

Package ‘jtheme’

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Type Package

Title A custom ggplot2 theme

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Description jtheme is a custom theme for ggplot2 for scientific purposes such as articles, presentations, reports, etc.

Imports ggplot2, extrafont

Suggests ggpubr

License TBD...

Encoding UTF-8

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Collate 'annotate_coord.R'

'annotate_pos.R'

'colors.R'

'globals.R'

'jarrange.R'

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| | |
|----------------|-----------------------------------------------------------|
| annotate_coord | <i>A custom annotation function based on coordinates.</i> |
|----------------|-----------------------------------------------------------|

Description

Annotate a plot at the N, NE, NW, E, W, S, SE, SW without having to worry about the positioning. Also handles naturally the custom font of `jtheme()`.

Usage

```
annotate_coord(  
  pos = c("N", "NE", "E", "SE", "S", "SW", "W", "NW"),  
  label = "",  
  padding = grid::unit(c(0.5, 0.5), "line"),  
  ...  
)
```

Arguments

- pos N, NE, E, SE, S, SW, W and NW.
- label Text to be annotated.

Value

Same as `grid::textGrob()`.

Author(s)

<https://stackoverflow.com/questions/47916307/>

| | |
|--------------|---------------------------------------------------------------------|
| annotate_pos | A <code>ggplot2::annotate()</code> wrapper with default positioning |
|--------------|---------------------------------------------------------------------|

Description

Annotate a plot at the top-left, top-right bottom-right or bottom-left without having to worry about the positioning. Also handles naturally the custom font of `jtheme()`.

Usage

```
annotate_pos(pos, label, ...)
```

Arguments

| | |
|-------|-------------------------------------------------------------------------------------------|
| pos | topright, topleft, bottomright or bottomleft |
| label | Text to be annotated. Passed directly to <code>ggplot2::annotate()</code> label argument. |
| ... | Other parameters passed to <code>ggplot2::annotate()</code> . |

Value

Same as `ggplot2::annotate()`.

Author(s)

Jeremie Boudreault

| | |
|--------|--------------------------------------------|
| colors | Colors used within the <code>jtheme</code> |
|--------|--------------------------------------------|

Description

- light_red :
- light_blue :
- red :
- blue :
- light_grey :

Usage

```
colors
```

Format

An object of class `list` of length 5.

| | |
|----------|--------------------------------------------------------|
| jarrange | <i>A wrapper for <code>ggpubr::ggarrange()</code>.</i> |
|----------|--------------------------------------------------------|

Description

jarrange allows to arrange multiple ggplots into a unique plot. It also handles annotation and legend combinations.

Usage

```
jarrange(
  plist,
  title = NULL,
  subtitle = NULL,
  hjust_title = 0.5,
  hjust_subtitle = 0.5,
  left = NULL,
  right = NULL,
  bottom = NULL,
  legend_pos = "bottom",
  ...
)
```

Arguments

| | |
|----------------|-------------------------------------------------------------------------------|
| plist | : List of the plots to be combined. Should be a <code>list()</code> . |
| title | : Title of the plot. |
| subtitle | : Subtitle of the plot. |
| hjust_title | : Horizontal adjusting of the title (default to center). |
| hjust_subtitle | : Horizontal adjusting of the sub-title (default to center). |
| left | : Left text. |
| right | : Right text. |
| bottom | : Bottom text. |
| legend_pos | : Legend position bottom, top or right. If NULL, individual legends are kept. |
| ... | : Other arguments passed to <code>ggpubr::ggarrange()</code> . |

| | |
|--------|-------------------------------------------|
| jtheme | <i>A custom theme for ggplot2 graphs.</i> |
|--------|-------------------------------------------|

Description

jtheme() is a customized theme for ggplot2 in order to make the graphs ready-to-use for scientific publications, reports, presentation, etc.

Usage

```
jtheme(
  borders = "normal",
  expand_xy = TRUE,
  legend_alpha = NULL,
  legend_byrow = FALSE,
  legend_nrow = NULL,
  legend_ncol = NULL,
  legend_pos = "bottom",
  rotate_x_labs = FALSE,
  show_grid = FALSE,
  show_leg_title = TRUE,
  tight_facets = FALSE,
  title_size = 14L,
  title_face = "bold",
  x_labs_to_months = FALSE,
  language = "eng"
)
```

