

**Algebraic Geometry: Old and New**  
**September 26 – 30, 2016**

**Schedule - L3**

**Monday, September 26**

- 9:00-9:30 Registration  
9:30-10:30 Song Sun, *Geometric flows and algebraic stability*  
10:30-11:00 Coffee  
11:00-12:00 Xiaowei Wang, *Moduli space of Fano Kähler-Einstein manifolds*  
12:00-14:00 Lunch  
14:00-15:00 Cristiano Spotti, *Kähler-Einstein metrics on smoothable  $Q$ -Fano varieties*  
15:00-15:30 Coffee  
15:30-16:30 Jacopo Stoppa, *K-stability, equivariance and filtrations*  
16:45-17:45 Yuchen Liu, *The volume of Kähler-Einstein  $Q$ -Fano varieties*

**Tuesday, September 27**

- 9:30-10:30 Yuji Odaka, *On compactifying the moduli spaces of Kähler-Einstein varieties*  
10:30-11:00 Coffee  
11:00-12:00 Kento Fujita, *A valuative criterion for uniform K-stability of log Fano pairs*  
12:00-14:00 Lunch  
14:00-15:00 Dominic Joyce, *New Donaldson-Thomas style counting invariants for Calabi-Yau 4-folds*  
15:00-15:30 Coffee  
15:30-16:30 Emanuele Macri, *Tilting of bounded  $t$ -structures and applications*  
16:45-17:45 Conan Leung, *Categorical Plucker formula and homological projective dual*

**Wednesday, September 28 - Clay Research Conference**

- 10:00-11:00 David Ben-Zvi, *Representation Theory as Gauge Theory*  
11:00-11:30 Coffee  
11:30-12:30 Bill Minicozzi, *The mean curvature flow*  
12:30-14:00 Lunch  
14:00-15:00 János Kollár, *Celestial surfaces and quadratic forms*  
15:00-15:30 Coffee  
15:30-16:30 Manjul Bhargava, *What is the Birch and Swinnerton-Dyer Conjecture, and what is known about it*  
16:30-17:30 Presentation of the 2016 Clay Research Awards  
17:30-19:00 Reception in the Mathematical Institute

**Thursday, September 29**

- 9:30-10:30 Bernd Siebert, *An intrinsic mirror symmetry construction*  
10:30-11:00 Coffee  
11:00-12:00 Mark Gross, *An intrinsic mirror symmetry construction*

12:00-14:00 Lunch  
14:00-15:00 Tom Coates, *Mirror symmetry and Fano manifolds*  
15:00-15:30 Coffee  
15:30-16:30 Eduard Looijenga, *Basic Tate extensions in the cohomology of Baily-Borel compactifications*  
16:45-17:45 TBC

### **Friday, September 30**

9:30-10:30 Alessandro Verra, *The universal K3 surface of genus 14 via cubic fourfolds*  
10:30-11:00 Coffee  
11:00-12:00 Christian Böhning, *Stable non-rationality for some conic bundles over rational surfaces and rational threefolds*  
12:00-14:00 Lunch  
14:00-15:00 Jaroslaw Wiśniewski, *Flag varieties, a geometric characterization and rigidity*  
15:00-15:30 Coffee  
15:30-16:30 Anne-Sophie Kaloghiros, *The Sarkisov program for Mori fibred Calabi-Yau pairs*  
16:45-17:45 TBC