

Abstract Submitted  
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**Development of a Laser Manipulation System for Dusty (Complex) Plasma Research**<sup>1</sup> LISA SIMPSON, JEREMIAH WILLIAMS, Wittenberg University — A dusty (complex) plasma is a cloud of ionized gas containing small particles (i.e. dust). In the laboratory setting, the dust component typically consists of micron- to nanometer-sized dust grains which allows for the study of a wide range of physics at the kinetic level. Because of the relatively large size of the dust grains, it is possible to manipulate the dust component via the radiation pressure force. This poster presents work on the development of a laser manipulation system for use in dusty plasma research. Details of the laser manipulation system, as well as the studies that we plan to conduct in the future, will be discussed.

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