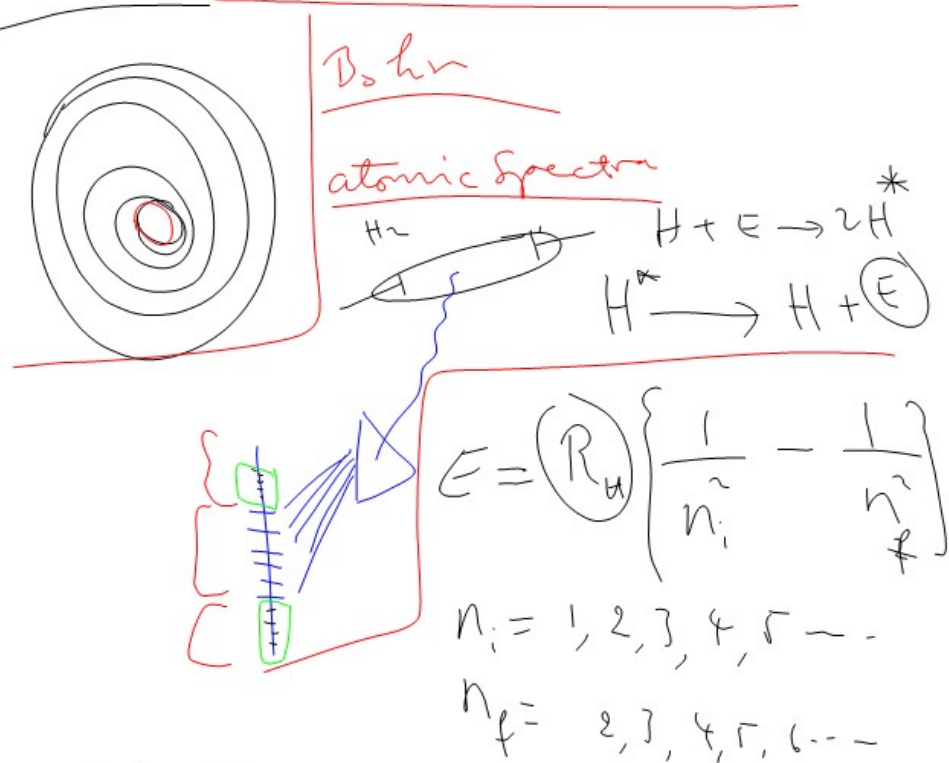
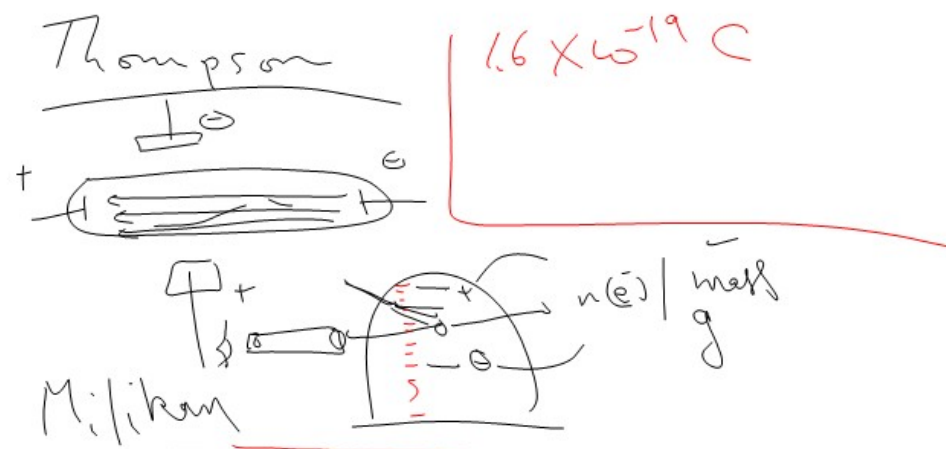
