

On Convergence Generation in Computing the Electro-Magnetic Casimir Force

Frédéric Schuller

Laboratoire de Physique des Lasers, UMR 7538 du CNRS, Université Paris 13, F-93430 Villetaneuse, France

Reprint requests to F. S.; E-mail: Annie.Spielfiedel@obspm.fr

Z. Naturforsch. **63a**, 571 – 574 (2008); received March 4, 2008

We tackle the very fundamental problem of zero-point energy divergence in the context of the Casimir effect. We calculate the Casimir force due to field fluctuations by using standard cavity radiation modes. The validity of convergence generation by means of an exponential energy cut-off factor is discussed in detail.

Key words: Casimir Effect; Zero-Point Energy; van der Waals Force.

PACS number: 03.70+k (theory of quantized fields)