## **CMono** Properties c:CColor mass:double type:unsign... Operations CMono (mol... CMono (p:C... CMono () CMono (a:do... CMono (nam... draw () getCol () getMass () getType () setCol (col:C... setCol (r:con... setMass (m:... -CMono ()

## CDi Properties c:CColor mass:double <u>type:unsign...</u> Operations CDi (a:doubl... CDi (p:CDi) CDi ()\_ CDi (p:CVect... CDi (mol:CPart) CDi (name:U... draw () getCol () getMass () getType () setCol (col:C... setCol (r:con... setMass (m:...

# CTri Properties c:CColor mass:double type:unsign... Operations CTri (p:CTri) CTri () CTri (mol:CP... CTri (p:CVec... CTri (name:... CTri (a:doub... draw () getCol() getMass () getType () setCol (col:C... setCol (r:con... setMass (m:...

Properties c:CColor draworb:bool drawpart:bool h:CHazard n:Unknown orb:COrbit p:CVector3D v:CVector3D ▼ Operations CPart (name... CPart (mol:C... CPart () CPart (p:CVe... CPart (a:dou... draw () getCol() getDraw () getDraworb () getMass () getName () getOrb () getPos () getType () getVel () operator <<... setCol (c:CC... setCol (r:con... setDraw (act... setDraworb ... setMass (m:... setName (str... setPos (r:CV... setPos (x:do... setVel (x:do... setVel (v:CV... updateorb () updatep (dt:... updatepX (la... updatepX0 () updatepY (h... undatanVA A

**CPart** 

#### CVector3D

- Properties x:double v:double z:double
- Operations CVector3D (... CVector3D ()
- CVector3D (...
- getCoords (x...
- getNorm ()
- getX ()
- getY ()
- getZ ()
- normalize ()
- norme ()
- nullify ()
- operator != (...
- operator \* (d...
- operator \* (d...
- operator \*= ...
- operator + (...
- operator +=...
- operator (\_...
- operator (v...
- operator -= ... operator / (d...
- operator /= ...
- operator <<...
- operator ==...
- operator ^ (v...
- operator  $\wedge = \dots$
- operator | (v...
- setCoords (x...
- setX (x:double)
- setY (y:double)
- setZ (z:double)
- ~CVector3D ()

## CHazard

- Properties
- ▼ Operations CHazard () gauss (moye...

unif (a:doub...

~CHazard ()

#### COrbit

- Properties c:CColor maxPoints:u... p:CVector3D
- ▼ Operations COrbit () clear () draw (c:CColor) operator <<... resize (i:uns...
- setMaxpoint...

update (p:C...

~COrbit ()

## **CColor**

- Properties alpha:double blue:double green:double red:double
- ▼ Operations CColor (c:CC...
- CColor ()
- CColor (r:co...
- getAlpha () getBlue ()
- getGreen ()
- getRed ()
- operator + (...
- operator +=...
- operator (... operator <<...
- setAlpha (i:c...
- setBlue (i:co...

#### CEnceinte

▼ Properties c:CColor h:double l:double max:int p:double

▼ Operations
CEnceinte ()
CEnceinte (h...
getCol ()
getH ()
getL ()
getMax ()
getP ()
operator <<...
setCol (r:do...
setH (hauteu...
setL (largeur...
setP (prof:d...
~CEnceinte ()

# CDrawable

► Properties
▼ Operations
CDrawable ()
draw ()

~CDrawable ()

### CSystem

▼ Properties colorset:uns... e:CEnceinte epsilon:double h:CHazard maxPoints:int t:double

▼ Operations CSystem () CSystem (h:... CSystem (s:... addorb (typ... addpart (mo... addpart (typ... addpart () clear () draw () getEcin () getEnceinte () getList () getPart (i:int) init () lessorb (typ... operator <<... operator = (...rm (type:uns... rmAll (type:... save () setAll (active... setAllbut (ac... setColorset () setEnceinte (... setEpsilon (e... setMaxpoint... setTemp (t:d... typecheck () update (dt:d...

~CSystem ()

#### Camera

▼ Properties
angle1:double
angle2:double
position:CVector3D

riding:int step:double

▼ Operations

Camera ()

Camera (cam:Camera)

Camera (position:CVector3D)

getAngle1 ()

getAngle2 ()

getPosition ()

getRiding ()

getVertical ()

moveLR (i:int)

moveUD (i:int)

operator << (ostream:Unknown)

operator = (cam:Camera)

save (ofstream:Unknown)

setAngle1 (angle1:const double)

setAngle2 (angle2:const double)

setAngles (angle1:const double, angle...

setPosition (position:CVector3D)

setRiding (riding:const int)
setStep (step:const double)

zoom (i:int)

~Camera ()

#### GUI

Properties

a\_dessiner:CSystem

alpha:double

beta:double

fullscreen:bool

leftMouse:bool

ma\_camera:Camera

ma\_fenetre:int

mouse\_ancienne\_x:int

mouse\_ancienne\_y:int

mouse\_x:int

mouse\_y:int

ratio:double

ridingpart:bool

temps:unsigned int

timer\_on:bool

type:unsigned int

▼ Operations

GUI (argc:int, argv:char [] \*, a\_d...

clavier\_special (touche:int, mou...

demarre ()

draw ()

getCamera ()

getSystem ()

getTemps ()

getTimer\_on ()

idle (\_UnnamedParametervoid1...

keyboard (\_UnnamedParameter...

menu ()

mouse\_clic (bouton:int, etat:int...

mouse\_rotate (mouse\_x:int, mo...

passive\_mouse (x:int, y:int)

reshape (largeur:int, hauteur:int)

save ()

setCamera (camera:Camera)

setRatio (i:int)

setTemps (temps:unsigned int)

setTimer\_on (timer\_on:bool)

simulation (id:int)

up\_keyboard (\_UnnamedParam...

```
CParser
▶ Properties
▼ Operations
CParser (file_name:Unknown)
extract_angle ()
extract_color ()
extract_double ()
extract_enceinte ()
extract_enceinte (system:CSystem)
extract_int ()
extract_mass ()
extract_part (system:CSystem)
extract_pos ()
extract_step ()
extract_string ()
extract_tag ()
extract_type ()
extract_vector ()
extract_vel ()
extract_word ()
load (system:CSystem, cam:Camera)
load (system:CSystem)
skip_comment ()
~CParser ()
```