

**Meddelelser** v/Morten Frydenberg  
Institut for Biostatistik  
Aarhus Universitet

**BREV**  
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Danmark

Returneres ved varig adresseændring

Næste nummer af "MEDDELELSER" udkommer 1. september 2000.

Bidrag til dette nummer skal være redaktøren i hænde senest

**fredag den 18. august 2000, kl. 12.00.**

Bidrag bedes sendt til:

Meddelelser, v/Morten Frydenberg  
Institut for Biostatistik  
Vennelyst Boulevard 6  
8000 Århus C.  
eller med e-mail til: [morten@biostat.au.dk](mailto:morten@biostat.au.dk)

[medinfo@dts.dk](mailto:medinfo@dts.dk) skal benyttes ved indmeldelse og adresseændring i DSTS.

Bidrag i elektronisk form ønskes helst i et af nedenstående formater: Word, LATEX, HTML, Postscript eller ASCII.

Annoncering af stillinger er kr. 500 pr. side

# MEDDELELSER

Dansk Selskab for Teoretisk Statistik

## Kontingent for 2000

- Kontingent udgør 200 kr. for normale medlemmer og 100 kr. for studerende.
- Hvis det fortrykte beløb ikke er korrekt, bedes du kontakt selskabet på [medinfo@dts.dk](mailto:medinfo@dts.dk). Vi vil så sende dig et nyt girokort.
- Husk at påføre både **navn** og **medlemsnummer** på vedlagte girokort.
- Betalingsfristen er **1. juli**.

## Abonnement på SJS med medlemsrabat

Fornylse eller nytegning af abonnement på SJS skal ske direkte hos forlaget Blackwell ([www.blackwellpublishers.co.uk](http://www.blackwellpublishers.co.uk)).

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## Selskabets bestyrelse:

|  |  |
|--|--|
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| <b>Næstformand:</b><br>Henrik Madsen<br>Institut for Matematisk Modellering<br>Bygning 321<br>DTU<br>2800 Lyngby                           | Tlf: 4525 3408<br>Fax: 4588 2673<br>e-mail: <a href="mailto:hm@imm.dtu.dk">hm@imm.dtu.dk</a><br><a href="mailto:nfmd@dsts.dk">nfmd@dsts.dk</a><br><a href="mailto:vchair@dsts.dk">vchair@dsts.dk</a>                                     |
| <b>Kasserer:</b><br>Ernst Hansen<br>Afdeling for Teoretisk Statistik<br>Københavns Universitet<br>Universitetsparken 5<br>2100 København Ø | Tlf: 3532 0773<br>Fax: 3532 0772<br>e-mail: <a href="mailto:erhansen@math.ku.dk">erhansen@math.ku.dk</a><br><a href="mailto:kass@dsts.dk">kass@dsts.dk</a><br><a href="mailto:treas@dsts.dk">treas@dsts.dk</a>                           |
| <b>Redaktør:</b><br>Morten Frydenberg<br>Institut for Biostatistik<br>Aarhus Universitet<br>Vennelyst Boulevard 6<br>8000 Århus C          | Tlf: 8942 6130<br>Fax: 8942 6140<br>e-mail: <a href="mailto:morten@biostat.au.dk">morten@biostat.au.dk</a><br><a href="mailto:red@dsts.dk">red@dsts.dk</a><br><a href="mailto:edit@dsts.dk">edit@dsts.dk</a>                             |
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| <b>Webmaster:</b><br>Henrik Stryhn<br>Statens Veterinære Serumlaboratorium<br>Bülowsvej 27<br>1790 København V                             | Tlf: 3530 0237<br>Fax: 3530 0120<br>e-mail: <a href="mailto:hes@svs.dk">hes@svs.dk</a><br><a href="mailto:web@dsts.dk">web@dsts.dk</a>   |

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## Department of Theoretical Statistics University of Aarhus

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## SYMPOSIUM IN HONOR OF OLE E. BARNDORFF-NIELSEN

November 16 – November 18, 2000

University of Aarhus, Denmark

Earlier this year Professor Ole E. Barndorff-Nielsen celebrated his 65th birthday. Further to this, a symposium in his honor will take place at University of Aarhus from November 16 to November 18.

The aim of the symposium is to discuss recent developments and identify new directions mainly in the following three areas: *Small Sample Asymptotics*, *Modelling in Finance and Turbulence*, and *Quantum Stochastics*.

