## New Perspectives 2020 (2.0)



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## **Mu2e Event Reconstruction**

Monday, 24 August 2020 16:15 (15 minutes)

The Mu2e Experiment reconstructs particle events with helical trajectories in the detector region using raw measurements primarily from the straw tracker and crystal calorimeter. In Mu2e, there are currently two algorithms that are used for reconstruction: one which seeds helix searches using calorimeter data and one which only uses tracker data to search for helices. Both algorithms perform well in reconstructing signal events, and applying both algorithms improves detection efficiency. In reconstructing background events, the outputs from the two algorithms do not always agree; this talk will discuss improving these algorithms to increase understanding of cosmic ray backgrounds.

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