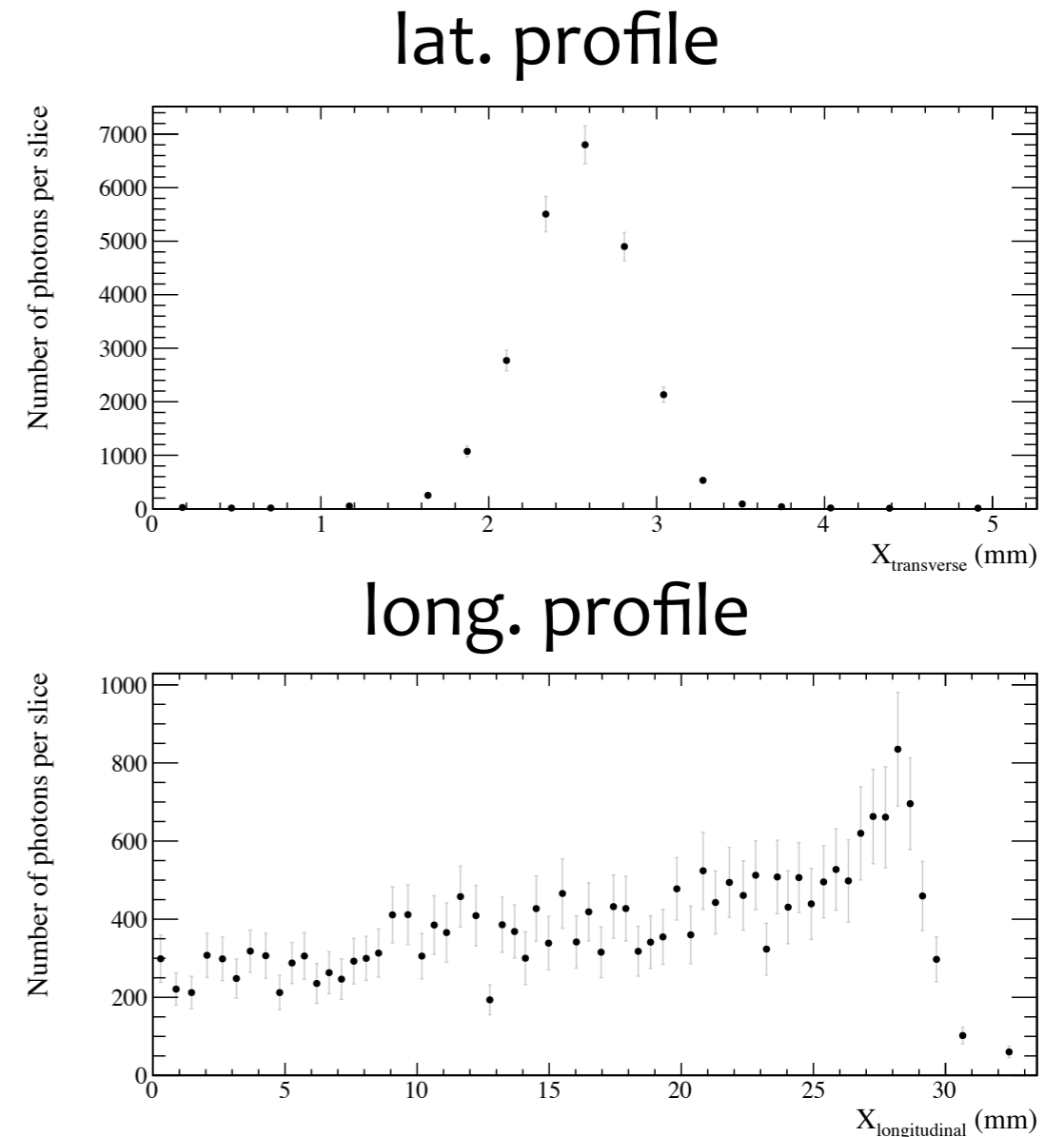
