

Fourth Weekly Microboone Meeting

Connor Callahan

Hardware

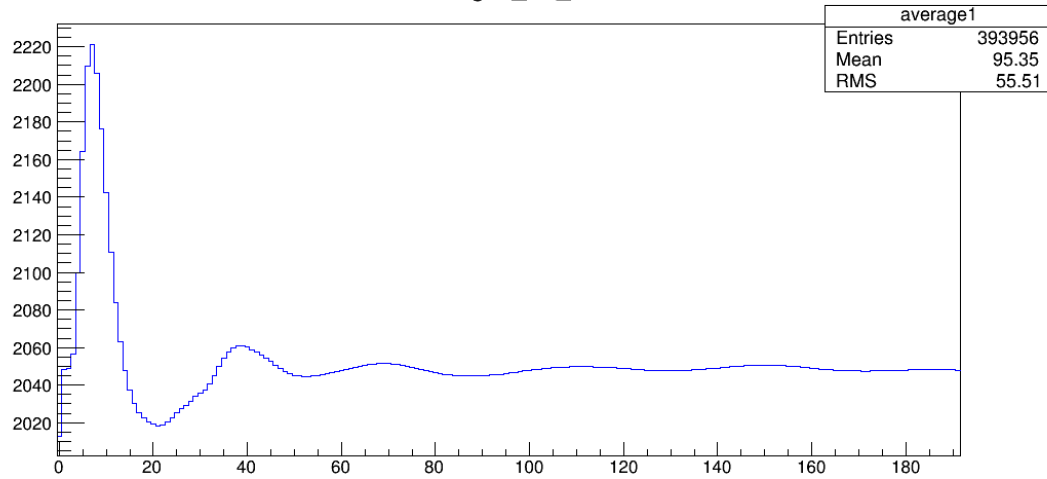
TPC Crate Tests

- - Finishing with the final crates
- - Waiting in optical cables to be delivered
- - Running a million events on the FEMs that weren't reliable before (about a day or two of testing)
- - Retesting two small ASIC tests on a previous crate

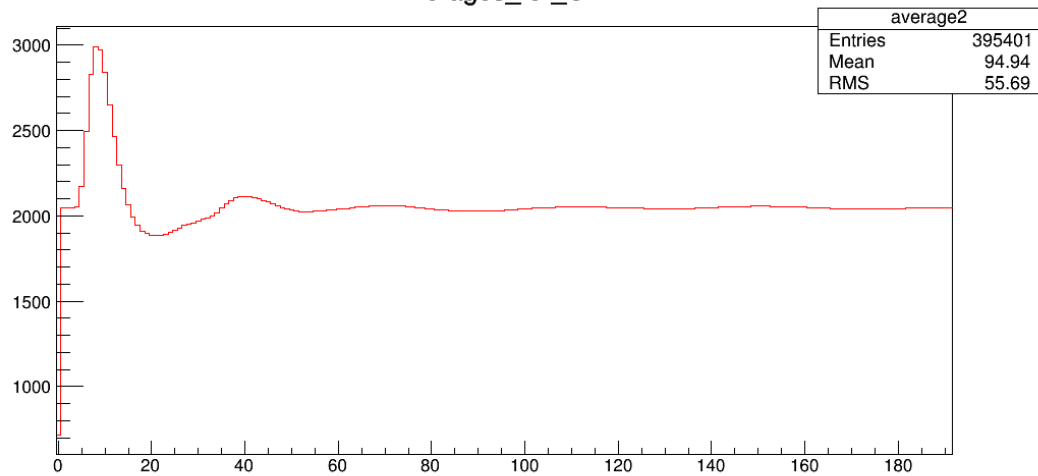


Averages LED (1650)

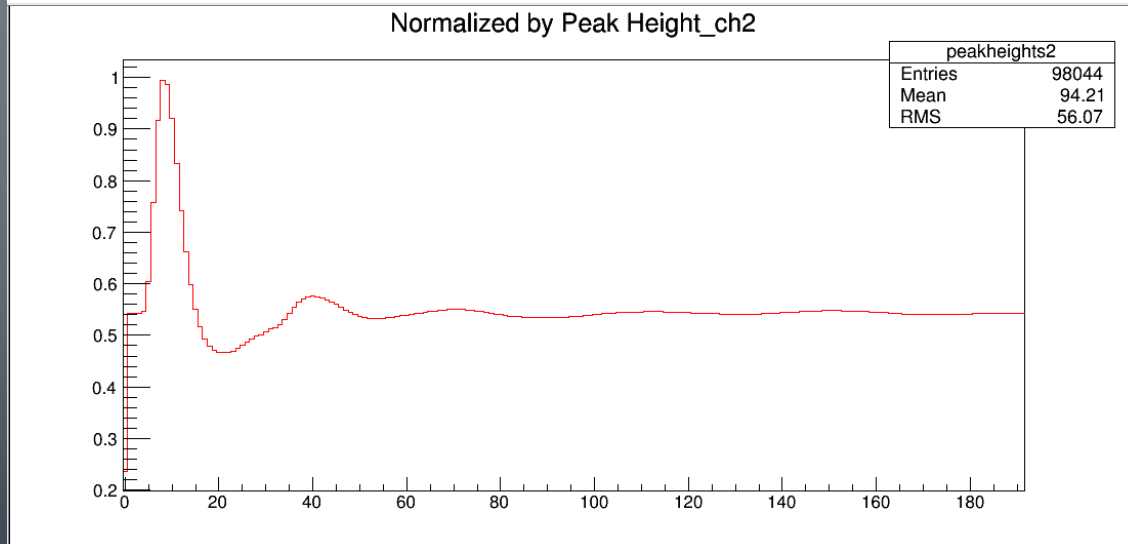
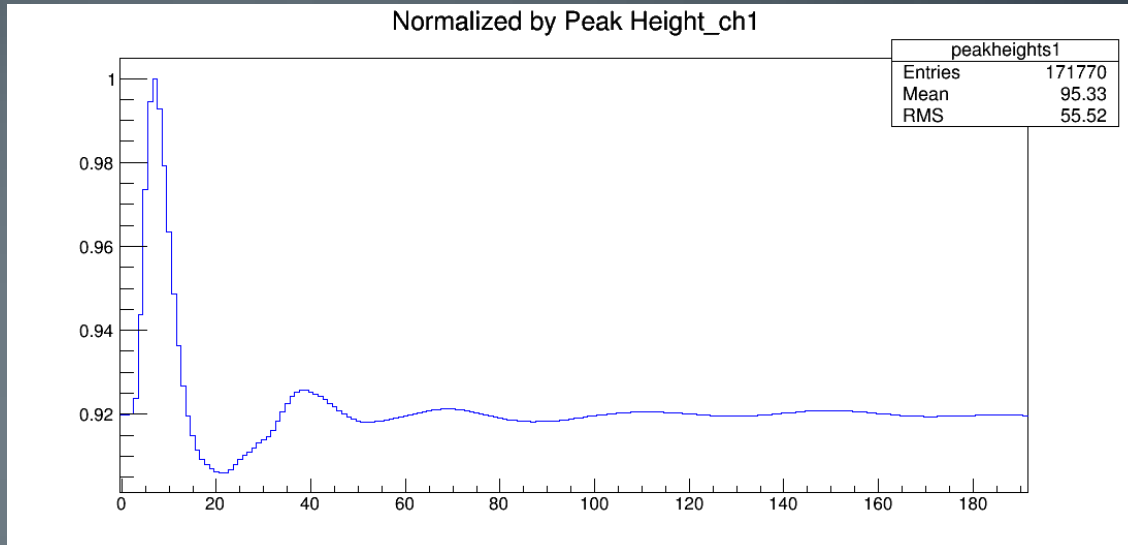
Averages_for_Ch1



