Extended font test

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This document provides a testing ground for different fonts.

Case: New Baskerville (pnb) with txfonts

This version used the following commands in the preamble.

```
\usepackage[T1]{fontenc}
\usepackage{baskervilleextended}
```

The `baskervilleextended` package also allows the use of the Baskerville font included with Mac OS X, via the `gtamac` option to the package. Note that bold math is not changed. Similar results would come from the following, but then `\mathrm` and operators like sin or max are not changed into Baskerville.

```
\usepackage[T1]{fontenc}
\usepackage{txfonts}
\renewcommand{\familydefault}{pnb}
\renewcommand{\rmdefault}{pnb}
\usepackage{textmath}
```

1 The test

HERE is some TEXT `And some in mono` And some in sansserif. BUT DO WE HAVE SMALL CAPS? The next fragment follows the Survey of Free Math Fonts on CTAN by Stephen G. Hartke, available at: `http://ctan.tug.org/tex-archive/info/Free_Math_Font_Survey/survey.pdf`

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 γ 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*

$$\frac{1}{2\pi i}\int_\gamma f = \sum_{k-1}^{m} h(\gamma; a_k)$$

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*

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

$$A\Gamma\Delta BCD\Sigma EF\Upsilon GHIJKLMNO\Theta\Omega P\Phi\Pi\Xi QRSTUVWXY\Upsilon\Psi Z1234567890$$

$$a\alpha b\hat{b}\beta\hat{\beta} c\delta\partial e\epsilon\varepsilon f\zeta\eta g\gamma h\hbar ijk\kappa\aleph l\lambda mn\theta\vartheta o\sigma\varsigma\phi\varphi\wp\rho qrst\tau\pi u\mu\upsilon v\nu uw\omega x\chi yvz\infty$$

Now some dummy text so you can see how that looks. There is one fake word in italic and one in bold. After that, another math text so you can see how bold caps and matrices look. Lipsum dolor sit amet, consectetuer *adipiscing* elit. Suspendisse aliquam **Allamcorper** nunc. Proin quis dolor id sem consectetuer volutpat. Maecenas scelerisque vehicula eros. Pellentesque id justo. Maecenas auctor ligula eget elit. Aliquam orci mauris, ultricies eu, facilisis vel, scelerisque a, nisi. Integer leo. Aliquam porttitor massa. Donec at augue sit amet sem adipiscing gravida. Curabitur eu nisl vitae lectus varius elementum. Nulla tristique fringilla est. Integer tellus. Duis eget velit sit amet dui blandit vehicula. Quisque eu metus et nisl gravida mollis. Morbi rutrum tempor augue. Phasellus eu nisi quis dolor dapibus rhoncus.

$$\Gamma y_t = E_t y_{t+1} - a(i_t - E_t\pi_{t+1}) + \tilde{u}_t > 0, \qquad \tilde{u}_t \sim N(0,\sigma_u) \tag{1}$$

$$y_t = b\pi_t - b\beta E_t\pi_{t+1} + \hat{v}_t < 0, \qquad \hat{v}_t \sim N(0,\sigma_v) \tag{2}$$

$$\begin{gathered}\mathbf{A}_1 E_t\mathbf{x}_{t+1} + \mathbf{A}_{0,t}E_t\mathbf{x}_t = 0, \text{ where} \\ \mathbf{A}_1 = \begin{bmatrix} -1 & -a \\ 0 & \beta b \end{bmatrix} \text{and } \mathbf{A}_{0,s} = \begin{bmatrix} 1 + aE_t\theta_{2,s} & aE_t\theta_{1,s} \\ 1 & -b \end{bmatrix}, \quad s = t,\, t+1\end{gathered} \tag{3}$$

$$E_t\mathbf{x}_{t+1} = -\mathbf{A}_1^{-1}\mathbf{A}_{0,t+1} \cdot -\mathbf{A}_1^{-1}\mathbf{A}_{0,t}\mathbf{x}_{t-1} \tag{4}$$

$$\mathbf{x}_t = -\left(\mathbf{A}_{0,t}^{-1}\mathbf{A}_{0,t+1}\right)\mathbf{A}_1^{-1}\mathbf{A}_{0,t}\mathbf{x}_{t-1} + [a\epsilon_t\; 0]' + [\tilde{u}_t\; \hat{v}_t]' \tag{5}$$

Donec nisi lorem, blandit non, vestibulum ac, adipiscing mattis, tortor. Vestibulum nec diam quis urna dignissim mattis. Maecenas tristique mauris eu lectus. Morbi posuere enim sit amet nibh. Ut tellus. Curabitur luctus, est sit amet ultricies tincidunt, lorem libero auctor quam, non gravida turpis lacus at arcu. Proin a nibh. Aliquam elit. Cras elit dui, adipiscing a, vestibulum id, cursus eu, lectus. Integer metus. Pellentesque est. Duis eu urna ut dolor molestie rutrum. Nullam gravida nibh quis lacus. Sed elit nisi, faucibus et, sodales eu, vulputate vel, metus. Just a little more to test other math alphabets.

$$\mathbf{min A\Gamma} + \mathbf{\Delta\tilde{B}\hat{C}\check{D}\Sigma\ddot{E}F\Gamma GHIJKLMNO1234567890}$$

$$\sin(\{\mathrm{ABCDEFGHIJKabdef}\delta\epsilon\xi\})$$