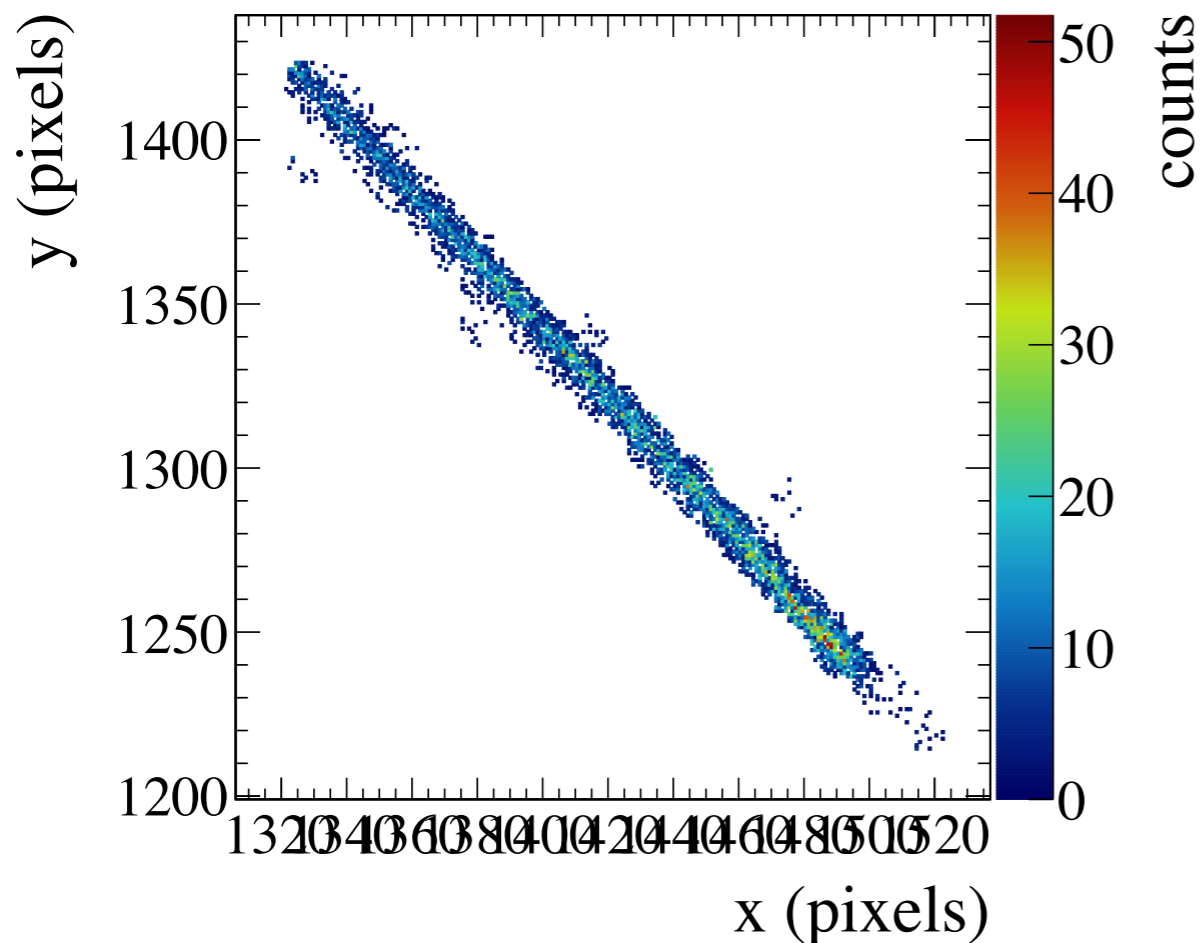