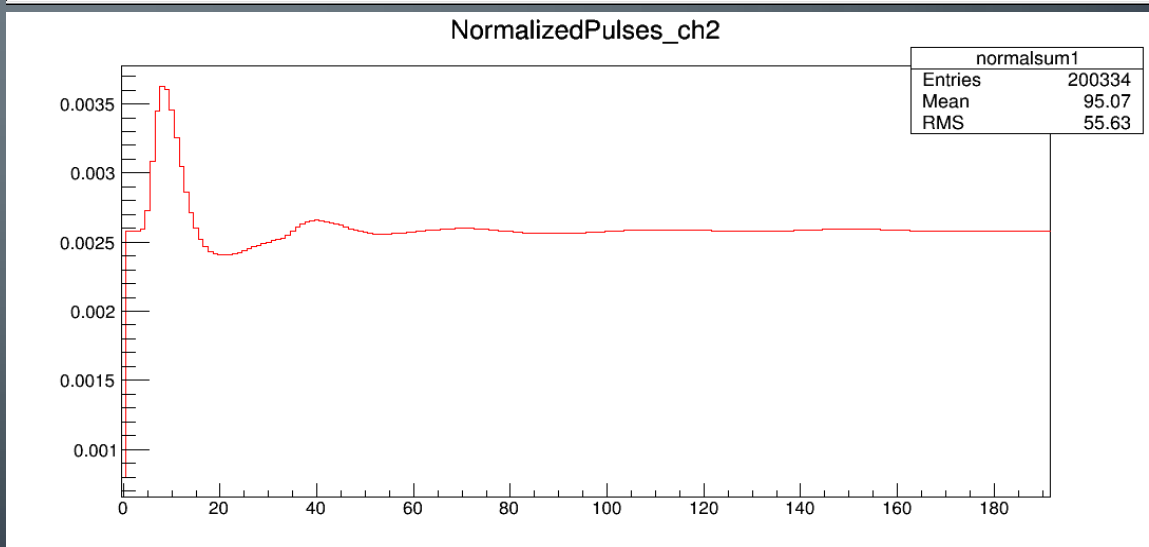
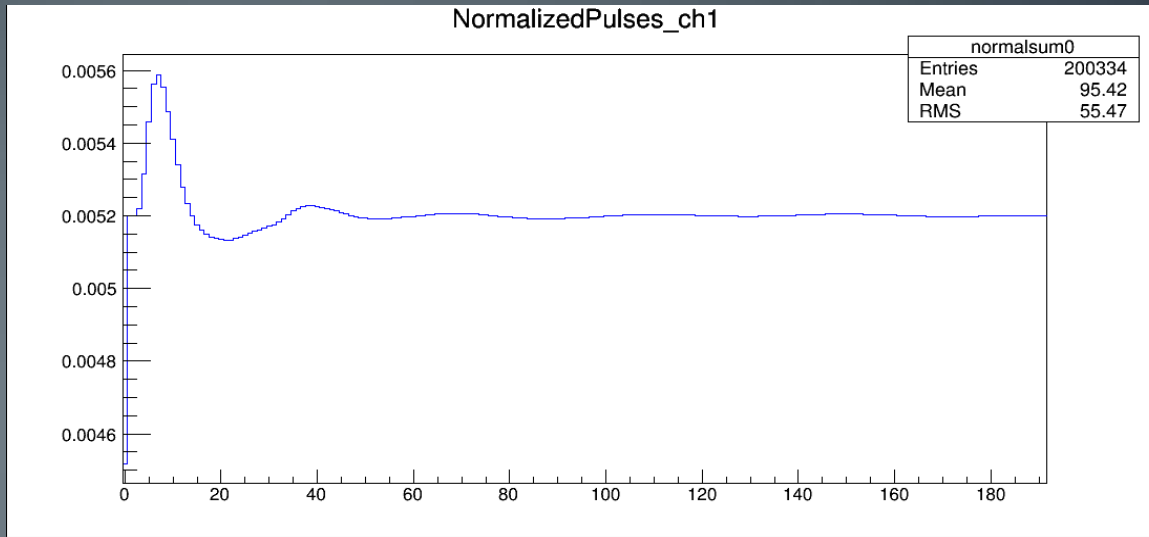
Averages_for_Ch2



