Hot/Cold/Dead Channel Classifier update

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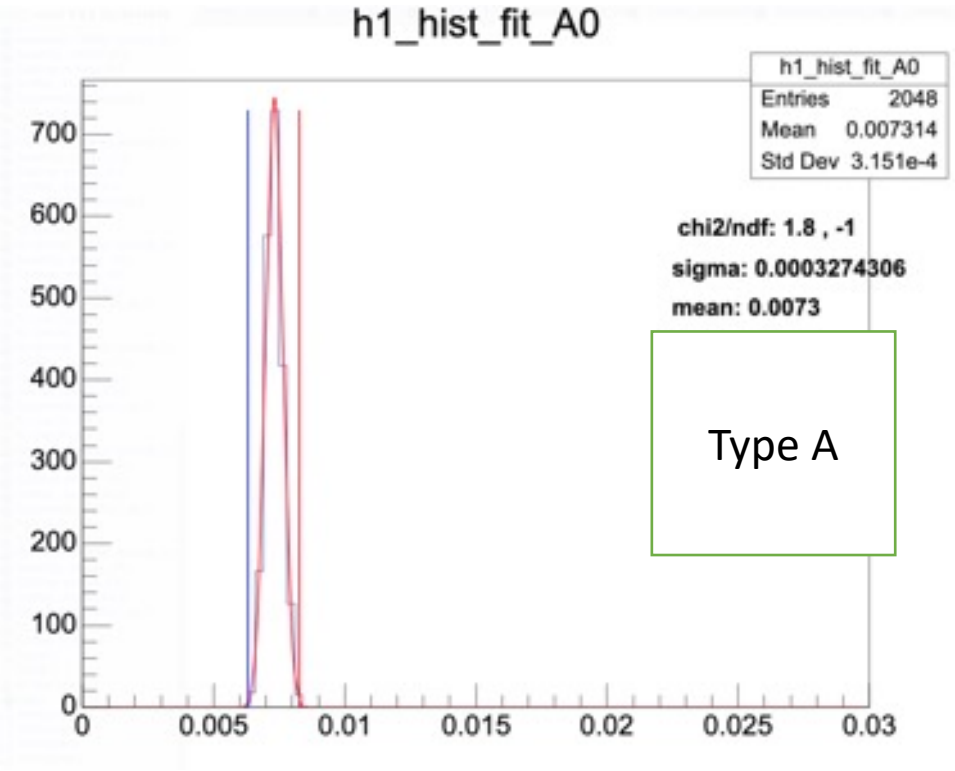
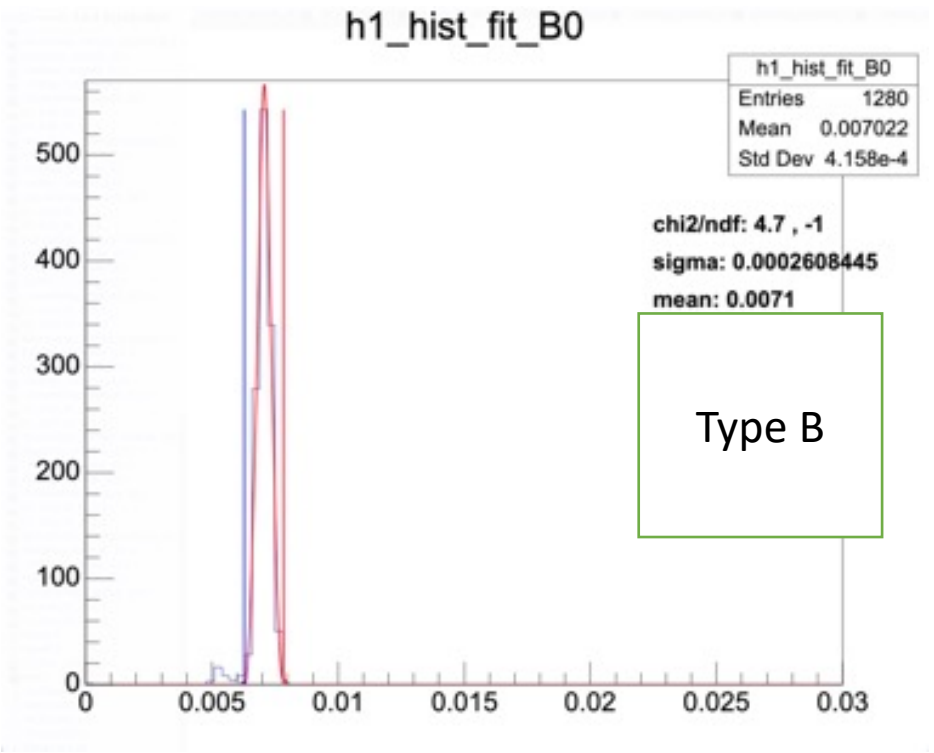
Hot Channel algorithm

