39 Which statement explains why alpha-particles have discrete energies, but beta-particles have a continuous range of energies?

A Beta-particles have a much smaller mass than alpha-particles which means beta-particles can be emitted with a larger range of velocities.

B Only alpha-particles experience repulsion from the nucleus which is dependent on the number of protons in the nucleus.

C Only beta-particles are emitted with another lepton and some energy is transferred to the other lepton.

D Only the energy of alpha-particles is discrete because the composition of alpha-particles is always the same.