BELGIAN MATHEMATICAL SOCIETY

Comité National de Mathématique CNM

C W M
N

NCW Nationaal Comite 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 91, January 15, 2013

Letter from the editor

Welcome to this first Issue of our Newsletter for 2013

Have a nice winter time ! !

Regards, Françoise

Table des matières

1 News from the BMS

Please find all the information (leaflet) at the end of this Newsletter for

the renewal of your membership to our society !

Many thanks for your support

! ! Account number ! !

Please note that for members from the EU, dues are to be paid on account number

IBAN : BE70 0011 7447 8525 ; BIC : GEBABEBB
This is with BNP PARIBAS FORTIS

2 Meetings, Conferences, Lectures

2.1 January 2013

SALT January 2013
Seminar Analysis Lüttich-Trier
ULg, Friday January 18, 2013

See the announcement at the end of this Newsletter

2.2 March-April 2013

Mathématiques et Littérature
Namur, mercredi 20 mars 2013

Dans le cadre du Printemps des sciences et des poètes, deux événements seront organisés à Namur le 20 mars prochain :

- Une après-midi de réflexion sur les relations entre mathématique et littérature, avec les interventions de Philippe Toint, Etienne Lecréoart, Elisa Brune et Caroline De Mulder. Egalement Gérald Purnelle et Jean-Luc De Meyer (sous réserve). Celle-ci se déroulera à la Maison de la Poésie de Namur.
- Une conférence-spectacle intitulée « *Les mathématiques sont la poésie des sciences* ». Celle-ci s'articulera sous la forme de deux conférences de 40 minutes, ponctuées de lectures de textes par un comédien, Jacques Neefs. Les conférenciers sont Cédric Villani (médaille Fields) et Jacques Roubaud (mathématicien et poète). Cette conférence spectacle se déroulera le mercredi soir. Plus de détails sur l'heure et la salle seront disponibles sur le site du printemps des sciences.

http ://www.printempsdessciences.be/

Les deux événements sont gratuits et ouverts au grand public.

Pour plus d'infos et réservation : mel.godin@gmail.com

Cette journée est le fruit d'une collaboration des Midis de la Poésie de Bruxelles et du Département de Mathématiques de l'Université de Namur. Avec le soutien de la Maison de la Poésie de Namur.

Locally compact groups beyond Lie Theory
Spa, Belgium ; March 31 - April 6, 2013

See the poster at the end of this Newsletter

3 From EMS

3.1 Message from the President of the EMS

See the text included in the mail message sent with the present issue of the Newsletter.

3.2 Call for submission

EMS Monograph Award : Call for submissions online

On the occasion of its 10th anniversary the EMS Publishing House is pleased to announce the EMS Monograph Award. It is awarded every two years to the author(s) of a monograph in any area of mathematics that is judged by the selection committee to be an outstanding contribution to its field. The prize is endowed with 10.000 Euro, and the winning monograph is published by the EMS Publishing House in the series EMS Tracts in Mathematics.

Deadline for submission of manuscripts : June 30, 2013. Information :

http ://www.ems-ph.org/EMS_Monograph_Award.php

3.3 Code of Practice

Dear Colleague,

As you already know, the EMS established an Ethics Committee in 2010. The first task of this Committee was to draft a Code of Practice. This task was accomplished in April 2012. The draft was discussed at the Council meeting in Krakow in July 2012, and the Code was approved by the Executive Committee at the end of October 2012, and it is now in effect.

The approved version can be downloaded at http ://www.euro-math-soc.eu/system/files/COP-approved.pdf

The Code will be effective in combatting the ethical issues such as plagiarism, lack of proper credit, etc. increasingly appearing in mathematics, only if a sufficient number of mathematicians adhere to the good practices described in the Code, and avoid the bad practices and unethical behaviors described in the Code.

The EMS asks its corporate members and friend societies and organizations for collaboration in speeding knowledge of the Code. You can help in several ways :
1) by informing your members about the existence of the Code. For example, by publishing it in your Newsletter (electronic or printed), through direct mail to the membership, etc. ;
2) by adopting the Code as the official policy of your society ;
3) if you have a publishing house, by asking it to adhere to the Code ;
4) if you adopt the Code, we suggest to arrange for a translation into your language(s). Note that the English version available at http ://www.euro-math-soc.eu/system/files/COP-approved.pdf is the definitive one.

