IPNet Digest Volume 23, Number 09 August 30, 2016 Today's Editor: Patricia (Patti) K. Lamm, Michigan State University Today's Topics: Postdoctoral Positions: Image Reconstruction at KTH Postdoctoral Research Associate: Inverse Imaging at University of Cambridge Postdoctoral Positions: Hybrid Tomography at TU Denmark Table of Contents: Inverse Problems Table of Contents: Inverse Problems in Science and Engineering Submissions for IPNet Digest: Mail to ipnet-digest@math.msu.edu Information about IPNet: http://ipnet.math.msu.edu From: Ozan Öktem <ozan@kth.se> Subject: Post-doc announcements for IPnet

Date: July 31, 2016 The Department of Mathematics at the KTH - Royal Institute of Technology in Stockholm, Sweden invites applications for three postdoctoral positions in tomographic reconstruction. One position is on usage of analytic and/or learned dictionaries for sparsity promoting reconstruction, another is on large-scale non-smooth optimization, and the final position is on shape theory (computational anatomy) in reconstruction. Review of applications will begin on October 3, 2016 and starting date is January 1, 2017. There is however some flexibility in the starting date. Further details are

given in the links below

Postdoc in Computational Harmonic Analysis in Imaging http://www.kth.se/en/om/work-at-kth/lediga-jobb/what:job/jobID:103222/where:4/

Postdoc in Convex Optimization and Image Processing http://www.kth.se/en/om/work-at-kth/lediga-jobb/what:job/jobID:103448/where:4/

Postdoc in Shape Theory and Image Reconstruction http://www.kth.se/en/om/work-at-kth/lediga-jobb/what:job/jobID:103449/where:4/

From: Carola-Bibiane Schönlieb <cbs31@cam.ac.uk>
Subject: Postdoctoral Research Associate in Inverse Imaging, University of Cambridge
Date: August 14, 2016

Postdoctoral Research Associate in Inverse Imaging, University of Cambridge -Department of Applied Mathematics and Theoretical Physics We invite applications for the position of a Postdoctoral Research Associate to work in the area of inverse imaging problems within the Cambridge Image Analysis (CIA) group at the Department of Applied Mathematics and Theoretical Physics (DAMTP), University of Cambridge. The research activity of the successful candidate will focus on the development and analysis of non-smooth and possibly non-convex variation regularisation approaches for inverse imaging problems and their robust optimisation. For more information please refer to http://www.damtp.cam.ac.uk/research/cia/.

Applicants must have (or be about to receive) a PhD degree in mathematics. The ideal candidate will be experienced in numerical analysis and optimisation, inverse problems and variational methods in image processing. Experience in parallel computing and C programming skills are desirable.

Fixed-term: The funds for this post are available for 2 years in the first instance and the successful candidate is expected to start no later than 1 January 2017.

Informal inquiries can be made by contacting: Carola-Bibiane Schoenlieb (cbs31@cam.ac.uk), and the Mathematics HR Office (LE09791@maths.cam.ac.uk).

Please quote reference LE09791 on your application and in any correspondence about this vacancy.

Application deadline: 11 September 2016

More information on the position and how to apply: http://www.jobs.ac.uk/job/AOJ038/postdoctoral-research-associate-in-inverse-imaging/

From: Kim Knudsen <kiknu@dtu.dk> Subject: 2 post doc positions in Hybrid Tomography at the Technical University of Denmark Date: August 17, 2016

2 post doc positions in Analysis and Computations for Hybrid Tomography

The Department of Applied Mathematics and Computer Science at the Technical University of Denmark (www.compute.dtu.dk/english) invites applications for 2 post doc position starting October 2016 (or shortly thereafter), see http://www.dtu.dk/english/career/job?id=0e029483-4350-487d-8703-adc065da5a3a. The positions are affiliated with the project "Improved Impedance Tomography using Hybrid data" (http://www2.compute.dtu.dk/~kiknu/HybridData/) funded by the Danish Research Council for Independent Research.

Candidates must have a PhD degree in applied mathematics, or equivalent academic qualifications, and some experience with mathematical analysis or numerical computations for inverse or imaging problems.

