

# Software Coordinators Report

F.Gaede, DESY

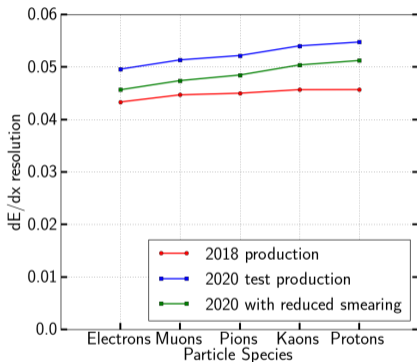
ILD Meeting, May 6, 2020

- Generator
- Simulation
- Reconstruction
- Monte Carlo Production

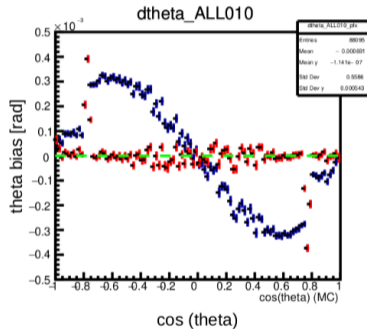
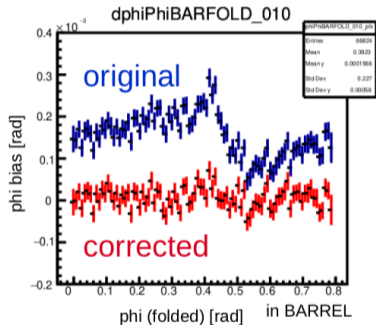
report from *ILD Software Convenors Meeting* today

- produced generator test sample  $qqH, H \rightarrow ZZ^*$
- generator cuts for low  $Q^2$   $\gamma\gamma$ -events
  - under investigation by MB (see talk last week)
  - probably not an issue for production
  - to be iterated w/ Whizard authors

- U.Einhaus computed new smearing factor in the *Compute\_dEdxProcessor* of 0.029
  - leads to a  $dE/dx$  resolution of about 4.45% for fiducial electrons
  - still an effective increase compared to 2018
  - but consistent with LCTPC test beam results (4.4%-4.7%)
- adjusted calibration constants for  $\gamma$ s
  - trying to correct for  $\pm 0.5\%$  bias in barrel and endcap
  - *validation ongoing*
- new issue in  $\mu$  reconstruction
  - see talk J.Tian



- DJ continued work on energy dependent correction for angular bias
  - $\phi$ ,  $\cos(\theta)$
- to be added to PhotonCorrectionProcessor
  - planned for end of this week





- produced an additional 10 k evt test sample:  $H^- \rightarrow ZZ^*$ 
  - using ilcsoft v02-01
  - *validation pending*
- after open issues resolved in patch release v02-01-01:
- produce di-jet calibration samples with  $uds$ ,  $cc$  and  $bb$ 
  - using new ILDConfig with **reconstruction/calibration issues fixed**
  - reconstruct these with **all three detector options**: