ERRATA

Erratum: Self-consistent frequencies of the electron-photon system [Phys. Rev. A 48, 1824 (1993)]

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PACS number(s): 03.65.Bz, 12.20.−m, 99.10.+g

I wish to thank Professor Robert F. O'Connell for calling my attention to the fact that the normal modes for an elastically bound electron interacting with its self-field can be found exactly in the dipole approximation. This observation was first made by van Kampen [1] and the idea was then developed by Ullersma [2]. Ford, Lewis, and O'Connell were the first to obtain unique, physically correct solutions with a lower bound to the system energy for an oscillator interacting with a heat bath [3]. Explicit solutions for the one-dimensional oscillator were obtained by finding the exact eigenfrequencies and then transforming to normal coordinates [4]. This can be applied to the special case of a particle coupled to blackbody radiation [5]. When second quantized, all the coordinates and momenta are operators, but the mathematical details of finding frequencies and normal modes are the same as in the classical case.

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