

DESY Summer Student Program 2007

Welcome Session

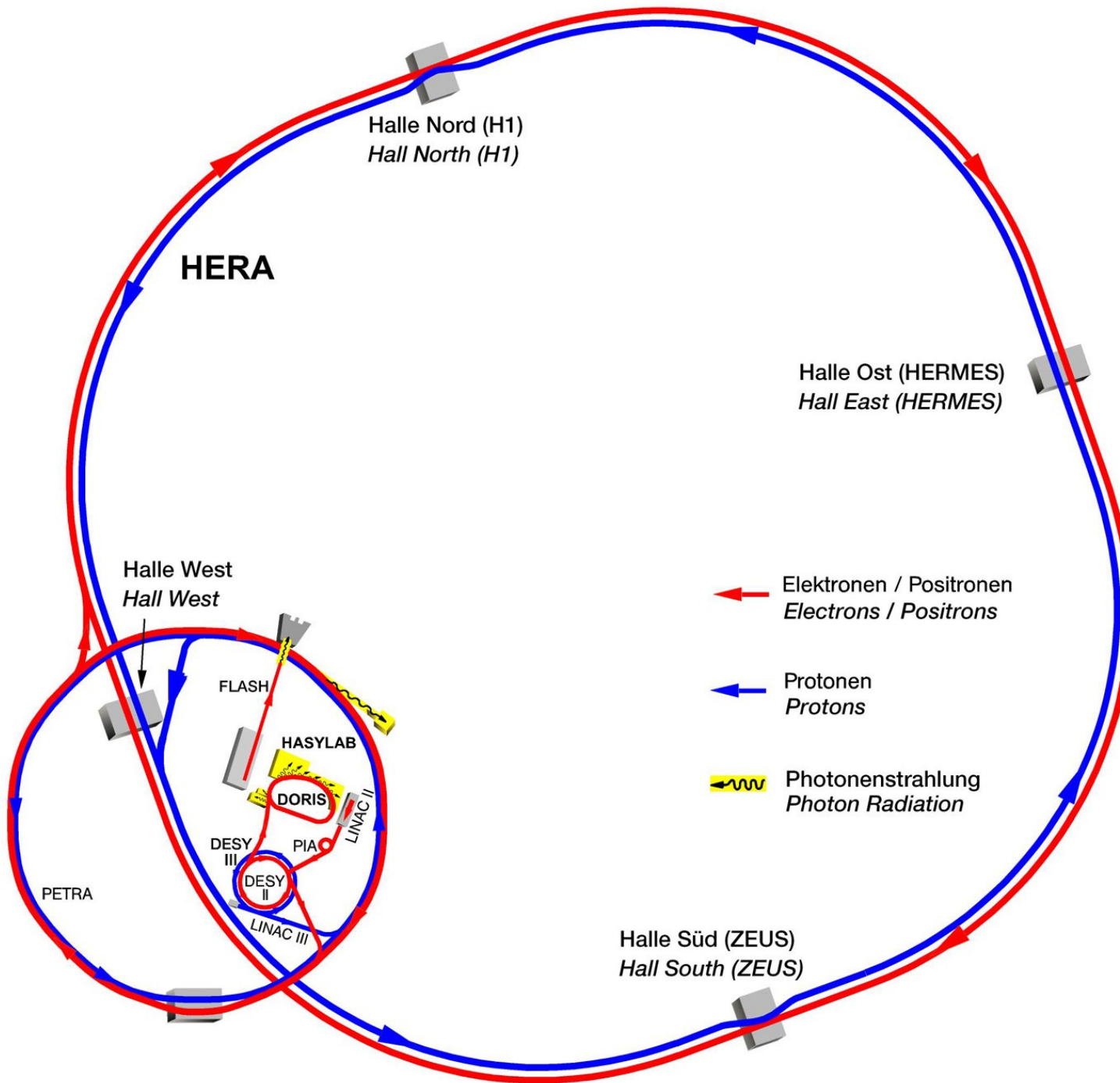
The 80 Summer students come from

- Armenia, Austria, China, Estonia, Finland, France
- Germany, Greece, Israel, Italy, Mexico, Poland
- Romania, Russia, Spain, Sweden, Switzerland
- Thailand, Turkey, Ukraine, UK, USA

DESY site in Hamburg



We are HERE now



Your Research Projects at DESY :

DESY Summer Students join groups engaged in the following activities:

Program A : Experiments with Synchrotron Radiation (only at Hamburg)

- Students join groups at [HASYLAB](#) engaged in fundamental and applied research in the fields of physics, biology, chemistry, crystallography, material science, geological science, and medicine. The work includes participation in the preparation and realization of measurements, evaluation of the measured data, and technical improvement of the instrumentation.

