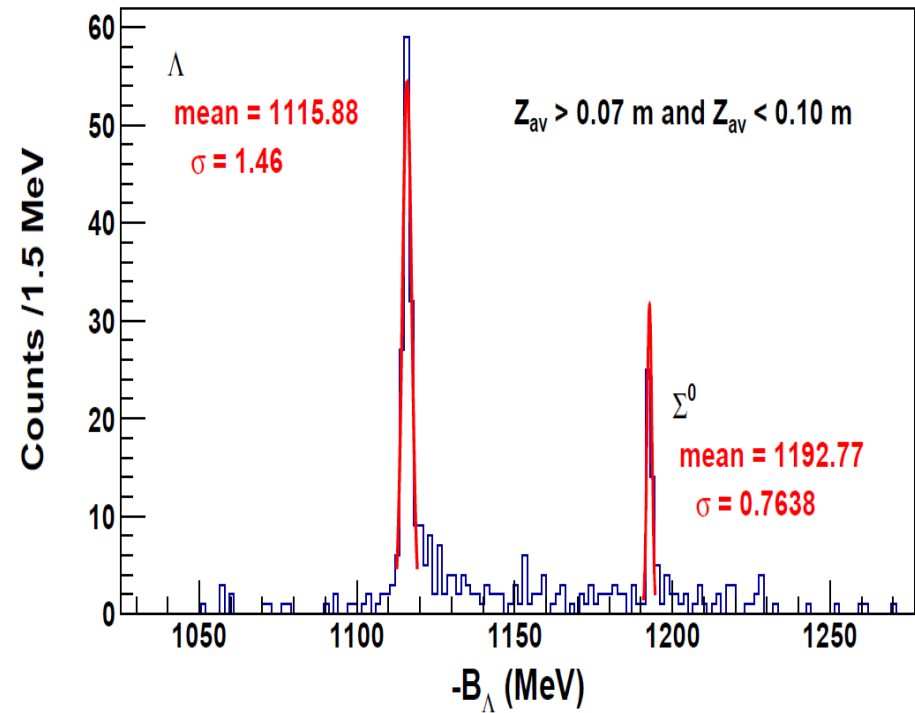
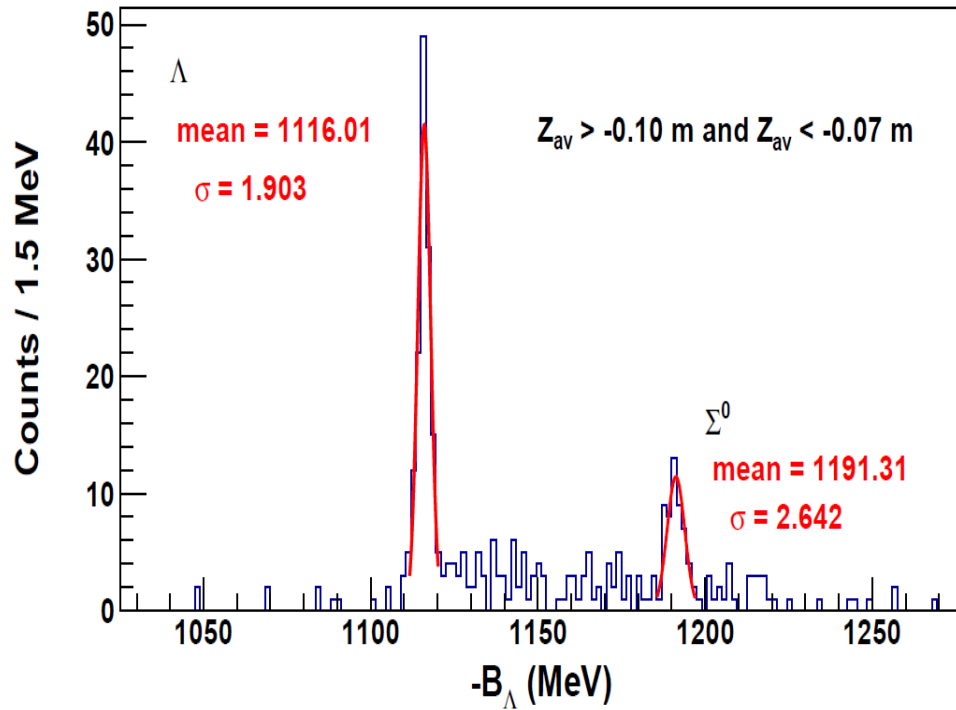


