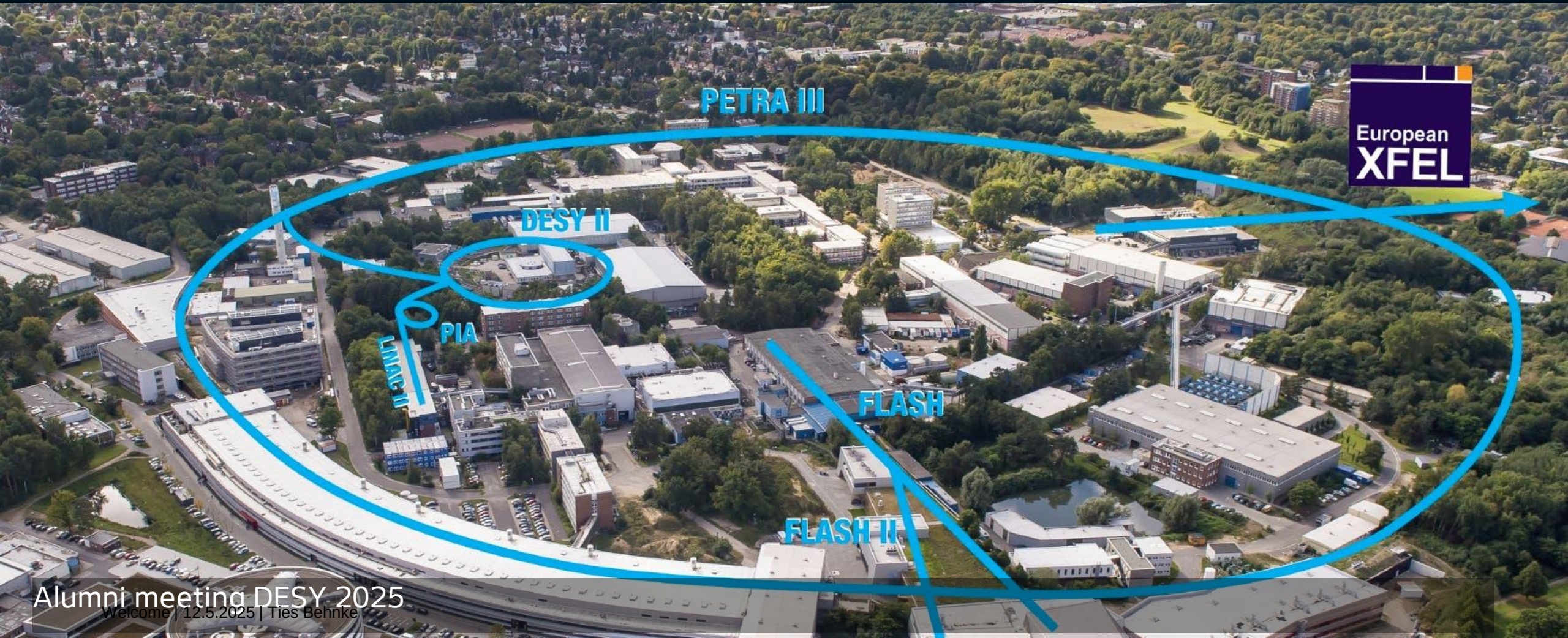


# DESY: Welcome Summer Student Alumni

Ties Behnke

Member of the DESY directorate in charge of Particle physics

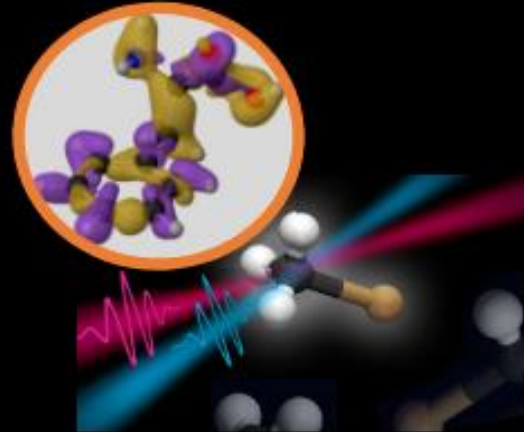


# The DESY Directorate: Welcome

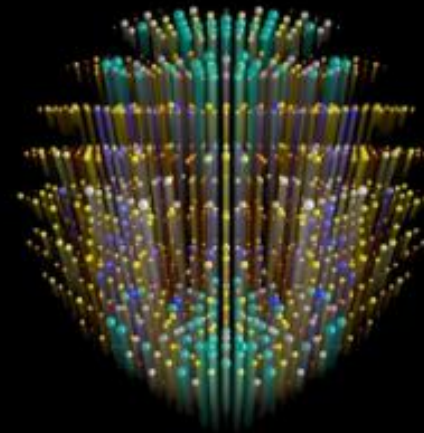
as of April 1, 2025



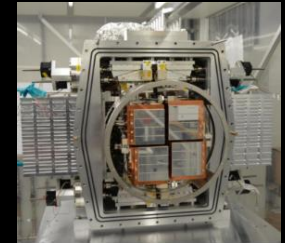
**DESY.** is striving to decode the Secrets of Matter and to devise the Accelerators of tomorrow.



