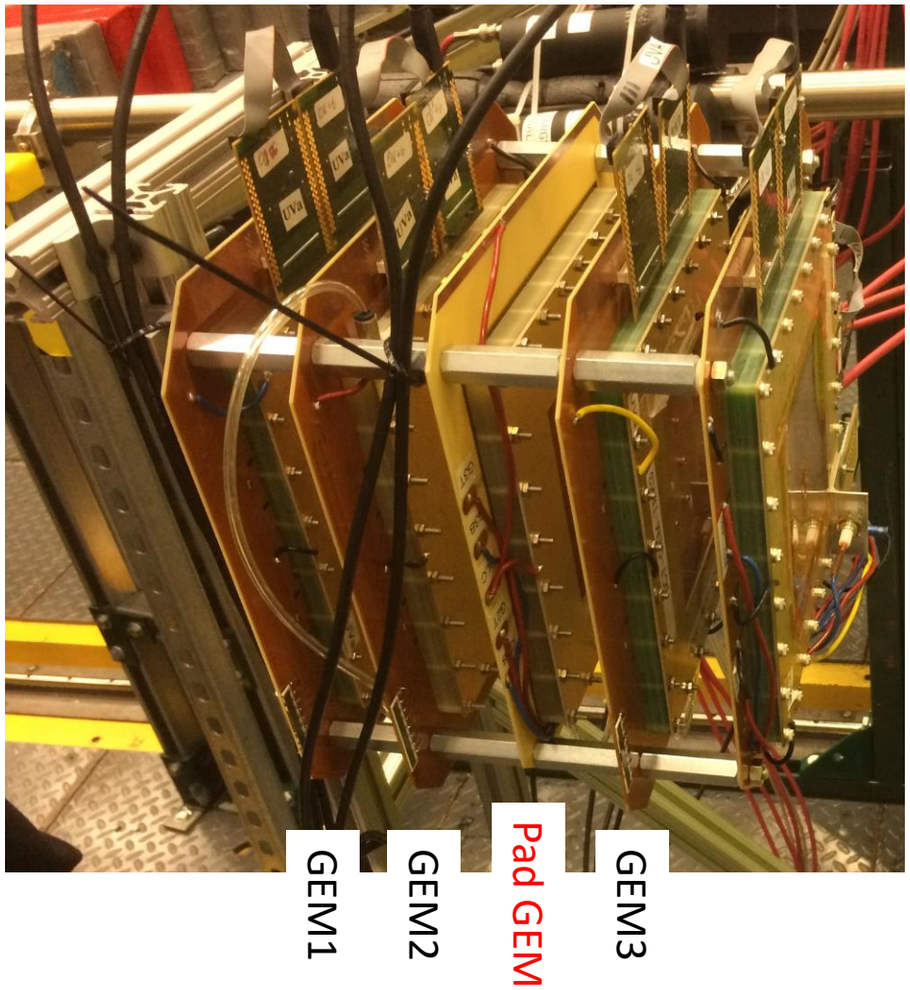
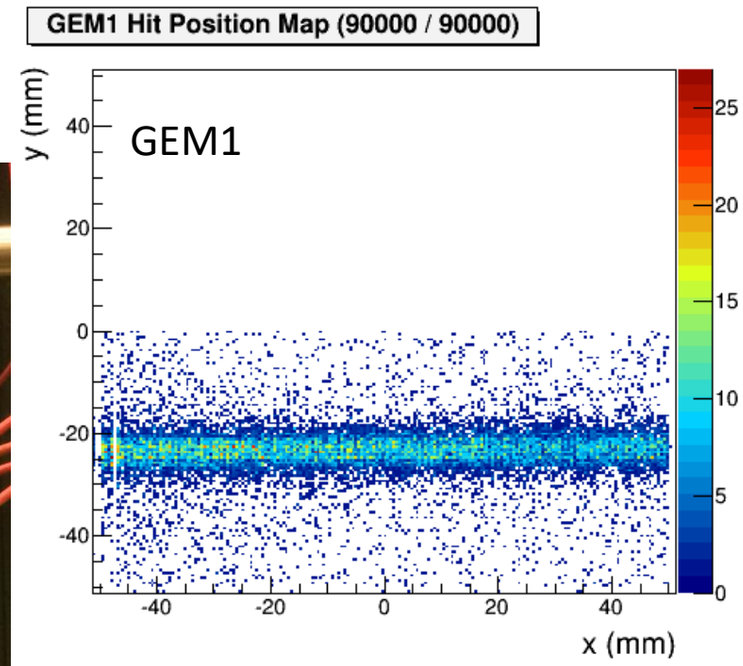
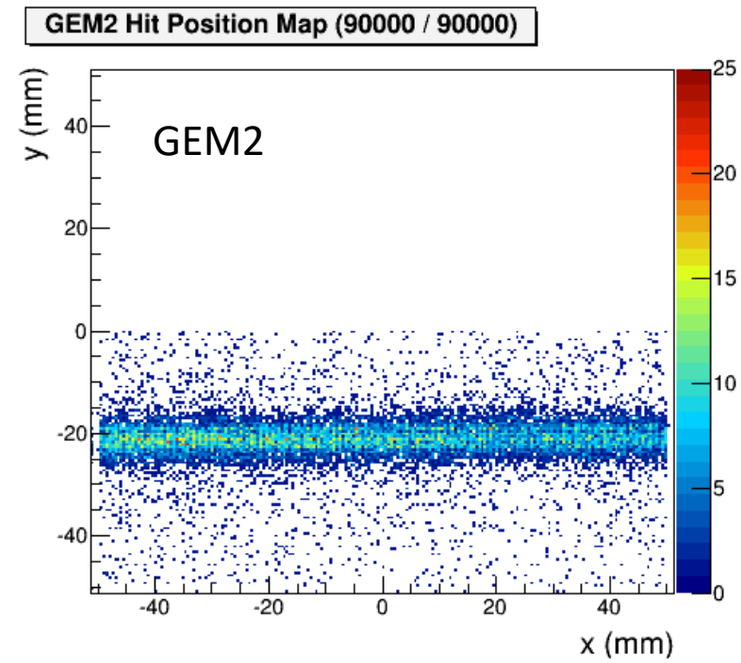
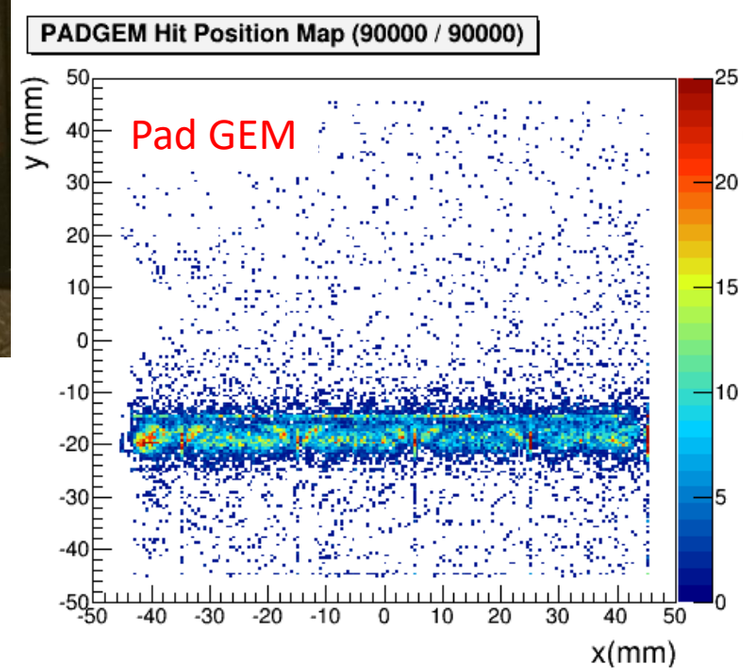
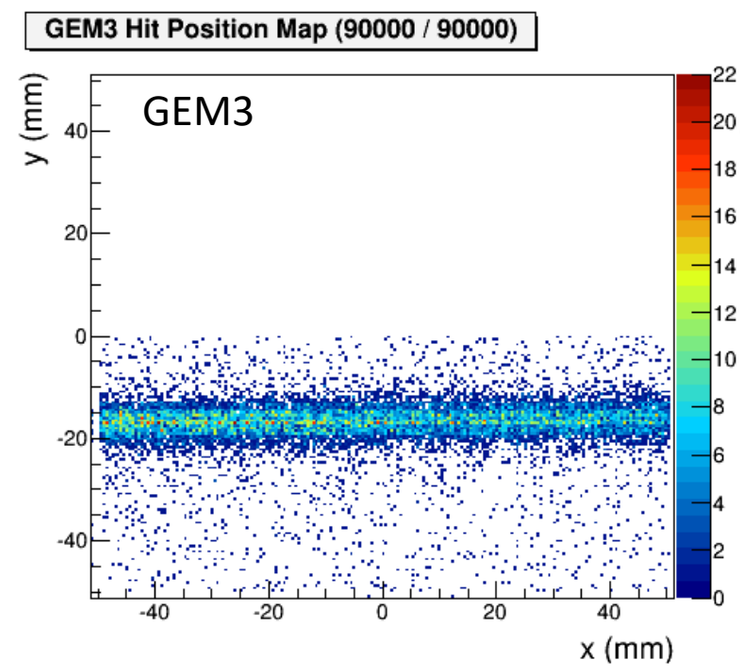
pad-GEM resolution studies (Kondo)







