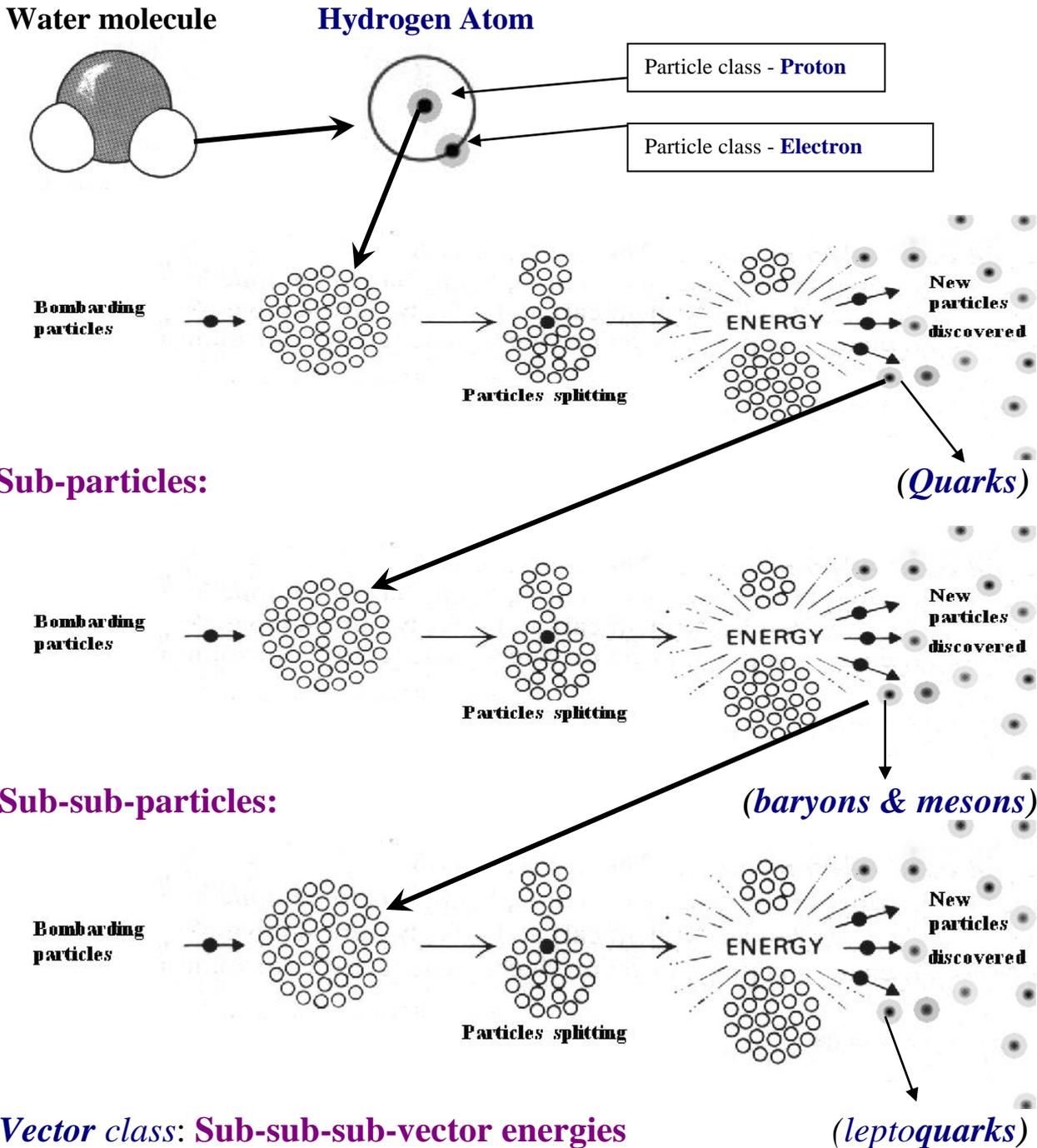


Cambridge Math from 2002, perhaps a little outdated now?

**The energy exists (further explanation, assisted classroom lecture notes by John Lawrence King)**



In Summary : if sub-sub-particles are again sub-divided, the measurements will be of pure energy.

Vector energies are involved with other by-products to form extra energy  
*Zero-Point-Energy*

**THIS IS THE ENERGY YOU ARE CALLING-IN**

# The mechanics of how energy-light is divided into colours

Where does *the additional energy* come from?

