

Chapter 2

The electromagnetic theory was developed by Maxwell.

Hertz produced electromagnetic waves confirming Maxwell theory.

He also showed that electromagnetic waves and light were one and the same.
⇒ Light is a wave!

Stefan found experimentally for a hot solid

$$\text{Stefan's Law} \rightarrow e = \sigma T^4 \quad (\text{Watt/m}^2)$$

T: Kelvin

$$\sigma: \text{Stefan-Boltzma const.} = 5.67 \times 10^{-8} \frac{\text{W} \cdot \text{m}^{-2}}{\text{K}^4}$$

Five years later, Boltzman derived Stefan's law from Maxwell + thermodynamics.