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Planck's High Temperature Catastrophe in Observational Astronomy:- (NASA proves Planck wrong) CLARENCE A. GALL, Universidad del Zulia, Venezuela — Planck's black body radiation law $\left(I_P = \frac{c_1}{\lambda^5}\frac{1}{e^{\frac{c_2}{\lambda T}}-1}\right)$predicts that a hotter body (higher T) should always emit more intensely than a colder body (lower T) throughout the entire EMR spectrum. However, space age infrared astronomy contradicts this prediction! It is now known that as observation moves from the visible to the near-, mid- and far infrared; increasingly cold celestial objects come into view while hotter ones fade and disappear (http://coolcosmos.ipac.caltech.edu/cosmic_classroom/ir_tutorial/irregions.html). Were Planck's law valid, the hottest stars would never disappear; and colder objects would not be detected. This can only be described as a high temperature catastrophe (BAPS, April Meeting 2008, H12.3, St Louis, MO) for Planck's law! On the other hand, Gall's black body radiation law $\left(I_G = \sigma\frac{T^6}{b^2}\lambda e^{-\frac{\lambda T}{b}}\right)$ (http://sites.google.com/site/purefieldphysics) predicts that as wavelength increases, there is a crossover point above which a colder object will emit more intensely than a hotter one. Hence colder objects will appear and hotter ones will eventually disappear from view. The crossover point for black bodies at 6000K and 100K is 12.066 microns. These calculations with Gall's law are in overall agreement with observational infrared astronomy.

Clarence A. Gall
Postgrado de Ingenieria,Universidad del Zulia, Apartado 98, Maracaibo, Venezuela

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