

ADAS Subroutine ccnse4

SUBROUTINE CCNSE4 (A0, CAO, A, CA, RH, CRH, NMIN, NMAX, ARED, CARED, RHS,
1CRHS, IR, ISH, JSH, KPF, NLIV, ILTXR)

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C ***** FORTRAN 77 ROUTINE : CCNSE4.F *****

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C PURPOSE : APPLIES MATRIX CONDENSATION TREATMENT TO
C THE ARRAYS WHICH ARE USED TO CONSTRUCT
C THE COLLISIONAL RADIATIVE MATRIX.

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

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C INPUT :

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C (R*8) A0 :

C (R*8) CAO :

C (R*8) A :

C (R*8) CA :

C (R*8) RH :

C (R*8) CRH :

C (I*4) IR : INDEX CORRESPONDING TO THE REPRESENTATIVE
C LEVEL OF INTEREST.

C (I*4) IRS : SWITCH USED TO LOCATE THE DIAGONAL ELEMENTS
C OF THE COLLISIONAL RADIATIVE MATRIX. THIS
C ROUTINE DOES NOT CONTAIN THE C-R MATRIX BUT
C ARRAYS WHICH ARE USED TO ASSEMBLE IT, FOR
C A SINGLE SPIN SYSTEM WITH NO METASTABLES
C IRS=0 .

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C VERSION: 1.2 DATE: 21-10-99

C MODIFIED: RICHARD MARTIN

C CHANGED HEXADECIMAL CONSTANTS TO Z'FFF00000' FORM.

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

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INTEGER	ILTXR(10,10,5),	IR,	ISH	
INTEGER	JSH,	KPF(1000),	NLIV(31),	NMAX
INTEGER	NMIN			
REAL*8	A(1000),	A0,	ARED(160)	
REAL*8	CA(1000),	CA0,	CARED(160),	CRH

REAL*8

CRHS,

RH,

RHS