



Contribution ID: 1779 Contribution code: MOPC37

Type: **Poster Presentation**

Mechanical analysis and design for the LCLS-II-HE soft X-ray undulator reconfiguration

Monday, 20 May 2024 16:00 (2 hours)

As a part of the High Energy upgrade to the Linac Coherent Light Source II at SLAC, LBNL is responsible for the update of the undulators of the Soft X-Ray (SXR) line. In order to span the required photon energy range, the SXR undulators require longer magnetic period. This increased magnetic period leads to higher magnetic force, requiring updates to certain elements of the design. In contrast, many elements can safely remain unchanged. This presentation details the updates and analyses performed to support the adaptation to HE-SXR, as well as pre-production undulator results.

Footnotes

Funding Agency

Paper preparation format

Word

Region represented

North America

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Session Classification: Monday Poster Session

Track Classification: MC1: Colliders and other Particle and Nuclear and Physics Accelerators: MC1.A08 Linear Accelerators