

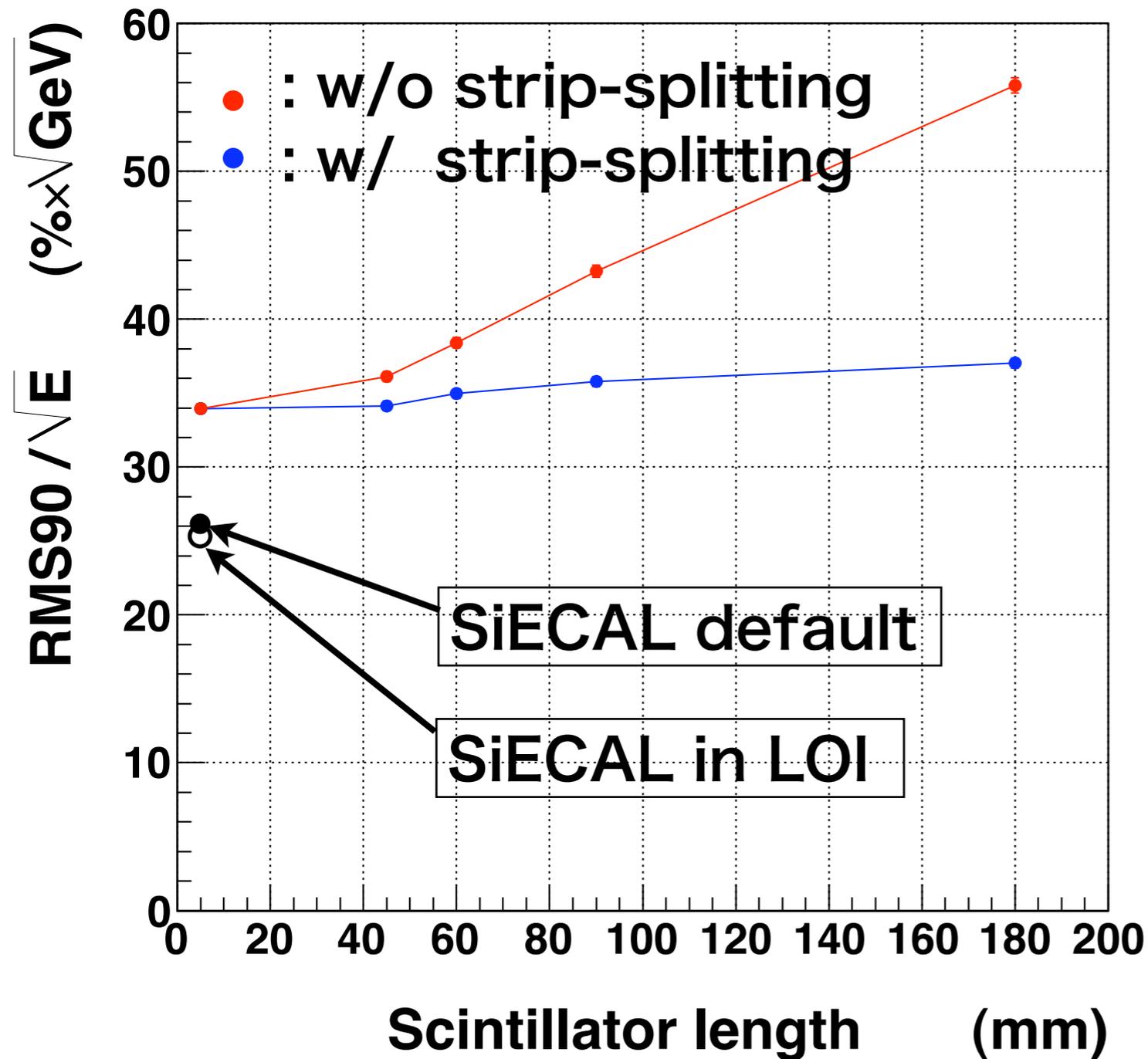
Status of Strip Clustering

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Physics and Software meeting of ILD-Asia

