NSF Response to Particle Physics Prioritization Plan

Denise Caldwell, Division Director, Division of Physics

New scientific results: Higgs boson, neutrino mass

Year-long Particle Physics community scientific planning process

Particle Physics Project Prioritization Panel (P5) charged to:

"develop an updated strategic plan for U.S. high energy physics that can be executed over a ten-year timescale, in the context of a twenty-year global vision for the field"

"Building for Discovery: Strategic Plan for U.S. Particle Physics in the Global Context" – May 2014

NSF Response Requires Further Study – Why?

Report was prepared using DOE budget scenarios only

High Energy Physics at DOE is a line item in budget request

Support for Particle Physics at NSF is not a separate item

Competes in Physics Division with programs in other subareas

Physics Division funds 1/3 of all University-based research
in Particle Physics in the U.S.

Impacts Workforce

Of Particular Relevance to NSF Physics Division

Long-term plan that outlines a program for next 5-10 years

Programmatic choices may involve not investing in certain subareas

Involves both NSF Physics and DOE roles in global context

Impacts emerging PHY investments in mid-scale instrumentation

Recommends major upgrades to ATLAS and CMS detectors

MPSAC Subcommittee

Young-Kee Kim, U Chicago, Chair

http://p5response.uchicago.edu/

Will not revisit P5 charge, priorities or conclusions

Focus on balance of NSF investments in Particle Physics:
        Taking P5 Report as given
        Assuming constrained budget scenarios

Interim report delivered to MPSAC on 3 November 2014

DOE Updated on progress on 5 November 2014

Final report due 31 January 2015

Back-Up Slide

Subcommittee Members

Young-Kee Kim (Chair)	The University of Chicago
Marina Artuso	Syracuse University
Frank Avignone	University of South Carolina
Patricia Burchat	Stanford University
Joel Butler	Fermilab
Marc Kamionkowski	Johns Hopkins University
Jay Marx	Caltech
Luis Orozco	University of Maryland
Bob Redwine	MIT
Hank Sobel	University of California, Irvine