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MicroTCA for photon beamlines - on-the-fly scans with spec

Thursday 4 December 2025 11:45 (15 minutes)

DESY is currently planning to upgrade the third generation synchrotron light source PETRA III to a state of the art diffraction limited storage ring.

The new machine PETRA IV will make use of MTCA not only for the accelerator itself but also for the photon science experiments.

In my presentation I will show possible applications of MTCA for experiment control and data acquisition at photon beamlines.

One of the most important applications is motion control and on-the-fly or continuous scanning.

I will present a very efficient implementation of on-the-fly scanning based solely on MTCA hardware and the well known software package spec realized at beamline P24 at PETRA III

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