

News - 2019
new macros and bugfixes for the basic package pstricks

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Part I.

pstricks – package

1. pstricks.sty – pstricks-pdf.sty

There is now a new optional argument for the package: ckeckengine, which will be used in later versions.

2. pstricks-tex.tex

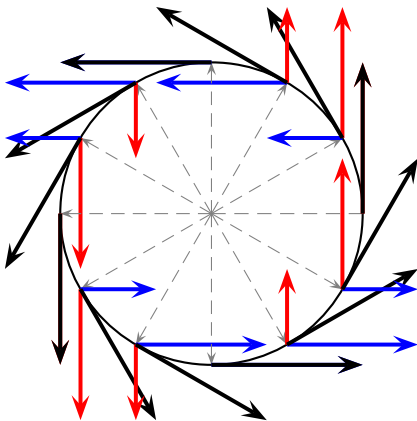
This package collects all additional latex macros which must be defined when running PSTricks with tex. They all moved from the base pstricks.tex into this new file.

3. pstricks.tex (v. 2.94 – 2019/01/07)

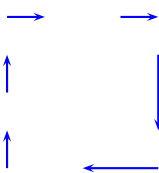
There is a new macro called `\psLine` (uppercase L!) which can have only one or two pairs of coordinates. Remember that `\psline` can have more. With `\psLine` and an defined arrow you'll get nothing for something like `\psLine{->}{1,1}(1,1)`, whereas `\psline` will output the arrowtip! This behaviour of `\psLine` maybe helpful for animations where a speedvector or a vector is shown with its components and one do not really knows the coordinates.

```
\psLine [Options] [(x0, y0)] (x1, y1)
\psLineSegments [Options] (x0, y0) (x1, y1) ... (xn-1, yn-1) (xn, yn)
```

If P_0 is missing for `\psLine` then $(0,0)$ as first point is assumed. `\psLineSegments` expects always pairwise coordinates.



```
\psset{unit=2cm}
\begin{pspicture}(-1,-1)(1,1)
\degrees[12]
\pscircle{1}
\multido{\iA=0+1,\iB=3+1}{12}{%
\pnode(1;\iA){R}
\psLine[linecolor=gray,linestyle=dashed,
linewidth=0.4pt](R)
\psset{arrows=->,arrowscale=1.5,linewidth=1.5pt}
\rput(R){%
\psLine[linecolor=blue]({1;\iB}|0,0)
\psLine[linecolor=red](0,0|{1;\iB})
\psLine(1;\iB)}%
}
\end{pspicture}
```



```
\psset{unit=0.5cm}
\begin{pspicture}(6,6)
\psLineSegments[linecolor=blue]{->}(0,0)(0,1)(0,2)(0,3)(0,4)(1,4)%
(3,4)(4,4)(4,3)(4,1)(4,0)(2,0)
\end{pspicture}
```

3.1. Error message

Using PSTricks with pdf_latex will work only when using package auto-pst-pdf and running the T_EX-file with

```
pdflatex -shell-escape <file>
```

otherwise you'll get an error message which was misleading in the past:

```
[...]
! Undefined control sequence.
<recently read> \c@lor@to@ps
```

This changes now to

```
[...]
! Undefined control sequence.
\c@lor@to@ps ->\PSTricks
                _Not_Configured_For_This_Format
```

3.2. Optional argument xetex

The output driver xdvipdfmx for using X_YT_EX or X_YL_AT_EX is not fully compatible to dvips. Especially some node operations will not work. If the L_AT_EX package detects a programm run with X_YL_AT_EX it automatically loads the file pstricks-xetex.def which defines some macros with a new name to keep the existing ones. By now there is only \NCput, which is the same as \ncput, but works with X_YL_AT_EX.

If someone wants to use these macros though he/she runs not X_YL_AT_EX then these macros are available too by using the optional argument xetex:

```
\usepackage[xetex]{pstricks}
```

4. *pstricks.pro*

References

- [1] Michel Goossens et al. *The L^AT_EX Graphics Companion*. 2nd ed. Reading, Mass.: Addison-Wesley Publishing Company, 2007.
- [2] Laura E. Jackson and Herbert Voß. “Die Plot-Funktionen von pst-plot”. In: *Die T_EXnische Komödie* 2/02 (June 2002), pp. 27–34.
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- [5] Herbert Voß. *PSTricks – Grafik für T_EX und L^AT_EX*. 7th ed. Heidelberg and Berlin: DANTE – Lehmanns Media, 2016.
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