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Commissioning of orbit feedforward system for HEX superconducting wiggler at NSLS-II

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A 1.2-m-long superconducting wiggler with the peak field of 4.3 T and period length of 70 mm has been recently installed for the High energy Engineering X-ray (HEX) Diffraction beamline at Cell 27 of NSLS-II Storage Ring. The commissioning result for the orbit feedforward system will be presented, including the uncorrectable dispersive pattern in horizontal orbit and non-negligible hysteresis effects. The impact of large residual field integrals on the active interlock envelope will be also discussed.

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Footnotes

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Yes

Primary author: HIDAKA, Yoshiteru (Brookhaven National Laboratory)

Co-authors: LI, Yongjun (Brookhaven National Laboratory); TANABE, Toshiya (Brookhaven National Laboratory); TIAN, Yuke (Brookhaven National Laboratory); WANG, Guimei (Brookhaven National Laboratory)

Presenter: HIDAKA, Yoshiteru (Brookhaven National Laboratory)

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