



INFOMAT

Januar 2012

Kjære leser!

I denne utgaven av INFO-MAT har vi en egen sekvens med tildelinger av matematikkpriser. Wolf-prisen, Crafoord-prisen, Fermat-prisen og Ramanujan-prisen er alle offentliggjort den siste måneden. Det er delte meninger om hvorvidt vitenskapelige priser er et gode eller et onde. Men prisene retter i det minste en viss oppmerksomhet mot vitenskapelig arbeid.

Nettstedet careercast.com har igjen kåret de beste og de verste jobbene. Matematikere, aktuarer og statistikere ligger helt i toppsjiktet. Lønn, arbeidsmiljø og arbeidsforhold er parametre som måles og som altså bringer disse yrkesgruppene høyt opp på skalaen. I år kun slått av dataingeniørene.

hilsen Arne B.

KRISTIAN SEIP UTNEVNT SOM EMS LECTURER 2012



Kristian Seip ved NTNU er av den europeiske matematikerforeningen utnevnt som EMS lecturer for 2012. Seip vil gi en serie med forelesninger "Selected problems in operator-related function theory and harmonic analysis" ved CRM (Bellaterra, Spania), Tel Aviv (Israel), og St. Petersburg (Russland).

Mer informasjon på: <http://www.euro-math-soc.eu/files/Seip.pdf>

INFOMAT kommer ut med 11 nummer i året og gis ut av Norsk Matematisk Forening. Deadline for neste utgave er alltid den 10. i neste måned. Stoff til INFOMAT sendes til

infomat at math.ntnu.no

Foreningen har hjemmeside <http://www.matematikkforeningen.no/INFOMAT>

Ansvarlig redaktør er Arne B. Sletsjøe, Universitetet i Oslo.

Matematisk kalender

2012:

Mars:

21. Abelpriskunngjøring, Oslo

Mai:

21.-25. Abelprisutdeling, Oslo

Juni:

11.-15. Sommerskole: *Geometry of Moduli*, Nordfjordeid

Juli:

2.-7. 6ECM, Krakow, Polen

August:

21.-24. Abelsymposiet: *Operator Related Function Theory and Time-Frequency Analysis*, Oslo

SOMMERSKOLE: GEOMETRY OF MODULI, Nordfjordeid, 11.-15. juni 2012

Program: The school is aimed at graduate students with a general background in algebra, and with interests in algebra, geometry or topology. There will be three lecture series and extensive problem sessions.

Gavril Farkas (Humboldt U, Berlin): Cohomological and birational aspects of the moduli space of curves.

Markus Reineke (U Wuppertal): Moduli spaces of quiver representations.

Claire Voisin (CNRS, Paris): Deformation of pairs and Noether-Lefschetz type loci.

Registration deadline is **May 1st 2012**

For registration and further information check the web page:

<http://www.mn.uio.no/math/english/about/collaboration/nordfjordeid/moduli2012/>

NYE MEDARBEIDERE VED NTNU

NTNU har ansatt tre nye matematikere fra 1. januar 2012, Førsteamanuensis **Mats Ehrnsström** i faggruppen Differensialligninger og numerisk analyse og Professorene **John Erik Fornæss** og **Berit Stensønes** i faggruppen Analyse.

Nye doktorgrader

Anton Stolbunov forsvarte 23. januar 2012 sin avhandling: *Cryptographic Schemes Based on Isogenies* for PhD-graden. Arbeidet er utført ved Institutt for matematiske fag, NTNU, med professor Stig Frode Mjølhusnes som veileder.

