

BELGIAN MATHEMATICAL
SOCIETY

Comité National de Mathématique CNM

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NCW Nationaal Comite 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

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

Newsletter F.Bastin@ulg.ac.be

Tel. F. Bastin, ULg,(32)(4) 366 94 74

Fax F. Bastin, ULg,(32)(4) 366 95 47



BMS-NCM NEWS

No 65, November 15, 2007

Letter from the editor

Welcome

to this November 15, 2007- Issue of our Newsletter,
between Halloween and Christmas

Regards, Françoise

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1 Euler’s Gallery

Remember: April 15, 2007, was Euler’s birthday! (300).

ABCDEFGHIJKL
 MNOPQRSTUVWXYZ
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 jklmnopqrstuv
 wxyz1234567890

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2 Meetings, Conferences, Lectures

2.1 EDT Maths–FNRS

Meetings organized in the context of the *Ecole Doctorale Thématique en mathématique- EDT maths-FRNS* at the University Mons-Hainaut and at the University of Liège.

ECOLE DOCTORALE THEMATIQUE MATHEMATIQUES Tuesday November 27, 2007— UMH

Place: Université de Mons-Hainaut, Le Pentagone, Local 0A11, Avenue du Champ de Mars, 6
7000 Mons - Belgique

Tuesday November 27 2007: Program

- 10h30 – 11h45: **Gilles GODEFROY**, Directeur de recherche CNRS, Université de Paris 6

Cantor, Borel, Baire, Souslin et les autres

- 14h00 – 15h15: **Sophie GRIVAUX**, Chargée de recherche CNRS, Université de Lille 1

Une introduction aux systèmes dynamiques linéaires

- 15h15 – 15h45 : **Pause café**

- 15h45 – 17h00 : **Martine QUEFFELEC**, Professeur à l'Université de Lille 1

Nombres normaux

Informations: Catherine Finet (catherine.finet@umh.ac.be)

ECOLE DOCTORALE THEMATIQUE MATHEMATIQUES Thursday December 20, 2007—ULg

Place: Université de Liège, Institut de Mathématique (B37, parking 32), Sart-Tilman
4000 Liège- Belgique

Thursday December 20, 2007: Program

Partie 1 09:30-13:15 (une pose café est à programmer):

Fractales et analyse fonctionnelle

- **Stéphane JAFFARD**, Paris 12

Les notions de dimension de Hausdorff, d'exposant de Hölder (global, local) et introduction au formalisme multifractal; exemples

- **Stéphane JAFFARD**, Paris 12

Et les ondelettes dans ce contexte?

- **Jean-Marie AUBRY**, Paris 12

Espaces de suites S^ν et analyse fonctionnelle

- **Samuel NICOLAY**, ULg

Applications pratiques à l'analyse des signaux de type fractal via ondelettes

Partie 2 14:30-16:30 (avec pose café)

La méthode de Mittag-Leffler

- Jochen WENGENROTH, ULg

Généralités sur les limites projectives et applications dans les algèbres de Fréchet

Informations: Françoise Bastin (F.Bastin@ulg.ac.be)

2.2 November 2007

FUNDP, Thursday November 22, 2007, see announcement at the end of the Newsletter

UMH: journée EDT, Tuesday November 27, 2007: see section 2.1

UGent, Friday November 30, 2007: see announcement at the end of the Newsletter

2.3 December 2007

ULg journée EDT, Thursday December 20, 2007, see section 2.1

2.4 2008

*Multiscale modeling an singular perturbations
Twente, January 8-11, 2008*

See the announcement at the end of the Newsletter.

*Ier Congrès de la Société Marocaine de Mathématiques Appliquées
06-08 février 2008, Rabat*

Informations: consulter la page web de la Société Marocaine de Mathématiques Appliquées (SM2A) www.enim.ac.ma/sm2a

*8th German Open Conference on Probability and Statistics:
Aachen, 4-7 March 2008*

Continuing the series of Conferences in Marburg 1993, Freiberg 1996, München 1998, Hamburg 2000, Magdeburg 2002, Karlsruhe 2004, and Frankfurt 2006, which have become the major events in probability and statistics in Germany, the DMV-Fachgruppe Stochastik jointly with the RWTH Aachen University organizes the 8th German Open Conference on Probability and Statistics ("Aachener Stochastik-Tage 2008").

