The `pst-light3d` package

version 0.11

A PSTricks package for three dimensional lighten effect on characters and PSTricks graphics*

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Abstract

This package allow to add a three dimensional lighten effect on characters (PostScript fonts), using the `PstLightThreeDText` macro, and curves (opened or closed), using the `PstLightThreeDGraphic` macro, with various customization parameters.

Contents

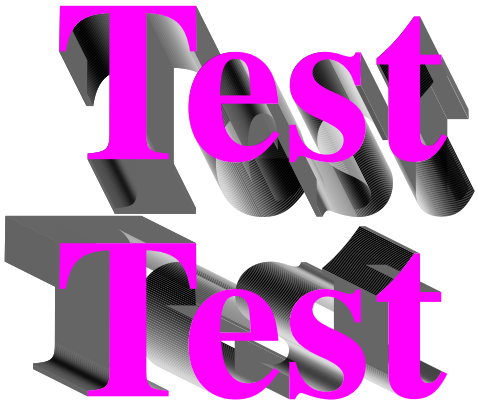
*Documentation revised by Herbert Voß

1 Examples

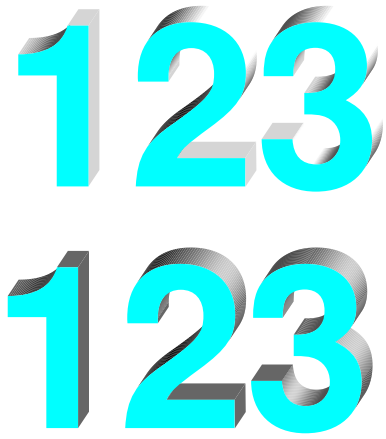
```
\DeclareFixedFont{\Bf}{T1}{ptm}{b
  }{n}{3cm}
\PstLightThreeDText[fillstyle=
  solid,fillcolor=white]{\Bf Test}
```

```
\DeclareFixedFont{\Bf}{T1}{ptm}{b
  }{n}{3cm}
\PstLightThreeDText[linestyle=
  none,fillstyle=solid, fillcolor=
  darkgray]{\Bf Test}
```

```
\psset{linestyle=none,fillstyle=
  solid,fillcolor=LightGreen}%
\PstLightThreeDText[
  LightThreeDAngle=0]{\Bf Test
  }\\[0.5cm]
\PstLightThreeDText[
  LightThreeDAngle=90]{\Bf Test}
```



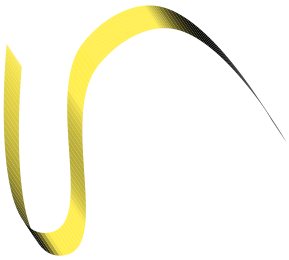
```
\psset{linestyle=none,fillstyle=
  solid,fillcolor=magenta,}%
\PstLightThreeDText[
  LightThreeDXLength=0.5,
  LightThreeDYLength=-1]{\Bf Test
  }\\[1cm]
\PstLightThreeDText[
  LightThreeDXLength=-1,
  LightThreeDYLength=0.5]{\Bf Test
  }
```



