### 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