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Type: **Poster**

A calibrated particle identification for Belle II

Thursday, 27 October 2022 11:00 (30 minutes)

The Belle II experiment has been taking data at the SuperKEKB collider since 2018. Particle identification is a key component of the reconstruction, and several detector upgrades from Belle to Belle II were designed to maintain performance with the higher background rates.

We present a method for a data-driven calibration that improves the overall particle identification performance and is resilient against imperfections in the calibration of individual detectors. Our framework also defines a “blame” metric that identifies the detectors with largest contributions to correctly and incorrectly assigned particle hypotheses.

Significance

References

Experiment context, if any

Belle II

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Session Classification: Poster session with coffee break

Track Classification: Track 2: Data Analysis - Algorithms and Tools