

Abstract Submitted  
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**Redesign of Gas Delivery System and Calibration Setup for Magnetic Probes in the Maryland Centrifugal Experiment**<sup>1</sup> GRAHAM TAYLOR, CARLOS A. ROMERO-TALAMAS, RICHARD ELLIS, ADIL HASSAM, CATALIN TEODORESCU, WILLIAM YOUNG, University of Maryland — This work consists of two parts. The first part is the design of a new gas feed system for the Maryland Centrifugal Experiment. The system is designed to maintain high vacuum conditions, prevent back flow, and allow for gas mixtures to be used in the experiment. The second part of this work describes a setup to calibrate magnetic probes at different frequencies. The setup will produce different resonance frequencies by adjusting the capacitance in a LRC circuit. The total capacitance is adjusted by connecting capacitors in series or in parallel with jumper cables.

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