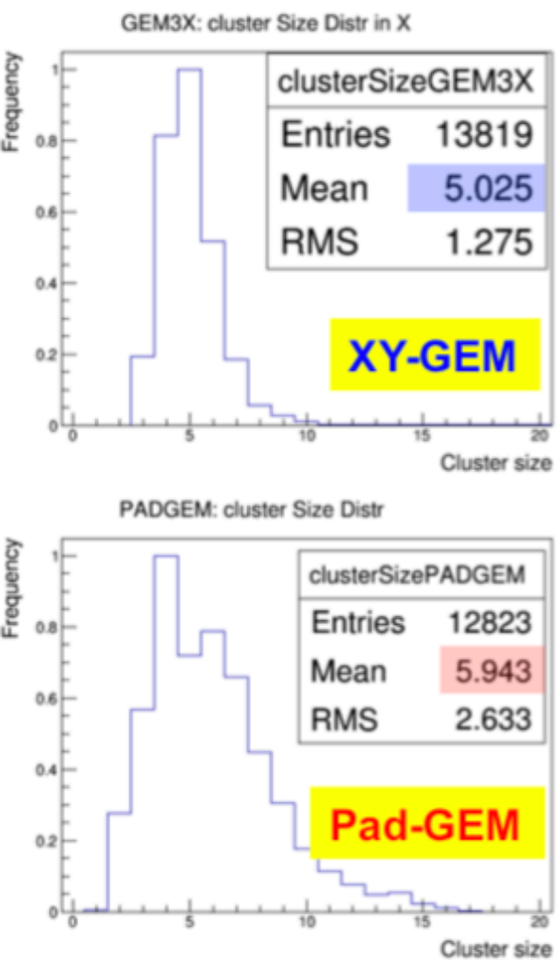




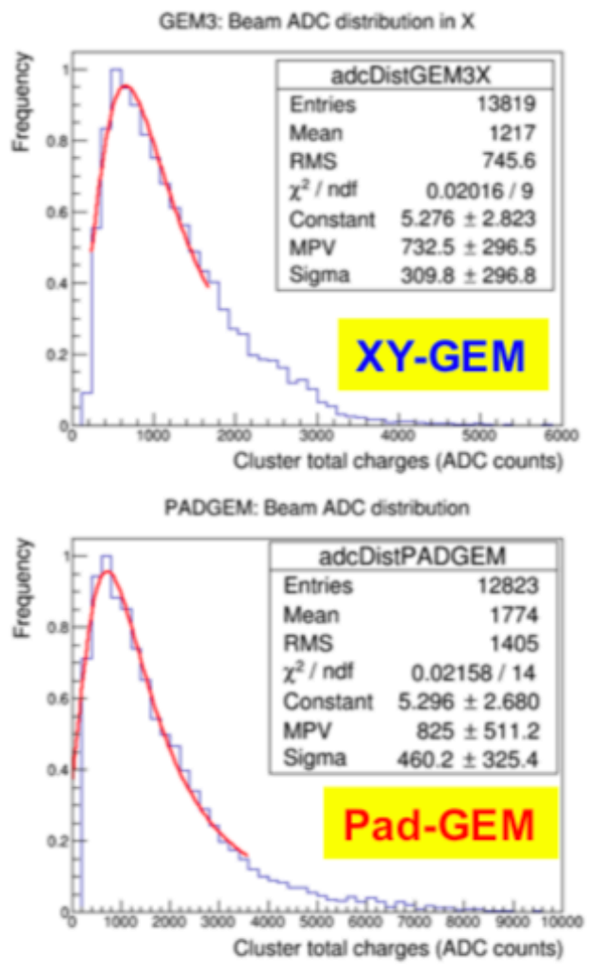
- Kondo estimates resolution of 450 um (preliminary, will share plots next week)
- However, HV up to 4850V with electrons and SRS (we had 4757V with pions and f125)

pad-GEM resolution studies (Kondo)

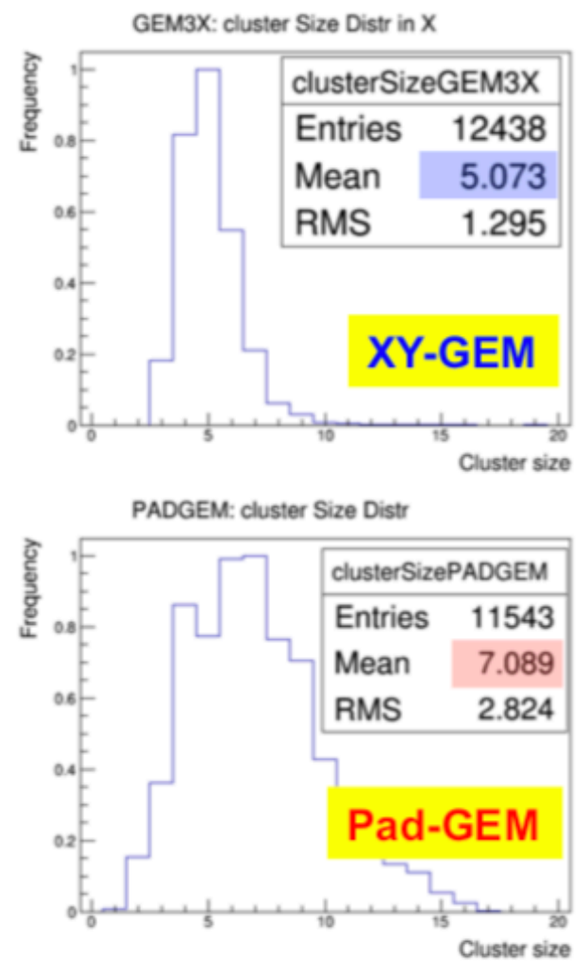
HV=4775V: Cluster Size



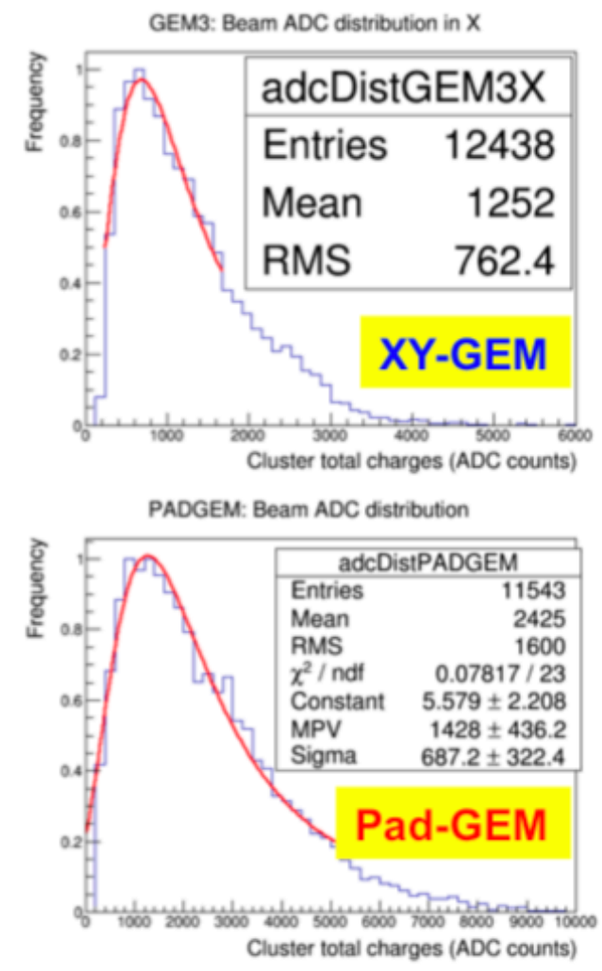
HV=4775V: ADC Distr.



HV=4850V: Cluster Size



HV=4850V: ADC Distr.

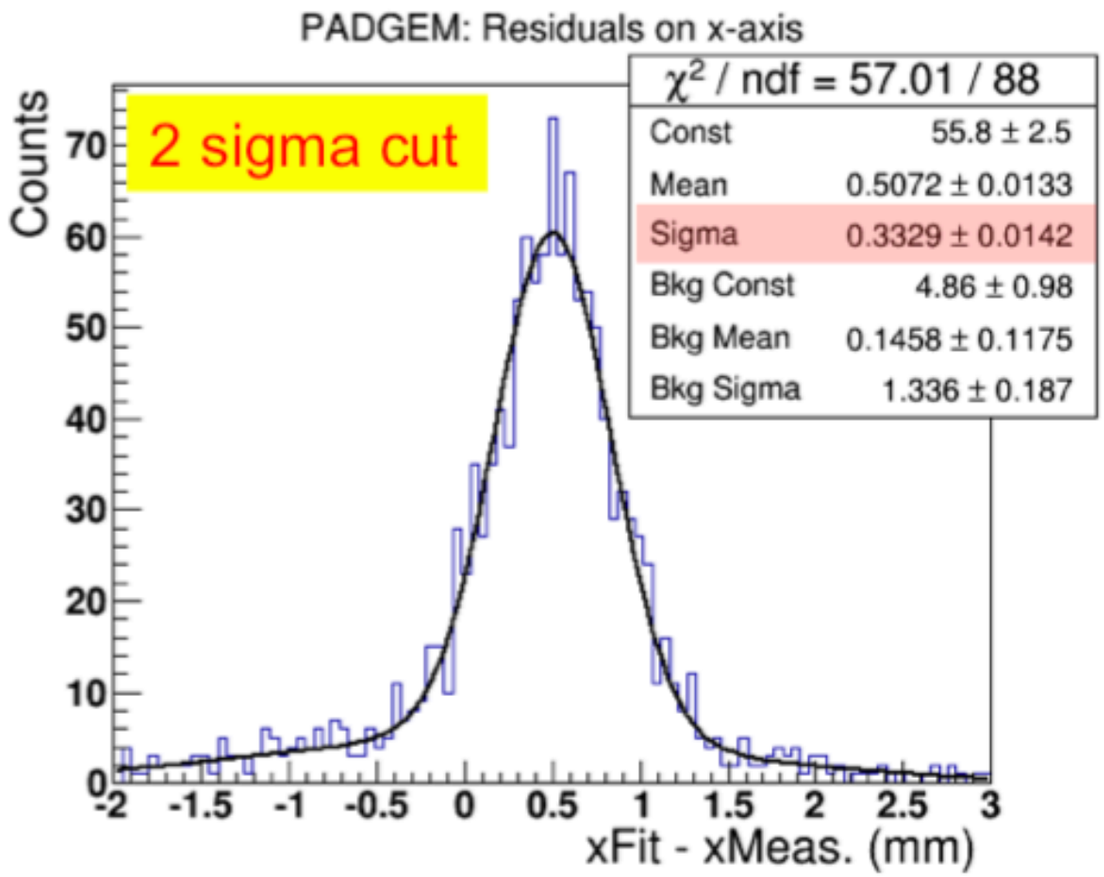


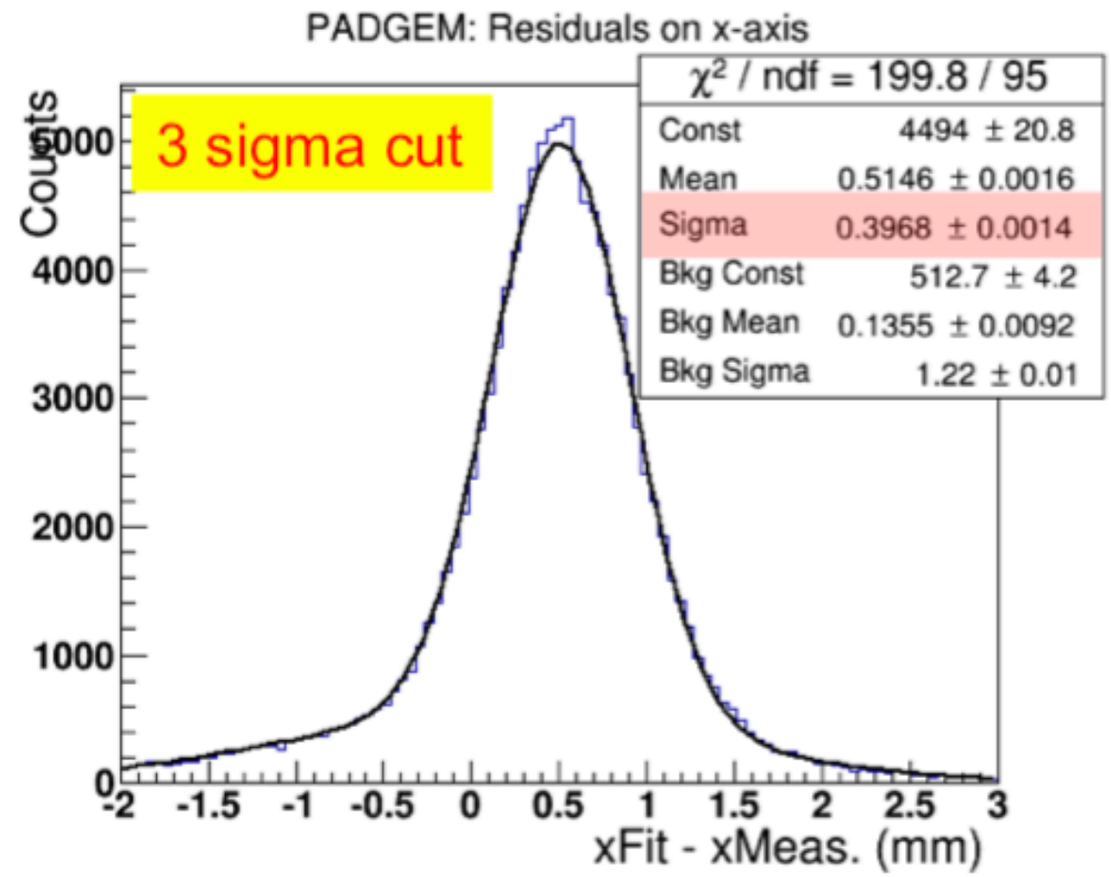
Pad GEM Efficiency = 12823 / (13819 × 0.95)
Pad GEM Efficiency = 98%

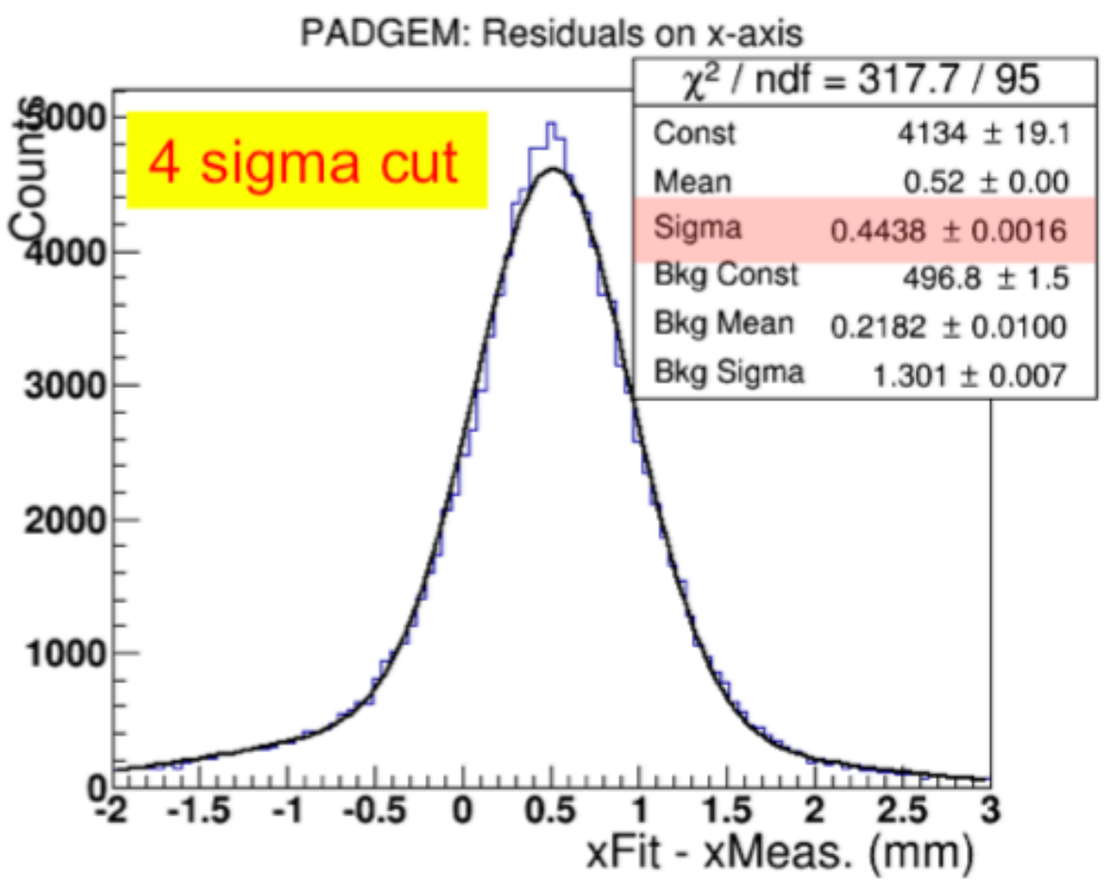
Pad GEM Efficiency = 11543 / (12438 × 0.95)
Pad GEM Efficiency = 98%

