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Type: **Poster Presentation**

Failure of the superconducting circuit during RHIC Run 23

A failure of the RHIC superconducting circuit occurred at the end of Run 23 and led to an unplanned shutdown and extensive work to replace a damaged superconducting magnet. After an in-depth investigation, the failure was found to have started with an electrical short within a superconducting current lead. The short led to large spilling of current through auxiliary superconducting circuits with limited quench stabilization which resulted in a superconducting splice fusing out. This paper will describe our understanding of the series of events leading to the superconducting circuit damage, describe the repair work undertaken for the remaining RHIC runs and discuss some lessons learned in view of EIC operation.

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

I have read and accept the Privacy Policy Statement

Yes

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