In the tradition of the previous conferences, it provides an international forum for presentation and discussion of new results in the area of probability and statistics. Participants from universities, business, administration, and industry are welcome.

Sections:

Stochastic Analysis; Limit Theorems and Large Deviations; Stochastic Geometry, Spatial Statistics, and Image Analysis; Random Discrete Structures and Analysis of Algorithms; Stochastic Processes: Theory and Applications; Time Series and Statistics of Stochastic Processes; Curve Estimation; Asymptotic Statistics; Stochastic Optimization and Operations Research; Data Analysis and Multivariate Statistics; Stochastic Models in Finance and Insurance; Statistical Methods in Finance and Insurance; Econometrics and Risk Analysis; Stochastic Models in the Natural Sciences; Statistics in Medicine and Biosciences; Stochastic Methods in Engineering

Plenary speakers will be:

N. Balakrishnan (McMaster University, Canada), Steven N. Evans (University of California at Berkeley, USA), Frank den Hollander (Universiteit Leiden, The Netherlands), Eva Riccomagno (Politecnico di Torino, Italy), and Aad van der Vaart (Vrije Universiteit Amsterdam, The Netherlands)

For an announcement of the conference including more detailed information please visit the conference website <http://gocps2008.rwth-aachen.de>.

Contact information:

Email: gocps2008@stochastik.rwth-aachen.de

Programme committee:

Christine Müller (chair), Department of Mathematics, University of Kassel, D-34132 Kassel, Germany
Local organizing committee: Udo Kamps (chair), Institute of Statistics, RWTH Aachen University, D-52056 Aachen, Germany

***MODNET Training Workshop-Model theory and Applications
La Roche-en-Ardenne, April 20-25, 2008***

A meeting of the research training network in Model Theory MODNET (<http://www.logique.jussieu.fr/modnet/Home/>)
Toutes les informations sont disponibles sur <http://www.logique.jussieu.fr/point/modnetlogic.html>

***Discrete groups and geometric structures, with applications
KUL, May 26-30, 2008***

See the page <http://www.kuleuven-kortrijk.be/workshop/>

***Spring school in nonlinear partial differential equations
UCL, May 26-30, 2008***

Organizers: J.P. Gossez (ULB), D. Bonheure, J. Van Schaftingen and M. Willem (UCL)

Confirmed lecturers: H. Berestycki (EHES), D.G. de Figueiredo (UNICAMP), S. Terracini (MILANO), M. Willem (UCL)

Description

The thematic of the Spring school on nonlinear partial differential equations is centered around nonlinear elliptic partial differential equations. The four 6 hours lectures will deal with various modern and active research fields of the theory of partial differential equations that interplay one with the others. Participants will have the opportunity to present a short communication.

Information

Homepage: <http://www.uclouvain.be/math-spring-school-pde-2008.html>
e-mail: denis.bonheure@uclouvain.be.

***Fifth European Congress of Mathematics
Amsterdam, July 14-18, 2008***

Informations can be found at the address <http://www.5ecm.nl>

The Fifth European Congress of Mathematics (5ECM) will be organized in Amsterdam, from 14 - 18 July, 2008, under the auspices of the European Mathematical Society. This congress is the fifth in a series of successful four-yearly European congresses that cover the whole range of the mathematical sciences, from pure to applied. The series started in Budapest, in 1992, followed by meetings in Paris (1996), Barcelona (2000), and Stockholm (2004). The ECM congresses alternate with the IMU world congresses, organized every (2 mod 4) year.

Next year's ECM congress will be organized under the special patronage of the Koninklijk Wiskundig Genootschap (Royal Dutch Mathematical Society, KWG), and will include the yearly meeting of the members of KWG. The 5ECM Local Organizing Committee consists of André Ran (Free University Amsterdam, chairman), Herman te Riele (CWI Amsterdam, secretary), and Jan Wiegerinck (University of Amsterdam, treasurer).

