

1st Hard X-ray Self-seeding Workshop (HXRSS 2025)

Report of Contributions

Contribution ID: 1

Type: **not specified**

Workshop introduction and goals - general introduction to HXRSS

Wednesday, October 15, 2025 9:00 AM (20 minutes)

Presenter: GELONI, Gianluca (European XFEL)

Session Classification: Session A: Introduction and perspectives

Contribution ID: 2

Type: **not specified**

Coherence Control and Limitation with HB SASE

Wednesday, October 15, 2025 9:20 AM (25 minutes)

Presenter: DIJKSTAL, Philipp (Paul Scherrer Institut)

Session Classification: Session A: Introduction and perspectives

Contribution ID: 3

Type: **not specified**

Extrapolation of EEHG towards higher photon energies

Wednesday, October 15, 2025 9:45 AM (25 minutes)

Presenter: ALLARIA, Enrico (Elettra - Sincrotrone Trieste)

Session Classification: Session A: Introduction and perspectives

Contribution ID: 4

Type: **not specified**

Overview of cavity based XFEL activities

Wednesday, October 15, 2025 10:10 AM (25 minutes)

Presenter: HUANG, Nanshun (Shanghai Optoelectronic Science and Technology Innovation Center)

Session Classification: Session A: Introduction and perspectives

Contribution ID: 5

Type: **not specified**

The cavity-based XFEL demonstrator at the European XFEL

Wednesday, October 15, 2025 10:35 AM (25 minutes)

Presenter: RAUER, Patrick (Deutsches Elektronen-Synchrotron DESY)

Session Classification: Session A: Introduction and perspectives

Contribution ID: 6

Type: **not specified**

Self-seeding FEL for experiments requiring energy scans at PAL-XFEL

Wednesday, October 15, 2025 11:20 AM (25 minutes)

Presenter: YANG, Haeryong (Pohang Accelerator Laboratory)

Session Classification: Session B: Current performance

Contribution ID: 7

Type: **not specified**

High repetition rate HXRSS system at the European XFEL

Wednesday, October 15, 2025 11:45 AM (25 minutes)

Presenter: LIU, Shan (DESY)

Session Classification: Session B: Current performance

Contribution ID: 8

Type: **not specified**

Recent activities of hard X-ray self-seeding at LCLS

Wednesday, October 15, 2025 12:10 PM (25 minutes)

Presenter: LUTMAN, Alberto (SLAC)

Session Classification: Session B: Current performance

Contribution ID: 9

Type: **not specified**

Daily optimization of reflection self-seeding

Wednesday, October 15, 2025 12:35 PM (25 minutes)

Presenter: Dr HARA, Toru (RIKEN SPring-8 Center)

Session Classification: Session B: Current performance

Contribution ID: **10**

Type: **not specified**

Discussion (B)

Wednesday, October 15, 2025 1:00 PM (30 minutes)

Session Classification: Session B: Current performance

Contribution ID: **11**

Type: **not specified**

Self-seeding option and status at SHINE

Wednesday, October 15, 2025 2:30 PM (25 minutes)

Presenter: LIU, Tao (Shanghai Advanced Research Institute, CAS)

Session Classification: Session C: Developments and schemes (I)

Contribution ID: 12

Type: **not specified**

Bandwidth and signal to noise ratio control for hard X-ray self-seeding

Wednesday, October 15, 2025 2:55 PM (20 minutes)

Presenter: LONG, Tianyun (DESY)

Session Classification: Session C: Developments and schemes (I)

Contribution ID: 13

Type: **not specified**

Pulselength Control in Self-Seeding

Wednesday, October 15, 2025 3:15 PM (20 minutes)

Presenter: DIJKSTAL, Philipp (Paul Scherrer Institut)

Session Classification: Session C: Developments and schemes (I)

Contribution ID: 14

Type: **not specified**

Development and applications of combined self-seeding and crystal optics

Wednesday, October 15, 2025 3:35 PM (25 minutes)

Presenter: INOUE, Ichiro (The University of Tokyo)

Session Classification: Session C: Developments and schemes (I)

Contribution ID: 15

Type: **not specified**

Discussion (C-I)

Wednesday, October 15, 2025 4:00 PM (30 minutes)

Session Classification: Session C: Developments and schemes (I)

Contribution ID: **16**

Type: **not specified**

Generation of tunable phase-locked hard X-ray pulses

Thursday, October 16, 2025 9:00 AM (20 minutes)

Presenter: DIJKSTAL, Philipp (Paul Scherrer Institut)

Session Classification: Session C: Developments and schemes (II)

Contribution ID: 17

Type: **not specified**

Comparison same bunch and fresh bunch self seeding at PAL

Thursday, October 16, 2025 9:20 AM (20 minutes)

Presenter: CHO, Myunghoon (Pohang Accelerator Laboratory)

Session Classification: Session C: Developments and schemes (II)

Contribution ID: **18**

Type: **not specified**

Self-seeding at higher harmonics

Thursday, October 16, 2025 9:40 AM (20 minutes)

Presenter: CAO, lu (Deutsches Elektronen-Synchrotron DESY)

Session Classification: Session C: Developments and schemes (II)

