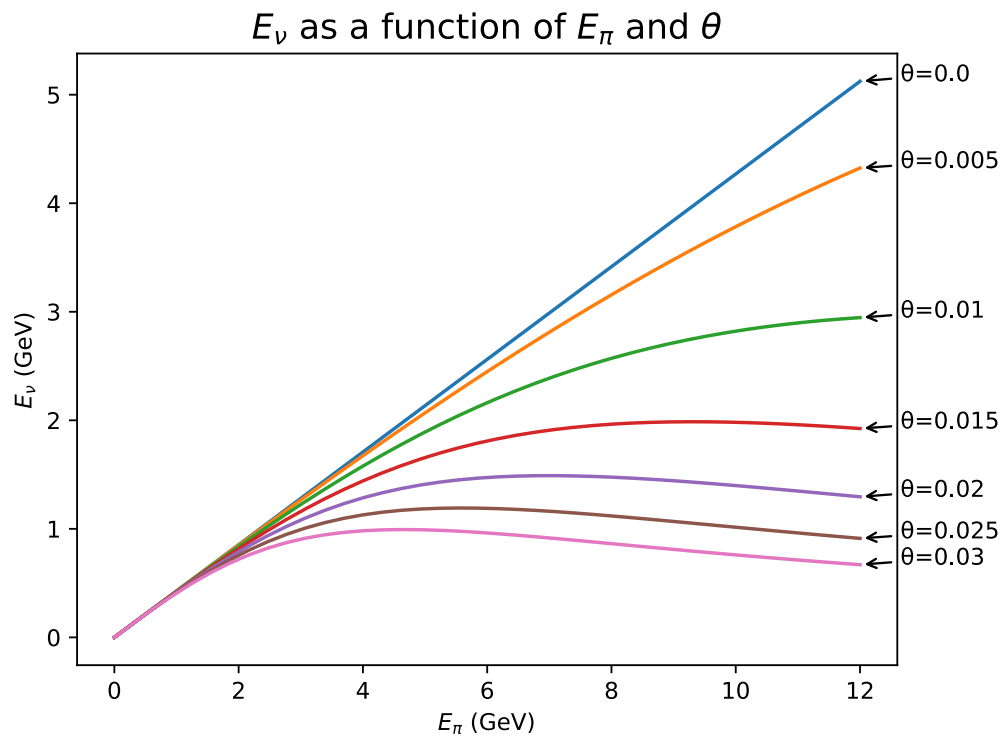
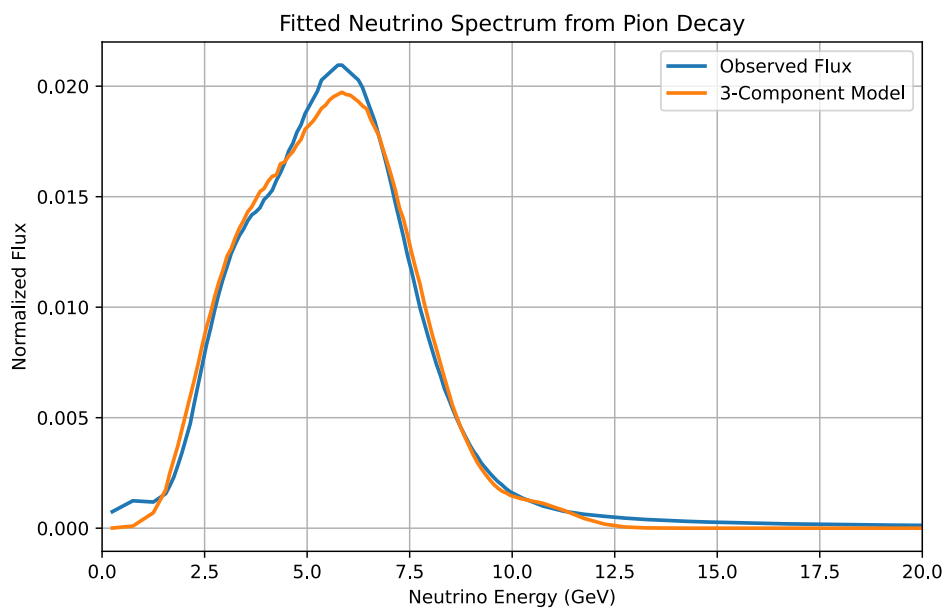


