UPPSALA UNIVERSITET

ÅTERRAPPORTERING CENTRUMBILDNINGAR 2020

2021-02-09

TEKNAT 2021/10

Uppföljning av 2020 och planering inför 2022 – underlag från Centrum för fotonvetenskap (CPS)

Mål och syfte för verksamheten

Centrets syfte är att främja fotonbaserade vetenskaper vid Uppsala universitet samt att ge fakulteten råd i frågor som rör detta forskningsområde på lokal, nationell och internationell nivå.

Styrelsemedlemmar

Styrelsen består av Maria Selmer (biologi) som ordförande, samt en ledamot för varje sektion inom fakulteten: Peter Lazor (geovetenskap), Hermann Dürr (fysik), Martin Sahlberg (kemi), Sopie Sanchez (biologi), Lars Österlund (teknikvetenskap), och Carl Nettelblad (Matematik och IT). Dessutom tillkommer två adjungerade ledamöter; Per Hansson (farmaci) och en för medicin (Mark Luberink). Olle Björneholm (fysik) kvarstår som föreståndare. Styrelsen har sammanträtt vid sju tillfällen under året; 21/1, 12/3, 13/5, 10/6, 19/8, 22/10 samt 30/11.

Verksamheten under 2020

Fokus har varit på de möjligheter MAX IV erbjuder, samt även andra anläggningar och tekniker. På grund av pandemin har denna verksamhet bedrivits över zoom.

Seminarier under 2020:

- BLOCH: A powerful new facility for surface science (Craig Polley, MAX IV)
- Understanding nanostructured materials by X-ray scattering and the potential of the new beamline CoSAXS at the MAX IV Laboratory (Tomas Plivelic (MAX IV)

- Macromolecular crystallography at MAX IV (Ana Gonzales, MAX IV)
- The role of SAXS in modern structural biology, Nathan Cowieson, beamline scientist at B21 for solution state SAXS at the Diamond Light Source; UK
- SoftiMAX A new Soft X-ray Microscopy and Coherent Imaging Beamline at the MAX IV Facility (Jörg Schwenke, MAX IV)
- The Swedish high-energy materials science beamline: status and perspective (Ulrich Lienert and Martin von Zimmermann, DESY)
- Current and Future Possibilities of XES and XAFS in the Laboratory (Birgit Kanngiesser, TU Berlin)
- New opportunities for RIXS and HAXPES at the GALAXIES beamline, Synchrotron SOLEIL (Jean-Pascal Rueff, Synchrotron SOLEIL)

Fotonens dag

För att uppmärksamma betydelsen av fotonvetenskap vid UU arrangerade vi för fjärde gången "Fotonens dag", där priset "Årets ljushuvud" för bästa doktorsavhandling från UU inom området under 2019 delades ut, samt seminarier av pristagaren Clara Saak (Fysik och Astronomi, UU) och tre externa föredragshållare:

- Elisabeth Blackburn (LU): Using X-rays to illuminate the state from which high temperature superconductivity develops
- Martin Högbom (SU): Toward geometric structures of high-valent metal-oxygen intermediates in di-metal protein cofactors by XFEL crystallography
- Clara Saak (UU): Molecular Interaction at the Surface of Aqueous Solutions
- Filipe Maia (UU): Ptychography: how does it work and what can it do for me

CeXS

CeXS (Center for X-rays in Swedish Materials Science, på svenska Centret för synkrotronljus inom svensk materialvetenskap) är ett samarbete mellan KTH, LiU (Linköpings universitet) och DESY (Deutsches Elektronen Synchrotron) i Hamburg. Syftet är att öka Sveriges användning av synkrotronljus för materialkarakterisering och stärka internationella samarbeten inom området. CeXS är akademisk

värd för det svenska strålröret kallat SMS (Swedish Material Science beamline P21), vilket är avsett att komplettera MAX IV-anläggningen. P21 ska tillgodose svenska forskares behov av att använda röntgenstrålning med hög energi. För att främja uppsalaforskningens möjligheter att delta i och bidra till verksamheten vid P21, har CPS har tagit initiativ till att UU ska engagera sig i CeXS. I skrivande stund verkar detta snart kunna börja med att UU blir en affilierad medlem i CeXS, med målet att bli fullvärding medlem inom några år.

Planerad verksamhet 2021-2022

Seminarier: Ett flertal symposier, utbildningar och workshops, vilka centrumet på olika nivåer är delaktigt i, är i skrivande stund planerade för 2021 inom centrumets verksamhetsområde. Vi planerar bland annat för cirka åtta zoom-baserade seminarier i ämnen som materialvetenskap, fysik, kemi, paleontologi och röntgenastronomi.

