

Mathematics (Geometrical) Method of Determination of the Volume (Extent) of the Black Hole in the Centre of Galaxy

Dhananjay Shantaram Janorkar
Author, Researcher and Founder President,
Shantaram Janorkar Foundation of Mathematics,
Mahan - 444405, Tq.Barshitakli, Dist. Akola, (Maharashtra State),
INDIA

Abstract

The Volume (Extent) of the Black Hole in the Centre of Galaxy is determined from the ancient times up to the modern super computer era. I give here geometrical method of determination of the Volume (Extent) of the Black Hole in the Centre of Galaxy.

Keywords

Value of Circle, Value of Circumference of circle, The speed of light is 186000 miles/second it has been accepted by scientists and The speed of light i. e. 186000 miles/second is of the source of light in the formula $E=Mc^2$.

I. INTRODUCTION

The Volume (Extent) of the Black Hole in the Centre of Galaxy is determined from the ancient times up to the modern super computer era. I give here geometrical method of determination of the Volume (Extent) of the Black Hole in the Centre of Galaxy. The last position of some stars is a black hole. Stars of a mass greater than a certain mass transform into a contraction at the end of their life, into a black hole. The gravity of such black holes is so high that even the light cannot escape it and that is why such stars are called black hole. In Geometry, symbol for measurement accepted by world scientists (world official) is degree and the very degree is the root, scale, source and base of the research. Degree: Closed chop (Compass), Tip of the compass means point, means 1 point, means 1° degree, means dot • = degree means unit of measurement. The base of this whole research is 36° measure of circle.

II. MATHEMATICAL FORMULATION

Method to Determine of the Volume (Extent) of the Black Hole in the Centre of Galaxy

I determined the Volume (Extent) of the Black Hole in the Centre of Galaxy by using geometrical construction of circle.

A1. The construction of formula:

The construction of formula is made via Dynamic + Static concept or via assertion. The diagram is show:

We define the dynamic value + static value as multiplier of the measure of following diagram is divided in to three parts as follows,

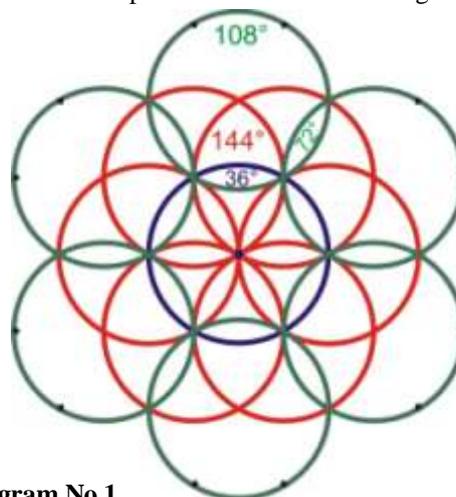


Diagram No.1

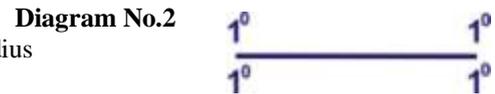
Detail of the definitions and values in the diagrams and all various types of methods of construction are given in the reference. [2,3,4,5,6,7,8,10,11,12,13,14,15,16,17,18,19,21,22].

Straight Radius: - Straight line segment joint centre of the circle and centre of the firstly constructed circle on the circumference of the original circle is called straight radius. **And its value is taken as $2^\circ + 2^\circ = 4^\circ$.**
[2,3,4,5,6,7,8,10,11,12,13,14,15,16,17,21,22].

Measure of straight radius: - Distance between two apex of the measure of straight radius is called “Measure of straight radius” **and it is in 4° degree measure.**
[2,3,4,5,6,7,8,10,11,12,13,14,15,16,17,21,22].

Measure of straight radius = It is sum of the measure of straight radius in clockwise direction

And anticlockwise direction
= $(2^\circ) + (2^\circ) = 4^\circ$ Measure of straight radius



Arc Radius: - An arcular line segment jointing centre of the circle and centre of the firstly constructed circle on the circumference of the original circle is called arc radius. **And its value is taken as $3^\circ + 3^\circ = 6^\circ$.** **OR**

The segment of circumference of a circle means An (Arc) arcular line segment joining measure of centre of a circle and measure of centre on the circumference of a circle and the distance between the two measures of centre are equal to straight radius, in clockwise and anti clockwise direction and which divide the circumference of the original circle in to six equal parts is called “Arc Radius” of circle. **OR**

Length of arc segment of circumference of circle is equal to radius then that segment of circumference of circle is called “Arc radius”. **OR**

The segment of the circumference of a circle whose length (distance) equal to straight radius its segment of the circumference of a circle is called “Arc Radius”.

[2,3,4,5,6,7,8,10,11,12,13,14,15,16,17,21,22].

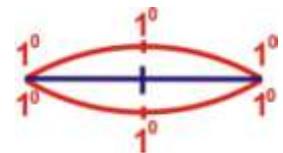
Measure of arc radius:- Distance between two apex of the measure of arc radius is called “Measure of arc radius” **and it is in 6° degree measure.**

[2,3,4,5,6,7,8,10,11,12,13,14,15,16,17,21,22].

Measure of arc radius = It is sum of the measure of arc radius in clockwise direction

And anticlockwise direction
= $(3^\circ) + (3^\circ) = 6^\circ$ Measure of arc radius

Diagram No.3



Circle: - Around the measure of centre of circle, up to the equal distance of radius means 6° measure of centre of circle of construction means up to circumference of circle completely circular and in the one plane of diagram is called circle. **And its value is taken as $6^\circ \times 6^\circ = 36^\circ$.** **OR**

A circle is a locus of a point in the plane such that its distance from a fixed point is always constant. Constant distance is called radius and fixed point is called centre. **OR**

The circle is a locus of a point such that it distance from fixed point is always constant, constant distance is called radius and fixed point is called centre of the circle.

[2,3,4,5,6,7,8,10,11,12,13,14,15,16,17,21,22].

Measure of circle: - Measure of plane is called measure of circle. **OR** Measure around the centre of circle is called measure of circle. **And it is in Measure of 36° .**

[2,3,4,5,6,7,8,10,11,12,13,14,15,16,17,21,22].

Centre of circle: - The fixed point at the middle of the circle is called its centre. **OR**

The place at the centre of a circle is called the centre of circle.

Measure of centre: - Measure of the fixed point at the middle of the circle is called its measure of centre.

And measure of centre of circle is 1° one Degree.

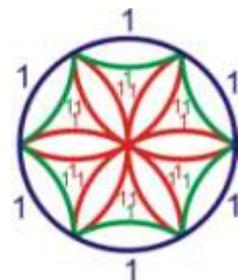
Interior all arc radius along with blue circumference of circle = $6 + 6 + 12 =$

24 arc radius or outer 24 arc radius of circle of first construction (Part No.1)

6 arc radius has 1 centre of circle hence how many centre of circle of 24 arc radius

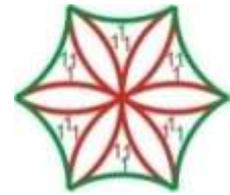
$24 \div 6 = 4$ centres of circle these are outside of first red construction.