**Light-Matter Interaction**



**SF X-Ray  
Crystallography**



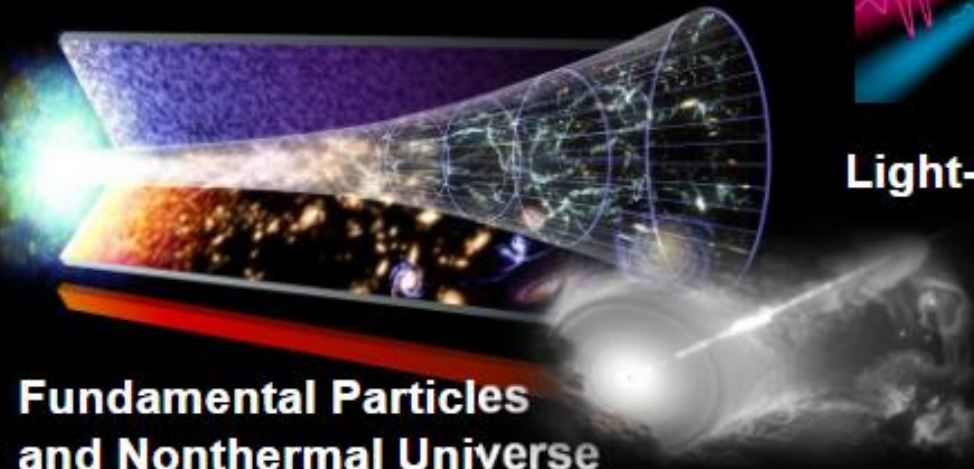
**Detectors**



**TESLA – Attosec Pulses**



**LPA – Ultimate Acceleration**

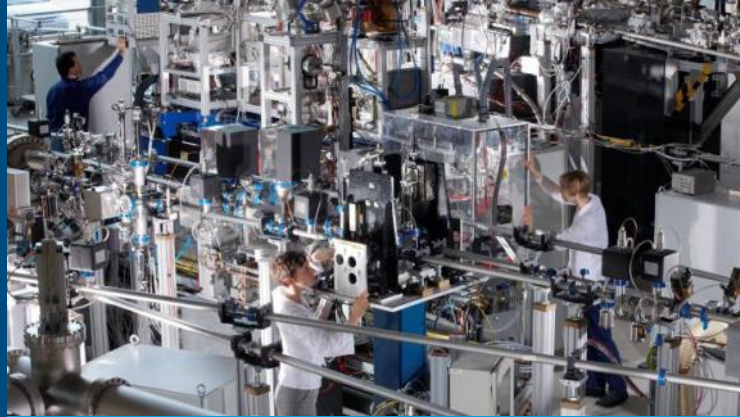


**Fundamental Particles  
and Nonthermal Universe**

# ... developing into a modern multi-disciplinary center



PETRA III World's largest synchrotron X-ray source



FLASH World's first free electron laser



EU-XFEL world's most powerful free electron laser



Large Computing Center



Test facilities for detectors



Interdisciplinary Research Centers

# Our Campus

World-class facilities for research with accelerators



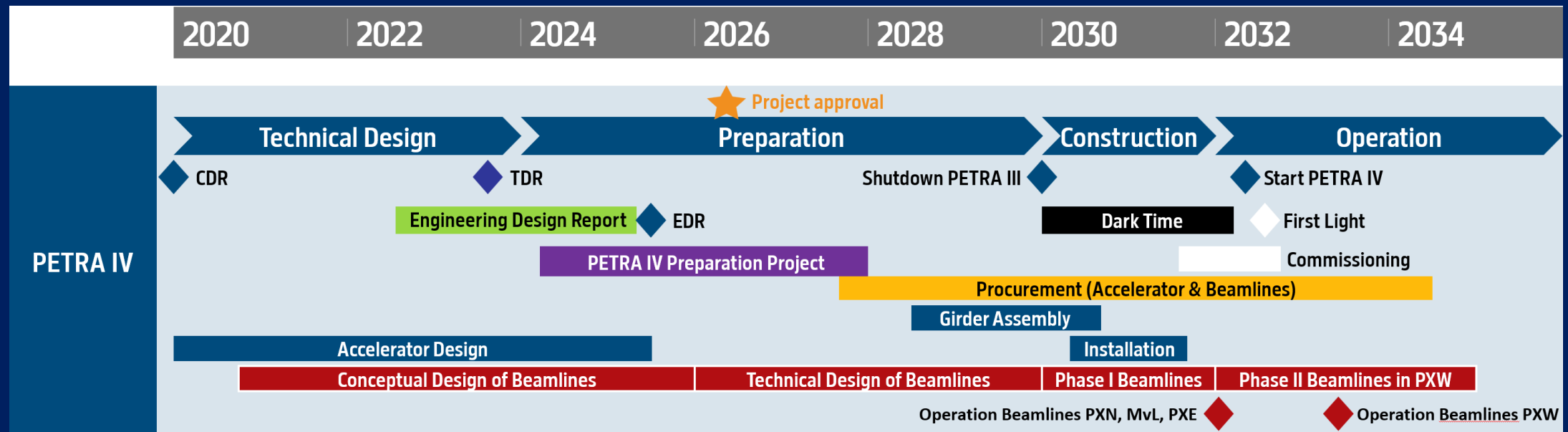
# The world's best X-ray microscope

## PETRA IV: DESY's highest priority future project

Major new accelerator project in Hamburg:

- Upgrade of the PETRA ring to PETRA IV
- Create the world's most powerful synchrotron source
- Discussion currently ongoing on funding from the national government

