

# Science Behind Paranormal Activities

Souvik Bhattacharjee

**Abstract**— This detail explanation is about the scientific causes behind every paranormal incident. Now-a-days documentary films on paranormal activities or researches on paranormal incidents is spreading throughout the world. But none of the researcher shows the exact cause behind those incidents. Scientists or the host of any paranormal tv shows directly said those can't be explained. Yes, that's true but not completely. They should say those can't be explained by normal scientific explanations. That's why it is called 'Paranormal'. In this paper, I'm going to unveil the real cause behind every paranormal incident with logics and scientific explanations. People should be reminded that all those concepts of physics and metaphysics are based on assumption. All those prove has been done on the basis of several assumptions.

**Index Terms**— Paranormal Activities, superstitions.

## I. INTRODUCTION

Many people still believe in superstitions. But modern science reveals the truths behind most of the superstitions with proper scientific explanations. But somehow, they couldn't succeed to remove the superstitious believe in people minds because they couldn't give proper explanation to every ancient thought.

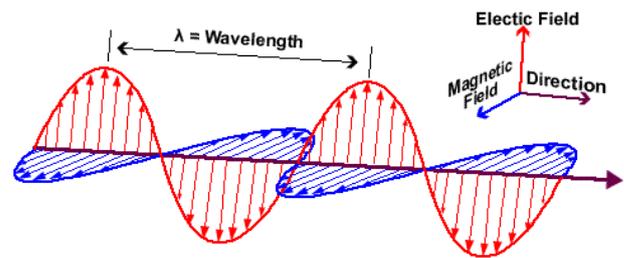
Actually, according to some research documents, it is proved that all superstitious believes are not wrong. "Are Ghosts real?" this question arises in everyone's mind.

Many people say that science has proved there is no existence of ghosts. But this fact is not true. Scientists couldn't give any scientific explanation on this fact because those are beyond normal imaginations. They are researching on this fact for decades after decades to prove its proper existence.

Now the fact is 'What is Paranormal Activity?'. The word 'paranormal' suggests things those are beyond normal; things we can't give any scientific explanations. Earlier researcher stated that those activities are attached with multiple dimensions. Some said spirits live in another dimensions which are beyond our 3-Dimension world. Now in this paper all those things all those terms have been clearly explained with scientific reasons.

According to the evidences of famous 'Ghost Adventures' and 'Ghost Hunters', It has been seen that we can't see ghosts or spirits with our naked eye but sometimes we can see. "WHY??" This is one of the biggest questions on this topic. Why can't we see ghosts? ... the reason is based on Electromagnetic theory. All those lights we are seeing with our own eyes are in visible

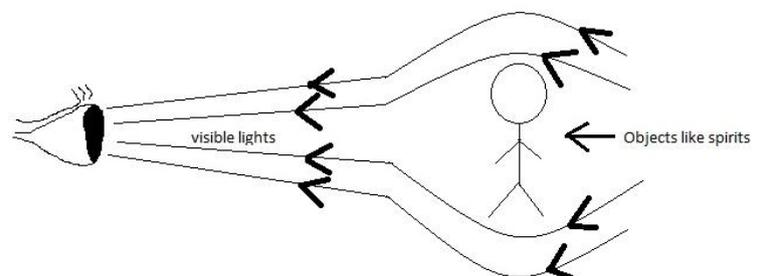
spectrum. Our eyes only can see what is inside those visible spectrums otherwise it's difficult for us to capture those images which are Use italics for emphasis; do not underline. beyond visible spectrum with our own eyes. Actually, the main reason behind that is based on the deviation of Electromagnetic waves due to high emf.



Generally, due to presence of high emf, lower wavelength and high frequency waves deviates from its natural path. But wave with lower frequency and high wavelength doesn't deviate that much. That's why infrared light deviates less in compare with visible rays.

Ghosts that only be seen with cameras, or other types of electronic equipment are simply phasing into our reality outside the range of visible light. Human eyes can only see visible light. Visible light is a form of electromagnetic radiation like that of Radio waves, Microwave radiation, Infrared radiation, Ultraviolet, X-Rays, and even Gamma Rays. Ghosts phase into our reality by directing their astral energy bodies into the energy strings that are the foundation of matter. This extra energizing of these vibrating strings causes photons to form.

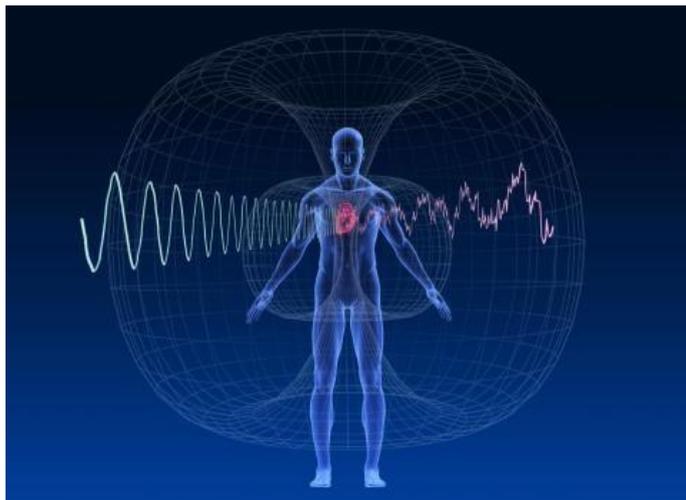
Photons are the foundation of electromagnetic radiation, and the ultimate source of light in this Universe when vibrating in a certain frequency range. So, as a ghost, or other higher



dimensional non-corporeal being, phases into our Universe they first produce radio waves. These radio waves may interfere with radio or television transmissions along with possibly creating verbal communications from the ghost. This is known as EVP, or Electronic Voice Phenomenon. As it gains supernatural strength via the absorption of

Souvik Bhattacharjee,

environmental energy, the ghost will next produce Microwave radiation which can cause interference in a



number of electronic devices. Then the entity enters the infrared spectrum, and may be picked up by some cameras but not to the naked eye. However more frequently the infrared manifestation is picked up by thermal imaging devices.

Now, it is often claimed by some paranormal researchers that ghosts are belonged actually in form of orbs. Now, what is Orb? Is it just a form of light balls that actually an energy pack inside a ghost's body or something else?

### II. ARE ORBS GHOSTS?

Orbs still fascinate when found in photographs taken at purported haunted places, being especially intriguing to the novice ghost hunter. But, are true orbs actually ghosts?

Orbs are also known as "ghost orbs" or "spirit orbs" and are



often thought to be the souls of people. Most orb images, however, are caused by the camera flash, or light of some sort, reflecting off of something such as glass, mirrors, metal, walls, dust, pollen, lint, moisture, snow, hair, or even insects. The rise in the "orb phenomenon" became especially prominent with the increased use of digital cameras. Digital cameras capture a higher amount of dust orbs in photos than do older, film cameras that typically have a protruding lens or flash unit that is further away. With pocket, digital cameras, the placement of the flash near the camera lens allows dust and other particulate to be more easily illuminated. Consequently, some orbs in photos are easily

proven to be dust, especially when spokes radiating from the center are apparent, being the source of the light reflection. For more on this subject, be sure and read, Get Rid of **Dust Orbs**.

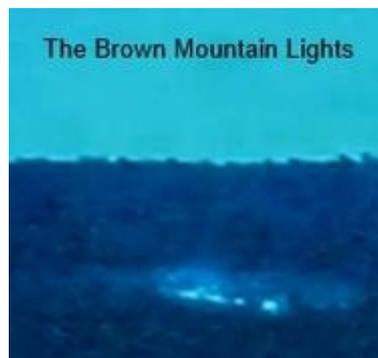
### III. SPIRIT ORBS AND PLASMA ORBS

Some orbs are definitely energy, and energy is spirit. However, no one knows what this energy is, for sure. Plasma balls of light, or **ghost lights** (orbs), have been proven to be electrically charged. Some of them are a naturally occurring phenomenon created through static discharge. True (plasma) orbs will normally have a more solid center, without any spokes radiating from the center, and emit their own light. Whether or not plasma-type orbs are only unintelligent, electrical discharges remains to be discovered and better understood. It's possible that some plasma orbs are intelligent spirit energy that manifests similarly.