Diagram No.4



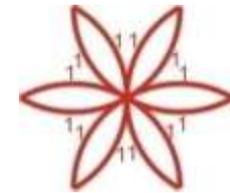
(Part No.2) Arc radius from green arc radius up to the original centre of circle
 = 6 + 12 = 18 centre of circle of this radius = 18 ÷ 6 = 3 centre of circles.

Diagram No.5



(Part No.3) How many measure of Centre of circle of 12 arc radius
 = 12 ÷ 6 = 2 Centre of circles.

Diagram No.6



The three parts of the diagram is as above. From this measure of 1 arc radius is 6^0 therefore measure of three parts is (Part No.1) 24 Arc radius $\times 6^0 = 144^0$ (Part No.2) 18 Arc radius $\times 6^0 = 108^0$ (Part No.3) 12 Arc radius $\times 6^0 = 72^0$

What is mean by dynamic value? Multiplication of the measure of above three parts

Dynamic value = $144 \times 108 \times 72 = 1119744^0 \div 36^0$ measure of circle = 31104 Dynamic value of Half Circumference of circle.

What is mean by static value? Sum of the measure of above three parts

Static value = $144 + 108 + 72 = 324^0$ Static value of Half Circumference of circle

Sum of the values Dynamic + Static = $31104 + 324^0 = 31428$ this total is the value of Half Circumference of circle.

The total value of Circumference of circle = $31428 \times 12 \div 6 = 31428 \div 2 = 62856$ total value

Diameter = $(6 + 6 + 12 \div 6 = 4$ Measure of centre of circle), Diameter = $1 + 2 + 1 = 4$, Diameter = $(1 + 3 + 3 + 3 = 4$ index of 10) = $10^4 = 10000$ Measure of radius 4 index of 10, Diameter $10000 \times 2 = 20000$ Measure of diameter

Goba = $62856 \div 20000 = 3.1428$ First value of Goba as per Dynamic + Static.

(Second value of Goba = $3.1428 - 0.0012 = 3.1416$)

Second value of Goba as per Dynamic + Static

62856 This is the total value of 6 arc radius of original circumference of circle therefore how many value of one arc radius = $62856 \div 6 = 10476$ From this value 4 measure of centre of circle outside of first construction of circumference of circle should be subtracted = $10476 - 4 = 10472$ This is multiplied by 6 arc radius, $10472 \times 6 = 62832$ This is the total second value of Goba as well as Circumference of circle.

Hence the value of goba = $62832 \div 20000 = 3.1416$ This is the second value of Goba, as per Dynamic + Static of second value of Half Circumference of circle. [2, 21].

A2. To solve this formula what is the relation between arc radius and straight radius? This is important to search this relation, because arc radius and straight radius are in proportional.

How many power or index of 10^0 for measure of radius?

First, Outside of the original circumference of circle + Measure of centre of circle of second construction is 10^0 measure of radius is power or index.

$$10^0 \text{ Measure of radius of power or index} = 10^{\frac{24 \text{ Arc radius} + 30 \text{ Arc radius}}{6 \text{ Arc radius}}} = 10^9$$

$$\text{Measure of radius} = 10^9 = 10 \times 10 = 1000000000^0$$

$$= 1000000000^0 \text{ One billion measure of radius}$$

[3,5,6,18,19,21].

The extreme limit of straight radius is one hundred crore or one billion straight radius and it is 3 stages.

The three stages follow as:

$$\text{Straight Radius} = 10^9 = 10^4 \times 10^3 \times 10^2 \text{ Three Stages}$$

$$10^4 \times 10000 \text{ First Stage}$$

$$10^3 \times 1000 \text{ Second Stage}$$

$$10^2 \times 100 \text{ Third Stage}$$

Straight Radius = $10000 \times 1000 \times 100 = 1000000000$ One Hundred Crore Straight Radius or One Billion Straight Radius.

This is extreme limit of radius. There is no bigger radius then this. The arc radius is in proportion with Straight radius. If radius is one hundred crore degrees then what is the measure of arc radius? Are radius is bigger than radius because arc radius is a curve.

How many arc radius?

1000000000 One billion radius

Diagram No.7

A3. Ratio of arc radius to straight radius

Static

Arc Radius

Dynamic

Value of 3 Arc Radius
(From the base is 36° Measure of Circle)

Diagram without flame
Measure of diagram is 324°

Diagram like a flame

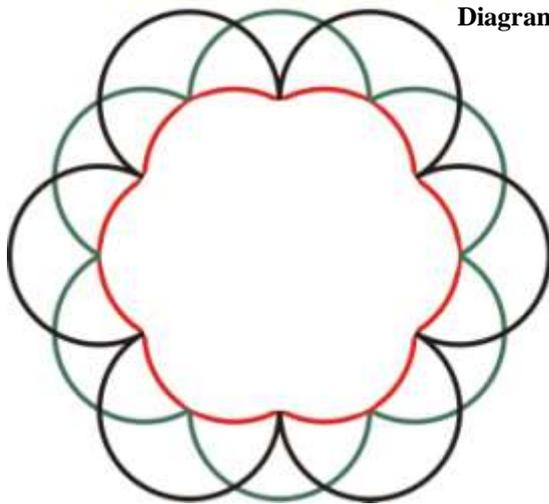


Diagram No.8

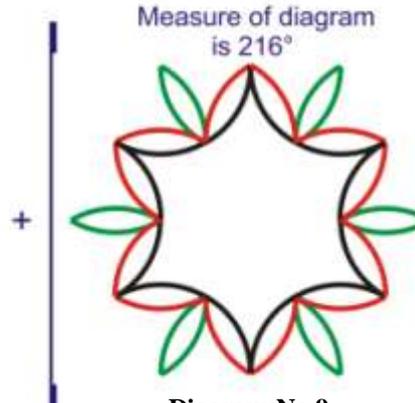


Diagram No.9

Measure of diagram is 144°



Diagram No.10

$$\frac{324^{\circ} + (216^{\circ} \times 144^{\circ})}{10000^{\circ}} = \frac{324^{\circ} + 31104^{\circ}}{10000^{\circ}}$$

