Scientific Program of the Conference

Tuesday, June 10, 2013

Opening and Morning Session   *Chair:* KAMEN IVANOV

8:30 − 8:50	Opening of the Conference
8:50 − 9:05	Ceremony of conferring Professor Edward B. Saff a Foreign Member of the Bulgarian Academy of Sciences
9:05 − 9:55	EDWARD B. SAFF: Minimal energy and maximal polarization
10:00 − 10:25	PETER DRAGNEV: Optimal s-energy configurations under external field
10:30 − 10:55	JOHANN BRAUCHART: The five point problem on the sphere as a weighted external field problem in the plane
11:30 − 11:55	RALITZA KOVACHEVA: Padé approximations of functions of Markov's type
12:00 − 12:25	VLADIMIR KOSTOV: Hardy-Petrovitch-Hutchinson's problem and partial theta function

Afternoon Session A   *Chair:* VLADIMIR KOSTOV

15:30 − 15:55	ULRICH ABEL: A generalization of the Leibniz rule
16:00 − 16:25	ALEXANDER GONCHAROV: On "two-sided Hölder" Green functions
16:30 − 16:55	ROUMEN ANGUELOV: Interval structures in real analysis. Contribution of Blagovest Sendov to the theory of interval functions
17:30 − 17:55	DIMITAR K. DIMITROV: Entire functions in the Laguerre - Pólya class
18:00 − 18:25	OLENA RADZIIEVSKA: On some estimates of singular number of integral operator of Hilbert-Schmidt

Afternoon Session B   *Chair:* RUMEN ULUCHEV

15:30 − 15:55	LUBOMIR DECHEVSKY: Smooth convex resolution of unity on triangulated polygonal domains with Hermite interpolation at the triangulation vertices using GERBS
16:00 − 16:25	PETER ZANATY: Least-squares fitting with Birkhoff interpolation at the vertices of triangulations using smooth GERBS
16:30 − 16:55	NIKOLAY BARABOSHKIN: Best uniform approximation to a continuous function by piecewise-linear continuous functions with restrictions on the angles between adjacent segments
17:30 − 17:55	ALEXANDER ROZHENKO: On new families of radial basis functions
18:00 − 18:25	GABRIELLE SANTIN: A fast algorithm for computing a truncated orthonormal basis for RBF native spaces

Wednesday, June 11, 2013

Morning Session   *Chair:* GENO NIKOLOV

8:30 – 9:20	GUERGANA PETROVA: Finding the minimum of a function
9:25 – 9:50	KAMEN IVANOV: Recent advances in spherical needlet approximations
9:55 – 10:20	WINFRIED SICKEL: Approximation numbers in Sobolev embeddings
10:25 – 10:50	HRISTO SENDOV: A new representation theorem for Bernstein functions with application to convexity and characteristic functions
11:30 – 11:55	VITALII ARESTOV: Szegő-Calderon-Klein inequalities for fractional derivatives of trigonometric polynomials
12:00 – 12:25	POLINA GLAZYRINA: Bernstein-Szegő inequality for trigonometric polynomials in the spaces Lp, $0 \leq p < 1$

Afternoon Session A   *Chair:* PETER DRAGNEV

15:30 – 15:55	LUDMILA NIKOLOVA: Properties of some functionals associated with h-convex and quasilinear functions
16:00 – 16:25	MARINA DEYKALOVA: Nikol'skii inequality for algebraic polynomials on the multidimensional Euclidean sphere and on a closed interval
16:30 – 16:55	IVAN SIMONOV: A sharp Markov-Nikolski type inequality in the spaces L_∞ and L_1 with Chebyshev weight

Chair: MORTEN NIELSEN

17:30 – 17:55	LOZKO MILEV: Semidefinite extreme points in a polynomial space
18:00 – 18:25	NIKOLA NAIDENOV: On the path-connectedness of the set of extreme points in a polynomial space

Afternoon Session B   *Chair:* GUERGANA PETROVA

15:30 – 15:55	STANISLAV HARIZANOV: Generalized normal multi-scale transforms for curves
16:00 – 16:25	RUMEN ULUCHEV: Interpolation and fitting by harmonic polynomials based on Radon projections
16:30 – 16:55	CLEMENS HOFREITHER: Cubature rules for harmonic functions based on Radon projections

Chair: YURI FARKOV

17:30 – 17:55	ISTVÁN BLAHOTA: Maximal properties of kernels for Vilenkin-like systems
18:00 – 18:25	ILONA SIMON: Convergence questions of sequences of two-dimensional (C, α) means of 2-adic Fourier series of integrable functions

Thursday, June 12, 2013

Morning Session   *Chair:* HRISTO SENDOV

8:30 – 9:20   GERARD KERKYACHARIAN: Analysis on convex subset of a Riemannian manifold and classical polynomial approximation

9:25 – 9:50   PENCHO PETRUSHEV: Sub-exponentially localized frames for spaces of distributions in the general setting of Dirichlet spaces

9:55 – 10:20   GEORGE KYRIAZIS: On the construction of bases and frames for general distribution

10:25 – 10:50   SHAI DEKEL: On Hardy spaces of distributions in the framework of Dirichlet spaces

Chair: ALEXANDER GONCHAROV

11:30 – 11:55   HEINER GONSKA: Infinite products of positive linear operators

12:00 – 12:25   MARGARETA HEILMANN: Some results for Szász-Mirakjan type operators

Afternoon Session A   *Chair:* ULRIH ABEL

15:30 – 15:55   BORISLAV DRAGANOV: Weighted uniform approximation by the Szász-Mirakjan operator

16:00 – 16:25   GANCHO TACHEV: Bernstein polynomials for arbitrary points of interpolation

16:30 – 16:55   PARVAN PARVANOV: Weighted approximation by a class of Baskakov-type operators

Chair: WINFRIED SICKEL

17:30 – 17:55   ELENA-DORINA STĂNILĂ: On the class of operators U_n^ρ linking the Bernstein and the genuine Bernstein-Durrmeyer operators

18:00 – 18:25   TEODORA ZAPRYANOVA: On approximation by algebraic version of the trigonometric Jackson integrals $G_{S,N}$ in weighted integral metric

Afternoon Session B   *Chair:* GŐRGY GÁT

15:30 – 15:55   PETER BINEV: On adaptivity in point-cloud approximation

16:00 – 16:25   USHANGI GOGINAVA: Strong summability of quadrat partial sums of double Fourier series

16:30 – 16:55   YURI FARKOV: Convergence of dyadic wavelet expansions in $L_p(\mathbb{R}+)$

Chair: PETER OSWALD

17:30 – 17:55   BÉLA NAGY: Sharp Bernstein inequality in integral norms

18:00 – 18:25   FEDERICO PIAZZON: Optimal polynomial admissible meshes for the closure of bounded $C^{1,1}$ domains in $\mathbb{R}^d$

Friday, June 13, 2013

Morning Session   *Chair:* HEINER GONSKA

8:30 – 9:20   PETER OSWALD: Stable space splittings and their applications

9:25 – 10:15   MARIA SKOPINA: Approximation by band-limited scaling and wavelet expansions

10:20 – 10:45   MARTIN LIND: Functions of bounded Λ-variation and integral smoothness

Chair: ANDREY ANDREEV

11:20 – 11:45   KAROL DZIEDZIUL: Smooth orthogonal projections on sphere

11:50 – 12:15   ELENA LEBEDEVA: Localization of dyadic functions

12:20 – 12:45   ALEXANDR KRIVOSHEIN: MRA-based wavelets with symmetry

Saturday, June 14, 2013

Morning Session   *Chair:* ALEXANDER ROZHENKO

8:30 – 9:20   MORTEN NIELSEN: Some new results on approximation with redundant dictionaries

9:25 – 9:50   MARKUS HANSEN: n-term approximation and Besov regularity for elliptic PDEs on polyhedral domains

9:55 – 10:20   KÁROLY NAGY: Restricted summability of the two-dimensional Walsh- and Walsh-Kaczmarz-Fejér means

10:25 – 10:50   RODOLFO TOLEDO: Convergence in L_p-norm of Fourier series on the complete product of quaternion groups with bounded orders

Chair: USHINAGI GOGINAVA

11:30 – 11:55   GYŐRGY GÁT: Subsequences of partial sums of one and two-dimensional Walsh-Fourier series

12:00 – 12:25   KRASSIMIRA VLACHKOVA: Convex scattered data interpolation in $\mathbb{R}^3$ using minimum norm networks

12:30 – 12:55   MARIA DANIELA RUSU: Chebyshev-Grüss-type inequalities – a new approach

Afternoon Session and Closing   *Chair:* BLAGOVEST SENDOV

15:30 – 15:55   HERMANN RENDER: Bernstein-type operators fixing two polynomials

16:00 – 16:25   GENO NIKOLOV: An extension of Turán's inequality for ultraspherical polynomials

16:30 – 17:15   Open Problems

17:15 – 17:30   Closing of the Conference