

CHAPTER-22

BLACK-HOLE & PUMPING-HOLE

Highlights about the chapter BLACK-HOLE & PUMPING-HOLE in MATERIALISTIC UNIVERSE by Ramesh Varma.

Note: Chapter over BLACK-HOLE and PUMPING-HOLE is not an encyclopedia. Challenger has illustrated facts/phenomena only which relates to the new or contrary findings/understandings over the subject with some existing references to make the subject understandable.

Illustration in this chapter has the answers of the following queries/phenomena:

- Matter can not swirl around a black-hole unless surrounding medium (particles of the rays) is materialistic.
- Active (young) galaxy does not have a black-hole at its centre; only a collapsing galaxy has it.
- Active (young) galaxy has a pumping-hole but not a black-hole, which (black-hole) has been falsely understood by the World (Experts).
- A black-hole can not eject gasses and matter particles in the form of jet from its poles; jet would be only of the particles of the rays and that too of the short/shortest wave length (small/smallest particles).
- A pumping-hole ejects mixture of gases, star-wind particles and particles of rays of all kinds (which cluster of stars ejects) in the form of jet from its centre.
- A massive active (young) galaxy can have more than one pumping-hole. Answer has been given that why binary black-holes can not exist in a galaxy but whereas two or even more pumping-holes have the possibility to exit and function.
- Mechanism has been discovered, that how a black-hole ejects rays and how a pumping-hole ejects mixture of gases, star-wind particles and particles of the rays.
- Reason and mechanism has been discovered that how a **saturated** black-hole splits to two parts from its equator plane to form two galaxies (spin retaining galaxies).
- What results to collapse a galaxy to form a massive or super massive black-hole?
- What results to bursting (explosion) of a saturated black-hole?
- What spins the black-hole other than the angular momentum (pre-spin) got by a black-hole at its formation from the collapse of a star (matter)?
- Much more has been discovered/understood about the black-hole, pumping-hole and also about the galaxy.

CHAPTER - 22

BLACK-HOLE

(BLACK-HOLE AND PUMPING-HOLE)

Discovered and claimed facts about pumping-hole would be explained after explanation over some discovered facts by the Challenger over black-hole and blazar & its jet.

Brief extract for the Experts:

(Other Concerneds, please read illustrated version given ahead)

World (Experts) have discovered a unique phenomenon in the centre of an active galaxy (young galaxy), which has all noticeable features similar to a black-hole. Thus Experts have falsely understood it as a small black-hole (*Experts are not sure that the discovered phenomenon is by a black-hole but they have presumed so. The fact is that the Experts do not know what is causing the phenomenon similar to a black-hole. They are far away from correctly understanding the noticed phenomenon because they have not yet understood correctly the true states of the matter and unique materialistic properties of the rays besides not understanding correctly true working mechanism of solar/planetary system*). The Challenger has understood correctly the said phenomenon and has given name to the said discovered phenomenon a 'Pumping-hole'. It is really pumping of the matter (white-matter) in spiral-way towards the centre of the galaxy by the cluster of massive stars, called galactic-bar and further it is really a hole (really a hollow hole) in the centre of the galaxy from where stars' wind matter particles, gasses and energy rays (materialistic-rays) are escaping with high speed in the form of two jets in opposite directions. Jets are formed of stars' wind particles, gases and rays, which emerge from a hole (seen hole and noticed like a black-colour dot thus look really a black hole). But a real independent black-hole at its centre has only a jet of the rays, which escape from the centre having no hole, in fact jet escapes from the surface of highly dense matter of the central part of the real black-hole on being extremely compacted (compressed).

Before any explanation over this chapter, contents of paragraph No. 1 and 2 are a must to read and understand:

1. Black-hole and Pumping-hole:

Challenger:

What the World (Experts) knows and understands about the black-hole, please read in the academic-books and see over the Internet. In this chapter, illustration is over the answers to the below said queries only.

Working mechanism of several phenomena the World (Experts) does not know and understand about the black-hole?

AND

Which of the working mechanism (phenomenon) the World (Experts) knows falsely and incorrectly about the black-hole?

- World knows that how a black-hole forms by the collapse of a massive star. World also understands though not fully that how a black-hole gets pre-spin by the collapse of the matter to least volume by the intense gravity of the massive star, but the World (Experts) do not know correctly rather does not know that how a black-hole spins after getting the pre-spin and how it gets accelerated spin to attain very fast spin.

- World (Experts) knows that a black-hole forms a pair of jet in opposite directions from its Poles consisting of rays but the World

does not know the cause behind it. To close the chapter over the cause, Experts have presumed an object matter 'Blazar' inside the black-hole to make it responsible for the cause of the Jet.

- World (Experts) does not know that how a black-hole explodes to create galaxy (galaxies). Challenger has concluded its answer.

- World (Experts) knows that star-ship (star and its family, like our Sun along with solar system) swirls around a black-hole before being merged into a black-hole. But the Experts have never given a thought that how the entire family (star-ship) can encircle around a black-hole (in no materialistic space zone), if individual matter or fragments of the matter are not surrounded by water/gas or any gas like state of the matter. (Experts do not understand that space is filled with a gas like kind of matter, they understand it as an empty space).

- World (Experts) does not know correctly and firmly that do all black-holes spin?

AND

- The most important fact, which the World (Experts) understands falsely, is the presence of a black-hole in the active (young) galaxy. Phenomenon of the jet (of gases, matter particles and rays) noticed by the Experts in the centre of the galaxy (galactic-bar) of an active (young) galaxy is not by the black-hole but it is by a **pumping-hole** formed by the cluster of stars (galactic-bar). What so ever is escaping in the form of jet that has been pumped by the cluster of stars to the centre of the galaxy (galactic-bar) and jet matter before its escape has not been attracted by the presumed black-hole.

A massive active (young) galaxy can have more than one pumping-hole at its centre. Recently a galaxy with such features has been discovered by the Experts but Experts do not know the correct reason behind it. Challenger has concluded the answer.

2. Universe is materialistic and rays of all kinds are also materialistic:

Discovery claims by the Challenger over pumping-hole and also over some new discovered facts about black-hole can not be fully understood unless one understands true states of the matter and unique materialistic properties of the rays of all kinds. For further better understanding one must have understood true working mechanism of solar/planetary system based over understood (discovered) unique materialistic properties of rays. However flash information has been given below over the said discovery claim, which is sufficient to understand discovery and claimed facts over the pumping-hole and black-hole to major extent.

Flash discovery information over the true states of the matter and unique materialistic properties of rays:

(a) Particles of the materialistic-rays form materialistic-space:

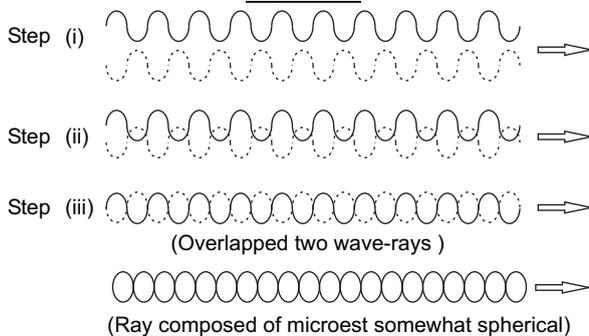
What soever in any form the Sun and all (billions and billions) the stars of the Universe inject into the space by losing their mass (Trillion and trillion of tons per second) that all is materialistic (a state of the matter, called white-matter). This phenomenon leaves no space empty (absolute nothing). Space is materialistic; it is filled with materialistic particles of rays and solar/star-wind particles besides some traces of gases, water vapors and matter particles. Materialistic-ray does not propagate in the form of a wave but propagates in the form of particles as stated under the relevant chapter. Dimension of a wave length (falsely understood as wave) is equivalent to the size of two particles (correctly understood) of the ray as shown below by a sketch.

Paragraph taken from chapter No. 1 over STATES OF THE MATTER.

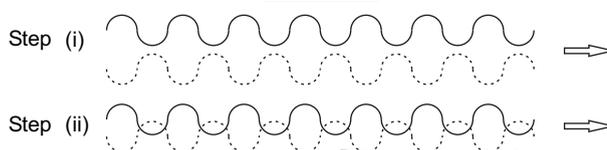
Overlapping of two wave-rays:Overlapping of two waves of the same specifications would result to form a ray; similar to materialistic-ray understood by the Challenger. Scientific calculation of this formed (understood) ray for the purpose of getting results of reflection, refraction, diffraction etc., would tally with the results obtained by understanding a ray composed of microest spheres by closely touching each other. Due to this fact Physicists of the past-era while laying foundation stone of the laws over light/rays committed blunder error. This can be well understood from the sketch as shown below.

Bring two wave-rays closer and closer till they form a ray as shown.

Sketch-A



Sketch-B



CONCLUSION:

Laws of reflection, refraction etc has been illustrated under the relevant paragraph of the chapter (states of the matter) by considering a ray forming of microest spheres, closely touching each other. In fact, wave motion theory can not yield the same results as results are being obtained by understanding a ray of stream of particles. No two different versions of the laws can yield the same results in science but these two stated understandings give most results the same. So, it is strange but true. **Why so? This all is due to the said error (blunder error).**

(b) Shortest wave-length and its true meaning to understand phenomenon related to black-hole:

A ray, which has been understood of short wave length, by the World actually it is the size of the particles of that ray that is of the small size/diameter. So X-rays, which has short wave length as per the World but as per the Challenger it is a ray composed of fine particles. Gamma rays has the shortest wave length known to the Experts, so size of the particles of Gamma rays is the fineness (As there is no end to finest, so there must be other kinds of rays, which would have further smaller sizes than the particles of the Gamma rays but such rays are not known/understood to us/Experts).

World does not know shorter- wave length than the Gamma rays. Information from the Internet has been exhibited below:

From Internet Answers.com date: 30/08/2011

Are there any wavelengths shorter than gamma rays?

Answer:

The electromagnetic (EM) spectrum is the range of all possible electromagnetic radiation. The "electromagnetic spectrum" (or just spectrum) of an object is the characteristic distribution of electromagnetic radiation from that object.

In 1900. Paul Ulrich Villard discovered another radiation, much more penetrating and able to pass even through a thick steel plate. This component proved to consist of electromagnetic waves which Rutherford called gamma-rays. They were the last editions to the electromagnetic spectrum as is known today.....

(c) Shape of the traveled path of the materialistic-rays: (Straight or curved?)

Materialistic-rays on emerging from any celestial-body (Sun/star or planets or satellites) behave the same. Materialistic-rays on emerging from a presumed stationary body, adopt a straight path but materialistic-rays on emerging from a spinning body adopt a curved path. Materialistic-rays create a zone of materialistic particles all around the spinning body. Because of the said materialistic zone, for optical purposes, we notice path of the ray(s) as straight but whereas for mechanical purpose(s), materialistic rays are curved. (Explanation is under the relevant chapter).

(d) Curved rays and working mechanism of celestial-bodies (Flash information):

Curved materialistic-rays form a mirror reflection pattern over the equator plane of the spinning body. This pattern forms a trap-zone over the equator-plane. Further, said pattern keeps the equator plane richest with the materialistic-rays (white-matter); this factor is helpful and responsible to pump materialistic-rays towards the centre by the cluster of stars of a galaxy. Curved materialistic-rays spin the celestial-bodies and also are responsible for their orbital motion.

