



BRÅKET



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

NR 26

FREDAGEN DEN 9 SEPTEMBER 2005

BRÅKET

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

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<http://www.math.kth.se/braket/>

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Red. för Bråket
Institutionen för matematik
KTH
100 44 Stockholm

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Sista manustid för nästa nummer:
Torsdagen den 15 september
kl. 13.00.

SEMINARIER

Må 09–12 kl. 13.15–14.00. DNA-seminariet Uppsala-KTH (Dynamical systems, Number theory, Analysis) — Docentföreläsning i matematik. Anders Öberg, Uppsala: *Uniqueness of g-measures*. Sal 2244, MIC, Polacksbacken, Uppsala universitet. Se Bråket nr 24 sidan 3.

Må 09–12 kl. 14.30–15.15. DNA-seminariet Uppsala-KTH (Dynamical systems, Number theory, Analysis) — Docentföreläsning i matematik. Andreas Strömbergsson, Uppsala: *Maass waveforms and Galois representations*. Sal 2244, MIC, Polacksbacken, Uppsala universitet. Se Bråket nr 24 sidan 4.

Må 09–12 kl. 15.15–16.00. Seminarium i finansiell matematik. Jonathan Wendin, ETH Zürich: *Bayesian inference for generalized linear mixed models of portfolio credit risk*. Seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se Bråket nr 25 sidan 5.

Fortsättning på nästa sida.

Money, jobs: Se sidorna 7–8.

ALGEBRA- OCH GEOMETRISEMINARIUM

Torsten Ekedahl:

Lie spaces and interpolation

Abstract: I have previously introduced an algebraic model for homotopy theory that (even though it is not quite presented that way) could be said to be based on torsion free nilpotent groups. I will present an analogous theory that replaces groups with Lie algebras and an “interpolation” between these theories. This interpolation should have the potential to give a comparison between the group cohomology of the integral points of a nilpotent algebraic group defined over the integers and the cohomology of its Lie algebra.

Tid och plats: Onsdagen den 14 september kl. 13.15–15.00 i seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

Seminarier (fortsättning)

- Ti 09–13 kl. 10.15–11.15. Docentföreläsning i matematik. Anders Karlsson:** *Asymptotic geometry of metric spaces*. Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se Bråket nr 25 sidan 6.
- Ti 09–13 kl. 14.00–15.00. Mittag-Leffler Seminar. Denis Serre, ENS, Lyon:** *Well-posed initial boundary value problems in linear elasticity*. Institut Mittag-Leffler, Auravägen 17, Djursholm.
- Ti 09–13 kl. 15.30–16.30. Mittag-Leffler Seminar. David Ambrose, Courant Institute, New York:** *Well-posedness for free surface problems in fluids*. Institut Mittag-Leffler, Auravägen 17, Djursholm.
- On 09–14 kl. 10.15–12.00. Kombinatorikseminarium. Jonas Sjöstrand:** *The sign of skew Young diagrams*. Seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 4.
- On 09–14 kl. 13.15–14.15. Seminarium i analys och dynamiska system. A. Baranov, S:t Petersburg och KTH:** *Completeness of systems of reproducing kernels in model subspaces*. Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.
- On 09–14 kl. 13.15–15.00. Logikseminariet Stockholm-Uppsala. Fredrik Dahlgren:** *TTE vs. effective domain representability*. Sal 3513 (hus 3), MIC, Polacksbacken, Uppsala universitet.
- On 09–14 kl. 13.15–15.00. Algebra- och geometriseminarium. Torsten Ekedahl:** *Lie spaces and interpolation*. Seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 1.
- On 09–14 kl. 15.15. Seminarium i matematisk statistik. Örjan Stenflo, SU:** *Chains with complete connections*. Rum 306 (Cramér rummet), hus 6, Matematiska institutionen, SU, Kräftriket. Se sidan 6.
- On 09–14 kl. 16.00–17.00. KTH/SU Mathematics Colloquium. Jürg Fröhlich, ETH:** *Boson stars*. 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 Bråket nr 25 sidan 5.
- To 09–15 kl. 13.15. Seminarium i teoretisk datalogi. Alan Abdulrahman:** *Web services security*. Rum 1537, Nada, KTH, Lindstedtsvägen 3, plan 5. Se sidan 5.
- To 09–15 kl. 14.00–15.00. Mittag-Leffler Seminar. Richard Beals, Yale University, New Haven:** *Peakons and antpeakons*. Institut Mittag-Leffler, Auravägen 17, Djursholm.
- To 09–15 kl. 15.30–16.30. Mittag-Leffler Seminar. Robin S. Johnson, University of Newcastle:** *The Camassa-Holm equation for water waves*. Institut Mittag-Leffler, Auravägen 17, Djursholm.
- Må 09–19 kl. 10.15. Seminarium i teoretisk datalogi. Tarmo Uustalu, Institute of Cybernetics, Tallinn:** *A compositional natural semantics and Hoare logic for low-level languages*. Rum 1537, Nada, KTH, Lindstedtsvägen 3, plan 5. Se sidan 6.
- Må 09–19 kl. 13.00. Licentiatseminarium i teoretisk datalogi. Johan Glimming, Nada, KTH, presenterar sin licentiatavhandling:** *Dialgebraic Semantics of Typed Object Calculi*. Opponent: **Tarmo Uustalu**, Institute of Cybernetics, Tallinn. Sal D3, KTH, Lindstedtsvägen 5, b.v. Se sidan 3.

