Abstract Submitted for the DPP19 Meeting of The American Physical Society

Soft X-ray Measurements of High Intensity Kilohertz Laser-Solid Interactions HUNTER ALLISON, NICHOLAS BEIER, SAHEL HAKIMI, MATTHEW STANFIELD, FRANKLIN DOLLAR, University of California, Irvine — Relativistic laser-solid interactions are a pathway to producing bright, attosecond duration, x-rays. The radiation produced is correlated to the driving laser and the specific plasma conditions. We present measurements of this radiation emission from a high-resolution spectrometer. We demonstrate how features in the emission correspond to plasma characteristics such as electron temperature.

Hunter Allison University of California, Irvine

Date submitted: 03 Jul 2019 Electronic form version 1.4