

Abstract Submitted  
for the TSS13 Meeting of  
The American Physical Society

**Optical Foucault Pendulum** RICHARD SELVAGGI, CHARLES ROGERS, Texas A&M University - Commerce — This experiment uses the concept of a photon clock to measure the trajectory of light in a rotating cavity. Our hypothesis asks what affect does motion have on the measured trajectory of photons? Does measuring the trajectory by the non-accelerated reference frame differ from the same measurement made by the accelerated reference frame? Will not producing and not measuring, or producing but not measuring, or not producing but measuring, or producing and measuring the photons in the non-accelerated reference frame but reflecting it through the accelerated reference frame produce the same or different results? The apparatus set-up, operation, and measured results are presented.

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Date submitted: 04 Mar 2013

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