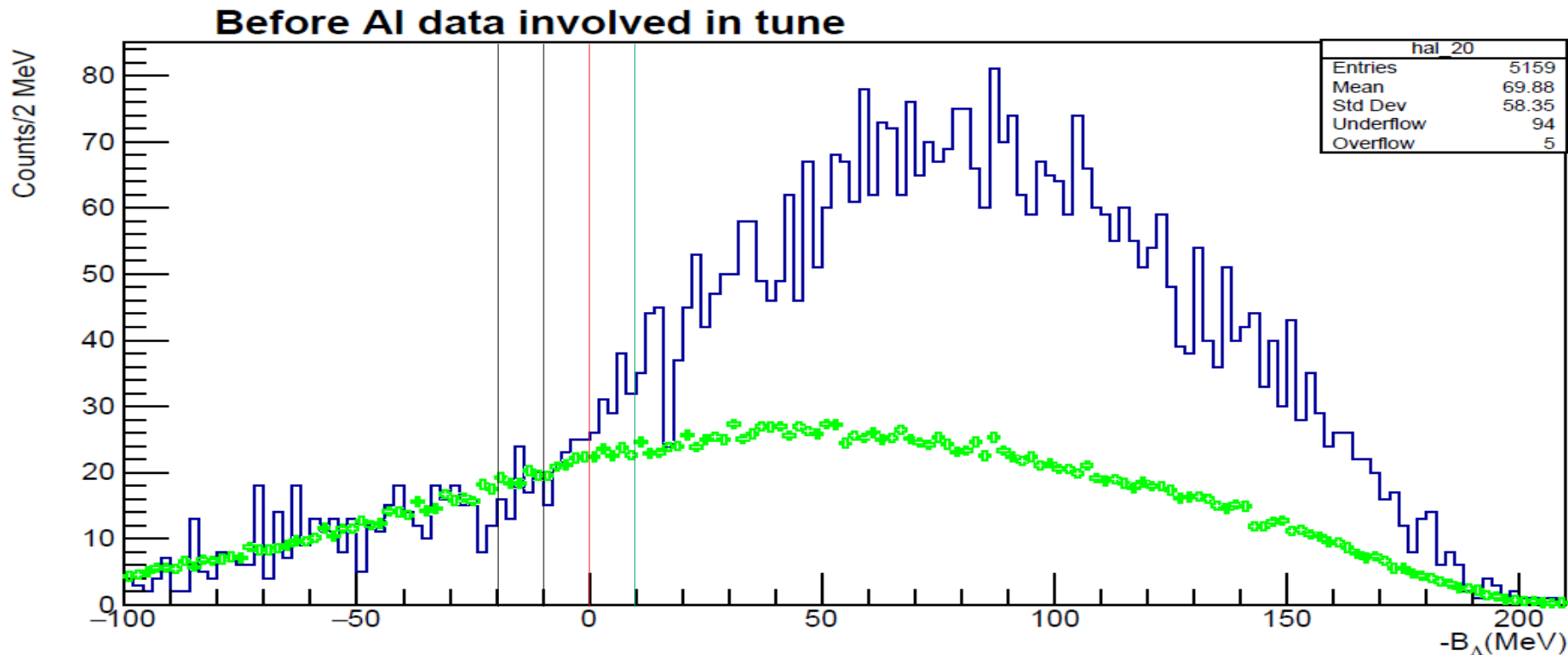
nn Λ Analysis Meeting
June 29, 2021
Bishnu Pandey