An outstanding Scientific Committee with representatives from all over Europe, chaired by Lex Schrijver (CWI and University of Amsterdam), has composed an interesting scientific program consisting of ten Plenary lectures, three (also plenary) Science lectures, about thirty (parallel) invited lectures, and twenty-one (parallel) Minisymposia. In addition, ten Prize lectures will be presented by outstanding young European mathematicians, selected by a Prize Committee chaired by Rob Tijdeman (Leiden University).

The ten *Plenary lectures* will be presented by

- Luigi Ambrosio (Scuola Normale Superiore di Pisa),
- Christine Bernardi (Université Paris VI),
- Jean Bourgain (IAS Princeton),
- Jean-François Le Gall (ENS & Université Paris VI),
- François Loeser (ENS Paris),
- László Lovász (Eötvös Loránd University, Budapest),
- Matilde Marcolli (Max Planck Institut Bonn),
- Felix Otto (Universität Bonn),
- Nicolai Reshetikhin (Univ. of California, Berkeley),
- Richard Taylor (Harvard University, Cambridge)

and the three *Science lectures* by

- Ignacio Cirac (Max-Planck-Institut für Quantenoptik, Garching, Germany), on Quantum Information Theory,
- Tim Palmer (ECMWF Reading, UK), on Climate Change,
- Jonathan Sherratt (Heriot-Watt University, Edinburgh, UK), on Mathematical Biology.

The *topics and the organizers of the Minisymposia are:*

- Advances in Variational Evolution (Alexander Mielke, Ulisse Stefanelli)
- Algebra in Optimization (Jan Draisma, Monique Laurent)
- Applications of Noncommutative Geometry (Gunther Cornelissen, Klaas Landsman)
- Applied Algebraic Topology (Michael Farber)
- Combinatorics of Hard Problems (Josep Diaz, Oriol Serra, Jaroslav Nešetřil)
- Coupled Cell Networks (Peter Ashwin, Ana Dias, Jeroen Lamb)
- Discrete Structures in Geometry and Topology (Dmitry Feichtner-Kozlov)
- Galois Theory and Explicit Methods (Bart de Smit)
- Global Attractors in Hyperbolic Hamiltonian Systems (Andrew Comech, Alexander Komech)
- Graphs and Matroids (Bert Gerards, Hein van der Holst, Rudi Pendavingh)
- Hypocoercivity, Analysis on Groups and Functional Inequalities (W. Hebisch, B. Zegarliński)
- Mathematical Challenges in Cellular Systems (Frank Bruggeman, Mark Peletier)
- Mathematical Logic (Peter Koepke, Benedikt Löwe, Jaap van Oosten)
- Mathematical Finance (Hans Schumacher, Peter Spreij)
- Mathematics of Cryptology (Ronald Cramer)
- Representation Theoretical Methods and Quantization (Stefaan Caenepeel, Jürgen Fuchs, Alexander Stolin, Christoph Schweigert, Freddy van Oystaeyen)
- Rough Path Theory (Peter K. Friz)
- Singular Structures in Variational PDE's (Matthias Roeger, Mark Peletier)
- Spectral Problems and Hilbert Spaces of Entire Functions (Joaquim Bruna, Hakan Hedenmalm, Kristian Seip, Mikhail Sodin)
- Spectral Theory (E.B. Davies, T. Weidl, F. Klopp, T. Hoffmann-Ostenhof)
- Weak Approximations of Stochastic Differential Equations (Dan Crisan)

Special activities, organized by the KWG, are the Brouwer medal ceremony (an event organized every three years in memory of the Dutch mathematician L.E.J. Brouwer, consisting of a laudatio, a lecture and a medal presentation, followed by a reception), a historical lecture on Brouwer's life and work (by Dirk van Dalen), and the so-called Beeger lecture (an event organized every two years in memory of the Dutch high-school teacher and mathematician N.G.W.H. Beeger, with a talk on algorithmic and/or computational number theory). The names of the Brouwer and Beeger lecturers will be announced later.

For more information on the conference, such as grants, up-to-date information on the program, and for registration, please visit our website at www.5ecm.nl.

