AN ACUTE SCRIPT FONT BASED ON RSFS

MICHAEL SHARPE

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. (The \mathrsfs package defines \mathscr to use rsfs for output.)

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}.

ARCDEFGHIJKLMNOP2RITUVWXYL

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

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

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

and with mathrsfs you get

ABCDEFGHIJKLMNOPQRSTUVWXYZ

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

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.

The virtual font production and their metric adjustments were carried out using the author's freely available OS X program TeXFontUtility which serves, among other functions, as a visual front-end to some fontinst manipulations.

 $E ext{-}mail\ address:$ msharpe at ucsd dot edu