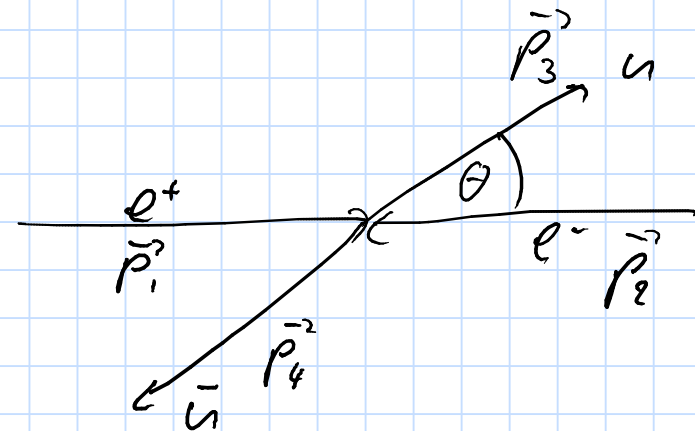


Feynman diagram  
(with additional momentum  
labels - not compulsory but helpful)



Lab frame

$$M_{fi} = \sqrt{4\pi\alpha} \cdot \frac{1}{q^2} \cdot \frac{-2}{3} \sqrt{4\pi\alpha}$$

$$= -\frac{8\pi\alpha}{3(p_1 + p_2)^2} = -\frac{8\pi\alpha}{3s} = -\frac{8\pi\alpha}{3E_{cm}^2}$$