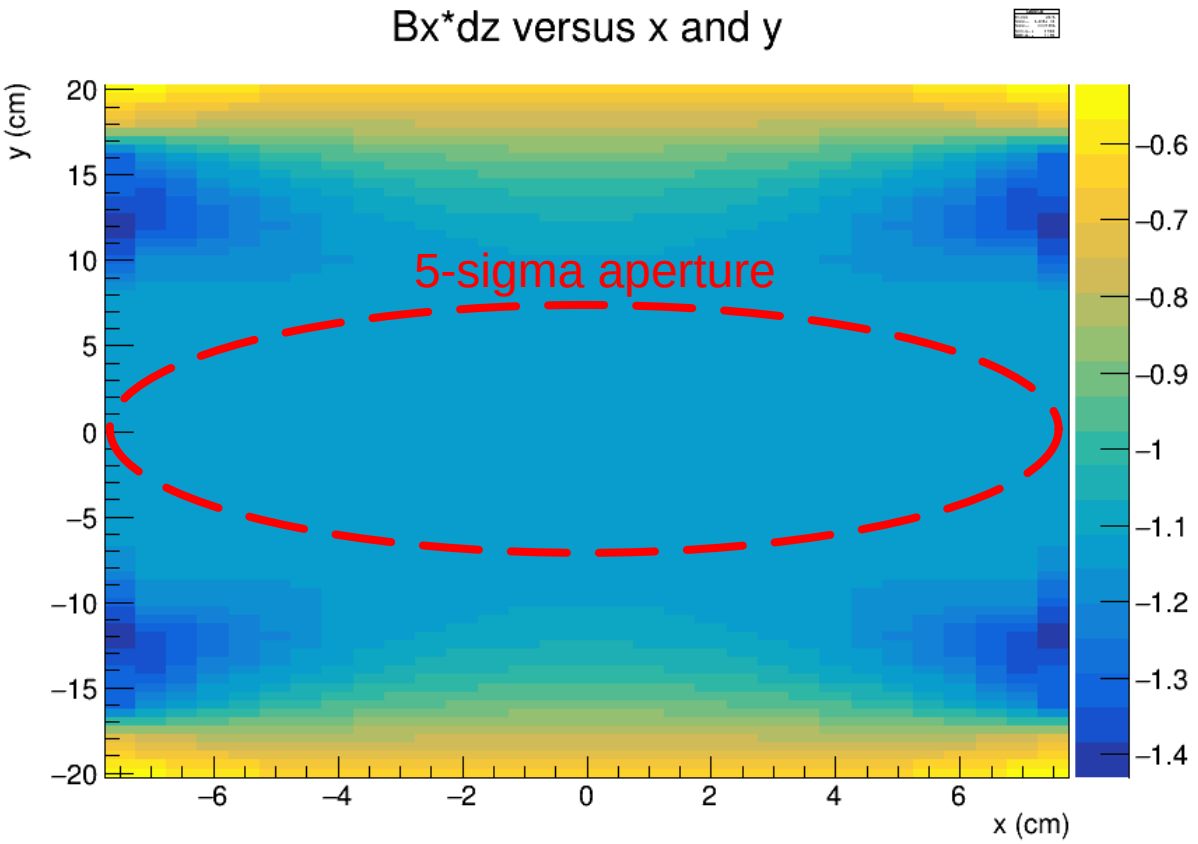
Bx*dz landscape

