

software report

Daniel Jeans for the SW group

ILD analysis-sw meeting 9 Oct 2019

generator group [Berggren]

checking Whizard2 performance at 500 GeV

same beam params → easier to compare to DBD samples

$e^+e^- \rightarrow 2f, 4f$

[almost always] very consistent x-sections

$e-\gamma, \gamma-\gamma$

more complicated to implement generator cuts

[changed treatment of beam remnants, ISR, ...]

not yet perfectly consistent x-secs

potentially serious issue with $e^+e^- \rightarrow 4f_singleW = e \nu_e f \bar{f}$

one beam polarisation case is fine

the other does not converge

→ in contact with Whizard team

simulation [report from Ete]


next major ilcsoft release (to be used in next large 250 production):
will take opportunity to use less antiquated versions of
c++, compiler, Geant4, root, DD4hep

new version/structure of lcio [with sio factored out]
→ a lot of work to ensure everything fits together

once it is technically working,
validation will be required, at least at the detector performance level

MC production [Miyamoto]

a few generator files have been generated through ilcdirac

- 14:00** → 14:10 **Software Coordinator's Report** 🕒 10m
Speaker: Daniel Jeans (KEK)
- 14:10** → 14:30 **Chargino cross section studies at ILC** 🕒 20m
Speaker: Teresa Nunez
- 14:30** → 14:50 **Semi-leptonic WW benchmark analysis** 🕒 20m
Speaker: Justin Lee Singer-Anguiano (The University of Kansas (US))
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- 14:50** → 15:10 **$e^+e^- \rightarrow Z\gamma$ benchmark analysis** 🕒 20m
Speaker: Takahiro Mizuno (Sokendai)
- 15:10** → 15:25 **$e^+e^- \rightarrow b\bar{b}$ & $c\bar{c}$ at 250 GeV** 🕒 15m
Speaker: Adrian Irlles (LAL - CNRS/IN2P3)