

Calculating the Cross-Section

- Uniform gas density $\rightarrow$ constant scattering probability for a fixed distance

$$I = I_0 e^{-\frac{L}{\lambda}}$$

$$\frac{1}{\lambda} = n\sigma$$

$$\sigma(V) = \frac{1}{nL} \ln \left[\frac{I_0(V)}{I(V)} \right]$$