

ADAS Subroutine ngffmh

REAL*8 FUNCTION NGFFMH(GAM2)
IMPLICIT REAL*8 (A-H, O-Z)

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C-----  
C  
C ***** FORTRAN77 SUBROUTINE: NGFFMH *****  
C  
C VERSION: 1.0  
C  
C PURPOSE: EVALUATES ELECTRON TEMPERATURE AND FREQUENCY AVERAGED  
C           HYDROGENIC FREE FREE GAUNT FACTOR.  
C  
C OBTAINED FROM INTERPOLATION OF KARZAS & LATTER (1959) FIG.6  
C FOR  $-3 < \text{LOG}_{10}(Z_0 * Z_0 * I_H / KTE) < 1$ . OUTSIDE THIS RANGE A VERY APPROXIMATE  
C EXTRAPOLATION IS PERFORMED WITH GFFMH=1 IN THE INFINITE LIMITS.  
C  
C INPUT:  
C     GAM2=Z0*Z0*IH/KTE  
C OUTPUT:  
C     NGFFMH=MAXWELL AND FREQUENCY AVERAGED FREE-FREE GAUNT FACTOR.  
C ***** H.P.SUMMERS, JET          12 JAN 1987 *****  
C-----  
C  
C UNIX-IDL CONVERSION:  
C  
C VERSION: 1.1                      DATE: 22-08-96  
C MODIFIED: WILLIAM OSBORN  
C           - FIRST CONVERTED. NO CHANGES.  
C  
C VERSION: 1.2                      DATE: 13-09-99  
C MODIFIED: Martin O'Mullane  
C           - Define function name as real*8.  
C  
C VERSION: 1.3                      DATE: 16-05-07  
C MODIFIED: Martin O'Mullane  
C           - Modified comments as part of subroutine documentation  
C             procedure.  
C-----  
C  
C     REAL*8                      GAM2
```