

MIP studies

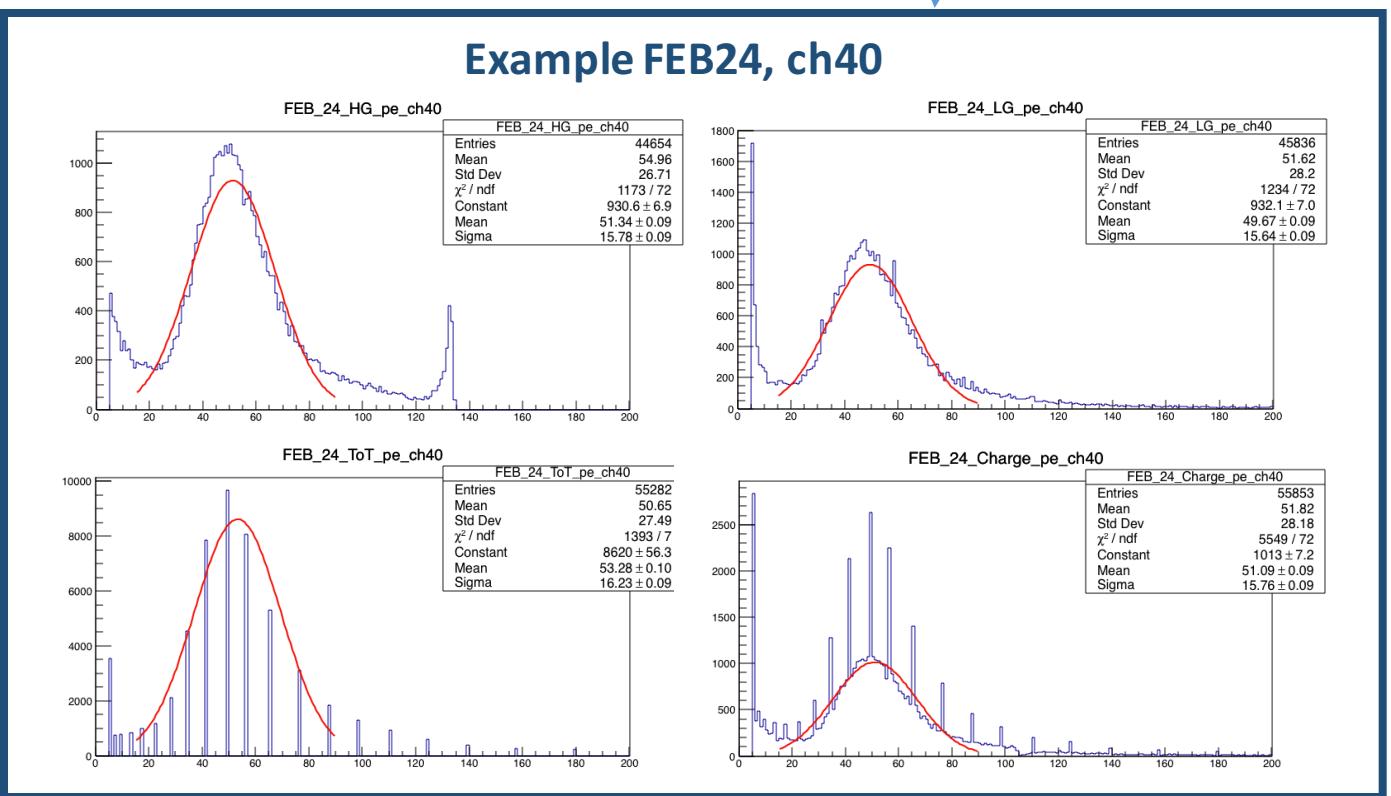
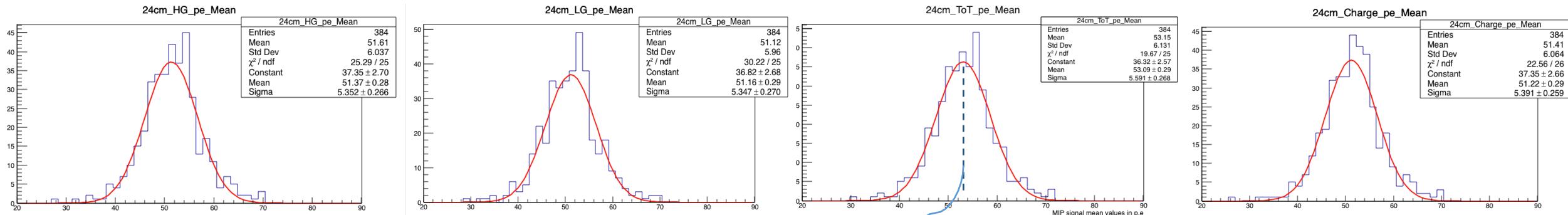
24 October 2018

