

The `pgfcet` package

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The `pgfcet` package exposes the perceptually-uniform colourmaps presented by colorcet.com in a form suitable for use as colourmaps with the `pgfplots` library. You must be using `pgfplots` with `tikz` for the colourmaps to be available. Otherwise, the package has no dependencies besides the `xstring` package, which will be loaded if not yet imported.

Usage

To load the library of colourmaps, use the command

```
\usetikzlibrary{pgfcet}
```

and then load individual colourmaps using the macro

```
\pgfcetloadcmap{XXX}
```

where `XXX` is replaced by the identifier of the colourmap from the webpage <https://colorcet.com/gallery.html> (minus the `CET-` prefix), for example `L20` or `D01A`. To then use the colourmap, it can be loaded in an axis using the property

```
colormap name=cet-XXX
```

The colorcet colourmaps

The maps used in colorcet were produced by Peter Kovesi. More information is available at colorcet.com, or in

Kovesi, P. (2015)

Good Colour Maps: How to Design Them <https://arxiv.org/abs/1509.03700>

Example

The plot in figure 1 is produced using the code

```
\usetikzlibrary{pgfcet}  
\pgfcetloadcmap{R3}  
  
\begin{figure}
```

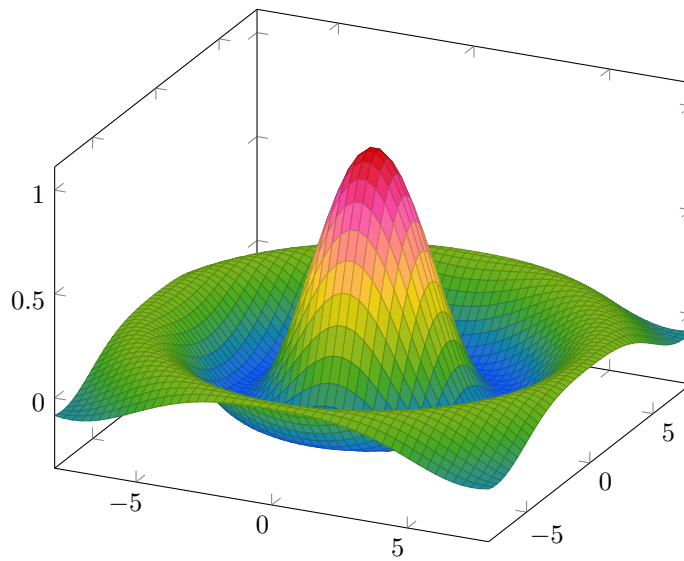


Figure 1: A sample plot

```

\centering
\begin{tikzpicture}
  \begin{axis}[colormap name=cet-R3, width=10cm]
    \addplot3[
      surf,
      samples=50,
      domain=-8:8]
      {sin(deg(sqrt(x^2+y^2)))/sqrt(x^2+y^2)};
  \end{axis}
\end{tikzpicture}
\caption{A sample plot}
\label{fig:example}
\end{figure}

```