Publc Methods of “plottingtools”, grouped by Topic

Changing the colour theme

plottingtools.lightmode([foreground = “0”, background = “1.0”])

- Description
  - Switch to light theme.
- Required parameters
  - None.
- Optional parameters
  - *foreground* String specifying the foreground colour. Default: “0”, i.e. pure black.
  - *background* String specifying the background colour. Default: “1.0”, i.e. pure white.
- Return
  - None

plottingtools.darkmode([foreground = “0.85”, background = “0.15”])

- Description
  - Switch to dark theme.
- Required parameters
  - None.
- Optional parameters
  - *foreground* String specifying the foreground colour. Default: “0.85”, i.e. light grey.
  - *background* String specifying the background colour. Default: “0.15”, i.e. dark grey.
- Return
  - None

Making a new Figure

plottingtools.singleplot([size = (10, 7)])

- Description
  - Generate a new plot with one figure.
- Required parameters
  - None.
- Optional parameters
  - *size* 2-Tuple of numbers, containing the figure's width and height. Default: (10, 7)
- Return
  - 2-tuple (matplotlib.figure.Figure, matplotlib.pyplot.Axes)

plottingtools.multiplot(nrows, ncols, size)

- Description
  - Returns a figure with nrows by ncols subplots
- Required parameters
  - *nrows* integer, the number of rows of plots
  - *ncols* integer, the number of columns of plots
  - *size_xy* 2-tuple of numbers, containing the figure's width and height
- Optional parameters
  - None.
- Return
  - Tuple (matplotlib.figure.Figure, matplotlib.pyplot.Axes)

Kinds of Plots unique to plottingtools

plottingtools.similarity_heatmap(ax, list_of_lists, method)

- Description
  -
- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

plottingtools.correlations_heatmap(ax, list_of_lists, method)

- Description
  -
- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

plottingtools.masked_heatmap(ax, data, mask, **kwargs)

- Description
  -
- Required parameters
  -

- Optional parameters
  - **
- Return
  - None.

Adding elements to an existing plot

plottingtools.title(ax, title, [fontsize = 40, pad = 20])

- Description
  -
- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

plottingtools.labels(ax, xlabel, ylabel, [fontsize = 30, pad = 15])

- Description
  -
- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

plottingtools.diagonal(ax, [colour = “black”, alpha = 0.3, linestyle = “-”, linewidth = 2])

- Description
  -
- Required parameters
  -

- Optional parameters
  - **
- Return
  - None.

plottingtools.rectangle(ax, x1, y1, x2, y2, [colour = “red”, linewidth = 3, linestyle = “-”, fill = False])

- Description
  -
- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

plottingtools.star(ax, x, y, [colour = “red”, fontsize = 50])

- Description
  -
- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

plottingtools.lines(ax, which, pos, [colour = “black”, alpha = 0.3, linestyle = “-”, linewidth = 2, zorder = -100])

- Description

-
- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

Changing elements of a plot

plottingtools.despine(ax, [which = [‘top’, ‘right’]])

- Description
  - Remove spines of a matplotlib.pyplot.Axes plot.
- Required parameters
  - *ax* The matplotlib.pyplot.Axes object to remove spines from.
- Optional parameters
  - *which* Array of strings specifying which spines to remove. Possible choices are “top”, “right”, “left”, “bottom”. Defaults to [“top”, “right”].
- Return
  - None.

plottingtools.ticklabelsize(ax, [which = “both”, size = 20])

- Description
  -
- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

plottingtools.limits(ax, xlimits, ylimits)

- Description
  -
- Required parameters
  -

- Optional parameters
  - **
- Return
  - None.

plottingtools.ticks_and_labels(ax, which, ticks, label)

- Description
  -
- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

plottingtools.rotate_ticklabels(ax, which, rotation)

- Description
  -
- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

plottingtools.align_ticklabels(ax, which, horizontal, vertical)

- Description
  -

- Required parameters
  -
- Optional parameters
  - **
- Return
  - None.

Saving the current figure to a file

plottingtools.save_png(filename, [dpi = 300])

- Description
  - Save the current plot as PNG file.
- Required parameters
  - *filename* string with the file name to export to.
- Optional parameters
  - *dpi* The resolution, in dpi. Default: 300
- Return
  - None.

plottingtools.save_svg(filename)

- Description
  - Save the current plot as SVG file.
- Required parameters
  - *filename* string with the file name to export to.
- Optional parameters
  - None
- Return
  - None.

plottingtools.save_pdf(filename)

- Description
  - Save the current plot as PDF file.
- Required parameters
  - *filename* string with the file name to export to.

- Optional parameters
  - None.
- Return
  - None.

Collections of default parameters for matplotlib plots

T.B.D.