Steps of the analysis

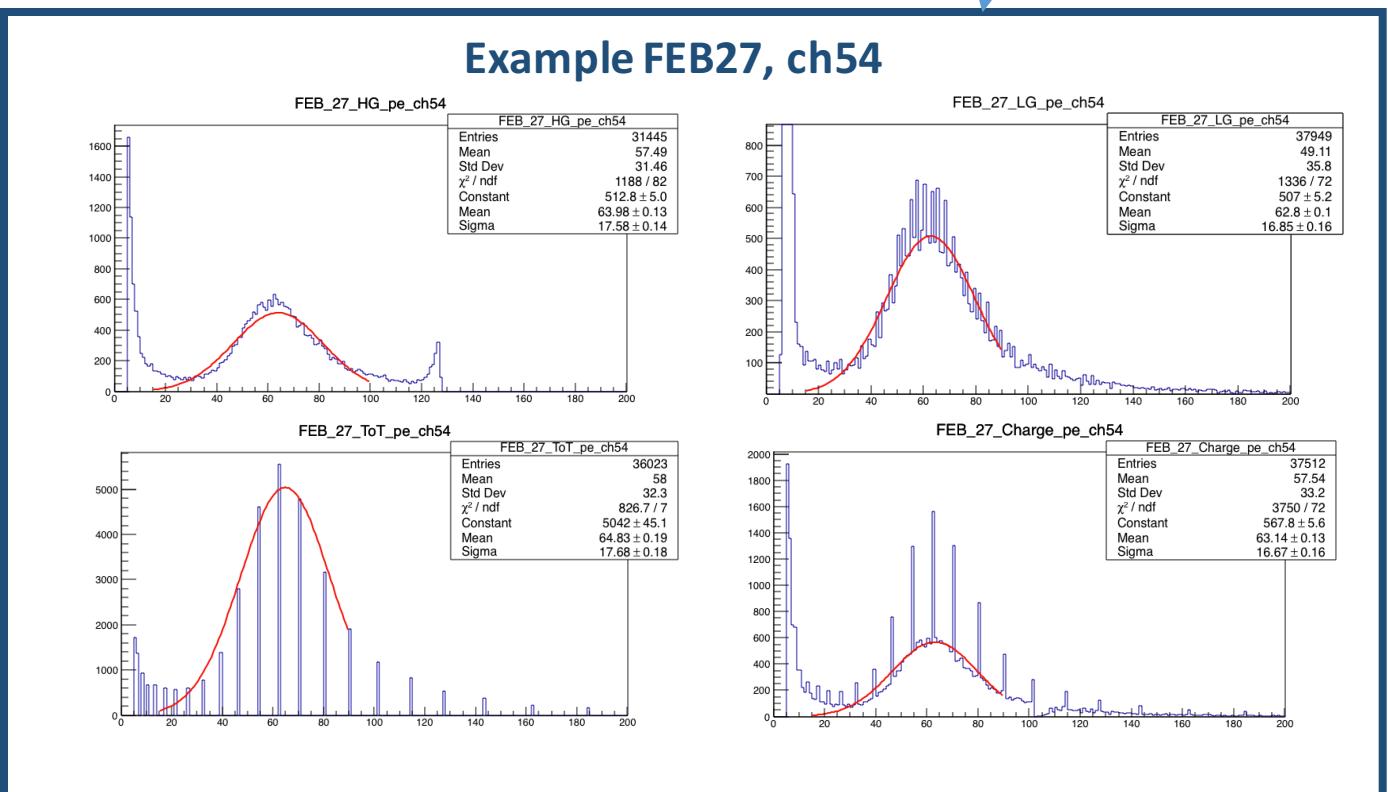
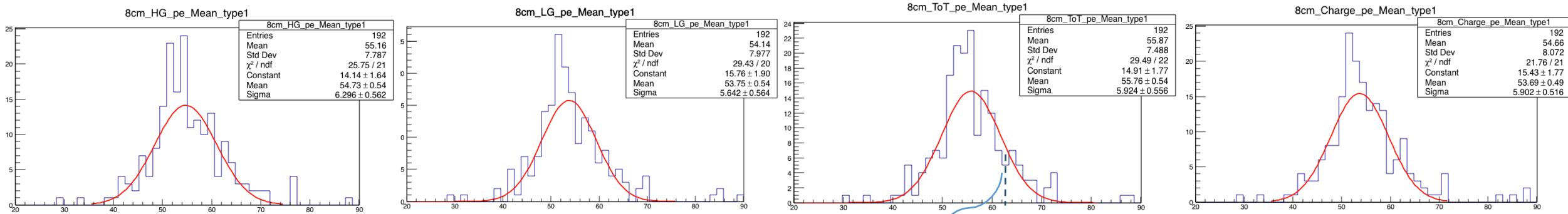
MIP data: 2 GeV muon beam with magnet OFF (1September_20)

