

Lettre MODE
novembre 2016

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1- Faculty position in Applied Mathematics, University of Maryland Baltimore County (UMBC)
(source : J.-B. Caillaud)

The Department of Mathematics and Statistics at the University of Maryland Baltimore County (UMBC) invites applications for one tenure-track faculty position in Applied Mathematics at the rank of Assistant Professor starting in the fall of 2017. The successful candidate should have a PhD in mathematics or a related field, have an active, independent research program, strong potential for obtaining external funding, and a commitment to excellence in teaching. Preference will

be given to candidates who are able to interact with existing groups in the Department, conduct interdisciplinary research, as well as those who could continue to strengthen connections with research groups across the university. Applicants with postdoctoral experience are encouraged to apply. The Department offers BS, MS and PhD degrees in applied mathematics and in statistics. For more information, see our website at <http://mathstat.umbc.edu>. Current research areas in the Department include applied analysis, numerical analysis and scientific computing, differential equations, optimization and optimal control, mathematical modeling, mathematical biology and stochastic processes. The departmental culture encourages significant interdisciplinary research collaboration outside the department, with a strong emphasis to involve undergraduate, as well as graduate students, in the research activities. UMBC is a public research university which integrates teaching and research, and has a strong emphasis on science and engineering at the graduate level. UMBC is located between Baltimore and Washington, and is in close proximity to several federal research agencies.

A complete application should include a cover letter, C.V., summary of current research program, teaching statement, and three letters of reference. All application materials should be submitted through MathJobs. Screening of applicants will commence December 1, 2016, and will continue until the position is filled.

Applications from minorities, women, veterans, and individuals with disabilities are especially encouraged. UMBC is an NSF-ADVANCE institution and an Affirmative Action/Equal Opportunity Employer.

2- PostDoc Position at INRIA, Sophia Antipolis
(source : R. Laraki)

A postdoctoral position is available within the Marelle Inria Team (<https://team.inria.fr/marelle/>) in Sophia Antipolis (south of France).

The position is funded by the ANR Fastrelax research project (<http://fastrelax.gforge.inria.fr/>) on "Fast and reliable approximation" for numerical computation.

We are looking for a candidate who is interested in applying theorem proving techniques to effective numerical computation. One of our interests is to formalise bounds on polynomial approximations of functions (Bernstein polynomials and Taylor models).

Another interest is to formalize in Coq some results in real and complex

analysis (differential equations, Padé approximants, generalized Fourier series or Lyapunov certificates).

Funding starts in 2017 and is available for 12 months. The net salary is around 2100 euros/month, (health insurance and social coverage are included).

The candidate must have a PhD, and a strong knowledge in theorem proving and/or mathematics.

Potential candidates can contact Laurent Théry (Laurent.Theiry@inria.fr) or Laurence Rideau (Laurence.Rideau@inria.fr).

3- Postdoc Positions in Optimization at Argonne National Laboratory
(source : M. Théra)

The Mathematics and Computer Science Division at Argonne National Laboratory seeks well-prepared candidates for postdoctoral fellow positions in nonlinear optimization algorithms.

The positions will include software development and/or theory in support of algorithms for robust optimization and design under uncertainty in areas of interest to the applied mathematics and numerical software group. Current optimization areas of interest include derivative-free, mixed-integer nonlinear, parallel/concurrent, PDE-constrained, robust, multi-objective, and simulation-based optimization.

Applicants should have comprehensive experience/expertise in computational mathematics, optimization, or statistics, and programming in C, Matlab, Python, or another scientific programming language. Considerable knowledge is desired at

least one of theory/analysis of optimization algorithms or parallel computing.

Candidates should apply at <https://goo.gl/f53Sdp>

Openings are available immediately, but there is flexibility in start dates for highly qualified candidates. More information can be obtained from Sven Leyffer (leyffer@anl.gov), Todd Munson (tmunson@anl.gov), and Stefan Wild (wild@anl.gov).

4- Postdoc position in numerical optimization, University of British Columbia, Vancouver
(source : M. Théra)

Applications are invited for a one- or two-year postdoctoral position at the University of British Columbia, Vancouver, under the supervision of Michael Friedlander.

Requirements:

- PhD in mathematics, operations research, computer science, or related discipline.
- Experience with and evidence of primary research interests in numerical optimization.
- Experience developing numerical software.

