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IPNet Digest   Volume 32, Number 1   21 January 2025

Today's Editor: Matti Lassas   University of Helsinki

Today's Topics:

Submissions for IPNet Digest: submit-ipnet@helsinki.fi

Information about IPNet: https://www.helsinki.fi/en/researchgroups/inverse-problems/ipnet-inverse-problems-network

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From: Antonio Leitao acgleitao@gmail.com
Date: Friday, 20 December 2024
Subject: AIP 2025 Conference - 2nd Call for Minisymposium Proposals

The next AIP Conference will be held at FGV EMAp, Rio de Janeiro, Brazil from July 28 to August 1, 2025.

For detailed information see https://eventos.fgv.br/aip2025/

We invite proposals for Mini symposia containing the following information:

- Title (up to 100 characters)
- Names and affiliations of organizers
- Brief description of the topic (about half a page)
- List of speakers including affiliations and links to webpages if available

A minisymposium may have either 4, 8 or 12 speakers, possibly including the organizers. Each talk is allocated 30 minutes, which includes time for discussion. Speakers should be contacted in advance. Please keep in mind that every participant may give at most two talks, preferably only one.

Minisymposium proposals should be submitted via email to aip2025@fgv.br with the subject line: Minisymposium Proposal

There is also an option to submit posters (a limited number of posters will be showcased during a single 90-minute poster section). Poster proposals (including title, abstract, name, affiliation and link to webpage) should be submitted via email to aip2025@fgv.br with the subject line: Poster Proposal

The submission deadline is January 31, 2025.

Contact: aip2025@fgv.br

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From: Hok Shing Wong hsw43@bath.ac.uk

Date: Wednesday, 8 January, 2025
Subject: Inverse Problems and Deep Learning, University of Bath, UK, 7-9 July 2025

Dear all,

We are pleased to announce that we are now inviting submissions for short talks and posters for the Maths4DL conference on Inverse Problems and Deep Learning. The conference is taking place at the University of Bath, UK, from 7-9 July 2025.

Plenary speakers are:

- Youssef Marzouk, MIT AeroAstro
- Sebastian Neumayer, TU Chemnitz
- Ozan Öktem, KTH Royal Institute of Technology
- Audrey Repetti, Heriot Watt University
- Gabriele Steidl, Technische Universität Berlin
- Silvia Villa, Università degli Studi di Genova

You are invited to submit a proposal for a talk or poster that fits within the theme of the conference. Topics of interest are anything on the intersection of inverse problems and deep learning, such as learned regularisation schemes, generative priors, plug-and-play methods, unrolled networks and neural operators for solving PDEs. Additionally, we are interested in uncertainty quantification for such reconstruction methods, for instance via Bayesian methods. Applications include problems from medical and non-medical image and signal processing, physics and engineering.
Please visit our website to find out more about the conference and to access the submission form:
https://maths4dl.ac.uk/newsevents/maths4dl-conference-on-inverse-problems-and-deep-learning.
 The deadline for contributions is **Friday 28 February 2025**.
Best wishes
Hok Shing
(on behalf of the Maths4DL Conference Team: Alexander Denker, Matthias Ehrhardt, Johannes Hertrich, Hok Shing Wong

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From: Matthias Ehrhardt me549@bath.ac.uk
Date: Monday, 20 January , 2025
Subject: Computational Techniques and Imaging Innovations in the Age of AI, UCL, 1-2 April 2025

We are pleased to announce the workshop on "Computational Techniques and Imaging Innovations in the Age of AI" held at UCL on 1-2 April 2025. The workshop aims to explore the intersection of inverse problems and machine learning, highlighting the critical interplay between classical approaches and modern AI techniques. Topics will include linear and non-linear imaging, Bayesian inversion, mathematics of deep learning, data assimilation, and generative models. This integration is crucial for developing fast, accurate, and reliable solutions to contemporary challenges in theory and applications.

This workshop also celebrates the 65th birthday of Prof. Simon Arridge, a leading figure in the international inverse problems community. His pioneering efforts in linking inverse problems with machine learning make this event a fitting tribute to his contributions and ongoing influence in the field.

