

# How to: produce simple figures (with Python)

Pierre Augier<sup>1</sup>

1. LEGI, CNRS, Université Grenoble Alpes

10 June 2015

(code at [https://bitbucket.org/paugier/figures\\_articles](https://bitbucket.org/paugier/figures_articles))

## Part 1

# Matplotlib with rcparams: simple and efficient

You do not need to use latex or beamer!

figure 11c (p.20): Matplotlib with latex  
(article fonts)

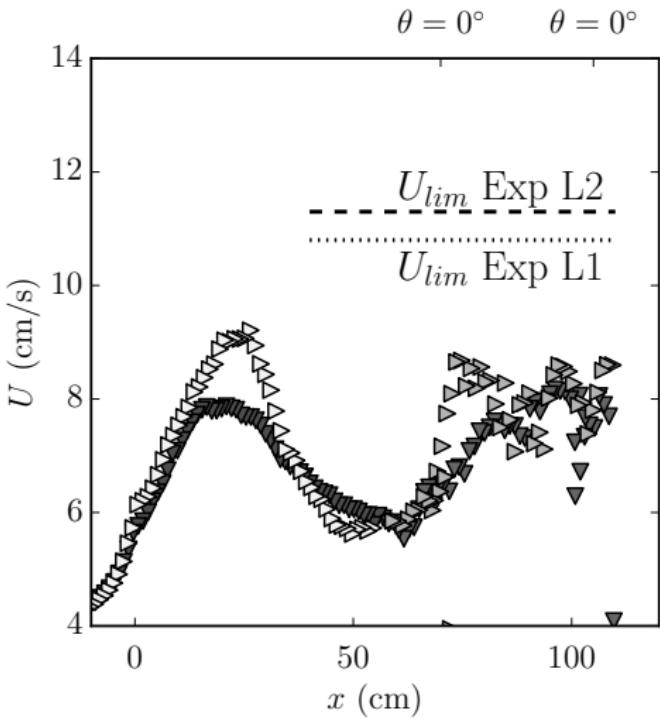


figure 11c (p.20): Matplotlib with latex  
(beamer fonts)

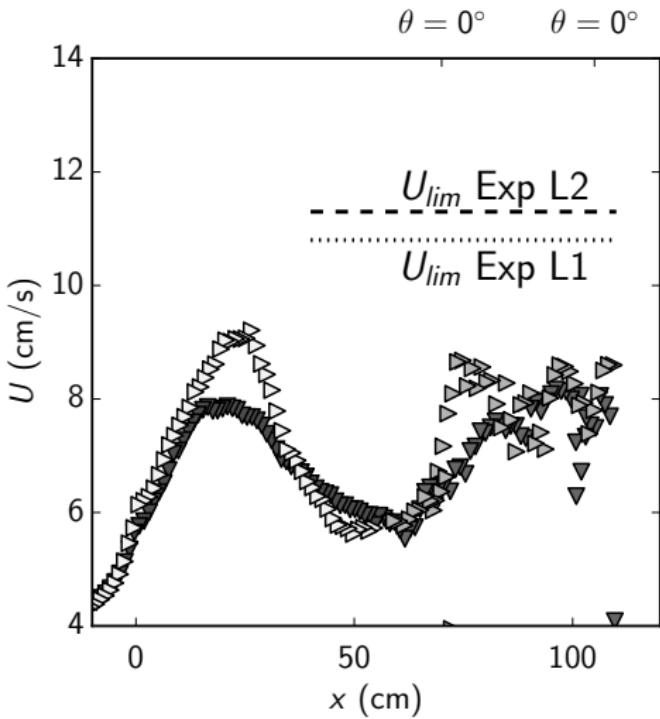


figure 11c (p.20): Matplotlib with latex  
(beamer fonts)

