

Abstract Submitted  
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**Overview of dusty plasma research in the Auburn Plasma Sciences Laboratory**<sup>1</sup> E. THOMAS, R. FISHER, J. SHAW, M. CIANCIOSA, R. JEFFERSON, P. PRICE, K. WOOD, Auburn University — Over the last fifteen years, the Auburn Plasma Sciences Laboratory (PSL) has pursued experimental and computational investigations of dusty (complex) plasmas. Much of this work has centered on the measurement of transport, collective behavior, and thermal properties of the charged microparticle component of a dusty plasma using particle image velocimetry (PIV) techniques. This presentation will give an overview of recent and upcoming dusty plasma studies in the PSL with a particular emphasis on ground-based studies of microgravity phenomena, simulations of the dust particle velocity space distribution function, and the development of new experimental hardware.

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