

## Workshop on Approximation Theory, CAGD, Numerical Analysis and Symbolic Computation



September 6 - 11, 2016, Sofia, Bulgaria

organized by

Institute of Mathematics and Informatics,  
Bulgarian Academy of Sciences

and

Doctoral Program Numerical Analysis and  
Symbolic Computation (JKU)

and

Todor Kableshkov University of Transport, Sofia



### Schedule

Arrival day  
Departure day  
Lectures

September 6, 2016  
September 11, 2016  
September 7-10, 2016

### Venue

Institute of Mathematics and Informatics  
Acad G. Bonchev Str. 8  
Lecture Room 403

## Workshop Program

### Wednesday, Sep 7, 2016

9:00 – 9:30	Registration, Opening, Coffee	
9:30 – 10:15	Alexander Alexandrov	Proof of a Conjecture of M.Patrick Concerning Jacobi Polynomials
10:15 – 11:00	Dragomir Alexov	Markov Type Inequalities in $L_2$ Norms with a Gegenbauer Weight Function
11:00 – 11:30	Coffee Break	
11:30 – 12:15	Krassimira Vlachkova	Algorithms for Comparison for Coincidence of Bézier Curves and Surfaces
	Lunch Break	
13:30 – 14:15	Stefan Takacs	Approximation Error Estimates for B-splines and Applications to Solvers
14:15 – 15:00	Jakob Ablinger	Algorithms for Nested Sums and Iterated Integrals
18:30 –	Official dinner	at the Restaurant "SkaraBar 3 Polygraphia"

## Thursday, Sep 8, 2016

9:30 – 10:15	Borislav Draganov	On a Method for Estimating the Rate of Approximation of Linear Operators
10:15 – 11:00	Clemens Hofreither Irina Georgieva	New Results on Best Approximation with Low-rank Matrices
11:00 – 11:30	Milen Borisov (poster presentation)	Extremum Seeking in a Functional Differential Model of a Bioreactor
	Coffee Break	
11:30 – 12:15	Gergana Bencheva	Haematopoietic Stem Cells Migration Revisited - Chemotaxis Model, Numerical Approaches, Open Issues
12:15 – 13:00	Peter Rashkov	A Simple Kinetic Model For Hormesis in an Onco-Targeted Signal Pathway
	Lunch break	
15:00 – 17:00	Open discussions	

**Friday, Sep 9, 2016**

9:30 – 10:15	Evgenija Popova	Fourier- Motzkin Elimination Applied to Linear Systems with Interval Parameters
10:15 – 11:00	Rumen Uluchev	Finite Blaschke Products in Approximations
11:00 – 11:30	Coffee break	
11:30 –11:55	Ivan Georgiev	HPC Simulations based on CT Data Geometry
11:55 – 12:15	Vencislav Pirinski	Measurement Applications based on Laser Scanning High Resolution Polygonal Models
12:15 – 13:00	Stanislav Harizanov	Fast Algorithm for Exact Solving of Quadratic Optimization Problem in the Nodes of the Unit Cube
	Lunch Break	
14:30 –	Open Discussions	

**Saturday, Sep 10, 2016**

10:00 –	Open discussions + Closing
12:00 –	Walk in Sofia and visit to "Sofia History Museum"