



Belgian Mathematical Society

Comité National de Mathématique CNM

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NCW Nationaal Comité voor Wiskunde

**BMS-NCM NEWS: the newsletter of the
Belgian Mathematical Society and the
National Committee for Mathematics**

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BMS-NCM NEWS

No 38, May 15, 2002

1 News from the BMS

1.1 General Assembly

The BMS members are invited to attend the

**General Assembly of the Belgian Mathematical Society
May 27, 2002**

**Room F (Aud. Henri Moissan) - Forum
Campus Plaine ULB, Bld du Triomphe, 1050 Brussels**

Programme

14.30: **Freddy Delbaen**(ETH Zurich): *A Stability Property of Sets of Probability Measures in relation with problems in finance and risk management*

15.45: **Luc Lemaire** (ULB): *EMS and mathematics in Europe*

16.15: Coffee

16.30: **General Assembly of the BMS**

- Report by Jean Schmets, retiring President.
- Elections.

1.2 BMS membership dues for 2002

At the time of this writing (May 2, 2002), 71 BMS members have not yet renewed their membership for 2002. They are kindly asked to pay their dues as soon as possible.

For those members who are expected to pay their dues directly to the BMS, an orange and white pay-in/transfer slip is contained in their issue of the Newsletter.

For details on membership fees and reciprocity agreements see Issue #36 of BMS-NCM NEWS (January 15, 2002) or the site <http://www.ulb.ac.be/assoc/bms/bms.org.html\#dues>

- BMS membership EUR 17,35
- BMS+EMS membership EUR 32,35

Account number 000-0641030-54, Belgian Mathematical Society

1.3 Web Pages

Recall that the Web Pages of our Society are located at the address <http://www.ulb.ac.be/assoc/bms/>. The person in charge of them is Philippe Cara (pcara@vub.ac.be).

2 Meetings and Conferences

2.1 May 2002

Groupe de contact FNRS de Logique Mathématique

21 mai 2002, Université de Mons-Hainaut.

Thème Logique et théorie des groupes

Contacts <http://www.umh.ac.be/math/logic/interuni/gpecontact.htm>

Si vous désirez être informé régulièrement de nos activités en Belgique, consulter le site

<http://www.umh.ac.be/math/logic/seminars.htm> (et éventuellement inscrivez-vous pour recevoir le programme par e-mail)

PROGRAMME

- 10h15-11h30 E. Jaligot (C.N.R.S., Paris 7, F.)
Groups of finite Morley rank (title to be confirmed)
- 11h30-12h45 E.I. Khukhro (Cardiff University, U.K., Novosibirsk Institute of Mathematics, R.)
Restricted Burnside type problems for groups with operators
- 12h45-14h15 Lunch
- 14h15-15h30 J.S. Wilson (Birmingham University, U.K.)
Invisible subgroups of finite index
- 15h30-16h45 N.Y. Makarenko (Novosibirsk Institute of Mathematics, R.)
Largely splitting automorphisms
- 16h45-17h15 Coffee break
- 17h15-18h30 R. Grigorchuk (Steklov Institute, Moscow, R.)
Groups generated by finite automata and amenability

Si vous désirez participer à cette réunion et prendre part au repas, faites-le savoir (si possible par email) à Christian Michaux (christian.michaux@umh.ac.be).

Votre inscription au lunch et/ou dîner doit nous parvenir le plus rapidement possible (au plus tard le 18 mai). Si vous désirez loger sur place, consulter <http://www.umh.ac.be/math/institut/hotel.htm>

Hopf Algebras in noncommutative Geometry and Physics

Vrije Universiteit Brussel (VUB), Brussel
Koninklijke Vlaamse Academie van België
voor Wetenschappen en Kunsten
May 28 - June 1, 2002

Scientific committee: S. Caenepeel (Brussels), F. Van Oystaeyen (Antwerp), H.-J. Schneider (Mnchen), M. Cohen (Ben Gurion University), and C. Năstăsescu (Bucharest)

Organizing committee: S. Caenepeel (Brussels), F. Van Oystaeyen (Antwerp)

The meeting is supported by

- The project "Non-commutative Geometry" (NOG) from the European Science Foundation (ESF)

