





v_α CCQE/CC1π⁺ Selection Studies

Trevor Towstego v_e CCQE/CC1 π^+ Meeting September 5, 2019

MaCh3 Installation

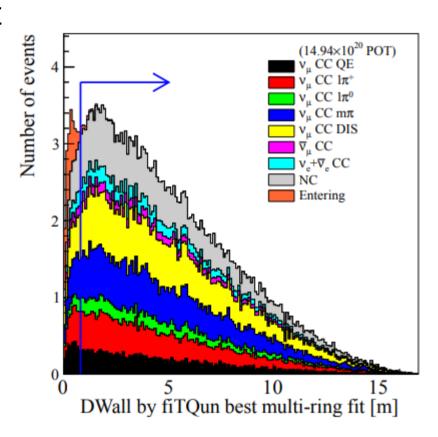
- Seem to have successfully installed Xiaoyue's MaCh3 branch
 - haven't actually run anything yet though
- Having an issue with irods installation
 - I believe this is needed to get MC and data files
 - In contact with Clarence Wret and Yoshida-san
 - Not entirely sure if I need this
- First steps:
 - BANFF and FSI/SI systematics
 - Should be more straightforward than detector systematics

Systematics Checks

- Working on plotting selection efficiencies versus some potentially problematic variables
 - CCQE sample: plot final state $1\pi^0$ rejection vs. true π^0 momentum
 - CC1 π [±] sample: plot final state 1e1 π ⁺ efficiency vs. true π ⁺ momentum (and true e momentum?)

FCFV Optimisation

- Would also like to finalise FCFV cut
 - Need to adjust DWall cut to account for entering backgrounds
 - Yoshida-san has done this can ask her where she got the MC files for these events
 - Plot DWall distribution of events at various points in selection (excluding FV cut)
 - Plot reconstructed energy resolution as a function of DWall and ToWall (for both rings
 - Make cuts on DWall and ToWall if needed



Backup