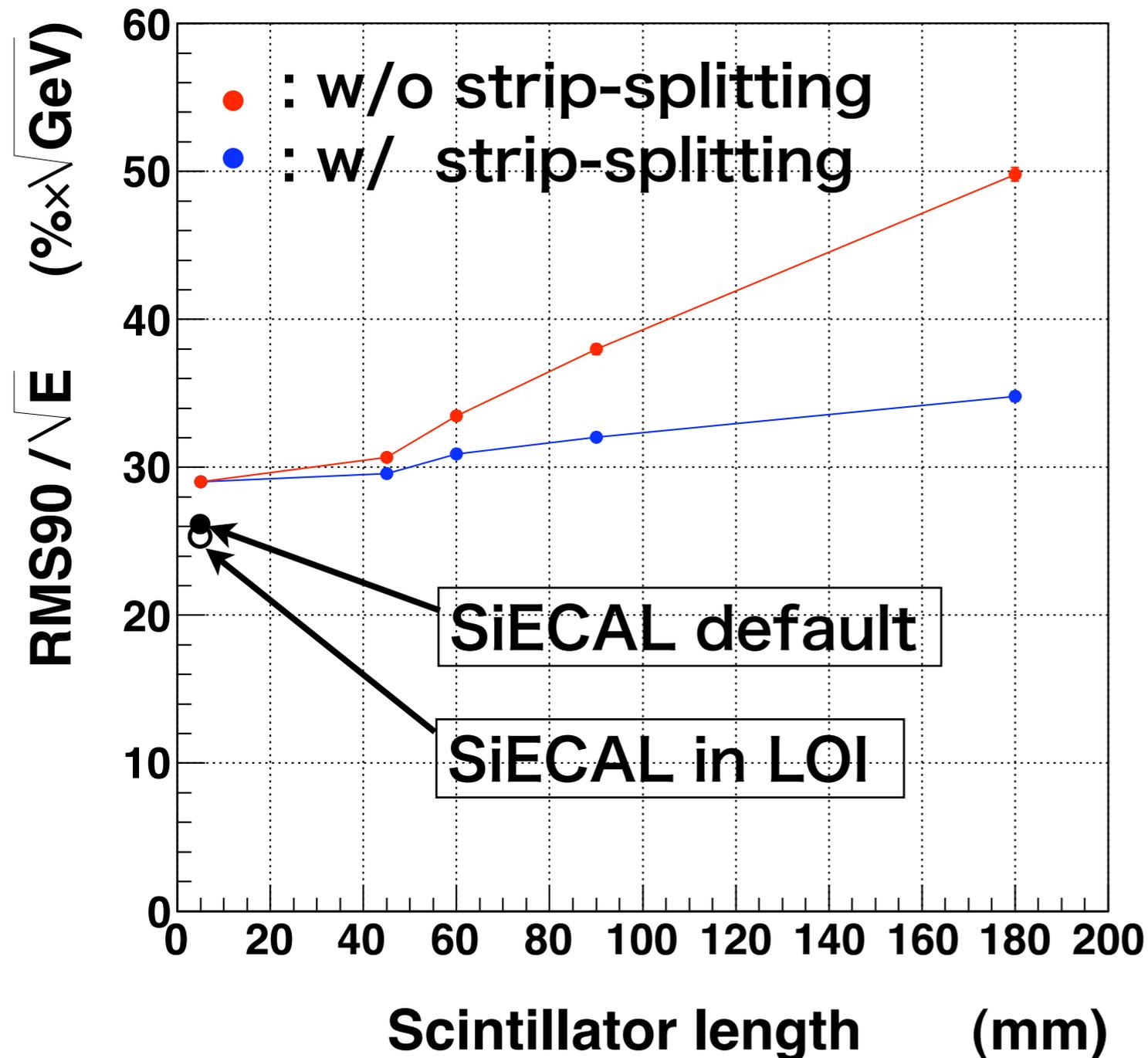
4th March 2011

Length dependence of JER 45 GeV with default parameters



- Center energy 45 GeV
- Clearly we can see the effect of strip-splitting method for two jet events

Length dependence of JER 45 GeV after tuned by M.Thomson



- Difference of JER between Sc and Si ECAL is reduced to one third with Mark's tuning.
- JER of 45x5mm² ScECAL with Strip-splitting method is achieved to be less than 30%

Changed parameters

-In MarlinPandoraProcessor

- ECalToMipCalibration 160.0 → 110.0
- ECalMipThreshold 0.5 → 0.2
- MuonHitEnergy : default → 0.5
- MaxHCalHitHadronicEnergy : default → 10000

-SimpleMuonDigiProcesso

- CalibMUON : 10000 → 100000
- MUONCollections : Added MuonPlugCollection
- KeepBarrelLayersVec : default → 1 2 3 8 9 10 15 16 17?

