BRÅKET
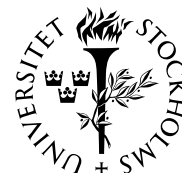
*Information om seminarier och högre undervisning
i matematiska ämnen i Stockholmsområdet*

BRÅKET

**Veckobladet från
Institutionen för matematik
vid Kungl Tekniska Högskolan
och Matematiska institutionen
vid Stockholms universitet**

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Sista manustid för nästa nummer:
Torsdagen den 19 mars kl. 13.00.

3rd Nordic
Optimization Symposium

Detta skall äga rum vid KTH den
13 – 14 mars. Se sidorna 3 – 4.

Uppsala Statistikermöte

Detta skall äga rum i Uppsala
onsdagen den 18 mars. Se sidan
10.

SEMINARIER

**Fr 03 – 13 kl. 12.15 – 13.00. Utbildningsseminarium i
matematik.** *Förslag till förändringar i våra
grundläggande kurser.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen
25, plan 7. Se Bråket nr 9 sidan 6.

**Må 03 – 16 kl. 13.15 – 14.15. DNA-seminariet Uppsala-
KTH (Dynamical systems, Number theory,
Analysis). Alexander Fish,** Ohio State University: *Sumset phenomenon for amenable groups.*
Sal D31, KTH, Lindstedtsvägen 17, b.v. Se
Bråket nr 9 sidan 8.

**Ti 03 – 17 kl. 13.15. Plurikomplexa seminariet. Alain
Yger,** Bordeaux: *Some questions about arithmetic
intersection or division problems involving residue
calculus.* Rum 306, hus 6, Matematiska institutionen, SU, Kräftriket. Se sidan 5.

**Ti 03 – 17 kl. 14.00 – 15.00. Institut Mittag-Leffler
Seminar. Olle Häggström,** Chalmers tekniska
högskola, Göteborg: *Dependent percolation on the
square lattice.* Institut Mittag-Leffler, Auravägen
17, Djursholm. Se sidan 6.

**Ti 03 – 17 kl. 15.15 – 16.00. Seminarium i numerisk
analys. Carl Christian Kjelgaard Mikkelsen,**
Purdue University, USA: *Parallel solution of
narrow banded linear systems.* Rum 1625, KTH
CSC. Se sidan 7.

**Ti 03 – 17 kl. 15.30 – 16.30. Institut Mittag-Leffler
Seminar. Svante Janson,** Uppsala universitet:
Susceptibility of random graphs. Institut Mittag-
Leffler, Auravägen 17, Djursholm. Se sidan 4.

**On 03 – 18 kl. 10.15 – 12.00. Kombinatorikseminarium.
Svante Janson,** Uppsala universitet: *Graph
limits and exchangeable infinite random graphs.*
Seminarierum 3733, Institutionen för matematik,
KTH, Lindstedtsvägen 25, plan 7. Se Bråket nr 9
sidan 7.

Fortsättning på nästa sida.

Seminarier (fortsättning)

On 03−18 kl. 11.00−12.00. KTH/Nordita/SU Seminar in Theoretical Physics. Michael Mulligan, MIT: *Holography and dynamical critical phenomena.* Sal FA31, Roslagstullsbacken 21, AlbaNova universitetscentrum. Se Bråket nr 9 sidan 8.

On 03−18 kl. 13.15−14.15. Seminarium i analys och dynamiska system. Todd Quinto, Tufts: *Some thoughts on limited data tomography.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 8.

Observera att Todd Quinto skall tala vid analysseminariet den 18 mars. I Bråket nr 9 angavs fel talare vid detta seminarium.

On 03−18 kl. 13.15−15.00. Algebra and Geometry Seminar. Mats Boij: *Cohomology tables of coherent sheaves and Betti diagrams of graded modules.* Rum 306, hus 6, Matematiska institutionen, SU, Kräftriket. Se sidan 6.

To 03−19 kl. 14.00−15.00. Institut Mittag-Leffler Seminar. Peter Hegarty, Chalmers tekniska högskola, Göteborg: *Concentration of measure in additive number theory.* Institut Mittag-Leffler, Auravägen 17, Djursholm. Se sidan 4.

To 03−19 kl. 14.15. Seminarium i matematikens filosofi. Wilfried Sieg, Carnegie Mellon University och SCAS: *Aspects of the mathematical mind.* Thunbergssalen vid Kollegiet för samhällsforskning (SCAS), Linneanum, Thunbergsvägen 2, Uppsala universitet.

