

Thoughts on SBSGenericDetector Class

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Updates to Juan Carlos' talk

- [Presentation](#) by Juan Carlos Cornejo went over setting up the SBS-offline and basics of SBSGenericDetector class.
 - Updates to Juan's talk
 - For PODD analyzer :
 - git checkout 70ce8ab
 - This is the 1.7.0-rc4 commit.
 - Some changes in SBS-offline are needed to be at the latest commit 1.7.0-rc5
 - For SBS-offline:
 - I created a branch bbshower_dev in my own SBS-offline repo based on the hcal_dev in Jefferson Lab repo
 - This bbshower_dev branch was merged into the Jefferson Lab main branch.
 - Should use the main branch of Jefferson Lab repo.
- Start to put SBS-offline documents in [wiki](#)

Suggestions for working with git

- Have an individual github account.
- On github.com: Fork the JeffersonLab SBS-offline to your account. Setup to “watch” Jlab SBS-offline
- `git clone git@github.com:GithubUserName/SBS-offline.git` (This is ssh access)
 - This will be the “origin” remote repo
 - Create your own branch: `git checkout -b NewBranchName`
- `git remote -add upstream git@github.com:JeffersonLab/SBS-offline.git`
 - This will be the “upstream” remote repo
- You can pull (or fetch/merge) changes from the upstream (JeffersonLab) repo.
- You can push commits in your branch to the origin (PersonalGithub) repo and then make pull requests.

- If working on modules in analyzer repo, then can do the same thing.

Some Updates to SBS-offline

- Start documentation of BBShower. [Repo](#) and [pdf](#).
- Modified SBSData for the ADC Waveform so that it will integrate the first pulse above threshold and get pedestal, timing, amplitude, integral .
 - Uses algorithm of FADC except threshold is relative to pedestal.
 - One finds only first pulse. Needs to change.
 - If no sample above threshold determines integral over fixed sample region. Time is set to zero.

What is the ordering of the detector method calls?

- For example with CoarseProcess
 - SBSGenericDetector has its own CoarseProcess
 - SBSCalorimeter inherits from SBSGenericDetector and has its own CoarseProcess which calls SBSGenericDetector::CoarseProcess
 - SBSBBShower inherits from SBSCalorimeter and has its own CoarseProcess which calls SBSCalorimeter::CoarseProcess
- Ole explained that for example SBSBBShower::CoarseProcess will only be called so that is why you need to call the SBSCalorimeter::CoarseProcess inside SBSBBShower::CoarseProcess