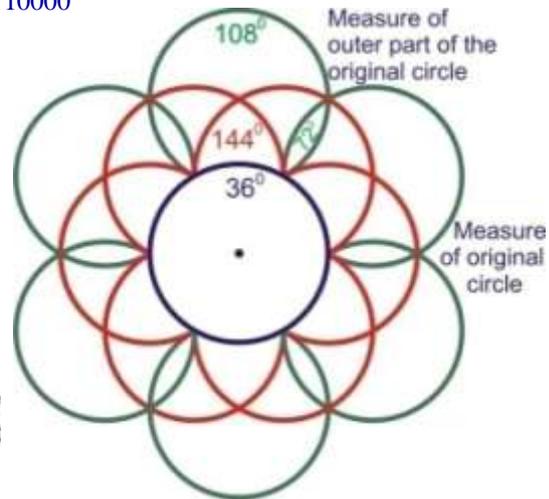
$$\text{Ratio} = \frac{\text{Arc radius}}{\text{Radius}} = \frac{31428^{\circ}}{10000^{\circ}} \text{ Value of 3 arc radius}$$

$$= \frac{31428^{\circ} \times (\frac{144^{\circ} + 72^{\circ} + 108^{\circ}}{36^{\circ}})}{10000^{\circ}} = \frac{31428^{\circ} \times \frac{324^{\circ}}{36^{\circ}}}{10000^{\circ}}$$

$$= \frac{31428^{\circ} \times 9^{\circ}}{1000^{\circ}}$$

$$= \frac{282852^{\circ}}{10000^{\circ}} \text{ Value of 27 arc radius}$$

Diagram No.11



$$= \frac{282852^{\circ} - (72^{\circ} \times 36^{\circ})}{10000^{\circ}}$$

$$= \frac{282852^{\circ} - 108^{\circ}}{10000^{\circ}}$$

$$= \frac{282744^{\circ}}{10000^{\circ}} \text{ 27 arc radius}$$

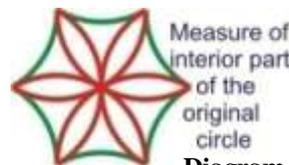


Diagram No.12

$$= \frac{282744^{\circ} \div \frac{324^{\circ}}{36^{\circ}}}{10000^{\circ}} = \frac{282744^{\circ} \div 9^{\circ}}{10000^{\circ}}$$

$$= \frac{31416^{\circ}}{10000^{\circ}} \text{ Value of 3 arc radius. Here the first stage of straight radius } 10^4 \text{ is complete.}$$

$$= \frac{31416^0 \times 1000^0}{10000^0 \times 1000^0} \text{The second stage } 10^3 \text{ of straight radius and arc radius starts}$$

$$= \frac{31416000^0}{10000000^0} \text{Value of three arc radius}$$

$$= \frac{31416000^0 \times \left(\frac{36^0 + 36^0 + 72^0}{36^0}\right)}{10000000^0}$$

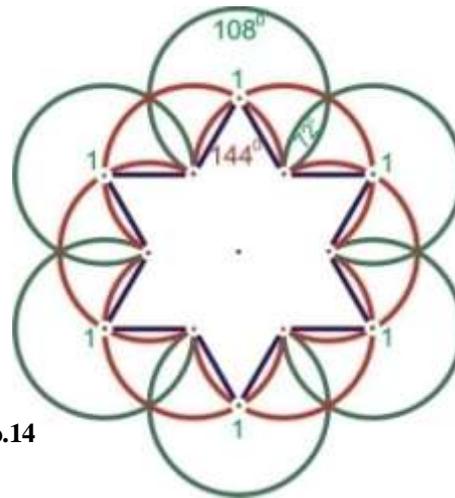
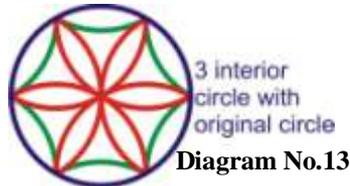
$$= \frac{31416000^0 \times \frac{144^0}{36^0}}{10000000^0} = \frac{31416000^0 \times 4 \text{Circle}}{10000000^0}$$

$$= \frac{125664000^0}{10000000^0} \text{Value of 12 arc radius}$$

$$= \frac{125664000^0 - [144^0 + 108^0 + 72^0 + 12^0(6^0 + 6^0)]}{10000000^0}$$

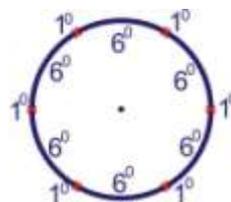
$$= \frac{125664000^0 - 336^0}{10000000^0}$$

$$= \frac{125663664^0}{10000000^0} \text{Value of 12 arc radius}$$



$$= \frac{125663664^0 + (36^0 + 6^0)}{10000000^0}$$

$$= \frac{125663664^0 + 42^0}{10000000^0} = \frac{125663706^0}{10000000^0}$$



$$\begin{aligned} &6^0 + 6^0 + 6^0 + 6^0 + 6^0 + 6^0 + \\ &1^0 + 1^0 + 1^0 + 1^0 + 1^0 + 1^0 \\ &= 36^0 + 6^0 = 42^0 \end{aligned}$$

Diagram No.15

$$= \frac{125663706^0 + 12}{10000000^0}$$

Diagram No.16



Value of 12 arc radius. Therefore, how many value of (1) one arc radius?

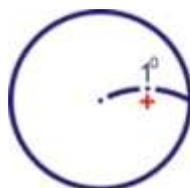
$$= \frac{10471975.5^0}{10000000^0} \text{Here the first stage of straight radius } 10^1 \text{ and the second stage } 10^3 \text{ of straight radius are complete.}$$

$$= \frac{10471975.5^0 \times 100^0}{10000000^0 \times 100^0} \text{Here the third stage of radius } 10^2 \text{ is complete. Radius is complete.}$$

$$= \frac{1047197550^0}{1000000000^0}$$

$$= \frac{1047197550^0 + 1^0}{1000000000^0}$$

Diagram No.17



When the original arc radius is created then it is divided in to equal part from the centre point of the arc radius. That centre point means 1^0 .

$$= \frac{1047197551^0}{1000000000^0} \text{The value of one arc radius and a straight radius is complete.}$$

(As above formula of goba is created) As per sign and digit in the formula of goba is as above.

[6,12,13,14,15,21,22].

A6. Second construction:

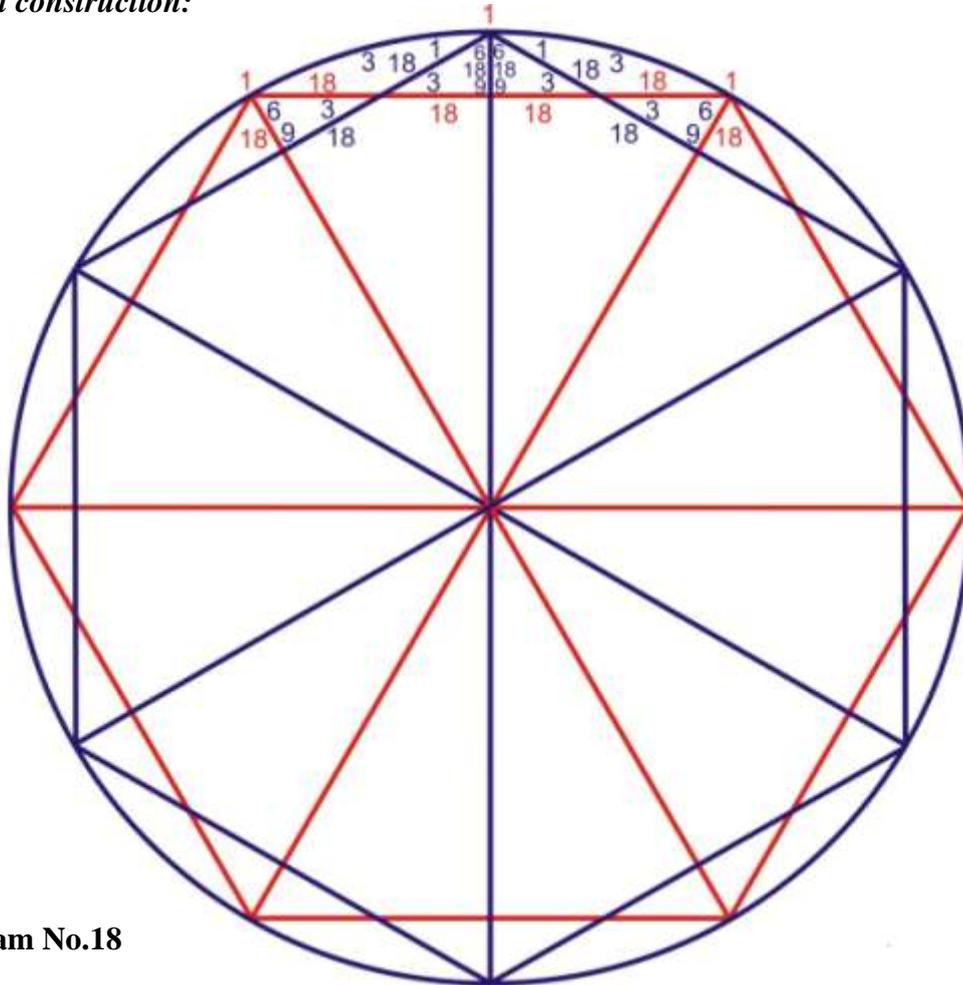


Diagram No.18

$$\text{Radius} = \ominus^{3 \times 3} = \bullet^9 = [10^{1+1+1} \times 10^{1+1+1} \times 10^{1+1}] = 10^9 = 10^4 \times 10^3 \times 10^2 = 1000000000^0$$

One billion or 100 crores radius is finite, radius is not infinite.

Arc Radius

Static

+

Dynamic

$$3^0 \times 18^0 + 3^0 \times 18^0 = 54^0 + 54^0 = 108^0$$

$$\begin{aligned} & [18^0 + 18^0 + 18^0 + 3^0 + 6^0 + 9^0] \times [18^0 + 18^0 + 18^0 + 3^0 + 6^0 + 9^0] \\ & + [18^0 + 18^0 + 18^0 + 3^0 + 6^0 + 9^0] \times [18^0 + 18^0 + 18^0 + 3^0 + 6^0 + 9^0] \\ & = [72^0 \times 72^0] + [72^0 \times 72^0] = 72^0 \times 72^0 + 72^0 \times 72^0 \\ & = 5184^0 + 5184^0 = 10368^0 \end{aligned}$$

$$108^0 + 10368^0$$

$$\text{Arc Radius} = 10476^0$$

$$10476^0 - 1^0 - 1^0 - 1^0 - 1^0$$

$$= 10472^0 \text{ Arc Radius } 10^4 \text{ up to the radius}$$

$10472^0 \times 10^{1+1+1}$ (x The next 10^3 radius start from here)

$$= 10472^0 \times 10^3 = 10472^0 \times 10^0 \times 10^0 \times 10^0$$

$=10472000^0$ Arc Radius
 $10472000^0 \times 12$ Arc Radius = 125664000^0 Value of 12 Arc Radius
 $125664000^0 - [(Half\ Circumference\ of\ circle)^2 = (18^0 \times 18^0) + (12^0)]$ 12 times the centre of circle must be subtracted from the circumference of circle
 $125664000^0 - [324^0 + 12^0] = 125664000^0 - 336^0 = 125663664^0$ Add in it measure of circle $36^0 + 6^0$ degree arc radius
 $=125663664^0 + 42^0 = 125663706^0$ Value of 12 Arc Radius
 The value of one Arc Radius
 $125663706^0 \div 12$ Arc Radius = 10471975.5^0 Arc Radius
 $10471975.5^0 \times 10^{1+1}$ (x The radius is equal to 10^2)
 $=10471975.5^0 \times 10^2$
 $=10471975.5^0 \times 100^0$
 $=1047197550^0$ Arc Radius
 $1047197550^0 + 1^0$ (Centre point of original arc radius of circle)
 $=1047197551^0$ Arc radius is completely limited

Ratio

Straight Radius 1000000000 : 1047197551 Arc radius

$$\frac{\text{Arc Radius}}{\text{Straight Radius}} = \frac{1047197551}{1000000000} = 1.047197551$$

Straight Radius 1 : 1.047197551 Arc Radius

Arc radius = $1.047197551 \times$ Straight Radius **and** **Straight radius** = $1.047197551 \div$ Arc radius [3, 4, 5].

Circumference of circle = 6 Arc Radius = $6 \times 1.047197551 = 6.283185306$ Circumference of circle

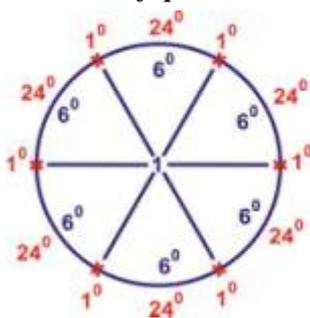
Diameter = 2 Radius = $1 \times 2 = 2$ Radius

$$\text{Formula of Goba} = \ominus = \frac{\text{Circumference of circle}}{\text{Diameter}} = \frac{\text{Circumference of circle}}{\text{Straight Diameter}} = \frac{6 \text{ Arc Radius}}{2 \text{ Straight Radius}} = \frac{6 \times 1.047197551^0}{2^0} = \frac{6.283185306^0}{2^0} = 3.141592653 \text{ Constant of Goba}$$

[1,2,3,4,5,6,12,13,14,15,18,19,21,22].

Arc radius is proportional to straight radius. Therefore, circumference of circle is proportional to diameter.

A7. Method of speed: A:



The speed of the cosmos, the speed of a sphere, the speed of a cube, the Speed of construction of Universe, The Speed of Mass and The Speed of Centre of circle

The speed of the cosmos = $6 \times 6 \times 6 \times 6 \times 6 \times 6 = 46656$

Subtract -1-1-1-1-1-1 Measure of Centres interior of the Circle 46656

$46656 - 6 = 46650$

Then subtract the addition of one on the circumference of the circle and Twenty four outside the circumference of the circle multiplied by 6.

