IPNet Digest Volume 20, Number 02 February 28, 2013

Today's Editor:

Patricia K. Lamm, Michigan State University

Today's Topics:

Conference: Computational Analysis of Inverse Problems and PDEs Workshop: Statistical and Computational Methods for Inverse Problems Symposium: Inverse Problems Symposium 2013 Abstract Deadline Extended Positions Available in Inverse Problems in Statistics, Computer Science Position: Assistant Professor in Computational Reconstruction Algorithms Journal Compilation: Inverse Problems Highlights Collection Table of Contents: Inverse Problems Table of Contents: Journal of Inverse and Ill-Posed Problems Table of Contents: Nonlinear Analysis: Modelling and Control

Submissions for IPNet Digest:

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Information about IPNet:

http://www.math.msu.edu/ipnet

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From: Qiyu Sun <Qiyu.Sun@ucf.edu>

Subject: Conference "Computational Analysis of Inverse Problems and Partial Differential Equations" at Orlando, May 9—11, 2013 Date: 2/2/2013

The international conference "Computational Analysis o

The international conference "Computational Analysis of Inverse Problems and Partial Differential Equations", dedicated to John Cannon and Zuhair Nashed, will be held in May 9—11, 2013 at the University of Central Florida, Orlando, Florida, USA.

You are cordially invited to participate in the conference. The theme of the conference is on computation and analysis of inverse problems and partial differential equations. The aim of the conference is to bring together top experts from USA and overseas to disseminate the most recent progress on Inverse Problems and PDE.

The organizers are Yanping Lin, Piotr Mikusinski, Yuanwei Qi, Qiyu Sun, Alexandru Tamasan, Hongming Yin and Jiongmin Yong.

Registration, title and abstracts of your presentation should be sent to Qiyu Sun (qiyu.sun@ucf.edu). The deadline for the registration is the last weekend of March (March 30 2013), and the deadline for title and abstract is the first weekend of April (April 6, 2013). However, it will help greatly with our planning if you can let us know in advance of that deadline if you plan to come.

Travel support is available, pending the funding approval. Priority is given to students, postdocs and young researchers. Participants who wish to apply for travel support should submit your application with your registration by March 30, 2013.

For further information, please visit the conference webpage: http://math.cos.ucf.edu/~inverse

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From: Marcos Aurelio Capistran <marcos@cimat.mx> Subject: Workshop on stat. and comp. methods for inverse problems, Guanajuato, Mexico, August 2013 Date: 2/5/2013

Call for abstracts for a workshop on statistical and computational methods for inverse problems arising in ordinary, stochastic and partial differential equations. The meeting will be held at CIMAT, in Guanajuato, Mexico, August 1st-3rd of 2013. The workshop is a satellite conference to the Congress of the Americas. It is an activity of the international year of statistics.

Please visit the website for further information:

http://www.cimat.mx/Eventos/SCMIP13/

Submitted by: Marcos Aurelio Capistrán Ocampo CIMAT / A. P. 402 / Jalisco S/N, Valenciana Guanajuato, GTO 36240 Tel: (473) 73 2 71 55 Ext. 49640

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From: Jon Woolley <j.w.woolley@gmail.com> Subject: Abstract Deadline Extended: Inverse Problems Symposium 2013 Date: 2/11/2013

2013 Inverse Problems Symposium - Abstract Deadline Extended

Dear Inverse Problems Researchers and Instructors,

The abstract deadline has been extended for the 2013 Inverse Problems Symposium that will be held June 9-11 in Huntsville, Alabama. This symposium is the 26th in the series of national and international meetings on Inverse Problems that were initiated at MSU in 1988 by Dr. James Beck. The last symposia were held at the University of Central Florida and Michigan State University in 2011 and 2012, respectively. The 2013 symposium in Huntsville, Alabama will retain the single session format of these symposia, and will have sessions addressing both the theoretical and applied aspects of inverse problems. We are actively seeking session organizers, so please let us know if you are interested.

The overall schedule for 2013 will be similar to that in 2012:

Sunday June 9:

15:00-17:00Dr. Cara Brooks, tutorial on local regularization methods for solving inverse problemsEvening:Informal dinner on our own

Monday, June 10:

8:00-17:00	Oral ar	nd Poste	r Presentations.	Breakfast	and	lunch	provided.

19:00 Symposium Banquet at the U.S. Space and Rocket Center

Tuesday, June 11:

8:00-17:00 Oral presentations. Breakfast and lunch provided.

17:00 Conclusion

Early registration is available through April 30, 2013. The early registration fee is \$200 for regular registration and \$150 for student registration. After April 30, the registration fee will go up to \$250/\$175 regular/student. The registration fee covers Monday/Tuesday continental breakfast, lunch, breaks, Monday banquet, and CD.

