykh (Cornell) Weyl algebra and Calogero-Moser spaces

June 8 Sergei Tsarev (Krasnoyarsk) From Schroedinger equation to categories

September 10 Peter Richter (Bremen) A study of (non-) integrable rigid body dynamics

October 5 Jenya Ferapontov *On a class of 3-dimensional integrable Lagrangians* 

October 12 Ian Sorrell High energy asymptotics for a perturbed harmonic oscillator

October 19 Alan Beardon (Cambridge) Continued fractions in all dimensions

October 22 Anatoly Kamchatnov (Troitsk) Whitham theory for KdV equation

November 2 Gerasim Kokarev (Heriot-Watt) Harmonic maps and Morse-Bott theory

November 9 Holger Dullin Degenerate Neumann system

November 16 Sasha Veselov Coincident root loci and integrable systems

November 23 Sasha Pushnitski *Perturbed Landau Hamiltonian and logarithmic capacity* 

November 26 INTEGRABLE DAY IN LOUGHBOROUGH

November 30 Ivan Cheltsov (Edinburgh) *Birational geometry of surfaces and 3-folds* 

December 7 Viacheslav Nikulin (Liverpool) *Del Pezzo surfaces with quotient singularities* 

December 8 Vladimir Roubtsov (University of Angers, France) Algebraic mechanism of the Stäckel separation of variables

Organiser: A.P. Veselov