

Workshop on Longitudinal Electron beam Dynamics for coherent light Sources 2026 (LEDS 2026)



Report of Contributions

Contribution ID: 29

Type: **not specified**

Balance of bunch compression and emittance preservation for high-brightness X-ray FEL injectors

Tuesday 14 April 2026 14:00 (25 minutes)

Presenter: DAVUT, Can (TENMAK)

Session Classification: Session 1

Contribution ID: 30

Type: **not specified**

Longitudinal emittance improvement by shortening injector laser pulse duration

Tuesday 14 April 2026 14:25 (25 minutes)

Presenter: PROVVEDI, Roberta (PSI)

Session Classification: Session 1

Contribution ID: 31

Type: **not specified**

Beam dynamics optimization for a higher-brightness photo injector with various photocathode laser pulse shape

Tuesday 14 April 2026 14:50 (25 minutes)

Presenter: ZEESHAN, Sumaira (DESY-PITZ)

Session Classification: Session 1

Contribution ID: 32

Type: **not specified**

Collective and surface charge effects in high-brightness electron bunch production for FCC-ee injector

Tuesday 14 April 2026 15:15 (25 minutes)

Presenter: OMOUMI, Anahita (CERN)

Session Classification: Session 1

Contribution ID: 33

Type: **not specified**

Round Table

Tuesday 14 April 2026 15:40 (30 minutes)

Presenter: MESECK, Atoosa (HZB / JGU)

Session Classification: Session 1

Contribution ID: 34

Type: **not specified**

Intrabeam scattering simulations of SwissFEL injector with RF-Track

Tuesday 14 April 2026 16:40 (25 minutes)

Presenter: VALDOR, Paula Desiré (CERN)

Session Classification: Session 2

Contribution ID: 35

Type: **not specified**

Accurate modelling of intrabeam scattering and its impact on photoinjectors for FELs

Tuesday 14 April 2026 17:05 (25 minutes)

Presenter: LUCAS, Thomas Geoffrey (PSI)

Session Classification: Session 2

Contribution ID: **36**

Type: **not specified**

Longitudinal phase Space tomography at PITZ

Tuesday 14 April 2026 17:30 (25 minutes)

Presenter: RICHARD, Chris (DESY-PITZ)

Session Classification: Session 2

Contribution ID: 37

Type: **not specified**

Round Table

Tuesday 14 April 2026 17:55 (30 minutes)

Presenter: GJONAJ, Erion (TEMF-TUDa)

Session Classification: Session 2

Contribution ID: 38

Type: **not specified**

Collective effects and beam instabilities at the EuXFEL

Wednesday 15 April 2026 08:30 (25 minutes)

Presenter: ZAGORODNOV, Igor (DESY)

Session Classification: Session 3

Contribution ID: 39

Type: **not specified**

Comparison of compression schemes in Soft (SXFEL) and Hard (UK-XFEL) X-ray FELs

Wednesday 15 April 2026 08:55 (25 minutes)

Presenter: DIXON, Adam (MAX IV)

Session Classification: Session 3

Contribution ID: **40**

Type: **not specified**

Microbunching instability studies at FERMI in the presence of two-stage compression

Wednesday 15 April 2026 09:20 (25 minutes)

Presenter: CAMPRI, Giovanni (Elettra)

Session Classification: Session 3

Contribution ID: 41

Type: **not specified**

Round Table

Wednesday 15 April 2026 09:45 (20 minutes)

Presenter: WILLIAMS, Peter (STFC)

Session Classification: Session 3

Contribution ID: 42

Type: **not specified**

Design and optimisation of the UK-XFEL spreader lattice and bunch distribution scheme

Wednesday 15 April 2026 10:35 (25 minutes)

Presenter: POTTER, Andrew (DLS)

Session Classification: Session 4

Contribution ID: 43

Type: **not specified**

Microbunching reduction in the spreader switchyard lines of FERMI

Wednesday 15 April 2026 11:00 (25 minutes)

Presenter: SPAMPINATI, Simone (Elettra)

Session Classification: Session 4

Contribution ID: 44

Type: **not specified**

Passive streaker and longitudinal phase-space studies at the EuXFEL

Wednesday 15 April 2026 11:25 (25 minutes)

Presenter: TOMIN, Sergey (EU-XFEL)

Session Classification: Session 4

Contribution ID: 45

Type: **not specified**

Round Table

Wednesday 15 April 2026 11:50 (25 minutes)

Presenter: THORIN, Sara (MAX IV)

