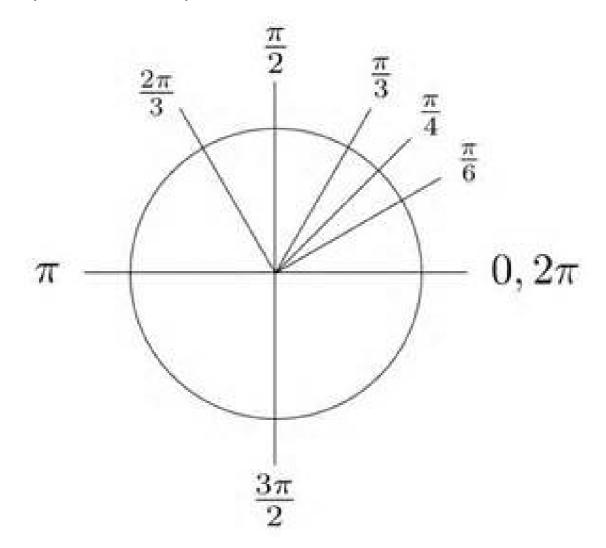
Why Pi?

By John Frederic Sweeney



Abstract

At least since the age of the ancient Greeks, humanity has understood the importance of the term Pi, or at least modern humanity has assumed so. Pi, in fact, contains a deeper meaning in a combinatorial universe, one long - forgotten, bypassed by the geometrical significance of Pi. This paper explains the importance of Pi as a value in a combinatorial universe. Along the way, the paper proves that half - spin fermions do not exist in reality.

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Introduction

Most westerners, indeed today most middle school students learn about Pi during their first course in pre - algebra or geometry. Yet what they are taught does not constitute the full meaning of Pi, and explains why the west has failed to grasp the importance of Platonic Solids and the Golden Section.

We live in a combinatorial world where Platonic Solids and the Golden Section constitute fundamental structures. Contemporary maths treats them as if they were some sort of exotic parlour game, as Magic Squares are treated. Few realize that these putative leisure games in fact constitute the very heart of physics. We learned from the Renaissance yet we have learned nothing.

Our combinatorial universe consists of three types of matter, while interactions between these types leads to five or more distinct states. The three matter types combine until they reach levels of coherency, where they synchronize, as a result of the addition of beats or counts, which add matter to sub - atomic structures. This process gives rise to the different types of sub - atomic particles, such as leptons, neutrinos, quarks, hadrons and baryons.

The process of synchronization ends at the value of Pi, and this is what makes the value key in our combinatorial universe.

This paper gives the Wikipedia entry on Pi for starters, and then relates with more technical detail, the actual process in Vedic Particle Physics. Then, the master chart of Exceptional Lie Algebras, Spheres and Fibrations specifies the location of Pi in the Grand Scheme of Things or in my TOE.

In this way, this explanation of Pi not only helps to explain why the numerical series of Hyper - Circles begins with Pi, but lends support to the unity and cohesiveness of the chart and the thought which supports the chart.

Wikipedia on Pi

Wikipedia describes Pi in this way:

The number π is a <u>mathematical constant</u>, the <u>ratio</u> of a <u>circle</u>'s <u>circumference</u> to its <u>diameter</u>, approximately equal to 3.14159. It has been represented by the Greek letter " π " since the mid-18th century though it is also sometimes spelled out as "**pi**" (<u>/par/</u>).

Being an <u>irrational number</u>, π cannot be expressed exactly as a <u>common</u> <u>fraction</u>, although fractions such as 22/7 and other rational numbers are commonly used to approximate π . Consequently its <u>decimal</u> <u>representation</u> never ends and never <u>settles into a permanent repeating</u> <u>pattern</u>. The digits appear to be randomly distributed although no proof of this has yet been discovered. Also, π is a <u>transcendental number</u> – a number that is not the <u>root</u> of any nonzero <u>polynomial</u> having <u>rational coefficients</u>. This<u>transcendence</u> of π implies that it is impossible to solve the ancient challenge of <u>squaring the circle</u> with a compass and straight-edge.

For thousands of years mathematicians have attempted to extend their understanding of π , sometimes by computing its value to a high degree of accuracy. Before the 15th century mathematicians such as <u>Archimedes</u> and <u>Liu Hui</u> used geometrical techniques, based on polygons, to estimate the value of π . Starting around the 15th century, new algorithms based on <u>infinite series</u> revolutionized the computation of π .

