10 TeV Detector Meeting

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Introduction and News

- What are people are currently working on?
 - Princeton: single pion samples; calorimeter performance
 - Fermilab/Yale: tau reconstruction; tracker occupancy
 - Chicago: track reconstruction with single muons and BIB (timing, fake rates, resolution)
 - Tennessee: (electron, jet, muon) reconstruction; calorimeter performance; event displays
 - **DESY**: photon reconstruction, BIB subtraction, sample generation and detector layout
 - **CERN**: machine-detector interface, BIB simulation
 - (according to Google notes and recent meetings; tasks/people may be missing!)
- At some point we want to converge and publish a paper...
 - What (if anything) isn't being worked on?
 - We should start thinking about what results/sections we'll want to include.
- What should we do with these meetings?
 - Would be nice to broaden the scope beyond just the 10 TeV detector study.
 - Ideally have a space for **all students** working on muon collider tasks to present work, get feedback, and hear about recent developments.
 - Let us know if you have suggestions.

Useful Links

• Documentation:

- Google doc with notes, list of tasks
- Muon Collider Software Tutorial
- Shared Overleaf
- Key4Hep Documentation
- LCIO Documentation
- Snowmass Connect Documentation
- Data files: /collab/project/snowmass21/data/muonc/fmeloni
 - Currently unavailable.
 - I can ping the admins after the meeting (unless someone already has).
- Communication channels:
 - #10tev-simulations channel on SCHEMA slack.
 - muoncollider-detector-physics@cern.ch: egroup (mailing list) for physics-related announcements from IMCC.