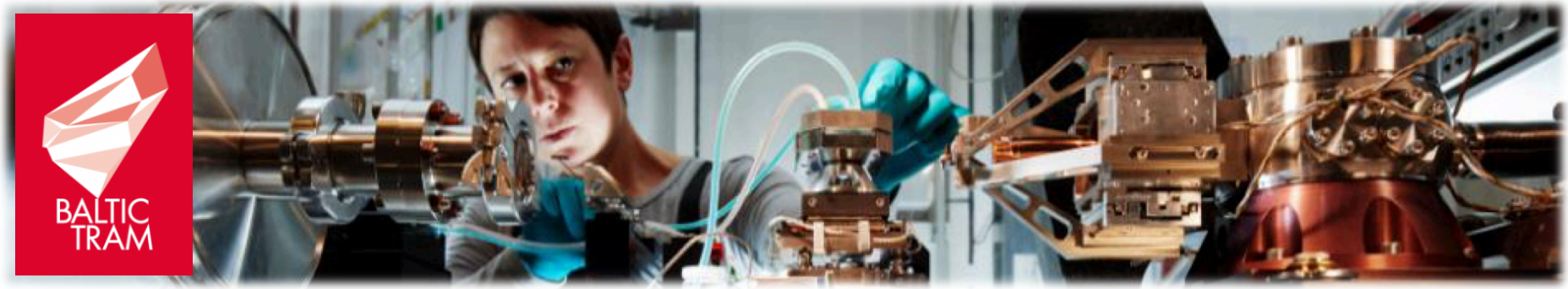
Industry collaboration at DESY



From Science to Innovation

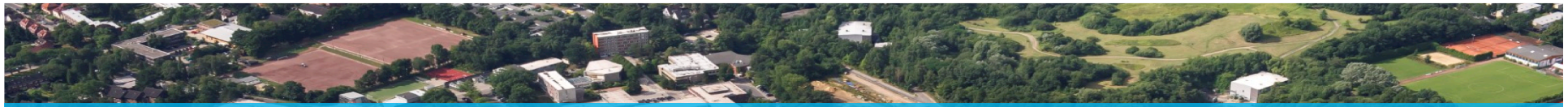
Sabine Jähmlich & Denny Droßmann

Stockholm, 26th October 2017

HELMHOLTZ RESEARCH FOR GRAND CHALLENGES

DESY

DESY - Basics.

