

Abstract Submitted  
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**A Classical Theory of Blackbody Radiation** JAMES ESPINOSA, Rhodes College, JAMES WOODYARD, West Texas A&M University — It has been over one hundred years that Max Planck introduced the concept of the quantum to resolve the blackbody radiation problem, thereby beginning the destruction of Newtonian physics. In most modern physics textbooks, authors mention Lord Rayleigh's failed attempt to apply electromagnetic wave theory, resulting in the famous ultraviolet catastrophe. A few textbooks mention Wien's attempt to explain the blackbody spectrum with a corpuscular model of light and show its close agreement with experiment. We will discuss an almost unknown classical development by Hugh Callendar in 1913 that correctly describes blackbody radiation. This discussion will explore the possible reasons for this Newtonian model being ignored by his contemporaries.

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