

Unipolar Charge Model

In modern physics, a bipolar model of electrostatic charge is defined. Due to some inconvenience of using this model, an attempt was made to create an alternative unipolar model of electric charge.

In the model of a unipolar charge (MUS), a charged body is a body whose property is the force interaction with an uncharged body, in which the interaction force is determined by the relation

$$F = \frac{qmx}{r^2},$$

where q is the charge of the body,

m is the mass of an uncharged body,

x is the coefficient of interaction of the electrostatic field with the mass of an uncharged body,

r is the distance between the bodies.

In particular, from this definition follows the uncharged electron and the non-existence of a positron.

The observation of positrons in the Wilson chamber is caused by an error in interpreting the origin of the tracks of the observed particles. The tracks probably belong to energetic ions.

Millikan's experiment in determining the charge of an electron is neither physically nor mathematically sound, which is easy to show.

The interaction of two charged bodies is determined by the expression:

$$F = \frac{q_1 m_2}{r^2} x + \frac{q_2 m_1}{r^2} x + \frac{q_1 q_2}{r^2} k,$$

where k is the interaction coefficient in the Coulomb law.

From the fact of attraction of charged and uncharged bodies, a negative value of the coefficient of this interaction x follows.

Experiments in electrostatics do not contradict these definitions.

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