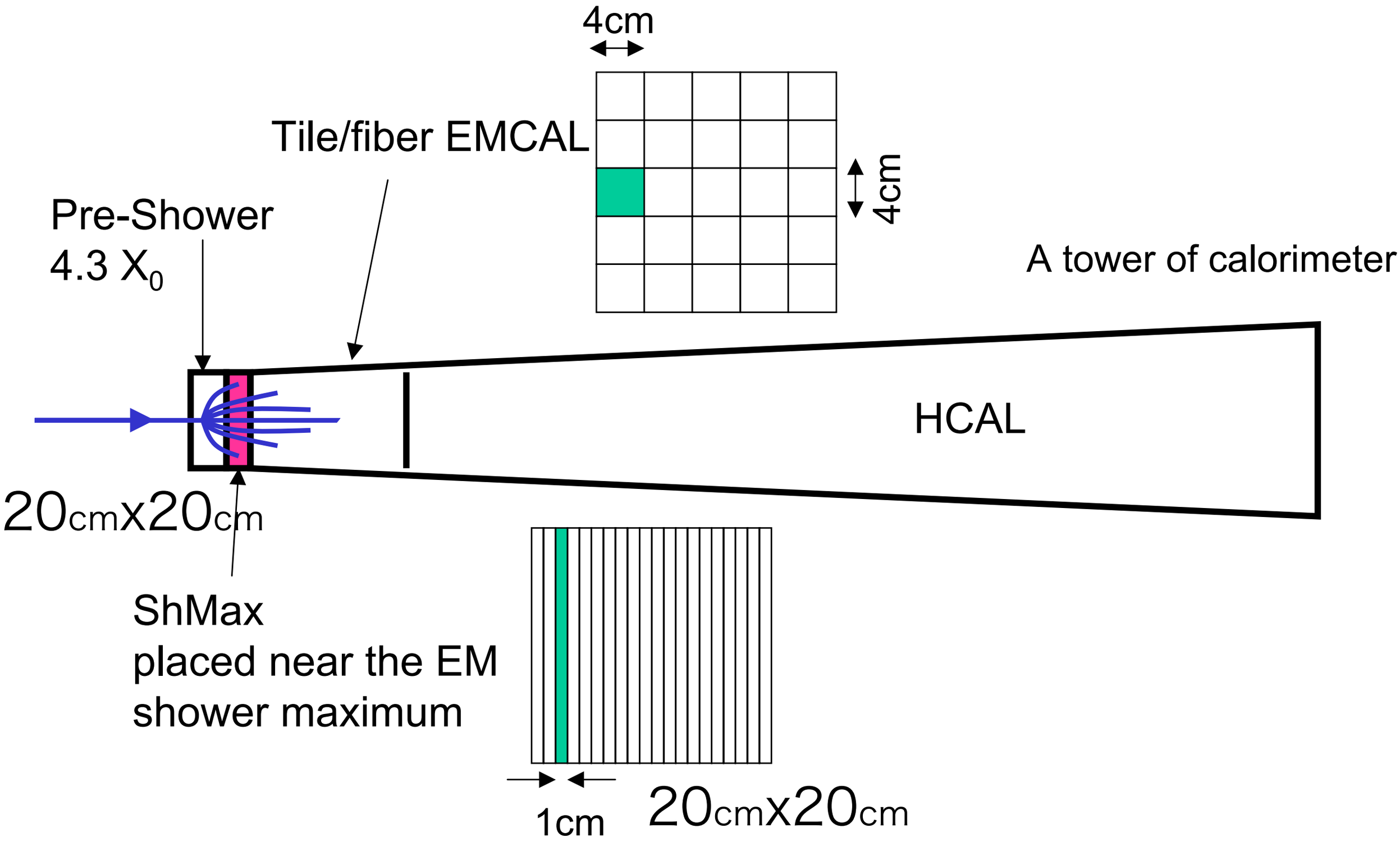
Strip-Shower MAX det. simulation

H.Oobe, S.Itoh and T.Takeshita
Shinshu Univ.

5/March/05 GLC-det. meeting TT

Strip Shower Max. Det.

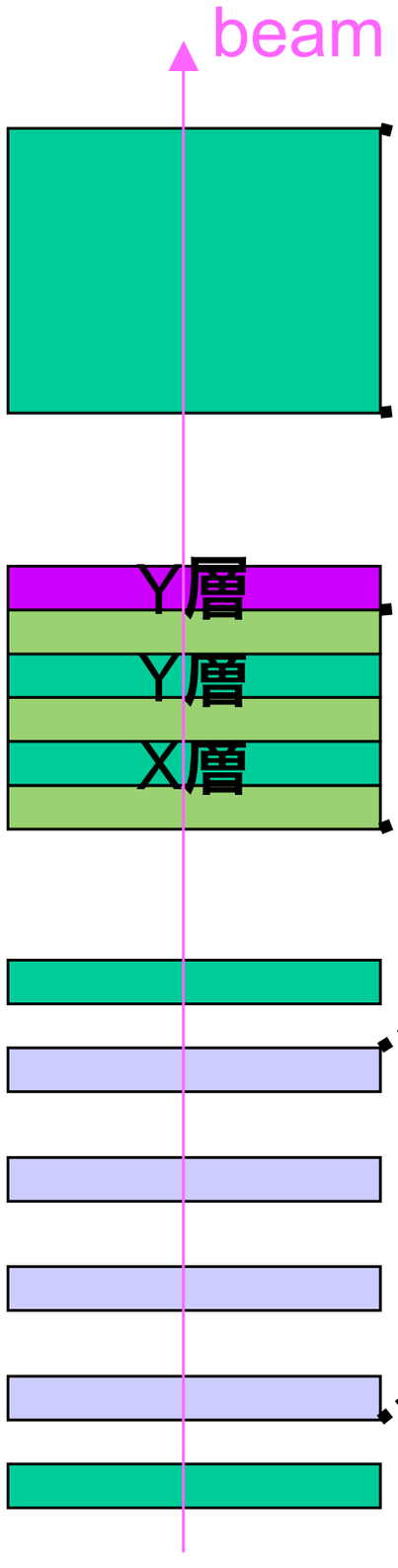


Tests at DESY and KEK

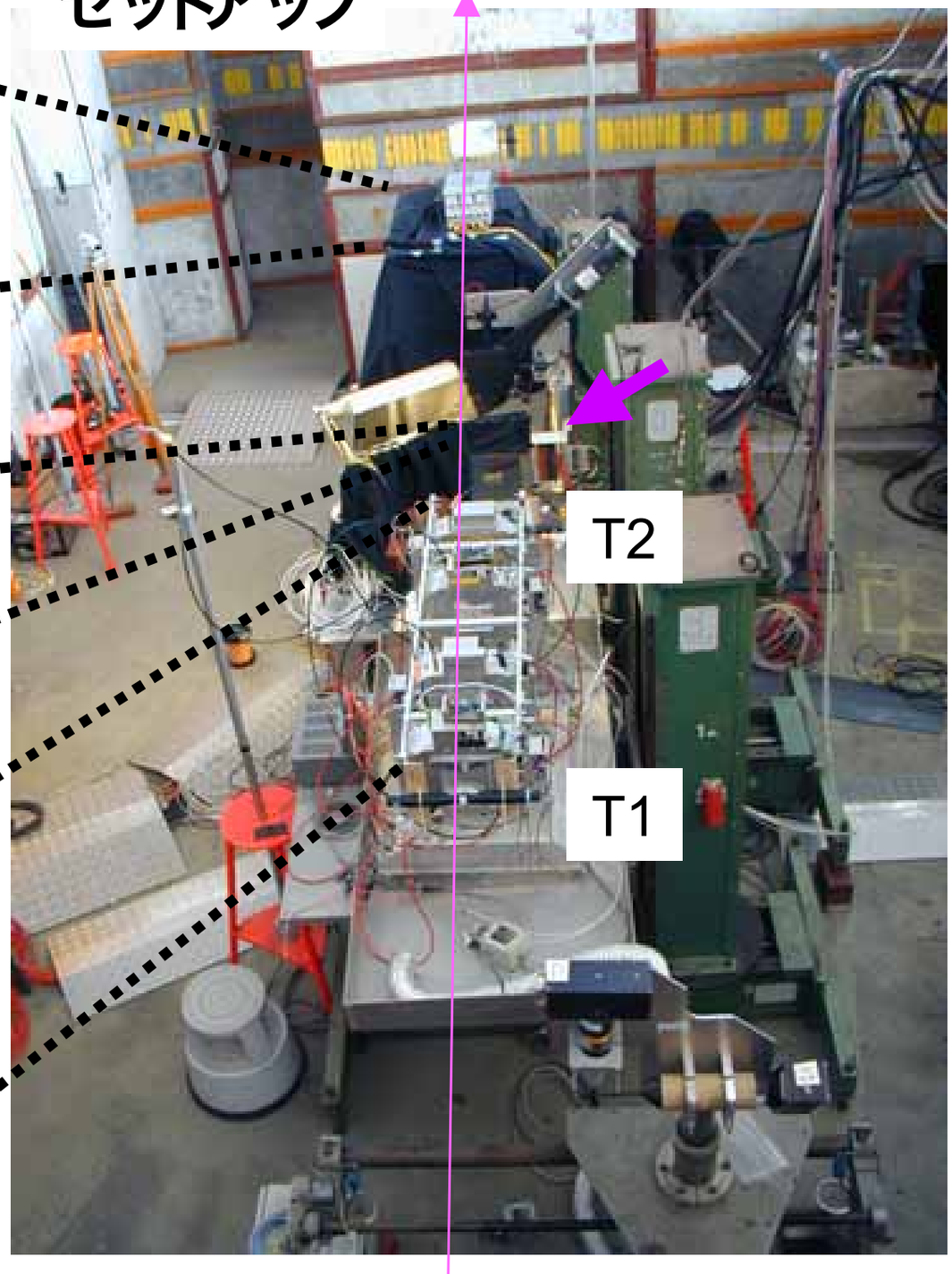
CAL.

