HEIC-Cube
束流数据处理

张研硕
中国科学技术大学
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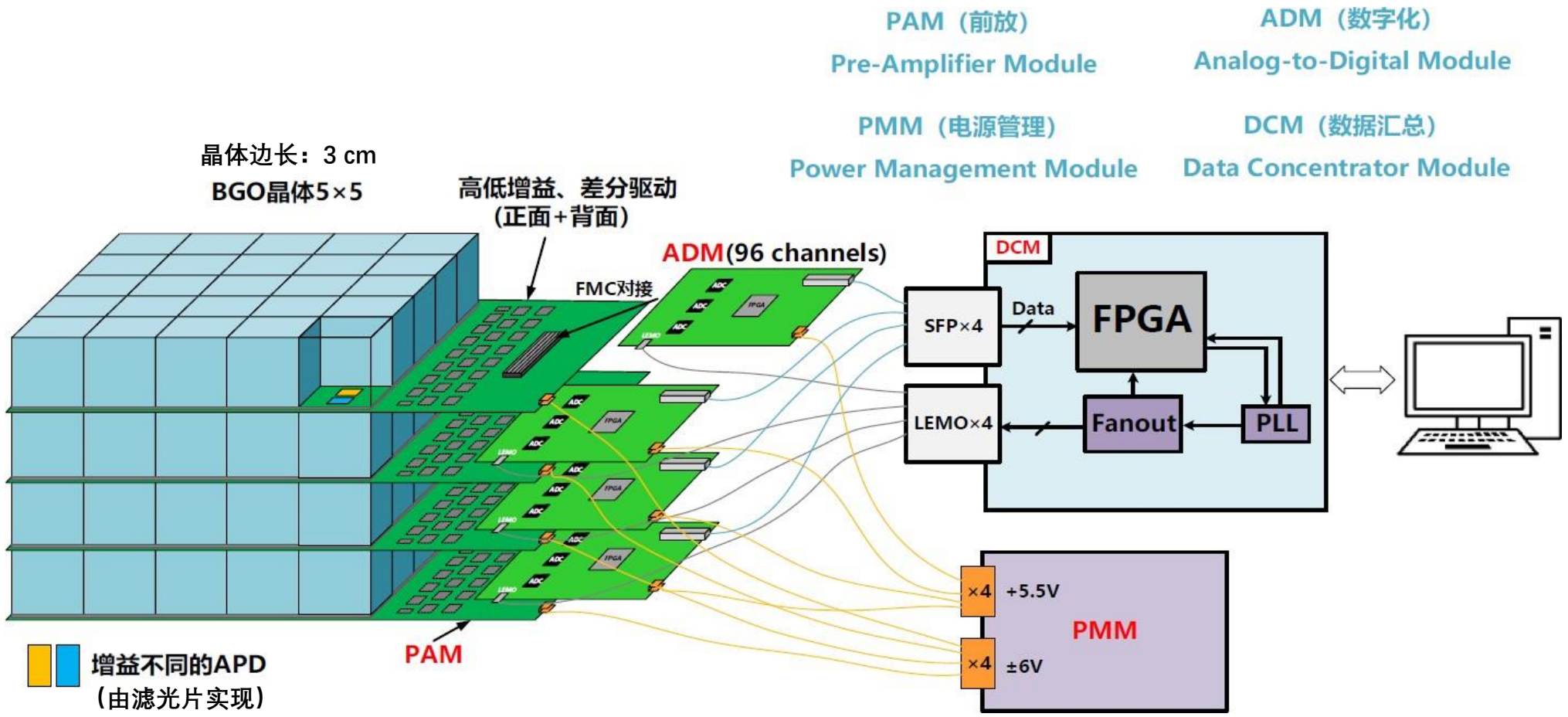
