

## Imaging of 3D-structures

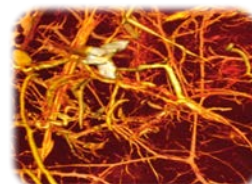
- a non-specialized summer school on Imaging with Neutrons and with Synchrotron Radiation X-ray Imaging

September 30 – October 4, 2019, LINXS institute, Lund, Sweden



Organizers: The research school "Imaging of 3D structures"

[www.imagingresearch.lu.se](http://www.imagingresearch.lu.se)

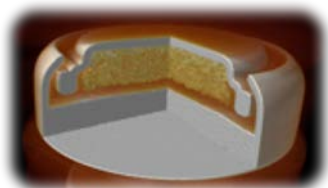


The new synchrotron radiation facility MAX IV and the coming Neutron facility ESS in Lund, will provide world-class neutron and x-rays beam for a broad range of sciences. The research school "Imaging of 3D structures" covers X-ray and neutron techniques to characterise 3D structures at all length scales, from protein structures to large materials and objects.



The purpose of this summer school is to introduce PhD students and post docs, with background in any field of natural science, engineering or medicine, to 3D imaging techniques with neutrons and synchrotron radiation.

The program will provide young researchers from all disciplines understanding of the great potential of the two future large-scale infrastructures in Lund – Max-IV and ESS – and how these infrastructures can be used to address their scientific questions.



PhD students, who actively attend the summer school, will be credited 3 ECTS points when they hand in a written exercise which will be given at the end of the school.

Participation fee is 2000 SEK to cover banquet dinner, lunches and refreshments served in the breaks. (registration fee is waived for LU students and employees)

This event is hosted by the Lund Institute of advanced Neutron and X-ray Science – LINXS [linxs.lu.se](http://linxs.lu.se)



Please sign up by email at latest September 1<sup>st</sup>, to [heather.sullivan@med.lu.se](mailto:heather.sullivan@med.lu.se)

Program:

**PhD summer school (registration required)**

Monday, September 30 – Friday October 4, 2019

Location: Lund Institute of advanced Neutron and X-ray Science  
LINXS, Scheelevägen 19, Lund, Sweden

<b>Monday</b>	
Morning	Welcome Introduction to MAX IV and ESS
Afternoon	Application examples and Student clip session
<b>Tuesday</b>	
Morning	Attenuation based x-ray and neutron imaging
Afternoon	Image processing and data treatment
<b>Wednesday</b>	
Morning	Diffraction and structural biology
Afternoon	Refraction and phase contrast
<b>Thursday</b>	
Morning	X-ray Microscopy methods
Afternoon	Fluorescence imaging
Evening	Poster session and Banquet dinner
<b>Friday</b>	
Morning	Visit at MAX IV and ESS
Afternoon	Proposal writing workshop, Closure