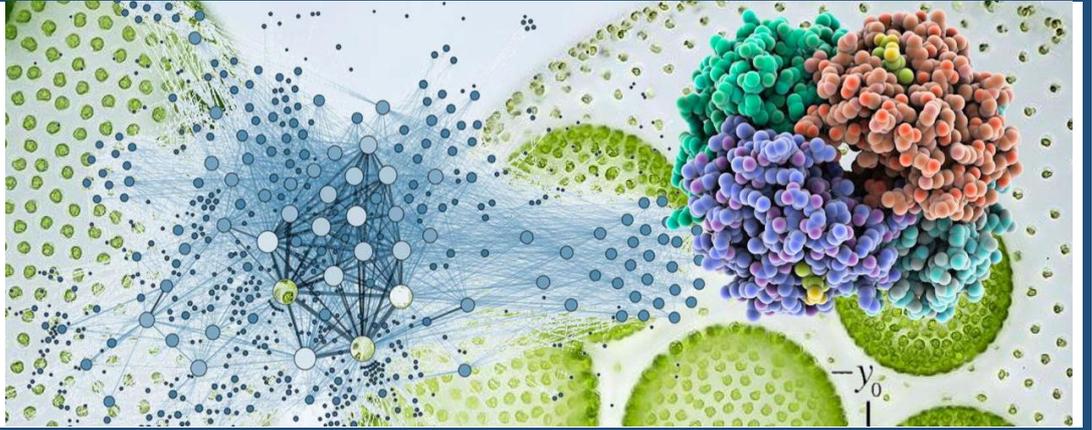


# NEWSLETTER

Department of  
Informatics



No. 7/2021  
9<sup>th</sup> April 2021



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

## Dear colleagues,

At the group contact meeting with research groups, administration and students this week, I got the following challenge: write the leader of this week's newsletter in form of poetry! Instead of making you suffer under a poor attempt of this, I rather share with you a poem by one of Norway's great poets Bjørnstjerne Bjørnson. It is about April. Keeping in mind the weather we've had during the first week of April, as well as the hope and promise of a better time due to hopefully speed up of vaccination, I think it is very fitting for today:

Jeg velger meg april

I den det gamle faller,  
i den det ny får feste;  
det volder litt rabalder,  
- dog fred er ei det beste,  
men at man noe vil.

Jeg velger meg april,  
fordi den stormer, feier,  
fordi den smiler, smelter,  
fordi den evner eier,  
fordi den krefter velter,  
- i den blir somren till!



If you have followed the news this past week, you might have noticed that due to the bad weather conditions, most mountain passes between Eastern and Western Norway were closed for several days. At some point all of them were closed, and when open, most of them allowed only driving in a convoy. Now here comes the next Norwegian glossary of today: kolonnekjøring.

We were also discussing this at the group contact meeting (I realize now that you might get the wrong impression of the importance of matters being discussed at these meetings, but I will resist the urge to explain), and wondering whether this phenomenon actually exists in any other country. The closest translation we found was driving in a convoy, and the Norwegian traffic information web pages contain actually [instructions on this](#). Colleagues from countries with tough mountain passes were explaining that in their country the responsibility of attempting to cross a mountain pass would lie with the driver, and the state would not provide this kind of help - or restriction, depending on the way you view it.

So perhaps we discovered something that is indeed truly particular to Norway? At least when it comes to the need of it due to weather? Searching for relevant information on driving in a convoy in other countries, I found a [Facebook group on the theme](#), which explains that "often, a convoy is organized with armed defensive support". The instructions there are very similar to the Norwegian instructions except this one: "Do not get excited on being in a convoy."

I wish you all a very nice weekend, hoping that the rest of April will give us promising days with respect to next month's poem, "Kom mai, du skjønne, milde"!

-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: [Bruk din stemme ved universitetsstyrevalget!](#) - [Stemmerett. Abelpriis. Og snart er det påske](#) - [Dette må kandidatene svare på før jeg stemmer](#)



## Congratulations colleagues!



### Fedor Fomin and Inge Jonassen

Warm and proud congratulations to Fedor and Inge who are now members of Det Norske Videnskaps-Akademi (The Norwegian Academy of Science and Letters)

[Learn more here.](#)



Det Norske  
Videnskaps-Akademi  
The Norwegian Academy  
of Science and Letters



## Current Issues [På Høyden](#) - [Krono](#) – [News from NFR](#) – [News from UiB](#) – [Informatics on Facebook](#)

### Happy 75<sup>th</sup> birthday to The University of Bergen!



On this day April 9, 2021, it exactly 75 years since our university was founded.

