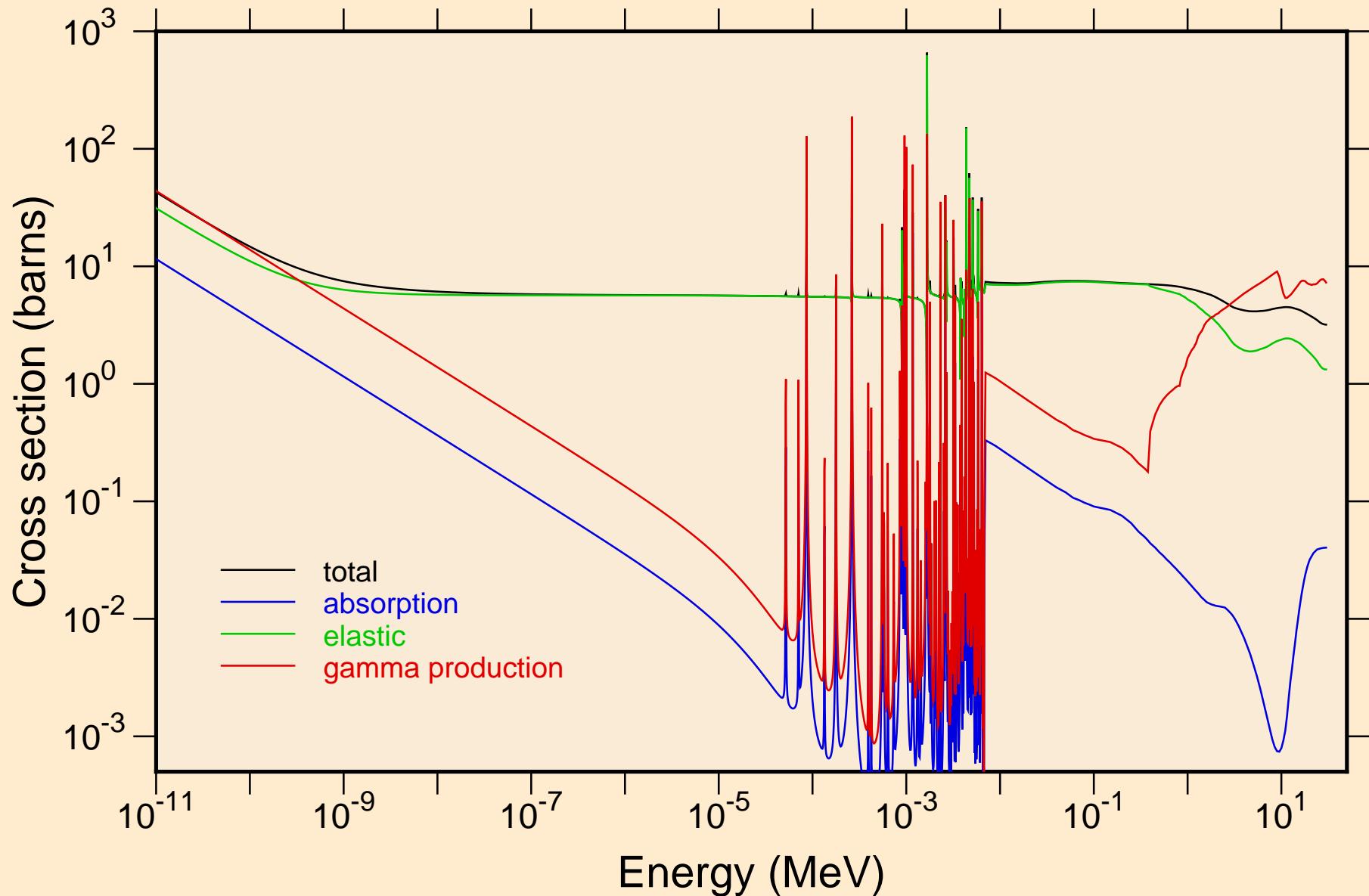
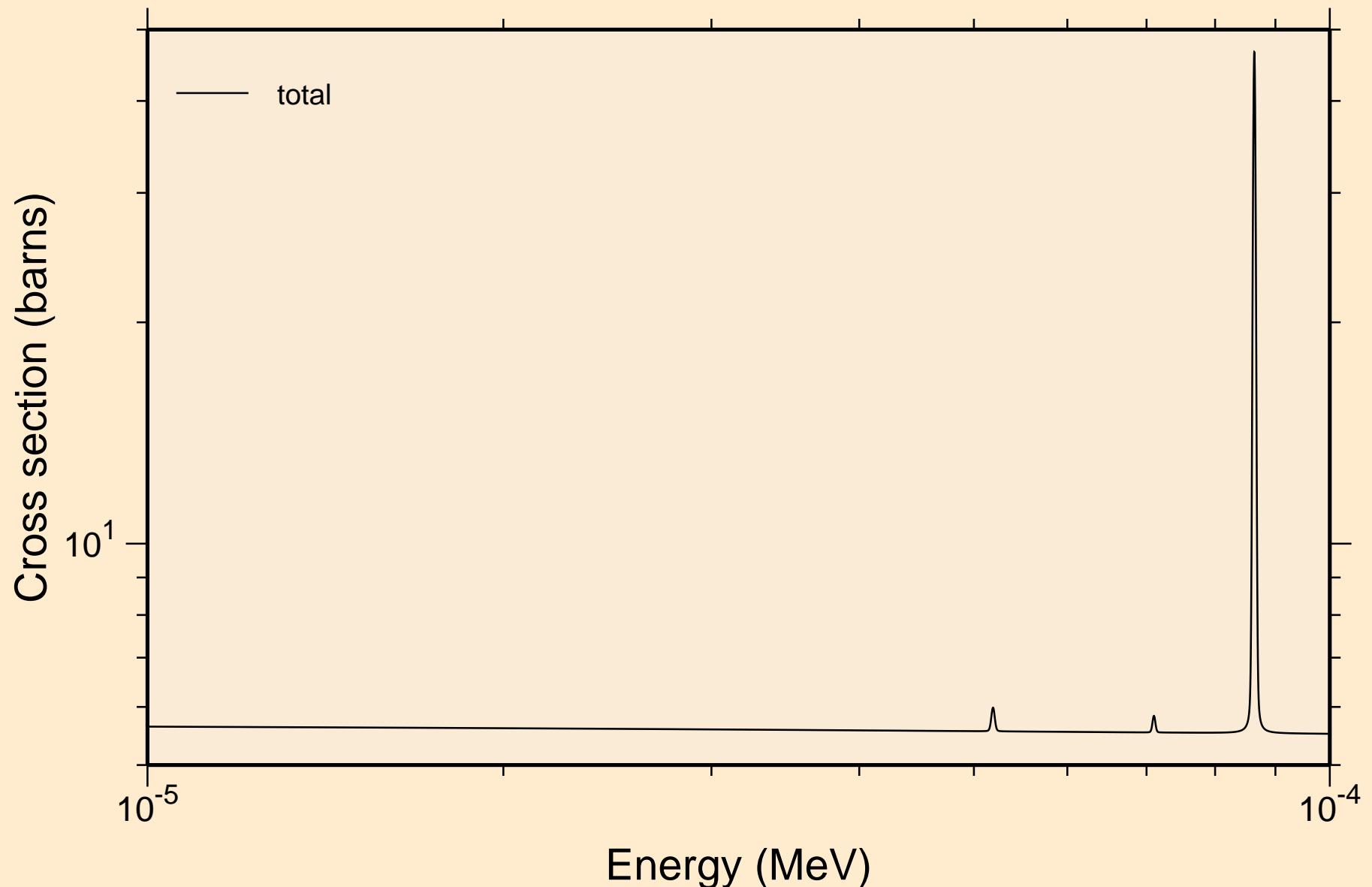


# ENDF/B-VII.1 PD-110

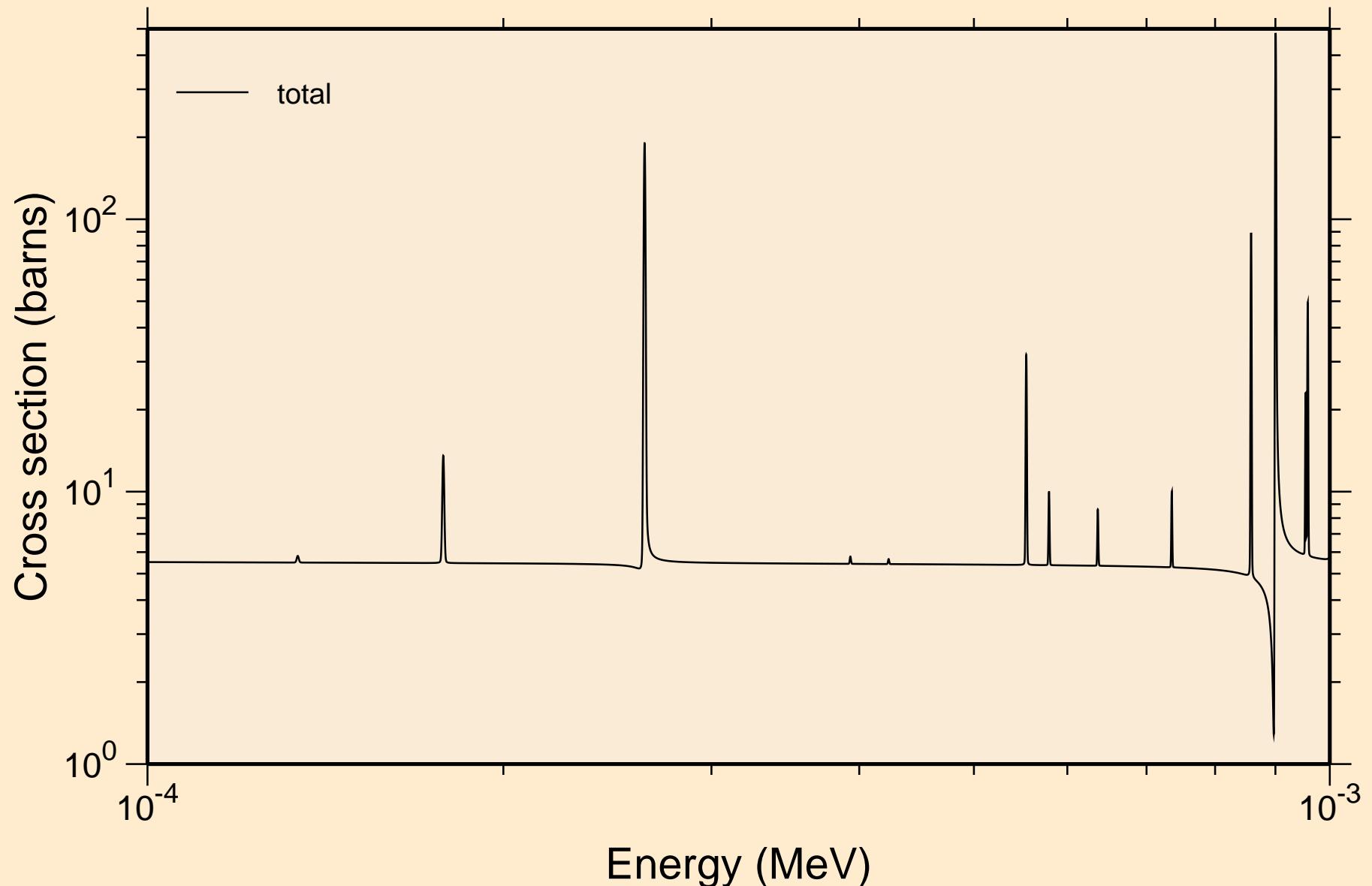
## Principal cross sections



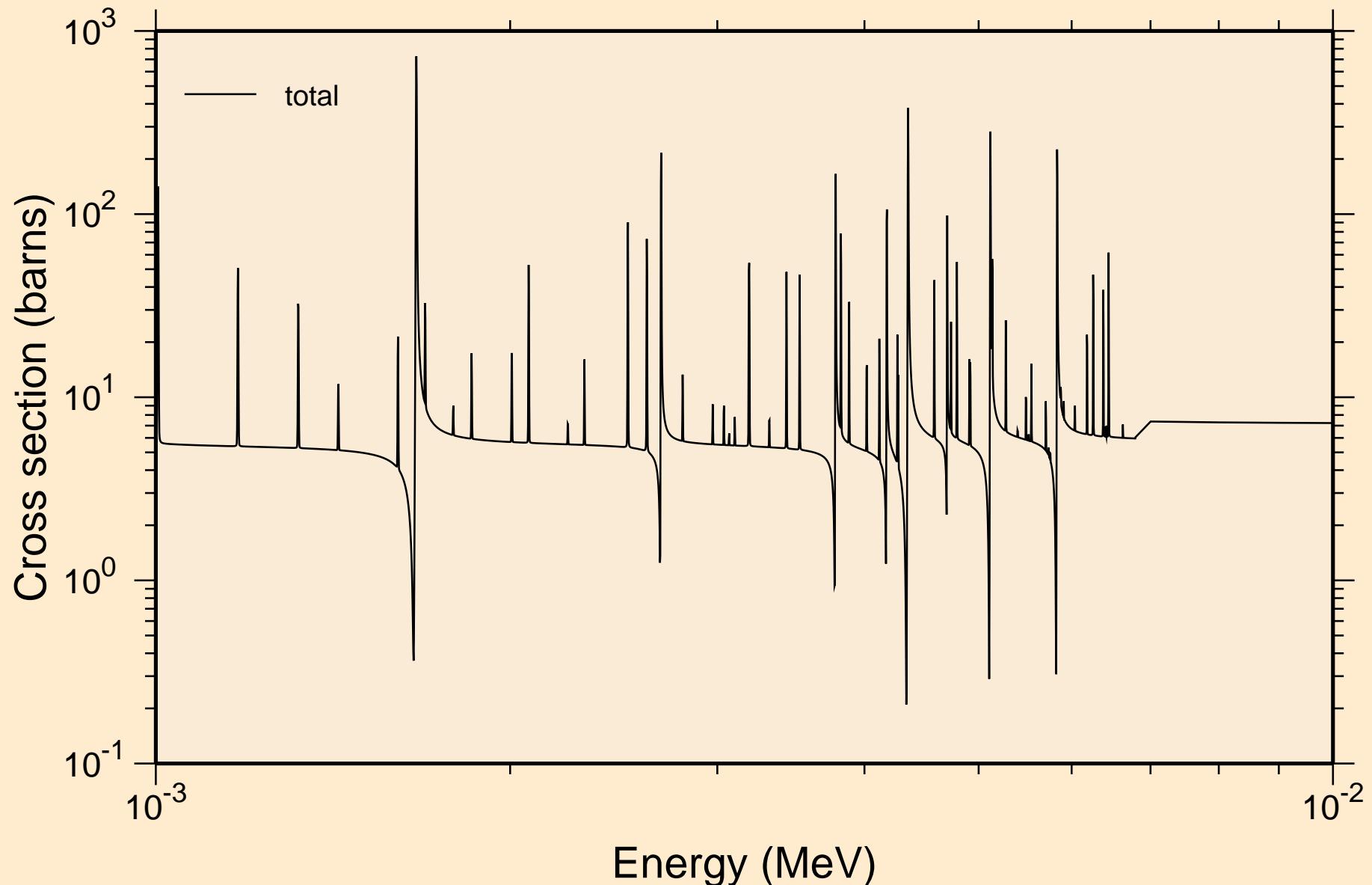
ENDF/B-VII.1 PD-110  
resonance total cross section



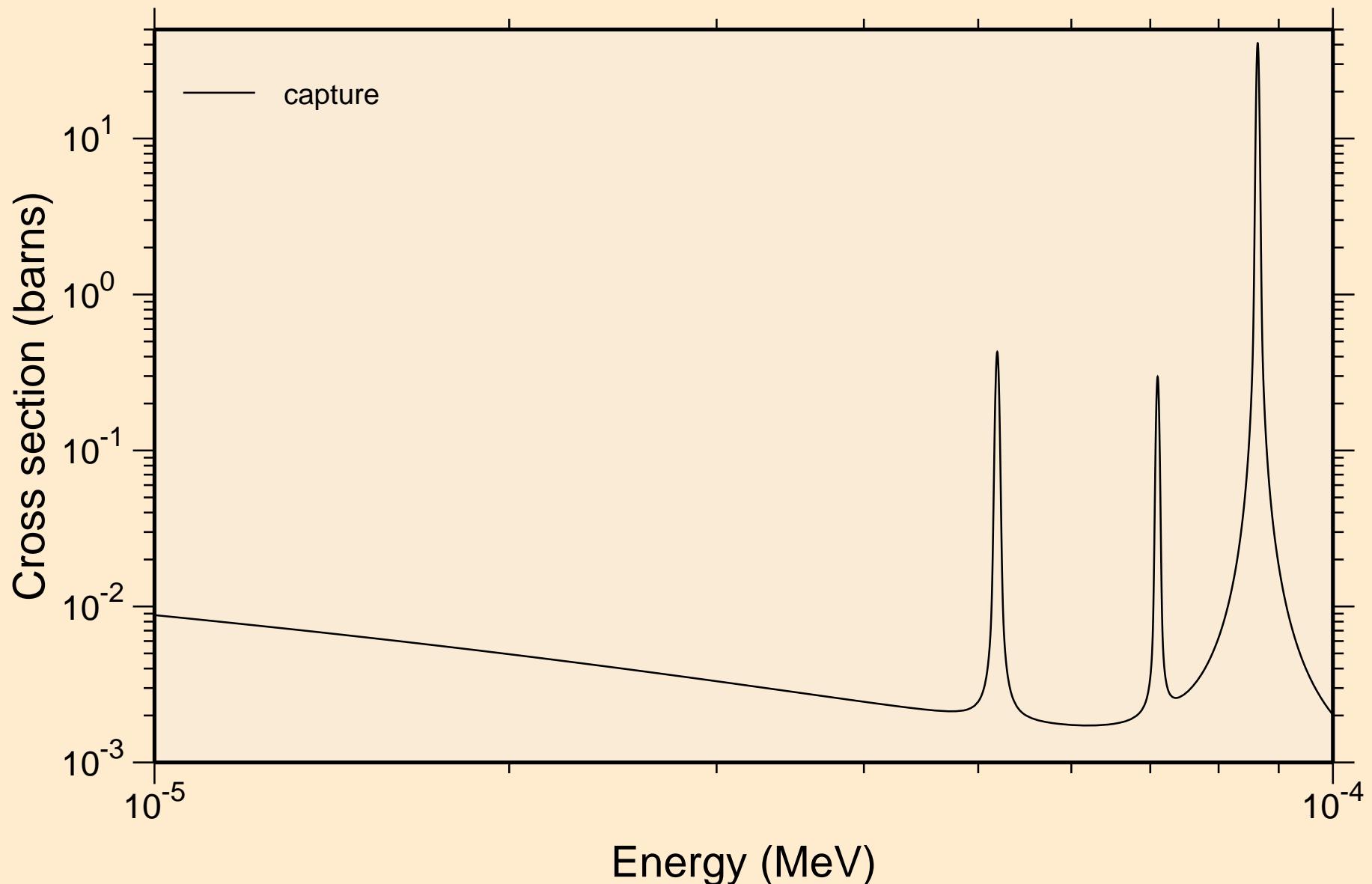
ENDF/B-VII.1 PD-110  
resonance total cross section



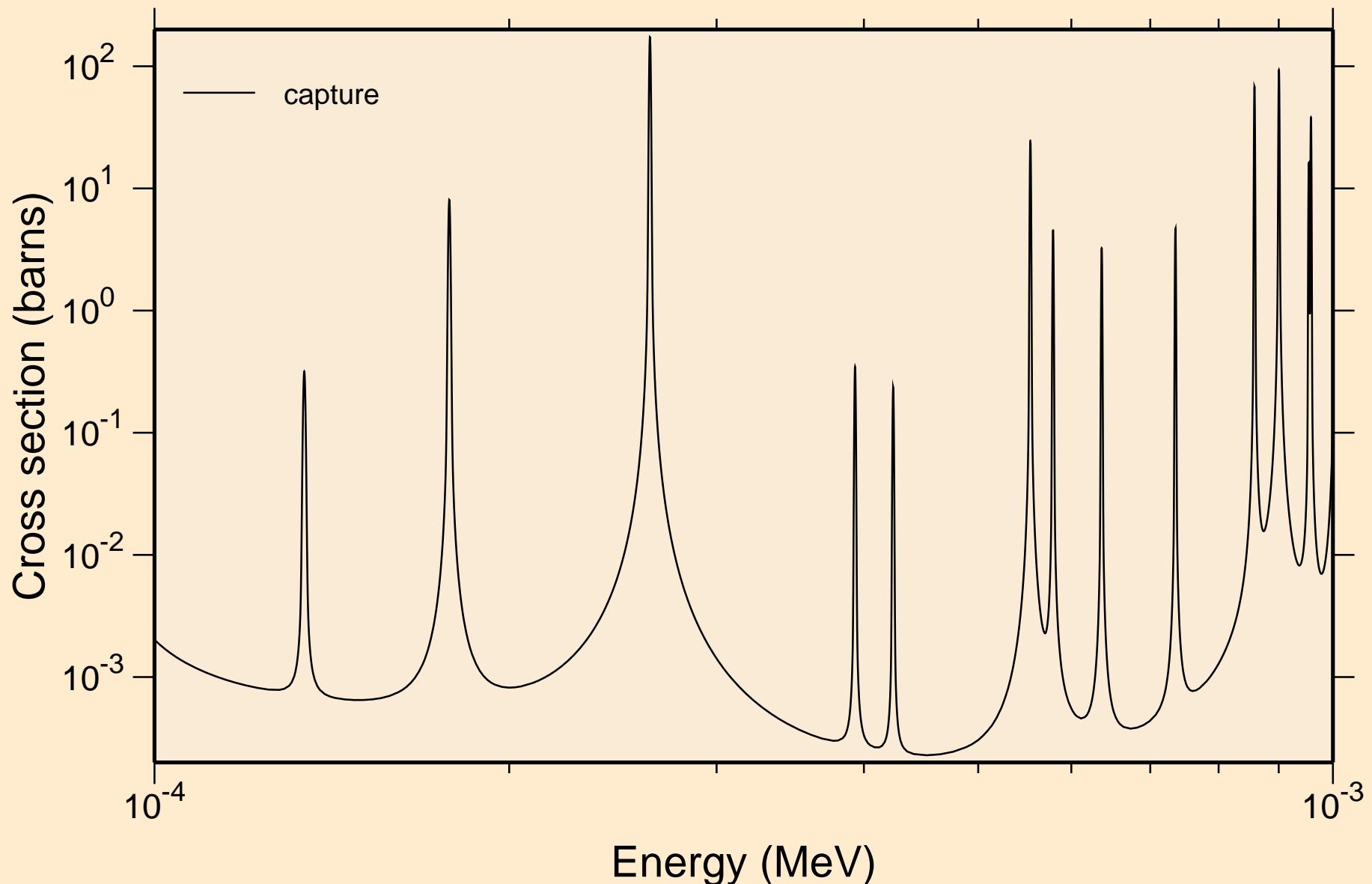
ENDF/B-VII.1 PD-110  
resonance total cross section



ENDF/B-VII.1 PD-110  
resonance absorption cross sections

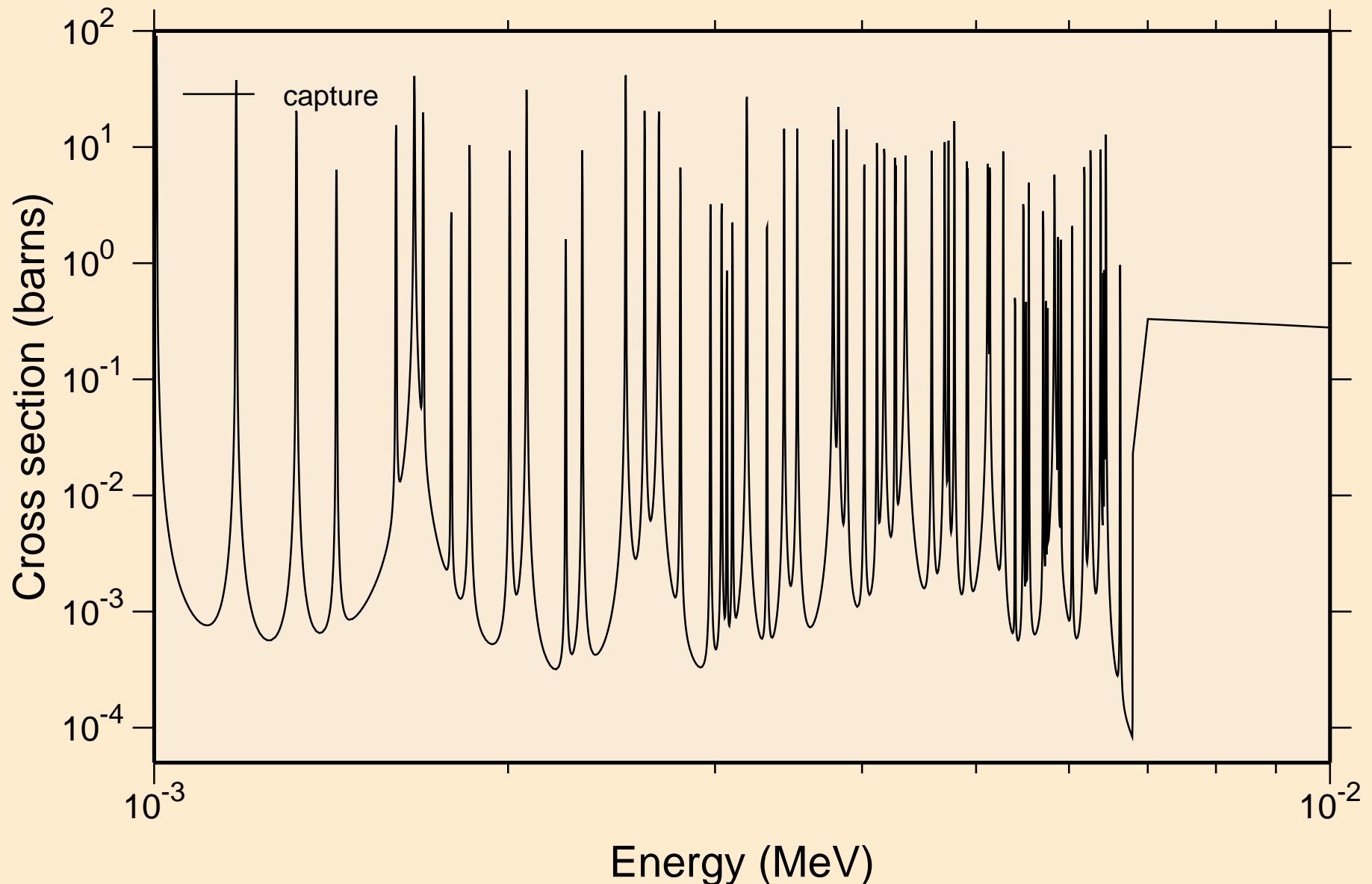


ENDF/B-VII.1 PD-110  
resonance absorption cross sections

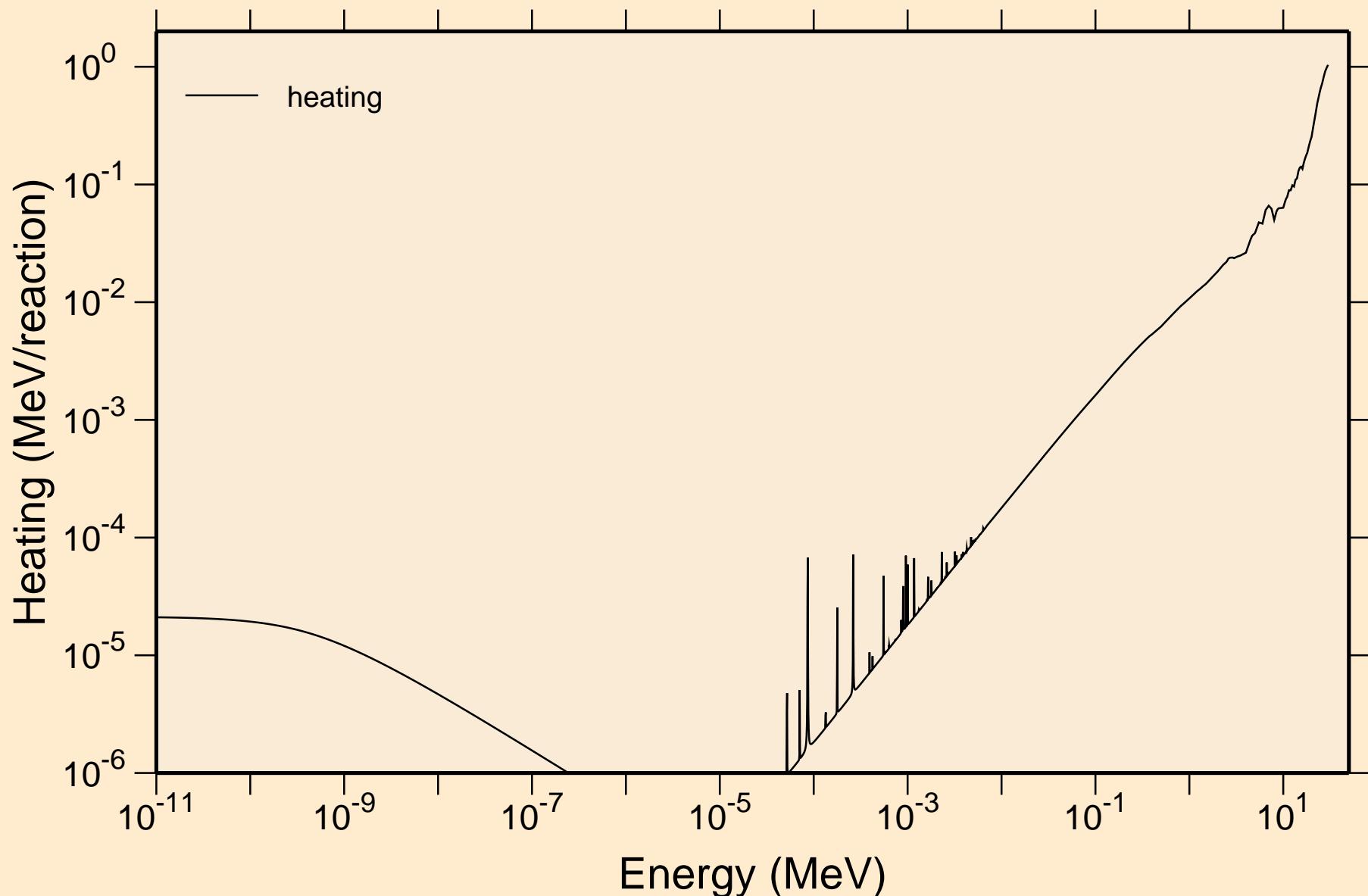


# ENDF/B-VII.1 PD-110

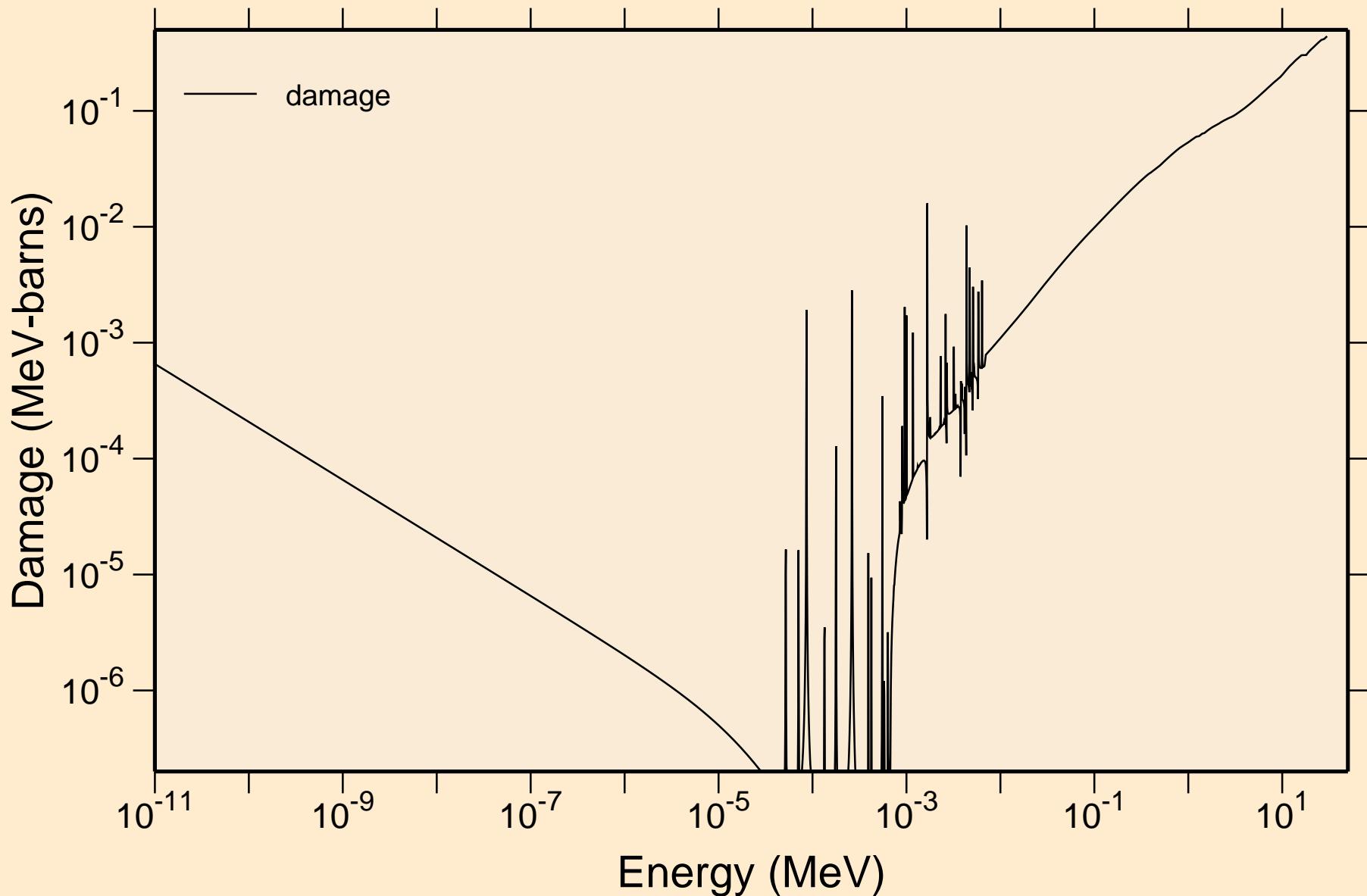
## resonance absorption cross sections



ENDF/B-VII.1 PD-110  
Heating

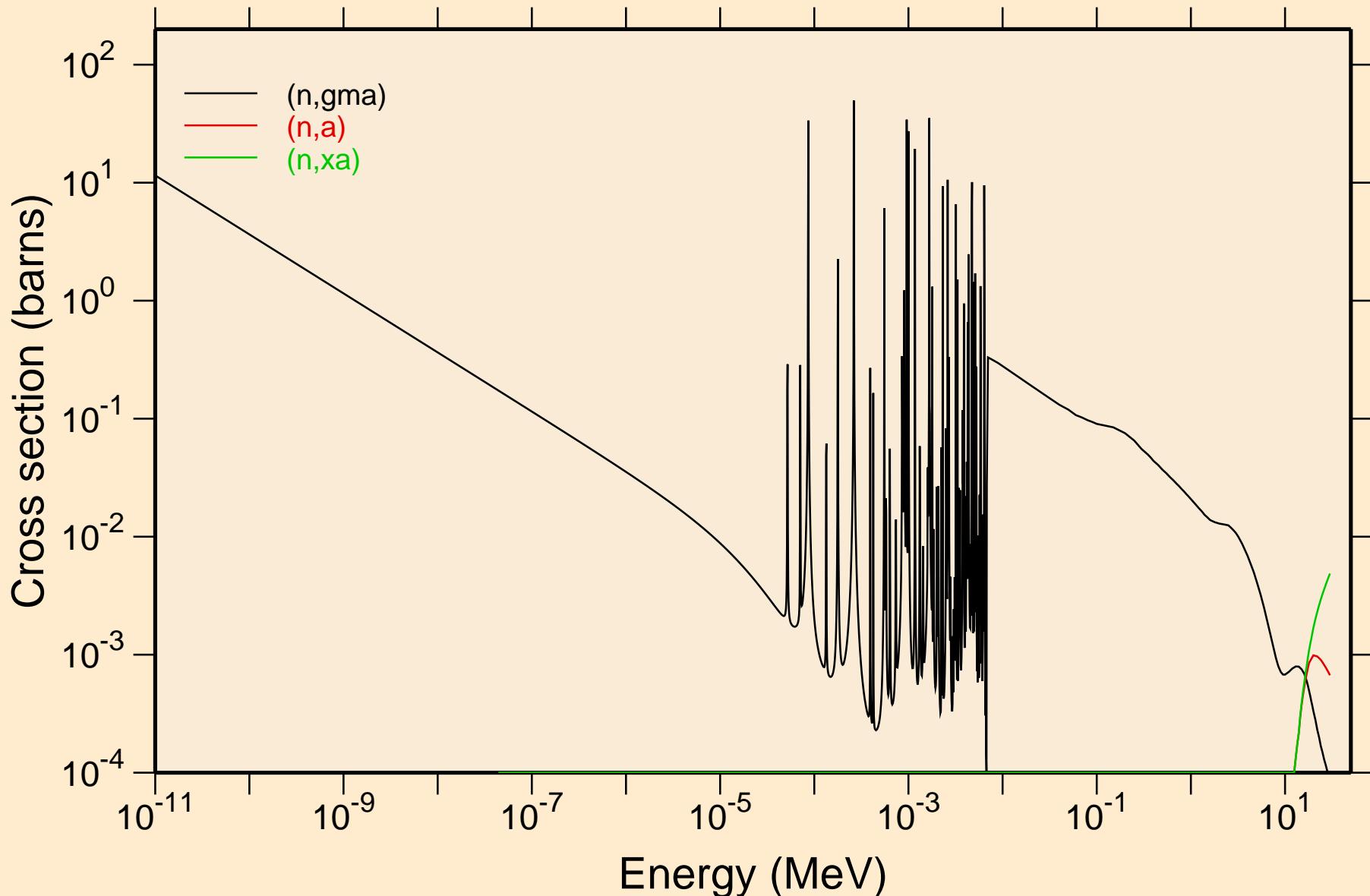


ENDF/B-VII.1 PD-110  
Damage



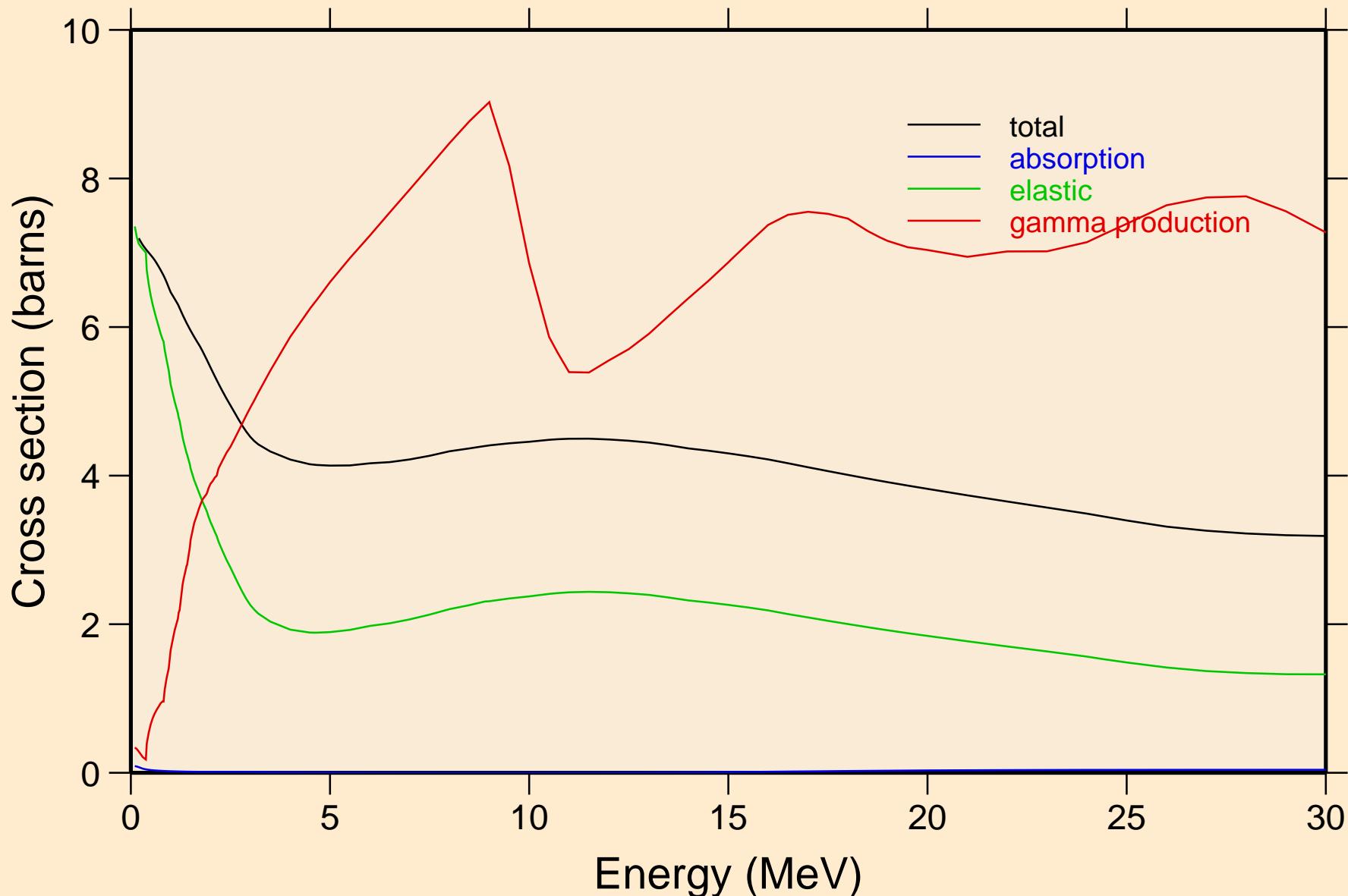
# ENDF/B-VII.1 PD-110

## Non-threshold reactions

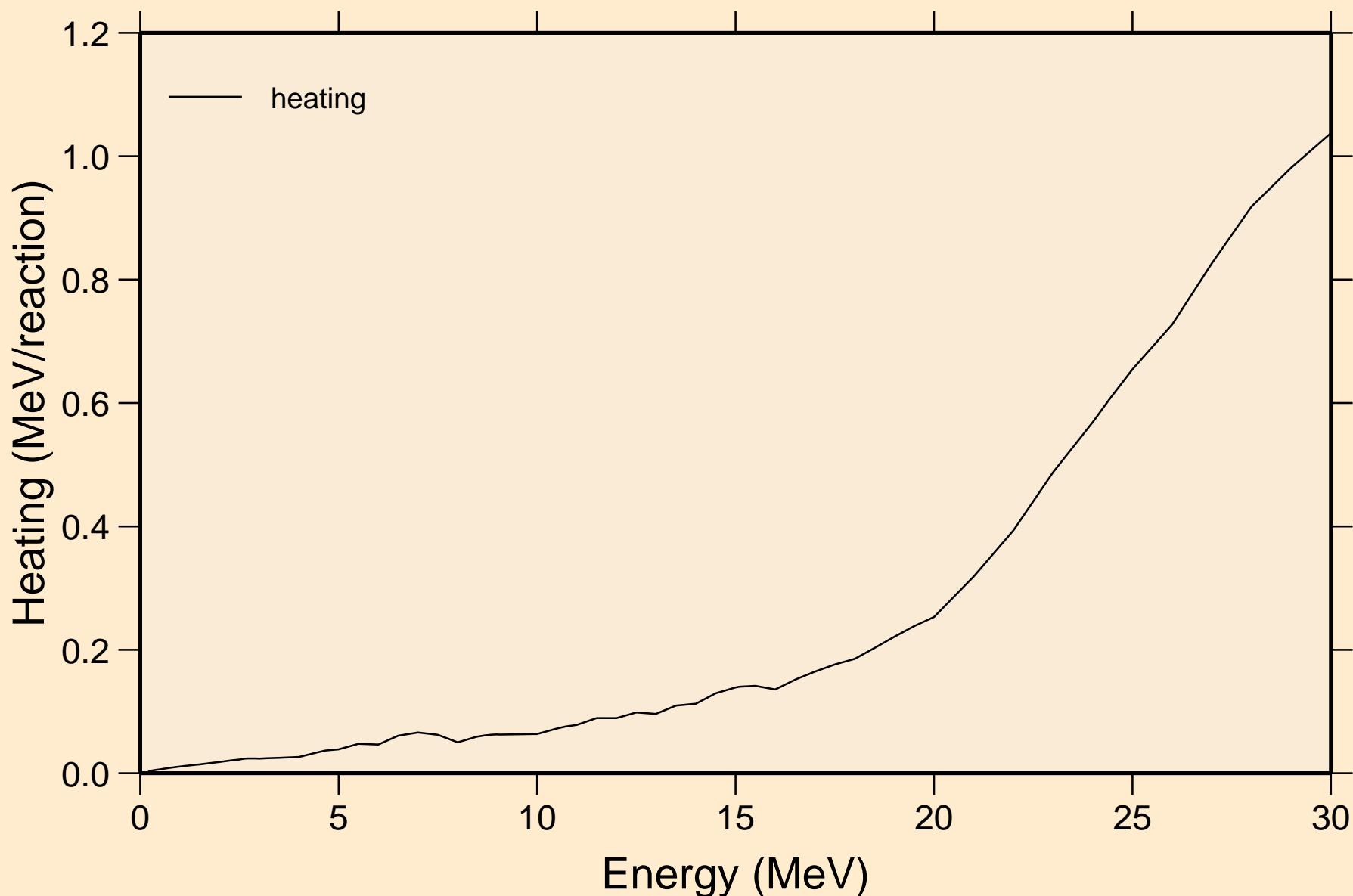


# ENDF/B-VII.1 PD-110

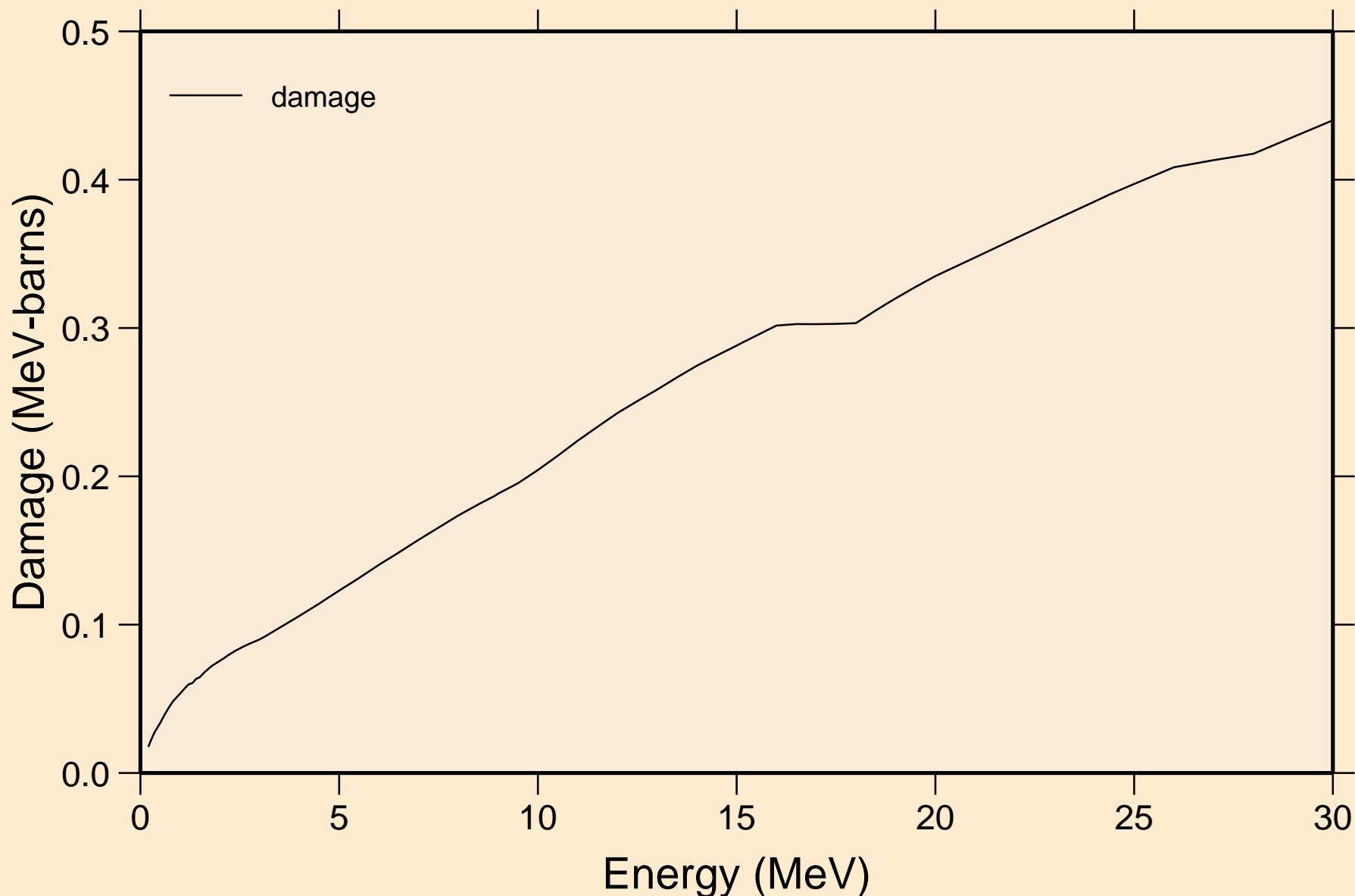
## Principal cross sections



ENDF/B-VII.1 PD-110  
Heating

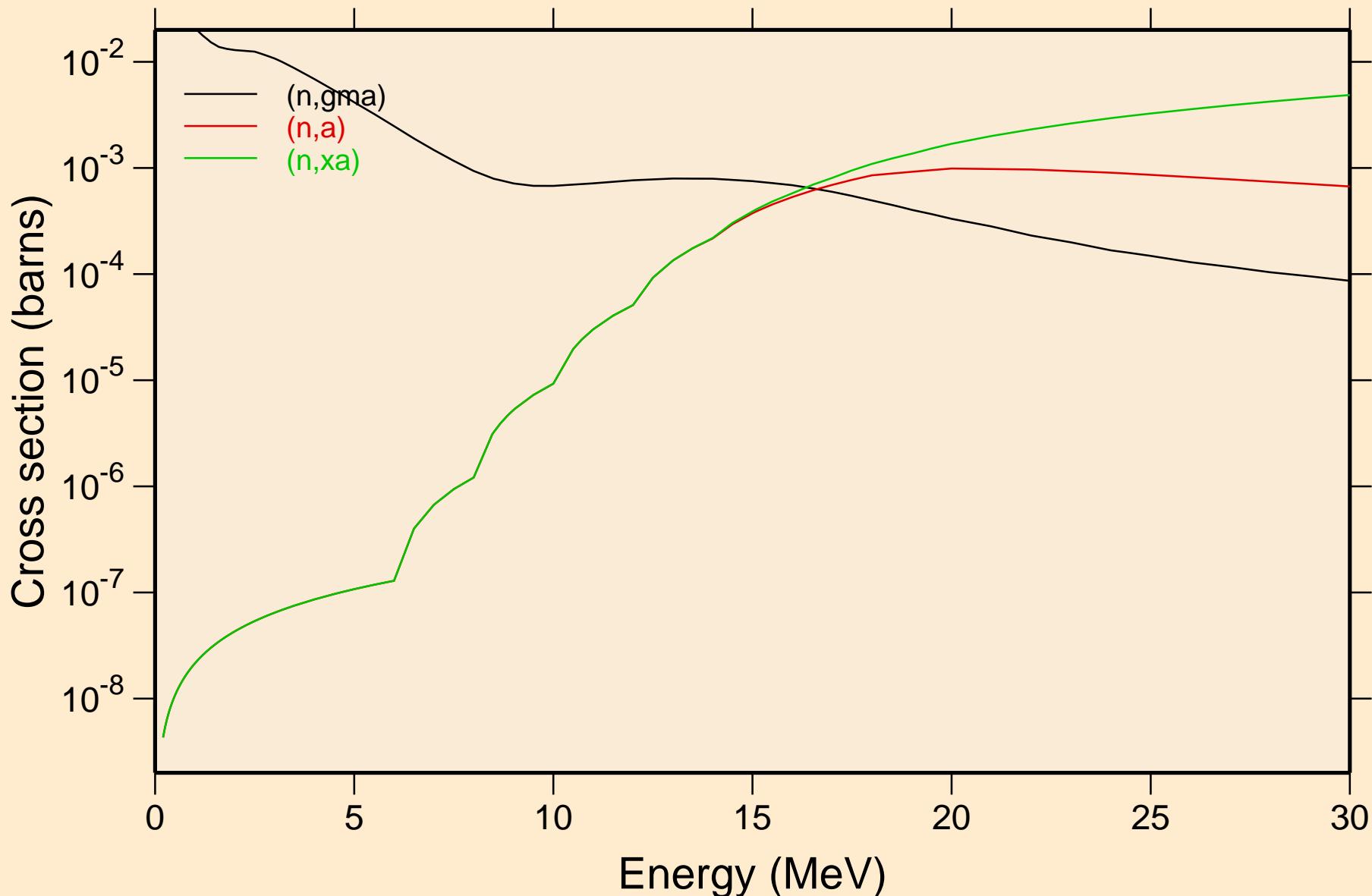


ENDF/B-VII.1 PD-110  
Damage



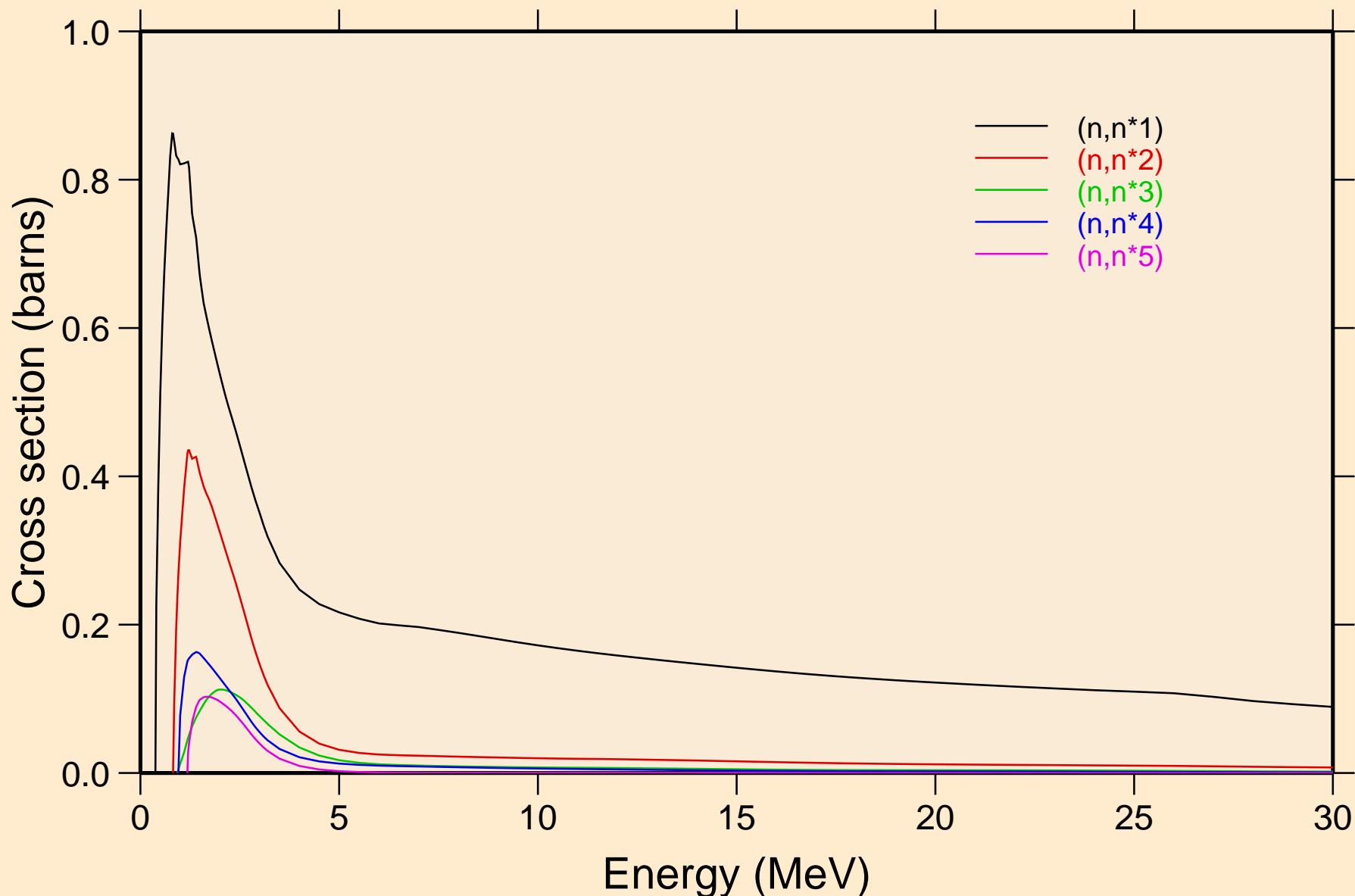
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## Non-threshold reactions



