

NEWSLETTER

Department of
Informatics



No. 12/2020
19th June 2020



Editor-in-chief: Pinar Heggernes. Editor: Linda Vagtskjold. Contributions or comments to the newsletter are very welcome.

Dear colleagues,

Quite a few interesting things happened during the past couple of weeks in the national research arena. The research council has announced 22 new national centers of research-based innovation (SFI), and [six of these centers are to be coordinated from Bergen](#): two by UiB, two by NORCE, one by Bergen hospital trust and one by the Institute of marine research. UiB is involved in all six centers, and our department is a partner in one of them: [MediaFutures](#), coordinated by the Department of information and media sciences.

Traditionally Trondheim is the big winner of centers of innovation, which is the case also this year, however it is very promising for the future that Bergen is now also able to compete in this field. I am sure that promoting Bergen as a city of innovation, as a city of science and technology will help us attract even more students and colleagues to Bergen in the future.



Another interesting event was that [NORA announced its strategy this week](#). Our university followed up with an [internal news story on the subject](#). Artificial intelligence and data science are in the core of several of the new SFIs that were announced just a few days before NORA announced its strategy. 8 of the news SFIs are to be coordinated by NORA members, which in my opinion clearly shows that together we stand stronger.

In the local arena, I hope that you are all enjoying the extraordinary sunny and hot weather in Bergen these days. We are at the end of the strangest academic year so far in our lifetimes, and this is in fact the last newsletter of this semester. It is perhaps a paradox that we will be saying goodbye for the summer just a few days after our university has been unlocked. The doors of our department building have been unlocked since Wednesday, and they will stay unlocked until the official end of the semester, the 3rd of July. Although there is no change in any of the other routines or rules that are in play, just the fact that employees, students and visitors can enter our buildings is such a great pleasure after three months with locked doors.

Our greatest concern now is how we will conduct the next semester. We need to prepare well. But first of all, we all need a proper holiday to completely relax and recharge. Next week, on Wednesday June 24 at 14:15, [we are inviting all colleagues to a digital meeting about the teaching of the fall semester](#), just so that we are all on the same page before we enter the holidays. I am glad that this meeting will give me a chance to meet many of you, albeit digitally, before the semester ends.

The last couple of weeks have been great in the sense that I have had a chance to meet many of you physically. Yesterday we had a social event with the administration, to mark the retirement of Liljan, finally being able to say properly farewell to her, and a lot of memories and fun stories from the past twenty years came up. Next week will also have the first physical group contact meeting in a long while, and I am really glad that we will be able to close the academic year being able to spend time physically together. In this sunny weather, it would have been great to conclude with a summer party for all, however our department is too big to accommodate such a party for all employees under the current contamination control rules. I encourage each research group to have a social gathering outdoors, perhaps a picnic, before saying farewell for the summer

I wish you all a wonderful, relaxing, and refreshing summer!

Pinar



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: [Derfor lønner det seg med lagspill](#) - [Realister er relevante](#) - [Dette er viktige steg for å realisere store prosjekt](#) - [Sentre for fremragende forskning \(SFF\) er en suksess](#)



Welcome new colleagues, and goodbye Liljan!



Knut Anders Stokke

Knut Anders started in his new PhD position on 15th June. He will be part of the PUT group and Håkon Gylterud will be his main supervisor.

The first thing he will do in his position, is to complete quite a big part of his quota of duty-work – he will be developing a web course “Introduction to programming”, funded by Kompetanse Norge.

Knut Anders newly completed his masters degree with an excellent A here at our department 😊



Achim Mall

New colleague with office at the CBU, coming from BIO: I am a microbiologist with a background in microbial metabolism and biochemistry. During my PhD in Freiburg, Germany I worked on different pathways for carbon fixation that operate in thermophilic bacteria from hydrothermal springs. I am now doing a postdoc here in Bergen on a fellowship funded by the German Research Council. My goals are to apply my knowledge about the diverse carbon fixation pathways in nature to deep sea environments, and to learn about the factors that shape their distribution in these environments. To achieve this, Håkon Dahle and me are exploring the feasibility of machine learning in order to predict the presence of these different pathways from metagenome sequence data from samples gathered at different hydrothermal systems along the arctic mid-ocean ridge. We hope that this approach will help us to avoid confirmation bias when looking for novel carbon-fixing organisms and pathways.

