INFOMAT

EMS-priser til Reinhard Siegmund-Schultze og Nina Holden
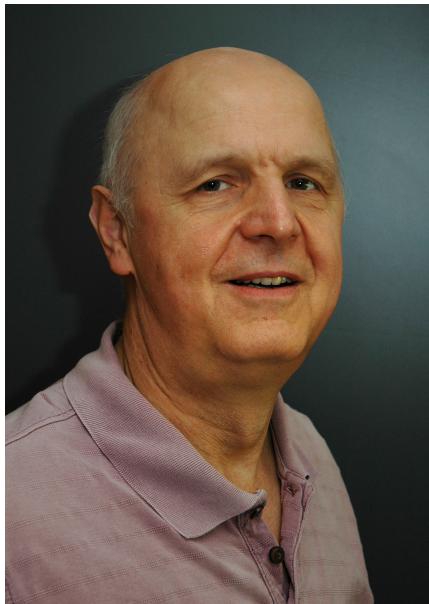
Under sommerens europeiske kongress i Sevilla ble Reinhard Siegmund-Schultze tildelt Otto Neugebauer-prisen for sitt arbeid innen matematikkhistorie og Nina Holden en av EMS-prisene for unge matematikere under 35 år.

INFOMAT gratulerer!

Matematisk kalender

Nye doktorgrader

Felix Thimm ved UiO forsvarte 7. august 2024 sin avhandling *Factorization and Wall-Crossing in Equivariant K-Theoretic Donaldson-Thomas Theory* for graden PhD.

Veiledere har vært Førsteamanuensis Jørgen Vold Rennemo og Professor John Christian Ottem, begge UiO.

Sammendrag:

In enumerative geometry, we compute various types of invariants in order to distinguish different geometries. The best-known such invariant counts the numbers of holes in a space. To distinguish geometries, which differ in more subtle ways, one source of invariants is viewing the given geometry as the underlying space of a physical theory and computing physical invariants.

A modern incarnation of this are algebraic curve-counting theories inspired by string theory. String theory views particles as 1-dimensional strings in space. Evolving over time, they span a 2-dimensional surface inside 10-dimensional space-time, which consists of usual 4-dimensional space-time together with six additional dimensions. Imposing certain physical conditions, this surface must be a complex algebraic curve inside a compact complex Calabi-Yau 3-fold, which comprises the extra dimensions. Studying particles in string theory is thus intimately connected to curve-counting in algebraic geometry.

One curve-counting theory is Donaldson-Thomas theory, where we count 1-dimensional subvarieties. In this thesis, we study generating series of K-theoretically refined Donaldson-Thomas invariants, which involve more intricate geometric information than more classical numerical Donaldson-Thomas invariants. We compute the refined generating series of a certain orbifold geometry explicitly using factorization. We also prove a correspondence between two types of refined invariants using wall-crossing.

Nyheter

EMS-priser til norske matematikere

The European Mathematical Society Prizes are awarded every four years to 10 young mathematicians under the age of 35, in recognition of exceptional contributions to mathematics. The winners must be of European nationality or have carried out their work in Europe.

One of this year´s winners is

Nina Holden, professor at the Courant Institute of Mathematical Sciences of New York University, *for her profound contributions to probability theory and its applications to statistical physics, including results linking Liouville quantum gravity, the Schramm-Loewner evolution, and random triangulations.*

Holden works at the boundaries of mathematical physics, complex analysis, and probability, in a very active area connected to statistical physics and quantum field theory. The central problem of her work is to develop a mathematically rigorous theory of random surfaces, whose notion is central to physicists' attempts at reconciling Einstein´s gravity with quantum mechanics, and where she has proved important results.

The Otto Neugebauer Prize is to be awarded for highly original and influential work in the field of history of mathematics that enhances our understanding of either the development of mathematics or a particular mathematical subject in any period and in any geographical region. The Prize is named after Otto Neugebauer (1899-1990), an Austrian-American mathematician and historian, who laid the foundations of our current understanding of the mathematical knowledge of Mesopotamia, Egypt, and Greece.

This year´s winner is:

Reinhard Siegmund-Schultze, German historian of mathematics at Adger University, Kristiansand, Norway, *for highly original and influential work in the field of history of mathematics that enhances our understanding of either the development of mathematics or a particular mathematical subject in any period and in any geographical region.*

Siegmund-Schultze studied mathematics at the Martin Luther University of Halle-Wittenberg, and did a PhD at the University of Leipzig, on the history of the branch of mathematics known as functional analysis. He is especially renowned for his historical research on the emigration of European mathematicians during Nazism.

Nina Holden er også, sammen med Xin Sun, tildelt **Frontiers of Science Award** for artikkelen *Convergence of uniform triangulations under the Cardy embedding*, publisert i Acta Mathematica i 2023. Juryen begrunner sitt valg slik:

Holden and Sun prove uniform triangulations converge to the 8/3-Liouville quantum gravity disk under the Cardy embedding, using site percolation on triangulations.

