

Artificial Ball Lightning production and exploitation device for Zero Point Electric Energy usage.

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Abstract,

Function Follows Form (FFF) in Quantum FFF THEORY.

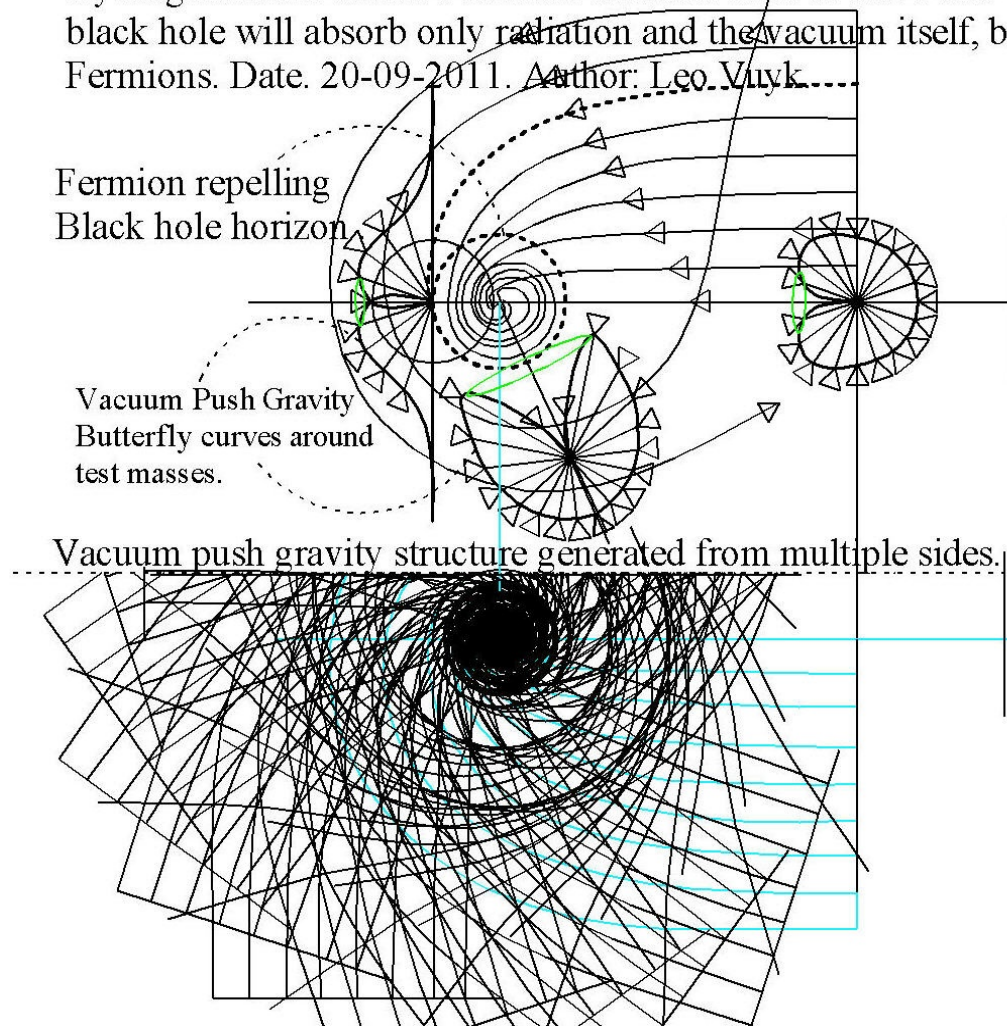
The Form and Microstructure of elementary particles, is supposed to be the origin of Functional differences between massless Higgs- Graviton- Photon/Gluon- and spinning propeller shaped Fermion particles with mass.

In Quantum FFF Theory, Ball Lightning is assumed to represent a small scale New Paradigm Black Hole (NPBH), able to produce so called Zero Point Energy. (ZPE)

In this letter we describe a possible design for production and exploitation of such ball lightnings, based on experimental experiences with Silicon-discharge fireball examples and our proposal for a new paradigm Black Hole (or Quantum Knot) based ball lightning plasma, as a part of Quantum FFF theory.

Quantum FFF theory states: Comets and Ball lightnings are micro new paradigm Black holes, equipped with a negative electric surface charge and hydrogen/oxygen/water creation by zero point energy effects.

Model below: Black hole cross section with schematic vacuum push gravity effects around test masses, depicted as Butterfly shaped vector arrays. OR: Zero Point Energy effects around a black hole. Nothing even NO gravitons will escape from within the black hole horizon! However the BH horizon is a (Higgs) particle collider and creator of electron positron pairs, annihilation and even Hydrogen nuclei inside a horizon oriented shell of electrons. The black hole will absorb only radiation and the vacuum itself, but no Fermions. Date. 20-09-2011. Author: Leo Vuyk.....



Introduction.

Quantum Function Follows Form (FFF) theory states, that the vacuum is seeded with fast oscillating massless Higgs particles, oscillating along a complex chiral tetrahedral vacuum lattice, which has the ability to transfer Photon and Graviton FORM information in bunches of oscillations, through the vacuum lattice with the local speed of light. Ref [5,6,8,9].

As a consequence there are no attraction forces on propeller shaped Fermions and there are even no attraction forces on new paradigm black holes. (11, 15)

If a New Paradigm Black Hole (NPBH) accelerates through the vacuum lattice (ref 4) it is only supposed to be possible by the anti-symmetric deformation of the vacuum lattice around the (NPBH).

According to Q-FFF theory NPBHs are equipped with a thin but effective Fermion repulsive globular horizon.

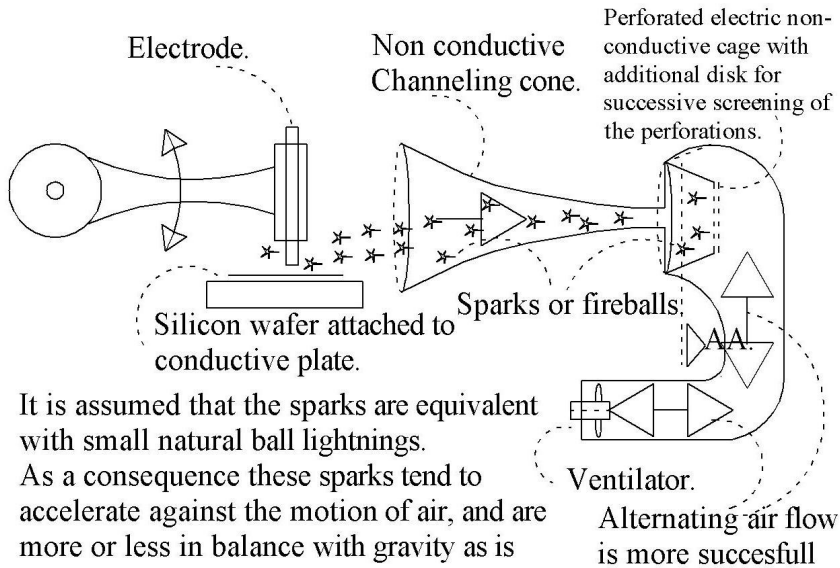
As a consequence Ball lightning and all other NPBHs do repel Fermionic matter, leading to plasma production and acceleration of the black hole into opposing air displacement or gravity concentrations.(ref 4,9,11)

This is in nature observed around Ball lightnings and most clearly in laboratory experiments, such as the bouncing spark-fireball production in Silicon Wafer discharge experiments. (ref.16,17,18,19)

In a former letter (ref. 9) we described the possibility of the theoretical solution to harness two micro black holes (ball lightnings) in a container for future Zero Point Energy or free electric energy production. (see ref. 9, figure 15).

As a result of the experimental evidence that the bouncing Spark-Fireball production in silicon wafer experiments (ref.16-19) have the same characteristic properties as natural ball lightnings and NPBHs, it is possible to describe the principles of a combined device of artificial ball lightning production and exploitation for Zero Point Electric Energy usage, see next figures 1-6.

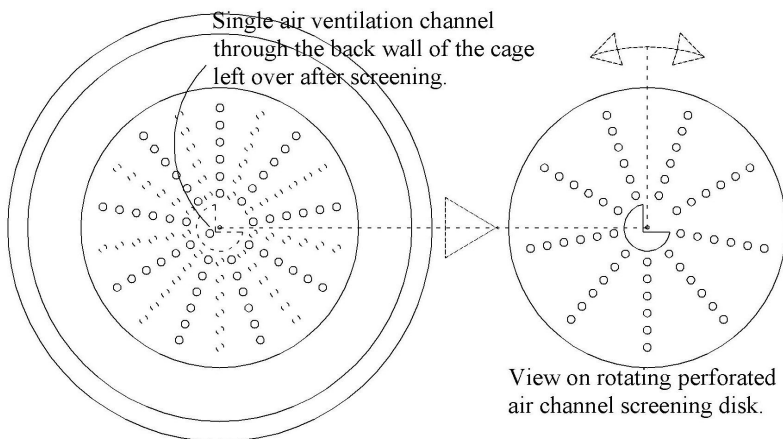
Cross section through an apparatus for Silicon-Spark bouncing ball lightning production, aiming to the channeling, catching and growing the resulting ball lightnings. d.d. 14-09-2011. Author Leo Vuyk.