- Consider the ASICs which see the beam
- For all channels reading the same fiber length:
 - Fit HG/LG/ToT/Charge distributions with a gaussian function. Record mean and sigma
 - Plot the histogram of mean values for each fiber/MPPC type
 - Plot mean channels vs mean values for each FEB

24 cm fibers

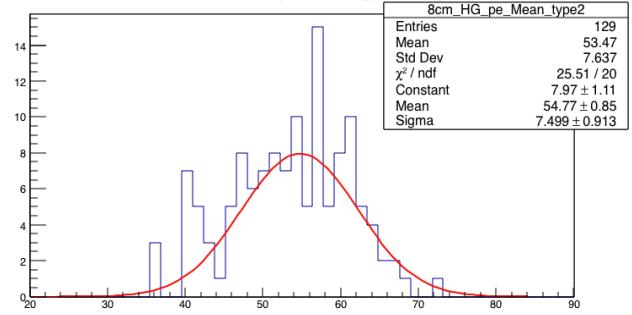


8cm fibers, Type1

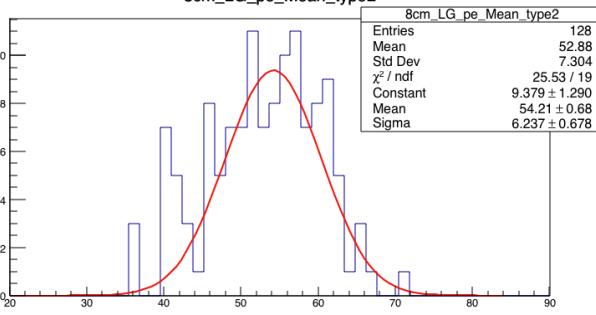


8cm fibers, Type2

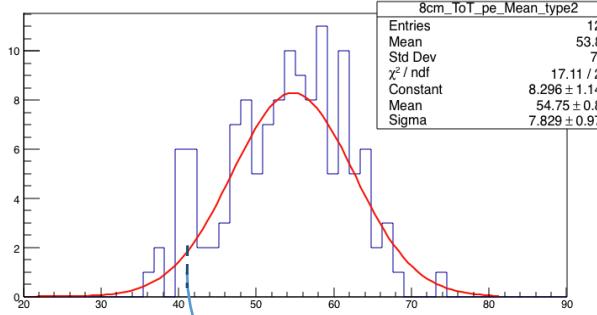
8cm_HG_pe_Mean_type2



