TOPSIDE STATUS AND OUTLOOK

EVENT 11
Q2: 10.71 GeV2
-t: 0.59 GeV2
5 GeV on 100 GeV

▷ Our strategy for TOPSiDE
- 🔵 (*ongoing*) Prove viability of concept through closed-loop simulation/reconstruction.
- ☐ Optimize TOPSiDE for key EIC physics milestones
- ☐ Release software stack when implementation complete
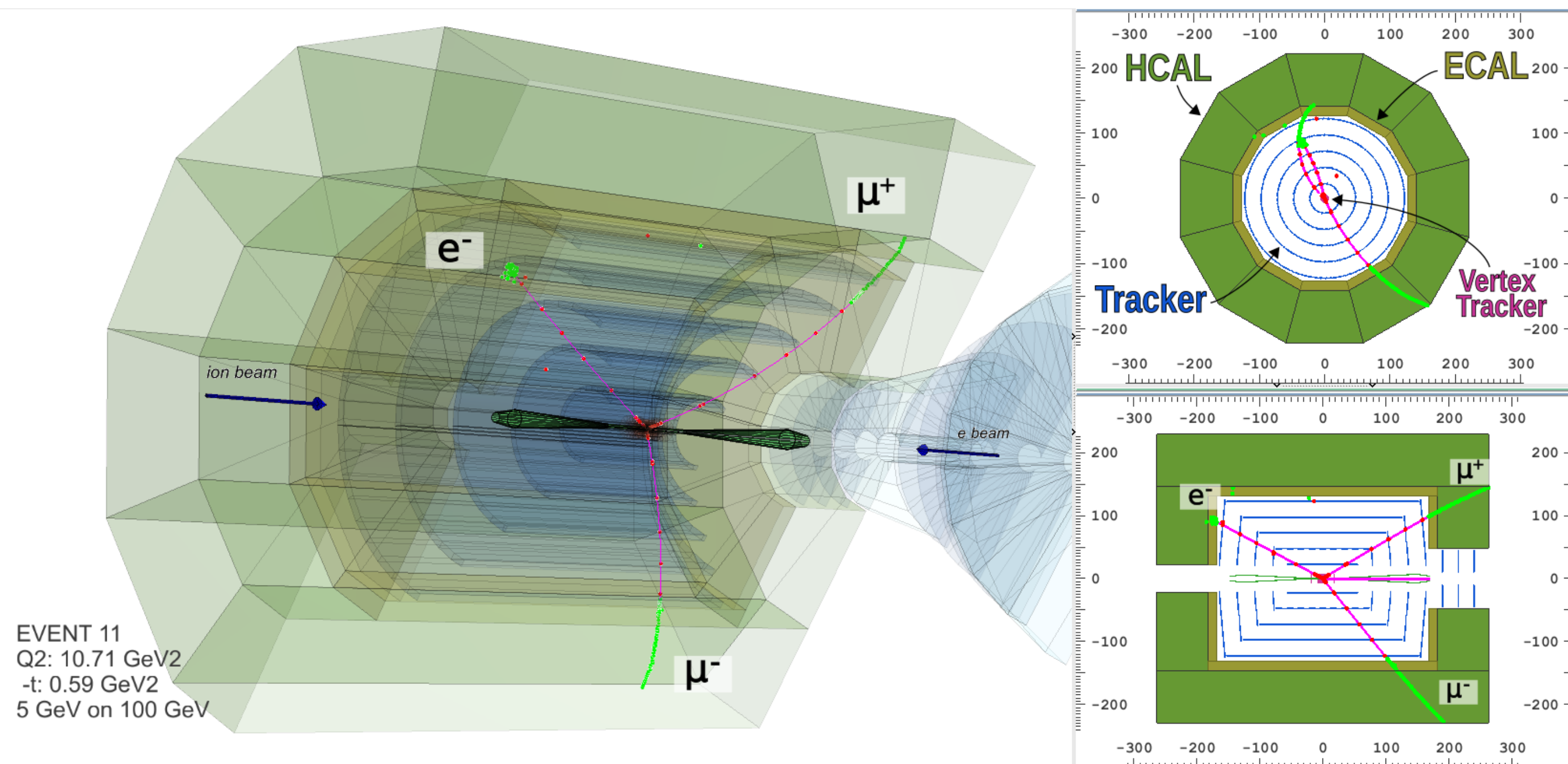- ☐ Possible to support TOPSiDE in other YR software afterwards

▷ Our team

▷ Software stack in good shape
- ☑ Detector simulation implemented through DD4HEP
- ☑ Digitization implemented
- 🔵 (*ongoing*) Tracking with GENFIT, intend to migrate to ACTS
- ☐ Use key EIC physics goals to benchmark detector performance
- ☐ Investigate use of ML techniques to accelerate closed-loop optimizations

S. Joosten   Argonne NATIONAL LABORATORY