Color extensions with the \texttt{xcolor} package — \texttt{pstricks} examples

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This document is not suitable for \texttt{pdflatex}! Please use \texttt{latex + dvips} etc.

Figure 1: Modified version of an example from the \texttt{pstricks} manual; requires \texttt{pst-tree}

\begin{pspicture}(-0.5,-2)(3,2)
  \cnode(0,0){.5cm}{root}
  \cnode*[linecolor=red](3,1.5){4pt}{A}
  \cnode*[linecolor=red!72.5375!blue](3,0){4pt}{B}
  \cnode*[linecolor=-red](3,-1.5){4pt}{C}
  \psset{nodesep=3pt}
  \ncline[linecolor=green!50!red]{root}{A}
  \ncline[linecolor=blue]{root}{B}
  \ncline[linecolor=-green!50!red]{root}{C}
\end{pspicture}

Figure 2: Moving from one color to its complement; requires \texttt{pst-slpe}

\begin{pspicture}(4,1)
  \psframe[fillstyle=slope,
    slopeangle=30,
    slopebegin=red!72.5375!blue,
    slopeend=-red!72.5375!blue](4,1)
\end{pspicture}

\footnote{This file is part of the \texttt{xcolor} distribution which can be downloaded from the CTAN mirrors (macros/latex/contrib/xcolor/) or the homepage \url{www.ukern.de/tex/xcolor.html}. Please send error reports and suggestions for improvements to xcolor@ukern.de.}
Figure 3: Explicit color specification via a loop command; requires `multido`

\begin{pspicture}(0,-1)(2,1)
\multido{\rHue=0.00+0.01}{100}\
{\pscircle[linewidth=0.01,\linecolor={hsb}{\rHue,1,1}](1,0){\rHue}}
\end{pspicture}

Figure 4: Color series — modified version of an example from the `pst-fill` manual; note that the `\multirput` command does not give the desired result here

\begin{pspicture}(-3,-6)(0,7.5)
\Multido{\ry=6.0+-1.5}{5}\
{\rput(0,\ry){\Multido{}{5}{\Sheep}}}
\resetcolorseries{sheep}\
\multirput(-6,-6)(3,0)5{\Sheep}
\end{pspicture}
Figure 5: Interaction with native PostScript code — $\gamma$-corrected wavelengths

\newcount\WL \unitlength.75pt
\def\WaveToPS#1\%
{\definecolor{tmp}{rgb:wave}{#1}\extractcolorspecs{tmp}\tmpm\tmpc
\expandafter\WaveToPSi\tmpc,}
\def\WaveToPSi#1,#2,#3,{{\pstVerb{/Red{#1}def /Green{#2}def /Blue{#3}def}}}
\def\DisplayBar#1#2\%
{\linethickness{1.25\unitlength}\WL=360
\pstVerb{/Gamma{#1}def}\
\multiput(360,#2)(1,0){456}{\WaveToPS{\the\WL}{col\lambda\line(0,1){50}}\global\advance\WL1}
\linethickness{0.25\unitlength}\WL=360
\multiput(360,#2)(20,0){23}{\picture(0,0)
\line(0,-1){5}\multiput(5,0)(5,0){3}{\line(0,-1){2.5}}\put(0,-10){\makebox(0,0){\the\WL}}\global\advance\WL20\endpicture}
\put(350,#2){\makebox(0,50)[r]{\small $\gamma$ = #1}}}
\pstVerb{/Corr{dup 0 gt {Gamma exp}if}def}
\definecolor{ps\lambda}{rgb}{Red Corr Green Corr Blue Corr}
\begin{picture}(510,345)(310,-10)
sffamily\tiny\DisplayBar{0.4}{0}\% \DisplayBar{0.4}{70}\%
\DisplayBar{0.6}{140}\% \DisplayBar{1.0}{210}\%
\DisplayBar{1.2}{280}\%
\end{picture}

$\gamma = 1.2$

$\gamma = 1.0$

$\gamma = 0.8$

$\gamma = 0.6$

$\gamma = 0.4$