

**13th Serbian Mathematical Congress**  
**Vrnjačka banja, May 22–25, 2014**

## **Conference Schedule**

### **Field 2: Numerical Mathematics, Applied Mathematics**

#### **May 23, 2014**

09:00–11:00 **Plenary lectures**

11:00–11:30 Coffee break

11:30–13:20 Field 2– Chairman: Blagovest Sendov

11:30 - 12:05  
Dimitrios Pappas  
*Image restoration methods based on least squares solutions*

12:05 - 12:25  
Ivan Stanimirovic  
*Computation of Generalized Matrix Inverses via Full-rank  $LDL^*$  Decomposition*

12:25 - 12:45  
Marko Petkovic  
*Hankel transform computation of different integer sequences*

12:45 - 13:05  
Vasilios N Katsikis  
*A new computational tool for option replication*

13:05 - 13:25  
Boban Marinkovic  
*A Motzkin-type theorem of the alternative in  $L_p$  spaces*

13:30–15:00 Lunch break

15:00–16:55 Field 2 – Chairman: Marko Petković

15:00 - 15:35  
Blagovest Sendov  
*Analogue of Gauss-Lucas theorem for complex polynomials*

15:35 - 15:55

Marija P. Stanić, Tatjana V. Tomović

*Multiple orthogonality in the space of trigonometric polynomials of semi-integer degree*

15:55 - 16:15

Tatjana V. Tomović, Marija P. Stanić

*Quadrature rules with an even number of multiple nodes and a maximal trigonometric degree of exactness*

16:15 - 16:35

Nenad P. Cakic

*q-analogues of multiparameter non-central Stirling numbers*

16:35 - 16:55

Natasa Krejic

*Inexact Restoration approach for minimization with inexact evaluation of the objective function*

17:00–17:30 Coffee break

17:30–19:30 Field 2– Chairman: Vasilios N. Katsikis

17:30 - 18:05

Tatyana Micic

*Modelling uncertainties in structural design and assessment*

18:05 - 18:25

Katica R. Stevanovic-Hedrih

*Petrovic's Elements of mathematical phenomenology AND Phenomenological Mappings in Science*

18:25 - 18:45

Lidija Rančić and Miodrag Petković

*A new simultaneous method with corrections for approximating zeros of analytic functions*

18:45 - 19:05

B. Malešević, M. Petrović, I. Jovović, B. Banjac

*Plane curves with foci and directrices in the facility location problems*

19:05 - 19:25

Branko Malešević, Tatjana Lutovac, Milica Makragić, Bojan Banjac, Marija Nenezić

*One method for proving a class of trigonometric inequalities*

19:25 - 19:45

Tatyana Micic, Miomir Stankovic, Dragoslav Stojic, Nikola Velimirovic

*Stochastic process representation for time-dependent timber-concrete composite beam deterioration*

## May 24, 2014

09:00–11:00 **Plenary lectures**

11:00–11:30 Coffee break

11:30–13:25 Field 2– Chairman: Branko Malešević

11:30 - 12:05

Bernd Steinbach, Christian Posthoff

*Boolean Differential Equations – Solution and Applications*

12:05 - 12:25

Sandra Hodzic

*About a nonlocal BVP for Poisson's equation*

12:25 - 12:45

Zorica Dusan Milovanovic

*Numerical approximation of 2D elliptic transmission problem in disjoint domains*

12:45 - 13:05

Bosko Jovanovic

*Some Boundary Value Problems for Fractional in Time Diffusion-Wave Equation and their Numerical Solution*

13:05 - 13:25

Aleksandra Delić

*A Finite Difference Scheme for a Fractional Super-diffusion Equation with Concentrated Capacity*

13:30–15:00 Lunch break

15:00–16:15 Field 2– Chairman: Bosko Jovanovic

15:00 - 15:35

Dimitrios Pappas

*Outer Inverses in constrained quadratic optimization*

15:35 - 15:55

Snezana Djordjevic

*New Hybrid Conjugate Gradient Method for Unconstrained Optimization*

15:55 - 16:15

Vladimir Janković

*A new proof of the necessary conditions of the first order for the general problem of the calculus of variations*