Fotonens dag: För att uppmärksamma betydelsen av fotonvetenskap vid UU kommer vi att arrangera "Fotonens dag", där priset "Årets ljushuvud" för bästa doktorsavhandling från UU inom området under 2020 kommer att delas ut. Föredrag av pristagaren samt två externa föredragshållare planeras.

MAX IV in-kind-bidrag: CPS tog under främst 2019 på uppdrag av Fakulteten en aktiv roll i arbetet med den första omgången in-kind-bidrag från UU till MAX IV. Det är nu dags för en andra omgång in-kind-bidrag, och CPS har ånyo fått i uppdrag av fakulteten att aktivt arbeta med detta under 2021.

Utbildning: CPS arbetar nu med att ta fram en webbaserad föreläsningsserie som ska ge en introduktion till synkrotronljus och röntgenbaserade metoder.

CPS bedömer inte att instruktionen/uppdraget för centrumbildningen behöver ses över inför 2022.

VP-underlag

I Teknat verksamhetsplan 2021 tilldelas CPS 300 tkr/år 2021-2023. Denna finansiering är i nuläget tillräcklig för den planerade verksamheten.

Bilaga 1. Styrelseprotokoll för 2020

Styrelsemöte Centrum för fotonvetenskap 21 januari 2020 13.15-15.00

Rosettarummet (Ångström 10239, http://bit.ly/2TpMl8P)

Närvarande: Olle Björneholm, Maria Selmer, Per Hansson, Hermann Durr, Martin Sahlberg

- 1. Mötets öppnande
- 2. Val av sekreterare
 - a. Martin Sahlberg. Justeras av Maria Selmer
- 3. Dagordning
 - a. Godkänns
- 4. Föregående mötesanteckningar
 - a. Godkänns, inga tillägg
- 5. Rapport från föreståndare och ordförande
 - a. Uppsalas bidrag till MAX-IV. 5 MSEK ytterligare från universitetet (från 2020) som ska bidra till verksamheten mot MAX-IV och SNIC, detta står i VP.
 Rektor vill att så mkt som möjligt av Uppsalas bidrag ska vara in kind.
 - b. Det finns fem in kind projekt pågående (eller under uppstart) för närvarande. Magnetism, ptychography, image analysis course, spectroscopy course, ion trap. Utöver detta används Ångströms workshop för att bygga instrument, och Marcus Agåker delfinansieras.
 - c. MAX-IV vill påbörja att definiera nästa fas med nya beamlines. Kommer att hållas ett antal workshops under våren, med tema t.ex. "energi", "magnetism".
 Där ska dessa möjligheter diskuteras.
 - d. Diskussioner pågår om utveckling om detektorer för MAX-IV m.a.p. koherens.
 Dessa bör diskuteras även m.a.p. in kind.
- 6. Aktuella frågor:
 - a. Årets verksamhet
 - i. Återkommande årlig aktivitet, "fotonens dag"
 - ii. Seminarier och kurser. Äskande om medel finns inskickade.
 - iii. Kan kanske vara intressant att ge små "bidrag" för resa och boende för resor till synkrotronkurs, eller "mätningar" för nya användare.
 - iv. Kanske en serie workshops om kompakta källor (tabletop)
 - v. En kurs om nya möjligheter med koherenta ljuskällor
 - vi. Workshop om "Food science" tillsammans med centrum för neutronspridning.

- vii. Ifall budget tillåter, kan det bli en call för små resebidrag under hösten.
- viii. Nästa möte ska föreståndare presentera budget för året.
- b. Fotonens dag och Årets ljushuvud
 - i. Detta ska ske även i år, samma upplägg som 2019. Preliminärt 5e maj. Bästa avhandling ska nomineras av handledare eller liknande. Bra vetenskap och innovativ användning av fotonvetenskap. Nomineringar för Årets ljushuvud ska efterfrågas, senast feb 28.
 - ii. Inbjuden föreläsare (en eller flera) samt föredrag från pristagare.Föreslagna talare: Martin Högbom (SU) samt Elizabeth Blackburn (LU).
- c. Seminarier & kurser
 - Det finns äskande för workshops inom minisymposium i SAXS/BioSAXS och workshop i BioSAXS, se bilagor. Båda äskanden beviljas medel från styrelsen (25000 kr resp 25100 kr)
- 7. Nästa möte
 - a. Föreståndare skickar ut Doodle. Förslagsvis andra veckan i mars.
- 8. Övriga frågor
 - a. Inga övriga frågor.
- 9. Mötet avslutas

