

An aerial photograph of the DESY (Deutscher Elektronen-Synchrotron) facility. The image shows a large complex of modern, multi-story buildings with flat roofs, interspersed with green lawns and trees. A prominent feature is a long, curved building with a white roof. In the foreground, there is a circular building with a distinctive white, star-like structure on its roof. The background shows a dense forest and a body of water under a cloudy sky.

Photon Science Summerstudents 2017

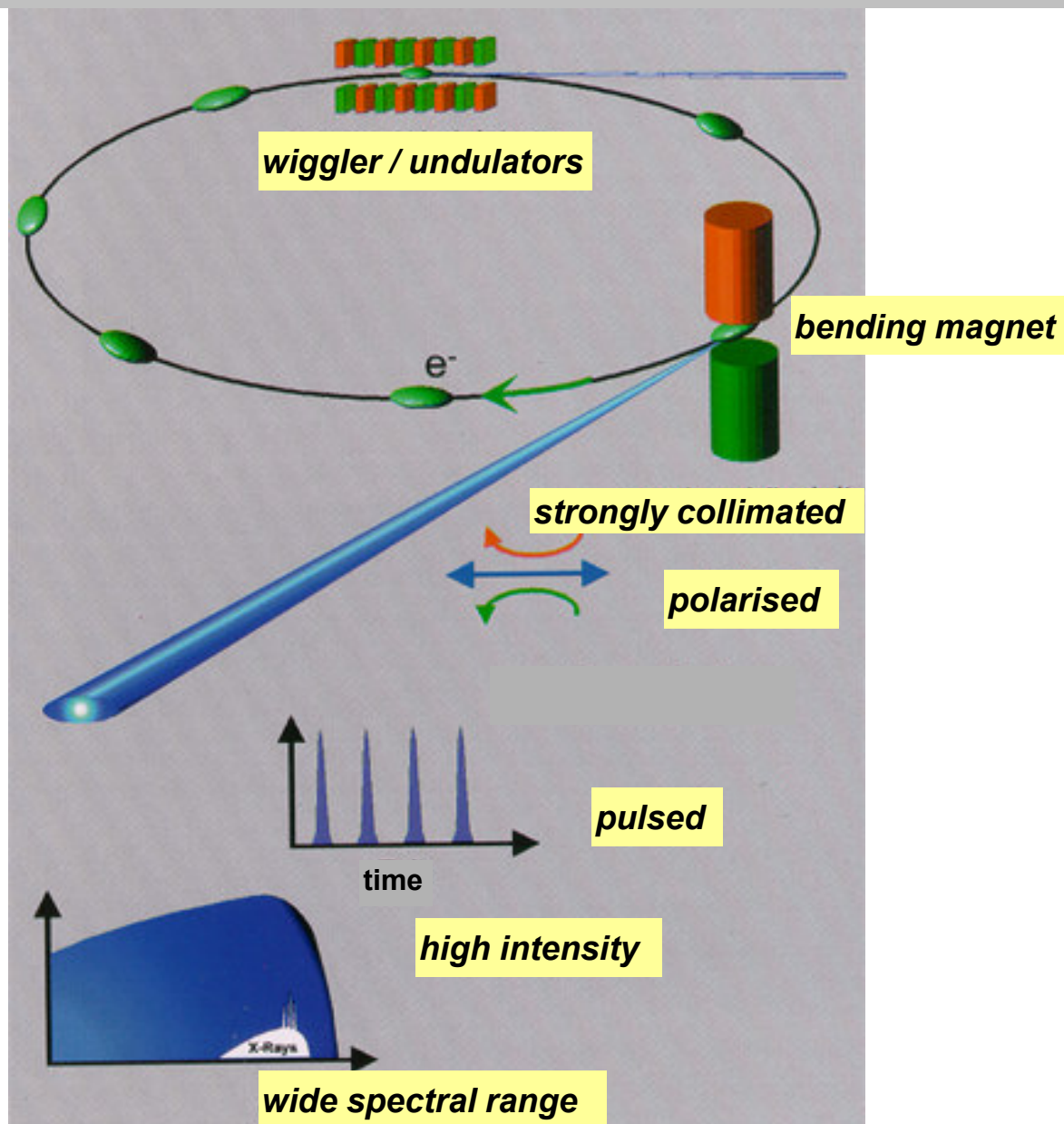
Welcome
Rainer Gehrke
(rainer.gehrke@desy.de)

