

ESSAY

Exploring the Link Between Paranormal Phenomena and Plasma Balls

Miguel A. Galán Santos¹

miguelags@gmail.com

Stanley A. Koren²

skoren@laurentian.ca

¹Citizen Scientist, Architect.
Madrid Spain

²Neuroscience Research Group,
Laurentian University Sudbury
Canada

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INTRODUCTION

Many paranormal phenomena seem to be caused by events of intense static electricity (Auerbach, 2010), and some of them by a kind of ionized plasma ball, called here *electroball*, closely related to ball lightning. It is hypothesized here that ball lightning is an extreme form of electroball. Ball lightning is difficult to explain; however, if models could be formed, then many unexplained phenomena could finally be answered (Turner, 2003). This idea was shared by other researchers, but was mainly limited to ball lightning and was rarely suggested to explain UFOs or Poltergeist phenomenon (Richmann, 2007). Electroball occurrence can often be characterized as fleeting and extreme; however, with the proliferation of cameras integrated within cell phones and digital devices, a growing database of excellent quality visual evidence and

HIGHLIGHTS

Many strange phenomena like UFOs, poltergeists, or ball lightning could be ‘electroballs,’ or plasma-like forms with electrically charged layers.

ABSTRACT

This article explores the relationship between many paranormal phenomena and a proposed type of plasma ball, with two electrically charged layers, referred to in this paper as “Electro-balls”. It provides a framework to explain these weird phenomena as different manifestations of Electro-balls and the mechanisms behind them. These manifestations include unexplained phenomena such as ball lightning, strange sounds in the sky (skyquakes), UFOs/ UAPs, haunted houses, poltergeist phenomenon, levitation, cattle mutilations, cryptids, angels & demons, demonic possessions, etc. It also discusses the electroball formation, its characteristics, and its effects on the environment.

KEYWORDS

Animal mutilations, ball lightning, earthquake, electro-balls, EMF, haunts, levitation, paranormal, plasma, sleep-paralysis, UFO.

data is emerging.

Electroball Definition

It is a mass of ionized air or plasma surrounded by another layer of ionized air or plasma with an electrical charge of the opposite polarity. Occasionally, they are also referred to as orbs or plasma balls. The core of the electroball is compressed by the attraction of both layers. A neutral layer is often formed between them by electric discharges (Figure 1). Therefore, a structure is formed that stores electric charge like a spherical capacitor (Anderson et al., 2004). If it rotates, it generates a magnetic field (Oreshko, 2015). There are no direct measurements, but in some anecdotal cases of small balls (less than 10 cm in diameter), the magnetic field was so strong that it burned out a nearby magnetometer, vaporized gold jew-



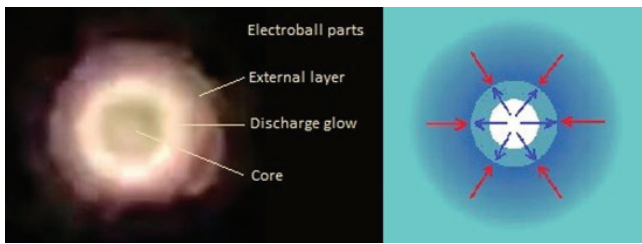


Figure 1. An electroball is a ball of ionized air or plasma surrounded and compressed by another layer of ionized air.

ely without touching it (Nikitin, 2023), or induced hallucinations at short distances (Clarke, 2000; Persinger, 2010). Occasionally, low-energy ball lightning has a bluish-violet glow around the core, which is produced by a corona discharge. In high-energy ball lightning, the glow generated by the movement of the elements of its core is added to the glow of the shell, so the total spectrum shifts to the red region. (Bychkov et al., 2008; Oreshko, 2021). The size of Electro-balls can vary from microscopic (Nikitin, 2023) to enormous (lenticular clouds).

Ball lightning seems to be one of the most mysterious and extreme Electro-balls. In ball lightning, the glow is different in nature and more intense. Very often, it lasts longer and contains much more energy than it should, according to current theoretical models (Sagan, 2004). Ball lightning has been produced in the lab, and results support some of the theories related to plasma spheres. The existing estimations of the energy density of the ball lightning show that this value is equal to 10^{10} J/m^3 (Friday et al., 2013; Oreshko, 2021). The occurrence of these plasma balls, especially ball lightning, typically occurs for a few seconds up to a minute (Donoso et al., 2016). Based on at least 10,000 reports of ball-lightning, they appear to be on average 1 foot (30 cm) in diameter, be as bright as a 100 Watt incandescent lamp, and last around 10 s (Stephan, 2012).

Some lenticular clouds share the same structure but last much longer with less charge density. Between this type of cloud and ball lightning there are many other types of Electro-balls.

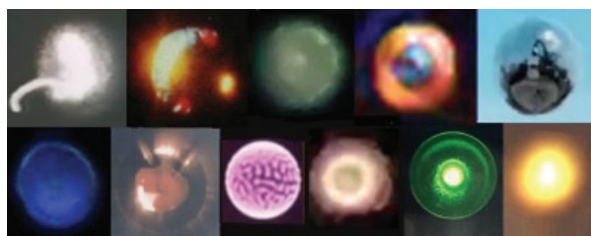


Figure 2. Electroballs can be transparent, translucent, cloudy, opaque, clear, dark, reflective, blurry, glowing, incandescent, and combined with others. (Galán S., M. A., 2021).

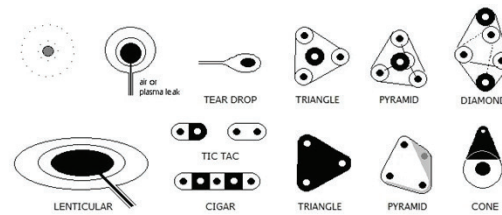


Figure 3. Common combinations of electroballs seen in UFOs. Some keep the round shape and others share the outer layer (Galán S., M. A., 2021).

Electro-balls can be transparent, translucent, cloudy, opaque, clear, dark, reflective, blurry, glowing, incandescent, etc, or have combinations of the above characteristics (Figure 2). The core could be covered with other substances like dust, litter, cobwebs, “angel hair” by the strong electromagnetic field. The most common are transparent or invisible, but they become visible with infrared cameras (Infamousfanclub, 2015). The transparent orb, in this case, was filmed during daylight hours (Paranormal Intelligence Agency, 2023). Electro-balls can combine by their charges, forming molecule-like structures. Many UFOs are made up of these combinations (Figure 3), but the most common are made up of just one (AARO, 2023).

In this video, a combination of three Electro-balls are visible (Figure 4) interacting with others around and creating more with leaked plasma from the core (ufotoday, 2009).

Formation of Electro-balls

A sudden corona discharge can create an electroball if the air around has a charge of the opposite polarity, as it is attracted to the air within, compressing it (Figure 5).

For ball lightning, gas discharge properties have been calculated to assess the possibility of resulting from an electrical discharge forming stable plasma balls, with electron densities of $\sim 10^{11} \text{ cm}^{-3}$. The ball can exist independent of the electrodes from corona pulses from a high voltage point within any structure, such as a house or aircraft fuselage. Large electric fields would be present at the tips of such metal conductors within an ambient electric field existing during a thunderstorm (Lowke, 2021).

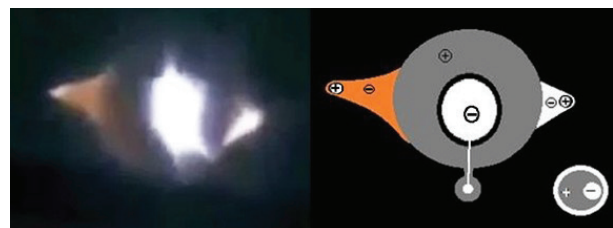


Figure 4. A combination of three electroballs (ufotoday, 2009).

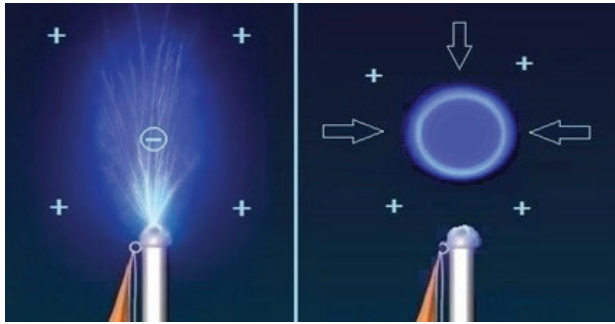


Figure 5. A sudden corona discharge or St. Elmo's fire at the top of a metal flag pole combined with charged air around form an electroball (Galán S., M. A., 2021).

Energy stored in ball lightning is, on average, 20KJ, energy density around 0.2 KJ/cm³ or 100 KJ/g, more than the common explosive trinitrotoluene (TNT). These powerful charge and energy densities suggest the extreme properties proposed here.

Sources of Electricity

The main sources of electricity in the air that form Electro-balls and other extraordinary phenomena are thunderstorms, charged particles discharged to Earth from the ionosphere, the Van Allen Belts or auroras (Figure 6), and electromagnetic pulses of meteors. The full moon and new moon phases can also have an influence as reported by Kovalyov and others below.

Discharges From The Van Allen Belts

Research indicates that particle discharges from the Van Allen Belts may generate UAPs, often during a full moon (Kovalyov, 2022), especially around areas with electromagnetic anomalies, detectable even at 400 km altitude (NASA, 2004). A link has been observed between full moon nights, new moon, and the paranormal (Dubaj & Dupont, 2022). Full moons and new moons increase the number of reported UAP's and paranormal cases, but it is not clear if it is made by tidal forces, due to the passage of the moon through the Earth's magnetic tail, or due to the

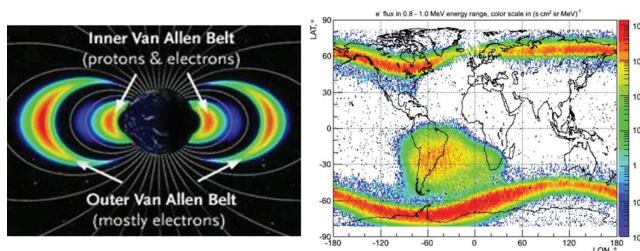


Figure 6. Particles in the Van Allen Belts. (Source: NASA / JHU-APL / Univ. of Colorado), and Electron Precipitation in the range of 0.8-1.0 MeV. (SPENVIS NASA, 1997).



Figure 7. A meteor triggers an unusual lightning called sprite (Shibahofer, 2023).

influence of the sunlit part of the moon that is charged with electricity by the solar wind and the radiation. During a full moon, the lunar sphere exerts a strong electrical influence on the night side of the Earth, especially when the moon is nearer to Earth (perigee). It seems the passage of the moon through the Earth's magnetic tail, made of plasma, could increase the particle flow through the Van Allen Belts and trigger a much larger discharge, with resemblance to the transistor amplification effect (Bell & Defouw, 1966). In line with the lunar amplification effect, researchers analyzed KP index data from 1932-1972 and found that there was an increase of 3 standard deviations around the time of a full moon (Knott, 1975).

Electrical Storms

Thunderstorms can form electroballs in the air or after a lightning strike, even dark & misty, like in this amazing video (iFunny, 2023). One model reported the generation of a powerful surge of microwave energy in the vicinity of a lightning strike (Wu, 2016). This microwave energy then ionizes the air in the locality of the strike and gives rise to a plasma sphere. This explanation is consistent with recorded observations of ball lightning (Stenhoff, 1976). Research into the effects of the full moon on increased thunderstorm activity was made with the hypothesis that the moon affected the Earth's geomagnetic field and possibly its atmosphere (Pinto & Pinto, 2015).

Electromagnetic Pulses (EMP)

EMPs created by meteors, lightning, solar storms, or nuclear explosions can trigger discharges because they can induce electric currents through the air, the ground, and in large metallic infrastructure, such as wires, pipes, or railways, and create discharges at the ends. This happened in telegraph lines during the Carrington event on September 1, 1859, when a significant geomagnetic storm with intense auroras occurred (Muller, 2014). The EMP from nuclear tests can also create Electro-balls in the atmosphere (Atomic Tests Channel, 2021).

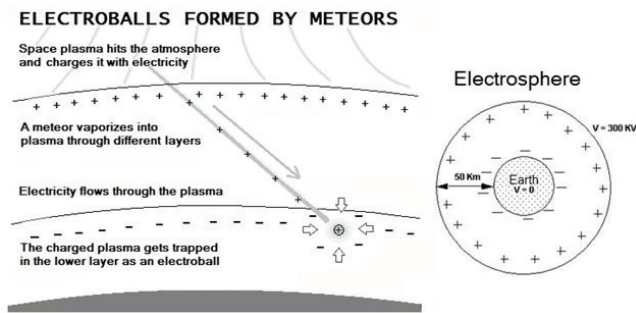


Figure 8. Electroball formed by charged plasma, from a meteor, trapped by charged air with the opposite sign around it (Galán S., M. A., 2021).

A 60% increase of UFO events were reported during meteor showers (Clarke & Anthony, 2000; Hughes, 2010). We propose two ways in which they could be formed: An EMP could happen when the conductive plasma tail of the meteor allows an electric discharge between atmosphere layers with very different electric charge (Hughes, 2010). The EMP triggers discharges such as sprites from below and from the ground as well (Figure 7). A video of a meteorite apparently triggering two sprites was captured recently over Mount Fuji in Japan (Shibahofer, 2023).

Another way a meteor could create an electroball is by vaporizing as charged plasma that becomes trapped by air with the opposite charge in the lower layers of the atmosphere (Figure 8). The charge of the core is transferred from the upper layer through the conductive plasma contrail to it. Then, once the electroball is formed, it could move in an alternative direction, following the electric field, in an unexpected movement.

