

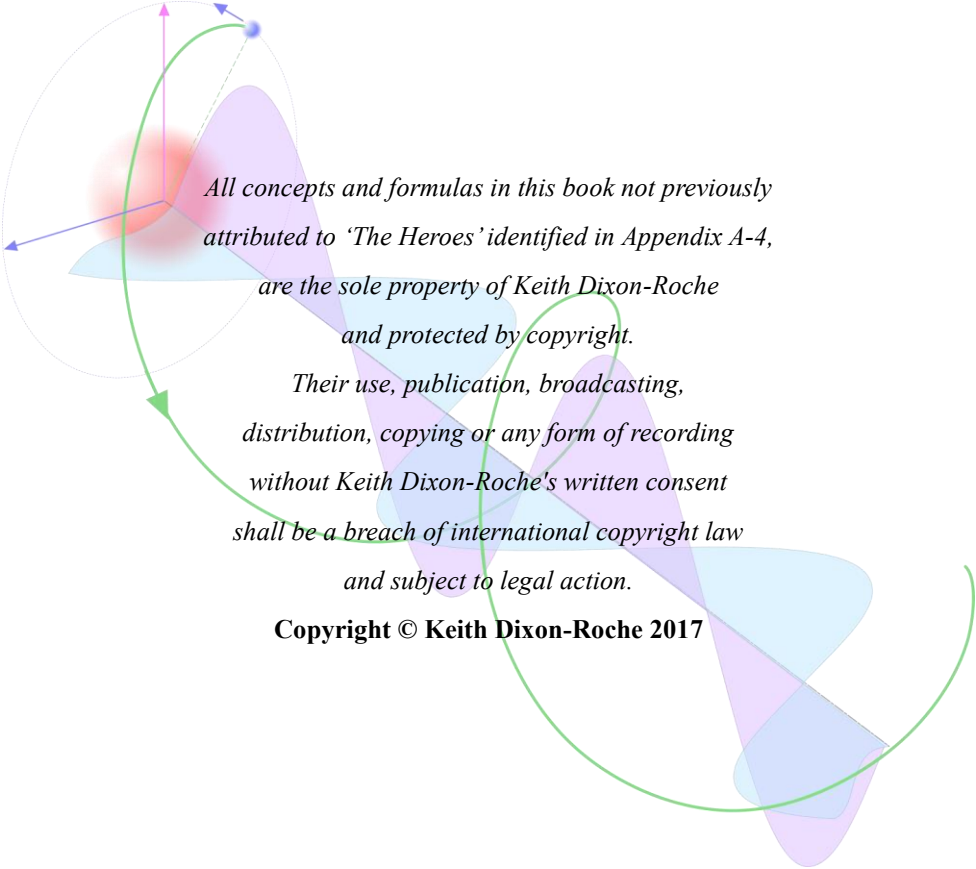
An abstract geometric diagram featuring several overlapping semi-transparent planes in light blue and light purple. A central 3D text 'E=mc²' is rendered in a dark blue, metallic-looking font. To the left, a red sphere is partially visible, with a blue arrow pointing towards it from the left and a pink arrow pointing upwards from the sphere. A green curved arrow starts from the bottom left and loops around the central text. The overall composition is dynamic and mathematical.

The Mathematical Laws of Natural Science

“unification is dead – long live unification!”

By

Keith Dixon-Roche



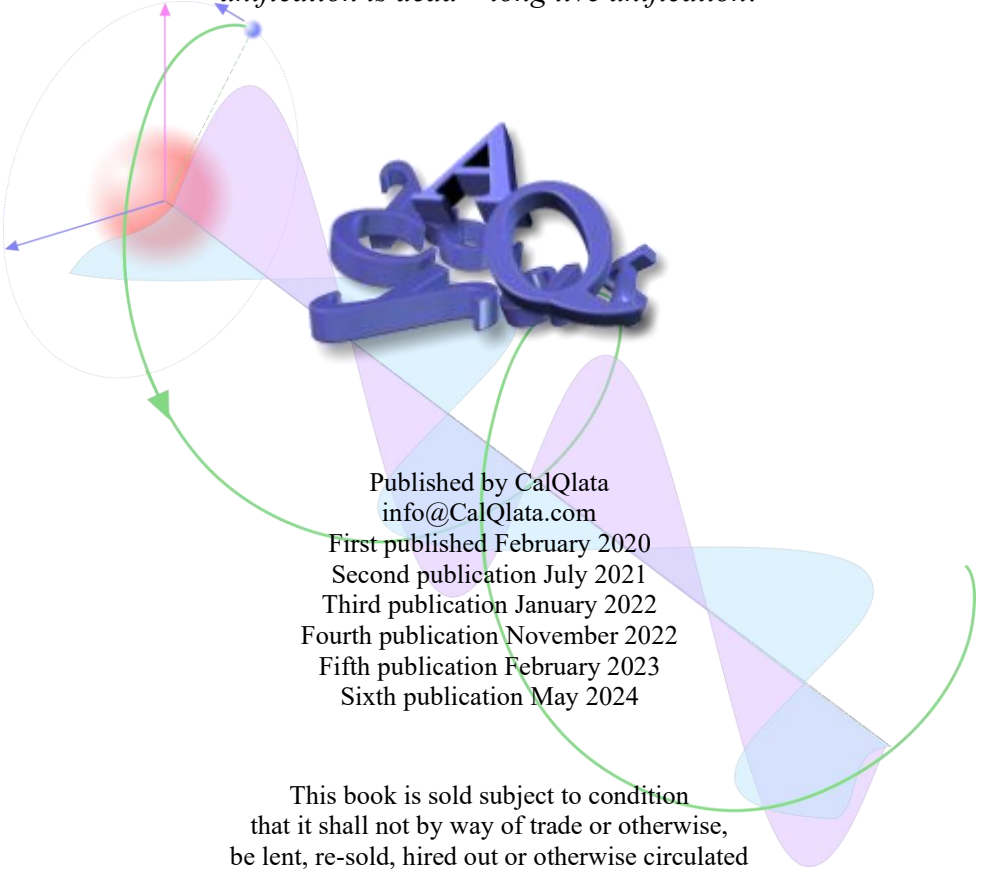
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Preface

Michael Faraday once said; “*Nothing is too wonderful to be true, if it be consistent with the laws of nature*”.

