

LLRF Topical Workshop - Timing, Synchronization, Measurements and Calibration



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Mitigation for a shorted cavity probe at EuXFEL

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Since the commissioning of the EuXFEL free electron laser, one of the 784 superconducting cavities of the linac has a short circuit at the probe connector. For this reason, its signal cannot be used for field regulation. Instead, the signal coming from a high order mode (HOM) coupler antenna is included in the vector sum regulation. This cavity shows a direct impact on the beam arrival time profile along the bunch train. In this work, limitations and operational solutions are described.

Primary author: DIOMEDE, Marco (DESY)

Co-authors: Dr LAUTENSCHLAGER, Björn (DESY); Dr SCHMIDT, Christian (DESY); Dr KOSTIN, Denis (DESY); BRANLARD, Julien (DESY); GRECKI, Mariusz (DESY); Dr WALKER, Nicholas John (DESY); Dr MAVRIC, Uros (DESY); Dr AYVAZYAN, Valeri (DESY)

Presenter: DIOMEDE, Marco (DESY)

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