



DESY facility update

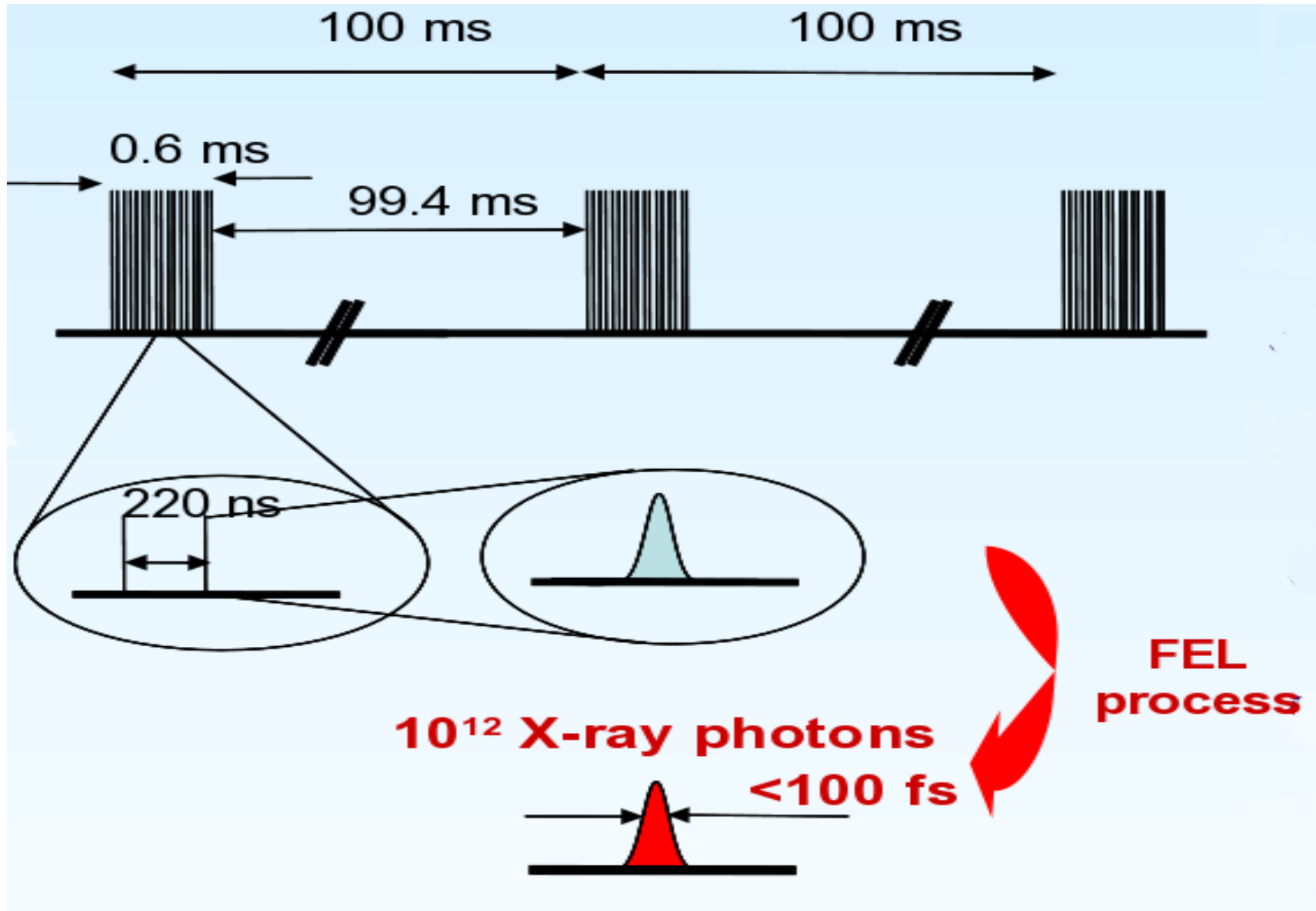
IFDEPS-2021 Virtual Thursdays

Heinz Graafsma; Photon Science - Detector Group (FS-DS)
March-April 2021

Photon Sources in Hamburg and their Detectors



FLASH & European XFEL: Burst-Mode machines





Experiments at PETRA-IV

More than
100-fold
increase in
coherent flux

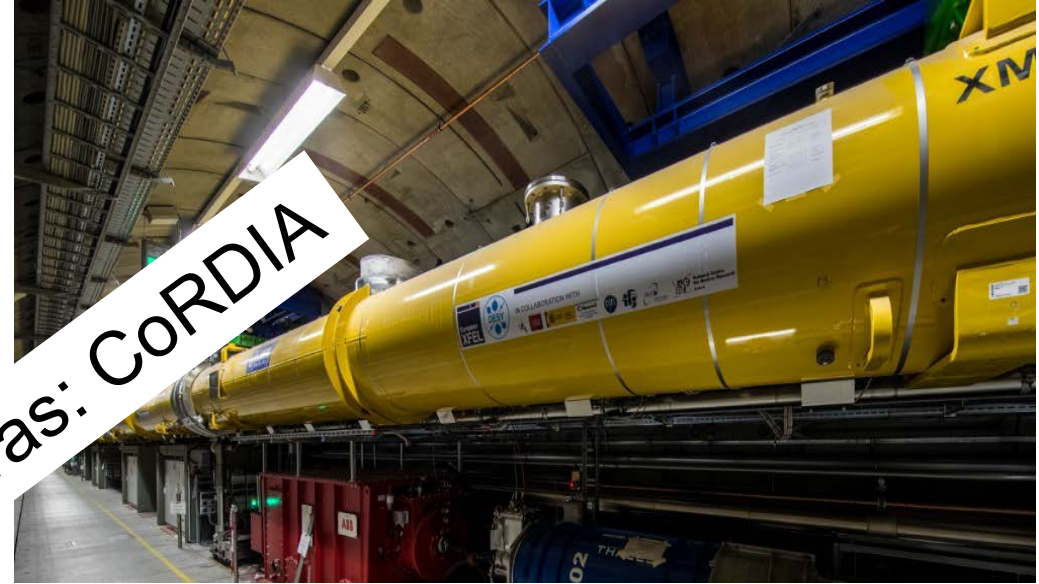


Requirements for future sources

PETRA-IV



CW-FLASH & CW-XFEL

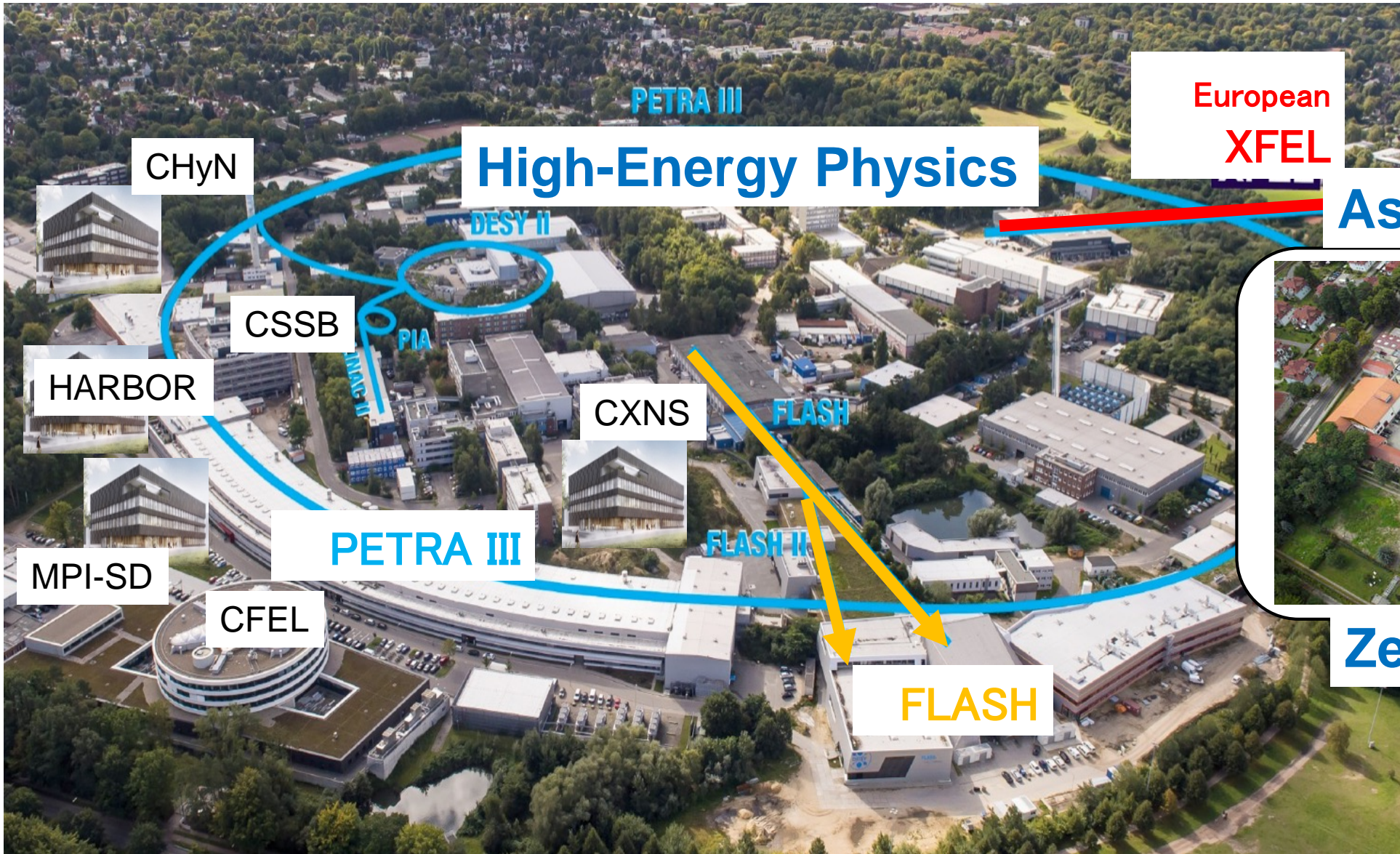


Alessandro Marras: CoRDIA

- Diffraction-Limited Storage Ring
- Approx continuous X-ray
- **x 100 increase in X-ray brilliance**
- Measurements from atomic to macroscopic scale, 10 μ s resolution

- Free electron laser
- Extremely intense X-ray pulses
- **100 kHz to 1MHz continuous bunch rate**
- “Flash photography” on atomic scales

DESY: Research Center



European
XFEL

Astro-Physics



Zeuthen (Berlin)



DESY 2030: (Photon) Science in Science City Bahrenfeld



(part of the) Photon-Science Detector-Systems Group