Program B : Research in Elementary Particle Physics, accelerators and computing:

- **Experiments in Elementary Particle Physics**
Research is concentrated mainly on the experiments [H1](#), [HERMES](#) and [ZEUS](#) at the electron-proton-collider HERA, the experiments [ATLAS](#), [CMS](#) at the proton-proton-collider LHC and in preparations for [experiments at a e+ e- Linear Collider](#). At Zeuthen research is done also in the area of [Neutrino-Astrophysics](#). The activities can be characterized by the following categories :
 - B1** Physics analysis (software-oriented)
 - B2** Data processing (software-oriented)
 - B3** Development of experimental equipment (hardware-oriented)
- **B4 Research on Accelerators**
Students join groups engaged in the development of accelerators. Activities include prototype projects for a [e+ e- linear collider](#) and research in the areas of superconducting magnets and cavities.
- **B5. Theory of Elementary Particles**
Students acquire some elementary insight into topics from the [wide spectrum of research](#) of the Theory group. Depending on previous knowledge, activities may range from further reading, with discussions of theoretical concepts and research methods, to participation in simple research projects.
- **B6. Computing**
Research is done in the area of Computing in High Energy Physics. At Zeuthen students participate also in tests and software development for [powerful parallel computers](#).

DESY Summer Student Program 2007 : Lectures at Hamburg

DESY Summer Student Common Lectures - Week 1 (Place : SEM 4, Bldg. 1B)

Time	Mon, 23.7.2007	Tue, 24.7.2007	Wed, 25.7.2007	Thu, 26.7.2007	Fri, 27.7.2007
9:00- 10:30			10:00 Welcome Session Registration <i>J. Meyer</i>	Introduction to Accelerators <i>B. Holzer</i>	e+ e- Linear Collider <i>E. Elsen</i>
11:00- 12:30				e+ e- Linear Collider <i>E. Elsen</i>	More on Accelerators <i>H. Mais</i>

DESY Summer Student Common Lectures - Week 2 - (Place : SEM 4, Bldg. 1B)

Time	Mon, 30.7.2007	Tue, 31.7.2007	Wed, 1.8.2007	Thu, 2.8.2007	Fri, 3.8.2007
9:00- 10:30	Superconductivity at Accelerators <i>P. Schmueser</i>	Astro Particle Physics <i>A. Lindner</i>	Free Electron Laser <i>J. Rossbach</i>	Elementary Particle Physics Research <i>A. Geiser</i>	Research with Synchrotron Radiation <i>R. Roehlsberger</i>
11:00- 12:30	Astro Particle Physics <i>A. Lindner</i>	Superconductivity at Accelerators <i>P. Schmueser</i>		Research with Synchrotron Radiation <i>R. Roehlsberger</i>	Elementary Particle Physics Research <i>A. Geiser</i>

For the remaining weeks the common lectures for all summer students are scheduled always for Friday :

DESY Summer Student Common Lectures - Weeks 3-6 - (Place : SEM 4, Bldg. 1B)

Time	Fri, 10.8.2007	Fri, 17.8.2007	Fri, 24.8.2007	Fri, 31.8.2007
9:00- 12:00	DESY - Research Strategy in a global context <i>A. Wagner</i>	Solid State Detectors <i>G. Steinbrueck</i>	Neutrino Physics <i>C. Hagner</i>	Life Science Applications with Synchrotron Radiation <i>M. Wilmanns</i>

Lectures for Summer Students in HEP, Accelerators and Computing (Place : SEM 2, Bld 2A)

