

Future far detector production plans

Dom, Chris

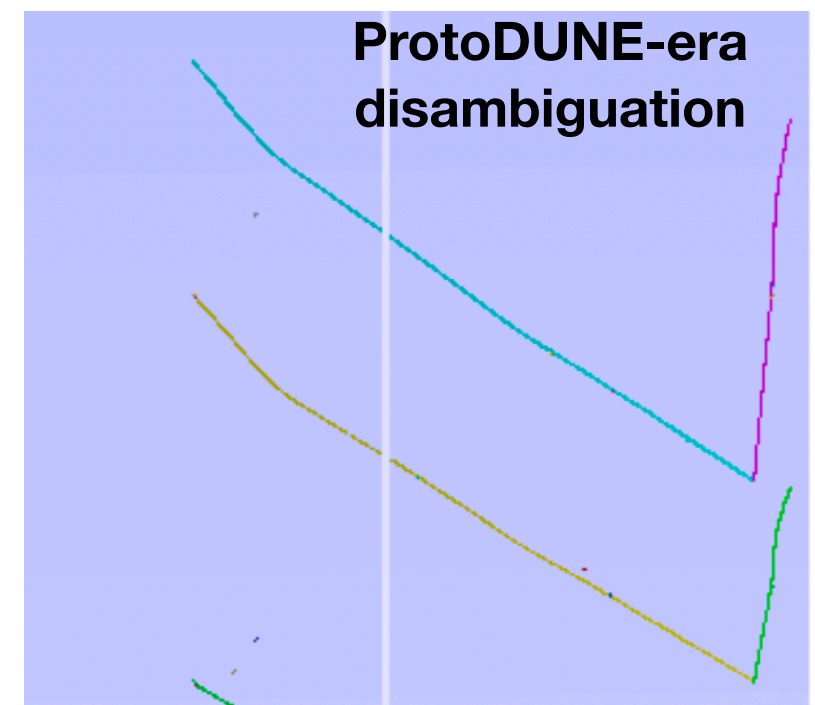
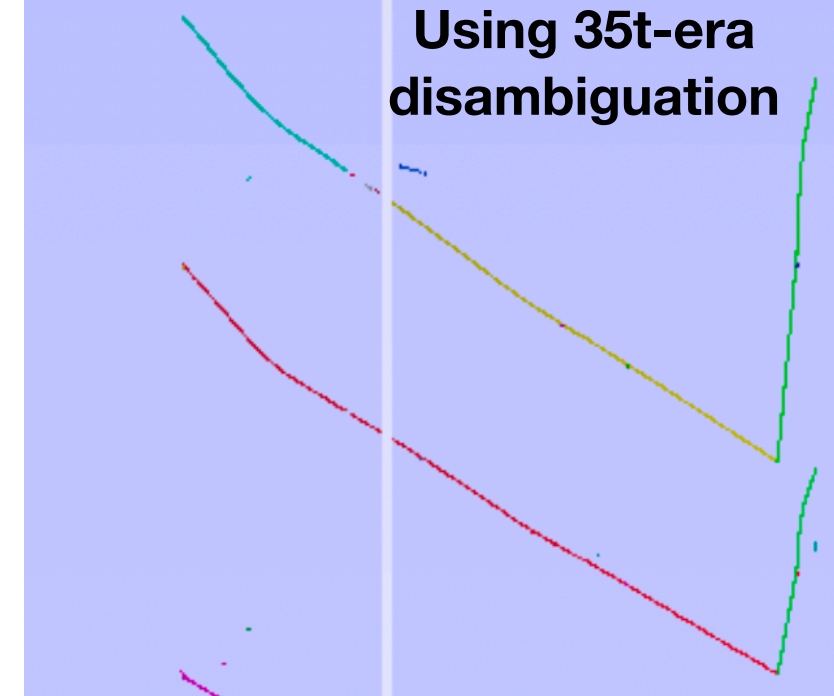
FD sim/reco meeting
21st June 2021

Future FD sim/reco MC preparation status

- Wirecell signal simulation (H. Yu): **In testing**. Many thanks to A. Wilkinson
- Wirecell signal processing (H. Yu): **Ongoing**. Possibly may need some upstream wirecell refactorisation
- Migration to new LArG4/wirecell (D. Brailsford): **Ongoing**. G4, detsim, reco, anatree files are complete. Most gen FCLs are still TODO
- DataPrep (D. Adams): **Ongoing**. Input files sent to David
- Pandora pat. rec. (various): **Ongoing**. See M. Brigida Brunetti's next talk
- Modernising other areas of the workflow (Volunteers!): **Ongoing**. See next slide

Workflow modernising example

- FD sim/reco workflow heavily tied to 35t
- As an example, the FD uses 35t-era triplet matching for hit disambiguation
- Top image show pandora event display of di-muon event in FD using 35t-era disambiguation
 - Ghost tracks near the anode gap in the induction views caused by disambiguation
- Bottom display is the same event using the ProtoDUNE-era disambiguation
 - Protodune disambiguation is Space Point Solver (C. Backhouse) + SP->Hit disambiguation (R. Sulej)
 - Ghost tracks near the anode plane are gone
- There are potentially (many) other places in the FD sim/reco workflow that need modernising



Expected software freeze date

- Development work is still ongoing
- The FD workflow needs checking over for more 35t-isms
- A software freeze for Friday 25th June is looking unlikely
- We will move the software freeze date to **Friday 23rd July**