Is there any relationship between Gravitational constant(G) , Escape velocity(V_e) and Gravitational Force(F_g)

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Abstract: In general, the Theory of Gravitational force states in two steps, that one of the bodies produce gravitational fields and another body on the fields of first one experience the force. And in other hand Newtonian force in vice-versa of first statement [1]. In reality the Gravitational fields are produced by the bodies but the gravitational fields experience the forward motion of the bodies due to changing complicity of Time. As per previous studies force is infinite in range but finite gravity acting on the surfaces. Gravity and Space-time both are interlinked in vast Universe, so it fails to reunion the Gravitational force in GUT (Grand Unified Theory) [2]. As follows the history of knowing the Gravity and field forces that expressed by the From Aristotle, Archimedes, Galileo Galilei, Sir Isaac Newton. Later on, Albert Einstein who developed new era of General Theory of Relativity [3] and Special Theory of Relativity [4]. Those all are fail for the Expanding of the Universe i.e. its not static at a point, the whole universe is changing by the forward motion of time. That there is no timelapse or time travel for the past movements which are happened. That implies that the Gravitational Fields are not constant at a particular point.

Keywords: Gravitational Fields, Gravitational Force, Force, Universe

Introduction: Gravitational force is the foremost important forces in the existing universe that makes the Solar system, Galaxies, stars are in order of motion [1]. It is one of the Force fields. Gravitational Force is the manifestation of the all the Gravitational fields produced by the massive objects from atoms to the entire galaxies in Universe. New method of finding Gravitational Force and Gravitational fields arranging in Universe by different parameters.

Methodology:

It's new method of progress of the knowing the field structure by the relations of Masses, Volumes, Distances and Time. The gravitational fields are produced by the bodies that makes the bodies are in order with in the Space. The gravitational forces are like Example of Magnetic Stirrer That's the Space is assumed as liquid and the Magnetic Stirrer Bar as object, Then the rotating force causing by the Stirrer is the Force exerted by the body. Thus, the force is acting upon the nearest is high where as at the longer distances it is uncontrollable if any change in phase of liquid happens. Its easy to understand the nature of existence of Gravitational Force and Gravitational Fields if we understand the relationship of Magnetic Stirrer and Magnetic bar under specific conditions. New method is approaching by the relationship of the Gravitational Force on object by Mass, Escape velocity and Radius.

In general,

$V_e = \sqrt{(2GM/R)}$ [1]

Where,

Ve = Escape Velocity

M = Mass of object

R = Radius of Object

Rearranging the above equation

$G = V_e^2R/2M$

We get G constants by above equation as follows, By average of 6.576 * 10^20

Generally,

$F = GMM'/R^2$ [1]

By substituting above arranging equation, we get

$F = V_e^2M'/2R$

Details of examples as follows, in table.

Table1:

S.no	Planet [5]	Radius(km) [5]	Mass(kg) [5]	Escape Velocity (km/s) [1]	$G = V_e^2R/2M$	$F = V_e^2M'/2R$
1	Mercury [6]	2439.7	$3.285*10^{23}$	4.25	$6.69*10^{-20}$	$1.216*10^{21}$
2	Venus [7]	6051.8	$4.867*10^{24}$	10.36	$6.57*10^{-20}$	$4.315*10^{22}$
3	Earth [8]	6371	$5.972*10^{24}$	11.2	$6.6*10^{-20}$	$1.175*10^{23}$
4	Mars [9]	3389.5	$6.39*10^{23}$	5.02	$6.64*10^{-20}$	$2.375*10^{21}$
5	Jupiter [10]	69911	$1.898*10^{27}$	59.5	$6.505*10^{-20}$	$4.603*10^{25}$
6	Saturn [11]	58232	$5.583*10^{26}$	35.46	$6.55*10^{-20}$	$6.027*10^{24}$
7	Uranus [12]	25362	$8.681*10^{25}$	21.28	$6.56*10^{-20}$	$7.749*10^{23}$
8	Neptune [13]	24622	$1.024*10^{26}$	23.44	$6.59*10^{-20}$	$2.285*10^{24}$
9	(Dwarf Planet) Pluto[14]	1188.3	$1.31*10^{22}$	1.2	$6.48*10^{-20}$	$7.937*10^{18}$

Conclusions:

The Gravitational Force of the individual Objects can be calculated on the basis of the escape velocity. It provides the Gravitational Constant value as average of $6.576 * 10^{-20}$. And the assumptions of the new theories were crosschecked in this way is good for knowing the truths of constants. Since now there is no proofs of Gravitational force has been seen by any parameters. Due to large range, we are not capable of field forces of gravity. But it's now possible to know the relationships of individual objects and interlink connections of two or more objects with in the space. Every body have escape velocity on the basis of Escape velocity by above equations we find Gravitational force of object.

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