

Evolving the LCIO Track Class

The purpose of this page is to host a discussion about improvements to the ILC Track class. The discussion might expand to include related classes such as hits and vertices. Please pass the url of this page on to any interested colleagues.

Motivation

Some of our efforts on SiD tracking are now suffering from limitations imposed by the existing LCIO track classes. For example we have a tower of Babel problem: many of our colleagues have created their own private, incompatible, extensions to the publicly supported track, hit and vertex classes. New code, currently under development, will require further extensions. At the DESY ILC meeting several speakers from other detector concepts reported that they too required extensions.

How to Proceed

1. Is this the right time and the right forum for these discussions?
 - Are there similar or related efforts that we should join or should be aware of?
2. Do we need to announce this more widely. I will announce this wiki page in the following places:
 - The lcd-dev mailing list.
 - The ILC forum under the topics: Tracking and Vertexing, LCIO
3. I propose that we start by adding our proposals/wish-lists to this wiki page. I have added mine (see below). We can discuss these electronically and then arrange phone/video meetings?
4. Should we plan to meet in person at ALCPG at Fermilab this fall?
5. When is a reasonable time scale to have a finished product?

Proposals and Wish Lists

1. [From Rob Kutschke](#)
2. [Miscellaneous comments](#)
3. Jan Strube's proposal: <http://confluence.slac.stanford.edu/display/~jstrube/A+New+Track+Interface>
4. [FastMC Track Discussion](#)