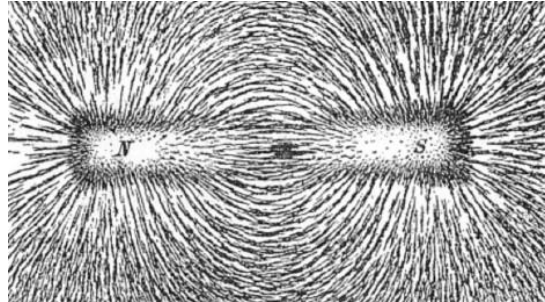
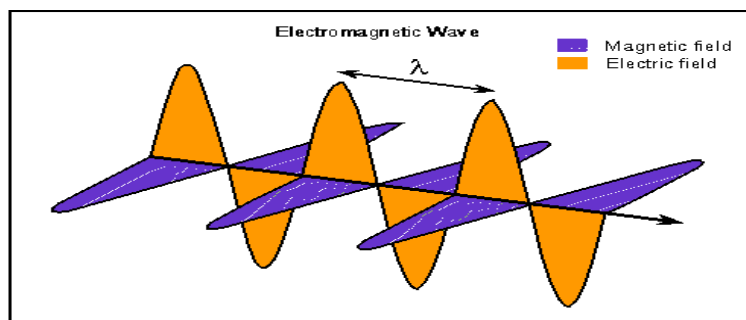


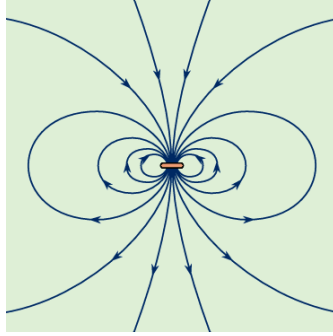
WHAT IS MAGNETISM?



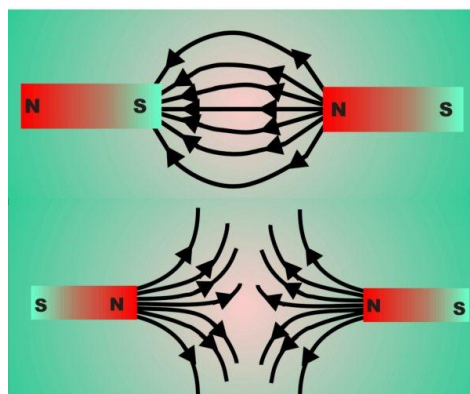
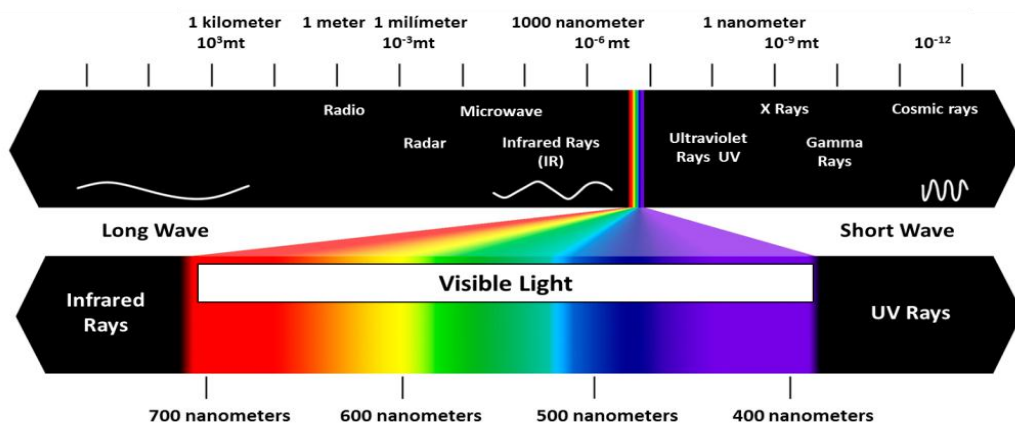
Magnetism is one of the two components of the electromagnetic field. All materials are influenced in varying degrees by the presence of a magnetic field, since its constituent particles are charged.



