

Geometry and Mathematical Physics Seminars 2017

Wednesdays 4 pm Room SCH 1.05

February 8 Sara Muhvic (Warwick) Hypersurface quotient 4-fold singularities and their resolutions

February 15 Andrea Brini (Imperial) Quantum topology, curve-counting invariants, and relativistic integrable systems

February 22 Elisa Postingshel Tropical compactifications, Mori Dream Spaces and Minkowski bases

March 1 Katie Spalding Growth of values of binary quadratic forms and Conway rivers

March 8 Dmitri Panov (King's College London) Real line arrangements with Hirzebruch property

March 15 Tom Ducat (RIMS, Kyoto) Constructing Q-Fano 3-folds following Prokhorov & Reid

March 22 Enrico Fatighenti (Warwick) Hodge theory, graded rings and Grassmannians

March 29 Dmitri Treshchev (Moscow) On the inclusion of a map into a flow

May 3 Julius Ross (Cambridge) The complex homogeneous Monge-Ampere equation and the Hele-Shaw flow

May 10 Liana Heuberger (Imperial) Fano fourfold with small invariants

May 17 David Gomez-Ullate Oteiza (Madrid and Kent) On Wronskian determinants with Hermite polynomial entries

May 24 Maksym Fedorchuk (Boston) Associated forms and applications

May 31 Caucher Birkar (Cambridge) Generalised pairs and applications

June 7 Aleksandr Pukhlikov (Liverpool) Ehrhart polynomial and valuations of lattice polytopes

October 4th

Marta Mazzocco (Loughborough)

Hole collisions and decorated character variety

October 11th

Idan Eisner (Loughborough)

Exotic cluster structures on simple Lie groups

October 18th - Room SCH1.01 East Midlands Seminar in Geometry:

1:30 - 2:30 pm: Dylan Allegretti (Sheffield) - Meromorphic projective structures and framed local systems

2:45 - 3:45 pm: Emilie Dufresne (Nottingham) - Separating invariants and local cohomology

4:00 - 5:00 pm: Anne Fahrner (Tuebingen) - Smooth Mori dream spaces with small Picard number

October 25th

3:00 - 4:30 pm: Anna Felikson (Durham): Quiver mutations, reflection groups and curves on punctured disc

4:30 - 5:30 pm: Alex Tovbis (Florida): New formula for maximal amplitudes for finite gap solutions of the NLS: the Riemann-Hilbert problem approach

November 1st

Alexey Bolsinov (Loughborough)

Nijenhuis operators: singular points and global properties

November 8th

3-4: Christoff Hische (Tuebingen): T-varieties of higher complexity

4-5: Milena Wrobel (Tuebingen): On iteration of Cox rings

November 15th

Gregory Sankaran (Bath)

Hyperkahler manifolds and degenerations

November 22nd

Fabien Clery (Loughborough)

Introduction to modular forms

November 24th

Integrable Day at Loughborough:

Valery Gritsenko (Lille and HSE, Moscow)

Affine and Lorentzian Kac-Moody Lie algebras and theta- blocks

Anne Taormina (Durham)

Counting states in string theory: the ubiquity of modular and mock modular forms

Katrin Wendland (Freiburg)

Refining the complex elliptic genus

Don Zagier (Bonn)

Periods and quasiperiods of modular forms and the mirror quintic family

November 29th

3-4: Kirill Krasnov (Nottingham): Gravity and differential forms

4-5: Raffaele Vitolo (University of Salento): The symbolic computation of integrability structures for PDEs

December 6th

Florian Bouyer (Bristol)

An introduction to a certain family of K3 surfaces

December 13th

Hamid Ahmadinezhad (Loughborough)

Birational Geometry in (complex) dimension 3

Organisers: H. Ahmadinezhad and A.P. Veselov