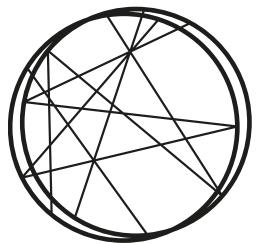




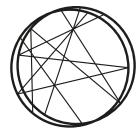
Image by Basics (www.basics.land)



LUND INSTITUTE OF ADVANCED NEUTRON AND X-RAY SCIENCE

Visit us at: www.linxs.se

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LINXS

1st LINXS Science Day



1st LINXS Science Day

8.30-9.00 LINXS – Stephen

9.00 – 9.30 LINXS historical perspective - Peter

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12.15 – 13.15 Lunch

13.15 - 14.00 Inspiration from LINXS activities

14.00 - 16:00 Group discussions

3 groups - 20 min / question:

- 1. What is LINXS for you?*
- 2. What do we want LINXS to be in 5-10 years?*
- 3. How do we get there?*

Summary and discussion

16.00 – Mingle and BBQ



MAX IV and ESS are the biggest investments in science infrastructure in the history of Sweden



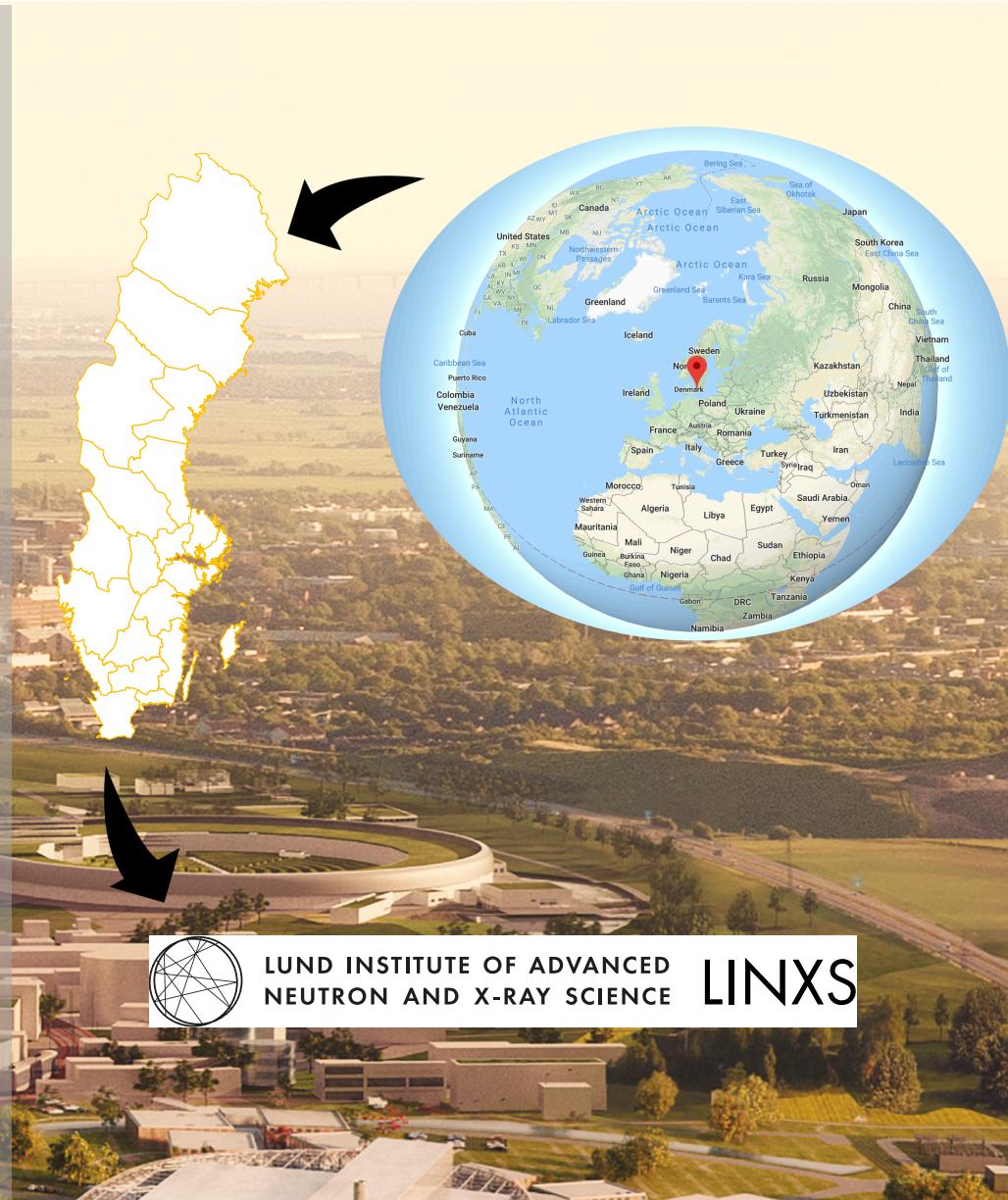
SETTING THE STAGE FOR OPTIMUM USE OF MAX IV AND ESS:

LINXS is an advanced study institute dedicated to becoming the nucleus for national and international scientific activities in Science Village Scandinavia situated between MAX IV and ESS.

