

Frascati analysis status

- Main duty – Silicon Hypernuclear spectra

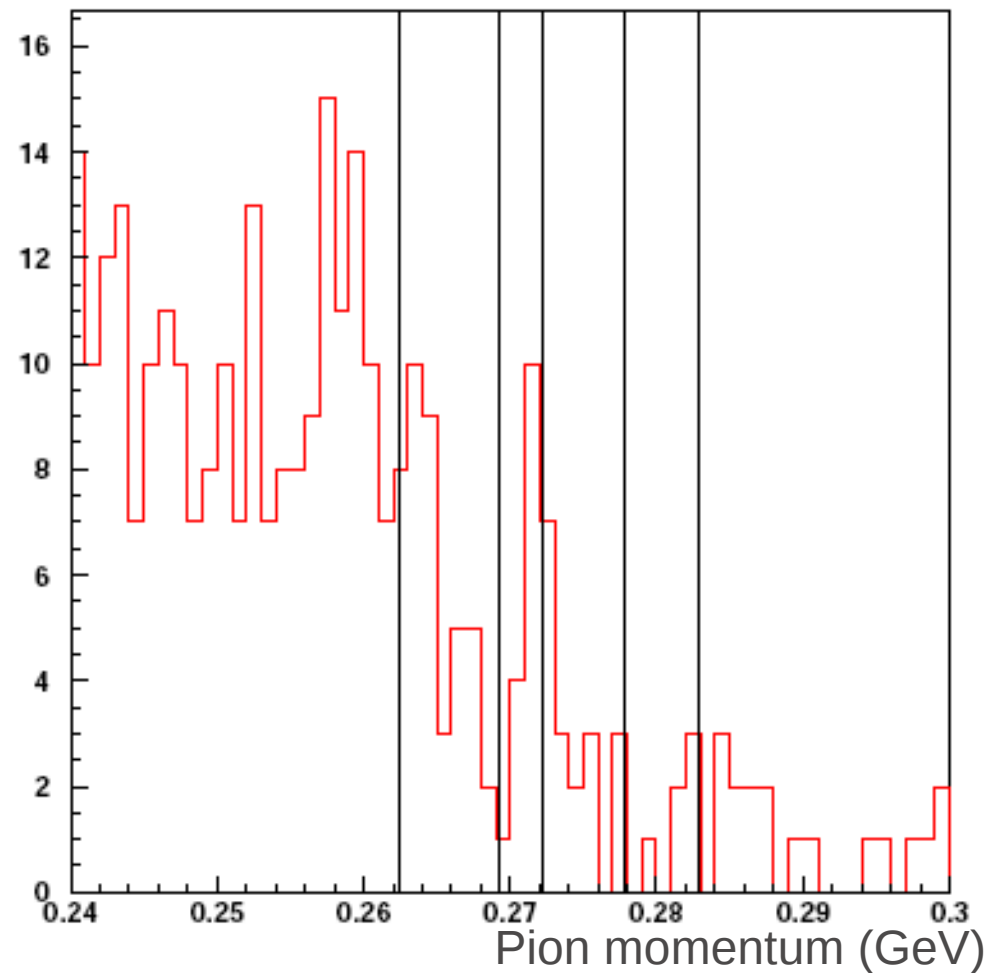
Please note that the plot of silicon spectrum presented in the LOI to the referees was the sum of 2003 & 2007 data taking. Naturally the 2003 set was effected by the wrong geometry in the reconstruction (I used production December 2003). In the following I do not consider 2003 data sample until the problem will be fixed.

