# EIC UGM Debrief | Overall Thoughts

- **Collaboration Focus:** work be ready for technical baseline by end of 2025 (see John's talk and integration discussion)
  - i.e. complete pTDR, be ready for TDR
  - ☞ Push towards integrating *all* aspects of ePIC

- **What does that mean for this WG?**
  - Focus on fulfilling 2025 priorities (set in Frascati)
  - Continue to **improve collaboration with PWGs (*and DSCs*)** on shared priorities
  - ☞ TDR ⇒ **demonstration of physics performance *in realistic conditions***
    - › LOTS of development needs to happen!

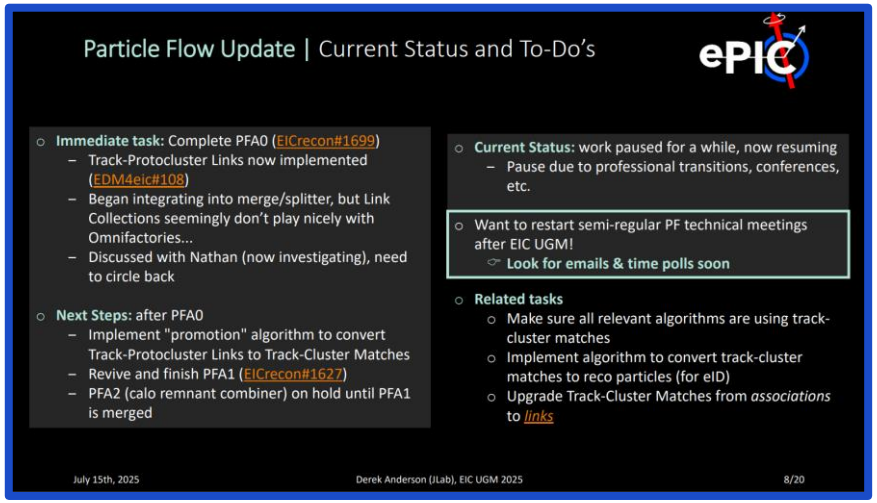
**Reconstruction Framework and Algorithms**

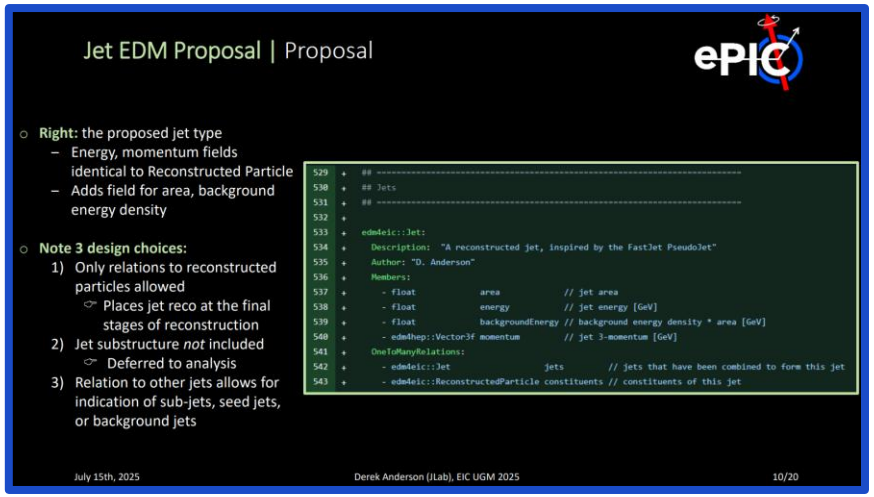
- **Charge**:
  - Development of a holistic and modular reconstruction for the integrated ePIC detector.
- **Priorities for 2025**:
  - Drive the **development of the reconstruction framework to meet ePIC needs**, e.g., on modularity or streaming data processing.
  - Host collaboration-wide discussions on all aspects of reconstruction, driving the **work toward holistic reconstruction**.
  - Enable reconstruction algorithms to **handle physics events with background**.
  - Collaborate with **PWGs** on **shared reconstruction priorities**, which currently include:
    - Secondary vertexing
    - Hadron identification
    - Particle flow algorithms for jet reconstruction
    - Event kinematics