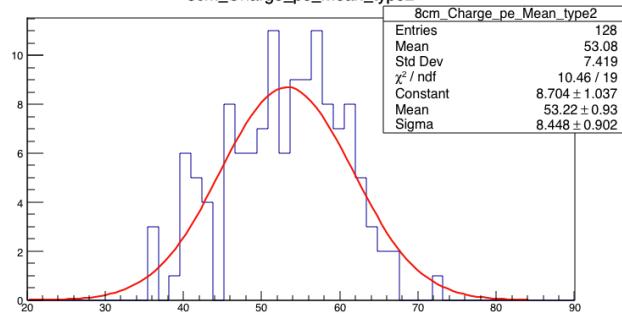
8cm_LG_pe_Mean_type2



8cm_ToT_pe_Mean_type2

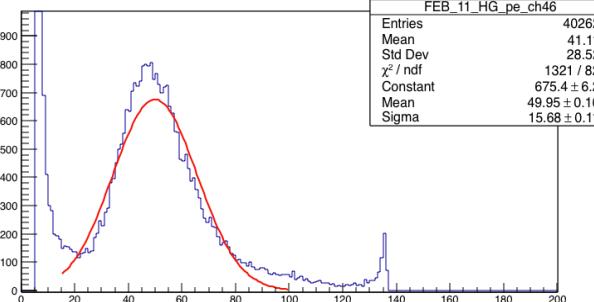


8cm_Charge_pe_Mean_type2

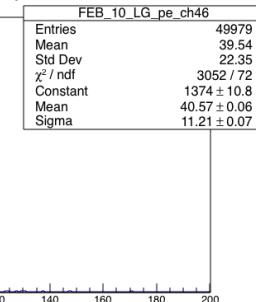


Example FEB27, ch54

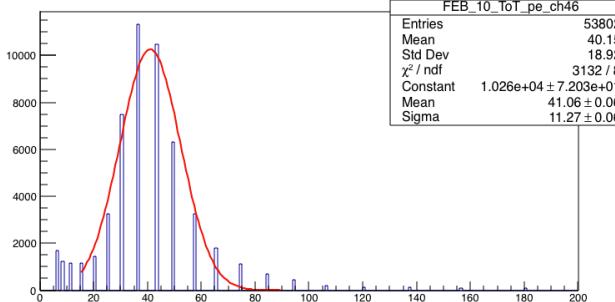
FEB_11_HG_pe_ch46



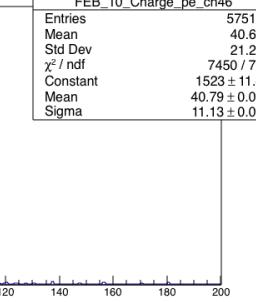
FEB_10_LG_pe_ch46



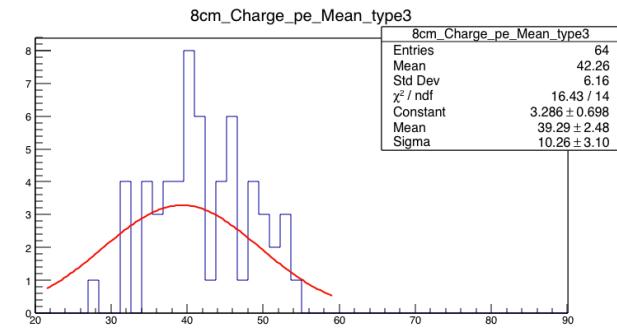
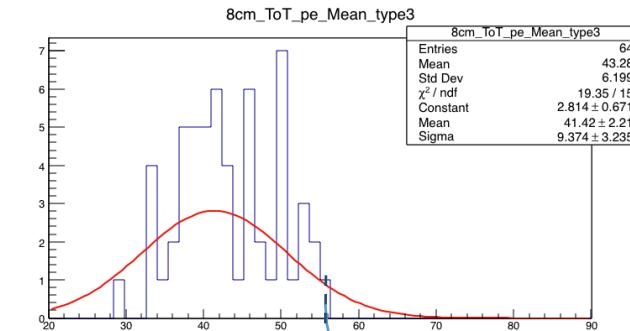
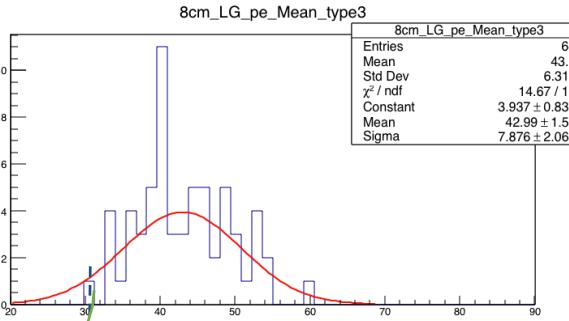
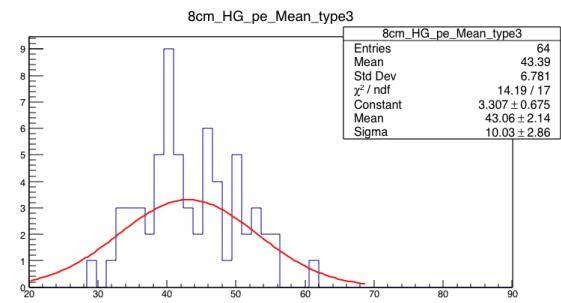
FEB_10_ToT_pe_ch46