FNG

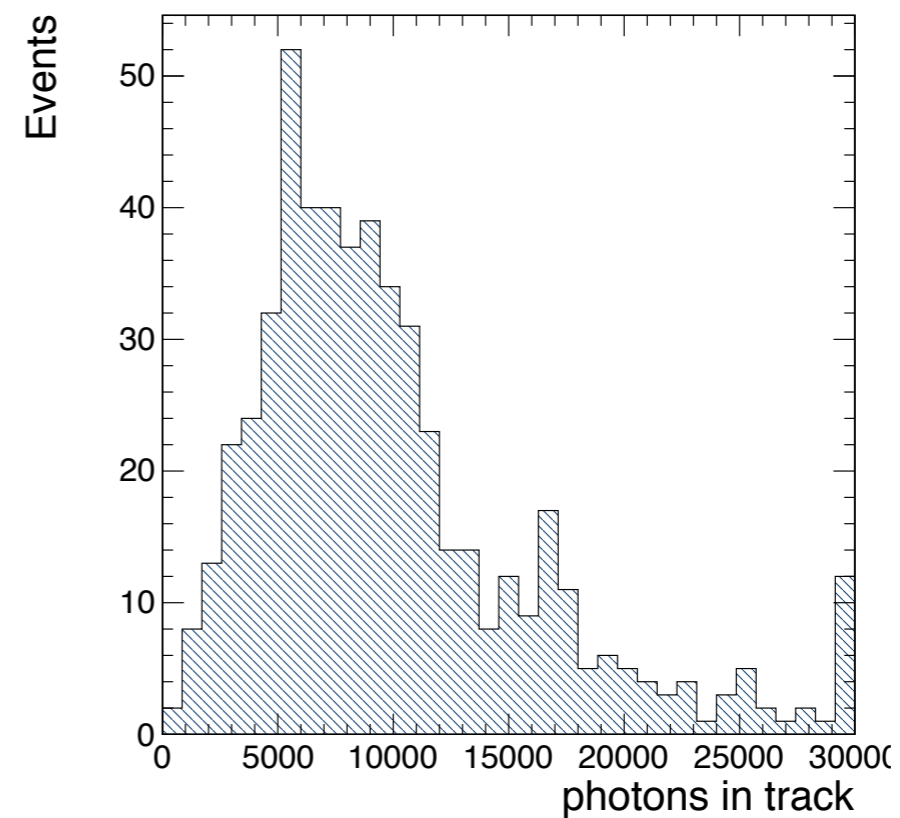
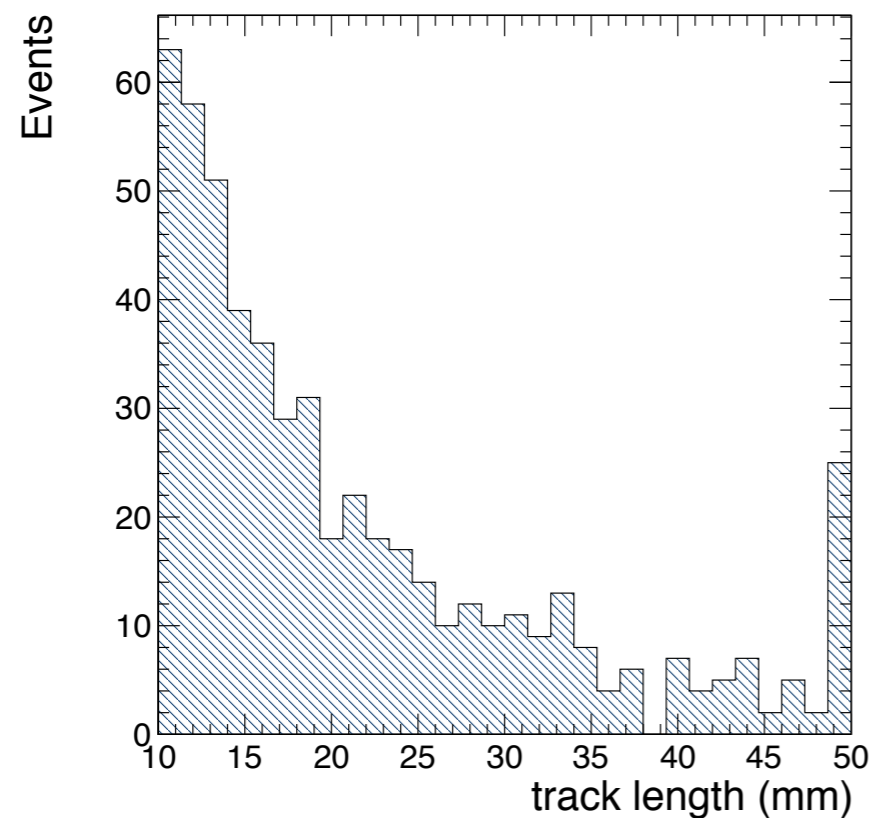
Emanuele

