

Crossing the Event Horizon

Presented by Nassim Hamein

Part 1: The Untold Physics

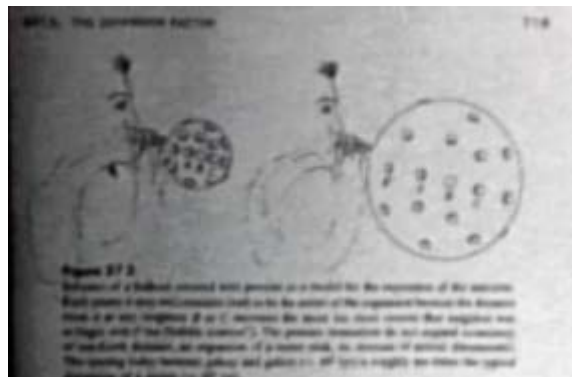
Chapter 4: Expansion of the Universe

The lesson begins with a reference to the book: *Gravitation*, which Nassim referred to in an earlier lesson as the ‘Bible of Physics’, especially for cosmological constants and computations.

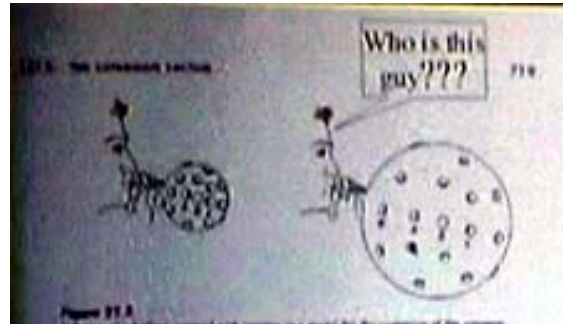
Nassim then started talking about his presentation lecture at Georgia Technical University and he again referred to the fact that he had quit school at 16, therefore was a bit hesitant to cover some of the materials in this course, as he did not have the normally required scholastic credentials.

However, the presentation moved along and Nassim approached the next topic by stating it as a question, **“We all agree and accept that the Universe is expanding...right?”** The room got quite restless as the students snickered and felt he should know that fact, or why would he be standing in front of them giving a lecture. .

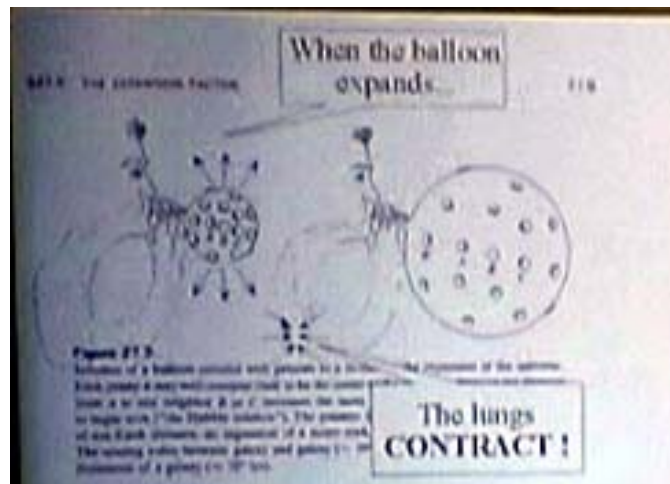
Turning to page 719, in the accepted reference book, *“Gravitation”*, would now allow Nassim to point out a few disconcerting facts as he proceeded with the lecture, which would show the missing piece of their accepted foundations. Projecting the following illustration, he pointed out that they had used a deflated balloon with pennies on it, therefore, when air was blown into the balloon, the pennies spread apart, indicating expansion of the universes. **Very simple, yes!...and they agreed, again restless.**



The next question that was posed by Nassim, silenced the room. As he pointed out in the following illustration, something was missing. Who is responsible for the inflation of the balloon (the universe), so the question became, “**Who is this guy???**” Again, silence. Everyone was thinking that Nassim was a religious fanatic and his next phrase would include the word “GOD”, which was just not acceptable at Georgia Tech.