Seismic Events

Occasionally, the sources of electricity are underground discharges, especially during earthquakes or volcanic eruptions, and often over fault lines (Derr & Persinger, 1991). Research by Freund on seismically generated luminous events and what he refers to as plasma plumes supports this idea (Freund, 2003; St-Laurent et al., 2006). Other research by Persinger further states that a solid-state plasma could form when tectonic strains trigger such an event. Specifically, the detection of Electro-balls in the vicinity of the seismic epicenter could provide a precursor to an earthquake event (Persinger, 1976; St-Laurent et al., 2006). Tiny plasma balls were actually simulated in the lab by placing rock samples under enormous physical pressure, thus reproducing seismic energy buildup (Derr & Persinger, 1986).

It is likely that the mass scale piezoelectric effect is the cause of these discharges, but research found links

to Van Allen Belts particle discharges and moon phases as well (Kovalyov, M., 2022; Conti et al., 2018). It appears that, prior to large earthquakes, a strong electric field builds up on the ground, the polarity of which is most often such that it pushes the F layer (+) aside, allowing energetic electrons from the higher ionospheric layers to penetrate to lower levels. These perturbations are generally observed about 5–10 days before large seismic events and disappear within 1–2 days (Freund, 2003).

Short Circuit Sparks

Electrical arcing of high intensity could also form different kinds of Electro-balls or ball lightning. Some of them created Electro-balls as ball lightning or even as black ball lightning (Rabinowitz, 1998). It should be noted that ball lightning was obtained with a charge in the capacitive energy storage model: $Q = 1 - 3 \text{ C}$, and black ball lightning was also observed at a very low charge in the capacitive storage equation: $Q = 0.25 \text{ C}$ (Oreshko, 2021; Nikitin et al. 2021). In an excellent video recorded in Serbia, an intense electrical storm is taking place, and after a short circuit occurs, two bright spheres move at high speed near the camera, causing distortion on the audio portion of the video recording (Almir Curić, 2019), consistent with strong EMF and its possible effect on electronic devices (Camp et al., 2001).

Static Electricity and Magnetic Anomalies

Electrical and magnetic parameters are essential characteristics of these phenomena (Persinger, 1975). When Electro-balls spin (Figure 9), they create a magnetic field able to be detected with a compass or magnetometer (Oreshko, 2015). Electromagnetic field meters have also been used to detect the resulting fields (Healing Tools, 2018).

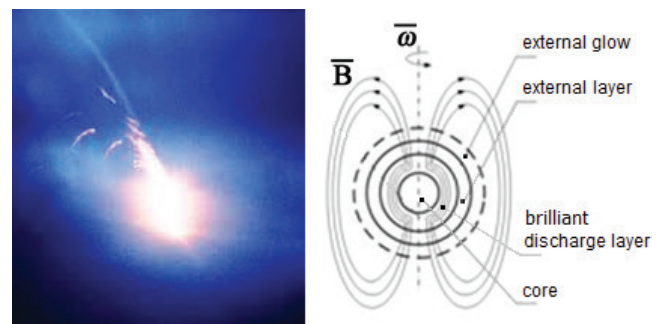


Figure 9. One of the few images of ball lightning taken at short distance. Notice that it is spinning and leaving a contrail. Magnetic field around (Oreshko, 2021).

Radioactivity

Radioactivity has been detected in some UFO sightings with Geiger counters but the origin is unknown. In experiments, radiation emitted when ball lightning pass through solid objects can be explained by cascading generation of particles by high-energetic protons of the ball lightning that enter dense matter and interact with it (Oreshko, 2015, 2021).

Places contaminated with radioactivity, like nuclear facilities and test areas, report more paranormal and UFO sightings (History Channel, 2019). Radioactive ionization of the surrounding air may attract them as radioactive lightning rods do by attracting lightning (Israelsson et al., 1987). Areas with higher natural radioactivity are related to higher air conductivity. Paranormal events have been linked to radon gas within houses especially in homes with basements (Baldassarro, 2013; Frohlich & Davis, 2003).

Radio Interferences, Electrical Anomalies, and Damage to Electronic Devices

The presence of Electro-balls discharging electricity can cause surges in nearby circuits. Plasma's high conductivity allows it to create short circuits, turn on lights, increase the electricity consumption of the grid or discharge batteries by contact with them (Turner, 1994). The discharge produces electrical noise which may be coupled into a radio receiver.

Cold Spots

If transparent orbs are formed outside, they could create cold spots if they enter a building, especially if they were formed at high altitudes where the air is very cold. Thermographic cameras are helpful in detecting and visualizing cold spots (Turner, 1994).

Sounds

Air leaks from the compressed core of the electroball can produce noise. Blows, cryings, roars, hissing or trumpet sounds have been reported (Stenhoff, 1999). Leaks from lenticular clouds have a sound like jet engines or strong wind gusts. They can explode with loud bangs or with weak pops (Figure 10). The corona discharge produces noise, too. In a video recording, loud horns can be heard echoing across a semi-rural landscape (MrGlowTm, 2019). They can make noises by colliding, bouncing, or even moving furniture. If a person speaks inside an electroball, the voice will be altered because the air is denser, suffering later hearing discomfort or tinnitus due to the high pressure.

Silence

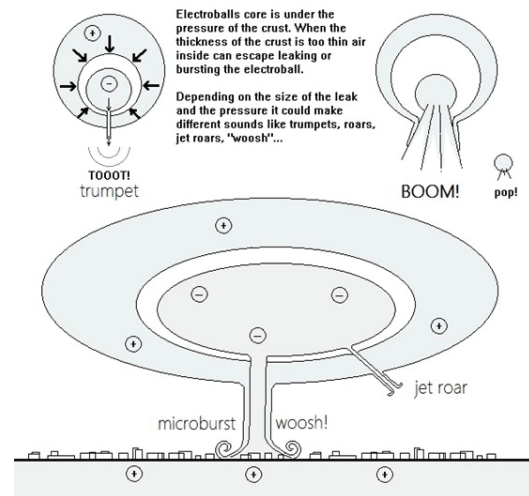


Figure 10. Sounds and wind blows produced by Electroballs (Galán S., M. A., 2021).

Often, there is a strange silence around large Electroballs because the ionized air dampens the noise by its attraction to the core. Probably, some supersonic UAPs are silent for this reason as well (Stenhoff, 1999).

Odors

The most common are by ozone and nitrogen oxides created by electric discharges through the air. Other odors that could be noticed are smoke (if it was burning) due to something trapped inside such as dust, moisture, etc (Neppe, 1983).

Fires

They can occur due to the impact of ball lightning. Apparently, transparent Electro-balls can sometimes burn things, too (Boerner, 2019). A short circuit between both layers or an electric discharge could be the mechanism to trigger them. Ball lightning has been proposed to explain some cases of spontaneous human combustion (St, 2006).

