BREV Ukonvoluteret



#### Returneres ved varig adresseændring

Næste nummer af "MEDDELELSER" udkommer 1. november 2010 Bidrag skal være redaktøren i hænde senest den 22. oktober kl. 12.00.

# **MEDDELELSER**

Dansk Selskab for Teoretisk Statistik

## Program for todagesmødet

Workshop in Honour of Ole E. Barndorff-Nielsen's 75th Birthday

CALL FOR PAPERS SYMPOSIUM I ANVENDT STATISTIK

Official opening of Centre for Stochastic Geometry and Advanced Bioimaging

### Seminarer

Seminar in applied mathematics and statistics, H.C. Ørsted institute, KU Seminar i anvendt statistik, Biostatistisk afdeling, KU

### Stillinger

Senior Biostatistician, Cyncron

Nyt om navne

Dansk Seiskub for Teoretisk Statistik Bestyrelse 2010

Formand

fmel a dats d

Søren Feodor Nielsen Institut for Finansiering, Center for Statistik CBS Tif: 38153515

Næstformand

nfmd/g/dsts.dk

Anders Tolver Jensen Institut for Grundvidenskab og Miljø/Statistics LIFE, Københavns Universitet Tif: 35332337

Kasserer

kass@dsts.dl

Novo Nordisk A/S Tlf: 30 79 62 09

Sekretær

sektraldists di

Esben Agerbo National Centre for Register-based Research Faculty of Social Sciences University of Aarhus Tif: 89 42 68 15

Webmaster

web/aidstx.dk

Klaus Kane Andersen Informatics and Mathematical Modelling, Section for Statistics, DTU TH: 45 25 34 19

Redaktor

red masts d

Charlotte Hindsberge Novo Nordisk TH: 30 79 65 92 Meddelelser er medlemsblad for Dansk Selskab for Teoretisk Statistik (DSTS), se http://www.dsts.dk.

Selskabets formål er at fremme den statistiske videnskab og dens anvendelser.

Indmeldelse og adresseændring i DSTS gøres via http://www.dsts.dk/da/index.html.

Selskabet har en elektronisk nyhedsliste E-Meddelelser, se http://www.dsts.dk/da/index.htm.

Bidrag og stillingsopslag til Meddelelser sendes til redakteren - rediadsts.dk. Bidrag i elektronisk form modtages i PDF format med indlejrede fonte i sidesterrelse A4, egnet til sort/hvid tryk i A5 format. Alternativt modtages Word

Annoncering af stillingsopslag i Meddelelser koster kr. 1.000,- pr. side. Opgiv venligst faktureringsoplysninger. Indstik til udsendelse i konvolut sammen med Meddelelser koster kr. 3.000,- pr. standard A4 side for første side og 500,- kr per efterfølgende side.

Meddelelser udkommer 9 gange om året, den første mandag ellet tirsdag i måneden undtagen januar, juli og august måned.

Udgivelsesplan for Meddelelser 2010

Nr.	Bidrag senest	Udkommer
+-	22. januar kl. 12	1. februar
3	26. marts kl. 12	42 april
3	23. april kl. 12	3. maj
4	28. maj kl. 12	7. juni
á	27-august kl-12	6. september
6	24. september kl. 12	4. oktober
7	22. oktober kl. 12	1. november
8	26, november kl. 12	6. december

## Todagesmøde i Dansk Selskab for Teoretisk Statistik 9. - 10. november 2010, Københavns Universitet

#### Praktiske informationer:

Arrangør: Biostatistisk Afdeling, Københavns Universitet

Sted: Dam Auditoriet, Panum Instituttet, Blegdamsvej 3B, 2200 Kbh. N

Tilmelding: Registrering sker ved email til Kathe Jensen: K.Jensen@biostat.ku.dk.

Tilmelding senest den 19. oktober 2010, sammen med oplysning om du ønsker kød, fisk eller vegetar hovedret.

Pris: 250 kr. for studenter (ekskl. ph.d.-studerende) og 500 kr. for alle andre. Prisen dækker deltagelse i 2-dages mødet (evt. formøde, se nedenfor) og al forplejning nævnt i programmet.

Betaling sker til DSTS, Jyske Bank, Reg. nr. 7853, konto nr. 1117188. Angiv klart hvilke(n) personer betalingen gælder for.

Ved tilmelding til 2-dages mødet bedes man angive om man også ønsker at deltage i formødet og den dertil hørende frokost tirsdag kl. 12.