To 03−19 kl. 15.15−16.15. AlbaNova and Nordita Colloquium in Physics. Professor Richard Wigmans, Texas Tech University: *Dual-readout calorimetry.* Oskar Kleins auditorium, Roslagstullsbacken 21, AlbaNova universitetscentrum. Se Bråket nr 9 sidan 7.

To 03−19 kl. 15.30−16.30. Institut Mittag-Leffler Seminar. Erik Broman, Chalmers tekniska högskola, Göteborg: *(Some new and some old results in) fractal percolation.* Institut Mittag-Leffler, Auravägen 17, Djursholm. Se sidan 5.

Fr 03−20 kl. 13.15−14.15. Graduate Student Seminar. Björn Winckler, Matematik, KTH: *An introduction to computer assisted proof in analysis.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 7.

Fr 03−20 kl. 15.15−16.15. Matematiska kollokviet i Uppsala. *(Observera lokalen!)* **Michael Rathjen,** University of Leeds: *The art of ordinal analysis.* Sal Å2005, Ångströmlaboratoriet, Uppsala universitet. Kaffe/te serveras utanför föreläsningssalen kl. 14.55. Se sidan 9.

On 03−25 kl. 13.15−14.15. Seminarium i analys och dynamiska system. Denis Gaidashev, Uppsala: *Title to be announced.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

On 03−25 kl. 13.15. Algebra and Geometry Seminar. Helge Maakestad: *Title to be announced.* Seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

On 03−25 kl. 14.30−15.30. KCSE (KTH Computational Science and Engineering Centre) Seminar. Anders Szepessy, Numerisk analys, KTH, och Matematik, KTH: *A stochastic phase-field model determined from molecular dynamics.* Rum RB15, Roslagstullsbacken 15, AlbaNova universitetscentrum. Se sidan 9.

Fortsättning på nästa sida.

Seminarier (fortsättning)

On 03−25 kl. 16.00. KTH/SU Mathematics Colloquium. Professor Joel Spencer, Courant Institute, New York University: *78 Years of Ramsey $R(3,k)$*. Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Kaffe/te serveras kl. 15.30 i pausrummet, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 4. Se sidan 6.

To 03−26 DNA-seminariet Uppsala-KTH (Dynamical systems, Number theory, Analysis). Jean-Pierre Conze, Université de Rennes 1: *Asymptotic laws for some sequential dynamical systems.* Seminariet skall äga rum i Uppsala. Tid och sal meddelas senare. Se sidan 8.

3RD NORDIC OPTIMIZATION SYMPOSIUM

We will be organizing the "3rd Nordic Optimization Symposium" at KTH on Friday, March 13, and Saturday, March 14. Everybody is welcome to attend the talks. Please see http://www.math.kth.se/optsyst/3nos/ for further information.

In particular, I recommend the plenary talks by Edwin Romeijn, University of Michigan, and Melvyn Sim, National University of Singapore. See below.

Edwin Romeijn:
Optimization problems for radiation therapy treatment planning

Abstract: In this talk we will discuss the state-of-the-art of optimization models for static radiation therapy treatment planning for cancer patients, focusing in particular on intensity modulated radiation therapy (IMRT). In particular, we will focus on (i) the fluence-map optimization problem, in which the goal is to design high-quality fluence profiles for the radiation beams, and (ii) the leaf-sequencing problem, in which the goal is to enable the efficient delivery of these optimal fluence profiles. In the first part of the talk we will discuss the issue of assessing the quality of a treatment plan and establish a connection with (financial) risk management. In the second part of the talk we will study a new optimization approach to the problem of decomposing a fluence profile into a collection of so-called apertures. Mathematically, a fluence profile can be represented as a nonnegative integer matrix, while an aperture can be represented as a binary matrix whose ones appear consecutively in each row. A feasible decomposition is one in which the original desired fluence profile is equal to the sum of a number of feasible binary matrices multiplied by corresponding intensity values. In order to most efficiently treat a patient, we wish to minimize a measure of total treatment time, which is given as a weighted sum of the number of apertures and the sum of the aperture intensities used in the decomposition. We develop an exact algorithm capable of solving real-world problem instances to optimality within practicable computational time limits, using a combination of integer programming decomposition and combinatorial search techniques. We demonstrate the efficacy of our approach on a set of 25 test instances derived from actual clinical data.

