

Why it absolutely impossible for ghosts, souls and or spirits of any kind to exist:

First let's cover a little anatomy. There are about 100 billion neurons, and about 2.5 trillion glial cells in the human brain. This amounts to 100 trillion neural connections in the average brain. This is more than a 1000 times the number of stars in the universe. These trillions of cells and connections are the responsible monitoring and regulating body functions and integrating and interpreting peripheral and external sensory information. But don't forget that these trillions of cells in the brain are maintained by the trillions of other cells in your peripheral nervous system, endocrine system, skeletal system, cardiovascular system, immune system, respiratory system, digestive system, lymphatic system, excretory system, urinary system, integumentary system and reproductive system.

All this requires a dietary input of about 2000-3000 Kilocalories a day. This energy originates from the sun unless you are eating tube worms found around deep sea fumaroles.

Now there are three laws of thermodynamic; The first law states: energy cannot be created nor destroyed it can only be converted from one form to another. And by the equation  $E=MC^2$  we know "matter" can be converted to energy and visa versa.

The second law is the one we are going to focus on! The second law states that for any closed system if energy exchanges occur, that ultimately the free energy to do work will become zero for that system.

The third law of thermodynamics is just a base line for the the other two.(Look it up)

Now first of all you must understand these LAWS are immutable, they are not open to the notion that they can be broken. Nothing in our universe can ultimately break these laws. The second law is the law that makes all actions in the universe predictable. It can't be broken!!!! period!!! If you believe they can be broken you need to take about 50 hours of thermodynamics or shut up! Without this law we could not keep track of time, chemical reactions, movements of planets, stars, anything that involves energy. Everything would be an unpredictable chaotic mess. As energy ultimately moves from regions of high energy to regions of low energy the total amount of energy to do work decreases. This is not a total decrease in energy, that never changes! Scientists call the energy available to do work on a system; Gibbs Free Energy. For any given system energy for work will run out and more "outside" energy must be added. That's why you have to eat to maintain those trillions and trillions of cells in your body, and ultimately photosynthetic autotrophs must capture energy from a sun that is burning out to keep them alive and this is passed on to you, an ingestive heterotroph.

Now let's talk about what a closed system is. It is the system that we are studying in which no energy or matter can enter the system. Think of it as an impenetrable box. Now in really the universe is the only true closed system but, we can create very good ones for study and or monitor the net input and output of our system with instrumentation and take this in account for our experiment.

Now for our thought experiment:

People believe that Ghosts=Spirits are some kind of etherial after image of ourselves after we die.

Lets pretend, that we can create a very very good "Closed System". Let me make one up.

First we find a big ass asteroid deep in space in which it's astronomical position relative to other astronomical objects is such that the astroids gravitational field has been canceled out for all

intents and purposes. Example if you had a planetary object deep in space. This object because it has mass, it will produce a gravitational attraction of its own. Say it was the size of the moon it would have a gravitational force about 1/6 the gravity of earth. But in deep space larger astronomical objects could exist at positions that would cancel out the moon sized object's gravity. Example when you hit golf ball on the moon it will go a specific distance given the force impact its acceleration and angle. Well it is theoretically possible say for, four larger planetary objects to exist at distances and angles 109.5 degrees apart from each other that they would negate the "moon's" gravity. In this case there would be no net gravitational attraction on the golf ball. Anyway this is really a small consideration, I'm just trying to cover all bases.

Now to the nitty gritty. We are going to hollow out this astroid so that we will ultimately create a inner chamber say 100 ft. diameter. This chamber is going to be lined with 100 ft of lead. This is to block any Gamma Radiation that might get to the inner chamber. 1 centimeter of lead will block 50% of all gamma radiation, another centimeter another 50% and so on. So for all intents and purposes 99.9%+ gamma radiation will be blocked and we've just started. Next we are going to line the outside of the lead lining with 100 feet of copper. Even though the lead lining would be a very effective faraday cage just to make a point here comes the copper lining. This will effectively block all radio waves. The lead and copper linings are opaque to electromagnetic radiation from X-rays though infrared light. So already, we've effectively blocked the inner chamber from any part of the electromagnetic spectrum. But we've just begun. now surround the copper lining with a evacuated chamber 100 ft wide with less than one hydrogen molecule per cubic meter. This inner "vacuum" chamber will again be lined outside with 100 feet of copper and 100 feet of lead. Now we have created one of the best thermally insulated chambers ever produced.

