## Abstract Submitted for the MAR10 Meeting of The American Physical Society

Precision Non-Contact Dynamic Measurement of Casimir Force between a Metallic Sphere and Semiconducor Plate CHIA-CHENG CHANG, UMAR MOHIDEEN — A dynamic measurement of the Casimir force between a gold coated sphere and Si plate performed by using a high vacuum based short coherence light source interferometer will be presented. The comparison of results with Lifshitz theory will be discussed. The results will find application in the design of MEMS (Micro Electro-Mechanical Systems).

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Date submitted: 24 Nov 2009 Electronic form version 1.4