DESY INFORM

10/2006

Polar Lights at DESY

On October 11, geologist and journalist Dr. Hinrich Bäsemann will show the fascination of polar lights—from the physics to the myths of the Arctic population. The talk for the general public starts at 19 h in the Auditorium (in German).

Testing James Bond

On November 1, the physics of 007 will put to the test. In his talk for the general public, Prof. Metin Tolan will give a review on how realistic stunts of the legendary movies really are. "Shaken, not stirred" begins at 19 h in the Auditorium (in German).

Click and Eat

From the Hamburg pan-fried fish to the Thuringian sausage—the weekly menu presents the whole variety offered by the new DESY canteen, always up-to-date on the internet: www.desy.de → Information and Services → Canteen menu.

Research Future

On Monday, October 23, the "Physics Research Committee" will meet in Zeuthen. Topics of the open session will be research at HERA, LHC and IceCube. In October, meetings of the "Scientific Council" and the "Photon Science Committee" will also take place.

Get the picture

You weren't there when the German President visited DESY? You missed the magician and the limbo dancer on the DESY party? You would like to use pictures of the DESY facilities for your own presentation?

This site offers help: you can find a photo archive on the DESY intranet (button "Internal") with pictures to view and download. By and by, photos of special events at DESY and of DESY facilities will appear on this site. The resolution is optimized for the screen and transparencies. For the photos, go to www.desy.de → Internal → Photo archive.

Have fun!
Your PR department

FLASH today, XFEL and ILC tomorrow

Project study makes Module 6 its study object

There's a hint of Ikea in the air of building 28 (also known as Hall 3). The physicists, engineers and technicians making up the module team that assembles the accelerator modules for FLASH are working on a kit of assembly instructions that easily outperforms those of the famous furniture store. To prepare for the European XFEL project, the plan is to let industry build the 120 accelerator modules necessary for the free-electron laser. The International Linear Collider (ILC) will use much of the same technology of FLASH and XFEL, and as it isn't decided yet where the ILC will be built, mass production of about 2000 modules for the 30-kilometer machine has to be prepared, too—internationally. At some point in the future, teams from around the world will have to be able to assemble thousands of these modules.

Kay Jensch, leader of the module assembly team, has grown used to people looking over his shoulder while he is working. "Colleagues from Fermilab, KEK and Korea have visited us," he says. The international

Assembly of the cavities for Module 6 in the cleanroom.

spectators stayed at DESY for a couple of weeks at a time to watch the complete process of a module being assembled—not just any module, but Module 6 for FLASH. They also helped to refine the assembly kit, including representatives from industry who contributed their expertise as part of an XFEL project study.

Instructions for an accelerating module are a highly complex matter—different from Ikea instructions for a wardrobe that fit on two pages. Every small detail has to be documented and catalogued precisely, from the production of superconducting cavities, their assembly in the cleanroom, to the mounting of the couplers, antennae and testing devices. "There are several large work segments that all consist of hundreds of smaller work packages," says Jensch. And in the end of course everything needs to fit down to a tenth of a millimeter. "We are learning a lot!" says Norihito Ohuchi from KEK. *(baw)*

Did you know ...?

Two email adresses to make your DESY life easier

In the future, the DESY print shop can be reached quickly and easily.
Send your print jobs in a compatible format (Word, Excel, PDF, PostScript, ...) to the following address:
kopierzentrale@desy.de

The remodelling phase of the post office will end in the second half of October.
The usual service that is currently available in the office container, like selling phone cards and posting stamped private mail, will then again be offered at the familiar but redecorated place. In case you have questions, ideas or complaints related to the postal service, please contact:
poststelle@desy.de
(she)

