INFOMAT

November 2016

TIMSS 2015

Norske elever på 5. trinn presterer svært bra i matematikk. De skårer signifikant høyere enn jevnaldrende elever i de andre nordiske landene og plasserer seg blant de beste i Europa. På 9. trinn kan norske elevers prestasjoner i matematikk karakteriseres som middels gode i et europeisk perspektiv. Det er særlig svake prestasjoner i emneområdet Algebra, som her trekker gjennomsnittsskåren ned. Både på 5. og 9. trinn viser norske elever at de har meget høy kompetanse innenfor emneområdet Statistikk. I Norge er det ingen kjønnsforskjeller i matematikk på de aktuelle trinnene. Trend for Norge, basert på resultater fra 4. og 8. trinn, viser ingen signifikant endring fra 2011 til 2015 for 4. trinn, men elevene på 8. trinn har hatt en signifikant framgang i matematikk i denne perioden.

Open access

Ole Kristian Bergem
Hege Kaarstein
Trude Nilsen (red.)

VI KAN LYKKES I REALFAG

Resultater og analyser fra TIMSS 2015

UNIVERSITETSFORLAGET

ARRANGEMENTER

Matematisk kalender

TOPOLOGY AND APPLICATIONS,
NTNU, 30. november-2. desember 2016

Dedicated to Nils A. Baas on his 70th birthday.
Speakers:
Marcel Bökstedt (Aarhus), Gunnar Carlsson (Stanford), Ralph Cohen (Stanford,) Herbert Edelsbrunner (Austria), Søren Galatius (Stanford), Kathryn Hess (EPFL), Gerd Laures (Bochum), Arnold Levine (IAS), Ib Madsen, (Copenhagen), Edvard Moser (NTNU), John Rognes (Oslo), Dennis Sullivan, (SUNY), Ulrike Tillmann (Oxford)
 https://www.math.ntnu.no/~mariusth/Nils70/
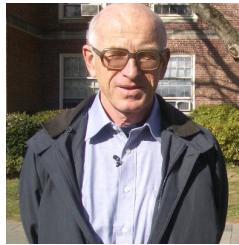
DANSK-NORSK OPERATORALGEBRA VERKSTED 2017

Det 17. "Dansk-Norsk Operatoralgebra verksted" vil finne sted 5.-8. januar 2017 på Lysebu (Oslo), med støtte fra Fondet for Dansk-Norsk Samarbeid. Arrangementet vil begynne med lunsj torsdag 5. januar og ende etter frokost søndag 8. januar
Den ene dagen vil det bli en minnemarkering av vår kjære venn og kollega, Ola Bratteli, som gikk bort i 2015 og som ville fylt 70 år i oktober 2016. Olas næmeste samarbeidspartnere gjennom mange år (George Elliott, David Evans, Akitaka Kishimoto, Palle Jorgensen and Derek Robinson) vil holde foredrag om Olas store bidrag innen flere områder (som f.eks. AF-algebraer, C*-dynamiske systemer, de-

rivasjoner, matematisk fysikk og wavelets). Deltagelse er mulig kun ved invitasjon av organisasjonskomitéen.
Programmet vil bli kunngjort rundt begynnelsen av desember.

POLAR GEOMETRY,
DNVA, Oslo, 26.-28. januar 2017

A conference celebrating the work of Ragni Piene on the occasion of her 70th birthday.
Time and place: Jan. 26, 2017 11:00 AM - Jan. 28, 2017 03:00 PM, The Norwegian Academy of Science and Letters
Invited speakers:
Paolo Aluffi (Florida) [TBC], Alicia Dickenstein (Buenos Aires), Sandra di Rocco (Stockholm), Lothar Göttsche (Trieste), Steven Kleiman (MIT), Raquel Mallavibarrena (Madrid), Dusa McDuff (Barnard), Elisa Postinghel (Loughborough), Jørgen Vold Rennemo (Oxford), Israel Vainsencher (UFMG), Bernard Teissier (Jussieu), Nelly Villamizar (RICAM)
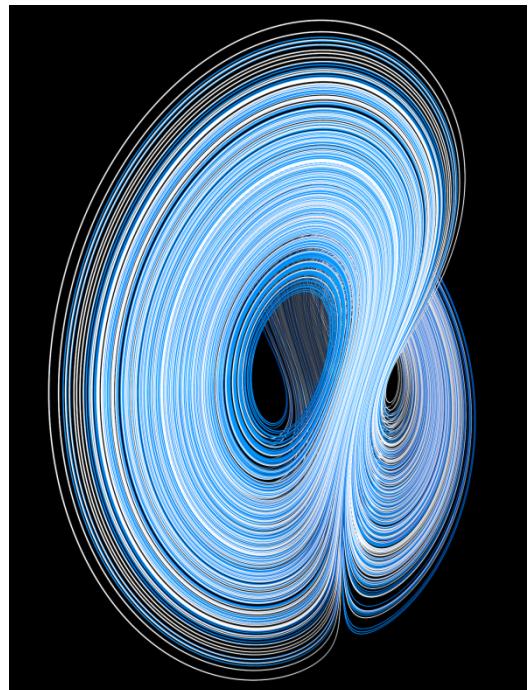
Nyheter