With my best regards,

Marta Sanz-Solé, EMS President

Sources of information :

Ethics Committee official page, http ://www.euro-math-soc.eu/comm_ethics.html

Chair of the Committee, Arne Jensen ¡matarne@math.aau.dk¿

3.4 Nordic Congress of Mathematicians

Dear Colleague,

We will appreciate having this news publicized in your Society. Many thanks for your kind collaboration.

The 26th Nordic Congress of Mathematicians will be held in Lund from 10 to 13 June 2013.

This time it is organized with the EMS as partner society, making the congress the 1st European-Nordic Congress of Mathematicians. Details can be found at http ://www2.maths.lth.se/nordic26/

The Call for Special Sessions is now open. Information can be found at http ://www2.maths.lth.se/nordic26/call-for-special-sessions/

Note the deadline : December 31, 2012.

Marta Sanz-Solé, EMS President

3.5 7ECM

Dear Colleague,

As you already know, the 7th European Congress of Mathematics (7ECM) will take place in Berlin, July 18-22, 2016. Jointly with the Berliner colleagues, we are undertaking the first steps of the organization.

In Spring 2013, the EMS Executive Committee will appoint the chairs of the Scientific and the EMS Prize Committees.

I would like to invite you to participate in this process suggesting candidates for these two important assignments. This can be done by sending proposals to the EMS office <ems-office@helsinki.fi>, with a copy to <ems-president@ub.edu>. With the names, please add the relevant information on the candidates and a brief motivation of your proposal.

The deadline is January 31, 2013. Thank you for your kind and helpful collaboration.

With my best regards,

Marta Sanz-Solé, EMS President

Past CHAIRS OF THE SCIENTIFIC COMMITTEES
Hans Föllmer (1ECM), Jürgen Moser (2ECM), Sir Michael Atiyah (3ECM), Lennart Carleson (4ECM), Lex Schrjver (5ECM), Eduard Feireisl (6ECM).

Past CHAIRS OF THE EMS PRIZE COMMITTEES
Max Karoubi (1ECM), Hans Föllmer (2ECM), Jacques-Louis Lions (3ECM), Nina Uraltseva (4ECM), Robert Tijdeman (5ECM), Frances Kirwan (6ECM).

4 Miscellaneous

4.1 Message from Springer

Dear secretary of the Belgian mathematical society,

First let me introduce myself as one of Springer's mathematics editors.

I am writing to you as the secretary of the Belgian mathematical society as I am hoping you can help me with an important project here at Springer.

We are in the process of retro digitizing all of the books copyright to Springer going back to the beginning of the company's publication programme, including all the subsidiary companies (e.g. Kluwer Academic Publishers), starting from 1842. It is an extremely complicated business finding the authors or their heirs to ask permission to publish electronically and obtain bank details in order to pay the royalties. We would really like to be able to put all these books back into publication and make them available electronically so this knowledge is available for future generations. We have tried to trace all the authors but as you can imagine, this is extremely difficult especially for those authors pre 1975 or so.

We are now asking societies and other institutions if they can help us spread the word by distributing the following statement to their members. Would you be able or willing to distribute such a message to your members ?

Best wishes, Lynn Brandon

INFORMATION FROM SPRINGER
The Springer Book Archives (SBA) project is an effort to breathe new life into older books published between 1842 and 2005 by making them available electronically and, if appropriate, in print. Many of these titles are currently out-of-print.

SBA books will thus be preserved for future generations of scientists and need never go 'out-of-print' again.

Authors will have free access to their electronic version. They will receive royalties on both print and electronic sales.

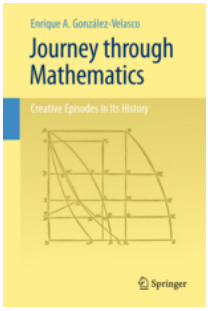
If you were the author of a Springer or Birkhaeuser book published earlier than 2005, and have NOT already been contacted by Springer in this connection by email, please visit the page

www.springer.com/SBAauthor<http ://www.springer.com/SBAauthor>

and let us know about it. If you know someone who is potentially concerned, for instance a retired colleague or even the family of a deceased colleague, please alert them to this and ask them to contact us via www.springer.com/SBAauthor¡http ://www.springer.com/SBAauthor¿.

