

BELGIAN MATHEMATICAL SOCIETY

Comité National de Mathématique CNM

C W M
N

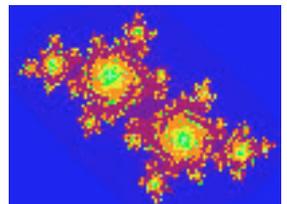
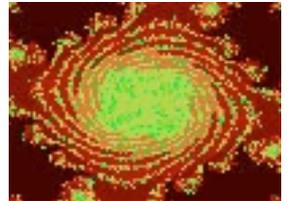
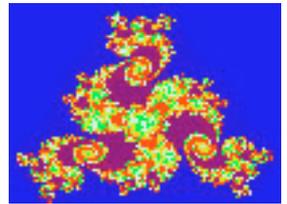
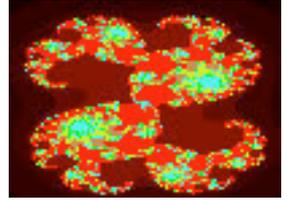
NCW Nationaal Comité voor Wiskunde

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

Campus Plaine c.p. 218/01,
Bld du Triomphe, B-1050 Brussels, Belgium
Tel. (32)(3) 820 24 02
Fax (32)(3) 820.24.21
Website <http://www.ulb.ac.be/assoc/bms>
Newsletter F.Bastin@ulg.ac.be

BMS-NCM NEWS

No 40, November 15, 2002



1 The Euclid project

The Bulletin of the Belgian Mathematical Society – Simon Stevin joins *Project Euclid*

From the first of January 2003 on, our Bulletin will be part of an aggregation of electronic journals. What does this mean?

Project Euclid is a partnership of independent journals of mathematics and statistics that is designed to address the unique needs of low-cost independent and society journals, such as the Bulletin. It is a (non-profit) electronic journal publishing initiative of Cornell University Library whose development is funded by the Andrew W. Mellon Foundation and is also a SPARC Scholarly Communities partner. The European Mathematical Society, the American Mathematical Society, the Society of Industrial and Applied Mathematics, and the American Statistical Association have all expressed their support for the project. The project prepares for expansion and moves to a new phase that will begin in January 2003. The Bulletin of the Belgian Mathematical Society – Simon Stevin will be there as an early partner. This way we hope to benefit the most from it.

The partnership is non-exclusive. This means that we go on with our printed journal just like nothing is happening. The individual subscriber will not notice any change. But libraries or institutions might. Indeed, Project Euclid is working to assemble a rich package of journals that will be licensed to libraries (smaller libraries will receive discounts). The estimation is that there will be 250 institutions subscribing by the end of the year. These institutions either already receive a printed version of our bulletin, or not. If they do, then they may cancel their subscription since they will get our bulletin through Project Euclid electronically. If they did not, then they become — so to speak — a *new member*. This way, we hope to gain a lot of readers.

The advantages of subscribing to such an aggregation of journals is clear; just to mention a few:

- * Broad exposure to potential subscribers is gained through a larger aggregated site.
- * Joining forces allows low-cost, high-quality journals to stay competitive with commercial publications and to meet the economic challenges of publishing by together creating alternative revenue sources.
- * Advanced features for users include browsing journal by journal, flexible keyword and full-text searching (journal by journal, any combination of journals, or all Project Euclid journals), reference linking (references in each article linked to Math Reviews and Zentralblatt), internal linking among Euclid journals, linking to Project Euclid from major discovery sources of the discipline (from Math Reviews, Zentralblatt, CIS), pay-per-view access, mirror sites, and e-mail current awareness services (users will be able to set up an individual profile and sign up to receive tables of contents of journals of interest).

Moreover, we will be well prepared when in the (distant?) future journals will only appear electronically. Then we can give our subscribers passwords and they can read our bulletin online through Project Euclid.

