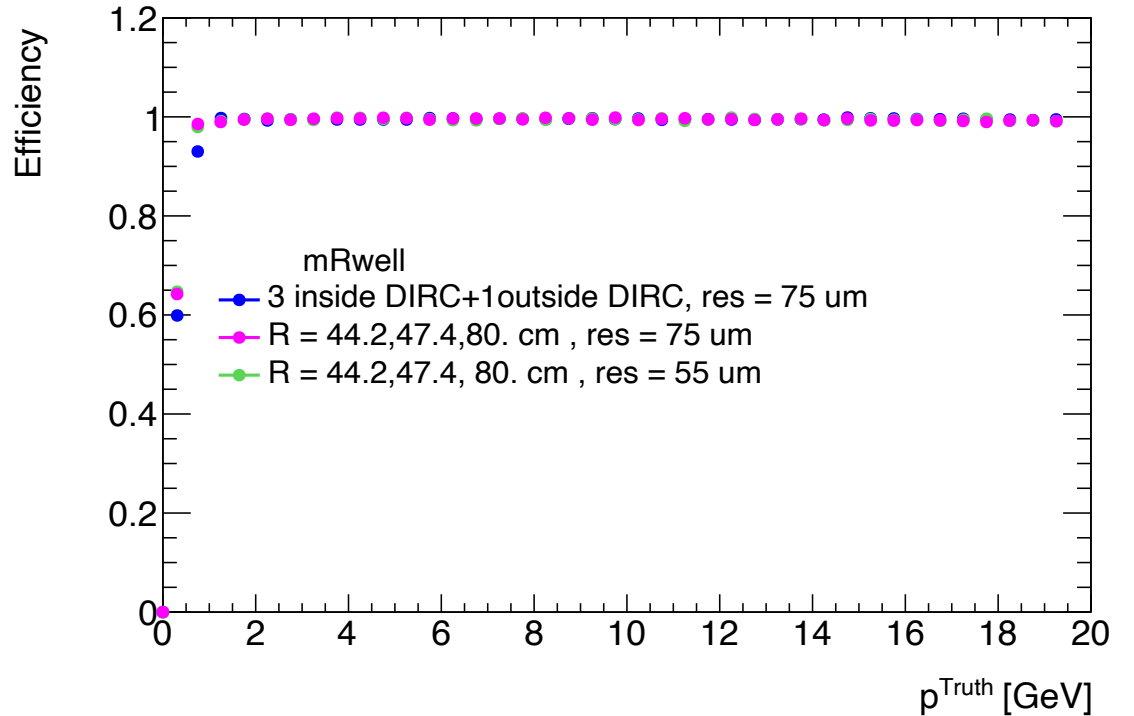
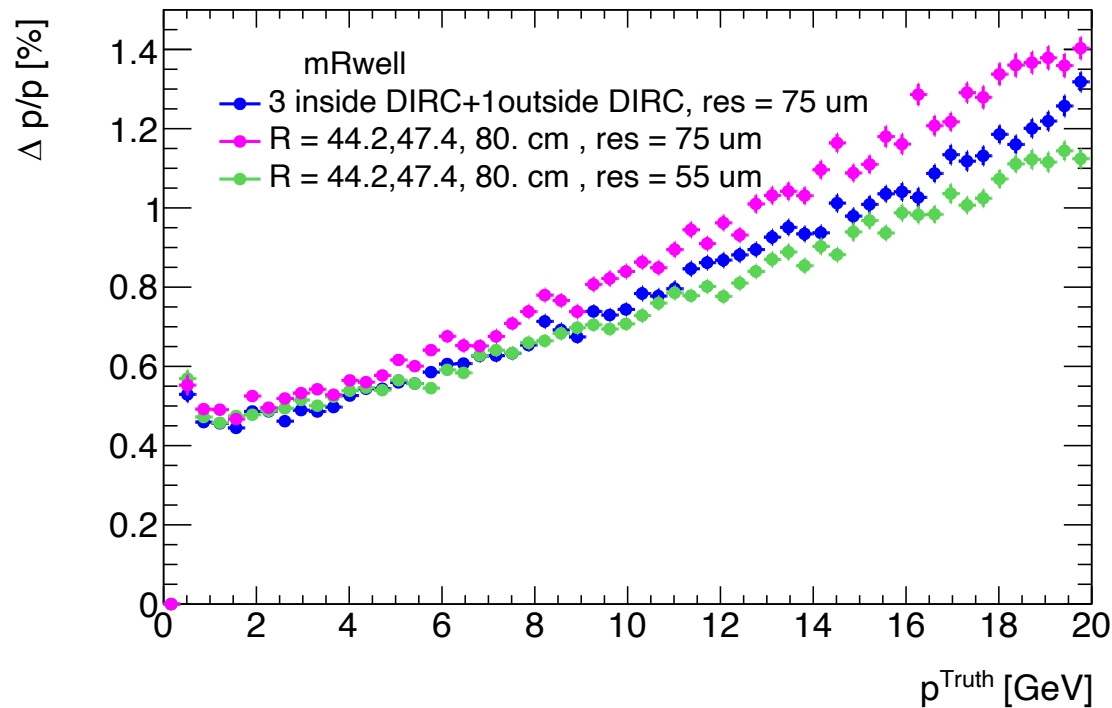


MPGD tracker central rapidity configuration

Sourav Tarafdar
Vanderbilt University

Central rapidity microRwell

- Tracking performance using 5 pions per event with $0.1 < p < 20$ GeV , $|\eta| < 1.0$ and $0 < \phi < 2\pi$.
- Active detectors in barrel region – Barrel (Si) + mRwell at various R + DIRC inner HCAL + in 1.5 T magnet and without tracking support for this study



- 3 layers (2 inside DIRC + 1 outside DIRC) gives best performance with res = 55 μm
- For 75 μm resolution 4 layers mRwell (3 inside DIRC + 1 outside DIRC) gives slightly better performance than 3 layers (2 inside DIRC + 1 outside DIRC)

Central rapidity micromega(3 vs 4 layers)

- Tracking performance using 5 pions per event with $0.1 < p < 20$ GeV , $|\eta| < 1.0$ and $0 < \phi < 2\pi$.
- Active detectors in barrel region – Barrel (Si) + mRwell at various R + DIRC inner HCAL + in 1.5 T magnet and without tracking support for this study
- Difference between default set up and this set up for 3 layers
 - Default set up uses layers @ R= 44.2, 47.4, 67.4 cm
 - This set up uses layers @ R = 60.2, 65.4 and 70.4 cm --→ Condor jobs in queue for mRwell