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

Journey through Mathematics. Creative Episodes in Its History, *Enrique A. González-Velasco* Springer, 2011 (xii+466 p.), hard cover, ISBN 978-0-387-92153-2, 59,95€ (net)



The book grew out of a mathematical history course given by the author. It has a list of 39 pages with references to historical publications which are amply cited and from which many parts are worked out in detail. This is organized in 6 richly illustrated chapters describing the evolution of concepts from ancient times till the XVIIIth century to what is now generally used in our calculus courses.

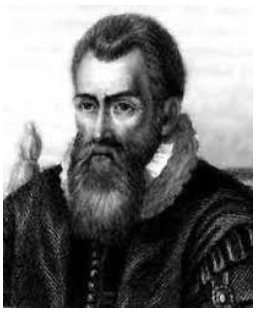
The first chapter on *trigonometry* starts with the Greek, the Indian, and the Islamic roots (mostly geometric) of trigonometric concepts. It all started with a stick fixed in the ground and shadows produced by the sun. The rectangular triangle was there and angles should be computed for astronomical computations. Fit the triangle in a circle and there is a bunch of geometric theorems to prove. Many were just helpful for computing the angles. Tables of chords were the predecessors of the goniometric tables. The diameter of the circle was divided into 120 parts and its circumference in 360 parts (implicitly setting $\pi \approx 3$) then $\sin\theta = \frac{\text{crd } 2\theta}{120}$ where crd 2θ is the length of the chord spanned by an angle 2θ. Thus one got approximate sine-tables although the idea is to work with lengths rather than with angles. One has to wait till the XVIth century for the real trigonometric tables to appear. They were used for computations in celestial mechanics in the work of François Viète (1540-1603). The cosine was not really needed and only appeared under its own name in 1620, while the notation sin. and cos. etc. (with dots), was only accepter as late as 1748.


González-Velasco

The second chapter on the *logarithm* is a natural consequence of the trigonometric tables as an aid for computation. $\sin A \cdot \sin B = \frac{1}{2}[\cos(A-B) - \cos(A+B)]$ could be used to multiply numbers $x \approx \sin A$ and $y \approx \sin B$. John Napier (1550-1617) and Henri Briggs (1561-1630) worked together and came up with the concepts of logarithms in base e and in base 10 respectively. This was not a simple thing to do in days when limits nor decimal points existed. For example $\log(1)$ was not zero, so that it had to be taken into account in all the computations. Napier implicitly defined the basis e of his logarithm as a number whose logarithm was approximately 1: namely $1 - 10^{-k}$ to be precise. Briggs chose a basis 10 but also he used approximations $\log(10^7) = 0$ and $\log(10^6) = 10^{10}$. If we now define $\log(x) = \int_1^x (1/t)dt$, then this is thanks to Grégoire de Staint-Vincent (1584-1667) who connected logarithms to areas between the t-axis and the curve $1/t$: the hyperbolic logarithm. Later Isaac Newton (1642–1727) with his theory of 'infinite' sequences linked it with series expansions. Another century later Leonhard Euler (1707-1783) generalized it to a logarithms in an arbitrary basis.

Complex numbers are introduced in chapter 3. This is tied up with the solution of a cubic equation as studied by Girolamo Cardano (1501-1576) and others. Polynomials were a big deal in those days and square roots of negative numbers were bound to appear. In 1545 he proposed to split 10 into two parts with product 40. Thus he solved $x(10-x) = 40$, giving the solutions $5 + \sqrt{-15}$ and $5 - \sqrt{-15}$. Rafael Bombelli (1526-1572) described complex arithmetic. He called $+\sqrt{-1}$ *più di meno* and $-\sqrt{-1}$ *meno di meno* and gave the rules to multiply $\pm i$ with $\pm i$ as they are familiar to us now. By the way he also was the one who invented some kind of exponential notation. For example he denoted $x^3 = 15x + 4$ as $\overset{3}{\smile}\ 1\ a\ \overset{1}{\smile}\ 15\ p.\ \overset{0}{\smile}\ 4$. Euler even studied the logarithm of complex numbers, but it was only John Wallis (1616-1703) and Caspar Wessel (1745-1818) who gave the geometric interpretation and made the complex numbers accepted (if you can draw them, then they must exist). To William Rowan Hamilton (1805-1865) they were a couple of real numbers, giving their algebraic interpretation. Carl Friedrich Gauss (1777-1855) was the one to introduced the letter i for $\sqrt{-1}$ (although engineers like to use j instead).

