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

Today's Topics:
    Summer School & Workshop: Quantitative Tomographic Imaging
    IMA Conference: Inverse Problems from Theory to Application
    Postdoctoral Position: Inverse Problems and Imaging (Linz, Austria)
    Postdoctoral Positions: Bayesian Inverse Problems, and More (Singapore)
    Postdoctoral Position: Inverse Problems for Wave Equations

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

From: Axel Kittenberger <axel.kittenberger@univie.ac.at>
Subject: Workshop: Quantitative Tomographic Imaging – Radon meets Bell and Maxwell (Linz, Austria)
Date: April 6, 2017

The Radon Institute of Computational and Applied Mathematics (RICAM) at Linz, Austria, is organizing a Summer School and Workshop entitled

"Quantitative Tomographic Imaging – Radon meets Bell and Maxwell".

The Summer School will take place from July 10 to 12, 2017 and the Workshop afterwards from July 12 to 14, 2017.

The purpose of the Summer School is to offer educational presentation of high profiled researchers for students and researchers working
in the area of tomographic and coupled Physics imaging. The workshop itself covers recent topics on Coupled Physics Imaging, Tomography, and
Inverse Problems.

The workshop is part of a special semester on “100 Years of the Radon Transform” organized by RICAM. Please visit the website for the list of speakers
and for further information: https://www.ricam.oeaw.ac.at/events/workshops/qti2017/

There is space for a limited number of oral and poster presentation. The conference and workshop are free of charge.

To express the interest in participation in this workshop please contact
office@ricam.oeaw.ac.at
To express the interest in giving a presentation please contact
leonidas.mindrinos@univie.ac.at

From: Pam Bye <Pam.Bye@ima.org.uk>
Subject: IMA Conference on Inverse Problems from Theory to Application
Date: April 28, 2017

IMA CONFERENCE ON
INVERSE PROBLEMS FROM THEORY TO APPLICATION
In collaboration with Turing Gateway to Mathematics
Tuesday 19 - Thursday 21 September 2017
Centre for Mathematical Sciences, University of Cambridge, UK

An inverse problem denotes the task of computing an unknown physical quantity from indirect measurements. The corresponding forward problem maps the physical quantity to the measurements. In most realistic situations the solution of the inverse problem is challenging, complicated by incomplete and noisy measurements, as well as non-invertible forward operators which render the inverse problem ill-posed (that is lack of stability and/or uniqueness of solutions). Inverse problems appear in many practical applications in biology, medicine, weather forecasting, chemistry, engineering, physics, to name but a few, and their analysis and solution presents considerable challenges in mathematics and statistics. This conference will bring together mathematicians and statisticians, working on theoretical and numerical aspects of inverse problems, and engineers, physicists and other scientists, working on challenging inverse problem applications. We welcome industrial representatives, doctoral students, early career and established academics working in this field to attend.

Conference topics:
- Imaging
- Regularisation theory
- Statistical inverse problems
- Sampling
- Data assimilation
- Inverse problem applications

Confirmed Invited Speakers
Dr Marta M. Betcke (University College London)
Professor Dan Crisan (Imperial College London)
Professor Jari Kaipio (University of Auckland, New Zealand)
Professor Dirk Lorenz (TU Braunschweig, Germany)
Professor Bill Symes (Rice University)
Dr Tanja Tarvainen (University of Eastern Finland)

Conference Fees – registration is open via https://my.ima.org.uk/

Early Bird Fees
IMA Member £265
IMA Student £170

Non IMA Member £360
Non IMA Student £180

Early Bird fees will be available until Monday 21 August 2017, after which the fees will be:

IMA Member £285
IMA Student £190
Non IMA Member £380
Non IMA Student £200

Early Bird Fees must be paid by Monday 21 August 2017 otherwise the higher price will be implemented.

Residential Fee £200 including single en suite bed and breakfast accommodation for the nights of Tuesday 19 and Wednesday 20 September, at the nearby Murray Edwards College, plus the conference dinner on the evening of Wednesday 20 September
Conference Dinner £45 on Wednesday 20 September for non-residents

*If you are an IMA Member or you have previously registered for an IMA conference, then you are already on our database. Please “request a new password” using the email address previously used, to log in.

Organising Committee
Carola-Bibiane Schönlieb (University of Cambridge) - Chair
Cristiana Sebu (University of Malta) – Co-chair
Paul Ledger (Swansea University)
Bill Lionheart (University of Manchester)

Scientific Committee
Simon Arridge (University College London)
Martin Burger (University of Münster)
Daniela Calvetti (Case Western Reserve University)
Paul Childs
Barbara Kaltenbacher (University of Klagenfurt)
Roland Potthast (University of Reading)
Samuli Siltanen (University of Helsinki)

Further information
For further information on this conference, please visit the conference webpage:
http://ima.org.uk/conferences/conferences_calendar/inverse-problems.html

Contact information
For general conference queries please contact Lizzi Lake, Conference Officer
E-mail: conferences@ima.org.uk Tel: +44 (0) 1702 354 020
Institute of Mathematics and its Applications, Catherine Richards House, 16 Nelson Street, Southend-on-Sea, Essex, SS1 1EF, UK.

