The shadethm package

Shaded theorem environments in \LaTeX, with \texttt{\newshadetheorem} in addition to \texttt{\newtheorem}

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2020/01/08

1 This package is obsolete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 \LaTeX2ε style, with \texttt{\usepackage{shadethm}}, it allows declarations of the form \texttt{\newshadetheorem\{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:

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

\texttt{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 \texttt{Option-Name}.sth and take the parameters from there. See the included files \texttt{shadein.sth} and \texttt{colored.sth}, the first of which gives theorems that are (like \LaTeX\ 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 \texttt{newtheorem} command still works.

(2) Numbering within: An prior version of this style required that you number within like this:

\begin{verbatim}
\newshadetheorem{thm}{Theorem}
\newshadetheorem{note}{shadethm}{Note} % No longer needed!
\end{verbatim}

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

(3) Works with \texttt{amsthm.sty}.

(4) Notice that if you say

\begin{verbatim}
\newshadetheorem{theorem}{Theorem}
\end{verbatim}

and then

\begin{verbatim}
\newtheorem{theorem}{Theorem}
\end{verbatim}

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

4 Installation

Put this where your \TeX\ looks for \texttt{.sty} files. There are some parameters you could set the default for (try them as is, first).

(i) \texttt{shadethmcolor} \ The shading color of the background. See the documentation for the \texttt{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) \texttt{shaderulecolor}  The shading color of the border of the shaded box. See (i). If \texttt{shadeboxrule} is set to 0 pt then this won’t print anyway.

(iii) \texttt{shadeboxrule}  The width of the border around the shading. Set it to 0 pt (not just 0) to make it disappear.

(iv) \texttt{shadeboxsep}  The length by which the shade box surrounds the text.

(v) \texttt{shadesetinsideminipage}  The theorems are set inside a \texttt{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 \texttt{\ExecuteOptions{...}} right before the \texttt{\ProcessOptions}.

\textbf{Comment:}
If you get an error about ‘undefined color model’ then you need to create the file \texttt{color.cfg} in the same place as \texttt{color.sty}, and put in it the line

\begin{verbatim}
\ExecuteOptions{dvips}
\end{verbatim}

(or whatever is the name of your driver). See the documentation for the \texttt{graphics} package. I needed this in the distant past under \TeX.

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 \texttt{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 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 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 \LaTeX. Now uses the graphics package, and all the neat \LaTeX 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 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.