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Today's Editor: Patricia (Patti) K. Lamm, Michigan State University

Today's Topics:

Submissions for IPNet Digest:
Mail to ipnet-digest@math.msu.edu

Information about IPNet:
http://ipnet.math.msu.edu

From: Filippo De Monte <filippo.demonte@univaq.it>
Date: Monday, September 7, 2020
Subject: ICIPE 20, save-the-date May 16-20, 2021 – Second Announcement

Dear Inverse Colleagues,

The covid-19 emergency seems to be partially and hopefully over!

On behalf of the Organizing Committee, we are pleased to inform you that the "10th International Conference on Inverse Problems in Engineering (ICIPE 2020)" will be held on May 16-20, 2021, in Francavilla al Mare (Chieti), Italy.

ICIPE 20 intends to be a global forum for researchers and engineers to present and discuss recent innovations and new techniques in Applied and Fundamental Inverse Analysis. We will also be honoring Professor James V. Beck, for his outstanding contributions to parameter estimation and inverse heat transfer analysis. The online abstract submission will be open in mid-September, the abstract deadline will be close by the end of October 2020, and draft manuscripts will be due by the end of January 2021.

Abstracts and papers already submitted are properly kept!

Download Flyer:
http://icipe20.univaq.it/icipe2020/wp-content/uploads/2020/09/flyer-1-icipe-v4.pdf

We would be grateful if you could disseminate this safe-the-date email and conference flyer to your colleagues. The conference website is: https://icipe20.univaq.it.

We are looking forward to meeting you at ICIPE 20!

With our best regards,

Filippo de Monte (University of L’Aquila, Italy), Conference Chair
Keith A. Woodbury (University of Alabama, USA), ICIPE Steering Committee
Kirk Dolan (Michigan State University, USA), IPS Steering Committee

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From: "Moser, Melanie (melanie.moser@uni-graz.at)" <melanie.moser@uni-graz.at>
Date: Thursday, September 10, 2020
Subject: University Assistant with doctorate, Graz, Austria

The Institute of Mathematics and Scientific Computing is looking for an University Assistant with doctorate (https://jobs.uni-graz.at/en/MB/187/99/6313) (40 hours a week; fixed-term employment for the period of 6 years; position to be filled as of now)

Your duties

- Research in the field of applied mathematics with emphasis on the analysis and the numerics of problems in mathematical image processing and inverse problems
- Collaboration in interdisciplinary cooperation projects and third-party funded projects
- Independent teaching of courses in the field of applied mathematics, supervision of students and holding of exams
- Participation in organizational and administrative matters

Your profile

- Doctoral degree in a mathematical branch of study
- Solid knowledge of mathematical methods in image processing, inverse problems and numercial mathematics
- Knowledge of functional analysis, geometric measure theory, continuous mathematical optimization and its efficient algorithmic realization (desirable)
- Ability for integration into the institute’s research profile and in particular into interdisciplinary cooperation projects
- Capacity for teamwork, organizational talent and ability to communicate
- Ability to teach in german language

Our offer
Classification
Salary scheme of the Universitäten-KV (University Collective Agreement): B1

Minimum salary
The minimum salary as stated in the collective agreement and according to the classification scheme is EUR 3889.50 gross/month. This minimum salary may be higher due to previous employment periods eligible for inclusion and other earnings and remunerations.

We offer you a job with a lot of responsibility and variety. You can expect an enjoyable work climate, flexible work hours and numerous possibilities for further education and personal development. Take advantage of the chance to enter into a challenging work environment full of team spirit and enthusiasm for your job.

Application Deadline: October 7th 2020

Reference Number: MB/187/99 ex 2019/20

The University of Graz strives to increase the proportion of women in particular in management and faculty positions and therefore encourages qualified women to apply.

Especially with regard to academic staff, we welcome applications from persons with disabilities who meet the requirements of the advertised position.

If you are interested, please submit your application documents (CV, certificates, etc.) before the stated deadline. Make sure to indicate the reference number on your application to:
bewerbung@uni-graz.at

For further information, Prof. Kristian Bredies is at your disposal at the telephone number
+43 (0) 316 / 380 - 5170.

From: Youzuo Lin ylin@lanl.gov [via NADIGEST]
Date: September 10, 2020
Subject: Postdoc Position, Deep Learning, Computational Imaging, LANL

We have an immediate opening for a creative and resourceful postdoctoral researcher with strong computational skills and experience in imaging inverse problems and deep learning methods. We are seeking a highly-motivated individual to join a multidisciplinary esearch team consisting of machine learning scientists, computational scientists and domain experts to conduct cutting-edge machine learning research for computational imaging, with application to the subsurface, material, and other scientific domains.

