

Lista di misure fatte

CREMAT(2)	PLANARE	scan di guadagno e in soglia
CAEN	PLANARE	scan di guadagno e in soglia
CREMAT(1)	GROOVED	scan di guadagno e in soglia
CREMAT(2)	GROOVED	scan di guadagno e in soglia
CAEN	GROOVED	scan di guadagno e in soglia
CREMAT(2)	GROOVED	scan in soglia + TRIGGER TOP

Cosa c'è

Confronto CAEN e CREMAT planare

Confronto CAEN e CREMAT grooved

Confronto simulazione e misure di energia depositata

Cosa manca

Misura del rate di acquisizione

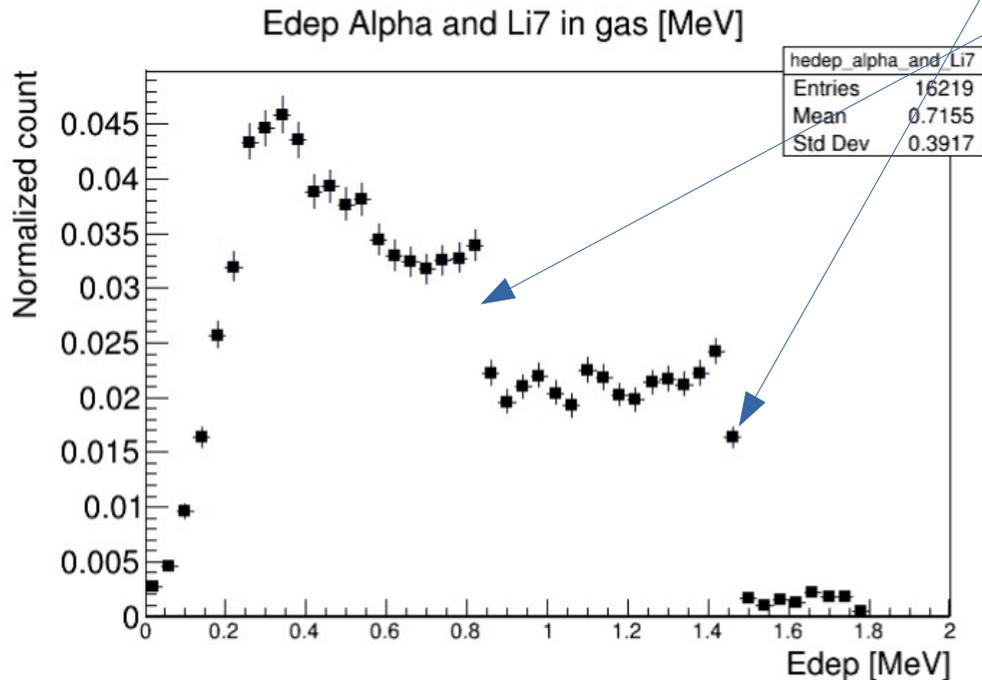
Analisi col GROOVED e 6kV/cm drift field

Confronto trigger HV side – NO HV side nel CREMAT(2)

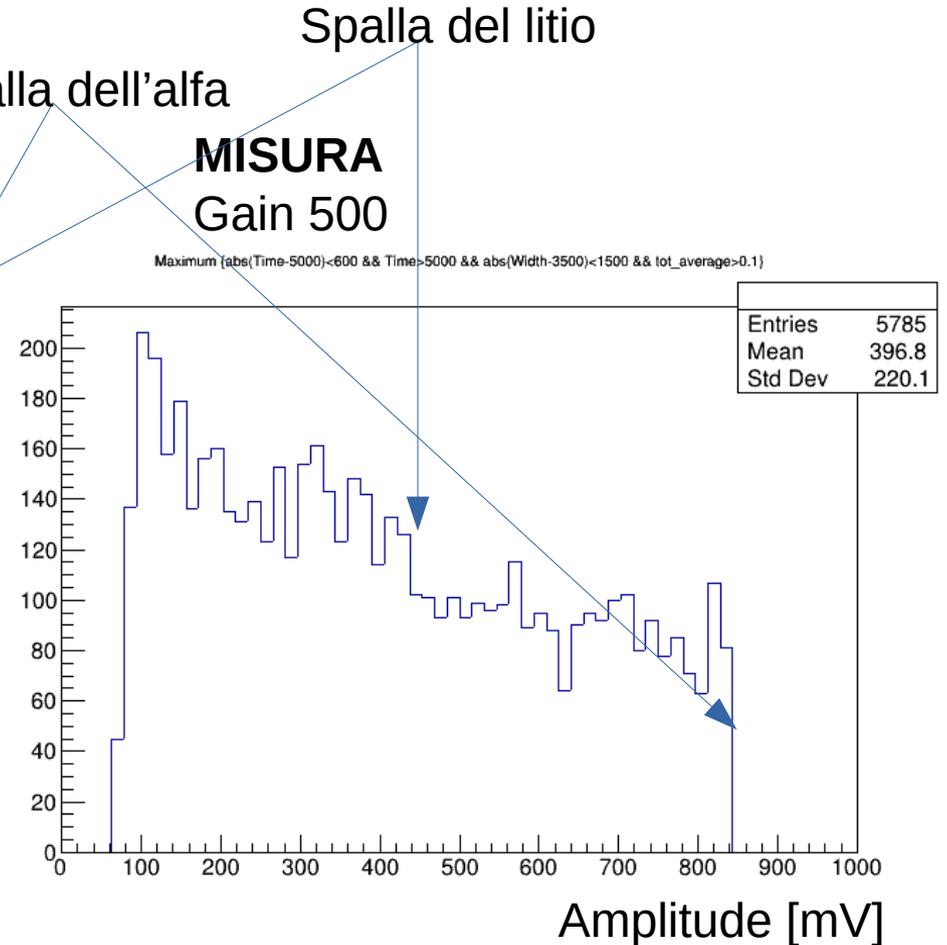
Analisi con doppio segnale da TOP e READOUT (coincidenza?)

CATODO BORATO PLANARE da 2.5 μm - CREMAT

SIMULAZIONE



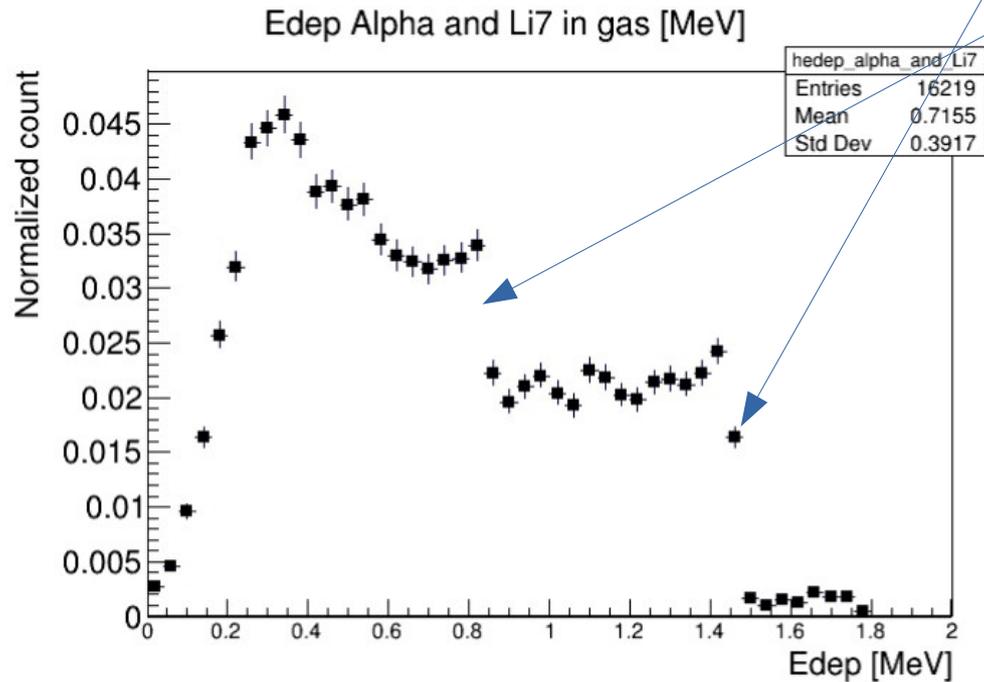
MISURA
Gain 500



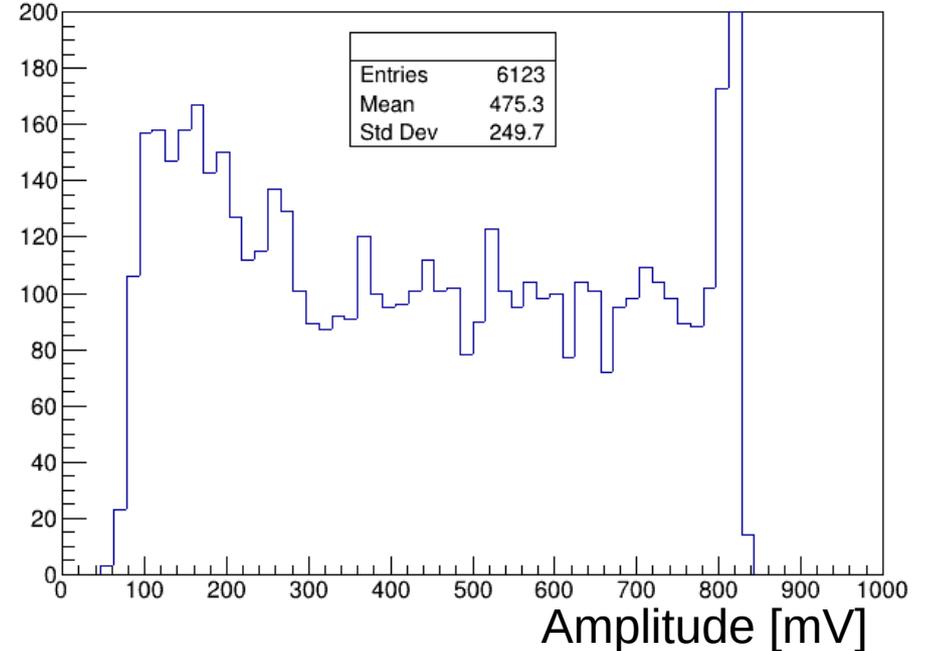
Conto a spanne: 1.4MeV~820mV \rightarrow 50mV di thr sono 0.08 MeV \rightarrow vediamo tutto lo spettro

