

1 开始

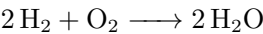
使用 L^AT_EX

$a^2 + b^2 = c^2$

$$\begin{aligned} |P - P_n| &= \left| a \sum_{k=n}^{\infty} \left(a e^{\frac{\pi}{4} i} \right)^k \right| = \left| a \left(a e^{\frac{\pi}{4} i} \right)^n \sum_{k=0}^{\infty} \left(a e^{\frac{\pi}{4} i} \right)^k \right| \\ &= \left| (2 - \sqrt{2}) ((\sqrt{2} - 1)(1 + i))^n \right| \cdot |P| \\ &= (2 - \sqrt{2}) ((\sqrt{2} - 1) \sqrt{2})^n \frac{\sqrt{6}}{3} \\ &= \frac{\sqrt{6}}{3} (2 - \sqrt{2})^{n+1} \end{aligned}$$

1.1 例子

量子效应[2]



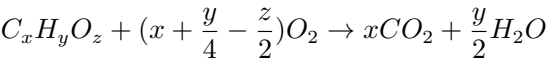
character	a	b	c	d	e
$f(c)$	45	13	12	16	9
Huffman Code	0	101	100	111	1101

$$P\left(\frac{X_1 + X_2 + \cdots + X_n - n\mu}{\sigma\sqrt{n}} \leq x\right) \rightarrow \frac{1}{\sqrt{2\pi}} \int_{-\infty}^x e^{-t^2/2} dt$$

$$\cos\theta = \frac{\vec{\mathbf{n}}_1 \cdot \vec{\mathbf{n}}_2}{|\vec{\mathbf{n}}_1| \cdot |\vec{\mathbf{n}}_2|} = \frac{x_1x_2 + y_1y_2 + z_1z_2}{\sqrt{x_1^2 + y_1^2 + z_1^2}\sqrt{x_2^2 + y_2^2 + z_2^2}}$$

2 人工转变

$$\left\{\begin{array}{l} {}^4_2\text{He}+{}^{14}_7\text{N}\rightarrow{}^{17}_8\text{O}+{}^1_1\text{H}(\text{Rutherford})\\ {}^4_2\text{He}+{}^8_4\text{Be}\rightarrow{}^{11}_6\text{C}+{}^1_0\text{n}(\text{Chadwick})\\ {}^4_2\text{He}+{}^{27}_{13}\text{Al}\rightarrow{}^{30}_{15}\text{P}+{}^1_0\text{n},{}^{30}_{15}\text{P}\rightarrow{}^{30}_{14}\text{Si}+{}^0_1\text{e}(\text{Curie}) \end{array}\right.$$



3 Part 2

关于 E^{n+1} 中超球面特征的一些结果 [1]

参考文献

- [1] 闻家君 陈抚良胡名成. 关于 e^{n+1} 中超球面特征的一些结果. 江西科学, 24(6):400–402, 2006.
- [2] A. Einstein, B. Podolsky, and N. Rosen. Can quantum-mechanical description of physical reality be considered complete? *Phys Rev*, 47(10):696–702, 1935.