

## Static condition for the formation of earth's surface under gravity

(2)

### Opinion

When comparing the centripetal acceleration of the Earth which tends to spin the Earth's mass outward, with the gravitational forces pulling it together, we see an interesting result.

a. centripetal force

 $F_C = Ma = M_C(\omega^2 r) \tag{1}$ 

 $\omega^2 = (d\theta/dt)^2 = (40,075 km/24 hours)^2 = 1669^2 km/hr$ 

**b.** gravitational forces

 $F_{G} = g G M_{1}M_{E} / r^{2}$ 

Set the two equal to determine the static conditions for the surface of the planet  $^{1}\,$ 

| $F = g G M_1 M_E / r^2 = F_G = Ma = M_C (\omega^2 r) C$          | (3)   |
|--|-------|
| ( <i>Note</i> : $G = 6.52$ not $6.67 = Ln \pi / 1.618$ )         |       |
| 6.52(1)(5.972) / (6371) C = (5.972)(1669.79) (669.79)            | 6371) |
| $6.52C = (1669.79)^{2} (6371)^{3} = 721.07$                      |       |
| $C = 3.007 \sim c$ = speed of light                              | (4)   |
| 2.9979 / 3.007 = 99.69% Accurate                                 |       |
| Now Using $G = 6.67$   | (5)   |
| $g 6.67(1)(5.972) / (6371)^{2} = (5.972)(1669.79)^{2}(6371)^{2}$ | 5371) |
| $6.67_g = (1669.79)^2 (6371)^3 = 721.078$                        |       |
| g = 1.081 Atomic Mass of Hydrogen                                | (6)   |
| And  |       |
| 6.52C = 721.078  |       |
| $C=3.007\sim c=t^2$  | (7)   |
| 1.081× 3.007 / 6.52  |       |
| $= 0.498 \sim 0.5$   |       |
| = 1 / 201  |       |
| = 1 / Y from AT Math   | (8)   |
| = t  |       |
| Continuing,  |       |
| E = 1 / t  | (9)   |
| t = 1 / E = 1 / Y  |       |
| 1/2.01 = 0.498   |       |
| And $E = Mc^2$   | (10)  |

Opinion

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$$1/E = 1/(Mc^{2})$$
Let  $M = 1$ 

$$E/1/c^{2}$$
Now, the distance D.E.:
$$d=v_{t}t+1/2at^{2}$$
(11)
Let  $v = a$ 

$$C = c = v = 3 = a$$

$$t^{2} = 3$$

$$d = 1/2(3)(3)$$

$$= 9/2$$

$$= 4.5$$
STATIC
EQUILIBRIUM
FG
HOLLOWCORE
HOLLOWCORE

Figure I Static Equilibrium of acceleration to gravity with a hollow core.

Now Circumference=Area

$$2\pi R = \pi R^2 \tag{12}$$

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# R = 2 $R_{E} = 6371$ 6.371 - 2 = 4.371Let s = d = 4.371 $d = 4.371 - 4.5 = v_{i}t + 1/2at^{2}$ $v_{i}t = 0.271 = e = AT$ Math Energy $v_{i}(\sqrt{t}) = 2.718 - 1.73$ = 1.0 d = 1.0 + 4.5 = 5.5 (14) 4.371 - 5.5 = 1.271 $\sim 4 / \pi$

= ρ

AT Density

We see that the constant is very close to c, the speed of light, within the marginal error of significant digits.

The  $\sqrt{c} = eigenvector$  from AT Math.

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None

#### **Conflict of interest**

The author declare there is no conflict of interest.

#### References

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