MM is studied with different Z-Vertex Cut



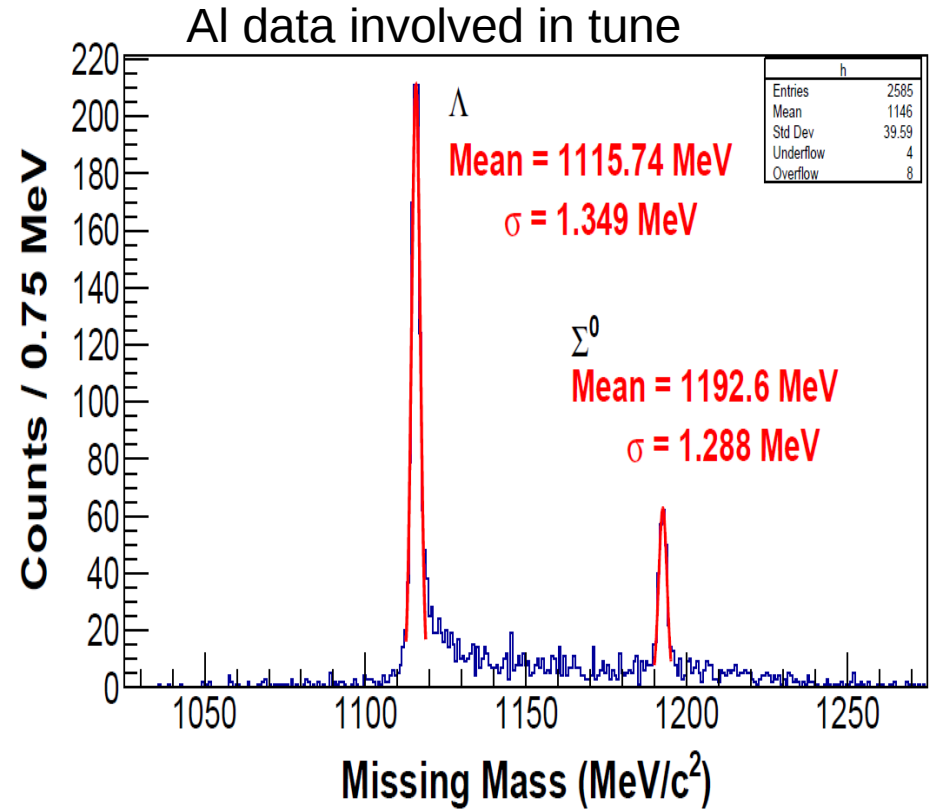
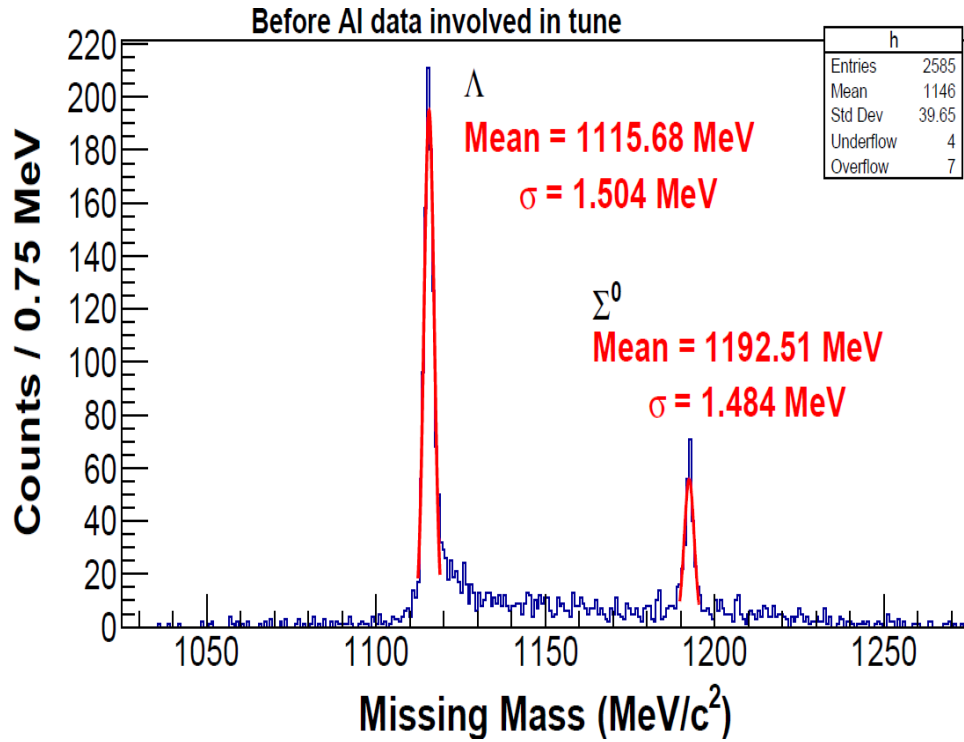
- From this study, the Λ (Σ) peak did not show any obvious Z dependence.
- The Z-dependence term added in the matrices worked well.

