

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**

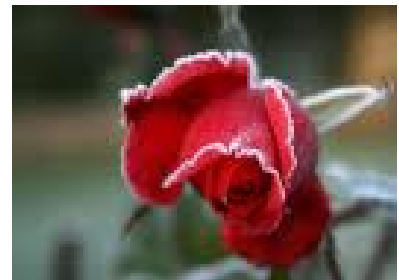
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BMS-NCM NEWS

No 78, May 15, 2010

Letter from the editor

*Welcome
to our "May 15, 2010-Newsletter"
Have nice end of semester and summer!*

The next edition of the Newsletter is scheduled for September 15, 2010.

*Nevertheless, a Special Issue dedicated to the PhD-Day will be
prepared and sent at the beginning of September!*

Françoise

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1 News from the BMS

The next

PhD-Day of the BMS

Monday September 13, 2010

will take place in Brussels (Academy).

Registration is open; see at the address <http://bms.ulb.ac.be/phdday>

More information about the schedule can be found on the poster at the end of the Newsletter. The invited speaker for **the Godeaux lecture** is Professor Gilles Godefroy, from Paris.

Linear chaos and invariant subsets Gilles Godefroy (Paris 6)

Summary.

Many linear operators on the Hilbert space (and more generally on Banach spaces or Frechet spaces) behave in a chaotic way, in the sense of dynamical systems: a dense set of vectors have dense orbits, but there are also e.g. many eigenvectors. We will provide natural examples of such linear chaos (with differential operators for instance) and investigate it from the point of view of ergodic theory. We will also survey some recent techniques for showing the existence of closed invariant subspaces and comment the important problems which remain open. The relevant arguments are quite simple and technicalities will be avoided.

You need more information? See the poster at the end of this Newsletter, have a look at the web pages of the BMS (<http://bms.ulb.ac.be/cgi/announce.php>) or contact one of the member of the organizing committee (F. Bastin, F.Bastin@ulg.ac.be; A. Bultheel, adhemar.bultheel@cs.kuleuven.be; S. Caenepeel, scaenepe@vub.ac.be; P. Cara, pcara@vub.ac.be; P. Godin, pgodin@ulb.ac.be; S. Vaes, Stefaan.Vaes@wis.kuleuven.be, H. Van Maldeghem, hvm@cage.ugent.be).

2 Meetings, Conferences, Lectures

2.1 May 2010

FNRS group “Functional Analysis”

May 27-28, 2010

Esneux (Liège) , Domaine du Rond-Chêne

Following the tradition, the FNRS group “Functional Analysis” will meet next May (Thursday May 27, Friday May 28). The meeting will take place in the small town of Esneux, in the “Domaine du Rond-Chêne”

The following speakers have already confirmed their participation (alphabetical order):

- M. CLAUSEL (U. Paris XII- Créteil): *Some prevalent results about strongly monoHolder functions*
- R. DEMAZEUX (U. d’Artois): *Weighted composition operators as Daugavet centers*
- J. JUAN-HUGUET (U. Pol. Valencia)
- M. MAESTRE (U. Valencia)
- J. WENGENROTH (U. Trier): *Inductive limits of topological algebra*
- P. ZIOLO (A.M. University Poznan): *Interpolation in weighted spaces of entire functions*

Contacts: Françoise Bastin (F.Bastin@ulg.ac.be) or Samuel Nicolay (S.Nicolay@ulg.ac.be)

2.2 June 2010

Workshop on Hopf algebras and quantum groups

June 24 and June 25, 2010

K.U.Leuven, Celestijnenlaan 200, building A

This workshop is dedicated to the celebration of Alfons Van Daele’s 65th birthday.

The confirmed speakers include:

- Stefaan CAENEPEEL
- Kenny DE COMMER
- Johan KUSTERMANS
- Leonid VAINERMAN
- Stanislaw L. WOROWICZ
- Yinhuo ZHANG.

The talks start on June 24 at 10h00. In the afternoon of June 24, we will make a walk in the forests around Heverlee and have a barbecue at the Zoete Waters in the evening.

Registration is compulsory: send an e-mail to stefaan.vaes@wis.kuleuven.be and indicate whether you join for the barbecue (which you have to pay on June 24 before lunch).

2.3 August 2010

Brussels Summer School of Mathematics

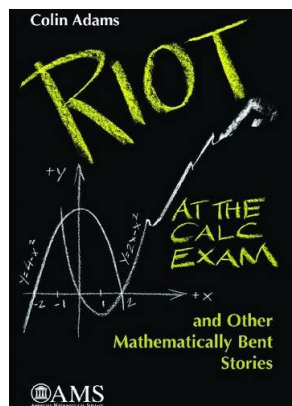
August 02-06, 2010

ULB

For more information: see the announcement (poster) at the end of the Newsletter

3 History, maths and art, fiction, jokes, quotations...

Riot at the Calc Exam and Other Mathematically Bent Stories Colin C. Adams, American Mathematical Society, 2009 (271 p.), soft cover, ISBN 978-0821848173, US\$32.



Colin Adams is Professor of mathematics at Williams College. His research interest is the mathematical theory of knots. Besides papers and a book on this topic, he is also coauthor of *How to Ace Calculus: The Streetwise Guide* and *How to Ace the Rest of Calculus: the Streetwise Guide* which are humorous supplements to calculus and he is writing a column called *Mathematically Bent* in *The Mathematical Intelligencer*. In fact this book is mainly a collection of these columns. At the end some additional notes explain some of the background, and some drawings are included as illustrations.

