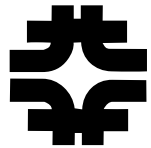


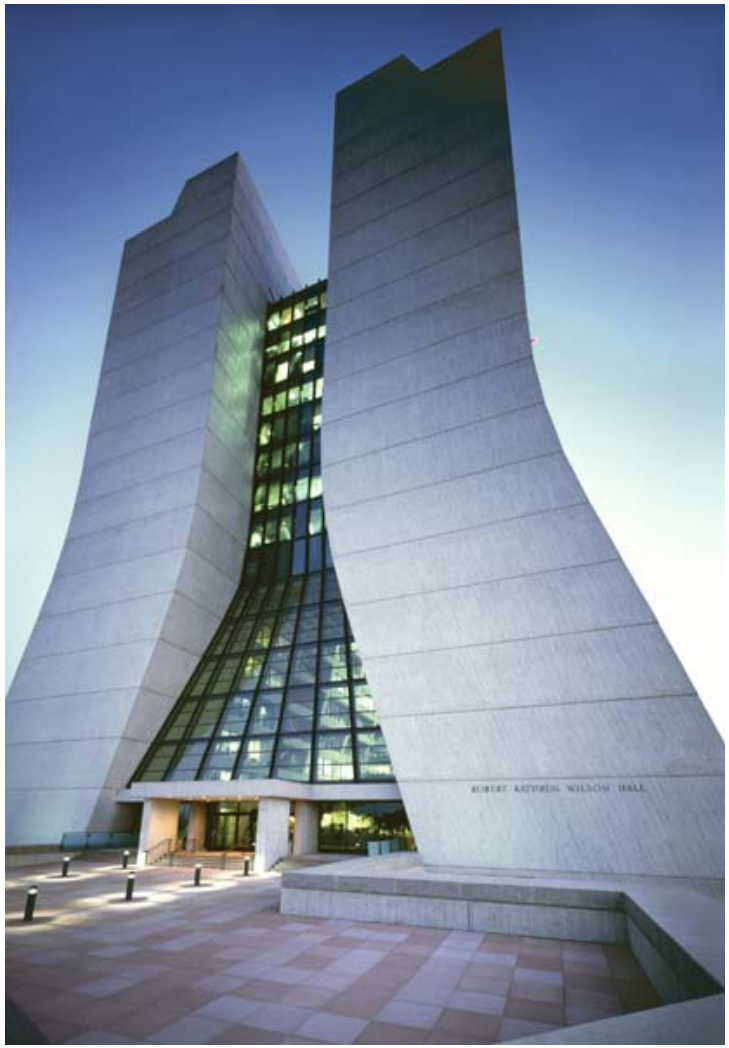
ILC Citizens' Task Force

Come here often?

Judith Jackson
Fermilab
January 27, 2007

Welcome! (And Aloha...)

A dramatic moment for Fermilab!

