

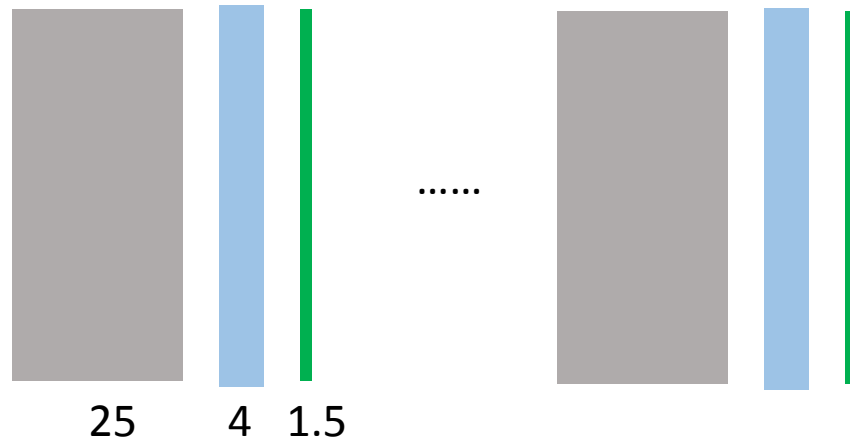
2016.05.31

S.Chen

# Outline

- 不同粒子的Cluster Level的重建情况
- Hit Level vs Cluster Level的线性/分辨比较

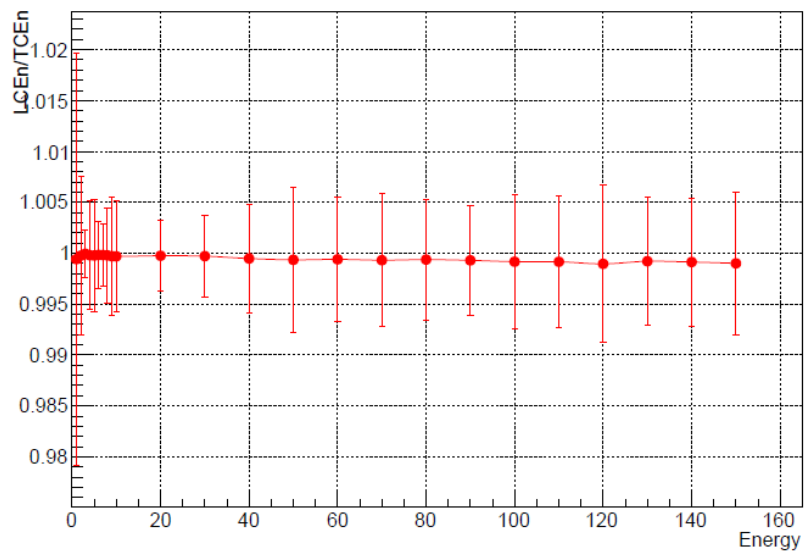
# 探测器结构



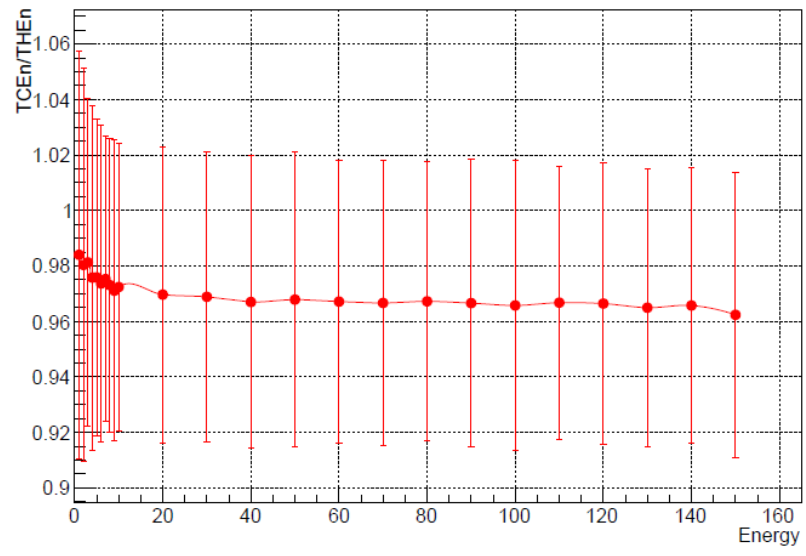
```
/Mokka/init/globalModelParameter SiCalLayerStructure (Iron:0,THGEM1:4,PCB:1.5)*200  
/Mokka/init/globalModelParameter SiCalZeroThickReset 25*200  
/Mokka/init/globalModelParameter SiCalInnerRadius 2080  
/Mokka/init/globalModelParameter SiCalBarrelHalfZ 2450
```

