See eq. 1.

$$\nabla \times \mathbf{B} - \frac{1}{c} \frac{\partial \mathbf{E}}{\partial t} = \frac{4\pi}{c} \mathbf{j}$$

$$\nabla \cdot \mathbf{E} = 4\pi \rho$$

$$\nabla \times \mathbf{E} + \frac{1}{c} \frac{\partial \mathbf{B}}{\partial t} = \mathbf{0}$$

$$\nabla \cdot \mathbf{B} = 0$$
(1)

where ${f B},{f E},{f j}:\mathbb{R}^4 o\mathbb{R}^3$ – vector functions of the form $(t,x,y,z)\mapsto{f f}(t,x,y,z),\,{f f}=(f_{
m x},f_{
m y},f_{
m z})$.

```
, \ \{\pmu\equiv \max2\} \\ \text{where } \ \mathbb{B}, \ \mathbb{E}, \ \mathbf{j}: \ \mathbb{R}^4 \rightarrow \mathbb{R}^3 \ - \text{vector functions of the form } \ \( (t, x, y, z) \rightarrow \mathbb{f}(t, x, y, z), \ \mathbf{f} = \left(f_{\text{'}}x^{\text{'}}, \ f_{\text{'}}y^{\text{'}}, \ f_{\text{'}}z^{\text{'}} \).
```

See eq. 2.

$$\nabla \times \mathbf{B} - \frac{1}{c} \frac{\partial \mathbf{E}}{\partial t} = \frac{4\pi}{c} \mathbf{j}$$

$$\nabla \cdot \mathbf{E} = 4\pi \rho$$

$$\nabla \times \mathbf{E} + \frac{1}{c} \frac{\partial \mathbf{B}}{\partial t} = \mathbf{0}$$

$$\nabla \cdot \mathbf{B} = 0$$
(2)

where ${f B},{f E},{f j}:\mathbb{R}^4 o\mathbb{R}^3$ – vector functions of the form $(t,x,y,z)\mapsto {f f}(t,x,y,z),\,{f f}=(f_{
m x},f_{
m y},f_{
m z})$.

$$\begin{bmatrix} : A \end{bmatrix} = \begin{bmatrix} : B \end{bmatrix}^{r \top r} \begin{bmatrix} : C \end{bmatrix} \begin{bmatrix} : B \end{bmatrix}$$

$$A = B^{r \top r} C B$$

$$\mathbf{A} = \mathbf{B}^{\mathrm{T}} \mathbf{C} \mathbf{B}$$

 $\mathbf{A} = \mathbf{B}^{\mathrm{T}} \mathbf{C} \mathbf{B}$

```
\{ [ X_{11} . X_{12} . X_{13} . . . . . X_{1n} ]^{:} 
X_{21} . X_{22} . X_{23} . . . . . X_{2n} ]^{:} 
\vdots . \vdots . \vdots . . . . \vdots ]^{:} 
X_{p1} . X_{p2} . X_{p3} . . . . . . . X_{pn} ]^{:}
```

```
egin{bmatrix} x_{11} & x_{12} & x_{13} & \dots & x_{1n} \ x_{21} & x_{22} & x_{23} & \dots & x_{2n} \ dots & dots & dots & \ddots & dots \ x_{p1} & x_{p2} & x_{p3} & \dots & x_{pn} \end{bmatrix}
```

$$egin{bmatrix} ax_0+by_1\ ax_1+by_2\ dots\ ax_{N-1}+by_{N-1} \end{bmatrix}=a\mathbf{x}+b\mathbf{y}$$

$$|x| = \left\{egin{array}{ll} x & ext{if} \ x \geq 0 \ -x & ext{if} \ x < 0 \end{array}
ight.$$

$$\operatorname{boole}(x) = \left\{ egin{array}{ll} 1 & ext{if x is True} \\ 0 & ext{if x is False} \end{array}
ight.$$

$$egin{aligned} \lim_{x o 0} rac{\sin x}{x} &= 1 \ U_{\delta_1
ho_2}^{eta_1lpha_2} \ \sqrt{x} &= 1 + rac{x-1}{2+rac{x-1}{2+rac{x-1}{2+rac{x}{\cdot}\cdot\cdot}} \end{aligned}$$

$$\sin^2 \ddot{x} + \cos^2 \ddot{x} = 1$$

$$(a_2^3/^3\sqrt{\{\beta_2^2 + \gamma_2^2\}})$$

$$(x + y)^2 = \sum_{k=0}^{\infty} (n|^ck)x^{n-k}y^k$$

$$(n|^ck) = \{(n|^kk)\}, \{[n|^kk]\}, (n|^ck)\}$$

$$\frac{\alpha_2^3}{\sqrt[3]{\beta_2^2+\gamma_2^2}}$$

$$(x+y)^2 = \sum_{k=0}^\infty inom{n}{k} x^{n-k} y^k$$
 $inom{n}{k} = inom{n}{k}, \quad inom{n}{k}$

$$x ext{times}$$
 $x + \ldots + x$ $x + \ldots + x$

$$\operatorname{erf}(x) = rac{1}{\sqrt{\pi}} \int_{-x}^{x} e^{-t^2} dt$$

$$f^{(2)}(0) = f''(0) = \left. rac{d^2 f}{dx^2} \right|_{x=0}$$

Text $\begin{pmatrix} a & b \\ c & d \end{pmatrix}$ and some more text.

prefix unary operator → :

```
(, f: x → \ { <arrow map > } _i x² (,
```

$$f: x \xrightarrow[i]{\operatorname{arrow map}} x^2$$

center binary operator :

$$f: x \overset{ ext{arrow map}}{ o} x^2$$

bug because styles also implemented as prefix unary operators (but by design styles should have priority!):

$$f: x \xrightarrow{\langle arrow \ } map
angle x^2$$