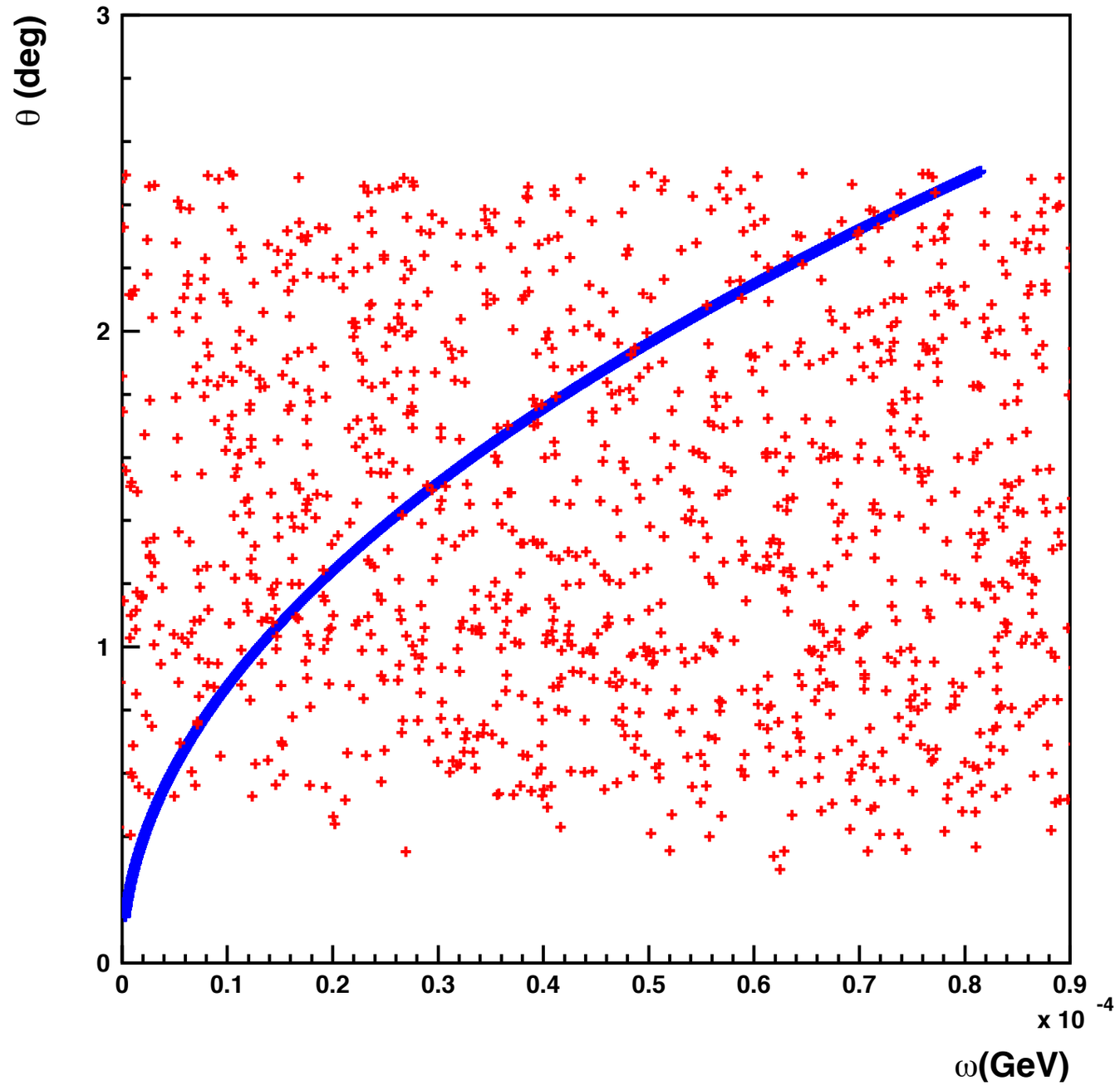
For elastic eD—> eD: $$E' = \frac{E_{beam}}{1 + \frac{2E_{beam}}{M_D}\sin^2\frac{\theta}{2}}$$

