Teaching news
Annual teaching awards

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Thank you…

… To all our dedicated teachers and teaching instructors for having dealt very well with another year plagued by Corona !

You have helped the students , offered digital teaching options (recordings, live streams, etc), as well as dealt with your own concerns about the virus.

We can continue our educational program without restrictions for the rest of the academic year!

It's winter still, so some students will be forced at home because of Corona. We have checked most auditoria at HCØ and Blegdamsvej, and they have good streaming options, see also https://itlc.science.ku.dk/english/teach-online/hybrid/.
Else contact your VILU if you need help with online teaching

Improving the study

Expect **135 new students** each year.

Continued focus on **bachelor and address the fall out rate (35-40% !)**
- data analysis to spot trends & know where work needed
- encourage innovation in teaching methods
- differentiate support to students
- support a good social network
- clarify studies relevance early enough

Revised master study plan for 2022/23++ approved by study board.
Thanks to the Head of Studies , the academic coordinators and students who helped.
Computational skills on all specialisations. New ideas for Physics specialisation.
Hope for even lower **unemployment fraction (now down to 4%).**
To all supervisors : Please help students complete master in time (avg overtime >5 months).

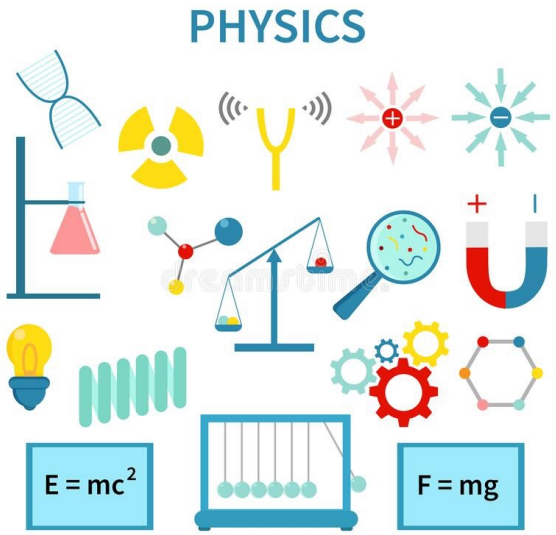
Review for Bachelor and Master Physics 2015-2021 this year.

Improving the study

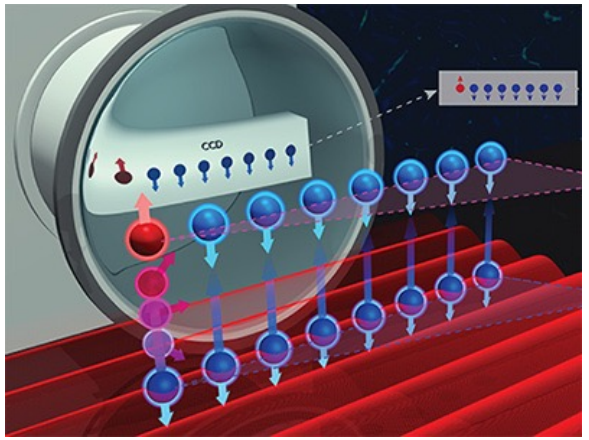
Study start : improvements to accommodate better lodging and transport solutions and larger attendance to the arrangements, both at BA and at KA level.

Support for experimental equipment in bachelor courses with labs : we wish to review the current progression in skills acquired in lab teaching, and the experiments currently proposed, and provide support to improve where needed.

From next year, yearly call for requests of support for teaching and student activities,
roughly around February.



Improving relevance of the study



A **new master education** in Quantum Information Science is planned to start 2023/2024.

Encourage more **projects in collaboration with external parties (industry, health, public, …).**
We need help from supervisors and their network to do better. Please collaborate with our business coordinator, Albert Schliesser academic-industrial-coordinator@nbi.ku.dk

More projects focusing on **green & sustainable solutions in our courses** ! Our coordinator Bo Vinther bvinther@nbi.ku.dk has obtained funding (100.000 DKK) to introduce projects / experiments in Termodynamics and data&project courses.
Help Bo and suggest him more ideas for your course. Students with ideas for projects can contact him and be redirected to a supervisor at NBI.

Improving safety in the study

For all courses with teaching labs, the course responsible should ensure safety training for all students and document the training has happened. We started this procedure in block 2 already.

For all projects and work in research labs, the solutions being worked on is that NBI sections designate a responsible for conducting safety training for lab users. Procedure is being formalised.

