Contribution ID: 218

Type: Poster accelerator

The Pandora multi-algorithm approach to pattern recognition at ProtoDUNE

Pattern recognition is an essential aspect in the reconstruction of particle interactions in liquid argon time projection chamber experiments. The novel multi-algorithm approach implemented in the Pandora software [1,2], developed in Cambridge, uses many tens of algorithms to gradually build up an image of the event and has been used successfully for pattern recognition in a number of particle physics experiments. This poster outlines the algorithm flow used by Pandora for reconstructing and identifying beam particle interactions in a dense cosmic ray environment. A demonstration of the performance of this reconstruction approach will be presented for the ProtoDUNE experiment.

Authorship annotation

On behalf of the DUNE SC

Session and Location

Wednesday Session, Poster Wall #57 (Auditorium Gallery Right)

Poster included in proceedings:

yes

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Track Classification: Poster (not participating in poster prize competition)