The formation and representation of Mass, dark matter/energy and Space expansion principle Explains creation of space, celestial bodies and future of it.

Mohammed Naveed Quadri,

Information Security Expert, Bangalore, India

Abstract— this document touches formation of mass, its representation in space, the property of mass and its interactions with dark matter. It also explains about the dark energy and its origin and why it is expanding the space. The document also explains the black holes and apparent reason of accretion disk around the same.

Audience — Budding Astro-Physicist, researchers, scholars, students and everyone who would find this topic interesting.

I. INTRODUCTION

There is a continuous urge by Human beings since the development of awareness and cognition to know from where we belong, where we are living and what would be the structure of our home. Also the knowledge and awareness of space, matter and its interactions is never a science of very recent researches, but it is being there since ages and great visionaries/scientists have given immense number of theories and projections.

Though the work done by Physicist, Astro-Physicists and thinkers from last few centuries have removed a lots of curtains from the space, matter, time and overall things a normal mind is not able to think and articulate.

This paper an effort to cover the below four points for people to ponder and build their understanding for the same.

- 1. Mass and its formation, interaction and its representation in space/universe. Dark matter and its possible contents and INS interactions with mass.
- 2. Dark Energy and its origin and interactions with mass.
- 3. The properties and behavior of large celestial bodies and how they can be represented in a lab [hypothesis]
- 4. How big bang can be reversed and how it can be replicated [hypothesis]

II. TOPICS DISCUSSION

1. Mass and its formation, interaction and its representation in space/universe.

There is a hypothesis that Big Bang formed the mass, space and everything around us, this happened around 13.4 Billion years back. So the formation of mass was dated back to then coming from a liquid state to the state we are looking now. Though Scientists did explained the formation of mass and, galaxies and everything which we see they weren't able to define and explain the encompassing dark fabric called as space around those balls of mass. This paper explains this by an example that if we buy a bottle of water or cold drink we never intend to have bottle or we never intend to purchase that one but we get in eventually.

In the same vein the space around in Universe is not the one we are intended to see or get but it is actually a by product of mass. Like a plastic bottle is an additional product encompassing the water which we never intend to buy or use it. Another way to say this, The Earth being a small ball of mass but in actual it is a ball of mass surrounded by dark mass or dark matter encompassing its gravity. That dark matter is actually spread across miles around Earth and is bend or curved as mentioned in the special theory of relativity by Sir Albert Einstein.

Another example to explain this phenomenon is the distant light source which looks bigger than its actual size for distant observer due to spread or dispersion of light.

The only way Mass/matter can react to the encompassing space around it is it can only influence by bending [curve] it. This curved space around any object in Universe right from celestial bodies to atoms and sub atomic particles bring about the movement like rotation and revolution.

The most inherent property of Mass is to continuously bend space and more space around them and to create more space.

Inference – The mass or matter always exists with encompassing curved space or dark matter and only able to cast its gravity to curve the same. Mass or matter have inherent attributes to keep on bending the maximum space around the.

2. Dark Energy and its origin and interactions with mass.

Scientists have concluded that the dark energy forms a big chunk in the Universe apart from a small percentage of mass and rest as dark matter. According to hypothesis dark energy is termed as force that is pushing objects away or expanding the Universe.

This paper completely negates this idea and according the hypothesis here the dark energy is nothing but the force exerted by the Mass or Matter on the encompassing space around it to make it wider and wider.

Inference – The Dark energy is a force exerted by Mass or matter on encompassing dark matter around it.

3. The properties and behavior of large celestial bodies and how they can be represented in a lab [hypothesis]

There are many theories and observations to define the complex celestial bodies like Black holes. The apparent reason for creation of black holes in the Universe is found to be a dying star which have imploded, that means it has gone into an uncontrolled fusion and keep on loosing Mass and piles up into a singular ball of mass. This uncontrolled loss of Mass brings about a huge disruption of Dark matter wrapped around it and it starts disintegrating.

This disruption creates vacuum of Dark matter and resulting in dark matter around it rushing to fill the vacuum of dark matter resulting in creation of accretion disk around the black hole.

Inference – Fusion reaction of celestial or sub-atomic bodies in Universe creates vacuum of dark matter which then behaves in highly disruptive manner. This can be replicated and a black hole can be created if human being can create a vacuum of dark matter and observe how space around it behaves.

4. <u>How big bang can be reversed and how it can be replicated [hypothesis]</u>

As stated in topic number one above the Mass or observable matter will always come with the Dark matter around it. The best way to reverse imagine Big bang and its occurrence is to reverse engineer it in imagination, like if we collect all the matter in the universe like Galaxies, clusters and all the observable matter in it and put it in a single ball the entire fabric of Universe will also shrink to a ball and dark matter will be shrink like a balloon being deflated.

III. FINAL INFERENCE

This paper is based on thought experiments and some data gathering being done on various topics like Dark matter, Dark energy and Space. The Inferences in the above topics are not mathematically tested and proved at this point in time. The inference can be used to further study Dark matter, dark energy and its interactions with observable mass. The paper can be presented and utilized for general space research and could provide a building block to get closer look at complex things like around us.

The most important thing about this paper is idea of Dark Energy and how it's possible origin and second it bought a new concept about idea of vacuum created on Dark Matter that is actual space when observable mass is lost due to Atomic fusion.

It also sums up the existence of dark fabric of space is due to existence of observable Mass/Matter and it will cease to exist in absence of it.