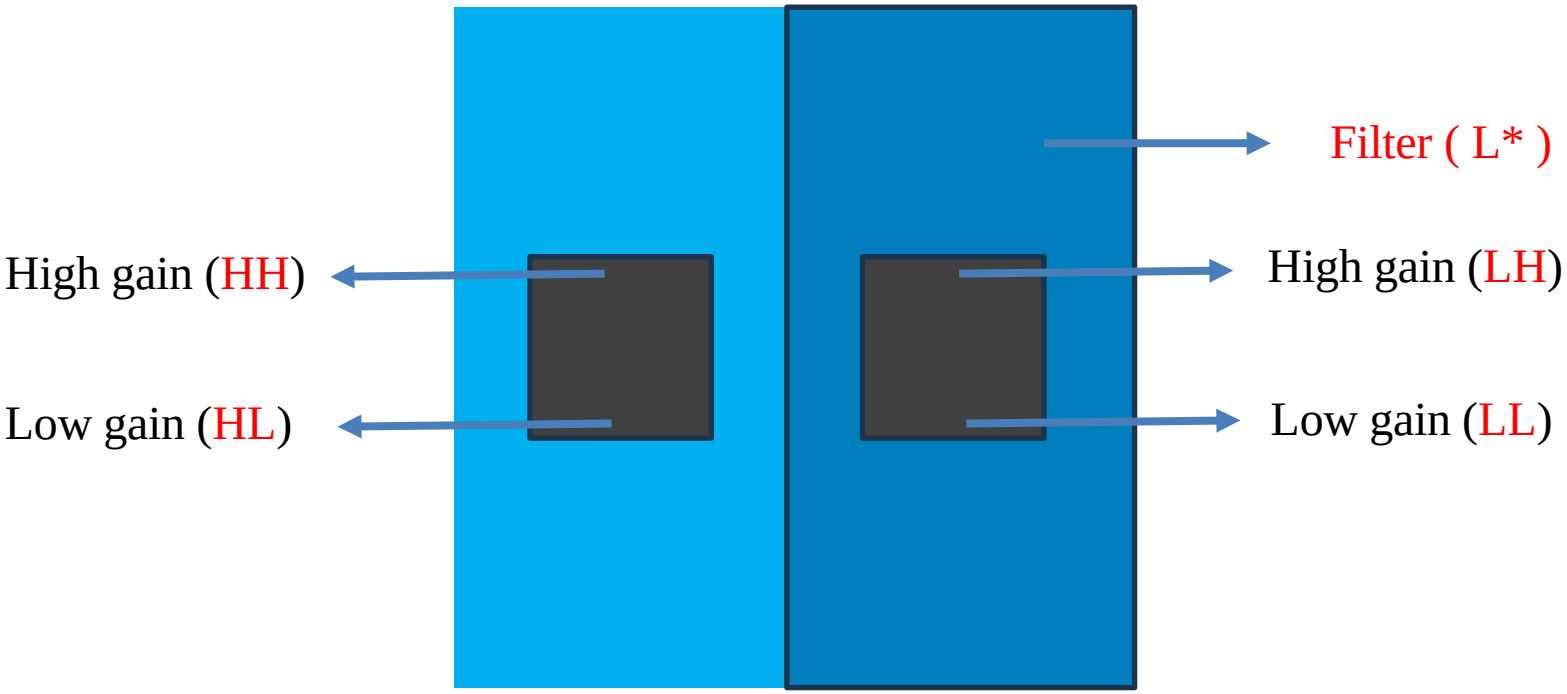
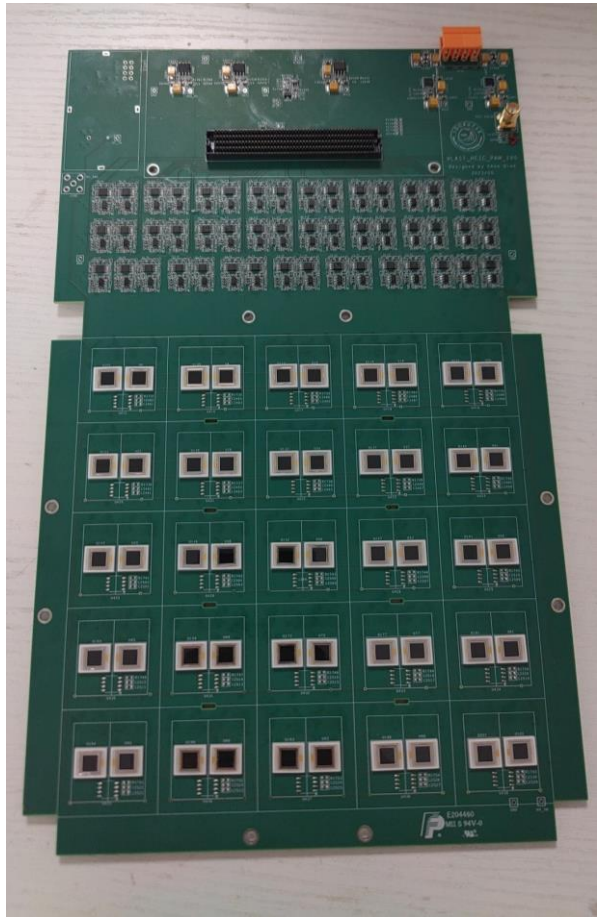
HEIC-Cube structure



