# Journal of Physics \& Optics Sciences 

# Ether Gravity 

Steve Olah<br>Independent Researcher, Laguna Woods, California, United States


#### Abstract

Mass does not create Gravity. Ether Energy Flow is Gravity. Ether fills the Universe and ether envelopes the Sun. High energy ether transfers some of its energy to the Sun, creating an energy density gradient in ether. The resulting Ether Energy River flows from the far corners of the Universe into the Sun. It is a "surround" river like a globe. This ether energy flow is Gravity. It is pushing the Planets, including our Earth toward the Sun. In addition, the Energy carried by this River of ether to the Sun causes the Sun to heat up and glow. The Sun and every celestial body is powered from the outside by Ether's Energy. This ether energy river also caused the Pioneer Anomaly.


## *Corresponding author

Steve Olah, Independent Researcher, Laguna Woods, California, United States.
Received: March 26, 2024; Accepted: April 03, 2024; Published: April 11, 2024

Keywords: Gravity, Ether, Universe, Sun, Solar System, Planets. Earth, Pioneer Anomaly

## Introduction

A student of Budapest University of Technology, and a graduate of UCLA's School of Engineering, working in private industry all my life, I did not depend on faculty appointments. I was able to write about ether without using pseudo-scientific terms like dark matter and dark energy. I am a proponent of a Kinetic Universe where Anti Matter, Forces at a distance, Fields of any kind and the Bending of the Fabric of Spacetime by Masses are not cultivated.

This paper describes my new ideas about Ether Gravity.
I am aware of a number of other accepted theories of Gravity: General Theory of Relativity describes Gravity as the Curvature of Spacetime caused by Masses.

Wikipedia's Definition of Gravitation, also known as Gravitational Attraction, is the mutual attraction between all Masses in the Universe.

How did we get here?
The Greeks determined that Gravity is pulling us down into a seemingly Flat Earth. Flat, because in every part of Earth things fall down. If vertical lines are all parallel, the Earth must be flat!

340 years ago, Newton discovered the Law of Universal Attraction between masses. He did that while lying on the ground under an apple tree. In his view the apple was falling sideways. After many years, Newton's Equation still valid $F=G . M . m / r^{2}$

Fatio, Le Sage and others theorized about tiny particles streaming from the Universe and the shadows of other masses caused Gravity. Fatio came close to the truth. If he could have figured out how to direct those particles from every direction to the center of his masses like the Sun, he could have ignored the useless shadows.

Einstein postulated that Mass bends Space and Bent Space tells Mass how to move. Getting rid of attractive gravitational fields is much appreciated.

In this paper we are attempting to find the physical realization of Gravity. We will also shed light on the Coronal heating of our Sun and Jupiter and others.

Gravity rules the Universe, declared Gamow in his book Gravity [1]. I enjoyed reading his book explaining all the things Gravity does for us, but being an engineer, I always wanted to know how things work. The head bone is connected to the neck bone, the neck bone is connected to the backbone and so on down the line to the tail bone. The negative result of the infamous M\&M experiment made many to deny the existence of Ether and we have lost 100 years of progress [2].

My fear is that upon my death I will be detained and interrogated about Gravitational Fields and Electric Fields and Strong Forces and other parts of Prevailing Theories. I think the Gods designed a Universe simpler than what is presented in Scientific Papers and Publications. They must still be angry about the Flat Earth fiasco, and about Gravitons, eight flavors of Gluons, and other residents of the Ivory Tower of the Standard Model. How embarrassing.

This paper is my attempt to redeem myself and the scientific world of the non- conformists. For many years I had ideas about the nature of Plato's Ether. The unexplained heating of the Sun's Corona gave me courage to pursue my thoughts about Ether Gravity. The results are interesting.

## Ether

Ether has a long history from the time of the Greek Masters, without defining the details. After reading about zero-point energy and dark matter and dark energy, I published a paper about Ether [3]. Ether distinguishes the expanding Universe from the surrounding empty space. Ether provides the infrastructure for
the Universe; it makes everything in our life possible. The Kinetic Energy of Ether is the source of all energies in the Universe.