Contribution ID: **19**

Type: **not specified**

Self-seeding systems for CW FELs - Remote

Thursday, October 16, 2025 10:00 AM (20 minutes)

Presenter: REIS, David (Stanford PULSE Institute)

Session Classification: Session C: Developments and schemes (II)

Contribution ID: 20

Type: **not specified**

Advanced studies at the LCLS - Remote

Thursday, October 16, 2025 10:20 AM (20 minutes)

Presenter: HALAVANAU, Aliaksei (SLAC National Accelerator Laboratory)

Session Classification: Session C: Developments and schemes (II)

Contribution ID: **21**

Type: **not specified**

Discussion (C-II)

Thursday, October 16, 2025 10:40 AM (30 minutes)

Session Classification: Session C: Developments and schemes (II)

Contribution ID: 22

Type: **not specified**

IXS challenges - Remote

Thursday, October 16, 2025 11:30 AM (25 minutes)

Presenter: DEAN, Mark

Session Classification: Session D: Experiments (I)

Contribution ID: 23

Type: **not specified**

Dynamics of compressed gas/liquid (CO₂, water, alcohol)

Thursday, October 16, 2025 11:55 AM (25 minutes)

Presenter: IHME, Matthias (Stanford University)

Session Classification: Session D: Experiments (I)

Contribution ID: 24

Type: **not specified**

Water dynamics

Thursday, October 16, 2025 12:20 PM (25 minutes)

Presenter: TYBURSKI, Robin (Stockholm University)

Session Classification: Session D: Experiments (I)

Contribution ID: 25

Type: **not specified**

Discussion (D-I)

Thursday, October 16, 2025 12:45 PM (30 minutes)

Session Classification: Session D: Experiments (I)

Contribution ID: 26

Type: **not specified**

Time-resolved Bragg Coherent X-ray Diffraction Imaging of Ferroelectric Transition

Thursday, October 16, 2025 2:15 PM (25 minutes)

Presenter: KIM, Hyunjung (Soagng University)

Session Classification: Session D: Experiments (II)

Contribution ID: 27

Type: **not specified**

3D time-resolved single-shot imaging

Thursday, October 16, 2025 2:40 PM (25 minutes)

Presenter: SONG, Changyong (POSTECH)

Session Classification: Session D: Experiments (II)

Contribution ID: **28**

Type: **not specified**

Discussion (D-II)

Thursday, October 16, 2025 3:05 PM (30 minutes)

Session Classification: Session D: Experiments (II)

Contribution ID: 29

Type: **not specified**

Single-shot structure determination under high magnetic field over 100 T

Friday, October 17, 2025 9:00 AM (25 minutes)

Presenter: IKEDA, Akihiko (University of Electro-Communications, Tokyo, Japan)

Session Classification: Session D: Experiments (III)

Contribution ID: 30

Type: **not specified**

Atomic-scale imaging of strong-field optically induced electron motion in imperfect crystals - Remote

Friday, October 17, 2025 9:25 AM (25 minutes)

Presenter: REIS, David (Stanford PULSE Institute)

Session Classification: Session D: Experiments (III)

Contribution ID: **31**

Type: **not specified**

Scandium-45 Nuclear-Clock Isomer driven by hard X-ray self-seeding - Remote

Friday, October 17, 2025 9:50 AM (25 minutes)

Presenter: SHVYDKO, Yuri (Argonne National Laboratory)

Session Classification: Session D: Experiments (III)

Contribution ID: **32**

Type: **not specified**

Discussion (D-III)

Friday, October 17, 2025 10:15 AM (30 minutes)

Session Classification: Session D: Experiments (III)

Contribution ID: 33

Type: **not specified**

Application of hard X-ray self-seeding at higher photon energies

Friday, October 17, 2025 11:05 AM (25 minutes)

Presenter: RODRIGUEZ FERNANDEZ, Angel (European XFEL)

Session Classification: Session D: Experiments (IV)

Contribution ID: 34

Type: **not specified**

Nonlinear spectroscopy utilizing two-color pulses composed of seeded and broadband beams

Friday, October 17, 2025 11:30 AM (25 minutes)

Presenter: LINKER, Thomas (SLAC)

Session Classification: Session D: Experiments (IV)

Contribution ID: 35

Type: **not specified**

Ultrafast Photocatalytic Reaction Dynamics Probed by HERFD-XAS with Self-seeded XFEL Pulses

Friday, October 17, 2025 11:55 AM (25 minutes)

Presenter: KIM, Tae Wu (Kyung Hee University)

Session Classification: Session D: Experiments (IV)

Contribution ID: **36**

Type: **not specified**

Discussion (D-IV)

Friday, October 17, 2025 12:20 PM (30 minutes)

Session Classification: Session D: Experiments (IV)

Contribution ID: 37

Type: **not specified**

Overall discussion and wrap-up

Friday, October 17, 2025 12:50 PM (30 minutes)

Session Classification: Session D: Experiments (IV)

Contribution ID: **38**

Type: **not specified**

Accelerator Demo.

Wednesday, October 15, 2025 4:30 PM (1h 30m)

Session Classification: Self-Seeding Demo.

Contribution ID: **39**

Type: **not specified**

Beamline Demo.

Wednesday, October 15, 2025 4:30 PM (1h 30m)

Session Classification: Self-Seeding Demo.