# Program for formøde om punktprocesser tirsdag 9. november kl. 9.30-12

- 9.30-10.00 Per Kragh Andersen. Interpretability and importance of functionals in competing risks and multi-state models.
- 10.00-10.15 Pause
- 10.15-10.45 Giuliana Cortese. Predictions of cumulative incidences for competing risks models with time-dependent covariates.
- 10.45-11.15 Anders Gorst Rasmussen. Survival regression with high dimensional features and the semiparametric additive risk model
- 11.15-11.30 Pause
- 11.30-12.00 Kaspar Bertelsen. Marked pairwise interaction point processes with intensity-dependent marks

Link til program for formøde inkl. abstracts: http://staff.pubhealth.ku.dk/~ts/pointprocess-2010.html

## Program for 2-dagesmøde

Tirsdag 9. november

- 14.00 14.05 Velkomst
- 14.05 14.50 Annette Ersbøll, National Institute of Public Health.
   Title: Register-Based Research Opportunities and Challenges
- 14.50 15.35 Rasmus Waagepetersen, Department of Mathematical Sciences, Aalborg University. Title: Decomposition of variance for spatial Cox processes
- 15.35 16.00 Kaffe og kage
- 16.00 17.30 Svend Kreiner, Biostatistisk Afdeling, Københavns Universitet. Titel: PISA. Hælder tårnet fordi fundamentet smuldrer? En kritisk vurdering af grundlaget for nationale sammenligninger af resultater fra pædagogiske test. Efter foredraget vil der være diskussion med udgangspunkt i tre inviterede diskutanters indlæg. Navnene på diskutanterne vil blive meddelt senere. Bemærk at denne del af 2-dagesmødet foregår på dansk.
- 17.30 18.30 Øl og sodavand
- 18.30 24.00 Middag på Doctors Pub, Blegdamsvej 32, 2200 Kbh.
   N

## Program for 2-dagesmøde

Onsdag 10. november

- 9.00 9.45 Klaus Holst, Department of Biostatistics, University of Copenhagen. Title: Latent variable models and their applications in neuroimaging studies
- 10.30 11.00 Kaffe og frugt
- 11.00 11.45 Jens Ledet Jensen, Department of Theoretical Statistics, Aarhus University. Title: Asymptotics for hidden Markov models with covariates.
- 11.45 12.30 Michael Væth, Department of Biostatistics, University of Aarhus. Title: Power and sample size calculations.
- 12.30 Sandwich og afgang

Link til program for todages mødet inkl. abstracts: http://staff.pubhealth.ku.dk/~jhp/2-dagesmoedeNov2010/program.html



Department of Mathematical Sciences Aarhus University

# Workshop in Honour of Ole E. Barndorff-Nielsen's 75<sup>th</sup> Birthday

#### 13-14 October 2010

The workshop is organized by the Thiele Centre and CREATES.

#### Oranizers:

Søren Asmussen, Thiele Centre and Department of Mathematical Sciences, Aarhus University Bent Jesper Christensen, CREATES and School of Economics and Management, Aarhus University Niels Haldrup, CREATES and School of Economics and Management, Aarhus University

#### Wednesday 13 October

Department of Mathematical Sciences, Aarhus University. Auditorium G.1 (building 1532)

12:15 Lunch

13:30-14:10: Fred Espen Benth (Oslo): Ambit fields and SPDEs

14:10-14:50: Robert Stelzer (Munich): On strong solutions of positive definite jump diffusions

14:50-15:30: Andreas Basse-O'Connor (Aarhus): Integration and semimartingale issues for a class of ambit processes

Coffee break

16:00-16:40: Jürgen Schmiegel (Aarhus): Ambit processes and ambit fields

16:40-17:20: Emil Hedevang (Aarhus): Intermittent fingerprints in wind-turbine interactions

17:20-18:00: Steen Thorbjørnsen (Aarhus): The Cauchy transform in classical and quantum probability

19:00: Conference Dinner

#### Thursday 14 October

CREATES, School of Economics and Management, Aarhus University. Eduard Bierman Auditorium (building 1352)

08:30-09:10: Neil Shephard (Oxford): Econometrics analysis of low latency data: discrete-valued volatility clustering and statistical leverage

09:10-09:50: José Manuel Corcuera Valverde (Barcelona): Multipower variation for Brownian semistationary processes

09:50-10:30: Mark Podolskij (Zurich): Estimation of scaling parameter for continuous models

Coffee break

11:00-11:40: Almut Veraart (Aarhus): Modelling electricity forward markets by ambit fields