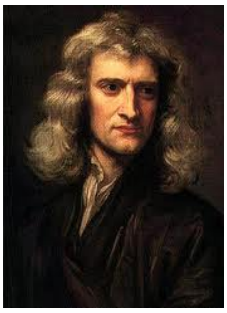
Viète



Napier

Briggs

de St.Vincent



Newton

Euler

Cardano

Bombelli

Wallis

Wessel

Hamilton

Gauss

Leibniz

Gregory

Taylor

Maclaurin

de Fermat

Barrow

Fourier

Bolzano

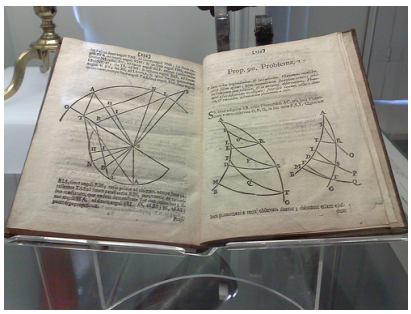
Cauchy

Dirichlet

da Cunha

D. Bernoulli

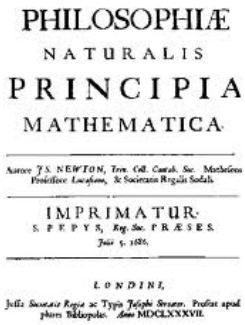
Abel



Gregory's book

Next chapter treats *infinite series*. Summation of (finite) numerical sequences, especially geometric sequences was known to the Egyptians and the Greek. But it was Gottfried Wilhelm Leibniz (1646-1716) who first summed the inverse of the triangular numbers $\frac{1}{n(n-1)}$ and Euler computed $\sum 1/k^2 = \pi^2/6$. As for function expansions, the Indians knew a series for $\sin(x)$ in the XIVth century, but in Europe one had to wait till the XVII-XVIIIth for Newton and Euler who developed a more general theory. However it was James Gregory (1638–1675) with his formulas for interpolating polynomials who later inspired Brook Taylor (1685-1731) and Colin Maclaurin (1698–1746) to develop their well known series.

Chapter 5 about *calculus* is the major part (about a quarter) of this book. Pierre de Fermat (1601-1665) contributed with his method of maxima and minima (derivatives) and his quadratures (integrals) of general hyperbolics $x^n y^m = 1$. So did Gregory and Isaac Barrow (1630-1677). Gregory wrote the first calculus book, but he, as well as Barrow did not talk about derivatives of integrals either. They studied tangents to a curve or a surface below a curve. Everything was still surprisingly inspired by geometry. Of course Newton and Leibniz are the main players here. Newton developed a theory of 'infinite' series (although there was always some 'last term'). Leibniz visited England and talked to Gregory but he basically developed his theory on his own. The problem seems to have been that his papers were very obscure and 'unreadable' for his fellow mathematicians. The well known dispute of plagiarism and who was the first to have invented 'calculus' was a consequence. González-Velasco makes a careful analysis of the work of both Newton and Leibniz and concludes that they worked independently.


PHILOSOPHIÆ
NATURALIS
PRINCIPIA
MATHEMATICA

Auctore J.S. NEWTON, Trin. Coll. Cantab. Soc. Mathematico Professore Lucasiano, & Societatis Regalis Sodali.

IMPRIMATUR:
S. PEPYS, Reg. Soc. PRÆSES.
Julii 5. 1686.

LONDINI,
Jussu Societatis Regiæ ac Typis Josephi Streater. Prostat apud plures Bibliopolas. Anno MDCLXXXVII.

Newton's book


PRINCIPIOS MATHEMATICOS
PARA INSTRUCÇÃO
DOS ALUMNOS DO COLLEGIO
DE
SAÕ LUCAS,
DA REAL CASA PIA DO CASTELLO
DE
SAÕ JORGE:
OFFERECIDOS
AO SERENISSIMO SENHOR
D. JOAÕ,
PRINCIPE DO BRAZIL;
COMPOSTOS PELO DOUTOR
JOSÉ ANASTACIO DA CUNHA,
DE OBEDIM DO DESEMBARGADOR DO PAÇO
DIOGO IGNACIO DE PINA MANIQUE,
Intendente Geral da Policia da Corte,
e Reino, &c. &c. &c.

