# **EURANDOM Newsletter**

Volume 1, Issue 0 -- October, 1999

#### Introduction

EURANDOM is the newly founded European research institute for the study of random phenomena. The area of its research consists of the mathematical disciplines of probability theory, mathematical statistics and the non-deterministic part of operations research. Apart from conducting purely scientific research in this field, EURANDOM also has a mission to contribute to applications of stochastics in the physical and life sciences, in business and industry and in the society at large.

EURANDOM started with the financial support of the Ministry of Education of The Netherlands, The Netherlands Organization for Scientific Research (NWO) and Eindhoven University of Technology.

At any time EURANDOM will carry out a limited number of research programmes. Each programme is reviewed periodically by the international Scientific Council of EURANDOM and will be concluded when a more promising research direction presents itself. EURANDOM wishes to employ talented young people. To retain the necessary flexibility, the scientific staff consists mainly of post-docs appointed for two years with a possible extension of at most another two years. A smaller number of graduate students with three or four-year appointments complete the full-time research staff.

The period from the formal opening (February 1998) until September 1998 was largely spent in finalizing the description of the research programme, recruiting the first scientific staff members and setting up the infrastructure of the institute. By now about 25 post doc- and PhD researchers are involved.

Through this Newsletter we intend to keep you informed about EURANDOM activities and other news on a more or less regular basis. As a start, we plan to send you one Newsletter every two months. Understandably, we have much to report in this first issue. To keep it at a reasonable length we will occasionally refer the reader to our website where the latest developments at EURANDOM may always be found.

# News

The Board of the EURANDOM foundation has recently changed. As from September 27, 1999 dr. J. Borgman stepped down in favour of prof.dr.ir. P.J. Zandbergen.

For an overview of people working at Eurandom at this moment and of visitors of EURANDOM now and in the past, please consult: http://www.eurandom.tue.nl/people.html

# New postdocs (in the coming months):

October 1.

Wim Schoutens, Katholieke Universiteit Leuven, Belgium \ -- \ reseach programme Financial \ Stochastics

November 1.

- -Sabine Schlegel, University of Ulm, Germany \-- \ research programme \ Stochastic Networks
- -P. Gruenwald, Stanford University, US \ \ research programme Complex Statistical Models

#### (Planned) visitors:

October 4 - 15

Wolfgang Koenig, TU Berlin - Germany

Achim Klenke, Universitaet Erlangen - Germany

Remco van de Hofstad, TU Delft - The Netherlands

---these three worked together, finished a joint project on a certain probabilistic model for a two dimensional polymer and discussed ideas for a new research project (resarch programme: ISS)

October 5 - 15

Peter Bickel, Berkeley - US, chair of the Scientific Council of EURANDOM

----Peter Bickel will discuss progress of all scientific programmes and will present several lectures

October 7 - 10

Tobias Ryden, Lund - Sweden

---is going to work with Peter Bickel and will give a lecture in the area of complex statistical models

October 7 - 16

Georg Pflug, Universitaet von Wien - Austria

---purpose: advisement on both programmems: Stochastic Netwoks and Financial Sochastics and will present a lecture

October, 31 - November 2 and November 14-17

Professor Y. Suhov (Cambridge)

---purpose: presenting a lecture, visit a workshop and work together with the SN group

November 6 - December, 12

Professor G. Pistone

---purpose: working together with the AofS group; will present a lecture

December 1, 1999 - March / April 2000

Professor A. Borovkov

---purpose: advising and working together with the SN group

December 4 - 14

Shanti Gupta, Purdue - US

---intends to participate in the institutes research seminar activities and give some presentations.

# Seminars, lectures, workshops

# OCTOBER 1999

October, 7

Tobias Ryden, Sweden

Title: Bayesian inference in hidden Markov models through reversible jump Markov chain Monte

Carlo

October, 11

Joint SOR/EURANDOM \QTR{bf}{Seminar}

Georg Pflug, Wien,

Title: Stochastic Optimization, sensitivity and convergence

October, 12

EURANDOM\ Complex Statistical Seminar

Geurt Jongbloed (Vrije Universiteit, Amsterdam)

Title: Nonparametric estimation in a thick slice version of Wicksell's problem

October 13 and 14

Peter Bickel, Berkely, USA

Titles: Testing semiparametric hypothesis and Selecting m in the m out of n bootstrap

October, 14

EURANDOM\ Postdoc \QTR{bf}{Seminar} (biweekly)

Stanislav Volkov, EURANDOM

Title: Reinforced random walks for everybody

October 15

EURANDOM Probability\QTR{bf}{\ Seminar (\)monthly)

Pablo A. Ferrari (Universidade de Sao Paulo): Loss network representation of Peierls contours.