Please submit application materials through the UBC Department of Mathematics post-doc listing on MathJobs.org (Job ID 9104): <https://www.mathjobs.org/jobs/jobs/9104>

5- 3 postes en Machine Learning et RO, Huawei France Research Center, Paris
(source : R. Laraki)

For further information please visit the website: http://www.roadef.org/forum_topic.php?topic_id=2304&forum_id=2

6- PhD positions - Programme INPhINIT "LaCaixa"
(source : J.-B. Caillaud et O. S. Serea)

La Caixa foundation has published the call for 57 PhD fellowships in the framework of the program "INPhINIT". The application period is from November 7th until February 2nd, 2017.

For further information, please visit the following links:
Application website: <https://www.lacaixafellowships.org/index.aspx>

How to apply in BCAM profiles: log-in, click in "Prospective Studies", choose "Basque Center for Applied Mathematics BCAM" and choose the position offered.

INPhINIT Programme: <https://obrasociallacaixa.org/en/educacion-becas/becas-de-posgrado/inphinit/about-inphinit>

7- Postdoc Position, Optimization/UQ, Sandia National Laboratories
(source : J.-B. Caillaud)

Sandia's Center for Computing Research in Albuquerque, NM, is seeking a Postdoctoral Appointee to conduct fundamental algorithm research, object-oriented software development, and development and application of methodologies in the broad area of optimization and uncertainty quantification. Areas of interest in algorithms R&D include, for example, numerical optimization, large-scale inverse problems, statistical inference, PDE-constrained and risk-averse optimization, design-of-experiments, multilevel and multifidelity methods, and random field modeling. This postdoctoral position is a temporary position for up to one year, which may be renewed at Sandia's discretion up to five additional years. The PhD must have been conferred within five years prior to employment.

For more information and to apply, go to <http://www.sandia.gov/careers/index.html> -> View All Jobs and then search for posting 655472.

8- Workshop "Games and Optimization", 21-22 novembre 2016, St-

Etienne
(source : R. Laraki)

Tous les détails sont à la page suivante : <https://www.gate.cnrs.fr/spip.php?article1030>

L'inscription est gratuite, mais obligatoire, pour des raisons d'organisation. Pour s'inscrire, il suffit d'envoyer un courriel à : eric.remila@univ-st-etienne.fr

9- Data61 5th International Optimisation Summer School, NSW south coast, Australia, from January 8 to January 13, 2017
(source : M. Théra)

For more informations, please look at the web site : http://www.cse.unsw.edu.au/~tw/school/Data61_5th_International_Optimisation_Summer_School/About.html

10- Weak KAM, Beyond Hamilton-Jacobi, Bordeaux, from January 9 to January 13, 2017
(source : J.-B. Caillaud)

Dear colleagues,
a conference organized by the ANR project WKBHJ : Weak KAM, Beyond Hamilton-Jacobi, will be held at Mathematical Institute of Bordeaux, from January 9 to January 13, 2017. It will be mainly focused on Hamilton-Jacobi equation, but it will cover also Aubry-Mather theory, Ergodic Optimization, Symplectic Geometry and Celestial Mechanics.

For more informations, you can look at the web site : <https://www.math.u-bordeaux.fr/~pthieull/LastCall/index.html>

If you would like to participate, please contact us, and pay attention to include always Philippe Thieullen (philippe.thieullen@u-bordeaux.fr) as a recipient of your answer. Organization can not cover travel expenses. We can cover some accomodation expenses within the limit of the available budget.

If you are speaker in this conference, or you are member of the WKBHJ ANR project, you have already been contacted, and

you can forget this message.

Best regards,

Andrea Venturelli,
Philippe Thieullen.

11- EJCIM 2017, 23-27 janvier 2017, ENS Lyon
(source : R. Laraki)

École Jeunes Chercheurs et Chercheuses en Informatique
Mathématique (EJCIM) du 23 au 27 janvier 2017 à Lyon

Tous les détails sont à la page suivante : [https://
ejcim2017.sciencesconf.org](https://ejcim2017.sciencesconf.org)

12- Journées de Combinatoire de Bordeaux (JCB 2017), 25-27
janvier
(source : R. Laraki)

Les (neuvièmes) Journées de combinatoire de Bordeaux (JCB
2017)
se tiendront au LaBRI du mercredi 25 au vendredi 27 janvier
2017.