LISBOA
NA OFFIC. DE ANTONIO RODRIGUES G. MALDO.
Impressor do Eminentissimo Senhor Cardeal Patriarca.
ANNO M.DCC.XC.
Com Licença da Real Meza da Comissão Geral sobre o Exame, e Censura dos Livros.

da Cunha's book

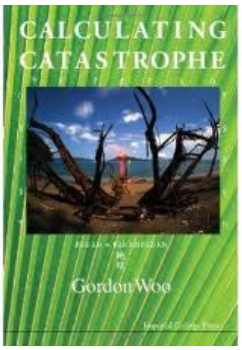
The last chapter is about *convergence*. Even Leibniz's and Newton's ideas were still rather geometric: derivatives were still tangents and integrals were quadratures, thus essentially finite. The notion of limit was lacking, which was only developed later in contributions by Joseph Fourier (1768–1830), Bernard Bolzano (1781-1848), Augustin-Louis Cauchy (1789-1857), Peter Gustav Lejeune Dirichlet (1805-1859), and others. Fourier formulated Fourier series and it was Daniel Bernoulli (1700-1782) who raised the question if any function could be expanded into a Fourier series. The others worked out the different notions of convergence as we know it nowadays. Those are the names we usually connect with convergence of series. However there was a Portugese mathematician José Anastácio da Cunha (1744-1787) who is less known, but who was actually the first, although his much earlier contribution went largely unnoticed. González-Velasco devotes an extensive section to this and somehow helps to rehabilitate de Cunha's contribution.

González-Velasco has done a marvelous job by sketching this very readable historical tale. He stays as close as possible to the original way of thinking and the way of proving results. He is even using the notation and phrasing and explains how it would be experienced by scientists of those days. However at the same time he makes it quite understandable for us, readers, used to modern concepts and notation. A remarkable achievement that keeps you reading on and on.

In my opinion, this is not only compulsory reading for a course on the history of mathematics, but everyone teaching a calculus course should be aware of the roots and the wonderful achievements of the mathematical giants of the past centuries. They boldly went where nobody had gone before and paved the road for what we take for granted today.

Adhemar Bultheel

Calculating catastrophe, *Gordon Woo* Imperial College Press, 2011 (xi+355 p.), soft cover, ISBN 978-1-84816-739-1, US$29 / £19 (paperback)



Let me start by a warning. Just as his earlier *The Mathematics of Natural Catastrophes* (World Scientific, 1999) which was not a book about 'mathematics'; this one is not about 'calculating' either. This one is a timely update of the predecessor, broadening it and including data of the last decade. The reader will not find the precise models, or computational methods to rigorously simulate or predict catastrophes. There are however a lot of data and many underlying principles are explained.

The first two chapters form a phenomenal collection of data about all kinds of hazards both natural (extra terrestrial, meteorological, geomorphic, or hydrological) or man-made (political violence, infectious diseases, industrial accidents, or financial crises) that have happened in the past or could happen in the future. There are some common characteristics for these two types of hazards so that flood, tsunami, quake, shock wave etc., use for man-made hazards are actually more than linguistic hyperboles. The massive recollection of disasters that have happened recently and that the reader has so easily forgotten is quite confronting. Notable (but essential in chaotic systems) are the almost philosophical reflections by Woo about whether some event is a cause or a consequence of another one. There is the classic story that Mary Shelley wrote *Frankenstein* in 1816 because she, together with her friends got bored of sitting inside because the weather conditions were so bad that year. That was caused by the debris in the atmosphere, remainders of the explosion of the Indonesian volcano Tambora in 1815. There is some causal connection, but this does not mean that she, or somebody else, would not have written the book, had the Tambora not exploded. Thinking of the butterfly-effect, it might be clear that complex nonlinear dynamics make it very difficult to find the cause of disastrous events. The problem being posed, the subsequent chapters will point to some possible answers.

Chapter 3 discusses the different scales and units in which the strength of all these phenomena are measured. Richter's scale for earthquakes is well known, but here one learns about the Fujita scale for tornados, Volcanic Explositivity Index (VEI) for volcanic eruptions, etc. Another aspect is to measure how far in time and space cataclysmic effects propagate. There are of course formulas to describe the decay of impact from an earthquake, a pollution, etc., but this is also a matter of the scale on which one wants to look. This gives Woo the occasion to introduce fractals. Earthquakes on a macro scale can be caused by instability of fine cracks in rocks on a micro scale.