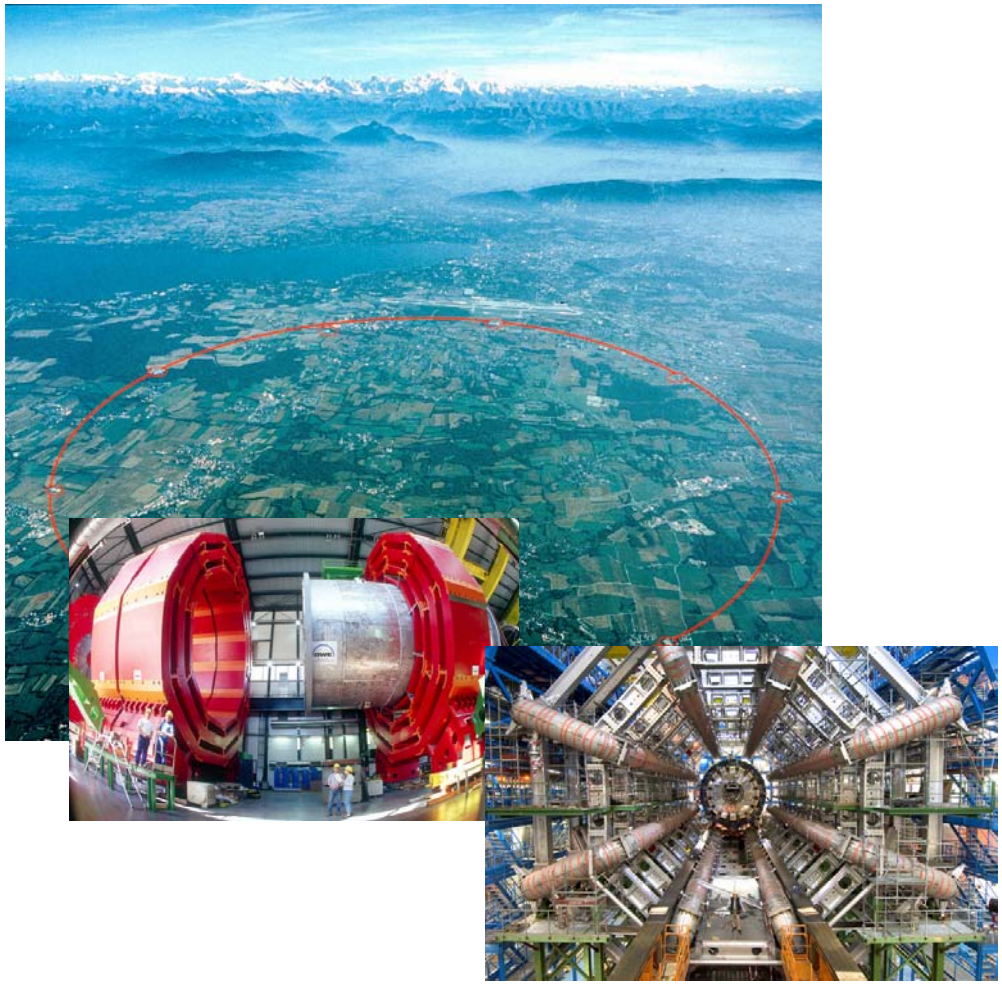


You have joined the Fermilab community at a remarkable time in the life of the laboratory.

Discoveries on the horizon?

It is possible that in the lifetime of your Task Force, discoveries will take place at Fermilab that will change the way we see the universe.

Coming soon: CERN



In about 2009, the Large Hadron Collider will replace Fermilab's Tevatron at the energy frontier.

Particle physics at a crossroads

On the one hand….

A fascinating scientific adventure!

A universe of dark matter and dark energy!

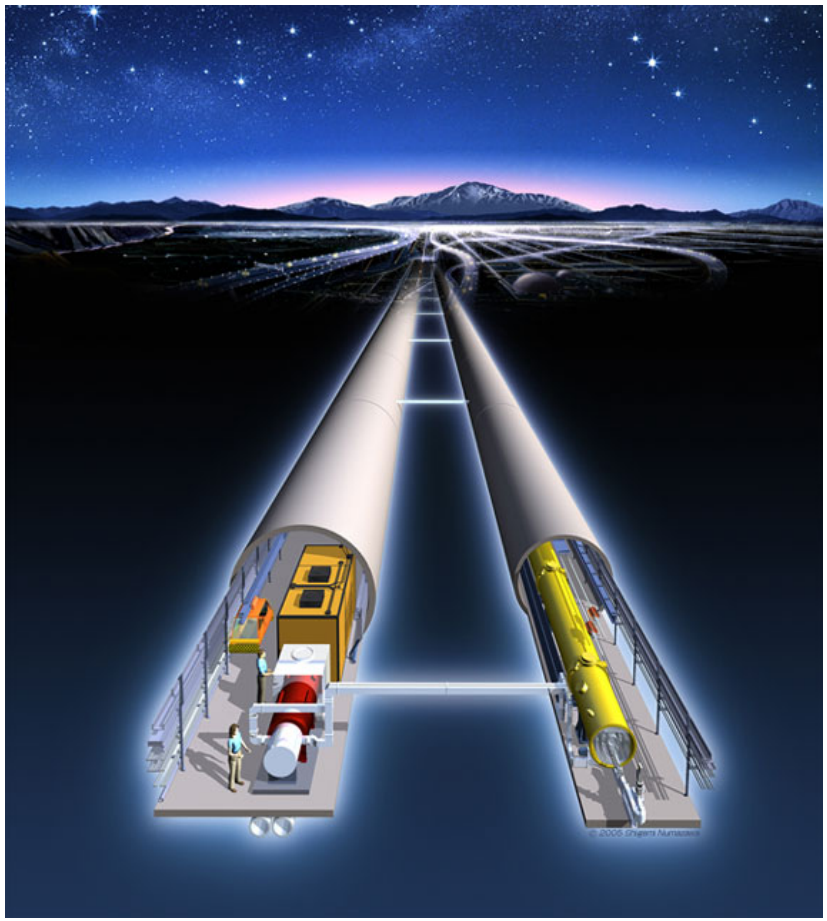
Extra dimensions!