- The bilateral project "New computational, geometric and algebraic methods applied to quantum groups and differential operators" of the Flemish and Chinese governments
- The bilateral project "Hopf algebras in Algebra, Topology, Geometry and Physics" of the Flemish and Romanian governments
- FWO-Vlaanderen
- The Royal Flemish Academy of Belgium (KVAB)
- The Free University of Brussels (VUB)

Websites

- Conference: <http://homepages.vub.ac.be/scaenepe/>.
- Hotel: <http://www.hotels-belgium.com/brussel-bac/descolonies.htm>
- Royal Academy: <http://www.kvab.be>

For more information Contact scaenepe@vub.ac.be

Program

Tuesday, May 28

- 10.00-10.50 B. Pareigis (München)
On Symbolic Computations with Elements in Braided Monoidal Categories
- 10.50-11.20 Coffee
- 11.20-11.55 L. Kadison (Göteborg)
Antipodes at Depth Two
- 12.00-12.35 A. Solotar (Buenos Aires)
- 12.35-14.20 Lunch
- 14.20-15.10 T. Brzeziński (Wales at Swansea)
Why corings?
- 15.15-15.50 Y. Sommerhäuser (München)
- 15.50-16.20 Coffee
- 16.20-16.55 M. Farinati (Buenos Aires)
On the semi-solvability of semisimple Hopf algebras of small dimension
- 17.00-17.35 S. Natale (Córdoba)
On the semi-solvability of semisimple Hopf algebras of small dimension
- 17.45-19.00 Reception in the Marble Room

Wednesday, May 29

- 09.00-09.50 H.-J. Schneider (München)
On the classification of pointed Hopf algebras
- 09.55-10.30 R. Wisbauer (Düsseldorf)
Galois corings
- 10.30-11.00 Coffee
- 11.00-11.35 J. Gomez Torrecillas (Granada)
Semisimple corings
- 11.40-12.15 S. Caenepeel (Brussels)
Cleft entwining structures and Morita contexts associated to a coring
- 12.15-14.00 Lunch
- 14.00-14.35 P. Schauenburgh (München)
- 14.40-15.15 T. Lenagan (Edinburgh)
- 15.20-15.55 P. Hajac (München)
Fredholm Index and locally trivial noncommutative Hopf fibration
- 16.00-16.30 Coffee

Thursday, May 30

- 09.30-10.20 S. Montgomery (Univ. of Southern California)
Properties of algebras invariant under twisting
- 10.20-10.50 Coffee
- 10.50-11.25 C. Menini (Ferrara)
- 11.30-12.05 D. Bulacu (Bucharest)
- 12.05-14.00 Lunch break
- 14.00-14.50 K. Szlachányi (Budapest)
Adjointable lax monoidal functors and bialgebroids
- 14.55-15.30 G. Böhm (Budapest)
Hopf algebroids with bijective antipode
- 15.30-16.00 Coffee
- 16.00-16.35 J. Cuadra (Almería and Antwerp)
The Brauer group of the Dihedral group respect to a quasi-triangular structure
- 16.40-17.15 Y. Zhang (Antwerp and Fiji)
The equivariant Brauer group of an infinite group
- 17.20-17.55 D. Wang (Brussels and Qufu Univ.)
Twistings, crossed coproducts and Hopf Galois coextensions
- 20.00 Congress Dinner

Friday, May 31

- 09.30-10.20 S. Majid (Queen Mary College, London)
Dirac operators and Riemannian geometry on Hopf algebras
- 10.20-10.50 Coffee
- 10.50-11.25 W. Chin (De Paul Univ., Chicago)
- 11.30-12.05 C. Cibils (Montpellier)
Hochschild cohomology of Hopf algebras
- 12.05-14.00 Lunch break
- 14.00-14.35 M. Beattie (Mount Allison University)
Hopf algebras of dimension 14
- 14.40-15.15 G. Militaru (Bucharest)
- 15.15-15.45 Coffee
- 15.45-16.20 F. Panaite (Bucharest)
- 16.25-17.00 X. Gomez (Queen Mary College, London)
Relating Woronowicz's quantum Lie algebras and Majid's braided Lie algebras
- 17.05-17.40 P. Wisniewski (Torun)
The Lasker-Noether theorem for commutative and noetherian module algebras over a pointed Hopf algebra