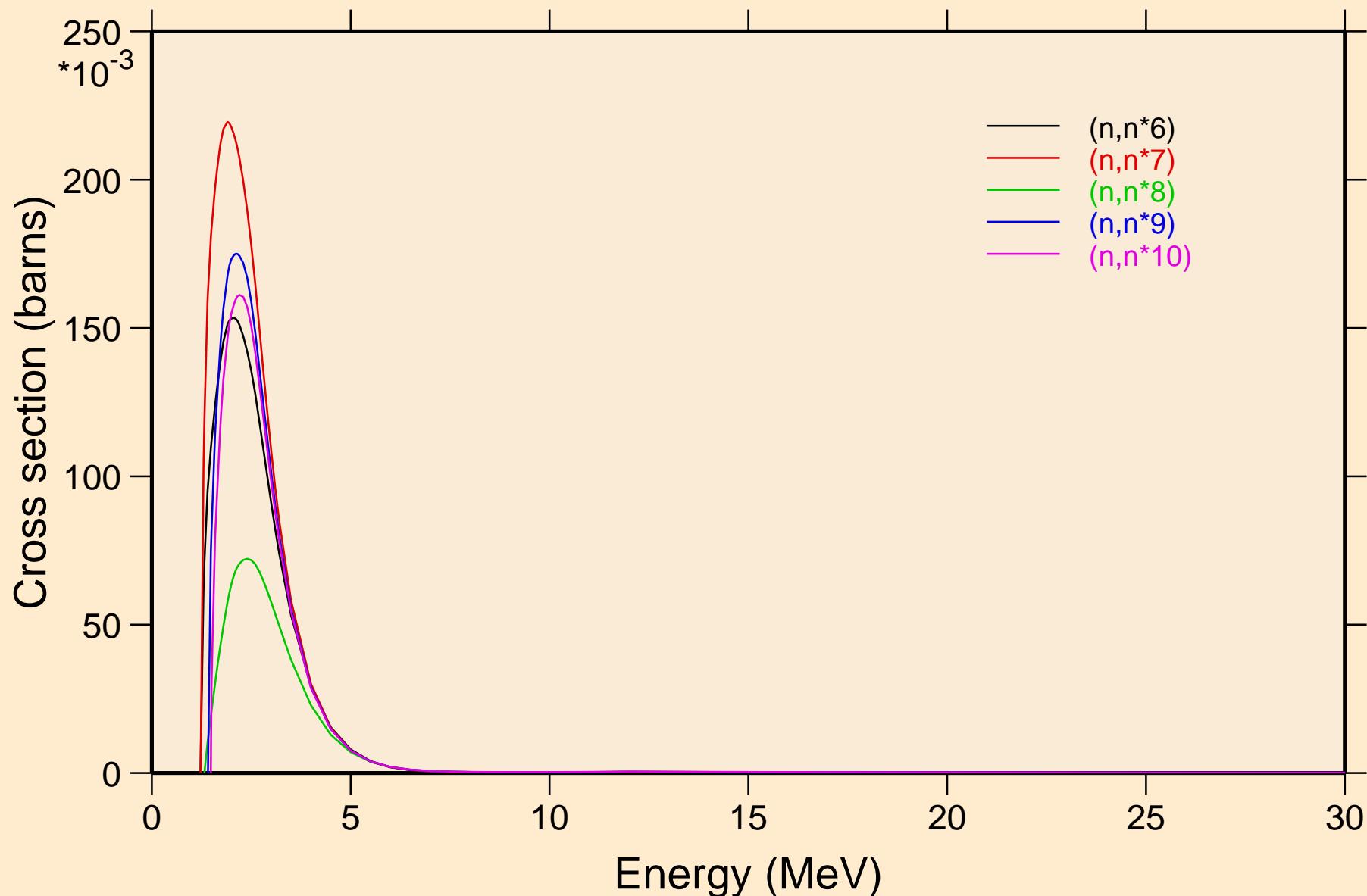
# ENDF/B-VII.1 PD-110

## Inelastic levels



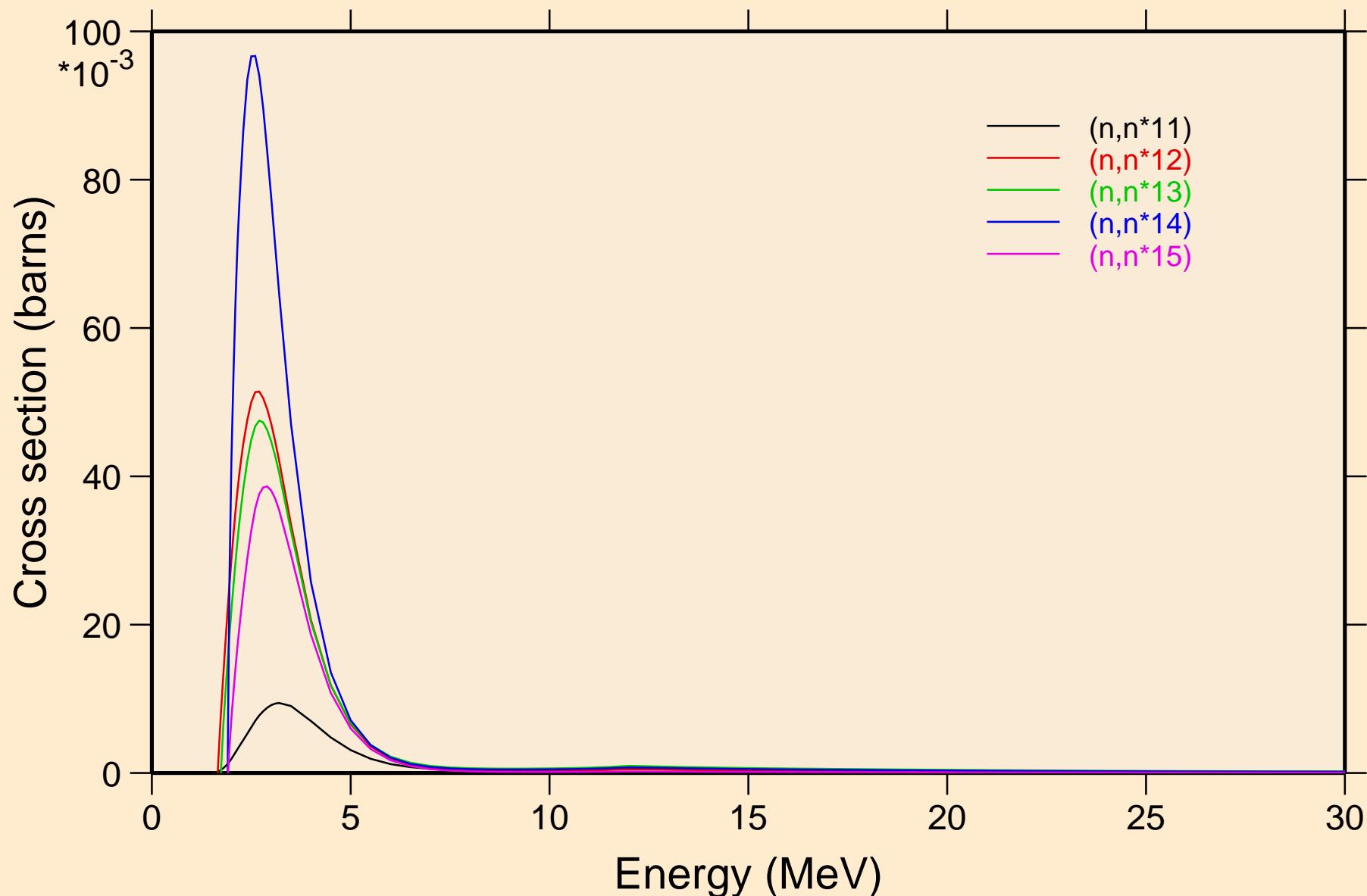
# ENDF/B-VII.1 PD-110

## Inelastic levels



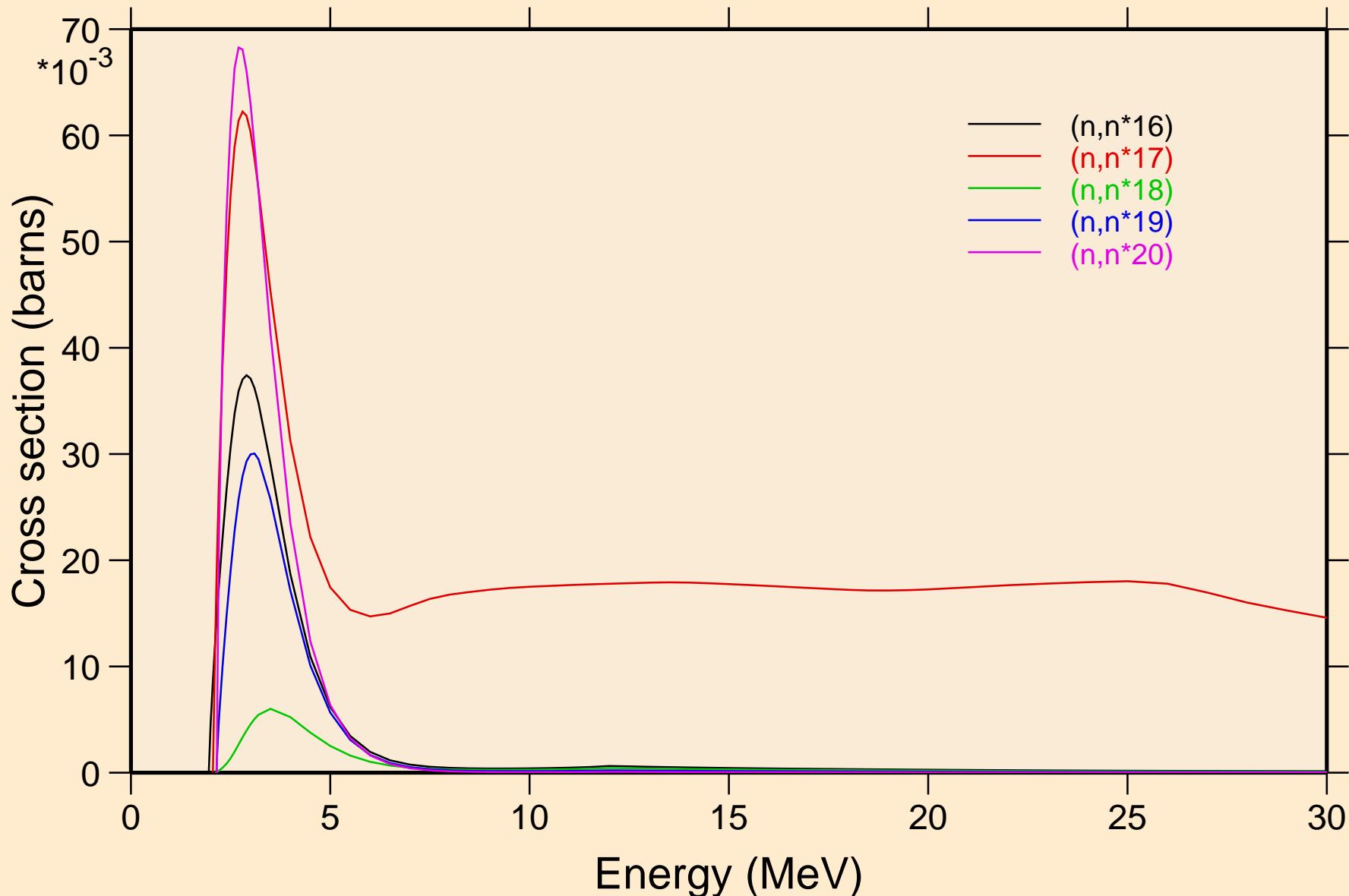
# ENDF/B-VII.1 PD-110

## Inelastic levels

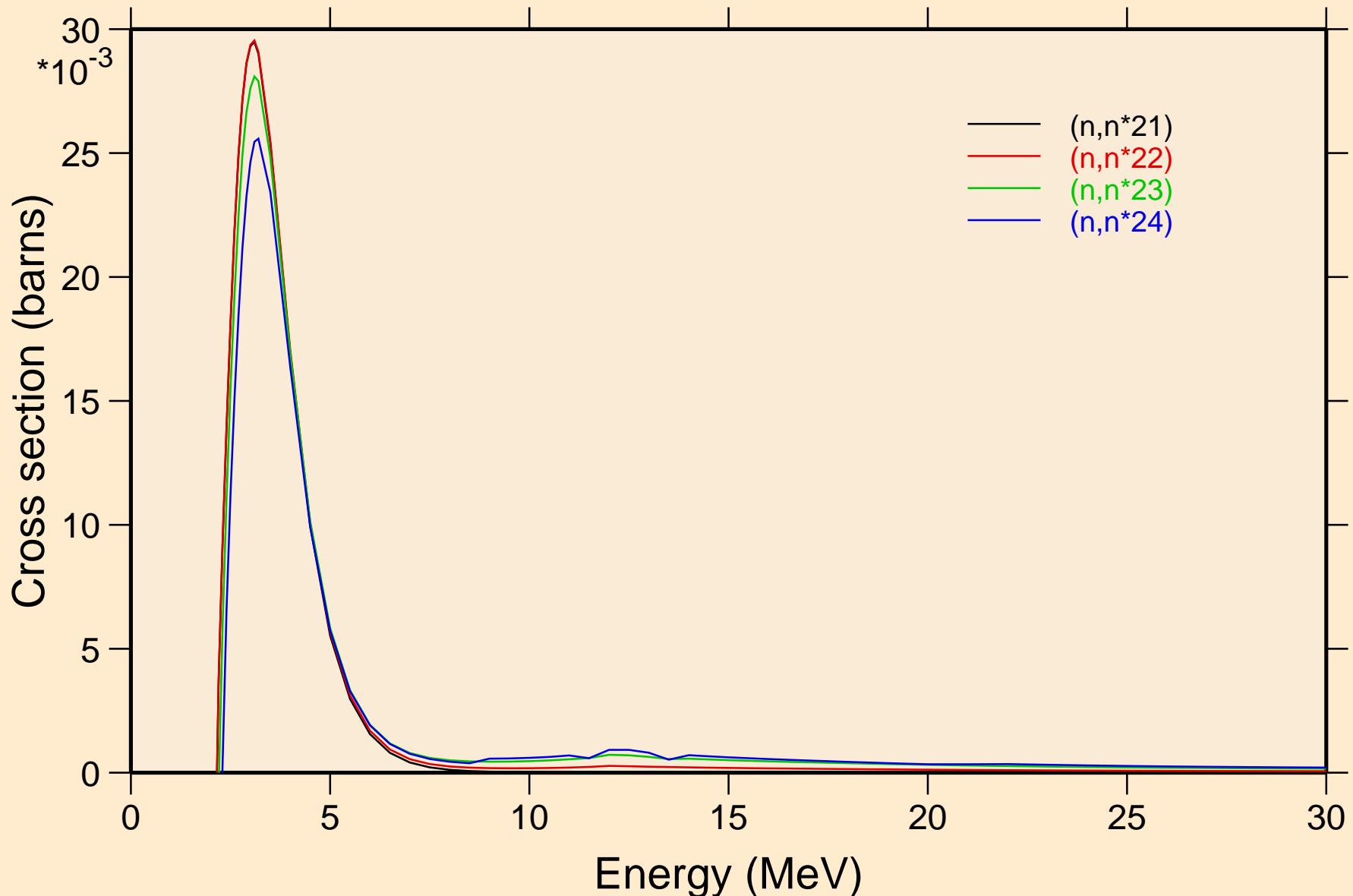


# ENDF/B-VII.1 PD-110

## Inelastic levels

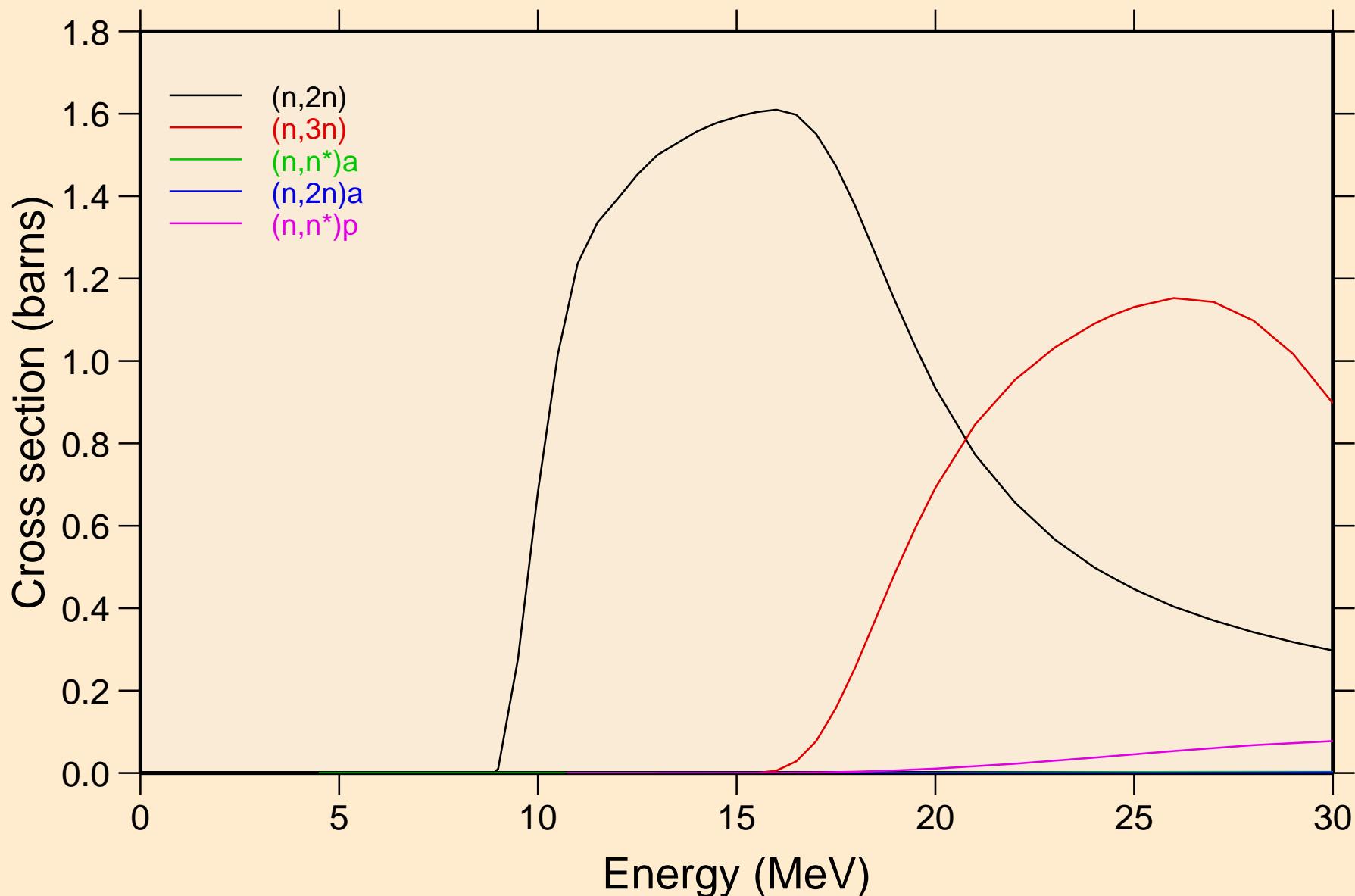


ENDF/B-VII.1 PD-110  
Inelastic levels



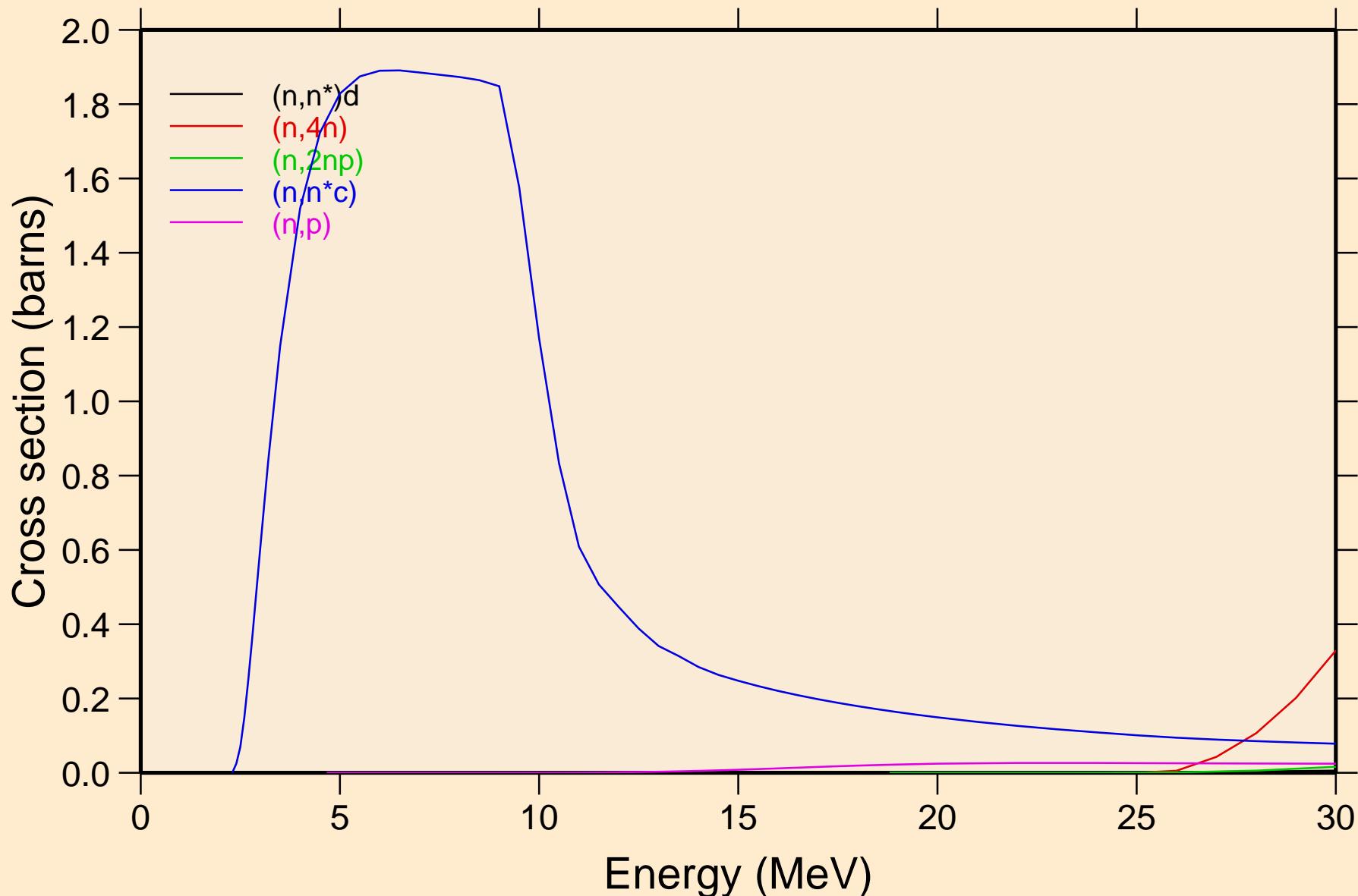
# ENDF/B-VII.1 PD-110

## Threshold reactions



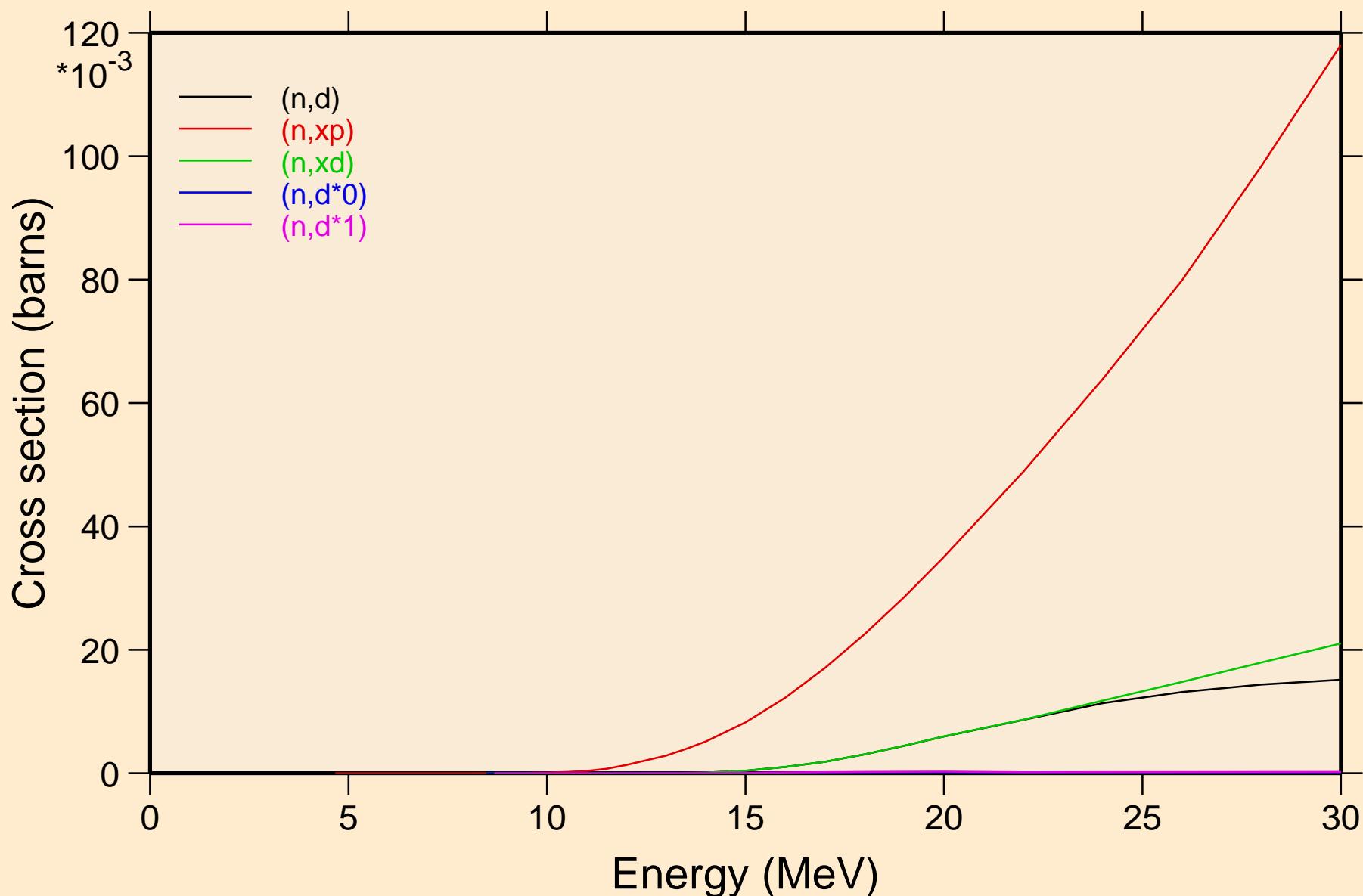
# ENDF/B-VII.1 PD-110

## Threshold reactions



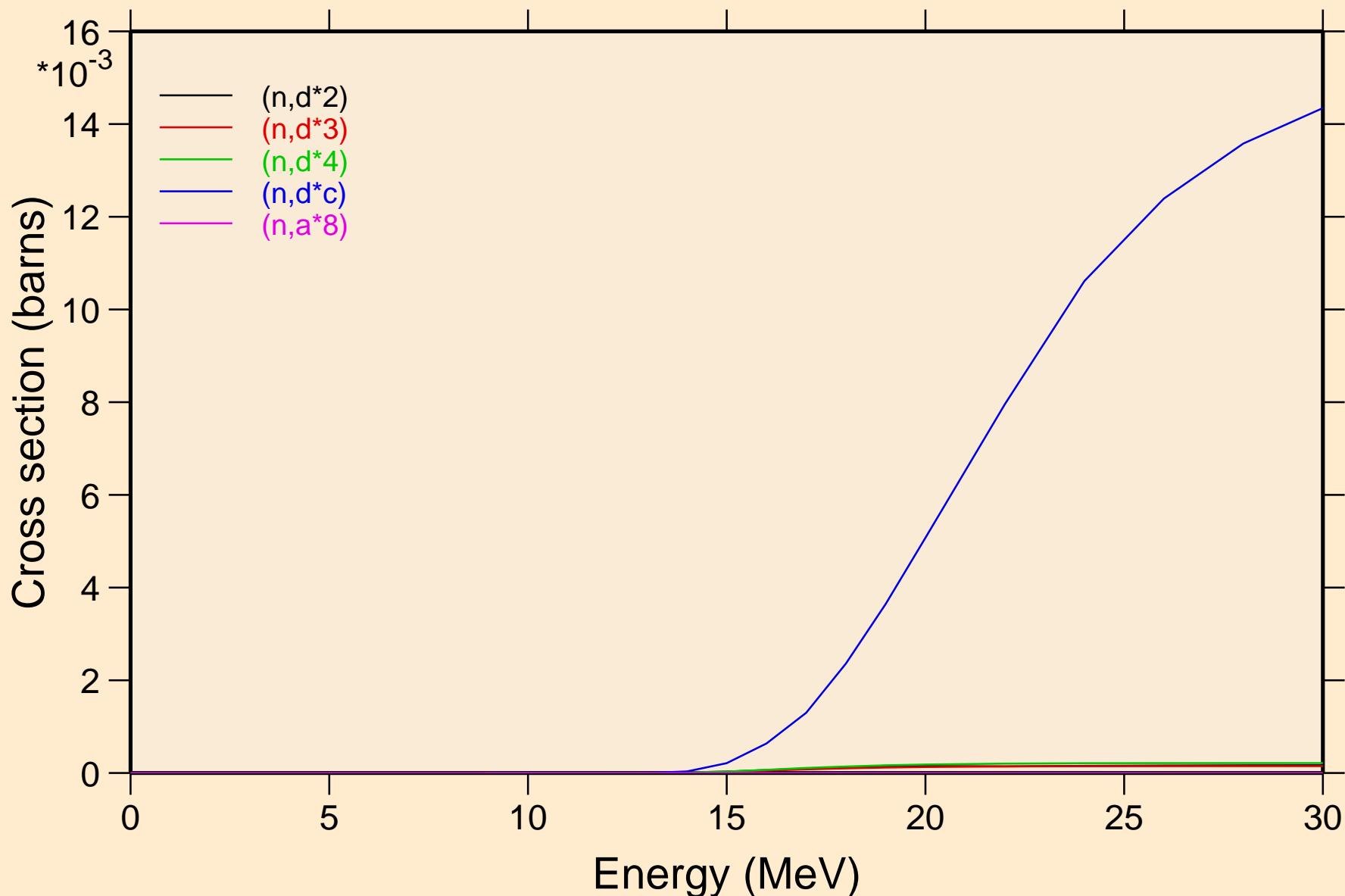
# ENDF/B-VII.1 PD-110

## Threshold reactions



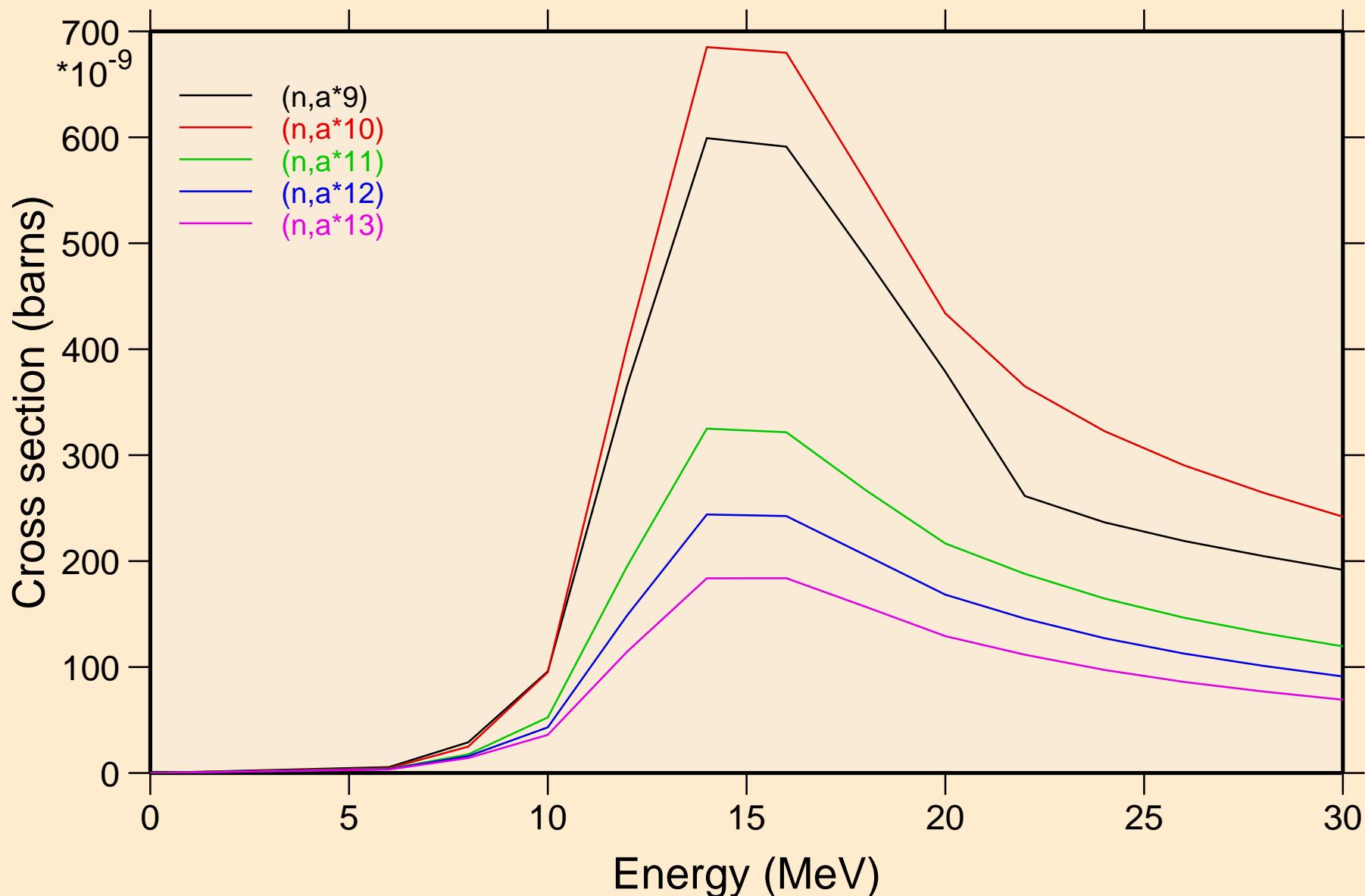
# ENDF/B-VII.1 PD-110

## Threshold reactions



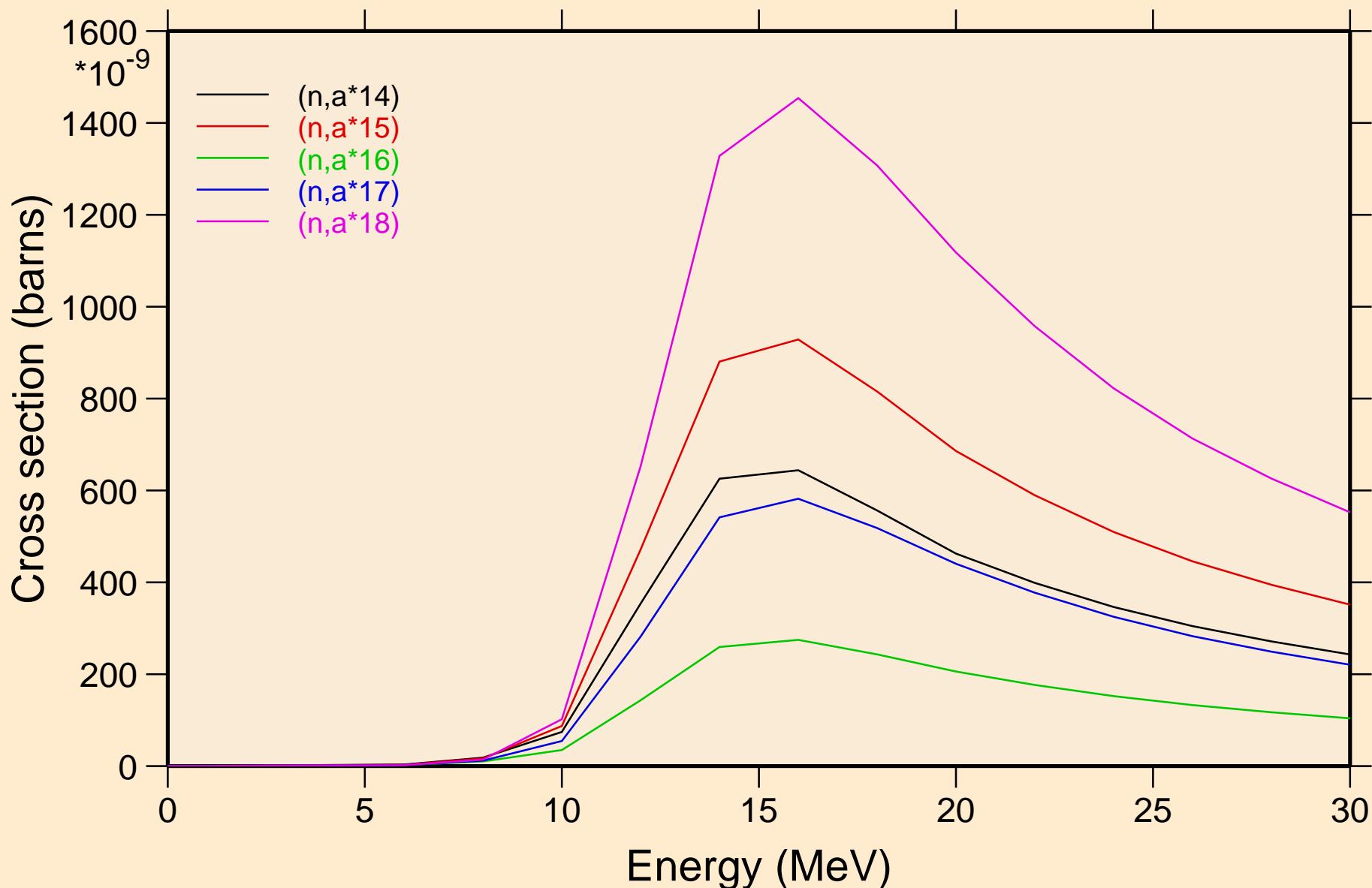
# ENDF/B-VII.1 PD-110

## Threshold reactions

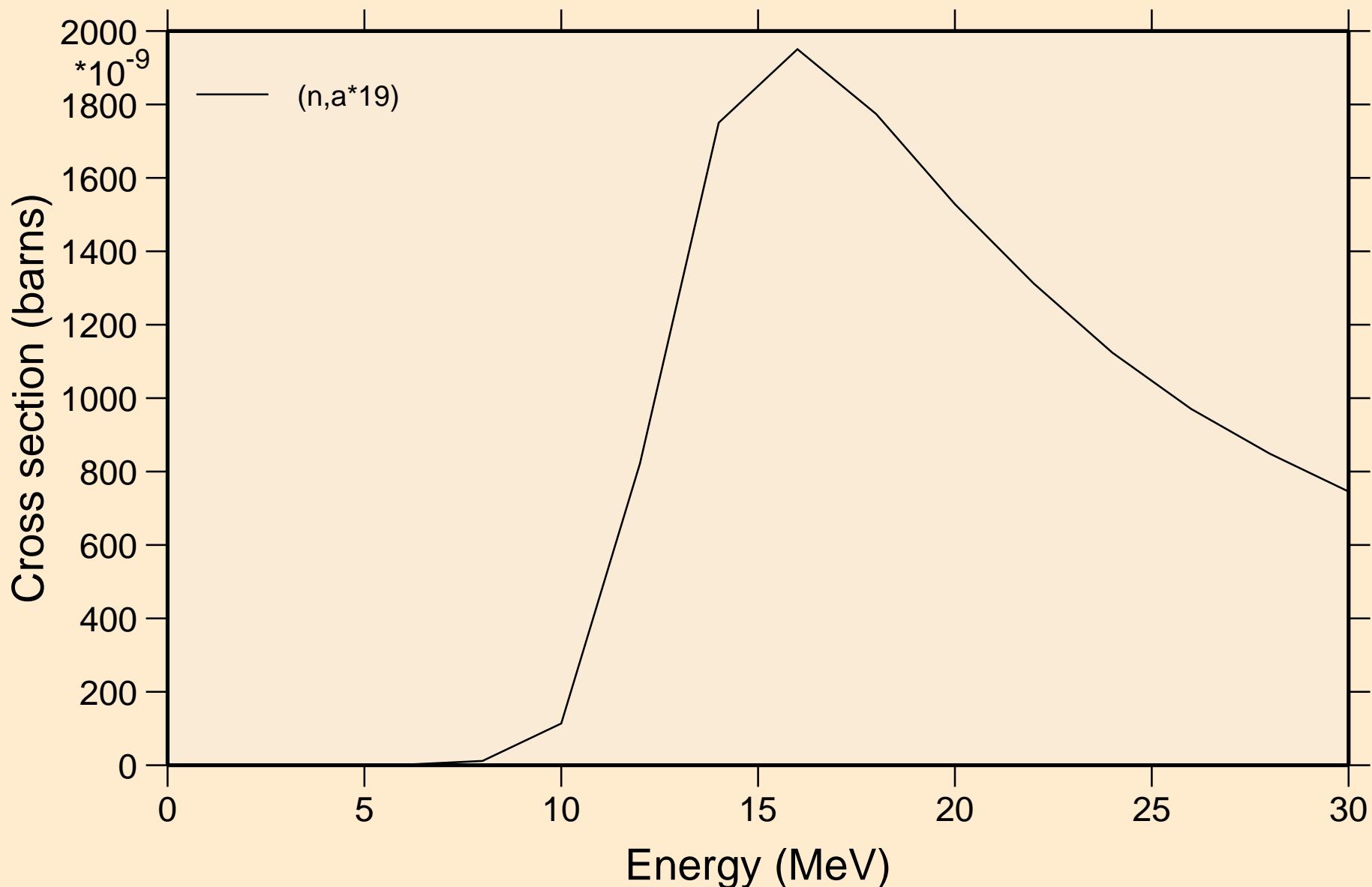


# ENDF/B-VII.1 PD-110

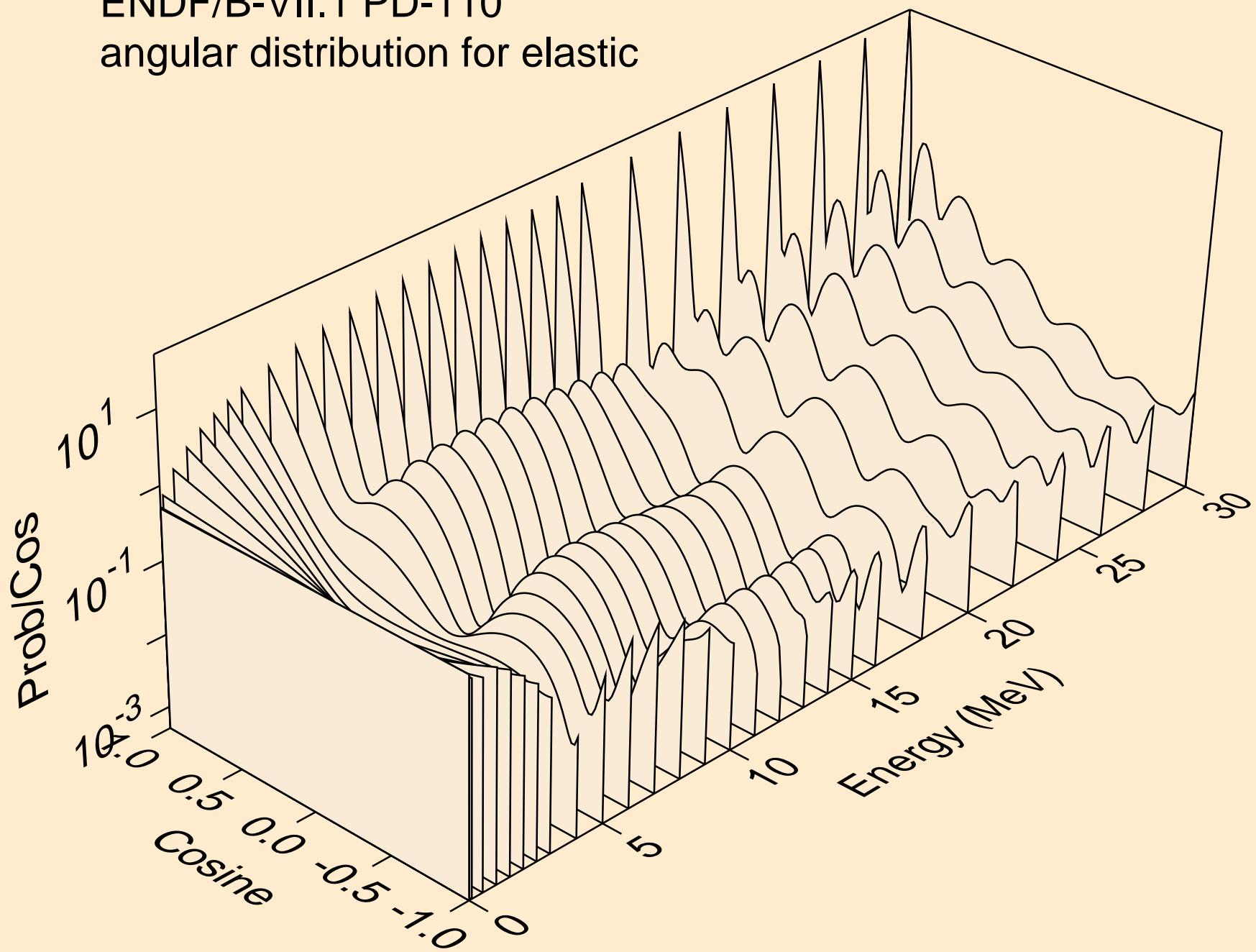
## Threshold reactions



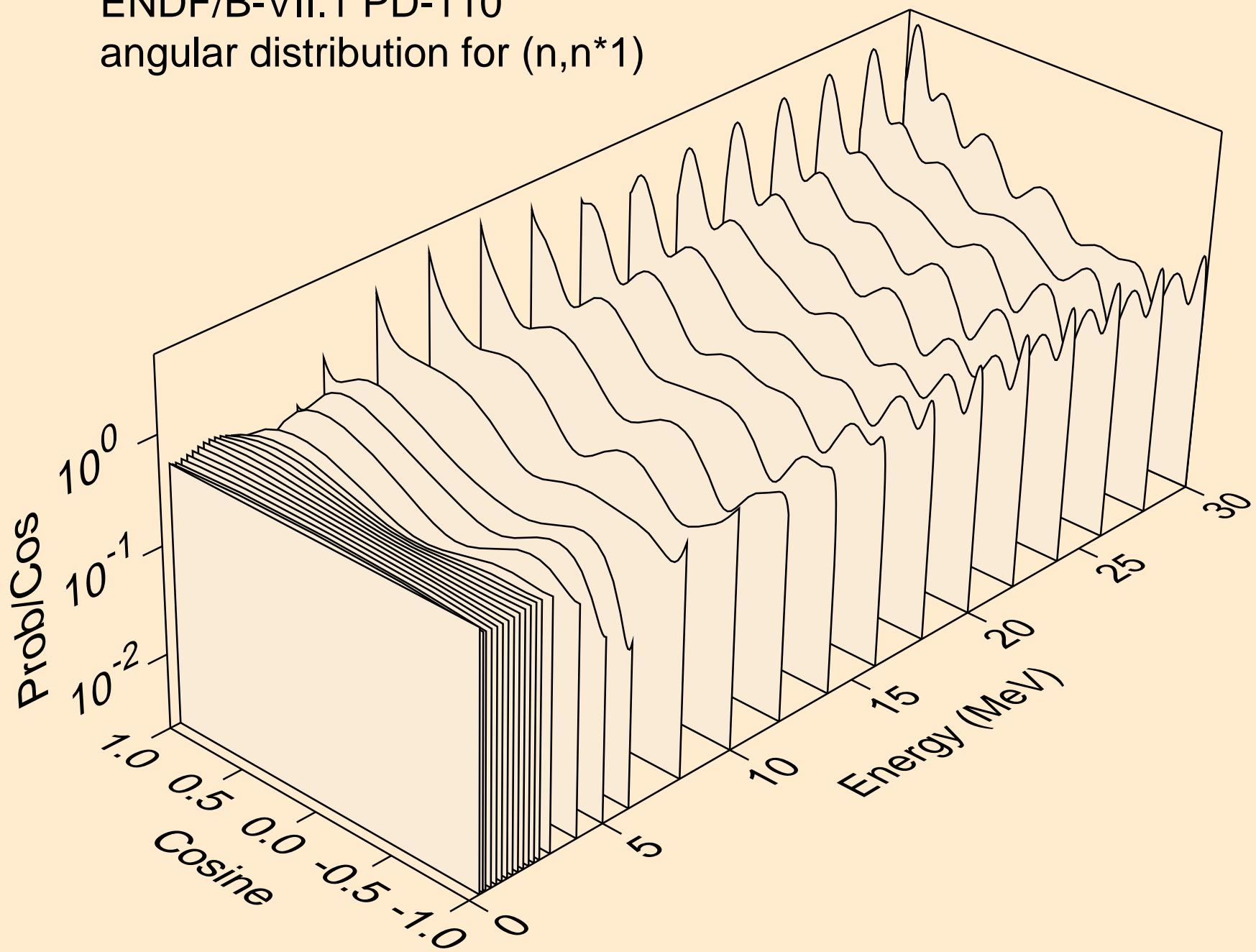
ENDF/B-VII.1 PD-110  
Threshold reactions



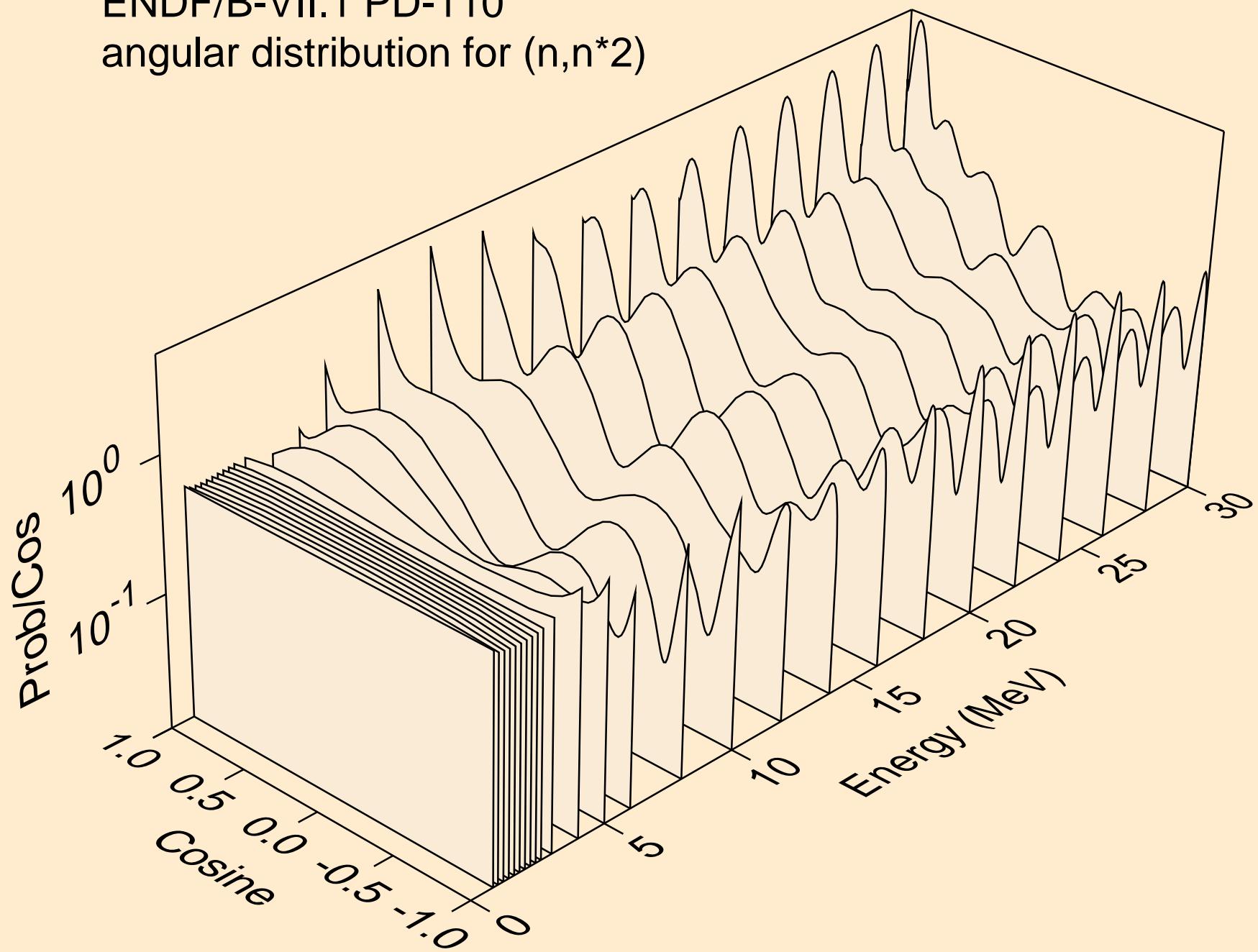
ENDF/B-VII.1 PD-110  
angular distribution for elastic



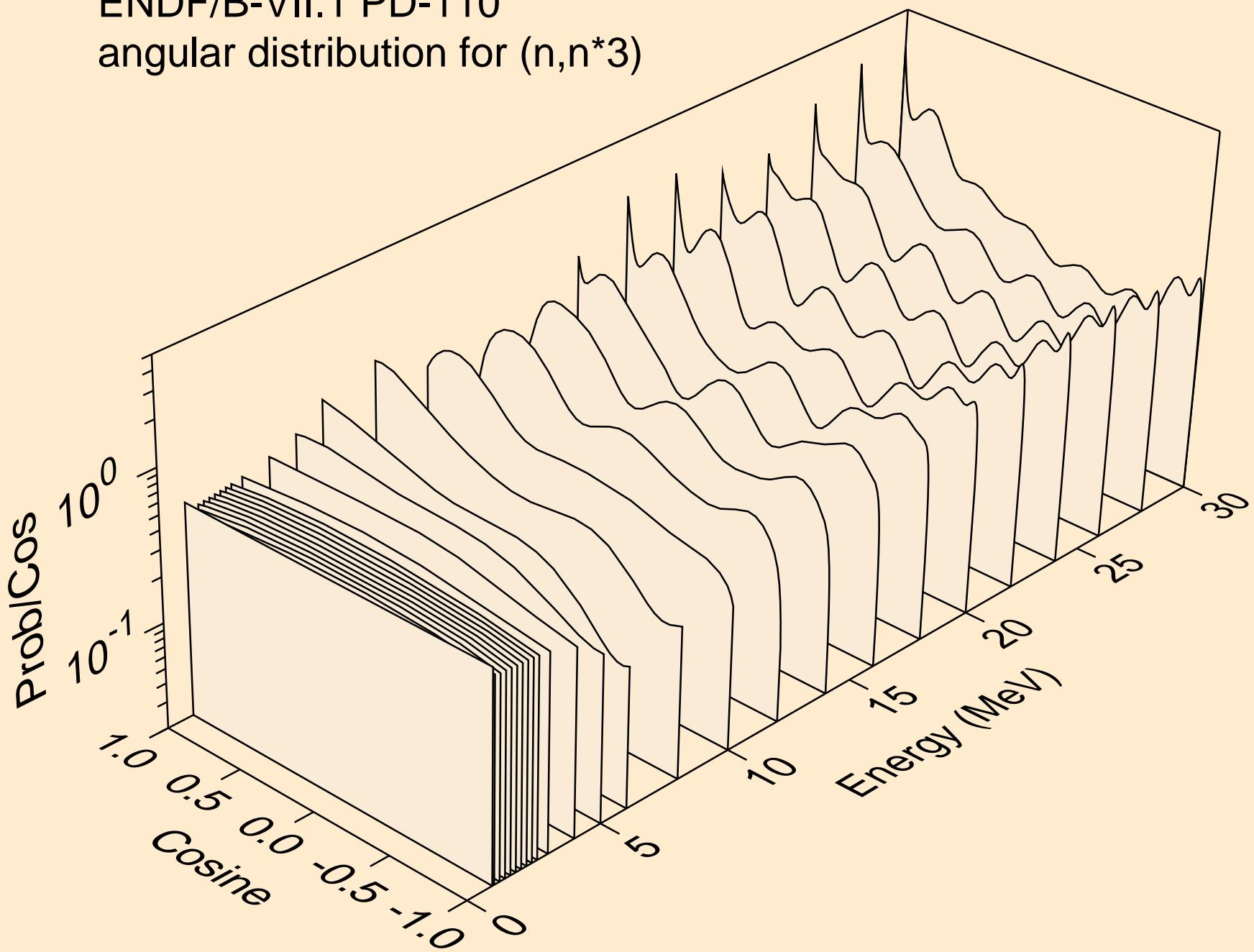
ENDF/B-VII.1 PD-110  
angular distribution for  $(n,n^*)$



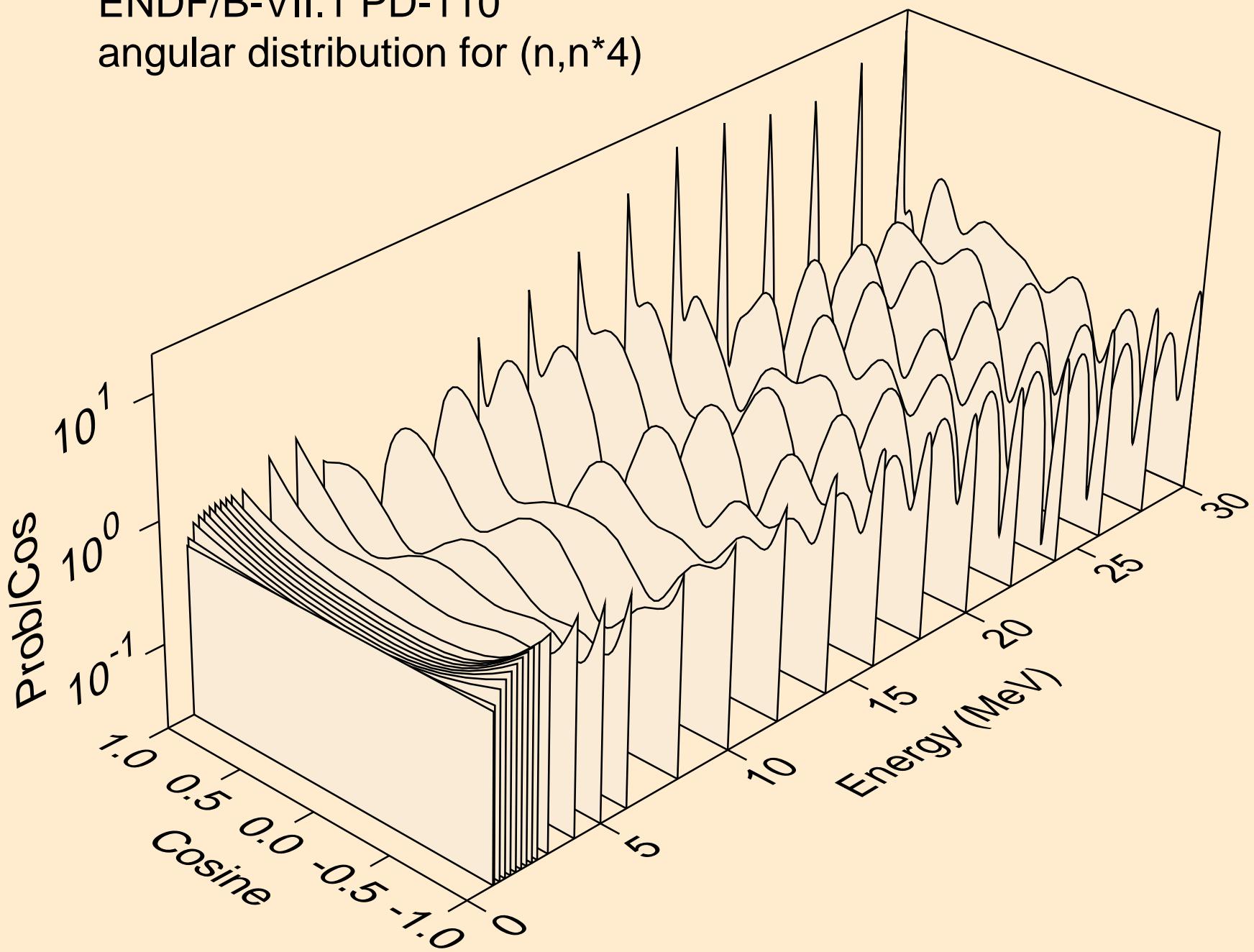
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angular distribution for  $(n,n^*)$



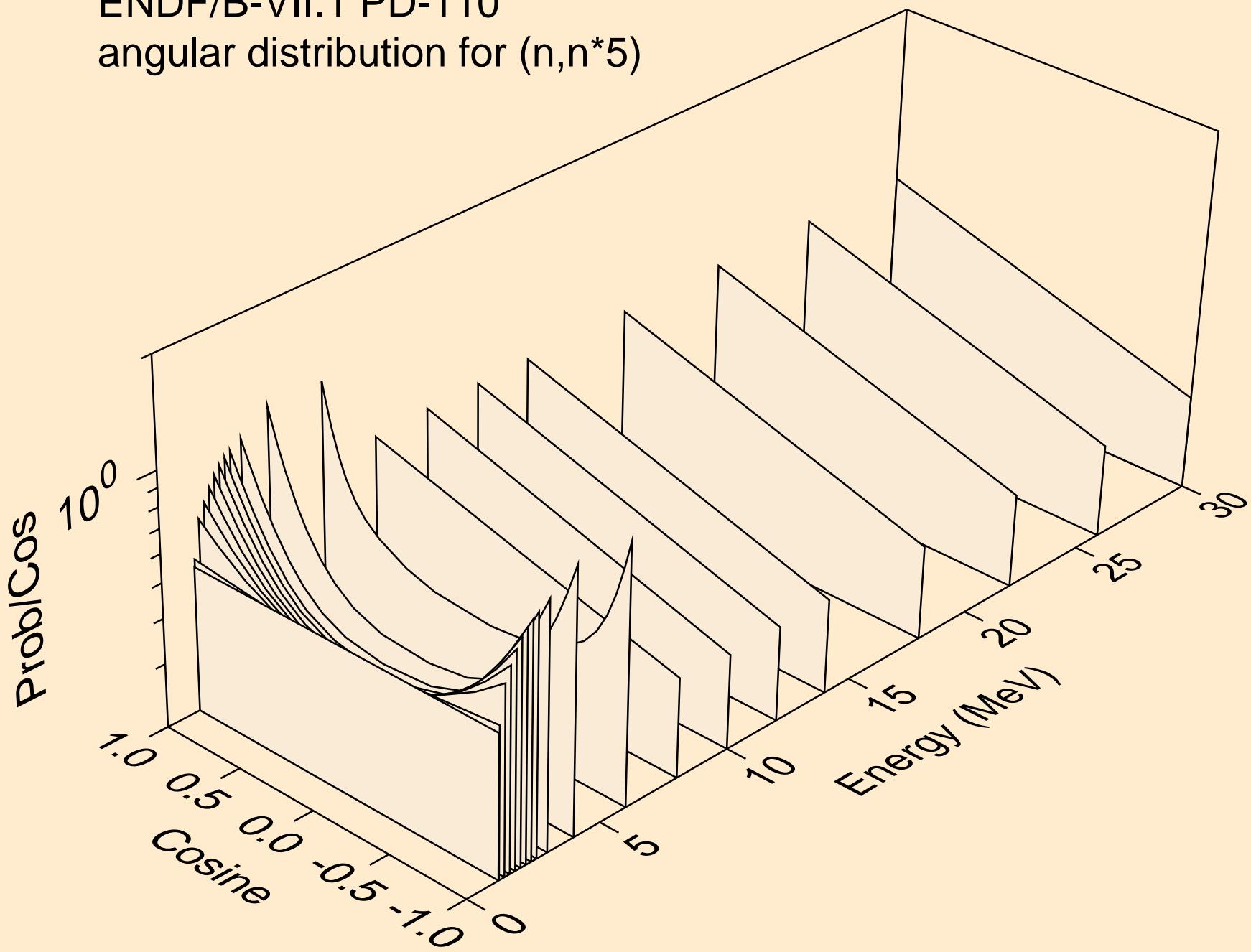
ENDF/B-VII.1 PD-110  
angular distribution for  $(n,n^*3)$



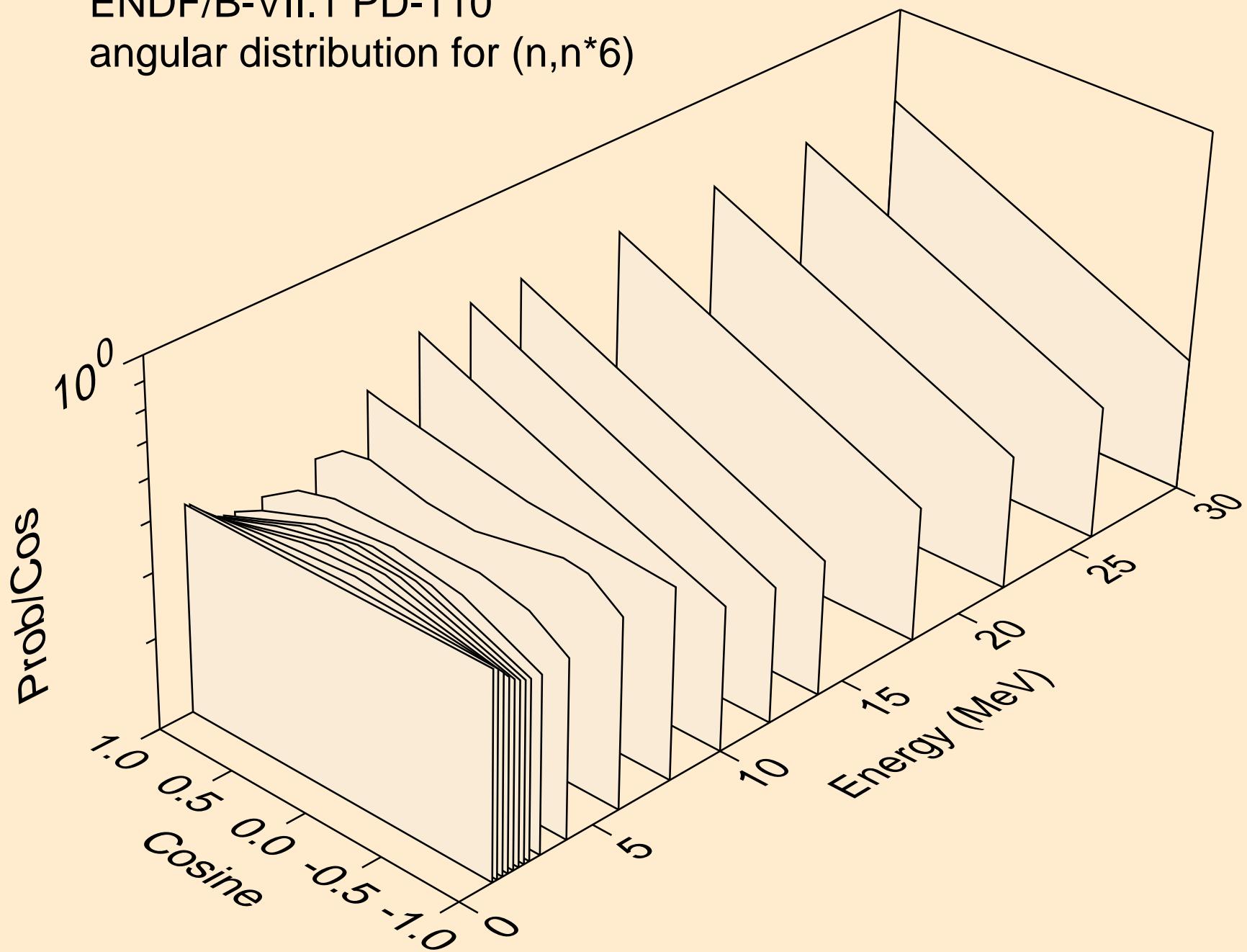
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angular distribution for  $(n,n^*4)$



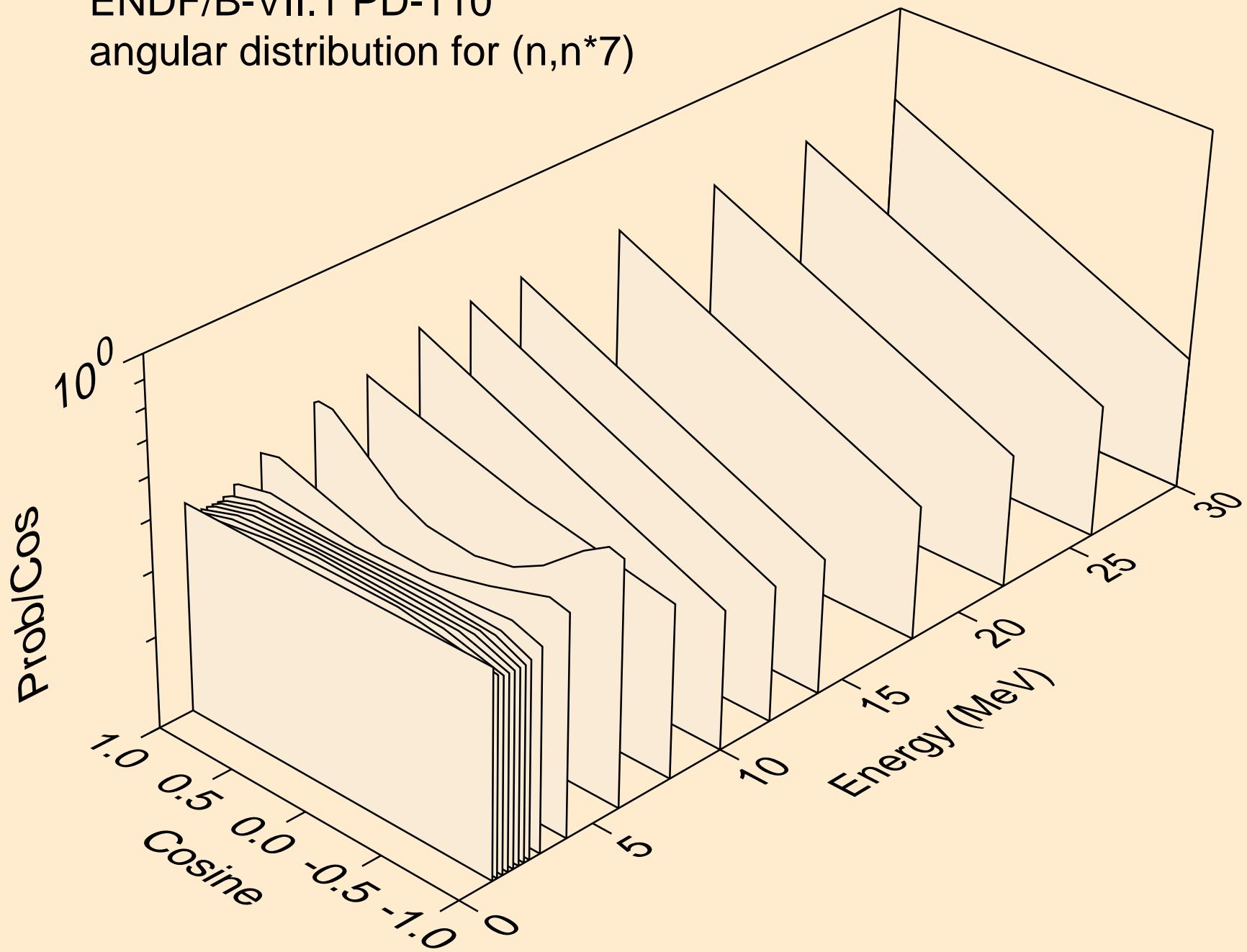
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angular distribution for  $(n,n^*5)$



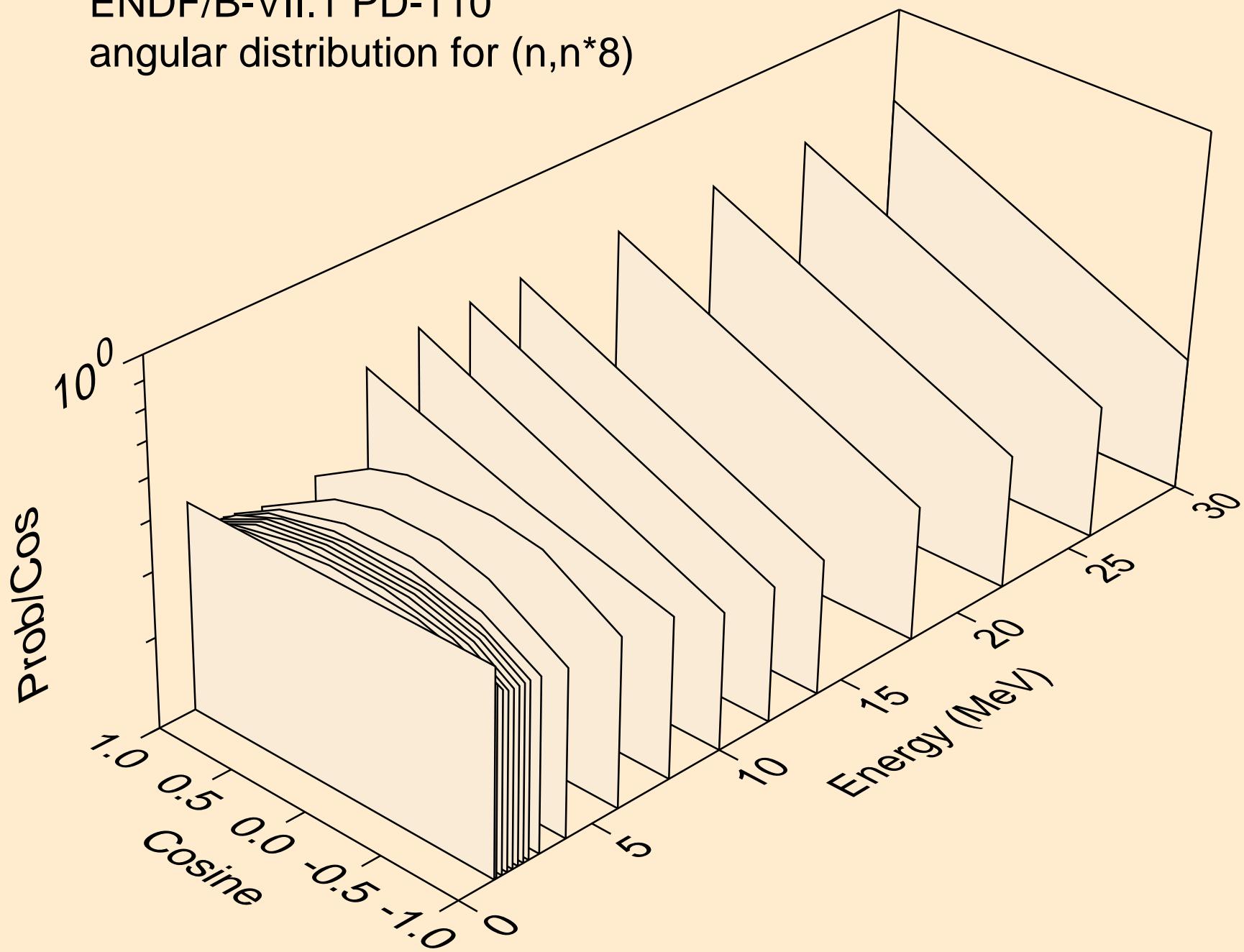
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angular distribution for  $(n,n^*6)$