Readout scheme of HEIC-Cube



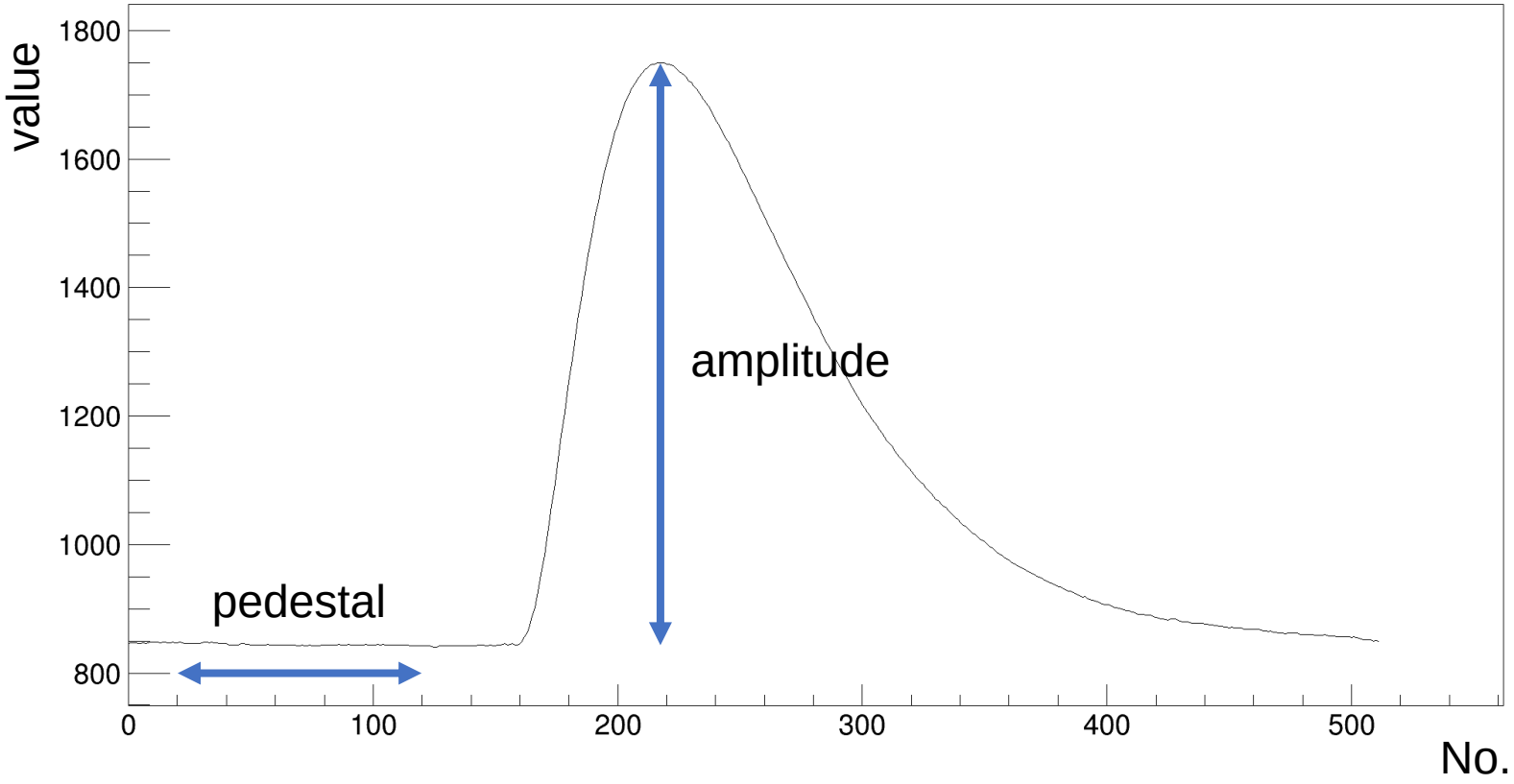


Different APDs use filters to realize high-low gain. (H* / L*)

One APD realizes high-low gain by electronics. (*H / *L)

Waveform sampling

Particle	Momentum (GeV/c)	Total counts
e^-	1, 2, 3, 4, 5	1,012,152
μ^-	5	327,294
π^-	10, 12	409,269



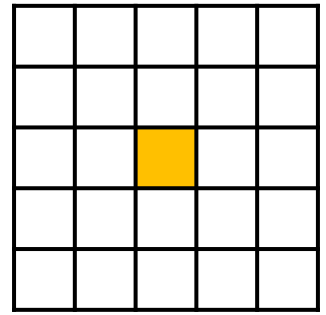
Data analysis content

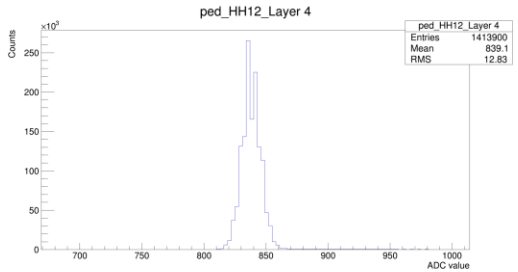
- Pion:
  - Pedestal;
  - HG-LG ratio;
- Muon:
  - MIPs;

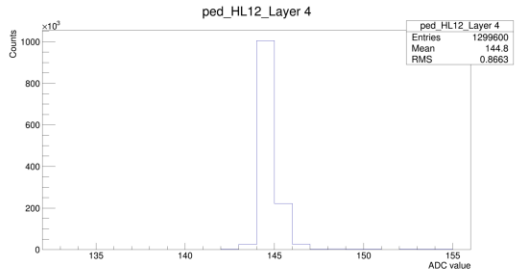
Pion data summary

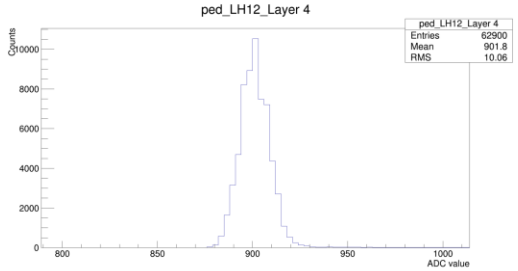
- 粒子动量为 12 GeV/c；
- 汇总了 25 个等间距位置扫描的数据文件，RunID 从 10045 到 10069；
- 入射位置分别对准 25 个小晶体的中心；
- 总共获得 232844 个有效事例。

