Tools for creating print quality figures in Matlab

(and making your life easier … at least in the long run)

I think to really get the maximum out of these tools, we should think of other aspects of figure preparation which take a lot of time/are annoying and try to automatize them. Here are some ideas:

- Write a very flexible automatic axis-range function. Similar to ‘axis auto’, but with more intelligence

- A way of checking / estimating whether labels will be inside or outside of the figure area

- Linewidths and MarkerSizes could automatically adapt to the size of the figure (and thus set automatically as parameters), of course with the possibility to overrule

- Legend creation : I have something called blegend , which is more flexible, but hard to use.

## Specific Functions :

setPlotOpt :

Define general properties of the figure, based on the desired size, Journal etc.

HF\_matchAspectRatio :

Make the figure have the same size on the screen as on the paper

axesDivide :

a replacement for subplot, with much more power (recursion!)

FigLabel :

Put Figure label automatically at the same absolute distance from the subplot

HF\_setFigProps :

set the properties for all axes, titles, labels, axis labels (could be extended)

HF\_viewsave :

save the figure in different formats and show the result on the screen

errorhull :

plotarea :

## General Functions :

parsePairs :

parse a series of Argument Value Pairs.

checkField

checks the entered fields and assigns default values

HF\_getSep

just assign the separator ‘/’ based on OS

setgetDirs

Organization of all the directories that pertain to certain projects, relative to the computer one is on.

## Best practices for Figure Preparation :

- keep Data for the figure in a file, such that it can always be recreated later

-

## An example code of a figure de bon goût: