Department Heads Meeting
November 17, 2011

David B. MacFarlane
Science program news

• LSST project
  – DOE CD-1 review of camera project [Nov 1-3] very positive; OHEP preparing for request formal approval from ESAAB

• SPC feedback [Nov 3-4]
  – Update on PPA strategy and presentations on independent labs and their relation to SLAC
  – Impressed by grounds-up re-evaluation of intensity frontier program and very supportive of move to create LBNE participation
  – Very positive about KIPAC role as an independent institute; KIPAC relationship to PPA acknowledged to be complicated but working
Roles & Connections: science incubation

Particle Physics & Astrophysics Directorate
D. MacFarlane, ALD

LSST Camera Project
LSST Data Management Project

Technical Support Centers

Elementary Particle Physics Division

KIPAC Division
R. Blandford, Director
A. Roodman & P. Burchat, Deputies
Ziba Mahdavi, Managing Director

DOE funded
Non-DOE funded
SLAC WFO (potential)
Roles & Connections: science projects

SLAC National Accelerator Laboratory
P.Drell, Director

Particle Physics & Astrophysics Directorate
D.MacFarlane, ALD

DOE OHEP

LSST Camera Project
Steve Kahn, Director
Nadine Kurita, Project Manager

DOE funded
Non-DOE funded
SLAC WFO (potential)
Roles & Connections: science exploitation

Particle Physics & Astrophysics Directorate
D. MacFarlane, ALD

- LSST Camera Project
- Technical Support Centers
- Elementary Particle Physics Division

LSST Data Management Project

KIPAC Division
R. Blandford (A. Roodman)

- LSST Science Department
S. Kahn

DOE funded
Non-DOE funded
SLAC WFO (potential)

KIPAC
R. Blandford, Director
A. Roodman & P. Burchat, Deputies
Ziba Mahdavi, Managing Director

Department Heads Meeting: November 17, 2011
Roles & Connections: science projects

- **SLAC National Accelerator Laboratory**
  - P. Drell, Director

- **Particle Physics & Astrophysics Directorate**
  - D. MacFarlane, ALD

- **LSST Data Management Project**
  - Steve Kahn, Director
  - TBA, Project Manager

- **LSST Project Management**

- **DOE funded**
- **Non-DOE funded**
- **SLAC WFO (potential)**

Department Heads Meeting: November 17, 2011
Science program news

• Progress in developing LBNE effort
  – Mark Convery taking the lead in creating an LBNE group and investigating roles for SLAC participation
  – SLAC will participate in neutrino session at IF workshop and as an observer at LBNE collaboration meeting in December
  – LBNE collaboration Exec Committee meets Dec 10-12 to reach a recommendation to LBNE PM (Jim Strait) on detector technology

• Intensity Frontier Workshop [Nov 30-Dec 2 in Washington]
  – JoAnne Hewett & Harry Weerts co-conveners
  – Focus on science opportunities on the intensity frontier
  – Should be SLAC participation in quark flavor, neutrino, and photon working groups [22 registered participants]

• Lab agendas for FY2012 corrected
PPA plans for enabling science: 5-10 years

- Pursue strategic programs in particle physics, particle astrophysics & cosmology
  - Continue as a major partner on the energy frontier and engage in LHC upgrade program
  - Establish a leading dark energy science program
  - Establish SLAC as major partner in next generation direct dark matter search
  - Play a leading role in initiating next generation US particle astrophysics experiments, such as CTA and EXO, with CD-0
  - Continue as a major partner in intensity frontier physics
PPA plans for enabling science: 2-5 years

- Pursue strategic programs in particle physics, particle astrophysics & cosmology
  - Establish major role in ATLAS upgrade plan
  - Execute the construction of the LSST camera and develop the data management system
  - Execute the fabrication of SuperCDMS sensors and construct germanium towers for SNOLab
  - Partner in the design and construction of a new intensity frontier experiment
  - Support the optimal performance of the Fermi LAT instrument & the delivery of high quality data to the scientific collaboration
  - Steward a device development program that supports ultrafast x-ray detector and PPA science programs at SLAC (Joint with LCLS & SSRL)
Pursue strategic programs in particle physics, particle astrophysics & cosmology
- Execute CD-2 on LSST [Kahn, Kurita, Q3FY13] and define and propose dark energy science center [Kahn, Q4FY13]
- Execute CD-0 on Super CDMS project [Partridge, Q1FY13]
- Secure initial extension of original 5-year mission from NASA and DOE for the Fermi GST [Blandford, Q4FY12]
- Complete development and release of Pass-8 reconstruction [Blandford, Q4FY12] and reprocess Fermi data [Blandford, Q4FY13]
- Publish first scientific results on neutrinoless double beta decay from EXO with enriched Xenon [Breidenbach, Q4FY12]
- Establish technology R&D plan for tonne-scale EXO [Breidenbach, Q2FY12]
PPA plans for enabling science: 0-2 years

- Complete phase 1 of CTA R&D plan [Blandford, Q4FY13]
- Further develop performance-based management in PPA by insuring that 80% of PPA employees have FY2012 goals [MacFarlane, Q2 FY12]
- Extend the Mechanical Engineering Center concept to other engineering services to include similar “good practices”. This should include Electrical Engineering and Vacuum Engineering practices, etc. [Wisniewski, Q2FY12]
- Develop a coordinated mechanical engineering organization and leadership plan with LCLS and AD [MacFarlane, Q2 FY12]
- Identify key leadership for EPP Division [MacFarlane, Q2FY12]
Administrative news