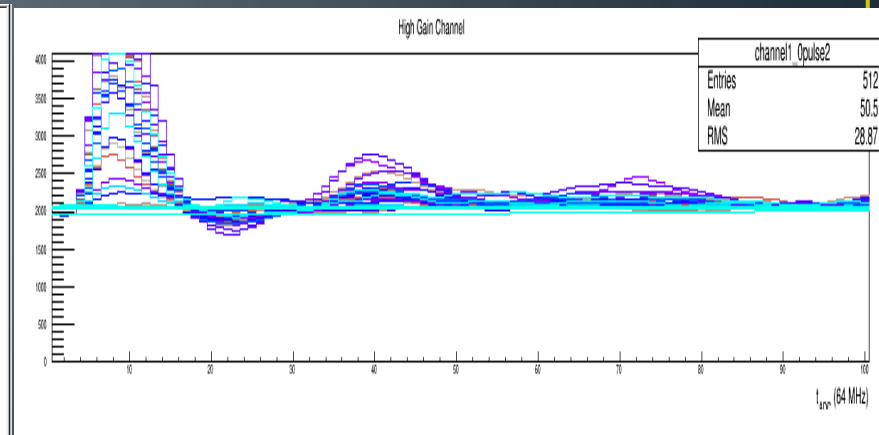
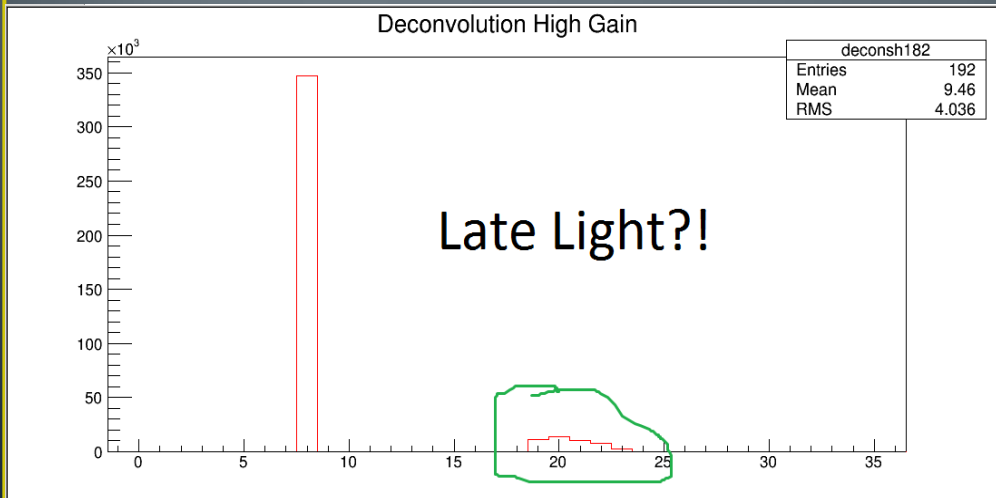
