6/18/19 Steering Group meeting notes

Attendees: Erica Snider, Herb Greenlee, Katherine Lato, Tom Junk, Jim Amundson.

Event Display work is on hold pending some other strategic decisions by the lab. We have had discussions about what to do, but don't have a detailed plan. The current status has not changed this quarter, and remains:

> The work on identifying possible technical replacements for the LArSoft event display has found four options that should undergo further evaluation: a custom, stand-alone application (of which the existing LArSoft event display is an example), a vtk-based solution (where the g-2 event display is an example), a TEve-based solution (where the CMS event display is an example), and a web browser-based solution (where Argo is an example).

A brief discussion of these options is in a document linked from: https://cdcvs.fnal.gov/redmine/issues/19038

GitHub and pull request migration. Three areas of work have been defined: the formal migration to repositories hosted on GitHub, the deployment of a pull-request system, and the possible re-organization of the repositories in such a way as to reduce the size of build units. Have started work with the first goal being to determine the coding that will be required to port the CMS pull-request system into LArSoft. While most of the porting work appears to be relatively simple, some potential security issues have been identified.

Discussed the status of the vectorization and thread safety work. Jim Amundson noted that, due to the evolving computing landscape, we should consider vectorization as a secondary long-term objective to utilizing GPUs.

Round robin:
- MicroBooNE: Has a replacement been identified for Lynn? There won't be a one-for-one replacement for her, especially with regard to help with such things as breaking changes, for instance. It will be important moving forward that the process of integrating release becomes trivial, which should possible downstream of the pull requests. The approvers for pull requests will ensure that the builds are clean and that everything works.

- MicroBooNE: Concerned about people developing outside the LArSoft environment with incompatible versions of things, and then they want to inject their items back into LArSoft. Discussed how LArSoft will continue to push a development model where we have small build units that are independent from art, and that can be developed in stand-alone frameworks and trivially ported back into LArSoft. Spack might solve some of the problem of dealing with external products, since many of the ones we use are already packaged by the Spack community.

- DUNE: Threaded code, intra-event threading is preferred by DUNE. Not interested in anything that requires us to use more memory to use more threads, we're not interested. Understood.