CDC Meeting Report

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1 Design Consept of Full Simulator (suggestion)

1.a Working Area

- Experimental hall
  An Experimental hall filled with the air is required for detector-installation. (G4 calls it "world volume".)
- Local working area for each detector
  All detectors have a local working area filled with the air. The shape and size of the area is managed by an administrator.
- Set of detectors
  We can make detector-set (ex. VTX and CDC = Tracker) inside a new working area filled with the air. (ex. Tracker Area)

1.b Coordinate System

- Each working area has its local coordinate system. All materials must be placed by their local coordinate.
- Each working area must have an installation method. All areas (ex, Tracker Area, Calorimeter Area...) are placed in their parent area (ex, Detector Area, Experimental Hall...) by their install method.

1.c Naming Convention

1.d Class Hierarchy

2 Preparation for JPS

2.a Menu List

- A) Making a Full Simulator for JLC
  - Simulate detector's response under the magnetic field 3T
  - Find best configuretion of each detector
  - Estimate background
- B) Event Reconstruction
  - making Track-Finding and Track-Fitting system
- C) Simulation
  - Expected physical process

2.b Before JPS

- Make concept of Full Sim
- Making CDC-part (3T version, easy cell structure)
- Simulate background