Fortsättning på nästa sida.

Seminarier (fortsättning)

- Må 09–19 kl. 13.15–14.15. Seminar in Analysis and its Applications.** Vladimir Tkachev: *Positive definite collections*. Seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidorna 6–7.
- Må 09–19 kl. 15.15–16.00. Seminarium i finansiell matematik.** Carl Mikael Bergman presenterar sitt examensarbete: *Estimating Volatility Structures for Pricing Options with Electricity Forwards and Futures as Underlying Assets*. Seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 5.
- Må 09–19 kl. 16.15–17.00. Seminarium i finansiell matematik.** Magnus Kullberg presenterar sitt examensarbete: *Valuing Credit Default Swaps*. Seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 4.
- On 09–21 kl. 13.15–14.15. Seminarium i analys och dynamiska system.** A. Borichev, Bordeaux: *Title to be announced*. Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.
- On 09–21 kl. 13.15–15.00. Algebra- och geometriseminarium.** Mattias Jonsson: *The valutative tree*. Rum 306, hus 6, Matematiska institutionen, SU, Kräftriket.

LICENTIATSEMINARIUM I TEORETISK DATALOGI

Johan Glimming

presenterar sin licentiatavhandling:

Dialgebraic Semantics of Typed Object Calculi

Opponent: Tarmo Uustalu, Institute of Cybernetics, Tallinn.

Abstract: Algebraic data type theory has a notion of structural recursion. Coalgebraic data types similarly have a notion of structural corecursion. In this thesis we study a third form of recursion: direcursion. The other two notions have been used in program derivations, correctness proofs, and in foundations of functional and class-based languages. Direcursion, on the other hand, has not been extensively studied in the context of programming languages, and not at all in the context of algebraic techniques for object-oriented programming languages or typed object calculi. Yet, every object in object calculi is equipped with this recursion principle, and we will demonstrate that this principle can be used in foundations and in programming (as a powerful and general way of computing with objects), and when reasoning with object calculi programs, e.g. in correctness proofs.

The family of *object calculi* developed by Abadi and Cardelli [MARTÍN ABADI and LUCA CARDELLI, *A Theory of Objects*, Springer-Verlag, 1996] is one of several proposed foundations for object-oriented programming languages. It is one of the more general frameworks available, and arguably the most general framework which fully supports subtyping. The study of direcursion involves dealing with several aspects of object calculus, with contributions ranging from giving an operational (natural) semantics of a typed object calculus and interpreting this semantics into fixed point calculus while proving soundness and adequacy results to directly constructing a denotational semantics of typed object calculi. As a result, this thesis lays a foundation for algebraic programming techniques and laws for typed object calculi based on direcursion.

Tid och plats: Måndagen den 19 september kl. 13.00 i sal D3, KTH, Lindstedtsvägen 5, b.v.

