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BULMUO MAAKUU, RICHARD APPARTAIM, Florida A&M University — Two wire x-pinches of tungsten, molybdenum, nichrome, aluminum, titanium, etc., with diameters ranging from 10-25 microns have been imploded with a 280 kA, 1 microsecond capacitor bank. The x-pinch plasma has been characterized with diagnostics which include soft x-ray PIN diodes, pinhole cameras, a flat crystal spectrograph and a Nd:YAG laser based interferometer. Time integrated x-ray data obtained with

X-Pinch Characteristics on A Microsecond Capacitive Discharge¹

source size and plasma temperature, respectively. X-rays from the pinch have been used to demonstrate point projection radiography of a simple biological system and a fine wire mesh. Plasma density measurements will also be reported from the Mach-Zender interferometer.

pinhole cameras and the spectrograph have enabled the estimation of the x-pinch

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