

ADAS Subroutine hydemi

SUBROUTINE HYDEMI(lp_{pass}, iunt)

IMPLICIT REAL*8 (A-H,O-Z)

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C   PURPOSE: Calculates the collisional mixing of excited levels of
C             hydrogen atoms in the beam.
C
C   IMAX - number of Stark resolved states
C   IMAXB - total number of included states
C   NA(I)- an array with principle quantum numbers of the states
C   ESTK(I)- the energies of the states in rydbergs
C   A(I,J) - |<r ij>|^2 - dipol matrix elements in at.units
C   BK(I) - the results of calculations
C   EBEAM - the energy of the beam atoms (keV/nucleon)
C   T - electron temperature of plasma in eV
C   DENS - electron density ( cm -3 )
C   ZEFF - effective charge of the plasma
C   MU - reduced mass(in mass of electron)
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C
C ADAS305 version. Developed from JETSHP.STARK.FORT (H P Summers).
C
C VERSION   : 1.1
C DATE      : 24-02-2005
C MODIFIED  : Martin O'Mullane
C            - First version.
C
C VERSION   : 1.2
C DATE      : 16-03-2005
C MODIFIED  : Martin O'Mullane
C            - Declare lppass as logical.
C
C VERSION   : 1.3
C DATE      : 16-05-2007
C MODIFIED  : Allan Whiteford
C            - Updated comments as part of subroutine documentation
C              procedure.
C-----
C----- alterations to dimensions and common to allow bundle-n extension
C----- hps 6 dec 1988
C-----
C           logical   lppass
C-----
C           INTEGER           IUNT
C           LOGICAL          LPASS
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