Confirmed speakers are:
- David Barber
- Teresa Correia
- Ben Cox
- Cosimo D'Andrea
- Marc Deisenroth

- [Lior Horesh](#)
- [Bangti Jin](#)
- [Bill Lionheart](#)
- [Peter Maaß](#)
- [Ronny Ramlau](#)
- [Carola-Bibiane Schönlieb](#)
- [John Schotland](#)
- [Tanja Tarvainen](#)
- [Kris Thielemans](#)

While the workshop is free to attend, it is mandatory to register in advance to help us plan for the event. We invite early-career researchers to submit an abstract for a poster. Please visit https://ctiai.github.io/ to find out more about the conference and registration.

Best wishes
Matthias
(on behalf of the organisers: Martin Benning, Marta Betcke, Matthias Ehrhardt, Zeljko Kereta)

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Matthias J Ehrhardt, PhD (he/him)
Reader, Department of Mathematical Sciences
University of Bath, UK
https://mehrhardt.github.io

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From: Florian Faucher florian.faucher@inria.fr
Date: Monday, 23 December, 2024
Subject: Post-doctoral and Ph.D. positions in Numerical Inverse Problems

Post-doctoral and Ph.D. positions in Numerical Inverse Problems.

The INCORWAVE project, funded by an ERC Starting Grant, invites applications for Postdoctoral and Ph.D. positions in computational inverse problems. These positions are part of the research team INRIA Makutu, at the University of Pau, located in the southwest of France.

Our project focuses on quantitative inverse methodologies in the context of passive imaging, with applications to helioseismology (solar imaging), and Earth seismology. The research encompasses both mathematical and numerical aspects of inversion. It includes convergence and stability analysis, which are essential for accurate reconstructions. In addition, the project aims to develop advanced quantitative imaging techniques for passive imaging. In particular for anisotropic media, where the multiple physical parameters of the mathematical model must be reconstructed. We are also investigating the integration of advanced regularization methods and data science approaches to enhance the performance of inversion algorithms.

Post-doctoral positions are two-years contracts renewable up to five years; Ph.D. positions are three-year contracts. Starting date is flexible.

More information at https://ffaucher.gitlab.io/erc-incorwave/categories/position/
To apply, please send your CV and cover letter to Florian Faucher at florian.faucher@inria.fr

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From: Luca Calatroni Luca.calatroni@unige.it
Date: Friday, 10 January, 2025
Subject: Post-doc position at MaLGa, Genoa - imaging inverse problems, learning and optimization

Dear colleagues,

Applications are open for one post-doctoral position within the Computational Imaging and Learning (CIL) unit at the Machine Learning Genoa Center (MaLGa), Department of Computer Science.

Self-supervised learning for non-linear image reconstruction problems in fluorescence microscopy: The project focuses on developing innovative reconstruction methods for partially unknown forward models with limited training data, with applications to fluorescence microscopy imaging. The work will be conducted in collaboration with the Italian Institute of Technology (IIT).

The position is funded by the ERC Starting Grant project MALIN.

Position Details:

- Start Date: May/June 2025 (flexible)
- Duration: 2 years (renewable)
- Location: Genova, Italy.

Interested candidates should apply by filling in the following application form before February 10, 2025.

For more details about the position and project, please contact Luca Calatroni (luca.calatroni@unige.it) directly.

All the best,
Luca Calatroni
Luca Calatroni

Associate Professor, University of Genoa, IT
PI at Machine Learning Genoa Center (MaLGa)
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From: Martin Holler martin.holler@uni-graz.at
Date: Friday, 17 January, 2025
Subject: Three-year postdoc position at the University of Graz

The University of Graz offers a

*** 3-year faculty position in the research group "Applied Mathematics and Machine Learning" ***

The research focus of this position is on mathematical foundations and interdisciplinary applications of machine learning and inverse problems.

