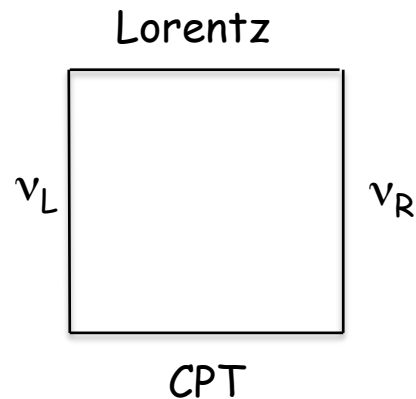
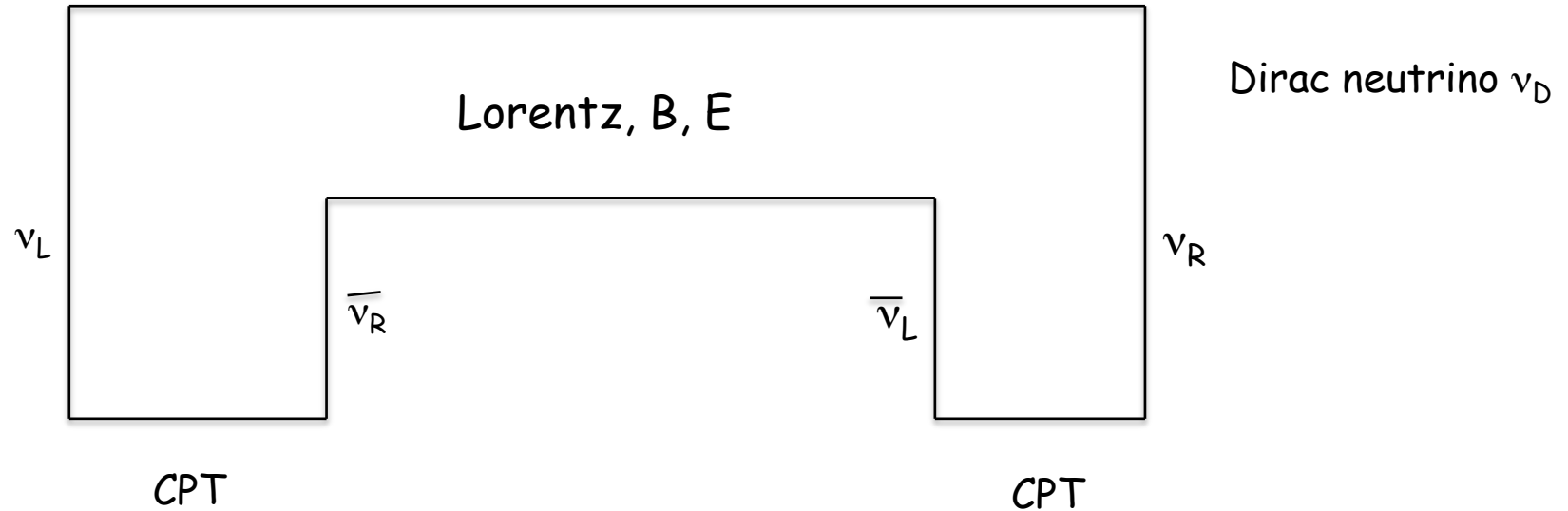


Four distinct states of a massive Dirac neutrino and the transformation among them.  $\nu_L$  can be converted into the opposite helicity state by a Lorentz transformation, or by the torque exerted by an external B or E field.



There are only two distinct states of a Majorana neutrino  $\nu_M$ . Under the Lorentz transformation  $\nu_L$  is transformed into the same state  $\nu_R$  as by the Lorentz transformation. The dipole magnetic and electric moments must vanish.