

Jet and Heavy Flavor WG Summary

Olga and Brian

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Group Information and Contacts

- ❑ Mailing List: eic-projdet-jethf-l@lists.bnl.gov
 - ❑ <https://lists.bnl.gov/mailman/listinfo/eic-projdet-jethf-l>

- ❑ Meeting Indico Pages: <https://indico.bnl.gov/category/420/>

- ❑ Wiki Page: <https://wiki.bnl.gov/eic-project-detector/index.php/JetsHF>

- ❑ Mattermost Chat: (sign-up link)
https://eic.cloud.mattermost.com/signup_user_complete/?id=i8gnmob4stdrpjfrezhegxs3ew

- ❑ Conveners
 - ❑ Olga Evdokimov – evdolga@uic.edu
 - ❑ Brian Page – bpage@bnl.gov

Next Meeting

- ❑ Previous meetings are summarized on the Wiki page
- ❑ Next meeting will be May 10th @ 12:00 pm

Task Summary

- ❑ Although not solely the purview of this working group, we want to emphasize the importance of having an energy flow type algorithm to provide a consistent treatment of the hadronic final state
- ❑ Jet related tasks
 - ❑ Further development of the EICrecon jet factories/algorithm (with the Reconstruction WG)
 - ❑ Integration of jet functionality, benchmarks, and other analyses into epic-analysis framework (with the SIDIS group)
- ❑ Heavy Flavor related tasks
 - ❑ Begin discussions with tracking group(s) on progress toward secondary vertex reconstruction

Benchmarks

- Jet related benchmarks
 - Basic kinematic distributions for reconstructed jets and constituent particles
 - JES/JER as a function of relevant kinematic quantities
- Benchmarks can be developed with track-only input (or whatever is included in ReconstructedParticle branch), but should transition to using calorimeter information and ultimately the output of an energy flow algorithm as soon as possible
- Heavy Flavor related tasks
 - Primary track DCA
 - Secondary track reconstruction efficiency
 - Secondary track DCA