(e) Pressure of white-matter:
(Like pressure of atmospheric gases)

Information given below is must to understand formation and explosion of a black-hole and also phenomenon like similar to speculated big-bang.

- There is no speculated dark-matter. It is the white-matter, which has not been understood as a matter but instead of white-matter World (Experts) has falsely understood presence of dark-matter in the galaxy. There is also no dark-energy. World (Experts) has also falsely understood (speculated) it instead of energy (thrust) of the white-matter. White-matter is thrusting the visible objects outwards with the result, Universe is expanding. Experts have understood (falsely) that dark-energy from out side the Universe is pulling the Universe objects outwards, resulting in the expansion of the Universe, which is wrong and false.

- Further, like atmospheric pressure by the air (gases), white-matter too exerts pressure. Atmospheric pressure over the Earth is the greatest and the least at far away (above). In a galaxy, white-matter pressure is the greatest in the centre and least at far away. In a star-system, like our solar-system, white-matter pressure is greatest at the surface of the Sun (but extreme greatest in the Sun) and the least at the end of solar system.

- As we do not feel the pressure of atmosphere, similarity we do not feel the pressure of white-matter. If a living body from the Earth is ejected in no time to above the atmospheric limit; living-body would be exploded to particles by the inside pressure of gasses/gas-molecules. Similarly pressure of the white-matter plays its own role.

- We can not develop any device to measure pressure by the white-matter because every atom of the device is formed of the white-matter. When air pressure inside our body and out side is the same (because we have originated and live so), we can not feel/understand atmospheric-pressure by the gases. We feel the atmospheric pressure, only when outside pressure of the atmosphere is more or less than the pressure of air in our body-cells. We do not have the special-matter, nor can we develop it, which would not have inside any particles of the white-matter. So, it is not possible to feel the white-matter pressure by any living body and also not possible to develop any device to measure it. It is the human-brain and knowledge, which could understand pressure exerted by the white-matter.

● Explosion of a black-hole by the reduced white-matter pressure of the surrounding space:

Universe is expanding; pressure of white matter at a specific location/position in the Universe is bound to decrease with the passage of time. A black-hole formed, when white-matter pressure over it was say 100 A units, it would explode when pressure of white-matter over it is reduced to (say 99A units). Similarly a black-hole formed, which on its formation had a pressure over it of white-matter say 99A units, it would explode on having a reduced pressure of 98A units and so on. With the passage of time every new black-hole formed at a specific location in the Universe would be of less density with lesser quantum of the mass.

Because of the said reason, a massive biggest ever black-hole existed in the centre of the Universe billion years ago at the beginning of the existing phase of present Universe. The said discovered fact also proves that there was no big-bang but Universe originated from a massive biggest ever black-hole with very little similarity to big-bang. Universe is expanding, not by the speculated big-bang but by the reason (fact) as stated. (More and better explanation over the pressure of white-matter is under the relevant chapter).

● Biggest ever formed black-hole of the Universe:

Just at the beginning of the visible Universe or before the start of formation of galaxies, a primary (1st) massive black-hole (Bigger ever of the show) was developed in the centre of the Universe. Said massive 1st black-hole on its explosion resulted to form a number of galaxies.

Massive 1st black hole on its explosion must have left with major mass at its centre. This left over mass again developed to a black-hole (2nd generation black-hole) with lesser magnitude in density and quantum of mass than the 1st black-hole. Newly formed Universe with some galaxies of 1st generation started expanding towards outer space. With the result pressure by the white-matter over the 2nd generation black-hole started decreasing. With decreased in pressure of white-matter, 2nd generation black-hole exploded to form more 2nd generation galaxies. Exploded 2nd

generation black-hole again left with some mass; this left over mass again formed a 3rd generation black-hole with lesser density. Expansion of Universe outward again reduced white matter pressure over 3rd generation black-hole resulting to explode it. Explosion of 3rd generation black-hole resulted to form 3rd generation galaxies. Scientific factors suggest that this process must be still going on in the centre of the Universe. Now a massive black-hole of the biggest magnitude in the centre of the Universe among other all newly formed black-holes from the collapse of galaxies/stars would be in the Universe. That biggest black-hole must be at a place in the Universe from which existing Universe had the beginning.

3. Black-hole:

Flash Information from the World:

<p>World: From Internet Encyclopedia, June 2009.</p> <p>How does a black hole form?</p> <p>A black hole forms when any object reaches a certain critical density, and its gravity causes it to collapse to an almost infinitely small pinpoint. Stellar-mass black holes form when a massive star can no longer produce energy in its core. With the radiation from its nuclear reactions to keep the star "puffed up," gravity causes the core to collapse. The star's outer layers may blast away into space, or they may fall into the black hole to make it heavier. Astronomers aren't certain how supermassive black holes form. They may form from the collapse of large clouds of gas, or from the mergers of many smaller black holes, or a combination of events.</p>

In brief:

A black-hole is a formation of huge and dense matter having extremely high gravity which sucks every surrounding matter towards its centre. Because of its extreme gravity it also sucks light/rays (white-matter) too. As it sucks light thus it is invisible, so, such formation is called 'Black-hole'.

Challenger:

Collapse of a galaxy is the birth of a supermassive black-hole and bursting of a supermassive black-hole on crossing at its density saturation point and also by the reduction in the pressure over it of the white-matter (which surrounds it) because of the expansion of the Universe is the birth of a galaxy.

4. Are all black-holes rotating?

World:

A few lines exhibited below from the World's knowledge are the proof that Experts have no firm answer for it.

<p>From Internet Wikipedia dated: 09/09/2011</p> <p>Rotating black hole</p> <p>..... A rotating black hole is a black hole that possesses spin angular momentum..... As most stars rotate it is expected that most black holes in nature are 'rotating black holes'..... As every massive object rotates, it is plausible that most, if not all, black holes also rotate.....</p>

Challenger:

A celestial body (Black-hole, star/planet and satellite etc) rotates when a body releases (ejects) or absorbs (gets) materialistic-rays.

A newly formed black-hole from the collapsed star gets the spin but its spin-speed varies. Chances of a black-hole to come at a

halt are extremely rare (almost nil) because friction of the surrounding fine space (white-matter) with the rotating black-hole (densest-matter) is very negligible, so halt would take billions of years. Prior to its halt, a black-hole (Saturated black-hole) may explode to create galaxy/galaxies as illustrated below.

Explanation:

A black-hole to become saturated; engulfs surrounding matter. Its gravity can not suck (attract) white-matter of the finest kind, say particles below the particles of the Gamma-rays. So when a saturated black-hole is left with surrounded white-matter of the finest grade/kind, its spin-speed keep on decreasing by the friction (though negligible but not absolute zero) of surrounding finest kind of matter with the result after billion of years it may stop spinning. But for such a long time a saturated Black-hole can not stay unexploded.

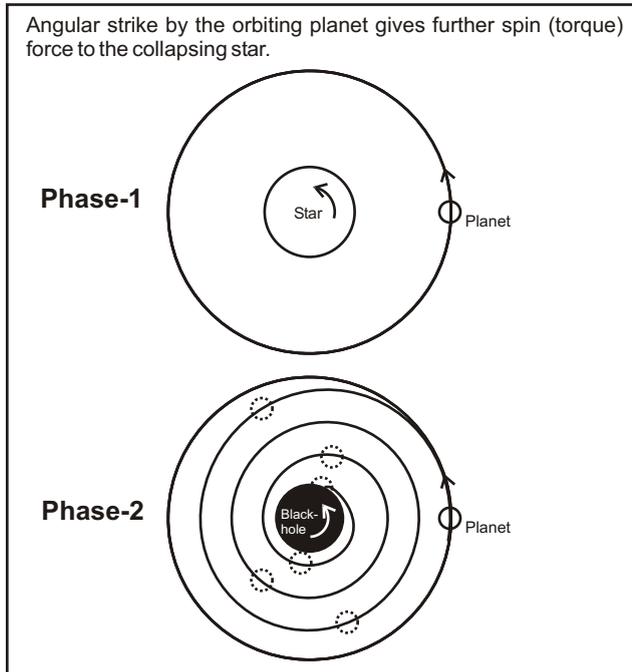
Explosion of a saturated black-hole is a must as the Universe is expanding. Expansion of the Universe is resulting in the lower and further lower pressure by the expanding white-matter zone thus thinning in density over the saturated black-hole. At a specific reduced pressure by the white-matter, a saturated black-hole would explode to pave the way to form galaxy/galaxies.



5. Pre-spin by the Black-hole:

Any dead star, which on its collapse has formed in a black-hole, was not stationary but its spin-speed must have come down, it must have been spinning like our Sun and other stars in its active life. Black hole has got pre-spin direction from the dead star (dead but spinning star). Further, it got acceleration to its spin-speed on its collapse to small volume. Dead-star, which becomes black-hole on its collapse would not be alone; it must have its family (forming of planets, satellites, asteroids, water and gases etc). At collapse of dead-star to a black-hole, its gravity sucked all of its family members to newly formed black-hole. (When the star was active; thrust of its materialistic-rays OR thrust of star-wind and star-radiation pressure along with centrifugal force had kept the family away in orbit but star on becoming dead or by losing intensity of the materialistic-rays, family matter would not be kept away by the great thrust thus it has to merge into black-hole). The whole condensed mass of the family to a black-hole got fast spin by the contraction. Experts (World) understand that formed black-hole is surrounded by absolute nothing space but newly formed black-hole of the solid mass is not surrounded by absolute nothing but it is surrounded by a state of the matter (white-matter). White-matter on its collapse further into the black hole gives it accelerated speed.

Dead-star on just its collapse also gets further spin by the angular strike of the matter of its own family at its collapse into it. The following sketch of the star and a planet can make the concerned understand. Angular strike by the orbiting planet gives further spin power to the collapsing star.



6. What spins the black-hole?

Challenger came to know in August 2011 after going through a magazine (ASTRONOMY) that Astronomers are still baffled that what spins the black-hole. Some lines from the magazines have been reproduced and exhibited as under:

Magazine 'Astronomy', issue Sept 2011, Page 20

What is one of the current "big ideas" about black hole?

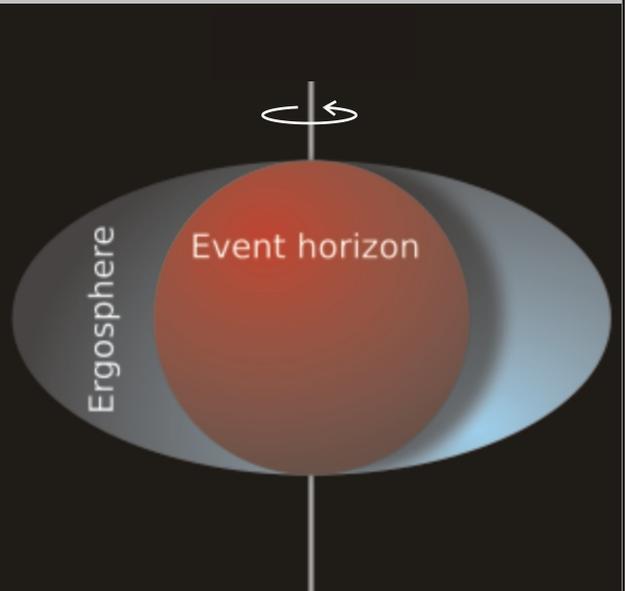
There are a few basic questions we're still trying to answer about stellar-mass black holes, but spin is one of the more interesting stories recently. Over the years, Scientists thought the spin of black holes must be associated with two origin factors. One is the progenitor— the object that collapses to form the black hole— where the progenitor's spin determines the resulting black hole's spin. The other factor relates to black hole evolution following its formation.....