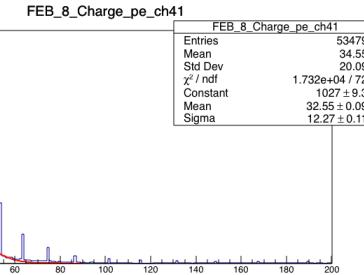
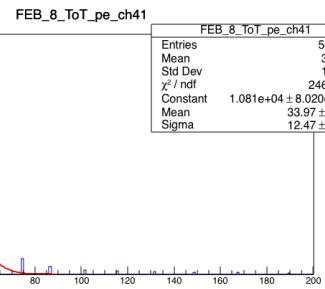
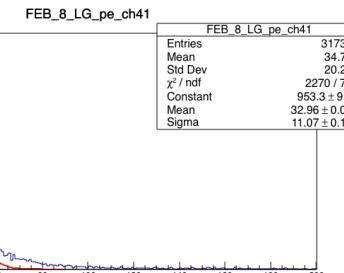
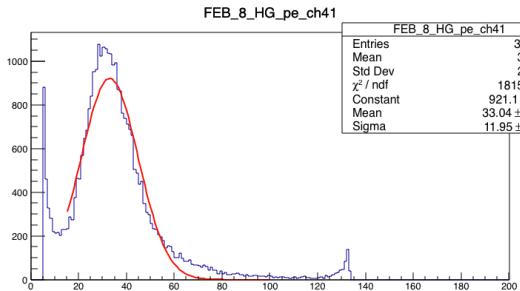
FEB_10_Charge_pe_ch46



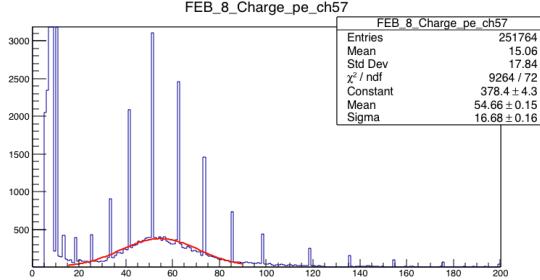
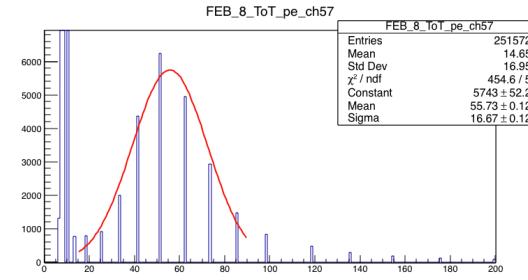
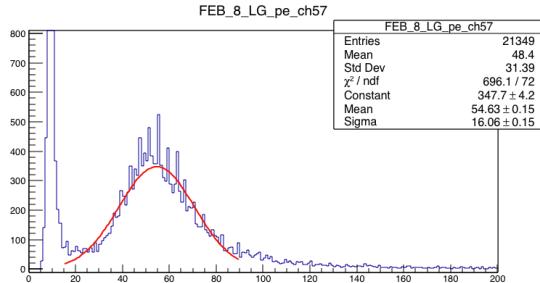
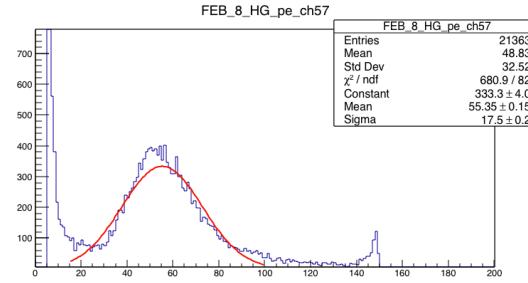
8cm fibers, Type3



