### A National Lab with a Global Mission





Pier's Symposium Fermilab, 13 June 2013

Stefan Söldner-Rembold, U of Manchester

## The race for the Higgs?

# U.S., European Scientists Race to Find 'God Particle'

Published June 04, 2009 / London Times

- During Run II, the Tevatron experiments became truly international collaborations.
- Thanks to Pier's support many new international institutions and several countries joined CDF and DØ.



About half of the Tevatron collaborators from non-US institutions.

#### **US Institutions Participating in LHC**

Fermilab is the lead lab and intellectual home of the US CMS Collaboration

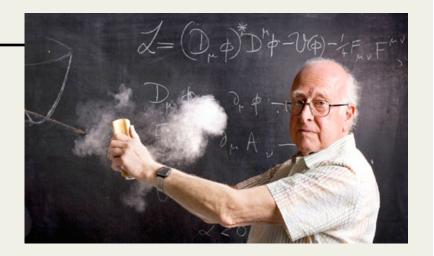
Remote Operations Center and Tier-1 Computing

LPC has >350 users and >100 residents

Fermilab contributing to accelerator, detectors..







"Today's announcement is the result of tireless work by an international collaboration of thousands. We're proud of the many contributions that scientists, engineers and students from Fermilab have made to the LHC." Pier Oddone

# Long Baseline Neutrino Physics

MINOS, NOvA, and LBNE are world-leading projects based on large

international collaborations.

#### MINOS Collaboration



LBNE Beamline

Minnesota

(Proposed)

lowa

**FERMILAB** 

North Dakota

Nebraska

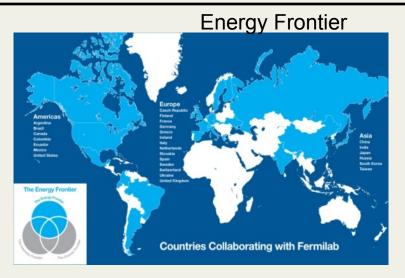
International participation essential to achieve full potential of LBNE.

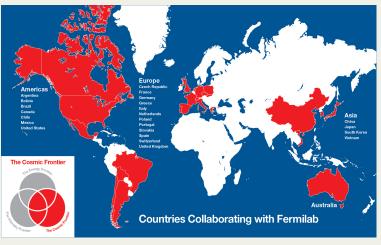
## The World according to Pier

#### **Intensity Frontier**



- 927 (37%) out of 2503 Fermilab users from non-US institutions.
- Representing 33 countries and 250 institutions.





Cosmic Frontier

#### Fermilab International Fellows

- Many students, postdocs, and senior scientist have been supported as Fermilab International Fellows since 2007.
- Prestigious fellowships which have been extremely valuable in supporting experimental programme.
- This and additional support provided by Fermilab to international collaborators – secures international collaboration.
- These programmes leverages significant additional overseas resources.

#### Proton Accelerators for Science and Innovation

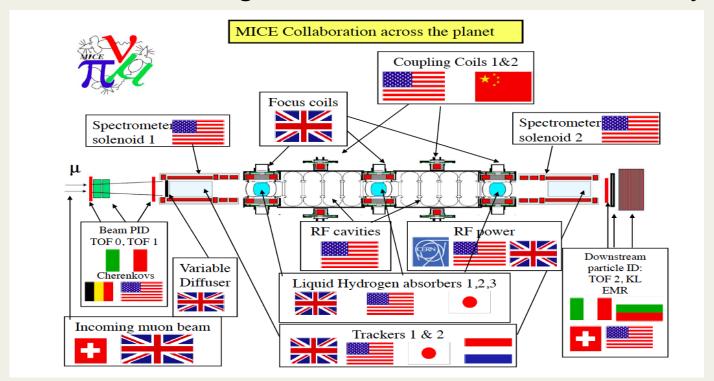
Joint programme with UK to collaborate on development and applications of proton accelerators.



### Muon Ionization Cooling Experiment

Fermilab important contributor to MICE experiment at the Rutherford Appleton Laboratory in the UK.

Studies muon cooling for muon collider, neutrino factory.



Pier has always supported international collaboration at Fermilab – it does not just bring additional resources but also ensures that Fermilab is in an elite group of global particle physics laboratories.

Pier has successfully created new international linkages in neutrino physics and precision measurements.

We now see the pay-off from these activities - for example the clear statement in the European strategy about collaboration in a US neutrino programme.

On behalf of all international collaborators at Fermilab, I would like to thank him for his strong support over the last years.



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Fermilab Today

# Matt Smith exit prompts Doctor Who speculation

By Neil Smith

Entertainment reporter, BBC News

The news that Matt Smith is to leave his role in Doctor Who at the end of 2013 has already prompted speculation on the identity of his replacement.

A host of names have been suggested in Sunday's papers, among them Idris Elba, Dame Helen Mirren and John

Hurt and Pier Oddone.