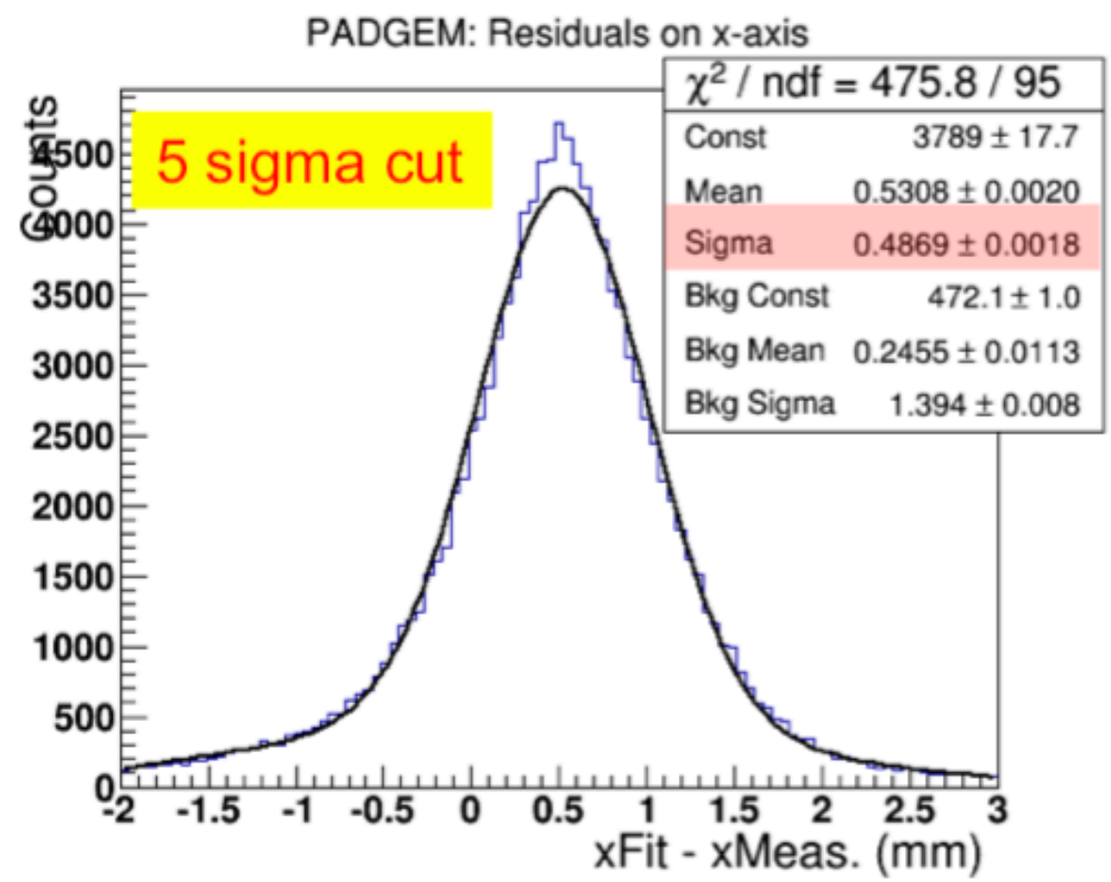
pad-GEM resolution studies (Kondo)