Hallucinations

Witnesses often report that they hear disembodied voices or see strange creatures. The intense electromagnetic field of the electroball can create auditory and visual hallucinations and other weird feelings, such as intense pareidolia or out-of-body experiences, especially at close range (Persinger, 1988). If a human happens to be in the vicinity of such a plasma orb, it could affect the perceptions by electrically stimulating the brain's neural circuits (Persinger et al., 2010; Roll & Nichols, 2000). Persinger and others further speculated that paranormal events could be perceived by witnesses in the form of a haunt or even an alien abduction event (Holden & French, 2002; Persinger,

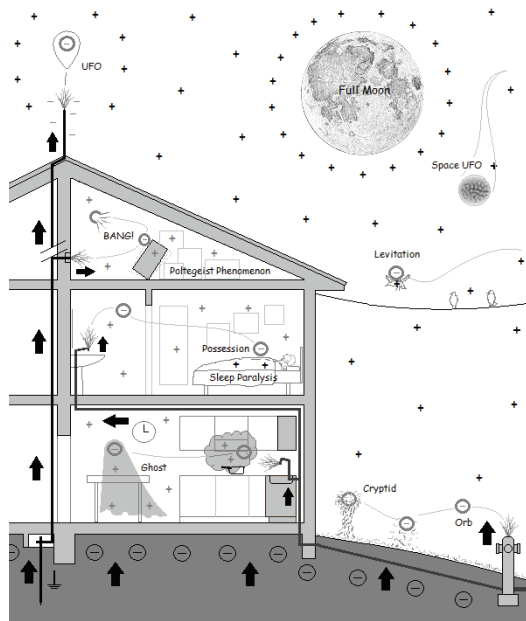


Figure 11. An isolated tall house, on top of a hill, during a night with a big full moon and under storms or auroras, is a good place to have paranormal phenomena or to see ufos. The electric influence of the moon (+) attract electrons (-) upwards through conductive elements, such as pipes or wires, especially if the air is charged too (+). The discharge of electrons could form electroballs (Galán S., M. A., 2023).

2001). These hallucinations seem to increase pareidolia because it is very common for people to see or hear what they would expect based on their personal expectations.

CRITICAL DISCUSSION

We now proceed to apply this model to some of the best-known paranormal phenomena. As can be seen, this proposal is primarily qualitative and necessarily quite speculative due to the strange and elusive nature of this phenomenon and the lack of enough quality data.

Haunted Houses and Boats

There are certain buildings with many reported cases of paranormal phenomena. Very often, these phenomena could be explained by electroballs formed inside by air previously charged and combined with a sudden surge of static electricity with the opposite charge or by electroballs attracted from the outside. The typical circumstances able to form such a rare phenomenon include the following: an isolated tall house, hilltops, full (super) moon nights, and beneath storms or auroras (Figure 11).

These discharges could happen especially at the top of isolated buildings or boats as corona discharges, such as Saint Elmo’s fire, but also inside buildings from wires

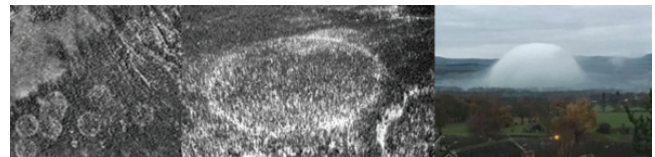


Figure 12. Forest rings from above. A charged cloud attracted to something on the ground.

or pipes, so they would be more common in kitchens and bathrooms located on upper floors. The observer may report witnessing a paranormal anomaly such as a ghost or an orb (Cameron, 1882). Electro-balls theory would be consistent with electrical disturbances during many reported haunts (Dagnall et al., 2020).

Forest Rings

Forest rings are large, circular patterns of an area with a low density of trees in the boreal forests of northern Canada and other locations generally found under the auroras. These rings can be from 50 meters (160 feet) to almost 2 kilometers (1.2 miles) in diameter, with edges about 20 meters (66 feet) thick. The origin of the forest rings is unknown. Some hypotheses include radially growing fungi, buried kimberlitic pipes, trapped gas pockets, and meteorite impact craters. Electrical anomalies have been found in them, especially in the center (source of negative charge) and around the edge, where charge differences can be found between the inner and outer sides measuring around 300mV (Hamilton, 2008). Similar rings have traditionally been linked to the paranormal. A strong electrical anomaly like this must be a source of ions for Electro-balls or to attract ionized air. Possibly, even large masses of surrounding ionized air create domes around the center of the ring (Figure 12). Similar domes have been seen developing tentacle-like protrusions that point or extend toward nearby objects.

Levitation

When the core of the electro ball has a large electrical



Figure 13. Left: The Sorcerer of Cideville France, 1850. Note animals on ceiling. Right: Poltergeist in a kitchen (Cawthorne & Matthews, 2009; Sinn, 2012).



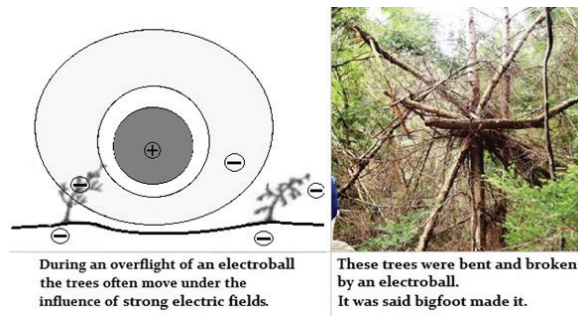


Figure 14. Near the ground, electroballs will attract or repel objects like trees, bending or even breaking them (Galán S., M. A., 2021; MagnusApollo, 2021).

charge, and it is over a place with the opposite charge, it moves towards it but without colliding because the external layer electrostatically repels the ground strongly at a short distance. The electroball tends to float at a short distance above the ground (Grand Illusions, 2012). Near the ground, Electro-balls could attract and raise objects depending on what charge they have, especially if they touch the outer layer (Figure 14). Extremely energetic electroballs (*Faya World Secrets*, 2019) could bend or even break trees (Figure 14) (Stenhoff, 1976, 1999). Sometimes, the classic bigfoot or sasquatch phenomena have been blamed for these occurrences (Clark, 2012)

Objects Levitating

Some objects in contact with the external layer get so highly charged that they levitate towards the core, because of opposite charges. The magnetic field has influence too. Reported cases of objects that appear or disappear, mysterious water puddles inside home, stone rains or even cars levitating are proposed to be explained as this type of levitation (Nikitin et al 2021; Cameron, D., 1882; Clark, 2012).

Levitation of Persons and Animals

It seems that the blood plays an important role in this since it has been noticed that it moves quickly towards the electroball but not as much as the rest of the body does (Bolonkin, 2005). We propose that the hemoglobin in the blood becomes charged after breathing the charged air of the outer layer, increasing the attraction to the core, with the opposite charge (Figures 15-16). It is not clear which charge, positive or negative, plays a role in charging the hemoglobin to levitate.

