

## Summary

Programme	Monday	Tuesday	Wednesday	Thursday	Friday
<b>Morning session</b>	10:00-11:10	9:00-10:00	9:00-10:00	9:00-10:00	9:00-10:00
Coffee break	11:10-11:40	10:00-10:30	10:00-10:30	10:00-10:30	10:00-10:30
<b>Morning session</b>	11:40-12:40	10:30-11:30	10:30-11:30	10:30-12:40	10:30-11:30
Lunch	12:40-14:00	11:30-13:00	11:30-13:00	12:40-14:00	11:30-13:00
Excursions			13:30-		
<b>Afternoon session</b>	14:00-15:50	14:00-15:50		14:00-15:50	
Coffee break	15:50-16:20	15:50-16:20		15:50-16:20	
<b>Afternoon session</b>	16:20-18:10	16:20-18:10		16:20-18:10	
<b>Public lecture</b>		18:40-19:40			
Conference dinner				20:00-23:00	
Welcome reception	20:00-22:00				

### Monday - Morning session, F015-016

Time	Speaker	Title of the talk
10:00-10:10		Opening
10:10-11:10	Jan-Hendrik Evertse	Results and open problems related to the Subspace Theorem.
11:10-11:40	<i>Coffee Break</i>	
11:40-12:40	Jack Thorne	Modularity of elliptic curves
12:40-14:00	<i>Lunch</i>	

### Monday - Afternoon session A, Lecture Hall I.

Time	Speaker	Title of the talk
14:00-14:20	Maxim Aleksandrovich Korolev	On the primitive of Hardy's function
14:30-14:50	Jan Büthe	Applications of partial knowledge of the Riemann Hypothesis
15:00-15:20	Paul Young	Bernoulli polynomial convolutions and $p$ -adic Arakawa-Kaneko zeta functions
15:30-15:50	Ayhan Dil	Geometric polynomials: properties and applications to series with zeta values
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Aleksandar Ivič	Some mean value results for the zeta-function and a divisor problem
16:50-17:10	Kohji Matsumoto	The mixed joint universality for a class of zeta-functions
17:20-17:40	Anders Södergren	Universality of the Epstein zeta function

## Monday - Afternoon session B, Lecture Hall II.

Time	Speaker	Title of the talk
14:00-14:20	Sergei Vladimirovich Konyagin	On sum sets of sets having small product set
14:30-14:50	David Joseph Grynkiewicz	A weighted zero-sum problem with quadratic residues
15:00-15:20	Jack Sonn	Quadratic residues and difference sets mod $p$
15:30-15:50	Thai Hoang Le	Additive bases in groups
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	József Solymosi	Problems in additive combinatorics
16:50-17:10	Sándor Kiss	On the quantitative version of the Erdős-Turán conjecture about the additive representation functions
17:20-17:40	Peter Vincent Hegarty	Permutations destroying arithmetic progressions in finite cyclic groups
17:50-18:10	Artem Uvakin	About two-dimensional sumsets and difference sets

## Monday - Afternoon session C, Lecture Hall III.

Time	Speaker	Title of the talk
14:00-14:20	Takao Komatsu	Some explicit formulas of Bernoulli and Cauchy polynomials in terms of Stirling numbers
14:30-14:50	Nazli Yildiz Ikkardes	Certain combinatoric convolution sums arising from Bernoulli and Euler polynomials
15:00-15:20	Yilmaz Simsek	A note on Stirling type numbers and Array type polynomials
15:30-15:50	István Mező	The mode of the Jacobi-Stirling numbers
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Piotr Miska	Arithmetic properties of the sequence of derangements
16:50-17:10	Gábor Nyul	Monochromatic linear recurrence sequences
17:20-17:40	Eszter Gyimesi	On properties of the $r$ -Dowling polynomials
17:50-18:10	Gabriella Rácz	Recent results on $r$ -Lah polynomials

## Monday - Afternoon session D, Lecture Hall IX.

Time	Speaker	Title of the talk
14:00-14:20	Dong Sung Yoon	Siegel invariants and its applications
14:30-14:50	Giovanni Coppola	Arithmetic bands and weighted Selberg integrals
15:00-15:20	Yumiko Hironaka	Harmonic analysis on the space of $p$ -adic unitary hermitian matrices
15:30-15:50	Yoshinori Hamahata	The transformations of a series in function fields

