

Package: posteriordb (via r-universe)

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alias_names	<i>Get all existing alias names from a posterior database</i>
-------------	---

Description

Get all existing alias names from a posterior database

Usage

```
alias_names(type, pdb = pdb_default())
```

Arguments

type	type of alias names. Cureently only posteriors.
pdb	a pdb object.

as.data.frame.pdb_posterior	<i>Coerce a [pdb_posterior] to a Data Frame</i>
-----------------------------	---

Description

Coerce a [pdb_posterior] to a Data Frame

Usage

```
## S3 method for class 'pdb_posterior'
as.data.frame(x, row.names = NULL, optional = FALSE, ...)

## S3 method for class 'pdb_posteriors'
as.data.frame(x, row.names = NULL, optional = FALSE, ...)
```

Arguments

x	a [pdb_posterior] object.
row.names	NULL or a character vector giving the row names for the data frame. Missing values are not allowed.
optional	Not used.
...	further arguments to as.data.frame for a list.

Details

The dataframe will consist of one row per keyword.

as.reference_posterior_draws.stanfit

Reference Posterior draws and summary statistics

Description

Reference Posterior draws and summary statistics

Usage

```
## S3 method for class 'stanfit'  
as.reference_posterior_draws(x, info, pdb = pdb_default(), ...)  
  
reference_posterior_draws(x, ...)  
  
as.reference_posterior_draws(x, ...)  
  
pdb_reference_posterior_draws(x, ...)  
  
as.pdb_reference_posterior_draws(x, ...)  
  
## S3 method for class 'character'  
reference_posterior_draws(x, pdb = pdb_default(), ...)  
  
## S3 method for class 'pdb_posterior'  
reference_posterior_draws(x, ...)  
  
## S3 method for class 'pdb_reference_posterior_info'  
reference_posterior_draws(x, pdb = pdb_default(), ...)  
  
## S3 method for class 'draws_list'  
as.reference_posterior_draws(x, info, ...)  
  
assert_reference_posterior_draws(x)
```

Arguments

x	a [posterior] object or a posterior name.
info	a [pdb_reference_posterior_info] object
pdb	a [pdb] object (if [x] is a posterior name)
...	further arguments supplied to specific methods.

Value

a [pdb_reference_posterior] object.

```
assert_checked_reference_posterior_draws
```

Assert that all checks of the reference posterior draws are true

Description

Assert that all checks of the reference posterior draws are true

Usage

```
assert_checked_reference_posterior_draws(x)

## S3 method for class 'pdb_reference_posterior_draws'
assert_checked_reference_posterior_draws(x)

## S3 method for class 'pdb_reference_posterior_info'
assert_checked_reference_posterior_draws(x)

assert_checked_summary_statistics_draws(x)

## S3 method for class 'pdb_reference_posterior_draws'
assert_checked_summary_statistics_draws(x)

## S3 method for class 'pdb_reference_posterior_summary_statistic'
assert_checked_summary_statistics_draws(x)

## S3 method for class 'pdb_reference_posterior_info'
assert_checked_summary_statistics_draws(x)
```

Arguments

x a [pdb_reference_posterior_draws] object

Details

This function asserts that the reference posterior draws comply with the criterias of the reference posterior draws.

See https://github.com/stan-dev/posteriordb/blob/master/doc/REFERENCE_POSTERIOR_DEFINITION.md for details.

bibliography	<i>Get the bibliography of a posterior database</i>
--------------	---

Description

Get the bibliography of a posterior database

Usage

```
bibliography(pdb, ...)
pdb_bibliography(pdb, ...)
```

Arguments

pdb	a posterior database connection
...	further arguments passed to [bibtex::read.bib]

check_pdb	<i>Check the content a posterior database</i>
-----------	---

Description

Check the content a posterior database

Usage

```
check_pdb(
  pdb,
  posterior_names_to_check = NULL,
  run_stan_code_checks = FALSE,
  verbose = TRUE
)

check_pdb_read_model_code(posterior_list)

check_pdb_aliases(pdb)

check_pdb_read_data(posterior_list)

check_pdb_read_reference_posterior_draws(posterior_list)

check_pdb_posterior_run_stan(po)

check_pdb_references(pdb)
```

```

check_pdb_posterior_references(posterior_list)

check_pdb_all_models_have_posterior(pdb)

check_pdb_all_data_have_posterior(pdb)

check_pdb_all_reference_posteriors_have_posterior(pdb)

