



Contribution ID: 1905 Contribution code: WEPG01

Type: **Poster Presentation**

Beam position monitoring system and beam commissioning at APS-U Storage ring

Wednesday, 22 May 2024 16:00 (2 hours)

Advanced Photon Source Upgrade (APS-U) storage ring, currently in installation and testing, is set for beam commissioning in early 2024. In the APS-U storage ring, there are 560 Beam Position Monitor (BPM) pickups, each equipped with high resolution electronics. This paper presents outcomes from pre-beam testing and beam commissioning of the APS-U BPM system. We discuss tailored features for advanced beam measurements, testing methodologies, challenges, and successful integration into the storage ring. Our findings demonstrate the robustness of the BPM system, emphasizing its crucial role in achieving the first beam and optimizing the APS-U storage ring's performance.

Footnotes

Funding Agency

This research used resources of the Advanced Photon Source, operated for the U.S. Department of Energy Office of Science by Argonne National Laboratory under Contract No. DE-AC02-06CH11357.

Paper preparation format

Word

Region represented

North America

Primary author: CHENG, Weixing (Argonne National Laboratory)

Co-authors: BRILL, Adam (Argonne National Laboratory); Dr SERENO, Nicholas (Argonne National Laboratory); KALLAKURI, Pavana (Argonne National Laboratory); SUN, Xiang (Argonne National Laboratory)

Presenter: CHENG, Weixing (Argonne National Laboratory)

Session Classification: Wednesday Poster Session

Track Classification: MC6: Beam Instrumentation, Controls, Feedback, and Operational Aspects: MC6.T03 Beam Diagnostics and Instrumentation