Recap

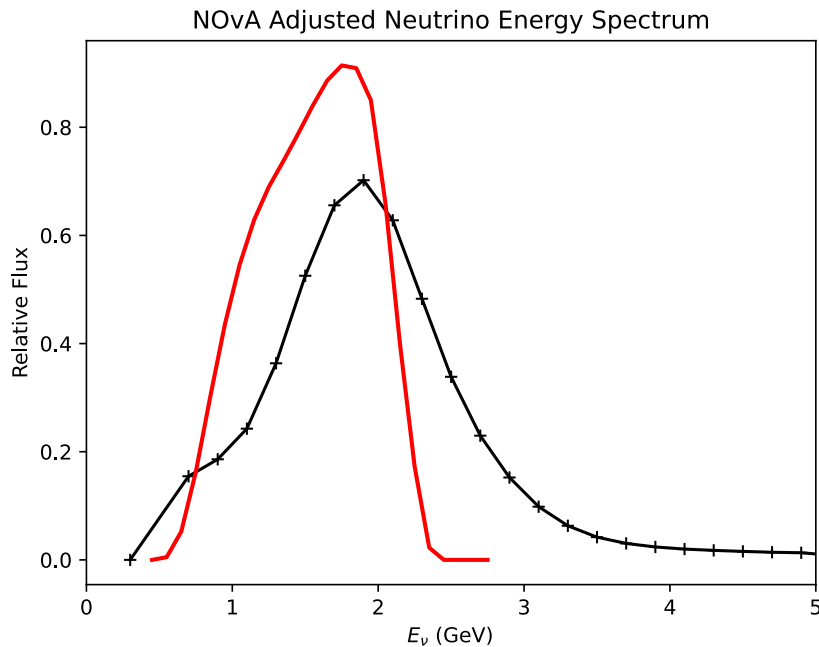
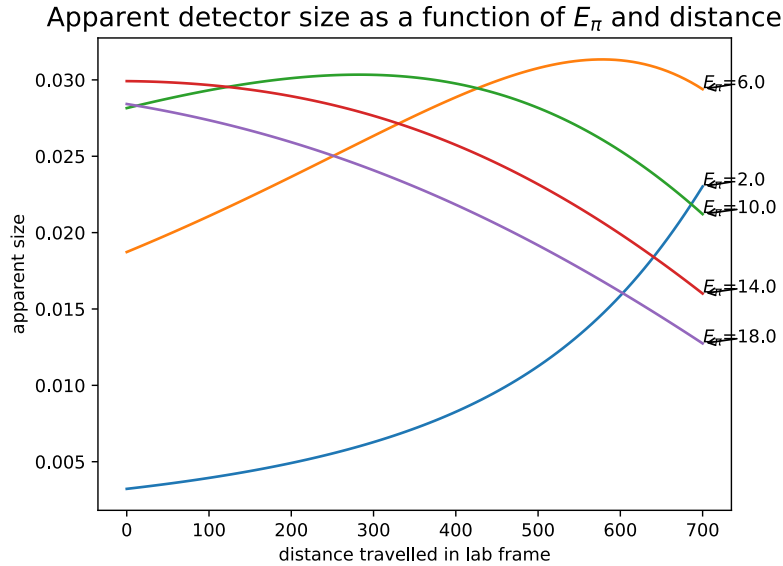
- 1) Get function to show neutrino energy as function of parent pion energy and lab-frame decay angle, θ .



- 2) Match MINERvA data assuming spectrum created by $\theta=0$ pion decays and all energies contribute (ie ignoring finite decay pipe)



- 3) Using incident pion energies from 2), calculate:-
 - i) Per energy slice, number of expected decays per ns
 - ii) Convert i) into expected decays/energy/meter in decay pipe
 - iii) Apparent detector cross-section for decays in ii) using detector dimensions and SR
 - iv) Expected neutrino spectrum using ii) and iii)
 - v) Combined spectrum for iv) for several different slices through detector



To check:

- Shorten decay pipe for step 2 and re-match distribution
- Check slicing working properly with multi-distribution
- Recalculate apparent target on per-slice basis