- Other tasks

 - Charge Exchange

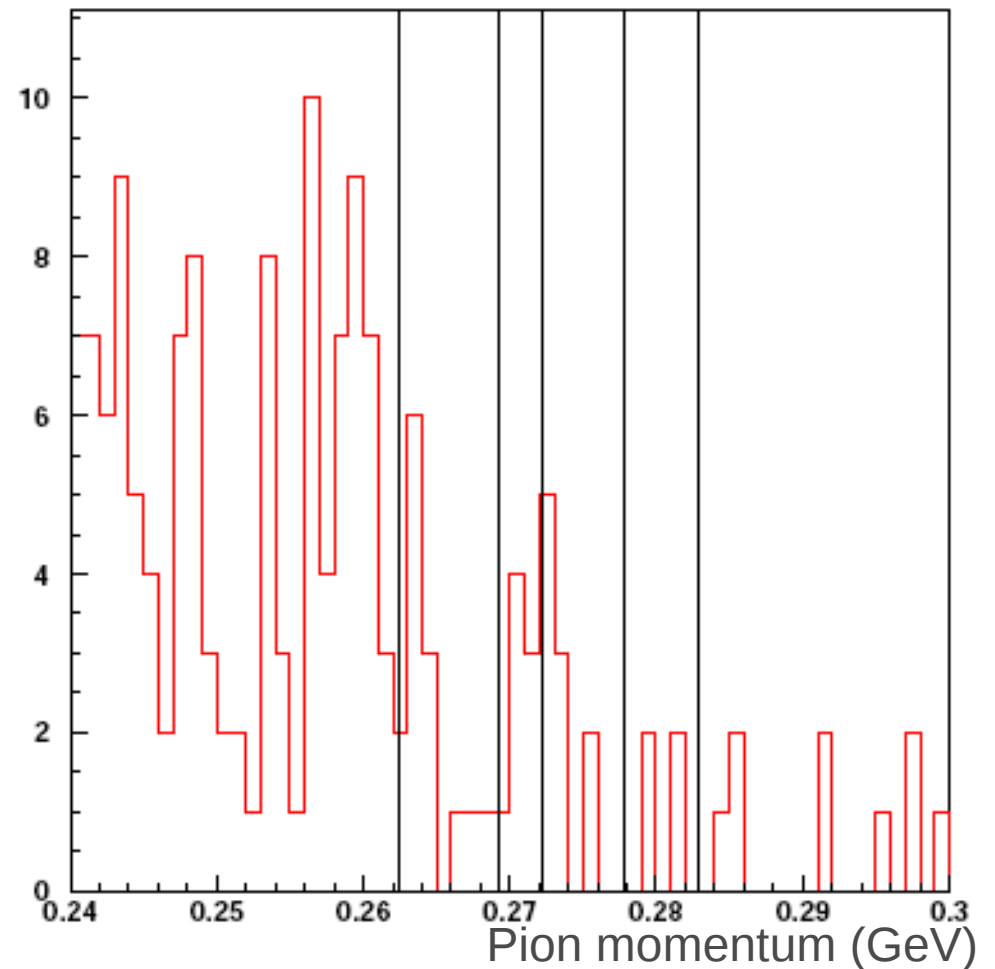
Silicon spectra 1/3

- Silicon spectrum from latest production
 - STOPMIN = 2 to select silicon stop
 - π^- spectrum with a proton in coincidence



Silicon spectra 2/3

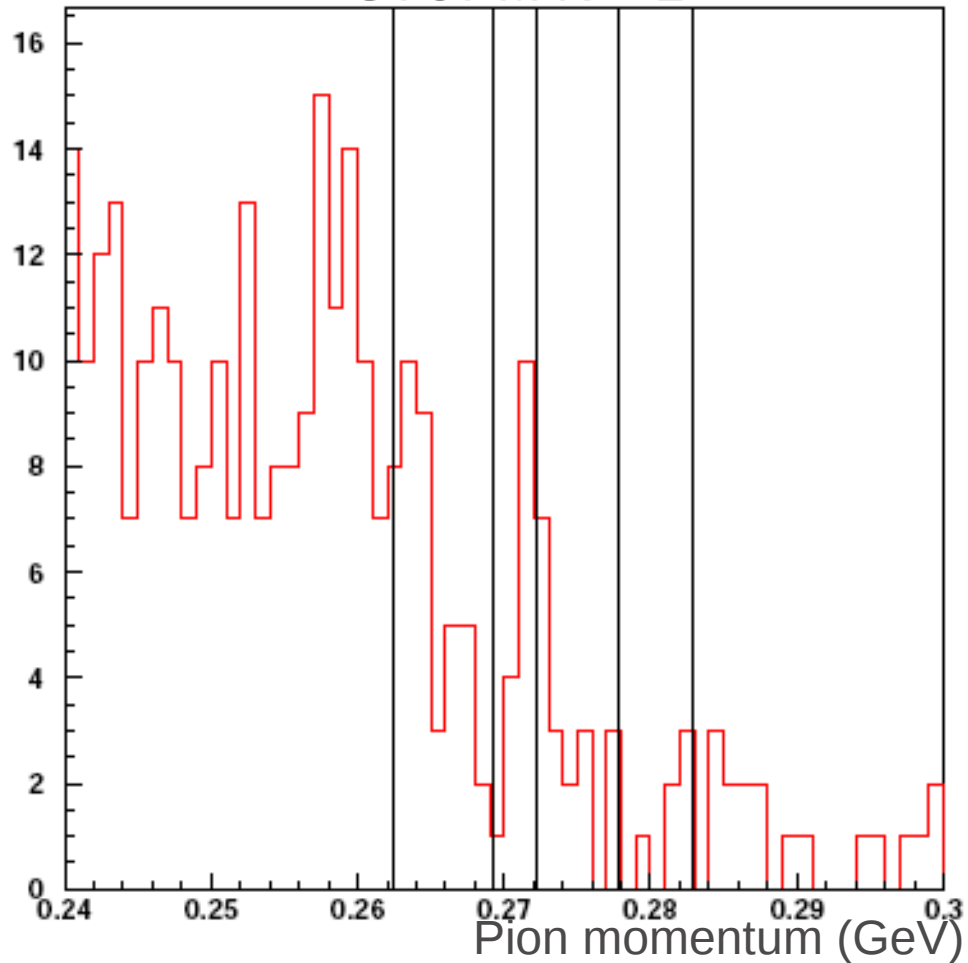
- Silicon spectrum from latest production
 - VMKTMIN = 5 to select silicon stop
 - π^- spectrum with a proton in coincidence