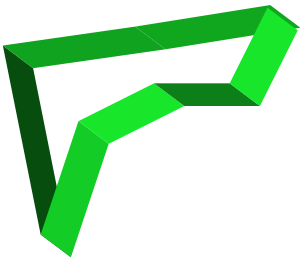
```
\DeclareFixedFont{\Sf}{T1}{phv}{b}{n}{3cm}
\psset{linestyle=none,fillstyle=solid,fillcolor=cyan}%
\PstLightThreeDText[LightThreeDColorPsCommand=1.2 div setgray]{\Sf 123}\\[1cm]
\PstLightThreeDText[LightThreeDColorPsCommand=2.5 div setgray]{\Sf 123}
```

```
\DeclareFixedFont{\Rm}{T1}{ptm}{m}{n}{3cm}
\psset{linestyle=none,fillstyle=solid}%
\PstLightThreeDText[fillcolor=Violet,LightThreeDColorPsCommand=%
 2.5 div 0.7 exch 0.8 sethsbcolor]{\Rm 987}\\[1cm]
\PstLightThreeDText[fillcolor=DarkGreen,LightThreeDColorPsCommand=%
 2 div 0.5 exch 0.2 exch sethsbcolor]{\Rm 987}
```

```
\DeclareFixedFont{\Rmb}{T1}{ptm}{m}{n}{4cm}
\PstLightThreeDText[linestyle=none,fillstyle=solid,fillcolor=Gold, LightThreeDColorPsCommand=%
 1.2 div 0.15 exch 0.7 exch sethsbcolor]{\Rmb PSTricks}
```



```
\psset{unit=0.5cm,linestyle=solid,
  fillstyle=none}%
\pspicture(-0.1,-3.5)(7.2,3)
\PstLightThreeDGraphic[
  LightThreeDXLength=0.4,
  LightThreeDColorPsCommand=%
   1.2 div 0.15 exch 0.7 exch sethsbcolor
    ]{%
     \pscurve(0,2)(1,-3)(2,2)(4,3)(7,0)}
\endpspicture
```

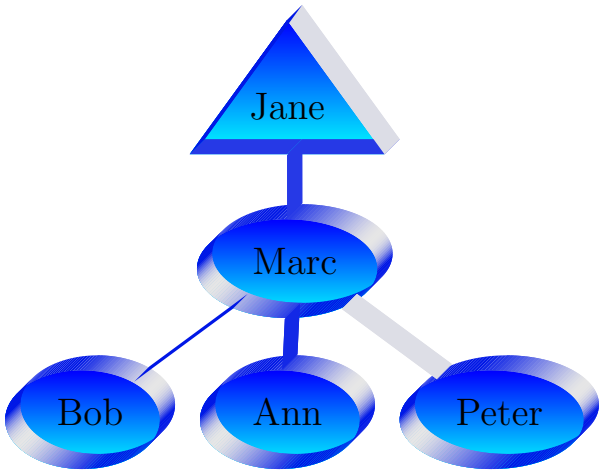


```
\psset{unit=0.5cm,linestyle=solid,
  fillstyle=none}%
\pspicture(0,-3.5)(7.7,3)
\PstLightThreeDGraphic[
  LightThreeDXLength=0.8,
  LightThreeDColorPsCommand=%
   2 div 0.35 exch 0.9 exch sethsbcolor
    ]{\pspolygon(0,2)(1,-3)(2,0)(4,1)
    (6,1)(7,3)}
\endpspicture
```

