

Meddelelser v/
Helle Andersen (HAnd)
Novo Nordisk A/S
2880 Bagsværd

BREV
Ukonvoluteret

PP
Danmark

43
Per Kragh Andersen
Hermelinvænget 54
2880 Bagsværd

Returneres ved varig adresseændring

Næste nummer af "MEDDELELSER" udkommer 1. juni 2001.

Bidrag til dette nummer skal være redaktøren i hænde senest

mandag den 25. maj kl. 12.00.

Bidrag bedes sendt til:

Meddelelser, v/Helle Andersen (Hand)
Novo Nordisk A/S
Novo Alle
2880 Bagsværd.
eller med e-mail til: HAnd@novonordisk.com

medinfo@dsts.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

Todagesmøde i selskabet

8.-9. maj 2001

**Institut for Matematiske fag ,
Aalborg Universitet,
Frederik Bajersvej 7G,
9220 Aalborg Ø**

Tilmelding: Til Ernst Hansen, erhansen@math.ku.dk, senest onsdag den 2. maj

Deltagergebyr: 450 kr. for voksne (incl. PhD-studerende), 225 kr. for studerende. Beløbet indbetales på DSTS girokonto, 318-8418, med tydelig angivelse af hvem det vedrører.

Program for mødes kan læses inde i bladet eller på <http://www.math.auc.dk/Todages>

Matematiker får Spar Nord Fondens Forskningspris på 250.000 kr.

Lektor, dr.scient. Jesper Møller, Aalborg Universitet, bliver dette års modtager af Spar Nord Fondens Forskningspris på 250.000 kr. for sin naturvidenskabelige doktorafhandling "Aspects of spatial statistics, stochastic geometry and Markov chain Monte Carlo Methods", som han forsvarede sidste år. Dir. Ole Jørgensen, Spar Nord Fonden, overrakte prisen ved Aalborg Universitets fest for årets doktorer og ph.d.er den 25. april, hvor prismodtageren kvitterede med en festforelæsning.

Selskabets bestyrelse:

Formand: Bjarne Højgaard Institut for Matematiske Fag Aalborg Universitet Frederik Bajersvej 7 9200 Aalborg Øst	Tlf: 9635 8927 Fax: 9815 8129 e-mail: bjh@math.auc.dk
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Selskabets www-adresse: [Http://www.dsts.dk](http://www.dsts.dk).

Generiske e-mail-adresser i selskabet:

Formand: find, formand, chair, chairman **Kasserer:** kass, kasserer, treas, treasurer
Redaktør: red, redaktoer, edit, editor **Sekretær:** sekr, sekretaer, secr, secretary
Jyske anliggender: jysk, jyskeanl, jutland **Webmaster:** web, webmaster, www
Meddelelser: medd, meddelelser, newsl, newsletter
Bestyrelsen: best, bestyr, bestyrelse, board

medlinfo@dsts.dk skal benyttes ved indmeldelse og adresseændring i DSTS .

PROGRAM FOR TODAGESMØDET I DSTS

8.-9. MAJ 2001

AALBORG UNIVERSITET

Tirsdag den 8. maj, NOVI, Niels Jernes vej 14, VR-center Nord, 3D-laboratoriet, lok. nr 4-111

14.00-15.00 **Ed Wegman**, Center for Computational Statistics, George Mason University, Virginia (USA).

Visual Data Mining

Data mining strategies are usually applied to opportunistically collected data and frequently focus on the discovery of structure such as clusters, bumps, trends, periodicities, associations and correlations, quantization and granularity, and other structures for which a visual data analysis is very appropriate and quite likely to yield insight. However, data mining strategies are often applied to massive data sets where visualization may not be very successful because of the limits of both screen resolution, human visual system resolution as well as the limits of available computational resources. In this talk we suggest some strategies for overcoming such limitations and illustrate visual data mining with some examples of successful attacks on high dimensional and large data sets.

15.00-15.30 Pause (Kaffe og The)

15.30-18.00,

3D Visual Data Mining

This is the title of a cross-disciplinary research project at Aalborg University with participation of researchers from vision, databases, perceptual psychology, and statistics. It exploits the 3D facilities at VR Center Nord, Aalborg.