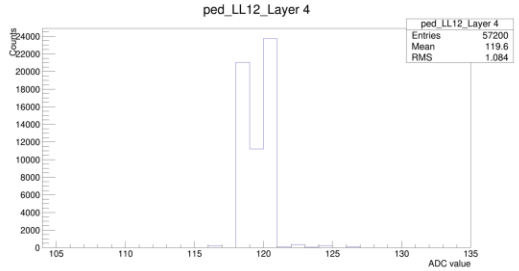
Pion pedestal

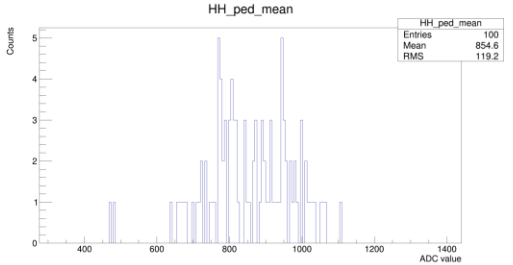


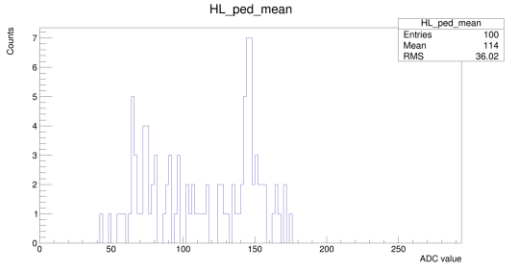


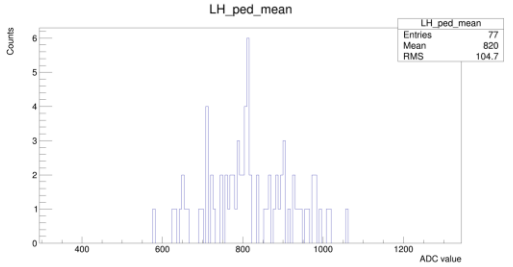


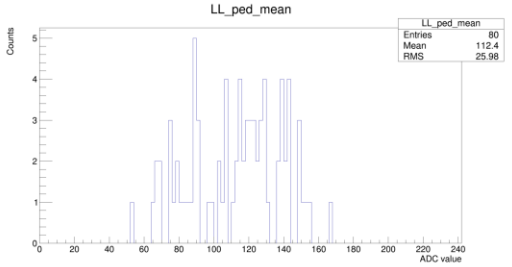




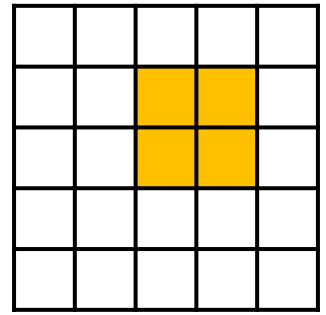


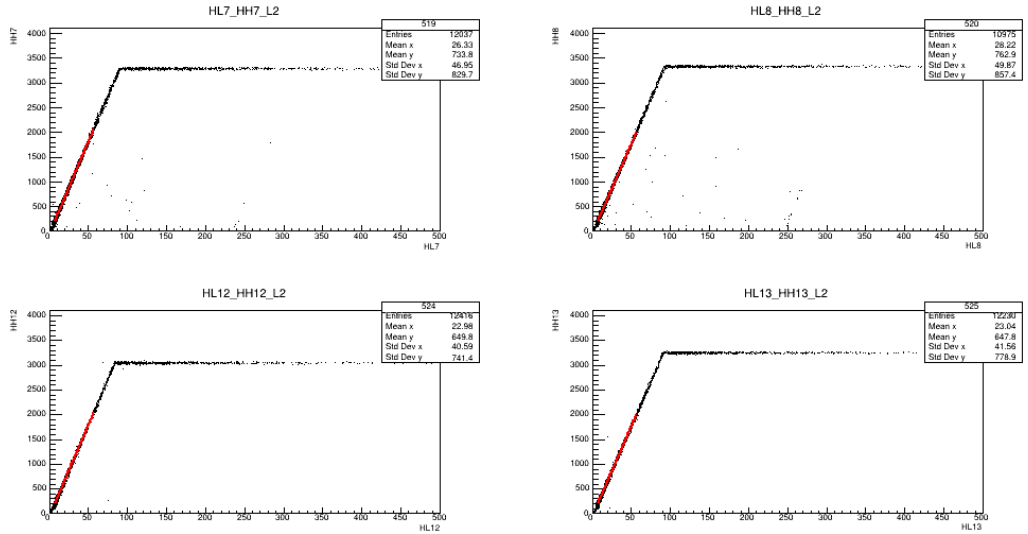