Now even though neutrinos haven't ever been captured and used as an energy source. They travel close to light speed and have a mass of  $.320 \pm 0.081 \text{ eV}/c^2$  and essentially pass through everything unhindered, we are going to keep track of incoming and out going neutrinos just to be thorough. By comparison an electron's mass is more than a million times greater! To do this, next we are going to surround the outer lead chamber by 100 feet wide chamber of heavy water and the highest density neutrino detection array ever produced. This is surrounded by another 200 ft of lead to block out incoming cosmic rays and gamma rays from the neutrino detector. This is surrounded by 100 feet of concrete which is surrounded by 100 ft wide chamber to house every known instrument known to man for measuring changes in gravitational fields, incoming electromagnetic radiation and thermal changes. Next another 200 ft of lead to protect our instrumentation and another 200 feet of concrete for good measure and this is all in a nickel iron asteroid in deep space say with a diameter of 100 miles across.

Let's look at the design. Another irrefutable fact of physics and nature, there are only four fundamental forces in the universe. These are it, there are not any others. No other magic forces.

These forces make up all the interactions of matter in the universe. Get it, there aren't any other forces other than these 4!

#1. The nuclear strong force; this force is what holds the protons and neutrons together in an atom. Each of the fundamental forces has a carrier particle, a particle that carries the interactive force between particles. The carrier particle for the strong force is the gluon. This force and carrier particle only interacts with particles over the distances of a atomic nucleus.

#2. The nuclear weak force; this force is responsible for atomic transmutations (decays from one element to another or other elements. The carrier particle for the nuclear weak force is a

gauge boson with three flavors ( $w^+$ ,  $w^-$  &  $Z$ ). But again the carrier particles only act over the diameter of the nucleus of atoms.

For our purposes forces 1 and 2 do not matter because they only deal with atomic nuclei and therefore nuclear reactions! Another theoretical nuclear weak force is the  $X$  boson, such a particle would carry an extremely short-range force that acts over distances only several times the width of an atomic nucleus. And where a dark photon (like a conventional photon) would couple to electrons and protons, the new boson would couple to electrons and neutrons.

#3 Gravitational force. The force of gravity is produced by any object that has mass, and this gravity interacts with every other object that has mass. Its carrier particle has been dubbed the graviton. This particle has been proven to travel at the speed of light but yet undiscovered due to the fact that it lies in a quantum dimension we have not been able to experimentally access. By the way nothing can travel faster than the speed of light! But the force of gravity is relatively weak. An object must have a very large mass to produce a substantial gravity and the gravity between two objects drops off by the equation: force of gravity =  $\frac{GM_1M_2}{r^2}$ . The important part of this equation is that it is divided by the square of the radial distance between the two bodies. So if the distance between two objects is doubled the gravitational force decreases 4 fold, by a distance of 4 the gravitational force is 1/16th. So it not hard to see as the distance becomes very great the gravitational force becomes very weak. That's why we don't even notice the giant black hole at the center of our galaxy. That 's why standing next to a 56 Buick has a greater effect on your astrology than the alignment of all the planets, but I digress on another stupid belief system. So to get work from the gravitational potential you need a strong gravitational force. We have essentially negated this force from our problem by the asteroid's position and by measuring a gravitational changes in our inner most chamber.

#4 Electromagnetism: The force of electromagnetism is the force that holds electrons around atoms and its carrier particle is the photon. As electrons move from one energy state to another they either absorb or release photons at a specific electromagnetic wavelength. These electromagnetic waves are propagated by photons at different wavelengths create the electromagnetic spectrum from gamma rays to ultra violet through the visible spectrum to infrared through the radio waves.

On a day to day bases the energy we use and notice typically comes from gravitational potential energy (stored energy of position) being converted to kinetic energy (energy in a moving object-particle). Example: car rolling down a hill or water from a waterfall running a grain mill and energy derived from the electromagnetic force. This includes anything to do with electricity (movement of electrons), magnetism (do to the arrangement of electrons and their spin), chemical reactions, and the use of photons that are part of the electromagnetic spectrum to change the potential energy of an electrons which can be used to create an electrical force and or magnetic force.

According to the First law of thermodynamics energy can be converted from one form to another. Example gravitational potential can be used to generate electricity. Water at a high potential energy is captured in a dam by generators to produce electrical energy. Electrical or chemical energy can be used to change the position of an object to a higher potential energy. The chemical reaction of burning rocket fuel raises the gravitational potential energy of a rocket.



So eventually if a ghost-spirit could exist it would succumb to the second law of thermodynamics just like the corporeal being did. It would cease to function. (die). But people don't believe ghosts-spirits can die.

Well I'm sorry to tell you this, the second law of thermodynamics is immutable, irrefutable, fact, cannot be broken. Everything in the universe must adhere to the second law of thermodynamics. Thats the facts Jack!

Now for some philosophical notions: So if you were born retarded, does you soul remain retarded?

If you suffered a brain injury that affected your personality, is the souls mind repaired?

If you die when you were five, does your soul grow to adulthood?

If you die as fetus, does your grow old?

If you die with an IQ of 80, is your souls IQ boosted to 100?

If you die with dementia, are your souls memories restored?

Hmmmm?