Matplotlib's math rendering engine

$$W_{\delta_1\rho_1\sigma_2}^{3\beta} = U_{\delta_1\rho_1}^{3\beta} + \frac{1}{8\pi 2}\int_{\alpha_2}^{\alpha_2} d\alpha_2' \left[\frac{U_{\delta_1\rho_1}^{2\beta} - \alpha_2' U_{\rho_1\sigma_2}^{1\beta}}{U_{\rho_1\sigma_2}^{0\beta}} \right]$$

Subscripts and superscripts:

$$\alpha_i > \beta_i, \ \ \alpha_{i+1}^{j} = \sin(2\pi f_j t_i)e^{-5t_i/\tau}, \ \ldots$$

Fractions, binomials and stacked numbers:

$$\frac{3}{4}, \ \binom{3}{4}, \ \frac{3}{4}, \ \left(\frac{5-\frac{1}{x}}{4}\right), \ \ldots$$

Radicals:

$$\sqrt{2}, \ \sqrt[3]{x}, \ \ldots$$

Fonts:

$$\mathrm{Roman} \ , \ \mathit{Italic} \ , \ \mathtt{Typewriter} \ \mathrm{or} \ \mathcal{CALLIGRAPHY}$$

Accents:

$$\acute{a}, \ \bar{a}, \ \breve{a}, \ \dot{a}, \ \ddot{a}, \ \grave{a}, \ \hat{a}, \ \tilde{a}, \ \vec{a}, \ \widehat{xyz}, \ \widetilde{xyz}, \ \ldots$$

Greek, Hebrew:

$$\alpha, \ \beta, \ \chi, \ \delta, \ \lambda, \ \mu, \ \Delta, \ \Gamma, \ \Omega, \ \Phi, \ \Pi, \ \Upsilon, \ \nabla, \ \aleph, \ \beth, \ \daleth, \ \gimel,$$

Delimiters, functions and Symbols:

$$\bigsqcup, \ \int, \ \oint, \ \prod, \ \sum, \ \log, \ \sin, \ \approx, \ \oplus, \ \star, \ \propto, \ \infty, \ \partial, \ \Re,$$