These facilities consists of a 3D-AUDITORIUM, a 3D-PANORAMA, and a CAVE. The facilities enable the researcher to be completely immersed in a virtual visual 3D world.

The challenge is to exploit this for display and analysis of statistical data. In this session the 3D facilities and current results from the research project will be described and demonstrated by researchers involved. For further information, visit the project home page:

<http://www.cs.auc.dk/3DVDM/>

19.00 - - Middag på Radisson SAS Limfjordshotellet, Ved stranden 14-15, Aalborg C .

Onsdag den 9. maj Auditorium 1.104, Kroghstræde 3.

09.30-10.30 **Søren Asmussen**, Afdeling for matematisk statistik, Lund Universitet (Sverige).

Extreme values and rare events for queues and regenerative processes

Extreme value calculations for queues are complicated by the fact that a queueing process is not an i.i.d. sequence. In this talk, I will show first how a number of calculations can be done explicitly using martingales, and proceed next to survey and extend approximations and simulation algorithms exploiting the regenerative structure.

10.30-11.00 Pause (Kaffe, The)

11.00-11.50 **Thomas Mikosch**, Forsikringsmatematisk Laboratorium, Københavns Universitet

Poisson limits for U-statistics

We consider Poisson limits for U-statistics with kernels assuming the values 0 and 1. The limit result is derived from Poisson convergence of appropriate point processes. We apply these results to the extremes of a (dependent) sample of U-statistics type, consider stable limits for U-statistics and study various estimators of the correlation dimension which appears in the theory of dynamical systems. (joint work with A. Dabrowski, H. Dehling and O. Sharipov)

11.50-12.00 Pause

12.00-12.50 **Henrik Madsen**, DHI Water & Environment.

Estimation of extreme hydrologic events

Estimation of extreme hydrologic events is an important element in the design and operation of hydraulic structures. The first stage in the design of reservoir and flood protection structures, such as dams, spillways and dikes, is selection of the design discharge, which is determined on the basis of an analysis of extreme runoff data. Estimation of extreme rain-falls forms the basis for design of urban drainage systems, and extreme low flow and drought characteristics are important in the design and operation of reservoirs.

For analysing extreme hydrologic events two extreme value models are prevalent; the annual maximum series and the partial duration series model. Estimation procedures based on the two methods are described, and simulation results on comparison of the performance of the methods are presented. The evaluation of estimation uncertainties for proper assessment of design events is discussed.

To obtain more efficient estimates regional information can be used by combining data from different sites in a region that can be assumed to have similar extreme hydrologic behaviour, i.e. space substitutes time to compensate for a short record at a specific site. The use of regional information reduces the sampling uncertainty by introducing more data, and, in addition, it facilitates the choice of an appropriate statistical distribution. Moreover, regionalisation forms the basis for making inferences at ungauged sites, which is extremely important for a general assessment of extreme events. Recently developed regional estimation techniques are described, and results from two studies, a regional flood frequency study in New Zealand and a regional study of extreme rain-falls in Denmark, are presented.

13.15-14.15 Frokost, Kantinen Fibigerstræde 15.

AVBPA 2001

Third International Conference on
Audio- and Video- based Biometric Person Authentication

Halmstad, Sweden, June 6-8 2001
<http://www.hh.se/avbpa>

CALL FOR PARTICIPATION

The interest for security and multi-modal biometric signal processing is growing. An important element of security is automatic authentication of persons. AVBPA has brought together leading biometric signal analysis researchers in all modalities, e.g. face, fingerprints, speech, in an attempt to contribute with robust solutions to efficient and secure communication. The conference, that has been organized biannually, is an official event of the International Association for Pattern Recognition (IAPR-TC14).

SCIENTIFIC PROGRAM

The scientific program includes contributed and invited presentations dealing with relevant issues in multi-modal biometrics:

- Face as biometrics
- Face image processing
- Speech as biometrics and speech processing
- Fingerprints as biometrics
- Gait as biometrics
- Hand, signature and iris as biometrics
- Multi-modal analysis and system integration

Four distinguished speakers, namely Bernt Ericsson, (Ericsson AB, Sweden), Anil Jain (Michigan State University, USA), Josef Kittler (University of Surrey, UK) and Satoshi Nakamura (ATR, Japan), will contribute invited presentations.