# muon的Cluster Level的重建

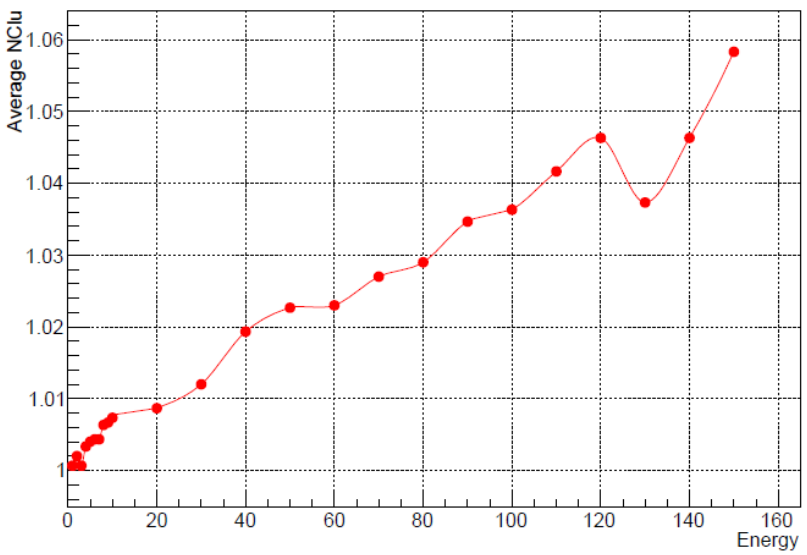
mu+ LCEn/TCEn



mu+ TCEn/THEn



mu+ NClu



单粒子入射

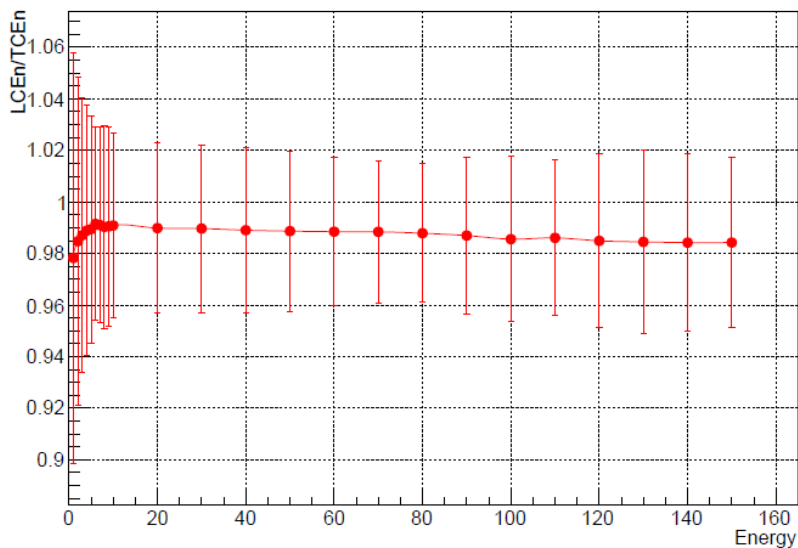
LCEn: Leading Cluster的重建能量

TCEn: Cluster的总能量

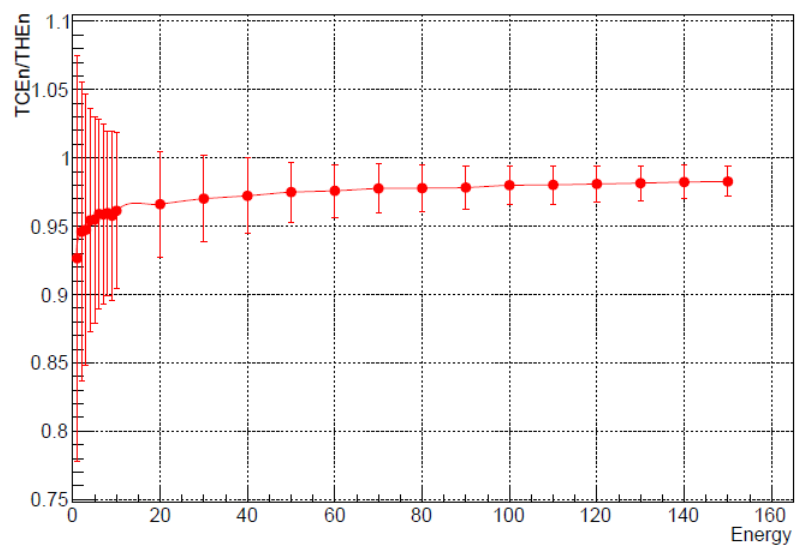
