Dear colleagues,

15 years ago, there were four universities in Norway: Bergen, Oslo, Trondheim and Tromsø. Since then, the number of universities has been steadily increasing, and today Norway has 10 universities. The government has high research ambitions for the newer universities, and clearly this means tough competition nationwide when it comes to recruiting new students, acquiring research funding, and acquiring new study slots. At the same time, funding of fundamental, in particular blue-sky, research is under stronger pressure than ever before. This gives a clear incentive to all scientists for disseminating their research results and explaining the importance of these to a broad audience. Days are gone, I'm afraid, where excellent researchers only needed to communicate with their students and their peers. Today, we have both a formal duty by law, and a strong self-interest to communicate our research to people outside of our scientific fields, to the general public, and to the authorities.

Many of us, including myself, find it hard to popularize, in particular theoretical, research. Fortunately, we have seen several excellent examples of such during the last couple of months. PhD students Håkon from bioinformatics and Torstein from algorithms prepared, with help from journalist Øystein Rygg Haanæs, popular science articles for forskning.no. They set a beautiful example, and I am really grateful to both of them. I hope this will motivate more of our research groups, and especially young researchers, to advertise for possible applications, implications, and importance of their research. Sometimes, the help for promoting a theoretical result comes from another research direction. This happened a couple of years ago when a much appreciated theoretical result in algorithms also found great interest in the field of practical cryptography. Three very busy people took the time to write about this in Khrono, and this played an important role in the series of attempts to convince the authorities to place more focus on fundamental research in informatics. I dare say our efforts gave results, as the government mentions basic fundamental research in informatics as one of the few areas to increase the funding of in the 2020 state budget.

Fortunately, it is not necessary to have real or made-up immediate applications of a research direction for it to be appropriate for popular presentation. Useless research can be very useful indeed 😊, and successful researchers in even the most applied fields are arguing for the importance of fundamental research. Reaching out to the public with our results can open people's minds, and perhaps motivate young people to follow in our footsteps. I am very proud that our department is becoming a key player in national research dissemination and debates on the importance of research. I thank all of you who are contributing to this for your wonderful efforts!

I wish you a very nice weekend,

-Pinar
Welcome new colleagues!

**Natacha Galmiche**

Natacha started in a PhD position in informatics - machine learning for ensemble prediction in weather and climate this week. Her main supervisor will be Nello Blaser.

The position is part of a multidisciplinary project on “Exploring Multimodality in Weather and Climate Prediction”, which is a collaboration between the Department of Informatics, Geophysical Institute and Department of Mathematics. The project will focus on research in machine learning, topological data analysis and visualization techniques and the exploration of new approaches to enhance weather and climate models. The state-of-the-art approach to assessing predictability in weather and climate models is to perform ensemble simulations and use mean, median, and standard deviation to assess model performance and forecast certainty. The presence of multimodality in the ensemble challenges existing methods for ensemble data analysis.

Natacha is French. She got her Master’s in Computer Science and Applied Mathematics (Specialization: HPC-Big Data-Machine learning) in ENSEEIHT, Paul Sabatier University Toulouse in 2019.

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**Current Issues**

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

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**Next Faculty and Staff lunch December 12**

The next Faculty & Staff lunch is on 12th December in the fourth floor lunch room!

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**Picture report from the II Department HSE seminar 2019**

**HSE seminar 2019**

Department of Informatics - 21st November at VIVitek

This year’s HSE seminar’s main focus will be on cultural differences regarding alcohol consumption and what is acceptable and unacceptable when it comes to alcohol and drugs in work related situations. We expect all informatics employees to attend the seminar if possible, but for health arising reasons, we would like you to [click here](#) by 18th November.

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Karin Ellis’ presentation

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Alcohol culture in Norway – dilemmas and challenges in the workplace
Datablokken is 30 years old! Picture report from celebrations on November 29!

30 years ago, in 1989, a very young (only five years old) Department of informatics moved to a brand new building. The building complex with the ambitious name “High Technology Center” has meant a lot for the development of Bergen city, our university, and the Marineholmen area. Needless to say, Datablokken of this complex has played a crucial role in the growth and success of our department.
Students affairs

Report from Selmer CryptoAften
On November 18th the Selmer Center organized Selmer CryptoAften, a social activity for students in security.

Around 30 students participated in this event. After a seminar giving an abstract introduction to cybersecurity, the students competed in six teams in an escape-room type of game: they had to find clues, hidden both in Høyteknologisenteret and in email account, the password to which they had to discover.