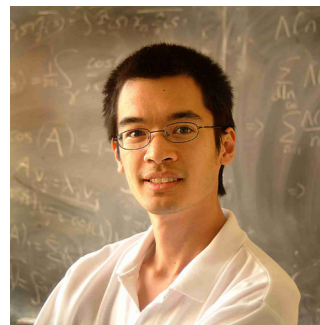
Andrey Kovalenko forsvarer 27. januar 2012 sin avhandling *Assessment of the Ensemble Kalman Filter Sampling Error* for PhD-graden i anvendt og beregningsorientert matematikk. Arbeidet er utført ved Matematisk institutt, UiB

Nyheter

CRAFOORDPRISEN I MATEMATIKK FOR 2012 TIL BOURGAIN OG TAO

Det svenske Viten- skapsakademiet har tildelt Crafoord- prisen i matematikk for 2012 til **Jean Bourgain**, Institute for Advanced Study, Princeton, USA og **Terence Tao**, University of California, Los Angeles, USA, for deres *brillante og gjen- nombrytende arbeider innen harmonisk analyse, partielle differensiallikninger, ergodeteori, tallteori, kombinatorikk, funksjonalanalyse og teoretisk informatikk.*

Mer om prisen på: <http://www.crafoordprize.se/press/arkivpressreleases/thecrafoordprizeinm>



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RAMANUJANPRISEN FOR 2011 TIL PHILIBERT NANG



Ramanujanprisen for 2011 er tildelt **Philibert Nang** (44), Ecole Normale Supérieure, Laboratoire de Recherche en Mathématiques, Libreville, Gabon.

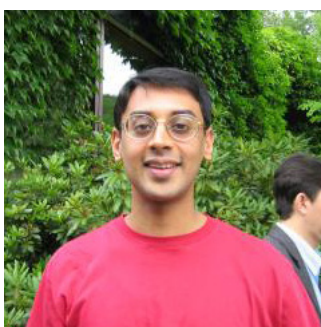
“The prize is in recognition of his outstanding contributions to the algebraic theory of D-modules.

He has important classification theorems for equivariant algebraic D-modules in terms of explicit algebraic invariants, and his results complement the insights obtained by others using perverse sheaves, and thus shedding new light on the Riemann-Hilbert correspondence.

The Prize is also in recognition of Dr. Nang’s determined pursuit of high level research while engaged in an academic career in his home country of Gabon, Africa. It is hoped that his example will inspire other young African mathematicians working at the highest levels while based in Africa.”

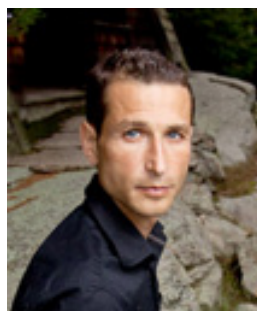
Ramanujanprisen er finansiert av Abelfondet og tildeles en ung matematiker fra et utviklingsland.

FERMAT-PRISEN TIL BHARGAVA OG RODNIANSKI



Fermat-prisen for 2011 deles mellom **Manjul Bhargava**, Princeton og **Igor Rodnianski**, MIT. Bhargava får prisen for sine arbeider innen generaliseringer av Davenport-Heilbronn-estimer og for sine

oppsiktsvekkende resultater (med Arul Shankar)



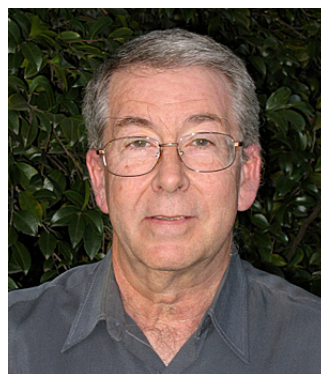
om gjennomsnittsrang av elliptiske kurver. Rodnianski får prisen for sine fundamentale bidrag til forståelsen av likningene i generell relativitetsteori og lysets forplantning på rom-

tid-kurver (i samarbeid med Mihalis Dafermos, Sergiu Klainerman og Hans Lindblad).

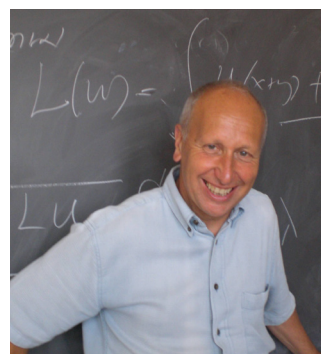
Mer om prisen på: <http://www.math.univ-toulouse.fr/PrixFermat>

Fermatprisen deles ut annethvert år i Toulouse, og er en anerkjennelse for arbeider innen formuleringer av variasjonsprinsipper, sannsynlighetsteori, analytisk geometri eller tallteori.

