**Project X Collaboration Meeting: April 10-12 at Lawrence Berkeley National Laboratory**

The spring 2012 Project X Collaboration Meeting will be held over April 10-12, 2012 at LBNL. We would like to take advantage of the presence of this meeting in the Bay Area to provide some emphasis on activities being undertaken at LBNL and SLAC.

**Meeting Goals**

1. Detailed discussion of the front end development program, with an emphasis on PXIE goals, concepts, and planning.
2. Statusing and plans for SRF development for PX and other applications
   1. Cavity development
   2. Cryomodule design efforts
   3. Rf sources
3. Exploration of research opportunities for particle physics research with nuclei
   1. edms
   2. Energy applications
4. Collaboration Council Meeting
   1. Review of Project X status and strategy
   2. Review current institutional assignments
   3. Establish next Collaboration Meeting dates

**Background Information**

The Reference Design continues as the basis for design and development activities. Changes to the Reference Design are mediated through a Technical Board. There have been no significant changes since the fall 2011 meeting.

The R&D program is organized around the Reference Design. As a major program Fermilab is developing a plan for the integrated systems testing of components making up the first 15-30 MeV of the Reference Design. This program will demonstrate the critical technologies that support the Reference Design, including the H- source, RFQ, wideband chopper, and initial stages of acceleration. This program is referred to as PXIE (Project X Injector Experiment).

The Department of Energy organized a Workshop on Fundamental Physics at the Intensity Frontier in December 2011. The workshop discussion was deliberately divorced from specific facilities, with an emphasis on identifying the underlying physics research opportunities. With input from this workshop the DOE will be submitting an Intensity Frontier strategy to Congress in early summer 2012. Discussions with the DOE Office of High Energy Physics since the December workshop have focused on staging opportunities for Project X. All staging options examined to date have been developed within the context of the Reference Design, which remains the ultimate facility configuration goal.

The Project X Collaboration was expanded in December when Pacific Northwest National Laboratory (PNNL) signed the Collaboration MOU. PNNL brings expertise in energy applications, materials properties in high radiation environments, along with an interest in the physics program enabled by Project X.

The collaboration with India on high intensity proton accelerators continues under the terms of the Fermilab-IIFC MOU and the Implementing Agreement between the U.S. Department of Energy and the Indian Department of Atomic Energy, signed last summer. Close communications are retained with Eurpoean (ESS, UK/RAL/JAI/CI/ASTEC and CERN/SPL) and Asian (China/IHEP/IMP and Korea/KoRIA) colleagues on issues of common interest. An Fermilab-ESS cooperative MOU was signed in December, and a UK LOI in was signed in January.

**Organization**

* Opening plenary session devoted to Project X status, strategies, and plans; SCRF activities at LBNL (including development of NGLS); accelerator activities (including PX) at SLAC
* Individual working group meetings co-organized by Fermilab and outside leads
* Collaboration Council meeting
  + Request that each participating laboratory provide a representative with authority to speak for their institution in the Collaboration Council meeting.
  + Primary discussion will be on strategy and planning;
  + Secondary discussion on institutional assignments
* Working group summaries on Thursday morning.

The meeting will end by noon on April 12 to allow people to catch afternoon/evening planes home.

**Provisional Agenda**

Tuesday, April 10

Registration 08:30-09:00

Plenary Session 09:00-10:30

Welcome, Overview of LBNL Accelerator S. Gourlay

Programs

Project X News, Strategy, Meeting Goals S. Holmes

PXIE Overview: Goals, Concepts, and Planning S. Nagaitsev

Coffee Break 10:30-11:00

Plenary Session 11:00-12:00

Physics Research Opportunities at Project X R. Tschirhart Overview of SLAC Accelerator Programs TBD

Lunch 12:00-13:00

Working Groups Session 1 (2.0h) 13:00-15:00

Coffee Break 15:00-15:30

Working Groups Session 2 (2.0 h) 15:30-17:30

Adjourn 17:30

Collaboration Council meeting 18:00-19:30

Wednesday, April 11

Working Groups Session 3 (1.5 h) 8:30-10:00

Coffee Break 10:00-10:30

Working Groups Session 4 (1.5 h) 10:30-12:00

Lunch 12:00-13:00

Working Groups Session 5 (2 h) 13:00-15:00

Coffee Break 15:00-15:30

Working Groups Session 6 (2 h) 15:30-17:30

Adjourn 17:30

Thursday, April 12

Working Group Reports 08:30-10:00

Coffee Break 10:00-10:30

Working Group Reports 10:30-12:00

Adjourn 12:00

**Working Groups**

As in the recent past we will run only two working groups in parallel at any given time. This will allow people to have access to multiple working groups. We will hold the Collaboration Council meeting in the early evening in order to allow CC members to participate in all sessions.

Program Committee

A program committee has been established to set up the detailed program. Program Committee members are (all TBC):

Sergei Nagaitsev/Fermilab

Jim Kerby/Fermilab

Bob Tschirhart/Fermilab

John Byrd/LBNL

***Everything from here on down is subject to modification by the Program Committee***

Working Groups/Topics for Discussion

A preliminary list of Working Groups and topics for technical discussion has been developed. The Program Committee will use this as a starting point in their construction of the program. It is anticipated that not all topics listed will actually be discussed at the meeting.

WG1: PXIE/Convenors TBD

WG2: Experimental Opportunities/ Convenors TBD

WG3: SRF Development/Convenors TBD

Collaboration Council/Holmes

* Status and strategies
* Institutional assignments
* FY13-15 plan