Good indications of real orbs are those that have been photographed without the camera's flash or those that are seen with the naked eye and self-illuminated. Eye-witness accounts of moving balls of light at night on the Gettysburg battlefield have been reported, for example. Video recordings of these lights did not require any artificial light source. We must also consider that some orbs have been videotaped floating with purpose, intelligently moving around objects, etc. Whether moving fast, moving slow or standing still, orbs are spiritually intriguing. Orbs have been known to, sometimes, "hang around" people. This would tend to cause some to believe that orbs might be angels, spirit guides or deceased relatives.

Those things which is written upper is just the conventional thoughts of orbs.

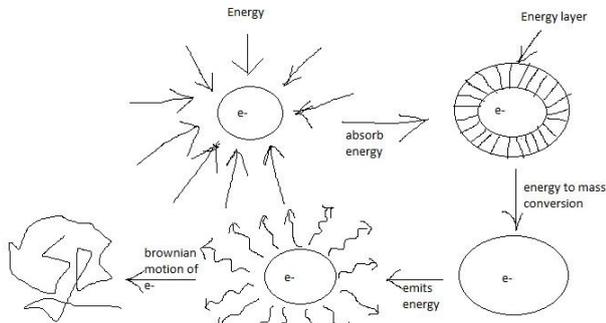
According to my research on orbs, I've found it's a form of plasma state. Spirits lives in plasma state not in another dimension. Plasma, in physics, an electrically conducting medium in which there are roughly equal numbers of positively and negatively charged particles, produced when



the atoms in a gas become ionized. It is sometimes referred to as the fourth state of matter, distinct from the solid, liquid, and gaseous states.

The negative charge is usually carried by electrons, each of which has one unit of negative charge. The positive charge is typically carried by atoms or molecules that are missing those same electrons. In some rare but interesting cases, electrons missing from one type of atom or molecule become attached to another component, resulting in a plasma containing both

positive and negative ions. The most extreme case of this type occurs when small but macroscopic dust particles become charged in a state referred to as a dusty plasma. The uniqueness of the plasma state is due to the importance of electric and magnetic forces that act on a plasma in addition to such forces as gravity that affect all forms of matter. Since these electromagnetic forces can act at large distances, a



plasma will act collectively much like a fluid even when the particles seldom collide with one another.

Nearly all the visible matter in the universe exists in the plasma state, occurring predominantly in this form in the Sun and stars and in interplanetary and interstellar space. Auroras, lightning, and welding arcs are also plasmas; plasmas exist in neon and fluorescent tubes, in the crystal structure of metallic solids, and in many other phenomena and objects. The Earth itself is immersed in a tenuous plasma called the solar wind and is surrounded by a dense plasma called the ionosphere.

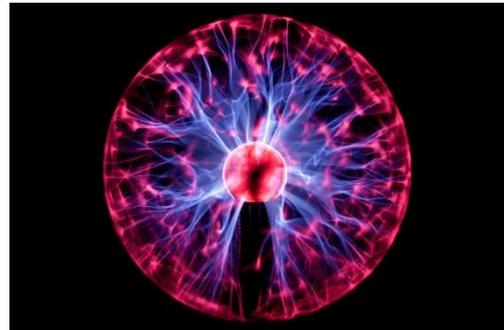
A plasma may be produced in the laboratory by heating a gas to an extremely high temperature, which causes such vigorous collisions between its atoms and molecules that electrons are ripped free, yielding the requisite electrons and ions. A similar process occurs inside stars. In space the dominant plasma formation process is photoionization, wherein photons from sunlight or starlight are absorbed by an existing gas, causing electrons to be emitted. Since the Sun and stars shine continuously, virtually all the matter becomes ionized in such cases, and the plasma is said to be fully ionized. This need not be the case, however, for a plasma may be only partially ionized. A completely ionized hydrogen plasma, consisting solely of electrons and protons (hydrogen nuclei), is the most elementary plasma.

