

## ADAS Subroutine c6ajtb

SUBROUTINE C6AJTB( MXJSHL , IZ1 , NU , LU , NL , LL , AA )

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C \*\*\*\*\* FORTRAN77 SUBROUTINE: C6AJTB \*\*\*\*\*

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C PURPOSE: CALCULATES HYDRONIC LJ RESOLVED A-VALUES.

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C THE SUBROUTINE CHECKS TO SEE IF A-VALUE IS POSSIBLE AND  
C DIPOLE ALLOWED AND RETURNS ZEROES IF NOT.

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C CALLING PROGRAM: ADAS306

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C INPUT : (I\*4) MXJSHL = MAXIMUM NUMBER OF J SUB-SHELLS.

C INPUT : (I\*4) IZ1 = ION CHARGE.

C INPUT: (I\*4) NU = UPPER PRINCIPAL QUANTUM NUMBER.

C INPUT: (I\*4) LU = ORBITAL QUANTUM NUMBER FOR NU.

C INPUT: (I\*4) NL = LOWER PRINCIPAL QUANTUM NUMBER.

C INPUT: (I\*4) LL = ORBITAL QUANTUM NUMBER FOR NL.

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C OUTPUT: (R\*8) AA () = LJ RESOLVED A-VALUE.

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DIMENSION: TRANSITION INDEX WHERE:

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1 GIVES LU+0.5 --> LL+0.5

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2 GIVES LU+0.5 --> LL-0.5

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3 GIVES LU-0.5 --> LL+0.5

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4 GIVES LU-0.5 --> LL-0.5

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C (I\*4) I = LOOP INDEX.

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C (R\*8) A = L RESOLVED A VALUE.

C (R\*8) XLU = REAL VALUE = LU.

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C ROUTINES:

C ROUTINE SOURCE BRIEF DESCRIPTION

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C R8ATAB ADAS RETURNS L RESOLVED HYDRONIC A-VALUE.

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C K1/0/81

C JET EXT. 5183

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C DATE: 08/11/93

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C UNIX-IDL PORT:

C

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C DATE: 22ND MAY 1996

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C VERSION: 1.1

DATE: 22-05-96

C MODIFIED: WILLIAM OSBORN

C - FIRST VERSION. IBM VERSION NOT CHANGED

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INTEGER	IZ1,	LL,	LU,	MXJSHL
INTEGER	NL,	NU		
REAL*8	AA (2*MXJSHL)			