## Ether Data

| Density of Ether* | $100 \mathrm{mg} / \mathrm{m}^{3}=1 \mathrm{E}-04 \mathrm{~kg} / \mathrm{m}^{3}$ |
| :--- | :--- |
| Pressure of Ether* | 5 terapascal |
| Energy Density of Ether | 10 terapascal |
| Average Velocity of Ethons | $1.5 \mathrm{c} \mathrm{m} / \mathrm{s} \mathrm{c}=$ speed of light |
| Diameter of individual Ethons | $6.071 \mathrm{E}-15 \mathrm{~m}$ |
| Mass of individual Ethons | $2.696 \mathrm{E}-37 \mathrm{~kg}$ |
| Number of Ethons | $3.71 \mathrm{E}+32$ each $/ \mathrm{m}^{3}$ |

## For Comparison

| Diameter of Electron | $9.110 \mathrm{E}-13 \mathrm{~m}$ |
| :--- | :--- |
| Diameter of Nucleon | $1.116 \mathrm{E}-11 \mathrm{~m}$ |
| Mass of Electron | $9.109 \mathrm{E}-31 \mathrm{~kg}$ |
| Mass of Nucleon | $1.674 \mathrm{E}-27 \mathrm{~kg}$ |
| Density of Matter | $2.0 \mathrm{E}+06 \mathrm{~kg} / \mathrm{m}^{3}$ |

* Only $\sim 25 \%$ of the cross section of solid matter consists of Atoms, the rest is Ether.
* I can't vouch for the Big Bang event, but the Universe was much smaller billions of years ago.

Ether's Density and Pressure was maybe hundred times higher, but they were reduced to these values by the expansion of the Universe.

## More Ether Data

Ether is a Gas under high pressure, 5 terapascal, maybe more. We derived this number from the tensile strength of Metals and Carbon Fiber. The Universe is filled with this high-pressure Gas. The small mon-atoms we call Ethons move in random directions at the speed of 1.5 c and collide with each other and other masses. This speed provides transportation for Photons that are Solitons. The action is similar to air and air pressure and speed of sound described in my paper titled Kinetic Gas [4].

Ether's pressure also holds together Atoms and Molecules. Ether's pressure provides tensile strength to structures. Ether is the transport medium of photons. Ether is the cause of the Electric Charge. Ether provides the Sun with energy to keep us warm. And Ether does all that at the speed of light.

The Universe and Ether has held onto their secrets. Time and again we were led down paths to nowhere. Just some years ago, we were going to experience the Big Crunch caused by the pull of Gravity. That did not work out. We are going in another direction. The Ether ball we call our Universe is expanding due to the pressure and energy of Ether. Ether rules the Universe not Gravity. It could be a cooperative effort. We are sure Mr. Gamow would appreciate the news.

The numbers listed here are based on Density of Matter of 2.0E +06 $\mathrm{kg} / \mathrm{m}^{3}$. Our choice is explained in a paper titled Matter [5]. We find the Bohr Atom numbers are excessive and unjustified as there is no Bohr Atom. Electrons do not revolve around Nucleons. We also stipulate that in our Universe everything is made of the same Matter. Our Ether is very capable to represent Dark matter and Dark Energy. Energy equals Mass in motion.

## Kinetics

For our next step, we turn our attention to Kinetics [6]. The rules of Kinetics are valid at any size. There is no need to resort to some sort of Quantum Mechanics. The rules of collisions are simple: upon collisions, Momentum and Kinetic Energy of colliding parts are transferred, shared but preserved [7].

For the purpose of our presentation of Ether Gravity we shall concentrate on the big picture of Energy Transfer. Ether transfers kinetic energy to bodies big and small with energy densities smaller than Ether's energy density. Local ether replenishes itself from the inexhaustible energy source of the Universe at the speed of light.

Ether cannot create photons due to the small size of ethons. Ether transfers its kinetic energy to atoms and molecules and in turn these atoms and molecules radiate away this energy in the form of photons. Size does matter. Think of phonons.