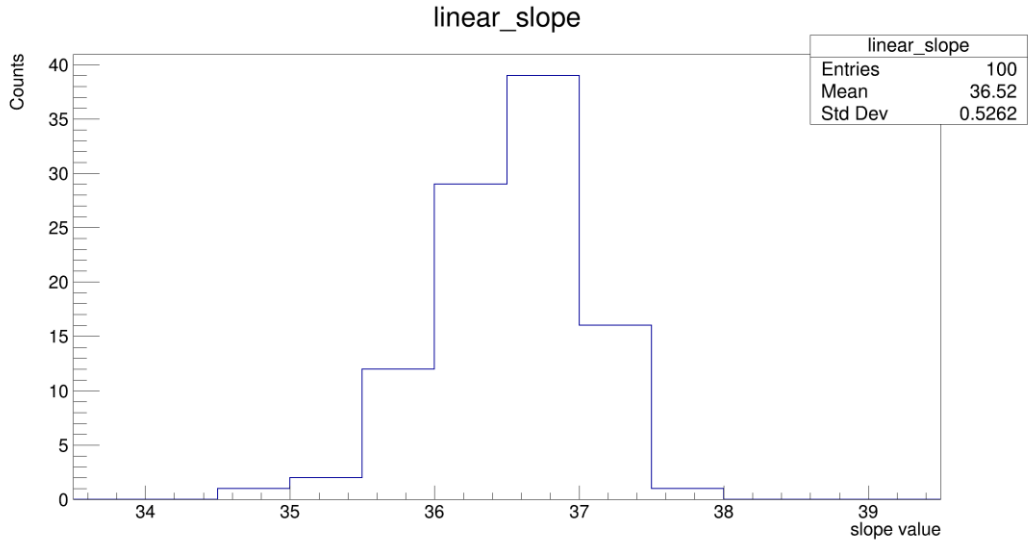




Pion HG-LG ratio







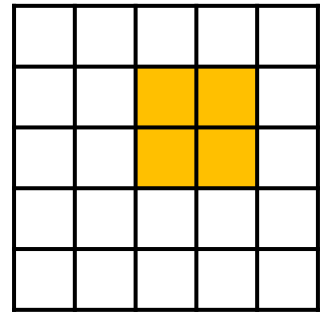
Muon data summary

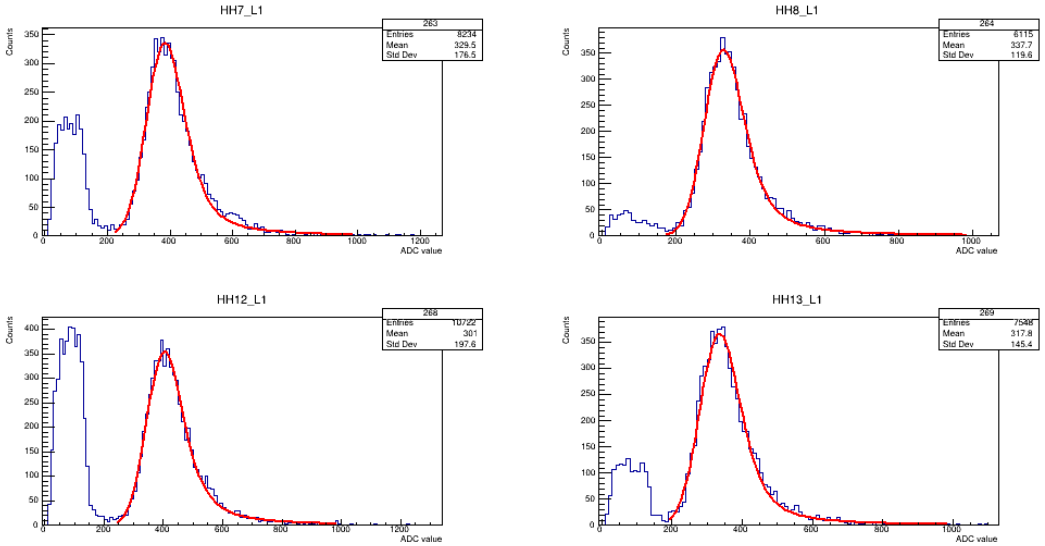
- 粒子动量为 5 GeV/c，
- 汇总了 25 个等间距位置扫描的数据文件，RunID 从 10004 到 10032;
- 入射位置分别对准 25 个小晶体的中心，
- 总共获得 192686 个有效事例。

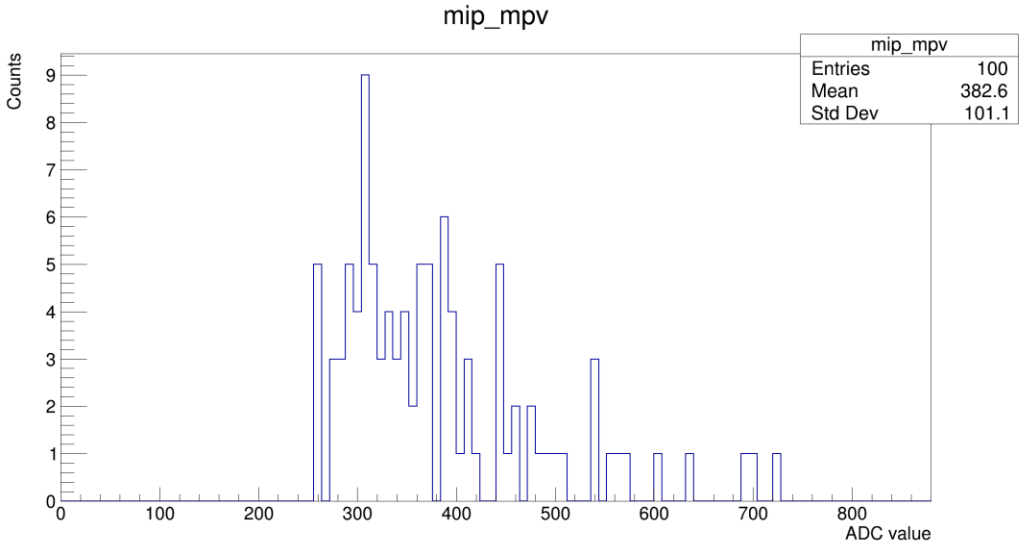
Muon MIPs

Screening condition:

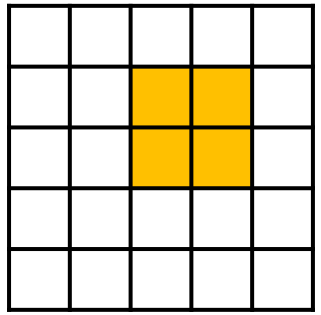
- Igniting layers >= 3;
- <=2 channels in one layer;

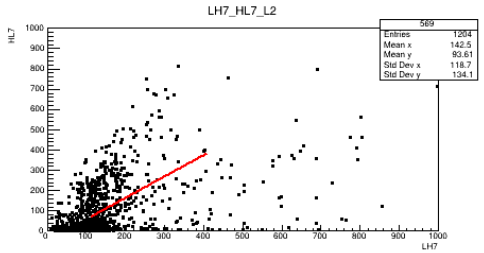


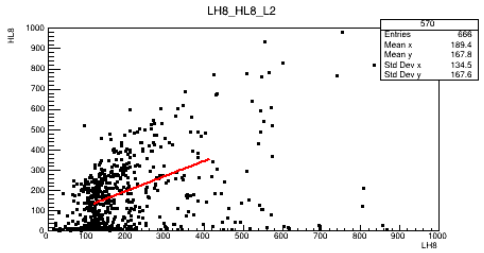


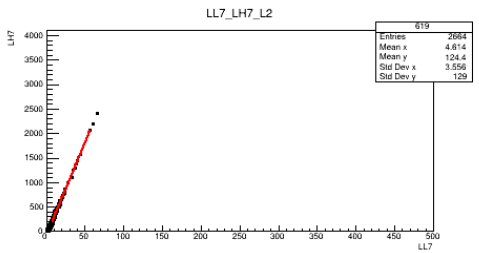


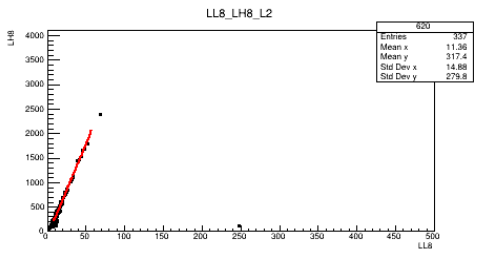
Pion HG-LG ratio

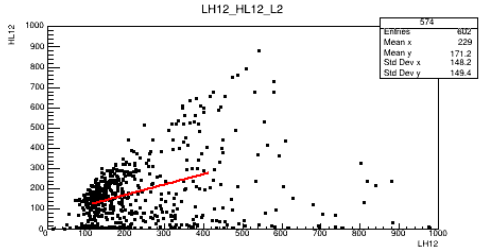


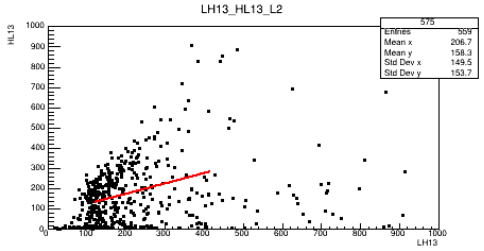