Whatever the plasma state has a center part where all the energy has been concentrated. Plasma is intermediate state of energy and mass. When energy to mass conversion takes place, all mass or all energy can't be converted at same time so there is some intermediate state called plasma state, where the object has both qualities of mass and energy. If we consider an electron, electron can't stay in one place. Why? Why only electron has that property of free motion? Why not proton and neutron? Some will say that proton is much heavier than electron as it has more mass. But only in compare with electron, the mass of the proton is also too much low as it is just a  $H^+$  ion. We know the momentum conservation theory. Say a particle has momentum  $P$  which is equal to the product of their mass and velocity.

So,  $P=mv$  [as  $P$  is constant here so  $m$  is proportional to  $(1/v)$ ]

Now we consider electron as plasma state neither a solid form nor a wave form. So, the mass is concentrated in center

of that electron. So, the electron can absorb energy. When it absorbs energy, energy gets concentrated around the surface of electron core. Energy layer is creating a torque to that electron. As a result, the velocity of that electron reduces. Due to the momentum conservation, mass of that electron has to be increased otherwise momentum conservation theory will not be applicable. Now as  $V$  decreases  $M$  will be increased. So energy to mass conversion takes place. Now electron become unstable then again it emits those excess energy. As a result, mass suddenly reduces and for maintaining momentum conservation velocity increases



rapidly which gives electron unstable motion. **This phenomenon generates Brownian motion.**

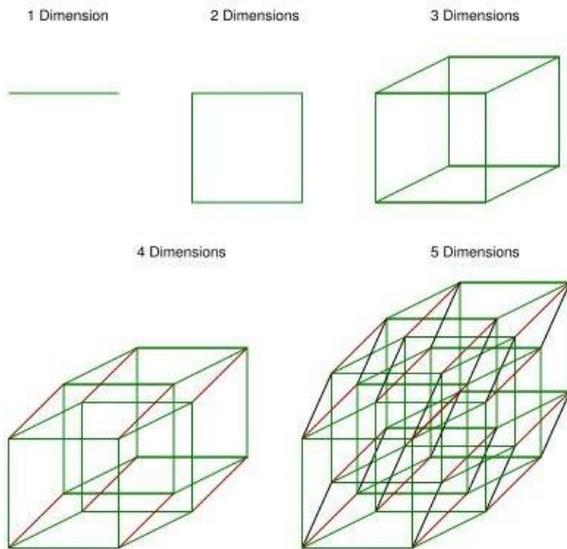
Similarly, it happens for a spirit. After death of a person or a creature its whole mass can't be transferred completely to energy. The whole mass of body concentrated in a center point and after absorbing energy from



surroundings energy layer forms at the surface of that concentrated mass. This whole thing is called in my term "**SPIRIT**" and the concentrated center is called as "**Orbs**".

Now sometimes people claim to see orbs and apparition with their naked eye.

Actually the reason behind it is in the contraction and expansion of our pupil. Our eyes are light sensitive. We can prove it by applying a torch light to our eyes and turning off the light in front of a mirror. In presence of light the radius of our pupil become less so that less number of light can pass to observe the scene. In the absence of light our pupil enlarges so that more light rays can enter in our eyes. So, after staying some minutes in darkness our pupil gets large enough so that large number of light rays can enter. For this reason, sometimes rays which are in infrared spectrum but close to red lights wavelength can enter in our eyes and we see some infrared lights such as remote's IR light or mobiles' proximity sensor's light in darkness. For this reason, sometime we can see apparitions and orbs with our naked eye as those are belonged to those spectrums.