### Happy 75<sup>th</sup> birthday to UiB!



The celebration started today with a **Lecture on the history of UiB** of 75 minutes by Professor Anders Johansen. The lecture is in Norwegian but will be recorded and texted in English. [Please find the broadcast here](#)

Today's lecture marks the beginning of UiB's anniversary year. This autumn we will celebrate with activities for students, employees, alumni, Bergen residents, and anyone else who wants to participate. In other words, this will be a proper celebration of UiB's first 75 years.

Our department is also invited to contribute! If you have any ideas or your and/or your group want to contribute with a seminar/talk, exhibition or other arrangement, please let Pinar/Linda know by 29<sup>th</sup> April.



## Corona related restrictions until April 16



Please be reminded that the national measures up until 16 April have the following consequences for us:

- Digital teaching.
- Campus and all study halls and reading rooms are still open.
- The distance rule on campus is two meters. Please pay attention to the marking in reading halls, seminar rooms and common rooms, like the lunch room.
- The use of face masks applies in all places where it is not possible to keep two meters. We strongly recommend wearing a face mask when being in the common areas in the building, like corridors, kitchens, lifts, reading halls, seminar rooms etc.
- We should avoid sharing offices. If both/all office mates are in need of using their office, please contact Linda/Ingrid to get assigned a new temporary office up until 16<sup>th</sup> April.
- All physical events that are not absolutely necessary to arrange should be postponed or changed to a digital event.
- The maximum limit for events is 20 with fixed seats.
- All unnecessary travel should be postponed. For travels abroad, much stricter quarantine rules are inserted.
- UiB recommends all employees and students to use the infection tracking app developed by FHI. [Read more and download.](#)

## Research, Science and Seminars [ScienceNorway.no](https://www.science-norway.no) - [forskning.no](https://forskning.no)

### Overview of Department Thursday seminars booked the rest of this semester

15 <sup>th</sup> April	Gunn Mangerud: <a href="#">"Nygårdshøyden South"</a>
22 <sup>nd</sup> April	Ion Petre: <a href="#">"Network controllability: algorithmics and applications in medicine"</a>
29 <sup>th</sup> April	John Reid: <a href="#">"History of coarrays and SPMD parallelism in Fortran"</a>
20 <sup>th</sup> May	Speed Talks

### Recording and useful links from yesterday's department seminar:

#### "1 year of Covid teaching experiences What have we learnt? And where are we headed?"

Thanks to the [UiB Learning Lab](#) representatives Magnus Svendsen Nerheim and Cecilie Boge and our own David Grellscheid, about 40 people (47 at the most) enjoyed a really interesting seminar yesterday.

The seminar was recorded, except for the break our rooms sessions. So if you missed it, please find [the recorded version here](#).



Presentations and other useful related information:

- Planning teaching under Corona restrictions ["How do we teach this spring?"](#)
- UiB læringslabs [ressurssider for digital undervisning og vurdering](#)
- [Velge rett verktøy til digital undervisning og vurdering](#)
- [The right tools](#)
- Samleside SLATE rapportene om underviserne og studentenes opplevelse av COVID19: [It Takes a Community : The Digital Transformation of UiB \(DigiTrans\)](#)
- [Davids presentation](#)
- [Magnus and Cecilie's presentation](#)

Welcome to department seminar, April 15: Nygårdshøyden South

# Digital meeting about Nygårdshøyden South (EnTek)

With Vice Dean Gunn Mangerud.



Foto/ill.: Cabus Arkitekter/UiB

Our university has an ambitious plan for developing the campus area during the next two decades: <https://ekstern.filer.uib.no/ledelse/MasterplanAreal2020-2040.pdf> A particularly relevant part of this plan is what is described in Section 4.2 as Nygårdshøyden South on Page 24. A completely new building is being planned as a part of this area development on top of the hill, next to the Geophysics building.

The Faculty of Mathematics and Natural Sciences is an important part of the revised Areal Masterplan for UiB. In order to meet the future, the faculty's scientific and educational ambitions related to the opportunities that both transformation of old buildings and one new building will provide, is being developed. Vice Dean Gunn Mangerud will give a first presentation of this work on progress - building on the Faculty's present Strategy Plan [mn\\_strategidok\\_2010-22\\_web.pdf \(uib.no\)](#).

The plans of the Faculty places the Department of informatics at the heart of the science and education across the disciplines of the faculty, and the areal plan might have important implications for our department.

The meeting will be held on teams. More details can be found here before the meeting.

## ARRANGEMENT

🕒 15.04.2021 - 14.15–15.30

📅 [Legg til i din egen kalender](#)



Vice Dean Gunn Mangerud Foto/ill.: Jens Helleland Adnanes



[Web announcement and participation link](#)



# Visual Computing Forum

<http://vis.UiB.no/vcf/>

## P4 Visualization through Visual analytics and Physicalization



**Friday, 16th of April, from 10:15**

Zoom meeting: <https://uib.zoom.us/>

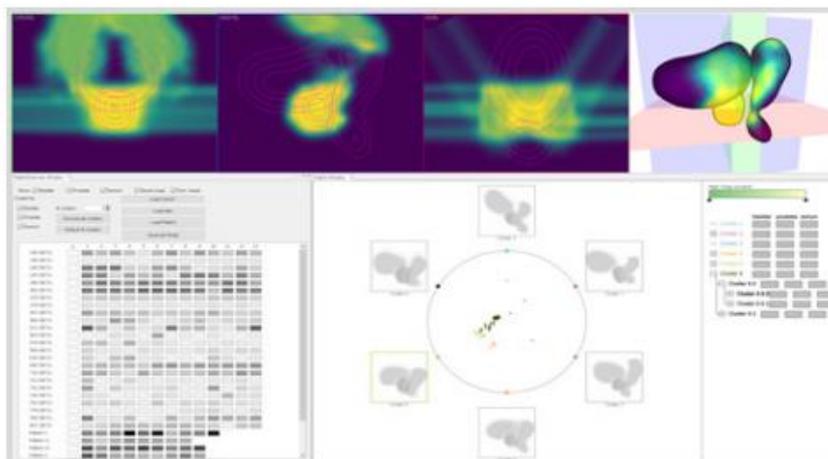
**Renata Raidou**

Assistant Professor  
@ TU Wien

### **Abstract:**

The term P4 (personalized, predictive, preventive, and participatory) medicine was coined almost a decade ago to indicate novel ways of early detection and prevention of diseases. P4 indicates that a diagnosis or treatment is tailored to each individual patient, risk factors are identified early and addressed before manifestation, and patients are actively involved into diagnosis and treatment. In this talk, I will discuss recent visual analytics approaches that support the

personalization, predictiveness and prevention aspects within the context of prostate cancer radiotherapy—empowering clinical research with new possibilities for more targeted and robust patient treatment. I also will discuss recent trends in physicalization, applied within the context of anatomical edutainment, to engage laymen or school-children, though the use of inexpensive and accessible computer-generated physical models.



Welcome to department seminar, April 22

# Network controllability: Algorithmics and applications in medicine

A talk by Prof. Ion Petre from University of Turku.



Prof. Ion Petre Photo: University of Turku

The problem of controlling a dynamic network has a long history in control theory, with roots in a diversity of mathematical methods from complex analysis to topology, graph theory and computational complexity.

The basic problem setup is that of a dynamical system represented as a directed graph, with nodes influencing each other's dynamics. Control is sought over a given set of targets, in the sense of being able to change their configuration through external interventions on some well-chosen input nodes in the network, taking advantage of the network topology.

We are interested in finding a minimal set of input nodes in the network such that the behavior of the target nodes may be changed arbitrarily through a well-chosen sequence of signals to the input nodes, cascaded throughout the network through its wiring.

We focus on formalizations of this network controllability problem that maximize its applicability in biomedicine, including a specific set of targets to choose from (e.g., disease-specific essential genes), a specific set of inputs to choose from (e.g., drug targets), as well as non-linear network topologies. We discuss some of our recent results on the computational complexity of the structural targeted network controllability problem, some fast heuristics for it, and some applications in cancer medicine.

The Zoom meeting will be open from 14:00.

