

The L^AT_EX macro packages tmmaths and tmmathm

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1 The TM-Math font set

MicroPress' TM-Math font set extends the Adobe Times typefaces:

- Additional text and text companion symbols make the full OT1 and T1 character sets and a subset of the text companion symbols available, including the Euro sign. With L^AT_EX, the enhanced Times typefaces are provided as a font family named `tmr`.
- Several math fonts, matching the 'Times' style, are provided to support all of T_EX's math typesetting capabilities and fully replace the default Computer Modern fonts.

Use of the TM-Math fonts with L^AT_EX is supported through the macro packages `tmmaths` and `tmmathm`.

2 The package `tmmaths`

Loading the package `tmmaths`

```
\usepackage{tmmaths}
```

makes L^AT_EX use the Times and TM-Math fonts: The default roman text font family (`\rmdefault`) is changed to `tmr`, i.e. enhanced Adobe Times, and the math fonts are changed to TM-Math.

2.1 Font encoding

The package does *not* change the default output font encoding from OT1. It is, however, recommended to make use of the font family `tmr` through the extended T1 and TS1 encodings, so as to provide access all glyphs. This is enabled by the following additional commands:

```
\usepackage[T1]{fontenc}  
\usepackage{textcomp}
```

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2.2 The `slantedGreek` option

When the macro package is loaded using the option `[slantedGreek]`, uppercase Greek letters in math will, by default, be slanted. Regardless of the option, the new commands `\upDelta` and `\upOmega` will *always* provide upright Δ and Ω symbols.

2.3 Bold math alphabet

The `tmmaths` package provides a ***bold italic*** math alphabet `\mathbold`. (Do not mix this up with `\mathbf`, which implements the **bold upright** text font for use in math!)

2.4 Using the AMS math symbol fonts

The TM-Math font set includes matching AMS symbol fonts, too. \LaTeX will use these, if the packages `amssymb` or `amsfonts` are loaded in conjunction with `tmmaths`.

3 The package `tmmathm`

Despite having been designed to blend with Adobe Times, the TM-Math fonts match also similar text fonts such as TimesTen or, for instance, central-european variants of Times. Doing so is supported through the package `tmmathm`. It affects only the *math* fonts used by \LaTeX , whereas the *text* fonts can be chosen separately.

Strangely, certain Times variants (TimesTen, Monotype TimesNewRoman) are about 5% larger than ‘ordinary’ Adobe Times. The `tmmathm` package can be loaded with the option `[TMlargescale]` to enlarge the TM-Math fonts accordingly.

For instance, if TimesTen (with real smallcaps) is installed as font family `pttx`, the following commands change the default roman text font family to `pttx` and load TM-Math, enlarged by 5%, for the formulas:

```
\renewcommand{\rmdefault}{pttx}  
\usepackage[TMlargescale]{tmmaths}
```

As to the `[slantedGreek]` option, the `\mathbold` alphabet, and the use of the AMS fonts, the `tmmathm` package does not differ from `tmmaths`—see above.

4 Availability and support

The latest versions of these packages can be obtained from the directory `macros/latex/contrib/supported/psnfssx/tmmath` of any CTAN host.

The TM-Math fonts are provided by

MicroPress, Inc.
6830 Harrow Street
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<<http://www.micropress-inc.com>>.

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