CEPC Soft Web

Functions:

 0、Overall Description of CEPC Physics (1 page)

 1、Introduction to Detector Model & Key Physics Channels

 Baseline Detector Model;

 Detector: Introduction & Display of the whole Detector, and each sub-system

 Physics Benchmarks:

 Higgs: llH, vvH, llH->WW\*->lvqq & 4q, …

 Leading SM background

 ISR Return Z,

 WW, ZZ

 Semi-leptonics

 Alternative detector models.

 2、Installation and Quick Start

 Objective: Start from SLC6, a fully functional Installation

 3、Software general description

 4、Building Blocks of Software/Samples

 4.1 Generator

4.2 Fast Simulation

 4.3 Mokka+ Simulation

 // Easy set up and a few simulation

 4.4 Data Models (Marlin + LCIO)

 // Common

 4.5 Druid

 4.6 Reconstruction in general

 4.7 Digitization ~~ VERY IMPORTANT…

 4.8 Tracking

 4.9 PFA & Arbor

 4.10 Photons

 4.11 Leptons

 4.12 Taus

 4.13 Jet Clustering

 4.14 Jet Flavor tagging

 Concrete examples:

 Sub-detector/Object Performances:

 Tracking Performance Analysis –

 Photon Energy Resolution

 Neutral Hadron Energy Resolution

 PFA Level Performance

 Lepton ID Plots

 Separation Plot

 W-Z-H Mass separation

 Physics Analysis

 llH, Higgs recoil mass spectrum

 H->di photon Mass spectrum

 H->mumu Mass spectrum

 vvH, recoil Mass spectrum & Z, W fusion separations

 H->WW mass spectrum