Benefits of the position include:

- Close integration into a well-established, interdisciplinary collaborative network of several research groups in Graz working in the areas of inverse problems, machine learning, optimization and medical imaging

- High degree of autonomy; individual travel budget, possibility to conduct independent research, to apply for third-party funding, to teach courses, and to co-supervise PhD and Master students

- Part of an active research group (two PostDocs and three PhD students by the end of 2025) working on both mathematical foundations and concrete applications with interdisciplinary cooperation partners, e.g., from biomedical imaging or emergency care medicine

More details can be found at
https://jobs.uni-graz.at/en/jobs/a0451eb9-518e-d9a7-f5b7-6756e9d72c44

For more information, please contact Martin holler
(imsc.uni-graz.at/hollerm)

Application Deadline: February 13, 2025

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Martin Holler
IDea_Lab, University of Graz
Leechgasse 34, A-8010 Graz
Phone:+43 316 380 5156
Web: imsc.uni-graz.at/hollerm
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From: Lothar Reichel reichel@math.kent.edu
Date: Monday, 6 January, 2025
Subject: Contents, Electron. Trans. Numer. Anal., vol. 60, 2024

Contents, Electronic Transactions on Numerical Analysis (ETNA), vol. 60, 2024:
Note: ETNA accepts software publications as well as historical papers.

H. Hakula, M. M. S. Nasser, and M. Vuorinen, Mobile disks in hyperbolic space and minimization of conformal capacity, pp. 1-19

J. Haug and R. Treinen, Multi-scale spectral methods for bounded radially symmetric capillary surfaces, pp. 20-39

E. Carson and I. Dauzickaite, The stability of split-preconditioned FGMRES in four precisions, pp. 40-58

C. M. Cuesta, F. de la Hoz, and I. Girona, Numerical computation of the half Laplacian by means of a fast convolution algorithm, pp. 59-98

T. Linss, N. Kopteva, G. Radojev, and M. Ossadnik, A review of maximum-norm a posteriori error bounds for time-semidiscretisations of parabolic equations, pp. 99-122

M. Errachid, A. Essanhaji, and A. Messaoudi, Dimensional reduction for multivariate Lagrange polynomial interpolation problems, pp. 123-135

B. Rester, A. Vasilyeva, and J. V. Lambers, Convergence analysis of a Krylov subspace spectral method for the 1D wave equation in an inhomogeneous medium, pp. 136-168

L. Gouarin and N. Spillane, Fully algebraic domain decomposition preconditioners with adaptive spectral bounds, pp. 169-196

J. M. Tabeart and J. W. Pearson, Saddle point preconditioners for weak-constraint 4D-Var, pp. 197-220

K. Kan, J. G. Nagy, and L. Ruthotto, LSEMINK: a modified Newton-Krylov method for log-sum-exp minimization, pp. 618-635

A. Hadjidimos, X. Li, and R. S. Varga, Application of the Schur-Cohn Theorem to the precise convergence domain for a p-cyclic SOR iteration matrix, pp. A1-A14
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From: Charley Denton cdenton@aimsciences.org
Date: Thursday, 19 December, 2024
Subject: IPNet Digest table of contents submission (IPI 19-1)

IPI February 2025 Vol. 19, No. 1 articles:

Charley Denton
Communications Specialist
American Institute of Mathematical Sciences
Email: cdenton@aimsciences.org
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From: Charley Denton cdenton@aimsciences.org
Date: Thursday, 19 December, 2024

IPI April 2025 Vol. 19, No. 2 articles:

1. [Convexification numerical method for a coefficient inverse problem for the system of nonlinear parabolic equations governing mean field games](#)
Michael V. Klibanov, Jingzhi Li and Zhipeng Yang

2. [A variational model to remove multiplicative noise based on SAR image feature preservation](#)
Yamei Zhou, Zhichang Guo, Yao Li, Wenjuan Yao and Boying Wu

3. [Quantum inverse scattering for time-decaying harmonic oscillators](#)
Atsuhide Ishida

4. [Reciprocal transformation based convex variational image restoration with multiplicative noise](#)
Yu Gan, Zhifang Liu and Huibin Chang