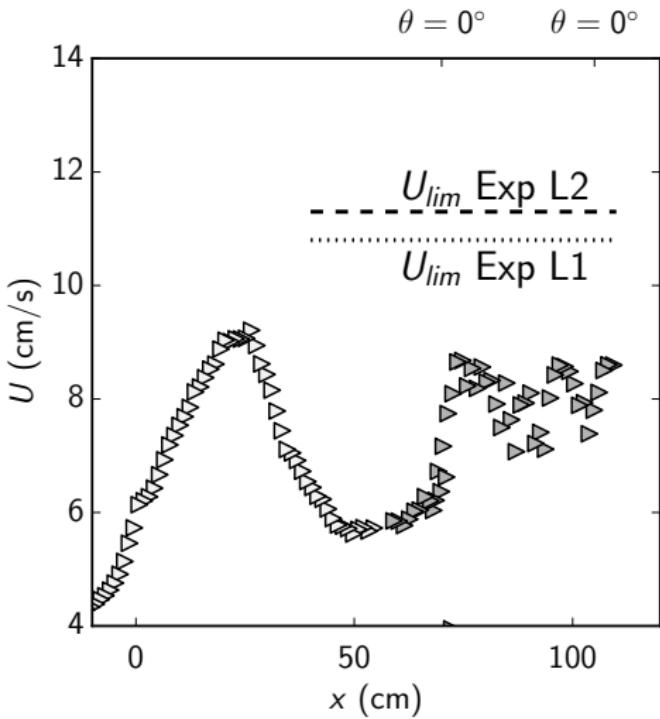
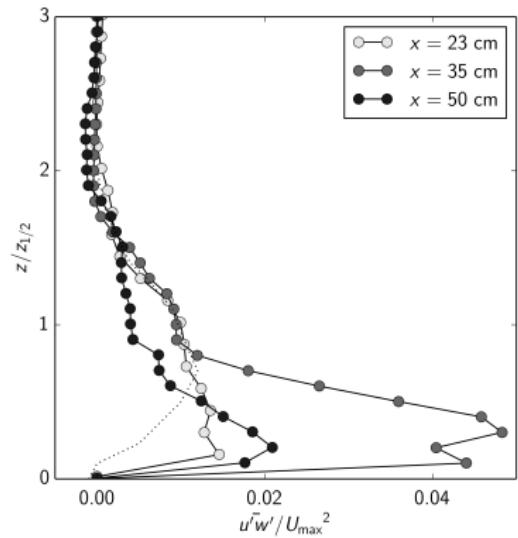
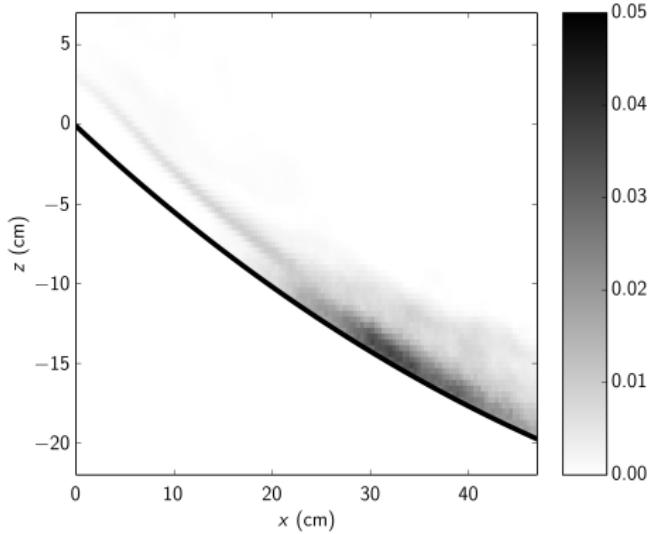


