```
See @eq:max.

``
˱∇ × [⃗B] - 1/c ∂[⃗E]/∂t ˳= 4π/c [⃗j] ¦#
              ∇ · [⃗E]\ ˳= 4πρ        ¦
 ∇ × [⃗E] + 1/c ∂[⃗B]/∂t ˳= [⃗0]       ¦
              ∇ · [⃗B]\ ˳= 0          ˃
,ˎˎ{#eq:max}

where ˎ[⃗B], [⃗E], [⃗j]: ℝ⁴ → ℝ³ˎ – vector functions of
the form
ˎ(t,x,y,z) ↦ [⃗f](t,x,y,z), [⃗f] = (f_⌜x⌝, f_⌜y⌝, f_⌜z⌝)ˎ.
```

See eq. 1. \[\begin{aligned}∇ × {\mathbf{B}} - \frac{1}{c} \frac{∂{\mathbf{E}}}{∂t} &= \frac{4π}{c} {\mathbf{j}}\\ ∇ · {\mathbf{E}}\ &= 4πρ \\ ∇ × {\mathbf{E}} + \frac{1}{c} \frac{∂{\mathbf{B}}}{∂t} &= {\mathbf{0}} \\ ∇ · {\mathbf{B}}\ &= 0 \end{aligned} ,\qquad(1)\]

where \({\mathbf{B}},\,{\mathbf{E}},\,{\mathbf{j}}:\,ℝ^{4} ⟶ ℝ^{3}\) – vector functions of the form \((t,x,y,z) ⟼ {\mathbf{f}}(t,x,y,z),\, {\mathbf{f}} = (f_{\mathrm{x}}, f_{\mathrm{y}}, f_{\mathrm{z}})\).

```
See @eq:max2.

``
˱∇ × B - 1/c ∂E/∂t ˳= 4π/c j ¦#
          ∇ · E\ ˳= 4πρ    ¦
 ∇ × E + 1/c ∂B/∂t ˳= 0      ¦
          ∇ · B\ ˳= 0      ˃
,ˎˎ{#eq:max2}
```

```
where ˎB, E, j: ℝ⁴ → ℝ³ˎ – vector functions of the form
ˎ(t,x,y,z) ↦ f(t,x,y,z), f = (f_⌜x⌝, f_⌜y⌝, f_⌜z⌝)ˎ.
```

See eq. 2. \[\begin{aligned}∇ × **B** - \frac{1}{c} \frac{∂**E**}{∂t} &= \frac{4π}{c} **j**\\ ∇ · **E**\ &= 4πρ \\ ∇ × **E** + \frac{1}{c} \frac{∂**B**}{∂t} &= **0** \\ ∇ · **B**\ &= 0 \end{aligned} ,\qquad(2)\]

where \(**B**,\,**E**,\,**j**:\,ℝ^{4} ⟶ ℝ^{3}\) – vector functions of the form \((t,x,y,z) ↦ **f**(t,x,y,z),\,**f** = (f_{\mathrm{x}}, f_{\mathrm{y}}, f_{\mathrm{z}})\).

```
ˎˎ [∵A] = [∵B]⌜T⌝ [∵C] [∵B] ˎˎ

ˎˎ A = B⌜T⌝C B ˎˎ
```

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

\[**A** = **B**^{{\mathrm{T}}}**C**\,**B** \]

```
ˋˋ
˂[ x₁₁ ˳x₁₂ ˳x₁₃ ˳· ˳x₁ₙ ¦∵
   x₂₁ ˳x₂₂ ˳x₂₃ ˳· ˳x₂ₙ ¦
    ⋮  ˳ ⋮  ˳ ⋮  ˳⋱ ˳ ⋮  ¦
   xₚ₁ ˳xₚ₂ ˳xₚ₃ ˳· ˳xₚₙ ]˃ ˎˎ
```

\[\begin{bmatrix} x_{11} &x_{12} &x_{13} &... &x_{1n}\\ x_{21} &x_{22} &x_{23} &... &x_{2n} \\ ⋮ & ⋮ & ⋮ &⋱ & ⋮ \\ x_{p1} &x_{p2} &x_{p3} &... &x_{pn} \end{bmatrix} \]

```
ˎˎ `def`B{
˱[ ax₀ + by₁ ¦∵
   ax₁ + by₂ ¦
       ⋮     ¦
   ax_{N-1} + by_{N-1} ]˲
}¦
`B = a[⃗x] + b[⃗y] ˎˎ
```

\[\def\B{ \begin{bmatrix} ax_{0} + by_{1}\\ ax_{1} + by_{2} \\ ⋮ \\ ax_{N-1} + by_{N-1} \end{bmatrix} }\\ \B = a{\mathbf{x}} + b{\mathbf{y}} \]

```
ˎˎ ˳|x|˳ = {∈  x˳ ‹if› x≥0 ¦
              -x˳ ‹if› x<0 } ˎˎ

ˎˎ ⸢boole⸣(x) = {∈ 1˳ ‹if ˎxˎ is › [ᵐTrue]  ¦
                   0˳ ‹if ˎxˎ is › [ᵐFalse] } ˎˎ
```

\[\left\vert{x}\right\vert = \begin{cases} x& {\text{if}} x≥0 \\ -x& {\text{if}} x<0 \end{cases} \]

\[{\mathrm{boole}}(x) = \begin{cases} 1& {\text{if x is }} {\class{MJX-Monospace}{\mathtt{True}}} \\ 0& {\text{if x is }} {\class{MJX-Monospace}{\mathtt{False}}} \end{cases} \]

```
ˎˎ ⸢lim⸣⎵x→0 ˱⸢sin⸣ x˲/x = 1ˎˎ
ˎˎ U_{δ₁ρ₂}^{β₁α₂} ˎˎ
ˎˎ √x = 1 + ˱x-1˲/ᶜ{2 + ˱x-1˲/ᶜ{2 + ˱x-1˲/ᶜ{2 + ⋱}}} ˎˎ
ˎˎ ⸢sin⸣² ẍ  + ⸢cos⸣² ẍ  = 1 ˎˎ
```

\[\underset{x⟶0}{{\mathrm{lim}}} \frac{{{\mathrm{sin}}\,x}}{x} = 1\] \[U_{δ_{1}ρ_{2}}^{β_{1}α_{2}} \] \[\sqrt[]{x} = 1 + \cfrac{{x-1}}{{2 + \cfrac{{x-1}}{{2 + \cfrac{{x-1}}{{2 + ⋱}}}}}} \] \[{\mathrm{sin}}^{2} \ddot{x} + {\mathrm{cos}}^{2} \ddot{x} = 1 \]

```
‚‚ α₂³/³√{β₂² + γ₂²} ‚‚
‚‚ (x + y)² = ∑ₖ₌₀^∞ (n¦ᶜk)xⁿ⁻ᵏyᵏ ‚‚
‚‚ (n¦ᶜk) = ˂(n¦:k)˃, ˂[n¦:k]˃ ‚‚
```

\[\frac{α_{2}^{3}}{\sqrt[3]{{β_{2}^{2} + γ_{2}^{2}}}} \] \[(x + y)^{2} = \sum_{k=0}^∞ \binom{n}{k}x^{n-k}y^{k} \] \[\binom{n}{k} = \genfrac{(}{)}{0pt}{}{n}{k}, \genfrac{[}{]}{0pt}{}{n}{k}\]

```
‚‚ {x + . + x}⏞̄{k ‹times›} ‚‚
‚‚ πd²/4 1/˳(A+B)˳² =
   πd²/4😮{˳(A)˳²} 1/˳(A+B)˳² ‚‚
‚‚ ∑ⁿ_{0≤i≤N ¦␣ 0≤j≤M} (ij)² +
   ∑ⁿ_{i∈A ¦␣ˡ 0≤j≤M} (ij)²  ‚‚
```

\[\overset{{k {\text{times}}}}{\overbrace{{x + … + x}}}\] \[\frac{πd^{2}}{4} \frac{1}{\left({A+B}\right)^{2}} = \frac{πd^{2}}{4\vphantom{{\left({A}\right)^{2}}}} \frac{1}{\left({A+B}\right)^{2}} \] \[\sum^{n}_{\substack{0≤i≤N\\0≤j≤M}} (ij)^{2} + \sum^{n}_{\begin{subarray}{l}i∈A\\0≤j≤M\end{subarray}} (ij)^{2} \]

```
‚‚ ⌜erf⌝(x) = 1/√π ∫₋ₓˣ e^{-t²} dt ‚‚
‚‚ f⁽²⁾(0) = f''(0) = ˳˂d²f/dx²|˳ₓ₌₀ ‚‚
```

```
Text ˎ˳˳(˱a ˳b ¦∷ᵗ c ˳d˲)˳˳ˎ and some more text.
```

\[{\mathrm{erf}}(x) = \frac{1}{\sqrt[]{π}} \int_{-x}^{x} e^{-t^{2}} dt \] \[f^{(2)}(0) = f''(0) = \left.{\frac{d^{2}f}{dx^{2}}}\right\vert_{x=0} \] Text \(\bigl(\begin{smallmatrix}a &b\\c &d\end{smallmatrix}\bigr)\) and some more text.

---

prefix unary operator `→⎴`:

```
ˎˎ f: x →⎴{‹arrow map›} ⎵i x² ˎˎ
```

\[f: x \underset{i}{\xrightarrow{{{\text{arrow map}}}}} x^{2} \] center binary operator `⎴`:

```
ˎˎ f: x → ⎴‹arrow map› ⎵i x² ˎˎ
```

\[f: x \underset{i}{\overset{{\text{arrow map}}}{⟶}} x^{2} \] bug because styles also implemented as prefix unary operators (but by design styles should have priority!):

```
ˎˎ f: x →⎴‹arrow map› ⎵i x² ˎˎ
```

\[f: x \xrightarrow{‹arrow} \underset{i}{map›} x^{2} \]