We are interested in a wide range of topics in engineering, agriculture, natural sciences, mathematics, statistics, etc. A written paper is not required and the papers will not be subject to copyright. The abstracts should be submitted before March 15, 2013. The program is being developed. On-line registration and submission will begin by December 1, 2012. The website can be found at this address:

www.inverseproblems2013.org

All the best, Jon Woolley

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From: Simon ARRIDGE <S.Arridge@cs.ucl.ac.uk> Subject: Positions in Inverse Problems Date: 2/5/2013

Positions available:

Inverse Problems in Statistics : https://atsv7.wcn.co.uk/search\_engine/jobs.cgi?owner=5041178&ownertype=fair&jcode=1302510

Inverse Problems in Computer Science: https://atsv7.wcn.co.uk/search\_engine/jobs.cgi?owner=5041178&ownertype=fair&jcode=1307990

Best Regards,University College London (UCL)Professor of Image ProcessingDepartment of Computer ScienceVisiting Professor of MathematicsDepartment of MathematicsTel. +44-(0)20-7679-2000 (ext 33714)Room No. 3.05Tel. +44-(0)20-7679-3714 (direct)Engineering Front BuildingFax +44-(0)20-7387-1397London WC1E 6BTE-mail: S.Arridge@cs.ucl.ac.ukUnited KingdomWWW home page - http://www.cs.ucl.ac.uk/staff/S.Arridge

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From: Kim Knudsen <kiknu@dtu.dk> Subject: Assistant Professor in Computational Reconstruction Algorithms, Technical Univ. of Denmark

Date: 2/18/2013 3:19 AM

DTU Physics and DTU Compute at the Technical University of Denmark invite applications for a position as Assistant Professor in Computational Reconstruction Algorithms. The position is available from June 1, 2013. The position is shared between the two departments and is associated with a newly established 3D Imaging Initiative at DTU. The assistant professor will be part of a team that develops computational reconstruction algorithms in multi-dimensional space for materials characterization, using data from large-scale measurement facilities such as synchrotrons, neutron sources and free electron lasers. Key elements of this work are the formulation of the underlying mathematical models and the utilization of large data sets for immediate applicability in materials physics studies. The Assistant Professor is expected to take part in teaching activities at both departments.

The candidate must demonstrate a strong background in mathematical/physical modeling and scientific computing, and must be able to work across the disciplines. Good communication skills are required. For more details, see: http://www.job.dtu.dk/?guid=9e41c50f-290c-4310-b921-f093600186b9

Applications must be written in English and submitted online via the above home page by March 31, 2013.

More Information can be obtained from

Professor Per Christian Hansen, DTU Compute; pch@imm.dtu.dk Senior Researcher Søren Schmidt, DTU physics; ssch@fysik.dtu.dk

Best wishes, Kim

Submitted by: Kim Knudsen, Lektor, DTU Compute Danmarks Tekniske Universitet http://www.dtu.dk/images/DTU\_email\_logo\_01.gif Institut for Matematik og Computer Science Matematiktorvet Bygning 303 B / 2800 Kgs. Lyngby Direkte telefon 45253026 / k.knudsen@mat.dtu.dk www.mat.dtu.dk/

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From: Leanne Mullen <Leanne.Mullen@iop.org> Subject: Inverse Problems Highlights Collection Date: 2/12/2013

Inverse Problems 2012 Highlights Collection

The Editorial Board have selected their highlights from Inverse Problems in 2012 http://iopscience.iop.org/0266-5611/page/Highlights% 20of% 202012

This is intended not as a list of the 'best' articles, but as an interesting and stimulating reading list. Articles were selected for many reasons, some contain outstanding research and breakthroughs, some may have an especially clear exposition and are beautifully presented, others are instructive, containing results and tools useful to many readers. Whether you are reading these articles for the first time or from renewed interest, we very much hope that you will enjoy reading them.

The journal homepage also features exciting short news stories on recently published papers called Insights see http://iopscience.iop.org/0266-5611/labtalk/1.

Further information on how to read, write for or subscribe to Inverse Problems can be found on the homepage http://iopscience.iop.org/0266-5611 or you can e-mail us at ip@iop.org.

Submitted by: Leanne Mullen Institute of Physics. Registered charity no. 293851 (England & Wales) and SCO40092 (Scotland) Registered Office: 76 Portland Place, London W1B 1NT

From: <custserv@iop.org> Subject: Inverse Problems, Volume 29, Number 2, February 2013 Date: 2/4/2013

Inverse Problems February 2013 Volume 29, Number 2 Table of Contents

A generalized Prony method for reconstruction of sparse sums of eigenfunctions of linear operators Thomas Peter and Gerlind Plonka

Nonlinear error dynamics for cycled data assimilation methods Alexander J F Moodey, Amos S Lawless, Roland W E Potthast, and Peter Jan van Leeuwen Topological sensitivity analysis in fluorescence optical tomography A Laurain, M Hintermüller, M Freiberger, and H Scharfetter

A double regularization approach for inverse problems with noisy data and inexact operator Ismael Rodrigo Bleyer and Ronny Ramlau

Inclusion estimation from a single electrostatic boundary measurement M Karamehmedovic' and K Knudsen

Analytic regularization of an inverse filtration problem in porous media A C Alvarez, G Hime, J D Silva, and D Marchesin

