

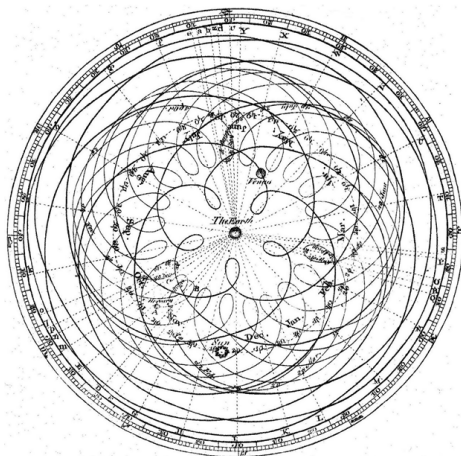
PREFACE

Einstein's relativity theories (SRT, GRT), as well as quantum mechanics (QM) are extremely difficult to fully grasp without the use of intricate mathematics. For instance, four-dimensional space-time is not easily visualized. In addition, quantum mechanics utilizes mathematical relationships that correctly predict outcomes, even though the theory makes no visual common sense. As a result, it is very difficult for the average person to appreciate them, let alone understand them. Here is a statement by the famous quantum physicist Richard Feynman, a Nobel Laureate, supporting this belief, "If you think you understand QM, then you don't understand QM."

In contrast, this publication uses three-dimensional space, logic, and a few equations to postulate a new alternative theory that encompasses, moreover, interconnects SRT, GRT, and QM. It is the author's conviction that modern-day physics (regarding relativity and QM) has lost sight of reality by using complex mathematical equations to produce correct outcomes. Nevertheless, the math employed does not characterize the actual and true universe. This paradox is apparent with present-day high school/college physics courses, whereby students often manipulate equations with no basic understanding as to how the math actually represents reality.

For instance, to clarify this divergence of mathematics versus reality, follow this logic. There are several methods by which math (and geometry) can portray the physics of the solar system, such as the Ptolemaic versus Copernican theories, as pictured in figures 0.1 and 0.2. With the use of mathematics, both theories accurately predict the orbital mechanics of the solar system, but one represents reality while the other does not.

It is generally accepted that the best theory is the simplest (Copernican and Kepler), or in other words, Occam's razor, the theory that is closest to what makes common sense (Copernican and Kepler). In essence, determining the best theory should be pursued first, then followed by the mathematics. The point being, the focus should be on the theory representing reality rather than just mathematics.

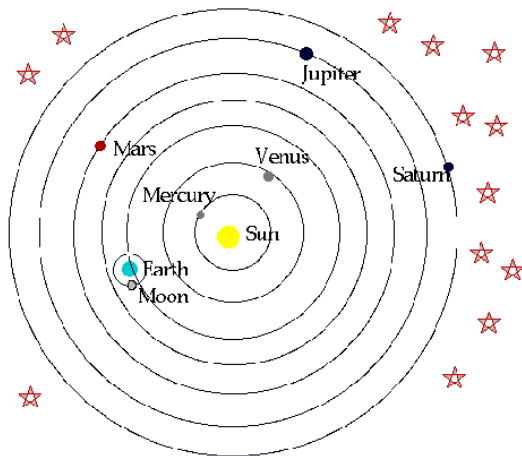


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Ptolemy
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Figure 0.1 Ptolemaic Model of the Solar System [Fair Use]



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Copernicus
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Figure 0.2 Copernican Model of Solar System [Fair Use]

Having stated all this, math is absolutely crucial for a rigorous proof of any given reality theory. So one should not demean math, only place it in its proper perspective. For this reason, one primary goal of this book is this: The average non-scientific individual should be able to read, moreover, easily comprehend, this dissertation and its concepts, without the use of math.

The Michelson–Morley experiment (MMX) is the main foundational block used as a validation for Einstein’s relativity theories. Its null outcome (as classically performed/interpreted)

implies there is no ether. Consequently, another basic goal of this publication is to demonstrate that the "null result" is, in fact, also compatible with the ether existence, rather than only a proof of its absence.

Essentially, this new pictorial theory, defined in Chapter 1 of this book as the Preferred Frame Special Relativity Theory (PFSRT), combines Galilean transformation theory and Newton's theories (three-dimensional space) with Maxwell's EM theory (velocity of light (c) relative to the observer) to propose a new relativity theory somewhat equivalent to SRT, but now, in this case, the speed of light (c) is a function of an ether (PFSRT) not a constant (c) in empty space ($=c$ relative to the observer of SRT irrespective of the observer's velocity).

In order to accomplish this objective, one needs to read, grasp, and accept the theories and assumptions presented in this work. They are extremely logical. As a result, it will eventually become crystal clear as to why the MMX always demonstrates isotropy, as classically portrayed/interpreted, specifically when performed on the rotating surface of the Earth, even in the presence of the ether wind. If correct, Einstein's SRT main foundation block validating the MMX is eliminated, and his relativity theories then collapse. As a result, a new groundwork of physics is required: **The Ether**.