THEn: Hit Level的总能量

# electron的Cluster Level的重建

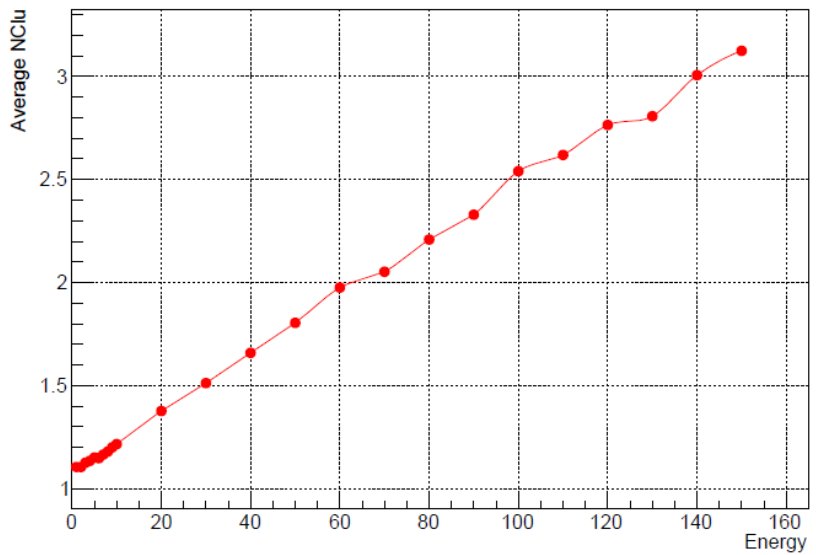
e+ LCEn/TCEn



e+ TCEn/THEn



e+ NClu



单粒子入射

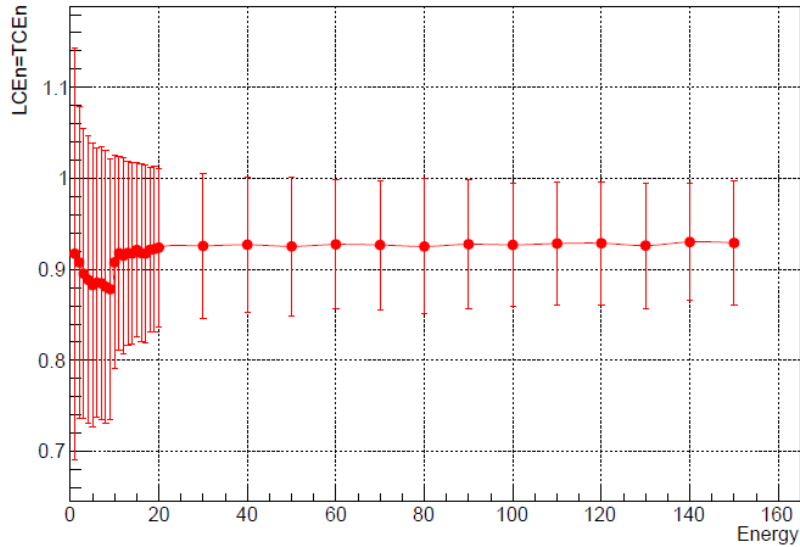
LCEn: Leading Cluster的重建能量

TCEn: Cluster的总能量

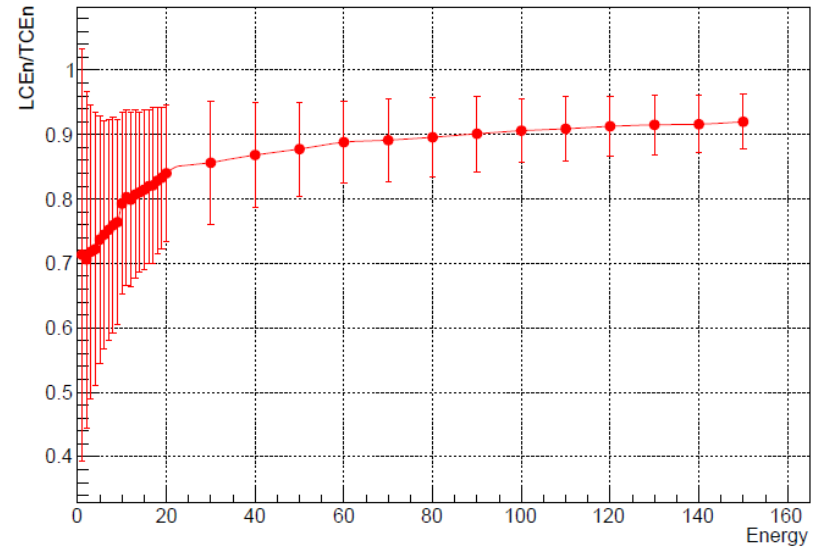