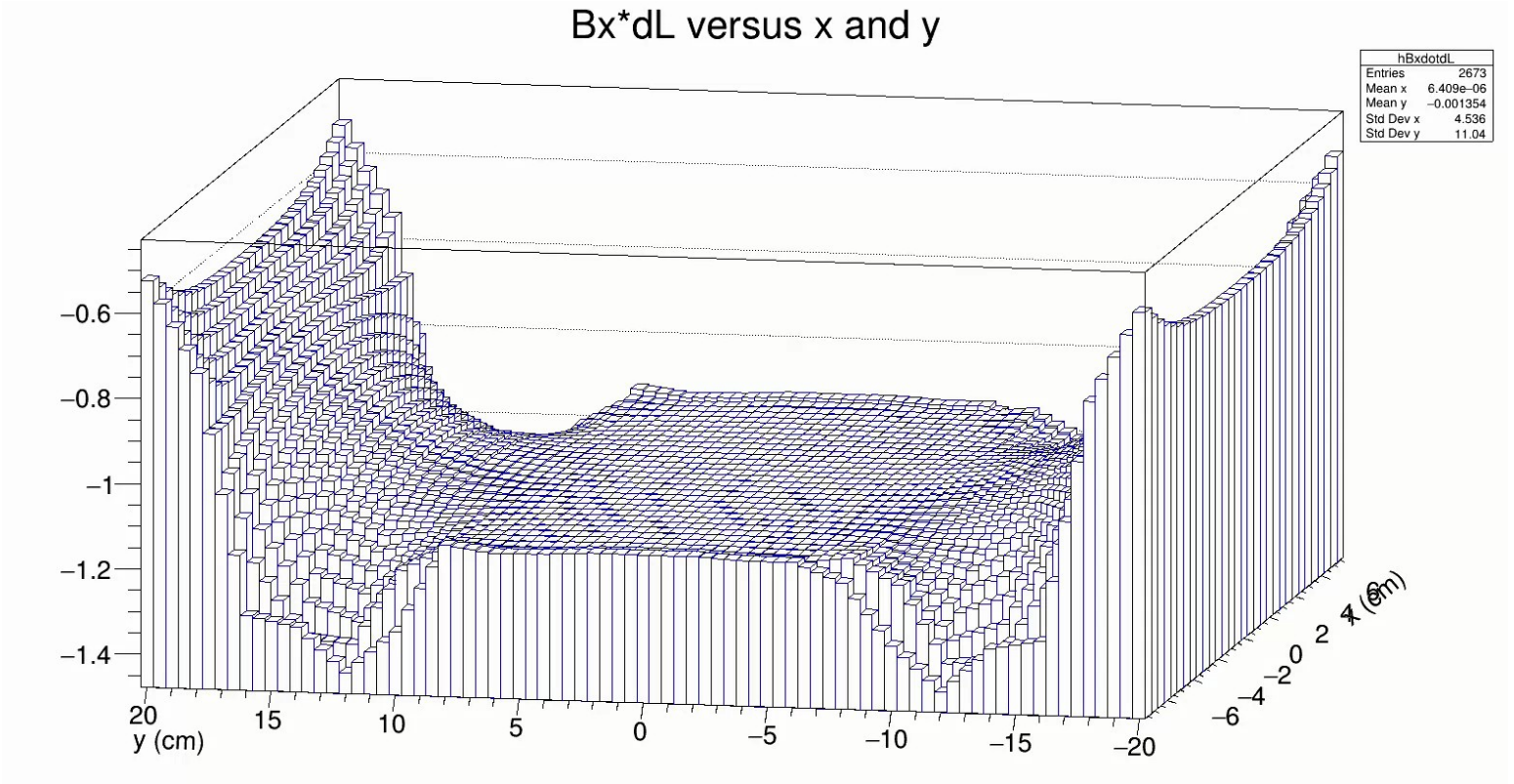


News:

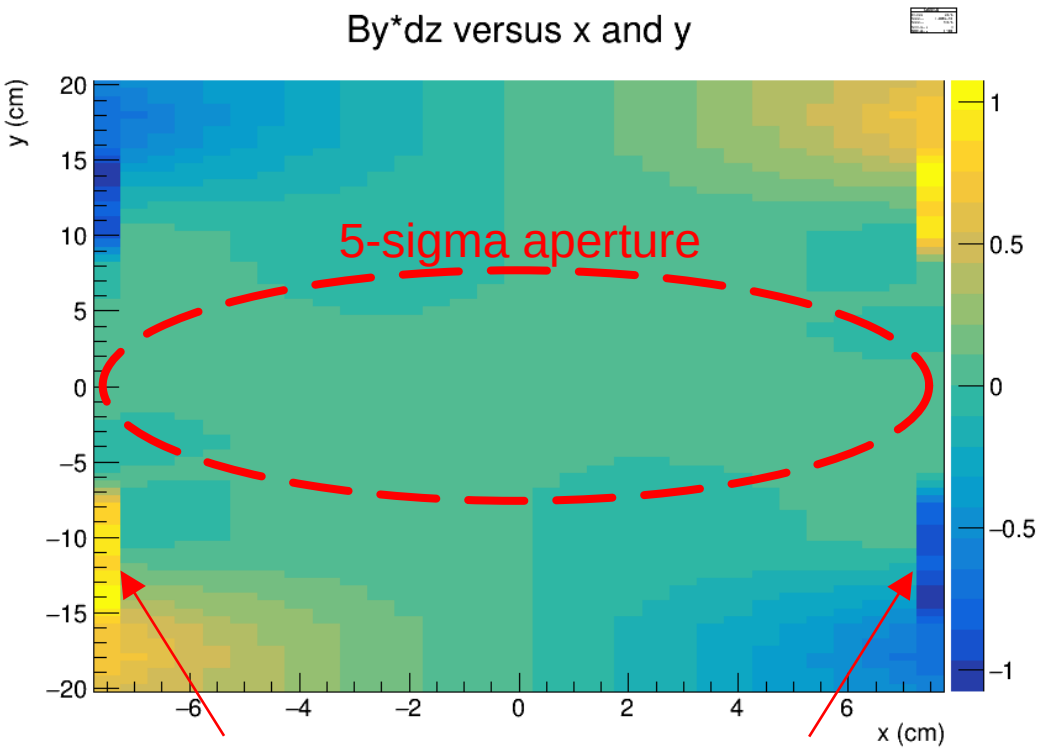
- The lumi dipole field maps provided by Peng Xu have been implemented in DD4hep (PR in progress).

- In 1-sigma aperture (1.5 cm radius):
  - **<Bx*dz> = -1.1385 T*m**
  - Std = 0.00005 T*m
- In 5-sigma aperture (7.5 cm radius):
  - **<Bx*dz> = -1.1395 T*m**
  - Std = 0.0015 T*m
- The ePIC lumi dipole's bending power is 3.4 times larger than ZEUS