Gordon Woo

That brings us to uncertainty and evidence. Historical and philosophical issues of probability theory and related notions are contemplated in chapter 4. Woo succeeds in sneaking in wavelets in this chapter when he discusses the analysis of fault ruptures in the soil to predict a probability of an earthquake. Hazards are rather exceptional, which make them hard to analyse and to predict? Risk management depends often on people's believe about what is going to happen, and not always on the laws of statistics. Think of the Ellsberg paradox and Knightian uncertainty. So when do people accept or believe evidence and how should one measure that believe? The chapter has some formulas, but it is mainly philosophical and narrative.

The previous chapter forms the basis to explain some statistics in chapter 5. Notions such as Poisson and Markov processes, Brownian motion, statistics of observed extremes, etc. are illustrated with examples and a few sporadic mathematical formulas. In this way it is hoped that the arrival-time of the next extreme situation can be predicted which may have a hazard as a possible consequence. Although precise prediction of man-made hazards such as the start of a war or a financial crash is very difficult, it is possible to recognize the conditions for instability and

Tsunami

Volcano

Land slide

Flood

Bhopal

Pandemic

Chernobyl

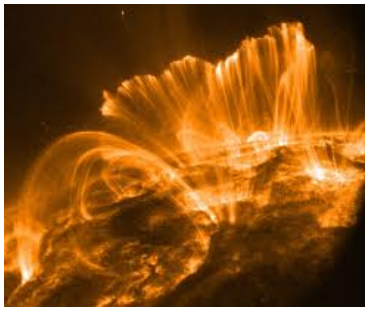
Tessorism

Financial crisis

Cyclone

Meteorite impact

Earthquake



Solar storm

Tornado

Extra terrestrial attack

indicators for an imminent outbreak as illustrated in chapter 6. And these are the simple cases because there are the laws of nature or of society that allows some predictability. The problem is to find or recognize the tipping point, i.e., when some threshold has been surpassed that will trigger a disaster. An illustration is taken form the financial markets. However when men with evil intentions come into play, safe predictions are quasi impossible. For example threats of terrorist attacks are very difficult to catch in mathematical laws. Nevertheless some of the mechanisms in a terrorist network and signs or conditions that can provoke a terrorist action are discussed in chapter 7.

The next chapter is somewhat more accurate where it is explained how forecasts can be made for earthquakes, tsunamis, tornadoes and floods. Predicting a major earthquake is still precarious, but predicting tsunamis or floods after an earthquake is realistic. As everywhere in this book all this is amply illustrated with examples from real life and greased with anecdotes or quotations from the literature.

Once a disaster is predicted, one should decide what precautions to take. When should one decide to evacuate? When is it safe enough to allow airplanes to fly after an ash cloud alarm? What scenarios should be followed e.g., when a solar storm is observed and satellites and electrical power plants can fail? When and how to inform the public? Woo ponders on possible scenarios of global disasters like a meteorite strike or a visit of extraterrestrials, major tsunamis or earthquakes, or world pandemics (e.g. H5N1 avian influenza). All this is discussed in chapters 9 and 10.

After the event is over, insurance companies have to deal with the survivors and the consequences of the disaster. These companies cannot be run with the gut feelings of their CEO's. They are bound to use probability theory. They have to give a reasonable argument for the answers they give to questions such as 'What is the probable maximum loss?' What should be covered and for what prize? How to calculate the risk of insuring something? What and how to reinsure? Not that Woo gives precise answers or the one-and-only-solution to all these questions, he gives some principles and a few formulas of possible lines of thought in his chapters 11 and 12. The final chapter deals with long-term planning about situations that we do observe but where it is not known what it will lead to and if or when it will reach a tipping point after which a disaster is unavoidable such as for example global warming, or the outburst of another world war or genetic modification.

