

Adding a Monte Carlo Truth T0 module to larana

Karl Warburton with guidance from Tingjun Yang

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Assigning a T0 to a track

- ❖ Using anab::T0 data product a module to calculate Monte Carlo T0 for a reconstructed track was written in lbnecode.
- ❖ Takes reconstructed tracks as an input.
 - ❖ Loops through tracks and their associated hits.
 - ❖ Determines which SimIDE contributed most charge to the track.
 - ❖ Uses BackTracker to assign a Geant4 particle with the track.
- ❖ Gives an anab::T0 data product as output, with structure;
 - ❖ Geant4 T0 (ns), Identifier that used MCTruth to find T0, Geant4 trackID, track number.
- ❖ Microboone has asked for this to moved to larana so they can use this too.

Changes

- ❖ Tingjun has made a feature branch in larana;
 - ❖ feature / tjyang_t0finder
 - ❖ https://cdcvcs.fnal.gov/redmine/projects/larana/repository?utf8=✓&rev=feature%2Ftjyang_t0finder
 - ❖ Made a new directory “T0Finder” into which the module and fcl file currently residing in lbnecode have been copied.
 - ❖ Pending approval the module and fcl file will be removed from lbnecode repository.