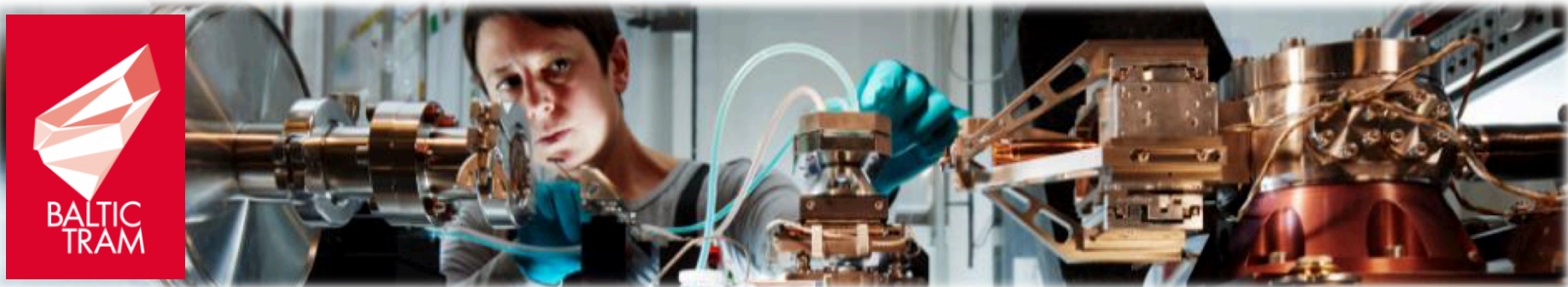


Industry collaboration at DESY



From Science to Innovation

HELMHOLTZ RESEARCH FOR
GRAND CHALLENGES

Sabine Jähmlich & Denny Droßmann
Stockholm, 26th October 2017

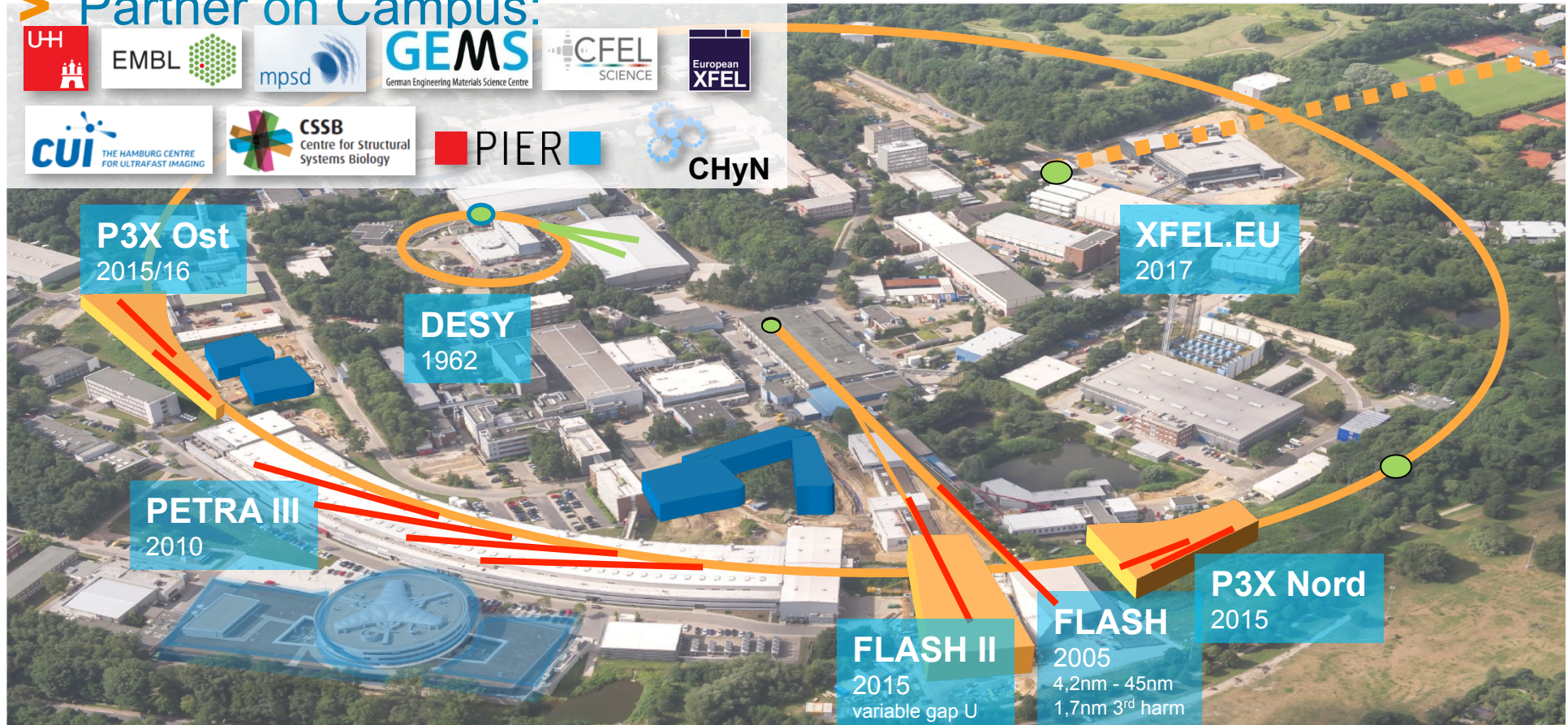


DESY - Basics.

