Message from Ed Lewis about "Strange Particles" and the Need for Paradigm Change in Physics Were It To Continue To Develop

February 22, 2019 (extended Feb 25)

Someone sent me this email, and I thought it might be a good set of propositions to write about because the ideas therein are common among CF researchers. Some researchers hold that the "strange traces" of the Russians are caused by monopoles, especially what is called the Lochack monopole that is a theorized kind of "leptonic monopole." Many in the CF Field, especially older people, say that there is no need for any kind of paradigm shift. They say that their own Quantum Mechanics theories are correct or that they don't see a need for a drastic revision of QM. They say the anomalies of CF can be explained by QM one day. To me, this is nonsense. Their attempts haven't worked for 30 years, and they keep ignoring all the anomalies of plasmoid phenomena.

Here is a message I received:

It is well known that we study the world around us, based on some basic theoretical constructs. which are a generalization of well-established experimental facts.

Such basic models are, in particular, electrodynamics and quantum mechanics, the validity of which is confirmed by the coincidence of the results of calculations with the results of experiments. Of course, these theories are valid at certain scales (at not very small distances, at moderate energy, etc.).

The problem of the structure of the atom belongs to the field where the laws of electrodynamics and quantum mechanics work very reliably. In my opinion, all the effects that are observed in these systems should be in good agreement with these theories.

Of course, sometimes at the scale of atoms and nuclei such phenomena are recorded that, at first glance, it is difficult to explain with the help of "standard" models of atomic and nuclear physics. Such processes include, in particular, the LENR phenomena. The actual question is - is it necessary to rebuild the entire theoretical basis for each such phenomenon (or process)?

If you take this position, then a natural question arises - how to be with the billions of facts and results that are already perfectly consistent with the existing theoretical model?

Based on this concept, I believe that at the moment there are no reasons to abandon the existing "quasiplanetary" model of the atom and proton-neutron model of nuclei, interpreted on the basis of quantum mechanics. It adequately describes all the properties of atoms and nuclei.

On the other hand, I confirm the authors' right to their model (in particular, to the model of some plasmoids). But in this case they must show that this model leads to the same well-established results (in particular, to the spectrum of electromagnetic transitions, to the selection rules, etc.).

The same applies to the LENR phenomenon.

I believe that the concept is erroneous when for each manifestation of LENR (in crystals, gases, liquids, electrical discharges, biological systems, for light and heavy nuclei, etc., including the prohibition of the synthesis of radioactive daughter isotropics and the suppression of gamma radiation during LENR) built its own separate model. In my opinion (and I confirm this on the basis of my calculations), these processes are described by a single mechanism, which ideally agrees well with quantum mechanics.

This is in very good agreement with the principles of the "Okama razor" - do not create entities (i.e. models) up needed!

Regarding incomprehensible tracks and holes, which are sometimes observed in experiments, they must first of all be carefully examined (to make sure they are reliable!) and only then build a model. A typical example is, in my opinion, our old experiments in the Proton 21 laboratory, where we first carefully studied all the parameters and then created a possible process model that does not contradict quantum mechanics and electrodynamics — the model of a magnetic monopole.

| Also | attached a | naner | regarding | magnetic | monopoles |
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| \neg 130 | attached a | paper | i Cgai airig | magnetic | monopoics |

The topic of experimental plasmoids was developed first by W. Bostick in the US and then by Shoulders. It seems to me that this person hasn't studied the litature on plasmoids by Bostick, Shoulders and others. The person never mentioned them. I think it is very necessary for people to **read the literature** if they are going to comment on my ideas of plasmoids.

I know in the CF field that there are those like me who say that the Russian experimenters were and are still simply producing plasmoids of the kind long studied by Shoulders and other Americans, and they saw no reason to believe these are some strange type of monopole that needed a whole new theory on special leptonic monopoles developed for their discovery. I could cite a paper or two where Shoulders explains this.

Yet there are still people insisting that these are strange monopoles, but they don't seem to acknowledge the prior work on plasmoids at all. So for this long going difference of opinion now two decades long, I'm writing this. Think through this issue, read my writings and Shoulders' writings and Kuhn's book.

For example, there is this article: "EVOs and the "Strange" Particles of L.I. Urutskoev" by Ken Shoulders © 2007. In it, he explained that Urutskoev and the many others (Russian and French mainly) who started research in this area following up on Urutzkoev's r esearch are simply finding the EVOs.

EVO was a purposefully non-meaningful name he choose because he says he wanted some sort of name devoid of meaning for the phenomena. He knew that in Bostick's plasmoids are these smaller objects he called EVOs and other names over the years. I call these smaller objects simply plasmoids or active plasmoids. Or I call them ball lightning-like plasmoids or sometimes simply micro ball lightning.

Questions..

I want to say though that the current file that I find online is not the file I remember on Ken Shoulders' own site: krscfs. He had that site up while he was alive. It was his own personal one. The article with the same or similar title that I remember from there was dated around 2002, 2003, 2004 and was shorter and less detailed.

I kind of wonder if someone ele wrote this version that says 2007. Or maybe Shoulders added in new stuff before he died. In the newer stuff I find online dated after about 2007, I don't quite recognize the writing style as being his. Perhaps before he died, he put up or ciculated new, sometimes quite roughly or "cludged" articles and revisions of some earlier articles such as the one cited above. Perhaps someone helped him do that so the style doesn't seem quite like Shoulders' own work.

I followed Shoulders work and what he put online closely from about 1996 when he started writing articles to about 2010. I don't remember some of the stuff online now. When I saw the new articles, I was suspicous and still am about those newer versions and some of the pieces after about 2007.

Scientific Revolutions (Paradigm Shifts) Happen about Every 80 Years

In the history of science as taught by historians such as Thomas Kuhn in *The Structure of Scientific Revolutions*, he shows that periodically (it works out to 80 years on average), the development of science is not "incremental" as he called it.. but **revolutionary**. Periodically, there are revolutionary changes in physics where one "paradigm" is replaced by another.

This happened with QM/Relativity theory replacing the experimentally contradicted hypotheses of Classical Field theory starting around the year 1905. Before that, Classical Field theory replaced the Fluid paradigm in the early to middle 1800s. Etcetra back to Copernicus.

The person wrote:

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My response:

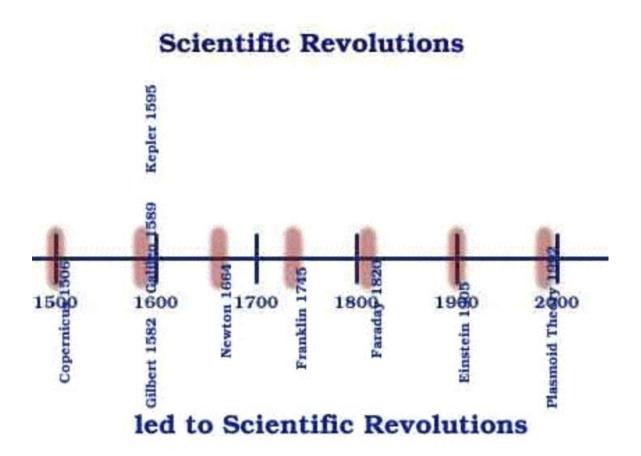
I agree that QM can explain thousands and maybe millions of observe effects. Thousands of people have labored for decades to make this so.

But it doesn't mean that there is no need now of a change of paradigm. As Kuhn described in his book, repeatedly... one of the main arguments against a new paradigm is that people say: "The old reliable theory works well for the myriad of observed effects and has been proving so accurately predictive for decades..."

The simple answer of someone **proposing a new paradigm model** is something like this: "The old theory can't resolve all the important anomalies that have more recently been discovered such as..." then they make a list of what they think are the big anomalies....

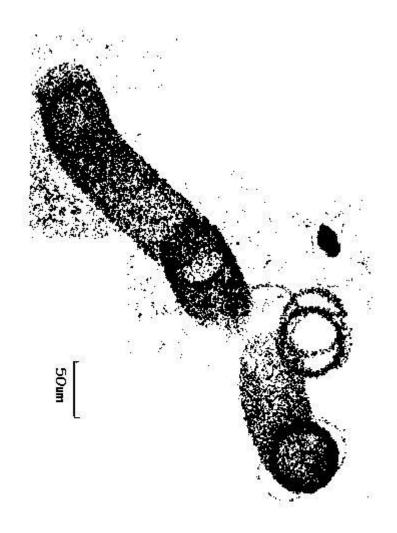
I suggest that people who want to understand these topics, scientific revolutions and when and how they happen and plasmoids, read Kuhn's book and Shoulders' writings.

Here is a chart of the paradigm shifts in physics since Copernicus



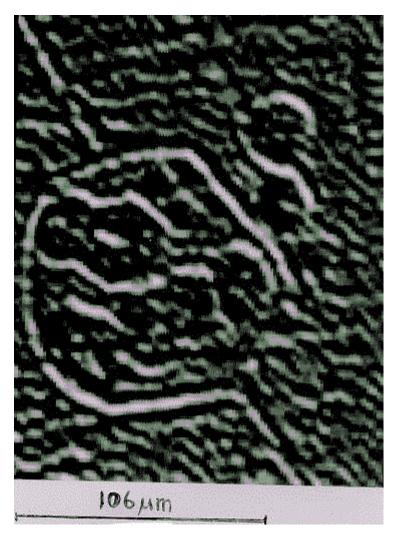
This chart was made by me about the year 2000. It shows how the major paradigm shifts in physics, if plotted on a timeline, do show a clear periodic pattern.

Plasmoid Markings (Traces) from the Past and from Space



This shows a ring plasmoid skimming and hopping on his nuclear emulsion (film used to get traces of particles).

From T. Matsumoto, *ARTIFICIAL BALL LIGHTNING -- PHOTOGRAPHS OF COLD FUSION*, January 17, 1995, manuscript presented at the Fifth International Conference on Cold Fusion, 1995, Monaco.



From 1996 (October or so). This picture was taken by me on a lexan casing from Miley's lab of a cell that had a lot of chemical elements that appear post electrolysis called Ni/plastic Run #8. For more information, see this old web article I made back in 1996 or 1997. http://www.sciencejunk.org/oldsite/ELEWIS9.html

Often, we see that a chain of plasmoids form a circle as in the example above. Shoulders called these formations "necklaces."

Here, in **Figure 4** below, we see a **typical plasmoid ring necklace mark Shoulders** showed people from his 1980s experimental lab research:

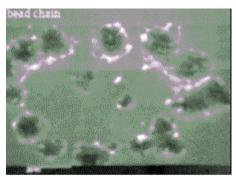


Figure 4. Scale is 25 micrometers.

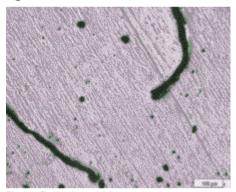


Figure 5, Scale is 100 microns

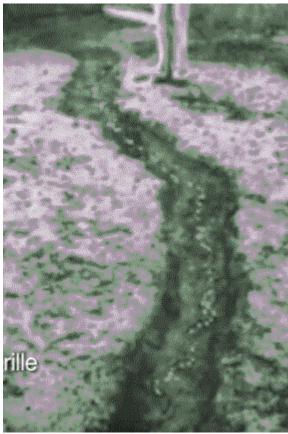


Figure 6. Scale is 70 microns.

In Figures 5 and 6, there are plasmoid marks by Savvatimova in the early to middle of the decade of the 2000s. We see two types of typical patterns. In Figure 5, these are what I call trenches. A moving active micro plasmoid (white state or maybe grey state) dug the trenches. Trying to determine where the material goes and how the material along the sides of the trench (you can see some uplifted material we call "sloshing" along the rims) are transmuted, transformed, moved, etcetra when it was in an active atomic plasmoid state is part of the fun.

The material doesn't always all revert back to a normal dormant atomic state. There might still be active patches in that sample if the sample still exists.

Figure 6 are typical tracks. Sort of like trenches or bead chains markings. It is these kinds of markings that the Russians started calling "caterpillar track" markings. The different kinds of patterns that have been discovered to date around the world are astounding and mirrored in astrophysical phenomena and terrestrial phenomena.

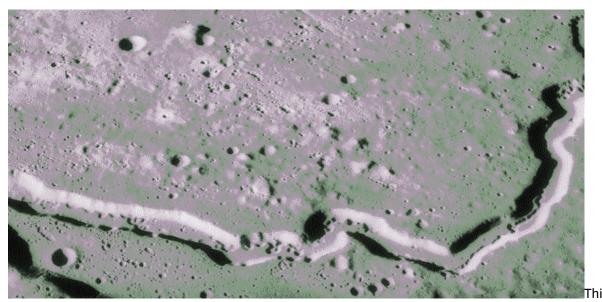


This is a ball lightning/lightning caused rille or trench dug by such a thing in the ground. All lightning bolts have a leading ball lightning that goes ahead of it and somehow sets the channel. This was a discovery of Ken Shoulders back in the 1980s, and he described this effect in his earliest patents of around the year 1990: that what we see as electrical discharge strokes (whether microscopic, common types such as static electricity discharges, or atmospheric or celestial discharges) are led by a plasmoid object that sets the trail up.

