Research Director's Report

What becomes of the WWS?
This month's Research Director's Report was written by François Richard, co-chair of the Worldwide Study, regional detector contact for Europe


François Richard

The readers of ILC NewsLine are by now well acquainted with the fast evolution occurring in the realm of Physics and Detector Management. For an up-to-date description of the Research Directorate see the new Physics and Detectors web page. Recall that the starting point has been the World Wide Study, WWS, organised in 1998 and initially in charge of monitoring the progress of these activities through regional and worldwide workshops. The WWS has also set up a number of general panels dealing for example with R&D on detectors, software coordination and the machine-detector interface (MDI) in collaboration with the Global Design Effort. When needed, the WWS has created specialised panels, for example for the RDR a costing panel.
Read more...

-- François Richard

Research Director's Report Archive

Calendar

Upcoming meetings, conferences, workshops

Conference on the Design/ Optimization of the Silicon Detector at the International Linear Collider
University of Colorado at Boulder, Colorado, USA
17-19 September 2008

Workshop of the Collaboration on Forward Calorimetry at ILC
Belgrade, Serbia
22-24 September 2008

In the News

A note from the editors
The news this week reflect of course the big event in particle physics: the start-up of the Large Hadron Collider at CERN. But there's more. Many of the articles and blogs also refer to future projects. In the selection below, we try to gather some interesting pieces where the future of colliders and particularly the ILC are addressed. We think that this is a clear sign that this celebration benefits particle physics and the science community. Enjoy!

From *nationalacademies.org*
16 September 2008
Physics Milestone: Large Hadron Collider Activated
Read more...

From *Betapolitique*
15 September 2008
Le LHC, un succès européen à célébrer
Read more...

From *Sunday Times*
14 September 2008
Sit tight, a bigger bang is coming
Read more...

From *Aftenposten*
14 September 2008
Tromsø-OL eller partikler?
Read more...

From *Soverato News*
14 September 2008
Large Hadron Collider e International Linear Collider a caccia del bosone di Higgs
Read more...

From *La Provincia*
13 September 2008
Big bang lariano nel 2020 "Buco nero? Rischio remoto"
Read more...

From *FAZ*
12 September 2008
Wir stoßen die Tür zum dunklen Universum auf
Read more...

Director's Corner

The Spallation Neutron Source at Oak Ridge Laboratory


Aerial view of the Oak Ridge Spallation Neutron Source

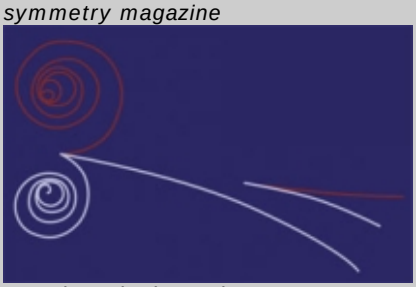
A few weeks ago, while at Oak Ridge National Laboratory as a panelist at the National Science and Technology Summit, I had the opportunity to visit the recently completed Spallation Neutron Source (SNS). The US Department of Energy (DOE) Office of Science has funded the construction of this new 1.4-billion-dollar accelerator-based neutron source, which provides the world's most intense pulsed neutron beams for scientific research and industrial development. This project promises to move neutron science into a new era and both the execution of the project and some key technologies are of important to our efforts towards the International Linear Collider.
Read more...

-- Barry Barish

Director's Corner Archive

Image of the Week

Symmetry Explains it in 60 Seconds: Positron
by Youhei Morita, KEK, Japan, for symmetry magazine



A positron is the antimatter partner of an electron. It has exactly the same mass as an electron but has the opposite electric charge. When

Pixel 2008 International Workshop
Fermilab, Batavia, IL, USA
23-26 September 2008

Workshop on Sources of Polarized Electrons and High Brightness Electron Beams (PESP 2008)
JLab, Newport News, Virginia, USA
1-4 October 2008

EUDET Annual Meeting 2008
Nikhef, Amsterdam, The Netherlands
6-8 October 2008

18th International Symposium on Spin Physics (SPIN 2008)
University of Virginia, Charlottesville, VA, USA
6-11 October 2008

CLIC08 Workshop
CERN
14-17 October 2008

Upcoming school

Third International Accelerator School for Linear Colliders (2008 LC School)
Oak Brook, Illinois, USA
19-29 October 2008

= Collaboration-wide Meetings

GDE Meetings calendar

View complete ILC calendar

From *ZDNet*
11 September 2008
LHC a sure sign that Europe is the center of physics
Read more...

From *MSNBC*
11 September 2008
Europe leaps ahead on physics frontier
Chapter 4: Collider becomes international magnet for brain power
Read more...

From *Discovery Space*
11 September 2008
Beyond the LHC: What's the Next Colossal Collider?
Read more...

From *Channel 4 News*
10 September 2008
Q&A: the Large Hadron Collider
Read more...

From *FAZ*
10 September 2008
Teilchenbeschleuniger LHC: Ring frei
Read more...

From *Daily Telegraph (AU)*
10 September 2008
Will atom smasher signal end of the world?
Read more...

From *Free Republic*
10 September 2008
5 Things You Need to Know About the Large Hadron Collider Now
Read more...

From *Nature*
10 September 2008
Collision course
Read more...

From *Money Week*
9 September 2008
What is the world's biggest machine costing us?
Read more...

From *Boston Globe*
8 September 2008
All eyes on collider as it comes to life
Read more...

From *Chicago Tribune*
7 September 2008
WHEN THEORIES COLLIDE
Why the Earth could end when the new collider fires up
Read more...

kept separate from matter, positrons can exist forever. However, when a positron meets an electron, the two particles annihilate into a flash of energy. (Read more)

Announcements

arXiv preprints

0809.2366
Electroweak Theory for the Tevatron, LHC, and ILC

0809.2047
Reconstructing SUSY and R-Neutrino Masses in SO(10)

0809.1827
Probing two Universal Extra Dimension model with leptons and photons at the LHC and ILC

0809.1707
Complementarity of the CERN Large Hadron Collider and the e^+e^- International Linear Collider

0809.1624
Single production of excited spin-3/2 neutrinos at linear colliders

0809.1302
Two-Loop Threshold Singularities, Unstable Particles and Complex Masses

0809.1134
The NLO corrections of H_{TC} Π^0 and $\Pi^+ \Pi^-$ pair production at the ILC in the TC2 model