

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

August 26–30, 2014, Sozopol, Bulgaria

Organized by



Institute of Mathematics and Informatics
Bulgarian Academy of Sciences, Sofia, Bulgaria



Doctoral Program Numerical Analysis and Symbolic Computation
Johannes Kepler University, Linz, Austria



Department of Mathematics and Informatics
Todor Kableshkov University of Transport, Sofia, Bulgaria

Schedule

Arrival day: August 25, 2014
Departure day: August 31, 2014
Lectures: August 26-30, 2014

Scientific Program of the Workshop

Tuesday, August 26, 2014

- 9:00 – 9:30 Registration, Opening, Coffee
- 9:30 – 10:30 GENO NIKOLOV
On a conjecture of M. Patrick concerning Jacobi polynomials
- 10:30 – 11:30 DRAGOMIR ALEXOV
Markov type inequalities in L_2 norms with a Gegenbauer weight function
- 11:30 – 12:30 VESSELIN GUSHEV
Dynamic mathematical models in education
- 12:30 – 13:30 Lunch break
- 16:00 – 18:00 Sailing cruise onboard the “Royal Helena” in Sozopol bay

Wednesday, August 27, 2014

- 9:00 – 10:00 CHRISTOPH KOUTSCHAN
Symbolic computation in Knot theory
- 10:00 – 10:30 Coffee break
- 10:30 – 11:30 LIANGJIE YE
Computer algebra algorithms for proving Theta function identities
- 11:30 – 12:30 JAKOB ABLINGER
Some new aspects about nested sums and iterated integrals
- 12:30 – 13:30 Lunch break
- 16:00 – 17:00 IVAN GADJEV
Approximation of functions by linear positive operators
- 17:00 – 18:00 BORISLAV DRAGANOV
Simultaneous approximation by the Bernstein and Kantorovich operators

Thursday, August 28, 2014

- 9:00 – 10:00 GÁBOR KISS
THB-splines: theory and applications
- 10:00 – 11:00 STEFAN TAKACS
A robust multigrid method for isogeometric analysis and its analysis
- 11:00 – 11:30 Coffee break
- 11:30 – 12:30 CLEMENS HOFREITHER
Analysis of geometric multigrid methods for isogeometric analysis
- 12:30 – 13:30 IRINA GEORGIEVA AND CLEMENS HOFREITHER
Approximation based on Radon projections
- 13:30 – 14:30 Lunch break
- 16:30 – 18:00 Open discussions
- 19:30 – Official dinner

Friday, August 29, 2014

- 9:00 – 10:00 OGNIAN KASSABOV
Congruence of minimal surfaces
- 10:00 – 11:00 KRASSIMIRA VLACHKOVA
Extremal scattered data interpolation in \mathbb{R}^3 using tensor product Bézier surfaces
- 11:00 – 11:30 Coffee break
- 11:30 – 12:30 STANISLAV HARIZANOV
TBA
- 12:30 – 13:30 CLEMENS HOFREITHER AND IRINA GEORGIEVA
The Poisson equation as an interpolation problem based on Radon projections
- 13:30 – 14:30 Lunch break
- 16:30 – 18:00 Open discussions

Saturday, August 30, 2014

- 9:30 – 11:00 Open discussions & Closing