

# PSTricks

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## **News -- 2023**

**new macros and bugfixes for the basic package.**

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## Part I.

### pstricks – package

#### 1. pstricks.sty

With Lua $\text{\LaTeX}$  the package now tries to detect if the command `\DocumentMetadata` is needed. If yes, than it is defined as `\DocumentMetadata{}`.
















#### 2. pstricks.tex (v. 3.19 – 2023/04/30)

Added a test for `lua $\text{\LaTeX}$`  before the default linewidth and color are set. See last line in `pstricks.tex`






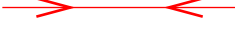



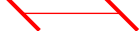
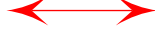

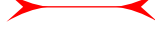

#### 3. Lua $\text{\LaTeX}$

This version has a stable basic support for the lua package `luapstricks.lua`, available from <https://github.com/zauguin/luapstricks>. This is also part of every MiK $\text{\TeX}$  or T $\text{\E}$ XLive installation. This documentation was run with `lua $\text{\LaTeX}$` , which creates directly the pdf. No GhostScript needed.

Example:

Value	Example	Name
-		None
<->		Arrowheads.
>-<		Reverse arrowheads.
<<->>		Double arrowheads.
>>-<<		Double reverse arrowheads.
-		T-bars, flush to endpoints.
* -  *		T-bars, centered on endpoints.
[ - ]		Square brackets.
] - [		Reversed square brackets.
( - )		Rounded brackets.
) - (		Reversed rounded brackets.
o - o		Circles, centered on endpoints.
* - *		Disks, centered on endpoints.
oo - oo		Circles, flush to endpoints.
** - **		Disks, flush to endpoints.

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<->		T-bars and arrows.
>-<		T-bars and reverse arrows.
h-h		left/right hook arrows.
H-H		left/right hook arrows.
v-v		left/right inside vee arrows.
V-V		left/right outside vee arrows.
f-f		left/right inside filled arrows.
F-F		left/right outside filled arrows.
t-t		left/right inside slash arrows.
T-T		left/right outside slash arrows.
<D-D>		curved arrows.
<D<D-D>D>		curved doubled arrows.
D>-<D		curved arrows, tip inside.
<T-T>		curved lines.

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## References

- [1] Michel Goossens et al. *The L<sup>A</sup>T<sub>E</sub>X 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: *DTK* 2/02 (June 2002), pp. 27–34.
- [3] Nikolai G. Kollock. *PostScript richtig eingesetzt: vom Konzept zum praktischen Einsatz*. Vaterstetten: IWT, 1989.
- [4] Herbert Voß. “Die mathematischen Funktionen von Postscript”. In: *DTK* 1/02 (Mar. 2002), pp. 40–47.
- [5] Herbert Voß. *PSTricks – Grafik für T<sub>E</sub>X und L<sup>A</sup>T<sub>E</sub>X*. 7th ed. Heidelberg and Berlin: DANTE – Lehmanns Media, 2016.
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- [7] Herbert Voß. *PSTricks Support for pdf*. 2002. URL: <http://PSTricks.tug.org/main.cgi?file=pdf/pdfoutput>.
- [8] Herbert Voß. *L<sup>A</sup>T<sub>E</sub>X Quick Reference*. 1st ed. Cambridge/UK: UIT, 2011.
- [9] Herbert Voß. *L<sup>A</sup>T<sub>E</sub>X Referenz*. 3rd ed. Heidelberg and Berlin: DANTE – lehmanns media, 2014.
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