11:40-12:20: Peter Reinhard Hansen (Stanford): A winner's curse for econometric models: On the distribution of in-sample fit and out-of-sample fit and its implications for model selection

12:20-13:00: Asger Lunde (Aarhus): Realized Beta GARCH: A multivariate GARCH model with large realized measures of volatility and co-volatility

Lunch

Further information at www.thiele.au.dk/events/conferences/2010/oebn75

#### KOBENHAVNS UNIVERSITET





# CALL FOR PAPERS

#### SYMPOSIUM I ANVENDT STATISTIK

24.-26. januar 2011 Frederiksberg

Symposiet er den største årligt tilbagevendende konference om anvendt statistik i Danmark. Det 33. symposium afholdes på Københavns Universitet den 24. til 26. januar 2011. Denne gang i et samarbejde mellem Fødevareøkonomisk Institut, Københavns Universitet og Danmarks Statistik. Symposiet afholdes i Biovidenskabelige Fakultets lokaler på Frederiksberg. Deltagergebyret er fortsat på 1.000 kr. – en fast lav pris der har været gældende i over 20 år.

Symposiets formål er at skabe et forum for udveksling af ideer og erfaringer med anvendelse af statistiske metoder og analyser på tværs af forskellige fagområder inden for forskning, anvendelser og marketing. Der lægges vægt på såvel analyse og metode som fremstilling og fortollening af resultater. Symposiet plejer at have omkring 30 indlæg fra forskellige fagområder og strækker sig over 2½ dag.

Personer, der vil bidrage med et indlæg på symposiet, bedes sende titel og et resumé på ca. 10 linjer til Peter Linde, pli@dst.dk

#### SENEST MANDAG 1. NOVEMBER

De skriftlige indlæg vil blive publiceret i en bog, der udkommer i forbindelse med symposiet. Deadline for de skriftlige indlæg er 15. december. På symposiet præsenteres de skriftlige indlæg med et oplæg på op til en halv time med efterfølgende diskussion. Deltagelse i symposiet koster 1.000 kr. og inkludere symposiebog, festmiddag, frokost og kaffe.

Hvis du ønsker af få tilsendt programmet når det foreligger, kan det ske ved henvendelse til Peter Linde, pli@dst.dk.

På organisationskomiteens vegne

Niels Kærgaard Fødevareøkonomisk Institut Københavns Universitet Peter Linde Dataindsamling og Metode Danmarks Statistik



www.csgb.dk

#### Official opening of Centre for Stochastic Geometry and Advanced Bioimaging Tuesday 2 November 2010

The Villum Foundation has donated 25 mill DKK to the new VKR Centre of Excellence, Centre for Stochastic Geometry and Advanced Bioimaging (CSGB), directed by Professor Eva B. Vedel Jensen, Department of Mathematical Sciences. Aarhus University.

CSGB is an inter-institutional collaboration between the Universities of Aarhus, Aalborg and Copenhagen in Denmark. Within CSGB, an interdisciplinary network of groups with backgrounds in computer science, stochastic geometry and spatial statistics as well as structural, molecular and cell biology has been formed with the aim of advancing methodologies needed to exploit the potential offered by novel microscopy and other bioimaging techniques.

Four research groups participate in CSGB

- · Stochastic geometry group, Department of Mathematical Sciences, AU
- · Biomedical group, Stereology and EM Research Laboratory, AU
- Spatial statistics group, Department of Mathematical Sciences, AAU
- · Image group, Department of Computer Science, KU

#### Programme:

Venue: Department of Mathematical Sciences, Aarhus University, Auditorium F, Building 1534

#### 13:00 Welcome

Erik Meineche Schmidt, Dean, Faculty of Science, Aarhus University

#### 13:05 Official programme

- Lars E. Kann-Rasmussen, Chairman of the Villum Foundation
- Erik Meineche Schmidt, Dean, Faculty of Science, Aarhus University
- · Ole E. Barndorff-Nielsen, Professor Emeritus, Department of Mathematical Sciences, Aarhus University
- Eva B. Vedel Jensen, Scientific Director of CSGB

#### 13:40 Short break

#### 13:45 Presentation of CSGB (Chairman: Erik Meineche Schmidt)

- Jesper Møller, Professor, Department of Mathematical Sciences, Aalborg University
- Mads Nielsen, Professor, Department of Computer Science, University of Copenhagen
- Jens R. Nyengaard, Professor, Stereology and EM Research Laboratory, Institute for Clinical Medicine, Aarhus University
- · Markus Kiderlen, Associate Professor, Department of Mathematical Sciences, Aarhus University

#### 14:30 Music by members of Aarhus Symfoniorkester

14:45 Reception in the Library, Department of Mathematical Sciences, Aarhus University

Registration should he sent to Oddbjørg Wethelund, Department of Mathematical Sciences, Aarhus University, email: oddbjørg@imf.au.dk, no later than 19 October 2010.