```

Arguments

pdb a pdb object
posterior_names_to_check an vector indicating what posteriors to check in the pdb. Default is NULL (all).
run_stan_code_checks should checks using Stan be run?
verbose should check results be printed?
posterior_list a list of `pdb_posterior` objects.
po a `pdb_posterior` object.

Details

`[check_pdb()]` checks that the content exists as specified `[check_pdb_run_stan()]` test to run all posteriors with stan models. `[check_pdb_stan_syntax()]` check that all stan model code files can be parsed. `[check_pdb_aliases()]` check that all alias are correct. `[check_pdb_read_model_code()]` check that posteriors can be read. `[check_pdb_posteriors()]` check a vector of posterior names. `[check_pdb_references()]` check that all references in posteriors also exist in bibtex. `[check_pdb_all_models_have_posterior()]` check that all models belong to a posterior `[check_pdb_all_data_have_posterior()]` check that all datasets belong to a posterior `[check_pdb_all_reference_posteriors_have_posterior()]` check that all reference posteriors belong to a posterior

Value

a boolean indicating if the pdb works as it should.

check_pdb_posterior *Test a posterior*

Description

Test a posterior

Usage

```
check_pdb_posterior(po, run_stan_code_checks = TRUE, verbose = TRUE)
```

Arguments

po a [pdb_posterior] to check.
run_stan_code_checks should checks using Stan be run?
verbose should check results be printed?

Details

The function checks that a posterior is consistent.

check_reference_posterior_draws

Check that reference posterior draws follows the reference posterior draws definition.

Description

Check that reference posterior draws follows the reference posterior draws definition.

Usage

```
check_reference_posterior_draws(x, ...)

## S3 method for class 'character'
check_reference_posterior_draws(x, ...)

## S3 method for class 'pdb_posterior'
check_reference_posterior_draws(x, ...)

## S3 method for class 'pdb_reference_posterior_draws'
check_reference_posterior_draws(x, ...)
```

Arguments

x a posterior name, posterior object or reference_posterior_draws object
... currently not used.

```
check_summary_statistics_draws
    Check that reference posterior draws follows the reference posterior
    summary definition.
```

Description

Check that reference posterior draws follows the reference posterior summary definition.

Usage

```
check_summary_statistics_draws(x, ...)

## S3 method for class 'character'
check_summary_statistics_draws(x, ...)

## S3 method for class 'pdb_posterior'
check_summary_statistics_draws(x, ...)

## S3 method for class 'pdb_reference_posterior_draws'
check_summary_statistics_draws(x, ...)
```

Arguments

x	a posterior name, posterior object or reference_posterior_draws object
...	currently not used.

```
compute_reference_posterior_draws
    Compute a Reference Posteriors for a reference posterior info object
```

Description

Compute a Reference Posteriors for a reference posterior info object

Usage

```
compute_reference_posterior_draws(rpi, pdb = pdb_default())
```

Arguments

rpi	a [reference_posterior_info] object.
pdb	a [pdb] object.

```
compute_reference_posterior_draws_stan_sampling
```

Compute a Reference Posteriors using Rstan

Description

Compute a Reference Posteriors using Rstan

Usage

```
compute_reference_posterior_draws_stan_sampling(rpi, pdb)
```

Arguments

rpi a [reference_posterior_info] object.
pdb a [pdb] object.

```
compute_reference_posterior_summary_statistic
```

Compute Summary statistics from a reference posterior

Description

Compute Summary statistics from a reference posterior

Usage

```
compute_reference_posterior_summary_statistic(rpd, summary_statistic = "mean")  
compute_summary_statistic(rpd, summary_statistic = "mean")
```

Arguments

rpd a [reference_posterior_summary_statistic] object
summary_statistic
 summary statistic to compute

data_file_path	<i>Extract data for posterior</i>
----------------	-----------------------------------

Description

Extract data for posterior

Usage

```
data_file_path(x, ...)  
stan_data_file_path(x, ...)  
stan_data(x)
```

Arguments

x	an object to access file path to.
...	further arguments supplied to methods.

data_info	<i>Access data and model information</i>
-----------	--

Description

Access data and model information

Usage

```
data_info(x, ...)  
as.data_info(x, ...)  
  
## S3 method for class 'pdb_posterior'  
data_info(x, ...)  
  
## S3 method for class 'character'  
data_info(x, pdb = pdb_default(), ...)  
  
## S3 method for class 'list'  
as.data_info(x, pdb = NULL, ...)  
  
pdb_data_info(x, ...)  
as.pdb_data_info(x, ...)
```

```

model_info(x, ...)

as.model_info(x, ...)

pdb_model_info(x, ...)

as.pdb_model_info(x, ...)

## S3 method for class 'pdb_posterior'
model_info(x, ...)

## S3 method for class 'character'
model_info(x, pdb = pdb_default(), ...)

## S3 method for class 'list'
as.model_info(x, pdb = NULL, ...)

```

Arguments

x	a object to access information for.
...	further arguments to methods.
pdb	a pdb object.

data_names	<i>Get all existing data names from a posterior database</i>
------------	--

Description

Get all existing data names from a posterior database

Usage

```

data_names(pdb = pdb_default(), ...)

## S3 method for class 'pdb_local'
data_names(pdb = pdb_default(), ...)

## S3 method for class 'pdb_github'
data_names(pdb, ...)

## S3 method for class 'pdb_github'
model_names(pdb, ...)

## S3 method for class 'pdb_github'
reference_posterior_names(pdb, ...)

```

Arguments

`pdb` a `pdb` object.
`...` Further argument to methods.

`filter_posteriors` *Filter Posteriors in Database*

Description

Filter Posteriors in Database

Usage

```
filter_posteriors(pdb = pdb_default(), ...)
```

Arguments

`pdb` a `pdb` object.
`...` further arguments to supply to `dplyr::filter()`

Details

Filter posteriors in the database and return list of posteriors/models/data to work with as a list.

The function is built upon the `dplyr` filter function and follows the exact same syntax. All elements in the `'posteriors/[posterior_name].json'`, `'models/info/[model_name].json'` and `'data/info/[data_name].json'` can be used to filter the posterior database. See examples below.

`framework` *Identify the framework for a given [model_code]*

Description

Identify the framework for a given `[model_code]`

Usage

```

framework(x)

## S3 method for class 'pdb_model_code'
framework(x)

framework(x) <- value

## S3 replacement method for class 'character'
```

```
framework(x) <- value

## S3 replacement method for class 'pdb_model_code'
framework(x) <- value
```

Arguments

x a [pdb_model_code] object.
value a supported framework.

get_data	<i>Posterior Data Sets</i>
----------	----------------------------

Description

Posterior Data Sets

Usage

```
get_data(x, ...)  
as.pdb_data(x, ...)  
  
## S3 method for class 'pdb_posterior'  
get_data(x, ...)  
  
## S3 method for class 'character'  
get_data(x, pdb = pdb_default(), ...)  
  
## S3 method for class 'pdb_data_info'  
get_data(x, pdb = pdb_default(), ...)  
  
## S3 method for class 'list'  
as.pdb_data(x, info, ...)  
  
pdb_data(x, ...)
```

Arguments

x an object to access data from.
... Currently not used.
pdb a pdb object.
info a pdb_data_info object.

github_pat	<i>Retrieve Github personal access token.</i>
------------	---

Description

A github personal access token Looks in env var ‘GITHUB_PAT‘

Usage

```
github_pat(pdb = NULL)
```

Arguments

pdb	A posterior database object to extract pat from.
-----	--

handle_aliases	<i>Return the name that the alias points to</i>
----------------	---

