BRÅKET

Information om seminarier och högre undervisning i matematiska ämnen i Stockholmsområdet

NR 18 **FREDAGEN DEN 11 MAJ 2007**

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: Tisdagen den 15 maj kl. 13.00.

SEMINARIER

Fr 05–11 kl. 10.00 – 12.00. Högre seminarium i språkfilosofi och logik. Jonas Åkerman: *Why believe in mainstream contextualism?* Rum D700, Filosofiska institutionen, SU.

Fr 05–11 kl. 11.00 – 12.00. Optimization and Systems Theory Seminar. Professor Alessandro Chiuso, University of Padova, Italy: *An overview of subspace identification methods.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se Bråket nr 17 sidan 9.

Fr 05–11 kl. 11.00 – 12.00. Extra Algebraic Geometry Seminar. Adam van Tuyl, Lakehead University, Canada: *The edge ideals of chordal graphs.* Sal D31, KTH, Lindstedtsvägen 17, b.v. Se Bråket nr 17 sidan 8.

Fr 05–11 kl. 12.15 – 13.00. GRU-seminarium i matematik. Anders Forsgren: *Några erfarenheter från undervisning i optimeringslära.* Sammanträdesrum 3424 (innanför pausrummet), Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 4. Se Bråket nr 17 sidan 5.

Fortsättning på nästa sida.

Göran Gustafsson Lectures in Mathematics

Dessa äger rum vid KTH den 11, 14 och 16 maj. Se Bråket nr 17 sidan 4.

Nästa nummer av Bråket

utkommer onsdagen den 16 maj. Material måste vara red. tillhanda senast den 15 maj kl. 13.00.

Disputation i numerisk analys

Per-Olov Åsén disputerar vid KTH på avhandlingen *Stability of Plane Couette Flow and Pipe Poiseuille Flow* fredagen den 25 maj kl. 10.15. Se sidan 7.

Matts Esséns resestipendium 2007

John Fabricius har utsetts till mottagare av detta stipendium. Se sidan 4.

Money, jobs: Se sidorna 8 – 9.

Seminarier (fortsättning)

Fr 05–11 kl. 13.15 – 14.15. Graduate Student Seminar. Douglas Lundholm, Matematik, KTH: *Geometry of simple supersymmetric systems.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se Bråket nr 16 sidan 3.

Fr 05–11 kl. 16.00. Göran Gustafsson Lecture in Mathematics. Professor William Fulton, University of Michigan, Ann Arbor: *Equivariant cohomology in algebraic geometry: Lecture I.* Sal D2, KTH, Lindstedtsvägen 5, b.v. Kaffe och te serveras från kl. 15.30. Se Bråket nr 17 sidan 4.

Må 05–14 kl. 13.15. Licentiatseminarium i matematik. Alan Sola försvarar sin licentiatavhandling: *Bergman space methods and integral means spectra of univalent functions.* Opponent: **Professor Alexandru Aleman,** Lunds universitet. Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

Må 05–14 kl. 15.15. Göran Gustafsson Lecture in Mathematics. Professor William Fulton, University of Michigan, Ann Arbor: *Equivariant cohomology in algebraic geometry: Lecture II.* Sal D3, KTH, Lindstedtsvägen 5, b.v. Se Bråket nr 17 sidan 4.

Ti 05–15 kl. 10.15. Plurikomplexa seminariet. Mattias Jonsson, Ann Arbor och KTH: *Formal plurisubharmonic functions.* Rum 306, hus 6, Matematiska institutionen, SU, Kräftriket. Se sidan 4.

Ti 05–15 kl. 13.15 – 14.00. 2007 Alfvén Lecture in Physics. Gregor Morfill, MPI für Extraterrestriche Physik, Garching: *Complex Plasmas — a new state of matter with unusual properties.* Oskar Kleins auditorium, Roslagstullsbacken 21, AlbaNova universitetscentrum. Se Bråket nr 17 sidorna 9 – 10.

Ti 05–15 kl. 14.00 – 15.00. Mittag-Leffler Seminar. Paolo Aluffi, Florida State University, Tallahassee: *Limits of Chow groups and characteristic classes.* Institut Mittag-Leffler, Auravägen 17, Djursholm. Se sidan 4.

Ti 05–15 kl. 15.30 – 16.30. Mittag-Leffler Seminar. Yuan-Pin Lee, University of Utah, Salt Lake City: *Flops, motives and invariance of quantum rings.* Institut Mittag-Leffler, Auravägen 17, Djursholm. Se sidan 3.

On 05–16 kl. 11.00 – 12.00. Kombinatorikseminarium. *(Observera tiden!)* **Mark Goresky,** Institute for Advanced Study, Princeton: *Subspace arrangements and equivariant cohomology.* Seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 5.

On 05–16 kl. 11.00 – 12.00. Common SU KoF/KTH Theoretical Physics Seminar. Dmitri Diakonov, S:t Petersburg: *Ensemble of dyons.* Sal FA31, Roslagstullsbacken 21, AlbaNova universitetscentrum. Se sidan 6.

On 05–16 kl. 13.15 – 14.15. Seminarium i analys och dynamiska system. Johan Andersson, SU: *Title to be announced.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

On 05–16 kl. 15.00 – 15.45. Seminarium i matematisk statistik. Oskar Sandberg, Chalmers tekniska högskola, Göteborg: *Small worlds and double clustering.* Rum 306 (Cramérrummet), hus 6, Matematiska institutionen, SU, Kräftriket. Se sidan 5.

Fortsättning på nästa sida.

Seminarier (fortsättning)

On 05–16 kl. 15.15. Göran Gustafsson Lecture in Mathematics. Professor William Fulton, University of Michigan, Ann Arbor: *Equivariant cohomology in algebraic geometry: Lecture III.* Sal D3, KTH, Lindstedtsvägen 5, b.v. Se Bråket nr 17 sidan 4.

On 05–16 kl. 16.00. KTH/SU Mathematics Colloquium. Professor Claus Scheiderer, Universität Konstanz, Tyskland: *Positive polynomials and sums of squares.* Sal 14, hus 5, Matematiska institutionen, SU, Kräftriket. Se Bråket nr 17 sidan 8.

On 05–16 kl. 19.00. Populärvetenskaplig föreläsning i fysik. Dr Jan Conrad, Fysik, KTH: *Att leta efter mörk materia med ljus: Om att lösa mörka materiens gåta via ljuspartiklar.* Oskar Kleins auditorium, Roslagstullsbacken 21, AlbaNova universitetscentrum. Se Bråket nr 17 sidan 9.

On 05–23 Kombinatorikseminarium. Petter Brändén, University of Michigan och KTH: *Title to be announced.* Tid och lokal meddelas senare.

On 05–23 kl. 16.00–17.00. KTH/SU Mathematics Colloquium. Robert D. MacPherson, Institute for Advanced Study, Princeton: *The geometry of grains.* 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 8.

To 05–24 kl. 14.00–16.00. Kollokvium i filosofi. Panos Dimas, Universitetet i Oslo: *Teachers of Virtue.* Rum D271, Filosofiska institutionen, SU.

To 05–24 kl. 15.15–16.15. AlbaNova and Nordita Colloquium in Physics. Jan Zaanen, Instituut-Lorentz for Theoretical Physics, Leiden University: *Twenty years of high Tc superconductivity.* Oskar Kleins auditorium, Roslagstullsbacken 21, AlbaNova universitetscentrum. Se sidan 5.

Fr 05–25 kl. 10.00–12.00. Högre seminarium i språkfilosofi och logik. Tor Sandqvist, KTH: *A note on harmony.* Rum D700, Filosofiska institutionen, SU. Se sidan 8.

Fr 05–25 kl. 11.00–12.00. Common SU KoF/KTH Theoretical Physics Seminar. *(Observera dagen!)* **Jan Zaanen,** Instituut-Lorentz for Theoretical Physics, Leiden University: *The stripes of the high Tc superconductors.* Sal FA31, Roslagstullsbacken 21, AlbaNova universitetscentrum. Se sidan 6.