Vid pennan, Martin Sahlberg

Workshop i BioSAXS 1-3 juni 2020

- Jack Tanner, University of Missouri, kommer till Uppsala den 1-3 juni för att hålla en workshop i SAXS riktad framför allt till strukturbiologer.
- Formatet kommer att vara två eftermiddagar med omväxlande föreläsning och dataanalys samt en tredje eftermiddag där deltagarna presenterar vad de gjort eller skulle vilja göra med BioSAXS.
- Workshopen kan räknas som doktorandkurs motsvarande 1 hp där presentationen utgör examination.
- Uppskattningsvis 10-15 deltagare uppskattas intresserade från UU. Med inbjudan till SLU samt Stockholms universitet bör antalet deltagare bli 20-30.

Jag äskar stöd från Centrum för Fotonvetenskap för följande:

Lärosal BMC 3 x 4h	6 000
Kaffe och kaka 3 x 30	1 000
Reseersättning Jack Tanner	12 000
Hotell Jack Tanner (4 nätter)	6 000

Summa 25 000 kr

Uppsala 2020-01-20

Maria Selmer

Till Centrum för Fotonvetenskaps styrelse

SAXS/BioSAXS minisymposium

I samband med invigningen av Uppsala universitets första avancerade labSWAXS/USAXS planeras ett symposium med tre-fyra inbjudna föredragshållare och förfriskningar.

Tid: Kl 10-15 ett datum mellan 11-15 maj 2020

Antal deltagare: 50

Förslag på inbjudna talare:

Lise Arleth, Nils Bohr institutet, KU
Jan Skov Pedersen, Aarhus universitet
Ulf Olsson, Fysikalisk kemi, LU, CoSAXS/MAXIV
Tommy Nylander, Fysikalisk kemi, LU
Bente Vestergaard, Dept. Of drug design and pharmacology, KU
Adrian Rennie, Fysik, UU
Anne Terry, MAXIV

Jag äskar stöd från Centrum för Fotonvetenskap för följande:

Reseersättning för inbjudna talare: 3 x 4000 kr 12000 kr Hotell inbjudna talare: 3 x 1200 kr 3600 kr

Lunch + fika: $50 \times 150 \text{ kr}$ 7500 kr

Hyra lokal BMC: 4h x 500 kr/h 2000 kr **Totalt:** 25100 kr

Uppsala 2020-01-21 Per Hansson Inst. för farmaci

Notes from The Center for Photon Science board meeting

Date: 30/11/2020

Online meeting via zoom

Attendees: Maria Selmer, Martin Sahlberg, Olle Björneholm, Sophie Sanchez, Per Hansson,

Carl Nettelblad, Filipe Maia (during 6a. MAX post-doctoral program), Peter Lazor

Maria Selmer opened the meeting

Peter Lazor appointed as secretary

Agenda approved

Notes from the last meeting

Olle: Research bill (Forskningsproposition) not out yet, but an extra funding for the national research infrastructure will be available next year

Photon day received positive responses

Maria asked for funding to organize SAXS workshop; now postponed (speaker prefers physical form)

Educational call: postponed until physical courses possible

Reports from chair and director

Maria: nothing to report

Olle: a number of seminars has been organized via zoom this autumn

The CPS is spending less during the pandemic but we can keep the money for some time

MAX post-doctoral program

Filipe Maia (UU representative in the program) joined the meeting to discuss this topic

Max4 used to have a postdoc program. First terminated; now restarting.

The ambition is to revive the postdoc program. The challenge is to find funding. Discussion between universities continues: main goals; theme/focused area, co-funding? The theme of the program should not be very limiting; this would exclude some research areas. Support can be given to nontraditional areas (e.g. cultural heritage?), attract new users, open for new funding possibilities. Next program meeting in two weeks. Send email to Filipe Maia if you have ideas. filipe.maia@icm.uu.se

Swedish materials science beamline at Petra III

Martin: UU should be much more active. The new beamline has just opened, it is perfect for ÅL needs (variety of techniques). Extremely underexploited by UU, Martin the only user.

<u>Center for X-rays in Swedish materials science (CeXS)</u> – currently run by KTH and LiU. UU should become a member. The CPS should push for it – contact KTH and ask to have our representative on the board.

Decision: Olle will contact director Peter Edström, on behalf of the CFS. Will draft a letter and share it before sending.

