

# The **shadethm** package

Shaded theorem environments in L<sup>A</sup>T<sub>E</sub>X,  
with `\newshadethorem` in addition to `\newtheorem`

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## 1 This package is obsolete

New projects should not use this package. There are a number of newer and more powerful packages that are available.

This material only remains available for people supporting existing projects.

## 2 Usage

Used as a L<sup>A</sup>T<sub>E</sub>X 2<sub>E</sub> style, with `\usepackage{shadethm}`, it allows declarations of the form `\newshadethorem{theorem}{Theorem}`, so that

```
\begin{theorem} $e=mc^2$ \end{theorem}
```

will produce the usual theorem, only placed in a shaded box.

### Options.

Two come in this file:

**bodymargin (default)** The body of the shaded text lines up with the margins.  
Just as though you called `newtheorem`, then colored later. Shading falls outside the margin.

**shademargin** The shading lines up with the margins, so the body of shaded text comes out a little thinner.

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If you call it with an option not on that list then it will look for a file `<Option-Name>.sth` and take the parameters from there. See the included files `shadein.sth` and `colored.sth`, the first of which gives theorems that are (like L<sup>A</sup>T<sub>E</sub>X quotations) indented left and right and the second of which gives color shading.

## 3 Remarks

- (1) You can of course have non-shaded environments, also. The `\newtheorem` command still works.
- (2) Numbering within: An prior version of this style required that you number within like this:

```
\newshadethm{thm}{Theorem}
\newshadethm{note}[shadethm]{Note} % No longer needed!
```

but this one drops that requirement. If you didn't use the old version, forget about it.

- (3) Works with `amsthm.sty`.
- (4) Notice that if you say

```
\newshadethm{theorem}{Theorem}
```

and then

```
\newtheorem{theorem}{Theorem}
```

then you will get an error message since the first allows you to say `\begin{theorem} ...`, as does the second.

## 4 Installation

Put this where your T<sub>E</sub>X looks for `.sty` files. There are some parameters you could set the default for (try them as is, first).

- (i) **shadethmcolor** The shading color of the background. See the documentation for the `color` package, but with a 'gray' model, I find .97 looks good out of my printer, while a darker shade like .92 is needed to make it copy well. (Black is 0, white is 1.)

- (ii) **shaderulecolor** The shading color of the border of the shaded box. See (i). If `\shadeboxrule` is set to 0pt then this won't print anyway.
- (iii) **\shadeboxrule** The width of the border around the shading. Set it to 0 pt (not just 0) to make it disappear.
- (iv) **\shadeboxsep** The length by which the shade box surrounds the text.
- (v) **\shadesetinsideminipage** The theorems are set inside a `minipage` to get line breaks, but some things, like paragraph indents, are messed with there, so I have a hook to reset them. Probably you can just leave this alone.
- (vi) The default option. Change the `\ExecuteOptions{...}` right before the `\ProcessOptions`.

**Comment:**

If you get an error about ‘undefined color model’ then you need to create the file `color.cfg` in the same place as `color.sty`, and put in it the line

```
\ExecuteOptions{dvips}
```

(or whatever is the name of your driver). See the documentation for the `graphics` package. I needed this in the distant past under NTEX.

## 5 Bugs

Note that this material is obsolete. The bug listed will not be fixed.

- (1) Page breaks are a problem since it sets the theorem before it is shaded. The theorem is put into a `minipage` in order to have the right line breaks put in, but then can't be broken across pages.

## 6 License

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## 7 History

20I08 **jh** [jhefferon@smcvt.edu](mailto:jhefferon@smcvt.edu) Declare package obsolete to keep people from mistakenly starting new projects with it.

99XI23 **jh** Redid the parsing to stick to `\newcommand`-style calls. Needed to put in some oppressive `\expandafter` strings.

99VII09 **jh** [tex@joshua.smcvt.edu](mailto:tex@joshua.smcvt.edu) Fixed the number within situation. LPPL added.

97I07 **jh** Changed the interior of the `\DeclareOptions` to `\AtBeginDocument` for cases where the `\textwidth` is changed.

95VI19 **jh** Adapted for L<sup>A</sup>T<sub>E</sub>X 2 <sub>$\varepsilon$</sub> . Now uses the `graphics` package, and all the neat L<sup>A</sup>T<sub>E</sub>X 2 <sub>$\varepsilon$</sub>  package stuff. Still haven't rewritten the parsing code to use the new optional arguments to `\newcommand`, though. Ah well.

94VII11 **jim hefferon** [hefferon@smcvax.smcvt.edu](mailto:hefferon@smcvax.smcvt.edu). First written (after lots of sporadic tries, over months; I couldn't get any of the extant shading macros to work with theorems) from a hint in TvZ's `Fancybox` writeup. It's all so easy once you know how.