IPNet Digest Volume 29, Number 16 November 14, 2022

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

Today's Topics:

PhD Position: 3D Imaging in Complex Media, Institut Polytechnique de Paris

Postdoc: Comput. Uncertainty Quantification for Inverse problems, TU

Denmark

Professorship: Applied Mathematics, Saarland University

IOP: Awards for Top Cited Papers in China, 2022

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

https://ipnet.math.msu.edu/

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From: IPNet

Sent: Monday, November 14, 2022

Subject: IMPORTANT IPNet Changes -- Re-subscription Required

As we approach 30 years of hosting by Michigan State University, we announce that the IPNet will soon be moving under the umbrella of the Inverse Problems International Association (IPIA), with initial hosting generously provided by the Finnish Inverse Problems Society (fips) and the University of Helsinki.

The goals of the IPNet remain unchanged, and subscriptions will continue to be free.

However, YOU MUST RE-SUBSCRIBE in order to continue to receive the IPNet Digest. To do so, please fill out the form at

https://elomake.helsinki.fi/lomakkeet/120750/lomake.html

Resubscriptions ensure email addresses are current for all subscribers. Please note that the original web-based IPNet subscriber directory will be discontinued for reasons of privacy.

Until the transition is complete, submissions to the IPNet Digest may be sent as usual to

ipnet-digest@math.msu.edu.

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From: Marcella Bonazzoli <marcella.bonazzoli@inria.fr>

Sent: Thursday, November 3, 2022

Subject: PhD position offer [ OptiGPR3D ]

A PhD position on "Numerical methods and high performance simulation for 3D imaging in complex media" is available at Inria Saclay Centre at Institut Polytechnique de Paris (Palaiseau, France).

This PhD is part of the OptiGPR3D exploratory action (https://www.inria.fr/en/optigpr3d) led by IDEFIX and POEMS research teams at Inria Saclay Centre (https://www.inria.fr/en/inria-saclay-centre), in collaboration with EDF

(https://www.edf.fr/en/the-edf-group/inventing-the-future-of-energy/r-d-global-expertise). Its objective is to introduce versatile and robust simulation tools that can adapt to complex materials while remaining efficient, in the perspective of making 3D electromagnetic imaging feasible and certifiable through interpretable and optimized inversion methods.

Candidates should have a 2nd year Master's degree (or equivalent), with skills in numerical analysis (PDE, finite element method, linear algebra ...) and programming (e.g. C/C++, Python,...).

For more details on the position and the instructions to apply, see https://uma.ensta-paris.fr/idefix/documents/these\_AEx\_en.pdf
Supervisors' email address: aex-optigpr3d-phd@inria.fr

Thank you in advance, best regards,

Marcella Bonazzoli, Xavier Claeys, Pierre Marchand

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From: Per Christian Hansen <pcha@dtu.dk>

Sent: Friday, November 4, 2022

Subject: Postdoc position, Computational UQ, Technical Univ. of Denmark

The Technical University of Denmark opens a 2-year Postdoc position starting February 2023. It is part of the research project CUQI: Computational Uncertainty Quantification for Inverse problems https://sites.dtu.dk/cuqi.

We create a platform for modeling and computations needed to apply UQ to a range of inverse problems. This position focuses on further development of our package CUQIpy https://cuqi-dtu.github.io/CUQIpy and the underlying computational methods.

You will join the developer team and play an integral role in expanding CUQIpy to support an even wider range of inverse problems and UQ analyses. You will interact with the CUQI team to ensure that our theory and methods are put into optimal use. Responsibilities include:

- Design, abstraction & implementation of Bayesian inversion methods.
- Acceleration of computations (using structureand parallelization).
- Development of high-level user interfaces for non-experts.
- Support and training of CUQIpy users.
- Co-supervision of MSc and PhD students.

CUQIpy is developed in a highly collaborative GitHub-centered workflow with regular programming sessions, code reviews, sprints, and hackathons. We offers rich opportunities to build a profile in scientific software development and computational UQ for inverse problems.

For more details and to apply (deadline December 12, 2022), see: https://www.dtu.dk/english/about/job-and-career/vacant-positions/job?id=079d614a -74bf-4946-912d-04b8871f47bb

Per Christian Hansen and Jakob Sauer Jørgensen

Submitted by:

Professor Per Christian Hansen

Villum Investigator

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CUQI project: https://sites.dtu.dk/cuqi

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From: Thomas Schuster <thomas.schuster@num.uni-sb.de>

Date: November 10, 2022

Subject: Professorship for Applied Mathematics at Saarland University

With numerous research institutes on campus and targeted support of collaborative

projects, Saarland University provides an ideal environment for innovation and technology transfer. The Department of Mathematics at Saarland University encompasses the full spectrum of mathematics and forms a joint faculty with the Department of Computer Science, with which it collaborates closely.

