July Processing
Status and Schedule

David Brown

Release Status

- V0.2.5 announced and Patched
  - Includes all fixes, development from V0.2.4
  - installed at CNAF for all architectures

Background Status

- Fullsim Radiative Bhabha bkg complete
  - 1M beam crossings simulated
  - Neutron interactions simulated in Geant
- Large angle Rad. Bhabhas and Pair electrons
  - Currently reusing files from Feb. production
  - Will regenerate with DG_4, V0.2.5 in next days
- Background timing windows (preliminary?)
  - -1.75→0.25 µsec window for Bhabha e, γ
  - -2.5→0.25 µsec window for neutrons
  - -0.25→0.25 µsec window for pair electrons

Pair Filtering

- Electron pairs generate ~10 extra tracks/event
  - causes combinatoric blowup in DReco, BReco
- Solution is to filter electrons using Svt dE/dx
  - AntiElectronLHSelection (from Leonid)
  - High efficiency, ~95% rejection rate
- Requires BtaCandidate list re-arrangement
  - Reconstructed Tracks $\Rightarrow$ AllTracks list
  - Filtered tracks $\Rightarrow$ ChargedTracks list
  - Electron selectors start with AllTracks

Production Performance

- B (Had and SL) cocktail and $K^{(*)} \nu \nu$ analyses
  - 2GHz Xeon processor
    - 50% faster on 2.27GHz Nehalem machines
  - 0.4 secs/event with no backgrounds
  - 0.66 secs/event with Rad Bhabha background
  - 0.87 secs/event with all backgrounds
    - includes pair filtering
  - 2.0→6.0 KBytes/event (acceptable)
- Bhabha_bhwide and $\tau \rightarrow 3\mu$
  - 0.09 secs/event with all backgrounds

Schedule

- V0.2.5 Validation samples in ~24 hours
  - ~500K events of each request
  - Prompt response needed, especially from DG
- 2 week production run starts July 26
  - enough to complete initial DG requests
- First 24 hours data need to be validated
  - Need to decided what to run, who will test
- Up to 4-weeks additional production in September if required

Production Requests

- Priority is to DG studies

  - charge from Annecy

- Additional time allocated as available

  - preliminary decisions today

  - final decisions before September restart