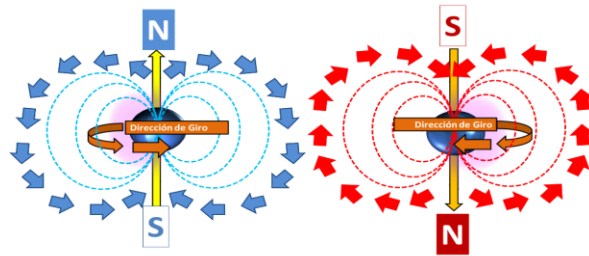
Magnetism is a physical phenomenon related to the charge of the particles composing the material and its emission of photons, and as a result of these interactions, the objects undergo attraction or repulsion over other materials.



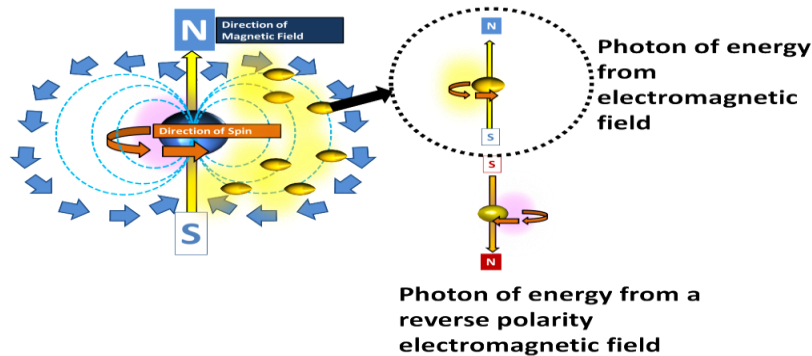
The universe is full of light photons with all known radiation in the electromagnetic spectrum through which light travels. These photons have a given wavelength.



Fundamental particles have a charge and a spin that provides the magnetic field and their motion or vibration provides an emission of photons which make up the electromagnetic field of the particle. A simplistic view of this is illustrated in the below graph:

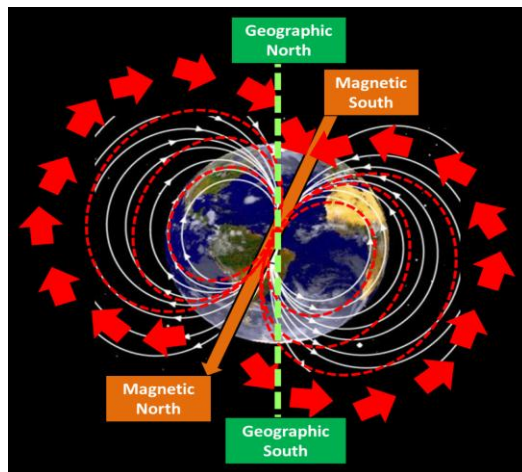


Photons are emitted in all directions through this field, similar to a garden sprayer, but following a pattern of polarities. Photons will be released with the same orthogonal spin direction of the particle which emits them, the displacement vector will form an electrical component while its direction or polarity is the magnetic component.

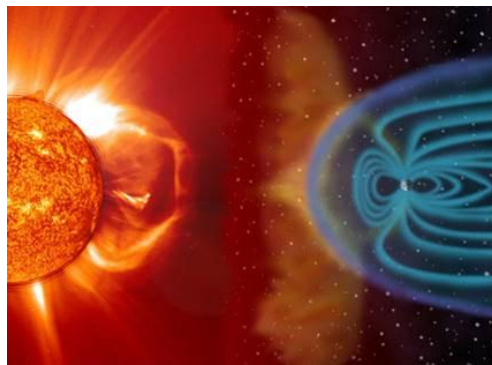


This bombardment could make contact with the electromagnetic field of, say, another electron which will receive the bombardment of photons, which if energized enough will move to new levels of energy or to another atom where it can come into contact with another electron and generate a chain reaction of electron displacement, generating an electrical current through this linear movement of free electrons on the “stream of photons”. Not all photons will be affected, because not all collide, but the field will be greatly reduced.

