

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.

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

$$, \dots \{ \#eq: max2 \}$$

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  $(t, x, y, z) \mapsto \mathbf{f}(t, x, y, z), \mathbf{f} = (f_x, f_y, f_z)$ .

$$, \dots \left[ \begin{matrix} \vdots \\ A \end{matrix} \right] = \left[ \begin{matrix} \vdots \\ B \end{matrix} \right]^{\top \top} \left[ \begin{matrix} \vdots \\ C \end{matrix} \right] \left[ \begin{matrix} \vdots \\ B \end{matrix} \right] , \dots$$

$$, \dots \mathbf{A} = \mathbf{B}^{\top \top} \mathbf{C} \mathbf{B} , \dots$$

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

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

$$\begin{aligned} & , \dots \\ & \left\langle \left[ \begin{array}{cccccc} x_{11} & x_{12} & x_{13} & \dots & x_{1n} & | \\ x_{21} & x_{22} & x_{23} & \dots & x_{2n} & | \\ \vdots & \vdots & \vdots & \ddots & \vdots & | \\ x_{p1} & x_{p2} & x_{p3} & \dots & x_{pn} & | \end{array} \right] \right\rangle , \dots \end{aligned}$$

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


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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] } ..

```

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

$$\mathsf{boole}(x) = \begin{cases} 1 & \text{if } x \text{ is True} \\ 0 & \text{if } x \text{ is False} \end{cases}$$

$$\begin{array}{l} \text{,, } \text{`lim`}_x\!\rightarrow\!0 \text{ } \text{`sin` } x\text{,}/x = 1 \text{,,} \\ \text{,, } U_{\{\delta_1\rho_2\}}^{\{\beta_1\alpha_2\}} \text{,,} \\ \text{,, } \sqrt{x} = 1 + \text{`x-1`}/^c\{2 + \text{`x-1`}/^c\{2 + \text{`x-1`}/^c\{2 + \cdots\}\}\} \text{,,} \\ \text{,, } \text{`sin`}^2 x + \text{`cos`}^2 x = 1 \text{,,} \end{array}$$

$$\lim_{x\rightarrow 0}\frac{\sin x}{x}=1$$

$$U_{\delta_1\rho_2}^{\beta_1\alpha_2}$$

$$\sqrt{x}=1+\frac{x-1}{2+\frac{x-1}{2+\frac{x-1}{2+\cdots}}}$$

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

$$\begin{array}{l} \text{,, } \alpha_2^3/\sqrt[3]{\{\beta_2^2+\gamma_2^2\}} \text{,,} \\ \text{,, } (x+y)^2=\sum_{k=0}^{\wedge\infty}(n\mid^ck)x^{n-k}y^k \text{,,} \\ \text{,, } (n\mid^ck)=\text{`}(n\mid^:k)\text{`},\text{`}[n\mid^:k]\text{`} \text{,,} \end{array}$$

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

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

$$\binom{n}{k} = \binom{n}{k}, \quad \begin{bmatrix} n \\ k \end{bmatrix}$$

$$\begin{aligned} & \text{.. } \{x + \dots + x\}^{\text{`k times`}} \text{ ..} \\ & \text{.. } \pi d^2/4 \text{ } 1/ \text{.} (A+B) \text{.}^2 = \\ & \quad \pi d^2/4 \text{ } \text{`{.} (A) \text{.}^2` } 1/ \text{.} (A+B) \text{.}^2 \text{ ..} \\ & \text{.. } \sum_{\text{`0\le i\le N`}} \sum_{\text{`0\le j\le M`}} (ij)^2 + \\ & \quad \sum_{\text{`i\in A`}} \sum_{\text{`0\le j\le M`}} (ij)^2 \text{ ..} \end{aligned}$$

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

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

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

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

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

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

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

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

`.. f: x  $\rightarrow^{\lrcorner}\{\langle \text{arrow map} \rangle\} \_i x^2$  ..`

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

center binary operator  $\lrcorner$ :

`.. f: x  $\rightarrow \lrcorner\langle \text{arrow map} \rangle \_i x^2$  ..`

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

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

`.. f: x  $\rightarrow^{\lrcorner}\langle \text{arrow map} \rangle \_i x^2$  ..`

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