In this way: Subtract $(1+24) \times 6$ Multipal = $25 \times 6 = 150$

$46,650 - 150 = 46,500$ miles/second speed

Diagram No.19

The addition of speeds = $46,500 \times 2$ or $46,500 + 46,500$ [Two (2) interior centres of circle in the interior of original circle] = $93,000$ mile/second inner speed

The addition of speeds = $46,500 \times 4$ [Four (4) outside centres of circle in the outside of original circle] = $1,86,000$ mile/second

[8,11,12,13,14,15,22].

OR

A8. Method of speed: B:

Clockwise direction	Speed	Anti-clockwise direction
$6 \times 6 \times 6 \times 6 \times 6 \times 6 - 6 - 6 - 144$	+	$6 \times 6 \times 6 \times 6 \times 6 \times 6 - 6 - 6 - 144$
= $46656 - 156$	+	$46656 - 156$

$$\begin{array}{rcl}
 = 46500 & + & 46500 \\
 & = & 93000 \text{ mile/second speed (This is the addition of speed)} \\
 \text{Anti-clockwise direction} & & \text{Clockwise direction} \\
 6 \times 6 \times 6 \times 6 \times 6 \times 6 - 6 - 6 - 144 & + & 6 \times 6 \times 6 \times 6 \times 6 \times 6 - 6 - 6 - 144 \\
 = 46656 - 156 & + & 46656 - 156 \\
 = 46500 & + & 46500 \\
 & = & 93000 \text{ mile/second speed (This is the addition of speed)} \\
 & \text{The addition of speeds} & \\
 & \leftarrow \frac{93000 + 93000}{2} \rightarrow & \\
 & = 186000 \text{ mile/second speed} &
 \end{array}$$

The speed, 1,86,000 mile/second is of flames, viz, the source of light. This speed of the cosmos. This speed is of the mass in cosmos. This speed is of all of us. This Speed of the construction of Universe. This Speed of the Centre of circle.

[8,11,12].

The speed of light is 1,86,000 miles/second. It has been accepted by scientists. [The speed of light, i. e., 1,86,000 miles/second is of the source of light in the formula $E = Mm^2$ which has been researched by Late Mr. Shantaram Bapurao Janorkar].

[8,9,11,12].

A9. $E = Mm^2$ which means Energy = Mass x (Speed of Mass) ²,

Speed of Light > Speed of Mass

$$\begin{aligned}
 \text{The Speed of Light} &= 1,86,000 \times 6^0 = 11,16,000^0 \times 10^4 = 11,16,000^0 \times 10 \times 10 \times 10 \times 10 \\
 &= 11,16,00,00,000 \text{ Internal Speed} \times 2^0 = 22,32,00,00,000 \text{ mile/second}
 \end{aligned}$$

Speed of Mass x Measure of centre of circle on the circumference of circle of the construction x Measure of circumference outside of the circle x Measure of centre of circle interior of the circle

$$1,86,000 \times \frac{10^4}{2} \times 2 = 22,32,00,00,000 \text{ mile/second}$$

Speed of Light/second = 22,32,00,00,000 mile most greatest speed

The Speed of Light is twenty two hundred and thirty two crore miles per second

[8,11,12].

A10. The total number of solar systems in the galaxy and the definite volume (extent) of the galaxy:

The total number of Solar Systems in the Galaxy

Proportion: One Solar System means measure of one degree of the original circle.(Original circle is in 36^0)

Means Measure of circle of the original circle 36^0 is 36 Solar Systems in one group of Solar System

The Total number of Solar Systems in the Galaxy:

36^0 Measure of circle of the original circle or 36 Solar Systems is in one group of Solar System x 6,283,185,306

The value of circumference of Galaxy or the circumference of circle = 226,194,671,016 The Total number of Solar Systems in the Galaxy.

COMPARISON OF 226,194,671,016 STARS IN THE GALAXY WITH 200 TO 400 BILLION STARS IN THE GALAXY

200 to 400 Billion Stars in the Galaxy (By World Astronomers)

200,000,000,000 to 400,000,000,000 World astronomers have found nearly approximately stars (Solar Systems) in the Galaxy.

[20].

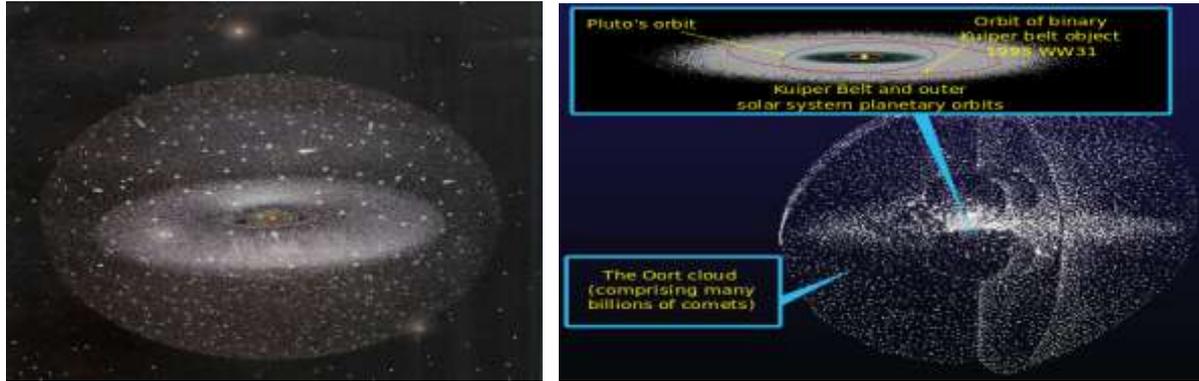
226,194,671,016 Stars in the Galaxy (By me)

226,194,671,016 I have found fixed stars (Solar Systems) in the Galaxy.

[12,13,14,15,22].

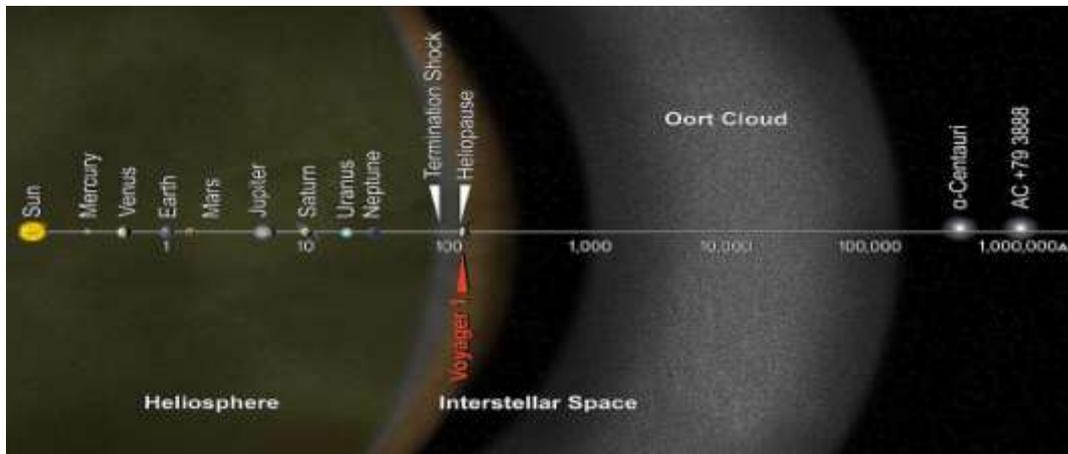
The definite Volume (Extent) of the Solar System and Galaxy

The Volume (Extent) of the Solar System:



<https://www.linkedin.com/pulse/20140921160548-91113078-our-twin-solar-system-and-its-discovery-at-the-turn-of-19th-century> Diagram No.20

Neptune Fact Sheet, NASA: Planet-Like Body Discovered at Fringes of Our Solar System, NASA Science: Heliophysics, Wikipedia Diagram No.21



The above diagram of solar system taken from Google Internet data. Diagram No.22

[12,13,14,15,20,22].

