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Measurement of LCLS Hard X-ray Undulator gain under CBXFEL-like conditions

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Cavity-based XFEL, or CBXFEL, is a future highly-coherent photon source under construction at LCLS. In the first phase of the CBXFEL project, we will demonstrate the regenerative amplifier mode of operation with 7 LCLS Hard X-ray Undulators (HXUs). In this paper, we report on the recent measurement of the FEL gain in 7 LCLS HXUs, and hard x-ray self-seeding (HXRSS) under e-beam conditions close to those chosen for the first phase of CBXFEL.

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Footnotes

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Yes

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