Dear colleagues,

The Research Council of Norway will be announcing a new call for Centers of Excellence in 2020. Our university has hosted 8 such centers since the start of this programme in 2003, and 4 of these have been at our Faculty of mathematics and natural sciences. For the application round in 2020, our university leadership is signaling that they will be very selective about which proposals to support, and they will provide extensive support for writing of the supported proposals.

Our department fulfills perfectly the criteria that are described by the university about what kind of research environments will have a chance to be supported. As I was studying these criteria, I was very proud to see how many prestigious grants and awards we host at our department. In fact, our university in general, and our Faculty of mathematics natural sciences in particular, host a large number of such grants.

- UiB has hosted 22 ERC grants in total, 12 of these are at our faculty, and three of them are at our department.
- UiB has hosted 36 starting grants from Bergen Research Foundation in total, 18 of these are at our faculty, and four of them are at our department.
- UiB hosts three FritPro ToppForsk grants from the Research Council of Norway, and one of these is at our department.
- UiB hosts five Elite professor grants from Bergen Research Foundation, and one of these is at our department.

In addition, our department has hosted five Young Research Talent grants from the Research Council of Norway.

Our dean has set a high goal: Faculty of mathematics and natural sciences should succeed in obtaining two centers of excellence in 2021. With the listed experience and expertise in succeeding in tough competition, I dare say that our department has the perfect background for initiating and coordinating a center of excellence.

Writing a proposal for such a center requires a clear vision, and the added value of a center compared to our current ongoing research must be evident. The vision needs to be important, timely, brave, and challenging. It takes a lot of thinking, discussing, reading, writing, rewriting, rethinking, rewriting, and repeating this many times. It takes many working hours, long weeks, late nights, most probably also a lot of frustration and perhaps even tears. On the other hand, it can perhaps be compared to having a baby; if we succeed, all the suffering will be immediately forgotten… I say let’s go for it!

I wish you all a very nice weekend!

-Pinar

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The Dean's Blog – Helge K. Dahle

The Dean's blog aims to inform us of ongoing work and processes at the Faculty of Mathematics and Natural Sciences.

His latest postings: Tiltak for god kjønnsbalanse er nødvendig - Derfor er medarbeidersamtalen viktig - Danmarks Tekniske Universitetet viser at vi har veldig mye å lære
## Welcome new colleagues

<table>
<thead>
<tr>
<th>Christoph Bauer</th>
<th>Thomas Stevenson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christoph is a postdoctoral researcher with a background in computational chemistry (University of Bonn, PhD, 2018). He did a project in cheminformatics/machine learning at ETH Zürich (2017-2018) and is currently working on models to expand on the prediction of the metabolism of xenobiotics at CBU and the department of chemistry at UiB.</td>
<td>Tom is a PhD student working on the role of RNA binding proteins in regulating genomic output. He is a biologist with a keen interest in improving his computational biology skills during the course of his studies. Tom is from Durham University and UiB and will be with us at the CBU for 3 years.</td>
</tr>
</tbody>
</table>

## Actualities

- På Høyden
- Khrono
- News from NFR
- News from UiB
- Informatics on Facebook

## Bergen Open programming contest

On November 10, 2018, our department hosted the Bergen Open programming contest, with 75 participants forming 33 teams, organized by Torstein Strømme. [Read more.](#)  

## Congratulations to CBU for partnership in a new research center for clinical trials!

A multidisciplinary team of leading clinicians and scientists will establish a national Center of Excellence for clinical research in brain diseases. The goal is to provide better access to the newest and best treatment within brain diseases, and to make experimental treatments available for patients all over Norway. This is a major milestone for Norwegian healthcare. The research center, called Neuro-SysMed, will receive 20 million NOK per year from the Research Council of Norway for up to eight years. This will be matched by the hosting institutions reaching a total of 320 million NOK (33 million Euro). CBU and our department are partners in this new research center. [Read more.](#)  

## Open hearing about the future needs for advanced e-infrastructure on 6th December

The Research Council of Norway invites to an open hearing about the future needs for advanced e-infrastructure at their premises on December 6, 2018. Registration deadline is November 28. [Learn more.](#)
Dialogue meeting on Open Access “Plan S” on 7th December

UiB and the Research Council of Norway welcome us to a dialogue meeting on Plan S on 7 December. If you have opinions on the new roadmap for open access publishing, you can express them at this meeting.

Time and venue: 7th December at 10.00–12.00, Dragetjelet skole, Magnus Lagabøtes plass 1, Auditorium 1.

Learn more

Register your publications in the Cristin database

The budget of our department is partly dependent on the publications that our scientific staff are authors and coauthors of. We therefore ask everybody to kindly register all their publications that have appeared in 2018 in the Cristin Database; after logging in, please choose “Research results” and then “Register result”. Some publications are automatically gathered from various journals, so please search for your publications via “Search in results” and register only the missing ones. Please try to complete this by mid January.