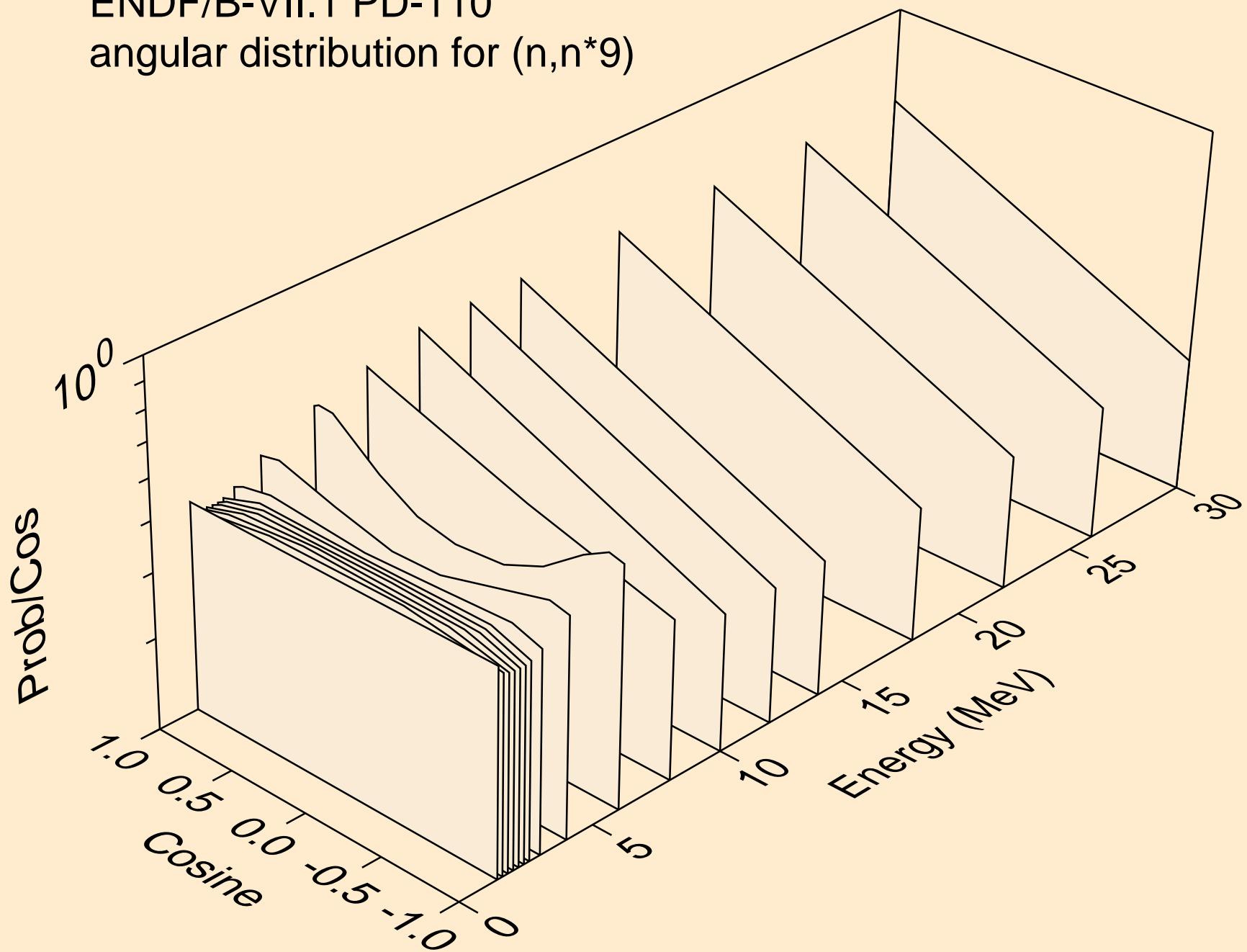
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angular distribution for  $(n,n^*7)$



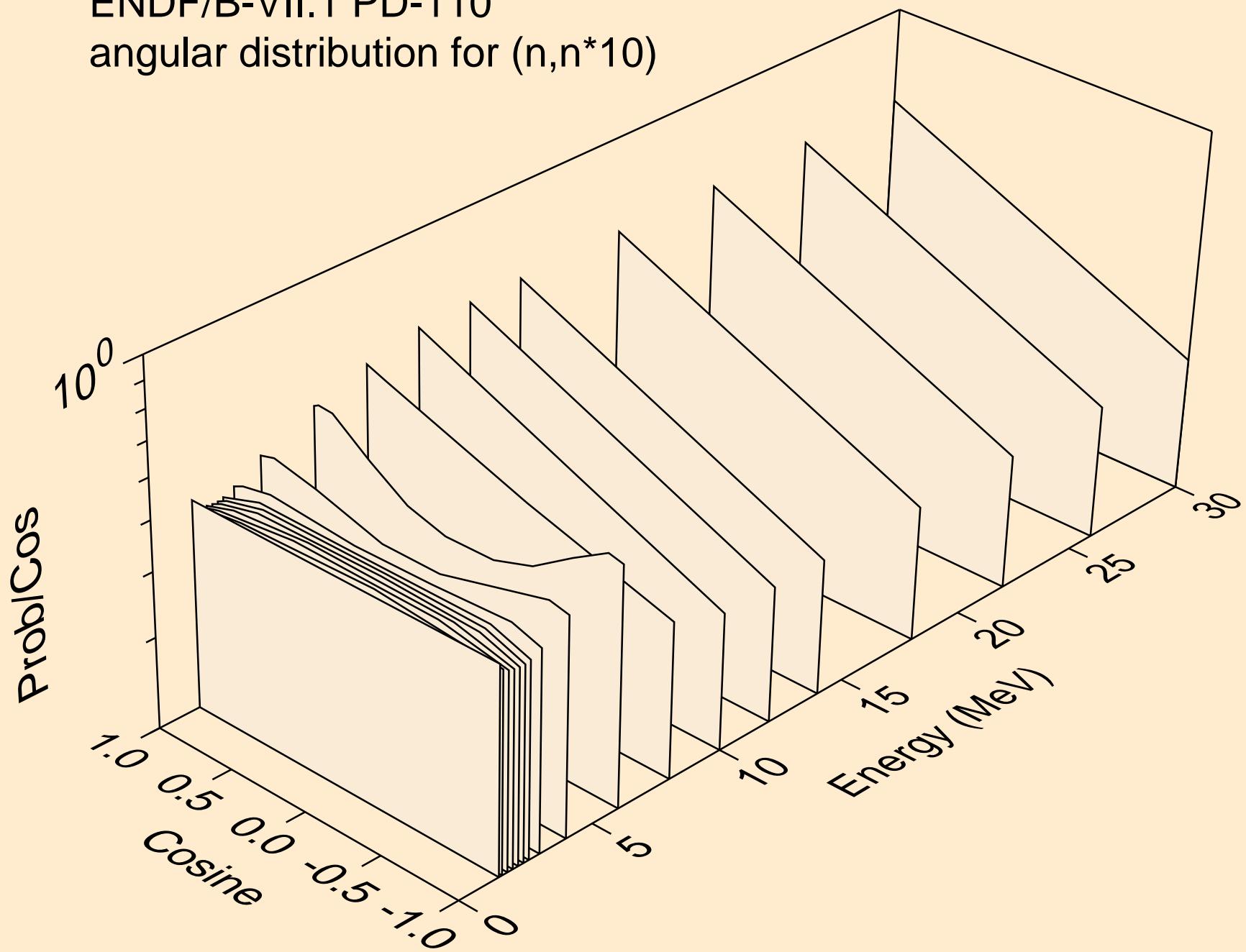
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angular distribution for  $(n,n^*8)$



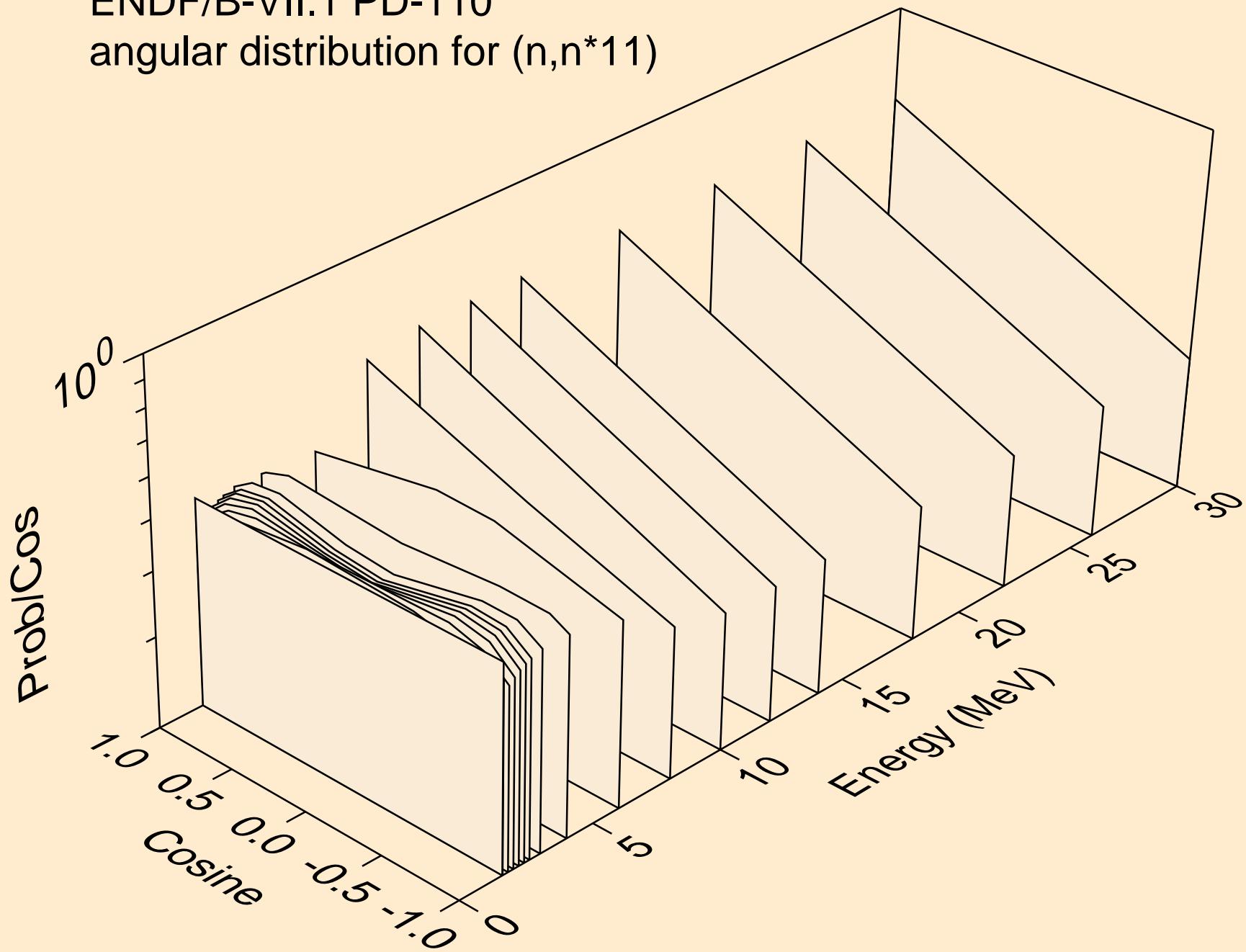
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angular distribution for  $(n,n^*9)$



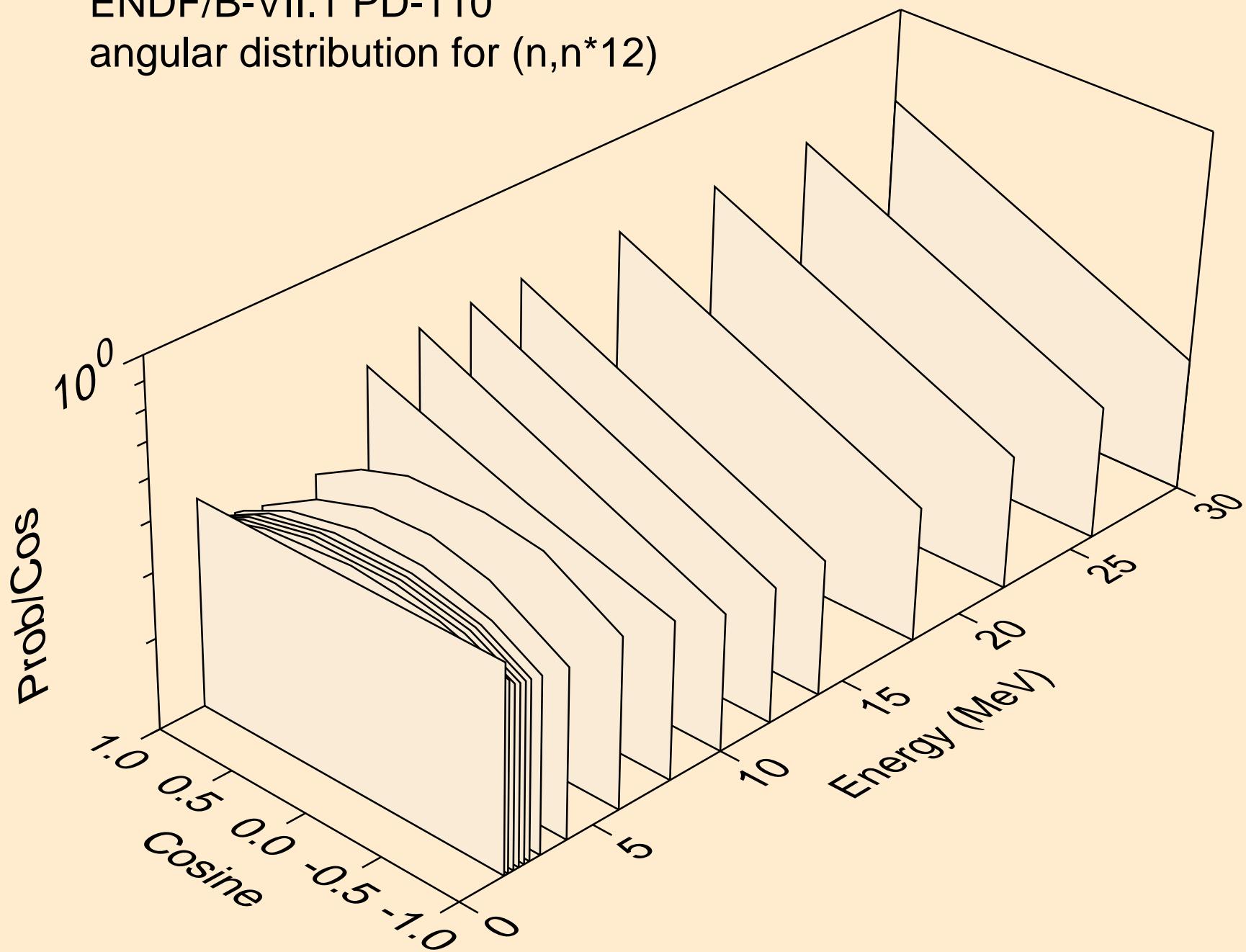
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angular distribution for (n,n\*10)



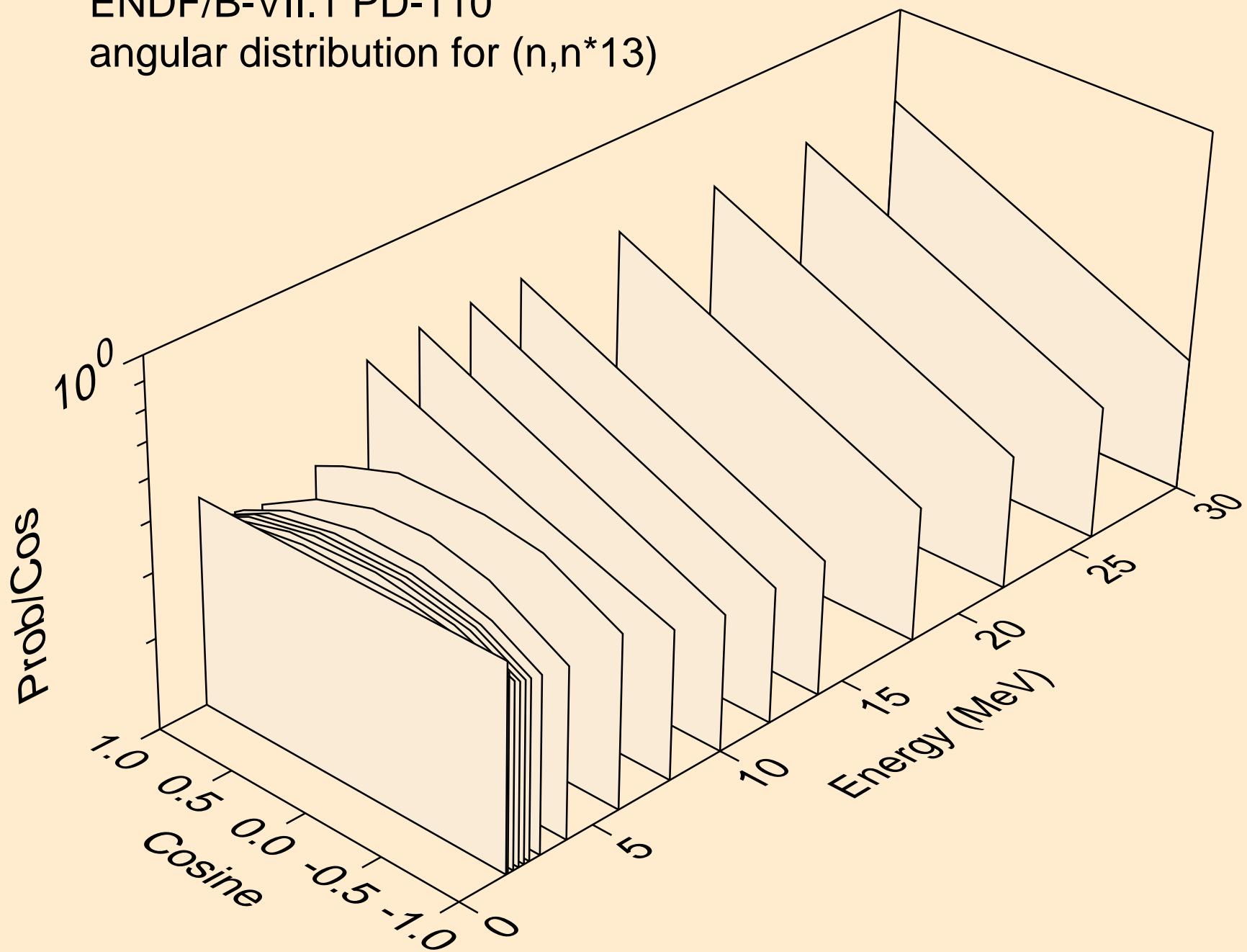
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angular distribution for (n,n\*11)



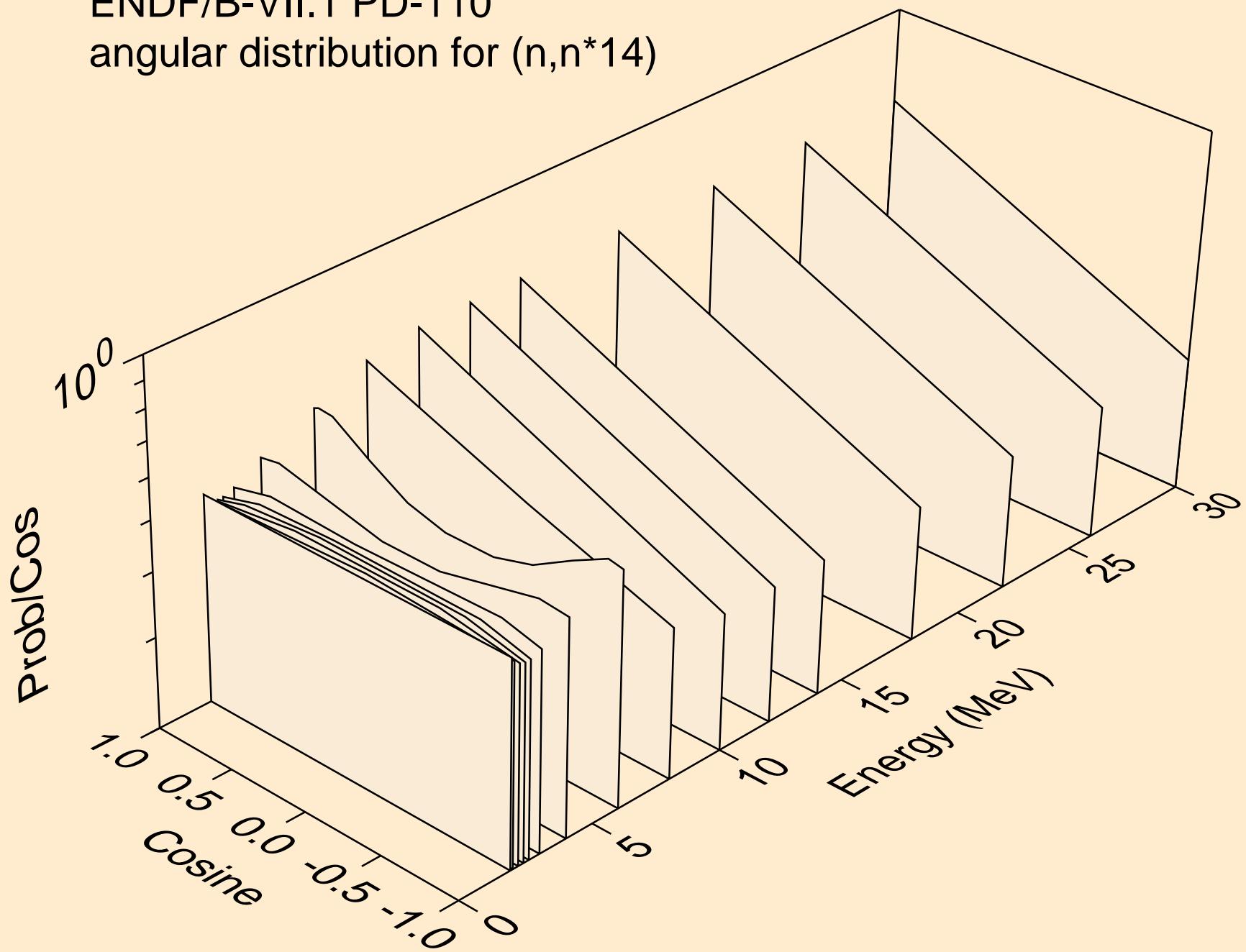
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angular distribution for  $(n,n^*12)$



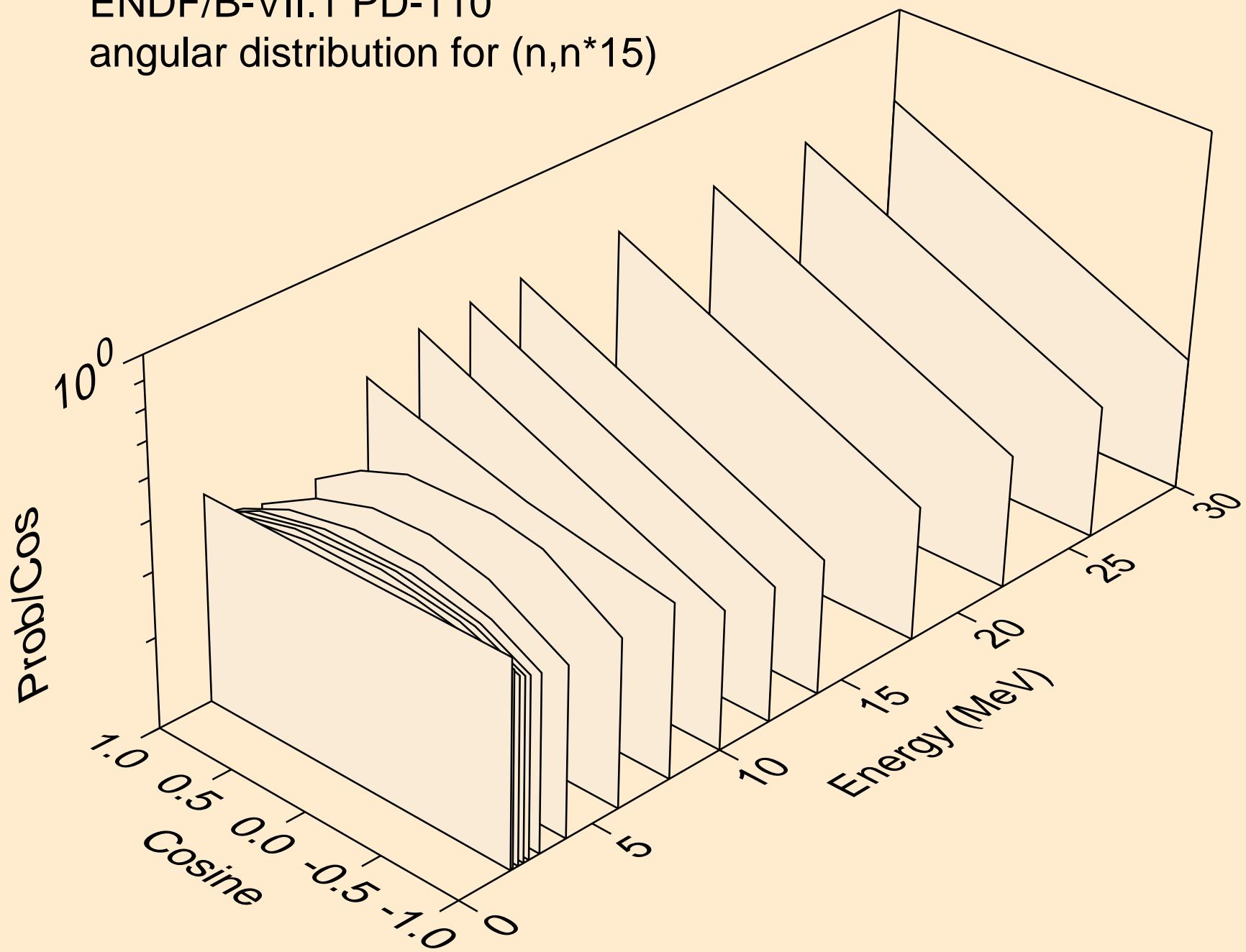
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angular distribution for (n,n\*13)



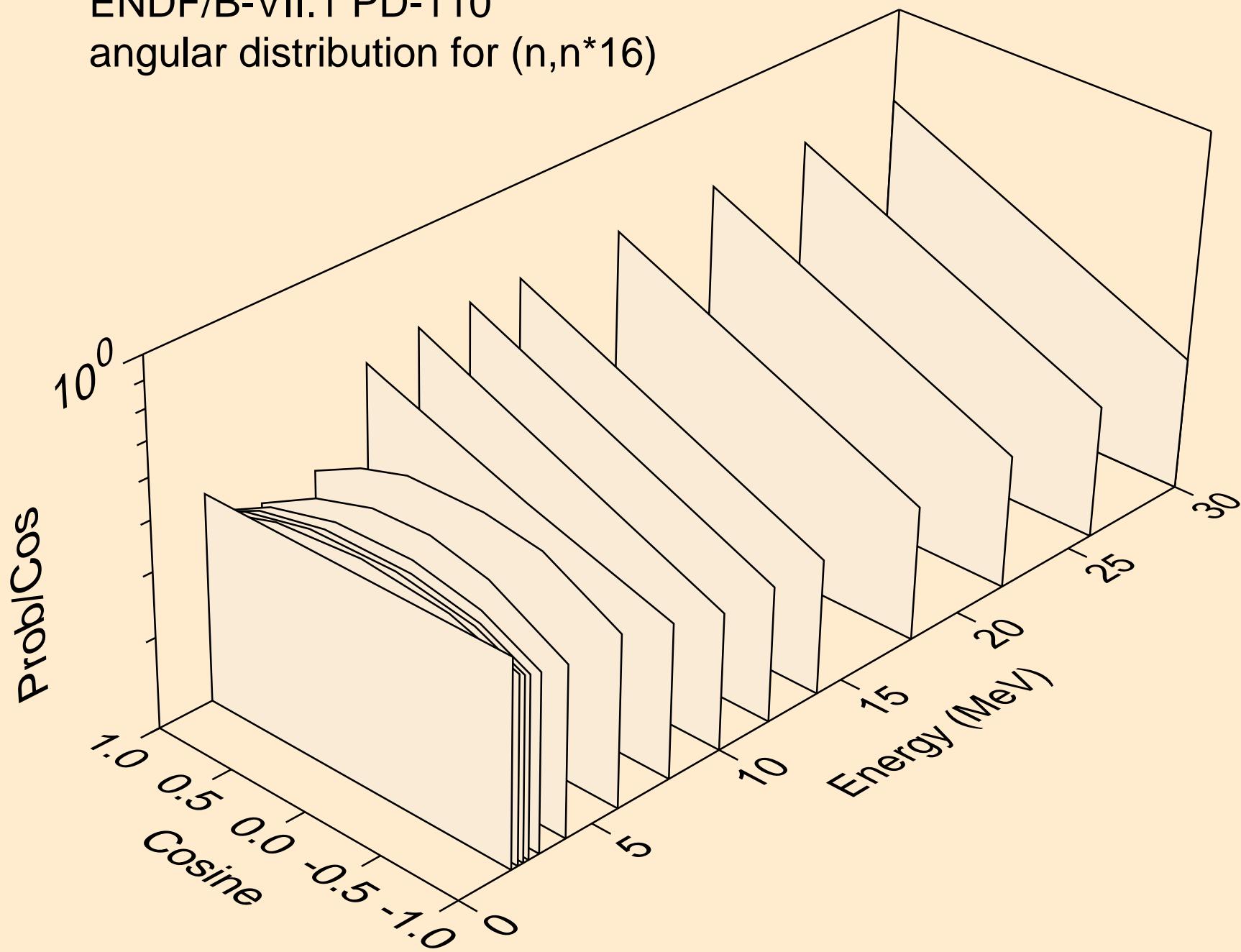
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angular distribution for (n,n\*14)



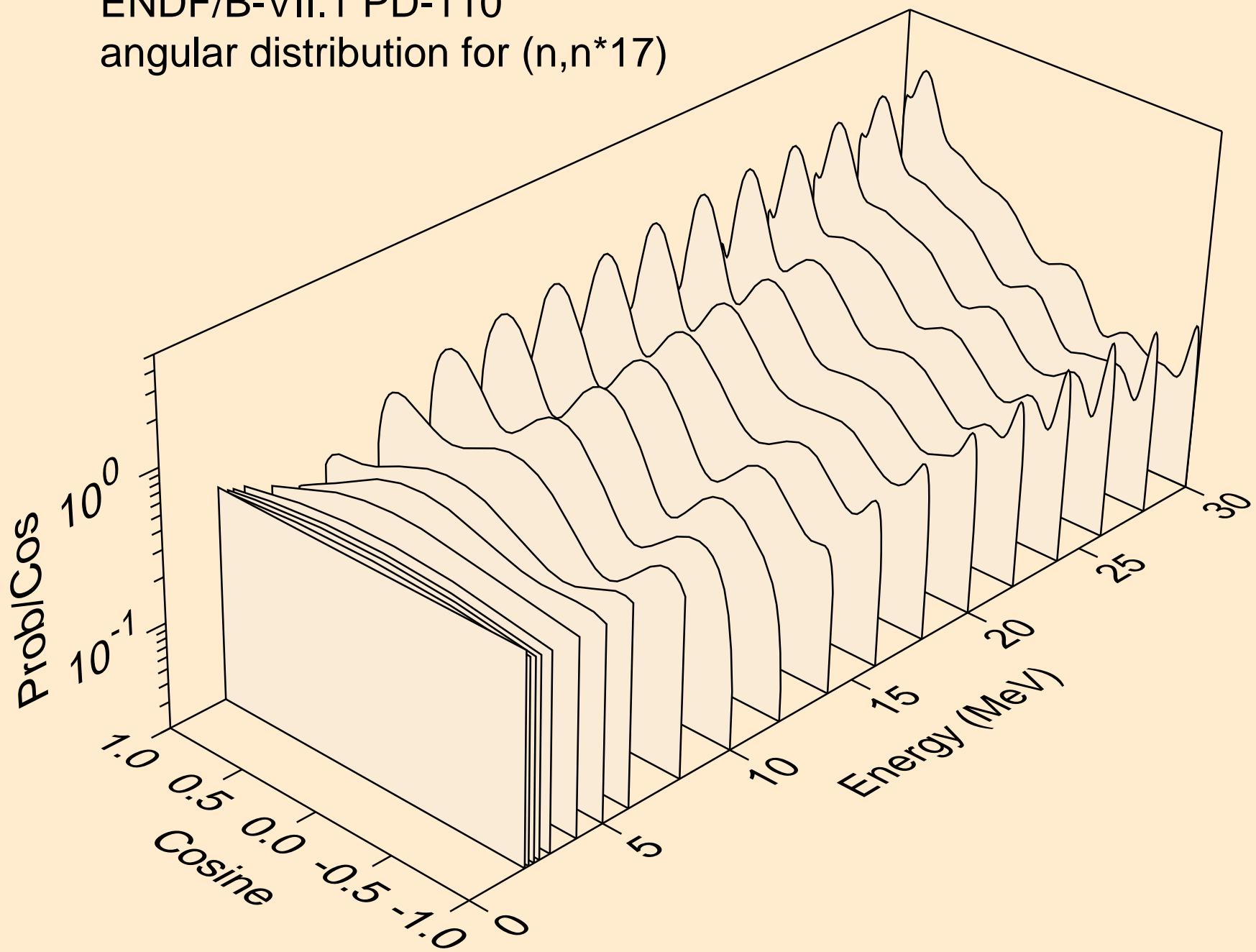
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angular distribution for (n,n\*15)



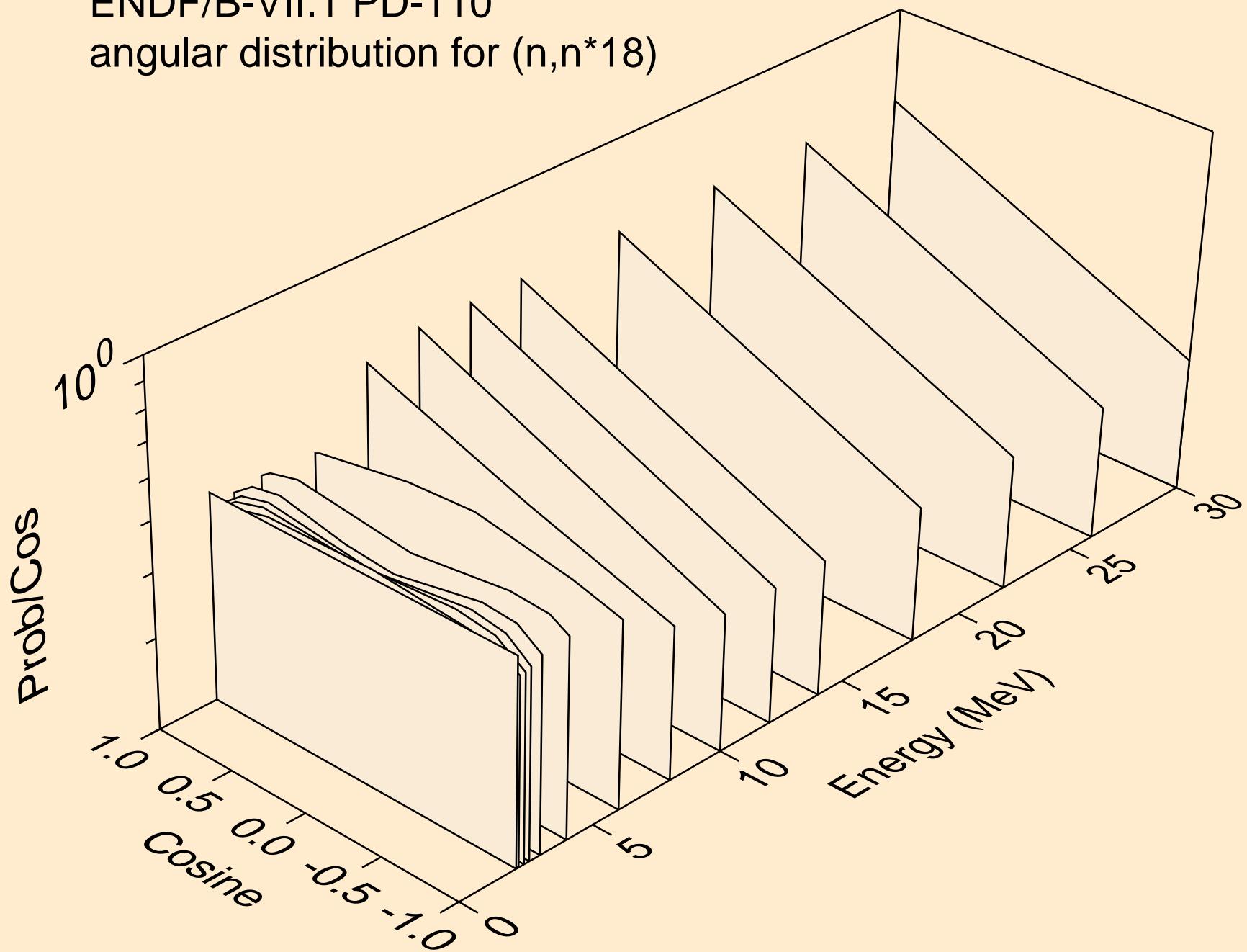
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angular distribution for (n,n\*16)



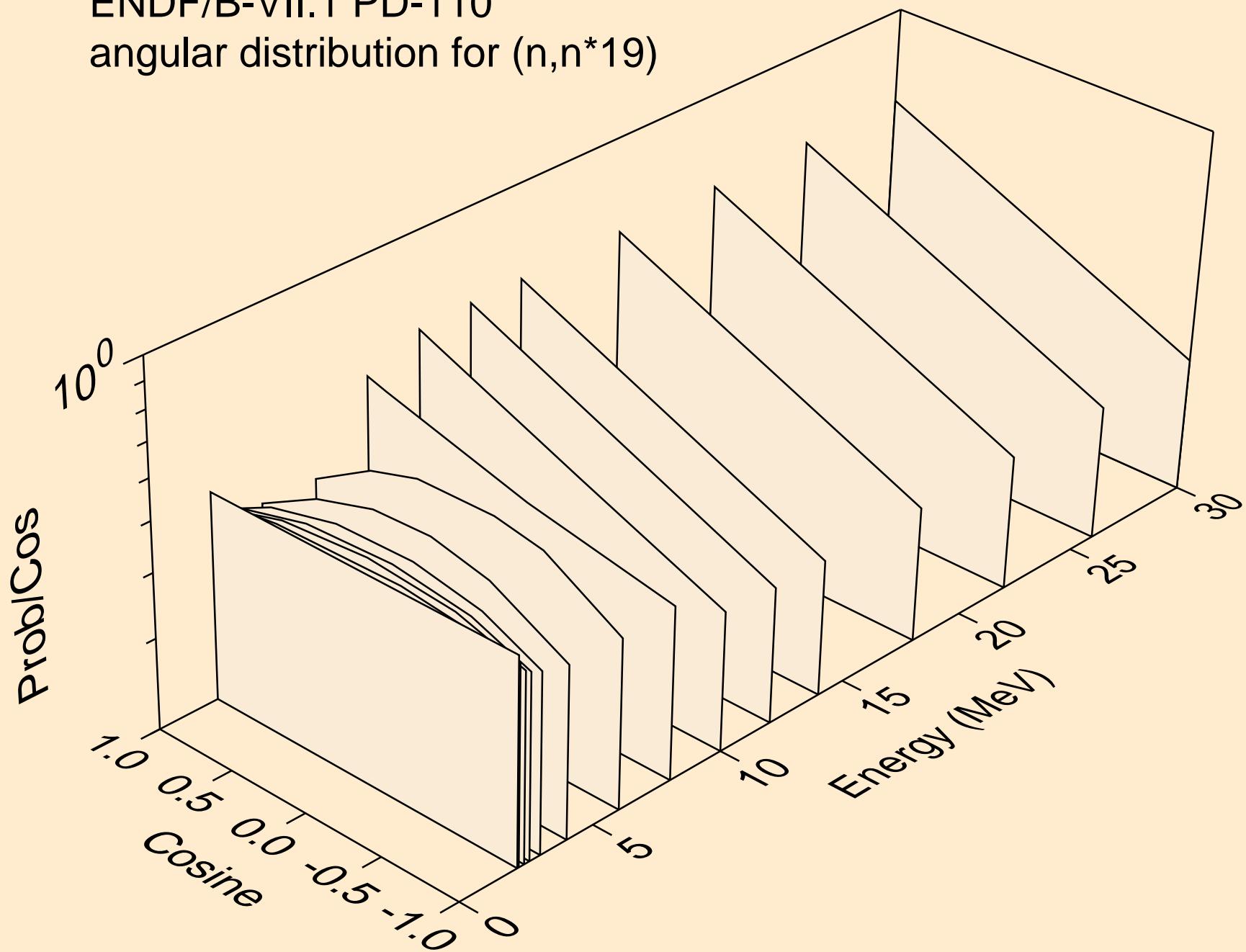
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angular distribution for  $(n,n^*17)$



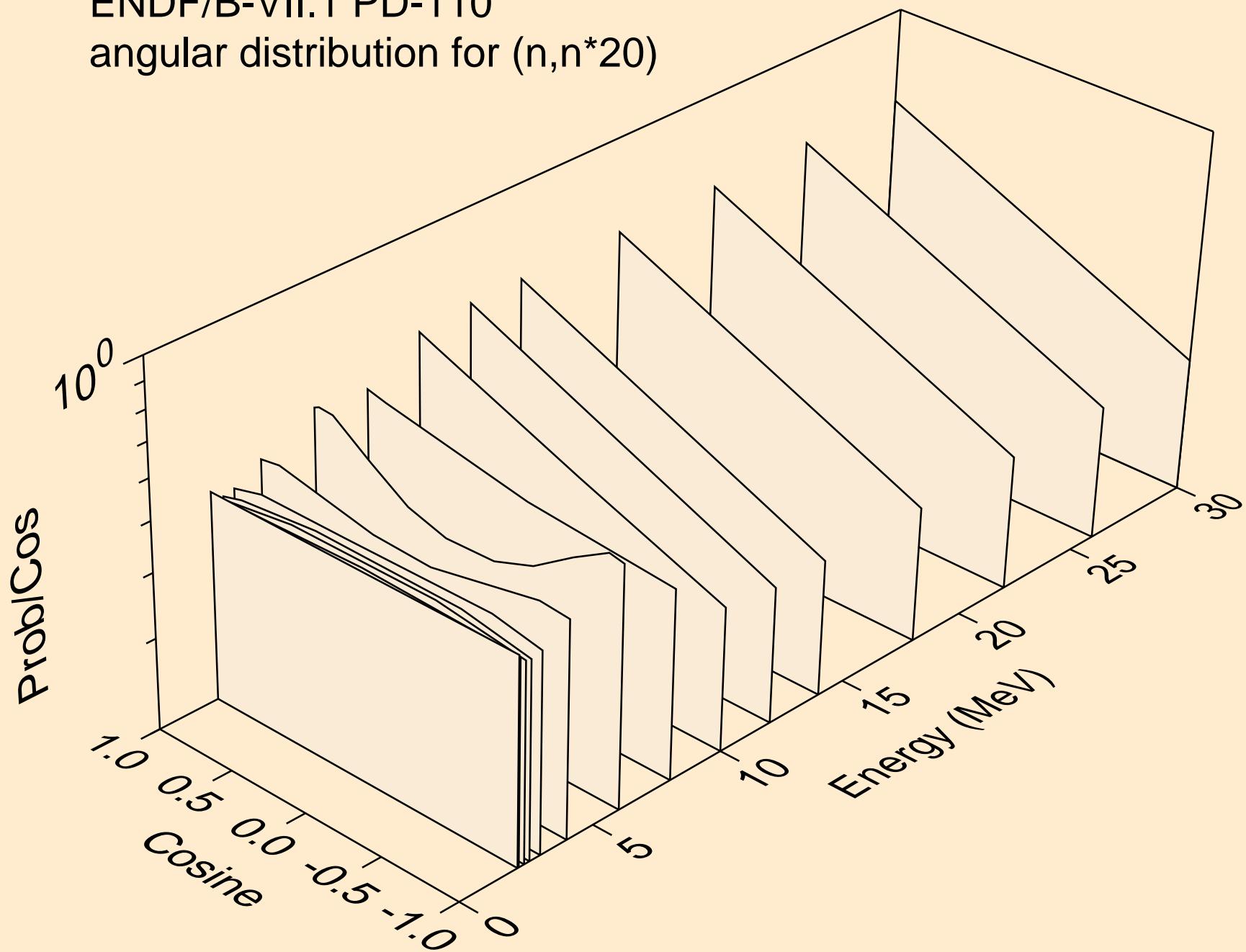
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angular distribution for (n,n\*18)



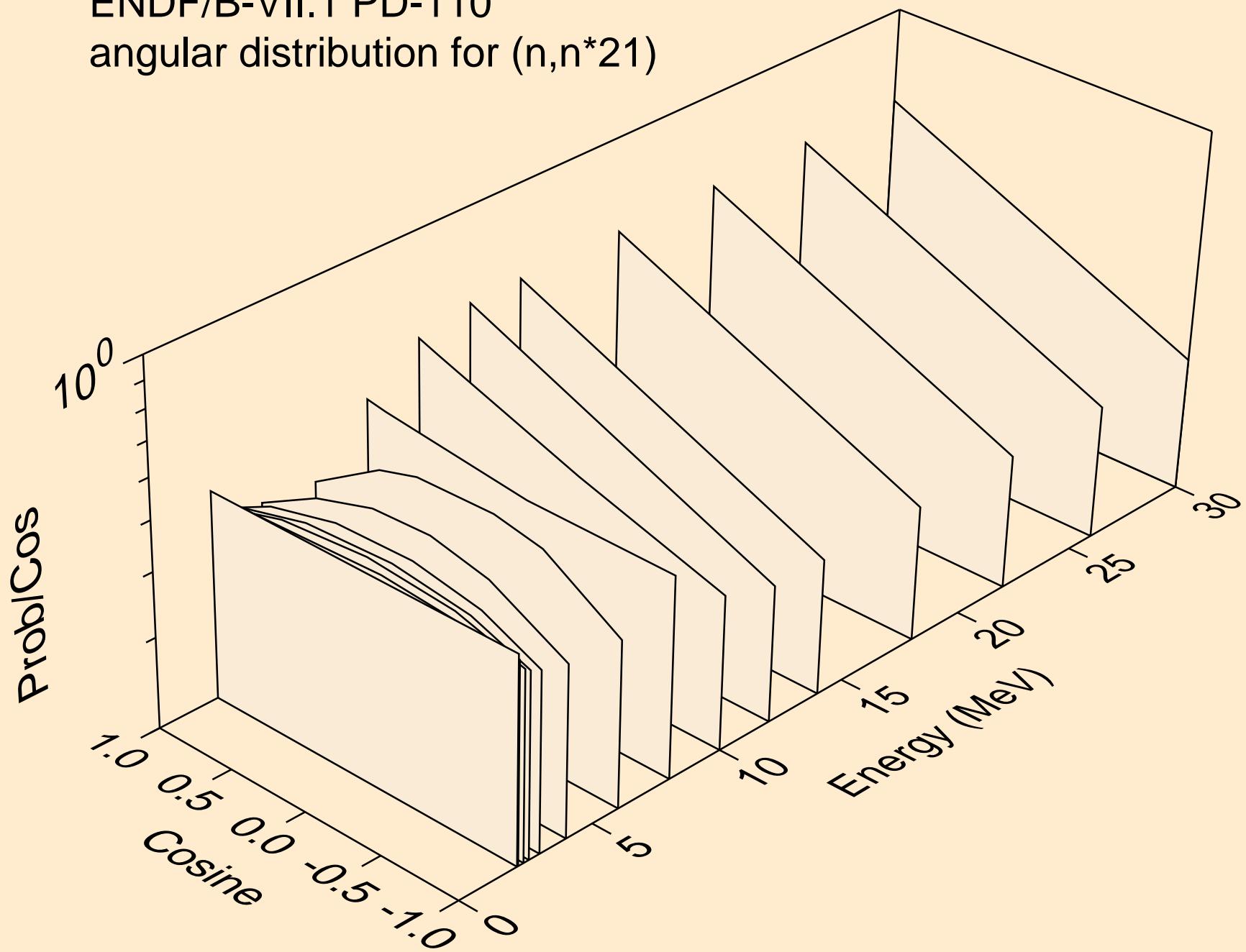
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angular distribution for (n,n\*19)



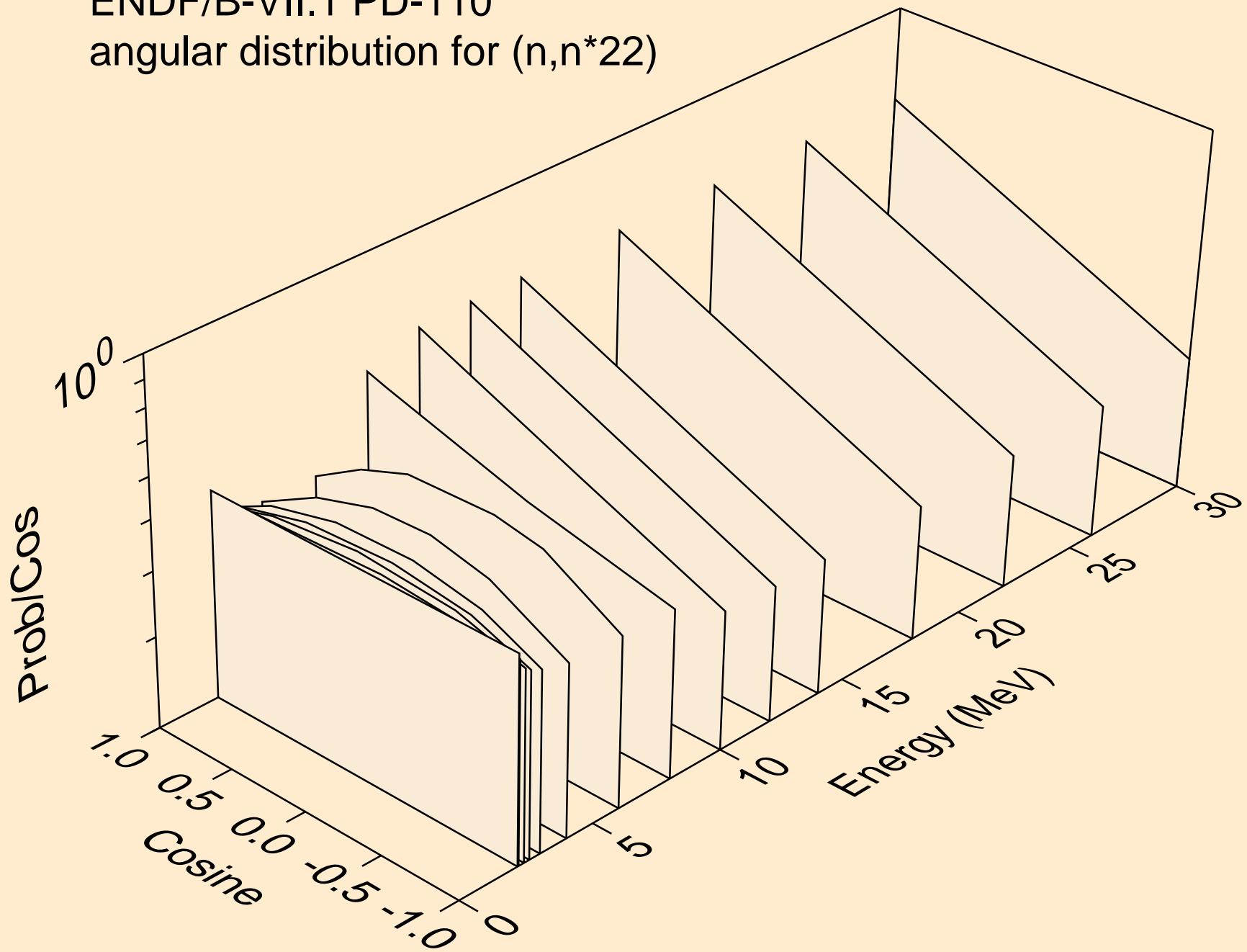
ENDF/B-VII.1 PD-110  
angular distribution for  $(n,n^*)20$



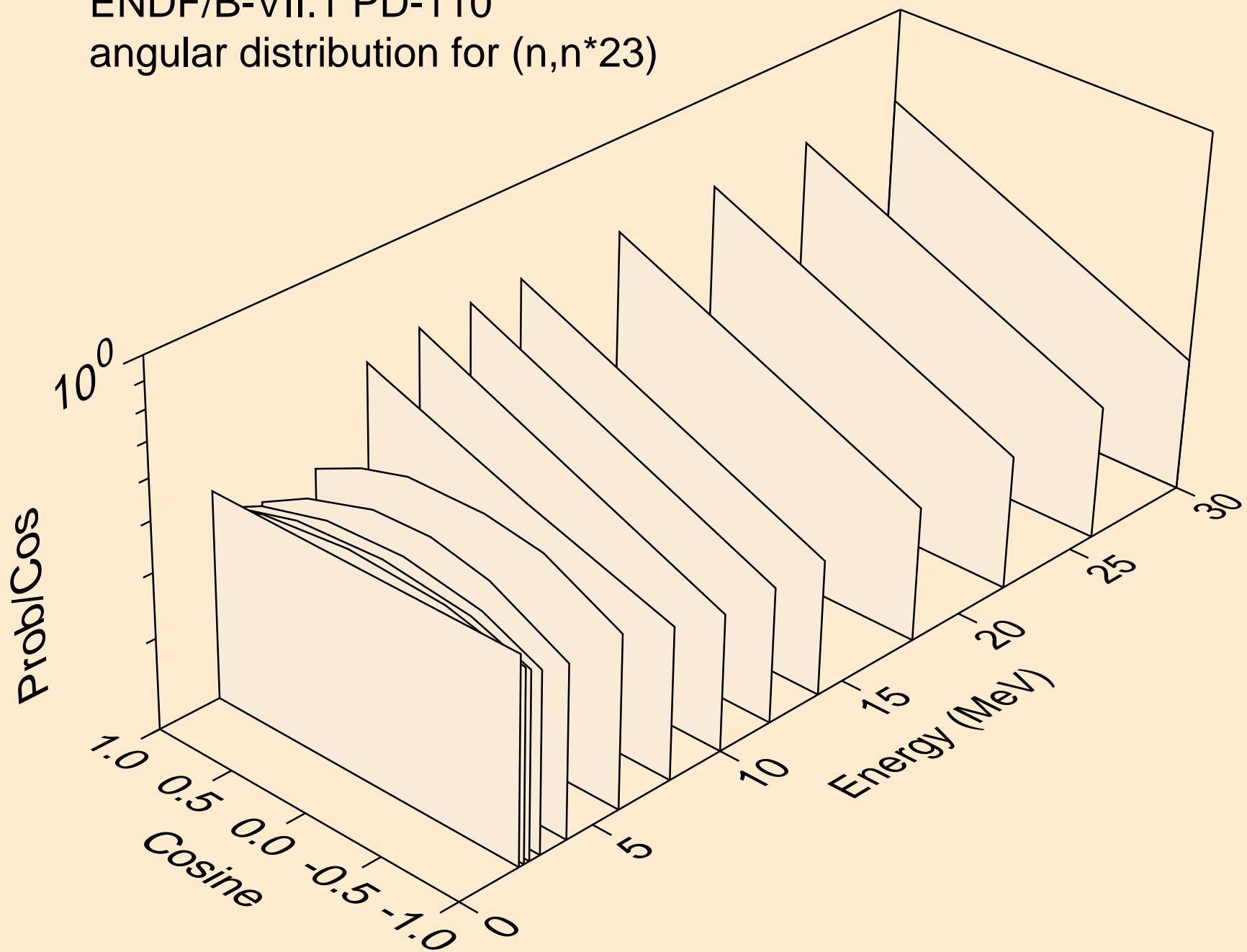
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angular distribution for  $(n,n^*21)$



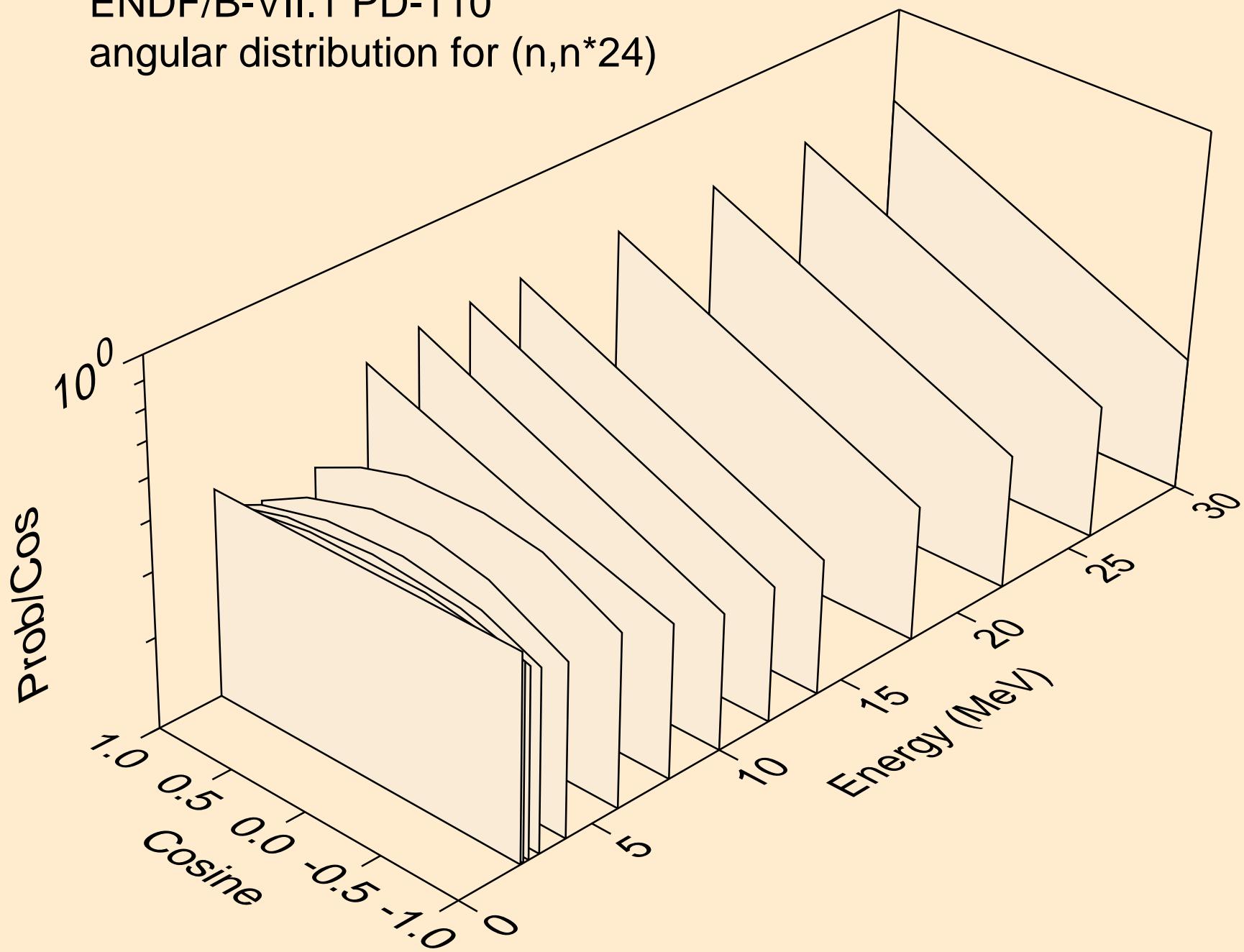
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angular distribution for  $(n,n^*22)$



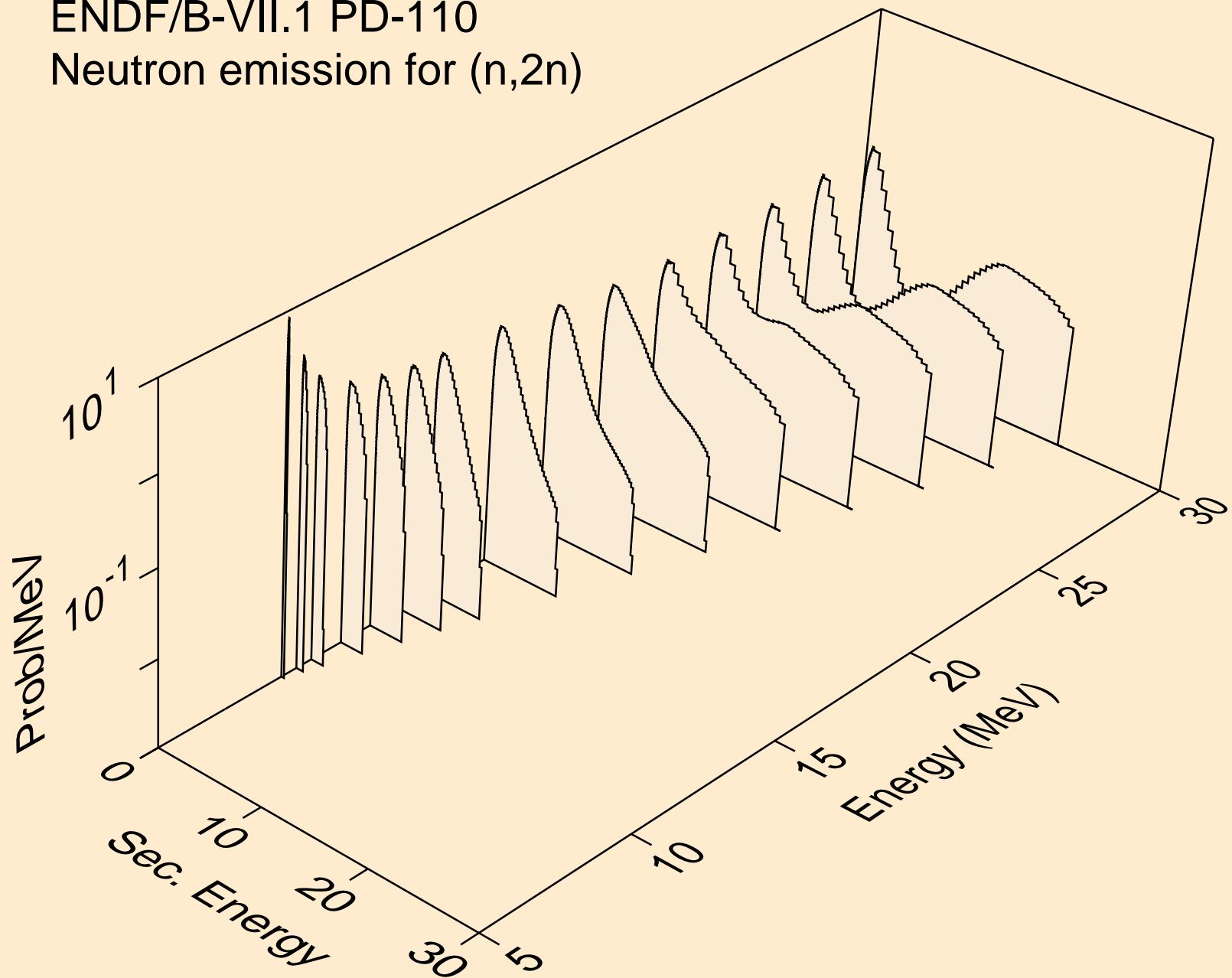
ENDF/B-VII.1 PD-110  
angular distribution for (n,n\*23)



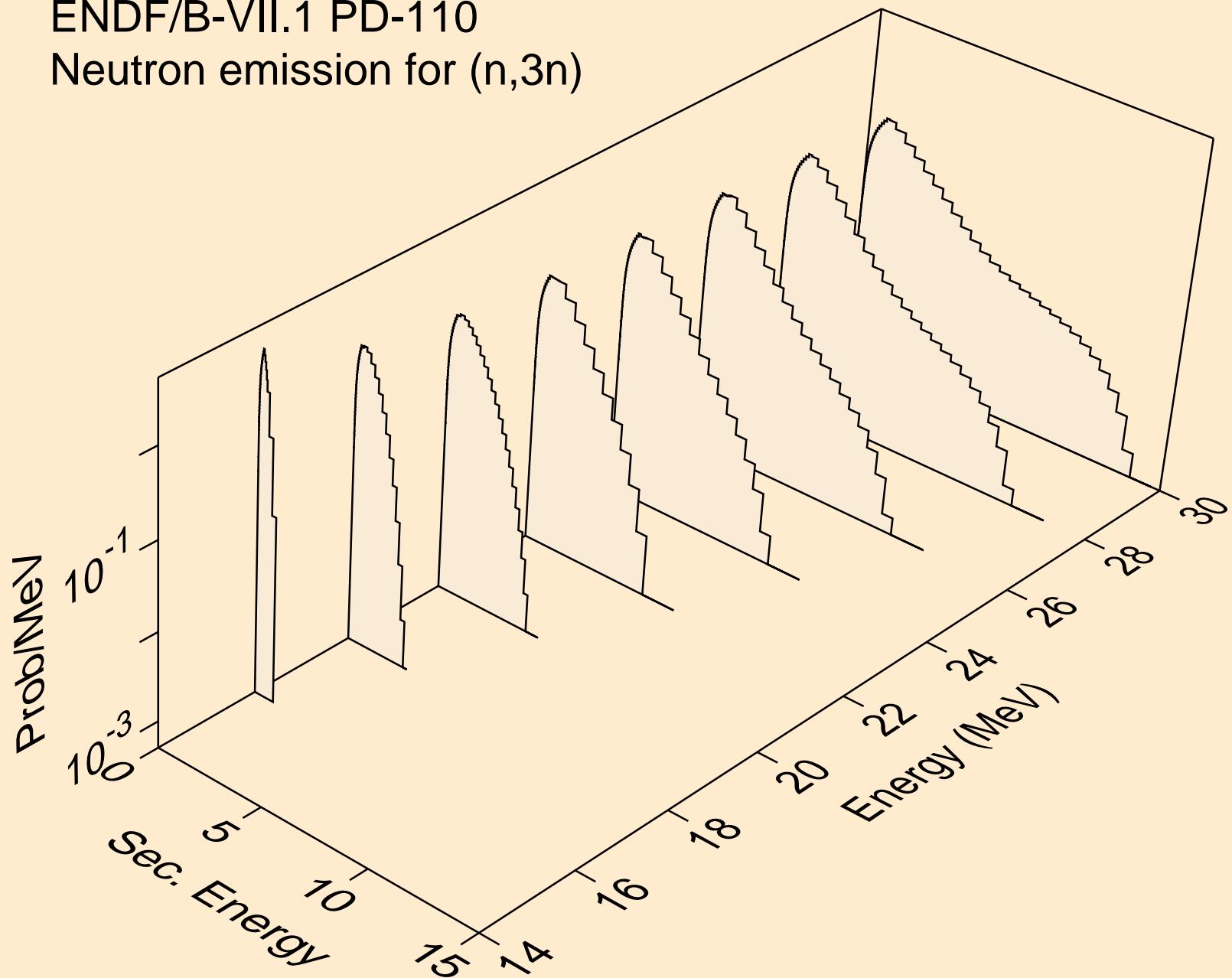
ENDF/B-VII.1 PD-110  
angular distribution for  $(n,n^*24)$



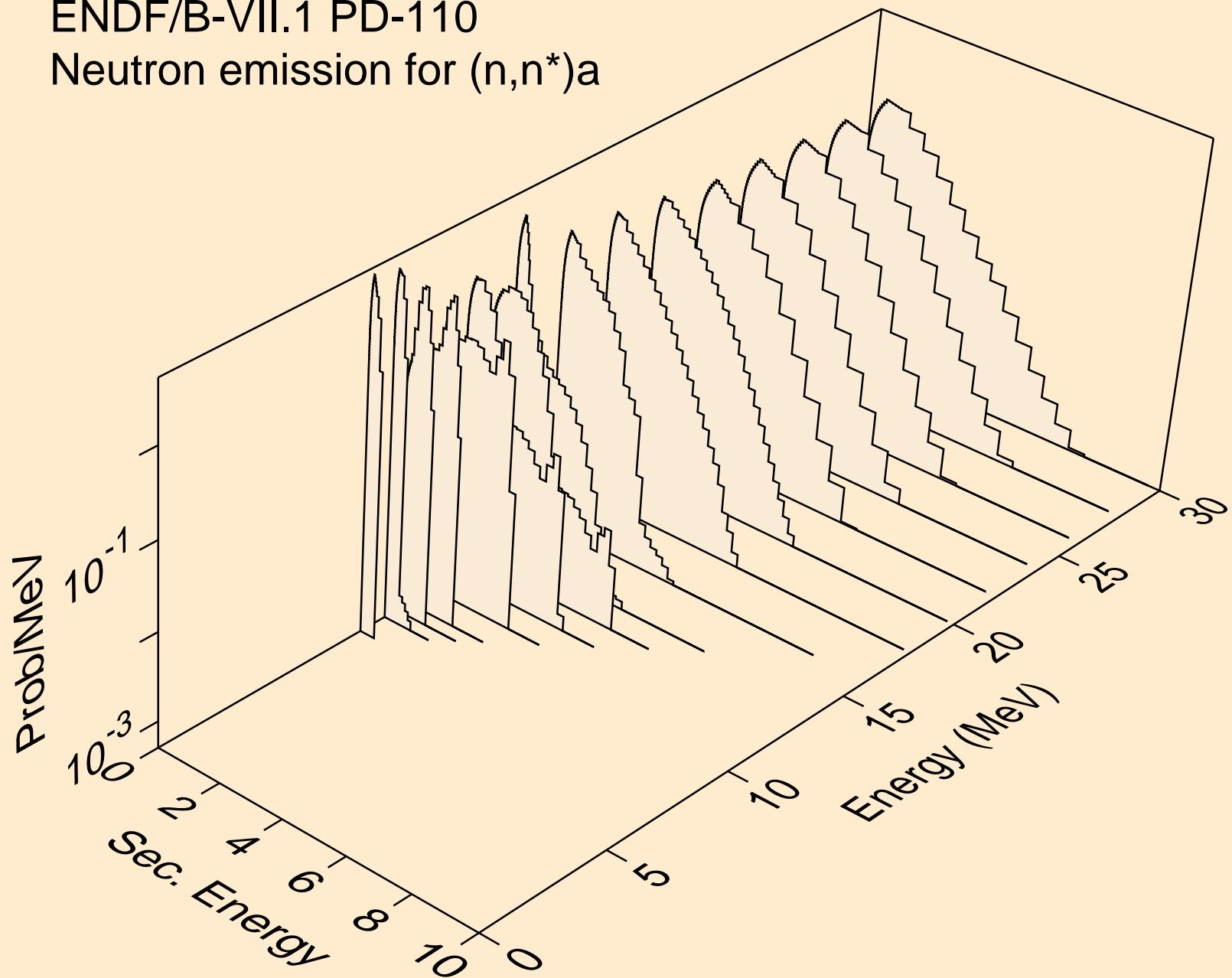
ENDF/B-VII.1 PD-110  
Neutron emission for  $(n,2n)$



