

Modeling Drifts with Parameter-Varying Response Matrix Utilizing Existing Data of European XFEL

At the free-electron laser EuXFEL several separate, slow feedback control loops are used for long-term stabilisation of the electron bunch parameters. This study aims to investigate and model the characteristics of residual drifts in the feedback system in order to evaluate its closed-loop behaviour. The final goal is to develop a new design for a generalised global controller.

Group

MSK-SDiag

Project Category

B3. Research on accelerators

Special Qualifications

DESY Site

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