Time	Mon, 6.8.2007	Tue, 7.8.2007	Wed, 8.8.2007	Thu, 9.8.2007	Fri, 10.8.2007
9:00 - 10:00	Introduction to Elementary Particle Physics <i>J. Meyer</i>	Detectors in Elementary Particle Physics <i>C. Niebuhr</i>	Introduction to Elementary Particle Physics <i>J. Meyer</i>	Introduction to Elementary Particle Physics <i>J. Meyer</i>	<i>see common</i>
10:30 - 11:30	Detectors in Elementary Particle Physics <i>C. Niebuhr</i>	Introduction to Elementary Particle Physics <i>J. Meyer</i>	Detectors in Elementary Particle Physics <i>C. Niebuhr</i>	Elementary Particle Physics Questions/Answers <i>J. Meyer</i>	<i>lecture</i>
11:45 - 12:30		Discussion Session <i>J. Meyer</i>	Discussion Session <i>C. Niebuhr</i>	Discussion Session <i>J. Meyer</i>	<i>program</i>

Time	Mon, 13.8.2007	Tue, 14.8.2007	Wed, 15.8.2007	Thu, 16.8.2007	Fri, 17.8.2007
9:00 - 10:00	Theory of Elementary Particles <i>B. Schrempp</i>	Theory of Elementary Particles <i>B. Schrempp</i>	Theory of Elementary Particles <i>B. Schrempp</i>		<i>see common</i>
10:30 - 11:30	Theory of Elementary Particles <i>B. Schrempp</i>	Theory of Elementary Particles <i>B. Schrempp</i>	Theory of Elementary Particles <i>B. Schrempp</i>	Computing in HEP <i>F. Gaede</i>	<i>lecture</i>
11:45 - 12:30	Discussion Session <i>Schrempp</i>	Discussion Session <i>B. Schrempp</i>	Discussion Session <i>B. Schrempp</i>	Visit Computer Center <i>F. Gaede</i>	<i>program</i>

Time	Mon, 20.8.2007	Tue, 21.8.2007	Wed, 22.8.2007	Thu, 23.8.2007	Fri, 24.8.2007
9:00 - 10:00	Physics at HERA <i>K. Krueger</i>	Physics at e+ e- Colliders <i>P. Bechtle</i>	Physics at HERA <i>K. Krueger</i>	Physics at e+ e- Colliders <i>P. Bechtle</i>	<i>see common</i>
10:30 - 11:30	Physics at e+ e- Colliders <i>P. Bechtle</i>	Physics at HERA <i>K. Krueger</i>	Simulating HEP Processes <i>H. Jung</i>	Physics at HERMES <i>J. Stewart</i>	<i>lecture</i>
11:45 - 12:30	Discussion Session <i>P. Bechtle</i>	Discussion Session <i>K. Krueger</i>	Discussion Session <i>H. Jung</i>	Discussion Session <i>J. Stewart</i>	<i>program</i>

Time	Mon, 27.8.2007	Tue, 28.8.2007	Wed, 29.8.2007	Thu, 30.8.2007	Fri, 31.8.2007
9:00 - 10:00		Physics at pp colliders <i>J. Mnich</i>			<i>see common</i>
10:30 - 11:30		Physics at pp colliders <i>J. Mnich</i>			<i>lecture</i>
11:45 - 12:30		Discussion session <i>J. Mnich</i>			<i>program</i>

DESY Summer Student Lectures 'Exp. with SR' - Week 3

Time	Mon, 6th Aug.	Tue, 7th Aug.	Wed, 8th Aug.	Thu, 9th Aug.	Fri, 10th Aug.
09:00 - 10:30		Synchrotron Radiation - Production and Properties <i>R. Gehrke</i>		Detectors for Synchrotron Radiation Experiments <i>M. Lohmann</i>	Common Lectures (09:00-12:30, Sem. Room 4, Bldg. 1b)
10:45 - 12:15		Optics for Synchrotron Radiation Experiments <i>H. Schulte-Schrepping</i>		VUV Experiments <i>A. Föhlisch</i>	

DESY Summer Student Lectures 'Exp. with SR' - Week 4

Time	Mon, 13th Aug.	Tue, 14th Aug.	Wed, 15th Aug.	Thu, 16th Aug.	Fri, 17th Aug.
09:00 - 10:30		Small Angle X-Ray Scattering <i>S. Roth</i>		Diffraction Imaging at Polycrystalline Materials <i>T. Wroblewski</i>	Common Lectures (09:00-12:30, Sem. Room 4, Bldg. 1b)
10:45 - 12:15		X-Ray Fluorescence <i>K. Rickers</i>		X-Ray Absorption Spectroscopy <i>E. Weiler</i>	