KOMBINATORIKSEMINARIUM

Jonas Sjöstrand:

The sign of skew Young diagrams

Abstract: Let the *sign* of a standard Young tableau be the sign of the permutation you get by reading it row by row from left to right, like a book. A couple of years ago Richard Stanley conjectured that the sum of the signs of all standard Young tableaux on n squares is $2^{\lfloor n/2 \rfloor}$. After about a year this conjecture was settled (independently by me and Thomas Lam). It turned out that a formula for sign transfer under the Robinson-Schensted correspondence was the key to understanding the sum of tableau signs. This immediately opened up the possibility of finding sign transfer formulas for the various variants of the RS-correspondence.

In this talk I will explain how the sign property is transferred by the *skew* RS-correspondence invented by Sagan and Stanley. Then I generalize previous results on the sign of ordinary tableaux to skew ones.

Tid och plats: Onsdagen den 14 september kl. 10.15–12.00 i seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

SEMINARIUM I FINANSIELL MATEMATIK

Magnus Kullberg

presenterar sitt examensarbete:

Valuing Credit Default Swaps

Abstract: This thesis looks at different ways of valuing a credit default swap, CDS, on one or several underlying credit risks. A CDS pays the holder a certain compensation if a particular underlying credit risk is triggered. In this thesis the credit risk is modelled using the intensity rate of default. We will go through the theoretical foundation for valuation methods based on the intensity rate approach, and then the specific valuation approaches are described.

Three methods of valuing a CDS on a single underlying risk are evaluated. It is concluded that a method that draws specific stopping times is less efficient than a method that calculates probable payouts without drawing a specific stopping time. However, the method that does draw specific stopping times is more flexible. The fastest method is derived straight from a simple Vasicek process and has analytic steps, but it is of course also the least flexible method.

Also, three approaches to valuing a CDS on several underlying credit risks are evaluated. A first approach is to use a Gaussian copula to mix the risks together. The lack of computational tractability and mathematical simplicity makes this approach less appealing than the second approach of a Gaussian factor copula which uses industry factors to link the risks together. If, as a third approach, an Archimedean Gumbel copula can be calibrated, it allows for a direct specification of the intensity rate for a first to default, FtD, CDS.

Even though the model for CDS valuation on one underlying risk that calculates probable payments seems to mix exactness with flexibility, the method that draws stopping times is very easy to use even for valuing a CDS on several underlying risks. Moreover, when valuing a CDS on a number of underlying risks, the Gaussian factor copula method seems to provide the best overall mix between tractability and accuracy.

Tid och plats: Måndagen den 19 september kl. 16.15–17.00 i seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

SEMINARIUM I TEORETISK DATALOGI

Alan Abdulrahman:
Web services security

Abstract: As the surrounding world changes, IT systems grow and become more complex. By providing everything in terms of service modules to internal and external users of an organization, these service modules can easily be regrouped and exchanged to provide new forms of services adapted to the new situation. This is the idea of service-oriented architectures. A set of specifications that provide means to communicate in a platform- and language-independent manner, are grouped under the concept of Web services, and provide a realization of service-oriented architectures. Web services facilitate communication between partner organizations with entirely different underlying IT infrastructures by exchanging XML messages in a standardized manner.

To address security in Web services environments, another set of specifications is being developed that goes under the name Web services security. These specifications include mechanisms for securing single messages, establishing and brokering trust relationships between organizations, putting security capabilities and constraints on Web services, establishing security contexts, federating identities across partner organizations, stating privacy policies, and subjecting Web services to fine-grained access control.

This seminar will present in more detail the specifications that comprise Web services security. No more than basic knowledge on computer security mechanisms is required.

Tid och plats: Torsdagen den 15 september kl. 13.15 i rum 1537, Nada, KTH, Lindstedtsvägen 3, plan 5.