LINXS will be an international competence centre, research networking hub and think tank for science with neutrons and x-rays.

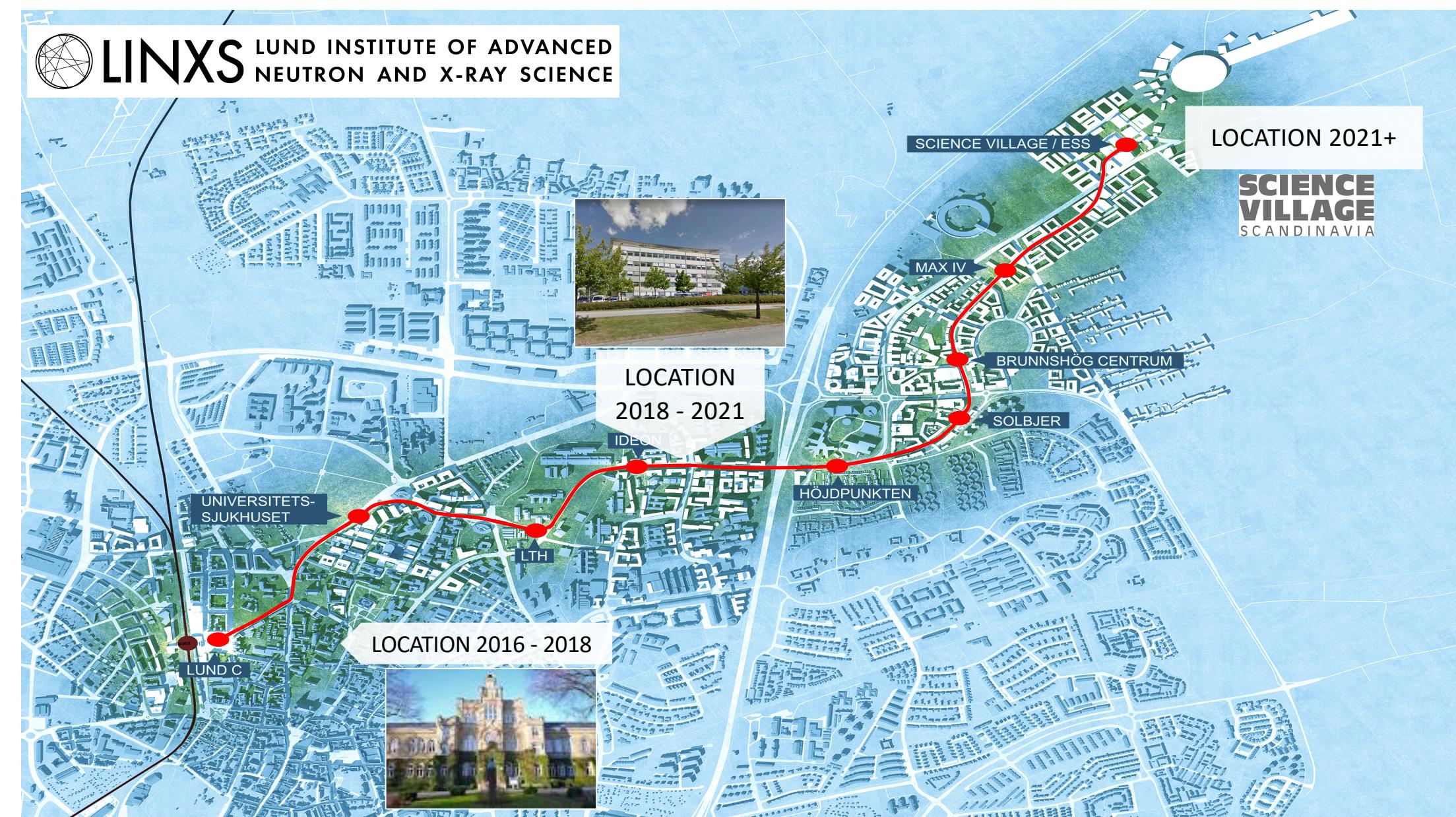
LINXS is built on a stream of highly motivated world-leading scientists invited for short-term focused topical research visits.