Selmer Cryptoaften was a chance to meet the students in an informal environment and to give them a taste of the emotions people experience when doing research.

A survey among the students after the event suggests that they were unanimously satisfied with the contents of Selmer CryptoAften.

Norway Bebras Challenge
The first Norway Bebras Challenge took place Nov 4 –15 and was a big success with over 2230 students from over 220 schools. Schools from all over Norway participated. Students from the University of Bergen, Department of Informatics translated tasks for the Challenge and helped create the Solution Booklet that will be given to all teachers. Professor Michael Fellows and Frances Rosamond at UiB have organized Bebras in Norway.

The international Bebras initiative, aims to promote algorithmics / informatics (Computer Science) and computational thinking among school students at all ages, from barne to VGS. All these skills are used today for safer, faster and more reliable services of all sorts – from video-based medicine to innovative deepwater drilling to computational contracts.

The annual Bebras Challenge is organized in over 60 countries. It is a 40 minute challenge performed at schools using computers. Students find out what is computational thinking in a soft way. No prior knowledge is expected or needed. There are different task sets for different age students. Teachers receive answers to each task, an explanation of how the answer could be obtained, plus a section about how the tasks are related to Computational Thinking. They receive a monthly newsletter with activities for the classroom. For more information see www.bebras.no and facebook bebras.Norge.

The following schools from Hordaland participated: Amalie Skram Videregående skole, International of School of Bergen, Olsvikåsen vgs., Søreide Skole, Ytre Arna Skule, Damsgård skole, Lysekloster skule, Sædalen, Slåtthaug skole, Kringlebotn skole, Storetveit skole, Manger skule, Krokeide vgs, Sandgota, Haukedalen, Skranevatnet, Hordvik skole, Kronstad.
The students who helped with the translations of Bebras Challenge problems and solutions into Norwegian: Jonas Drageset Lindaas, Maren Aleksandersen, Amanda Helgesen, Madelen Holberg and Elise Fiskeseth.

They are all undergraduate students in the Informatics Dept. All the females are in the beginning Algorithms class and Jonas took that class last year.

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**PhD Updates**

**There’s a new PhD in town - congratulations Paloma Thomé de Lima!**

Paloma successfully defended her thesis "Structural and Algorithmic Graph Theory Through the Lenses of Graph Classes" on Wednesday 27th November

[Here you can learn more about her project.](#)

Congratulations to Paloma, the Algorithms group and supervisor Pinar Heggernes!

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**PhD defense – Andrea Tenti**

Andrea Tenti will defend his thesis "Sufficiently overdetermined random polynomial systems behave like semiregular ones" on Wednesday 18th December at 10:00, Large Auditorium, Datablokken.

- Opponent: Professor Tim Hodges, University of Cincinnati, USA
- Opponent: Associate Professor Magali Bardet, University of Rouen, France
- Committee member: Professor Lilya Budaghyan, UiB
- Leader of the defense: Professor Matthew Geoffrey Parker, UiB

All are welcome!

Please find [the press release here](#).
The 20th anniversary Geilo Winter School will take place January 19th-24th, 2020 at Dr. Holms Hotel, Geilo. The school topic is Modern Techniques and Algorithms in High Performance Computing, and we will cover topics including quantum computing, abstractions in HPC codes, machine learning with derivatives, and GPU computing. The program of the school will soon be announced on the winter school webpages.

Final registration deadline: December 10th, 2019.
Price: Free to attend, participants cover own travel and accommodation.
Webpage: [http://www.sintef.no/GeiloWinterSchool/](http://www.sintef.no/GeiloWinterSchool/)

**Research, Science and Seminars**  [ScienceNorway.no - forskning.no](http://www.sintef.no/)

**Trial lecture Ana Ozaki December 2nd: Logic and learning**

**Department of Informatics**

**Logic and Learning**

Trial lecture in connection with recruitment for tenure track associate professor in machine Learning  
Ana Helena Ozaki Rivera Castillo.

December 2nd at 13:15– 14:00  
Large auditorium 2nd floor Datablokken

**Abstract:**

Computational logic and machine learning are the pillars of artificial intelligence. The former stems from syllogisms while the latter may apply inductive reasoning. Logic provides methods for deriving valid specific conclusions based on a general theory asserted to be true. On the other hand, learning methods can be applied to generalize specific observations. These disciplines naturally complement each other.

