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## Improving the performance of dealing with non-ideal tracks within ATLAS reconstruction

*Tuesday 31 May 2022 10:30 (3 minutes)*

Within high transverse momentum jet cores, the separation between charged-particles is reduced to the order of the sensor granularity in the ATLAS tracking detectors, resulting in overlapping charged-particle measurements in the detector. This can degrade the efficiency of reconstructing charged-particle trajectories. This presentation identifies the issues within the current reconstruction algorithms that cause the reduction in reconstruction efficiency and explores an enhanced selection to recover some of the lost efficiency. The presentation will also discuss machine learning techniques to aid with recovering and removing bad quality track candidates.

### Consider for young scientist forum (Student or postdoc speaker)

No

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