

ADAS Subroutine bbitrp

```
subroutine bbitrp( ninmx , noutmx ,  
&                nein  , neout  , te    ,  
&                nform1 , param1 , nform2 , param2 ,  
& ein    , fin    , eout  , fout  
&                )
```

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C-----  
C  
C ***** fortran77 subroutine: bbitrp *****  
C  
C purpose: To interpolate/extrapolate numerical distribution from  
C           fin(ein) to fout(eout).  
C           A  $f=\sqrt{E} \cdot \exp(-E)$  fit is chosen for interpolation  
C           Extrapolation uses limit behaviour from nform1 and nform2  
C  
C calling program: adas211  
C  
C input : (i*4)  ninmx   = max no of input energies  
C input : (i*4)  noutmx  = max no of output energies  
C input : (i*4)  nein    = no of input energies  
C input : (i*4)  neout   = no of output energies  
C input : (r*8)  te      = temperature  
C input : (i*4)  nform1  = type of threshold behaviour  
C                   1 => cutoff  
C                   2 => energyparam1  
C input : (r*8)  param1  = parameter of threshold form  
C input : (i*4)  nform2  = type of high-energy behaviour  
C                   1 => cutoff  
C                   2 => energy-param2(1)  
C                   3 => exp(-param2(1)*energy)  
C                   4 => exp(-param2(1)*energyparam2(2))  
C input : (r*8)  param2() = parameter of high-energy form  
C  
C input : (r*8)  ein()   = input energy of distribution  
C input : (r*8)  fin()   = value of distribution at ein  
C input:  (r*8)  eout()  = output energy  
C  
C output: (r*8)  fout()  = (value of distribution at eout)/sqrt(eout)  
C  
C  
C author: Paul Bryans, University of Strathclyde  
C  
C date:   30/11/04  
C  
C update:  
C  
C-----
```

INTEGER	NEIN,	NEOUT,	NFORM1,	NFORM2
INTEGER	NINMX,	NOUTMX		
REAL*8	EIN(NINMX),	EOUT(NOOUTMX)		
REAL*8	FIN(NINMX),	FOUT(NOOUTMX),		PARAM1
REAL*8	PARAM2(2),	TE		