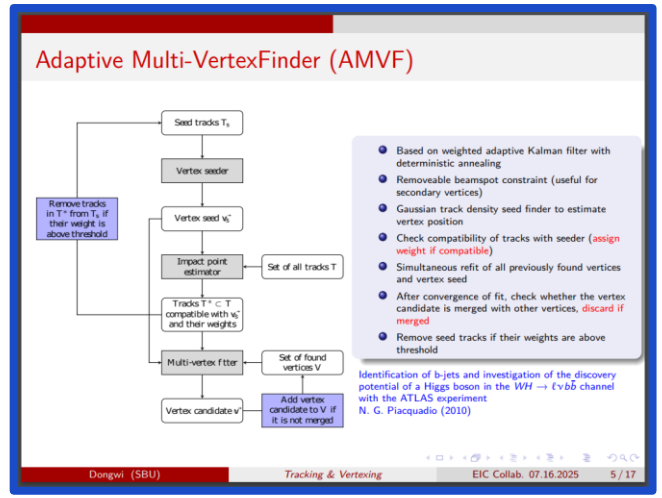
    **And DSCs!**
  - Integrate continued development of **web-based event display** in reconstruction efforts.

From Markus' Talk

# EIC UGM Debrief | Jet/HF Workfest

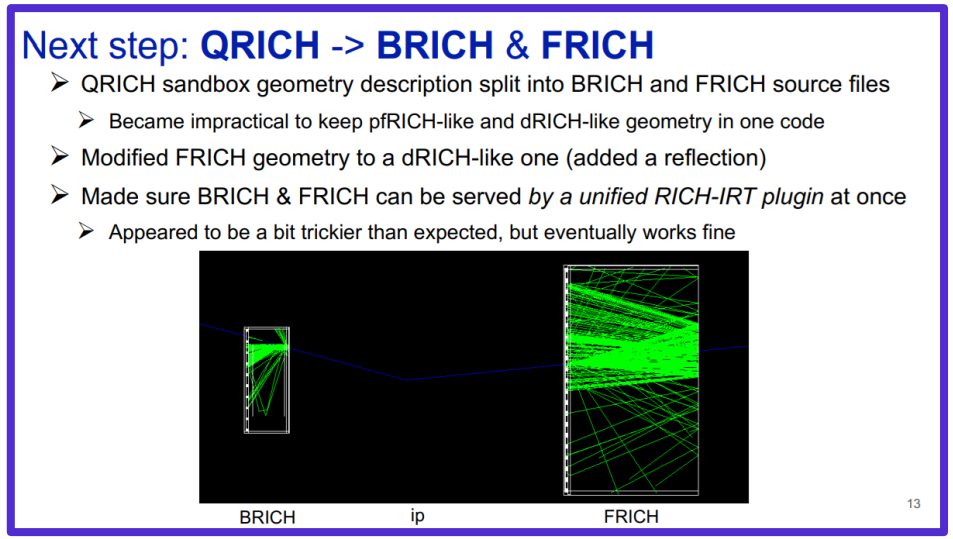


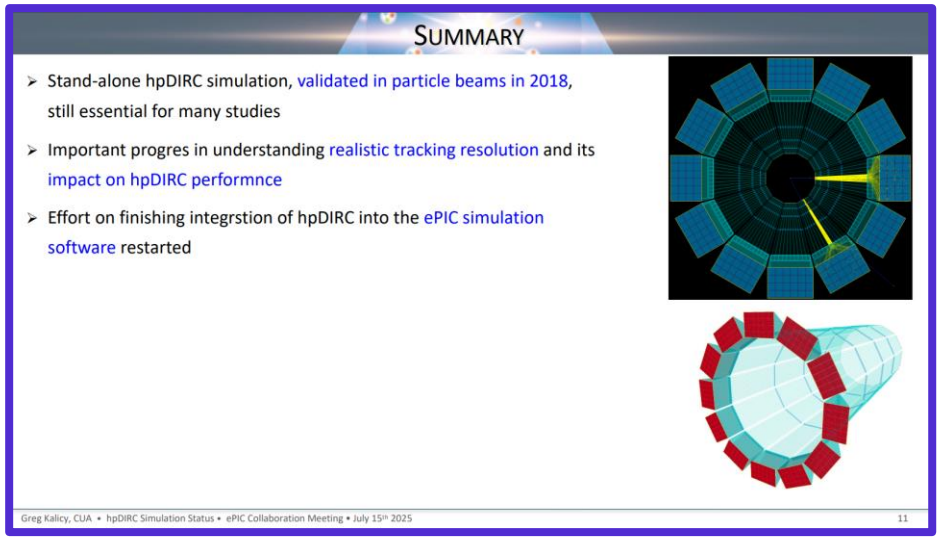




- I presented status report on PF (& jet) reco in Jet/HF Workfest (left, middle)
  - PF status report same as 07.07.2025 report here
    - ☞ **Renee had great suggestion:** Jet/HF PWG meeting is biweekly, so alternate PF technical discussion with PWG
  - Also presented proposal for jet datatype
- Bishoy presented update on status of the AMVF implementation in EICrecon (right)
  - Performance is looking good, and PR is moving towards merge!