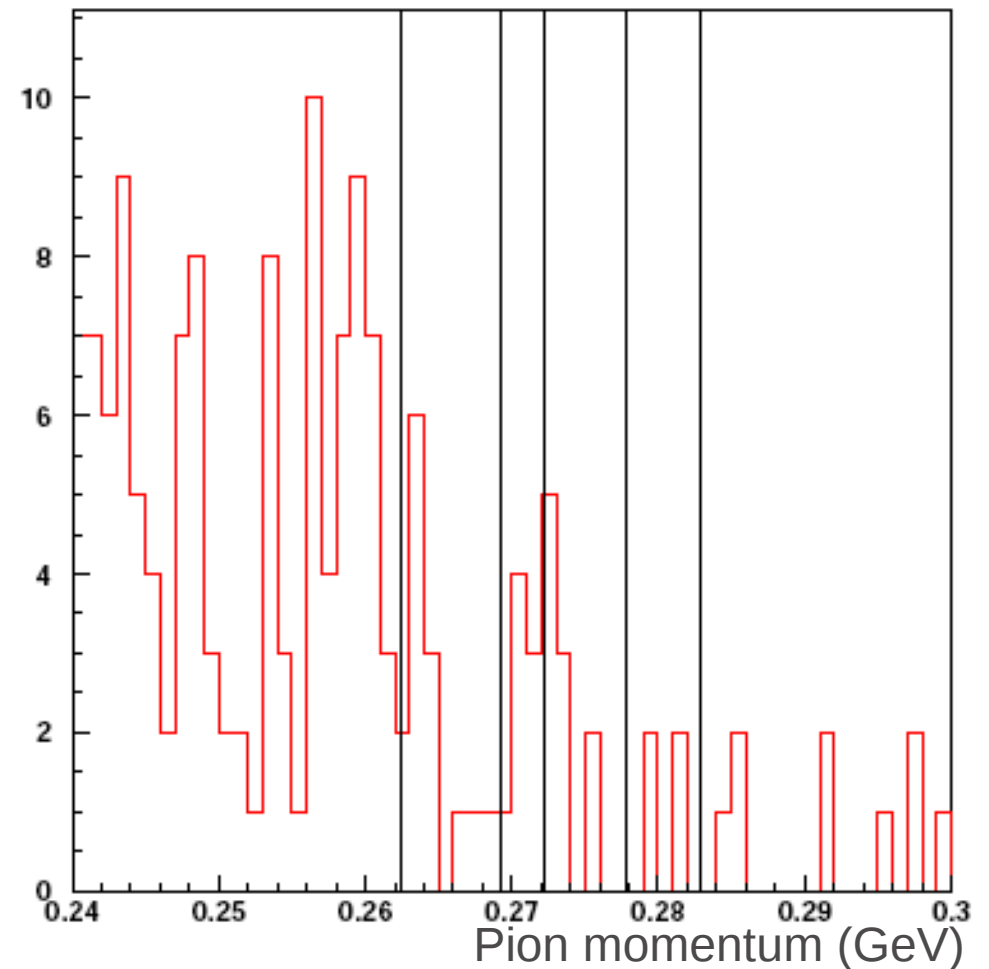
Silicon spectra 3/3

As requested we tried to evaluate the efficiency of VMKTMIN in selecting silicon events. At the moment it still seems to be worse than STOPMIN=2.....

