

Feature Story

From SLAC today: People: Andrei Seryi

Since beginning his career in 1986, SLAC senior scientist and project manager for FACET Andrei Seryi has worked at five labs in three countries, with the last 10 years at SLAC. In this decade, Seryi has led international collaborations to design and build linear accelerator experimental facilities, all while continuing his accelerator research and design projects at SLAC.



Andrei Seryi.
(Photo by Diana Rogers.)

Today, Seryi devotes most of his efforts at SLAC to the FACET project—Facilities for Accelerator Science and Experimental Test Beams at SLAC—an experimental facility created for studies of advanced methods of plasma wakefield acceleration of electron and positron beams.

[Read more...](#)

-- Lauren Knoche

BlogLine

14 October 2009 - *Frank Simon*
[Off the deep end...](#)

13 October 2009 - *Frank Simon*
[The Yearly Madness](#)

13 October 2009 - *Ingrid Gregor*
[Star Trek IV](#)

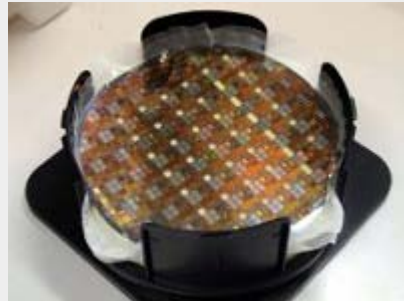
[Follow all Quantum Diaries](#)

Calendar

Upcoming meetings, conferences, workshops

Around the World

SOI technology for next-generation sensors



Prototype of monolithic pixel detector at KEK

What do you visualise when you are asked about a sensor? There are many sensors around us. For example, CCDs (Charge Coupled Device), which is the basis of today's digital camera, and the technology for this year's Nobel Prize in Physics are also sensors. Thus, sensors are absolutely necessary devices for our daily life and also important technologies for the International Liner Collider. In the last years, many new sensors have been developed for the ILC, one of them being pixel sensors using Silicon-On-Insulator (SOI) technology for particle detectors, under development at KEK's Detector Technology Project Office. This sensor is expected to serve as one of the alternatives for particle sensors used in such parts as the silicon vertex detector.

[Read more...](#)

-- Hajime Tanaka

In the News

From *European XFEL*
13 October 2009

HRB 111165: The European XFEL GmbH has been founded!

"Now it's official and we're legally authorized to operate" Massimo Altarelli and Karl Witte rejoiced on taking up their new functions as Managing Directors of the European XFEL GmbH.

[Read more...](#)

From *nature blogs*

Director's Corner

CERN prepares for LHC commissioning



Philippe Lebrun, CERN

Once again, the Large Hadron Collider at CERN is moving to centre stage. The LHC is the world's largest and highest-energy particle accelerator designed to collide protons at energies of 7 TeV per beam. Just about one year ago, as commissioning of this complex next-generation machine was being initiated, the immediate success of circulating beam in the main ring of the LHC for the first time was interrupted by a serious fault between two superconducting magnets. The past year has been dedicated to carrying out the time consuming repairs and provisions to prevent future such incidents. Those repairs are nearing completion and commissioning is set to resume in mid-November. We were very fortunate to hear a timely report from Philippe Lebrun on the status of the LHC and plans for commissioning at the American Linear Collider Physics Group workshop ([ALCPG09](#)) in Albuquerque at the end of September.

[Read more...](#)

-- Barry Barish

[Director's Corner Archive](#)

Image of the Week

RF Unit Test Facility takes (big and yellow) shape

[CLIC09 Workshop](#)
CERN
12-16 October 2009

[12th International Conference On Accelerator And Large Experimental Physics Control Systems \(ICALEPCS 2009\)](#)

Kobe International Conference Center, Kobe, Japan
12-16 October 2009

[EUNET Annual Meeting](#)
University of Geneva and CERN, Geneva, Switzerland
19-21 October 2009

[FCAL Collaboration Meeting](#)
CERN, Geneva, Switzerland
21-22 October 2009

[2009 IEEE Nuclear Science Symposium and Medical Imaging Conference](#)
Orlando, Florida, USA
25-31 October 2009

[6th ILC Positron Source Collaboration Meeting](#)
IPPP, Durham, UK
28-30 October 2009

[GDE Meetings calendar](#)
[View complete ILC calendar](#)

12 October 2009
UK Press + CERN arrests + al-Qaeda = Cold fusion?
... But wait? Did we hear the word "nuclear" and "al-Qaeda"? Cue the press. Coverage has been wide and varied, but for the best of the best, you have to the UK:
[Read more...](#)

From *interactions.org*
9 October 2009
UK Accelerator Research Receives a Boost
Research into accelerator science and technology in the UK has received a boost with the announcement of nearly £20m of funding by the Science and Technology Facilities Council (STFC) to The Cockcroft and John Adams Institutes.
[Read more...](#)

From *Science*
9 October 2009
Russian Expats Challenge Country's Support of Science
... In their letter, they suggested the country try to attract world-scale scientific projects, using as a concrete example the construction of the International Linear Collider. This high-energy particle collider, envisioned as a possible successor to the Large Hadron Collider, would boost Russia's research in many fields, including information science, biology, and materials science, they say.
[Read more...](#)



Fermilab engineers and technicians move the first ILC-like cryomodule assembled at the laboratory into place to for testing. It will become the front-end of Fermilab's future accelerator R&D test beam in the SRF Test Facility.
Photo courtesy of Fermilab.

Announcements

arXiv preprints

[0910.2235](#)

A Finely-Predicted Higgs Boson Mass from A Finely-Tuned Weak Scale

[0910.2106](#)

Supersymmetry and other New Physics at gamma gamma colliders

[0910.1305](#)

High-gradient SRF Cavity with Minimized Surface E.M. Fields and Superior Bandwidth for the ILC