Figure 8ab (p. 18): Matplotlib with pcolormesh and colorbar

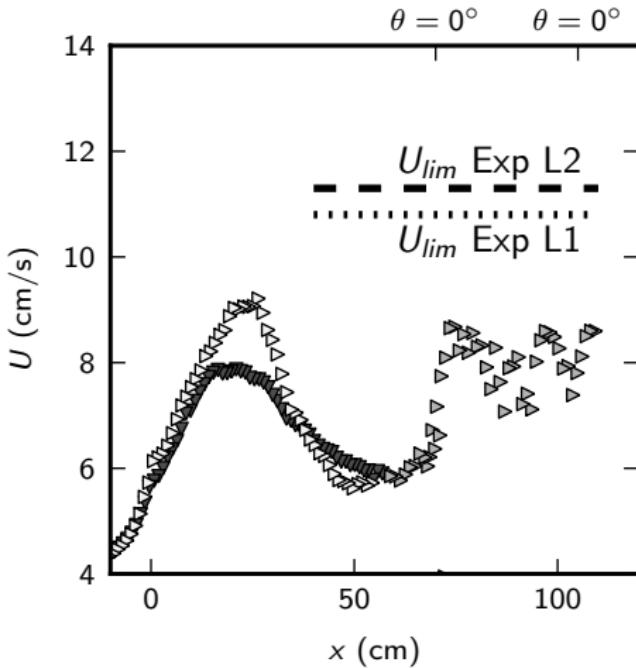


## Part 2

More exotic...

# Matplotlib figures can be saved in pgf

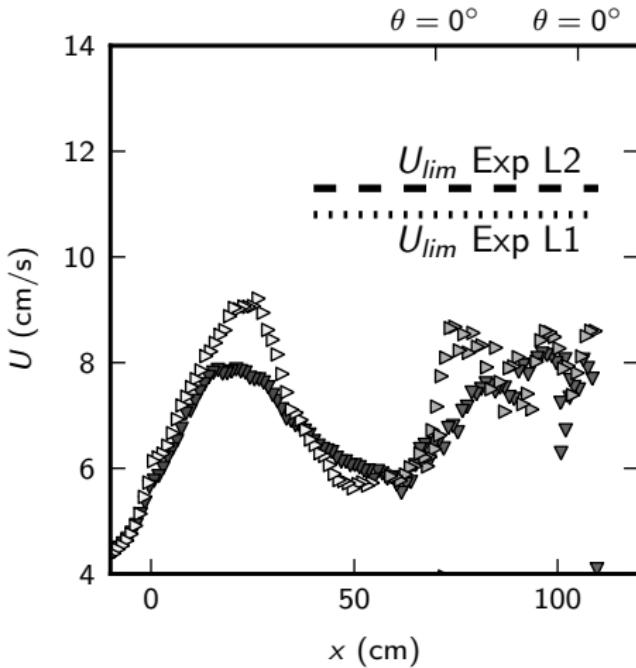
“portable graphics format”, for insertion in latex



+ manually add `\only<2>{}` commands in the pgf file...

