

Package name: newpxtext (Palatino)

Derived from: TeX Gyre Pagella

Weights and shapes: {m, b}, {n, it}.

Features:

- full set of f-ligatures;
- SMALL CAPS in all weights and shapes;
- monospaced lining figures 0123456789;
- taboldstyle (monospaced) figures 0123456789—option osf makes these the default text figures, while using lining figures for math; (the TeXGyrePagella package doesn't seem to have an option for this;)
- superior figures ⁰¹²³⁴⁵⁶⁷⁸⁹. Unless you use the option defaultsup, these will be used for footnote markers;

Typical invocation:

```
\usepackage[full]{textcomp}
\usepackage[osf]{newpxtext} % osf for text, not math
\usepackage{cabin} % sans serif
\usepackage[varqu,varl]{inconsolata} % sans serif typewriter
\usepackage[bigdelims,vvarbb]{newpymath} % bb from STIX
\usepackage[cal=boondoxo]{mathalfa} % mathcal
```

Example using this preamble:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

The typeset math below follows the ISO recommendations that only variables be set in italic. Note the use of upright shapes for d, e and π . (The first two are entered as `\mathrm{d}` and `\mathrm{e}`, and in fonts derived from mtpro2 or newtxmath, the latter is entered as `\uppi`.)

Simplest form of the Central Limit Theorem: Let X_1, X_2, \dots be a sequence of iid random variables with mean 0 and variance 1 on a probability space $(\Omega, \mathcal{F}, \mathbb{P})$. Then

$$\mathbb{P}\left(\frac{X_1 + \dots + X_n}{\sqrt{n}} \leq y\right) \rightarrow \mathfrak{R}(y) := \int_{-\infty}^y \frac{e^{-t^2/2}}{\sqrt{2\pi}} dt \quad \text{as } n \rightarrow \infty,$$

or, equivalently, letting $S_n := \sum_1^n X_k$,

$$\mathbb{E}f(S_n/\sqrt{n}) \rightarrow \int_{-\infty}^{\infty} f(t) \frac{e^{-t^2/2}}{\sqrt{2\pi}} dt \quad \text{as } n \rightarrow \infty, \text{ for every } f \in \mathcal{BC}(\mathbb{R}).$$