

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

Today's Topics:

Conference: Numerics for Fractional-Derivative Problems, including Inverse Problems

Extended Deadline: International Conference on Inverse Problems in Engineering

Professorship: Inverse Problems at the University of Helsinki

Postdoc: Uncertainty Quantification and Inverse Problems at LUT University

Postdoc: Nonsmooth Optimisation / Inverse Problems at the University of Helsinki

Postdoc: Modern Areas of Data Science involving Large and Complex Data at UC Davis

REU: Inverse Problems, Computational Methods, and the Environment at Dartmouth

College

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Information about IPNet:

<http://ipnet.math.msu.edu>

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From: Martin Stynes [m.stynes@csrc.ac.cn](mailto:m.stynes@csrc.ac.cn) (va nadigest)  
Subject: Fractional-Derivative Conference, China, Jun 2020  
Date: January 10, 2020

The 4th Conference on "Numerical Methods for Fractional-Derivative Problems" will be held at Beijing Computational Science Research Center during 4-6 June 2020. The previous three workshops on this topic, held at Beijing CSRC in 2017, 2018 and 2019, each attracted more than 100 participants. This year's conference, in addition to focusing on fractional derivative problems, will include a few talks on the closely-related area of inverse problems.

Four confirmed main speakers are Bangti Jin (London), Natalia Kopteva (Limerick), Abner Salgado (Tennessee) and Masahiro Yamamoto (Tokyo). Other main and invited speakers, and full details regarding the conference, will be listed on the conference website

[https://urldefense.com/v3/\\_\\_http://www.csrc.ac.cn/en/event/workshop/2020-01-10/103.html\\_\\_;!!HXCxUKc!gMSLurZ4mrLUkm0nwknz9CfZq2o6\\_uhBM3z8pFIVEvwbIDQYo\\_kQtxPbT8l1rozt\\$](https://urldefense.com/v3/__http://www.csrc.ac.cn/en/event/workshop/2020-01-10/103.html__;!!HXCxUKc!gMSLurZ4mrLUkm0nwknz9CfZq2o6_uhBM3z8pFIVEvwbIDQYo_kQtxPbT8l1rozt$)

Some slots are still open for contributed talks; if you wish to submit a talk, then please email [fdworkshop2020@csrc.ac.cn](mailto:fdworkshop2020@csrc.ac.cn) your title and abstract (between a half-page and one page) by 1 March 2020.

Registration at the conference website is now open.

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From: ICIPE 20 <[icipe20@strutture.univaq.it](mailto:icipe20@strutture.univaq.it)>  
Subject: International Conference on Inverse Problems in Engineering (ICIPE 20), Paper submission is now open and deadline extended  
Date: Sunday, January 19, 2020

Dear Inverse Colleagues,

The deadline for paper submission for the "10th International Conference on Inverse Problems in Engineering: ICIPE 20" is extended to February 15, 2020.

In order to submit your ICIPE 20 paper, please use the online submission system that is now OPEN.

You may find detailed information on the Web site: <http://icip20.univaq.it>.

Submit your paper here: [http://icip20.univaq.it/wordpress/?page\\_id=281](http://icip20.univaq.it/wordpress/?page_id=281)

Best regards,  
The ICIPE 20 Organizing Committee

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From: "Siltanen, M Samuli" <[samuli.siltanen@helsinki.fi](mailto:samuli.siltanen@helsinki.fi)>  
Subject: Professor position open in Helsinki  
Date: Wednesday, January 8, 2020

University of Helsinki has an open position for Professor in Inverse Problems at the Department of Mathematics and Statistics. All career levels (assistant/associate/full) are considered. The deadline for applications is February 15, 2020.

Here is the official announcement:  
<https://www.helsinki.fi/en/open-positions/professor-or-assistantassociate-professor-in-applied-mathematics-conducting-research-on-inverse-problems>.

Women and other underrepresented groups in the field of mathematics are specifically encouraged to apply.

Please share this information with anyone possibly interested in applying!

Best regards,

Samuli Siltanen Professor of Industrial Mathematics  
Vice Dean of the Faculty of Science  
University of Helsinki, Finland  
Tel. +358 29 415 1420  
Homepage: [www.siltanen-research.net](http://www.siltanen-research.net)

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From: Tapio Helin <[Tapio.Helin@lut.fi](mailto:Tapio.Helin@lut.fi)>  
Subject: Postdoc position in uncertainty quantification and inverse problems at LUT University  
Date: Wednesday, January 15, 2020

Dear colleagues,

I'm looking for a postdoctoral researcher to join our research group on Uncertainty quantification and inverse problems at the LUT School of Engineering Science in Finland. The position is for a fixed term of two years and focuses on research at the interface

of inverse problems and statistics. The start date for the position is April 1, 2020, but a later date can certainly be negotiated.

