

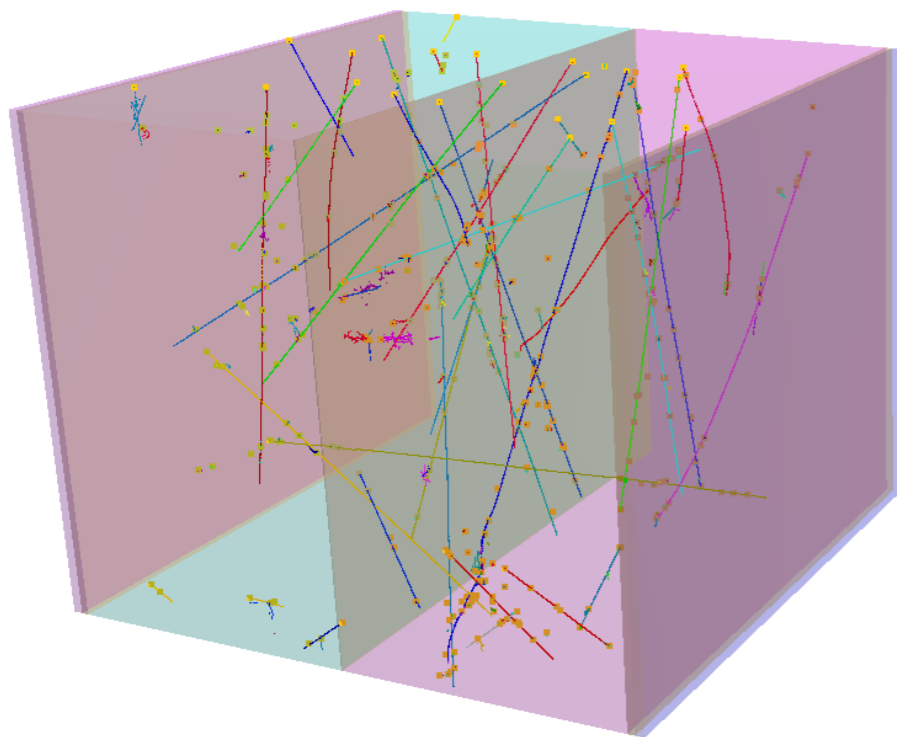


Advance Particle Flow

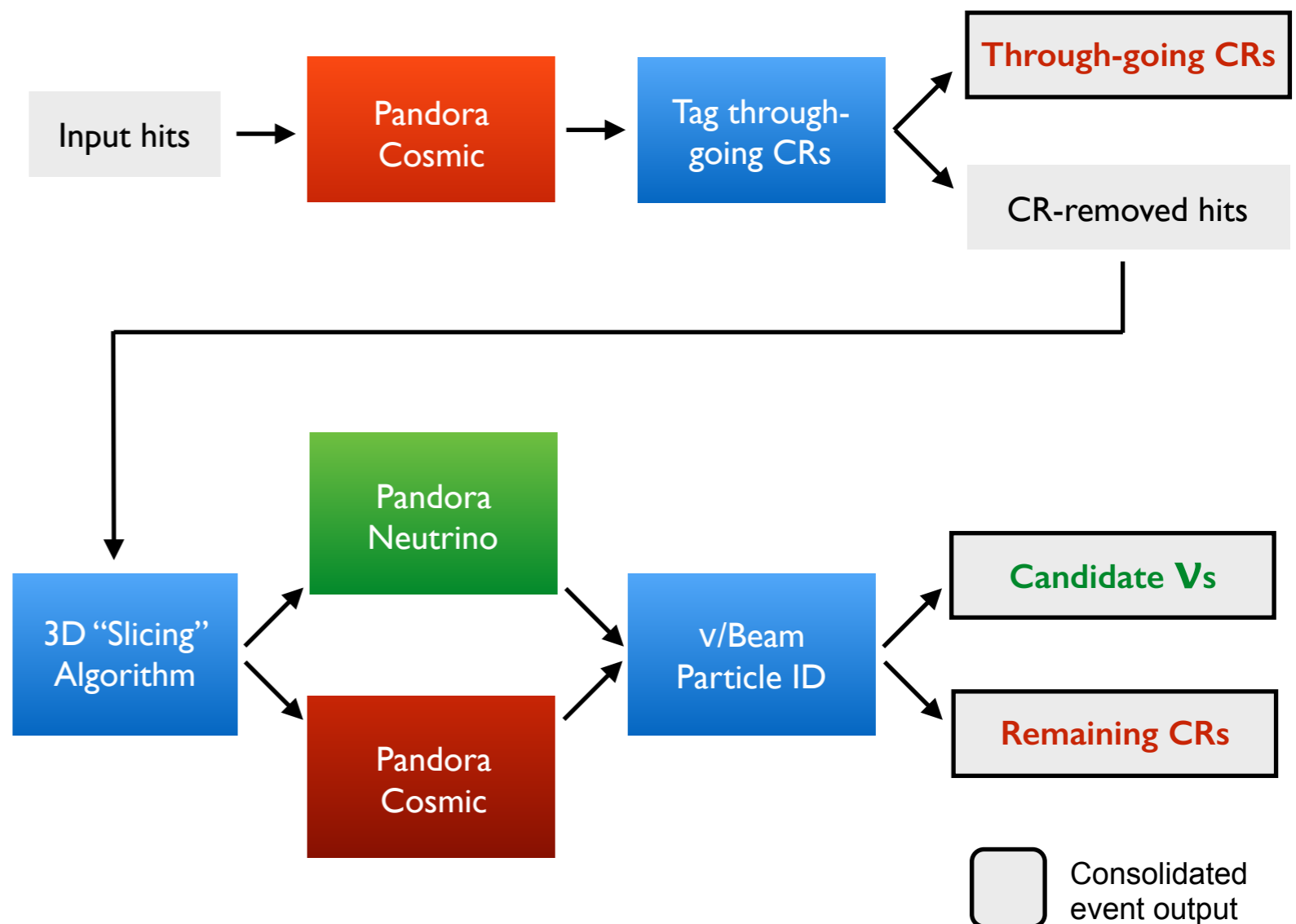
- **Development of advanced particle flow and pattern recognition algorithms in PandoraPFA**
- **Application to LHC, LC and neutrino experiments**