There are also financial consequences. First of all, we expect to lose some library memberships. But we hope this will be compensated by the additional Project Euclid subscribers from which we financially benefit through our contact with Project Euclid. In the long run there should be no financial loss, and we even do hope the contrary.

In conclusion, the benefits of this plan for the Belgian Mathematical Society are multiple: there are no out-of-pocket costs, Project Euclid will do marketing for us, and there will be a positioning of our journal as part of a high-visibility aggregation with advanced user features and good linkages with other systems used by researchers of the discipline.

Hendrik Van Maldeghem (R. U. Gent)

2 Meetings and Conferences

2.1 November 2002

- Friday November 22, 2002, 19h45, Institute of Mathematics of the UMH, Grands amphithéâtres, auditoire Marie Curie

Des cailloux vers la puce: l'histoire des techniques de calcul élémentaire

Il s'agit de la première conférence du cercle mathématique et culture, qui sera donnée par MICHEL LARTILLIER, professeur à l'athénée Bracops-Lambert (Anderlecht), à l'UREM ((ULB).

Résumé: un petit voyage temporel qui montre comment l'addition et la multiplication s'effectuaient avant l'apparition des calculatrices (en passant par les boucliers, les tables à calculs et les techniques indiennes de calcul écrit).

Informations: <http://www.umh.ac.be/math/institut/activites/mathculture.htm>

- November 28-29, 2002, University of Gent
On November 28 - 29, 2002 a workshop

Mathematical and Numerical methods for modelling in the life sciences

is organized by the Flemish Research Community "Advanced numerical methods for mathematical modelling" at the University of Gent, Belgium.

Organizers are

E. Dick (Fluid Mechanics Laboratory, University of Gent),
W. Govaerts (Applied Mathematics and Computer Science, University of Gent) and
D. Roose (Computer Science Department, University of Leuven, Belgium).

Full information and details on participation and registration can be found at
allserv.rug.ac.be/~ajdhooge/workshop.html

- November and December, KUL
Thu, 19 Dec 2002 SISTA Seminar - Andre Aubert ESAT 00.62 4:00 pm-5:00 pm
Thu, 5 Dec 2002 SISTA Seminar - Hugues Bersini ESAT Aud A 4:00 pm-5:00 pm "Frustrated Chaos in Neural Networks" Hugues Bersini (IRIDIA - ULB)
Thu, 21 Nov 2002 SISTA Seminar - Robert French ESAT 00.62 4:00 pm-5:00 pm "Using noise to overcome catastrophic interference in neural networks" Robert French (Université de Liège)

Everyone forgets but, fortunately, people don't forget catastrophically. On the other hand, connectionist networks often do forget old information catastrophically when learning new information. We will discuss the severity of the problem, the reasons it occurs, and will focus on a class of new techniques using noise to prevent it. We will also suggest a number of research directions in this area.

See <http://www.esat.kuleuven.ac.be/sista-cosic-docarch/index.php?page=activities>

2.2 2003

- **February-March, UMH, ULB**

Le professeur Ahmed DJEBBAR (Université de Lille 1) fera un cours sur

Les mathématiques arabes entre l'orient, le maghreb et l'Espagne

les mardis suivants de 16h30 à 18h30:

-à l'UMH (auditoire 211, B6, Avenue Maistriau, Mons) les

4 février (introduction), 11 février (géométrie), 18 février (théorie des nombres), 25 février (algèbre)

- à l'ULB (lieu à préciser) les

11 mars (analyse combinatoire), 18 mars (sciences du calcul), 25 mars (trigonométrie), 1er avril (méthodes d'approximations).

