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

❑ Meetings
 ❑ Keep the Wednesday 12 pm time slot? Biweekly?

Near-Term Task Summary

❑ Begin work on an energy/particle flow algorithm

    ❑ Identify stakeholders from other working groups / subsystems

    ❑ Discuss best way to categorize 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

❑ Document performance and physics impacts of barrel and backward HCals

    ❑ Rapid feedback for project

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