biblatex-phys – A biblatex implementation of the AIP and APS bibliography style*

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This package provides a style for biblatex which follows the guidelines of the AIP and APS. The citation style is numeric and unsorted. The bibliography style follows the pattern of the official REVTeX class (`http://ctan.org/pkg/revtex`). The style should be loaded in the usual way

```
\usepackage[style=phys]{biblatex}
```

Load-time options are provided to deal with the small number of variations between the AIP and APS styles. The References section of this document demonstrates the format generated by the package using the `biblatex-phys.bib` database of example citations.

The styles use the standard biblatex database requirements. This means that a database designed for traditional biblatex use may need some editing for optimal output. The accompanying example database `biblatex-phys.bib` shows examples of all of the supported entry types with common fields filled in.

1 Style options

All of the styles here add a small number of package options to the standard set provided by biblatex. This allows the styles to cover the variations seen between the AIP and APS styles.

doi / eprint / isbn / url — The standard style options `doi`, `eprint isbn` and `eprint`, as described in the biblatex manual. However, these options are turned off as standard by the phys style. This reflects the fact that these entries may be present in reference databases but are not generally included in published bibliographies. Note that DOI values are printed for journal articles with no pages given, even if the `doi` option is `false`.

subentry — In common with the standard biblatex numeric styles, all of the styles in the bundle support the boolean `subentry` option. With this set `true`, entries of type `set` are given individual labels within the bibliography.

articletitle — The use of article titles varies between the AIP and APS styles. The boolean option `articletitle` is available is control this behaviour. The standard settings is `true`, which follows the guidelines of the AIP: it should be set to `false` to follow the APS style. (This option also applies to the titles of proceedings entries and patents, which are treated in the same way.)

biblabel — The format of the numbers used in the bibliography (the "bibliography label")

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varies. he `biblabel` option allows the user to easily set the format used. This option takes a values `superscript` (the standard setting) and `brackets`.

chaptertitle   Printing chapter titles for `incollection` entries is part of the AIP style but is not part of the APS style. The `chaptertitle` option can be used to control this.

pageranges   The inclusion of the full page range of journal articles varies between the AIP and APS styles. The boolean option `pageranges` is available is control this behaviour. The standard settings is `true`, which follows the guidelines of the AIP and prints the full range: it should be set to `false` to follow the APS style, which will result in only the first page being printed.

1.1 `collaboration` field

To support large-scale collaborations, the style recognises the `collaboration` field. This is a simple text field which gives the name of the collaboration, and which is printed in parenthesis after the authors.

1.2 aip and aps styles

As detailed above, the standard settings follow the AIP style. To obtain the APS style, use

```
\usepackage[%
    style=phys,%
    articletitle=false,biblabel=brackets,%
    chaptertitle=false,pageranges=false%
  ]
  {biblatex}
```

2 Title formatting

The style convert article titles to sentence case format. This can be suppressed using

```
\DeclareFieldFormat{titlecase}{#1}
```

3 url formatting

The style uses the url package to format hyperlinks. As such, the format of these is left to the document author to alter. The `\urlstyle` command may be used to alter this, either for the whole document or only for the bibliography, for example by using

```
\AtBeginBibliography{%
  \urlstyle{rm}%
}
```

4 Interaction with **babel**

In common with other biblatex styles, biblatex-phys uses the csquotes package mechanism to place article titles in quotation marks. This means that the formatting

of these will depend on the `babel` language in use. Full details are covered in the manuals for `biblatex` and `csquotes`.

5 Errors and omissions

Suggestions for improvement and bug reports can be logged in the package issue database, found at `https://github.com/josephwright/biblatex-phys/ issues`, or can be sent by e-mail to `joseph.wright@morningstar2.co.uk`.

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Change History