# EIC UGM Debrief | PID CCWG Workfest

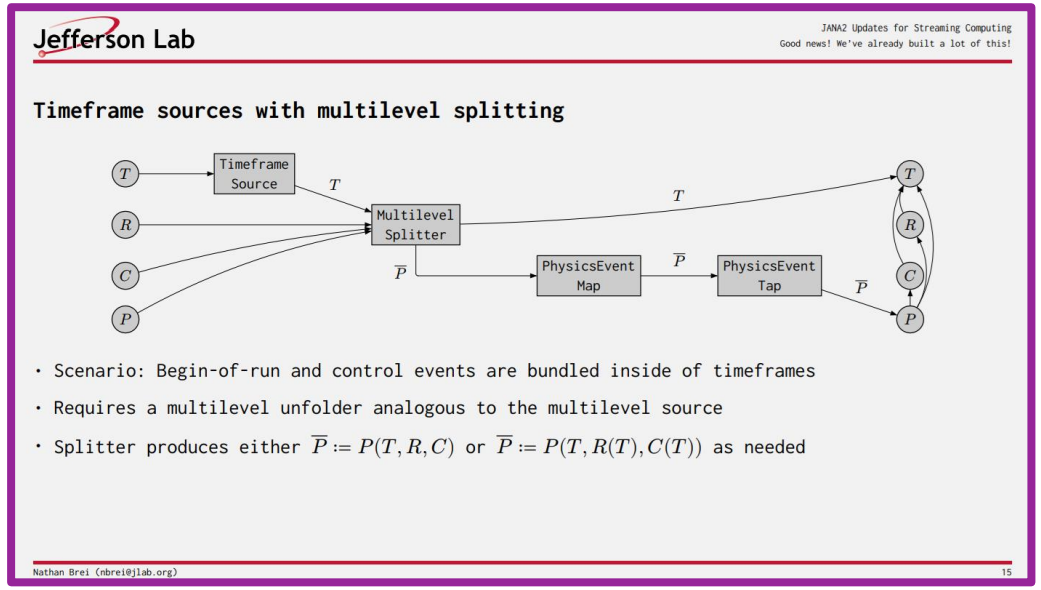


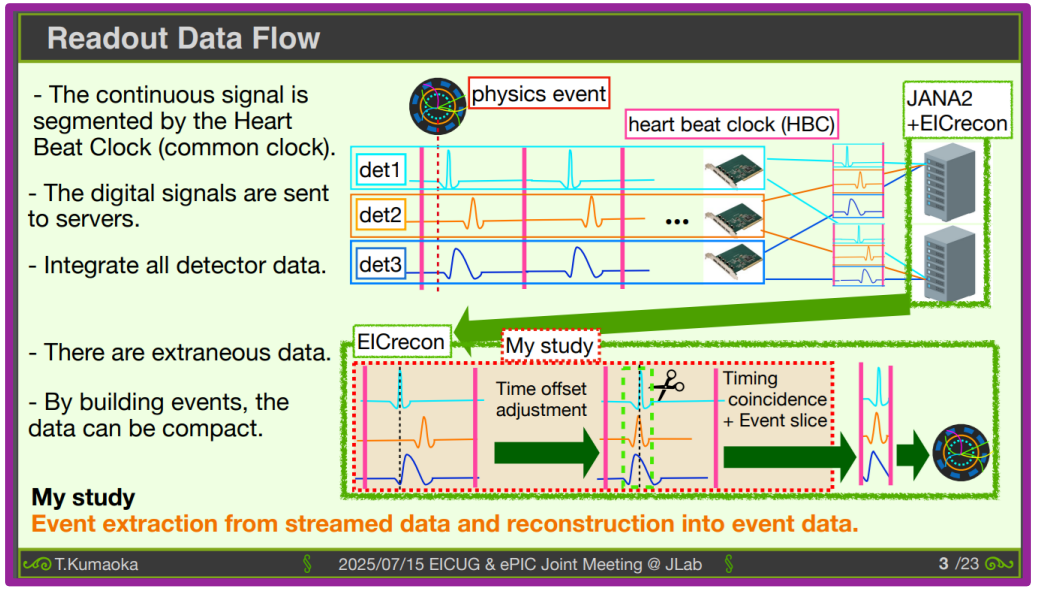




- Very productive workfest w/ PID CCWG!
  - Thomas led discussion of role of CCWG moving forward
  - Alexander gave an update on IRT2, pfRICH integration (left)
  - Greg gave update on hpDIRC status (right)
  - Tommy gave update on TOF software implementation
    - ☞ **Update following this talk!**

- **Key takeaways/impressions:** (from my perspective…)
  - General consensus was to maintain PID CCWG, and continue/improve coordination w/ software team
  - IRT2 integration making *impressive* progress, **need support to help with *holistic* PID reconstruction**
  - Bill (Llope) now investigating status of hpDIRC software & will report back, **may need support based on status**

