

# Programme

## 14<sup>th</sup> general meeting of European Women in Mathematics

University of Novi Sad, Faculty of Sciences,  
Department of Mathematics and Informatics  
Novi Sad, Serbia

August 25-28, 2009



### Monday, 24<sup>th</sup> August

17.00 -19.00 Internal meeting

### Tuesday, 25<sup>th</sup> August

09.00-10.00 Registration

10.00 Opening session

10.30 EMS Plenary lecture Ingrid Daubechies,  
Princeton University, USA  
*Harmonic Analysis with Applications to Image Processing*

Chair Viviane Baladi

11.30-12.00 Coffee break

12.00 Plenary lecture Nalini Anantharaman,  
CMLS, Ecole Polytechnique, France  
*Entropy of eigenfunctions on locally symmetric spaces*

Chair Viviane Baladi

13.00-14.30 Lunch break and poster section

15:00 Parallel sections

- 16.30-17.00 Presentation of the Marie Curie (FP7) program  
Dagmar Meyer, Irish National Contact Point for the 'People' (Marie Curie) and 'Research Potential' programmes in the 7th Research Framework Programme of the EU'.  
  
Chair Ivana Tumbas
- 17:00-18:30 Discussion forum: EWM developments and related issues  
Chair Caroline Series
- 18:30-19:30 Gaided Walking tours to old city from Math. Dep.
- 19.30 Cocktail in Serbian Academy of Sciences Branch in Novi Sad

## Wednesday 26<sup>th</sup> August

- 09.00 Plenary lecture Marta Sanz-Sole,  
Universitat de Barcelona, Spain  
*Hitting probabilities for random fields: some criteria with applications to systems of stochastic partial differential equations*  
Chair Ragni Piene
- 10.00 Plenary lecture Reidun Twarock,  
University of York, UK  
*Applications of Group Theory in Virology: Affine extensions of noncrystallographic groups predicting virus architecture*  
Chair Ragni Piene
- 11.00-11.30 Coffee break
- 11.30 Plenary lecture Ingrid Daubechies,  
Princeton University, USA  
*Analog-to-Digital Conversion*  
Chair Ragni Piene
- 12.30-14.30 Lunch break and poster section
- 14.30 Plenary lecture Cheryl Praeger,  
University of Western Australia  
*The normal quotient philosophy for studying edge-transitive graphs*  
Chair Laura Ciobanu Radomirovic
- 17.00 Excursion to Sremski Karlovci and conference dinner from Dormitory

## Thursday 27<sup>th</sup> August

- 09.00 Plenary lecture Jelena Kovačević,  
Carnegie Mellon University, USA  
*Problems in Biological Imaging: Opportunities for Mathematical Signal Processing*  
Chair Michele Vergne
- 10.00 Plenary lecture Brigitte Vallee  
GREYC, CNRS and UNIVERSITY of CAEN  
*On the non-randomness of modular arithmetic progressions:  
a solution to a problem by V.I.Arnold.*  
Chair Michele Vergne
- 11.00-11.30 Coffee break
- 11.30 Plenary lecture Barbara Lee Keyfitz,  
The Ohio State University  
*Where the Wild Things Might Be: Functional Spaces for Multidimensional Conservation Laws*  
Chair Michele Vergne
- 12.30-14.00 Lunch
- 14.00-15.00 General Assembly meeting  
Chair Frances Kirwan
- 15.00-17.00 Parallel sections
- 17.00-18.30 Panel discussion "Career do's and don'ts"  
Chair Sylvie Paycha

## Friday, 28<sup>th</sup> August

- 10.00 Plenary lecture Tatiana Suslina,  
St.Petersburg State University  
*Spectral approach to homogenization of periodic differential operators*  
Chair Dusanka Perisic

- 11.00 Plenary lecture Ingrid Daubechies,  
Princeton University, USA  
*Case study: Independent Component Analysis as used in fMRI (functional  
Magnetic Resonance Imaging) of the human brain*  
Chair Dusanka Perisic
- 12.00-12.30 Coffee break
- 12.30 Closing ceremony