Session Classification: Session 4

Contribution ID: **46**

Type: **not specified**

Recent results from laser-based bunch shaping at FLASH

Wednesday 15 April 2026 14:00 (25 minutes)

Presenter: AMSTUTZ, Philipp (DESY)

Session Classification: Session 5

Contribution ID: 47

Type: **not specified**

Experimental generation of petawatt peak power electron beams via laser heater shaping at FACET-II

Wednesday 15 April 2026 14:25 (25 minutes)

Presenter: EMMA, Claudio (SLAC)

Session Classification: Session 5

Contribution ID: **48**

Type: **not specified**

Coherent sub-femtosecond x-ray FEL pulses with low-charge electron beams

Wednesday 15 April 2026 14:50 (25 minutes)

Presenter: PRAT, Eduard (PSI)

Session Classification: Session 5

Contribution ID: 49

Type: **not specified**

Attosecond pulse generation and relevant electron beam dynamics at the EuXFEL

Wednesday 15 April 2026 15:15 (25 minutes)

Presenter: SERKEZ, Svitozar (EU-XFEL)

Session Classification: Session 5

Contribution ID: 50

Type: **not specified**

Round Table

Wednesday 15 April 2026 15:40 (30 minutes)

Presenter: VACCAREZZA, Cristina (INFN-LNF)

Session Classification: Session 5

Contribution ID: 51

Type: **not specified**

Understanding energy spread evolution through modeling of collective beam dynamics

Wednesday 15 April 2026 16:40 (25 minutes)

Presenter: PEROSA, Giovanni (EU-XFEL)

Session Classification: Session 6

Contribution ID: 52

Type: **not specified**

Update on active energy compression of a laser-plasma electron beam

Wednesday 15 April 2026 17:05 (25 minutes)

Presenter: WINKLER, Paul (DESY)

Session Classification: Session 6

Contribution ID: 53

Type: **not specified**

Advanced longitudinal shaping and driver-witness selection for high brightness PWFA-driven FELs

Wednesday 15 April 2026 17:30 (25 minutes)

Presenter: VACCAREZZA, Cristina (INFN-LNF)

Session Classification: Session 6

Contribution ID: 54

Type: **not specified**

Round Table

Wednesday 15 April 2026 17:55 (30 minutes)

Presenter: CRAIEVICH, Paolo (PSI)

Session Classification: Session 6

Contribution ID: 55

Type: **not specified**

Dinner

Contribution ID: 56

Type: **not specified**

Intrabeam scattering in Simulation and Experiment

Thursday 16 April 2026 08:30 (25 minutes)

Presenter: BERGAN, William (BNL)

Session Classification: Session 8

Contribution ID: 57

Type: **not specified**

Coherent emission from microbunched beams at the Metrology Light Source

Thursday 16 April 2026 08:55 (25 minutes)

Presenter: KRUSCHINSKI, Arnold (HZB)

Session Classification: Session 8

Contribution ID: 58

Type: **not specified**

Preservation of transverse coherence in Elettra 2.0 timing mode

Thursday 16 April 2026 09:20 (25 minutes)

Presenter: DI MITRI, Simone (Elettra)

Session Classification: Session 8

Contribution ID: 59

Type: **not specified**

Round Table

Thursday 16 April 2026 09:45 (20 minutes)

Presenter: MAI, Carsten (HZB)

Session Classification: Session 8

Contribution ID: **60**

Type: **not specified**

Semi-analytical code for Transient Beam Loading effects in harmonic RF systems and their mitigation

Thursday 16 April 2026 10:35 (25 minutes)

Presenter: BELLAFONT, Ignasi (ALBA)

Session Classification: Round Table

Contribution ID: **61**

Type: **not specified**

Experience with normal conducting harmonic cavities at BESSY II

Thursday 16 April 2026 11:00 (25 minutes)

Presenter: MATVEENKO, Aleksandr (HZB)

Session Classification: Round Table

Contribution ID: 62

Type: **not specified**

Double- and Triple-RF systems for MAX4U and Commissioning of a 500 MHz Cavity for Bunch Lengthening using Two Higher RF Harmonics

Thursday 16 April 2026 11:25 (25 minutes)

Presenter: BARBOSA ALVES, Murilo (MAX IV)

Session Classification: Round Table

Contribution ID: 63

Type: **not specified**

Round Table

Thursday 16 April 2026 11:50 (25 minutes)

Presenter: SOLANS, Pol (ALBA)

Session Classification: Round Table