

Abstract Submitted
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Rotational and Vibrational as Well as Linear Kinetic Energies Should Be Included In Pair Production and Annihilation Energy Calculations STEWART BREKKE, Northeastern Illinois University(former grad student) — Including rotational and vibrational as well as Linear kinetic energies in pair production and annihilation calculations may produce a better reconciliation between theoretical and experimental values. The creating photon may produce particle vibration and/or rotation as well as possibly linear motion besides mass: $hf = [(m_0c^2)_+ + (m_0c^2)_- + (1/2I\omega^2)_+ + (1/2I\omega^2)_- + (1/2kx^2)_+ + (1/2kx^2)_-]$. In pair annihilation at least two photons may be produced: $hf_1 + \dots + hf_n = (m_0c^2)_+ + (m_0c^2)_- + (1/2I\omega^2)_+ + (1/2I\omega^2)_- + (1/2kx^2)_+ + (1/2kx^2)_-$.

Stewart Brekke
Northeastern Illinois University(former grad student)

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