Time and place: Friday, March 13, at 9.00−9.50 in room D2, KTH, Lindstedtsvägen 5, ground floor. The symposium begins with opening remarks at 8.50−9.00 in room D2.

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Melvyn Sim:
Distributionally robust optimization:
A marriage of robust optimization and stochastic programming

Abstract: Stochastic Programming (SP) and Robust Optimization (RO) are often viewed as two extreme approaches of addressing optimization problems under uncertainties. In SP, uncertain data are represented as a random variable based on an assumed probability distribution. However, from practical perspective, it is impossible to elicit the exact distribution of the uncertain data. Besides, an SP model is generally computationally intractable. In RO, data uncertainty is represented by an uncertainty set. Although some RO models are computationally amiable, their solutions can be rather conservative. In this talk, we look at Distributionally Robust Optimization (DRO), which integrates SP and RO models. A DRO model allows the modeller to consider uncertain parameters whose distributions are unknown but with the same descriptive statistics on the data, such as known means, variances and directional deviations among others. We will discuss the techniques for formulation computationally tractable DRO models for multistage modelling with recourse and for safeguarding constraints against infeasibility analogous to joint chance constrained problems.

Time and place: Saturday, March 14, at 9.00 – 9.50 in room D2, KTH, Lindstedtsvägen 5, ground floor.

Anders Forsgren
Chairman
Organizing committee

INSTITUT MITTAG-LEFFLER SEMINAR

Svante Janson:
Susceptibility of random graphs

Abstract: The susceptibility of a graph is a fancy name for the average size of the component containing a random vertex. I will start with a quick survey of some models of random graphs, and then proceed to recent results on their susceptibility.

Tid och plats: Tisdagen den 17 mars kl. 15.30 – 16.30 vid Institut Mittag-Leffler, Auravägen 17, Djursholm.

INSTITUT MITTAG-LEFFLER SEMINAR

Peter Hegarty:
Concentration of measure in additive number theory

Abstract: Additive number theory is basically concerned with properties of so-called sumsets, i.e.: with the relationship between a set A of integers and the set $A + A$ consisting of all possible sums of two elements of A. Some of the most famous problems of number theory involve this notion. Probabilistic methods have many applications in this area, and very often these require the application of some strong concentration inequality. I will discuss some of these applications, from the classical example of so-called "thin integer bases" considered by Erdös, to more recent applications considered by myself and other researchers.

Tid och plats: Torsdagen den 19 mars kl. 14.00 – 15.00 vid Institut Mittag-Leffler, Auravägen 17, Djursholm.

PLURIKOMPLEXA SEMINARIET

Alain Yger:
Some questions about arithmetic intersection
or division problems involving residue calculus

Abstract: It appears now from the elegant approach developed by Z. Jelonek, and very recently adapted to the arithmetic context by T. Krick and M. Sombra, that arithmetic division problems such as the Hilbert nullstellensatz are well understood (moreover settled in the almost sharpest way) from the point of view of arithmetic intersection theory. Duality methods (based for example on multivariate residue calculus) appear on the other hand to be essential when dealing with division problems of the Briançon-Skoda type that do not seem easily tractable through arithmetic intersection theory. Such methods provide also an alternative view on Chow's ideas or Perron's theorem, which are basic ingredients in the intersection theory setting (either geometric or arithmetic), which I will explain in this talk. Though of course they are of true analytic nature, residue currents of the Bochner-Martinelli type play an essential role (for example in the explicitation of M. Hickel's result about effective global Briançon-Skoda theorem or in the computation of the intersection multiplicities in the Vogel-Tworzevski sense in the improper intersection setting in a joint work in progress with M. Andersson, H. Samuelsson and E. Wulcan) and remain a key ingredient to express Green currents, which are the analytic pendants of arithmetic cycles in intersection theory, or even to compute, unfortunately in very few cases, the normalized height of a projective hypersurface. I will also discuss some toric aspects, mainly connected with the role that could be devoted to the Ronkin function (instead of the Mahler measure) in order to measure the contribution at archimedian places to the height of a hypersurface in a complete projective toric variety. Some recent work by P. Philippon and M. Sombra seems to confirm this idea.

Tid och plats: Tisdagen den 17 mars kl. 13.15 i rum 306, hus 6, Matematiska institutionen, SU, Kräftriket.

