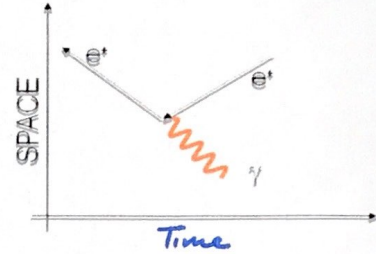


The following questions are about Feynman diagrams.

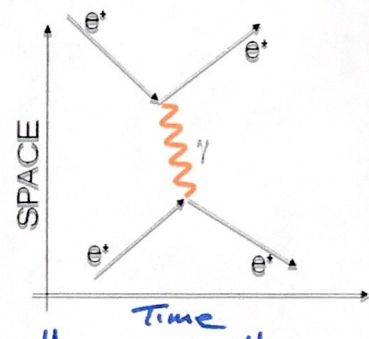
16. Explain what is happening in this Feynman diagram.

*Positron is decaying into a positron and a photon.*



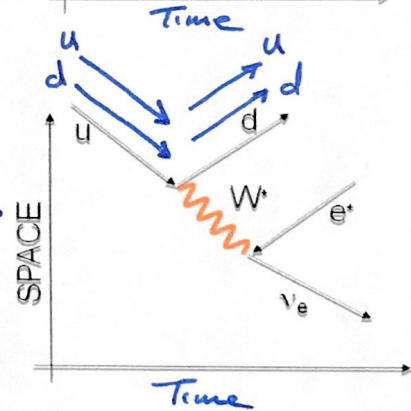
17. Explain why this Feynman diagram, showing a positron repelling a positron, is incorrectly drawn.

*The positron (antimatter of electron) should have arrows (↖) pointing in the opposite direction.*



18. Explain what is happening in this Feynman diagram. What kind of decay is illustrated? Add two quarks to complete the top of the diagram so that it shows the common particles in the reaction.

*An Up quark is decaying into a Down quark. This is Beta positive decay. This is a proton turning into a neutron.*



19. Fill in the boxes with the particles that are not identified in the Feynman diagram.

*Beta negative decay, a neutron becoming a proton; ~~and~~ an electron, and an anti neutrino.*

