

Beam-Based Feedback for the European XFEL

Thursday, 3 October 2013 11:50 (20 minutes)

Pump-probe and seeding experiments at free-electron laser facilities such as the European XFEL are highly dependent on precise regulation of bunch arrival time and bunch compression. Combined RF field and beam-based measurement and feedback allow to fulfill these requirements. This contribution shows the beam-based feedback implementation for XFEL and current achievements and limitations at FLASH. Furthermore, the large amount of accelerating modules within the FEL main linac requires a beam energy management. An outline of slow and fast beam energy feedbacks, which will further improve the beam performance, is given.

Primary author: Mr PFEIFFER, Sven (DESY)

Presenter: Mr PFEIFFER, Sven (DESY)

Session Classification: Session 2: Operations