

Abstract Submitted
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Measurements of the Casimir-Lifshitz force between a metal and a dielectric in fluid JEREMY MUNDAY, FEDERICO CAPASSO, Harvard University — The Casimir force arises from the confinement of quantum fluctuations of the electromagnetic fields. The boundary conditions on these fields are dependent upon the electromagnetic properties of the interacting materials and affect both the magnitude and sign of the resulting force. We will discuss our experiments for measuring the Casimir-Lifshitz force between a metal and a dielectric immersed within a fluid and will describe situations which can give rise to a repulsive interaction.

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