THEn: Hit Level的总能量

# pion的Cluster Level的重建

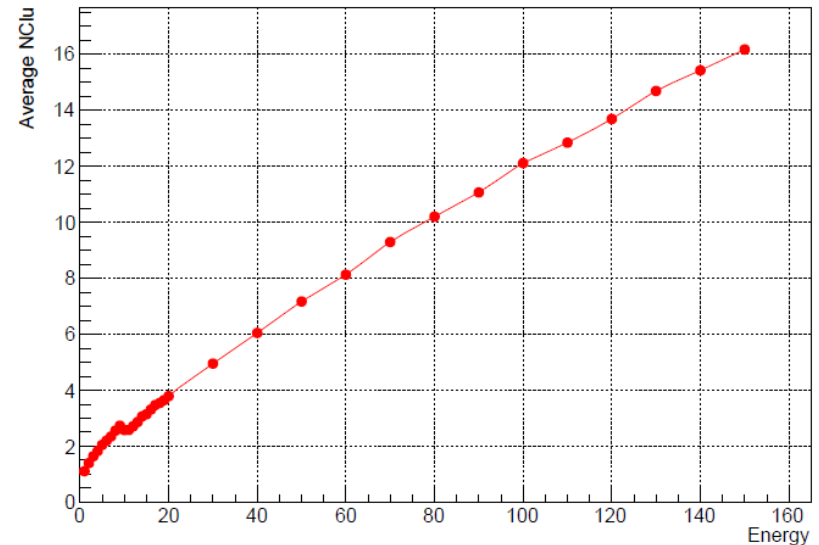
pi+ LCEn/TCEn



pi+ TCEn/THEn



pi+ NClu



单粒子入射

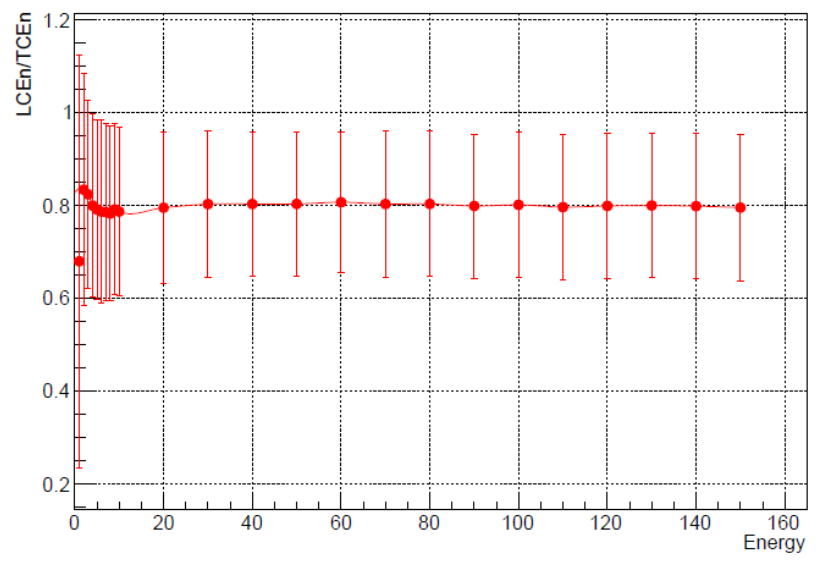
LCEn: Leading Cluster的重建能量

TCEn: Cluster的总能量