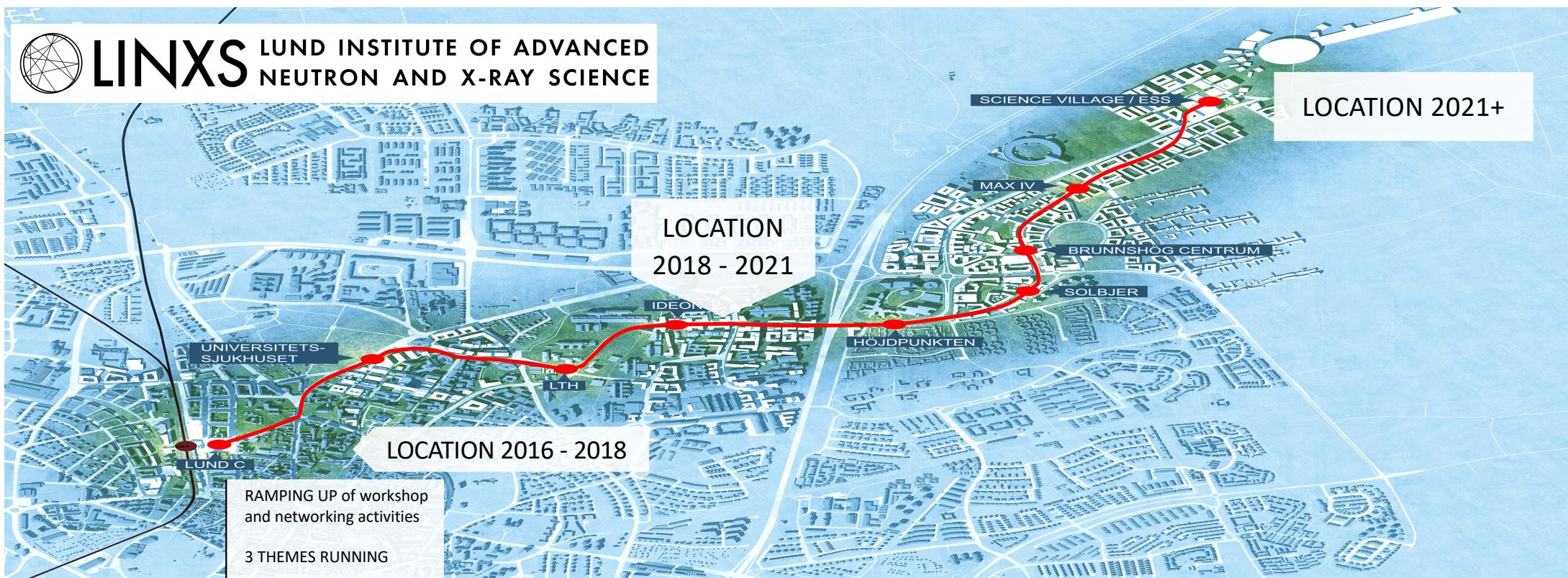
More info: www.linxs.se/about





LINXS LUND INSTITUTE OF ADVANCED NEUTRON AND X-RAY SCIENCE





RAMPING UP of workshop and networking activities

3 THEMES RUNNING

Interim location established

First call for LINXS postdoctoral fellows

2018

Regular hosting activities

Opening up for other partner organisations and membership

2019

CALL FOR NEW THEME

Long term guest hosting solution

2020

Permanent location in SVS established

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2022

Steady state operations reached at 16-24 MSEK/year

2023

**GENERAL
PLAN**

MAX IV
3 BEAMLINES available for user operations

MAX IV
9 BEAMLINES available for user operations

MAX IV
13 BEAMLINES available for user operations

MAX IV
14 BEAMLINES available for user operations

ESS
Start of user operations

Aims and objectives of LINXS for 2019 – summary of full document

Scientific objectives

- Establish LINXS as a nucleus for x-ray and neutron based research in Lund
- Establish the LINXS premises as a vibrant, active and attractive work/meeting/interaction space
- Solidify and extend LINXS's scientific portfolio within and between the existing Themes
- Establish a path towards the development of new themes

Operational objectives

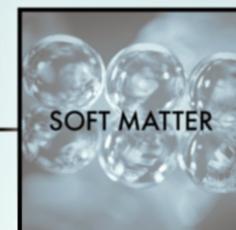
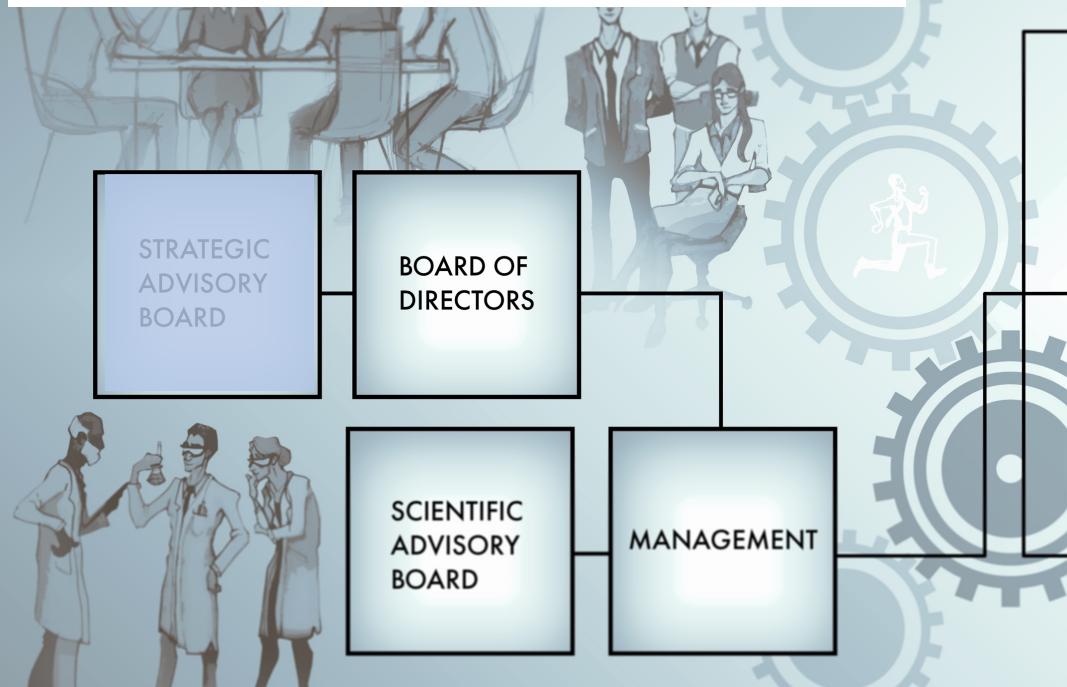
- Develop clear and transparent working practices
- Extend LINXS's remit beyond Lund University (develop partnerships)
- Secure long-term funding
- Plan for and initiate the process to find a new director

