

ADAS Subroutine bbprs1

SUBROUTINE BBPRS1 (NDMET, STRING, WNO, CPL, NPT, IPLA, ZPLA)

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C
C ***** FORTRAN77 SUBROUTINE: BBPRS1 *****
C
C PURPOSE:  TO ANALYSE THE TAIL CHARACTER STRING OF A LEVEL DATA LINE
C           OF A SPECIFIC ION FILE INTO WAVE-NUMBER AND SETS OF
C           (PARENT IDENTIFIER, EFFECTIVE ZETA FOR THE PARENT) PAIRS.
C
C CALLING PROGRAM: ADAS208
C
C NOTES: DETECT  - LEVEL WAVE NUMBER WHICH PRECEEDS FIRST '{'
C              - SETS OF PARENT INDEX CONTAINED IN '{.}'
C              FOLLOWED BY EFFECTIVE ZETA
C              NB. 'X' AS FIRST PARENT ASSIGNMENT MEANS EXCLUDE IONISATION
C              FROM THIS LEVEL.
C              NO PARENT ASSIGNMENT MEANS TAKE LOWEST PARENT WITH
C              ZETA =1.
C              LOWEST PARENT BUT NO ZETA MEANS TAKE ZETA =1.
C              IF THERE IS MORE THAN ONE PARENT THEN ZETA'S MUST BE IN.
C
C SUBROUTINE:
C
C INPUT : (I*4)  NDMET    = MAXIMUM NUMBER OF PARENTS
C INPUT : (C*(*)) STRING  = STRING TO BE PARSED
C
C OUTPUT: (R*8)  WNO      = EXCITATION WAVE NUMBER OF LEVEL RELATIVE
C                       TO LOWEST PARENT
C OUTPUT: (C*1)  CPL      = LEAD PARENT FOR IONISATION OR 'X'
C OUTPUT: (I*4)  NPT      = NUMBER OF BINDING WAVE NUMBERS DETECTED
C OUTPUT: (I*4)  IPLA()   = PARENT INDICES.
C OUTPUT: (R*8)  ZPLA()   = EFFECTIVE ZETA FOR PARENT IPLA()
C
C           (L*4)  LSET    = .TRUE.  - WAVE NUMBER PART SET
C                       .FALSE. - WAVE NUMBER PART NOT SET
C           (L*4)  LWNO    = .TRUE.  - IN THE WAVE NUMBER PART
C                       .FALSE. - NOT IN THE WAVE NUMBER PART
C           (L*4)  LPRNT   = .TRUE.  - IN A PARENT SPECIFIER
C                       .FALSE. - NOT IN A PARENT SPECIFIER
C           (L*4)  LZETA   = .TRUE.  - IN A ZETA SPECIFIER
C                       .FALSE. - NOT IN A ZETA SPECIFIER
C           (I*4)  IC      = GENERAL USE
C           (I*4)  IABT    = FAILURE NUMBER FROM R8FCTN
C           (I*4)  NCHAR   = NUMBER OF CHARACTERS IN SUBSTRING
C           (C*15) SSTRNG  = ISOLATED SUBSTRING
C
C ROUTINES: NONE
C
C AUTHOR:  HP SUMMERS
C          K1/1/57
C          JET EXT. 4941
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C
C DATE: 22/06/92
C
C UPDATE: 24/06/96 HP SUMMERS - CHANGED SOUBRTOUNE NAME FROM B8PRS1 TO
C BBPRS1
C
C UNIX-IDL PORT:
C
C AUTHOR: WILLIAM OSBORN (TESSELLA SUPPORT SERVICES PLC)
C
C DATE: 4TH JULY 1996
C
C VERSION: 1.1 DATE: 04-07-96
C MODIFIED: WILLIAM OSBORN
C - FIRST VERSION.
C
C VERSION: 1.2 DATE: 17-03-03
C MODIFIED: RICHARD MARTIN
C INITIALISED LWNO AS .FALSE.
C
C-----

CHARACTER	CPL		
CHARACTER*(*)	STRING		
INTEGER	IPLA (NDMET),	NDMET,	NPT
REAL*8	WNO,	ZPLA (NDMET)	