



Contribution ID: 28 Contribution code: TUP64

Type: Contributed Poster

EEHG Seeding Scheme at SwissFEL ATHOS FEL

Tuesday, 23 August 2022 17:40 (20 minutes)

In order to improve the brightness and coherence of the soft x-ray FEL line of SwissFEL (Athos), components for an Echo Enabled Harmonic Generation (EEHG) scheme are currently in preparation. The first components have been installed to allow first ESASE operation test in Spring 2022. This first stage consists in a 10 mJ class seed laser, a U200 modulator with individual control of each half period and a four electromagnets dipole chicane ($R56 < 800 \text{ um}$). The large magnetic chicane and the second modulator are still in preparation for an installation by end 2022. This paper will give a technical description of the different systems as well as preliminary results of the commissioning with beam.

I have read and accept the Privacy Policy Statement

Yes

Primary authors: GANTER, Romain (Paul Scherrer Institut); TRISORIO, Alexandre (Paul Scherrer Institut); VICARIO, Carlo (Paul Scherrer Institut); PRAT, Eduard (Paul Scherrer Institut); CHRISTOPH, Kittel (Paul Scherrer Institut); AEPPLI, Gabriel (Paul Scherrer Institut); ARRELL, Christopher (Paul Scherrer Institut); BRAUN, Hans-Heinrich (Paul Scherrer Institut); CALVI, Marco (Paul Scherrer Institut); CAVALIERI, Adrian (Paul Scherrer Institut); DAX, Andreas (Paul Scherrer Institut); DIJKSTAL, Philipp (Paul Scherrer Institut); FERRARI, Eugenio (Paul Scherrer Institut); HILLER, Nicole (Paul Scherrer Institut); HUPPERT, Martin (Paul Scherrer Institut); JURANIC, Pavle (Paul Scherrer Institut); LIANG, Xiaoyang (Paul Scherrer Institute); NEPPL, Stefan (Paul Scherrer Institut); PRAT, Eduard (Paul Scherrer Institut); REICHE, Sven (Paul Scherrer Institut); VOULOT, Didier (Paul Scherrer Institut)

Presenters: GANTER, Romain (Paul Scherrer Institut); TRISORIO, Alexandre (Paul Scherrer Institut); VICARIO, Carlo (Paul Scherrer Institut); PRAT, Eduard (Paul Scherrer Institut); CHRISTOPH, Kittel (Paul Scherrer Institut); AEPPLI, Gabriel (Paul Scherrer Institut); ARRELL, Christopher (Paul Scherrer Institut); BRAUN, Hans-Heinrich (Paul Scherrer Institut); CALVI, Marco (Paul Scherrer Institut); CAVALIERI, Adrian (Paul Scherrer Institut); DAX, Andreas (Paul Scherrer Institut); DIJKSTAL, Philipp (Paul Scherrer Institut); FERRARI, Eugenio (Paul Scherrer Institut); HILLER, Nicole (Paul Scherrer Institut); HUPPERT, Martin (Paul Scherrer Institut); JURANIC, Pavle (Paul Scherrer Institut); LIANG, Xiaoyang (Paul Scherrer Institute); NEPPL, Stefan (Paul Scherrer Institut); PRAT, Eduard (Paul Scherrer Institut); REICHE, Sven (Paul Scherrer Institut); VOULOT, Didier (Paul Scherrer Institut)

Session Classification: Tuesday posters**Track Classification:** Seeded FEL