SiCalo Tracking meeting

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Feb.12 2025

Review / Motivation
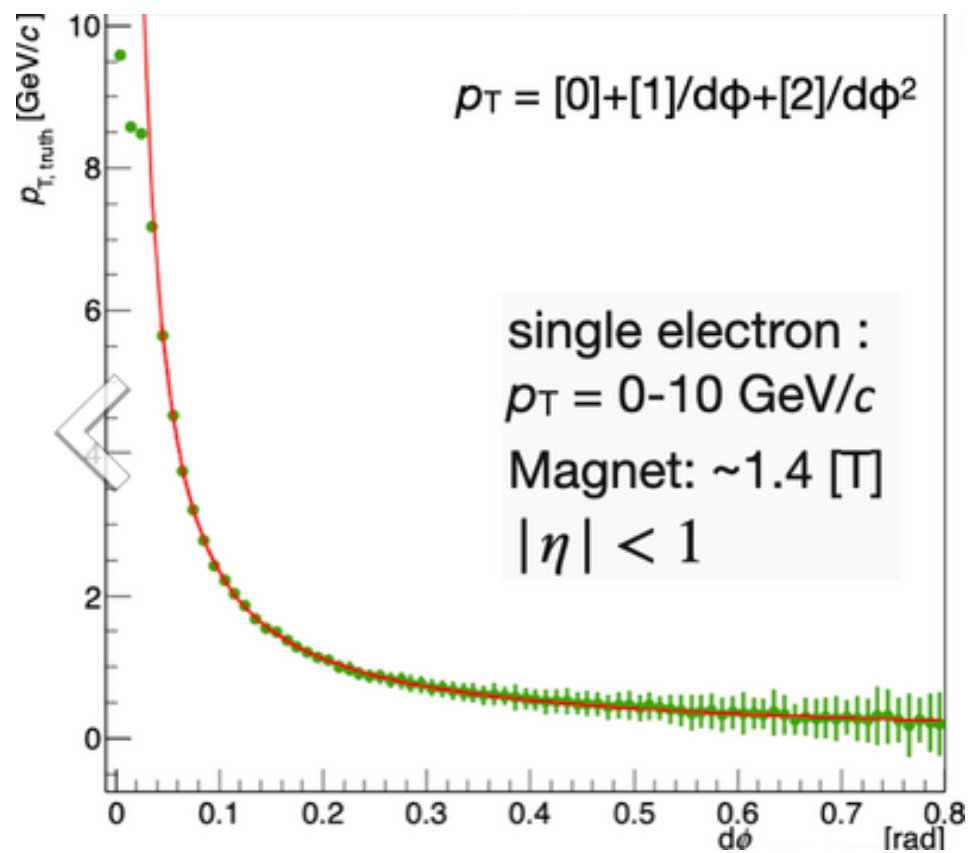