There will only be invited speakers. Among the confirmed speakers are:

S. Asmussen, F.E. Benth, B.J. Christensen, D.R. Cox, E. Eberlein, P. Embrechts, R. Gill, P. Jagers, P. Jupp, B. Jørgensen, W.S. Kendall, C. Klüppelberg, G. Letac, P. McCullagh, T. Mikosch, V. Perez-Abreu, A. Salvan, N. Shephard, A. Shiryaev, I. Skovgaard, A.T.A. Wood, W. van Zwet.

A 'get-together' party is planned for Wednesday evening and a dinner is planned for Friday evening.

To participate in the Symposium, please contact the organizers at your earliest convenience, before **October 6, 2000**.

### ORGANIZING COMMITTEE:

J.L. Jensen (University of Aarhus)  
E.B. Vedel Jensen (University of Aarhus)  
M. Sørensen (University of Copenhagen)

### CONTACT PERSON:

Secretary Oddbjørg Wethelund  
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Ny Munkegade, DK-8000 Aarhus C, Denmark.  
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Thursday, 8 June, at 14.00 in Room E3-109

Katja Ickstadt, Dept. of Mathematics, Darmstadt University of Technology and  
Robert L. Wolpert, Inst. of Statistics and Decision Sciences, Duke University.

*Simulation and Estimation of Independent-Increment Random Fields.*

**Abstract:** Stationary increasing independent-increment stochastic processes and nonnegative random fields ("Lévy processes"), such as the Poisson, Gamma, and one-sided Stable processes, are useful for building hierarchical models for a wide range of applications in time series and in spatial statistics. We present an efficient numerical algorithm for simulating random processes and fields from all of these distributions. We also discuss an application, remote sensing of forest heights in Queensland, Australia, by airborne laser sensors, in which we seek to identify which Lévy process is generating the data we observe.

Host: Jesper Møller

Thursday, 15 June, at 14.00 in Room B2-109

Viktor Benes, Department of probability and Statistics, Charles University, Prag.

*Statistical models for the mapping of disease-risk.*

**Abstract:** Assessment of risk map of infection by epidemiologic diseases can be solved in various ways. We consider a situation where a point pattern of infection cases of tick-borne encephalitis in Central Bohemia is given. Moreover there is an information about population density and some covariates, namely a map of forests and altitude.

The various approaches compared belong to two groups: the quadrat counts methods divide the region in subregions and deal with relative counts. Here first a simple Bayesian approach is used and secondly the hierarchical Bayesian model (Stern, Cressie, 1999) applied, in the latter the spatial dependence is involved. The posterior variances of risk estimator are compared.

A different approach is based on inhomogeneous point pattern modelling. First a spline technique combined with maximum likelihood is mentioned. Recently, the log Gaussian Cox process (Møller et al., 1998) is discussed as a suitable model to get reliable solution.

#### References:

- Møller J, Syversveen AR, Waagepetersen RP (1998). Log Gaussian Cox processes. *Scand. J. of Statist.*, 25, 451-482.  
Stern HS, Cressie N (1999). Inference for extremes in disease mapping. In: Lawson A Ed.: *Advanced methods of disease mapping and risk assessment for public health decision making*. Wiley, London. Ch.6.

Host: Jesper Møller

Final Announcement

Summer School on

## Quantum Field Theory — from a Hamiltonian point of view

August 2–9, 2000 at Sandbjerg Manor, Denmark

Organized by

MaPhySto and the EU-TMR network on PDE and Quantum Mechanics

**Organizers.** The Summer School is organized by Jan Philip Solovej (Copenhagen) and Søren Fournais (MaPhySto, Aarhus).

**Contents.** There will be the following series of lectures (3-4 hours each):

*Prof. Volker Bach, Universität Mainz: Spectral Analysis of Nonrelativistic Quantum Electrodynamics*

*Prof. Jan Dereziński, University of Warsaw: Spectral analysis of simple models of Quantum Field Theory*

*Prof. Gian-Michele Graf, ETH Zürich: Stability of (ultraviolet cutoff) non-relativistic QED*

*Prof. Jens Hoppe, Max-Planck-Institut für Gravitationsphysik, Albert-Einstein-Institut, Potsdam: Membranes and Matrix Models*

*Prof. Michael Loss, Georgia Tech: Self-energy of electrons in nonrelativistic QED*

*Prof. Herbert Spohn, TU München: Dynamics of classical charges and their radiation field*

The summer school will commence in the late afternoon of Wednesday 2 August and will conclude with lunch on Wednesday 9 August, 2000.