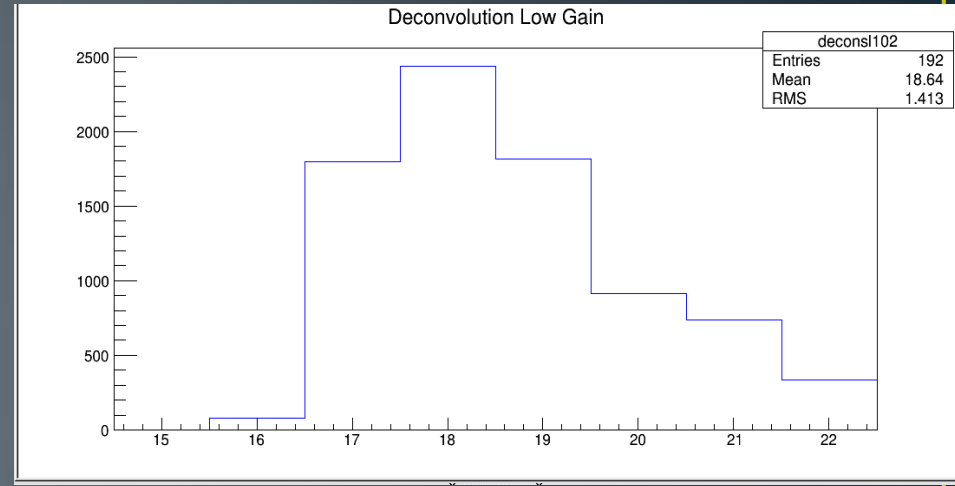
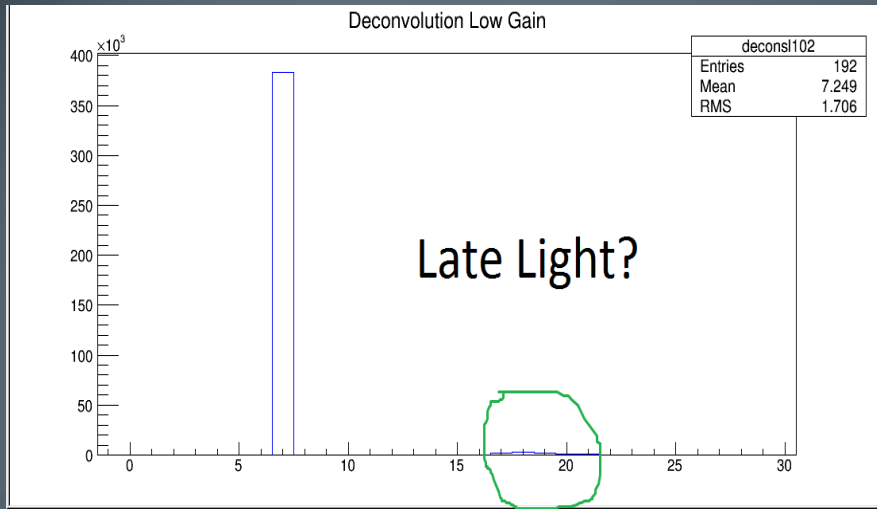
Normalized Peak Heights