Informations: <http://www.umh.ac.be/math/institut/activites/mathculture.htm>

- **12-17 May, Pamplona, Navarra, Spain**

12-17 MAY 2003

23rd International Seminar on Stability Problems for Stochastic Models,

Pamplona, Navarra, Spain

Aim to bring together those working in probability theory, statistics and stochastic models

Location UPNA - Public University of Navarra, Pamplona, Spain

Information and registration

e-mail: stochastic@unavarra.es

website: <http://www.unavarra.es/stochastic>

Topics

- Limit theorems in probability theory
- Asymptotic methods in mathematical statistics
- Characterisations of stochastic models
- The Method of Probability metrics
- Renewal theory
- Insurance and Financial Mathematics
- Reliability theory
- Special Processes
- Teaching of Statistics and Probability

Organising Committee

V.M. Zolotarev (Moscow), F. Mallor (Pamplona), V. Korolev (Moscow), E. Omev (Brussels)

Organizing Universities:

UPNA - Public University of Navarra (Pamplona), Moscow State University

Steklov Mathematical Institute

Economische Hogeschool EHSAL

Deadline for Abstracts: February 15, 2003

• **13-22 June, ULB**

Poisson geometry, deformation quantisation and group representations

See the announcement at the end of this Newsletter.

3 Books for review

The following books have been received for review in The Bulletin of the Belgian Mathematical Society Simon Stevin (for more information, please contact Professor Yves Félix at felix@agel.ucl.ac.be)

1. Peter Deuflard and Folmar Bornemann,
Scientific Computing with Ordinary Differential Equations
Texts in Applied Mathematics, Volume 42, Springer-Verlag 2002. 37 fig. XIX, 485 pages, Hardcover
2. George Bluman and Stephen Anco
Symmetry and Integration Methods for Differential Equations 2nd ed.
Applied Mathematical Sciences, volume 154, Springer-Verlag 2002, 18 figs. X, 419 pages, Hardcover
3. Jean F. Maurras
Programmation linéaire, Complexité, Séparation et Optimisation
Mathématiques et Applications, Volume 38 2002. XIV, 221 pages, Broché,
4. *Codes and Designs*,
Proceedings edited by T. Arasu and A. Seress,
Ohio State University Mathematical Research Institute Publications 10, Walter de Gruyter
5. Greg N. Frederickson
Hinged dissections : swinging and twisting
Cambridge University Press

6. John Norbury and Ian Roulstone,
Large-scale atmosphere-ocean dynamics I, analytical methods and numerical models
Cambridge University Press
7. Yadolah Dodge
Mathématiques de base pour économistes
2002, XII, 377 pages, Relié Springer-Verlag
8. James D. Murray,
Mathematical Biology I, An introduction
3rd edition, XXIII, 551 pages Interdisciplinary applied mathematics 17, Springer-Verlag Hardcover
9. Wolfgang Lück
L2-invariants: Theory and Applications to Geometry and K-Theory
2002, XV, 595 pages, Hardcover, Ergebnisse der Mathematik und ihrer Grenzgebiete. 3
10. Clifford A. Pickover
The Mathematics of OZ. Mental gymnastics from beyond the edge
Cambridge University Press Hardcover, 351 pages
11. M. W. Wong
Wavelet Transforms and Localization Operators
Operator Theory Advances and Applications Vol 136 Birkhäuser Hardcover, 156 pages

4 Positions

POSTE EN GEOMETRIE ALGEBRIQUE Université de Mons-Hainaut

Vous trouverez ci-dessous l'annonce officielle telle que publiée au moniteur belge le 1er Novembre 2002 ou sur le site web: <http://www.umh.ac.be/math>

Si vous avez des questions, vous pouvez contacter par e-mail: christian.michaux@umh.ac.be

L'Université de Mons-Hainaut annonce la vacance d'une charge de cours à temps plein au Centre interfacultaire des Sciences et de la Médecine (Faculté des sciences). La personne désignée le sera, dans une première phase, à durée déterminée de maximum cinq ans. Elle dirigera un service et développera sa recherche dans le domaine de la géométrie algébrique (en section mathématique). A partir du 1er octobre 2003, elle aura la charge des enseignements suivants :

"Algèbre linéaire", 30 h + 30 h exercices, 1re candidature en sciences mathématiques

"Géométrie", 15 h + 15 h exercices, 1re candidature en sciences mathématiques.