Strip Shower Max. Det.

DC’s



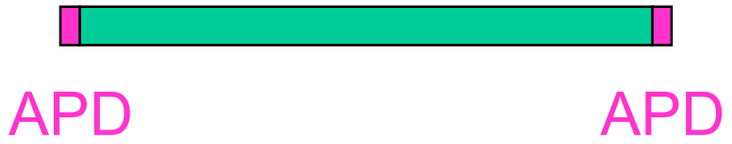
セットアップ

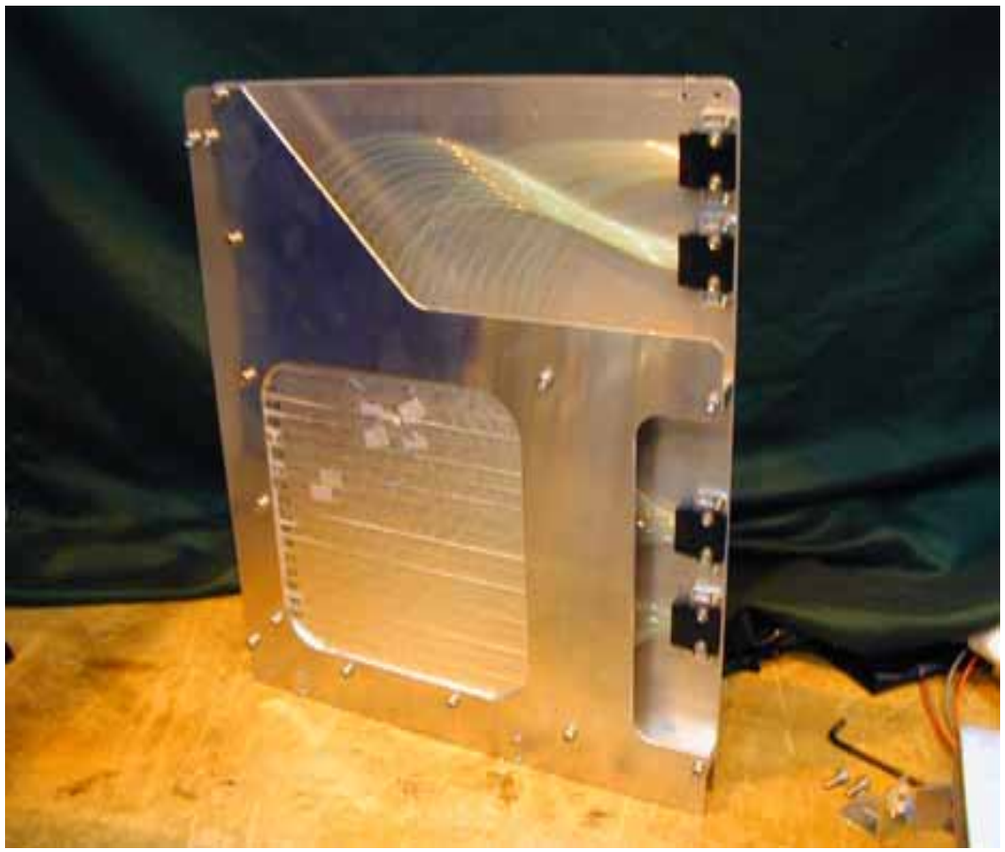


Strip Shower Max. Det.

