

U.S. Input to the CERN Council Strategy Group

Zeuthen Meeting

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*on behalf of DOE and NSF

EPP2010 Released

- US National Academy Report “Revealing the Hidden Nature of Space and Time” reported out on April 26, 2006
- Charged by U.S. DOE and NSF to prioritize and articulate the scientific questions and opportunities in particle physics
- Recommend a 15-year implementation plan
- Concluded that “U.S. Particle Physics is at a Crossroads”

EPP2010 Membership

Harold Shapiro (chair)

- Sally Dawson (v chair)
- Norm Augustine
- Jon Bagger
- Philip Burrows
- Sandra Faber
- Stuart Freedman
- Jerry Freedman
- David Gross
- Joseph Hezir
- Takaaki Kajita
- Neal Lane
- Nigel Lockyer
- Sid Nagel
- Homer Neal
- Ritchie Patterson
- Helen Quinn
- Chuck Shank
- Paul Steinhardt
- Harold Varmus
- Edward Witten

Seven Strategic Principals

- Advocates a strong role for particle physics in the “broad scientific and technological enterprise”
- Advocates a US commitment to leadership in particle physics
- International partnerships structurally integrated in conceiving, planning, etc.
- Long-term vision, clear priorities, take scientific risks, joint ventures, adequate budget; diverse portfolio.
- 10-15 year budget planning projection
- Advocates a strong Fermilab as the remaining U.S. particle physics lab, which should advance national priorities identified in the report.
- National Committee to prioritize and recommend projects taken in the full international context

Six Action Items

- Realize physics potential at LHC
- Launch major program in R&D, design, industrialization, management, financing for ILC and detectors
- Work towards a U.S. bid to host ILC
 - But support and participate in ILC wherever built
- DOE, NSF, & NASA should jointly prioritize projects at the interface of particle physics, astrophysics, and cosmology.
- Neutrinos: mass, accelerator-based, CP.
- Large-scale high precision tests that probe beyond the SM, *as budgets allow*.

Since its release

- EPP2010 briefed widely in Washington. US Government officials have taken notice.
- Press coverage since release
- First step in solving a problem is recognizing that there is one.
- EPP2010, with its (somewhat) unconventional makeup, was a successful experiment in the government advisory process. We knew from the beginning it was an experiment.