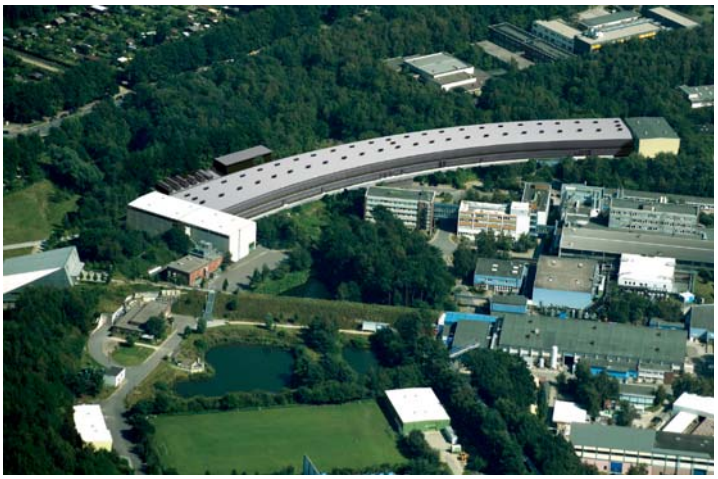
DESY INFORM

Spotlight on the New Super Lamp

The PETRA III Project Takes Shape

Even if the experimental hall for the new X-ray source PETRA III is now only visible on the architectural drawings, evidence is gathering that next summer its construction will start on the DESY site: in the area where the new PETRA III hall is to be erected, a test front has recently been installed. This way, the material and design of the planned hall will be put to the acid test—including its ability to cope with the Hamburg drizzle. The appealing and functional design is the result of an architectural competition initiated by DESY. But these are only the obvious signs of the oncoming construction start of PETRA III. Also behind the scenes, the project planners under the leadership of Prof. Edgar Weckert have made substantial progress. Thus, DESY is very pleased that at the end of August the Federal Ministry of Education and Research granted special funds amounting to approximately 124 millions Euros for the remodelling of the PETRA ring. These funds will be supplemented by a sum from the City of Hamburg, financing 10 percent of the project. Moreover, Hamburg gave the official building permit for the 280-meter PETRA III experimental hall, making up nearly one-eighth of the future X-ray source. Currently, concrete planning is running at full speed. The bidding for the general contractor for the construction of the experimental hall is scheduled for this year. Moreover, at the end of October, the first trees will be cut down near the PETRA south hall, behind the auditorium. The authorisation for the clearing at the end of the growing period has already been given. At the same time, the coordination of the work packages at the different construction sites of PETRA III is under way. After all, there will be simultaneous building at virtually all bends of the ring in order to meet the concise operating schedule for the remodelling from 2007 to 2009. *(tz)*

http://petra3.desy.de



This is what it will look like: artist's impression of the 280-meter PETRA III experimental hall. In the foreground: the FLASH facility.

Submitted to continuous testing: Test front for the PETRA III hall.

Cuba lounge, party beaches and magicians

DESY staff celebrated a fabulous “Caribbean Night”

Even if it had rained, the party would never have been a washout. On September 14, when the drummers of the Samba band marked the start of the party, the first guests were already in high spirits. Nearly 1300 colleagues followed the invitation to the “Caribbean Night” and were drawn in by the terrific atmosphere in the party tents. In the Cuba lounge, at the party beach or in the tent, fire artists, magicians and limbo dancers mingled with the guests, making them laugh and drop their jaws in astonishment. Scraps of conversations could be heard, like “excelled all expectations”, “the event of the year”, “really tasty” and “we'll keep the admission wristbands as a souvenir”. Everybody celebrated in the company of well-known or even still unknown colleagues. The last guests left the party shortly after four a.m. Quote from a mail from Zeuthen: “It was very quiet in the bus returning home because many had partied till early morning.” *(she)*

Fun: Even DESY scientists couldn't get to the bottom of the magician's tricks.

IceCube

First data from the neutrino observatory

In Zeuthen, scientists of the IceCube Collaboration will present the first physics data from the upgraded neutrino observatory at the South Pole from 6 to 10 October. Starting at the beginning of the Antarctic summer, the gigantic telescope will be equipped with more Digital Optical Modules (DOM). This time, 900 DOMs will be installed in depths of up to 2.5 kilometers. 260 of these DOMs were assembled at DESY. *(she)*

Imprint

Publisher
DESY-PR
Notkestr. 85
22607 Hamburg, Germany

email: inform@desy.de
tel.: +49/40/8998-3613
fax: +49/40/8998-4307
www.desy.de

Editors
Christian Mrotzek (V.i.S.d.P.)
Sandra Hesping
Thomas Zoufal