Ces deux cours seront au moins en partie donnés conjointement en 1re candidature en sciences physiques et en 1re candidature informatique.

"Algèbre I", 30 h + 15 h exercices, 2e candidature en sciences mathématiques

"Algèbre II", 30 h + 15 h exercices, 1re licence en sciences mathématiques, 1re licence en sciences mathématiques option informatique

"Compléments de géométrie", 30 h + 15 h exercices, 1re licence en sciences mathématiques, 1re licence en sciences mathématiques option informatique

Cours à option dans le domaine de recherche du candidat : 15 h + 15 h exercices, 1re licence en sciences mathématiques, 1re licence en sciences mathématiques option informatique

30 h + 30 h exercices, 2e licence en sciences mathématiques, 2e licence en sciences mathématiques option informatique.

Les candidatures avec l'exposé des titres doivent être adressées, par lettre recommandée avec demande d'accusé de réception, au recteur de l'Université de Mons-Hainaut, place du Parc 20, 7000 Mons, dans un délai de trente jours à dater de la publication du présent avis. Les dossiers doivent comprendre les documents suivants : un curriculum vitae, un exposé des intérêts scientifiques, un projet de recherche, une liste des publications et si possible, les noms et adresses de trois experts internationaux, qui peuvent donner un avis sur le candidat. Une copie des publications doit également être jointe.

POSTE EN GEOMETRIE DIFFERENTIELLE
Université libre de Bruxelles

See the announcement at the end of this Newsletter.

POSTE ACADEMIQUE A TEMPS PLEIN
Université catholique de Louvain

Ouverture d'un poste académique à temps plein à l'UCL, au département de mathématique; date d'entrée en vigueur: 1er septembre 2003.

Référence à mentionner dans toute correspondance: SC/ MATH / 2003 / 811

Profil : Le/la titulaire fera preuve de dispositions confirmées pour la recherche et de bonnes qualités pédagogiques. Il/elle aura obtenu des résultats significatifs après sa dissertation doctorale. La préférence sera donnée aux candidats qui apportent des compétences nouvelles dans une des directions que le département souhaite développer, notamment en algèbre, en analyse ou en géométrie. Le/la candidat(e) retenu(e) sera appelé(e) participer à temps plein à la recherche en mathématiques, l'enseignement des mathématiques en faculté des sciences ou dans d'autres facultés, à l'encadrement des étudiants en thèse ou en mémoire et au service à la communauté universitaire.

Renseignements complémentaires : Prof. Jean-Pierre Tignol, Tignol@math.ucl.ac.be

Pour plus de détails, voir la description à l'URL

http://www.crct.ucl.ac.be/Postes_acad_vacants_2003_2004/811_Mathematique.htm

5 Summary of PhD

*Diffusion d'ondes dans l'espace à trois dimensions.
Calcul des pôles de résonance et application en acoustique*
Pascal Zeihen, Université de Liège, 20 septembre 2002

Abstract

We first study the propagation of waves in an open subset of the three-dimensional space, by using the method of semi-groups. After having formulated the mixed problem of the wave operator, we prove the existence and the uniqueness of the solution, as well as some of its properties.

The wave scattering by an obstacle implies the appearance of wave *resonance*. The so-called *poles of resonance* (complex numbers) describe the frequencies and the associated decreasing factors of the amplitude of the solution near the obstacle. We characterize these poles with a surface potential and we present the underlying theory.

We can determine the exact values of the poles, when the obstacle is a sphere. For other obstacles, we develop a new method to approach the numerical values of the poles. Our method exploits the structure of the exact solutions in the case of the sphere and tries to extend it to more general cases. It also smoothes the weak singularities of the integrands. Furthermore it makes sure that after the wave equations have been reduced by Galerkin's method, the resulting matrix is well-conditioned and easy to work with. Unlike the BEM-FEM (*Boundary Elements Method, Finite Elements Method*) technique, which is often described in recent papers, our method, simply of type BEM, does not decompose the border of the obstacle into small, "finite" elements, but it uses very smooth functions all over the border to approach the solutions of resonant waves. For special kinds of obstacles, invariant by symmetry or by rotation, we optimize our method by making use of some properties of the matrix generated by Galerkin's equations. This hugely reduces the quantity of necessary calculations. We finally compare our method to the BEM-FEM techniques used elsewhere.

