# MAPS Simulation Status

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MAPS meeting at Rutherford Appleton Laboratory

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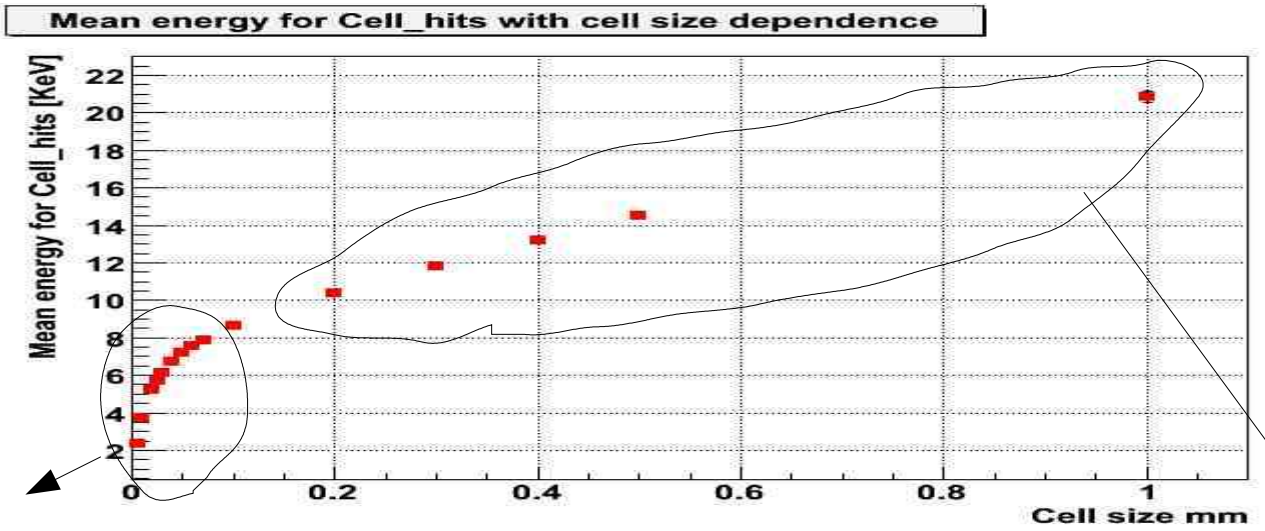
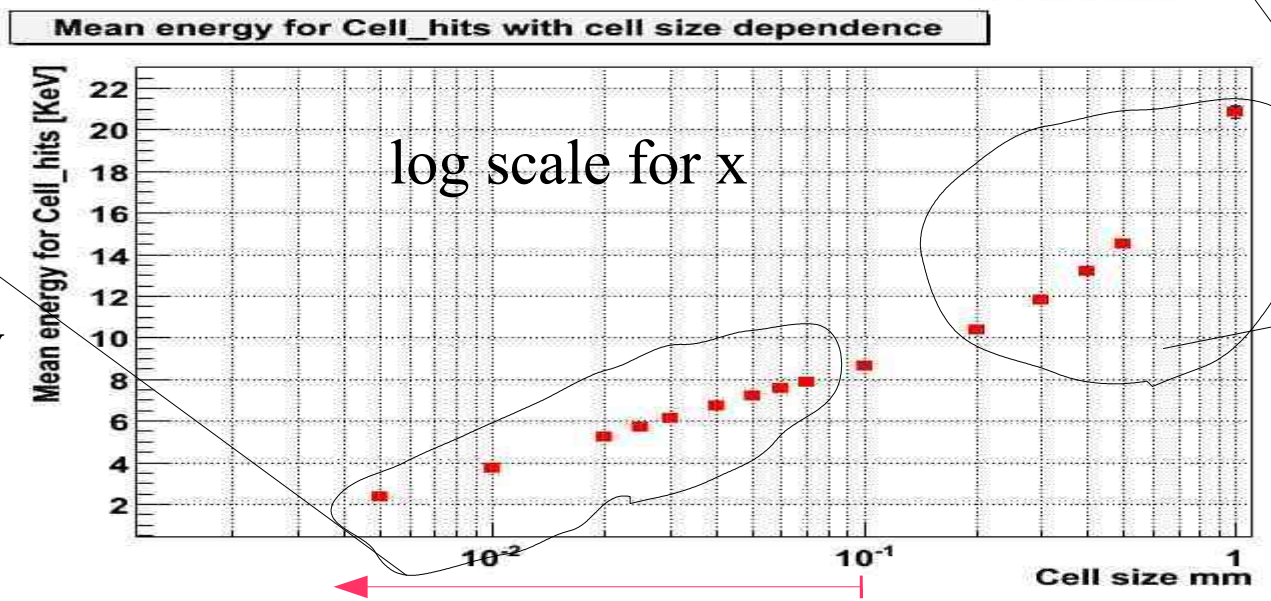
# Mean Energy of Cell_hits v.s. Cell size