It is assumed that the sparks are equivalent with small natural ball lightnings. As a consequence these sparks tend to accelerate against the motion of air, and are more or less in balance with gravity as is the case for ball lightning found in nature. However the experiment shows that a strong airflow is not resisted by the sparks. Conclusion an alternating airflow is needed to do the job.

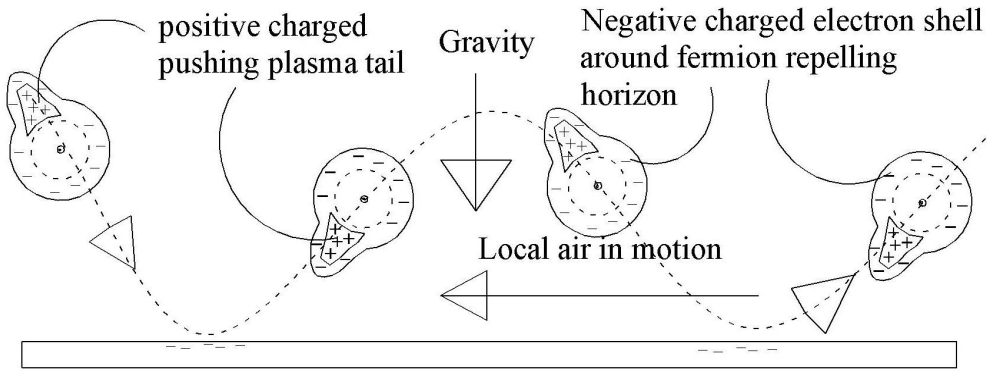
Secondly it is observed that the sparks bounce from electric isolated surfaces.

Figure 1, Production and gathering principle for Silicon discharge Spark-Fireballs.



Cross section AA through the electric non- conductive cage with perforated back wall and additional rotating perforated diaphragm disk. The disk has the function of air flow variation by successive screening of the perforations. By concentration of air flow into one single point, the fireballs will automatically concentrate on that single point and merge their nuclei into one larger nucleus. As a result the initial produced small fireballs (sparks) will not dye out as usual, but keep up the function of a stable black hole.

Figure 2, Example of a perforated wall with variable air transmission.



Bouncing micro black hole (ball lightning) with pushing plasma tail bouncing on a non conductive surface, as observed in Silicon discharge experiments and conform Qauntum-FFF Theory. Author, Leo Vuyk.

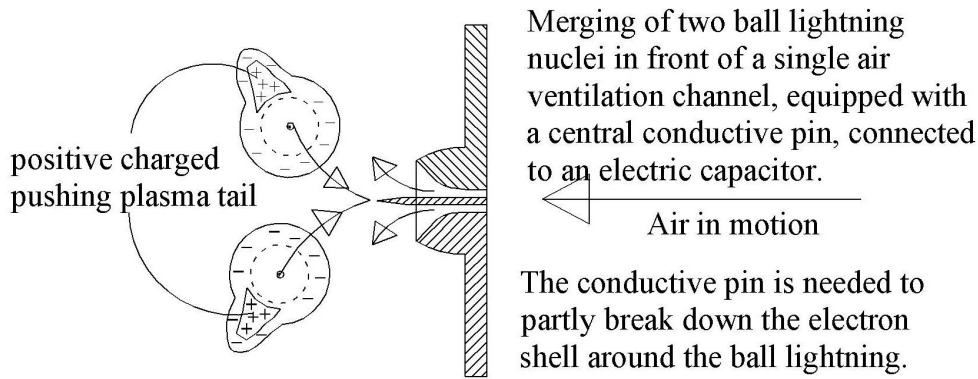


Figure 3, Principle of Bouncing Spark Fireballs with principle for merging small fireballs.

Cross section through the apparatus principle for Silicon-Spark (ball lightning) exploitation as electron pump d.d. 20-08-2011. Author Leo Vuyk.

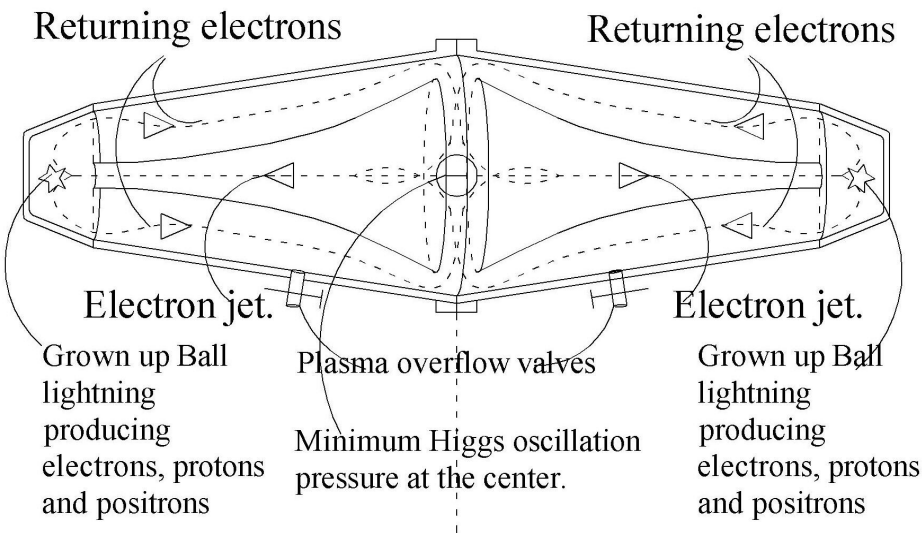
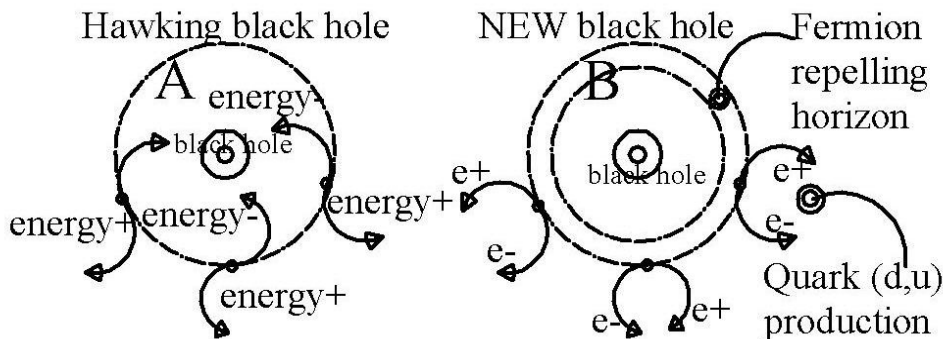


Figure 4, Cross section through a principle apparatus for exploitation of ball lightnings as an electron pump or ZPE Zero Point Energy production around two black holes. See also figure 6.

The NEW Black Hole Paradigm



The standard Hawking Radiation postulate is: that all matter (NOT all energy) is drawn into the Black hole.

My NEW postulate is that matter is even created (and pushed outside) at the Black hole horizon by QUANTUM FLUTUATIONS producing Electrons and Positrons. Some Electrons and Positrons will annihilate, but the rest will form Quarks and plasma, because the Higgs vacuum lattice is CHIRAL and prefer to link Gluons to Positrons and form U- Quarks in favour of Electrons and Gluons, which form D-Quarks.

Thus more Electrons will stay single and form Hydrogen atom shells. However they have less mass than Quarks and feel less attraction to the Black hole nucleus, thus Electrons form also an external shell around the Black hole inner shell of Protons and some Neutrons !

Due to the propeller shape of the particles all the plasma is repelled away from the black hole!! The Black hole will not evaporate !

This is the base for NEW Physics and a support for a new explanation of Cometary X-rays, Hydrogen and AMINO ACID production. Even Gas Pillar and Herbig Haro formations inside Nebula become a logic base. Author Leo Vuyk.