CATODO BORATO PLANARE da 2.5 μm - CREMAT

SIMULAZIONE



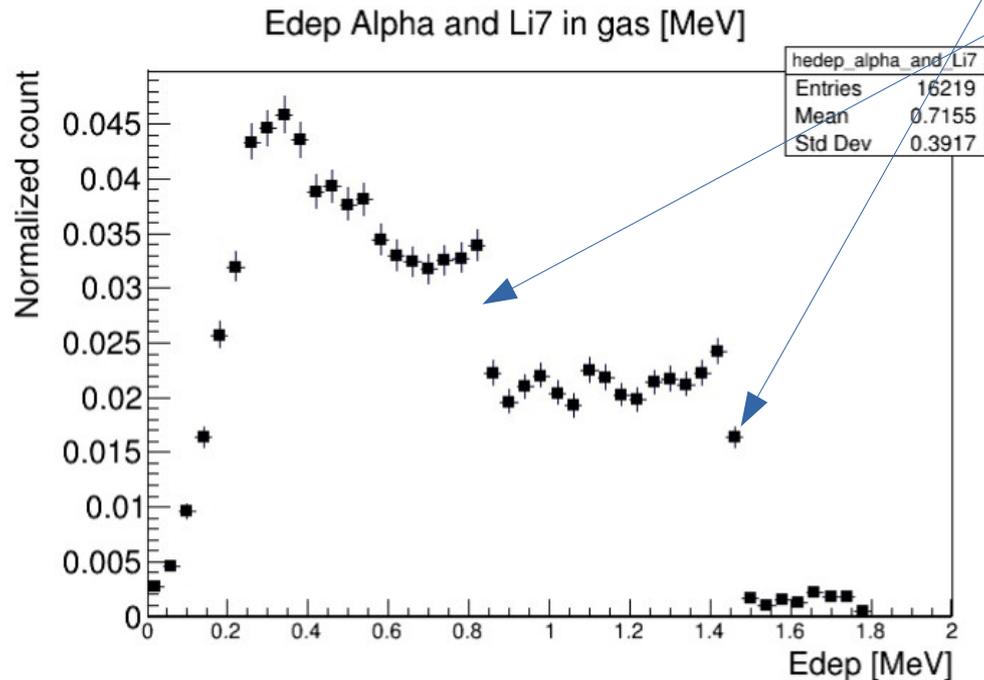
MISURA
Gain 1000



Conto a spanne facendo quello prima(500) x2 \rightarrow 50mV di thr sono 0.04 MeV

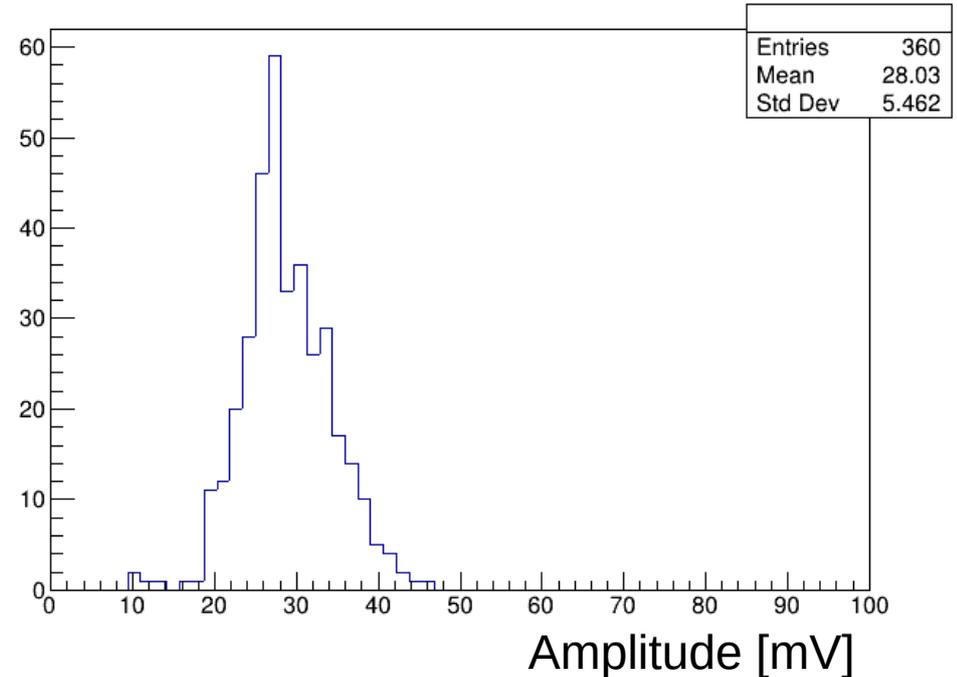
CATODO BORATO PLANARE da 2.5 μm - CAEN

SIMULAZIONE



MISURA
Gain 500

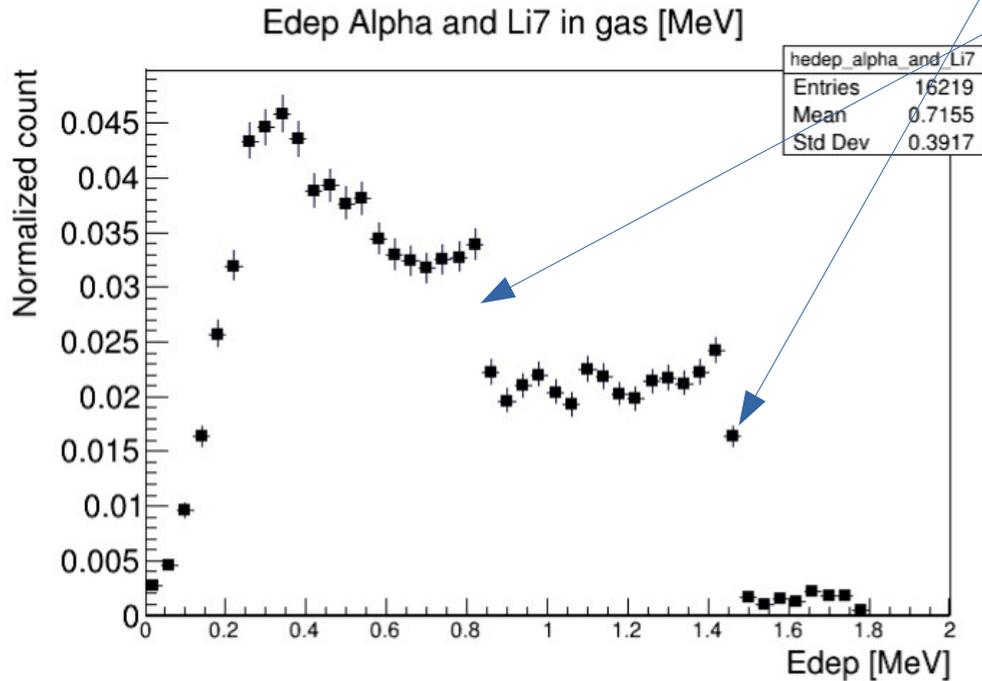
Maximum {abs(Time-5000)<100 && abs(Width-450)<250 && tot_average>0.1}



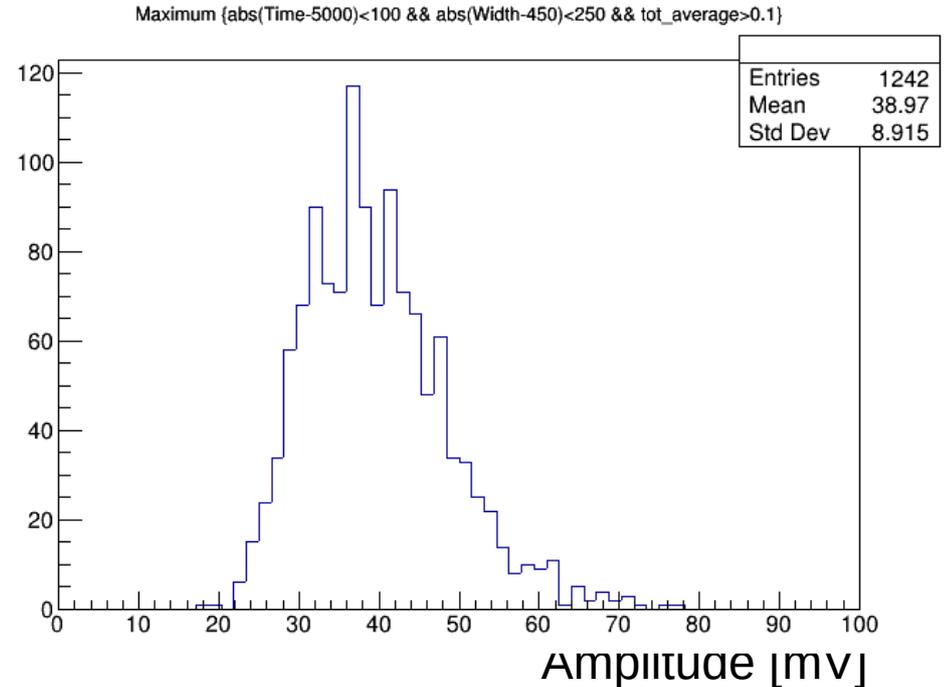
Distribuzione non chiara e molto compatta. Differente da quella "storica" acquisita sul TOP