The organizers are proud that the EMS has selected Amsterdam to be the host city for its fifth congress, and we look forward to meeting you all next year in Amsterdam. Do not miss this opportunity to learn about the latest developments in mathematics, to meet old friends, and make new acquaintances, while enjoying a charming city with many 'do-not-miss-this' sights!

The 5ECM Local Organizing Committee

On the website: www.5ecm.nl you will find the **Call for Registration and Abstracts** with all information about the congress known so far. It is possible to register now for this event. Please notice that members of the EMS and of the KWG pay a reduced fee. **Registration before April 1, 2008 further reduces the fee.**

Noncommutative Structures in Mathematics and Physics
A Satellite Meeting of the Fifth European Congress of Mathematics
Brussels, July 22-26, 2008

First announcement

Topics: Non-commutative geometry; algebraic and categorical structures; quantum groups and their representations; applications in mathematical physics.

Invited speakers: Y. Manin (Evanston and Bonn), C. De Concini (Rome), C. Kassel (Strasbourg), M. Van den Bergh (Hasselt), H.-J. Schneider (Munich), G. Böhm (Budapest), G. Landi (Trieste), S. Waldmann (Freiburg), J. Andersen (Aarhus), M. Markl (Prague), K. Fredenhagen (Hamburg), E. Karolinsky (Kharkov), M. Kapranov (New Haven).

Organizing Committee: S. Caenepeel (Brussels), F. Van Oystaeyen (Antwerp), S. Gutt (Brussels), C. Schweigert (Hamburg), J. Fuchs (Karlstad), A. Stolin (Göteborg)

Local Committee: S. Caenepeel, K. Janssen, J. Vercruyssen

Related event: Minisymposium Representation Theoretical Methods and Quantization at the Fifth European Congress of Mathematics in Amsterdam.

Parallel sessions: Requests for talks in parallel sessions will be considered by a selection committee; they should be submitted upon registration. Registration will start in October 2007.

Website: <http://dwispc8.vub.ac.be/NoMaP>

Website of 5ecm: <http://www.5ecm.nl>

3 Miscellaneous

3.1 From UMH

Le séminaire interuniversitaire de logique mathématique a repris ses activités hebdomadaires début octobre. Pour toute information sur le programme et les lieux, veuillez consulter en temps utile le site: <http://math.umh.ac.be/logic/seminars.htm> ou contacter christian.michaux@umh.ac.be

3.2 In Memoriam

In Memoriam Paul Dedecker (Brussels, 15 June 1921-Caracas, 27 July 2007)

Paul Dedecker started his mathematics studies in 1940 at the Free university of Brussels (ULB). Due to the closure of the university in 1941 to avoid nazi involvement, he got his license degree in 1943 from the Belgian central examination commission. His advisor for his senior thesis on birational involutions on non orientable "Riemann Surfaces" was Prof. Paul Libois. He was awarded the doctor's degree in 1948 with a thesis on "The Equations of Mechanics and the Inverse Problem of the Calculus of Variations", with Prof. Frans Van

den Dungen as advisor. He earned his habilitation (agrégation de l'enseignement supérieur) in 1957 with a dissertation on "Calculus of Variations and Algebraic Topology".

His main contribution to mathematics is in the field of the calculus of variations and its links to global differential geometry and algebraic topology. He connected the circulation theorem of Bjerknæs in dynamical meteorology with the theory of integral invariants of Elie Cartan. He was mainly interested in the inverse problem of the calculus of variation. This means: given a set of differential equations, do they derive from a variational principle? The case of one variable was well understood. For several variables many question marks remained. Following the work of Théophile Lepage he used systematically differential forms. By introducing suitable filtrations, related to the fibration of the phase space, he is able to clarify various problems. He considered the spectral sequences defined by the above filtrations and linked them to the inverse problem. His collaboration with Charles Ehresmann was very beneficial for this work.

His second domain of research was non-abelian cohomology. He found very soon, as did other mathematicians, that a first cohomology set could be defined for a sheaf of non commutative groups. It was a challenge to define higher dimensional cohomology objects. This he did in collaboration with several people, among others Frei, Lavendhomme and Lue. Some "exact sequences" between these objects were obtained.

