

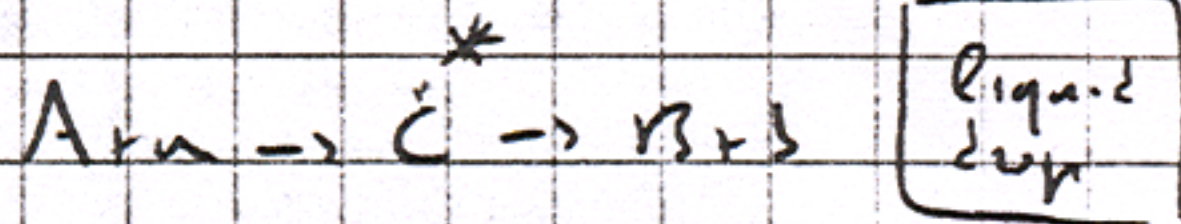
Classification

type

elastic, inelastic, transfer

E_{in}
 T_{in}

CV



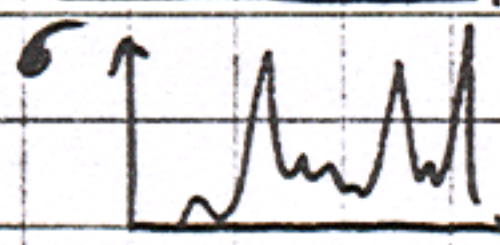
$\sigma \sim \sigma_{An}^c \cdot P(C \rightarrow B + b)$

example $p + {}^{63}\text{Cu}$, $\alpha + {}^{60}\text{Ni}$ form ${}^{64}\text{Zn}$

pre-24

direct

liquid drop



typical angular distributions

example my laptop

$\sqrt{s} = \sqrt{\frac{2T}{M}}$

$\Delta t = \frac{R}{v} = \frac{R}{hc} \sqrt{\frac{Mc^2}{2T}} \cdot \hbar \sim \frac{5 \text{ fm}}{200 \text{ MeV fm}} \cdot 6.10^{-12} \text{ MeV}, \sqrt{\frac{10^3}{2T}} \sim \frac{1}{6} \cdot 10^{-12}, \sqrt{\frac{10^7}{2T}}$

100-200 MeV : direct reaction

1 MeV compound