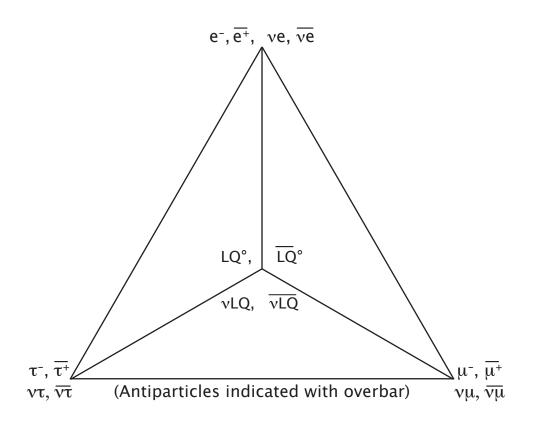
THE SYMMETRY GROUPS OF LIGHT: THE LEPTONIC SPECTRUM Creation of mass during the T.O.E. or Plank Era of the "Big Bang"



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The leptoquark is the heaviest member of the leptonic spectrum—so heavy that it splits into three quarks bearing partial charges (as a more stable solution to the self-repulsion of its own electric charge). Leptoquarks connect leptons with quarks—baryons are fractured leptons derived from leptoquarks. As an elementary particle, the leptoquark has its own neutrino (vLQ), which is a natural candidate for the "dark matter" WIMP. Leptoquarks originally form as matter–antimatter charged pairs, but (only) the "Y" IVBs can produce a decay to an electically neutral quark configuration (see below). These electrically neutral leptoquarks go on to decay asymmetrically via the "X" IVB of the next lower (G.U.T.) energy level, producing an excess of matter baryons, which decay in turn (via the "W" IVBs) to produce the particles of the electroweak domain. Every lepton can transform into every other given sufficient energy and the mediation of the appropriate IVBs, neutrinos, and virtual particle pairs. Connecting lines indicate 2–way transformation pathways.

$$LQ^{-} \xrightarrow{(Y^{-})} LQ^{\circ} + e^{-} + \overline{ve}$$
$$LQ^{\circ} \times LQ^{\circ} \xrightarrow{(\overline{X^{\circ}})} vLQ + \overline{e^{+}} + e^{-} + neutral hyperon$$

See: www.johnagowan.org/origin.html www.johnagowan.org/weakforce.html ; www.johnagowan.org/higgstable.html