.....A new idea is that neither factor determines black hole spin. Instead, the main influence is the supernova process itself— the core-collapse process.....

.....So, it leaves the core-collapse process as the remaining alternative to be responsible for the spin.

From Internet Wikipedia dated: 30/08/2011

Rotating Black hole



A rotating black hole is a black hole that possesses spin angular momentum.....

Rotating black holes are formed in the gravitational collapse of a massive spinning star or from the collapse of a collection of stars or gas with a total non-zero angular momentum. As most stars rotate it is expected that most black holes in nature are rotating black holes.....

Experts are far away from understanding correctly the basics of Physics (True States of the matter and unique materialistic properties of the Rays of all kinds) thus they are further far away from correctly understanding the basics of Astronomy (working mechanism of celestial-bodies).

In the absence of said correct knowledge, they are baffled and have no way out except to accept finally that it is the core collapse process that had/has given the spin to the black-hole or in other words black hole spins by the conservation of angular momentum, like understanding of the World over spin by the planets. What the Experts understand about present spin (not pre-spin) by the black-hole and also by the planets that is wrong and false. It is the materialistic-rays of the Sun and the planet, which spins the planet

(Explanation is under the relevant chapter) Pre-spin by the black-hole is by the collapse of the star/matter and present spin and accelerated spin by the black-hole is by the collapse of existing surrounding matter and particularly the materialistic-rays (white-matter), which surrounds the black-hole.

Explanation:

A black-hole has got primary spin from the collapse of a star. This primary spin reason the World understands but explanation over discovery by the Challenger that what presently spins the black-hole with accelerated spin-speed that could be given in a few paragraphs but because the Experts (World) do not know correctly the true States of the matter and unique materialistic properties of the rays thus explanation given here is long and like explanation to school-students.

- Rays of any kind are not merely a form of the energy but are the States of the matter, which act as energy. Rays are composed of particles and rays propagate in the form of particles thus are materialistic. Space is not empty, (absolute nothing) it is filled with materialistic rays OR in other words, space is filled with particles of the matter. Challenger has called this matter as white-matter.
- A black hole does not stop from collapsing further after collapse of the star matter. It keeps on further collapsing with the surrounding mass and particles of rays (which are filling the space) till it saturates to explode at any later stage. With the increase in the mass of a black-hole, gravity increases thus it sucks matter (white-matter and other matter) rapidly, hence its spin gets acceleration.
- Further, it is the resistance factor, which provides time period to collapse. If a matter collapses in no time, collapsed matter (core) would not have spun. Time period factor results the spin, when a matter by the collapse is transformed from one state to another by the black-hole or by any other body.
- How the resistance factor or the time factor plays the role to spin a body (black-hole) has long explanation, which runs into several pages. This factor can be well understood only after going through the chapter 'BLACK-HOLE' and other pages of the discovery claim under title: MATERIALISTIC UNIVERSE.

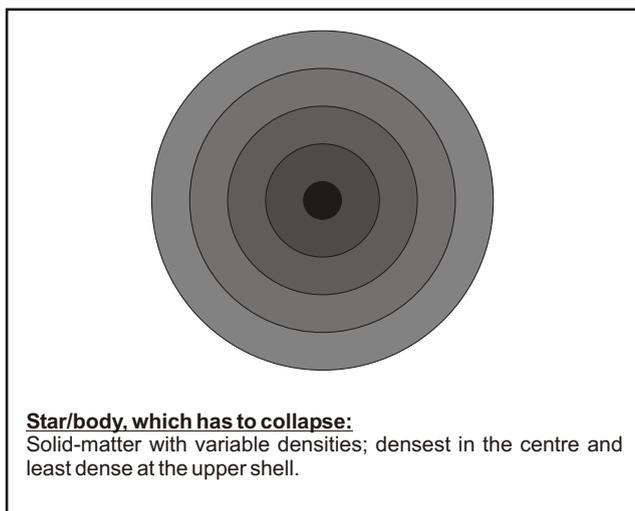
Note: It may not be easy to understand from the explanation given above over the spin by the black-hole by the white-matter and resistance factor, unless one goes through contents of explanation given for spin by the planets under title: MATERIALISTIC UNIVERSE. Explanation given below through visualized-experiment would ease understanding that what actually spins the black-hole after getting pre-spin by the collapse of the matter by a collapsed-star.



Faster and accelerated spin by the black-hole after its pre-spin on its collapse:

Visualized-experiment:

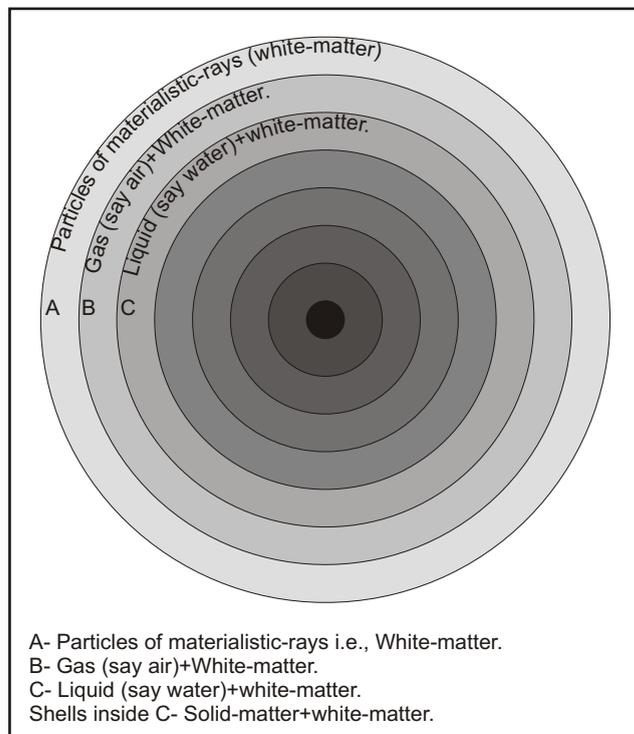
Step No. 1 Presume a collapsing star which has to collapse to form a black-hole. Collapsing star would be having matter with variable densities, greatest at the centre and minimum at its surface. For easy understanding, presume this star-matter in the form of shells with different densities as exhibited below:



According to the Experts (Astronomers/Physicists.....), such collapsing body to black-hole would spin at its collapse and would become the core of the black-hole. It is true but angular momentum would not keep on spinning the black hole for ever and ever and that too with accelerated speed unless it gets spin-power continuously from the further collapsing matter (a kind of matter as stated ahead).

Step No.2

Now, presume another big body enough to collapse to black-hole, though such a huge body with below stated features may not have its existence in the Universe. For visualized-experiment, consider-additional three more shells (A, B and C) of the matter of different states over the body as exhibited below.

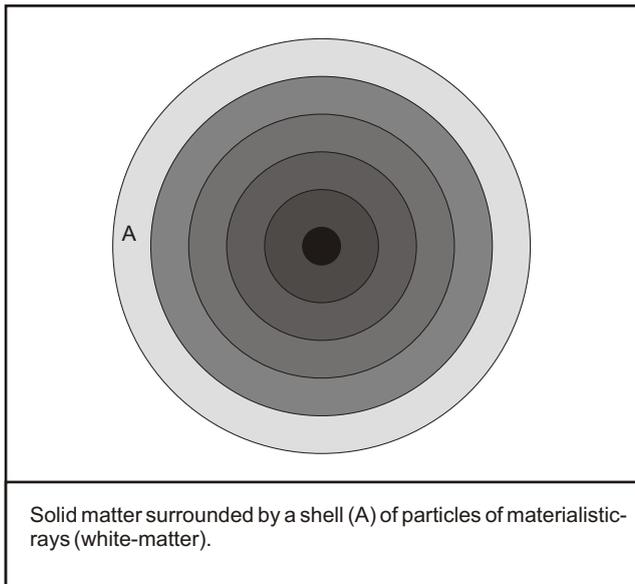


Before giving any explanation over kinds of matter of additional shells (A, B and C), information about true States of the matter and unique properties of Rays needs its flash reference. Rays of any kind are a State of the matter (materialistic). Illustration and proof of it has been given under the relevant chapter under title: MATERIALISTIC UNIVERSE. Here three repeated proofs are sufficient to understand that Rays of any kind are materialistic but not a wave (only a kind of energy). (i) Black-hole by its extreme gravity pulls (sucks) Light and other kinds of Rays. Gravity pulls (attracts) only the matter, so a Ray can not be a wave but it is a form of the matter. (ii) Speed of light-rays in water is less than speed in air; speed in air is less than speed in vacuum. Vacuum is not a zone with absolute nothing matter but it is a zone filled with a kind of matter. This kind of matter poses resistance to light-ray particles. Because of the said resistance, Light-rays travel in vacuum with a limited (specific) speed. If the space-zone had absolute nothing, it would have posed no resistance. Light-rays would have traveled any distance in no time but light-ray travels with a limited speed. So, particles of the rays are materialistic. (iii) It is not only the Sun, which is losing its mass but trillion and trillion of stars in the Universe are also losing their mass. Mass of the Universe is constant; so, lost mass by the Sun/stars has not vanished in the form of energy but it is in the space and also lost mass by the Sun/stars is being consumed by the black-holes. So, Rays of all kinds are a State of the matter. Rays are composed of materialistic particles. These materialistic particles are every where, forming a space medium. Materialistic particles of the rays are called by the Challenger as a white-matter; white matter exists in the solids, liquids, gasses and also has free existence forming a zone called space.

Now, the additional three shells (C, B, A) over the solid huge body, which has to collapse can be considered as shell of liquid (say water) plus white-matter; gases (say air) plus white-matter and particles of materialistic rays (white-matter) it self respectively.

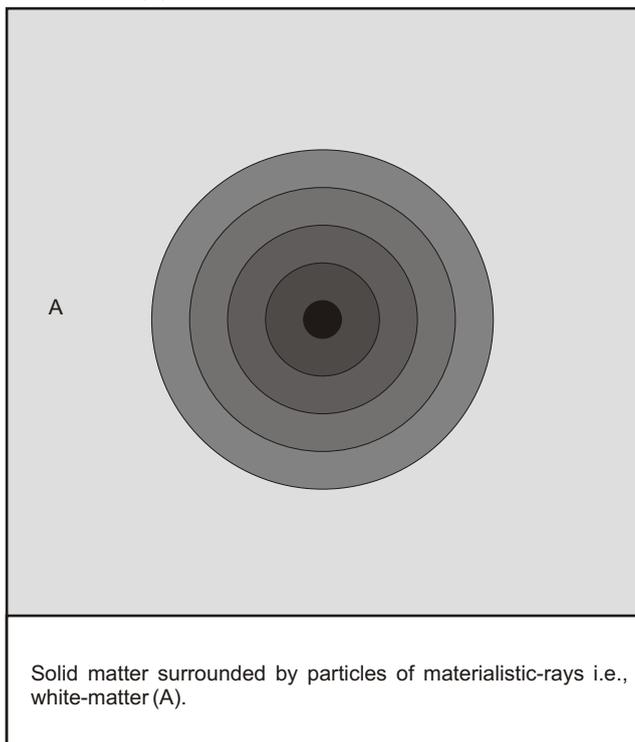
According to the Experts' understanding, Experts have no way out except to accept that such collapsing body too would get a spin on its collapse and would keep on spinning with accelerated speed till the whole mass gets compacted to a single unit of solid mass (black-hole).

