Joint International Meeting of the American Mathematical Society and the Romanian Mathematical Society

in partnership with the
Simion Stoilow Institute of Mathematics of the Romanian Academy

June 27 - 30, 2013, Alba Iulia, Romania

The meeting will be held at "1 Decembrie 1918" University of Alba Iulia

E-mail address: ams-ro2013@imar.ro
Web: http://imar.ro/amsro2013/description.php

Invited Addresses

Viorel Barbu (University of Iasi, Romania): *Stabilization of Navier-Stokes equations by boundary and point feedback controllers*

Sergiu Klainerman (Princeton University): *Are black holes real?*

George Lusztig (Massachusetts Institute of Technology): *On conjugacy classes in the Lie group E8*

Stefan Papadima (Simion Stoilow Institute of Mathematics of the Romanian Academy): *Geometry of homology jump loci and topology*

Mihnea Popa (University of Illinois, Chicago): *Vanishing theorems and holomorphic one-forms*

Dan Timotin (Simion Stoilow Institute of Mathematics of the Romanian Academy): *Horn inequalities: finite and infinite dimensions*

Special Sessions

1. **Algebraic Geometry**
   Organizers: Marian Aprodu, Mircea Mustata, Mihnea Popa

2. **Articulated Systems: Combinatorics, Geometry and Kinematics**
   Organizers: Ciprian S. Borcea, Ileana Streinu

3. **Calculus of Variations and Partial Differential Equations**
   Organizers: Marian Bocea, Liviu Ignat, Mihai Mihailescu, Daniel Onofrei

4. **Commutative Algebra**
   Organizers: Florian Enescu, Cristodor Ionescu

5. **Discrete Mathematics and Theoretical Computer Science**
   Organizers: Sebastian Cioaba, Gabriel Istrate, Ioan Tomescu, Marius Zimand

6. **Domain Decomposition Methods and their Applications in Mechanics and Engineering**
   Organizers: Lori Badea, Marcus Sarkis

7. **Harmonic Analysis and Applications**
   Organizers: Ciprian Demeter, Camil Muscalu

Special Sessions

8. Hopf Algebras, Coalgebras, and their Categories of Representation
  Organizers: Miodrag C. Iovanov, Susan Montgomery, Siu-Hung Ng

9. Geometry and Topology of Arrangements of Hypersurfaces
  Organizers: Daniel Matei, Alexandru I. Suciu

10. Local and Nonlocal Models in Wave Propagation and Diffusion
  Organizers: Lorena Bociu, Anca V. Ion, Petronela Radu

11. Mathematical Finance, Stochastic Analysis, and Partial Differential Equations
  Organizers: Lucian Beznea, Paul Feehan, Victor Nistor, Camelia Pop, Mihai Sirbu

12. Mathematical Models in Life and Environment
  Organizers: Gabriela Marinoschi, Fabio Augusto Milner

13. Mathematical Models in Materials Science and Engineering
  Organizers: Marian Bocea, Bogdan Vernescu

14. Noncommutative Ring Theory and Applications
  Organizers: Toma Albu, Lance W. Small

Special Sessions

15. *Nonlinear Evolution Equations*
        Organizers: Daniel Tataru, Monica Visan

16. *Operator Algebra and Noncommutative Geometry*
        Organizers: Marius Dadarlat, Florin Radulescu

17. *Operator Theory and Function Spaces*
        Organizers: Aurelian Gheondea, Mihai Putinar, Dan Timotin

18. *Probability and its Relation to Other Fields of Mathematics*
        Organizers: Krzysztof Burdzy, Mihai N. Pascu

19. *Random Matrices and Free Probability*
        Organizers: Ioana Dumitriu, Ionel Popescu

20. *Several Complex Variables, Complex Geometry and Dynamics*
        Organizers: Dan Coman, Cezar Joita

21. *Topics in Geometric and Algebraic Topology*
        Organizers: Stefan Papadima, Alexandru I. Suciu

Over 400 participants form the following 30 countries:

Argentina	France	Rep. of Moldavia
Australia	Germany	Romania
Austria	India	South Korea
Belgium	Ireland	Spain
Brazil	Israel	Sweden
Bulgaria	Italy	Switzerland
Canada	Japan	Tunisia
Croatia	Mexic	Turkey
Denmark	Norway	United Kingdom
Finland	Poland	USA

About 350 talks

The meeting is organized by

- **The American Mathematical Society**
- **The Romanian Mathematical Society**

in partnership with

- **The Simion Stoilow Institute of Mathematics of the Romanian Academy**

- ***Host institution*: "1 Decembrie 1918" University of Alba Iulia**

Program Committee
Marian Aprodu (*Bucharest*)
Lucian Beznea (*Bucharest*)
Ioana Dumitriu (*Washington*)
Radu Gologan (*Bucharest*)
Tudor Ratiu (*Lausanne*)
Daniel Tataru (*Berkeley*)
Yuri Tschinkel (*New York*)
Steven H. Weintraub (*Bethlehem*)

Organizing Committee
Lucian Beznea (*Bucharest*)
Daniel Breaz (*Alba Iulia*)
Radu Gologan (*Bucharest*)
Cezar Joita (*Bucharest*)
Radu Purice (*Bucharest*)
Bogdan Vernescu (*Worcester*)

Satellite Conference

• International Conference: **Experimental and Theoretical Methods in Algebra, Geometry and Topology**
Web: (http://math.univ-ovidius.ro/Conference/ETMAGT60/GeneralInfo.htm)

Mathematics Book Stands

- **European Mathematical Society Publishing House**
- **Springer Verlag (*to be confirmed*)**
- **Romanian Academy Publishing House**
- **Theta Foundation**

Social Events

- **Opening Reception, Thursday, June 27 (evening)**: In the courtyard of [Medieval Hotel](#), located in the middle of the star-shaped historical fortress of Alba Iulia, in the neighbourhood of the Road of the Three Fortifications, one of the most important sightseeings of the city.

- **Excursion, Friday, June 28 (afternoon)**: The excursion program includes a visit to [Turda Salt Mine](#). The cave is now a museum of salt mining in Transylvania. A classical music concert will be performed for the participants in the Amphitheatre of the mine, a place with a remarkable acoustics.

An alternative excursion program includes a visit to [Ramet Monastery](#), located in Trascau Mountains (Western Carpathians). The name originates from the Latin "eremita" (hermit). It was founded by two monks back in 1214, it is one of the oldest orthodox monastic establishments in Transylvania, and is famous for hand-made knit carpets.

- **Conference Dinner, Saturday, June 29**. The event will take place in the courtyard of [Jidvei Castle](#), Cetatea de Balta, close to Alba Iulia. The old castle, demolished in the 16-th century,was used as a royal residence by the viceroys of Transylvania. The present castle was rebuilt in the 17-th century by Count Bethlen and it is today a renowned symbol of [Jidvei](#), a famous vineyard in Transylvania, on Tarnava valley.