Circumference of solar system:

The Speed of construction of Universe, The Speed of Mass and The Speed of Centre of circle is 1,86,000 mile/second x 6,283,185,306 The value of circumference of solar system or the circumference of circle = 1,168,672,466,916,000 mile, Circumference of the solar system or The total number of Planets-stars, Mass, Holes (Hollow part like Hole or Space) in the Solar system 1,168,672,466,916,000 mile, Circumference of the solar system

1,168,672,466,916,000 mile, Circumference of the solar system, from this, by finding the straight radius of circumference of the solar system I find The Volume (Extent) of the solar system:

(\ominus = Goba means Circumference of circle ÷ straight diameter = Goba, $6.283185306^0 \div 2^0 = 3.141592653$)

Formula of straight radius -

$$r_s = \text{Circumference} \div 2 \ominus$$

$$\text{Straight radius} = \text{Circumference} \div 2 \times \text{Goba}$$

$$\text{Straight radius} = 1,168,672,466,916,000 \text{ mile, Circumference of the solar system} \div 2 \times 3.141592653$$

$$= 1,168,672,466,916,000 \text{ mile, Circumference of the solar system} \div 6.283185306 =$$

$$= 186,000,000,000,000 \text{ mile, The straight radius of the circumference of the solar system}$$

Formula of Volume (Extent) of the sphere (cubic units):

$$= \frac{4}{3} \pi r_s^3$$

The Volume (Extent) of the solar system:

$$= \frac{4}{3} \pi r_s^3, = \frac{4}{3} \times \text{Goba} \times \text{Straight radius}^3$$

$$= \frac{4}{3} \times 3.141592653 \times (186,000,000,000,000 \text{ mile})^3$$

$$= \frac{4 \times 3.141592653}{3} \times 6.434856 \times 10^{42} \text{ mile}^3$$

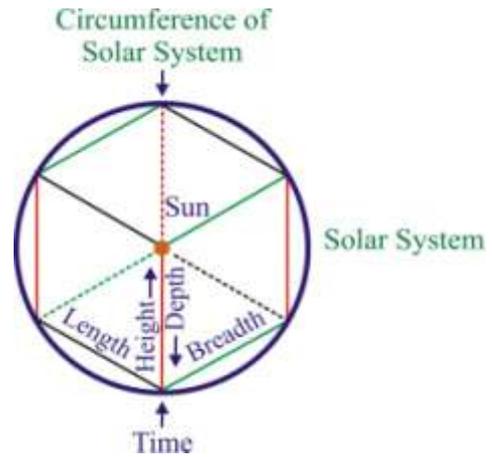


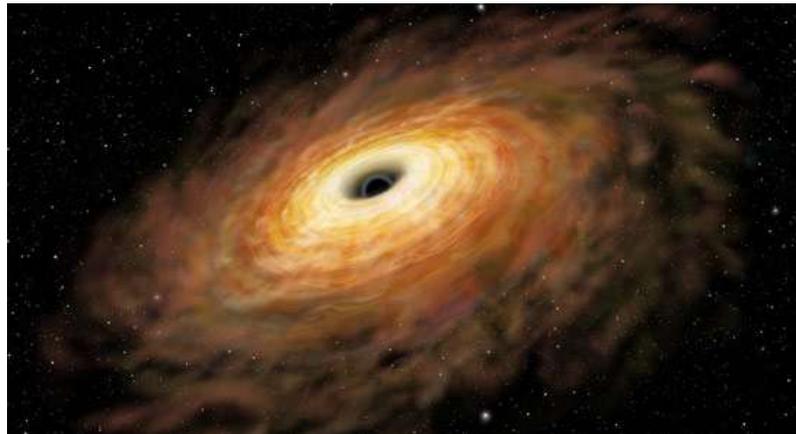
Diagram No.23

$$= \frac{12.566370612}{3} \times 6.434856 \times 10^{42} \text{ mile}^3$$

$$4.188790204 \times 6.434856 \times 10^{42} \text{ mile}^3 = 2.6954261776950624 \times 10^{43} \text{ mile}^3$$

$2.6954261776950624 \times 10^{43} \text{ mile}^3$, The Volume (Extent) of the Solar System or The Volume (Extent) of the total number of Planets-stars, Mass, Holes (Hollow part like Hole or Space) in the Solar system
 $2.6954261776950624 \times 10^{43} \text{ mile}^3$, The Volume (Extent) of the Solar System [12,13,14,15,22].

The definite Volume (Extent) of the Galaxy:



Subaru-Telescope-Reveals-Active-Supermassive-Black-Holes

Diagram No.24

Diagram No.25

The above diagram of Galaxy and Black-Hole taken from Google Internet data

[12,13,14,15,20,22].

36^0 Measure of circle of the original circle or 36 Solar Systems is in one group of Solar System $\times 6,283,185,306$
 The value of circumference of Galaxy or the circumference of circle = $226,194,671,016$ The Total number of Solar Systems in the Galaxy $\times 2.6954261776950624 \times 10^{43} \text{ mile}^3$, The Volume (Extent) of the one Solar System = $6.09691037511648997 \times 10^{54} \text{ mile}^3$ The definite Volume (Extent) of the Galaxy

The definite Volume (Extent) of the Galaxy = $6.09691037511648997 \times 10^{54} \text{ mile}^3$

Circumference of the Galaxy is $7.12067107543674 \times 10^{18} \text{ mile}$, Straight radius of the Galaxy is $1.13329 \times 10^{18} \text{ mile}$ and Straight diameter of the Galaxy is $2.26658 \times 10^{18} \text{ mile}$.

[12,13,14,15,22].

COMPARISON OF $2.26658 \times 10^{18} \text{ MILE STRAIGHT DIAMETER OF THE GALAXY WITH 100,000 LIGHT YEARS STRAIGHT DIAMETER OF THE GALAXY}$

100,000 Light Years means $5.87863 \times 10^{17} \text{ Mile Straight Diameter of the Galaxy (By World Astronomers)}$

100,000 Light Years means $5.87863 \times 10^{17} \text{ Mile}$, World astronomers have give approximately Straight Diameter of the Galaxy. [20].

