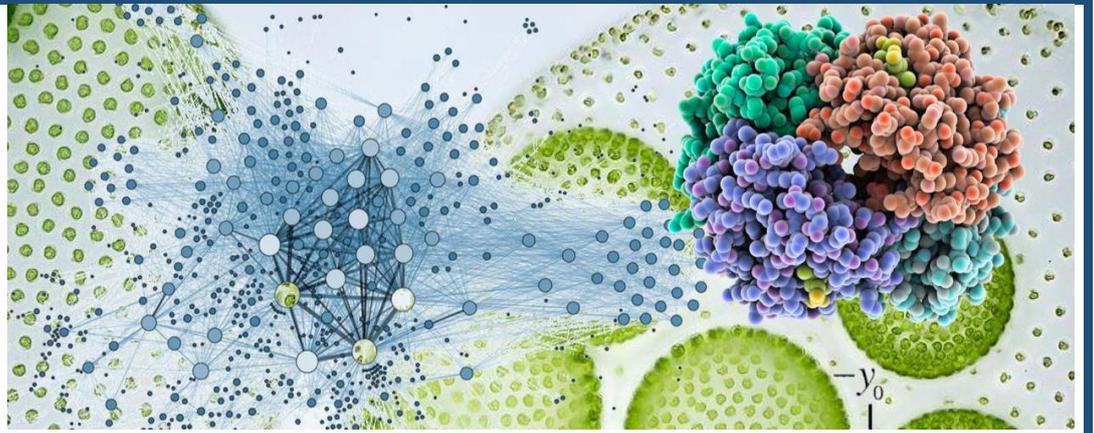


NEWSLETTER

Department of
Informatics



No. 02/2019
25th January 2019



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

Dear colleagues,

On Monday we welcomed a whole bunch of high school pupils at our department, who were curious about informatics studies. We hope that we will welcome many of them as our new students in August. The application deadline for university education, April 15, is approaching rapidly, and right now we are focusing heavily on advertising our studies and reaching out to potential new bachelor students. You might remember [how early NTNU started this work](#), already in September last year. In a certain sense we can say that we were also early out, as we were lucky to get quite a few stories in newspapers and magazines during the fall semester, about how attractive our graduates are for companies. It will be interesting to see whether those will have a positive effect for the number of applicants to our bachelor studies this year.



May I encourage you to have student recruitment in mind both in your daily work and when you are interacting with people outside of academia? Do you have a cool research result that might make an interesting news story? Do you have a student who implemented something spectacular? Did you organize something that attracted a lot of interest, either from your peers or from your students? All these things can be used to promote our department in particular, and our university in general. If you have pictures and can prepare a text, then we can publish it at least on our department's web pages or Facebook account, and perhaps even contact the media to see whether they are interested. Another way to make our department visible is to write commentaries in newspapers. These are usually easy to get accepted, but they must come timely in connection to the news agenda or a popular topic. If you have an idea in this direction, but do not yet master the Norwegian language perfectly, you might approach a colleague for translation and thus co-authorship of a newspaper story or commentary. It is quite fun, too!

Advertisement and news stories are of course just one part of the story. The real brand building happens in the way we do our job: our everyday excellence in research and education. In this respect, I am very proud of each and every one of you; you are doing a wonderful job every single day. Knowing that all major companies are extremely happy with our master and PhD graduates, and would like to hire many more of them, gives an extra motivation. The impact of our research is a topic that is much discussed, but the impact we make on the future of Norway through our graduates is immediate and absolute. Let us recruit and graduate more students!

I wish you all a very nice weekend!

-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: [Det ER positivt å ha lågt klimaavtrykk](#) - [Skal vi nå våre strategiske mål må vi finne gode, langsiktige samarbeidspartnere - Dette legger premissene for framtida](#) -



Welcome new colleagues!