Description

Return the name that the alias points to

Usage

```
handle_aliases(x, type, pdb)
```

Arguments

x	a name to lookup in alias list
type	type of alias names. Cureently only posteriors.
pdb	a pdb object.

info	<i>Extract information from a pdb object</i>
------	--

Description

Extract information from a pdb object

Usage

```
info(x)
```

Arguments

x	a [pdb_data], [pdb_model_code] and [pdb_reference_posterior]
info	a [pdb_]

info<- *Set information to a pdb object*

Description

Set information to a pdb object

Usage

```
info(x) <- value
```

Arguments

x a [pdb_data], [pdb_model_code] and [pdb_reference_posterior]
 value an info object

model_code *Extract and construct model code objects*

Description

Extract and construct model code objects

Usage

```
model_code(x, ...)

as.model_code(x, info, ...)

## S3 method for class 'pdb_posterior'
model_code(x, framework, ...)

## S3 method for class 'character'
model_code(x, framework, pdb = pdb_default(), ...)

## S3 method for class 'pdb_model_info'
model_code(x, framework, pdb = pdb_default(), ...)

## S3 method for class 'stanmodel'
as.model_code(x, info, ...)

## S3 method for class 'character'
as.model_code(x, info, framework, ...)

pdb_model_code(x, ...)
```



```

as.pdb_model_code(x, info, ...)

model_code_file_path(x, ...)

## S3 method for class 'pdb_posterior'
model_code_file_path(x, framework, ...)

## S3 method for class 'pdb_model_info'
model_code_file_path(x, framework, pdb = pdb_default(), ...)

## S3 method for class 'character'
model_code_file_path(x, framework, pdb = pdb_default(), ...)

stan_code_file_path(x)

stan_code(x, ...)

as.stan_code(x, info, ...)

pdb_stan_code(x, ...)

```

Arguments

x	an object to access file path to.
...	further arguments supplied to methods.
info	a <code>pdb_model_info</code> object.
framework	model code framework (e.g. <code>stan</code>).
pdb	a <code>pdb</code> object.

See Also

`framework()`

model_names

Get all existing model names from a posterior database

Description

Get all existing model names from a posterior database

Usage

```

model_names(pdb = pdb_default(), ...)

## S3 method for class 'pdb_local'
model_names(pdb = pdb_default(), ...)

```

Arguments

pdb a pdb object.
... Further argument to methods.

pdb<- *Set pdb slot*

Description

Set pdb slot

Usage

pdb(x) <- value

Arguments

x a [pdb_data], [pdb_model_code] and [pdb_reference_posterior]
value a pdb object

pdb_aliases *Extract aliases list from posterior database*

Description

Extract aliases list from posterior database

Usage

pdb_aliases(type, pdb)

Arguments

type type of alias names. Cureently only posteriors.
pdb a pdb object.

`pdb_assert_file_exist` *Assert that a file exists*

Description

Assert that a file exists

Usage

```
pdb_assert_file_exist(pdb, path, ...)
```

```
## S3 method for class 'pdb_local'  
pdb_assert_file_exist(pdb, path, ...)
```

Arguments

<code>pdb</code>	a pdb object.
<code>path</code>	a pdb path.
<code>...</code>	further arguments supplied to methods.

`pdb_cached_local_file_path`
Read json file from path

Description

Read json file from path

Usage

```
pdb_cached_local_file_path(pdb, path, unzip = FALSE)
```

Arguments

<code>pdb</code>	a pdb to read from.
<code>path</code>	a pdb to read from.
<code>unzip</code>	if true, path is zipped and should be unzipped to cache.

Details

Copies the file to the cache and return path

pdb_cache_path	<i>Returns a writable cache path for a pdb and a path It will create the directory if it does not exist.</i>
----------------	--

Description

Returns a writable cache path for a pdb and a path It will create the directory if it does not exist.

