```
See @eq:max.  \begin{array}{c} \ddots \\ <\nabla\times [\vec{\ }B] - 1/c\ \partial [\vec{\ }E]/\partial t\ = 4\pi/c\ [\vec{\ }j]\ |\# \\ & \nabla\cdot [\vec{\ }E]\setminus = 4\pi\rho \qquad | \\ \nabla\times [\vec{\ }E] + 1/c\ \partial [\vec{\ }B]/\partial t\ = [\vec{\ }0] \qquad | \\ & \nabla\cdot [\vec{\ }B]\setminus = 0 \qquad , \\ , \ \ (\#eq:max) \end{array}  where  (\vec{\ }B],\ [\vec{\ }E],\ [\vec{\ }j]:\ \mathbb{R}^4\to\mathbb{R}^3 \ -\ vector\ functions\ of\ the\ form \\ (t,x,y,z)\mapsto [\vec{\ }f](t,x,y,z),\ [\vec{\ }f]=(f_{\ }'x',\ f_{\ }'y',\ f_{\ }'z')\ .
```

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\eq:max2\} \ \text{where \ \mathbb{B}, \ \mathbb{E}, \ \mathbb{j}: \ \mathbb{R}^4 \rightarrow \mathbb{R}^3 \ - \text{vector functions of the form \ \((t,x,y,z)\) \rightarrow \mathbf{f}(t,x,y,z), \ \mathbf{f} = \left(f_\cap{r}x^\dagger, \ f_\cap{r}y^\dagger, \ f_\cap{r}z^\dagger\right)\.
```

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 $(t,x,y,z)\mapsto {f f}(t,x,y,z),\,{f f}=(f_{
m x},f_{
m y},f_{
m z})$.

$$["A] = ["B]^{\intercal} ["C] ["B] ,$$

$$A = B^{\intercal} C B ,$$

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

```
\begin{bmatrix} X_{11} & X_{12} & X_{13} & ... & X_{1n} & | & & \\ & X_{21} & X_{22} & X_{23} & ... & X_{2n} & | & & \\ & \vdots & \vdots & \vdots & \ddots & \vdots & | & & \\ & X_{p1} & X_{p2} & X_{p3} & ... & X_{pn} \end{bmatrix}
```

```
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}
```

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

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

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

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

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

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

$$(n \mid k) = \{(n \mid k)\}, \{[n \mid k]\},$$

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

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

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

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

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

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!):

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