

THE COSMIC DAWN CENTER NEWSLETTER

Date: October 2020



GUEST VISIT



It gives us great pleasure to welcome Dr. Charlotte Mason to DAWN. Dr. Mason is currently a NASA Hubble/CfA Fellow at The Center for Astrophysics | Harvard & Smithsonian. We look forward to her cake talk.

On Thursday, 29 October @ 1400-1500, Dr

Title: What can galaxies tell us about reionization?

The reionization of hydrogen in the Universe's first billion years was likely caused by photons from the first galaxies. We will probably never observe these galaxies directly, but their properties can be inferred by measuring the timeline and morphology of reionization. I will describe how we can use galaxies at our current observational frontiers to measure the reionization process. In particular, Lyman alpha ($\text{Ly}\alpha$) emission can probe the intergalactic medium (IGM), but requires modelling physics from pc to Gpc scales. I will describe how we can constrain reionization from spectroscopy of galaxies, focusing on $z > 6$ $\text{Ly}\alpha$ emission, by comparing observations to models and simulations using statistical inference methods. I will present measurements which favour a late and relatively rapid reionization, and place these in the context of high redshift galaxy formation, and I will describe how the lineshape of $\text{Ly}\alpha$ can constrain detailed properties of reionizing bubbles, ionizing sources, and the high redshift IGM.

Please join us over zoom: <https://ucph-ku.zoom.us/j/61068537442>

1ST AUTHOR'S PUB CLUB

1st Author's Pub Club is a new addition to the DAWN newsletter. To become a member of the club, you must be the 1st Author on the publication. So send me those pubs!

Our first member, Associate Professor Charles Steinhardt is the 1st Author of our premiere publication entitled [Effects of Supernove Redshift Uncertainties on the Determination of Cosmological Parameters](#). DAWN student Albert Sneppen and DAWN intern Bidisha Sen are second and third authors. Congratulations to Charles and his students! Who will be our next Pub Club Member?

MSc DEFENCE

Simon Pochinda will virtually defend his master thesis

A panchromatic and structural study of high redshift star forming galaxies

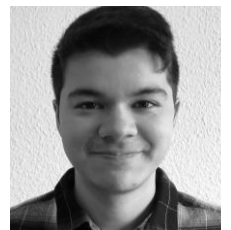
October 29th 13:00.

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TALKING SCIENCE

Peter Laursen appeared in the Danish newspaper "Information" earlier this month, talking about the 2020 Nobel Prize in Physics, which went to Roger Penrose, Andrea Ghez, and Reinhard Genzel for their groundbreaking work with black holes. [Read the Danish article here.](#)

The three Laureates share this year's Nobel Prize in Physics for their discoveries about one of the most exotic phenomena in the universe, the black hole.

FLU SHOTS

Flu Vaccinations will take place at NBB instead of Vibenshuset November 5

It is no longer necessary to go to Vibenshuset to be vaccinated. Vaccine Specialist Dr. Søs Holten will visit NBB to administer vaccinations to DAWN and DARK staff members. She is expected to arrive at 10:00, start the program immediately after setting up and stay for 1 hour after the last person has received the shot. This is a observation period and Dr Søs will provide treatment in case of a reaction. If you have not signed up, it's not too late. Contact Guarn.



The free flu vaccine, which was offered at DTU has been postponed until further notice.

This is because the health authorities have decided to prioritize flu vaccines to vulnerable citizens.

COVID-19 UPDATE

The government has extended the current restrictions to combat corona virus in Denmark until 2 January 2021

Teaching and research activities will continue. The requirement to wear a face mask has been extended to include all common areas at UCPH ([see news article](#)). The ban on all [social events](#) and overnight courses continues until 2 January 2021.

However, some courses are held online and meeting activities across UCPH are kept to a minimum.

[Recommendation: Download coronavirus app and keep UCPH open in the autumn](#)

[Click here](#) for more information on COVID-19 updates at KU

The corona regulations at DTU have been extended until 31 October, including work from home for some staff.

[Read more here at DTU Inside \(in English\)](#)

Also remember these tips from the institute leadership when at work:

- If you suspect that you are ill, stay at home
- Practice social distancing
- Wash your hands , use sanitizers and clean relevant surfaces
- Don't touch your face

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NEWSLETTER

UPCOMING BIRTHDAYS

Birthday Celebrations at DAWN!



Sune Toft



Peter Jakobsen



Kristian Finlator



Claudia L. Urbina

COPENHAGEN ON A STUDENT BUDGET

Here are a few tips for surviving Copenhagen on a student budget:

- ✓ **Eat at public kitchens**
Maybe you can afford to eat out after all. Copenhagen is full of public kitchens that offer a communal dining experience at a low cost. Every day, Absalon on Vesterbro serves dinner for DKK 50 a plate – on Mondays and Wednesdays it's vegetarian. If you're looking for an even cheaper option KraftWerket in Valby offers vegan food on Tuesdays for DKK 25 and on Thursdays Ungdomshuset will dish out a vegan course for DKK 25.
- ✓ **Learn to fix your bike**
Bike repair is expensive, especially in Denmark where your average bike lives on the street year-round in all weather. Teaching yourself basic bike maintenance is a great investment and will save you a bunch. You won't have to pay your local repair guy DKK 150 every time you have a flat. At Bicycle Innovation Lab on Amager there's an open repair shop, where you can work on your bike. They regularly advertise events on [Facebook](#) where you can learn everything about bike repair from experts.
- ✓ **Borrow a bike for a year for free** If your bike is stolen, and you can't afford a new one (or an old one), try sending an application to [Studiecyklen](#), where students can borrow a bike for a year for free. The bike will be decked out with ads from various companies, but hey, it's a free bike!
- ✓ **Get a Rejsekort, but never (or only on rare occasions) use it**
Biking and walking is free, but if you absolutely have to take public transportation now and again, please, dear God, make sure you use a Rejsekort. SMS-fare and other options are super expensive. The price of travelling two zones within the city is cut in half if you use Rejsekort. Here is a guide on [how to use the Danish rejsekort](#).
- ✓ **Swap out your things and buy second hand**
Need new pots and pans or a new winter coat? Go to a swap meet. They pop up around town, and trade in free stuff. You don't have to bring a lot in order to take cool stuff home with you. You can check out the schedule on this [Facebook-page](#). Or organize your own swap meet with friends and classmates.
There's also a bargain to be made at flea markets. There are flea markets all over town, especially during the summer months. Make a list of things you need and set a spending limit for yourself before you go.