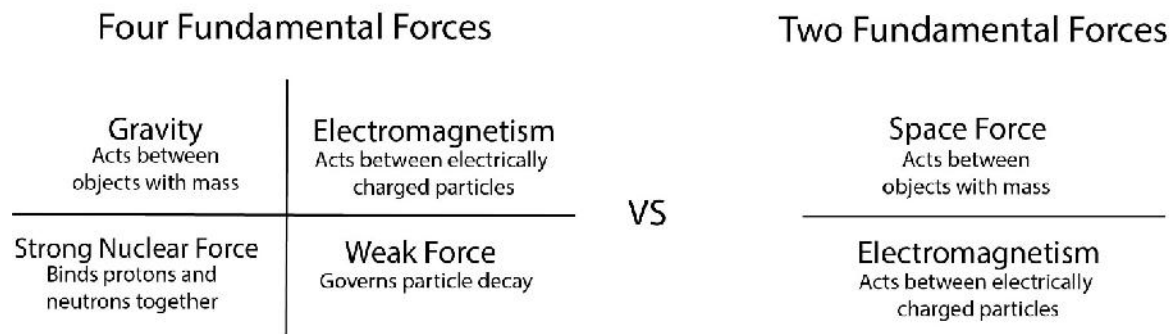


John Hall (September 22, 2019 Revision), Litchfield Park, AZ 85340, USA,

This Time - The Theory of Everything

Bringing together Einstein's theory of relativity and quantum mechanics has been a challenge of many for nearly 100 years. The issues that keep popping up seem to be surrounded by the separation of forces, where the known math principles can be applied, and predictions can be made. My "Theory of Everything" doesn't change any math, but moves the baseline, changing the categories of forces from four to two.

Currently, there appear to be four fundamental forces in the known universe; Gravitational Force, Electromagnetic Force, Strong Nuclear Force, and Weak Nuclear Force.



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The force of Gravity is the most familiar force, and probably the least understood of all the forces, as the hypothetical Graviton is believed to be the cause of all gravity. Although the force of gravity is greatly decreased with distance, the effects of gravity has no limit. The Weak Force governs particle decay, which could be described as the force on a particle outside of the Strong Force. The force of the Weak Force is weak, and the range of the force is short. Electromagnetism is the force between electrically charged particles. Like Gravity, the range of electromagnetism is infinity. The Strong Nuclear Force, or Strong Force, is said to be responsible for keeping the nucleus (quarks and gluons) of all atoms together. The Strong Force is extremely strong, but only to the boundaries of the nucleus of any atom, which may be just over 2 femtometers in diameter. A femtometer is 1×10^{-15} meters. That is 15 zeros small.

I submit that Gravity, Weak Force, and Strong Force are the results of the interaction of the fabric of space, which I'll call Space Force, starting with the force holding the nucleus of atoms together, all the way to the expanse of the universe. Electromagnetism would still be the reaction between positively and negatively charged particles, making Space Force the only other fundamental force. That's it.

How this theory works begins with the nucleus of all atoms existing in the first layer of the fabric of space. All the protons and neutrons exist and are bound together in a tiny unit of space. This tiny unit of space could be described as something like a wiffleball, or a ball of steel wool, or even a ping pong ball.

The Strong Nuclear force could better be described as the force of the fabric of space containing the particles of the nucleus of all atoms. The force encapsulating the nucleic particles would be strong up until the point of passing through the porous layer of the unit of space. Once past the Space layer, the force no longer exists upon the particle because it would be outside the influence of the force of the layer. This would be consistent with the properties of the current Strong Nuclear Force and it gives a better explanation as to how the force is very strong at close distance but fades to zero very rapidly.

The Weak Force could be described as the force of the encapsulated particle as it leaves that layer of space. The orbiting electrons around the nucleus of the atoms could also be orbiting within outer layers (relative to the inner most layer) of space. The presence of more and more atoms (or mass) eventually displaces the fabric of space, resulting in a pushing back to the center force called Gravity.

Gravity, therefore, would be the force of the displaced fabric of space pushing inward towards the center of the mass from all directions. The Gravity force is the actual fabric of space, which explains the bending of light around massive objects like stars, black holes, and even galaxies. Gravity pushing instead of pulling also better explains why the force of gravity diminishes rapidly as distance increases. For example, the force of gravity on the surface of the Earth is measured to be 1G (9.8 meters per second squared). The force of gravity from the distance of the radius of the Earth (half the diameter of the Earth) is 75% less than the force of gravity on the surface of the Earth. The amount of space pushing inward towards the center of mass is increasingly less as distance increases, much like coming to the surface from under water.

With the understanding that the fabric of spacetime is the medium by which all things relate, Einstein's Theories of Relativity are pertinent. The laws of physics would apply only to things in the fabric of space. Although the protons, neutrons, and any other elementary particle inside the nucleus of any atom are technically in the fabric of space, they are outside the influence of the fabric of space. Consider the boundary of the nucleus of the atom the baseline for the 5th, 6th, and 7th dimension, just like the first 3 dimensions, with time as the fourth dimension, only inward and essentially getting smaller. Any particle escaping the nucleic boundary would be entering, or re-entering the fabric of space, unless of course it was at the edge of the universe.