Fr 05–25 kl. 13.15–14.15. Graduate Student Seminar. David Eklund, Matematik, KTH: *Title to be announced.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

MITTAG-LEFFLER SEMINAR

Yuan-Pin Lee:
Flops, motives and invariance of quantum rings

Abstract: In this talk, I will explain a relation between birational geometry and Gromov-Witten theory. Specifically, I will show that GW theory is invariant under certain flops.

This is a joint work with H.-W. Lin, C.-L. Wang (and Y. Iwao, work in progress in higher genus).

Tid och plats: Tisdagen den 15 maj kl. 15.30–16.30 vid Institut Mittag-Leffler, Auravägen 17, Djursholm.

PLURIKOMPLEXA SEMINARIET

Mattias Jonsson:
Formal plurisubharmonic functions

Abstract: I will discuss joint work with Charles Favre and Sebastien Boucksom on singularities of plurisubharmonic (psh) functions defined in a neighbourhood of the origin in $\mathbf{C}^n$, $n \geq 2$. The most basic information about a psh singularity is given by the Lelong number. We can get more information by blowing up the origin and recording the Lelong numbers of the pullback at all points on the exceptional divisor. More generally, we could do the same thing for Hironaka-style composition of blowups.

Our main result is — loosely speaking — that the collection of Lelong numbers thus obtained gives essentially complete information on the singularity of the psh function. Further, the collection of Lelong numbers can be organized as a "formal" psh function, living on a formal neighbourhood of the origin. More precisely, we obtain a function defined on a compact space consisting of valuations centred at the origin.

Tid och plats: Tisdagen den 15 maj kl. 10.15 i rum 306, hus 6, Matematiska institutionen, SU, Kräftriket.

MITTAG-LEFFLER SEMINAR

Paolo Aluffi:
Limits of Chow groups and characteristic classes

Abstract: We define an 'enriched' notion of Chow groups for algebraic varieties, agreeing with the conventional notion for complete varieties, but enjoying a functorial push-forward for arbitrary maps. This tool allows us to glue intersection-theoretic information across elements of a stratification of a variety; we illustrate this operation by giving an alternative construction of Chern-Schwartz-MacPherson classes of singular varieties.

Tid och plats: Tisdagen den 15 maj kl. 14.00 – 15.00 vid Institut Mittag-Leffler, Auravägen 17, Djursholm.

Matts Esséns resestipendium 2007

John Fabricius får det tredje resestipendiet på 8000 kronor från Stiftelsen Matts Esséns minnesfond. John är doktorand vid Luleå tekniska universitet och avser att deltaga i konferensen *Des équations partielles au calcul scientifique* i Paris den 2 – 7 juli 2007 och dessförinnan i en sommarskola, *Cours d'école doctorale,* också i Paris. Hans forskningsområde är homogeniseringsteori.

Matts Essén (född den 9 maj 1932, död den 10 maj 2003) disputerade år 1963 och arbetade därefter som lärare och forskare i matematik dels vid Uppsala universitet, dels vid KTH. Under åren 1992 – 1997 var han professor i matematik vid Uppsala universitet. Efter hans alltför tidiga död har vänner och kolleger samlat till en minnesfond som skall användas till resestipendier för unga matematiker.

Se minnesartikeln på sidorna 12 – 13 i Bråket 2003 nr 20.

Christer Kiselman
Ordförande i styrelsen för Matts Esséns minnesfond

KOMBINATORIKSEMINARIUM

Mark Goresky:
Subspace arrangements and equivariant cohomology

Abstract: If a complex algebraic torus $T = (C^*)^n$ acts on a complex projective algebraic variety X, then the equivariant cohomology $H_T^*(X)$ is a module over the equivariant cohomology of a point. Under fairly mild hypotheses, the equivariant cohomology of X can be interpreted as the set of functions on a certain affine variety, denoted $\mathrm{Spec}(H_T^*(X))$. This variety often turns out to be an arrangement of linear subspaces of C^n. Arrangements of this type can be studied by combinatorial techniques, and this sometimes leads to combinatorial formulas for the cohomology of X.

