

Book on the topic titled

**“Foundations and Ideologies: Dark
matter, the Dark energy and the
Human Health”**



**By Ashwini Sathnur,
Capacity Development Expert in
United Nations Development
Programme**

Galaxies in our universe seem to be achieving an impossible feat. They are rotating with such speed that the gravity generated by their observable matter could not possibly hold them together; they should have torn themselves apart long ago. The same is true of galaxies in clusters, which leads scientists to believe that something we cannot see is at work. They think something we have yet to detect directly is giving these galaxies extra mass, generating the extra gravity they need to stay intact. This strange and unknown matter was called “dark matter” since it is not visible.

Dark matter

Unlike normal matter, dark matter does not interact with the electromagnetic force. This means it does not absorb, reflect or emit light, making it extremely hard to spot. In fact, researchers have been able to infer the existence of dark matter only from the gravitational effect it seems to have on visible matter. Dark matter seems to outweigh visible matter roughly six to one, making up about 27% of the universe. Here's a sobering fact: The matter we know and that makes up all stars and galaxies only accounts for 5% of the content of the universe! But what is dark matter? One idea is that it could contain "super symmetric particles" – hypothesized particles that are partners to those already known in the [Standard Model](#). Experiments at the [Large Hadron Collider](#) (LHC) may provide more direct clues about dark matter.

Many theories say the dark matter particles would be light enough to be produced at the LHC. If they were created at the LHC, they would escape through the detectors unnoticed. However, they would carry away energy and momentum, so physicists could infer their existence from the amount of energy and momentum “missing” after a collision. Dark matter candidates arise frequently in theories that suggest physics beyond the Standard Model, such as super symmetry and extra dimensions. One theory suggests the existence of a “Hidden Valley”, a parallel world made of dark matter having very little in common with matter we know. If one of these theories proved to be true, it could help scientists gain a better understanding of the composition of our universe and, in particular, how galaxies hold together.

Dark energy

Dark energy makes up approximately 68% of the universe and appears to be associated with the vacuum in space. It is distributed evenly throughout the universe, not only in space but also in time – in other words, its effect is not diluted as the universe expands. The even distribution means that dark energy does not have any local gravitational effects, but rather a global effect on the universe as a whole. This leads to a repulsive force, which tends to accelerate the expansion of the universe. The rate of expansion and its acceleration can be measured by observations based on the Hubble law. These measurements, together with other scientific data, have confirmed the existence of dark energy and provide an estimate of just how much of this mysterious substance exists.

Hence from the created original research work on the mathematical computation, it is derived that Energy of Dark matter and Dark Energy is approximately $[10 \wedge 10]$ times the Energy of the Human being individual.

Since the enormous dark energy impinges and surrounds the human being, this dark energy is also transferred as waves colliding the human body. This leads to imbalances in the human being due to the imbalances in the two energy comparisons.

Higher energy collisions on the lower energy substances lead to weakening of the lower energy bodies.

The ideology which is described in this opportunity is for implementation in the Low – Earth – Orbit and also in the deep space regions.

Study of the effects of dark matter, dark energy and gravity is to be performed on the human astronauts who are located in the International Space Station in the Low – Earth – Orbit region and also human astronauts who travel to the deep space regions.

Also there is a study to be worked upon based on the origin of the universe and the beginning of the human forms of life in the universe.

Also to study the destiny and future of human life and its relations to the effects of dark matter and dark energy.

These studies would be analyzed in – depth utilizing artificial intelligence and deep learning on the Information and Communication Technologies products and solutions.

As the first step in this ideology and project,

The fundamental innovative ideologies of the abstract of this product and solution is created in the theories of Astrophysics and the new development of the mathematical models.

This initial fundamental ideology is described in a detailed methodology in the written book on the topic **"Foundations and Ideologies: Dark matter, the dark energy and the Human Health"**.

The abstract details of the content of the above mentioned book is mentioned in the section consisting of the chapters, here below:-

Chapter Number 1

Introduction to the concept of dark matter

Chapter Number 2

Introduction to the concept of dark energy

Chapter Number 3

Introduction to the concept of life sciences

Chapter Number 4

Ideologies of dark matter and the galaxy

Chapter Number 5

Foundations on mathematical derivations based on the relations between the dark matter and the galaxy

Chapter Number 6

Ideologies on the effects of light in the galaxy and these effects of the dark matter

Chapter Number 7

Conceptual ideologies of dark energy and the expansion of the universe

Chapter Number 8

Mathematical derivations to measure the effects of dark energy and the expansion of space

Chapter Number 9

Measurement of the dark matter and dark energy effects on the human health

Chapter Number 10

Creation of solutions of accessibility to solve the effects of dark matter and dark energy

Chapter Number 11

Mathematical derivations and measurements on the research areas of Accessibility and the Dark matter and the Dark energy

Chapter Number 12

Advantages of accessibility

Chapter Number 13

Risks associated with the accessibility solutions

Chapter Number 14

Providing solutions to these risks on Accessibility

Chapter Number 15

Conclusion