

# Software Coordinators Report

ILD Software and Analysis Meeting

26.05.21

Frank Gaede, DESY

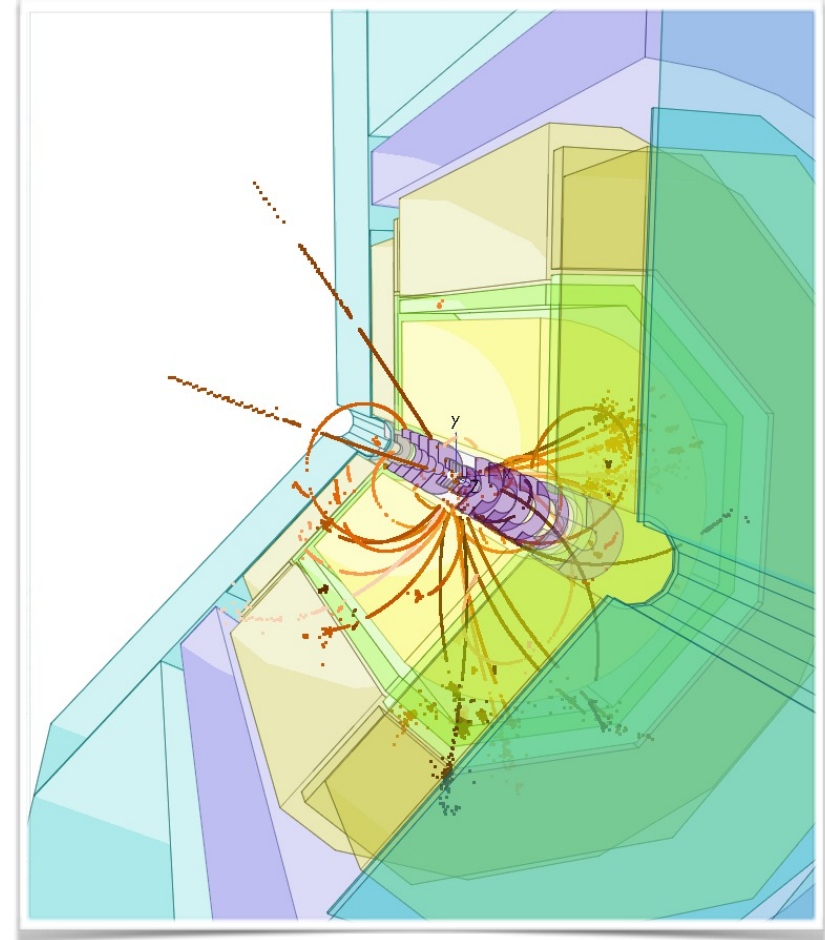


# Outline



- Generator
- Simulation
- Reconstruction
- Monte Carlo Production
  
- ILD meeting software session
- IDT-WG3-SW: tutorials

report from SW convenors meeting on Friday

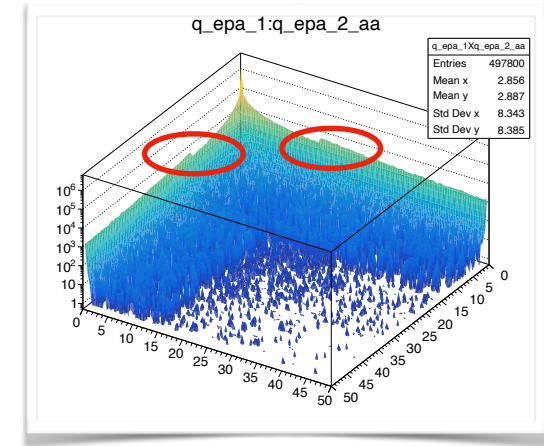


# Generator

M.Berggren, J.Tian



- issue w/ virtual photon cross sections:
  - re-pinged Whizard authors
  - they will look into it ...
- issue with stau- $\rightarrow$ tau decays and polarization
  - fixed and patch provided to Whizard authors
  - will go into next releases
  - BSM experts on ILD can use the patched HEAD version ...
  - should also go into 2.8.5. path release once the virtual-photon issue is solved

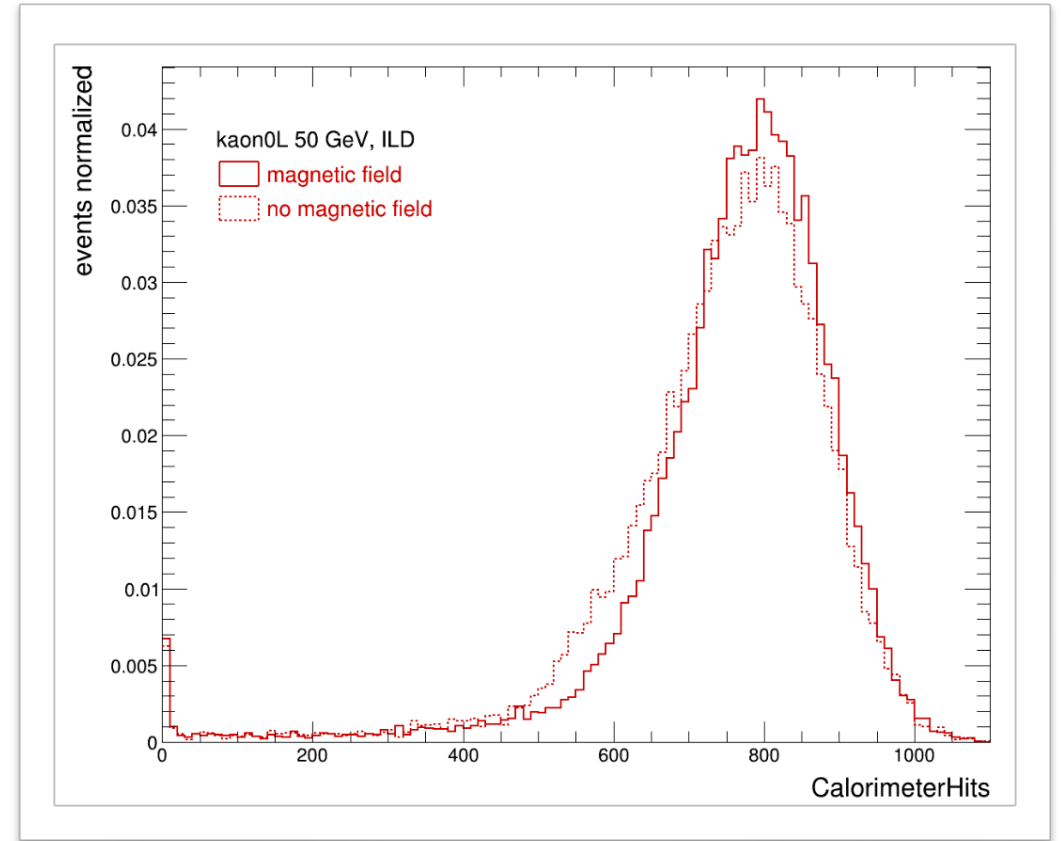


# Simulation

D.Jeans, M.Ruan



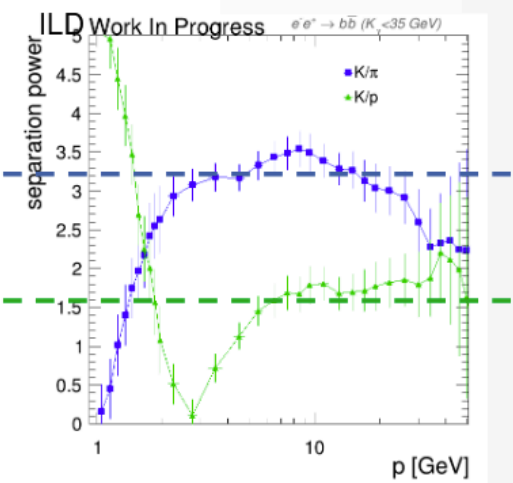
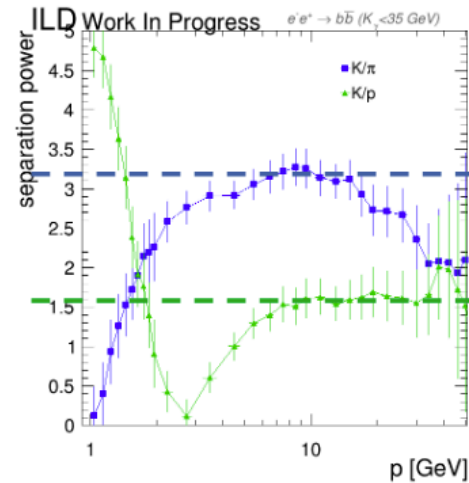
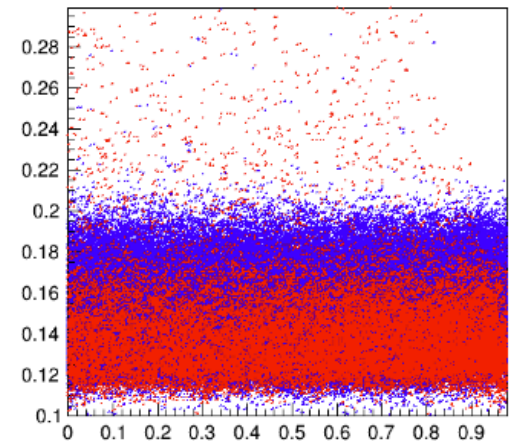
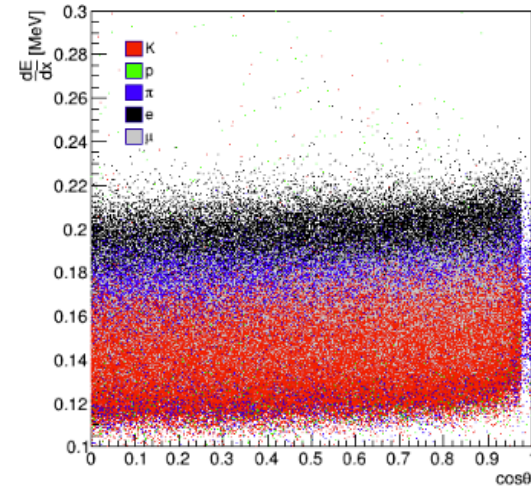
- issue w/ SDHCal hit numbers for calorimeters showers resolved:
  - tracked down w/ SDHCal experts to B-field turned off in standalone simulation
- see talk C.Carillo in ILD SW&Ana meeting on May 12



