



BRÅKET



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

NR 39

FREDAGEN DEN 30 NOVEMBER 2007

BRÅKET

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

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Red. för Bråket

Institutionen för matematik

KTH

100 44 Stockholm

Sista manustid för nästa nummer:

Torsdagen den 6 december

kl. 13.00.

Structural Equation Modeling

En seminariedag med denna titel
anordnas vid Uppsala universitet
onsdagen den 5 december. Se
Bråket nr 38 sidorna 7–8.

Money, jobs: Se sidorna 9–10.

SEMINARIER

Fr 11–30 kl. 11.00. Mittag-Leffler (Post)Graduate Seminar. Lluís Quer-Sardanyons: *Title to be announced*. Institut Mittag-Leffler, Auravägen 17, Djursholm.

Fr 11–30 kl. 15.15. Small Talk Seminar. Jonas Kiessling: *Localizing subcategories of the derived category of a ring*. Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se Bråket nr 38 sidan 7.

Må 12–03 kl. 13.15–14.00. Seminarium i finansiell matematik. (Observera tiden och lokalen!) Farid Bonawiede presenterar sitt examensarbete: *Exercise boundaries for American option prices and related problems*. Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 5.

Ti 12–04 kl. 10.15. Plurikomplexa seminariet. Mats Andersson, Göteborg: *Koppelman formulas on analytic varieties*. Rum 306, hus 6, Matematiska institutionen, SU, Kräftriket. Se sidan 4.

Ti 12–04 kl. 14.00–15.00. Mittag-Leffler Seminar. Paul Malliavin, Académie des Sciences, France: *Non-parametric statistics of multivariate covariances: applications to H.J.M model of interest rate*. Institut Mittag-Leffler, Auravägen 17, Djursholm.

Paul Malliavin's seminar is based on a paper published in Japan Journal of Mathematics, 2007.

Ti 12–04 kl. 15.30–16.30. Mittag-Leffler Seminar. K. D. Elworthy, University of Warwick, UK: *Filtering in a geometric context*. Institut Mittag-Leffler, Auravägen 17, Djursholm. Se sidan 4.

Fortsättning på nästa sida.

Seminarier (fortsättning)

- On 12–05 kl. 10.15–11.30. Structural Equation Modeling.** Ulf Henning Olsson, Norwegian School of Management: *The power of the non-normality corrected chi-square statistics in Structural Equation Modeling*. Sal H429, Fakultetsklubben, Ekonomikum, Kyrkogårdsgatan 10, Uppsala universitet. Se Bråket nr 38 sidan 7.
- On 12–05 kl. 10.15–12.00. Logikseminariet Stockholm-Uppsala.** (*Observera tiden: seminariet börjar en kvarts timme senare än vanligt.*) Professor Jan von Plato, Filosofiska institutionen, Helsingfors universitet, håller en gästföreläsning i beviseteorins historia med titeln: *The Narrow Path to Sequent Calculus*. Sal 16, hus 5, Matematiska institutionen, SU, Kräftriket.
- On 12–05 kl. 10.15–12.00. Kombinatorikseminarium.** Anders Claesson, Reykjavík University: *Stack sorting, trees and pattern avoidance*. Seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 6.
- On 12–05 kl. 11.00–12.00. Common SU KoF/KTH Theoretical Physics Seminar.** Marcus Berg, SU: *Introduction to orientifolds*. Sal FA31, Roslagstullsbacken 21, AlbaNova universitetscentrum. Se Bråket nr 38 sidan 6.
- On 12–05 kl. 13.00. Seminarium i statistik.** Mattias Villani: *Regression density estimation using smooth adaptive Gaussian mixtures*. Sal B705, Statistiska institutionen, SU, Universitetsvägen 10B, plan 7, Frescati. Se sidan 5.
- On 12–05 kl. 13.15–14.15. Seminarium i analys och dynamiska system.** Jacek Graczyk, Orsay: *Cohomological inequality and smoothing operators*. Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 7.
- On 12–05 kl. 13.15–14.30. Structural Equation Modeling.** Albert Satorra, University of Pompeu Fabra, Barcelona: *Assessment of validity in SEM models*. Sal H429, Fakultetsklubben, Ekonomikum, Kyrkogårdsgatan 10, Uppsala universitet. Se Bråket nr 38 sidan 8.
- On 12–05 kl. 13.15. Algebra and Geometry Seminar.** Martin Gulbrandsen: *Classical GIT quotients and stacky Proj*. Seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 6.
- On 12–05 kl. 16.00. KTH/SU Mathematics Colloquium.** Johan Håstad, KTH: *Verifying proofs by reading only 3 bits*. 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 38 sidan 5.
- To 12–06 kl. 10.00. Licentiatseminarium i matematisk statistik.** Patricia Geli, SU, presenterar sin licentiatavhandling: *Models Related to Growth and Selection of Antibiotic Resistant Bacteria under Drug Exposure*. Inbjuden diskussionsinledare: Gianpaolo Scalia Tomba, University of Rome Tor Vergata. Sal 14, hus 5, Matematiska institutionen, SU, Kräftriket. Se Bråket nr 38 sidorna 5–6.
- To 12–06 kl. 14.00–15.00. Mittag-Leffler Seminar.** Aurel Rascanu, Alexandru Ioan Cuza University of Iași, Roumania: *Multivalued monotone BSDE in Hilbert spaces*. Institut Mittag-Leffler, Auravägen 17, Djursholm. Se sidan 8.
- To 12–06 kl. 15.30–16.30. Mittag-Leffler Seminar.** Szymon Peszat, Polish Academy of Sciences, Krakow, Poland: *Law of large numbers for a passive tracer model*. Institut Mittag-Leffler, Auravägen 17, Djursholm. Se sidan 7.