-LEPTrackingProcessor

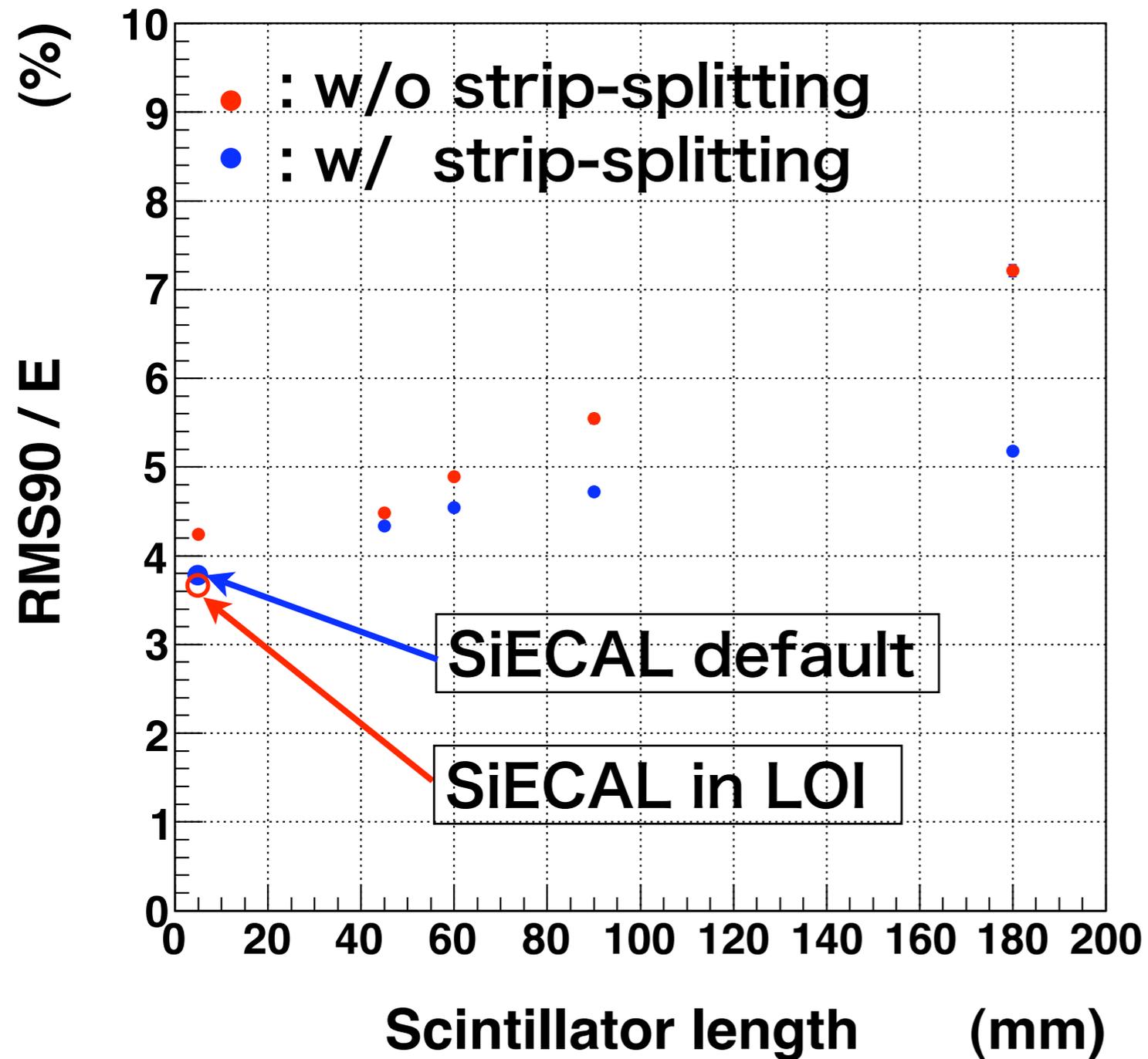
- AlwaysRunCurlKiller : default → yes
- MultiplicityCut : default → 4

-ECALGapCorrection issues

Summary and Plan

- Mark Thomson helped us to tune parameters, then
 - Difference of JER between Sc and SiEcal reduced to one third.
 - Still it is a black box.
 - ▶ Learning the functions of changed parameters reading their codes.
- JER for $\sqrt{s} = 200$ GeV, 360 GeV, and 500 GeV with Mark's steering will be shown soon

Length dependence of JER 45 GeV



After

-Center energy 45 GeV
-Clearly we can see the effect of strip-splitting method for two jet events