



Office of Science

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# The View from DOE

- **Moving Forward**
- **HEPAP**
- **FY08 “in review”**
- **Detector R&D Support**



# Moving Forward on ILC

- Independent of recent events DOE plans to remain a strong, active partner in the ILC and envisages supporting a focused U.S. ILC program.
- FY09 request will be released first week of February.
- As Undersecretary Orbach has made clear, a decision on the ILC requires
  - convergence of the R&D program
  - guidance from the LHC
  - well developed internationalization
- Planning on similar levels of support through 2012.

All of which leads to a decision mid-decade



# Community Input

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- HEPAP has been charged to identify and evaluate scientific opportunities that can be pursued at different funding levels.
- Requested by Orbach & impelled by recent events
- Scenarios have been updated to reflect current events
  - Constant effort at the FY 2008 (Omnibus) funding level
  - Constant effort at the FY 2007 funding level
  - Doubling of funding starting in FY 2007
  - Additional funding above the previous level, in priority order, associated with specific activities needed to mount a leadership program that addresses the scientific opportunities identified in the EPP2010 report.
- Meetings at Fermilab(ILC), SLAC( $\mu$ ,astro,DUSEL), Brookhaven(Precision, LHC, R&D).
- Report due in April, preliminary report to help with FY10 budget.
- There are a number of possible facilities and projects, be sure your voice is heard: <http://hepwww.physics.yale.edu/P5/> (would encourage comments on detector R&D)



# The First Quarter of FY08

- In proposed Presidential and Congressional budgets for FY2008 OHEP fared well.
- ILC (including detector) at \$60M, SRF at \$23.5M.
- Due to difference between congressional and executive branches funding bills were delayed.
- Accordingly OHEP operated under a Continuing Resolution from Oct '07 through end of Dec '07.
- Funding for Continuing Resolution is held at previous year's level and rate. In this case, spending occurred at the rate dictated by FY07 total. For the ILC a total of \$42M.



# The FY08 Omnibus

- The final budget or Omnibus Appropriations was released to the public December 17<sup>th</sup>, 2008.
- Due to a spending limit enforced by the executive branch and different priorities of the legislative branch there was significant reallocation of discretionary funding.
- These reallocations were not anticipated by DOE.
- OHEP was reduced significantly. Major impacts
  - Nova construction funding set to \$0.
  - ILC funding set to \$15M from \$60M.
  - SFR funding set to \$5M from \$24M.
- Severely reduced activities at Fermilab and SLAC
- Incidentally, ITER construction was set to zero.



# The Remainder of FY08

- Any further ILC work must be consistent with \$15M budget cap on ILC.
- This has stopped ILC work in the U.S., as nearly all funds were utilized during the continuing resolution.
- We have nearly completed collecting information from laboratories on obligations and costs.
- Subject to last minute surprises, remaining funding will be used for
  - U.S. DOE portion of the GDE Common Fund.
  - GDE Management at a reduced level (Director, Project Manager, ART Director, ART Project Manager).
  - CESRTA e-cloud project led by NSF but jointly supported by DOE and NSF. This was in process prior to the Omnibus.
- All other work terminated, should any funds remain, we will consider options.



# Detector R&D

- For better or for worse, FY08 budget explicitly linked ILC detector R&D with ILC budget line.
- Given the outcome this was unfortunate.
- In the short term
  - There are no ILC FY08 funds available.
  - We are looking at the possibility of closing out efforts gracefully and efficiently. This probably applies only to the high priority supplemental proposals now in their 2<sup>nd</sup> year.
  - A possibility is to assist a limited set of efforts with a combination of DOE research funds and NSF funds.
  - All this is uncertain, conversations within DOE and with NSF are early and ongoing.



# Long Term Detector R&D

- **Current thinking places all detector R&D proposals in the Advanced Technology R&D program**
  - Therefore must have a generic aspect.
  - This will be the case for all programs and projects.
  - Admin. & management not yet fully formulated.
  - Not sure how joint DOE & NSF program works.
- **LOIs**
  - Situation further clouded by recently changed timescales
  - Engineering a final detector inconsistent with DOE protocol.
  - However, R&D does include prototyping, there should be sufficient flexibility to proceed. For instance PFA R&D would require engineering R&D to understand integration.
  - We will need to continue discussing this.





# Personal Comments

- Although the longer time scale and funding loss are extremely disappointing, the need for and benefits of advanced detector R&D remain.
- Given the utility of better performing devices and the quality of past ILC R&D results, very likely many of the ongoing ILC efforts will be supported in any program.
- This is a long march: we need to keep moving forward with whatever resources are made available.