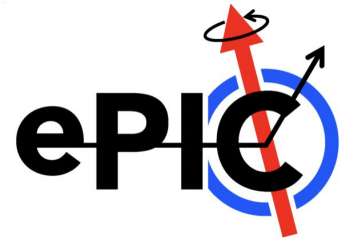


EW-BSM Update

Analysis Coordination Meeting
06/02/2023

Ciprian Gal and Michael Nycz



General Updates

- Updates to the wiki: <https://wiki.bnl.gov/EPIC/index.php?title=BSMEW>
 - List of current activities and possible future tasks
 - Links to software tutorials (and other documentation to help new members)
- Revived the mattermost channel
 - <https://eic.cloud.mattermost.com/main/channels/ew-bsm>
- Meeting Indico webpage
 - <https://indico.bnl.gov/category/421/>

Recent Meeting Updates

- Discussion around how best to use the current workforce
 - Possibility of new postdoc support
 - Assistance from collaborators with summer undergraduate students

List of projects and possible tasks

- **Uncertainty in unfolding:** Mike N.
- **Tau Identification:** (new postdoc support ?)

Software and Computing Open Tasks: Workforce

- **Implement an e/p cut for electron-pion separation**

Benchmarks

1. **Electron Identification**
2. Charge Lepton Flavor Violation (CLFV)
 - a. Tau ID
 - b. Muon ID

Discussion ongoing.....

Software and Computing Open Tasks

- **Electron Finder**: Developing an efficient and accurate algorithm for identifying electrons and identifying the scattered electron of the DIS process.
- **Vertexing and PID**: Enhancing the vertexing capabilities and particle identification techniques to study heavy flavor physics.
- **Particle Flow**: Improving the jet reconstruction using particle flow information.
- **Low- Q^2** : Integration of the low- Q^2 tagger into the reconstruction framework for precise measurements of photo production and vector mesons.