STOPMIN = 2

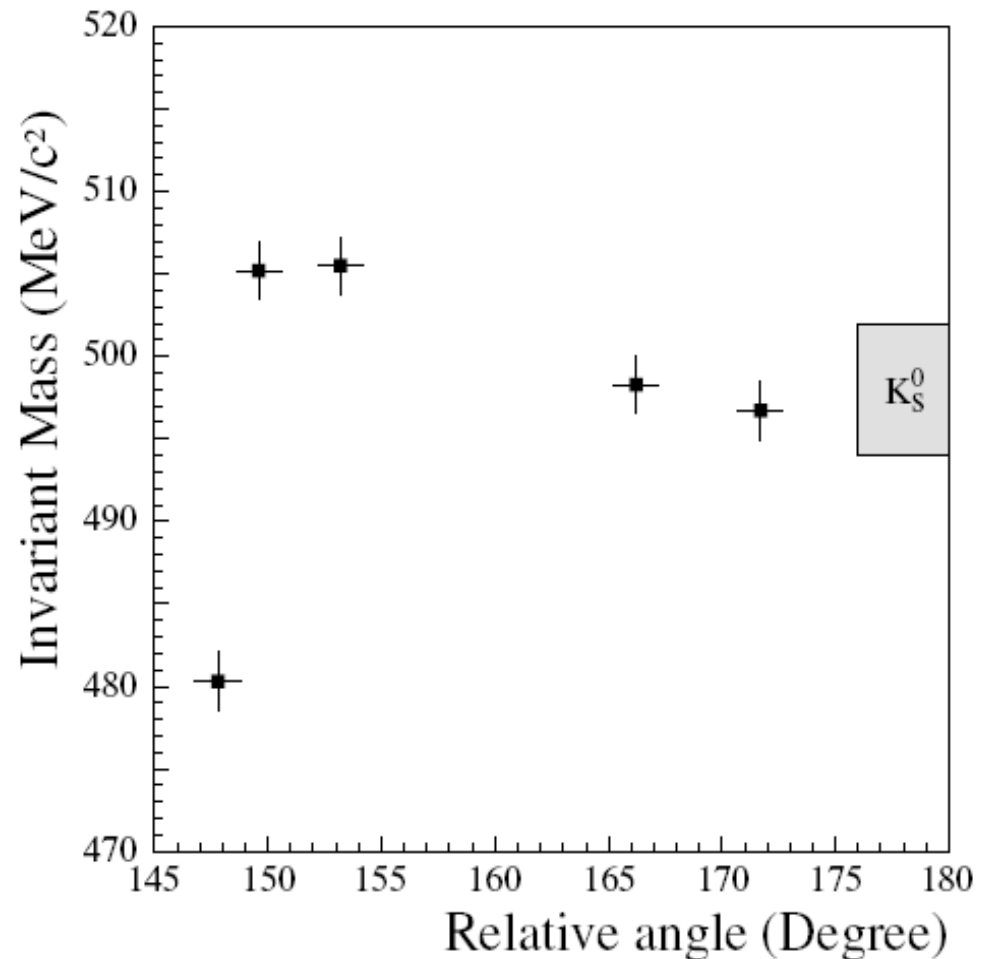


VMKTMIN = 5



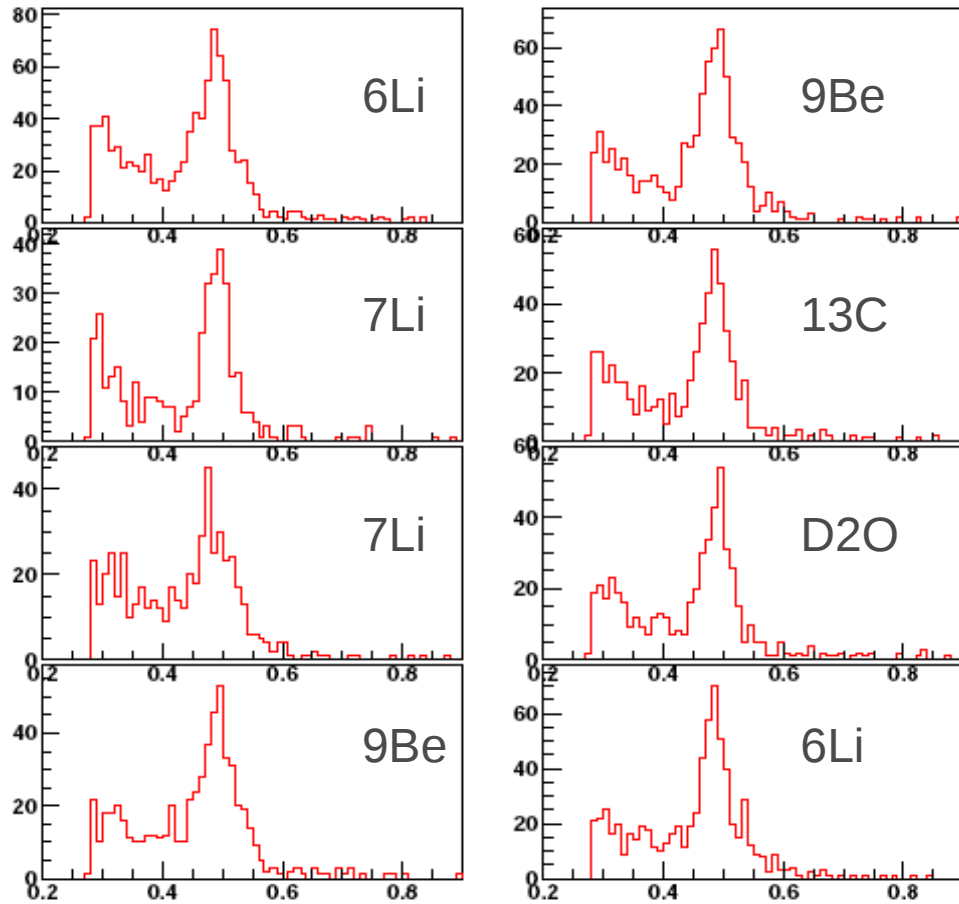
Charge Exchange

- First step try to reproduce the results of PLB
- With the 2003 data sample with do not found events in the signal region...So we fix an upper limit



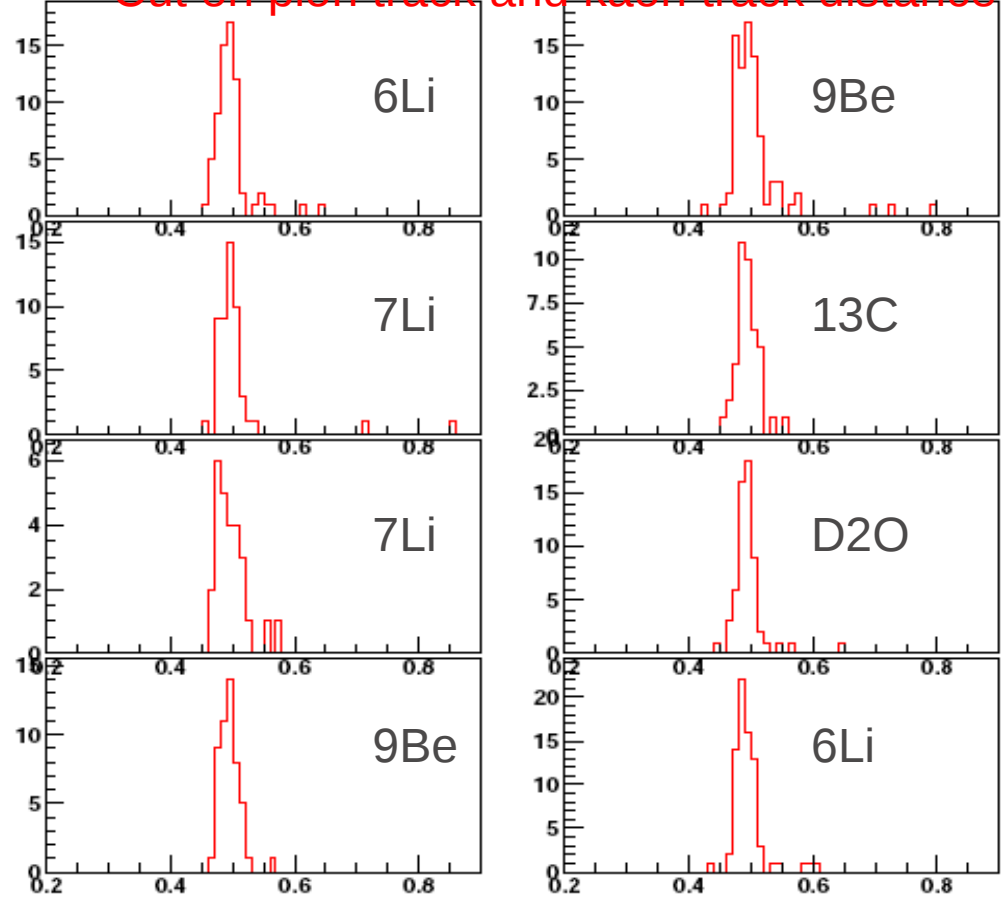
Charge exchange

- Production December 2007
(not enough time to analyze the latest one)



$\pi^- \pi^+$ invariant mass (GeV)

Cut on pion track and kaon track distance



$\pi^- \pi^+$ invariant mass (GeV)

Charge exchange

- Few events now are inside the signal region....
- More detailed and accurate studies now are needed to better understand them....

