# The PHENIX DAP update

- HEPData development and corrections
- HEPData procedures website updates
- DB
- Theses uploads (Stacyann)
- Conferences?
- REANA
- PHENIX School
- OpenData
- EC presentation: a discussion

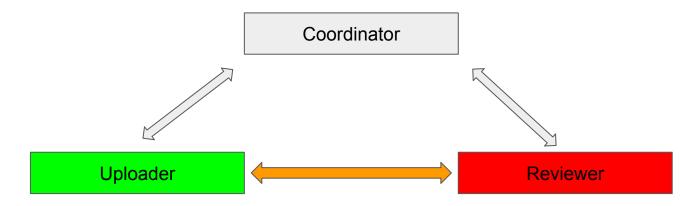
Maxim Potekhin (BNL, NPPS) 01/14/2021

### **HEPData status**

- Thanks to Christine for continued work in this area
- On our side checks and supervision
- Discovered an older entry ppg083 needing correction, work in progress
- 115, 209 are in development
- "Steady state" work in progress
- Trying out the new interaction procedure for the uploaders and reviewers

## HEPData documentation on the website

- The new paradigm is direct communication of the uploader and the reviewer, as we agreed upon in Dec. 2020
- Refactored the content for better readability (lots of material)
  - Separate pages for "policy and procedure" and for detailed instructions
  - The diagram below added to the page
  - Please comment, would be nice to finalize soon



## DB support

- Got some feedback from Irina; paraphrasing -
  - Most scripts are old and mostly static, shouldn't be a problem
  - Voting process does need adjustments from time to time, better to migrate
  - Google Forms (or comparable) are a good drop-in replacement
- Chris: PHENIX calibrations DB is static, will probably work
- sPHENIX does not have calibrations yet, so it's safe in that regard
- Phonebook could replace it but the authors' list functionality is the sticking point
  - Exporting and manipulating data is very doable (already done for the website)
  - Comment can re-implement logic for the authors' list offline
  - The next PHP and/or OS version bump may be too high a hurdle

#### Theses on Zenodo

- Continued effort by Stacyann thank you!
- 124 theses uploaded+backed up on GitHub, and counting
- Proper use of keywords website compatibility
  - Minor improvements could be made e.g. adding appropriate keywords like
    "DCA" where needed (done in this case)
  - Can we ask Gabor to do another quick survey?
  - "phenix" + "rhic" should be ideally added to all uploads
- Looks like this effort will be successfully completed, perhaps later this year

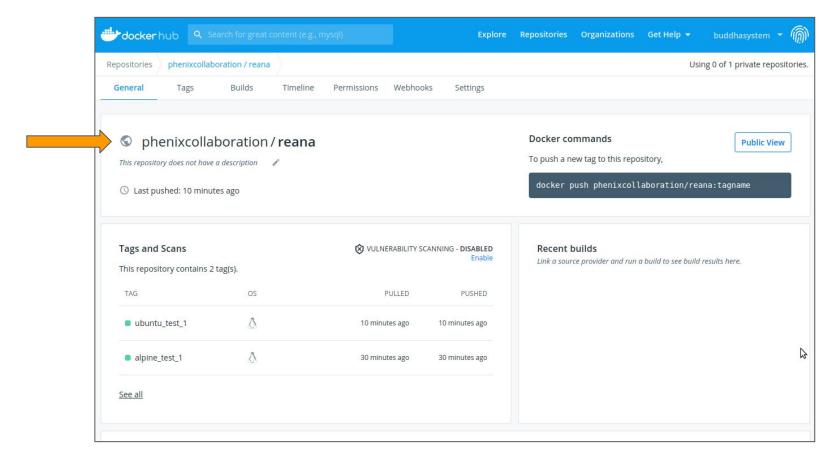
# Conferences and workshops

- Please keep me (Maxim) informed about the conference content that will need to be added to the new site - we are still keeping the old one but both are ideally up-to-date
- Stubbing out conference entries is the first step after which adding material is easy
  - Upload the PDF to Zenodo
  - Tag with the predefined keyword like "zs20", along with other keywords
  - o That's it!
- We can leverage GitHub and ask collaborators to push to the repo, it's not hard
  - Suggestions?

### REANA

- Described in our DAP meeting on Dec. 10, 2020
  - A robust framework for reproducible analysis
  - Container-based (capture of the computing environment and software)
  - Structured workflow description
- What's new: a REANA test cluster has been created at BNL
  - Running initial tests, good support from SDCC
  - BNL users are welcome to use it for non-production purposes
- Created an organization on DockerHub for PHENIX materials
  - Named "phenixcollaboration"
  - DockerHub is one of the leading repositories for Docker images
  - Integration with REANA and other systems
- Can be as simple as "docker run phenixcollaboration/muon\_analysis:0.1"
  - But more optimally configured in REANA more flexible configuration options

## DockerHub



# PHENIX School - leveraging the website

- Our current strategy is not to host actual files on the site and use cloud resources instead
  - o GitHub, DockerHub, OpenData, Zenodo
- The website itself is a portal and link aggregator
  - some content (text, figures) still hosted locally of course
- In my opinion this approach should be used for school(s)
- In past I was already using Zenodo to upload prior schools' slides

## PHENIX School - materials

- The 3-4 analysis tutorials/writeups are our current assets
  - Caveat some need work i.e. software references are obsolete
- As before, greater engagement by the community is crucial to grow this section of the PHENIX website
  - Still lacking reliable basic tutorials e.g. PISA some testing done but finalizing is on the to-do list - this can be a contribution from someone actively running now
  - REANA effort looks more hopeful now but it would need content anyhow
- School will any materials be reused? Who will created a curated list?
  - Adding materials to the site and Zenodo is not a problem
  - Can we create truly reusable materials for this and subsequent schools?
- Will there be a task force?

# PHENIX School - scheduling

- Two scenarios
  - Short to medium term effort by students and analyzers prior to School
  - School in a few months, enhance the DAP content on the site in the meantime
- Things usually take longer than expected, and we do have long-lead items
- Also current tutorials will indeed need an update

## The OpenData Portal

- Materials provided by Gabor reviewed by the OpenData team and their high quality has been recognized - in general, things are looking good for us
- There is feedback (sent on the Christmas day, hence the lag) with a long to-do list
  - Renaming folders (in the CERN storage)
  - Extracting macros from the paper into standalone \*.C files etc
- Also: "The two n-tuple data files have different set of variables, which will cause some attribution troubles in the 'Dataset semantics' part of the record description. Basically, we would have to explain which variable refers to which file. This could be solved if we create two separate records, one for each ntuple, and then another record for the example code describing its use".
- Need to discuss this with Gabor, work in progress

# The OpenData Portal as a potential school platform

- OpenData was designed to host datasets, software and documentation
- At first glance this seems ideal to keep materials well organized for school
- Logically extended to containerized software, REANA etc

## DAP slides for EC

To be presented and discussed separately, stay tuned