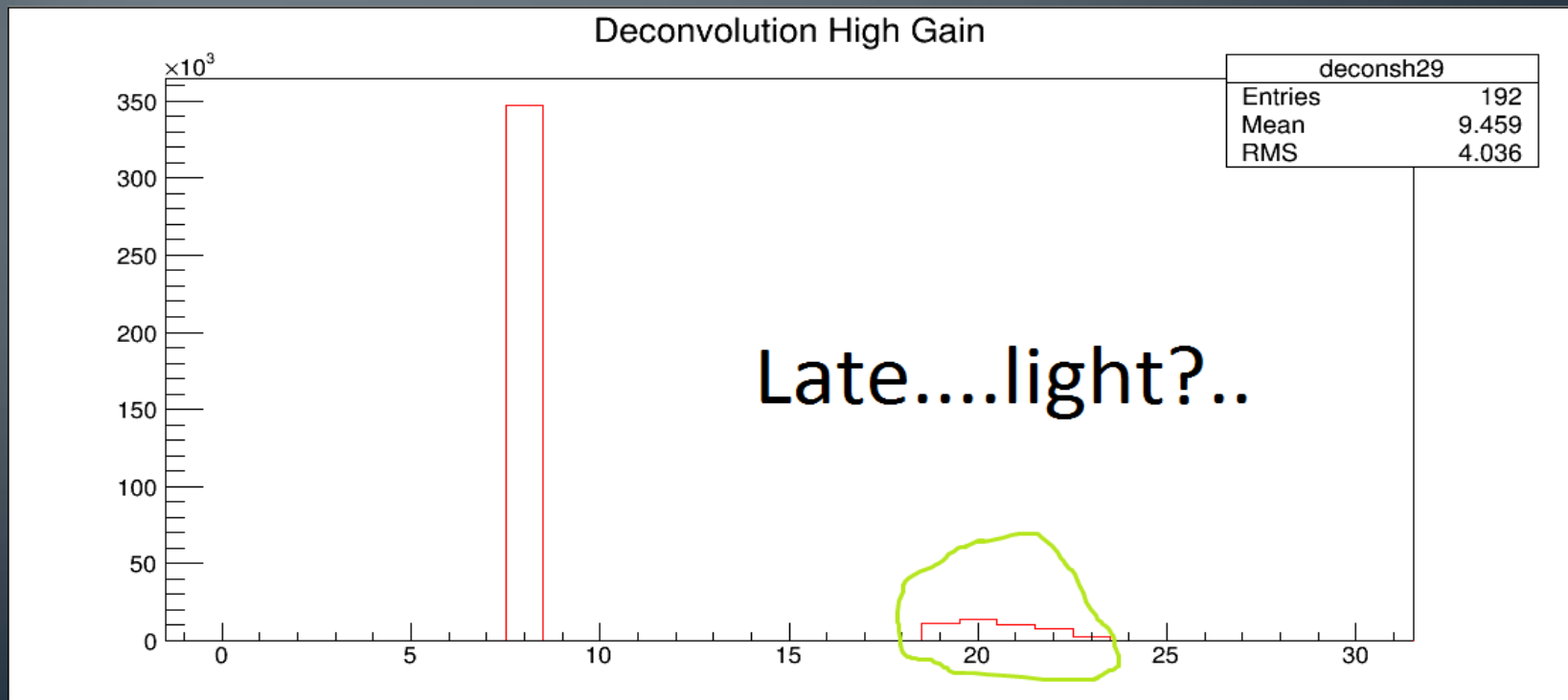
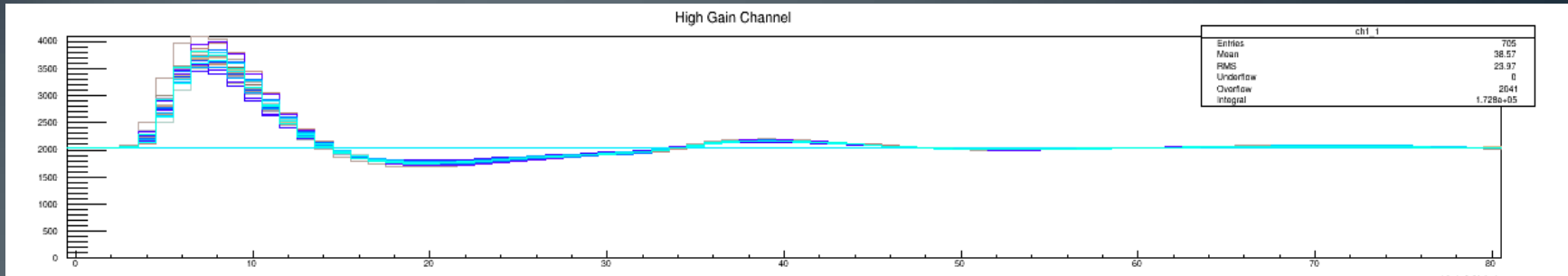
Normalized by Area