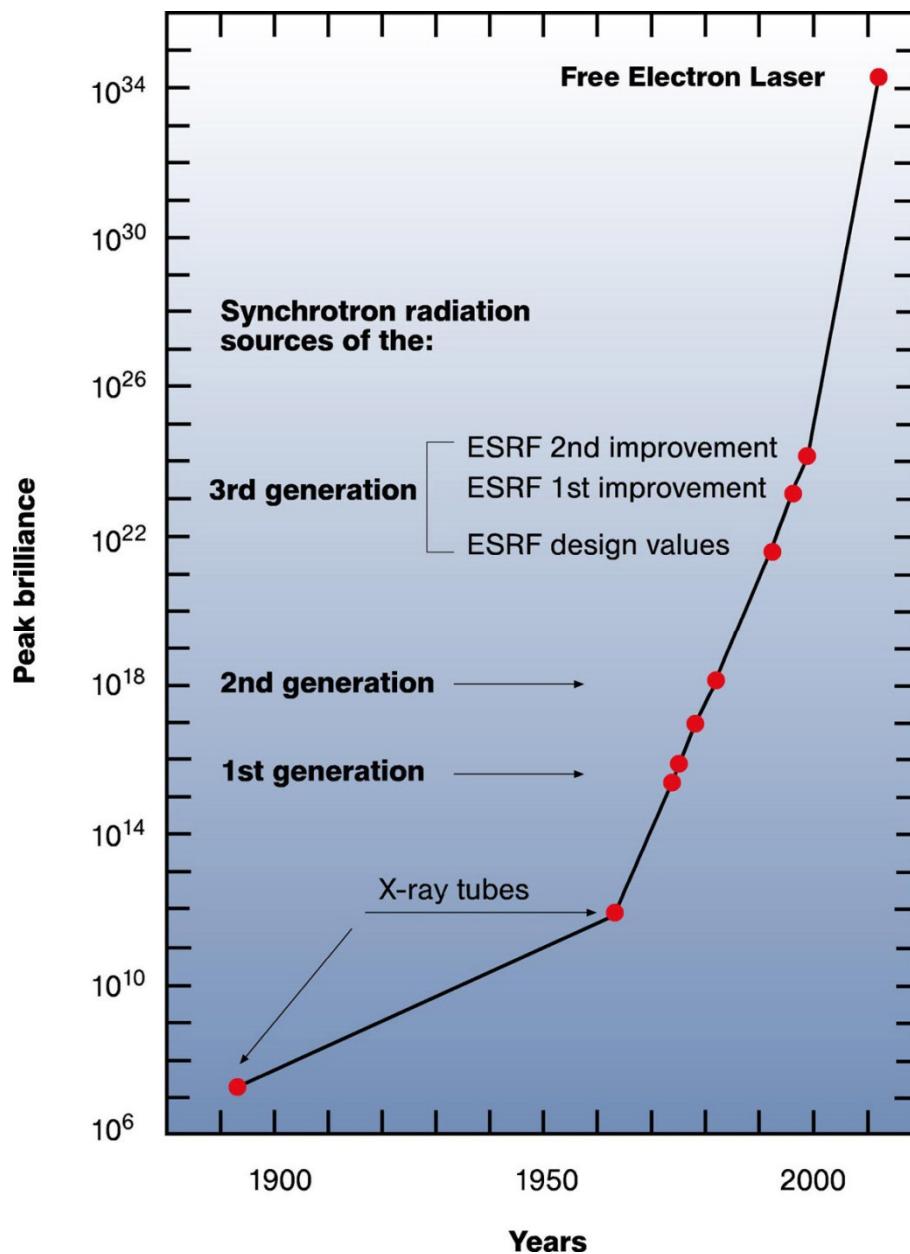
2000 Employees, 3000 International Guests
 (100 apprentice, 100 undergraduate, 350 PHD, 300 Postdoc)
 Annual Budget: 230 M€

DESY founded 1959 as an Electron Synchrotron Facility for Elementary Particle Research

1964	DESY (Synchrotron)		e-	7.4 GeV
1974	DORIS (Storage Ring)	300m	e+/e-	3.5 GeV (later 5 GeV)
1980	HASYLAB@DORIS			
1984	Upgrade with 7 Wiggler/Undulator Beamlines			
1993	Dedicated SR Source at 4.5 GeV			
1978	PETRA (Storage Ring)	2.3km	e+/e-	19 GeV
1990	HERA (Storage Ring)	6.3km	p+/e-	920 GeV / 27.5 GeV (using PETRA as Booster)
1997	FLASH (Free Electron Laser)			
2005	Dedicated User Facility			
2007	Shutdown of HERA and Reconstruction of PETRA → PETRA III			
2009	PETRA III Dedicated SR Source at 6 GeV (presently most brilliant SR source worldwide)			
2012	Shutdown of DORIS			
2014	FLASH II (Extension of FLASH)			

Participation in the European XFEL project





Min. wavelength 0.1 nm
 10^{12} photons per pulse

+ fully coherent
+ short pulses (<100 fsec)

Photon Facilities at DESY



PETRA III
Extension

DESY

European
XFEL

CSSB

~~DORIS~~



EMBL

Nanolab

PETRA III
Extension

Laser Institute
(Uni HH)

PETRA III

FLASH

FLASH II

CFEL

Ingredients

1. Participation in the work of Photon Science Research Groups at DESY or European XFEL
Own Project (Final Report, maybe presentation in final studentsession)
2. Plenary (common) lectures about DESY activities in general
3. Special lectures about Research with photons at DESY/EuXFEL
4. Summer → Good weather ??

