

Program of international conference
Arithmetic and allied subjects on the banks of the Neva
Euler International Mathematical Institute
St. Petersburg, November 24—28, 2014

MONDAY, November 24

Registration (begins at **9:30**)

10:00 — 10:50 Andrei Raigorodskii. *Set covering problems: from combinatorial geometry to the geometry of numbers.*

Coffee break

11:10 — 12:00 Pietro Corvaja. *Hilbert Irreducibility Theorem over linear algebraic groups.*

12:10 — 13:00 Aleksei Parshin. *A holomorphic version of the Tate-Iwasawa method and its applications.*

Lunch

14:30 — 15:20 Yves de Cornulier. *Gradings on Lie algebras and endomorphisms of nilpotent groups.*

15:30 — 16:20 Anatoly Vershik. *Probabilistic approach to the additive problems in number theory and combinatorics.*

Coffee break

16:40 — 17:30 Inna Capdeboscq. *On some pro- p groups arising from infinite Lie theory.*

Welcome party 18:00

TUESDAY, November 25

10:00 — 10:50 Ilya Shkredov. *Sum-products and energies.*

Coffee break

11:10 — 12:00 Julia Wolf. *Ramsey multiplicity of patterns in abelian groups.*

12:10 — 13:00 Alexei Skorobogatov. *Applications of additive combinatorics to rational points.*

Lunch

14:30 — 15:20 Valentin Blomer. *Arithmetic, combinatorics and analysis of rational points on a cubic fourfold.*

15:30 — 16:20 Regis de la Bréteche. *Largest prime factor of integer value of polynomial of degree 4.*

Coffee break

16:40 — 17:30 Per Salberger. *Counting rational points on projective varieties.*

WEDNESDAY, November 26

10:00 — 10:50 Sergey Konyagin. *Large gaps between consecutive primes.*

Coffee break

11:10 — 12:00 James Maynard. *Large gaps between primes.*

12:10 — 13:00 Anne-Maria Ernvall-Hytonen. *On Baker type bounds and generalised transcendence measure (joint work with K. Leppälä and Tapani Matala-aho).*

Lunch

Sightseeing tour and Hermitage 14:15

THURSDAY, November 27

10:00 — 10:50 Boris Adamczewski. *Diophantine equations in characteristic p and finite automata.*

Coffee break

11:10 — 12:00 Ekaterina Amerik. *P -adic uniformization in algebraic dynamics.*

12:10 — 13:00 Misha Rudnev. *Some incidence geometry questions, viewed on the Klein-Plücker quadric.*

Lunch

14:30 — 15:20 Narutaka Ozawa. *Noncommutative real algebraic geometry of Kazhdan's property (T).*

15:30 — 16:20 Alain Valette. *Box spaces: bridging geometric and asymptotic group theory.*

Coffee break

16:40 — 17:30 Romain Tessera. *Local-Global rigidity for vertex-transitive graphs.*

Bus departures at 18:00

Conference party in Tchaikovsky restaurant 19:00

FRIDAY, November 28

10:00 — 10:50 Yuri Bilu. *CM-points on straight lines and hyperbolas.*

Coffee break

11:10 — 12:00 Antonio Cordoba. *Two Mathematical Haikus.*

12:10 — 13:00 Yuri Matiyasevich. *Approximation of Riemann's zeta function by some finite Dirichlet series.*

Lunch

14:30 — 15:20 Harald Helfgott. *Soficity, recurrence and short cycles of exponential maps.*

15:30 — 16:20 Martin Kassabov. *Intersection growth and zeta functions for nilpotent groups.*

Coffee break

16:40 — 17:30 Tatiana Smirnova-Nagnibeda. *Spectral zeta-function of the lamplighter groups, de Bruijn graphs and the polylogarithm.*