The 33 short stories are often extended versions of mathematical jokes. In several cases, it is like a parody of stories we all know. In my opinion, one of the best examples is the story *A difficult delivery*. Karen, an algebraic geometer, and Jeff a number theorist are married when Karen announces one morning that “she is with theorem”. Some elementary tests, and checking some counterexamples, confirm that the night they discussed jet bundles has consequences. They went to see a doctor at the university, and low and behold, after a terrible struggle with computations, and formulas, the theorem is born, and it is huge: 10 pages in 12-point type.

There is a class reunion of calculus functions, gossiping for example about $1/(1+x^2)$ who, like Arctan, is trying to “integrate itself into society” again. *Math fall fashion preview* is a description of ‘fashionable’ outfits of mathematicians.

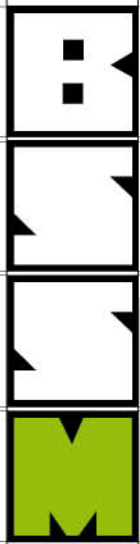
But there are other examples like *Dr. Yeckel and Mr. Hide* (after R.L. Stevenson’s Dr Jekyll and Mr. Hyde) or *Journey to the center of the mathematics* (as J. Verne’s journey to the center of the earth), *The three little pigs* and *Rumpled Stiltsken* (after the fairy tales), and *The integral: a horror story* (somewhat longer, agonizing story where for example a staircase refines to a slippery slide), *The S.S. Riemann* (mimicking a mighty theorem going down like the Titanic on its maiden trip), *Into thin air* (about the deadly storm at Mt. Everest, here translated as attempts to prove long standing conjectures), *The red badge of courage* (about the American civil war, like mathematics is war for some students), etc. It needs not much explanation about what kind of stories these are. One just has to replace the usual characters by mathematicians or mathematical objects.

All of these are written with humor. No need to know mathematics to understand the pun. The mathematics are usually just gibberish. Here is from *The big theorem*: “We’re talking another Atiyah-Patoni-Singer Index Theorem. Think of Mostow Rigidity or Heine-Borel... Here it is: the Mandelbrot-Thurston-Wiles-Pi-Orbifold Syzygy Theorem. ... Invite the Institute of Advanced Studies, the Fields Institute and the International Congress... On the PR front we have lots of ideas... You’re probably wondering what the theorem is about... Quite frankly. I haven’t got a clue. ... But there will be singularities ... π of them. ... and spectral sequences ... Or a statement that is true but unprovable... But of course we’re still in the early development stages. We’ll need Mandelbrot, Thurston, and Wiles to fill in some details. ...”.

And then there are some stories that are as funny as the rest of them, but which have some serious subsoil. *A proof of God* where an amateur mathematician terrorizes an assistant with proofs of squaring the circle etc, *Riot at the calc exam* where a professor terrorizes the students with impossible tests, *The mathematical ethicist* about what to do when you are referee of a paper that you could have written yourself, *Overcoming math anxiety* when students get a complete black-out during an exam.

Not that I was LOL but it is quite amusing to read some of the stories once in a while. Reading the whole book at once from cover to cover is a bit too much of the same in my opinion.

Adhemar Bultheel



BRUSSELS SUMMER SCHOOL OF MATHEMATICS

Brussels Summer School of Mathematics

3^E ÉDITION

C'EST LA SAISON DES FESTIVALS,
LES FANS DE MATHÉMATIQUES
ONT ENFIN LE LEUR!

UNIVERSITÉ LIBRE DE BRUXELLES,
CAMPUS PLAINE,
BÂTIMENT NO, 9^E ÉTAGE
SALLE DES PROFESSEURS

02 - 06
AOÛT
2010

ANALYSE
ALGÈBRE
LOGIQUE
STATISTIQUE
GÉOMÉTRIE
PROBABILITÉS
PHYSIQUE MATHÉMATIQUE
OPTIMISATION COMBINATOIRE

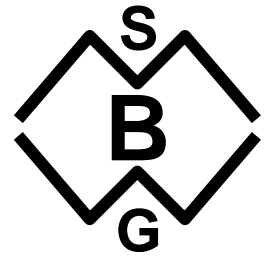
Programme détaillé:

Site web: [http://homepages.
ulb.ac.be/~yvswan/bssm.htm](http://homepages.ulb.ac.be/~yvswan/bssm.htm)

Inscription (gratuite) et informations supplémentaires:

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Young mathematicians,

TELL US WHAT YOU ARE DOING !

The Belgian Mathematical Society invites you to its third

PhD-Day

on **Monday, 13 September 2010**

at the **The Royal Flemish Academy of Belgium
for Science and Arts**

(Paleis der Academiën – Hertogsstraat 1 – 1000 Brussel)

On this day we give the opportunity to all Belgian PhD students to present their research and to get to know their colleagues from all over the country.

PROGRAMME OF THE DAY

- 10h00** Welcome from the president of the Society
- 10h15** Godeaux Lecture by G. Godefroy (Paris)
- 11h15** Coffee
- 11h45** Poster presentations
- 12h45** Lunch (free for BMS members)
- 14h15** Oral presentations
- 16h35** Poster presentations
- 17h25** Drink and award for best poster

For more information and registration (deadline is July 1):

<http://bms.ulb.ac.be/phdday>