Density of the Rotating Universe

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Abstract

The Big Bang theory basically states that the universe is expanding and that there is point that there could be a critical density at which the universe could go on expanding forever or crunch. The theory of a rotating universe can also have a critical density is different for rotating universe. To contrast with the big bang theory, a rotating universe would have an equilibrium density. In fact, the particular rotating universe that this theory deals with is that our universe may be in equilibrium with neither contraction or expansion but with kinetic and potential energy.

In Sphere Theory of the Universe, the universe is rotating. This rotating universe has mass where parts of it are moving at familiar velocities and some are moving at relativistic velocities. Size itself is confused, in that nothing really travels in a straight line, and therefore we are trying to weed out these problems in calculating the size of the universe. It appears that light itself travels in a spiral, which is controlled by gravitational forces. The observed quantities of particles are further complicated in that the relativistic velocities make the quantities of particles look higher. The concentrations of particles are highest at the center of the sphere, but the rotation imparts energy that makes things look like the concentration is mostly uniform. This paper tries to sort out these problems and present a Mass, Size, and Equilibrium Density of the Universe. The mass of the universe, which would include matter, dark matter, and dark energy.
There is still some work to figure exactly what is going on the potential and kinetic energy. The equilibrium appears to be about 8.01*10^-25 kilograms per meter cubed. The spinning universe iuch denser than an expanding universe. The radius of the spinning universe is much smaller than an expanding universe at 3.1 billion light years, but light gets bent as it travels out to the edge of the universe.

1.0 Calculations

What is different about this paper from other papers about the universe is that we have figured out part of the mechanism of the universe that controls the amount of matter and energy in the universe. This was shown in the paper “Predicting the Gravitational Constant from the New Physics of a Rotating Universe”[1] The amount of energy in the universe was found to be proportionally equivalent to $1.8654150388941*10^{81}$ *Neutrons*

1.1 Mass of universe

The mass of the universe is related to the amount of Planck Spheres on the outside of the universe, which is related to the amount of discontinuities formed when packing spheres into a sphere. This is shown in the following paper. “How can the Particles and Universe be Modeled as a Hollow Sphere”[2]

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The rest mass of the universe is calculated from the following equation.

$$1.8654150388941*10^{81}*\frac{1}{3}*\pi*M_n = 3.27190062213\times10^{54}\,Kg \qquad [1]$$

The value $N = 1.8654150388941*10^{81}$ was calculated to the energy equivalent particles of the universe. It was found over and over again in sphere theory, that particles are all composed of multiples of 3 components. Therefore "N" is divided by 3. It was found in "Predicting the Gravitational Constant from the New Physics of a Rotating Universe"[1] that the rotational energy of the universe and its Lorentz equivalent was equivalent to π times the rest mass. Therefor the equation is divided by π. Equation 2 is the calculation for the sum energy from a rotating universe.

$$n \geq 1\int_{-n}^{n} x/n\,\frac{(x/n)^2-((x-1)/n)^2}{(1-(x/n)^2)^{.5}}\,dx = \pi \qquad [2]$$

Then the equivalent rest particles are multiplied by the mass of the neutron for a total mass shown in equation 1.

1.2 Calculating the Diameter of the universe

$$\sqrt{1.86541503*10^{81}\pi 0.99862347871\frac{12^{.5}}{\pi}\frac{1}{4\pi}\frac{6.62607015*10^{-34}}{299792458*1.674927498*10^{-27}}*\frac{3}{2\pi}} = 2.8555495\times10^{25}\,meters$$

$$= 3.0183173*10^{9}\,lightyears$$

Due to light having to travel in a spiral through the Planck spheres the speed of light must be multiplied by 4.554032147

Density of the universe dividing the mass of the universe by the volume of the universe

$$\frac{3.27190062213\times10^{54}\,Kg}{(\pi*2.855549536981*10^{25}\,meters)^3}\frac{\pi}{18^{0.5}}*\frac{3}{4\pi} = 8.01136283*10^{-25}\,\frac{kg}{m^3}$$

Density of the universe balancing kinetic energy with potential energy from Equation 14 below derived in section 3

$$\frac{\pi}{18^{.5}}\frac{[c\pi]^2}{G*[\pi*2.855549536981*10^{25}]^2}*\frac{\pi^3}{27^{0.5}}\frac{1}{2*4.554032147} = 8.01135283*10^{-25}\,\frac{Kg}{m^3}$$

The universe is much smaller than expected, but appears infinite as the curvature curves to a spherical radius. Due to this curvature and the dark energy coming from a rotating universe, the equilibrium density is much higher than a Critical Density of about of a big bang universe of

$$9.48*10^{-27}\,\frac{kg}{m^3}$$

$M_p = Massofproton$

$M_n = Massofneutron$

$h = Planckconstant$

$c = speedoflight$

3.0 Discussion

The current model of the universe assumes that the universe is expanding.

In Big Bang theory it is assumed that the Redshift is mostly Radial Redshift as shown in Equation 3. Using current technology, it is impossible to measure if the motion is actually Transverse, that is moving perpendicular to our view, or Radially, that is moving away from our view.

The Big Bang theory basically states that the universe is expanding and that there is point that there could be a critical density at which the universe could go on expanding forever or crunch. The theory of a rotating universe can also have a red shift, but the equations are different and the critical density is different for rotating universe. In fact, the particular rotating universe that this theory deals with is that our universe may be in equilibrium with neither contraction or expansion but with kinetic and potential energy.

In Sphere Theory of the Universe, the universe is rotating. This rotating universe has mass where parts of it are moving at familiar velocities and some are moving at relativistic velocities. Size itself is confused, in that nothing really travels in a straight line, and therefore we are trying to weed out these problems in calculating the size of the universe. It appears that light itself and gravity travel in a spiral, which is controlled by gravitational forces. The observed quantities of particles are further complicated in that the relativistic velocities make the quantities of particles look higher. The concentrations of particles are highest at the center of the sphere, but the rotation imparts energy that makes things look like the concentration is mostly uniform. This paper tries to sort out these problems and present a Mass, Size, and Equilibrium Density of the Universe. The mass of the universe, which would include matter, dark matter, and dark energy. A star's action is based off of its mass, therefore a moving star would not need as much material as a star standing still. Therefor stars moving farther out in the universe would have less mass, but still shine as bright as more massive stars closer to the center of the universe. At the very edges of the universe everything would be obliterated as if it was the big bang due to the very high energy of matter moving at near light velocities. It would be the source of the microwave background a neutrino background and be a quark gluon soup.

4.0 References

1 http://vixra.org/pdf/1903.0253v3.pdf
2 http://vixra.org/pdf/1407.0183v3.pdf
3 http://vixra.org/pdf/1601.0234v6.pdf