

Introduce of

Concordance:

Preface

To Reader

This book is the result of my thinking and curiosity about the existence of creation and the wonders of galaxies and black holes and the phenomenon of light and tiny particles and the connection and compatibility of all these phenomena with mathematical language. In writing this book, I put aside any prejudice towards previous knowledge and beliefs, be it religious, traditional, or even scientific. In this process of searching and being curious about the issues that I grew up with since childhood, I had uncertainty and doubt even about the most obvious. I had doubts about things that were normal, acceptable, and certain according to everyone, in such a way that expressing this issue questioned my sanity. Among the things that were my doubt and uncertainty and I did not accept any scientific definition of them are different definitions of space-time, the creation of metaphysics, physics, and the definition of a set number, finite and infinite set number, point and line, Big Bang, universe inflation, dark matter. Do electrons exist? What is the gravity field and how does it work? How is light nature? What happens in the center of galaxies?

Like all those familiar with the beauty of mathematics and physics and who have drunk a sip from the holy grail of physics, which is the unit field theory, I was thirsty to understand its truth. Such an important goal could not be achieved and the need for mathematical sub-structures is necessary in this regard. I concluded by thinking about mathematics science that mathematics itself has fundamental ambiguities in its basic infrastructures and definitions, and those ambiguities are rooted in the definitions and principles of ontology. Some objects lead to philosophical categories.

I was looking for unity to achieve a basic unity between the three different categories of philosophy, mathematics, and physics. so that these sub-structures match each other. Doubting the principles of physics, mathematics, and philosophy among all their countless followers is like walking alone in the desert on a night when even the moon and stars do not show themselves. This matter put me at an important crossroads: either I should go to the safe path that everyone was taking, or I would walk alone in the lonely desert, the destination of which was not clear. Its purpose was only a mirage in the desert. A path that no one had taken before, there were no footprints or directions, and there were no signs on this path, I just had to follow a mirage that seemed far from reality, and most importantly, I could not carry anything, because the condition of going on this trip is to pass all that you know. And I chose the second way with the help of firm will.

I spent with my firm will, alone on this path to keep up step by step 27 years. I proceeded slowly to reach the edge of the springs of truth and drank a sip of it to quench my thirst for curiosity.

This book is the result of several years of research and thinking, so if you plan to spend your valuable time reading this article, I request you to travel with me while you are reading this book leave behind your believes, and explore new strange lands. You don't need to believe in my words, I only ask you to put everything aside at the beginning of this journey. In this way, we will pass through many lands, many of which are unknown, and we will go through difficult paths together to reach the truth. This book has three chapters, philosophy, mathematics, and physics for you to study these three chapters. You will need at least some knowledge of these three fields of science. Considering that the focus of this book is on the unification and generalization of these three categories as unique fields, therefore, to study each chapter, we must know the other categories so that we can understand the definitions and principles of each section, therefore, understand so that we can achieve the final goal of this book, which is the unity and generalization between these three categories. In the end, we get a science that takes us out of the limitations of space and time and gives us the power to generalize science, which we can use to answer many questions and uncertainties. in this journey, We are looking for some facts that when we reach it, we realize that we knew it, we just forgot it.

## Introduction

Here we introduce the SGH hypothesis, which is a kind of everything theory. Finding a theory of everything is one of the most important unsolved problems in physics science. A theory of everything is a coherent, comprehensive and unified idea of theoretical physics that is supposed to fully explain and connect all physical aspects of the universe. String theory and M theory have been proposed as the theory of everything. But still, these theories could not overcome the problems and criticisms that have been put on them and have been divided into different branches that have their own supporters and opponents and have not yet been able to be fully integrated. Currently, there is no candidate theory of everything that includes the Standard Model of particle physics and general relativity and, at the same time, is able to account for the fine structure constant or electron mass. Most particle physicists await the results of ongoing experiments to search for new particles in large particle accelerators, as well as investigations space including solar system or galaxy or dark matter exploration and so on. While all of these experiment needs a lot of expense and time. While these type of everything theory are under some limitations of logical principles such as Occam's razor and Gödel's theorem.

Nevertheless, SGH is a new and creative scientific hypothesis that has new and revolutionary theoretically ideas in the three fields of philosophy of ontology, mathematics and physics. SGH will redefines fundamentals principle of ontology , mathematics and physics, then by applying a new definition and integrating concepts and creating a correspondence between the fundamental principles of these three scientific field of science, it establish new method for unifying and generalizing the three field of philosophy, ontology, mathematics and physics and reconstruct these three fields as one unique field of science which we call it Science generalization hypothesis. Apply this theoretical method has low cost and save the time. At first step SGH would redefine the fundamental principles of ontological philosophy, such as existence of entity and dimension of existence,

It define existence of entity from two point of view: object and motion

it defines dimension of entity from two point of view: space and time.

Then it consider definition of entity as exist of entity as following aspects:

1-quantity of exist :object in space

2-quality of exist: motion in time

Then, using this new ontological definition of exist and its dimensional frame, SGH will reviewed and explained and reconstructed mathematics field of science in two separate categories corresponding to the ontology category as follows:

Number theory and geometry

1- Number theory: corresponding to the quantity of Existence, that is, object in space

2- Geometry: Corresponding to the quality of existence that is, motion in time

Then, next step, based on these new definitions of the fundamental principles of ontology, i.e. existence, space, time, dimensions, and new definitions of the fundamental principles of mathematics, i.e. number theory and geometry ,SGH theory explains and reconstructs physics science from new perspectives :

1-Field theory: correspondent to the number theory of mathematics, which is also corresponding ontologically the quantity of Existence, that is, object in space.