As the Earth is made of matter, the vast majority of photons emitted by the magnetic core have a spin in the same direction, creating a strong magnetic field. The sum of the photons with the same rotation generates significant electromagnetic force on Earth.

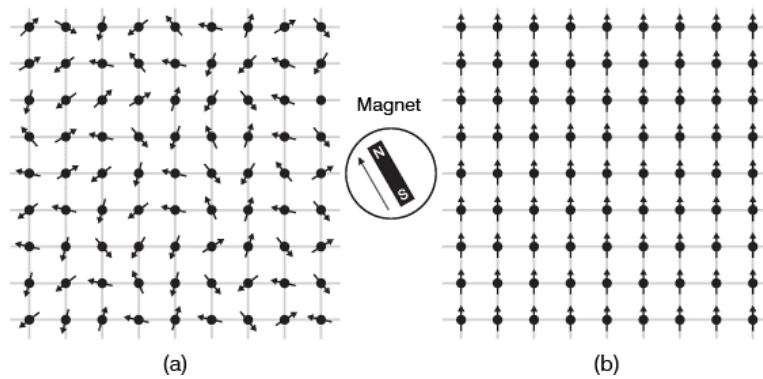


The Earth's magnetic field extends from the inner core of the Earth to the confluence with the "solar wind." It is approximately a dipole magnetic field at an angle of 11 degrees with respect to the rotation axis, as if it was a magnetic bar, because the field changes is generated by the movement of the solid iron inner core within the molten iron alloy in the outer core and extends to several tens of thousands of kilometers into space, even surpassing the orbit of the moon.



If a small object in space starts a spin or orthogonal rotation of its photons emitting a field and conjugates with other fields, it can create a magnetic interaction.

A material with unpaired electrons can emit electromagnetic charge, as their charges do not cancel as when it exists in even numbers. If the molecules of this material are aligned, the magnetic charge is consistent with parallel spin photons, maximizing its angular momentum and directing full force of spin together, in contact with other quantum particles.



The materials that can have magnetism easily detectable are iron (atomic number 26), cobalt (atomic number 27), nickel (atomic number 28) and its alloys. There are 4 types of permanent magnetic materials: Neodymium Iron Boron (NdFeB), Samarium Cobalt (SmCo) Alnico and Ceramic or Ferrite.

<div> <div>1 H</div> <div>3 Li 4 Be</div> <div>11 Na 12 Mg</div> <div>19 K 20 Ca</div> <div>37 Rb 38 Sr</div> <div>55 Cs 56 Ba</div> <div>87 Fr 88 Ra</div> </div> <div> <div>21 Sc</div> <div>39 Y</div> <div>57 La</div> <div>89 Ac</div> </div> <div> <div>22 Ti</div> <div>40 Zr</div> <div>72 Hf</div> </div> <div> <div>23 V</div> <div>41 Nb</div> <div>73 Ta</div> </div> <div> <div>24 Cr</div> <div>42 Mo</div> <div>74 W</div> </div> <div> <div>25 Mn</div> <div>43 Tc</div> <div>75 Re</div> </div> <div> <div>26 Fe</div> <div>44 Ru</div> <div>76 Os</div> </div> <div> <div>27 Co</div> <div>45 Rh</div> <div>77 Ir</div> </div> <div> <div>28 Ni</div> <div>46 Pd</div> <div>78 Pt</div> </div> <div> <div>29 Cu</div> <div>47 Ag</div> <div>79 Au</div> </div> <div> <div>30 Zn</div> <div>48 Cd</div> <div>80 Hg</div> </div> <div> <div>31 Ga</div> <div>49 In</div> <div>81 Tl</div> </div> <div> <div>32 Ge</div> <div>50 Sn</div> <div>82 Pb</div> </div> <div> <div>33 As</div> <div>51 Sb</div> <div>83 Bi</div> </div> <div> <div>34 Se</div> <div>52 Te</div> <div>84 Po</div> </div> <div> <div>35 Br</div> <div>53 I</div> <div>85 At</div> </div> <div> <div>36 Kr</div> <div>54 Xe</div> <div>86 Rn</div> </div>