Comme chaque année, les JCB ont pour but de faire se
rencontrer
les combinatoristes répartis sur tout le territoire : 15
exposés
de recherche couvrant un large spectre des objets et méthodes
de la combinatoire seront proposés aux participants.

On trouvera sur la page : <http://jcb2017.labri.fr> tous les
renseignements utiles (programme, etc).

13- JMB Remembrance Day - Paris, February 10, 2017
(source : M. Théra)

Dear colleagues and friends,

Please find below the information about the workshop, to be held at the Institut Henri Poincaré in Paris on 10 February 2017, that is "Dedicated to the memory of Professor Jonathan Michael Borwein." Here are the details:

<https://carma.newcastle.edu.au/meetings/remembranceday/>

If you have any questions, feel free to contact me.

I would like to take the opportunity of this mail to thank all of those who have contributed to the organization of this remembrance day, the speakers, the mathematical societies for their sponsorship, and PGMO and GDR MOA and CARMA for their support.

Please, on behalf of all of us, could you promote the event and encourage participation around you.

Yours,

Michel

14- 6th Workshop on Stochastic Methods In Game Theory, Erice,
5-13 May 2017
(source : M. Théra)

For more informations, please look at the web site : <https://sites.google.com/site/ericegametheory2017/speakers>

15- Constructive Nonsmooth Analysis and Related Topics, 22-27
May, 2017, Saint Petersburg
(source : M. Théra)

Euler International Mathematical Institute jointly with Saint Petersburg State University are planning to organize international conference "Constructive Nonsmooth Analysis and Related Topics" dedicated to the memory of worldwide known scientist Prof. Vladimir Fedorovich Demyanov. A special place in the event program will be designated to the talks on topics that constituted the circle of the main scientific interests

of Professor V.F. Demyanov.

The topics of interest include:

1. Constructive tools of Nonsmooth Analysis.
2. Nonsmooth Problems of Calculus of Variations and Control Theory.
3. Problems of Nonsmooth Mechanics.
4. Nondifferentiable Optimization.
5. Applications of Nonsmooth Analysis (Nonsmooth Mathematical Modeling, Mathematical Diagnostics).
6. Nonsmooth Methods in Game Theory.
7. Nonlinear Chebyshev approximations and nonsmooth optimization.

Conference Web Page: <http://www.pdmi.ras.ru/EIMI/2017/CNSA/index.html>

16- Journées Optimisation de Formes et Applications, Limoges,
1-2 juin 2017
(source : L. Bourdin)

Les détails sont à retrouver sur le site : <https://indico.math.cnrs.fr/event/1695/>

17- LION11, the 11th Learning and Intelligent Optimization
Conference, JUNE 19-20-21, 2017 NIZHNY NOVGOROD, RUSSIA
(source : M. Théra)

LION11 explores the intersections and uncharted territories between machine learning, artificial intelligence, mathematical programming and algorithms for hard optimization problems. In addition to scientific papers:

- Contests in continuous and discrete optimization.
- Sessions dedicated to commercial software and open source initiatives.
- Parallel computing, supercomputing, and cloud for "big optimization".
- Elevator pitches about new and crazy ideas (also by PhD students).
- Tutorials about methods and software.

Conference proceedings published by Springer-Verlag.
Collocated with Net2017, which takes place in the following

dates: June 22-23-24, 2017. Dec 10, 2016 paper submission deadline.

General chair: Yaroslav Sergeyev. Local organization committee: Roman Strongin (Chair), Victor Gergel (Vice-Chair), Vladimir Grishagin, Konstantin Barkalov, Dmitri Kvasov. Steering committee: Roberto Battiti (head), Holger Hoos, Youssef Hamadi, Mauro Brunato, Thomas Stuetzle, Christian Blum, Martin Charles Golumbic, Marc Schoenauer, Xin Yao, Benjamin W. Wah.

For more informations, please look at the web site : <http://intelligent-optimization.org/lion11/>

18- SING13 European Meeting of Game Theory, Paris from Wednesday July 5th to Friday July 7th, 2017
(source : R. Laraki)

Paris Dauphine University is proud to host the 13th SING Conference.