## Ether Gravity, The Details

Ether transfers some of its kinetic energy to the Sun. The reduced energy density in ether establishes an Ether energy flow from the far corners of the Universe to the Sun. This river of ether energy becomes a giant energy transfer operation from the Universe to the Sun. The Universe has unlimited number of Ethons and unlimited energy. The Sun's molecules are not going anywhere as they are absorbing the incoming energy. The stream of fully energized Ethons come from far away, following the inverse $\mathrm{r}^{2}$ rule. Calculation is made on the scale of the Solar System.

Gravitational Acceleration Numbers for the Solar System

| Planets | Distance to Sun's <br> Center | Sun's g |
| :--- | :---: | :---: |
| Radius of Sun <br> $696,000 \mathrm{~km}$ | 0.00465 AU | $2.74 \mathrm{E}+02 \mathrm{~m} / \mathrm{s}^{2}$ |
| X0.01 | 0.01 AU | $5.93 \mathrm{E}+01 \mathrm{~m} / \mathrm{s}^{2}$ |
| X0.1 | 0.10 AU | $5.93 \mathrm{E}-01 \mathrm{~m} / \mathrm{s}^{2}$ |
| Mercury | 0.38 AU | $4.11 \mathrm{E}-02 \mathrm{~m} / \mathrm{s}^{2}$ |
| Venus | 0.72 AU | $1.14 \mathrm{E}-02 \mathrm{~m} / \mathrm{s}^{2}$ |
| Earth | 1.00 AU | $5.93 \mathrm{E}-03 \mathrm{~m} / \mathrm{s}^{2}$ |
| Mars | 1.52 AU | $2.57 \mathrm{E}-03 \mathrm{~m} / \mathrm{s}^{2}$ |
| Jupiter | 5.20 AU | $2.19 \mathrm{E}-04 \mathrm{~m} / \mathrm{s}^{2}$ |
| Saturn | 9.58 AU | $6.46 \mathrm{E}-05 \mathrm{~m} / \mathrm{s}^{2}$ |
| Uranus | 19.19 AU | $1.61 \mathrm{E}-05 \mathrm{~m} / \mathrm{s}^{2}$ |
| Neptune | 30.07 AU | $6.56 \mathrm{E}-06 \mathrm{~m} / \mathrm{s}^{2}$ |
| X50 | 50.00 AU | $2.37 \mathrm{E}-06 \mathrm{~m} / \mathrm{s}^{2}$ |
| X100 | 100.00 AU | $5.93 \mathrm{E}-07 \mathrm{~m} / \mathrm{s}^{2}$ |
| X500 | 500.00 AU | $2.37 \mathrm{E}-08 \mathrm{~m} / \mathrm{s}^{2}$ |
| X1000 | 1000.00 AU | $5.93 \mathrm{E}-09 \mathrm{~m} / \mathrm{s}^{2}$ |

$1 \mathrm{AU}=149,600,000 \mathrm{~km}$
A 1 kg . mass standing at the orbit of Neptune is pushed toward the Sun by the ether energy flow with a force of 6.56E-06 Newton a very small force. At the orbit of Earth this force is a thousand times higher, 5.93E-03 Newton. On the Sun's surface, a force of 273.7 Newton is pushing this 1 kg . mass into the Sun. These numbers are equal to the numbers calculated with Newton's equation, but we present a physical delivery method of forces, without fields.

We calculated the gravitational acceleration numbers at the orbit of each planet. It shows the $1 / \mathrm{r}^{2}$ rule of the ether energy river as it travels to the Sun. You could imagine a shrinking sphere, shrinking slowly from the orbit of Neptune and beyond, growing the flow faster and denser as it moves closer to the Sun.

Earth also has its own river of ether energy. We can feel its effect. It is pushing us into the ground. We call it Gravity. It is Ether Gravity, 9.81 Newton.

## Ether Gravity, Details within the Sun

If you accept the idea that ether energy flow is causing ether gravity, you understand that ether pressure anywhere inside the Sun is never higher than ether pressure outside the Sun, outside the Galaxy. This is bad news for Fusion. The Sun is fueled by ether's energy and not by fusion. There could be some fission type activity similar to activity found in Earth producing Radan gas. Fusion created heavier elements when ether pressure was many times higher than today's values in the first 4 to 6 billion years of the life of the Universe. Fusion is still possible if we find suitable energy sources to power it. But fusion does not produce energy. Fusion will defy a bootstrap process.

