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If Entropy Exists, There Exists Anti-Entropy; Similarly, If an Anthropic Principle Exists, There Exists an Anti- Anthropic Principle to Support Symmetrical Universe to Be Symmetrical

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Abstract — *the concept of symmetrical Universe came into existence by observations of things that exist in pairs in the Universe. The symmetrical Universe is also supported by the Newton's third law of motion which states that every action has equal and opposite reaction. Thus, action and reaction are things in pair to support symmetrical Universe to be symmetrical. There are many other pairs which are equal and opposite in nature with each other like electron and proton, positive and negative, causality and anti-causality, future and past, orderliness (anti-entropy) and disorderliness (entropy), cause and effect, right and wrong, balanced and unbalanced, mass and anti-mass, energy and anti-energy, self and anti-self and many more. According to the second law of thermodynamics, the entropy increases in time for a closed system. To support symmetrical Universe, if entropy exists, there must be anti-entropy that exists in the Universe too. Thus, if entropy increases in time for a closed system, the entropy borrowed from the Universe (can be treated as open system), which in turn, can be written that the entropy decreases in time for the Universe or in other words, anti-entropy increases in time for the Universe. That is why, the Universe is getting more and more even, ordered, soothe, stable in present arrow of time. According to the anthropic principle, the whole Universe is the way it is just to sustain sapient life comfortably in the World. To support symmetrical Universe, if an anthropic principle exists, there must be an anti-anthropic principle with opposite reasoning with respect to the anthropic principle; an anti-anthropic principle can be defined as the whole Universe the way it is because we live in the Earth to observe the Universe the way it is. Anthropic principle focuses us at the center of the Universe; the anti-anthropic principle focuses the Universe as the center of attraction excluding us. We are here to make the Universe as observer dependent realism only. Thus, according to the concept of symmetrical Universe, entropy and anti-entropy, anthropic principle and anti-anthropic principle exist in pairs which also obey the Newton's third law of motion too; things in pair are equal and opposite to each other.*

Keyword — Symmetrical Universe, Entropy and Anti-entropy, Anthropic principle and Anti-anthropic principle, Newton's third law of motion, the second law of thermodynamics.

1. Introduction And The Theories

Theory 1: Entropy and anti-entropy exist in pairs in the Universe to support the concept of symmetrical Universe. Every entropy (measure of disorderliness) has an equal and opposite anti-entropy (measure of orderliness) which obeys Newton's third law of motion.

Theory 2: Anthropic principle and Anti-anthropic principle exist in pairs in the Universe to support the concept of symmetrical Universe. If anthropic principle exists, there exists an equal and opposite anti-anthropic principle to support the symmetrical Universe which obeys Newton's third law of motion.

Theory 3: The entropy can neither be created nor be destroyed. The entropy (measure of disorderliness) is a constant which can be termed as the conservation of entropy.

Theory 4: The anti-entropy can neither be created nor be destroyed. The anti-entropy (measure of orderliness) is a constant which can be termed as the conservation of anti-entropy.

According to the theory of conservation of mass [1, 2], mass can neither be created nor be destroyed; the total amount of mass is a constant [3, 4]. If M_{Total} is the total mass of the Universe and C is a constant, then according to the theory of conservation of mass,

$$M_{Total} = m_1 + m_2 + m_3 + \ldots\ldots\ldots\ldots = C$$

Where, m_1, m_2, m_3 are individual masses.

According to the theory of conservation of energy [5, 6], energy can neither be created, nor be destroyed; the total amount of energy is a constant [7, 8]. If E_{Total} is the total energy of the Universe and C is a constant, then according to the theory of conservation of energy,

$$E_{Total} = e_1 + e_2 + e_3 + \ldots\ldots\ldots\ldots = C$$

Where, e_1, e_2, e_3 are individual energies.

According to the theory of conservation of momentum [9, 10], for a collision occurring between object 1 and object 2 in an isolated system, the total momentum of the two objects before collision is equal to the total momentum of the two objects after the collision. As the Universe can be treated as isolated entity, the total momentum of the Universe is a constant [11, 12]. If MO_{Total} is the total momentum of the Universe and C is a constant, then according to the theory of conservation of momentum,

$$MO_{Total} = mo_1 + mo_2 + mo_3 + \ldots\ldots\ldots = C$$

Where, mo_1, mo_2, mo_3 are individual momentums of objects.

