第一章 绪论

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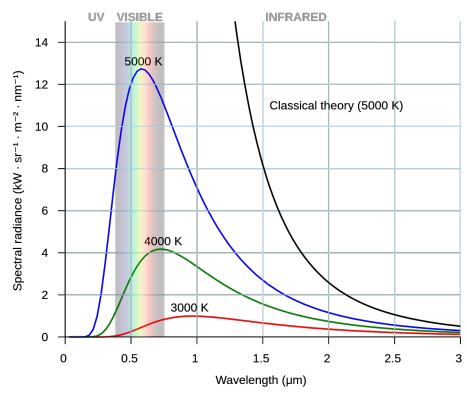
$$h = 6.626 \times 10^{-34}\ J \cdot S$$

↳ 角动量的量纲.

Planck 黑体辐射公式：$\rho_\nu d\nu = \dfrac{8\pi h\nu^3}{c^3} \dfrac{d\nu}{e^{h\nu/k_BT} - 1}$



Einstein 光电效应方程：$\frac{1}{2}m_e v_m^2 = h\nu - W_0$

de Broglie 关系：$\begin{cases} E = \hbar\omega = h\nu \\ \vec{p} = \dfrac{h}{\lambda}\vec{n} = \hbar\vec{k} \end{cases}$

氢原子的 Balmer 公式：$\nu = R_\infty c\left(\dfrac{1}{n'^2} - \dfrac{1}{n^2}\right)$，$n' = 1, 2, \cdots$；$n = 2, 3, \cdots$；$(n > n')$

自由粒子的平面波：$\begin{cases} 3D: & \Psi(\vec{r}, t) = \dfrac{1}{(2\pi\hbar)^{\frac{3}{2}}} e^{\frac{i}{\hbar}(\vec{p}\cdot\vec{r} - Et)} \\ 1D: & \Psi(x, t) = \dfrac{1}{2\pi\hbar} e^{\frac{i}{\hbar}(p_x x - Et)} \end{cases}$