



HELMHOLTZ
GEMEINSCHAFT

Deutsches Elektronen-Synchrotron

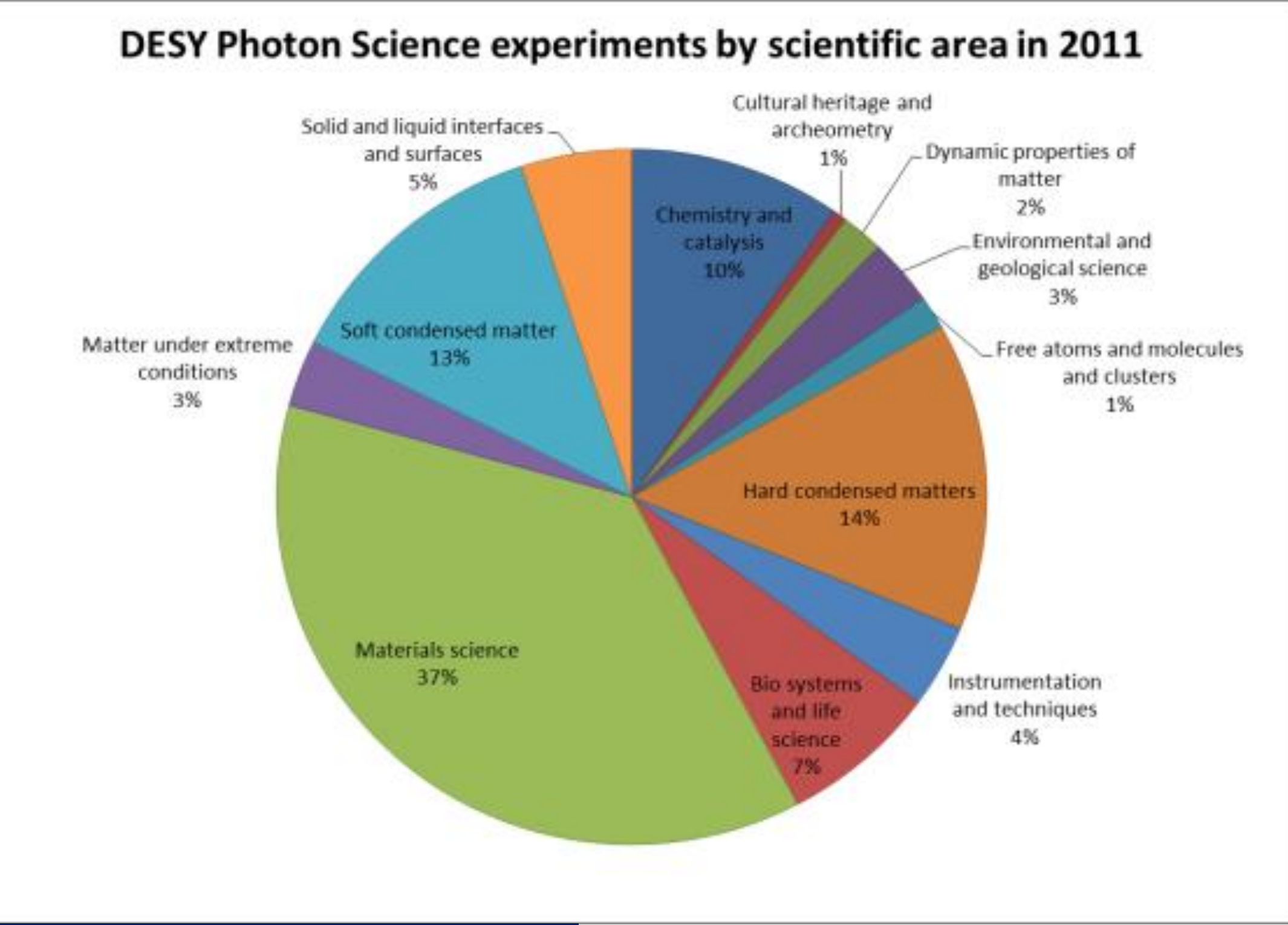


Deutsches Elektronen-Synchrotron (DESY)

DESY is one of the world's leading accelerator centres and a member of the Helmholtz Association. DESY develops, builds and operates large particle accelerators used to investigate the structure of matter. DESY offers a broad research spectrum of international standing focusing on three main areas: accelerator development, construction and operation; photon science; particle and astroparticle physics.