	<p>Olav Røthe Bakken Olav is a new PhD candidate in the Algorithms group, employed by The Norwegian National Security Authority (NSM). He will be working on research in the field of parameterized complexity. Fedor Fomin will be his main supervisor.</p> <p>Olav is from Bergen. He holds a Master's degree in Algorithms from UiB in 2018.</p>
	<p>Hans Waardal Heum Hi! My name is Hans, and I'm one of the rare locals to join the PhD program at Simula UiB. I finished my master's degree in theoretical particle physics in December of 2017, about 200 meters up the street from here.</p> <p>I'm now looking forward to providing my mathematical knowledge to help make the internet a safer place, and to prepare for the future of communication, together with my colleagues in the cryptography group at Simula UiB. I look forward to meeting you all!</p>
	<p>Hilde Strand Dybevik Hilde is employed for six months as a research assistant to assist Mike & Fran with initiatives:</p> <ul style="list-style-type: none">• promoting, community-building, and communicating broadly concerning parameterized complexity and algorithms• promoting awareness among teachers of the importance of modern algorithms research and computational thinking• promoting and assisting associated curriculum reform efforts• promoting involvement of researchers in broad and interdisciplinary communication of research <p>Hilde is Norwegian. She holds a Master's in marine biology from UiB in 2017.</p>
	<p>Prafullkumar Tale Prafullkumar is employed for six months as a researcher in the Algorithms group. He is a specialist in practical algorithm development. He will be developing practical FPT algorithms and testing in practice their performance.</p> <p>Prafullkumar is from India. He holds a Ph.D. in Theoretical Computer Sciences from The Institute of Mathematical Sciences, Chennai Aug 2015.</p>
	<p>Hyeongji Kim Hyeongji is a new Research Fellow employed at the Marine Research Institute, and also affiliated with our Machine Learning group, with Ketil Malde as her main supervisor. She will be working on interpretation methods in machine learning models and applying those for object localizations on marine image data.</p> <p>Hyeongji majored mathematics at Kangwon national university for bachelors, and bioinformatics at the University of Copenhagen for masters.</p>

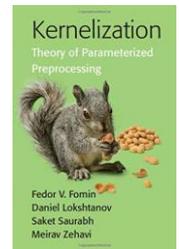
Congratulations Fedor Fomin



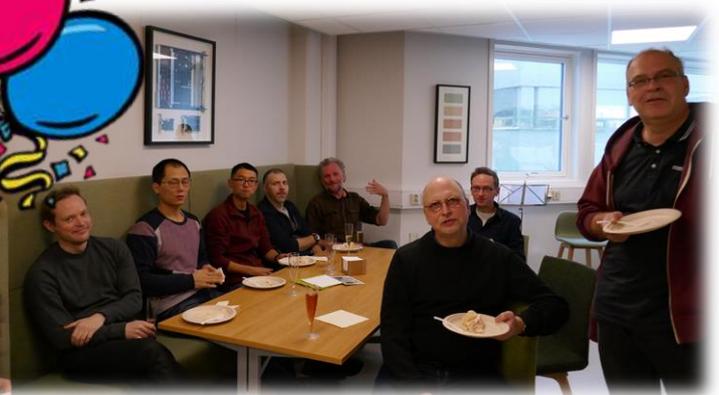
Fedor has been recognized as an EATCS (European Association for Theoretical Computer Science) fellow his outstanding contributions to theoretical computer science! [More details.](#)

At the same time, his most recent book, co-authored with our colleagues Daniel, Saket, and Meirav has just hit the bookshelves!!

Congratulations!



Picture report from Pinar's 50th birthday celebration



"Kjære sjefen, kjære sjefen,
we can do it, we can do it..." 😊

Register your publications in the Cristin database by 31st January!

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](#). Please try to complete this by **mid January, 31st at the latest**. This is very important, not only for the budget, but also for the visibility of our research production, as more and more official information is from now on based on what is registered in the national Cristin Database.

Next faculty and staff lunch: 6th February

Our next faculty and permanent staff lunch will be on February 6 at 12:00, fourth floor lunch room/social area.

Picture report from “open day” on 21st of January with high school pupils visiting us



Picture report from opening of refurbished study room for bachelor students at II and BIO



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 detailed information, program and registration to appear soon!

Department of Informatics



Learning Ontologies with Epistemic Reasoning: The EL Case



Dr. Ana Ozaki from the Free University of Bolzano will give a guest talk on Tuesday, February 5th at 9.15 in lecture room 510N3 on the 5th floor of Datablokken in Høyteknologisenteret (Thormøhlens gate 55).

Abstract:

We investigate the problem of learning description logic ontologies from entailments via queries, using epistemic reasoning. We introduce a new learning model consisting of epistemic membership and example queries and show that polynomial learnability in this model coincides with polynomial learnability in Angluin's exact learning model with membership and equivalence queries.

We then instantiate our learning framework to EL and show some complexity results for an epistemic extension of EL where epistemic operators can be applied over the axioms. Finally, we transfer known results for EL ontologies and its fragments to our learning model based on epistemic reasoning.

