

Abstract Submitted  
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**Building Optical Tweezers to Study a Dusty Plasma** ROBERT MERRILL, Ohio Northern University, JOHN GOREE, University of Iowa — Research was conducted to determine the feasibility of using optical tweezers to study particles in a dusty (complex) plasma. We will describe a method for building optical tweezers intended to manipulate plastic microspheres in a complex plasma. The apparatus for trapping dielectric microspheres is presented. Preliminary measurements of beam profiles will be presented and future work will be discussed.

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