Search for a new Director

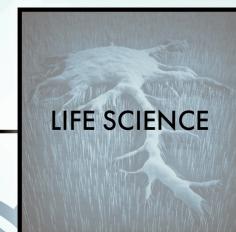
- To ensure the long term future of LINXS requires the appointment of a new director.
- A director of LINXS should have a broad, strong research profile in x-ray and neutron related science and associated international (and national) network.
- The position will be a professorial post: 50% LINXS and 50% at a host institute.
- It is envisaged that directors will hold the position 5 years, which is renewable.
- Search Committee:
 - Stacey Sørensen, chair.
 - Erik Swietlicki, LTH representative.
 - Oxana Klementieva, Med-fak representative.
 - Peter Schurtenberger, N-fak representative.
 - Marianne Sommarin, national representative
 - Martin Stankovski, administrative support.



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SOFT MATTER



LIFE SCIENCE



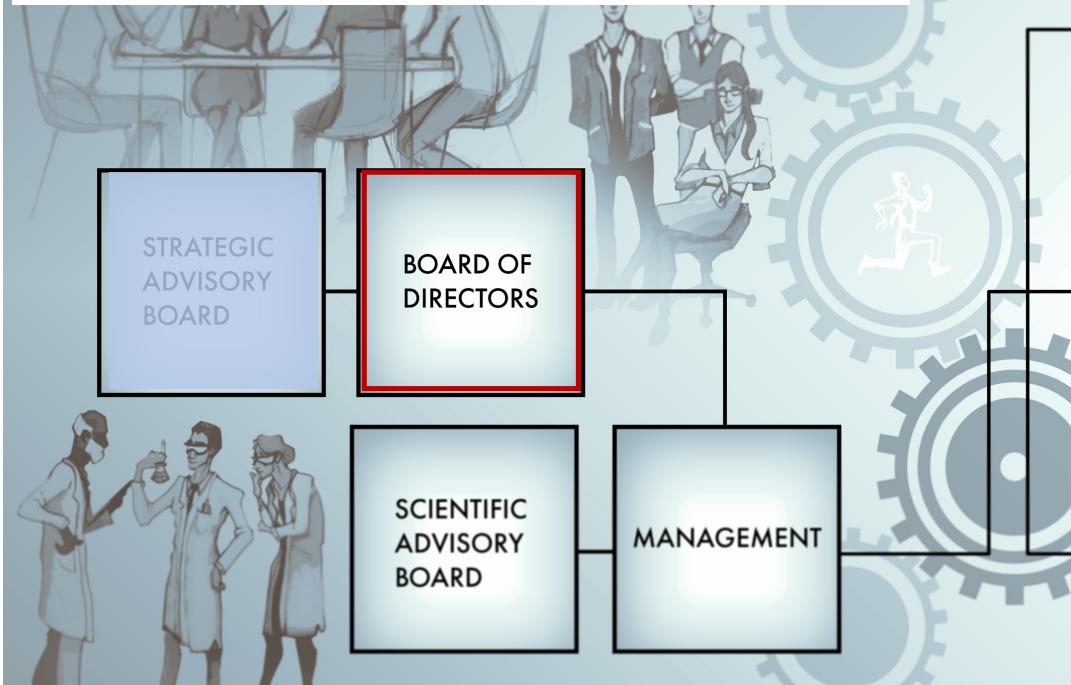
HARD MATTER



THEMES



LINXS LUND INSTITUTE OF ADVANCED
NEUTRON AND X-RAY SCIENCE



Board



S. Lidin
Chair



U. Olsson
Nat. Fak



E. Swietlicki
LTH



K. Paulsson
Med. Fak



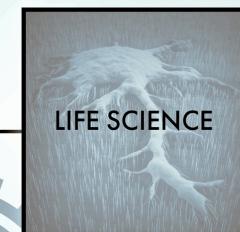
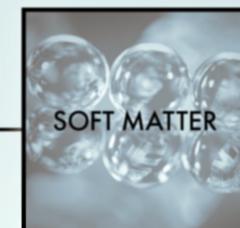
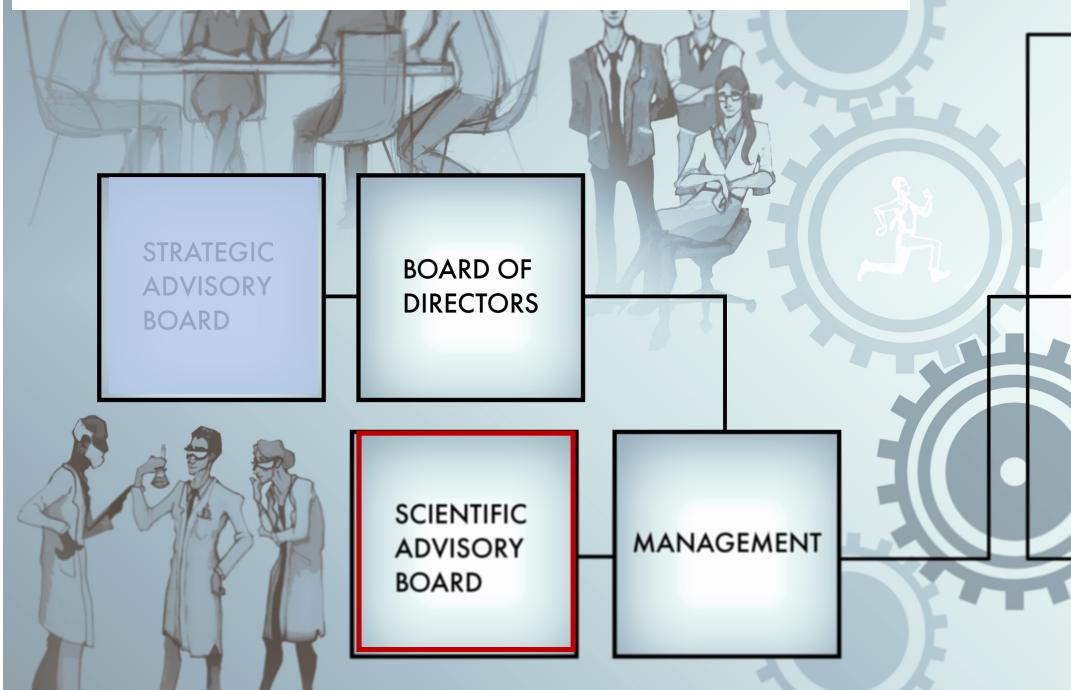
M. Thunnissen
MAXIV



S. Peterson-Årsköld
ESS



M. Sommarin
Extern (Umeå)



SAB



Lise Arleth
Chair
Copenhagen Univ.



Christiane
Alba-Simionescu



Stefan U Egelhaaf
Heinrich-Heine
University Düsseldorf



Daan Frenkel
Cambridge Univ.



Christian Rüegg
Univ. Geneva/
PSI-SINQ



Marco Stampanoni
ETH Zürich/PSI-SLS



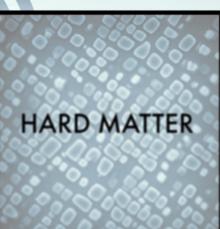
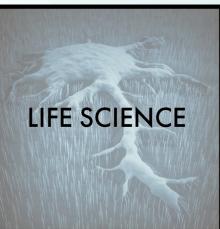
LINXS LUND INSTITUTE OF ADVANCED
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STRATEGIC
ADVISORY
BOARD