In this presentation, we will revisit the classical exact and probably approximately correct (PAC) learning models and study how algorithms designed for such models can draw a general theory, formulated in logic, from specific observations. We also recall from the literature a connection between these two models, in particular, how positive results from the exact model can be transferred to the PAC model.
Department seminar
5th December at 14:15

This Department seminar is composed by speed talks given by our own in-house researchers.

The goal is that we all should be a little bit better informed on what our department colleagues are focusing on in their research.

**Noeska Smit**
'Back to the Future'

**Torstein Strømme**
Kan algoritme redde planene dine fra å gå i vasken?

**Eivind Valen**
Reading DNA – there’s an app for that!

Large Auditorium 2nd floor Datablokken
Refreshments will be served from 14:00
Visual Computing Forum
http://vis.UiB.no/vcf/

Parkinson’s disease: from the patient to the lab and back

Friday, 6th of December, from 10:15
Høyeteknologisenteret, Lille auditorium
(Thormøhlens gate 55)

Charalampos Tzoulis
Professor of Neurology
@ University of Bergen

Abstract:
Parkinson’s disease (PD) is the second most common neurodegenerative disorder, affecting ~2.5% of the population above the age of 65 years. In spite of more than 200 years of research, the etiology of PD remains unknown and there are no successful disease-modifying therapies. In order to understand and treat PD, we need to elucidate the complex molecular signatures underlying disease initiation and progression. This talk will focus on the ParkOme project, an initiative to map, characterize and visualize multidimensional molecular fingerprints associated with PD. The overarching aim of the ParkOme is to provide an integrated platform, enabling the identification of clinical biomarkers for patient stratification and molecular targets for drug development.
Mohn Medical Imaging and Visualization Centre Conference

Convergence of medical data science for improved patient care

December 9-11, 2019

Welcome to the second MMIV conference on December 9th and 10th, followed by a Hackathon on December 11th at Bikuben conference center.

The four MMIV centre projects are presenting scientific sessions on machine learning, cancer imaging, neuro imaging, and visualization, along with invited talks on related topics.

The conference is open to everyone, and there is no admission fee.

Featured Speakers

Dag Rune Olsen
Rector, University of Bergen

Bradley J. Erickson
Radiology Informatics, Mayo Clinic

Anders Persson
Director of the CMIV at Linkoping University

Sebastien Ourselfin
Kings College London

Helga M. Bragger
President, Norwegian Society of Radiology

Johanna Pijnenborg
Radioud Medical Centre

Ofer Pasternak
Harvard Medical School

Thomas Schultz
University of Bonn

Register now via http://mmiv.no/conference
Popular science writing course in Norwegian (16 January 2020)
The Faculty of Mathematics and Natural Sciences' offers a one-day popular science writing course. The course will be in Norwegian and targets scientific staff members (PhD candidates, Postdocs, Associate Professors, Professors, forskere etc.) who want to learn more about how to best present their research in Norwegian media (newspapers, websites). You are required to submit a text before the course. If you are interested in attending the course, please register via this website by 3 January 2020.
**Funding opportunities**  
**Research support services** - **Upcoming funding opportunities**

Please inform research coordinator [Stefanie Meyer](mailto:Stefanie.Meyer@uib.no) about all planned and ongoing funding applications!

At this point, we would like to highlight the following upcoming calls and funding-related events:

### Local funding

**UIB SPIRE (Strategisk program for internasjonalt forskningssamarbeid)**  
SPIRE-funds are strategic funds that shall help to facilitate international research collaboration. One can apply for funds in two different categories: 1) international research collaboration, and 2) invitation of guest researchers. **Application deadline:** 1 December 2019. Please send your applications to Stefanie.Meyer@uib.no.

**UIB POS: Positioning funding for Horizon 2020/Horizon Europe**  
The PES2020 scheme is designed to relieve the cost burden related to the preparation of project proposals to H2020 (including ERC applications, MSCA applications, COST applications, Societal Challenges applications etc.). The **PES2020 scheme at UIB** involves support for the following categories: PES - Project Support for researchers and POS - Positioning funding (including category 1: POS for researchers who are positioning themselves towards a H2020/Horizon Europe-application). **The next POS application deadline is 1 December 2019.** Please send your applications to Stefanie.Meyer@uib.no.

