Software Coordinators Report

ILD Software and Analysis Meeting

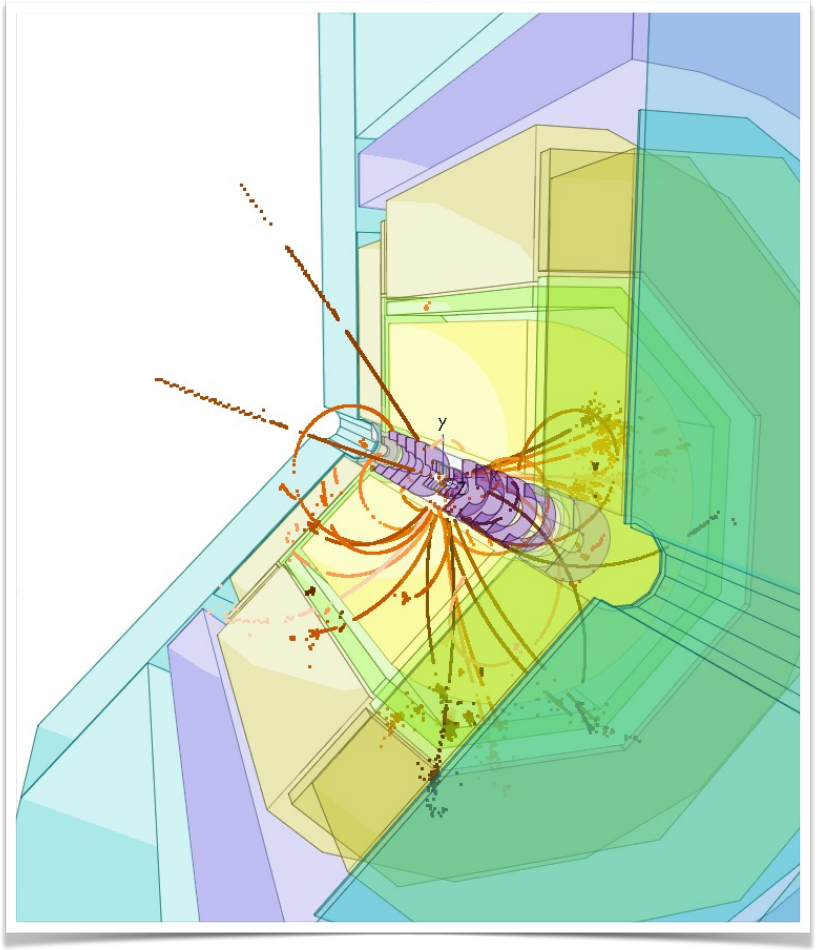
12.04.23

Frank Gaede, DESY

Outline

- Generator
- Simulation
- Reconstruction
- Monte Carlo Production

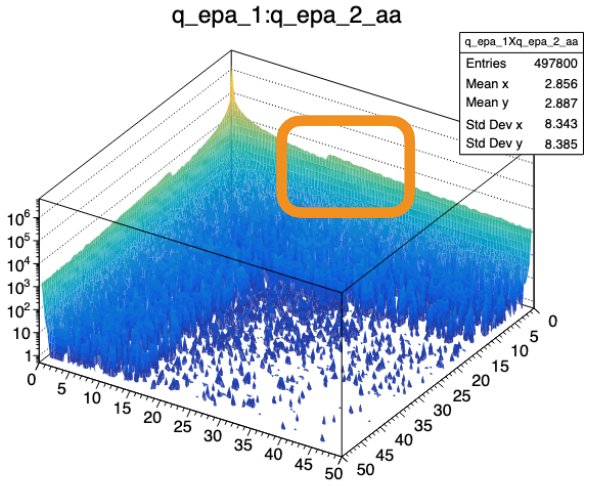
report from SW convenors meeting last Friday

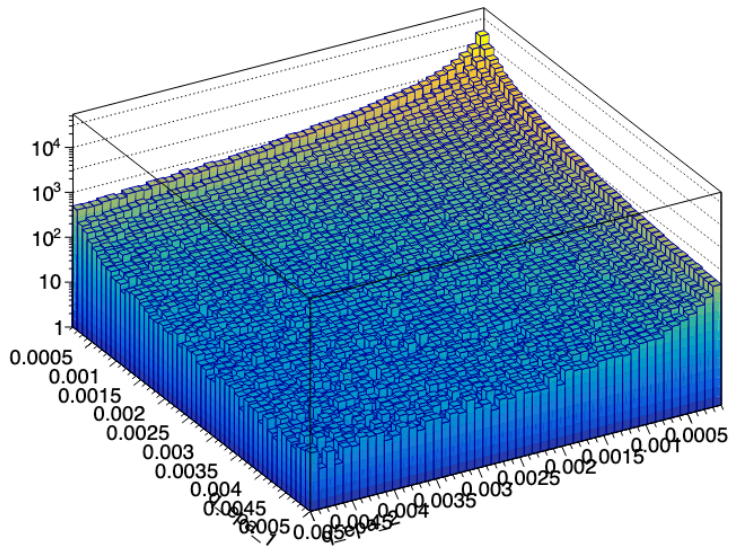


Generator

M.Berggren

- generation of virtual photon samples done
  - see talk M.Berggren Sw&Ana 15.02.23
  - reminder total of 86 channels
  - 72 w/ < 1M evts / 14 big channels: ~ 450 M evts
    - corresponding to ~1year of 250 GeV running
    - roughly twice the Bhabha running (not small !)