Einstein's mass-energy equivalence equation [13, 14]-

$$E = mC^2$$

Although Einstein's mass-energy equivalence equation contradicts with the theory of conservation of mass and the theory of conservation of energy [15, 16]; but since the mass-energy conversion (mass into energy conversion and energy into mass conversion) in the Universe is too insignificant compared to total mass and total energy in the Universe [17, 18], thus, the theory of conservation of mass and the theory of conservation of energy hold very good shape [19, 20]. Little deviation from idealism is always allowed by nature to generate exception in the Universe. Thus, the Universe is almost even but not absolute even, almost perfect but not absolute perfect, almost ideal but not absolute ideal. The Universe is almost symmetric with a lot of variables that exist in pairs with equal and opposite to each other. But the Universe is not absolute symmetric. Little chaos is always there in the Universe and the Universe runs with an aim to attain absolute symmetry to compensate the little in-built asymmetry which is necessary and sufficient condition to run the Universe the way it is at the present time arrow.

2. The Theory Of Conservation Of Entropy

According to the second law of thermodynamics, the entropy (the measure of disorderliness) increases with time in a closed system [21, 22]. The increased amount of disorderliness is borrowed from the Universe (can be treated as open system), thus, the entropy of the Universe on an average decreases with the present arrow of time. Thus, we are getting more and more ordered Universe day by day. And the entropy is getting isolated in a local area of isolation day by day. Although, total amount of entropy of the Universe is a constant; it has equal and opposite amount of anti-entropy (measure of orderliness) of the Universe. As entropy is getting localized, anti-entropy is getting globalized, that is why, we have dark, dull, cool, cold, very highly stable, boring Universe at the present time arrow of the Universe. The Universe will be further ordered in time.

3. Why Anti-Anthropic Principle Must Exist

According to the anthropic principle, the whole Universe exists the way it is just to accommodate us comfortably on Earth [23, 24]. It is as if, the whole Universe runs with one goal to take care of us on Earth. The anthropic principle focuses us at the center of the Universe [25, 26]. According to the concept of symmetric Universe, if an anthropic principle exists, there must be an equal and opposite anti-anthropic principle with opposite reasoning. According to the anti-anthropic principle, we are here on Earth to take care of the Universe the way it is and we are here just to accommodate the Universe the way it is. According to the anti-anthropic principle, the whole Universe is at the center of focus excluding us, we are here to observe the Universe the way it is; the Universe exists with one goal, just to be observer dependent realism only.

4. Why Sun Shines And Black Hole Is Too Black

Energies have too high velocity close to the speed of light C, the Universal speed limit (a constant) of the Universe. Ordinary masses have very low velocity compared to the speed of light C. That is why energies have higher momentum compared to ordinary mass although energies have very little and insignificant mass. Because of higher momentum, the stars like sun can trap all masses but cannot trap all energies. Thus information exchanges by sun with photon; the sun shines. But black holes can trap both masses and energies with extreme gravitational field. Thus, black holes isolate itself from the rest of the Universe; because of no emission of photon, black holes look really black.

5. Conclusion

Entropy and anti-entropy exist in pairs in the Universe to support the concept of symmetrical Universe to be symmetrical. Every entropy (measure of disorderliness) has an equal and opposite anti-entropy (measure of orderliness) which also obeys Newton's third law of motion. The anthropic principle and the anti-anthropic principle exist in pairs in the Universe to support the concept of symmetrical Universe to be symmetrical. If anthropic principle exists, there exists an equal and opposite anti-anthropic principle to support the symmetrical Universe which obeys Newton's third law of motion too. The entropy can neither be created nor be destroyed. The entropy (measure of disorderliness) is a constant for the Universe which can be termed as the conservation of entropy. The anti-entropy can neither be created nor be destroyed. The anti-entropy (measure of orderliness) is a constant for the Universe too which can be termed as the conservation of anti-entropy. Because of moderate gravitational force, sun can trap mass but not energy, thus sun shines. And black holes can trap both mass and energy because of its intense gravitational pull, thus black holes prevents photon emission too which make black holes look really black.

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