IPNet Digest Volume 21, Number 10 November 1, 2014

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

Today's Topics:
    School: New Perspectives in Markov Chain Monte Carlo
    Junior Professorship: 4D Microscope Modeling, Image Analysis and Data Processing
    New Book: Probabilistic Information Transfer
    Table of Contents: Inverse Problems
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Submissions for IPNet Digest:
    Mail to ipnet-digest@math.msu.edu

Information about IPNet:
    http://www.math.msu.edu/ipnet

Subject: Announcement of School
From: Maria Paz Calvo <maripaz@mac.uva.es>
Date: October 9, 2014

School: New Perspectives in Markov Chain Monte Carlo
June 8-12, 2015
Univerisity of Valladolid, Spain

Markov Chain Monte Carlo (MCMC) methods are undoubtedly among the most important algorithms in science. The school New Perspectives in Markov Chain Monte Carlo is aimed at providing a survey of several recent developments in MCMC. There will be three courses of lectures taught by leading researchers; additionally, some participants will be given the opportunity of presenting their own results.

The school is addressed to mathematicians, statisticians, and scientists interested in MCMC. PhD students and postdoctoral researchers attending the school may be financially supported by the organization.

Further information can be founded at http://wmatem.eis.uva.es/npmcmc

Submitted by: Mari Paz Calvo, Professor of Applied Mathematics
Universidad de Valladolid, Spain

Subject: Job opening- Junior Professor
From: Alfio Borzi <alfio.borzi@mathematik.uni-wuerzburg.de>
Date: October 19, 2014

Junior Professorship for

Mathematical 4D Microscope Modeling, Image Analysis and Data Processing

Institut for Mathematics
University of Würzburg
Germany

Official Announcement (in English and German)
http://www.mathematik.uni-wuerzburg.de/pdf/W1JuniorMathematik_e_1409.pdf
http://www.mathematik.uni-wuerzburg.de/pdf/W1JuniorMathematik_1409.pdf

Application should be sent by December 1st, 2014.

Thank you very much!
Best regards

Alfio Borzi

Subject: New book: Probabilistic Information Transfer
From: Société de Calcul Mathématique SA <scm.sa.2014@orange.fr>
Date: October 6, 2014

Dear Sir, dear Madam, dear Colleagues,

We are glad to introduce the new book by Olga Zeydina and Bernard Beauzamy:

Probabilistic Information Transfer

A book you will be proud to have for yourself and to show to your friends!

ISBN: 978-2-9521458-6-2, ISSN : 1767-1175. Size 15,3 x 24 cm. Hardcover, 208 pages.

In real life situations, one rarely has desirably detailed information.
It is sometimes incomplete, sometimes corrupted, or with missing or erroneous data.
Conversely, some pieces of information do exist. Therefore, there is a natural wish: to try to use the existing information in order to reconstruct some missing items.
However, this should be done with two constraints:
First, one should not add any artificial information, such as model assumptions (for instance, that some growth is linear, or that some law is gaussian);
Second, the result should be of probabilistic nature: we do not want a precise value for the reconstruction, but a probability law, which allows estimation of the uncertainties.

This is precisely the topic of this book.
We show how to "propagate" the information, from a place where it exists to a place where we want to use it; this propagation deteriorates with the distance, somewhat as a gravitational field decreases with the distance.
The book is organized in three parts: the first part presents the basic rules,

accessible with no specific expertise in probabilities; the second presents the applications to real world problems, and the third part gives the theory.

This is a situation not so common these days: a new mathematical theory, developed by us, in order to meet a need initially expressed by the industry (namely Framatome, 2003).
Existing applications are now numerous: classifying industrial objects (Air Liquide), evaluating a pollution (Total), estimating water quality in rivers (European Environment Agency), controlling the safety in a nuclear reactor (Institut de Radioprotection et de Surete Nucleaire), and so on.

In order to learn more about the book and see an order form, please see:
http://scmsa.eu/archives/SCM_PIT_order.htm

In order to see the readers' comments, please see:
http://scmsa.eu/archives/PIT_readers_comments.pdf

The book can be bought on line.

The complete list of the books we publish can be seen here:
http://scmsa.eu/SCM_books.htm

In order to discover the research program "Robust Mathematical Modeling" (more than 70 institutions worldwide), please visit:
http://scmsa.eu/robust.htm

Thank you for your interest

Prof. Bernard Beauzamy
Chairman and CEO, Societe de Calcul Mathematique SA
111 Faubourg St Honoré 75008 Paris - France

Subject: Inverse Problems, Volume 30, Number 10, October 2014
From: <noreply@iopscience.org>
Date: September 30, 2014

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Subject: Table of Contents, 'Journal of Inverse and Ill-posed Problems'
From: <noreply@degruyter.com
Date: October 1, 2014

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