

Scientific Program of the Conference CTF-2016

Sunday, June 12, 2016

Opening and Morning Session

Chair: GENO NIKOLOV

- 8:30 – 8:45 Opening of the Conference CTF-2016
- 8:45 – 9:35 HEINER GONSKA:
Grüss-Voronovskaya estimates for Bernstein-type polynomials
- 9:40 – 10:05 MARGARETA HEILMANN:
A nice representation for a link between Bernstein-Durrmeyer
and Kantorovich operators
- 10:10 – 10:35 BORISLAV DRAGANOV:
Estimates of the simultaneous approximation by the Bernstein
and Kantorovich operators
- 11:10 – 11:35 GEORGE ANASTASSIOU:
Self adjoint operator Korovkin type and polynomial direct
approximations with rates
- 11:40 – 12:15 IRINA GEORGIEVA:
An algorithm for low-rank approximation of bivariate functions
using splines (poster)

Afternoon Session

Chair: BORISLAV DRAGANOV

- 15:30 – 15:55 DENKA KUTZAROVA:
An X-greedy algorithm with weakness parameters
- Chair: RUMEN ULUCHEV*
- 17:00 – 17:25 IVAN GADJEV:
Approximation of functions in L_p -norm by Kantorovich modifi-
cations of some classical operators
- 17:30 – 17:55 TEODORA ZAPRYANOVA:
On the iterates of continuous linear operators preserving
constants and Jackson type operator $G_{s,n}$

Monday, June 13, 2016*Morning Session**Chair: ALEXEI SHADRIN*

8:30 – 9:20 FENG DAI:
Moduli of smoothness and polynomial approximation on spheres
and balls

9:30 – 10:20 PENCHO PETRUSHEV:
Nonlinear n -term approximation of harmonic functions from
discrete Newtonian potentials

Chair: PENCHO PETRUSHEV

11:00 – 11:25 KAMEN IVANOV:
Highly localized kernels on the sphere induced by discrete
Newtonian potentials

11:30 – 11:55 GEORGE KYRIAZIS:
Homogeneous spaces of distributions associated with operators

*Afternoon Session**Chair: GEORGE KYRIAZIS*

15:30 – 15:55 PETER DRAGNEV:
On the checkmark function polynomial approximation

16:00 – 16:25 PETER BOYVALENKOV:
Universal lower bounds for energy of codes in polynomial metric
spaces

Chair: BORISLAV DRAGANOV

17:00 – 17:25 ALEXANDER PUSHNITSKI:
Best rational approximation of functions with logarithmic
singularities

17:30 – 17:55 ARTHUR DANIELYAN:
Rubel's problem on bounded analytic functions

18:00 – 18:25 THAIS JORDAO:
General types of spherical mean operator and K -functionals of
fractional orders

Tuesday, June 14, 2016*Morning Session**Chair: KAMEN IVANOV*

- 8:30 – 9:20 SZYLARD REVESZ:
A potential theoretic minimax problem on the torus
- 9:30 – 9:55 BELA NAGY:
A potential theoretic minimax problem on the torus. II
- 10:00 – 10:25 BLAGOVEST SENDOV:
Refinement of Gauss-Lucas theorem for polynomials with real coefficients
- 11:00 – 11:25 VLADIMIR KOSTOV:
On the partial theta function
- 11:30 – 11:55 NIKOLA NAIDENOV:
Some exact inequalities for polynomials on the standard triangle

*Afternoon Session**Chair: SZYLARD REVESZ*

- 15:30 – 15:55 ALEXANDER ALEXANDROV:
Proof of a conjecture of M. Patrick about Jacobi polynomials
- 16:00 – 16:25 ARPAD BARICZ:
Bounds for the radii of univalence of some special functions
- 16:30 – 16:55 ANA AVDZHIEVA:
Asymptotically optimal definite quadrature formulae of 4-th order

Wednesday, June 15, 2016*Morning Session**Chair: FENG DAI*

- 8:30 – 9:20 OLEG DAVYDOV:
Approximation by multivariate piecewise polynomial splines
- 9:30 – 9:55 MARKUS PASSENBRUNNER:
Orthogonal projection operators onto spline spaces
- 10:00 – 10:25 VALERY ZHELUDOV:
Local splines on non-uniform grids generating real-time wavelet transforms

Chair: HEINER GONSKA

- 11:00 – 11:25 KEVIN FORD:
Permutations fixing a k -set
- 11:30 – 11:55 STANISLAV HARIZANOV:
Numerical approximation of the inverse principal square root of an M-matrix, using univariate polynomial techniques
- 12:00 – 12:25 ULRICH ABEL:
Asymptotic properties of Chlodovsky polynomials
- 12:30 – 12:55 GANCHO TACHEV:
Voronovskaja's theorem for functions with exponential growth

Thursday, June 16, 2016*Morning Session and Closing**Chair: OLEG DAVYDOV*

- 8:30 – 9:20 ALEXEI SHADRIN:
Markov-type inequalities and their applications
- 9:30 – 9:55 GENO NIKOLOV:
Markov-type inequality in the L_2 norm induced by Laguerre weight
- 10:00 – 10:25 SERGEI KALMYKOV:
Inequalities for series in q -shifted factorials and q -Gamma functions

Chair: ALEXANDER PUSHNITSKI

- 11:00 – 11:25 MARINA DEIKALOVA:
Jacobi translation and Nikol'skii inequality for algebraic polynomials on a closed interval
- 11:30 – 11:55 MARIA FILATOVA:
Approximation of the differentiation operator by linear bounded operators on the class of smooth functions in the space L_2 on the half-line
- 12:00 – 12:10 Closing of the Conference CTF-2016