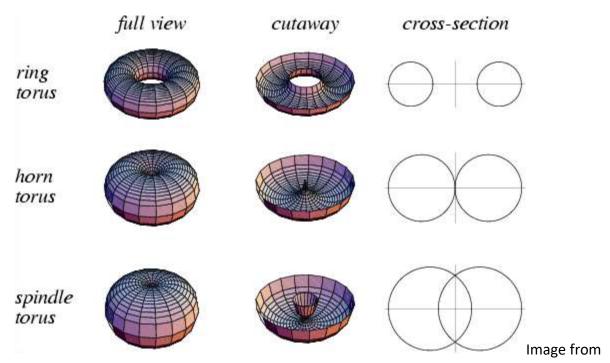
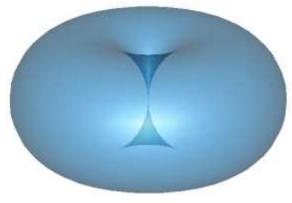
# **Exotic Geometry**



http://www.harmonicresolution.com/Toroidal%20Space.htm



point, the torus is called a vortex torus.

http://doc.spatial.com/index.php/Torus

The pseudosphere

if the hole in the middle of a torus collapses to a single

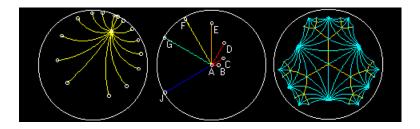


Figure 5a: Congruent Line Segments that Share an Endpoint.

Figure 5b: Segments 0.25, 0.5, 1.0, 2.0, 4.0, 8.0 and 16.0 Units in Length.

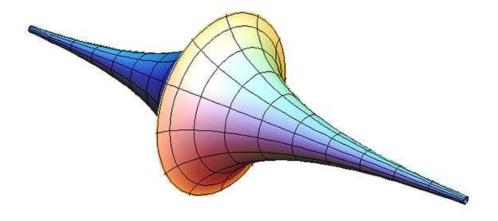
Figure 5c: Tessellation of Congruent Triangles.

As a point becomes closer to the Boundary Circle, its distance from the center approaches infinity. Figure-5a shows a set of Straight, Hyperbolic, Line Segments all of Length 3.00 units. Noticed that the closer a segment is to the Boundary Circle, the "shorter" it appears. This set of segments can be thought of as radii of a circle (since they are congruent, and have a common endpoint).

The set of segments in Figure-5b, have a common endpoint at the center of the Boundary Circle. Segment AB has a length of 0.25 units. Segment AC has a length of 0.5 units. Going clockwise, each segment is twice as long as the previous segment. The last two segments (AG and AJ) appear to be the same length, yet AJ, (half a pixel longer), has twice the length of AG!.

From: <a href="http://www.cs.unm.edu/~joel/NonEuclid/pseudosphere.html">http://www.cs.unm.edu/~joel/NonEuclid/pseudosphere.html</a>

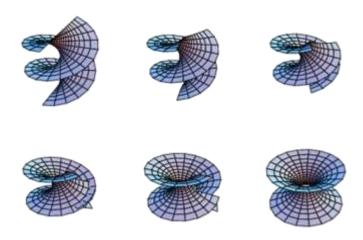
the notion of pseudospheres was invented in 1868 by the mathematician Eugenio Beltrami, who formulated the more familiar (and simplistic) "double trumpet" model,



Where the perimeter boundary represents a plane of infinite extent.

From: http://www.rudyrucker.com/blog/2009/08/28/pseudospheres/

#### The Helicoid and Catenoid



The helicoid can be continuously deformed into a catenoid

From: <a href="http://mathworld.wolfram.com/Catenoid.html">http://mathworld.wolfram.com/Catenoid.html</a>

#### **Definitions**

#### vortex:

- 1. A spiral motion of fluid within a limited area, especially a whirling mass of water or air that sucks everything near it toward its center.
- 2. A place or situation regarded as drawing into its center all that surrounds it.

Energy is implied.

http://www.thefreedictionary.com/vortex

#### **End appendix**

The torus shape enables vortexes to be formed.

Torii are associated with dynamic flow. Smoke rings are an example. More scientifically, shown that a vortex ring (torus) is formed during the rise of a hot mass initially having a spherical shape.

In cosmology, thin ring gravitating toroidal vortices exist.

http://www.springerlink.com/content/u0177077x486646w/

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.147.2252&rep=rep1&type=pdf

### no confirmation found for these:

The catenoid is of particular interest here since it is the same shape that Wheeler (1962) uses in his theory to describe how wormholes act as transducers for higher dimensional energy to influx into our 4D space/time reality. A similar idea for the influx of energy from higher dimensions has also been proposed (Shacklett, 1993) based on Twistor theory (Peat, 1988) which is based on a unique topology composed of a catenoid inside the hole of a toroid.