**PETRA IV.**  
NEW DIMENSIONS

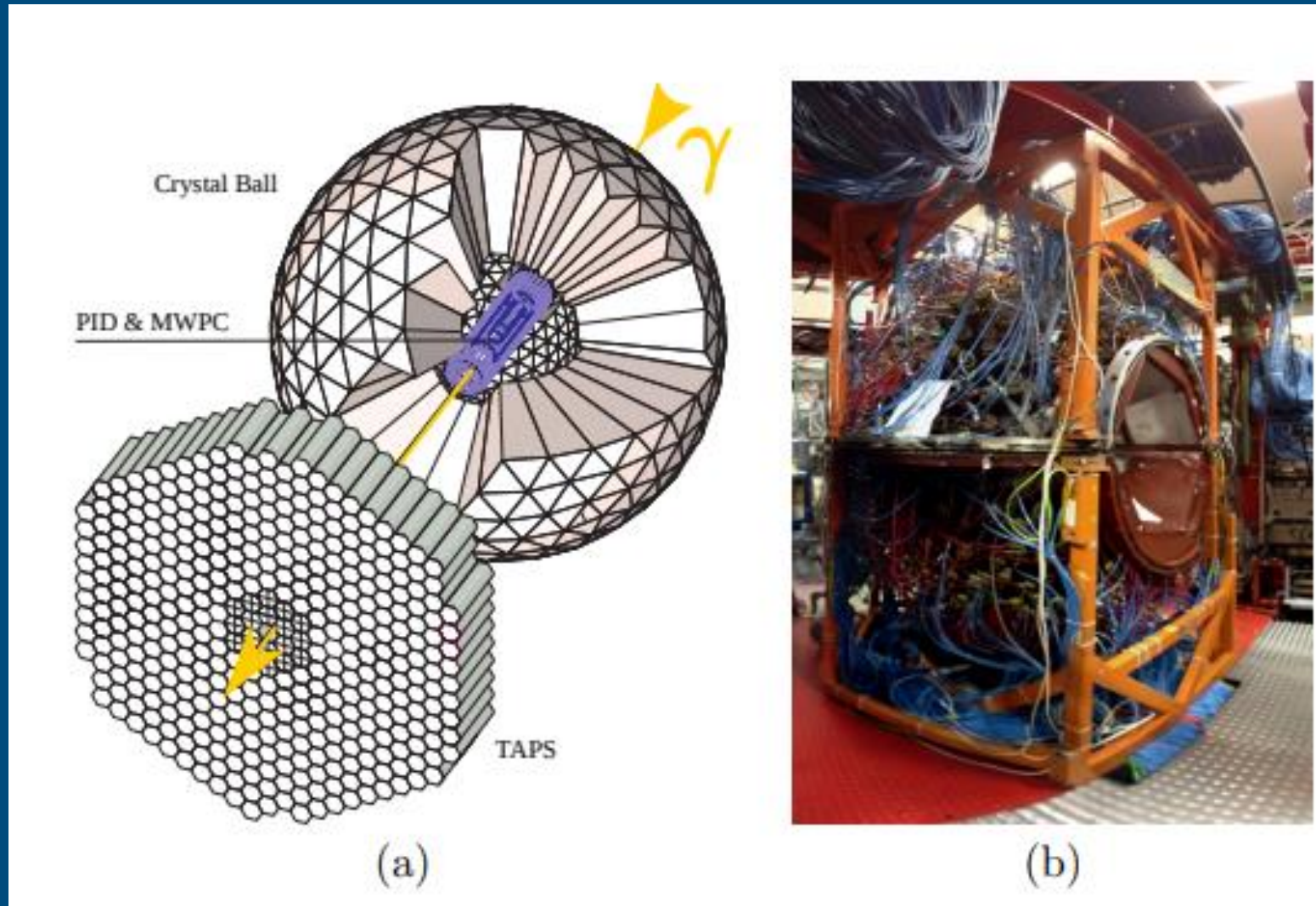


# Summer Students at DESY



# A look back: Summer Student 1982

## Crystal Ball at DESY



# DESY: Overview and Status

DESY: a multidisciplinary laboratory in Hamburg and Zeuthen



## DESY Today

- Operate user facilities for more than 4000 users each year
- Operate large computing infrastructure for research to understand structure and dynamics of matter
- Operate local world-class experiments (ALPS, BABYIAXO, LUXE, ...)
- Facilitate national contributions to large international experiments (ATLAS, CMS, Belle-II, CTA, IceCube, ..)

## The Future vision for DESY

- Cutting edge science opportunities in particle/ astro-particle and photon science
- Recruiting people is a key part of success in science
- Our summer Student program is a key element in our strategy
- We are very happy to have summer students each year at our campus: please spread the word
- We do hope that many of you return to DESY in the course of your career

A word cloud in the background of the slide, containing various words in different languages and colors, including "danke", "ngiyabonga", "tesekkiir ederim", "haka", "welafin", "lack", "spas", "rahmat", "Bаярлалаа", "хвала", "asante", "manana", "brigade", "murakoze", "tenki", "ram", "at", "trugarez", "SI", "enkosi", "ob", "hadankt", and "sp".

Welcome to DESY

In the name of the directorate  
I wish you a successful and  
fruitful workshop