
F_UNCLE Documentation

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DOCUMENTATION

The FUNCLE module

Functional UNCertainty Constrained by Law and Experiment

1.1 pyStruc

class `FUNCLE.utils.pyStruc.Struc` (*name*, *def_opts=None*, *informs=None*, *warns=None*, **args*, ***kwargs*)

Abstract object to contain properties and warnings

name

str – The name of the object

def_opts

dict – Default options and bounds

informs

dict – Important user information prompts

warns

dict – Optional warnings

options

dict – The options as set by the user

get_inform (*err_id*)

Returns an inform corresponding to the error code

Parameters *err_id* (*int*) – Error ID number

Returns String containing the error message

Return type (*str*)

get_option (*name*)

Returns the option corresponding the the given name

Parameters *name* (*str*) – Name of the option

Returns Value of the option corresponding to ‘name’

get_warn (*warn_id*)

Returns an inform corresponding to the warning code

Parameters *warn_id* (*int*) – Warning ID number

Returns String containing the warning message

Return type (str)

plot()

Returns a plot of the object

set_option(name, value)

Sets the option corresponding to the given name to a specified value.

Enforces the following checks

- 1.name is valid
- 2.value is of correct type
- 3.value is within bounds
- 4.**Not Implemented** value has correct units

Parameters

- **name** (str) – Name of the option to set
- **value** – Value of the option to set

Returns None

write_to_file()

Writes the object to a file

1.2 pyContainer

class FUNCLE.utils.pyContainer.**Container**(name, def_opts=None, informs=None, warns=None, *args, **kwargs)

An abstract iterable container object

_contents

dict – An integer keyed list. Do not access this list directly use the iterable functions

Note: The container does not fill in the gaps when an object is delete, i. e. if the container contained indices 1,2 and 3 and index 2 was deleted, the object would then contain index 1 and 3. If an object were then ap- pended to the list it would have index 4.

append(value)

Appends the data to the end of contents

clear()

Deletes all the container contents

1.3 pylsentrope

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