Applications must be submitted ONLINE by September 15, 2016.

More information can be obtained from Assoc. Prof. Kim Knudsen (kiknu@dtu.dk).

Submitted by: Kim Knudsen, Associate Professor Head of the DTU Compute PhD School DTU Compute Technical University of Denmark Department of Applied Mathematics and Computer Science Matematiktorvet Building 303B, 106 2800 Kgs. Lyngby Direct phone 45253026 kiknu@dtu.dk www.compute.dtu.dk/ From: <noreply@iopscience.org> Subject: Inverse Problems, Volume 32, Number 9, September 2016 Date: August 10, 2016 September 2016 Volume 32, Number 9 Inverse Problems Table of Contents Topical Review: Inverse problems with Poisson data: statistical regularization theory, applications and algorithms Thorsten Hohage, and Frank Werner Special Issue Paper: The least error method for sparse solution reconstruction K Bredies, B Kaltenbacher, and E Resmerita Convergence rates for l1-regularization without injectivity-type assumptions Jens Flemming Introducing shape constraints into object-based traveltime tomography G Gaullier, P Charbonnier, F Heitz, and P Côte Material derivatives of boundary integral operators in electromagnetism and application to inverse scattering problems Olha Ivanyshyn Yaman, and Frédérique Le Louër Fourier rebinning and consistency equations for time-of-flight PET planograms Yusheng Li, Michel Defrise, Samuel Matej, and Scott D Metzler An inverse problem for a class of conditional probability measure-dependent evolution equations Inom Mirzaev, Erin C Byrne, and David M Bortz Stationary black hole metrics and inverse problems in two space dimensions

Gregory Eskin, and Michael Hall

Reconstruction of the shear modulus of viscoelastic systems in a thin cylinder: an inversion scheme and experiments Junyong Eom, Hyeonbae Kang, Gen Nakamura, and Yun-Che Wang Passive synthetic aperture imaging with limited noise sources Josselin Garnier Corrigendum: Analysis of regularized inversion of data corrupted by white Gaussian noise (2014 Inverse Problems 30 045009) Hanne Kekkonen, Matti Lassas, and Samuli Siltanen http://iopscience.iop.org/issue/0266-5611/32/9 From: "Robinson, Justin" <Justin.Robinson@tandf.co.uk> Subject: FW: Inverse Problems in Science and Engineering, Volume 24, Issue 9, December 2016 is now available online on Taylor & Francis Online Date: August 15, 2016 Inverse Problems in Science and Engineering December 2016 Volume 24, Issue 9 Table of Contents Heterogeneous and anisotropic long-term concrete damage of the dez arch dam using thermal inverse analysis M. Labibzadeh & M. Khayat A coupled complex boundary method for the Cauchy problem X. L. Cheng, R. F. Gong & W. Han Reconstruction of multiplicative space- and time-dependent sources A. Hazanee & D. Lesnic Numerical solution of a Cauchy problem for Laplace equation in 3-dimensional domains by integral equations Ihor Borachok, Roman Chapko & B. Tomas Johansson A real-time Lie-group differential algebraic equations method to solve the inverse nonlinear vibration problems Chein-Shan Liu & Chih-Wen Chang An inverse heat conduction problem of estimating the multiple heat sources for mould heating system of the injection machine Jinguo Li, Ning Jiang, Zengliang Gao, Hong Liu & Gengjie Wang A Gaussian RBFs method with regularization for the numerical solution of inverse heat conduction problems Yong-Fu Zhang & Chong-Jun Li

Inverse spectral problems for differential pencils on a graph with a rooted cycle Vjacheslav Yurko

Real-time identification of a high-magnitude boundary heat flux on a plate C. C. Pacheco, H. R. B. Orlande, M. J. Colaço & G. S. Dulikravich

http://www.tandfonline.com/toc/gipe20/24/9

Submitted by: Justin Robinson Managing Editor | Taylor & Francis | Routledge Journals Mathematics | Statistics | History of Science | Science, Technology & Society 4 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN, UK Tel: +44 (0)20 755 19470 e-mail: justin.robinson@tandf.co.uk ----- end ------