15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Nigel Byott	Galois module structure of ideals in weakly ramified extensions of local fields
16:50-17:10	G. Griffith Elder	Scaffolds and Hopf-Galois module structure for ramified extensions of degree $p$
17:20-17:40	Diana Savin	About division quaternion algebras and division symbol algebras
17:50-18:10	Vincenzo Acciario	Computing normal integral bases of abelian number fields

### Monday - Afternoon session E, Lecture Hall X.

Time	Speaker	Title of the talk
14:00-14:20	Nikolay Moshchevitin	Inequalities for diophantine exponents in small dimensions
14:30-14:50	Oleg German	On multiplicative Diophantine exponents for lattices
15:00-15:20	Jaroslav Hanel	New asymptotic irrationality measure for $e$ and other numbers
15:30-15:50	Tomislav Pejkovic	Quadratic Lagrange spectrum
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Dzmitry Badziahin	Cantor-winning sets and their applications in Diophantine approximation
16:50-17:10	Stephen Harrap	A problem in non-linear Diophantine approximation
17:20-17:40	Johannes Schleisitz	Diophantine approximation on manifolds
17:50-18:10	Steffen Hojris Pedersen	On a higher dimensional Mahler approximation

### Monday - Afternoon session F, Lecture Hall XI.

Time	Speaker	Title of the talk
14:00-14:20	Andrej Dujella	High-rank elliptic curves induced by Diophantine triples
14:30-14:50	Alan Filipin	Some recent results on polynomial Diophantine $m$ -tuples
15:00-15:20	Tim Trudgian	A new bound on Diophantine quintuples
15:30-15:50	Ljubica Bačić	On the number of $D(4)$ -quintuples
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Ana Jurasić	On the size of Diophantine $m$ -tuples for linear polynomials
16:50-17:10	Christoph Anton Hutele	Only finitely many Tribonacci Diophantine triples exist
17:20-17:40	Mariia Monina	About integer Somos-8 and Somos-9 sequences
17:50-18:10	Alexey Ustinov	Double Somos-4

## Monday - Afternoon session G, Lecture Hall XII.

Time	Speaker	Title of the talk
14:00-14:20	Fabien Pazuki	Bad reduction of curves with CM jacobians
14:30-14:50	Jannis A. Antoniadis	Arithmetical properties of the Heisenberg curve
15:00-15:20	Keisuke Arai	Points on Shimura curves rational over imaginary quadratic fields in the non-split case
15:30-15:50	Tomasz Jędrzejak	On the torsion of the Jacobians of two families of hyper-elliptic curves
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Junjiro Noguchi	Distribution of entire curves and integral points in open algebraic varieties
16:50-17:10	Sylvain Duquesne	Memory-saving computation of the pairing final exponentiation on BN curves
17:20-17:40	Samuele Anni	On the generalized Fermat equation $x^{2l} + y^{2m} = z^p$
17:50-18:10	Amilcar Pacheco	Effective bounds for a conjecture of Lang: the case of curve

## Tuesday - Morning session, F015-016

Time	Speaker	Title of the talk
9:00-10:00	Henri Darmon	Euler Systems
10:00-10:30	<i>Coffee Break</i>	
10:30-11:30	David Loeffler	Euler systems: new constructions, results and conjectures
11:30-13:00	<i>Lunch</i>	

## Tuesday - Afternoon session A, Lecture Hall I.

Time	Speaker	Title of the talk
14:00-14:20	Irina Rezvyakova	On Selberg's mollification method in the theory of $L$ -functions
14:30-14:50	Andrew James Corbett	Special $L$ -values and automorphic period integrals
15:00-15:20	Luis Lomelí	On the rationality and holomorphy of Langlands-Shahidi $L$ -functions over function fields
15:30-15:50	Tomokazu Onozuka	On the various mean values of the Dirichlet $L$ -functions
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	G Sudhaams Mohan Reddy	Upper and lower bounds for $\frac{L_d(1)}{L_d(2)}$ and related results
16:50-17:10	Sumaia Saad Eddin	An asymptotic distribution for $ L'/L(1, \chi) $
17:20-17:40	Ade Irma Suriajaya	Some results on the zeros of the derivatives of the Riemann zeta function and Dirichlet $L$ -functions

