

# Interplay of Physics and Software & Computing WGs

- **Role of Physics Studies:**
  - **Validating Detector Design (must have):** For the TDR, we need to demonstrate that the ePIC Experiment can deliver on EIC Science as defined in the NAS and YR reports.
  - **Simulation Accuracy (must have):** We need physics (and detector) studies to evaluate and improve the quality of our reconstruction and simulation campaigns.
  - **Physics Validation:** Expand existing Continuous Integration (CI) workflows using physics studies to find error and prevent recurring errors.
  - **User-Centered Analysis Tools:** PWGs efforts essential to develop ePIC analysis methods and tools.
- **Divergent Perspectives on Readiness**
  - **"Reconstruction Not Ready":** Concerns that current software development does not support physics studies due to ongoing reconstruction efforts.
  - **"Ready for Physics Studies":** Successful use cases by Brian and Kong demonstrate potential readiness for physics studies.
  - We can only reconcile these perspectives in a collaborative approach with excellent communication about challenges, struggles, needs, and priorities.
- **Help with Reconciling Divergent Perspectives:**
  - **Collaboration Meeting Tutorials:** Use upcoming tutorials as a platform for training and initiating collaborative analysis and reconstruction efforts.