CATODO BORATO PLANARE da 2.5 μm - CAEN

SIMULAZIONE



MISURA
Gain 1000

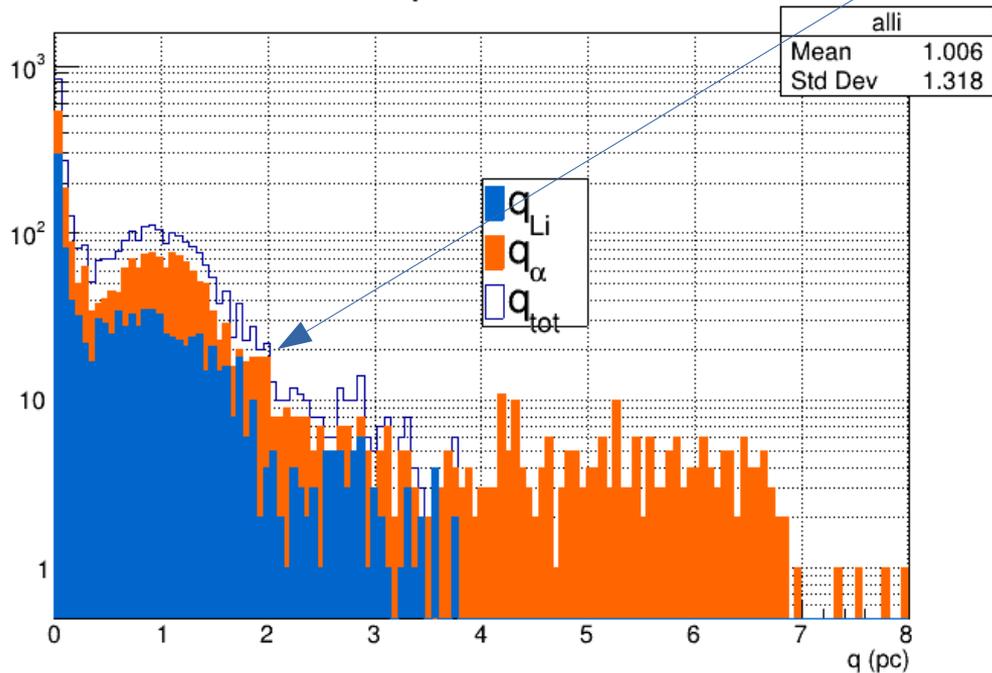


Distribuzione meno compatta

CATODO BORATO GROOVED - CREMAT

SIMULAZIONE

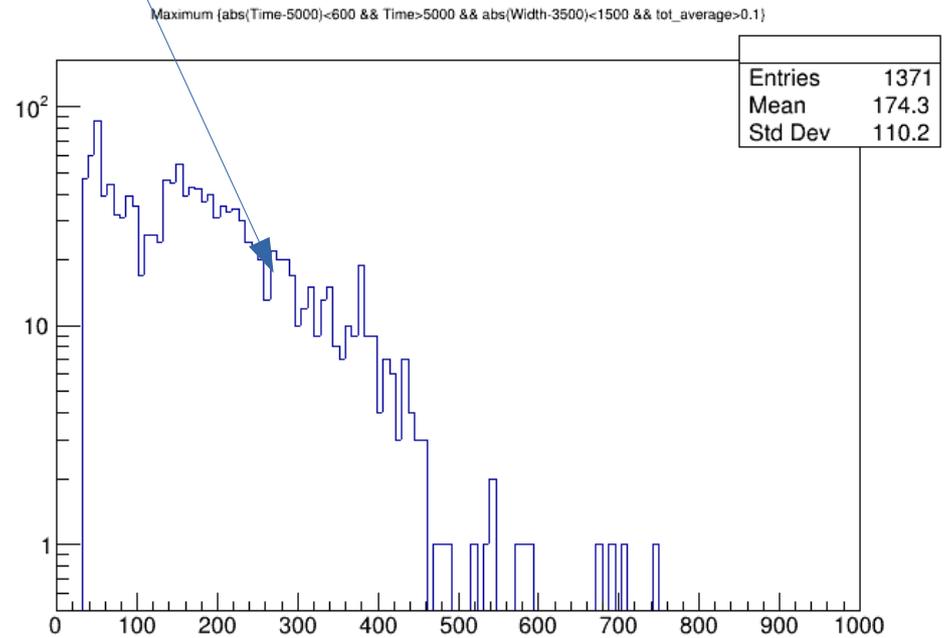
q 0.25 mm



Spalla del bulk a 1 pC

MISURA

Gain 500

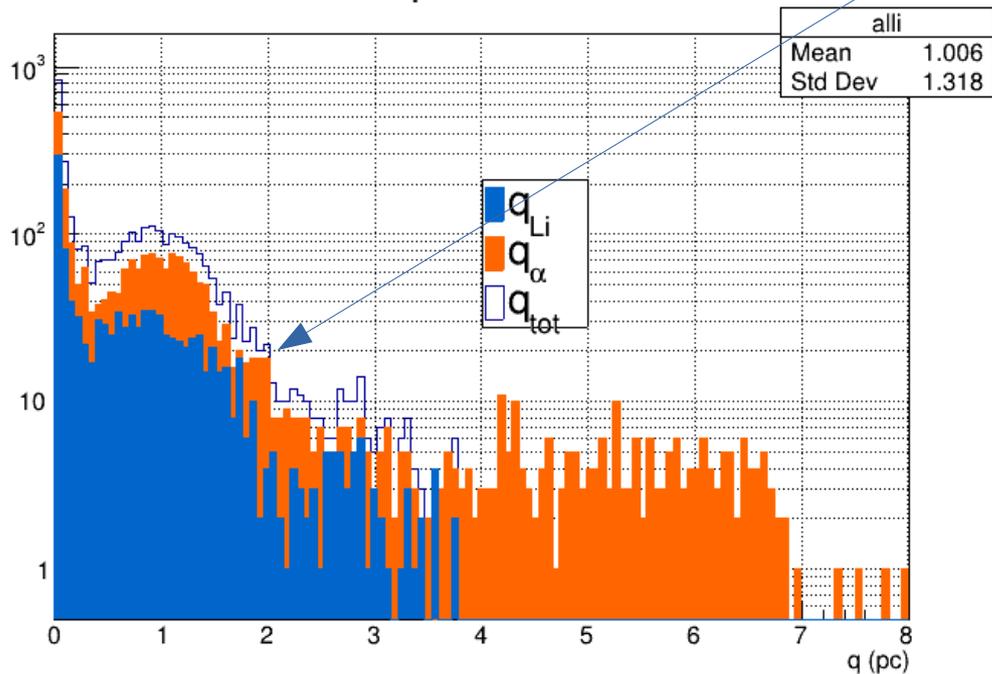


Conto a spanne: 2pC~250mV → 50mV di thr sono 0.4 pC → vediamo bene il picco a 1 pC ???

CATODO BORATO GROOVED - CREMAT

SIMULAZIONE

q 0.25 mm

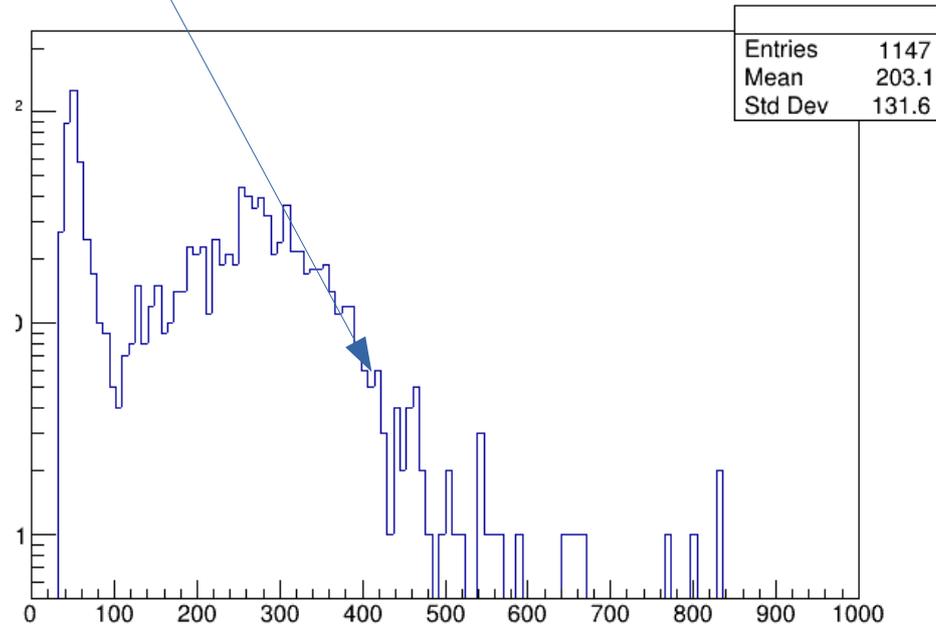


Spalla del bulk a 1 pC

MISURA

Gain 1000

Maximum (abs(Time-5000)<600 && Time>5000 && abs(Width-3500)<1500 && tot_average>0.1)

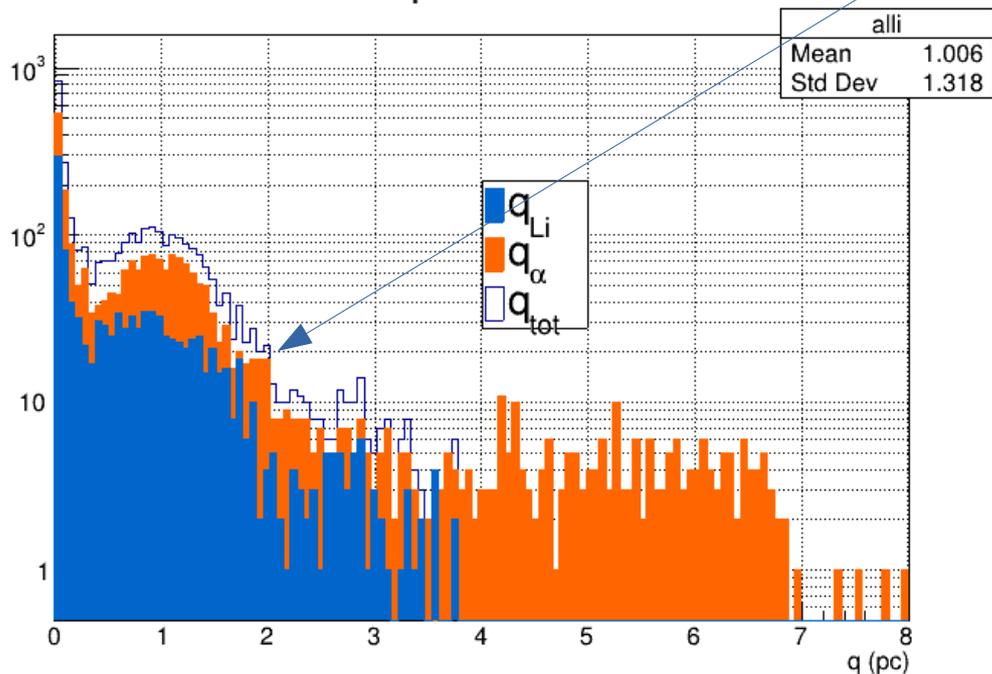


Conto a spanne: 2pC~450mV → 50mV di thr sono 0.2 pC → vediamo bene il picco sotto 1 pC ???

CATODO BORATO GROOVED - CAEN

SIMULAZIONE

q 0.25 mm

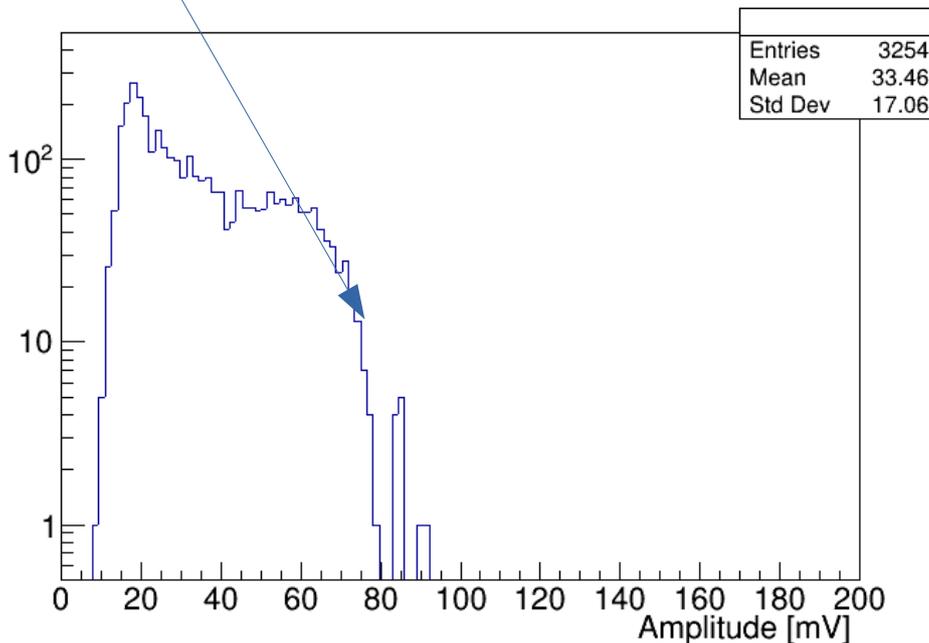


Spalla del bulk a 1 pC

MISURA

Gain 500

Maximum {abs(Time-5000)<200 && abs(Width-1000)<400 && tot_average>0.1}

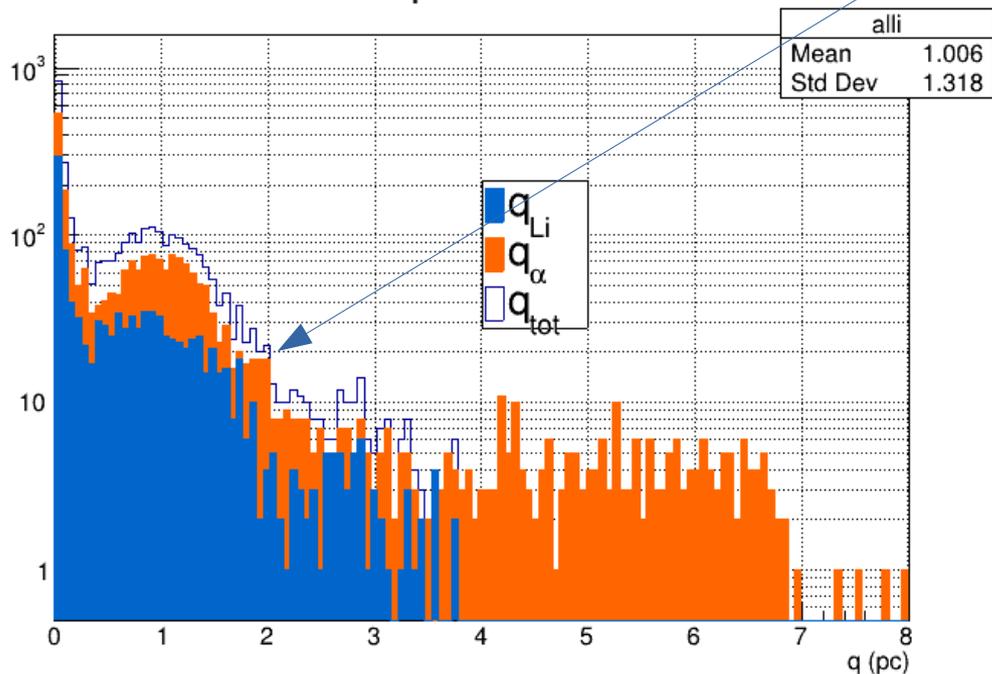


Conto a spanne: 1pC~40mV → 5mV di thr sono 0.12 pC → vediamo la fine il picco a bassa carica

CATODO BORATO GROOVED - CAEN

SIMULAZIONE

q 0.25 mm

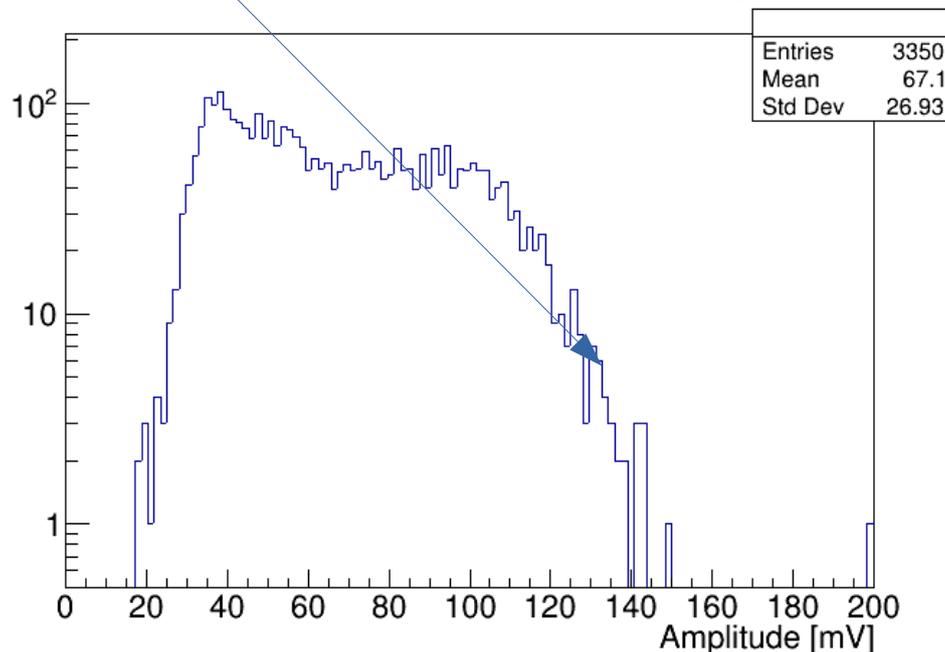


Spalla del bulk a 1 pC

MISURA

Gain 1000

Maximum (abs(Time-5000)<200 && abs(Width-1000)<400 && tot_average>0.1)

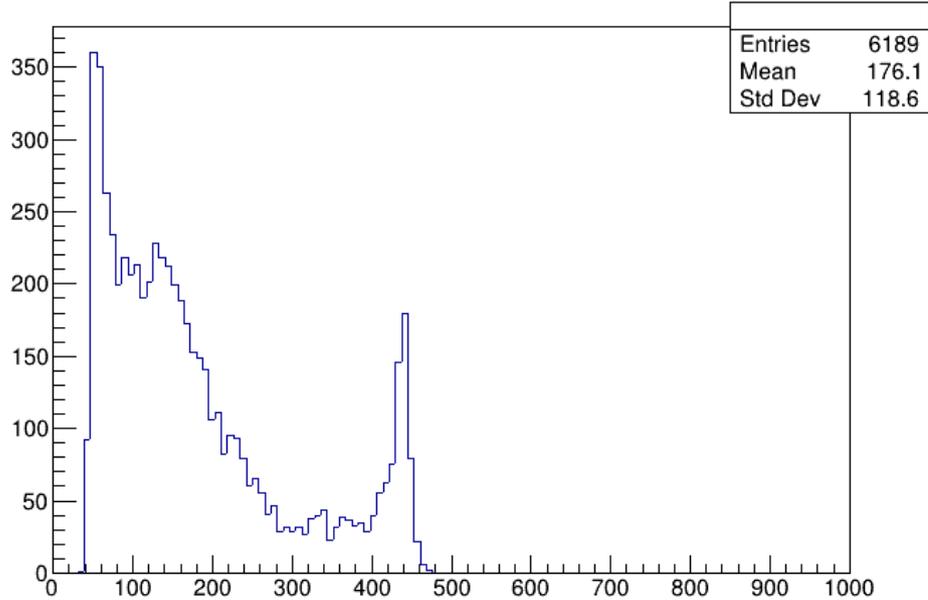


Conto a spanne: 1pC~70mV \rightarrow 5mV di thr sono 0.08 pC \rightarrow vediamo la fine il picco a bassa carica