**More Information and Registration.** Regularly updated information about this summer school can be found at the web-page

[www.maphysto.dk/events/SummerMP2000/](http://www.maphysto.dk/events/SummerMP2000/)

from where it is also possible to register for the Summer School.

The registration fee is DKK 750 (or USD 100 or 100 EURO).

**The deadline for registration is 1 June 2000**

You are also most welcome to contact the MaPhySto secretariat at any of the below-mentioned addresses for further information.

## Instructional Workshop on Empirical Process Techniques for Dependent Data

Tuesday November 21 — Friday November 24, 2000

University of Copenhagen

The instructional workshop will take place at the Department of Statistics and Operations Research, University of Copenhagen. There will be 5 hours of lectures daily. The instructional workshop is organized by Thomas Mikosch (Univ. of Groningen), Søren Feodor Nielsen (Univ. of Copenhagen) and Michael Sørensen (Univ. of Copenhagen).

### Main Lecturers

- Herold Dehling (Ruhr-Universität Bochum)
- Walter Philipp (University of Illinois at Urbana-Champaign)

Further lectures will be given by Miguel A. Arcones (Binghamton Univ.), Rainer Dahlhaus (Univ. of Heidelberg), Paul Doukhan (Univ. of Cergy Pontoise and Paris-Sud), Liudas Giraitis (London School of Economics) and Holger Drees (Univ. of Cologne).

### Content

The aim of the instructional workshop is to give an introduction to the recently developed theory of empirical process techniques for dependent data which is scattered widely in the literature, and to provide an overview of the most recent developments in various fields related to empirical processes. These include the spectral analysis of time series, the bootstrap for stationary sequences, the empirical process for mixing dependent observations, including the case of strong dependence. The introduction to the theory will be given in lectures by H. Dehling and W. Philipp. They will give the basics of the theory, starting from the classical contributions of P. Billingsley and covering the development up to the present. In addition to these lectures, some of the top specialists in the field will lecture on the most recent results in their areas.

Although the motivation for this workshop partly stems from the MaPhySto Summer School on Empirical Processes held in 1999, there will be almost no overlap with that course, as this workshop will focus on dependent data and statistical issues.

### More Information

Regularly updated information about the instructional workshop can be obtained from the web-page

[www.stat.ku.dk/maphysto/empproc.html](http://www.stat.ku.dk/maphysto/empproc.html)

from where you also can register and find travel information. The registration fee is DKK500 (approx. \$65).

**The deadline for registration is November 1, 2000**

## Forskningsassistent i biostatistik

Ved Biostatistisk Afdeling er to eller tre stillinger (afhængigt af bevillinger) som projektlønnet forskningsassistent til besættelse.

En stilling er til besættelse pr. 1. august 2000 og en pr. 1. november 2000, og afhængigt af bevilling er der yderligere en stilling til besættelse snarest eller efter nærmere aftale.

Arbejdet vedrører forskellige medicinsk-statistiske samarbejdsprojekter, mest i epidemiologi og analyse af overlevelseshdata.

Ansøgere skal have baggrund som statistiker, eksempelvis cand.scient. eller evt. cand.polyt.

Projektfinsierede statistikere i Biostatistisk Afdeling har traditionelt gode muligheder for faglig videreudvikling, enten gennem senere ph.d.-studier i Afdelingen eller ved at benytte deres erfaring fra Afdelingen som baggrund for en tilfredsstillende indplacering som biostatistiker i erhvervslivet eller i sektorforskningsinstitutioner.

Ansættelse vil ske i henhold til reglerne i cirkulæret om stillingsstruktur ved de højere uddannelsesinstitutioner under Undervisningsministeriet. Der vil således blive nedsat et bedømmelsesudvalg på to medlemmer. Den enkelte ansøger vil få bedømmelsen af sig selv tilsendt.

Ansøgning fremsendes til Professor Niels Keiding, Biostatistisk Afdeling, Københavns Universitet, Blegdamsvej 3, 2200 København N., senest 15. juni 2000 kl. 12.00.