Saturday, June 1

- 09.30-10.20 D. Sternheimer and Ph. Bonneau (Univ. de Bourgogne)
- 10.20-10.50 Coffee
- 10.50-11.25 C. Frons Dahl (UCLA)
- 11.30-12.05 A. Paolucci
Cuntz Algebras and Dynamical Quantum Group $SL(2)$

2.2 June 2002

FNRS Contact Group in Functional Analysis

 FUNCTIONAL ANALYSIS AND PARTIAL DIFFERENTIAL EQUATIONS
 Han-sur-Lesse, June 10–11, 2002, Domaine des Mesures

The next meeting is organized at the “Domaine des Mesures” in Han-sur-Lesse. It will start on Monday 10 around 14:00 and will end on Tuesday 11 in the early afternoon.

The following speakers are expected:

1. V. Colin (University of Liège)
Asymptotic expansions and Whitney functor

2. A. D'Agnolo (University of Padova)
Integral geometry and D-modules
3. K.-G. Grosse-Erdmann (University of Hagen)
Chaos and Hypercyclicity for Unbounded Operators
4. S. Jaffard (University of Paris 12)
Analyse multifractale et ondelettes: quelques nouveaux développements
5. E. Jorda (Politechnical University of Valencia)
Extensions of Vector-Valued Meromorphic Functions
6. W. Lusky (University of Paderborn)
On Bases and Bounded Approximation Properties in Banach Spaces
7. A. Peris (Politechnical University of Valencia)
Hypercyclic Multipliers on Banach Algebras

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2.3 July 2002

UMH-Service d'analyse mathématique

Professor **V. Lomonosov** will deliver a talk on Thursday July 4th. The title is

A counterexample to the Bishop-Phelps theorem in complex spaces.

The lecture will take place on July, 4th, 10h30, in the Department of Mathematics of Mons-Hainaut University, "Le Pentagone", room salon bleu, 6 avenue du champ de Mars, 7000 Mons.

6th Workshop on Dynamics and Computation

From robotics to quantum control

Royal Academy of Sciences, Brussels, Belgium

July 1-2, 2002

<http://www.inma.ucl.ac.be/dynamics/>

OVERVIEW

The purpose of the workshop is to bring together students and researchers from the computer science, dynamical systems, and control communities on the general theme of dynamic manipulation.

The first day of the workshop will be an introductory minicourse by Professor Roger Brockett (Harvard University, USA). The second day will consist of invited talks. All talks will be in tutorial format and informal discussions between the participants will be encouraged throughout the two days.

This is the sixth in a series of annual workshops held in Belgium on topics related to dynamical systems. The goal of this series is to gather researchers from different disciplines around the general theme of dynamical systems in a casual and informal atmosphere, see <http://www.inma.ucl.ac.be/~blondel/workshops/> for previous editions.

July 1. One day introductory minicourse. Roger Brockett, Harvard University (USA).

Dynamical systems as computers: quantum mechanical and neuronal realizations

July 2. Invited lectures.

- Introduction by Jan C. Willems, Katholieke Universiteit Leuven (Belgium)
- U. Helmke, Wuerzburg University (Germany).
Optimization on Lie Groups: Applications in NMR Spectroscopy

- K. Lynch, Northwestern University (USA).
Control Issues in Underactuated Robotic Manipulation
- P. Rouchon, Ecole des Mines de Paris (France).
Flatness based motion planning of quantum oscillators
- G. Turicini, Inria Rocquencourt (France).
Quantum control: from controllability to algorithms

REGISTRATION

There are no registration fees. Registration is by email. If you wish to participate in the workshop, please send your name and surname, affiliation and email address to dynamics@inma.ucl.ac.be. The closing date for registrations is June 15th, 2002.

VENUE

The workshop will be held in the main building of the Belgian Royal Academy of Sciences, next to the Royal Palace and at walking distance from most facilities. The academy is easily accessible by public transportation.

SPONSORS

Royal Academy of Science, Belgian National Research Fund.