Om **Frontiers of Science Awards**:

The International Congress for Basic Science honors top research, with an emphasis on achievements from the past ten years which are both excellent and of outstanding scholarly value. For the 2024 selection, scientific works in both basic and applied research are chosen in 42 areas of the three basic science fields (mathematics, theoretical physics, and theoretical computer and information sciences) represented at the ICBS.
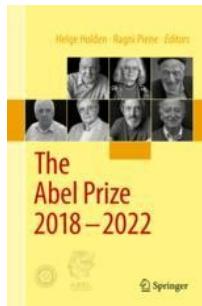
Ny bok om Abelprisvinnerene er nå tilgjengelig: <https://link.springer.com/book/10.1007/978-3-031-33973-8>

Det blir 5 år til neste annonsering!

Kunngjøringer

Årsmøte i Norsk Matematisk Forening

Informasjon og sakspapirer til NMFs årsmøte, 13. september 2024 vil bli tilgjengelig på <https://web.matematikkforeningen.no/2024/07/22/arsmote-og-generalforsamling-13-09-2024/>

Søknad Abelsymposium 2027

Vi ber om at alle som ønsker å avholde Abelsymposium 2027 sender en skisse til mailto:nmf@matematikkforeningen.no innen 1. september 2025. Styret i NMF vil velge ut en av skissene og gi i oppgave å utarbeide en full søknad. Skissen bør inneholde:
* Tema / tittel for symposiet
* Noen mulige foredragsholdere (det er ikke nødvendig med bekreftelse på dette tidspunkt)
* Mulige datoer
* Sted

<https://web.matematikkforeningen.no/2024/07/22/soknad-abelsymposium-2027/>

Symmetries in Computations

This fall Hans and I are giving a course on *Symmetries in Computations* – which can thought of as *Representation Theory and Fourier Transformation in action*. This course will be thought in a hybrid setup: Weekly lectures are given virtually over zoom and there will be two in person meetings – financially supported by the Trond Mohn Foundation. The lectures will start in the beginning of September.

All master students, advanced Bachelor students and PhD students in Norway are very welcome to join, and we would appreciate if you could point potentially interested students to this possibility (the course will give 10 ECTs). Additionally, to students from Norway, there will also international students be participating though a new collaboration between LSC and CIMPA. In case you or any interested students have questions, we are very happy to answer. For organizational purposes we invite interested student to sign in (informally) to the following nettskjema : https://nett-

skjema.no/a/438608 Thank you very much for helping us to spread this information!

Best wishes for the summer,

Cordian Riener and Hans Munthe-Kaas

ICM 2026

Dear colleagues

The Program Committee (PC) for the International Congress of Mathematicians 2026 in Philadelphia, USA, 23–30 July 2026, has been established. At this moment in time the Adhering Organizations of the IMU and mathematical societies worldwide are invited to nominate plenary and sectional speakers.

I refer to section 4 of the 2023 report of the ICM Structure Committee, which lists the ICM 2026 sections as proposed by the ICM Structure Committee and endorsed by the IMU Executive Committee (see CL 8/2023). When you make nominations for speakers, please specify whether you suggest them as plenary speakers or sectional speakers. In case of proposals of sectional speakers, please indicate to which sections you would like the persons to be invited. Shared lectures between sections are also possible.

As a reminder, the IMU Executive Committee also endorsed the proposal to leave 20 sectional talks, and one or two plenary talks, to be assigned to special lectures (described in section 3.3 of the report). Nominations for these talks are also invited.

All communication concerning the scientific program of ICM 2026 is handled by the Chair of the Program Committee, Claire Voisin. Please direct all your proposals for invited plenary and sectional speakers to Claire Voisin using the email address

<chair@pc26.mathunion.org>.

Nominations should be received by the PC Chair no later than **1 November 2024**.

Regards
Christoph Sorger, Secretary General of the IMU

Program, Nasjonalt Matematikermøte 2024

12 September
10:00 - 10:30 Arrival. Morning coffee
10:30 - 10:40 Opening words
10:40 - 11:30 Plenary lecture I: Gunnar Fløystad
11:45 - 11:50 Viggo Brun prize 2024
11:50 - 12:00 Music
12:00 - 12:50 Lecture, Viggo Brun 2024 laureate
12:50 - 14:00 Lunch
14:00 - 14:45 Sectional talks I
15:00 - 15:45 Sectional talks II
16:00 - 16:50 Plenary lecture II: Marie Rognes
17:30 - 19:00 Social activities
19:00 - 22:00 Conference dinner

13 September
09:00 - 09:55 Elisabeth Stephansen lecture: Giulia Di Nunno
09:55 - 10:30 Coffee break
10:30 - 11:15 Sectional talks III
11:30 - 12:15 Sectional talks IV
12:15 - 13:15 Lunch
13:15 - 14:05 Plenary lecture III: Geir Dahl
14:15 - 15:10 Plenary lecture IV: Kristian Seip
15:10 - 15:15 Closing words
15:15 - 15:30 Afternoon coffee
15:30 - 17:00 NMF annual meeting

Sec.	ST I	ST II	ST III	ST IV
1	Grong	Lue	Ebrahimi-Fard	Selberg
2	Grunert	Kastberg Nilsen	Rognlien Dahl	Li
3	Rognes	Riener	Knutsen	Benth
4	Massing	Solem	Thorarins-dottir	Shaw