INSTITUT MITTAG-LEFFLER SEMINAR

Erik Broman:
(Some new and some old results in) fractal percolation

Abstract: There are a number of ways to construct random fractals (random sets). The most studied is the so-called Mandelbrot fractal percolation model. This model has a number of interesting properties. For instance, in contrast to ordinary percolation, it has a percolation function that is discontinuous at its critical point (for $d = 2$).

I will define the model and discuss its basic properties and some previously known results. I will proceed by explaining how we obtained some new results concerning the discontinuous behaviour of the percolation function in dimensions higher than 2. I will also talk about the analogue of taking a scaling limit in two dimensions of ordinary critical percolation, and in particular give our result concerning this.

Lastly, I will talk about connectivity phase transitions of a large class of random fractals and show that they all behave the same at their critical point of transition.

The talk is based on joint work with F. Camia.

Tid och plats: Torsdagen den 19 mars kl. 15.30 – 16.30 vid Institut Mittag-Leffler, Auravägen 17, Djursholm.

INSTITUT MITTAG-LEFFLER SEMINAR

Olle Häggström:
Dependent percolation on the square lattice

Abstract: Uniqueness of the infinite cluster for i.i.d. percolation on $\mathbb{Z}^2$ (as well as in higher dimensions) is a classical result. The conclusion about uniqueness survives substantial, but not all, generalizations to dependent models. Key assumptions involve translation invariance, finite energy, and the FKG inequality. In this talk I will survey old and new ideas, results and counterexamples.

Tid och plats: Tisdagen den 17 mars kl. 14.00 – 15.00 vid Institut Mittag-Leffler, Auravägen 17, Djursholm.

ALGEBRA AND GEOMETRY SEMINAR

Mats Boij:
Cohomology tables of coherent sheaves
and Betti diagrams of graded modules

Abstract: In 2008 David Eisenbud and Frank-Olaf Schreyer proved a set of conjectures, stated by Jonas Söderberg and myself in 2006, giving a characterization of possible Betti diagrams of graded Cohen-Macaulay modules up to multiplication by scalars. In doing this, they also provided an unexpected relation between this problem and the corresponding problem for cohomology tables of vector bundles on projective spaces. After this, we were able to extend the result on Betti diagrams to the case of graded modules that are not necessarily Cohen-Macaulay. Now, Eisenbud and Schreyer have gone further on the side of cohomology tables and extended their results to the case of coherent sheaves on projective spaces. In this talk I will explain these developments and give an idea about what lies behind the results.

Tid och plats: Onsdagen den 18 mars kl. 13.15 – 15.00 i rum 306, hus 6, Matematiska institutionen, SU, Kräftriket.

KTH/SU MATHEMATICS COLLOQUIUM

Joel Spencer:
78 Years of Ramsey $R(3, k)$

Abstract: The Ramsey Number $R(3, k)$ is that least number n (dependent on k) so that *any* triangle-free graph on n vertices *must* contain an independent set of k vertices. An examination of (appropriately defined) random graphs and random processes plays a key role in finding the asymptotics of $R(3, k)$. Our story takes us from three youngsters, George Szekeres, Esther Klein and Paul Erdös, in the winter of 1932/3 through the decades to very recent work of Bohman. A Computer Science perspective is often useful, giving algorithms to create graphs or independent sets. Large deviations in probability are often used. In Bohman's work stability of a system of differential equations is vital.

Tid och plats: Onsdagen den 25 mars kl. 16.00 i seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Kaffe/te serveras kl. 15.30 i pausrummet, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 4.

SEMINARIUM I NUMERISK ANALYS

Carl Christian Kjelgaard Mikkelsen:
Parallel solution of narrow banded linear systems

Abstract: Given a sparse linear system

$$Ax = f$$

it is often possible to find permutation matrices P and Q such that

$$\tilde{A} = PAQ^T$$

is narrow banded, i.e.