Animation of Bx*dz landscape

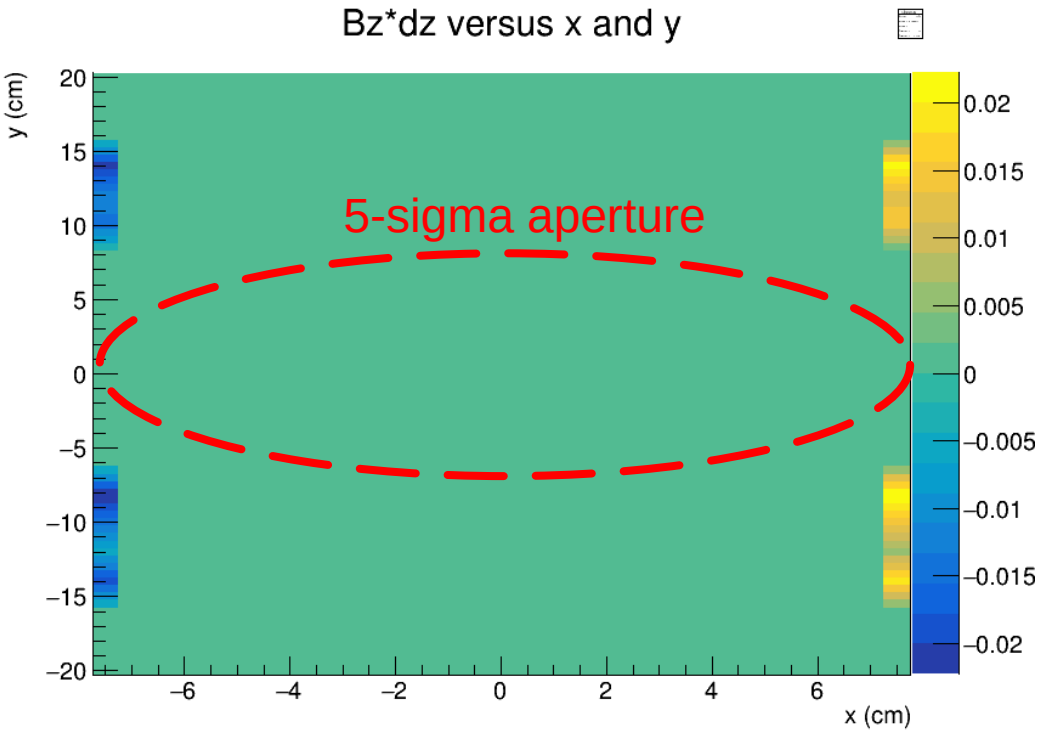


By*dz and Bz*dz landscape



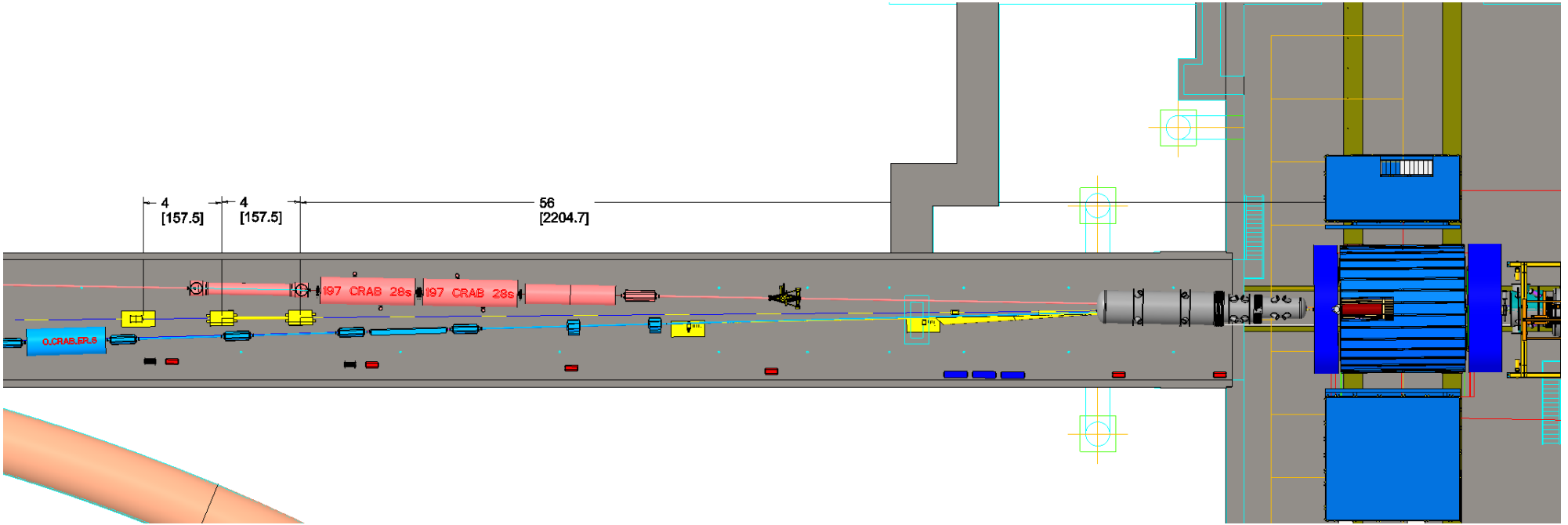
These poles are due to extrapolations into copper coils