Fortsättning på nästa sida.

Seminarier (fortsättning)

- Fr 12–07 kl. 13.15–14.15. Graduate Student Seminar. Denis Gaydashev, KTH:** *Title to be announced.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.
- Fr 12–07 kl. 13.15–14.15. DNA-seminariet Uppsala-KTH (Dynamical systems, Number theory, Analysis). Dennis Hejhal, Uppsala universitet:** *On multivariate Gaussians and zeros of linear combinations of L-functions.* Sal D35, KTH, Lindstedtsvägen 5, b.v.
- Fr 12–07 kl. 15.05. Small Talk Seminar. (Observera tiden!) Dan Laksov:** *Formal and geometric determinantal formulas.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidan 6.
- Lö 12–08 kl. 9.00–9.05. Nobelföreläsningarna 2007. Bo Sundqvist, Kungl. Vetenskapsakademiens preses:** *Öppningsanförande.* Aula Magna, SU.
- Lö 12–08 kl. 9.05–9.55. Nobelföreläsning i fysik. Peter Grünberg, Institut für Festkörperforschung, Forschungszentrum Jülich, Tyskland:** *From spinwaves to Giant Magnetoresistance (GMR) and beyond.* Aula Magna, SU.
- Lö 12–08 kl. 9.55–10.45. Nobelföreläsning i fysik. Albert Fert, Unité Mixte de Physique CNRS/THALES, Université Paris-Sud, Orsay, Frankrike:** *The origin, the development and the future of spintronics.* Aula Magna, SU.
- Lö 12–08 kl. 11.00–11.50. Nobelföreläsning i kemi. Gerhard Ertl, Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, Tyskland:** *Reactions at solid surfaces: From atoms to complexity.* Aula Magna, SU.
- Lö 12–08 kl. 13.00–13.50. Nobelföreläsning i ekonomi. Eric S. Maskin, Institute for Advanced Study, Princeton, USA:** *Mechanism design: How to implement social goals.* Aula Magna, SU.
- Lö 12–08 kl. 13.50–14.40. Nobelföreläsning i ekonomi. Leonid Hurwicz, University of Minnesota, USA:** *But who will guard the guardians?* Aula Magna, SU.
- Lö 12–08 kl. 14.40–15.30. Nobelföreläsning i ekonomi. Roger B. Myerson, University of Chicago, USA:** *Perspectives on mechanism design in economic theory.* Aula Magna, SU.
- On 12–12 kl. 13.00. Algebra and Geometry Seminar. Timothy Logvinenko:** *Geometrical construction of the McKay correspondence in dimension three.* Rum 306, hus 6, Matematiska institutionen, SU, Kräftriket. Se sidan 9.
- On 12–12 kl. 13.15–14.15. Seminarium i analys och dynamiska system. Jan Boman, SU:** *Unique continuation of microlocally analytic distributions and injectivity theorems for the ray transform.* Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7. Se sidorna 7–8.
- On 12–12 kl. 15.15. Seminarium i numerisk analys. Claes Johnson, Numerisk analys, KTH:** *A new computational foundation of thermodynamics.* Rum 4523, KTH CSC, Lindstedtsvägen 5, plan 5.
- To 12–13 kl. 10.30. Seminar in Fluid Mechanics. Jenny Brandefelt:** *Simulations of past and future global climate.* Seminarierummet, Institutionen för mekanik, KTH, Teknikringen 8.