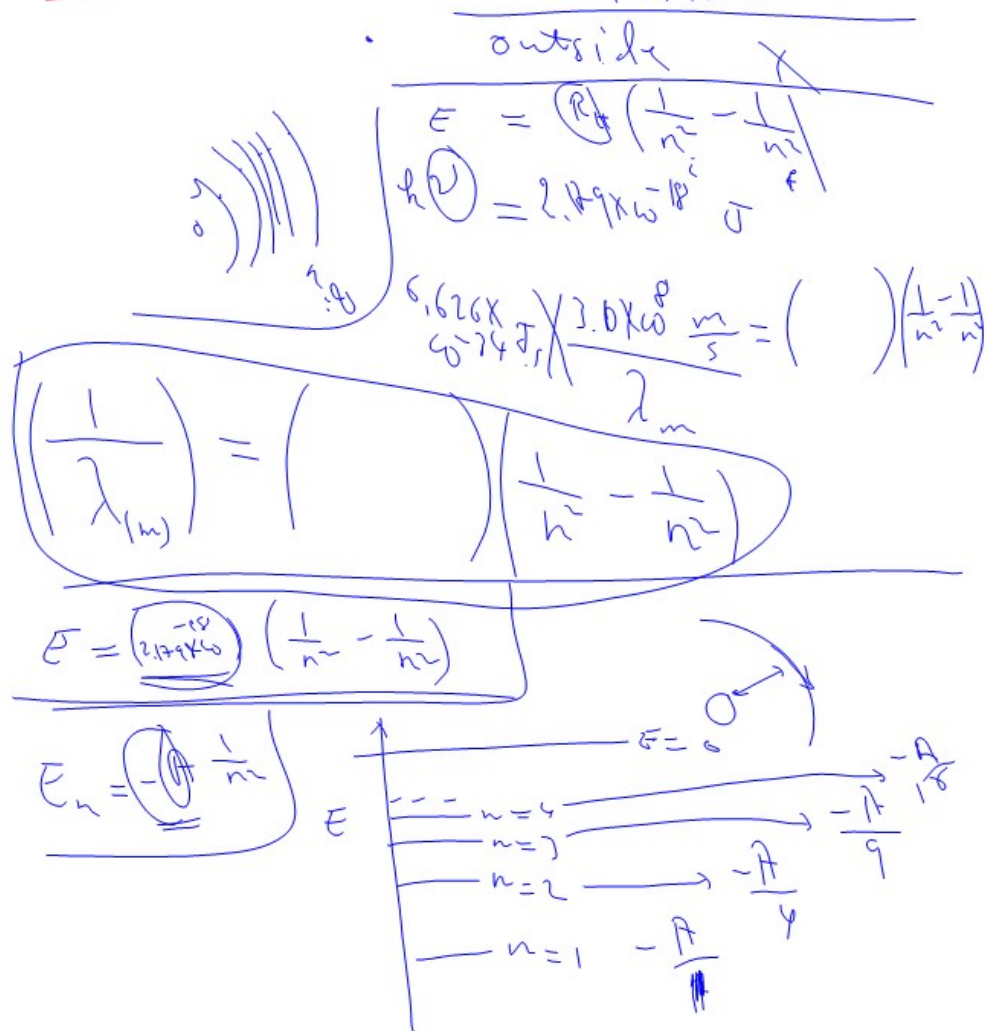
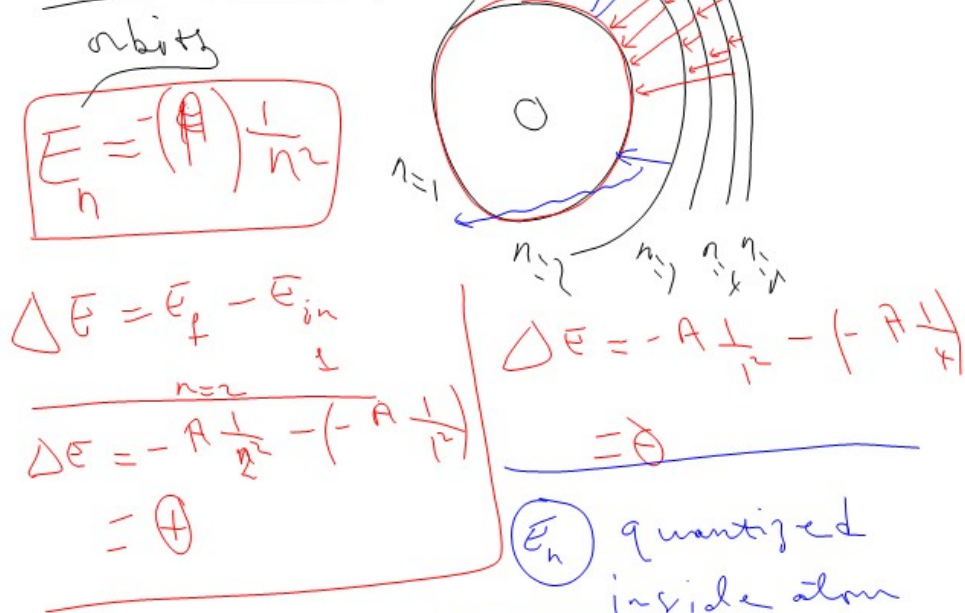