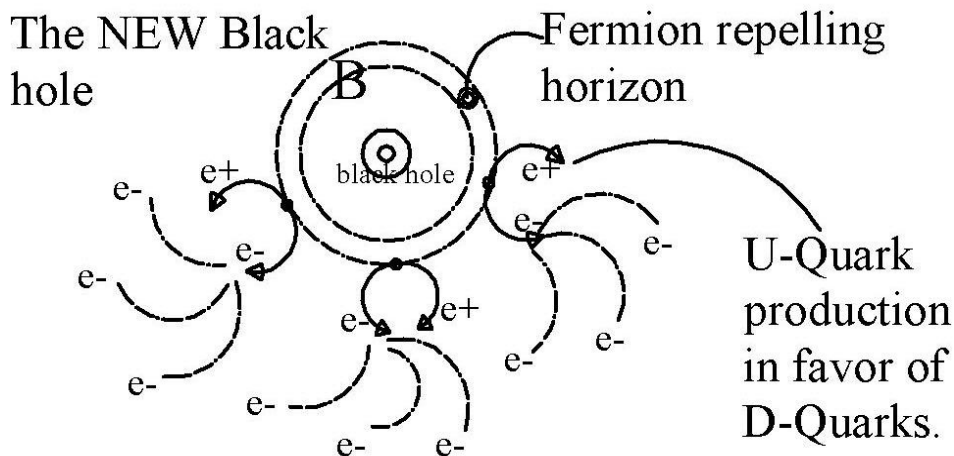
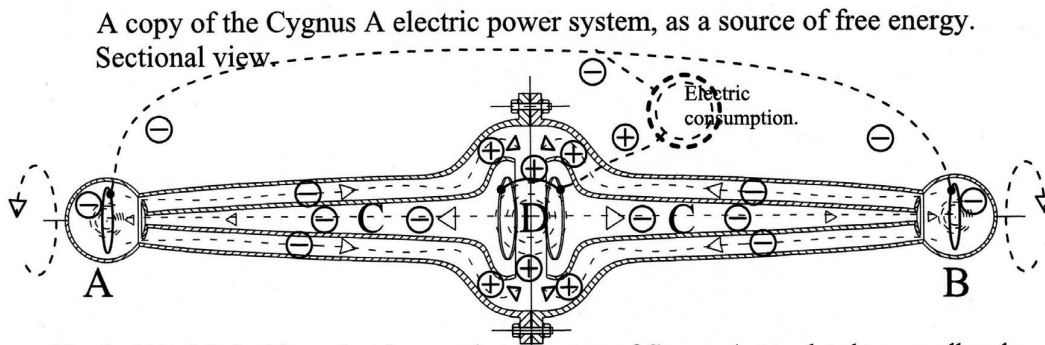


Figure 5, Principle of the new paradigm black hole model, described in Ref 4: "An Alternative Black Hole, Provided with Entropy Decrease and Plasma creation".



The dual black hole driven electric powerhouse system of Cygnus A, translated to a small scale micro black hole "ball lightning" solution. Artificial produced ball lightnings are located at point A and B, which are negative charged. The midpoint D is positive charged. The charge origin is to be found in the vacuum driven electron jets C just like Cygnus A. author: Leo Vuyk.

Figure 6, Device described at [ref 9] called: ZPE Zero Point Energy Examples Around Black Holes. (as figure 15.)



Figure 7. Example of ball lightning in nature pushed by self created plasma tail, comparable with Bouncing Spark Fireballs as observed in the lab see figure 3.

Dumbbell system of new paradigm Black holes kept apart by two Herbig Haro electron -ion particle jets. Zero Point Energy pressure effects around test masses are depicted as Butterfly shaped vacuum pressure curves (vector arrays) . In Q-FFF theory is Vacuum gravity pressure interpreted as Dark energy and black holes as Dark matter. The so coined "white/grey hole" in the middle is the Gas Concentration locus and center of all Star clusters and Spiral Galaxies. Date. 20-09-2011. Author: Leo Vuyk.

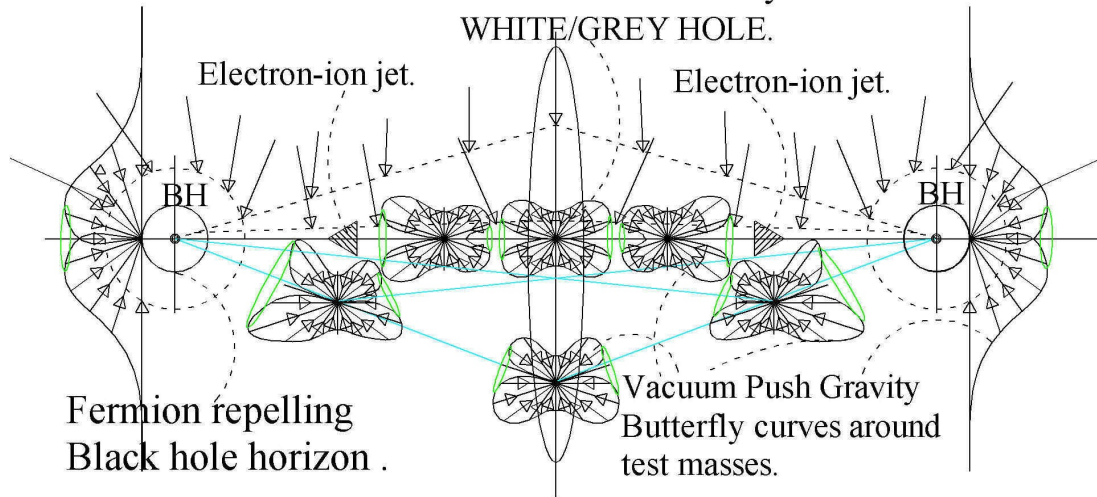


Figure 8, New paradigm double black hole system

Alternative interpretation of Silicon based Ball lightning globule shaped residues:

The next Electron microscope images of the Silicon based BL nuclei, are printed with permission of the author: Ronald Dekker et al.

Ronald Dekker, Martijn Goossens and Pascal de Graaf. TuDelft (University of Delft, the Netherlands)

Figure 9: Image of some silicon nuclei, all with globular shape and equipped with one large and several smaller appendices and diameters between 0.4 and 0.8 mm

Silicon globules as the result of the Silicon Ball Lightning experiment made by Ronald Dekker et al. (TuDelft The Netherlands).

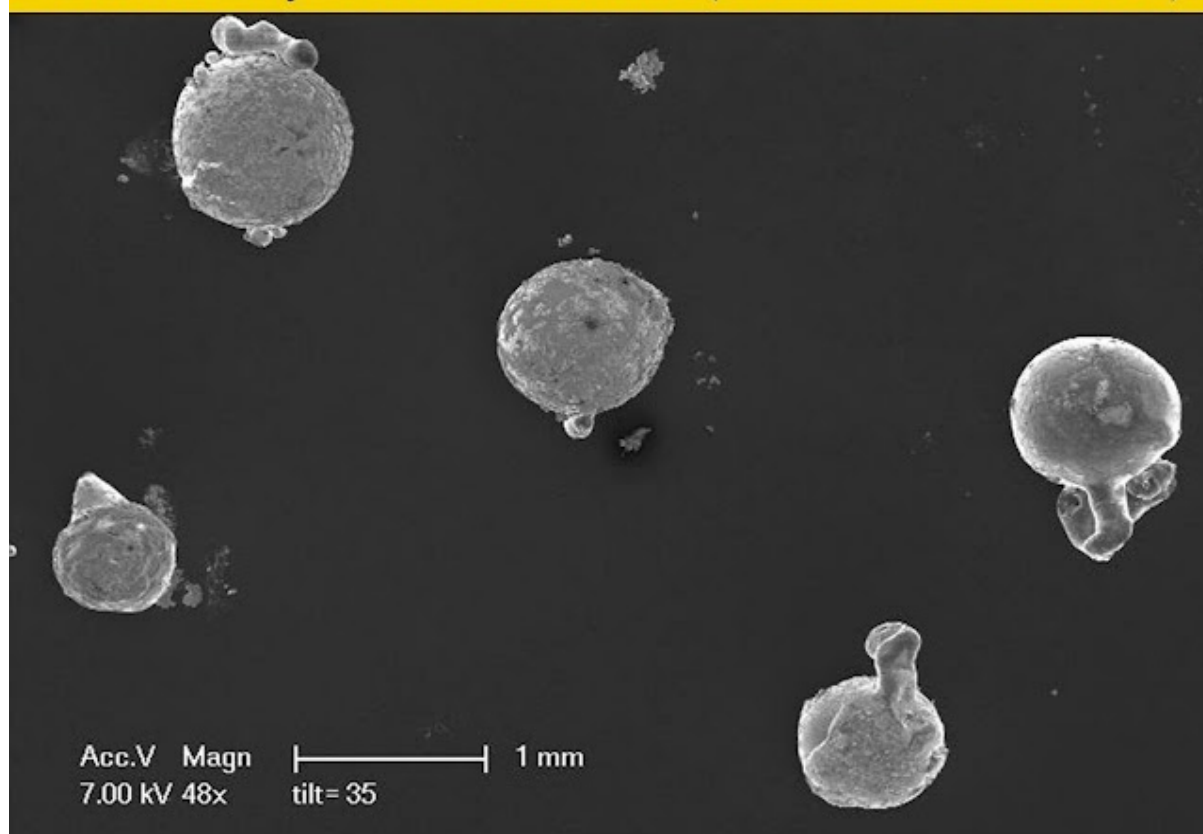


Figure 9,

A remarkable globular nucleus: equipped with several small globules- and only ONE larger appendix (TRUNK) without the oxidation skin observed at the Silicon globule.

