

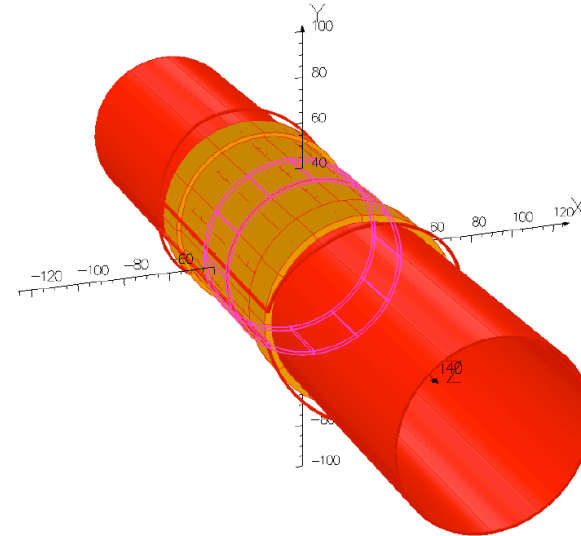
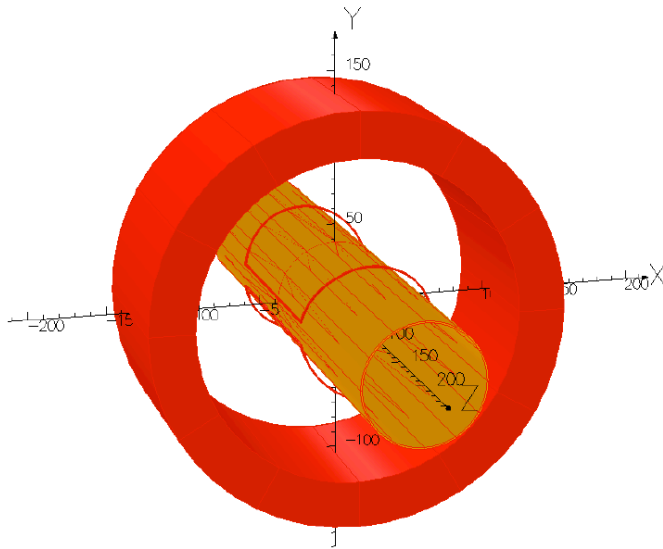
Transverse spin effects in SIDIS at 11 GeV with transversely polarized target using the CLAS12 detector

(A CLAS12 experiment proposal for PAC38)

Contalbrigo Marco
INFN Ferrara

JLab PAC 38 – Open session
August 23, 2011 Newport News

Configurations



➤ N80:

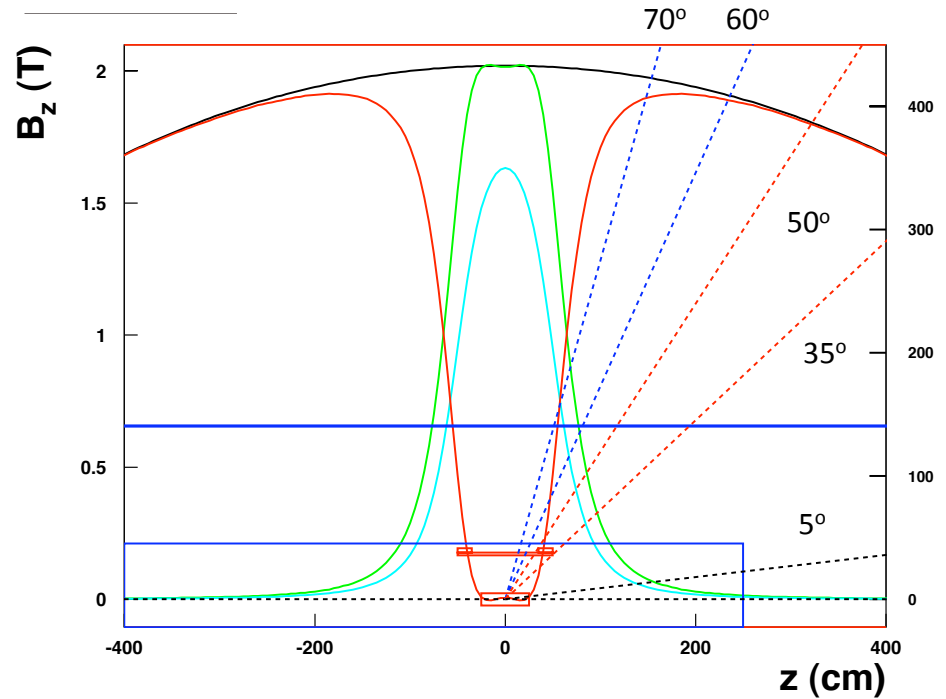
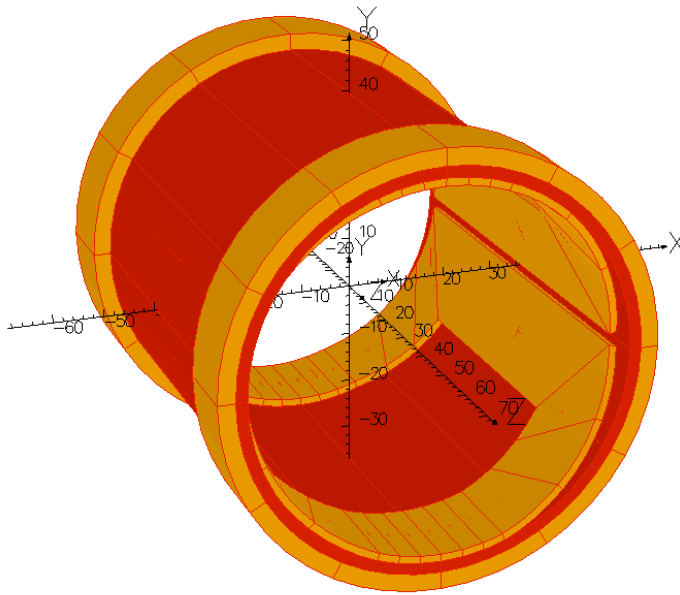
- ✓ *High Field for high Lumi*
- ✓ *Decouple from Hdice cryo*
- ✓ *Short target*

➤ N101:

- ✓ *Mild Field for low Lumi*
- ✓ *Light structure*
- ✓ *Long target*

Configurations

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➤ N111 (5 cm target):

- ✓ Mild Field for low Lumi
- ✓ Coils above 35°
- ✓ Long. Component < 5mT
- ✓ Transv. Homogeneity ~ 10%

- ❖ Good compensation (homogeneity)
- ❖ Untouched 35° forward acceptance
- ❖ Material budget at large angles
 - ~ 7 mm from 35 to 50 degrees
 - ~ 3 mm above 50 degrees

Major Issues

- ❖ Luminosity
- ❖ Beam depolarization effects
- ❖ Field homogeneity needed
- ❖ Magnet configuration stability