Representation Theory XIX
IUC, Dubrovnik, Croatia, June 22 – 28, 2025
Schedule: Number Theory Section

Monday, June 23

8:50 – 9:15 **Filip Najman:** Ranks of elliptic curves with prescribed torsion over number fields

9:25 – 10:15 **Florian Luca:** On a question of Douglass and Ono

10:25 – 10:50 **Matija Kazalicki:** Rational Diophantine m-tuples in the work of Andrej Dujella

Chair: Tomislav Pejković

10:50 – 11:10 **Coffee break**

11:10 – 12:00 **Gary Walsh:** Results and problems on ranks of elliptic curves arising in the work of Tetsuji Shioda

12:10 – 12:35 **Dubravka Ban:** Locally analytic vectors in Banach space representations of $SL_2(Q_p)$

12:45 – 13:10 **Igor Ciganović:** Induction from two linked segments with one half border and cuspidal reducibility

Chair: Bartosz Naskrecki

Tuesday, June 24

9:00 – 9:50 **István Gaál:** Monogenity of algebraic number fields

10:00 – 10:50 **Yasutsugu Fujita:** On the generalized Ramanujan-Nagell equation $x^2 - D = 4p^n$

Chair: Petar Orlić

10:50 – 11:10 **Coffee break**

11:10 – 11:35 **Mihai Cipu:** D(+-1)-quintuples in imaginary quadratic fields

11:45 – 12:10 **Szabolcs Tengely:** Higher power rational Diophantine tuples

12:20 – 12:45 **Alen Andrašek:** Regular higher power Diophantine m-tuples

Chair: Lajos Hajdu

Wednesday, June 25

9:00 – 9:50 **Lajos Hajdu:** On Diophantine graphs

10:00 – 10:50 **Attila Berczés:** Some Diophantine problems connected to binary recurrences

Chair: Mihai Cipu

10:50 – 11:10	**Coffee break**
11:10 – 11:35	**Dijana Kreso:** Composite Polynomials as Sums of Powers of Two Fixed Polynomials
11:45 – 12:10	**Sanda Bujačić:** Regularity of D(4)-quadruples in Q[i][X]
12:20 – 12:45	**Ana Jurasić:** Extensions of the Triangular D(3)-pair {3,6}

Chair: Ivan Soldo

Thursday, June 26

9:00 – 9:50	**Bartosz Naskrecki:** Detecting Symmetry Groups in Crystallographic Tilings
10:00 – 10:50	**Mohammad Sadek:** Abelian varieties, torsion and local arithmetic

Chair: Ivan Novak

10:50 – 11:10	**Coffee break**
11:10 – 11:35	**Domagoj Vlah:** Teaching old sums new tricks: Data-driven enhancements for elliptic curve rank heuristics
11:45 – 12:10	**Ivan Novak:** Q-curves over number fields of small odd prime degree
12:20 – 12:45	**Petar Orlić:** Tetragonal intermediate modular curves
12:55 – 13:20	**Lukas Novak:** Twists arising from torsion points

Chair: Matija Kazalicki

Friday, June 27

9:00 – 9:50	**Boris Širola:** On prime numbers in orders of number fields and some applications
10:00 – 10:25	**Tomislav Pejković**: Schneider's p-adic continued fractions of rational numbers
10:30 – 10:50	**Poster session**

Chair: Lukas Novak

10:50 – 11:10	**Coffee break**
11:10 – 11:35	**Mirela Jukić Bokun:** Extensions of D(-1)-pairs in imaginary quadratic fields
11:45 – 12:10	**Ivan Soldo:** The extendibility of the parametric D(-1)-triples

Chair: Alen Andrašek

Saturday, June 28

Free discussion