27_Mg_L before AI Data involved in tune



- No energy shift (~ 3 MeV) is applied between the entrance and exit AI windows data.
- Peak Search test tune was performed by selecting the events from the wide gates (~ -20 to -10 MeV, -10 to 0 MeV and 0 to 10 MeV).
- This is the start point the current tune.

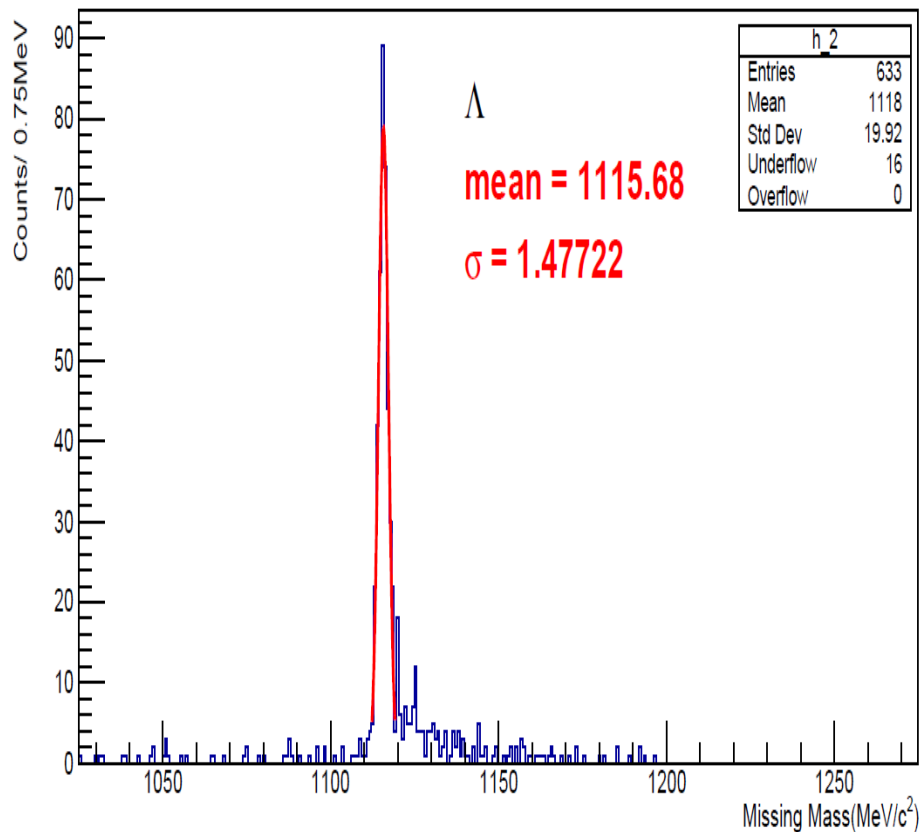
Comparison: Before and After AI data involved in tune