• Changes in financial planning group
  – Eric Kennedy started as a second financial planner on Nov 1; focusing initially on monthly reports
  – Phased transition for Marie to CFO office through March 2012
  – Currently evaluating options for seeking a replacement: financial director or more broadly a PPA operations manager

• FY2012 budget & goal setting process
  – Initial laboratory model for FY2012 is now in place
  – Further ongoing changes will be implemented as monthly refinements in EAC
  – Still need to complete some discussions about detector R&D budget and engineering manpower
Administrative news

• Headcount reductions implemented by Nov 17-22
  – Able to reduce RIF numbers substantially by finding other funding in the area of computing and engineering
  – Final list leads to about $2.4M in reductions, which together with 4.4 FTEs ($1.6M) moved onto bridging funds, leaves us in reasonable shape versus overall IFP funding level
  – Reductions will be implemented in FY12 budget model and then a list of requests generated to move funding between B&R codes
  – Some specific issues in the IFP authorization still under discussion with DOE: Theory, EXO R&D, and ESTB operations funding
### Timeline for PPA performance evaluations

<table>
<thead>
<tr>
<th>Step</th>
<th>Period</th>
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<tbody>
<tr>
<td>Employees complete self-evaluations; administrative supervisors collect input from functional supervisors</td>
<td>Now-10/28</td>
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<tr>
<td>Department Heads provide status for FY2011 program goals and complete draft program goals for FY2012</td>
<td>Now-10/28</td>
</tr>
<tr>
<td>Employees meet with supervisors, discuss individual goals draft performance evaluations</td>
<td>10/31-11/11</td>
</tr>
<tr>
<td>PPA management reviews FY2012 program goals and provides feedback</td>
<td>10/31-11/11</td>
</tr>
<tr>
<td>PPA management reviews and provides feedback on performance evaluations and individual goals</td>
<td>11/14-11/25</td>
</tr>
<tr>
<td>Feedback to employees and finalize review</td>
<td>11/28-12/9</td>
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Update

• Behind in providing feedback on department goals
  – Not all departments have provided goals
  – Will aim to get feedback by 11/25

• Need to status individual performance evaluations
  – Ignore HR message of 11/15: as previously indicated, we will not be normalizing in the fashion described or otherwise overriding department averages
    • We will provide feedback on department level goals, which are related and help define individual performance and goal setting
    • In some cases, where the department self-evaluation is high, we will discuss the grading scale with the department head
  – Harvey and David Muller will lead a tutorial discussion with some goal setting examples
Importance of performance evaluation

• Should provide specific, direct and meaningful feedback
  – Many recent examples where problems were not identified and/or not documented; often arises in matrixed situations
  – Without such feedback, the employee is unaware of performance issues and the problem is unaddressed
  – Feedback allows employees to understand your expectations, and your assessment of strengths and areas for improvement

• Setting goals is a key part of performance-based management
  – Allow an objective, measurable means for performance evaluation
  – Goals should be specific, measurable, aggressive, realistic, and time-bound
  – Recommend a mixture of realistic and aggressive goals; this is a mechanism for improving performance & challenging employees
Importance of Position Description

• Position Description is the primary tool
  – Ignored by HR this year
  – In PPA we take this as the foundation for the expectations communicated to employees in the past
  – Would like to keep it as the central item going forward
  – Please review each description for relevance and discuss it with those you are reviewing
Emphasis on Goal Setting

• Setting goals
  – This year's theme from HR
  – Part of a cultural change that is coming and to which we shall have to adapt
  – Old, totally freewheeling scientific atmosphere does not fit into the new paradigm
  – DOE wants some comparative measure increasingly
  – We would like some measure ourselves, to evaluate our own performance and to optimize scientific output
General Strategies

• Setting goals is difficult
  – not required by PPA last year
  – but some people did so anyway
• A goal should be specific and measurable
  – think in terms of a deliverable
  – want something useful for next year’s PE process
• Suggestion: dynamic goals
  – goals might change during the year in response to changing times / funding / priorities
  – requires approval from / discussion with supervisor
  – If changes affect department goals, needs to be discussed with Division Head
General Strategies

• Suggestion: 50%, 100% and stretch goals
  – 50% is what must be done at a minimum
  – 100% is your best guess
  – Stretch is a tool for pushing performance levels

• Other considerations, if applicable
  – rectify a past unsatisfactory performance
  – learn to meet a different set of expectations
Some Examples of Goals

• For a scientist conducting publishable research
  – Lead, organize and/or perform a specific analysis on a specific dataset with a specific target
    • Specify in phases: develop the analysis; conference result; final result; publish
    • A 50% goal might be internal documentation, with 100%=publication, stretch=start follow on analysis
    • If an analysis direction looks untenable, modify goals mid-year with agreement between supervisor and scientist
  – Complete some specific calculation within some specific timeframe
    • Specify in phases: develop framework; first result; automate; apply the method more widely
    • A 50% goal might be assess feasibility, 100%=first result, stretch=apply more widely
  – Organize a specific event, such as a workshop
Some Examples of Goals

• For a project (manager) [construction, software…]
  – Project schedule and milestones should be used
    • Critical or “easy” milestones should be 50% goals
    • Ahead of schedule or under budget is a stretch

• R&D activity
  – Schedule is at least in part subject to discovery, but goal is to produce an outcome (preferably publishable)
    • 50%=perform tests by Sept 1, 100%=by June 1, stretch=by April 1
    • 50%/100%/stretch=perform a minimum set of tests, a full suite of tests, or expanded scope

• Administrator
  – Organize a specific event, such as a workshop
  – Learn a new task, become someone’s backup