

ADAS Subroutine pchx

FUNCTION PCHX(V,L,L1,E)
IMPLICIT REAL*8 (A-H,O-Z)

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C-----  
C  
C PURPOSE: EVALUATES PEACH PHASE X(V,L,E,L1) BY TABLE INTERPOLATION  
C  
C TABLES ARE READ IN FROM DISC FILE 'JETSH.PCHXTAB.DATA' ON FIRST  
C CALL TO PCHX AND STORED IN LABELLED COMMON /PCHXTB/.  
C THE INPUT IS ON STREAM 14. IFIRST MUST BE SET TO 1 IN MAIN ROUTINE  
C INITIALLY. IT IS RESET TO 0 AFTER TABLES ARE READ IN.  
C ***** H.P. SUMMERS, JET      26 JUNE 1985 *****  
C-----  
C INPUT  
C     N=EFFECTIVE PRINCIPAL QUANTUM NUMBER OF BOUND STATE  
C     L=ORBITAL ANGULAR MOMENTUM OF ELECTRON IN BOUND STATE  
C     L1=ORBITAL ANGULAR MOMENTUM OF ELECTRON IN FREE STATE  
C     E=ELECTRON ENERGY IN FREE STATE (REDUCED RYDBERG UNITS)  
C OUTPUT  
C     PCHX=PEACH INTERPOLATED PHASE  
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: 19-12-01  
C MODIFIED: Martin O'MULLANE  
C           - Removed junk from > column 72.  
C  
C VERSION: 1.3                      DATE: 20-07-07  
C MODIFIED: Allan Whiteford  
C           - Small modification to comments to allow for  
C             automatic documentation preparation.  
C-----  
C  
C     INTEGER          L,          L1  
C     REAL*8          E,          V
```