58 Ce

59 Pr

60 Nd

61 Pm

62 Sm

63 Eu

64 Gd

65 Tb

66 Dy

67 Ho

68 Er

69 Tm

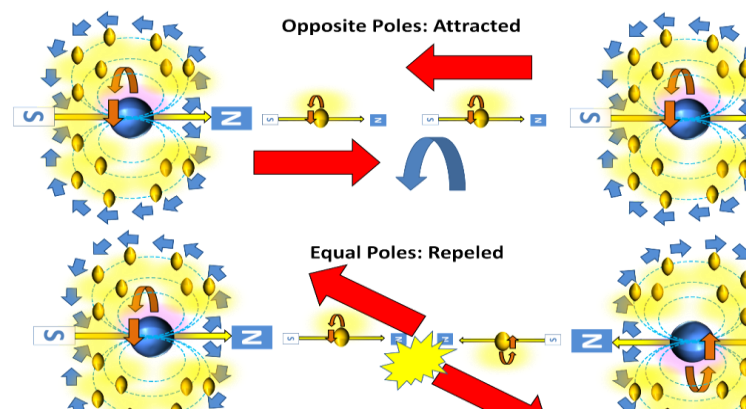
70 Yb

71 Lu

Differences in electron configuration in the elements determine the nature and magnitude of the atomic magnetic moments.

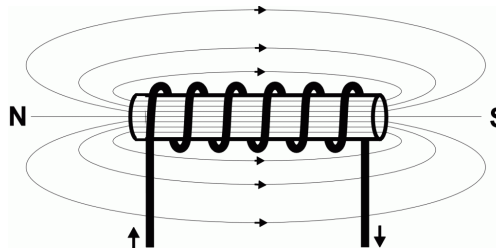
A normal object does not act as a magnet, because it has no unpaired electrons emitting a large amount of photons that added together cause a spin, so they do not have large amounts of charge with a spin “surplus” and cannot create consistency with an external magnetic field.

Placing together a north pole of a magnet with a south pole, the photons collide and overlap in spins that are contrary, then the rotation is void or canceled, only allowing the electric field and gravity in bodies work, uniting them (although but the electric field is maintained and if they are aligned, will generate an electric charge is likely to occur as a row of electron flow). As the charge field is blocked completely, the bodies are joined by a larger force.



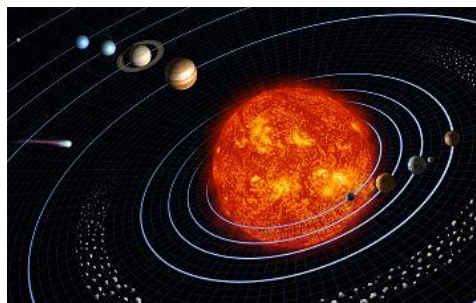
If overlapping photons have the same orientation of its rotation, the spins are then added or are strengthened, causing repulsion between the bodies by the bombardment of photons from the particles of both bodies.

If a body is energized with electricity, will increase the density of the payload field, the number of collisions of photons excluding the external field interaction, aligning electrons were not aligned so increase the magnetic field strength.



The larger the volume of a body, gravity will act with largely because the photon is relatively smaller, but as we get closer to the body, the electromagnetic field will be stronger.

Larger objects are always moving in orbits trying to strike a balance between electromagnetism and gravity, just as quantum particles.



The bodies in space are always in constant change, colliding because of its instability. The bodies are affected by electromagnetism of other bodies such as the sun, stars and galaxies that emit their own payload fields. On the surface of the earth there is a balance between the electromagnetic force and gravity, so that there is a relative stability.



Source: <http://www.artinaid.com/2013/04/what-is-magnetism/>