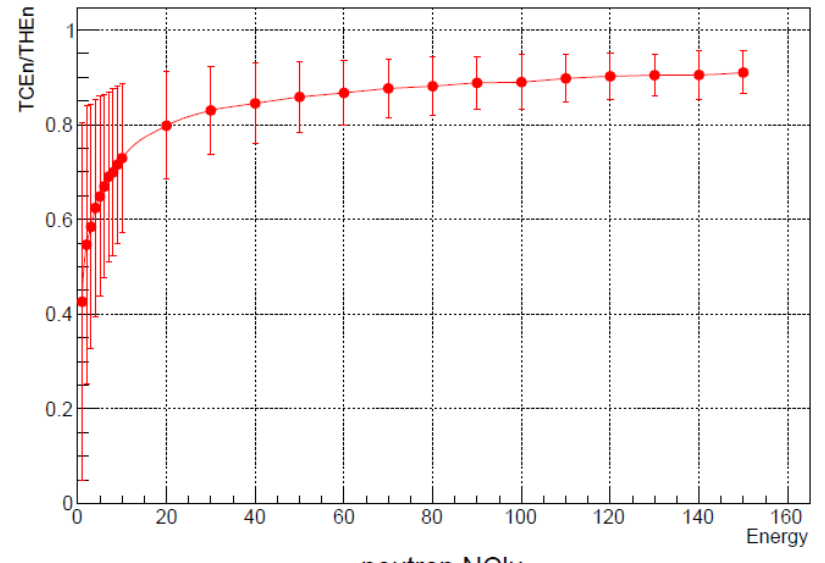
THEn: Hit Level的总能量

# neutron的Cluster Level的重建

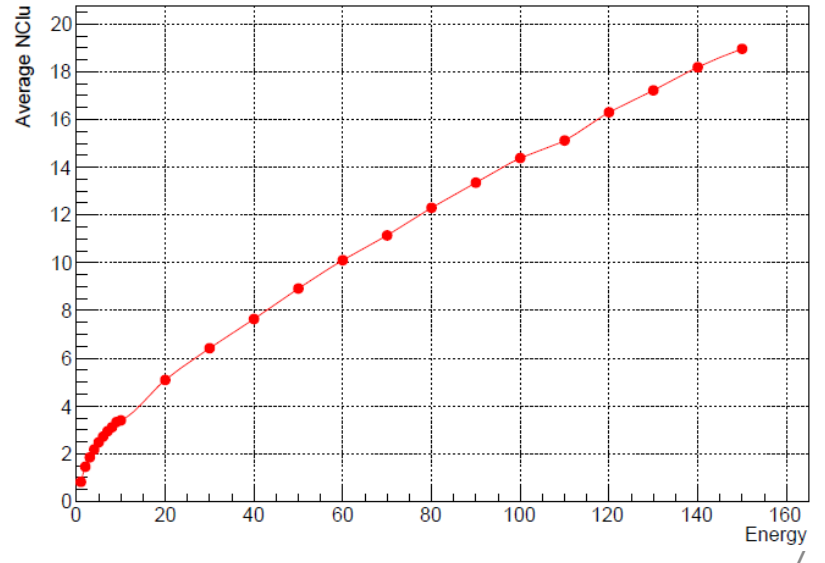
neutron LCEn/TCEn



neutron TCEn/THEn



neutron NClu



单粒子入射

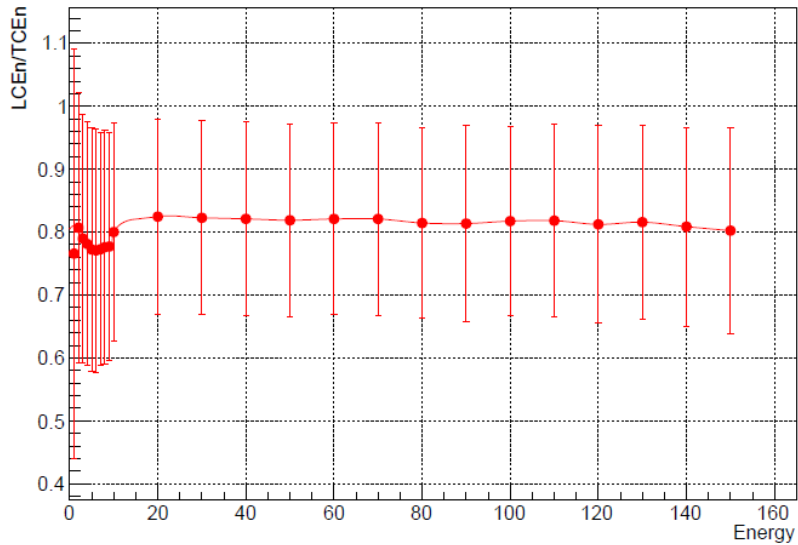
LCEn: Leading Cluster的重建能量

