

# Software Coordinators Report

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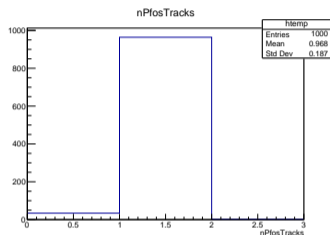
ILD Meeting, Mar 11, 2020

- Generator
- Reconstruction
- Monte Carlo Production
- iLCSoft release

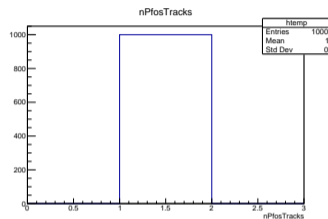
report from *ILD Software Convenors Meeting* today

- Generator Meeting at CERN:
  - ILD, SiD, CLICdp generator experts and Whizard authors
- new Whizard releases planned:
  - version 3, probably several months away
  - 2.8.3 should come out in a few weeks
  - has a few small bug fixes
    - e.g. accuracy of ASCII fiel w/ integration grid
    - allows setting of processID and runID in the event header
  - should use this for the production
- discussion about how to set a unique run and event number
  - currently we have duplicate run/evt numbers in large DST files. . .
  - ideally Whizard should set it at generation time
- discussed issue w/  $\gamma\gamma$  events:
  - need to correctly define the phase space for this
- JJ.Blaising did studies w/ Bhabha scattering:
  - found consistent cross sections when using correct cuts

- fixed the muon reconstruction issue at  $\cos(\theta) \approx 0.6$
- tracked down to incorrect normal vector in Yoke barrel
- fixed in DDMarlinPandora steering and in YokeBarrel detector driver in lcgeo:



old



new

- DetElement tree was incorrect, resulting in wrong transformation used for normal vector (0,1,0)



- will start with test production of 10k events of
  - $HZ \rightarrow H\mu\mu$ , 2f leptonic ( $\tau\tau$ ), 4f semi-leptonic ( $qq\nu$ )
  - and O(100k) of single  $\gamma$ ,  $K_L^0$ ,  $\pi$ ,  $K$ ,  $\mu$ ,  $e$
- a 500 GeV 6q samples with BG overlay for flavor tag studies will be produced with the final production version
- see confluence page: <https://confluence.desy.de/display/ILD/Production+with+v02-01>
- then need **physics validation** of these samples:
  - already assigned manpower to the individual channels

- finalized the v02-01 release
- installed in afs:

```
/afs/desy.de/project/ilcsoft/sw/x86_64_gcc82_sl6/v02-01
```

```
/afs/desy.de/project/ilcsoft/sw/x86_64_gcc82_centos7/v02-01
```

- soon also in cvmfs:
  - CentOS7 will have to come later for technical reasons

```
/cvmfs/ilc.desy.de/sw/x86_64_gcc82_sl6/v02-01
```

- ILDConfig installation and ILCDirac tag to follow soon