The **tpslifonts** package<superscript>*</superscript>

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1 Introduction

Presentations to be displayed 'online' with a video beamer have special needs concerning font configuration owing to low 'screen' resolution and bad contrast caused by possibly bad light conditions combined with color highlighting.

This package tries to cater to these needs by offering a holistic configuration of all document fonts, including text, typewriter, and math fonts. Special features are 'smooth scaling' of Type1 fonts and careful design size selection for optimal readability.

The default is to use "lcmss", also called "slifonts" for text and the usual cmtt and cmm for typewriter and math. There's a large variety of options and parameters for choosing different text and math fonts, all from the large "cm" family of fonts, which has the advantage that readability can be enhanced by scaling small design sizes. A couple of additional math fonts like ams and doublestroke fonts are supported.

For some of the options to yield satisfying results, it is neccessary to install additional (free) Type1 fonts on your system. There's no intention to support other font families like the typical "psnfss" PostScript fonts, as they usually don't

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<superscript>*</superscript>This document corresponds to **tpslifonts** v0.6d, dated 2004/07/27.

come in different design sizes, making the effort of tuning them for viewing futile. If you wish to use such a font, load it with the usual packages.

This package is part of the TeXPower bundle, to be found at `http://texpower.sourceforge.net/`

2   User interface

The package doesn't define any user-level commands; the font configuration is done entirely by package options.

Furthermore, the accompanying example document slifontsexample gives a lot of information about the fonts configured and some examples of math typesetting. Please read the comments in slifontsexample.tex carefully and try out some of the configuration variants described therein.

3   Description of package options

3.1   Text font options

The default is to use SLITEX computer modern sans serif, an eminently readable font and my personal favourite.

Option	Meaning
cmr	Set computer modern roman text fonts.
cmfib	Set computer modern roman Fibonacci text fonts.
cmss	Set computer modern sans serif text fonts.
cmbright	Set computer modern bright text fonts.
concrete	Set concrete text fonts.

3.2   Design size bounding

Usually design sizes are 'bounded' by 8pt, that is, if an 8pt (or lower) design size of a font exists, it will be scaled to larger sizes even if larger design sizes exist, because large design sizes tend to be less readable at low resolutions. For sizes below 8pt, smaller design sizes are used if available.

The limit of 8pt is adjustable (downwards) by options.

Option	Meaning
scale7pt	Use 7pt as a bound.
scale6pt	Use 6pt as a bound.
scale5pt	Use 5pt as a bound.

3.3   Font scaling

The default lcmss text fonts have very high 'small letters', making normal-size fonts look small and difficult to read. There are options for scaling up math and

typewriter fonts slightly so they harmonize a little more with text fonts.

Option	Meaning
scaleupmath	scale up math fonts
scaleuptt	scale up typewriter fonts

3.4   Math fonts

Because the availability of different fonts in different encodings is not really homogenous, we differentiate between the font used for operator names (plus upper case greek, digits and some symbols) and the font used for other symbols. In some cases (math extension font), the choices are quite limited anyway.

The default is to use cmr for operators and such and the standard cmm and relatives for symbols. The concrete option for concrete text fonts selects concrete math fonts by default, but as these don't seem to exist in Type1 format currently, it's recommended to combine concrete text with Euler math.

Option	Meaning
eulermath	Use Euler math fonts. This implies the option textops (see below).
eulerdigits	Take digits also from the Euler fonts (default: the text font used). Can be used only in conjunction with the eulermath option.
cmbrightmath	Use cmbright math fonts.
textops	Take operator names, upper case greek, digits and some symbols from the text font rather than from some font matching the math font (default for Euler math).