

Software Coordinators Report

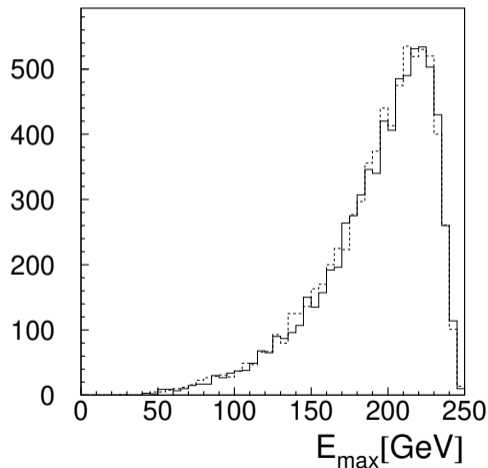
F.Gaede, DESY

ILD Meeting, Apr 22, 2020

- Generator
- Simulation
- Reconstruction
- Monte Carlo Production

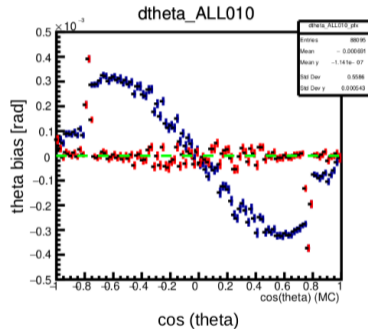
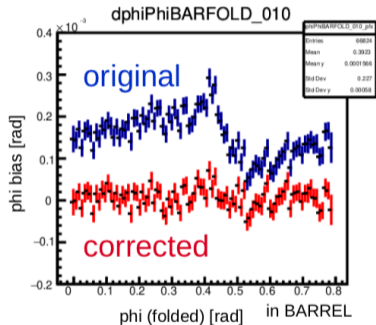
report from *ILD Software Convenors Meeting* today

- resolved issue w/ lepton and quark masses:
 - will use **correct lepton masses** for all samples
 - continue to use **zero quark masses**
- issue w/ cut definition in new Whizard version
 - talk M.Berggren today ?
- potential issue: definition of unique event meta data
 - needs to be checked...
- MB had checked samples wrt to zero quark masses
- observed only small differences between samples w/ and w/o zero quark masses
 - E of leading hadron in $H \rightarrow bb$ events w/ and w/o $m_b = 0$



- changes in ionization caused slightly reduced dE/dx resolution
 - see talk U.Einhaus
- adjusted calibration constants for γ s
 - trying to correct for $\pm 0.5\%$ bias in barrel and endcap
- new question came up:
 - why is the factor between the two absorber stacks not exactly 2
 - RE will investigate
- DJ fixed bug in MarlinReco for photon correction
 - correction was not applied to momentum
 - to be included in next production release !

- DJ working on energy dependent correction for angular bias
 - ϕ , $\cos(\theta)$
- to be added to PhotonCorrectionProcessor



- request for additional 10 k evt test sample: $H^- \rightarrow ZZ^*$
 - potentially also including 6f background for this
- will be produced w/ ilcsoft v02-01

- 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**
- idea: reconstruct these with **all three detector options**:
 - provided that the reconstruction and calibration is available

model	Hcal	Ecal
ILD_l5_o1_v02	analog	silicon
ILD_l5_o2_v02	semi-digital	silicon
ILD_l5_o3_v02	analog	scintillator