Next faculty and staff lunch December 12, 2018

Our next faculty and permanent staff lunch will be on November 14 at 12:00. Since our common lunch room and social area on the fourth floor is being refurbished, we will use the “Yoga room” (room 510N3) on the fifth floor.

Research, Science, and Seminars

The next monthly informatics department seminar is on November 29 at 14:15

Speaker: Professor Wolfgang Achtziger, University of Erlangen-Nüremberg Germany

Title: Topology Optimization of Mechanical Structures: On Bars, Holes, and the Anglerfish

Abstract: While classical techniques of design optimization of engineering structures are based on the parameterization of boundaries or other geometrical properties of the structure, modern methodologies try to discover new initial designs by regarding structures as an optimal material distribution within the design space.

By this methodology, the principal shape of the structure is not pre-determined meaning that, e.g., the number of holes in a structure may vary during the design process. This realizes a so-called free design optimization, i.e., optimization of structural topology. The price of this freedom is hidden in the mathematical challenges to be covered by the mechanical and mathematical background as well as by the used optimization methods.

The talk will give an introduction into these problems and their difficulties from the viewpoint mathematical optimization.

A frequently considered experimental field in this area the design optimization of trusses. Some classical truss problem formulations allow the mathematical reformulation as convex optimization problems, and therefore globally optimal truss designs can be calculated. More realistic formulations, however, incorporating stress constraints or the consideration of pre-fabricated truss bars etc., are challenging, even for small academic instances. For discretized continuum structures, i.e., based on finite elements, the consideration of stress constraints seems to be a must for practitioners. The topology nature of the problem, i.e., the unknown location of holes in the structure, leads to so-called vanishing constraints. The talk will also explain the relation of these constraints. The talk will also explain the relation of these constraints to the Anglerfish and will show ways how to catch it....
### Course 19 January 2019: How to write the impact part of project proposals

In this course, Sean McCarthy will focus on the impact part of a proposal. 'Impact' is one of the most important evaluation criteria in European project proposals. Many researchers find understanding the concept and explaining the expected impact challenging. The course is aimed at clearing this up, and teaching applicants to sell their ideas in the project summary (abstract) and the impact part. The abstract should introduce the impact of the project to the evaluator.

The course is UiB internal and all UiB staff and researchers are welcome. The course language is English. Lunch will be served - no conference fee.

Sean McCarthy in Hyperion Ltd. is an experienced researcher, research manager and evaluator. He has trained researchers and research administrators from European universities for many years. Learn more and registration

### Annual Department of informatics gathering will take place April 29-30, 2019

Every year in April, the employees of our department and the student council go for a two day seminar somewhere in the vicinity of Bergen. Next gathering will take place April 29-30, 2019 at Solstrand. All faculty members are expected to attend this gathering, and all other employees are most welcome. At this meeting, we will discuss very important things like our department’s research and education strategy for the next five years.

Please reserve the dates, and wait for more information!

### Academic affairs and PhD Updates

#### PhD defense Bjørn Møller Greve

Bjørn Møller Greve will defend his thesis "Systems of Boolean equations, elimination theory, and applications to cryptography" on Friday 7 December at 11:15, VilVite Auditorium, Thormølens gate 51. All are welcome!

- Opponent: Professor, Dr.renat. habil. Martin Kreuzer, Universität Passau, Germany
- Opponent: Dr.renat. Patrick Felke Hochschule Emden-Leer, Tyskland
- Committee member: Director, Ph.d. Kjell Jørgen Hole, SIMULA UiB, Norway
- Custos/Leader of the defense: Professor Jaakko Timo Henrik Järvi, Department of Informatics, UiB

Please find the press release here.

#### Online course for PhD supervisors

The course includes rules, regulations and procedures for the PhD program. Everyone appointed as main supervisor or co-supervisor for PhD candidates at the Faculty of Mathematics and Natural Sciences from 1 December 2018 must complete the online course. You can take the course in Norwegian or in English. Please make sure you verify the completion of the course when it is completed.

### Funding opportunities

#### Reminder about the Meltzer Research Fund

The Meltzer Research Fund awards research prizes, funding for projects and travel stipends for researchers. The Fund also awards stipends to students. The Funds are awarded every year on Lauritz Meltzer's birthday, on March 8. The application deadline for project grants for students/PhD-candidates is December 1, 2018. Only particularly gifted students and research fellows are eligible for grants from the Meltzer Foundation. General guidelines for project grants for students and PhD-candidates. Applications must be submitted via a web-based system.
Reminder about the Bergen Universitetsfond
You may apply to Bergen Universitetsfond for funding for projects for dissemination and publication of research results and support for the organizing scientific conferences, workshops etc. in the period 1 April 2019 to 31 March 2020. It is also possible to apply for support for preparing of scientific conferences scheduled to take place after 31 March 2020. Learn more here.

