

# Kickers at DESY

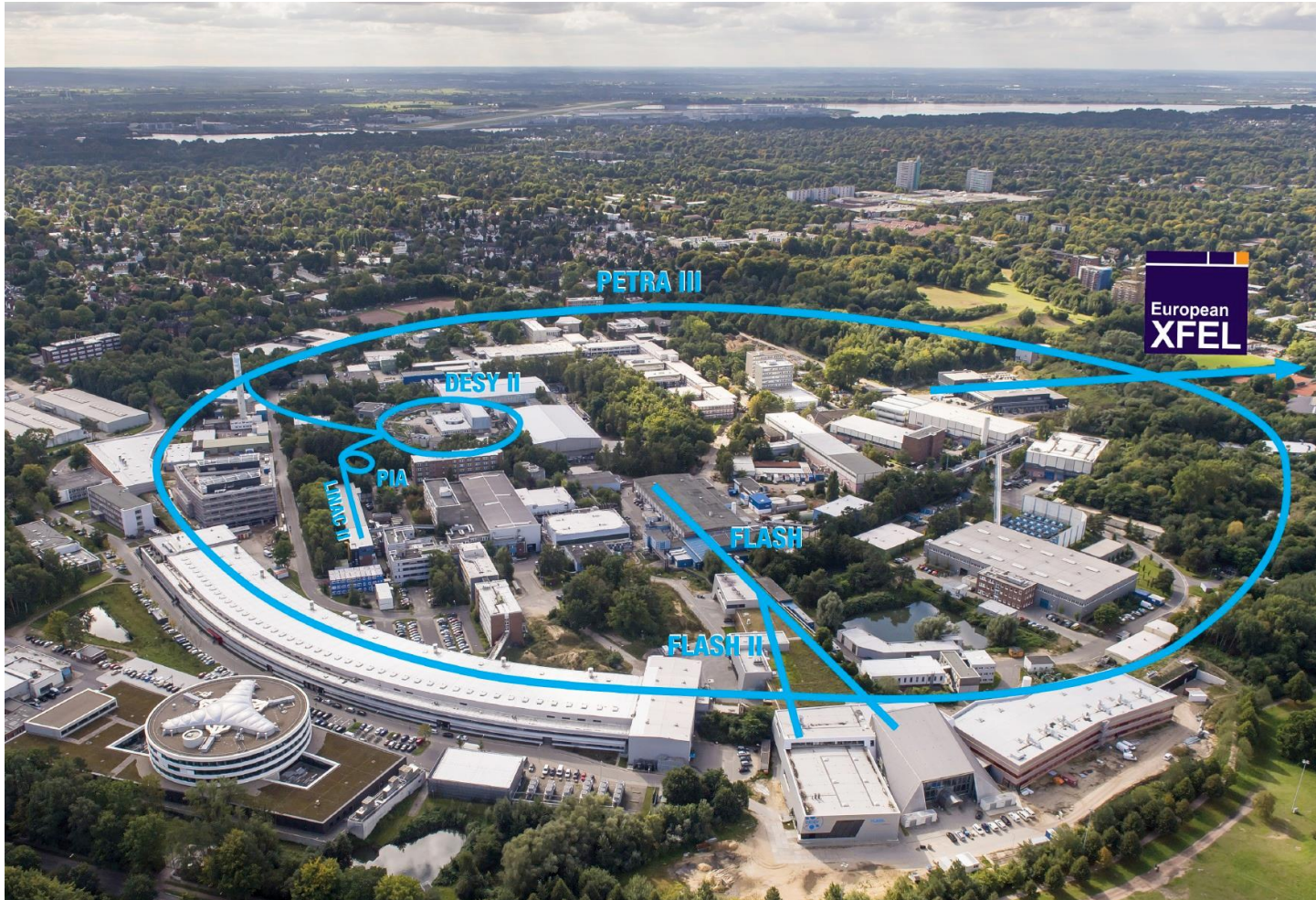
Just a Glimpse

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Geneva, 12.03.2018



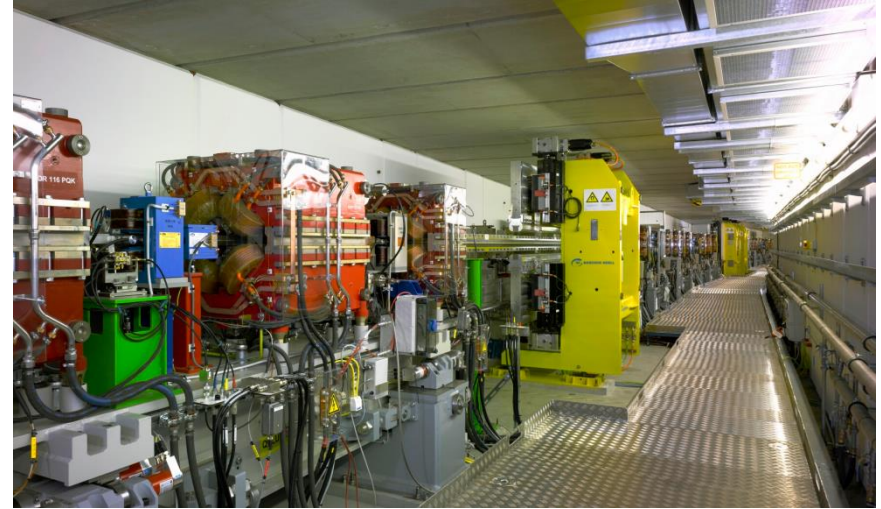
# Accelerators at DESY

We have 3 individual accelerator complexes



# PETRA III

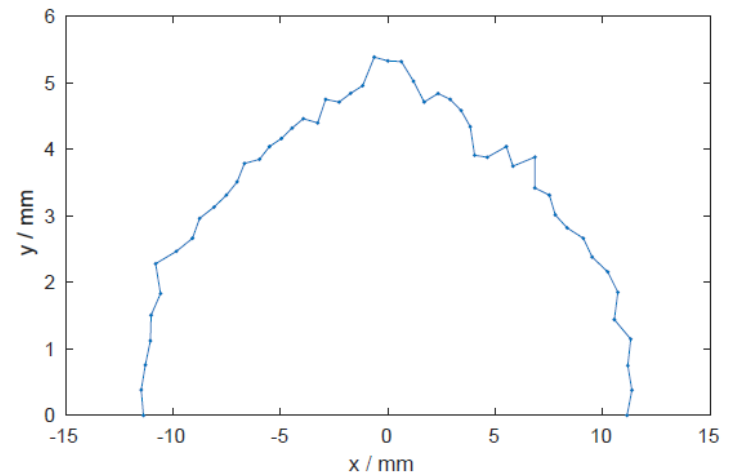
- To date the brightest synchrotron radiation source for hard X-rays
- Three experimental halls with up to 22 undulator beamlines + 1 beamline from damping wigglers
- Operated at 6GeV in top-up mode
- Chain of accelerators
  - Linac II
  - PIA
  - DESY II
  - PETRA III
- Each with a set of injection, ejection and feedback kickers



