QEGO

Quantum particle Electric Generator and Observer

When it comes to the smallest components of our universe, our usual understanding of how the world works ceases to apply. We have entered the realm of quantum physics. For a long time, many quantum phenomena could only be examined theoretically. Rolling back to 1980s, **Serge Haroche** has designed ingenious experiments to study *quantum phenomena when matter and light interacts*. Haroche has been able to *capture photons using another kind of trap–two mirrors which they can bounce between*. This device allowed Haroche to study the photons by passing Ryberge atoms

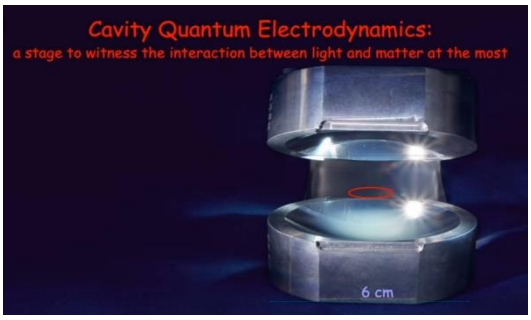

Figure 1
capturing of photons using mirrors in a different manner to make the photons bounce in between

VIDEO

Figure 2
Serge Haroche, The Nobel Prize in Physics (2012), Born: 11 September 1944, Casablanca, Morocco, Affiliation at the time of the award: Collège de France, Paris, France; École Normale Supérieure, Paris, France,Prize motivation: for ground-breaking experimental methods that enable measuring and manipulation of individual quantum systems

through the trap. The procedure followed by Mr.Haroche helps us to understand my idea.
We all know that the light is the fastest traveller in the universe and it is made up of mass less particles called photons. A photon is an elementary particle it is a quantum of the electromagnetic field, including electromagnetic radiation such as light and radio waves, and the force carrier for the electromagnetic force. The photon belongs to the class of Bosons these are the particles that carry energy and forces throughout the universe, photons carry energy in the form of packets (light quantum) and moves in the form of a wave in a straight line path. Whenever a photon hits an object, either it performs a perfectly elastic collision and bounces back by changing its direction depending on the angle of projection or it gets absorbed by the object for example, if a photon at visible spectrum hits an object coated with carbon black, the photons will be absorbed and (light energy) it will be converted into heat energy. In case of a mirror the photons bounces back without any absorption but there is an increment in temperature because, Heat is the internal energy of a substance which is manifest as molecular vibrations, rotations, bending, electronic transitions therefore, the increment in temperature is due to the collisions of photons with the atoms. Simply, heat is also produced due to collisions not only due to the absorption of photons. Heat is produced with no loss of energy (Energy of photon). If there is a constant light source then the internal energies of the impacted area (light concentrated area) gets increased and eventually heat is exerted and this exerted heat can be converted into electrical energy. But, we never had a constant

reliable light source even the Sun sets down and running an artificial light isn't reliable. There is only a way left to get a constant source of light which is to capture the photons. Photons has a long lasting life, if a photon can be captured in a loop it will be existed forever in the loop until it get absorbed or the loop gets destroyed. Can we capture a photo in a loop? Can we capture it just like a ball?

Photon is a quantum particle running at the speed of light, keeping it into a loop seems to be unreal, but it is practical. Just imagine a pipe folded into a donut shape (Torus) with an inlet and outlet *(Figure 3)* now take a ball and through it in side and close the pie without disturbing the system by merging *(Figure 4)* the inlet and outlet (A closed Torus) before the ball precedes the outlet. Now the ball is in a loop hence, it revolves inside the Tours and stays for ever but it comes to rest after a while due to the forces acting on it. Then what about a Photon?

