

Mathematical typesetting with Lucida Bright

First some large operators both in text: $\iiint_{\mathcal{Q}} f(x, y, z) dx dy dz$ and $\prod_{y \in \Gamma_{\tilde{\zeta}}} \partial(\tilde{X}_y)$; and also on display:

$$\begin{aligned} \iiint_{\mathcal{Q}} f(w, x, y, z) dw dx dy dz &\leq \oint_{\partial \mathcal{Q}} f' \left(\max \left\{ \frac{\|w\|}{|w^2 + x^2|}; \frac{\|z\|}{|y^2 + z^2|}; \frac{\|w \oplus z\|}{\|x \oplus y\|} \right\} \right) \\ &\approx \bigoplus_{\mathcal{Q} \in \bar{\mathcal{Q}}} \left[f^* \left(\frac{\mathcal{Q}(t)}{\sqrt{1-t^2}} \right) \right]_{t=\alpha}^{t=\theta} - (\Delta + \nu - \nu)^3 \end{aligned} \quad (1)$$

For x in the open interval $] -1, 1[$ the infinite sum in Equation (2) is convergent; however, this does not hold throughout the closed interval $[-1, 1]$.

$$(1-x)^{-k} = 1 + \sum_{j=1}^{\infty} (-1)^j \begin{Bmatrix} k \\ j \end{Bmatrix} x^j \quad \text{for } k \in \mathbb{N}; k \neq 0. \quad (2)$$