8 November 2018

- Changes wrt last time:
 - tuned more DBSCAN parameters to allow clustering very long tracks
 - in this way, I think we also get some cosmic rays
 - moved from average profiles ($\langle \text{photons} \rangle / \text{pixel}$ \rightarrow integral of photons / slice)

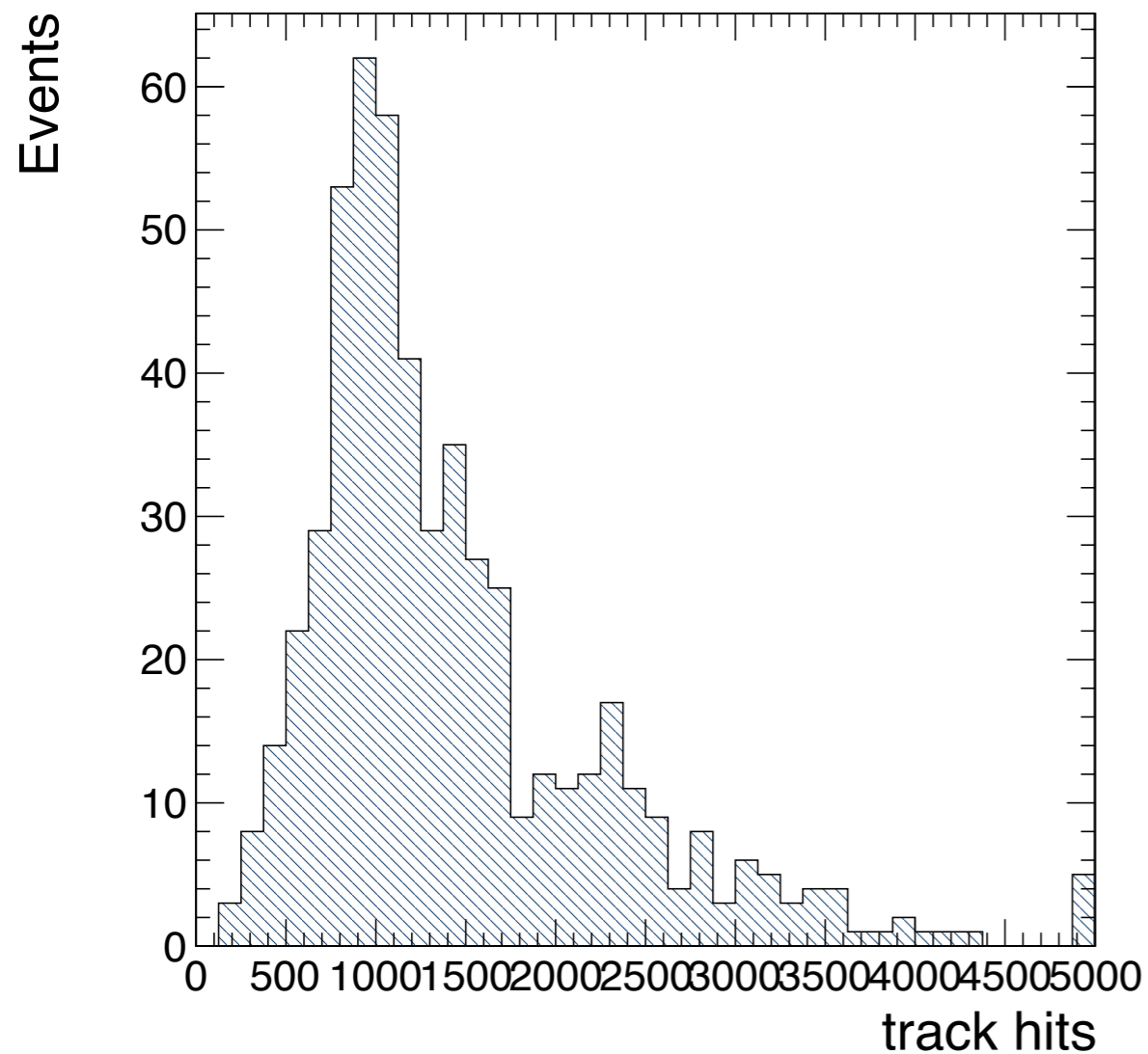


- For each good cluster (a.k.a. “track”) save:
 - integral (#photons along full track)
 - length and width
 - run a peak finder on the profile and save, for the highest peak:
 - amplitude, prominence (height wrt the ‘baseline’ -i.e. the average energy loss)
 - integral (aka “Amplitude” or “A” below)
 - full width @ half maximum
- track selection: $L > 1\text{cm}$, $Ax_{maj}/Ax_{min} > 2$ (reject sparks)