Seminars and courses

Send suggestions for speakers for the next year

Lecture series

Start with an overview of Yasmine Sassa's lecture series

Target groups: PhD students, people who need updates

Phd students could do presentations, get points, but no exam

Idea: run 45-min long lectures biweekly

Invite lecturers; make productions (with camera)

Working group – Maria, Olle, Sophie - will make a tentative list of topics, approach good speakers at UU. The group will have a meeting.

Workshop with Max IV

Thematic workshop in the 1st half of 2021

Suggest a topic. Environmental science missing so far.

Possible topics from us:

Energy material: Håkan Rensmo

Magnetism: Hermann Duerr

We (not Max IV) would need to take care about the organization. CFS can provide a support.

Urgent to decide a date. Olle will try to get a feedback from Max IV.

Survey of photon sources

No entries yet, but not urgent. We can wait with it.

The idea is to show available photon facilities on our home page.

Future plans

To become a member of the <u>Center for X-rays in Swedish materials science</u> (CeXS)

Physics has initiative to build a new x-ray source

Olle, Herman and Per appointed as working group: will present during January meeting a proposal on the future role of the CFS. Extending its agenda?

Next meeting

Wednesday 13 January, 10:30-12:00

Working groups will meet before that. Read the Max IV review (shared by Maria) before the meeting.

Board Meeting Centre for Photon Science 10 June 2020 13:15

Members present: Olle Björneholm, Maria Selmer, Hermann Dürr, Martin Sahlberg,

- 1. Opening of the meeting and welcome
- 2. Martin Sahlberg was elected to take notes.
- 3. The suggested agenda was approved.
- 4. **Notes from last meeting.** The notes were discussed, and approved.
- 5. Reports from chairperson and director.

ÅMA contact. Olle participated in a meeting with ÅMA, and we may provide some advice to ÅMA in the future.

University reference group MAX-IV. New chair will be Olle Björneholm, replacing Kristina Edström as her term ends.

MAX-IV hopes to start a post doc program in the future. Small work group will look into this. Here, we should come up with a possible person for this working group. Maria will ask Filipe if he is interested.

Strategy for MAX-IV. Before Sep. All universities should report on a wish list on instruments and equipment. This will be prepared by Kristina Edström and the centre will be allowed to comment on this.

Fall 2020. URG will have meetings to discuss strategies. Spring 2021, there will be thematic workshops. UU might host a workshop on energy materials and magnetism.

6. Current issues

a. Remiss om centrumbildningar

the centre was positive on this, and supported the documents prepared by the document. It might be good to have also a PhD-student representative on the board. Olle will contact Johan Tysk and ask if this should be done.

b. Fotonens dag och årets ljushuvud

Doodle suggested that the date is Oct 8 or 9. After contacting some possible speakers a final date will be set. It will be held either online or as a physical meeting.

c. Höstens verksamhet

The centre will host a seminar series during the fall. It will also be recorded for future use. The topics will follow a previous syllabus for a summer course. The topics are discussed and approved. Both with respect to technique and applications.

We will also ask for input from the board members not present at the meeting.

We can also suggest other lecturers for a general science seminar. There may also be funding available for this.

d. Fotoncentrums framtida roll

Call for support document was discussed. The members present were positive towards this. This will be decided formally at the next board meeting.

Olle has asked about administrative support. But has not received any reply yet.

A survey will be initiated during the fall on available photon sources. Also try to discuss and define what "is a photon source"

- 7. **Next meeting:** a doodle will be set up for August, week Aug 17th
- 8. Other issues: no other issues.
- 9. **End of meeting.** The chairperson ended the meeting.

Board Meeting Centre for Photon Science 12 March 2020 10:15

Rosettarummet, Ångströmlaboratoriet (Å10239)

Members present: Olle Björneholm, Maria Selmer, Sophie Sanchez, Carl Nettelblad, Hermann Dürr, Peter Lazor

- 1. The meeting was opened by the chairperson.
- 2. **Carl Nettelblad was elected to take notes**. A suggestion was made was to keep most activities in English from now on, unless when Swedish is required based on external circumstances.
- 3. The suggested agenda was approved.
- 4. **Notes from last meeting.** The notes were discussed and approved. Several issues reappear on the agenda for the current meeting.
- 5. **Reports from chairperson and director.** These included advances in remote data collection abilities, of relevance in times of restricted travel. First light to the VERITAS detector was achieved in early March.