He worked on several other subjects. Let us mention his paper on category theory and the foundations of mathematics, trying to give a framework to the "set" of all sets. Under the influence of Ehresmann he wrote several papers on local categories. Let us mention a nice paper on approximate equations, using filtrations in an unexpected situation (Bull. Soc Math. France 1955).

Franz Bingen

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

4.1 Euler

2007 is
THE YEAR OF EULER
(Leonhard Euler 1707 - 1783)

Visit the the Euler Shop at <http://www.mathematicianspictures.com/EULER/Euler300.htm>
See also the review of P. Levrie at the end of this Newsletter.

4.2 About Mathematics Education Series

Philosophical Dimensions in Mathematics Education

Series: Mathematics Education Library , Vol. 42

Francois, Karen; Bendegem, Jean Paul Van (Eds.)

2007, Approx. 240 p., Hardcover

ISBN: 978-0-387-71571-1

About this book

Philosophical Dimensions in Mathematics Education brings together diverse recent developments exploring philosophy of mathematics in education. The unique combination of ethnomathematics, philosophy, history, education, statistics and mathematics offers a variety of different perspectives from which existing boundaries in mathematics education can be extended. The ten chapters in Philosophical Dimensions in Mathematics Education offer a balance between philosophy of and philosophy in mathematics education. Attention is paid to the implementation of a philosophy of mathematics within the mathematics curriculum to become a philosophy in mathematics education. In doing so, many chapters provide ideas for actual practice and some practical examples directly usable in teacher training and in mathematics classrooms.

Philosophical Dimensions in Mathematics Education is intended for researchers in mathematics education, as well as for those working in the discipline of the philosophy of mathematics. It is also intended for those mathematics and statistics educators who want to broaden their view on mathematics/statistics education.

Written for: Researchers in Mathematics Education, mathematics teacher trainers, mathematics teachers, philosophers of science, mathematicians, statisticians

Informations:

<http://www.springer.com/east/home/generic/search/results?SGWID=5-40109-22-173732024-0>

Some more Euler books



In this Euler-year, several books about Euler are published. One of them came extremely early, in 1999: *Euler, the master of us all* by William Dunham (xxviii+185p., MAA, Dolciani Mathematical Expositions 22, paperbound, ISBN 0-88385-328-0). This book reads like a train. In it you'll find chapters on Euler's contributions concerning (analytic) number theory, logarithms, infinite series, complex variables, algebra, geometry and combinatorics. It also contains a chapter with an overview of the contents of Euler's Opera Omnia. If you think you must read at least one Euler-book this year, it should be this one.

The Bibliothèque Tangente has recently published a Hors Série volume entitled *Leonhard Euler* (in French, 2007, 154p., Éditions Pole, HS nr. 29, ISSN 0987-0806). It is comparable to Dunham's book, in the sense that it contains sections on

many mathematical subjects that have been treated by Euler. What is different is that Euler's work is placed in a modern context and that his influence on mathematics is made clear. The book is very nicely illustrated.

The MAA (Mathematical Association of America) started a nice series of books dedicated to Euler. The first one, *The early mathematics of Leonhard Euler*, by C. E. Sandifer (2007, 393p., MAA, Spectrum Series, hardback, ISBN 0-88385-559-3) describes Euler's early mathematical works. A number of his mathematical papers (49 to be precise, all the papers he wrote during his first stay in St.-Petersburg) are discussed in detail, among them some of his greatest works (the solution of the Basel problem, the problem of the Königsberg bridges, his essay on continued fractions *De fractionibus continuis dissertatio*,...). When reading these, you'll learn a lot about the young Euler, and you'll stand in awe of his achievements.

