

**SWEDNESS/LINXS Doctoral
Course on Neutron Imaging**

Report of Contributions

Contribution ID : 1

Type : **not specified**

Welcome: aims, structure assessment

Monday, 1 October 2018 10:30 (30)

Presenter(s) : HALL, Stephen (LINXS)

Contribution ID : 2

Type : **not specified**

Introduction to neutron imaging

Monday, 1 October 2018 11:00 (60)

basic concepts/definitions, interaction mechanisms, introduce different modalities (set the scene for the coming days: Polychromatic, monochromatic, wavelength resolved, steady state versus ToF,...)

Presenter(s) : Prof. STROBL, Markus (PSI)

Contribution ID : 3

Type : **not specified**

Neutron imaging beamlines and systems (past, present, future)

Monday, 1 October 2018 13:00 (60)

Presenter(s) : Prof. STROBL, Markus (PSI)

Contribution ID : 4

Type : **not specified**

Introduction to (neutron) tomography

Monday, 1 October 2018 14:05 (120)

acquisition to reconstruction including mathematical principals, with a focus on transmission (attenuation) imaging and including potential artefacts such as rings, beam hardening etc..

Presenter(s) : Dr. KAESTNER, Anders (PSI)

Contribution ID : 5

Type : **not specified**

Introduction to tomography reconstruction tutorial

Monday, 1 October 2018 16:15 (45)

– code installation, etc.

<https://github.com/neutronimaging/imagingsuite/releases>

Presenter(s) : Dr. KAESTNER, Anders (PSI)

Contribution ID : 6

Type : **not specified**

“Extreme” imaging (fast, large, high res.)

Tuesday, 2 October 2018 11:00 (60)

Presenter(s) : Dr. KARDJILOV, Nikolay (HZB)

Contribution ID : 7

Type : **not specified**

Tutorial on tomographic reconstruction part I

Tuesday, 2 October 2018 09:00 (90)

Presenter(s) : Dr. KAESTNER, Anders (PSI)

Contribution ID : 8

Type : **not specified**

Scattering contrast: Phase contrast, grating interferometry, SESANS, 3DND...

Tuesday, 2 October 2018 13:00 (90)

Presenter(s) : Prof. STROBL, Markus (PSI)

Contribution ID : 9

Type : **not specified**

Energy selective imaging 1 (steady state sources)

Tuesday, 2 October 2018 15:00 (90)

Presenter(s) : Dr. KARDJILOV, Nikolay (HZB)

Contribution ID : **10**

Type : **not specified**

Polarised neutron imaging

Wednesday, 3 October 2018 09:00 (90)

Presenter(s) : Dr. KARDJILOV, Nikolay (HZB)

Contribution ID : 11

Type : **not specified**

Tutorial on tomographic reconstruction part II

Wednesday, 3 October 2018 11:00 (90)

Presenter(s) : Dr. KAESTNER, Anders (PSI)

Contribution ID : 12

Type : **not specified**

Energy selective imaging 2 (ToF)

Wednesday, 3 October 2018 13:30 (90)

Presenter(s) : Dr. WORACEK, Robin (ESS)

Contribution ID : 13

Type : **not specified**

2D, 3D and 4D image analysis

Wednesday, 3 October 2018 15:30 (90)

Presenter(s) : Dr. HALL, Stephen (LINXS); Dr. TUDISCO, Erika (Lund University)

Contribution ID : 14

Type : **not specified**

Complementarity of x-ray and neutron imaging & dual modality

Thursday, 4 October 2018 09:00 (60)

Presenter(s) : Dr. KAESTNER, Anders (PSI)

Contribution ID : 15

Type : **not specified**

Planning & running a neutron imaging experiment

Thursday, 4 October 2018 10:00 (75)

Presenter(s) : Dr. WORACEK, Robin (ESS)

Contribution ID : 16

Type : **not specified**

2D, 3D and 4D image analysis: practical session

Thursday, 4 October 2018 14:15 (90)

Presenter(s) : Dr. HALL, Stephen (LINXS); Dr. TUDISCO, Erika (Lund University)

Contribution ID : 17

Type : **not specified**

Neutron imaging in material science

Thursday, 4 October 2018 13:30 (45)

Presenter(s) : Dr. WORACEK, Robin (ESS)

Contribution ID : **18**

Type : **not specified**

Neutron imaging in mechanics

Thursday, 4 October 2018 11:15 (45)

Presenter(s) : Dr. TUDISCO, Erika (Lund University)

Contribution ID : **19**

Type : **not specified**

feedback session on beamtime proposals

Thursday, 4 October 2018 12:45 (45)