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**Hot Electron Generation in the Micro-Tipped Cone and Wedge Targets Irradiated with Ultra Intense Laser.** B.I. CHO, G.M. DYER, S. KNEIP, D.R. SYMES, A.C. BERNSTEIN, Texas Center for High Intensity Laser Science, The University of Texas at Austin, S. PIKUZ, Lomonosov Moscow State University, Russia, Y. SENTOKU, N. LE GALLOUDEC, T.E. COWAN, Nevada Terawatt Facility, University of Nevada at Reno, T. DITMIRE, Texas Center for High Intensity Laser Science, The University of Texas at Austin — By comparing  $K\alpha$  and bremsstrahlung x-rays yields, we have investigated hot electron generation from pyramidal-shaped reentrant micro-structured targets. We focused the THOR laser at the University of Texas at Austin (800nm, 40fs, 600mJ,  $2 \times 10^{19}$  W/cm<sup>2</sup>) into these cone and wedge shaped targets with various polarizations. We find that hot electron production is highest in the wedge targets when irradiated with transverse polarization, though  $K\alpha$  is maximized with wedge targets and parallel polarization. These results are explained with particle-in-cell simulations.

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