The organizing committee has the pleasure of inviting you to participate in the 13th European (formerly Spain-Italy-Netherlands) Meeting on Game Theory (SING13), to be held in Paris, France.

The conference will take place in Paris from Wednesday July 5th to Friday July 7th, 2017.

The conference is organized by the Laboratoire d'Analyse et Modélisation de systèmes pour l'Aide à la Décision (LAMSADE) of the Paris Dauphine University.

SING13 is the thirteenth in the series of Spain-Italy-Netherlands Meetings on Game Theory. The conference program will consist of a number of invited lectures and contributed papers. Contributions from all over the world are invited and encouraged. English is the language of the meeting.

We welcome contributions from all areas of game theory, including, but not limited to: Cooperative games and their applications, Mechanism design Networks, Dynamic games, Evolutionary games, Stochastic games, Voting and power indices, Auctions, Bargaining, Learning and experimentation in games, Computational game theory, Game theory applications in fields such as management, energy, health policy, industrial organization, and others.

Game theory applications in fields such as: management, energy, health policy, industrial organization, and others. For the first time, the SING – Best Student Paper Prize will be awarded and announced at the end of the Conference.

Visit the website <http://www.lamsade.dauphine.fr/sing13/> to learn more about the conference and the conference venue.

Questions can be directed to sing13paris@gmail.com

The organizing committee
Stefano Moretti (Chair), Hawa Gary, Laurent Gourvès, Juliette de Roquefeuil, Olivier Rouyer

19- Annonces de séminaires

Une rubrique pour signaler quelques liens pour les séminaires ayant lieu ce mois-ci et organisés dans nos laboratoires. N'hésitez pas à l'alimenter, préférentiellement via un lien vers la page du séminaire

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Séminaire Parisien d'Optimisation (exceptionnellement : ENSCP 01, à côté de l'IHP)

<http://www.ljll.math.upmc.fr/~plc/spo.html>

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Séminaire du programme PGMO, salle PGMO (Polytechnique)

<http://www.fondation-hadamard.fr/en/pgmo/seminar>

**

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Groupe de Travail CalVa (université Paris-Dauphine, en salle A711)

https://www.ljll.math.upmc.fr/fr/seminaires/gt_calcul_des_variations.html

**

**

Groupe de Travail Analyse Non-linéaire et EDP (IHP)

<http://www.math.ens.fr/~alazard/seminaire.html>

**

**

Séminaire Pluridisciplinaire d'Optimisation de Toulouse
(lieu : voir site)

<http://projects.laas.fr/spot/>

**

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Séminaire SAMOCOD (séminaire Avignon Montpellier Optimisation
Contrôle
et Dynamique)

[http://www.i3m.univ-montp2.fr/index.php?
option=com_content&view=article&id=59&catid=19&sem=618](http://www.i3m.univ-montp2.fr/index.php?option=com_content&view=article&id=59&catid=19&sem=618)

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Séminaire hebdomadaire de l'équipe MOD de l'Université de
Limoges

<https://indico.math.cnrs.fr/categoryDisplay.py?categId=36>

**

**

Séminaire Parisien de Théorie des Jeux (IHP, salle 05, 201 ou
314)

<https://sites.google.com/site/theoriesdesjeux/>

**

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Séminaire de Mathématiques Discrètes, Optimisation et
Décision, Centre
d'Economie de la Sorbonne et Université Paris 1

<http://ces.univ-paris1.fr/membre/seminaire/MDOD/>

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Séminaire de géométrie sous-riemannienne - IHP

<http://webusers.imj-prg.fr/~davide.barilari/seminar.php>

**

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Séminaire de de l'équipe Statistique, Probabilités,
Optimisation et Contrôle (SPOC) - IMB

<https://math.u-bourgogne.fr/spip.php?page=seminairespoc>

**

**

Séminaire MDOD (Mathématiques Discrètes, Optimisation et
Décision), Maison des Sciences Economiques, Paris

<http://ces.univ-paris1.fr/membre/seminaire/MDOD/>

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20- Un interview de Jean-Bernard Lasserre sur Mathematics of
OR

(source : J. Bolte)

Pour plus des détails voir : [http://pubsonline.informs.org/
page/moor/lasserre](http://pubsonline.informs.org/page/moor/lasserre)

21- M. Théra a été nommé co-Director of the International
School of Mathematics «Guido Stampacchia» workshops in Erice
(source : M. Théra)

M. Théra a été nommé par le directeur de la fondation
«Ettore Majorana», co-Director of the International School of
Mathematics «Guido Stampacchia» workshops in Erice. Je vous
adresse la liste des prochains colloques acceptés
Voici le calendrier des prochains colloques:

2017.

