

# Scientific program

## Doctoral Conference in Mathematics and Informatics

15-18 October 2015, Sofia, Bulgaria

### Friday 16 October 2015

Friday 16 October 2015		Chairperson
09:00 – 09:40	<b>Opening (Welcome addresses)</b>	
09:40 – 10:00	<b>Vladimir Sapundjiev, Detelin Luchev</b> , <i>Interactive Environment for Creating and Preservation of Fashion Objects Integrated with Data Base of Learning Resources</i>	<i>Elitsa Peltekova</i>
10:00 – 10:20	<b>Victor Glavev</b> , <i>Problems of the architecture of e-governance in public administration of Republic of Bulgaria</i>	
10:20 – 10:40	<b>Tea/coffee break</b>	
10:40 – 11:00	<b>Slav Angelov</b> , <i>Modelling company's performance based on financial ratios and macroeconomic variables</i>	<i>Tihomir Ivanov</i>
11:00 – 11:20	<b>Milen Borisov</b> , <i>Stability Analysis in a Model of Anaerobic Digestion with Hydrogen and Methane Production</i>	
11:20 – 11:40	<b>Gergana Gerova</b> , <i>Application of Numerical Methods to Differential Equations for Poisoning of Nuclear Reactors</i>	
11:40 – 12:00	<b>Maria Vasileva</b> , <i>On a family of Weierstrass-type root-finding methods with high order of convergence</i>	
12:00 – 14:00	<b>Lunch time</b>	
14:00 – 14:20	<b>Nikolay Dimitrov</b> , <i>Existence of Positive Solutions of Discrete Nonlinear Problem</i>	<i>Slav Angelov</i>
14:20 – 14:40	<b>Krasimira Kostadinova</b> , <i>The Polya-Aeppli risk model with stochastic premium process</i>	
14:40 – 15:00	<b>Maria Dobрева</b> , <i>A Matched Case-Control Study in Dental Medicine. Bayesian approach.</i>	
15:00 – 15:20	<b>Ana Serafimova</b> , <i>Analysis of the effect of feature selection and the use of similarity measures in case-based reasoning on predicting the outcome of bank telemarketing calls</i>	
15:20 – 15:40	<b>Tea/coffee break</b>	
15:40 – 16:00	<b>Lyubomir Andreev</b> , <i>Estimates for the Kobayashi and Quasi-Hyperbolic Distances</i>	<i>Dafinka Miteva</i>
16:00 – 16:20	<b>Ivaylo Kamenarov</b> , <i>Versioning in a business process repository</i>	
16:20 – 16:40	<b>Hristo Kirlov</b> , <i>Framework for building dynamic business applications</i>	
16:40 – 17:00	<b>Denitza Charkova</b> , <i>Learning in the Cloud: Individualized or Team Work?</i>	
17:00 – 17:20	<b>Vesela Mihova</b> , <i>Maximizing social welfare in environmental context</i>	
18:00 – 22:00	<b>Official Dinner - BAS Hotel Restaurant</b>	