5. [Variational image dehazing with a novel underwater dark channel prior](#)
Zhengmeng Jin, Yue Ma, Lihua Min and Minling Zheng

6. [Distribution of resonances and inverse resonance problems with the mixed given data for the massless Dirac operator on the real line](#)
Ting-Ting Zuo and Xiao-Chuan Xu

7. [Texture Edge detection by Patch consensus (TEP)](#)
Guangyu Cui and Sung Ha Kang

8. [Numerical method for inverse scattering by random penetrable periodic structures](#)
Yi Wang, Junliang Lv and Shuxin Li

9. [Fractional optimal control for deep convolutional neural networks exploring ODE-based solutions for image denoising](#)
Fakhr-eddine Limami, Aissam Hadri, Amine Laghrib and Lekbir Afraites

Best regards,
Charley Denton
Communications Specialist
American Institute of Mathematical Sciences
Email: cdenton@aimsciences.org
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Today's Editor: Matti Lassas   University of Helsinki

Today's Topics:
1. Postdoc opportunity at UCL in Maths for Deep Learning
2. Inverse Problems Symposium June 1-3, 2025 at Michigan State University
3. Online training Core Imaging Library, March 2025
4. AIP 2025 Conference - Updated Deadline for Minisymposium Proposals

Submissions for IPNet Digest: submit-ipnet@helsinki.fi

Information about IPNet: https://www.helsinki.fi/en/researchgroups/inverse-problems/ipnet-inverse-problems-network

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From: Simon Arridge <s.arridge@ucl.ac.uk>
Date: Thursday, 13 February 2025
Subject: Post doc opportunity at UCL in Maths for Deep Learning

We have an opportunity for a 18-month postdoc position at UCL on our programme grant "Maths for Deep Learning" https://maths4dl.ac.uk/

For more information and to apply, please visit the UCL jobs site: Job details: Research Fellow in the Mathematics of Deep Learning

Informal enquires can be made to Simon Arridge <s.arridge@ucl.ac.uk>

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From: Kirk Dolan, dolank@msu.edu
Date: Thursday, 23 January, 2025
Subject: Inverse Problems Symposium June 1-3, 2025 at Michigan State University

Inverse Problems Symposium 2025 registration and abstract submission are open!

The IPS 2025 is a continuation of 31 successful US and international symposia since 1991. The purpose of this conference is to bring together researchers and practitioners in inverse problems to exchange ideas, methods, and latest developments.

Early Registration (available until April 13th): $375
Regular Registration (begins April 14th): $425
Student Early Registration (available until April 13th): $150
Student Regular Registration (begins April 14th): $200

Sunday, June 1, is a tutorial on Machine Learning. Monday, June 2, will be oral presentations, Student Poster Competition, and evening banquet. Tuesday will be oral presentations finishing after lunch.
 https://www.canr.msu.edu/inverse-problems/

Kirk Dolan, Ph.D.
Professor

Department of Food Science & Human Nutrition
Department of Biosystems & Agricultural Engineering
469 Wilson Road
135 Trout Food Science Building
Michigan State University
East Lansing, MI 48824
Phone: 517-353-3333
dolank@msu.edu

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From: Jakob Sauer Jørgensen, DTU, jakj@dtu.dk
Date: Tuesday, 28 January 2025
Subject: Online training Core Imaging Library, March 2025

We're hosting 3 online training sessions, where you can dive into the Core Imaging Library (CIL) - a python package for tomographic imaging and other inverse problems. Sessions are hands-on using Jupyter notebooks and Python on our cloud platform, no installation needed.

Day 1 - 25 March, 13-17 GMT: Getting started with CIL
Day 2 - 26 March, 13-17 GMT: Iterative reconstruction with CIL
Day 3 - 27 March, 13-17 GMT: Advanced topics in CIL

This training is ideal for students and researchers working with CT data or inverse problems. Whether you're conducting research, building algorithms, or analysing imaging data, this is your chance to enhance your skills.

