

Where Do We Stand?

Manfred Paulini
CDF Simulation Meeting
10 October 2002
Fermilab

- **LaThuile release is now 4.8.4**
- **→ Re-integrating simulation → 4.8.5pre1 has been built**
- **Generated 10k samples of $W \rightarrow e/\mu$, $Z \rightarrow e/\mu$, $t\bar{t}$ with 4.8.4pre2**
- **Changes that went into 4.8.5pre1:**
 - **Silicon: Fix of potential memory leaks, more hooks for realistic MC, creation of PropagatedSiParticleColl (also in keepList), fix to PadTrackModule to inherit from AppModule, add utility routines for SiStudyGroup, change some defaults in tcl files**
 - **Muons: Fix merging of neg. times in MuonDigitizer, BlueBeam & MiniSkirt off by default in tcl, add some MuonFiducialTools**
 - **Calorimeter: fix bug in CalDataMaker to correctly tread PEM tower with WHA behind**
 - **generators: remove Grappa from default build (executable size)**
 - **EvtGen: add new talk-to's and some fixes**
 - **SvtSim: fix bugs**

Status of Simulation Validation

- **Known features in 4.8.4pre2:**
 - CT_SimVertex: core dumps when using TrackOBSPMatch
 - Calorimeter: E/p vs. data: MC too narrow and tail does not match, tail in highest pT track pointing to tower (also in low-pT pions), 1% energy shift in plug tower 40-03, CES dX and dZ distributions too narrow in MC, potential difference in fraction of zero's vs. pT (see talks by Shabnaz & Evelyn)
 - 1 core dump in silicon routine in 50k test with realistic MC (Saverio)
 - Potential framework problem with too large files
 - COT track multiplicity match
 - Potential problem with precision in QQ boost routine
- **Simulation is in workable condition (10k, 50k tests ok)**
- **Like to request sign off on silicon simulation, realistic silicon MC & SvtSim**