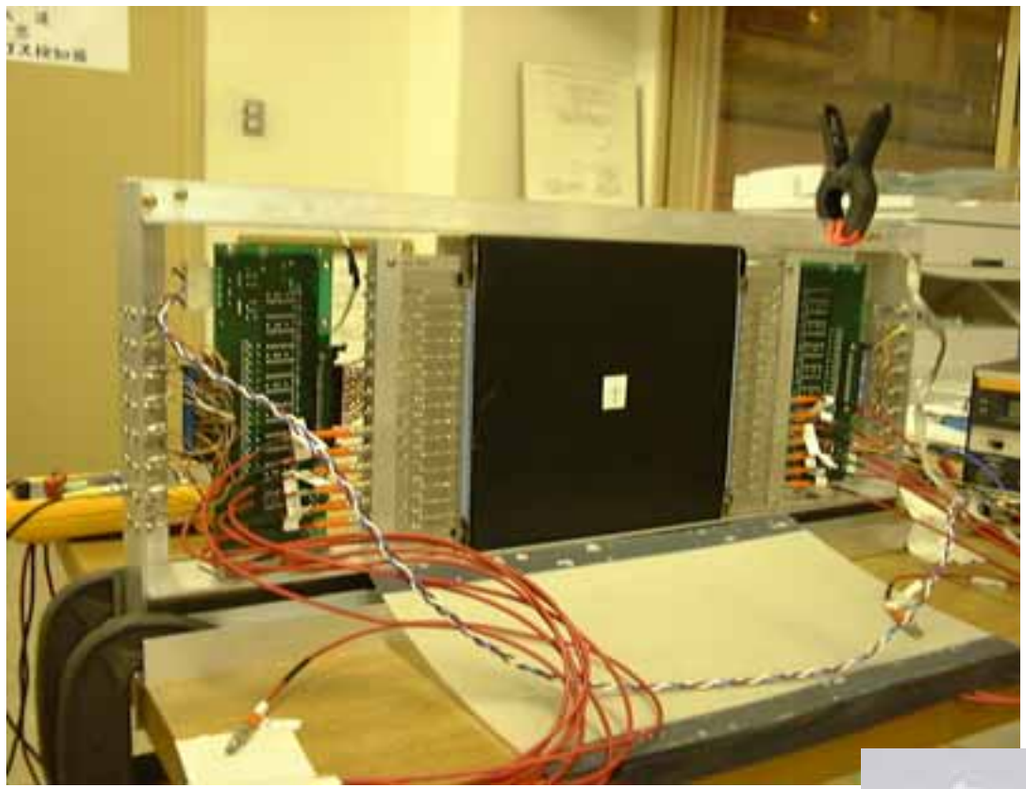
MAPMT type

APD type





2 layers

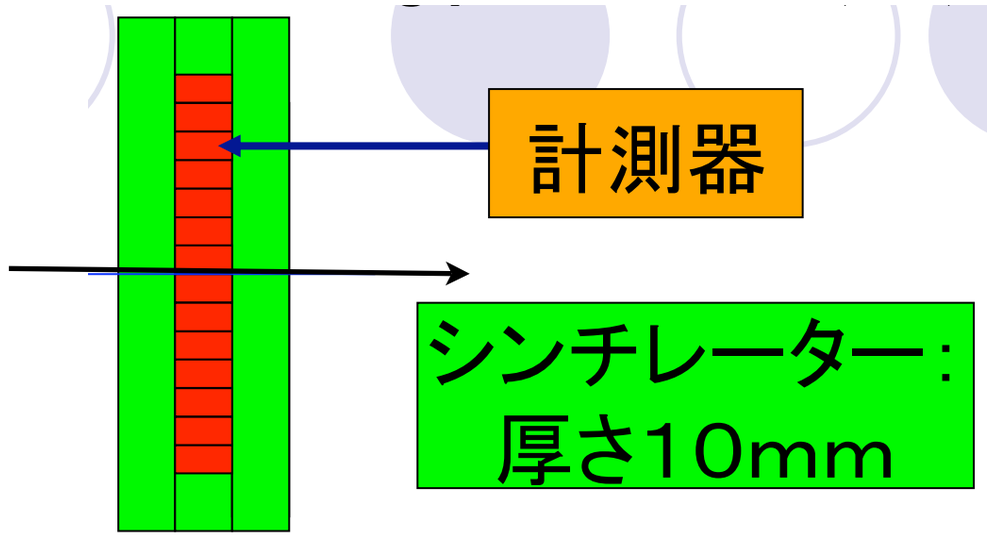


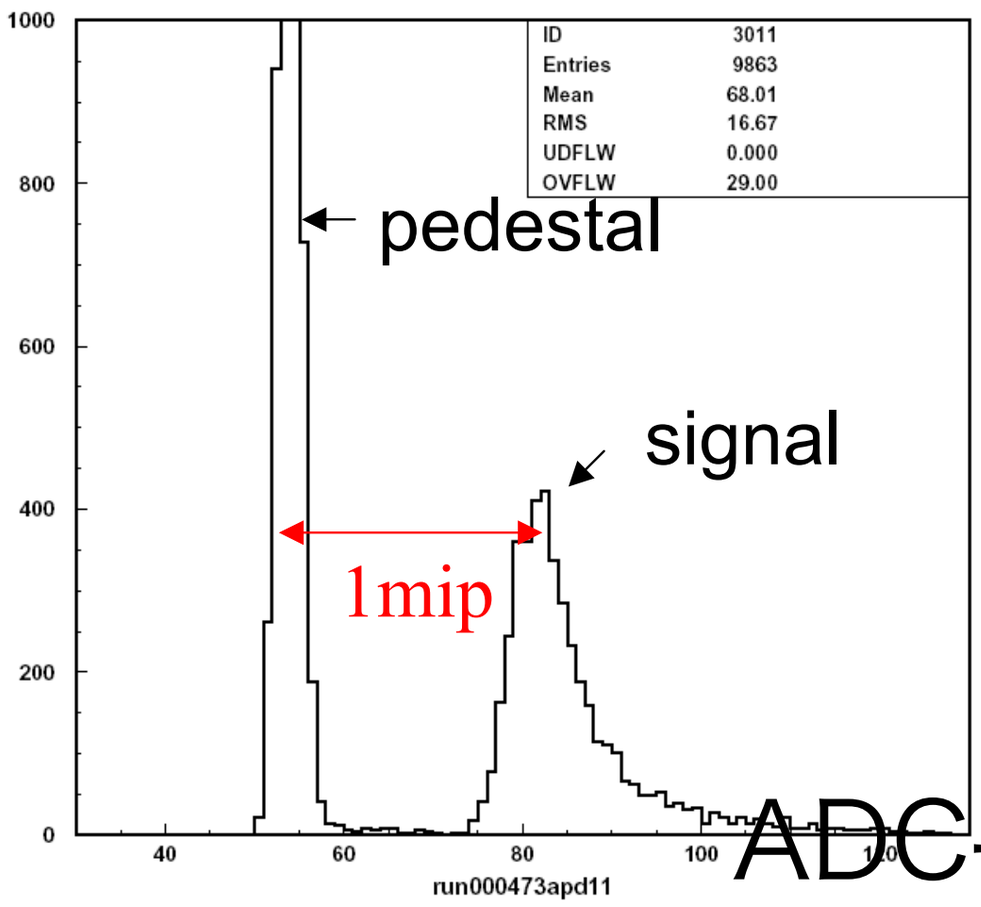
1 layer

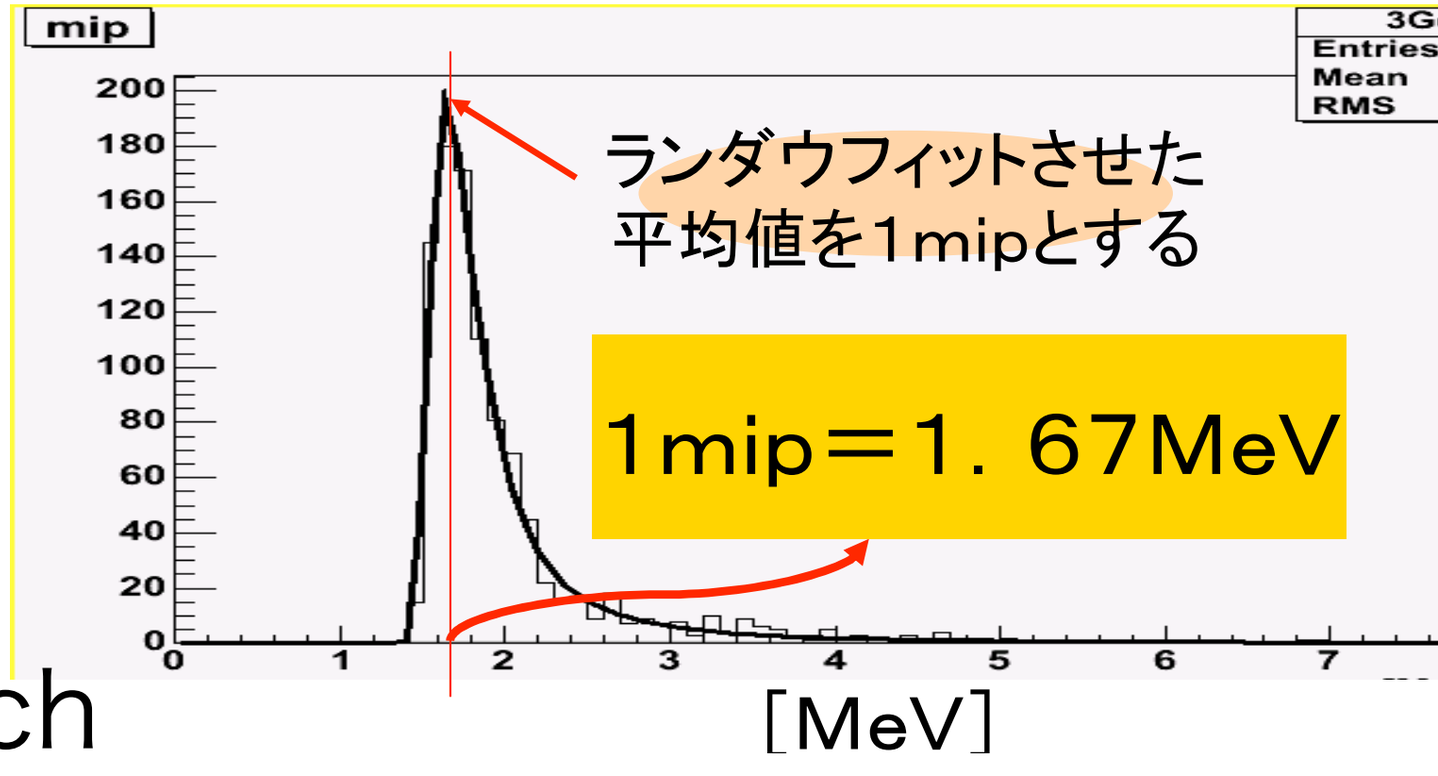
Calibration

MIP unit