Future research should focus on these differences!

For My Quantum FFF theory proposal, based on the new black hole paradigm, see:
 (see: <http://vixra.org/pdf/1103.0011v1.pdf> and <http://vixra.org/pdf/1108.0036v3.pdf>)

Figure 10. The silicon globule below represents the splitting of the original central NEW micro black hole (Quantum Knot) located inside the Silicon globule, into one larger and multiple smaller BH nuclei, tunneling through the silicon to the surface of the globule and leaving there "naked" Silicon globules (small) and only one larger trunk behind..

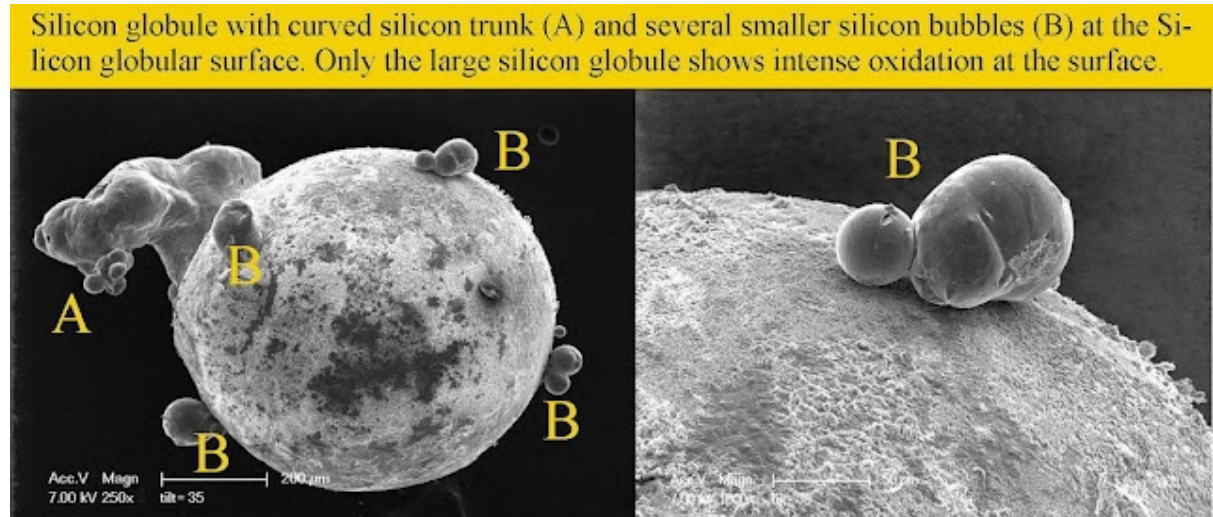


Figure 10,

Figure 11: Examples of possible micro black hole tunneling locations in sectional view.
 A: is a large central hole presenting an irregular shape with "arms" suggesting the beginning of the splitting process?
 B and C: sectional view of different micro black hole tunneling results?

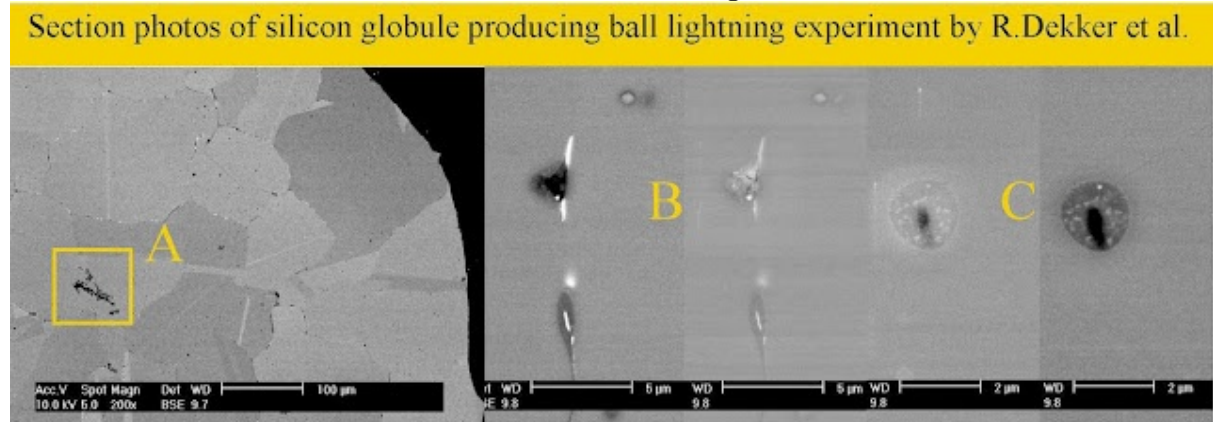


Figure 11,

Figure 12: Examples of large appendices or tunneling trunks or funnels assumed to be originated by the micro black hole while leaving the globule. Curved trunks are an indication for extra spin of the silicon globule at the end of the journey. (see also the "roundabouts" observed at the black scorch traces. figure 17)

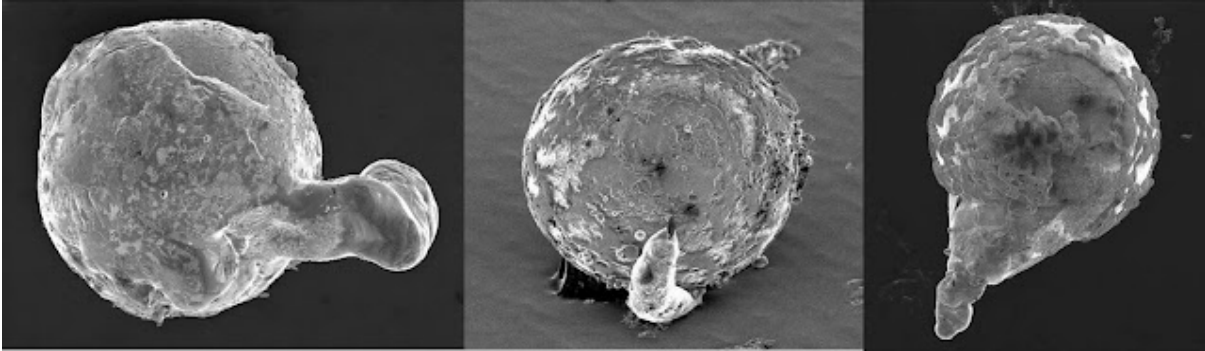


Figure 12,

Figure 13: Examples of small "naked" globules supposed to represent the tunneling exit of the smallest micro black holes.

