

INTT Workshop Summary

Joseph Bertaux

Purdue University

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Goals for this workshop included:

- Gave two talks
 - A Practical Understanding of Git ([link](#))
 - Brief Overview of Λ_c Related Physics and Results ([link](#))
- INTT-MVTX and INTT internal alignment
- Λ_c reconstruction and MC training workflow

- These can be found on the Indico page for the workshop
 - <https://indico.bnl.gov/event/24622/>
- The talks have been updated since originally presented
 - A Practical Understanding of Git (updated) ([link](#))
 - Brief Overview of Λ_c Related Physics and Results (updated) ([link](#))
- This is to help them serve as references for those who found them useful
- (Or if I present them again)
 - The final version of the Git talk is particularly useful
- The \LaTeX source is also available on the Indico page
 - It won't compile without local images, which have not been uploaded separately
 - The code itself is a useful reference for those learning \LaTeX or beamer

- Working (remotely) with Tony Frawley and Greg Ottino on alignment
 - Time difference makes attending meetings difficult
 - Communication was primarily over email and Mattermost
- Succeeded to run `HelicalFitter` over real data, 0-Field runs
- Succeeded to run `Millepede` over the residuals file produced by `HelicalFitter`
- Next step is to produce a `localAlignmentParamsFile.txt` from `Millepede` output
 - Tony has a macro to do this, but I need to understand it better
- Ultimate goal is a standardized workflow
- More progress to be made during the tracking workfest Dec 10 & 11

- Continuously improving Λ_c workflow
 - A previous limitation was lack of training data
 - Improved my scripting to allow for bulk Condor submissions
 - This uses the `_CONDOR_SCRATCH_DIR` workflow Chris has recently described
 - https://wiki.sphenix.bnl.gov/index.php?title=Condor#Minimizing_Disk_Ops
- Helper class facilitates
 - (re)specification of source branches
 - training variables (as functions of source branches)
 - cuts
- Almost centralized configuration
 - `bash` scripts must know the path to data files
 - Otherwise, all parameters are specified in a single macro
- Initial double-Gaussian fit and training macro are near-finalized
- Training application macro soon to follow

- An extra task for me was to help people with software
- Everyone did a decent job of helping everyone else this workshop it seems
- Please reach out if you need help with technical, software-related issues
 - I tend to respond to direct messages or direct pings in Mattermost quickly
 - INTT codes you want help with may be codes that I wrote
- Remember there is always the [sPHENIX Software Help](#) channel
- In order to become a really good programmer:
 - Don't stop when you've figured out how you *can* do something,
 - keep going until you figured out how you *should* do something
 - And you can always keep going ...