## Understanding Dimensions:

Now we come to the topic of “**Dimensions**”. What is dimension? How can we merge dimensions with paranormal activities? Dimensions are nothing but some virtual co-ordinates declared by mathematician to solve their problems. Dimensions are different co-ordinates where we can define the placement of a particle in this infinite universe. Generally, we discussed only about 3-dimensions which are length, width and height represented as x, y, z axis. But there are other dimensions we usually don’t talk about like 4<sup>th</sup> dimension ‘time’, 5<sup>th</sup> dimension is ‘effects’ and so on. Now how we interconnect spiritualism with these dimensions? It is believed and also proved on the basis of some assumptions that all the human beings and all the living beings are connected to star-dusts. When supernova takes place, at the center of a dead star gravitational force becomes too much high so that black holes can form. Say the escape velocity of an object is  $V_e$  and mass  $M$ ,  $G$  is gravitational constant and  $R$

is the radius of that object. Now  $V_e = \sqrt{\left(\frac{2GM}{R}\right)}$ ; If

$\sqrt{\left(\frac{2GM}{R}\right)} \geq c$ , black hole is created. All the particles of

that star or star-dusts are attracted by that black hole. Those pass through a wormhole and through white whole those are again ejected and inside the wormhole all the particles remain in form of energy. Thus how universe has been created. So all the particles in our body is from some star-dusts. So, every human being is connected to a wormhole. People survived from coma condition often claimed to see a bright tunnel. That tunnel is nothing but a wormhole. Actually wormhole is interconnection between dimensions or we can say it as a portal to another dimension. If we say creature or people live in other dimensions is actually called spirits, can’t be denied completely. Those things may use wormhole to connect them

with other dimensions. Dimensions can’t be explained so



easily as it is in hypothetical form of science.

Leaving those apart now we’ll discuss about hauntings. What is hauntings? A haunting is a kind of "recording" of a past event on an environment, such as a house, building or a battlefield. These recordings play back, over and over in a kind of loop -- always the same, like a film or video. It is thought that the presence of certain people can trigger these recordings to play back. They are not ghosts capable of interacting with the living. It is not known how these recordings are made, but they are often associated with a traumatic or strongly emotional event.

Hauntings are of 4 types ---->

- a) Residual hauntings
- b) Intelligent hauntings
- c) Poltergeist
- d) Demonic hauntings

a) *Residual Hauntings*

“Aresidual haunting is a playback of a past event. The apparitions involved are not spirits, they are "recordings" of the event. I believe that this will be the first type of haunting that main stream researchers will recognize and study. There are numerous theories on how these residual hauntings come to be. The main one will be discussed here.

Video and audio tapes capture sounds and images on a film of special material that has been oxidized or rusted. Certain building materials, such as slate used in older castles and stone structures and iron nails used in many older buildings, have properties similar to that of the tapes. When a traumatic event occurs or a time of heightened emotions, these materials record the event for future playback. Everything is made up of energy and energy cannot be destroyed. The materials store the energy created by these traumatic events and plays them back at a later time. The Tower of London’s ghost of Anne Boleyn and the Brown Lady of Raynham Hall are two famous examples of residual hauntings. We are not sure what causes the playback of the events, that still remains a mystery. Is it the right weather conditions, the witness’s energy or sensitivity or some type of energy release? That is the question that we as researchers are trying to answer.”By Dave Juliano

b) *Intelligent hauntings*

“An intelligent haunting is also known as a traditional or classic haunting. It is called an intelligent haunting due to the fact that the spirit is aware of and able to interact and communicate with those living in the physical world. These spirits want to get the attention of the living and they can move or hide objects, send signals or even speak to do so. The optimal time for ghostly appearances is during the late night hours, but the spirits who can muster up enough energy can make their presence known in the daytime. There can be many reasons why an intelligent haunting occurs. In many cases, some entities choose to stick around their loved ones, for example, grandparents around younger children. Some are unaware that they have died because it may have happened suddenly. In those instances, the assistance of a psychic medium may be necessary to help them cross over to the other side. Other times, the spirit may not be visible — a cold spot, experiencing chills and goosebumps or feeling as if someone is staring at you are signs. Sometimes the spirit refuses to cross over until a major issue or unfinished business is resolved in family, business or financial matters. Most of these ghosts are not malicious — they just want to be noticed and have their message heard.”

