## NAPAC25 - North American Particle Accelerator Conference 2025



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Type: Poster Presentation

# Radiation Dose Simulations on Permanent Magnets for the CEBAF Energy Upgrade

The ongoing work related to the LDRD funded by JLab is investigating the effects of radiation on permanent magnet materials intended for use in the CEBAF energy upgrade. This effort combines experimental exposure of magnet samples to radiation rates within the accelerator with detailed simulation studies. Samples are positioned at various locations to capture a range of radiation environments, helping researchers assess how different doses influence magnetic performance over time. Simulations using BDSIM support the interpretation of measured results and extend predictions to the higher energy stages planned for CEBAF. This paper presents recent findings and outlines the progress made toward understanding the long-term behavior of these materials in high-radiation settings.

### Please consider my poster for contributed oral presentation

No

# Would you like to submit this poster in student poster session on Sunday (August 10th)

No

### Footnotes

### **Funding Agency**

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#### I have read and accept the Privacy Policy Statement

Yes

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