

ECCE Simulations

Campaign 3
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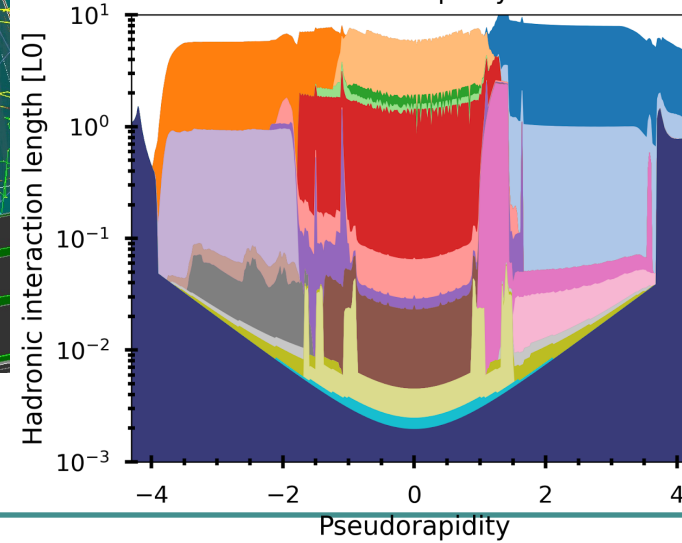
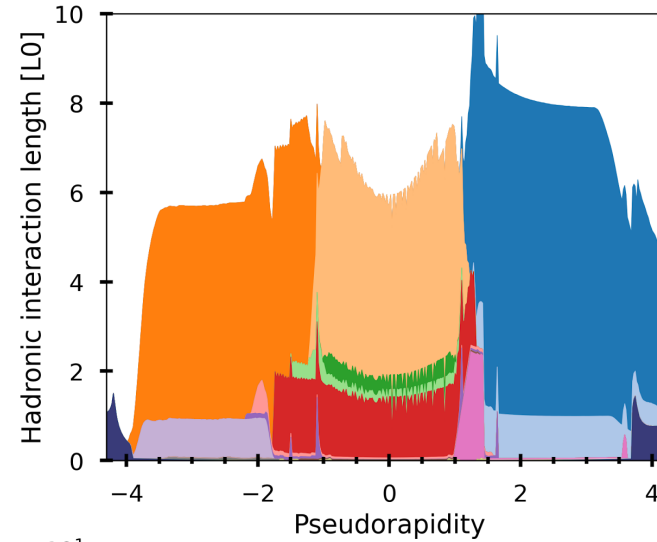
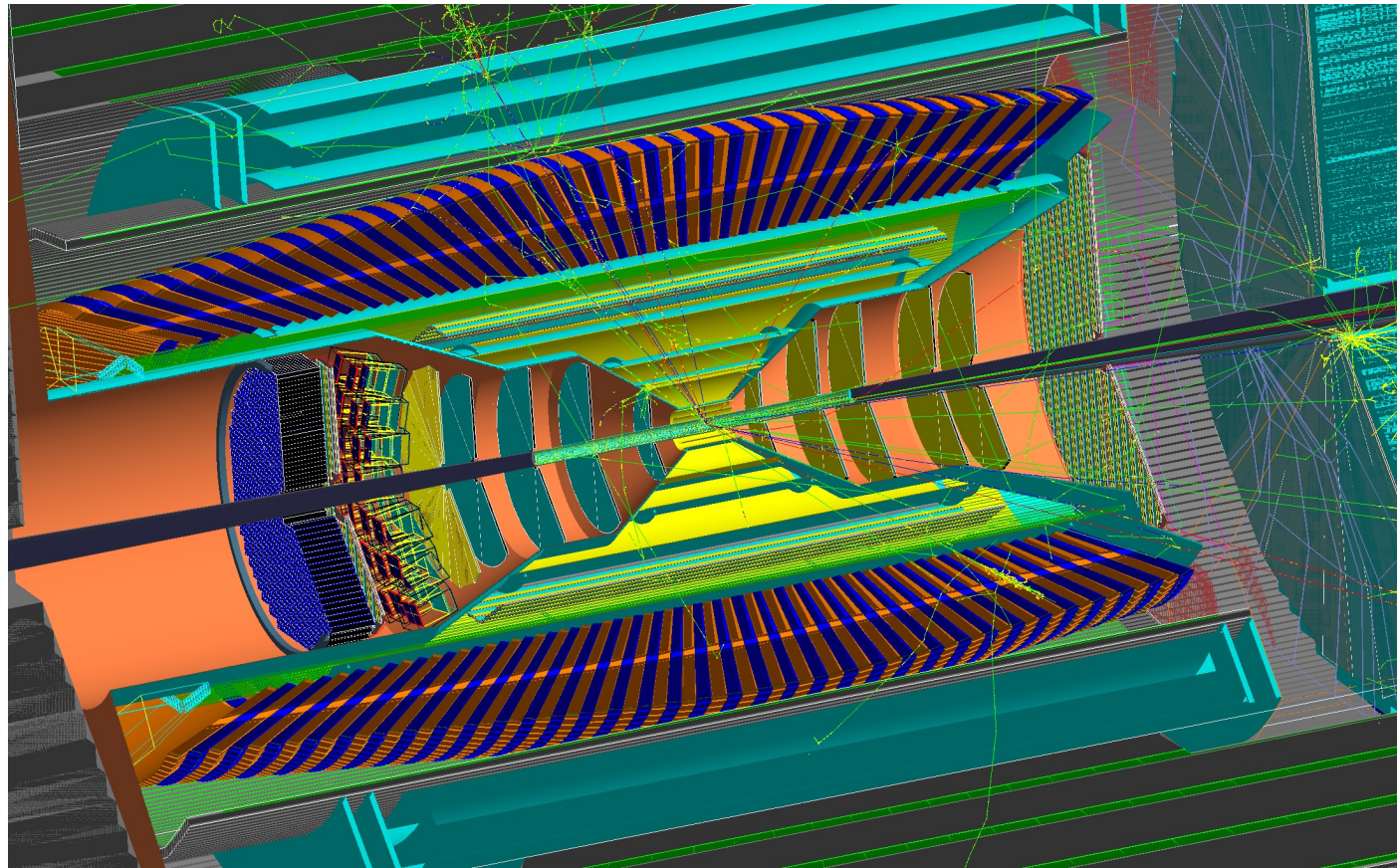
Software and Computing Meeting

