

Tracking studies at Colorado

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- SODTracker
- Track Fitting
- Goals for Vancouver in red

SODTracker

- Track finding and fitting in the Silicon Outer Detector (SOD)
- Method:
 1. Find seed tracks in the Vertex Detector
 2. Extend seed tracks by adding hits in Tracker
 - $r\phi$ only --> add available z information
 3. Fit tracks
 - circle fitter --> Kalman filter fitter
 4. Insert SODTrack (implementation of Track) in event
- Performance: high efficiency, good resolution
(see SiD tracking meeting presentation on March 17, 2006)
- SODTracker code committed to CVS (in org/lcsim/contrib/)

Track Fitting

- Fit tracks found with SODTracker
 - currently simple circle fit
- Full 3D fit with Kalman filter
 - Goal: have a working basic fitter for VLCW06
- Needs:
 - how to access the material information? Example?
 - and time...