

A Simple Mechanism for Gravitation

Jiang Chunxuan

Institute for Basic Research, Palm Harbor, FL34682-1577, USA

And: P. O. Box 3924, Beijing 100854, P. R. China

jiangchunxuan@sohu.com, cxjiang@mail.bcf.net.cn, jcxuan@sina.com, Jiangchunxuan@vip.sohu.com,
jcxxxx@163.com

Abstract: Gravity is a great mystery. No one has since given any machinery. In this paper we give a simple machinery. Gravity is the tachyon centripetal force. Anybody may understand gravitation.

[Jiang Chunxuan. **A Simple Mechanism for Gravitation**. *Rep Opinion* 2017;9(4s):17-19]. ISSN 1553-9873 (print); ISSN 2375-7205 (online). <http://www.sciencepub.net/report>. 3. doi:[10.7537/marsroj0904s17.03](https://doi.org/10.7537/marsroj0904s17.03).

Keywords: Gravity; machinery; tachyon; centripetal; force.

Gravity is a great mystery. No one has since given any machinery. In this paper we give a simple machinery. Gravity is the tachyon centripetal force. Anybody may understand gravitation.

Gravity is a great mystery. No one has since given any machinery. In this paper we give a simple machinery. Gravity is the tachyon centripetal force.

Anybody may understand gravitation.

Using the tardyon and tachyon coexistence principle [1]

$$u\bar{u} = c^2 \tag{1}$$

where c is light velocity in vacuum, $u \leq c$ tardyon velocity and $\bar{u} \geq c$ tachyon velocity.

$$\bar{F} = -\frac{mc^2}{R}$$

We deduce the new gravitation formula:

Figure 1 shows that the rotation ω of body A emits tachyon mass \bar{m} , which forms the tachyon and gravitation field and gives the body B revolutions u and \bar{u} .

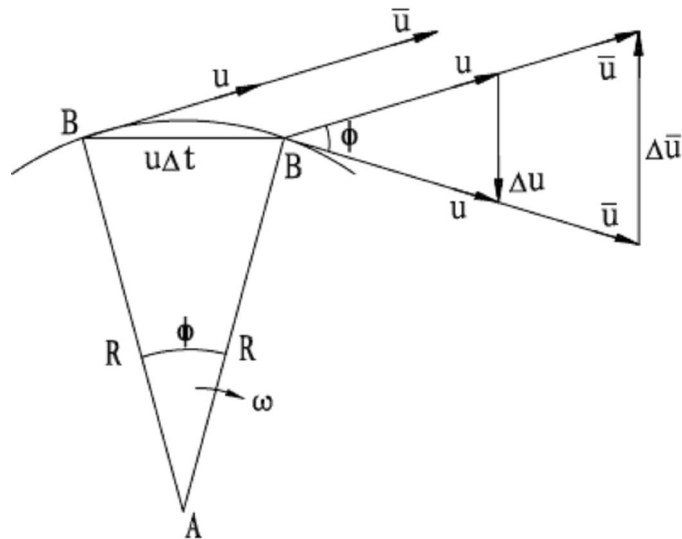


Fig.1. On body B $\frac{du}{dt}$ and $\frac{d\bar{u}}{dt}$ coexistence [2].

From Fig. 1 it follows

$$\frac{u\Delta t}{R} = \frac{\Delta u}{u} \tag{2}$$

From (2) it follows the tardyon centripetal acceleration on the body B [2-5],

$$\frac{du}{dt} = \lim_{\substack{\Delta u \rightarrow 0 \\ \Delta t \rightarrow 0}} \frac{\Delta u}{\Delta t} = \frac{u^2}{R} \tag{3}$$

From Fig. 1 it follows

$$\frac{u\Delta t}{R} = -\frac{\Delta \bar{u}}{\bar{u}} \tag{4}$$

From (4) and (1) it follows the tachyon centrifugal acceleration on the body B [2-5],

$$\frac{d\bar{u}}{dt} = \lim_{\substack{\Delta \bar{u} \rightarrow 0 \\ \Delta t \rightarrow 0}} \frac{\Delta \bar{u}}{\Delta t} = -\frac{u\bar{u}}{R} = -\frac{c^2}{R} \tag{5}$$

On body B $\frac{du}{dt}$ and $\frac{d\bar{u}}{dt}$ coexistence.

From (3) it follows the tardyon centrifugal force on body B [2-5],

$$F = \frac{M_B u^2}{R} \tag{6}$$

where M_B is body B mass.

From (5) it follows the tachyon centripetal force on body B , that is gravity [2-5],

$$\bar{F} = -\frac{mc^2}{R} \tag{7}$$

where m is the gravitation mass converted into by tachyon mass \bar{m} which is unobservable but m is observable. On body B F and \bar{F} coexistence.

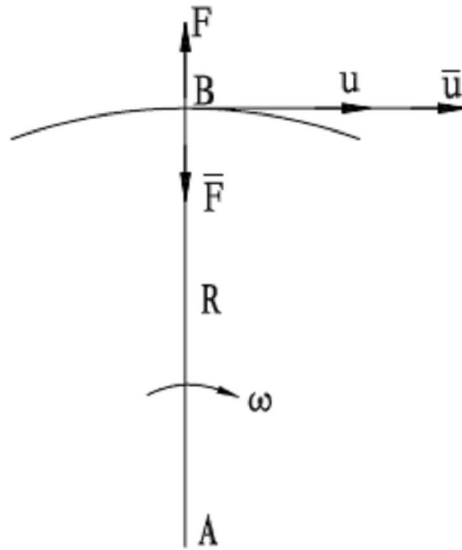


Fig.2. On body B F and \bar{F} coexistence[2].

From Fig. 2, it follows

$$F + \bar{F} = 0 \quad (8)$$

From (6), (7) and (8) it follows

$$\frac{m}{M_B} = \frac{u^2}{c^2} \quad (9)$$

Body B increases mass m and centrifugal force is greater than gravitation force, then body B expands outward. [5]

From (7) it follows Newtonian gravitation formula. The m is proportional to body A mass M_A , in (9) m is proportional to M_B , is inversely proportional to the distance R between body A and body B . It follows

$$m = k \frac{M_A M_B}{R} \quad (10)$$

where k is constant

Substituting (10) into (7) it follows the Newtonian gravitation formula [2-5]

$$\bar{F} = -G \frac{M_A M_B}{R^2} \quad (11)$$

where $G = kc^2 = 6.673 \times 10^{-8} \text{ cm}^3 / \text{g} \cdot \text{sec}^2$ is gravitation constant.

References

1. Chun-Xuan Jiang, A theory of morphisms between the tardyon and tachyon, Wuli (physics), (Chinese), 4. (175)119-125.
2. Chun-Xuan Jiang, On nature for gravitation, J. Beijing observatory (Chinese), 7(1976)32-38.
3. Chun-Xuan Jiang, An approach on the nature of attractive force, Potential science (Chinese), 4(1982)19-20.
4. Chun-Xuan Jiang, A unified theory of the gravitational and strong interactions, Hadronic J., 24(2001)629-638.
5. Chun-Xuan Jiang, An equation that changed the universe: $F = -mc^2/R$
<http://www.wbabin.net/ntham/xuan150.pdf>, <http://vixra.org/pdf/1007.0018v1.pdf>.

5/7/2017