Campaign 3



- Third campaign setup is ready to go!
- We have tested single jobs of up to 1k events
 - No overlaps
 - No crashes
 - Reasonable memory usage (~2.3GB)
- Changes wrt prop.4.3
 - Magnetic field scaled back to nominal value
 - Better scintillation production for EEMCH
 - Rearranged barrel AC-LGAD, outer muRwell, DIRC and BECAL according to design mockup
 - Additional detectors such as mRPCs, hadron-going TRD, full sim B0 and B0 ECal
 - Rearranged inner tracking detectors according to costing review
 - Projective tracking support to reduce dead area

Campaign 3



- ECCE Simulation
prop.5, Oct-2021 concept
- Forward LHCAL
 - Forward ECal
 - Backward Field Return
 - Barrel HCal
 - SC Magnet
 - Active BCal Support
 - BECal
 - DIRC
 - Inner det. spt./service
 - Backward ECal
 - Barrel AC-LGAD
 - Backward AC-LGAD
 - Dual RICH
 - Forward AC-LGAD
 - mRICH AeroGel
 - Forward/backward MPGD
 - Forward/backward silicon
 - Barrel muRwell
 - Barrel silicon
 - Au-coated beam chamber



- New software stack, prop.5
 - [/cvmfs/eic.opensciencegrid.org/ecce/gcc-8.3/release/prop.5/](https://cvmfs/eic.opensciencegrid.org/ecce/gcc-8.3/release/prop.5/)
- Macros hashes:
 - Production = d833d31
 - Single Electron = b4cfbdc
 - Single Pion = ef2da02
 - Pythia8 = ba98f0d
- Production scripts have been updated to pick all this up

PWG ↕	Process ↕	Generator ↕	Beam Parameters ↕	No. Events Requested ↕	No. Events In Storage ↕	Notes ↕	Assigned To ↕
General	Single Pions	Particle Gun	N/A	5M	0		
General	Single Electrons	Particle Gun	N/A	5M	0		
SIDIS	(SI)DIS	Pythia6	18x275 ep	20M	0	1 < Q2 < 100	
SIDIS	(SI)DIS	Pythia6	18x275 ep	4M	0	100 < Q2	