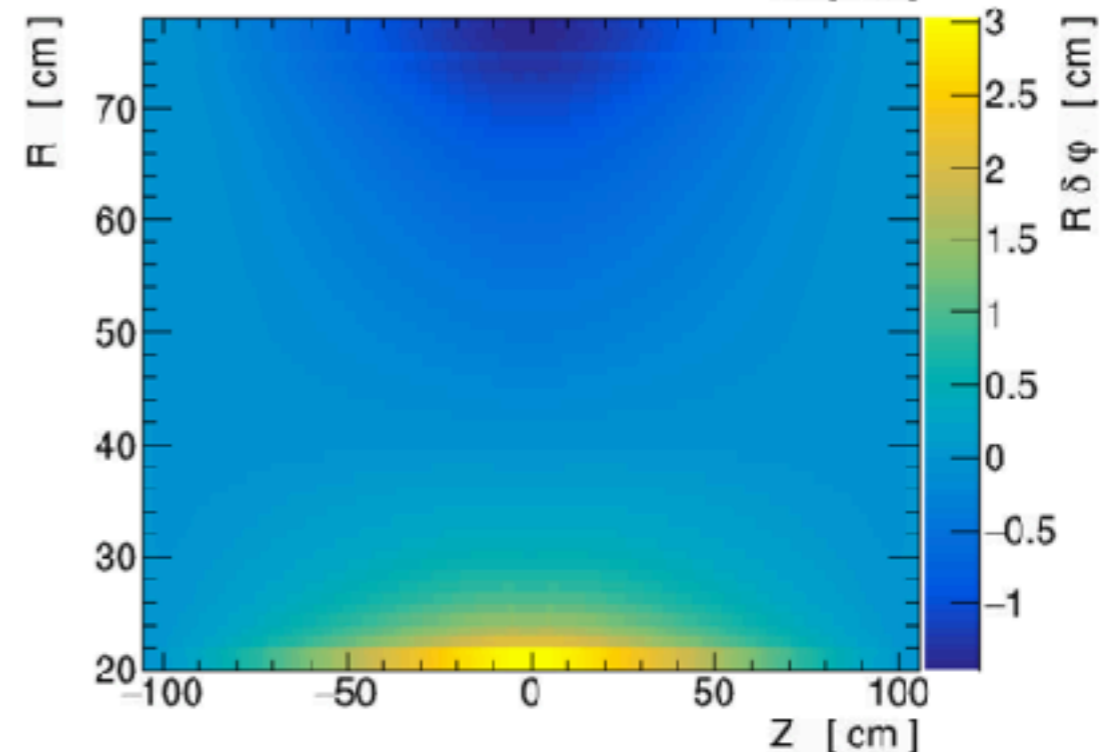
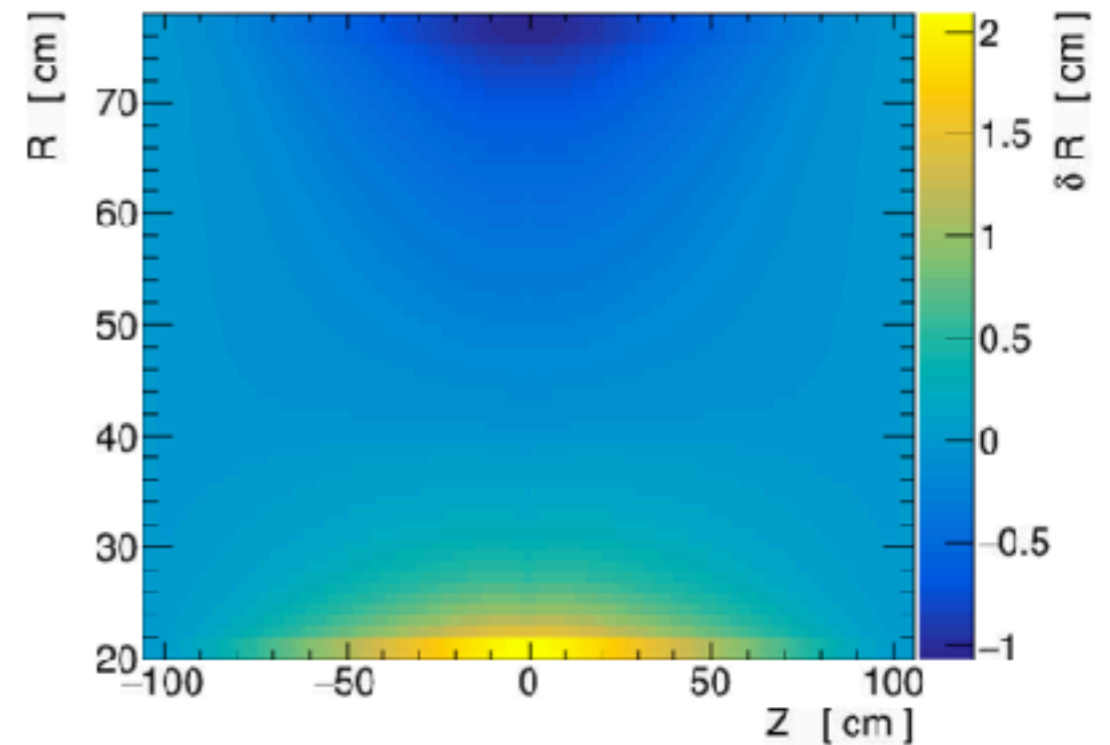


Update on TPC Distortions

Summary of Scheme

- Accurately measure/
model the ion charge
density in the TPC
- Accurately build the
electric field due to that
- Accurately back-
propagate particles
from the readout plane
back to their origin

Magnitude of R and Rphi distortions



Progress

- Exchanged a heuristic charge model with ALICE for comparison
- Integrated an (arbitrary) analytical distortion model into PHG4 code, checking how well we can reconstruct that distortion with existing detectors
- Borrowed an analytic solution from ALICE to study resolution effects, still debugging that analysis code
- Lots of tasks still on the plate: Checking gas parameters, generating phi distortions, building charge models a la ALICE with sPHENIX lumi/occupancy/epsilon...