BOARD OF
DIRECTORS

SCIENTIFIC
ADVISORY
BOARD

MANAGEMENT



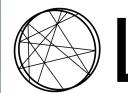
S. Hall
Director



J. Lagerstedt
Vice-Director

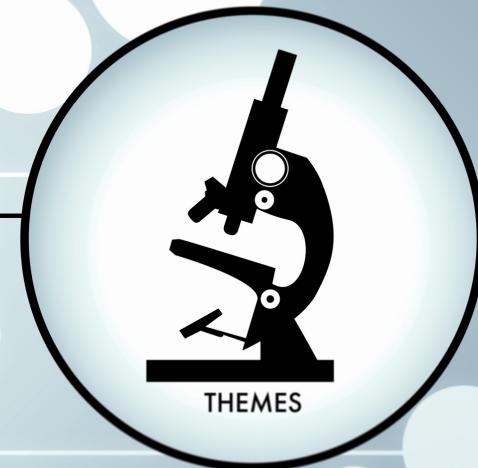
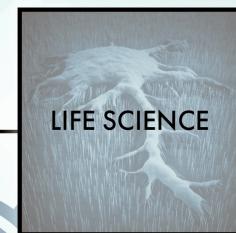
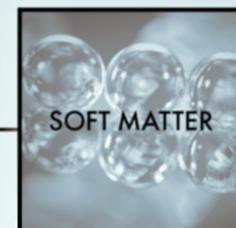
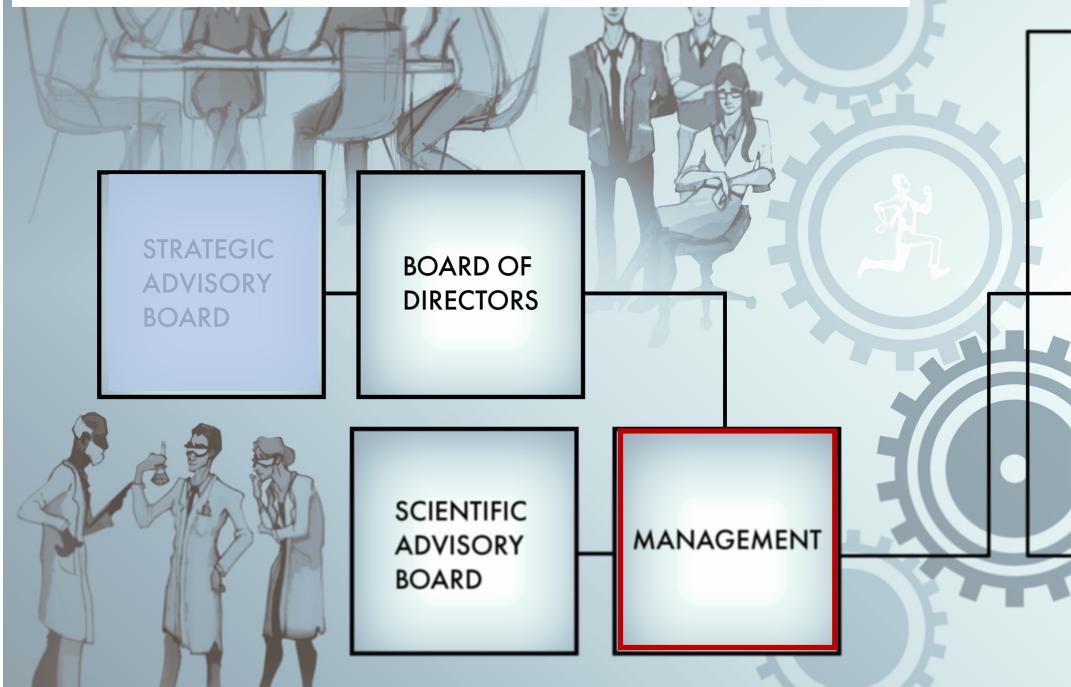


M. Skepö
Co-Director



LINXS

LUND INSTITUTE OF ADVANCED
NEUTRON AND X-RAY SCIENCE



Admin head
Anna Ntinidou



Åsa Grunning
Science activities manager



M. Stankovski
Strategic development



Noomi Egan
Communications Officer



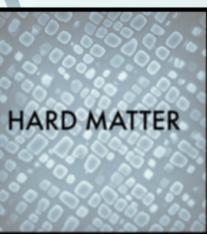
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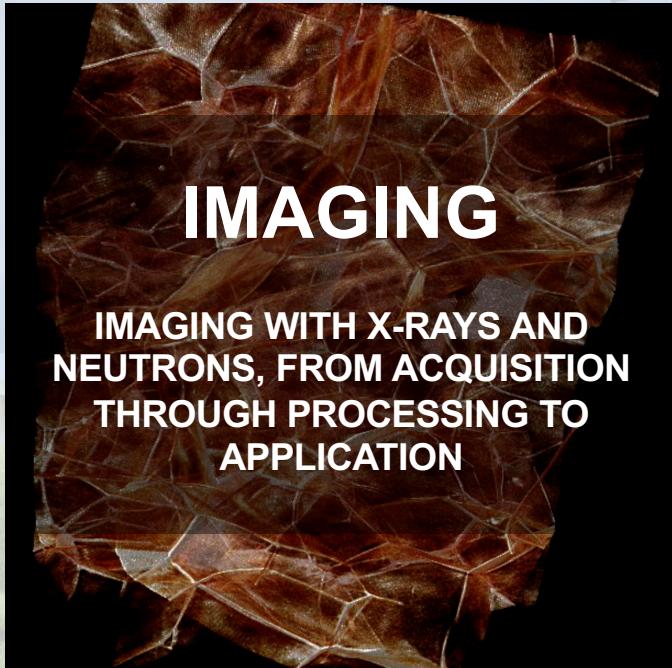
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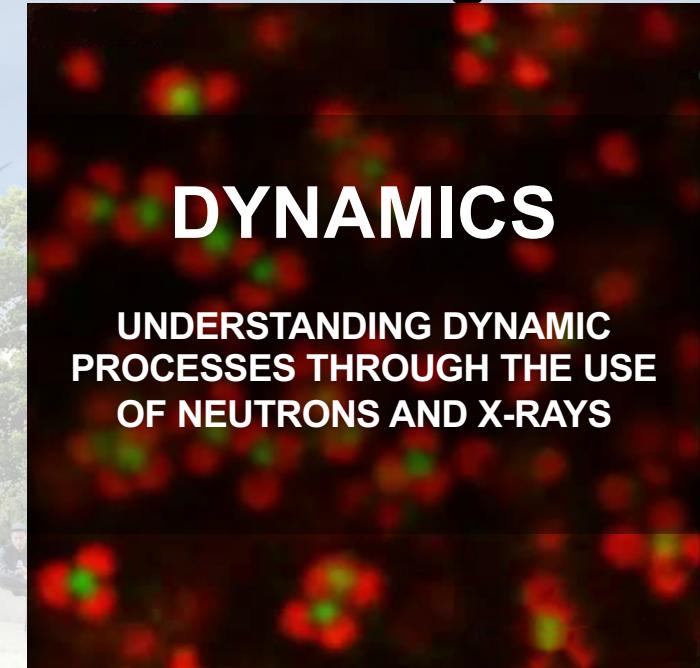
CURRENT THEMES & Working Groups



