

PSTricks

News - 2014

new macros and bugfixes for the basic package pstricks

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Part I.

pstricks – package

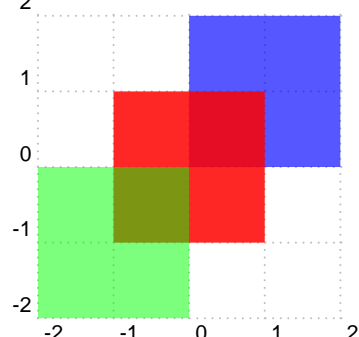
1. pstricks.tex (2.54a– 2014/05/19)

1.1. Opacity

The keyword `strokeopacity` is now also valid for `\psdot`, `\psdots`, and the `linestyle/plotstyle=do`

1.2. PostScript notation for numbers

Optional arguments which expects a real number can now have a preceeding `!` character for a PostScript notation which is directly passed to PostScript. The user has take care that such a number isn't use before in another \TeX macro. In such a case it gives an error.



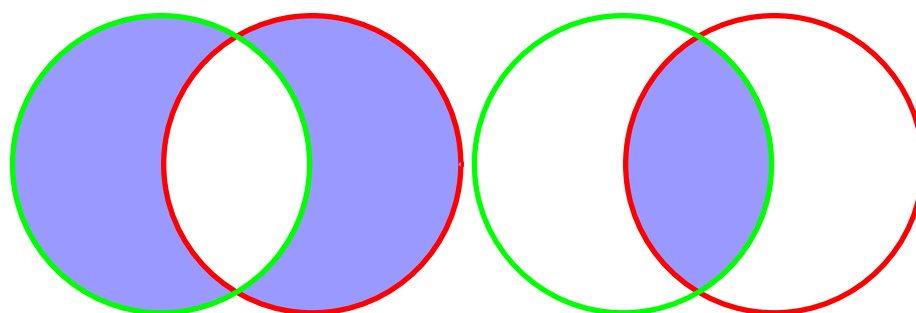
```

1 \pstVerb{ 1234321 srand }
2 \begin{pspicture}[showgrid](-2,-2)(2,2)
3 \psframe*[linecolor=blue,opacity=!Rand](2,2)
4 \psframe*[linecolor=red,opacity=!Rand](-1,-1)
5 \psframe*[linecolor=green,opacity=!Rand](-2,-2)
6 \end{pspicture}

```

1.3. Fillstyle eofill

It is an experimental fillstyle. PostScript knows only the `eofill` and the other way round needs some tricky internal commands and may not work in all cases.



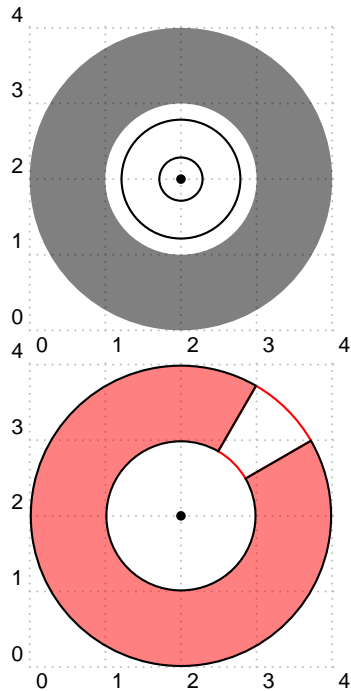
```

1 \begin{pspicture}[linewidth=2pt](12,4)
2 \pscustom[linestyle=none,fillstyle=eofill,fillcolor=blue!40]{%
3   \psellipse(4,2)(2,2)\psellipse(2,2)(2,2)}
4 \psellipse[linecolor=red](4,2)(2,2)\psellipse[linecolor=green](2,2)(2,2)
5 %
6 \pscustom[linestyle=none,fillstyle=eofill,fillcolor=blue!40]{%
7   \psellipse(10,2)(2,2)\psellipse(8,2)(2,2)}
8 \psellipse[linecolor=red](10,2)(2,2)\psellipse[linecolor=green](8,2)(2,2)
9 \end{pspicture}