You're welcome to join one or all of the sessions, but if you're new to CIL or CT, we recommend kicking off with Day 1 to get familiar with the basics. If you have been to one of our CIL trainings before, Day 3 has some new notebooks and content to check out!

There are limited places available, so fill in the registration form as soon as possible!

More details and sign-up (free of charge but mandatory) at https://ccpi.ac.uk/events/cil-online-training-march-2025/

Post event (and in general) support is available on our Discord: https://discord.gg/kmBcU2kebB

Hope to see you there, and feel free to forward the invitation,

Jakob Sauer Jørgensen, DTU (jakj@dtu.dk)
 - on behalf of the CIL team

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From: Antonio Leitao acgleitao@gmail.com
Date: Monday, 3 February, 2025
Subject: AIP 2025 Conference - Updated Deadline for Minisymposium Proposals

We are pleased to announce that the submission deadline has been extended to February 14, 2025. The next AIP Conference will be held at FGV EMAp, Rio de Janeiro, Brazil, from July 28 to August 1, 2025.
For detailed information, please visit: https://eventos.fgv.br/aip2025/

We invite proposals for Minisymposia containing the following information:
- Title (up to 100 characters)
- Names and affiliations of organizers
- Brief description of the topic (about half a page)
- List of speakers, including affiliations and links to webpages if available

A Minisymposium may have either 4, 8, or 12 speakers, possibly including the organizers. Each talk is allocated 30 minutes, which includes time for discussion.
Please ensure that speakers are contacted in advance.
Kindly note that each participant may give at most two talks, preferably only one.
Minisymposium proposals should be submitted via email to aip2025@fgv.br with the subject line: Minisymposium Proposal.

We look forward to receiving your proposals. For any questions or further details, please contact us at aip2025@fgv.br.

Kind regards,
AIP 2025 Organizing Committee

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IPNet Digest   Volume 32, Number 3   21 March 2025

Today's Editor: Matti Lassas   University of Helsinki

Today's Topics:
1. 8 PhD and 7 Postdoc Positions in a New Special Research Area
2. Associate professor (non-tenure track) at LUT University - DL 3.4.2025
3. Professor / Associate Professor (tenure track) position in Scientific Computing: UEF
4. Helsinki Speech Challenge 2024 AMMC special issue
5. Summer school 2025: University of Jyväskylä
6. table of contents
7. table of contents, AIMS

Submissions for IPNet Digest: submit-ipnet@helsinki.fi

Information about IPNet: https://www.helsinki.fi/en/researchgroups/inverse-problems/ipnet-inverse-problems-network

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From: Martin Holler martin.holler@uni-graz.at
Date: Friday, 07 March, 2025
Subject: 8 PhD and 7 Postdoc Positions in a New Special Research Area

Dear Colleagues,

In our new special research area (SFB) on "Mathematics of Reconstruction in Dynamical and Active Models", teams at the University of Graz, TU Graz, TU Vienna, and University of Klagenfurt are collaborating on a comprehensive, joint, interdisciplinary research effort to advance the mathematics of reconstruction for dynamical and active model, in particular in view of applications in magnetic resonance imaging (MRI).
Towards this aim, we will develop a comprehensive mathematical and computational framework for quantitative imaging, including physical modeling and optimization of the data acquisition process, identification of parameters, variational modeling, and generative machine learning methods; see
https://imsc.uni-graz.at/mr-dynamo

for further details. As part of this research effort, we invite applications for in total 8 PhD and 7 PostDoc positions within our research area, see
https://imsc.uni-graz.at/mr-dynamo/jobs
To receive full consideration, applications should be submitted before March 21, 2025, but the call will remain open until all positions are filled.

Best regards,
Martin Holler on behalf of the SFB
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Martin Holler
IDea_Lab, University of Graz
Leechgasse 34, A-8010 Graz
Phone:+43 316 380 1645
Web: imsc.uni-graz.at/hollerm

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From: Toni Karvonen Toni.Karvonen@lut.fi

Date: Thursday, 13 March 2025
Subject: Associate professor (non-tenure track) at LUT University - DL 3.4.2025

The [Department of Computational Engineering](#) at LUT University in Lappeenranta, Finland, is seeking an associate professor (non-tenure track) to develop education in, for example, mathematics within our computational science and artificial intelligence degree programmes.