IMAGING

IMAGING WITH X-RAYS AND NEUTRONS, FROM ACQUISITION THROUGH PROCESSING TO APPLICATION

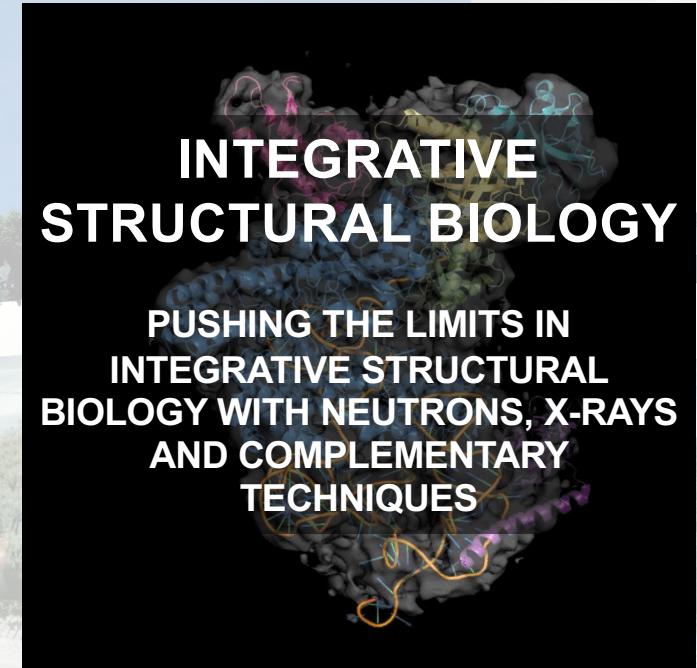
- **GeoArCH:** Geology, Archaeology and Cultural Heritage
- **Quantim** – 3D/4D image analysis
- **New imaging** possibilities with x-rays and neutrons
- X-ray and neutron imaging applications in **soil sciences**
- **TBT:** Tomography of Biological Tissues
- **Imaging Food**



DYNAMICS

UNDERSTANDING DYNAMIC PROCESSES THROUGH THE USE OF NEUTRONS AND X-RAYS

- Dynamics and structure of **biological macromolecules**
- **XPCS:** Characterizing soft matter with x-ray photon correlation spectroscopy
- Dynamics and structure of **membranes** and their constituents



INTEGRATIVE STRUCTURAL BIOLOGY

PUSHING THE LIMITS IN INTEGRATIVE STRUCTURAL BIOLOGY WITH NEUTRONS, X-RAYS AND COMPLEMENTARY TECHNIQUES

- **Biocompute**
- **Time resolved ISB**
- **Membrane proteins**
- **AMYLOID:** an integrative approach

More info: www.linxs.se

SCIENTIFIC ACTIVITIES

LINXS Kickoff
Wed, Sep 27, 2017, 00:00 – Fri, Sep 29, 2017, 00:00

Imaging thematic symposium
Mon, Dec 18, 2017, 12:00 – Tue, Dec 19, 2017, 15:00

X-ray Fluorescence imaging - how to plan and execute the perfect

Workshop - Dynamics of biological macromolecules

Satellite Meeting - The Future of Chemistry with MAX IV and ESS

Workshop - Dynamics of membranes and their constituents

First symposium - Integrative Structural Biology
Mon, Nov 19, 2018, 12:00 – Wed, Nov 21, 2018, 12:00

The Quantim Hackathon at LINXS!

Workshop - Scattering and Dynamics of Flowing Soft

LINXS Event: Geology, Archaeology and Culture

Partner Event: Magnetism, Correlated Systems and X-

Partner Event: Symposium - Lipid self-assembly - structure, function and applications
Thursday, March 14, 2019
14:30 – 17:30
Kemicentrum, Lecture hall C (map)

2nd QUANTIM Hackathon - Cellular materials in 3D and 4D

LINXS Event: Workshop - Tomography of Biological

Partner Event: Northern Lights on Food

NORTHERN LIGHTS

LINXS Event: Inverse problems in X-ray phase retrieval and

Partner Event: BigScience@LU – addressing the need of

LINXS related event - lecture with Prof. Marco Stampanoni from the Institute of Biomedical

Partner Event: French and Swedish School on Energy

LINXS Event - Save the date - LINXS @ Nordic AI Powwow, Lund

LINXS Partner event - X-ray Imaging workshop at Syddansk

LINXS Event: Welcome to afternoon coffee and a seminar by Dr Sylvain Bohic from STROBE

LINXS Event: Workshop for X-ray and neutron imaging applications in soil sciences
Mon, Jun 17, 2019, 11:00 – Tue, Jun 18, 2019, 15:30
Matematik Annexet (map)