Fortsättning på nästa sida.

Seminarier (fortsättning)

To 12–13 kl. 11.00. Common SU KoF/KTH Theoretical Physics Seminar. (*Observera dagen och lokalen!*) **Matti Manninen**, Jyväskylä: *Localization of particles and vortices in quantum dots and cold atom clouds*. Sal FB54, Roslagstullsbacken 21, AlbaNova universitetscentrum.

To 12–13 kl. 11.15–12.15. DNA-seminariet Uppsala-KTH (Dynamical systems, Number theory, Analysis). **Magnus Aspenberg**, Orsay: *On rational Misiurewicz maps*. Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

To 12–13 kl. 15.15–16.15. AlbaNova and Nordita Colloquium in Physics. Professor Carl Wieman, University of British Columbia: *Science education in the 21st century: Using the tools of physics to teach physics*. Oskar Kleins auditorium, Roslagstullsbacken 21, AlbaNova universitetscentrum. Se sidan 8.

Fr 12–14 kl. 13.15–14.15. Graduate Student Seminar. (*Preliminärt datum.*) **Brett Wick**, University of South Carolina: *Title to be announced*. Seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

Observera att datumet för Brett Wicks seminarium har ändrats. I Bråket nr 38 angavs fel datum för hans seminarium.

PLURIKOMPLEXA SEMINARIET**Mats Andersson:****Koppelman formulas on analytic varieties**

Abstract: Given an ideal sheaf J in a neighbourhood of the closed unit ball in \mathbb{C}^n , there is a certain residue current R whose annihilator ideal is precisely the given ideal. If J is the ideal associated to an analytic variety, one can use the associated current to characterize the meromorphic functions on Z that are strongly holomorphic; moreover, one can construct integral formulas on Z and obtain new existence theorems for the $\bar{\partial}$ -equation.

Tid och plats: Tisdagen den 4 december kl. 10.15 i rum 306, hus 6, Matematiska institutionen, SU, Kräftriket.

MITTAG-LEFFLER SEMINAR**K. D. Elworthy:****Filtering in a geometric context**

Abstract: Suppose $p : N \rightarrow M$ is a smooth map of manifolds with a smooth diffusion process u on N projecting to a diffusion on M . Basic questions arising concern the conditional expectations of functionals of u given $p(u)$ up to a time t , and the possibility of decomposing u into a generalized skew product. The talk will be a review of ongoing work with Yves LeJan and Xue-Mei Li. The set-up includes a variety of situations coming for example from stochastic flows, from the reduction of Hamiltonian stochastic systems with symmetries (as described in recent work by Lázaro and Ortega), or from more classical nonlinear filtering where the observation process is not usually a diffusion.

Tid och plats: Tisdagen den 4 december kl. 15.30–16.30 vid Institut Mittag-Leffler, Auravägen 17, Djursholm.

SEMINARIUM I FINANSIELL MATEMATIK

Farid Bonawiede

presenterar sitt examensarbete:

Exercise boundaries for American option prices and related problems

Abstract: In this work, we investigate the efficiency and accuracy of pricing an American put option in the Black-Scholes model using the integral equation derived in Pham (1997). We approximate the early exercise boundary of an American option with piecewise linear splines.

We also compute European options under the jump-diffusion model, using a double exponential distribution described in Ramezani and Zeng (1999) and Kou (2002). This model fits real data better than the classical lognormal diffusion model of Black and Scholes and is also very intuitive to use.

References:

KOU, S. G., *A Jump-Diffusion Model for Option Pricing*, Management Science, **48**, (2002), 1086–1101.

PHAM, H., *Optimal Stopping, Free Boundary, and American Option in a Jump-Diffusion Model*, Applied Mathematics, Optimization, **35**, (1997), 145–164.

RAMEZANI, C. A., ZENG, Y., *Maximum likelihood estimation of asymmetric jump-diffusion process: Application to security prices*, Working paper, Department of Statistics, University of Wisconsin, (1999).

