

## The Terascale Playing Field

### Kick-off Workshop at DESY

When you organise a workshop you have a rough idea of how many people are likely to come. The organisers of the Kick-off workshop of the Helmholtz Alliance "Physics at the Terascale" had expected some 200 participants, but they were in for a surprise. By the time the workshop started (on 3 December), there were more than 350 registrations. "This is just great," beamed DESY Research Director Rolf Heuer, one of the Alliance initiators and scientific coordinators, in his opening speech. "It's good to see so many young people in the auditorium."

The Terascale Alliance, a consortium of 17 German universities, two Helmholtz research centres and one Max Planck Institute, started officially in the summer, but the three-day kick-off workshop brought all participants together for the first time. The new structure will give a boost to particle physics in Germany –



More than 350 scientists attended the kick-off workshop for the Helmholtz alliance "Physics at the Terascale".

almost all institutes involved in the LHC at CERN are part of it, and by strengthening the interplay between all these experts, German scientists ranging from student to professor will be able to play more prominent roles in the international community.

A total of over 50 new positions at universities and labs all over the country has been created, most of them for young researchers, many for tenure track. Rainer Nicolay from the Helmholtz Association, who also spoke at the opening stressed the good example of the Terascale Alliance. "Now it is up to you to turn the money into success," he said. The Alliance's International Advisory Board also met for the first time during the meeting at DESY.

Peter Mättig (Wuppertal University), the other scientific coordinator, stressed the switch from top-down to bottom-up approach that happened at the meeting. "During the last five months we have created a skeleton structure. Now its members should fill it with flesh and muscles and shape the Alliance in the way they think is best." (baw)

## Time to Tighten Our Belts

### DESY has to economise substantially in the coming years

At a staff meeting on 10 December, Albrecht Wagner outlined the future budget of the lab. The ambitious aim had been to keep the budget for infrastructure at the level of the year 2003 – but this aim was not met. In the past years the budget exceeded the limit by roughly 17 million Euros. The funds released from the shut-down of HERA would have compensated the liabilities, but there were also un-

foreseeable excess expenditures. This means that DESY has to economise: several areas of expense are put to the test, especially those regarding recruiting and investments. First and absolute priority, however, is to guarantee the future of the research centre.

From 2008 onwards there will be similar challenges for Zeuthen, due to the fulfilment of obligations in the human re-

sources sector and the increasing participation in the XFEL.

Albrecht Wagner appealed to the staff to think of and submit proposals for saving measures to the directorate.

In mid-February 2008 the Administrative Council will discuss the austerity programme in an extraordinary session. The DESY staff will be informed of the outcome in a new meeting. (she)

#### The Real Life

There is a life beyond science. DESY's diploma and PhD students' initiative Dolt is starting a lecture series about "The Real Life". Former DESY students talk about their jobs in the world out there.

Linus Lindfeld, formerly H1, now a patent lawyer, will give the first talk on 10 January, 6 p.m., seminar room 3.

#### Users' Meetings

On 23 and 24 January the second XFEL User's Meeting will take place in the auditorium, followed immediately by this year's HASYLAB Users' Meeting on 25 January.

Scientists will update each other on the current status of photon sources and projects.



## DIRECTOR'S CORNER

Welcome to the new year for which I would like to wish you a lot of joy, prosperity and good health. I hope you had some nice holidays away from work to gather spiritual and physical strength.

Starting 1 January Edgar Weckert will be acting Director for Photon Science. Why just an acting director? It is because all the candidates who were chosen by the finding commission for the succession of Jochen Schneider have unanimously declared that they first wanted to know

who would be the next Chair of the Directorate, i.e. my successor. We don't know this yet, which is why the Scientific Council decided to appoint an acting director. The Administrative Council accepted this proposal.

