

# SoLID tracking/software status

## Ole, 12-Feb-2013

- CW 2-4: Test tracking with latest digitized data from Seamus. Near zero tracking efficiency. Investigate.
- CW 4: Realize that wires in different planes are not parallel due to relative angle of baffles. Explains tracking failure with TreeSearch. Can be fixed easily by redigitizing with different strip angles (although this breaks geometric symmetry, probably no big deal). **How to handle this with real hardware? Do we want trackers with non-parallel strips?**
- CW 5: In view of shifted March 22 “deadline”, decide to postpone re-digitization and to take time to reorganize the badly hacked tracking library.
- CW 5-7: Reorganize library, eliminating various small bugs along the way. **ETA Feb 15**. Indeed, almost done.
- CW 8: Test new library. Re-run digitization. **Need input from Seamus et al. (next slide)**.
- CW 9: Analyze new digitized data and get results (yea/nay on TreeSearch). **ETA Mar 1**.
- CW 10-11: Study details, produce plots. Consider track curvature.
- CW 12: Prepare for collaboration meeting.

Need (from Seamus or Rich):

- Info on true MC track to be written to ROOT file with digitized data. Please put this into `TSolSimGEMDigitization::FillTreeEvent`. Need 3-vectors for origin and momentum/direction. I can add the variables to the tree. Also need info on track reference plane wrt lab system.
- Ideally (esp. to investigate track curvature), also want true hit info (center position where true track crosses each GEM plane). If multiple tracks exist, include some kind of track index.