About magnetic field lines in relation to curvatures

Magnets and magnetism are known for centuries. The study of magnetic fields seems to has begun in 1269 when French scholar Petrus Peregrinus de Maricourt mapped out the magnetic field on the surface of a spherical magnet using iron needles [note 1]. He also clearly articulated the principle that magnets always have both a north and south pole. https://en.wikipedia.org/wiki/Magnetic_field

Although magnetic fields are well known and well studied there is no explanation for the existence of field lines.

Introduction

In the article "About the refraction of light in relation to curvatures" (www.dbphysics.org, Gerhard Jan Smit, Jelle Ebel van der Schoot, April 5, 2017, Nijmegen) we have tried to explain that the found patterns -that can be found through the refraction of light- are cause by scattered light particles due to the influence of curvatures of specific atoms that are present in the material needed to create the used slits. In our opinion the pattern is caused by the bending of photons in a discrete pattern caused by the curvature of electrons that circle in discrete orbitals around nuclei on the edge of the used slits. This means that the material of the slides (creating the slits) is responsible for the found pattern. Since the introduction of laser light the refraction of light can be observed in a more accurate way.

When we look closely we see that the patterns do not suggest wave patterns. It becomes obvious that the phenomena are –in our opinion- cause by scattered light particles due to the influence of curvatures of specific atoms that are present in the material needed to create the used slits. The curvatures are –in our opinion- caused by the electrons that surround the atoms of the used material to create the slits. A direct consequence of the described idea is that different materials will give a different refraction pattern. This seems indeed the case. The electron shells around nuclei that are responsible for the refraction of light.

Magnetic fields

In the adjustment that was made on January 7, 2017 in the article "About Black Matter and the Nature of Elementary Particles" that was published on the internet on November 21, 2016 we introduce a paragraph about Electromagnetic Fields.

> *Electromagnetic Fields*
> *Electromagnetic fields around an energized wire behave like fluids within a centrifugal pump. The centrifugal pump has been developed in the end of the 17th century by Denis Papin. If the fan of a centrifugal pump begins to rotate the fluid within the fan will get a tangential speed (= speed in the direction of the periphery). The centrifugal force that hereby arises makes the fluid being pushed to the outer periphery of the fan. In this the mechanical energy (the rotation of the fan) is being converted into potential and kinetic energy. In analogy to, the electrons (who all have a likeminded spin) will be hurled to the outer periphery of the wire. On the outside of the wire the curvatures caused by the electrons will be large. Through these curvatures the 1-db particles will be sucked in. This causes a whirlwind of 1-db particles which will rotate around the energized wire. This causes the electromagnetic fields with their attractive force. This process is depicted in illustration 1. By winding an energized wire in a coil the electromagnetic forces are being cumulated, this resulting in the fields as observed around an energized coil. This process is depicted in illustration 2. When implementing positrons through a wire the fields will show an opposite direction with respect to the fields caused by electrons.*

Illustration 1: Electromagnetic fields around an energized wire.

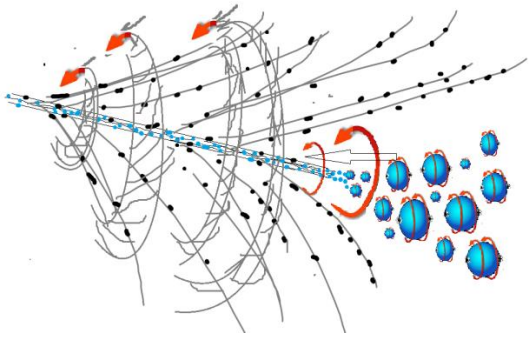
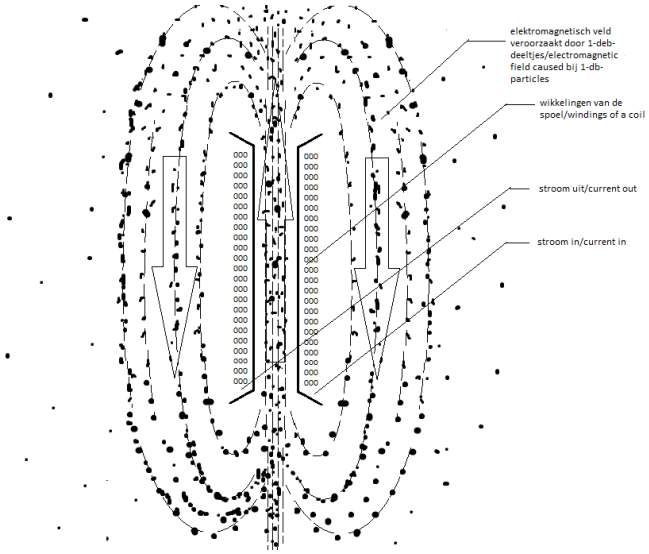


Illustration 2: Electromagnetic fields in and around an energized coil.



Field lines can be made clear when using iron fillings randomly dropped on paper that is covering the magnet. When you shake the paper in a gently way the field pattern will occur.

Explanation

In our opinion the pattern is caused by the bending of the db-particles [note 2] in a discrete pattern caused by the curvature of electrons that circle in discrete orbitals around nuclei of the used (electro)magnet. Due to the influence of curvatures of specific atoms that are present in the material needed to create the (electro)magnet the field lines are created. This phenomena is analogue to pattern we see in the refraction of light.

Jelle Ebel van der Schoot, Gerhard Jan Smit, May 15, 2017, Nijmegen
www.dbphysics.org

note 1 His Epistola Petri Peregrini de Maricourt ad Sygerum de Foucaucourt Militem de Magnete, which is often shortened to Epistola de magnete, is dated 1269 C.E.

note 2 The characteristics of the db is described in the article “About Black Matter and the Nature of Elementary Particles” that was published on the internet on November 21, 2016 (www.dbphysics.org)