

Fast and efficient orbit response matrix measurement: A simulation study for PETRA IV

PETRA IV's large-scale storage ring will include 790 Beam Position Monitors (BPMs) and 560 fast corrector magnets, making traditional orbit response matrix (ORM) measurements inefficient. This summer student project focuses on deploying and testing in simulation a faster ORM measurement technique by simultaneously exciting corrector magnets with variable frequencies.

Group

MSK

Project Category

B3. Research on accelerators

Special Qualifications

Programming Skills (Matlab)

DESY Site

Hamburg

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