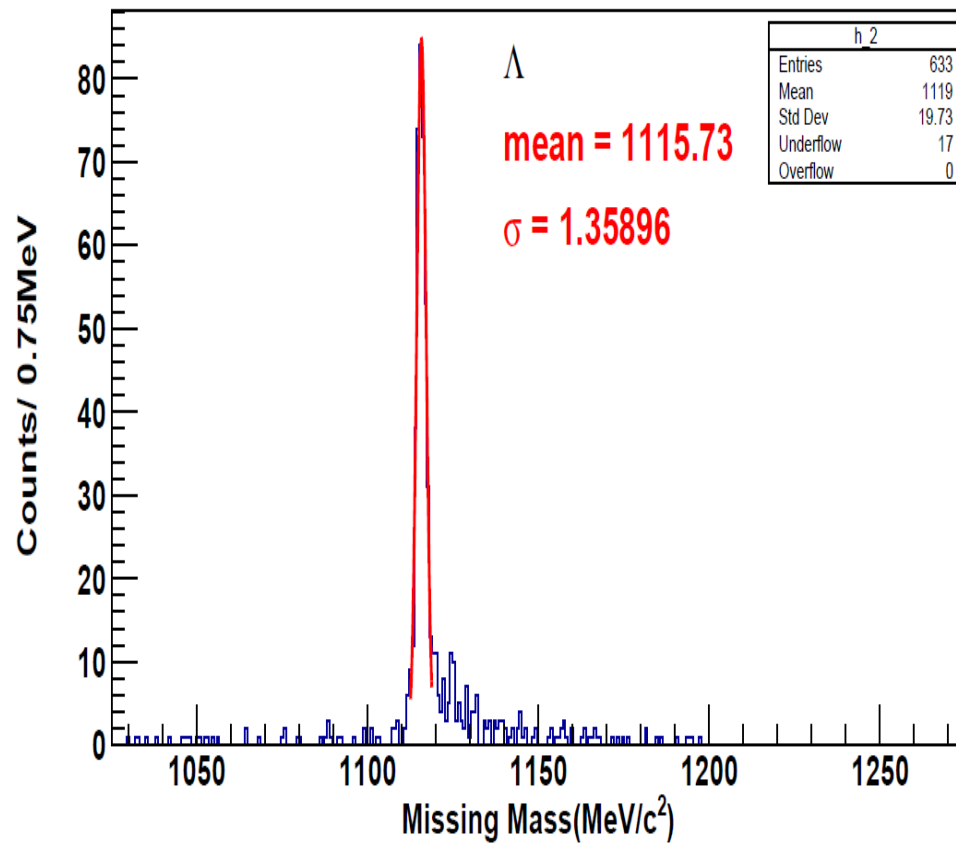
- The momentum matrices are tuned couple of cycles with one or two loop each time.
- The resolution improved by about 10%.