### Meltzer Foundation, Bergen University Fund and other bequests

**Meltzer:** Researchers from the University of Bergen can apply for financial support for academic travels and sabbaticals. In addition, the foundation supports talented students and PhD cand. with project stipends that can be used for covering costs in connection with their projects, for example research travel, field work, equipment, materials etc. **Bergen University Fund:** Researchers from the University of Bergen, including Postdocs, can apply to the university fund if they need support for communication and dissemination activities, including the organization of conferences, workshops etc. **Other bequests:** The university also administers several other bequests (legater) that support education, research, and outreach, and which are open for researchers, Postdocs, PhD cand. and/or students. **Application deadline:** 1 December 2019.

### National funding

**Research Council of Norway: Industrial Ph.D. Scheme – Doctoral Projects in Industry**  
“The Research Council has established the **Industrial Ph.D. Scheme** to boost research efforts and long-term competence-building for Norwegian trade and industry through the recruitment of doctoral candidates. [...] Funding is available for projects with start-up within the next 12 months. The scheme has an open-ended application submission deadline and applications may be submitted throughout the year as long as the call is still active.” As the number of applications received by the RCN in 2019 has been lower than anticipated, the chances of receiving funding are exceptionally high when sending an eligible application by the end of this year.

**Research Council of Norway: Student entrepreneurship**  
Students who have recently received their master degree can, in collaboration with a Norwegian university or university college, apply to the RCN to get funding for realizing a “business idea or to carry out crucial activities that will mitigate technology- and concept-related risks by providing the answers to uncertainties that are preventing the project from moving forward in the commercialisation process”. UiB has initiated an innovation hub for students where those who want to apply can get help. **RCN application deadline:** 12 February 2020.

**Research Council of Norway: Application deadline 2020 for researcher projects**  
Do not forget: Next year’s main application deadline for researcher projects (including young research talents projects) will be **6 May 2020!**

### International funding

**COST**  
COST is the **European Cooperation in Science and Technology**. The organization provides funds for researchers from all fields to set up international, interdisciplinary research networks (so-called COST Actions). COST Actions run on average for 4 years and require the participation of at least seven COST Members. **Application deadline:** 29 April 2020.

**NordForsk: The Research and Innovation Programme on Digitalisation of the Public Sector**  
“The Digitalisation Programme focuses on three interrelated areas that enable and shape the digital transformation of the public sector: (1) the enabling factors of digitalisation; (2) digital innovation; and (3) society and the end-user perspective. The overarching aim of the call is to combine and integrate knowledge-based, digital innovation efforts related to the public sector with research on the related drivers, effects and impact on society and end-users.” **Application deadline:** 16 January 2020.
Industrial Ph.D. scheme – Doctoral projects in industry

Do you have a master graduate who now works at a company and would make a great PhD student? Then perhaps, your former student, yourself and the company together could apply for this? Several of our research groups have used this opportunity with great success.

Please find more information here.

8th Heidelberg Laureate Forum (HLF), September 20-25, 2020 // Call for Applications

Apply for the 8th HLF!

Calling outstanding young researchers in mathematics and computer science!

The application process for the 8th Heidelberg Laureate Forum has begun.

Young researchers in computer science and mathematics from all over the world can apply for one of the 200 coveted spots to participate in the Heidelberg Laureate Forum (HLF), an annual networking event. The HLF offers all accepted young researchers the great opportunity to personally interact with the laureates of the most prestigious prizes in the fields of mathematics and computer science. For one week, the recipients of the Abel Prize, the ACM A.M. Turing Award, the ACM Prize in Computing, the Fields Medal, and the Nevanlinna Prize engage in a cross-generational scientific dialogue with young researchers in Heidelberg, Germany.

The application period for the 8th HLF runs from November 14, 2019, until February 14, 2020. Young researchers at all phases of their careers (undergraduate/pre-master, graduate PhD or postdoc) are encouraged to complete and submit their applications by February 14 (midnight at the dateline) via the following link: http://application.heidelberg-laureate-forum.org

The 8th HLF will take place from September 20 to 25, 2020 (with young researcher registration on September 19). This prominent, versatile event combines scientific, social and outreach activities in a unique atmosphere, fueled by comprehensive exchange and scientific inspiration. Laureate lectures, young researcher workshops and a structure welcoming unfettered discussions are the elements that compose the Forum's platform.

Over the course of the weeklong conference, young researchers will be given the exclusive possibility to profoundly connect with their scientific role models and find out how the laureates made it to the top of their fields. Young researchers have ample time to exchange ideas and extensively discuss with other bright scientists from diverse backgrounds. One HLF alumna passed this advice on to future participants, “Come with a really open mind, attend talks and discussions that are not in your area and that you know nothing about. Just sit there, learn and absorb the information. Just expand your mind.”