(Si sensitive thickness:15um, 100 GeV single electron)




Angle effects make pass length shorten in small cell case.

(One particle pass boundary of cells.)




Multi MIPs inside one cell

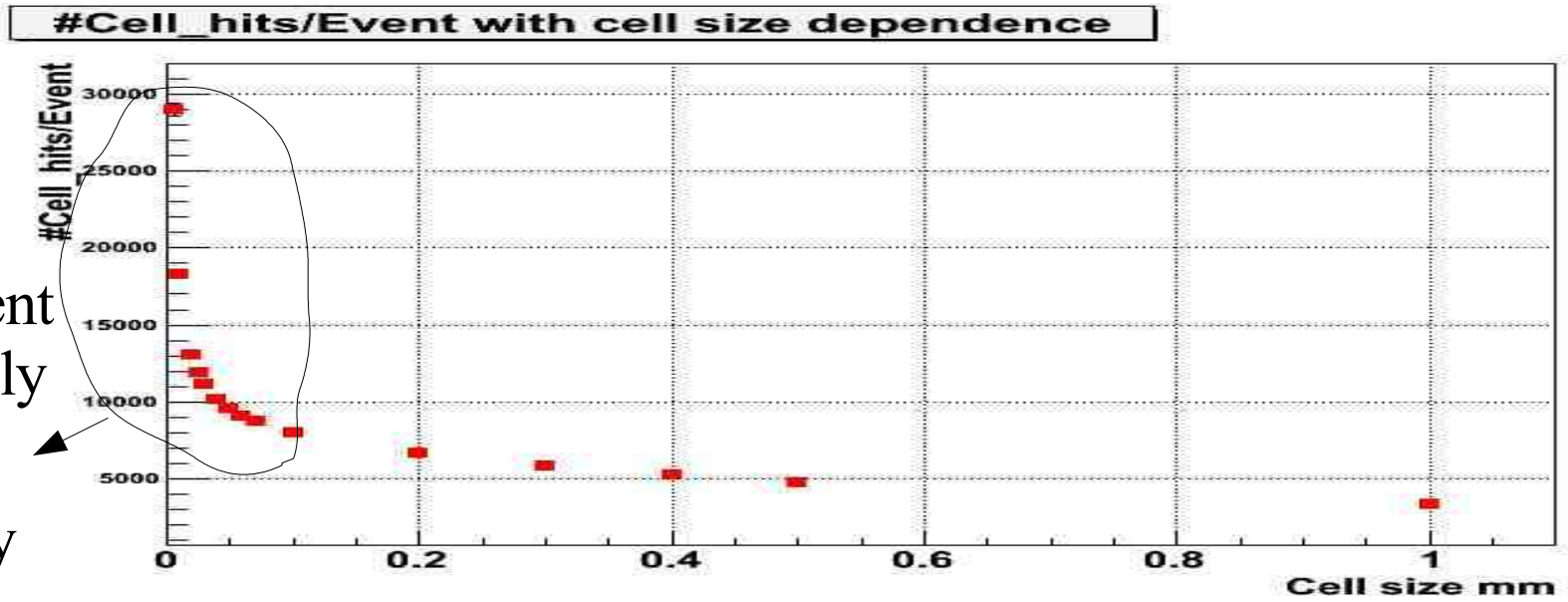
One MIP per cell starts from ~100um cell size. Simultaneously, angle effect (one particle pass cell boundary) becomes significant.

