

The file `newfont.dtx` for use with L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>.\*

It contains the code for `newfont.sty`

Frank Mittelbach

December 7, 2009

## 1 Introduction

This file contains the code for the `newfont` package which provides defines commands like `\rm` to behave as with NFSS1, i.e., to change one font attribute without resetting the other attributes.

## 2 The Code

```
1 (*package)
```

We define the font commands for selecting the typeface. They are probably defined by the document class/style but we want to force the old meaning from NFSS1.

```
2 \let\rm\rmfamily
3 \let\sf\sffamily
4 \let\tt\ttfamily
5 \let\bf\bfseries
6 \let\sl\slshape
7 \let\sc\scshape
8 \let\it\itshape
```

We also have to define the *emphasize* font change command (i.e. `\em`). This command will look whether the current font is sloped (i.e. has a positive `\fontdimen1`) and will then select either an upright or italic font.

```
9 \DeclareRobustCommand\em{%
10   \@nomath\em
11   \ifdim \fontdimen\@ne\font >\z@\upshape \else \itshape \fi}
```

For compatibility with old sources we should define the following commands although their use in new documents is discouraged.

```
12 \let\mediumseries\mdseries
13 \let\normalshape\upshape
```

In case `newfont` is used in compatibility mode, eg  
`\documentstyle[newfont]{article}`

or with the `oldlfont` package already loaded we have to undo a number of settings changed by the compatibility mode for L<sup>A</sup>T<sub>E</sub>X 2.09 documents.

`\@setfontsize` should not have a `\reset@font` included.

```
14 \def\@setfontsize#1#2#3{\@nomath#1%
15   \ifx\protect\@typeset@protect
16     \let\@currsize#1%
17     \fi
18   \fontsize{#2}{#3}\selectfont}
```

---

\*This file has version number v2.2m, dated 1998/08/17.

Math alphabet identifiers should have an argument.

```
19 \let\math@bgroup\bgroup
20 \def\math@egroup#1{#1\egroup}
21 \let \@@math@bgroup \math@bgroup
22 \let \@@math@egroup \math@egroup
```

Warn again, if text font commands are used in math (same macro as in `lfonts.dtx`).

```
23 \def\not@math@alphabet#1#2{%
24   \relax
25   \ifmmode
26     \@latex@error{Command \noexpand#1invalid in math mode}%
27     {%
28       Please
29       \ifx#2\relax
30         define a new math alphabet^^J%
31         if you want to use a special font in math mode%
32       \else
```

We have to add `\noexpand` below to prevent expansion of `#2`. In case of `#1` we can omit this (due to the current definition of robust commands since they do come out right there :-).

```
33         use the math alphabet \noexpand#2instead of
34         the #1command%
35       \fi
36     .
37   }%
38 \fi}
```

In NFSS1 math alphabets had arguments so we have to change `\cal` and `\mit` which by default are defined to behave like in  $\text{\LaTeX}209$ .

```
39 \let\pcal\@undefined
40 \let\cal\mathcal
41 \let\pmit\@undefined
42 \let\mit\mathnormal
```

The NFSS1 version of `newlfont` included the  $\text{\LaTeX}$  symbols. And that is probably all there is.

```
43 \RequirePackage{latexsym}
44 \end{package}
```