The change in the top management in the area of photon science was predictable and planned. The appointment of Rolf Heuer as CERN Director General starting in January 2009 was not. I am extremely pleased that he was nominated because this is a great

distinction for him and a clear recognition of his many achievements, above all of his role as Research Director at DESY. His nomination has two sides: on the one hand it will strengthen particle physics worldwide, on the other it presents DESY with a great challenge in a phase of many changes. Therefore, Rolf Heuer has asked the Administrative Council to appoint a deputy till he goes to CERN, proposing Joachim Mnich. This was also accepted.

As I already mentioned, we

have also started searching for my successor. This means that there will be many changes in the executive level at DESY in the next one or two years. However, the course of the DESY ship will not be altered by these changes. Let us hope that DESY will continue sailing in good wind towards progress.

Sincerely yours,  
Albrecht Wagner

# Jochen Schneider Goes Into Retirement

... but the former Director for Photon Science still has big plans

by Albrecht Wagner

In the December issue, Jochen Schneider bid his farewells. I would like to take the opportunity to review life and work of the first member of the DESY Directorate for Photon Science.

Jochen Schneider was born in Saxony in 1941. As a trained high voltage electrician, he qualified in electrical engineering and began to study physics in Hamburg in 1965. After his pre-degree in 1968 – the year of student revolts – he went to Grenoble where he worked on his diploma and PhD theses under the tutorial of the famous German physics professor Heinz Maier-Leibnitz.

He spent his postdoctoral fellowship in Grenoble and, in 1976, went to the Hahn-



Albrecht Wagner and Jochen Schneider

Meitner-Institute in Berlin. He habilitated in 1982 at Technische Universität in "Experimental Physics and Crystallography" and was nominated extraordinary professor in 1988. At the end of 1989, the

DESY Directorate asked him to come to Hamburg, where his career made quick progress (see below).

Jochen Schneider, a prominent scientist, has received numerous distinctions for his research and attractive offers for other leading positions. The reason why he stayed at DESY was certainly due to the fact that – with the PETRA III, FLASH and XFEL projects – he could help to create several new research facilities. There were no such opportunities elsewhere. Jochen Schneider has made a substantial contributions to put DESY in a top position, with a brilliant future, in the field of photon science. For this, we feel much obliged. For his future work, we wish him a lot of success.

### Career at DESY: Jochen R. Schneider

- 1989-1993 Deputy Director of Hamburg Synchrotron Laboratory HASYLAB
- Since 1990 Leading Senior Scientist at DESY  
Teaching position at the University of Hamburg
- Since 1993 Director of HASYLAB
- 2000-2007 Member of DESY's directorate for photon science

From 2008 Jochen Schneider will make a balancing act between SLAC and DESY to strengthen the collaboration of both institutes in the field of FEL research.

# Top Job

## Interview with Rolf Heuer

On 14 December, the CERN Council elected a new Director General: DESY Research Director Rolf Heuer.

**You will have the most important job in particle physics. When do you start?**

In January 2009. Until then I will continue to be head of high energy and astroparticle physics research here. However, I will probably travel a lot between DESY and CERN. During times of absence, Joachim Mnich will act as my personal deputy.



F.l.: CERN Director General R. Aymar, President of CERN Council T. Åkesson, next Director General R. Heuer

**What are your first tasks at CERN?**

After learning how it is organised I will form the new CERN Directorate. The most important goal is the start-up of the LHC with data taking and analysis. In the long run it will be necessary to set the course for the future of particle physics at CERN and in the world.

**What about the future plans at DESY?**

Like all areas the high-energy physics also has to save money. This affects investments and may cause a delay in recruiting. But these measures will not have such a big impact that they could endanger the research programme.

**And the future of the Helmholtz-Alliance?**

The coordination will be taken over by Ties Behnke. Everything else continues as planned. (she)



On Friday noon, the so called vibrating screed smoothed out the first metres of the concrete surface

## A Race Against the Clock

### Logistical and constructional climax at the PETRA III construction site

On 14 December at 5 a.m. sharp, construction workers poured the first load of concrete for the PETRA III ground plate into the hall. Four concrete pumps operated continuously for three days and two nights. Nearly 850 lorries delivered some 6600 cubic metres of concrete, all according to a meticulously elaborated time schedule. The pumps needed continuous supply and there was a lot of traffic at the DESY entrance at Luruper Chaussee.