Thank you and happy retirement, Liljan!



Planned maintenance of Departments systems, weekend week 26

Between Friday, June 26th, 5:00 p.m. and Monday, June 29th, 12:00 p.m., we have a planned maintenance window for the server room in the UiB, HiB. All systems and services running and provided locally by the Department of Informatics will be unavailable. Systems will go through maintenance and restart. Please save your work in advance.

If you need further information or any special support after the downtime, don't hesitate to contact trouble@ii.uib.no

Welcome to hiring lectures for the associate professor position in algorithms in June

For the associate professor position in algorithms that was announced with deadline 31.01.2020, five candidates will be interviewed and give trial lectures. Everybody is very welcome to attend the lectures that will be held over Zoom. Abstracts and zoom links will be sent out by email to all employees and master students. Information will also appear in the web calendar. Two candidates already gave their trial lectures, William Lochet and Mateus de Oliveira Oliveira. The following candidates will be next: Johannes Langguth, Pål Grønås Drange and Marc Hellmuth.

Johannes Langguth, June 23 at 11:15



Department of Informatics

Fake news, Digital Wildfires, and Graph Neural Networks



Trial lecture in connection with
recruitment for Associate
Professor position in Algorithms
Johannes Langguth
Tuesday 23.06.2020 at 11.15
Zoom
[https://uib.zoom.us/j/68231436303?](https://uib.zoom.us/j/68231436303?pwd=aIE3RUF5d3hHTklvR0NoaENLT1Mzdz09)
[pwd=aIE3RUF5d3hHTklvR0NoaENLT1](https://uib.zoom.us/j/68231436303?pwd=aIE3RUF5d3hHTklvR0NoaENLT1Mzdz09)
[Mzdz09](https://uib.zoom.us/j/68231436303?pwd=aIE3RUF5d3hHTklvR0NoaENLT1Mzdz09)

Abstract:

In the wake of the 2016 US presidential elections, misinformation in social networks, often referred to as fake news, has received significant attention from media, researchers, and the general public.

We introduce the topic while focusing on digital wildfires i.e. fast spreading online misinformation phenomena with the potential to cause harm in the physical world.

We introduce possible countermeasures from the computer science point of view and show that among the possible countermeasures, network based approaches are particularly suitable, both due to their generality and robustness.

We then explain the recently developed graph neural networks and show why they constitute a powerful tool for network based tracking of misinformation.

Zoom-link: <https://uib.zoom.us/j/68231436303?pwd=aIE3RUF5d3hHTklvR0NoaENLT1Mzdz09>

Department of Informatics



This has applications in ...



Trial lecture in connection with
recruitment for Associate
Professor position in Algorithms
Pål Grønås Drange

Thursday 25.06.2020 at 11.15

Zoom

[https://uib.zoom.us/j/61491367408?
pwd=ZDdWQ25zb2Z6Sy9VZnkdzUxU
DdEdz09](https://uib.zoom.us/j/61491367408?pwd=ZDdWQ25zb2Z6Sy9VZnkdzUxUDdEdz09)

Abstract:

Theoretical computer science is a mathematical field completely disconnected from the real world. Or is it? Yes, our results are mathematical in nature, our highest goal is rigour, and perhaps elegance, and our results can only become obsolete if someone extends them.

We prefer to deal in definitions, theorems, and proofs.

But the real world is flourishing with computer science problems that we struggle to understand and solve, and this can often be due to a lack of a theoretic foundation.

