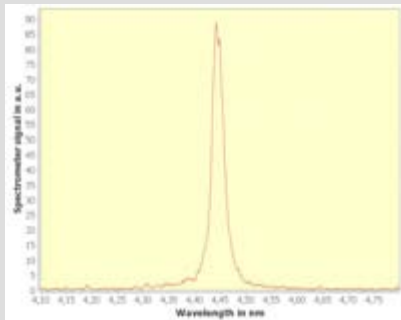


Around the World

From DESY: Record wavelength at FLASH – First lasing below 4.5 nanometres at DESY's free-electron laser

A recent record at DESY's FLASH accelerator is a direct result of the TESLA Technology Collaboration – a new cryomodule built at Fermilab brings the energy of the electron beam right up and the size of the laser beam right down.



The spectrum of the record laser pulse peaks at a wavelength of 4.45 nanometres.

For the first time, FLASH produced laser light with a wavelength of 4.45 nanometres; thus, DESY's free-electron laser for soft X-ray light considerably beat its previous record of 6.5 nanometres. At the same time, the peak intensity of single light pulses nearly doubled, with 0.3 millijoule. Prior to this, there was a five-month machine upgrade, above all with a significant improvement of the superconducting linear accelerator and the installation of a seeding experiment together with the University of Hamburg.

[Read more...](#)

Calendar

Upcoming meetings, conferences, workshops

[TeV Particle Astrophysics 2010](#)
Paris, France
19 July - 23 July 2010

[35th International Conference on High Energy Physics \(ICHEP2010\)](#)
Palais des Congrès, Paris, France
21 July - 28 July 2010

[First Baseline Assessment Workshop](#)
KEK, Tsukuba, Japan
7-10 September 2010

[XXV Linear Accelerator Conference \(LINAC10\)](#)
Tsukuba, Japan
12 - 17 September 2010

Upcoming school

Feature Story

Jie Gao: new chair of the Asian Linear Collider Steering Committee



Former and new ALCSC chair meet at IPAC'10, Shin-ichi Kurokawa (left) and Jie Gao (right). Image: Nobuko Kobayashi.

Jie Gao, professor at the Institute of High Energy Physics (IHEP) in Beijing, China, has been appointed by the Asian Committee for Future Accelerators (ACFA) to be the new chair of the Asian Linear Collider Steering Committee (ALCSC) for a term of three years. The appointment occurred during the First International Particle Accelerator Conference, IPAC'10. "I feel that it is a great honour for me to serve as the new chairman of ALCSC, and at the same time I feel a great responsibility to fulfil this role of promoting and coordinating ILC activities in Asia with good accordance and communication with other regions," said Gao.

[Read more...](#)

-- Min Zhang

In the News

From *{sciences²}*, *blog of Libération*
23 June 2010

Physique des particules : le Cern s'élargit

"Le principal enjeu de ce grand jeu mondial est le site de la prochaine machine mondiale, post LHC.(...) La technologie de ce collisionneur linéaire est elle aussi en discussion, entre un système dit ILC avec des cavités supraconductrices et CLIC un projet plus futuriste et plus puissant." [Read more...](#) (in French)

From *Science Magazine*
22 June 2010

Director's Corner

Flexibility in the ILC design

Today's issue features a Director's Corner by Ewan Paterson, member of the Global Design Effort Executive Committee.



Schematics of the ILC with the Reference Design Report layout on the left and one "SB2009" version, which is under study, on the right.

In a new large accelerator complex which will take years to get approved and constructed, one must maintain some degree of flexibility in its design as many things can change before a construction start. The accelerator physics and technology that constrains the performance will advance and the knowledge of the physics which determines its future physics programmes will be better known and continually evolving. At the same time a complete baseline design and associated cost estimate is needed to support the many technical and cost reviews that will be required to obtain the necessary global support and funding.

[Read more...](#)

-- Ewan Paterson

[Director's Corner Archive](#)

Announcements

ILC Internal Document

[2010-045](#)

ILC Global Design Effort – Project Managers' Report – May 2010

arXiv preprints

[1006.3991](#)

KEK GRID for ILC Experiments

[1006.3744](#)

ISIS2: Pixel Sensor with Local Charge Storage for ILC Vertex Detector

[1006.3712](#)

AHCAL Energy Resolution

[1006.3674](#)

Progress towards a Technological Prototype for a Semi-Digital Hadron

In Race to Build New Particle Smasher, Japan Gets \$100 Million Head Start Over Italy

"To be spent over the next 3 years, the money granted by the Japanese government will cover only a fraction of the \$350 million needed to complete the Super KEKB upgrade."
[Read more...](#)

From *BBC News*
22 June 2010

Neutrino 'ghost particle' sized up by astronomers

"Using data from the largest ever survey of galaxies, researchers put the mass of a neutrino at no greater than 0.28 electron volts."
[Read more...](#)

From *TRIUMF*
22 June 2010

British Columbia Invests in Next-Generation Accelerator Technology

"...construction of a new research facility to produce and study isotopes for physics and medicine. The heart of the facility is a high-power electron linear accelerator utilizing superconducting radiofrequency (SRF) technology."
[Read more...](#)

From *CERN*
18 June 2010

CERN Council opens the door to greater integration

"Council also opened the door to greater integration in particle physics when it unanimously adopted the recommendations of a working group set up in 2008 to examine the role of the Organization in the light of increasing globalization in particle physics."
[Read more...](#)

From *CNRS and CEA*
17 June 2010

HESS-II : A new camera for exploring the violent universe

"This camera is a real eagle's eye and the key component of the fifth telescope. It represents France's main contribution, with IN2P3/CNRS as project manager."
[Read more...](#)

Calorimeter based on Glass RPCs

[1006.3662](#)

Monte Carlo Studies of the CALICE AHCAL Tiles Gaps and Non-uniformities

[1006.3626](#)

Shintake Monitor in ATF2 : Present Status

[1006.3623](#)

Status of Simulation Tools for the ILD ScECAL

[1006.3551](#)

Using Single Photons for WIMP Searches at the ILC

[1006.3503](#)

The SiD Detector Concept

[1006.3434](#)

Analysis of Little Higgs Model with T-parity at ILC

[1006.3427](#)

Measurement of Higgs Anomalous Coupling with $H \rightarrow WW^*$ at International Linear Collider

[1006.3421](#)

Simulation Study of FPCCD Vertex Detector

[1006.3402](#)

Studies on the Electron Reconstruction Efficiency for the Beam Calorimeter of an ILC Detector

[1006.3396](#)

The International Large Detector: Letter of Intent

[1006.3263](#)

Photon detection efficiency of Geiger-mode avalanche photodiodes

[1006.3220](#)

A Lightweight Field Cage for a Large TPC Prototype for the ILC

[1006.3081](#)

Numerical relativity for D dimensional space-times: head-on collisions of black holes and gravitational wave extraction