Using only E_{beam} and θ: calculate ω = E_{beam} - E' and plot θ vs ω

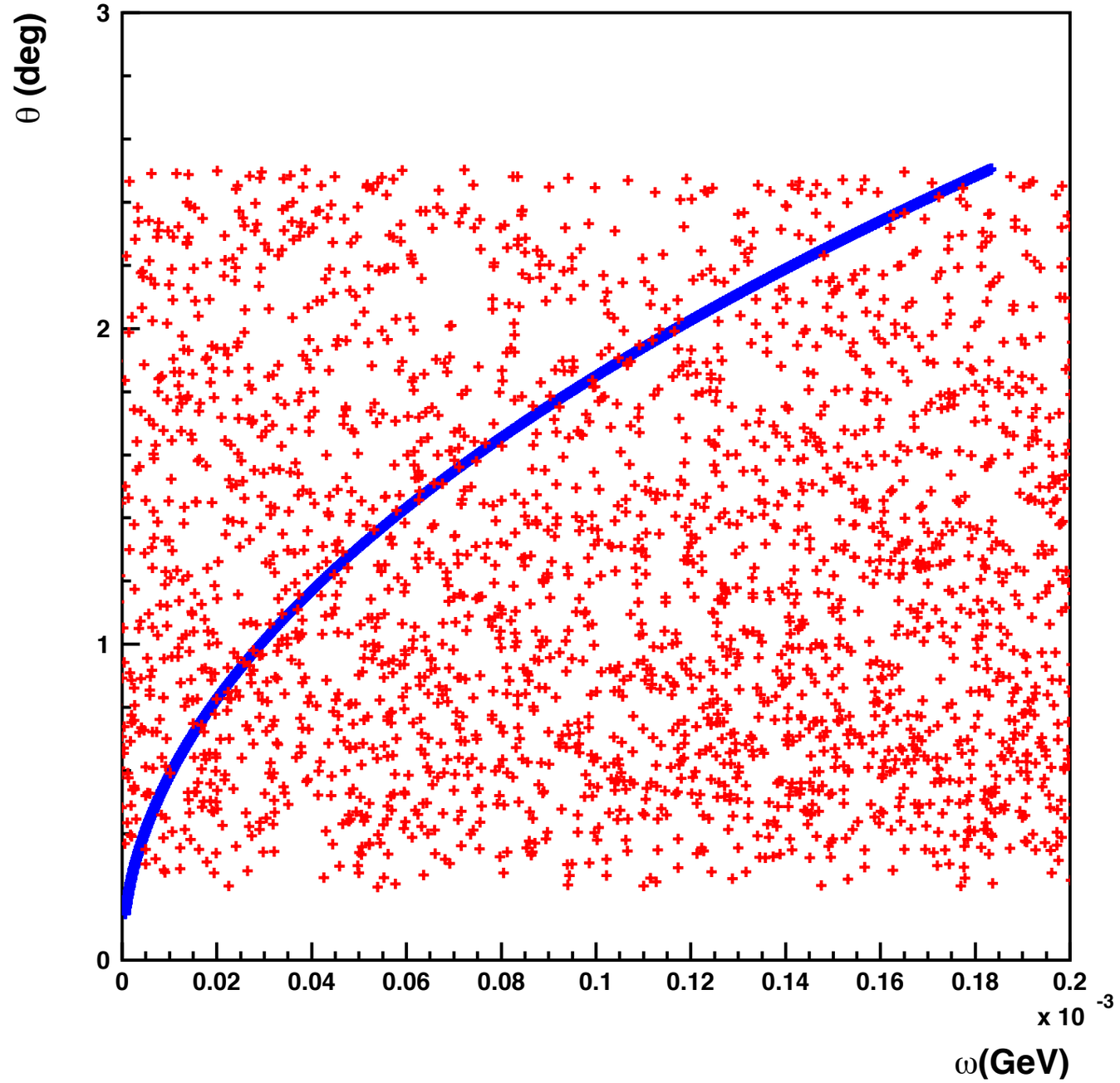
For quasi-elastic eD scattering: $$E' = \frac{E_{beam}}{1 + \frac{2E_{beam}}{M_p}\sin^2\frac{\theta}{2}}$$

Using only E_{beam} and θ: calculate $Q^2 = 4EE'\sin^2\theta/2$
use $\omega_{peak} = Q^2/2M_p - 2.2$ and
$\omega_{width} = 2QP_{Fermi}/M_p$
plot θ vs ω

