

OVERVIEW

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John A. Gowan

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[Our universe probably began](#) as a production of the "Multiverse", which is truly eternal and infinite, the "scientific" (or rational) equivalent of "God". The "given" physical constants which cannot be otherwise derived have their origins in the Multiverse. All else can be explained through considerations of conservation of energy and symmetry ([Noether's Theorem](#)).

[Space and time are entropy domains](#) serving energy conservation for free and bound forms of electromagnetic energy. "[Velocity c](#)" is a [symmetry state](#), vanishing the asymmetric dimension of time. Gravity is a negentropic force arising from the intrinsic motion of time. [Gravity creates time from space and vice versa](#). These, and the following, are some of the concepts necessary for the development of a "[Unified Field Theory](#)".

The positive energy of our universe is balanced by its negative gravitational energy, and the universe is overall charge neutral, as it was from the beginning. The Multiverse is therefore not diminished by its creation. Its creation is evidently due only to the positive force of the Creative Energy resident in the Multiverse. Our universe is grossly asymmetric in that it consists of matter only, its original antimatter complement having been destroyed by the matter-antimatter explosion that was the "Big Bang". This primordial asymmetry is necessary for our universe to exist at all (otherwise it is only photons), and is the single most significant fact of our existence, having the most explanatory power (including the origin of quarks, gluons, neutrinos, the relationship between leptons and quarks, dark matter, etc. - see: "[Table of the Higgs Cascade](#)".) [The charges of matter are symmetry debts of light](#).

The "[leptonic spectrum](#)" consists of the electron, muon, tau, and probably the leptoquark, in ascending order of mass. There is a (nearly massless) neutrino associated with each massive lepton, and taken together with their antiparticles, this leptonic family comprises the only known truly elementary particles. Furthermore, because the [leptoquark is the source of all the quarks](#), (and therefore of all [mesons and baryons](#)), the leptonic spectrum provides the foundation for the entire material (atomic) content of the cosmos - stars, galaxies, humanity. This is sufficient reason to select the Leptonic Spectrum for special attention in our overview of a "[Theory of Everything](#)": what is the "[Leptonic Spectrum](#)"?

It seems fairly obvious that the leptonic spectrum is some sort of a resonant or harmonic series, in this case a series created by two fundamental forces, the electromagnetic and weak forces, as they engage one another at successively greater energies. The neutrinos are the evidence of the presence of the weak force. The electromagnetic force provides the energy for the mass of the particles ($e=mc^2$), while the weak force provides their identity; in other words, the weak force differentiates the nodes of the resonant series ([neutrinos are "bare" identity charges](#)). Hence we have an energy field interacting with an *information field* to form the elementary particles of our universe, with the most basic information "bit" the identity charge carried (in its free form) by neutrinos. That this is as it must be is seen upon consideration of the problem of conservation: these particles (and the energy they contain) [cannot be conserved](#) unless they have (at least) an identity. (For example, annihilation with an antiparticle will require at a bare minimum an identity for both

partners.)

While the electromagnetic field is reasonably well known, the nature of the information field provided by the weak force is mysterious and still being explored, but we can see immediately that its basic rationale is conservation. Each node of the electroweak resonant series is associated with an "IVB" (Intermediate Vector Boson - [the massive field vector of the weak force](#)), which is a necessary "gatekeeper" or catalyst for the interaction of these two forces during the production of a massive (single) elementary particle. The function of the massive IVBs is to regulate or "gauge" the energy of interaction to the same high level in which these particles were originally produced, ensuring that all elementary particles (of a given species) are absolutely identical, wherever or whenever they may be produced. This is another conservation function of the weak force, encompassing both energy and symmetry, and circumventing the enervating attrition of the entropic expansion of both space and history over the evolutionary aeons of the cosmos. The [Higgs boson](#) evidently sets the gauge for the electroweak IVBs, thus determining the masses of elementary particles in our spacetime domain. However, there may well be [yet more massive "Higgs-type" bosons](#) that regulate higher energy interactions of the very primitive universe (before the entropic expansion of spacetime), such as the "X" IVB regulating "proton decay" and the asymmetric origin of our "matter-only" universe, and the "Y" IVB [regulating the production of electrically neutral leptiquarks](#).

Life is the means whereby the [universe comes to know itself](#), explore and enlarge its creative powers and experience. Life is the rationale for the existence of our universe; it is an [emergent capacity inherent in the atomic structure](#) of the cosmos (from the information field of the electroweak force expressed through the Periodic Table of the Elements), and will [spontaneously arise given suitable environmental conditions](#).

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