Step No. 3 Now, from the visualized presumption, take out two shells (C and B) of the matter i.e., (liquid+white-matter) and (gases+white-matter) and presume the huge solid body with only one surrounding shell (A) (or the space of white-matter).



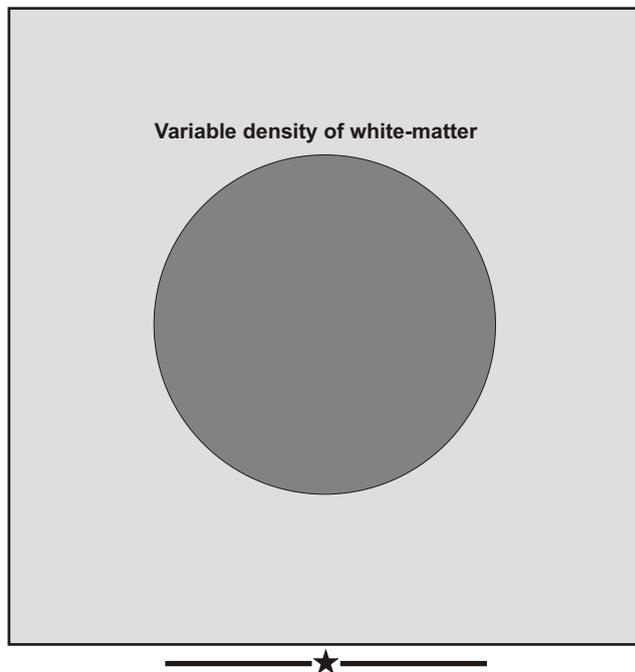
No doubt is left that such a body on its collapse would not get a spin till matter (white-matter) of the shell (A) is compacted to black-hole.

Step No. 4: Now, instead of presumed surrounding shell (A) of white matter over the solid mass of collapsing body presume vast and endless space (A) filled with white-matter.



Gravity of black-hole is so great, which sucks light and all other kinds of rays (white-matter) in space OR in other words, black hole is collapsing further with the surrounding white-matter.

Step No.5: Now the fact is that the white-matter, which surrounds the solid mass of a huge body has variable density; greatest over the solid body and the least at far away. White-matter near or over the huge solid body would be denser, like white-matter is dense over or near the Sun/star. Such huge solid body with such a great dense white-matter near to it would get spin from the collapsing white-matter into it. With the increase in the density of black-hole, density of surrounding white-matter would also further increase till saturation comes resulting to explode the black-hole at appropriate developed situation to form galaxy/galaxies.



Experts (Astronomers/ Physicists.....), please answer that why solid core of the black hole has got spin only on its collapse from solid-mass and why it (black-hole) can not get further spin (accelerated spin) by the white-matter on its collapse.

Conclusion: Space, which surrounds the collapsing star or the body (Body which has transformed to black-hole) is not empty (absolute-nothing) but filled with white-matter (particles of the rays). Collapsing of white-matter into the solid mass of the black hole alone or along with solids or gases is resulting in its further spin. Further, with increase in the mass (density) of a black-hole, speed gets acceleration. Present spin by the black-hole is not only by the conservation of angular momentum, which it had got from the collapsed star (body) but it was a pre-spin. Now the black-hole spins with accelerated rate by the collapse of surrounding matter (i.e., white-matter alone or along with any surrounding solid mass or gas). Black hole or any body on its collapse spins if the grains/atoms/ particles of the matter of any state(s) are closely touching each other. White-matter, which is present every where in space, forms a touching bond with every state of the matter. Because of white-matter, black-hole or any body on its collapse spins, irrespective of the noticeable touching bond of any state of the matter.

A matter can not become dense beyond a limit. Limit in the density is governed by the pressure of white-matter, which surrounds the mass. A black hole on reaching to its maximum density as per pressure of white-matter has to explode to form galaxy/galaxies.

Universe is expanding thus pressure of white-matter is decreasing. So, with the passage of time every black-hole is bound to explode. New black-holes would keep on forming but having lower density magnitude.

This discovered fact also proves that there was no Big-Bang because extreme high density of the matter of Big bang at its origin, (which has been speculated under the Big-Bang theory) could not have existed if such a densest matter is surrounded by a space of absolute nothing (Explanation is under the relevant chapter).

Final conclusion:

Present spin with the accelerated rate by the black-hole is by the collapse (sucking) of the dense white-matter from the surrounding space. When surrounding space would be left with finest form of the white-matter; black-hole would not get acceleration to its spin speed but would start slowing and further slowing till it explodes to create galaxies.

7. Why a star-ship does not dash straight towards a black-hole and why it swirls around a black-hole before merging into it to attain singularity?

Challenger:

World (Experts) has come to know through devices that a star-ship (star and its family, like Sun along with solar system) spiral-encircles around a black-hole before merging into it to attain singularity. Experts have no firm answer of it; except to link the phenomenon with the speculated theory 'time and space theory'.

There are two prime factors to swirl around a black-hole besides gravity and some other factors.

(i) **Resistance factor:** Resistance by the matter to get transformed from one state to another or to get transferred from one kind of matter to another. If there was no resistance by the space and no resistance for conversion of the matter from one kind to another or from one state to another, the said process would had taken no (zero) time. In such case star-ship matter would have dashed straight towards the black hole in zero time to merge into it.

(ii) **Connectivity factor by the matter, particularly by the white-matter:** World (Experts) has not given a thought over the fact that how a star-ship could spiral-encircle around a black-hole if the family of the star is floating in absolute no matter zone. Star-ship (Star and its family) can not swirl around a black-hole if the space between the two objects is empty i.e., absolute nothing. Space is filled with white-matter that is why a star-ship (star with its family) swirls around a black-hole before merging into it.

If particles, fragments or numbers of bodies as whole) are surrounded by **absolute nothing**, they can not spiral-encircle (swirl) around a black-hole to merge into its core. A solid matter surrounded by **absolute nothing** medium or space would move straight towards the core of the black-hole to merge into it.

This factor confirms that in absolute nothing medium particles of the solid matter can not spiral encircle around a black-hole unless, all particles are touching each other themselves or by any other state of the matter. Question of fragments and bodies as whole to spiral-encircle around a black-hole in absolute medium does not arise.

A solid matter only can spiral-encircle (swirl) around a black-hole to merge into it, if it has medium around of liquid or gas but solid matter spiral-encircle around a black-hole even in the absence of medium of liquid or gas. The medium, which binds the solid matter to spiral-encircle in the absence of liquid or gas is the **white-matter**. Density of white-matter around the black-hole varies, it is the greatest near to black-hole and the least dense at the far-off. Density of white-matter around a black-hole at close to it would be greater than the density of white-matter, at far off. Density of white-matter at close would be as dense as it has in the corona of the Sun (or any star).



8. Does rotating matter around a black-hole have the chances to escape from being merged into the black-hole?

Experts have understood that matter dashing with speed towards a black-hole has no escape from being merged into a black-hole matter but a matter which rotates around a black-hole has the chances to escape from being merged. A few lines have been exhibited below after taking from the World's knowledge to give a proof of it.

From Internet Wikipedia dated: 09/09/2011

As every massive object rotates, it is plausible that most, if not all, black holes also rotate. This makes Schwarzschild black holes very unlikely to exist.

If an object were to be sucked into a Schwarzschild black hole, there would be no way to avoid the singularity - any attempt to escape from the black hole will only shorten the time required to get to the singularity. When the object reaches the singularity it is crushed to infinite density and zero volume, and the object's mass is added to the black hole. In the case of rotating black holes however, it is possible to avoid the singularity.....

Challenger:

● A stationary star (presume a stationary star, though there is absolutely no possibility of a stationary star; active or even dead) on its sudden collapse (presumed in zero time period) to a black-hole would not spin. If a stationary star collapses in some time, it would get a spin with spin direction related to some other factors. Time period (resistance factor) and quantum of the collapsed matter would define its spin-speed.

● In the Universe no matter can dash perfectly straight towards the big matter because space is not empty (absolute nothing) and nothing is stationary. Very less distance between the two bodies would make one falsely understand that a small body has perfect straight move towards the large body. If it is presumed that a body can have straight move towards the black-hole, definitely there is no chance of its survival from having merged to a black-hole matter.

● Once a star-ship has got the rotation around a black-hole, it has no chances of its escape from being merged to a black-hole. It is only the time factor i.e., delay because a matter to get compressed or to get transformed into another kind of matter requires time period because of the factor 'Resistance'. Conversion process is fast but matter is huge, so we can't notice/see the changes to the matter in our life or in a century. In addition to it, we do not have a black-hole near to our Earth to see/notice with ease.

Matter once got attracted towards the black-hole would not find its escape.



9. Blazar:

World:

From Internet Wikipedia date: 30/08/2011

Blazar

A blazar (blazing quasi-stellar object) is a very compact quasar (quasi-stellar object) associated with a presumed supermassive black hole at the center of an active, giant elliptical galaxy. Blazars are among the most energetic phenomena in the universe and are an important topic in extragalactic astronomy.

Blazars are members of a larger group of active galaxies, also termed active galactic nuclei (AGN).....

Structure

Blazars, like all AGN, are thought to be ultimately powered by material falling onto a supermassive black hole at the center of the host galaxy. Gas, dust and the occasional star are captured and spiral into this central black hole creating a hot accretion disk which generates enormous amounts of energy in the form of photons, electrons, positrons and other elementary particles. This region is quite small, approximately 10^3 parsecs in size..... Perpendicular to the accretion disk, a pair of relativistic jets carries a highly energetic plasma away from the AGN.....

.....These relativistic jets can extend as far as many tens of kiloparsecs from the central black hole.....

.....All of these regions can produce a variety of observed energy, mostly in the form of a nonthermal spectrum ranging from very low frequency radio to extremely energetic gamma rays, with a high polarization (typically a few percent) at some frequencies.....

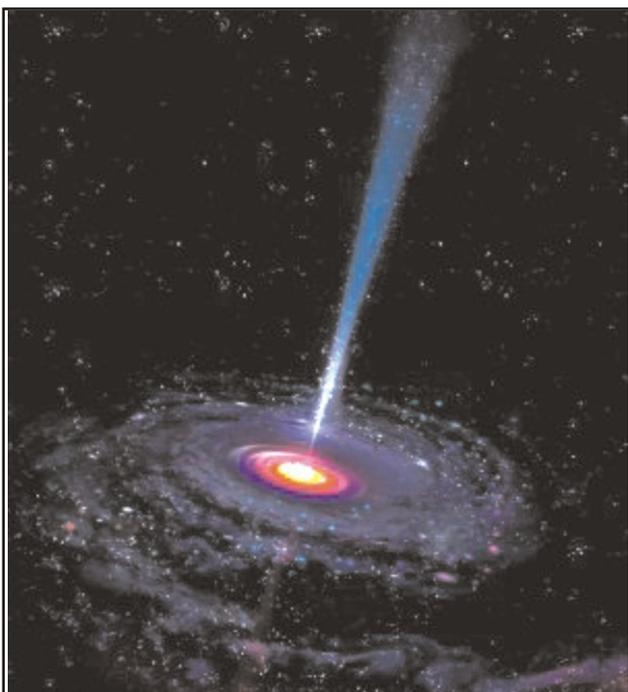
Relativistic beaming

The observed emission from a blazar is greatly enhanced by relativistic effects in the jet, a process termed relativistic beaming. The bulk speed of the plasma that constitutes the jet can be in the range of 95%–99% of the speed of light.

