pinp is not PNAS

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This short vignette details several of the available options for the pinp pdf vignette template.

1. Introduction

The *pinp is not PNAS* template extends and reworks the pnas_article template from the wonderful rticles package. This vignette aims to list all the available option in order to provide both a reference documentation, and a simple introduction. The source of this vignette is of course included in the package itself.

2. YAML Content

author. Fields `name` and `affiliation` must be given. The latter can be a single-letter index referring to the address field described in the next paragraph.

address. Fields `code` (referring to the index from `affiliation`) and `address` must be given. The latter is free-form, and may include `\url{}` and other LaTeX macros.

lead_author_surnames. A free-form field usable for either a simple "Author *et al*", or a simple text field listing two or more authors. This field is not post-processed.

doi_footer. A free-form URL for a doi reference for a publication, or a canonical URL for a software package or repository. These are typeset as actual URLs and resolve their links from the pdf document following standard LaTeX practice.

abstract. A short free-form abstract can be used to inform the reader of the essence of the subsequent document.

acknowledgements. An *optional* free-form text which will be typset at the very end of the document right before the (optional also) references.

keywords. An optional list (entered as a YAML list following – marks) which will be typeset as a list of alternatives separated by vertical *pipe* symbols.

3. Options

fontsize. Default it 9pt, also supported are 10pt, 11pt and 12pt which may make sense in one-column mode.

one_column. An *optional* override (using value `true`) for the default two-column layout. Useful for initial stages of a document, as well as for documents with wide-format tables and figures.

lineno. An *optional* selection (via value `true`) of line numbers, selectable only if `one_column: true` is set. Currently typesets number on both the left and right-hand side which seems in error.

one_sided. An *optional* selection (via value `true`) of one-sided rather than two-sided output. This should probably alter the footnote but does not currently do so.

numbersections. An *optional* selection (via value `true`) for overriding the default unnumbered section headers. Useful if you need to refer to sections by number.

secnumdepth. An *optional* selection (via values 1, 2, 3, . . .) of section numbering depth, selectable only if `numbersections: true` is set. Useful if you only want to number sections and subsections but not subsubsections and so on.

skip_final_break. An *optional* selection (via value `true`) that avoids inserting a `\pnasbreak` at the end of the document. This is useful when dealing with float issues that may appear at the end of documents with acknowledgements and bibliographies.

bibliography. A field for an *optional* selection of a Bibtex input file, extension can be omitted. Alternative, bibliographic information may also be included directly as a `thebibliography` environment by including the content of the generated `bbl` file. The `after_body` include of the YAML header can also be used.

footer_contents. An character value delimited by quotes for something like *"mypackage Vignette"* which will be shown in the footer.

date_subtitle. An *optional* free-form text string. Could be used, for example, to mention the bibliographic info in a post-print. If not specified, defaults to "This version was compiled on {current date}"

4. Code

Knitr. The knitr package (Xie, 2017) is also available to both typeset code, typically in R or one of the other supported engines. Knitr segments used three backticks (just like Pandoc described below) followed by curly brace sgement listing first the desired engine, and then the selected display options. Output from the code can also be shown, and a myriad of options permit many variants.
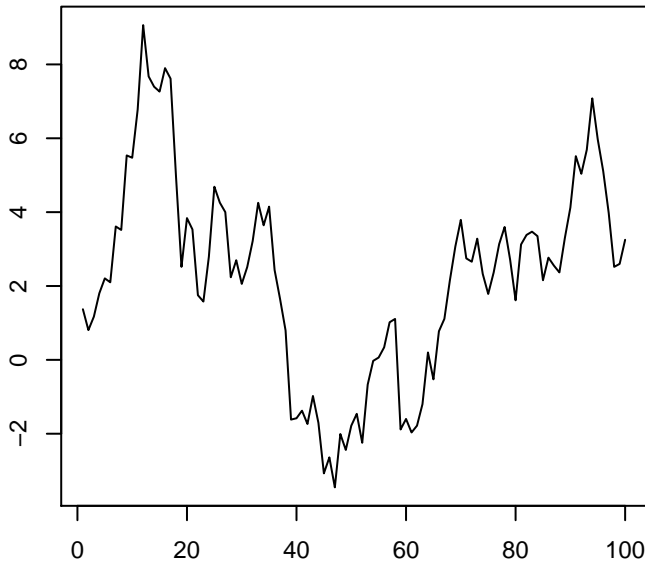
```
a <- 2 + 2
a
```

```
#  [1] 4
```

Output from such code blocks is also shown in a framed and shaded box. Code segments containing plots producing figures results in these figures being automatically inlined:

```
set.seed(42)
par(mar=c(3,3,3,0))
plot(cumsum(rnorm(100)), type='l',
```

```
      main="Up and and away")
```

Up and and away

Pandoc. The easiest way to typeset code is to simply open three backticks followed by the name of one of the *numerous* built-in pandoc parsers, *i.e.*, ```` ```c ```` to typeset in the C languags.

```
/* this is a C function example */
int doubleMe(int x) {
    return x + x;
}
```

Pandoc segments are highlighted as usual, and per a convention in this template also shown in a framed and slightly shaded box as seen here and above.

Another example from Python:

```
# A Python example
def printSomething(str):
    "This prints the string passed in"
    print str
```

5. Environments

Standard LaTeX. All standard LaTeX environment are directly usable if needed, including of course all mathematical environments and symbols such as, say, the greek lettering: α, β, γ, and so on.

The following is set as usual via the `displaymath` environment:

$$a^2 = b^2 + c^2$$

figure*. Figure can span two columns (when the default two-column mode is used) by using a (LaTeX) `\begin{figure*}` ... `\end{figure*}` environment, . Figures will then be *floats* in the LaTeX sense and place at the top or bottom of the page. An example is given by the skeleton document of the package. Similarly, `\begin{figure*}` ... `\end{figure*}` could be used around a wide table structure.

widetext. The `\begin{widetext}` ... `\end{widetext}` environment can be used to break text from two-column mode to one-column mode and back.

6. Other Help

RMarkdown. The rmarkdown site by RStudio is very comprehensive and can answer many questions pertaining to Markdown processing in R using the rmarkdown package.

LaTeX. Ultimately, this style uses LaTeX to produce the pdf output. The tex StackExchange can be very helpful for specific LaTeX questions.

References

Allaire J, R Foundation, Wickham H, Journal of Statistical Software, Xie Y, Vaidyanathan R, Association for Computing Machinery, Boettiger C, Elsevier, Broman K, Mueller K, Quast B, Pruim R, Marwick B, Wickham C, Keyes O, Yu M (2017). *rticles: Article Formats for R Markdown*. R package version 0.4.1, URL https://CRAN.R-project.org/package=rticles.

MacFarlane J (2017). *Pandoc: A Universal Document Converter*. Version 1.19.2.1, URL http://pandoc.org.

Xie Y (2017). *knitr: A General-Purpose Package for Dynamic Report Generation in R*. R package version 1.17, URL https://yihui.name/knitr/.

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