Tracking WG meeting
Planning the next steps

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- recent discussion with the DWG conveners
- preliminary outline of our contribution to the YR

Discussion with DGW conveners on June 1st

1. **Requests to the DWG Subgroups (short term activity for June 15 meeting)**

All Detector Working Groups

- Review material from PWGs presented at the Pavia meeting. Document the requirements relevant to your group and any concerns or missing information and present it at our June 15 meeting;
- Document the current status of your working group, e.g. based on the Pavia meeting summaries in the DWG Wiki by June 15;
- Start thinking about the outline for your YR section and present a scheme at our June 15 meeting;
- List all suitable technologies for all applicable regions of the detector in the DWG Wiki by June 15.

Discussion with DGW conveners on June 1st

1. Requests to the DWG Subgroups (short term activity for June 15 meeting)

2. **Suggestions to the DWG Subgroups towards the 3rd EIC YR Workshop (longer term activity)**

Tracking WG

- Continue evaluation and performance studies of different technologies.
- Evaluate material budget.
- Implement realistic material for the services for all tracking technologies.
- Determine, as much as possible, the power generated by the readout for all tracking technologies.

First outline of tracking contribution to YR

Volume I: Executive Summary
Volume II: Physics
Volume III: Detectors

1. Introduction
2. Detector Challenges and Performance Requirements
3. Detector Aspects
   - 3.1 Magnet
   - 3.2 Tracking
   - ...
   - 3.9 Software, Data Analysis and Data Preservation
4. The Case for Two Detectors
5. Integrated EIC Detector Concepts
6. Area of Targeted R&D
7. References
8. Appendices

Volume IV: Accelerator Physics Experiments

Expected ~10-15 pages

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for the EICUG SC

EICUG meeting 23.1.2020

First outline of tracking contribution to YR

Central Tracking

1. Introduction
2. Main requirements and acceptance coverage
   - 2.1 Barrel Tracking
   - 2.2 End Cap Tracking
3. Technology survey
   - 3.1 Silicon Detectors
   - 3.2 Gaseous Detectors
   - 3.3 Compared issues (cost, power, material budget etc)
4. Detector Concepts and performance studies
   - 4.1 All-Silicon Tracking System (Barrel + End Caps)
   - 4.2 Hybrid Tracking System
     - 4.2.1 Barrel: Silicon Vertex + TPC
     - 4.2.2 Barrel: Silicon Vertex + Drift Chambers
     - 4.2.3 Barrel: Silicon Vertex + Cylindrical MPGDs
     - 4.2.4 Hadron & Electron End Cap: MPGDs, sTGCs etc
   - 4.3 Fast Tracking layers & Additional Tracking and PID detectors
     - 4.3.1 Fast signal and high resolution MPGDs: for DIRC in the barrel region
     - 4.3.2 GEM-TRD for Electron End Cap or behind RICH in Hadron End Cap
5. Integration issues
6. References