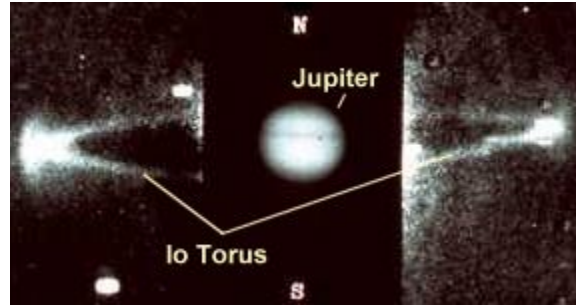


However, he did get their attention and as the presentation progressed, the answer became obvious. If something inflates, then it must also **CONTRACT**, as shown in the next slide. This statement again silenced the room. It appeared that the illustration in the book had never been challenged in this manner, just accepted for what it showed. However, if the premise for the universe expanding to infinity is only based on one action, without the natural opposite action, then the whole theory is flawed at the foundation. Patterns and relationships of movement are the **KEY** to synchronicity.



Therefore in looking at the above illustration, the fact that this became an accepted theory without any exploration of what causes the expansion and contraction, a gap has been left to ponder in the basic theory. In any system, you must have both actions in order to create this systemic understanding of the functions.

The next example Nassim provided was an explanation of the movement of the donut-shaped torus which has been seen around planets, moons and stars in space.



The NASA photo above shows the torus energy movement around the Io Moon of Jupiter. The *torus is shaped as a double doughnut and as the top compresses, the bottom expands, allowing for both movements in an energy field. However, if you were on the expansion side of the torus movement, you would not necessarily know that the other side was contracting. This understanding creates a link to the fundamental knowledge of how the structure of space may function.

An animation of the movement of the Torus grid can be viewed at:

<http://www.theresonanceproject.org/research/torus.htm>

In developing the new **Unified Field Theory**, the extensive equations for all of these findings were accomplished with the collaboration and expertise of Elizabeth A. Rauscher-Bise, Ph.D., a nuclear scientist and researcher at Lawrence Berkeley National Laboratory, Stanford Research Institute, and a Professor of Physics at John F. Kennedy University of California. Professor Rauscher-Bise also served as a research consultant to NASA and the U.S. Navy, with a long history of accomplishments, while authoring over 250 scientific papers, four books and holds 3 U.S. Patents and 1 European patent.

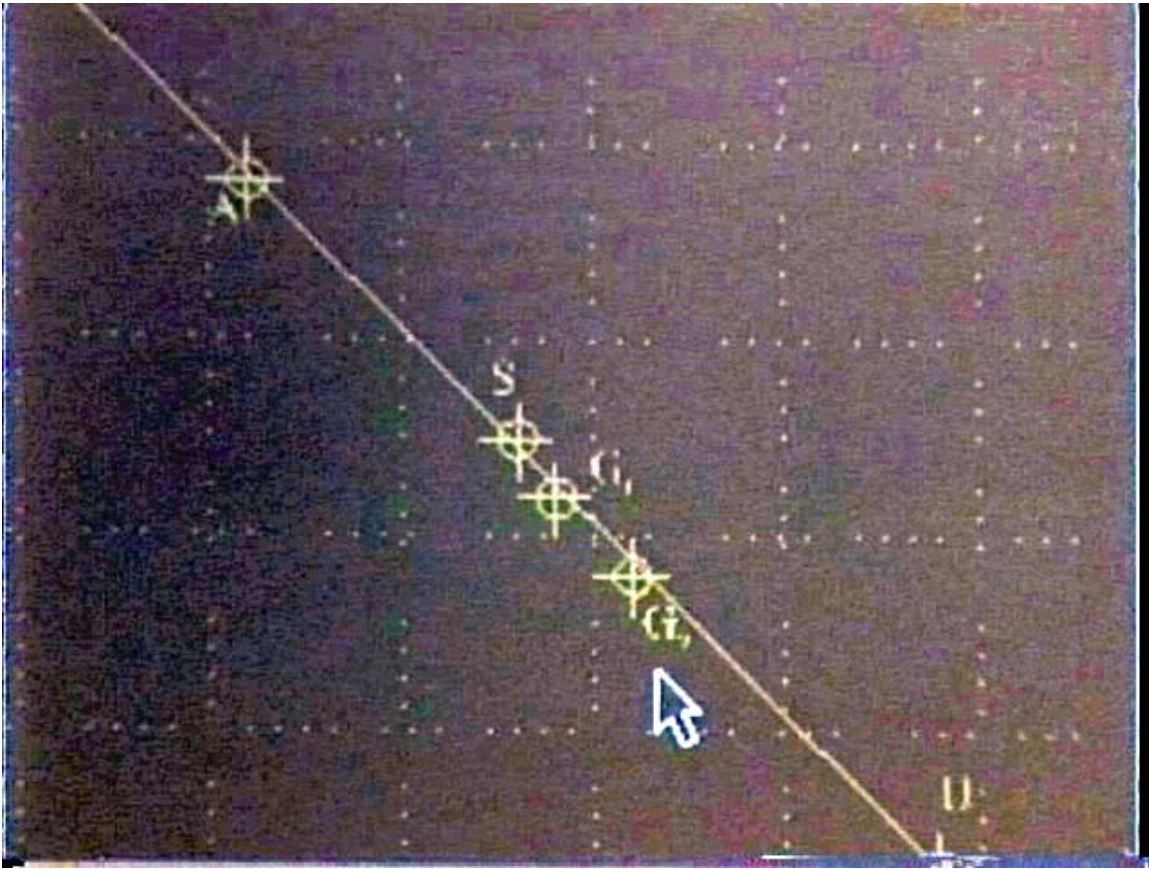
The paper they wrote is titled: *The Fundamental Dynamics of Black Hole Physics*, which has passed all the peer reviews and is ready for publishing in the journals.