Comparison Continue

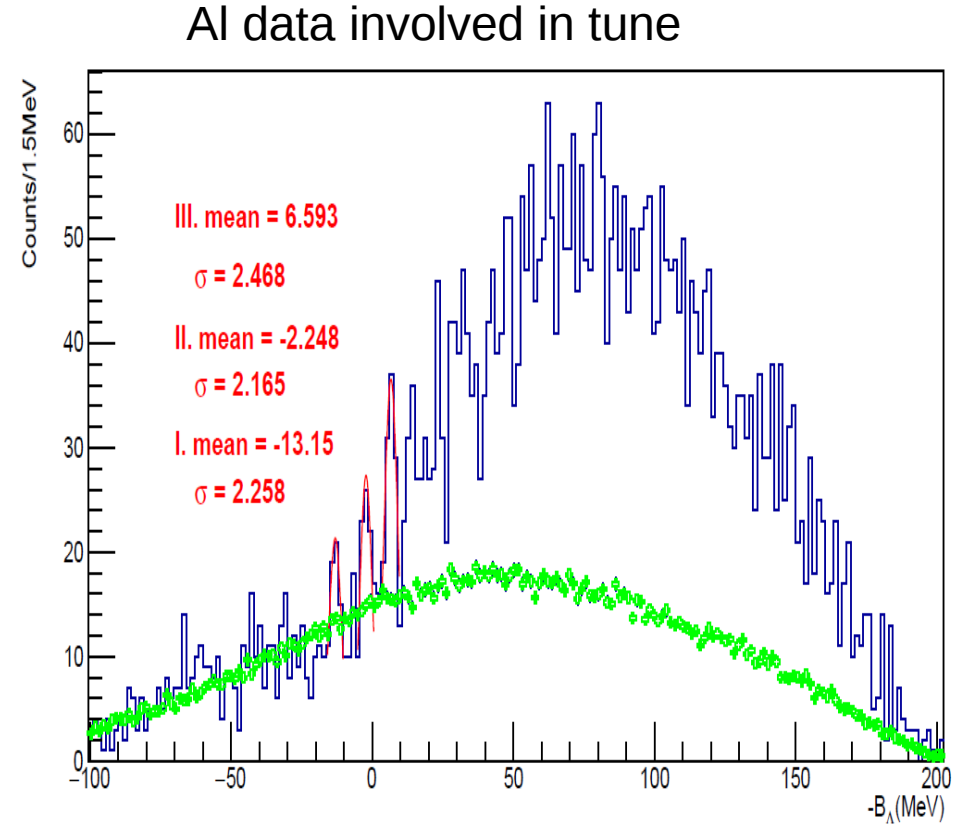
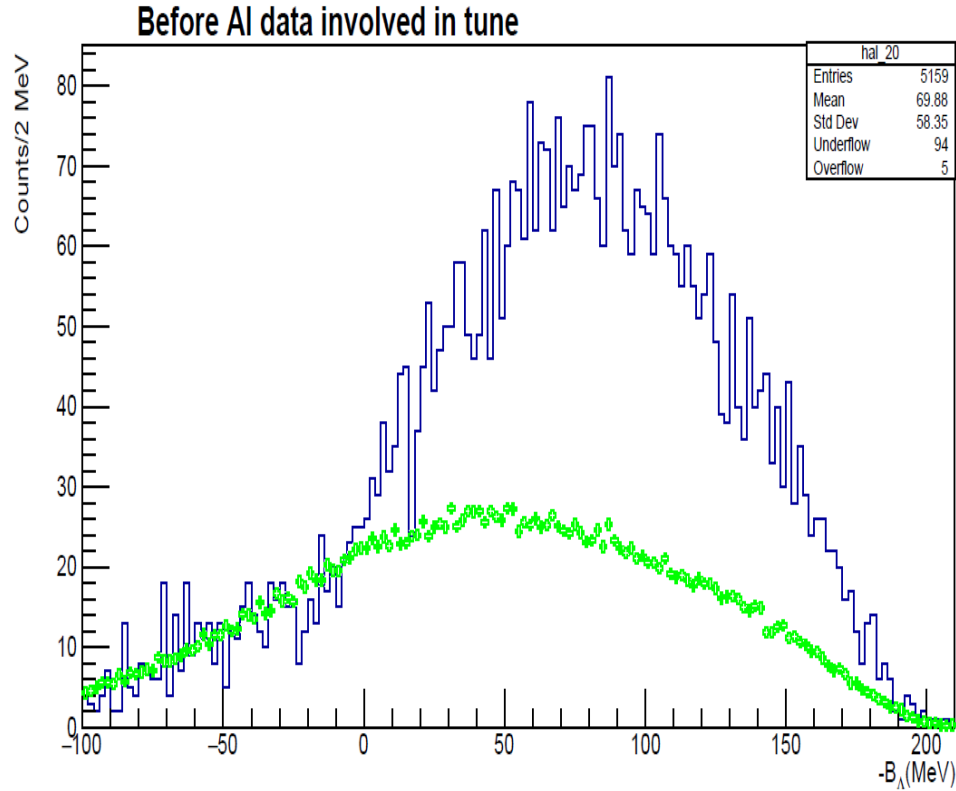
Before AI data involved in tune