Hull extended Beltrami's theory by demonstrating that the toroid is composed of two additional negative Gaussian surfaces, the pseudosphere and the catenoid (Hull, 1996).

http://www.item-bioenergv.com/infocenter/ConsciousIntentiononDNA.pdf

vortex string is a magnetic flux tube

**Black Holes, White Holes, and Wormholes:** 

Vortices (toroids) in the General Theory of Relativity

Black and white holes absorb and emit light (energy)

Black holes have four dimensions: 3space + time. However, nobody really knows how many dimensions make up the universe. Black holes may be able to provide clues to help astronomers estimate the number of dimensions that make up the universe, since these extra dimensions are only "felt" during very energetic processes such as inside a black hole!

http://imagine.gsfc.nasa.gov/docs/ask\_astro/answers/021127b.html (2002)

The first type of wormhole solution discovered was the *Schwarzschild wormhole* which would be present in the <u>Schwarzschild metric</u> describing an eternal <u>black hole</u>, but it was found that this type of wormhole would collapse too quickly for anything to cross from one end to the other. Wormholes which could actually be crossed, known as *traversable wormholes*, would only be possible if <u>exotic matter</u> with negative <u>energy density</u> could be used to stabilize them. (Many physicists such as <u>Stephen Hawking</u>, [1] <u>Kip Thorne</u>, [2] and others <u>Balia [3]</u> believe that the <u>Casimir effect</u> is evidence that negative energy densities are possible in nature.) Physicists have not found any natural process which would be predicted to form a wormhole naturally in the context of general relativity ???? then what is a black hole?

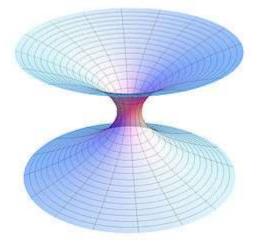
http://en.wikipedia.org/wiki/Wormhole

A **white hole**, in <u>general relativity</u>, is a hypothetical region of <u>spacetime</u> which cannot be entered from the outside, but from which <u>matter</u> and <u>light</u> may escape. In this sense it is the reverse of a <u>black hole</u>, which can be entered from the outside, but from which nothing, including light, may escape. White holes appear in the theory of <u>eternal black holes</u>. In addition to a black hole region in the future, such a solution of the <u>Einstein equations</u> has a white hole region in its past. However, this region does not exist for black holes that have formed through <u>gravitational collapse</u>, nor are there any known physical processes through which a white hole could be formed.

the Einstein-Rosen bridge (wormhole) can either connect two black hole event horizons in each universe (with points in the interior of the bridge being part of the black hole region of the spacetime), or two white hole event horizons in each universe (with points in the interior of the bridge being part of the white hole region).

### http://en.wikipedia.org/wiki/White\_hole

There is no observational evidence for wormholes, but on a theoretical level there are valid solutions to the equations of the theory of general relativity. The first type of wormhole solution discovered was the *Schwarzschild wormhole*:



http://upload.wikimedia.org/wikipedia/commons/thumb/d/d7/LorentzianWormhole.jpg/250px-LorentzianWormhole.jpg

## Nnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnn

## Begin notes

http://iopscience.iop.org/0264-9381/25/16/165004

classical and quantum gravity: Higher dimensional Bondi energy

http://www.health-science-spirit.com/energy.html

pulsons (tachyons)

basic energy phenomena is vortex: pulson. The quantum field stores energy as vortex energy

two pulsons of opposite type may combine: similar to ledbetter "anu" vortices

vortex: vortices: torsion fields

higher-dimensional energy vortices

Because pulson vortices are higher-dimensional phenomena, their real nature is usually hidden from our view, and we become aware of them only through secondary effects, such as electromagnetic phenomena

orthodox cosmology in essence states that in the beginning there was Nothing. Then Nothing exploded in a Big Bang and that created Everything. Reacting to fundamental laws, simple ingredients combined by chance to form a highly complex universe.

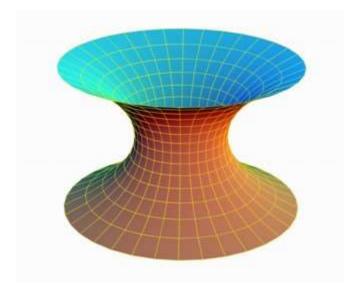
The Pulson Theory, on the other hand, assumes instead that our physical universe precipitated from higher dimensional planes of existence. Its evolution is being guided by pre-existing fields in a wide range of dimensional levels. These higher-dimensional fields with lower space-density counteract the Second Law of Thermodynamics and lead to increasingly complex structures.

