Jets in epic-analysis:
First Steps & Future Work

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ePIC Jets & HF Working Group Meeting

May 10, 2023

Prior to March/April 2023 Updates

- Jet kinematic variables were stored with all other physics (inclusive, SIDIS, etc.)
  - Original class: Kinematics

- All jet values (pT, energy, eta, etc.) were pulled from the Kinematics class shared pointers

- Goals:
  1. Refactor the Kinematics class to have the jet kinematics separate (DONE)
  2. Integrate the jets into the AnalysisEpic class – currently only integrated into the fast simulation (Work starting next week!)

Current Status

- Created KinematicsJets class
  - Houses all variables related directly to jets
  - Currently the entire class is surrounded by #ifndef EXCLUDE_DELPHES
  - Will need some updates as I work the jet analysis code into AnalysisEpic (in a similar fashion to how it works in AnalysisDelphes
- Created kinJets and kinJetsTrue shared pointers in the Analysis(.h/.cxx) files that now point to the new KinematicsJets class
- Updated all other code with appropriate preprocessor directives and new variable names as necessary
- All updates were done in epic-analysis PR252 and merged into the main branch in March/April

Moving Forward

- Any comments, suggestions or requests on the future as I move forward with AnalysisEpic integration?