The Arthur style for BibTeX

Emilio Pisanty^{1,*}

¹ Attosecond Quantum Physics Laboratory, Department of Physics, King's College London, Strand, WC2R 2LS London, UK (Dated: April 2, 2025)

This is a showcase file for the BibTeX style file arthur.bst.

The BibTeX style file arthur.bst is optimized for physics (more specifically atomic, molecular and optical physics). It was generated from the makebst utility, and then modified by hand to give it DOI linking capabilities comparable to those used in production by modern physics journal

It also admits arbitrary eprint capability for indicating the URL and identifier of the eprint,

```
eprint = {https://arxiv.org/abs/yymm.nnnn},
archive = {arXiv:yymm.nnnn},
```

whether that be on arXiv or somewhere else, and it has a dedicated preprint entry type:

```
@preprint{arxivPreprint,
  author = {Ann Author},
  title = {A preprint still under review},
  year = {2020},
  eprint = {https://arxiv.org/abs/yymm.nnnn},
  archive = {arXiv:yymm.nnnn},
}
```

This file exists to showcase how the style file behaves when typesetting journal articles [1], preprints [2],

books [3], theses [4], code [5], and collections [6]. This repository also contains two shorter versions of the style file, arthurShort.bst and arthurUltraShort.bst, which produce minified entries.

The name 'arthur' derives from the name of the 'master' style form the makebst utility, merlin.bst, in the understanding that arthur is still learning from merlin.

On the whole, I am extremely happy with this style file, though it does have a minor 'tick' in that it tends to hyperlink the period between a paper's title and its journal reference; this is a side effect of the DOI linker which I was unable to iron out. If this is found undesirable, it can be fixed using a simple Perl script; a sample 'prettifier' shell file is provided.

For some historical context, I prepared this style file around 2015, before version 4.2 of the revtex package became widespread. The updated version of revtex does provide APS style files which include proper DOI hyperlinking, with the clearest contender being apsrev4-2.bst, and those may be found preferable depending on individual tastes; copies are easily found online, and they are natively available to revtex4-2 documents. Nevertheless, a copy of apsrev4-2.bst is included in this repository (under its LPPL license) for ease of comparison.

^[1] J. Doe and J. Doe. Sample journal article., J. Acad. Res. Inv. 1 no. 2, pp. 34–56 (1978). Author eprint.

^[2] A. Author. A preprint still under review. arXiv:yymm. nnnn, (2020).

^[3] B. Writer. Books are longer than articles (Random publisher, Somewhere, 2000).

^[4] J. Doe. Theses take a long time to write. PhD thesis, Forest University (2020).

^[5] E. Pisanty. The Author ORCID package. GitHub, github.com/episanty/authororcid (2020).

^[6] A. Author and C. Collaborator. This chapter is in a book which is in a series. In E. Editor and C. Copyeditor (eds.), Fancy Book: collecting different chapters, pp. 123–456. A Series of Books on Serious Stuff (Random Publisher, Somewhere, 2000). arXiv:yymm.nnnn.

^{*} emilio.pisanty@kcl.ac.uk