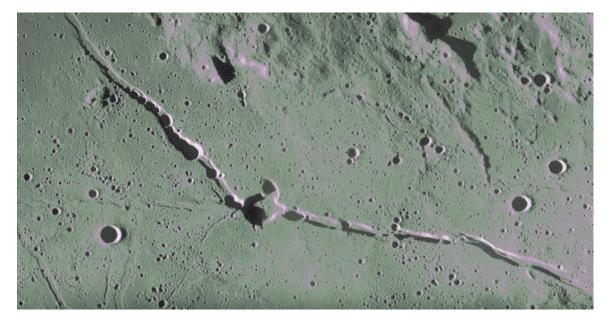
You can see in this a fairly common pattern of pits set in a line. Such pits in lines like that suggest two phenomena: one is called the "plasmoid chain effect" (that is, connected plasmoids in a line similar to a bead chain landed in the trench (less likely)); and the other I call a plasmoid hopping effect (that is, one singular small plasmoid (from the scale of the man's feet perhaps 2 or 3 inches across) skipped along and as it did left the pits).

It would be great if more information can be had on what was in the pit or if anyone ever did a chemical analysis of the parts of it. Generally however, where there is an active white or grey state plasmoid interacting with any dormant atom (I call atoms not in a plasmoid state dormant atoms), the atoms will change state, even momentarily to different kinds of plasmoids and exhibit this spectrum of common behaviors depending on what state they change to and other criteria: transmutation of the residues and isotopic changes, extended active plasmoid life, resultant geometrical and "growing" or transforming or transmutating atomic patterns, radiation of various types, plasmoid emission, etc. etc.

I forgot whether this was reported to be a trench caused by ball lighting or lightning, but either way it doesn't matter since these are similar as I described above and I am not sure what the observer or observers might have actually seen or simply have inferred. It would be great to have a more accurate eye-witness report about it.



is a similar looking large rille on the moon. I again, don't know the dimensions, its name or other information, but I don't that that really matters because this is one of millions of various sizes and features. I do know this was taken from a craft far above it and that it is kilometers long. As per above, whether this is due to a singular ball lighting-like object or due to multiple ball lightning-like objects (such as a chain that landed in it), or due a discharge.... is uncertain...



This rille on the moon (perhaps a segment of the one above) also featues the pits in a row as well as a secondary small line above as well as double pit markings. Double pits marks are a characteristic and common plasmoid pit formation.



Another chain of craters on the moon. This is a quite common planetary feature seen often on the planets and their moons.



Plasmoids don't always leave pits or craters. They make mounds or mountains as well. Here are **boulders or mounds** on Mars. Other such formations have been found on Mars including rings

reminiscent of Stone Henge.

Domes or boulders like these are very common on Mars.



is the chaining effect way out in space somewhere. Reminscent of bead lightning.



About 6 plasmoids were in a chain next to the sun.

Tornadoes



This is faint. Objects such as this have been dubbed "solar tornados."

Tornadoes and ball lightning are actually the same thing basically because **large ball lightning developed tornadoes** and big whirlwinds and tornadoes had aspects much like that of ball lightning such as being luminscent or having luminescent parts. If one kind of thing converts to another, than the two kinds of things much be versions of the same thing.

To learn more about this and the evidence for interconversion of these kinds of plasmoids, see this article written in the early to middle 1990s called "Tornadoes and Ball Lightning." http://www.padrak.com/ine/ELEWIS3.html

I was suggesting that a tornado exhibited a gravitional effect in this article. A man who was caught in a tornado saw fir trees being plucked up by it. When he was directly below the rim of a tornado, "he felt a kind of pressure from above; he noticed an unusual smell of ozone; then he felt himself raised up, and this **not by the wind, for it was calm**, but as though by some invisible force."

Work was done by Vonnegut and others on vortices produced by electrical discharge. Ken Shoulders said it was experimental work such as these that helped him focus to begin his experimental research on microplasmoids.

"Miniature whirlwinds produced in the laboratory by high-voltage electrical discharges" (1970), R. T. Ryan and B. Vonnegut, *Science* **168**, 3937, pp 1349-1351.

For more accounts of unusual, electrical and luminescent tornaodes, see

R. Hall, "Inside a Texas Tornado," Weatherwise, 4, no. 3, 54 (June, 1951).

H. A. Hazen, "Electric Storms and Tornadoes in France on Aug. 18 and 19, 1890" *Science*, **17**, no. 434, 304 (May 29, 1891).



Someone named Aaron Jayjack published (on May 26, 2016) 4K footage of the Big Spring, Texas anticylonic tornado on 05-22-2016. He wrote: "This anticyclonic tornado was extra rare in that it was not a satellite of a parent tornado, and was associated with a mesoanticyclone. This footage was taken about 8 miles SW of Big Spring, just off of I-20 interstate. I was looking south while taking the footage. You can clearly see a clear slot punch in from the south east and wrapping around to the north east.

