Scientific Program

Monday, June 3, 2019

Opening and Morning Session

9:30 – 9:40 Opening of the Conference

9:40 – 10:30 Blagovest Sendov:
On Rolle’s theorem for complex polynomials

10:30 – 11:00 Coffee Break

11:00 – 11:30 Hristo Sendov:
Polar convexity and critical points of polynomials

11:30 – 12:00 Vladimir Kostov:
Descartes’ rule of signs and moduli of roots

12:00 – 12:30 Lozko Milev:
Sharp estimates for the critical points of oscillating polynomials with Laguerre weight

Afternoon Session

15:30 – 16:00 Nikola Naidenov:
Further results on the zeros of the derivative of oscillating polynomials with Laguerre weight

16:00 – 16:30 Ognyan Kounchev:
On polyharmonic interpolation of data on parallel hyperplanes

16:30 – 17:00 Coffee Break

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

17:30 – 18:00 Davit Voskanyan:
On the set of solutions of polynomial systems

19:30 – Reception
Tuesday, June 4, 2019

Morning Session

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

10:30 – 11:00  ~~~ Coffee Break  ~~~

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

15:30 – 16:00  **Heiner Gonska:**
Remarks on classical Kantorovich operators

16:00 – 16:30  **Margareta Heilmann:**
Some results for linking Baskakov-type operators

16:30 – 17:00  ~~~ Coffee Break  ~~~

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

9:00 – 9:50  Dany Leviatan:
             Visiting Whitney

9:50 – 10:15  ~~~  Coffee Break  ~~~

10:30 –  Excursion
Thursday, June 6, 2019

Morning Session

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

10:30 – 11:00 Coffee Break

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

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

16:30 – 17:00 Coffee Break

17:00 – 17:30 Kamen Ivanov:
Non-linear approximation in BMO($S^{d-1}$)

17:30 – 18:00 Arthur Danielyan:
On Fatou’s theorem on bounded analytic functions

20:00 – Conference Dinner
Friday, June 7, 2019

Morning Session

9:00 – 9:50 Vilmos Totik:
Polynomial inequalities on general sets

10:00 – 10:30 Alexei Shadrin:
Optimal sampling rates for approximating analytic functions from pointwise samples

10:30 – 11:00 Coffee Break

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 – 12:30 Ivan Gadjiev:
Weighted approximation of functions in $L_p$-norm by some Kantorovich operators

12:30 – 12:45 Closing of the Conference