

Diophantine Approximation and Transcendence

CIRM, Luminy, from September 10 to September 14, 2018

SCHEDULE

Monday, Sept. 10:

9h05 – 9h15: Welcome

9h15 – 9h45: G. Rémond, *Nouveaux théorèmes d'isogénie*

10h – 10h30: M. Carrizosa, *Counting polarisations on abelian varieties*

Coffee break

11h – 11h30: M. Widmer, *Averages for the ℓ -torsion in class groups*

11h45 – 12h15: J.H. Evertse, *S-parts of values of polynomials*

Lunch

17h – 17h30: J. Demeio, *Hilbert Property and Elliptic Fibrations*

17h45 – 18h15: S. Fischler, *Irrationality of odd zeta values, with (or without) Shidlovsky's lemma*

18h30 – 19h: C. Viola, *Linear independence of $1, \text{Li}_1$ and Li_2*

Tuesday, Sept. 11:

9h15 – 9h45: L. Kühne, *The Equidistribution Conjecture for Semiabelian Varieties*

10h – 10h30: N.M. Mavraki, *Arithmetic equidistribution, dynamics and elliptic curves*

Coffee break

11h – 11h30: F. Pazuki, *Regulators of elliptic curves*

11h45 – 12h15: L. Capuano, *An effective criterion for periodicity of p -adic continued fractions*

Lunch

17h – 17h30: V. Beresnevich, *Simultaneous rational approximations to several functions of a real variable*

17h45 – 18h15: S. Velani, *Inhomogeneous Diophantine Approximation on M_0 -sets with restricted denominators*

18h30 – 19h: N. Moshchevitin, *Irrationality measure functions and Diophantine spectra*

Wednesday, Sept. 12:

9h15 – 9h45: S. Le Fourn, *Around Baker's method for higher-dimensional varieties*

10h – 10h30: N. Hirata-Kohno, *Linear forms in logarithms via Padé approximations and their applications*

Coffee break

11h – 11h30: B. Adamczewski, *Mahler's method in several variables*

11h45 – 12h15: M. Bennett, *Quartic forms: computations in search of a theorem*

Free afternoon

Thursday, Sept. 13:

9h15 – 9h45: S. Akhtari, *Lower bounds for the Mahler measures of polynomials that are sum of a bounded number of monomials*

10h – 10h30: F. Amoroso, *Factorization of bivariate sparse polynomials*

Coffee break

11h – 11h30: H. Krieger, *Height pairings, torsion points, and dynamics (Part 1)*

11h45 – 12h15: L. DeMarco, *Height pairings, torsion points, and dynamics (Part 2)*

Lunch

17h – 17h30: D.H. Kim, *The Lagrange and Markov Spectra of Pythagorean triples*

17h45 – 18h15: H. Kaneko, *Diophantine approximation and base-b expansion of smooth numbers*

Friday, Sept. 14:

9h15 – 9h45: B. Matschke, *Solving Thue-Mahler equations via the Shimura-Taniyama conjecture*

10h – 10h30: M. Coons, *Two regular questions*

Coffee break

11h – 11h30: J. Thunder, *A Height Heuristic for a -Numbers*

11h45 – 12h15: L. Hajdu, *On the smallest number of terms of vanishing sums of units in number fields*

Free afternoon