Tid och plats: Onsdagen den 16 maj kl. 11.00 – 12.00 i seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

SEMINARIUM I MATEMATISK STATISTIK

Oskar Sandberg:
Small worlds and double clustering

Abstract: We have all heard that it is a small world: starting from any person, one can find a short chain of friendships connecting him to anybody else. But why is this so? It turns out that graphs must have to obey certain structural rules in order for such paths to be at all findable. We discuss these rules, and show how such "small-world graphs" arise when each vertex connects to those vertices which are similar to it in either of two different ways. This provides a simple and natural rule that leads exactly to the dynamics that reality seems to predict.

Tid och plats: Onsdagen den 16 maj kl. 15.00 – 15.45 i rum 306 (Cramérrummet), hus 6, Matematiska institutionen, SU, Kräftriket.

ALBANOVA AND NORDITA COLLOQUIUM IN PHYSICS

Jan Zaanen:
Twenty years of high Tc superconductivity

Abstract: The discovery that superconductivity can occur at temperatures as high as 150 kelvins in copperoxides triggered twenty years ago a hype with no precedent in the history of physics. However, as a beneficial side effect these systems were thoroughly studied, and in the course of time it became clear that at the heart of the phenomenon lies one of the great mysteries of physics. It is about the general laws governing the collective quantum behaviours of large numbers of strongly interacting electrons, and I will attempt to get across the fascination by telling stories about what has been learned in the last twenty years: the stripes, or why this electron world has more to do with rush hour traffic than with Fermi's electron gas; Planckian dissipation, or why we know for sure that high Tc's normal state is characterized by a scale invariant quantum dynamics, and why this implies that Fermi-Dirac statistics has dealings with pretty pictures.

Tid och plats: Torsdagen den 24 maj kl. 15.15 – 16.15 i Oskar Kleins auditorium, Roslagstullsbacken 21, AlbaNova universitetscentrum.

COMMON SU KOF/ KTH THEORETICAL PHYSICS SEMINAR

Dmitri Diakonov: Ensemble of dyons

Abstract: We construct the integration measure over the moduli space of an arbitrary number of N kinds of dyons of the pure $SU(N)$ gauge theory at finite temperatures. The ensemble of dyons governed by the measure is mathematically described by a three-dimensional quantum field theory that is exactly solvable and is remarkable for a number of striking features:

1) The free energy has the minimum corresponding to the zero average Polyakov line, as expected in the confining phase.
2) The correlation function of two Polyakov lines exhibits a linear potential between static quarks in any N-ality non-zero representation, with a calculable string tension roughly independent of temperature.
3) The average spatial Wilson loop falls off exponentially with its area and the same string tension.
4) At a critical temperature the ensemble of dyons rearranges and de-confines.
5) The calculated ratio of the critical temperature to the square root of the string tension is in excellent agreement with the lattice data for any N.

Tid och plats: Onsdagen den 16 maj kl. 11.00 – 12.00 i sal FA31, Roslagstullsbacken 21, AlbaNova universitetscentrum.

COMMON SU KOF/ KTH THEORETICAL PHYSICS SEMINAR

Jan Zaanen:
The stripes of the high Tc superconductors

Abstract: 'Stripes' code for a peculiar electronic ordering phenomenon, generic in doped Mott-insulator. After a long history of controversy these are now generally recognized as the main competitor of superconductivity in the cuprate superconductors. I will tell the story from a historical and subjective viewpoint: how it all started by an accidental discovery by a young theorist on a Friday afternoon in 1987; how the idea inspired a brilliant experimentalist to start to dig in a place where nobody dared to go; how the stripes turned magically into guinea pigs for completely novel modes of experimentation to probe strongly interacting quantum matter, culminating in Abbamonte's synchrotron experiments and the Mott-maps of Davis et al.; why the idea of stripe quantum liquids is very much alive but still controversial; why one has to grasp some strange duality transformations in order to understand what has to be done in order to nail down these quantum stripes experimentally.

Tid och plats: Fredagen den 25 maj kl. 11.00 – 12.00 i sal FA31, Roslagstullsbacken 21, AlbaNova universitetscentrum.