x-positions



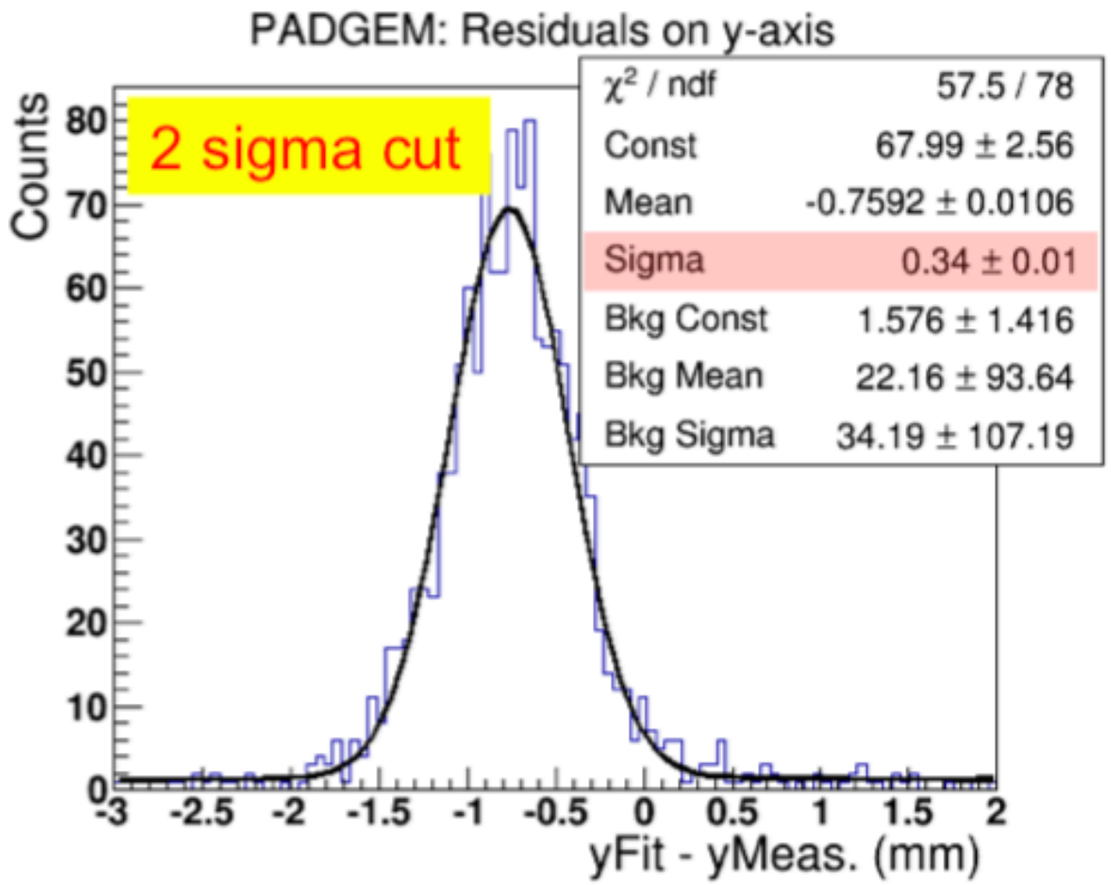


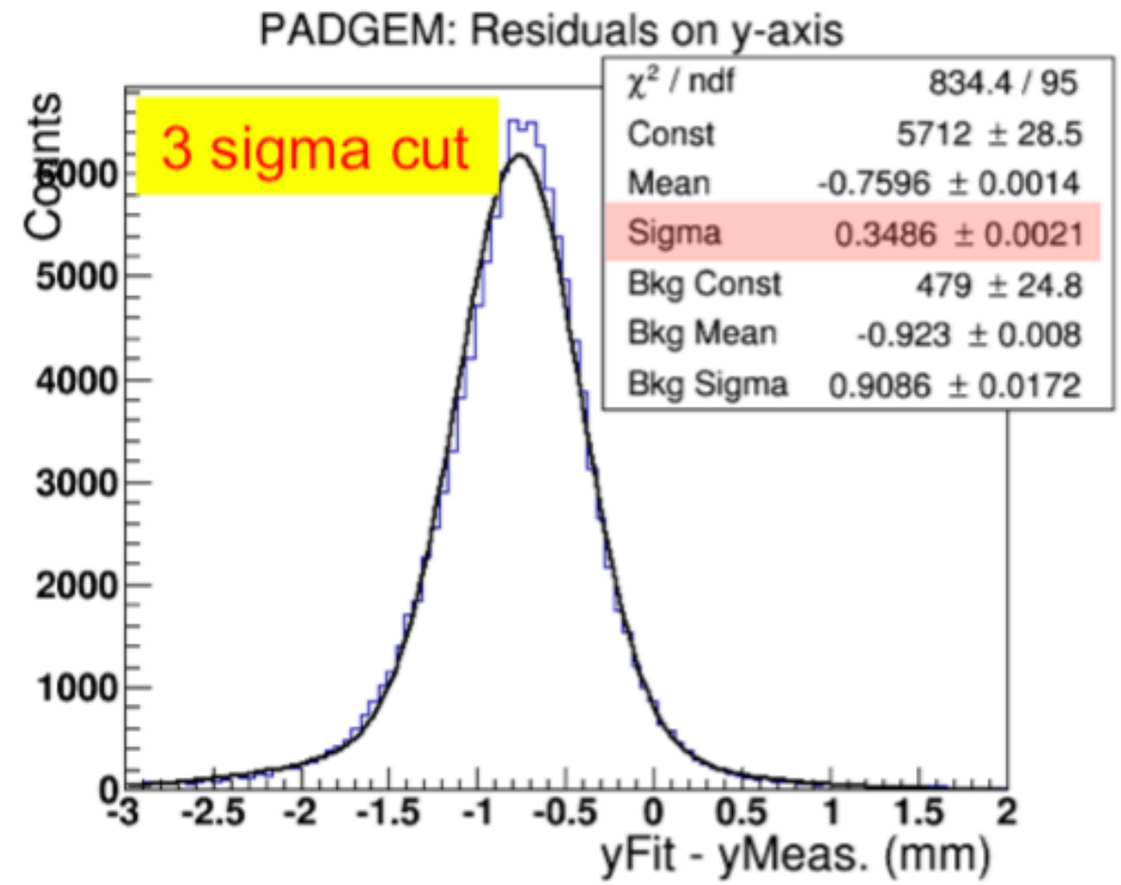


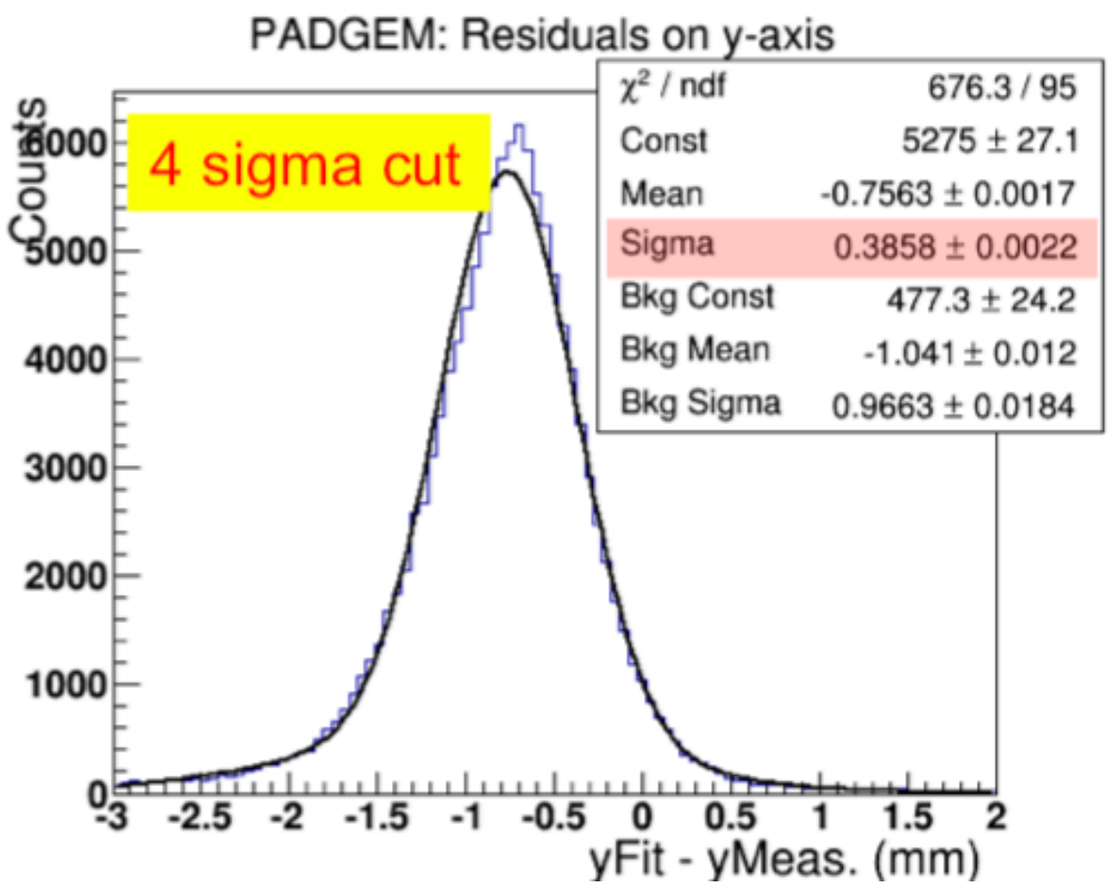


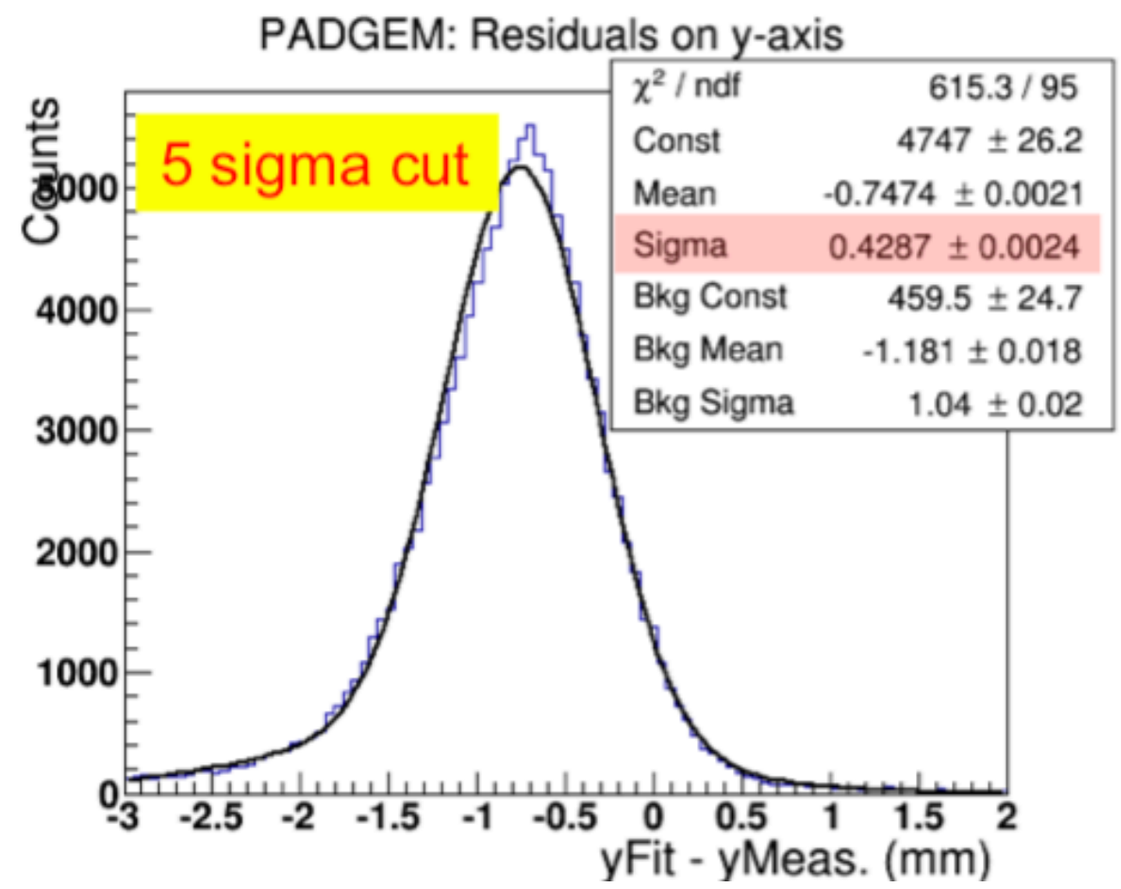
pad-GEM resolution studies (Kondo)