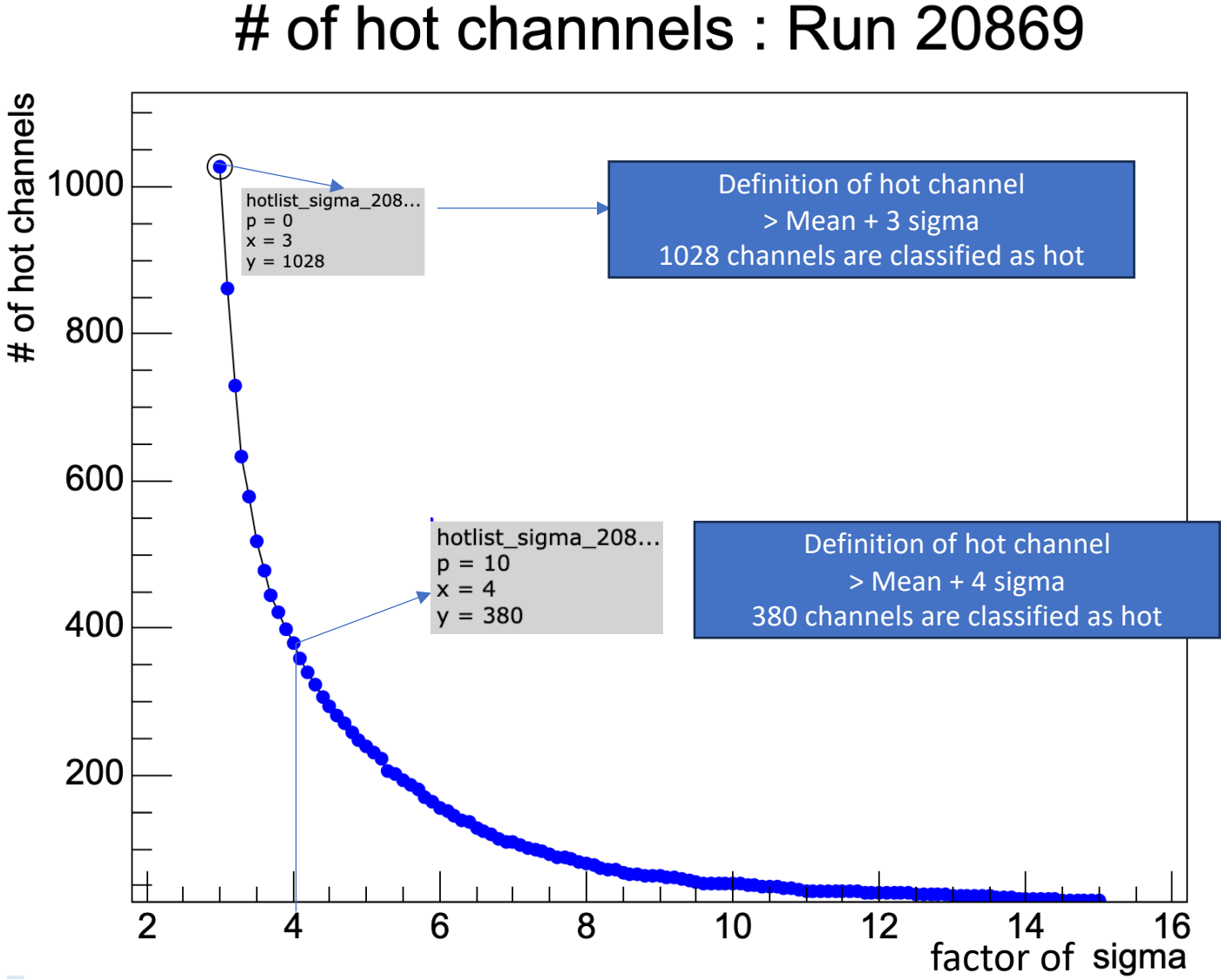
Definition of channel

Hot Channel : mean + 3sigma
Cold Channel : mean – 3sigma
Dead Channel : 0 hit
Question : Is the mean+3sigma cut too tight? Question came from sPHNEIX collaboration meeting





of hot channels as a function of sigma



X axis : constant value used for hot channel definition > mean+C*sigma

Y axis : # of hot channels

# of hot channels

mean + 3 sigma : 1028
mean + 3.5 sigma : 518
mean + 4 sigma : 380
mean + 5 sigma : 239
mean + 8 sigma : 81
mean + 10 sigma : 53

Remaining question : Which cut should we use?

- Based on hot channel stability?

Location of the file

/sphenix/tg/tg01/commissioning/INTT/work
/jaein/HotChannelFinder/event_base_finder
/1220/result/hotlist_sigma_20869.root