- ongoing:
- generation of 500 GeV Bhabha samples requested by T.Suehara
  - using latest Whizard version and current iLCSoft prod version

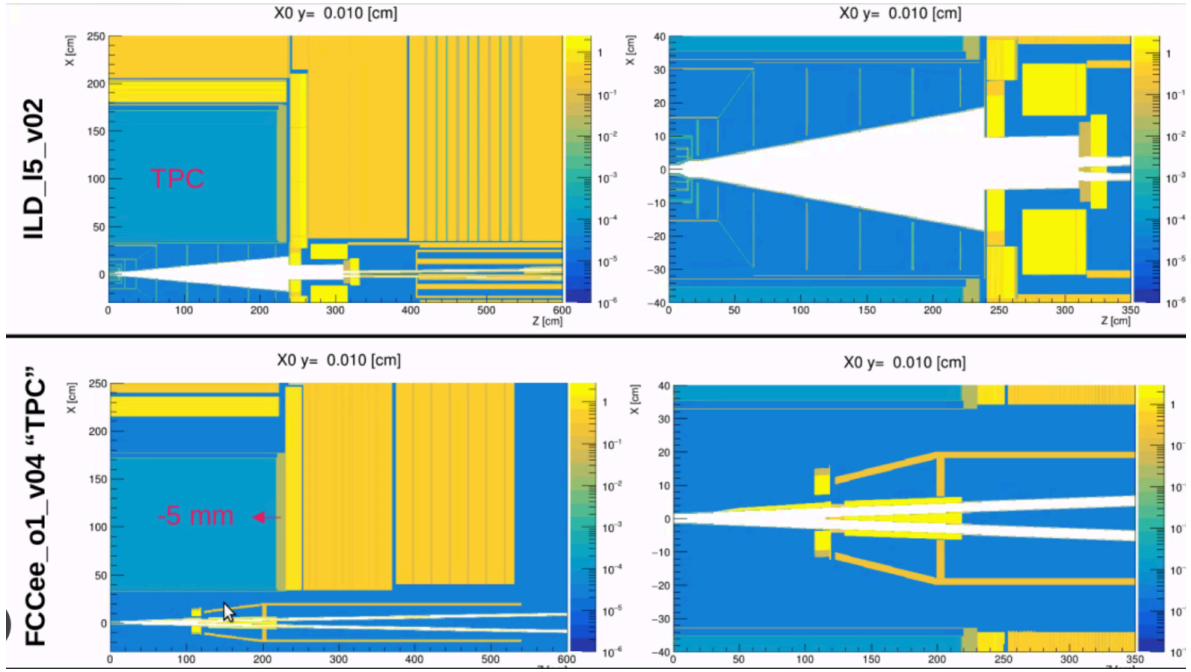
Simulation

D.Jeans

- dedicated meeting of technical/MDI coordinators and software coordinators on forward region in ILD for a circular collider (e.g. FCC-ee)

- discussion on using CLD (CLIC for FCC) forward part as start and adapt to ILD detector
  - create a baseline simulation model for initial studies
  - many open questions to be answered…

- D.Jeans will look into this



Reconstruction

T.Madlener

- no news on iLCSoft
- currently work focused on Key4hep
  - PODIO/EDM4hep
  - LCIO-EDM4hep conversion

- working towards starting a transition of moving to Key4hep

Monte Carlo Production

H.Ono, R.Yonamine

- ready to start production of virtual photon samples

- need more storage at DESY-SE
- resource needs:
  - ~ 50 TB * 2 = 100 TB

- preparation for more disk space at DESY is ongoing
  - (should be available very soon)

250 GeV samples

group	nbjobs	total_nb_inputs	totev_submit		CPUday sim+rec	SIM (TB)	REC (TB)	DST (TB)
aa_2f_leptonic_eW_pW	133,800	446	267,600,000		9,450	40.8	180.9	6.17
aa_2f_leptonic_eW_pB	123,433	529	370,300,000		10,383	40.4	177.2	8.45
aa_2f_leptonic_eB_pW	123,400	617	370,200,000		10,839	44.6	160.9	7.41
aa_2f_hadronic_eW_pW	71,600	358	71,600,000		6,042	38	83.7	2.9
aa_2f_hadronic_eW_pB	60,133	451	90,200,000		6,613	43.9	82.4	3.39
aa_2f_hadronic_eB_pW	60,267	452	90,400,000		6,672	40.6	87.4	3.47
aa_4f	229	40	929000		14	0.03	0.08	0
5f	946	52	620000		87	0.8	1.09	0.03
3f	617008	1504	712440000		71949	460.3	752.78	18.76
Total	**1,190,816**	**4,449**	**1,974,289,000**		**122,049**	**709**	**1,526**	**51**

-> ~ 40days for 3000 CPUs