

MEASUREMENTS OF MAGNETIC FIELDS - I

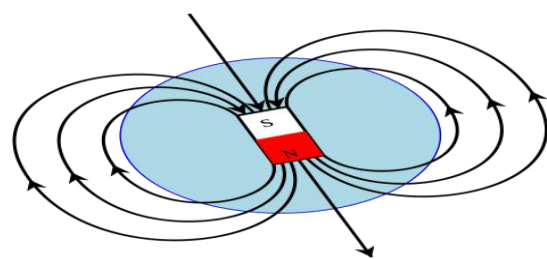
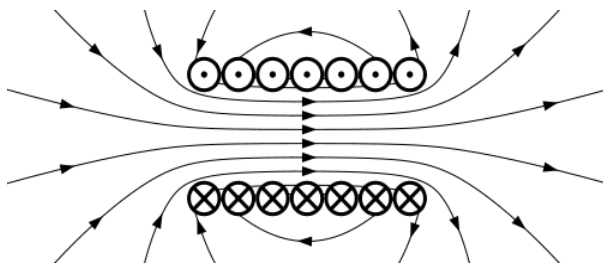
Objectives

Check that an electric current creates a magnetic field and a practical use of formulas to calculate value and direction of magnetic field vectors. Between the main concepts to deal with in this practice, we highlight:

- Calculation of the resistance of a coil
- Resistances code



- Equivalence between magnet and coil
- Determination of the Earth's magnetic field



Materials



- Coil (solenoid) of 94 turns of copper wire 11 cm diameter and 35 cm length
- DC power supply
- Set of 5 resistors between 22 and 220 Ω
- Multimeter
- Switch
- Cables
- Compass

Source: <http://web.ua.es/docivis/magnet/objectives.html>