2.26658 x10¹⁸ Mile Straight Diameter of the Galaxy (By me)

2.26658 x10¹⁸ Mile, I have give complete Straight Diameter of the Galaxy.

[12,13,14,15,22].

A11. The Volume (Extent) of the Black Hole in the Centre of the Galaxy, After the Super-massive explosion (blast), after completely expansion and in the end times

“In the time itself, after the Super-massive explosion (blast) of the invisible degree, the creation of the whole Universe means the Cosmos”

A11:1. After the Super-massive explosion (blast), the Universe means the Cosmos

After the Super-massive explosion (blast), Galaxies were created in the Universe i.e. the Cosmos,

The definite volume (Extent) of the Black Hole in the Centre of Galaxy:

36⁰ Measure of circle of the original circle or 36 Solar Systems is in one group of Solar System x 6,283,185,306 The value of circumference of Galaxy or the circumference of circle = 226,194,671,016 The Total number of Solar Systems in the Galaxy x 2.6954261776950624 x10⁴³ mile³, The Volume (Extent) of one Solar System = 6.09691037511648997 x 10⁵⁴ mile³, The definite Volume (Extent) of one Galaxy ÷ 72 (Measure of 12 arc radius or 12 arc radius x 6⁰ = 72⁰ Interior of the original circumference of a circle) = **8.467931076551x 10⁵² mile³**, After the Super-massive explosion (blast), Galaxies were created in the Universe i.e. the Cosmos, The definite volume (Extent) of the Black Hole in the Centre of Galaxy.

After the Super-massive explosion (blast), Galaxies were created in the Universe i.e. the Cosmos, one straight radius of the circumference of the Black Hole in the Centre of Galaxy is 2.72414 x10¹⁷ mile, Straight diameter is 5.44828 x10¹⁷ mile and circumference of Black Hole is 1.711627641949 x10¹⁸ mile. [22].

A11:2. The completely expanded the perfect Universe means the Cosmos

After completely expansion, Galaxies is in the perfect Universe i.e. the Cosmos, The definite volume (Extent) of the Black Hole in the Centre of Galaxy:

The formula for the Volume (Extent) of the point, i. e., the Volume (Extent) of the solid sphere

$$\text{Point} = \text{Solid sphere} = \frac{4}{3} \times \text{Goba} \times \text{Cube of Radius}$$

The value of the Volume (extent) of this point is 432 is the Volume (extent) of the sphere and I put the value in a formula. I find the static value of Goba, which is like this

$$432 = \frac{4}{3} \times \text{Goba} \times 1^3$$

$$\text{Goba} = \frac{3}{4} \times 432 \times 1$$

$$= \frac{3 \times 432}{4} = \frac{1296}{4} = 324$$

= 324 The value of Goba in static state

Circumference of circle = Goba x 2 = 324 x 2 = 648

= 648 The value of circumference of circle in static state.

[11,12,13,14,15,22].

OR

The three parts of the **diagram no. 1**. From this measure of 1 arc radius is 6⁰ therefore measure of three parts is [See in **diagram no. 4**] (Part No.1) 24 Arc radius x 6⁰ = 144⁰, [See in **diagram no.5**] (Part No.2) 18 Arc radius x 6⁰ = 108⁰, [See in **diagram no. 6**] (Part No.3) 12 Arc radius x 6⁰ = 72⁰

Static value sum of the measure of above three parts

Static value = 144 + 108 + 72 = 324⁰ Static value of Half Circumference of circle x 2 = **648⁰ Static value of Circumference of circle.**

After completely expansion, Galaxies is in the perfect Universe i.e. the Cosmos, The definite volume (Extent) of the Black Hole in the Centre of Galaxy:

36⁰ Measure of circle of the original circle or 36 Solar Systems is in one group of Solar System x 6,283,185,306 The value of circumference of Galaxy or the circumference of circle = 226,194,671,016 The Total number of Solar Systems in the Galaxy x 2.6954261776950624 x10⁴³ mile³, The Volume (Extent) of one Solar System = 6.09691037511648997 x 10⁵⁴ mile³, The definite Volume (Extent) of one Galaxy ÷ 648 (648 The value of circumference of circle in static state) = **9.408812307279 x 10⁵¹ mile³**, After completely expansion, Galaxies is in the perfect Universe i.e. the Cosmos, The definite volume (Extent) of the Black Hole in the Centre of Galaxy.

After completely expansion, Galaxies is in the perfect Universe i.e. the Cosmos, one straight radius of the circumference of the Black Hole in the Centre of Galaxy is 1.30963×10^{17} mile, Straight diameter is 2.61926×10^{17} mile and circumference of the Black Hole is $8.228647972296 \times 10^{17}$ mile. [22].

A11:3. In the end times, Galaxies is in the perfect Universe i.e. the Cosmos, The definite volume (Extent) of the Black Hole in the Centre of Galaxy:

36^0 Measure of circle of the original circle or 36 Solar Systems is in one group of Solar System $\times 6,283,185,306$ The value of circumference of Galaxy or the circumference of circle = $226,194,671,016$ The Total number of Solar Systems in the Galaxy $\times 2.6954261776950624 \times 10^{43}$ mile³, The Volume (Extent) of one Solar System = $6.09691037511648997 \times 10^{54}$ mile³, The definite Volume (Extent) of one Galaxy $\div 648$ (648 The value of circumference of circle in static state) **to, up to 0 = _____ mile³**, This is coming, in the end times, Galaxies is in the perfect Universe i.e. the Cosmos, The definite volume (Extent) of the Black Hole in the Centre of Galaxy.

For example: Take a round wheel there is a hole in the center of that round wheel not moving around without the axle being inserted in that hole. Likewise, there is a hole in the center of the galaxy. We call it black hole, and due to the gravitational waves invisible in that black hole, this galaxy completes its orbit. This whole universe is based on gravity, is surviving.

III. CONCLUSIONS

1. Mathematics (Geometrical) method it is a good method for determination of the Volume (Extent) of the Black Hole in the Centre of Galaxy.

2. After the Super-massive explosion (blast), Galaxies were created in the Universe i.e. the Cosmos, The definite volume (Extent) of the Black Hole in the Centre of Galaxy is $8.467931076551 \times 10^{52}$ mile³, Straight radius is 2.72414×10^{17} mile, Straight diameter is 5.44828×10^{17} mile and circumference is $1.711627641949 \times 10^{18}$ mile.

3. After completely expansion, Galaxies is in the perfect Universe i.e. the Cosmos, The definite volume (Extent) of the Black Hole in the Centre of Galaxy is $9.408812307279 \times 10^{51}$ mile³, Straight radius is 1.30963×10^{17} mile, Straight diameter is 2.61926×10^{17} mile and circumference is $8.228647972296 \times 10^{17}$ mile.