25th January 2018

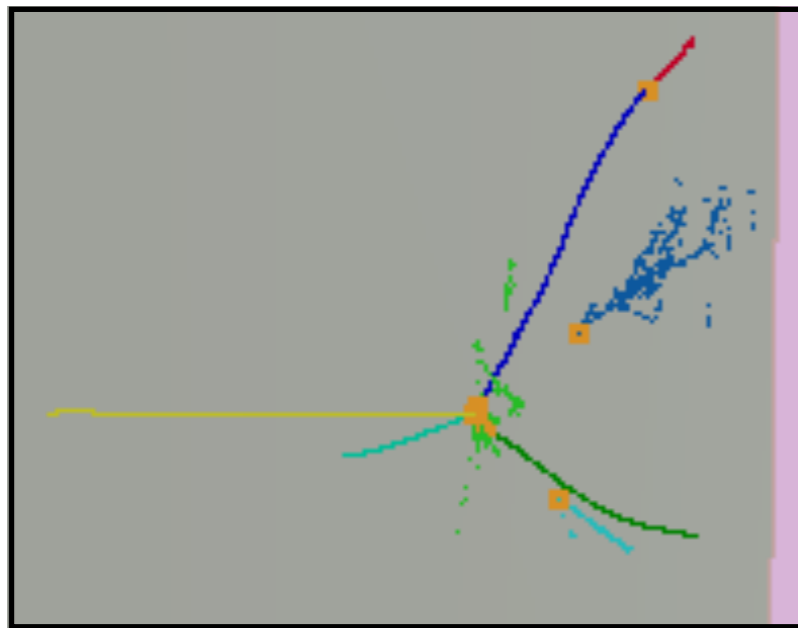
- * We are continuing to exploit the benefits of the new Pandora **consolidated reconstruction** for use in LArTPC experiments.
- * A beam particle ID tool has been developed for use at ProtoDUNE, which now means Pandora provides a **full reconstruction for ProtoDUNE**.



