

Technology Committee Meeting October 15th, 2018

Agenda

- Approval of minutes
- Meeting time shift?
- Website manager
- Do we need a Fermipoint?
- Update on meeting with Nigel – Sergey
- Mapping the Committee members to technologies they represent – any corrections/edits?
- Discussion of the draft list of Fermilab technologies.
- Requests to the Committee
- AOB

Minutes

Present: S. Belomestnykh, A. Bross (connected remotely), S. Chattopadhyay, G. Deptuch, A. Fava, A. Grassellino, C. Hill, J. Jarvis, P. Merkel, A. Para, G. Perdue, Ch. Thangaraj, W. Wester
Absent: P. Hurh, J. Estrada

- Angela can attend this meeting only after 11:30 am. **Sergey will send a Doodle.**
- Indico site was created: <https://indico.fnal.gov/category/903/>. We will use it for distributing information relevant to each particular meeting. Fermipoint is created as well: https://fermipoint.fnal.gov/org/cto/techn_cmte/layouts/15/start.aspx - /, nothing posted there yet. It will be used to store and share documents. Website will be for general public and will have just generic information about the Committee (not created yet).
- Update on meeting with Nigel: Wait on Exascale computing and perhaps have someone added to the Committee at a later stage. The same on the proposed Technology Advisory Committee.
- Brief notes from discussion of the List of Fermilab Technologies
 - Para: Liquid Argon TPC – broaden to noble gases.
Replace Radiation Detector technology with Solid State Detector technology
Amplitude detectors?
Rad Detector tech is ionizing.
General technology and supporting words.
Rad hard detectors?
 - Lasers, optics, cavity SRF missing, photonics
Optics photonics important
21st – century of photonics
 - Computing, data storage, data moving, analysis techniques
 - Edge computing IOT, network sensors
Internet of things devices, sensor networks
 - Inspiring list, make a good graphic representation of the list.
 - High density interconnects?
 - Other technologies?

- Scintillators under other tech?
Sensor technologies
Nano materials, active materials,
- Detectors for astrophysics? What specific technology?
- Perhaps a paragraph for each of these.
- Assign paragraph writing. **Will discuss at the next meeting.**
- Drafted charge to committee = Nigel's letter.
- Cmtee for coordination of DPF technologies CPAT(?) Many technologies are general. Keep community informed and involved. Annual meeting. Overlap? Interaction? Invite inputs. European strategy...what is ours?
- Requests to the committee. Mike Vincent: Can the Technology Committee help with an inquiry to the lab Employee Advisory Group? Basic app creation with android developer. Best way to distribute? -- Gabe: Google has a way to handle this. Computing Division...will forward.
- Space utilization/infrastructure
 - Para: Issue: new Engineering building (IERC). Think forward, what kind of tech facilities should we have? Some role in designing these plans? PoC's wrt use of infrastructure. Space will be generic. Review it?
 - Infrastructure very important to technology. E.g., input to modernization plan PPD... ground up activities...
 - Is this committee is drafted to define this? Strategic plan?
 - Response to DOE request. DOE Lab optimization/diagonalization exercise. Proceed logically...space variability is not necessarily driver. Audit? Modernization deadline of report to DOE is June. **Sergey will talk with Lindgren and invite him to discuss how Technology Committee should be involved...**
 - IERC space is allocated. This is essentially done ... probably too late for input.
 - Have a summary of lab space. **Sergey will invite Erik Gottschalk and/or Kate Sienkiewicz to discuss IERC plans with the committee.**
- What are other labs doing wrt technologies? Look from outside (Argonne) etc.
- Report on material science, from Patrick: creating a radiation facility. Outsourcing, not much at Fermilab. Make stronger case to Nigel with common needs.
- Next meeting in 4 weeks.