Example FEB8, ch41

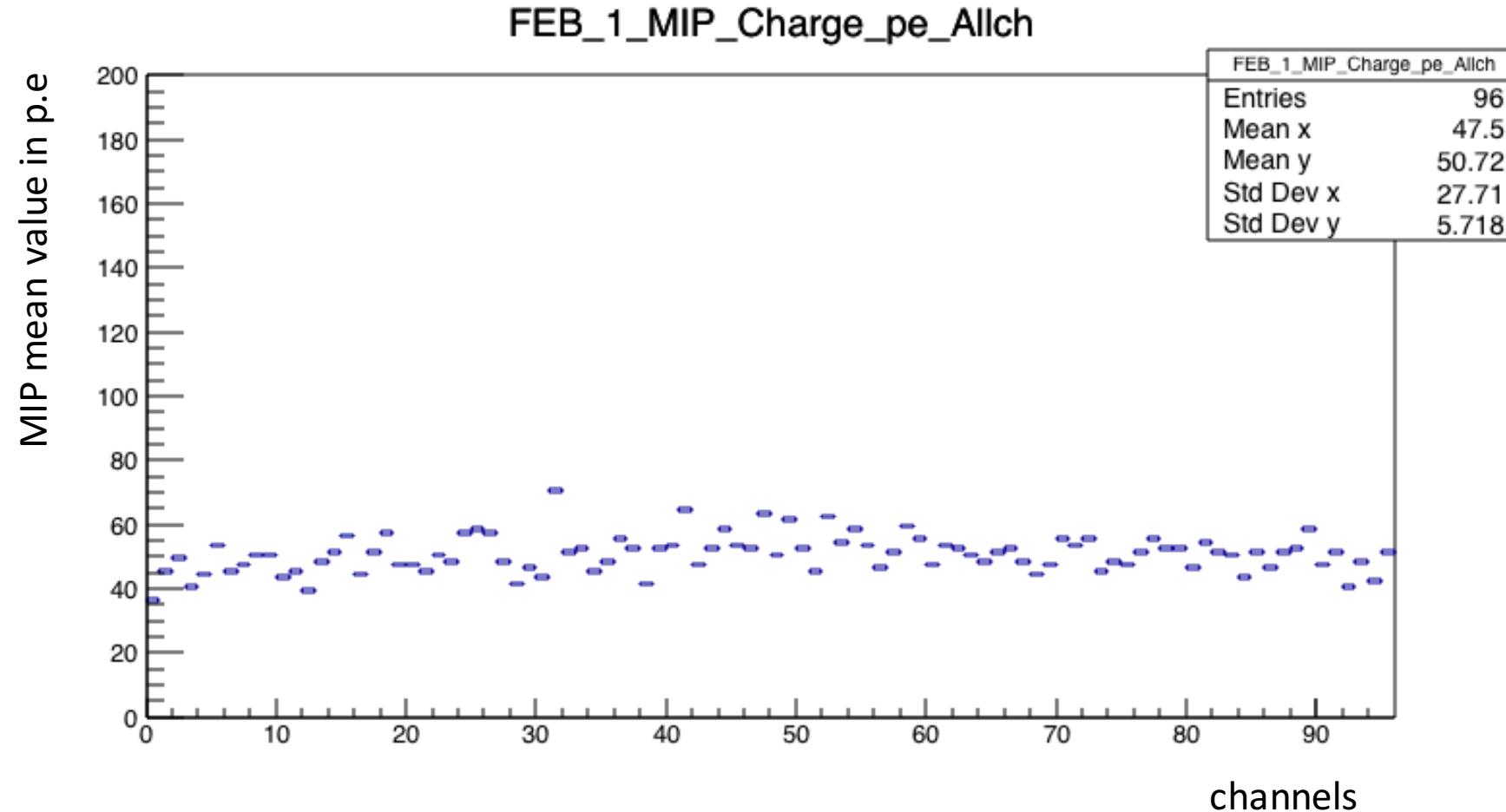


Example FEB8, ch57



Distribution of MIP mean values for channels of one FEB

Example for FEB1



Summary plot for all FEBs