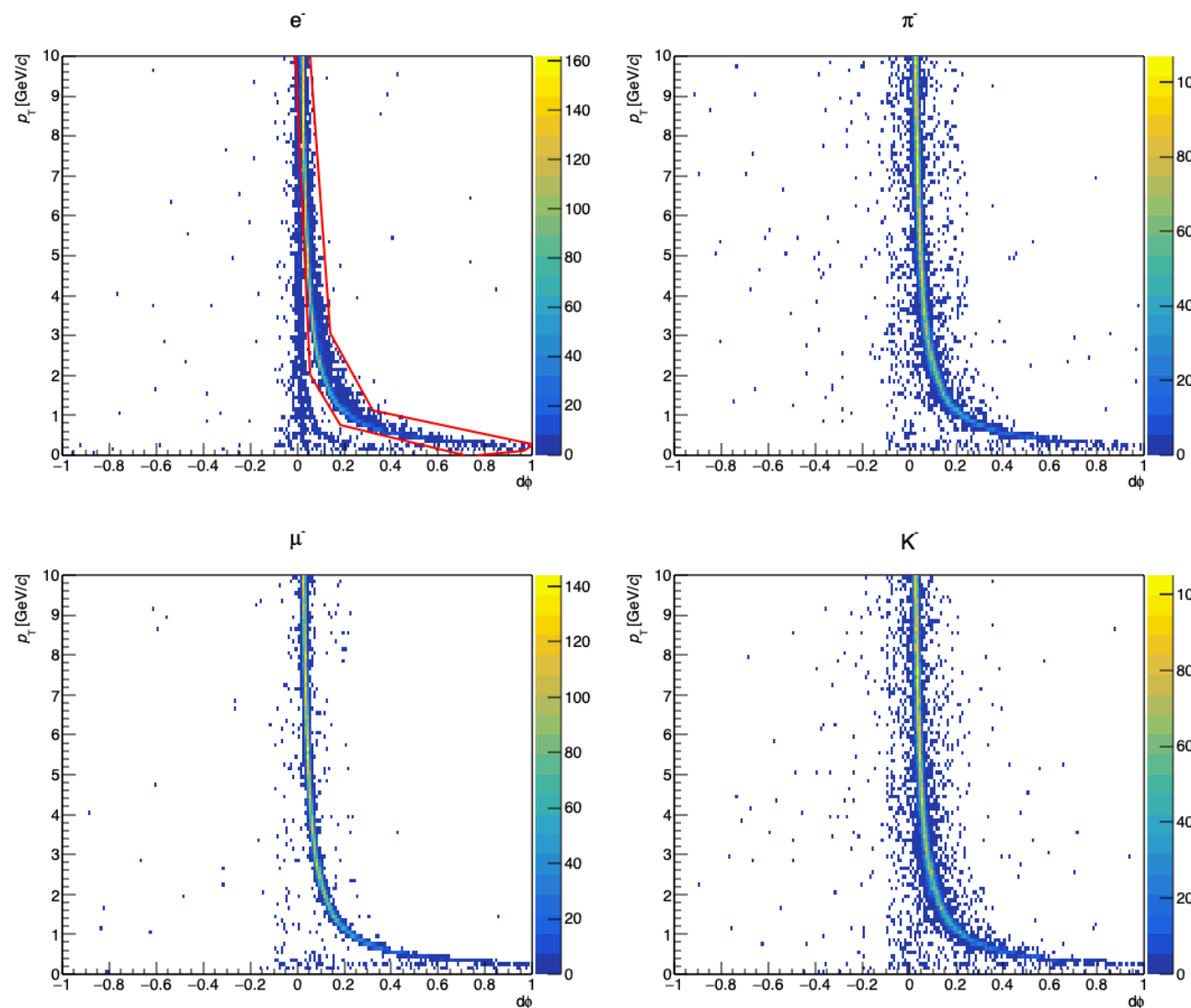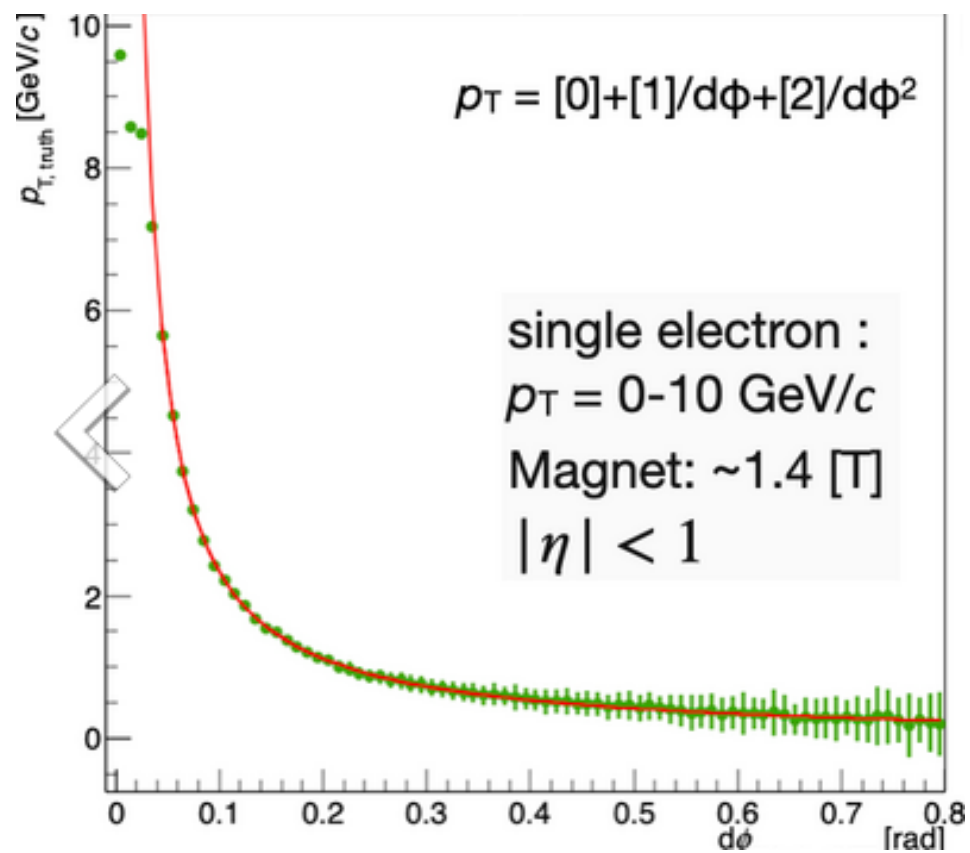
From Takuya's study, P_t - angle relation can be used for
P_t correction to improved P_t resolution.

