

ADAS Subroutine xxbcon

SUBROUTINE XXBCON(INTYP, OUTTYP, IEVAL, EIN, EOUT)

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C
C ***** FORTRAN77 SUBROUTINE: XXBCON *****
C
C PURPOSE: TO CONVERT AN ARRAY OF BEAM ENERGIES INTO SPECIFIED UNITS
C
C CALLING PROGRAM: GENERAL USE
C
C SUBROUTINE:
C
C INPUT :    (I*4)  INTYP    = 1 => 'EIN (ARRAY)'  UNITS: EV/AMU
C              = 2 => 'EIN (ARRAY)'  UNITS: AT. UNITS
C              = 3 => 'EIN (ARRAY)'  UNITS: CM SEC-1
C INPUT :    (I*4)  OUTTYP   = 1 => 'EOUT (ARRAY)' UNITS: EV/AMU
C              = 2 => 'EOUT (ARRAY)' UNITS: AT. UNITS
C              = 3 => 'EOUT (ARRAY)' UNITS: CM SEC-1
C INPUT :    (I*4)  IEVAL    = NUMBER OF BEAM ENERGIES IN 'EIN (ARRAY)'
C INPUT :    (R*8)  EIN ( )  = INPUT BEAM ENERGIES (STATED UNITS)
C OUTPUT:    (R*8)  EOUT ( ) = OUTPUT BEAM ENERGIES (STATED UNITS)
C
C            (R*8)  EVUATU   = EV/AMU TO ATOMIC UNITS CONVERSION
C            (R*8)  EVUCMS   = EV/AMU TO CM S-1 CONVERSION
C
C            (I*4)  I        = GENERAL USE
C
C            (R*8)  BCONV ( ) = BEAM ENERGY CONVERSION PARAMETERS
C
C ROUTINES:  NONE
C
C NOTE:
C          BEAM ENERGY CONVERSION PARAMETERS:
C
C          INTYP = 1 ; BCONV (1) =>             EV/AMU  -> OUTPUT UNITS
C          INTYP = 2 ; BCONV (2) =>             AT. UNITS -> OUTPUT UNITS
C          INTYP = 3 ; BCONV (3) =>             CM SEC-1 -> OUTPUT UNITS
C
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C
C DATE:    20/04/95
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C
C          INTEGER          IEVAL,          INTYP,          OUTTYP
C          REAL*8           EIN (IEVAL),    EOUT (IEVAL)
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