y-positions



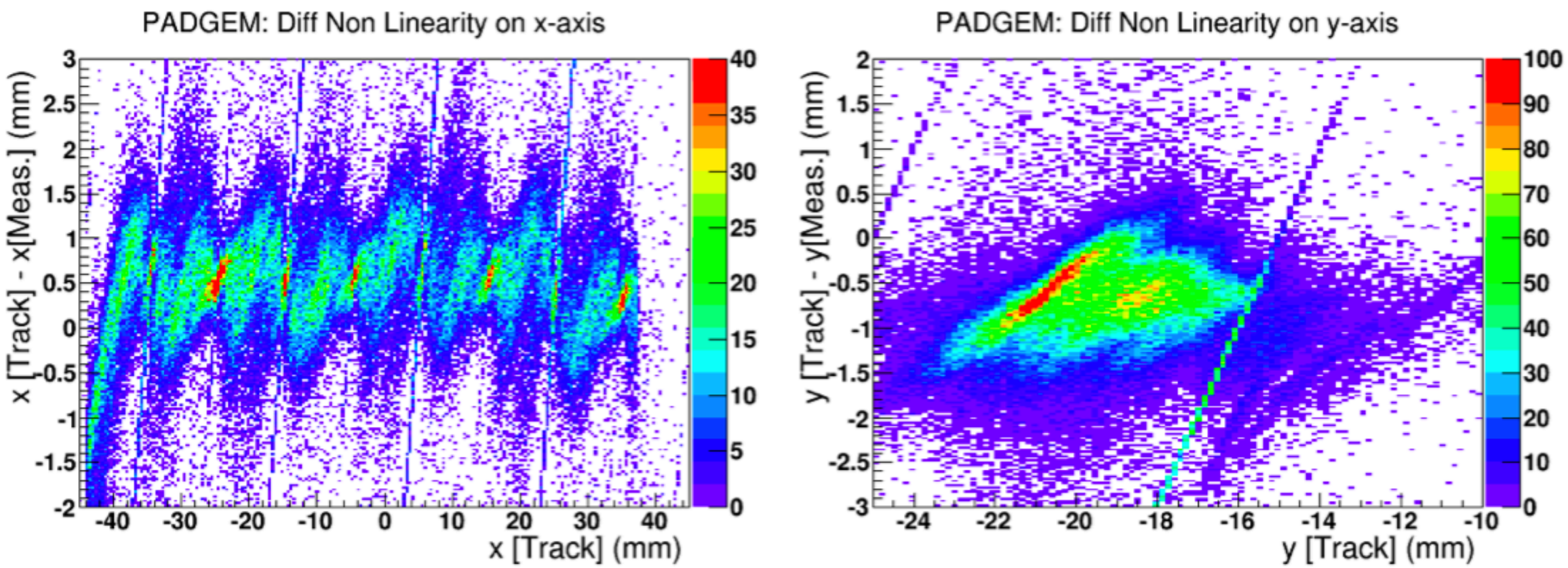




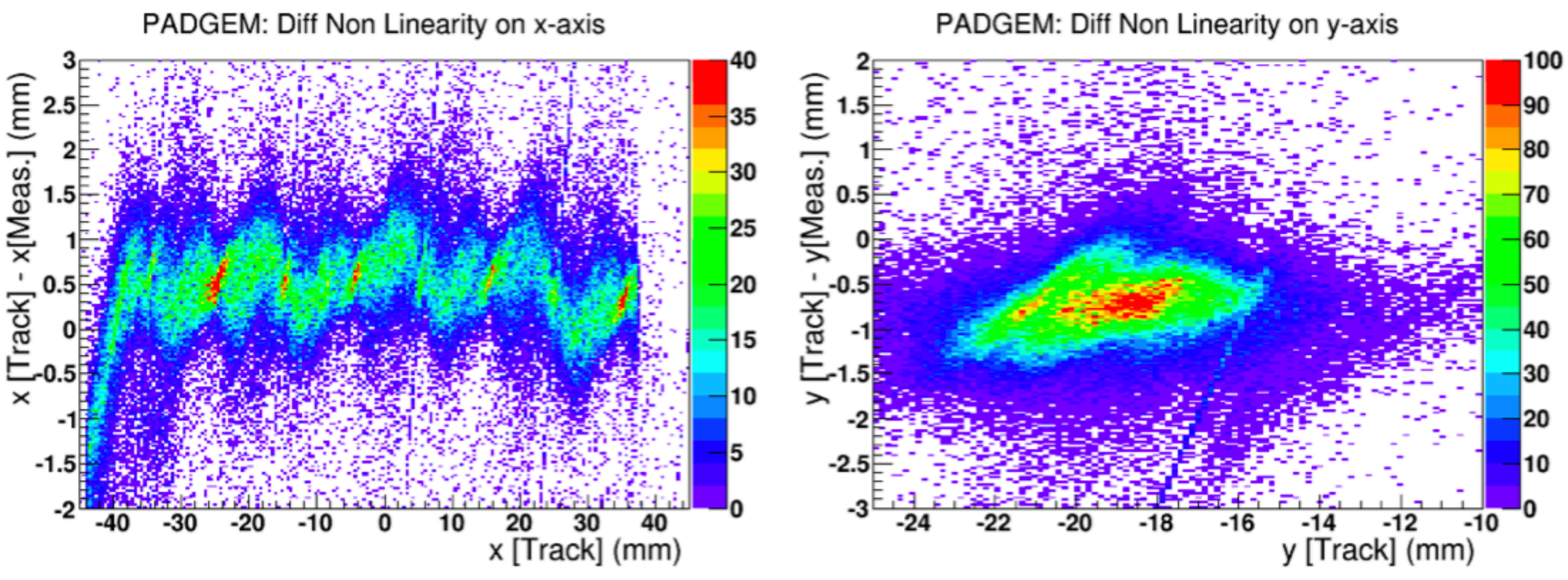


pad-GEM resolution studies (Kondo)