For all teachers, in case you wish inspiration or use exiisting modules on safety in your courses, see https://absalon.ku.dk/courses/23466/pages/laboratoriesikkerhed-for-studerende-interaktive-videoer

1st NBI student symposium

- Covers all research fields at NBI
- MSc students can present and discuss their projects
- All students, staff and supervisors are invited to attend
- Oral and poster prizes

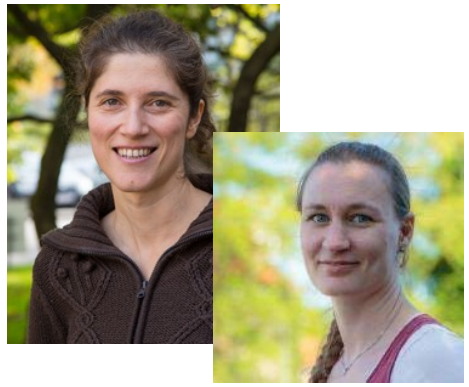
Announcement next week
- encourage your students to submit

Conveners:
Christine Hvidberg, Jørgen Beck Hansen

With Freja Amalie Nørby, Jonathan Melchior, Jeppe Cederholm (Science Organizing Committee), and Stine West.

Please don't hesitate to contact us for any questions, help or feedback regarding teaching and recruting.

VILU



NBI Teaching dept

Heads of Studies

Physics

Christine Schøtt Hvidberg
Master level

Jørgen Beck Hansen
Bachelor level

Climate Change

Anders Svensson

Nanoscience

Thorsten Hansen

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Questions? Comments?

Program for today

1:00 PM → 1:20 PM	**Introduction and category A courses announcement** **Speaker**: stefania xella (hep)	20m	
1:20 PM → 1:50 PM	**JMK prize winner announcement and talk**	30m	
1:50 PM → 2:10 PM	**IT learning center : IT support for teachers** **Speaker**: Kasper Bergstrøm	20m	
2:20 PM → 2:50 PM	**Coffe break**	30m	
2:50 PM → 3:00 PM	**Flipped Classroom and activation of students** **Speaker**: Anders Sørensen	10m	
3:10 PM → 4:00 PM	**Extending our teaching methods to include digital media, to enhance the quality of learning** Hybrid teaching consists of a mixture of digital and on-campus activities, where students may be able to attend on-campus sessions, digital sessions, recordings, etc... (presentations plus discussion) **Speakers**: Freja Amalie Noerby, James Avery	50m	

We have some IND collegues at the workshop:

Ricardo Karam, whom many of you know from the University Pedagogy course, he is supervisor to most of our assistant professors.

Lars Klinkenberg, research consultant in digital education at the Center for Digital Education (IND+DIKU) and teacher at IND.

Category A courses

Pick up your diplomas outside during the coffee break

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Category A courses

Courses evaluated in the **A category** for period block 2 2020 – block 1 2021: **Courses where the teaching has worked especially well and may be an inspiration to others**

Who decides ? The NBI teaching committee, composed of VILU, Kim Leffman, Johan Fynbo, Ala Trusina, Bo Vinther, and students from Physics and Nanoscience. Stine West, Malene Vinding and Study Leaders as observers.

Procedure based on teachers feedback, students evaluations and grades/exam outcome

this year ~ 26 % of our courses are in cat A

Troels Haugbølle: Computational Astrophysics: Star and Planet Formation

excellent alignment between teaching and exam format.

James Avery and Kurt Mikkelsen: Scientific Computing

very high learning outcome for students with many different backgrounds.

Brian Møller Andersen: Condensed Matter Physics 2 (CMP2)

clear structure evident in the course plan, which was available before course start.

Mark Spencer Rudner: Condensed Matter Theory 1 (CMT1)

well-structured and meaningful conversion to online teaching.

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Oleg Ruchayskiy: Elementary Particle Physics

successful implementation of office hours and pre-recorded lectures.

Pól Martin Bendix: Food Physics

clear structure and alignment of expectations, as well as a successful takeover of the course from the previous teacher.

Bo Møllesøe Vinther, Christine Schøtt Hvidberg: Ice and Climate

very successful adjustments made to the course in connection with conversion to online teaching.

Anja C. Andersen & Troels Haugbølle: Stjerner og planeter (Astro2)

successful implementation of group work and well-tailored assignments.

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Anders Svensson : Climate Change Mechanisms and Tipping Points

excellent learning outcome in a research-based course for students of many different backgrounds, and clear structure.

Heloisa Nunes Bordallo : Experimental x-ray Physics

very motivational teaching, excellent structure and well-aligned exam form.

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Eigil Kaas : General Circulation of the Atmosphere

very successful conversion to online teaching which still gave the students a high learning outcome.