A similar mechanism is also the basis for the **'memory of water'** as shown by Benveniste in 1988 (Nature). Benveniste found that a solution that once contained antibodies or histamine still activated white blood cells. He claimed that this was due to ghostly imprints in the water structure where the antibodies had been. These imprints may be understood as pulson fields of specific structure and space-density. More recently these experiments have been confirmed by Madeleine Ennis (*Inflammation Research*, vol 53, p 181), who admits that she is unable to explain the results.

Wheeler wormholes transducers no google results

higher dimensional energy

A wormhole is a hypothetical "tunnel" connecting two different points in spacetime.



Catenoid: <a href="http://www.migel.com/fractals">http://www.migel.com/fractals</a> math patterns/visual-math-minimal-surfaces.html

From the above figures we may deduce that catenoids and wormholes have the same topology.

energy from higher dimensions Shacklett

**Twistor** 

http://universe-review.ca/R15-19-twistor.htm

influx of energy from higher dimensions has also been proposed (Shacklett, 1993) based on Twistor theory

"The Toroidal Shape of the Sun and the Planets"

Google:

influx of energy from higher dimensions based on Twistor theory

EM fields generated from potentials

EM fields generated from toroidal potentials

Electromagnetic fields generated from potentials

Electromagnetic fields generated from toroidal potentials

Toroid pseudosphere catenoid

Torus pseudosphere catenoid

String physics torus perfect

Maxwells vortices

energy from higher dimensions peat

Shacklett RL. "The Penrose twistor: a possible link in the mind-matter connection

**Torus** 

energy\_studies.doc has relevant stuff in it

I am trying to get evidence for higher dimensions used in physics; Rein's notion of transducers for higher dimensional energy to influx into our 4D space/time reality. Says: wheeler's wormholes

This is analogous to the function of the chakra system, said to do the same thing Rein is saying the same thing is happening at the DNA level

Pair of Toroidal coils forms a transformer from lower to higher energy (step up/down)

kkkkkkkkk

Wheeler JA. Geometrodynamics, Academic Press, NY, 1962.

http://en.wikipedia.org/wiki/Geometrodynamics very good

Beltrami's theories have not been in favor with most of the physics community, although Kovac has recently re-examined these theories and used them to explain his anomalous results in the field of plasma physics (Kovac, 1996).

http://mathworld.wolfram.com/Pseudosphere.html

http://mathworld.wolfram.com/Catenoid.html

These modern theories in quantum physics therefore support the Toroid Antennae Model of DNA by suggesting the toroid acts as a transducer for some new form of energy (ie. subtle energy) which exists in higher dimensional spaces.

The nature of this type of energy or information has been considered by other scientists and has received a variety of names including non-Hertzian, scalar, tachyon and zero point energy. The biological role of these forms of subtle energy has also been studied by the author and summarized elsewhere (Rein, 1992).

Beltrami E. "Considerazioni idrodinamiche", Rend. Inst. Lombardo Acad. Sci. Lett. 22: 121-131, 1889.

Beltrami E.(translation by Filipponi G) "Notes on the mathematical theory of electrodynamic solenoids" Int. J. Fusion Energy 3: 43-50, 1985.

Gariaev PP et al. "Investigation of the fluctuation dynamics of DNA solutions by laser correlation spectroscopy", Bull. Lebedev Phys. Instit. 12: 24-30, 1992.

Hull H. "Potential in space of compound curvature", Internat. Symp. New Energy", Denver, April 1996

http://newenergytimes.com/v2/archives/fic/J/JNE1N2.PDF

Kovac RJ. "Plasma shaping reveals new atomic transformation technique..." Fulcrum 3:19-30, 1994.

Marko JF, Siggia ED. "Bending and Twisting Elasticity of DNA", Macromolecules 27: 981-988, 1994a.

Marko JF, Siggia ED. "Fluctuations and Supercoiling of DNA", Science 265: 506-508, 1994b.

Paulson KE, Deka N, Schmid CW et al. "A transposon-like element in human DNA", Nature 316: 359-361, 1985.

Paddison S. "The Power of the Heart, Planetary Pub, Boulder Creek, CA, 1992.

Peat FD. Superstrings and the search for the theory of everything, Contemporary Books, N.Y., 1988.

Poponin V. "The DNA phatom effect: direct measurement of a new field in the vacuum substructure", Ann. Conf. on Treatment and Res. Experienced Anomalous Trauma, San Rafael, CA. 1995.

Rein G., McCraty, R. "DNA As a Detector of Subtle Energies", Proc. Fourth Internat. Soc. Study Subtle Energy & Med. Conf., Monterey, CA, 1994.

Rennie J. "DNA's new twists", Scientific American, p122-132, March, 1993.

Shacklett RL. "The Penrose twistor: a possible link in the mind-matter connection", Conf. Common Basis for Language, Math. & Phys., Santa Clara, CA., 1993.