

## Scientific Program of the Conference

### Thursday, June 2

*Chair:* BLAGOVEST SENDOV

- 9:00 – 9:10 Opening of the Conference  
 9:15 – 10:00 *Plenary lecture*  
                   CARL DE BOOR: On ideal interpolation  
 10:15 – 11:00 *Plenary lecture*  
                   PER ENFLO: Minimal and contractive projections

#### *Morning Session A*

*Chair:* BLAGOVEST SENDOV

- 11:45 – 12:05 HEINER GONSKA: On rational B-splines  
 12:10 – 12:30 BORIS SHEKHTMAN: Ideal projectors

#### *Morning Session B*

*Chair:* ANDREY ANDREEV

- 11:45 – 12:05 BORISLAV BOJANOV: Majorization of polynomials on the complex plane  
 12:10 – 12:30 PETER BINEV: Universal algorithms for learning theory

#### *Afternoon Session A*

*Chair:* BORISLAV BOJANOV

- 14:55 – 15:15 TIMOFEY RODIONOV: On the Parseval equality for some systems of exponents  
 15:20 – 15:40 LOZKO MILEV: Weighted Markov inequality for infinite intervals  
 15:45 – 16:05 DIMITAR K. DIMITROV: Continuous dependence of zeros of a polynomials on their coefficients

#### *Afternoon Session B*

*Chair:* KAMEN IVANOV

- 14:30 – 14:50 UWE LUTHER: A note on interpolation and numerical integration of functions with singularities  
 14:55 – 15:15 JOAN GAVREA: About a result of Tiberiu Popoviciu  
 15:20 – 15:40 MOHAMMED A. QAZI: Local behaviour of entire functions of exponential type  
 15:45 – 16:05 SANDOR SZABO: On the Freud weight

## Friday, June 3

*Chair:* ALEKSEI SHADRIN9:00 – 9:45 *Plenary lecture*

VILMOS TOTIK: Quarter of a century of weighted K-functionals

*Morning Session A**Chair:* ALEKSEI SHADRIN

10:00 – 10:20 KAMEN IVANOV: A characterization of weighted K-functionals and its application

10:25 – 10:45 BORISLAV DRAGANOV: A characterization of weighted K-functionals and its application, II

11:15 – 11:35 SERGEY TELYAKOVSKII: Relative widths for classes of differentiable functions

11:40 – 12:00 PAWEŁ WOZNY: Generalized Bernstein basis polynomials

12:05 – 12:25 SIMON FOUCART: On the value of the max-norm of the orthogonal spline projection

*Morning Session B**Chair:* SZILÁRD RÉVÉSZ

10:00 – 10:20 SVETOSLAV MARKOV: Arithmetic operations for Hausdorff continuous functions

10:25 – 10:45 FERENC TOKOS: Hölder continuity of Green's functions

11:15 – 11:35 GEORGY GÁT: On convergence properties of logarithmic means of Walsh-Fourier series

11:40 – 12:00 RAMAZAN AKGÜN: Approximation properties of the interpolating polynomials in the Smirnov-Orlicz class

12:05 – 12:25 ISTVAN BLAHOTA: Norm convergence of logarithmic means of Fourier series on unbounded Vilenkin groups

*Afternoon Session A**Chair:* VILMOS TOTIK

14:30 – 15:50 SZILÁRD RÉVÉSZ: The right order of Turán-type converse Markov inequalities for convex domains on the plane

14:55 – 15:15 NIKOLA NAIDENOV: Markov's inequality for Tchebycheff systems

15:20 – 15:40 ULRICH ABEL: Enhanced and one-sided asymptotic approximation by linear operators

15:45 – 16:05 MIRCEA IVAN: On some mean-value theorems

*Afternoon Session B**Chair:* PETER BINEV

14:30 – 14:50 SADEGH JOKAR: Simultaneously interpolation and mass conserving by polynomials and splines

