

# "Solution to Dark Matter Missing Mass Mystery via Stellar Metamorphosis"

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Abstract:

Dark matter and energy are simply celestial objects that are solids, liquids and gases. We can show this by recalculating the mass of the Sun using Newton's equations for gravitational force in reference to movement of the tides on Earth. We can also show this by recalculating the density of the Sun based off its moment of inertia for a spherical body and its long period global harmonic oscillations.

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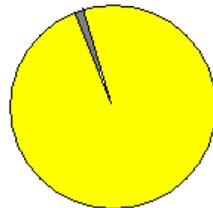
Gravity Centered  
Cosmology using  
Fusion/Star Model



- dark energy (Unseen, unmeasured)
- dark matter (Same as above)
- Visible matter (includes all stars/planets, exo-planets, moons, asteroids etc.)

Mass/Gravity Centered

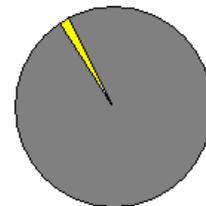
Plasma Centered Model



- matter in its plasma state
- matter in solid/liquid/gas state

Plasma/Mass Centered

Stellar Metamorphosis  
Model Incorporating  
Gravity as Electromagnetic  
Phenomenon



- matter in its plasma state
- matter in solid/liquid/gas state

Electromagnetism Centered

The two mass centered models on the left grossly overvalue the gravitational impact of objects that are seen and unseen.

Two methods will be used to come to same conclusion of mainstream science being orders of magnitudes off in reference to the true mass of the Sun:

1. Measurement of the Sun's and Moon's gravitational pull by the empirical evidence presented by measurement of the tides. This method will be based on the agreement of the scientific establishment's belief that the Moon's effect on the tides gravitationally is 2.21 times the force of the Sun.<sup>[1]</sup>

2. Measurement of the Sun's mass by first coming to agreement that the Sun is mostly homogenous (isotropic). Meaning the overall density of this celestial object will not increase significantly as opposed to the density of the lower photosphere.

A. the Sun has presented global harmonic oscillations of 2 hours and 40 minutes, meaning it is undifferentiated throughout.<sup>[2]</sup>

B. The assumption that the Sun is homogenous also agrees with its specific moment of inertia for a spherical body, which is roughly .059, also meaning it is mostly undifferentiated throughout. More than likely it could also mean the majority of its differentiation is in the surface, which could resemble a giant shell without interior.<sup>[3]</sup>

## Measuring the Mass of the Sun with the Tides

It is agreed upon in the scientific establishment that the Moon exerts 2.21 times the pull gravitationally as the Sun. Using Newton's equations for determining the force exerted on objects according to mass will be used to disprove the Sun being 333,000 times the mass of Earth.

Newton's Equation:  $F = G((M_1m_2)/d^2)$

Assumptions as shown empirically:

1. Force of Moon effects tides with 2.21 times the force of the Sun.
2. Mass of the Earth is rounded to  $6 \cdot 10^{24}$  Kg (little m)
3. Mass of the Sun will be the unknown variable that we solve for. (big M)
4. The constant  $G = 6.7 \cdot 10^{-11} \text{ m}^3\text{kg}^{-1}\text{s}^{-2}$
5. The Distance  $d = (\text{Earth to Sun distance}) = 1.46 \cdot 10^{11} \text{ m}$
6. The Force of the Sun pulling on the Earth being 2.21 times less than the moon
  - A. Force of the moon:  $1.55 \cdot 10^{16}$  which will then be divided by 2.21 to show the mass of the Sun.
  - B. The force of the Sun is  $6.8 \cdot 10^{15}$  as shown empirically and is well established in scientific community based on movement of the tides.
7. Now all we have to do is solve for  $M_1$

$$6.8 \times 10^{15} = \frac{GM_1(6 \times 10^{24})}{(1.46 \times 10^{11} \text{ m})^2}$$

$$F = G \left( \frac{M_1 M_2}{d^2} \right)$$

$$6.8 \times 10^{15} = \frac{(6.7 \times 10^{-11} \text{ m}^3 \text{ kg}^{-1} \text{ s}^{-2}) M_1 (6 \times 10^{24} \text{ kg})}{(1.46 \times 10^{11} \text{ m})^2}$$

$$\frac{6.8 \times 10^{15}}{6.7 \times 10^{-11} \text{ m}^3 \text{ kg}^{-1} \text{ s}^{-2}} = \frac{M_1 (6 \times 10^{24} \text{ kg})}{(1.46 \times 10^{11} \text{ m})^2}$$

$$\frac{6.8 \times 10^{15} (1.46 \times 10^{11} \text{ m})^2}{(6.7 \times 10^{-11} \text{ m}^3 \text{ kg}^{-1} \text{ s}^{-2}) (6 \times 10^{24} \text{ kg})} = M_1 = \text{mass of the Sun}$$

$$M_1 = 3.61 \times 10^{33} \text{ kilograms} = \text{Mass of the Sun}$$

## Measuring the Mass of the Sun via Photosphere Density

The values used will be the empirically tested (not based on models) density of the lower photosphere of the Sun which is roughly:

$$2 * 10^{-4} \text{ kg/m}^3$$

Also used will be the empirically measured value of the volume of the Sun which is:

$$1.412 * 10^{27} \text{ m}^3$$

$$(1.412 \times 10^{27} \text{ m}^3) (2 \times 10^{-4}) = 2.82 \times 10^{23} \text{ kg}$$

$$\text{mass of sun} = 2.82 \times 10^{23} \text{ kg}$$

## Conclusion

Using two empirically tested methods for determining the mass of the Sun has yielded similar results:

Determining the mass of the Sun via the tides yields a mass of:

$$3.61 * 10^{23} \text{ kilograms}$$

Determining the mass of the Sun via measurements of its homogenous (isotropic) nature via global harmonic oscillations (helioseismologic measurements) and measurements of its moment of inertia for a celestial sphere yields:

$$2.82 * 10^{23} \text{ kilograms}$$

The results are inconclusive at this moment, but both results show an immediate albeit gigantic discrepancy in the determination of the true mass of the Sun and all plasma/gas related celestial objects based off two empirical methods for the determination of stellar mass. These discrepancies have lead to the false hypothesis that objects can exist that do not emit or absorb electromagnetism, such as dark matter.

The results also have similar questions that can be raised as to what the true nature of gravity is, because these two empirical measurements show that gravity clearly is caused by a phenomenon that can be measured, as opposed to spacetime.

The dark matter mystery is therefore solved. The missing matter is in the form of actual objects the size of Earth, Venus or Jupiter.

The mainstream used bogus math to justify the internal fusion model, and its required density and mass, which was completely unscientific and unproven. It is suggested to the reader to research electrical systems in outer space, as this will lead to more rational and intuitive answers.

## References

[1]

[http://imagine.gsfc.nasa.gov/docs/ask\\_astro/answers/961029b.html](http://imagine.gsfc.nasa.gov/docs/ask_astro/answers/961029b.html)

[2] <http://www.mandley.com/advdemo/mod03/adv3206.htm>

[3] <http://nssdc.gsfc.nasa.gov/planetary/factsheet/sunfact.html>