WOLFPRISEN I MATEMATIKK FOR 2012 TIL ASCHBACHER OG CAFFARELLI



Wolfprisen i matematikk for 2012 er tildelt **Michael Aschbacher**, Caltech, for hans arbeider innen teorien for endelige grupper, og **Luis Caffarelli**, University of Texas, Austin, for hans arbeider innen partielle differensiallikninger. Wolf-prisen overrekkes i det israelske parlamentet, Knesset, i mai 2012 av presidenten i staten Israel.



THE 10 BEST JOBS OF 2011

By Andrew Strieber /www.careercast.com/

The geeks strike back: despite enduring an industry bubble and the threat of outsourcing, Software Engineer ranks as the Best Job of 2011.



In recent years, the job market has increasingly

rewarded math whizzes at the expense of less technical professionals. Actuary, Mathematician and Accountant have all ranked among the best jobs in America by offering a pleasant work environment, good salary and healthy job security. But in 2011, as the emergence of specialized technologies creates new industries, landing the year's best job requires not just skill with numbers, but a strong knowledge of computers too.

Software Engineer, a job that involves the design and creation of software for everything from operating systems to cell phone "apps" to interactive games, ranks as the best job of 2011, according to this year's Jobs Rated report. Surveying 200 different professions across a wide variety of industries, skill levels and salary ranges, Jobs Rated researchers determine their rankings of the best jobs and worst jobs according to five core criteria: Work Environment, Physical Demands, Outlook, Income and Stress. The goal of each Jobs Rated report is to determine how gratifying each profession will be for a majority of workers – not just those who are famous or exceptional – so they can be sorted into a list of the "worst" and "best" jobs.

What helped Software Engineer capture the title of America's Best Job? While many factors push a career to the top of the rankings, the strong performance of Software Engineer this year can be attributed to two emerging industries: web applications and cloud computing. A proliferation of companies making applications for smartphones and tablets, along with the push to develop "cloud" software hosted entirely online, has made the job market for Software Engineers broader and more diverse. And a diverse job market brings improvements in stress factors such as Growth Potential

and Competitiveness, as workers become less beholden to employers or vulnerable to outsourcing. In fact, the stress ranking for Software Engineer improved 10 spots this year, jumping from 25th to 15th place overall.

By contrast, 2010's Best Job, Actuary, saw both its overall outlook and stress rankings fall sharply for 2011, due in part to continued uncertainty regarding insurance industry regulation.

Each year the Jobs Rated report seeks to find professions that provide the best overall experience for workers, not just jobs that excel in one particular area. For 2011, Software Engineer managed to rank better than 15th for every measurement criteria save one – Income, where it still finished 23rd. This means that on average, the profession offers a comfortable work environment, few intense physical demands, better than average income, strong hiring and comparatively low stress, helping it easily rank among the best jobs of the year. And while there may be exceptions to these findings (both good and bad), when compared to a low-ranking job such as Garbage Collector, which requires intense physical labor in an unpleasant work environment for little pay, Software Engineer fares particularly well.

Continuing a recent trend, a majority of the jobs that rank in the top 10 this year require proficiency in math, science or technology, and all of them require higher education or specialized training:

1. Software Engineer, Overall Score: 60.00
Researches, designs, develops and maintains software systems along with hardware development for medical, scientific, and industrial purposes.
 2. Mathematician, Overall Score: 73.00
Applies mathematical theories and formulas to teach or solve problems in a business, educational, or industrial climate.
 3. Actuary, Overall Score: 123.00
Interprets statistics to determine probabilities of accidents, sickness, and death, and loss of property from theft and natural disasters.
 4. Statistician, Overall Score: 129.00
Tabulates, analyzes, and interprets the numeric results of experiments and surveys.
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