

# Loughborough University

## Department of Mathematical Sciences

### *Mathematical Physics Seminars 2003*

**Wednesdays 4pm Room W 145**

September 5 Michael S. Birman (St. Petersburg) *Homogenization for periodic differential operators of Mathematical Physics*

September 9 Jiri Podolski (Prague) *General structure of radiation near (anti-)de Sitter-like infinity*

September 19 Sasha Sergeev (Balakovo) *Generalised root systems and Macdonald polynomials*

October 1 Jenya Ferapontov *On the integrability of 2-component (2+1)-dimensional systems of hydrodynamic type*

October 8 Sasha Veselov *Cauchy problems on quad-graphs*

October 15 Rod Halburd *Meromorphic solutions of integrable difference equations and singularity confinement*

October 22 John Samson *Path integrals and Wigner functions*

October 29 Polina S. Landa (Moscow and Lancaster) *Development of turbulence in submerged jets: linear approximation*

November 5 Ilpo Laine (Joensuu) *Growth of Painlevé transcendents in the complex plane*

November 12 Mu-Fa Chen (Beijing) *Eigenvalues, inequalities and ergodic theory*

November 19 Sasha Mikhailov (Leeds) *Automorphic Lie algebras and quasi-graded structure*

November 26 Alexander S. Blagovestchenskii (St. Petersburg) *Compactification of Minkowski space and waves with sources at infinity*

and

Misha Feigin (Imperial) *Volumes of compact Lie groups and Mehta-Macdonald conjecture*

November 28 *Integrable Day in Loughborough*

December 2 Taras Panov (Moscow and Manchester) *Combinatorics of polyhedra and toric varieties* (W190, 1-2pm)

and

Maciej Dunajski (Cambridge)

*Einstein--Weyl spaces and dispersionless PDEs* (W190, 4-5pm).

Organiser: A.P. Veselov