## The Structure and Composition of Cosmic Background

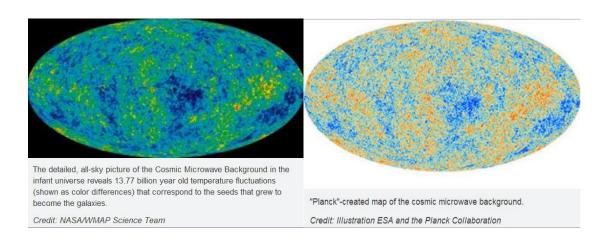
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Abstract: shows a viewpoint about the structure and composition of cosmic ontology

## Main viewpoints, evidences and conclusions:

Physicists believe that the Universe's vacuum space is not empty at all, there should be exists substance, and have put many models even the theories corresponding with these models that regards to the substance, such as Aether, Dark matter and Dark energy, Dirac sea and Higgs. Same time, because of this subject involves the origins of space and time, the structure and evolution of the Universe, and the nature of gravitation, so, it is always an important topic in physics and cosmology since it has been proposed.



The vacuum space, first of all and us known, is means nothingness, and inside the space, there be -- everywhere is the same and everywhere is naught of the density of matter; natural frequency is naught and therefore the energy levels (energy density) is naught; and the space should be at the absolute zero. This kind of space which without substance existence unable to absorb, emit and reflect the light in any frequencies above naught; and unable to produce any energy levels and any forms of radiations that energy levels above naught.

Moreover, if the Universe spaces are all vacuum and nothingness in addition to galaxies and celestial bodies, then would be there exist no any microwave radiations produced by cosmic background which has been observed and measured. Contrary, in fact, there be exists radiations (cosmic microwave background) in everywhere of the Universe and it shows there existing substance but not nothingness in the Universe spaces in addition to galaxies and celestial bodies, and the natural frequencies (energy levels) of the matter should belongs to microwave's frequencies band (energy levels interval). [1][2][3]

The Universe and galaxies originate in from neutron stars, and are the results of the attenuation and decay of the neutron stars (a neutron star = neutrons + huge amounts of thermal energy = protons +  $\pi$ -mesons + huge amounts of thermal = protons + electrons + neutrinos + huge amounts of thermal; and it has the structure which similar to the internal structure of a pomegranate and each neutron is a pomegranate's granule). [4][5]

Along with the attenuation, decay and fission of the neutron star, very huge amounts of neutrons, neutrons clusters and neutron star's clumps (smaller neutron stars) have been also released and generated. The neutrons directly decayed into hydrogen atoms by released neutrinos; the all neutrons clusters that with different numbers of neutrons decayed into different kind of atoms --  $Z\pi$ -mesons were released from the A neutrons cluster, Z neutrinos escaped, and Z electrons formed into the extranuclear charges in soft matter form of a multi-density charges body with a spherically shape of the nucleus (the neutrons cluster after decayed); the neutron star's clumps (smaller neutron stars) into the states of decay or proliferation by the conditions and circumstances which they are in.

The neutrinos which released of the decay of the neutrons, neutrons clusters and neutron star's clumps, is a kind of Bosons which with the property of that contract when is heated and expand when is cooled, namely, cold expansion and contraction, cohesion together and became into a whole body -- cosmic ontology also is the cosmic background and into Bose-Einstein condensate with an ellipsoid body shape along with temperature gradually decreased. [6][7]

The cosmic ontology that formed by cosmic background matter (neutrinos agglomerates), not only formed the gravitational field as well as gravitational effects; simultaneously, it is also the propagation medium of light and mechanical waves (mechanical vibrations). And the galaxies, celestial bodies and all substances in the Universe are only the presence of energy and matter inside the Bose-Einstein condensates body. [6][7]

## References

- [1] Cosmic microwave background
  - https://en.wikipedia.org/wiki/Cosmic\_microwave\_background
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- [3] Einstein put to the test: Satellite mission on dark energy and theory of gravitation https://www.sciencedaily.com/releases/2015/03/150305110346.htm
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  - http://vixra.org/abs/1609.0392
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