Tid och plats: Måndagen den 3 december kl. 13.15–14.00 i seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

SEMINARIUM I STATISTIK

Mattias Villani:

Regression density estimation using smooth adaptive Gaussian mixtures

Abstract: We model a regression density flexibly so that at each value of the covariates the density is a mixture of normals with the means, variances and mixture probabilities of the components changing smoothly as a function of the covariates. The model extends existing models in two important ways. First, the components are allowed to be heteroscedastic regressions as the standard model with homoscedastic regressions can give a poor fit to heteroscedastic data, especially when the number of covariates is large. Furthermore, we typically need a lot fewer heteroscedastic components, which makes it easier to interpret the model and speeds up the computation. The second main extension is to introduce a novel variable selection prior into all the components of the model. The variable selection prior acts as a self-adjusting mechanism that prevents overfitting and makes it feasible to fit high-dimensional nonparametric surfaces. We use Bayesian inference and Markov Chain Monte Carlo methods to estimate the model. Simulated and real examples are used to show that the full generality of our model is required to fit a large class of densities.

The talk is based on joint work with Robert Kohn and Paolo Giordani.

Tid och plats: Onsdagen den 5 december kl. 13.00 i sal B705, Statistiska institutionen, SU, Universitetsvägen 10B, plan 7, Frescati.

KOMBINATORIKSEMINARIUM

Anders Claesson:

Stack sorting, trees and pattern avoidance

Abstract: The subject of pattern avoiding permutations has its roots in computer science, namely in the problem of sorting a permutation through a stack. A formula for the number of permutations of length N that can be sorted by passing it twice through a stack (where the letters on the stack have to be in increasing order) was conjectured by Julian West, and later proved by Doron Zeilberger. Goulden and West found a bijection from such permutations to rooted nonseparable planar maps, and later Cori, Jacquard and Schaeffer presented a bijection from these planar maps to certain labelled plane trees.

We show that these labelled plane trees are in one-to-one correspondence with permutations that avoid the generalized patterns 3-1-4-2 and 2-41-3. We do this by establishing a bijection that preserves 7 statistics, between the avoiders and the trees.

This is joint work (in progress) with Sergey Kitaev and Einar Steingrímsson.

Tid och plats: Onsdagen den 5 december kl. 10.15–12.00 i seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

ALGEBRA AND GEOMETRY SEMINAR

Martin Gulbrandsen:

Classical GIT quotients and stacky Proj

Abstract: The special linear group $SL(2)$ acts by substitution on the projective space P^d of binary forms of degree d . A central problem in classical invariant theory was to find explicit presentations for the corresponding invariant rings T . Furthermore, according to Mumford, the locus in P^d of semistable points admits a good quotient, namely the projective variety $X = \text{Proj}(T)$. Now, it is natural to classify binary forms according to their symmetries (i.e. stabilizer groups), but this classification is not reflected by the geometry of X . We suggest to enrich X by replacing it with the “stacky Proj” of T , i.e. the stack quotient of $\text{Spec}(T) \setminus 0$ by its natural G_m -action. For binary forms of degree up to 6, we use the classical presentations of the invariant rings T to study these stacks explicitly. In particular they are smooth, and their geometry “remembers” the classification of binary forms by their symmetries.

Tid och plats: Onsdagen den 5 december kl. 13.15 i seminarierum 3733, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

SMALL TALK SEMINAR

Dan Laksov:

Formal and geometric determinantal formulas

Abstract: We give a geometric construction that gives the connection between formal and geometric determinantal formulas.

Tid och plats: Fredagen den 7 december kl. 15.05 i seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

SEMINARIUM I ANALYS OCH DYNAMISKA SYSTEM

Jacek Graczyk:

Cohomological inequality and smoothing operators

Abstract: In the work with Duncan Sands it is proved that an analytical conjugacy class of every smooth map of the interval with all critical points non-flat and all periodic points repelling contains a map with negative Schwarzian derivative. For circle maps one needs an additional “integrability” condition. The main idea of the proof is to find an analytical solution of a cohomological inequality. The dynamics supplies us with a natural but only essentially bounded measurable solution. Using smoothing techniques one can promote this “rough” solution to an analytic one. During the talk I will concentrate on analytical aspects of the problem.

Tid och plats: Onsdagen den 5 december kl. 13.15–14.15 i seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

MITTAG-LEFFLER SEMINAR

Szymon Peszat:

Law of large numbers for a passive tracer model

Abstract: Consider the following ODE, $x'(t) = V(t, x(t))$, where V is a stationary Gaussian random field. It will be shown that for a large class of Markovian fields V , $x(t)/t$ converges weakly as t goes to infinity to a certain constant independent of the initial value $x(0)$. This observation follows from the following two facts:

- 1) The observation process $L(t, x) = V(t, x + x(t))$ satisfies a certain non-linear SPDE.
- 2) This SPDE has a unique invariant measure.