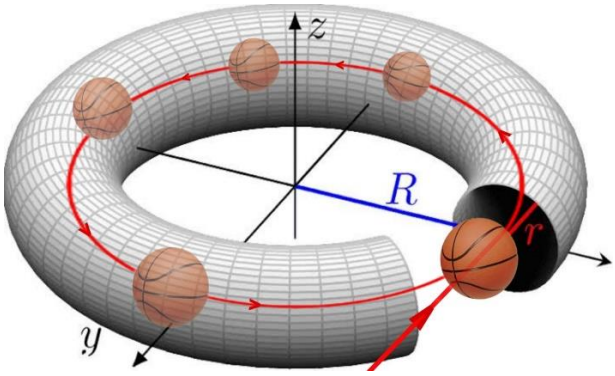

Figure 3
A ball is thrown into an open torus

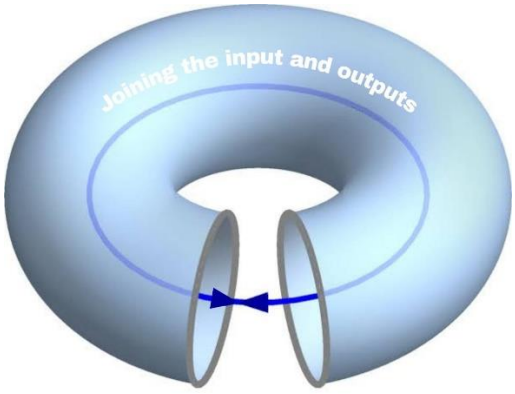

Figure 4
Close the torus before the ball completes a rotation

Well it is a bit different case to capture a photon as it runs at the speed of 29,97,92,458 m/s ≈ 3 x 10^8 m/s), we won't be able to get a noticeable time gap (The time taken to travel from the starting point to the ending point of an open torus) between the photon's entering and exiting points in a torus but, this time gap is crucial to capture the photons like a ball. In case of a ball it's velocity is very less when compared to light so, a noticeable time gap can be seen between the entering and exiting points of a ball in an open torus which allows us to close the torus before the ball gets out from the torus.

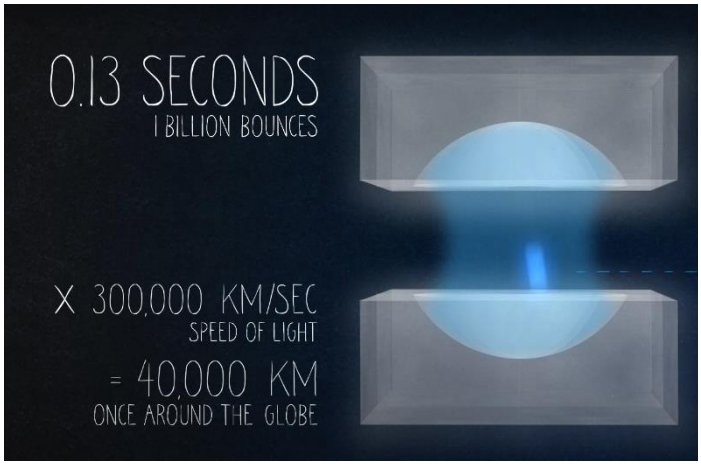

Figure 5

When a beam of light is passed through a torus of circumference 3 x 10^8 m (3,00,000 Km) we will be having a time gap of 1.00069 seconds but, it is impossible to construct a torus of circumference 3 x 10^5 Km. For the sake of a smaller torus with a higher time gap we have to make the longest path for the nearest points like, Serge Haroche *(Figure2)* Did in his study of quantum phenomena when matter and light interacts. He had trapped photons for 0.13 seconds between the mirrors by making them bounce in-between (1Billion Bounces

which is 40,000 Km that equals to the circumference of the earth) The system just takes a 6 cm *(Figure1)*

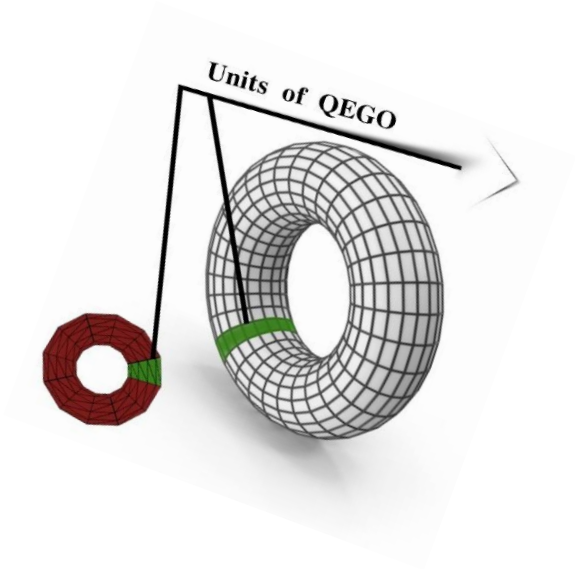

Figure 6

QEGO is divide as units represented by the lines parallel to z-axis *(Figure 3)* these units consists of mirrors arranged in a systemic format