From **universal energy**

The universe is made of energy (*shown in slide 1*)

Thus, all **tangible & non-tangible matter** is made of universal energy

In mathematics:

$$(+2) \text{ plus } (-2) = 0$$

Energy **can not** be used, it can only be **transformed**

The Sun affects the molecular heat (*particles - kinetics*) **Solar weather**

Energy is generated from explosions (*mostly hydrogen*)

In physics: (+ particle) plus (- particle) = energy changes to a different form.

*Einstein* proved conversion of mass to energy  $E=mc^2$

In Metaphysics:

Weak Force Leptoquark Decays

**VECTOR ENERGIES ( $\pm$ ) DECAY**

(X(Lq x Lq)(vLq x vLq)W+ \_\_\_\_\_ (baryon) + vLq + energy)

(+ vector leptoquark) plus (- **antivector antileptoquark**) *pairs decays*

**Vector energies carry colour**

PRODUCTS

(via a neutrino-antineutrino complex are **formed** by the W+ vector energies)

**FORMING**

**Matter Baryons & antileptoquark neutrino**

(neutrino-antineutrino & particle-antiparticles) **complex are formed**

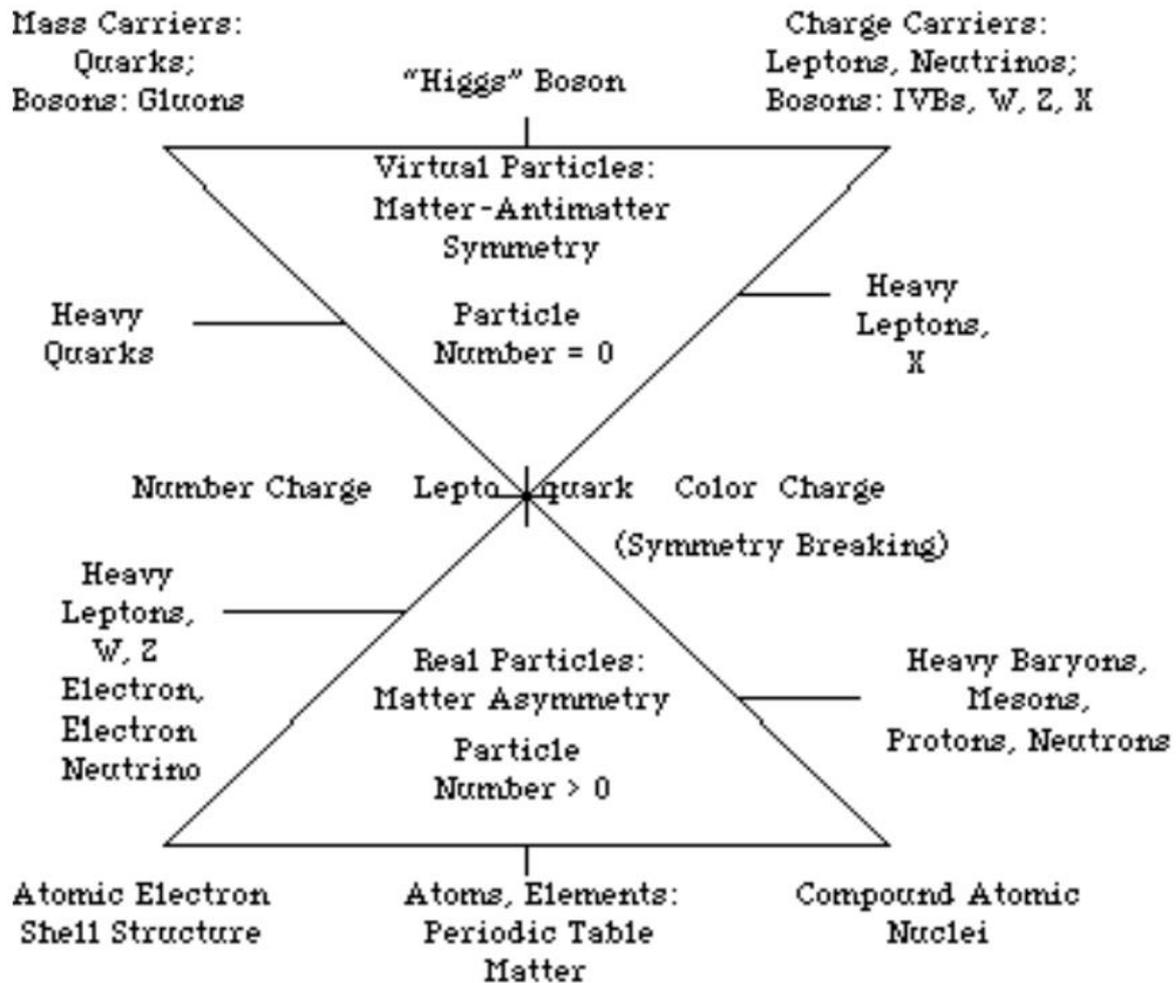
PRODUCTS

The *leptoquarks* are then **compressed to colour neutrality** by the "X" IVB vector energies