SEMINARIUM I FINANSIELL MATEMATIK

Carl Mikael Bergman

presenterar sitt examensarbete:

Estimating Volatility Structures for Pricing Options with Electricity Forwards and Futures as Underlying Assets

Abstract: At Nord Pool options are traded with forward contracts on electricity as the underlying asset. The market uses a constant, implied volatility as input into the Black-76 formula for option pricing. However, the assumption of a constant volatility is clearly violated for forward prices at Nord Pool. The focus of this thesis is on methods of specifying the volatility for forward and futures contracts to allow for time dependence, which then can be used for valuing options. Two different approaches are used; for seasonal forwards, we propose a method where historical price data are used to obtain time-varying variance functions, and for monthly futures we apply principal components analysis to obtain the volatility structure. Thereafter both approaches are used as input into Black-76 to obtain option prices. Interestingly, we find that forward and futures seem to exhibit different volatility dynamics; forward prices seem to be more volatile than futures prices towards delivery. For seasonal forwards, we can compare our own option prices with real option prices from Nord Pool, and for monthly futures, we obtain theoretical option prices by using the results of the principal components analysis.

Tid och plats: Måndagen den 19 september kl. 15.15–16.00 i seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

SEMINARIUM I MATEMATISK STATISTIK

Örjan Stenflo:

Chains with complete connections

Abstract: We consider discrete-time stochastic processes and give conditions ensuring them to be completely characterized by their conditional distributions of the “future” given the “present and complete past”.

Under these conditions we also show how to generate a “perfect sample” from the process. An important particular case of our results concerns the class of Markov chains where conditional distributions of the “future” given the “present and complete past” in fact do not depend on the “complete past”. Our method of generating a “perfect sample” then reduces to the well-known Propp-Wilson method.

Tid och plats: Onsdagen den 14 september kl. 15.15 i rum 306 (Cramérrummet), hus 6, Matematiska institutionen, SU, Kräftriket.

SEMINARIUM I TEORETISK DATALOGI

Tarmo Uustalu:

A compositional natural semantics and Hoare logic for low-level languages

Abstract: The advent of proof-carrying code has generated significant interest in reasoning about low-level languages. It is widely believed that low-level languages with jumps must be difficult to reason about by being inherently non-modular. We argue that this is untrue. We take it seriously that, differently from statements of a high-level language, pieces of low-level code are multiple-entry and multiple-exit. And we define a piece of code to consist of either a single labelled instruction or a finite union of pieces of code. Thus we obtain a compositional natural semantics and a matching Hoare logic for a basic low-level language with jumps. By their simplicity and intuitiveness, these are comparable to the standard natural semantics and Hoare logic of While. The Hoare logic is sound and complete with respect to the semantics and allows for compilation of proofs of the Hoare logic of While.

This is joint work with Ando Saabas, based on a paper at SOS 2005.

Tid och plats: Måndagen den 19 september kl. 10.15 i rum 1537, Nada, KTH, Lindstedtsvägen 3, plan 5.

SEMINAR IN ANALYSIS AND ITS APPLICATIONS

Vladimir Tkachev:

Positive definite collections

Abstract: An arbitrary finite collection of disks $\mathcal{B} = \{B_{a_j}(R_j)\}_{j \leq n}$ in the complex plane is called *positive* if the matrix with entries

$$D_{ij} = - \prod_{k=1}^n [(a_i - a_k)(\bar{a}_j - \bar{a}_k) - R_k^2],$$

is positive definite. Here $a_{ij} = a_i - a_j$ and a_j stands for the centres of the disks. Recently, Gustafsson and Putinar proved that this function is a positive kernel, that is (D_{ij}) is a positive definite matrix, provided $\mathcal{B}$ consists of *disjoint* disks only. On the other hand, numerous examples show that $\mathcal{B}$ remains positive even if the discs overlap a little.

(Continued on the next page.)

I will show that the latter observation is valid at least for the symmetric collections. Moreover, the explicit description of the above positivity will be given in terms of the zeroes of the generalized Jacobi polynomials. We show also that asymptotically (as $n \rightarrow \infty$) the measure of overlapping of the symmetric collection tends to $j_{1,1}/\pi = 1.219$, where $j_{1,1}$ is the first positive zero of the Bessel function $J_1(z)$.

Tid och plats: Måndagen den 19 september kl. 13.15–14.15 i seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

MONEY, JOBS

Columnist: Tommi Asikainen, Department of Mathematics, SU. E-mail: tommi@math.su.se.

Info = information. This will be given and repeated until obsolete. Rely on other sources as well.