Department of Informatics



Teaching Algorithms: Online and Flipped Formats



Alexander S. Kulikov is a senior research fellow in Laboratory of Mathematical Logic of St. Petersburg Department of Steklov Institute of Mathematics. He was teaching various algorithms and complexity courses in St. Petersburg and UCSD. Nowadays, as one of the creators of the successful Data Structures and Algorithms Specialization at Coursera <https://www.coursera.org/specializations/data-structures-algorithms> he is strongly involved in online Computer Science education.

Abstracts:

While educational psychologists agree that a large traditional one-to-many classroom is minimally effective, I have been teaching in the same way my professors taught me when I was a student. A few years ago I realized that it has to change and started teaching flipped classes to maximize my interactions with students. Since students mainly learn outside the classroom, I decided to invest efforts in the development of an automated system for HW testing that includes a compendium of 10-20 most frequent errors for each of 100 HWs in our Algorithms specialization on Coursera. I will discuss how these system may contribute to flipped offline classes and will describe our recent progress with development of interactive quizzes for various CS courses. The goal of such quizzes is to force students to “invent” classical CS concepts (active learning) instead of introducing them in a lecture (passive learning). E.g., we want students to invent the binary search by analyzing an unknown sequence of 20 binary numbers starting from 0 and ending in 1. Students may reveal any number by clicking on it and the goal is to find a pair of different consecutive numbers using less than six clicks. Our goal is to develop 100 such interactive quizzes covering Discrete Mathematics, Algorithms, and other courses.

Thursday, February 14, 2019
From 14:15 Large Auditorium
2nd floor, Datablokken.

Refreshments will be served from 14:00

Academic affairs and PhD Updates [bioCEED news](#)

There's a new PhD in town – congratulations Arne Klein!



Arne Klein successfully defended his thesis "Methods for Optimizing Turbine Locations and Cable Routes in Offshore Wind Farms" on 18th January.

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

Congratulations to Arne and also to the Optimization group and his supervisor Dag Haugland!



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.

Evaluering av implementering av digitale litteraturlister, Leganto

Når vi nå skal implementere det nye systemet for digitale litteraturlister, Leganto, på hele universitetet for høstsemesteret 2019, ønsker vi tilbakemeldinger fra dere som var med på implementeringa for dette semesteret. En evaluering fra dere vil kunne gi oss viktig informasjon for best mulig tilrettelegging for arbeidet dette semesteret.

Vi ønsker tilbakemelding både fra studieadministrativt ansatte og vitenskapelige

Her finner dere lenke til [evalueringsskjemaet](#)

Funding opportunities

Call for SPIRE funding 2019

UiB are announcing funds in its strategic program for international research collaboration (SPIRE). The program aims to support UiB's strategy and action plan for internationalization 2016-2022.

You can apply for SPIRE funds in two categories:

- (1) SPIRE funds for international research collaboration
- (2) SPIRE guest research funds

Applicants are requested to read the [Guidelines for applicants](#), and the [SPIRE application form](#) must be used. Scientific staff in first positions and postdoctoral fellows at UiB can apply for SPIRE funds (see the guidelines for details) and learn more on the [FA's SPIRE website](#).

The departments are asked to rank the applications for each of the categories before sending them to the faculty by 13 February 2019. We therefore request that any applications be sent to the institute by email to Linda by **11 February 2019**.

Visit by the Research Council of Norway on March 7 about the IKTPLUSS program

The Research Council of Norway (RCN) is coming to our department on March 7 to explain to us the details on the new application procedures and proposal guidelines in the IKTPLUSS research funding program. We allocated the Thursday seminar time slot for this meeting, so that all our employees can participate. Please reserve the date and time in your calendars. [Full details can be found here.](#)

Vacant positions

Postdoctoral positions (2) in Computer Science

Closing date: 05.02.2019. Please find [the announcement here](#).

Postdoctoral Research Fellow within Computational Systems Biology

Closing date: 07.02.2019. Please find [the announcement here](#).

Research Science and Seminars

NTVA-seminar 29th January:

«Maskinsyn: et algoritmisk blikk på verden?»

Department of Informatics



NTVA

Norges Tekniske Vitenskapsakademi

www.ntva.no

Norges Tekniske Vitenskapsakademi,
NTVA, og Tekna inviterer til møte i Bergen.

Tirsdag 29. januar 2019 kl. 1900

Nansensenteret på Marineholmen, Thormøhlens gate 47

Maskinsyn: et algoritmisk blikk på verden?

