

Contribution ID: 1945 Contribution code: TUPR04 Type: Poster Presentation

Preserving, restoring and conditioning the RF cavities of the storage ring for the Advanced Photon Source upgrade

Tuesday, 21 May 2024 16:00 (2 hours)

The Advanced Photons Source (APS) storage ring (SR) underwent an upgrade to the multi-bend achromat (MBA) lattice recently. As part of the upgrade, four out of the sixteen Radio Frequency (RF) cavities were removed from the storage ring. The remaining twelve cavities were left in place during the entire upgrade process and restored to full operating power to support beam commissioning once the installation activities were completed. This paper provides details on the planning and preparations made to preserve the cavity integrity during the installation period, challenges faced while restoring the cavities and how the cavity power coupler beta values were determined.

Footnotes

Funding Agency

Work supported by U. S. Department of Energy, Office of Science, under Contract No. DE-AC02-06CH11357.

Paper preparation format

LaTeX

Region represented

North America

Primary author: GOEL, Aditya (Argonne National Laboratory)

Co-authors: NASSIRI, Ali (Argonne National Laboratory); POPOVIC, Branko (Argonne National Labora-

tory); WALDSCHMIDT, Geoff (Argonne National Laboratory)

Presenter: GOEL, Aditya (Argonne National Laboratory)

Session Classification: Tuesday Poster Session

Track Classification: MC7: Accelerator Technology and Sustainability: MC7.T06 Room Temperature

RF