ADAS Subroutine g4ppnrb

```
C
      subroutine g4ppnrb(iunt09 , isreq  , wghtn  , emin , emax ,
     &                    iunt10 , iunt07 , ltext  , date , user )

C-----------------------------------------------------------------------
C
C  ******************* FORTRAN77 ROUTINE: G4PPNRB *********************
C
C  PURPOSE: Program to post-process AUTOSTRUCTURE to give the spin
C           breakdown Auger rates.
C
C
C-----------------------------------------------------------------------
C
C  Based upon PPAUTS2:
C
C  PROGRAM PPAUTS2
C  ---------------
C
C  PROGRAM TO READ OUTPUT FILE FROM AUTOSTRUCTURE AND STRIP OUT
C  AUTOIONISATION TRANSITION PROBABILITIES OF INTEREST
C
C  REVISED DATA READING ALGORITHM
C
C  THIS VERSION OF CODE INTERROGATES MULTIPLE N AND L OUTPUT AS
C  PREFERRED BY NRB.
C
C  THUS REQUIRES A PRIOR RUN OF AUTOSTRUCTURE WITH OUTPUT GENERALLY
C  WRITTEN TO A FILE SUCH AS
C                JETUID.AS91#C.AS#O1.PASS3
C
C  CHOICES ON THE SPIN (2S+1) OF THE BOUND STATE AND ON THE ENERGY OF
C  THE FREE STATE ENABLE RESOLUTION INTO SPIN SYSTEM AND PARENT
C
C  THE FINAL OUTPUT CONTAINS WEIGHTED SUMS OF AUGER TRANSITION
C  PROBABILITIES, WHICH ARE SUMMED OVER L SEPARATELY AND THEN OVER N.
C
C  EACH INDIVIDUAL AUGER TRANSITION PROBABILITY IS WEIGHTED BY (2J+1)
C
C  AN N-SHELL AVERAGE IS OBTAINED BY NORAMILISING BY THE WEIGHT OF THE
C  ENTIRE N-SHELL. THIS IS INPUT BY THE USER AS A MULTIPLIER ON N**2
C        I.E.
C            N-SHELL WEIGHT = WGHTN * N**2
C
C
C   AUTHOR:  WILLIAM J. DICKSON
C   DATE:  2ND DECEMBER 1992
C   ADDRESS:  K1/1/26, JET JOINT UNDERTAKING
C
C-----------------------------------------------------------------------
C  ROUTINES:
C          ROUTINE    SOURCE    BRIEF DESCRIPTION
```

```
C            -------------------------------------------------------------
C            G4LLVL     ADAS     CHECK WETHER A SPECIFIC TRANSITION
C                                BELONGS TO REQUIRED SET
C
C
C  AUTHOR : Martin O'Mullane,
C           K1/1/43,
C           JET
C
C
C  VERSION  : 1.1
C  DATE     : 15/09/2000
C  MODIFIED : Martin O'Mullane
C            First version.
C
C
C-------------------------------------------------------------------------
      CHARACTER*8       DATE
      CHARACTER*30      USER
      INTEGER           ISREQ,      IUNT07,      IUNT09,      IUNT10
      LOGICAL           LTEXT
      REAL*8            EMAX,       EMIN,      WGHTN
```