Nærmere oplysninger kan gives af Peter Dalgaard, tlf. 35 32 79 18.

Aflønning ifølge overenskomst mellem Finansministeriet og AC. Til forskningsassistent ydes et ikke pensionsgivende tillæg på p.t. kr. 27.483,66.

## Statistikere/dataanalytikere

I Kræftens Bekæmpelses Institut for Epidemiologisk Kræftforskning, Forskningsafdeling 2, er en stilling som statistikere/dataanalytikere ledig til besættelse 1. august 2000 eller efter aftale.

Du vil indgå i projektgruppen omkring "Kost, kræft og helbred" undersøgelsen, som er en stor kohorteundersøgelse, der beskæftiger sig med forskelligartede problemstillinger vedrørende kost og andre livsstilsfaktorer i relation til udvikling af kræft og andre sygdomme. Derudover vil du blive tilknyttet forskningsprojekter, fortrinsvis inden for brystcancer, hvor arbejdsopgaverne vil være databearbejdning og statistisk analyse. Der vil være gode muligheder for selvstændigt ansvar for dele af projekterne.

### Kvalifikationer

- Relevant akademisk uddannelse
- Lyst til at arbejde med biostatistik og epidemiologisk metode
- Interesse for og erfaring med databearbejdning
- Gode edb-kundskaber, kendskab til SAS et stort plus
- Tidligere erfaring med epidemiologisk eller samfundsmedicinske undersøgelser er en fordel, men ingen forudsætning

### Vi tilbyder

Aflønning sker efter overenskomst mellem Akademikernes Centralorganisation og Kræftens Bekæmpelse under hensyntagen til kvalifikationer. Arbejdspladsen er røgfri.

Yderligere oplysninger om stillingen kan fås ved henvendelse til seniorforsker Lene Mellemkjær, Forskningsafdeling 2, tlf. 3525 7612.

### Ansøgning

sendes til afdelingsleder, overlæge, dr.med. Jørgen H. Olsen, Kræftens Bekæmpelse, Strandboulevarden 49, 2100 København Ø, inden 22. juni.

### FO2

er en afdeling i Kræftens Bekæmpelses uafhængige epidemiologiske forskningsinstitut, der har en lang tradition for kræftepidemiologisk forskning. Vi beskæftiger ca. 30 mennesker, heraf yderligere to statistikere.

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## Statistikere

### Novo Nordisk, Health Care

Statistikafdelingen i Health Care Quality Support søger en statistikere til en nyoprettet stilling. Afdelingen fungerer som en centralt placeret statistisk konsulentenhed som har et tæt samarbejde med produktionen og kvalitetsorganisationen i Health Care. Stillingen medfører en bred kontakthorizont da kunderne kommer fra mange områder i virksomheden både i Danmark og udlandet.

I forbindelse med løsning af konkrete opgaver er der ofte brug for den store 'værktøjskasse' af statistiske metoder. Det vil bl.a. være forsøgsplanlægning, stikprøveudtagning og analyse af modeller herunder variansanalyse, varianskomponenter, generaliserede lineære modeller og generel eksplorativ statistik.

Vi er i øjeblikket 8 statistikere, heraf 2 erhvervsforskere. Afdelingen fungerer som et team, hvor der lægges vægt på 'sharing of better practices'. Der er en høj grad af indflydelse på eget arbejde og gode udviklingsmuligheder.

### Arbejdsopgaver

- Varetagelse af statistiske opgaver/rådgivning i Health Care, herunder statistiske analyser, afrapportering og konklusion på resultater.
- Deltagelse i tværorganisatoriske projekt-grupper bl.a. i forbindelse med kvalitets-forbedringer.
- Deltagelse i udvikling og afholdelse af afdelingens kurser og seminarer for ansatte i Health Care.
- Vejledning af studerende indenfor afdelingens fagområde.

### Kvalifikationer

- Solid baggrund indenfor matematisk statistik som civilingeniør eller cand. scient. evt. suppleret med en Ph.D. grad indenfor statistik.
- Godt kendskab til IT, herunder programpakker for statistik.
- Gode samarbejds- og kommunikationsevner og høj grad af fleksibilitet, men er samtidig i stand til at arbejde selvstændigt og udvise initiativ.
- Behersker engelsk i skrift og tale.
- Der lægges vægt på relevant erhvervs erfaring.