## Terminal Velocity [8]

We want to emphasize that while the acceleration numbers are small, the energy flow is substantial. Force is developed by collisions of Ethons with the one kg. mass. Terminal Velocity is achieved when the 1 kg . mass is accelerated to the velocity of the ether energy flow. You must realize, there is no gravity involved here or anywhere. The push of the ether energy flow provides the force of Gravity.

## Visual Demo

Imagine a giant flat sheet of ice with a 1 kg mass tied to a hook at one end of the ice area. There is a steady state wind of $10 \mathrm{~km} /$ hr . blowing from that end. A force gage would show the Number of Newtons the wind is exerting on the 1 kg . mass. Next step, we release the 1 kg . mass. At the end of the first second the velocity of the 1 kg . mass will signify the acceleration number a, similar to g . It will take a considerable time to accelerate the 1 kg . mass to the speed of the wind at $10 \mathrm{~km} / \mathrm{hr}$. This is the terminal velocity for this setup. In case of the Solar System after the terminal velocity is achieved, it will grow as the flow of ether energy keeps accelerating because of the $1 / \mathrm{r}^{2}$ rule. Wikipedia has an extensive section on Terminal Velocity. In our case we do not encounter air resistance. Terminal Velocity is achieved when our "falling" object has achieved the speed of the ether energy flow.

## Gravitational Lensing

On the Sun's surface, gravity is 28 times the value of gravity on the surface of Earth. The strength of this ether energy flow applies side pressure to light photons passing close to the Sun's surface and changes the direction of the light photons, creating the lensing effect.
Gravitational lensing is a kinetic event in the Kinetic Universe [9].

## Notes from the Voyager Program

I have come across an interview with Mr. Fran Bagenal, a graduate student at MIT in the 1980s, working on Voyager data collected from Jupiter. Interview text was released by the University of Colorado at Boulder. In part Mr. Bagenal said:
"Jupiter, Saturn and Neptune all emit a lot of heat from the inside. They glow in the infrared, emitting two and a half times more energy than they receive from the sun. These things are hot. Uranus isn't the same. It doesn't have this internal heat source".

Upon further investigation I find that Jupiter does absorb large amounts of ether energy, Saturn and Neptune smaller amounts. In the following table, leading with the Sun, you will find a list of all the solar system's planets, and some moons. The items listed are the mass of the planet to absorb ether energy to create its own gravity, the surface size of the planet to radiate away the energy in the form of photons and the ratio of these to numbers. Energy absorption is proportional to the Mass of the planet. Energy output is proportional to the surface of the planet and to the square of its temperature.

| Planets | Mass <br> $\mathbf{k g}$ | Surface size <br> $\mathbf{k m 2}$ | Surface/Mass <br> $\mathbf{k m 2} / \mathbf{k g}$ |
| :--- | :---: | :---: | :---: |
| Sun | $1.9885 \mathrm{E}+30$ | $6.0900 \mathrm{E}+12$ | $3.0626 \mathrm{E}-18$ |
| Jupiter | $1.8982 \mathrm{E}+27$ | $6.1469 \mathrm{E}+10$ | $3.2383 \mathrm{E}-17$ |
| Saturn | $5.6834 \mathrm{E}+26$ | $4.2700 \mathrm{E}+10$ | $7.5131 \mathrm{E}-17$ |
| Neptune | $1.0240 \mathrm{E}+26$ | $7.6187 \mathrm{E}+09$ | $7.4401 \mathrm{E}-17$ |
| Uranus | $8.6810 \mathrm{E}+25$ | $8.1156 \mathrm{E}+09$ | $9.3487 \mathrm{E}-17$ |
| Earth | $5.9722 \mathrm{E}+24$ | $5.1007 \mathrm{E}+08$ | $8.5408 \mathrm{E}-17$ |
| Venus | $4.8675 \mathrm{E}+24$ | $4.6023 \mathrm{E}+08$ | $9.4552 \mathrm{E}-17$ |
| Mars | $6.4171 \mathrm{E}+23$ | $1.4437 \mathrm{E}+08$ | $2.2498 \mathrm{E}-16$ |
| Mercury | $3.3011 \mathrm{E}+23$ | $7.4800 \mathrm{E}+07$ | $2.2695 \mathrm{E}-16$ |
| Ganymede <br> (Jupiter) | $1.4819 \mathrm{E}+23$ | $8.7200 \mathrm{E}+07$ | $5.8843 \mathrm{E}-16$ |
| Io (Jupiter) | $8.9319 \mathrm{E}+22$ | $4.1698 \mathrm{E}+07$ | $4.6684 \mathrm{E}-16$ |
| Moon (Earth) | $7.3420 \mathrm{E}+22$ | $3.7930 \mathrm{E}+07$ | $5.1662 \mathrm{E}-16$ |
| Triton <br> (Neptune) | $2.1389 \mathrm{E}+22$ | $2.3018 \mathrm{E}+07$ | $1.0762 \mathrm{E}-15$ |

