IFT-posten week 9, 2015

# **IFT-POSTEN**

NYTT FRA INSTITUTT FOR FYSIKK OG TEKNOLOGI UNIVERSITETET I BERGEN



### **Department Head's Intro**

Winter break is now over. For those of us who spent the last couple of days on ski slopes, it was unfortunately not a basic course in mechanics in which we participated, but in return we got to philosophize a bit around the central elements of optics. The weather conditions were, namely, dominated by a sort of optical depth. Multiple light scattering accompanied by a lack of normal optical imaging which made it necessary to test the slope empirically for establishing the skiing and topographical conditions. After having proved to be a slightly clumsy skier, one can only comfort oneself by a Franklinian wisdom which could be useful even for those who did not take a skiing vacation:

#### A slip of the foot you may soon recover, but a slip of the tongue you may never get over.

Last week we published an overview of the 100 researchers with the highest number of publications at UiB. Congratulations and thanks go to Bodil for representing us on this list. We hope this will inspire many others to strive to be included in this productive company.

Otherwise, the Nordic Physics Days are approaching, and the deadline for submitting your contributions is getting closer. It would be nice if

we manage to mark a positive contribution here as well. More info on this is given on the next page

Have a great weekend,

Øyvind

PhD candidate Andrii Sofiienko will hold a seminar on a self-chosen topic:

Alpha decay: physical background and practical applications

Wednesday, March 4<sup>th</sup> 2015, at 15:15

Place: Room 546. Bjørn Trumpys House, Allégaten 55



### Open Day at the UiB and the Department of Physics and Technology

The coming Thursday (March 5<sup>th</sup>) the corridors of this building will hopefully be swarmed by a great number of high

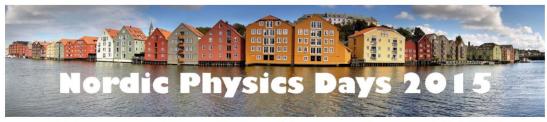
-school students; that is namely the day we intend to arrange Open House here at UiB and IFT. The intended audience is primarily high-school students, but all interested parties are welcome to participate in the various events. At the moment of writing this announcement, more than 1100 people have signed up for the various events organized at the university. Of this total, 550 persons have signed up for visiting our faculty, and almost a hundred seem to be interested in visiting IFT, which is the second largest number when compared to all other UiB departments. You can check the number of people who signed up at this link. Here is the program for the entire UiB, and here you can find the program for IFT (physics).











### Welcome to Trondheim, Norway June 9-12, 2015

The Nordic Physics Days is a conference for both researchers, teachers and students in physics.

The Norwegian Physics meeting 2015 is a part of Nordic Physics Days.

**ABSTRACT DEADLINE IS MARCH 20!** 

Venue:



#### www.ntnu.edu/physics/npd2015

Head of organizing committee: Prof. Asle Sudbø, Dep. Physics, NTNU









You can read more about the Nordic Physics Days 2015 at this link.

Are you a Master's student at IFT, and would like to participate at this conference? If you submit an abstract and are selected to present it, IFT will support you with up to 5000 NOK (participation fee, travel/accommodation). Contact Anders B. Kulseng, Grete K. Ersland or Øyvind Frette if you would like to get more information.

## SuperconductingSpintronics

Low dissipation. Long spin lifetimes. Infinite magnetoresistance.

### **International workshop: SUPERSPIN15**

We are delighted to welcome you to Trondheim, Norway to attend an international workshop (SUPERSPIN15) on superconducting spintronics, This workshop aims to bring together communities from the spintronics, topological superconductor, and superconducting hybrid structure fields, with the aim to develop a common language and define new signposts for an emerging superconducting spintronics, featuring topics such as:

- Spin injection and spin accumulation in superconductors
- Spin transfer torques and magnetization switching in superconducting hybrids
- Interplay between magnetic textures with superconductors
- Using triplet supercurrents for spintronics

More information

# Practical Info

#### Time & Place

The workshop will take place on April 29th and 30th, 2015.

The venue for the workshop will be Radisson Blue Royal Hotel in Trondheim. We encourage invited speakers to stay at this hotel for convenience.