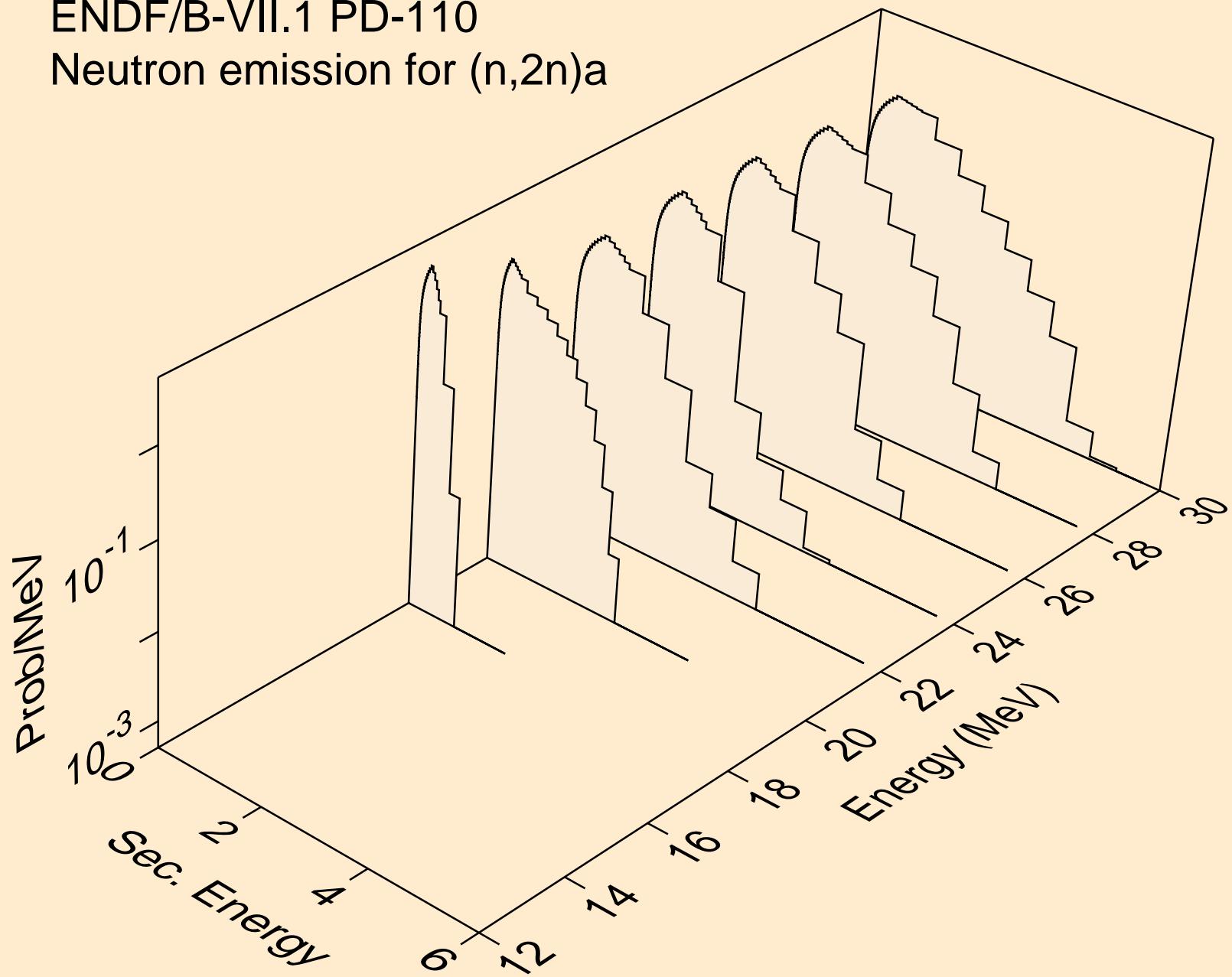
ENDF/B-VII.1 PD-110  
Neutron emission for (n,3n)



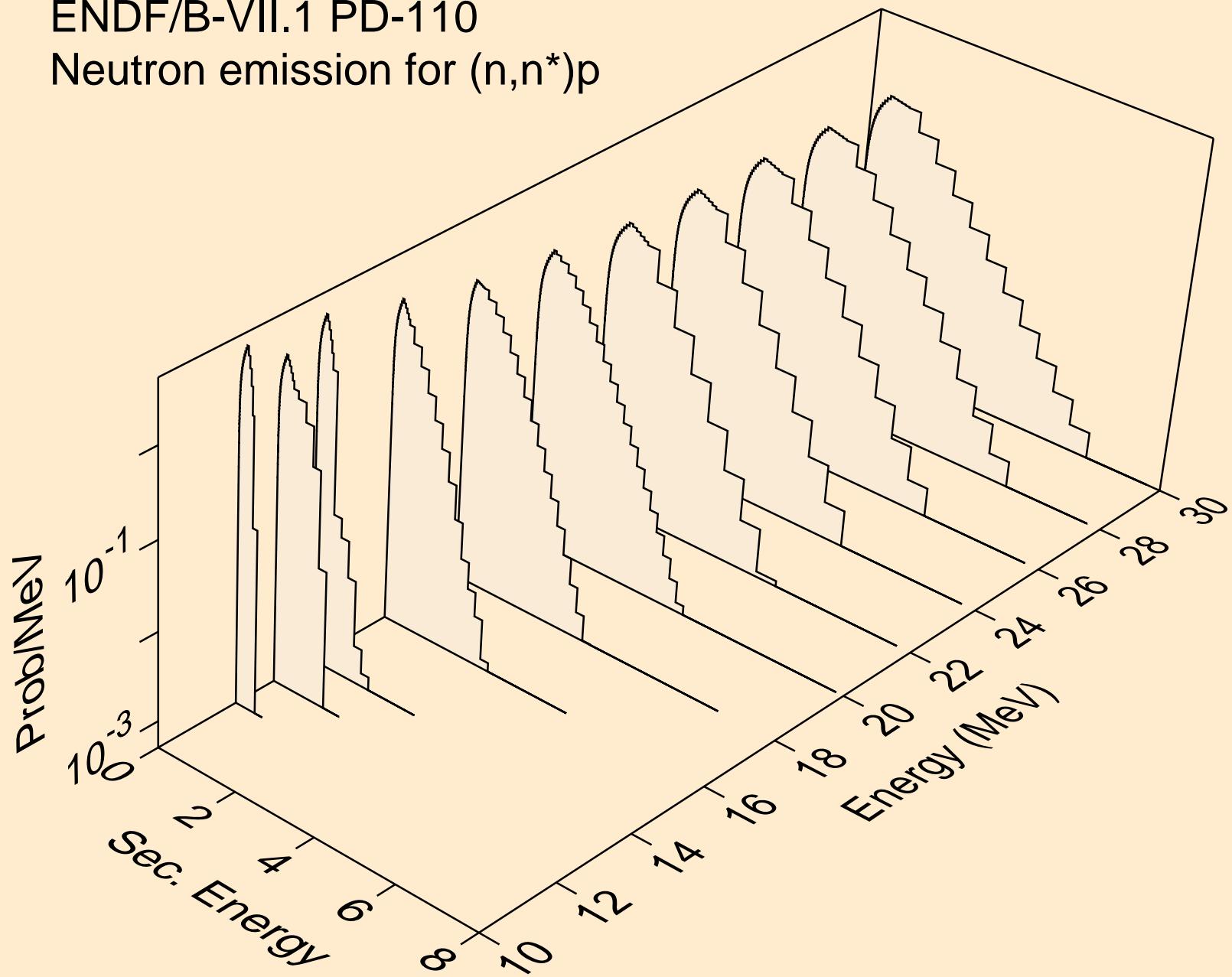
ENDF/B-VII.1 PD-110  
Neutron emission for  $(n,n^*)a$



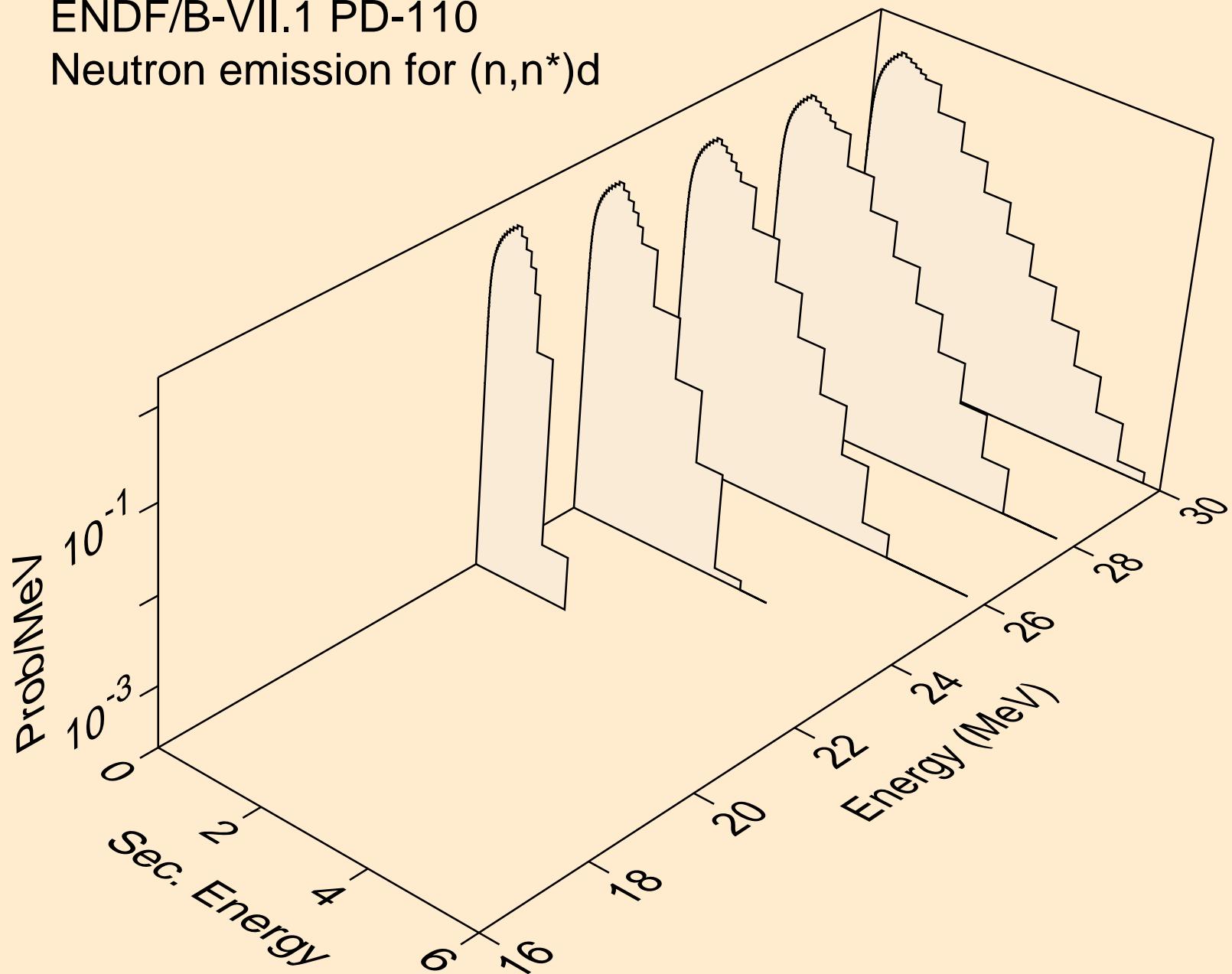
ENDF/B-VII.1 PD-110  
Neutron emission for  $(n,2n)a$



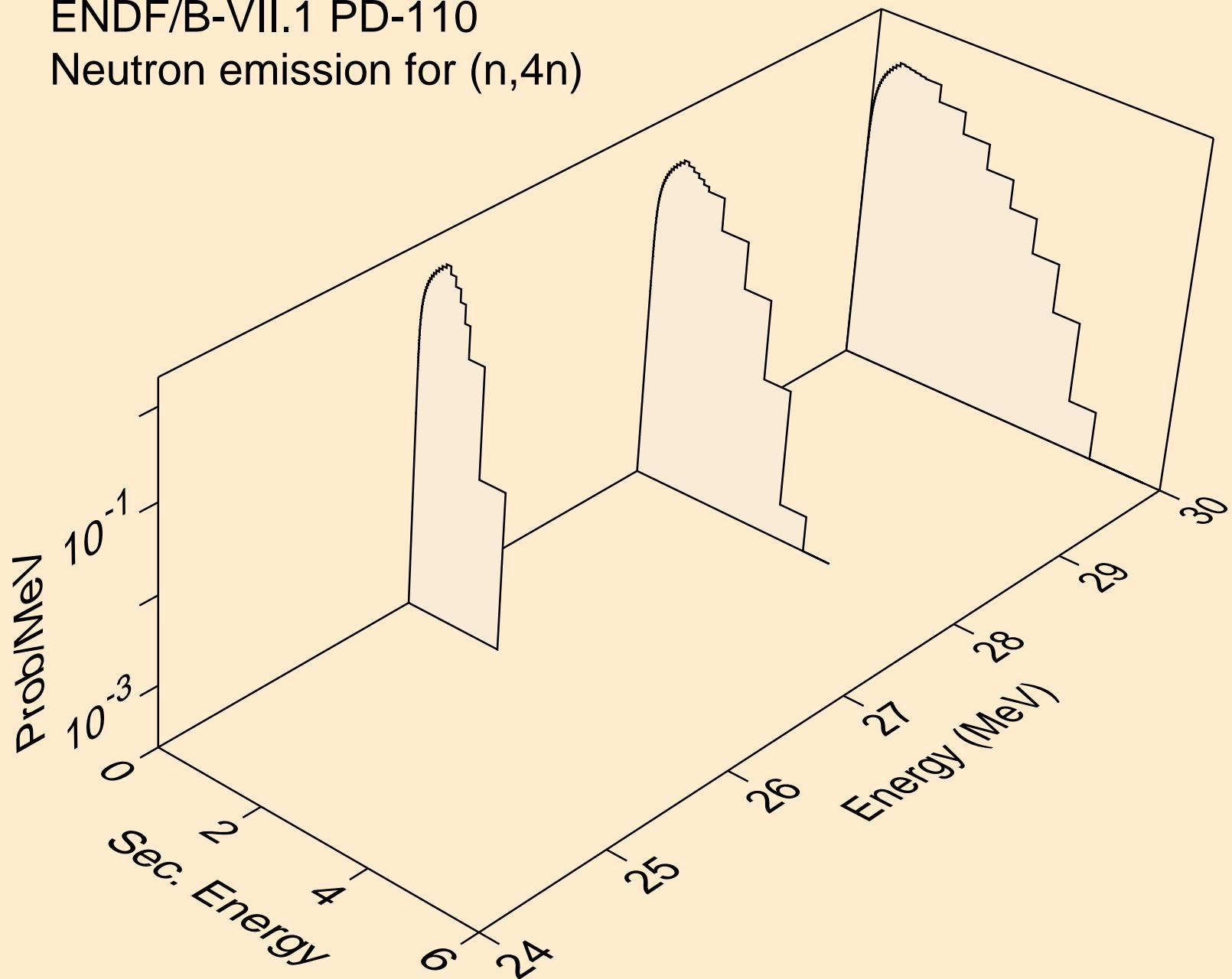
ENDF/B-VII.1 PD-110  
Neutron emission for  $(n,n^*)p$



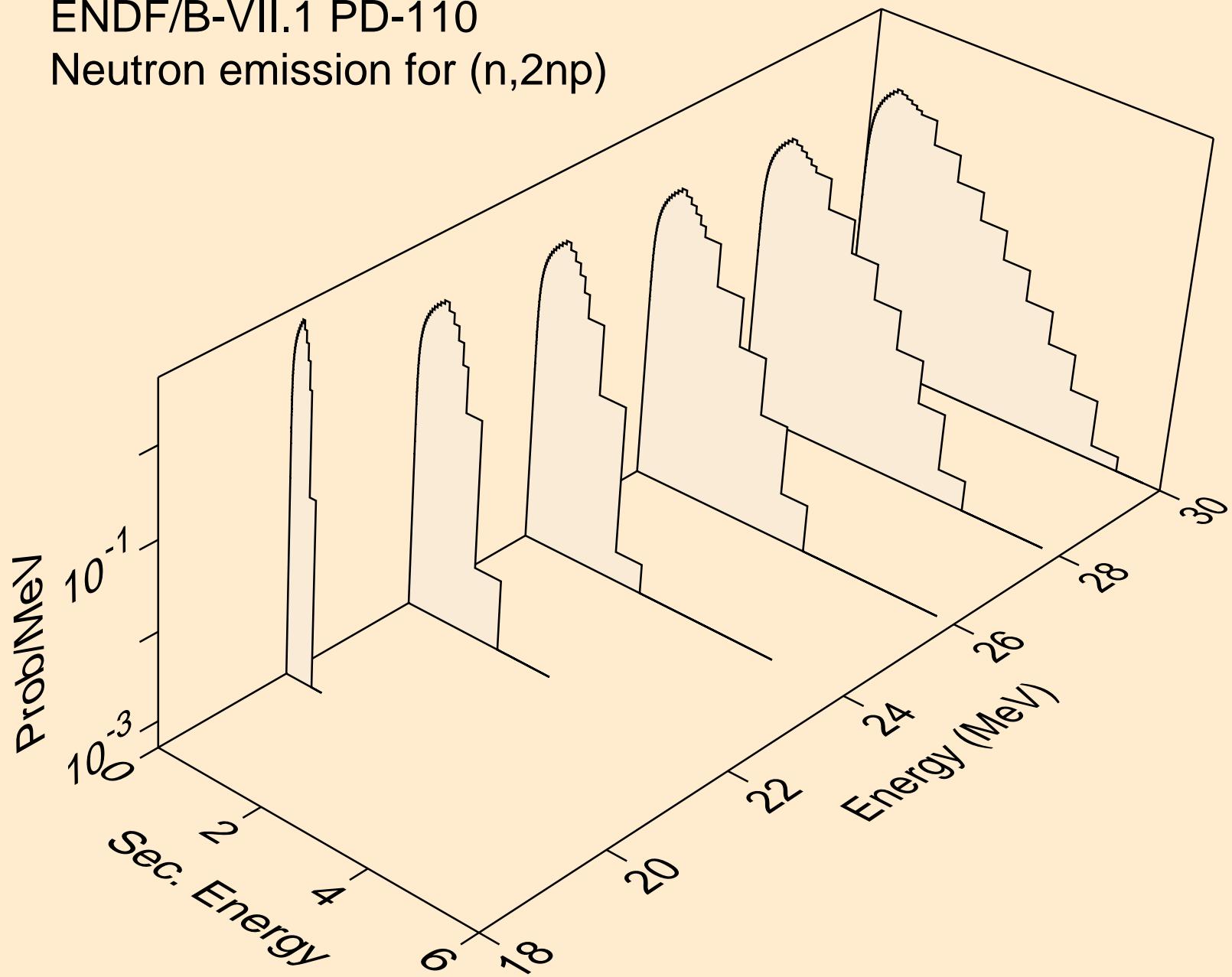
ENDF/B-VII.1 PD-110  
Neutron emission for  $(n,n^*)d$



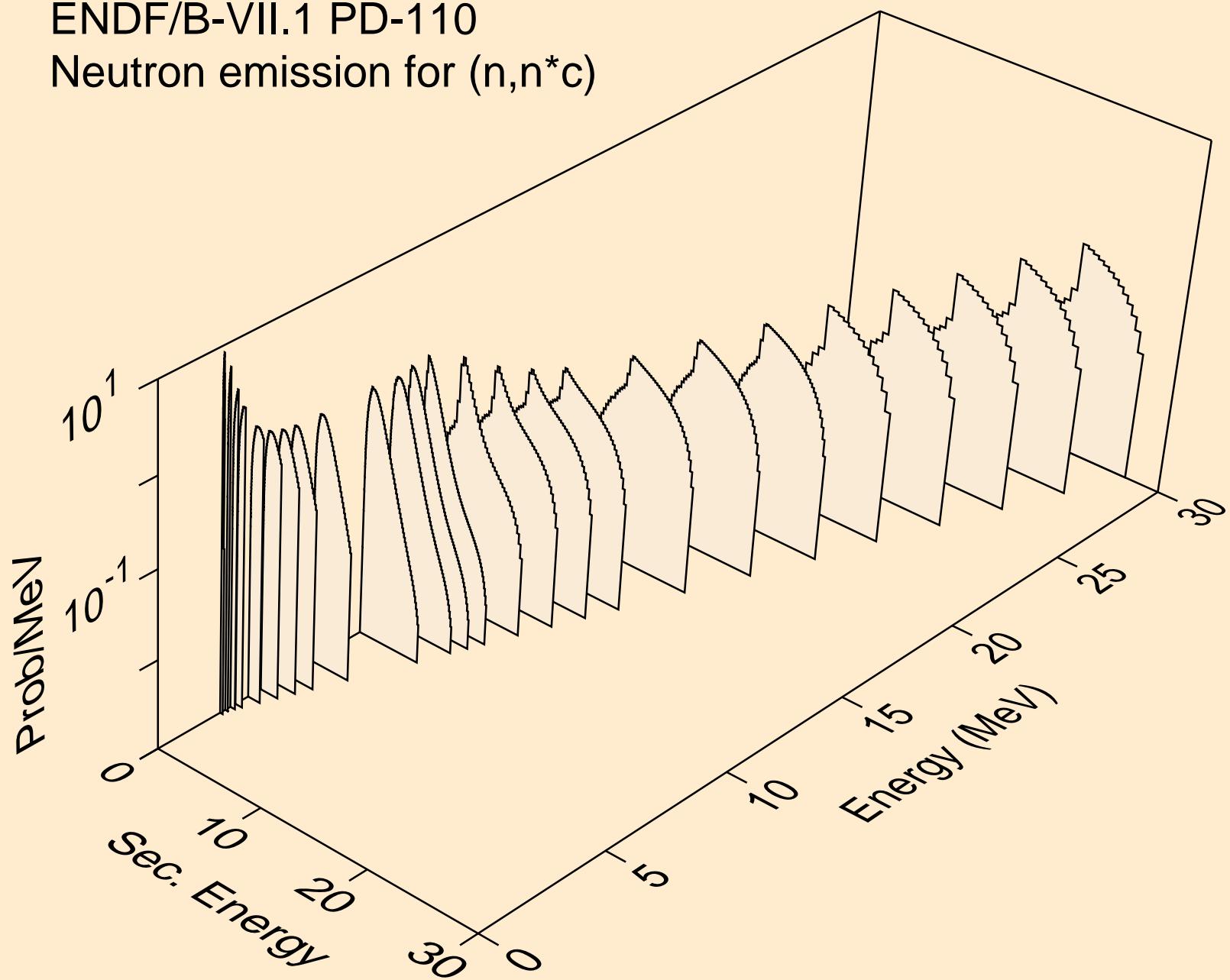
ENDF/B-VII.1 PD-110  
Neutron emission for  $(n,4n)$



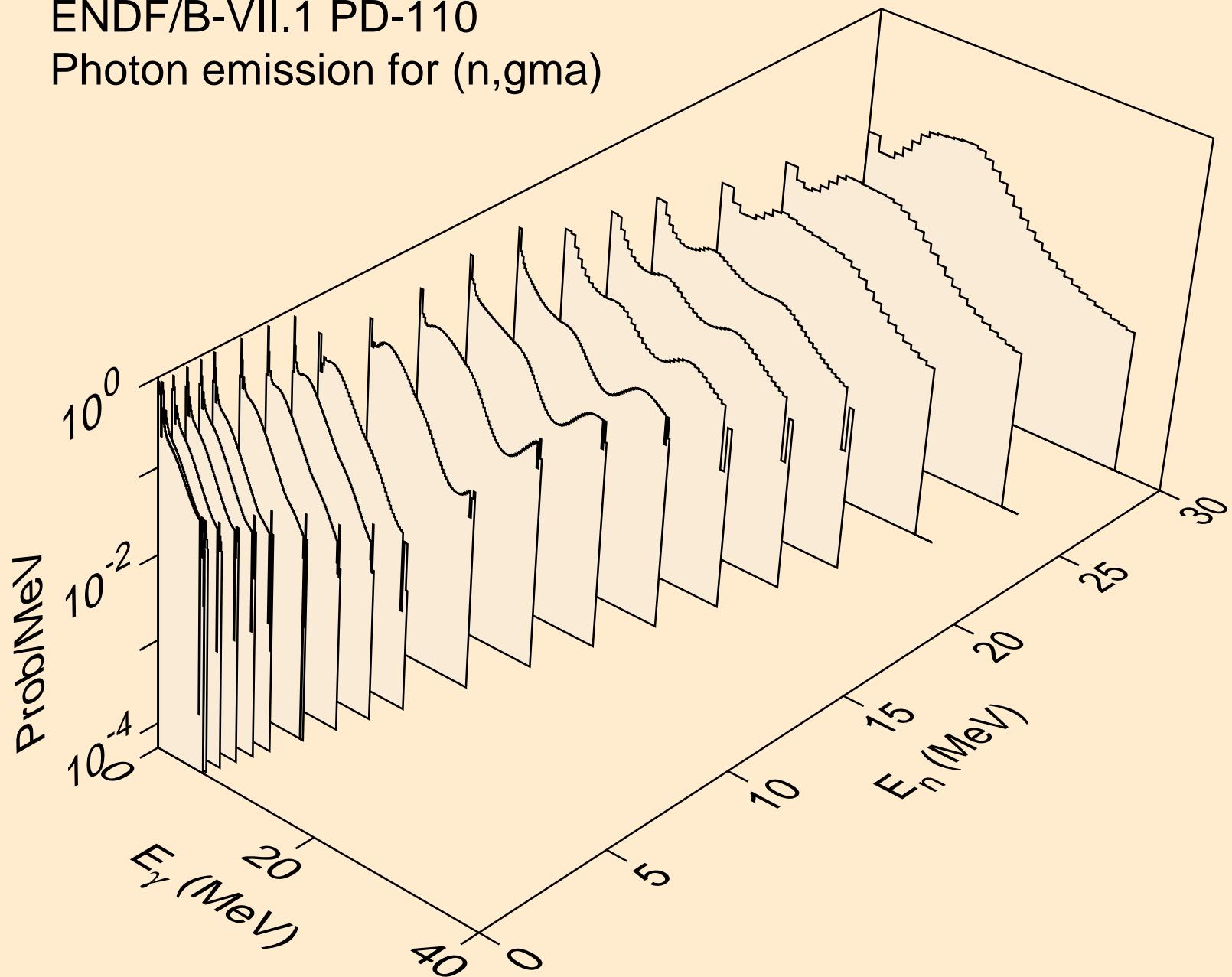
ENDF/B-VII.1 PD-110  
Neutron emission for (n,2np)



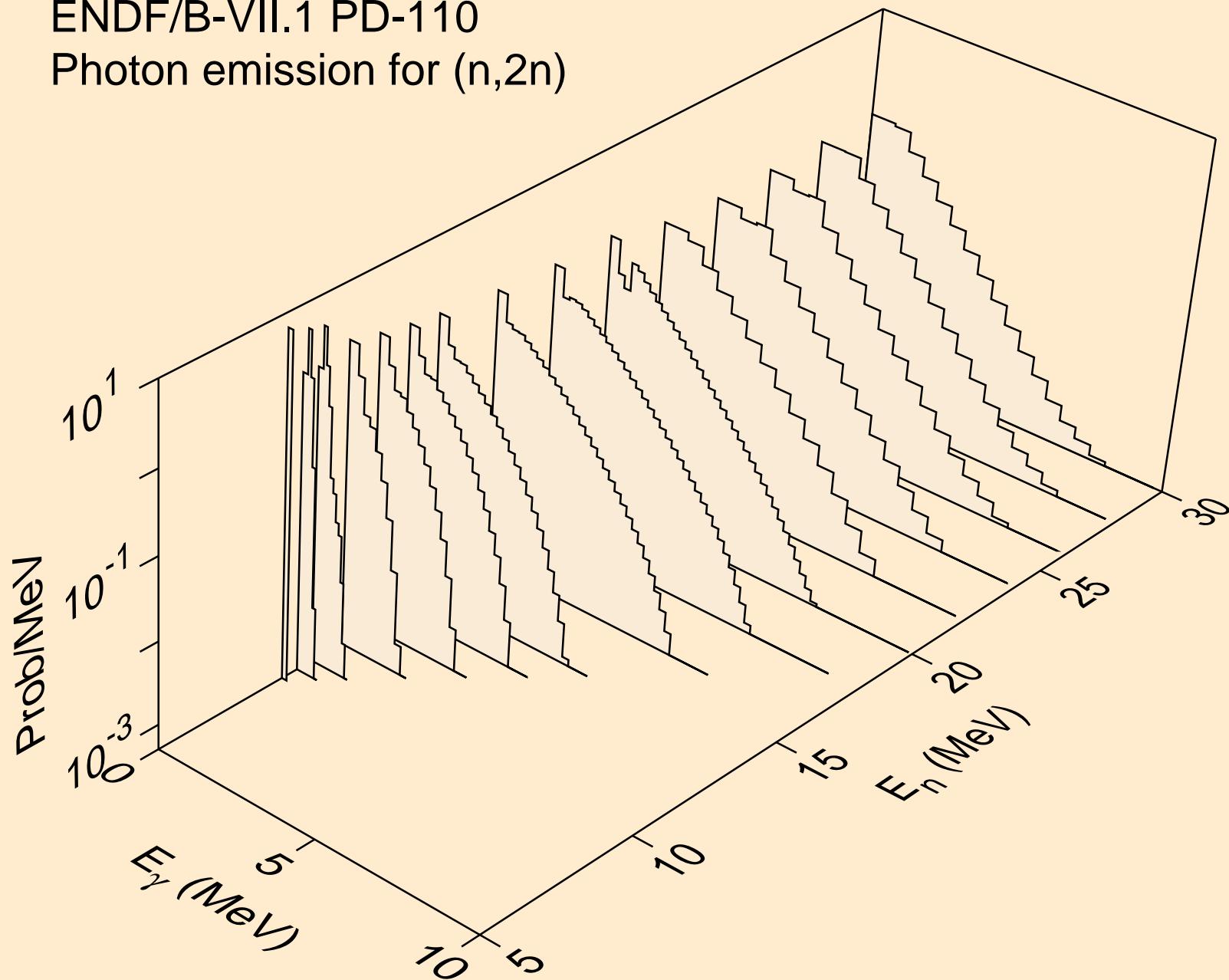
ENDF/B-VII.1 PD-110  
Neutron emission for  $(n, n^* c)$



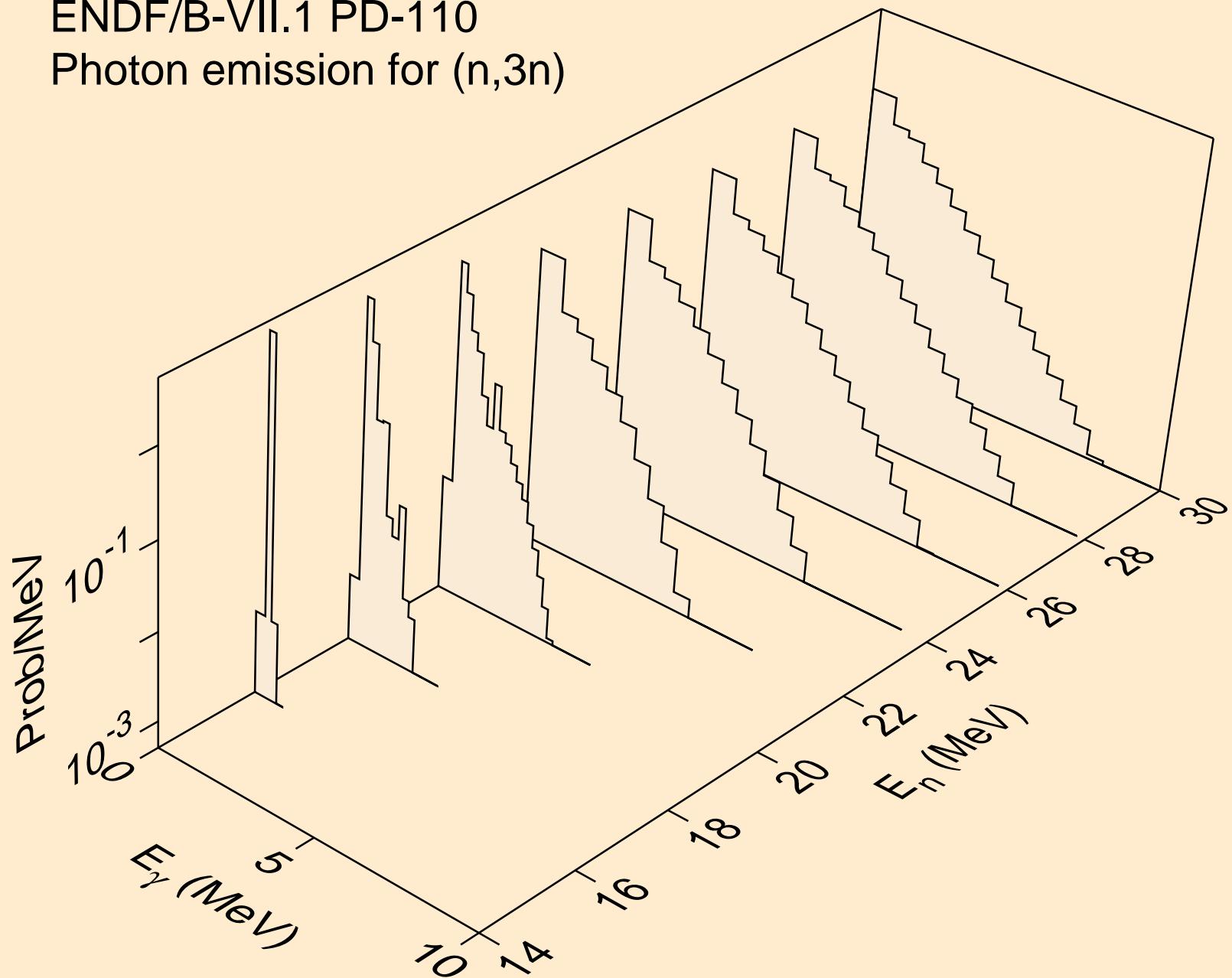
ENDF/B-VII.1 PD-110  
Photon emission for (n,gma)



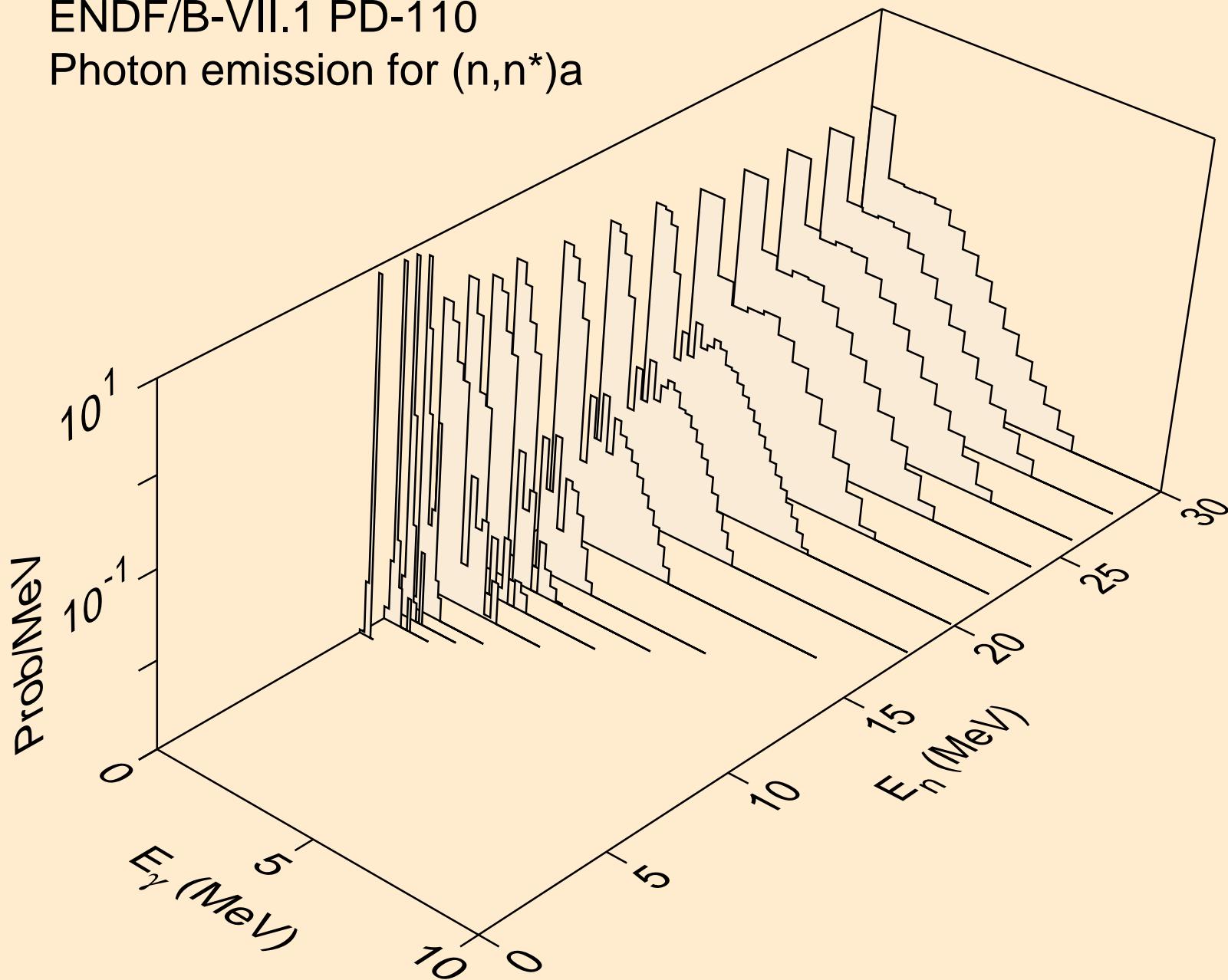
ENDF/B-VII.1 PD-110  
Photon emission for (n,2n)



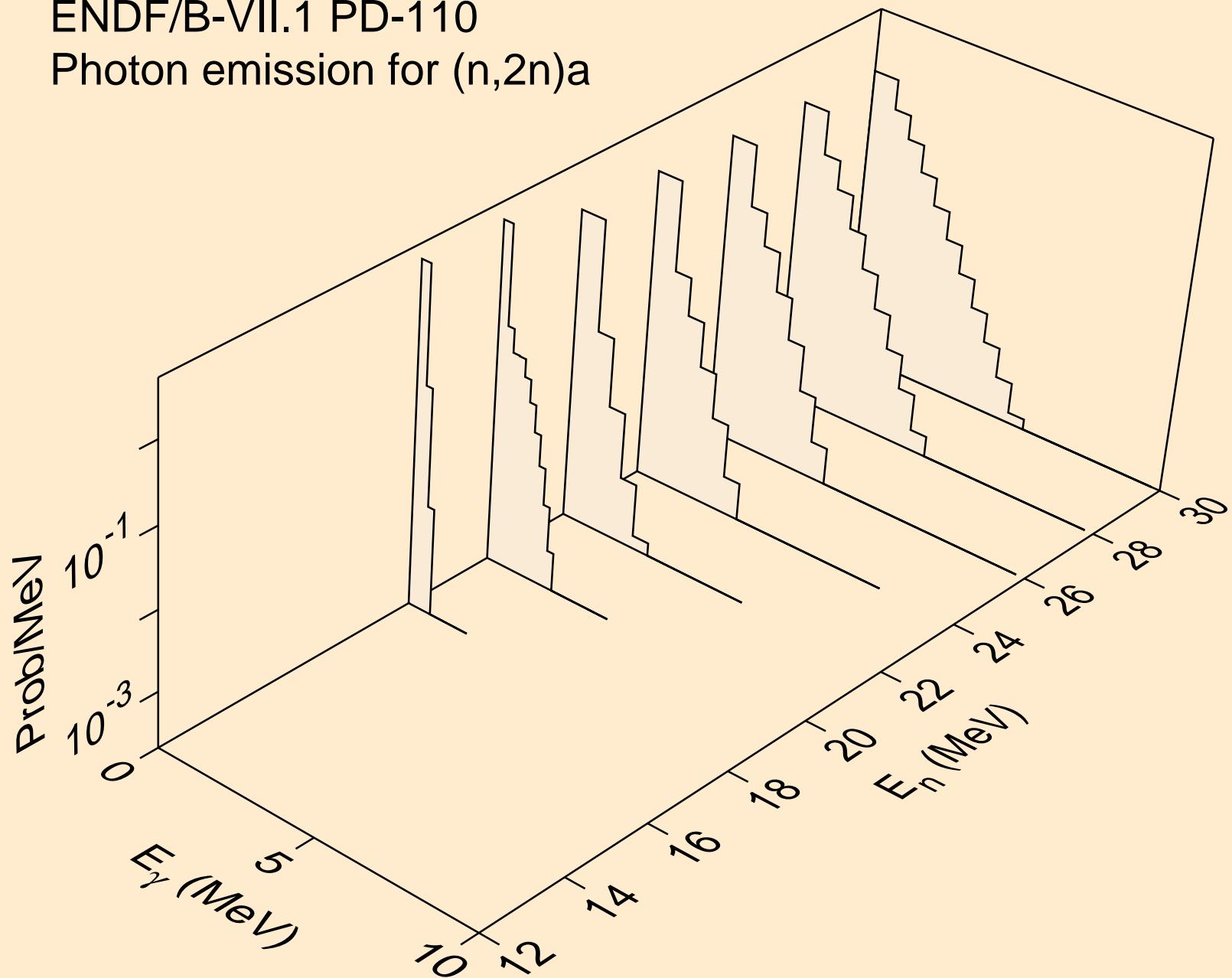
ENDF/B-VII.1 PD-110  
Photon emission for (n,3n)



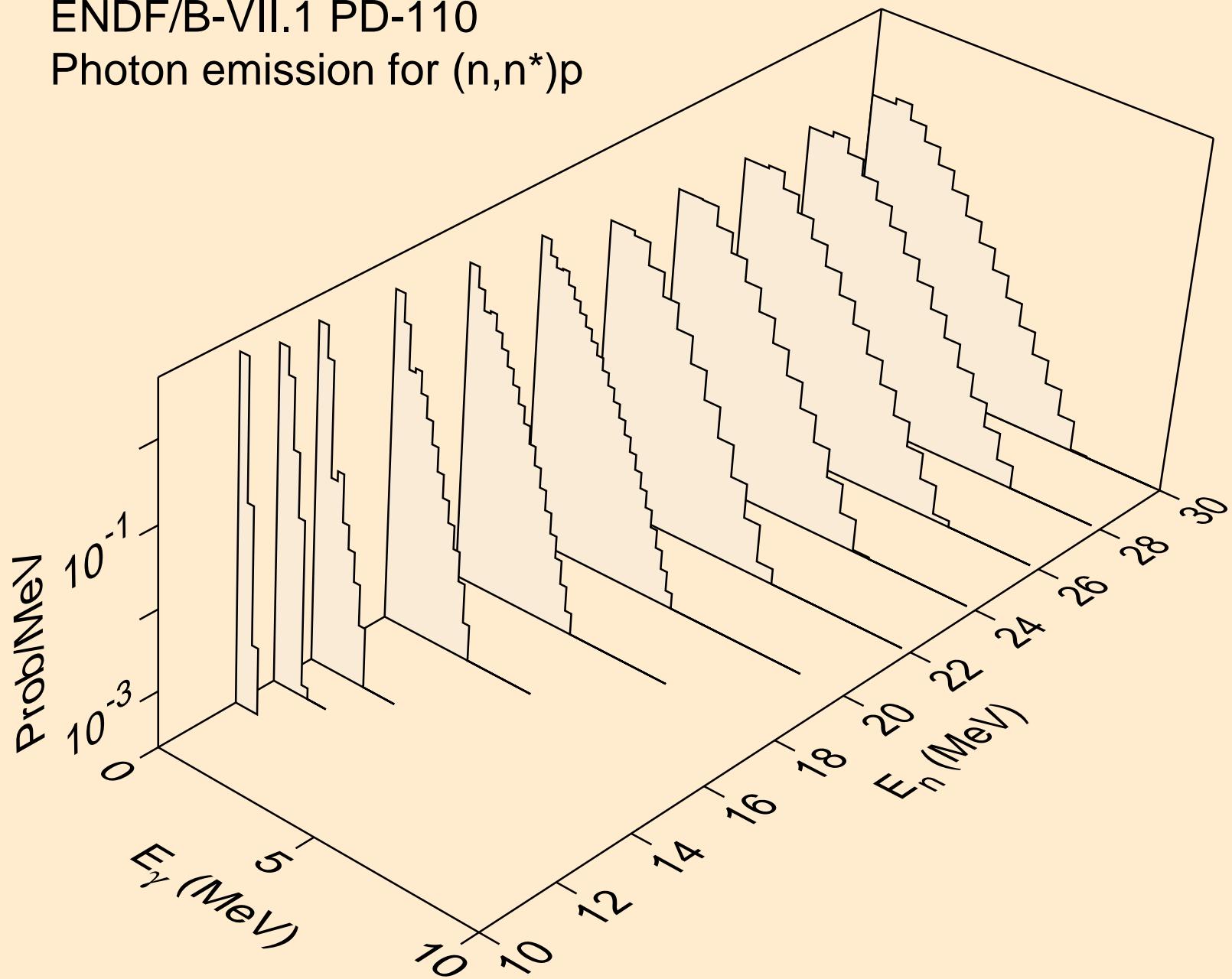
ENDF/B-VII.1 PD-110  
Photon emission for  $(n,n^*)a$



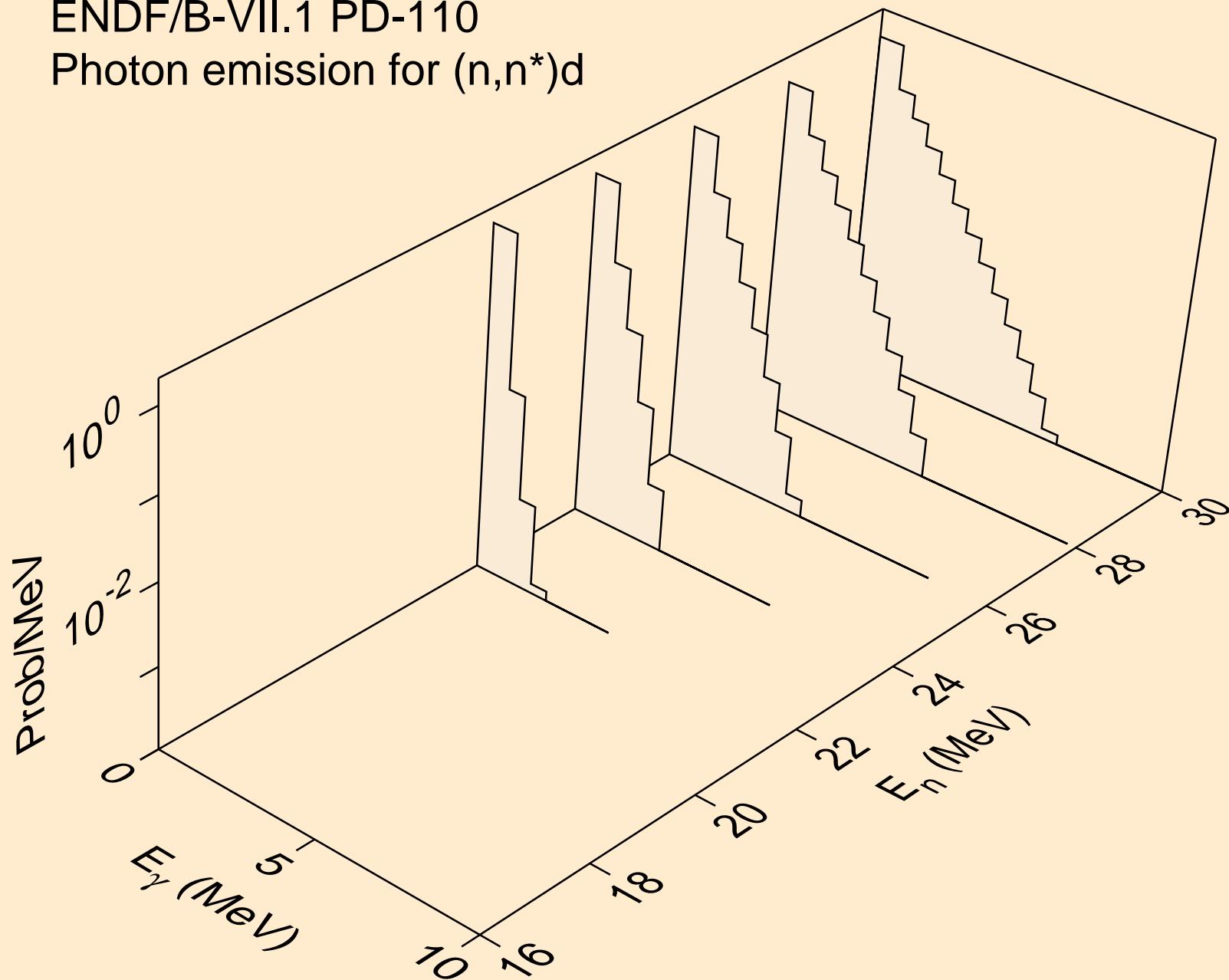
ENDF/B-VII.1 PD-110  
Photon emission for  $(n,2n)a$



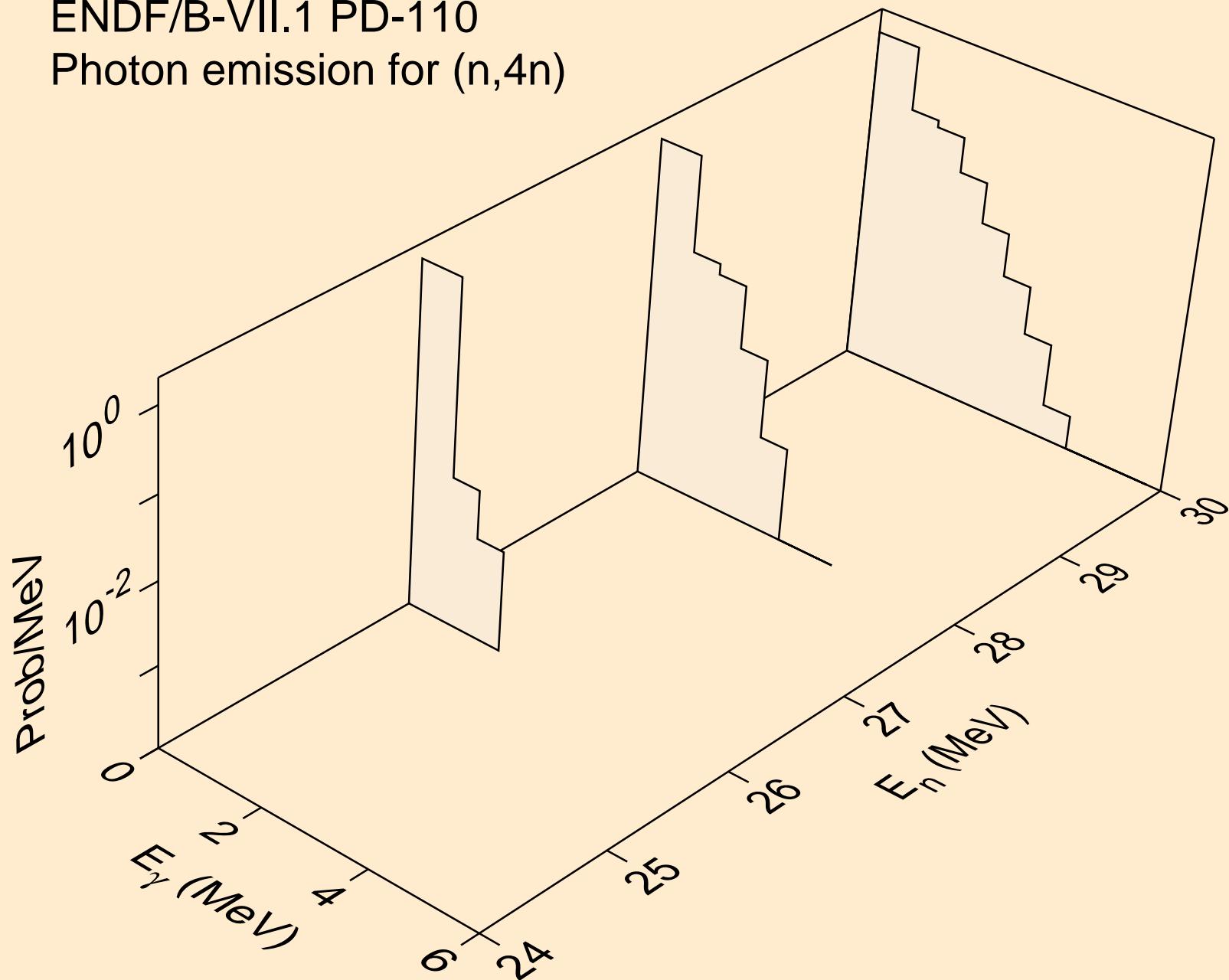
ENDF/B-VII.1 PD-110  
Photon emission for  $(n,n^*)p$



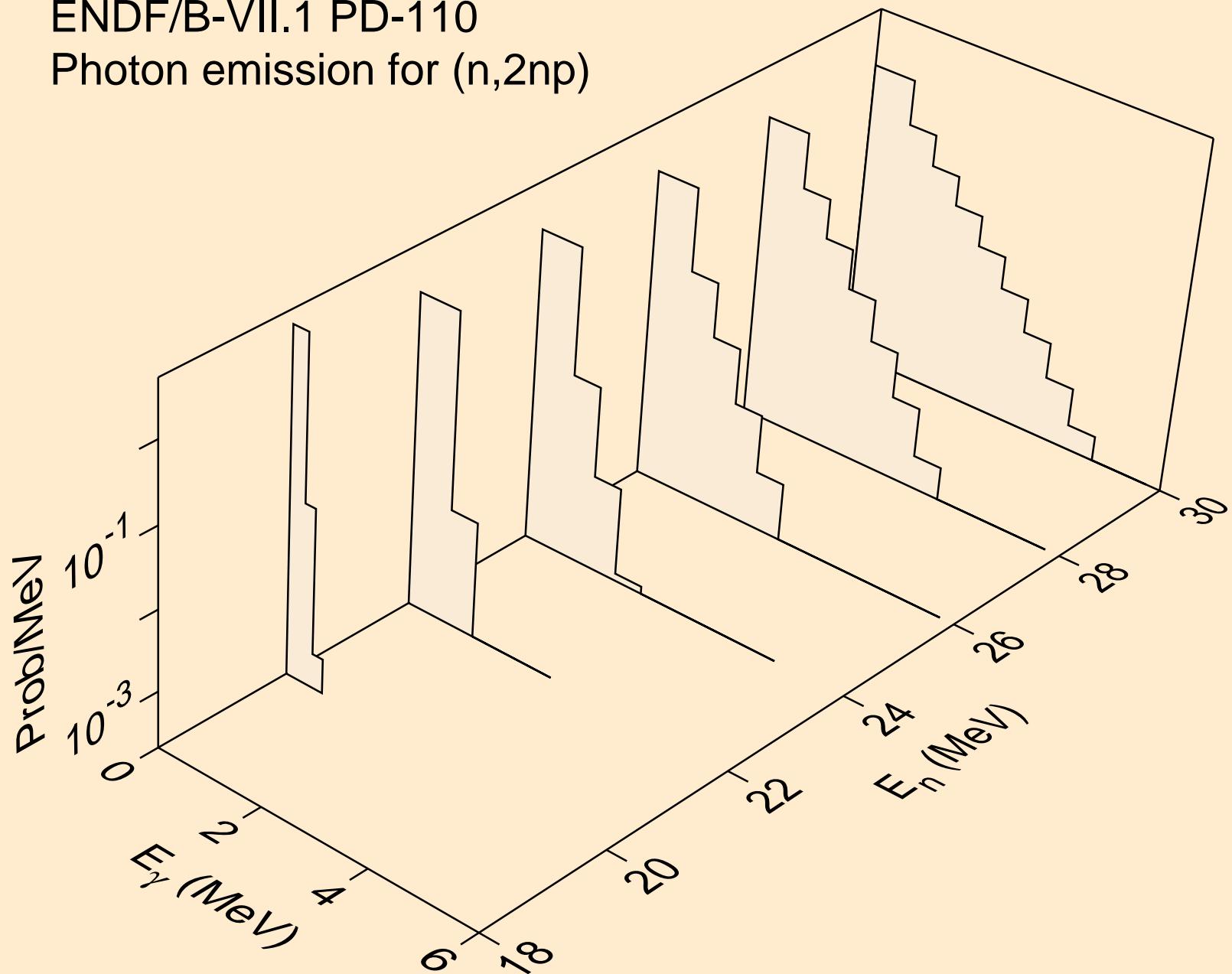
ENDF/B-VII.1 PD-110  
Photon emission for  $(n,n^*)d$



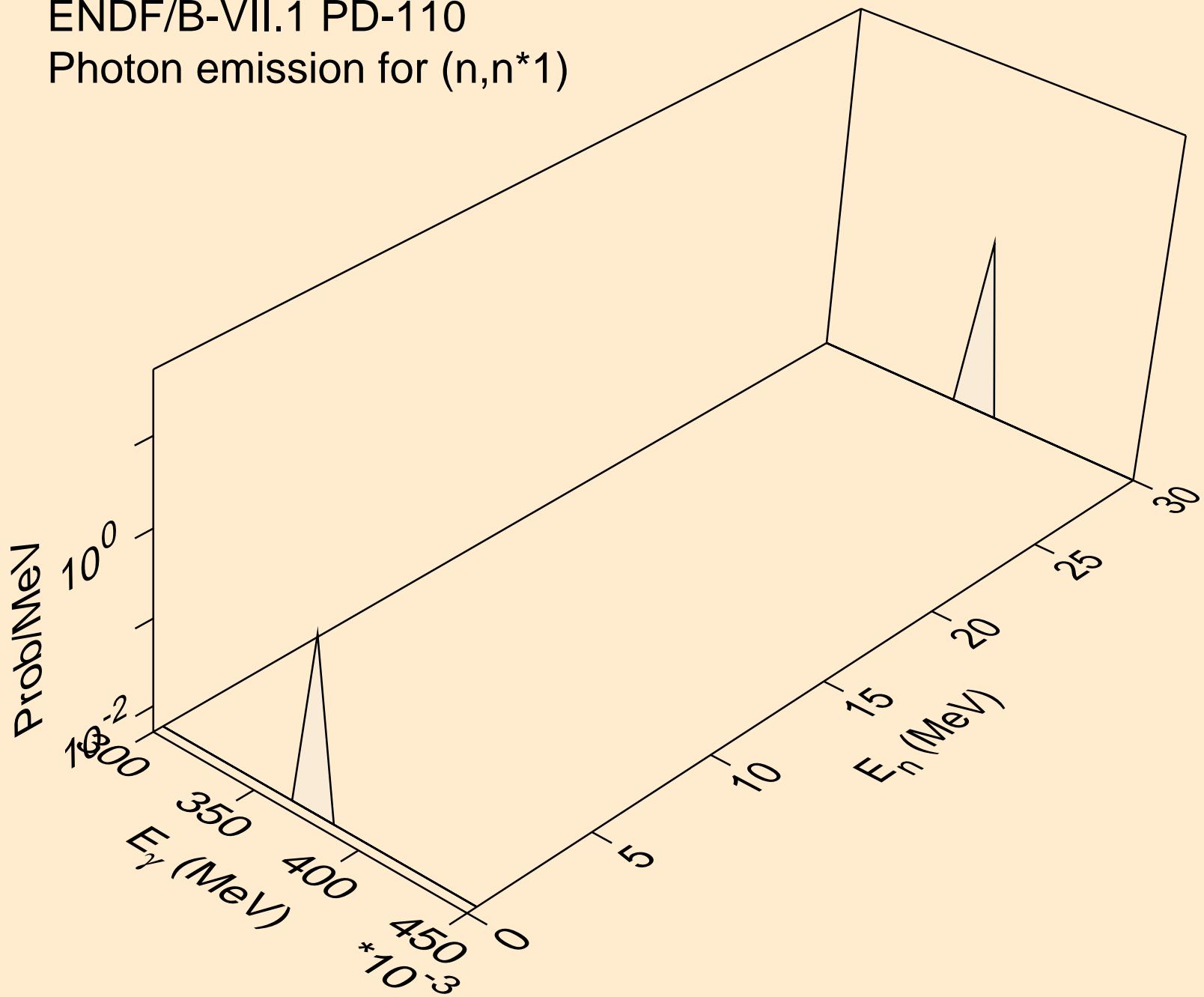
ENDF/B-VII.1 PD-110  
Photon emission for (n,4n)



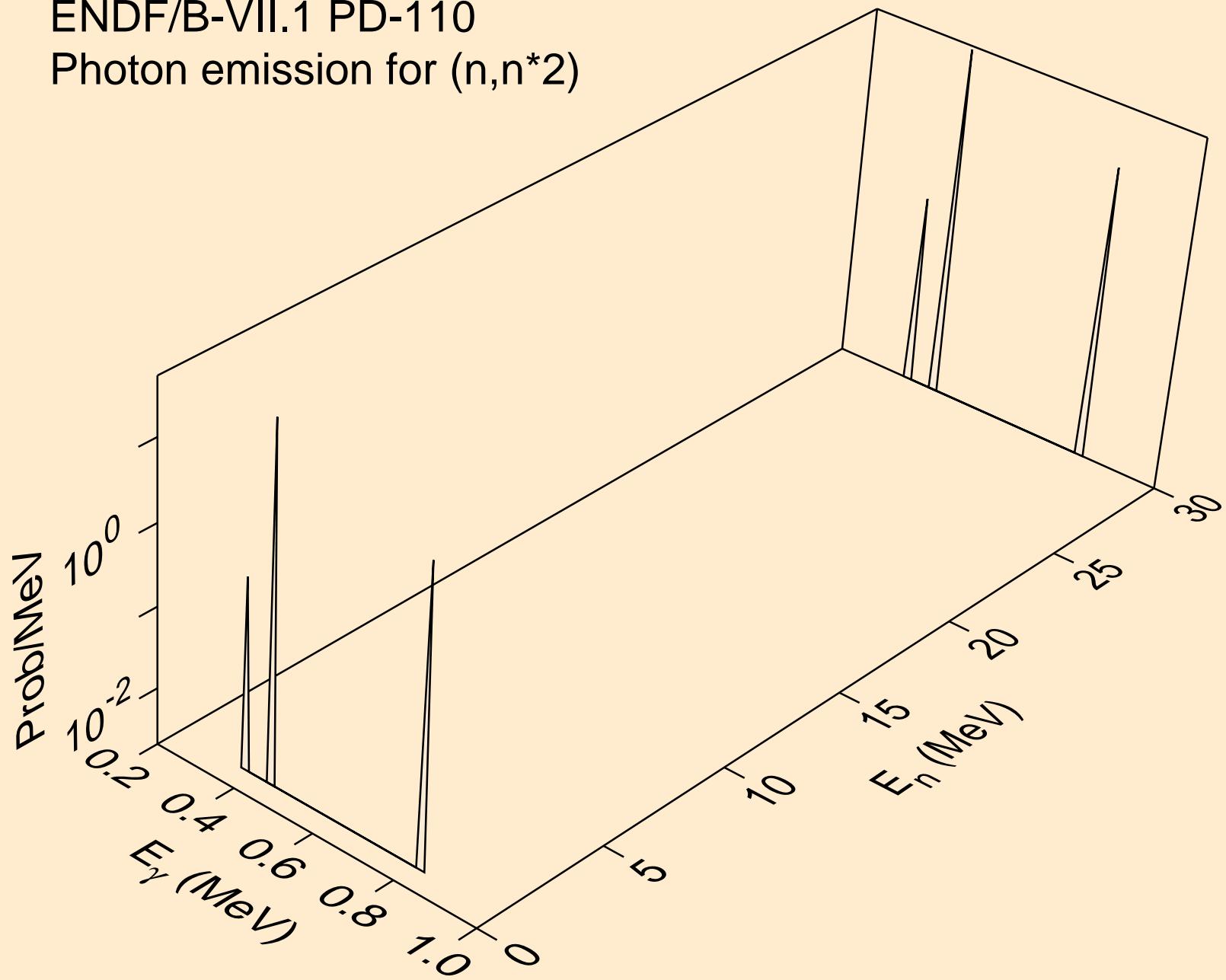
ENDF/B-VII.1 PD-110  
Photon emission for ( $n, 2np$ )