DISPUTATION I NUMERISK ANALYS

Per-Olov Åsén

disputerar på avhandlingen

Stability of Plane Couette Flow and Pipe Poiseuille Flow

fredagen den 25 maj 2007 kl. 10.15 i sal D3, KTH, Lindstedtsvägen 5, b.v. Till opponent har utsetts *professor Jonathan Goodman.*

Abstract of the thesis

This thesis concerns the stability of plane Couette flow and pipe Poiseuille flow in three space dimensions. The mathematical model for both flows is the incompressible Navier-Stokes equations. Both analytical and numerical techniques are used.

We present new results for the resolvent corresponding to both flows. For plane Couette flow, analytical bounds on the resolvent have previously been derived in parts of the unstable half-plane. In the remaining part, only bounds based on numerical computations in an infinite parameter domain are available. Due to the need for truncation of this infinite parameter domain, these results are mathematically insufficient.

We obtain a new analytical bound on the resolvent at $s = 0$ in all but a compact subset of the parameter domain. This is done by deriving approximate solutions of the Orr-Sommerfeld equation and bounding the errors made by the approximations. In the remaining compact set, we use standard numerical techniques to obtain a bound. Hence, this part of the proof is not rigorous in the mathematical sense.

In the thesis, we present a way of making also the numerical part of the proof rigorous. By using analytical techniques, we reduce the remaining compact subset of the parameter domain to a finite set of parameter values. In this set, we need to compute bounds on the solution of a boundary value problem. By using a validated numerical method, such bounds can be obtained. In the thesis, we investigate a validated numerical method for enclosing the solutions of boundary value problems.

For pipe Poiseuille flow, only numerical bounds on the resolvent have previously been derived. We present analytical bounds in parts of the unstable half-plane. Also, we derive a bound on the resolvent for certain perturbations. Especially, the bound is valid for the perturbation which numerical computations indicate to be the perturbation which exhibits largest transient growth. The bound is valid in the entire unstable half-plane.

We also investigate the stability of pipe Poiseuille flow by direct numerical simulations. Especially, we consider a disturbance which experiments have shown is efficient in triggering turbulence. The disturbance is in the form of blowing and suction in two small holes. Our results show the formation of hairpin vortices shortly after the disturbance. Initially, the hairpins form a localized packet of hairpins as they are advected downstream. After approximately 10 pipe diameters from the disturbance origin, the flow becomes severely disordered. Our results show good agreement with the experimental results.

In order to perform direct numerical simulations of disturbances which are highly localized in space, parallel computers must be used. Also, direct numerical simulations require the use of numerical methods of high order of accuracy. Many such methods have a global data dependency, making parallelization difficult. In this thesis, we also present the process of parallelizing a code for direct numerical simulations of pipe Poiseuille flow for a distributed memory computer.

KTH/SU MATHEMATICS COLLOQUIUM

Robert D. MacPherson: The geometry of grains

Abstract: A metal or ceramic is naturally decomposed into cells called "grains". The geometry and combinatorics of this cell complex influence the properties of the material. Some interesting mathematical problems arise in trying to understand the time evolution of these grains. In 1952, von Neumann gave a simple formula for the growth rate of a grain in two dimensions, which has been used as the basis for much of the work on grain evolution. This formula will be generalized to three (and higher) dimensions (joint work with David Srolovitz).

Tid och plats: Onsdagen den 23 maj kl. 16.00 – 17.00 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.

HÖGRE SEMINARIUM I SPRÅKFILOSOFI OCH LOGIK

Tor Sandqvist: A note on harmony

Abstract: Anyone who studies the natural-deduction calculus of intuitionistic predicate logic is struck by the pleasing way in which, for each operator, the introduction and elimination rules seem to be faces of the same coin. The nature of this complementarity has been much investigated, typically by showing the calculus to satisfy certain formal requirements — cases in point are Prawitz's normalization theorems and Tennant's explication of the notion of proof-theoretic harmony.

The present paper takes a somewhat different approach to the subject: it aims to characterize intuitionistic logic in such a way that its intrinsic coherence is manifest in its very formulation, rather than in theorems proved about it. A result along these lines is achieved by conceiving of logically complex sentences not only as *subject to* but in themselves as *expressions of,* rules of inference.