AI data involved in tune



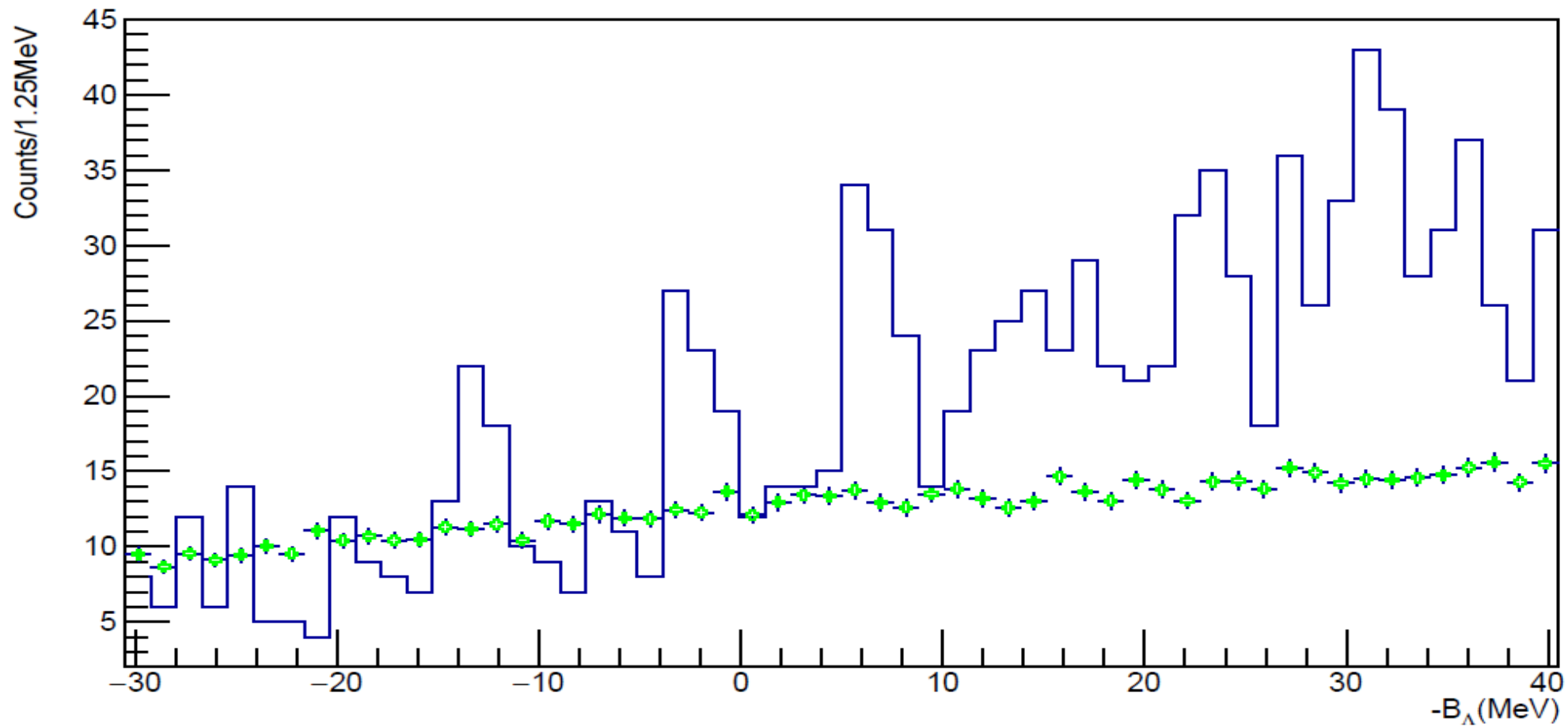
Comparison Continue



- Two bound and one unbound states are observed.
- The means of the observed states agreed with those in 28_Mg_L with in 1 to 1.5 MeV.