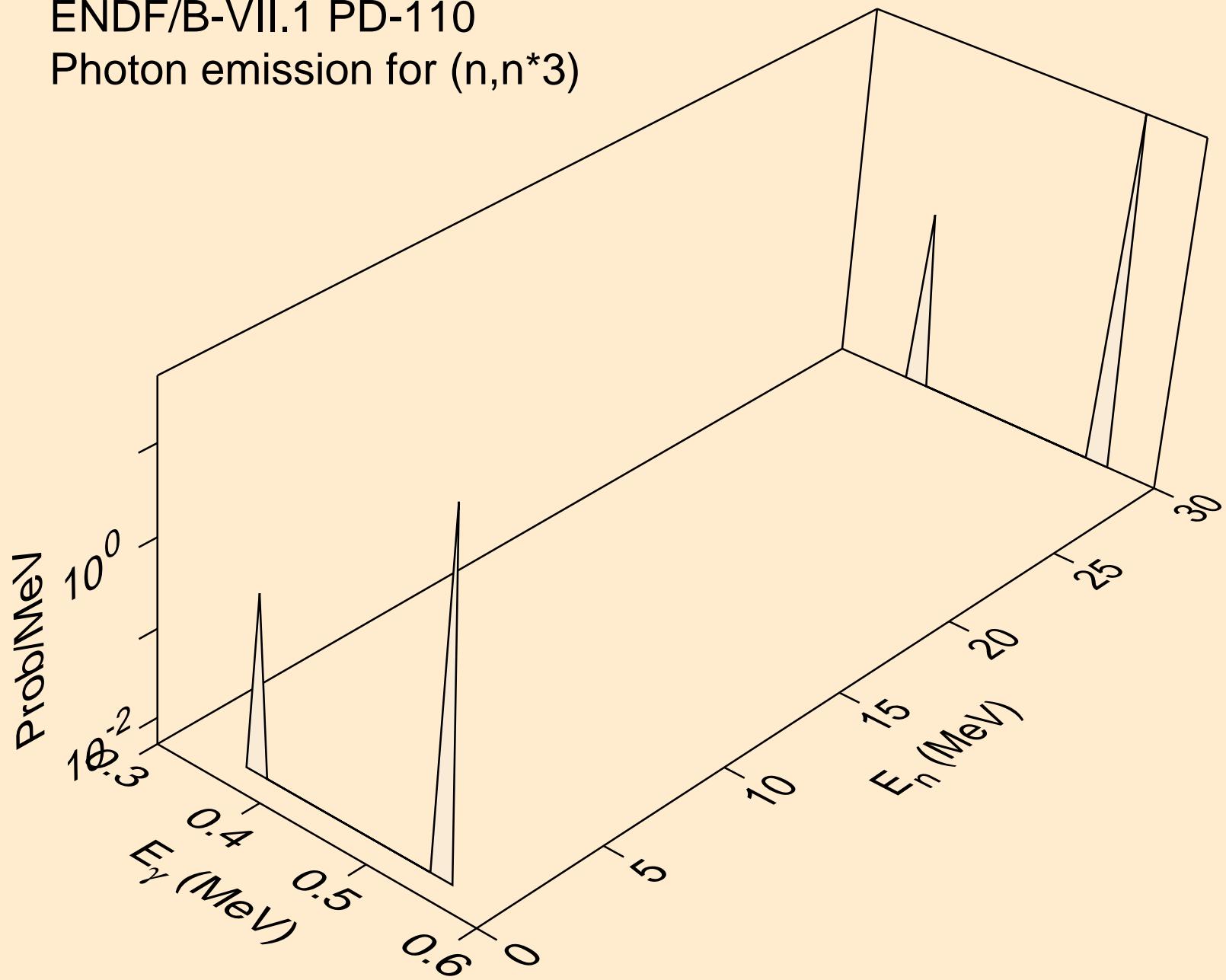
ENDF/B-VII.1 PD-110  
Photon emission for (n,n\*1)



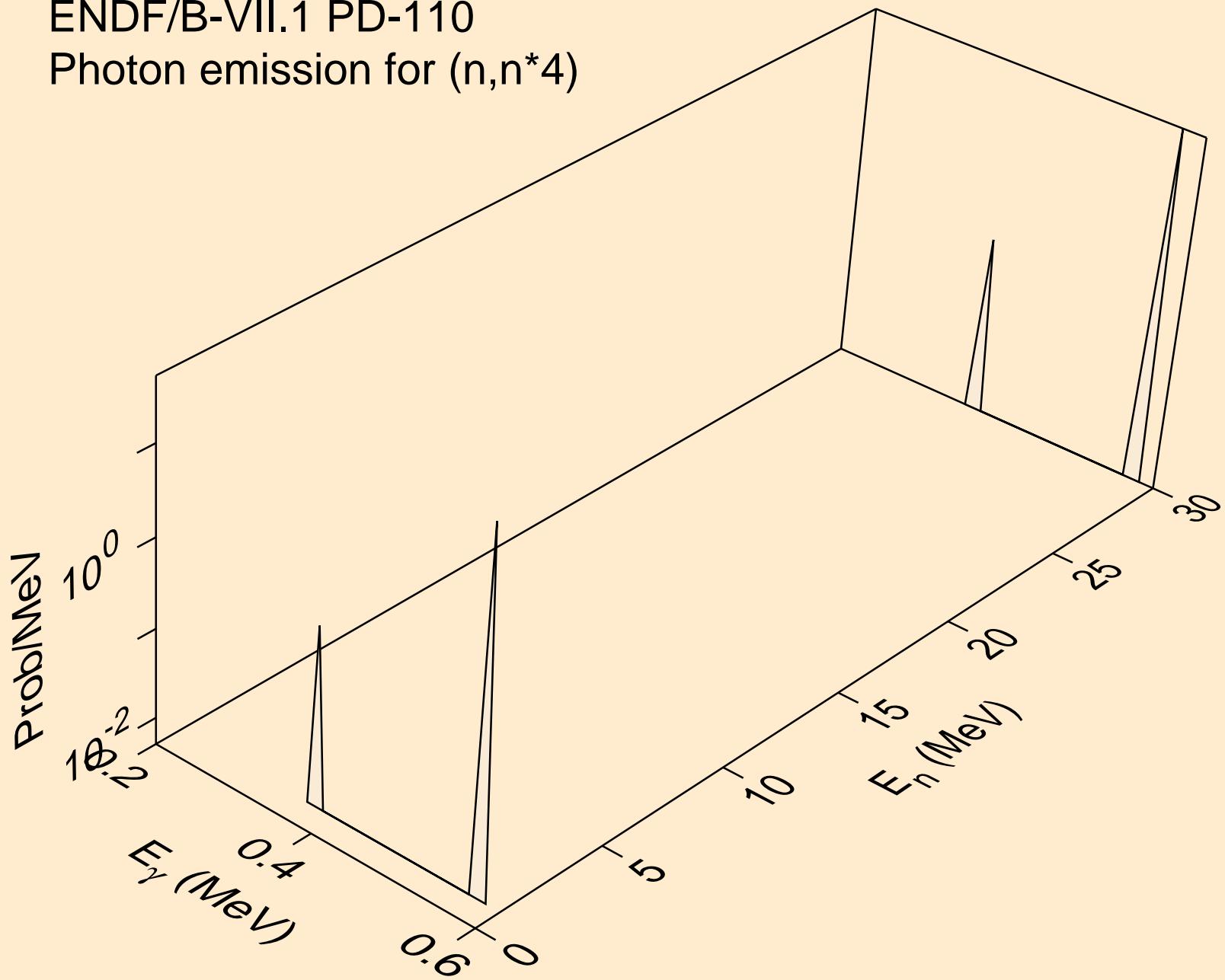
ENDF/B-VII.1 PD-110  
Photon emission for (n,n\*2)



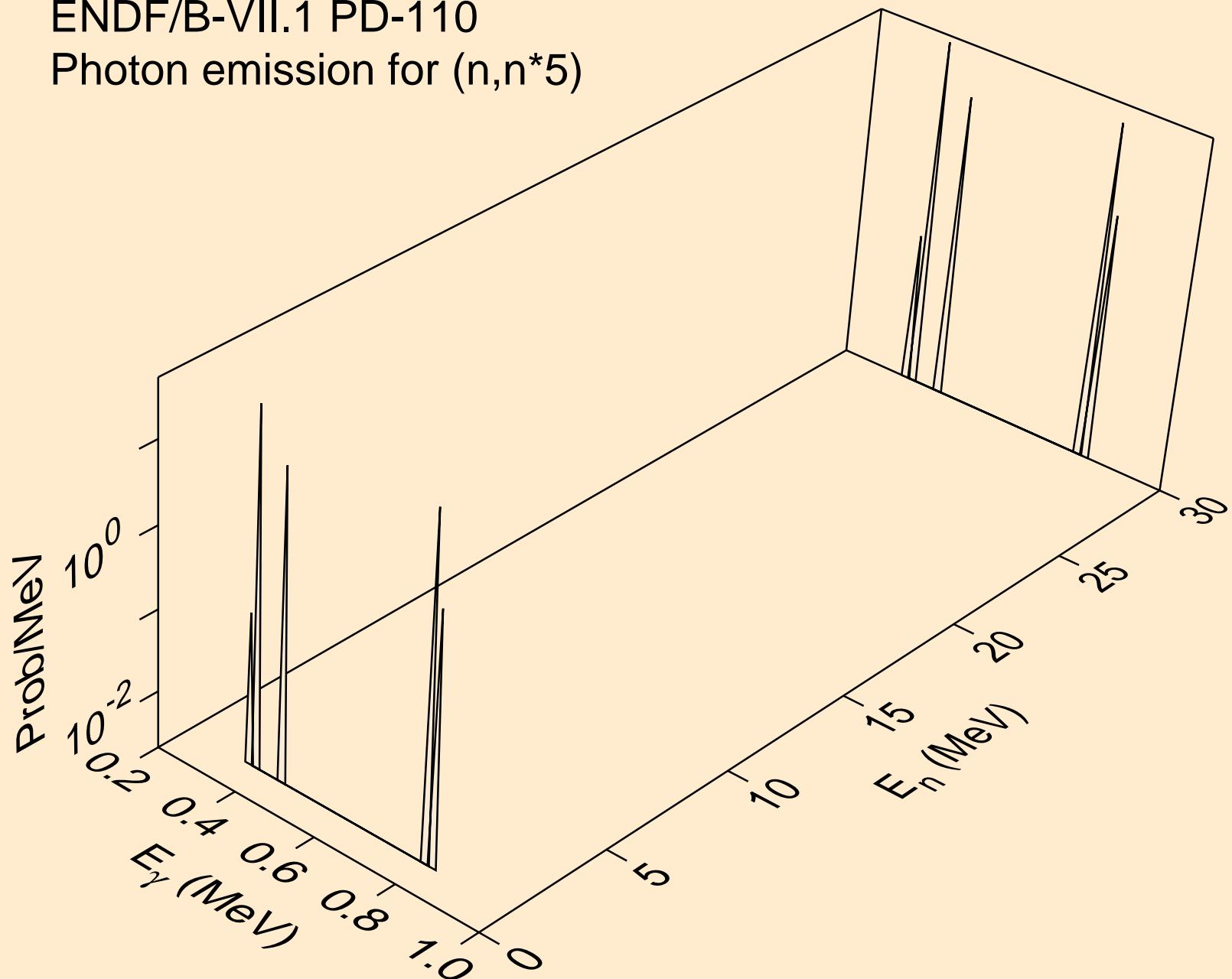
ENDF/B-VII.1 PD-110  
Photon emission for (n,n\*3)



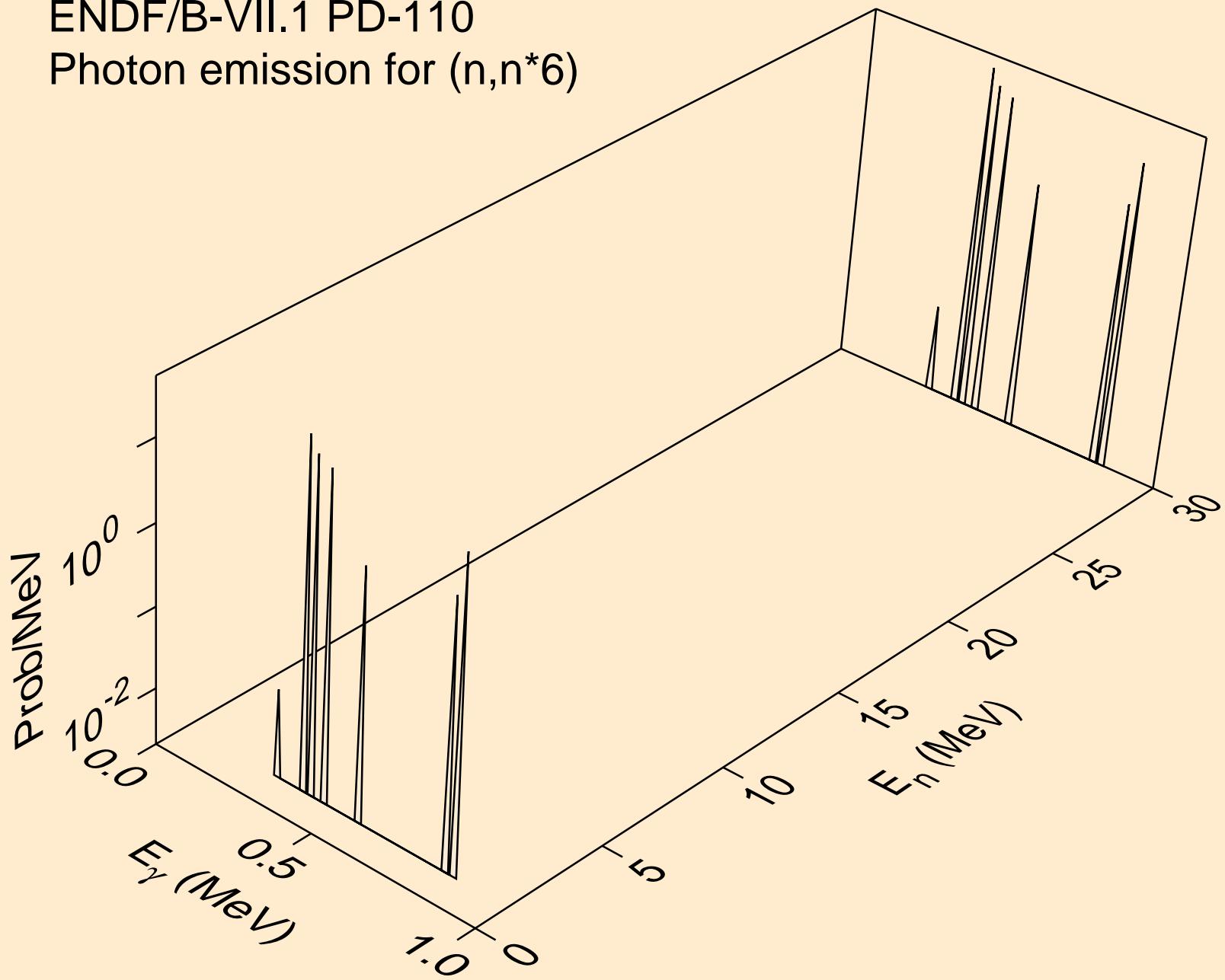
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Photon emission for (n,n\*4)



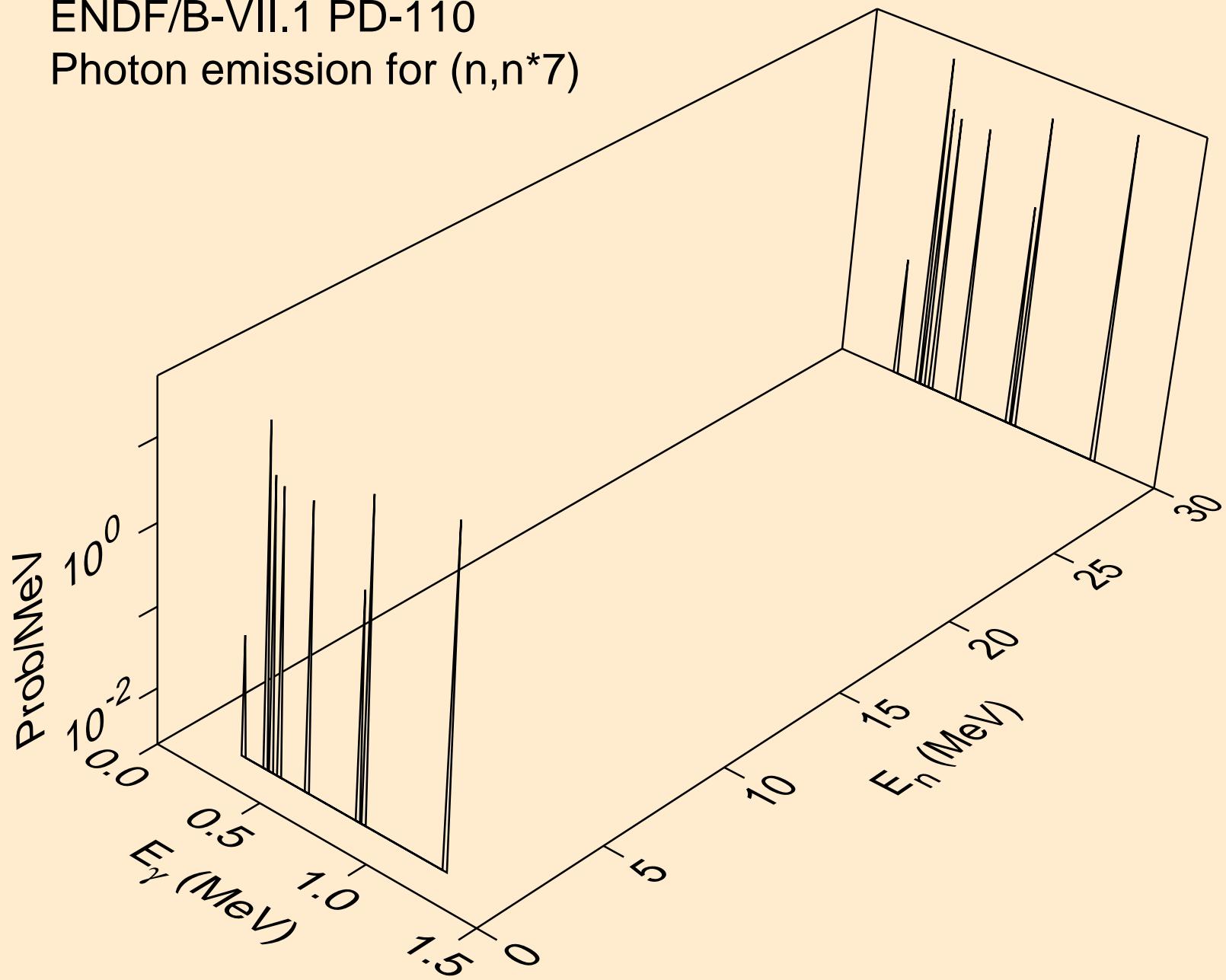
ENDF/B-VII.1 PD-110  
Photon emission for (n,n\*5)



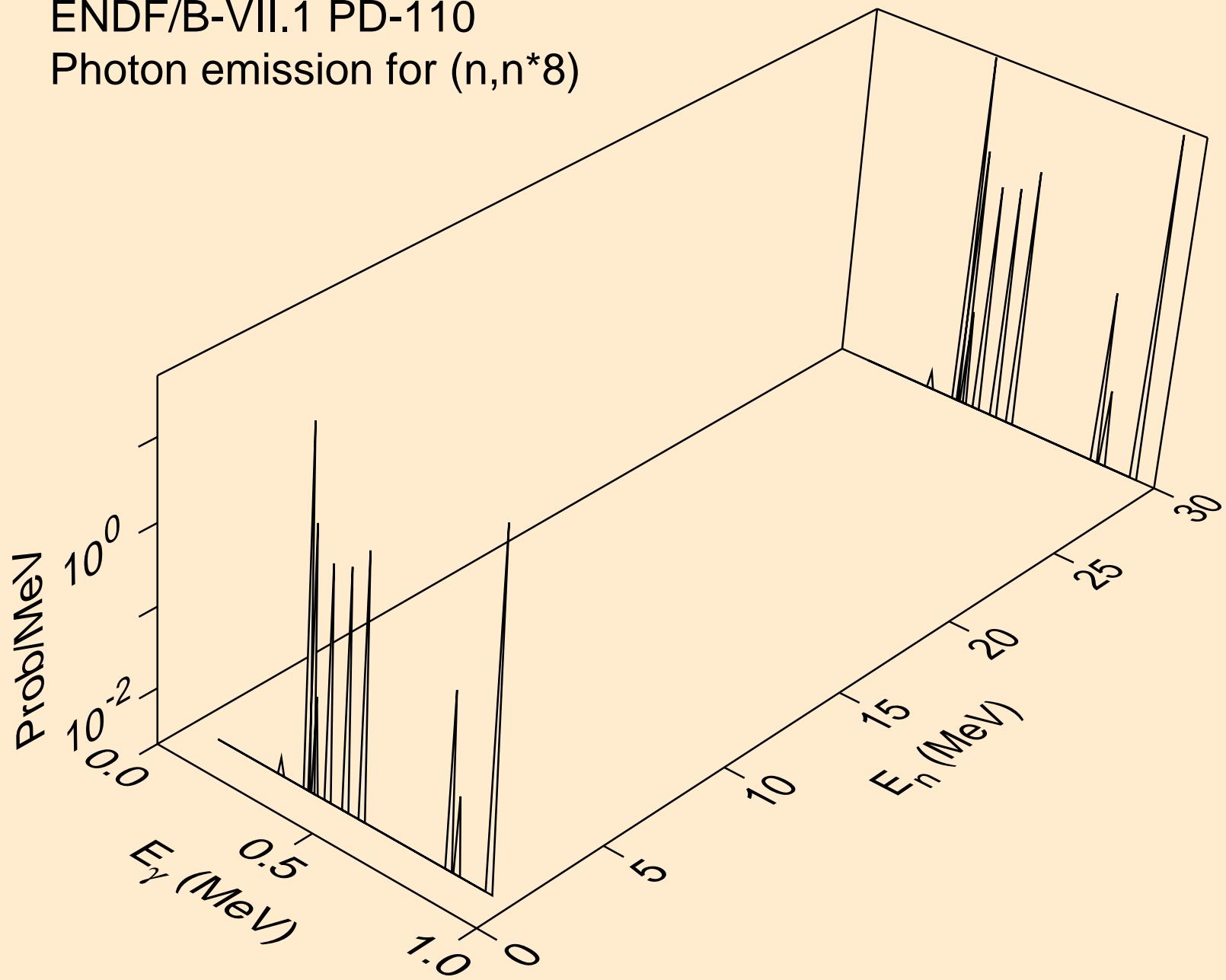
ENDF/B-VII.1 PD-110  
Photon emission for ( $n, n^*6$ )



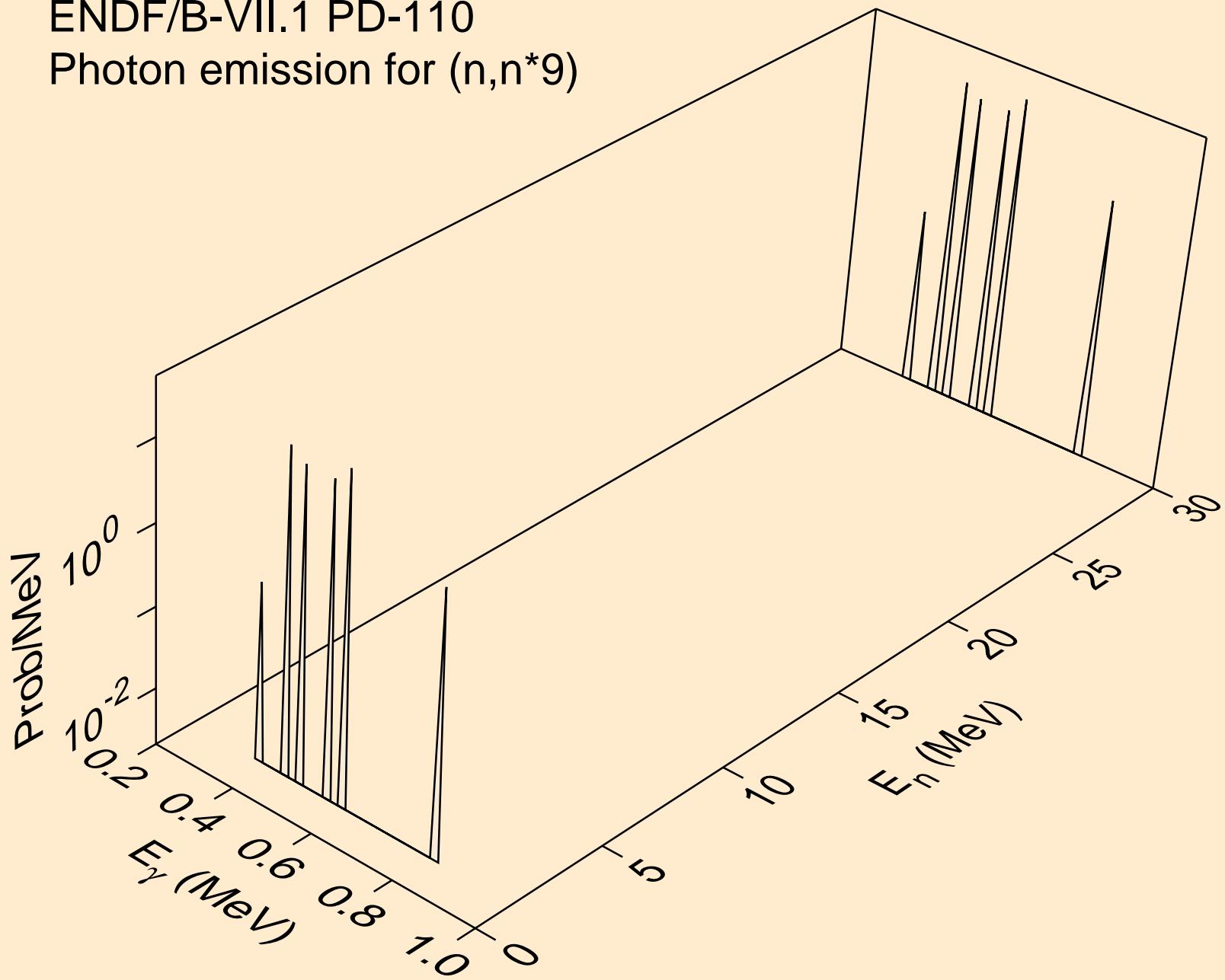
ENDF/B-VII.1 PD-110  
Photon emission for ( $n, n^*7$ )



ENDF/B-VII.1 PD-110  
Photon emission for (n,n\*8)

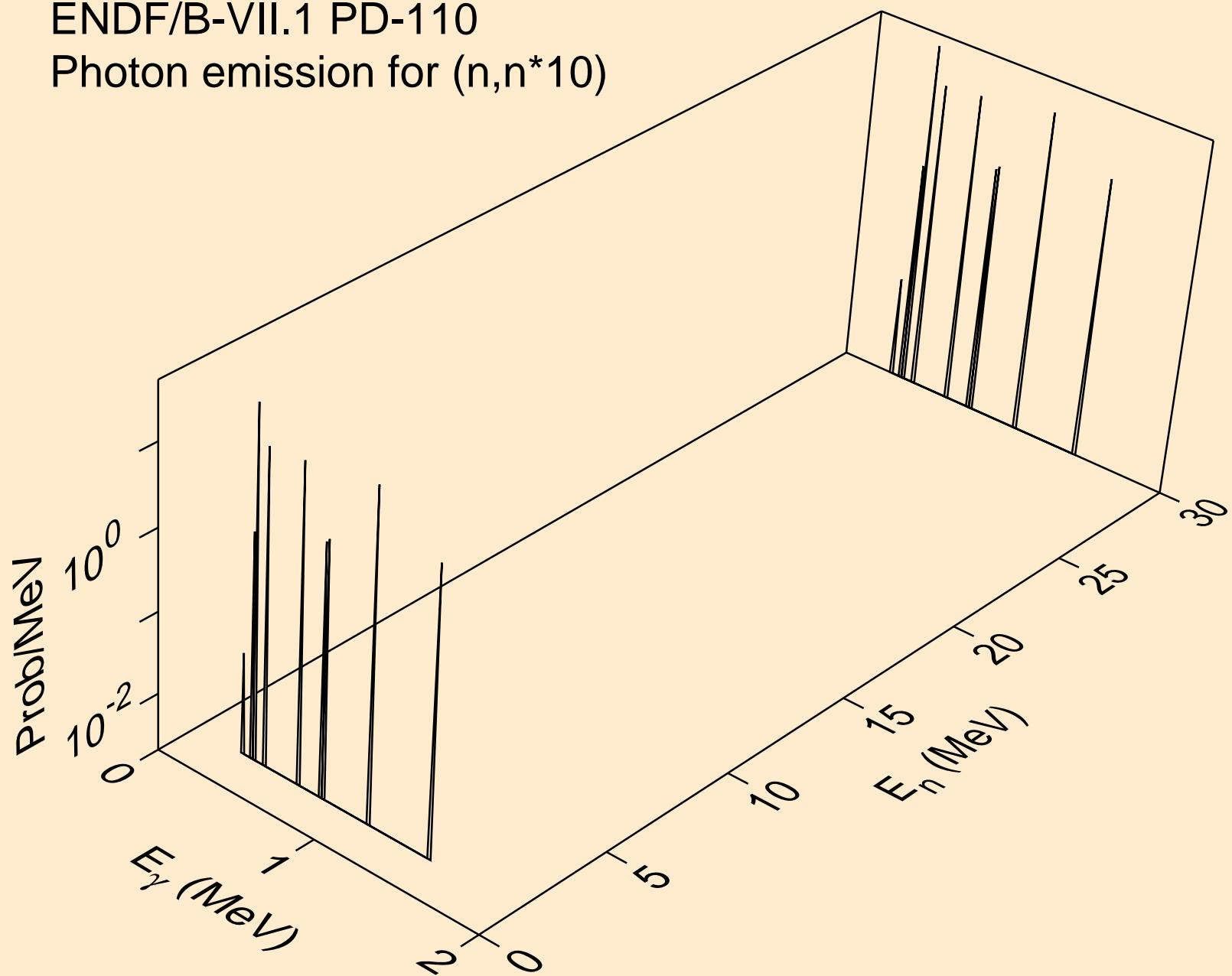


ENDF/B-VII.1 PD-110  
Photon emission for (n,n\*9)

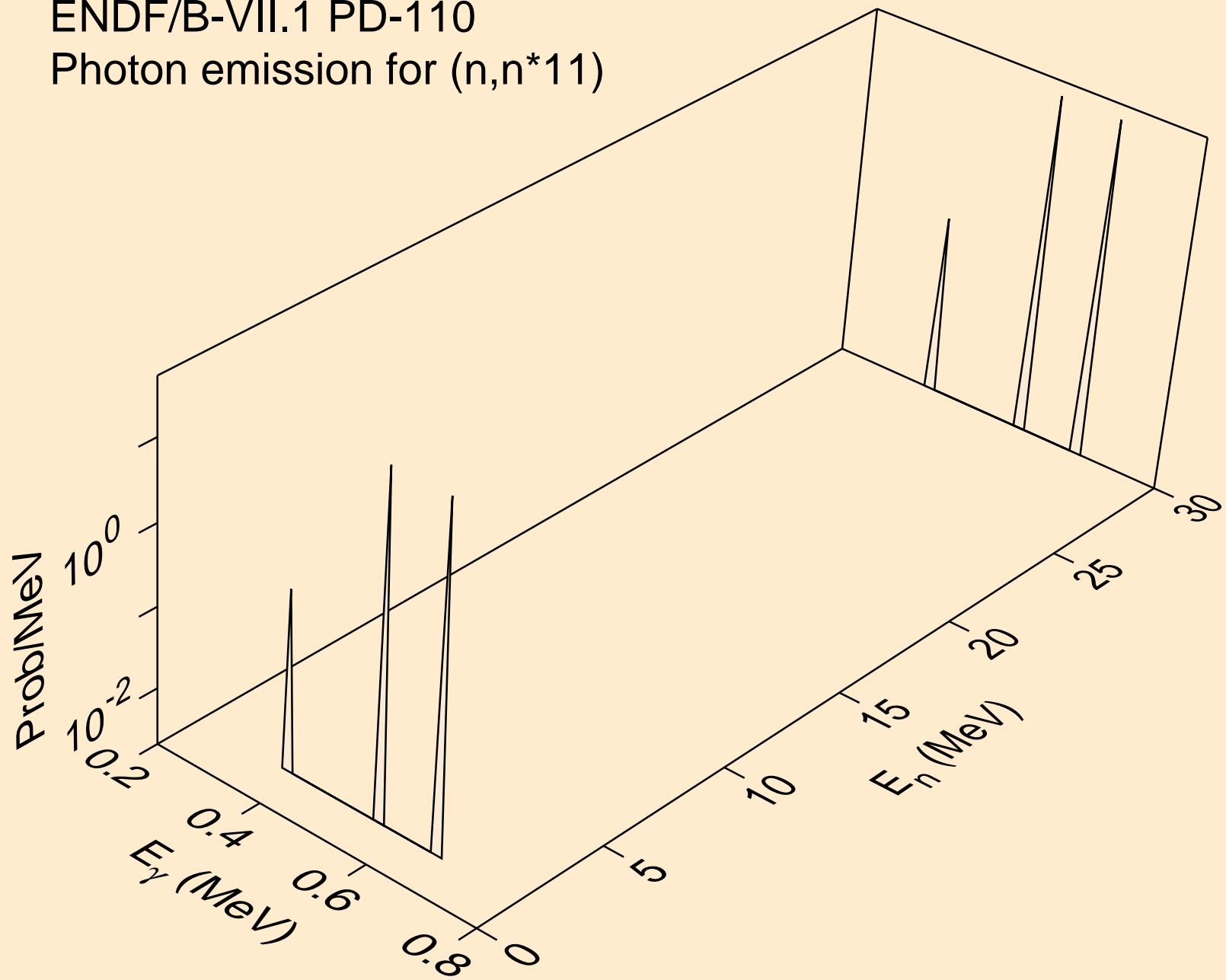


# ENDF/B-VII.1 PD-110

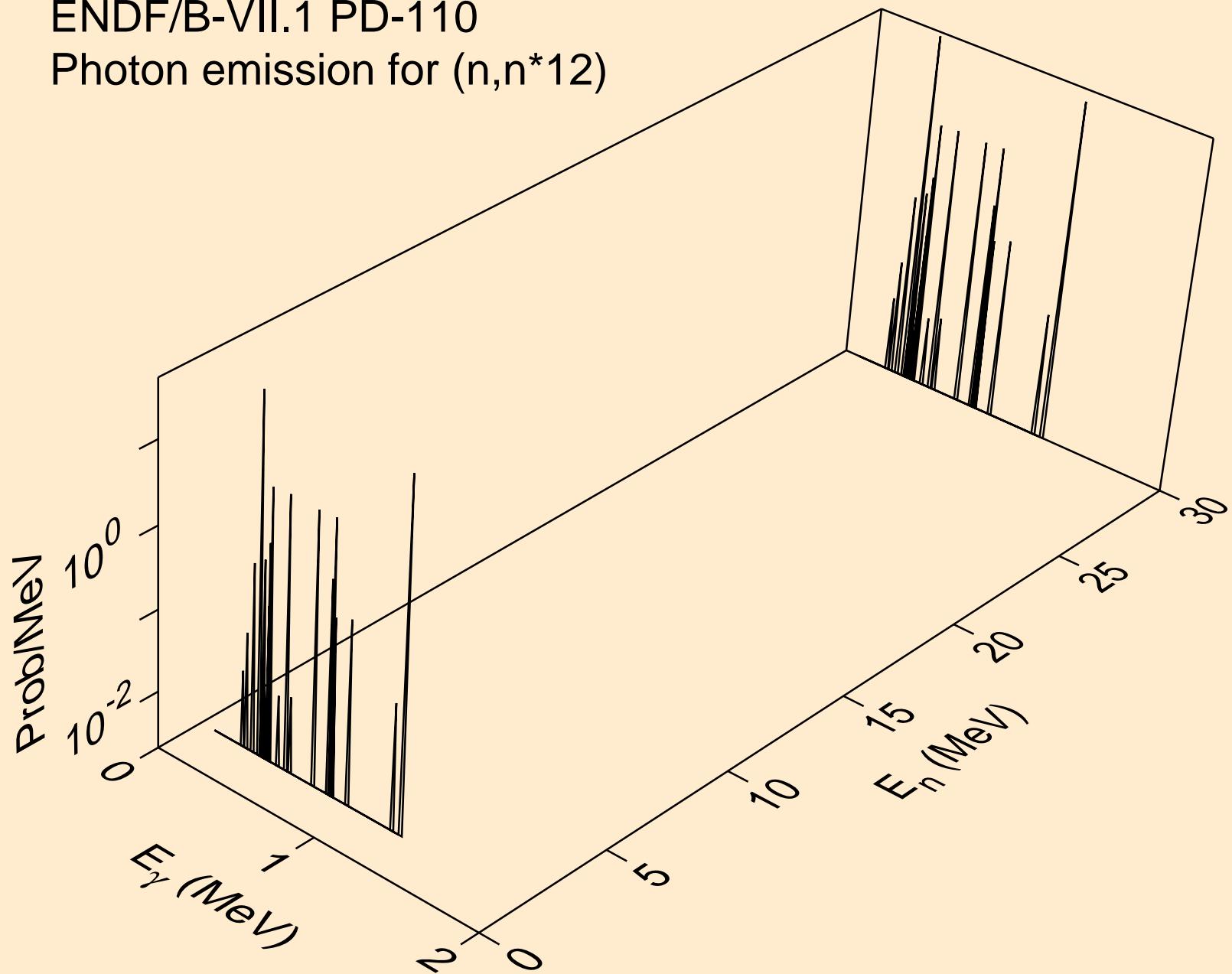
## Photon emission for (n,n\*10)



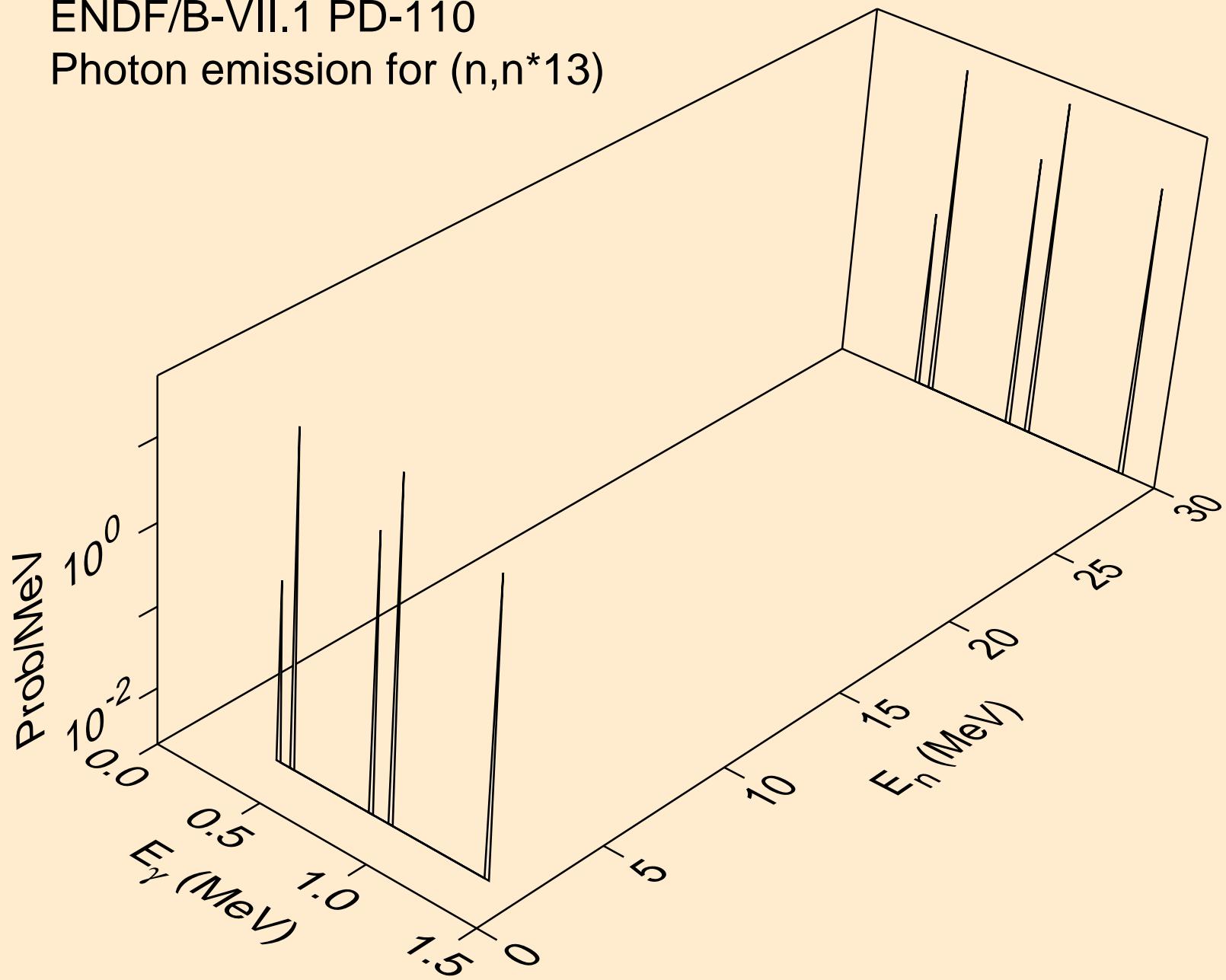
ENDF/B-VII.1 PD-110  
Photon emission for ( $n, n^* 11$ )



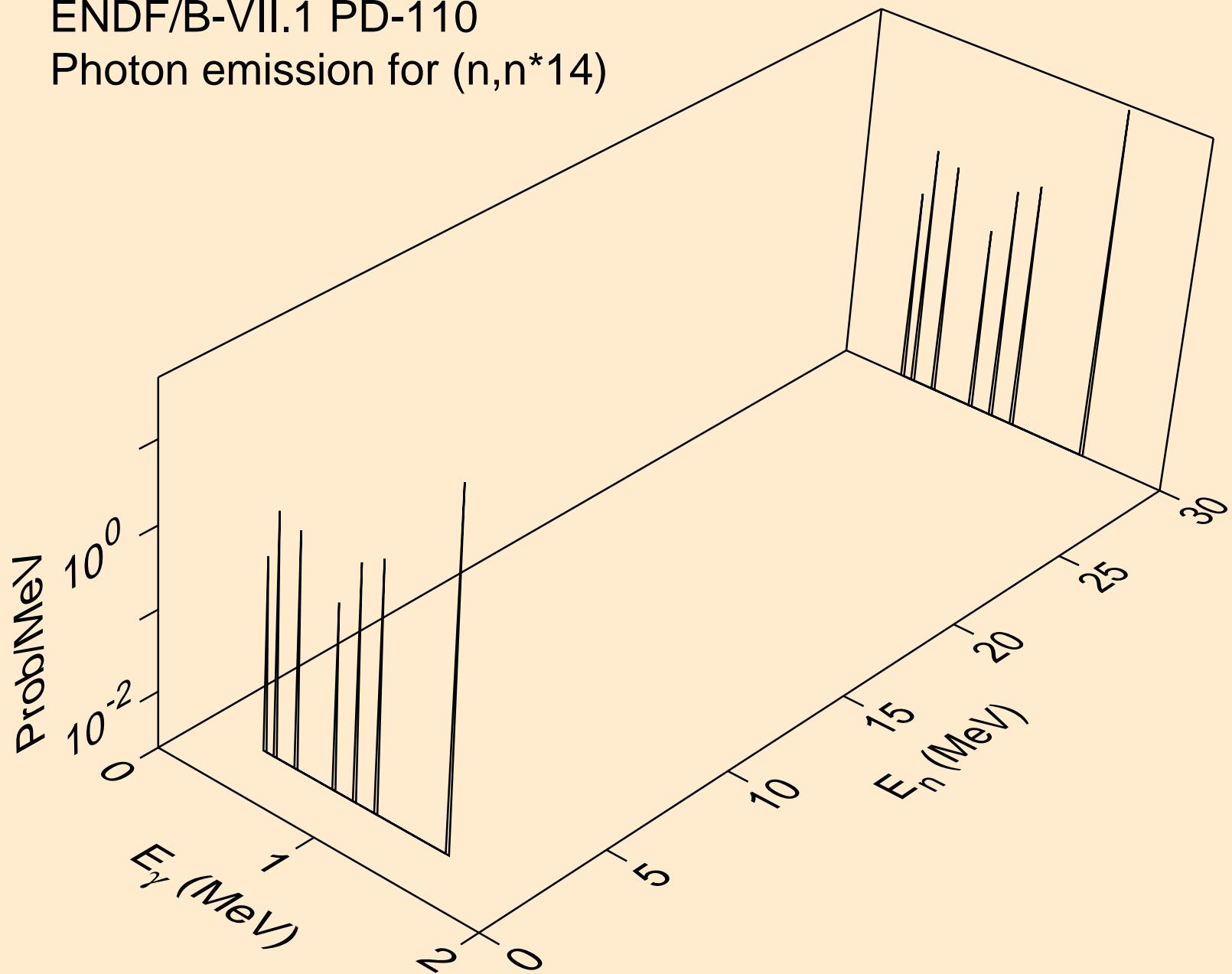
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Photon emission for  $(n,n^*12)$



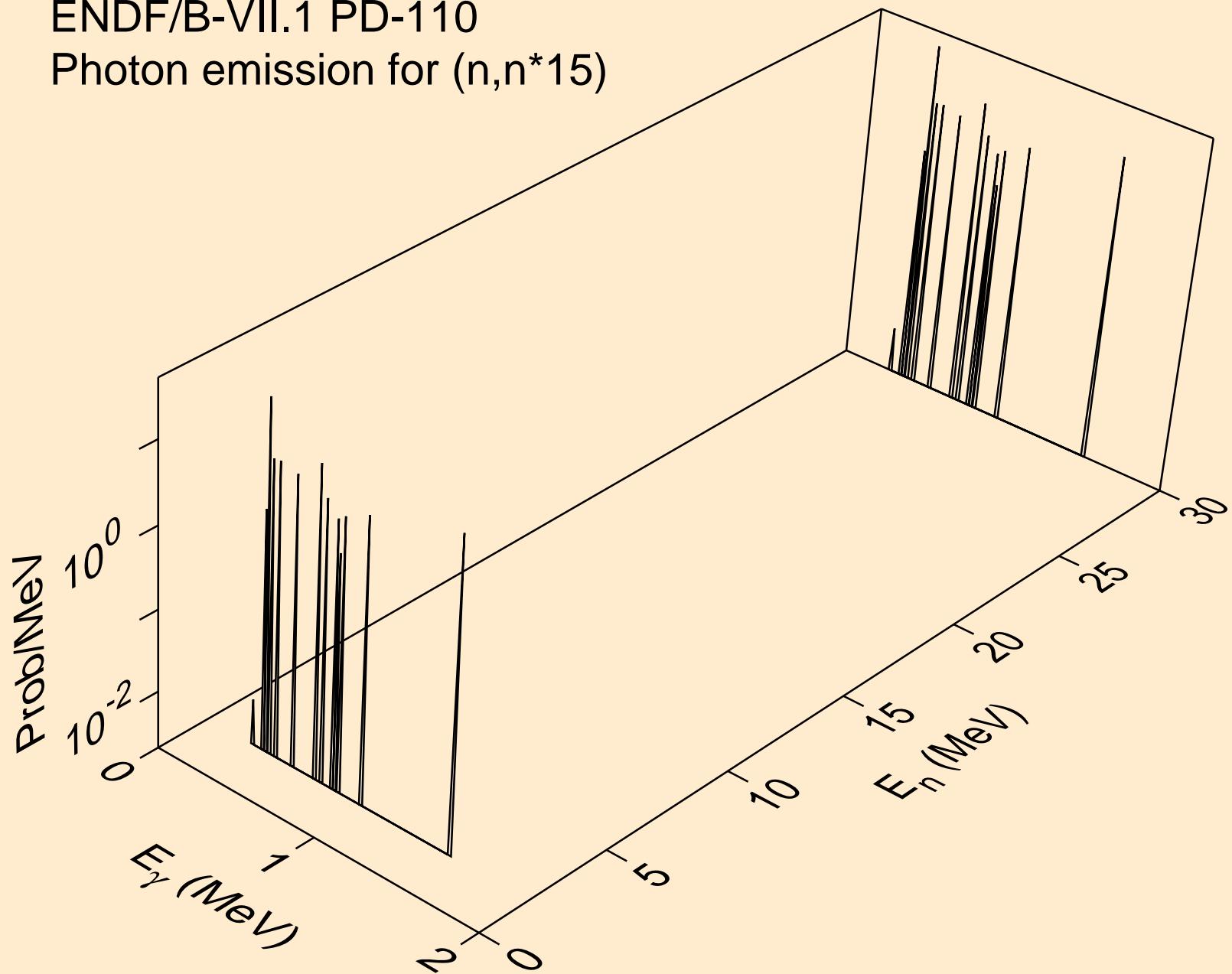
ENDF/B-VII.1 PD-110  
Photon emission for ( $n, n^* 13$ )



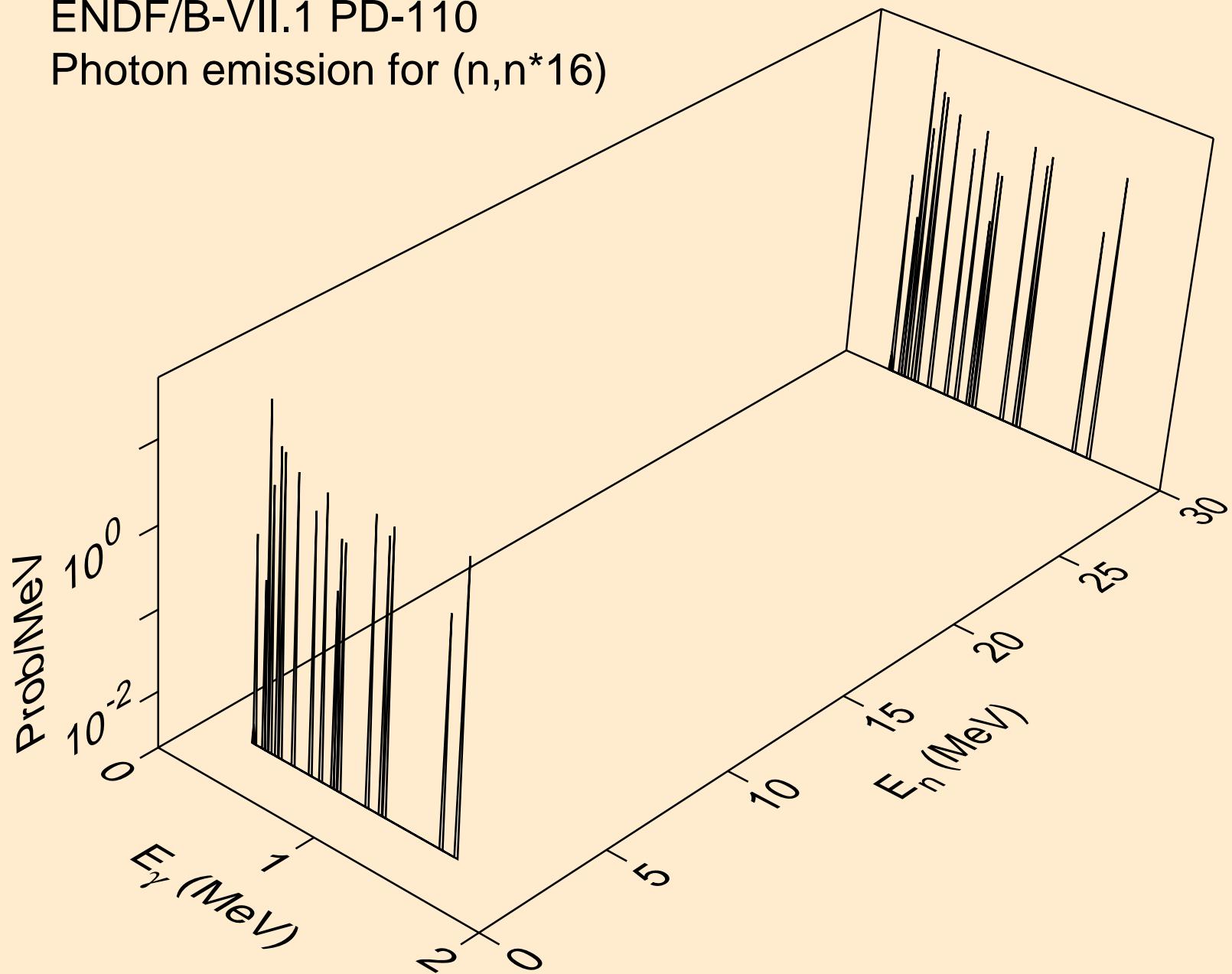
ENDF/B-VII.1 PD-110  
Photon emission for ( $n, n^* 14$ )



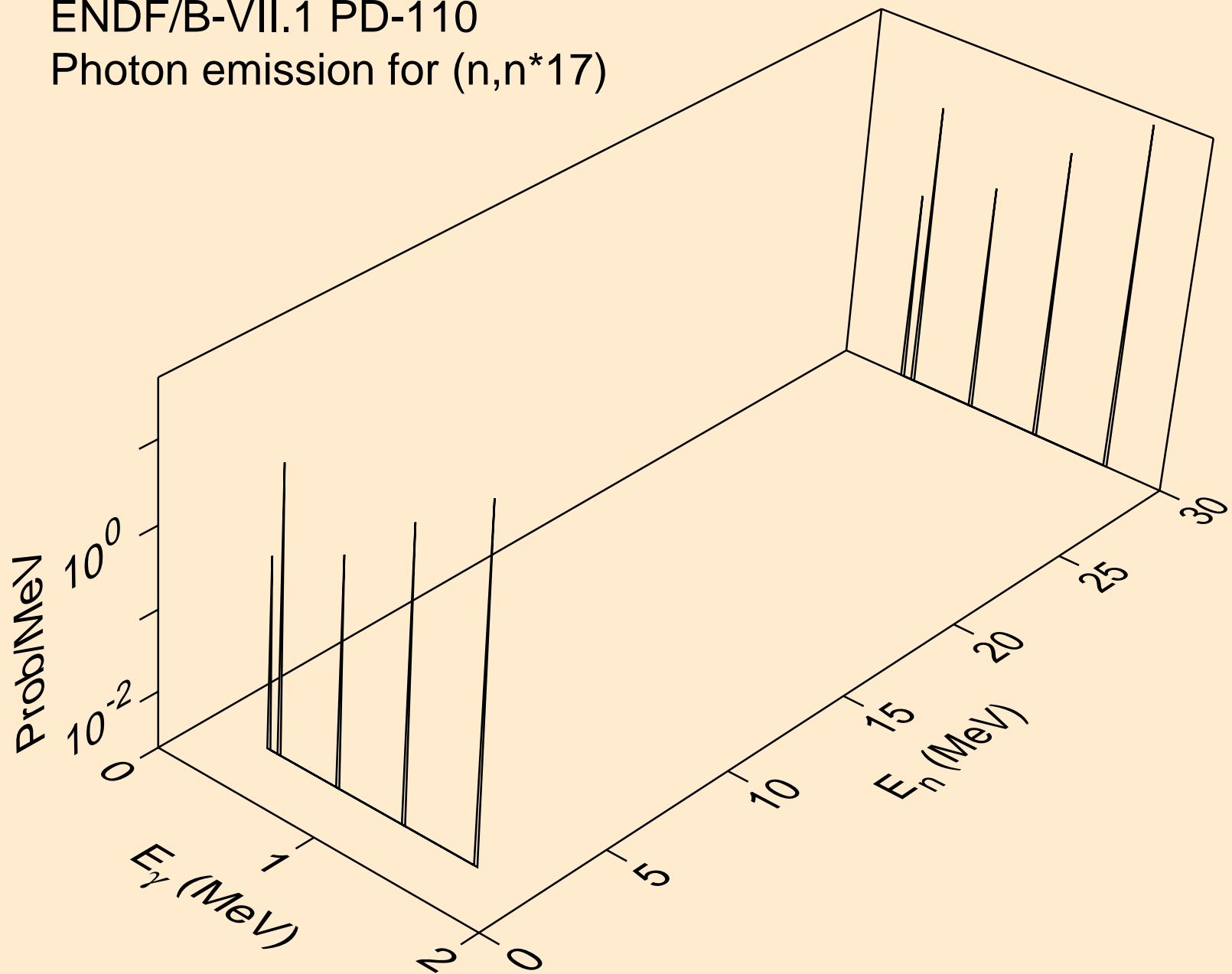
ENDF/B-VII.1 PD-110  
Photon emission for  $(n,n^*15)$



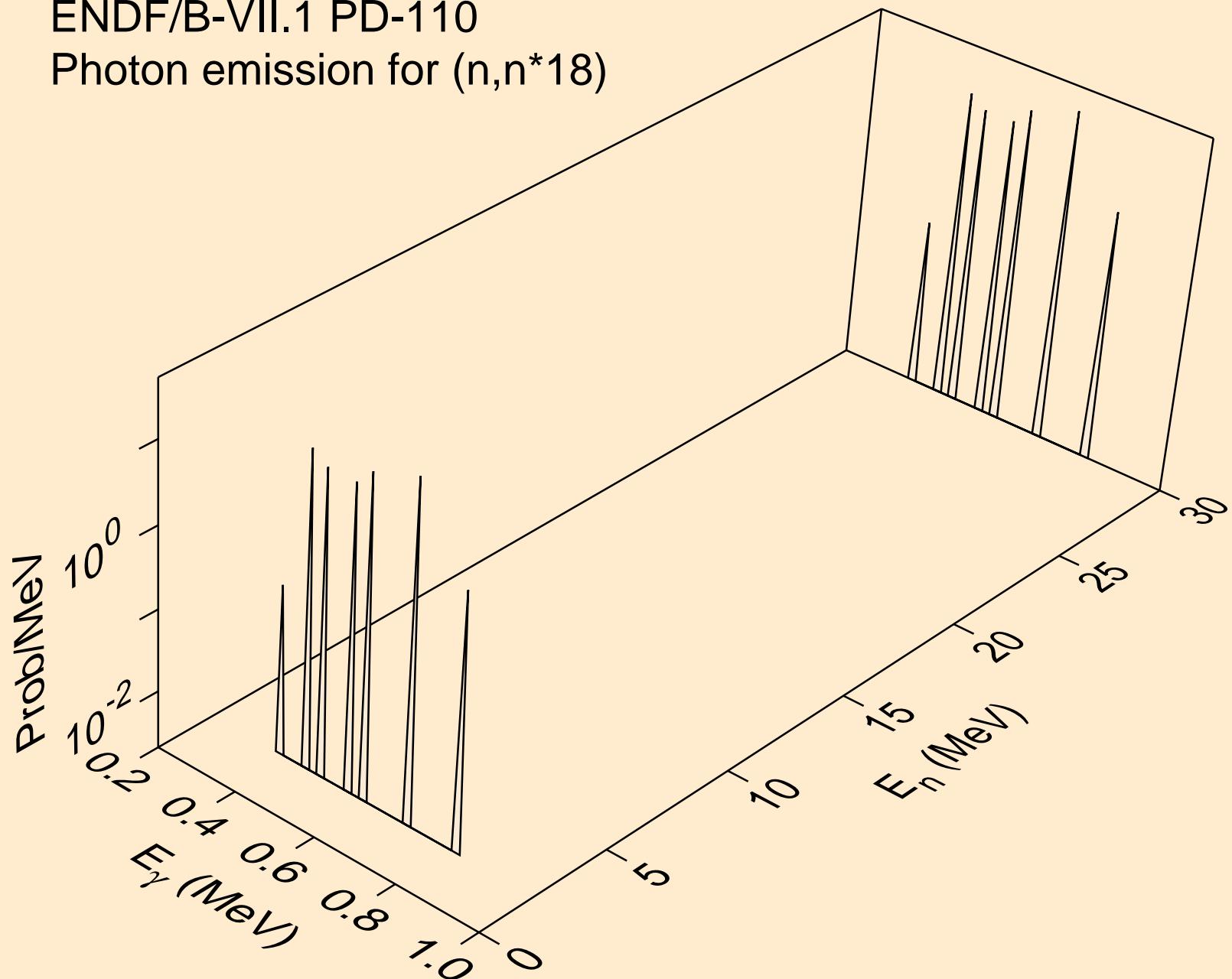
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Photon emission for  $(n, n^* 16)$



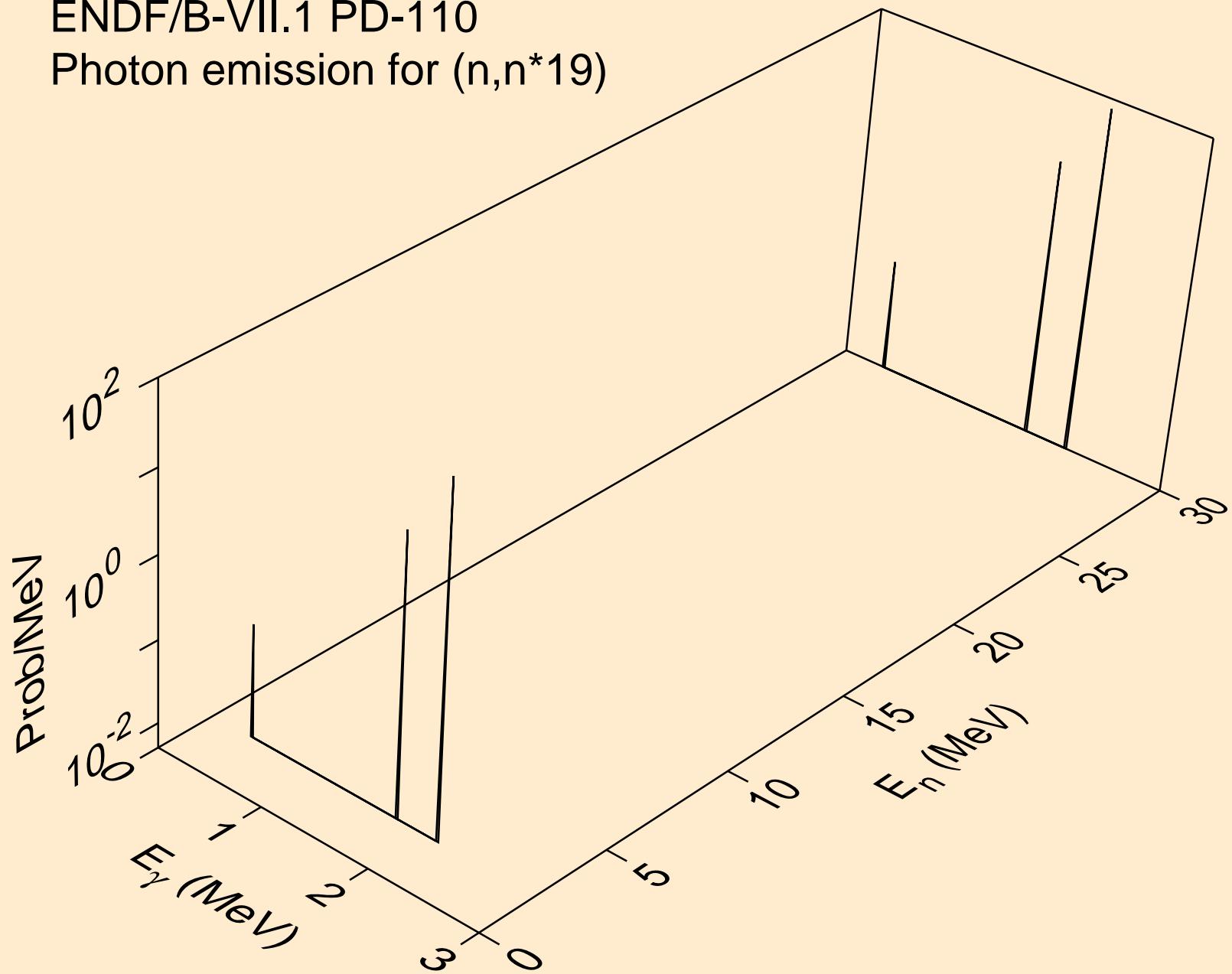
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Photon emission for ( $n, n^* 17$ )



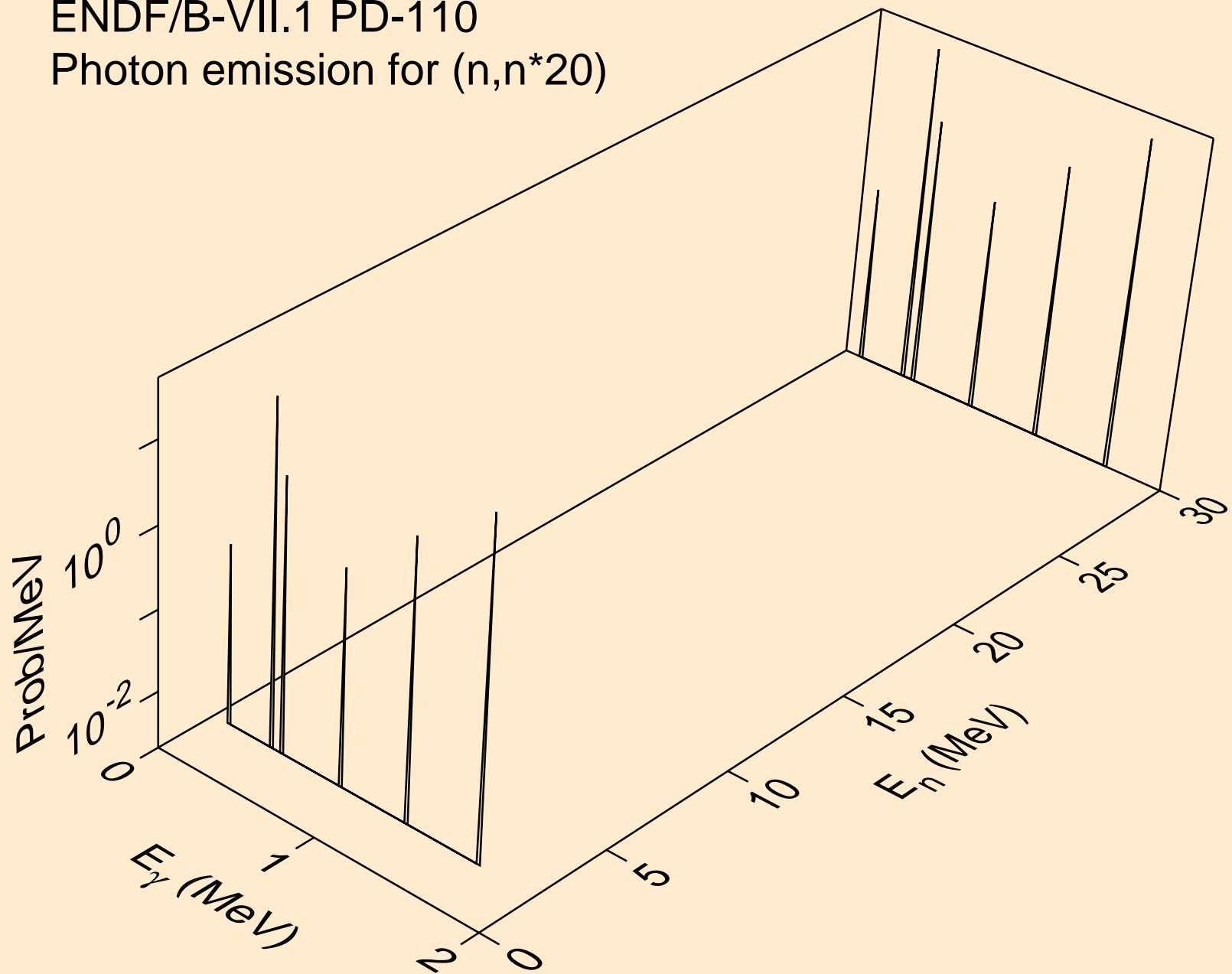
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Photon emission for ( $n, n^* 18$ )



