# Antimatter

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#### July 19, 2013

#### Abstract

Current knowledge of antimatter has been a road block for the real understanding of antimatter. Currently antimatter is generated with high energy devices (colliders and proton guns). Used energies are just too big. Excited anti-particle's are very hard to handle.

## **ToEbi and Antimatter**

The Theory of Everything by illusion [1] gives deeper knowledge and tools for cheap antimatter "production". The key is spinning orientation of same massed particles. Based on ToEbi, matter and antimatter particles push each other away (II Law of ToEbi). That information alone opens huge opportunities. Spinning phenomenon extends itself on stellar objects as well. Different spinning directions between galaxies explains why Universe has an increasing expansion rate, in other words, no need for dark energy.

Because of different spinning directions, matter and antimatter won't contact and annihilate too easily. The weak spot of particles is their rotation axis poles. Normally protons (or electrons) push each other away when they are brought close together rotation axis poles head on (with aligned axis orientation).

But in case of (electron-positron) proton-anti-proton there will be pulling force experienced. Because of the lacking supportive repulsion on rotation axis poles, proton and anti-proton will contact and annihilate.

# It's very common

Currently anti-particles are produced with a particle colliders and proton guns. After impact there is plenty of a very high energy particles with different spinning orientations. With magnetic traps after collision point it's possible to catch "anti-particles". These very high energy particles are extremely reactive due to increased spinning rate.

Good news is that we don't have to create antimatter. It's everywhere! For example, at room temperature hydrogen gas and water contains roughly 25% so called para-hydrogen and para-water. It means that another proton in hydrogen diatomic molecule is spinning to the opposite direction.

According to ToEbi, it means that this diatomic molecule is composed from matter (hydrogen atom) and antimatter (anti-hydrogen atom). Annihilation of these atoms is prevented by orbiting electrons, which create big enough repulsion between hydrogen and anti-hydrogen atom.

Solid material block contains also antimatter! It all depends on its atoms nuclear spin orientation. Electrons involved in a solid matter crystal structure prevents nearby matter and antimatter nucleus to annihilate. Because a constant disturbances (in normal conditions) at the nuclear level those potential annihilation positions are extremely short lived.

At this point we can settle the answer to the question whether antimatter falls up or down? Based on Second Law of ToEbi, particle and its anti-particle generates pushing force. But the dominating factor is Earth's FTE movement. Particle's spin orientation doesn't matter because it's always aligned (or heading to alignment) with Earth's (smoothed) surface and hence experiences pulling force against Earth's FTE flux (which has a very weak horizontal orientation).

## **Rouvari Effect**

Based on ToEbi, different particle spin direction combined with pole-to-pole contact causes annihilation. At its simpliest version where annihilation happen between electrons it's called Rouvari Effect.

Idea is to have electrons side-by-side (rotation poles head on) with opposite spins and push them together. It sounds much easier said than done! Actually it's easier annihilate protons and neutrons than electrons.

## **Extended Rouvari Effect**

Extended Rouvari Effect means annihilation of protons and neutrons. Once again the key to success emerges from ToEbi. In order to create annihilation we need at least two pieces (as pure as possible and as smooth surfaced as possible) cobalt pieces and few powerful (Neodymium) magnets.

Magnets are used to control nuclear spin orientations of cobalt atoms on contact surfaces. Idea is to contact two cobalt pieces where both pieces have uniform nuclear spin orientation (among its atoms) but opposite compared to another piece. Contact surfaces must be cleaned from oxide films, free electrons and other impurities. In order to keep surfaces clean vacuum chamber might be mandatory.

Even a tiny contact area contains a huge amount protons and neutrons. In case where only tiny fraction of these particles annihilate there will be a massive amount of energy released. There is also a possibility for further nuclear reactions (chain reaction) because of those initial annihilation.

## **Preventing Larmor precession**

At this point, the only thing which prevents annihilation is Larmor precession. There is a two basic principles in order to prevent precession. Picture below helps you to understand both of them. Arrows in picture presents a different magnetic field choices.

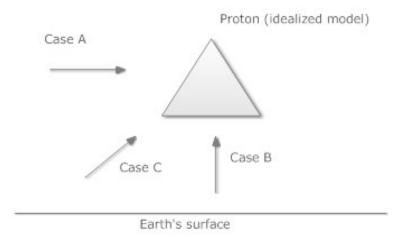


Figure 1: Precession

First principle: Create magnetic field with only one magnetic pole. No matter which magnetic field orientation choice you make, in case of two magnetic poles, there will be always more perturbation and bipolar nuclear spinning positions.

Second principle: Always use Case C! Case A is quite trivial. Horizontal magnetic field causes the top electron inside a proton move towards the magnetic pole which causes disturbance for the alignment between a proton and Earth. Broken alignment causes RFAA to a proton. After some time there will be a balance between RFAA and magnetic field (strength). In Case B there is no additional benefit in order to get wanted proton-proton spinning axis orientation.

What are the specifications of Case C? Lets start with the angle of 60 degrees which is the value of every angle within equilateral triangle. Obviously this angle prevents top electron to react but downright electron experiences the pulling force, hence precession generated. With little less than 60 degrees we get the right balance between pulling forces of top and downright electrons. At this point, obvious choice for experiments would be the magic angle (54.7 degrees)

## References

[1] Kimmo Rouvari, http://www.vixra.org/abs/1211.0027