Usage

```
pdb_cache_path(pdb, path)
```

Arguments

pdb	a pdb object.
path	a pdb path.

pdb_cache_rm	<i>Remove object from cache</i>
--------------	---------------------------------

Description

Remove object from cache

Usage

```

pdb_cache_rm(x, ...)

## S3 method for class 'pdb_reference_posterior_draws'
pdb_cache_rm(x, ...)

## S3 method for class 'pdb_data'
pdb_cache_rm(x, ...)
```

Arguments

x	an object to remove from cache
...	Currently not in use.

`pdb_compare_stan_models`

Compare two stan models for the same data

Description

Compare two stan models for the same data

Usage

```
pdb_compare_stan_models(po, new_stan_model_code_file, upar_values = NULL)
```

Arguments

<code>po</code>	a 'pdb_posterior' object
<code>new_stan_model_code_file</code>	a file path to another stan code to compare with
<code>upar_values</code>	a list of values on the constrained space to use for comparisons. Defaults to 100 samples from a standard normal.

`pdb_file_copy`

Copy a file from a pdb to a local path

Description

Copy a file from a pdb to a local path

Usage

```
pdb_file_copy(pdb, from, to, overwrite = FALSE, ...)
```

```
## S3 method for class 'pdb_local'
pdb_file_copy(pdb, from, to, overwrite = FALSE, ...)
```

```
## S3 method for class 'pdb_github'
pdb_file_copy(pdb, from, to, overwrite = FALSE, ...)
```

Arguments

<code>pdb</code>	a pdb connection.
<code>from</code>	a path in the pdb
<code>to</code>	a local file path
<code>overwrite</code>	overwrite local file.
<code>...</code>	further argument supplied to methods

Value

a boolean indicator as file.copy indicating success.

pdb_local	<i>Create a Posterior Database (pdb) connection</i>
-----------	---

Description

Create a Posterior Database (pdb) connection

Usage

```

pdb_local(
  path = getOption("pdb_path", Sys.getenv("PDB_PATH")),
  cache_path = tempdir()
)

pdb(x, ...)

## Default S3 method:
pdb(x, ...)

## S3 method for class 'pdb_model_code'
pdb(x, ...)

## S3 method for class 'character'
pdb(x, pdb_type = "local", cache_path = tempdir(), ...)

pdb_default(cache_path = tempdir())

pdb_config(directory = getwd())

pdb_github(
  repo = getOption("pdb_repo", "stan-dev/posteriorodb"),
  cache_path = tempdir(),
  ref = "master",
  subdir = NULL,
  auth_token = github_pat(),
  host = "https://api.github.com"
)

```

Arguments

path	a local path to a posterior database. Defaults to ‘pdb_path’ option or PDB_PATH environment variable.
cache_path	The path to the pdb cache. Default is R temporary directory. This is used to store files locally and without affecting the database.

x	an object to access a pdb for, if character this is how to identify the pdb (path for local pdb, repo for github pdb)
...	further arguments for specific methods to setup a pdb.
pdb_type	Type of posterior database connection. Either <code>local</code> or <code>github</code> .
directory	the directory to look for the <code>.[pdb_config.yml]</code> file
repo	Repository address in the format <code>'username/repo[/subdir][@ref#pull]'</code> . Alternatively, you can specify <code>'subdir'</code> and/or <code>'ref'</code> using the respective parameters (see below); if both is specified, the values in <code>'repo'</code> take precedence.
ref	Desired git reference. Could be a commit, tag, or branch name. Defaults to <code>"master"</code> .
subdir	subdirectory within repo that contains the posterior database.
auth_token	To use a private repo, generate a personal access token (PAT) in <code>"https://github.com/settings/tokens"</code> and supply to this argument. This is safer than using a password because you can easily delete a PAT without affecting any others. Defaults to the <code>'GITHUB_PAT'</code> environment variable.
host	GitHub API host to use. Override with your GitHub enterprise hostname, for example, <code>"github.hostname.com/api/v3"</code> .

Details

Connect to a posterior database locally or in a github repo.

