9/9/21 LArSoft Steering Group/Offline leads meeting notes

Attendees: Liz Sexton-Kennedy, Robert Wilson, Tracy Usher, Joseph Zennamo, Wes Ketchum, Tom Junk, Andrzej Szelic, Erica Snider, Katherine Lato

This is the time of year LArSoft starts developing the LArSoft work plan for the next year. We will have one-on-one meetings with each experiment through October, have a rough draft in November, ready for approval for December Steering Group meeting.

Erica reviewed the 2021 work plan. LArSoft has been working for years to make our code work with multi-threading to manage memory without leaving CPUs idle. This has been the highest priority.

Questions/comments on the work plan:

- Tracy noted that they don't have a satisfactory event display for everything they need, so use two. Need to make it more uniform. We know how to make some steps in that direction, it's just a question of finding time.
    - LArSoft can help with design or integration issues, but has no plans to work on event display development, as described in the work plan
- With redmine requiring SSO:
    - Several people mentioned that it is difficult to find information ever since Redmine required the SSO service. It used to be possible to use google, but now it's not. The redmine search feature is useless. At first, we (experiments, LArSoft) expected the redmine pages to be opened fairly quickly, since they have always been public and contain no sensitive information, but this has not happened.
    - The option for locking the pages was required by DOE. The SSO solution was the least objectionable of two possibilities, the other placing it behind VPN. The lab / DOE (?) is reviewing "public" web page content and opening those that have nothing sensitive, but with many websites to review, LArSoft redmine is not a high priority (for DOE).
    - Since people are being encouraged to move to GitHub, path of less resistance is to move documentation to github, or some other public web page hosting platform (e.g., Jekyll). People are working on ways to automate and move things to a publicly supported place. (Mark Mengel)
    - Note, it's not just LArSoft documentation. Need *art* documentation. All of the FIFE documentation. Those would also need to be moved. LArSoft commented that *art* and LArSoft have the same support teams, so tend to do things together, or at least in coordinated ways. Will make sure that the team understands that this is an issue.
    - Liz noted that Redmine will still be supported for people who can use it with single sign on [suggesting it may never become public again]. For people who need world-wide collaboration, GitHub supports open source. If you have specific needs for data files, that can be discussed.
- Improvements to Pandora
    - Peculiarities of ICARUS geometry and how that is handled in Pandora. How to resolve debugging issues with the geometry within Pandora?

- SBN is looking to incorporate WireCell packages. On the Pandora side, they need a discussion with the group. Where does LArSoft fit? They''re worried about the support--onboarding more people to work on specific things.
- LArSoft has encouraged WireCell and Pandora to build from the LArSoft geometries, but neither team does that in a fully programmatic way. As a result, changes need to be re-implemented within each system.

  Aside from that, LArSoft can help facilitate discussions, but is also only a spectator to Pandora development. There is proof of principle that experiments can get involved as Pandora developers, just as they can become LArSoft developers. At some level, this is the cost of dealing with independent reconstruction packages.

- Pandora has a liaison to each experiment, so should be the first point of contact for such issues. As of November 2020, these were listed in LArTPC Event Reconstruction as:
  - Pandora lead John Marshall john.marshall@warwick.ac.uk
  - DUNEFD single phase Dom Brailsford d.brailsford@lancaster.ac.uk Andy Chappell andrew.chappell@warwick.ac.uk
  - ProtoDUNE single phase Leigh Whitehead leigh.howard.whitehead@cern.ch Steve Dennis srd52@cam.ac.uk
  - ProtoDUNE dual phase Maria Brigida Brunetti Maria.Brunetti@warwick.ac.uk Etienne Chardonnet chardonn@apc.in2p3.fr
  - MicroBooNE Andy Smith asmith@hep.phy.cam.ac.uk Alex Moor afm67@cam.ac.uk
  - SBN Dom Brailsford d.brailsford@lancaster.ac.uk Ed Tyley e.tyley@sheffield.ac.uk Yun-Tse Tsai yuntse@slac.stanford.edu
- Note: UK is not funded to work on ICARUS, so cannot directly support working on reconstruction algorithms / issues for ICARUS.

Please email Katherine Lato or Erica Snider for any corrections or additions to these notes.