## Surface Tension Gravitational Theory Version 2

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Gravity is an object that has greater mass than the ambient particles and waves surrounding it where the force of gravity is only realized once the resistance force is created against the surface tension of a substance of greater mass or greater tension of which can't be penetrated. The resultant force can be calculated using the Gravitational Equation with Gravitational Constant Adjusted to 6.67e-15.
*Utilize this equation for Volume to volume comparisons, then it is up to the strength of the molecular bonds/ surface tension, if an object moves away from the center of mass or away from it.

As stated above, to Find this resistance force, the gravitational equation must be updated to the a gravitational constant of Force of Gravity $=6.67 \mathrm{e}-15(\mathrm{M} 1 * \mathrm{M} 2) / R 2$

Additional Data Points are required to realize net gravitational applied force, shown below.

Vector 1: ForceG Vector $\mathrm{M} 2=(\mathrm{G}(\mathrm{M} 1 \mathrm{M} 2) / \mathrm{R} 2))-(\mathrm{G}(\mathrm{M} 2 \mathrm{M} 3) / R 2)-(\mathrm{G}(\mathrm{M} 1 \mathrm{M} 3) / \mathrm{R} 2)$

Vector 2: ForceG Vector $\mathrm{M} 2=(\mathrm{G}(\mathrm{M} 4 \mathrm{M} 2) / \mathrm{R} 2))-(\mathrm{G}(\mathrm{M} 2 \mathrm{M} 5) / R 2)-(\mathrm{G}(\mathrm{M} 4 \mathrm{M} 5) / \mathrm{R} 2)$

Vector 3: ForceG Vector $\mathrm{M} 2=(\mathrm{G}(\mathrm{M} 6 \mathrm{M} 2) / \mathrm{R} 2))-(\mathrm{G}(\mathrm{M} 2 \mathrm{M} 7) / R 2)-(\mathrm{G}(\mathrm{M} 6 \mathrm{M} 7) / \mathrm{R} 2)$


When you look at a mass and its immediate surroundings, you can calculate the net gravitational/buoyancy force and determine if it have potential to move toward the center of the sphere or away from it.

When you look at buoyancy, you are seeing gravity in action. As you and I are objects of greater mass in the air, we are up against the surface of the earth, experiencing the force of gravity since we are not at equilibrium with our surrounding. If you were to, "Float," in water, gravity seems to just disappear doesn't it. It's because all the forces are equal. When it comes to planetary gravity, forces bringing objects to the center or moving them away from the center, the net force is a resultant of surface tension. Without surface tension all objects remain suspended.

It's easier to see the correlation if you begin to look at everything as energy density and mass, such as the matrix picture below, it helped me see what was happening.


To continue this train of thought, I started to realize, almost every layer on earth behaves like a liquid and as objects behave more like a liquid, they develop surface tension and per the definition above, if it's true for us, how we see the world, it will be true everywhere. I will start at the atom and move up. See Below.


This is a single atom and the cluster of atoms is spherical due to surface tension.


Why is this concept important?
Well most people when they think of buoyancy, they are thinking, literally in 1 , maybe 2 dimensions, does this object go up or does it go down.

Here's where it gets exciting!!

I want you to think of buoyancy in 3 dimensions, such as a sphere of water in space.


Looks a lot like our blue ocean, doesn't it. That just food coloring! It is proven that this is spherical due to surface tension. Let's say we had some liquid gallium, which is denser or higher atomic mass than the water and we broke the surface tension and injected it just below the surface. Back to our buoyancy, the heavier gallium would, "sink," to the middle of less molecularly massed water. 2 reasons for this, one is the intermolecular forces inside the water and 2 if the gallium contains much more mass and the objects were moving, the object with the larger mass would retain its momentum and the object with the lesser would follow suit. The traditional definition of gravity does not apply here. It does not simply sink because of gravity, it sinks because the water creates surface tension which exerts a force onto the liquid gallium.

Look at the small bubbles in the above picture. The small bubbles will be forced away from the center because of surface tension, unless it establishes equilibrium being in the center. That equilibrium can be shown with larger bubbles where this effect is minimized. The bubbles move away from the center and press against the surface tension of the water from below and once it has enough force to break the surface tension, it exits the spherical water. ${ }^{* *}$ Motion of Water Sphere is still and as an air bubble increases in size the less net force will act on the bubble within the sphere of water.

How does this relate to gravity and the earth? I am glad you asked.

Example set up to correlate with the Earth:
Set up Large Sphere of water in space, Inject liquid Gallium, and add some silica also inject the surrounding air just under the water's surface tension layer and what would happen?

This applies the same principles as the buoyancy example but in 3 dimensions.
Liquid Gallium would be become the core, the pocket of air would be forced to the surface tension layer and stay there until its force broke the surface tension and the silica would settle just above the gallium. The air will result in negative net gravitational force, the silica experiencing gravity and the Gallium experiencing no net force as a whole.

Another Quick Example: See below where most people use an actual fabric to show gravity but this needs to go a step further. The only weights added to this example should be balls so that it can simulate being a liquid. I want you to imagine adding 3 Bowling Balls, 3 Tennis Balls, and 3 Balloons. All with the same volume. The net result is the same, they all sink toward the middle but, the bowling balls will be at the center, then the tennis balls and then the balloons. That is what this example below is missing.