#### Abstract submission

Please mail the title + abstract of your talk to jacob.linder |at| ntnu.no before March 15th.

### **Information about Forskningsdagene 2015 (norwegian)**



### New and easier e-mail address for all employees

In order to simplify and adjust to the UiB's e-mail system for newer and better services, the abbreviations standing for various entities/departments/areas will be removed from the e-mail address. All new e-mail addresses will end with just uib.no

All persons employed in the Central Administration have now received @uib.no, and on March 12<sup>th</sup>, all of the UiB employees will also get the new e-mail address. NB! The old e-mail address (@department.uib.no) will still function!

Persons with the same names will be contacted by the IT-department either by e-mail or by phone.

You can read more here about this project.

Contact the IT-department if you have any questions or if some things seem unclear.



### Smoking ban in the entrance areas of public offices

On the basis of the new decisions in the tobacco-damage law, it is now prohibited to smoke in the entrance areas of public offices. The university will therefore start removing ashtrays and sitting up signs on smoking ban in entrance areas.

Several new resolutions of the tobacco-damage law have been enforced as of July 1<sup>st</sup> 2014. Among other things, it had been decided that there should be no smoking in the entrance areas of health institutions and public offices. In the case of universities, this smoking ban includes removing ashtrays from entrance areas and putting up signs informing about the ban.

As a result of this ban, UiB will thus in the future remove all the ashtrays placed in the entrance areas.



In short, I am a man who has used the largest part of my 27 years in the swimming pool, with running shoes or other forms of perseverance training. I believe I can qualify as an extremely active person and I possess perhaps a bit too much of the competition instinct. Luckily, I too need restitution and that is when my other interests come in handy. I like learning, and believe I could have been forced to study any academic field, but my sitting instincts somehow landed me in physics. I grew up in a Danish family in the Paris of the North, and as all Danish people, I became fascinated by the Northern light. That is also the core reason why I long time ago opted for physics and space physics. I have been living in Bergen for almost eight years, and unfortunately both my language and intonation have picked up a bit from my surroundings.



Upon completing my Master's at the Space Physics department in Bergen, I

was lucky to get a PhD Research Assistantship at Birkelandssenteret, although not with focus on Northern lights. I chose the group Q4 (question 4,) where we try to explain the role of the energetic particles of thunder clouds in the near space. My role is to try to explain how these energetic particles get created. More concrete, I intend to explain how 10^18 photons with energies between 1 and ~40 MeV can be produced in the Earth's atmosphere at under 1 millisecond. This production can unfortunately not be directly measured and it is difficult to recreate the phenomena in a laboratory setting, and it is therefore up to me to go deep into the computer models' world in order to estimate which mechanisms play a part in this. It is a rather frustrating existence in which I use endless hours on creating codes which in the end can never be anything more than a step closer to the problem. At the same time, it is indeed a great pleasure when my Mac finally understands what you are trying to say.

Outside work, there are numerous activities that interest me. The first couple of years in Bergen, I classified myself as a «swimmer», until November when I wanted to classify myself as «triathlon fanatic» and the last couple of months I can finally be as precise as possible in my classification as «runner». I can also be described as a collector. I use every chance I get to collect more kilometers and anything that is to disrupt my collection needs to be announced at least 4-6 weeks in advance, which can be a bit problematic for all other activities which require spontaneity. I am also very keen on big adventures, the run on the Great Wall of China, crossing Grand Canyon, and in the middle of February I climbed up Mount Everest (not all the way to the top). If at the end of the day I decide to curl up on the couch, I prefer doing it with good food and a movie of the Star Wars or Lord of the Rings caliber on TV.





# Photo of the Week By Alexander Broberg Skeltved



The photo is taken on the ridge of the Khumbu-isbreen which stretches from Mount Everest and ca 50 km toward the South. Me and my girlfriend Yngvil Marie are standing at the start of the Everest Base Camp, where in April and May more than 1000 tents are set up, in order to follow the approximate number of 500 persons who annually climb up the top of Mount Everest. All those intending to climb up the top live there for approximately two months in order to get used to the conditions prior to the «summit push». You cannot see Mount Everest from the camp, but is standing in the footprints of all of those who climb «North Face» of the world's highest mountain. We saw Mount Everest clearly the day after from Kalla Patthar, which is a top of 5,565 m above sea level. The photo was taken on February 18<sup>th</sup> 2015.