# Matplotlib figures can be saved in pgf

“portable graphics format”, for insertion in latex

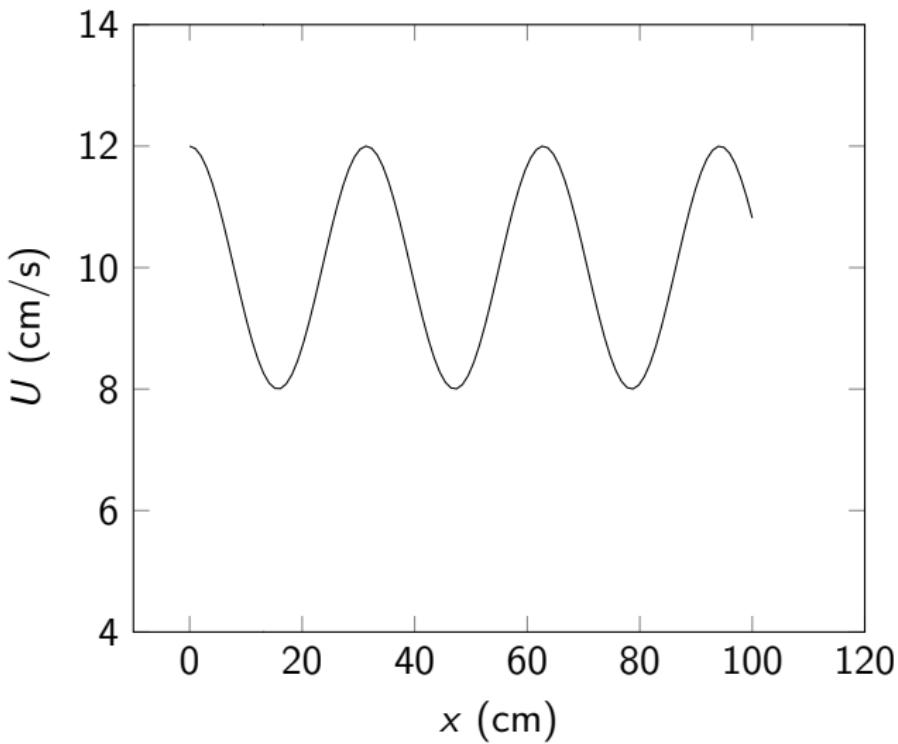


+ manually add `\only<2>{}` commands in the pgf file...

Matplotlib figures can be saved in svg (and also loaded!)

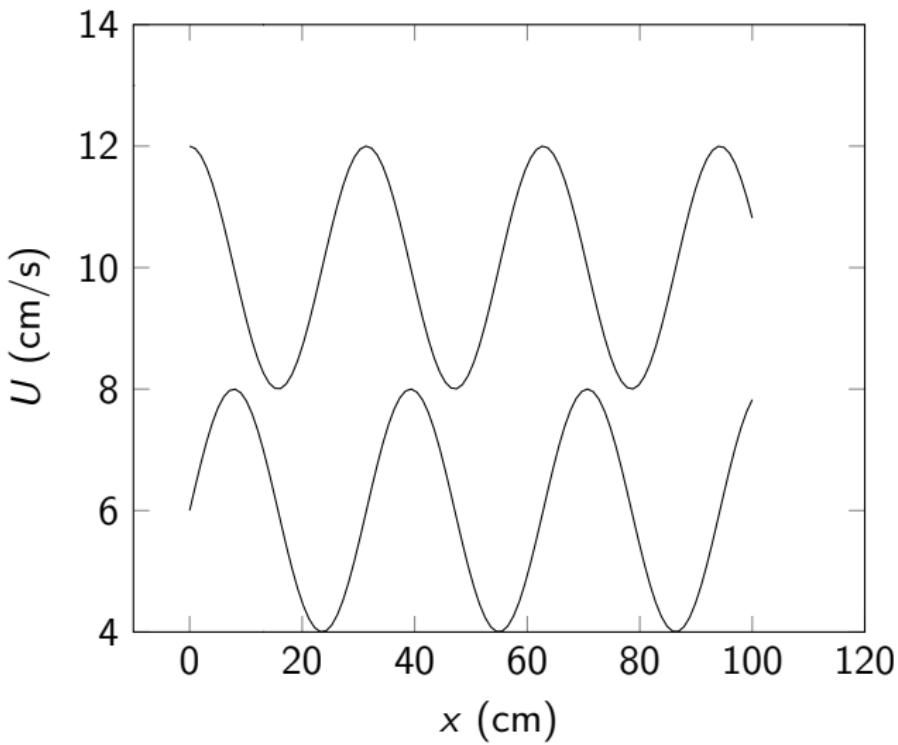
<http://neuroscience.telenczuk.pl/?p=331>

## Matplotlib figures saved in tikz with matplotlib2tikz



+ manually add `\only<2>{}` commands in the tikz file...

## Matplotlib figures saved in tikz with matplotlib2tikz



+ manually add `\only<2>{}` commands in the tikz file...

## Conclusions

It is easy and efficient to produce publication-quality “simple” figures with Python and Matplotlib.

<http://matplotlib.org/>