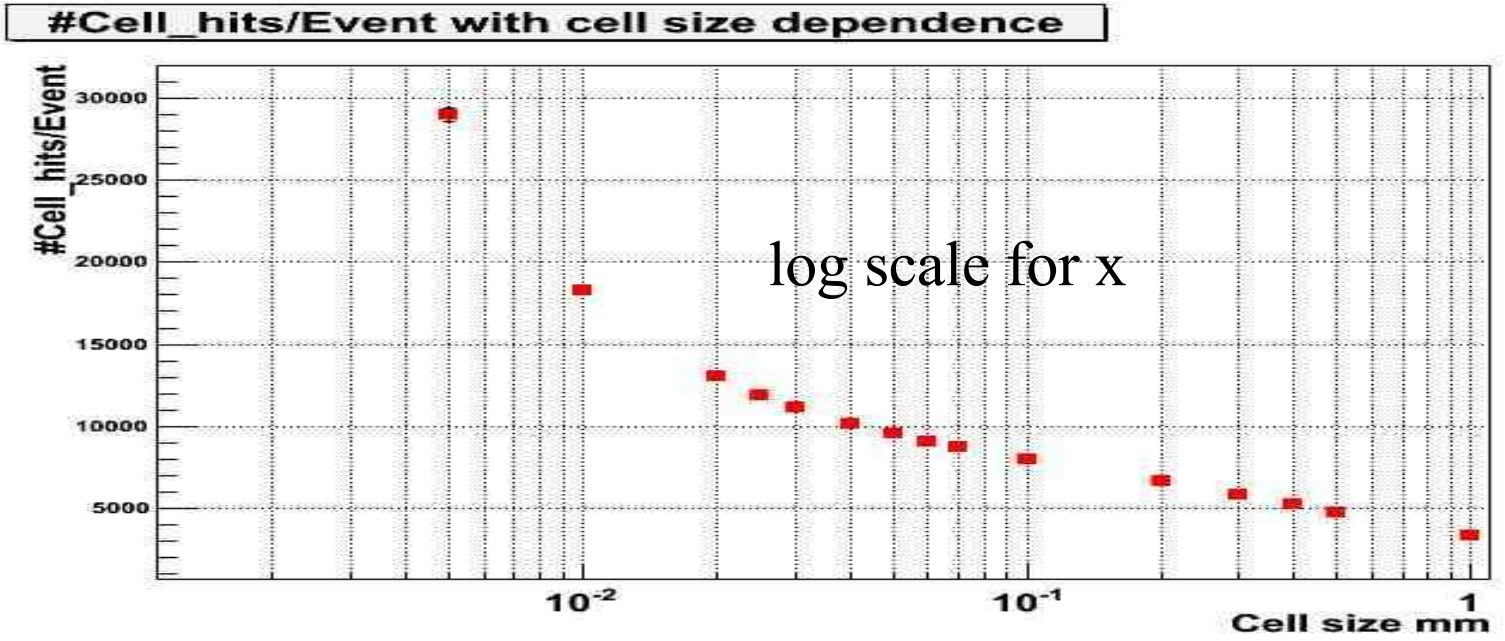
# #Cell_hits / Event v.s. Cell size

(Si sensitive thickness:15um, 100 GeV single electron)

