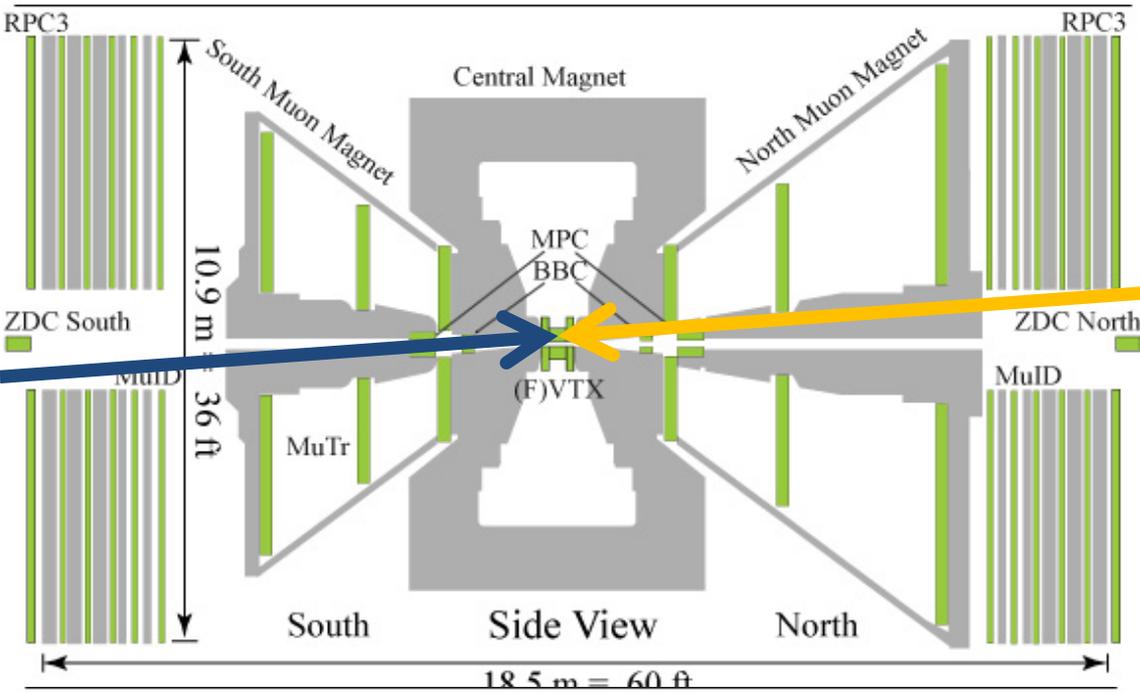


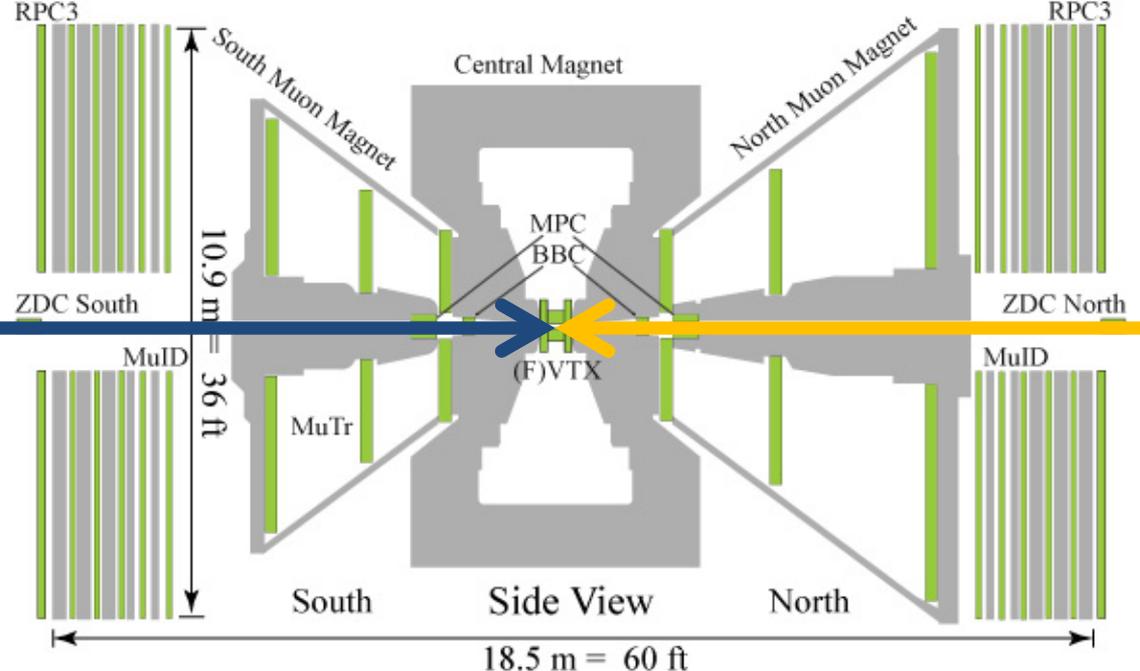
Angled Beams Request

- PHENIX π^0 - A_{LL} measurements are currently limited by systematic errors
 - Dominant source: Relative luminosity. Error is estimated with the difference between the spin-sorted BBC and ZDC rates.
- Idea:
ZDC neutron A_N + residual transverse polarization during longitudinal beam + angled and/or offset beams are distorting the true luminosity measured by ZDC.
- Proposal to study the effect
 - Baseline: Four $\sqrt{s}=200$ GeV pp with transverse polarization fills with +/- 400 and +/- 200 μ rad angle.
 - All 4 stores should have the same spin pattern.
 - 8 hour stores
 - Do not want fills early in Run-12
 - Depending on the study's success, we may expand the request to some additional stores during the 200 GeV p+p running and possibly 1 or 2 additional fills at $\sqrt{s}=500$ with transverse polarization.

ANGLED Beam



OFFSET Beam



Slightly Increased Collision Energy in p+p Running

- PHENIX supports the proposal for running at p+p 510 GeV if it improves the polarization lifetime as expected.
- We prefer any development of the new working point during the 200 GeV p+p running be done during APEX or machine development time. We don't want to take significant amounts of 200 GeV p+p data at 201 GeV.