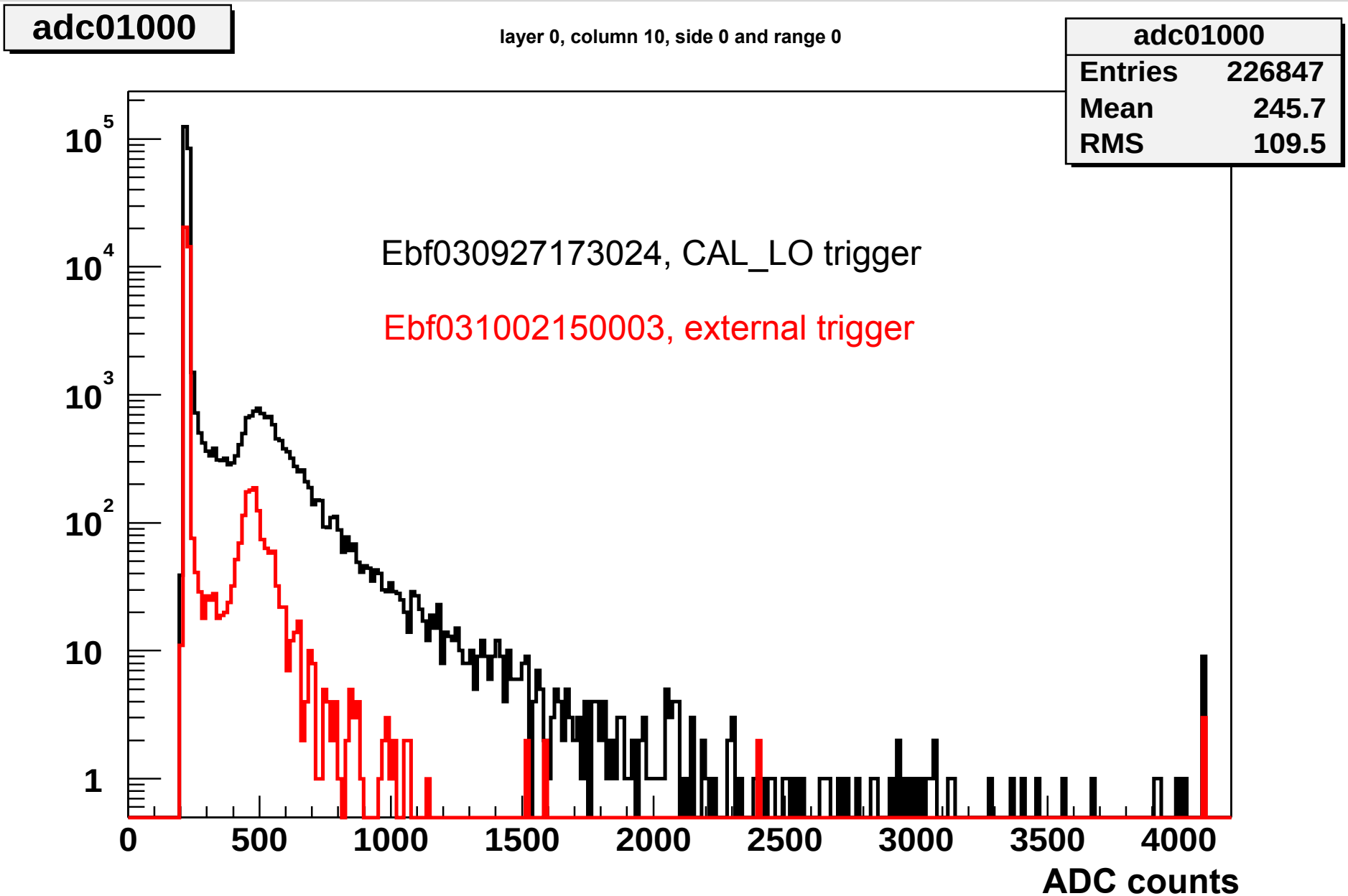
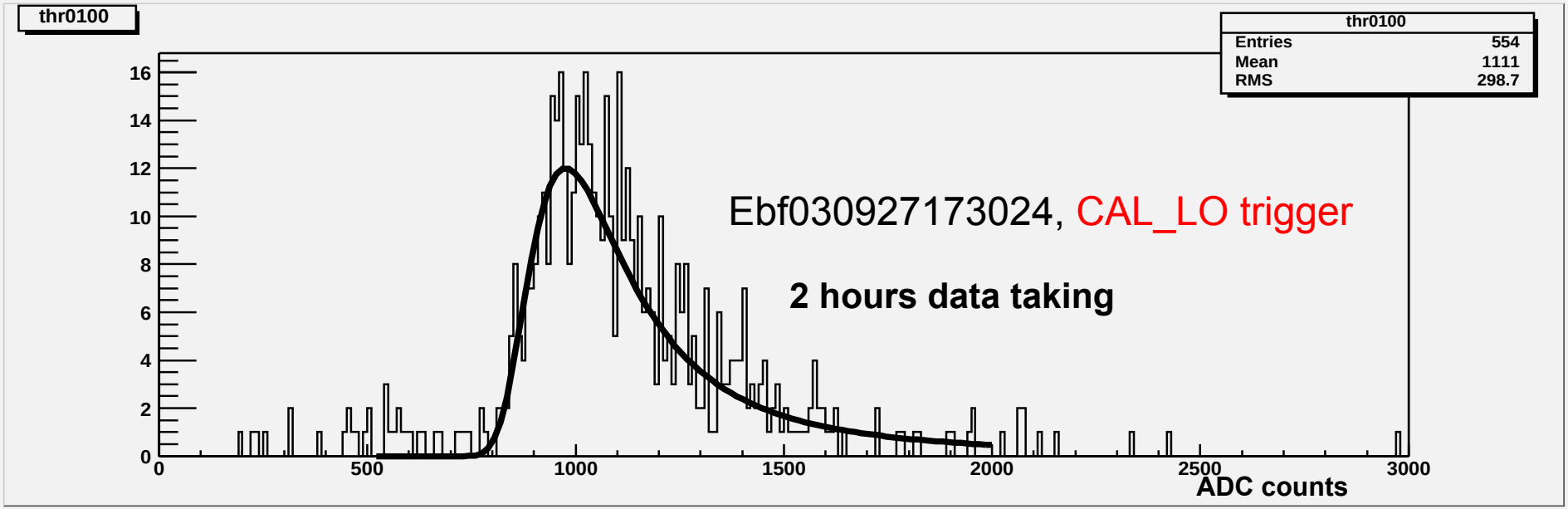
Outline

