

Quo vadis Simulation?

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CDF Simulation Meeting
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Fermilab

Subdetector status:

- **Silicon:** Tuning of physical & parametric CDM still in progress – strong interest of Btag & top group, milestones in October
- **COT:** Understanding of occupancies in data & simulation
- **Calorimeter:** In good shape, better than QFL. Current issues: retuning of lateral shower shape for low pt tracks, crack response (3 mio), CES response (see talk by Evelyn), plug waiting for better understanding of reconstruction, PPR currently not included
- **Muons:** Coming together, better than QFL, CMU, CMP ok, CMX need better understanding of data, need more validation in general
- **ToF:** functional
- **CLC:** fine
- **Generators:** Grappa still not in cdfSim, MC@NLO ready to go into cdfSim, encourage standalone generation of matrix element generators
FNAL event generator workshop on Fri Oct. 04

- **Trigger simulation: Make SVTSim into user friendly; work in progress on making mechanism for lumi weighting available; work on "realistic" SVX simulation in progress (functionality exists)**

Operational:

Follow path of successful new model for production validation:

- **Use release frozen for production as base release (4.8.0)**
- **Do 100k test of tt= events to check for core dumps, corruption, ... => fix problems (4.8.1)**
- **Run dedicated samples to test the various parts of the simulation for performance (dijet balance for the calorimeters, $W \rightarrow e \nu$ and $W \rightarrow \mu \nu$ for lepton id, ...) => Need people assigned to validate these samples => => need stronger physics group involvement (See discussion to follow)**

Requests for setting priorities in simulation features should be joint effort of simulation group together with offline & physics coordinators as well as physics groups

