AN ACUTE SCRIPT FONT BASED ON RSFS

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The rsfs fonts are, in their natural states, very oblique, appearing to be slanted to the right at close to 45°. In my opinion, this makes them less suited for use as a replacement for \mathcal. If you choose to use the rsfs fonts, it is best to invoke them via the mathalpha package. For example:

\usepackage[cal=rsfs,calscale=1.03]{mathalpha} % invoke as \mathcal scaled up 3%

or

\usepackage[scr=rsfs,scrscale=1.03]{mathalpha} % invoke as \mathscr

The purpose of this package is to make a collection of virtual fonts from the rsfs PostScript fonts that remove much of the slant. The o in rsfso stands for oblique, though acute would be a better description. The end result is quite similar in appearance, modulo a few flourishes, to the commercial script font in the Adobe Mathematical Pi collection. Here is a sample (as a png snapshot) of the latter, produced via \usepackage[mathcal]{mathpi} but also useable via mathalpha with the incantation \usepackage[cal=mathpi]{mathalpha}.

ARCDEFGHIJKLMNOP2RITUVWXYL

 $\hat{\mathscr{A}}\hat{\mathscr{F}}_i\bar{\mathscr{M}}_k^2$

The second line above shows that work will need to be performed to get spacing, accents and subscript positions in better shape than when invoked by the now obsolete mathpi package. The same fragment using rsfso renders as

ABCDEFGHIJKLMNOPQRITUVWXYL

 $\hat{\mathscr{A}}\hat{\mathscr{F}}_i\bar{\mathscr{M}}_k^2$

Compare this to the output from rsfs:

ABCDEFGHIJKLMNOPQRSTUVWXYZ

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\hat{\mathscr{A}}\hat{\mathscr{F}}_i\bar{\mathscr{M}}_k^2
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The rsfso package has two options: scr causes a redefinition of \mathscr rather than \mathcal, and [scaled=1.1] expands the size by a factor of 1.1, allowing you to match the size of the \mathcal (or \mathscr) output to your math font. IMO, it is better to use it via the mathalpha package, as it provides a shared syntax for loading a large number of mathematical alphabets.

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