```

1.4. New macro \psRing

`\psRing * [Options] (x,y) [start,end] {Inner Radius}{Outer Radius}`

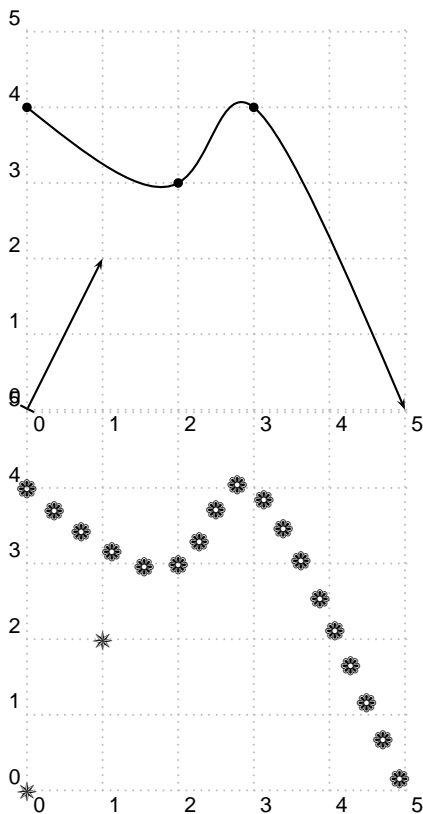


```
1 \begin{pspicture}[showgrid](4,4)
2   \psRing(2,2){0.3}{0.8}
3   \psRing*[opacity=0.5](2,2){1}{2}
4   \psdot(2,2)
5 \end{pspicture}
```

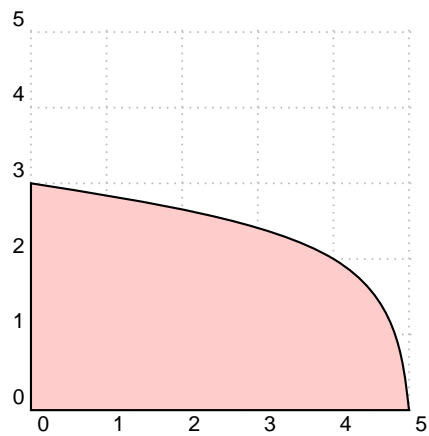
```
1 \begin{pspicture}[showgrid](4,4)
2   \psRing[linecolor=red](2,2)[30,60]{1}{2}
3   \psRing[opacity=0.5,fillstyle=solid,
4     fillcolor=red](2,2)[60,30]{1}{2}
5   \psdot(2,2)
6 \end{pspicture}
```

1.5. New macro \pscspine (by Christoph Bersch)

`\pscspine * [Options] (x0,y0) (x1,y1)... (x,y)`



```
1 \begin{pspicture}[showgrid](5,5)
2   \pscspine[arrows=|->, showpoints](0,0)(1,2)
3   \pscspine[arrows=->, showpoints](0,4)(2,3)(3,4)
4     (5,0)
5   \pscspine(4,4)
6 \end{pspicture}\par
7 \begin{pspicture}[showgrid](5,5)
8   \pscspine[linestyle=symbol, symbol=U,
9     symbolStep=12pt](0,0)(1,2)
10  \pscspine[linestyle=symbol, symbol=a,
11    symbolStep=12pt](0,4)(2,3)(3,4)(5,0)
12 \end{pspicture}
```



```
1 \begin{pspicture}[showgrid](5,5)
2   \pscustom[fillcolor=red!20, fillstyle=solid]{%
3     \pscspline(0,3)(4,2)(5,0)
4     \lineto(0,0)
5     \closepath}
6 \end{pspicture}
```

1.6. \Special Coor

The Macro \SpecialCoor for scanning special coordinate expressions is now enabled by default. You can enable it with \NormalCoor.

References

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- [7] Herbert Voß. *PSTricks – Grafik für T_EX und L^AT_EX*. DANTE – Lehmanns Media, Heidelberg/Hamburg, 6. edition, 2010.
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- [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/>, 2003.

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