Application to perfect simulation of low temperature ising models

F. Takens (University of Groningen): Generalized entropies

October, 27

Joint TUE/EURANDOM Statistics Seminar (LG 1.105)

Gerda Claeskens, TUE

Title: Estimation and testing with penalized regression splines, some results

October, 28

EURANDOM Postdoc Seminar (biweekly)

Brandon Whitcher, EURANDOM

Title: Simulating Gaussian Stationary Processes with Unbounded Spectra

**NOVEMBER 1999** 

November, 2

Joint SOR/EURANDOM Seminar

Y. Suhov, Cambridge University, UK

November, 2

Seminar of Financial Stochastics, EURANDOM

Wim Schoutens, EURANDOM

Title: Chaotic and predictable representations for Levy processes

November, 10

Joint TUE/EURANDOM Statistics Seminar (LG 1.105)

Henry Wynn, Warwick \ University, UK

Title: Application of discrete tube methods to coherent system with links to Grobner basis methods

November, 10

Joint SOR/EURANDOM \QTR{bf} {Seminar}

Bernd Heidergott

November, 11

EURANDOM Postdoc Seminar (biweekly)

November 15 - 17

Workshop

The Stochastics of Integrated-services Communication Networks

(http://www.eurandom.tue.nl/Stochasticsworkshop.htm)

This workshop is organized and funded by EURANDOM and is held under the auspices of the Dutch (NWO) research programme 'Stochastic Networks'. Quality-of-Service issues in both ISDN and the Internet have triggered a strong interest in the performance analysis of traffic models with several classes of customers with often vastly different traffic characteristics and vastly different service requirements, competing for the same resources. The workshop is devoted to this performance analysis, as well as to related admission control and pricing issues. Two mini-courses on the first morning of the workshop are intended to familiarize a broader audience with the main issues and recent developments in the subject.

These tutorials will be given by F.P. Kelly (Cambridge Univ., UK) and J.W. Roberts (France Telecom).

Lectures and contributed presentations by F. Baccelli (ENS, Paris), D. Mitra (Bell Laboratories, Lucent Technologies), V. Ramaswami (AT\&T Labs) and A. Stolyar (Bell Laboratories, Lucent Technology), a.o.

November, 24:

Joint SOR/EURANDOM Seminar

Dee Denteneer (Philips)

November 24:

Giovanni Pistone

November, 25:

EURANDOM Postdoc Seminar (biweekly)

November, 25 - 27

Workshop Ergodic Theory (on invitation)

Organiser: M. Keane, a.o.

#### DECEMBER 1999

December 1

Joint TUE/EURANDOM Statistics Seminar (HG 6.29)

Ingrid van Keilegom

December 8.

Joint TUE/EURANDOM Statistics Seminar -- Shanti Gupta (at HG 6.29)

December 10.

EURANDOM Complex Statistical Seminar -- Marie-Colette van Lieshout

December 14:

Joint TUE/EURANDOM Statistics Seminar -- William Rey (at HG 6.29)

# Reports

Publications of EURANDOM researchers appear in a EURANDOM prepint series ISSN 1389-2355 For an overview of reports, please consult the web pages (http://www.eurandom. tue.nl/publications.htm)

#### VACANCIES

EURANDOM has vacancies for postdocs in a new prgramme on Biostatistics (soon more information on: http://www.eurandom.tue.nl, under vacancies and under programmes)

Further more EURANDOM will have vacancies in several programmes as of \ the second half of next year (2000).

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Suggestions for names of people who might be interested are welcome too, at my e-mail address: cantrijn@eurandom.tue.nl.

If you ever want to remove yourself from this mailing list, you can send mail to

"Majordomo@listserver.tue.nl" with the following command in the body of your email message: unsubscribe eurandomnews cantrijn@eurandom.tue.nl

Here's the general information for the list you've subscribed to, in case you don't already have it: Eurandom Newsletter