ProtoDUNE 7 GeV Beam + Cosmic Reconstructed Event

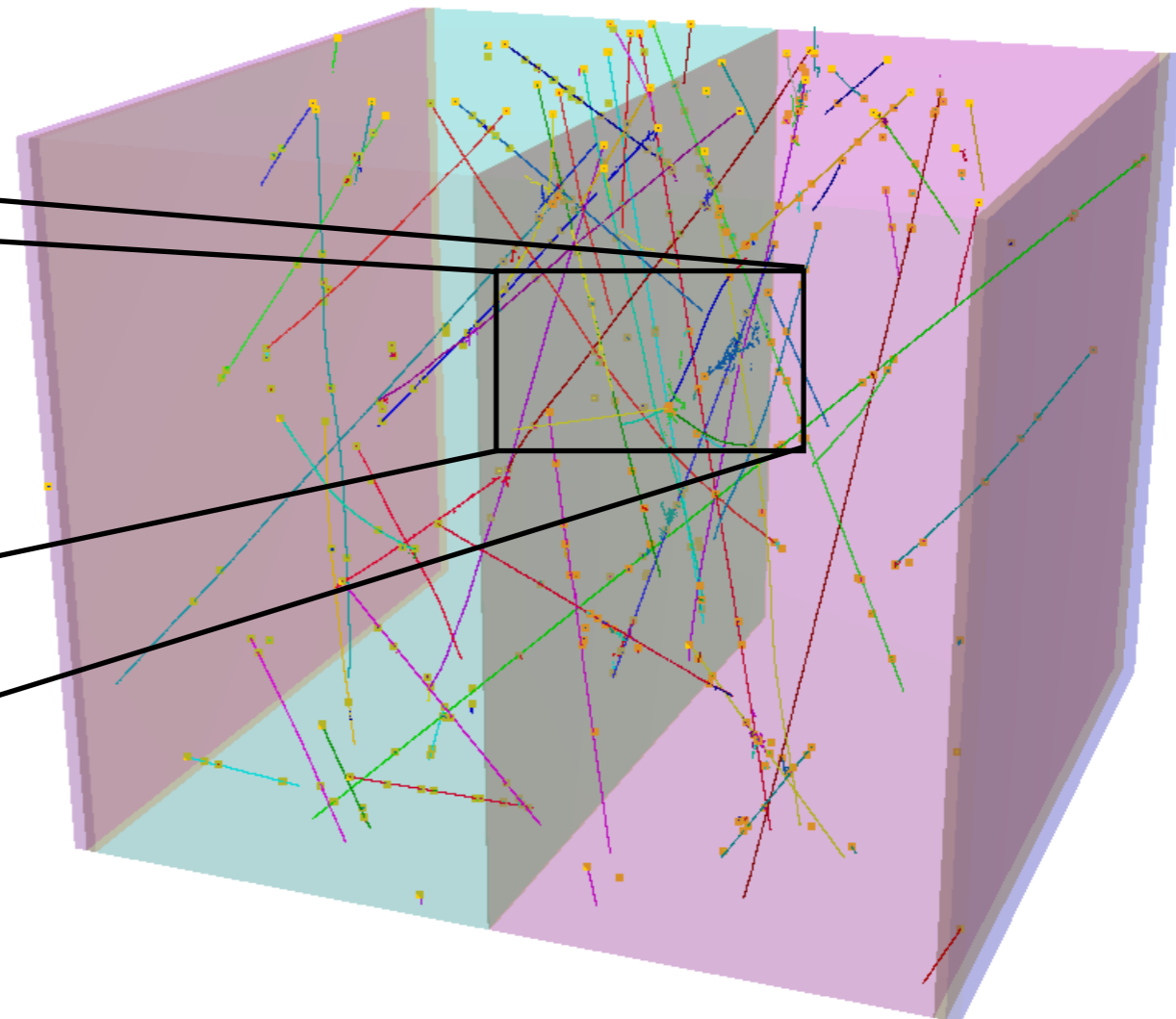


- * The beam particle ID tool was included in the latest Pandora software and was **used in the recent MCC10 sample production.**
- * We are now analysing both the high and low level reconstruction of these samples to further refine the LArTPC reconstruction.



**Beam Particle Correctly
Reconstructed and Tagged**

ProtoDUNE 5 GeV Beam + Cosmic
Reconstructed Events



**All Remaining Particles Correctly
Reconstructed and Tagged as Cosmic-Rays**

* Not this time. The latest update was presented in the previous AIDA meeting (December 2017).

* Not this time. The latest update was presented at LCWS and CHEF by Bo, Remi and Manqi (October 2017).

Thank you for your attention.
Question?