# Reconstruction

A.Irles, T.Madlener

- preparation of iLCSoft patch release: v02-02-02
- dE/dx correction for 250 GeV production:
  - **AngularCorrection\_dEdxProcessor** (MarlinReco)
- updated **ILDPerformance/dEdxAnalyser.cc** (U.Einhaus)
- updated **LikelihoodProcessor**
  - add new dEdx\_PID\_vXY objects to PandoraPFOs
- updated **ComputedEdxProcessor**
  - apply smearing before angular correction and changed parameterization of angular correction
- prepared steering file for creation of **miniDSTs** (S.Kawada) from 250 GeV production
- one technical issue w/ **TrueJetParser** pending
  - needs to be moved to MarlinUtil



- v02-02-02 to be releases rather soon ...

# Monte Carlo Production

H.Ono, A.Miyamoto

- **2f, 4f, H samples complete statistics done** - except 2f hadronic samples
- moving to finish 2f hadronic samples
  - currently **6-7 k jobs running in parallel**
  - expect ~2 months to finish
  - some issues observed last week due to network problems at DESY
- only left then
  - 6f samples (small cross section )
  - samples w/ virtual photons (larger cross section)

check status of production at this web page:

<https://ild.ngt.ndu.ac.jp/mc-prod/prodmon/prodsum-mc2020.html>

# Software session at ILD Meeting

Friday June 4, 13:00 CEST

- we have a 1.5 h session at next week's ILD meeting for software topics:
  - present recent developments and plans
  - discuss future developments
  - and next Monte Carlo production(s)
- see how we can optimise and advance ILD

<b>ILD Software: Status, Plans and Possibilities</b>	<i>Frank Gaede</i>
<i>zoom</i>	13:00 - 13:20
<b>Key4hep/EDM4hep: the way forward</b>	<i>Thomas Madlener</i>
<i>zoom</i>	13:20 - 13:40
<b>Status of large scale Monte Carlo production(s)</b>	<i>Hiroaki Ono</i>
<i>zoom</i>	13:40 - 13:50
<b>Requirements for new Monte Carlo productions</b>	<i>Mikael Berggren</i>
<i>zoom</i>	13:50 - 14:00
<b>Discussion on ILD Software</b>	<i>Daniel Jeans et al.</i>
<i>zoom</i>	14:00 - 14:30

## planning of seminar / tutorial series

plan for series of ~monthly seminars / tutorials

Wednesdays at [ 06:30 PDT / 15:30 CEST / 22:30 JST ]

60~90 minutes

first one penciled in for June 23:

DELPHES ILC card (Filip Zarnecki)

“make your first ILC Higgs plot” (Jenny List)

Future candidates: ilcsoft, LCFIPlus, PandoraPFA, ddsim, ...

**what do you want to see covered ?**

**send your suggestions to** `ilc-swc-core AT ml.post.kek.jp`

slide shown by D.Jeans in IDT-WG3 meeting