

# About Magnetic Matter

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## Abstract

**The article discusses the properties of hypothetical magnetic matter consisting of magnetic monopoles and methods of production. The atoms of magnetic matter are bound together by magnetic forces. Electric forces are only sinusoidal. Therefore magnetic matter does not interact with ordinary matter. These qualities play a far-reaching role in technical development in the future. For example, bearings with no friction and wear, massless spacecraft, transportation systems with a very tiny consumption of energy, etc.**

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## **Introduction**

Electric forces govern in micro-scale distances [1] in our Universe. Electrons and nucleons in atoms are bound together by an electric field. Chemical bonds have electric nature. The strength of materials depends only on electric forces among atoms. Practically all properties of bodies are determined by electric fields. Magnetic phenomena arise as consequences of electric charge movement. Thanks to the above-mentioned, ordinary matter is called electric matter in this article.

In the hypothetical magnetic Universe [2] the magnetic field is potential, but an electric field solenoidal. Therefore magnetic forces govern in micro-scale distances. There are [3] magnetic particles (monopoles) with electric momentum, magnetic atoms which consist of a magnetic nucleon orbiting by magnetic leptons [4]. The magnetic atoms are bound together by magnetic forces to create magnetic chemical compounds. Practically all properties of bodies are determined by magnetic fields. Electric phenomena arise as consequences of magnetic charge (monopole) movement. Because of the above-mentioned this matter is called magnetic matter.

## **Properties of magnetic matter**

In the magnetic Universe the properties of magnetic matter are the same as those of ordinary electric matter in our Universe. There are galaxies, stars, comets, hydrogen and cosmic dust clouds in space, planets, oceans of water, atmosphere and so on. They all are composed of magnetic matter. Magnetic matter annihilates with magnetic antimatter and converts to photons. The observer inside the magnetic Universe cannot determine whether the Universe is magnetic or electric.

The only difference lies in the interaction between a piece of ordinary matter and magnetic matter. They do not interact chemically. The interaction is mainly caused by gravitation. The very weak interaction can be caused by magnetic and electric forces because electric and magnetic matter have opposite characteristics. In electric matter the electric field is potential and the magnetic field is solenoidal, but in magnetic matter it is *vice versa*, i.e., the magnetic field is potential and the electric field is solenoidal. Magnetic antimatter cannot annihilate with electric matter and *vice versa*. For this reason, containers for storage of antimatter may be made of magnetic matter. It makes real the possibility to use antimatter as fuel in spacecraft.

Magnetic matter is very slippery in relation to ordinary matter. The friction is zero between magnetic and ordinary matter. One cannot take into hands a piece of magnetic matter. It will slip out. Magnetic matter can be handled only by strong permanent magnets. Due to this property magnetic matter is ideal for bearings with no friction, no need for lubrication, no energy losses, no wear.

Magnetic antimatter has negative mass and therefore is repelled by ordinary matter. This feature can be used to make composite materials containing magnetic antimatter with zero weight. The plane or spacecraft manufactured from this material consumes fuel only for transfer of valid cargo. It is impossible to manufacture such material by using electric antimatter because it annihilates.

The above-mentioned refers to static properties of magnetic matter. It is known that a moving monopole induces direct current in conductors instead of ordinary magnetic dipoles which can induce only alternating current. This phenomenon leads to a principally new type of electric generators and motors.

### **Production of magnetic matter**

There is no evidence [5] that magnetic monopoles exist in our Universe and therefore it is impossible to find magnetic matter. There are no natural restrictions to create magnetic matter artificially. One of the possible ways is the following. In a very strong magnetic field a photon should be split to magnetic monopoles, probably to magnetic leptons and anti-leptons. The magnetic monopoles are separated by an electric field to prevent their annihilation, and they are stored in an electric trap. They should be used for the creation of the next generation of monopoles. In the vicinity of a monopole the strength of a magnetic field is very high. This makes possible the production of magnetic baryons, for example, magnetic neutrons. The neutrons should decay to protons and leptons. As the result, one gets magnetic hydrogen, which should be used for nucleo-synthesis of heavier atoms.

### **Conclusions**

The synthesis path of magnetic matter is very difficult and complicated, but it pays off to a large extent. It leads to a completely new technique: transport spending energy only to move a valid cargo, bearings of motors without friction, massless

spacecraft which can travel directly to the Mars or other planets, direct current generators and motors. The above sentence exemplifies only some applications of magnetic matter. The possible reality exceeds imagination.

The most difficult part is the first step, i.e., the making of first magnetic monopoles.

## References

1. <http://nap.edu/629> Elementary-Particle Physics.
2. Prūsis, I. and P. Hypothesis of Tetraverse.  
<https://ia801503.us.archive.org/23/items/HypothesisOfTetraverse/Hypothesis%20of%20Tetraverse.pdf>
3. Prūsis, I. and P. New Concept of Magnetic Monopoles.  
<https://ia601503.us.archive.org/22/items/NewConceptOfMagneticMonopoles/New%20Concept%20of%20Magnetic%20Monopoles.pdf>
4. Prūsis, I. and P. About Magnetic Monopoles.  
<https://ia601407.us.archive.org/20/items/AboutMagneticMonopoles/About%20Magnetic%20Monopoles.pdf>
5. M. Tanabashi et al. (Particle Data Group), Phys. Rev. D 98 , 030001 (2018)

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