

See @eq:max.

$$\begin{aligned} \nabla \times [\vec{B}] - 1/c \partial[\vec{E}]/\partial t &= 4\pi/c [\vec{j}] \quad | \# \\ \nabla \cdot [\vec{E}] &= 4\pi\rho \quad | \\ \nabla \times [\vec{E}] + 1/c \partial[\vec{B}]/\partial t &= [\vec{0}] \quad | \\ \nabla \cdot [\vec{B}] &= 0 \quad > \end{aligned}$$

, , , {#eq:max}

where  $[\vec{B}], [\vec{E}], [\vec{j}]: \mathbb{R}^4 \rightarrow \mathbb{R}^3$  – 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.

$$\begin{aligned} \nabla \times \mathbf{B} - \frac{1}{c} \frac{\partial \mathbf{E}}{\partial t} &= \frac{4\pi}{c} \mathbf{j} \\ \nabla \cdot \mathbf{E} &= 4\pi\rho \\ \nabla \times \mathbf{E} + \frac{1}{c} \frac{\partial \mathbf{B}}{\partial t} &= \mathbf{0} \\ \nabla \cdot \mathbf{B} &= 0 \end{aligned}, \quad (1)$$

where  $\mathbf{B}, \mathbf{E}, \mathbf{j}: \mathbb{R}^4 \rightarrow \mathbb{R}^3$  – vector functions of the form  
 $(t, x, y, z) \mapsto \mathbf{f}(t, x, y, z)$ ,  $\mathbf{f} = (f_x, f_y, f_z)$ .

See @eq:max2.

$$\begin{aligned} \nabla \times \mathbf{B} - 1/c \partial \mathbf{E} / \partial t &= 4\pi/c \mathbf{j} \quad | \# \\ \nabla \cdot \mathbf{E} &= 4\pi\rho \quad | \\ \nabla \times \mathbf{E} + 1/c \partial \mathbf{B} / \partial t &= \mathbf{0} \quad | \\ \nabla \cdot \mathbf{B} &= 0 \quad > \end{aligned}$$

, , , {#eq:max2}

where  $\mathbf{B}, \mathbf{E}, \mathbf{j}: \mathbb{R}^4 \rightarrow \mathbb{R}^3$  – vector functions of the form  
 $(t, x, y, z) \mapsto \mathbf{f}(t, x, y, z), \mathbf{f} = (f_x, f_y, f_z)$ .

See eq. 2.

$$\begin{aligned} \nabla \times \mathbf{B} - \frac{1}{c} \frac{\partial \mathbf{E}}{\partial t} &= \frac{4\pi}{c} \mathbf{j} \\ \nabla \cdot \mathbf{E} &= 4\pi \rho \\ \nabla \times \mathbf{E} + \frac{1}{c} \frac{\partial \mathbf{B}}{\partial t} &= \mathbf{0} \\ \nabla \cdot \mathbf{B} &= 0 \end{aligned}, \quad (2)$$

where  $\mathbf{B}, \mathbf{E}, \mathbf{j}: \mathbb{R}^4 \rightarrow \mathbb{R}^3$  – vector functions of the form  
 $(t, x, y, z) \mapsto \mathbf{f}(t, x, y, z), \mathbf{f} = (f_x, f_y, f_z)$ .

$$A = B^T C B$$

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

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


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.. `def`B{
  <[ ax0 + by1 |"
    ax1 + by2 |
      :      |
    ax_{N-1} + by_{N-1} ],
  }!
`B = a[ ^x] + b[ ^y] ..

```

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


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.. .|x|. = {∈ x. <if> x≥0 |
            -x. <if> x<0 } ..

.. `boole`(x) = {∈ 1. <if> `x` is > [^True] |
                0. <if> `x` is > [^False] } ..

```

$$|x| = \begin{cases} x & \text{if } x \geq 0 \\ -x & \text{if } x < 0 \end{cases}$$



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

$$\binom{n}{k} = \binom{n}{k}, \quad \left[ \begin{matrix} n \\ k \end{matrix} \right]$$

$$\begin{aligned} & \text{,, } \{x + \dots + x\}^{\text{---}}\{k \times \text{times}\} \text{,,} \\ & \text{,, } \pi d^2/4 \text{ } 1/ \text{.} (A+B) \text{.}^2 = \\ & \quad \pi d^2/4 \text{ } \text{ } \{ \text{.} (A) \text{.}^2 \} \text{ } 1/ \text{.} (A+B) \text{.}^2 \text{,,} \\ & \text{,, } \sum^n_{\{0 \leq i \leq N \text{ } | \text{ } 0 \leq j \leq M\}} (ij)^2 + \\ & \quad \sum^n_{\{i \in A \text{ } | \text{ } 0 \leq j \leq M\}} (ij)^2 \text{,,} \end{aligned}$$

$$\overbrace{x+\ldots+x}^{k\text{ times}}$$

$$\frac{\pi d^2}{4} \frac{1}{(A+B)^2} = \frac{\pi d^2}{4} \frac{1}{(A+B)^2}$$

$$\sum_{\substack{0\leq i\leq N\\0\leq j\leq M}}^n (ij)^2 + \sum_{\substack{i\in A\\0\leq j\leq M}}^n (ij)^2$$

$$\begin{aligned} & \text{,, } \text{`erf`}(x) = 1/\sqrt{\pi} \int_{-x}^x e^{\{-t^2\}} \, dt \text{,,} \\ & \text{,, } f^{(2)}(0) = f''(0) = \text{.} \text{ } d^2 f/dx^2 | \text{.} \text{ } x=0 \text{,,} \\ & \text{Text } \dots (\text{ } a \text{ } b \text{ } | \text{ }^t \text{ } c \text{ } d \text{ } ) \dots \text{ and some more text.} \end{aligned}$$

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

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

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

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prefix unary operator  $\rightarrow^{\neg}$ :

`.. f: x  $\rightarrow^{\neg$ {<arrow map>}  $\sqsubset$ i x2 ..`

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

center binary operator  $\neg$ :

`.. f: x  $\rightarrow$   $\neg$ {<arrow map>}  $\sqsubset$ i x2 ..`

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

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

`.. f: x  $\rightarrow^{\neg$ {<arrow map>}  $\sqsubset$ i x2 ..`

$$f : x \xrightarrow[\quad i]{\text{<arrow map>}} x^2$$