It proves things sink and float due to an objects mass trying to find equilibrium and that gravity is a product of an object being pushed up against the surface tension of another.

Our example is exactly how the earth is composed, isn't it.......


So if we know that objects sinking in a medium to achieve equilibrium but can't because it interacts with the resistant force of a surface tension layer, then we know, gravity, from our perspective, is a result from an inability to find equilibrium.

Opposite could be true for anti-gravity, such as a helium balloon at the surface of the earth, or the famous vacuum example for 2 falling objects.

Does, this make sense? Remember to think about it like the Matrix Picture with more molecular mass as more density of energy.

How can we prove that this is gravity and that we are just surrounded by buoyant forces?

Well, if it's true for one thing, it's true for everything - Let's look at our galaxy and refer back to the picture of the atom by itself, see any similarities. This is true when there are no other forces at work, such as standing waves. Ect.


Summary Points:
-Gravity is only realized when you interact with the resistance force of a surface tension.
-Objects around and in earth have either a net gravitational force toward the center or away unless acted upon by a different force, such as standing waves, solar winds, ect.
-3 Dimensional Buoyancy is more about molecular composition/ mass and due to the surface tension, buoyancy (Gravity) can exist. Read that one again - If you have a plastic baggy in space filled with water and bubbles in it and surface tension is non-existent, the bubbles will not necessarily rise to the surface, away from the center of the sphere.
-This effect is true from the Atom to the Galaxy.
-Gravitational Pull and Buoyancy near or within an object of mass are one and the same. This can be proven by doing the water sphere, gallium, silica and air experiment in space.

## Surface Tension Gravitational Theory

Gravity is a cohesive force between all objects of similar molecular mass, held together with adhesive forces. The force perceived as gravity is this force downward, counterbalanced by the compression resistance and surface tension of matter with greater nuclear mass(IMF) Surface Tension can be created by any object with Kinetic Energy but ideally Low kinetic energy gas, Liquids or High Kinetic Energy Solid.

If an objects molecular mass (IMF) is greater than the boundary of surface tension but can't break the surface tension of that boundary, that object will have an effect on it called Gravity. Opposite is true, if an object has less molecular mass that the matter surrounding it, it will have a negative force, known as anti-gravity.

Examples: Throw Iron into water and it will sink. Add iron to a body of water in space and it will become the center due to its greater nuclear density/mass. Alternatively if you have a helium balloon which has a less mass than the surrounding matter will, float, or be forced up by the matter with more mass.

What is surface tension?

## Surface Tension

Surface tension is a property of liquids or solids with high kinetic energy or gases with low kinetic energy that arises due to the fact that the molecules at the surface of a liquid have a different potential energy than those in the bulk. Molecules that are at the surface are "missing" neighbors with whom they have attractive interactions (Intermolecular forces). As a result, they have a higher energy than molecules in the bulk that are surrounded by other molecules. This matter will therefore minimize their surface area in order to minimize the number of higher energy molecules at a surface. Thus liquid drops will be spherical as a spherical shape has the minimum surface energy for a given volume (note: macroscopic drops are affected by gravity as well and thus have a teardrop shape). This effect also causes the surface to have a "tension." That is, one must apply a force in order to "break through" the surface. The easiest way to think about this is that by breaking or bending the surface you are always creating more surface molecules. This will cost some energy. So if the energy to break the surface is not sufficient, then the surface will not break. As a result, small objects will float on top of high surface tension liquids since the force down from the gravity on these objects will not be sufficient to overcome the surface tension of the liquid. The opposite will be true where in space is air is put into water, that air may not be able to escape the (IMF) of the water due to the surface tension.

The intermolecular attraction between like molecules is called cohesion. The intermolecular attraction between unlike molecules is called adhesion.

An object of mass could have several layers that create surface tension. Such as liquid Iron, Water or Nitrogen gases. See example below.


All objects of mass with any amount of kinetic energy will create surface tension and will want to become spherical in space unless acted on an outside force. The matter with higher atomic mass (Greater IMF) will, "sink" or move towards the center within the surface tension of the primary to become its core. Just as matter with less nucleus atomic number will become the outside layer. Essentially float or sink based on atomic mass and levels of intermolecular forces. An object such as the earth will have multiple layers of surface tension of different elements.

For Example, The earth's core is iron and as we move further away from our core we go molecules such as H 2 O and further away Nitrogen and even further away are helium which seemingly floats.


A requires experiment: Large volume of water in space and inject liquid gallium, it will become the core and be centered due to its higher mass of the nucleus or stronger IMF exhibited.


Diagram not to scale

People when asked why the earth is round, they respond gravity. It is surface tension of different types of matter, surface tension of solids in a high kinetic state, Liquids such as water and also gases in a slower kinetic state.

This came to me while watching water in space which creates a sphere. Its gravitation pull in the traditional sense would be too weak to do this but because of surface tension, it creates a sphere.


Above is a schematic of the molecular view of surface tension. The molecules at the surface have attractions for their neighbors but they don't have any molecules "above" them (these are the ones that are missing).
$\mathrm{F}=(\mathrm{G} * \mathrm{M} 1 * \mathrm{M} 2) / \mathrm{r} 2$
No suggested changes as of yet but mulling over it.