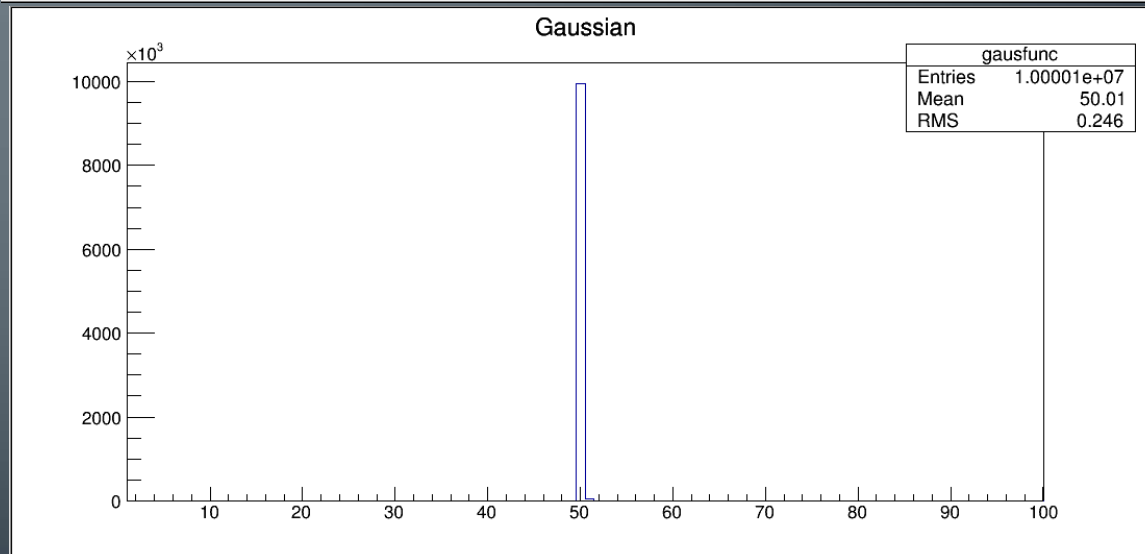
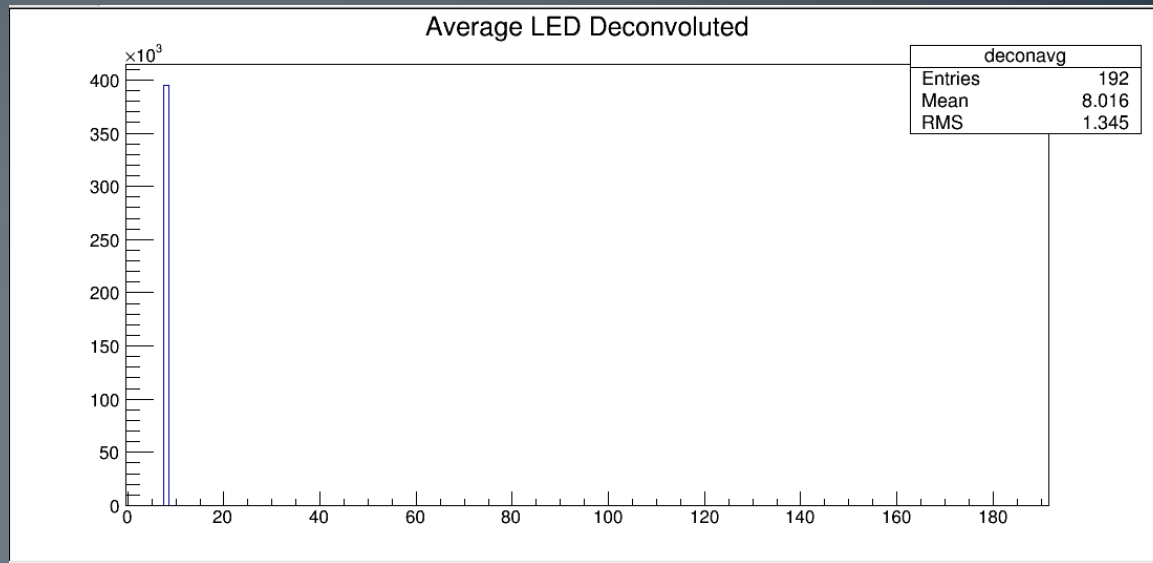
Deconvoluted Cosmics!



Deconvoluted... LEDs?



And Yet....



Interesting Facts:

- Uses Gold's deconvolution algorithm, Richardson-Lucy is also available but not as sensitive. (Also shot the Gaussian to infinity at some points)
- Low-Gain has much more variety, but also harder to find
- There IS some variety in the High Gain, but most follow that same shape and have the same ADC value at the same point
- For 50 cosmics, 11 low gain have something in that area, all different values. 27 Have something in that area, all with the same value (10695.5)