ORGANIZING COMMITTEE

Vincent Blondel, University of Louvain, Belgium
Pierre Rouchon, Ecole des Mines de Paris, France
Rodolphe Sepulchre, University of Liege, Belgium

2.4 From the Web Pages of the Society

We recall that announcements can also be found on the Web Pages. Here follows the actual list; more complete informations is available from the Web Pages.

- May 22 - 24, 2002, Kortrijk
Discrete Groups and Geometric Structures, with Applications
- May 28 - 31, 2002, Liège
ACOMEN 2002: Advanced Computational Methods in Engineering
- May 28 - June 1, 2002, Brussels
Hopf Algebras in noncommutative Geometry and Physics (see also precise information here above)
- July 22 - 26, 2002, Katholieke Universiteit Leuven
Tenth International Congress on Computational and Applied Mathematics
- August 12 - 17, 2002, Leuven
Euro Summer School in Orthogonal Polynomials and Special Functions
- September 25 - 27, 2002, Zeist, The Netherlands
2002 Conference of the Dutch-Flemish Numerical Analysis Communities

2.5 Mathematics Competition for Students

The "9th International Mathematics Competition for University Students" will take place in Warsaw, Poland, from July 19 to July 25, 2002. The web page is <http://www.imc-math.org/>

International Mathematics Competition



IMC

9th International Mathematics Competition for University Students



2002

19 July to 25 July
Warsaw, Poland



<http://www.imc-math.org/>

Every participating university is invited to send several students and one teacher. Individual students are welcome.
The competition is planned for students completing their first, second, third or fourth year of university education and will consist of 2 Sessions of 5 hours each.
Problems will be from the fields of Algebra, Analysis (Real and Complex) and Combinatorics.
The working language will be English.

organized by

University College London
Warsaw University

Opening Ceremony and Reception
sponsored by



UBS

Financial Services Group

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Local Organizing Committee

Michal Krych

Zbigniew Marciniak

Pawel Strzelecki

Over the previous eight competitions we have had students from the following seventy three universities from twenty seven countries

Los Andes University (Colombia), University of Athens, Babes-Bolyai University (Romania), Belarusian State University, University of Belgrade, Ben Gurion University (Israel), Blagoevgrad University (Bulgaria), Bessenyei College Nyiregyháza (Hungary), University of Birmingham, Bonn University, University of Bordeaux, University of Bucharest, Cambridge University, Charles University Prague, Technical University of Cluj- Napoca (Romania), Colombia National University, Comenius University (Slovakia), Complutense University of Madrid, Nicholas Copernicus University (Poland), University of Debrecen (Hungary), École Normale Supérieure, University of Iowa, Hebrew University of Jerusalem, Jagiellonian University (Poland), Kharkov State University (Ukraine), Lorand Eötvös University (Hungary), Free University Berlin, TU-Berlin Fachbereich Mathematik, Helsinki University of Technology, University of Helsinki, Kiev Polytechnic Institute, Kyiv Taras Shevchenko University, University of "Kyiv-Mohyla Academy", University of Kishineu (Moldova), University of Ljubljana (Slovenia), University College London, Masaryk University Brno (Czech Republic), Massachusetts Institute of Technology, Adam Mickiewicz University (Poland), Mongolian Technical University, Moscow Institute of Physics and Technology, Moscow State University, University of Murcia (Spain), University of Nis (Serbia), North University of Baia (Romania), Odessa National Mechnikov University (Ukraine), University of Oradea (Romania), Oxford University, University of Paris VI, University of Plovdiv (Bulgaria), Poznan University (Poland), University of Rouse (Bulgaria), University of Shoumen (Bulgaria), Shahid Beheshti University (Iran), Sharif University of Technology (Iran), Shiraz University (Iran), University of Skopje (Macedonia), University of Sofia (Bulgaria), University of Szeged (Hungary), University of Tehran, University of Valencia (Spain), University of Veliko Turnovo (Bulgaria), University of Tartu (Estonia), Technical University Budapest, Technical University Sofia (Bulgaria), Technion Institute (Israel), Tel-Aviv University, Vilnius University (Lithuania), Warsaw University, Warwick University, University of Timisoara (Romania), University of Zagreb (Croatia), University of Zaragoza (Spain).