

Abstract Submitted
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Electron transport in cone targets in high intensity laser-plasma interaction¹ NATHALIE LE GALLOUDEC, University of Nevada, Reno, EM-MANUEL D'HUMIERES, Centre de Physique Theorique, Ecole Polytechnique, France, BYOUNG-ICK CHO, University of Texas Austin, JENS OSTERHOLZ, University of Duesseldorf, Duesseldorf, Germany, YASUHIKO SENTOKU, University of Nevada Reno, TODD DITMIRE, University of Texas, Autin — Copper cones targets of different roughnesses were irradiated with the Thor laser (0.5J, 40fs, 800nm, 7 micron focal spot, $3.10^{19}\text{W}/\text{cm}^2$) at UT Austin. Hot electron transport in the tip has been diagnosed with Coherent Transition of Radiation (CTR). Progress at the NTF has been made and a new diagnostic is being designed to provide a CTR at both ω and 2ω . Results supported by simulations will present the current knowledge and trace a path to future progress.

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