14:55 – 15:15 GANCHO TACHEV: Inverse theorems for the Schoenberg splines

15:20 – 15:40 BÉLA NAGY: Higher order flexibility of lemniscates

## Saturday, June 4

*Chair:* CARL DE BOOR

- 9:00 – 9:45 *Plenary lecture*  
 ARNO KUIJLAARS: Polynomial approximation problems in  
 the convergence analysis of iterative methods
- 10:00 – 10:45 *Plenary lecture*  
 GENO NIKOLOV: Polynomial inequalities of Markov and  
 Duffin-Schaeffer type

*Morning Session A**Chair:* CARL DE BOOR

- 11:30 – 11:50 ALEKSEI SHADRIN: On Markov-Duffin-Schaeffer inequalities  
 with majorants
- 11:55 – 12:15 ILIA KRASIKOV: Bounds on orthogonal polynomials via La-  
 guerre and Turán type inequalities

*Morning Session B**Chair:* BORIS SHEKHTMAN

- 11:30 – 11:50 NATAN KRUGLYAK: Covering theorems, Calderon-Zygmund  
 type decompositions and almost optimal approximations
- 11:55 – 12:15 BALINT FARKAS: Chebyshev constants of abstract spaces and  
 new applications

*Afternoon Session A**Chair:* FRANZ-JÜRGEN DELVOS

- 14:30 – 14:50 HEINER GONSKA: The degree of convergence of iterated Bern-  
 stein operators
- 14:55 – 15:15 MARGARETA HEILMAN: Eigenfunctions of Durrmeyer-type  
 operators
- 15:20 – 15:40 LUDMILA NIKOLOVA: Weighted Hardy and Polya-Knopp type  
 inequalities with variable limits
- 15:45 – 16:05 SALEEM ISMAIL: On recovering of bivariate polynomial from  
 its Radon projections

*Afternoon Session B**Chair:* WALTER VAN ASSCHE

- 14:30 – 14:50 IRINA ASEKRITOVA: Multiparametric approximation spaces
- 14:55 – 15:15 RODOLFO TOLEDO: Fourier analysis on the complete product  
 of finite groups
- 15:20 – 15:40 KAROLY NAGY: Almost everywhere convergence of two-  
 dimensional Marcinkiewicz means with respect to Walsh-  
 Kaczmarz system
- 15:45 – 16:05 ANDREY ANDREEV: Averaged moduli of smoothness and  
 Runge-Kutta methods

**Sunday, June 5**

*Chair:* BORIS SHEKHTMAN

9:00 – 10:00 *Open problems in approximation theory*

*Chair:* ANDREY ANDREEV

10:00 – 10:20 ANETA KARAIVANOVA: EU-project “GRIDS for E-science in Europe”

**Monday, June 6**

*Chair:* ARNO KUIJLAARS

9:00 – 9:45 *Plenary lecture*

SERGEY KONYAGIN: Some error estimates in learning theory

*Morning Session A*

*Chair:* ARNO KUIJLAARS

10:00 – 10:20 KONSTANTIN OSIPENKO: Optimal recovery of derivatives and exact inequalities in Hardy spaces

10:25 – 10:45 WALTER VAN ASSCHE: Some applications of multiple orthogonal polynomials

11:15 – 11:35 ARPAD FEKETE: Statistical limits of measurable functions and its applications

11:40 – 12:00 PREDRAG RAJKOVIĆ: The least square approximation via  $q$ -orthogonal polynomials

12:05 – 12:25 INNA NIKOLOVA: On the discriminants of the hypergeometric orthogonal polynomials from the Askey scheme

12:30 – 12:50 ANGELA SPALSBURY: Müntz’s theorem and cyclic vectors

*Morning Session B*

*Chair:* HEINER GONSKA

10:00 – 10:20 FRANZ-JÜRGEN DELVOS: Mean square approximation by minimum norm interpolation

10:25 – 10:45 ALEXANDER GONCHAROV: Interpolational topological bases

11:15 – 11:35 AGOTA HORVATH: Rodrigues’ property in weighted spaces

11:40 – 12:00 BURÇİN OKTAY: Approximation properties of the Julia polynomials on complex domains

12:05 – 12:25 MEHMET KÜÇÜKASLAN: On the convergence speed of orthogonal polynomials on complex domain

12:30 – 12:50 MARIA MITREVA: Representation of meromorphic functions and estimates of their growth with respect to separated variables