

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

Today's Topics:

Symposium Update: 28th Inverse Problems Symposium 2015

Research Fellowship: Computational Imaging and Modelling

Postdoctoral Position: Sparse Approximations, Compressive Sensing, etc.

Table of Contents: Inverse Problems

Table of Contents: Journal of Inverse and Ill-posed Problems

Submissions for IPNet Digest:

Mail to [ipnet-digest@math.msu.edu](mailto:ipnet-digest@math.msu.edu)

Information about IPNet:

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

-----

From: "Dolan, Kirk" <[dolank@msu.edu](mailto:dolank@msu.edu)>

Date: December 31, 2014

Subject: 28th Inverse Problems Symposium 2015

You are invited to submit an abstract for the 28th Inverse Problems Symposium 2015.

Website: <http://www.inverseproblems2015.org/>

Conference will be held May 31-June 2, 2015, Michigan State University, East Lansing, MI.

Timetable:

- Abstract submission opens: January 7, 2015
- Registration opens: February 5, 2015
- Abstract acceptance notification: April 1, 2015
- Early registration closes: May 1, 2015

Contact:

Kirk Dolan, Conference Chair

Keith Woodbury, Conference Co-Chair

James Beck, Conference Honorary Chair

We look forward to seeing you in East Lansing.

Submitted by: Kirk Dolan, Associate Professor

Department of Food Science & Human Nutrition

Department of Biosystems & Agricultural Engineering

135 Trout Food Science Building, Michigan State University

East Lansing, MI 48824

Phone: 517-353-3333 Fax: 517-353-8963

-----

From: Alejandro Frangi <[a.frangi@sheffield.ac.uk](mailto:a.frangi@sheffield.ac.uk)>

Date: December 6, 2014

Subject: Sheffield VC's Fellowship Programme

Do you have a ground-breaking proposal at the interface where computational imaging and modelling meet?

The Center for Computational Imaging and Simulation Technologies in Biomedicine (CISTIB) at the University of Sheffield welcomes you to a vibrant environment where you will have the space and support needed within a world-class centre. The Vice-Chancellor's Fellowship Programme can provide you with the funding for the independence you need. Just talk to us!

The University of Sheffield is a world top-100 university, renowned for its research and for shaping leading minds across the world. The Vice-Chancellor's Fellowship programme supports exceptional early-career researchers who have the potential to be leaders of the future. This four-year prestigious Fellowship will lead to a permanent (tenured) academic position.

If you have a ground-breaking research proposal, ambition, and an outstanding track record read more about the University and follow our instructions on how to apply. [www.sheffield.ac.uk/ris/vcfellows/vcf2015](http://www.sheffield.ac.uk/ris/vcfellows/vcf2015)

If your area of interest is at the interface between computational imaging and modelling, then the Center for Computational Imaging and Simulation Technologies in Biomedicine (CISTIB) can provide you with the context, support, yet independence you need to explore your ideas.

Please, talk to us to explore possibilities.

Alejandro Frangi ([a.frangi@sheffield.ac.uk](mailto:a.frangi@sheffield.ac.uk))

Zeike Taylor ([z.a.taylor@sheffield.ac.uk](mailto:z.a.taylor@sheffield.ac.uk))

-----

From: Thomas Strohmer <[strohmer@math.ucdavis.edu](mailto:strohmer@math.ucdavis.edu)>

Date: December 2, 2014

Subject: Post-doctoral position available at University of California, Davis

POST-DOCTORAL POSITION IN MATHEMATICS University of California, Davis

The Department of Mathematics is soliciting applications for a Postdoctoral Scholar position with a starting date between March 2015 and October 2015.

To be considered for the position, the Department seeks applicants with a strong knowledge base in Sparse Approximations, Compressive Sensing, Numerical Algorithms, and/or Optimization. Applicants must have completed their Ph.D. by August 31, 2014. The position requires working on research related to a defense-based project (sponsored by DTRA/NSF) led by Professor Thomas Strohmer. The research is concerned with developing theory and algorithms for high-dimensional data analysis, imaging and signal recovery in connection with threat detection. The candidate should also have excellent programming skills in Matlab. The annual salary will be \$50K. Salary is negotiable based on experience and funding available. The Postdoc may be asked to

teach one or two courses depending on experience and the Mathematics department needs. The appointment is renewable for a total of up to two years, assuming satisfactory performance. A US-Citizenship is not required.

