# SCSC meeting minutes 2011-03-28

Present: Rob Cameron, Ashley Deacon, Richard Dubois, Imre Kabai, David MacFarlane, Stuart Marshall, Randy Melen, Marc Messerschmidt, Brian Moritz, Leonard Moss, Amedeo Perazzo, Vineet Rawat, Norm Ringgold.

Via teleconference: Amber Boehnlein.

## Meeting agenda page

#### Minutes:

- Introduction to/from David MacFarlane
  - o Discussion of SCSC's role, its connection to the Executive Council
- · Rob gave update on IT SubCouncil
  - Revamped SLACspace home with improved organization
  - Two (of four) meetings remain for cataloging IT services
    - Better online documentation required (turning spreadsheet into documentation)
- Upcoming hardware acquisitions:
  - PPA:
    - Richard on Fermi:
      - \$800K of hardware (all storage, no compute)
      - Lots of tape (1500 at least)
    - Richard on BaBar:
      - 24 more nodes (on top of existing 4)
      - Len correctly said it is 60 by end of fiscal year
    - Richard on ATLAS:
      - \$400K, mostly storage, maybe 30 compute nodes
    - Stuart on KIPAC:
      - · In need of storage
      - Pending Lance's investigation
      - 2-3 trays, 10-20U
      - 10U of compute to go into Orange(?) cluster
    - Richard on EXO and CDMS:
      - small purchases, ~30TB each
  - o Amedeo on LCLS:
    - Looking for JBOD with SAS, a few different vendors being considered
    - SSN, SanMina, AMAX
    - No new compute nodes, upgrades to processors instead, compute nodes underused
  - O Brian on Photon Science:
    - Depends on grants
    - Tom: \$100-\$150K, about a rack
      - Colfax solution, Kerry getting Dell pricing
    - Jenz may want SunCap expansion of a rack
    - Norm indicates the troubles of planning with respect to grant cycles
  - Ashley on SSRL:
    - None
  - O Vineet on AD:
    - Yunhai Cai's cluster
    - Len thinks Les Cotrell may want to add to that cluster (some code being tested on SUNCAT?)
- Richard on recharge
  - Agreement with ALDs was for everything, power, racks, etc. but some things aren't budgeted for
    - e.g., Fermi wants 10Gbps, 1Gbps is standard, how to charge them more?
  - Small clusters
    - 4-node cluster in SSRL, \$20K/year cluster charge plus per-node charge seems excessive
    - Crossover point?
    - Len: need to create incentive to contribute to large clusters
  - O Norm's thoughts:
    - Dispel the rumors about capacity
      - removal of silos should give 1700-1800 additional sq. ft.
      - 1 MW residual power
      - Sufficient chilled water (without getting 10" pipes)
    - Need to plan for delivery and distribution
      - Needs lead time
      - Without sufficient lead time, it might seem like a capacity issue to whoever's making the request
    - Need Boris + 1 more, but getting only 50% of Boris (other 50% to building 50)
  - Discussion between Richard, Norm, Stuart, David about how to encourage good behavior (e.g., keeping storage sufficiently dense)
    - Economic incentives? Charge for low-density, as in the 10Gbps case?
  - David: Sandy agreed to pay considerable amount, situation is not sustainable. Need to prepare for unforseen costs.
- · Richard on ALD retreat
  - $^{\circ}$  1.5h session on sci. comp.
  - O Discussion of different "end-to-end" sci. comp. models in the various directorates
    - Slide seems to fit HEP model
    - Can Brian replicate the slide for simulation group
  - David: any assistance for proposal writing (SciDAC, etc.)? Campus advertises such help
    - Richard to check with Amber
  - O Discussion of two governance models:
    - collaborative
      - agreement that this is more appropriate for sci. comp.
        - Richard needs to articulate convincing defense

- Imre: perhaps show how the SubCouncil approach would break down
- reporting to one
- Seminar series in need of name so that advertising can begin (posters to be printed)

### Actions:

- · Richard to clean up slides for ALD retreat
- Brian to provide simulation group's workflow for ALD retreat slide
- Imre to discuss ALD retreat slides further with Richard
- · SCSC members to come up with potential seminar series names

## Post-meeting email updates:

## Thomas Eriksson on sci-comp mailing list:

I received a big list of initial members from Anders Borglund, and I have collected and handful of people at SSRL that would be interested in the sci-comp mailing list.

Please see if some of you at AD, PS, and LCLS could gather some initial members, and we could go ahead and create the mailing list.

### Vineet on SC seminar series:

- · Seminars will be held monthly.
  - We'll go off-schedule occasionally to accommodate out-of-town speakers who might be visiting.
  - Time and location does not have to be strictly fixed (at this frequency people might forget or not care).
- A number of great potential speakers have been proposed from both inside and outside SLAC.
  - o Initially, talks closely related to SLAC research are preferred.
  - O General sci. comp. related external talks are important to the series' success. Maybe about a third of all speakers should be external?
    - Possible speakers from LBL, eBay, Facebook, Wikimedia, UCs Berkeley and Davis, Pixar, DESY, ...
- The proposed timeline for speakers is as follows:
  - End of April (or as soon as Amber is here): Garth Williams (LCLS Coherent X-ray Imaging) confirmed
  - Late May: Bill Dally (TBD?) (NVIDIA Chief Scientist & Sr. VP of Research, Stanford CS Prof.)
  - o Mid-June: Ralf Kaehler (Cosmology visualization), possibly including a tour of Kavli's 3D vis. room) confirmed
  - Late June (coordinated with the SC Jamboree): UC Davis Professor on Memristors
  - o End of June: Mike Huffer (LSST storage), possibly Anton Barty (LCLS Imaging) who's interested but may not be available in early June
- · Kavli auditorium is preferred location.
  - Limited availability, we need to set dates and book it soon.
- Still searching for an appropriate time (maybe we need a doodle poll?):
  - Monday ruled out because of weekly colloquium at 4PM.
  - Tuesday might work.
  - Wednesday ruled out because of weekly LCLS seminar (around 3PM); general dislike of the 1:30PM slot at the Mar. 28 SCSC meeting.
  - Thursday at 3PM seemed to work, but conflicts were reported at the Mar. 28 SCSC meeting.
  - Friday ruled out because of proximity to the weekend.
- · Seminar series also needs a name (posters need to be printed soon).
  - · Homework for SCSC members.

## Imre on FudForum status:

FudForum has been installed, fs. backups and db. exports completed. Crowd integration is working and Tony is looking into email integration.

Tony sent out a detailed list of suggestions around governance, I will add more to his email and try to bring together the right people to talk about the governance aspects. I have Tony, Farnaz, Randy, Richard, Ernest and Teresa in mind. Please let me know, if you want to be involved and/or know someone who should be involved.