`[pdb_config()]` read `.[pdb_config.yml]` in `[directory]` and use that to setup a pdb connection.

The connection `[pdb_default()]` first checks if there exists a `.[pdb_config.yml]` file in the working directory. If it exist, `[pdb_config()]` is used to setup, the connection. If no `.[pdb_config.yml]` file is found, `[pdb_local()]` is used to setup a pdb. If no local pdb is found, `[pdb_github()]` is used.

Value

a pdb object

`pdb_stan_sampling_versions`

Extract relevant stan versions

Description

Extract relevant stan versions

Usage

`pdb_stan_sampling_versions()`

pdb_version *Get version of the pdb*

Description

Get version of the pdb

Usage

```

pdb_version(pdb, ...)

## S3 method for class 'pdb_local'
pdb_version(pdb, ...)

## S3 method for class 'pdb_github'
pdb_version(pdb, ...)

```

Arguments

pdb a pdb object to return version for.
... Further argument to methods.

Value

the git sha for the posterior database.

posterior *Access a posterior in the posterior database*

Description

Access a posterior in the posterior database

Usage

```

posterior(x, pdb = pdb_default(), ...)

as.posterior(x, pdb = pdb_default(), ...)

## S3 method for class 'character'
posterior(x, pdb = pdb_default(), ...)

## S3 method for class 'list'
as.posterior(x, pdb = pdb_default(), ...)

```



```
pdb_posterior(x, pdb = pdb_default(), ...)
```

```
as.pdb_posterior(x, pdb = pdb_default(), ...)
```

Arguments

x	a posterior name that exist in the posterior database or a list used to construct a posterior object.
pdb	a pdb posterior database object.
...	currently not in use.

Details

To setup a posterior object from a list, a minimum och a ‘pdb_model‘, ‘pdb_data‘, and a ‘dimension‘ element need to be included. See ‘posterior("eight_schools")\$dimensions‘ for an example.

posterior_s_tbl_df *Create Posterior Database tibbles*

Description

Create Posterior Database tibbles

Usage

```
posteriors_tbl_df(pdb = pdb_default(), ...)
```

Arguments

pdb	a pdb object.
...	further arguments to supply to <code>dplyr::filter()</code>

Details

Generates a tibble data frame of all posteriors in the database and their side information

posterior_dimension_names

Construct dimension names from a posterior dimension list

Description

Construct dimension names from a posterior dimension list

Usage

```
posterior_dimension_names(x)
```

Arguments

x a dimensions slot from a [pdb_posterior]

posterior_names

Get all existing posterior names from a posterior database or posterior objects.

Description

Get all existing posterior names from a posterior database or posterior objects.

Usage

```
posterior_names(x = pdb_default(), ...)
```

```
posterior_name(x = pdb_default(), ...)
```

Arguments

x a pdb, pdb_model_code, pdb_data, posterior object or a list of posterior objects.

... further arguments supplied to specific methods (not in use)

Details

If a `pdb_model_code` or a `pdb_data` object is supplied, the function returns the name of all posteriors that uses the data or the model.

read_json_from_pdb *Read JSON objects from the posterior database*

Description

Read JSON objects from the posterior database

Usage

```
read_json_from_pdb(fn, path, pdb, ...)
```

Arguments

fn	file name
path	path to file name in pdb
pdb	a [pdb] object
...	further arguments supplied to [jsonlite::read_json()]

reference_posterior_draws_file_path
Extract data for posterior

Description

Extract data for posterior

Usage

```
reference_posterior_draws_file_path(x, ...)
```

```
## S3 method for class 'pdb_posterior'
```

```
reference_posterior_draws_file_path(x, ...)
```

```
## S3 method for class 'character'
```

```
reference_posterior_draws_file_path(x, pdb = pdb_default(), ...)
```

```
## S3 method for class 'pdb_reference_posterior_info'
```

```
reference_posterior_draws_file_path(x, pdb = pdb_default(), ...)
```

Arguments

x	an object to access file path to.
...	further arguments supplied to methods.
pdb	a pdb object.