The UC Davis Math and Applied Math programs have been ranked among the nation's top programs by the National Research Council in its most recent report. Additional information about the Department may be found at "<http://www.math.ucdavis.edu/>" <http://www.math.ucdavis.edu/>.

Applications will be accepted until the positions are filled. To guarantee full consideration, the application should be received by December 30, 2014 by submitting the AMS Cover Sheet and supporting documentation electronically through <http://www.mathjobs.org/> (see also <https://www.mathjobs.org/jobs/jobs/6810>).

The University of California, Davis, is an affirmative action/equal opportunity employer and is dedicated to recruiting a diverse faculty community. We welcome all qualified applicants to apply, including women, minorities, individuals with disabilities, and veterans.

-----  
From: <noreply@iopscience.org>

Date: December 2, 2014

Subject: Inverse Problems, Volume 30, Number 12, December 2014

Inverse Problems	December 2014	Volume 30, Number 12
Table of Contents		

Seismic tomography is locally ill-posed  
Andreas Kirsch, and Andreas Rieder

Polarization tomography for residual stress measurements in a hexagonal single crystal  
A Puro, and D Karov

Minimization of multi-penalty functionals by alternating iterative thresholding and optimal parameter choices  
Valeriya Naumova, and Steffen Peter

Reconstruction of constitutive parameters in isotropic linear elasticity from noisy full-field measurements  
Guillaume Bal, Cédric Bellis, Sébastien Imperiale, and François Monard

Lipschitz continuous dependence of piecewise constant Lamé coefficients from boundary data: the case of non-flat interfaces  
Elena Beretta, Elisa Francini, Antonino Morassi, Edi Rosset, and Sergio Vessella

Time reversal in photoacoustic tomography and levitation in a cavity  
V P Palamodov

Nonstationary analogue black holes

Gregory Eskin

Exact determination of the volume of an inclusion in a body having constant shear modulus

Andrew E Thaler, and Graeme W Milton

Virtual resistive network and conductivity reconstruction with Faraday's law

Min Gi Lee, Min-Su Ko, and Yong-Jung Kim

A projection-based approach to diffraction tomography on curved boundaries

Gregory T Clement

A model reduction approach to numerical inversion for a parabolic partial differential equation

Liliana Borcea, Vladimir Druskin, Alexander V Mamonov, and Mikhail Zaslavsky

Forward-backward splitting method for quantitative photoacoustic tomography

Xue Zhang, Weifeng Zhou, Xiaoqun Zhang, and Hao Gao

Inverse problem for a one-dimensional dynamical Dirac system (BC-method)

M I Belishev, and V S Mikhailov

Regularized solution of a nonlinear problem in electromagnetic sounding

Gian Piero Deidda, Caterina Fenu, and Giuseppe Rodriguez

The soft x-ray transform

Joanna Klukowska, Gabor T Herman, Joaquin Otón, Roberto Marabini, and José-María Carazo

-----

From: <noreply@degruyter.com>

Date: December 2, 2014

Subject: Table of Contents, 'Journal of Inverse and Ill-posed Problems'

Journal of Inverse and Ill-posed Problems      December 2014      Volume 22, Issue 6  
Table of Contents

An inverse problem for the recovery of the vascularization of a tumor

Colin, Thierry / Iollo, Angelo / Lagaert, Jean-Baptiste / Saut, Olivier

Estimating the ice thickness of mountain glaciers with a shape optimization algorithm using surface topography and mass-balance

Michel, Laurent / Picasso, Marco / Farinotti, Daniel / Bauder, Andreas / Funk, Martin / Blatter, Heinz

On the determination of the principal coefficient from boundary measurements in a KdV equation

Baudouin, Lucie / Cerpa, Eduardo / Crépeau, Emmanuelle / Mercado, Alberto

Reconstructing conductivities with boundary corrected D-bar method

Siltanen, Samuli / Tamminen, Janne P.

Regularization of linear inverse problems with total generalized variation

Bredies, Kristian / Holler, Martin

----- end -----