## **PGFPlotsX**

## 0.1 Packages

```
import Pkg; Pkg.add("PGFPlotsX")
using PGFPlotsX
```

```
using PGFPlotsX
using LaTeXStrings
w = range(0; stop = 2, length = 40)
v = range(0; stop = 2, length = 40)
f(w,v) = \sin(w) * \sin(v)
fig = @pgf Axis(
    {
        #view = (0, 90), #to rotate the figure set "view" to true
        colorbar,
        "colormap/viridis",
        #"colormap/jet",
        height = "10cm",
        width = "16cm",
        grid = "major",
        xlabel = L"w",
        ylabel = L"v",
       title = "A nice plot",
    },
    Plot3(
        {
            surf,
            #shader = "flat",
```

```
Coordinates(w, v, @. (f(w, v')))
! LaTeX Error: File `luatex85.sty' not found.
Type X to quit or <RETURN> to proceed,
or enter new name. (Default extension: sty)
Enter file name:
! Emergency stop.
<read *>
1.579 \RequirePackage
                     {pdftexcmds}
End of file on the terminal!
Here is how much of LuaTeX's memory you used:
 887 strings out of 471907
 100000,662416 words of node, token memory allocated 379 words of node memory still in use:
   2 hlist, 1 rule, 1 dir, 3 kern, 1 glyph, 3 attribute, 48 glue_spec, 3 attribute_list, 2 is
   avail lists: 2:14,3:2,4:1,5:1,7:2,9:3
 27557 multiletter control sequences out of 65536+600000
 15 fonts using 723367 bytes
 57i,0n,80p,205b,40s stack positions out of 10000i,1000n,20000p,200000b,200000s
! ==> Fatal error occurred, no output PDF file produced!
! LaTeX Error: File `luatex85.sty' not found.
Type X to quit or <RETURN> to proceed,
or enter new name. (Default extension: sty)
Enter file name:
! Emergency stop.
<read *>
1.579 \RequirePackage
                     {pdftexcmds}
End of file on the terminal!
```

```
Here is how much of LuaTeX's memory you used:
  887 strings out of 471907
  100000,662416 words of node, token memory allocated 379 words of node memory still in use:
       2 hlist, 1 rule, 1 dir, 3 kern, 1 glyph, 3 attribute, 48 glue_spec, 3 attribute_list, 2 is
      avail lists: 2:14,3:2,4:1,5:1,7:2,9:3
  27557 multiletter control sequences out of 65536+600000
  15 fonts using 723367 bytes
  57i,0n,80p,205b,40s stack positions out of 10000i,1000n,20000p,200000b,200000s
! ==> Fatal error occurred, no output PDF file produced!
Axis(PGFPlotsX.Options(OrderedCollections.OrderedDict{String, Any}("colorbar" => nothing, "colorbar" => nothing, "colorbar => nothing, "colorba
16), nothing, nothing, nothing, nothing), Coordinate{3}((5.155434098198635, 6.28318530717958
16), nothing, nothing, nothing, nothing), Coordinate {3} ((5.316541413767342, 6.28318530717958)
16), nothing, nothing, nothing, nothing), Coordinate {3}((5.47764872933605, 6.283185307179586
16), nothing, nothing, nothing, nothing), Coordinate {3} ((5.638756044904757, 6.28318530717958)
16), nothing, nothing, nothing, nothing), Coordinate {3}((5.799863360473465, 6.28318530717958
16), nothing, nothing, nothing, nothing), Coordinate {3} ((5.960970676042171, 6.28318530717958)
17), nothing, nothing, nothing, nothing), Coordinate (3)((6.122077991610879, 6.28318530717958)
17), nothing, nothing, nothing, nothing), Coordinate {3}((6.283185307179586, 6.283185307179586
32), nothing, nothing, nothing, nothing), nothing]), Any[])])
! LaTeX Error: File `luatex85.sty' not found.
Type X to quit or <RETURN> to proceed,
or enter new name. (Default extension: sty)
Enter file name:
! Emergency stop.
<read *>
1.579 \RequirePackage
                                              {pdftexcmds}
End of file on the terminal!
Here is how much of LuaTeX's memory you used:
```

100000,662416 words of node, token memory allocated 379 words of node memory still in use:

887 strings out of 471907

```
2 hlist, 1 rule, 1 dir, 3 kern, 1 glyph, 3 attribute, 48 glue_spec, 3 attribute_list, 2 is
avail lists: 2:14,3:2,4:1,5:1,7:2,9:3
27557 multiletter control sequences out of 65536+600000
15 fonts using 723367 bytes
57i,0n,80p,205b,40s stack positions out of 10000i,1000n,20000p,200000b,200000s
! ==> Fatal error occurred, no output PDF file produced!
```