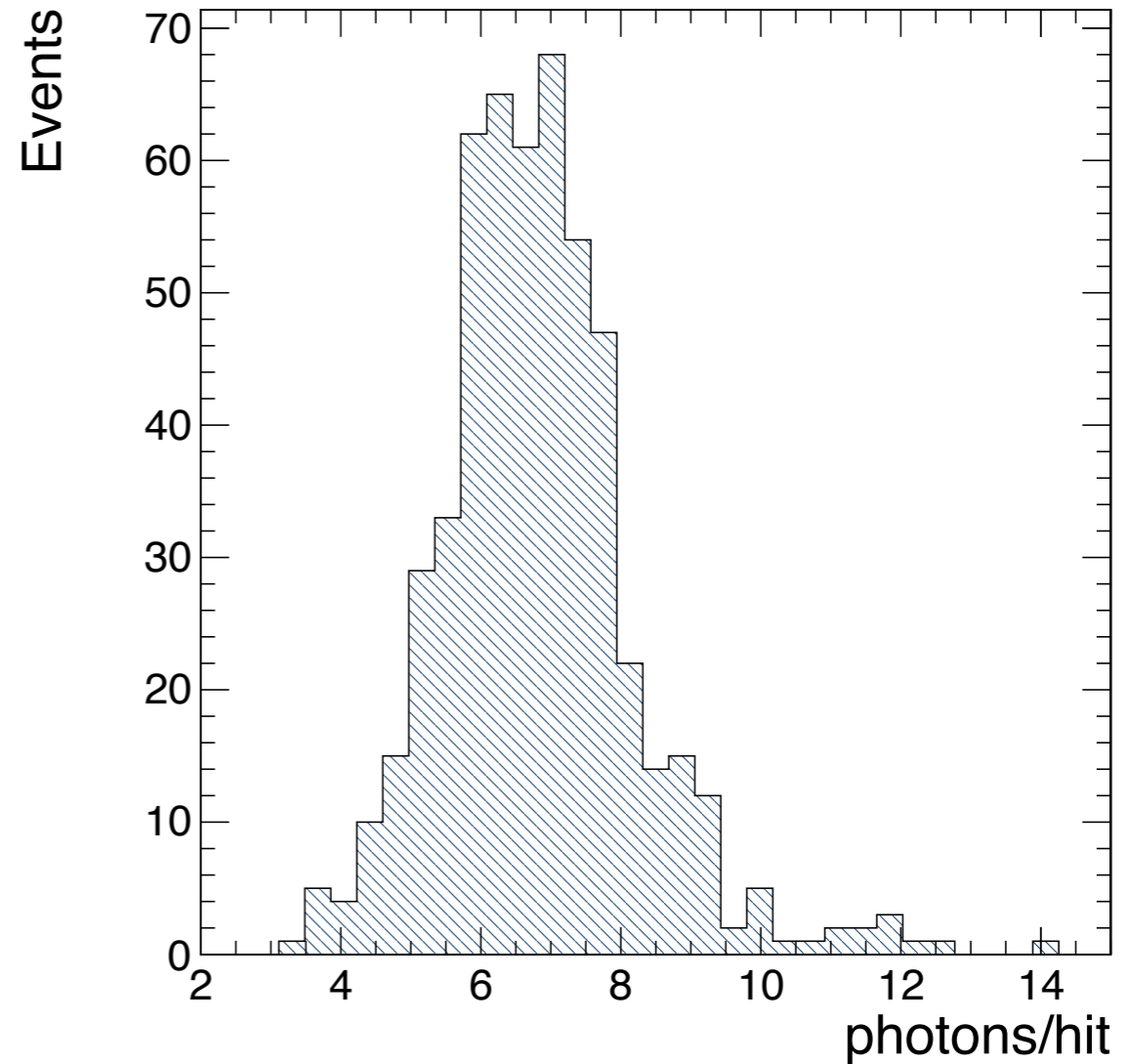


Track size / density

hits in track

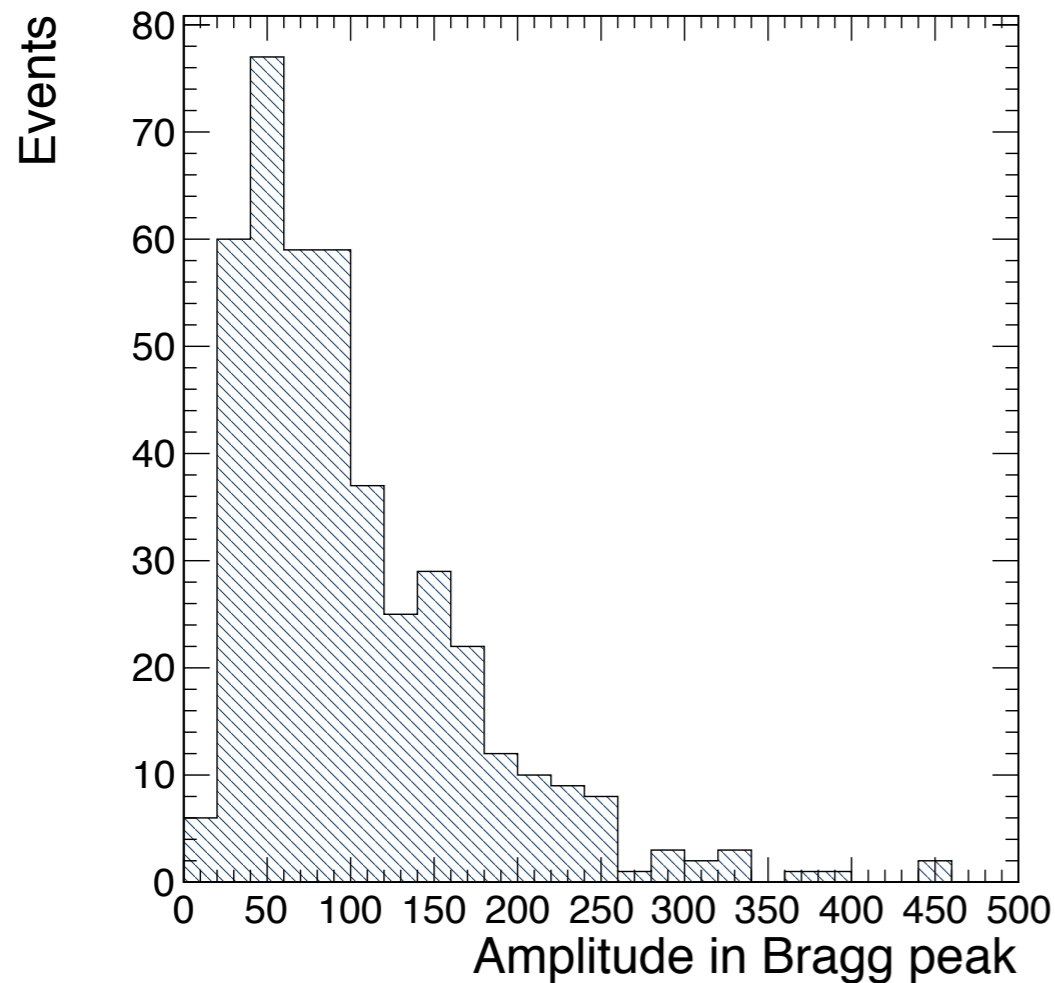


