

# Monte Carlo Workshop April 25, 2002

## Status of COT Simulation

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Goal: Comparison of COT data and simulation

- Data

- Cdfsoft Version 4.4.0
- dataset: stripped  $J/\psi \rightarrow \mu\mu$  (run# 138425 )
- 167 events  $\rightarrow$  20k tracks

- Simulation

- Pythia + QQ  $\rightarrow$  cdfSim  $\rightarrow$  ProductionExe
- drift models: Penn & default (“Garfield”)
- $\sim$ 450 events  $\rightarrow$  20k tracks

Comparison slides that follow show 3 plots:

- top: data
- center: Penn model
- bottom: Garfield model

- Garfield
  - current default in cdfSim
  - entirely parameterized
  - produced by the Harvard group (cdfnote: 5050)

- Penn

- available from SimControlModule talk-to

ConfigMenus

CotGroup\_CotSuperLayer

```
# DriftModel set Garfield  
DriftModel set Penn  
exit
```

- full pulse formation and ASDQ simulation—slow
  - currently provides width only (for  $dE/dx$ ). Start time is calculated but is not yet available

<http://salam.hep.upenn.edu/~wasiq/asdq-talks.html>  
<http://penn01.fnal.gov/~cot/>





