## Tuesday - Afternoon session B, Lecture Hall II.

Time	Speaker	Title of the talk
14:00-14:20	Paulius Drungilas	On the degree of sum of two algebraic numbers
14:30-14:50	Antonella Perucca	Reductions of algebraic integers
15:00-15:20	Jonas Jankauskas	Simple linear equations in conjugates of a Pisot number
15:30-15:50	Dragan Stankov	Powers of Salem numbers and distribution modulo 1
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Victoria Zhuravleva	Diophantine approximation with Pisot numbers
16:50-17:10	Tomas Vavra	Number fields generated by Pisot units
17:20-17:40	Adrian Scheerer	Normality in Pisot numeration systems
17:50-18:10	Hajime Kaneko	Arithmetical properties of power series related to $\beta$ -expansion

## Tuesday - Afternoon session C, Lecture Hall III.

Time	Speaker	Title of the talk
14:00-14:20	Florian Luca	On a problem of Pillai with Fibonacci numbers and powers of 2
14:30-14:50	Takafumi Miyazaki	On a three term exponential Diophantine equation
15:00-15:20	Gökhan Soydan	On the Diophantine equation $(x+1)^k + (x+2)^k + \dots + (lx)^k = y^n$
15:30-15:50	Péter Olajos	Properties of balancing and generalized balancing numbers
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Boris Bartolome	On the equation $X^n - 1 = BZ^n$
16:50-17:10	István Pink	On the diophantine equation $1 + 2^a + x^b = y^n$
17:20-17:40	Zsolt Rábai	A note on the shuffle variant of Jesmanowicz' conjecture
17:50-18:10	Csanád Bertók	A Hasse-type principle for exponential Diophantine equations and its applications

## Tuesday - Afternoon session D, Lecture Hall IX.

Time	Speaker	Title of the talk
14:00-14:20	Marco Streng	Elliptic divisibility sequences and modular units
14:30-14:50	Ho Yun Jung	Primitive Fricke families and their application to modular function fields
15:00-15:20	Hironori Shiga	One class field via hypergeometric modular function
15:30-15:50	Guillermo Mantilla-Soler	A space of weight 1 modular forms attached to totally real cubic number fields
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Jolanta Marzec	Siegel modular forms and their fundamental Fourier coefficients

16:50-17:10	Thorsten Paul	The Fourier-Jacobi-decomposition of Eisenstein series of Klingen type
17:20-17:40	Raphael Sebastian Steiner	Supnorms of half-integral weight modular forms
17:50-18:10	Enrico Varela	Representation theory of Drinfeld modular forms

## Tuesday - Afternoon session E, Lecture Hall X.

Time	Speaker	Title of the talk
14:00-14:20	Jean-Louis Verger-Gaugry	A Dobrowolski type minoration of the Mahler measure of height 1 trinomials
14:30-14:50	Norbert Kaiblinger	On open problems by Lind and by Taussky-Todd
15:00-15:20	Kostadinka Lapkova	On the $k$ -free values of the polynomial $xy^k + C$
15:30-15:50	Christina Karolus	Explicit bounds for composite lacunary polynomials
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Rainer Schulze-Pillot	Koecher-Maaßseries and representation of quadratic forms
16:50-17:10	Guram Gogishvili	"Some special classes of positive quaternary quadratic forms, which sharpen general estimates of corresponding singular series"
17:20-17:40	Ketevan Shavgulidze	On the quadratic forms of five variables
17:50-18:10	Teimuraz Vepkhvadze	On the number of representations of numbers by the binary quadratic forms with discriminants -80, -128 and -140

## Tuesday - Afternoon session F, Lecture Hall XI.

Time	Speaker	Title of the talk
14:00-14:20	Paul Voutier	Periodic Jacobi-Perron algorithm expansions
14:30-14:50	Maciej Szymon Zakarczemny	Number of solutions in a box of a linear equation in an Abelian group
15:00-15:20	Pee Choon Toh	On certain pairs of $q$ -series identities
15:30-15:50	Rupam Barman	Hypergeometric series in the $p$ -adic setting
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Stefan Porubský	On common structure of $n_k$ 's for which $n_k \alpha \pmod{1} \rightarrow x$
16:50-17:10	Ladislav Mišík	Simple sets of distribution functions of ratio sequences
17:20-17:40	Maciej Gawron	On formal inverse of the Prouhet-Thue-Morse sequence
17:50-18:10	Sneh Bala Sinha	Transcendence of generalized Euler-Lehmer constants