Foredrag av:

*Jill Walker Rettberg, professor, Institutt for lingvistiske,
litterære og estetiske studier, Universitetet i Bergen*

Nærmere informasjon om foredraget på vår hjemmeside.

Møtet er åpent for alle interesserte.

De som vil delta på et enkelt måltid etter foredraget må
melde seg på til post@ntva.no innen **torsdag 24. januar**.

Måltidet er gratis.

Innovation and entrepreneurship

Open workshops and seminars

As extensions to the course Innovation and Entrepreneurship (ELMED 223, Faculty of Medicine), the following events are available to students and staff of the Faculties of Medicine and Mathematics and Natural Sciences. Participation is free, but places are limited. Please register by email to yves.aubert@uib.no

Meet the **Helpers** for **Start-up** and **Business Financing**

When: January 29, 09:00-13:00

Where: BTO, room DaVinci

Who:

Per Arve Frøyen, Innovasjon Norge

Nils-Eivind Holmedal, BTO

Eirik Fosse, Research Council

Erlend Waaler, DNB

Øivind Enger, Sarsia Seed

Ingrid Teigland Akay, Hadean Ventures

Note: Lunch will be provided



Hadean Ventures: Fra venstre: Dr. Siro Park, Dr. Ingrid Teigland Akay, Dr. Walter Stockinger. Foto: Hadean Ventures

Hadean Ventures lander første investorrunde for sitt nye fond. Skal investere 100 millioner euro i nordiske medtech-selskaper.



Laura Weidaghecid
Journalist og gründer i Shitter
Publisert 18. desember 2017

Discussion on **Innovation Mindset** and **Perspectives**

When: January 31, 08:15-15:00

Where: HUH B-302

Who:

Pernille Rydén, DTU, DK (big data mindset)

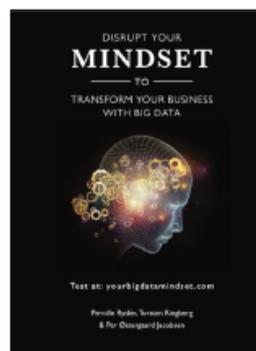
Susan Johnsen, UiB (sustainable business model)

Nils Jacob Berland, Bergen Robotics

Arvid Lundervold, UiB (Machine Learning)

Emil Pamer, UiB (Travelogue app)

Jon Ingar Kjenes, Motitech



“Kunnskapselet”: Popular science talks at the library!

The Mathematics and Natural Sciences Library is starting up a series of popular science talks in spring 2019, to be held in our new, upgraded learning centre. This is a perfect opportunity for researchers, PhD students, and other employees to speak about their research!

We will organise the practical side (microphone, screen for presentation, and promotion of the talk). Each event will last around 30-45 minutes, so talks should ideally be 20-30 minutes long, leaving time for questions afterwards. For more information, see <https://www.uib.no/en/ub/123688/popular-science-talks-library>

Contact kjersti.enerstvedt@uib.no if you would like to hold a talk, or have any questions.

Welcome to debate on 6th February: Does climate mitigation trump other concerns?

Balancing mitigation actions and their impacts. Dilemmas in implementing rapid transformation of the energy system to reach the Paris targets are many. Our expert panel will present and discuss major challenges and possible conflicts between the SDG goals.

06.02.2019 at 12.15–17.00
University Aula, Bergen

[Registration.](#)

[Learn more.](#)



Photo: Alto Crew, Unplash

Shut up and write!

The Science Library wishes all new and old ph.d. students and postdocs welcome to “Shut Up and Write”, starting up next Wednesday (Jan 23th).

Shut up and Write is an informal gathering with the aim of giving you a dedicated time and space to focus on writing, without distractions (no email, no phone, no SoMe), with 45 minutes of writing and 15 minutes break. We serve coffee and biscuits, so bring your coffee mug (and laptop) and come!

Time: Every Wednesday, 14.00-16.00 (18)
Place: Mathematics and Natural Sciences Library, «Dompapen» group room

[For more information, click here](#) and [here](#)

Please contact Kjersti.enerstvedt@uib.no or caroline.armitage@uib.no if you have any questions.



EVERY WEDNESDAY SHUT UP AND WRITE!

Are you a PhD or Postdoc, and struggling with finding the time to sit down and write?

Shut up and Write is an informal gathering with the aim of giving you a **regular, dedicated time and space to focus on writing**. It consists of:

- A distraction-free workspace: no phones, no emails, no interruptions
- Structured working blocks: 45 minutes writing, 15 minute break
- Coffee, biscuits and chat with other writers during the break



Go to our facebook page events for more information!