Surface to Mass ratio of Jupiter is more than ten times higher than the ratio of Sun's. The Sun's temperature must be much higher to emit ten times more energy per unit of surface. This table needs another column to list the radiated energy output of the planets. In a steady state system, the radiated infrared photon energy equals the incoming ether energy. All data were obtained from Wikipedia.

## Casimir Effect

One could ask: would a diesel locomotive have gravity? Yes, but very tiny. Think of the Casimir Effect [10]. Two flat plates close to each other. Both plates have energy transfer from ether, but at the internal surfaces, the energy losses of ether re-enforce each other as they are being replenished only from the outside sides and edges. The force between the plates is barely measurable. Increasing the thickness of the plates could help. This experiment does not rely on gravity, but on ether energy flow.

## Black Holes

The idea of black holes was borne from an equation not featured in our Kinetic Universe. There is no attraction in ether gravity and ether's energy density is limited to about 10 TPa . That makes me very suspicious of the existence of black holes. The Black Hole experts owe us an explanation. The pictures of black holes presented to us are artist renderings. Very nice pictures.

## Pioneer Anomaly [12]

Ether gravity is created with moving ether energy river in a kinetic process, unlike a Static Gravitational Field. The incoming ether energy river speed is added to the speed of the outgoing Pioneer spacecraft's speed to find the proper gravitational forces.

## Numbers of General Interest

As a public service, we are presenting values of gravitational forces in our Solar system and in our Milky Way Galaxy.

Gravitational Acceleration
Location
On surface of Sun
On surface of Earth
On surface of Moon
Gravitational Force
Location of Item
1 kg mass on surface of Earth
Earth "pulled" by Sun
Sun "pulled" by center of MWG
Earth "pulled" by center of MWG
MWG = Milky Way Galaxy

