

Virtual Hard X-Ray Collaboration Seminar Series

Date: Thursday 25 May 2023

Title: Generation of ultraintense X-ray beam with sub-10-nm focusing

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Abstract:

An ultraintense 9.1-keV X-ray beam with 10^{22} W/cm² intensity has been generated by nanofocusing of the X-ray free-electron laser at SACLA. The focusing optics consisting of Wolter type III- advanced Kirkpatrick–Baez mirror system provided highly stable 7 x 7 nm spot focus. The mirror fabrication with wavefront correction technique, focus characterization complementarily using three different methods, and the latest experimental results will be presented.