## 11th Workshop on Longitudinal Electron Bunch Diagnostics







## Report of Contributions

Contribution ID: 30 Type: not specified

### Welcome and opening remarks

Contribution ID: 31 Type: not specified

### Welcome - organizational aspects

Wednesday 29 June 2022 09:00 (15 minutes)

Presenter: BIELAWSKI, Serge

Session Classification: Talk session

Contribution ID: 32 Type: not specified

### Presentation of the PhLAM laboratory

Wednesday 29 June 2022 09:15 (15 minutes)

**Presenter:** Prof. QUIQUEMPOIS, Yves (PhLAM)

Session Classification: Talk session

Contribution ID: 33 Type: not specified

## Welcome and opening remarks

**Session Classification:** \*

Talk: Beam instrumentations and · · ·

Contribution ID: 34 Type: not specified

## Talk: Beam instrumentations and diagnostics, current and future technologies

Wednesday 29 June 2022 14:00 (30 minutes)

**Presenter:** Dr CASELLE, Michele (KIT - Karlsruhe Institute of Technology (DE))

Contribution ID: 35 Type: not specified

## Joint working group (plenary): Electronics needs in diagnostics

Wednesday 29 June 2022 14:30 (1 hour)

**Presenter:** Dr CASELLE, Michele (KIT - Karlsruhe Institute of Technology (DE))

Contribution ID: 36 Type: not specified

#### Talk: laser heater

Wednesday 29 June 2022 17:45 (30 minutes)

Talk: laser heater

Carsten Mai and Christopher Gerth

**Presenters:** MAI, Carsten (TU Dortmund University); Dr GERTH, Christopher (Deutsches Elektronen-Synchrotron DESY)

Contribution ID: 37 Type: not specified

#### Triple frequency comb generation in optical fibers

Thursday 30 June 2022 08:50 (30 minutes)

Presenter: Prof. MUSSOT, Arnaud (PhLAM)

11th Workshop · · · / Report of Contributions

Contribution ID: 38 Type: not specified

### Talk: X-ray photon diagnostics

Thursday 30 June 2022 09:40 (30 minutes)

Talk: X-ray photon diagnostics

Title to be confirmed

Presenter: LIU, Jia

Contribution ID: 39 Type: not specified

#### **Discussion: next collaborations**

Friday 1 July 2022 10:00 (45 minutes)

Discussion: next collaborations

Contribution ID: 40 Type: not specified

#### **FLASH and EuXFEL**

Wednesday 29 June 2022 09:30 (20 minutes)

**Presenter:** Dr STEFFEN, Bernd

Session Classification: Talk session

**FERMI** 

Contribution ID: 41 Type: not specified

#### **FERMI**

Wednesday 29 June 2022 09:50 (20 minutes)

**Author:** Dr SPAMPINATI, Simone

**Presenter:** Dr SPAMPINATI, Simone

Session Classification: Talk session

#### Contribution ID: 42 Type: not specified

#### **PSI**

Wednesday 29 June 2022 10:10 (20 minutes)

Author: ORLANDI, Gian Luca (Paul Scherrer Institut)

Presenter: ORLANDI, Gian Luca (Paul Scherrer Institut)

Session Classification: Talk session

DELTA

Contribution ID: 43 Type: not specified

#### **DELTA**

Wednesday 29 June 2022 11:00 (20 minutes)

Carsten or Vivek - To be confirmed

**Presenter:** VIJAYAN, Vivek (TU Dortmund)

Session Classification: Talk session

Contribution ID: 44 Type: **not specified** 

#### **KIT**

Wednesday 29 June 2022 11:20 (20 minutes)

to be confirmed

**Presenter:** Dr FUNKNER, Stefan (KIT)

Session Classification: Talk session

Contribution ID: 45 Type: not specified

### PhLAM activities in longitudinal diagnostics

Wednesday 29 June 2022 11:40 (20 minutes)

**Presenter:** BIELAWSKI, Serge

Session Classification: Talk session

Talk: Longitudinal feedbacks for  $\cdots$ 

Contribution ID: 46 Type: not specified

### Talk: Longitudinal feedbacks for FELs

Thursday 30 June 2022 16:30 (30 minutes)