# DEPARTMENT OF MATHEMATICAL SCIENCES UNIVERSITY OF COPENHAGEN



# SEMINAR IN APPLIED MATHEMATICS AND STATISTICS

Wednesday, October 6, 2010, 15:15, aud. 10, H.C. Ørsted Institute Speaker: Seiichiro Kusuoka, Keio University Title: Malliavin calculus for stochastic differential equations driven by subordinated Brownian motions

Abstract: Malliavin calculus is applicable to functionals of stable processes by using subordination. We prepare Malliavin calculus for stochastic differential equations driven by Brownian motions with deterministic time change, and consider the conditions that the existence and the regularity of the densities inherit from those of the densities of conditional probabilities. By using these, it is possible to prove regularity properties of the solutions of equations driven by subordinated Brownian motions. We also consider equations driven by rotation-invariant stable processes. We prove that the ellipticity of the equations implies the existence of the density of the solution, and also prove that the regularity of the coefficients implies the regularity of the densities in the case when the equations are driven by one rotation-invariant stable process.

Friday, October 29, 2010, 14:15, aud. 10, H.C. Ørsted Institute Speaker: Nikolai Kolev, Sao Paulo University Title: Maximum T(q)-Likelihood Estimation and Extreme Value Abstract: Let  $X_1, ..., X_n$  be a iid sample from a distribution with a density  $f(x, \theta_0)$ , where  $\theta_0$  is unknown (vector) parameter. The Maximum T(q)-Likelihood Estimator (MT(q)LE)  $\tilde{\theta}_n$  of  $\theta_0$ , is defined as  $\tilde{\theta}_n = argmax_{\theta \in \Theta} \sum_{i=1}^n T(q, f(X_i; \theta)), q > 0$ . For a fixed q > 0, the function T(q, u) represents the Box-Cox transformation in statistics, often called deformed logarithm of order q. The MT(q)LE  $\tilde{\theta}_n$  can be computed by T(q)-likelihood equation(s)  $\frac{\partial}{\partial \theta} \sum_{i=1}^n T(q, f(X_i; \theta)) = 0$ . If  $q \to 1$ , then  $T(q, u) \to \ln u$  and the usual MLE is recovered, i.e. the MT(q)LE extends the classic MLE method. Basic properties of the MT(q)LE will be shown. We will discuss the choice of the parameter q when evaluating extreme values of a real data set and by Monte Carlo simulations. Few open problems will be stated.

SPTEMBER 24, 2010

UNIVERSITETSPARKEN 5 DK-2100 COPENHAGEN DENMARK

http://www.math.ku.dk/

Biostatistisk Afdeling Københavns Universitet

17. september 2010

#### Seminar i anvendt statistik

Seminarerne afholdes på det gamle Kommunehospital, Øster Farimagsgade 5. Der serveres te i Biostatistisk Afdelings bibliotek (opgang B, lokale 10.2.15) en halv time før.

## Mandag d. 4. oktober 2010, kl. 15.15, lokale 7.0.01

#### Søren Hauberg

Department of Computer Science, University of Copenhagen

# Predicting on Manifolds in a Physiotherapeutic Setting

Today physiotherapy roughly consists of two parts: first the patient learns a set of exercises from the therapist and then the patient performs these exercises at home without assistance. In practice, the latter part is often problematic as the patient often performs the exercises in the wrong way leading to further injuries. As an aid to the patient we are developing autonomous computer systems for monitoring the patient. This system will provide feedback to the patient during exercise sessions, such that the patient has a greater chance of performing the exercises correctly. The core of the computer system is a "tracking" system that estimates the pose of the patient at all time during the exercise using a stereo camera. At the heart of this tracking system lies a Bayesian filter consisting of a likelihood term and a motion prior. We will describe the tracking system with a focus on the motion prior. In our parametrisation the motion is confined to a quadratic constraint manifold embedded in a Euclidean space. Creating models on such manifolds leads to many questions; some we can answer, some are still open.