The talk will be based on a joint work with T. Komorowski (Lublin) and T. Szarek (Kato-wice).

Tid och plats: Torsdagen den 6 december kl. 15.30–16.30 vid Institut Mittag-Leffler, Auravägen 17, Djursholm.

SEMINARIUM I ANALYS OCH DYNAMISKA SYSTEM

Jan Boman:

**Unique continuation of microlocally analytic distributions
and injectivity theorems for the ray transform**

Abstract: Let L_k , $k = 1, 2, \dots$, be an infinite family of distinct hyperplanes in \mathbf{R}^n such that $\lim_{k \rightarrow \infty} L_k = L_0$ (in the topology of the manifold of hyperplanes). It is easy to prove that if u is a C^∞ function that vanishes on all L_k , then u is flat along L_0 in the sense that the derivatives of u of all orders vanish on L_0 . If u is only a locally integrable function or a distribution and the wave front set $WF(u)$ of u is disjoint from the set $N^*(L_0)$ of conormals of L_0 in the open set $U \subset \mathbf{R}^n$, then the restriction of u and all its distribution derivatives to $L_0 \cap U$ and $L_k \cap U$ are well-defined if k is large enough, and we may ask if u must be flat along $L_0 \cap U$ if u vanishes on $L_k \cap U$ for all $k \geq 1$.

(Continued on the next page.)

The answer is *yes* (under a certain additional condition). Using this theorem and a vanishing theorem for microlocally real analytic distributions that I gave in 1992 (C. R. Acad. Sci. Paris 1992, pp. 1231–1234), I will give new proofs of results of Bélisle, Massé, and Ransford on injectivity for ray transforms.

Tid och plats: Onsdagen den 12 december kl. 13.15–14.15 i seminarierum 3721, Institutionen för matematik, KTH, Lindstedtsvägen 25, plan 7.

MITTAG-LEFFLER SEMINAR

Aurel Rascanu:

Multivalued monotone BSDE in Hilbert spaces

Abstract: We discuss the existence and uniqueness of a solution for the backward stochastic differential equation (BSDE) in Hilbert spaces involving a maximal monotone operator A :

$$\begin{cases} dY(t) + F(t, Y(t), Z(t))dt \in A(Y(t))(dt) + Z(t)dW(t), \\ Y(T) = \xi, \quad t \in [0, T]. \end{cases}$$

By the monotonicity property the uniqueness follows. For the existence one considers, as usual, the approximating problem with A replaced by the Yosida approximation

$$A_\varepsilon(y) = [y - (y - \varepsilon A(y))^{-1}] / \varepsilon.$$

We show that problems arrive when we pass to the limit in the general case. However, when A is a subdifferential operator, a stochastic subdifferential inequality yields the convergences. Some examples of backward stochastic PDE are given.

Tid och plats: Torsdagen den 6 december kl. 14.00–15.00 vid Institut Mittag-Leffler, Auravägen 17, Djursholm.

ALBANOVA AND NORDITA COLLOQUIUM IN PHYSICS

Carl Wieman:

Science education in the 21st century:

Using the tools of physics to teach physics

Abstract: Guided by experimental tests of theory and practice, science has advanced rapidly in the past 500 years. Guided primarily by tradition and dogma, science education meanwhile has remained largely medieval. Research on how people learn is now revealing how many teachers badly misinterpret what students are thinking and learning from traditional physics classes and examinations. However, research is also providing insights on how to do much better. The combination of this research with modern information technology is setting the stage for a new approach that can provide the relevant and effective physics education for all students that is needed for the 21st century. I will discuss the failures of traditional educational practices, even as used by “very good” teachers, and the successes of some new practices and technology that characterize this more effective approach, and how these results are highly consistent with findings from cognitive science.

Tid och plats: Torsdagen den 13 december kl. 15.15–16.15 i Oskar Kleins auditorium, Roslagstullsbacken 21, AlbaNova universitetscentrum.

