Simulation News

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ALCPG Workshop

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**Issues**

- Improve level of detector simulation
  - Collaborative effort on G4 becoming more cohesive
    - e.g. Mokka, LCDG4, TB sim @Kansas, ...
    - strong G4 expertise @SLAC, thanks!

- Event Generation
  - What generators should we actively support?
  - Canonical 2ab⁻¹ samples available for fastMC.
  - Catalog existing samples (what metadata?)
  - Can we use any Grid services?
Issues

- LCIO v1.0 out
  - Simulation output now common
  - Adapted to real detector data
  - Work still needed to define reco objects
- LCDRoot support and user base
- Better/faster detector response simulation
  - emphasis on digitization to understand hit merging, ghosting, resolution smearing
  - need for ~fastMC to study pattern recognition issues quickly for different detectors.
Milestones

- Need feedback from physics and detector groups on their requirements.
- What detector capabilities do we need to benchmark?
- What changes are needed for the canonical detector(s)?
- What do we need to accomplish by LCWS?
Documentation & Communication

- lcd-dev & lcd-sim mailing lists ~dormant
- Introduce hypernews forum
- Should be usable, still evolving.
Announcing the next in a series of Workshops on Simulation and Particle-flow Reconstruction for a future Linear Collider:

**Linear Collider Simulation Workshop III**  
June 2-5, 2004  
Argonne National Laboratory

Topics for discussion include: GEANT4 event and particle generation, detector models and performance, Particle-flow algorithm development, standardized geometry and data I/O, and tools for reconstruction and analysis... - continuing the efforts started at

**Linear Collider Simulation Workshop**  
May 19 - 22, 2003

Workshop on simulation, energy-flow algorithms, and software for the Linear Collider  
November 7-9, 2002, Northern Illinois University, DeKalb, IL, 60115, USA