## FEL2024 - 41st International Free Electron Laser Conference



Contribution ID: 293 Contribution code: MOAI07

Type: Invited Oral Presentation

## **The European XFEL**

Monday 19 August 2024 10:10 (10 minutes)

has been in operation since 2017. It features a superconducting linear accelerator capable of achieving a maximum energy of 17.5 GeV. The accelerator can deliver up to 27,000 electron bunches per second, distributed into ten equidistant short bursts, each lasting 600 microseconds. It simultaneously serves three FEL undulators, covering photon energy ranges from 300 eV to 30 keV, with pulse energies in the millijoule range. In addition to standard SASE operation, the facility offers hard X-ray self-seeding, two-color operation, variable polarized soft X-rays, and ultra-short photon pulses down to the sub-femtosecond range.

Footnotes

**Funding Agency** 

Primary author: DECKING, Winfried (Deutsches Elektronen-Synchrotron)Presenter: DECKING, Winfried (Deutsches Elektronen-Synchrotron)Session Classification: First Lasing, New FEL projects and Facility Reports

Track Classification: New FEL projects and Facility Reports