ALGEBRA AND GEOMETRY SEMINAR

Timothy Logvinenko: Geometrical construction of the McKay correspondence in dimension three

Abstract: Let G be a finite subgroup of $SL_2(C)$. In their famous paper Gonzales-Sprinberg and Verdier gave a natural geometric construction that yielded a 1-to-1 correspondence between the non-trivial irreducible representations of G and the irreducible exceptional divisors on the minimal resolution Y of C^2/G . This became known as the McKay correspondence. We, for the first time, give a natural generalization of their construction to the dimension three, for G an abelian subgroup of $SL_3(C)$ and Y the distinguished crepant resolution G -Hilb(C^3). The generalized construction yields a 1-1 correspondence between exceptional divisors on Y and some of the irreducible representations of G . It also explains what happens to the rest of the representations — each of them corresponds to a union of several exceptional divisors “in degree -1 in derived category”.

This is a joint work with Sabin Cautis.

Tid och plats: Onsdagen den 12 december kl. 13.00 i rum 306, hus 6, Matematiska institutionen, SU, Kräftriket.

MONEY, JOBS

Columnist: Johannes Lundqvist, Department of Mathematics, Stockholm University.
E-mail: johannes@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/~johannes/mj.html.en>.

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.
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>.

(Continued on the next page.)

Old information

Money to apply for

11. Stiftelsen G. S. Magnusons fond utlyser stipendier och anslag inom ämnesområdet matematik för följande ändamål: Stöd till doktorander. Stöd till den som önskar ytterligare meritera sig efter doktorsexamen. Stöd till svenska forskare för forskning hemma eller i utlandet samt för inbjudan av utländska gästforskare. Bidrag för att kvarhålla forskare inom landet. Stöd till den som inom sin verksamhet utnyttjar matematik och som önskar bidrag till vetenskaplig förkovran inom ämnet. Till doktorander utdelas stipendier med ett maximibelopp på 100 000 kronor, och till forskare som avlagt doktorsexamen år 2002 eller senare utdelas forskningsanslag med ett maximibelopp på 300 000 kronor. Anslag utgår under högst 1 år. Sista ansökningsdag är den 31 januari 2008. Web-info: http://www.kva.se/KVA_Root/swe/awards/scholarships/detail_scholarships.asp?grantsId=45.
12. Lennanders stiftelse utlyser stipendier för främjande av naturvetenskaplig och medicinsk forskning: 5 st à 103 000 kr och 10 st à 70 000 kr. I första hand delas stipendier ut till nydisputerade forskare som saknar försörjning eller doktorander som befinner sig i slutfasen av sin utbildning. Sista ansökningsdag är den 31 januari 2008. Web-info: <http://info.uu.se/fakta.nsf/sidor/separata.kungorelser.idA5.html>.
13. Institut Mittag-Leffler utlyser postdoktorala stipendier för verksamhetsåret 2008/09. Ämnesområdet för hösten 2008 är: "Geometry, analysis and general relativity". Ämnesområdet för våren 2009 är: "Discrete probability". Sista ansökningsdag är den 31 januari 2008. Web-info: <http://www.mittag-leffler.se/programs/0809/grants.php>.
14. Stiftelsen Längmanska kulturfonden utlyser bidrag för att främja bl.a. naturvetenskaper. Bidrag ges främst till särskilda ändamål, däremot inte till löpande verksamhet, periodiska skrifter och dylikt. Beviljade belopp är i regel i storleksordningen 15 000 – 40 000 kr. Sista ansökningsdag är den 15 januari 2008. Web-info: <http://www.langmanska.se/>.
15. Stiftelsen P. E. Lindahls fond utlyser två stipendier om vardera 150 000 kronor för vetenskapliga studier eller fortsatt praktisk utbildning i naturvetenskapliga ämnen inom eller utom Sverige. Sökande skall ha avlagt doktorsexamen år 2002 eller senare eller vara behörig att antagas till forskarutbildning och får inte inneha tjänst hos stat eller kommun. Tidigare har prioritering givits till nydisputerade forskare samt seniora forskare som är i behov av bidrag till fortsatt utbildning, exempelvis i form av resa/vistelse vid annat universitet. Sista ansökningsdag är den 17 december. Web-info: http://www.kva.se/KVA_Root/swe/awards/scholarships/detail_scholarships.asp?grantsId=15.

Jobs to apply for

16. Lunds universitet söker en biträdande universitetslektor i matematisk statistik med inriktning mot statistiska metoder inom livsvetenskaper. Sista ansökningsdag är den 14 december. Web-info: http://www.naturvetenskap.lu.se/upload/LUPDF/natvet/Utlysningar/071123_3463.pdf.
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