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## **Automated evaluation of LHC proton losses during high-energy beam dumps for the Post-Mortem System**

*Monday, 8 May 2023 16:30 (2 hours)*

All high-energy beam dump events at the Large Hadron Collider (LHC) are analysed to verify correct functioning of the Machine Protection System and to allow early identification of potential issues. This includes the evaluation of particle losses before and during the beam dump event.

The paper describes a newly developed tool for the automated evaluation of beam losses during high energy proton dumps. It presents the approach to derive individual thresholds for more than 3600 Beam Loss Monitors based on historic data from Run 2 of the LHC (2015–2018) and reviews the performance of the tool.

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### **Footnotes**

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

Yes

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