After the presentation of the theoretical bases of our method, we describe its implementation on personal computers, and we discuss the correctness of the used algorithms, as well as the numerical errors. Our implementation is written in C and destined to MacOS and UNIX systems. We show the techniques used in the program, regarding the numerical integration and the other major computations. Some excerpts of the source-code in C complete our discussion.

In order to underline the quality of the developed algorithms, we prove the convergence of the numerically computed values to the exact poles. We can even prove optimal orders of convergence, which are not obtained

by common techniques. The recent advances of some other researchers are sketched and associated with the present work.

We illustrate the working of our computer program by showing figures with some poles of a few simple obstacles. We relate the obtained poles to the theoretical estimations of their asymptotic behaviour, proved in some recent papers. Finally, we propose two concrete applications in acoustics, where our method may facilitate the development of loudspeakers and increase at the same time the high-fidelity of the reproduced sounds. On the one hand, the numerical poles, obtained by our computations and associated with an existing loudspeaker, are compared to the experimental measures done by the manufacturer. On the other hand, our ideas have been used to install a high-end hi-fi equipment, which we also describe.

6 A letter about first-year students

Lack of autonomy in mathematics in first-year Science students.

M. van der Rest-Jaspers.

Senior Lecturer at the Faculty of Sciences, University of Liège

First-year lecturing staff from all faculties of all the French-speaking universities in Belgium agree unanimously that: students are immature and lack autonomy. I note from experience that this lack is more crucial in mathematics than in any other branch. It concerns knowledge, know-how and behaviour.

Firstly, knowledge. Students are aware neither of what they know or do not know nor of the extent to which they know anything. The situation could be summed up as “they have heard of it”. They are incapable of naming the information: whether a definition, a property, a law, a theorem or a postulate/ hypothesis and even worse they see no need to do so. The most difficult questions in tests and examinations are definitions. If, for example, you ask for the definition of an increasing/ growing function most of them will answer that it is a function whose derivative is positive.

Next, know-how. Almost all students have enormous difficulty in assimilating the theoretical content of the syllabi. There are various reasons. In particular, they have no command of written French and still less of the French used in the discipline. Formal and symbolic language is a closed book to them. In desperation, they try to study the course from their notes, but these are unfortunately incomplete, unclear, imprecise, unstructured and sometimes incorrect. It is a feat to take down correctly what is barely understood during the lecture ! Not knowing the theory, they cannot apply it in exercises or the solutions of problems, which is why the latter are seen as successive applications of techniques with no comprehension. They perform but do not think. They wait for the teachers to show the way. The dissociation of theory from exercises can never lead to a thorough knowledge of the subject. They memorise undigested theory and techniques for solving problems, so it is no wonder the marks obtained in examinations are so low. They find it extremely difficult to understand abstract concepts or reasoning and ask for examples of everything.

Finally, behaviour. The lack of autonomy is reflected in absence from lectures, not bringing notes up to date, a lack of regular study, the incapacity to make an effort of concentration in order to enter into the subject rather than skimming over it, the lack of personal discipline aimed at precision and rigour. It's the reign of “near enough”. They start studying just before tests or swot for exams. It is too late ! They will not have time to go into the subject or assimilate it in the long term.

This situation is neither a fatality nor a social phenomenon -a facile argument often advanced to explain the problems that arise- but the result of a policy of destructuring in secondary school courses, added to the deliberate destruction of the mathematics course that has been going on for 30 years. Since the introduction of modern mathematics, in the early 70's, the mathematics course has undergone one reform after another, reducing it to its minimal expression both in content and in its requirements. Furthermore, like all branches, it is subject to inadequate methodological directives. I quote four of these.

