

Application of Active Disturbance Rejection Control in Superconducting Radio Frequency Cavities

Friday, 4 October 2013 11:05 (25 minutes)

In this talk, the previous results on the mitigation of microphonics using Active Disturbance Rejection Control (ADRC) is briefly reviewed first to show the benefit of this new control method, followed by the introduction of ADRC in more details. Then the application of ADRC at Facility for Rare Isotope Beams (FRIB)/ National Superconducting Cyclotron Laboratory (NSCL) to other problems, such as beam loading are addressed. Recent work on the implementation of ADRC in FPGA and future work on improving tuner control will be discussed as well.

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