

PSTricks

News - 2015

new macros and bugfixes for the basic package pstricks

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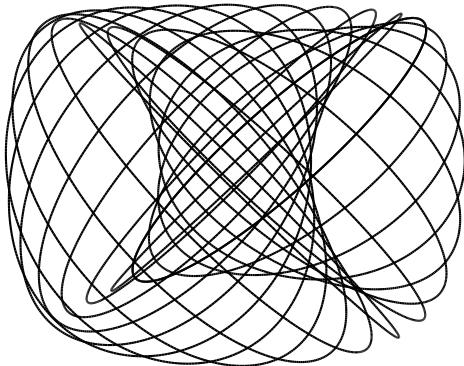
Part I.

pstricks – package

1. pstricks.tex (2.63– 2015/09/11)

1.1. PostScript code

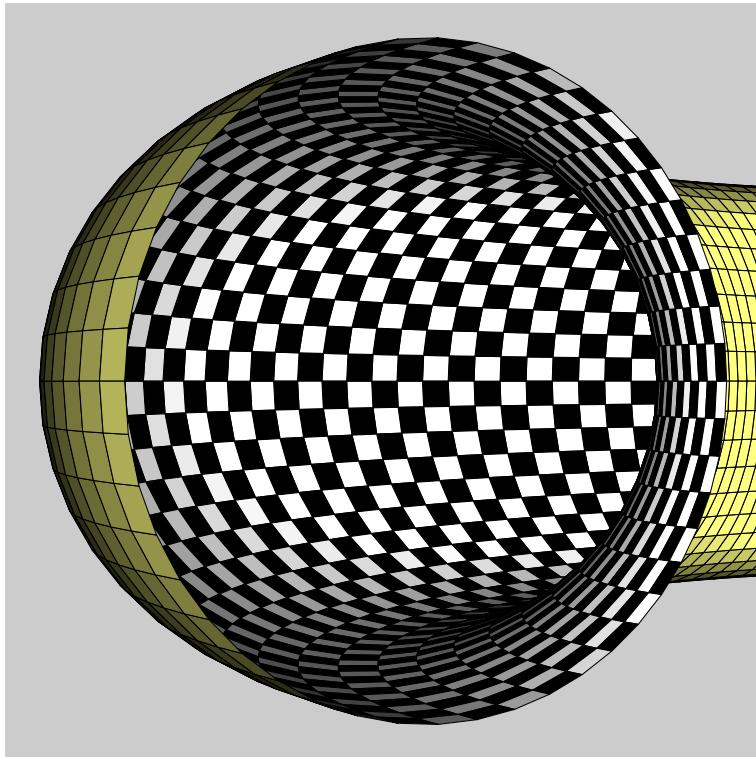
Additionally to the macro `\pstVerb` there are now the keywords `precode` and `postscode` which can be used by other packages to paste PostScript code before and after the macros.



```
\psset{viewpoint=40 35 10 rtp2xyz,Decran=40,lightsrc=viewpoint,unit=0.5}
\begin{pspicture}(-6,-6)(6,6)
\defFunction{cercle1}(t)
  {4 t cos mul 2 sub rZ cos mul 4 t sin mul rZ sin mul add}%
  {4 t cos mul 2 sub rZ sin mul neg 4 t sin mul rZ cos mul add}%
  {4 t sin mul}%
\psforeach{\iA}{0,20,\dots,360}{%
  \psSolid[object=courbe,
    precode=/rZ \iA\space def,
    r=0,range=0 360,resolution=360,function=cercle1]}
\end{pspicture}
```

1.2. Background color

There is now the optional argument `bgcolor` (background color), which is only valid for the background of the environment `pspicture` with its defined coordinates. Internally it uses the macro `\psframe*`:



```
\begin{pspicture*}[bgcolor=black!20](-12,-5)(-2,5)
\psset{viewpoint=6 -50 0 rtp2xyz,Decran=4,lightsrc=viewpoint}
\defFunction[algebraic]{torus}(u,v)
    {2*(1+ 0.5*cos(u))*cos(v)}% x=f(u,v)
    {2*(1+ 0.5*cos(u))*sin(v)}% y=f(u,v)
    {2*0.5*sin(u)}% z=f(u)
\psSolid[object=surfaceparametree,
precode=/n1 48 def /n2 90 def /n1n2 n1 n2 mul 2 mul 1 sub def /iS 0 def,
base=0 2 pi mul 0 pi 1.5 mul ,
fcol=0 2 n1 2 sub{/i exch def
i n2 mul 2 i n2 mul n2 add 1 sub {(Black)} for} for
1 2 n1 1 sub{/i exch def i n2 mul 1 add 2 i n2 mul n2 add 1 sub {(Black)} for
} for,
fillcolor=white,incolor=yellow!50,
function=torus,
linewidth=0.5\pslinewidth,unit=5,ngrid=n1 n2]
\end{pspicture*}
```

References

- [1] Michel Goosens, Frank Mittelbach, Sebastian Rahtz, Denis Roegel, and Herbert Voß. *The L^AT_EX Graphics Companion*. Addison-Wesley Publishing Company, Reading, Mass., 2007.
- [2] Laura E. Jackson and Herbert Voß. Die Plot-Funktionen von `psplot`. *Die T_EXnische Komödie*, 2/02:27–34, June 2002.
- [3] Nikolai G. Kollock. *PostScript richtig eingesetzt: vom Konzept zum praktischen Einsatz*. IWT, Vaterstetten, 1989.
- [4] Herbert Voß. Die mathematischen Funktionen von Postscript. *Die T_EXnische Komödie*, 1/02:40–47, March 2002.
- [5] Herbert Voss. *PSTricks Support for pdf*. [http://PSTricks.tug.org/main.cgi?
file=pdf/pdfoutput](http://PSTricks.tug.org/main.cgi?file=pdf/pdfoutput), 2002.
- [6] Herbert Voß. *L^AT_EX Referenz*. DANTE – lehmanns media, Heidelberg/Hamburg, 2. edition, 2010.
- [7] Herbert Voß. *PSTricks – Grafik für T_EX und L^AT_EX*. DANTE – Lehmanns Media, Heidelberg/Hamburg, 6. edition, 2010.
- [8] Herbert Voß. *L^AT_EX Quick Reference*. UIT, Cambridge/UK, 1. edition, 2011.
- [9] Herbert Voß. *PSTricks – Graphics for L^AT_EX*. UIT, Cambridge/UK, 1. edition, 2011.
- [10] Michael Wiedmann and Peter Karp. *References for T_EX and Friends*. [http://www.
miwie.org/tex-refs/](http://www.miwie.org/tex-refs/), 2003.

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