#### Mandag d. 11. oktober 2010. kl. 15.15, lokale 7.0.01

#### **Bendix Carstensen**

Steno Diabetes Center

### **Models for Method Comparison Studies**

Comparing two methods of measurement is normally done with limits of agreement, i.e. a prediction interval for the difference between two future measurements. In a recent publication Bland and Altman recommended the use of replicate measurements for assessment of the method-specific variances as well as difference and provided examples of calculations to generalize the limits of agreement.

I will argue that the relevant approach is to set up a proper statistical model for the collected data. Depending on whether replicates are exchangeable (a concept which will be explained) or not, different models are needed.

The point of the models I propose is that they include the item (person, sample) effect as fixed, because the distribution of the sample used should not have any bearing on the prediction of future differences between methods. Many other methods proposed include the variance of the person effects. I will argue that this an absurd approach.

The simplest model I propose is a standard mixed model that can be fitted with standard software. I provide a justification for the model and outline how to fit them by standard software. An extension of the model to a more realistic situation with a linear relationship between measurement methods is introduced too, and fitting algorithms are provided.

Finally I will demonstrate how the models can be used to provide a practical and simple approach to construction of limits of agreement with replicate measures, as well as how to accommodate non-linear effects through proper transformations.

I will give a brief overview of the facilities for handling, displaying and analyzing this type of data implemented in the MethComp package for R.

#### References

JM Bland, DG Altman: Measuring agreement in method comparison studies. (1999). Statistical Methods in Medical Research 8, pp. 136--160.

JM Bland and DG Altman: Agreement between methods of measurement with multiple observations per individual. (2007) J Biopharm Stat 17, pp. 571--582.

B Carstensen, J Simpson, LC Gurrin: Statistical models for assessing agreement in method comparison studies with replicate measurements. (2008) International Journal of Biostatistics, Article 16.

B Carstensen: Comparing Clinical Measurement Methods: As practical guide, Wiley, 2010, ISBN: 978-0-470-69423-7 (172 pages).

Esben Budtz-Jørgensen



### Senior Biostatistician

Do you want to join an innovative CRO company as a Senior Biostatistician?

We are offering an exciting and varied job in a motivated and professional group. You will be working in close collaboration with many clients and colleagues in a team-based organization, where you will have great influence on your own work. Industry experience and proficiency in SAS programming is a must in this position.

Cyncron is a full service CRO and Cyncron Biometrics offers the full range of data management, biostatistics and programming services. Our main deliverables lie within statistical analysis and reporting of clinical trials, services related to Data Monitoring Committees (DMC), and statistical consultancy regarding trial design and related areas.

#### Job profile

Statistical tasks on projects using ICH, GCP, company guidelines and SOP systems

SAS programming experience

Good and broad knowledge of clinical trial methodology

Client relations, main contact person on specific projects

Project statistician on specific projects

Data Monitoring Committee statistician on specific projects

#### **Your Profile**

 MSc in Statistics and experience as a Biostatistician in a pharmaceutical or CRO environment

Good communication skills with a flair for explaining statistical techniques and results to non-statisticians

Ability to work effectively and independently as a part of a multi-disciplinary team

- · Team player with a good sense of humour
- Excellent in written English and fluent in oral English
- Proficient in MS applications (word, excel)

#### Application

Please send your application and CV to Per Settergren Sørensen, Head of Statistics and programming, e-mail, <a href="mailto:pss@cvncron.com">pss@cvncron.com</a>, no later then Friday October 29<sup>th</sup>, 2010. For further information please feel free to contact Per Settergren Sørensen at +45 2675 2054 or the above email address.

Read more on www.cyncron.com

# Nyt om navne

Pr. 1.september er Ulla Ivens ansat som Senior Biostatistician hos BioStata ApS.

# Kalender 2010-2011

Dato	No.	Aktivitet
4. okt	6	Seminar Biostatistisk Afdeling, KU: Predicting on Manifolds in a Physiotherapeutic Setting
6. okt.	6	Seminar HCØ, KU: Malliavin calculus for stochastic differential equations driven by subordinated Brownian motions
11. okt.	6	Seminar Biostatistisk Afdeling, KU: Models for Method Comparison Studies
13-14. okt.	6	Workshop in Honour of Ole E. Barndorff-Nielsen's 75th Birthday
29. okt	6	Seminar HCØ, KU: Maximum T(q)-Likelihood Estimation and Extreme Value
2. nov	6	Official opening of Centre for Stochastic Geometry and Advanced Bioimaging
9-10. nov.	2	Todagesmøde, Biostatistisk Afdeling, Københavns Universitet
24-26. jan 2011	6	Symposium i anvendt statistik