**An informal
dedicated time and
space for writing**

**Date: Wednesdays
from 23th January 2019**

Time: 14 – 16 (-18)

You are welcome to drop in at any point during breaks (the first 10 mins of each hour); doors close and writing begins at 10 past each hour

**Place: Lib. for maths,
and nat. sci.,
“Dompapen”**

**LIBRARY FOR
MATHEMATICS AND
NATURAL SCIENCES**

Ground floor; Realfagbygget /
the Science building
Allégaten 41

<https://www.uib.no/ub>

Bergen Summer Research School June 17-27, 2019



We want to draw your attention to the [Bergen Summer Research School](#), 17-27 June 2019.

With its general focus on current global challenges and sustainable development goals through courses on water, climate change, migration, maternal health, heritage and poverty, an overall aim of this year's summer research school in Bergen is to explore the interface between science and policymaking, or "science diplomacy".

Bergen Summer Research School 2019 offers a series of parallel multidisciplinary courses with top international lecturers to help you make your research play a role for a sustainable future. The research school is further tied together with common sessions on research tools, presentation skills, keynotes by high-profile researchers, plenary discussions, and an excursion into the Norwegian waterscape.

Deadline for application is 24 February 2019.

HR, Operations, Health, Safety and Welfare [sikresiden.no](#) – [UiB welfare offers](#)

Introduction seminar for new employees 5th February

This Introductory seminar will provide you with some basic information about what being an employee at the University of Bergen entails. [Please find more information and sign up here.](#)

Reminder: Yoga on Wednesdays

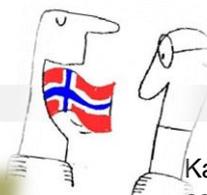
Yoga is a great way to reduce stress and tensions from work.

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 held on Mondays at 12 o'clock in the lunchroom, 4th floor.

You bring your own lunch, and we share a cake. All are welcome!

We hope to see you there, both internationals and Norwegians!

Invitation to concert in Grieghallen for University Employees 06.02.2019

Rector has the pleasure of inviting you, with accompanying person, to this season's Concert for University Employees with Bergen Philharmonic Orchestra, Wednesday 6th of February 2019 at 19:00 in Grieghallen.

The concert program:

- Andrew Litton, conductor
- Harald Sæverud, Kjempeviseslått (The Ballad of Revolt)
- Aaron Copland, Symphony No. 3

Both works are composed during and after World War II.

The composer Harald Sæverud's most famous work **The Ballad of Revolt** composed in 1943, was dedicated **The Norwegian home front**. A musical symbol of the resistance movement.

Aaron Copland's uplifting Third Symphony is a victorious cheer from a country emerging from the Second World War, incorporating his iconic Fanfare for the Common Man in its final movement and some of the most riotous orchestral music he would write along the way.

Program:

18:45: The doors open to Grieghallen

19:00: Rector invites to an aperitif in the foyer

19:35: The doors open to the concert hall

20:00: [The concert starts](#)

21:00: End of concert - After the concert it will be possible to buy refreshments until 22.00.

[Registration](#) Answer requested within 1st of February. (No tickets - only registration in the attached link. Open seating)

Welcome!

Best regards,

Dag Rune Olsen, Rector

Welfare offers from the UiB



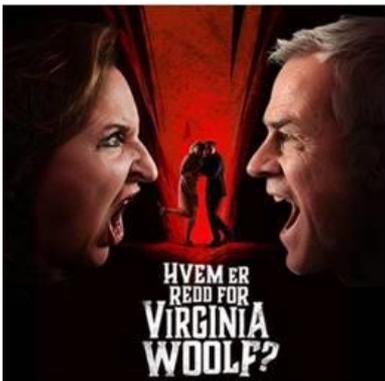
Hedda Gabler

Drama: Ibsens gåtefulle og ikoniske kvinneportrett. Hedda Gabler har fascinert verden i over hundre år. Vi gripes stadig av hennes indre drama og farlige spill.

Lørdag 2. februar kl. 18.00. Store Scene. **UiB pris kun 290,-**

Bestill [her](#) eller ring 55 60 70 80 innen 25.januar!

[Mer informasjon.](#)



Hvem er redd for Virginia Woolf?

Drama: Bli med på verdens mest berømte nachspiel! Moderne og underholdende klassiker om hvordan en fuktig fest eskaleres og ekteskapets baksider avsløres.

