

Group meeting

November-1

Zulkaida Akbar

Summary of the current work

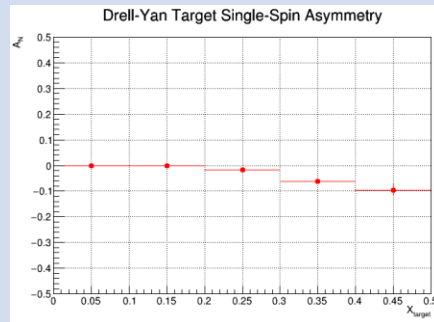
Topic	Summary
<p>Readiness review preparation -> Mock data challenge</p> <div data-bbox="156 568 575 811"><p>CODA online</p><ul style="list-style-type: none">• e1039-core/online/macros - Kenichi<p>CODA offline</p><ul style="list-style-type: none">• e1039-analysis/CODACHainDev - working<p>Sim chain</p><ul style="list-style-type: none">• e1039-analysis/SimChainDev - working<p>SRawEvent</p><ul style="list-style-type: none">• e1039-analysis/SRawEventChainDev - working</div>	<ul style="list-style-type: none">• Large-scale production test of the SpinQuest computing power• No OFFSITE option 40 M events/day• With OFFSITE option 40M events/5 hours• Near future plan: CODA chain test and established the framework in Rivanna

Summary of the current work

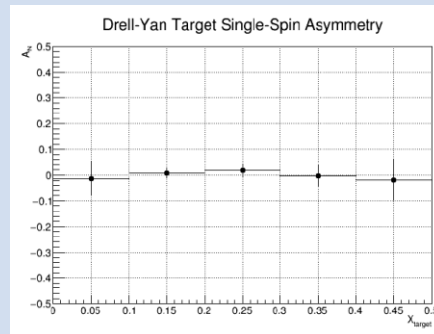
Topic

Full analysis software of the
Sivers Asymmetry extraction

Target Rest
Frame



Dimuon Rest
Frame



Summary

- The goal is develop and validate frameworks and methods to extract Sivers function/Asymmetry (with all systematics) in order to speed up the publication after data taking
- Some methods are tested
- Near future plan:
 - **Make sure about the frame**
 - **Check the alignment effect (*.opts)**
 - **Check the 4-vector propagation from generated to reconstructed**

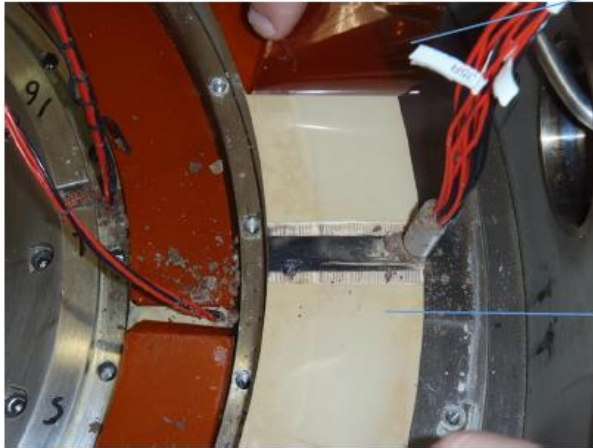
Summary of the current work

Topic

Summary

Completion of Quench simulations and write up

- New framework (1D Approach)



A layer of kapton covered the coils 😞
It is very thin 😊

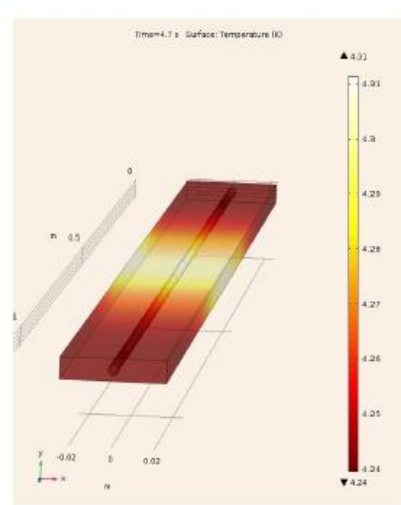
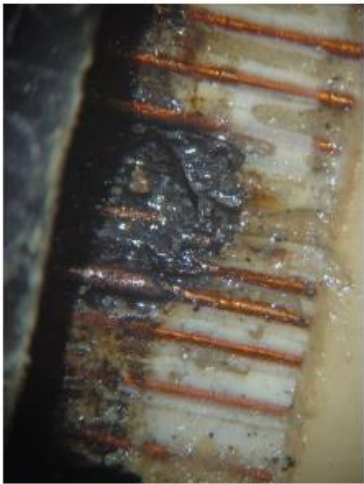
And in a direct contact with the LHe 😊

The coils are impregnated or "potted" in epoxy to prevent them from moving when the magnet is energized. Epoxy has relatively low thermal conductivity 😞

Summary of the current work

Topic

Completion of Quench simulations and write up



Summary

- New framework (1D Approach)
- The epoxy is really effective as heat sink
- Find the heat load in epoxy (back ground heat load)
- Estimate the density

Summary of the current work

Topic	Summary
Fermilab visit	<ul style="list-style-type: none">• Make sure about the cabling from/to magnet rack• Magnet rack layout• Make sure about all VI related to the magnet and vacuum system• Real E1039 Cosmic CODA analysis