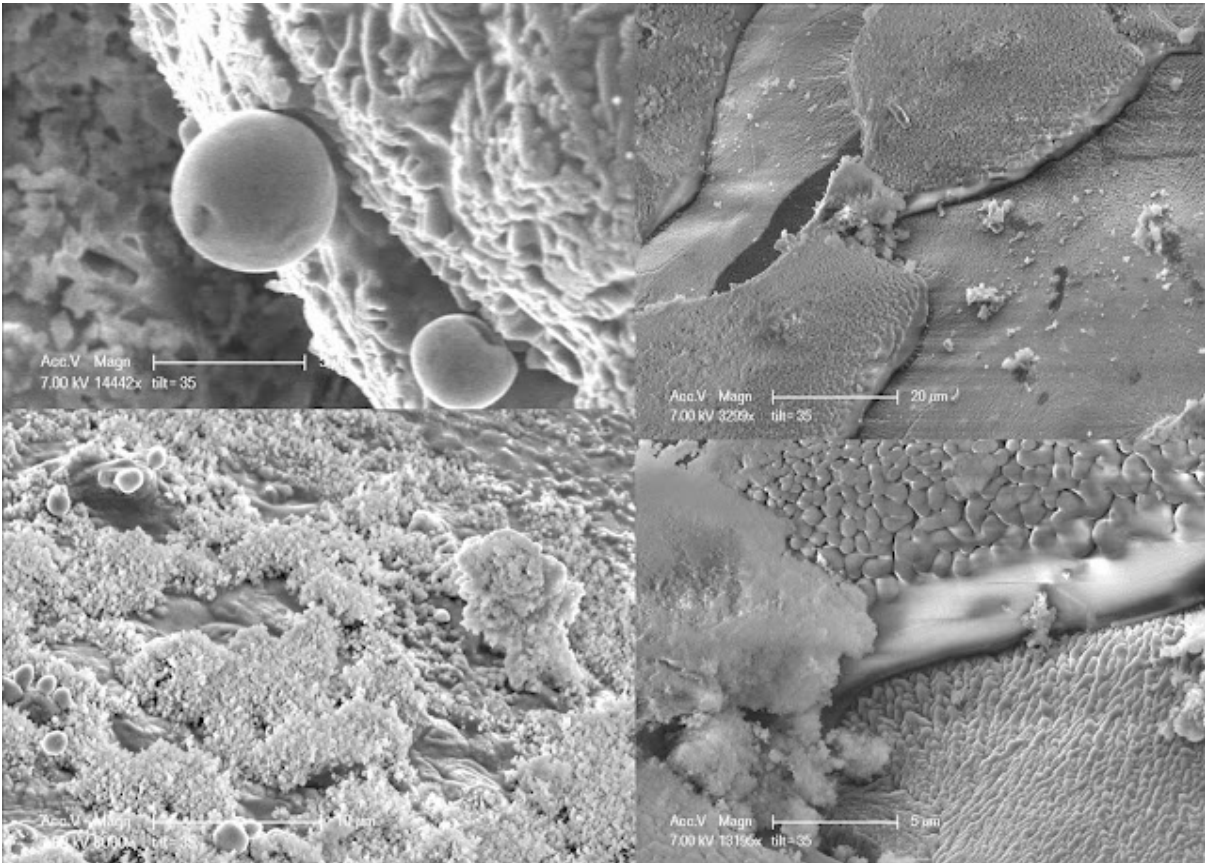


Figure 13,

How could we relate these images to Quantum FFF theory based effects?
 By assuming that splitting NEW paradigm micro black holes are the shaping origin of these silicon based nuclei. for new paradigm black holes see the older blog article (17-05-2012).

Figure 14: If we look at SECTIONAL VIEWS of these nuclei: we find some extra support for this hypothesis.

However, new experiments under nitrogen conditions combined with other variability's are needed to get more foundation for this hypothesis.

Sectional view of a Silicon globule of the Silicon Ball Lightning experiment made by R. Dekker et al. A: peculiar compound material residue inside the centre of a trunk shaped appendix. B: oxidation layer. C: section through a tunnel segment. D: Oxidation transition layer.

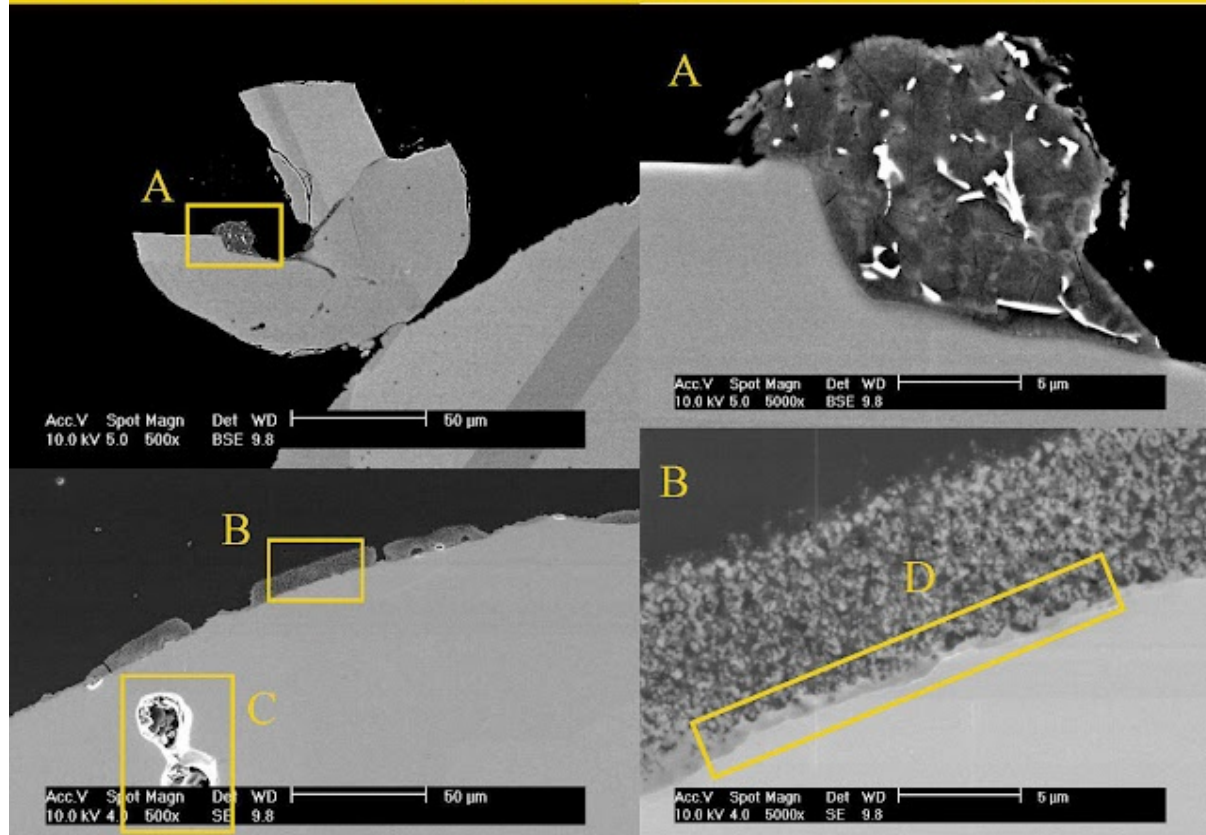


Figure 14,

Sectional views.

A; Future metallurgical research should define which molecules are gathered here.

B; Future research should produce clues why the Oxidation skin is monolithic and has a very thin boundary layer (D)

C: This double hole could be representing the curved exit tunnel of the main micro black hole as the origine of the nearby located trunk shaped appendix.(A)

Oxidation defects, curved appendices and Macro-Casimir compactification of granulates inside Silicon Ball Lightning globules (photos by R. Dekker at al. TuDelft the Netherlands)

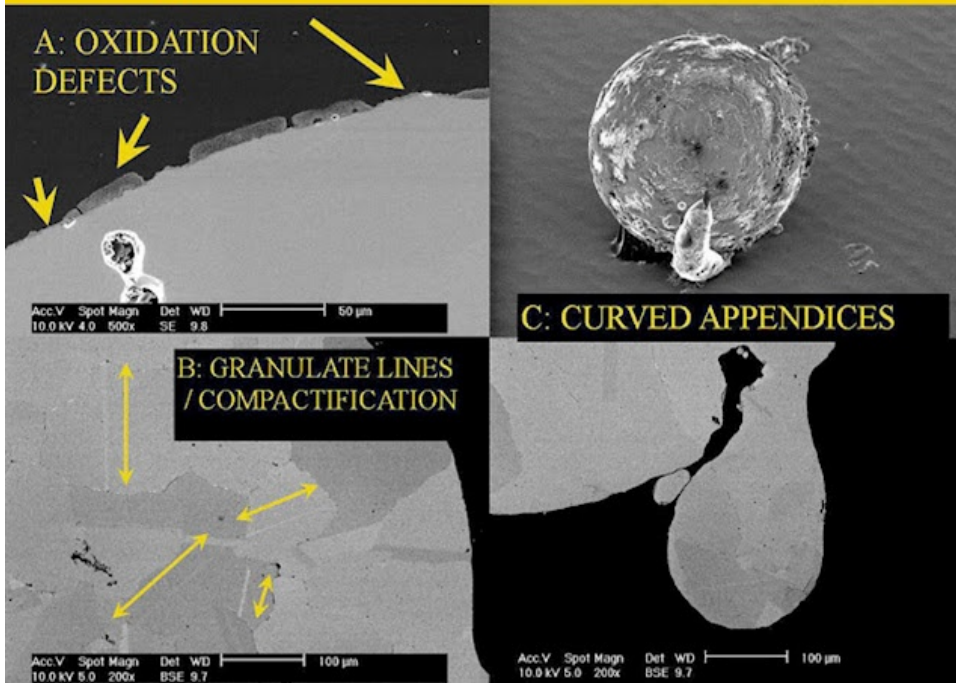


Figure 15,

Micro Black Hole (MBH) and Macro Casimir Effect (CE) on two masses (M) inside the oscillating vacuum lattice (OVL), according to Quantum FFF theory and observed inside Silicon Ball Lightning granulate compactification.