BBKTH = Bulletin Board at the Department of Mathematics, KTH.

BBSU = Bulletin Board at the Department of Mathematics, SU.

The following information, with links, is also available at <http://www.math.su.se/~tommi/mj.html>.

Unless stated otherwise, a given date is the last date (e.g. for applications), and the year is 2005. A number without an explanation is a telephone number.

Standard information channels

1. A channel to information from Vetenskapsrådet: <http://www.vr.se/naturteknik/index.asp>.
2. A channel to information from the European Mathematical Society: <http://www.emis.de>.
3. A channel to information from the American Mathematical Society: <http://www.ams.org>.
4. KTH site for information on funds: <http://www.kth.se/aktuellt/stipendier>.
5. Stockholm University site for information on funds: <http://www.su.se/forskning/stipendier/databas.php3>.
6. Umeå site for information on funds: http://www.umu.se/umu/aktuellt/stipendier_fond_anslag.html.
7. Job announcement site: <http://www.maths.lth.se/nordic/Euro-Math-Job.html>. This is run by the European Mathematical Society.
8. Stiftelsen för internationalisering av högre utbildning och forskning (STINT) site for information on funds: <http://www.stint.se>.
9. Nordisk Forskerutdanningsakademi (NorFA) site for information on funds: <http://www.norfa.no>.
10. Svenska institutet (SI) site for information on funds: <http://www.si.se>.

New information

Jobs, to apply for

11. Universitetet i Tammerfors söker en professor i matematik. Ansökan senast den 15 september. Web-info: http://www.uta.fi/ajankohtaista/avoimet_virat.html.

Old information

Money, to apply for

12. Vetenskapsrådet och Formas utlyser gemensamt Linnéstödet. Stödet riktas till ett antal starka grundforskningsmiljöer inom samtliga vetenskapsområden. Totalt kommer minst 14 miljöer att stödjas. Universitet och högskolor kan söka Linnéstöd till en eller flera starka forskningsmiljöer. Enskilda forskare eller forskargrupper kan inte söka. Enskilda forskare som medverkar i en ansökan om eller får ta del av Linnéstöd kan inneha, söka och/eller få andra former av bidrag från Vetenskapsrådet och/eller Formas. Web-info: <http://www.vr.se/forskning/bidrag/ovrbidrag.jsp?resourceId=-134&language=1>.
13. Resebidrag ur jubileumsdonationen, Knut och Alice Wallenbergs Stiftelse för forskare vid Stockholms universitet. Bidrag ges i första hand för sådana resor som befordrar ett personligt vetenskapligt utbyte till gagn för svensk forskning. Ansökan senast den 22 september. Web-info: <http://www.su.se/forskning/stipendier/wallenberg.php3>.
14. Wenner-Gren Stiftelserna utlyser postdoktorala stipendier för svenska postdoktorer för utbildning utomlands, för utländska postdoktorer för utbildning i Sverige samt gästforskarstipendier för utländska seniora forskare i Sverige. Ansökan för dessa senast den 1 oktober. Web-info: <http://www.swgc.org/>.