Unbelievable lightning strikes occur at around the 1:50 mark including one bolt that **starts behind the tornado**, **wraps around the front**, **and strikes behind the tornado** - an amazing shot. Video captured with a Sony PXW-Z150, and likely one of the first if not the first captures of an anticyclonic tornado in 4K video."

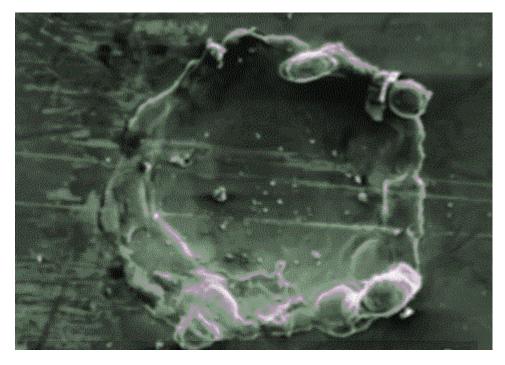
Anticyclonic tornadoes in the Northern Hemisphere are tornadoes that turn clockwise. They are rare. This picture is evidence that the ball lightning that led the visible lightning bolt had to **follow the track of space defined by the plasmoid.** So the tornado, the material, and the ball lightning turned in a clockwise direction. I think it is evidence of gravity.

Geometrical Patterns

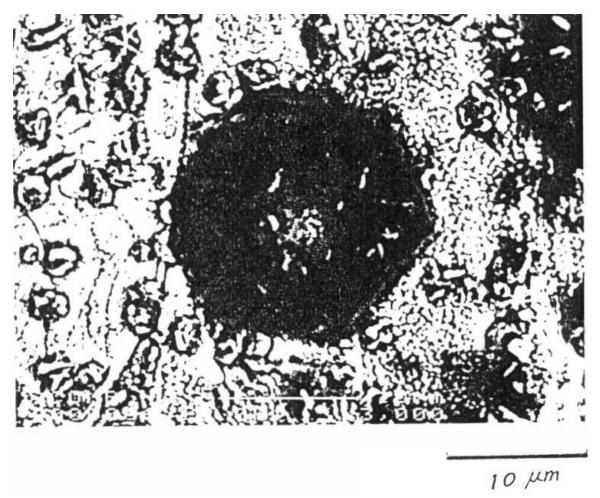


Jacob Gables and others have shown that simple discharges in sand will produce cratering similar to the cratering and rilles we see on the planets, the moons of the planets, and the asteriods. Usually, the craters are cicular, and there are often paired craters, but the picture above is of a **hexagonal crater** being dug by the discharge.

Geometrically shaped craters are quite common on the planets and moons.



Hexangonal crater produced by electrical discharge.

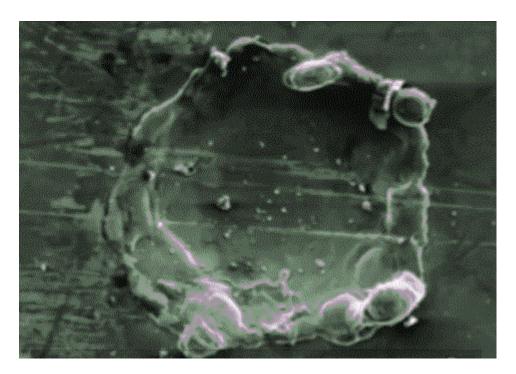


Takaaki Matsumoto also observed hexagonal plasmoid markings durng his transmutation and ball lightning research around the years 1989 to 1997. This hexagonal marking was not a crater. It was a plate-like deposit that was left by a plasmoid on a sheet of nuclear emulsion (acrylite plastic coated with a special film to register particle tracks).

He wrote that the microplasmoids left the cell and flew to the detection film.

RIng and . Matsumoto published very similar looking markings in *Fusion Technology* in the early to middle 1990s.

Microplasmoids themselves will often form geometrical patterns such as circles or rings and lines. Three might form a triangle, four might form a rhombus or quadrilateral arrangement, etc. An arrangement of six in a hexagon is common.



Hexangonal crater produced by electrical discharge.

I've written picture articles with pictures of plasmoid markings in space and in experiments starting from the middle of the 1990s. You can see some of them online at:

http://sciencejunk.org/?page_id=81

I also wrote a book on many of the topics described here such as a theory for why **scientific revolutions in the field of physics happens every 80 years** or so. You can find that here: http://sciencejunk.org/?page_id=227