

ADAS Subroutine h4fasy

```
C
      subroutine h4fasy(  istdim ,
&                      x      , xa      , n      , ya      , y      , dy      ,
&                      c1     , c2     , c3     , c4     ,
&                      form   , iforms
&                      )
```

C

C ***** fortran77 subroutine: h4spl3.for *****

C
C purpose: provide a spline interpolate making use of specified
C asymptotic behaviour

C
C calling program: various

C
C notes: (1) uses labelled common /espl3/

C
C input : (i*4) istdim = dimensionality for splining arrays

C
C input : (r*8) x = required x-value

C input : (i*4) x(i) = knots

C input : (r*8) n = number of knots

C
C input : (r*8) c1(i,j) = 1st spline coefficient precursor

C input : (r*8) c2(i,j) = 2nd spline coefficient precursor

C input : (r*8) c3(i,j) = 3rd spline coefficient precursor

C input : (r*8) c4(i,j) = 4th spline coefficient precursor

C input : (r*8) form = external function specifying asymptotic forms

C input : (i*4) iforms = index of required form

C
C output: (r*8) y=returned y-value

C output: (r*8) dy=returned derivative

C

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C routines:

C routine source brief description

C h4fspl adas

C i4unit adas fetch unit number for output of messages

C

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C version: 1.1 Hugh Summers 24/07/02

C modified: first release

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INTEGER

IFORMS,

ISTDIM,

N

```
REAL*8          C1 (ISTDIM, ISTDIM-1) ,      C2 (ISTDIM, ISTDIM-1)
REAL*8          C3 (ISTDIM, ISTDIM-1) ,      C4 (ISTDIM, ISTDIM-1)
REAL*8          DY,          X,              XA (ISTDIM) ,   Y
REAL*8          YA (ISTDIM)
```