TCEn: Cluster的总能量

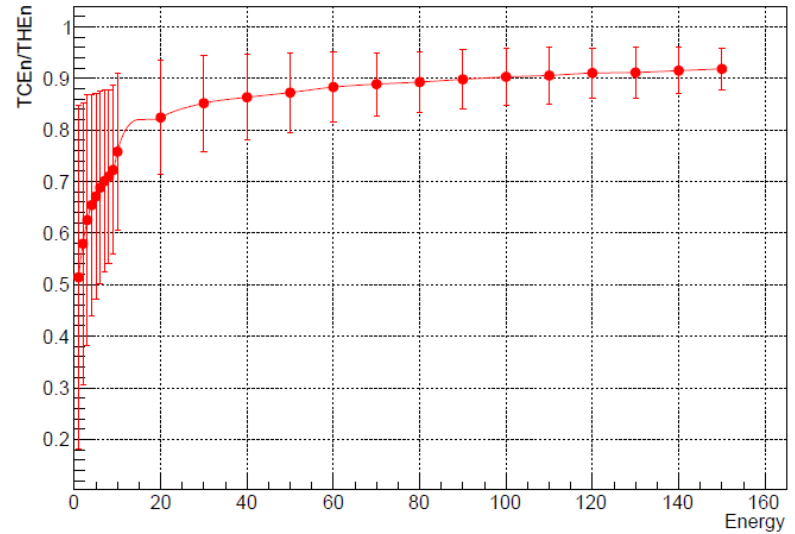
THEn: Hit Level的总能量

# $K_{OL}$ 的Cluster Level的重建

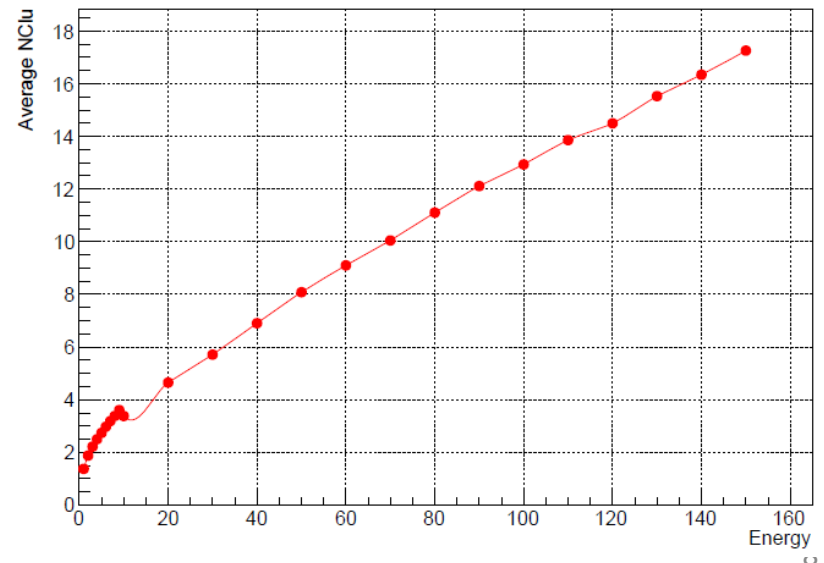
kaon0L LCEn/TCEn



kaon0L TCEn/THEn



kaon0L NClu



单粒子入射

LCEn: Leading Cluster的重建能量