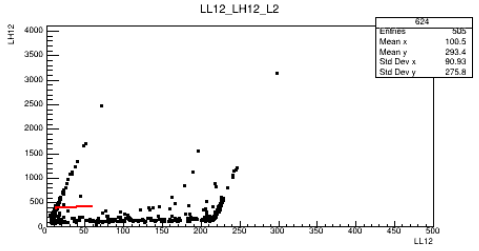


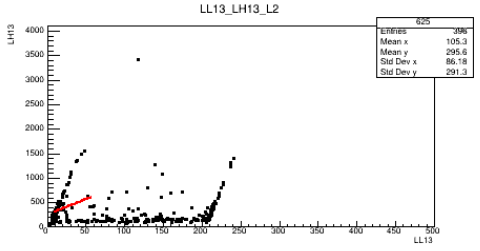




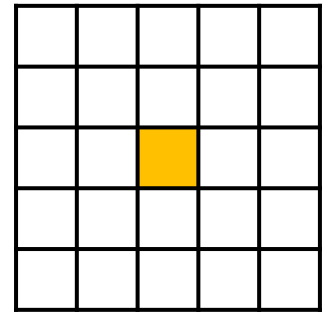


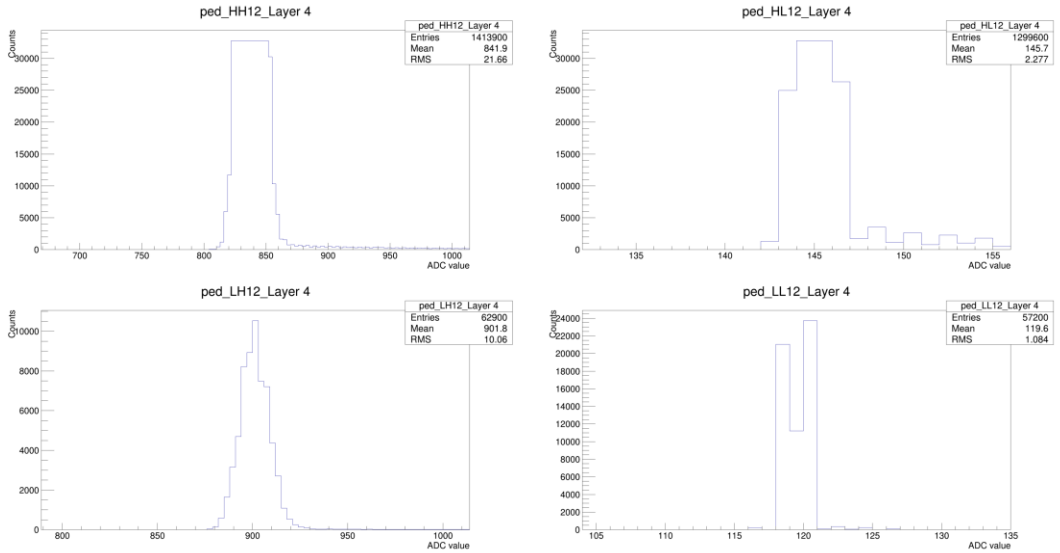


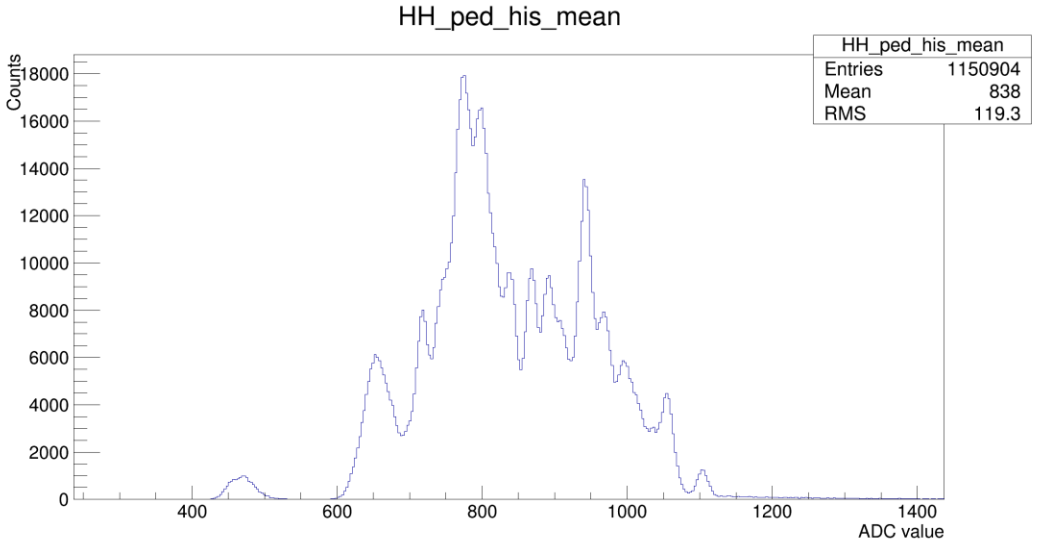




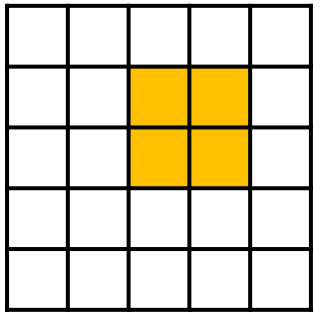
Muon pedestal

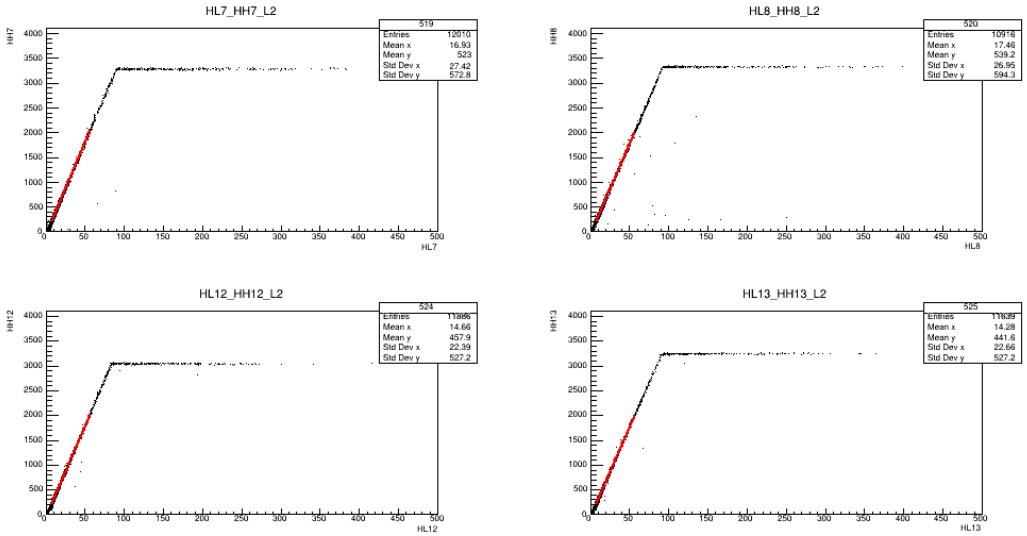


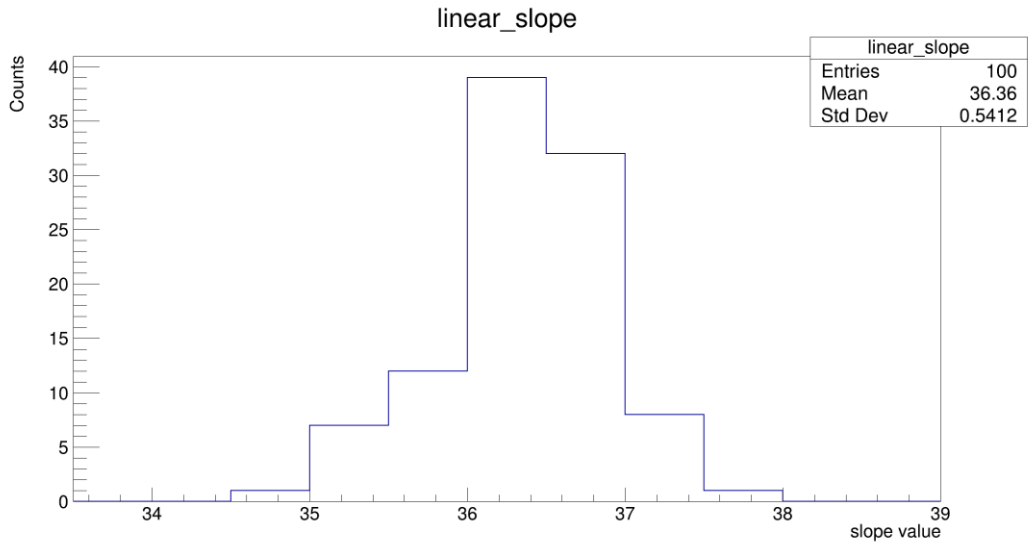
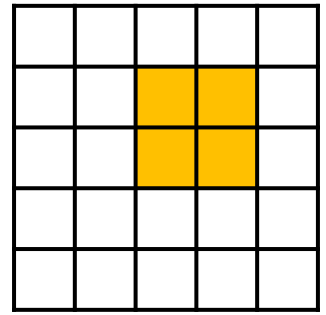