CATODO BORATO PLANARE da 2.5 μm – CREMAT TRIGGER SUL TOP

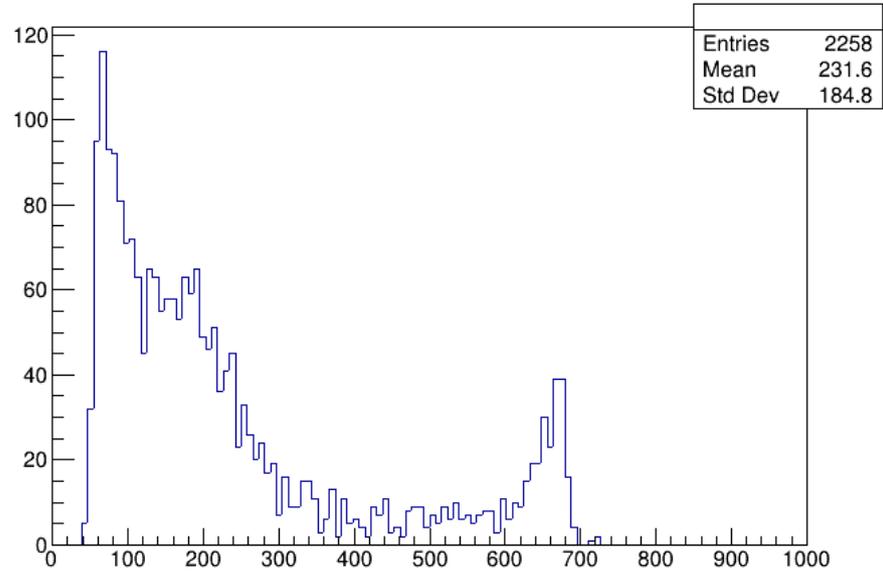
MISURA
Gain 500

Maximum {abs(Time-5000)<1000 && Time>4900 && tot_average>1}



MISURA
Gain 1000

Maximum {abs(Time-5000)<1000 && Time>4900 && tot_average>1}



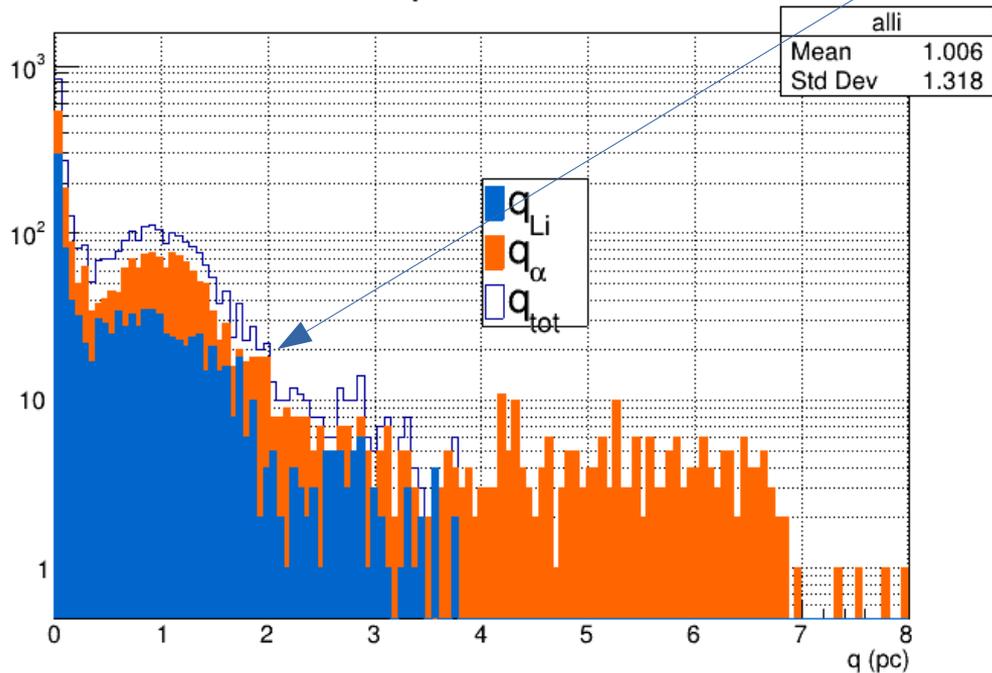
Amplitude [mV]

Backup

CATODO BORATO GROOVED - CREMAT

SIMULAZIONE

q 0.25 mm

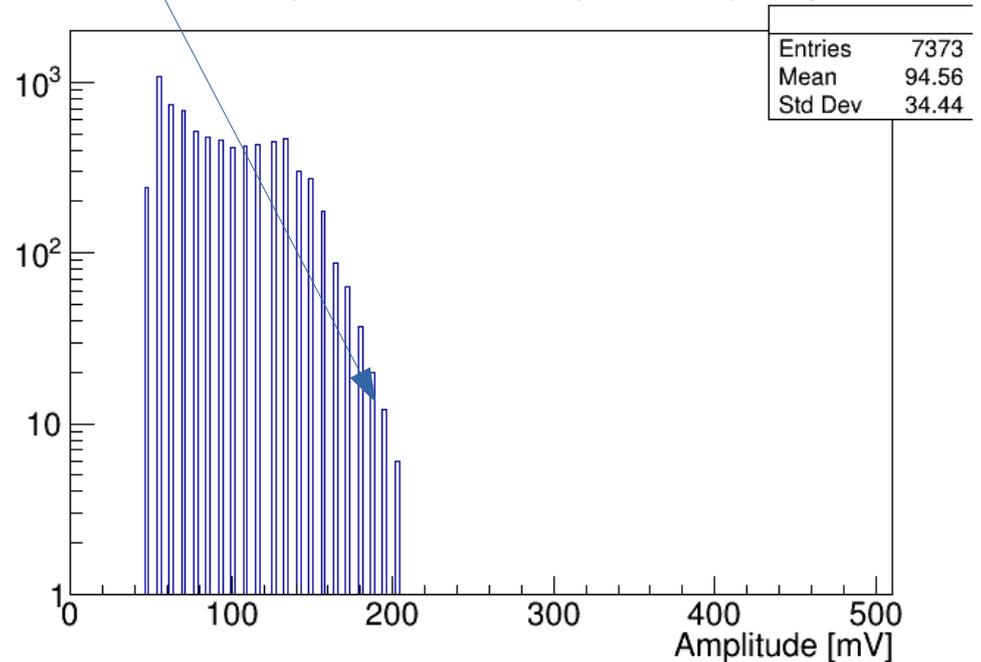


Spalla del bulk a 1 pC

MISURA

Gain 100

Maximum {Width>2000 && abs(Time-5000)<500}

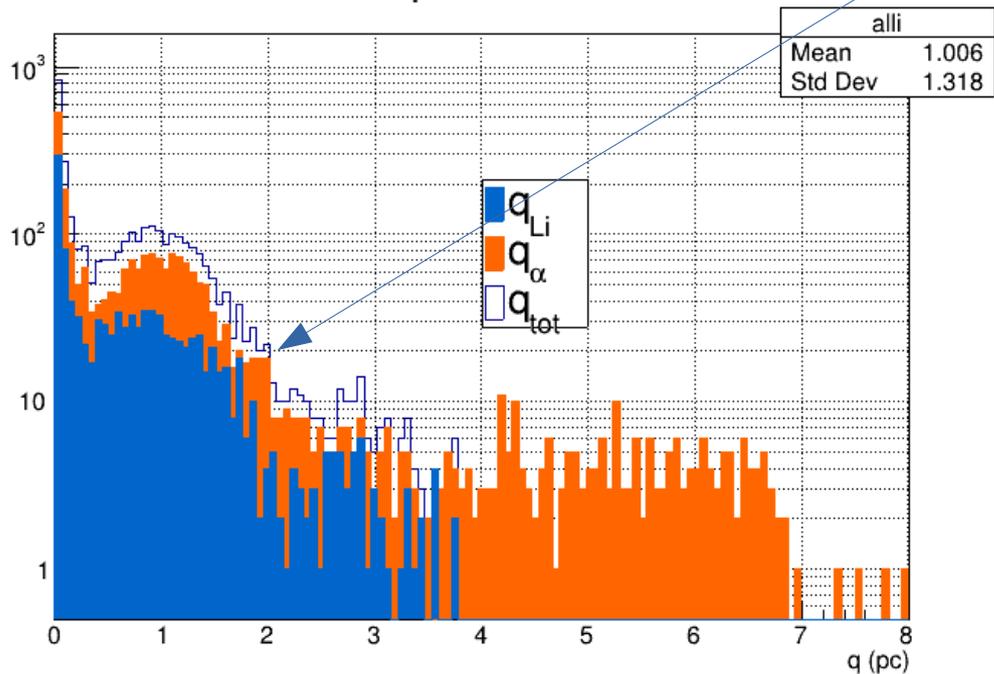


Conto a spanne: 1pC~100mV → 50mV di thr sono 0.5 pC → vediamo bene il picco a 1 pC ???