2017		
July	August	September
Sa 1	Tu 1	Fr 1
Su 2	We 2	Sa 2
Mo 3	Th 3 Küpper / Son	Su 3
Tu 4	Fr 4	Mo 4
We 5	Sa 5	Tu 5
Th 6	Su 6	We 6
Fr 7	Mo 7 Küpper / Son	Th 7
Sa 8	Tu 8	Fr 8
Su 9	We 9 Common Lecture	Sa 9
Mo 10	Th 10 Santra / Santra	Su 10
Tu 11	Fr 11 Common Lecture	Mo 11
We 12	Sa 12	Tu 12
Th 13	Su 13	We 13
Fr 14	Mo 14 Demirbas / Tolkiehn	Th 14
Sa 15	Tu 15 SR Exercise Day	Fr 15
Su 16	We 16 Demirbas / Tolkiehn	Sa 16
Mo 17	Th 17 SR Exercise Day	Su 17
Tu 18	Fr 18	Mo 18
We 19 Common Lectures	Sa 19	Tu 19
Th 20 Common Lectures	Su 20	We 20
Fr 21 Common Lectures	Mo 21 Schroer / Röhlberger Exercise Seminar	Th 21
Sa 22	Tu 22	Fr 22
Su 23	We 23	Sa 23
Mo 24 Common Lectures	Th 24 Schroer / Stierle	Su 24
Tu 25 Common Lectures	Fr 25 Common Lecture	Mo 25
We 26	Sa 26	Tu 26
Th 27 Gehrke / Toleikis	Su 27	We 27
Fr 28	Mo 28	Th 28
Sa 29	Tu 29	Fr 29
Su 30	We 30	Sa 30
Mo 31 Gehrke / Toleikis	Th 31	

Common and Photon Science Lectures: Place and time see

<http://photon-science.desy.de> → News and Events → Summer Students → Lectures

Photon Science Lectures: 9:00 – 12:30 in Seminar Room 456, Bldg. 25F (Exception: M. Tolkiehn in Bldg. 61, Auditorium)

The Lectures are mandatory, please attend !!

List will be posted on the small notice board in front of Room 259 (Bldg. 25B)

	Tuesday August 15				Thursday August 17			
P02.2 H.P. Liermann								
P04 J. Viefhaus			Alisa Danilenko	Maxim Kiselev			Alisa Danilenko	Maxim Kiselev
P06 G. Falkenberg								
P24 M. Tolkiehn								
P64 W. Caliebe								
P65 E. Welter								
P02.2	X-ray diffraction of samples under high pressure							
P04	15.8. - Beamline-Diagnostics for x-ray coherence and polarization measurements				17.8. - X-ray photoelectron spectroscopy			
P06	Hard X-ray micro fluorescence imaging microscopy							
P24	X-ray diffraction							
P64	Introduction into EXAFS spectroscopy as a tool for structure determination							
P65	Introduction into EXAFS spectroscopy as a tool for structure determination							

Monday, August 21, 14:00 Bldg. 25B, Room 109
Seminar PETRA III Exercise Day

SR Summer Students Webpages:

<http://photonscience.desy.de> → News & Events → Summer Students ... (Lectures 2017)

Co-ordinator **R. Gehrke** Bldg. 25B, Room 221 rainer.gehrke@desy.de

Secretaries Office **U. Micheelsen** Bldg. 25F, Room 259

Computer Based Safety Training
(PETRA, FLASH, CFEL)

1. **Register under <https://door.desy.de>**
2. *Door -> General User -> Online Safety Training*
3. *Print and sign affirmation sheet*
4. *Pass affirmation sheet to Secretaries office*

Dachs (Desy ACcess Handling System)

Frequently check your DESY email account (firstname.lastname@desy/cfel/xfel.de)

An aerial photograph of the DESY (Deutscher Elektronen-Synchrotron) facility. The image shows a large complex of modern buildings, including a prominent curved white structure with a circular roof featuring a logo. The facility is surrounded by lush green trees and a few small ponds. In the background, a large airport runway and a body of water are visible under a cloudy sky. A red banner with yellow text is superimposed over the center of the image.

Have a nice time at DESY !!!