#photons / hit

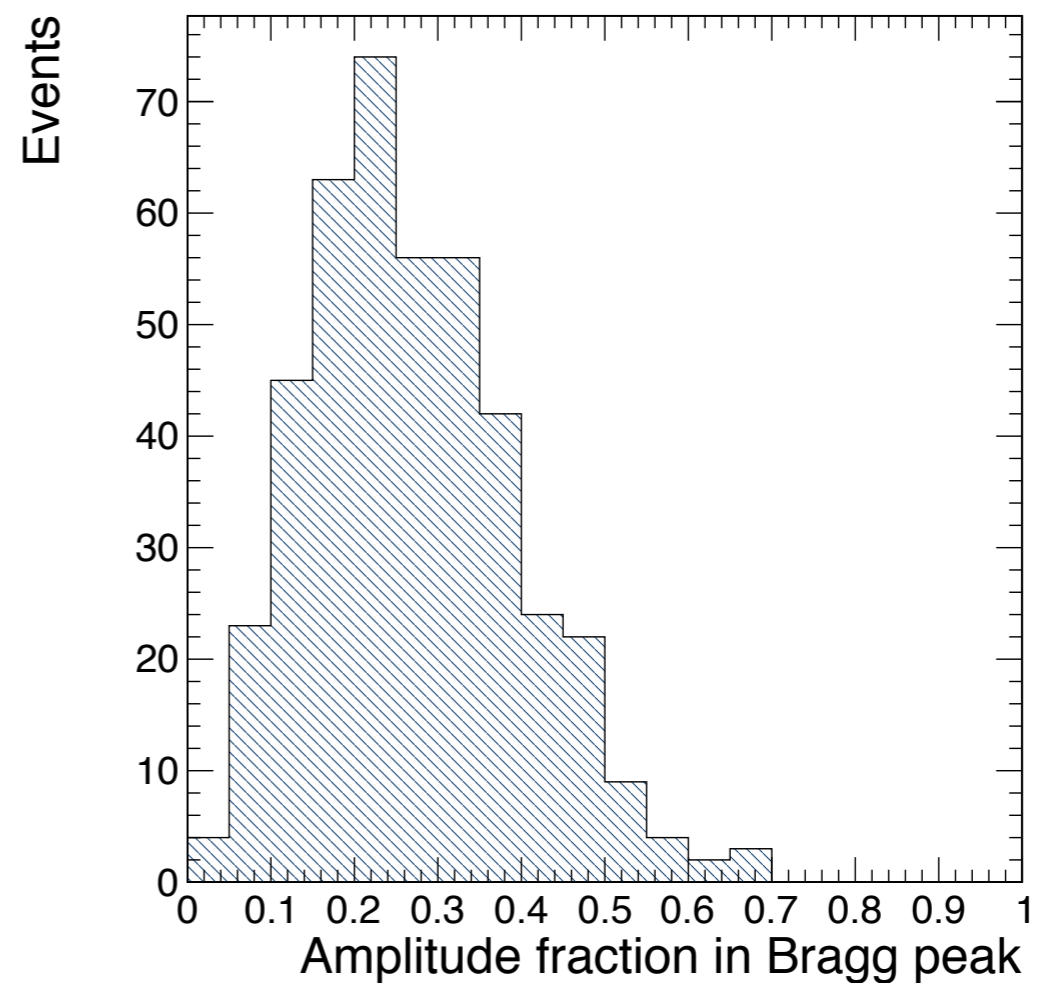


“Bragg peak” amplitude

- Constant energy in the Bragg peak? Boh, no...
 - seems more a faction of the total energy



A_{peak}



A_{peak}/A_{track}

correlations

