

# Bohr Hydrogen Atom

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## 1 Introduction

Bohr Hydrogen Atom is a positively charged nucleus. It is surrounded by negatively charged electron cloud. The electrostatic forces between positive nucleus and negative electron clouds hold the atom.

## 2 Formula

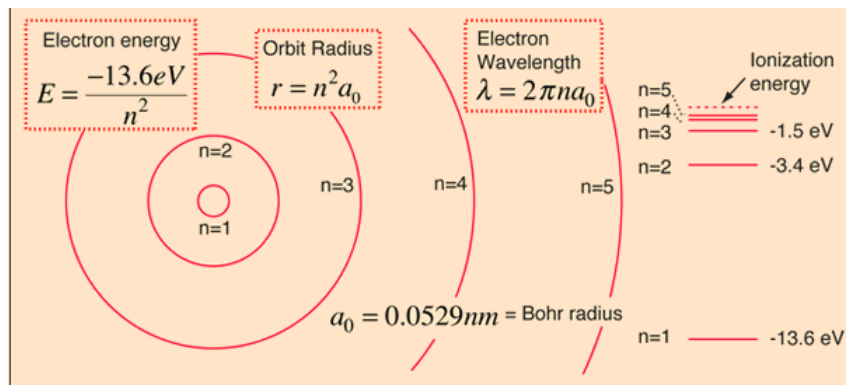
$$h\nu = \frac{2\pi^2me^4}{h^2} \left( \frac{1}{n_1^2} - \frac{1}{n_2^2} \right) = -13.6 \left( \frac{1}{n_1^2} - \frac{1}{n_2^2} \right) eV$$

$$\frac{1}{\lambda} = R_h \left( \frac{1}{n_1^2} - \frac{1}{n_2^2} \right)$$

R is Rydberg Constant and

$$R_h = 1.0973731 \times 10^7 m^{-1}$$

## 3 Graph



## 4 Citation

N.p., n.d. Web. <http://hyperphysics.phy-astr.gsu.edu/hbase/hyde.html>