Template demonstrating the quantum bibstyle

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1 Overview

We use the opportunity of talking about bibtex entries to give an overview of the available reference classes:

`article`	Section ??
`book`	Section ??
`repository`	Section ??
`website`	Section ??
`misc`	Section ??
Other classes	Section ??
`booklet`	Section ??
`inbook`	Section ??
`incollection`	Section ??
`inproceedings`	Section ??
`manual`	Section ??
`mastersthesis`	Section ??
`phdthesis`	Section ??
`proceedings`	Section ??
`techreport`	Section ??
`unpublished`	Section ??
Mixed tests	Section ??

All of these reference classes are available in standard bibtex style files as well, with the exception of `repository` and `website`. Of course there may be other style files supporting reference classes with the same name, but the implementation in quantum.bst will not be based on any of those.

2 Reference class `article`

For the `article` class, the `title` is printed in *italics*. The `journal` is not reformatted, the `volume` printed in **bold font**. We also include the `pages` if present and the `year` in round brackets (). `doi` links are always included if given, the same holds for `eprint`. Only if neither of these two fields is given do we use the `url` to provide a hyperlink to the article. Code repositories are linked whenever provided via the `code` field, which is a non-standard field in quantum.bst.

Examples:

doi	eprint	url	code	result
✓	✓	✓/×	✓	[?]
✓	✓	✓/×	×	[?]
×	✓	✓/×	✓	[?]
×	✓	✓/×	×	[?]
×	×	✓/×	✓	[?]
×	×	✓/×	×	[?]

Note that in particular citations via a URL alone are not recommended. If you want to cite a website or code repository, please use the respective reference classes `website` or `repository` (see below).

3 Reference class `book`

For the reference class `book`, the `title`, the `year`, the `publisher` as well as *either* the `author` *or* the `editor` field must be given. The `volume`, `number` and `series`, the (publisher) `address`, the `edition` as well as links in the fields `doi`, `eprint` and `url` are optional. The order in which links are printed is the same as for `article`, Section ??. Some example `book` references are [? ?].

4 Reference class `repository`

For the custom `repository` reference class, the `author` field is used if given but is not required (in contrast to the `article` class). If the repository address is given via `code` (strongly recommended), a properly formatted repository name is printed and links to the given address, including potentially version-, branch- or even commit-specific links. If no `code` entry is given, `url` is used as address instead, without any formatting of the printed text; Either `code` or `url` have to be provided. A title is not considered even if given.

TODO: Consider a year in any way?

code	url	result
✓	✓/×	[?]
×	✓	[?]
×	×	invalid

Note that if you want both a url and a code link to be displayed, you can use the website reference class presented below for that.

5 Reference class website

For the new custom reference class website, we require a title and a url which are both printed always. author is optional and printed if given, the same holds for code, which is formatted as repository link like for repository. If you want to provide code but not url, the reference class repository (see above) is made for you.

author	code	result
✓	✓	[?]
×	✓	[?]
✓	×	[?]
×	×	[?]

Note that if you want both a url and a code link to be displayed, you can use the website reference class presented below for that.

6 Reference class misc

The reference class misc is meant to be used for miscellaneous entries that do not fall into any of the provided categories. As such, misc entries display the generic properties author, title, howpublished, date, eprint and note, the only requirement being at least one of these fields to be provided and non-empty. As the reference class article covers the case of preprint articles, the misc class was modified to refer back to article if archivePrefix is set to "arxiv" or an anyhow capitalized version thereof *and* primaryClass is provided and non-empty.

We provide some examples, not covering all cases, because misc is very flexible and there are many possibilities.

- A citation that actually is an article on the arXiv: [?]

- A footnote-like reference only containing a note: [?]

- A reference to a private correspondence: [?]

6.1 Reference class inbook

The reference class inbook is an alias for book with the additional requirement that chapter, pages or both are provided. Examples would be Refs. [? ?].

7 Tests

Directly from the arxiv [?], arxiv via Zotero [?], some more testcases [? ? ? ? ? ? ?]