Q.) Does this function works for other charged particles?

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single electron :
p_T = 0-10 GeV/c

Magnet: ~1.4 [T]

$|\eta| < 1$

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Q.) Does this function works for other charged particles?
A.) Yes! Extracted relation has nice agreement together.

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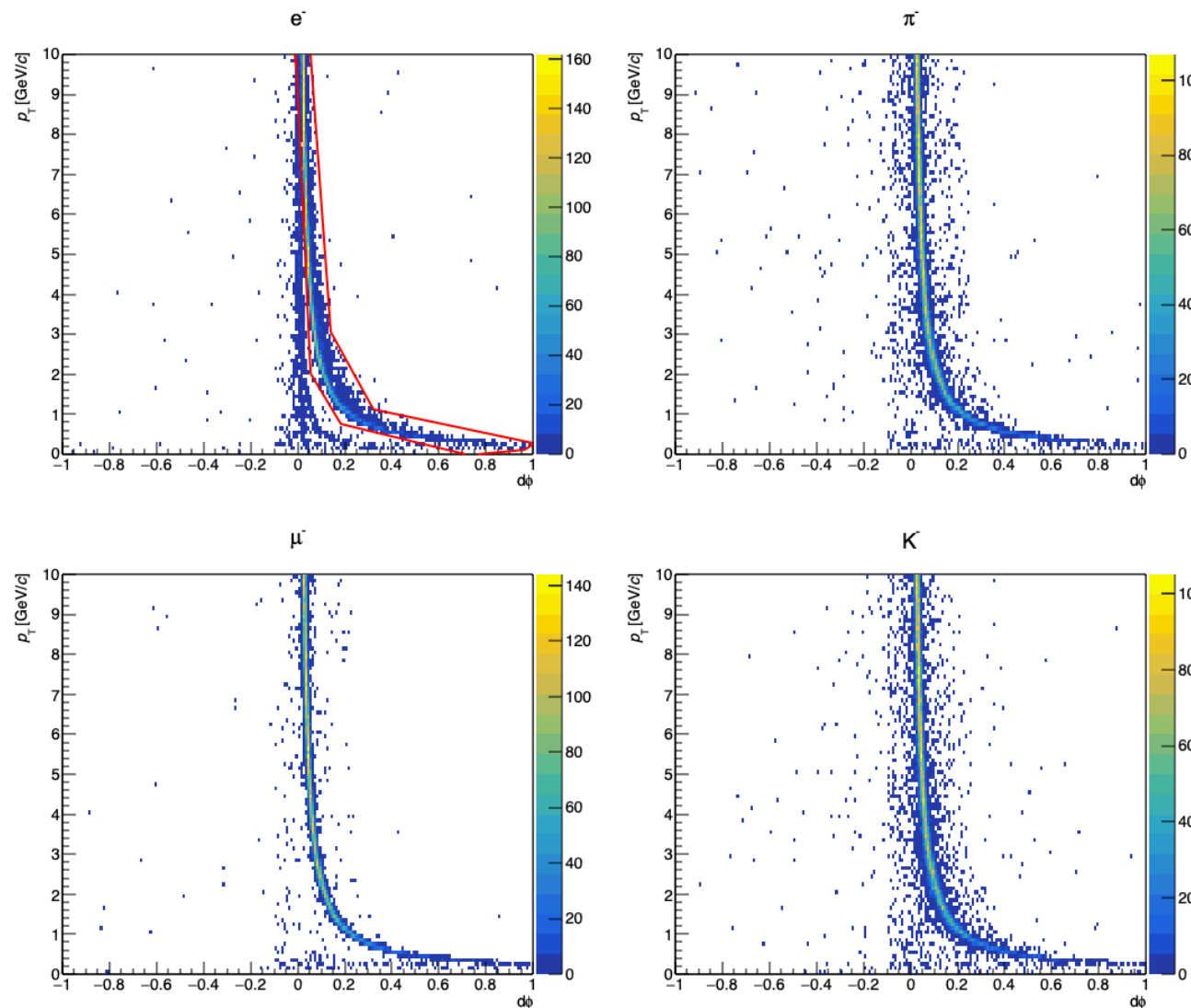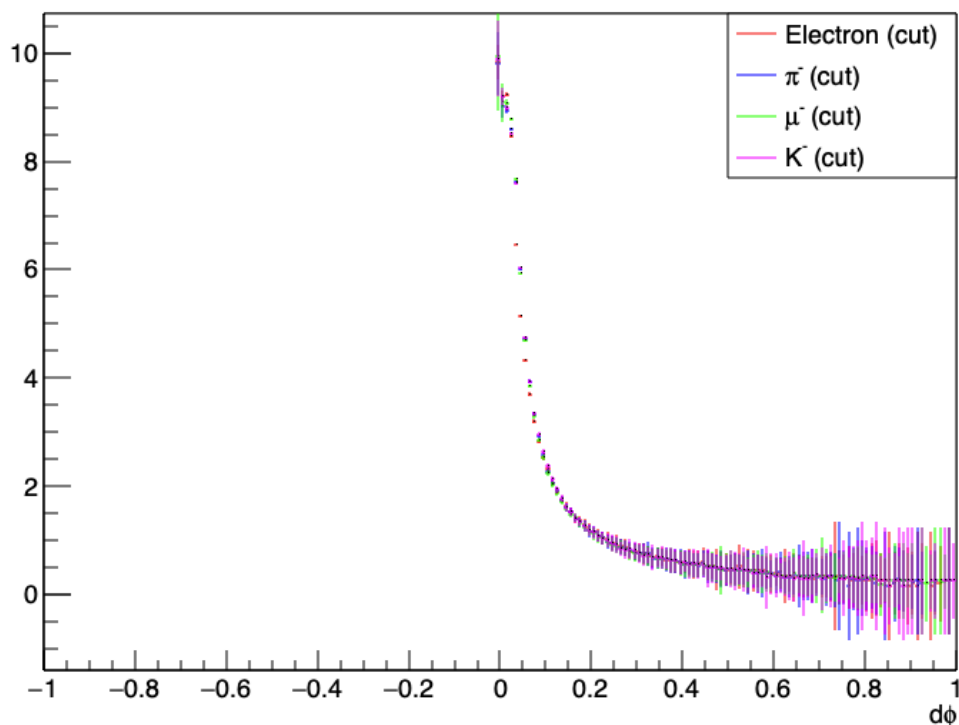
Moved to other motivation
Trying to catch feasibility of eID for future development

