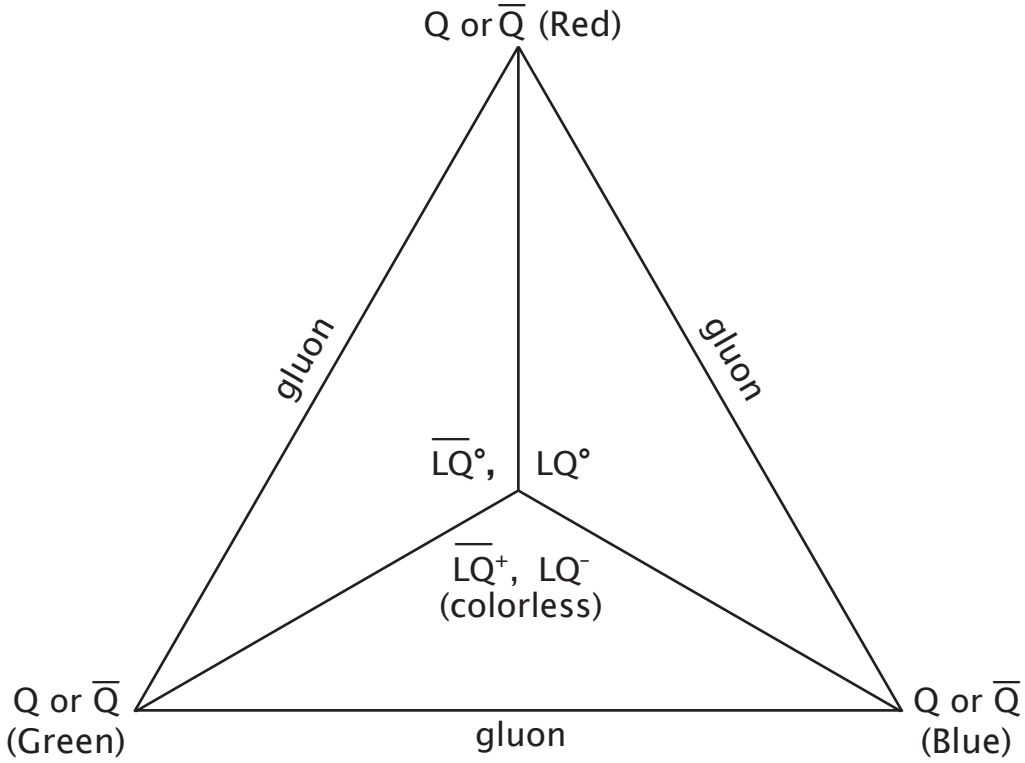
Fig. 2 (johnagowan.org/tetralq.pdf)

THE SYMMETRY GROUPS OF LIGHT: LEPTOQUARKS. G.U.T. ENERGY DOMAIN (GRAND UNIFIED THEORY: UNION OF STRONG AND ELECTROWEAK FORCES)



John A. Gowan and August T. Jaccaci

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A primordial heavy lepton (or antilepton) splits into 3 quarks, forming a leptoquark (or anti-leptoquark). Quarks are transformed to red, blue, or green "colors" by gluon exchange (strong force confinement via color charges, perimeter "vertices"). Lines indicate transformation pathways via gluon exchange. The strong force functions to maintain whole quantum unit charges in baryons (3 quarks) or mesons (quark-antiquark pairs). Quark partial charges are necessary to create electrically neutral leptoquarks, which can undergo an asymmetric weak force decay, producing our matter-only cosmos. "X" IVBs compress quark and gluon fields, creating a colorless leptoquark ("central" vertex of diagram). Subsequent asymmetric weak force decays (via the "X°" IVB) of electrically neutral leptoquarks result in an excess of matter baryons (and leptoquark antineutrinos), creating the electroweak domain, as shown below and in Figure 3:

$$LQ° \times \overline{LQ}° \xrightarrow{(\overline{X}°)} \overline{\nu LQ} + \overline{e}^+ + e^- + \text{neutral hyperon}$$

(Antiparticles indicated with overbar.)

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