Reminder: Call for applications to the Centre for Advanced Study (CAS)

The Centre for Advanced Study (CAS) invites researchers to pursue excellent, fundamental, curiosity-driven research for a year in Oslo. CAS is accepting applications for the 2021/22 academic year. Click here to register and apply. Deadline: 14 January 2019. Learn more.

Vacant positions

Tenure Track Associate Professor in Software
Closing date: 25.11.2018. Please find the announcement here

Researcher in Cryptology
Closing date: 01.12.2018. Please find the announcement here

Four PhD fellowships in Computer Science
We have announced four PhD positions! Excellent candidates within each of our research directions will be considered. Please spread the word, look for good candidates, and talk to your students and colleagues. Closing date: 09.12.2018. Please find the announcement here

PhD position in computer science: parameterized complexity applications in visualization
Closing date: 15.12.2018. Please find the announcement here.

Professor in information security – applied cryptography
Closing date: 06.01.2019. Please find the announcement here.

Researcher in Algorithms
Closing date: 15.01.2019. Please find the announcement here

HR, Operations, Health, Safety and Welfare sikresiden.no – UiB welfare offers

Refurbishing of our common lunch room and social area on the fourth floor

You might have noticed that our common lunch room and social area is under reconstruction and refurbishing. While this work is going on, please feel free to use all other meeting rooms in the fourth floor and the other floors. On the fourth floor we have the “aquarium” and “kroken” rooms, and on the third floor we have the “library”. Please ask Ingrid if you don’t know where these rooms are. This might also be a good chance for you to join other research groups for lunch!
The Faculty of Mathematics and Natural Sciences to be re-certified as “Miljøfyrtårn”

In April 2016, the Faculty of Mathematics and Natural Sciences was certified as a “Miljøfyrtårn” (“Environmental Beacon”).

The certification includes the departments, centers and the faculty administration. The certification was part of the fact that the University of Bergen, as the first of the major university in Norway, now became a “Miljøfyrtårn”.

Being an “Miljøfyrtårn” involves systematic work on environmental measures in everyday life. The organization must meet requirements and implement measures for a more environmentally friendly operation and a healthy working environment.

To be certified as a “Miljøfyrtårn”, means that the faculty must meet a number of requirements within systematic HSE work, as well as requirements for waste, procurement, transport and energy. And all these requirements must be documented. We must also meet all the requirements necessary for a good HSE system.

Being a “Miljøfyrtårn” commits us as an institution and as an individual employee to make environmentally conscious choices in everyday life.

UiB info for International Researchers
4 December: Introductory seminar for new employees

Reminder: Yoga on Wednesdays!
Yoga is a great way to reduce stress and tensions from work.
Yoga classes are held on Wednesdays at 2:30 p.m. to 3:30 pm at the Meeting room in 5th floor.

Our professional yoga instructor, Kjersti Næss, is teaching in English. No signing up, and no participatory fee will be charged. Please bring your own yoga mat. We also have some mats for loan.

Reminder: Kakeklubben on Mondays
Kakeklubben aims to help our international colleagues to practice Norwegian while spending nice time together with people across group borders. Club meetings are normally held on Mondays at 12 o’clock in the lunchroom, 4th floor. While the lunch room is under reconstruction, we gather in the small meeting room at the end of the same corridor as the lunch room is. You bring your own lunch, and we share a cake. We hope for volunteers among the club members to bring cakes, and we plan to make a department cake recipe book after some time. All are welcome!

We hope to see you there, both internationals and Norwegians!
Welfare offer from the UiB: Arv og Miljø

ARV OG MILJØ - Premiere 21.november
Først ut er Arv og Miljø, hvor Vigdis Hjorths bestselgende roman Arv og Miljø tas til scenen for første gang.

Stykket spilles kun i fire uker, og UiB ansatte har billetter til torsdag 29.november.

Store Scene. Torsdag 29.november.
UiB pris kun kr 270,-  Bestill her.

Welfare offer from the UiB Kim F før jul - bestill UiB-billetter!

KIM F - Premiere 15.desember
Kim F er en forestilling om undertrykkelse, opprør og kjærlighet. Kim Friele var den første i Norge til å stå frem offentlig som homofil og kjempet for å få fjernet straffelovsparagrafen 213 om homofili som en psykisk diagnose. Stykket handler om kampen for å leve det livet man ønsker!

Teaterkjelleren. Tirsdag 18.desember.
UiB pris kun kr 250,-  Bestill her innen 27.november