

Weekly Report

-- This week , I mainly report my status --

CEPC CMOS Pixel Sensor

-- Update of the firmware (for B-matrix)

-- adjust the format to that of “A” with the TUL (finally, it is done by Chenfei)

-- run simulation, verification/debug (most work was done by Chenfei & Liejian)

CEPC Data Analysis

-- Higgs2ZZ , deal with the ZH samples

-- run simulation/reconstruction from stdhep files

-- run analysis procedures... after that, found large background, and try to tune the cut.

Allpix2 (Lingteng)

Cut Flow Table(signal vs ZH)

just confirmation

	Signal (->ZZ*)	ZH	$\mu\mu H$ (->WW*)	$\mu\mu H$ (-> $\tau\tau$)	$\nu\nu H$ (->ZZ*)	$\mu\mu H$ (->ZZ*)
Missing mass > M(di-jets)	145	3336	889	1182	212	145
80 < M(dimuon) < 100	133	2063	776	1063	110	131
120 < RecM(dimuon) < 135	118	1783	668	951	42	116
N(pfo) > 15	99	553	320	154	37	96
Pt(total visible) > 10	93	502	299	132	36	92
Min angle > 0.3	87	455	281	120	33	85
Missing Mass & M(dijets)	61	70	13	9	29	60
Pt(jet1) > 3 & Pt(jet2) > 3	54	55	11	3	26	52
N(lepton) < 3 (==2)	52	55	9	2	25	50

Cut Flow Table (signal vs bg)

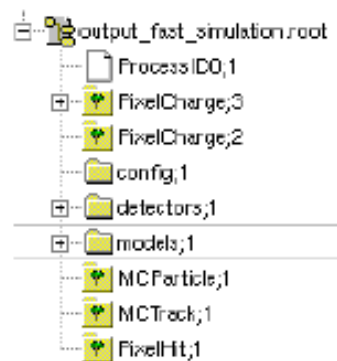
	Signal	SM lep.	SM had.	sznu_sl	sze_sl	ww_sl	zz_sl
Missing mass > M(di-jets)	145	1176076	144	5	0	1683	2435
80 < M(dimuon) < 100	133	601787	0	0	0	174	886
120 < RecM(dimuon) < 135	118	39245	0	0	0	48	174
N(pfo) > 15	99	1513	0	0	0	48	173
Pt(total visible) > 10	93	235	0	0	0	48	30
Min angle > 0.3	87	98	0	0	0	13	28
Missing Mass & M(dijets)	61	35	0	0	0	0	3
Pt(jet1) > 3 & Pt(jet2) > 3	54	5	0	0	0	0	1
N(lepton) < 3 (==2)	52	4	0	0	0	0	1

Next week

- Join the test beam.
- I will visit DESY from 19th Aug. - 5th Sep.

Weekly report

- Run the telescope example in allpix2 and get the root file.



- Understand the parameters in the config files according to the allpix2 manual.

Lingteng

Plan

- Try to do the DESY telescope stimulation

Lingteng