6. Current issues

- a. Activities during the year. Three seminars were planned, and the possibility to announce them jointly was discussed. The BioSAXS workshop was provisionally postponed for June, due to the Covid-19 situation. An activity was planned focusing on the presence and use cases for the UU Helios facility. The need to highlight the know-how and facilities available in a crossdisciplinary way was noted.
- b. The prize "Årets Ljushuvud" and organization of the day of the photon. The board decided to award Clara Saak the "Årets Ljushuvud" prize 2020. The board noted that there was only a single nomination this year for the prize. Maybe the stressing of photon science novelty has deterred applicants with worthy scientific contributions. It would make sense to adjust the phrasing for next year, in order to make sure that there is a pool of candidates, while still promoting novelty in the development and use of photon science techniques when judging candidates. The plan was to have a program 13.15-15.30 May 5, with an additional lunch for the prize recipient and the invited speakers beforehand.

- c. Seminars and courses. A suggestion to organize activities regarding magnetism, energy materials, spintronics was mentioned. The decision on this was to integrate it into a wider budget discussion for possible activities for the next meeting. It would be very welcome to (re)introduce summer courses giving a wide sampling of photon science activities and possibilities, the course 1FA582 Applications of Synchrotron Radiation in Natural Sciences, which was given by Yasmine Sassa was specifically mentioned. Currently, there are also courses like 1FA555 Synchrotron Radiation given by Jan-Erik Rubensson. Some material in these could be of interest to PhD students, especially from outside physics.
- 7. **Next meeting.** The plan is to try to come up with a full budget for 2020, with suitable activities. Olle will probe all board members for a suitable time, since attendance was limited at the meeting. Possible dates might be afternoon 2020-05-07, 2020-05-08, 2020-05-14, 2020-05-15.
- 8. **Other issues.** No other issues were brought up.
- 9. End of meeting. The chairperson ended the meeting.

Notes by Carl Nettelblad

Board Meeting Centre for Photon Science 13 May 2020 10:15

https://uu-se.zoom.us/j/61129995062

Members present: Olle Björneholm, Maria Selmer, Hermann Dürr, Martin Häggblad Sahlberg, Peter Lazor, Carl Nettelblad, Per Hansson, Mark Lubberink, Lars Österlund, Sophie Sanchez

- 1. **Opening of the meeting** and welcome of new member, Mark Lubberink
- 2. Hermann Dürr was elected to take notes.
- 3. The suggested agenda was approved.
- 4. **Notes from last meeting.** The notes were discussed, attendance was corrected and approved. There was a discussion of approved events that are delayed due to covid 19 (see point 6)
- 5. **Reports from chairperson and director.** MAX IV plans to initiate a postdoctoral program and inquired with universities to initiate a working group for a possible SSF application. A digital platform between MAX IV/ESS and organisations/PIs nationwide is planned to provide companies with photon science expertise and contacts. OB updates about two passed and one upcoming zoom seminars for MAX IV scientists; some MAX IV in-kind activities, especially courses coordinated by MAX IV, face delays.

6. Current issues

- a. Economic report by OB on current Photon Science Center funding levels of ~300 kSEK per year plus carry-over from previous year. This implies that there is room to fund more activities. A discussion results into a decision that OB and MS draft a call for supporting both the organisation of courses and travel/attendence of courses.
- b. Photon Science Day has been delayed due to covid 19. It is agreed that the event needs to take place in the fall either in digital form or as a live event depending on circumstances. A doodle will be set up to fix a date during the time period Oct. 5-16.
- c. Seminars & courses: Three approved events have been postphoned due to covid 19. It is agreed that these events should take place this year, in digital form if necessary. In

addition more zoom seminars by MAX IV scientists, EuXFEL scientists or staff from other x-ray facilities (e.g. Diamond) are desirable. OB and MS will collect suggestions of possible speakers. Also a virtual summer school is to be organised during the fall.

- d. ÅMA (Ångström Materials Academy) has reached out asking for input to their mission. OB agreed to join an upcoming ÅMA meeting to discuss details.
- e. The future role of the photon science center: OB initiated a discussion if the current mission of the photon science center to promote and increase photon science within the UU faculty should be enlarged. The Lund Laser Center was discussed as a way to improve visibility and develop a strategy to also reach out to funding organisations. A working group (OB, PH, HD) was formed to lead further discussion during the next meeting.
- 7. **Next meeting:** a doodle is set up for mid-June
- 8. **Other issues**: OB has been given a mandate to investigate funding administrative support for improving communications between the center and scientists at and outside UU.
- 9. **End of meeting.** The chairperson ended the meeting.