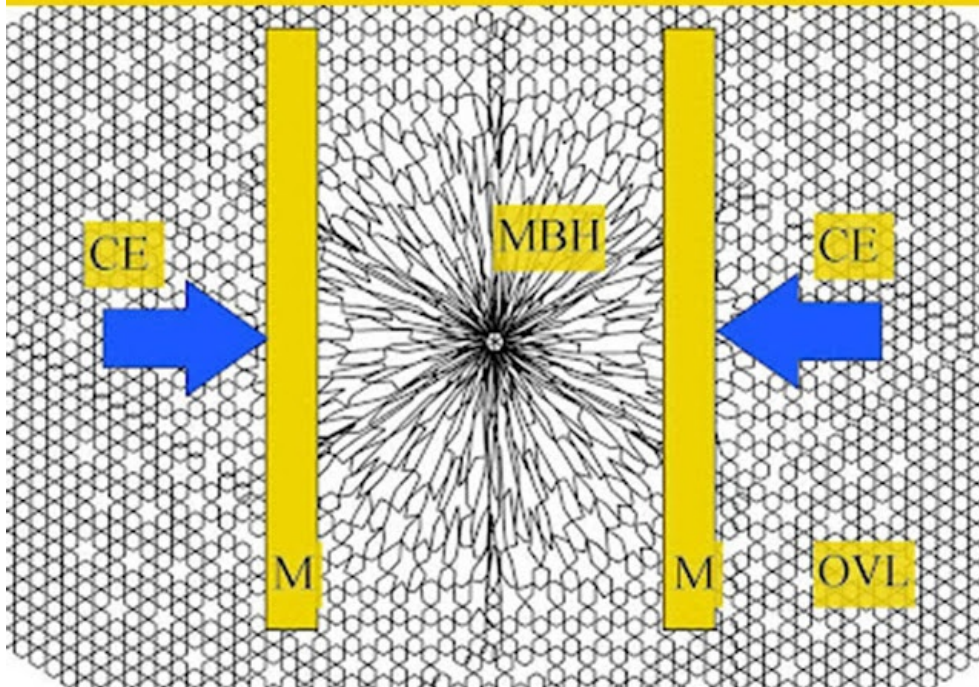


Figure 16,

For more info, see;

The new black hole at larger scale:

<http://bigbang-entanglement.blogspot.nl/2012/05/500-light-years-wide-cygnus-x-area.html>

this is an example for the proposal that NEW paradigm black holes are active at all universal scales from ball lightning Comets Sunspots Herbig Haro objects Galaxy forming Galaxy Anchor Black Holes (GABHs) Dark matter, and the Big Crunch/ Big Bang. (Pulsating Universe hypothesis)

Artificial Ball Lightning production and exploitation device for Zero Point Electric Energy usage.

<http://vixra.org/pdf/1108.0036v3.pdf>

Figure 17: Silicon Ball Lightnings leaving black scorch traces on (horizontal) paper, some with regular white bouncing contact points (ABCD).

Two traces are equipped with strange roundabouts (due to local silicon nucleus rotation?) at the end of the bouncing traces (A, C and D).

Future experiments should focus on these roundabouts, because it is assumed that here we will find silicon nuclei equipped with "Curved Trunks or Funnels" as the tunneling ejecting result of the large micro black hole.

Two aberrant rectangular scorches are observed at (E,F) assumed to be the scorching result of hot silicon particles without internal micro black holes.

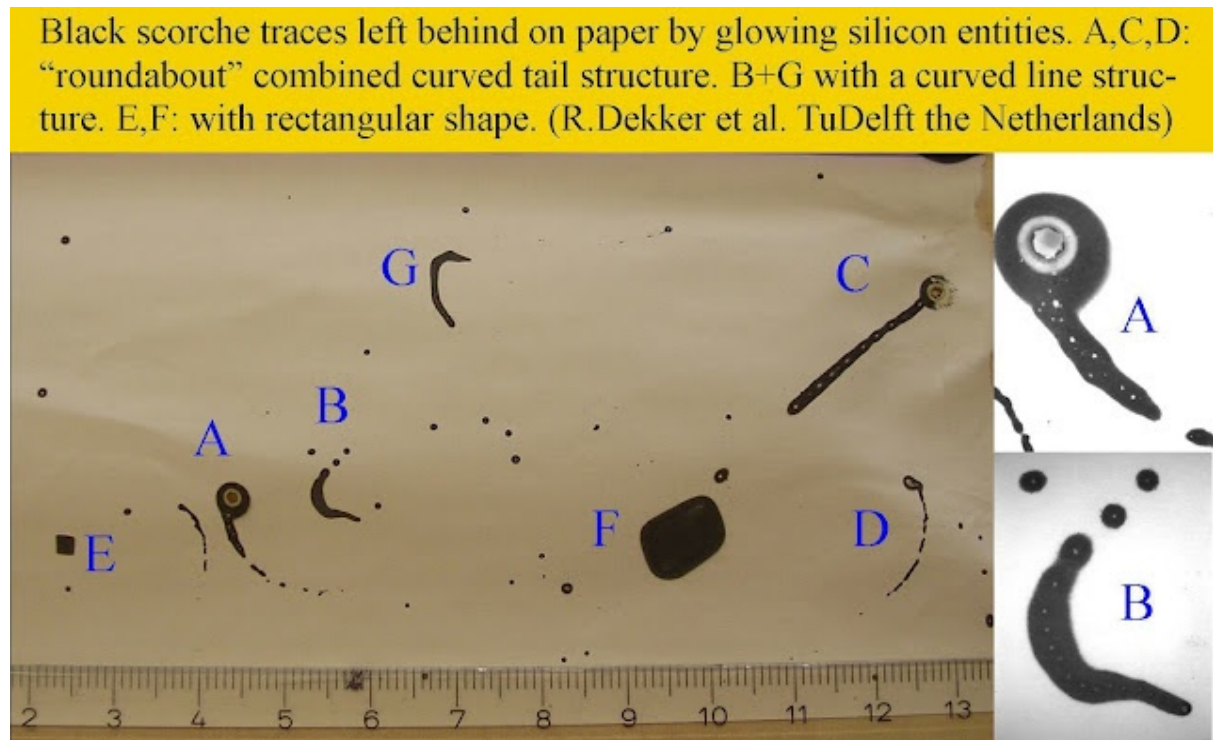


Figure 17,

Why Silicon? Silicon structure (A) seems to be related to the structure of Black Hole Quantum Knots (B) proposed by the New Black Hole paradigm of Quantum FFF Theory. Basic Black Hole Quantum Knots are assumed to be formed by 3,4 or more real photon particles (B+C)

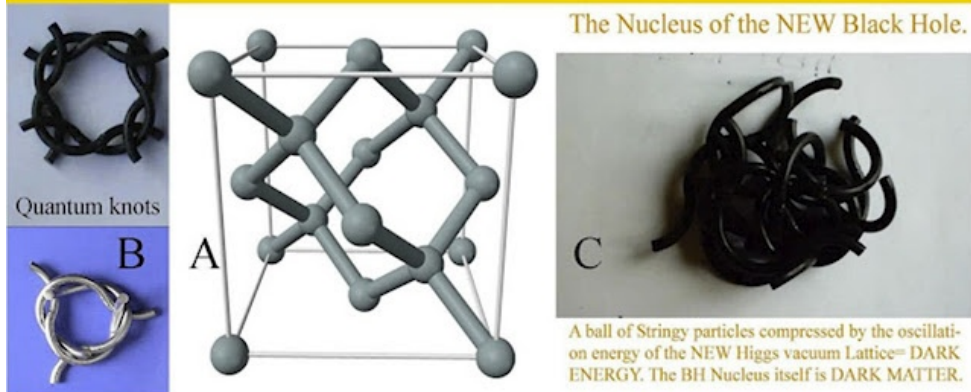
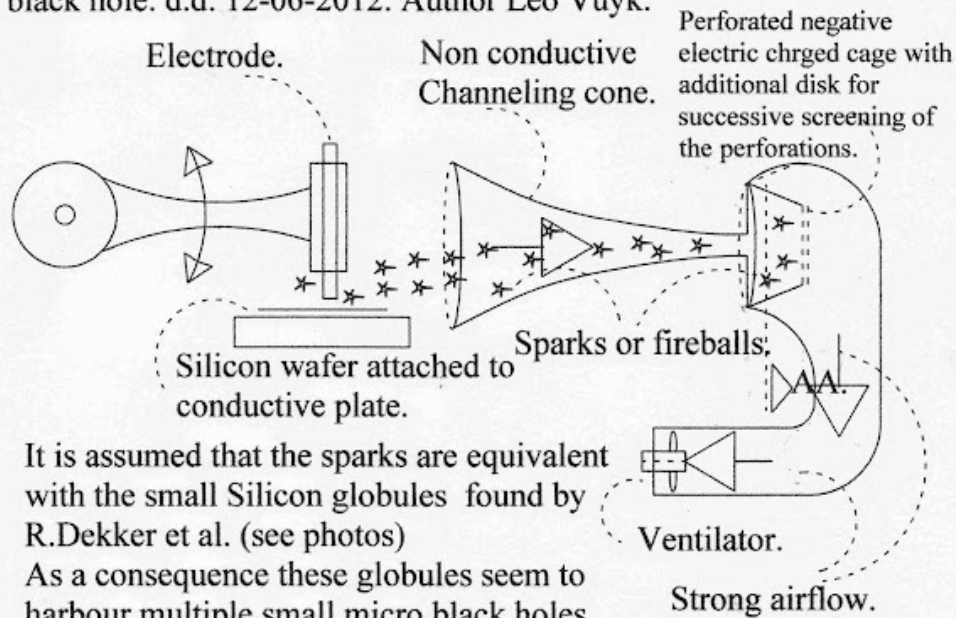


Figure 18,

How a future Silicon based Ball Lightning experiment could look like.