The main duties will include:
- developing education at the national and international levels and coordinating administrative tasks in the degree programmes;
- teaching basic and intermediate courses; and
- contributing to the department's research activities.

The department hosts the Flagship of Advanced Mathematics for Sensing, Imaging and Modelling (FAME), funded by the Research Council of Finland and a research unit on [Applied Mathematics](#). Current research areas of the department include inverse problems, numerical analysis, computational statistics, computer vision and pattern recognition.

The position is part of LUT University's non-tenure track. The employment relationship is fixed-term for four years with a six-month trial period. At the end of the four-year term, the position may be made permanent after a successful promotion review.

The deadline for applications is **3 April 2025**. More information and instructions for applying: [Associate professor (non-tenure track)](#)

For further information, please contact Lassi Roininen (lassi.roininen@lut.fi) or Toni Karvonen (toni.karvonen@lut.fi)

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From: Tanja Tarvainen tanja.tarvainen@uef.fi
Date: Friday, 21 March 2025
Subject: Professor / Associate Professor (tenure track) position in Scientific Computing

The University of Eastern Finland is inviting applications for the post of Professor/Associate Professor (Tenure Track) of Artificial Intelligence in Scientific Computing at the Department of Technical Physics of the Faculty of Science, Forestry and Technology on the Kuopio campus. The position will be filled from 1 September 2025 (or as agreed).

Please find more information and submit your application: [Professor/Associate Professor (Tenure Track), Artificial Intelligence in Scientific Computing](#)

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From: Hjørdis Schlüter hjordis.schluter@helsinki.fi
Date: Friday, 14 March 2025
Subject: Helsinki Speech Challenge 2024 AMMC special issue

Dear all,

The journal Applied Mathematics for Modern Challenges (AMMC) is running a special issue on the Helsinki Speech Challenge 2024. The special issue is open for submissions from anyone and welcomes papers detailing reconstruction methods for the datasethttps://blogs.helsinki.fi/helsinki-speech-challenge/data/.

The submission deadline for this is August 15, 2025, and the aim is to publish the special issue in the December volume of AMMC. Submission should be done via the journal's homepage https://www.aimsciences.org/AMMC/ using EditFlow.

For reference, the link below is a previous special issue on the Kuopio Tomography Challenge (KTC2023):https://www.aimsciences.org/AMMC/article/2024/2/2.

Please let us know if you have questions regarding the special issue.

With kindest regards,
Kim Knudsen and Hjørdis Schlüter (guest editors of the special issue)
………………………………………………………
From: Janne Nurminen janne.s.nurminen@jyu.fi
Date: Thursday, 20 March, 2025
Subject: Jyväskylä Summer school 2025

Dear colleague,

Greetings from the University of Jyväskylä!

The application period for the Jyväskylä Summer School is now open! ☀️
Read more & apply not later than 30 April here: www.jyu.fi/jss
The 34th Jyväskylä Summer School will take place on **4-15 August 2025 at the University of Jyväskylä**. One of the largest and oldest summer schools in Finland is organised by the Faculty of Mathematics and Science and the Faculty of Information Technology. Jyväskylä Summer School welcomes students from all over the world and offers a chance to take part in courses and get international experience.

This year's Summer School courses fall mostly under the themes of *Quantum Science and Probability Theory* and *Advanced Approaches for Secure and Intelligent Technologies*. Courses are offered in the following subjects:
- Chemistry
- Cognitive Science
- Computational Sciences
- Cyber Security
- **Inverse Problems**
- Mathematics
- Nanoscience
- Physics
- Biological and Environmental Sciences

All courses are taught in English by distinguished researchers from different parts of the world. **Participation in all Summer School courses is free of charge.**

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From: noreply@iopscience.org
Date: Thursday, 13 March 2025
Subject: Inverse Problems, Volume 41, Number 3, March 2025

