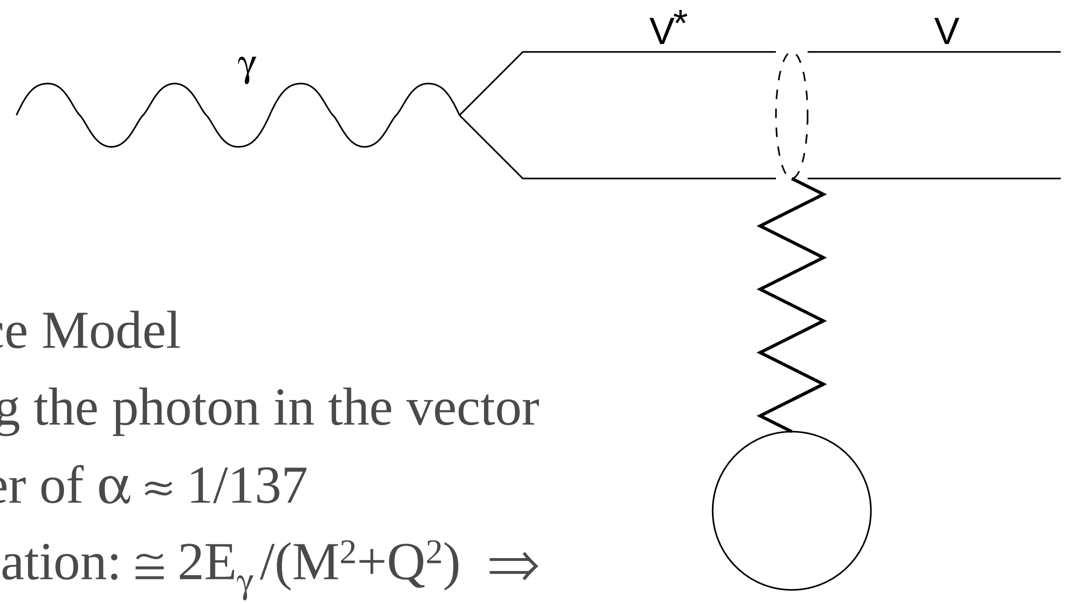
One of the nuclei emits a photon. The photon fluctuates into a vector meson, which scatters off the other nucleus.



– Vector Meson Dominance Model

– The probability of finding the photon in the vector meson state is of the order of $\alpha \approx 1/137$

– The lifetime of the fluctuation: $\cong 2E_\gamma/(M^2+Q^2) \Rightarrow$ For high E_γ, the distance the vector meson travels is large compared with the nuclear dimensions

– The reaction is mediated by a colorless exchange particle (meson/Pomeron/gluon-pair)