

## Algebraic Techniques for Combinatorial and Computational Geometry

### Tuesday March 18, 2014

- 3:30–4:30 **Ruixiang Zhang** (Princeton University)  
*Discrete Models of the Kakeya Set Problem and the Furstenberg Set Problem in  $R^n$*

### Thursday March 20, 2014

- 3:30–4:30 **Kaloyan Slavov** (American University in Bulgaria)  
*An application of the upper semicontinuity theorem*

### Tuesday April 1, 2014

- 3:30–4:30 **Dmitrii Zhelezov** (Chalmers University of Technology)  
*Structural properties of sumsets and product sets*

### Thursday April 3, 2014

- 1:50–2:50 **Imre Barany** (Renyi Institute of Mathematics)  
*On a geometric Ramsey number*
- 3:30–4:30 **Marta Narvaez Clauss** (University of Barcelona)  
*Equidistribution of Galois orbits of points of small height*

### Tuesday April 15, 2014

- 3:30–4:30 **Ameera Chowdhury** (Rutgers University)  
*The MDS Conjecture - Part I*

### Thursday April 17, 2014

- 1:50–2:50 **Janos Pach** (École Polytechnique Fédérale de Lausanne (EPFL))  
*From distances to graphs and back*
- 3:30–4:30 **Marina Iliopoulou** (University of Edinburgh)  
*Counting joints and multijoints with multiplicities*



## Thursday April 24, 2014

3:30–4:30 **Ameera Chowdhury** (Rutgers University)  
*The MDS Conjecture - Part II*

## Tuesday April 29, 2014

2:00–3:00 **Ehud Hrushovski** (Hebrew University)  
*From groups to graphs*

## Thursday May 1, 2014

3:30–4:30 **Oliver Roche-Newton** (University of Reading)  
*Variations on the sum-product problem*

## Tuesday May 13, 2014

3:30–4:30 **Frank de Zeeuw** (École Polytechnique Fédérale de Lausanne (EPFL))  
*Triple lines on curves*

## Thursday May 15, 2014

3:30–4:30 **Benjamin Lund** (Rutgers University)  
*The number of perpendicular bisectors determined by a subset of a plane over a finite field*

## Tuesday May 27, 2014

3:30–4:30 **Brendan Murphy** (University of Rochester)  
*A triangle theorem for additive energy*

## Thursday May 29, 2014

3:30–4:30 **Abdul Basit** (Rutgers University New Brunswick/Piscataway)  
*Incidences between sufficiently non-degenerate sets and applications*

## Tuesday June 3, 2014

- 2:00–3:00 **Orit Raz** (Tel Aviv University)  
*Polynomials vanishing on Cartesian products: The Elekes-Szabó Theorem revisited*
- 3:30–4:30 **Brandon Hanson** (University of Toronto)  
*Character sum estimates for Bohr sets*