We will see some (admittedly anecdotal) surprising uses of theoretical results in practice, and further take a look at how theoretical computer science finds its way into network science, defined as "the study of network representations of physical, biological, and social phenomena leading to predictive models of these phenomena"

Zoom link: <https://uib.zoom.us/j/61491367408?pwd=ZDdWQ25zb2Z6Sy9VZnkdzUxUDdEdz09>

Department of Informatics



Tree-Representations of Relations



Trial lecture in connection with recruitment for Associate Professor position in Algorithms

Marc Hellmuth

Friday 26.06.2020 at 11.15

Zoom

<https://uib.zoom.us/j/67494159040?pwd=VXJRTzg3MjE2Ni9CNDV0dIIYajhWQT09>

Abstract:

Tree representations of (sets of) binary relations, or equivalently edge-colored graphs, play a crucial role e.g. in data compression, solving hard problems in polynomial-time or understanding principles in molecular biology.

We will first provide a mathematical characterization of relations that can be represented by trees. As we shall see, there is a close relationship of such relations to so-called directed cographs and particular colored triangles. We then continue to provide a quadratic-time algorithm to recognize tree-representable relations and, in the affirmative case, to construct their tree-representations. Finally, we discuss several applications of such relations. In particular, we will see how these relations can be used to reconstruct evolutionary histories of genes and species based on genomic sequence-data. In practice, such relations are often only estimates of some "ground truth" and are usually plagued by measurement errors and noise. While the underlying editing-problems are NP-hard, we used integer linear programming to compute exact solutions and to demonstrate the potential of our approach without confounding it with computational approximations. In particular, we show how to use "noise" as add-on to other phylogenetic information, that formerly has been treated as a dangerous nuisance that has to be detected and removed.

Student / Teaching matters

Teaching at the Department of Informatics autumn 2020 – meeting on June 24 at 14.15

You are all welcome to a department meeting on the latest updates regarding teaching in the coming autumn.

Please find [detailed information and joining link here](#).

Important: old server with recorded lectures will be shut down this autumn

The University has previously (2012-2018) tested a solution for recording lectures. For reasons related to security and administration this pilot phase is being discontinued. The recordings done between 2015 and 2018 are still available at <http://video.dig.uib.no> – but stored on a server that will be shut down this autumn.

However, the University would like to offer everyone who wishes to download their recorded lectures an opportunity to do so, as well as assisting with uploading to Kaltura. If you have any recorded lectures you want to keep, please notify the responsible parties using [this form](#). The deadline for submitting a request is August 1st.

PhD updates

PhD course in transdisciplinary life science August 24-27, 2020

This Digital Life Norway course is for all PhD students and postdoctors who want to learn more about working on transdisciplinary research projects within biotechnology and the life sciences.

Here you can engage in a project - choosing between:

- imaging of living and fixed cells
- integrative omics-analysis in cancer research
- multiomics in toxicology
- modelling for therapy design
- network inference using single-cell data



Registration deadline is postponed to 20th of June. [Learn more here](#).



NORBIS Annual conference – save the date!

NORBIS Annual conference will be arranged November 2-4th, 2020! If the national guidelines allow, we will gather at beautiful Ullensvang Hotel in Hardanger for student talks, poster sessions, invited speakers and other fun activities. [More information here](#)



ICT Research School Annual Meeting 2020 - save the date!

This year's meeting has been scheduled for **26-27 October 2020 in Park Hotel Vossevangen**. This year's organizing committee has now been appointed and consists of Alessandro Budroni, Dan Zhang and Nooshin Heidari. More information will follow.

UiB Department of Informatics Writing Workshop 2020 – save the date!

Welcome to the Department of Informatics [Writing Workshop 2020!](#) The Department of Informatics offers a scientific writing course for PhD candidates enrolled in the department's PhD program.

Registration will open after the summer break and be announced in a separate email. [Please find more detailed information here](#)

Transdisciplinary life science – a Digital Life Norway course

This course is for all PhD students and postdoctors who want to learn more about working on transdisciplinary research projects within biotechnology and the life sciences.

The main part of the course will be to work directly on a pre-defined research project, with a highly skilled supervisor and a transdisciplinary team. There will be special focus and training on how to work in teams with a common goal, how to implement the principles of RRI (responsible research and innovation) in your research, and data management. Participants with a background in life sciences, biotechnology, bioinformatics, mathematics, or computer science are encouraged to apply, in addition to students from the humanities with an interest in biotechnology.

