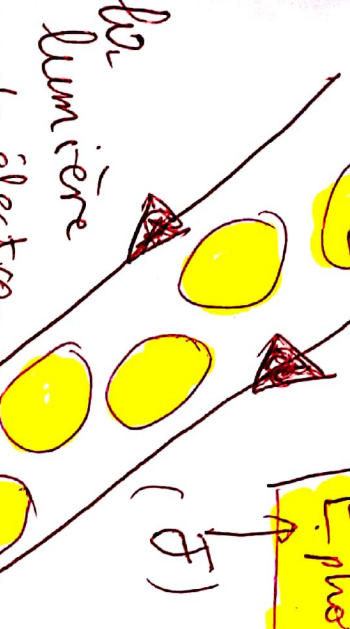


lumière

photon = quanta

$$N = \frac{dE}{\Delta E} = \frac{\lambda}{\tau} = \lambda \cdot \nu$$

$$N = \frac{V}{\lambda}$$



$$E_{\text{photon}} = h \cdot \nu = h \cdot \frac{c}{\lambda}$$

constante de Planck ($h = 6.626 \cdot 10^{-34} \text{ J}\cdot\text{s}$)

$$\nu = \frac{c}{\lambda}$$

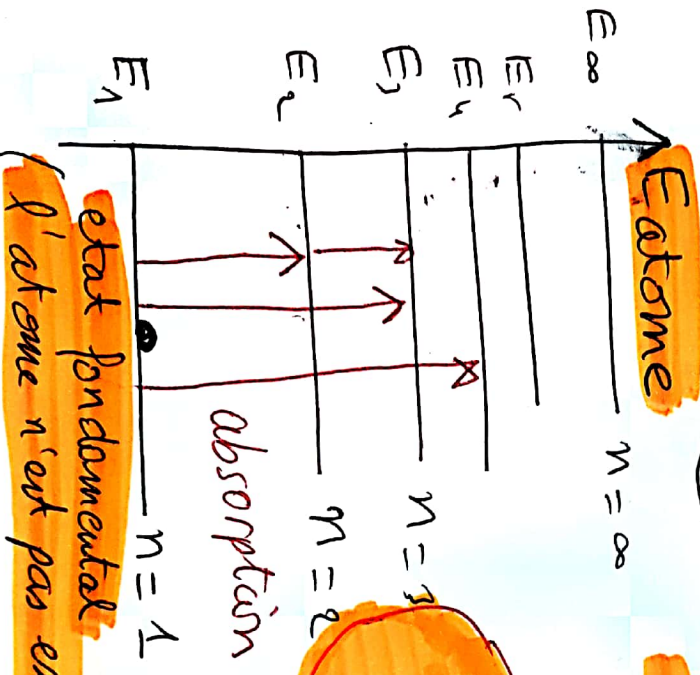
la matière

énergie

$$F_{gr} = G \cdot \frac{m_1 \cdot m_2}{r^2}$$

$$F_{elec} = k \cdot \frac{|q_1 \cdot q_2|}{r^2}$$

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$$|\Delta E| = E_{\text{photon}}$$

état excité

→ emission