Cattle Mutilations and Animal Rains

The animal mutilation phenomenon can purportedly happen the same way. The blood of animals is attracted towards powerful Electro-balls making animals levitate,

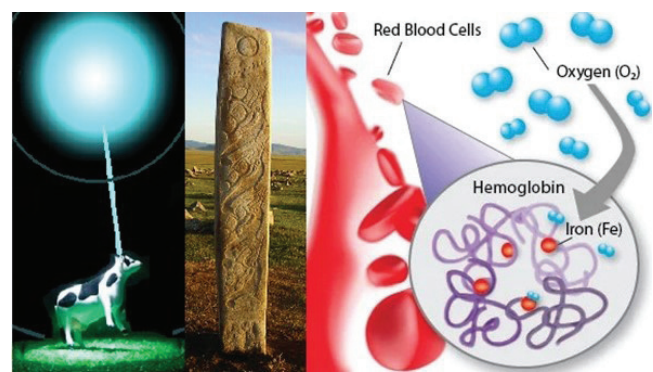


Figure 15. Attraction to animal’s charged blood produces bleeding to the electroball, mutilations and even levitation (Galán S., M. A., 2021); Deer stone, represents deers levitating to an electroball.© Ts.Turbat (2009); Hemoglobin (Doyle, Maggie, 2015).

suffer extreme bleeding and mutilations by the strong electrostatic pull on blood. Later, when the electroball vanishes or the animals lose enough blood, they fall. Fish rains could happen in this way.

In the USA, in the last 50 years, there are reports of over 10,000 animals that have suffered similar mutilations (O’Brien, 2014). In Alamosa, Colorado, on September 7, 1967, a horse named Snippy is believed to have come in contact with a fireball. Sadly, Snippy did not survive, and there was evidence of scorching. The flesh from the head and neck was completely cleaned to the bones. There were also reports of scorch marks on the ground (Denver Public Library, 2020).

It seems that in ancient times, this was a big problem due to the risk to people and livestock, so they offered blood sacrifices at the top of shrines to these supposed entities to attract them to the sacrificed blood. In Siberia and Mongolia, hundreds of monoliths of the late bronze age, called deer stones, seem to represent animals like deer levitating and being mutilated under Electro-balls,

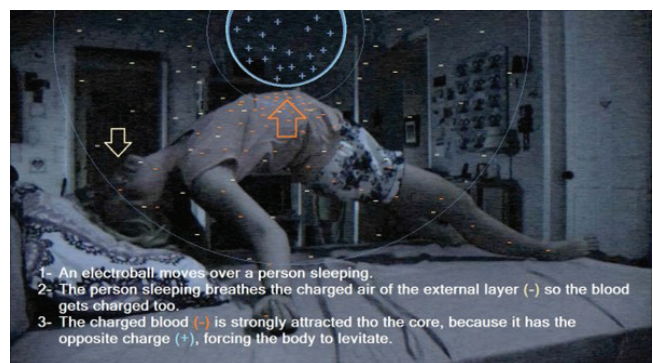


Figure 16. Levitation during sleep. The ground must have the same charge sign than the core to avoid the core to move down. (Galán S., M. A., 2021).

probably as a warning of the risk within their vicinity (Figure 15). In Scotland, some monoliths with the so-called “Pictish beast”, dated around the 200AD, seem to depict the same.

Spirit-Demonic Possessions and Attachments

In some circumstances, an electroball can get attached electrostatically to a person, often as a transparent one, and be identified as a possession by a spirit or a demon. If the influence is very strong, the person can get paralyzed (Figure 17: Fuseli 1781), suffer seizures, or be physically dragged by the electro ball. It seems to happen more during full moon nights and often in the early morning (Dubaj & Dupont, 2022). Sometimes, climbers report being followed by an invisible entity or suffer sudden hallucinations near the top of mountains due to this.

Extreme Sleep Paralysis

Sleep paralysis is only identified as a mild neurological problem, but when the characteristics are very extreme, it seems to be hypothesized as being associated with electroball attachment (Figure 17: Fuseli, 1781; Wright, 2017). It occurs more at night, around 3:00AM, when an electro ball adheres to the upper part of the body or to the head, suffocating the victim and also causing strong pressure on the chest. Paralysis is often reported, among other disturbing symptoms, as near-death experiences or abductions. Some appear to have been suffocated to death. Sudden infant death syndrome could be related as this phenomenon has been referred to in folklore (Wright, 2017). Researchers have found that sleep paralysis can be induced when magnetic fields are applied to the right temporal lobe (Roll & Nichols, 2000). This would be consistent with the electromagnetic fields reported with plasma balls.

Incubi and Succubi

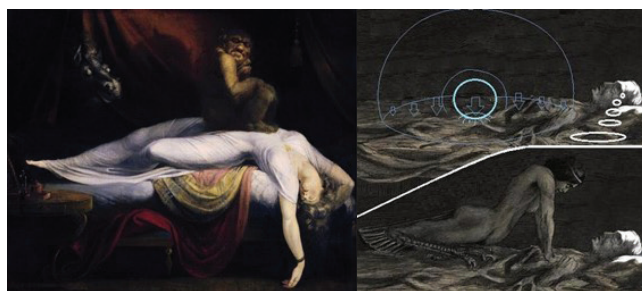


Figure 17. Sleep paralysis (Source: Henry Fuseli “The Nightmare” 1781). The victim use to suffer hallucinations and paralysis induced by the electroball’s electromagnetic field.



Figures 18 & 19. Left: Spherical plasma surface with ripples made in the laboratory. (SAFIRE Project. 2020). Right: Claw-like marks known as stigmata. (“The Exorcist”, 1973).

When the attachment happens on the groin, it is identified as a possession with sexual assault by a demon, sometimes even with penetration. In folklore, this demon is referred to as a succubus if it attacks a man or an incubus if it attacks a woman. In many cases, the victims report being attacked by invisible entities, such as dark shadows, orbs, or lights. If they hallucinate, they often see creatures very different from persons, such as demons, aliens, beings of light, etc. (Persinger, 2001).

Hitchhiker Effect

Being apparently deeply affected or “infected” by paranormal phenomena after being exposed to them has been called the Hitchhiker Effect (Kelleher, 2022). It could last for years and the cause is unknown, excluding those based in autosuggestion or social contagions. There is a hypothesized link to quantum entanglement, but this has not been proven (I-Team, 2022), or to multiple charged clusters having the structure of ball lightning (Nikitin A.I., 2023). Again, there is a possible link between hemoglobin and electricity overcharge because among the symptoms, there are blood disorders, as well as lupus and Raynaud’s disease (Kelleher, 2022). Thyroid disorders are also common, which are linked to radioactivity (UpToDate, 2024). I suggest avoiding charged places and earthing as a treatment to discharge it to the ground. One particular location that has gained notoriety with this effect is the Skinwalker or Sherman Ranch in Utah state (Kelleher, 2022).