The findings are very exciting concerning this expansion/contraction relationship. Many questions arise involving the dynamics of the interactions concerning how the universe functions.

If we go back to the fractals in Lesson 2 and remember how they repeat to infinity while realizing they are also in the sub-atomic particles of the atom, it gives us a very different picture of the structure of space. Therefore, if every atom has an infinite amount of subatomic particles within it, then you can describe the atom as a black hole, due to the infinite amount of density created by the subatomic particles at the quantum level. The mathematical equations substantiate this theory at the quantum level, validating the accuracy of this new understanding.

Looking at the whole scale from sub-atomic particles to the cosmological scale of the universe, they were able to use the *Swartzchild constant*, for the measurements. (*Karl*

Swartzchild showed that if enough mass was inside a small enough radius, light would be locked in orbit around the mass. It would not be able to escape)



Developing a chart using the *Swartzchild radius* of the universe, which shows the density that creates its mass was the next step in the process. ***The Scaling Law for Organized Matrix of Frequencies vs. Radius*** on the chart plots the Universe (U), Galactic (G), Solar (S) and Atomic (A) scale of density which form a perfect linear progression. These frequencies are based on the mass of matter until you get to the atomic level, where they are based on the electromagnetic frequencies of the quantum level of measurement.

This density also exceeds the escape velocity of light, meaning that our galaxy and solar system are black hole entities. *Recently, the orbit of a star near the Milky Way's galactic center was measured. The calculation of the mass of the galactic center suggested it was too dense to be anything but a black hole.*

The next step was the study of the frequency of the oscillation of the outer boundary of a cell. The results proved the oscillation rate at 10^{11} hertz, which also obeys the *Swartzchild constant*. In looking at the chart, they found that all of these ratios were close to the *phi ratio of 1.618*.



Please notice on the chart above that the *cell* fits exactly in the center of the perfect linear progression, aligned between the atom and the Solar system. This validates that we are finding some key fundamental foundations in the structure of nature.

In the mysteries of the universe, this is a pattern that will be very important to your understanding of the entire theory. Patterns and relationships keep surfacing in nature as clues to our wholeness. An example described by Nassim related to the structure of the human body.

All of the parts of your body are proportioned to match the *phi ratio of 1.618*. Starting with the first joint in your finger, the second joint will be 1.618 larger, and this progression continues to your hand and up your arm, to your torso. Then you can go back to your toes and move up your legs, finding the same ratio which continues to your torso. Another, less obvious, example of this special ratio can be found in Deoxyribonucleic Acid (DNA) - the foundation and guiding mechanism of all living organisms. This ratio was discovered by the Greeks and Egyptians of ancient civilizations, but was attributed to the Greeks.