Papers

A constructible conductivity cloak via homogenisation*
Yves Capdeboscq and Eleanor Gemida

Convergence of Poisson point processes and of optimal transport regularization with application in variational analysis of PET reconstruction
Marco Mauritz and Benedikt Wirth

Imaging sound-soft targets in waveguides using the topological derivative
Umid Karimov, Peter Monk and Virginia Selgas

Microlocal properties of the Radon transform on V-lines: a framework to reduce artifacts due to intrinsic missing data in linear Compton cameras
Mariel Rosenblatt, Marcela Morvidone and Javier Cebeiro

Half-time range description for the free space wave operator and the spherical means transform
P Kuchment and L Kunyansky

Spatially-distributed parameter identification by physics-informed neural networks illustrated on the 2D shallow-water equations
Hugo Boulenc, Robin Bouclier, Pierre-André Garambois and Jérôme Monnier

Solving the acousto-electric tomography by the adaptive Nesterov method of Kaczmarz type
Kai Zhu and Min Zhong

A three-stage method for reconstructing multiple coefficients in coupled photoacoustic and diffuse optical imaging
Yinxi Pan, Kui Ren and Shanyin

Stability analysis of inverse problems for coupled magnetic Schrödinger equations
Mohamed Hamrouni, Moez Khenissi and Éric Soccorsi

Iterative regularization in classification via hinge loss diagonal descent
Vassilis Apidopoulos, Tomaso Poggio, Lorenzo Rosasco and Silvia Villa

On projective stochastic-gradient type methods for solving large scale systems of nonlinear ill-posed equations: applications to machine learning
J C Rabelo, Y Saporito, A Leitão and A L Madureira

Randomized block coordinate descent method for linear ill-posed problems
Qinian Jin and Duo Liu

Direct sampling for recovering a clamped cavity from the biharmonic far-field data
Isaac Harris, Heejin Lee and Peijun Li

PALADIN: a novel plug-and-play 3D CS-MRI reconstruction method
Jia-Mian Wu, Shi-Bai Yin, Tai-Xiang Jiang, Gui-Song Liu and Xi-Le Zhao

Simultaneous estimation of electrical conductivity and permittivity in quantitative thermoacoustic tomography
Teemu Sahlström, Timo Lähivaara and Tanja Tarvainen

Issue 3 - Volume 41 - Inverse Problems - IOPscience

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From: Charley Denton cdenton@aimsciences.org
Date: Friday 14 March 2025
Subject: IPNet Digest table of contents submission (IPI 19-3)

IPI June 2025 Vol. 19, No. 3 articles:

1. [Linearization-based direct reconstruction for EIT using triangular Zernike decompositions](#)
Antti Autio, Henrik Garde, Markus Hirvensalo and Nuutti Hyvönen
2. [Minimizing quotient regularization model](#)
Chao Wang, Jean-Francois Aujol, Guy Gilboa and Yifei Lou
3. [Uniqueness and numerical resolution via iterated sensitivity equation of an inverse electromagnetic coefficient problem with partial boundary data](#)
Jérémy Heleine
4. [A fundamental sequences method for an inverse boundary value problem for the heat equation in double-connected domains](#)
Ihor Borachok and Roman Chapko
5. [Dynamic MRI reconstruction via weighted nuclear norm and total variation regularization](#)
Bao-Li Shi, Li-Wen Fu, Meng Yuan, Hao-Hui Zhu and Zhi-Feng Pang
6. [Subspace-based coupled tensor decomposition for hyperspectral blind fusion](#)
Kunjing Yang, Minru Bai, Renwei Dian and Ting Lu
7. [Sampling strategies in Bayesian inversion: A study of RTO and Langevin methods](#)
Rémi Laumont, Yiqiu Dong and Martin Skovgaard Andersen
8. [Diffusion posterior sampling for magnetic resonance imaging](#)
Ji Li and Chao Wang

[Inverse Problems and Imaging](#)

Best regards,
Charley Denton
Communications Specialist
American Institute of Mathematical Sciences
Email: cdenton@aimsciences.org

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