#Cell_hits/Event increase rapidly

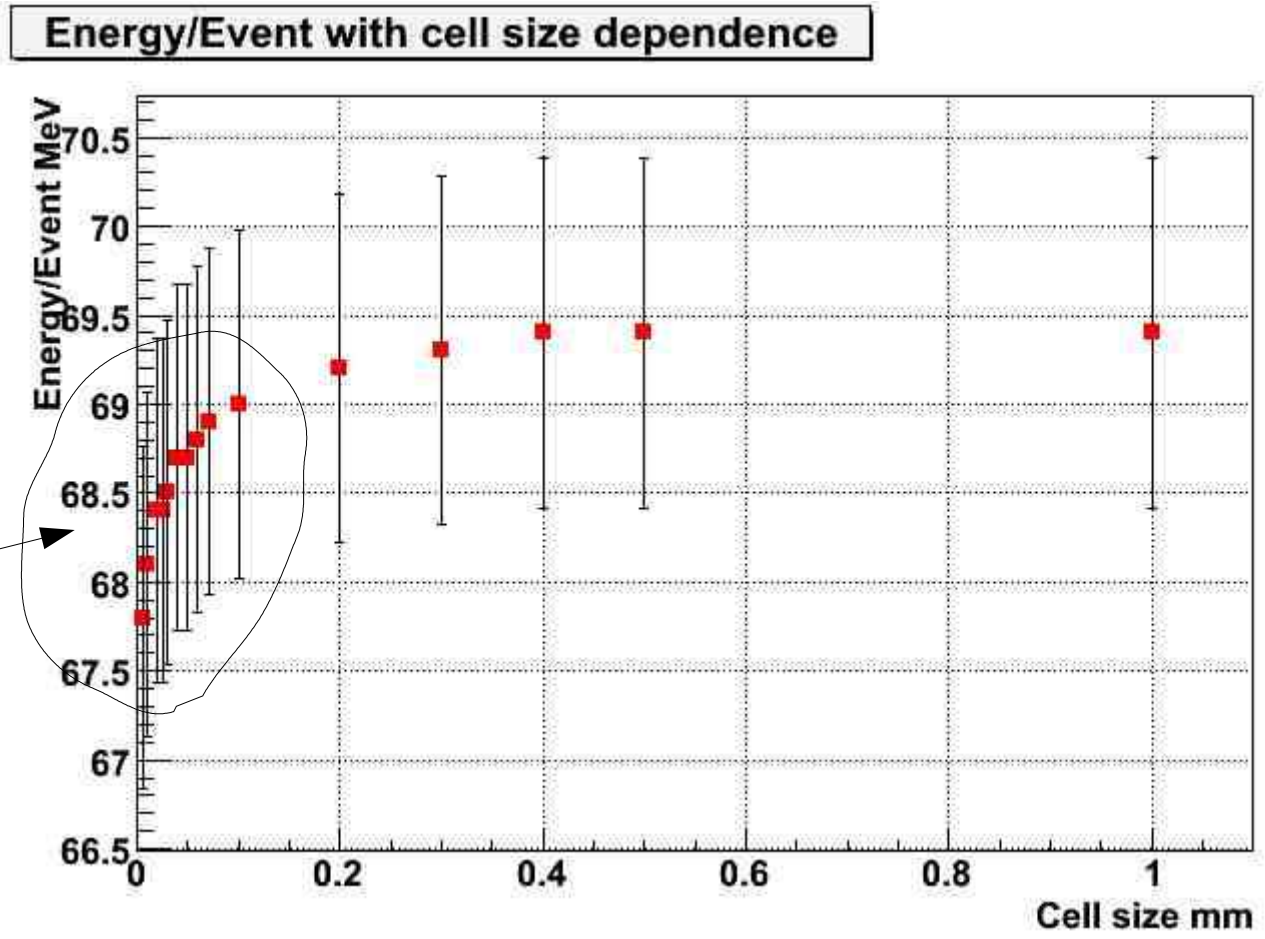
(One particle pass boundery of cells.)



# Total Energy / Event v.s. Cell size

(Si sensitive thickness:15um, 100 GeV single electron)




Some ~3% systematics (Not yet understood)

# Plans for next meeting

Understading why 'hit->getNMCContributions()' gives 4~5 hits for one MIP hit.
(12th July slides: It gives 4~5 secondary hits in one cell hit even for muon case.
Therefore it will be step size or something, but not yet understood completely.)

- Secondary shower angle distribution isn't understood yet. (Related on the above.)
- Study for lines of 48 contiguous pixels (Recently started)