

NAME

codata_constant_type – derived type

LIBRARY

Codata library (*libcodata*, *-lcodata*)

SYNOPSIS

Fortran **type(codata_constant_type) :: c**

C **struct codata_constant_type c**

DESCRIPTION

Defines a constant with *the name, the value, the uncertainty and the unit*.

type :: codata_constant_type

character(len=64) :: name

real(dp) :: value

real(dp) :: uncertainty

character(len=32) :: unit

contains

procedure :: print

procedure :: to_real_sp

procedure :: to_real_dp

generic :: to_real => to_real_sp, to_real_dp

end type codata_constant_type

struct codata_constant_type{

char name[65];

double value;

double uncertainty;

char unit[33];

};

EXAMPLE

Fortran:

```
use codata
type(codata_constant_type), pointer :: c
c = SPEED_OF_LIGHT_IN_VACUUM
```

C:

```
include "codata.h"
struct codata_constant_type c;
c = SPEED_OF_LIGHT_IN_VACUUM;
```

SEE ALSO

codata(3), **codata_cli**(1), **codata_version**(3), **codata_constant_type**(3)