

Advanced Manufacturing Workshop ILL-ESRF



Report of Contributions

Contribution ID: 1

Type: **not specified**

Andreas Meyer, TBC | ILL & ESRF

Tuesday, 3 June 2025 08:30 (30 minutes)

Contribution ID: 2

Type: **not specified**

Jonathan D. Almer | APS synchrotron in situ AM diff

Tuesday, 3 June 2025 09:00 (45 minutes)

Session Classification: Internal and residual stress

Contribution ID: 3

Type: **not specified**

Levente Balogh | Queens, Quantifying complex defect structures created by advanced manufacturing using X-ray diffraction

Tuesday, 3 June 2025 09:45 (30 minutes)

Session Classification: Internal and residual stress

Contribution ID: 4

Type: **not specified**

Jens Gibmeier | KIT, in situ mechanical neutron & synch & lab XRD

Tuesday, 3 June 2025 13:30 (45 minutes)

Session Classification: Internal and residual stress

Contribution ID: 5

Type: **not specified**

Supriyo Ganguly | Univ Cranflied ,Application of neutron strain measurement in wire plus arc additive structure for better manufacturability and structural integrity

Tuesday, 3 June 2025 14:15 (30 minutes)

Session Classification: Internal and residual stress

Contribution ID: 6

Type: **not specified**

Andrea Cuffinni | NOVITOM, ESRFsynchrotron in situ AM diff

Tuesday, 3 June 2025 14:45 (30 minutes)

Session Classification: Internal and residual stress

Contribution ID: 7

Type: **not specified**

Christopher Fancher | ORNL, Strains in Wire Arc Additive Manufacturing; Insights from operando neutron scattering

Tuesday, 3 June 2025 10:45 (30 minutes)

Session Classification: Internal and residual stress

Contribution ID: 8

Type: **not specified**

Sandra Cabeza | ILL, Operando characterization in Advanced Manufacturing by Neutron Diffraction at ILL

Tuesday, 3 June 2025 11:15 (30 minutes)

Session Classification: Internal and residual stress

Contribution ID: 9

Type: **not specified**

Carsten Ohms | NET, industry examples neut&sync

Tuesday, 3 June 2025 16:15 (30 minutes)

Session Classification: Harmonization and standardization

Contribution ID: **10**

Type: **not specified**

Joe Kelleher | ISIS, neutron

Tuesday, 3 June 2025 16:45 (30 minutes)

Session Classification: Harmonization and standardization

Contribution ID: 11

Type: **not specified**

Don Brown | LANL, neutron characterization

Tuesday, 3 June 2025 17:45 (30 minutes)

Session Classification: Harmonization and standardization

Contribution ID: **12**

Type: **not specified**

TBC

Session Classification: 2D & 3D Imaging

Contribution ID: 13

Type: **not specified**

F. Poulsen | DTU, Dark field x-ray microscopy for advanced manufacturing

Wednesday, 4 June 2025 09:15 (30 minutes)

Session Classification: 2D & 3D Imaging

Contribution ID: 14

Type: **not specified**

A. Rack | ESRF, Insights into laser advanced manufacturing with synchrotron imaging

Wednesday, 4 June 2025 09:45 (30 minutes)

Session Classification: 2D & 3D Imaging

Contribution ID: 15

Type: **not specified**

Adrian Brugger | Columbia, Imaging

Wednesday, 4 June 2025 08:30 (45 minutes)

Session Classification: 2D & 3D Imaging

Contribution ID: 16

Type: **not specified**

Sergio Soria | PSI, Bragg edge imaging and polarisation contrast neutron imaging

Wednesday, 4 June 2025 11:15 (30 minutes)

Session Classification: 2D & 3D Imaging

Contribution ID: **18**

Type: **not specified**

Peter Lee | UCL, Multi-modal Correlative Imaging of Laser Additive Manufacturing Processes

Wednesday, 4 June 2025 13:30 (45 minutes)

Session Classification: 2D & 3D Imaging

Contribution ID: **19**

Type: **not specified**

Pierre L'Hussier | SIMAP, mech & imaging

Wednesday, 4 June 2025 14:15 (30 minutes)

Session Classification: 2D & 3D Imaging

Contribution ID: 20

Type: **not specified**

Steven van Petegem | PSI, In-situ multimaterial printing: diffraction and imaging

Wednesday, 4 June 2025 14:45 (30 minutes)

Session Classification: 2D & 3D Imaging

Contribution ID: **21**

Type: **not specified**

Federico Sekt | IMDEA

Wednesday, 4 June 2025 15:15 (30 minutes)