DESY Summer Student Lectures 'Exp. with SR' - Week 5

Time	Mon, 20th Aug.	Tue, 21st Aug.	Wed, 22nd Aug.	Thu, 23rd Aug.	Fri, 24th Aug.
09:00 - 10:30		Characterization of Surfaces <i>O. Seeck</i>		Inelastic Scattering <i>H. Franz</i>	Common Lectures (09:00-12:30, Sem. Room 4, Bldg. 1b)
10:45 - 12:15		X-ray Photon Correlation Spectroscopy <i>C. Gutt</i>		Spectroscopy with X-Rays <i>W. Drube</i>	

DESY Summer Student Lectures 'Exp. with SR' - Week 6

Time	Mon, 27th Aug.	Tue, 28th Aug.	Wed, 29th Aug.	Thu, 30th Aug.	Fri, 31st Aug.
09:00 - 10:30		Free Electron Lasers <i>N.N.</i>		Scattering and Diffraction <i>E. Weckert</i>	Common Lectures (09:00-12:30, Sem. Room 4, Bldg. 1b)
10:45 -				Protein Crystallography	

DESY Summer Student Programme 2007 (25/07/07 - 18/09/07) ■■■

Summer students should visit this page regularly to get informed about the latest news.

The summer student lectures at Hamburg you find [here](#)

- There are also some 'nonofficial' special tutorials offered: [C++ and ROOT](#)

● ■ ■ Current Messages for DESY - Hamburg

Official announcements for the DESY summer students will be made here. Please read and react.




- ◆ **Wednesday 25/7 at 10:00, Seminar room 4 (building 1 B)** (changed !!)
Opening Session . Since also the registration takes place at this occasion please bring all the necessary documents with you.
- ◆ **Thursday 26/7 at 10:30 :**
A Photo of the summer students will taken during the lecture break (in front of the entrance of Building 2B)
- ◆ **Tuesday 31/7 at 14:00, Head building Lab. 1, in front of PR :**
Guided tour around the DESY site
- ◆ **Friday 10/8 at 18:00, DESY Canteen Extension :**
Buffet Dinner

● ■ ■ Practical Information


Special information concerning the summer student program at Zeuthen you find [here](#)

- ◆ You need help ? Try [Summer Student Organization](#)

Where to find Help : <http://www.desy.de/summerstudents>

   Summer Student Programme

Name	Building	Room	Phone	E-mail
Andrea Schrader	1c	378	4453	andrea.schrader@desy.de
Joachim Meyer	1a	329	2479	joachim.meyer@desy.de

   Staff Department 

Opening hours : Monday - Friday from 9:00 to 12:00

Name	Building	Room	Phone	E-mail
Annette Pettersson	7	209	3765	annette.pettersson@desy.de
Regina Hoppman	7	204	3628	regina.hoppmann@desy.de

   Travel expenses 

Opening hours : Tuesday - Friday from 8:00 to 12:00

Name	Building	Room	Phone	E-mail
Erika Schuster	1c	356	3107	erika.schuster@desy.de

Where to find Help :

Accommodation

In case you can't organize housing on your own (a list of student hostels you find [here](#)) contact the hostel (for housing on DESY site) or the housing office (for private off-site housing).

NOTE : In case you contact the hostel or housing office please state that you are a summer student!

Hostel : Housing at DESY

[Info page](#)

Opening hours :

- ◆ Monday and Friday : 9:00- 13:00
- ◆ Tuesday - Thursday : 9:00- 13:00 and 14:30- 17:00

Name	Building	Room	Phone	E-mail
Hella Hummerjohann	6	120	2740	hostel@desy.de

Housing Office : Housing off- site

[Info page](#)

Opening hours :

- ◆ Monday : 9:00- 13:00
- ◆ Wednesday : 11:00- 13:00
- ◆ Friday : 9:00- 13:00

(Please be prepared to wait if you come to the office!)

Name	Building	Room	Phone	E-mail
Cathrin Schierholz	11a	28a	3487	housing@desy.de

Foreign guests

International Office

[Info page](#)

Name	Building	Room	Phone	E-mail
International Office	6	114	2516	international.office@desy.de

DESY info

Cashier : Building 6, first floor

Opening hours : Monday - Thursday from 9:30 - 13:00 and 13:00 - 15:00, Friday from 9:30 - 13:00

The DESY Site :

HASYLAB R. Gehrke 25B 221
HASLAB Lectures 25

E. Schuster 1C 356

A. Schrader 1C 378

HEP-Lectures SEM 2

Common Lectures SEM4

J. Meyer 1A 329

Canteen

Administration 7

Guest office 6



SAFETY at DESY :

DESY Safety information for Visitors and Contractors

1. Safety-Organisation

The Industrial Safety Regulations, Accident Prevention Measures, and Health Provisions at DESY conform to the German Statutory requirements and to those of the European Community. The DESY board of directors fulfils its obligations in this respect by appointing Safety Officers within the groups who are responsible for ensuring that the safety regulations and accident prevention measures are obeyed.