Arguments

| | |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>borders</code> | : Show "all" (all around the plot), "normal" (x and y axe) or "hide" borders. |
| <code>expand_xy</code> | : Should an extra spacing be added x/y values and axes. Values are TRUE, FALSE, "x_only" and "y_only". |
| <code>legend_byrow</code> | : Should the legend be filled by row. |
| <code>legend_nrow</code> | : Number of row the the legend. |
| <code>legend_ncol</code> | : Number of cols the the legend. |
| <code>legend_pos</code> | : Legend position. <code>bottomright</code> , <code>topleft</code> , <code>topright</code> refers o inner legend while <code>bottom</code> , <code>left</code> refers to legend outside of the plot. |
| <code>rotate_x_labs</code> | : Parameter to rotate the x labels. |
| <code>show_grid</code> | : Toggle on/off the grid on ggplot2. |
| <code>title_size</code> | : Customise title size. Default to 14L. |
| <code>title_face</code> | : Customise title face. Default to "bold". |
| <code>x_labs_to_months</code> | : Transformation of julian days to month (TRUE/FALSE). |
| <code>language</code> | : Language of the plot ('fr' or 'eng') |
| <code>tight_facet</code> | : Toogle on/off the tight facetting |

Details

In addition to a custom theme, `jtheme()` allows the user to have different add-on to graph that are explained below.

| | |
|----------|-----------------------------------------------|
| plot_pal | <i>A function to plot a palette of color.</i> |
|----------|-----------------------------------------------|

Description

plot_pal takes a palette of colors of values and plot it.

Usage

```
plot_pal(pal)
```

Arguments

pal : A vector of colors.

| | |
|------------|------------------------------------------------------------------------------------------------|
| round_trim | <i>round_trim is a wrapper for <code>base::round()</code> and <code>base::format()</code>.</i> |
|------------|------------------------------------------------------------------------------------------------|

Description

round_trim is a wrapper for `base::round()` and `base::format()`.

Usage

```
round_trim(x, nsmall)
```

Arguments

x : The number of the rounded.
 nsmall : The number of digits.

| | |
|-------------|----------------------------------------------------------------|
| save_ggplot | <i>A custom function to save ggplot into predefined sizes.</i> |
|-------------|----------------------------------------------------------------|

Description

save_ggplot is a wrapper for `ggplot2::ggsave()` that allows the user to save plots in predefined sizes.

Usage

```
save_ggplot(file, size = "rect", w = NULL, h = NULL, ...)
```

Arguments

file : Filename to save the plot.
 size : One of the predefined sizes given in 'sizes_map'.
 ... : Other arguments passed to `ggplot2::ggsave()`.

Details

This function is very convinient for scientific articles or presentations when you need all your figures to have the same aspect ratio.

save_plot

A custom function to save classic plot into predefined sizes.

Description

save_plot is a wrapper for `png()` ... `dev.off()` that allows the user to save plots in predefined sizes.

Usage

```
save_plot(file, size = "rect", pl_expr, res = 300L, w = NULL, h = NULL)
```

Arguments

file : Filename to save the plot.
size : One of the predefined sizes given in 'sizes_map'.
pl_expr : The plot expression to be saved.
res : A custom resolution. Default to 300

Details

This function is very convinient for scientific articles or presentations when you need all your figures to have the same aspect ratio.

to_factor

A small wrapper for factor function.

Description

to_factor is a wrapper for `base::factor()` that allows to easily convert a string character to some factors for plotting purpose.

Usage

```
to_factor(x, rev = FALSE)
```

Arguments

rev : Do you want to reverse the levels.

| | |
|----------|----------------------------------------------------------------------------------------------------------------------------------|
| to_lower | to_lower is a wrapper for <code>base::tolower()</code> that allows also to capitalize first letter of the sentence or all words. |
|----------|----------------------------------------------------------------------------------------------------------------------------------|

Description

to_lower is a wrapper for `base::tolower()` that allows also to capitalize first letter of the sentence or all words.

Usage

```
to_lower(x, cap = "first", pol = TRUE)
```

Arguments

| | |
|-----|-------------------------------------------------------------------------------|
| cap | : Do you want to capitalize the first letter (first) or all first (allfirst). |
| pol | : Do you want to capitalize pollutant names (e.g. O3, PM2.5, etc.) |

| | |
|----|------------------------------------|
| ul | <i>A small wrapper for unlist.</i> |
|----|------------------------------------|

Description

ul is a wrapper for `base::unlist()`.

Usage

```
ul(x, recursive = FALSE, use.names = FALSE)
```

Arguments

| | |
|-----------|---------|
| recursive | : FALSE |
| use.names | : FALSE |

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