Protokoll

Styrelsemöte Centrum för fotonvetenskap Augusti 19 2020 10.15-12.00

Närvarande: Olle Björneholm (ordf), Hermann Dürr,

1. Mötets öppnande

Olle Björneholm öppnade mötet.

2. Val av sekreterare

Lars Österlund valdes till sekreterare

3. Dagordning

Godkändes

4. Föregående mötesanteckningar

Utgick pga. förannonserad tidsbrist

5. Rapport från föreståndare och ordförande

Olle rapporterar att Filipe Maia föreslagits som ledmot för UU i arbetsgrupp för MAX-IV post doc program.

- 6. Aktuella frågor:
 - a. Fotonens dag och Årets ljushuvud

BESLUT: Distans

b. Seminarier & kurser

Inga föreslag har inkommit. Skicka föreslag på namn. Diskussion om att erbjuda egna kurser föreslås diskuteras vid ett senare möte.

c. Educational call

Maria and Olle draft a proposal and circulate

d. Utredningen om forskningsinfrastruktur (https://www.regeringen.se/rattsliga-dokument/kommittedirektiv/2020/05/dir.-202052/)

General discussion. Send comments to Maria and Olle before 24 Aug.

e. Fotoncentrums framtida roll

Follow-up from previous meeting 10 June 2020. Call for support document was discussed. The members present were positive towards this. This will be decided formally at the next board meeting. Olle has asked about administrative support. But has not received any reply yet.

A survey will be initiated during the fall on available photon sources. Also try to discuss and define what "is a photon source"

- 7. Nästa möte

 Olle kallar till möte om ung 1 mån.
- 8. Övriga frågor
- 9. Mötet avslutas

Center for Photon Science October 22, 2020 13.15-15.00

In attendance: Olle Björneholm, Maria Selmer, Hermann Dürr, Mark Lubberink, Carl Nettelblad

Virtual location: https://uu-se.zoom.us/j/64151510007

- 1. Meeting opens 13.18
- 2. Election of secretary
 - a. Carl Nettelblad was elected.
- 3. Agenda
- 4. Notes from last meeting
 - a. The list of members present seems incomplete.
- 5. Reports from Chair and Director
 - a. Several matters were mentioned, mostly focusing on the government review headed by Tobias Krantz regarding research infrastructure.
 - b. The director noted that there has been an announcement of additional government funding for research infrastructure. This was discussed during the MAX IV URG meeting, but details on what this would actually entail are scant.

6. Present issues:

- a. The Photon Day
 - i. The virtual format was evaluated, and the matter of mixing subjects versus focusing. Overall, the outcome was positive with reasonable attendance given the circumstances.

b. Seminars & courses

- i. The SAX-related workshop has been postponed again, possibly into 2021, possibly being turned into an online event.
- ii. The current Zoom seminars keep going. Attracting speakers is easier than ever, which is of course a positive aspect. 4 seminars in total for the rest of 2020, one already on Monday October 26. There is a significant need for suggested speakers for 2021. All members should explore their scientific networks.

c. Educational call

- i. The chair and director decided jointly to postpone the call due to the lack of physical events. Even though some online events have fees associated to them, those are generally lower.
- d. Committee for research infrastructure
 - i. It is crucial that MAX IV can cover basic running costs. The chair has tried to convey this point.
- e. Workshops with MAX IV
 - i. Magnetism and Energy Materials have previously been suggested as themes from UU.
- f. Survey of photon sources at UU
 - i. Nothing is present in the table yet. There should be facilities that can be open to other users and those should be entered. Fill in relevant details!
- g. Future plans for Photon Science and the Center at UU
 - i. Discussion postponed due to limited attendance in the meeting.
- 7. Next meeting
 - a. Next meeting is November 30 at 13.15.
- 8. Additional points
 - a. LINXS hackathon
 - i. The Lund Institute of advanced Neutron and X-ray Science working group on Biocompute and Artificial Intelligence, where Carl is a member, will host an online hackathon this spring, tentatively April 12-14. If you have problems (preferably with datasets) that would be approachable for small teams to work on for a little more than a day, please reach out to Carl. The problem might have an existing solution (manual or a fixed pipeline), where it would be valuable with an alternative that would be more highly automated/robust/real-time/based on machine-learning.
 - b. Webmaster assistance
 - i. Olle is still looking for someone within the university who could help out with the homepage as a small part-time activity.
- 9. Meeting closes
 - a. The meeting was closed at 13.59. Seminar Softimax