Magnetism

Magnetism is the phenomenon that certain objects attract or repel each other without being electrically charged. Magnetic fields are found everywhere, both around the Earth's atmosphere and in some rare rocks, and among other things protect the Earth from incoming solar storms. Historically, magnetism was seen as a separate phenomenon, before Maxwell managed to unite the descriptions of electricity and magnetism in his famous equations, following the observations of the time that electricity could produce magnetic fields. Closer inspection of these equations showed that what we perceive as magnetic attraction is electrical attraction if lengths and time intervals are contracted when objects move. Einstein took this theory seriously and based on it developed his special theory of relativity.