In the 20th and 21st centuries mathematicians and <u>computer</u> <u>scientists</u> discovered new approaches that, when combined with increasing computational power, extended the decimal representation of π to, as of late 2011, over 10 trillion (10¹³) digits.^[1] Scientific applications generally require no more than 40 digits of π so the primary motivation for these computations is the human desire to break records. However, the extensive calculations involved have been used to test <u>supercomputers</u> and high-precision multiplication <u>algorithms</u>.

Because its definition relates to the circle, π is found in many formulae in <u>trigonometry</u> and <u>geometry</u>, especially those concerning circles, ellipses or spheres. It is also found in formulae used in other branches of science such as <u>cosmology</u>, <u>number</u>

theory, statistics, fractals, thermodynamics, mechanics and electromagnetism. The ubiquity of π makes it one of the most widely-known mathematical constants both inside and outside the scientific community: Several books devoted to it have been published, the number is celebrated on <u>Pi Day</u> and record-setting calculations of the digits of π often result in news headlines. Attempts to memorize the value of π with increasing precision have led to records of over 67,000 digits.

Pi in Vedic Particle Physics

First, imagine three types of matter in our combinatorial universe, two of them visible, which form along axes. As beats or counts add up, these create sub - atomic structures from Dark Matter. Eventually these become visible matter at Pi.

An increasing rate of vibration in one axial direction, relative to a constant rate in another axial direction, produces a path of proportionately diminishing displacements, in a confined domain, which sums up to Pi. Putting that in the language of interactions, after this point there are no intermediate vectorial positions, but it flips over. Therefore, nature axiomatically provides particle states with half-spin fermion characteristics inside this boundary.

The value of pi is naturally derived as a cut-off point when outward - bound interactions turn inward, precisely at the nuclear radius. Beyond this point, the interaction flips over to the opposite state, thereby giving the impression of spin half-fermionic particles. This characteristic behaviour becomes evident only through self-similar mathematics.

Therefore, half - spin fermions do not exist in reality.

The other stuff about geometry and circles still holds, however, and illustrates just how integrated the geometry and the math truly are.

Exceptional Lie Algebras, Fibres, Spheres, Bundles, Projective Spaces and Hyper Circles

If H2 + H2 = G2

S7 + S8 = S15, and these = B4, F4 and E8, then

Fibre	Sphere	Bundle		Hyper Circle	Value	Difference	Projective Space
				H8	32.469697		
					33.132304 6	0.6623076	Planck Const
S ⁷	+ S ⁸	= S ¹⁵			33.073362	0.589426	\mathbf{OP}^1
B4	F4		E 8	H7			
S ³	S ⁴	S ⁷			31.006277	2.067085	HP ¹
B3	D4		E 7	H6			
S ¹	S ²	S ³			26.318945	4.687332	\mathbf{CP}^n
D4	G2		E 6	H5	19.739209	6.579736	
Sº	S ¹	S ¹			12.566371	7.172838	\mathbf{RP}^1
H2	G2		D 4	H4			
					6.2831853	6.2831857	Circle
H2	H2		G 2	H3			
H1	H1		H 2	H2	3.1415927	3.141593	Radius

Spheres

These spheres may simply refer to spheres or to the Exotic Milner Spheres.

Fibre	Sphere	Bundle	Hyper Circle	Value	Difference	Projectiv e Space
			H8 Max H9	32.469697 33.1323046 29.68658		Opace
			H10	25.50164		
			H11	20.725143		
			H12	16.023153		
			H13	11.838174		
			H14	8.3897034		
			H15	5.7216492		
			H16	3.765290		
			H17	2.3966788		
			H18	1.478626		
			H19	0.44290823		
			H20	0.258		

Conclusion

There it is, another brick in the wall of the Vedic Particle Physics Theory Of Everything. This is a fundamental building block, upon which rests most of the rest, of the theory. Once having grasped this elementary fact, the reader may then begin to accept and understand the remainder of this fascinating story of knowledge, which the ancients have passed down to us in the form of the Vedas and the Sanskrit language.

Srinivasan mentions Sanhkya in the text at places: the reader should understand this to indicate a philosophical school which came long after the Vedas, but which reiterated and clarified the nuclear secrets encoded in the Rig Veda. Maha means great in Sanskrit, while Rishi refers to an intellectual or gifted person.

That Srinivasan comes up with results that mesh with those of Khem Chand Sharma indicates that both are on the right track, the work of one confirms the work of the other, because they are both working on Vedic Particle Physics, which is an a priori integrated whole, and has been for at least 14,000 years.

Bibliography

Wikipedia.

Secret of Sankhya, II, by G. Srinivasan.

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'Some men see things as they are and say, why? I dream things that never were and say, why not?'

So let us dedicate ourselves to what the Greeks wrote so long ago: to tame the savageness of man and make gentle the life of this world.

Robert Francis Kennedy