## Main Points

1) Energy transfer from Ether to the Sun creates an energy depression in Ether. That depression in turn creates a river of ether energy flow, moving toward the Sun. This ether energy stream is Ether Gravity. It pushes the Planets and other masses toward the Sun. It works the same way for all Masses of the Universe.
2) The generation of ether gravity mirrors Newton's equation: Ether generates an ether energy flow proportional to the size of Mass M. The volume of the ether flow density is reduced by the inverse $r^{2}$ rule at the distance $r$ of the second mass. The ether energy flow develops a force proportional to the size of the second mass m . The equation $F=G . M . m / r^{2}$ prevails.
3) The second mass $m$ also generates an ether energy river of its own and its effect is combined with the main event. In case of Sun-Earth duo, it is negligible. Combining the two forces is done automatically with the fudge factor $G$.
4) Gravity waves are the ripples in ether energy flow due to the dance of multiple masses around each other. There is no magic involved.
5) The Sun including the Suns' Corona absorbs the incoming ether energy. I am not convinced about the $10^{\mathrm{w}} \mathrm{K}^{o}$ temperature noted in Wikipedia. There could be other contributors. But $6000 \mathrm{~K}^{\circ}$ temperature produces white light and that is achievable.
6) The Fusion process in the Sun may be overestimated. Fusion is an energy storage operation because we know Fission returns some of that stored energy. Fusion does not produce energy. Mass does not turn into energy. It does not happen in the Sun or anywhere else. 4 billion years ago ether's pressure was hundred times today's value. That pressure was reduced by assembling Stars and Galaxies in addition to the expansion of the self-contained ether ball we call our Universe. In time with ether pressure further reducing, Atoms will fall apart, and we will fade into the past.
7) Large bodies like our Sun collect enough energy from the ether of the Universe to be a Glowing Energy Source for us. Smaller bodies like Jupiter collects enough energy to radiate infrared energy away. Earth can barely collect enough energy to keep themselves lukewarm. It is possible that seasonal fluctuations in ether's energy level have an influence on Ice-ages and Warm periods. Smaller bodies like our Moon and all other moons receive almost nothing for their thermal needs; it is freezing cold over there.
8) With the expansion of the Universe and the reduction of ether's energy level, ether energy flows will become smaller resulting in weaker ether gravity and dimmer Suns everywhere.
9) In the Beginning, in a Universe of energetic ether, single Nucleons
could start the clumping process by creating a small energy depression in Ether to "attract" other Nucleons. Masses do not attract masses. Kinetic energy gradient created in ether is the culprit. The energy of ether forms Stars from clouds of Nucleons.
10) We suspect there is a relationship between the Mass of a Star, the Density of the Star, and the Brightness of the Star. The Star's mass determines the energy inflow, the relative size of the Star's surface determine the energy density of the photon outflow. All dependent on the energy density of ether.
11) Ether Gravity amongst many bodies is a complex situation. In addition, moving bodies drag Ether with them and moving Ether drag other bodies with them. Think of counter revolving Planets. They do not exist.
12) Pioneer Anomaly. We offer Ether Gravity to solve the mystery of the Pioneer Spacecraft's deceleration mystery. Ether Gravity is created by a moving river of ether energy. The speed of the outgoing spacecraft increases the effective speed of the ether energy river relative to the spacecraft, increasing its gravitational push, causing the anomaly.

## Disclaimer

It will take many years to calculate and verify the correct numbers to maintain Ether Gravity and the Luminosity of the Sun and other Stars. Your help is welcome and appreciated.

## The End

I hope that you have read this paper with an open mind.
It would be great if you found some of the information useful.
It would be fantastic if you could see the possibilities of a new dawn. If I ruined your day, I apologize.

## References

1. George Gamow (1962) Gravity. ISBN 0-486-42562-0.
https://www.goodreads.com/book/show/17264.Gravity
2. M \& M experiment, Wikipedia. https://en.wikipedia.org/wiki/ File:M\%26M-experiment.jpg
3. Steve Olah (2024) Ether. General Science Journal: 1-8. https:// www.gsjournal.net/Science-Journals/Research\ PapersAstrophysics/Download/9826
4. Steve Olah (2022) Kinetic Gas. General Science Journal: 1-6. https://www.gsjournal.net/Science-Journals/Research\  Papers-Mathematics\%20and\%20Applied\%20Mathematics/ Download/9316
5. Steve Olah (2024) Matter, General Science Journal. https:// www.gsjournal.net/
6. Kinetics, Wikipedia. https://en.wikipedia.org/wiki/Kinetics_ (physics)
7. Momentum, Wikipedia. https://en.wikipedia.org/wiki/ Momentum
8. Terminal Velocity, Wikipedia. https://en.wikipedia.org/wiki/ Terminal_velocity
9. Gravitational Lens, Wikipedia. https://en.wikipedia.org/wiki/ Gravitational_lens
10. Casimir Effect, Wikipedia. https://en.wikipedia.org/wiki/ Casimir_effect
11. Steve Olah (2024) Atoms. General Science Journal: 1-15.
12. Pioneer Anomaly, Wikipedia.
https://en.wikipedia.org/wiki/Pioneer_anomaly

Copyright: ©2024 Steve Olah. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

