

AI for Operations

Discussion points

- **AI infrastructure**
 - Documentation readiness (cleaned to avoid old data)
 - Lower-level data readiness (e.g., detector control system data)
 - What levels of resources are needed for the types of workflows envisioned?
- **Common themes across experiments**
 - Detector and facility operations
 - Software and computing operations
 - Agentic backends
- **Other topics**
 - Building trust in agentic systems
 - Cost of agents (computing, tokens, human validation)

Themes for collaboration

- Detector & accelerator operations
 - CMS, DUNE, ATLAS, Mu2e
 - Digital twins
- Software & computing operations
- Agentic backends
 - Benchmarking & safety
 - Data and knowledge curation and availability
- Cross group (beyond the subthemes, e.g. Infrastructure or agentic analysis)
- Bridges between the subthemes

Next steps

- Continue discussing group formation
- Start meetings and other communication channels (e.g., slack)
- Collect informations from previous proposals (Genesis Phase I, Hardware-aware AI, etc)
- Come up with work scope with clear definitions to avoid overlap too much overlap in effort
- Summarize work scope in a document

More details

- Notes (and your suggestions) can be found here:

https://docs.google.com/document/d/1-SsV3pCR2bsPEL9FGeG_Zw2aGcSZ1fxImtD1qJZZxQ/edit?usp=sharing