(Precise title to be confirmed)

**Presenter:** CZWALINNA, Marie Kristin (Deutsches Elektronen-Synchrotron)

Contribution ID: 47 Type: **not specified** 

### Brainstorming for new topics/ideas/collaborations

Thursday 30 June 2022 14:30 (30 minutes)

11th Workshop  $\cdots$  / Report of Contributions

WG2

Contribution ID: 48 Type: not specified

WG2

Session Classification: Working groups

Contribution ID: 49

Type: not specified

## Diagnostics in the time domain (EO, streaking, etc.) - Chairs: Bernd Steffen and Serge Bielawski

Thursday 30 June 2022 10:30 (2 hours)

Including, but not limited to:

- \* Laser-based diagnostics:
- Electro-optic detection of electric fields
- X-ray-induced transient reflectivity,
- optical transposition
- etc.
- \* Diagnostics based on electron bunch deflection:
- RF-based transverse cavities
- THz electric field-induced deflection (split-ring resonators, etc.)
- etc

Location to be decided:

- CERLA
- or P5-bis building, Room 172 (1st floor)
- or P5-bis building, Salle du conseil room (2nd floor)

Presenters: STEFFEN, Bernd; Prof. BIELAWSKI, Serge

**Session Classification:** Working groups

Contribution ID: 50 Type: not specified

## Diagnostics in the spectral domain - Chair: Niels Lockmann

Thursday 30 June 2022 10:30 (2 hours)

#### Including but not limited to:

- THz/IR spectrometer-based diagnostics of short electron bunches (e.g., compression monitors)
- Diagostics based on arrays of THz detectors
- etc

#### Location to be decided:

- CERLA
- or P5-bis building, Room 172 (1st floor)
- or P5-bis building, Salle du conseil room (2nd floor)

Presenter: LOCKMANN, Nils Maris

Session Classification: Working groups

Contribution ID: 51 Type: not specified

## Fast electronics for detectors and data acquisition - Chair: Michele Caselle

Thursday 30 June 2022 10:30 (2 hours)

Location to be decided:

- CERLA
- or P5-bis building, Room 172 (1st floor)
- or P5-bis building, Salle du conseil room (2nd floor)

Presenter: Dr CASELLE, Michele (KIT - Karlsruhe Institute of Technology (DE))

Session Classification: Working groups

EOD for FLASH2020+

Contribution ID: 52 Type: not specified

#### **EOD for FLASH2020+**

Wednesday 29 June 2022 12:00 (3 minutes)

Presenter: STEFFEN, Bernd

Session Classification: Speed poster session

Contribution ID: 53

Type: not specified

## Single-Shot Time-Stretch Electro-Optic Sampling at the ELBE Coherent THz CDR Source

**Session Classification:** Speed poster session

Contribution ID: 54 Type: not specified

## Diversity EO at FLASH 2020+: status of the table-top prototype

Wednesday 29 June 2022 12:03 (3 minutes)

Presenter: DEMAZEUX, Quentin

Session Classification: Speed poster session

Contribution ID: 55 Type: not specified

# Electro-optical near-field bunch profile monitor concept for long bunches and high bunch charge at FCC-ee

Wednesday 29 June 2022 12:21 (5 minutes)

Presenter: REISSIG, Micha

Session Classification: Speed poster session

Contribution ID: 56 Type: not specified

## Complete phase space reconstruction from ultra-fast longitudinal bunch profile measurements

Wednesday 29 June 2022 12:06 (3 minutes)

Presenter: FUNKNER, Stefan (KIT)

Session Classification: Speed poster session

Contribution ID: 57 Type: not specified

## Fermi recent advances: IR spectrometer for microbunching and EOS2

Wednesday 29 June 2022 15:55 (6 minutes)

**Presenter:** VERONESE, marco (Elettra Sincrotorne Trieste SCpA)

Session Classification: Speed poster session

Contribution ID: 58 Type: not specified

## Temporal diagnostics of X-ray free-electron laser pulses at MHz rates

Wednesday 29 June 2022 12:26 (3 minutes)