Torsdag 21. februar kl. 19.30. Teaterkjelleren. **UiB pris kun 240,-**

Bestill [her](#) eller ring 55 60 70 80 innen 8. februar!

[Mer informasjon.](#)

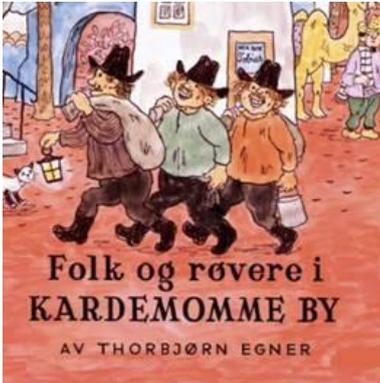


KORPS

Familieforestilling av Knut Nærum: Humoristisk kjærlighetserklæring til korpslivet. En skikkelig sjarmbombe som treffer uavhengig av alder og korps-erfaring!

Lørdag 9. mars kl 18.00 - PREMIEREBILLETTER på Store Scene. **UiB pris kun 290,-**

Bestill [her](#) eller ring 55 60 70 80 innen 22. februar!
[Mer informasjon.](#)



Folk og røvere i Kardemomme by

Festen fortsetter i Kardemomme by frem til påske!

Ta med små og store barn på denne varme og fine versjonen av Folk og røvere i Kardemomme by!

Lørdag 6. april kl. 16.30 på Store Scene. **UiB pris kun 100,-**

Bestill [her](#) eller ring 55 60 70 80 innen 22.mars!
[Mer informasjon.](#)

Velferdstilbud: Utstilling og foredrag på Bergen Kunsthall



Peter Wächtler: Franky's Theme
25. jan - 31. mar

Åpner fredag 25. januar:
20:00 - 22:00 - **Gratis inngang**

20:15 - Julie Andersland, Byråd for klima, kultur og næring åpner utstillingen.
Introduksjon ved Axel Wieder, direktør Bergen Kunsthall
22:00 Åpningsfest på Landmark med DJ Vilde Tuv

Peter Wächtler bor og arbeider i Brussel og Berlin.

[Les mer om utstillingen på kunsthall.no](#)



Beatrice Gibson:
I Couldn't Sleep in My Dream
25. jan - 31. mars

Åpner fredag 25. januar, 20:00 - 22:00 med gratis inngang!

[Les mer om utstillingen på kunsthall.no](#)

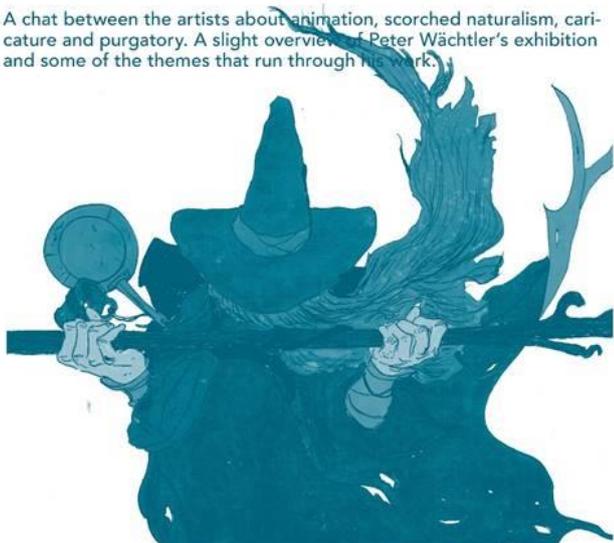
**BERGEN
KUNSTHALL**

**PLATTFORM
PETER WÄCHTLER
IN CONVERSATION
WITH ED ATKINS**

Saturday 26 January 14:00 Free

A chat between the artists about animation, scorched naturalism, caricature and purgatory. A slight overview of Peter Wächtler's exhibition and some of the themes that run through his work.

Rasmus Meyers alle 5
5015 Bergen
www.kunsthall.no



Plattform:
Peter Wächtler i samtale med Ed Atkins
Lørdag 26. jan., 14:00
Bergen Kunsthall
Gratis inngang!

En samtale mellom to kunstnere om animasjon, naturalisme, karikatur og skjærsilden. Med en liten oversikt over Peter Wächtler sin utstilling og noen av temaene som går igjen i hans arbeider.

Plattform er Bergen Kunsthalls egen forelesningsserie knyttet til vårt utstillingsprogram og øvrige samtidige diskusjoner.

Samtalen vil foregå på engelsk

[Les mer på facebook](#)