

So you want to publish in IOP? Here's a template for you.

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Abstract. The ecological emergency refers to the current state of the global environment, characterized by unprecedented declines in biodiversity, rapid loss of natural habitats, and increasing frequency of extreme weather events. The root cause of the ecological emergency is human activity, specifically the overconsumption of resources and the release of greenhouse gases. The situation is dire, with scientists warning that up to one million species are at risk of extinction due to human activities. The ecological emergency also poses a threat to human well-being as it disrupts the provision of vital ecosystem services such as air and water purification, pollination, and climate regulation. The time to act is now, as the window of opportunity to prevent the worst outcomes of the ecological emergency is rapidly closing. It is crucial that immediate and ambitious actions are taken at the global, national, and local levels to reduce greenhouse gas emissions, protect biodiversity, and restore natural habitats. This requires a transformation of our economic and societal systems towards sustainability.

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Introduction

This is a dummy example only for the purpose to use this repo as a template starter for creating new formats. For this `article-format-template` we call our dummy article `aft`.

This quarto extension format supports PDF and HTML outputs. `quarto-journals` is aiming at porting existing \LaTeX template from journals to be used with quarto. PDF format is what require the most work to fit the journals guideline, but Quarto offer a nice rendering for HTML output too. This demo format template only use basic HTML format without any customization for now.

About Quarto Extensions formats And Quarto Journals Article

First, please get familiar with the following resources:

- [Creating Formats](#) in Quarto as part of the [Extensions](#) mechanism.
- [Journals Articles](#) for Quarto.

Structure of this repository

Everything for the extensions is in `_extensions`. See Quarto doc for details.

- In `partials`, you'll find the `.tex` partials that can be used and should be removed or tweaked,s
- Your extension can make shortcodes and lua filters available. This document shows the effect of the one provided in the `aft` format.
- `aft` format sets some defaults which are different from `pdf` or `html`, link setting links to URL in read inside PDF output.

Source repository for this template format can found on [Github](#)

`_extensions\aft` In this folder you'll find everything that defines the extensions which could be installed using `quarto install extension` or be part of the template when using `quarto use template`

Format Metadata This is in `_extension.yml` is where all the metadata about the format are defined so that Quarto knows what to use. Adapt this file for you own template.

Partials In `partials`, there are the `.tex` files that will be used as Pandoc's template. We provide here all the partials supported by Quarto and custom one for this format. Quarto allows to provide partials to ease the process of tweaking the default latex Pandoc's template and keeping it up to date.

This template repo contains all the relevant partials that you can use with Quarto *as example*. We only tweaked `title.tex` to show the usage of a custom partials called `_custom.tex`.

Only keep the partials that you need to tweak for the format you are creating

If you need to completely change the default template (i.g customizing partials is not enough), then you need to provide your own template to Pandoc based on `template.tex` and also using partials or not. This can be provided using the `template` YAML key in `_extension.yml` for Quarto to use it.

This is considered advanced configuration as it will be harder to maintain than only using partials but could be required for some specific format. Be aware that this may lead to loose some Pandoc or Quarto features tied to default `template.tex` content if you remove some specific parts.

Lua Filters Most of the time, custom formats will need Lua filters to provide specific features like cross format supports or provides custom shortcodes through the Quarto extension mechanism. Those filters will be available to the user and

could be used in the custom formats (according to `_extensions` metadata). We have provided two examples:

- `color-text.lua`, a Lua filter used to add color to inline text for PDF and HTML outputs using the same Markdown syntax
- `shorcodes.lua`, a Lua filter which follow [Quarto custom shortcodes](#) guidelines to provide a `{{< LaTeX >}}` shortcode to nicely print LaTeX in PDF and HTML.

Remove or replace with your own Lua filters

Format resources Resources required by the format needs to be available. We have provided two examples:

- `te.bst` is a biblio style file for demo. It has been downloaded from <https://www.economics.utoronto.ca/osborne/latex/TEBST.HTM> (<http://econtheory.org/technical/te.bst>) - Licence [LPPL](#)
- `aft.cls` is a dummy class file for this example format. It is a copy of official `article.cls`, the one provided in LaTeX installation (i.e at `kpsewhich article.cls`) and renamed as example (Licence LaTeX Project Public License)
- `custom.scss` is a style file to have a custom theme for our HTML format so that our Lua filter feature `color-tex.lua` works.

Those files are referenced within the `_extension.yml` to be used with our example format.

Remove and replace with your own resources

.quartoignore Sometimes it is useful to have some files only needed for reference or for development. They should be available in the source repository but not downloaded to the user when `quarto use template` is used.