Facts and figures

- Established in Hamburg on 18 December 1959
- Locations: Hamburg and Zeuthen (Brandenburg)
- Budget: 192 Mio.€ (Hamburg 173/Zeuthen 19 Mio.€) , Financing: 90% on the national level (German Federal Ministry of Education and Research); 10% on the state level (City of Hamburg and Federal State of Brandenburg)
- Employees: approx. 2000, including 650 scientists working in the fields of accelerator operation, research and development
- Guest scientists: more than 3000 from over 40 countries p.a.
- Training: more than 100 young people in commercial and technical vocations
- Young scientists: more than 700 diploma students, doctoral candidates and postdocs

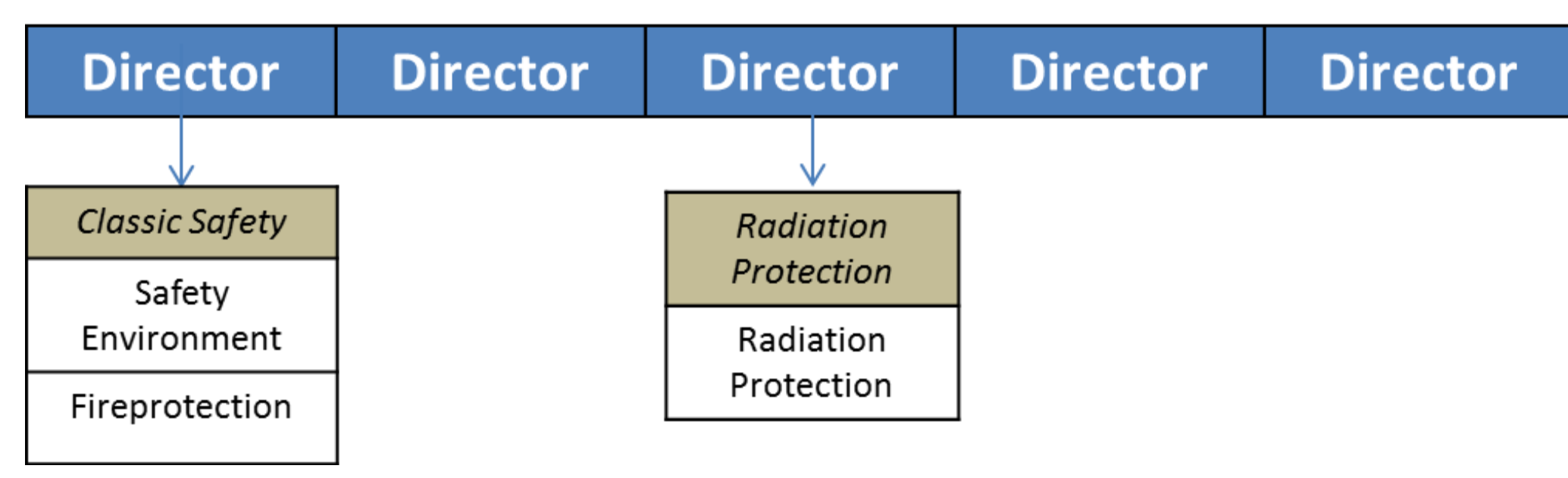


Year	DESY activities
2009	Start with XFEL
2010	Start with PETRA III
2010	„Go“ for CSSB building
2011	Start of FLASH Extension: FLASH II
2012	Completion of CFEL building
2012	DORIS III shutdown
2013	Start of construction PETRA III Ext. North , East
International and national cooperations: CFEL, CSSB, PIER, LHC, Ice Cube, CTA etc.	