Dermography and Stigmatization

The repulsive forces among the charged particles in the core push them to its surface. If the density of particles is very high, they could form ripples (Figure 18). Sometimes, when the electroball touches the skin, it could cause finger-like marks when pressure is exerted if it has an undulated surface. Objects attracted to the electroball

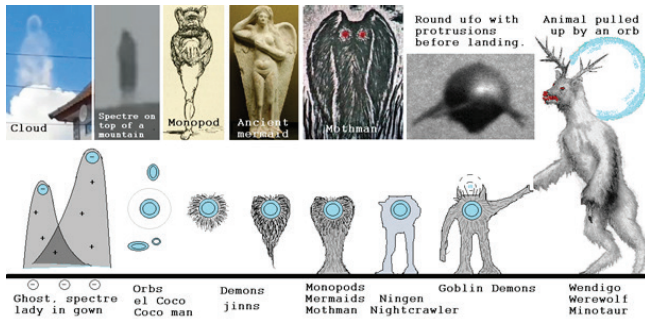


Figure 20. Cryptids formed by electroballs attracting charged mist or litter around them. Note that ghost shapes are visible in orange and white colors in this video (Figure 4).

could scratch the skin as well. When these marks are short-lived lived they are called dermatography (Collins Dictionary, 2023) because they can be misidentified as writing. If the attraction of the blood is very strong, internal bleeding could result, and even claw-like marks are also commonly reported (Figure 19). Its cause is often attributed to demons. These scars are called stigmas and are also referred to as a witch's mark in folklore (Wikipedia, 2023).

Cryptids, Ghosts, Spirits

Sometimes electroballs can be misidentified as paranormal entities or creatures:

- When they are transparent or invisible: as spirits, poltergeists, guardian angels, or demons possessing their victims.
- When they are brilliant like ball lightning or glowing orbs, as angels, apparitions of God, the Virgin, saints, fairies, extraterrestrial or multidimensional beings of light, and even demons.
- When they are misty: as specters, ghosts, ladies in gowns, shadow people. They could look clear or dark depending on the position of the light around them (Figure 20).
- When they make noises: if the noise is like a woman crying, as Banshee (Ireland) or La Llorona (México); if it is like a roar as a Bigfoot and if it is like a trumpet as angel Gabriel.
- When they show attraction to blood, as vampires, chupacabras, and other bloodthirsty gods and monsters. Sometimes, it even kills with a plasma beam from the core (Wells A., 2016).
- When they are covered with electrostatically bonded litter like hair, cobwebs, dust, leaves, grass, or ice, they could resemble furry creatures such as Bigfoot-Sasquatch, Yeti, gremlins, critters, etc. Depending

on the quantity of litter attached or if they develop protrusions, they could appear to float midair or have one or more limbs, legs, or feet if the litter reaches the ground, but the minimum number of limbs is the most common. The head would be another electroball. Like Fomorians (Irish mythology), they are very different from each other and show random characteristics (Figure 20).

- When electroballs move, they resemble living beings because they do it independently to gravity or wind (Joseph, R., 2024), following charged objects or people without colliding with them as if they were interested in them (e.g., Foo Fighters or the Angel Raphael following pilgrims). It happens because the double-layer bi-charge structure of the electroball usually attracts charged objects at long distances but repels them at short distances, reaching a balance point where it maintains the distance. That can be imitated with magnets (Grand Illusions, 2012). They could develop protrusions that look like limbs and point to charged objects in the vicinity (Figure 20).
- Some cryptids identified as animals that walk like humans (werewolves, minotaurs) could be explained as cases of levitation in which the animal is lifted by the head, but the force is not enough to raise the entire body, so it seems that it walks on hind legs (Figure 20).

A driver recorded what seems to be a cryptid like a goblin or a nightcrawler seen on the road apparently made by a misty electroball with protrusions as legs (Fox News, 2023).

Angels & Demons

In ancient times, Electro-balls were often identified as angels and demons. They were believed to be messengers between God and men. The concept of an angel has

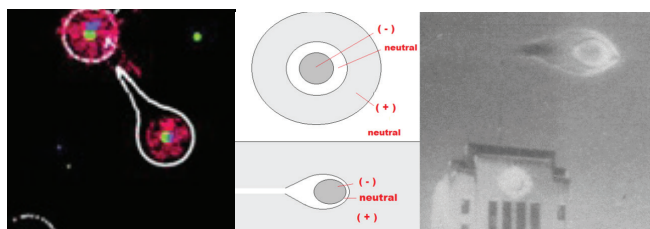


Figure 21. : (Left) A program with a similar kind of particle simulation can be seen in this video. Even without been adjusted to test this concept, it shows the spontaneous formation of structures similar to electroballs and groups of particles that move as if they were conscious living beings, as happens with electroballs (Brainxyz, 2022). (Right) Supersonic UFOs don't use to create sonic boom. Image of a silent and fast UFO over Vancouver (1937).

changed, becoming more anthropomorphic and confusing over time, but in its origin, it was probably based on different transitory phenomena observed in the sky, such as Electro-balls or parhelion (Seraph, Thrones, Cherub: Galán, 2021). In the Bible, there are many references to them, but it doesn't explain what they are; it only assumes their existence and activity. In Judaism, during some epochs, they were said to be entities without conscience or shape. Different types were described: some as wheels, spheres, or flying torches. For the Catholic Church, angels are incorporeal creatures with personality.

Common angels and archangels often looked like torches and used to be Electro-balls like ball lightning. If they were high in the sky, they couldn't do any harm, so they were identified as angels, but if they were seen close to the ground, they could harm people, animals, or properties, so they were identified as demons: the fallen angels rejected by God. Among them, you can identify at least Michael, Gabriel, Raphael, guardian angels, and choirs of angels.

- *Michael*: He is described as a warrior angel with a fire sword. It is a luminous electroball with a beam of plasma leaked from the core. (first image in Figure 2).
- *Gabriel*: Often identified as a trumpet-blowing messenger angel. It is an electroball, often without light, like a cloud or not visible at all, with a noisy air leak. It often makes a trumpet or horn sound known as a skyquake. There are many recordings on YouTube (MrGlowTm, 2019).
- *Raphael*: It follows pilgrims and travelers. It is an electroball attracted to electrically charged objects such as people or vehicles. Called Foo Fighter during the WW2. They could be of very different types (iufosightings, 2015).
- *Guardian angels*: They are transparent Electro-balls, the most common, responsible of spirits and also for the poltergeist phenomenon (Paranormal Intelligence Agency, 2023).
- *Choirs of angels*: Some Electro-balls surrounding a mass of charged air forming a circle.

EXPERIMENTAL RESEARCH PROPOSALS

It is possible to study the phenomenon of Electro-balls with computer simulations, in the laboratory and in situ. Similar experiments have already been carried out successfully.

Computer Simulations

The simulation of Electro-balls necessitates a meticulous consideration of several factors. Notably, ionized

air serves as a more feasible medium for simulation compared to plasma due to the latter's inherent conductivity and strong magnetic properties, which present challenges requiring sophisticated computational algorithms. Of particular interest is the determination of whether the presence of particulate matter, such as dust, smoke, or fog, is requisite for electroball formation, along with the influence of various environmental parameters, including temperature, charge, humidity, and pressure. Some researchers hypothesize the formation of charge aggregates on the surface of ball lightning, positing the existence of Exotic Vacuum Objects (EVOs) characterized by a ring of electrons confined within their self-generated magnetic fields. Additionally, certain sightings have suggested the manifestation of macro-quantum phenomena or unconventional states of matter within Electro-balls. These complexities render comprehensive simulation of this phenomenon challenging, prompting an initial focus on modeling ionized air scenarios. For example, a team of computer scientists applied classical and quantum gravity models in order to create an lmax resolution visual simulation of gravitational lensing using a spinning black hole. This video sequence was used for scientific explorations in astrophysics and in the movie *Interstellar*. Within a few years, this simulation was verified to be correct.

