

# Prominent T<sub>E</sub>X<sub>MACS</sub> equations features

Unsurpassed typesetting :

$$\frac{1}{1+\frac{1}{1+\frac{2}{1+\frac{3}{1+\frac{4}{1+\frac{5}{1+\frac{6}{1+\frac{7}{1+\ddots}}}}}}}} = \sqrt{\frac{\pi e}{2}} \left(1 - \operatorname{erf} \frac{1}{\sqrt{2}}\right) = \sqrt{e} \left\{ \sqrt{\frac{\pi}{2}} - \sum_{n=0}^{\infty} \frac{(-1)^n}{2^n n! (2n+1)} \right\}$$

Many fonts available :  $\frac{1}{\pi} = \frac{2\sqrt{2}}{9801} \sum_{k=0}^{\infty} \frac{(4k)!(1103+26390k)}{(k!)^4 396^{4k}}$

Automatic baseline alignment  $n(t) = \frac{s(t)}{1 - \int_0^1 s(t) dt}$  in writer.

Colored equations

$$\mathcal{S}_{l_0 l_0}(t, \mathbf{V}) = 4\pi \frac{G_K}{\hbar} \left( (1 - \mathcal{T}_0) \mathcal{T}_0 e^{j(t)} \gamma(\mathbf{t}) \cos \frac{e \mathbf{V} t}{\hbar} + \mathcal{T}_0^2 \gamma(\mathbf{t}) \right) \quad \frac{dE_0^*}{dE_0} = \frac{C_{\text{gtot}} - \mathcal{C}_3(E_0, \mathbf{Z} = 0)}{C_{\text{gtot}} - \mathcal{C}_3(E_0^*, \mathbf{Z})}$$

**IMPORTANT : you need not know anything of T<sub>E</sub>X or L<sup>A</sup>T<sub>E</sub>X for using T<sub>E</sub>X<sub>MACS</sub> !** Equations in T<sub>E</sub>X<sub>MACS</sub> are directly entered in their final visual form, using an extremely flexible and well thought-out combination of toolbars, menus, and keyboard shortcuts... And this can even be customized !

Hence, unlike with LibreOffice Math or the Textmath extension, with T<sub>E</sub>X<sub>MACS</sub> you simply cannot make a syntax error while entering your equation! Indeed, in spite of its very misleading name, T<sub>E</sub>X<sub>MACS</sub> is actually *not at all* based on T<sub>E</sub>X ; there is no need to *code* your equations following an obscure syntax.

Nevertheless, if you have Latex material at hand or are proficient typing Latex, this is not wasted! Indeed, any Latex markup can also be converted to a nice equation by T<sub>E</sub>X<sub>MACS</sub>. For instance if you enter the Latex code :

$$\pi = \frac{9801}{2\sqrt{2} \sum_{n=0}^{\infty} \frac{(4n)!}{(n!)^4} \times \frac{1103+26390n}{(4 \times 99)^{4n}}}$$

select it, call T<sub>E</sub>X<sub>MACS</sub> from the toolbar, and you get :

$$\pi = \frac{9801}{2\sqrt{2} \sum_{n=0}^{\infty} \frac{(4n)!}{(n!)^4} \times \frac{1103+26390n}{(4 \times 99)^{4n}}}$$