## Poster Sections

### Tuesday, 25th August

- Aceska *Variable bandwidth on the time-frequency domain*  
Boysal *Nonabelian theta functions of positive genus*  
Rapajic *Jacobian smoothing IN method for NCP with a special choice of forcing  
parameters*  
Gavrilova *Rubber-fluid interaction in a circular cylindrical tank*  
Grybos *Local Approximation of Dual Atom for Finite Gabor Frames*  
Lehman *Branch Curves of Surfaces with Ordinary Singularities*  
Teofanov *to be announced*  
Gajic *On fixed point results in D-metric spaces*

### Wednesday, 26th August

Kalandadze *Faraday rotation in magnetite magnetic fluids*  
 Stoeva *Frames and Multipliers*  
 Dzadzamia *One Extension of Equivariant Shape Theory*  
 Djakovic- Sekulic and Lozanov Crvenkovic  
*Multivariate statistical analysis characterization of newly synthesized compounds*  
 Engelputzeder *Approximation of Linear Time Variant Filters by Gabor Multipliers*  
 Rokva *All  $XI$  – subsemilattice of the class  $\Sigma_3 X,7$*

## Short Communications

## Tuesday, 25th August

### Session 1 (room 60, third floor) ALGEBRA

15:00-15:15 Bertrand- Mathis  
*Algebraic numbers, proper values of positive matrices and enumeration*  
 15:20-15:35 Ciobanu Radomirovic  
*Decision problems in free groups*  
 15:40-15:55 Dragomirescu  
*Polynomials based methods for linear nonconstant coefficients eigenvalue problems*  
 16:00-16:15 Vukovic  
*From Bourbaki's and Krasner's Graduations to Krasner's and Vukovic's Paragraduations*

### Session 2 (room 61, third floor) **Canceled**

### Session 3 (room 62, third floor) Applied Mathematics

15:00-15:15 Ivetić

- 15:20-15:35 Lyulko  
*Confluence of the sequent lambda calculi*  
*Parametric Resonance in a Linear Hyperbolic System on the Plane*
- 15:40-15:55 Mishchenko  
*On some properties of B-spline bases*
- 16:00-16:15 Stajner-Papuga  
*Interval-valued pseudo-integral*

Session 4 (room 63, third floor) **Canceled**

## Thursday, 27<sup>th</sup> August

Session 1 (room 60, third floor) ANALYSIS

- 15:00-15:15 Rajter-Ciric  
*A note on fractional derivatives of Colombeau generalized stochastic processes*
- 15:20-15:35 Levajkovic  
*Equations with Malliavin derivative*
- 15:40-15:55 Selesi  
*Chaos expansion methods for singular stochastic differential equations*
- 16:00-16:15 Stojanovic  
*Fractional derivatives in Colombeau algebra*

Session 2 (room 61, third floor) Combinatorics and Topology

- 15:00-15:15 Karaman  
*Combinatorics of Patterns in Sturmian strings*
- 15:20-15:35 Jaksic  
*Types for information access control in  $X_d$  calculus*
- 15:40-15:55 Stamatovic  
*Automata recognition of a class of two-connected labyrinths*
- 16:00-16:15 Fajstrup  
*Directed Topology*
- 16:20-16:35 Pavlyk  
*On Topological Semigroups of Matrix Units*

### Session 3 (room 62, third floor) Applied Mathematics

- 15:00-15:15 Petcu  
*eScience and Grids*
- 15:20-15:35 Pitalskaya  
*About the analytical solutions of a homogeneous viscous fluid in the basin of rectangular shape*
- 15:40-15:55 Stanojevic  
*Something about a heavy tail distribution*
- 16:00-16:15 Tkacenko  
*The Stochastic Multiple Criteria Transportation Problem*
- 16:20-16:35 Lehman  
*Branch Curves of Surfaces with Ordinary Singularities*

### Session 4 (room 63, third floor) Applied Mathematics and Gender Issues

- 15:00-15:15 Hollanti  
*Problems in algebraic number theory provoked by wireless communications*
- 15:20-15:35 Kochubinska  
*Special subsemigroups of wreath product of finite inverse symmetric semigroups*
- 15:40-15:55 Takaci  
*The Influence of Computers on Teaching mathematics*
- 16:00-16:15 Divjak  
*Gender issues in Mathematics for ICT study*
- 16:20-16:35 Ivanovic  
*How Gender Issues can Influence Studying Computer Science*