Location: NTNU Trondheim + home university of project leader

Dates: Plenary meetings: 24-27 August & 12-13 October + Project work in-between plenary meetings

[Registration](#) deadline is postponed to 20th of June.

Research, Science and Seminars ScienceNorway.no - forskning.no

The Nordic Nanopore-Seq Network Meeting 2020, September 14

The Valen Lab at the Computational Biology Unit Bergen is hosting a **conference to get to know Oxford Nanopore Sequencing and its applications**.

The **free-of-charge, one-day** meeting aims at bringing together Nanopore experts with interested scientists from various disciplines. Experts from the company as well as experienced scientists will cover a wide range of scientific areas.



Additionally, this conference aims at **founding a network of Nanopore Sequencing users in the Nordics**.

If you are interested, find out more information at [the conference website](#)

Olav Thon Stiftelsens priser for fremragende undervisning og støtte til studentaktive forskningsprosjekter innen naturvitenskap og medisin 2021

Olav Thon Stiftelsen ble etablert i 2013. I stiftelseserklæringen § 7a) er det fastsatt bl.a. følgende oppgave for Stiftelsen:

Støtte kan ytes til formål innen det matematisk-naturvitenskapelige og medisinske fagområde. Som en del av de midler som styret måtte stille til rådighet for dette formål kan det utdeles følgende priser:

Inntil 10 priser, hver på NOK 500 000 - femhundretusen -, kan tildeles norske og utenlandske akademiske forskere som yter fremragende undervisning av studenter innen det matematisk-naturvitenskapelige og medisinske fagområde ved norske læresteder. Midler kan også utdeles til forskningsprosjekter, under forutsetning om videreformidling av den ervervede kunnskap ved norske læresteder.



Pris for fremragende undervisning: inntil 3 nasjonale priser vil bli tildelt i 2021.

Finansiell støtte til studentaktive forskningsprosjekter: inntil 3 forskningsprosjekter vil bli støttet i 2021.

[Her finner du hele annonsen med mer detaljert informasjon.](#)

NB: Due to coordination of the application process with the faculty and UiB central, the department has set an internal deadline of **28 August 2020** by which all applications have to be sent to research coordinator [Stefanie Meyer](#).

Publishing Open Access

The University of Bergen Library has prepared very good websites on the current status of local, national and international open access (OA) policies as well as their services related to OA publishing. Please have a look at their websites and make yourself familiar with the different policies as well as the existing publishing deals with several of the academic publishers. Furthermore, UiB has a publication fund for OA that can cover the article processing charges (APC) when publishing in eligible open access journals.

Before you (your group) pay(s) any fees for making an article openly available, please consult the webpages to see if you are entitled to a discount, may get the fees refunded through the publication fund, or maybe don't even have to pay anything based on an existing agreement with the publisher!

If you have questions, please contact the department's research coordinator [Stefanie Meyer](#).



[Publication fund for Open Access at UiB](#)



[Open access publishing deals](#)



[Open Access - what, why and how](#)

Upcoming funding opportunities

On a monthly basis, the department releases a comprehensive overview over [upcoming funding opportunities](#) on its website for [research support services](#). Please inform research coordinator [Stefanie Meyer](#) about all planned and ongoing funding applications! **This includes both applications you coordinate yourself, and those where you are included as a partner/collaborator!** At this point, we would like to highlight the following upcoming calls and funding/research-related events:



IKTPLUSS. The Research Council has an open call on Artificial Intelligence, Robotics and Autonomous Systems. "The objective of this call is to further develop expertise and capacity in artificial intelligence, robotics and autonomous systems. Efforts are to help to move the research front, build vital competence and create new opportunities for people and society in the short and long term."

Please note that these are collaborative projects where two or more of the project partners have to come from outside academia (i.e. the private or public sector) and have to stand for at least 10% of the effort.

Application deadline: open-ended.



