

**Programme on**  
**“Advances in Birational Geometry”**

**April 3 – May 26, 2017**

**organized by**

**Fedor Bogomolov (Courant Institute, NYU), Jean-Louis Colliot-Thélène (U Paris-Sud),  
Ludmil Katzarkov (U Vienna), Alexander Kuznetsov (Steklov Inst. Moscow), Alena Pirutka  
(Courant Institute, NYU), Yuri Tschinkel (Courant Institute, NYU)**

**Workshop 2**

**“Categorical approach to rationality”**

**May 2 – 5, 2017**

• **Tuesday, May 2, 2017**

09:00 – 09:30 **Opening & Registration**

09:30 – 10:30 **Alexander Kuznetsov**

*Birational geometry and derived category of Gushel-Mukai fourfolds, I*

10:30 – 11:00 *coffee / tea break*

11:00 – 12:00 **Christian Boehning**

*Unramified Brauer groups of fourfold conic bundles, degenerations, and Gushel-Mukai fourfolds, I*

12:00 – 14:00 *lunch break*

14:00 – 15:00 **Alexei Igorewitsch Bondal**

*Tilting relative generators and strict admissible filtrations*

• **Wednesday, May 3, 2017**

09:30 – 10:30 **Alexander Kuznetsov**

*Birational geometry and derived category of Gushel-Mukai fourfolds, II*

10:30 – 11:00 *coffee / tea break*

11:00 – 12:00 **Christian Boehning**

*Unramified Brauer groups of fourfold conic bundles, degenerations, and Gushel-Mukai fourfolds, II*

12:00 – 14:00 *lunch break*

14:00 – 15:00 **George Dimitrov**

*Stabilities and Norms*

- **Thursday, May 4, 2017**

09:30 – 10:30 **David Favero**

*Equivalences of derived categories from mirror symmetry constructions*

10:30 – 11:00 *coffee / tea break*

11:00 – 12:00 **Ed Segal**

*Homological Projective Dualities*

12:00 – 14:00 *lunch break*

14:00 – 15:00 **Andrew Harder**

*Perverse sheaves of categories and noncommutative deformations*

15:00– 15:30 *break*

15:30 – 16:30 **Sergey Galkin**

*On a derived involution on variety of lines on a cubic fourfold*

- **Friday, May 5, 2017**

09:30 – 10:30 **Alexey Elagin**

*On exceptional collections of line bundles on weak del Pezzo surfaces*

10:30 – 11:00 *coffee / tea break*

11:00 – 12:00 **Tamás Hausel**

*Perverse Hirzebruch  $\chi$ -genus of Hitchin systems*

12:00 – 14:00 *lunch break*

14:00 – 15:00 **Jihun Park**

*K-stability of del Pezzo surfaces*

**All talks take place at the ESI, Boltzmann Lecture Hall!**