$$R_H = 1.097 \times 10^7 \text{ m}^{-1} \Rightarrow 2.179 \times 10^{-18} \text{ J}$$

Bohr's Model



Bohr ✓✓

one- e^- atoms
cons

$$E_n = -A(z) \frac{1}{n^2} \quad \text{more than } (1) \times$$

De Broglie:

$$\lambda = \frac{h}{m v}$$

$$\approx \frac{10^{-10} \text{ m}}{10}$$

$$\lambda = \frac{h}{m v}$$

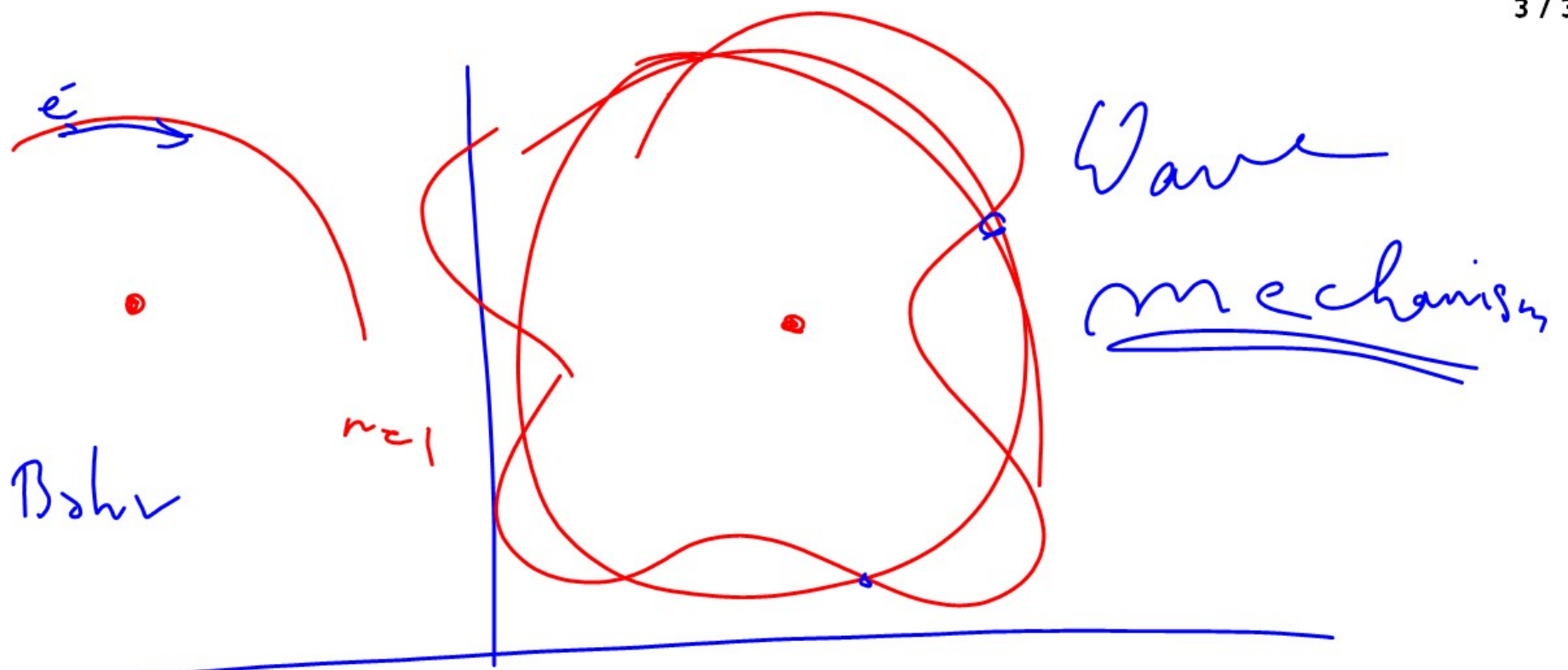
$$h \rightarrow \text{J.s}$$