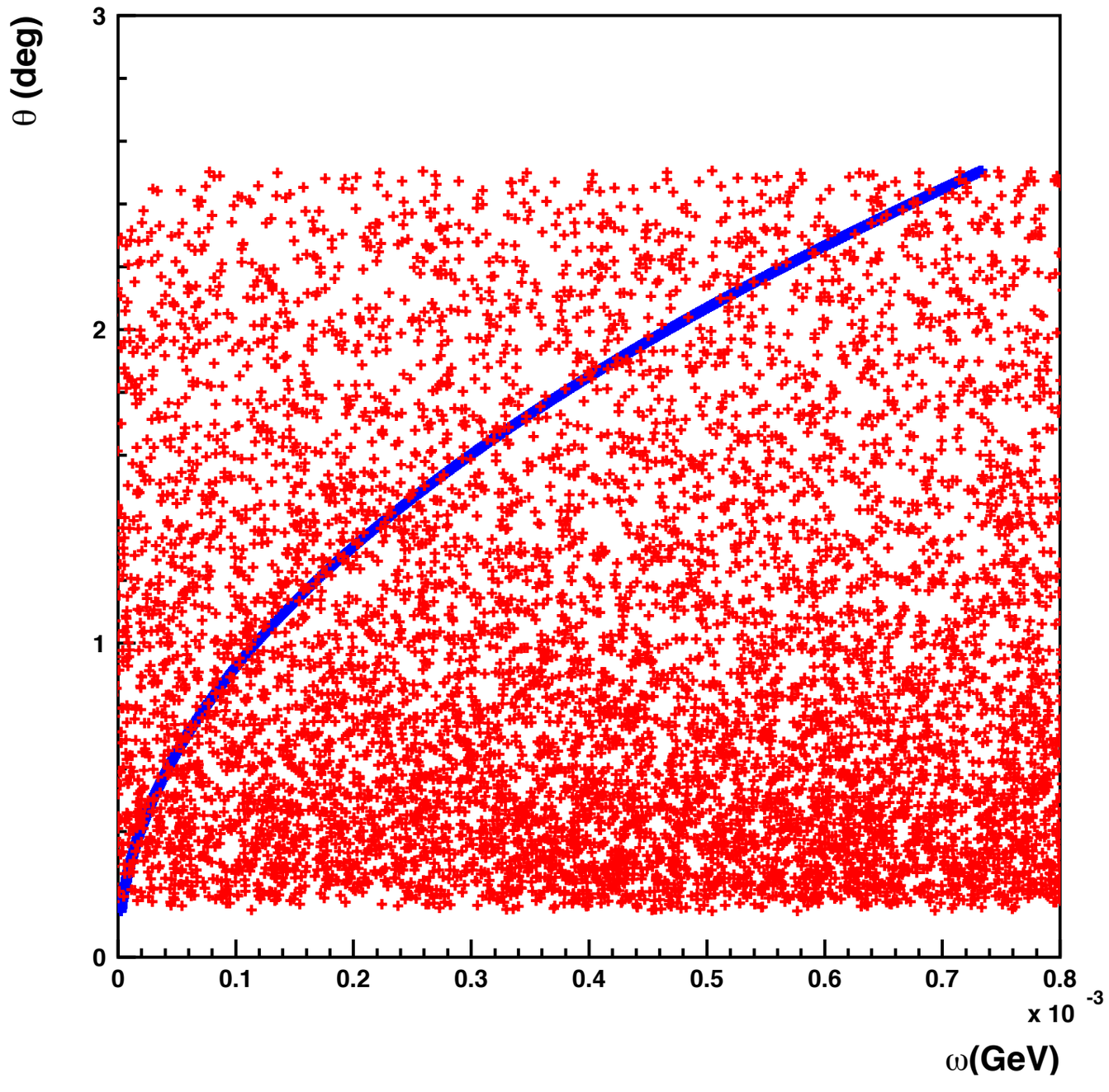
E_{beam} = 0.4 GeV



E_{beam} = 0.6 GeV



E_{beam} = 1.2 GeV



E_{beam} = 1.8 GeV