

ADAS Subroutine r8yip

FUNCTION R8YIP (XI , DELTA)

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C ***** FORTRAN77 REAL*8 FUNCTION: R8YIP *****

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C PURPOSE: EVALUATES IMPACT PARAMETER CROSS-SECTION SECOND BESSEL

C

C INTEGRAL Y [BURGESS AND SUMMERS: MNRAS (1976)

C

C 172,345 - EQN C14]

C

C CALLING PROGRAMS: EIQIP, CXEIQP

C

C INPUT: (R*8) XI = Z[1/KN-1/KN1]/A0 WITH Z TARGET CHARGE,

C

C KN, KN1 INITIAL AND FINAL ELECTRON WAVE

C

C NUMBERS AND A0 THE BOHR RADIUS

C

C INPUT: (R*8) DELTA = RC[KN-KN1] WITH RC THE CLOSEST APPROACH

C

C OUTPUT: (R*8) R8YIP = Y(XI,DELTA)

C

C ROUTINES: NONE

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C

C K1/0/81

C

C JET EXT. 5183

C

C DATE: 07/10/93

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C VERSION 1.1

DATE: 07/10/93

C MODIFIED: JONATHAN NASH

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C - FIRST VERSION

C VERSION 1.2

DATE: 17-04-07

C MODIFIED: HUGH SUMMERS

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C - COMPLETED COMMENT BLOCK DESCRIPTION

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REAL*8

DELTA,

XI