67th Workshop: Stochastic Methods In Game Theory
Directors: Jérôme Renault (Université Toulouse 1 Capitole),
Marco Scarsini (LUISS), Rann Smorodinsky (Technion)

5-13 May 2017

68th Workshop: Graph Theory, Algorithms and Applications 4th
Edition

Directors: R. Cerulli , A. Goldberg, G. F. Italiano , R. E.
Tarjan

2018.

69th Workshop: Variational Analysis and Applications
Directors: Hedy Attouch, Giuseppe Buttazzo, Patrizia Daniele,
Antonino Maugeri

28 August-5 September 2018 (100) San Domenico

22- Notice sur Robert Janin
(source : J.-P. Penot)

Robert Janin nous a quittés le 3 octobre à Caen. Il a été professeur à l'Université de Poitiers, puis à l'Université Antilles-Guyanne avant de revenir vivre à Caen. Lorsque j'ai reçu l'annonce de son décès j'avais sous les yeux, à côté de mon clavier, un texte de Robert Janin et un autre cosigné de Jean-Pierre Dedieu et Robert Janin sur les conditions d'optimalité d'ordre trois et quatre. La coïncidence m'a frappé. J'étudiais ces articles pour examiner s'ils avaient une relation avec des conditions d'optimalité d'ordre supérieur (non spécifié) pour des fonctions pas nécessairement différentiables. Ces deux articles, rédigés d'une belle écriture manuscrite, sont restés inédits à ma connaissance. Je vois dans ce fait un reflet de la personnalité de Robert qui tournait le dos au "Publish or perish" qui s'installait dans le monde scientifique. Une autre marque de cette attitude se trouve dans la dérision manifestée par Robert à l'égard de sa thèse enfermée dans les murs des bâtiments de Jussieu à la suite de l'opération de désamiantage. Je lui ai dit mon regret de ce fait, car à mon sens elle contient des approches innovantes concernant des classes de fonctions non différentiable ayant des propriétés remarquables, appelées par lui fonctions PC1 et PC2. Elles anticipaient d'autres travaux qui ont connu des retentissements importants (fonctions sous-C1 et sous-C2 ou semi-convexes).

Impulsés par Robert Pallu de la Barrière, son directeur de thèse (ainsi que celui de Charles Castaing, Ivar Ekeland, Etienne Lanéry, Philippe Michel, Michel Valadier, D. Saxir Thiam, Van Cutsem.....) les travaux de Robert Janin ont été motivés par la commande optimale, aussi appelée contrôle optimal. A cette époque, Halkin et Neustadt avaient donné un nouveau tour à ce domaine jusqu'alors dominé par l'école russe en suggérant de réduire certains aspects de ces problèmes (comme les conditions d'optimalité) à des problèmes de programmation mathématique. Il était donc naturel de s'intéresser aux

propriétés de la fonction valeur. Aussi, c'est dans le domaine de la sensibilité (étude des propriétés de continuité et de dérivabilité de la fonction valeur) que les contributions de Robert Janin ont été les plus importantes. Il a réuni autour de lui des contributeurs comme Luc Barbet, Bruce Craven, Jacques Gauvin, Jean-Claude Mado, Jacky Narayaninsamy, Michael Ranguin, Rémi Sentis et d'autres qui ne me viennent pas à l'esprit.

Ce faisant, il a galvanisé des énergies, suscité des enthousiasmes et donné une impulsion à l'Université Antilles-Guyane qui a perduré et l'a hissée au rang des universités de taille réduite mais d'activité remarquable. Le charme de Robert, son humour, la profondeur de ses vues mathématiques resteront dans bien des mémoires, comme la force des vagues frappant la côte au vent sur laquelle il avait bâti sa maison.

--

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* F-66860 Perpignan, France

* <http://perso.univ-perp.fr/oserea/>