



UK-Japan Winter School Algebraic and Symplectic Geometry

Monday 7th – Friday 11th January 2008

Dedicated to the memory of James Eells (1926-2007)

PROGRAMME (subject to change)

All talks will be in Lecture Room B3.02, Mathematics Institute, Zeeman Building

MONDAY, 7 JANUARY

- 13:30-13:50 **Registration** in the MRC Room B1.37
 13:50-14:00 **Opening**
 14:00-15:00 **Alessio Corti** (Imperial College) *The quantum cohomology of Fano stacks (I)*
 15:00-15:30 Tea in the Mathematics Institute Common Room
 15:30-16:20 **Daniel Huybrechts** (Bonn and Imperial College) *Derived equivalences of K3 surfaces and their deformations*

TUESDAY, 8 JANUARY

- 09:30-10:30 **Alessio Corti** (Imperial College) *The quantum cohomology of Fano stacks (II)*
 10:30-11:00 Coffee in the Mathematics Institute Common Room
 11:00-12:00 **Richard Thomas** (Imperial College) *Algebraic-geometric counting invariants (I)*
 12:00-14:00 Lunch
 14:00-14:50 **Yoshinori Namikawa** (Osaka) *Poisson deformations and symplectic varieties*
 15:00-15:30 **Tomoo Matsumura** (Max Planck) *Stringy cohomology of the symmetric product of an orbifold*
 15:30-16:00 **Yuji Sano** (IHES) *On relationships between multiplier ideal subschemes and Futaki invariant on toric Fano manifolds*
 16:30-17:20 **Egor Shelukhin** (Tel Aviv) *The Futaki invariant and Hamiltonian dynamics*

WEDNESDAY, 9 JANUARY

- 09:30-10:30 **Nigel Hitchin** (Oxford) *Generalized geometry (I): Skew torsion*
 10:30-11:00 Coffee in the Mathematics Institute Common Room
 11:00-12:00 **Richard Thomas** (Imperial College) *Algebraic-geometric counting invariants (II)*
 12:00-14:00 Lunch
 14:00-14:50 **Frances Kirwan** (Oxford) *Non-reductive geometric invariant theory and symplectic implosion*
 15:00-15:30 **Andrei Mustata** (University College Cork) *Quantum cohomology and flops of rationally connected varieties*
 15:30-16:00 **Seyed Mohammad Bagher Kashani** (Tarbiat Modarres) *Totally geodesic singular orbits in cohomogeneity one Riemannian manifolds*
 16:00-16:30 Tea in the Mathematics Institute Common Room
 16:30-17:20 **Toshiki Mabuchi** (Osaka) *Kähler-Ricci solitons in Sasakian geometry*
 Evening **A Memorial Dinner with Nan Eells**

THURSDAY, 10 JANUARY

- 09:30-10:30 **Nigel Hitchin** (Oxford) *Generalized geometry (II): Generalized complex structures*
 10:30-11:00 Coffee in the Mathematics Institute Common Room
 11:00-12:00 **Richard Thomas** (Imperial College) *Algebraic-geometric counting invariants (III)*
 12:00-14:00 Lunch
 14:00-14:50 **Tom Bridgeland** (Sheffield) *Stability conditions and Stokes factors*
 15:00-15:50 **Daisuke Matsushita** (Hokkaido) *On remarks of terminations of D-flops on symplectic manifolds*
 15:50-16:20 Tea in the Mathematics Institute Common Room
 16:20-17:10 **Takehiko Yasuda** (Kyoto University) *Crepant resolution via Frobenius morphisms*

FRIDAY, 11 JANUARY

- 09:30-10:30 **Nigel Hitchin** (Oxford) *Generalized geometry (III) Holomorphic Poisson manifolds*
 10:30-11:00 Coffee in the Mathematics Institute Common Room
 11:00-12:00 **Richard Thomas** (Imperial College) *Algebraic-geometric counting invariants (IV)*
 12:00-14:00 Lunch
 14:00-14:50 **Balázs Szendrői** (Oxford) *Enumerative invariants of non-commutative Calabi-Yau algebras*
 15:00-15:50 **Ryushi Goto** (Osaka) *Deformations of generalized Kähler structures, Poisson structures and bihermitian structures*

If you have any questions during the Workshop please see either Hazel Higgins or Yvonne Collins in Room B1.37 which is opposite the Common Room