NYTT FRA CIMPA

The CIMPA features a program of Support for Training in Research (STR) for the most mathematically or economically deprived areas. The STR program consists in funding the organization of a series of research-level courses in mathematics within the geographic areas of activities of CIMPA (Africa, Central or South America, Asia). Each application for funding shall concern one series of course on a given subject during one to four weeks, preferably by a teacher/researcher holding a position in one of the supporting countries of CIMPA (France, Switzerland, Spain, Norway) or in a developing country.

The CIMPA launches a call for proposals for the period March 2017-August 2017. Applications must be submitted by **3 January 2017**, more information here

http://www.cimpa-icpam.org/soutien-a-la-formation-a-la/presentation/.

Ludovic Rifford
Director of CIMPA

RAMANUJAN PRIZE

The Ramanujan Prize for young mathematicians from developing countries has been awarded annually since 2005. The Prize is funded by the Department of Science and Technology of the Government of India (DST). It is administered jointly by the Abdus Salam International Centre for Theoretical Physics (ICTP), the International Mathematical Union (IMU), and the DST.

The Ramanujan Prize is usually awarded to one person, but may be shared equally among recipients who have contributed to the same body of work. The Prize is awarded annually to a researcher from a developing country who is less than 45 years of age on 31 December of the year of the award, and who has conducted outstanding research in a developing country.

The deadline for nominations is **1 February 2017.**

Nominations can only be made by using the online system. See
https://www.ictp.it/about-ictp/prizes-awards/the-ramanujan-prize/call-for-nominations.aspx
Please advertise this call for nominations for the Ramanujan Prize in your mathematical community.

EMS-SIMONS FOR AFRICA

The African Continent is very diversified and the development of a career in mathematics faces different and sometimes difficult progression. The Committee for Developing Countries (CDC) of the EMS, with the support of the Simons Foundation, opens a program of research visits to foster research opportunities for young and established researchers.

The aim is to promote individual career possibilities with consequence of an improved global capacity in African academic institutions. The program is open to all areas of pure and applied mathematics and statistics and it is directed to fellows based in Africa.

Open calls:
A. Collaborative research visits:
A1. Continuation in research
A2. PhD development
B. Top-up grants for women
C. Top-up grants for conference participation
For all applications there are four deadlines:
February 15th, May 15th, September 15th, November 15th
All details can be found at webpage: http://www.euro-math-soc.eu/ems-simons-africa
Please help to distribute this information among your associates and students.

Best regards
Giulia Di Nunno, UiO
EMS-CDC Chair

NYHETER

NOMINATIONS FOR THE IMU DISTINCTIONS

Dear colleagues,

As Secretary of the IMU I invite you to submit nominations for the IMU distinctions listed below, thus assisting the corresponding committees in their task of selecting the awardees who will receive their distinctions at ICM 2018 in Rio de Janeiro.

Here is the list of awards for which we presently seek nominations, each listed with the email address to which nominations can be sent, and with its short description:

* *Fields Medals* – Chair: IMU President Shigefumi Mori.
Email: chair@fm18.mathunion.org
The Fields Medals are awarded every 4 years on the occasion of the International Congress of Mathematicians to recognize outstanding mathematical achievement for existing work and for the promise of future achievement, see award details at http://www.mathunion.org/general/prizes/fields/details/.