- Abolition of text-books and, with it, the disappearance of structure, precision, rigour, diversity of the terms used for exercises or problems and the absence of a high-quality written support for studying the subject.
- Instructions to allow pupils the use of their own words without imposing the non-deformation of the content. In practice, this results in gibberish that the pupil does not understand himself. It's the reign of the woolly-headed, the vague, the “near enough”! What a disaster for a mathematics course.
- The quasi total suppression of theory. Teachers can test only ten theorems a year! Pedagogy according to competence is the rule: there must be exercises and these must be concrete, practical!
- The introduction by pedagogues of problem situations in order to give pupils a liking for mathematics that the teachers have been incapable of inspiring. All mathematicians should read: “Algebra through problem situations” (“L'Algèbre par des situations problèmes” (J.Vlassis, I.Demonty- De Boeck). It makes you think.

7 Mathematics, fiction and history

Tom Petsinis *The French mathematician*, Hardcover: Penguin Books, 1997; Pocket edition: Berkley Pub Group, 2000; *De franse wiskundige*, Cargo/De Bezige Bij, 2002.

This is a fictional biography of Evariste Galois (Bourg-la-Reine 25 Oct 1811 - Paris 31 May 1832). The known facts about his life can be found at the math history site <http://www-gap.dcs.st-and.ac.uk/~history/Mathematicians/Galois.html>. A brief summary: He was introduced to mathematics by Vernier and later by Louis Richard at the Lycée of Louis-le-Grand in Paris. He took up a passion for mathematics, but had much difficulties in communicating his results. In 1828 he took an examination to enter the Ecole Polytechnique but failed. His first paper on continued fractions was published in 1829. In that year however, his father committed suicide because of malicious actions of the priest of Bourg-la-Reine. This turned Galois into a passionate anti-clerical republican. One should know that in that period were the hectic revolutionary demonstrations against the king Louis-Phillipe with the slogans "Liberté, Egalité, Fraternité". He tried a second time to enter the Ecole Polytechnique, not only because that would give him the occasion to develop his mathematical skills, but also because of the revolutionary atmosphere there. He failed again because of his lack of communicative talent, still being in an emotional shock after his father's provoked death. Instead he enrolled at the Ecole Normale. The director locked the students up to prevent them from taking part in the riots outside. Galois published a pamphlet against this and was expelled from school. He became now heavily involved with the revolution and when he brought a threatening toast to the king, showing a blank dagger, he was arrested but released shortly after. On Bastille Day (14 July 1830), he was arrested a second time while wearing a military uniform (which was forbidden), a rifle and several pistols. When he got ill in prison, a cholera epidemic sweeping Paris, he was transferred to a health pension where he met Stephanie-Felice du Motel. He seemed to have fallen in love with her which probably resulted in the duel with his friend d'Herbinville. He was wounded and died in hospital on 31 May 1832. The night before his death he tried to write up his mathematical testament, which was posthumously published and forms the outlines of what we now call Galois theory.

All these facts truthfully appear in this novel but they form only the decor. Instead, the author has transformed himself into this young genius and writes down a character study of such a man. The I-person is Galois telling what he feels and thinks. This person comes forward as a provocative revolutionary (in the broad sense) teenager, living in his own isolated world, desperately trying to please his father and despising his mother for her devotion to the church. He is not very healthy and socially unadapted. He thinks himself high above his teachers and does not want to take the effort to communicate with them. He is the real genius, misunderstood by everybody. Mathematics is the only pure thing to be trusted. Only in mathematics, things are clean, pure and uncorrupted. Mathematics is in a sense the ultimate goal of mankind and the revolution has to free the people so that man like himself can be free to be occupied only with mathematics and mathematics is what brings prosperity to mankind.

