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APS upgrade - beamline engineering overview

Tuesday 16 September 2025 13:00 (20 minutes)

The Advanced Photon Source Upgrade (APSU) has transformed the APS into a 4th generation light source. The new 6 GeV, 200 mA multi-bend achromat (MBA) storage ring, along with injector improvements and new front ends will provide an increased brightness and an orders-of-magnitude improvement in coherent flux over the current facility. To take advantage of these new capabilities, we have designed and constructed nine new "feature beamlines" and implemented numerous additional beamline enhancements, all while ensuring the compatibility of existing programs. This talk will present a comprehensive overview of the APSU beamline scope, focusing on successes, challenges, and lessons learned.

Footnotes

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