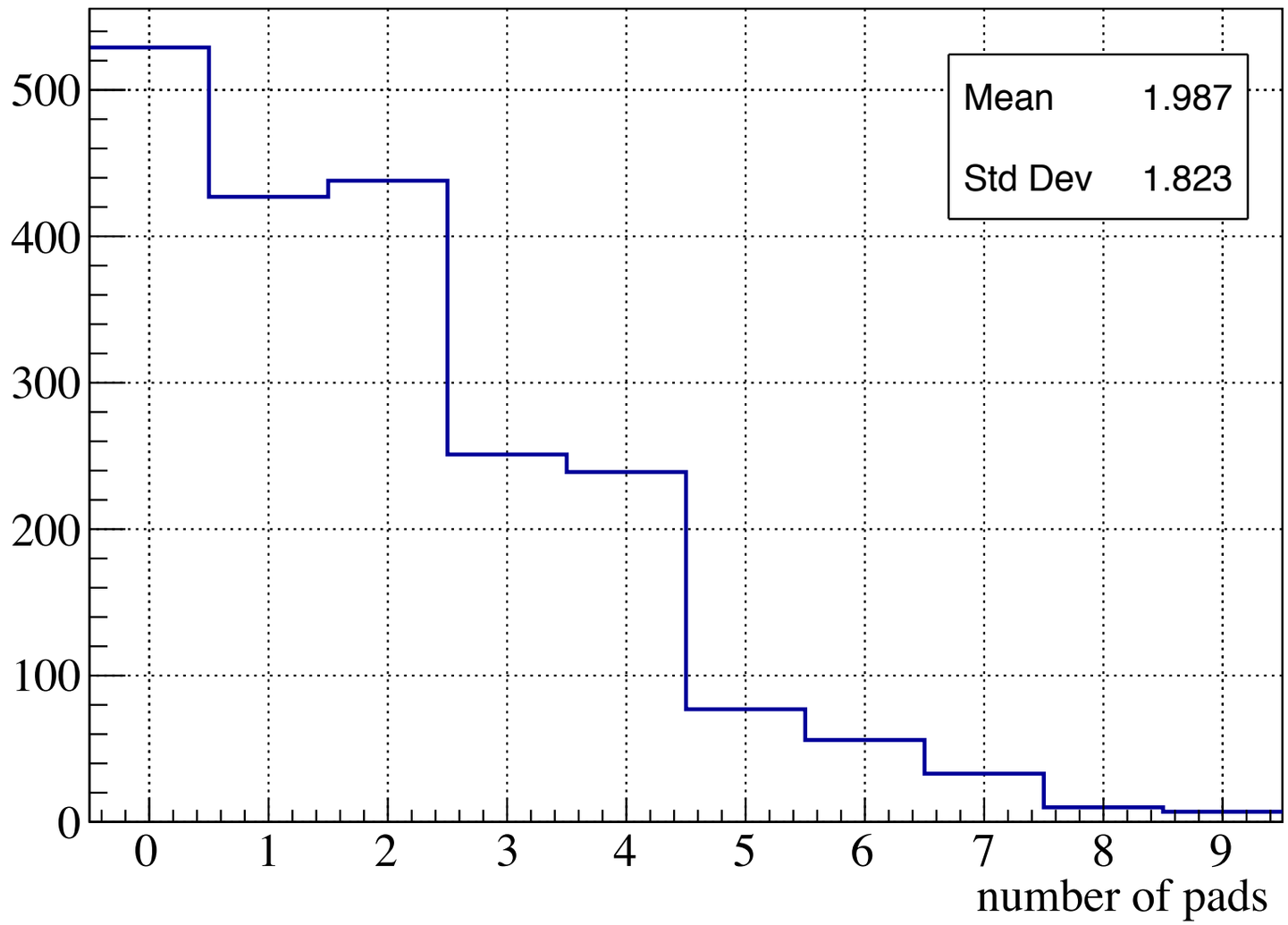
5 sigma cut



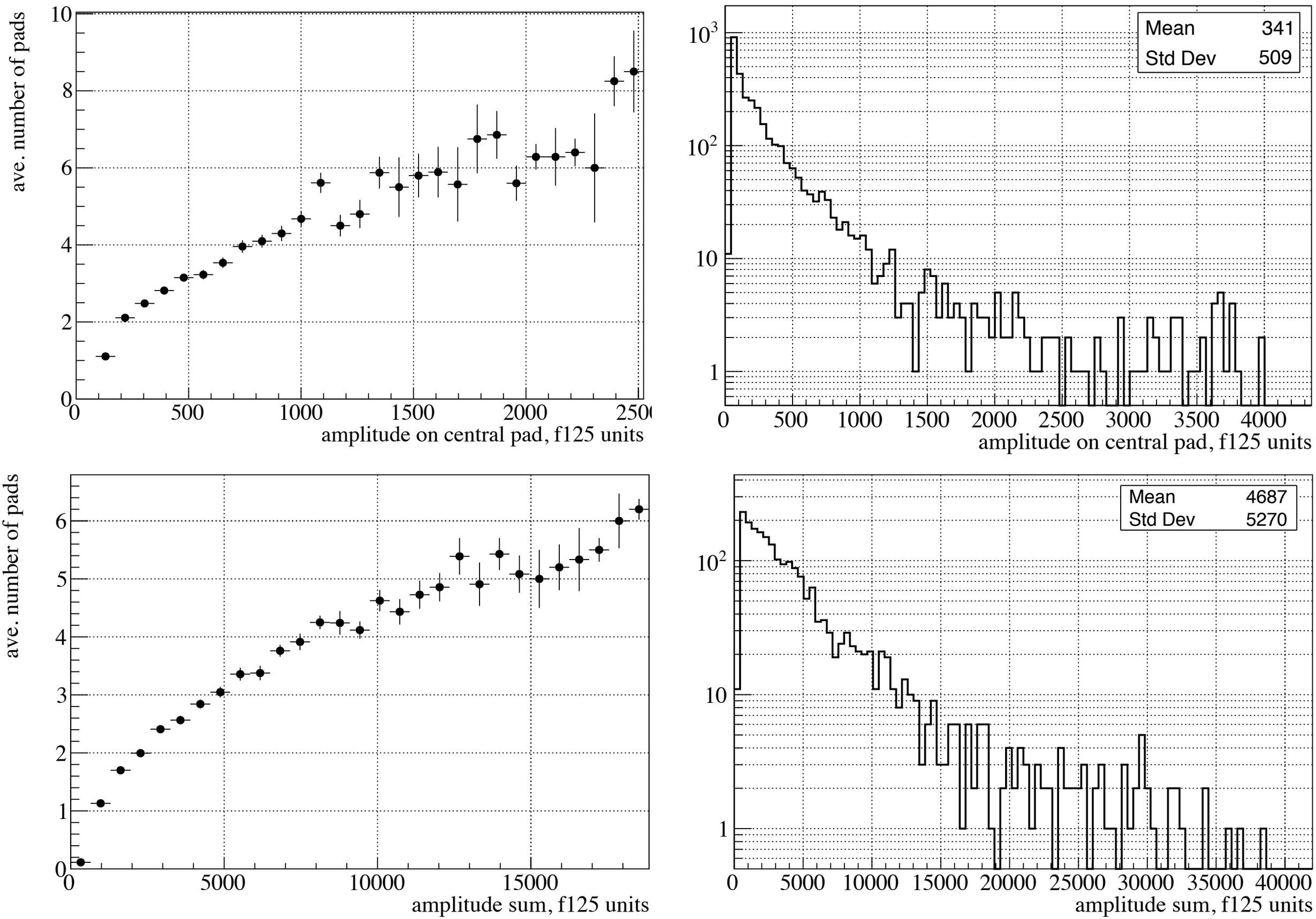
3 sigma cut



Pad GEM - charge sharing

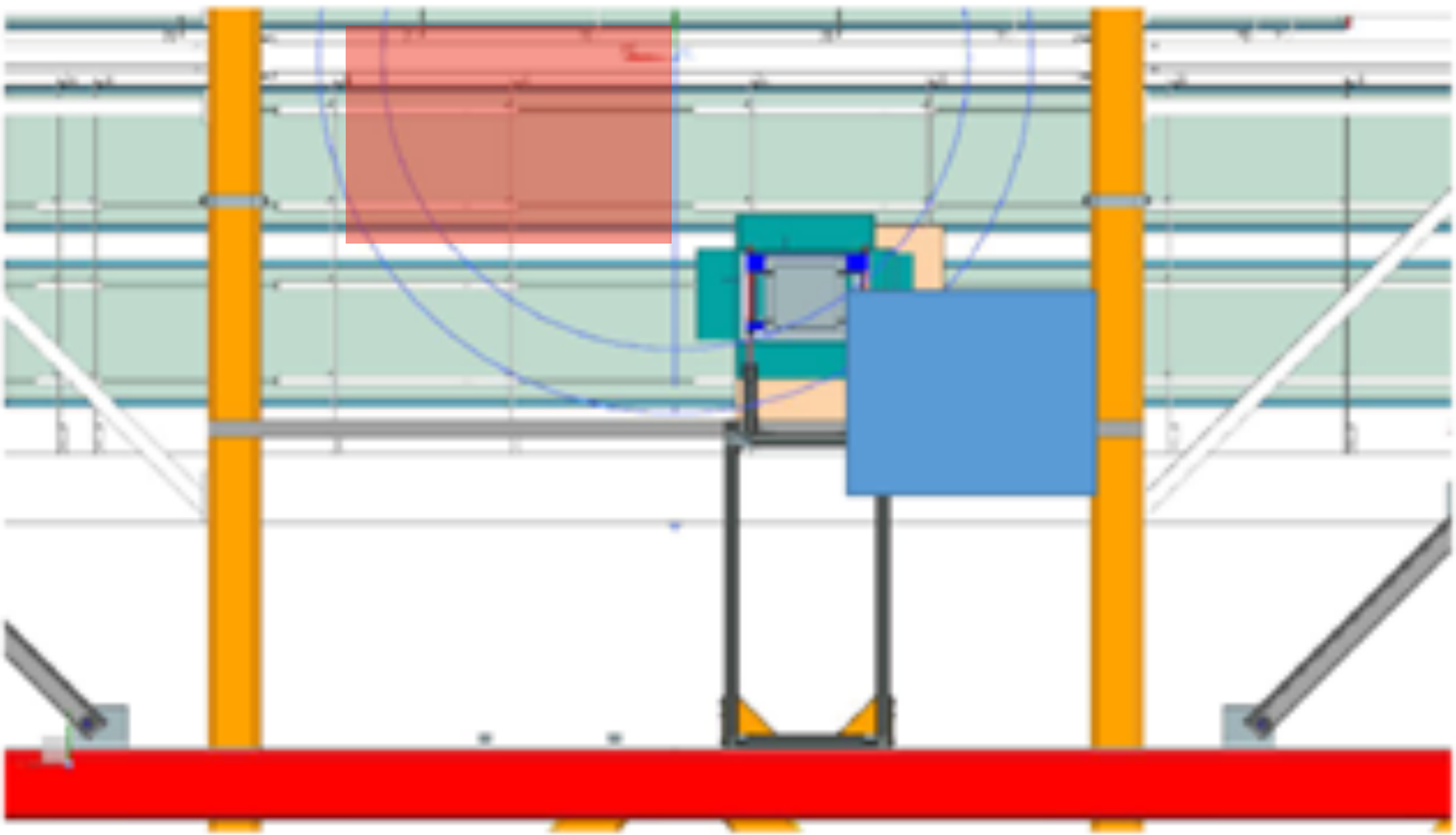


Pad GEM - charge sharing

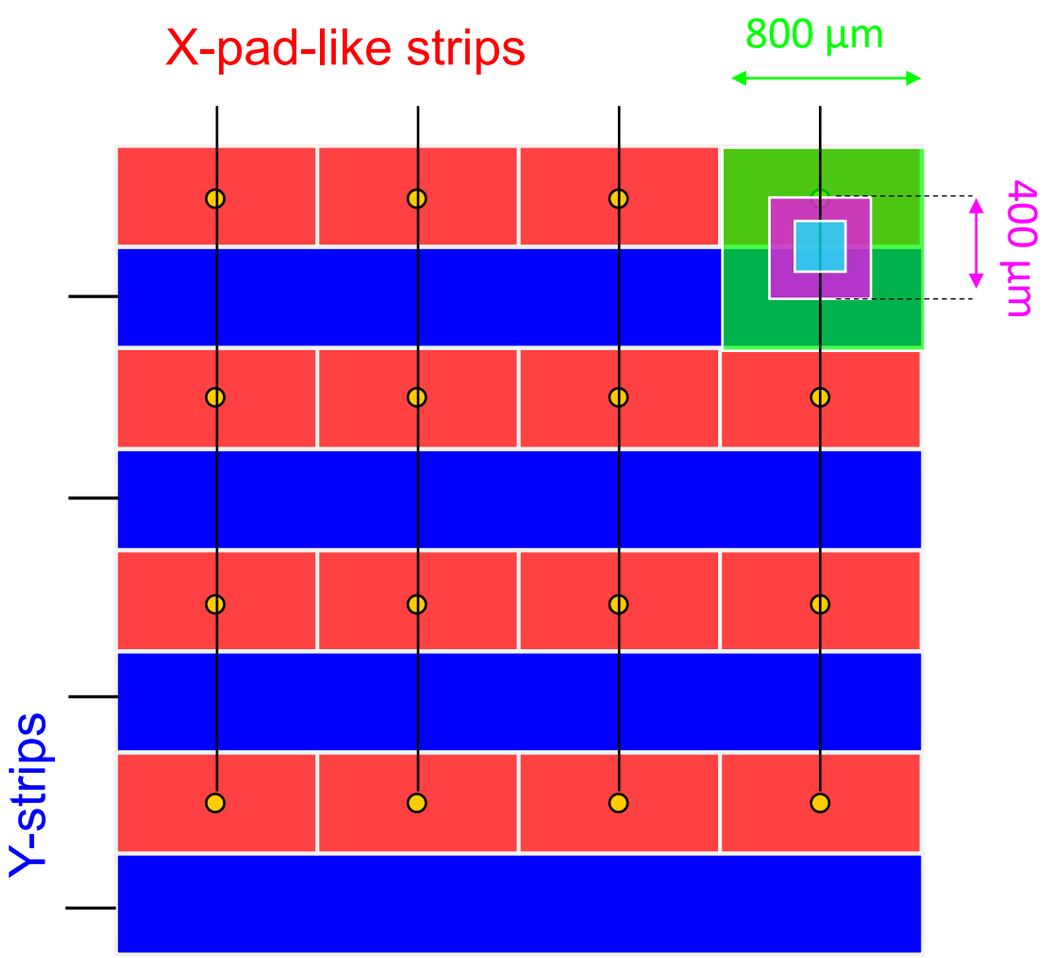
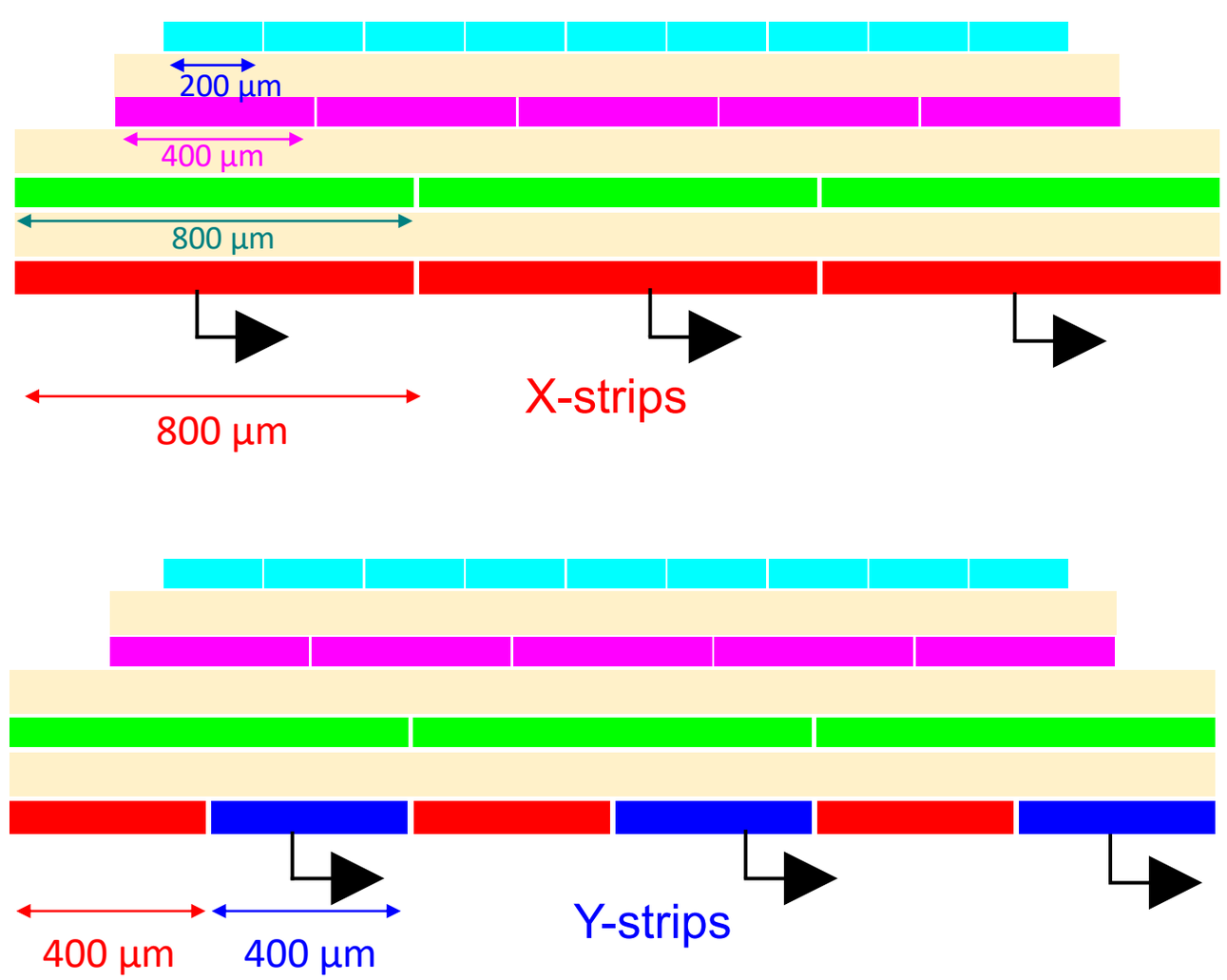


Large scale prototype 48x72 cm^2

- 3456 pads
- Electronics at one side (144 preamps, Fernando working on it)
- 48 fADC125 (streaming?, Cody working)
- 3 VME chasis (not VXS crates)



Large scale prototype 48x72 cm² (optional) large-strip readout

- 1500 strips
- Electronics at both x and y side side (63 preamps, Fernando working on it)
- 21 fADC125 (streaming?, Cody working)
- 2 VME chasis (not VXS crates)
- Electronics < $100k?

Capacitive-Sharing Large-Strip Readout: Low channel count X-Y strip readout