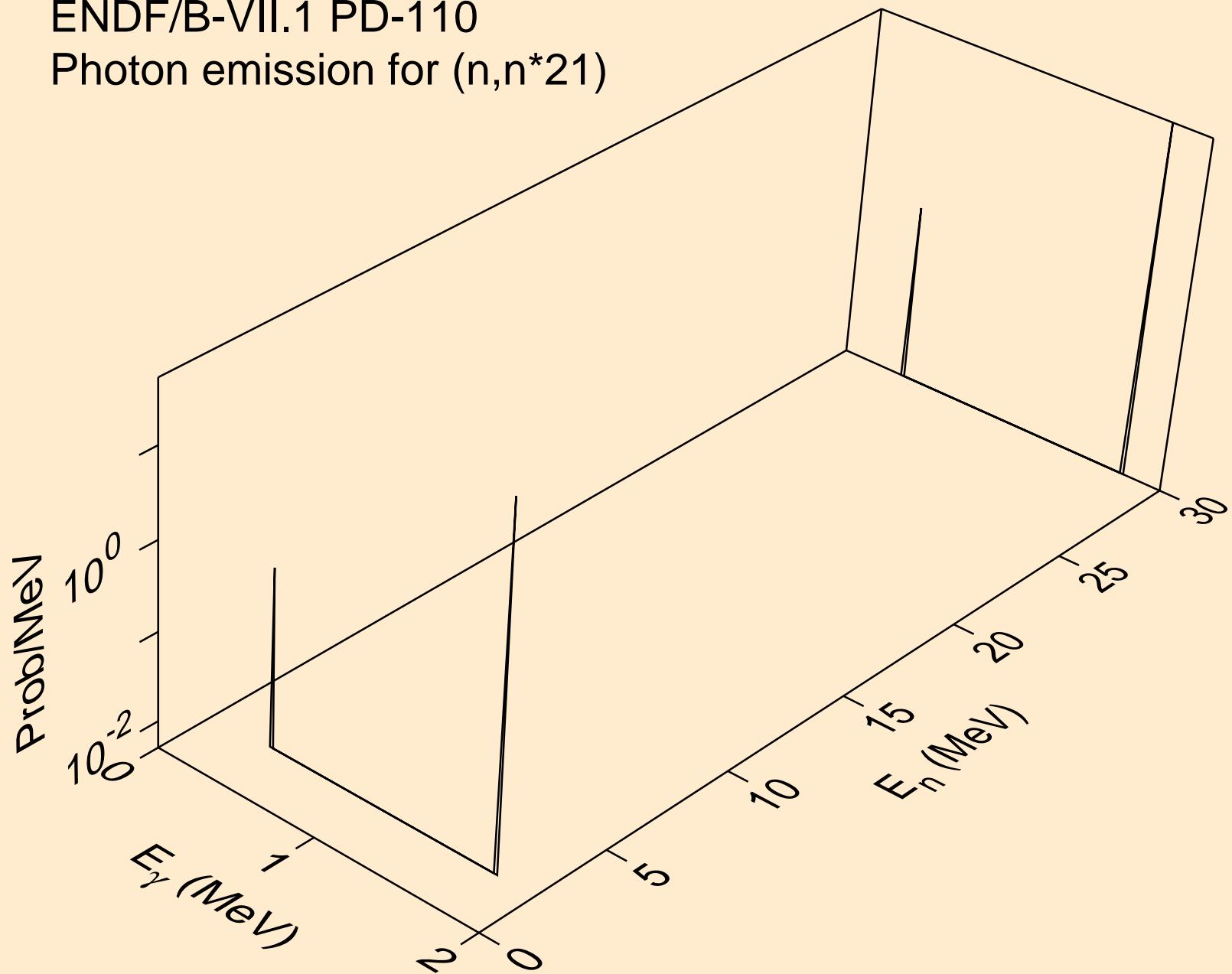
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Photon emission for ( $n, n^* 19$ )



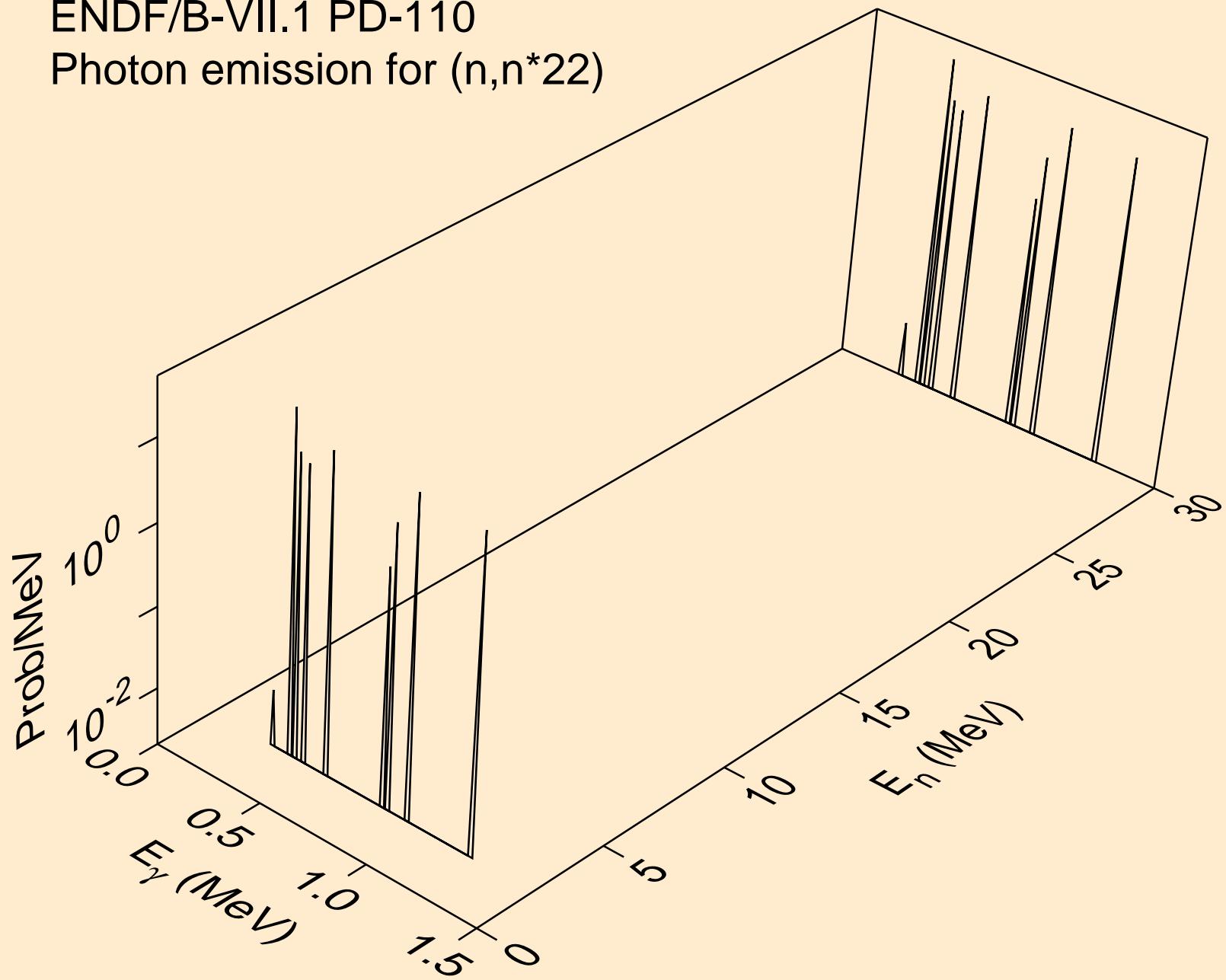
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Photon emission for (n,n\*20)



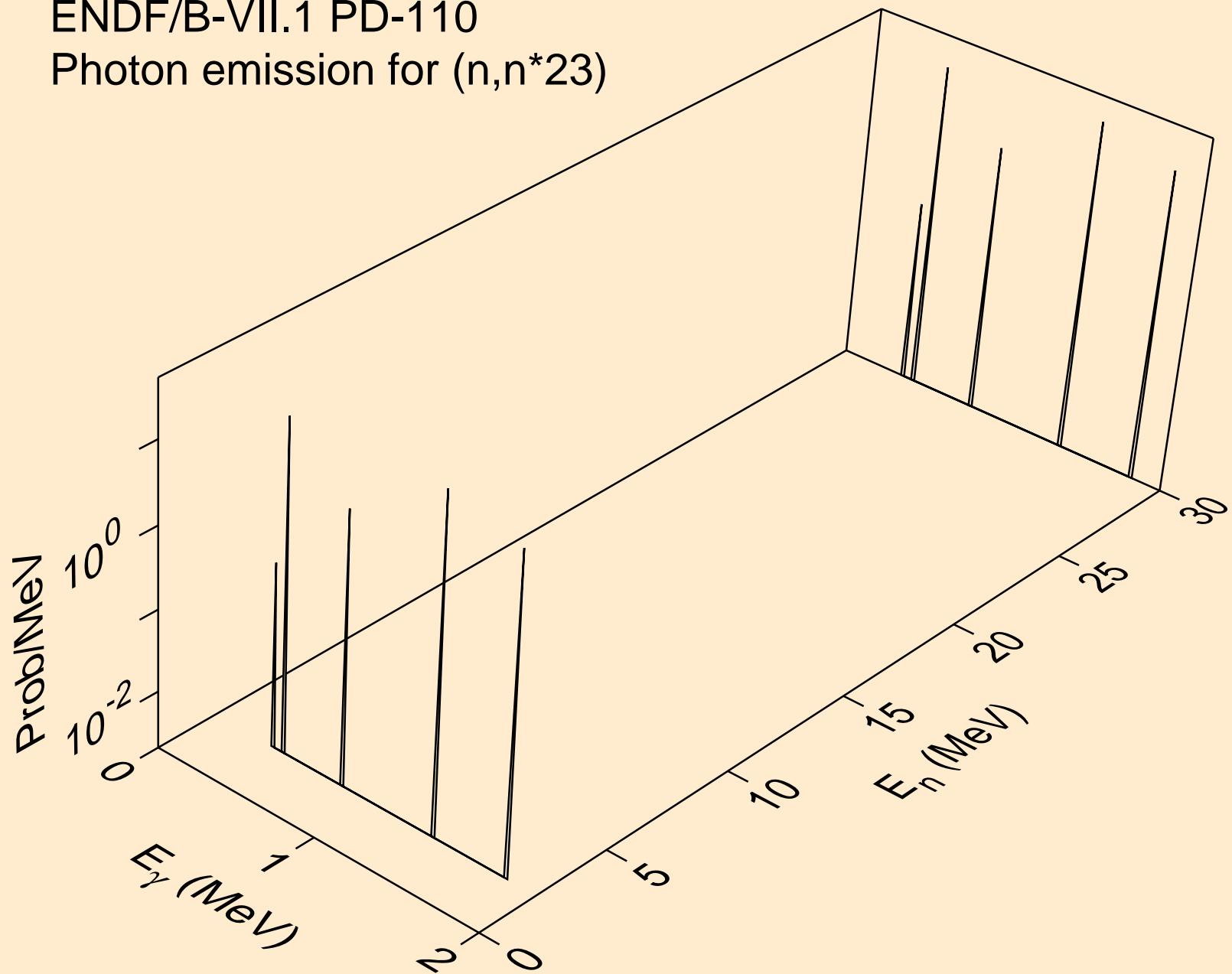
ENDF/B-VII.1 PD-110  
Photon emission for ( $n, n^* 21$ )



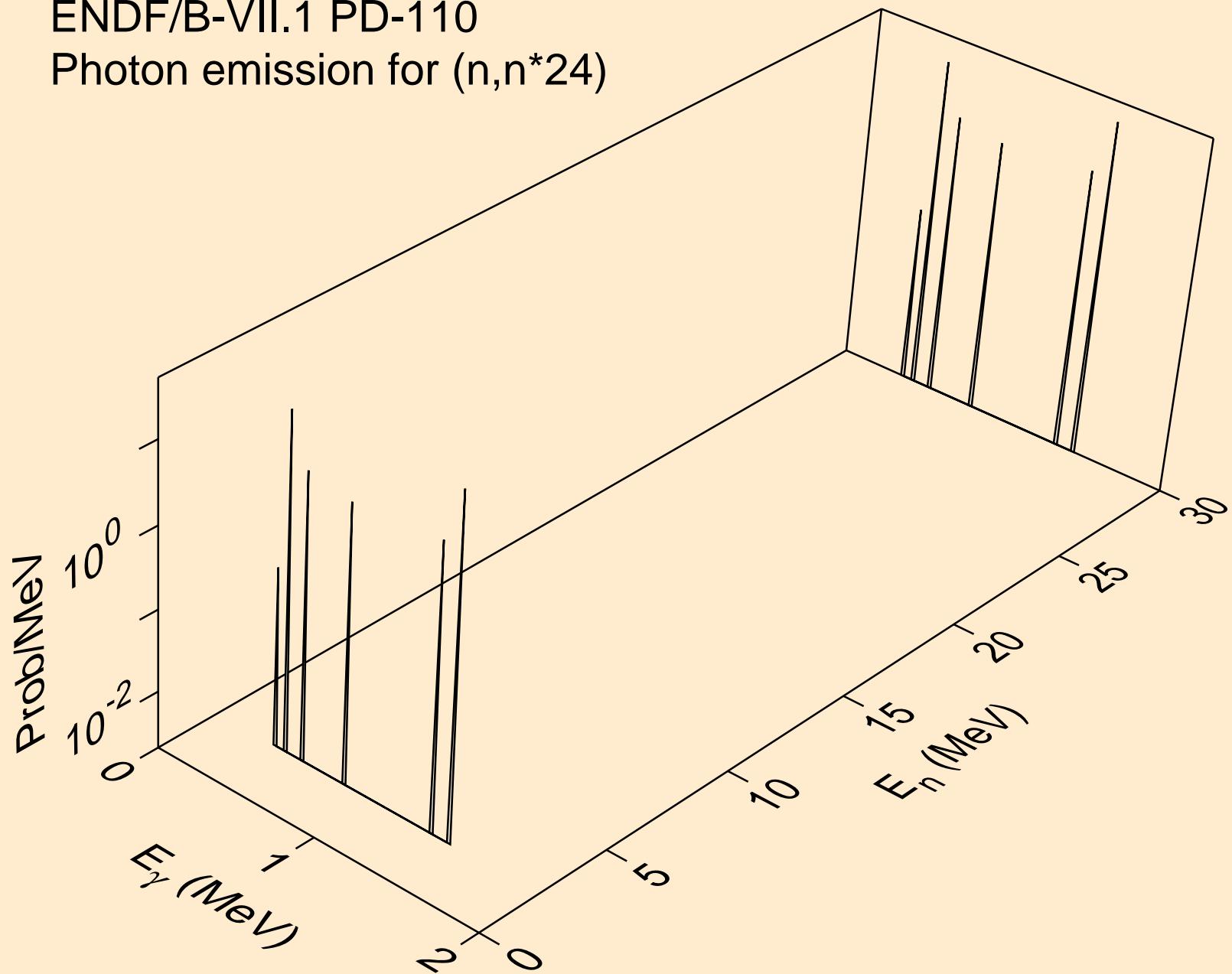
ENDF/B-VII.1 PD-110  
Photon emission for ( $n, n^* 22$ )



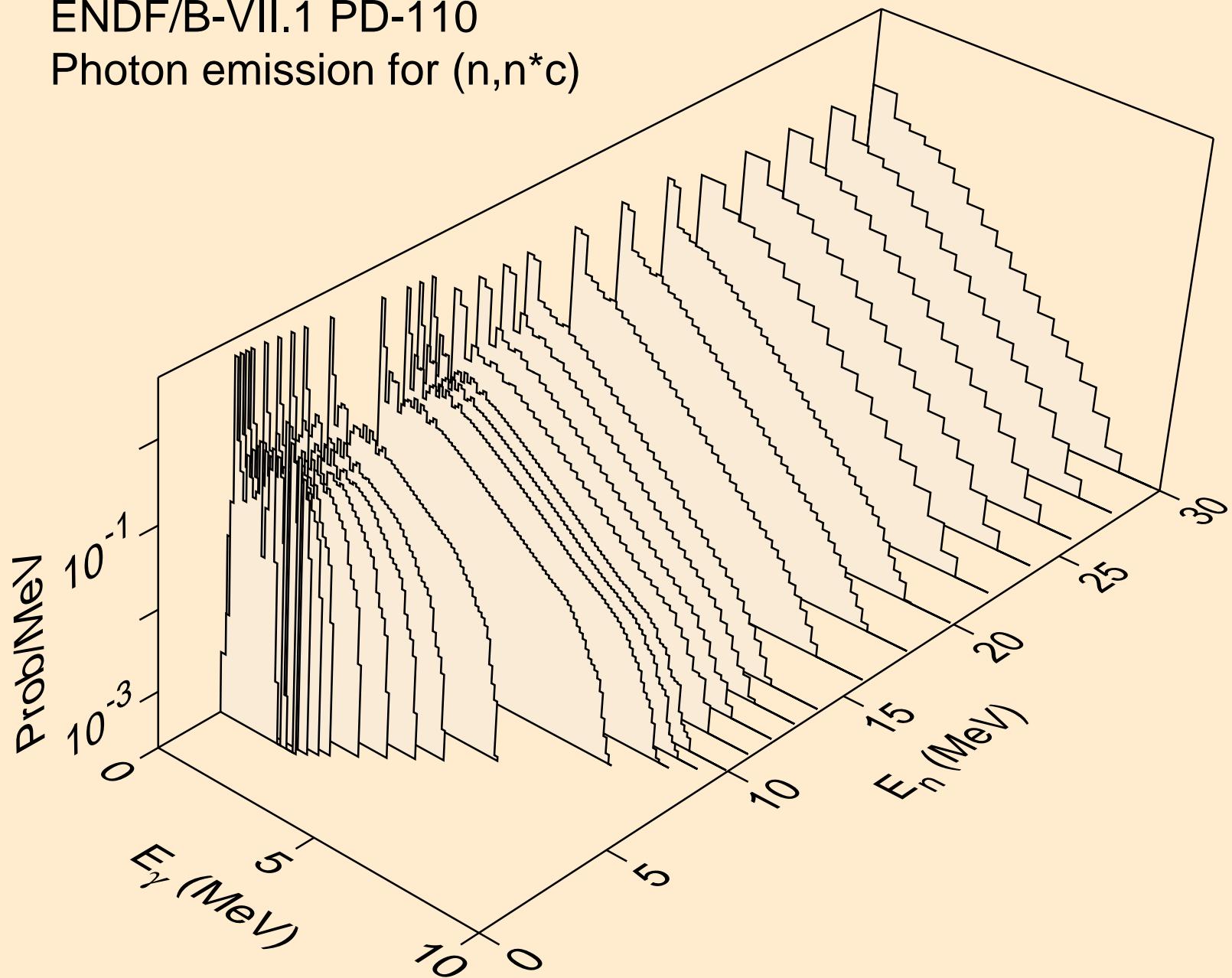
ENDF/B-VII.1 PD-110  
Photon emission for ( $n, n^*$ )<sup>23</sup>



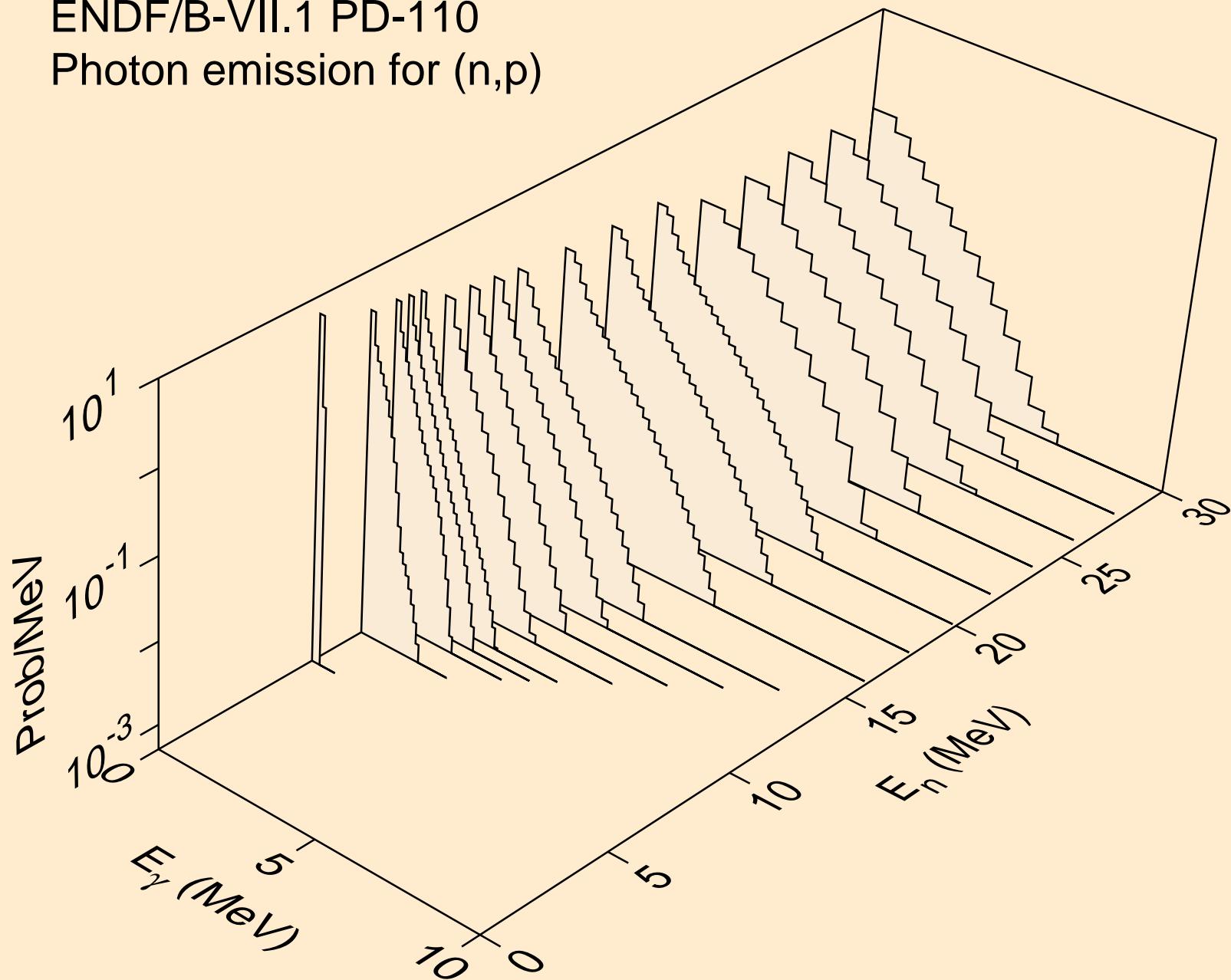
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Photon emission for ( $n, n^*$ )<sup>24</sup>



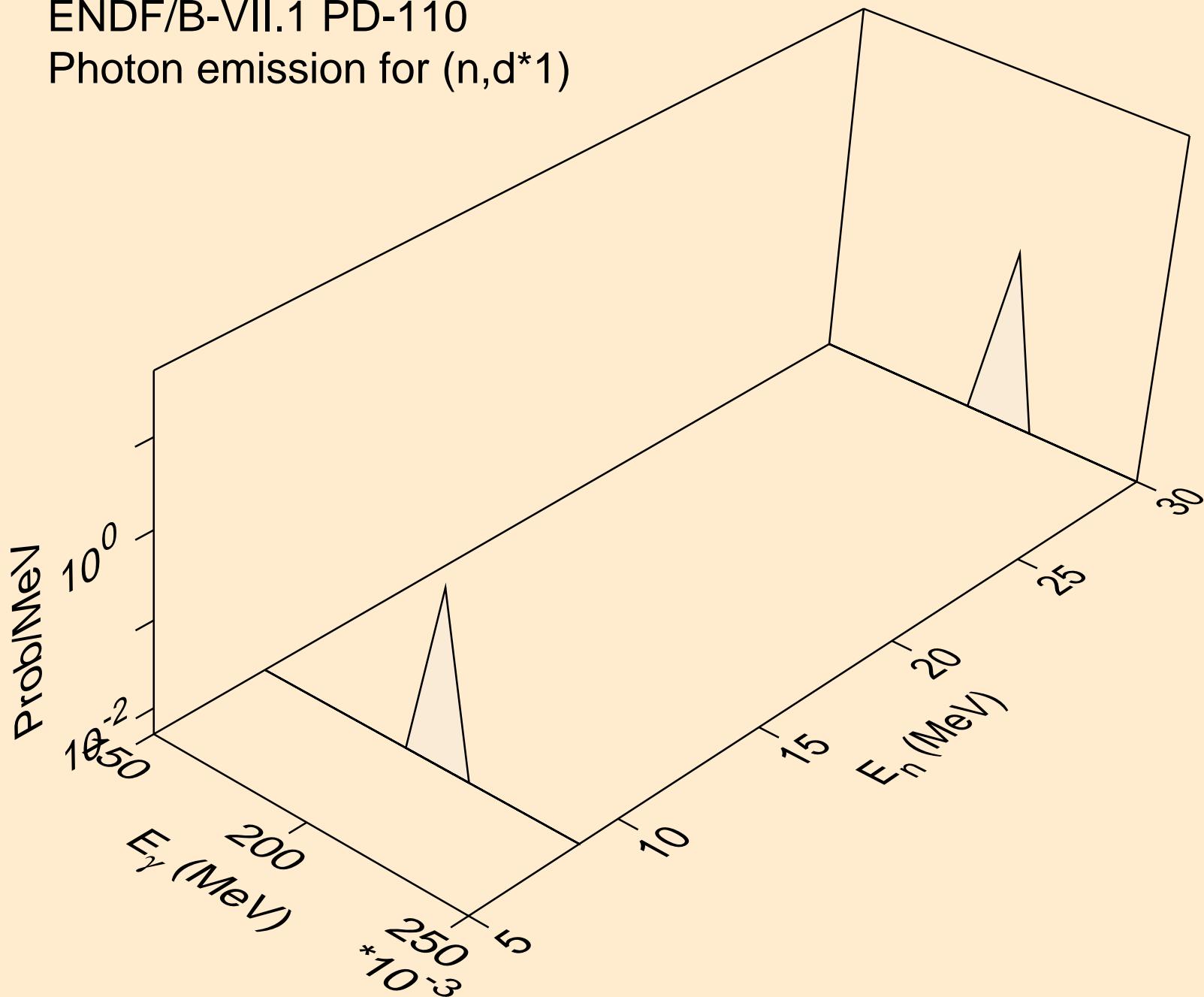
ENDF/B-VII.1 PD-110  
Photon emission for  $(n, n^* c)$



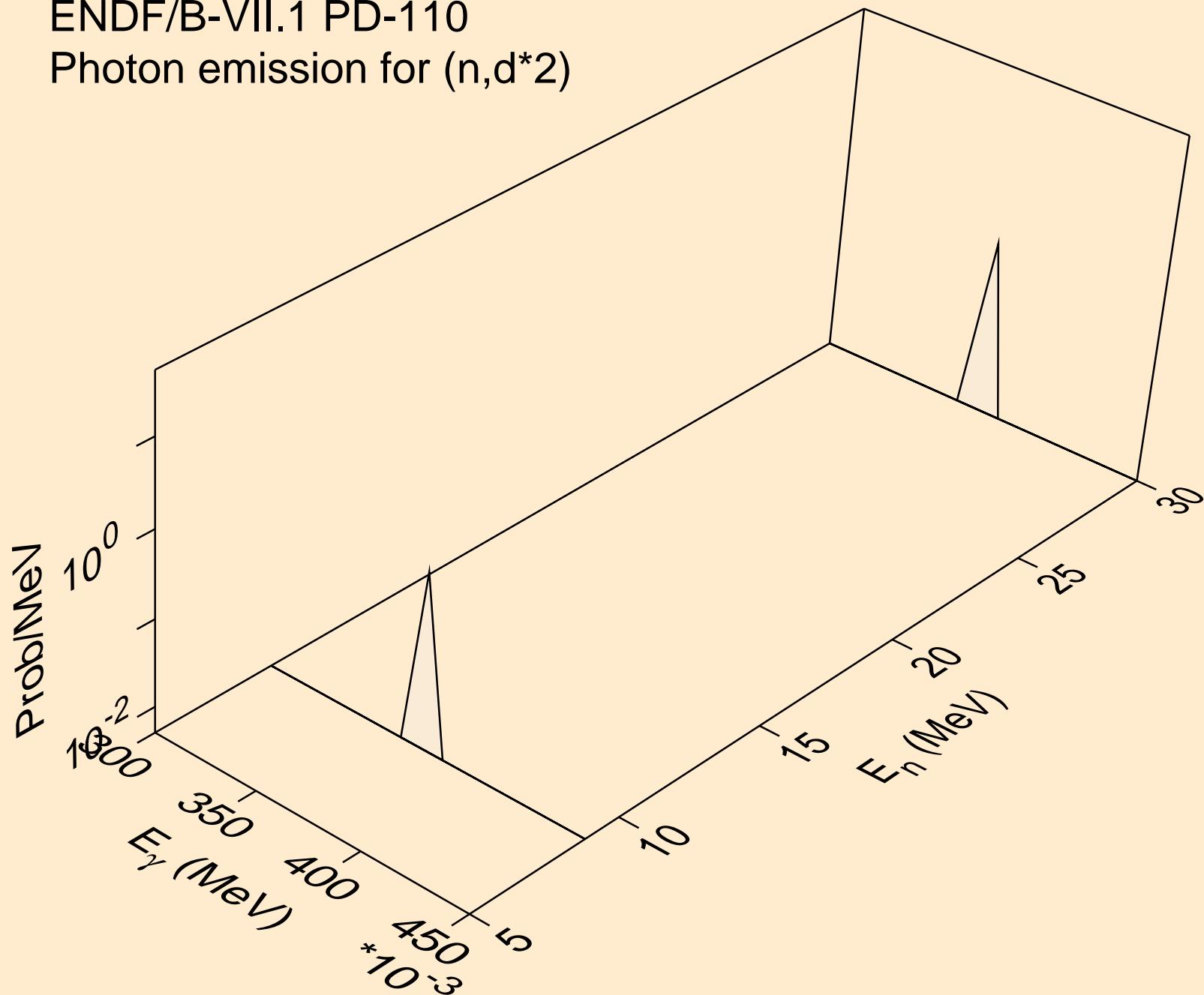
ENDF/B-VII.1 PD-110  
Photon emission for (n,p)



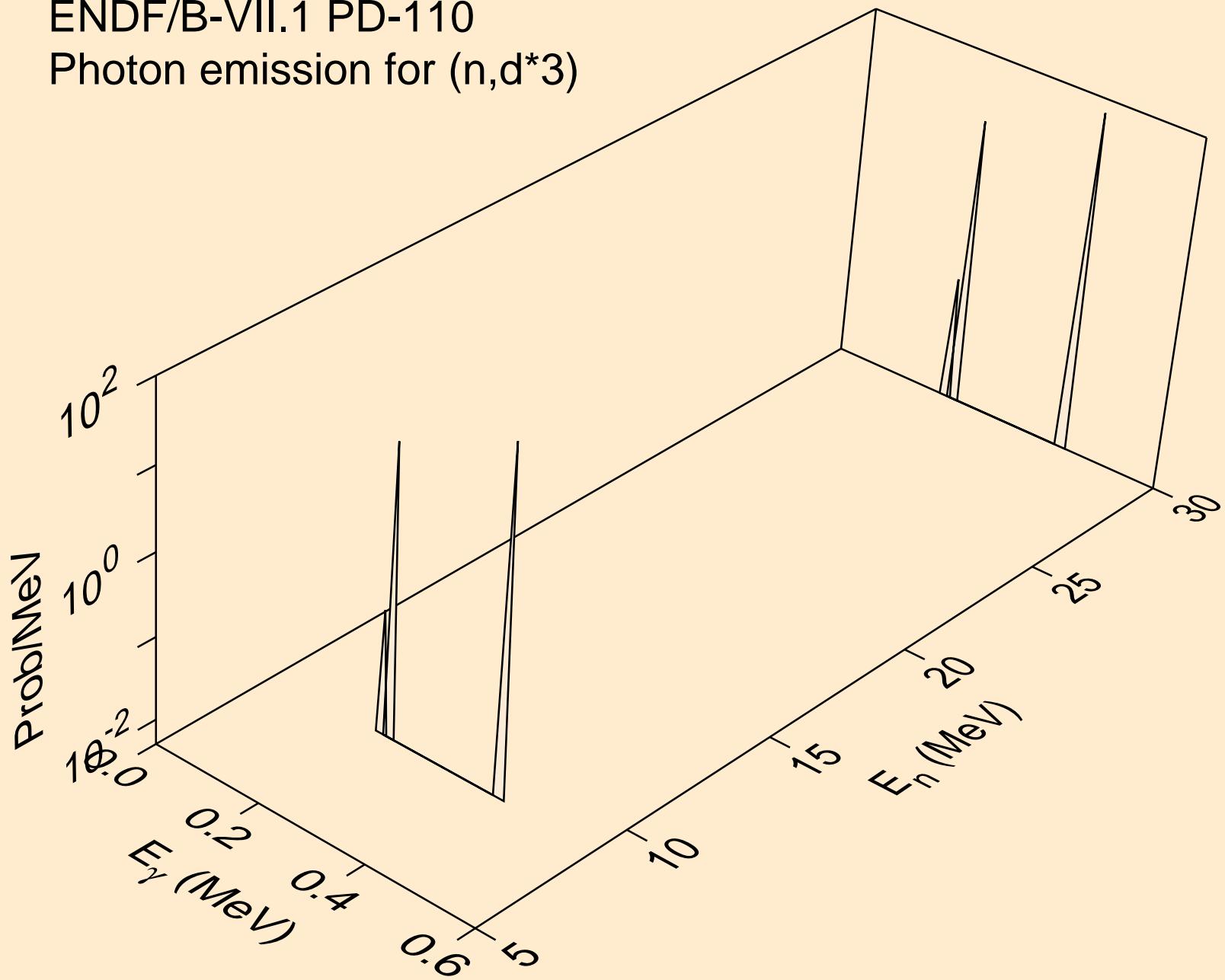
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Photon emission for (n,d\*1)



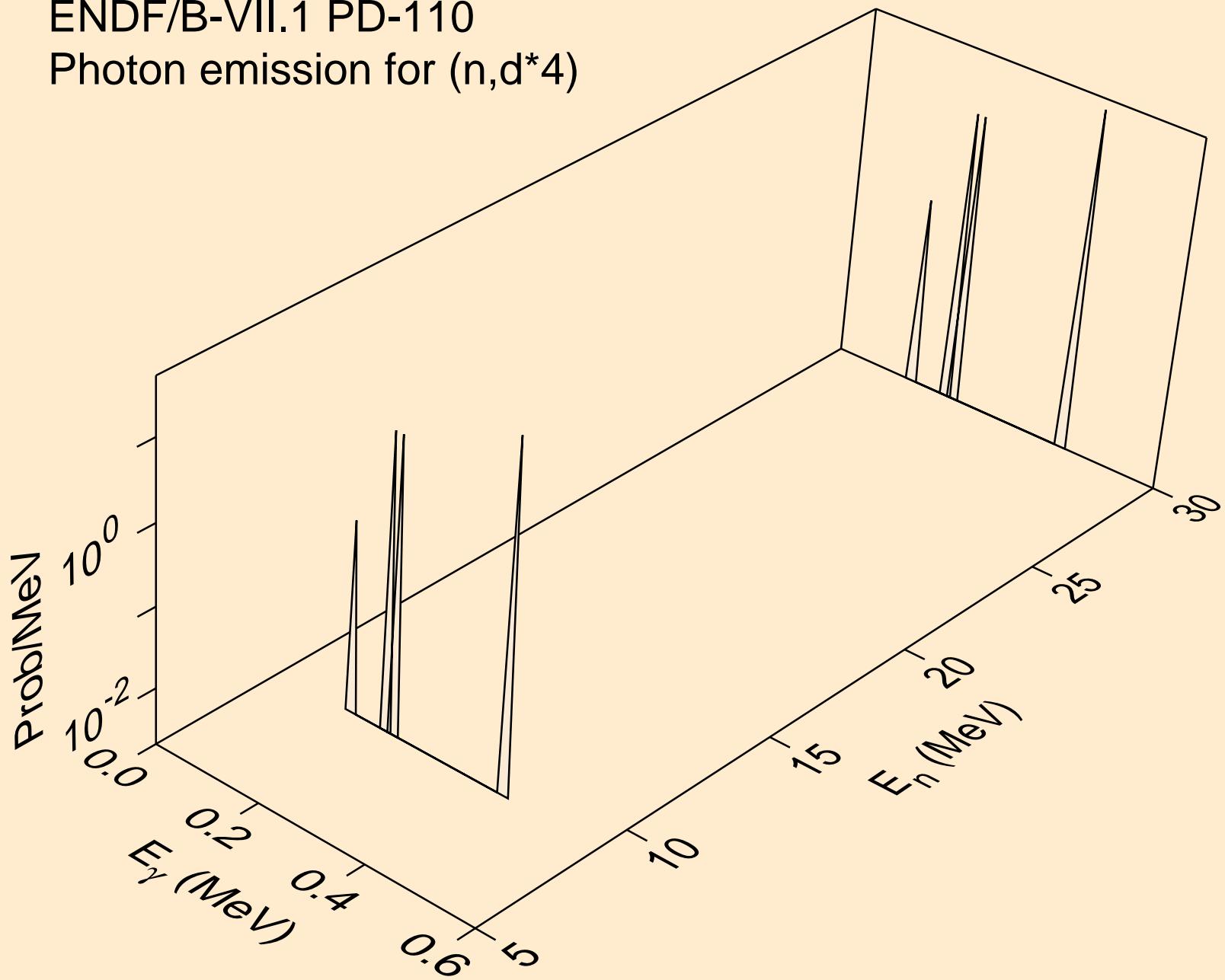
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Photon emission for (n,d\*2)



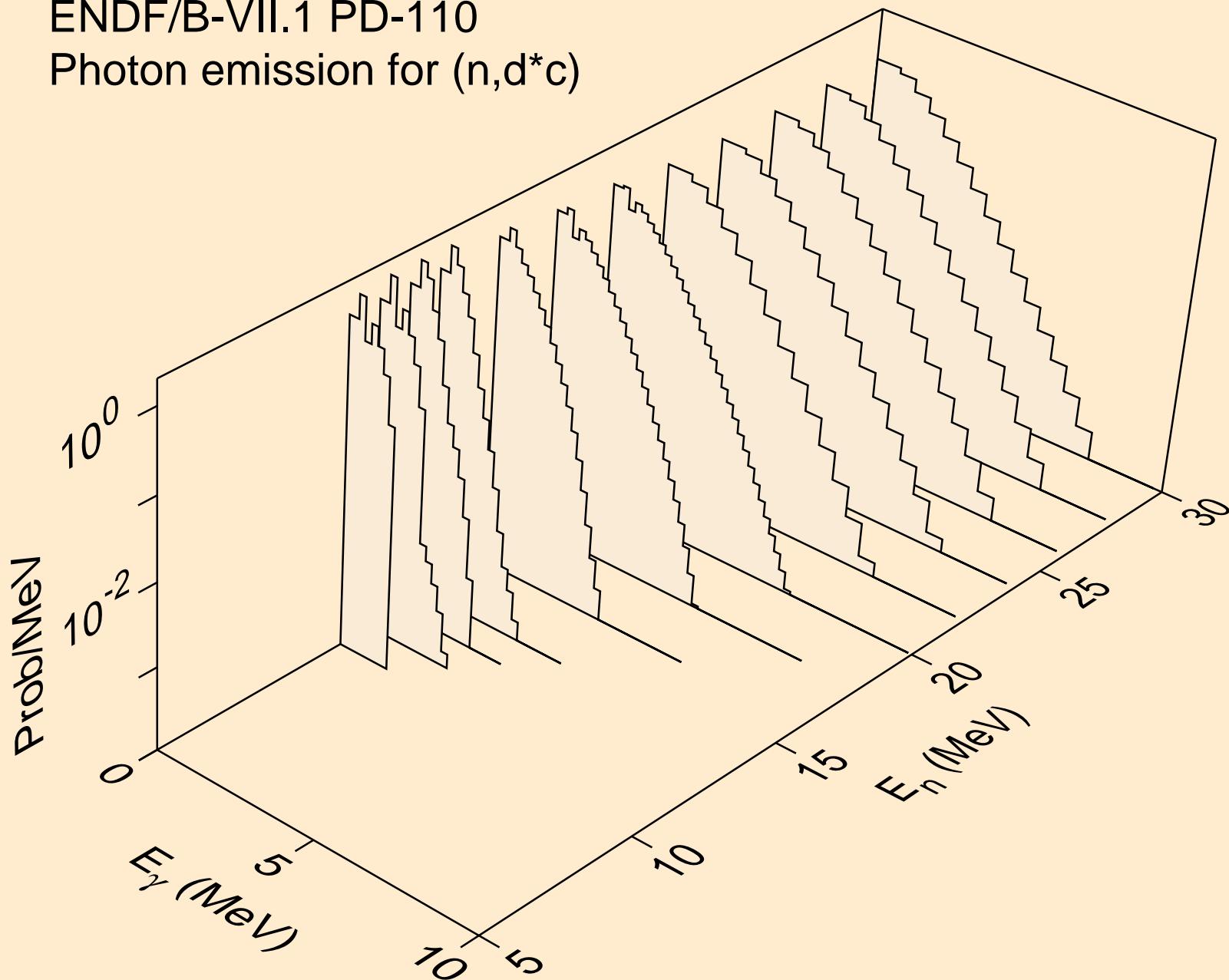
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Photon emission for (n,d\*3)



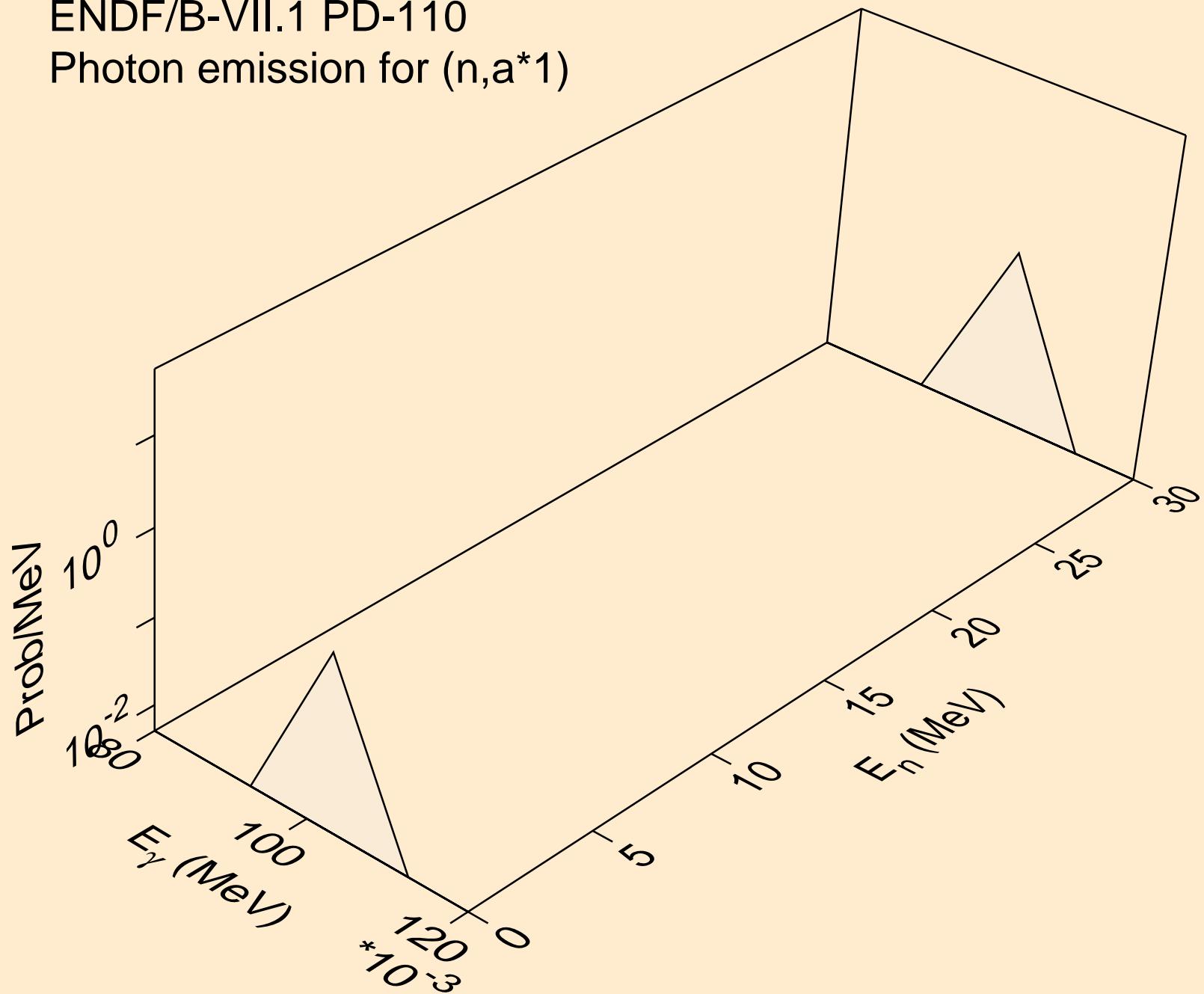
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Photon emission for (n,d\*4)



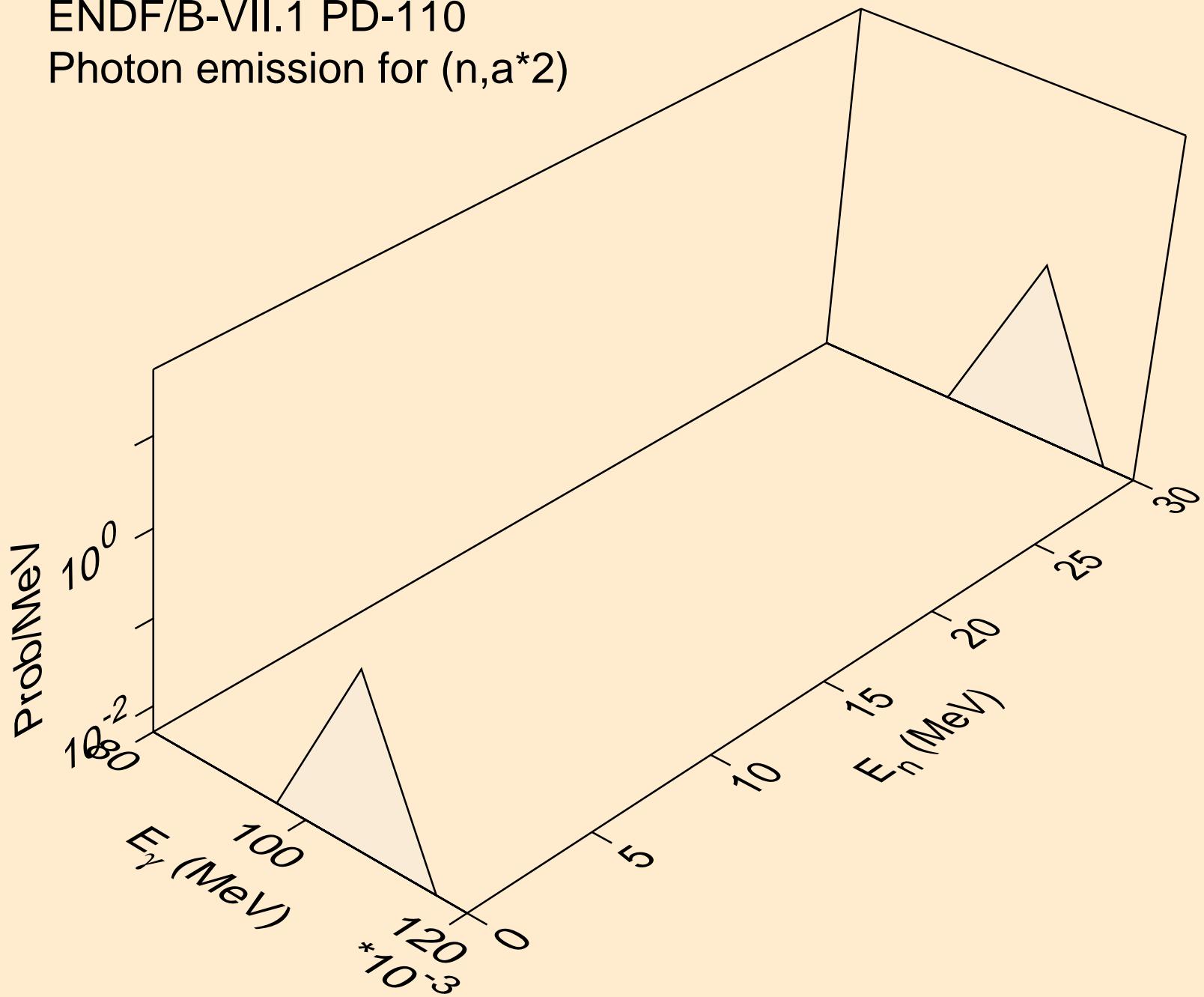
ENDF/B-VII.1 PD-110  
Photon emission for  $(n, d^* c)$



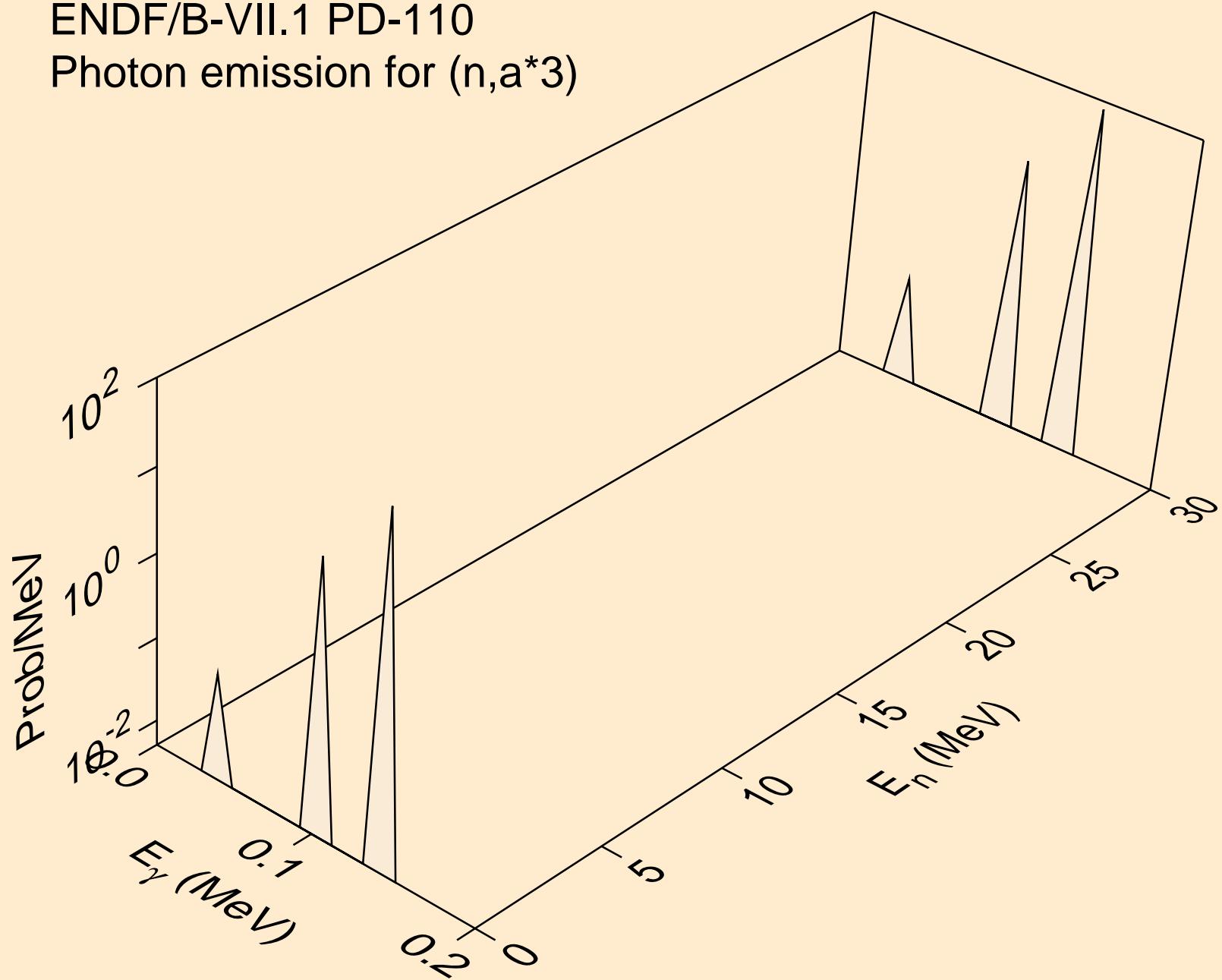
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Photon emission for  $(n, a^* 1)$



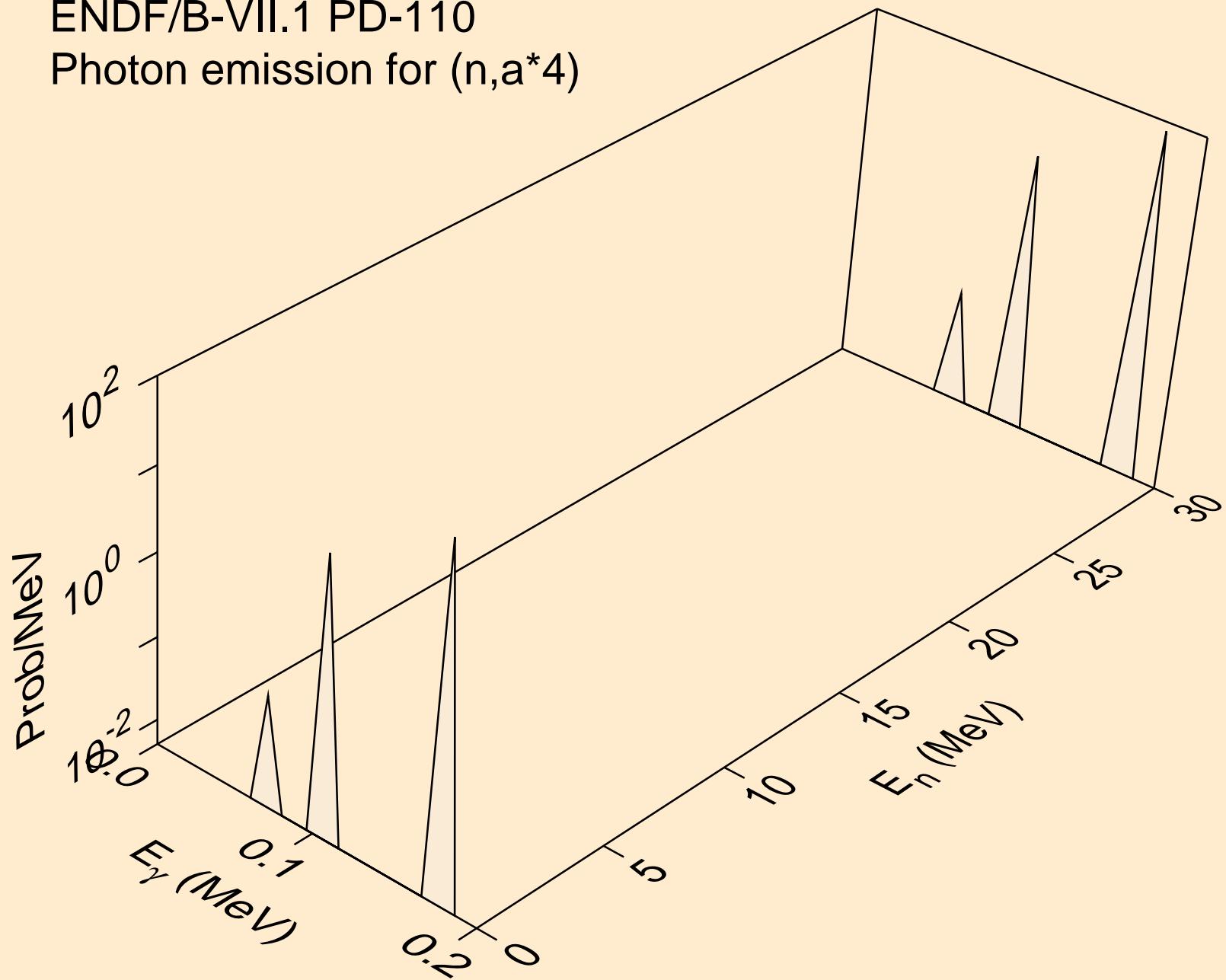
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Photon emission for (n,a\*2)



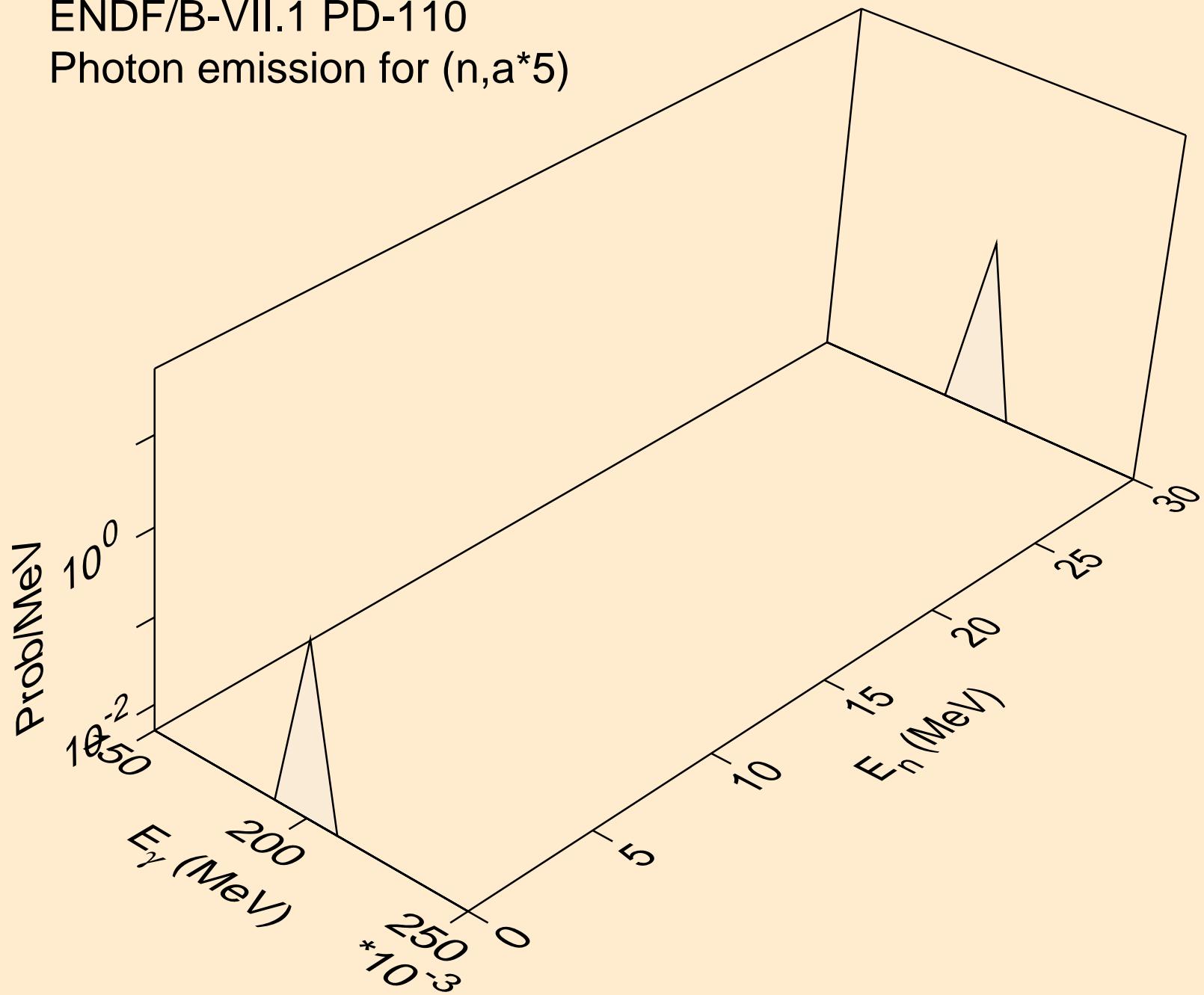
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Photon emission for  $(n, a^* 3)$



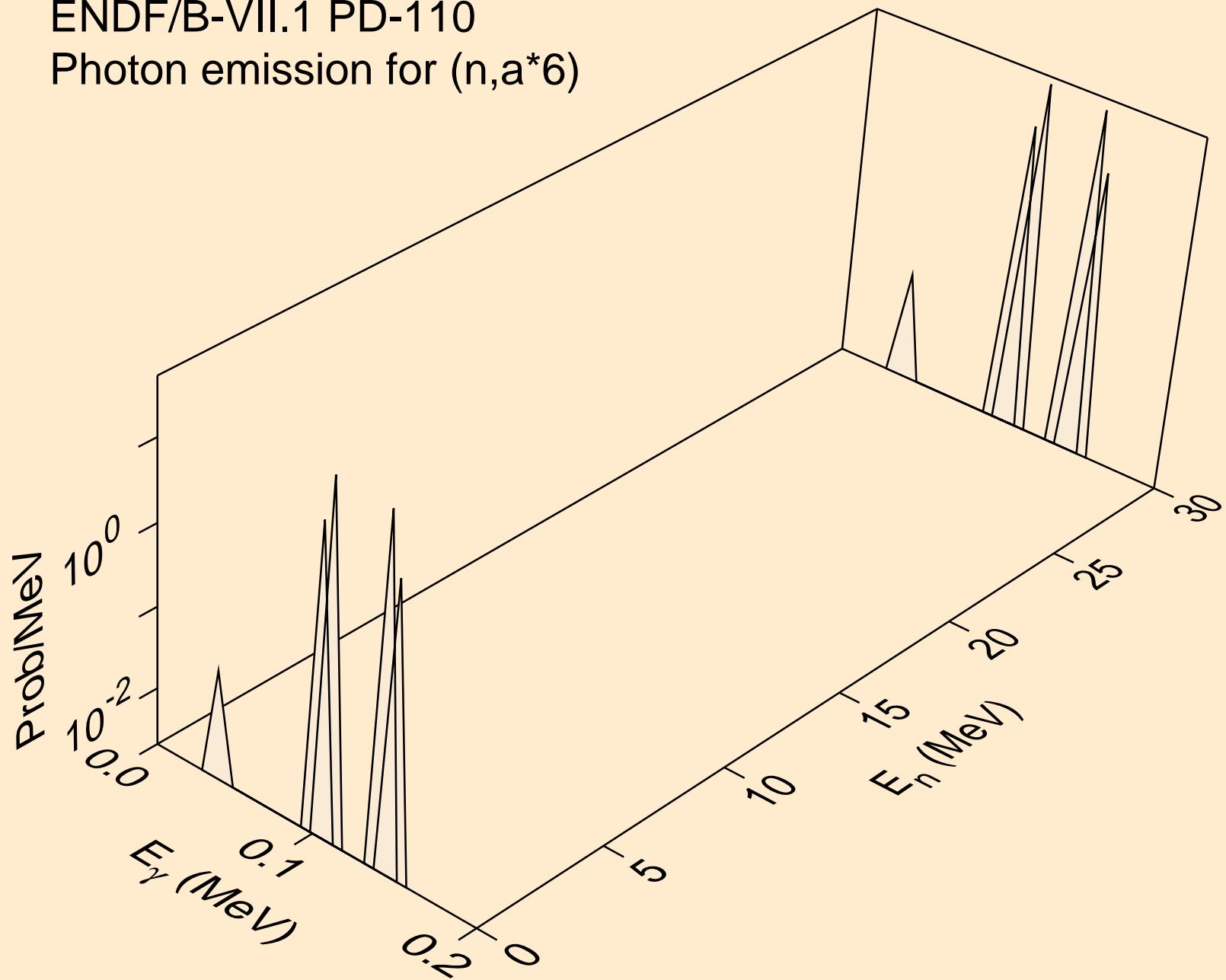
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Photon emission for  $(n, a^* 4)$



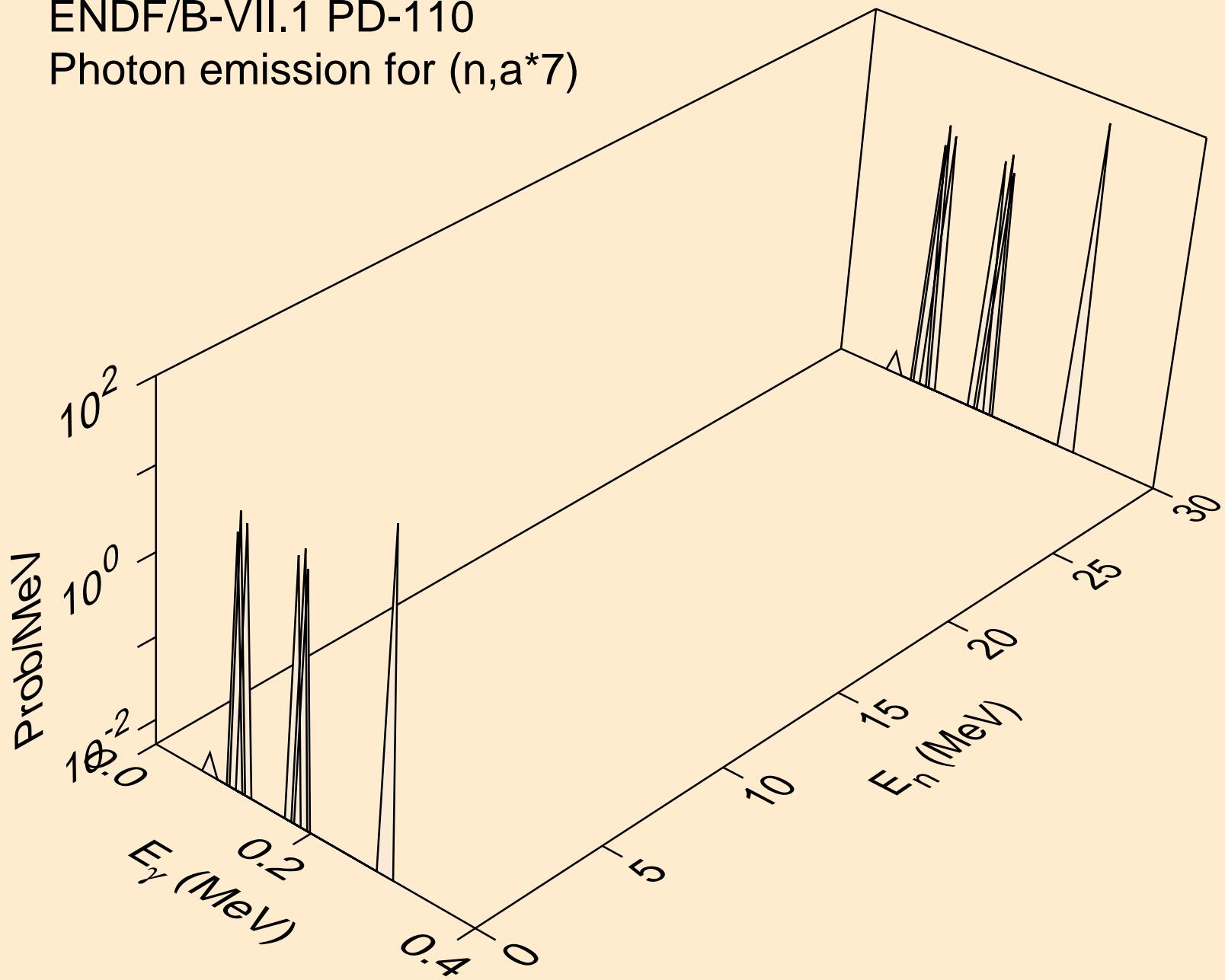
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Photon emission for  $(n, a^* 5)$