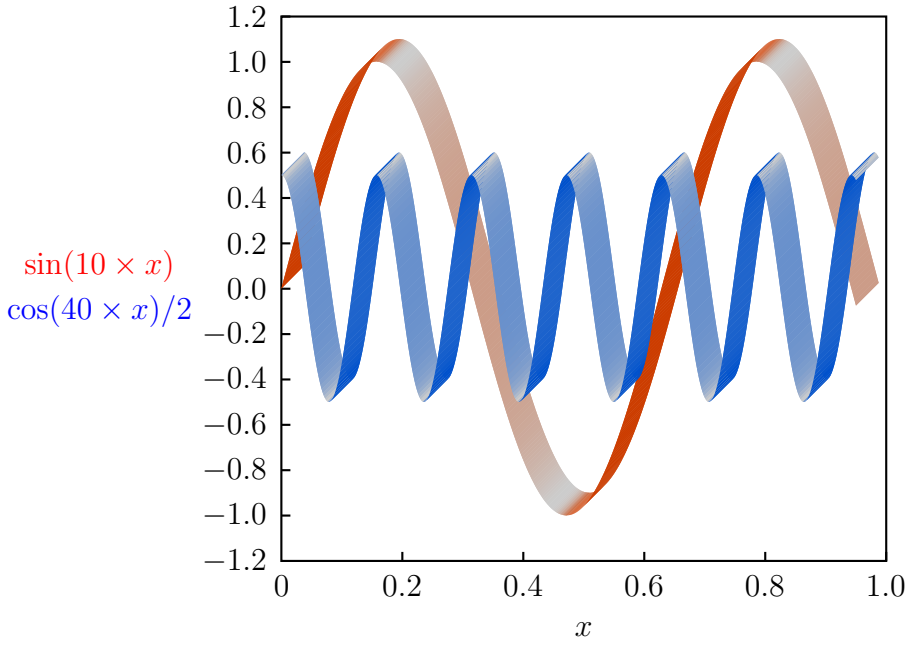
```
\psset{unit=0.5cm,linestyle=solid,
  fillstyle=none}%
\pspicture(0.5,-3.6)(3.8,3)
\PstLightThreeDGraphic[
  LightThreeDColorPsCommand=%
   2.6 div 0.12 exch 0.7 exch sethsbcolor
    ]{\psellipse(2,0)(1.5,3)}
\endpspicture
```

```
\SpecialCoor
\def\PstCoordinates{}%
\Multido{\nDistance=0.00+0.02,\iAngle
  =0+20}{200}{%
   \edef\PstCoordinates{\PstCoordinates(\
    nDistance;\iAngle)}}
\psset{unit=0.5cm}%
\pspicture(-3.8,-4)(4.1,3.7)
\PstLightThreeDGraphic[LightThreeDLength
  =0.2, LightThreeDColorPsCommand=%
   1.2 div 0.3 exch 0.7 exch sethsbcolor
    ]{\expandafter\pscurve\PstCoordinates
    }
\endpspicture
```

```
\SpecialCoor
\def\PstCoordinates{}%
\Multido{\nDistance=0.00+0.02,\iAngle=0+20}{200}{%
  \edef\PstCoordinates{\PstCoordinates(\nDistance;\iAngle)}}
\psset{unit=0.5cm}%
\pspicture(-3.8,-4)(4.1,3.7)
\PstLightThreeDGraphic[LightThreeDLength=0.2, LightThreeDAngle=30,
  LightThreeDColorPsCommand=%
  /Counter Counter 0.00005 add def 2 mul Counter exch 0.7 exch sethsbcolor]{%
  \pstVerb{ /Counter 0 def }%
  \expandafter\pscurve\PstCoordinates}
\endpspicture
```




```
\PstLightThreeDGraphic[LightThreeDXLength=0.2,
  LightThreeDYLength=-0.2, LightThreeDColorPsCommand=%
  1.2 div 0.65 exch 0.9 sethsbcolor]{%
    \large \let\TovalORIG\Toval \def\Toval#1{\TovalORIG{\raise2mm\hbox{\hskip2mm#1}}}%
    \let\TtriORIG\Ttri \def\Ttri#1{\TtriORIG{\raise3mm\hbox{#1}}}%
    \psset{framesep=0.15,fillstyle=gradient,gradmidpoint=0,gradbegin=cyan,gradend=blue}%
    \pstree[treesep=0.5]{\Ttri{Jane}} {\psset{framesep=0.25}%
    \pstree{\Toval{Marc}} {\Toval{Bob}\Toval{Ann}\Toval{Peter}}}}}
```




```
\psset{xunit=8cm,yunit=3cm}%
\pspicture(-0.45,-1.6)(1,1.3)%
\psaxes[Dx=0.2,Oy=-1.2,Dy=0.2,tickstyle=top, axesstyle=frame
  ](0,-1.2)(1,1.2)%
\psset{plotpoints=500,LightThreeDXLength=0.3,
  LightThreeDYLength=-0.3}%
\PstLightThreeDGraphic[LightThreeDColorPsCommand=1.5 div 0.05
   exch 0.8 sethsbcolor]{%
  \psplot{0}{0.95}{x 10 mul 57.296 mul sin}}%
\PstLightThreeDGraphic[LightThreeDColorPsCommand=1.5 div 0.6
  exch 0.8 sethsbcolor]{%
  \psplot{0}{0.95}{x 40 mul 57.296 mul cos 2 div}}%
\rput(-0.3,0.1){\textcolor{red}{$\sin (10 \times x)$}}%
\rput(-0.3,-0.1){\textcolor{blue}{$\cos (40 \times x) / 2$}}%
\rput(0.5,-1.5){$x$}%
\endpspicture
```