

Major changes in Quick Simulator since ACFA WS@Beijing

Akiya Miyamoto
at JLC weekly meeting @KEK, 5-February-1999

(see <http://www-jlc.kek.jp/subg/offl/lclib/lclib.html>
<http://www-jlc.kek.jp/subg/offl/jsf/jsf.html> for more details)

1. VTX

- * # VTX layer can be > 2, Hit points are gaussian smeared.
- * Production: CDC_VTX;Track_Parameters
Use only inner and outer most hits. (as a temporary version)
- * Detector Parameter set for 4 layer VTX

| r | z | |
|-----|------------|--|
| 2.4 | +D 5 cm | <i>Insufficient coverage without forward vertex detector</i> |
| 3.6 | +D 7.5 cm | |
| 4.8 | +D 10.0 cm | |
| 6.0 | +D 12.5 cm | |

(similar program is prepared for JIM.)

2. Interface to BASES/SPRING Generator

- *Prepare ee -> WW generator as an example.
Most of the source code written by fortran is reused.
- * Now, K.Fujii is thnikng about PDG class to write all codes by C++.

3. SIMDST (Common simulator output)

- * According to the request by S.Yamashita, simulator data format to be used by QuickSimulator and JIM are considered. A lot of CPU time is required to produce JIM data. A simple and small data structure to share data production is requested.
- * Use FORTRAN unformatted I/O.
Though the binary data structure depends on OS, it is easy to use.
~ 10kbyte/300 GeV ZH event by Quick Simulator.
- * ntuple or root file may be created.
- * Test data is now placed at
/.../ccjlc.kek.jp/fs/ea0/simdata/
It is also available at,
<http://www-jlc.kek.jp/subg/offl/simdst/data/>

ROOT file at this location could be accessible by ROOTD through network. Does some one has interested to do R&D ?

4. Comming next ?

- * make sample data by Quick Simulator, and put them on web and ftp server.
- * JIM will be released soon. > Make a comparison.
- * Event Display of SIMDST (by Nakamura san ?)

- * More event generator.
- * Prepare codes to read MC data from a file.
- * ...