

File created: 26-Jun-90 18:51:31 {DSK}<usr>local>lde>lispcore>internal>library>PEANO.;2

changes to: (VARS PEANOCOMS)

previous date: 8-Nov-88 14:27:45 {DSK}<usr>local>lde>lispcore>internal>library>PEANO.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

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```
(RPAQQ PEANOCOMS ((FNS PEANODEMO PEANOROTATE PEANO1 PEANOSTEP)
  (MACROS PLOT)
  ::
  (GLOBALVARS XNOW YNOW ORIENT PEANOSCALE PEANOWINDOW)
  (VARS PEANOSCALE (PEANOWINDOW NIL))))
```

(DEFINEQ

**(PEANODEMO**

(\* rrb "31-MAY-82 12:16")

```
[LAMBDA (LEVEL SCALE)
  (OR LEVEL (SETQ LEVEL 7))
  (COND
    (SCALE (SETQ PEANOSCALE (FIX SCALE)))
    ((FIXP PEANOSCALE))
    (T (SETQ PEANOSCALE 3)))
  (PROGN [COND
    ((TYPENAMEP PEANOWINDOW 'WINDOW))
    (T (SETQ PEANOWINDOW
      (CREATEW (create REGION
        LEFT _ 624
        BOTTOM _ 402
        WIDTH _ 396
        HEIGHT _ 406)
        "Peano curves"]
      (CLEARW PEANOWINDOW)
      (MOVETO PEANOSCALE PEANOSCALE PEANOWINDOW))
    (SETQ XNOW 1)
    (SETQ YNOW 1)
    (SETQ ORIENT 0)
    (PEANO1 LEVEL 1])
```

**(PEANOROTATE**

(\* bas%: "30-APR-82 19:29")

```
[LAMBDA (DIRECTION)
  (add ORIENT DIRECTION)
  (COND
    ((IGREATERP ORIENT 3)
      (SETQ ORIENT (IDIFFERENCE ORIENT 4)))
    ((ILESSP ORIENT 0)
      (SETQ ORIENT (IPLUS ORIENT 4))
```

**(PEANO1**

(\* rrb "31-MAY-82 13:17")

```
[LAMBDA (LEVEL HAND)
  (COND
    ((EQ LEVEL 1)
      (PLOT))
    (T (SETQ LEVEL (SUB1 LEVEL))
      (PEANOROTATE HAND)
      (PEANO1 LEVEL (IMINUS HAND))
      (PEANOSTEP)
      (PLOT)
      (PEANOSTEP)
      (PEANOROTATE (IMINUS HAND))
      (PEANO1 LEVEL HAND)
      (PEANOSTEP)
      (PLOT)
      (PEANOSTEP)
      (PEANO1 LEVEL HAND)
      (PEANOROTATE (IMINUS HAND))
      (PEANOSTEP)
      (PLOT)
      (PEANOSTEP)
      (PEANO1 LEVEL (IMINUS HAND))
      (PEANOROTATE HAND)
      (BLOCK]))
```

**(PEANOSTEP**

(\* rrb "31-MAY-82 11:31")

```
[LAMBDA NIL
```

```
(SELECTQ ORIENT
  (0 (SETQ XNOW (ADD1 XNOW)))
  (1 (SETQ YNOW (ADD1 YNOW)))
  (2 (SETQ XNOW (SUB1 XNOW)))
  (3 (SETQ YNOW (SUB1 YNOW)))
  (ERROR "Step: strange direction" ORIENT))
(MOVETO (ITIMES XNOW PEANOSCALE)
  (ITIMES YNOW PEANOSCALE)
  PEANOWINDOW])

)

(DECLARE%: EVAL@COMPILE

(PUTPROPS PLOT MACRO (NIL (RELDRAWTO PEANOSCALE 0 PEANOSCALE 'REPLACE PEANOWINDOW)))

)

;;

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS XNOW YNOW ORIENT PEANOSCALE PEANOWINDOW)

)

(RPAQQ PEANOSCALE 3)

(RPAQQ PEANOWINDOW NIL)

(PUTPROPS PEANO COPYRIGHT ("Venue & Xerox Corporation" 1982 1988 1990))
```

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