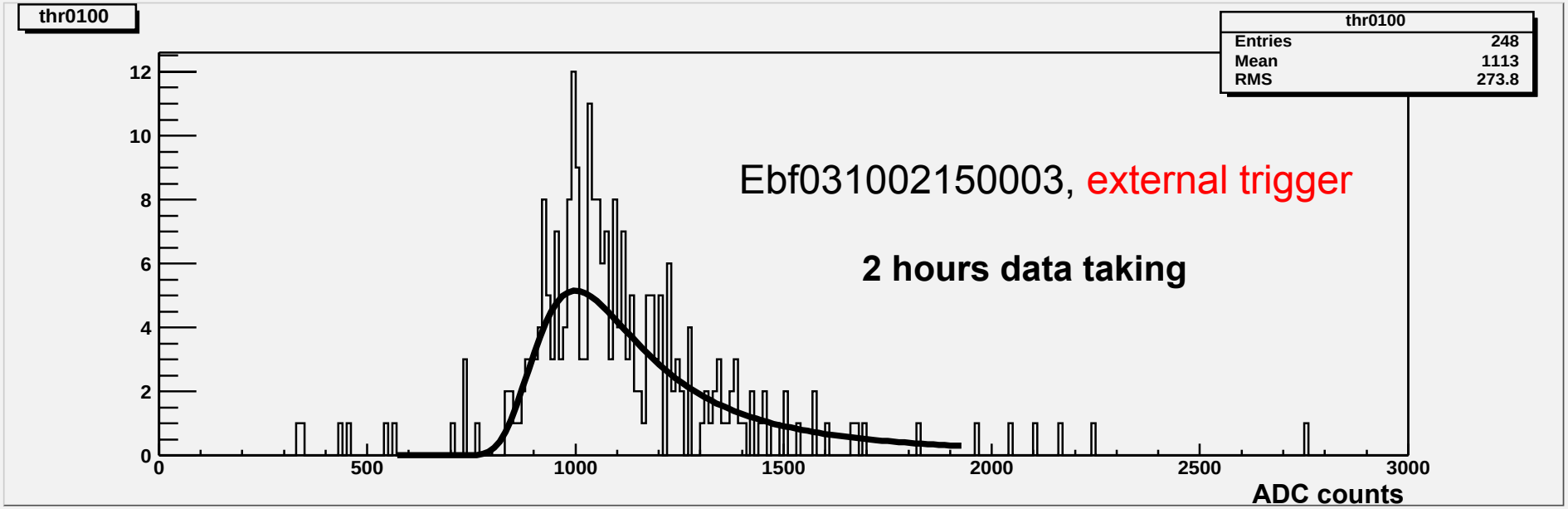
- Compare existing data for different configurations
  - CAL_LO Trigger and no Pb
  - External Trigger and 50 cm Pb
- Provide statistics for data taking plan

Cosmic ray raw ADC spectrum



Calibrated muon spectrum





Data Taking Time

ANALYSES	DATA	CALCULATION Hrs needed for 1000 muons/bin size		
Cuts	# Muons/log (based on 2 hour data)	1 mm	3 mm	10 mm
CAL only event selection (**ebf030927173024)**	554	1155	385	116
TKR tracks within < 20 deg w.r.t vertical (**ebf030927173024)**	6623/12 = 552	1160	387	116
TKR tracks within < 10 deg w.r.t vertical (**ebf030927173024)**	1971/12 = 164	3896	1299	390
CAL only event selection with 50 cm Pb (**ebf031002150003)**	248	2581	860	258

CAL group requests 1000 muons per mm.

We need to discuss with the CAL group what is the strategy for the data taking, because probably the best we can do is about half of the statistics required since
14 days of 16 hour data taking corresponds to 224 hours ~ 600 muons per 3 mm bin

Conclusion

- External Scintillator Trigger
  - When calibrating muon peaks, data quality does not improve significantly.
  - Reduces statistics by half when compared to the CAL_LO trigger
- CAL_LO Trigger
  - seems to be a better choice
  - May not have sufficient events to meet CAL group requirements (1000 selected muon events/mm)