[Join Zoom Meeting](#)

Meeting ID: 619 7164 7464

Password: 6Cep.6D1

## EVENT

🕒 22.04.2021 - 14.15–15.00

📍 Zoom

👤 [Mikhail Barash](#)

📅 [Add to calendar](#)

Ion Petre is professor of mathematics at the University of Turku, Finland. His research is on foundational aspects of computational systems biology. Details can be found at <https://users.utu.fi/ionpet/>.



[Web announcement and participation link.](#)

Welcome to department seminar, April 29

# History of coarrays and SPMD parallelism in Fortran

John Reid presents his paper, followed by discussion.



John Reid Photo: Privat

The paper "History of coarrays and SPMD parallelism in Fortran" was authored by John Reid, Bill Long and Jon Steidel:

"The coarray programming model is an expression of the Single-Program-Multiple-Data (SPMD) programming model through the simple device of adding a codimension to the Fortran language. A data object declared with a codimension is a coarray object. Codimensions express the idea that some objects are located in local memory while others are located in remote memory. Coarray syntax obeys most of the same rules for normal array syntax. It is familiar to the Fortran programmer so the use of coarray syntax is natural and intuitive. Although the basic idea is quite simple, inserting it into the language definition turned out to be difficult.

In addition, the process was complicated by rapidly changing hardware and heated arguments over whether parallelism should be supported best as an interface to language-independent libraries, as a set of directives superimposed on languages, or as a set of specific extensions to existing languages.

In this paper, we review both the early history of coarrays and also their development into a part of Fortran 2008 and eventually into a larger part of Fortran 2018. Coarrays have been used, for example, in weather forecasting and in neural networks and deep learning."

The presentation starts at 14:15, but the zoom meeting will be open from 14:00.

[Join Zoom Meeting](#)

Meeting ID: 649 7425 8534

Password: Wyfq9a?h

## LECTURE

🕒 29.04.2021 - 14.15–16.00

📍 Zoom

📅 [Add to calendar](#)

John Reid spent most of his career performing research in the Numerical Analysis Group that began at Harwell and moved to the Rutherford Appleton Laboratory (RAL) in 1990. He is currently an Honorary Scientist at RAL. Much of this work resulted in Fortran codes in HSL (formerly Harwell Subroutine Library). He has been actively involved in Fortran standardization since 1983 and was Convenor (chair) from 2000 to 2017 for ISO/IEC JTC1/SC22/WG5. He was the main author of a series of OUP books giving informal descriptions of the successive Fortran standards, all with explanations. For the last ten years, his main Fortran interest has been in the standardization of coarrays.



[Web announcement and participation link here.](#)

## Welcome to the Christie Conference, April 27



CHRISTIEKONFERANSEN

27 . A P R I L 2021

The Christie Conference will take place on April 27<sup>th</sup>. I am pleased to invite you to the conference which will be digital, and participation is free of charge this year. I hope you would like to attend, whether you are a student or staff at the University of Bergen.

The Christie Conference is one of Norway's most important meeting places for academia and business, culture and society. We invite guests and participants from business, cultural life, the public sector and NGOs. This year's conference is in collaboration with Norwegian School of Economics (NHH). Some of the sessions will be held in English, such as the first session with keynote speaker John van Reenen.

### **The theme for the Christie Conference 2021 is "The New Economy".**

The "new economy" provides us with a range of so-called "super-star" companies. Google is more than a search engine, and Amazon is more than an online bookstore. Can we imagine our neighbourhood grocery store replaced by a super star delivering everything we need to our doorsteps? Arguably, this development presents great opportunities and potential efficiency gains, but it also changes society and makes us more vulnerable in certain areas. What consequences will this development have for the Nordic Welfare Model? How can we secure the tax revenues of the welfare state in this context, and how can we protect our personal data? Does this development make us more vulnerable for corruption and fraud?

[See program](#) [Registration](#)

Please also notice: our own PhD student Nikolay Kaleyski from the Selmer group will be one of three researchers giving a presentation at 12:24 under the headline "Forskning i front". Wow, Nikolay!!

## Student affairs

### **The National Teacher Survey 2021 + The Time Use Survey 2021**

NIFU and NOKUT have for 2021 merged the Time Use Survey and the Teacher Survey. The surveys will be sent out to the academic staff at all higher education institutions in Norway on **April 13<sup>th</sup>, 2021**. Everyone in the target group will receive an email with a unique link to their own questionnaire. We hope you all find time to answer the surveys.