Four concrete plants and one cement plant had been working exclusively for DESY during these days. They were responsible for the proper mixing of the concrete. The lower half of the one-metre thick ground plate consist of standard concrete, the upper one of a special steel fibre concrete specially produced for PETRA III. The layers had to be cast in a fresh state to make sure that they harden in one piece. To guarantee delivery of each kind of concrete at the right place and time during the three days of

uninterrupted service, the lorry and pump drivers used a colour system for orientation: red for standard concrete and green for steel fibre concrete.

At a width of ten metres, the specialists only had a tolerance of about four millimetres. According to the DESY construction management, the one-meter thick piece of concrete will be flatter than a parquet floor.

Cracks had to be avoided at all cost during the hardening of concrete. The steel fibres in the upper 50 centimetres already prevented this in the first hardening phase.

Similar to two-component adhesives, concrete heats up during hardening – up to 45 degrees. Tension was absorbed by a thin bitumen layer at the bottom of the slab. The floor slab was “cast floating” and contracted by several previously calculated centimetres. The time schedule was also kept: On Sunday 16 December the last lorry left the site at a quarter to five in the afternoon. (she)

#### Infinite Space?

This year the Science Café starts with Martin Köhler talking about “Infinite and Warped Space – Infinite Space Limitations” (in German). Thursday, 10 January, 5 p.m. in the DESY cafeteria.

#### World Cup

Metin Tolan has already revealed the tricks of James Bond and Star Trek. He is coming back to DESY in January to give a lecture on the physics of football. Auditorium, 25 January, 7 p.m. (in German).



## Happy New Year from the South Pole

Taking advantage of the good weather conditions Alexander Kappes from the IceCube Collaboration is standing in front of the new research station at the South Pole, the sun shining brightly, but temperatures ranging around minus 35 degrees. Delia Tosi and Stefan Klepser from Zeuthen are currently on site. Both are responsible for the installation of acoustic sensors and IceTop tanks. If the weather continues to be fine and everything goes according to plan, half of the neutrino telescope IceCube will be installed at the end of the season. (she)

# A New Face in the Directorate

## Interview with Edgar Weckert

Edgar Weckert is the new acting Director for Photon Science. On 6 December, the Administrative Council accepted the Directorate's proposal.

### Why is there only an acting director?

The successor for Jochen Schneider has not yet been chosen. For the transition period I have been assigned to assume the responsibility for DESY's photon science.

### How do you organise yourself in your new job?

Apart from the project leadership of PETRA III, my new field of duties now also comprises DORIS, FLASH, CFEL, the ZM sector and our participation in the XFEL. The workload is spread over many shoulders: Gerhard Grübel will act as interface to the XFEL project team and Hermann Franz will take up more responsibilities at PETRA III.

Edgar Weckert, new acting Director for Photon Science



### Is PETRA III also affected by the saving plan?

I don't see any danger because we are financed through project funds and monitor our expenses carefully. At the moment we are well positioned both with our budget and time schedule.

### What about the future of your sector?

Our goal is to carry on with our successful light sources, for example DORIS with about 2000 users and more than 500 publications per year. We want to

expand the international pioneering role of FLASH and continue to supervise the main construction period of PETRA III successfully. Moreover, we have to advance CFEL and our participation at the XFEL. (she)

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## ATLAS-Analyse-Workshop at DESY

On 12 and 13 November 2007, around 20 physicists met for a workshop at DESY in Hamburg. The participants from Bonn and Heidelberg University and from DESY in Hamburg and Zeuthen had lively discussions about the software for the ATLAS detector, with emphasis on analysis tools and their use.

The main speaker was Prof. Dr. Amir Farbin from the Uni-

versity of Texas, Arlington, USA. He is the coordinator of the "ATLAS Analysis Tools" group and one of the main authors of „EventView“ software that provides many complex analysis functions. The workshop took place at a time when active communication between developers and users is necessary because the ATLAS analysis software is currently being prepared for the first data.