Unified theory of force field (without a single substance).

Box-continuum where each point of its associated mathematical object: the scalar, spinor, vector, or tensor.

The force field is a vector field whose vector is called the tension:

$\vec{\mathbf{E}}$ -the tension of potential fields

$\vec{\mathbf{B}}$ - tension solenoidal (Vortex) fields.

Special points of a field $\vec{\mathbf{E}}$ of type focus * (drain, source) is comparable, so called them to charge $\mathbf{q}$ so that

$$\vec{\mathbf{E}} \cdot \mathbf{q} = \vec{\mathbf{F}} \text{[Dean, n]}$$

$\vec{\mathbf{F}}$ – the force acting on a charge $\mathbf{q}$, in $\vec{\mathbf{E}}$ the non-native, and other.

When you determine the charge, as its own field, the mean of a coexistence of each other, which is impossible.

The charge is a property of the singular singular point of potential fields, that is, connected with it.

What comes first: the charge or the field? That leads to what?

Field in the emission can exist separately from the charge, and the charge is not (cannot be).

In the theories of dal′nodejstviâ are only the concept of charge (Coulomb's law, Newton's). In field theories (blizkodejstviâ) charge is of secondary importance (Maxwell's laws).

In modern physics the concept of fields is more suitable for large-scale events, and for short distances and quantum transitions easier to operate with the notion of charges and currents.

Stationary relative to each other charges interact with force.

$$\boldsymbol{F} = \boldsymbol{k}\frac{q_1 \cdot q_2}{r^2} \text{ - Coulomb Law, Newton.}$$

$\boldsymbol{k}$- coefficient,

for a gravity $\boldsymbol{k} = \sqrt{\mathbf{G}}$, $\mathbf{G}$ - Newton's constant,

$$\boldsymbol{q}_{\text{rp.}} = \sqrt{\mathbf{G}} \cdot \mathbf{m},$$

$\mathbf{m}$ is the mass.

Orderly moving charges should be considered their currents:

$$\vec{\mathbf{J}}_1 = \mathbf{q}_1 \cdot \boldsymbol{\vartheta}_1 \ ,$$

$$\vec{\mathbf{J}}_2 = \mathbf{q_2} \cdot \boldsymbol{\vartheta}_2$$

Force interaction of currents, according to the Ampere is equal to:

$\frac{\vec{\mathbf{J}}_1 \cdot \vec{\mathbf{J}}_2}{\boldsymbol{r}}$ - linear density of force between currents at a distance **r.**

Current $\vec{\mathbf{J}}$ around any kind of charge (electric, gravitational) there is a vortex (solenoidal) field $\overrightarrow{\mathbf{B}}$ such that:

$$\mathbf{rot}\ \overrightarrow{\mathbf{B}} = \frac{\mathbf{1}}{\mathbf{C}} \cdot \vec{\mathbf{J}},$$

C- speed of disturbances in the field.

In this case, the force field is defined by the expression of the Lorentz force:

$$\vec{\mathbf{F}}_{\text{л}} = \overrightarrow{\boldsymbol{E}_q} + \mathbf{q} \cdot \left(\frac{\boldsymbol{\vartheta}}{\mathbf{C}} \times \overrightarrow{\mathbf{B}} \right)$$

$$\vec{\mathbf{F}}_{\text{л}} = \overrightarrow{\mathbf{F}}_{\text{пот.}} + \vec{\mathbf{F}}_{\text{вхр.}}$$

$$\left.\begin{array}{l} \vec{\mathbf{F}}_{\text{пот.}} \parallel \boldsymbol{\vartheta} \\ \vec{\mathbf{F}}_{\text{вхр.}} \perp \boldsymbol{\vartheta} \end{array}\right\} \boldsymbol{\vartheta} \textbf{ -} \text{ скорость заряда } \mathbf{q}$$

Force $\vec{\mathbf{F}}_{\text{пот.}}$ - makes a charge, change its speed by size**.**

The strength $\vec{\mathbf{F}}_{\text{вхр.}}$ - do not commit work, it only changes the direction of the velocity of the charge.

Fixed fields $\vec{\mathbf{E}}$ and $\overrightarrow{\mathbf{B}}$ do not interact with each other; changing in time, and give rise to each other:

$$\frac{\mathbf{1}}{\mathbf{C}} \cdot \frac{\partial \vec{\mathbf{E}}}{\partial \mathbf{t}} = \mathbf{rot}\ \overrightarrow{\mathbf{B}}$$

$$\frac{\mathbf{1}}{\mathbf{C}} \cdot \frac{\partial |\vec{\mathbf{B}}|}{\partial \mathbf{t}} = \mathbf{div}\ \vec{\mathbf{E}}$$

The general equations of any force field are of the form:

$$\mathbf{div}\ \vec{E} = 4\pi\rho - \frac{1}{C} \cdot \frac{\partial|\vec{B}|}{\partial t},$$

$$\mathbf{rot}\ \vec{E} \equiv 0,$$

$$\mathbf{rot}\ \vec{B} = \frac{1}{C} \cdot \vec{j} + \frac{1}{C} \cdot \frac{\partial \vec{E}}{\partial t},$$

$$\mathbf{div}\ \vec{B} \equiv 0,$$

where

ρ -density of charges (electric, gravitational),

$\vec{j}$ -density currents (electrical, gravity),

$\boldsymbol{\rho}_{\mathbf{CM}} = \frac{1}{C} \cdot \frac{\partial|\vec{B}|}{\partial t}$ -density of charges of bias,

$\vec{j}_{\mathbf{cm}} = \frac{1}{C} \cdot \frac{\partial \vec{E}}{\partial t}$ - density currents shift.

These equations differ from the equations of electrodynamics of Maxwell that always

$\mathbf{rot}\ \vec{E} = 0;$ $\frac{1}{C} \cdot \frac{\partial|\vec{B}|}{\partial t}$ -is treated as offset charge density $\boldsymbol{\rho}_{\mathbf{cm}}$.

Result:

look up the work of the author.