Fermi Software Week Winter 2018

The software week goal is to facilitate coordination between communication and collaboration between everyone as we move forward with the transition away from DOE funding for Fermi. FSSC members will be available at SLAC all week for group discussions and one-on-one meetings. In addition to targeted topics, we encourage attendees with broad or cross-cutting interests to join the various discussions. There will be plenty of work, so we'll need everyone to take part in this transition.

Previous Software Weeks: Fall 2017, Winter 2017

Dates: February 12-16, 2018

Location: SLAC: Almanor, Havasu rooms, 4th floor SUSB

Remote access: using Zoom - Havasu: https://stanford.zoom.us/j/614104244 Almanor: https://stanford.zoom.us/j/497566243

Live Notes

Wifi:

- eduroam
- · visitor network

Onsite Food:

- SLAC Cafeteria 2nd floor SUSB
- Starbucks near the Guest House

Remote Attendance: We encourage everyone to attend the meeting in person. But we are also planning to provide remote access capability for people who cannot attend, but are interested in joining the discussions. Please indicate below if you will need remote access so that we can plan effectively.

Cultural notes:

- Monday Colloquium is about history of SLAC KAVLI Aud, 4-5pm
- KIPAC colloquium Gravity wave astronomy Thurs 11am Kavli Aud.

Strawman agenda

| | Monday | Tuesday | Wednesday | Thursday | Friday |
|----|--------|---------|-----------|----------|--------|
| AM | | | | | |
| PM | | | | | |

Attendees

| Name | Local or Connecting Remotely? | From | Availability | Topics of Interest |
|-------------------|-------------------------------|-----------|-------------------------------------|---|
| Elizabeth Ferrara | Local | FSSC | All week | All |
| Alex Reustle | Local | FSSC | All week | ST, Conda, Jenkins, Github |
| Tom Stephens | local | FSSC | All week | L1, HalfPipe, ST, GR |
| Tom Glanzman | local | SLAC | Th,Fr (maybe We) | repro, hw infrastructure |
| Joanne Bogart | local | SLAC | All week | ST, GR, Github |
| Heather Kelly | local | SLAC | All week | pinball |
| Don Horner | local | FSSC | All week | L1, HalfPipe, ISOC software |
| Steve Tether | local | SLAC | All week | ISOC software, Archiver, ConfigSystem vs. RHEL6 |
| Helen Poon | local | Hiroshima | All week | All |
| Richard Dubois | local | SLAC | All week, with holes (Tues > 10:30) | |
| Rob Cameron | local | SLAC | when I can make it | All |
| Eric Charles | local | SLAC | Mon-Wed | ST |
| Joe Asercion | local | FSSC | All Week | ST |
| Giacomo Vianello | local | Stanford | All Week | ST, Conda, fermipy |

Session Blocks

- Developer/Release workflow
 - Jenkins
 - Parallel Nodes
 - more build agents
 - stashing?
 - Release process (verify + deploy stage)
 - Mac VM Nodes
 - Job Management (Multibranch pipeline?)
 - Administration
 - o Conda distributions
 - Finalize conda-forge dependencies (2 outstanding)
 - Define config.yaml, build.sh for SCons release
 - Modules or Monolith How to distribute?
 - Docker/Singularity
 - Continuous Integration
 - See Jenkins
 - o OS support issues
 - Mac?
 - SCons
 - Handling user question (Brian & Matt)
 - Move to a py3 version of SCons (version3)? or provide support both for py2 and py3
 - Externals outside slac
- Pipeline Ops Support (running HalfPipe, L1, ASP)
 - o source code location/access
 - o maintenance responsibilities
 - o documentation updates
- ISOC Support
 - Virtualization
 - o Archiver
 - FYI- From Grace Tsai at SLAC Computing:

The current way to access HPSS/astore file family is via our locally developed software running on a Solaris machine, and nobody actually is maintaining this old software. It will be replaced with an HPSS provided package and will run on a RHEL6 host.

The interface to astore will therefore change (no schedule given yet) so we need to think some more about replacing the Archiver or patching it one more time.

- ISOC Operations Tasks and Tools
 - Monitoring, Trending, Reporting
 - ConfigSystem running from the ISOC RHEL6 build
 - Recurring ISOC support tasks
- ScienceTools
 - Unit test framework
 - O Python 3 support
 - o Externals outside slac
- GlastRelease
- Documentation
- Skimmer support
 - Skimmer at Slac

Desired Meeting Outcomes

- Time for Don & Tom & Helen to work with Warren
- Time for Alex to work with Eric on git
- Time for Alex to work with Brian & Joanne on Jenkins
- Time for Alex to work with anyone(?) on SCons dependency management
- Time for Alex to talk with Giacomo about Conda
- Discuss hardware resources for generating builds and running tests
- Full schedule for handing over routine operations and finalizing transition