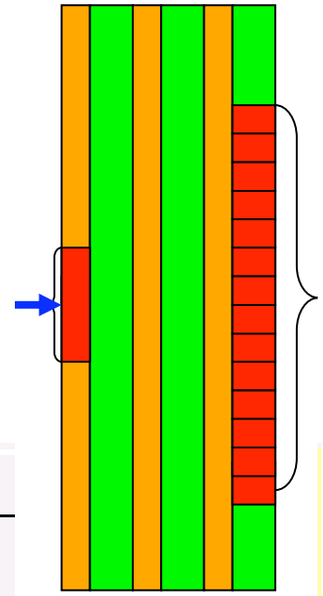
Beam test　3GeV electron　Simulation



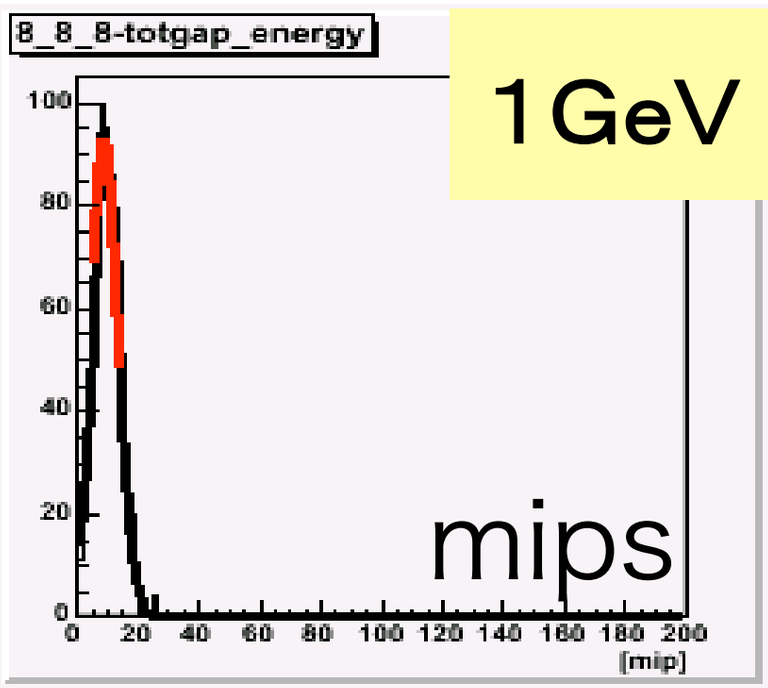


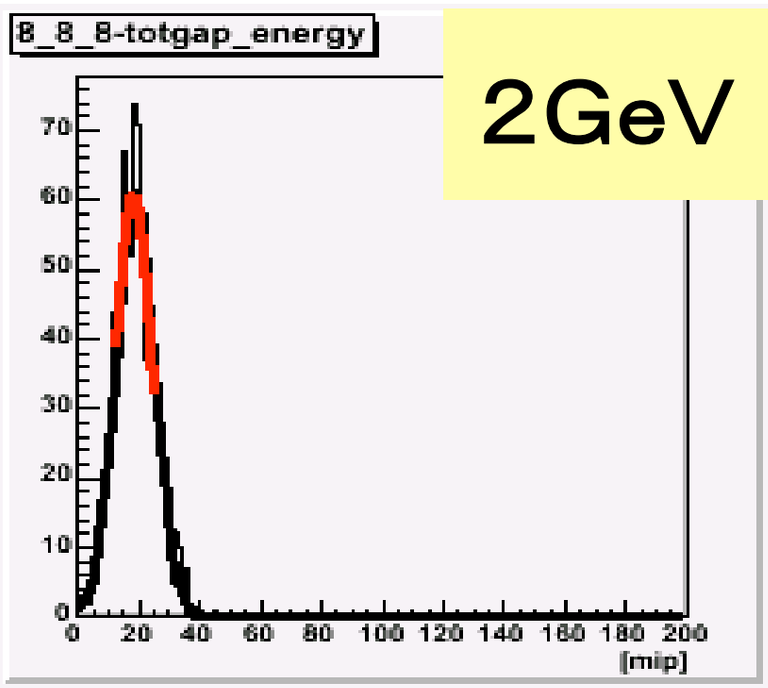


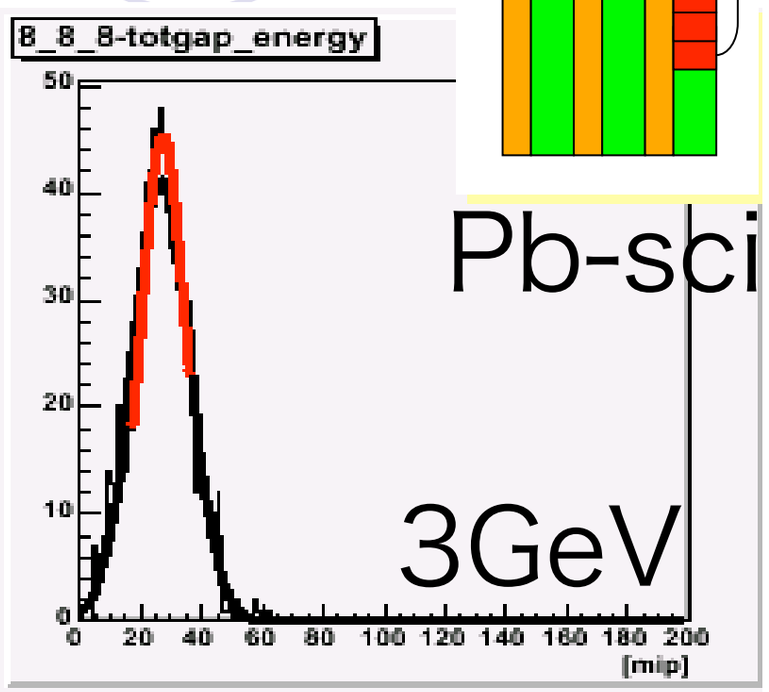
simulation results: Energy distribution