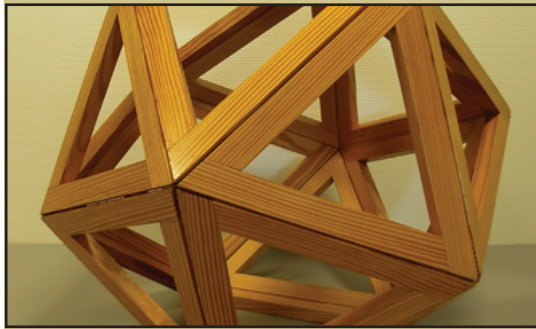
The papers are presented chronologically (by year), and the different years are linked by interludes that contain biographical data about Euler, as well as an overview of world events.

The second book in the series, *The genius of Euler - reflections on his life and work* (ed. W. Dunham, 2007, 309p. MAA, Spectrum Series, hardback, ISBN 0-88385-558-5) is a collection of papers (written between 1897 en 2006) related to Euler, biographical as well as mathematical, most of them serious, but not all (excerpt from a poem by Charlie Marion and William Dunham:

Consider how he summed, in turn
 The quite elusive mix
 Of one slash n all squared – you'll learn
 He got π^2 slash six.

p. 95-96). Papers by A. Weil, C. Boyer, M. Kline, P. Erdős (and Underwood Dudley), G. Polya,...., to name but a few. Some of the papers are classics, for instance Philip J. Davis' paper on the Gamma function, and R. Ayoub's paper on the Zeta function. Most of them are reprinted from the American Mathematical Monthly, Mathematics Magazine, and the College Mathematical Journal. All of them are well-written.

Paul Levrie



INAUGURELE VOORDRACHTEN DOOR
DE PROFESSOREN BART DE BRUYN EN TOM DE MEDTS
OPENING TENTOONSTELLING "BEELDENE WISKUNST"

Vrijdag 30 november 2007 – Gent, België

Krijgslaan 281, campus "De Sterre", gebouw S25, auditorium "Emmy Noether"

De Vakgroep Zuivere Wiskunde en Computeralgebra van de Universiteit Gent (Faculteit Wetenschappen) heeft de eer u uit te nodigen tot de inaugurele voordrachten door de professoren Bart De Bruyn en Tom De Medts, die met ingang van 1 oktober 2007 werden benoemd. Bovendien zal de tentoonstelling "Beeldende Wiskunst" worden geopend. In deze tentoonstelling worden wiskundemodellen getoond die werden gerealiseerd onder impuls van Jean-Marie Dendoncker, leraar wiskunde aan het Sint-Barbaracollege in Gent. De voordrachten en de opening van de tentoonstelling gaan door op vrijdag 30 november in gebouw S25 (Auditorium Emmy Noether), campus Sterre, Krijgslaan 281, 9000 Gent.

- 15:30h Onthaal en koffie
- 16:00h **Prof. Dr. Frank De Clerck** (voorzitter van de vakgroep)
Inleiding
- 16:10h **Prof. Dr. Bart De Bruyn**
Duale polaire ruimten
- 17:00h **Prof. Dr. Tom De Medts**
Zuiver toegepaste zuivere wiskunde
- 17:50h Opening van de tentoonstelling "Beeldende Wiskunst"
- 18:00h Receptie en rondleiding in de tentoonstelling

Registratie en meer informatie – <http://java.ugent.be/~tdemedts/inaugural/>

Namur, le 6 novembre 2007



FUNDP
Faculté des Sciences
Département de Mathématique
Rempart de la Vierge, 8
B-5000 Namur Belgique

Dans le cadre des **Séminaires d'Analyse Numérique**,
le Département de Mathématique des
Facultés Universitaires de Namur
a le plaisir de vous inviter à l'exposé intitulé

Adaptive cubic overestimation for unconstrained optimization
par **Philippe Toint (FUNDP)**

