Contribution ID: **633** Contribution code: **TEST005** Type: **Invited Oral Presentation**

PMQ radiation resistance testing at NSLS-II

Sunday 25 August 2024 16:00 (2 hours)

A new lattice for the NSLS-II upgrade is likely to use high strength (> 100 T/m) permanent magnet quadrupoles (PMQs). An ID beam exiting through these quadrupoles will place highly intense x-rays very close (˜ 1mm) to the permanent-magnet material. In these tests the PMQs will be placed in the IFE (Instrumentation Front End) front end to assess any degradation of their field strengths and field quality due to long term exposure to an ID beam. The IFE beamline was recently commissioned at NSLS-II and is dedicated to testing the mechanical properties of accelerator materials and components. The description of the source and experimental setup will be given.

Footnotes

Funding Agency

Author: WOOTTON, Kent (Argonne National Laboratory)

Presenter: WOOTTON, Kent (Argonne National Laboratory)

Session Classification: Student Poster Session

Track Classification: MC1: Beam Dynamics, Extreme Beams, Sources and Beam-Related Technologies: MC1.1 Beam Dynamics, beam simulations, beam transport