**The national teacher survey (NOKUT)** gathers information on how teachers work with teaching and the students learning, how they prioritize, and what resources they have available. The goal is to acquire a representative picture of the views of the academic staff on various aspects of educational quality.

**The Time Use survey (NIFU)** collects data on the scientific staff's time use for R & D. The time use survey is a necessary tool for calculating the resource input for research and development work (R&D) in the national R&D statistics and is thus part of Norway's international obligations in the field of statistics.

### **Erasmus+ trainee and guest students autumn 2021**

Do you plan to supervise a trainee or welcoming a guest student next semester? If so, please note that the application deadline for both is 1 May. For more information contact [Ida Rosenlund](#)

### **Are you interested in learning more about the possibilities of applying for funds within Erasmus+?**

International center at UiB are hosting a seminar on project collaboration on Wednesday 14 April. [See this page for more information](#)

## PhD updates

### There's a new PhD in town - Congratulations Kirill Simonov!



Kirill successfully defended his *thesis "Algorithmic Complexity of Clustering and Low-Rank Approximation Problems"* on 29<sup>th</sup> March.

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

Congratulations to Kirill, the Algorithms group and supervisor Fedor!

Kirill has already left us and returned to his home country Russia. We wish him all the best for his future career!



### Welcome to ICT PhD Forum, April 14

Welcome to the April edition of the ICT PhD Forum! This month, [Nello Blaser](#) will give a brief and practice-oriented introduction to statistics. In particular, we will discuss how to choose the correct statistical method for your data and how to avoid common pitfalls in statistical modeling.

More information about the forum meeting, including the Zoom link and a registration link, has been sent to all PhD candidates in a separate email. [Please learn more here.](#)

### R-course for bio-scientists, May 3-7

The R crash course is an introductory course and no previous knowledge about programming is necessary for participation. It extends over five days, 3rd-7th May, from 9-16.

You will learn how to get started with R, how to make small useful programs, how to analyze your data in reproducible ways, how to visualize your dataset with beautiful plots and how to take advantage of thousands of R packages. The course is biology-oriented, and will introduce you to the wonders of Bioconductor. We will also expect you to complete a few homework assignments to practice and hone your skills. The R crash course is adapted from Software Carpentry workshops, and we expect a high level of interaction and hands-on exercises. [More information here](#)



### Genome assembly and annotation workshop, May 3-7

The workshop is aimed at researchers interested in learning more about genome assembly and annotation. It will include information useful for both the beginner and the more advanced user. We will start by introducing general concepts and then continue to step-by-step describe all major components of a genome assembly and annotation workflow, from raw data all the way to a final assembled and annotated genome.

There will be a mix of lectures and hands-on practical exercises using command line Linux. [More information here](#)

## Vacant positions

### PhD position in Informatics - Cryptography

Please find [the announcement here](#). Closing date: 15.04.2021

### Tenure Track Associate Professor in Informatics - Optimization

Please find [the announcement here](#). Closing date: 16.04.2021

### Postdoc in Concrete Cryptology at Simula UiB

Please find [the announcement here](#). Closing date: 30.04.2021

### PhD position in Informatics – open for all our research fields

Please find [the announcement here](#). Closing date: 30.04.2021

# Publishing Open Access

## Open Access Policy

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. [UiB's policy for Open Science](#) can be found by following the link. 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](#)

## Plan S requirements



For calls for proposals from and including 2021, the [Research Council of Norway](#) (RCN) will require full and immediate open access to all articles from projects that receive funding from the Council.

According to the [Plan S requirements](#), there are **three main ways to OA**: publishing in OA journals, publishing in venues under a transformative arrangement, or making a version (either the AAM or final version) of the article available by depositing it in an open archive. For any chosen route to compliance, the publication must be **openly available immediately** with a Creative Commons Attribution license (**CC BY**). Coalition S has recently launched a [journal checker tool](#), where you can check whether your chosen journal/venue is Plan S compliant and which routes are available. Currently, the requirements apply only to scientific articles. During 2021, cOAlition S will develop joint open access requirements for scientific books and book chapters (monographs and anthologies). When this has been done, the RCN will introduce requirements for scientific books in line with the recommendations made by cOAlition S.