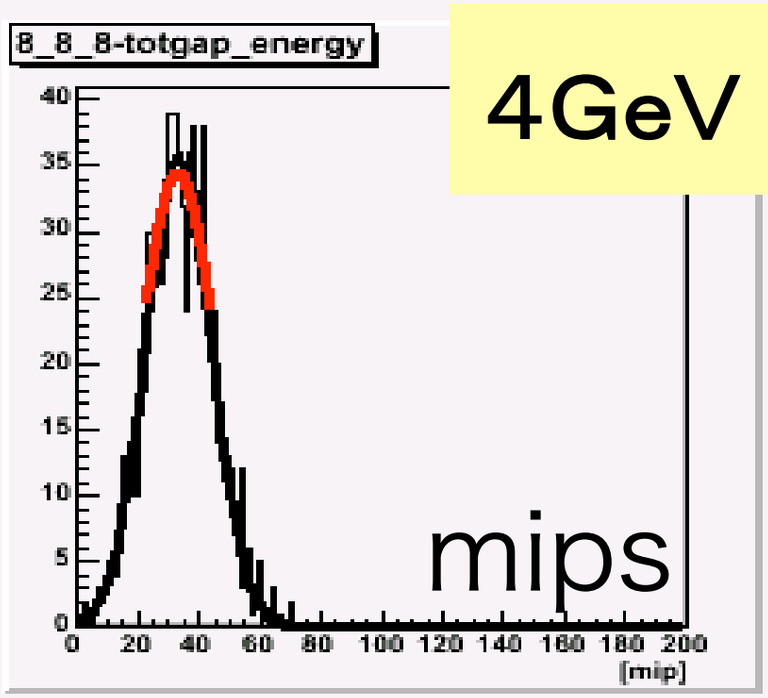


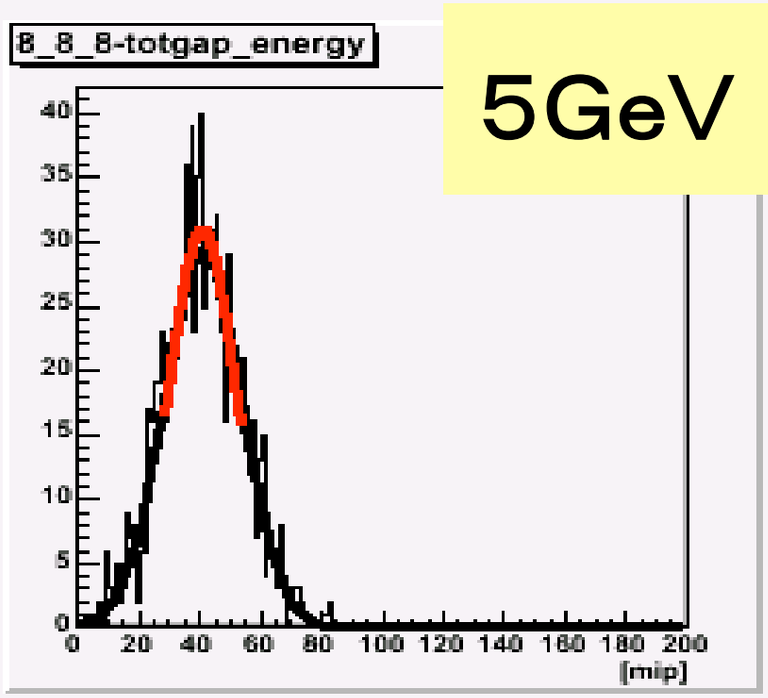
Pb-sci

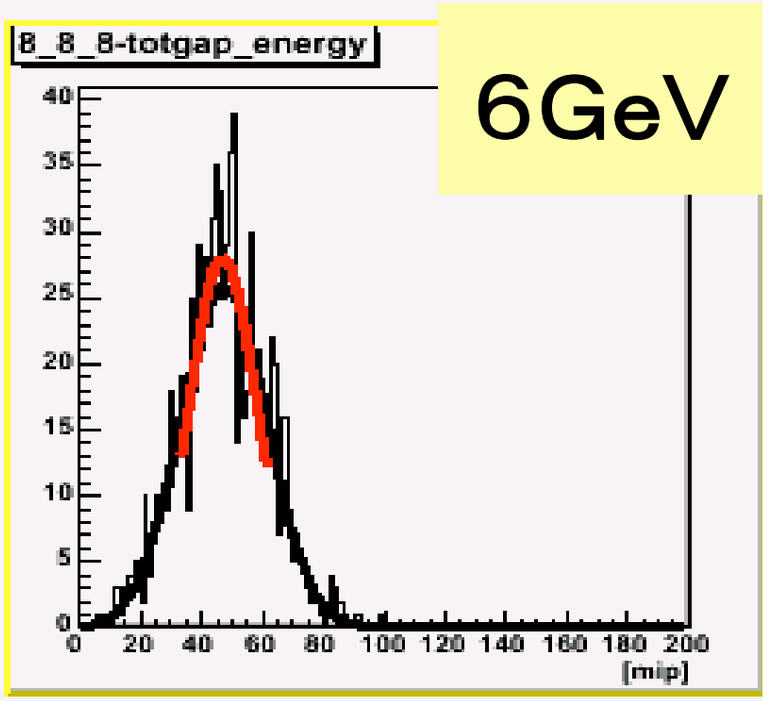








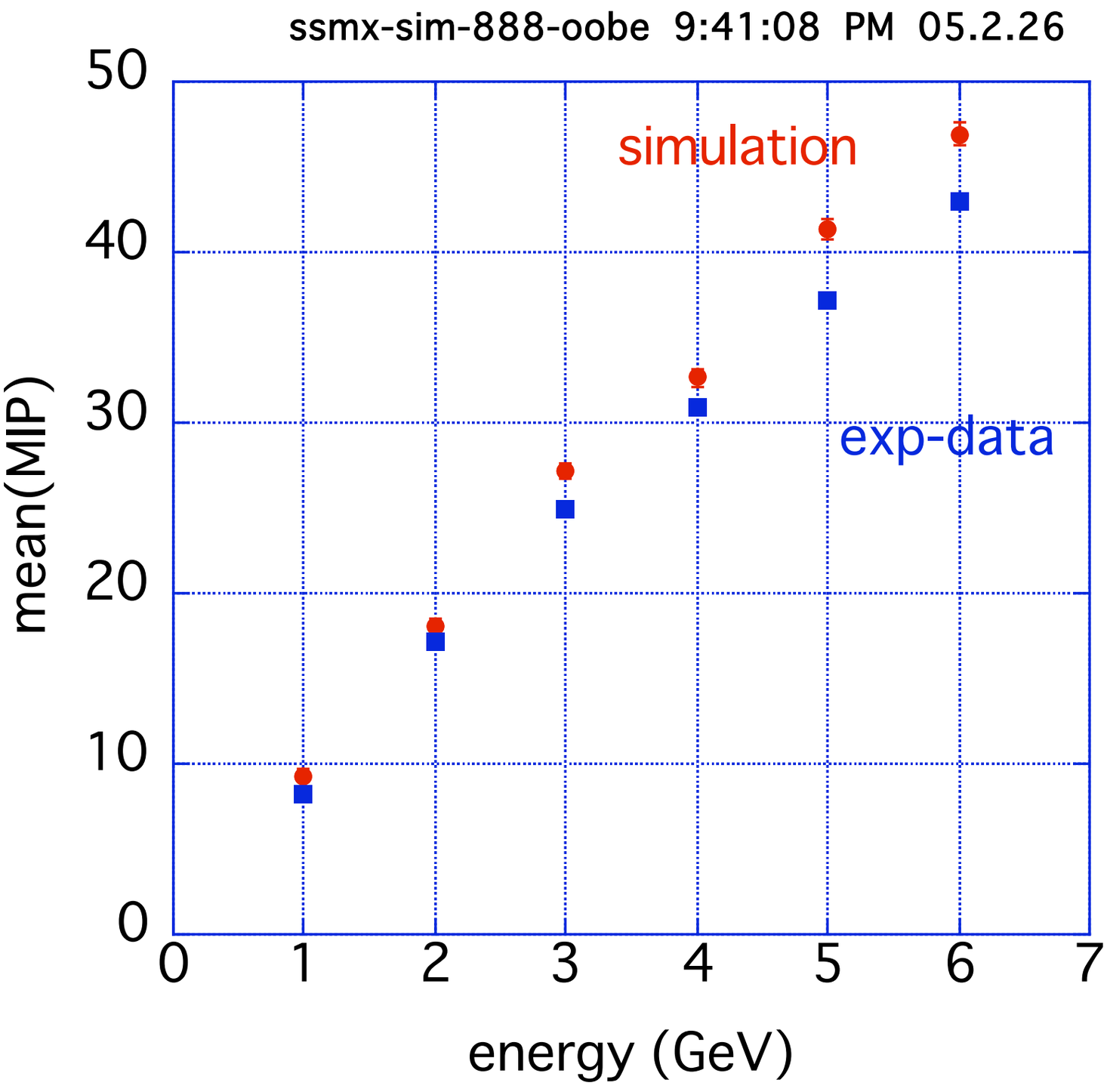


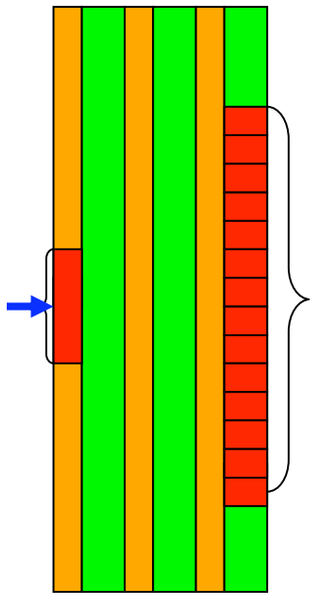


comparison: energy dist.

