

ADAS Subroutine photo2

SUBROUTINE PHOTO2 (PION,PREC,PSTIM,CREC,ZZ,TE,TP,N1,L1,LT1,E1,V1,
1KPION,KPREC,KPSTIM,CUT,IOPT,C1,C2,C3)

C-----

C

C ***** FORTRAN 77 ROUTINE : PHOTO2 *****

C

C PURPOSE : EVALUATES PHOTO IONISATION, STIMULATED
C AND RADIATIVE RECOMBINATION RATES.

C

C NOTE : THE INTEGRALS INVOLVING THE BOUND-FREE
C GAUNT FACTOR ARE EVALUATED USING A
C COMBINATION OF LAGUERRE AND GUASSIAN
C QUADRATURE.

C

C HISTORY : ROUTINE WAS ORIGINALLY WRITTEN BY
C H.P.SUMMERS.

C

C CONTACT : HARVEY ANDERSON
C UNIVERSITY OF STRATHCLYDE
C ANDERSON@PHYS.STRATH.AC.UK

C

C DATE : 5/2/98

C

C-----

C

C CHANGE TO PHOTO2 ON 17/11/83 AND GPRT=GPRT1=0

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

INTEGER	IOPT,	KPION,	KPREC,	KPSTIM
INTEGER	L1,	LT1,	N1	
REAL*8	C1 (5, 5, 3),	C2 (5, 5, 3),	C3 (5, 5, 3),	CREC
REAL*8	CUT,	E1,	PION,	PREC
REAL*8	PSTIM,	TE,	TP,	V1
REAL*8	ZZ			