Similarly, with respect to radiation safety, the groups have their own nominated radiation Safety Officers.

Advice on questions of safety (excluding radiation safety matters) can be obtained through the safety engineer, Mr. Sindt (ext. 3585, building 35, room 12), Mr. Schrader (ext. 2085, room 13) or Mrs. Danker (ext. 2965, room14) -D5-.

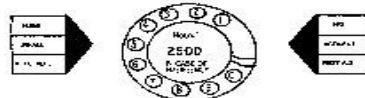
Mrs. Danker -D5- is responsible for hazardous materials and their disposal (ext. 2965, building 35, room 14).

In addition to the group -D5- questions concerning safety in the halls may be directed to the group -ZMEA- where Mr. Siniarn (ext. 3714, building 1d, room 11), is the contact man.

Radiation protection questions should be directed to the group -D3- in the persons of Mr. Tesch (ext.4915 building 1c, room 278) or Mrs. Racky (ext. 3690, building 1c, room 275).

Industrial medical advice and assistance may be obtained from Dr. Bandelow (ext. 2171, building 1a, room 107).

DESY-Emergency Call: Tel. 2500



All accidents, fires, or other emergency situations should be reported via this telephone number. In the event of language difficulties the number of the telephone extension from which you are calling indicates where you are. The emergency call number alerts the DESY Technical Emergency Service which then arranges for all necessary assistance, e.g. Fire Service, Ambulance, etc. The Technical Emergency Service is available 24 hours a day, seven days a week. For more general information, and to report technical problems please use the telephone extension number 5555 or from outside DESY call ext. 8998-5555.

2. Safety Instructions

Except in the accompaniment of an experienced person, nobody is allowed to undertake any work or enter any experimental area at DESY without having first received instructions from the local Safety Officer on special dangers which might be expected, warning or alarm signals which could occur, rescue facilities which are available, and how one should react under emergency circumstances. The issue of a magnetic card allowing independent access to the HERA halls is also conditional on a course of instructions on local safety requirements. If it is intended to work over an extended period it is necessary to take part in a general DESY safety course provided by the group -D5-.

3. Companies and Firms

When engaging a firm or company to execute work on the DESY site the originator of the order is obliged to ensure that the local Safety Officer is informed of the work and that any employees of the company involved in the work receive adequate safety instructions.

4. Rules of the road

The general German road traffic regulations also apply on the DESY site. The maximum speed is 30 km/h (20 mph). Particular care must be taken due to the relatively large number of pedestrians on the roads. The transport of special loads over the site is also a hazard which can be regularly expected. One must drive particularly slowly in the vicinity of sharp curves, road works and building activities.

5. Cranes and lifting tackle

According to German law, cranes and motorised lifting equipment may only be operated by authorised personnel. Appropriately trained and tested guests may receive limited authorisation to operate such equipment in agreement with -ZMEA- (ext. 3714) and the safety group -D5- (ext. 3585 / 2965).

6. Electrical equipment

Electrical equipment at DESY must conform to the VDE standards. The experimental and accelerator areas contain a wide range of electrical equipment and it is not always possible to erect an enclosure around each individual item. Such rooms are therefore declared as electrical service rooms where only authorised personnel are allowed. Before commencing work in such areas you must contact the responsible Safety Officer and ascertain what possible hazards exist.

Communication :

As soon as you have a computer connection ,
send an email to
joachim.meyer@desy.de

I need your email address for communication purposes !

You are expected to check your email daily !

In case you have already an office number and a telephone
number please give these as well

NEXT STEPS :

- Registration (NOW And HERE)
 - International Office (Steffi Killough et al)
 - Administration (Anette Pettersson et al)
 - Travel Cost (Erika Schuster)
 - General (Andrea Schrader)
- Afterwards : Contact your Supervisor
- Lectures start Tomorrow 9:00 HERE !