Tom Petsinis, born in Greece, but raised in Australia, where he teaches mathematics at the Victoria University of Technology in Melbourne has written several novels and plays. So he knows how to write and he knows about mathematics. In this book he attributes the kind of ideas, that were sketched above, to Galois and writes them down in over 400 pages of engaged and tragic prose. It is thus not the story of mathematics, but the story of a tormented young person living in a revolutionary world. He lets him meet Cauchy, Fourier, Poisson and others of the Academy with whom Galois clashes because at first his memoir is "misplaced" and lost, and later it was rejected. He lets him have a conversation with Alexandre Dumas about the revolution. He lets Galois have hallucinations where he discusses with Pascal, Abel, and (this is a bit weird) also with his own biographer. This reflects in a sense how thoroughly Petsinis has tried to actually become Galois: the Galois-Petsinis is talking to the biographer-Petsinis, and it is not likely that the real Galois would have done that.

These multifaceted aspects: a psychological character study of a young self destructing rebellion, the mathematics which are constantly present, at first brightly shining when Galois discovers mathematics, but later more latently, the turbulent historic events, the mixture of fiction and historical facts make this novel a highly appreciated piece of work. You do not need to know anything about mathematics to read the book, but it will give an extra kick if you do.

A. Bultheel

Jean Baudet *Nouvel abrégé d'histoire des mathématiques*, éditions Vuibert, 332pp, 30 euros

From Jacques Poncin (Le Soir, octobre 2002) : the title of his paper is "*La pascaline, ancêtre de la calculette*". I reproduce here some parts of this paper (written in French):

[...] Approche historique donc. Pour rappeler combien il fut difficile de dépasser le stade du "1,2, beaucoup...", qu'il fallut un siècle pour introduire le "*x*" dans les formules [...] Ne leurrons pas le lecteur potentiel:

c'est un ouvrage difficile, même si l'on ne dépasse pas le XVII^{ème} siècle, même s'il faut reconnaître à l'auteur un grand sens de la vulgarisation [...] Mais, comme (l'auteur) le dit avec un sourire en coin, *dans les bons livres policiers, on doit parfois aussi relire une page pour bien comprendre l'intrigue.*

F. Bastin

8 The end

Just surf on the web... and find many servers about maths...

Some examples (very very very few, when you compare to what you can find, of course)...

And if you have something else to propose, please send me your suggestion! Each reader will take advantage of it!

A mathematician wandered home at 3 AM. His wife became very upset, telling him, "You're late! You said you'd be home by 11:45!" The mathematician replied, "I'm right on time. I said I'd be home by a quarter of twelve."

What keeps a square from moving? Square roots, of course.

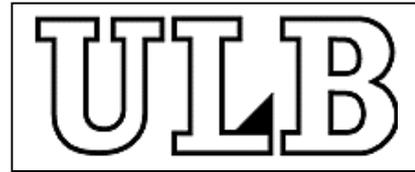
In the topological hell the beer is packed in Klein's bottles.

Some say the pope is the greatest cardinal. But others insist this cannot be so, as every pope has a successor.

Call for contributions

Do you have information that could be interesting for mathematicians in Belgium, do contribute to this Newsletter and make it YOUR Newsletter! Make it interesting to read for you and your colleagues. Keep us informed about PhD theses with a mathematical subject in your institution. You have a strong opinion about the educational math system? Share it with others via this Newsletter. You don't agree with some opinions that we published? Do not hesitate a moment longer to react. Have you read an interesting novel, seen an interesting play, movie, or exhibition, found a thrilling website, heard a newswatch, were told the funniest joke ever? If mathematics plays a role, then why not share this experience and inform others? This Newsletter is your forum! We await YOUR contribution for YOUR Newsletter.

We are waiting impatiently for your suggestions... Please, contact F.Bastin@ulg.ac.be before January 10, 2003.



