

The HEP-FONT package*

Latin modern extended by computer modern

Jan Hajer†

2024/11/01

Abstract

The HEP-FONT package loads standard font packages and extends the usual latin modern implementations by replacing missing fonts with computer modern counterparts.

The package is loaded using `\usepackage{hep-font}`.

size The `size=<size>` option loads the specified font size. The possible *<sizes>* are: 8pt, 9pt, 10pt, 11pt, 12pt, 14pt, 17pt, 20pt and `default` deactivates this switch. The default value is 11 pt.

sans The `sans` option switches to sans-serif font instead of serif font.

oldstyle The `oldstyle` option switches to oldstyle numerals such as 123 in text mode instead of lining numerals such as 123.

The FONTENC package [1] with T1 and TU font encoding is loaded for pdfTEX and LuaTEX, respectively.

Some restrictions of computer modern (CM) fonts are lifted with the FIXCM package [2].

The MICROTYPE [3] optimizations are activated.

The LATEX new font selection scheme is extended with the NFSSEXT-CFR package [4].

The latin modern font is loaded using the CFR-LM [5] and LMODERN [6] packages for pdfTEX and LuaTEX, respectively.

The text companion fonts are loaded [7].

\textsc Bold **SMALL CAPS** and a sans serif **SMALL CAPS** based on the CM font [8] is provided, the latter using the SANSMATHFONTS [9] and HFOLDSTY [10] packages.

\textui A sans-serif upright italic font is provided using the SANSMATHFONTS package [9].

Finally the INPUTENC package [11] with the `utf8` option is loaded.

References

- [1] *TEX Team*. ‘The fontenc package: Standard package for selecting font encodings’ (1995). CTAN: fontenc.
- [2] F. Mittelbach, D. Carlisle, C. Rowley, and W. Schmidt. ‘The fix-cm package: Permit Computer Modern fonts at arbitrary sizes’ (1993). CTAN: fix-cm.
- [3] R. Schlicht. ‘The microtype package: Subliminal refinements towards typographical perfection’ (2004). CTAN: microtype.

*This document corresponds to HEP-FONT v1.3.

†jan.hajer@tecnico.ulisboa.pt

- [4] C. F. Rees and P. Lehman. ‘The `nfssect-cfr` package: Extensions to the \LaTeX NFSS’ (2003). CTAN: `nfssect-cfr`.
- [5] C. F. Rees. ‘The `cfr-lm` package: Enhanced support for the Latin Modern fonts’ (2008). CTAN: `cfr-lm`.
- [6] B. Jackowski and J. Nowacki. ‘Latin Modern Family of Fonts: Latin modern fonts in outline formats’ (2003). CTAN: `lm`. URL: gust.org.pl/projects/e-foundry/latin-modern.
- [7] *LaTeX Team*. ‘The `textcomp` package: \LaTeX support for the Text Companion fonts’ (1995). CTAN: `textcomp`.
- [8] D. E. Knuth. ‘Computer Modern fonts’ (1986). CTAN: `cm`.
- [9] A. Barton. ‘The `sansmathfonts` package: Correct placement of accents in sans-serif maths’ (2013). CTAN: `sansmathfonts`.
- [10] H. Harders. ‘The `hfoldsty` package: Old style numerals with EC fonts’ (2004). CTAN: `hfoldsty`.
- [11] *LaTeX Team*. ‘The `inputenc` package: Accept different input encodings’ (1989). CTAN: `inputenc`.