All applications that are completed and submitted by the deadline are meticulously reviewed by an international committee of experts to ensure that only the most qualified candidates are invited. There are 100 spaces available for each discipline, mathematics and computer science. All applicants will be notified by the end of April 2020 whether or not they will be invited.

For questions regarding requirements and the application process, please contact Young Researchers Relations at: yr@heidelberg-laureate-forum.org

For more information, please visit: www.heidelberg-laureate-forum.org
Vacant positions

**Associate professor in Algorithms**
Closing date: 31st January 2020. Please find [the announcement here](#).

**Postdoctoral Research Fellow position in informatics: logic and graph theory**
Closing date: 20th January 2020. Here you will find [the announcement](#).

**Researcher in informatics: algorithmic foundations of data science**
Closing date: 15th January 2020. Please find [the announcement here](#).

**PhD position in machine learning**
Closing date: 12th January 2020. Please find [the announcement here](#).

**Administrativ koordinator for CBU (seniorkonsulent)**
Closing date: 8th January 2020. Please find [the announcement here](#).

HR, Health, Safety and Welfare

[siKresiden.no](#) – [UiB employees welfare benefits](#) – [Credit card UiB](#) – [Fire extinguishing courses](#) – [Reporting of Deviations](#)

Welcome to the cake club (Kakeklubben) on Tuesdays!

Kakeklubben aims to help our international colleagues to practice Norwegian while spending nice time together with people across group borders. Club meetings are held on Tuesdays at 12 o’clock in the lunchroom, 4th floor.

You bring your own lunch, and we serve cake and coffee. Everyone is welcome, no matter how much Norwegian you speak. We hope to see you there, both internationals and Norwegians!

![The happy cake club participants of this week](#)

Yoga on Wednesdays - you would not want to miss it!

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

Our professional yoga instructor, Kjersti Naess, is teaching in English. No signing up, and no participation fee. Please bring your own yoga mat. We also have some mats for loan. All employees are welcome – also those of you who never tried yoga before.

And remember: When you are too busy to go to the yoga class – then is when you need it the most!

Department gathering at Voss 27-28 April - save the date!
The department gathering in 2020 will take place 27-28 April at Park Hotel Voss. Save the date!
Have you registered all your vacation days?

Christmas is soon upon us and soon it will be a new year. And whether you are planning on spending the rest of your 2019 vacation days under the sun or in the snow, **there is one thing you have to do right away:** Register your rest-vacation for 2019 in PAGA. It is a requirement that everyone registers their vacation, and it is the general rule that all vacation days has to be taken within the calendar year.

Not sure when you’ll be going or taking days off? Register it now anyway (you can change it later), and avoid running the risk of someone else deciding when you’re going to take days off. You will also be relieved from the stress of being followed up through emails and visits from the administration.

Further information on how to register vacation can be found here (in Norwegian): [http://pagaweb.b.uib.no/ansatte/ferie/](http://pagaweb.b.uib.no/ansatte/ferie/)

If you have any questions regarding vacation or the registration of vacation in PAGAWEB, please contact your local HR professional at your department, Lene Sørheim.

**Fire Safety course**

All employees at the UiB are required to complete a fire safety course. The course lasts two hours – 1 hour of theory and 1 hour of practice. If you have not attended a course previously, you are required to do so as soon as possible. Please notice that this fall there will be one course in English intended for non-Norwegian speaking staff: Thursday December 5th - 09:00-11:00, [Follow this link to sign up](http://). For «Fakturadresse» use this code: 121200

**Welfare offer: Bergen kunsthall**

Utstillingsåpning, konsert og klubb

Sandra Mujinga  
*SÖNW – Shadow of New Worlds*  
22.11.2019 - 19.1.2020

Åpner fredag 22.11.2019 kl 20:00 med gratis inngang!

[Les mer om utstillingen her](https://)

**Rabatterte billetter til "Mozarts Requiem mot midnatt" Johanneskirken 5. desember kl. 23**

228 år etter Mozarts død toner hans Requiem ut på samme tidspunkt som komponisten utåndet. Mozart døde 5. desember 1781, og hans aller siste verk er like uddødelig som han selv – det står der som en bauta over hans livsverk og lyser inn i natten, vinteren og fremtiden.

[https://operabergen.no/](https://)

UiB-ansatte kan ved bestilling til post@operabergen.no kjøpe billetter for 250,- inkl. billettavgift (ord. pris 310,- + billettavgift).