

# **LEDS Workshop – Longitudinal Electron beam Dynamics for coherent light Sources**



LEDS Workshop  
Longitudinal Electron beam Dynamics for coherent light Sources



## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## **CompactLight: how to write a proposal**

*Tuesday, October 3, 2023 2:35 PM (25 minutes)*

**Presenter:** D'AURIA, Gerardo (Elettra Sincrotrone Trieste)

**Session Classification:** CompactLight, lessons learned

Contribution ID: 2

Type: **not specified**

## **CompactLight: bunch compression, microbunching instability and seeding aspects**

*Tuesday, October 3, 2023 3:00 PM (25 minutes)*

**Presenter:** LATINA, Andrea (CERN)

**Session Classification:** CompactLight, lessons learned

Contribution ID: 3

Type: **not specified**

## **Beam loading effects in photo-injectors, simulations and measurements**

*Tuesday, October 3, 2023 3:25 PM (25 minutes)*

**Presenter:** OLIVARES HERRADOR, Javier (CERN)

**Session Classification:** CompactLight, lessons learned

Contribution ID: 5

Type: **not specified**

## **Linac-driven beam physics at Eupraxia@SPARC\_Lab**

*Tuesday, October 3, 2023 4:30 PM (25 minutes)*

**Presenter:** VACCAREZZA, Cristina (INFN-LNF)

**Session Classification:** New coherent light sources

Contribution ID: 7

Type: **not specified**

## **The DALI project at HZDR**

*Tuesday, October 3, 2023 4:55 PM (25 minutes)*

**Presenter:** TBD (HZDR)

**Session Classification:** New coherent light sources

Contribution ID: 8

Type: **not specified**

## **THz source @ PITZ as pump for X-ray FELs**

*Tuesday, October 3, 2023 5:20 PM (25 minutes)*

**Presenter:** KRASILNIKOV, Mikhail (DESY)

**Session Classification:** New coherent light sources

Contribution ID: 12

Type: **not specified**

## **Insights on slice energy spread and space charge in photoinjectors**

*Wednesday, October 4, 2023 9:00 AM (25 minutes)*

**Presenter:** RICHARD, Christopher James (DESY)

**Session Classification:** On the true origin of microbunching



Contribution ID: 13

Type: **not specified**

## **Modelling and observation of intrabeam scattering in photoinjectors**

*Wednesday, October 4, 2023 9:25 AM (25 minutes)*

**Presenter:** GEOFFREY, Thomas Lucas (PSI)

**Session Classification:** On the true origin of microbunching

Contribution ID: 14

Type: **not specified**

## **Energy spread measurements at the European XFEL**

*Wednesday, October 4, 2023 9:50 AM (25 minutes)*

**Presenter:** WALKER, Stuart (EUXFEL)

**Session Classification:** On the true origin of microbunching

Contribution ID: 15

Type: **not specified**

## **Self-consistent intrabeam scattering methods**

*Wednesday, October 4, 2023 11:20 AM (25 minutes)*

**Presenter:** ADELMANN, Andreas (PSI)

**Session Classification:** On the true origin of microbunching

Contribution ID: 18

Type: **not specified**

## **Widely tunable electron bunch trains for the generation of high-power narrowband 1–10 THz radiation**

*Wednesday, October 4, 2023 2:00 PM (25 minutes)*

**Presenter:** YAN, Lixin (Tsinghua University)

**Session Classification:** Diagnostics of microbunching and beam manipulation

Contribution ID: 19

Type: **not specified**

## **Compact and versatile infrared spectrometer for microbunching detection**

*Wednesday, October 4, 2023 2:25 PM (25 minutes)*

**Presenter:** SPEZZANI, Carlo (Elettra Sincrotrone Trieste)

**Session Classification:** Diagnostics of microbunching and beam manipulation

Contribution ID: 20

Type: **not specified**

## **Electron beam manipulation using self-induced fields**

*Wednesday, October 4, 2023 3:10 PM (25 minutes)*

**Presenter:** CRAIEVICH, Paolo (PSI)

**Session Classification:** Diagnostics of microbunching and beam manipulation

Contribution ID: 21

Type: **not specified**

## **Commissioning results of the MAX-IV transverse deflecing cavity**

*Wednesday, October 4, 2023 4:00 PM (25 minutes)*

**Presenter:** TBD (MAX-IV, STFC)

**Session Classification:** Diagnostics of microbunching and beam manipulation

Contribution ID: 22

Type: **not specified**

## **Experience with magnetic linearization, longitudinal jitters and outlook to HB-SASE**

*Thursday, October 5, 2023 8:30 AM (25 minutes)*

**Presenter:** THORIN, Sara (MAX-IV)

**Session Classification:** Magnetic lattices



Contribution ID: 23

Type: **not specified**

## **Coherent synchrotron radiation and microbunching instability at FERMI**

*Thursday, October 5, 2023 8:55 AM (25 minutes)*

**Presenter:** BRYNES, Alexander Darius (Elettra Sincrotrone Trieste)

**Session Classification:** Magnetic lattices

Contribution ID: 24

Type: **not specified**

## High order design of magnetic compressors

*Thursday, October 5, 2023 10:20 AM (25 minutes)*

**Presenter:** WILLIAMS, Peter (STFC)

**Session Classification:** Magnetic lattices

Contribution ID: 25

Type: **not specified**

## **Microbunching instability in multi-bend lines**

*Thursday, October 5, 2023 10:45 AM (25 minutes)*

**Presenter:** TBD

**Session Classification:** Magnetic lattices

Contribution ID: 26

Type: **not specified**

## **Microbunching gain and beam shaping with velocity bunching vs. magnetic compression**

*Thursday, October 5, 2023 11:10 AM (25 minutes)*

**Presenter:** GIRIBONO, Anna (INFN-LNF)

**Session Classification:** Magnetic lattices

Contribution ID: 27

Type: **not specified**

## **Laser heater for a multi-stage compressor superconducting FEL driver**

*Wednesday, October 4, 2023 11:45 AM (25 minutes)*

**Presenter:** AMSTUTZ, Philipp (DESY)

**Session Classification:** On the true origin of microbunching

Contribution ID: 29

Type: **not specified**

## **Round table:definition of the LEDS proposal**

**Session Classification:** LEDS proposal for LEAPS

Contribution ID: **30**

Type: **not specified**

## **Self-locked time-resolved measurements with a passive streaker**

*Wednesday, October 4, 2023 3:35 PM (25 minutes)*

**Presenter:** MALYZHENKOV, Alexander (CERN)

**Session Classification:** Diagnostics of microbunching and beam manipulation