



Contribution ID: 72 Contribution code: WEO12

Type: Contributed Oral Presentation

Lessons learned during removal and installation period of the Advanced Photon Source

Wednesday 17 September 2025 15:40 (20 minutes)

The Advanced Photon Source, a fourth generation light source located at Argonne National Laboratory, recently went through an upgrade where almost the entire storage ring and all the front ends were removed and either replaced or refurbished. The shutdown began in April of 2023 where all 200 girders and associated hardware were removed by the end of June. The first upgraded girder was installed in July 2024, hardware installation was completed by February 2024, first beam taken in April 2024 and first x-rays taken in June 2024. The \$815M project has created a 200mA beam with a world record emittance of 33 pm rad that is 500 times brighter than the old machine. The lessons learned during the Removal and Installation of the storage ring and front ends will be presented.

Footnotes

Funding Agency

Work supported by the U.S. DOE Office of Science - Basic Energy Sciences, Under Contract No. DE-AC02-06CH11357

Author: ERDMANN, Mark (Argonne National Laboratory)

Presenter: ERDMANN, Mark (Argonne National Laboratory)

Session Classification: Accelerators Session 2

Track Classification: ACCELERATORS: Storage Rings