reference_posterior_info

Reference posterior information

Description

Reference posterior information

Usage

```
reference_posterior_info(x, type, pdb = pdb_default(), ...)  
as.reference_posterior_info(x, type, pdb = pdb_default(), ...)  
pdb_reference_posterior_info(x, type, pdb = pdb_default(), ...)  
as.pdb_reference_posterior_info(x, type, pdb = pdb_default(), ...)  
reference_posterior_draws_info(x, pdb = pdb_default(), ...)  
pdb_reference_posterior_draws_info(x, pdb = pdb_default(), ...)  
  
## S3 method for class 'pdb_posterior'  
reference_posterior_info(x, type, ...)  
  
## S3 method for class 'character'  
reference_posterior_info(x, type, pdb = pdb_default(), ...)  
  
## S3 method for class 'list'  
as.reference_posterior_info(x, type = NULL, pdb = NULL, ...)
```

Arguments

x	a posterior object to access the reference posterior for.
type	Type of reference posterior [draws] or [summary_statistic].
pdb	a pdb posterior database connection.
...	Currently not used.

Details

Reference posterior information on how, when and by whom the reference posterior was computed.

See Also

reference_posterior_draws

`reference_posterior_names`*Get all existing reference posterior names from a posterior database*

Description

Get all existing reference posterior names from a posterior database

Usage

```
reference_posterior_names(pdb = pdb_default(), type, ...)
```

```
## S3 method for class 'pdb_local'
```

```
reference_posterior_names(pdb = pdb_default(), type, ...)
```

Arguments

<code>pdb</code>	a <code>pdb</code> object.
<code>type</code>	supported reference posterior types.
<code>...</code>	Further argument to methods.

`reference_posterior_summary_statistic`*Reference posterior summary statistics*

Description

Reference posterior summary statistics

Usage

```
reference_posterior_summary_statistic(x, ...)
```

```
pdb_reference_posterior_summary_statistic(x, ...)
```

```
## S3 method for class 'character'
```

```
reference_posterior_summary_statistic(x, pdb = pdb_default(), type, ...)
```

```
## S3 method for class 'pdb_posterior'
```

```
reference_posterior_summary_statistic(x, type, ...)
```

```
## S3 method for class 'pdb_reference_posterior_info'
```

```
reference_posterior_summary_statistic(x, pdb = pdb_default(), type, ...)
```

```
## S3 method for class 'list'
reference_posterior_summary_statistic(x, info, type, ...)

reference_posterior_summary_statistics(x, ...)

pdb_reference_posterior_summary_statistics(x, ...)

## S3 method for class 'character'
reference_posterior_summary_statistics(x, pdb = pdb_default(), ...)

## S3 method for class 'pdb_posterior'
reference_posterior_summary_statistics(x, ...)
```

Arguments

x	a [posterior] object or a posterior name.
...	further arguments supplied to specific methods.
pdb	a [pdb] object (if [x] is a posterior name)
type	the type of summary statistic to extract
info	a [pdb_reference_posterior_info] object

Value

a [pdb_reference_posterior_summary_statistic] object.

remove_pdb	<i>Remove objects from local pdb</i>
------------	--------------------------------------

Description

a function to simplify removing object from a local pdb.

Usage

```
remove_pdb(x, pdb, ...)

## S3 method for class 'character'
remove_pdb(x, pdb, ...)

## S3 method for class 'pdb_data'
remove_pdb(x, pdb, remove_info = TRUE, ...)

## S3 method for class 'pdb_data_info'
remove_pdb(x, pdb, ...)

## S3 method for class 'pdb_model_code'
```

```

remove_pdb(x, pdb, remove_info = TRUE, ...)

## S3 method for class 'pdb_model_info'
remove_pdb(x, pdb, ...)

## S3 method for class 'pdb_posterior'
remove_pdb(x, pdb, ...)

## S3 method for class 'pdb_reference_posterior_draws'
remove_pdb(x, pdb, remove_info = TRUE, ...)

## S3 method for class 'pdb_reference_posterior_info'
remove_pdb(x, pdb, type, ...)

## S3 method for class 'pdb_reference_posterior_summary_statistic'
remove_pdb(x, pdb, remove_info = TRUE, ...)

