

Eurizon 2020+ workshop FEL linac driver and FEL physics applications



23 January 2024 – 09:15 to 18:50
European XFEL, European XFEL GmbH,
Holzkoppel 4, 22869 Schenefeld, Germany
XHO Building, Think Tank Room, 2nd floor



The EU funded project EURIZON is about European scientific and technical collaboration in the field of research infrastructures. Part of the project consists of a collaborative study on a 6 GeV Linac based on S-C band technology to serve as a Free-Electron Laser (FEL) driver and, potentially, as top-up injector for synchrotron X-ray storage rings. A workshop including FEL developers and possible users will be organized by, and held at the European XFEL, where the study will be disseminated. The workshop is organized to target not only experts, but also newcomers in the field of particle accelerators, FELs and scientific applications of FELs. Young scientists from Ukraine and Eastern Europe are welcome in particular. The subjects will include

- Introduction to linear electron accelerators and X-ray Free-Electron Lasers
- Results from the Eurizon 2020+ project (linac / FEL driver)
- Scientific Applications of FELs

Organisers: Gianluca Geloni
Sandra Kniehl

Contact: gianluca.geloni@xfel.eu
Contact: Sandra.kniehl@xfel.eu

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Tuesday, 23 January 2024

Session 1 Introduction			
09:00-09:15	Welcome and Workshop Presentation,	Gianluca Geloni	European XFEL
09:15-10:00	Introduction to Linear Particle Accelerators	Anna Giribono	INFN-LNF
10:00-10:30	<i>Coffee Break</i>		
10:30-11:15	Introduction to X-ray FELs and the European XFEL	Fabian Pannek	European XFEL
Session 2 Results from the Eurizon 2020+ investigations			
11:15-12:00	6 GeV Linac as FEL driver and storage ring injector	Anna Giribono	INFN-LNF
12:00-12:30	X-ray FEL pulse characteristics from the 6 GeV driver	Fabian Pannek	European XFEL
12:30-13:30	<i>Lunch</i>		
Session 3 Applications of X-Ray FELs – The European XFEL instruments			
13:30-14:10	Science at the SPB/SFX instrument	Chan Kim	European XFEL
14:10-14:50	Science at the FXE instrument	Mykola Biednov	European XFEL
14:50-15:30	Science at the MID instrument	Ulrike Boesenberg	European XFEL
15:30-16:10	Science at the HED instrument	Ulf Zastrau	European XFEL
16:10-16:40	<i>Coffee Break</i>		
16:40-17:20	Science at the SQS instrument	Tommaso Mazza	European XFEL
17:20-18:00	Science at the SCS instrument	Andreas Scherz	European XFEL
18:00-18:40	Science at the SXP instrument	Manuel Izquierdo	European XFEL
18:40-18:50	Wrap-up		