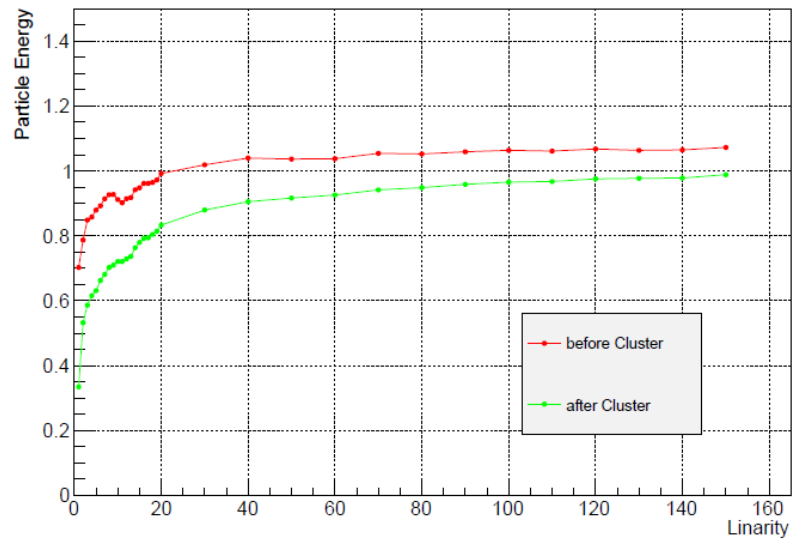
TCEn: Cluster的总能量

THEn: Hit Level的总能量

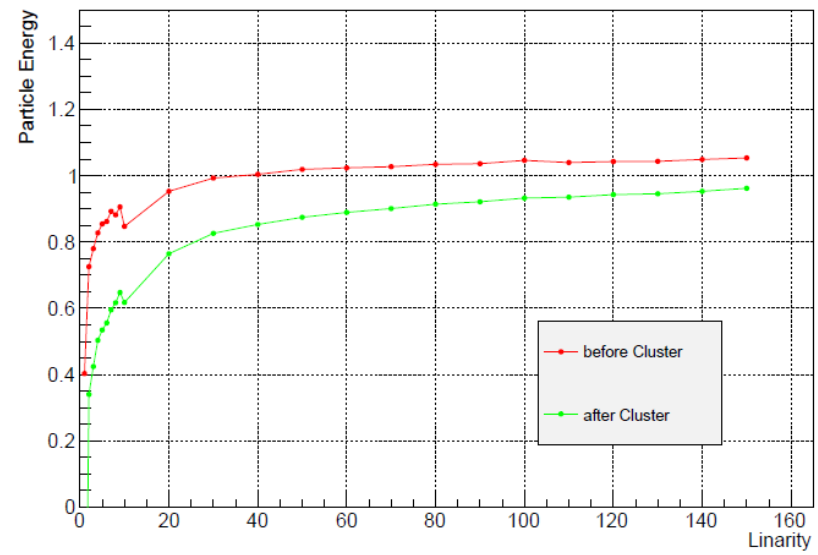


# 重建前后Linarity 对比

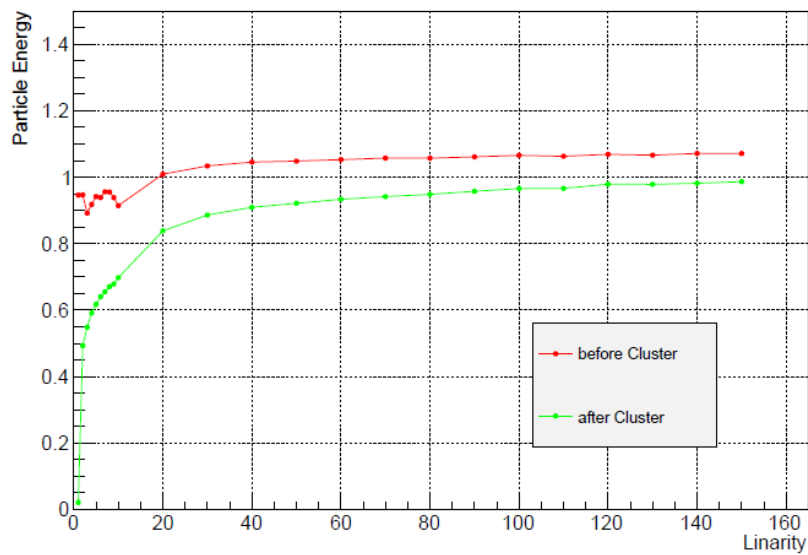
pi+ Linarity before/after cluster



neutron Linarity before/after cluster