$$\lambda = \frac{h}{m c}$$

$$E = h \nu$$

$$= h \frac{c}{\lambda} = m c^2$$

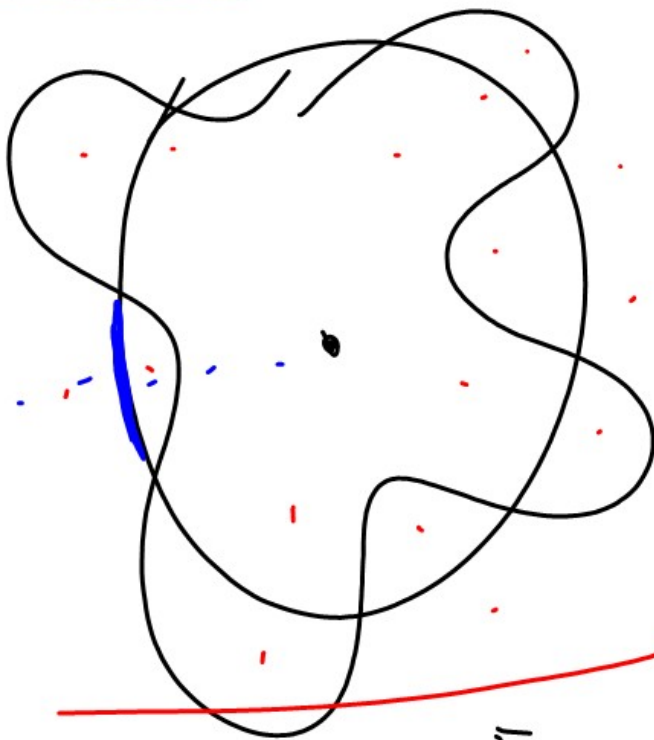
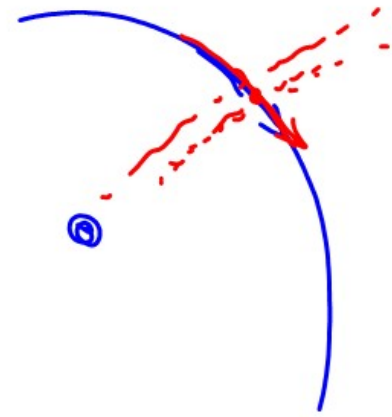
$$\frac{h}{m c} = \lambda$$



Heisenberg

$$\Delta p \Delta x \geq \frac{h}{4\pi}$$

$$m \Delta v \Delta x \geq \frac{h}{4\pi}$$



Physics of Waves

Schrodinger

Schrodinger Equation:

ψ → mathematical function

ψ^2 → describes probability