

## NATIONAL FOR WOMEN IN SCIENCE FELLOWS SERBIA 2015

### JELENA ALEKSIĆ

Jelena Aleksić, born 16.9.1979., is an associate professor at the Chair of analysis, probability and differential equations, Department of Mathematics and Informatics, Faculty of Sciences, University of Novi Sad, where she teaches Multivariable Analysis and Differential equations. She defended her PhD thesis entitled „Conservation laws in heterogeneous media" on 16.10.2009. at the same faculty. During different periods of her studies she held scholarships from the Serbian Ministry of Science, the Royal Norwegian Embassy in Serbia and the Austrian Agency for International Cooperation OeAD-Österreichische Austauschdienst, so she spent six months as postgraduate student at the University of Innsbruck in Austria. She obtained numerous awards from the University of Novi Sad.

Her scientific interests are in development and application of functional analysis and measure theoretic tools in partial differential equations. Her scientific contribution is in the classical and Colombeau theory of hyperbolic nonlinear conservation laws. With her collaborators she proved the existence of the weak solution to the Cauchy problem for conservation laws with discontinuous heterogeneous flux which may not be genuinely nonlinear, improved the ratio of diffusion and dispersion parameter in the problem of diffusion-dispersion limit of approximate solutions to conservation law, proved the existence of a strong trace of entropy solutions to ultraparabolic equation, and expanded spaces where microlocal defect measures, used in compactness results of approximate solutions to above mentioned problems, are defined. She proved equivalence of concepts of measurevalued and Colombeau solutions to conservation laws, gave a complete description of conservation laws with heterogeneous flux in Colombeau algebras etc.

Among other activities, she serves as regional coordinator of the international organization "European Woman in mathematics", established by the European Mathematical Society and as reviewer for "Mathematical Reviews" of the American Mathematical Society. She is a member of the editorial board of the Novi Sad Journal of Mathematics, Serbian Scientific Mathematical Society and the Center of Excellence for the mathematical research of nonlinear phenomena. She is advisor of one PhD and a number of master thesis. She was coordinator of the bilateral project between Republic of Serbia and Croatia in 2011-2012 and participated in numerous republic, regional and bilateral projects. As a member of the faculty marketing team she actively promotes science. She is happily married mother of two.

### LJUBICA DAVIDOVIĆ

Ljubica Davidovic was born on December 17, 1980 in Belgrade, Serbia, where she finished elementary school and Mathematical Gymnasium, both with honours. She obtained her Bachelor of Science in Theoretical Physics from The University of Belgrade, on 17 May 2005, by defending her diploma thesis (done under the supervision of prof. dr Maja Buric) titled: "The characteristics of the scalar field on the non-commutative space." Her average mark was 9,59 (out of 10). She obtained her MSc degree on 8 October 2007 from the same University. She received her PhD in Physics degree from The University of Belgrade on 12 March 2014, by defending the PhD thesis (done under the supervision of

prof. dr Branislav Sazdovic) titled: "Dirichlet p-brane in a weakly curved space." Ljubica Davidovic was a Ministry of Education, Science and Technological development scholar during her graduate and postgraduate studies. Her diploma thesis was awarded with the foundation „Prof. Dr Ljubomir Cirkovic" award, for the best diploma thesis defended at The Faculty of Physics in school year 2004/2005. She was a Norway government scholar (2002), as one of the 500 best students in Serbia.

Ljubica Davidovic is a research assistant professor at the Institute of Physics, University of Belgrade. Her research topics are the string theory and the formulation of quantum mechanics in the phase space. She publishes in the top international physics journals.

### **TAMARA SAKSIDA**

Tamara Saksida (maiden name Cvjetićanin) was born on August 18<sup>th</sup>, 1980 in Belgrade, Serbia. She graduated in 2006 from the Faculty of Chemistry, University of Belgrade, at the Department of Biochemistry. During her Master studies enrolled at the same faculty, she held a scholarship from the Ministry of Science and Technological Development of the Republic of Serbia and then she got employed at the Institute for Biological Research "Siniša Stanković". In 2011 she earned her Ph.D. degree at the the Faculty of Biology, University of Belgrade. Excellence of her thesis was recognized by Foundation "Goran Ljubijankić", that declared it as one of the best thesis in the field of molecular biology defended in 2011. Until now, she authored and co-authored 23 research papers in international journals and had numerous presentations at international meetings. The relevance of her work is evident in the number of citations, as she was cited more than 100 times. So far, she participated in two scientific projects funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia, and in two projects funded by the European Association for the study of Diabetes. She has fruitful collaboration with scientists from USA, Italy, Sweeden and Greece. Tamara devotes her time and energy to educate young researchers: so far she successfully mentored one diploma, one master and one doctoral thesis. This thesis was recognized by aforementioned Foundation as one of the best in 2014. Her research interests include immunoregulation, physiological and pharmacological modulation of autoimmune diseases, in particular diabetes. This successful young scientist is a mother of a three-year old boy.