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An experimental apparatus for Casimir torque measurements DAVID A.T. SOMERS¹, JEREMY N. MUNDAY², Univ of Maryland-College Park — We have developed an experiment to measure the Casimir torque. In our experiment, a solid birefringent crystal causes a nematic liquid crystal director to rotate such that the extraordinary axes are aligned. A transparent and isotropic dielectric spacer layer is used to separate the two birefringent materials and an all-optical technique is used for detection. In this talk, we report on the progress of this experiment.

¹Department of Physics, Institute for Research in Electronics and Applied Physics ²Electrical and Computer Engineering, Institute for Research in Electronics and Applied Physics

> David Somers Univ of Maryland-College Park

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