$$\exists k \ll n : \forall i,j : |i - j| > k \Rightarrow \tilde{a}_{ij} = 0,$$

or such that $\tilde{A}$ admits a narrow banded preconditioner $\tilde{M}$, such that $\tilde{M}^{-1}$ is a good approximation of $\tilde{A}^{-1}$. In either case, we are left with the problem of solving one or more narrow banded linear systems. In this talk we consider the problem of solving a narrow banded linear system on a linear array consisting of p processors. We state the explicit SPIKE algorithm, the truncated SPIKE algorithm and introduce a new algorithm MinCom. The explicit SPIKE algorithm applies to linear systems for which the main block diagonal is nonsingular. The original system is transformed into the so-called SPIKE system, which contains a reduced system of dimension $2(p - 1)k$. Once the reduced system has been solved and the solution spread across the processors, the remaining $n - 2(p - 1)k$ components of the solution can be obtained with no communication. The truncated SPIKE algorithm applies to systems which are strictly diagonally dominant by rows. In this case the reduced system is nearly block diagonal in a sense which can be made precise and exploited. We present tight estimates on the decay rate of the spikes as well as the truncation error. Finally, we use the analysis of the SPIKE algorithm to derive a new algorithm MinCom for which the solve phase can be carried out with only a single one to all broadcast. If the system is well conditioned, then this can be reduced further to a single exchange of information between neighbouring processors. MinCom applies to systems for which the main block diagonal is nonsingular.

Tid och plats: Tisdagen den 17 mars kl. 15.15 – 16.00 i rum 1625, KTH CSC.

GRADUATE STUDENT SEMINAR

Björn Winckler:
An introduction to computer assisted proof in analysis

Abstract: In this talk I will outline a method for using computers to prove the existence of fixed points for non-linear operators acting on infinite-dimensional Banach spaces. It is not immediately apparent how this is even possible, since computers are not exactly well equipped to deal with infinite dimensions. I will explain how a "reduction" to finite dimension can be carried out and how to deal with rounding errors that arise from the use of finite precision arithmetic. The subject matter is accessible without much knowledge of analysis; if you know of Banach spaces and the contraction mapping principle, you will be set.

Tid och plats: Fredagen den 20 mars kl. 13.15 – 14.15 i seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

SEMINARIUM I ANALYS OCH DYNAMISKA SYSTEM

Todd Quinto:
Some thoughts on limited data tomography

Abstract: Many tomography problems involve limited data, in which some of the data needed for standard reconstruction algorithms are not available. We will discuss a few such problems, including electron microscopy tomography (ET). We will examine our reconstructions (pictures of the objects being scanned) from limited data to see how the limited data affect reconstructions. We will develop microlocal analysis, a powerful tool to understand singularity detection and use this to understand our observations. Finally, we will discuss algorithms and show the associated point spread functions. This will give practical perspective on our theoretical results and explain advantages of my algorithm over the standard filtered back projection. My mathematical research on ET is joint with Ozan Öktem and practical research joint with Ozan Öktem and Ulf Skoglund.

Tid och plats: Onsdagen den 18 mars kl. 13.15 – 14.15 i seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

DNA-SEMINARIET UPPSALA-KTH
(DYNAMICAL SYSTEMS, NUMBER THEORY, ANALYSIS)

Jean-Pierre Conze:
Asymptotic laws for some sequential dynamical systems

Abstract: Let $(\tau_n)_{n\geq 1}$ be a "sequential" dynamical system, i.e. a sequence of non-singular transformations on a probability space (X, m). We consider different examples where, after normalization, a limit theorem can be obtained for the sums $\sum_{k=1}^{n} f(\tau_k \circ \tau_{k-1} \circ \cdots \circ \tau_1 x)$ when f is a regular function on X.

We will take for (τ_n):

1) a sequence of β-transformations $\tau_n : x \to \beta_n x \mod 1$, with $\beta_n > 1$;

2) a sequence of toral automorphisms $\tau_n : x \to A_n x \mod \mathbb{Z}^d$ with $A_n \in \{A, B\}$, where A and B are two matrices in $SL(d, \mathbb{Z})$.

3) The asymptotic behaviour of the sums $\sum_{k=1}^{n} f(q_k x \mod 1)$, where (q_n) is an increasing sequence of integers, will also be discussed, an old question since A. Zygmund, M. Kac, R. Fortet among others, recently considered again by C. Aistleitner and I. Berkes.

In case 1) the spectral gap method for the corresponding transfer operators and a martingale argument can be used to prove a Central Limit Theorem (joint work with A. Raugi).