E-> Total Energy from Calo(EMCal+HCal)
p-> truth momentum
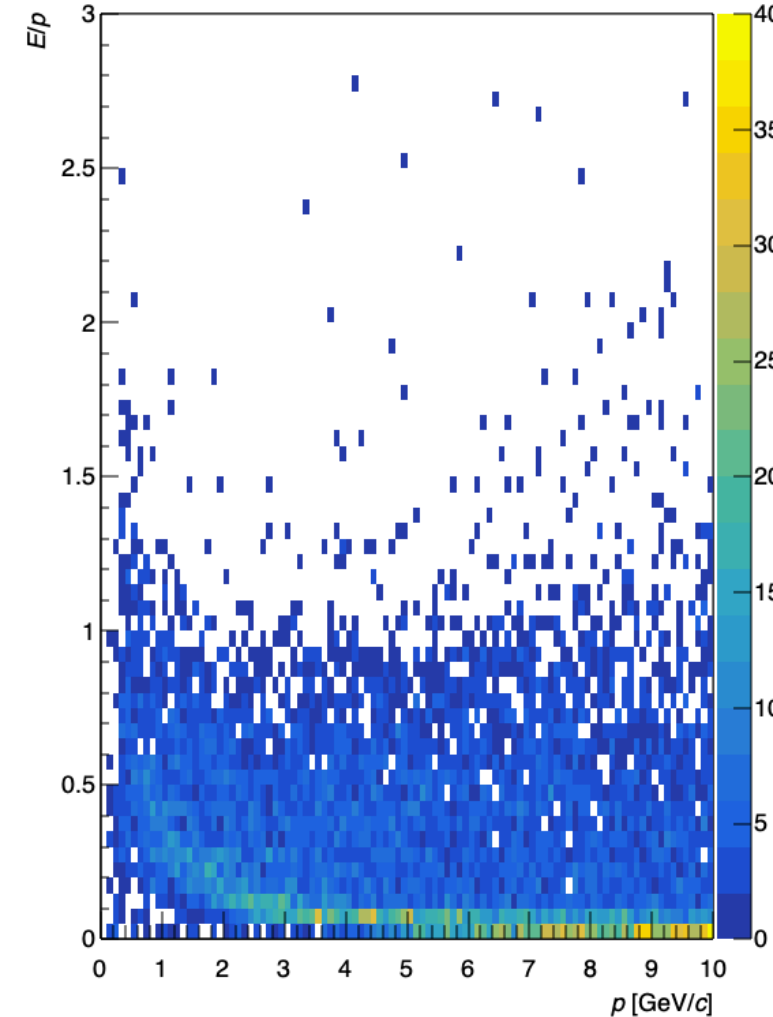(worth to check with calculated momentum)