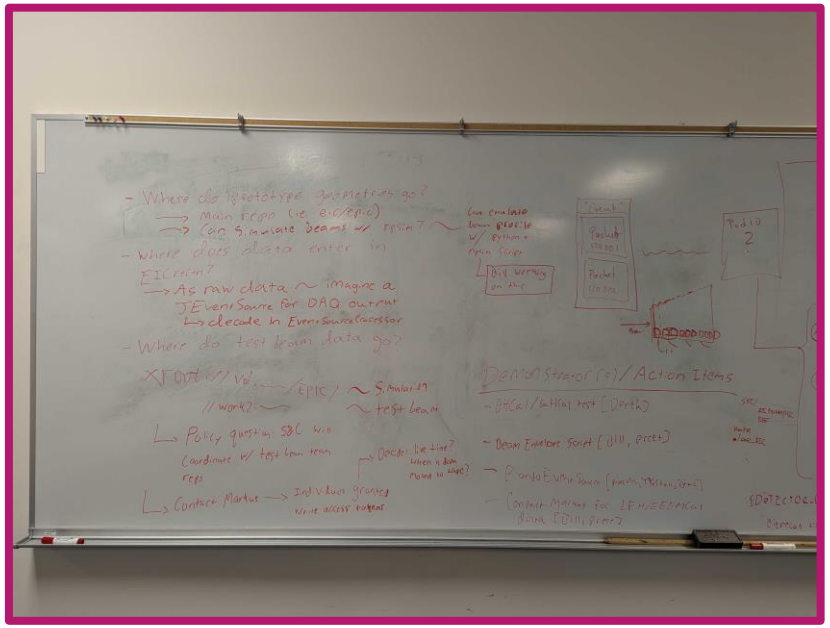
# EIC UGM Debrief | SRO Workfest

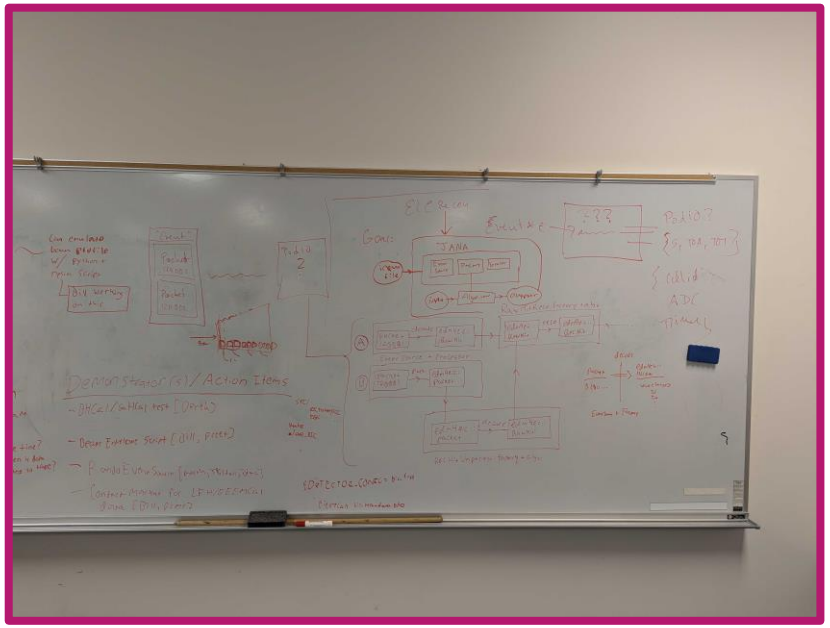



- Wasn't able to attend SRO Workfest, but Nathan (left) and Takuya (right) gave very intriguing talks on JANA2 updates for streaming
  - ☞ Should touch base with them soon!

