
REPRESENTATION THEORY

XVI

Inter-University Centre, Dubrovnik, Croatia
Jun 24th – 29th, 2019



Scientific Center of Excellence for Quantum and Complex Systems, and Representations of Lie Algebras - QuantiXLie

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SCHEDULE: NUMBER THEORY SECTION

Representation Theory XVI
IUC, Dubrovnik, Croatia, June 23 – 29, 2019
Schedule: Number Theory Section

Monday, June 24

- 9:00 – 9:50 **Clemens Fuchs:** Composite values in polynomial power sums
10:00 – 10:50 **Lajos Hajdu:** Multiplicative decompositions of polynomial sequences

Chair: Andrej Dujella

- 10:50 – 11:10 **Coffee break**
11:10 – 11:40 **Borka Jadrijević:** Simplest quartic and simplest sextic Thue equations over imaginary quadratic fields
11:50 – 12:20 **Ivan Soldo:** A Pellian equation with primes and its applications
12:30 – 13:00 **Antonela Trbović:** Torsion subgroups of elliptic curves over number fields of small degree

Chair: Filip Najman

- 16:00 – 16:50 **Attila Bérczes:** Effective results for Diophantine equations over finitely generated domains
17:00 – 17:50 **Filip Najman:** Modularity of elliptic curves over totally real cubic fields

Chair: Lajos Hajdu

Tuesday, June 25

- 9:00 – 9:50 **Marko Tadić:** On problems showing up in classifying irreducible unitary representations of classical p -adic groups
10:00 – 10:50 **Yann Bugeaud:** On the decimal expansion of $\log(2019/2018)$ and e

Chair: Attila Bérczes

- 10:50 – 11:10 **Coffee break**
11:10 – 12:00 **Tomoyuki Arakawa** (plenary lecture): Quantum Langlands duality of representations of W -algebras
12:10 – 13:00 **Ivan Mirković** (plenary lecture): A geometric construction of Witt rings

Chair: Dražen Adamović

- 16:00 – 16:50 **Bartosz Naskrecki:** Hypergeometric differential equations and hypergeometric motives
17:00 – 17:50 **Matija Kazalicki:** Congruences for sporadic sequences and modular forms for non-congruence subgroups

Chair: Yasutsugu Fujita

Wednesday, June 26

- 9:00 – 9:50 **Attila Pethő**: Results and problems on diophantine properties of radix representations
10:00 – 10:50 **Robert Tichy**: Equidistribution, van der Corput sets and exponential sums

Chair: Yann Bugeaud

- 10:50 – 11:10 **Coffee break**
11:10 – 11:40 **Zrinka Franušić**: On $D(n)$ -quadruples in $\mathbf{Q}(\sqrt{2}, \sqrt{3})$
11:50 – 12:20 **Ana Jurasić**: Diophantine quadruples in $\mathbf{Z}[i][X]$
12:30 – 13:00 **Borna Vukorepa**: Torsion subgroups of rational elliptic curves over some cyclotomic fields

Chair: Clemens Fuchs

Free afternoon

Thursday, June 27

- 9:00 – 9:50 **Dubravka Ban**: Banach space representations of $SL(2, \mathbf{Q}_p)$
10:00 – 10:50 **Goran Muić**: Existence of cuspidal automorphic forms for reductive groups over number fields (in plenary room)

Chair: Marko Tadić

- 10:50 – 11:10 **Coffee break**
11:10 – 11:40 **Sonja Žunar**: Non-vanishing of Poincaré series
11:50 – 12:20 **Igor Ciganović**: Composition series of a class of induced representations
12:30 – 13:00 **Ivan Krijan**: Torsion groups of elliptic curves over \mathbf{Z}_p -extensions of \mathbf{Q}

Chair: Goran Muić

- 16:00 – 16:50 **Daniel Kohen**: Understanding the Gross-Kohlen-Zagier theorem (for non-split Cartan curves)

Chair: Matija Kazalicki

Friday, June 28

- 9:00 – 9:50 **Mihai Cipu**: Report on $D(-1)$ -quadruples
10:00 – 10:50 **Yasutsugu Fujita**: The regularity of extensions of Diophantine triples or pairs

Chair: Bartosz Naskrecki

- 10:50 – 11:10 **Coffee break**
11:10 – 11:40 **Marija Bliznac Trebješanin**: Extensions of a $D(4)$ -triple
11:50 – 12:20 **Vinko Petričević**: Rational Diophantine sextuples

Chair: Mihai Cipu