Astronomy magazine, issue March, 2010

In the heart of an active galaxy, matter falling into a supermassive black hole somehow creates jets of particles traveling near the speed of light.....

.....No one understands exactly what's happening in blazars or how the gamma rays arise. "When one of these things goes off, we see it coming, we see it peak, and we see it go away," says Michelson. " Eventually, that will provide us with tremendous insights into the physics of what's generating that emission".....



Jet of particles and rays from active galactic nuclei of the galaxy.

Above exhibited information about blazar is just a reference to make the concerned understand that the Experts do not know correctly that what is causing the jet of rays to come out from Poles' sides from the core of a black hole in an active galaxy. Experts understand that it is a stellar object inside the core which is generating and releasing the jet of particles and gamma rays etc.

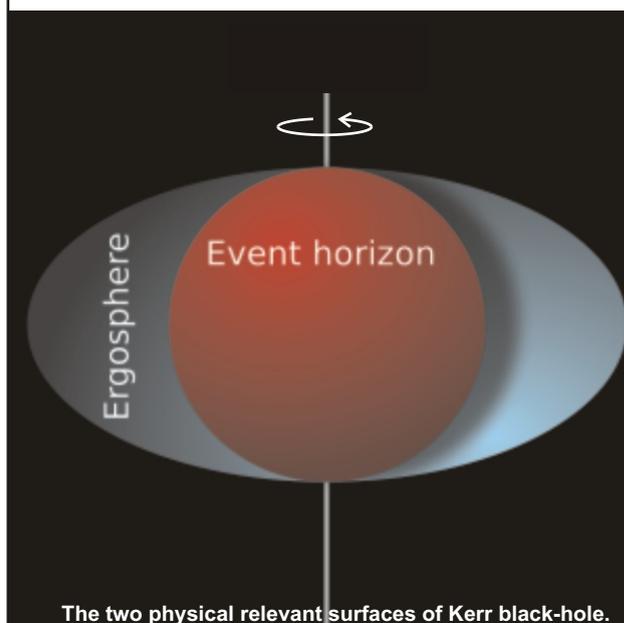
Challenger:

Challenger needs not to go for explanation over the blazar, like the Experts have. The reason of jet of particles/rays from the Poles of a black hole is very simple; provided the Experts understand correctly the states of the matter and unique materialistic properties of the rays.

Black-hole is compacting matter of all the states. Matter comes in to black-hole for getting compacted from all sides, except from the sides of the poles. Rays of any kind are formed of particles and particles are materialistic (or a state of the matter). Materialistic particles of the rays (or white-matter) are of variable densities and sizes. Matter on being compacted to high pressure inside the core, releases trapped materialistic particles (white-matter) of different densities and sizes in the form of jet, which can find their escape. There is no way out to escape by the said particles of the white-matter, except to find escape from the Poles. The said escaping white-matter on having highly compacted under extreme pressure forms the jet of white-matter particles.

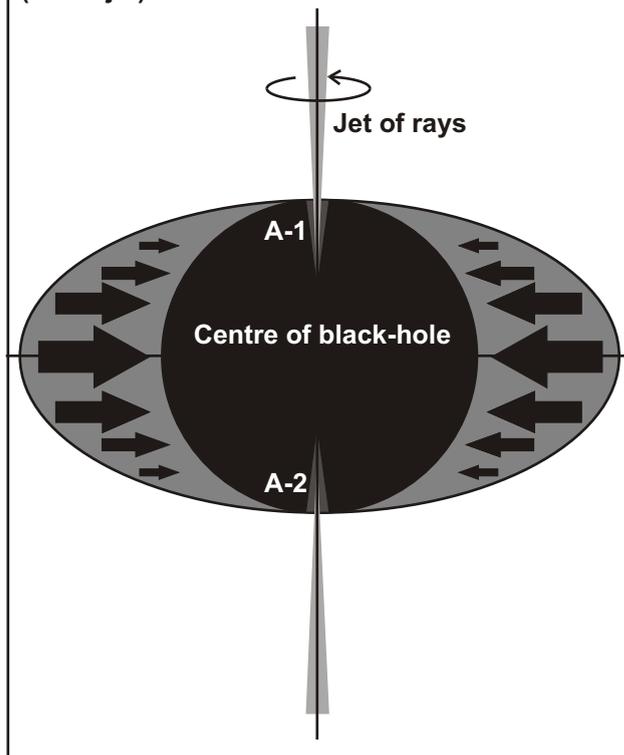
Rotating black-hole:

Sketch from Internet dated: 30/08/2011



The two physical relevant surfaces of Kerr black-hole.

Below is the modified sketch by the Challenger of the black-hole to understand escape of rays (like X-rays & Gamma rays etc.) in the form of jet (flared jet) from both the Poles.



Inward pressure over the matter of black-hole is variable because variable quantum and angles of approaching matter towards black-hole, which moves to get merge into it. Inward pressure is greatest at the equator and is the least over the Poles because great quantum of matter approaches over or near from the equator than near to the Poles. In addition to it, strike (approach) of the matter forms variable oblique angles (greatest oblique angle at the Poles and perpendicular over the equator). This phenomenon creates zones (A1 & A2) over and near to the Poles in the form of a cone at each Pole with the tip at some distance deep inside from the pole. The matter of the said conical zones (A1 & A2) on getting compressed by the surrounding matter of black-hole because of extreme gravity acts like an outlet valve to allow escape of the finest forms of the matter to escape, reach to the said zones A1 and A2 from the entire matter of the black-hole.

Escaping white-matter finest particles are under great pressure by the extreme gravity of the black-hole matter, so white-matter particles on their escape expand. Further, zones A1 and A2 are conical, so escape path takes a shape of flared jet. Escaping white-matter particles are in fast circulation by the fast spin of black-hole, so particles on their escape move in a spiral shape, like long stretched conical spring.

Escaping matter in the form of flared jet from a black-hole could only be the white-matter and that too of the finest kind particles like X-rays and Gamma-rays or even much finer than said materialistic-rays, which we do not know (or can't detect).

Why the jet flares at a distance?

Escaping white-matter of the jet inside the black hole was under extreme pressure, so on its escape white-matter particles start expanding. As speed of the escaping particles is almost equivalent to speed of light, so flared part of the jet is noticeable after some distance from the pole.



10. Black-hole & Galaxy relationship:

What World understands about the relationship between a black-hole and a galaxy, Challenger has not gone deep to understand it but Challenger's conclusion and explanation is as under:

The cycle to form a galaxy from the explosion of a black-hole and to form a black-hole by the collapse of a galaxy has time period of billions and billions of years. There are several phases and events that took place in the said cycle. It is not possible to understand any phenomenon by just noticing or seeing it. Any phenomenon can only be understood by knowing correctly the basics and scientific laws which govern the said cycle. By understanding (discovery) true basics, Challenger has been able to understand most phenomena correctly, which the Experts have not understood and some of which have been falsely understood by the Experts.

FACT: A black-hole on its explosion results in the formation of galaxy/galaxies and collapse of a galaxy forms a black-hole.



11. Collapse of the galaxy:

Collapse of a star in any location of a galaxy becomes the reason to collapse a galaxy resulting to form a black-hole. If a massive star in the galactic bar collapses, it results to collapse the galactic bar (cluster of stars); with the results galaxy collapses at the faster rate. If any star collapses at far away from the galactic-bar of a galaxy; collapsed star first engulfs its own family of planets satellites etc and then become the cause of collapse of nearby celestial-bodies' formations to it; ultimately leading to collapse the whole galaxy.



12. What results to collapse of a galaxy to from a massive or super massive black hole?

Pre-understanding before getting the answer:

To understand solar/planetary working mechanism, behavior of the Sun (*because of its intense materialistic-rays*) with the planets and other small objects (*because of their feeble materialistic rays*) is required. But to understand working mechanism of the galaxy, behavior of the central-zone massive star (*because of its extremely high*

materialistic rays) with the adjacent stars (*because of their high intensity rays*) is required. Whereas to understand black-hole; behavior of the central-zone massive living star (*because of its high materialistic rays*) with the adjacent weak/dead star (*because of its feeble materialistic rays*) is required.

(a) Collapse of a star in the galactic-bar resulting to develop a supermassive black-hole:

Two or more massive stars form a galactic-bar in the centre of a galaxy. These massive stars are away from each other because of their high intensity materialistic rays. Among these few central clubbed massive stars, by the passage of time when one star becomes weak/dead, its intensity of rays goes down drastically but whereas its great mass results to provide it extreme gravity. Adjacent massive living star cannot keep the weak/dead star away by its own rays, so both stars have to collide to become one unit. High-impact collision or 'too big one formation' of the stars' matter results to cease function of both the stars as star thus, they develop to a core to become black-hole; thus a black-hole is born. At the centre of galaxy two massive clubbed former stars (not now as stars) by becoming one giant body having huge gravity starts sucking nearby stars along with all other objects, dust and gas to become more and more powerful to suck every thing that it (clubbed central body stars) surrounds resulting to develop it a super massive black-hole.

(b) Collapse of a star in any location of the galaxy resulting to develop a supermassive black-hole:

If a star collapses in the galactic-bar, galaxy is transformed to a black-hole earlier. But if a star becomes a black-hole in any position/location in the galaxy, it would reach to a massive and supermassive black-hole in a long period.

A galaxy has space filled with white-matter (There is no dark-matter, it has been falsely speculated). White-matter exists every where in the galaxy, which does not leave any space as absolute nothing in between the two adjacent bodies. In the absence of white-matter as medium, no matter could have swirled around a black-hole before merging into it. Because of existence of white-matter every where, any star or huge-body on its collapse gets the opportunity to suck surroundings till developed black-hole does not reach at the centre or near to the galactic-bar to suck (merge) every thing of the galaxy into it. With this process, any collapsed star in the galaxy any where would result to collapse of the galaxy sooner or later.



13. Pattern of explosion and rapid-expansion of a black-hole to form galaxy/galaxies:

Challenger had a query in his mind from more than a decade that how a spinning black-hole explodes to form a galaxy (spinning-galaxy)? He got the answer in September 2011. Challenger has brain visualized by brain computing the known laws/factors that explosion by a black-hole would not be like explosion of a bomb in random form. A ball shaped bomb explodes in random form because of a number of factors; some of which are the following.

