

# 1 Introduction

This document illustrates how the **keywords** and other attributes in BibTeX entries may be used to produce bibliographies that are narrowed to a selection of a subset of citations.

## 1.1 Bib related document content

Each section below applies a citation selection criteria and gives some description as to its nature. Nominally, the references across these sections would share a common numbering. Here, the option to have per-section numbering is illustrated by wrapping each section in a **refsection** environment.

In each section, a single call to `\nocite{*}` is used as a proxy for what normally is a number of calls to `\cite{...}` in order to cite **all** entries in the bib database files. Then, a single `\printbibliography[...]` call is used in a section to illustrate one selection. In a “real” document, each section (or chapter) may have multiple bibliographies, each with some unique section. When selecting, care is needed so that all select bibliographies cover the total set of citations.

## 1.2 Selective bibliographies

A bib “filter” is used to perform a selection on the **keywords** set and a bib “check” to select on the **year** attribute. These can be define anywhere (not just in the preamble). In this example the following are used:

```
\defbibfilter{bvoredg}{keyword=bv or keyword=edg}
\defbibcheck{old}{\ifnumless{\thefield{year}}{2019}}{\skipentry}}
\defbibcheck{new}{\ifnumgreater{\thefield{year}}{2018}}{\skipentry}}
```

## 1.3 The bib files

Two contrived bib files used here: **generated.bib** and **curated.bib**. The first represents the output of an automated workflow that consists of running **recibi** commands on an authoritative source of document identifiers associated with desired **keywords** tags. The second represents the results of manual human editing efforts.

The **generated.bib** file has three entries, one of which lacks the **edg** tag. This omission represents an actual case at the time of developing this example where the **recibi** workflow encountered a publication that InspireHEP has associated with an EDG member but which EDG has not yet put into the group’s “official” list from which it is determined which entries get a **edg** tag. This omission should **not** be fixed by editing **generated.bib** nor by adding the updated bib entry manually but by rerunning the **recibi** workflow.

The **curated.bib** file has a single entry that represents a contrived case where **recibi** is unable to discover references. In fact, it was discovered via a query to InspireHEP using the EDG member’s author ID.

# 2 ALL

This section illustrates no selection. All entries in the bib files are cited with `\nocite{*}` and no selection is made by `\printbibliography`.

```
\printbibliography[title={ALL}]
```

## ALL

- [1] P. Abratenko et al. “First double-differential cross section measurement of neutral-current  $\pi^0$  production in neutrino-argon scattering in the MicroBooNE detector”. In: (Apr. 2024). arXiv: 2404.10948 [hep-ex].
- [2] F. P. An et al. “Search for a sub-eV sterile neutrino using Daya Bay’s full dataset”. In: (Apr. 2024). arXiv: 2404.01687 [hep-ex].

- [3] Brett Michael Viren. “A Search for the decay of protons to positron neutral pion and charged muon neutral pion”. PhD thesis. SUNY, Stony Brook, 2000.
- [4] Chao Zhang, Xin Qian, and Muriel Fallot. “Reactor antineutrino flux and anomaly”. In: *Prog. Part. Nucl. Phys.* 136 (2024), p. 104106. DOI: 10.1016/j.pnpnp.2024.104106. arXiv: 2310.13070 [hep-ph].

### 3 BV

This section illustrates selecting on one tag `bv` that was set by the `recibi` workflow as part of a query to InspireHEP with an author ID.

```
\printbibliography[keyword={bv},title={BV}]
```

### BV

- [1] P. Abratenko et al. “First double-differential cross section measurement of neutral-current  $\pi^0$  production in neutrino-argon scattering in the MicroBooNE detector”. In: (Apr. 2024). arXiv: 2404.10948 [hep-ex].
- [2] F. P. An et al. “Search for a sub-eV sterile neutrino using Daya Bay’s full dataset”. In: (Apr. 2024). arXiv: 2404.01687 [hep-ex].
- [3] Brett Michael Viren. “A Search for the decay of protons to positron neutral pion and charged muon neutral pion”. PhD thesis. SUNY, Stony Brook, 2000.

### 4 NOT BV

This section inverts the selection from the previous section. `\printbibliography[notkeyword={bv},title={NOT BV}]`

### NOT BV

- [1] Chao Zhang, Xin Qian, and Muriel Fallot. “Reactor antineutrino flux and anomaly”. In: *Prog. Part. Nucl. Phys.* 136 (2024), p. 104106. DOI: 10.1016/j.pnpnp.2024.104106. arXiv: 2310.13070 [hep-ph].

### 5 BV - select

In this section `\nocite{*}` is not used and instead individual citations form the entries. This is as may be used in a CV to populate the “select publication” list.

```
\nocite{MicroBooNE:2024sec}
\nocite{DayaBay:2024nip}
\printbibliography
```

### References

- [1] P. Abratenko et al. “First double-differential cross section measurement of neutral-current  $\pi^0$  production in neutrino-argon scattering in the MicroBooNE detector”. In: (Apr. 2024). arXiv: 2404.10948 [hep-ex].
- [2] F. P. An et al. “Search for a sub-eV sterile neutrino using Daya Bay’s full dataset”. In: (Apr. 2024). arXiv: 2404.01687 [hep-ex].