Statistics Aug 2017 – Dec 2018:
Total number of participants: 773
(42% national/international)

SCIENTIFIC ACTIVITIES – upcoming events

LINXS Hosted event - a non-specialized summer school: Imaging of 3D-structures
SEP 30 TO OCT 4

LINXS Partner Event - 8th Scandinavian Symposium, Amyloid Diseases and Amyloid Mechanisms (ADAM 8)
AUG 28 TO AUG 30

LINXS Event: Welcome to morning seminar with Dr Thomas Hellweg, Dep. of Physical and Biophysical Chemistry, Bielefeld University in C
AUG 27

LINXS Event: 2nd Symposium - Integrative Structural Biology
OCT 9 TO OCT 11

Wed, Oct 9, 2019, 12:00 – Fri, Oct 11, 2019, 13:30
Kulturen (map)

Join us in Lund for a lunch-to-lunch scientific symposium from Wednesday (October 9th) to Friday (October 11th), noon to noon.

- Modelling of scattering data (autumn 2019)
- Coherent Diffractive Imaging (autumn 2019)
- 2nd Fluorescence imaging workshop (late 2019 / early 2020)
- IDP workshop (autumn 2019)
- XPCS workshop (autumn 2019)
- STXM imaging workshop (early 2020)

<http://www.linxse>

Visitors & Postdoc Programs



Prof. Dr. Jan K. G. Dhont

Director at Forschungszentrum Jülich GmbH
Full Professor at Heinrich-Heine University Düsseldorf
Department of Physics
Germany
April-May 2019



Prof. Dr. Thomas Hellweg

Faculty of Chemistry,
Dep. of Physical and Biophysical Chemistry,
Bielefeld University
Germany
June-August 2019



Dr. Chris Garvey

Instrument Scientist
ANSTO
Sydney
Australia
(Collaboration with Malmö University)
Summer 2019-Summer 2020



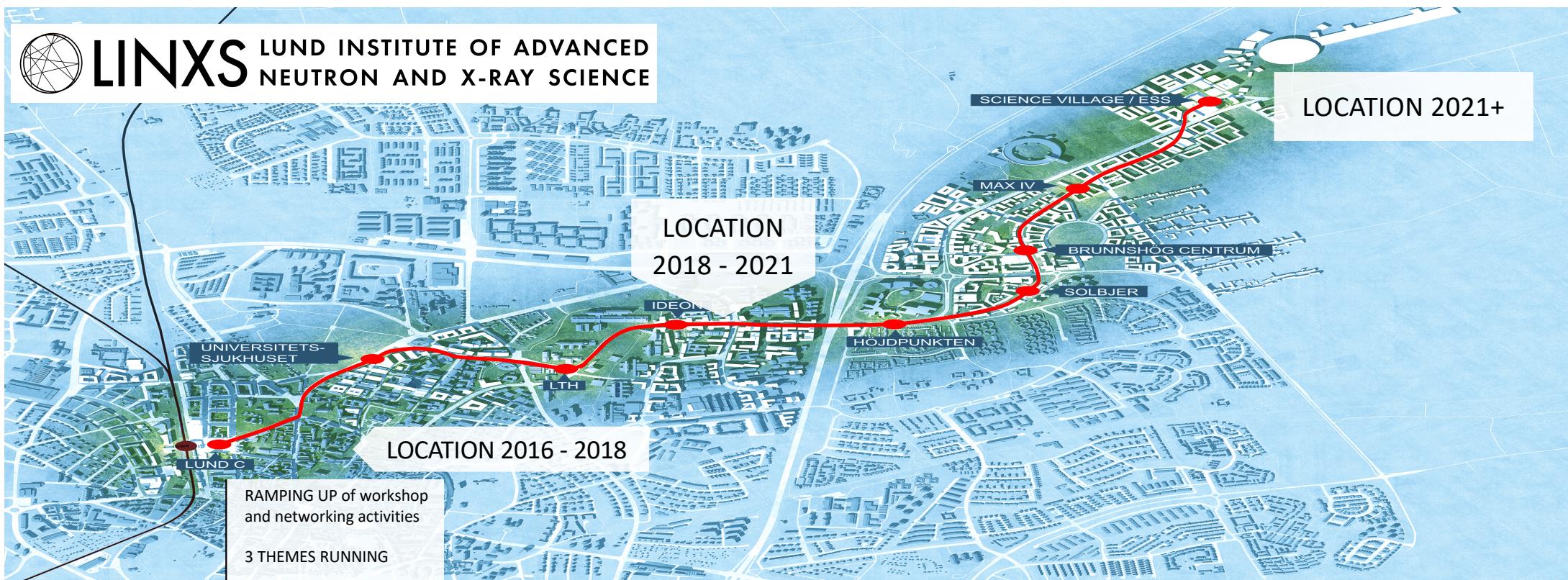
Prof. José Campos Terán

Departamento de Procesos y Tecnología
División de Ciencias Naturales e Ingeniería
Universidad Autónoma Metropolitana – Cuajimalpa
Col. Santa Fe, Mexico
Summer 2019-Summer 2020



Dr. Anurag Kawde

LINXS Postdoc Fellow



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