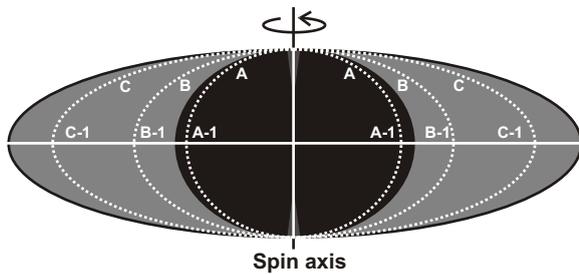
Factors with a spherical bomb:

- **Gravity factor:** A bomb bears the gravity direction effect, different at its upper half hemisphere than the lower side towards the Earth and also different gravity affects at its different other parts.
- Body of the shell or fragments of the bomb are not perfectly homogenous bonded at every part/point.
- Surrounding of the bomb too has different physical properties towards the outer sides (shell) of the bomb.

Factors with a saturated black-hole:

● But situation with a saturated black-hole, which has to explode, is different. It floats in almost no gravity zone effect, which (gravity effect) can be caused by the other nearby galaxy or black-hole. It (saturated black-hole) has almost uniform surroundings. Bond of its mass with each other forms a specific pattern and composition of matter and bond of matter is not random. If a black-hole is divided into shells of oblate shape, a shape similar to a black-hole; matter of every shell would have weakest bond with the nearby mass at the ring formed by the said shells with the equator plane of the black-hole because mass at the said every ring is at farthest away of that specific-shell of matter from the centre of the black-hole. On being farthest away, mass at the said every ring has the least pressure over it by the surrounding matter (thus least bond) as compared with the pressure (thus bond) of the mass at any part of the specific-shell. Or in other words equator plane of the black-hole is the plane (among all the planes parallel to it) with weakest bond between the two hemisphere of the black-hole.

A black has weakest bond of upper hemisphere (half part) with the lower hemisphere (half part) at its equator:



Shell(A) of the matter would have weakest bond at the ring A-1 over which shell and equator plane cut each other and the same factor is with the shells B and C at their specific rings B-1 and C-1 over the equator.

Black-hole spins very fast thus white-matter, which has to result the explosion inside the core would have greatest pressure by the centrifugal force to expand (move) over the equator plane. Two factors i.e., (i) Weakest bond of the black-hole matter over its equator plane and (ii) strongest tear off pressure of white-matter over the equator plane results to make apart upper and lower hemispheres and blow them away from each other by retaining the spin and also spin direction, though some what disturbed.

Separated half central densest thus highly brittle solid core matter at reduced and variable pressure over it would develop cracks to form a number of stars and also cluster of stars for newly formed galaxy. Central densest mass on being reduced to half in size would lose half gravity, thus matter would burst to form fine particles. These particles would again re-arrange themselves as per the situation. Each half part would transform its shape to a disc to form two separated galaxies.

Sketch to understand explosion of a saturated black-hole.

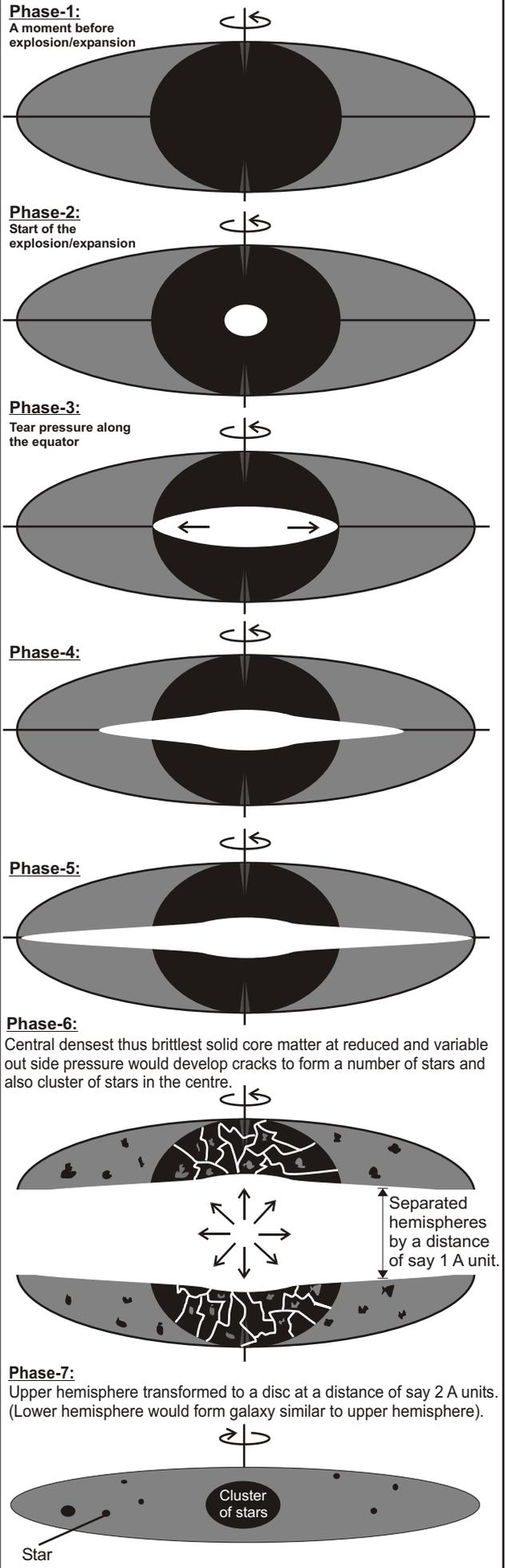
Before understanding phases of explosion; factor responsible for the explosion needs understanding.

Cause of extreme pressure by the white matter in the centre of black-hole; which results/triggers explosion:

Every black-hole releases white-matter of the finest grades (X-rays and Gamma-rays etc) in the form of jet from both the Poles. At saturation stage, matter of the black-hole becomes extreme dense thus makes difficult even for the finest white-matter to escape. White-matter of grades bigger in sizes than the X-rays and Gamma-rays keep on raising their pressure inside as they could not escape with the result, a stage comes for the explosion at the centre of the black-hole.

At the time of explosion by a black-hole, outward pressure by the inside exploding densest central core white-matter would split black-hole into two parts, like slicing at its equator. The following sketch with some phases of the explosion cum rapid expansion would make the concerned better understand.

Phases of explosion cum rapid expansion by a saturated black-hole:



Two separated primary galaxies would remain separated at wide distance to develop independent galaxies. Chances of re-merging of two galaxies to form one galaxy are nil. Formation and existence of separated two separate galaxies have the reason that by the expanding Universe with the passage of time Black-holes are formed of lesser and lesser magnitude, so the galaxies must have the principle to form new galaxies of lesser and lesser dimensions and mass. Collision and merging two different galaxies which are nearby can not be avoided, such phenomenon is taking place in the Universe with the passage of time formed galaxy can have a tilt to its plane.



Tilted plane of a galaxy with respect to plane of another galaxy:

Universe is expanding by the thrust of escaping white-matter from the central (inside part) of the Universe to outward. Situation of a galaxy is different at different location in the Universe thus intensity of thrust over a galaxy (or over its plane like a solid sheet) is variable/ different at its half side, which tilts the plane of a galaxy. Tilted plane can never be the same with the same tilting angle; as the galaxy orbits and also moves outwards by the expansion of the Universe, its situation keeps on changing resulting to change its tilt.

Because of the said fact, all the galaxies in the Universe have different tilt angles but most galaxies have orbital plane almost parallel to the equator plane of the spinning Universe (The whole Universe).



14. Black-hole or Pumping-hole:

Existence of a black-hole in the galaxy at any location or in the galactic-bar is justified only in case the galaxy is under the collapse. But if a galaxy is young then there existence of a black-hole in the galactic bar is not justified as per the Challenger's observation. Jet of particles and rays; a young galaxy could also eject from its centre without existence of a black-hole, like a black hole ejects.

A phenomenon in the centre of an active (young) galaxy has been discovered by the Experts, but Experts have falsely understood their discovered phenomenon as a small black-hole. In fact their discovered phenomenon is not a black-hole but it is a **pump-hole** having almost all noticeable physical features similar to a black-hole.

A small invisible place (dot) inside the galactic-bar is not a black-hole matter but it is actually and really a hole from where jet of particles, gases and materialistic-rays (energy rays) is escaping. Said mixture of matter has been pumped by the cluster of stars. The said hole is like an empty hole formed by the whirling water pool as explained below by a practical illustration.

14 (a): A simple practical, similar to pumping hole:

(Note: Practical illustration is not for the Experts to read but only for all other concerneds. Explanation for the Experts is after illustration given over the said practical).

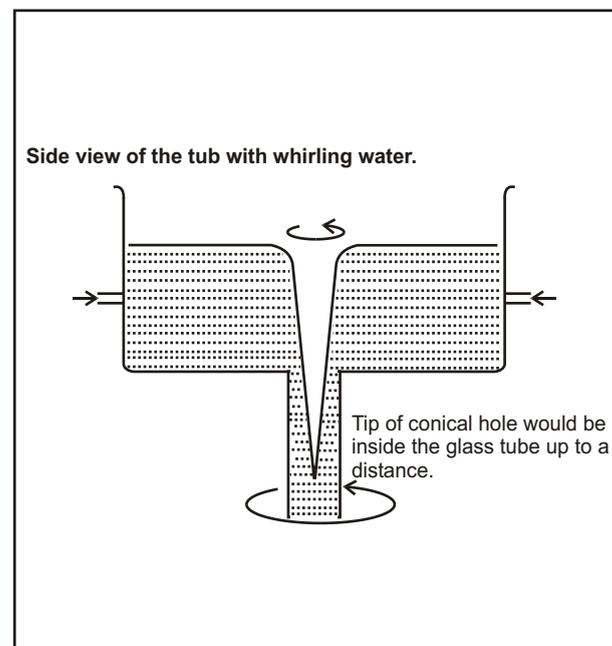
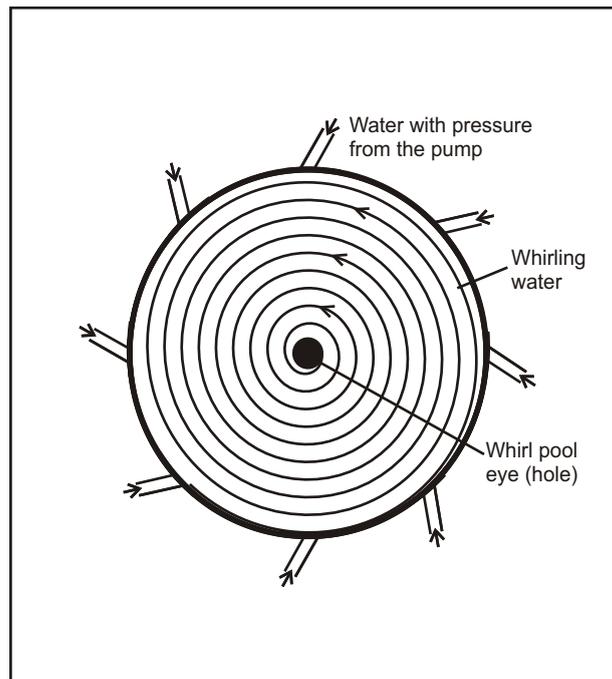
Practical-1:

Take a round plastic tub of diameter say three feet and of height say one foot and make a hole at its centre of diameter say 2 inches. Have a glass tube one foot long and of diameter 2 inches. Make arrangement to bond/fix glass tube at the bottom of the tub at the hole. Place the tub over a tripod stand. Put a rubber plug at the inlet of glass tube. Fill the tub with water and stir it vigorously to give fast rotation to water. Now remove the plug. Whirling water would

form a conical hole. This conical hole would be hollow in the tube up to some distance till spin speed by the water molecules becomes too low.