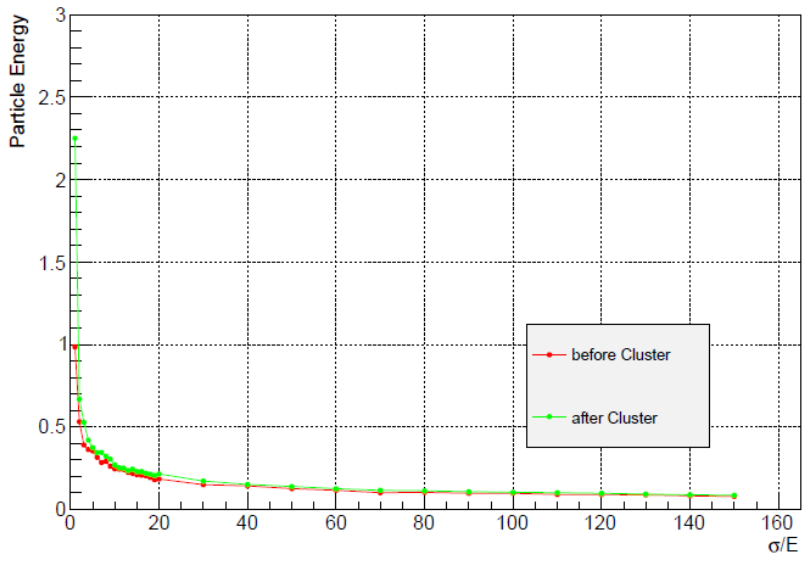


kaon0L Linarity before/after cluster

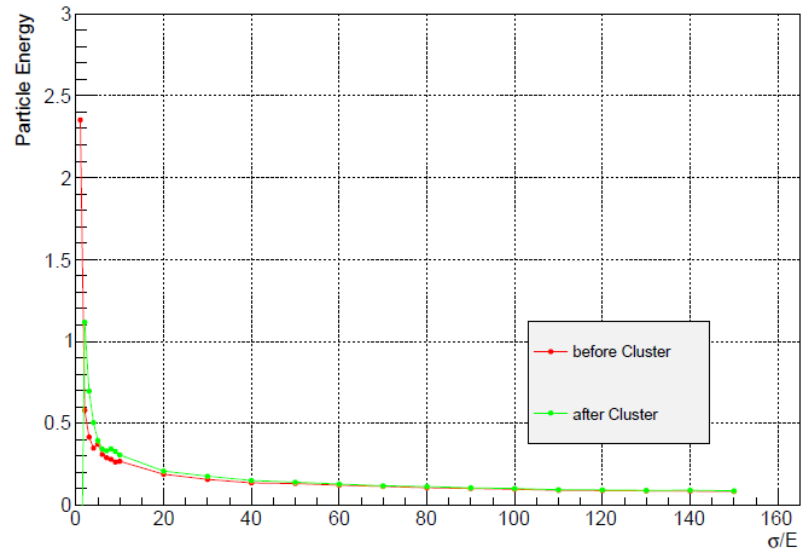


# 重建前后Resolution对比

pi+ Resolution before/after cluster



neutron Resolution before/after cluster



kaon0L Resolution before/after cluster