# PETRA IV

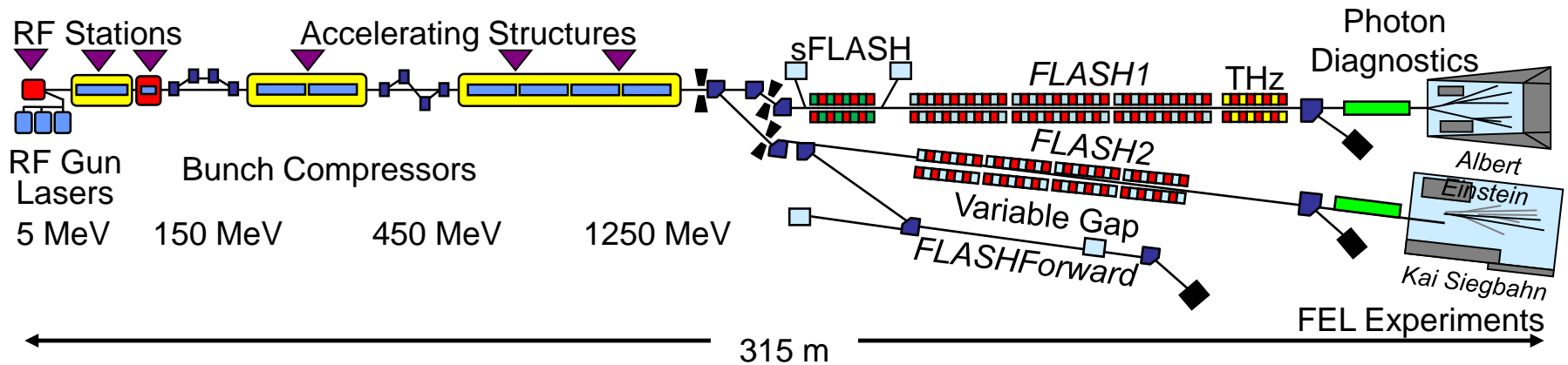
## Aim for an Ultimate Storage Ring

- Currently in the Conceptual Design Phase
- Diffraction limited for X-rays around 10keV
- Horizontal emittance in the range of 10-30 pm rad
- Injection Scheme unclear as of now, might require on-axis injection

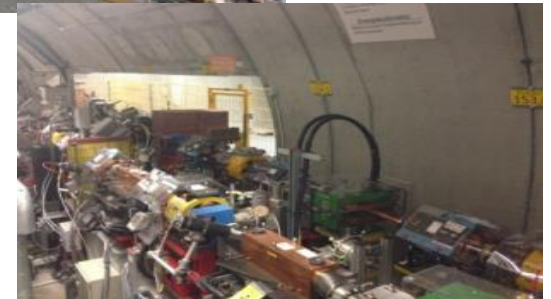


# FLASH

## Superconduction Soft X-Ray FEL

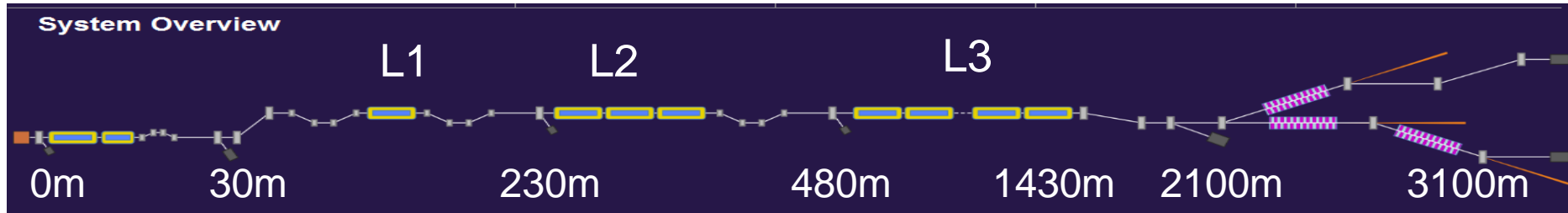


- Kickers for
  - Dark current removal
  - Diagnostics (TDS)
  - Feedback
  - Beam Distribution



# European XFEL

## Superconducting Hard X-Ray FEL



- Kickers for
  - Dark current removal
  - Diagnostics (TDS)
  - Feedback
  - Beam Distribution
  - FEL Suppression
  - Arbitrary Pattern Generation



# Thank you

## Contact

**DESY.** Deutsches  
Elektronen-Synchrotron

[www.desy.de](http://www.desy.de)