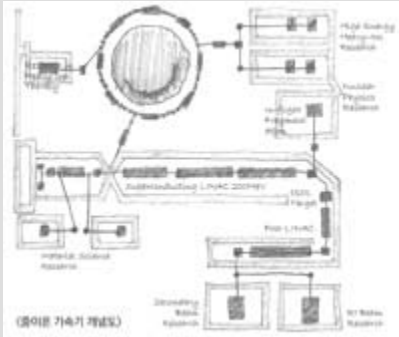


### Around the World

#### Korea to build new science and business city



Conceptual design for Korean rare isotope accelerator

Since the leadership of its President Lee Myung-bak, Korea has placed high value on science and technology. On 13 January, the government officially signed a contract for a big project to build an international science and business belt that includes the establishment of a new institute, the Asian Basic Science Institute (ABSI), and the construction of a Rare Isotope Accelerator.

[Read more...](#)

-- Rika Takahashi

### Calendar

#### Upcoming meetings, conferences, workshops

[Accelerator Reliability Workshop](#)  
TRIUMF, Vancouver, Canada  
26-30 January 2009

[TH Institute: From the LHC to a Future Collider](#)  
CERN  
9-27 February 2009

[ILD Workshop](#)  
Ewha Womans University, Seoul, Korea  
16-18 February 2009

[Silicon Detector Design Study Workshop](#)  
SLAC  
2-4 March 2009

[GDE Meetings calendar](#)

### Feature Story

#### From SLAC Today: Groovy Beam Pipe Update



This insert, manufactured by SLAC and the company EMEGA, was placed inside the KEK-B accelerator beam pipe to trap stray electrons with its triangular grooves.  
Photo: Mauro Pivi.

Something unwanted lurks within accelerator beam pipes around the world: stray electrons. This haze of electrons interacts with positron and proton beams, often causing distortion. Previous tests showed that an insert designed by SLAC researchers works well to capture stray electrons in an environment with no magnetic field. Now, recent tests carried out at the Japanese accelerator facility KEK confirm that a new insert can reduce this electron cloud effect in a magnetic field.

[Read more...](#)

-- Kelen Tuttle

### In the News

From *Interactions*  
27 January 2009  
**New grant will help UK remain at cutting edge of particle physics**  
The work of UK physicists in the quest to unravel the secrets of the fundamental building blocks of our Universe has just (27th January 2009) received a boost with a 10 year, £16.7M grant from the Science and Technology Facilities Council (STFC) to Durham University's Institute for Particle Physics Phenomenology (IPPP)—a research centre dedicated to the application of theory to high energy particle physics experiments.  
[Read more...](#)

From *CERN Courier*  
27 January 2009

### Director's Corner

#### ILC power

Today's issue features a Director's Corner by Ewan Paterson, Member of the GDE Executive Committee.



Rankine (Scotts Physicist, 1820-72) was an early leader in the science of thermodynamics where much of the motivation was energy efficiency and the target technology was the steam engine.

I have many times been in the situation where I took an interested non-expert on a tour of SLAC National Accelerator Laboratory and explained how it relates to a future project, the International Linear Collider. I would often say that in several ways it is similar but ten times longer. This particularly gets a lot of attention while standing in the 3-kilometre-long klystron gallery where

one is never sure that you can really see the end! This immediately leads to the question "where could you build something that is 30 kilometres long?" The fact that it would be mostly in underground tunnels and could be built almost anywhere in the world is usually a satisfactory answer.  
[Read more...](#)

-- Ewan Paterson

[Director's Corner Archive](#)

### Announcements

#### arXiv preprints

[0901.4183](#)  
LiC Detector Toy - Tracking detector optimization with fast simulation and its application to the ILD design

[0901.4151](#)  
Study of Beam Profile Measurement at Interaction Point in International Linear Collider

[0901.4132](#)  
Status of the CALICE DAQ system

[View complete ILC calendar](#)

**Accelerators shine as experts gather in Genoa**

EPAC returned to Italy for the last meeting in this European series, which is to merge into an annual international event. It revealed the increasing strength and breadth of research in particle accelerators, which seems destined for a bright future.

[Read more...](#)

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From *CERN Courier*  
27 January 2009

**DESY awards two building contracts for European XFEL**

DESY has commissioned two consortia of renowned building contractors to construct the underground buildings (tunnels, shafts and halls) for the 3.4 km long X-ray laser facility, European XFEL.

[Read more...](#)

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From *New York Times*  
26 January 2009

**Essay: Elevating Science, Elevating Democracy**

...Those values, among others, are honesty, doubt, respect for evidence, openness, accountability and tolerance and indeed hunger for opposing points of view.

[Read more...](#)

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From *Fermilab Today*  
23 January 2009

**Energy Secretary Steven Chu looks to labs for DOE's future**

The Department of Energy's new leader, Energy Secretary Steven Chu, quite literally wants the organization to help save the world.

[Read more...](#)

[0901.4020](#)

Implementation and application of kinematic vertex fitting in the software environment of ILD

[0901.3598](#)

Analysis of ZHH in the 4-jet mode

[0901.3429](#)

Development of Pair Monitor

[0901.3427](#)

Development of Readout ASIC for FPCCD Vertex Detector

[0901.3159](#)

A powerful tool for measuring Higgs associated Lepton Flavour Violation