

# The Nuclear Atom? The True Theory of the Physical Universe— From Microcosmos to Macrocosmos

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Four books by Dewey B. Larson just come to hand.

- (1) *The Structure of the Physical Universe* (1959).
- (2) *Case Against the Nuclear Atom*
- (3) *Beyond Newton* (1964).
- (4) *New Light on Space and Time* (1965).

Review copy from *North Pacific Publishers*, P.O. Box 13255, Portland, Oregon 97213 U.S.A.

“Since the beginning of the 20<sup>th</sup> century, we seem to have accepted, quite blindly sometimes, all experimental observations, whether they fitted into the general framework of Bohr & Rutherford, or not. Whenever they do not, present practice is to try and save the theory, by adding further extensions and qualifications. What Larson does, and with alarming simplicity, is to show that most of the ‘physical and chemical’ evidence, to which text book writers refer, is equally consistent with many other hypotheses, beside the theory of the nuclear atom, and is therefore no proof to any hypothesis. Where do we go from here?”

Not only has Larson accomplished the difficult, but to many people, schooled in current theories, he has done the impossible. Never before has there been a purely theoretical method to evaluate interatomic distance, density, cohesion of liquids and solids, etc. Now it has been done without recourse to any experiment. This alone is sufficient reason to give the theory further critical evaluation, despite any apparent incredibilities. Then a whole host of achievements are revealed as one pursues the developments. Gravity is explained, neither as a propagating force, nor an instantaneous action at a distance. Galactic recessions are made clearly understandable. A Euclidean concept of space is found to be in agreement with the result of the Michelson-Morley experiment, without *ad hoc* assumptions. The temperature-dependent properties of the fluid states of matter, (liquid vapour and gas) are *linear* with respect to both temperature and pressure. In the first book (1959) a prediction was made to the existence, somewhere in the universe, of events, millions of times more energetic than the most violent explosions, then known to science, and since then, these have been observed. Electricity, (current and static) are simply explained, and there is clarification of the true relation of electric charge to electric current. Also there is a list of all sub-atomic particles, even those not yet discovered, all derived from theory alone. This is part of the larger chart including all elements, with an associated 3-number identification, from which, by purely mathematical methods, all physical properties are calculated.

Bohr’s work was a marriage of Rutherford’s theory of the nuclear atom, with Planck’s theory of the quantum. The decree that makes the divorce final, is the abandonment of the last vestiges of Rutherford’s theory. All that is left, is what came originally from Planck. We must go on from here, and the new atomic theory, that replaces the nuclear atom, must embody the quantum concept in some manner. To all of us, steeped in the unquestioning adoration of the contemporary scientific method, *The Case Against the Nuclear Atom*, is a rude and outspoken book, which sometimes hurts. The frightening

thing about it is that it rings true.

A summation of the four books would be: The author, having been aware of the shortcomings of the logic used by physicists, when formulating their conclusions from the observed results of experiments in fields as diverse as subatomic and astronomical ones, has listed in great detail what the whole subject of logical deduction is about, and what one cannot assume as a proof, just because the current theory agrees with observation. He points out internal contradictions in theories of some noteworthy people, including Einstein, who therefore becomes a little less deified. As a result, he decided to question the *whole basis* of space-time definitions and assumptions, resulting in two fundamental postulates.

1. The physical universe is composed entirely of one component, space-time, existing in three dimensions, in discrete units, and in two reciprocal forms, space and time.
2. The physical universe conforms to the relations of ordinary commutative mathematics, its magnitudes are absolute, and its geometry is Euclidean.

He makes extrapolations within strict bounds of logic, with constant checking, for the benefit of the reader, and eventually, throughout the books, in great detail, he constructs a theoretical universe, and summarizes most of it in the fourth book. This theoretical universe is based on his reciprocal system, as defined in the postulates. There are no *ad hoc* assumptions anywhere. The mathematics involves the theory of probability and simple algebraic methods. No need for tensors, spinors, quaternions, etc. This complete theoretical universe has its counterpart in the observed universe, where *anything* that we may question about the observed universe, can be explained in terms of this theoretical universe. His only points of difference with current theories, is where the so-called proof or conclusion is at variance with his theoretical extrapolation, and where there is in fact no actual proof yet—this being merely the pitting of one theory against another. The important point is that to date there is no currently accepted theory, which has been genuinely proved correct, which causes Larson's theory to crumble. This, of course, can be taken as a challenge to all “unbelievers” to find such a fault were it to exist.