CATODO BORATO GROOVED - CREMAT

SIMULAZIONE

q 0.25 mm

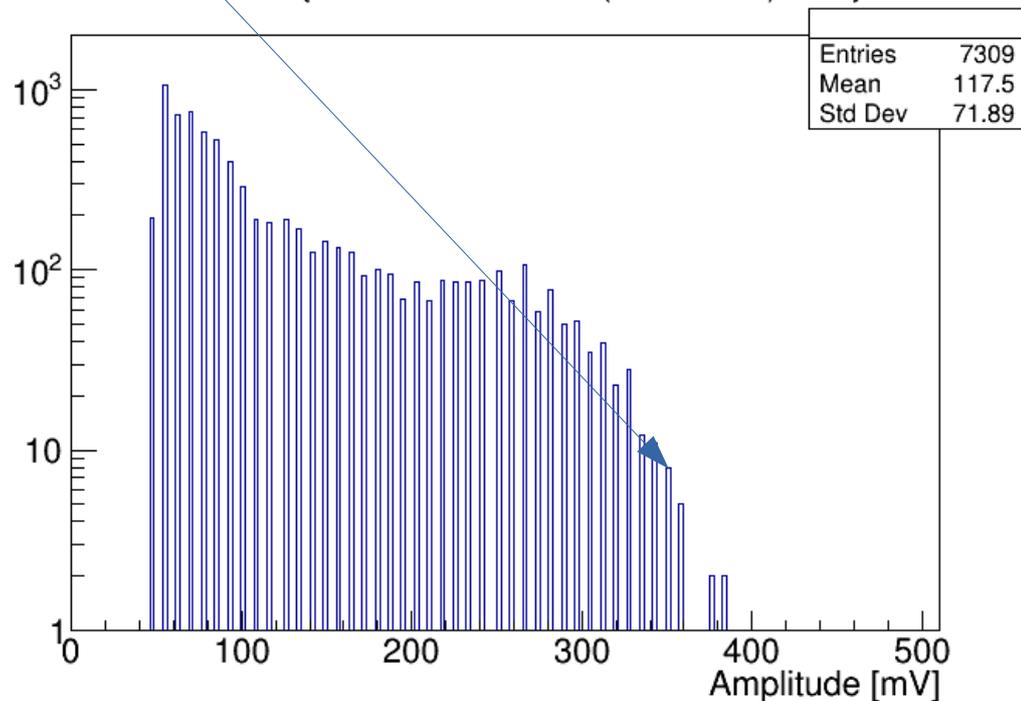


Spalla del bulk a 1 pC

MISURA

Gain 200

Maximum {Width>2000 && abs(Time-5000)<500}

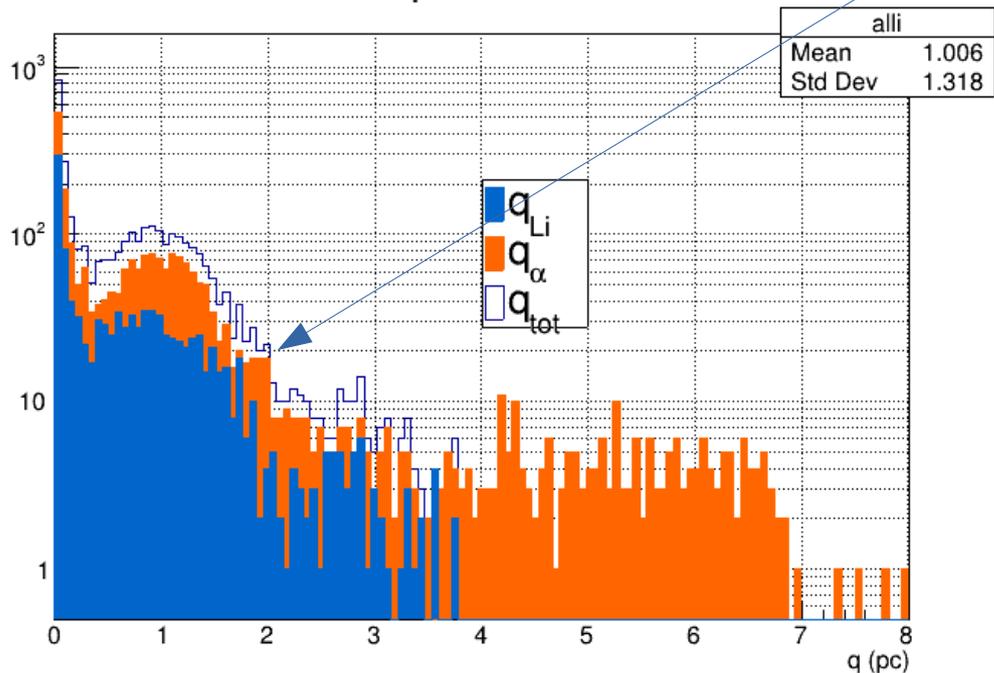


Conto a spanne: 1pC~175mV → 50mV di thr sono 0.35 pC → vediamo bene il picco a 1 pC ???

CATODO BORATO GROOVED - CREMAT

SIMULAZIONE

q 0.25 mm



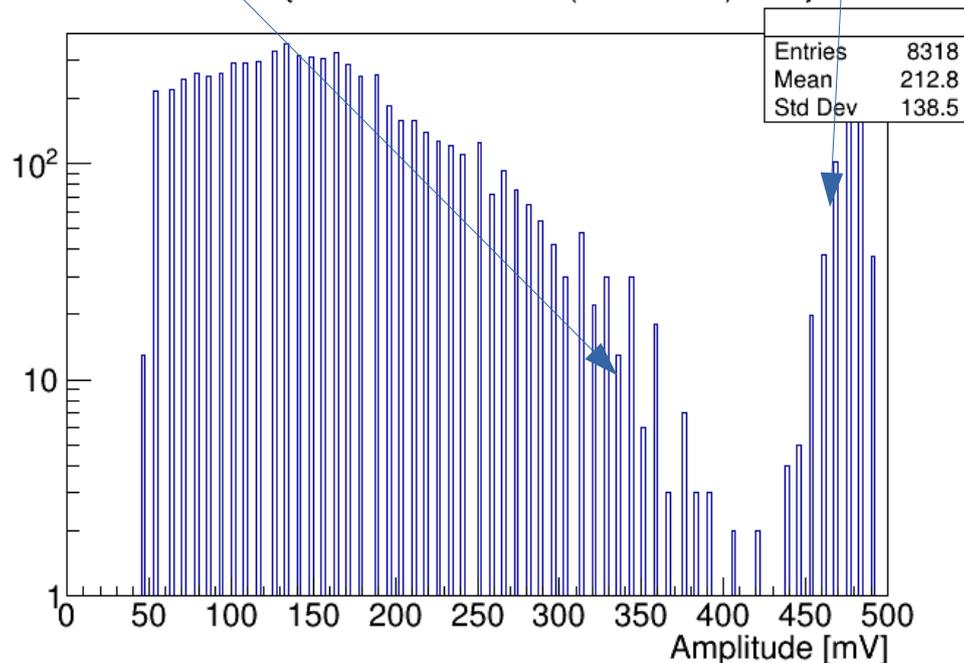
Spalla del bulk a 1 pC

MISURA

Gain 500

saturation

Maximum {Width>2500 && abs(Time-5000)<500}

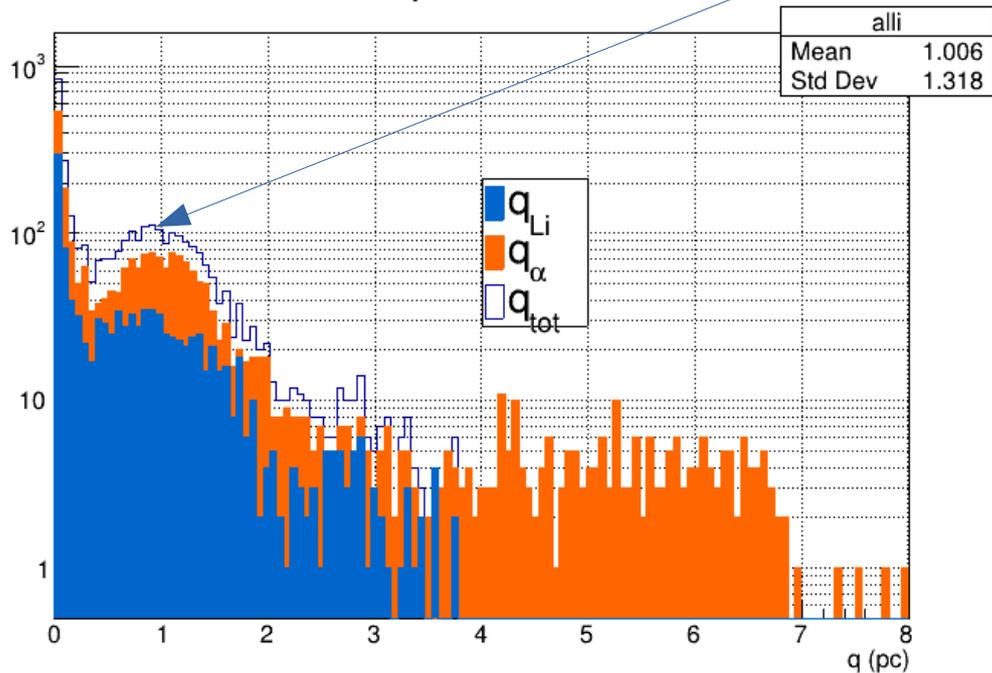


Conto a spanne: 1pC~175mV → 50mV di thr sono 0.28 pC → non vediamo meglio il picco a bassa carica

