



Contribution ID: 171 Contribution code: TUP171-THA

Type: **Poster Presentation**

## Measurements of slice parameters for EEHG optimization

*Tuesday 20 August 2024 20:40 (20 minutes)*

An accurate knowledge of the slice electron beam parameters such as energy spread and seed laser induced energy modulation is very critical for an optimal setting of the EEHG parameters and FEL optimization. In this work we report about a method that, based on a fitting of experimental parameters scans in coherent harmonic generation with numerical simulations or models, can provide accurate information of the electron beam properties. We present recent results obtained at FERMI FEL-1.

### Footnotes

### Funding Agency

**Authors:** SPEZZANI, Carlo (Elettra-Sincrotrone Trieste S.C.p.A.); ROUSSEL, Eléonore (Laboratoire de Physique des Lasers, Atomes et Molécules); ALLARIA, Enrico (Elettra-Sincrotrone Trieste S.C.p.A.); FERRARI, Eugenio (Deutsches Elektronen-Synchrotron)

**Presenter:** ALLARIA, Enrico (Elettra-Sincrotrone Trieste S.C.p.A.)

**Session Classification:** Poster session

**Track Classification:** Electron diagnostics, timing, synchronization & controls