

ADAS Subroutine oured9inv

FUNCTION OURED9INV(KTYPE , EIJ , EJ , OURED , B , C)

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C
C ***** FORTRAN 77 FUNCTION: OURED9INV *****
C
C PURPOSE: TO CALCULATE THE COLLISION STRENGTH FROM THE REDUCED
C           COLLISION STRENGTH FOR EIGHT TYPES OF TRANSITION
C
C CALLING PROGRAM:
C
C FUNCTION:
C
C INPUT:   (R*8)  EIJ   = TRANSITION ENERGY (RYD)
C           (R*8)  EJ    = COLLIDING ELECTRON ENERGY AFTER
C                       EXCITATION (RYD)
C           (R*8)  B     = BURGESS SCALING PARAMETER - B
C           (R*8)  C     = BURGESS SCALING PARAMETER - C
C           (R*8)  TL    =  EJ/Eij
C           (I)   KTYPE = TRANSITION TYPE
C                       1 ELECTRIC DIPOLE
C                       2 NON ELECTRIC DIPOLE
C                       3 SPIN CHANGE
C                       4 OTHER
C           (R*8)  OURED = REDUCED COLLISION STRENGTH
C
C OUTPUT:  (R*8)  OURED9INV = UPSILON
C
C           (I*4)  IASYMC = ASYMPTOTIC CLASSIFICATION TYPE
C           (I*4)  ITHRSC = THRESHOLD CLASSIFICATION TYPE
C           (R*8)  E0     = SWITCHING ENERGY
C
C ROUTINES: NONE
C
C DATE:      25/05/99 VERSION 1.1
C AUTHOR:    HUGH SUMMERS, UNIVERSITY OF STRATHCLYDE
C
C-----
C           INTEGER          KTYPE
C           REAL*8          B,          C,          EIJ,          EJ
C           REAL*8          OURED
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