

On-going items for Oct 3rd, 2023

- Engineering work for new beam pipe is still underway.
 - Engineers are solving issues related to the neutral exit toward the ZDC, impedance issues, etc.
- ZDC technology discussion happening this Monday, Oct. 9th @ TIC meeting.
 - Focus on HCAL technologies but will also discuss EMCAL(s).
 - ePIC management wants to better understand the status.
- BxByBz field map capability added to ePIC by Dhevan → will study B0 field map in DD4HEP and compare to constant fields.
 - Especially important since field map describes the field non-uniformities, which can affect tracking resolution.
- Waiting to hear back from management on the ePIC collaboration meeting.
 - Goal is to have overlapping parallel sessions with FB and the Exclusive PWG – also asked to avoid conflicts with AC-LGAD parallel session since many of us will also participate there.

On-going items for Oct 3rd, 2023

- DD4HEP work
 - **Geometry:**
 - ✓ Need to clean up definitions of RP/OMD to make them better able to handle beam-optics changes.
 - ✓ This is especially challenging as this portion is part of the physical geometry (same thing for the fields), so a user has to be very careful to use the right XML files.
 - ✓ Vacuum volume in RP/OMD beam pipe area needs to be re-generalized/optimized in parallel, like was done for the magnet region.
 - **ElCrecon:**
 - ✓ Testing for digitization + thresholds on matrix reconstruction.
 - ✓ Inclusion of PyTorch libraries in ElCrecon so we can use the ML algorithm for reconstruction (in progress).
 - ✓ Evaluation of beam effects in the reconstruction.
 - ✓ ZDC reconstruction really needs to be setup for users to get output that is usable.