Cross section through an apparatus for Silicon-globule ball lightning production, aiming on the channeling, merging and growing of the resulting multiple MICRO BLACK HOLES into one singular micro black hole. d.d. 12-06-2012. Author Leo Vuyk.

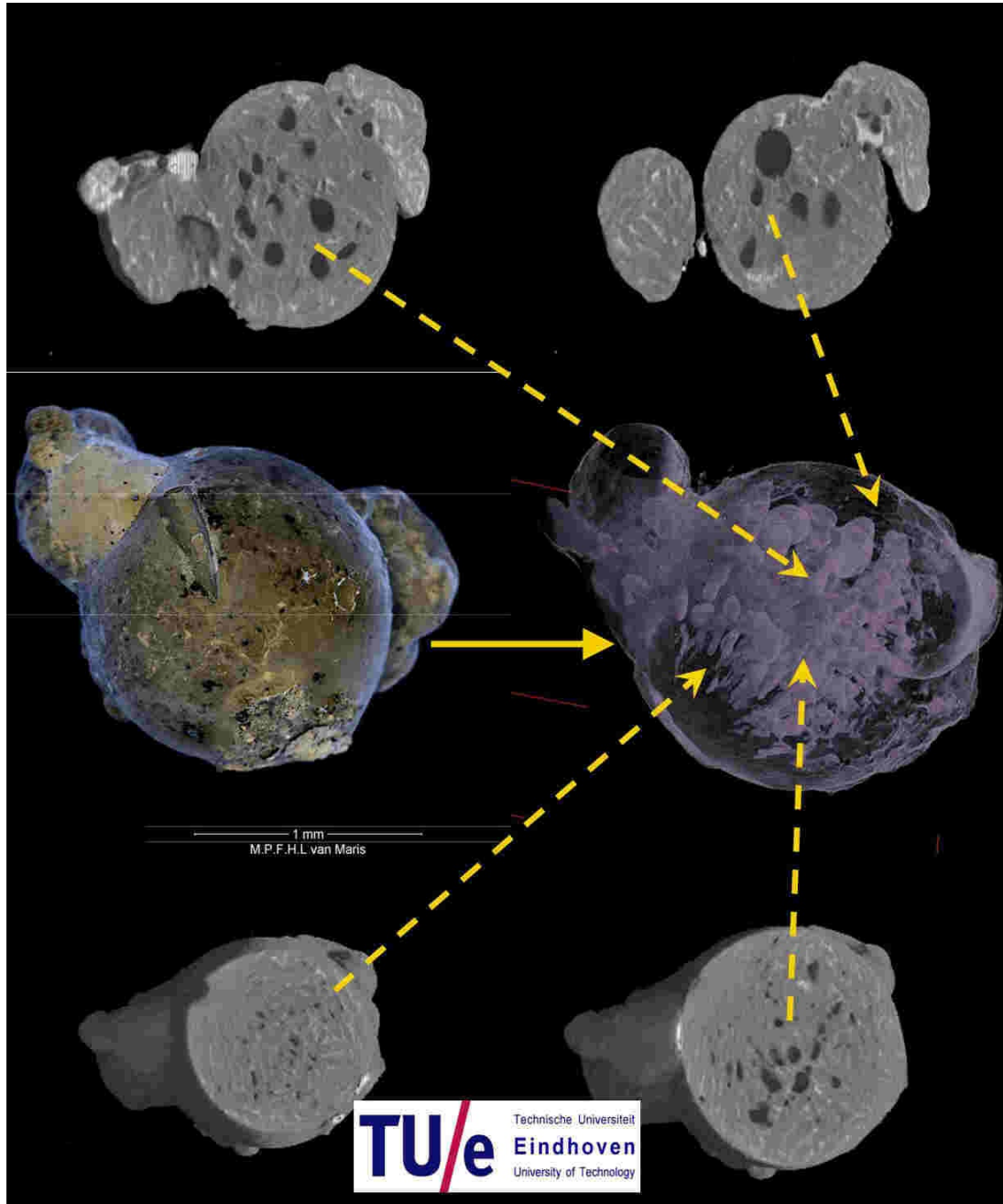


It is assumed that the sparks are equivalent with the small Silicon globules found by R.Dekker et al. (see photos)

As a consequence these globules seem to harbour multiple small micro black holes, leaving the globule and able to accelerate the globules by ejection of hot Ions.

A strong air flow will be needed to channel the globules into the perforated electric charged cage, before the micro black holes have left the Silicon globules. New Paradigm Black Holes are supposed to have an outer shell of electrons and an inner shell of positive charged Ions.

Figure 19,

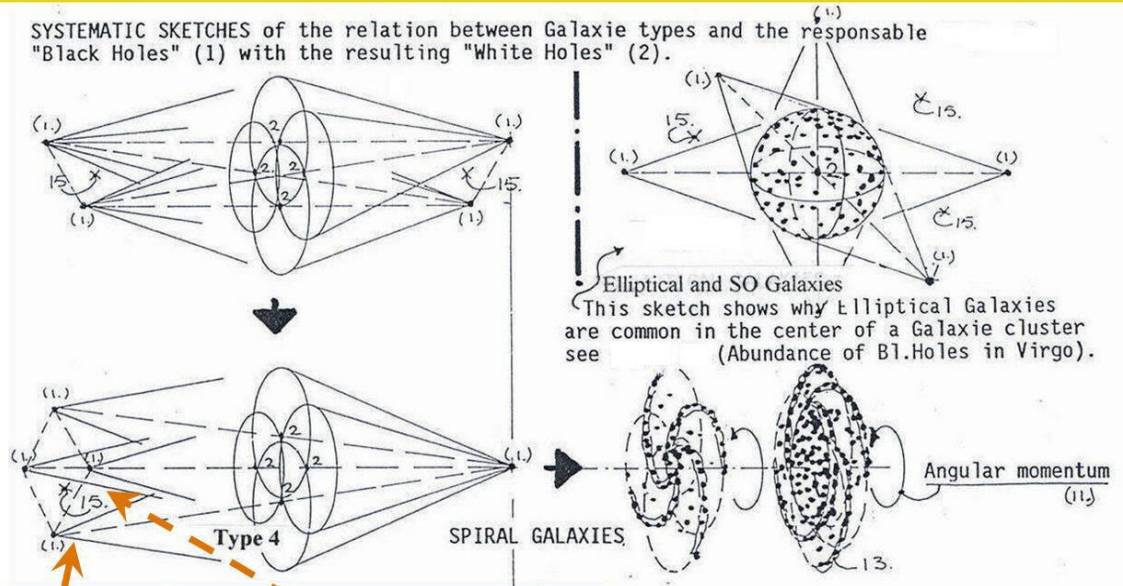


Internal Silicon globule structure made by 2D and 3D Nano-CT scan at the University of Eindhoven (NL). Internal linear cone-shaped hollow channels are observed, supposed to be created by migrating- and evaporating Quantum Knots (according to Quantum Function Follows Form Theory, author: Leo Vuyk).