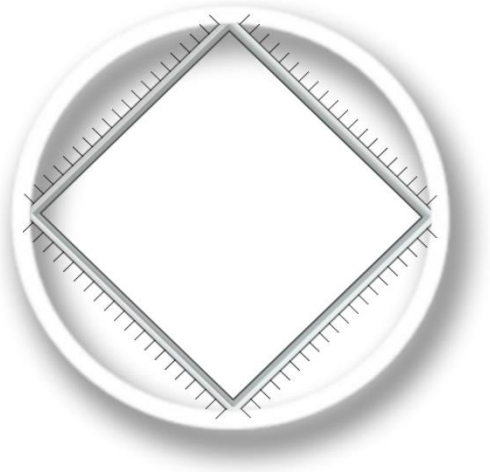

Figure 7

This a Square systemic arrangement of mirrors are arranged in a unit of QEGO

These type of systems can be considered as the building blocks of a QEGO *(Figure 6 & 7)*
A systematic arrangement of mirrors placed as the units of a torus which make the photons bounce in-between them forever in a loop is called a QEGO (Quantum particle Electric Generator and Observer) it makes the light to follow the longest path to make the smallest displacement,
For a square systemic arrangement of mirrors as the units of a QEGO tested by myself,
by the Mirrors of,

◊ Thickness : 1mm
◊ Length : 5cm
◊ Width : 5cm
◊ Refractive Index : 1.6

Placed as the four faces of a cube and a similar mirror is placed at the bottom of the cube and the cube is let to be open at the top to incident the light, and the light used in the experimentation is a laser light of

◊ Wavelength : 532 $\pm$ 10nm
◊ Powered by : 3v (2 Units of 1.5v batteries)
◊ Output : Max < 10mW

is made to incident on mirrors with an angel of $\approx 45^{o}$ is reflected infinitely through the four mirrors. The reflected rays forms a three layered rectangular geometry in different positions within the length (cube's length) of 2.5 cm. Rectangles are of length 4cm, breadth 2cm therefore, the distance travelled by the light in a rectangular path is 12cm (2 + 4 + 2 + 4) and the system accounts of three rectangles therefore, 3 x 12 = 36cm and the total cube accounts 72cm (2.5 + 2.5=5cm, ∴2 x 36=72cm) of travelled distance by light. There are 6 rectangles formed in a cube of 5cm.

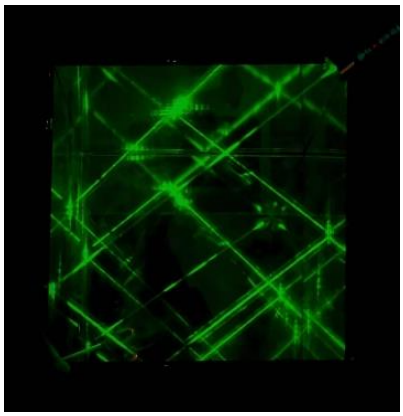

Figure 8

Formation of three layered rectangular geometry in the system with in 2.5cm of length when a light ray is projected with an angle of 45°

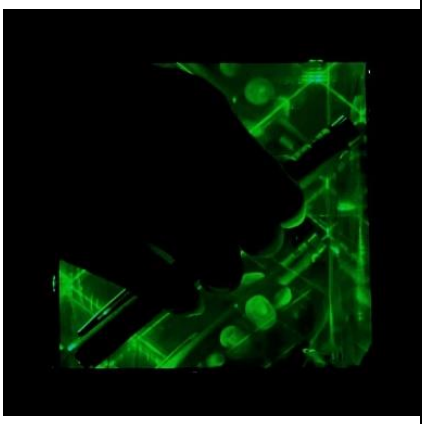

Figure 9

The light source kept inside the system with no deflection of angle (45°) the resultant path remained the same