In case 2) we give conditions which imply decorrelation and enable to apply the method of "multiplicative systems" of Komlòs, providing a Central Limit Theorem for the sums $\sum_{k=1}^{n} f(\tau_k \circ \tau_{k-1} \circ \cdots \circ \tau_1 x)$ when f is a regular function on $\mathbb{T}^d$. These conditions hold for 2×2 matrices with positive coefficients. In dimension d, they can be applied when $\tau_n x = A_n(\omega) x \mod \mathbb{Z}^d$, with independent choice of $A_n(\omega) \in \{A, B\}$, A and B in $SL(d, \mathbb{Z}^+)$, in order to prove a "quenched" CLT (question also recently considered by A. Ayyer, C. Liverani and M. Stenlund).

In case 3) we recall an ancient example where the CLT does not hold, but where a mixture of Gaussian laws is obtained as asymptotic law, and we give a generalization of this fact. The results in 2) and 3) are joint works with S. Le Borgne and M. Roger.

Tid och plats: Seminariet skall äga rum i Uppsala torsdagen den 26 mars. Tid och sal meddelas senare.

MATEMATISKA KOLLOKVIET I UPPSALA

Michael Rathjen:
The art of ordinal analysis

Abstract: A central theme running through all the main areas of Mathematical Logic is the classification of sets, functions or theories, by means of transfinite hierarchies whose ordinal levels measure their 'rank' or 'complexity' in some sense appropriate to the underlying context. In Proof Theory this is manifest in the assignment of 'proof theoretic ordinals' to theories, gauging their 'consistency strength' and 'computational power'. This area of mathematical logic has its roots in Hilbert's "Beweistheorie", the aim of which was to lay to rest all worries about the foundations of mathematics once and for all by securing mathematics via an absolute proof of consistency.

In the main, ordinal-theoretic proof theory came into existence in 1936, springing forth from Gentzen's consistency proof of arithmetic. The intent of the talk is to elucidate the underlying notions and the rationale of ordinal-theoretic proof theory by relating the developments from Gentzen up to recent advances in ordinal analysis of theories.

Tid och plats: Fredagen den 20 mars kl. 15.15 – 16.15 i sal Å2005, Ångströmlaboratoriet, Uppsala universitet. Kaffe/te serveras utanför föreläsningssalen kl. 14.55.

KCSE SEMINAR

Anders Szepessy:
A stochastic phase-field model
determined from molecular dynamics

Abstract: The phase-field method is widely used to study evolution of microstructural phase transformations on a continuum level; it couples the energy equation to a phenomenological Allen-Cahn/Ginzburg-Landau equation, modelling the dynamics of an order parameter determining the solid and liquid phases, including also stochastic fluctuations to obtain the qualitatively correct result of dendritic side branching.

I will present a method to determine stochastic phase-field models from atomistic formulations by coarse-graining molecular dynamics. It has four steps:

(1) Derivation of stochastic molecular dynamics from the time-indepedent Schrödinger equation;
(2) a precise quantitative atomistic definition of the phase-field variable, based on the local potential energy;
(3) derivation of its coarse-grained dynamics model, from microscopic Smoluchowski molecular dynamics; and
(4) numerical computation of the coarse-grained model functions.

Tid och plats: Onsdagen den 25 mars kl. 14.30 – 15.30 i rum RB15, Roslagstullsbacken 15, AlbaNova universitetscentrum.

UPPSALA STATISTIKERMÖTE ("UPP-UPP")

Mötet skall äga rum onsdagen den 18 mars 2009 i sal B153, Ekonomikum, Uppsala universitet.

Program

9.15 **Rolf Larsson:** *Inledning.*

9.20 **Fredrik Jonsson,** Matematisk statistik, UU: *Hur påverkar avvikelser från normalfördelningsantagandet mitt p-värde?*

9.45 **Marianne Mehle-Schmidt,** Statisticon: *Presentation av Statisticon.*

10.10 Kaffe.

10.30 **Claudia von Brömssen,** SLU: *Semiparametric smoothers for trend assessment of multiple environmental time series.*

10.55 **Joakim Ekström,** Statistik, UU: *A generalized definition of the tetrachoric correlation coefficient.*

11.20 Lunch (sponsrad av Phadia).

12.00 **Henrik Renlund,** Matematisk statistik, UU: *Urnor och stokastisk approximation.*

12.25 **Dietrich von Rosen,** SLU: *Estimation in high-dimensional analysis and multivariate linear models.*

12.50 **Rolf Larsson:** *Avslutning.*