Session Classification: 2D & 3D Imaging

Contribution ID: 22

Type: **not specified**

Round Table - Fabrication

Session Classification: Round tables

Contribution ID: 23

Type: **not specified**

Round Table - Fabrication & Modelling

Wednesday, 4 June 2025 16:15 (30 minutes)

Session Classification: Round tables

Contribution ID: 24

Type: **not specified**

Round Table - Harmonization

Wednesday, 4 June 2025 17:15 (30 minutes)

Session Classification: Round tables

Contribution ID: 25

Type: **not specified**

Round Table - in-situ / operando

Wednesday, 4 June 2025 16:45 (30 minutes)

Session Classification: Round tables

Contribution ID: 26

Type: **not specified**

Thomas Niendorf | U Kassel, From alloy design and process parameters to part properties – The role of advanced characterization techniques in AM

Thursday, 5 June 2025 08:30 (45 minutes)

Session Classification: Microstructure

Contribution ID: 27

Type: **not specified**

Mark Easton | RMTI, Challenges in metal additive manufacturing that synchrotron experiments can enlighten

Thursday, 5 June 2025 09:15 (30 minutes)

Session Classification: Microstructure

Contribution ID: 28

Type: **not specified**

Samantha Lawrence | LANL, Probing hydrogen-modified phase transformations and deformation behavior with in-situ diffraction techniques

Thursday, 5 June 2025 09:45 (30 minutes)

Session Classification: Microstructure

Contribution ID: 29

Type: **not specified**

**Eitan Tiferet | NRCN, Israeli Atomic Energy
Commission, Developing printing parameters in PB
EBM, modeling, simulation and powder metallurgy
approach**

Thursday, 5 June 2025 10:45 (30 minutes)

Session Classification: Microstructure

Contribution ID: **30**

Type: **not specified**

TBC

Session Classification: Microstructure

Contribution ID: 31

Type: **not specified**

Helmut Klöcker | EMSE, Cold Spray deposits: mechanical and microstructural characterizations

Thursday, 5 June 2025 11:15 (30 minutes)

Session Classification: Microstructure

Contribution ID: **32**

Type: **not specified**

TBC

Session Classification: Microstructure

Contribution ID: 33

Type: **not specified**

Ibo Matthews | Livermore Nat Lab, Designing new metal alloys for applications in extreme conditions

Thursday, 5 June 2025 13:30 (45 minutes)

Session Classification: Industry

Contribution ID: 34

Type: **not specified**

Christian Leinenbach | EMPA, Tracking Defects and Phase Evolution in Laser Metal Additive Manufacturing: Insights from In Situ/Operando Experiments at Synchrotron and Neutron Beamlines

Thursday, 5 June 2025 14:45 (30 minutes)

Session Classification: Industry

Contribution ID: 35

Type: **not specified**

Elena Lopez | Fraunhofer IWS, Advanced materials and system technology developments for Additive Manufacturing

Thursday, 5 June 2025 14:15 (30 minutes)

Session Classification: Industry

Contribution ID: 36

Type: **not specified**

Simon Hunt | University of Manchester, New algorithms for stress and grain-size from spotty, noisy or incomplete x-ray diffraction data

Tuesday, 3 June 2025 15:15 (30 minutes)

Session Classification: Internal and residual stress

Contribution ID: 37

Type: **not specified**

WRAP-UP | END OF THE WORKSHOP

Thursday, 5 June 2025 16:15 (20 minutes)

Contribution ID: **38**

Type: **not specified**

CULTURAL VISIT GRENOBLE

Thursday, 5 June 2025 17:30 (2h 30m)

Contribution ID: 39

Type: **not specified**

Anna Ziara-Paradowska | ANSTO - TBC

Tuesday, 3 June 2025 17:15 (30 minutes)

Session Classification: Harmonization and standardization

Contribution ID: 40

Type: **not specified**

Alessandro Tengattini | ILL, Neutron imaging at ILL and its potential for Additive Manufacturing

Wednesday, 4 June 2025 10:45 (30 minutes)

Session Classification: 2D & 3D Imaging

Contribution ID: 41

Type: **not specified**

Sunchi Chen | UKAEA,

Thursday, 5 June 2025 15:15 (30 minutes)

Session Classification: Industry

Contribution ID: 42

Type: **not specified**

Yaron Ganor | NRCN, Israeli Atomic Energy Commission, Printing recipes for 17-4 SS in PB EBM, opportunities and challenges

Thursday, 5 June 2025 15:45 (30 minutes)

Session Classification: Industry