

# Preliminary Program

## August 28, Monday

8.30 - 9.15     **Registration**

9.20 - 9.30     **Opening**

*Chair:*         *L. Mišík*

9.30 - 10.10   **K. Györy**

**Integral polynomials of given discriminant  
and their applications**

### Coffee break

*Chair:*         *R. Kučera*

10.40 - 11.00   Š. Porubský

Uniform distribution of the weighted sum-of-digits functions II

11.05 - 11.25   B. Jadrijevič

Characterization of quadratic  $\varepsilon$ -CNS polynomials

11.30 - 11.50   K. Gyarmati

Random polynomials in Legendre symbol sequences

11.55 - 12.15   T. Karam

Ranges control degree ranks of multivariate polynomials over finite prime fields

12.00 - 12.20   N. Adžaga

Asymptotics of the number of  $D(q)$ -pairs and  $D(q)$ -triples via  $L$ -functions

### Lunch time

*Chair:*         *L. Hajdu*

14.00 - 14.20   B. Sobolewski

Hankel determinants associated with weighted binary sum of digits

14.25 - 14.45   D. Gayfulin

Second best approximations and the Lagrange spectrum

14.50 - 15.10   A. Munagi

Development of perfect partitions of numbers

15.15 - 15.35   M. Tinková

Additive structure of non-monogenic simplest cubic fields

### Coffee break

*Chair:*         *Sz. Tengely*

16.00 - 16.20   N. Varga

Polynomial values of Littlewood polynomials

16.25 - 16.45   K. Müllner

Test of measures of pseudorandom binary sequences

16.50 - 17.10   G. Batta

On higher power Diophantine tuples

17.15 - 17.35   F. Rami

About Pascal-like triangles

# Preliminary Program

## August 29, Tuesday

*Chair:* R. Tichý

9.00 - 9.40 **R. Kučera** **Annihilators of the class group of an Abelian field**

9.45 - 10.05 I. Gaál Monogenity and power integral bases of algebraic number fields

10.10 - 10.30 L. Major Enumerating self-avoiding walks of prescribed lengths on finite grids

### Coffee break

*Chair:* Š. Porubský

11.00 - 11.20 D. Kreso Pillai's problems with polynomials

11.25 - 11.45 F. Filip Matrix densities and the relations between them

11.50 - 12.10 L. Remete Monogenity of pure relative quartic extensions of  $\mathbb{Q}(i)$

12.15 - 12.35 K. Gajdzica Some problems related to the restricted partition function  $p_A(n, k)$

### Lunch time

*Chair:* L. Major

14.00 - 14.40 **H. Belbachir** ***Péter Kiss Memorial Section***  
**Linear recurrences in binomial coefficient triangle and its extensions**

14.45 - 15.05 K. Liptai Random inhomogeneous binary recurrence

15.10 - 15.30 N. Aït-Amrane Incomplete bicomplex generalized Fibonacci polynomials

15.35 - 15.55 N. Irmak The  $k$ -generalized Lucas numbers and the inequality  $|L_n^{(k)} - 2^m| < 2^{m/2}$

### Coffee break

*Chair:* D. Gayfulin

16.20 - 16.40 M. Genčev. On a parametric  $K$ -fold infinite series

16.45 - 17.05 A. Bazsó Recent Diophantine results on power sums of arithmetic progressions

17.10 - 17.30 S. Tebtoub About ellipses and integer sequences

**Conference banquet:** Nyugat Étterem (Restaurant Nyugat) in the main campus.

# Preliminary Program

## August 30, Wednesday

*Chair:* A. Bérczes

9.00 - 9.40 M. Ulas

**Geometric progressions in the sets of values of rational functions**

9.45 - 10.05 L. Hajdu

On polynomials having only rational roots

10.10 - 10.30 G. Walsh

Large rank specializations of Shioda's curve and a conjecture of Erdős on powerful numbers

### Coffee break

*Chair:* P. Young

11.00 - 11.20 G. Nyul

Monogeneity and the minimal index of pure quartic fields

11.25 - 11.45 P. Francírek

Enlarging the Stickelberger ideal

11.50 - 12.10 B. Rago

A characterization of half-factorial orders in algebraic number fields

12.15 - 12.35 M. Pulikowski

Gauss congruences in algebraic number fields

12.40 - 13.00 R. Boumahdi

On the exponential Diophantine equation  
 $(a^n - 1)(b^m - 1) = x^2$

### Lunch time

## 14.00 Conference excursion to Eszterházy Palace, Fertőd, the "Hungarian Versailles"

The bus departs on Wednesday at 14:00 from the main entrance of the campus of University of Sopron. After visiting the palace in Fertőd (in two groups), the bus goes to Rupprecht Borozó (Sopron, Lőver körút 52.), where we have dinner.

# Preliminary Program

## August 31, Thursday

*Chair:* G. Walsh

9.00 - 9.40 T. Miyazaki

**Number of solutions to a special type of Pillai's equation**

9.45 - 10.05 A. Pethő

Common values of linear recurrences related to Shank's simplest cubics

10.10 - 10.30 L. Mišík

On the set of maldistributed sequences in metric spaces

### Coffee break

*Chair:* B. Jadrijevič

11.00 - 11.20 P. Young

Global series for height 1 zeta functions

11.25 - 11.45 L. Tóth

Menon's identity: proofs, generalizations and analogs

11.50 - 12.10 Sz. Tengely

Coloring collision problems

12.15 - 12.35 L. S. Altuzarra

Recent results on the geometry of numbers

### Lunch time

*Chair:* M. Ulas

14.00 - 14.20 D. Nyirenda

Generalizing a theorem of Andrews

14.25 - 14.45 I. Pink

Additive Diophantine equations with binary recurrences,  $\mathcal{S}$ -units and several factorials

14.50 - 15.10 A. Racioui

The application of permutation groups in parking function

15.15 - 15.35 I. Vukusic

On a simple quartic family of Thue equations

### Coffee break

*Chair:* H. Belbachir

16.00 - 16.20 I. Djellas

On some new identities involving  $q$ -Fibonacci numbers

16.25 - 16.45 A. Benmezai

On the  $q$ -Fibonacci and  $q$ -Lucas sequences

16.50 - 17.10 I. Benrabia

Lucas-Motzkin numbers

# Preliminary Program

## September 1, Friday

*Chair:* A. Munagi

9.00 - 9.40 V. Ziegler

**On Pillai's problem involving Lucas sequences**

9.45 - 10.05 A. Bérczes

Effective results for division points on curves over finitely generated domains

11.10 - 10.30 P. Miska

$p$ -adic denseness of members of partitions of  $N$  and  $p$ -adic asymptotic densities

### Coffee break

*Chair:* L. Szalay

11.00 - 11.20 T. Herendi

Automata and arithmetic in canonical number systems

11.25 - 11.45 S. Abbad

Zeckendorf's Lucas code and Lucas cube

11.50 - 12.10 T. Szakács

Repdigits in named sequences

12.15 - 12.35 M. Ouannas

Distribution of prime numbers

### Closing