This ratio is used in many structures today because it appeals to the eye of the beholder. An example in your everyday world of something mundane based on this structure is a cassette tape. The common usage of this pattern happens due to the fact that it is a *natural ratio*, therefore a size that is common in nature and pleasing to the eye, which usually shows up in commercial products. (*See Glossary for more detailed examples.*)

Questions:

1. What was the missing pattern in the relationship for the expansion theory of the universe?
 - a. Contraction _____
 - b. Regeneration _____
2. What is the shape of the Torus?
 - a. Oblong _____
 - b. Double doughnut _____
3. Looking at the whole scale from sub-atomic particles to the cosmological scale of the universe, what theorem was used, for the measurements?
 - a. The phi ratio _____
 - b. Swartzchild constant _____
4. In developing *The Scaling Law for Organized Matrix of Frequencies vs. Radius* on the chart that plots the Universe (U), Galactic (G), Solar (S) and Atomic (A) what scale was used to show the linear progression?
 - a. Frequencies _____
 - b. Density _____
5. What did they measure on the outer boundary of the cell?
 - a. Radius
 - b. Frequency of oscillation _____
6. What ratio was found for the cell to line up on the linear progression?
 - a. phi ratio 1.618 _____
 - b. 10^{11} hertz _____
7. The phi ratio of 1.618 which is found in all structures in nature is related to what field of math?
 - a. geometry _____
 - b. algebra _____

Glossary

Torus: 1. A large convex molding, semicircular in cross section, located at the base of a classical column. 2. A bulging or rounded projection of swelling. 3. A mound-like or rounded structure, as the receptacle of a flower. 4. *Math. A toroid generated by a circle; a surface having the shape of a doughnut.*

General Relativity: General relativity is a theory of gravity that comes from the ideas of special relativity. It comes from a single principle called the principle of equivalence. Two verifications of General Relativity:

- 1) Precession of the perihelion of Mercury.
- 2) Position of stars with small angular separation from the sun appears to change. This was the first experiment evidence for Einstein's theory. It has other implications as well, all of which are consistent with observations.

Principle of equivalence: – Gravitational effects are no different from effects of accelerated motion. In order to do this Einstein had to allow space and time to curve. Even light (which has no mass) will be affected by gravity.

Swartzchild Constant: regarding Black Holes: Since Einstein's General relativity predicts that even light is affected by gravity. Karl Swartzchild showed that if enough mass was inside a small enough radius, light would be locked in orbit around the mass. It would not be able to escape! (*An object that is dense enough to prevent light from escaping is called a black hole.*)

Swartzchild radius : The radius (in kilometers) for a star with mass M (in solar masses) needed for a black hole is given by

$$R = 3 M$$

To be a black hole, a star with the mass of our sun would have to have a diameter of just 3 km! This radius is known as the *Swartzchild radius*. Light cannot escape if it is within this radius, so we have no way to get information from what is going on inside that radius. The spherical surface that has a radius of the Swartzchild radius is called the *Event Horizon*, since no information (events) can be detected inside this radius. (*However, Steven Hawking has changed his theory about black holes as of May 21, 2004 and now postulates that information can be released from a black hole, albeit, damaged or corrupted*)

Phi ratio: The Phi or **Golden Ratio** is approximately **1 : 1.618**
Besides for possessing some remarkable and unique characteristics, the Golden Mean is found in **ALL** living creatures on Earth. Along with the **Fibonacci Sequence** (which is a whole-number system approximating the Golden Ratio, discovered by Leonardo Pisano Fibonacci), this ratio is found in plants and animal life wherever one looks. For example, this ratio can be found in fingers one's hand, amongst many other places, and it is prevalent in the skeletal structure of all creatures.

Phi to 31 decimal places: 1.6180339887498948482045868343656

Our reality is very structured, and indeed Life is even more structured. This is reflected though Nature in form of geometry. Geometry is the very basis of our reality, and hence we live in a coherent world governed by unseen laws. These are always manifested in the natural world. The **Golden Mean** governs the proportion of our world and it can be found even in the most seemingly proportion-less living forms.

Clear examples of geometry (and Golden Mean geometry) in Nature and matter:

- All types of crystals, natural and cultured.
- The hexagonal geometry of snowflakes.
- Creatures exhibiting logarithmic spiral patterns: e.g. snails and various shell fish.
- Birds and flying insects, exhibiting clear Golden Mean proportions in bodies & wings.
- The way in which lightning forms branches.
- The way in which rivers branch.

- The geometric molecular and atomic patterns that all solid metals exhibit.

Another, less obvious, example of this special ratio can be found in Deoxyribonucleic Acid (DNA) - the foundation and guiding mechanism of all living organisms.