

February 2010 Production

David Brown

SuperB Production

- Use FullSim for Background frames
 - accurate generators, machine element models
- Use FastSim for physics signals
 - From generation to physics tuple
 - Background frames merged with generator signals
- Many analyses in parallel
 - $K_{\nu\nu}$, charm, S2B, 2-body,...
- Concentrate on generics (backgrounds)
 - B^+B^- , $B^0\bar{B}^0$, $c\bar{c}$, uds

February Production

- First 'full-scale' production for TDR
 - 1 ab^{-1} ($\sim 10\text{X}$ November production)
- Physics reach + detector configuration studies
- Target production start for Feb. 1st
 - code freeze ~ 2 weeks earlier
 - target 2 weeks completion time

Developments for February

- More complete background simulation
 - e^+e^- pairs, neutrons, Touschek (?)
- Better tracking simulation
 - Full Kalman fit (outwards + inwards)
 - Tracking pat. rec. confusion simulation
 - hits randomly mis-assigned based on density, proximity
- Additional analyses, generators
 - τ LFV, polarized τ , 2-body, SL tags, ...
- Job management improvements
- Additional resources beyond CNAF

Questions for Physics/Det

- Is 1ab^{-1} a useful amount of data?
 - is November 100fb^{-1} already sufficient?
 - is $\sim 10\text{ab}^{-1}$ required for interesting results?
- Can relevant analyses be ready in time?
- What backgrounds are necessary?
 - are pairs + radiative Bhabha enough?
- Are multiple geometries still required?
 - are full statistics needed for each geometry?
- Is signal mode production needed?