The Department of Mathematics is inviting applications for the following tenure—track position commencing at the earliest opportunity:

Professorship (W2 with tenure track to W3) for Applied Mathematics (m/f/x; reference number W2177)

This position will initially be a fixed-term public sector position ('Beamtenverhältnis auf Zeit') for a maximum of six years. If after completing the quality-assured

evaluation

process the appointee has demonstrated excellence in teaching and research, the position will be upgraded to a permanent professorship at the W3 salary grade (tenured

full professorship).

The successful candidate will have exceptional research and teaching skills, international

visibility and a research focus in numerics; additional knowledge in scientific computing

or mathematical modelling is welcome. The candidate will complement existing activities

in applied mathematics and demonstrate potential for collaboration. The person appointed will also be expected to have experience in the acquisition of third party

funded projects, independently acquire external funding and to be willing to contribute

to joint research proposals to strengthen the department, faculty and university.

Teaching duties cover the full range of courses for mathematics students (including those

studying for teaching qualifications) as well as service courses for other departments.

Courses are taught in German and English.

At Saarland University, we view internationalization as a process that spans all aspects of

University life. We therefore expect members of our professorial staff to engage in

activities that promote and foster further internationalization. Special support will be

provided for collaborative work with existing international partners such as the 'European

University Transform4Europe' and the 'University of the Greater Region', which we would

like to further develop.

The appointments will be made in accordance with the general provisions of German

public sector employment law. Candidates must have experience in and an aptitude for

academic teaching. They will have a PhD or doctorate in an appropriate subject and will

have demonstrated a proven track record of independent academic research (e.g. as a

junior or assistant professor, or by having completed an advanced, post-doctoral research degree (Habilitation) or equivalent academic activity at a university or research

institution).

In accordance with the objectives of its affirmative action plan, Saarland

University is

actively seeking to increase the proportion of women in professorial positions and

applications from qualified female candidates are therefore strongly encouraged. Preferential consideration will be given to disabled candidates of equal eligibility.

To apply for this position, please submit your application no later than December 2,

2022 via Saarland University's online applications portal:

www.unisaarland.de/berufungen. Please complete the online synopsis (brief applicant profile)

and upload your completed application documents as a single PDF file (max. size: 10 MB).

Please include the following: a letter of application, which should be addressed to the

Dean of the Faculty of Mathematics and Computer Science, Prof. Jürgen Steimle, and

should include your private address, phone number and email, your CV/résumé including

details of academic teaching duties and research history, a complete list of publications,

a statement of your previous and planned research and teaching activities, your record

in acquiring external funding, and electronic copies of your certificates. For questions

about this position, please contact Prof. Roland Speicher (email: speicher@math.unisb.de).

When you submit a job application to Saarland University you will be transmitting

personal data. Please refer to our privacy notice for information (www.unisaarland.de/en/privacy.html) on how we collect and process personal data in accordance

with Art. 13 of the General Data Protection Regulation (GDPR). By submitting your

application, you confirm that you have taken note of the information in the Saarland

University privacy notice.

See the full notice here:

https://www.uni-saarland.de/fileadmin/upload/verwaltung/stellen/Wissenschaftler/W2177\_EN\_W2TTW3\_Angewandte\_Mathematik.pdf

## Submitted by:

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From: Mikhail Klibanov <mklibanv@uncc.edu>

Sent: Tuesday, November 8, 2022

Subject: Congratulations IOP Publishing. Here's your Top Cited Paper Awards

China 2022 certificate and badge!

From IOP Publishing:

Here is your Top Cited Paper Awards China 2022 Credential.

Congratulations Michael V Klibanov on being awarded an IOP Publishing Top Cited Paper Award for your article Convexification of electrical impedance tomography with restricted Dirichlet-to-Neumann map data.

This noteworthy achievement signifies that your research is featured in the top 1% of the most cited papers in your subject category. And that it is also one of the most cited articles collaborating with China, published across the entire IOP Publishing journal portfolio within the past three years (2019 to 2021).

Please visit our awards webpage

https://ioppublishing.org/china-top-cited-author-award/?utm\_campaign=topcitedpaperchina2022&utm\_medium=referral&utm\_source=accredible to find the full list of the top cited papers.

Submitted by:

Mikhail V. Klibanov

Link to my recently published book:

https://www.degruyter.com/document/doi/10.1515/9783110745481/html

Ph.D. and Doctor of Science in Mathematics

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