Abstract

We investigate the theoretical and numerical aspects of an adaptive cubic overestimation algorithm for unconstrained optimization. This algorithm has its roots in ideas proposed by Griewank, Nesterov, and Weiser, Deuffhard and Erdmann. This method computes in each iteration, the global minimizer of a local cubic over-estimator of the objective function, which gives a guaranteed improvement provided the Hessian of the objective is Lipschitz continuous. The resulting algorithm is shown to be globally convergent and with a provable worst-case iteration complexity for certain classes of problems, the latter analysis being an exciting novelty in the context of Newton's method applied to nonlinear and even nonconvex problems. The primarily theoretical intent and content of the algorithm however make the method computationally inefficient, while its extraordinary theoretical reliability and original construction, prompt us to investigate its potential for a successful practical implementation. Furthermore, since trust-region methods have been a very successful way of regularizing Newton's method, comparing the practical variant of Nesterov's algorithm that we propose to standard trust-region implementations is a worthwhile task, possibly with far reaching implications for safeguarding large-scale codes for nonlinear optimization. The talk will report on the adaptive overestimation algorithm itself, its theoretical convergence and complexity properties and finally on preliminary numerical experience.

(This is joint work with C. Cartis and N. Gould)

Date : Le jeudi 22 novembre 2007 à 14h00

Lieu : Salle de Conférence, 2ème étage du bâtiment des Sciences Economiques et Sociales, Rempart de la Vierge, 8 - 5000 Namur

Contact : Philippe Toint (Tél. 081/72 49 17 - Fax : 081/72 49 14)



Tél. +32 (0)81 72.49.25

Fax +32 (0)81 72.49.14

<http://www.fundp.ac.be/facultes/sciences/departements/mathematique/>

Announcement one week course 7-11 January 2008

Multiscale Modeling and Singular Perturbations

Speakers

Henk Broer
Arjen Doelman
Tasso Kaper
Martin Krupa

Singular perturbations arise naturally when the dynamical changes in systems occur at different time scales. These systems are called fast-slow systems or multiscale systems. Numerous examples arise in optics, chemistry, biology neurophysiology, celestial mechanics and pattern formation, to mention a few areas.

Geometric Singular Perturbation Theory is the mathematical framework that yields the tools, like the slow manifold and Fenichel's coordinates, to explore the complicated dynamical behaviour of these systems.

In this course there will be expositions of the fundamental mathematical concepts as well as lectures that highlight the various application areas.

There will be seminar talks (particularly on Friday) by the following speakers: Freddy Dumortier, Chris Jones, Floris Takens and Ferdinand Verhulst (all to be confirmed).

Location	University of Twente
Period	January 7-11, 2008
Course fee	400 € This includes lodging and all meals
Subscription	Mrs. Satie Bihari: s.bihari at utwente.nl
Information	Stephan van Gils: s.a.vangils at math.utwente.nl

This course is meant for PhD students and advanced Master students in mathematics and physics with interest in dynamical systems and/or any of the application areas mentioned above. The course will be organized under the auspices of the NWO-cluster 'Nonlinear Dynamics of Natural Systems'.

The University of Neuchâtel, Switzerland, is seeking to hire:

A Full professor (professeur ordinaire) of mathematics

The Faculty of Sciences, University of Neuchâtel (Switzerland), invites applications for a **full professorship in mathematics in the domain “dynamical systems”**, starting August 1st, 2008.

Candidates should have a strong record of internationally recognised research in the field of dynamical systems (e.g.: ergodic theory, ordinary differential equations, partial differential equations, etc...). They should own a PhD in mathematical science, and on the basis of their experience they should qualify to teach mathematics at all levels (bachelor, master, doctoral program).

Duties: Full chair (teaching in French, 6 hours weekly; research activities; administrative tasks).

The University of Neuchâtel is an equal opportunity employer, and encourages women to apply.

Applications must consist of:

- a detailed curriculum vitae with a description of the research, teaching, grants, and administration experience;
- a complete list of publications;
- a research programme (describing the scientific vision and the research which the candidate plans to develop), of at most 5 pages.

The candidates will ask to three experts to send a letter of recommendation to the head of the hiring committee.

All the documents should be sent before January 31th, 2008, including electronic copy, to the following address:

Prof. O. Besson, head of the hiring committee (chair in mathematics), Institut de Mathématiques, 11 Rue Emile Argand CP 158, CH-2009 Neuchâtel, Suisse. Email : olivier.besson@unine.ch

Information: visit <http://www.unine.ch/sciences> under “emploi” for complete information.

For other informations concerning this position, please contact Prof. Olivier Besson (email; olivier.besson@unine.ch).