4. $6.09691037511648997 \times 10^{54}$ mile³, The definite Volume (Extent) of one Galaxy $\div 648$ (648 The value of circumference of circle in static state) **to, up to 0 = _____ mile³**, This is coming, in the end times, Galaxies is in the perfect Universe i.e. the Cosmos, The definite volume (Extent) of the Black Hole in the Centre of Galaxy.

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V. REFERENCES

- [1] Shantaram Bapurao Janorkar, "Goba Cha Swayamshidha Sidhanta" (In Marathi language) -15 September 1998, Om Publication, Mahan-444405, India
- [2] Shantaram Bapurao Janorkar, "Goba Cha Swayamshidha Sidhanta Wa Sutracha Aadharacha Spastikaran" (In Marathi language) – 4 April 2004, Om Publication, Mahan-444405, India
- [3] Dhananjay Shantaram Janorkar, Web-Site: www.sbjanorkar.com – 10 December, 2014, Om Publication, Mahan- 444405, India
- [4] Dhananjay Shantaram Janorkar, Internet data.
- [5] Dhananjay Shantaram Janorkar, researchgate.net Link: https://www.researchgate.net/profile/Dhananjay_Janorkar3/publications
- [6] Shantaram Bapurao Janorkar, Dhananjay Shantaram Janorkar, The self - proving theorem of Goba and its explanation on the basis of a formula, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume - 1, Issue - 1, 15 September, 2015, Page No. 81-156. ISSN (P):2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 157-226).
- [7] Shantaram Bapurao Janorkar, Dhananjay Shantaram Janorkar, Point - The theorem of existence of point and its aspect, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume - 1, Issue - 1, 15 September, 2015, Page No. 227-245. ISSN (P):2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 246-264).
- [8] Shantaram Bapurao Janorkar, Dhananjay Shantaram Janorkar, $E=Mm^2$ Which means Energy = Mass \times (Speed of Mass)², Speed of Light = $22,32,00,00,000$ Mile/per Second (Twenty two Hundred and Thirty two Cores Mile/per Second), International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume -1, Issue-1, 15 September, 2015, Page No. 265-290. ISSN (P): 2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 291-316).
- [9] Shantaram Bapurao Janorkar, Dhananjay Shantaram Janorkar, The Distance between Shining Lightening as well as Thundering Cloud and the Earth, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume -1, Issue-1, 15 September, 2015, Page No. 317-321. ISSN (P): 2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 322-325).
- [10] Dhananjay Shantaram Janorkar, The Theorem of the Formula of Arc Radius, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume - 2, Issue - 2, 15 September, 2016, Page No. 1-18. ISO 9001:2008, ISSN (P):2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 19-36).

- [11] Dhananjay Shantaram Janorkar, The Theorem of the Evolution or Creation of the Universe i.e. the Cosmos and the Speed, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume- 2, Issue - 2, 15 September, 2016, Page No. 37-78. ISSN (P):2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No.79-116).
- [12] Dhananjay Shantaram Janorkar, The theorem with respect to the total number of solar systems in the galaxy, the total number of planets revolving around the sun and having earth like organisms and the definite volume (extent) of the galaxy ► The total number of solar systems in the galaxy = 226,194,671,016 ► The total number of planets revolving around the sun and having earth like organisms in the galaxy = 113,097,335,508 ► The definite volume (extent) of the galaxy = $6.09691037511648997 \times 10^{54}$ Mile³, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume-2, Issue-2, 15 September, 2016, Page No. 211-268. ISO 9001:2008, ISSN (P):2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 269-322).
- [13] Dhananjay Shantaram Janorkar, The theorem with respect to the total numbers of Planets - Stars, Mass and Holes (Hollow part like Hole or Space), Solar Systems, Planets revolving around the sun and having earth like organisms, Galaxies in the Universe i.e. the Cosmos and the definite Volume (Extent) of the Universe i.e. the Cosmos, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume-2, Issue-2, 15 September, 2016, Page No. 323-392. ISO 9001:2008, ISSN (P):2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 393-458).
- [14] Dhananjay Shantaram Janorkar, The Theorem of the Definite Volume (Extent) of the Great-Colossal, Huge Black Hole in the Center of the Universe i.e. the Cosmos, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume -2, Issue - 2, 15 September, 2016, Page No. 603-686. ISSN (P):2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 687-768).
- [15] Dhananjay Shantaram Janorkar, The Theorem of the Evolution or Creation of the whole Universe i.e. the Cosmos by the Invisible Degree and the End in the Invisible Degree, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume - 3, Issue - 3, 15 September, 2017, Page No. 623-706. ISSN (P):2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 707-786).
- [16] Dhananjay Shantaram Janorkar, "Arc Radius of Circle in Geometry" Edition - 1, 28 May, 2018, ISBN: 978-81-930845-3-3, Om Publication, Mahan – 444405, India
- [17] Dhananjay Shantaram Janorkar, "Bhumiti Madhil Vartulachi Kansa Trija" (In marathi), Edition - 1, 28 May, 2018, ISBN: 978-81-930845-4-0, Om Publication, Mahan - 444405, India
- [18] Dhananjay Shantaram Janorkar, True Value of Pi (π) Now is 3.141592653 we Call This as Goba Constant we Symbolic Θ it as This Goba, This Letter, International Journal of Mathematics Trends and Technology (IJMTT) – Volume 59 Number 1- July 2018, Page No. 27-34. ISSN: 2231-5373.
- [19] Dhananjay Shantaram Janorkar, True Value of Pi (π) Now is 3.141592653 we Call This as Goba Constant we Symbolic it as Θ This Goba, This Letter, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume - 4, Issue - 4, 15 September, 2018, Page No. 1-10. ISSN (P):2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 11-20).
- [20] Google, The diagram of solar system, The diagram of galaxy, The diagram of Black Hole, Etc, Internet data.
- [21] Dhananjay Shantaram Janorkar, Geometrical Method of Determination of the Value of Pi (π), International Journal of Mathematics Trends and Technology (IJMTT) - Volume 65, Issue 6 - June 2019, Page No.142-150. ISSN: 2231-5373.
- [22] Dhananjay Shantaram Janorkar, The Theorem of the Volume (Extent) of the Black Hole in the Centre of Galaxy, International Journal of Shantaram Janorkar Foundation of Mathematics, Science & Spiritual, Volume - 2, Issue - 2, 15 September, 2016, Page No. 769-844. ISSN (P):2454-5236, ISSN (O):2454-633X, RNI No. MAHBIL/2015/67021, India (Also in Marathi language, Page No. 845-916).



Author & Researcher

Dhananjay Shantaram Janorkar
E-Mail: sjfomindia1@gmail.com
Mobile No.: +91 - 9021607450, 9226442256,
Website: www.sbjanorkar.com