ENTROPY (*not random*) - **ZERO-POINT-ENERGY**

Matter baryons,  
**Antileptoquark neutrinos**  
and  
particle & **antiparticle pairs**  
**Collide together**

# The Particle Spectrum and *Weak Force Intermediate Vector Bosons*



The "Higgs" boson may be thought of as a "sticky" property of the metric which enhances the probability of its entanglement and interaction with electromagnetic waves, forming immobile massive structural "knots", or particles.

Quarks	Quark Designations:	Leptons	Lepton Designations:
X+, X-, X, H	IVBs, "Higgs"	W-, W+, Z, H	IVBs, "Higgs"
Lq	Leptoquark	Lq, $\nu$ Lq	Leptoquark, $\nu$ Lq Neutrino
t, b	Top, Bottom	t-, vt	Tau, Tau Neutrino (pairs)
c, s	Charm, Strange	u-, $\nu$ u	Muon, Muon Neutrino
u, d	Up, Down	e-, $\nu$ e	Electron, Electron Neutrino
Composite Particles	Baryons, Mesons	Elementary Particles	Electrons, Neutrinos
Primary Mass Carriers	Hadrons	Alternative Charge Carriers	Leptons
Primary Field, Mass	Colour	Secondary Field, Charge	Electric, Identity Charge

Gross, D, Wilczek, F, (1973) Ultraviolet Behaviour of Non-Abelian Gauge Theories. *Phys. Rev. Lett.* 30: 1343.  
 Cronin, J. W (1981) CP Symmetry Violation - the Search for its Origin. *Science* 212: 1221

## Examples of *Weak Force Decays: Leptons*

$$t-(u+x u-)W- \text{ \_\_\_\_\_\_ } \nu t + \nu u + u-$$

A tau decays (via a muon-antimuon particle pair complex formed by the W-) to a tau neutrino, a muon antineutrino, and a muon (antiparticles shown in italics).

$$u-(e+x e-)W- \text{ \_\_\_\_\_\_ } \nu u + \nu e + e-$$

A muon decays (via an electron-positron particle pair complex formed by the W-) to a muon neutrino, a positron neutrino, and an electron.

$$(e- + \nu e)Z \text{ \_\_\_\_\_\_ } \nu e + e-$$

An electron and electron neutrino interact (via a complex formed by the Z) and swap identities.

## Examples of *Weak Force Decays: Baryons and Mesons*

$$(neutron)(e+x e-)W- \text{ \_\_\_\_\_\_ } (proton)+ + \nu e + e-$$

A neutron (udd) decays (via an electron-positron particle *paired complex are formed* by the W-) to a proton (uud)+, a positron neutrino, and an electron.

$$(proton)+(e-x e+)W+ \text{ \_\_\_\_\_\_ } (neutron) + \nu e + e+$$

A proton (uud)+ decays (via a *W+ complex involving an electron-antielectron particle pair*) to a neutron (udd), an electron neutrino, and a positron. This reaction *requires an energy input*.

$$(ud)-(e+x e-)W- \text{ \_\_\_\_\_\_ } (energy) + \nu e + e-$$

A negative pion (ud)- decays (via an electron-positron particle pair complex formed by the W-) to a *particle-antiparticle pair* (energy), a positron neutrino, and an electron.

## Hypothetical *Weak Force Decays: Leptoquark*

$$X(Lq x Lq)(\nu Lq x \nu Lq)W+ \text{ \_\_\_\_\_\_ } (baryon) + \nu Lq + energy$$

A neutral lepto**quark**-antilepto**quark** pair decays (via a neutrino-antineutrino **complex formed** by the W+) to a *matter baryon*, an *antileptoquark neutrino*, and a *particle-antiparticle pair* of which, *annihilate each other* (energy).

Whereby the *leptoquarks are compressed to colour neutrality* by the "*X*" *IVB (Higg's Boson/vectors)*.

Cambridge Math from 2002, perhaps a little outdated now?

Literature cited:

Cronin, J. W (1981) CP Symmetry Violation - the Search for its Origin. Science 212: 1221.  
Gross, D, Wilczek, F, (1973) Ultraviolet Behaviour of Non-Abelian Gauge Theories. Phys. Rev. Lett. 30: 1343.