UNIVERSITE LIBRE DE BRUXELLES

**OUVERTURE D'UN POSTE
EN GEOMETRIE DIFFERENTIELLE**

Moyennant l'accord des autorités, l'Université Libre de Bruxelles annoncera prochainement l'ouverture d'un poste au Département de Mathématiques dans le domaine de la géométrie différentielle.

L'engagement est prévu en septembre 2003 au titre de chargé de cours, soit le premier échelon dans la carrière des professeurs d'université en Belgique.

Les candidats sont invités à prendre contact dès maintenant avec un des membres de l'unité de géométrie différentielle, en joignant leur curriculum vitae.

Après une première sélection, certains candidats seront invités au début de l'année 2003 à présenter un exposé et à séjourner brièvement à l'Université Libre de Bruxelles.

Pour plus de renseignements ou pour annoncer votre candidature, veuillez contacter :

Simone Gutt
sgutt@ulb.ac.be
+32-2-650.58.38

ou

Luc Lemaire
llemaire@ulb.ac.be
+32-2-650.58.37

Université Libre de Bruxelles
Faculté des Sciences
Département de Mathématiques
Campus Plaine CP 218
Bd du Triomphe
B-1050 Bruxelles
Belgique

International EuroSchool and EuroConference PQR 2003

POISSON GEOMETRY, DEFORMATION QUANTISATION AND GROUP REPRESENTATIONS

ULB, BRUSSELS 13-22 JUNE 2003

Scientific Committee: Alain Connes, Simone Gutt, Maxim Kontsevich, Yvette Kosmann-Schwarzbach, Pierre Lecomte, Tudor Ratiu, John Rawnsley, Wilfried Schmid, Daniel Sternheimer, Alan Weinstein.

Local Committee: Pierre Bieliavsky, Michel Cahen, Simone Gutt, Luc Lemaire.

EUROSCHOOL PQR 2003, BRUSSELS 13-17 JUNE 2003

The first five days will be devoted to short courses (4 or 5 hours each) by
Alberto Cattaneo on Formality and Star Products,
Ieke Moerdijk on Lie Groupoids and Lie Algebroids,
Wilfried Schmid on Geometric Methods in Representation Theory,
Alan Weinstein on Morita Equivalence in Poisson geometry,
and Daniel Sternheimer will give a broad presentation of Deformation
Quantisation.

EUROCONFERENCE PQR 2003, BRUSSELS 18-22 JUNE 2003

Invited participants: Didier Arnal(*), Melanie Bertelson(*), Ranee Brylinski(*), Henrique Bursztyn, Alberto Cattaneo(*), Alain Connes(*), Boris Fedosov, Rui Fernandes(*), Chris Fronsdal, Ezra Getzler(*), Yael Karshon(*), Maxim Kontsevich(*), Bertram Kostant(*), Yvette Kosmann-Schwarzbach(*), Pierre Lecomte, Jiang-Hua Lu(*), Yoshioka Maeda, Ieke Moerdijk(*), Ryszard Nest(*), Tudor Ratiu, John Rawnsley, Wilfried Schmid(*), Lorenz Schwachhoefer(*), Carlos Simpson(*), Daniel Sternheimer, Dmitry Tamarkin(*), Charles Torossian(*), Kari Vilonen(*), Waldmann(*), Alan Weinstein(*), Ping Xu.

(* confirmed lecturers

Proposals for posters are welcome.

Location : Université Libre de Bruxelles

Grants : This conference is supported by an EU grant; a limited number of young European researchers (under 35 years old at the time of the conference) can be supported for travel, hotel and subsistence. The conference fee is 40 Euros for the Euroschool and 60 Euros for the Euroconference; any researcher can apply for some financial support to attend the meeting. Applications for support should be addressed to pqr2003@ulb.ac.be before the 15th of December 2002; later applications will be considered if possible.

Deadlines : A special price of 90 euros per night at the Astrid Hotel in Brussels can only be guaranteed for registration before the end of December 2002.

Information : <http://homepages.ulb.ac.be/~pqr2003/>

Registration and further information : pqr2003@ulb.ac.be