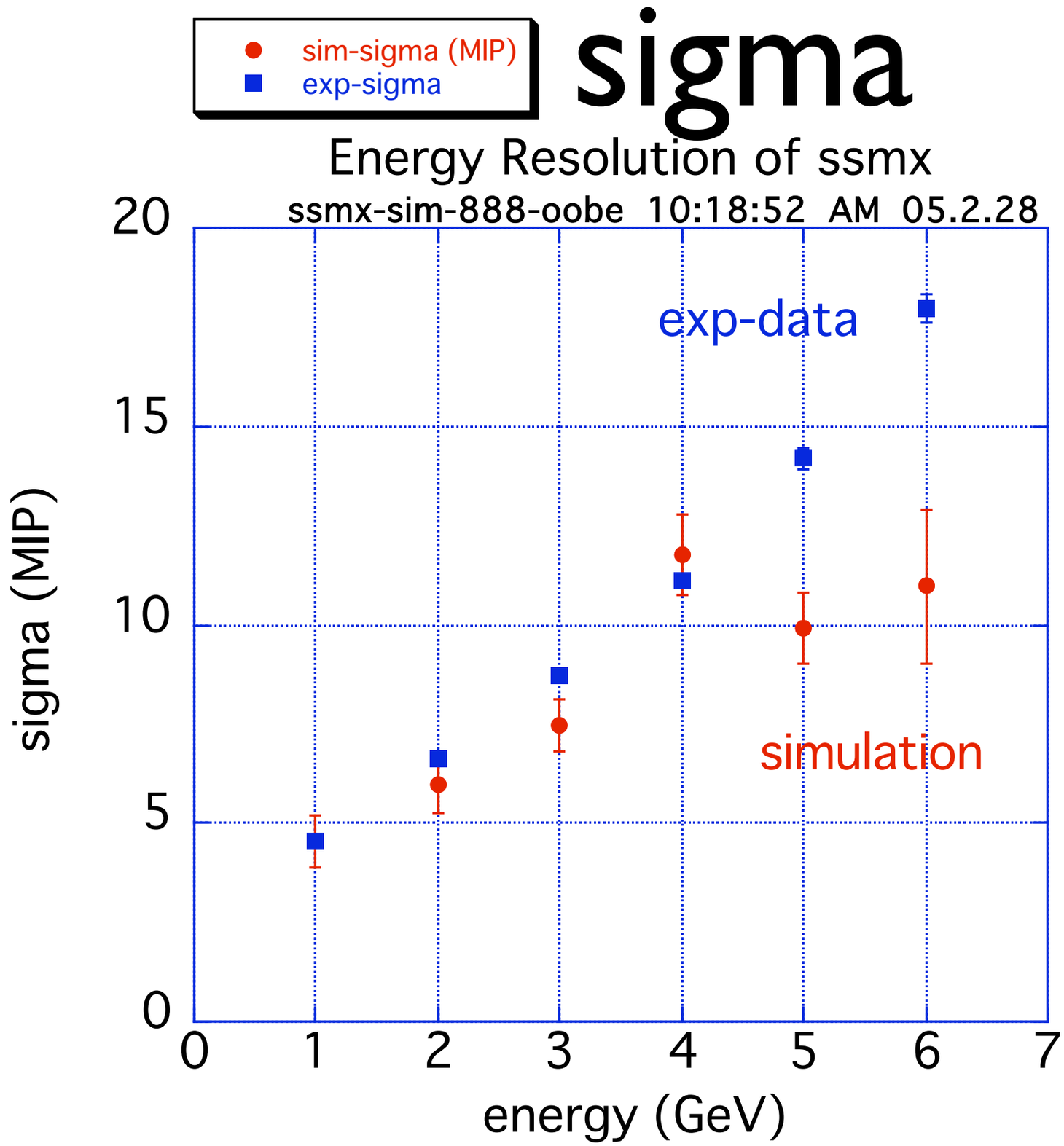
mean(MIP)
exp-mean

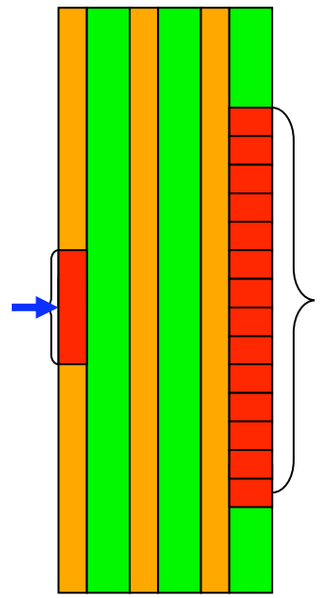
Range cutoff=0.0003mm



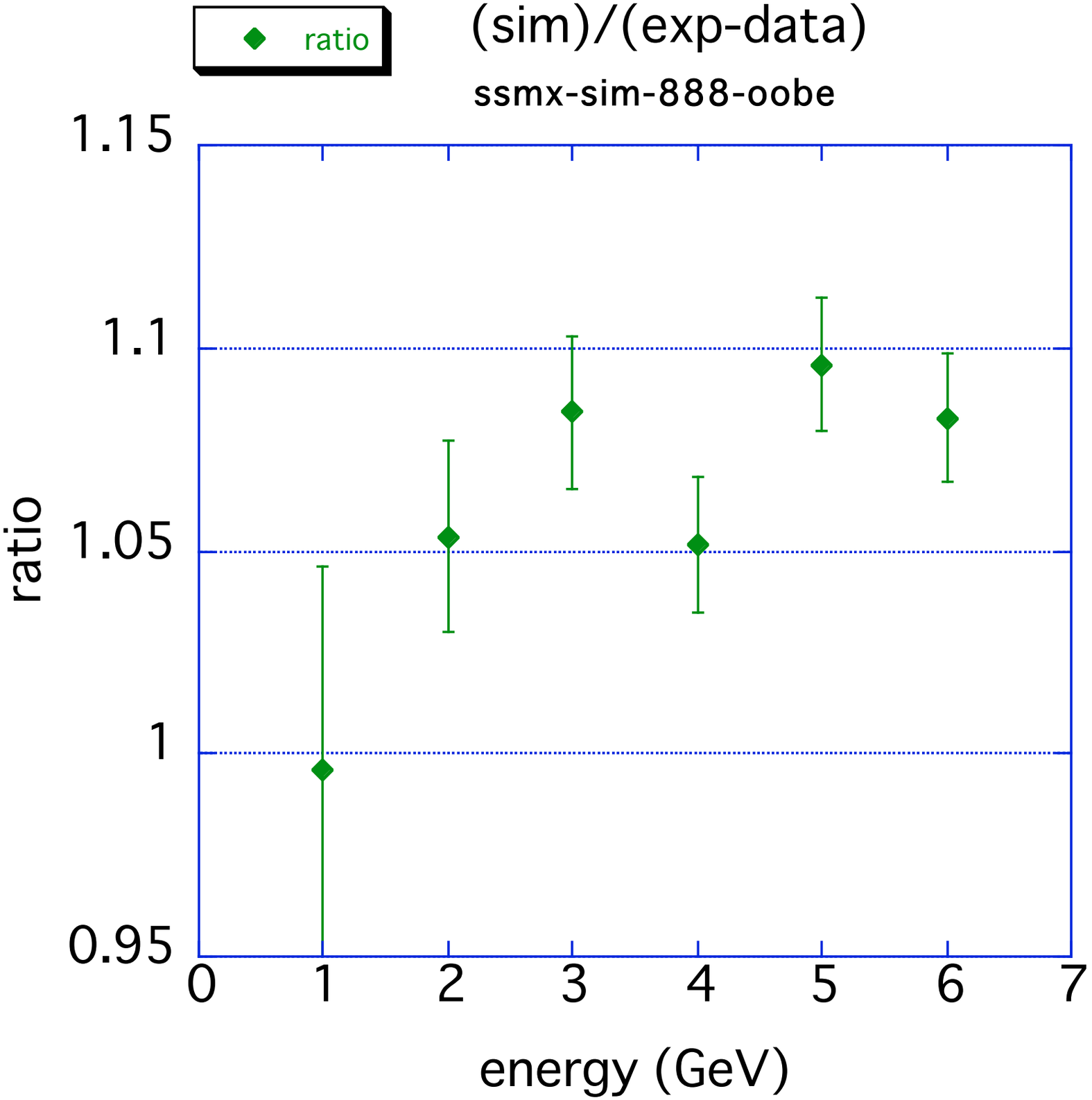


comparison: energy dist.-sigma

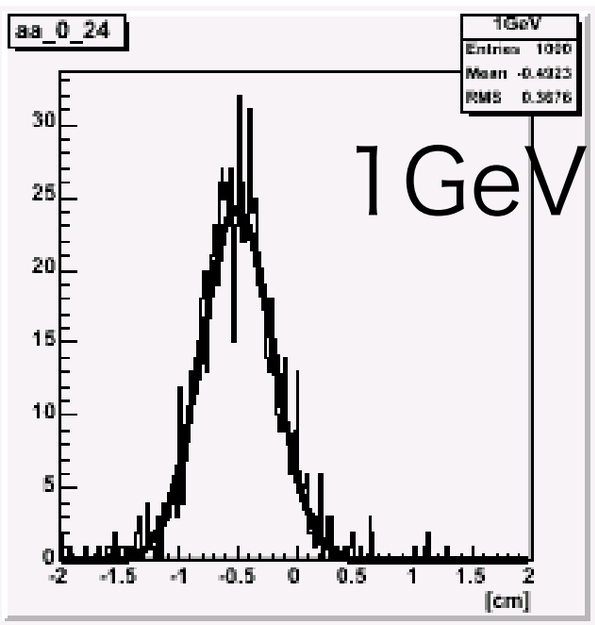


