pst-venn

A PSTricks package for drawing Venn sets; v 0.01

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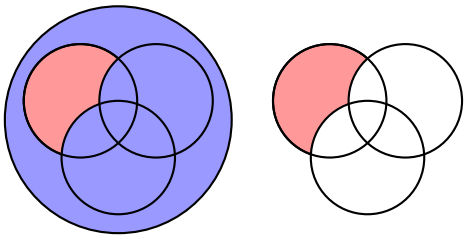
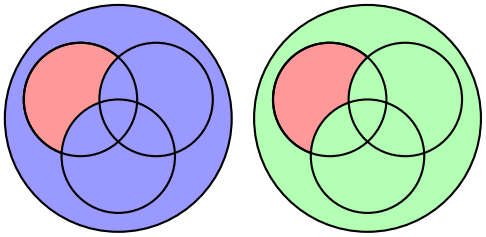
`\psVenn[options](O1)(O2)(O3){radius}{segments}`

There are the following optional arguments:
`bgcircle=<true/false>`:



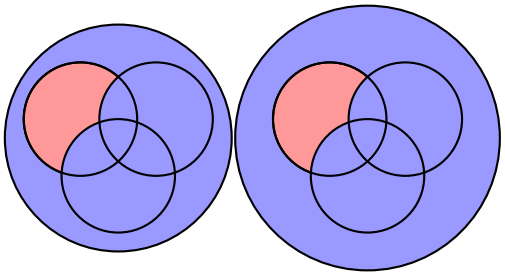
```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn[bgcircle](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn[bgcircle=false](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
```

`bgcolor=<color>`:



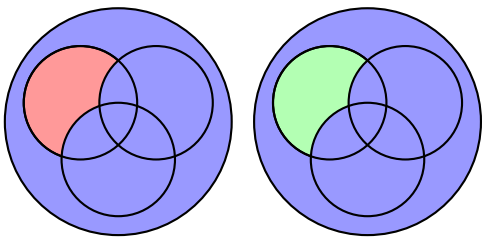
```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn[bgcolor=green!30](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
```

`bgradius=<value[unit]>`:



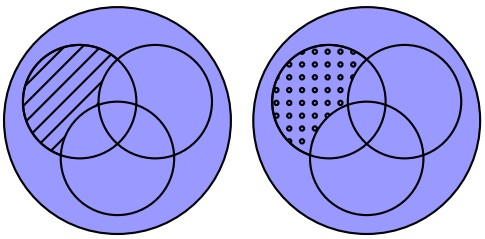
```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn[bgradius=3.5](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
```

`fgcolor=<color>`:



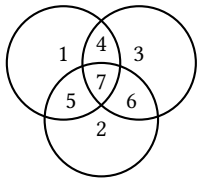
```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn[fgcolor=green!30](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
```

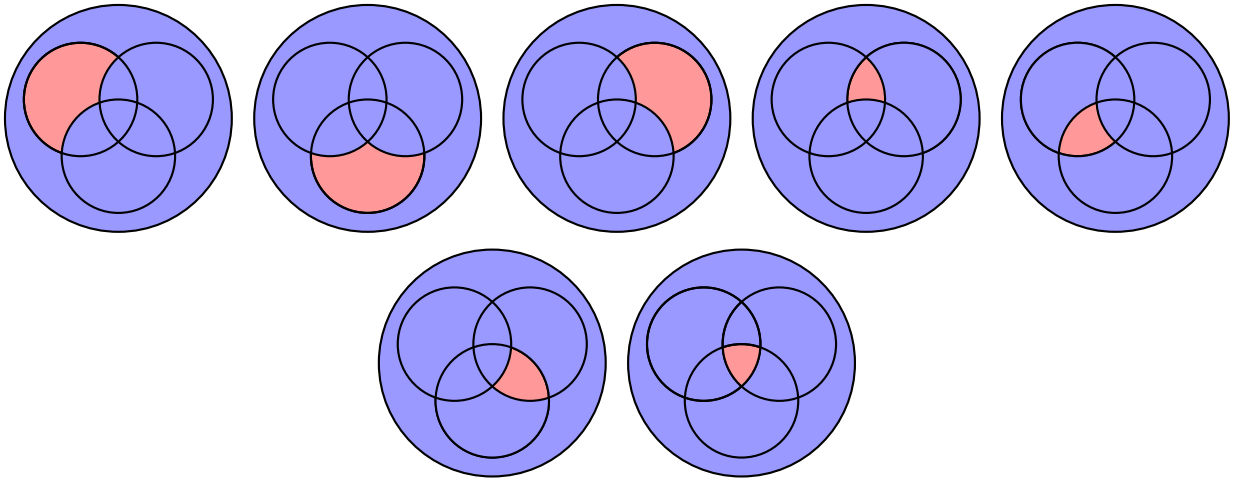
vennfill=<style>:



```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn[vennfill=hlines](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn[vennfill=dots](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
```

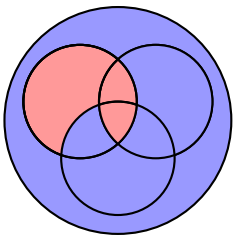
Every single area of the three circles has a number:



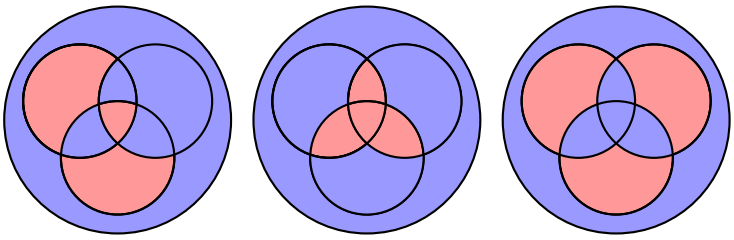


```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{1} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{2} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{3} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{4} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{5} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{6} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{7} \end{pspicture}
```

The elements can be combined like 147:



```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
  \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{147}
\end{pspicture}
```



```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{127} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{4567}\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{123} \end{pspicture}
```

References

[1] Denis Girou. “Présentation de PSTricks”. **in***Cahier GUTenberg*: 16 (**april** 1994), **pages** 21–70.

[2] Michel Goosens **andothers**. *The LaTeX Graphics Companion*. second. Boston, Mass.: Addison-Wesley Publishing Company, 2007.

[3] Nikolai G. Kollock. *PostScript richtig eingesetzt: vom Konzept zum praktischen Einsatz*. Vaterstetten: IWT, 1989.

[4] Edward Reingold **and** John Tilford. “Tidier Drawings of Trees”. **in***IEEE Transactions on Software Engineering*: SE-7.2 (1981).

[5] Herbert Voß. *PSTricks – Grafik für TeX und LaTeX*. fifth. Heidelberg/Hamburg: DANTE – lehmanns media, 2010.

[6] Herbert Voß. *PSTricks – Graphics for LaTeX*. 1. Cambridge: UIT, 2011.

[7] Timothy Van Zandt. *multido.tex - a loop macro, that supports fixed-point addition*. CTAN:/macros/generic/multido.tex, 1997.

[8] Timothy Van Zandt **and** Denis Girou. “Inside PSTricks”. **in***TUGboat*: 15 (**september** 1994), **pages** 239–246.