The discoveries of the years just ahead will revolutionize our picture of the universe!

A paradise for particle physics!

On the other hand…

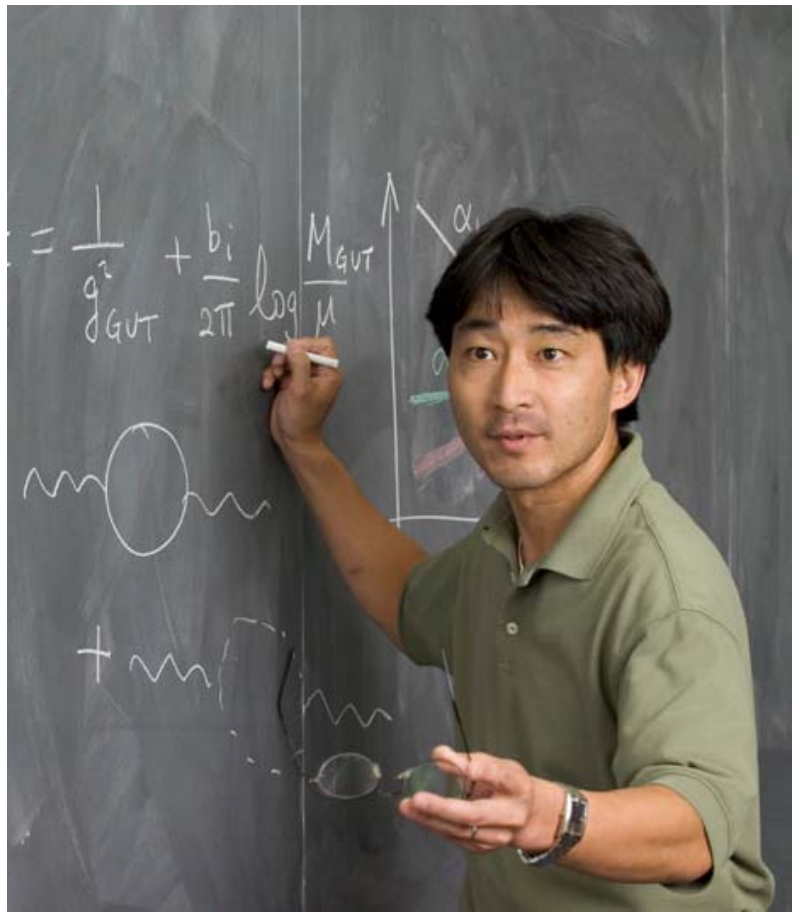
- Accelerators and detectors that are more and more costly
- A fundamental science, difficult to understand, without immediate applications
- Thoroughly international
- Competing with other sciences and other needs of society



What will the future be?

- For particle physics in the United States
- For Fermilab

?



