NAME

genworm - generate a RADIANCE description of a functional worm

SYNOPSIS

genworm mat name 'x(t)' 'y(t)' 'z(t)' 'r(t)' nseg [−e expr][−f file]

DESCRIPTION

Genworm produces a RADIANCE scene description of a worm defined by the parametric equations *x(t), y(t), z(t),* and *r(t)* (the radius). *T* will vary from 0 to 1 in steps of *1/nseg*. The surface will be composed of *nseg* cones or cylinders and *nseg+1* spheres. The expressions are of the same type used in RADIANCE function files. Auxiliary expressions and/or files may be specified in any number of *−e* and *−f* options. The variable and function definitions in each *−f source* file are read and compiled from the RADIANCE library where it is found.

EXAMPLE

To generate a banana:

```
genworm yellow banana '0' '5*sin(t)' '5*cos(t)' '.4-(.5-t)*(.5-t)' 20
```

ENVIRONMENT

RAYPATH	the directories to check for auxiliary files.

AUTHOR

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BUGS

Since the worm is constructed of intersecting surfaces, only opaque materials should be used with this object. Also, a worm cannot double back inside itself without making a mess.

SEE ALSO

genbox(1), genrev(1), gensurf(1), icalc(1), rpict(1), rvu(1), xform(1)