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Particle(bpy_struct)

base class — [bpy_struct](#)

class bpy.types.Particle(bpy_struct)

Particle in a particle system

alive_state

TYPE:

enum in ['DEAD', 'UNBORN', 'ALIVE', 'DYING'], default 'DEAD'

angular_velocity

TYPE:

[mathutils.Vector](#) of 3 items in [-inf, inf], default (0.0, 0.0, 0.0)

birth_time

TYPE:

float in [-inf, inf], default 0.0

die_time

TYPE:

float in [-inf, inf], default 0.0

hair_keys

TYPE:

[bpy_prop_collection](#) of [ParticleHairKey](#), (readonly)

is_exist

TYPE:

boolean, default False, (readonly)

is_visible

TYPE:

boolean, default False, (readonly)

lifetime

TYPE:

float in [-inf, inf], default 0.0

location

TYPE:

[mathutils.Vector](#) of 3 items in [-inf, inf], default (0.0, 0.0, 0.0)

particle_keys

TYPE:

[bpy_prop_collection](#) of [ParticleKey](#), (readonly)

prev_angular_velocity

TYPE:

[mathutils.Vector](#) of 3 items in [-inf, inf], default (0.0, 0.0, 0.0)

prev_location

TYPE:

`mathutils.Vector` of 3 items in $[-\infty, \infty]$, default (0.0, 0.0, 0.0)

prev_rotation**TYPE:**

`mathutils.Quaternion` rotation of 4 items in $[-\infty, \infty]$, default (0.0, 0.0, 0.0, 0.0)

prev_velocity**TYPE:**

`mathutils.Vector` of 3 items in $[-\infty, \infty]$, default (0.0, 0.0, 0.0)

rotation**TYPE:**

`mathutils.Quaternion` rotation of 4 items in $[-\infty, \infty]$, default (0.0, 0.0, 0.0, 0.0)

size**TYPE:**

float in $[-\infty, \infty]$, default 0.0

velocity**TYPE:**

`mathutils.Vector` of 3 items in $[-\infty, \infty]$, default (0.0, 0.0, 0.0)

uv_on_emitter(modifier)

Obtain UV coordinates for a particle on an evaluated mesh.

PARAMETERS:

modifier (`ParticleSystemModifier`, (never None)) – Particle modifier from an evaluated object

RETURNS:

uv

RETURN TYPE:

`mathutils.Vector` of 2 items in $[-\infty, \infty]$

classmethod bl_ma_get_subclass(id, default=None)**PARAMETERS:**

id (*str*) – The RNA type identifier.

RETURNS:

The RNA type or default when not found.

RETURN TYPE:

`bpy.types.Struct` subclass

classmethod bl_ma_get_subclass_py(id, default=None)**PARAMETERS:**

id (*str*) – The RNA type identifier.

RETURNS:

The class or default when not found.

RETURN TYPE:

type

Inherited Properties

- `bpy_struct.id_data`

Inherited Functions

- | | |
|---|--|
| • <code>bpy_struct.as_pointer</code> | • <code>bpy_struct.items</code> |
| • <code>bpy_struct.driver_add</code> | • <code>bpy_struct.keyframe_delete</code> |
| • <code>bpy_struct.driver_remove</code> | • <code>bpy_struct.keyframe_insert</code> |
| • <code>bpy_struct.get</code> | • <code>bpy_struct.keys</code> |
| • <code>bpy_struct.id_properties_clear</code> | • <code>bpy_struct.path_from_id</code> |
| • <code>bpy_struct.id_properties_ensure</code> | • <code>bpy_struct.path_resolve</code> |
| • <code>bpy_struct.id_properties_ui</code> | • <code>bpy_struct.pop</code> |
| • <code>bpy_struct.is_property_hidden</code> | • <code>bpy_struct.property_overridable_library_set</code> |
| • <code>bpy_struct.is_property_overridable_library</code> | • <code>bpy_struct.property_unset</code> |
| • <code>bpy_struct.is_property_readonly</code> | • <code>bpy_struct.type_recast</code> |
| • <code>bpy_struct.is_property_set</code> | • <code>bpy_struct.values</code> |

References

- | | |
|---|---|
| • <code>ParticleHairKey.co_object</code> | • <code>ParticleSystem.particles</code> |
| • <code>ParticleHairKey.co_object_set</code> | • <code>ParticleSystem.uv_on_emitter</code> |
| • <code>ParticleSystem.mcol_on_emitter</code> | |