This scientific philosophy was abandoned at the beginning of the 20th century, since when innumerable fanciful and unprovable theories have been created to explain the laws of nature (astronomic and atomic) based upon a fundamental error; the photon.

The inability of scientists to explain the laws of nature based upon the photon has led to general acceptance of the phrase; “*the normal laws of physics do not apply*”, may be used to justify any and all irreconcilable theories, which in turn, has led to the need for a unification theory to unite them. This is the reason why scientific advancement is still dependent upon experimentation, just as it was at the start of the industrial revolution.

The problem with this philosophy is that it facilitates the exploitation of ever failing projects based on flawed science. Because, if solutions are actually found for; pollution, waste, medicine, energy, transport, materials, chemistry, etc. this opportunity for never-ending profit would be lost.

As an engineer (not a scientist) I have been able to study the subject unrestricted by institutional dogma. Moreover, as an engineer, I understand the importance of accuracy and verification; as failure to do so can be catastrophic, which is not a constraint for scientists.

I have discovered that there is no need for a unification theory. A single scientific theory that unites every branch of science in the universe; *energy*, was available to us as long ago as the 19th century.

The purpose of this book is to explain how the universe (and everything in it) actually works, in the hope that one day, somebody may have the will and the means to apply real science to the world’s problems, for the benefit of all.

Newton and Faraday were not only visionary; they were also correct:

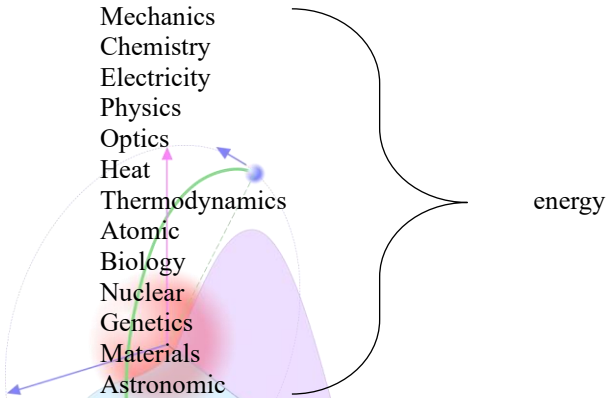
the laws of nature really are simple and consistent!

Keith Dixon-Roche

2020

One Law Fits All:

Numerous independent scientific fields and sub-fields have emerged over the last century, each of which generates its own nomenclature, formulas, units, laws, rules, etc. almost none of which interrelate, i.e.;



They are, however, simply different versions of the same entity; energy.

All of the above branches of science can be mathematically described using exactly the same formulas, exactly the same four constants, exactly the same two ratios and exactly the same units.

The above fields and sub-fields have evolved because the true nature of the atom and its particles, together with the true nature of all scientific constants, remain a mystery today.

But that should no longer be the case. All of physics can and should be united under one subject: The Mathematical Laws of Natural Science, which are all based upon energy.

Whilst it is understood that the above fields have their place in the world with regard to their use of these mathematical laws, the building blocks remain the same for all of them, for example:

Organic and inorganic chemistry apply to different forms of matter, but they both rely on the same proton-electron pairs, atoms and molecules, that react according to the same electrical and magnetic fields & charges.

In other words; whilst one may apply to the treatment of life and the other to the treatment of matter, the chemical reactions are identical.

1.1 Science – A Definition

Science is an all-inclusive mathematically verifiable description of all the natural features and events in our universe, from atoms to celestial bodies.

Conversely, a mathematical description that is only valid for a single universal natural feature or event, is not scientific.

That Isaac Newton understood this concept is self-evident from the title of his thesis; "Philosophiæ Naturalis Principia Mathematica" ("the mathematical laws of natural science"), which applies to all natural events and features from the atom to the 'Big-Bang'.

Note the term; "mathematica"; it means that all natural features and events must be explainable using [the same] mathematical laws - excluding statistics.

Irrespective of context or field, laws are fixed and all-inclusive; they are not open to interpretation or arbitration, nor are they selective.

Statistics relate to the consequences of laws, not the laws themselves.

Science is "knowledge", it is not "experimentation".

The correct scientific validation procedure is; first, develop the mathematical explanation, and only then, verify through observation.

Because this approach has been ignored (e.g. EHT, JET, Hadron collider, etc.) for more than a century, scientific progress is still based upon statistics and experimentation, and is therefore no further advanced today than it was over a hundred years ago.

Any and all scientific theories that cannot be verified as such, must be rejected. These include; Relativity, Quantum Theory, uncertainty, dark matter, anti-matter, black-holes, sub-atomic particles, man-made global warming, CO₂ 'the pollutant', event horizons, etc., none of which is representative of a single characteristic or event in nature. Moreover, any theory that relies for justification on the phrase "*the normal laws of physics do not apply*", must also be rejected.