IPNet Digest Volume 30, Number 01 January 9, 2023 Today's Editor: Patricia (Patti) K. Lamm, Michigan State University Today's Topics: Upcoming: IPNet Subscription Changes Postdoc: Computational UQ for Inverse Problems, Technical Univ. of Denmark PhD Studentship: Deep learning for Nonlinear PDE Based Inverse Problems at UCL Deadline: Entries for the Twenty-First IMA Leslie Fox Prize for Numerical Analysis Submissions for IPNet Digest: Mail to ipnet-digest@math.msu.edu Information about IPNet: https://ipnet.math.msu.edu/ From: IPNet Sent: Monday, January 9, 2023 Subject: IMPORTANT IPNet Subscription Changes ****** *** Important IPNet Subscription Changes *** ***** As a reminder, 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. More information may be found in the IPNet Digest mailed out on November 14, 2022. You may receive email from Majordomo@helsinki.fi regarding these new subscription changes.

Please note that subscriptions will continue to be free.

Until the transition is complete, submissions to the IPNet Digest may be sent as usual to ipnet-digest@math.msu.edu.

From: Per Christian Hansen <pcha@dtu.dk>
Sent: Monday, January 2, 2023
Subject: Postdoc position, Computational UQ, Technical Univ. of Denmark

The Technical University of Denmark opens a 2-year Postdoc position starting May 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 Uncertainty quantification (UQ) to a range of inverse problems. This position focuses on the development and use of Statistical Learning as a framework for formulating and performing computational UQ.

You will be responsible for advancing the mathematical and statistical theory behind UQ for inverse problems, e.g., arising from partial differential equations. In addition, you will together with the team aim for bridging the gap between rigorous theoretical analysis and computations. You will work in a team of PhD students, postdocs, and faculty members in the CUQI project. You are expected to interact with our collaborators on applications of UQ for inverse problems.

We are looking for a profile who will also find it exciting to give limited contributions to teaching and training activities as well as supervision of students.

For more details and to apply (deadline March 1, 2023), see: https://efzu.fa.em2.oraclecloud.com/hcmUI/CandidateExperience/en/sites/CX_1/job/ 1265/?utm_medium=jobshare

Per Christian Hansen and Kim Knudsen

Submitted by: Professor Per Christian Hansen Villum Investigator Section for Scientific Computing DTU Compute - Technical University of Denmark Tel +45 23.65.27.98 Homepage: http://people.compute.dtu.dk/pcha/ LinkedIn: https://www.linkedin.com/in/per-christian-hansen-23bb55209/ CUQI project: https://sites.dtu.dk/cuqi

From: Betcke, Marta <m.betcke@ucl.ac.uk> Sent: Wednesday, January 4, 2023 Subject: PhD studentship in Deep learning for nonlinear PDE based inverse problems at UCL

We would like to bring to your attention a 4 year PhD studentship at UCL to work with Marta Betcke and Simon Arridge on "All-at-once deep learning methods for nonlinear PDE based inverse problems", see below for a more detailed project description (and a project ID needed for the application form) https://ucl-epsrc-dtp.github.io/2023-24-project-catalogue/projects/2228bd1149. html

The application should be completed by 12 (noon) on 26th of January 2023. The instructions and links to a 3-part application form can be found below https://www.ucl.ac.uk/epsrc-doctoral-training/prospective-students/apply-ucl-

esprc-dtp-studentship

The funding is available to both UK home and international students (the number of admitted international students is capped at 30%) and it will be allocated primarily on the basis of academic merit.

The candidates are welcome to contact Marta Betcke m.betcke@ucl.ac.uk for an informal discussion of the research project.

Submitted by: Dr Marta M. Betcke Associate Professor Dept. Computer Science University College London 90 High Holborn WC1V 6LJ London, UK Email: m.betcke@ucl.ac.uk Tel: +44 (0)20 3549 5568 (Direct Dial)

From: Carola-Bibiane Schönlieb <cbs31@cam.ac.uk>
Sent: Sunday, January 8, 2023
Subject: Deadline imminent: Submission for IMA Leslie Fox Prize 2023

The prestigious IMA Leslie Fox Prize is to be held in collaboration with The Alan Turing Institute for the first time. The outstanding, biennal prize was established in 1985 in honour of distinguished mathematician and researcher Leslie Fox. The next prize (the twenty-first) will be awarded on the 26th of June 2023, aligning with the 29th Biennial Numerical Analysis Conference in Strathclyde.

Entries for the twenty-first IMA Leslie Fox Prize for Numerical Analysis should be submitted by 31st of January 2023 using the form on the website (link below). Any person who is less than 31 years old on 1st of January 2023 and has not already won a first prize is eligible – candidates need not come from academia.

Each entry should be based on a paper, describing some of the candidate's research, that is suitable for a 40 minute lecture at a numerical analysis meeting.

For detailed eligibility criteria and submission guidelines please check the website https://ima.org.uk/14623/ima-fox-prize-2023-call-for-papers/

Best regards, Carola Schönlieb (on behalf of all members of the adjudicating committee, Jan S Hesthaven, Carola Schönlieb and Alex Townsend) ------ end ------