Figure 10

The mirrors are arranged on the five sides of a cubic box as shown in the *Figure 10*, when this system is placed in a QEGO the fifth mirror at the bottom side should be removed as it is used in the box only to gain perfect reflections

If we consider this square systemic arrangement of mirrors as a fundamental building block for a QEGO then a second time gap accounts a torus of circumference 24,000Km,
and this is how,

16 units accounts a Kilometre then,
3,00,000Km distance is equal to 48,00,000 units (3,00,000 x 16),
=> One unit is equal to 5cm,
=> $5 \times 48 \times 10^5$ cm
=> 24×10^6 cm
=> 24,000 Km (66% distance of the earth's circumference)

It does make sence when compared to the QEGO of 3×10^5 Km. If the QEGO's circumference is of 1,44,000 Km (Nearly 3.5 times of the earth's circumference) we will be able to get a time gap of 60 seconds

For an easier production of energy and observation of quantum particals, we need to reduce the circumference of a QEGO to 10 – 100m on keeping a time gap of 60 seconds, It is possible by developing more efficient reflecting mirror systems. In conclusion photons can be captured by passing a beam of light into an open QEGO and closing it before the light gets out of it, so that the light keeps on revolving in the QEGO forever.

But…, there are some specified circumstances which we should make a note off

2 Years back, a similar experiment was performed by a you tuber in his channel "Matescium", Touch the sun for a brighter view

A Photon doesn't mean only light, as mentioned earlier it is the elementary particle it is a quantum of the electromagnetic field, including electromagnetic radiation such as light and radio waves, and the force carrier for the electromagnetic force. Photons exists in all ranges of spectrum from Far Infrared to Ultraviolet, though the photon is same everywhere it's behaviour changes according the wavelengths of waves, Due to this phenomenon we can't capture all type of waves (Photons) propagating in a media with the same instruments. We can capture Infrared rays by Infrared cameras but not by mirrors whereas the same camera which can capture Infrared rays can't capture the visible spectrum to generate a photograph, while traditional visible-light cameras capture images of objects radiating light visible to the naked eye, an infrared camera captures what the human eye cannot see. All objects radiate energy, but some wavelengths within the electromagnetic spectrum are invisible.

The same things goes in the QEGO not every photon can be captured in the QEGO, If a beam of light is sent into a QEGO, and trapped then the photons which are propagating as waves in the above and below regions of the spectrum which can't be trapped by the mirrors will be either emitted or absorbed

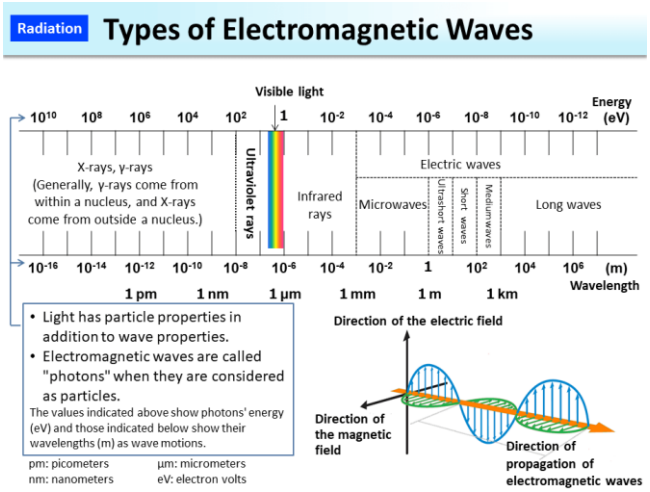

Figure 11

Emission of uncaptured photons in all directions

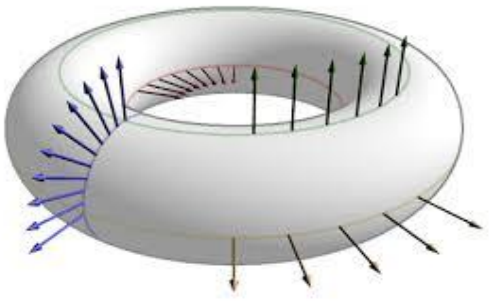

Figure 12

Finally a particular, selected, unescapable, photons will be left inside the QEGO and these photons will lead to the constant collisions with the surface of mirrors and liberates Heat.

The

QEGO

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