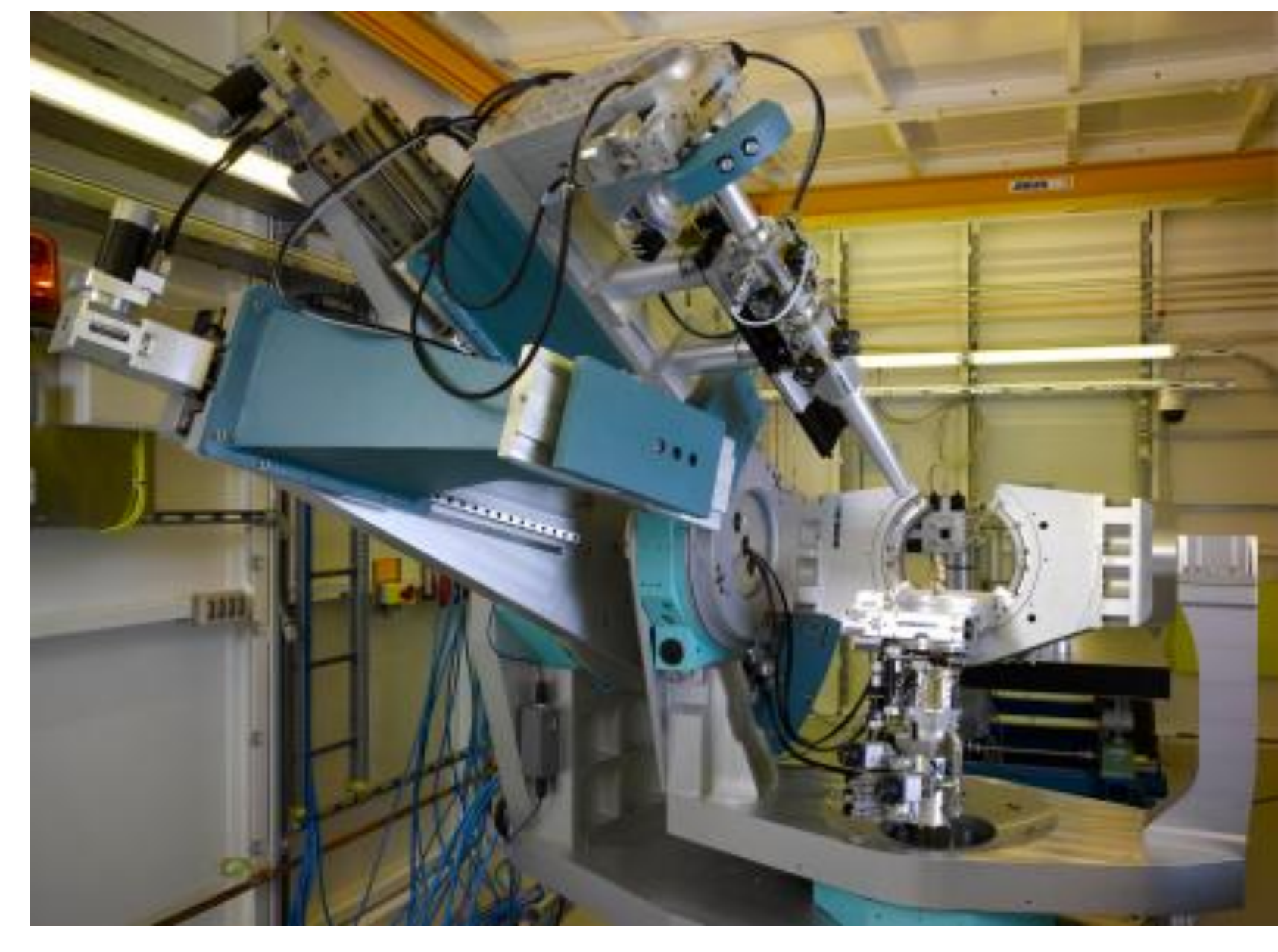
HSE Organisation

The classical Safety, Fire protection and Environmental Group and Radiation Protection Group are administrative departments. Personnel safety and experimental safety is under the administration of the different work departments. In total there are 12 engineers, 10 technicians and 5 administrative assistants to support DESY employees and guests in safety, health and environmental interests.



Safety hazards

In addition to safety hazards due to ionizing radiation (accelerators, x-ray beamlines) and non-ionizing radiation (lasers, magnetic fields), other safety risks such as electrical hazards, chemical hazards, bio hazards, transportation of large equipment, working at elevated height and cryogenic gases have to be considered. The safety hazards resulting from the specific user experiments (3000 users/yr) have to be analyzed continuously. Construction work for new projects is increasing on the DESY site.



Projects and cooperations on the DESY site

Besides the strong collaboration between DESY and the external institutes on-site such as EMBL, HZG, CFEL, the University of Hamburg and other research groups, several projects and cooperations take place:

- The European XFEL, one of the largest European research projects to date, is a project with strong DESY participation. The facility is under construction and the beginning of commissioning is planned for 2015. User operation with one beamline and two instruments will start in 2016.
- The future FLASH facility at DESY will comprise two separate and almost independent FEL sources (FLASH I and FLASH II). The construction of FLASH II already started and first user experiments are expected in 2014.
- The PETRA III extension project comprises two new experimental halls on either side of the large new PETRA III hall (North and East). In total, 10 new beamlines with 14 end stations will be built. The reconstruction will start in autumn 2013 and first experiments are planned in 2014.
- DESY NanoLab is planned as a user facility providing access to advanced nano-characterization, nano-structuring and nano-synthesis techniques on-site, in combination with beamtime at one of the DESY photon sources PETRA III or FLASH. Construction work will start in autumn 2013 and the building will be finally completed in 2015.
- The new Centre for Structural Systems Biology (CSSB) will be an interdisciplinary center with partners from several universities and research facilities from Hamburg and Lower Saxony. Construction is due to begin in 2013.



International Technical Safety Forum ESRF, Grenoble, France, 21 – 24 May 2013

