Wien's Law: equation that describes the relationship between the black body radiation curve (Planck's curve) as a function of emission wavelength for objects with varying emission temperatures. This law states that the wavelength at which radiant energy peaks is inversely proportional to temperature.

$$\lambda_{max} = {}^{a}/_{T}$$

Where a = 2900 μm K , and T is temperature in degrees Kelvin. With this law, we can clearly see that objects such as the walls in a room that is room temperature (T=290K), have a peak wavelenth of emission of around 10μm.

Stefan-Boltzmann Law: equation that describes the radiation emitted from a blackbody of a given temperature. This law says that the energy emitted from an object is proportional to its emission temperature to the fourth power.

$$I = \sigma T^4$$

Where $\sigma = 5.67 \times 10^{-8}$ W m^{-2} K^{-4}; and T is temperature in degrees Kelvin