Minimum Job Requirements: Strong computational science and numerical optimization skills, in particular, computational imaging and inverse problems; Strong deep learning skills and practical experience in various neural network architectures (DNN, CNN, RNN/LSTM, GAN, or other auto-encoder); Practical experience with machine learning packages such as PyTorch, TensorFlow, Keras, etc.; Code development and computational experience in using high-performance parallel computing resources; Solid publication record in high-impact journals, top-tier machine learning, and related conferences; Excellent communication, writing, and oral presentation skills; and Strong programming skills, in Python in particular.

Desired Skills: Demonstrated ability to work creatively and independently and in a team environment.

Education: A Ph.D. in Computer Sciences, Applied Math, Computational Sciences, Electrical Engineering, or closely related field is required. The candidate must have completed all Ph.D. requirements by the commencement of the appointment and be within 5 years of completion of the Ph.D.

To apply, please search for IRC81985 under jobs.lanl.gov

Additional information about this position can be obtained by contacting Dr. Youzuo Lin (ylin@lanl.gov) and Dr. Brendt Wohlberg (brendt@lanl.gov).

From: Olga Mula mula@ceremade.dauphine.fr [via NADIGEST]
Date: September 23, 2020
Subject: Postdoc Position, Reduced Modeling and Machine Learning, France

We are looking for a postdoctoral applied mathematician/computational scientist to join the research group Models & Measures financed by the Emergences grant project of the Paris City Council lead by Prof.Olga Mula.

Current activities of the group focus on addressing forward and inverse problems with methods combining modern computational methods, such as reduced modelling of parametric PDEs, and recent machine learning techniques, in particular based on neural networks and optimal transport metrics. The developments seek to overcome known bottlenecks of classical algorithms and introduce new paradigms to solve problems of relevance to science and engineering. The postdoctoral fellow is expected to engage in different projects in line with the above vision. As a support for our numerical tests, we will consider applications related to air pollution, fluid dynamics, and epidemiology.

The ideal candidate will have the following skills: A PhD in Applied Mathematics, Data Science, or Statistics. Solid experience in the development of numerical methods or data analysis with Python, Julia, R or C++. Solid working knowledge in at least one of the following topics: reduced modeling of PDEs, optimal transport, machine learning, uncertainty quantification, optimization. The effort is of a collaborative nature so strong interpersonal and communication skills are required. Working language is English or French.

We offer a 1 year contract with the possibility of an extension. Starting date is flexible but ideally between December 2020 and March 2021.

To express your interest, please send a letter of motivation, a resume, and at least 2 names of references to mula@ceremade.dauphine.fr. Evaluation of applications will continue until the position is filled.

From: Stefan Kunis stefan.kunis@math.uos.de [via NADIGEST]
Date: September 25, 2020
Subject: PhD/Postdoc Positions, Univ Osnabrueck, Germany

The Applied Analysis Group at the University of Osnabruck invites applications for 2 Research Assistants (PhD student or PostDoc) starting as soon as possible. The PhD student positions are limited to three years, the PostDoc position has an adapted duration.

Your responsibilities:
- Development, mathematical analysis, and implementation of new algorithms for moment problems and super-resolution imaging.

Required qualifications:

- Successfully completed university degree (Master or equivalent) in Mathematics or related fields.
- Good knowledge in applied harmonic analysis, inverse problems, optimization, or applied algebraic geometry.
- Programming skills and hands on experience in modern image processing tools.

For further information, please contact Prof. Dr. Stefan Kunis (email: Stefan Kunis stefan.kunis@math.uos.de, homepage: https://urldefense.com/v3/__http://www.math.uos.de/kunis__;!!HXCxUKc!jfLJdWve2tx-_s4xL203jXZ3zS9MrXTXcSqctE_JsdLaJTBYBPQuLGTPBjzPa_Sr$).

Please send your application (including a letter of motivation, CV, publication list, copies of certificates, as well as names and contact details of 2 referees) as one PDF file via
Email: stefan.kunis@math.uos.de.

Application deadline is 14.10.2020.

From: "noreply@iopscience.org" <noreply@iopscience.org>
Date: Wednesday, September 16, 2020
Subject: Inverse Problems, Volume 36, Number 9, September 2020

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