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15. Wenner-Gren Stiftelserna utlyser resestipendier för disputerade forskare under 40 år för resa till konferens utanför Sverige. Ansökan senast den 1 oktober. Web-info: <http://www.swgc.org/>.
16. Wenner-Gren Stiftelserna utlyser gästföreläsaranslag som ger institutioner bidrag till att bjuda in utländska gästföreläsare m.m. Ansökan kan inlämnas när som helst under året. Web-info: <http://www.swgc.org/>.
17. Vetenskapsrådets utbildningsvetenskapliga kommitté utlyser konferens- och resebidrag för i första hand unga och/eller nydisputerade forskare. Bidrag kan sökas när som helst under året. Web-info: <http://www.vr.se/omvr/organisation/sida.jsp?unitId=24>.
18. Svenska institutet ger bidrag för utbildning och forskning utomlands. Sista ansökningsdag varierar för olika länder. Web-info: <http://www.si.se>.
19. Letterstedtska föreningen utlyser bidrag, i första hand till anordnande av nordiska konferenser och seminarier, men även till enskilda personer för bidrag till studieresor till annat nordiskt land. Web-info: <http://www.letterstedtska.org/>.
20. NordForsk utlyser mobilitetsstipendier för vistelse vid en annan nordisk institution. Web-info: <http://www.nordforsk.org/meny.cfm?m=142,218>.
21. Stiftelsen för internationalisering av högre utbildning och forskning (STINT) erbjuder korttidsstipendier: 2 veckor till 3 månader långa besök. Stipendierna är avsedda för besök vid utländska institutioner, alternativt för att bjuda in en utländsk forskare. De kan ej sökas av doktorander. Ansökan kan göras löpande under året. Info: Agneta Granlund, 08-671 19 95, e-post agneta.granlund@stint.se. Web-info: <http://www.stint.se/index.php?articleId=34>.
22. Från Vetenskapsrådet kan resebidrag sökas av främst disputerade forskare, av doktorander i undantagsfall. Bidrag kan bland annat sökas för konferensdeltagande (ej posterpresentation), för att representera Sverige i viktiga sammanhang samt för att bjuda in utländska gästforskare. Bidrag för resa till internationellt forskningssamarbete kan också få finansiering. Ansökan skall vara inkommen senast två månader innan resan äger rum. Ansökningar behandlas ej mellan den 15 juni och den 15 augusti. Info: Mona Berggren, 08-546 44 246, e-post Mona.Berggren@vr.se. Web-info: <http://www.vr.se/forskning/bidrag/ovrbidrag.jsp?resourceId=665&languageId=1>.
23. Från Vetenskapsrådet kan konferensbidrag sökas med huvudsyftet att göra det möjligt att inbjuda framstående utländska föredragshållare. Ansökan skall vara inkommen senast två månader innan konferensen äger rum. Ansökningar behandlas ej mellan den 15 juni och den 15 augusti. Info: Mona Berggren, 08-546 44 246, e-post Mona.Berggren@vr.se. Web-info: <http://www.vr.se/forskning/bidrag/ovrbidrag.jsp?resourceId=822&languageId=1>.
24. Från Knut och Alice Wallenbergs Stiftelse ställs anslag till rektors för KTH förfogande för att ”i första hand användas till bidrag för sådana resor, som bäst befordrar ett personligt vetenskapligt utbyte till gagn för svensk forskning. Bidrag skall främst beviljas till yngre forskare. Medel kan även — efter rektors bedömning — undantagsvis disponeras för utländska gästforskare.” Bidrag kan sökas under hela året. Info: Anette Nyström, 08-790 70 59. Web-info: se punkt 4 ovan.

Jobs, to apply for

25. Lunds universitet söker en doktorand i matematisk statistik. Ansökan senast den 15 september. Info: Ulla Holst, 046-222 85 49, e-post ulla@maths.lth.se. Web-info: <http://www3.lu.se/info/lediga/admin/document/4410.pdf>.
 26. Malmö högskola söker en doktorand i tillämpad matematik med inriktning mot bildanalys/datorseende. Ansökan senast den 12 september. Info: Anders Heyden, 040-665 77 16, e-post anders.heyden@ts.mah.se. Web-info: http://www2.mah.se/templates/Job_____21935.aspx.
 27. Aarhus Universitet söker en lektor i matematisk statistik. Ansökan senast den 30 september kl. 12.00. Web-info: <http://www.nat.au.dk/default.asp?id=10606&la=UK>.
 28. Uppsala universitetet söker en professor i tillämpad matematik. Ansökan senast den 29 september. Info: Anders Öberg, 018-471 31 96, e-post Anders.Oberg@math.uu.se, alt. Svante Janson, 018-471 31 88, e-post Svante.Janson@math.uu.se. Web-info: http://www.personalavd.uu.se/ledigaplatser/2140prof_eng.html.
 29. Uppsala universitetet söker en professor i matematik. Ansökan senast den 29 september. Info: Anders Öberg, 018-471 31 96, e-post Anders.Oberg@math.uu.se, alt. Svante Janson, 018-471 31 88, e-post Svante.Janson@math.uu.se. Web-info: http://www.personalavd.uu.se/ledigaplatser/2139prof_eng.html.
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