



Any Classical Description of Nature Requires Classical Electromagnetic Zero-Point Radiation

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Any attempt to describe nature within classical physics requires the presence of Lorentz-invariant classical electromagnetic zero-point radiation so as to account for the Casimir forces between parallel conducting plates at low temperatures. However, this zero-point radiation also leads to classical explanations for a number of phenomena which are usually regarded as requiring quantum physics. Here we provide a cursory overview of the classical electromagnetic theory which includes classical zero-point radiation, and we note the areas of agreement and disagreement between the classical and quantum theories, both of which contain Planck's constant h .

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