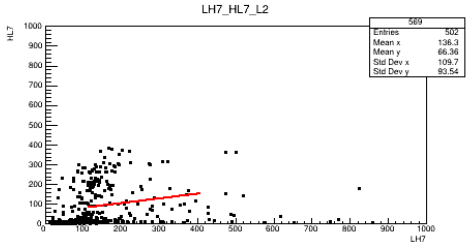
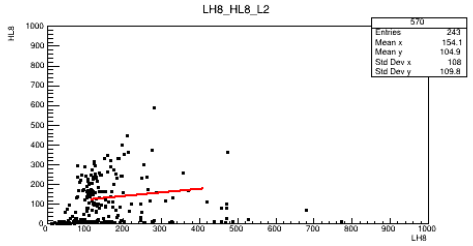
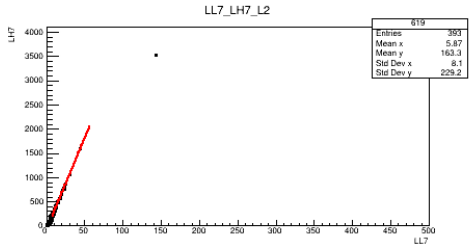
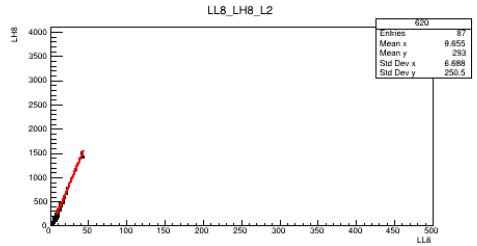
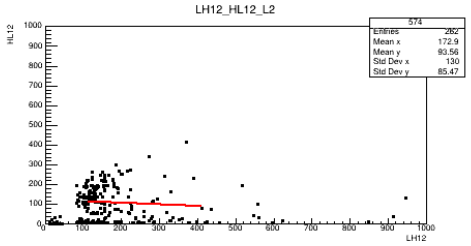
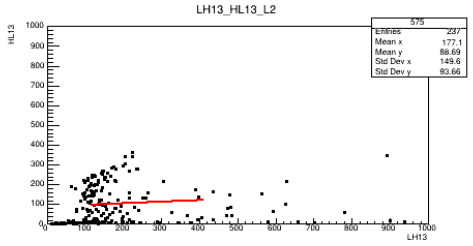
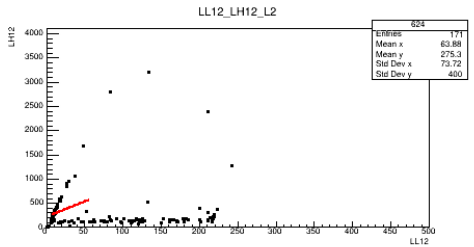
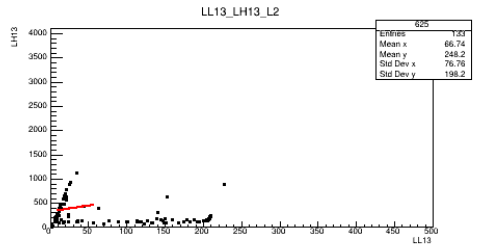




Muon HG-LG ratio







Muon HG-LG ratio