

# Introduction: technical details

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Tracking workshop for HEP

### **ACTS** code development



- Will hear about setting up ACTS software in the next talks
- ACTS code is available on gitlab, its main repository is https://gitlab.cern.ch/acts
- For easy development we created a fork of acts software https://gitlab.cern.ch/berkeleylab/acts
  - master branches are synchronized with the main repositories: acts-core, actsframework, acts-fatras
- A branch of acts-framework (from master) was created for common "addons" that we may want to share for this workshop: *lbl-trkws*
  - Was needed in December for non SLC systems, now ok
- Note: a CERN computing account is needed to access and push your changes to acts, if you can't access the URL above:
  - Login to your CERN account
  - Make sure you login to https://gitlab.cern.ch
  - Email me (spagangriso@lbl.gov) and I'll add you to the project
  - I've already added the ones who did do the steps above in the past

## Suggested workflow for workshop

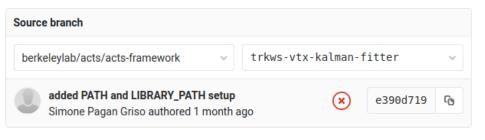


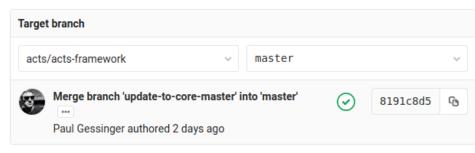
Create your own branch from *lbl-trkws* or *master*:

First user of the group creates a specific branch for the workshop work:

- Develop your code, push to the repo for sharing among the group
- Once the work is done, you can open a merge-request to the main acts repository

#### **New Merge Request**





Compare branches and continue

### **Computing resources**



- You can develop and test your code either:
  - Locally on your laptop (some dependencies needed)
  - On lxplus.cern.ch (familiar env, pacific ocean in the middle)
  - On pdsf.nersc.gov (local NERSC cluster, guest accounts available)
- In case you want to access our PDSF cluster:
  - Guest accounts are already available, talk to Heather or me
  - cvmfs is available, and can be used to setup acts dependencies: source CI/setup lcg94.sh #from acts-framework folder
  - See also CI/setup\_lbl\_pdsf.sh if using the Ibl-trkws branch
  - if you need to setup ATLAS sw:
    source /project/projectdirs/atlas/scripts/setupATLAS.sh
    setupATLAS



### **HAPPY DEVELOPMENT!**

For "local" questions at any point: spagangriso@lbl.gov hgray@lbl.gov