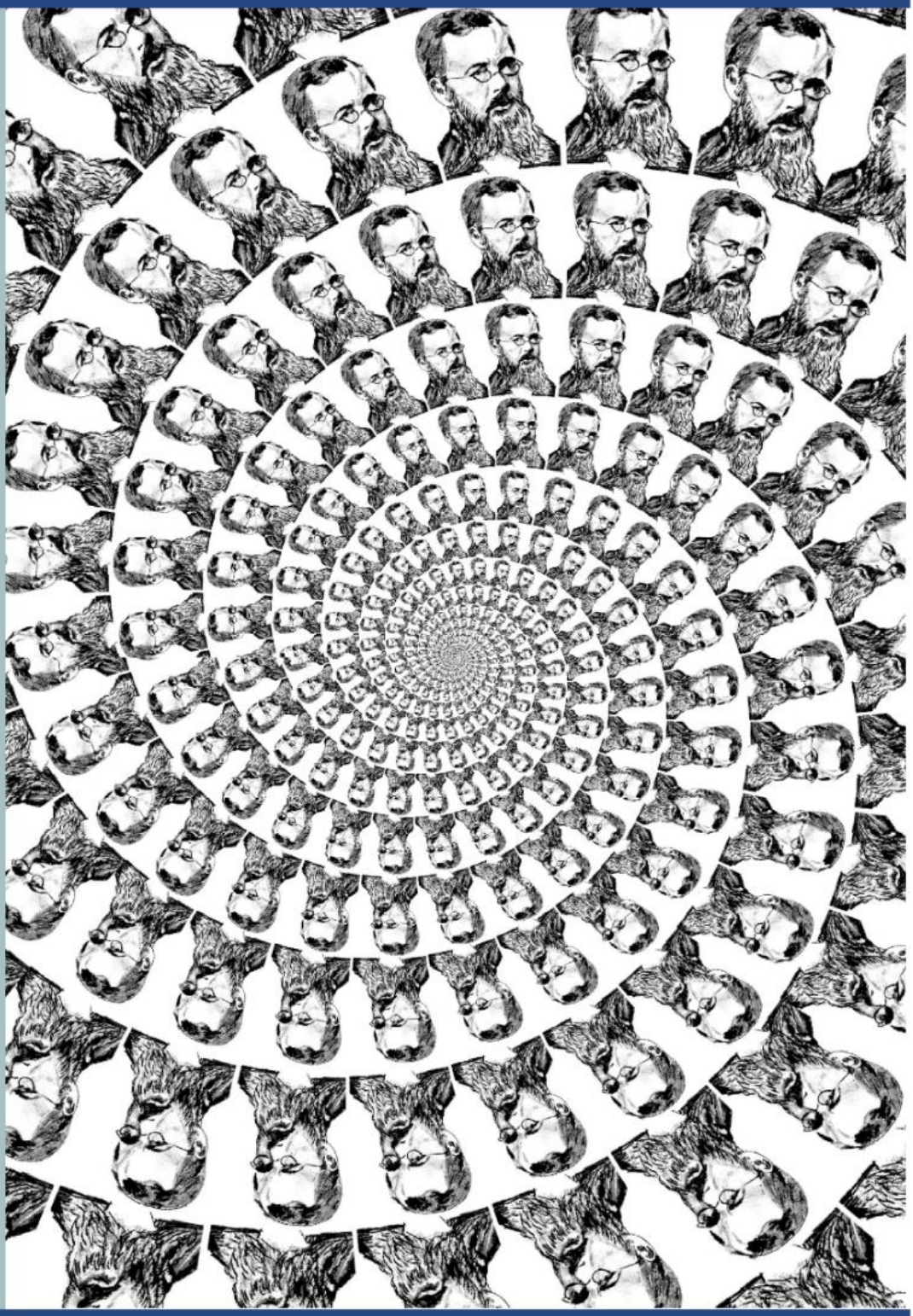
As it is stated in the conclusion: the majority of catastrophes will not be controlled by force or science. The only thing one can do is to try and understand the principles. That is exactly what the author has achieved for a very broad readership. The reader is not supposed to be skilled in mathematics. The formulas interlacing the text could even be skipped, and what remains will still be enjoyable to read. However mathematics from secondary school suffice. The reader who is a mathematician could be a bit disappointed if he is after ready-made applicable models, proofs or derivations. But after he has accepted that this is not a book about the mathematics, but a book about facts and principles, he will definitely enjoy the reading as well. The tsunami of disastrous events that have happened, or that have been described in the literature is overwhelming. A new topic is never started with boring mathematics but with an anecdote, an evocation of a situation in a novel, and quotations are generously sown as you read along. For example from Einstein: "intellectuals solve problems, geniuses prevent them" and there are many like this. The eruption of erudition and literacy displayed by the author is amazing. It is a true intellectual pleasure to read. Besides the names of scientists, you can find a lot of names of artists and citations from their work: from Henry Longfellow and Graham Green to Fyodor Dostoevsky and from Paul Cézanne to Franz Kafka, Samuel Becket and Hokusai. Even phenomena such as Harry Potter, Lord of the Rings, and Star Wars are featuring. Woo succeeds is shuffling into this book about any buzz word possible, modern hypes or facts that are still vivid in our collective memory. Tying this to the many events that are very recognizable or unsolvable questions the keep mass imagination busy, the book will be a commercial success. In my opinion rightfully so. Hence be part of the crowd: read and enjoy before the next hazard strikes!