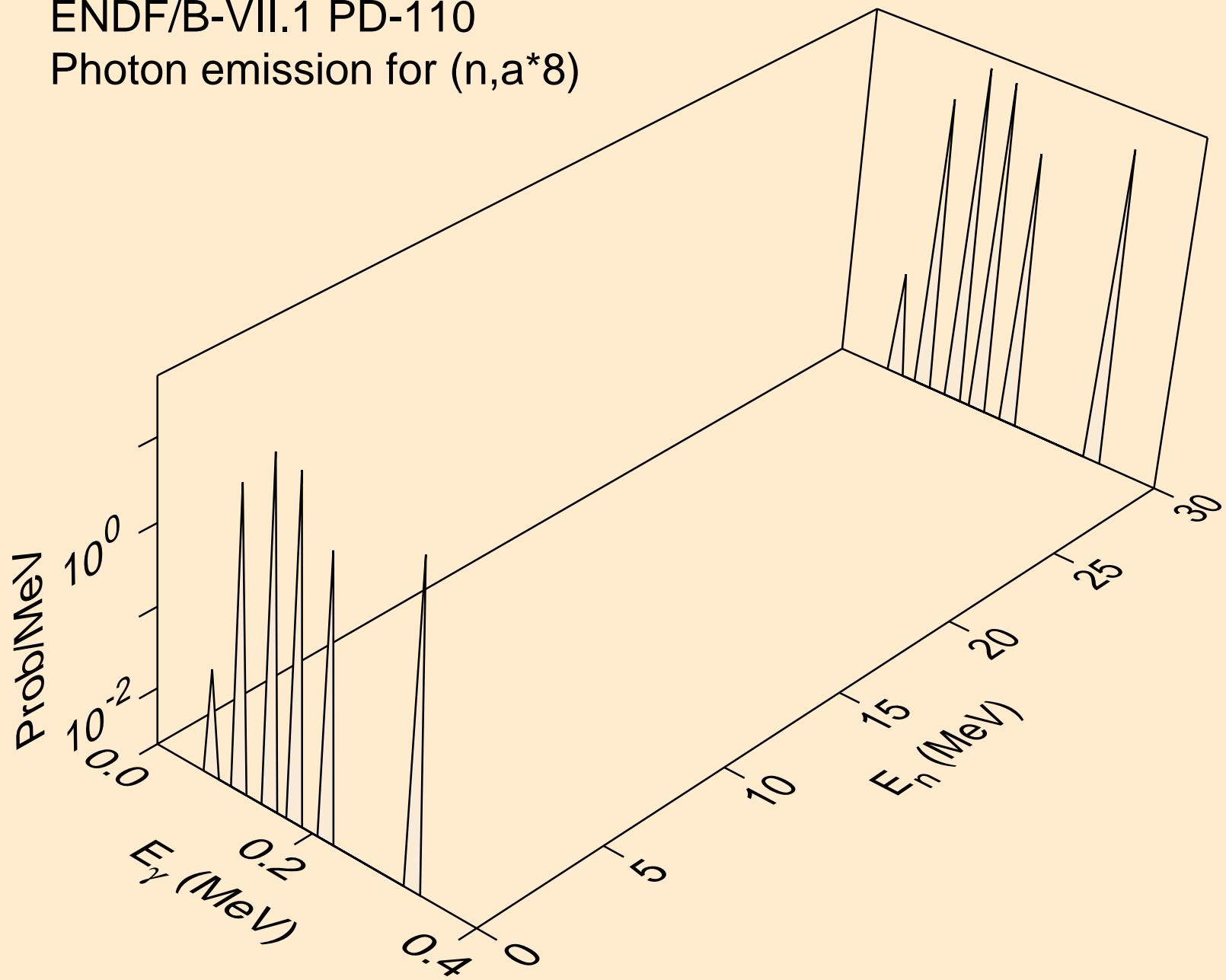
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Photon emission for  $(n,a^*6)$



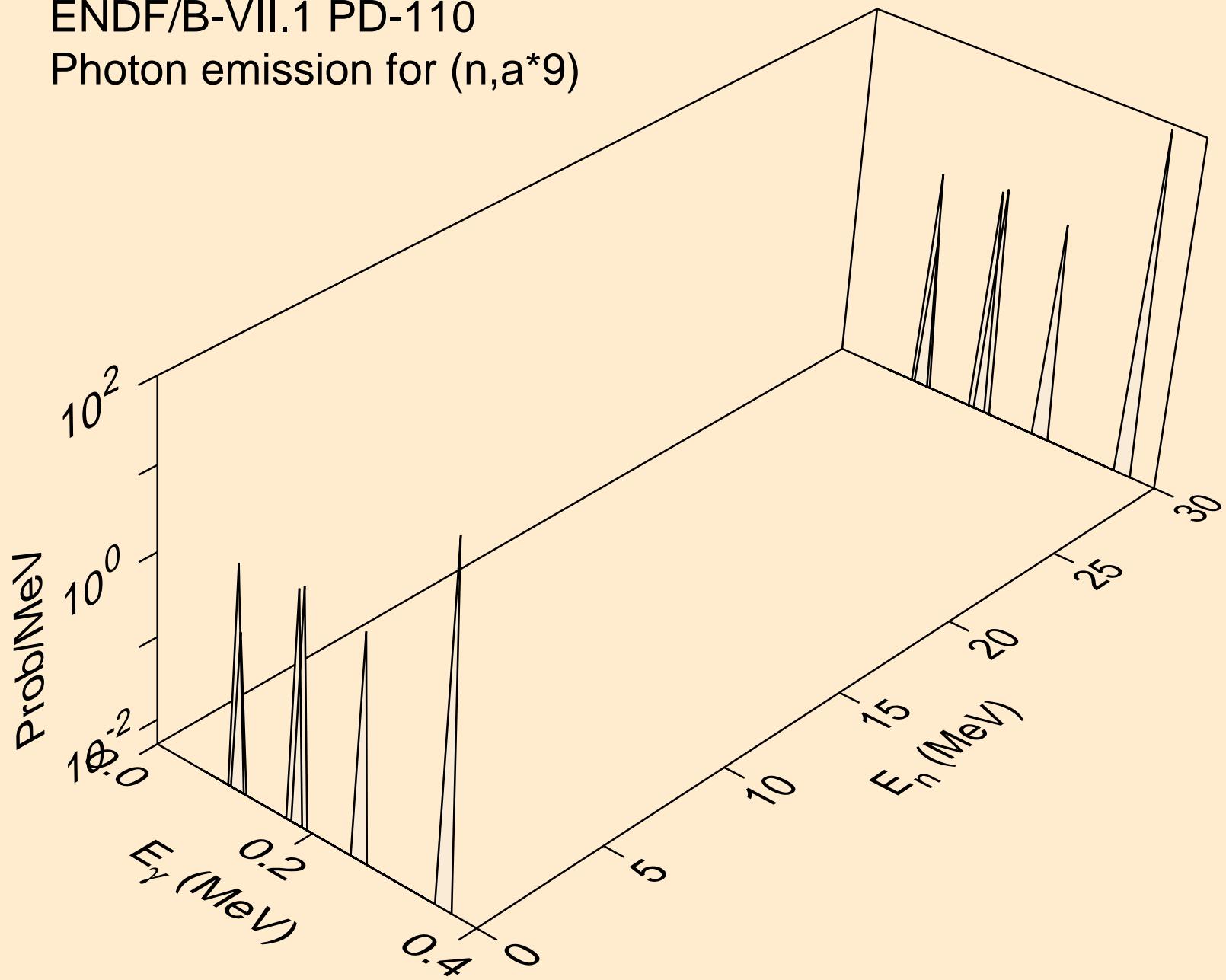
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Photon emission for  $(n, a^* 7)$



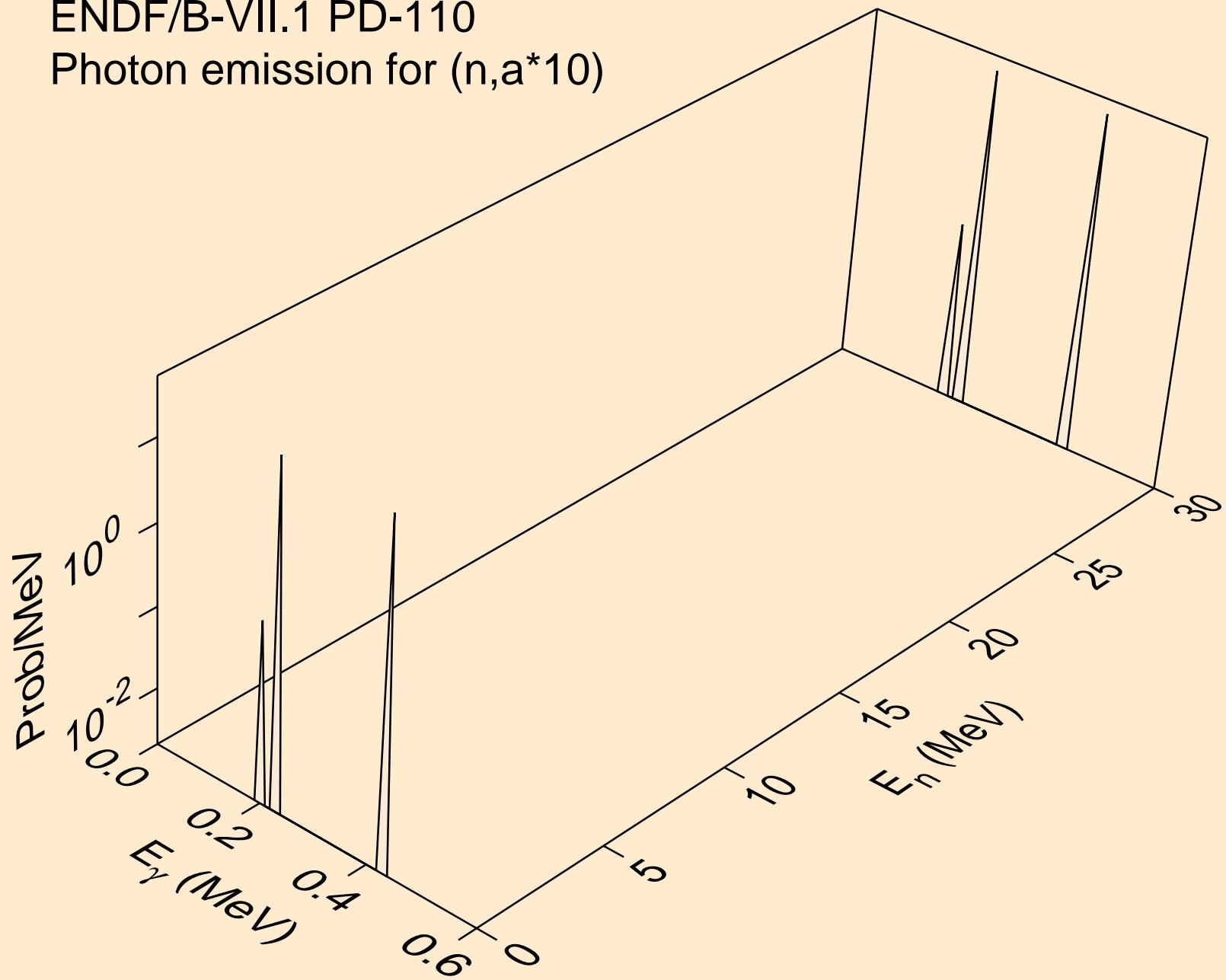
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Photon emission for  $(n, a^* 8)$



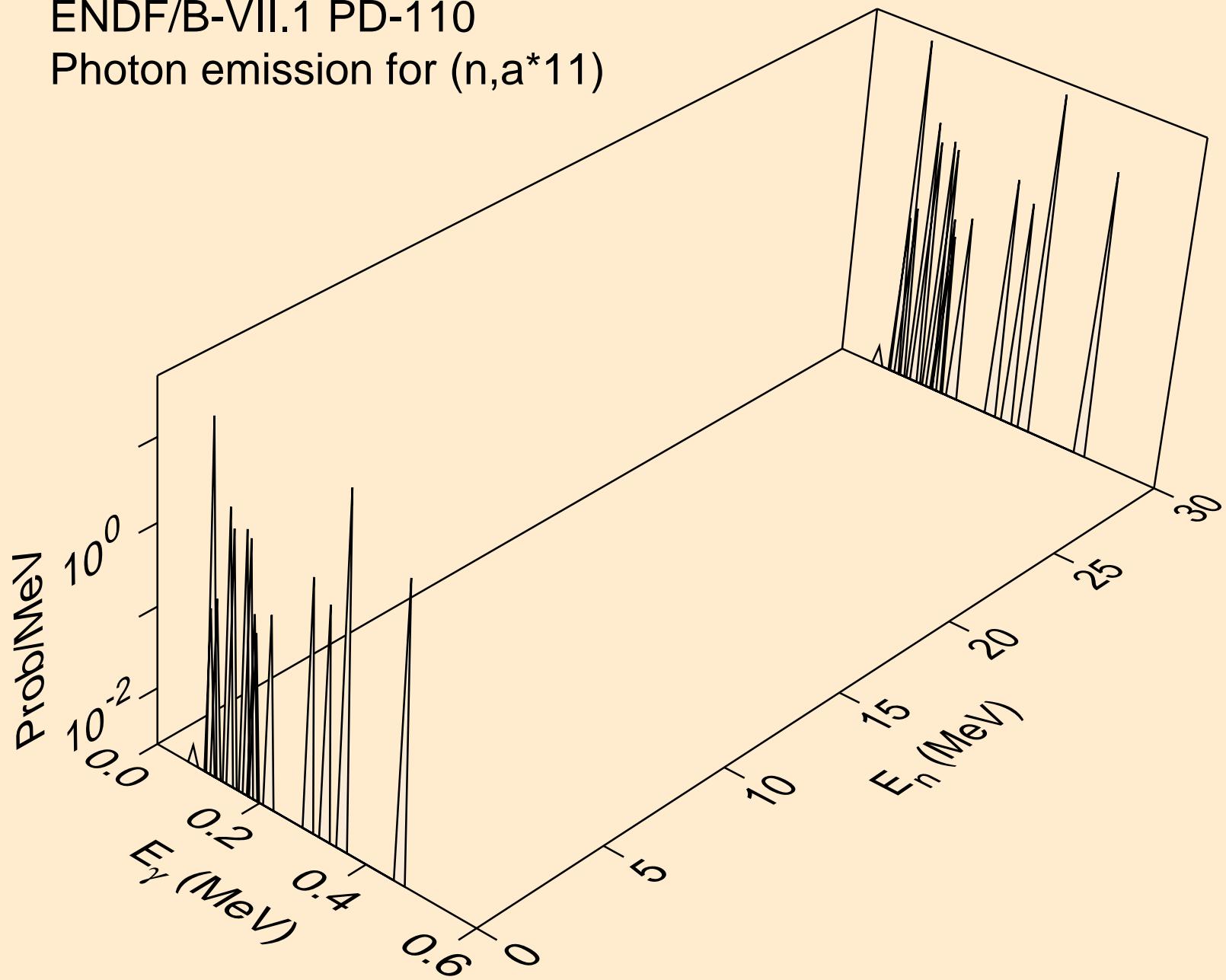
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Photon emission for  $(n,a^*9)$



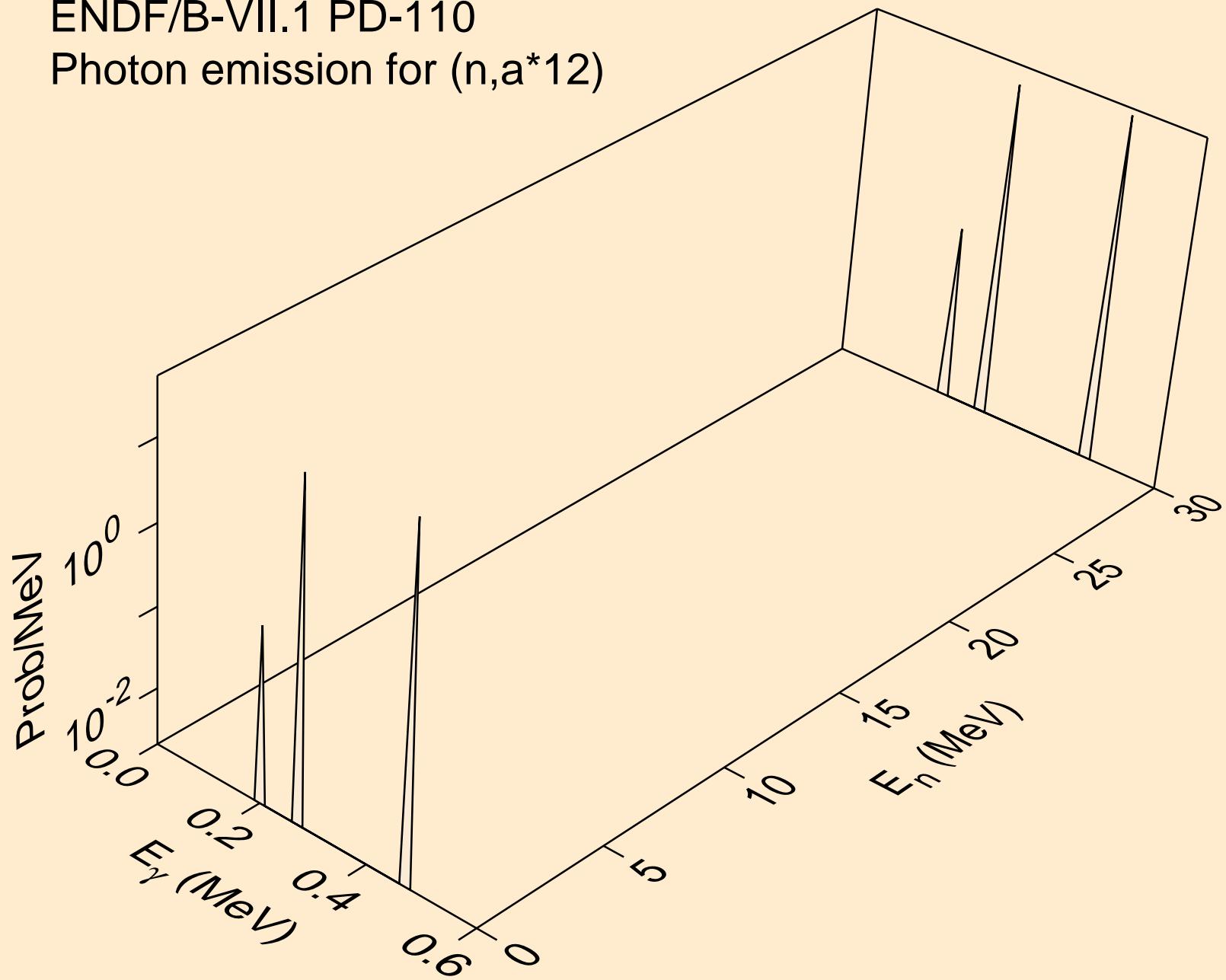
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Photon emission for  $(n,a^*10)$



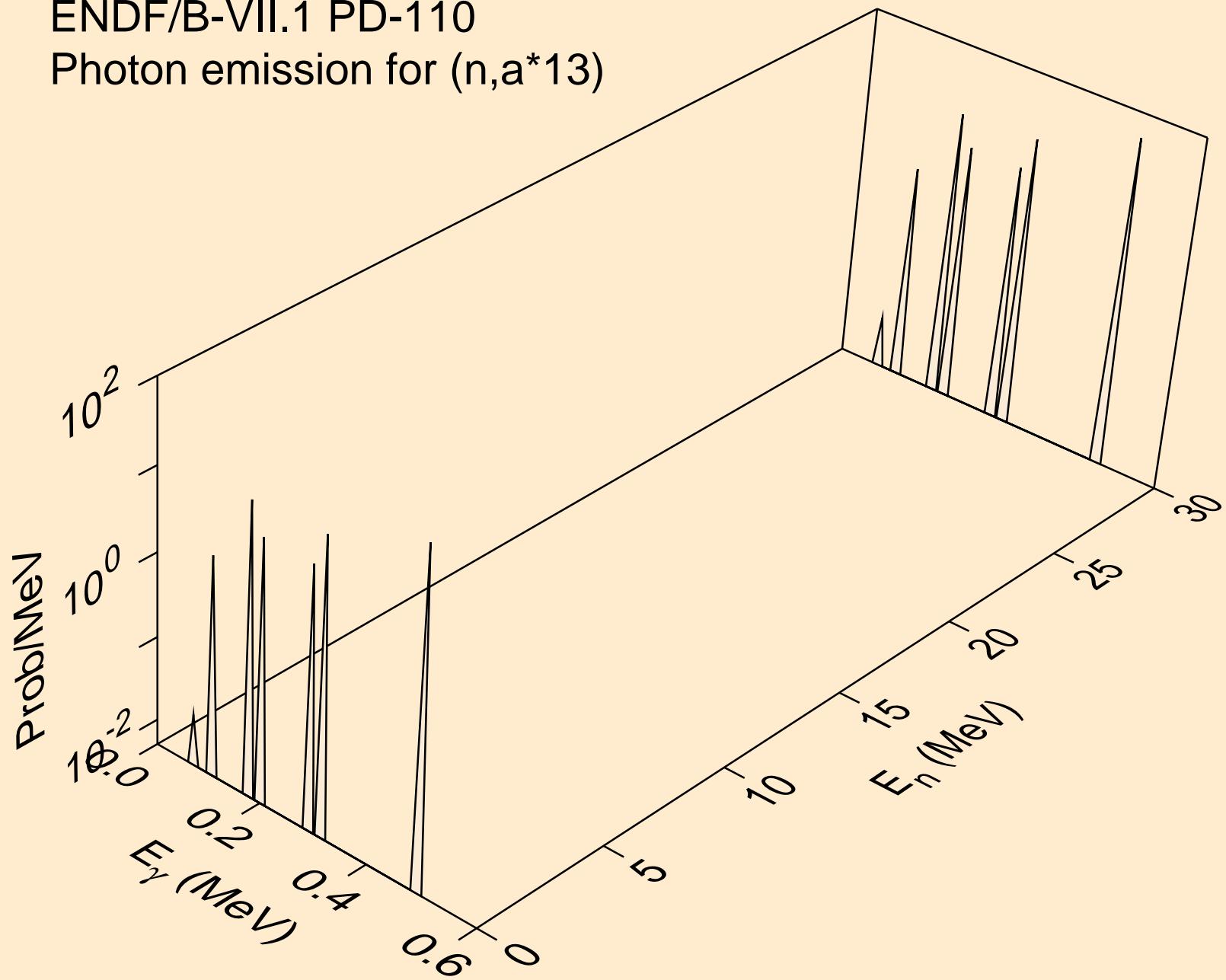
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Photon emission for  $(n, a^{*}11)$



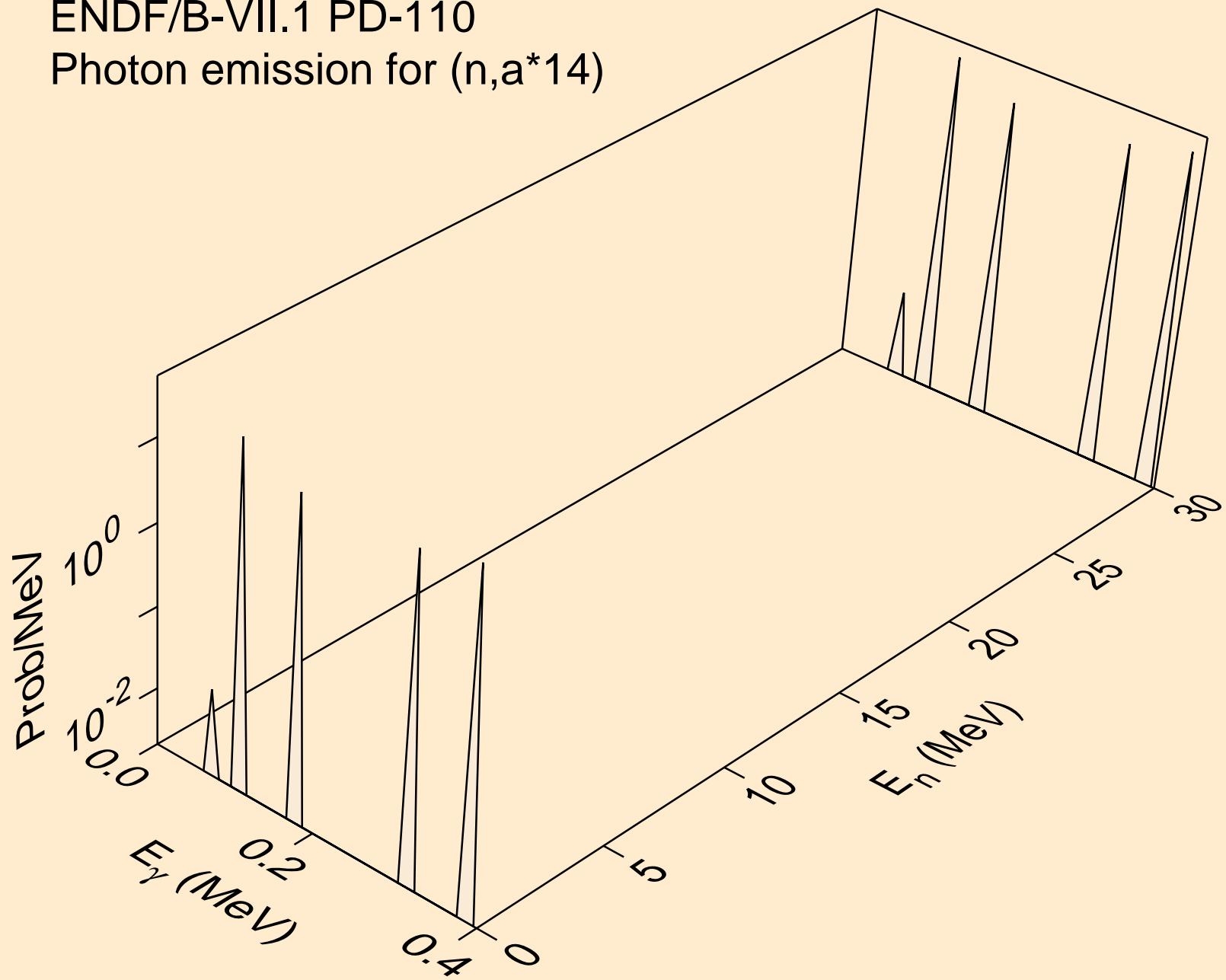
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Photon emission for  $(n, a^* 12)$



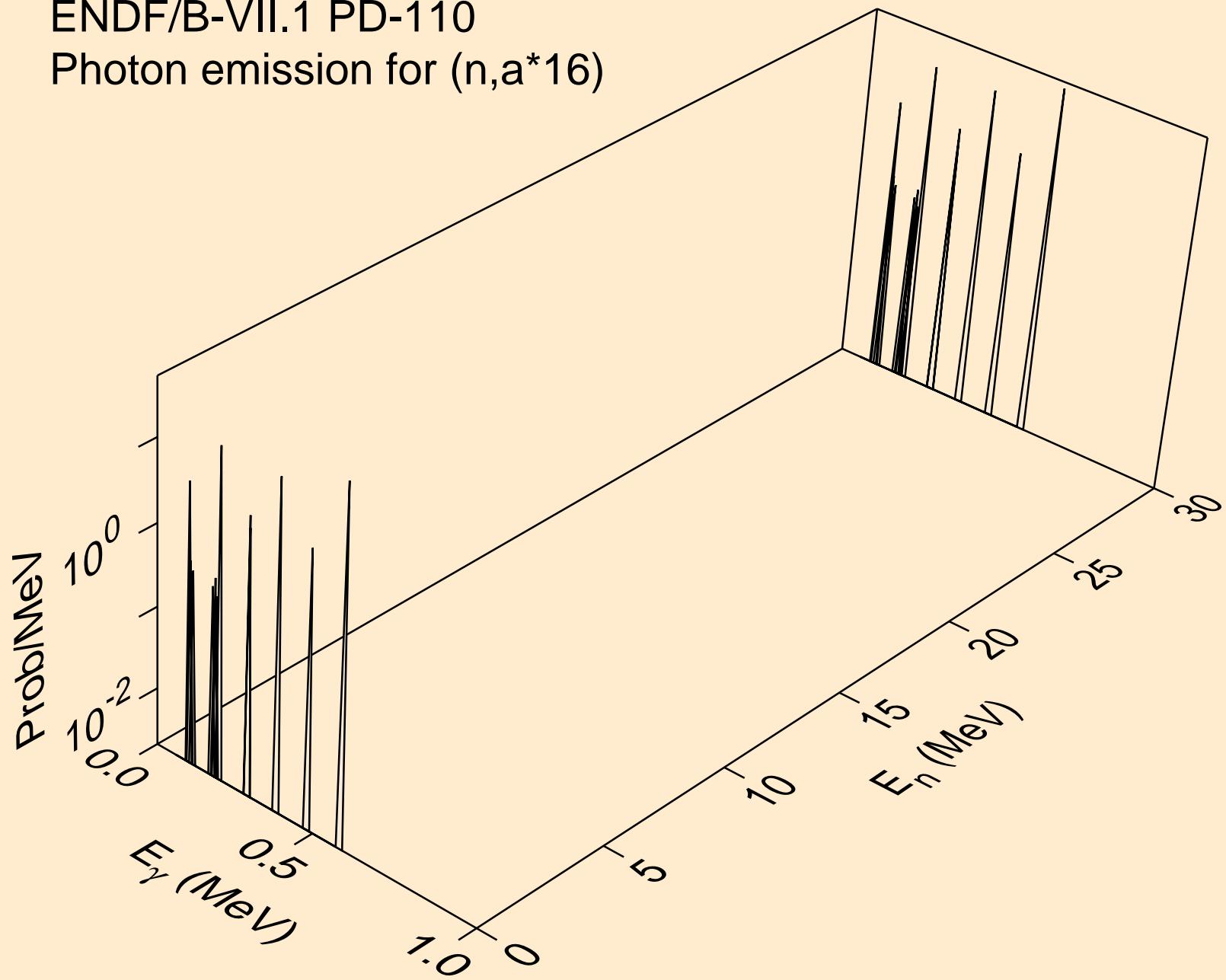
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Photon emission for  $(n, a^* 13)$



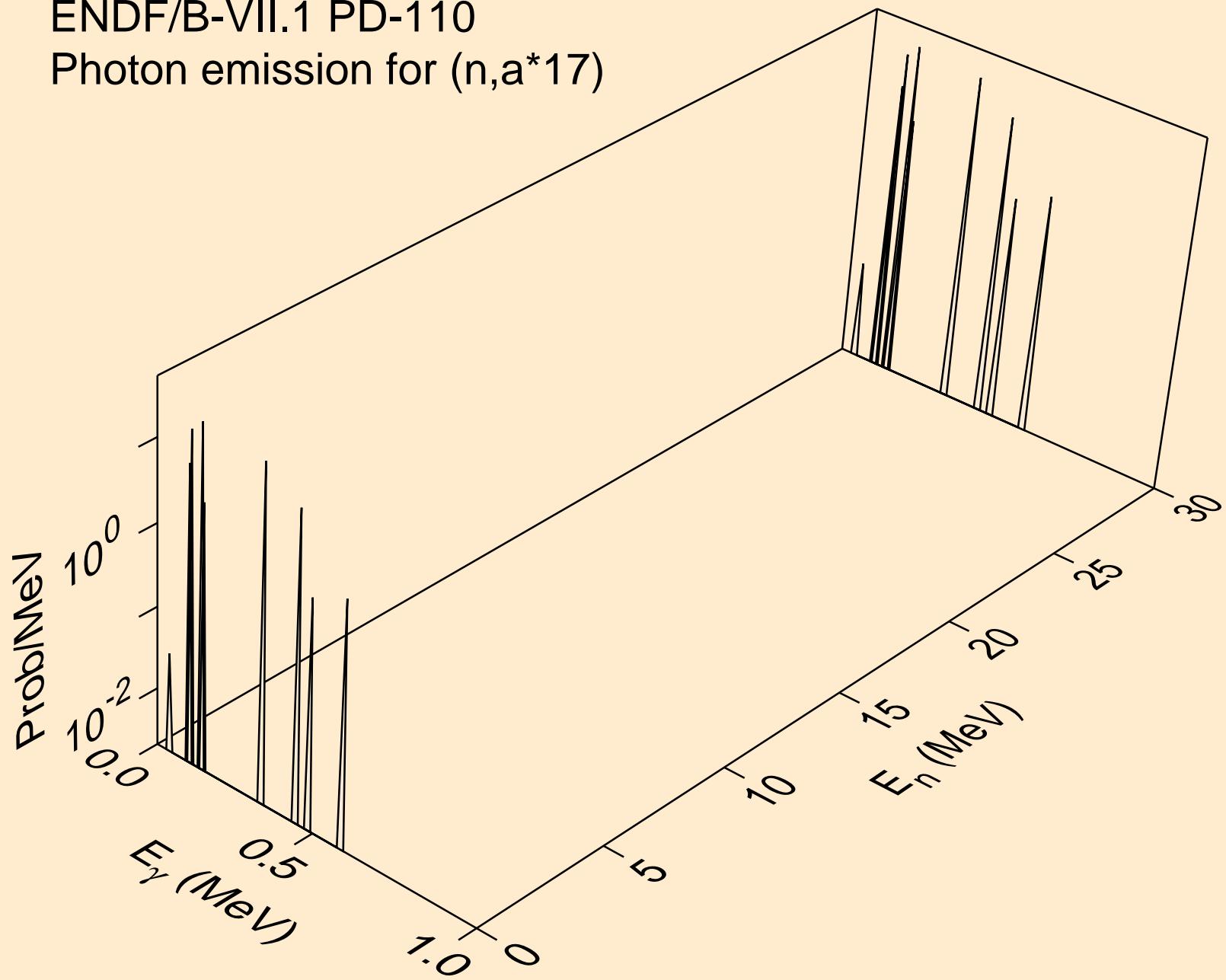
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Photon emission for  $(n,a^{*}14)$



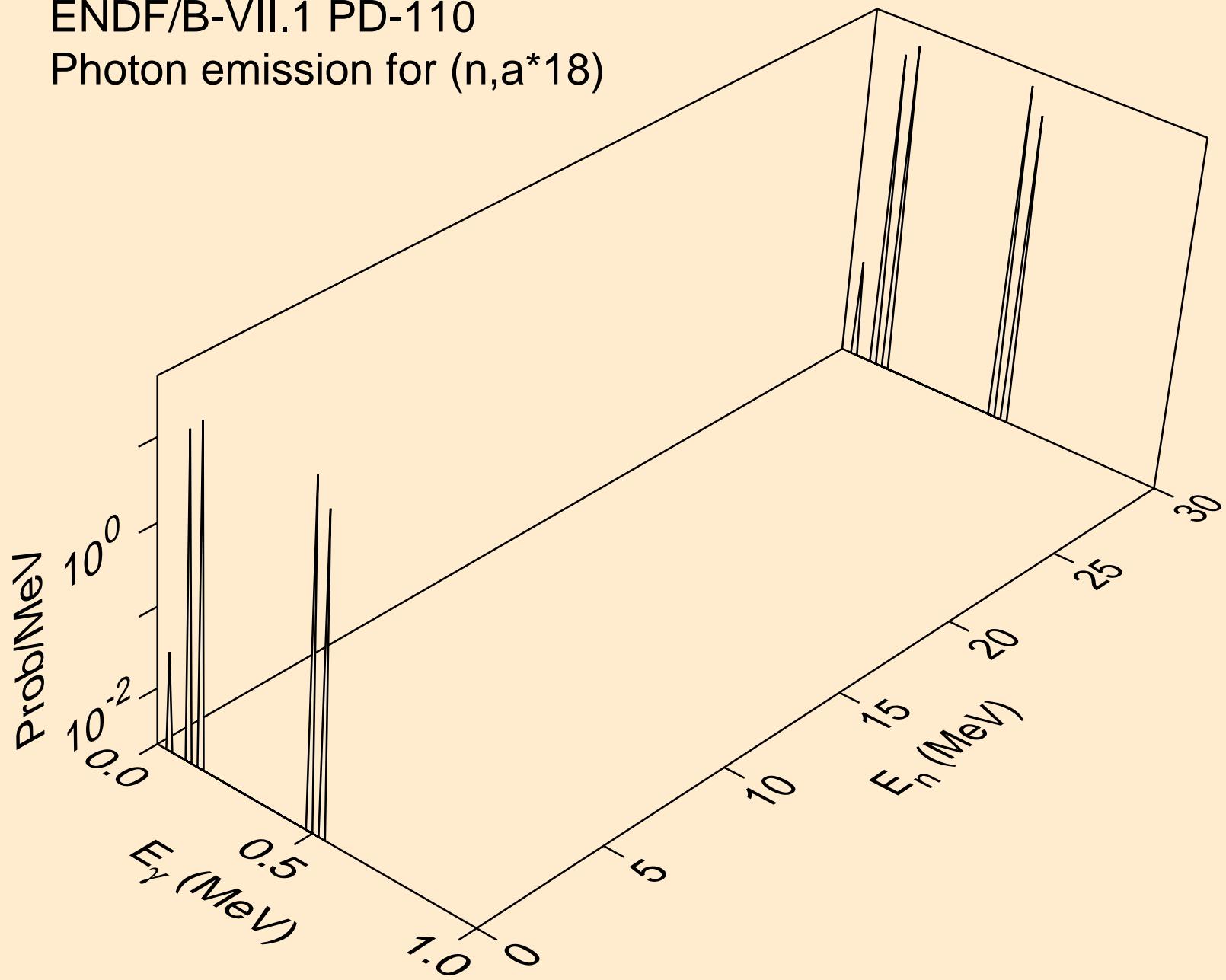
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Photon emission for  $(n, a^* 16)$



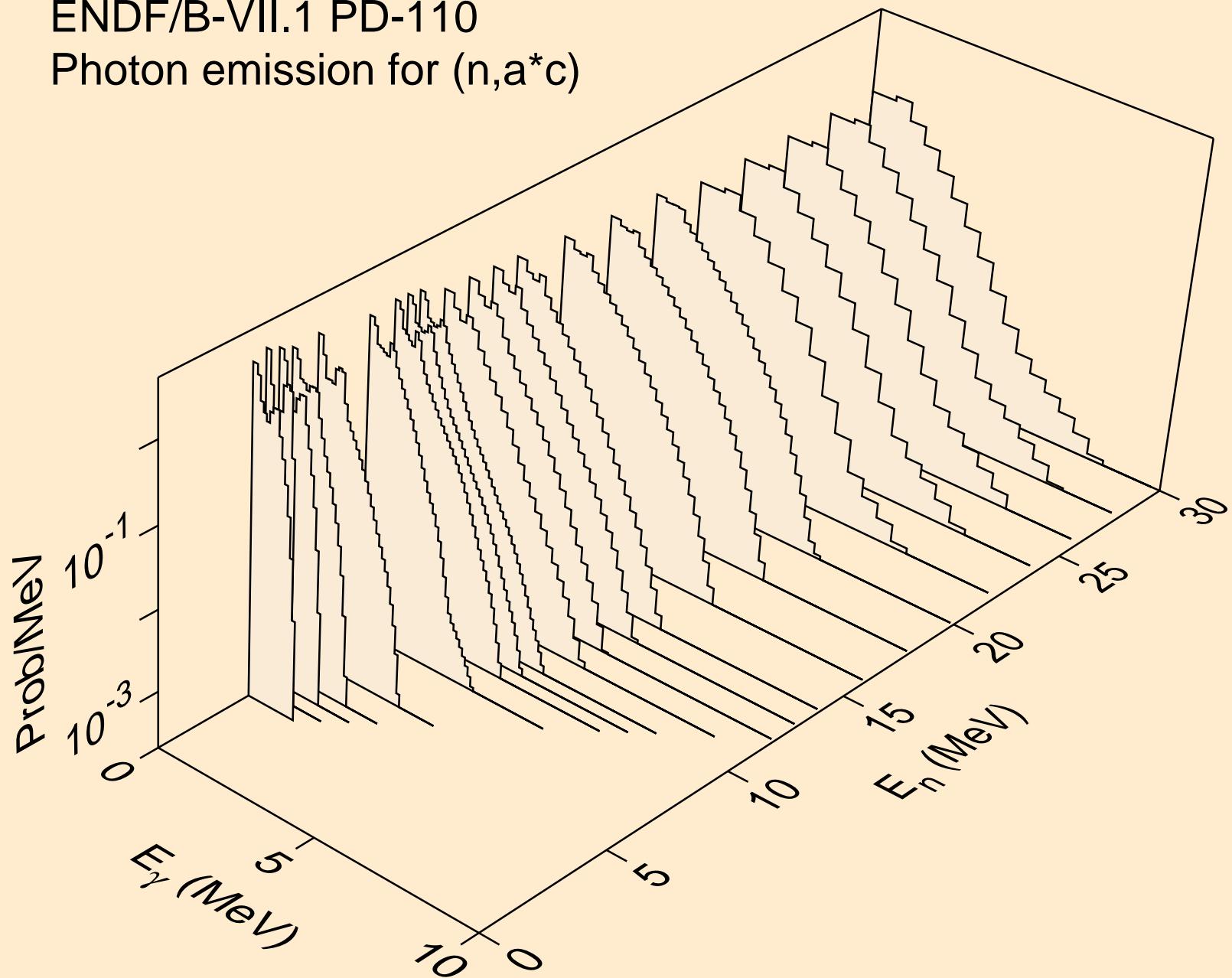
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Photon emission for  $(n, a^* 17)$



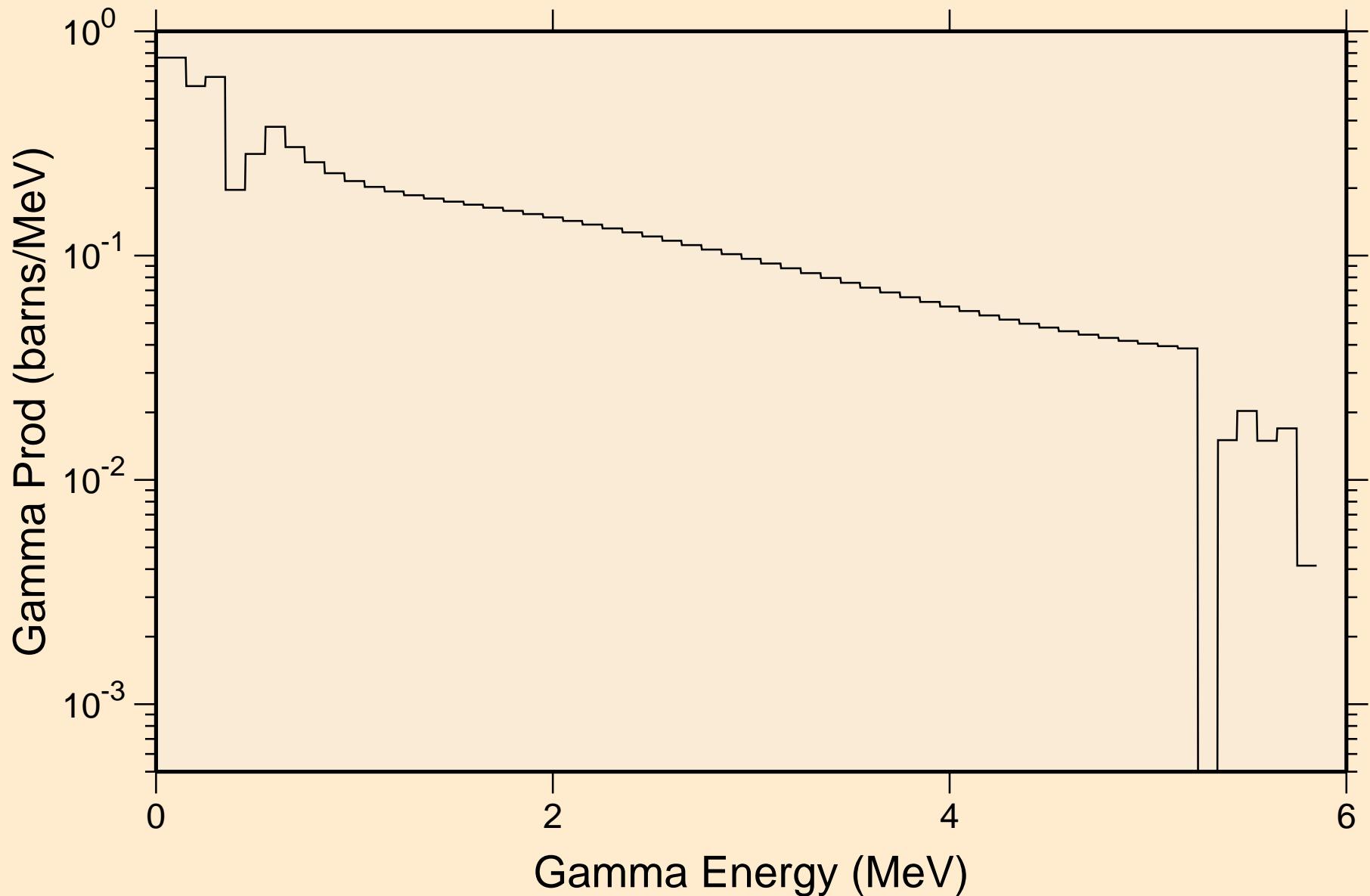
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Photon emission for  $(n, a^* 18)$



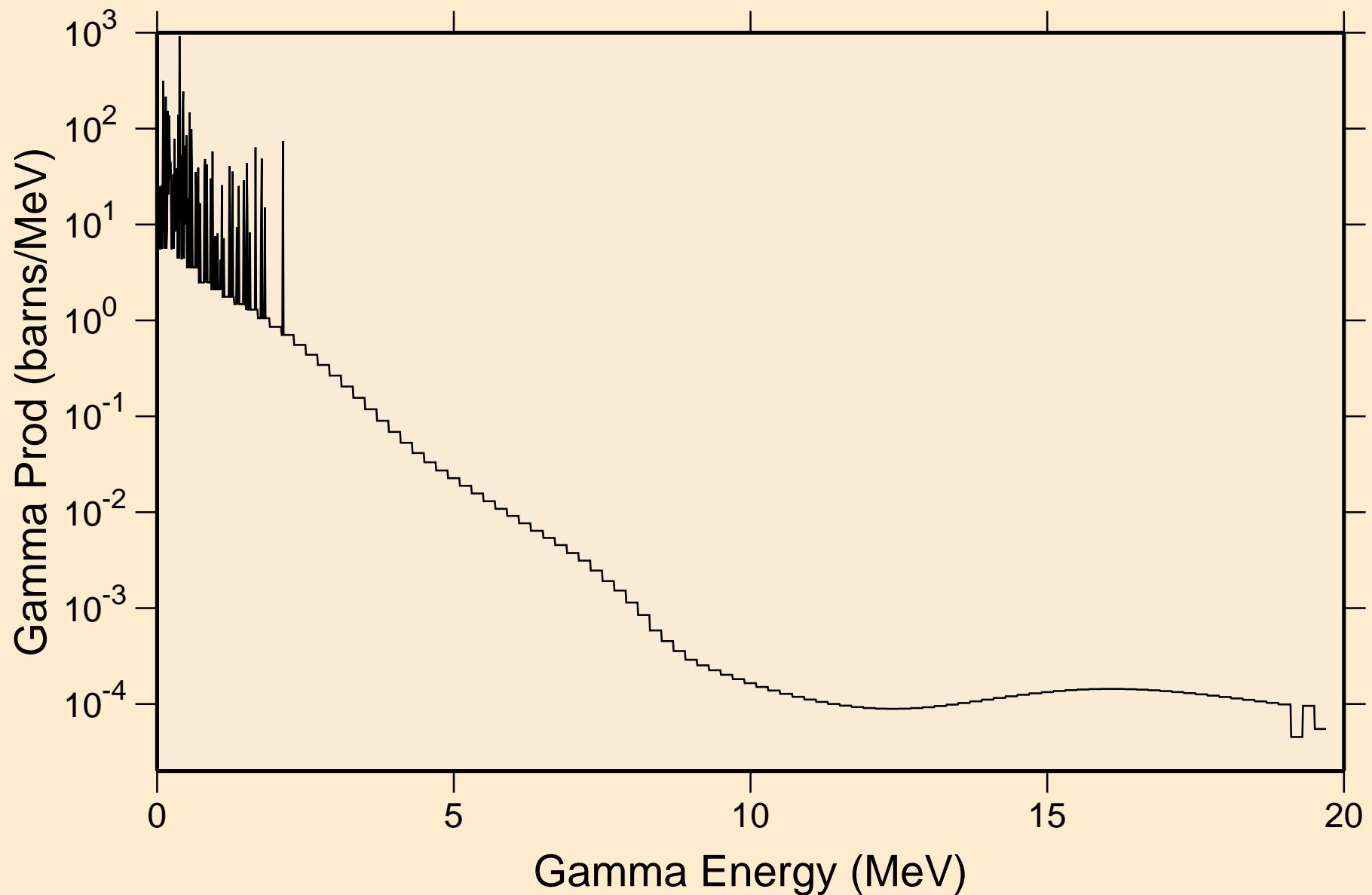
ENDF/B-VII.1 PD-110  
Photon emission for  $(n, a^* c)$



ENDF/B-VII.1 PD-110  
thermal capture photon spectrum

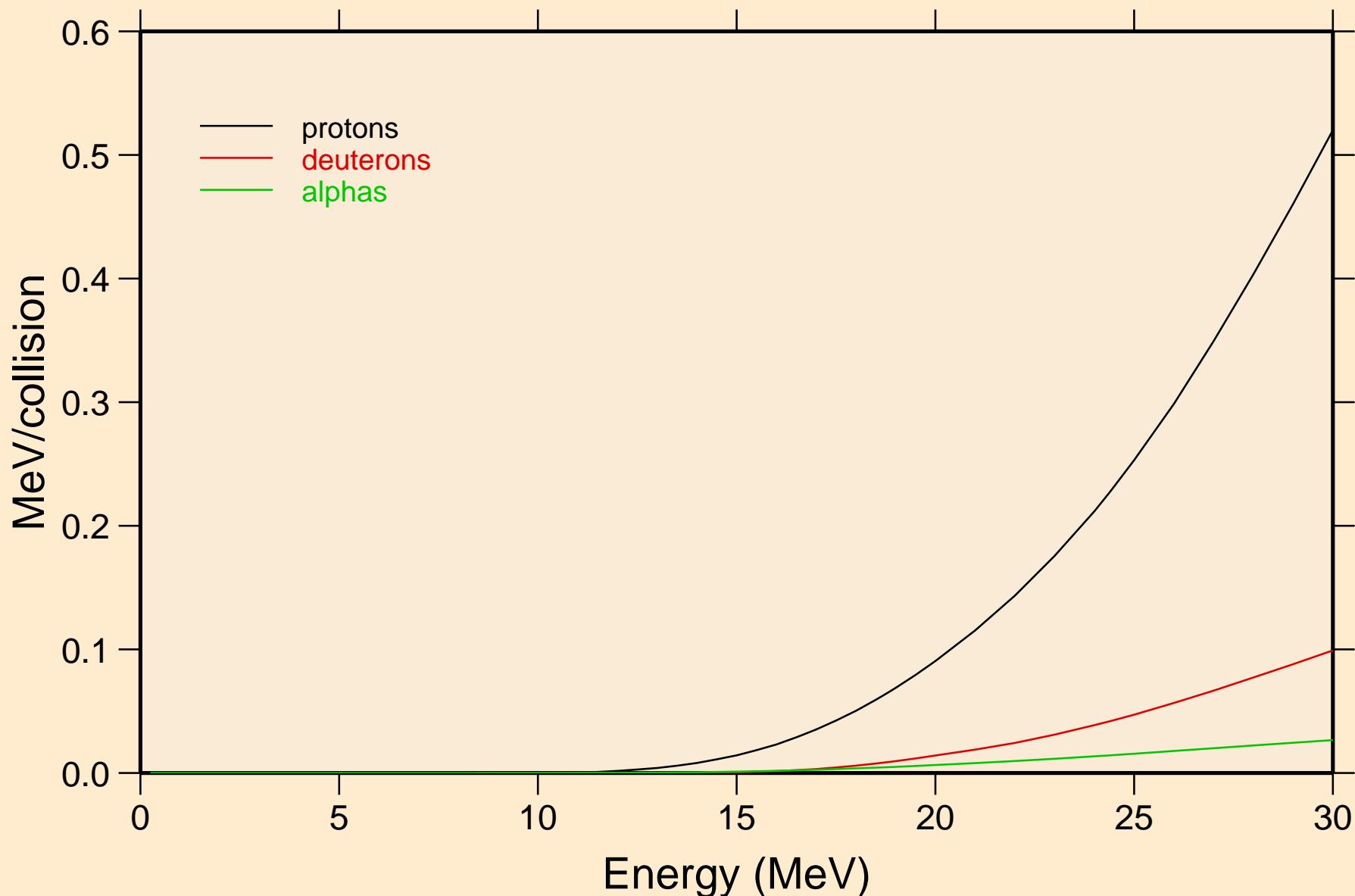


ENDF/B-VII.1 PD-110  
14 MeV photon spectrum

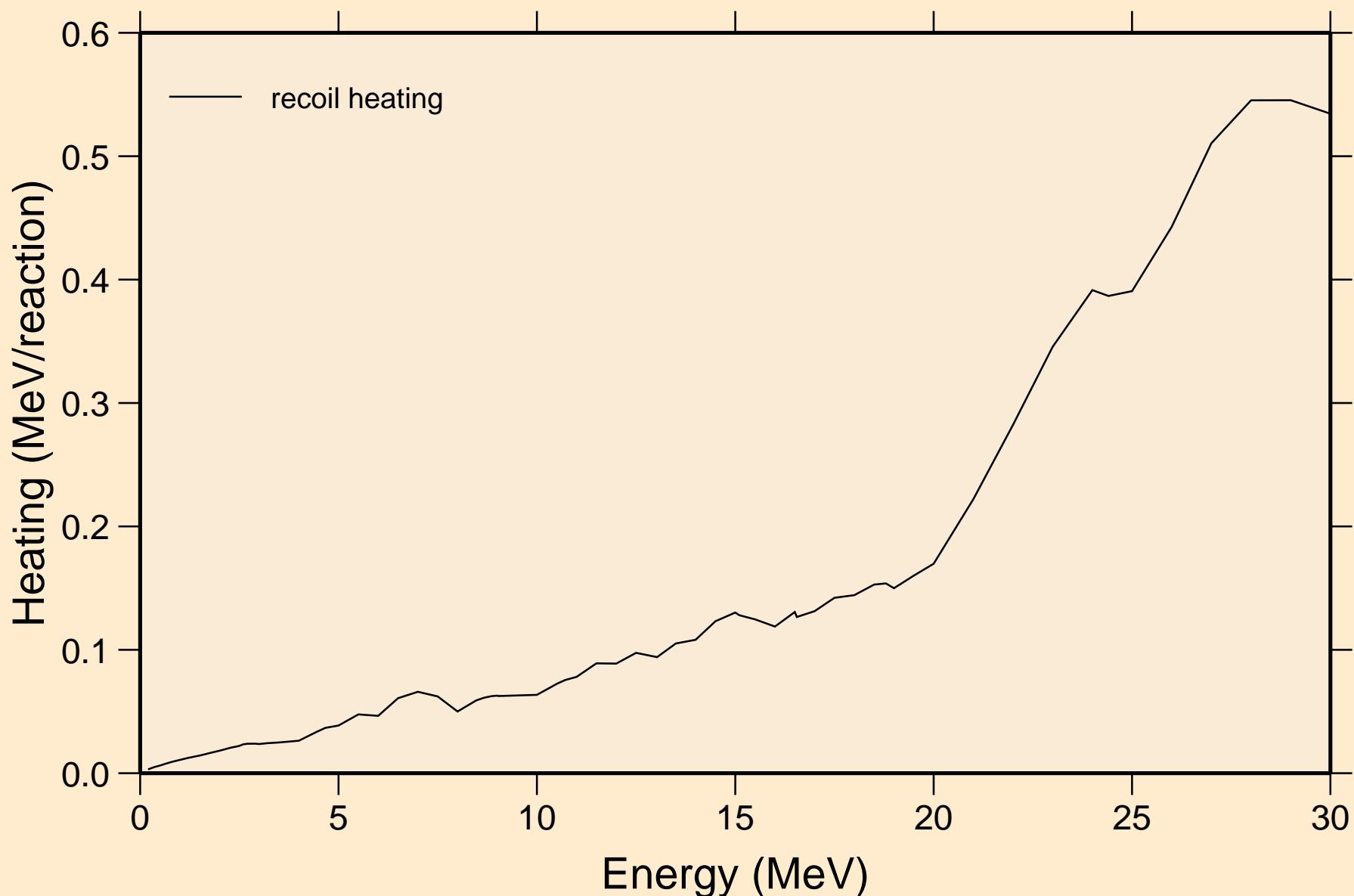


# ENDF/B-VII.1 PD-110

## Particle heating contributions

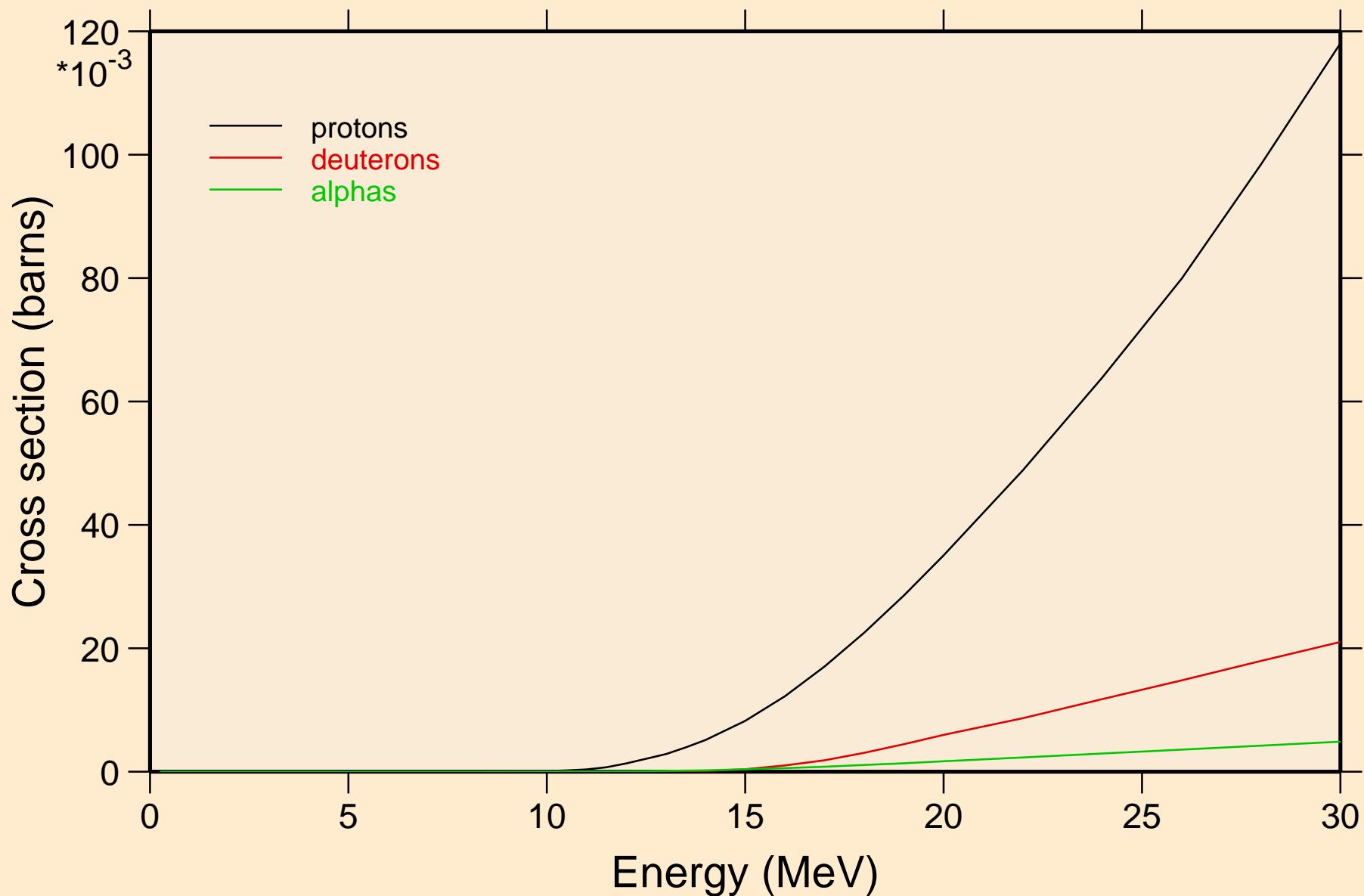


ENDF/B-VII.1 PD-110  
Recoil Heating

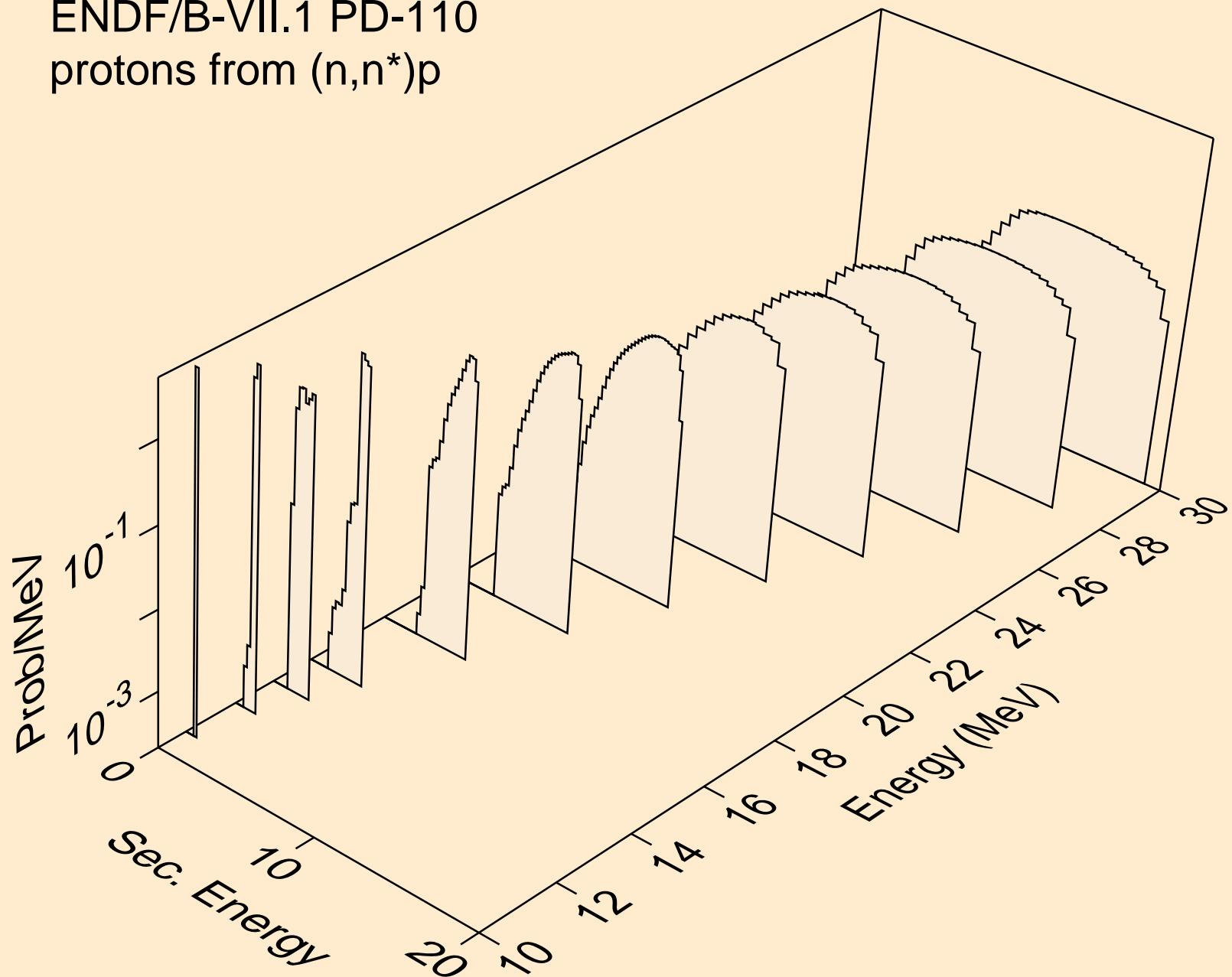


# ENDF/B-VII.1 PD-110

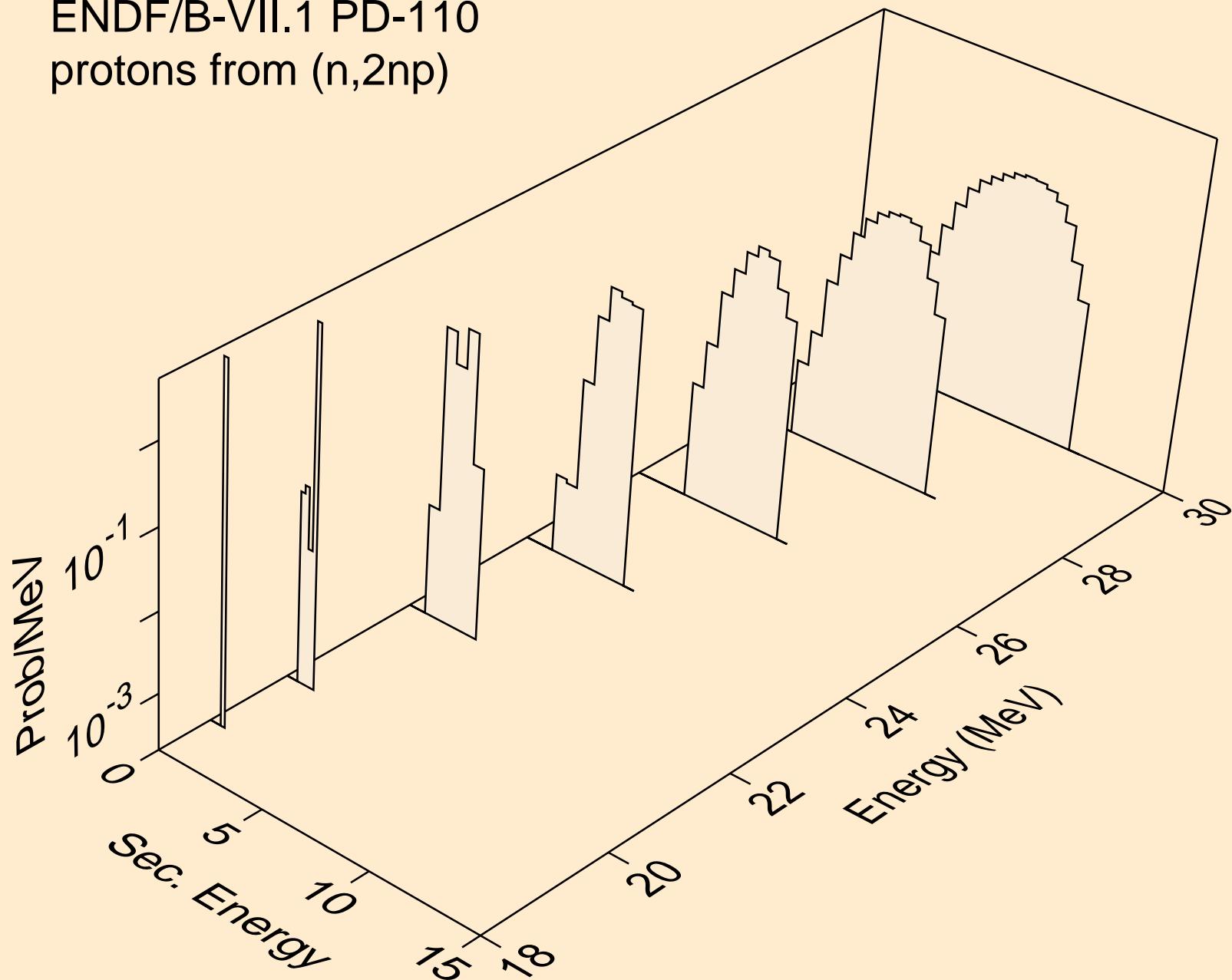
## Particle production cross sections



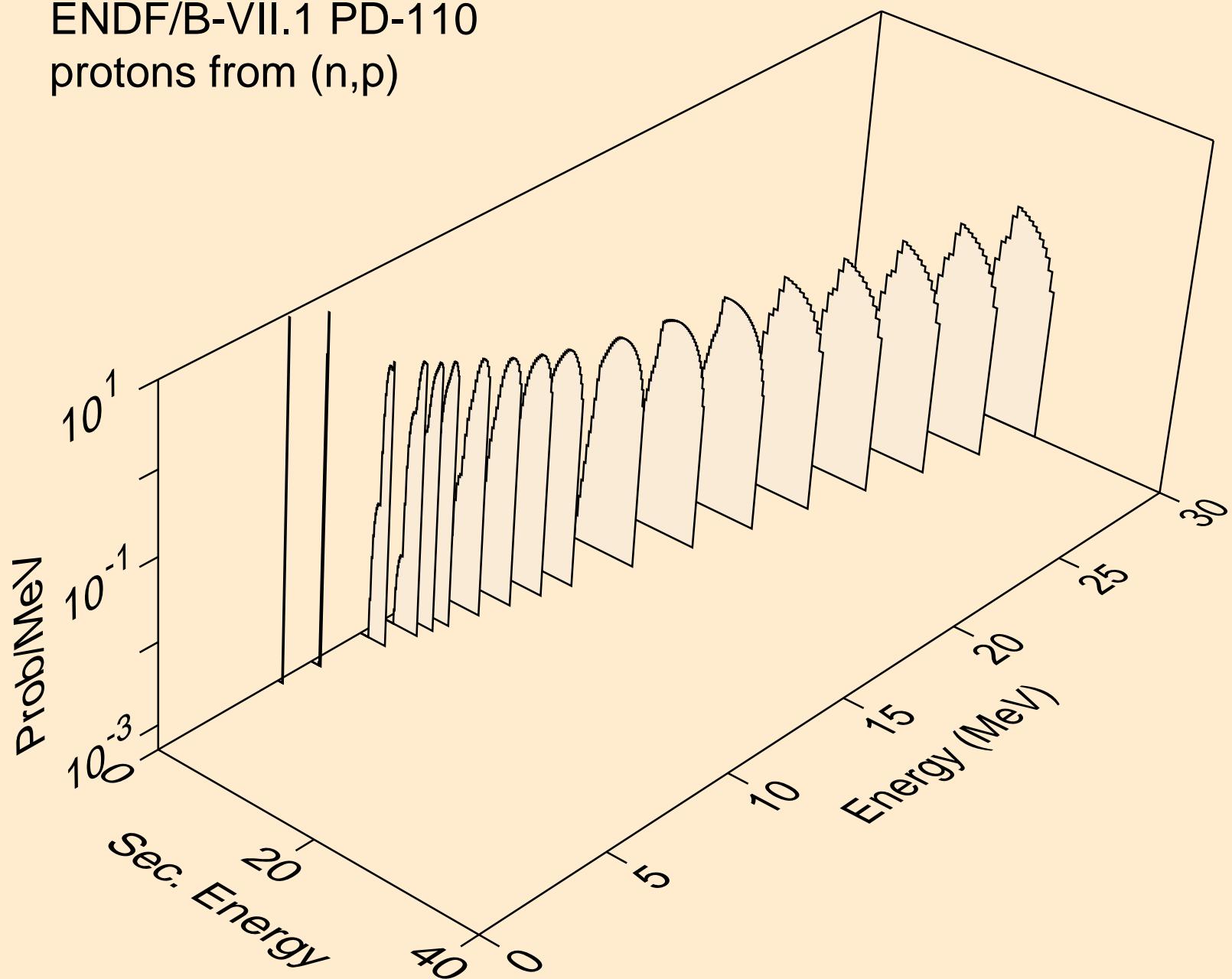
ENDF/B-VII.1 PD-110  
protons from  $(n,n^*)p$



