

# Color extensions with the `xcolor` package — `pstricks` examples

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Figure 1: Modified version of an example from the `pstricks` manual; requires `pst-tree`

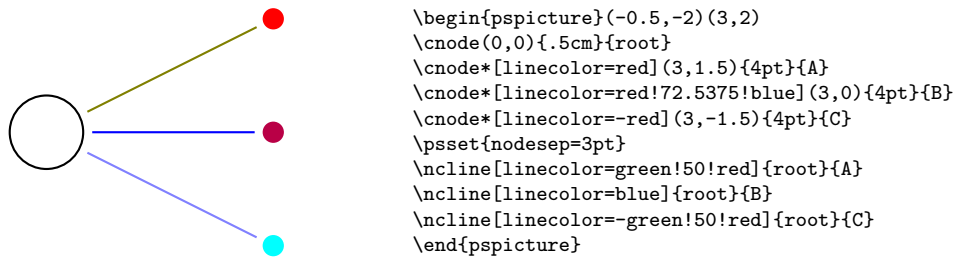
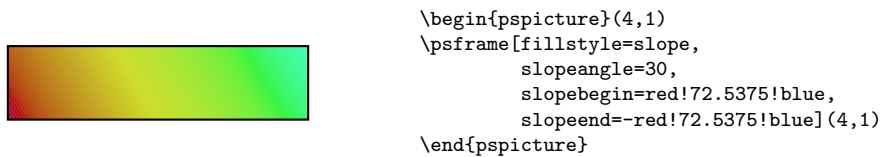


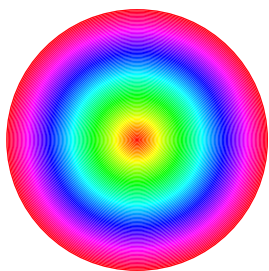
Figure 2: Moving from one color to its complement; requires `pst-slpe`



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\*This file is part of the `xcolor` distribution which can be downloaded from the CTAN mirrors (`macros/latex/contrib/xcolor/`) or the homepage [www.ukern.de/tex/xcolor.html](http://www.ukern.de/tex/xcolor.html). Please send error reports and suggestions for improvements to [xcolor@ukern.de](mailto:xcolor@ukern.de).

Figure 3: Explicit color specification via a loop command; requires `multido`



```
\psset{unit=1.75}%
\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



```
\newcommand*\Sheep
{\begin{pspicture}(3,1.5)
\pscustom[liftpen=2,fillstyle=solid,fillcolor=sheep!!+}%
{\pscurve(0.5,-0.2)(0.6,0.5)(0.2,1.3)(0,1.5)(0,1.5)
(0.4,1.3)(0.8,1.5)(2.2,1.9)(3,1.5)(3,1.5)(3.2,1.3)
(3.6,0.5)(3.4,-0.3)(3,0)(2.2,0.4)(0.5,-0.2)}
\pscircle*(2.65,1.25){0.12\psunit}% Eye
\psccurve*(3.5,0.3)(3.35,0.45)(3.5,0.6)(3.6,0.4)% Muzzle
\pscurve(3,0.35)(3.3,0.1)(3.6,0.05)% Mouth
\pscurve(2.3,1.3)(2.1,1.5)(2.15,1.7)
\pscurve(2.1,1.7)(2.35,1.6)(2.45,1.4)% Ear
\end{pspicture}}
\definecolorseries
{sheep}{rgb}{step}{rgb}{.95,.85,.55}{.17,.47,.37}
\resetcolorseries{sheep}
\psset{unit=0.4}
\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}{\color{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)
\sfamily\tiny
\DisplayBar{0.4}{0}%
\DisplayBar{0.6}{70}%
\DisplayBar{0.8}{140}%
\DisplayBar{1.0}{210}%
\DisplayBar{1.2}{280}%
\end{picture}

```