Adhemar Bultheel

Locally compact groups beyond Lie theory

U. Bader
Y. Barnea
E. Breuillard
Y. de Cornulier
D. Dreesen
M. Ershov
T. Gelander
Y. Glasner
B. Green
N. Monod
S. Mozes
N. Nikolov
A. Ould Houcine
A. Pillay
C. Reid
D. Segal
T. Steger
R. Tessera
G. Willis
J. Wilson

Organizing committee
P-E. Caprace
M. Carette
T. De Medts
C. Michaux
A. Valette



March 31 - April 6, 2013 • Spa • Belgium

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Séminaire d' Analyse Liège Trèves

Seminar Analysis Lüttich Trier

We invite most cordially to the next session of our joint seminar.

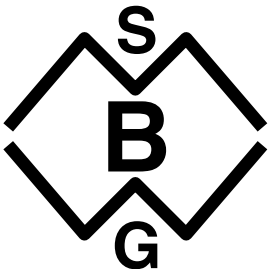
Friday, January 18, 2013
10:30 – 12:00 and **13:30 – 15:00**
Building B37, Room 033
University of Liège

Tobias Lorson from Trier will speak about

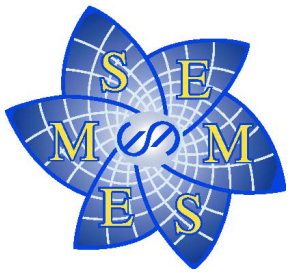
The Hadamard product of holomorphic functions and applications.

On the campus of the university the building B37 of the mathematical department is most easily found if one looks for the parking P32. If you need further information do not hesitate to contact

Françoise Bastin (Tel.: ++32 4 366 94 74, F.Bastin@ulg.ac.be),
Leonhard Frerick (Tel.: ++49 651 201 3505, frerick@uni-trier.de), or
Jochen Wengenroth (Tel.: ++49 651 201 3499, wengenroth@uni-trier.de).



Belgian Mathematical Society



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The ***BMS*** has been active in organizing international congresses and other meetings: "The mathematics of ranking" (Royal Academy Brussels), December 4–5, **2009** Leuven: joint meeting with the London Mathematical Society, September 13 **2010** Ph.D. day Royal Academy Brussels, November 9 **2011**: Mathematics and Teaching (Royal Academy Brussels), joint meeting with RSME (Real Sociedad Matemática Española) and SML (Luxembourg Mathematical Society June 6–8 **2012**. Future plans include Ph.D. day September 9 2013.
The ***BMS*** and the National Committee for Mathematics has published official standpoints in the BaMa discussion and in the use of the Science Citation Index and Impact Factors for the evaluation of mathematicians. This has been approved by the ***EMS***.

The activities of the ***EMS*** are numerous and of high quality with the organization of the European Congress of Mathematics (ECM) every four years (Paris in 1992; Budapest in 1996; Barcelona in 2000, Stockholm in 2004, Amsterdam in 2008, 6th ECM, Krakow, July 2–7, 2012), with the Forum Mathématique Diderot, with the publication of the **Journal of the *EMS***. The ***EMS*** as also created its own publishing house and offers a large and well-maintained collection of non-commercial journals and books on ***EMIS***, the European Mathematics Information Service (www.emis.de).

Further information on the *BMS* and on the*EMS*:
`http://bms.ulb.ac.be/` (***BMS***) and `http://` www.euro-math-soc.eu (***EMS***).

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