



Tracking & Alignment Workshop

28./29.01.2010

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TIM Meeting

- weekly TIM meeting Thursdays 11:30-13:00h
- need place to discuss recent changes to the software, both technical issues and algorithm changes
- in general: each change to tracking related code, should be discussed/presented/mentioned there
- if there are not news, meeting can be kept short
- is a virtual meeting o.k.?

New Fit Interface

- Most frequent question I get asked by almost everyone

Is an easy interface for the track fit available for all track types which gives Identical results than in Brunel?

The tool is available from (Tr/TrackTools v3r23 – Rec v7r8):

- exactly identical results for all track types but velo only tracks
 - very similar results for velo only tracks
- See talk in T-Rec 9. November (Kostya Holubyev)

```
# include "TrackFitterInterfaces/ITrackFitter.h"
```

```
ITrackFitter* m_fitter = tool<ITrackFitter> ("TrackInitFit");
```

```
LHCb::track tr;  
m_fitter->fit(tr);
```

No need to configure anything, picks automatically proper initialization.

Focus of the Workshop

Pattern Reco/Vertexing (offline and HLT) (Thursday, 28.01.2010):

- Which pattern reco do we like to use for the reprocessing of the 450 GeV + 450 GeV 2009 data?
- Which pattern reco do we like to use for the 3.5 + 3.5 GeV data supposed to be come in?
- What is our current performance?
- We should test combination of all changes for 450 GeV on V0 signals before releasing them for reprocessing (Timescale next week?)
 - recommended alignment decided this morning
 - decided on very loose PV last week TIM meeting
 - no changes to Matching and Seeding (see TIM meeting last week)
 - no changes to Velo
 - enlarge the ST and OT errors – proposed this morning
 - changes to PatDownstream, addTT and PatForward see this afternoon
 - changes to HLT track tuning?
 - do we want second track collection (downstream tracks) stored

Additional this afternoon: update on B field and ghost studies

Focus of the Workshop

Tracking Detectors (Friday, 29.01.2010):

- What is the current status of our understanding of the sub-detectors?
- Are there any tools missing/to share to improve it?
- What is our wish list for simulation (feed back to Gloria)

+ update on tools/algorithms

Very full agenda, however this is a workshop and we do not want to rush through the programme!

If we need more time, we still have the whole Friday afternoon;
please take as much time as you need.