

## Algebraic versus Analytic Geometry

November 19 - December 13, 2011

Organized by Herwig Hauser, János Kollár, Josef Schicho, Duco van Straten

- **Week 1: Artin Approximation and Arcs**  
**November 19 - 26, 2011**

Organizer: Guillaume Rond, Clemens Bruschek

**Saturday, November 19, 2011**

**09:00 – 10:30: Dorin Popescu**

*Artin Approximation 1*

**10:30 – 11:00: coffee break**

**11:00 – 12:00: Goulwen Fichou**

*Arc spaces and Motivic integration 1*

**12:15 – 13:15: Shihoko Ishii**

*Applications of Arc spaces to birational geometry 1*

**16:00 – 17:30: Problem session with speakers**

**Sunday, November 20, 2011**

**10:00 – 11:00: Goulwen Fichou**

*Arc spaces and Motivic integration 2*

**11:30 – 12:00: Shihoko Ishii**

*Applications of Arc spaces to binational geometry 2*

**Monday, November 21, 2011**

**09:00 – 10:30: Dorin Popescu**

*Artin Approximation 2*

**10:30 – 11:00: coffee break**

**11:00 – 12:00: Monique Lejeune-Jalabert**

*Nash Problem*

**12:30 – 13:30: Ana Reguera**

*Curve Selection Lemma*

**16:00 – 17:30: Problem session with speakers**

**Tuesday, November 22, 2011**

**10:00 – 11:00: Lawrence Ein**

*Arc spaces and binational geometry*

**11:00 – 12:00: Hussein Mourtada**

*Rogers-Ramanujan identities*

**15:00 - 16:00: Takehiko Yasuda**

*Higher Nash blow-ups*

**Wednesday, November 23, 2011**

**09:00 – 10:30: Dorin Popescu**

*Artin Approximation 3*

**10:30 – 11:00:** coffee break

**11:00 – 12:00: Guillaume Rond**

*Review on smooth and étale morphisms*

**12:15 – 13:15: Michel Raibaut**

*Motivic invariants vs. Geometric invariants*

**16:00 – 17:30: Problem session with speakers**

**Thursday, November 24, 2011**

**10:00 – 11:30: Dorin Popescu**

*Artin Approximation 4*

**12:00 – 13:00: Adam Parusinski**

*Topological equivalence between analytic and algebraic sets*

**16:00 – 17:30: Herwig Hauser**

*The constant rank theorem in infinite dimension*

**Friday, November 25, 2011**

**09:00 – 10:30: Dorin Popescu**

*Artin Approximation 5*

**10:30 – 11:00:** coffee break

**11:00 – 12:00 Mark Spivakovsky**

*Néron desingularization*

**15:30 – 16:30: Krzysztof Kurdyka**

*Arc spaces in subanalytic geometry*

**16:45 – 17:45: Bernhard Lamel**

*Artin approximation in CR Geometry*

**Saturday, November 26, 2011**

**09:00 – 10:30: Dorin Popescu**

*Artin Approximation 6*

**10:30 – 11:00:** coffee break

**11:00 – 12:00: Peter Petrov**

*Grinberg-Kazhdan Theorem*

**All lectures take place in the ESI Schrödinger Lecture Hall (except for Wednesday in Boltzmann Lecture Hall)**