### Special offer from the University of Bergen

Applications for the UiB cabins this summer: you can now apply electronically for the use of UiB's cabins in Uheimen, Ottesheimen and Butten at Ustaoset and Tingviken at Utne for the period June 21<sup>st</sup> to August 16<sup>th</sup> 2015. Use UiB's electronic cabin booking system, log yourself in with the UiB username and password. Application deadline is March 16<sup>th</sup>, and the lucky winners will be chosen on March 17<sup>th</sup>.

Cabin at Tingviken: The cabin was built around the year 1900 and is used by the University employees.

Tingviken consists of the main house, annex and boat house. The main house contains a living room, bedroom and kitchen, two bedrooms and a bathroom in the annex, with a total of 12 beds distributed among three bedrooms.

Tingviken is located at Utne in Ullensvang, about 1 km from the Utne docks. The houses are not isolated from cold and will be opened around the Easter holidays and will be closed in September/October.

Here you can read more on the cabin in Tingviken.

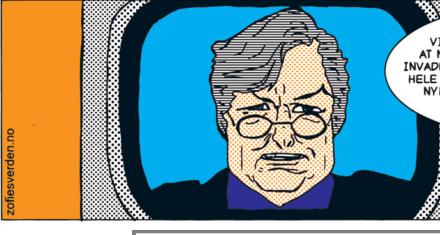












OG TIL SLUTT HAR
VI FÅTT INN EN MELDING OM
AT NORGE ER I FERD MED Å BLI
INVADERT AV FIENTLIG NASJON LANGS
HELE KYSTEN. MER OM DET PÅ TV2NYHETENE I KVELD KLOKKA 21.
HA EN TRIVELIG DAG.
VI SES.

### **H-Dal** is open every Friday from 19.00 - 01.00.

On Tuesdays, every even-numbered week, there are organized publectures at H-bar.

More info at H-bar's <u>facebook page</u>.H-bar is run by IFT's Fagutvalget, and is primarily aimed at department's students – but employees are also welcome!



#### **Publications**

- Guo, X. D.; Helseth, L. E.: *Layer-by-layer polyelectrolyte films for contact electric energy harvesting* JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 48 Issue: 7
- Buanes, T.; Dale, O.; Eigen, G.; Kastanas, A.; Liebig, W.; Lipniacka, A.; Rosendahl, P. L.; Sandaker, H.; Sjursen, T. B.; Smestad, L.; Stugu, B.; Ugland, M.; et al.: Measurement of the t(t)over-bar production cross-section as a function of jet multiplicity and jet transverse momentum in 7 TeV proton-proton collisions with the ATLAS detector JOURNAL OF HIGH ENERGY PHYS-ICS Issue: 1 Pages: 1-67
- Haukalid, Kjetil: Impact of Gas Hydrate Formation/Dissociation on Waterin-Crude Oil Emulsion Properties Studied by Dielectric Measurements EN-ERGY & FUELS Volume: 29 Issue: 1 Pages: 43-51



# **Useful links**

The IFT Webpages

**Employees at the administration** 

Webpages of the Faculty

The Board of Faculty

**The Faculty- Strategy and Vision** 

The HSE Gateway

**Archive of IFT-posten** 

The UiB Magazine

The internet News Bulletin På Høyden

FAQ A - W

Fagutvalget at IFT: <a href="http://fft.uib.no/">http://fft.uib.no/</a> / Facebook

**UiB** internal phonebook

**Employee pages** 

**PagaWeb** (Your current job)

**BRITA** (IT-support)

**LYDIA** (transport)

**SEBRA** (user account)

**The Campus Bus** 

**Cristin** 

**Pubmed** 

**Recent PhDs at the UiB** 

**Vacant positions at UiB** 

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**Bjørn Trumpy**, 1900 - 1974



**Bjørn Trumpys hus** 



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