ADAS Subroutine r8scon

```
      FUNCTION R8SCON( INTYP, OUTTYP, XSIN )
C-----------------------------------------------------------------------
C
C  ****************** FORTRAN77 SUBROUTINE: R8SCON *********************
C
C  PURPOSE: TO CONVERT AN ARRAY OF CROSS-SECTIONS INTO A SPECIFIED FORM.
C           (DOUBLE PRECISION FUNCTION VERSION OF 'XXSCON')
C
C  CALLING PROGRAM: GENERAL USE
C
C  FUNCTION:
C
C             (R*8)  R8SCON  = FUNCTION NAME -
C                              OUTPUT CROSS-SECTION (STATED UNITS)
C             (I*4)  INTYP   = 1 => 'XSIN' UNITS: CM**2
C                            = 2 => 'XSIN' UNITS: PI*(A0**2)
C             (I*4)  OUTTYP  = 1 => 'R8SCON' UNITS: CM**2
C                            = 2 => 'R8SCON' UNITS: PI*(A0**2)
C             (R*8)  XSIN    = INPUT  CROSS-SECTION (STATED UNITS)
C
C             (R*8)  A0      = PARAMETER: BOHR RADIUS = 5.29177D-09 cm
C             (R*8)  PI      = PARAMETER: Pi = 3.1415926536
C             (R*8)  CM2A0   = PARAMETER: CM**2 TO PI*(A0**2) CONVERSION
C                                         FACTOR.
C             (R*8)  A02CM   = PARAMETER: PI*(A0**2) TO CM**2 CONVERSION
C                                         FACTOR.
C
C             (R*8)  SCONV() = ENERGY/VELOCITY CONVERSION PARAMETERS
C
C ROUTINES:  NONE
C
C NOTE:
C            ENERGY/VELOCITY CONVERSION PARAMETERS:
C
C            INTYP = 1 ; SCONV(1) =>  VELOCITY: CM**2     -> OUTPUT FORM
C            INTYP = 2 ; SCONV(2) =>  VELOCITY: PI*(A0**2)-> OUTPUT FORM
C
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C          K1/0/81
C          JET EXT. 4569
C
C DATE:    05/02/91
C
C-----------------------------------------------------------------------
C
C-----------------------------------------------------------------------
      INTEGER             INTYP,       OUTTYP
      REAL*8              XSIN
```