Please also note that the RCN requires all articles to be archived in a suitable open archive (no matter which OA route was used). We recommend to use CRISin for this purpose.

## 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.** There is an open call for Collaborative Projects on Digital Security and Artificial Intelligence, Robotics and Autonomous Systems. “The objective of this call is to develop new knowledge within one or both topics for the call: Digital security and/or AI, Robotics and Autonomous Systems. [...] The project must involve two or more Norwegian partners that are not research organisations. Partners that are not research organisations must together participate with a minimum of 10 per cent of the total project costs.” **Application deadline: open-ended.**



**ERC.** The European Research Council has updated their website with the call deadlines for 2021 as well as tentative deadlines for the 2022 calls:

- Consolidator Grant '21, **20 April 2021**
- Advanced Grant '21, **31 August 2021**
- Synergy Grant '22, **10 November 2021**
- Starting Grant '22, **13 January 2022**
- Consolidat. Grant '22, **17 March 2022**
- Advanced Grant '22, **28 April 2022**



**Shaping Europe's digital future.** Find out more about the European approach to Artificial intelligence by following the link. “The European Commission’s approach on Artificial Intelligence centres around excellence and trust. It aims to boost the EU’s research and industrial capacity. Artificial intelligence (AI) is an area of strategic importance and a key driver of economic development. It can bring solutions to many societal challenges...”

### 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](#), where you will also find a list of our services.*



**Introduction to Data Management Plan.** “This course gives you a short introduction to what a data management plan is, why you need it, and how to write one. The course will be held in Norwegian.” **Course: 16 April 2021. Registration deadline: 15 April 2021 (noon).**

**Data Management Planning workshop for Life Science Projects - Bergen.** ELIXIR Norway, Digital Life Norway and the UiB University Library Research Data team organize a Data Management planning workshop for Life Scientists in Bergen. Find out more about how to generate a data management plan for a Life Science research project that will meet the requirements of the funding organizations and the University of Bergen. **Workshop: 21-22 April 2021.**

**Dissemination and Open Access in HEU.** “The course is all about communication about the project and dissemination of its results. We will tell you different ways to assess your target groups, how to create a good brand and how to engage your stakeholder groups. The course also covers how to handle open access in an EU project. The course finishes off with a practical workshop, where you can try building your own dissemination strategy and data management plan.” **Workshop: 28 April 2021. Registration deadline: 26 April 2021 (noon).** The workshop will be repeated in June.

**Innovation in EU R&I projects.** “The course helps you to explore the concept of innovation in Horizon Europe and utilize practical guidance to address innovation in your proposals. You will learn how to develop a good innovation management structure, and to describe related tasks, deliverables and budgetary aspects in your proposal. We will go through possible commercial and non-commercial routes for exploitation of project results, including handling and intellectual property. [...]” **Event: 29 April 2021. Registration deadline: 27 April 2021 (noon).** The event will be repeated in June.

**Data Management Plan WORKSHOP.** “In this workshop you will work on your own DMP using a digital DMPtool, e.g DMPOnline, and then share your DMP with other participants and get feedback on your own DMP. Experts from the University Library will also be there to guide you.” **Workshop: 7 May 2021. Registration deadline: 6 May 2021 (10 am).**

**CEDAS conference.** The Center for Data Science (CEDAS) will hold its first conference in June 2021. Save the date! **Event in Bergen: 1-2 June 2021.**

**European Research and Innovation Days 2021.** “European Research and Innovation Days is the European Commission’s annual flagship Research and Innovation event, bringing together policymakers, researchers, entrepreneurs and the public to debate and shape the future of research and innovation in Europe and beyond. The event will take place online [...], allowing everyone to get involved from anywhere.” Save the date! **Event: 23-24 June 2021.**

## HR – HSE (Health, Safety and Environment) – Welfare

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



På den  
sikre siden

### Fjelltur-challenge 26.3 -31.5

Do you like hiking and fresh mountain air? Then you should consider taking part in the “mountain trip challenge”! Employees are this year invited to participate in the annual competition organized by the students in our department. Go hiking, earn points and win prizes!

For more information visit this facebook group: [Fjelltur-challenge! | Facebook](#)

