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Generation of Waves in the Gravitational Field of the Universe

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ABSTRACT

The gravitational field naturally perturbs due to the wave (light, x-ray, infrared, etc.). The gravitational field encompasses everything. Wave formation, like to that of the natural world. In the natural world, when wood and plants burn, a chemical reaction produces CO_2, CO, and other gases. During this chemical process, tiny particles (atoms, molecules, etc.) vibrate, and their vibrations get intense enough to cause the gravitational field to be disrupted. This kind of vibration creates waves in the surrounding gravitational field and propagates them forward with a specific initial power, wavelength, and amplitude.

Keywords: Natural disturbance, wood burning, microscopic particle, gravitational wave

INTRODUCTION

These days, people are talking a lot about waves, particularly gravitational waves. Waves of various kinds, including light and x-ray waves, are well known to us. Light, infrared, X-rays, and other waves are produced by natural perturbations in the gravitational field.
A complete wave is described as consisting of a peak and a trough. A single frequency is represented by an entire wave (Sankar Palchoudhury, 2020). Here, the Palchoudhury wave equation is

$$F = ki\frac{A}{\lambda} \tag{1}$$

The unit wave's force is represented by F, its amplitude by A, the gravitational field intensity is represented by i, the wavelength is represented by λ, and the proportionality constant (1.9199×10^{-34}) by k. Once more,

$$P = Ff \tag{2}$$

According to Sankar Palchoudhury (2020), P represents the force of waves per second and f denotes their frequency per second. There is coexistence between A and λ. When determining wave energy, the A/λ ratio is essential. Wave power is inversely related to λ and changes with A. Once more,

$$C = \lambda f \tag{3}$$

C is the speed of light. Additionally, we categories waves (such as red, blue, infrared, and x-ray) according to their range of wavelengths (Sankar Palchoudhury, 2020).

Each wave has a starting power at the source, and its wavelength and amplitude change according to the strength of the gravitational field (S. Palchoudhury, 2020; Sankar Palchoudhury, 2020)

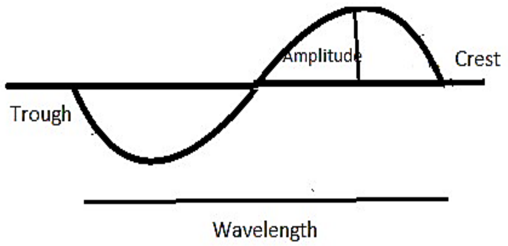


Fig 1

GENERATION OF WAVES

Wave generation, just like in the natural world. CO_2, CO, and other gases are produced chemically when wood and shrubs burn. Tiny particles (atoms, molecules, etc.) vibrate during this chemical process, and their vibrations become strong enough to disrupt the gravitational field. This type of vibration travels forward and produces waves in the vicinity of the gravitational field. A particle of any kind sinks in the gravitational field. A boat's lower surface sinks in water. During plying, the boat creates waves and disturbs the water.

This is why burning wood causes microscopic particles to vibrate enough to create a range of waves that encircle the gravitational field. Of course, for the minute particle to vibrate, it needs force against mass, a strong gravitational field, and surface area. According to a modified version of the wave equation, a wave's force is directly proportional to the product of the tiny particle's mass and surface area (atom, molecules, or subatomic particle). Palchoudhury wave equation is $F = ki\ (A/\lambda)$. It is now necessary to recreate the Palchoudhury wave equation as follows:

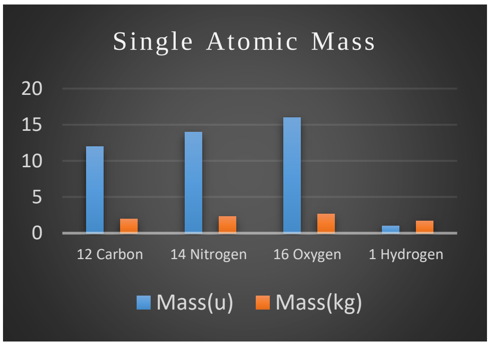
$$F = Qmsi\frac{A}{\lambda} \tag{4}$$

F is the unit wave force, Q is the constant (restructured), m is the minuscule particles' mass, s is the minuscule particles' surface area, i is the intensity of the gravitational field, A is the Amplitude and λ is the wavelength.

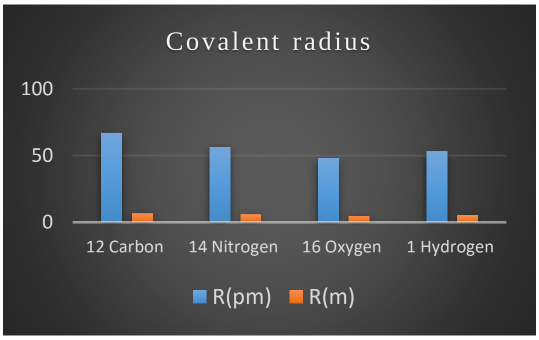
Table 1- Mass & Surface area of Single Atom

Elements	Single Atomic Mass		Covalent radius		Surface area	Van der Waals radius		Surface area
	u	Kg (10^{-26})	Pm	Meter (10^{-11})	Sq. m10^{-20})	$\dot{A}$(Angstrom)	Meter(10^{-10})	Sq. m (10^{-19})
^{12} Carbon	12.0107	1.994	67	6.70	5.64104	1.70	1.70	3.63168
^{14} Nitrogen	14.0067	2.325	56	5.60	3.94081	1.55	1.55	3.01907
^{16} Oxygen	15.9994	2.656	48	4.80	2.89529	1.52	1.52	2.90333
^{1} Hydrogen	1.0079	0.1673	53	5.30	3.52989	1.20	1.20	1.80956

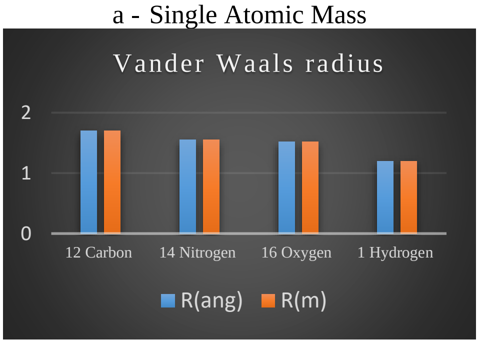
1 $pm = 10^{-12}$ meter, 1 $\dot{A} = 10^{-10}$ meter, 1 Atomic mass unit $(u) = 1.66 \times 10^{-27}$ kg Atomic covalent radius & Van der Waals radius collected from periodic table.



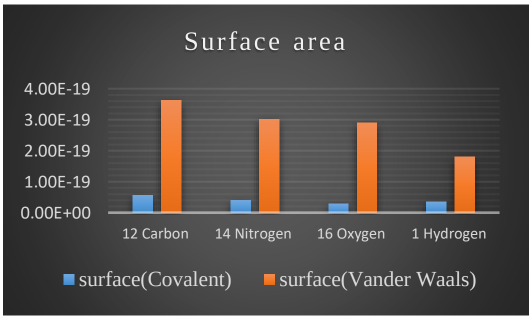
a - Single Atomic Mass



b - Covalent radius



c - Vander Waals radius



d - Surface area

Figure-2

Table 2- Wave power relation

Wave	Constant (k) 10^{-34}	GFI (i)	Wavelength (λ) 10^{-7}	Amplitude (A) 10^{-7}	Force (F) 10^{-34}	Frequency (f) 10^{14}	Power (P) 10^{-19}
Red*	1.92	9.798	6.8	2.4	6.64	4.37	2.9

*Data collected from Palchoudhury, S. (2020)

Now, we have to re-construct Palchoudhury wave equation with data as follow:

Table 3- Generation of Waves

Wave	Single Atom	Constant (Q)	Mass(kg) 10^{-26}	Surface Area(S) 10^{-20}	GFI	Wavelength (λ)10^{-7}	Amplitude (A)10^{-7}	Force (F)10^{-34}	Frequency (Hz)10^{14}	Power (P)10^{-19}
Red	^{12} Carbon*	1.9199E-34 (k)	-		9.798	6.8	2.4	6.64	4.37	2.90
	^{12} Carbon	1.70797E+11(Q)	1.99	5.6	9.798	6.8	2.4	6.64	4.37	2.90

The mass and surface area of a ^{12}carbon atom can be taken as standard. In this work and all my prior work on this issue, we can introduce the magnitude of the constant (Q) as 1.70797×10^{11} instead of 1.92×10^{-34} (k). Data MKS system.