Not total energy from Calo, better to use
E_emcal and E_hcal

For example,
E_emcal/E_hcal can be used for one of
training sample such as BDT in future
(I think that would be quite long future plan)

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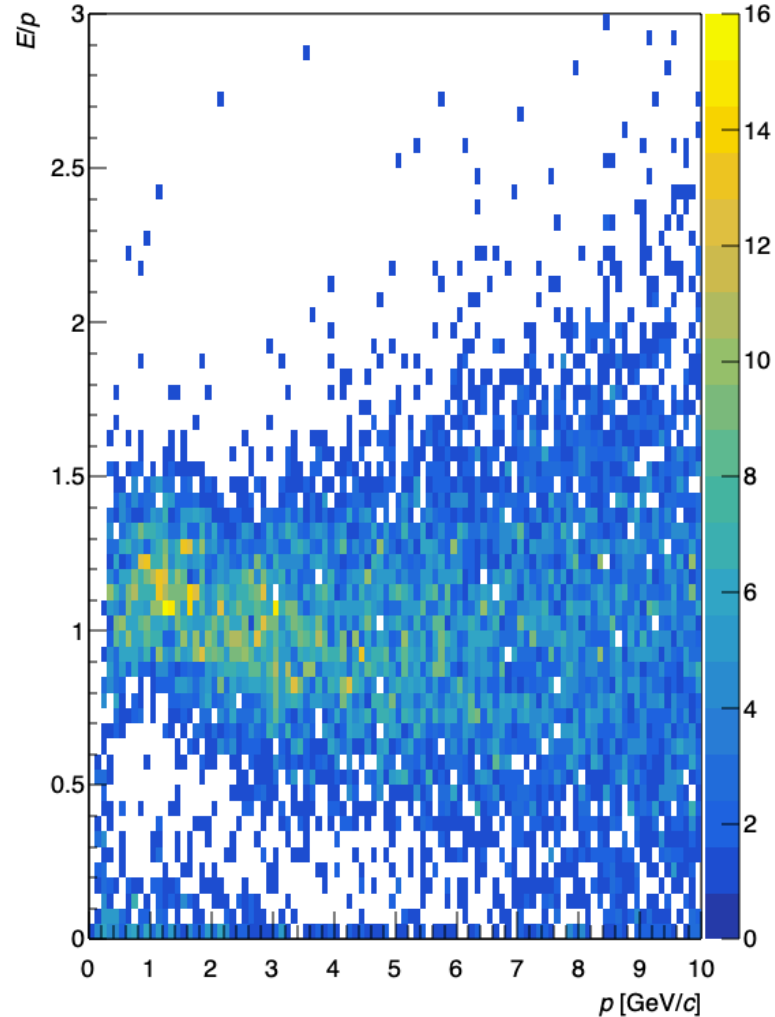
Can we apply current code with real data and Pythia?

Mostly, no

We need to identify crossing information to match with Calo cluster with trigger information, and for silicon seeding as well(and to separate pile-up)

-> Worked with Joe for data production development with corrected INTT crossing calibration so far.(mostly done, but production is not started yet . -> might need to revisit this once actual DST file is available.)