

## ADAS Subroutine axetrd

FUNCTION AXETRD( KTYPE , E , T , C)

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C  
C  
C \*\*\*\*\* FORTRAN 77 FUNCTION: AXETRD \*\*\*\*\*  
C  
C PURPOSE: TO CALCULATE THE REDUCED ENERGY FOR FOUR TYPES OF  
C TRANSITION  
C  
C CALLING PROGRAM: VARIOUS ADAS101 CODES  
C  
C FUNCTION:  
C  
C INPUT: (R\*8) E = TRANSITION ENERGY (Eij)  
C (R\*8) T = COLLIDING ELECTRON ENERGY AFTER  
C EXCITATION (Ej)  
C (R\*8) C = ADJUSTABLE SCALING PARAMETER  
C (R\*8) TL = Ej/Eij OR kTe/Eij  
C (I) KTYPE = TRANSITION TYPE  
C 1 ELECTRIC DIPOLE  
C 2 NON ELECTRIC DIPOLE  
C 3 SPIN CHANGE  
C 4 OTHER  
C  
C COMMON:  
C /BURG/  
C (L\*4) LUPSIL = .TRUE. (UPSILON FITTING)  
C .FALSE. (OMEGA FITTING )  
C  
C OUTPUT: (R\*8) AXETRD = REDUCED ENERGY OR TEMPERATURE  
C  
C ROUTINES: NONE  
C  
C WRITTEN: CONVERSION OF ETRED BY A.LANZAFAME & D.H.BROOKS BY  
C HUGH P. SUMMERS, UNIVERSITY OF STRATHCLYDE  
C TEL. 0141-553-4196  
C  
C DATE: 24/11/96 VERSION 1.1  
C  
C MODIFICATION HISTORY:  
C  
C VERSION: 1.1 HUGH SUMMERS 24/11/96  
C MODIFIED: FIRST RELEASE  
C  
C-----

INTEGER  
REAL\*8

KTYPE  
C,

E,

T