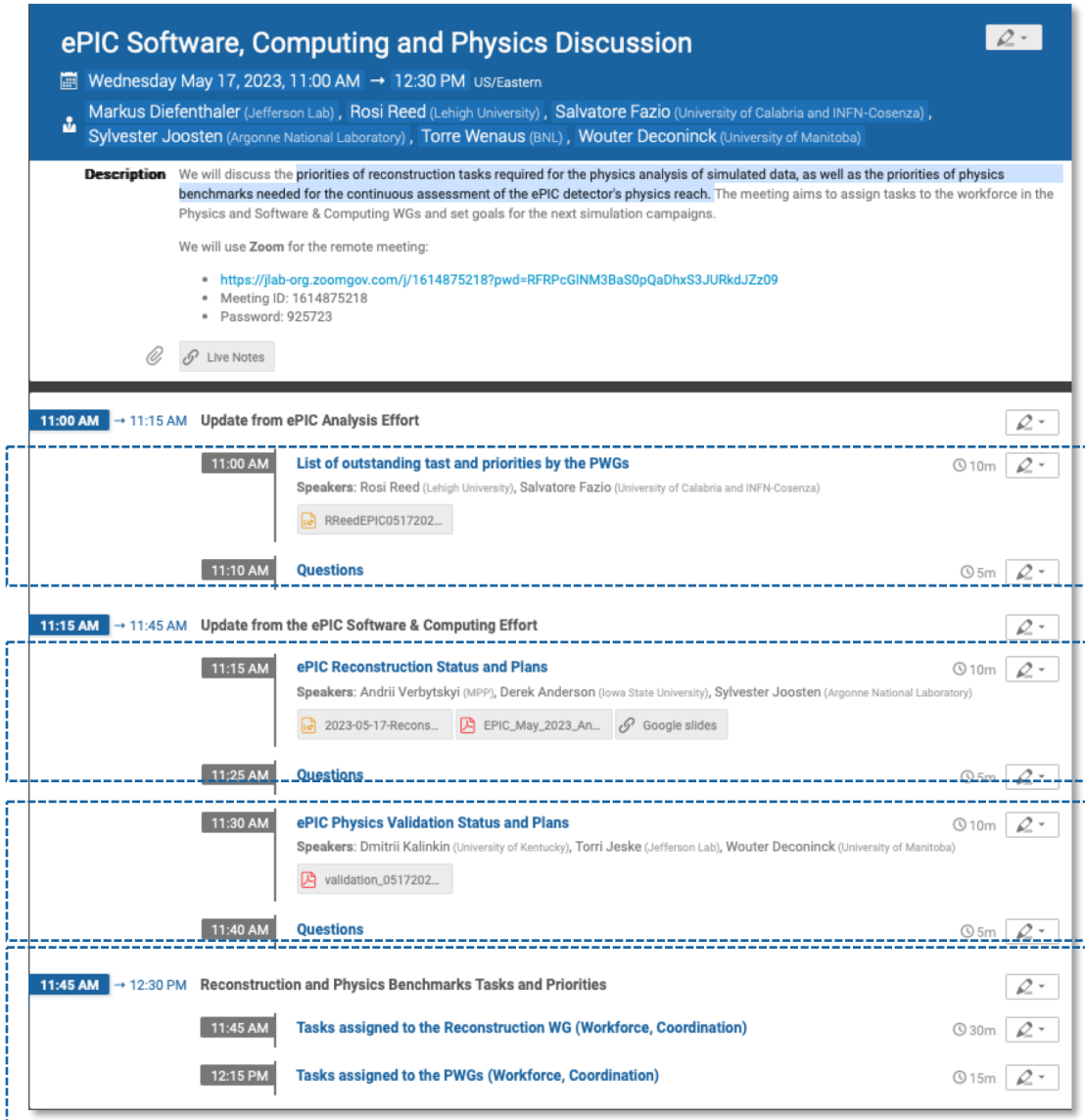
ePIC Software, Computing, and Physics Discussion on May 17



AC/SC meeting: https://indico.bnl.gov/event/19473/

Detailed minutes available.

Rosi and Sal: Key priorities for the reconstruction from the perspective of the PWGs.

Sylvester: Thorough update on the reconstruction status and plans. **Andrii**: Update on DIS lepton finder.

Torri: Validation strategy and the need for physics benchmarks.

Excellent discussion, mainly on the reconstruction.

Reconstruction Tasks

Electron Finder: Developing an efficient and accurate algorithm for identifying electrons and the scattered electron of the DIS process.

- **Overall status**: Baseline implementation completed.
- **Updates for December campaign**: Initial algorithms on electron finding or DIS lepton finding included (**tbc**).

Vertexing and PID: Enhancing the vertexing and PID capabilities to study heavy flavor physics.

- **Overall status**: Focusing on the primary vertexing algorithm and upstream algorithmic infrastructure.
- **Updates for December campaign**: None.

Particle Flow: Improving the jet reconstruction using particle flow information.

- **Overall status**: Baseline implementation PFAlpha ongoing. Aimed for December campaign but delayed to later in December.
- **Updates for December campaign**: None.

Low Q^2: Integration of the low-Q2 tagger for precise measurements of photo and vector mesons production.

- **Overall status**: Baseline implementation available, pending on AI integration in ePIC reconstruction and productions workflows. Improvements for moving to streaming frames will full backgrounds under development.
- **Updates for December campaign**: None.