

## **Minutes of the face-to-face CPAD Meeting, Wednesday, December 10, 2014**

Present: Rick van Berg, Andy White, Bonnie Fleming, Erik Ramberg, Ron Lipton, Ian Shipsey, Howard Nicholson, Bob Wagner, Juan Estrada, Clarence Chang (part-time), Maurice Garcia-Sciveres (by phone)

Present for PREP discussions: Jonathan Lewis, Lorenzo Uplegger, Ryan Rivera, John Anderson, Alan Prosser, Bob Tschirhart, Kurt Biery,

Agenda: <https://indico.hep.anl.gov/indico/conferenceDisplay.py?confId=619>

- 1) Ian and Marcel gave a brief introduction on the changes to CPAD since Snowmass and introduced the new CPAD members and thanked the outgoing CPAD members: Abe Seiden, Gil Gilchriese, Ed Blucher and David Lissauer.
  - 2) Helmut Marsiske gave the view from DOE on the future of the KA25 program. The KA25 program supports the research leading to fundamental advances in the science of particle detection, and develop the next generation of instrumentation for HEP. The agency is looking for ways to "do more with less": more science, more generic/high-risk/high potential for impact R&D, more university involvement, engagement of more young people, better communication through for example workshops and more cost-effectiveness not only of the instrument but also through sharing of resources. DOE is eager to receive input from CPAD on suggested directions.
  - 3) Andy White presented the preparations for the April 7-9 CPAD workshop in Arlington Texas. UTA has good experience organizing larger scale workshops. The last workshop they organized was LCWS in 2012, which had 250 participants. Meetings will be held in the University Center and a website will be available shortly.
1. There was a lively discussion on PREP. There clearly is a lot of value of the PREP equipment and program to the field. The question to be addressed is to understand if the community supports maintaining the current PREP pool and broadening the program to a national service. There was consensus that a repair capability, that has been offered by Argonne, would be very useful. PREP currently uses a standard that is nearly 30 years old. There was a lot of discussion on if the current standard needed to be phased out and a move to a more modern FPGA standard adopted. The need for modernization was recognized. This was not part of the questions raised, namely to gauge the community support for the current form on PREP and its role as a service for the whole community. Bonnie Fleming has agreed to compile a survey that will be sent to the community to gauge their interest.

- 4) WG status reports:
- a. Coordination of instrumentation resources at National Labs for the HEP community  
No update.
  - b. Development of a solicitation for instrumentation grand challenges (Wesley Smith, Jim Alexander, Marina Artuso, David McFarlane)  
No update.
  - c. Creation of a National Instrumentation Fellowship program for both post docs and graduate students  
Ulrich reported on the activities of the group and presented the proposal that was drafted by Maurice. It was not clear if the fellowships were only for graduate students or if postdocs were included too.
  - d. A program to further develop instrumentation schools and education  
Erik reported on the plans for the next EDIT schools. It was discussed if there should be a dedicated annual school in the U.S. perhaps as part of the US particle accelerator school. Erik would look into that.
  - e. The creation of an APS DPF Award for Excellence in Instrumentation Research and Development  
Howard presented the current status. A single prize has been approved by DPF and the nominating committee is being formed. CPAD will provide three members to the initial committee, and two in the steady state. CPAD's initial three members are Marina Artuso, Howard Nicholson and Graham Smith
  - f. Continuation and organization of an, at least, annual national instrumentation workshop for the HEP community  
Bob presented the current status of the plans for the workshop. Details are in the slides on the indico server. Feedback is highly appreciated.
  - g. The enhancement of interdisciplinary aspects of instrumentation  
No update
  - h. Preparation of the groundwork to request input on which topics in instrumentation should be encouraged in the yearly SBIR/STTR proposal calls  
Helmut noted that CPAD could play an extremely helpful and beneficial role in this area for the community and urged us to engage early in the process for 2016.
  - i. Develop a plan to establish and maintain a repository of examples of migration of technologies

No update

- j. Establish an improved model of an equipment pool that could be used for instrumentation development at U.S. universities and labs. See above.