2-Studying the motion of an object: correspondent to the geometry theory of mathematics, which is also corresponding ontologically the quality of existence that is, motion in time

This hypothesis explains, integrates and correlates the fundamental principles of ontology, mathematics and physics sciences with a new point of view and make generalize them to all philosophical, mathematical and physical categories

in order to achieve a unification and generalization in all of them. To be able to answer the ambiguities, problems, questions and paradoxes related to the various fields of these sciences.

Examples of unsolved problems that this hypothesis can answer are divided into three categories:

1- philosophy of ontology science:

What is existence? What characteristics can existence be classified into? What is the definition of time, space and dimension? What is the correct definition of abstract and concrete object? What is the difference between the ideal world and real world? What is the shape of the universe? Does the world have a beginning and an end? How was the world created? What is it made of? During what stages was it created?

2-Mathematics science:

All materials are composed of particles that have properties such as charge and spin, but these properties are completely mathematical. Space also has its own geometric features and like the rest of the world, it is made of a structure based on mathematics. Space and all its contents have mathematical properties by themselves, and if the world is really based on mathematics, there will be nothing incomprehensible in it. While many of its axioms are hidden from us. Like: What are the nature of numbers and mathematical forms? Do mathematical concepts have an independent and specific meaning outside of our mind? Basically, what is the relationship between mathematical concepts and theorems with reality? How is the relationship between mathematics and other sciences such as physics? What is the relationship between mathematics and logic? Can mathematical concepts and theorems be analyzed and delivered to non-mathematical concepts and theorems such as logical concepts and theorems?

Why is there always correspondence between numbers and existence? Paradoxes related to sets and number theory, such as: assignment of the infinite subject in sets and Russell's paradox. Why, according to the contour theory, the points on the line and plane, etc., correspond to each other

Which coordinate system corresponds to the real world? Flat or curved? Why? Euclidean, non-Euclidean or Hilbertian geometry?

### 3-Physics science:

As of Today, the need for a unified field theory, the ambiguity in the description of the gravity field, and the ambiguity in the description of the nature of light or the expansion of the universe, as well as the scattering of votes in the field of the Big Bang theory and many similar ambiguities, prove the inability of current physics theories. In the meantime, many scientists have tried to interpret and describe some of these uncertainties, but these interpretations were fragmented and generally failed to solve the problems, for example, when we accept Newton's laws as the fundamental principles of physics, when we reach high speeds, i.e. speeds close to the speed of light, or we study in extragalactic times, we inevitably have to abandon these principles. After that, Einstein and the relativity law, which could solve the problems of our physical science, but it was not long before quantum mechanics challenged Einstein's laws. How long should we go on like this? Does human science have limitations? Are we always one step behind nature? Are we limited in the time frame?

1. What are correspondent of complex numbers in nature? And what creatures do they correspond to in nature?
2. Does the world have an end? Does nature, which corresponds to geometry, have infinite dimensions? Does it have an end? If so, in which dimension does it end?
3. Earth is not influential in intergalactic dimensions, or electron mass is negligible in the structural equations of atom and nucleus, why?
4. Why gravity is described by geometry and electromagnetism and other forces are described by quanta fields. Which is correct?
5. What is the reason for our lack of knowledge about gravitational field?

6. What is the shape of the world? And how was it created? In what stages was the world created?
7. What is time what is space? What's dimension?
8. Is the expansion of the world real? Did the universe come from the Big Bang? Is the inflation of world true? If it is true, can it be concluded that the Big Bang hypothesis is true? If the Big Bang is true, what happened before the big Bang? Is our world one of many other worlds?
9. What is gravity, the most mysterious and exclusive force of nature, and how does it work?
10. Why do celestial bodies rotate around themselves? Why does the planet Saturn have rings around it?
11. The GZK paradox Greisen-Zatsepin-Kasmin based on special relativity concluded that there is an upper limit for the energy of cosmic rays, but in observations, sometimes this limit is broken and rays With how many times that energy have they reached the ground.
12. Bentley's paradox: In the Newtonian universe, all the stars attract each other and as a result the universe should not be stable, but all of them should collapse.
13. Why is Newton's law of gravity not valid all over the world?
14. Where is the antimatter? Why is there mirror symmetry between the first discovered particles and antiparticles? Will there be a fundamental particle that, after its discovery, will end human efforts to find a single substance?
15. What are dark matter and dark energy? Do they exist externally? Why have we not been able to have comprehensive information about them?
16. Are there other forces and fields in nature apart from the weak and strong nuclear electromagnetic forces and gravity that we are familiar with? Is there any field or force which not discovered yet?

physicists are looking for a unified field theory for the unity of all forces and fields, while SGH, with a more comprehensive view, is looking for the unity between different field of sciences and fundamental concepts, because any unified theory be required making of unity between its components.

#### Achievements:

1. Creating a correspondence between nature and mathematics in order to create a language that can act as a mediator between the two means that this interpretation enables us to interpret the phenomena of nature to mathematics and vice versa. We used it for the same purpose, and the need for more complete mathematics is felt
2. Vanish time and space limitation from our knowledge, that is, these two should not cause disruption in it
3. Simplicity and generalization of science. a generality that includes from the smallest particles to the super collection of galaxies and larger collections and fulfills the human desire of the present century, which is seriously looking for the unified field theory.
4. It enables us to get the facts in places where we have limited access in terms of space and time.
5. It enables us to clarify our problems and challenge so that we can classify them and use this classification to reach new results.