## Tuesday - Afternoon session G, Lecture Hall XII.

Time	Speaker	Title of the talk
14:00-14:20	Christian Elsholtz	A problem of Ramanujan, Erdős and Kátai on the iterated divisor function
14:30-14:50	Alain Togbe	On $P$ -integers
15:00-15:20	Sanda Bujacic	A variation of a congruence of Subbarao for $n = 2^\alpha 5^\beta$ , $\alpha, \beta \geq 0$
15:30-15:50	Titus Hilberdink	Extremality of the completely multiplicative functions
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Ehud Moshe Baruch	Hecke operators and new forms
16:50-17:10	Aftab Pande	Reductions of Galois representations
17:20-17:40	Adrián Zenteno	Four dimensional Galois representations with large image
17:50-18:10		

## Tuesday, Public Lecture

Time	Speaker	Title of the talk
18:40-19:40	László Lovász	Limit structures in graph theory and number theory

## Wednesday - Morning session, F015-016

Time	Speaker	Title of the talk
9:00-10:00	James Maynard	Long gaps between primes
10:00-10:30	<i>Coffee Break</i>	
10:30-11:30	Julia Wolf	Ramsey multiplicity of patterns in finite abelian groups
11:30-13:00	<i>Lunch</i>	

## Thursday - Morning session, F015-016

Time	Speaker	Title of the talk
9:00-10:00	Tim Browning	How common are failures of the Hasse principle or weak approximation?
10:00-10:30	<i>Coffee Break</i>	
10:30-11:30	Julia Hartmann	Obstructions to Local-Global Principles for Torsors
11:30-11:40	<i>Break</i>	
11:40-12:40	Anna Cadoret	Specialization of representations of the étale fundamental group
12:40-14:00	<i>Lunch</i>	

## Thursday - Afternoon session A, Lecture Hall I.

Time	Speaker	Title of the talk
14:00-14:20	János Pintz	On the distribution of consecutive gaps between primes
14:30-14:50	Ákos Magyar	Prime and almost prime solutions to diophantine systems of high rank
15:00-15:20	Neville Robbins	Some new necessary conditions for the existence of an odd perfect number
15:30-15:50	Stijn Stefan Campbell Hanson	Various extensions of Chen's theorems
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Markus Hittmeir	Deterministic integer factorization via polynomials over $\mathbb{Z}$
16:50-17:10	Christiaan van de Woestijne	Factorisation of finite graphs and polynomials with nonnegative coefficients
17:20-17:40	Korneel Debaene	Sieving for completely splitting primes

## Thursday - Afternoon session B, Lecture Hall II.

Time	Speaker	Title of the talk
14:00-14:20	András Bíró	Class number one problem for Richaud-Degert type fields
14:30-14:50	Günter Lettl	Orders and conductors in algebraic number fields
15:00-15:20	Miho Aoki	Systems of fundamental units of quartic fields and imaginary quadratic fields with class number divisible by five
15:30-15:50	Nathan Jones	The distribution of class groups of imaginary quadratic fields
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Laura Paladino	Fields generated by torsion points of elliptic curves
16:50-17:10	Yasuhiro Kishi	Imaginary quadratic fields whose ideal class groups have 3-rank at least three
17:20-17:40	Borka Jadrijević	Computing relative power integral bases in a family of quartic extensions of imaginary quadratic fields
17:50-18:10	Tímea Szabó	Power integral bases in quartic fields and quartic extensions

## Thursday - Afternoon session C, Lecture Hall III.

Time	Speaker	Title of the talk
14:00-14:20	Maciej Ulas	Primitive integer solutions of certain Diophantine equations
14:30-14:50	Dijana Kreso	Indecomposability of polynomials and Diophantine equations
15:00-15:20	Divyum Sharma	Number of solutions of Thue inequalities
15:30-15:50	Akinari Hoshi	On the simplest number fields and related Thue equations
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	László Szalay	Sum of certain elements in Pascal-type triangles
16:50-17:10	Kevin Henriot	Diophantine equations in dense variables