c) *Poltergeist*

The word poltergeist means “noisy ghost” and the term comes from the German words “poltern,” which means to make noise and “geist,” which means ghost. Poltergeist hauntings usually take the form of objects moved, hidden or thrown, disturbing noises, interference with electronic devices, physical attacks and even spontaneous combustion. Objects have also been known to disappear and reappear. Ghosts can be the culprits for these disturbances but some incidents are believed to be the result of psychokinesis (PK), the power to move objects with the mind, consciously or unconsciously. If PK is the cause of the haunting, the individual is most likely moving the objects — unknowingly and unconsciously, due to a compounding of some overwhelming stress or emotional angst the person is suffering in life. Poltergeist hauntings have been associated with young adolescent girls; however, they are not limited to that group. The haunting usually affects a person, female or male, who is possibly under great duress. However, it takes its toll on the whole household or group. Poltergeist hauntings can be sometimes playful or sometimes malicious. When the intent is malicious, objects might be placed in such a way that could cause harm. The hauntings usually start out slowly and increase in intensity until it reaches its peak. This is when the occurrences can be the most dangerous. However, sometimes the disturbances stop abruptly and are never repeated again.

d) *Demonic Hauntings*

In demonic hauntings, the main goal of the demon is to break down a person’s free will so that it can take over and possess the individual. The deceptive evil spirit enters a home or location to do harm and destroy all that is good and sacred. The demon not only can possess people; it can attach itself to objects. At first, these types of hauntings or possessions may seem benign or non-threatening. They can appear similar to poltergeist hauntings as they usually start out with slight disturbances, such as knocking noises, furniture being moved, etc. The demon may appear as a dark shadow in a

location or may first show itself as a benevolent spirit. When the demon finally reveals itself, foul odors, extreme temperature changes and even physical attack can occur. Demons also have the ability to transform and shape shift from human to animal. The demon will try to convince the individual that it is no longer present; however, it lays in wait to strike at a time when the individual is weak or vulnerable. The demon becomes stronger when it senses fear and that is the time when a possession can take place. Another sign of possession is that the possessed individual becomes fluent in many languages, speaks in tongues or has gained knowledge in subjects you knew nothing about prior. The individual possessed will become a shell of his former self and become terribly cruel to those he loves. This type of haunting is not easily resolved — it requires an exorcism. Seek guidance and help from highly trained paranormal investigators, clergymen and others familiar with demonic hauntings.

Spirits can do all those things only when they were formed in solids. This happens when a spirit body takes energy from surroundings. It helps it to convert energy to mass for a moment. In that particular moment spirits are in solid form. All those hauntings incident only takes place at their solid state not in plasma state. By performing exorcism priests convert those spirits into plasma state again. Sometimes paranormal experts say that water is good source of spiritual energy. That’s why normally all spiritual activities take place near any water source or any high magnetic field of quartz. Paranormal activities are not only limited by ghosts or spirits; it can be done by any extraterrestrial species also.

#### IV. RESULTS AND CONCLUSIONS

So, what we’ve found during our research is all paranormal incidences actually the results of natural things. Although we consider this topic as Para-science or metaphysics but still all its causes can be defined scientifically. If someone find a particular place cooler than others in surroundings, there is a chance of a spirit being there because a spiritual body always try to form solid state from plasma condition as a result energy of surroundings get lower and temperature drops suddenly. So, in my opinion spirit is nothing but a natural phenomenon after death. That’s why we shouldn’t afraid of that. All our fear is nothing but a chemical reaction took place in our brain. Danger might be real but fear is our own choice. As a lead investigator of the paranormal researching team SPI, I believe one day we can really debunk the paranormal causes and call them normal activities.

#### REFERENCES

- [1] Britannica Encyclopedia
- [2] Google images
- [3] Physics –Dutta, pal
- [4] <http://psychiclibrary.com>
- [5] Concepts of Modern Physics- Arthur Beiser
- [6] TV Shows- “Ghost Adventures”, ”Ghost Hunters”.
- [7] Wikipedia
- [8] Relativity: The Special and the General Theory – Written by Albert Einstein