Template demonstrating the quantum bibstyle

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1 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 |
|--------------|--------------|---------------------|--------------|--------|
| \checkmark | \checkmark | \checkmark/\times | \checkmark | [1] |
| \checkmark | \checkmark | √/× | × | [2] |
| × | \checkmark | √/× | \checkmark | [3] |
| × | \checkmark | √/× | × | [4] |
| × | × | √/× | \checkmark | [5] |
| × | × | √/× | × | [6] |

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).

Article references

- [1] Matthew McKague. "Self-testing in parallel with CHSH. Quantum 1, 1 (2017). DOI: 10.22331/q-2017-04-25-1. eprint: arXiv:1609.09584. code: tony-blake/Hybrid-x509-s.
- [2] Matthew McKague. "Self-testing in parallel with CHSH . Quantum ${f 1},$ 1 (2017). DOI: 10.22331/q-2017-04-25-1. eprint: arXiv:1609.09584.
- [3] Matthew McKague. "Self-testing in parallel with CHSH . (2016). eprint: arXiv:1609.09584. code: tony-blake/Hybrid-x509-s.
- [4] Matthew McKague. "Self-testing in parallel with CHSH. (2016). eprint: arXiv:1609.09584.
- [5] Matthew McKague. "Self-testing in parallel with CHSH . (2016). URL: doi.org/10.22331/q-2017-04-25-1. code: tony-blake/Hybrid-x509-s.
- [6] Matthew McKague. "Self-testing in parallel with CHSH. (2016). URL: doi.org/10.22331/q-2017-04-25-1.

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2 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?

```
 \begin{array}{cccc} \textbf{code} & \textbf{url} & \textbf{result} \\ \checkmark & \checkmark/\times & [1] \\ \times & \checkmark & [2] \\ \times & \times & \textbf{invalid} \\ \end{array}
```

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.

Repository references

- [1] Johannes Jakob Meyer. code: johannesjmeyer/rsmf.
- [2] Johannes Jakob Meyer. URL: github.com/johannesjmeyer/rsmf.

3 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 \checkmark \checkmark [1] \times \checkmark [2] \checkmark \times [3] \times \times [4]
```

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.

Website references

- [1] The Wiki-authors. "Wikipedia". URL: wikipedia.com. code: wikimedia/mediawiki.
- [2] "Wikipedia". URL: wikipedia.com. code: wikimedia/mediawiki.
- [3] The Wiki-authors. "Wikipedia". URL: wikipedia.com.
- [4] "Wikipedia". URL: wikipedia.com.

4 Tests

Directly from the arxiv [1], arxiv via Zotero [2], some more testcases [3, 4, 5, 6, 7]

Test references

- [1] Thomas Hubregtsen, David Wierichs, Elies Gil-Fuster, Peter-Jan H. S. Derks, Paul K. Faehrmann, and Johannes Jakob Meyer. "Training Quantum Embedding Kernels on Near-Term Quantum Computers" (2021) eprint: arXiv:2105.02276.
- [2] Thomas Hubregtsen, David Wierichs, Elies Gil-Fuster, Peter-Jan H. S. Derks, Paul K. Faehrmann, and Johannes Jakob Meyer. "Training Quantum Embedding Kernels on Near-Term Quantum Computers". arXiv:2105.02276 [quant-ph] (2021). eprint: arXiv:2105.02276.
- [3] A S Holevo and V Giovannetti. "Quantum channels and their entropic characteristics". Reports on Progress in Physics **75**, 046001 (2012). DOI: 10.1088/0034-4885/75/4/046001.
- [4] A S Holevo and V Giovannetti. "Quantum channels and their entropic characteristics". Reports on Progress in Physics **75**, 046001 (2012). DOI: 10.1088/0034-4885/75/4/046001.
- [5] Chris Akers, Netta Engelhardt, and Daniel Harlow. "Simple holographic models of black hole evaporation". JOURNAL OF HIGH ENERGY PHYSICS (2020). DOI: 10.1007/JHEP08(2020)032. Place: ONE NEW YORK PLAZA, SUITE 4600, NEW YORK, NY, UNITED STATES Publisher: SPRINGER Type: Article.
- [6] Vishal Katariya and Mark M. Wilde. "Geometric distinguishability measures limit quantum channel estimation and discrimination". Quantum Inf Process 20, 78 (2021). DOI: 10.1007/s11128-021-02992-7.
- [7] Vishal Katariya and Mark M Wilde. "Geometric distinguishability measures limit quantum channel estimation and discrimination". Quantum Information Processing 20, 1–170 (2021).