Use `.quartoignore` to register such file and folder (one file or folder per line)

style-guide folder For `quarto-journals` format, use `style-guide` folder to include any documentation and resourced used for format creation, like a journal style guide or original `.tex` template. This folder is already added in `.quartoignore` in this example repo.

Remove, rename or add to this folder

template.qmd This file is the template document that shows how to use the custom format. It will be downloaded with other resource by `quarto use template`, and even offered to be renamed if the name `template.qmd` is used.

This file will usually use the custom format (here `aft-pdf` and `aft-html`) and show how to use the template. When you'll copy this template, you should be able to render this document to the demo format.

Adapt this file to provide a suitable template for your custom format

Other files Other files are needed by the template and are usually user provided - they are not part of the custom format.

Here `bibliography.bib` is here to demo the usage of the bst file from the custom format.

Remove this file and provide a suitable one for your template

Checklist: Creating a custom format

Here is the checklist to help you know what to modify:

- Read the resources mentioned at the top,
- Use this template repo to create a new repository for your format (Click on “Use this template” to create new github repo)
- Once you are acquainted with the content, remove the resources that are there only as example (see above)
- Update README by replacing `aft` and `Article Format Template` mentions for your journal format
- Keep only the template partials that you need to tweak, and add custom ones if needed
- Add any Lua filters for shortcodes and other that would be useful to create the expected output format
- Add any external resource your format will need, and that should be part of the extension format that will be downloaded,
- Check `_extension.yml` is updated correctly
- Modify the skeleton `template.qmd` to your format and add any required resources to be downloaded to user.
- Check `.quartoignore` is updated which everything that should not be downloaded.
- Publish a demo of you format to github pages of the repo by using `quarto publish` command

Demo of some features found in this demo journal template

Shortcode demo PDF are rendered using L^AT_EX but it is best if one can use a Markdown syntax for cross format support.

used in source is a shortcode syntax where the shortcode is included in the extension folder `_extensions`

Code chunk This format hide chunks by default as option has been set in `_extension.yml` file.

But you can set `echo` option to `true` locally in the chunk

```
m_pois <- glm(Days ~ (Eth + Sex + Age + Lrn)^2, data = quine, family = poisson)
summary(m_pois)
```

Call:

```
glm(formula = Days ~ (Eth + Sex + Age + Lrn)^2, family = poisson,
     data = quine)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-7.6533	-2.7796	-0.5301	1.5749	8.1955

Coefficients: (1 not defined because of singularities)

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	2.93246	0.09826	29.843	< 2e-16 ***
EthN	-0.17399	0.12134	-1.434	0.1516
SexM	-0.71452	0.12229	-5.843	5.14e-09 ***
AgeF1	-0.04270	0.12691	-0.336	0.7365
AgeF2	-0.08632	0.16164	-0.534	0.5933
AgeF3	-0.15290	0.11898	-1.285	0.1987
LrnSL	0.21608	0.14558	1.484	0.1377
EthN:SexM	0.43902	0.09208	4.768	1.86e-06 ***
EthN:AgeF1	-0.92889	0.14657	-6.337	2.34e-10 ***
EthN:AgeF2	-1.33398	0.13504	-9.879	< 2e-16 ***
EthN:AgeF3	-0.11242	0.13478	-0.834	0.4042
EthN:LrnSL	0.26415	0.11378	2.322	0.0203 *
SexM:AgeF1	-0.05565	0.16303	-0.341	0.7328
SexM:AgeF2	1.09942	0.15281	7.195	6.26e-13 ***
SexM:AgeF3	1.15949	0.13859	8.366	< 2e-16 ***
SexM:LrnSL	0.04143	0.13718	0.302	0.7627
AgeF1:LrnSL	-0.13019	0.15688	-0.830	0.4066
AgeF2:LrnSL	0.37340	0.14563	2.564	0.0103 *
AgeF3:LrnSL	NA	NA	NA	NA

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for poisson family taken to be 1)

Null deviance: 2073.5 on 145 degrees of freedom
Residual deviance: 1368.7 on 128 degrees of freedom
AIC: 1993.1

Number of Fisher Scoring iterations: 5

Text color Our format makes applying color on inline text possible using the [content]{color=<name>} syntax. Let's see an example.

Here we are using a special feature of our format which is the coloring because pink is a nice color.

This is possible thanks to the Lua Filter included in the custom extension format.

Using references I did not read this book (Brown 2019) but it must be interesting.

Differences between `aft-html` and `aft-pdf`:

- For the HTML format, we are using Pandoc citeproc to include the bibliography. Here `reference-section-title` controls the title for the chapter that will be used.
- For the PDF format, `natbib` is used by default and the bibliography is included with a title by the LaTeX template.

References

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