

ADAS Subroutine bgsetm

```
C
      SUBROUTINE BGSETM( IZ0      , IZ      ,
&                      NDLEV    , IL      , ICNTE  ,
&                      CSTRGA   , ISA     , ILA     , XJA    ,
&                      STRGA    , NPL     , CPRTA   , NDMET ,
&                      STRGMF   , STRGMI
&                      )
C-----
C
C ***** FORTRAN77 SUBROUTINE: BGSETM *****
C
C PURPOSE:  TO SET UP PARAMETERS TO PASS TO IDL
C
C CALLING PROGRAM: ADAS216
C
C DATA:
C          DATA IS OBTAINED VIA SUBROUTINE 'BADATA'
C
C SUBROUTINE:
C
C INPUT  : (I*4)  IZ0      = NUCLEAR CHARGE READ
C INPUT  : (I*4)  IZ       = RECOMBINED ION CHARGE READ
C
C INPUT  : (I*4)  NDLEV   = MAXIMUM NUMBER OF ENERGY LEVELS ALLOWED
C INPUT  : (I*4)  IL      = INPUT DATA FILE: NUMBER OF ENERGY LEVELS
C INPUT  : (I*4)  ICNTE   = NUMBER OF ELECTRON IMPACT TRANSITIONS
C
C INPUT  : (C*18) CSTRGA() = NOMENCLATURE/CONFIGURATION FOR LEVEL 'IA()'
C INPUT  : (I*4)  ISA     = MULTIPLICITY FOR LEVEL 'IA()'
C                      NOTE: (ISA-1)/2 = QUANTUM NUMBER (S)
C INPUT  : (I*4)  ILA     = QUANTUM NUMBER (L) FOR LEVEL 'IA()'
C INPUT  : (R*8)  XJA     = QUANTUM NUMBER (J-VALUE) FOR LEVEL 'IA()'
C                      NOTE: (2*XJA)+1 = STATISTICAL WEIGHT
C INPUT  : (I*4)  NPL     = NUMBER OF PARENTS IN INPUT DATA SET
C INPUT  : (C*9)  CPRTA() = PARENT NAME FROM INPUT DATA SET
C INPUT  : (I*4)  NDMET   = MAX.NO.OF METASTABLES ALLOWED
C
C OUTPUT: (C*22) STRGA() = LEVEL DESIGNATIONS
C OUTPUT: (C*11) STRGMF() = INFORMATION STRINGS FOR IDL
C OUTPUT: (C*12) STRGMI() = INFORMATION STRINGS FOR IDL
C
C          (C*8)  F6      = PARAMETER = 'VREPLACE'
C
C          (I*4)  ILEN    = LENGTH, IN BYTES, OF ISPF DIALOG VARIABLES
C          (I*4)  ILEV    = ARRAY COUNTER FOR LEVEL INDEX
C          (I*4)  J       = VALUE OF QUANTUM NUMBER L + 1
C          (I*4)  LFPOOL  = NO. OF LEVEL STRINGS SENT TO FUNCTION POOL
C
C          (C*2)  SZ0     = NUCLEAR CHARGE READ
C          (C*2)  SZ      = RECOMBINED ION CHARGE READ
C          (C*4)  SCNTE   = NUMBER OF ELECTRON IMPACT TRANSITIONS
C          (C*4)  SIL     = NUMBER OF ENERGY LEVELS
```

```

C      (C*1)  CONFIG()= QUANTUM NUMBER (L) LETTERS
C
C      (C*8)  CHA()   = FUNCTION POOL NAMES: CHARGE VALUES
C      (C*8)  CHB()   = FUNCTION POOL NAMES: LEVEL DESIGNATIONS <=99
C      (I*4)  PIPEOU  = PARAMETER = UNIT NUMBER FOR OUTPUT TO PIPE
C
C

```

C ROUTINES:

```

C      ROUTINE      SOURCE      BRIEF DESCRIPTION
C      -----
C

```

C BASED ON B8SETP.FOR

C AUTHOR: D.H.BROOKS, UNIVERSITY OF STRATHCLYDE, 11/04/96

C AUTHOR : Martin O'Mullane,
C K1/1/43,
C JET

C VERSION : 1.1 DATE: 17/03/1999

C MODIFIED: Martin O'Mullane
C First version.

```

C-----
C-----

```

CHARACTER*9	CPRTA (NDMET)			
CHARACTER*18	CSTRGA (IL)			
CHARACTER*22	STRGA (NDLEV)			
CHARACTER*11	STRGMF (NDMET)			
CHARACTER*12	STRGMI (NDLEV)			
INTEGER	ICNTE,	IL,	ILA (IL) ,	ISA (IL)
INTEGER	IZ,	IZ0,	NDLEV,	NDMET
INTEGER	NPL			
REAL*8	XJA (IL)			