Fermilab's future

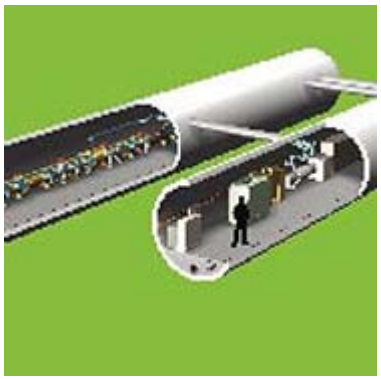
- Fermilab hopes to be part of the 21-century adventure of exploring the revolutionary new physics of the universe.

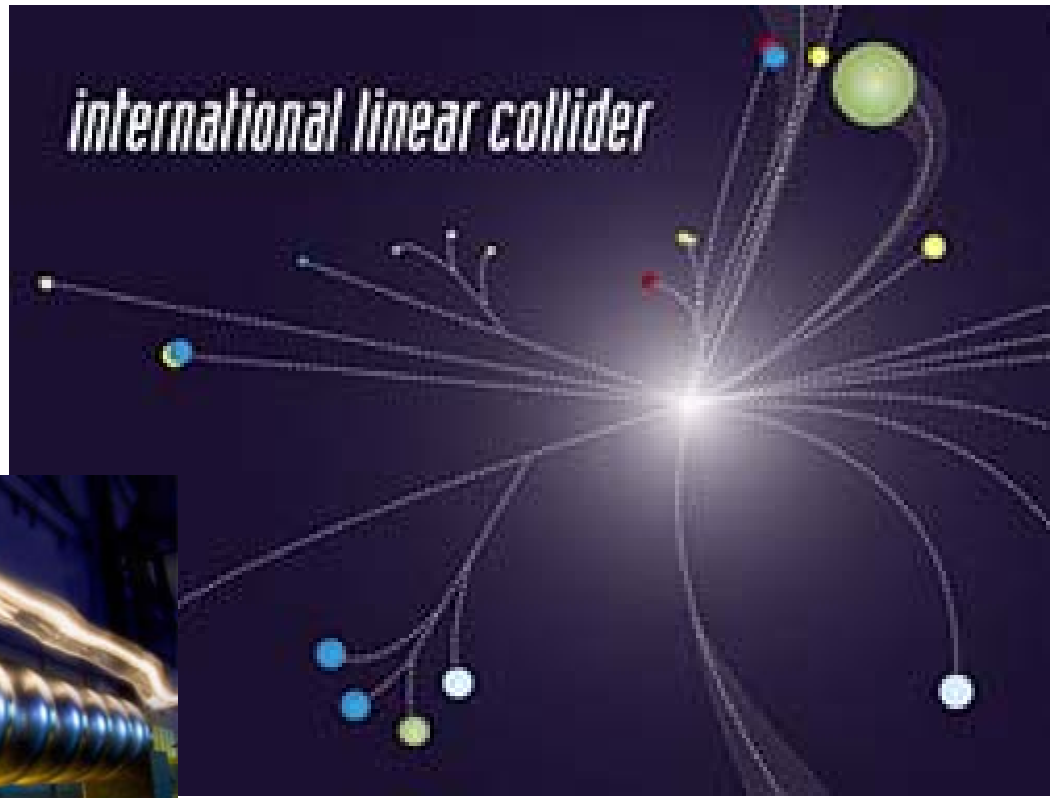
Particle physics labs

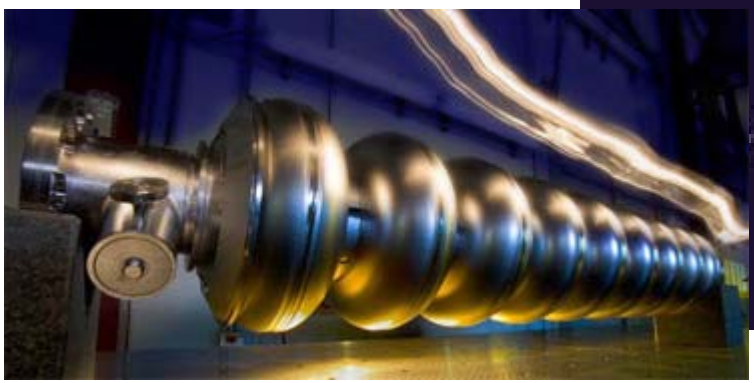
Geneva, Swiitzerland

Batavia, Illinois

What's next for Fermilab?





