Researcher Name :- Patel Arvind Rajkumar

Email ID :- <u>arvinrajsun1999@gmail.com</u>

Subject :- Physics (Gravitation)

Title :- Gravitational Field Equation

Abstract:-

In this research I have given formula of gravitational field and hypothesis of gravitational volume. I have not given hypothesis of field of gravitational. I have given new hypothesis of gravitational boundary.

Introduction:-

We all know that any planet or satellite or object or body in the gravitational field experiences gravitational force. A lot of scientists have researched on the force of gravitational, but no one has given the equation of this field.

Research Methodology (Process) And Diagram :-

We know that the gravitational field is the field in which any planet or satellite or object or body experiences gravitational force. 15

The gravitational field of any planet or satellite or object or body is equal to its gravitational volume. I.e.

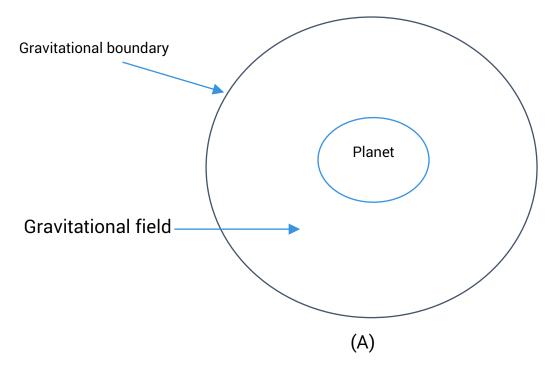
Gravitational field = Gravitational volume or

 $R_{G} = V_{G}$

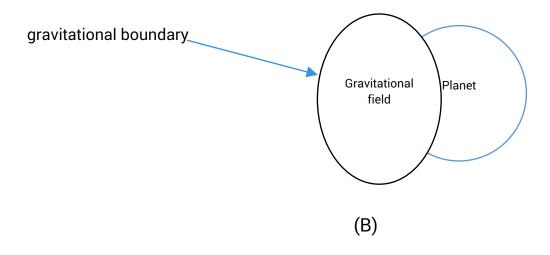
Gravitational Volume:-

There is a planet in the figure(A), surrounded by

its gravitational field. This gravitational field has a boundary, which is called the gravitational boundary. Within this boundary, the volume of that planet is also included. The whole volume of this gravitational boundary is called gravitational volume, in which the volume of that planet is also included.



Gravitational boundary of any planet or satellite or object or body is that boundary in which the whole gravitational field of that planet or satellite or object or body is involved.



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Now suppose that the gravitational field of a planet is in accordance with the gravitational boundary shown in the figure (B) in which some field of that planet is outside the gravitational field. In this situation also the gravitational volume of the planet will be according to the volume of the planet's gravitational boundary.

Like this,

The gravitational volume of any planet or satellite or object or body is equal to the volume of the gravitational boundary of that planet or satellite or object or body. Or

The volume of the gravitational boundary of any planet or satellite or object or body is called the gravitational volume of that planet or satellite or object or body.

Conclusion:-

- **1.** In this research I have given formula of field of gravitational and hypothesis of gravitational volume. I have not given hypothesis of field of gravitational. I have given new hypothesis of gravitational boundary.
- **2.** We can count gravitational field of any planet or satellite or object or body from this equation.

Reference:-

1. This line or sentences has taken from book of physics of Mittal Publishing. Its author is Kumar Mittal.