Class to describe/define dimensions of sets.

Dimension

C_BASE_SET_R

C_BASE_SET_N

C_BASE_SET_Z

C_BASE_SET_DO

_id

_name_short

_base_set

_name_long

_name_latex

_unit

_unit_latex

_boundaries

_description

__init__(p_id,
p_name_short,
p_base_set=C_BASE_SET_R,
p_name_long='',
p_name_latex='',
p_unit='',
p_unit_latex='',
p_boundaries=[],
p_description='')

get_id()

get_name_short()

get_base_set()

get_name_long()

get_name_latex()

get_unit()

get_unit_latex()

get_boundaries()

get_description()

Multivariate Set

Set

_dim_list

_dim_ids

__init__()

add_dim(p_dim:Dimension)

get_dim(p_id)

get_num_dim()

get_dim_ids()

spawn()

Objects of this type can be stored as components of an element.

Correlates to Dimension base set type C_BASE_SET_DO

DataObject

_data

_meta_data

__init__(p_data, *p_meta_data)

get_data()

get_meta_data()

Template for a multivariate metric space

MSpace(Set)

distance(p_e1, p_e2)

Element

_set

_values:numpy.array

__init__(p_set)

get_related_set()

get_dim_ids()

get_values()

set_values()

get_value(p_dim_id)

set_value(p_dim_id, p_value)

Multivariate Euclidian space

ESpace(MSpace)

distance(p_p1, p_p2)

Template for Bi-Multivariate mathematical functions

Function

_input_space:MSpace

_output_space:MSpace

__init__(p_input_space:MSpace,
p_output_space:MSpace,
p_output_elem_cls=Element)

map(p_input:Element): Element

_map(p_input:Element,
p_output:Element)

ElementList

_elem_list

_elem_ids

__init__()

add_elem(p_id, p_elem:Element)

get_elem_ids()

get_elem(p_id)

Legend:

In progress

In validation

Ready to use

Depends on

Inherits from

attribute / method() — New public attribute/method to be implemented

attribute / method() — New/inherited public attribute/method that is implemented here

_attribute / _method() — New protected method/attribute to be implemented

_attribute / _method() — New/inherited protected Method that is implemented here