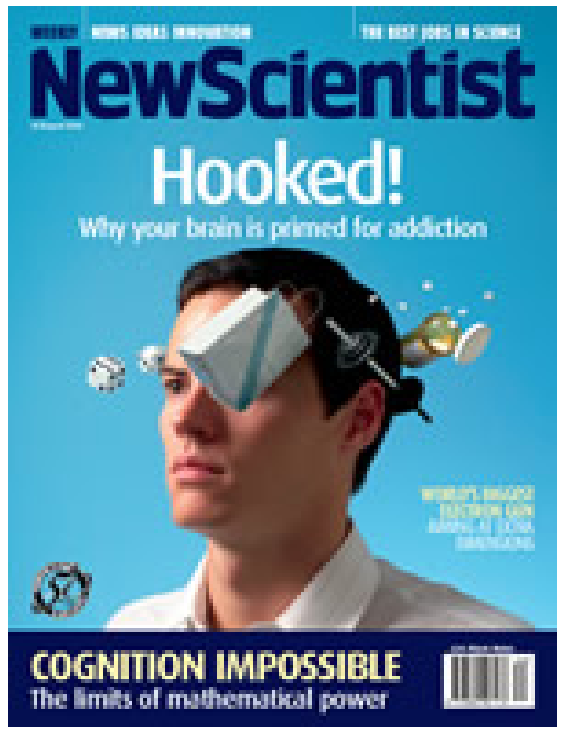


Why a linear collider?

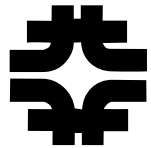
- “Part of the answer is that it is likely to be built in the US, and without it American particle physicists face a bleak future, with no big accelerators to play with on home ground and no fresh data to work on. Are several thousand physicists clutching at one very long straw - or is there really something special about this machine?”

- “It could be the tool to finally take us beyond the standard model of particle physics, not merely opening up a new world of exotic particles, but telling us why those particles exist and behave as they do. The ILC could examine the origins of mass, dissect dark matter, reveal secret symmetries of the universe, perhaps even discover extra dimensions of space.”

- New Scientist, August 25, 2006



A inear collider would:

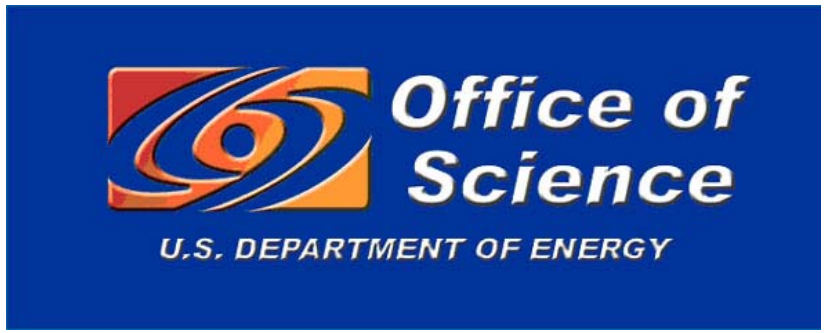


- Be a gateway to discovery.
- Require global commitment and investment.
- Cost billions of dollars.
- Give Fermilab a clear future at the scientific frontier.
- Extend beyond Fermilab's boundaries.
- Have profound worldwide, national and local effects.
- Require the active participation of neighboring communities.

Fermilab and US particle physics

- EPP2010:
  - The United States should remain globally competitive in elementary particle physics by playing a leading role in the worlside effort to aggressively study Terascale physics.
  - A strong and vital Fermilab is an essential element of U.S. leadership in elementary particle physics. Fermilab must play a major role in advancing the priorities identified in this report.

The Basics



Fermi Research Alliance

Fermilab