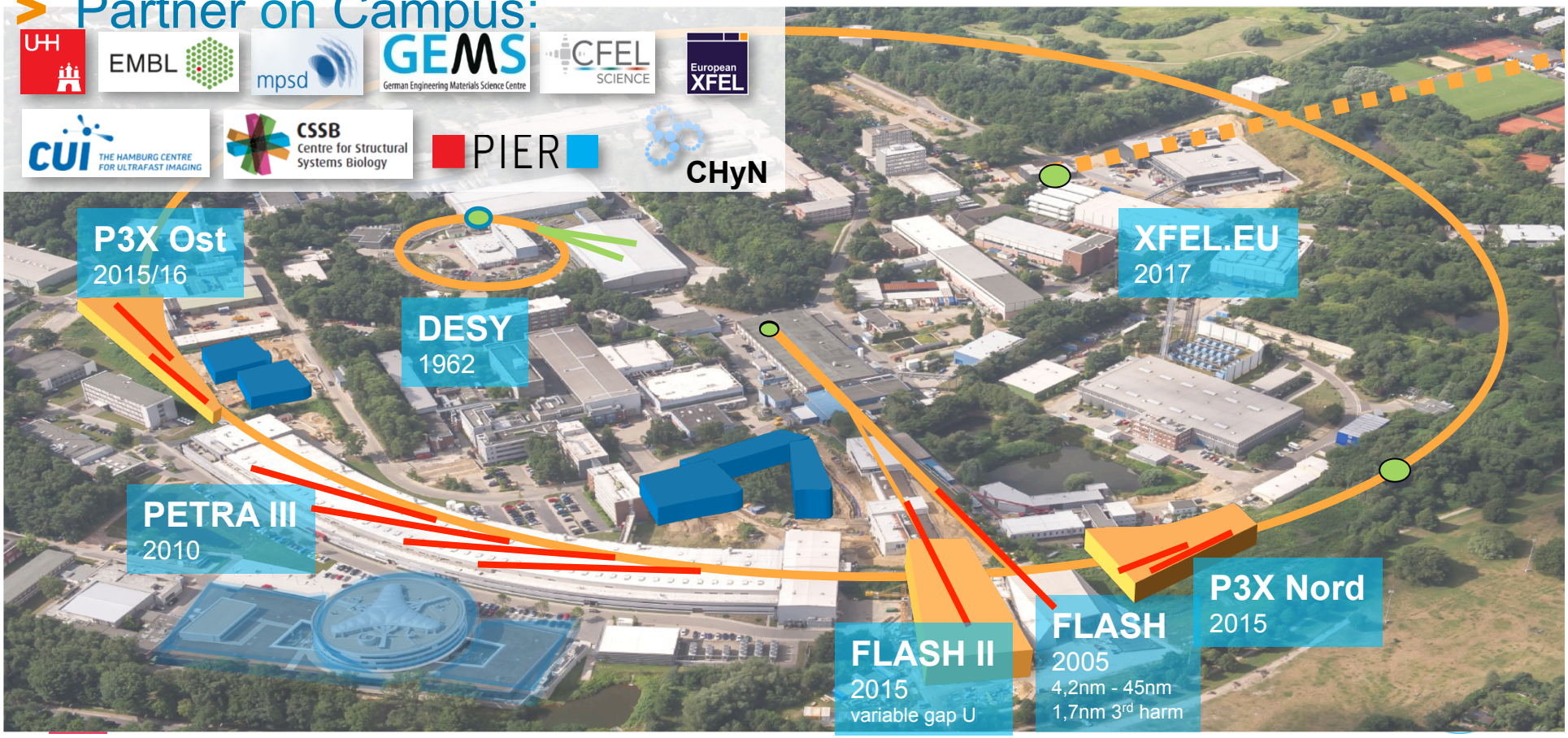


- founded in 1959 as Germany‘s national accelerator laboratory
- ca. 220 Mio. € base budget + 100 Mio. € third party funding
- over 400 Mio. € investments p.a. in/around Hamburg in recent years
- 2.378 employees: among the largest employers in Hamburg
- more then 3.000 users per year
  from 45 countries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

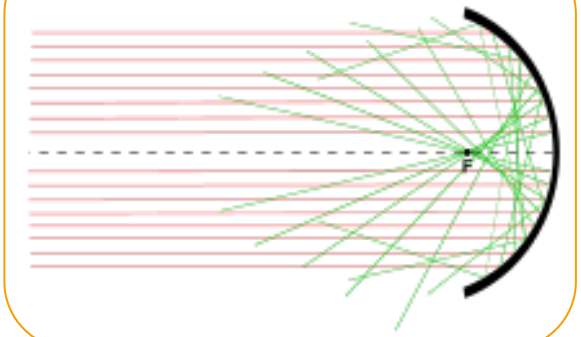


Testing area for new technologies.

> Maintenance robot at the European XFEL tunnel



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



DESY ITT – Team Structure.



Communications
Maike Bierbaum



Industry Relations
Sabine Jähmlich

Chief Technology Officer
Arik Willner



Secretary
Britta Persson



Executive Assistant
Denny Droßmann



Innovation Services

Katja Kroschweski
Sörne Möller
Oliver Wendt







Exploitation and Patents

Ilka Mahns
Lan Fimmen



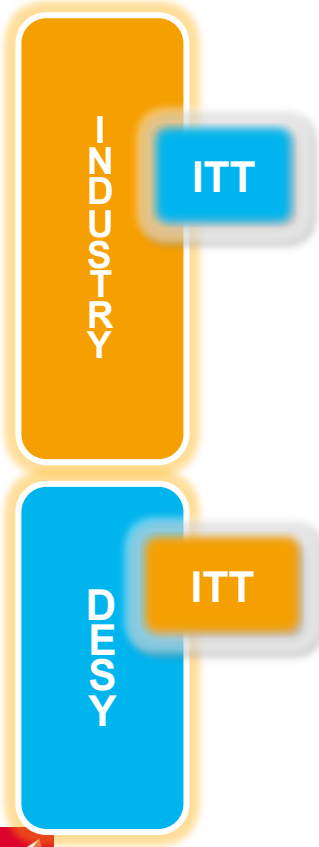


Start-up Office

Katharina Kull
N.N.



Outreach – outside and inside DESY.



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

- 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

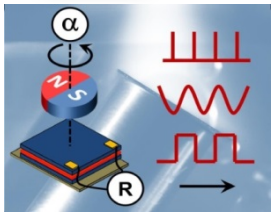
- reviews applications and gives advice

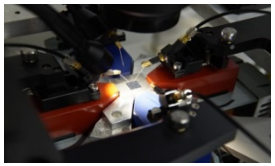


Ideas to Market.

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 then 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 decission 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:

