# A Sample of the XCharter Font

with Charter-style math font from newtxmath and Cabin

### 1 Lorem ipsum dolor sit amet

#### 1.1 Quisque ullamcorper placerat ipsum

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#### 1.2 Morbi vel justo vitae lacus tincidunt ultrices

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- 2. Nunc elementum fermentum wisi.

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## 2 Sample page of mathematical typesetting

First some large operators both in text:  $\iiint_{\mathbb{Q}} f(x,y,z) dx dy dz$  and  $\prod_{\gamma \in \Gamma_{\widetilde{C}}} \partial(\widetilde{X}_{\gamma})$ ; and also on display:

$$\iiint\limits_{Q} f(w, x, y, z) \, dw \, dx \, dy \, dz \le \oint_{\partial Q} f' \left( \max \left\{ \frac{\|w\|}{|w^2 + x^2|}; \frac{\|z\|}{|y^2 + z^2|}; \frac{\|w \oplus z\|}{\|x \oplus y\|} \right\} \right)$$

$$\lessapprox \biguplus\limits_{\mathbb{Q} \in \bar{Q}} \left[ f^* \left( \frac{\int \mathbb{Q}(t) \setminus \mathbb{Q}(t)}{\sqrt{1 - t^2}} \right) \right]_{t=\alpha}^{t=\vartheta}$$

$$\tag{1}$$

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].

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

**Theorem 1 (Residue Theorem).** Let f be analytic in the region G except for the isolated singularities  $a_1, a_2, \ldots, a_m$ . If  $\gamma$  is a closed rectifiable curve in G which does not pass through any of the points  $a_k$  and if  $\gamma \approx 0$  in G then

$$\frac{1}{2\pi i} \int_{\gamma} f = \sum_{k=1}^{m} n(\gamma; a_k) \operatorname{Res}(f; a_k).$$

**Theorem 2 (Maximum Modulus).** Let G be a bounded open set in  $\mathbb{C}$  and suppose that f is a continuous function on  $G^-$  which is analytic in G. Then

$$\max\{|f(z)| : z \in G^-\} = \max\{|f(z)| : z \in \partial G\}.$$

01234567890 abcdef ghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ αβγδεεζηθθικκλμνξοπωρρσςτυφφχψω  $\Gamma\Delta\Theta\Lambda\Xi\Pi\Sigma\Upsilon\Phi\Psi\Omega$   $\ell\,\wp\aleph\infty\propto\,\emptyset\,\nabla\partial$   $\Im\hbar\delta$  ΑΛΔ $\nabla$ BCDΣΕΓΓGHIJKLMNO $\Theta\Omega$   $\Im\Phi\Pi\Xi$ QRSTUVWXYY $\Psi$ Z  $A\Lambda\Delta$ BCDEFΓGHIJKLMNO $\Theta\Omega$ P $\Phi\Pi\Xi$ QRSTUVWXYY $\Psi$ Z