## 6 EDG

This section illustrates selecting on one tag `edg` that was set by the `recibi` workflow that derives document identifiers from “official” EDG lists of publications and queries InspireHEP to transform the IDs to bib entries.

```
\printbibliography[keyword={edg},title={EDG}]
```

## EDG

- [1] F. P. An et al. “Search for a sub-eV sterile neutrino using Daya Bay’s full dataset”. In: (Apr. 2024). arXiv: 2404.01687 [hep-ex].
- [2] Chao Zhang, Xin Qian, and Muriel Fallot. “Reactor antineutrino flux and anomaly”. In: *Prog. Part. Nucl. Phys.* 136 (2024), p. 104106. DOI: 10.1016/j.pnpnp.2024.104106. arXiv: 2310.13070 [hep-ph].

## 7 NOT EDG

This section inverts the selection from the previous section. `\printbibliography[notkeyword={edg},title={NOT EDG}]`

## NOT EDG

- [1] P. Abratenko et al. “First double-differential cross section measurement of neutral-current  $\pi^0$  production in neutrino-argon scattering in the MicroBooNE detector”. In: (Apr. 2024). arXiv: 2404.10948 [hep-ex].
- [2] Brett Michael Viren. “A Search for the decay of protons to positron neutral pion and charged muon neutral pion”. PhD thesis. SUNY, Stony Brook, 2000.

## 8 BV AND EDG

The selection of this section is the logical AND of two tags.

```
\printbibliography[keyword={bv},keyword={edg},title={BV AND EDG}]
```

## BV AND EDG

- [1] F. P. An et al. “Search for a sub-eV sterile neutrino using Daya Bay’s full dataset”. In: (Apr. 2024). arXiv: 2404.01687 [hep-ex].

## 9 BV OR EDG

The selection of this section is the logical OR of two tags. `\printbibliography[filter=bvoredg,title={BV OR EDG}]`

## BV OR EDG

- [1] P. Abratenko et al. “First double-differential cross section measurement of neutral-current  $\pi^0$  production in neutrino-argon scattering in the MicroBooNE detector”. In: (Apr. 2024). arXiv: 2404.10948 [hep-ex].
- [2] F. P. An et al. “Search for a sub-eV sterile neutrino using Daya Bay’s full dataset”. In: (Apr. 2024). arXiv: 2404.01687 [hep-ex].

- [3] Brett Michael Viren. “A Search for the decay of protons to positron neutral pion and charged muon neutral pion”. PhD thesis. SUNY, Stony Brook, 2000.
- [4] Chao Zhang, Xin Qian, and Muriel Fallot. “Reactor antineutrino flux and anomaly”. In: *Prog. Part. Nucl. Phys.* 136 (2024), p. 104106. DOI: 10.1016/j.pnpnp.2024.104106. arXiv: 2310.13070 [hep-ph].

## 10 NEW

This section selects all entries with a `year` (strictly) less than 2019. `\printbibliography[check=new,title={NEW}]`

### NEW

- [1] P. Abratenko et al. “First double-differential cross section measurement of neutral-current  $\pi^0$  production in neutrino-argon scattering in the MicroBooNE detector”. In: (Apr. 2024). arXiv: 2404.10948 [hep-ex].
- [2] F. P. An et al. “Search for a sub-eV sterile neutrino using Daya Bay’s full dataset”. In: (Apr. 2024). arXiv: 2404.01687 [hep-ex].
- [3] Chao Zhang, Xin Qian, and Muriel Fallot. “Reactor antineutrino flux and anomaly”. In: *Prog. Part. Nucl. Phys.* 136 (2024), p. 104106. DOI: 10.1016/j.pnpnp.2024.104106. arXiv: 2310.13070 [hep-ph].

## 11 OLD

This section selects all entries with a `year` (strictly) greater than 2018. `\printbibliography[check=old,title={OLD}]`

### OLD

- [1] Brett Michael Viren. “A Search for the decay of protons to positron neutral pion and charged muon neutral pion”. PhD thesis. SUNY, Stony Brook, 2000.

## 12 Daya Bay

This section selects for entries with the tag `dayabay`.

This tag was added as part of the `recibi` workflow by transferring the content of a `collaboration` field to a member of the `keywords` set. In principle, a selection based directly on `collaboration`. However, this field is not visible in the default bibtex “data model” and a solution for adding it at the  $\text{\LaTeX}$  level could not be found. On the other hand, adding it via `recibi` workflow is trivial. This does however mean any curated entries need care in adding a correct collaboration tag to the `keywords` for them to participate in such selections.

`\printbibliography[keyword={dayabay},title={Daya Bay}]`

### Daya Bay

- [1] F. P. An et al. “Search for a sub-eV sterile neutrino using Daya Bay’s full dataset”. In: (Apr. 2024). arXiv: 2404.01687 [hep-ex].