<By*dz> = 1e-21 T*m
Std = 0.001 T*m



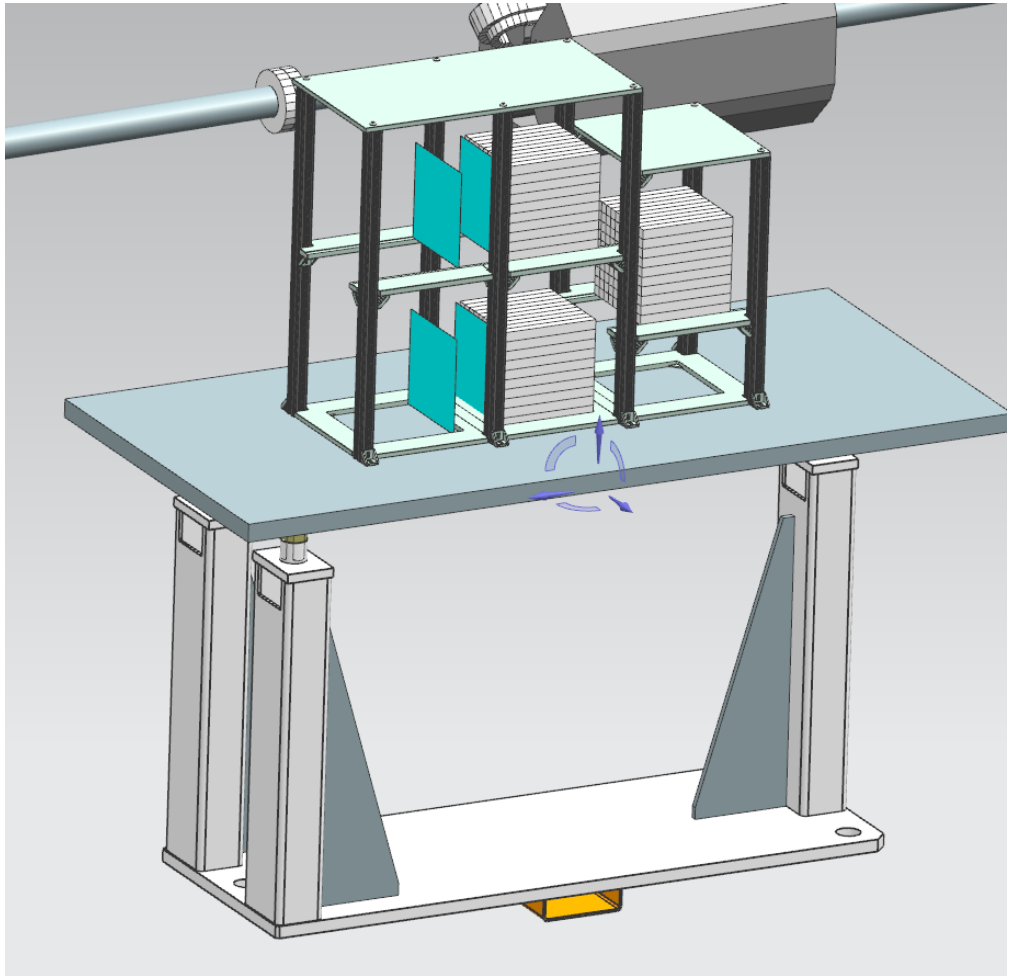
<Bz*dz> = 1e-14
Std = 1e-13

Karim’s FB CAD model with current Lumi system



- The Lumi system was shifted 6.5 m closer to the IP due to an overlap with the large electron CRAB cavity.

Jonathan Smith’s current CAD model of Lumi system



The 80/20 frame was extended to provide support for tracking layers