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Energetic Electron Beams in Conical Wire Array Z-Pinches¹ R. PRESURA, M.S. WALLACE, S. HAQUE, A. ARIAS, N. QUIROS, University of Nevada Reno — Intense beams of energetic electrons are often inferred in z-pinch experiments. Using magnetic deflection and Faraday cup detection we diagnosed electron beams with energies in the range 0.1-1 MeV produced in conical wire array z-pinches and x-pinches. The experiments were performed on the 1 MA Zebra z-pinch at the Nevada Terawatt Facility. The divergence of the beams and variations in pointing from one emission episode to another reduced the accuracy of these measurements and are subject of further investigation. However, the temporal characteristics of the electron beams can be correlated with the x-ray emission of the z-pinches. Results of these measurements will be presented.

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