

Abstract Submitted
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Construction of a hybrid rf/dc discharge source for dusty plasma studies¹ JUSTIN KRUPA, JEREMIAH WILLIAMS, Wittenberg University — A complex (dusty) plasma is a four-component system composed of ions, electrons, neutral particles and charged microparticles. The presence of the microparticles gives rise to new plasma phenomena at time scales on the order of Hertz. Over the last several years, the Wittenberg University Plasma Laboratory has studied these dusty plasma systems in a dc discharge plasma. In this poster, we present work on a dual rf/dc hybrid discharge system to replace the dc glow discharge system currently in use. Details of the design and use of 3D printing in the construction will be presented.

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