Proposed Simulations

1. **General Particle-Based Simulation**: Given the skepticism surrounding this phenomenon, such simulations offer a simple and intuitive means to illustrate its basic features, including the double-layered structure, responses to gravity and electric fields, various configurations observed in UAPs, as well as phenomena such as leaks, beams, protrusions, and explosions. Even basic 2D simulations can effectively convey these concepts. Notably, these programs are user-friendly, lightweight, and capable of real-time operation, making them particularly suitable for modeling scenarios involving sparsely ionized air, such as certain cloud formations or large air masses, rather than highly ionized plasma environments (Figure 21).
2. **Simulating a supersonic-charged plasma ball in ionized air** offers insights into the reported absence of a sonic boom in supersonic UFOs believed to be composed of such plasma balls. We propose that the ionized air surrounding the plasma ball is attracted to its core during movement, thereby attenuating noise. This effect is attributed to the deformation of the bow wave around the electroball into a teardrop shape, resulting in reduced aerodynamic drag and noise levels (Figure 21). Additionally, rare instances of ball lightning pass-

ing through solids with apparent ease may provide an alternative explanation for the lack of noise, albeit observed only under extreme conditions (Oreshko, 2021).

Laboratory Experiments

Various studies have endeavored to recreate phenomena such as ball lightning and other plasma balls, yielding intriguing findings (Shabanov, 2019). Some have successfully generated Electro-balls resembling ball lightning or even black ball lightning (Rabinowitz, 1998). Notably, ball lightning has been observed at charge levels in capacitive energy storage ranging from $Q = 1$ to 3 C, while black ball lightning has been noted at significantly lower charge levels, around $Q = 0.25$ C. These Electro-balls have exhibited the ability to penetrate solid-state barriers, similar to observations of natural ball lightning (Oreshko, 2021; Nikitin et al., 2021). Furthermore, experimental setups have replicated surface irregularities or ripples consistent with eyewitness accounts (see Figure 18).

Proposed Experiments

We suggest to replicate and expand previous experiments with the aim of generating various types of Electro-balls, including transparent, translucent, misty, and black variants.

- Employ IR and thermal cameras, as many Electro-balls are invisible to the naked eye.
- Utilize polarized filters, because the charged surface could align molecules as a liquid crystal able to polarize light. Some UAPs have been seen only through them.
- Employ barometers to measure internal pressure, which is expected to be higher near the core of the electroball. Additionally, utilize hygrometers, thermometers, and other instruments to assess atmospheric conditions.
- Employ Geiger counters to detect radioactivity, as was reported in some UFO cases.
- Create two types of Electro-balls: one in uncharged air, which typically floats without colliding, and a plasma ball in charged air that moves very fast and collides quickly.
- Test their reactions to external electromagnetic fields (EMF) because they must react to but not collide with charged objects in neutrally charged air.
- Test the adhesion of water, ice, and debris to the surface. This includes testing whether debris adheres in shapes consistent with proposed hypotheses (Figure 20).
- Disperse different substances inside them to know whether moisture, dust or smoke are necessary to create them and what differences these components make, as the composition of the air influences the color of light emitted, akin to the phenomenon observed in auroras.
- Create an invisible “force field”: Reports occasionally mention the presence of a mysterious “force field” surrounding certain UFOs, in a 3M factory or around charged objects such as an airplane. These objects were heavily charged with electricity, attracting air of opposite charge so intensely that it formed a compressed cushion of air around them.
- Induce leaks, beams, and “tentacles” by bringing charged objects close to them.
- Anecdotal cases suggest that they can be formed as transparent Electro-balls, like those in haunted houses. This involves combining ionized air from storms in the outer layer with discharges to form the core, potentially sourced from power grids (~230V AC for residential use and up to hundreds of thousands of volts AC for transmission lines), telephone lines (40-75V DC), or electric welding (20-100V DC). It seems that air is so highly conductive in some situations that it could drain the batteries or turn on the lights or other devices.
- Spray water to discharge Electro-balls as has been used during exorcisms. Using a metallic web should work even better to discharge them, but beware of electric shocks and explosions.
- Test whether light shortens the duration of the phenomenon, as has often been noticed.
- Test whether pocket laser beams cause internal flashing as they increase inter-layer conductivity, as has been stated by UAP witnesses. Powerful laser beams have triggered lightning from storm clouds to Earth. Be careful of electric shocks in both cases.
- Test whether rubber balloons filled with charged air under ionized air conditions behave similarly to Electro-balls. If it works, it might be easier to see their behavior.
- Test the attraction to charged blood: To test if the blood of animals is attracted to electroballs (cattle mutilations, possessions, levitation, vampires), check if there is the attraction of a small animal, such as a mouse, towards a charged surface over it. Repeat the experiment after letting the animal breathe charged air from an air ionizer. If it works, the different attraction to charged blood after breathing ionized air should be noted. It is not clear if it works with the electrical charges of each polarity, so it must be tested with both positive and negative.
- Test the attraction of Electro-balls to blood outside the body. Based on folkloric beliefs and reported blood based phenomena, many societies throughout history practiced blood sacrifices to the gods, supposedly to prevent demons and spirits from attacking people or

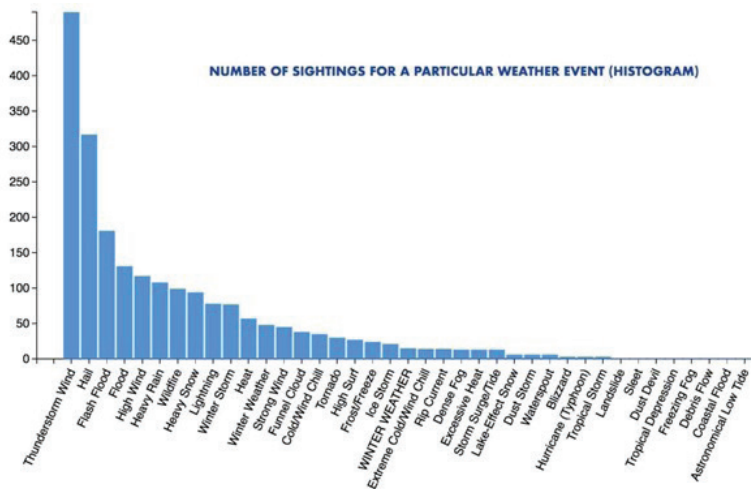


Figure 22. To examine if severe weather events influenced sightings, USC Viterbi computer science master's students joined the UFO dataset with a NOAA dataset and found that most sightings occur during thunderstorms. Source/Team 8 Final Project Visualization.

livestock.

In Situ Experiments

To test these ideas in situ, we need to identify the places and circumstances where they should be easiest to find.