### Kontakt

Vil du vide mere om stillingen, så kontakt Henrik Melgaard på telefon 4443 9884 eller e-mail: hmel@novo.dk. Send din ansøgning mrk "Statistikere.9691-M" til Staffing, Health Care, Krogshøjvej 41, bygn 9P1.20, 2880 Bagsværd.

Sidste ansøgningsfrist: 15 Juni 2000





# Biostatistician

## Biostatistics Department

We are looking for a statistician/biostatistician for a vacant position. Through its specialist services in statistics, this department contributes to the fast and competent accomplishment of the Lundbeck R&D programmes. We offer a challenging job in a dynamic and open working atmosphere which is highly conducive to professional growth. The current staff includes 6 biostatisticians working together with a number of statistical programmers.

### Your job

Your primary responsibility will be to plan, analyse and report clinical Phase I-IV studies in close collaboration with clinical researchers and other specialists within the area of psychiatry and neurology. This work includes utilising your expertise in experimental design, statistical modelling, analysis and interpretation of study data, keeping abreast of current issues and practices of pharmaceutical R&D.

You will be faced with many exciting challenges, for example, you will participate in the development of appropriate study designs and analysis methods for differentiating between drug effectiveness and the natural progression of progressive diseases such as Parkinson's or Alzheimer's. The job will also involve explorative statistical modelling and mathematical simulation of a diverse range of research data, including data in health economics.

### Your qualifications

Your background is a PhD or a MSc degree in Statistics or Biostatistics. You should have a strong interest in applications, excellent verbal and written communication skills as well as a sense of humour and ability to work efficiently in a team. Work experience gained in the pharmaceutical industry or consulting experience from an industrial or academic setting are highly desirable. Programming experience and familiarity with statistical software is also required.

### We offer

An independent job with great personal and technical potentiality in a growing international company. Add to this attractive conditions of employment and good staff conditions.

### Your application

For further information please contact Head of department Per Tanghøj, extension 2812. Please send your application quoting reference "Biostatistician" and a complete CV to the Personnel Department or to [jobs@lundbeck.com](mailto:jobs@lundbeck.com).

H. Lundbeck A/S is an international pharmaceutical company. Our research is focused exclusively on drugs for the treatment of diseases in the central nervous system. We operate globally and exports account for more than 95% of the turnover, which exceeded 4,1 bn in 1999. We market and sell our products in 69 countries. The Lundbeck Group has 2,823 full-time employees whereof approximately half work in Denmark. We are working consciously at creating ideal working conditions for our employees, where all activities are based on respect for the individual.

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## Kalender 2000

(arrangementer annonceret i MEDDELELSER)

| Dato        | Med.nr. | Aktivitet  |
|-------------|---------|--|
| 8/6         | 5/00    | Seminar. Katja Ickstadt. Simulation and Estimation of Independent-Increment Random Fields. (Aalborg)   |
| 5-8/6       | 8/99    | 18 <sup>th</sup> Nordic Conference in Mathematical Statistics, 2000.<br><a href="http://www.math.uio.no/~nordstat/">Http://www.math.uio.no/~nordstat/</a><br>Deadline contribution 1-2-2000. |
| 15/6        | 5/00    | Seminar. Viktor Benes. Statistical models for the mapping of disease-risk. (Aalborg)   |
| 21/6        | 4/00    | Seminar. Xiaohong Chen. Principal components and the long run. (ASOR-KU)   |
| 2/8-9/8     | 5/00    | MaPhySto: Summer School on Quantum Field Theory – from a Hamiltonian point of view.  |
| 14/8-18/8   | 1/00    | MaPhySto: Concentrated Advanced Course on Percolation Theory and Applications in Statistical Mechanics.  |
| 28/8-1/9    | 1/00    | MaPhySto: Concentrated Advanced Course on Lévy Processes and Branching Processes.  |
| 16-18/11    | 5/00    | Symposium in honor of Ole E. Barndorff-Nielsen. (ATS-AU)   |
| 21/11-24/11 | 5/00    | MaPhySto: Workshop on Empirical Process Techniques for Dependent Data.   |

### Deadlines i 2000

#### Frist for indlevering af bidrag:

18. august kl. 12.00  
20. september kl. 12.00  
20. oktober kl. 12.00  
20. november kl. 12.00

#### MEDDELELSER udkommer

1. september  
2. oktober  
1. november  
1. december