* Rolf Nevanlinna Prize – Chair: Tony F. Chan. Email: chair@nevanlinna18.mathunion.org
The Nevanlinna Prize is awarded once every 4 years at the International Congress of Mathematicians, for outstanding contributions in mathematical aspects of information sciences, see award details at http://www.mathunion.org/general/prizes/nevanlinna/details/.

* *Carl Friedrich Gauss Prize* – Chair: Björn Engquist.
Email: chair@gauss18.mathunion.org
The Gauss Prize is awarded once every 4 years to honor a scientist whose mathematical research has had an impact outside mathematics – either in technology, in business, or simply in people's everyday lives, see award details at http://www.mathunion.org/general/prizes/gauss/details/.

* *Chern Medal Award* – Chair: Caroline Series.
Email: chair@chern18.mathunion.org
The Chern Medal is awarded every 4 years on the occasion of the International Congress of Mathematicians to an individual whose accomplishments warrant the highest level of recognition for outstanding achievements in the field of mathematics, see award details at http://www.mathunion.org/general/prizes/chern/details/.

* *Leelavati Prize*, sponsored by Infosys – Chair: Gert-Martin Greuel.
Email: chair@leelavati18.mathunion.org
The Leelavati Prize, sponsored by Infosys, is intended to accord high recognition and great appreciation of the IMU and Infosys of outstanding contributions for increasing public awareness of mathematics as an intellectual discipline and the crucial role it plays in diverse human endeavors, see award details at http://www.mathunion.org/general/prizes/leelavati/details/.

IMU also requests nominations for the

* *ICM Emmy Noether Lecture* – Chair: Irene Fonseca.
Email: chair@noether18.mathunion.org
The ICM Emmy Noether Lecture is a special lecture at an ICM which honors women who have made fundamental and sustained contributions to the mathematical sciences, see more details at http://www.mathunion.org/activities/icm/emmy-noether-lecture/.

More information about each of these awards and the Noether lecture, as well as lists of past laureates, can be found on the IMU Web site at URL: www.mathunion.org/general/prizes.

To allow the committees sufficient time for this decision process, the IMU has set
December 31, 2016
as the deadline for nominations. Nominations received after this date will only be considered at the discretion of the committee.

Thus, we would like to urge you to submit before the deadline any compelling nominations of which you are already aware now.

The full compositions of all committees remain confidential and will be announced at the Opening Ceremony of ICM 2018 only.

The guidelines for nominations are specified at the Web
page: http://www.mathunion.org/general/prizes/nomination-guidelines/.

For some awards (e.g., the Leelavati Prize) additional hints concerning the nomination can be found on the respective Web pages.

Sincerely,
Helge Holden

Laureates of mathematics and computer science meet the next generation

HEIDELBERG LAUREATE FORUM

5th Heidelberg Laureate Forum
September 24 - 29, 2017
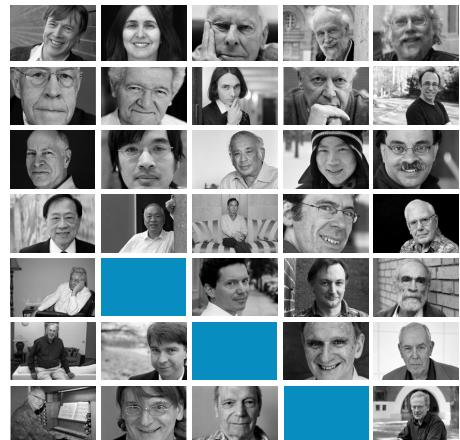
Apply now!

Submission Deadline: February 14, 2017

- **Mathematics and computer science in one symposium**
- **Meet your scientific role models face to face**
- **Advance your scientific career**
- **Travel grants available**
- **Lodging and board provided**

"The best professional experience of my life. I thought that receiving my PhD was the most ultimate event and highlight, but the HLF tops even that."
Young researcher at HLF 2016

The Heidelberg Laureate Forum (HLF) annually connects promising young researchers in mathematics and computer science with the top scientists in their fields. For one week in late summer, the Heidelberg Laureate Forum Foundation (HLFF) invites the recipients of the Abel Prize, the ACM A.M. Turing Award, the ACM Prize in Computing, the Fields Medal, and the Nevanlinna Prize to join 200 carefully selected young researchers.

For more information and online application, please visit:

www.heidelberg-laureate-forum.org

HEIDELBERG LAUREATE FORUM FOUNDATION

Klaus Tschira Stiftung gemeinnützige GmbH

KTS