Tid och plats: Fredagen den 25 maj kl. 10.00 – 12.00 i rum D700, Filosofiska institutionen, SU.

MONEY, JOBS

Columnist: Eric Emtander, Department of Mathematics, SU. E-mail: erice@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/~erice/mj.html.
Unless stated otherwise, a given date is the last date (e.g. for applications), and the year is 2007. 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://www2.su.se/forskning/stipendier/databas.php3.
6. Umeå site for information on funds: http://www.umu.se/umu/aktuellt/stipendier_fond_anslag.html.

(Continued on the next page.)

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. Linköpings universitet söker en doktorand i matematik med placering vid avdelningen för tillämpad matematik vid Matematiska institutionen. Tillträde enligt överenskommelse eller omkring den 1 augusti 2007. Sista ansökningsdag är den 28 maj. Web-info: http://www.liu.se/jobbdb/show.html?2075.
12. University College Dublin is seeking to appoint a Lecturer in Mathematics in the School of Mathematical Sciences. All areas of mathematics will be considered, but applications are particularly encouraged from specialists in Potential Theory, Complex and Harmonic Analysis, Quadratic Forms, Linear Algebraic Groups and Matrix Theory. Closing date for receipt of applications is noon, Friday 25 May 2007. Web-info: http://www.ucd.ie/personl/html/vacancies/2007/academic/002891.htm.

Old information

Money to apply for

13. Letterstedtska föreningen utdelar anslag för att befordra gemenskapen mellan de fem nordiska länderna på industrins, vetenskapens och konstens områden. Ansökan om anslag skall insändas före den 15 september. Web-info: http://www.letterstedtska.org/.
14. Sweden-Japan Foundation utlyser stipendier för studier, forskning samt examensarbete och praktik på högskolenivå i Japan. Ansökningsdagar är den 1 mars och den 1 oktober. Web-info: http://www.swejap.a.se/.
15. Wenner-Gren Stiftelserna delar ut stipendier för att möjliggöra för svenska disputerade forskare att verka vid utländsk vetenskaplig institution. Sista ansökningsdag är den 1 oktober. Stipendierna beviljas för en tid av lägst 1 och högst 12 månader med möjlighet till förlängning till högst 24 månader. Web-info: http://www.swgc.org/index.aspx?pageID=14.

Jobs to apply for

16. Statistiska institutionen vid SU söker doktorander i statistik. Tillträde den 1 september eller enligt överenskommelse. Sista ansökningsdag är den 25 maj. Web-info: http://www.su.se/pub/jsp/polopoly.jsp?d=858&a=18918.
17. École Normale Supérieure, Paris, utlyser ett 9 månader långt postdoctoral fellowship i matematik med början tidigast den 1 oktober. Sista ansökningsdag är den 15 maj. Web-info: http://www.dma.ens.fr/international/ENIGMA.html.
18. KTH ledigförklarar ett antal anställningar som doktorand i matematik. Sista ansökningsdag är den 11 maj. Web-info: http://www.math.kth.se/utlysning.tjanst/utlysn.doktorand.html.
19. School of Mathematical Sciences, University College Dublin, utlyser en postdoktjänst inom projektet "Potential Theory and Quadrature Domains". I utlysningen står: "Quadrature domains are domains in Euclidean space over which the integrals of harmonic functions can be computed by integration with respect to a measure that has compact support. They arise naturally in many areas of the mathematical sciences and are the subject of significant contemporary research activity." För vidare information, kontakta Björn Gustafsson, gbjorn@kth.se, vid KTH eller Stephen Gardiner (se nedan). Ansökan innehållande CV, publikationslista, beskrivning av matematiska intressen samt kontaktinformation och två angivna referenspersoner skickas till: Professor Stephen J. Gardiner, UCD School of Mathematical Sciences, Belfield, Dublin 4, Ireland. Fax: +353-1-716 11 96. E-post: stephen.gardiner@ucd.ie. Web-info: http://maths.ucd.ie/~sjg/.