Table 4- Generation of Waves on the Earth

Wave	Single Atom	Constant (Q)10^{-11}	Mass(kg) 10^{-26}	Surface Area (s)10^{-20}	GFI	Wavelength (λ) 10^{-7}	Amplitude (A)10^{-7}	Force (F)10^{-34}	Frequency Hz (f)10^{14}	Power (P)10^{-19}
RED	^{12} Carbon	1.70797	1.99	5.6	9.798	6.8	2.4	6.64	4.37	2.9
	^{16} Oxygen	1.70797	2.65	2.9	9.798	6.8	3.1	6.64	4.37	2.9
	^{14} Nitrogen	1.70797	2.32	3.9	9.798	6.8	2.9	6.64	4.37	2.9
	^{1}Hydrogen	1.70797	0.167	3.5	9.798	6.8	46	6.64	4.37	2.9

Table 5- Generation of Waves on the Sun

Wave	Single Atom	Constant (Q)10^{11}	Mass(kg) 10^{-26}	Surface Area (s) 10^{-20}	GFI	Wavelength (λ) 10^{-7}	Amplitude (A)10^{-7}	Force (F)10^{-34}	Frequency Hz (f)10^{14}	Power (P)10^{-19}
RED	^{12} Carbon	1.70797	1.99	5.6	274	6.8	2.4	6.64	4.37	2.90
	^{16} Oxygen	1.70797	2.65	2.9	274	6.1	3.1	6.64	4.91	3.26
	^{14} Nitrogen	1.70797	2.32	3.9	274	6.8	2.9	6.64	4.37	2.90
	^{1}Hydrogen	1.70797	0.167	3.5	274	6.8	46	6.64	4.37	2.90

Table 6- Generation of Waves on the Moon

Wave	Single Atom of	Constant (Q)10^{11}	Mass (kg)10^{-26}	Surface Area(s) 10^{-20}	GFI	Wavelength (λ)10^{-7}	Amplitude (A)10^{-7}	Force (F)10^{-34}	Frequency in Hz(f)10^{14}	Power (P)10^{-20}
RED	^{12} Carbon	1.70797	1.99	5.6	1.62	6.8	2.4	6.64	4.37	4.79
	^{16} Oxygen	1.70797	2.65	2.9	1.62	6.1	3.1	6.64	4.91	5.39
	^{14} Nitrogen	1.70797	2.32	3.9	1.62	6.8	2.9	6.64	4.37	4.79
	^{1}Hydrogen	1.70797	0.167	3.5	1.62	6.8	46	6.64	4.37	4.79

In water, a boat's lower surface sinks. The boat stirs up waves and disturbs the water while plying.
Burning wood and bushes chemically produces CO2, CO, and other gases. During this chemical process, tiny particles (atoms, molecules, etc.) vibrate, and their vibrations get intense enough to cause the gravitational field to be disrupted. This kind of vibration propagates forward and generates waves in the gravitational field's vicinity. Any form of particle in the gravitational field sinks.
The strongest gravitational waves are produced by cataclysmic events such as colliding black holes, supernovae (massive stars exploding at the end of their lifetimes), and colliding neutron stars.
The first gravitational waves happened when two black holes crashed into one another. The collision happened 1.3 billion years ago. But the ripples didn't make it to Earth until 2015! (NASA)(NASA Official, 2023)
In the gravitational field, all materials sink. When two black holes collide in the gravitational field, the black holes vibrate, disrupting the field and creating a gravitational wave that radiates outward from the source.
The oscillation of tiny particles in the gravitational field generates waves. The sun and stars are the natural sources of waves. Electric bulbs artificially create waves. When a device's electrical current causes tiny particles in the gravitational field to vibrate violently enough, waves are created.
The number of microscopic particle vibrations and the frequency of waves are the same. Massive bodies (black holes) produce larger length waves, such as gravitational waves,

based on the size of its constituent particles, which produce lower length waves, such as red, blue, etc.

Everything sinks in the gravitational field. A gravitational wave emanates from the source of a collision between two black holes, which causes the black holes to vibrate and disturb the gravitational field.

Waves are produced by the microscopic particles oscillating in the gravitational field. Waves originate naturally from the sun and stars. Waves are produced artificially by electric lamps. Waves are produced when an electrical current flowing through a device causes minute particles in the gravitational field to vibrate intensely. Wave frequency and the quantity of small particle vibrations are the same. Massive objects (black holes) produce larger-length waves (gravitational waves) based on the size of its constituent particles, while tiny objects (atoms, molecules) produce lower-length waves (red, blue, etc.).

CONCLUSION

There is a powerful attraction between every piece of matter in the universe. The gravitational attractive force is the name given to this force. Gravitational fields are made of matter that are dispersed throughout the space. There's not much noise in this gravitational field. Everything dissolves into the silent gravity field. This gravitational field is peaceful, however there are some perturbations to it. Examples include the sun's ability to burn different elements, disrupt the gravitational field, and produce waves with a range of amplitudes and wavelengths that carry diverse powers and travel throughout the universe.

Small (NM) waves are produced by molecules vibrating during chemical processes in the quiet gravitational field due to a variety of sources, including burning wood. Once more, the huge body (star) claims that large-scale waves are mostly produced by vibrations during a collision. Depending on their intensity and the gravitational field's strength, all of these waves spread outward.

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