The preliminary program is available online at

<http://www.hh.se/avbpa/prelprogram.html>

LOCATION

Halmstad is a seaside resort located on the West coast of Sweden, south of Gothenburg. Besides the beautiful Kattegat beaches, the town boasts the highest concentration of golf courses in the Country. Salmon fishing is another popular activity. Tourist highlights in the region include Helsingør (Elsinore) castle, that provided the setting for Shakespeare's Hamlet, the cities of Gothenburg, Malmö and Copenhagen and the newly-built Öresund bridge between Sweden and Denmark. The weather in June is usually nice, with temperatures above 20C (70F).

REGISTRATION

Participants can register for the Conference through the AVBPA registration page

<http://www.hh.se/avbpa/registration.html>

The deadline for early registration is May 6th.

SPONSOR INFORMATION

The AVBPA conference offers companies that are active in the area an opportunity to increase their visibility in all branches of Biometric Person Authentication, by participating to a single event.

Companies wishing to sponsor the Conference and/or to mount a stand at the conference venue are welcome to contact the organization at avbpa@hh.se. Sponsorship will be acknowledged in the printed conference program as well as on the conference web page.

SEMINAR I MATEMATISK STATISTIK OG SANDSYNLIGHEDSREGNING.

Seminarerne afholdes kl. 15:15 præcis normalt i auditorium 10 på
H.C. Ørsted Instituttet. Der serveres te i lokale E325 kl. 15:00.

Onsdag den 2. maj i AUDITORIUM 4: Flemming Topsøe (IMF, KU):
Maximum entropy - a new foundation for parts of science ?

We shall discuss a development which is of relevance to probability theory, statistics and parts of quantum physics. Relevant names behind this development are Gibbs, Jeffreys, Shannon and Jaynes as perhaps the most significant ones. The maximum entropy principle is particularly significant in this respect. This principle, and the information theoretical reasoning behind, allows one to distinguish between two conceptions of probability: As the "truth" about a given model or as expressions for our knowledge about the model. Examples involving some of the classical discrete distributions will illustrate the point of view taken.

Onsdag den 16. maj: Martin Jacobsen (ASOR, KU):
Some examples of multidimensional diffusions.

The talk will focus on examples of multidimensional diffusions that have at least some decent and tractable properties. In the one-dimensional case it is perfectly understood how to determine e.g. the range of the diffusion, whether it is transient or recurrent, and when it has an invariant distribution, which can then be given explicitly. In higher dimensions the situation is quite obscure with the finite-dimensional Ornstein-Uhlenbeck processes (homogeneous Gaussian diffusions) one of the very few reasonably well understood examples. One example to be given in the talk is a multi-dimensional Cox-Ingersoll-Ross type process. One problem here is to control the range - all coordinates must stay strictly positive at all times. As it turns out, this class of processes has some additional attractive structural properties. Consider a multi dimensional diffusion with an invariant distribution. Finding e.g. the density for this seems quite hopeless in general, but examples will be given of reversible diffusions, where it appears possible to write down explicit expressions for the invariant density.

Onsdag den 23. maj: Masayuki Uchida
(Department of Mathematics, Kyushu University, Japan, p.t. ASOR, KU):
Information criteria in model selection for stochastic processes.

Information criteria are model evaluation-selection tools based on minimizing the Kullback-Leibler divergence between the fitted model and the true model. In order to obtain information criteria which work for stochastic processes with continuous time parameter, we will use the asymptotic expansions derived with the Malliavin calculus. With asymptotic expansions, we will be able to formulate the model selection problem in the light of the higher order asymptotic theory in a unified way, and to show other possibilities than the usual expectation-unbiased information criteria, with the median-unbiased information criteria. We will also discuss applications to diffusion processes.

TIRSDAG den 29. maj: Ola Hössjer
(Centre for Mathematical Sciences, Lund University):
Asymptotic estimation theory of multipoint linkage analysis.

We consider estimators $\hat{\tau}$ of a disease locus with unknown position τ along a chromosome, defined by taking the argmax of a linkage test statistic. Under the assumption of perfect information from marker genes, it is proved that $\hat{\tau} - \tau$ converges to zero at a surprisingly fast rate N^{-1} , where N is the number of pedigrees (families). The limiting distribution is a constant times the argmax of a standard Brownian motion $B(s)$ minus a $|s|$ drift term. Our estimation approach to statistical linkage automatically handles the multiple testing problem. Moreover, optimal weighting schemes for pedigrees and optimal score functions can be derived in a unified framework for parametric and non-parametric linkage analysis as well as for quantitative trait loci.