Practical-2:

Now make eight holes of half inch diameter to the side of tub to fix hose nipples at oblique position. Attach these hose nipples to a water-pump to pump water to the tub. Water would get a spiral circulation with a central conical hole on its escape from the tube. This arrangement would give a long period to study the practical to link observation with the actual phenomenon formed by the cluster of stars at the centre of the galaxy (galactic-bar). Consider incoming of water as entering of matter with thrust by the stars and whirling water like encircling white-matter; whirl hole as hole formed at the escape of jet.



Conclusion:

Noticed black-hole by the Experts in the centre of the active (young) galaxy is not the black-hole matter but really a hole. Because of the empty hole (no visible matter zone), hole-space is invisible space thus it mislead to understand as a black-hole.

14 (b): Black-hole and discovered Pumping-hole:**(Explanation for the Experts and also for all other concerned)**

Challenger has concluded from the discovered and claimed working mechanism of solar/planetary system by the materialistic-rays that a galaxy can not survive for long if it has a black-hole at its centre. But the Experts have claimed that a black-hole exists in the centre of the galaxy or in the galactic-bar. Their (Experts) finding (claim) kept on baffling the Challenger. It was the month of August, 2011 that Challenger came with the idea (conclusion) that similar phenomenon, like phenomenon by a black-hole can be formed by the stars of the galactic-bar. He named this phenomenon as 'Pumping-hole'. Explanation of his finding is as under:-

Explanation:

Any one phenomenon among the said two phenomena by the Pumping-hole or Black-hole could exist in the centre of a galaxy. Every concerned understands that what is a black-hole but Challenger has given a new name to a phenomenon which exists in the young galaxy as 'Pumping-hole', whereas a collapsing galaxy has a black-hole. A black-hole attracts (sucks) surrounding matter by its extreme gravity and it gets spin by the collapse of the matter (including white-matter) and by the angular strike of the collapsing matter. But a pumping hole at the centre of galactic-bar of young galaxy gets pumped matter (white-matter, gases and star-wind particles) from the cluster of stars which is extremely compressed white-matter of great density like or even greater dense than the density of white-matter of the corona of the Sun (but matter of much lesser in density than the black-hole). Pumping-hole matter spiral-encircles (swirls) around the dot by the materialistic-rays (white-matter) of the stars, like Sun's materialistic rays give spin to the planets. Pumped white-matter on move towards the dot (Pumping-hole) finds its escape route perpendicular to the plane of the galaxy in the form of a jet. Materialistic-rays along with gasses and star-wind particles on their escape move forward with almost speed of light but adopt a spiral path like stretched spring and also get flared because they are escaping from a fast rotating pool of dense and highly compressed white-matter.

14 (c): What is the difference between a black-hole and a pumping hole?

Information is repeated for better and firm understanding.

Black-hole:

Black-hole in the space is a densest form of the huge matter but in smallest compressed volume, which by its extreme gravity pulls (sucks) all surrounding matter in spiral encircling form. Density thus gravity of a black-hole matter is so great that light-rays (being materialistic) too can't escape from it, so it is invisible thus its name 'Black-hole'.

Pumping-hole:

Whereas discovered and claimed 'Pumping-hole' by the Challenger is a phenomenon in the centre of an active (young) galaxy or in the centre of galactic-bar formed (created) by the cluster of massive stars. Cluster of massive stars pump star-wind particles, gases and energy-rays (materialistic-rays) towards their common centre of orbit. Fast moving said matter reaches in the centre after traveling distance in the form of encircling spiral-way by forming an eye (hole) at the centre. From the said hollow-hole (eye) said matter escapes in the form of two jets (in opposite direction to each other). Small black dot noticed by the Experts in the galactic-bar is not a matter similar to a black-hole (invisible by extreme gravity) but it is really a hollow hole seen/noticed as black (not reflecting back light) similar to a black-hole (not reflecting back light).

Black-hole & Pumping hole:

- A black hole because of its extreme gravity has extreme pressure over the matter at its centre, which results to release trapped energy-rays (materialistic-rays) of shortest wave length (smallest/finest form of the white-matter particles) from the most densest part of the matter, which a black-hole has at its centre. But whereas a pumping hole in the centre of an active (young) galaxy actually gets pumped matter by the cluster of massive stars. Pumped matter is a mixture of star-wind particles, gases and energy-rays (materialistic-rays or white-matter).

Black-hole sucks matter from all direction except from its poles. So, Pole is the weakest spot/patch to get out some forms of the white-matter by the intense inside pressure thus a pair of jet in opposite directions of energy-rays (only finest form of the particles of materialistic-rays) come out from the Poles, whereas Pumping-hole gets pumped matter (star-wind particles, gases and materialistic-rays) from the cluster of stars. Stars'-rays are curved, so rays form a pattern of the matter around the eye (hole) at its centre (Explanation requires understanding about the discovered and claimed working mechanism of the Sun). Jet can not be formed at any other place other than at the said eye.

- A black-hole can exist anywhere; it may be independent in the space or in the galaxy at any location. Black-hole can not exist in the active (young) galaxy at its centre or in the centre of a galactic-bar but if it is there then the galaxy is not an active (young) galaxy but it is a collapsing galaxy, which has formed a black-hole by the collapse of a massive star among the cluster of stars.

- Spin direction of a pumping hole swirling in active (young) galaxy and by a black-hole which is in the centre of a collapsing galaxy is the same i.e., in the same direction that of the spin direction by the galaxy.

14 (d): Brain visualized experiment to understand working mechanism of a Pumping-hole in the centre of young galaxy (see sketch as exhibited ahead) :

Consider a cluster of stars which forms a galactic-bar to spin the galaxy. For easy understanding, presume all the stars of the same size and of the same intensity, let their number be eight. In such case, all the stars would have the same orbital-path and would orbit around a dot i.e., the centre of the orbit-circle. They all would also maintain the same distance from each other while orbiting.

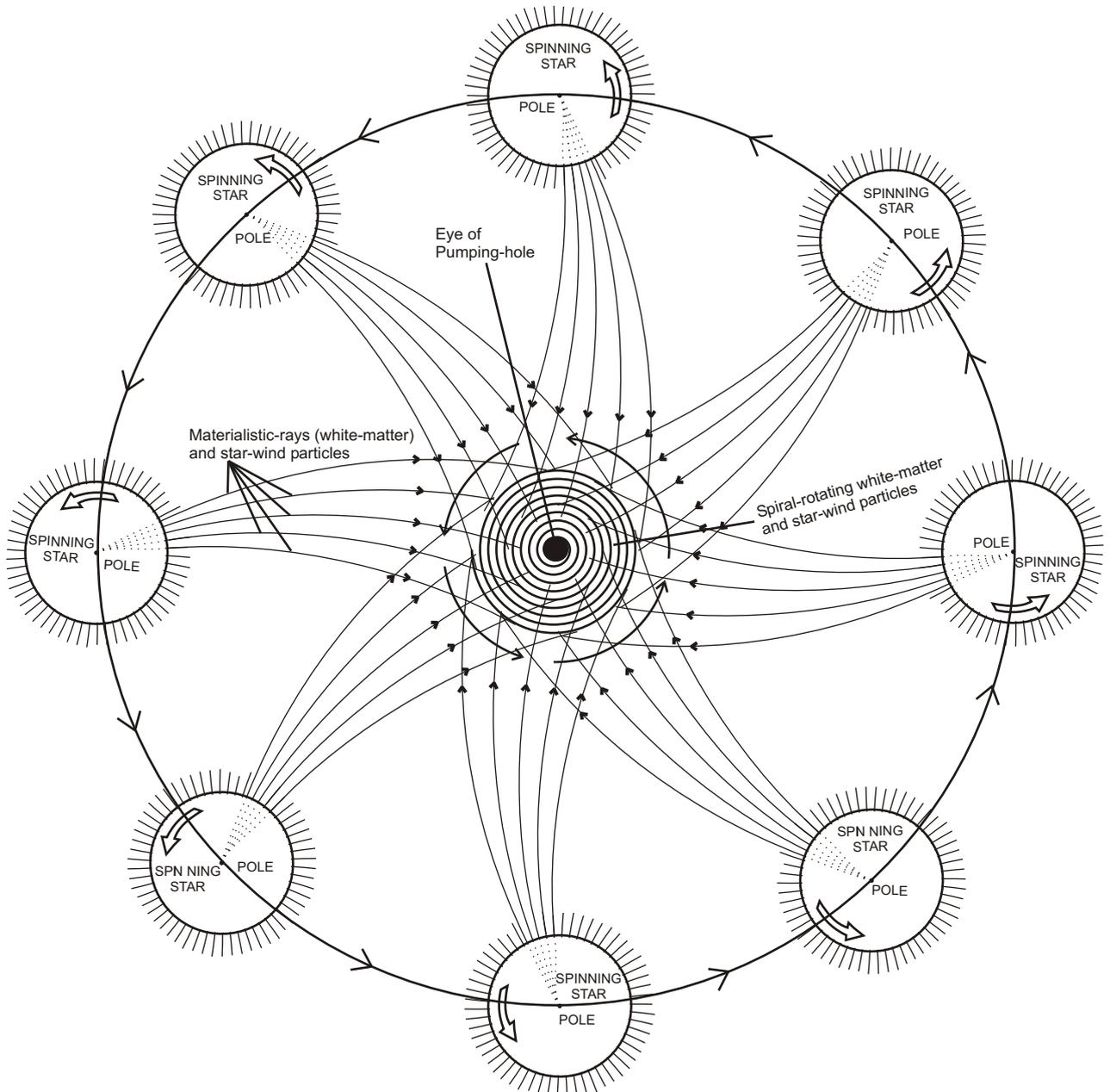
Every star would pump materialistic-rays and star-wind particles to all directions but with concentration of pumped matter over the plane of the orbital-path (galaxy). (Concentration of white-matter and star-wind particles over the 'plane of galaxy' or over the 'plane of orbital-path' of the stars is because all the stars spin). Pumped materialistic rays and star-wind particles on their move towards the centre of galactic-bar do not find their escape, except to adopt a pass route through the centre, which is perpendicular to the orbital plane of the stars. Accumulated and under high pressure spiral-encircling (swirling) materialistic-rays, gases and star-wind particles would escape from the centre in the form of jet.

Orbital speed of the stars would be very much less, because galactic-bar, which has bonded the stars together, has to spin the entire mass of the galaxy. Rotation/swirl-speed of the white-matter and star-wind particles at the pumping hole would be greatest at the centre, may be 75 to 95 % speed of the particles coming out in the form of jet, which move at speed almost comparable to speed of light/rays.

Spiral-spin (rotation) direction of the pumping-hole matter would be the same as spin direction of the galaxy.

PUMPING-HOLE Sketch No.-1

As viewed from its pole, visualized sketch of a pumping-hole formed by the compressed pumped matter by the cluster of stars in the centre of a massive young galaxy.