CATODO BORATO GROOVED - CREMAT

SIMULAZIONE

q 0.25 mm



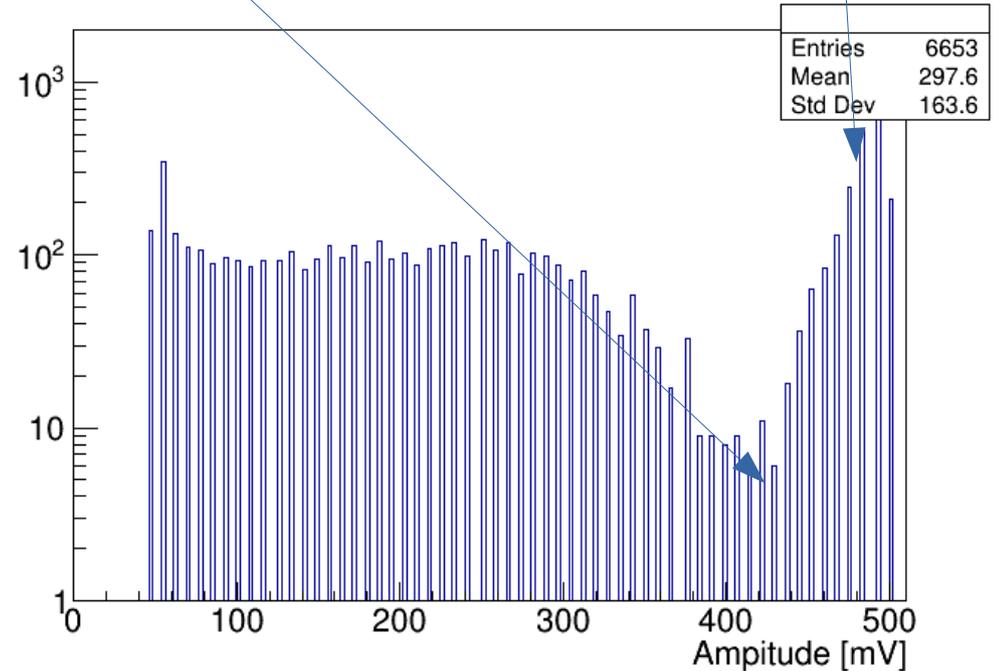
Picco del bulk a 1 pC

MISURA

Gain 1000

Maximum {Width>2000 && abs(Time-5000)<500}

saturazione

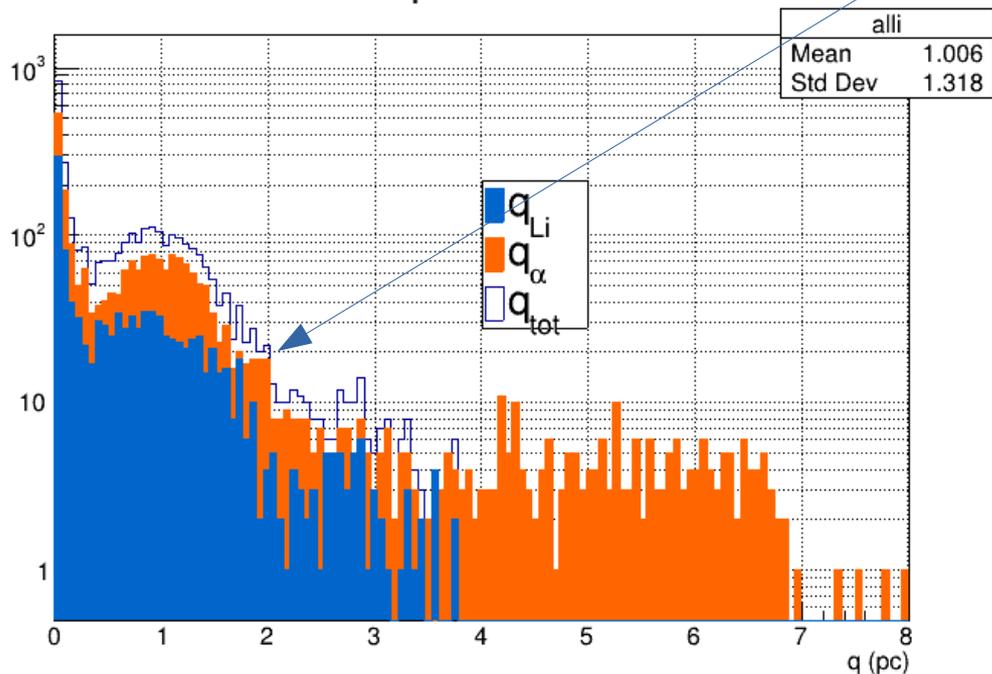


Conto a spanne: 1pC~220mV \rightarrow 50mV di thr sono 0.25 pC \rightarrow non vediamo meglio il picco a bassa carica

CATODO BORATO GROOVED - CAEN

SIMULAZIONE

q 0.25 mm

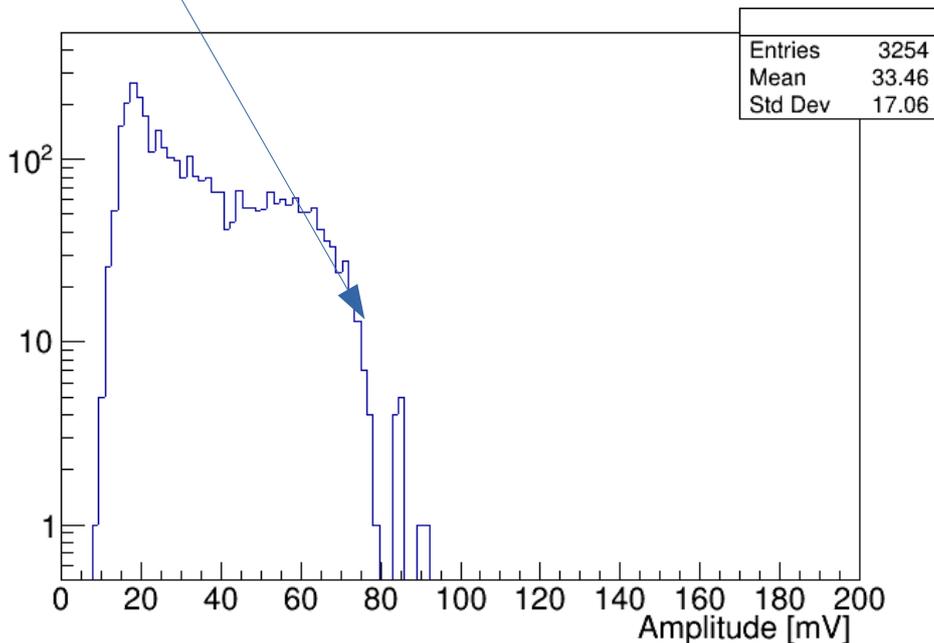


Spalla del bulk a 1 pC

MISURA

Gain 500

Maximum {abs(Time-5000)<200 && abs(Width-1000)<400 && tot_average>0.1}

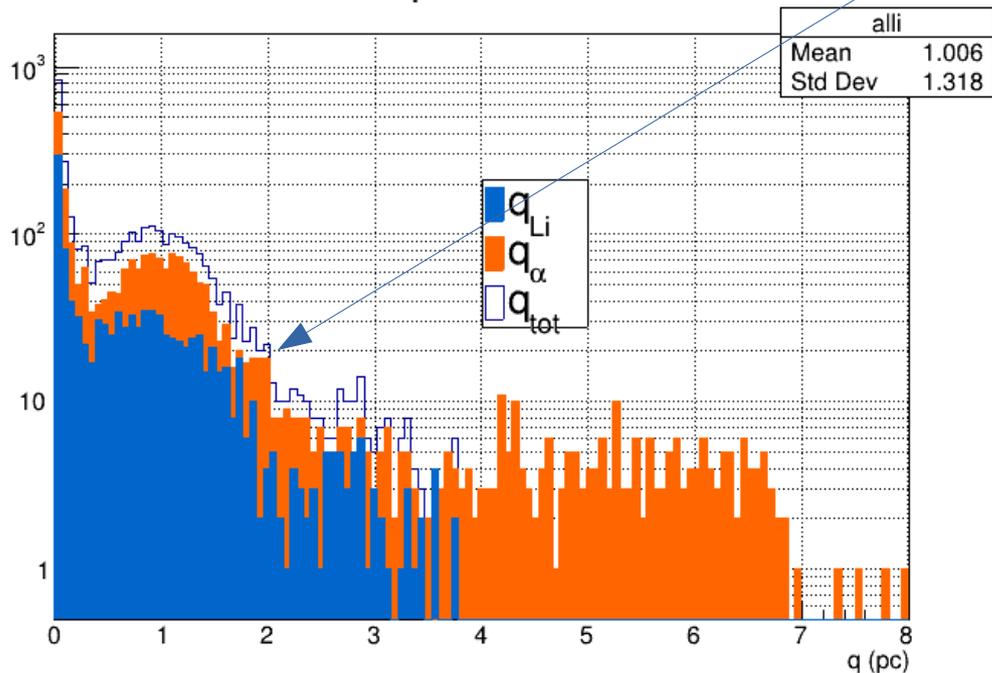


Conto a spanne: 1pC~40mV → 5mV di thr sono 0.12 pC → vediamo la fine il picco a bassa carica

CATODO BORATO GROOVED - CAEN

SIMULAZIONE

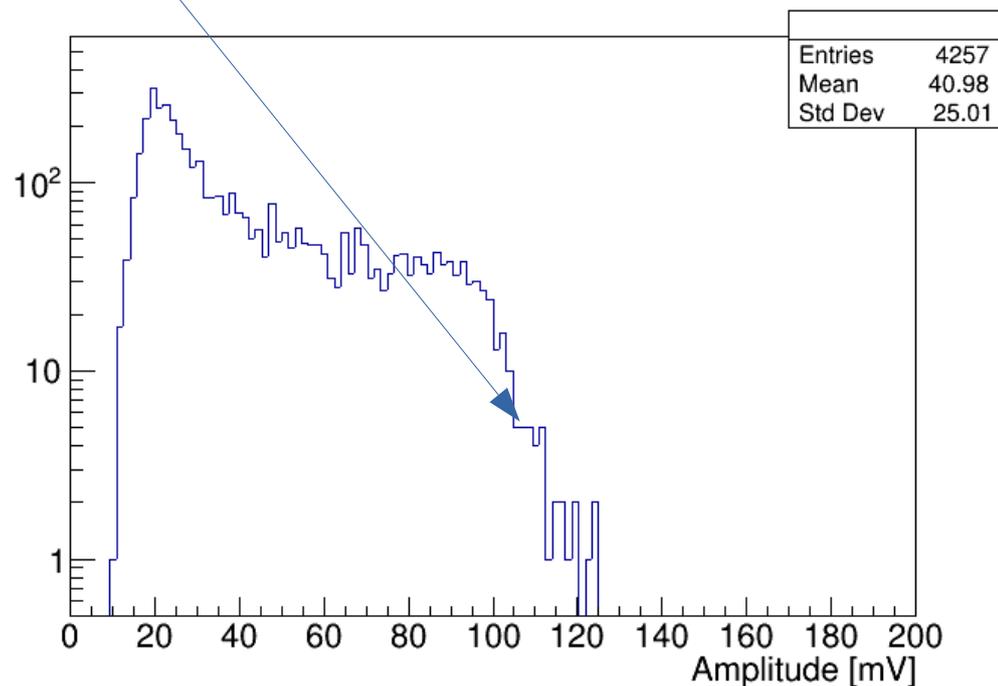
q 0.25 mm



Spalla del bulk a 1 pC

MISURA

Gain 700

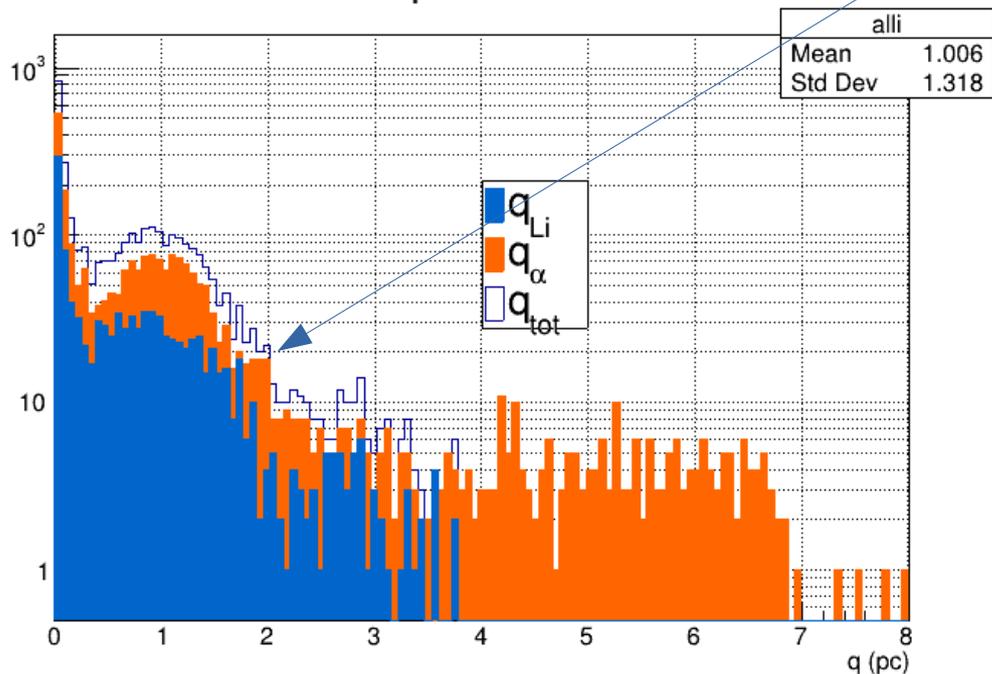


Conto a spanne: 1pC~55mV → 5mV di thr sono 0.1 pC → vediamo la fine il picco a bassa carica

