Scientific Program of the Conference

Monday, June 3, 2019

Opening and Morning Session   *Chair:* KAMEN IVANOV

  9:30 – 9:40   Opening of the Conference

  9:40 – 10:30   BLAGOVEST SENDOV:
                     On Rolle's theorem for complex polynomials

11:00 – 11:30   HRISTO SENDOV:
                     Polar convexity and critical points of polynomials

11:30 – 12:00   LOZKO MILEV:
                     Sharp estimates for the critical points of oscillating polynomials
                     with Laguerre weight

12:00 – 12:30   NIKOLA NAIDENOV:
                     Further results on the zeros of the derivative of oscillating
                     polynomials with Laguerre weight

Afternoon Session   *Chair:* GENO NIKOLOV

16:00 – 16:30   OGNYAN KOUNCHEV:
                     On polyharmonic interpolation of data on parallel hyperplanes

17:00 – 17:30   HERMANN RENDER:
                     On interpolation with a class of bivariate polysplines for data in
                     the plane

17:30 – 18:00   VLADIMIR KOSTOV:
                     Descartes' rule of signs and moduli of roots

Tuesday, June 4, 2019

Morning Session   *Chair:* BLAGOVEST SENDOV

9:00 – 9:50   GITTA KUTYNIOK:
               The approximation power of deep neural networks: theory and
               applications

10:00 – 10:30   HEINZ-JOACHIM RACK:
               Explicit solution, for $n = 6$, to a Markov-type extremal problem
               initiated by Schur

11:00 – 11:30   THEODORE KILGORE:
               Weighted approximation with Bernstein-Chlodovsky operators

11:30 – 12:00   GENO NIKOLOV:
               A discrete Markov-Bernstein inequality for sequences and
               polynomials

12:00 – 12:30   ALETTA JOOSTE:
               Recurrence equations involving different orthogonal polynomial
               sequence

Afternoon Session   *Chair:* BORISLAV DRAGANOV

15:30 – 16:00   HEINER GONSKA:
               Remarks on classical Kantorovich operators

16:00 – 16:30   MARGARETA HEILMANN:
               Some results for linking Baskakov-type operators

17:00 – 17:30   ULRICH ABEL:
               Voronovskaja type theorems for positive linear operators related
               to squared basis functions

17:30 – 18:00   ANA-MARIA ACU:
               Voronovskaya type theorems for certain operators

Wednesday, June 5, 2019

Morning Session   *Chair:* HRISTO SENDOV

9:00 – 9:50   DANY LEVIATAN:
               Visiting Whitney

Thursday, June 6, 2019

Morning Session   *Chair:* PENCHO PETRUSHEV

9:00 – 9:50   JEAN-MARIE MIREBEAU:
Numerical methods for the discretization of anisotropic PDEs on cartesian grids

10:00 – 10:30   PETER BINEV:
Fast algorithms for adaptive approximation on conforming partitions

11:00 – 11:30   SERGEI KALMYKOV:
On some Bernstein-type inequalities for rational functions

11:30 – 12:00   ALI ARAL:
Operators preserving exponential functions in approximation theory

12:00 – 12:30   ANA AVDZHIEVA:
Definite quadrature formulae of order three

Afternoon Session   *Chair:* PETER BINEV

15:30 – 16:00   PENCHO PETRUSHEV:
Gaussian bound for the heat kernel induced by prolate spheroidal wave functions with applications

16:00 – 16:30   GEORGE KYRIAZIS:
Product Besov and Triebel-Lizorkin spaces with application to nonlinear approximation

17:00 – 17:30   KAMEN IVANOV:
Non-linear approximation in $\mathrm{BMO}(\mathbb{S}^{d-1})$

Friday, June 7, 2019

Morning Session   *Chair:* DANY LEVIATAN

9:00 – 9:50   VILMOS TOTIK:
Polynomial inequalities on general sets

10:00 – 10:30   IVAN GADJEV:
Weighted approximation of functions in L_p-norm by some Kantorovich operators

11:00 – 11:30   RUMEN ULUCHEV:
On Hardy L_2 inequality in certain finite dimensional spaces

11:30 – 12:00   BORISLAV DRAGANOV:
Simultaneous approximation by Bernstein polynomials and their integer forms

12:00 – 12:15   Closing of the Conference