A strongly ill-posed problem for a degenerate parabolic equation with unbounded coefficients in an unbounded domain  $\operatorname{O} = \operatorname{O} = \operatorname{O$ 

A discrepancy-based parameter adaptation and stopping rule for minimization algorithms aiming at Tikhonov-type regularization Kristian Bredies and Mariya Zhariy

A method for model identification and parameter estimation M Bambach, M Heinkenschloss, and M Herty

Convergence rates for an iteratively regularized Newton–Landweber iteration in Banach space Barbara Kaltenbacher and Ivan Tomba

A primal-dual fixed point algorithm for convex separable minimization with applications to image restoration Peijun Chen, Jianguo Huang, and Xiaoqun Zhang

Increasing stability in an inverse problem for the acoustic equation Sei Nagayasu, Gunther Uhlmann, and Jenn-Nan Wang

Convergence rates in 11-regularization if the sparsity assumption fails Martin Burger, Jens Flemming, and Bernd Hofmann

Thermoacoustic tomography with an arbitrary elliptic operator Michael V Klibanov

A contrast source inversion method in the wavelet domain Maokun Li, Og(uz Semerci, and Aria Abubakar

Robust imaging of localized scatterers using the singular value decomposition and 11 minimization A Chai, M Moscoso, and G Papanicolaou

On the use of the linear sampling method to identify cracks in elastic waveguides L Bourgeois and E Lunéville

Corrigendum: The direct and inverse scattering problems for partially coated obstacles Fioralba Cakoni, David Colton, and Peter Monk

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From: "noreply@degruyter.com" <noreply@degruyter.com> Subject: Table of Contents 'Journal of Inverse and Ill-Posed Problems' Date: 2/5/2013

Journal of Inverse and Ill-Posed Problems Feb 2013 Volume 21, Issue 1

## Table of Contents

Data regularization using Gaussian beams decomposition and sparse norms Wang, Yanfei / Liu, Peng / Li, Zhenhua / Sun, Tao / Yang, Changchun / Zheng, Qingsheng

Material parameter estimation and hypothesis testing on a 1D viscoelastic stenosis model: Methodology Banks, H. Thomas / Hu, Shuhua / Kenz, Zackary R. / Kruse, Carola / Shaw, Simon / Whiteman, John R. / Brewin, Mark P. / Greenwald, Steve E. / Birch, Malcolm J.

The use of statistical tests to calibrate the normal SABR model Fatone, Lorella / Mariani, Francesca / Recchioni, Maria Cristina / Zirilli, Francesco

Unique determination of potentials and semilinear terms of semilinear elliptic equations from partial Cauchy data Imanuvilov, Oleg / Yamamoto, Masahiro

Irregular nonlinear operator equations: Tikhonov's regularization and iterative approximation Vasin, Vladimir

On a multidimensional integral equation with data supported by low-dimensional analytic manifolds Kokurin, Mikhali Y.

Inverse problem for elliptic equation in a Banach space with Bitsadze–Samarsky boundary value conditions Orlovsky, Dmitry G.

Certain problems of synchronization theory Aisagaliev, Serikbai A. / Kalimoldayev, Maxat N.

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From: Romas Baronas <romas.baronas@mif.vu.lt> Subject: Table of Contents, Nonlinear Analysis: Modelling and Control Date: 2/2013 7:05 AM

Nonlinear Analysis: Modelling and Control 2013 Volume 18, Number 1 Table of Contents

Linear and nonlinear stability in nuclear reactors with delayed effects, pp. 1-13 Kostas Bucys, Donatas Svitra, Ramune Vilkyte

A coupled common fixed point theorem for a family of mappings Binayak S. Choudhury, Nikhilesh Metiya, Pradyut Das

Some exact solutions to the generalized Korteweg-de Vries equation and the system of shallow water wave equations Ihsan Timucin Dolapci, Ahmed Yildirim

Optimal management of a renewable resource utilized by a population Balram Dubey, Atasi Patra

Blow-up of the solution of a nonlinear Schrödinger equation system with periodic boundary conditions Feliksas Ivanauskas, Gintaras Puriuskis

A novel chaotic system and its topological horseshoe Chunlai Li, Lei Wu, Hongmin Li, Yaonan Tong

Global attractors for non-linear viscoelastic equation with strong damping Zhiyong Ma

Stabilizing uncertain steady states of some dynamical systems by means of proportional feedback Elena Tamaseviciute, Aru-nas Tamasevicius

Modeling nonlinear stochastic kinetic system and stochastic optimal control of microbial bioconversion process in batch culture Lei Wang, Enmin Feng, Z. Xiu

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Adaptive hybrid function projective synchronization of chaotic systems with fully unknown periodical timevarying parameters Jinsheng Xing

For a paper submission, please refer to http://www.mii.lt/NA/ A free on-line edition is available at: http://www.mii.lt/NA/issues.htm

Submitted by: Dr. Romas Baronas, Deputy-Editor-in-Chief, Nonlinear Analysis: Modelling and Control ----- end ------