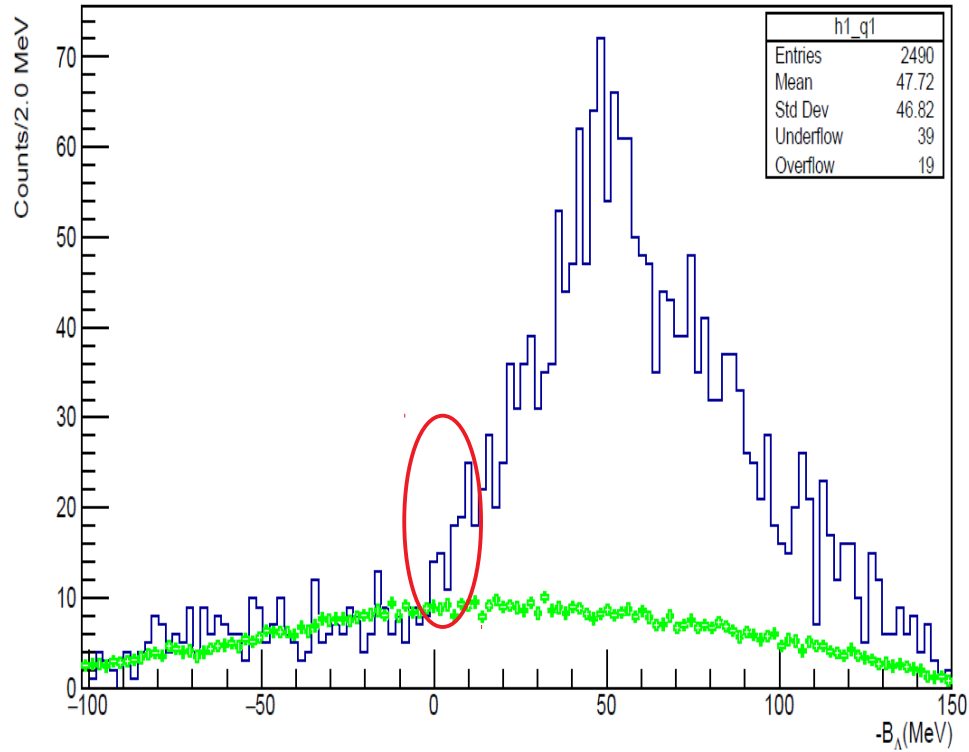
Closer view of the observed states

Al Spectrum(H/T+ TT)

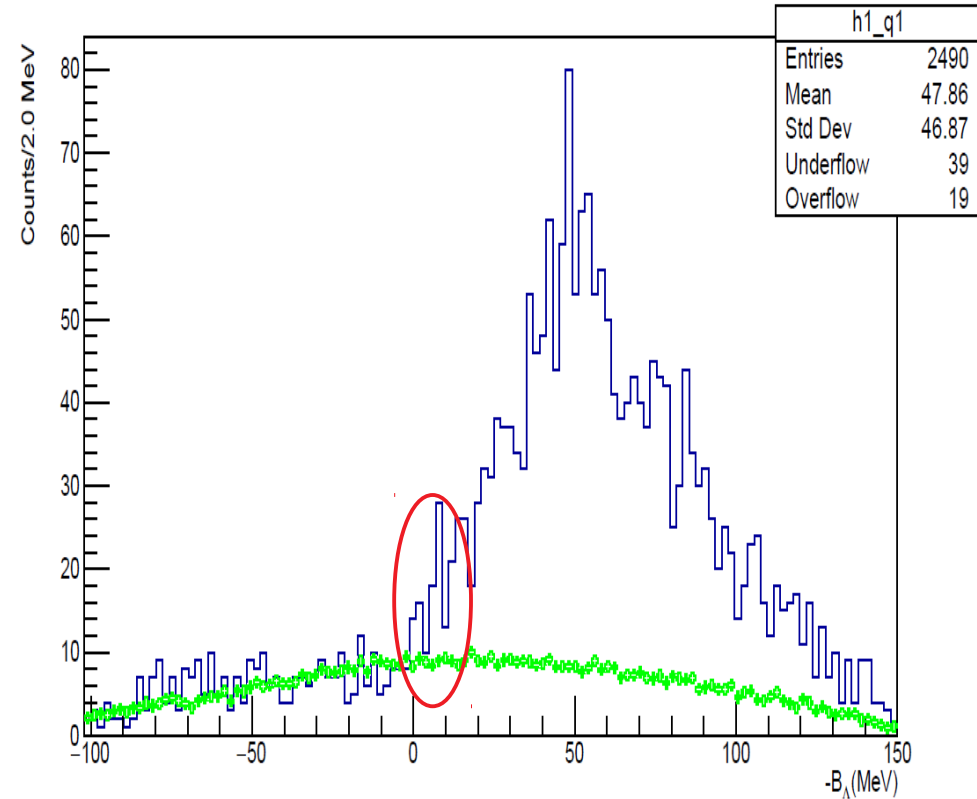


Comparison Continue

No AI data involved in tune



AI data involved in tune



The small enhancement above threshold is always there before and after involving the AI data in the matrix tune.