

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.

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

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

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

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


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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] } ..

```

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

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

$$\begin{array}{l} \text{.. } \text{`lim`}_\text{`x\to0` } \text{`sin` } x_\text{>}/x = 1 \text{..} \\ \text{.. } U_{\{\delta_1\rho_2\}}^{\{\beta_1\alpha_2\}} \text{..} \\ \text{.. } \sqrt{x} = 1 + \text{`x-1`}_\text{>}/\text{`2 + `x-1`}_\text{>}/\text{`2 + `x-1`}_\text{>}/\text{`2 + `.``}} \text{..} \\ \text{.. } \text{`sin`}^2 x'' + \text{`cos`}^2 x'' = 1 \text{..} \end{array}$$

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

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

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

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

$$\begin{array}{l} \text{.. } \alpha_2^{\,3}/^3\sqrt{\{\beta_2^{\,2}+\gamma_2^{\,2}\}} \text{..} \\ \text{.. } (x+y)^2=\sum_{k=0}^{\,\infty}\,(n\text{!}^{\,c}k)x^{n-k}y^k \text{..} \\ \text{.. } (n\text{!}^{\,c}k)=\text{`x(n\text{!}^{\,c}k)`}_\text{>},\text{`x[n\text{!}^{\,c}k]`}_\text{>} \text{..} \end{array}$$

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

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

$$\binom{n}{k}=\binom{n}{k},\quad \left[n\atop k\right]$$

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$\{x + \dots + x\}^{k \text{ times}}$   
 $\pi d^2/4 \cdot 1/(A+B)^2 =$   
 $\pi d^2/4 \cdot \{ (A)^2 \cdot 1/(A+B)^2$   
 $\sum^n_{\{0 \leq i \leq N \mid 0 \leq j \leq M\}} (ij)^2 +$   
 $\sum^n_{\{i \in A \mid 0 \leq j \leq M\}} (ij)^2$

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

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

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

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$\text{erf}(x) = 1/\sqrt{\pi} \int_{-x}^x e^{-t^2} dt$   
 $f^{(2)}(0) = f''(0) = \left. d^2 f/dx^2 \right|_{x=0}$   
 Text  $(a \ b \mid\!\!\mid c \ d)$ , and some more text.

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

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

Text  $\left(\begin{smallmatrix} a & b \\ c & d \end{smallmatrix}\right)$  and some more text.

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prefix unary operator  $\rightarrow$ :

```
.. f: x → {⟨arrow map⟩} _i x² ..
```

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

center binary operator `⟨`:

```
.. f: x → ⟨⟨arrow map⟩ _i x²⟩ ..
```

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

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

```
.. f: x → {⟨arrow map⟩ _i x²} ..
```

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