From: Axel Kittenberger <axel.kittenberger@univie.ac.at>
Subject: PostDoc position, Inverse Problems and Imaging, Linz, Austria
Date: April 6, 2017

At the Johann Radon Institute for Computational and Applied Mathematics (RICAM) of the Austrian Academy of Sciences, Linz, Austria, the "Inverse Problems and Imaging Group" is searching a PostDoc with a strong background in Tomography or Regularization. The research focus will be adjusted according to the interests of the successful candidate, although expert knowledge in either one of the following topics Mathematical Tomography, Integral Geometry, Regularization Theory, Stability Estimates is preferential.

A doctorate in mathematics or a closely related field is required. The working language is English. For more information contact Prof. O. Scherzer at: otmar.scherzer@univie.ac.at

RICAM went into operation on January 1, 2003 and has established research groups in six areas:
* Computational Methods for PDEs
* Geometry in Simulations
* Optimization and Optimal Control
* Inverse Problems and Mathematical
* Symbolic Computation
* Transfer Group
The Institute is located on the campus of the Johannes Kepler University in Linz, a city with approx. 205,000 inhabitants. Linz is located on the Danube, close to the Austrian Alps and half-way between Vienna and Salzburg. Further information is available at: www.ricam.oeaw.ac.at

Applications with personal and scientific data and a compact statement about scientific interests and achievements should be sent by May 31, 2017, by email to the address above.

The Austrian Academy of Sciences is an equal opportunity employer.

We are approaching interested candidates, prepared to exercise the aforementioned duties for a yearly gross salary of € 50.772,40 EUR. We offer a fixed-term contract for an initial period of one year (with possible extensions up to a maximum of six years). Starting date will be October 1, 2017.

https://www.ricam.oeaw.ac.at/files/jobs/ip_2017_04_04.pdf

From: Alexandre THIERY <a.h.thiery@nus.edu.sg>
Subject: PostDoc Positions at the National University of Singapore (NUS)
Date: April 6, 2017

Research Fellow: Bayesian inverse problems, high-dimensional Monte-Carlo methods and Data Assimilation, Bayesian Deep Learning
(http://www.normalesup.org/~athiery/job_adv/postdoc_MC.pdf)
Salary Range: S$70K -- S$85K
Initially for a period of 2 years
Department of Statistics and Applied Probability, NUS, Singapore

Dear colleagues,

the department of Statistics and Applied Probability of the National University of Singapore has 3 postdoctoral positions are available. Topics of interest include, but are not limited to: PDE-constrained Bayesian inverse problems, high-dimensional Monte-Carlo methods (MCMC, particle methods, optimal transport), high-dimensional Data Assimilation (SMC, EnKF, Variational approaches, Hybrid Methods), Bayesian Deep Learning models for inference in data-scarce settings.

These projects are in collaboration with (i) Abyss Processing, a young and energetic startup specializing in leveraging Deep Learning for medical diagnosis (ii) the Solar Energy Research Institute of Singapore (SERIS). The candidate will work closely with Dr. Alex Thiery and will use this postdoctoral stint to develop a strong research profile that will enable him/her to find a good faculty position.

Applicants should be highly motivated and creative, show an exceptional track record, and hold a Ph.D. degree in Computational Statistics, Computer Science, Signal Processing, Mathematics, or related fields, and be interested in working in an interdisciplinary and
multicultural environment. Positions for postdocs who just obtained their Ph.D. degree and for experienced researchers with several years of postdoctoral experience are available. These positions offer the opportunity to gain leadership and supervision experience in joint projects with younger scientists.

Term of Appointment: the appointment can commence immediately and will be initially for a period of two years (renewable for a third year).

Interested candidates are encouraged to directly contact Dr. Alex Thiery (a.h.thiery@nus.edu.sg) for further details.

From: "Hohage, Thorsten" <hohage@math.uni-goettingen.de>
Subject: Postdoctoral Position in Inverse Problems for Wave Equations
Date: April 25, 2017

The Max Planck Institute for Solar Systems Research (MPS) in Göttingen (Germany) invites applications for a postdoctoral position within the Max Planck Fellow Group “Inverse Problems” of Prof. Thorsten Hohage. The successful candidate will have research experience in either full-waveform inversions, efficient numerical solution of time-harmonic wave equations, uniqueness results for inverse elliptic boundary value problems, wave propagation in random media, or other topics related to inverse

problems for wave equations. She/he is expected to have an interest, but not necessarily previous experience in helioseismic inversions and to collaborate with a large and lively group of scientists working on this topic at MPS. The candidate may also profit from several other groups working on inverse problems and imaging on the Göttingen Campus in the applied mathematics, statistics, and physics departments of the university and at the MPS, providing a vibrant atmosphere for research on these topics.

Applications including a short CV, a short statement of research interests, and a preferred start date should be sent as a single PDF file to hohage@mps.mpg.de with “postdoc on inverse problems” in the subject line. Review of the applications will begin on 8 May 2017 and continue until a suitable candidate is found.

The initial contract is for a period of 2 years and may be extended to up to 4.5 years. Remuneration is according to the German public salary scale TVöD E13. Benefits include unemployment, healthcare, and retirement benefits. The MPS is an equal opportunity employer and places particular emphasis on providing career opportunities for women. Applications from persons with disabilities are expressly encouraged.
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