Places

Locations with heightened conductivity and a propensity to accumulate charge including:

- Mountain peaks (Mount Shasta), hilltops (castles), isolated islands, buildings, boats
- Around rivers bordered by deserts, such as the Nile and Colorado rivers.
- Sites like caves, forest rings, wells, oil rigs, or missile silos due to their underground conductivity.
- Upper floors and basements of buildings, especially places with pipes, such as bathrooms or kitchens, and along large metallic infrastructures such as cables, pipes, drill holes, fences, or railway tracks.
- Areas under auroras or with large precipitation of particles (Figure 6) and around magnetic anomalies at low or high altitudes (Hessdalen).
- Around active fault lines or volcanoes, such as Popocatepetl and Yellowstone.
- Sites ionized by radioactive contamination, including Chernobyl, Fukushima, basements with radon, and nuclear facilities.

Moreover, recent reports of repetitive paranormal or UFO activity often cluster in specific locales, such as:

- Haunted houses, characterized by phenomena like Poltergeist activity, ghost sightings, demonic possessions and extreme sleep paralysis.
- UFO or cryptid hotspots and areas with documented cases of animal mutilations.

Circumstances

UFO sightings are most prevalent around 9:30 PM, particularly when there is a full moon (Kovalyov, 2022). This phenomenon also tends to coincide with earthquakes, volcanic activity, auroras, meteor showers, and severe weather conditions (Figure 22).

Similarly, other paranormal occurrences, such as Poltergeists, cryptids, extreme sleep paralysis, and demonic possessions, tend to peak at night, around 3:00 AM (Roll, 2003).

During electric storms, they have been seen as lenticular or spherical clouds, as ball lightning, glowing orbs, and translucent or transparent Electro-balls. Transparent Electro-balls seem to be the most common, but IR cameras or polarized filters are required to see them.

Certain cloud formations, including ellipsoidal, spherical, lenticular, and teardrop-shaped clouds, are not recognized by meteorologists as formed from masses or charged air.

Measures Proposed

- Barometric pressure, temperature, humidity inside clouds and air around them.
- Measure electromagnetic fields, radioactivity, and ozone levels in the air.
- Analyze their chemical composition with spectrometers if they are luminous.

which it is anticipated that certain physical source causes may be inferred.

Table of Effects Frequency	
• Apparent abductions	129
• Electromagnetic effects on vehicle(s)	77
• Paralysis	75
• Perceived time loss	75
• Light beam effects	61
• Eye injuries (e.g., temporary blindness, conjunctivitis)	54
• Heat	43
• Medical exam	42
• Burns	41
• Unconsciousness	33
• Marks left on body	33
• Significant sound effects (e.g., humming)	27
• Electrical shock	23
• Physiological/emotional shock, intense fear	23
• Prickles, tingling sensations	22
• Pain	22
• Skin sores, rash	18
• Induced headaches, migraines	18
• Force field impact	18
• Nausea, vomiting	17
• Sensation of cold	16
• Disorientation, confusion	14
• Ground traces	10
• Weakness, fatigue	9
• Amnesia	9
• Apparent experience of telepathy	9
• Numbness	8
• Significant odors	8
• Voice loss	7
• Appetite loss	7
• Insomnia	7
• Perceived time suspension	7
• Dehydration	6
• Swelling of tissues	6
• Dizziness	5
• Weightlessness, levitation	5
• Healing	5
• Sexual encounters	5
• Deaths	5
• Diarrhea	4
• Hair loss	4
• Nightmares	4
• Claimed ESP development	4
• Nose bleeds	3
• Tastes	3
• Ringing in ears	3
• Weight loss	3
• Breathing problems	3
• Urination problems	3
• Gynecological problems	3
• Claimed implant	3
• Perceived teleportation	3
• Stunned	2

Figure 23. Study on UFO-Related Human Physiological Effects during close encounters.

- Shooting intense laser beams through lenticular clouds could trigger lightning inside or toward the ground. This is being investigated today with storm clouds.
- Monitor voltage surges in power and telephone lines, as they are sources of electrons.
- Measure ionization of air, from ground to air discharges, and measure currents in conductive pipes and lightning rod wires. Especially interesting in moments and places with a higher probability of having paranormal phenomena mentioned before.
- Measure environmental radioactivity because it increases air conductivity, which correlates, in contaminated areas, with reports of UFOs and paranormal phenomena.
- Ground electron flow induced by the moon, storms, aurora and meteorite EM pulses. During earthquakes, over-voltages of 5-10 kV were recorded in underground cables.
- In natural environments, attract them using large surfaces charged by high voltage generators or Van de Graaff generators.

APPLICATIONS

The spontaneous and stable presence of plasma inside ball lightning and radioactive emissions suggest the possibility of using an electro ball to keep the plasma confined in a nuclear fusion reactor as a simpler and

cheaper way than with, for example, using a tokamak fusion reactor (Tar, 2009). Charged deuterium and tritium would be in different layers, reacting between both layers in this proposed simulation of ball lightning within a fusion reactor, which essentially reproduces the forces and temperature of the sun (Oreshko, 2015).

EXPECTED DANGERS

Warning!: Electro-balls pose significant dangers. Refer to the health risks associated with UFOs in Figure 23. Even small Electro-balls present numerous health hazards, including electric shocks, burns, cuts, bruises, internal bleeding, irritating gases, ionizing radiation, hallucinations, seizures, paralysis, emotional trauma (PTSD), and the Hitchhiker effect. In severe instances, risks extend to fatal encounters, displacement, mutilation, lightning strikes, deep burns, and radioactive poisoning. It’s crucial to avoid inhaling electrically charged air, particularly during experiments conducted in situ, to minimize attraction. Damage to sensitive electronic devices is a frequent occurrence. While Faraday cages are typically effective in containing the phenomenon and its effects, some instances have seen penetration through solid metallic sheets (Oreshko, 2021). Sometimes, ionized air has exhibited extreme conductivity, leading to battery discharges, activation of appliances and lights, and a significant surge in electrical consumption. Incidences of fires have also been documented.

Remember: if this explanation is correct, reported real or imagined phenomena such as demons and monsters are connected to Electro-balls as well.

CONCLUSION

There is a consistent historical record describing paranormal phenomena. It is theorized that many stories exist in folklore and can be classified as being caused by Electro-balls. This text presents a comprehensive exploration of electroballs and their potential and categorical role in explaining a wide range of paranormal phenomena; this paper lists this phenomenon systematically and presents and examines literature and evidence in order to hypothesize possible connections to electroballs. While an exhaustive description of each phenomenon is outside the scope of this paper, the list is a starting point and reference for researchers in this area. By proposing a model grounded in scientific principles, it offers a potential avenue for further understanding and investigating these unexplained events. Since Electro-balls may happen under a very short onset time and at unpredictable locations, they tend to be very difficult to observe and measure. With the proliferation and



advancement of all sorts of novel photographic devices, the data matrix regarding this phenomenon is rapidly advancing. Many of these devices are able to record high-resolution video, which will be of immense help in collecting data on this dynamic object that seems to come out of nowhere, exist for a short time, and then randomly wander through space before dispersing.

Obviously, more photographic and videographic data of these anomalies and properly controlled studies are needed. Simulations and laboratory recreations of this phenomenon would also help to shed light on this perplexing rare phenomenon.

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