

Abstract Submitted  
for the DPP11 Meeting of  
The American Physical Society

**Analyzing Spatially Resolved Z-pinch Spectra to Determine the Nature of “Bright Spots”\*** J.P. APRUZESE, J.L. GIULIANI, J.W. THORNHILL, Naval Research Laboratory, D.J. AMPLEFORD, B. JONES, C.A. COVERDALE, Sandia National Laboratories — Wire array Z-pinch implosions which access the K-shell stages of their load elements are usually characterized by spatially nonuniform emission. But, is the existence of the “bright spots” due to density enhancement, higher temperature, or some combination of the two? Does the answer vary with atomic number of the load? To investigate this issue we have analyzed spatially resolved spectra from Cu and Al pinches driven by the Z generator. Correlation studies and regression analyses from the derived conditions are employed in order to infer the cause(s) of the local enhancements of K-shell powers.

\*Work supported by U. S. Department of Energy, National Nuclear Security Administration. Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. DOE’s NNSA under contract DE-AC04-94AL85000. JPA is a consultant to NRL through L3 Communications, Chantilly, VA 20151

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Date submitted: 13 Jul 2011

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