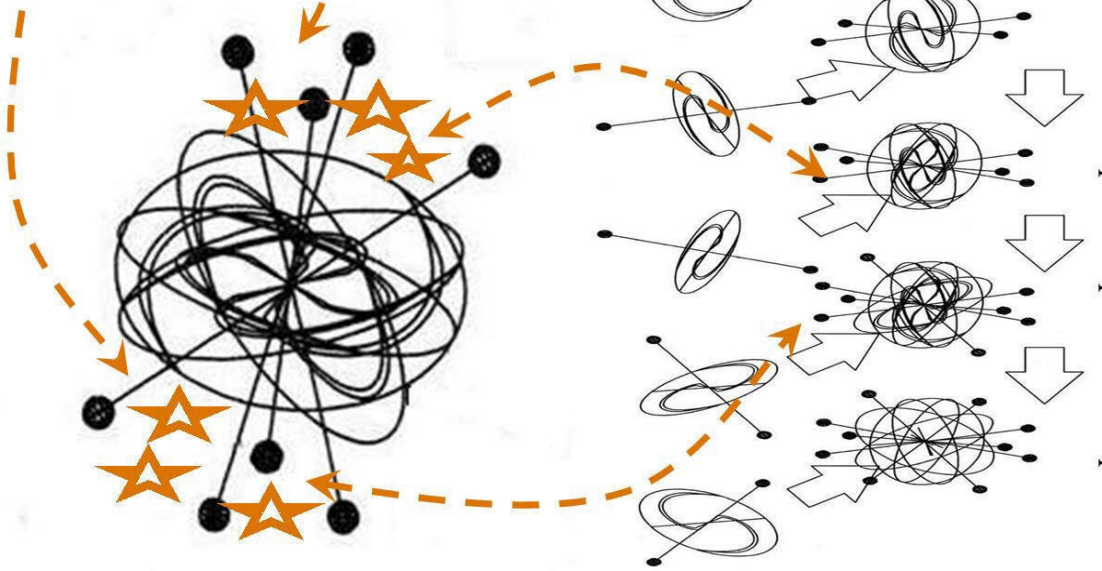
Figure 20 Internal Silicon globule structure made by 2D and 3D Nano CT scan at the University of Eindhoven (NL) Internal linear cone shaped hollow channels are observed, supposed to be created by migrating- and evaporating micro Black Holes (or Quantum Knot Plasma according to Quantum Function follows Form theory.

Other examples of NON- evaporating Quantum Knots (Black Holes)

DWARF Galaxy formation (15) in between (2 +) Galaxy Anchor Black Holes (1) (GABHs= Clumpy Dark Matter) after Galaxy merging according to Quantum FFF- Theory.



DWARFS between GABHs



Galaxy merging

Figure 21, Dwarf Galaxy formation between Galaxy Anchor black Holes (GABHs)

The boundary between Evaporating- and NON evaporating Black Holes: Comets and Sunspots?.

Quantum FFF Theory states,

- 1: That the oscillating Higgs vacuum is the origin of the Casimir effect and the entropy decrease around (micro) Black Holes or Quantum Knots.
- 2: that large Black Holes are equipped with a Fermion repelling horizon, being the main origin of electron-positron pair- and H₂ production.(ref 14)
- 3: that large Black Holes are always growing in size if they are located in a stable vacuum.
- 4; that small Black Holes can degenerate and even fully evaporate, if the Black Hole nucleus is too small to be able to absorb the aggressive oscillating Higgs vacuum particles and photons.

According to Q-FFF Theory are Comets and Sunspots long living Black Holes or large Quantum knots, large enough to be at least stable for a long time and perhaps even growing.

These BHs are supposed to be created by the electro magnetic interfering processes around the Sun or solar system like Birkeland current interference. Silicon based Quantum Knots are also supposed to be created by electromagnetic interfering processes.

It is assumed that the real FORM of magnetic monopole photons is the origin of Quantum Knot or BH formation.

Conclusion:

Silicon discharge experiments in the laboratory show, that smaller Black Holes (Quantum Knots) are created if less strong currents are used for silicon discharge.

The differences between the internal channel structure of the globules of fig 20 respectively fig 11, are showing these differences.

In fig. 20 we observe multiple cone shaped “hollow” channels with large diameters as the result of relative shorter living Heat producing Quantum Knots as we may observe in fig 11.

In fig.11 we observe the remnants of channeling Quantum Knots which did not leave open channels behind, because the Silicon Globule experienced a much longer life as a silicon “liquid droplet” heated by the larger and longer living Quantum Knots.

The observed silicon globule appendices in the form of “Trunks” (fig 12) is supposed to indicate the existence of at least one migrating “long living” Quantum knot able to create such a trunk.

Extended research is needed to get more clarity about these processes.

I Suppose that Ball Lightning (plasma) phenomenon could be the base for future energy production.

However if we need stable Cometary and Sunspots sized Quantum Knots for our energy production I see no future for such a system on Earth..

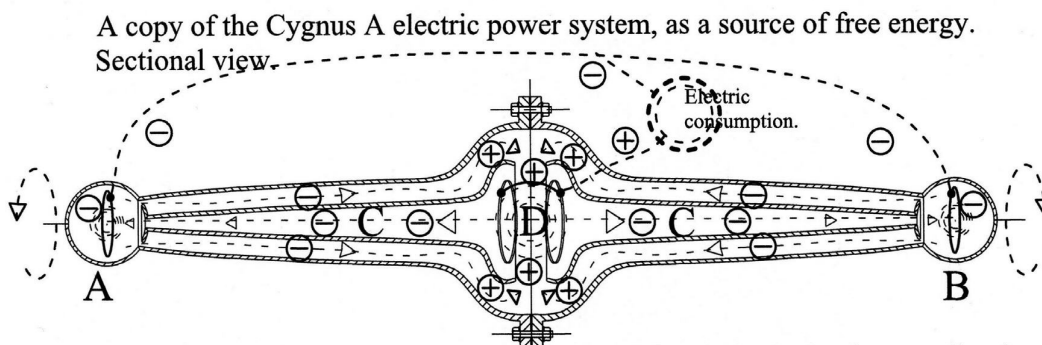
As a consequence, I propose that we always have to look for small sized multiple Quantum Knot plasma based so called “over-unity” energy production systems, as depicted in figure 6.

Some of the electric energy produced by these dual Quantum Knot “plasmas” as we observe in silicon globules like (fig 20) have to be used for the maintaining and constant recreation of both Quantum Knot plasmas.

Perhaps we even have to look for ancient forms such as the so called Vajra, well known in history for their relation with lightning alike effects.



Figure 22, Vajra example could be used for Overunity energy production as depicted in figure 23..



The dual black hole driven electric powerhouse system of Cygnus A, translated to a small scale micro black hole "ball lightning" solution. Artificial produced ball lightnings are located at point A and B, which are negative charged. The midpoint D is positive charged. The charge origin is to be found in the vacuum driven electron jets C just like Cygnus A. author: Leo Vuyk.

Figure 23, The two Ball Lightnings located at positions A and B are supposed to be QUANTUM KNOT PLASMAS, MAINTAINED by additional internal electro magnetic interference of Radio Frequency energy alike magnetron sources.

Other explanations for spinning and self propulsion of silicon based ball lightning is given by:

Gerson S. Paiva and Carlton A. Taft

Centro Brasileiro de Pesquisas Físicas, 22290-180, Rio de Janeiro, Brazil.

called

SELF-PROPULSION OF LEIDENFROST SILICON BALL LIGHTNING

http://sbpmat.org.br/9encontro/especific_files/papers/B532.pdf

The pair suggested that when lightning strikes a surface, like the Earth's silica-rich soil, a vapor is formed. This silicon vapor may condense into particles that combine with oxygen in the air to slowly burn with the chemical energy of oxidation.

National geographic quote:

Pavão and Paiva have spent two years testing the theory with a simple experiment.

They used electrodes to shock silicon wafers with enough electricity to create a silicon vapor.

Most of the artificial orbs lasted two to five seconds, but at least one has survived as long as eight seconds—approximating natural ball lightning and far exceeding previous efforts to create the phenomenon in the lab.

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Authors: Leo Vuyk.

Category: Quantum Gravity and String Theory

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Authors: Leo Vuyk.

Category: High Energy Particle Physics

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An Alternative Black Hole, Provided with Entropy Decrease and Plasma Creation.

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Category: High Energy Particle Physics

[5] viXra:1103.0002

3-Dimensional String Based Alternative Particle Model.

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ZPE Zero Point Energy Examples Around Black Holes.

Authors: Leo Vuyk

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Stellar Anchor Black Holes as the Remnants of Former Herbig Haro Objects

Authors: Leo Vuyk

[11] viXra:1104.0044

Ball Lightning, Micro Comets, Sprite-Fireballs and X-Ray/gamma Flashes According to Quantum FFF Theory

Authors: Leo Vuyk

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Authors: Leo Vuyk

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Authors: Leo Vuyk

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Centro Brasileiro de Pesquisas Físicas, 22290-180, Rio de Janeiro, Brazil.

called

SELF-PROPULSION OF LEIDENFROST SILICON BALL LIGHTNING

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