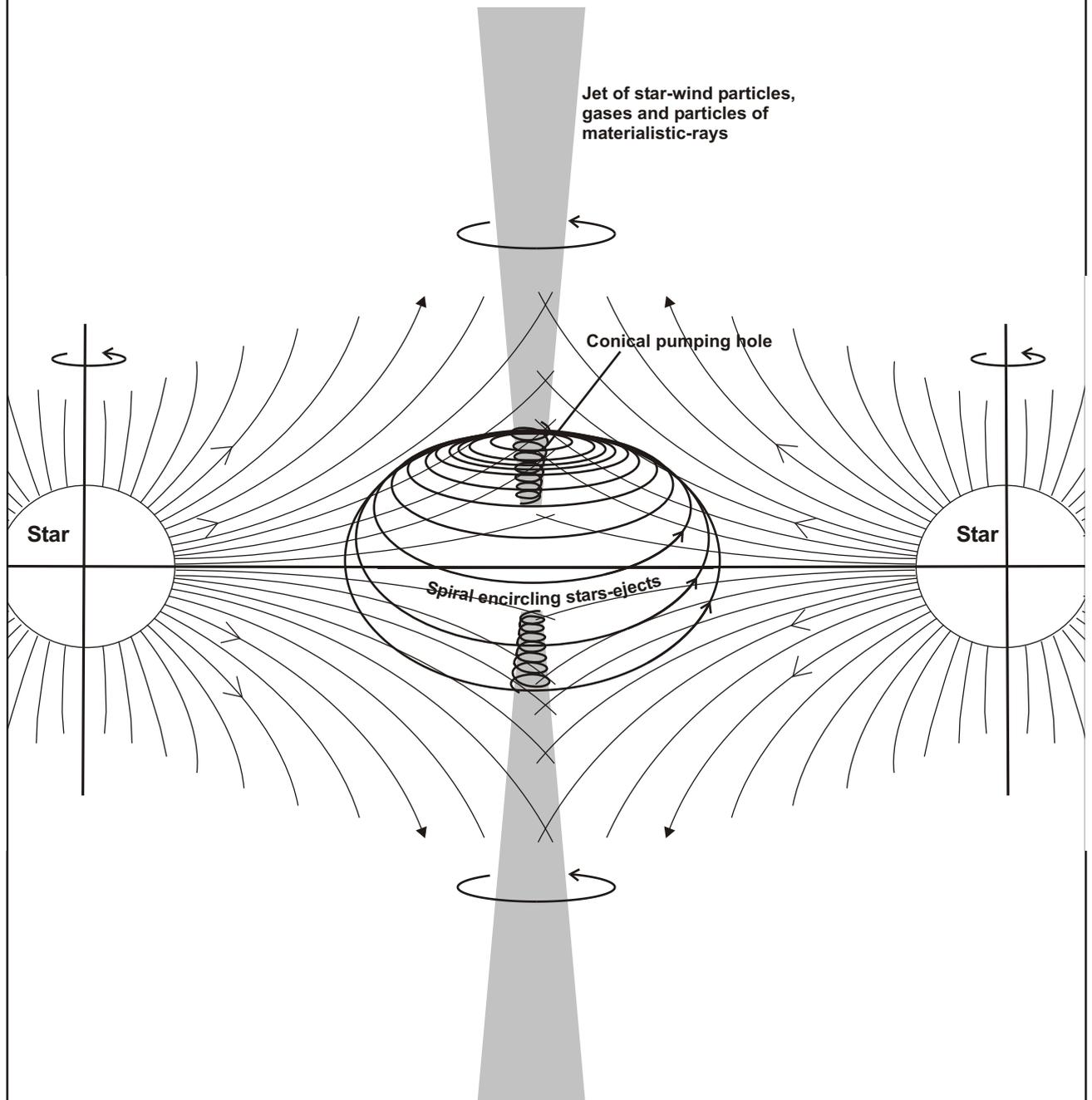


Materialistic-rays along with star-wind particles and gases from cluster of stars form a pumping-hole in the common orbital centre of the cluster of stars. Pumped mixture of matter swirls in the direction of the orbital direction of the stars. Swirling matter of the pumping-hole under pressure finds its escape in the form of a pair of jets in opposite direction as shown over the another sketch No. 2.

Rotation/swirl direction of the pumping-hole matter is the same as that of the rotation direction of the galactic-bar (galaxy).

PUMPING-HOLE Sketch No.-2

As viewed from its equator, visualized sketch of a Pumping-hole has been shown with only two stars; though to form a pumping-hole (formed of compressed pumped matter), massive stars in a great numbers are required:



Note: In this sketch only two stars have been shown among so many, which form pumping-hole. In fact a pumping-hole is formed by a number of stars.

14 (e): How a pumping hole phenomenon vanishes to become a black-hole?

Till a galaxy is young, it would have at its centre a pumping-hole(s). If any star among the galactic-bar or from the cluster of stars which forms galactic-bar collapses, that collapsed star would come in the centre of the stars at the location of the pumping-hole and would become a core of the black hole to suck materialistic-rays and star-wind particles and there after it would, also merge other stars into it to form a big black-hole. Spin direction of the newly formed black hole would be the same as that of the vanished pumping-hole. This process would result to collapse the galaxy. Galaxy would not collapse in very short period but may take thousands and thousands years.

14 (f): Path of the matter of the jet from the black-hole and pumping-hole.

(i) Path of the particles of the Jet (Blazar) from the Black-hole:

Black-hole matter spins, so path of the escaping particles of the rays of the jet would be spiral, like a stretched spring. White-matter particles of the jet before their escape are under extreme pressure thus compacted and speed of the particles is almost equivalent to speed of light-rays. So, beam of jet formed by the particles of rays would flare because of reduced pressure over the particles. Facts conclude that particles move fast, so beam would get flared continuously over a long distance in a spiral path.

(ii) Path of the particles of the Jet from the Pumping-hole:

In pumping-hole pressure over the gases, white-matter and other particles which the stars eject is lesser than the pressure, which a black-hole creates over the white-matter. But path of the matter of the jet is almost the same with similar/same other features.

14 (g): Massive active (young) galaxies with more than one Black-hole (Pumping-hole):

World:

It was reported in the magazine 'Astronomy' issue October 2011 that Astronomers have discovered binary active black-holes in a galaxy named 'Galaxy Markarain 739', which is at a distance of some 420 million light-years. Astronomers already knew one black-hole in the said galaxy but now they have discovered another black-hole in it.

Astronomers do not know correctly the reason that how a galaxy has two (binary) black-holes, which they believe to have formed through the merger. A few lines have been reproduced from the magazine and exhibited below, which confirms that the Experts do not understand the reason of existence of binary black-holes in a galaxy.

From Magazine 'Astronomy' dated: October 2011

Astronews

Astronomers discover binary active black-holes

Almost all massive galaxies have supermassive black holes at their cores that contain at least millions of times more mass than the Sun does. When galaxies merge, these central objects do, too. Astronomers have found that the galaxy Markarian 739 (which they already believed to have formed through a merger) contains two supermassive black holes.....

Challenger:

Challenger has understood the reason and working mechanism of binary black-holes (Pumping-holes) in a galaxy and the explanation is as under:

(i) What makes existence possible of binary black-holes (Pumping-holes) in a massive active (young) galaxy?

Two galaxies on their merge can not have binary black-holes (pumping-holes). On their merge (collision) working system of both the galaxies would get disturbed resulting to form a massive black-hole (actual-black-hole).

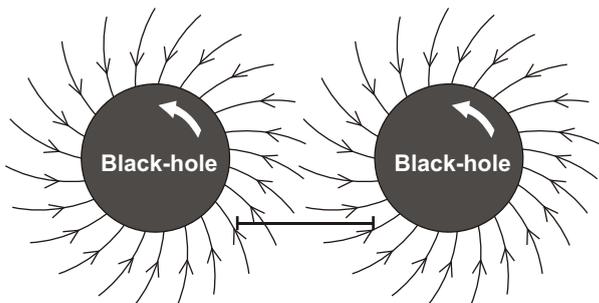
Binary black-holes (Pumping holes) are formed at the birth of the galaxy by the explosion of a saturated black-hole as explained earlier in this chapter.

(ii) Can two (Binary) black-holes co-exist?

It is not possible for the two black-holes to co-exist near to each other and question of binary black-holes in the centre of a galaxy does not arise. Let it be presumed that two (binary) black-holes exist in the galaxy, then both the Black-holes have matter to suck from all direction but they have no source to suck matter continuously for long from space in between them. In such presumed case, they both would come closer and closer to each other to attain singularity.

Sketch No.-3-B

Wrongly/falsely understood binary black-holes instead of binary pumping-holes in an active (young) galaxy.



No matter is available to suck in between the two black-holes thus both black-holes would get attracted towards each other to attain singularity.

Prior to this status, if any matter (stars) was in between them, they would have swallowed it.

Further, speculated binary black-holes having extreme gravity attraction in a galaxy are not far apart from each other and also both are not orbiting too fast around their common orbital centre to remain away from each other to prevent singularity. (Explanation is over the next page).

(iii) Working mechanism of a massive galaxy with two pumping-holes (pumping-holes but not black-holes as falsely understood by the Experts).

Binary pumping-holes work as two biggest stars (in the sketch each X and Y are considered/supposed biggest stars formed of a number of stars or cluster of stars). Cluster of stars (R) would spin around Pumping-hole (X) and cluster of stars(S) would spin around pumping-hole(Y) in direction as shown over the sketch. Both clusters of stars (R and S) would orbit around a dot (Z) which is the centre of (R) and (S). In fact dot (Z) too is a pumping-hole formed by the two clusters of stars (R) and (S). Intensity of this third pumping-hole (Z) to eject matter and rays in the form of jet as pumping holes (X) and (Y) are ejecting through their jets would be lesser because pumping hole (Z) is not encircled from all sides by the clusters of stars, like clusters of stars (R) and (S) are encircling

Their pumping holes (X) and (Y) receptively. For the galaxy, AD is the galactic-bar with spin axis at (Z).

If the galaxy had only one cluster of stars (R) among (R) and (S); AB would be the galactic bar with pumping hole (X) and in case galaxy had cluster of stars (S) only, in that case with the cluster of stars (S), it would have had galactic-bar CD with pumping-hole at (Y).

Note: If a galaxy has one pumping-hole, it would have one pair of jet in opposite directions but if a galaxy has two pumping-holes, it would have an additional third pumping-hole too with lesser intensity. If a galaxy have three pumping-holes formed by the three clusters of stars, a fourth pumping would also be there with intensity depending upon the situation and intensities of the clusters of stars of the galaxy.

Two or more pumping-holes in a galaxy can have their existence as shown over the sketch No.3-A. But binary black-holes do not have any reason to exist; their close existence with no matter zone in between them would result to bring them closer to attain singularity as shown over the sketch No. 3-B.

Working mechanism of a supermassive galaxy with binary pumping-holes (not black-holes as falsely understood by the Experts).

BINARY PUMPING-HOLES
Sketch No.-3-A

- X and Y are two pumping-holes.
- Z is an additional pumping-hole formed of low intensity.
- R and S are clusters of stars.
- AD is the galactic-bar of the galaxy.
- P is the spin direction of the galaxy.
- Q is the orbit and orbit direction of clusters of stars (R and S) and also orbit of pumping-holes (X and Y).

- (M) and (N) is orbit of the stars of cluster of stars (R) & (S) respectively.

Note: Materialistic-rays of clusters of stars R and (S) around (Z) in opposite directions are keeping each other at distance besides away by some other factors.