CATODO BORATO GROOVED - CAEN

SIMULAZIONE

q 0.25 mm

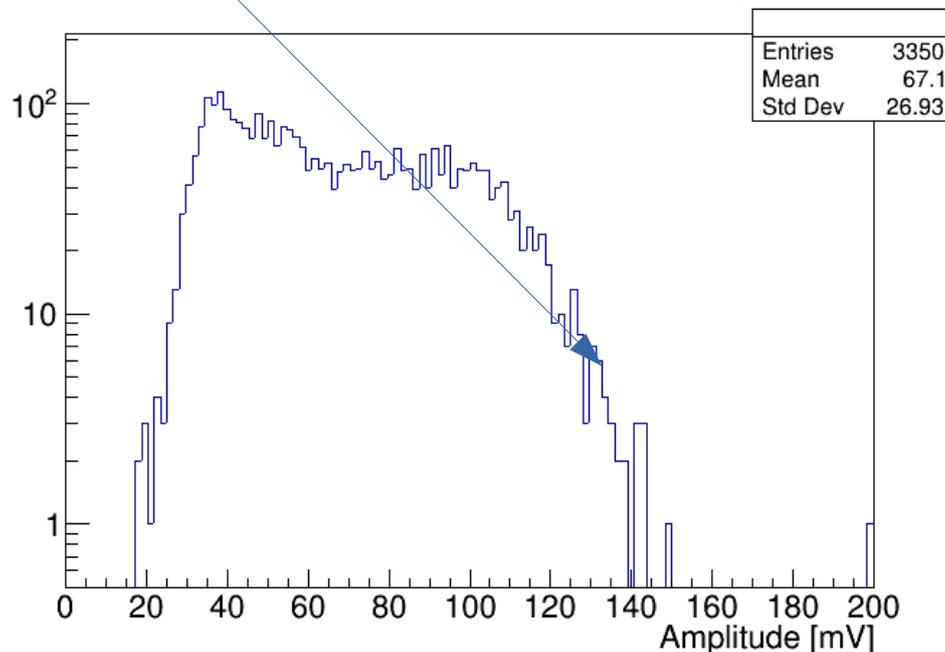


Spalla del bulk a 1 pC

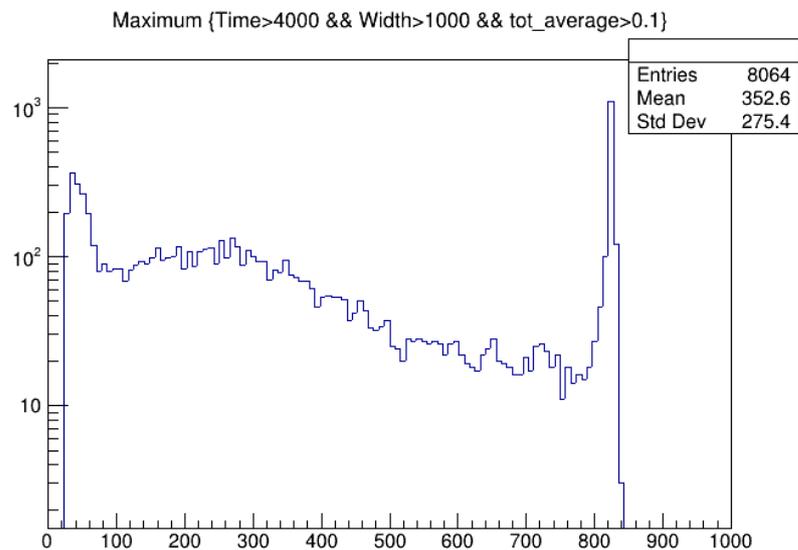
MISURA

Gain 1000

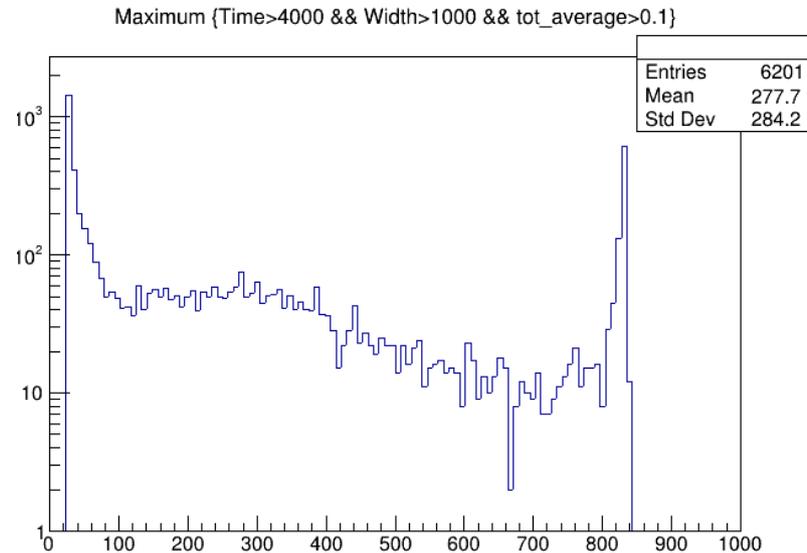
Maximum (abs(Time-5000)<200 && abs(Width-1000)<400 && tot_average>0.1)



Conto a spanne: 1pC~70mV → 5mV di thr sono 0.08 pC → vediamo la fine il picco a bassa carica



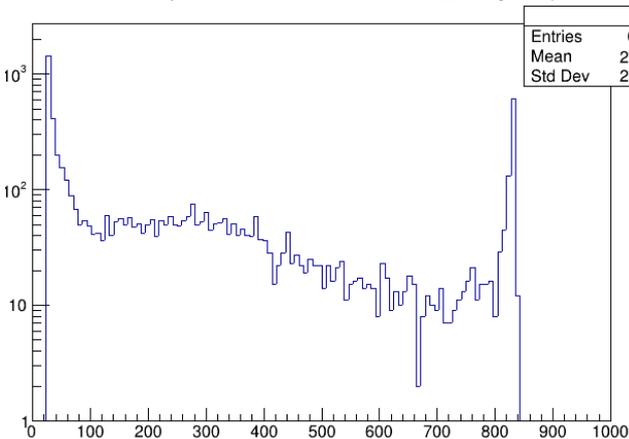
Trigger HV side



Trigger NO HV side

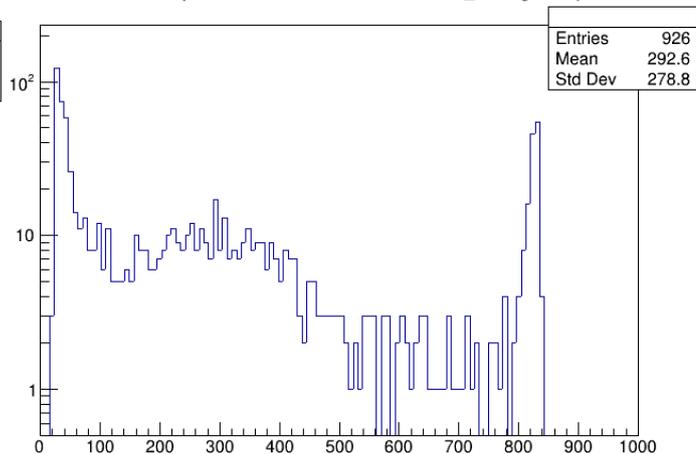
Trigger NO HV side

Maximum {Time>4000 && Width>1000 && tot_average>0.1}



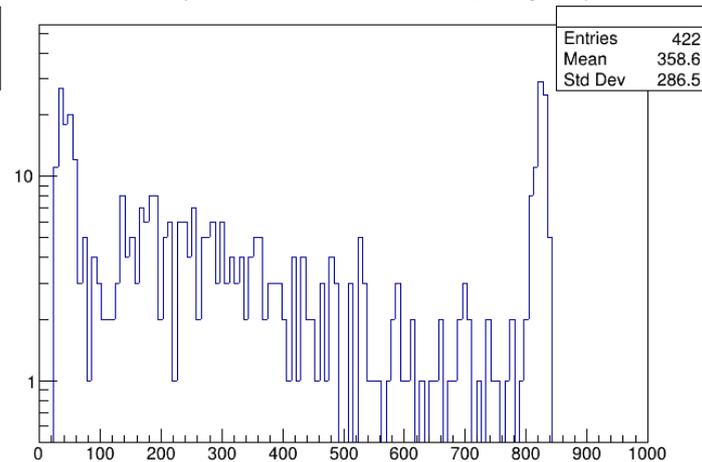
Thr 25 mV

Maximum {Time>4000 && Width>1000 && tot_average>0.1}



Thr 20 mV

Maximum {Time>4000 && Width>1000 && tot_average>0.1}



Thr 15 mV