From last lecture – Bohr model

Angular momentum is quantized

$$L_n = nh/2\pi \qquad n = 1, 2, 3 \ldots$$

Energy is quantized

$$E_n = -\frac{mk^2e^4}{2\hbar^2}\frac{Z^2}{n^2} \approx -\frac{13.6 \cdot Z^2}{n^2}\ \text{eV} \quad \left(\text{where } \hbar \equiv h/2\pi\right)$$

Radius is quantized

$$r_n = \left(\frac{h}{2\pi}\right)^2 \frac{1}{mke^2}\frac{n^2}{Z} = \left(0.0529\ \text{nm}\right)\frac{n^2}{Z}$$

Linear momentum too

Bohr model is incorrect!