Rigshospitalets Finsencentret

Statistikere til DBCG

Sekretariatet for DBCG (Danish Breast Cancer Cooperative Group) søger en statistiker til besættelse af en ledig stilling snarest.

DBCG har ansvar for vedligeholdelse og opdatering af et landsdækkende register for brystkræftpatienter, og har koordineret brystkræftbehandlingen i Danmark siden 1977. En væsentlig del af dette arbejde er foregået i randomiserede forsøg.

Sekretariatets arbejde består i :

- Statistisk bearbejdelse af resultater fra kliniske forsøg, herunder samarbejde med læger om forskningsprojekter på grundlag af disse forsøg.
- Deltagelse i udvikling af protokoller til kliniske forsøg, tildels i internationalt samarbejde, som vil blive søgt udbygget i de nærmeste år.
- Epidemiologiske forskningsprojekter i samarbejde med andre registre.
- Deltagelse i kvalitetssikring og vedligeholdelse af databasen.

Sekretariatet er pt normeret til en læge (deltid), 3 statistikere og 5 datasekretærer. Databasearbejdet varetages af UNI-C. Der er aftalt et samarbejde med Biostatistisk Afdeling ved Det Sundhedsvidenskabelige Fakultet.

Kvalifikationer

Du skal have en matematisk-statistisk uddannelse som cand.stat, cand.scient, cand.polyt eller lignende og have interesse for at DBCG's aktiviteter fortsættes og udbygges på internationalt metodeniveau.

Løn og ansættelses forhold.

Lønnen aftales i henhold til gældende overenskomst, med mulighed for at forhandle et personligt tillæg. Arbejdstiden er 37 timer pr uge. Finsencentret er røgfrit.

Ansøgning

Nærmere oplysninger kan fås ved henvendelse til ledende statistiker Susanne Møller, tlf. 3538 6530 eller Rigshospitalets hjemmeside på WWW.Rigshospitalet.dk, hvor du kan få flere oplysninger om Rigshospitalet og Finsencentret.

Du skal sende din ansøgning til Finsencentrets Personalefunktion, Rigshospitalet afsnit 5074, Blegdamsvej 9, 2100 Ø eller via e-mail til piap@rh.dk senest den 28. maj 2001.

Kalender 2001

(arrangementer annonceret i MEDDELELSER)

Dato	Med. nr.	Aktivitet
18/4-16/5	1/01	Ph.d. kursus: Statistical computing and Unix/Linux (Biostat-ku)
2/5	4/01	Seminar (KU): Maximum entropy- a new foundation for parts of science?
8-9/5	3/01	Todagesmøde i DSTS. Aalborg Univertitet.
16/5	4/01	Seminar (KU): Some examples of multidimensional diffusions.
23/5	4/01	Seminar: Information criteria in model selection for stochastic processes.
29/5	4/01	Seminar: Asymptotic estimation theory of multipoint linkage analysis.
28/5-1/6	2/01	MaPhySto: Concentrated Advanced course on Monte Carlo Methods in Financial Engineering. (Aarhus)
6-8/6	1/01	Third International Conference on Audio- and Video-Based Biometric Person Authentication. (Halmstad, Sverige). http://www.hh.se/avbpa
18-19/6	3/01	NSF's Etterutdanningsseminar 2001: Eksakte metoder
1-6/7	3/01	16 th International workshop on statistical modelling. (OU)
19-22/8	9/00	MaPhySto: Summer School on Spatial Statistics and Computational Methods. (Aalborg)
7-13/10	1/01	ECAS. The 8 th course in the ECAS Programme. Bayesian Statistics and Financial Econometrics.
		NORDSTAT 2002 - the 19th Nordic Conference on Mathematical Statistics in Stockholm.

Deadlines i 2001

Frist for indlevering af bidrag:

25. maj kl. 12.00
24. august
24. september
23. oktober
23. november

MEDDELELSER udkommer

1. juni
3. september
1. oktober
1. november
3. december