Application deadlines 2021. The Research Council of Norway has issued a note about next year's application deadlines:

"From 2021, our major grant application deadlines for research organisations will be in the month of February. The deadline for grant applications for **Researcher Project** will be **10 February 2021**, and the deadline for grant applications for **Competence and Cooperation Project** will be **17 February 2021**."

More information can be found on [this website](#).

Did you know?

Impact. In general, research impact refers to the evidenced and measurable effect, change or benefit derived from your project outputs. Impact can be defined at several levels and for different stakeholders and users. If you would like to find out more about this topic, then maybe this document can be of interest to you:



[Added Value – A researcher's guide](#)

Need help?

*Please contact research coordinator Stefanie Meyer if you have questions with regard to your **planned and ongoing funding applications** as well as **all contractual work related to external funds**! All applications and agreements/contracts need to be approved by the department leadership. In addition, you can have a look at our websites for research support services. There you will find a list of our services.*



NIKT 2020. Norwegian ICT conference for research and education. Save the date. **Event: 23-25 November 2020.**

How to write competitive ERC StG & CoG Grant applications. The University of Bergen, together with Enspire Science and The Research Council of Norway, organize a workshop about ERC Starting and Consolidator Grant writing. **Event: 2 December 2020. Registration deadline: 26 November 2020.**

ICPerMed Conference 2020 'Personalised Medicine – From Vision to. “During the conference, ICPerMed will be committed to demonstrate the importance and the need to address personalised medicine challenges through the prism of these critical pillars focusing on data & technology, intersectoral synergies and education & literacy necessary to initiate the translation into healthcare systems.” **Event: 25-26 February 2021.**

Vacant positions

Postdoctoral Research Fellow position in informatics - applied cryptology

Please find the announcement [here](#). Closing date: 15.09.2020.

PhD position in informatics - applied cryptology

Please find the announcement [here](#). Closing date: 15.09.2020.

HR-matters, Welfare and Health, Safety and Environment



Have you registered vacation days?

Are you ready to go? Summer is soon upon us, and whether you are planning on spending all of it in sunny Bergen or making other arrangements, there is one thing you have to do right away: Register your vacation in the HR-portal (some also call it PAGA). It is a requirement that everyone registers their holiday, and it is the general rule that all vacation days has to be taken within the year.

Not sure when you'll be going? Register it anyway (you can change it later) and avoid running the risk of someone else deciding when you're going on holiday. You will also be relieved from the stress of being followed up through emails and visits from the administration. The deadline for registering the summer vacation has already passed, so please make it a priority.

[Further information on how to register vacation can be found here](#) If you have any questions regarding vacation or the registration of vacation, please contact your local HR professional at your department, [Lene Sørheim](#).

The above information is a common information for all departments at our Faculty. We refer to the minutes from our last group contact meeting and the follow-up email to stoppers on June 4, and remind you of the new routine for our department: those among the scientific staff who do not register any vacation by June 20, will be registered for a fictitious vacation period in July/August. If you now or later prefer to update this registration with your actual vacation period, simply open a new form, click on previously registered this year, delete the fictitious period, add a short comment and register you actual vacation in that same form.

Please notice that all staff in administrative and technical positions still are expected to register themselves and will be reminded by Linda until they do so if needed.

Welfare offer from the UiB: Theatre: "De urolige"

Opplev Linn Ullmanns gripende romansuksess gjenskapt for scenen!

Endelig premiere på De Urolige! Spilles fra lørdag 15.august

Linn Ullmanns roman «De urolige» er en hudløs fortelling om et barns kjærlighet til sine foreldre, om uendelig lengsel og en oppsplittet familie. Nå blir den for første gang iscenesatt i Norge.



[Klikk her for å lese mer om forestillingen og de medvirkende.](#)

UiB-velferdspris kr 245,-. Billetter må bestilles innen 12.august!

Tirsdag 25.august kl 19.30, Teaterkjelleren

UiBpris: kun kr 245 (ord kr 390):

[Klikk her for å bestille billetter til 25.august](#)

Torsdag 27.august kl 19.30, Teaterkjelleren

UiBpris: kun kr 245 (ord kr 390):

[Klikk her for å bestille billetter til 27.august](#)