


	Fermion	We use this code on the diagrams. The code is used by the Institute of Physics and is common but not universal
	Photon	
	Gluon	
	Boson (W, Z)	

The diagrams are intended to help us think about what happens but they cannot represent anything like a true image of interactions that take place in 3 dimensions.

The particles entering and leaving the interaction (fermions) are shown as solid lines. The exchange particles shown here are either photons or a weak interaction boson.

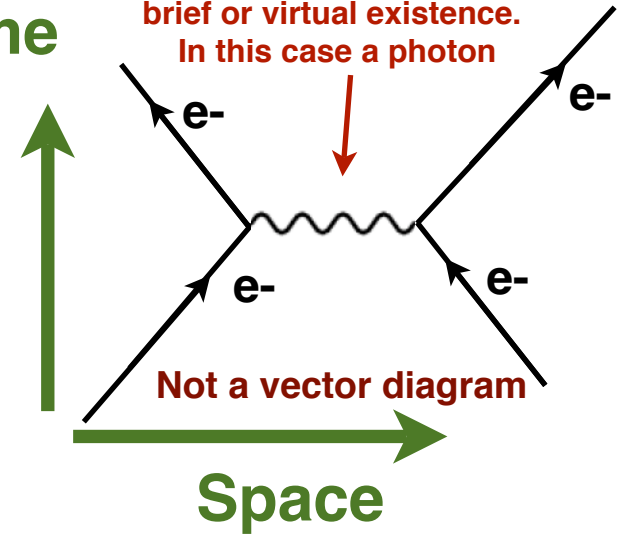
The changes in direction of the particles simply represent a change in momentum. They are not vector diagrams, there is no scale.

An upward arrow on the line shows a real particle and a downward arrow is an antiparticle.

### Interaction between two electrons

**Represents the energy change or exchange particle which has a brief or virtual existence. In this case a photon**

**Time**



### Interaction between two positrons