# EIC UGM Debrief | Data-Software Interface Workfest

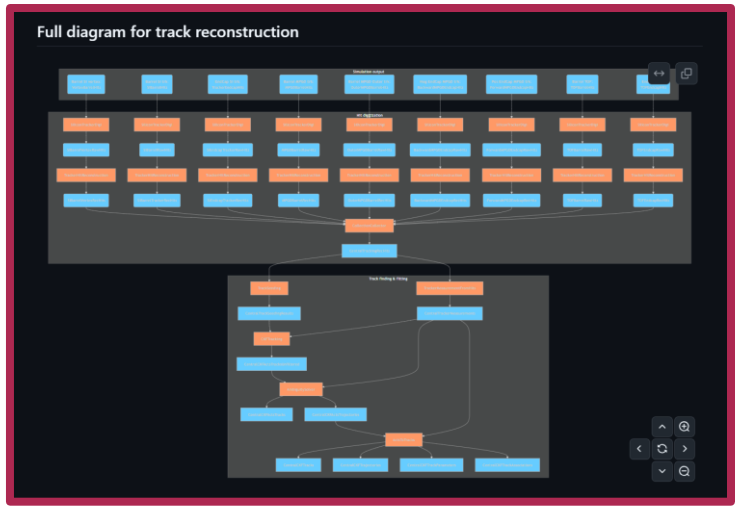


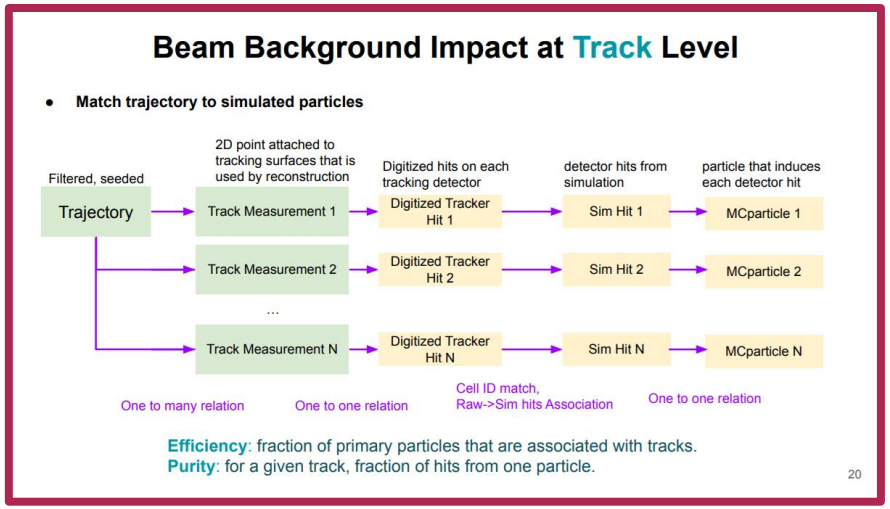



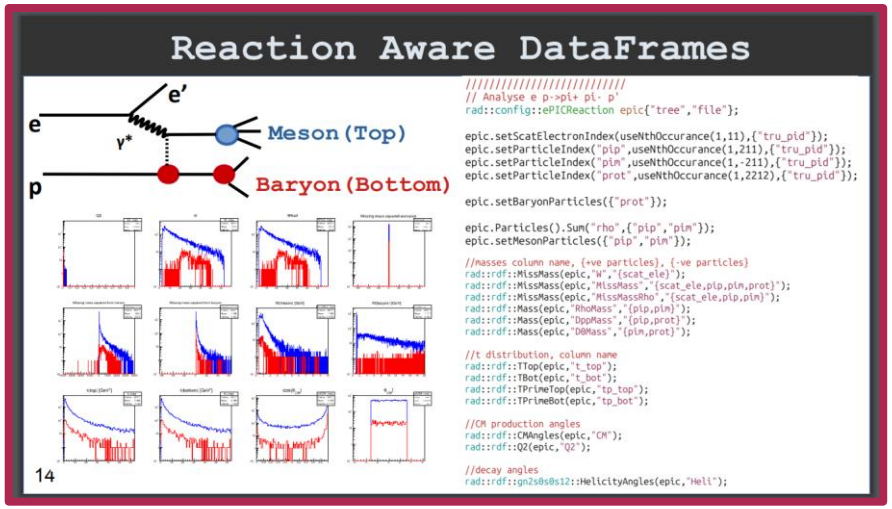

- 2-part workfest on interfacing our software environment with (test beam/bench/etc) readouts
  - **Part 1 [joint w/ E&DAQ Workfest]:** talks on test beam & DAQ (RCDAQ, CODA/ERSAP, NestDAQ) experience
  - **Part 2:** hackathon on getting test beam data into EICrecon
- **Above:** whiteboard notes from hackathon
  - No code written (as per tradition), but **extremely productive**
  - Some concrete tasks for framework & simulation development

  ☞ Expect more detailed report soon!

# EIC UGM Debrief | Tracking + Observables Workfest(s)




- 3-part workfest on tracking + physics observables for detector performance
  - Part 1: General tracking overview/discussion
  - Part 2: Tracking WG meeting
  - Part 3: Physics observables (parallel w/ tracking WG meeting, wasn't able to attend)

- **A few highlights:**
  - Barak showed some *very* good documentation of tracking in part 1
  - Shujie led a great discussion of background vs. tracking in part 2
  - Derek gave update on low-Q2 analyses using a *very* cool analysis framework (epic-rad)