Johan Peter Uldall Fynbo & Steen Harle Hansen : Gravitational Dynamics and Galaxy Formation

excellent coherence in a two-teacher course as well as very successful conversion to online teaching.

Anders Søndberg Sørensen : Kvantemekanik 2 (KM2)

excellent structure and successful differentiated teaching

Mogens Dam : Particle Physics Phenomenology

very committed teaching and excellent feedback to the students during the course.

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Matthias Wilhelm : Quantum Field Theory 1

good structure and really motivating the students to learn

Jens Jørgen Gaardhøje : Radioactive Isotopes and Ionizing Radiation

engaged and committed teaching, as well as successfully teaching students of many different backgrounds.

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Namiko Mitarai : Diffusive and Stochastic Processes

inspiring and committed teaching which gives the students very useful interdisciplinary skills.

Darach Jafar Watson: Experimental Physics (EF)

clear structure and inspiring students to create their own experiments

Anders Søndberg Sørensen : Quantum Information

very successful use of digital tools for activation of students.

Jes Kristian Jørgensen & Lars Egstrøm Kristensen : The Interstellar Medium and Formation of Stars

excellent structure and systematic improvements, which give a very good connection with the students.

Julius Bier Kirkegaard: Numerical Methods in Physics

very successful takeover, an excellent structure, and a way of teaching programming that gave the students a very high learning outcome.

Poul Henrik Damgaard: Analytical Mechanics

engaded and informative teaching as well as inspiring students to want to learn more

Liselotte Jauffred: Biophysics of Cells and Single Molecules

successful interdisciplinary nature as well as very pedagogical and engaging teaching.

Troels Harmark: General Relativity and Cosmology

very pedagogical and engaging teaching, as well as overall clear structure.

Anders Søndberg Sørensen & Anasua Chatterjee: Quantum Information

excellent structure and clarification of expectations, and very successful implementation of Flipped Classroom

Martin Elias Pessah: Theoretical Astrophysics

continuous development of this excellent course, and inspiring and engaging the students.

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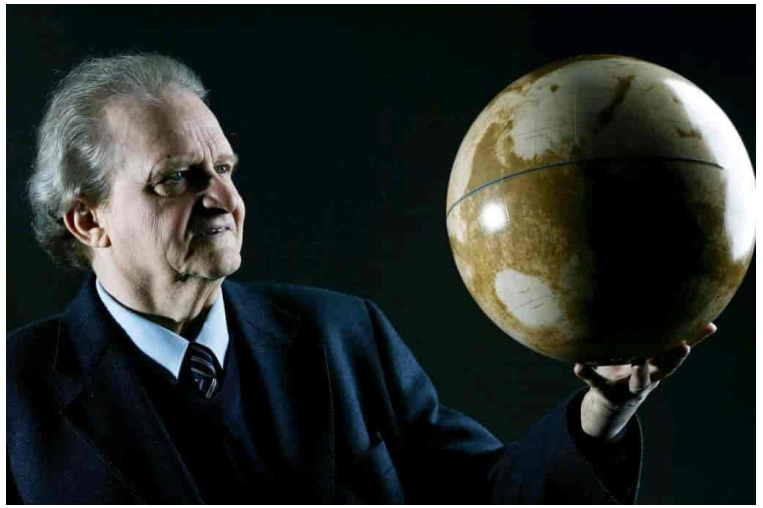
Thank you all
for the great
work !

Jens Martin Knudsen Prize



Given by the students, with support from the NBI teaching committee

Passion, engagement, experience

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The nominees for the JMK Prize are:

Poul Henrik Damgaard

Troels Harmark

Julius B. Kirkegaard

Namiko Mitarai

Martin Pessah

Matthias Wilhelm

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Quotes from the students evaluations for the winner:

good teacher inspiring engagement which you obviously display in your teachings.

teaching at a pace where the focus is the learning outcome of the students and not hurrying through a set curriculum.

most down-to-earth professor they have had, someone who is always willing, ready and capable to help

the best teacher they've seen at KU

And the winner is …

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Julius Bier Kirkegaard

MODTAGER AF

NIELS BOHR INSTITUTETS

JENS MARTIN

UNDERVISNINGSPRIS 2021

FOR BACHELORKURSET:
NUMERICAL METHODS IN PHYSICS

JAN THOMSEN
HEAD OF INSTITUTE
JANUAR 2022

Med undervisningsprisen følger en driftsbevilling på 10.000,- kr. til brug i år 2022. Beløbet disponeres af undervisningssekretær Stine West.

Midler der ikke er brugt ved årets udgang falder bort.

Congratulations ! And thank you !

I leave the word to Jonathan and then Julius