**Saturday 17 October 2015**

		<i>Chairperson</i>
09:00 – 09:20	<b>Krassimir Angelow</b> , <i>New Boundary Condition of the Stationary Wave Solutions to a Two Dimensional Boussinesq Equation</i>	<i>Maria Vasileva</i>
09:20 – 09:40	<b>Georgi Iliev</b> , <i>Social Mobile Application Sportlikers Live</i>	
09:40 – 10:00	<b>Pavel Kyurkchiev</b> , <i>Integrating a system for symbol programming of real processes with a cloud service</i>	
10:00 – 10:20	<b>Nikolina Nikolova, Dafinka Miteva</b> , <i>Forming inquiry meta-skills in the School of the Future</i>	
10:20 – 10:40	<b>Tea/coffee break</b>	
10:40 – 11:00	<b>Ekaterina Madamlieva, Radoslava Terzieva</b> , <i>Stability with initial time difference of difference equations</i>	<i>Paunka Yordanova</i>
11:00 – 11:20	<b>Slav Cholakov, Milena Petkova</b> , <i>Convergence of a fourth-order method for simultaneous finding polynomial zeros</i>	
11:20 – 11:40	<b>Elitsa Peltekova</b> , <i>Instructional technology tool for effective education – interactive white board</i>	
11:40 – 12:00	<b>Maria Dobрева</b> , <i>Security Policies in a Framework for Distributed Business Applications</i>	
12:00 – 14:00	<b>Lunch time</b>	
14:00 – 14:20	<b>Hristo Hristov</b> , <i>Why, although the exact subject matter of the mathematics, we grade the students inaccurately?</i>	<i>Todorka Terzieva</i>
14:20 – 14:40	<b>Margarita Atanasova, Anna Malinova</b> , <i>Adaptive user interfaces in software systems</i>	
14:40 – 15:00	<b>Kirina Boykova</b> , <i>Technology comes to the aid – using Web 2.0 tools to enhance language learning</i>	
15:00 – 15:20	<b>Metodi Nikolov</b> , <i>Parameter Estimation of the Normal Inverse Gaussian Distribution</i>	
15:20 – 15:40	<b>Tea/coffee break</b>	
15:40 – 16:00	<b>Vanya Ivanova, Todorka Terzieva</b> , <i>Criteria for the Construction of Tests for Language Assessment and Evaluation</i>	<i>Anna Malinova</i>
16:00 – 16:20	<b>Venelin Valkov</b> , <i>Spice Up Your Life: A Bayesian Approach to Personalized Daily Activity Scheduling</i>	
16:20 – 16:40	<b>Tatyana Ivanova</b> , <i>Logics for Extended Distributive Contact Lattices</i>	
16:40 – 17:00	<b>Georgi Spasov</b> , <i>Library for control and remote access to Arduino controller</i>	
17:00 – 17:20	<b>Paunka Yordanova</b> , <i>Applied Mathematics in High School Education</i>	

**Sunday 18 October 2015**

		<i>Chairperson</i>
09:00 – 09:20	<b>Viktor Matanski</b> , <i>Generative visualisation based on sound</i>	
09:20 – 09:40	<b>Hristo Manev</b> , <i>Three-dimensional almost contact B-metric manifolds as hypersurfaces and warped products</i>	
09:40 – 10:00	<b>Temenuzhka Zafirova-Malcheva</b> , <i>An example of teaching special educational software design and development</i>	
10:00 – 10:20	<b>Zornitsa Yakova, Krassen Stefanov</b> , <i>Information security measures applied at the university</i>	
10:20 – 10:40	<b>Tea/coffee break</b>	
10:40 – 11:00	<b>Tihomir Ivanov, Elena Nikolova</b> , <i>Analysis of Stability in a Mathematical Model of Arterial Aneurysmal Walls</i>	
11:00 – 11:20	<b>Dessislava Koleva</b> , <i>Evolution of the numerical application of discrete dividends to option pricing</i>	
11:20 – 11:40	<b>Meglana Lazarova</b> , <i>Noncentral Polya-Aeppli process and Applications</i>	
11:40 – 12:00	<b>Vladimir Georgiev</b> , <i>Online Platform for Managing 3D Virtual Collections – Usage and Applications</i>	
12:00 – 14:00	<b>Lunch time</b>	
14:00 – 14:20	<b>Mihail Hamamdjiev</b> , <i>Selections of the Gâteaux subdifferential</i>	
14:20 – 14:40	<b>Ana Staneva</b> , <i>Applications of the Monte Carlo EM algorithm in Multitype Branching Processes with power series offspring distributions</i>	
14:40 – 15:00	<b>Krasimir Baylov</b> , <i>Adaptive Microservice Architectures</i>	
15:00 – 15:20	<b>Vasilka Sabeva</b> , <i>A Stepwise Application of Longitudinal Data Analysis in Food Industry</i>	
15:20 – 15:40	<b>Antoanela Terzieva</b> , <i>Modeling phytoplankton population by branching processes</i>	

**Registration:**

October 15, 2015, Thursday 16:00 – 18:00

October 16, 2015, Friday 8:30 – 12:00

**Address:**

Acad. Georgi Bonchev Str., Block 8,  
1113 Sofia, Bulgaria

[IMI, BAS](#)

Multimedia Room 055, -1<sup>st</sup> Floor