Our research group at LUT focuses on applied statistics and inverse problems. We specialise in the field of Bayesian statistical inverse problems, which refers to the effort to address real-world inverse problems as Bayesian statistical estimation problems. We study how statistical errors in measured data propagate to solutions within the complex mathematical models of inverse problems. Our group at the School of Engineering Science is part of the Centre of Excellence of Inverse Modelling and Imaging (2018-2025) selected by the Academy of Finland. For information, see <https://www.lut.fi/web/en/school-of-engineering-science/research/research-groups/inverse-problems>

For more information and application instructions, see [https://lut.rekrytointi.com/paikat/?o=A\\_RJ&jgid=1&jid=309](https://lut.rekrytointi.com/paikat/?o=A_RJ&jgid=1&jid=309)

Best regards,  
Tapio Helin  
Associate Professor  
Computational and Process Engineering  
School of Engineering Science  
LUT University

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From: Tuomo Valkonen <tuomov@iki.fi>  
Subject: Postdoc position in Nonsmooth Optimization/Inverse Problems, University of Helsinki  
Date: January 24, 2020

I am looking for a post-doctoral researcher to work on nonsmooth optimisation methods specifically for the solution of inverse problems. The position is at the Department of Mathematics and Statistics at the University of Helsinki in close contact with the Finnish Centre of Excellence in Inverse Modelling and Imaging. The starting date is negotiable, preferably in September 2020. In the first place, funding is secured until the end of August 2021. An extension is foreseen.

Enquiries: Tuomo Valkonen <tuomo.valkonen@helsinki.fi>

To apply:  
[https://urldefense.com/v3/\\_\\_https://www.helsinki.fi/en/open-positions/postdoctoral-researcher-in-optimization-for-inverse-problems\\_\\_;!!HXCxUKc!mVBgqGeMiIMkNDB2fOWRsMnV6-gwg\\_fcejZkJX7afS6lkzCRv\\_Bd0A5hnHjbbvJQX6BxiNY\\$](https://urldefense.com/v3/__https://www.helsinki.fi/en/open-positions/postdoctoral-researcher-in-optimization-for-inverse-problems__;!!HXCxUKc!mVBgqGeMiIMkNDB2fOWRsMnV6-gwg_fcejZkJX7afS6lkzCRv_Bd0A5hnHjbbvJQX6BxiNY$)

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From: Naoki Saito <saito@math.ucdavis.edu>  
Subject: UCD4IDS Research Postdoc Position at CS/ECE, University of California, Davis  
Date: Friday, January 3, 2020

Location: UC Davis Department of Computer Science or Electrical & Computer Engineering

Description:

The UC Davis TETRAPODS Institute of Data Science (UCD4IDS) funded by the NSF HDR-TRIPODS grant, is soliciting applications for a full-time UCD4IDS research postdoc position starting July 1, 2020 for joint appointment in the Department of Electrical & Computer Engineering (ECE) and Department of Computer Science (CS).

UCD4IDS seek applicants who demonstrate promise and the capability of developing cutting edge computational, mathematical, and/or statistical methodology pertaining to modern areas of data science that involve large and complex data, as well as effective teaching skills.

In particular, those candidates whose research interests are in the following three broad themes of the Institute are strongly encouraged to apply:

- 1) Fundamentals of machine learning directed toward biological and medical applications;
- 2) Optimization theory and algorithms for machine learning including numerical solvers for large- scale nontrivial learning problems; and
- 3) High-dimensional data analysis on graphs and networks.

#### Qualifications:

Applicants are required to have completed their Ph.D. in Computer Science, Electrical & Computer Engineering, or related fields, by the time of their appointment, but no earlier than July 1, 2018. The starting annual salary is \$50,760 and may be adjusted according to experience level and estimated salary increase for 2020. Supplemental salary is available through teaching positions in either ECE or CS departments, and the exact amount depends on the teaching load. Appointment is renewable for a total of up to two years, upon demonstration of satisfactory performance in research.

Additional information about the UCD4IDS may be found at: <https://ucd4ids.ucdavis.edu/>

#### How To Apply

Please send cover Letter, CV, research statement, and contact information for three references to:  
[cabustamante@ucdavis.edu](mailto:cabustamante@ucdavis.edu)

Applications will be accepted until the position is filled. Priority will be given to applications received by January 31, 2020.

The University of California, Davis, is an affirmative action/equal opportunity employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.

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From: IPNet <[ipnet@math.msu.edu](mailto:ipnet@math.msu.edu)>

Subject: REU on ICE: Inverse problems, Computational methods, and the Environment

Date: January 23, 2020

The Department of Mathematics at Dartmouth College invites undergraduate student applications to participate in a summer research experience program for studying the mathematics as it relates to inverse problems, computational methods, and the environment.

The deadline to apply is March 13, 2020.

Please see <https://math.dartmouth.edu/~reu/> for more complete information.

(Thank you to Hristo Linkov for suggesting this news item for the IPNet. -- Ed.)  
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