```

Arguments

x	an object to remove to the pdb.
pdb	the pdb to remove from. Currently only a local pdb.
...	further arguments supplied to methods.
remove_info	should the information JSON be removed as well?
type	supported reference posterior types.

rename_pdb	<i>Rename a pdb object</i>
------------	----------------------------

Description

Rename a pdb object

Usage

```

rename_pdb(x, new_name, ...)

## S3 method for class 'pdb_data'
rename_pdb(x, new_name, ...)

## S3 method for class 'pdb_posterior'
rename_pdb(x, new_name, ...)

```

Arguments

x	an object to rename
new_name	the new name of the object
...	further arguments (not in use)

run_stan	<i>Run Stan on a posterior</i>
----------	--------------------------------

Description

Run Stan on a posterior

Usage

```
run_stan(x, stan_args, ...)

## S3 method for class 'pdb_posterior'
run_stan(x, stan_args, ...)
```

Arguments

x	a [pdb_posterior] object.
stan_args	Arguments supplied to [rstan::stan] to compute the posterior
...	currently not in use.

subset.pdb_reference_posterior_draws	<i>Subset a [pdb_reference_posterior_draws] object</i>
--------------------------------------	--

Description

Subset a [pdb_reference_posterior_draws] object

Usage

```
## S3 method for class 'pdb_reference_posterior_draws'
subset(x, variable, ...)
```

Arguments

x	a [pdb_reference_posterior_draws] to subset
variable	parameter names to subset.
...	Further arguments (not used).

`summary_statistic_type`*Extract the type of summary statistic*

Description

Extract the type of summary statistic

Usage

```
summary_statistic_type(x)
```

Arguments

x a [pdb_reference_posterior_summary_statistic]

`thin_draws.pdb_reference_posterior_draws`*Thin draws to reduce their size and autocorrelation of the chains.*

Description

Thin [pdb_reference_posterior_draws] objects to reduce their size and autocorrelation of the chains.

Usage

```
thin_draws.pdb_reference_posterior_draws(x, thin, ...)
```

Arguments

x An R object for which the methods are defined.
thin A positive integer specifying the period for selecting draws.
... Arguments passed to individual methods (if applicable).

Value

A thinned [pdb_reference_posterior_draws] object.

`write_pdb`*Write objects to pdb*

Description

a function to simplify writing to a local pdb.

Usage

```
write_pdb(x, pdb, overwrite = FALSE, ...)  
  
## S3 method for class 'pdb_reference_posterior_info'  
write_pdb(x, pdb, overwrite = FALSE, type, ...)  
  
## S3 method for class 'pdb_reference_posterior_draws'  
write_pdb(x, pdb, overwrite = FALSE, ...)  
  
## S3 method for class 'pdb_reference_posterior_summary_statistic'  
write_pdb(x, pdb, overwrite = FALSE, ...)  
  
## S3 method for class 'pdb_data'  
write_pdb(x, pdb, overwrite = FALSE, ...)  
  
## S3 method for class 'pdb_data_info'  
write_pdb(x, pdb, overwrite = FALSE, ...)  
  
## S3 method for class 'stanmodel'  
write_pdb(x, pdb, overwrite = FALSE, ...)  
  
## S3 method for class 'pdb_model_code'  
write_pdb(x, pdb, overwrite = FALSE, ...)  
  
## S3 method for class 'pdb_model_info'  
write_pdb(x, pdb, overwrite = FALSE, ...)  
  
## S3 method for class 'pdb_posterior'  
write_pdb(x, pdb, overwrite = FALSE, ...)
```

Arguments

<code>x</code>	an object to write to the pdb.
<code>pdb</code>	the pdb to write to. Currently only a local pdb.
<code>overwrite</code>	overwrite existing file?
<code>...</code>	further arguments supplied to methods.
<code>type</code>	supported reference posterior types.

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