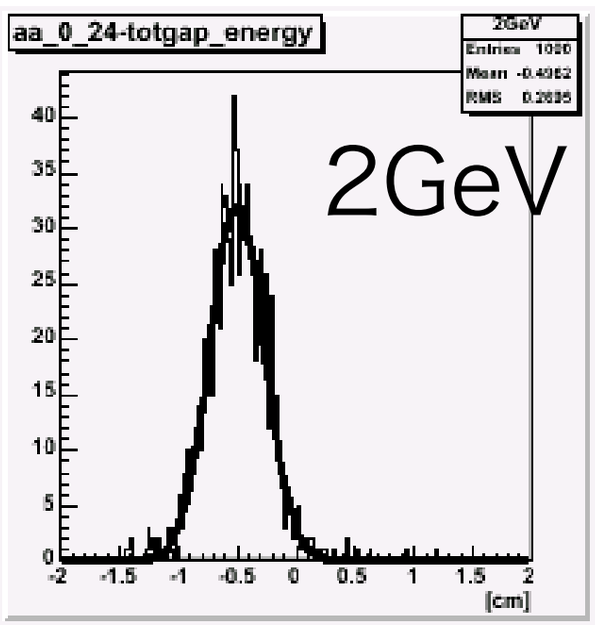


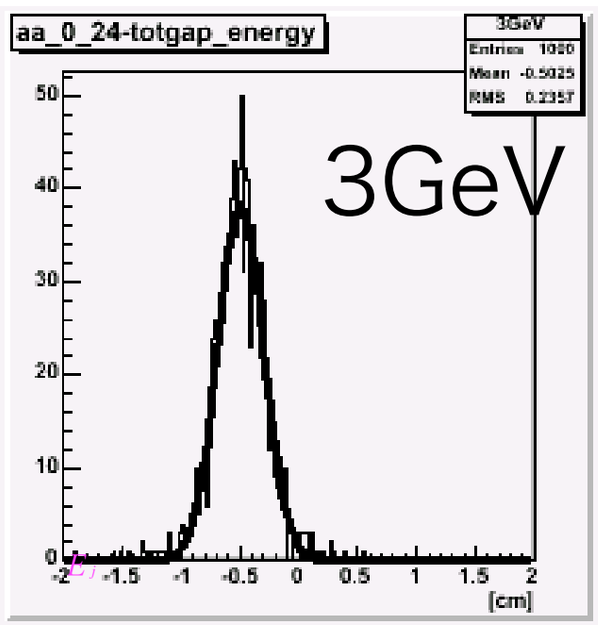
comparison: energy ratio

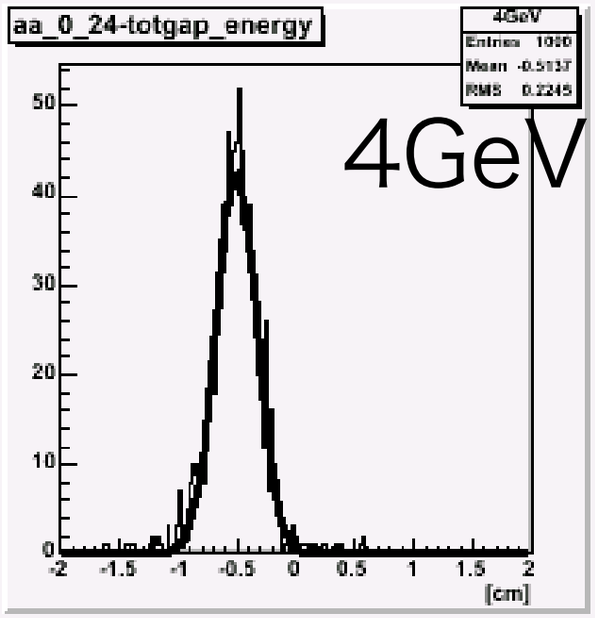


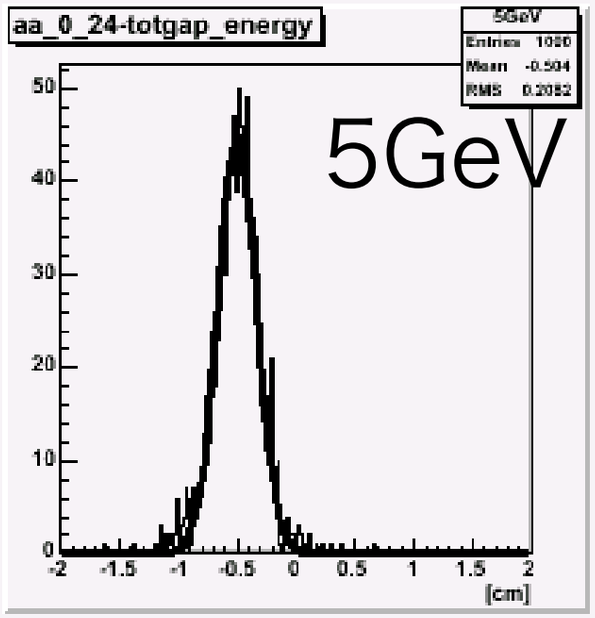
comparison: spatial res.

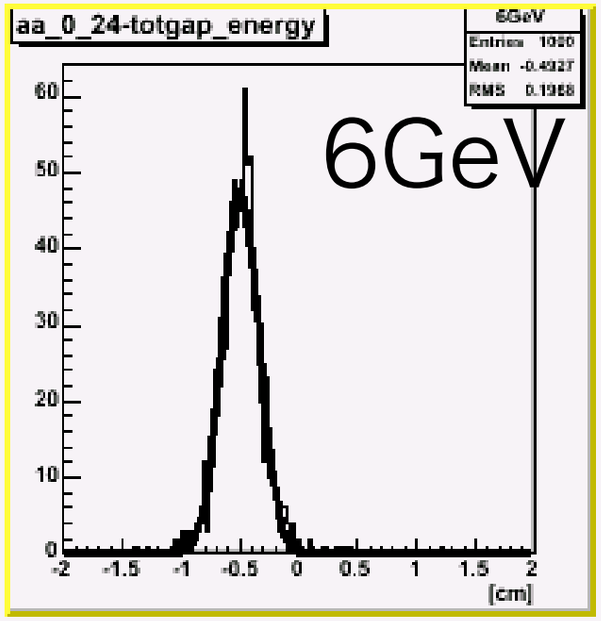


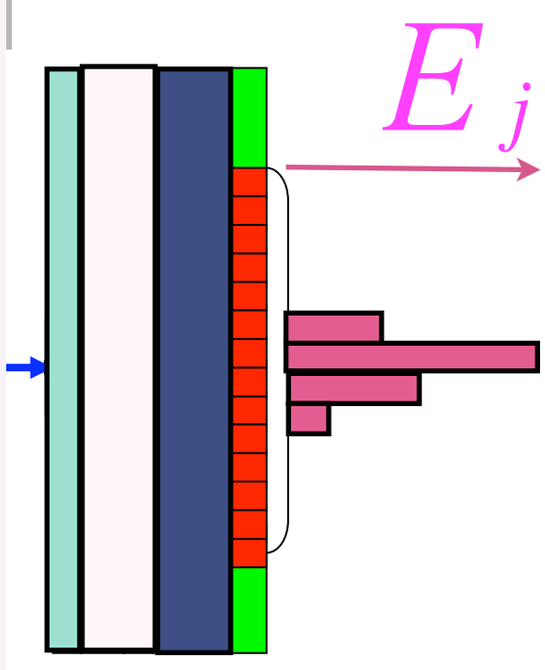








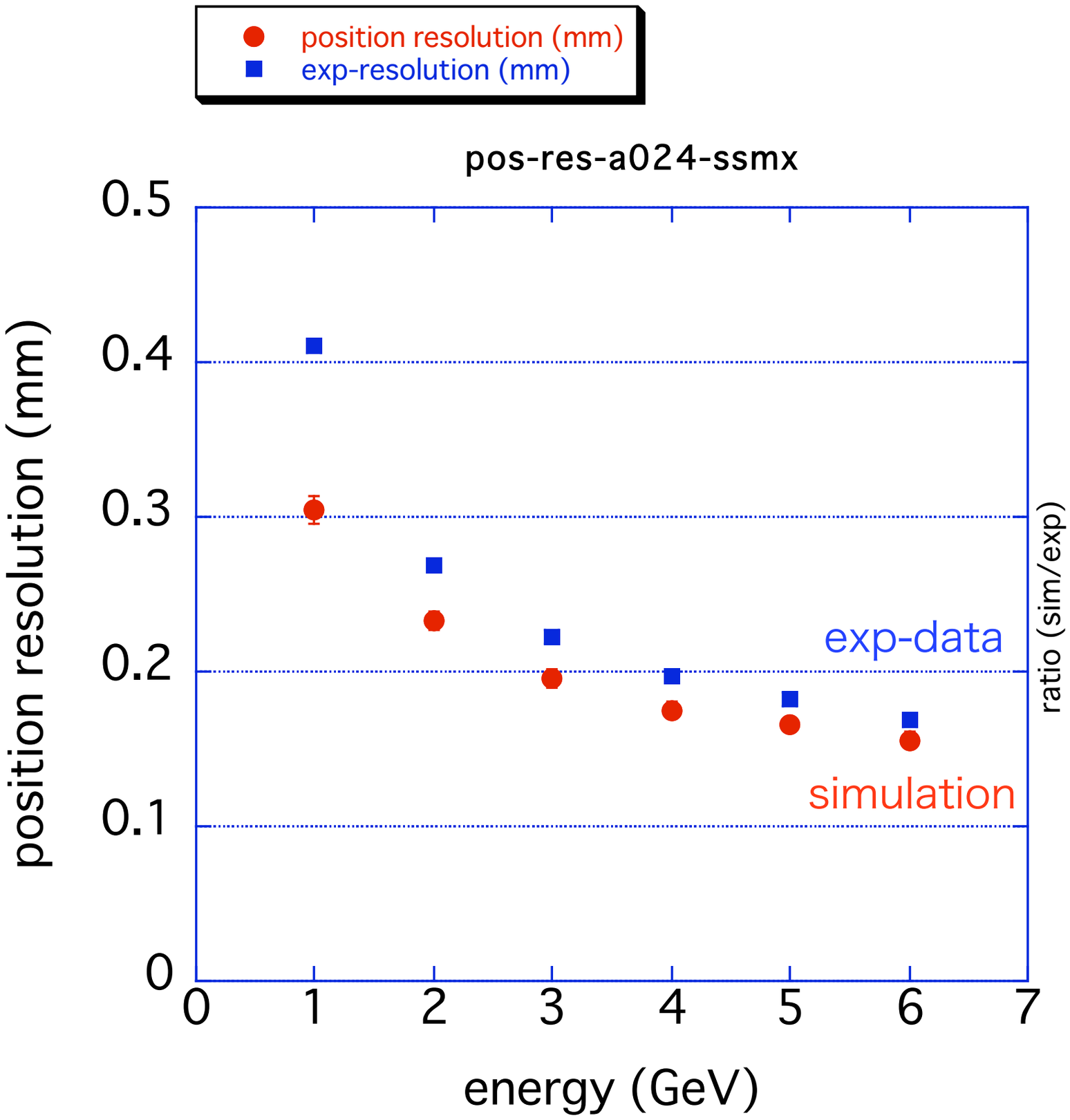


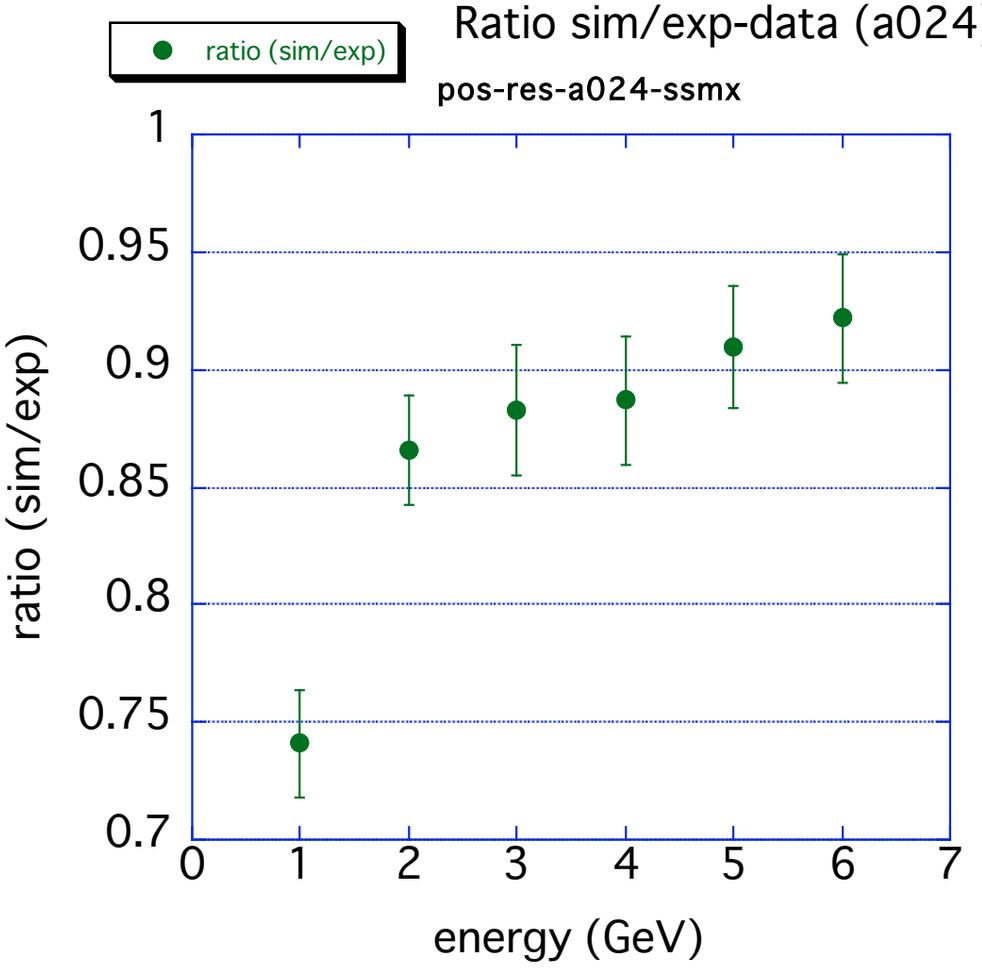


$$x_i = \frac{\sum_j x_j E_j}{\sum_j E_j}$$

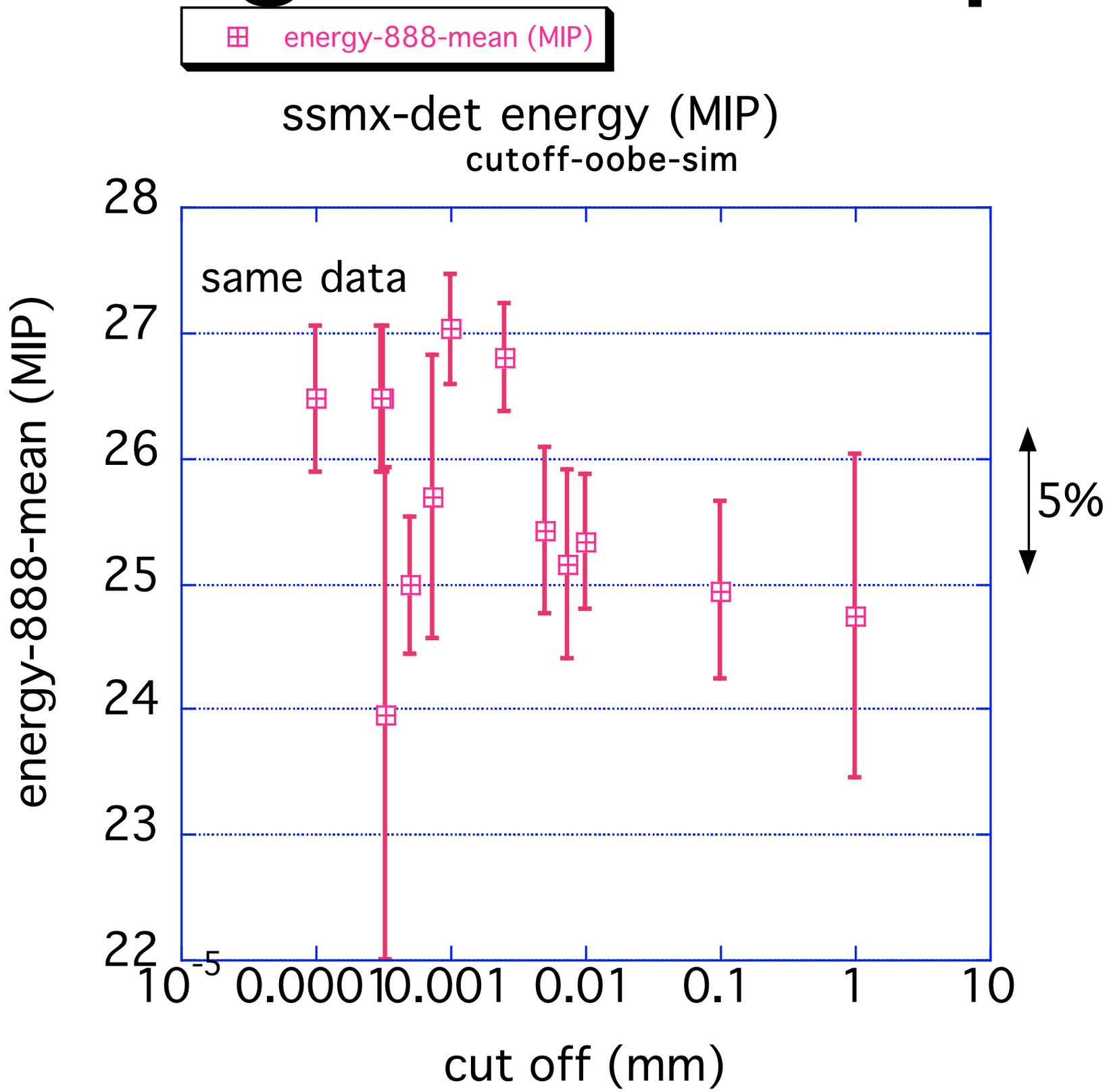
a024

comparison: spatial res.





range cut off dep.



summary

SSMX-simulation (EM-shower)

E(simulation) > E(exp.) by 5-10%

need more effort

gap between strips

gap between absorber and scinti.

pedestal width