Presenter: LIU, Jia

Session Classification: Speed poster session

Contribution ID: 59 Type: not specified

## Single-shot detection of THz waveforms using 1550 nm chirped pulses at the teraFERMI beamline

Wednesday 29 June 2022 12:09 (3 minutes)

Presenter: ROUSSEL, Eleonore

Session Classification: Speed poster session

Contribution ID: 60 Type: not specified

## Single-Shot Time-Stretch Electro-Optic Sampling at the ELBE Coherent THz CDR Source

Wednesday 29 June 2022 12:12 (3 minutes)

**Presenter:** HANOUN, Christelle

Session Classification: Speed poster session

Contribution ID: 61 Type: not specified

## Time-stretch EO using low bandwidth ADCs and 1550 nm lasers: first tests at SOLEIL

Wednesday 29 June 2022 12:15 (3 minutes)

**Presenter:** HANOUN, Christelle

Session Classification: Speed poster session

Contribution ID: **62** Type: **not specified** 

## Terahertz Sampling Rates With Photonic Time-Stretch for Electron Beam Diagnostics

**Session Classification:** Speed poster session

Contribution ID: 63 Type: not specified

#### THESTRAL: A High Granularity Monolithic THz Pixel Detector

Wednesday 29 June 2022 15:36 (10 minutes)

Presenter: ELSENHANS, Alexander

Session Classification: Speed poster session

Contribution ID: 64 Type: not specified

## Coherent Radiation Diagnostics at EuXFEL and FLASH

Wednesday 29 June 2022 15:33 (3 minutes)

Presenter: LOCKMANN, Nils

Session Classification: Speed poster session

Contribution ID: 65 Type: not specified

# Bunch Length and Energy Characterization with the Synchrotron Radiation Monitor of the SwissFEL Bunch Compressor

Wednesday 29 June 2022 15:30 (3 minutes)

Presenter: ORLANDI, Gian Luca (Paul Scherrer Institut)

Session Classification: Speed poster session

Contribution ID: 66 Type: not specified

## Global Longitudinal Beam-based Feedbacks with Distributed Detectors

Wednesday 29 June 2022 15:49 (3 minutes)

**Presenter:** CZWALINNA, Marie Kristin (Deutsches Elektronen-Synchrotron)

Session Classification: Speed poster session

Contribution ID: 67 Type: not specified

## TWAC : THz wave accelerating cavity for compact accelerator

Wednesday 29 June 2022 15:52 (3 minutes)

TWAC : THz wave accelerating c  $\,\cdots$ 

**Presenter:** Dr MARTINET, Guillaume

Session Classification: Speed poster session

Contribution ID: 68 Type: not specified

## KINGFISHER: Fast Machine Learning Inference for Autonomous Accelerator Systems

Wednesday 29 June 2022 15:46 (3 minutes)

Presenter: SCOMPARIN, Luca

Session Classification: Speed poster session

Contribution ID: 69 Type: not specified

#### **Terahertz Sampling Rates With Photonic Time-Stretch for Electron Beam Diagnostics**

Wednesday 29 June 2022 12:18 (3 minutes)

Presenter: MANZHURA, Olena

Session Classification: Speed poster session

Contribution ID: 70 Type: not specified

#### Visit of the Fibertech facility

Friday 1 July 2022 14:30 (2 hours)

Note: an ID card will be required

Fibertech is a fiber fabrication facility, that is mainly operated by the photonics team of the PhLAM laboratory

https://fibertech.univ-lille.fr/en/

It is located on the campus, at the IRCICA institute: https://ircica.univ-lille.fr/

**Presenter:** TEAM, Fibertech (PhLAM, Lille university)

11th Workshop  $\cdots$  / Report of Contributions

INDICO test

Contribution ID: 71 Type: not specified

#### **INDICO** test

**Presenter:** AA\_TEST, aa\_test

**Session Classification:** Speed poster session

11th Workshop  $\cdots$  / Report of Contributions

INDICO test2

Contribution ID: 72 Type: not specified

#### **INDICO** test2

**Presenter:** AA\_TEST, aa\_test

**Session Classification:** Speed poster session