**Noteguide for QED and Types of Particles - Video 32B Name**

Quantum Electrodynamics (QED) – Richard Feynman

Forces are mediated by virtual particles

How QED Explains:

What charge actually is

Force dropping off over distance

How accelerating a charge causes it to radiate actual photons



The Yukawa Particle:



 



Annihilation:



(Write down what the axes mean, and why the positron is going backwards in time)



**Bosons (Integer spin)**

 Gauge Bosons (Spin 1)

 Scalar Boson (Spin 0)

 Mesons (Even # of Spin ½)

**Fermions (Non integer Spin or Spin 1/2)**

 Leptons



 Bosons

 Quarks