- > founded in 1959 as Germany's national accelerator laboratory
- > ca. 220 Mio. € base budget + 100 Mio. € third party funding
- > over 400 Mio. € investments p.a. in/around Hamburg in recent years
 - > 2.378 employees: among the largest employers in Hamburg
 - > more then 3.000 users per year
from 45 countries
 - > DESY produces the most brilliant X-ray light worldwide

DESY - Campus.

> Partner on Campus:



DESY as Core and Anchor of the Ecosystem



Mission Statement.

expand the understanding of innovation:

“Ideas to Market”

technology driven → market driven



Challenges and Goals.



> transform the innovation term in a traditional research surrounding **#DESY DNA**

> keep and built up the regional **innovative and economical power**

> generate an impact on **relevant developments for society** on short and medium term **#ideastomarket**

> positioning the DESY research activities within the **industrial innovation chains #branding**

> structure and professionalize the network between science and industry **#bonding**

Fields of Action.

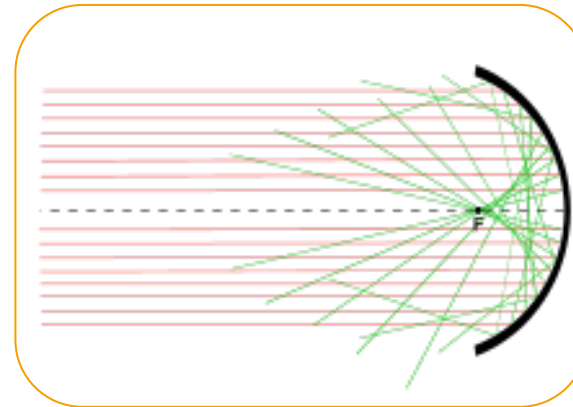


Testing area for new technologies.

- > Maintenance robot at the European XFEL tunnel



- > Innovative solar panel at the facade of one of our oldest buildings



DESY ITT – Team Structure



Outreach – outside and inside DESY.

INDUSTRY

ITT

Establish DESY in the **industrial context**

- > membership of DESY in associations and unions of all relevant branches
- > integrating the brand DESY into regional and national innovation concepts
- > participation in conferences, conventions and other industry related events
- > hosting events and scheduling trainings for the industry on the DESY-Campus

DESY

ITT

- > Holding events and workshops on innovation and technology transfer to inform and foster exchange within DESY
- > communicating all topics of the operational fields by providing catchy info material to all departments at DESY



Partner to the Industry.

Innovation Service



- > offering an easy and direct access to large scale research infrastructure
- > broad spectrum of highly specialized machines, workshops and methods to cope with various challenges #MacGyver
- > translating industrial needs into scientific language #compiler
- > offering access to the whole DESY ecosystem #single-access-point
- > offering packages by involving all sources available on campus #allinclusive

Involving the Industry into large research projects from the beginning #IndustrialCase



Science for Industry.



- > Life Science, Pharmaceuticals & Bio-Tech
- > Catalysis & Chemistry
- > Material Science & Engineering
- > Food & Agriculture
- > Energy Production & Storage
- > Automotive & Aerospace
- > Data Science

Ideas to Market.

Exploitation



- > building up a regular tech-screening within DESY
#technologyscouts
- > protecting the intellectual property (IP) and thereby strengthen the brand DESY #DESY-Technologies
- > scientific transparency vs. intellectual property – finding the right balance between scientific and industrial needs
- > building up an efficient patenting process – making sure we only patent the right developments
- > DESY Generator Program – internal support mechanism to validate DESY-Technologies
- > involving the industry precociously into research project
#validation

Ideas to Market.

DESY Generator Program

- > Funding for potentially innovative technological developments at DESY
- > activities must be outside the daily research business
- > funding depends on the evaluation of the market value
- > Goal is making a lab prototype ready for further validation
- > „Generator Program” can also be used for co-funding of third party funding

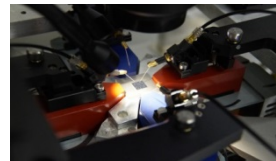
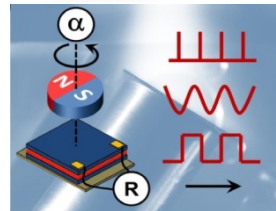
Advisory Board

- > reviews applications and gives advice



Ideas to Market.

Validation Projects



- > DESY supports the development of promising technological inventions to industrially useable products

Example: Magnetic Sensors

GOAL: joint validation with the industry in an industrial context

- > patented DESY-Technology enables the production of made-to-measure magnetic sensors with outstanding qualities
- > by using a special layering process the new sensors are vastly more effective and able to measure more than one parameter at a time
- > this project received a funding from the Helmholtz Validating Fund of 1,8 Mio €



Cradle to new Enterprises.

Start-ups



- > licensing either into the industry or into a DESY spin-off (implement a decision process)
- > developing a specific counseling for start-ups in their pre-seed phase
- > integrating into the regional founder community and start-up-networks
- > combining different local offers and networks
- > establishing events and training programs especially for founders and potential founders (e.g. Scientists, Post-Docs, PhDs)
- > making founding a visible career option

Innovation Center - Start-up Chain



> by this spatial closeness they remain part of DESY's ecosystem



> once established, DESY start-ups may then move to the Technology Park nearby



> newly founded start-ups will then move to the Innovation Center



> DESY start-ups are fostered at DESY during their pre-seed phase

Thanks and see you at:

