

Abstract Submitted  
for the DPP05 Meeting of  
The American Physical Society

**X-pinch Plasma Observations**<sup>1</sup> BULMUO MAAKUU, Student,  
RICHARD APPARTAIM, Florida A&M University — The parameters of an X-  
pinch plasma produced by the discharge of a microsecond capacitor bank through  
fine wires of tungsten, molybdenum, nichrome, aluminum etc, have been studied  
with a number of diagnostic techniques. We report on the results of measurements  
with PIN diodes, a Nd:YAG laser based interferometer, and preliminary results from  
a crystal spectrograph using a flat mica crystal. We will also demonstrate that for  
certain applications, the X-pinch produced by the cheaper capacitive discharge tech-  
nique performs sufficiently well compared to more expensive pulsed power systems.

<sup>1</sup>We will like to thank the Department of Energy for supporting this work

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Date submitted: 22 Sep 2005

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