17:20-17:40	András Bazsó	On a diophantine equation concerning Appell sequences
17:50-18:10	Judit Ferenczik	Equal values of combinatorial numbers

### Thursday - Afternoon session D, Lecture Hall IX.

Time	Speaker	Title of the talk
14:00-14:20	Thomas Wright	Carmichael numbers and variants of Korselt's criterion
14:30-14:50	Tamás Lengyel	Arithmetic properties of lacunary sums of binomial coefficients
15:00-15:20	Matthew Charles Lettington	On higher dimensional interlacing Fibonacci sequences, continued fractions and Chebyshev polynomials
15:30-15:50	Mehmet Cenkci	Recurrences and congruences for several degenerate numbers
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Volker Ziegler	On the number of integers that are the sum of exactly $k$ units
16:50-17:10	Szabolcs Tengely	Rational functions and arithmetic progressions
17:20-17:40	Márton Szikszai	Bounds and formulas for a Jacobsthal-type function in sequences
17:50-18:10	Jasbir Chalal	Rational albime triangles and elliptic curves

### Thursday - Afternoon session E, Lecture Hall X.

Time	Speaker	Title of the talk
14:00-14:20	Alina Carmen Cojocaru	Arithmetic properties of the Frobenius traces of an abelian variety
14:30-14:50	Andrzej Dabrowski	Orders of Tate-Shafarevich groups in quadratic twists of $X_0(49)$
15:00-15:20	Daniel C. Mayer	Index- $p$ Abelianization data of $p$ -class tower groups
15:30-15:50	Valentijn Zoe Karemaker	Constructing abelian varieties providing solutions to the inverse Galois problem for symplectic groups
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Florian Bouyer	How to identify lattices: an introduction
16:50-17:10	Matthew James Spencer	Brauer relations in positive characteristic
17:20-17:40	Ram Krishna Pandey	Direct and inverse problems in subsequence sums

### Thursday - Afternoon session F, Lecture Hall XI.

Time	Speaker	Title of the talk
14:00-14:20	Joerg Thuswaldner	$S$ -adic words, Rauzy fractals, and torus rotations
14:30-14:50	Valerio Talamanca	Symmetries for heights on split tori

15:00-15:20	Damaris Schindler	Del Pezzo surfaces of degree four violating the Hasse principle
15:30-15:50	Péter Maga	Subconvexity for sup-norms of automorphic forms on $PGL(n)$
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Su-ion Ih	Distribution of integral division points on the algebraic torus
16:50-17:10	Sam Chow	Equidistribution of values of linear forms on a cubic hypersurface
17:20-17:40	Evgeniy Zorin	Rational points and linear forms near manifolds
17:50-18:10	Jun Ueki	Relative genus theory and Iwasawa $\mu$ -invariants for rational homology 3-spheres

### Thursday - Afternoon session G, Lecture Hall XII.

Time	Speaker	Title of the talk
14:00-14:20	Robert Tichy	Arithmetic dynamical systems
14:30-14:50	Katalin Gyarmati	On the complexity of a family of Legendre sequences with irreducible polynomials
15:00-15:20	Manfred Madritsch	Forms of differing degrees over number fields
15:30-15:50	Elisa Lorenzo Garcia	Statistics for the number of points on biquadratic curves over finite fields
15:50-16:20	<i>Coffee Break</i>	
16:20-16:40	Rainer Dietmann	Hilbert cubes in arithmetic sets
16:50-17:10	Qinghai Zhong	The set of minimal distances in Krull monoids
17:20-17:40	Giacomo Cherubini	Error terms in hyperbolic counting
17:50-18:10	Richárd Sebők	On a connection between pseudorandom measures

### Friday - Morning session, F015-016

Time	Speaker	Title of the talk
9:00-10:00	Harald Helfgott	The ternary Goldbach conjecture
10:00-10:30	<i>Coffee Break</i>	
10:30-11:30	Jared Weinstein	Moduli of $p$ -divisible groups
11:30-13:00	<i>Lunch</i>	