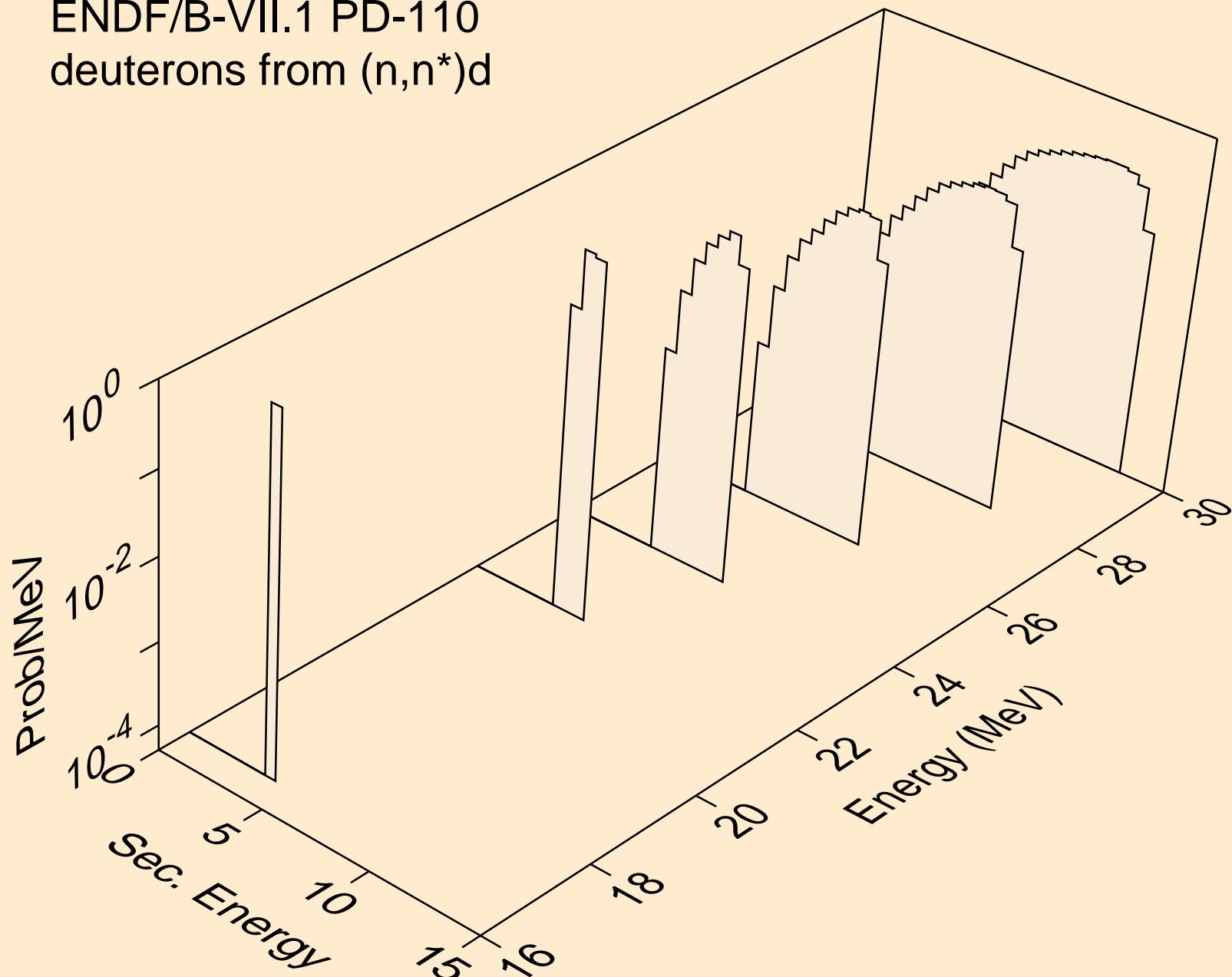
ENDF/B-VII.1 PD-110  
protons from ( $n,2np$ )



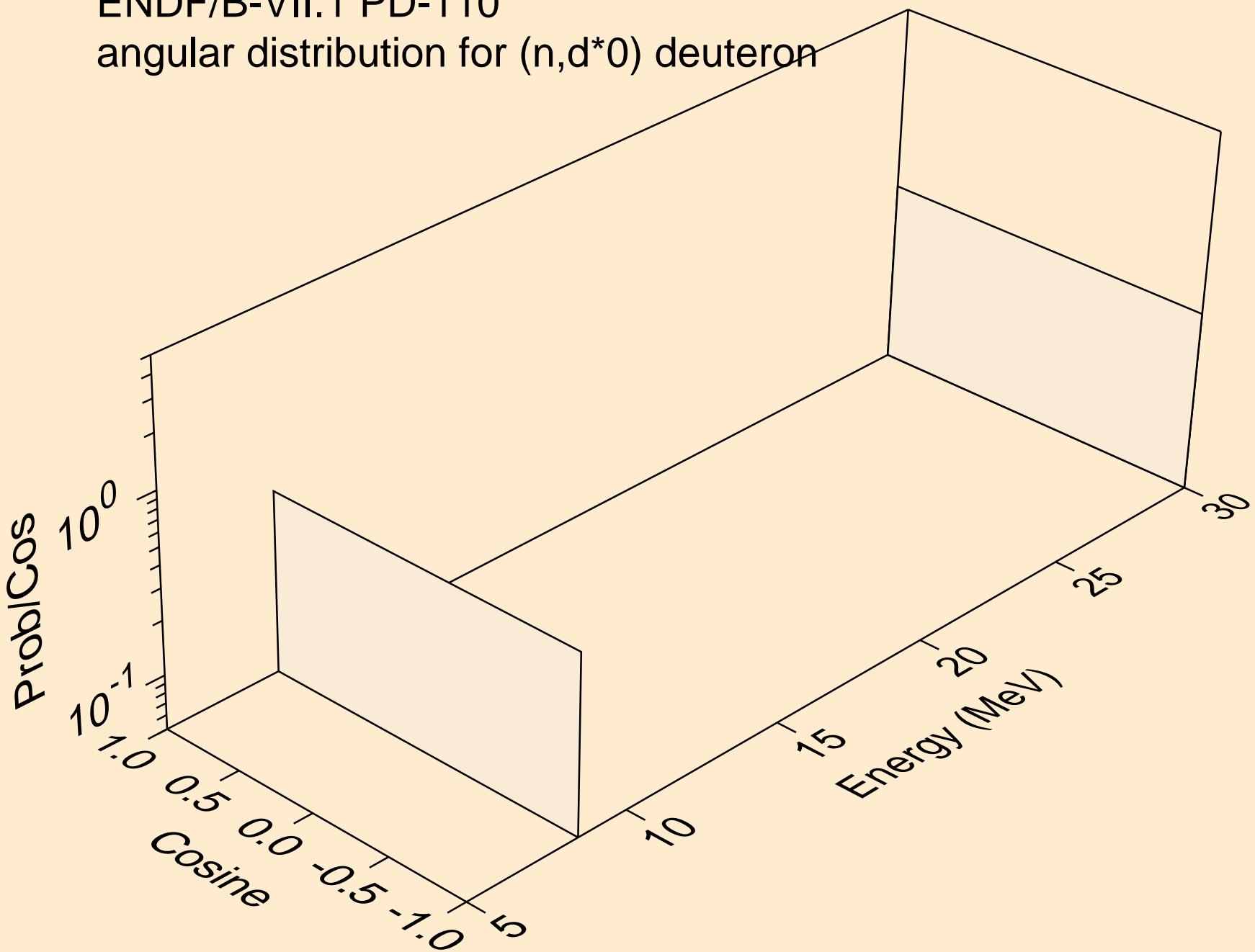
ENDF/B-VII.1 PD-110  
protons from (n,p)



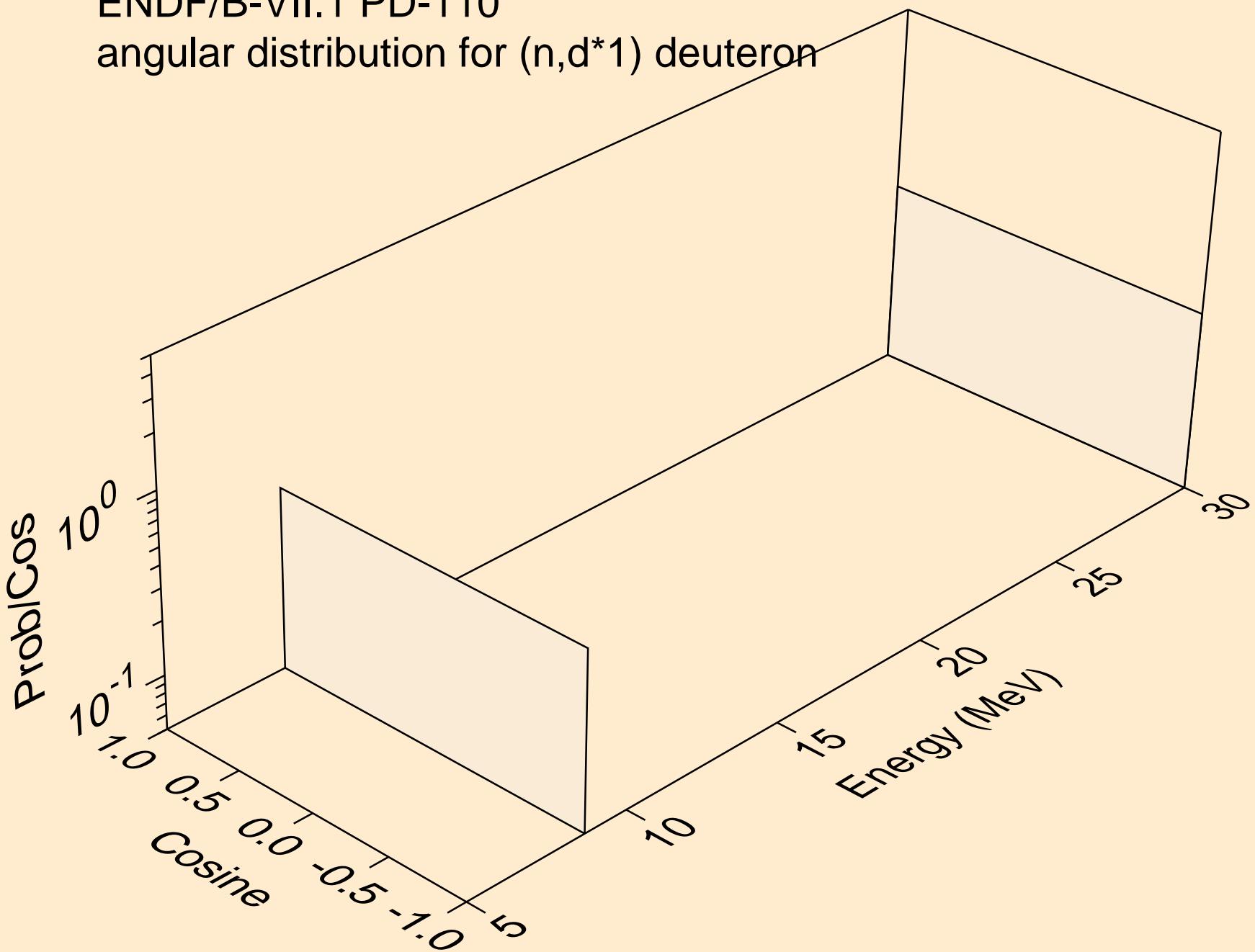
ENDF/B-VII.1 PD-110  
deuterons from  $(n,n^*)d$



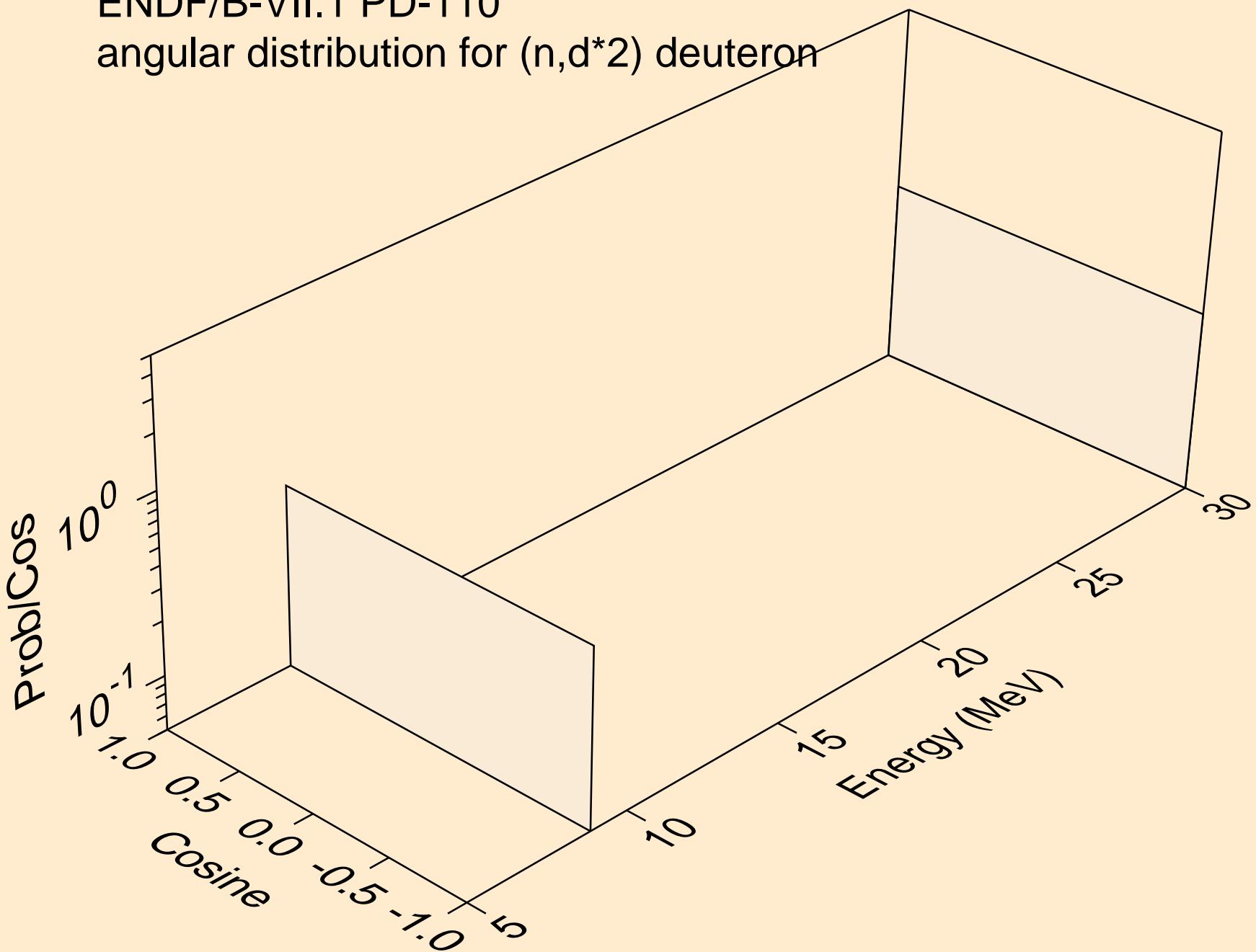
ENDF/B-VII.1 PD-110  
angular distribution for  $(n,d^*0)$  deuteron



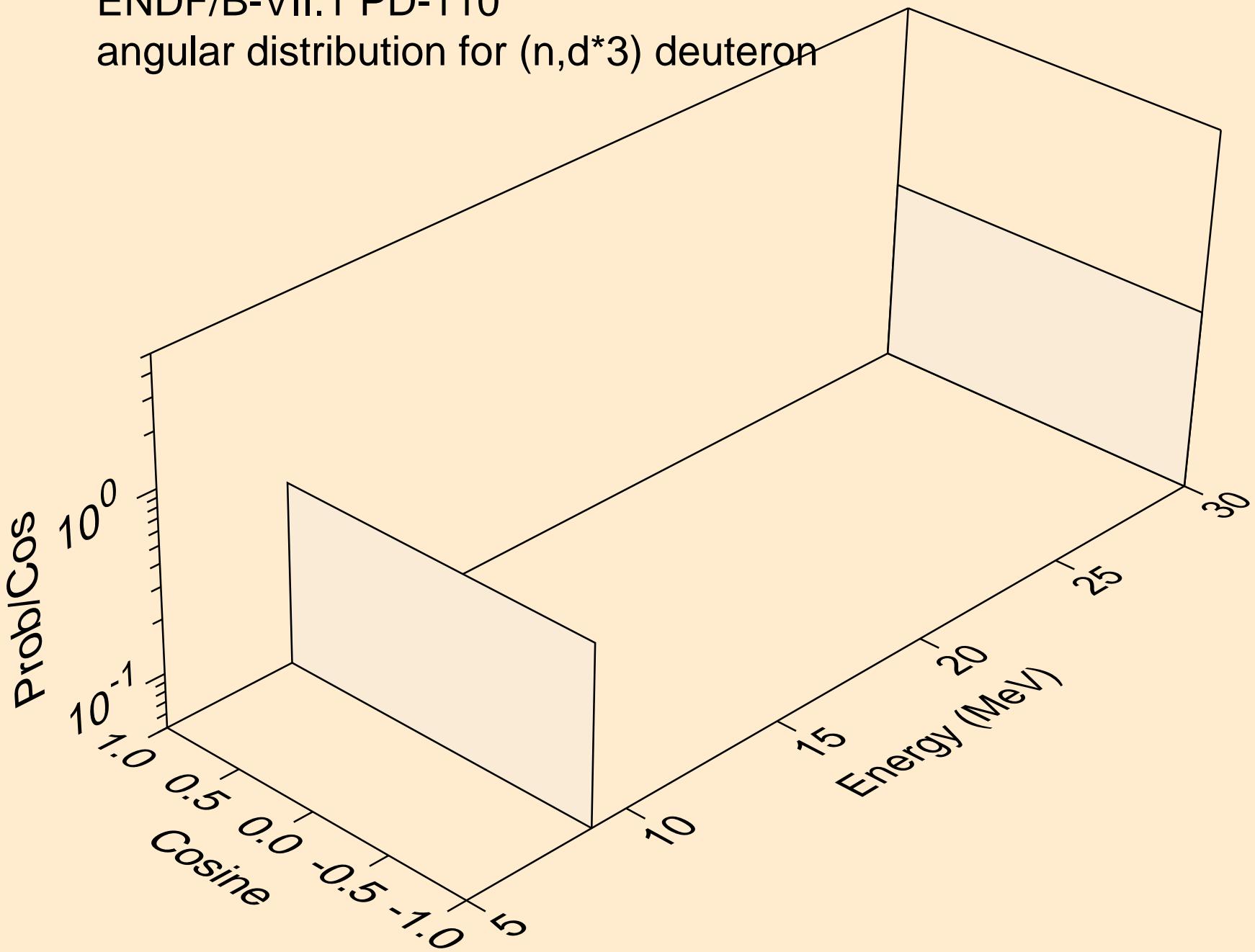
ENDF/B-VII.1 PD-110  
angular distribution for (n,d\*1) deuteron



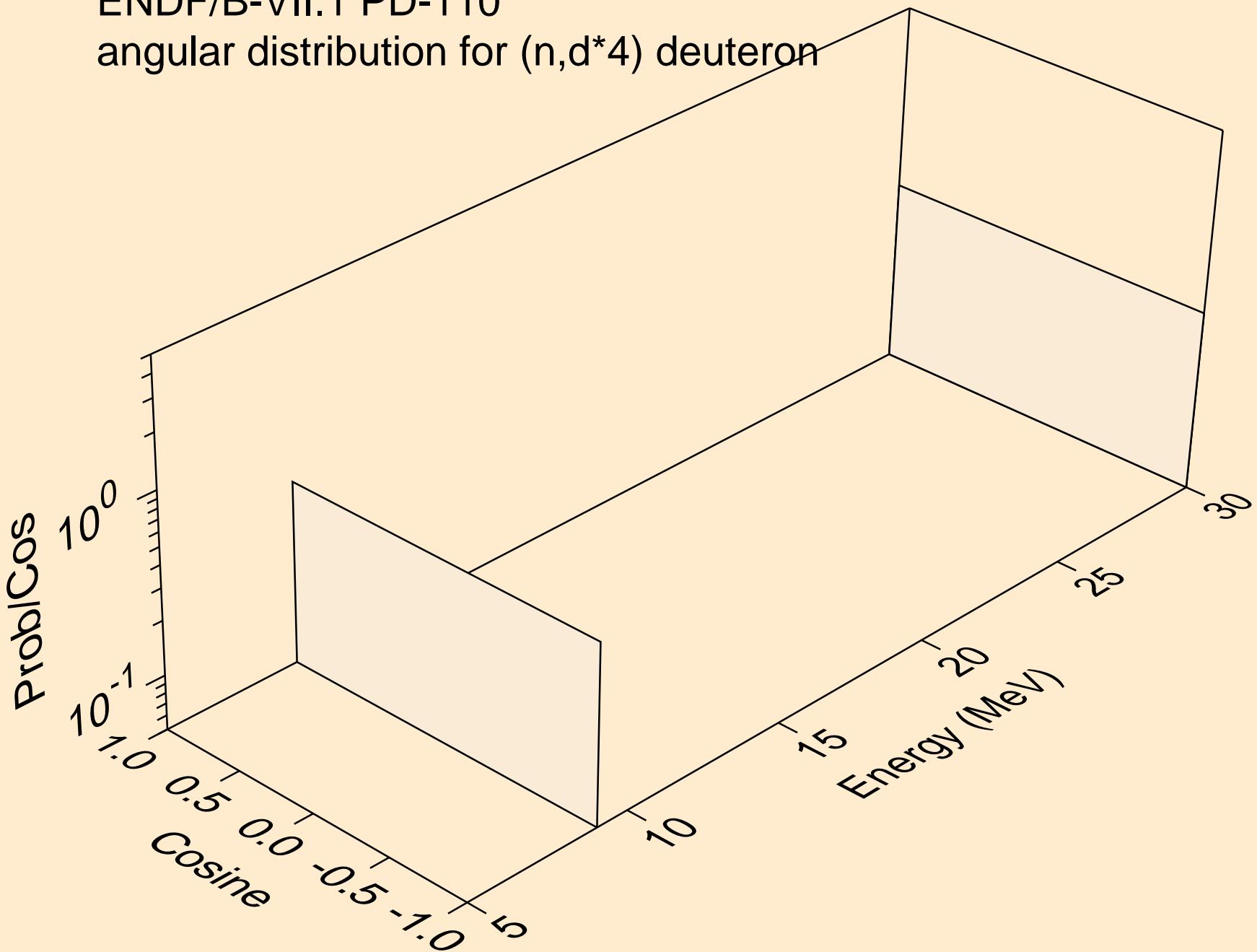
ENDF/B-VII.1 PD-110  
angular distribution for  $(n,d^*2)$  deuteron



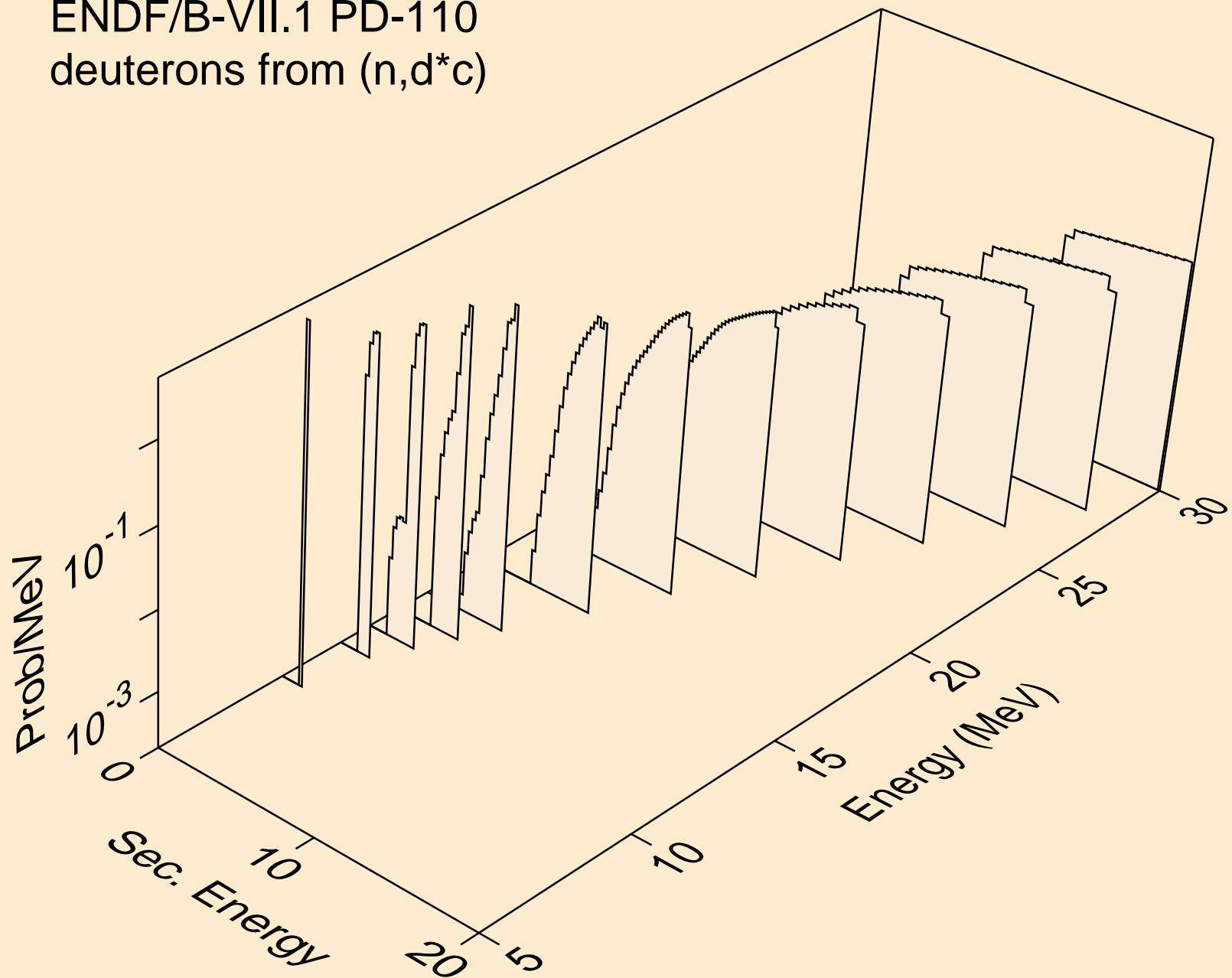
ENDF/B-VII.1 PD-110  
angular distribution for ( $n, d^* 3$ ) deuteron



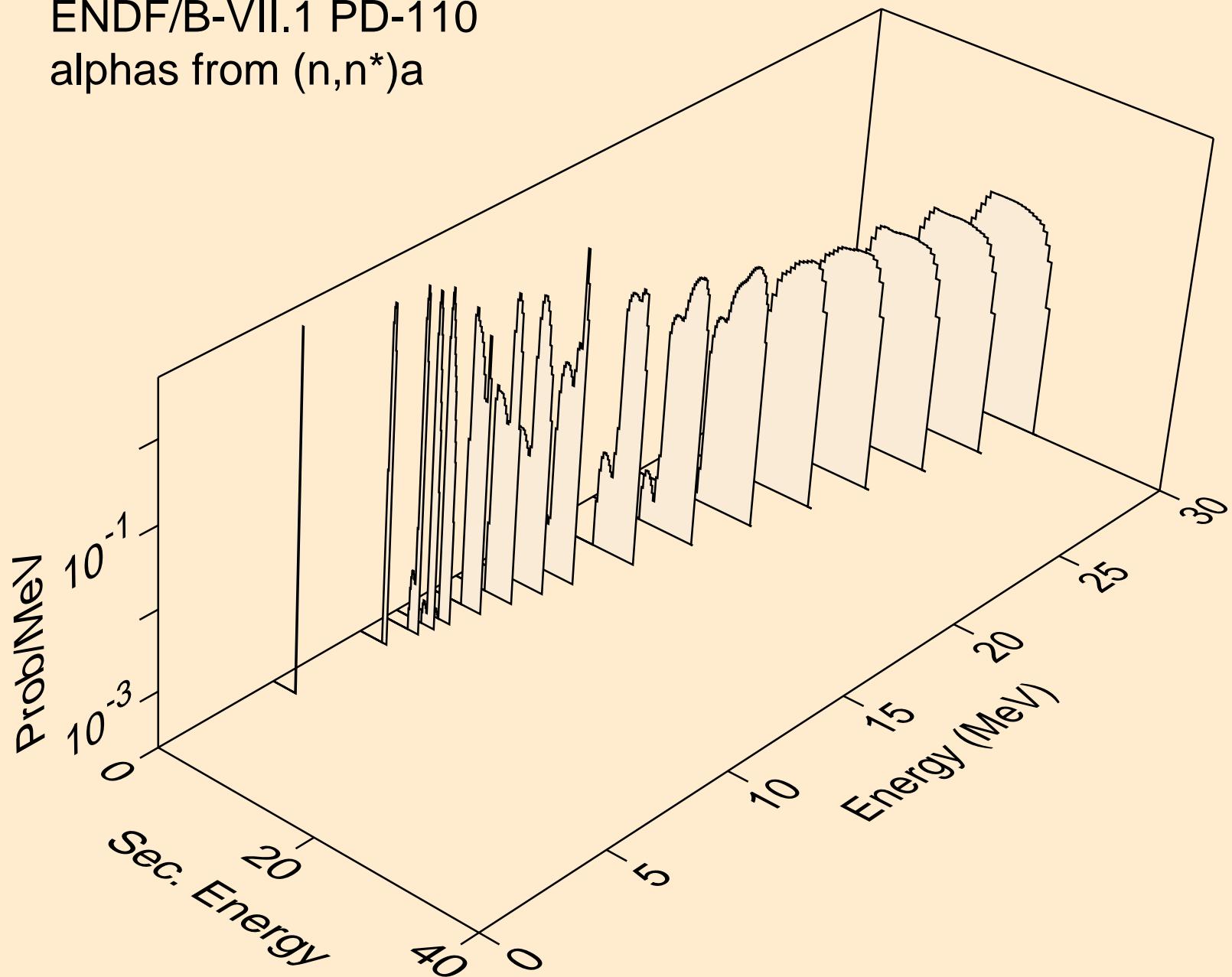
ENDF/B-VII.1 PD-110  
angular distribution for ( $n,d^*4$ ) deuteron



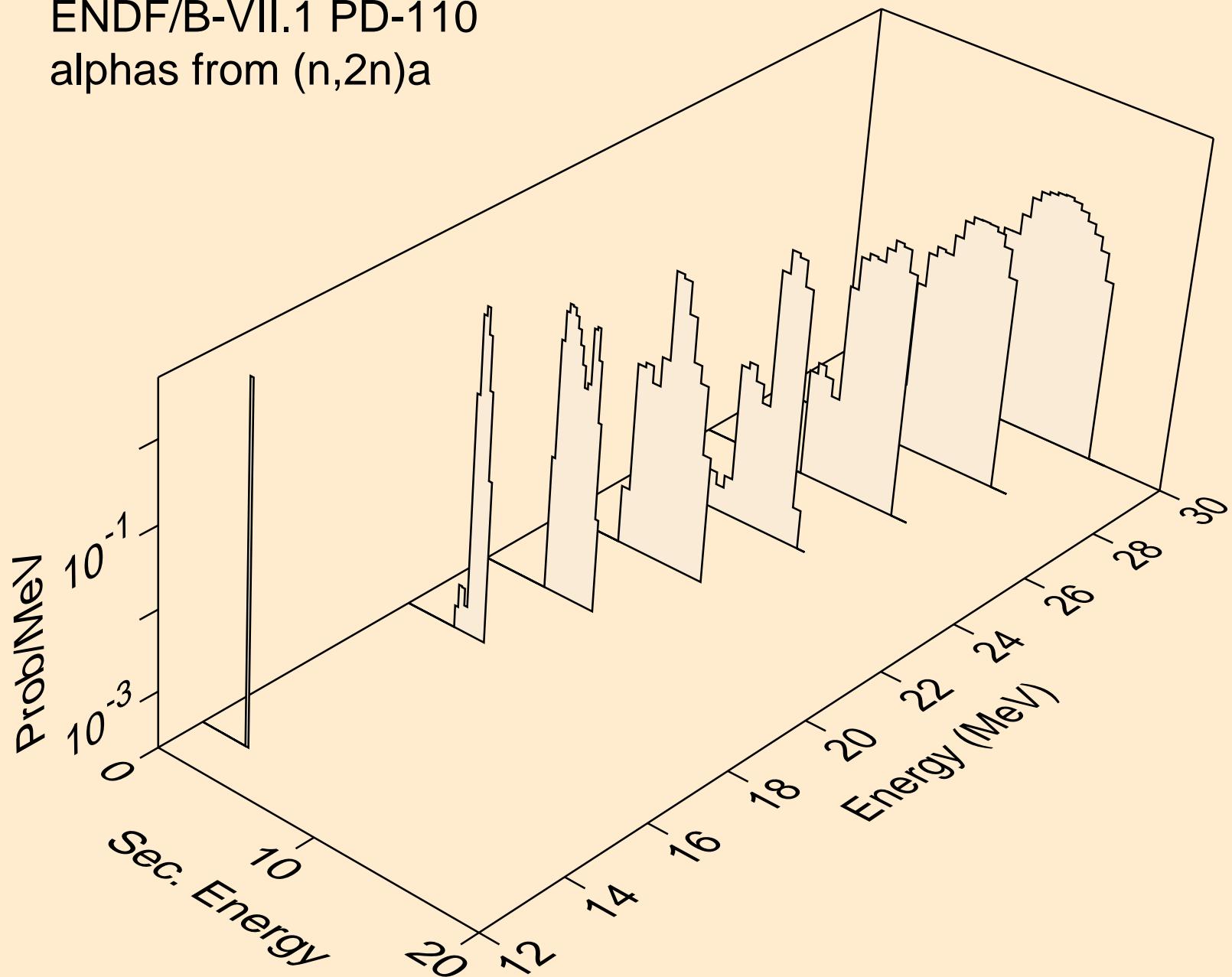
ENDF/B-VII.1 PD-110  
deuterons from  $(n, d^* c)$



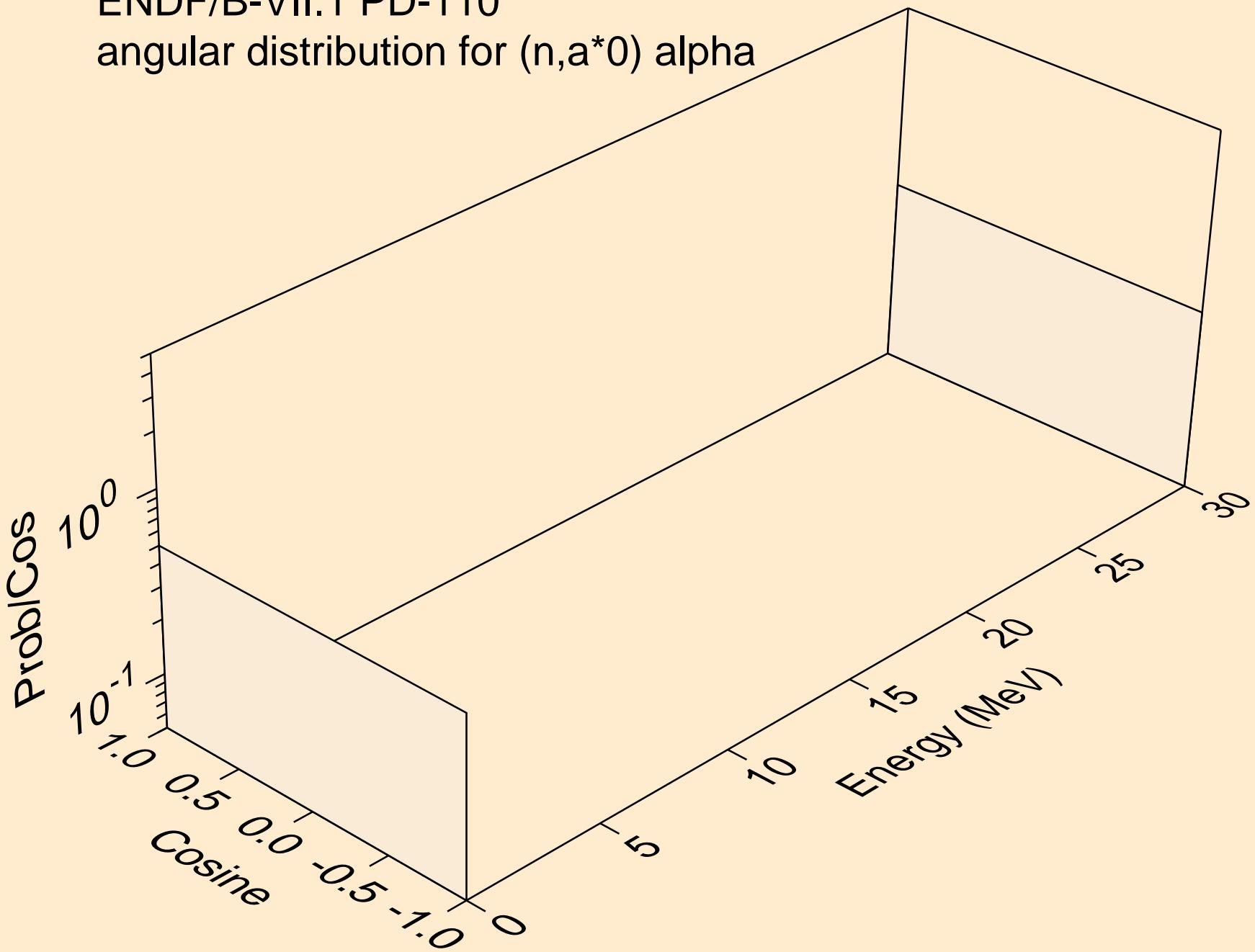
ENDF/B-VII.1 PD-110  
alphas from  $(n,n^*)a$



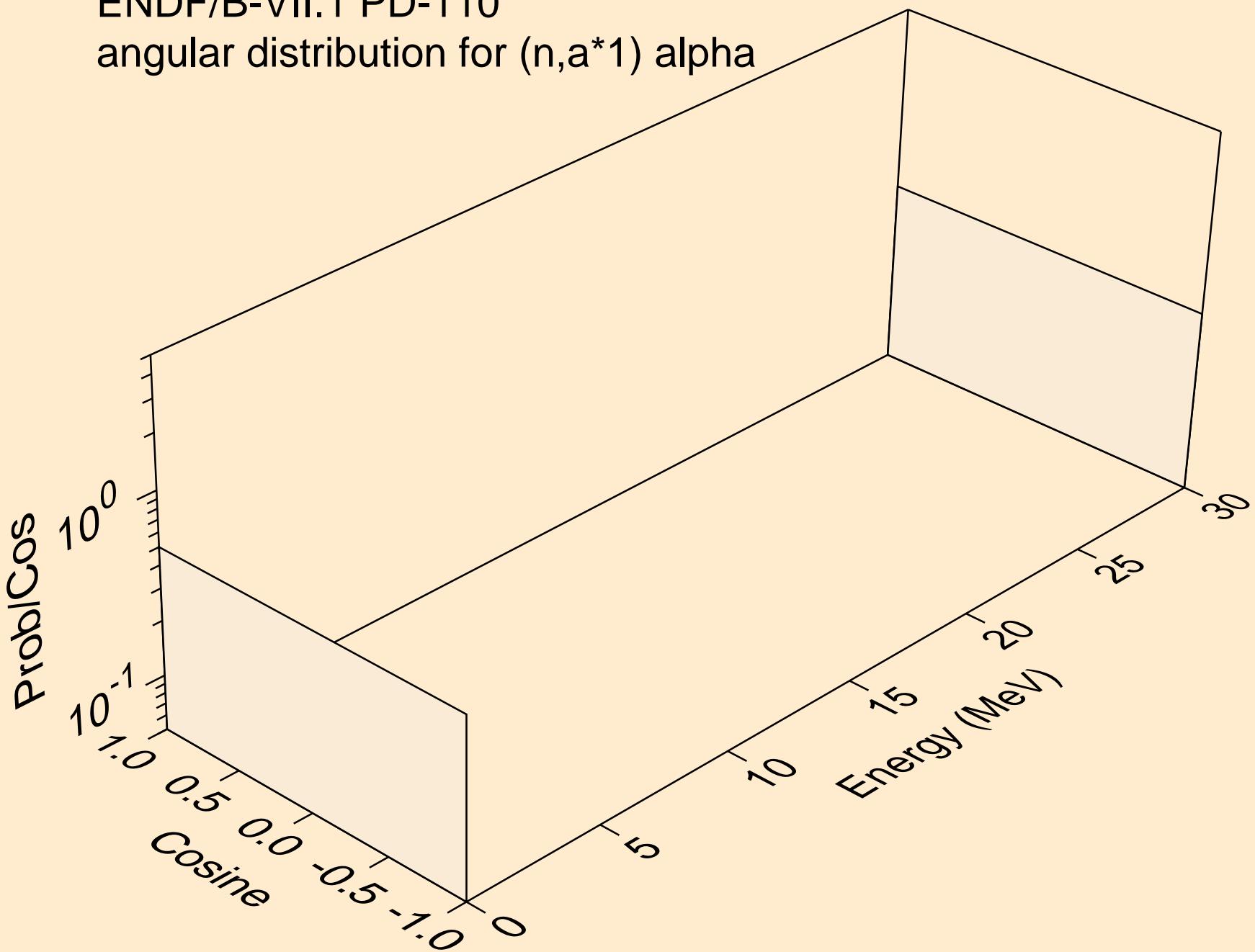
ENDF/B-VII.1 PD-110  
alphas from  $(n,2n)a$



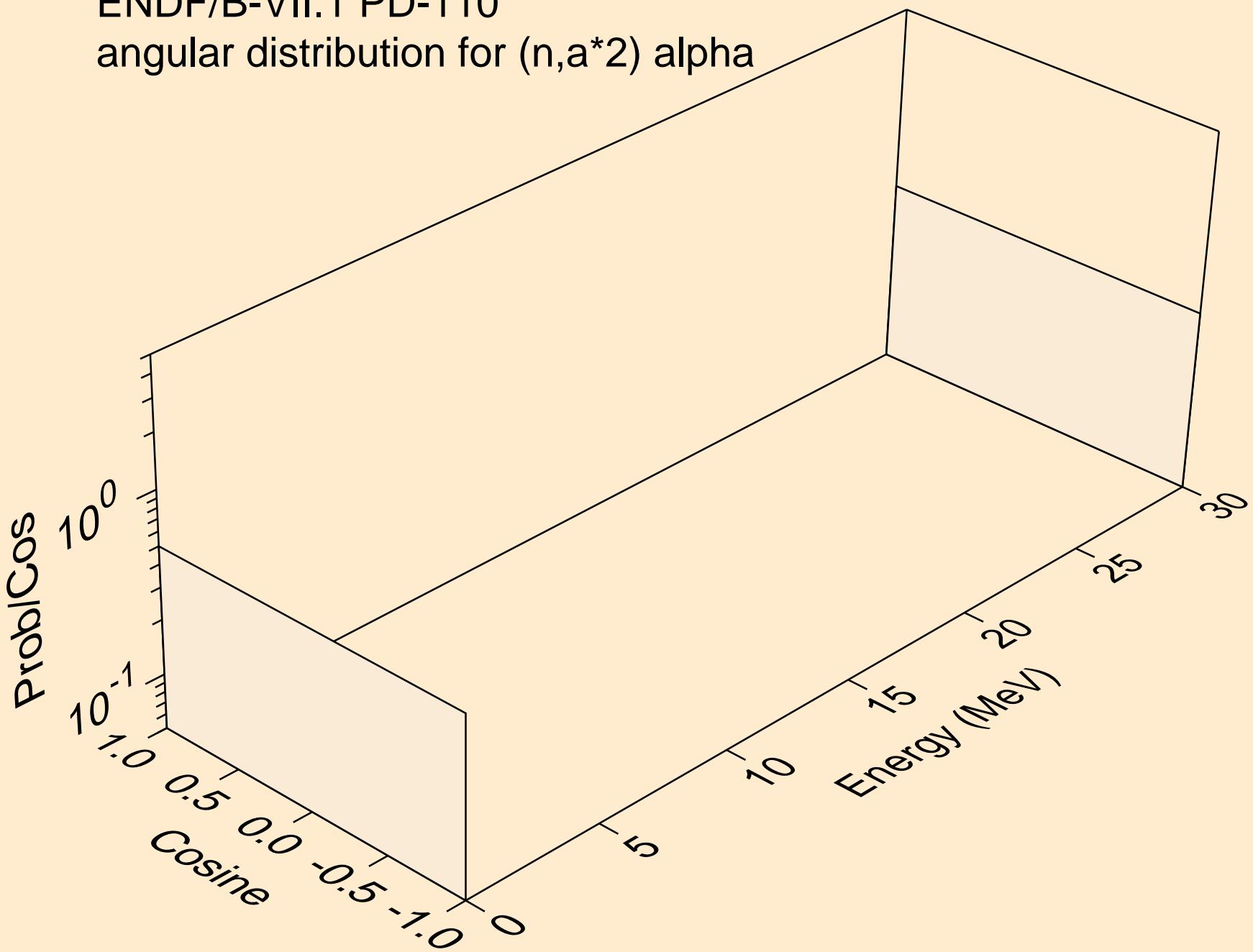
ENDF/B-VII.1 PD-110  
angular distribution for  $(n,a^*0)$  alpha



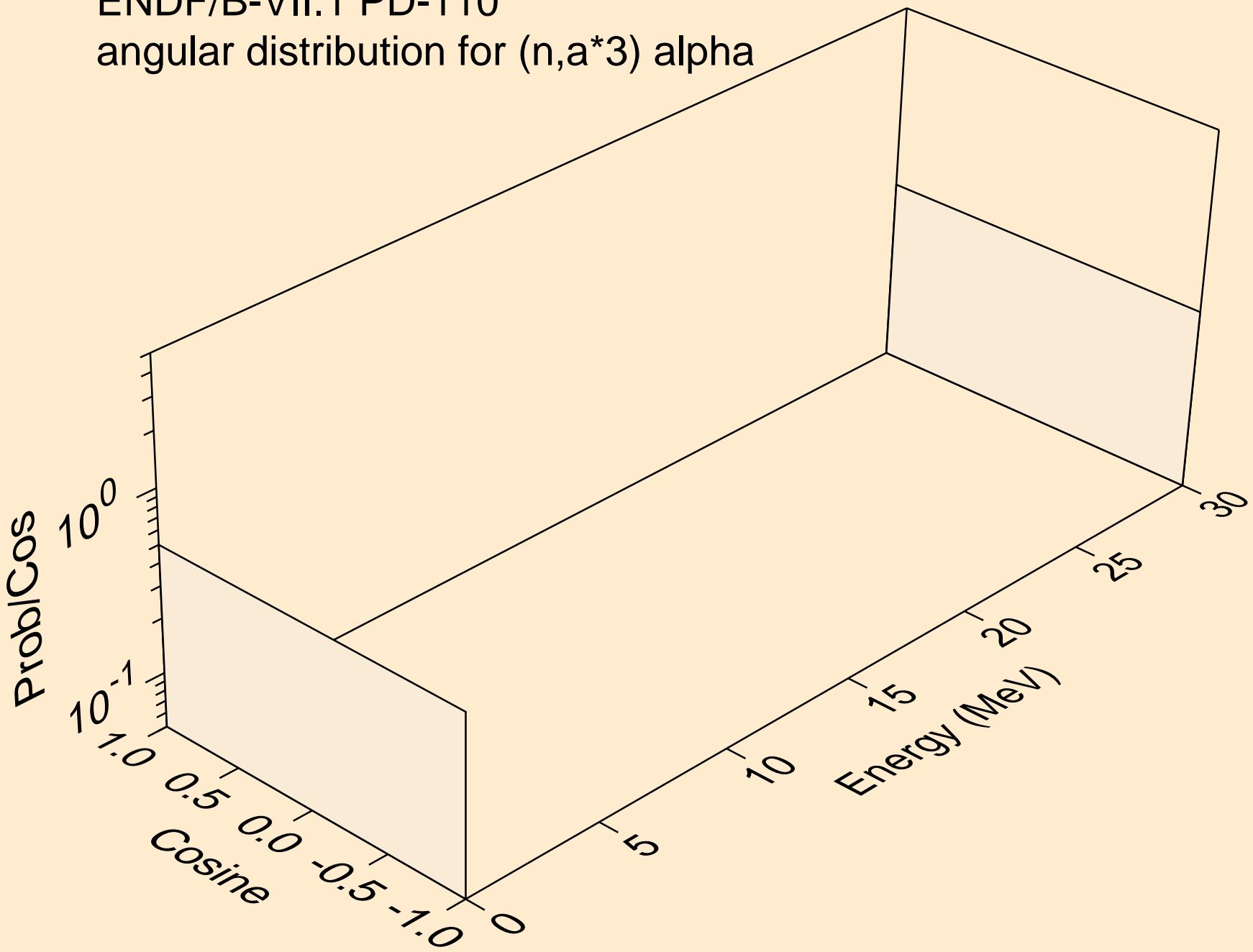
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angular distribution for (n,a\*1) alpha



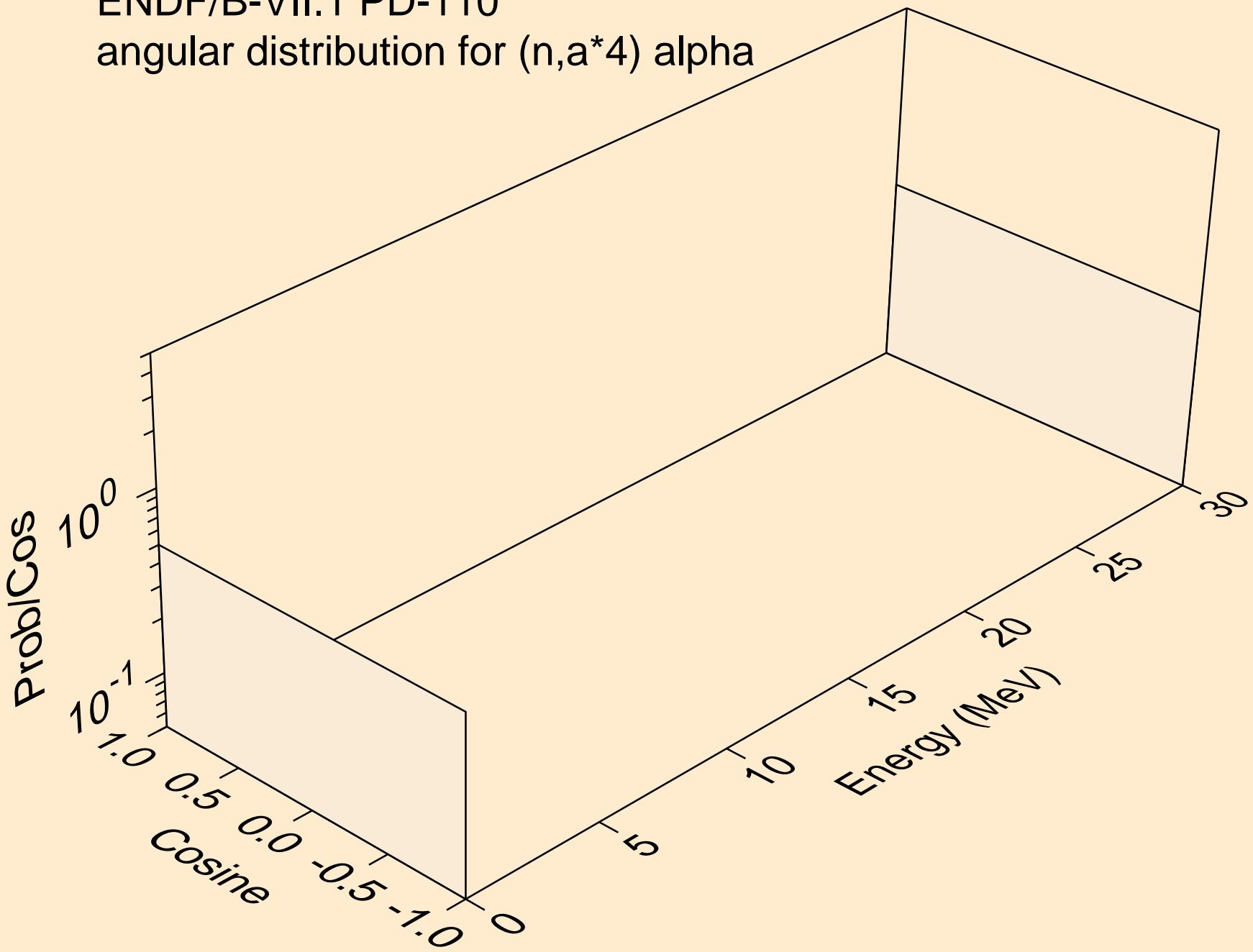
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angular distribution for  $(n,a^2)$  alpha



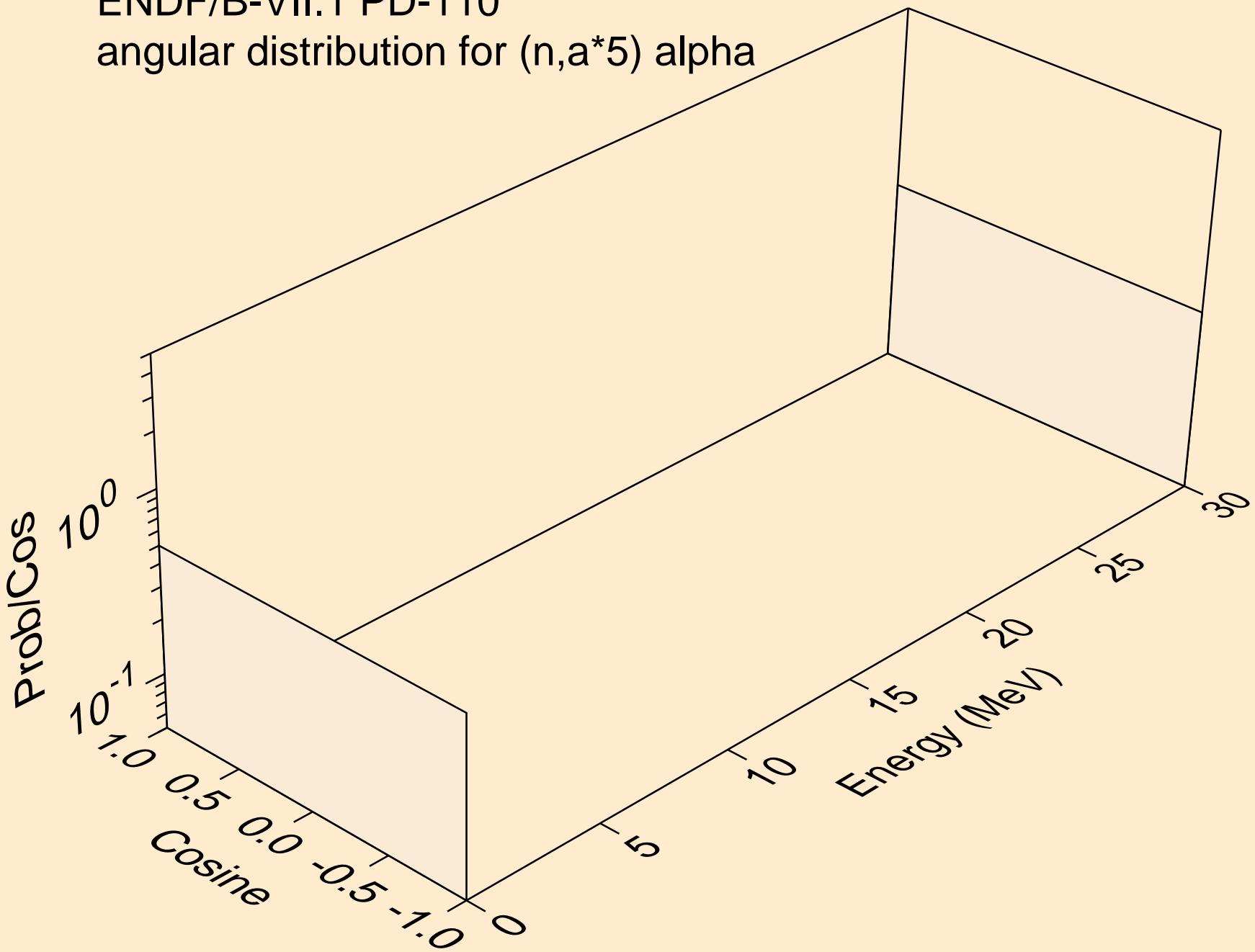
ENDF/B-VII.1 PD-110  
angular distribution for (n,a\*3) alpha



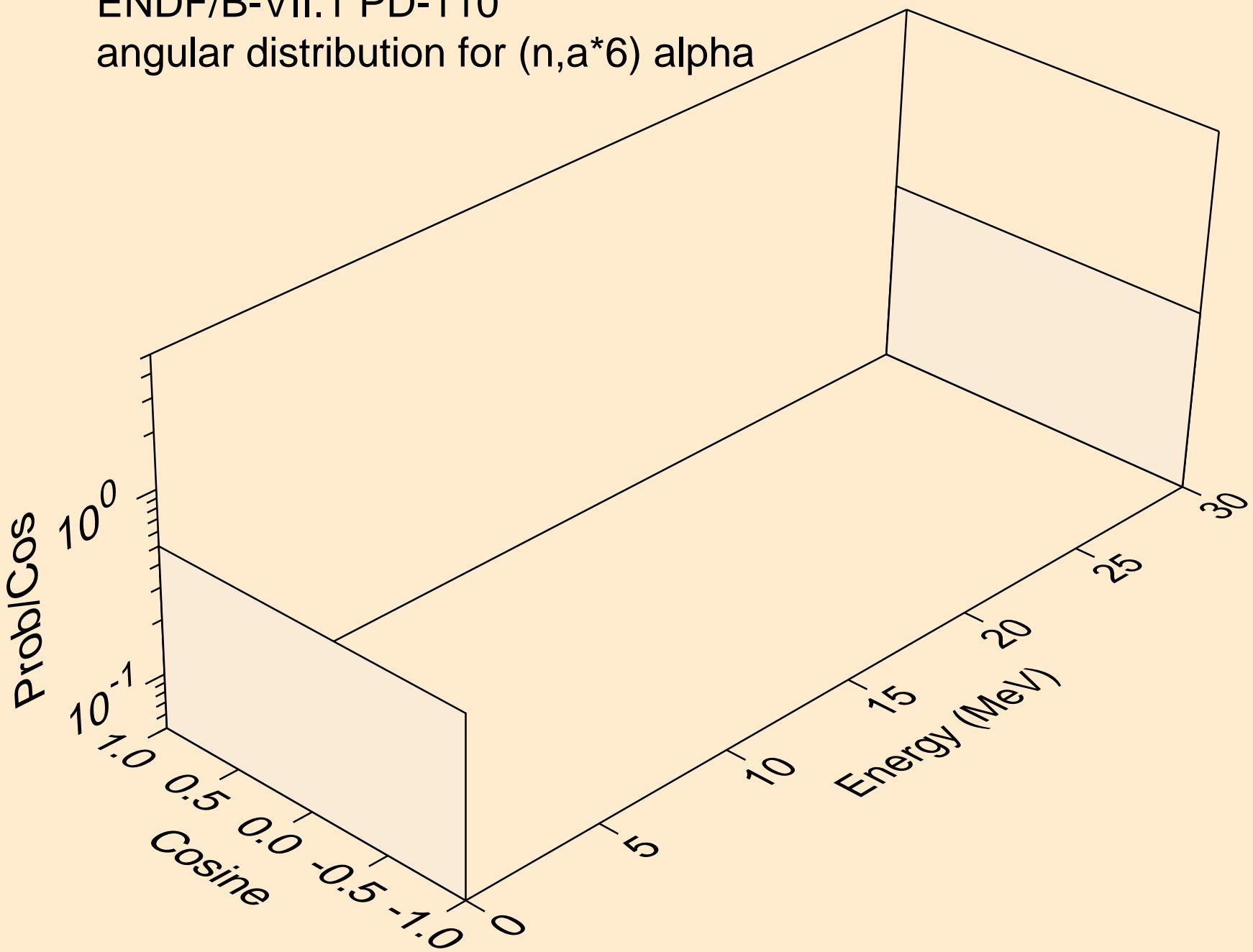
ENDF/B-VII.1 PD-110  
angular distribution for (n,a\*4) alpha



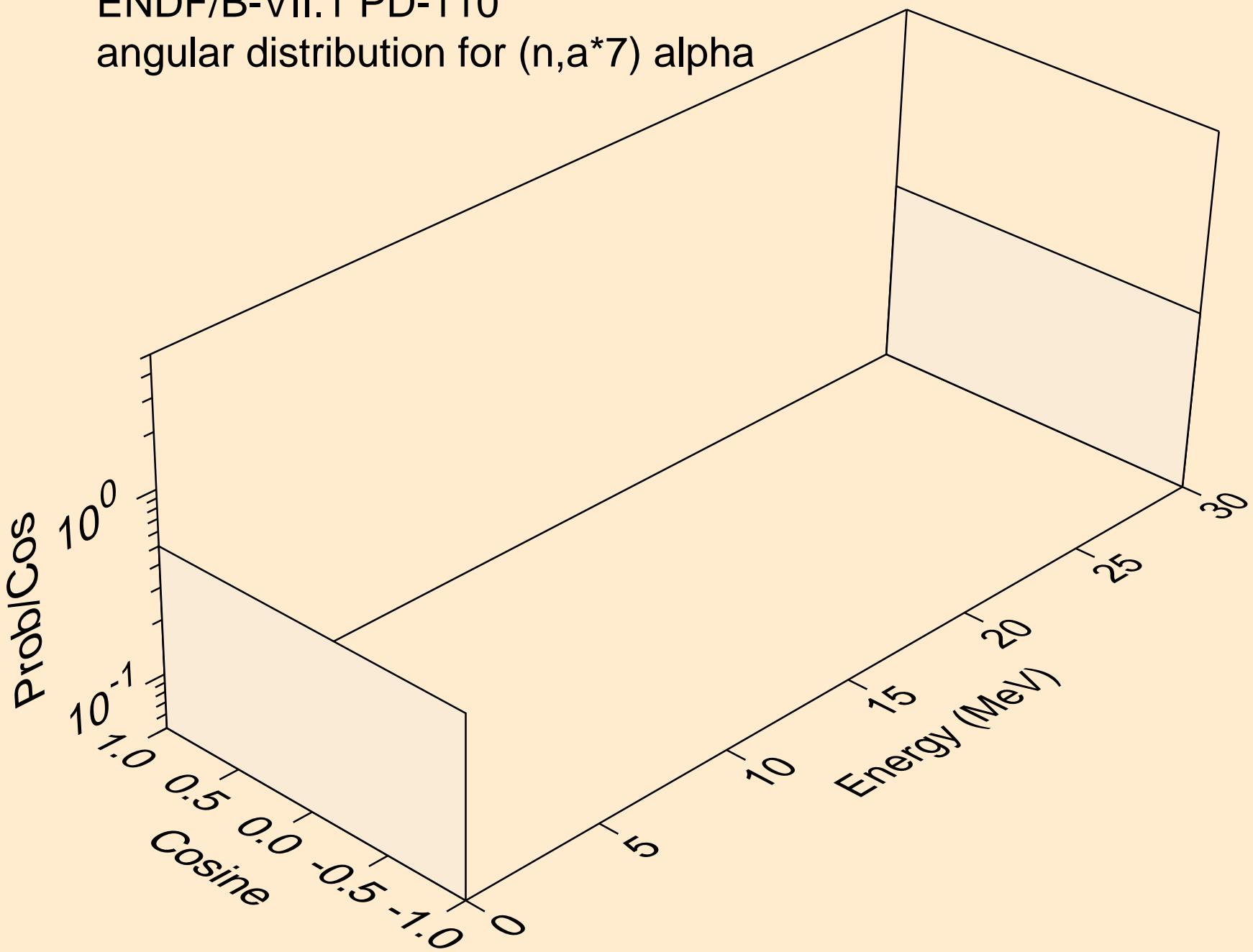
ENDF/B-VII.1 PD-110  
angular distribution for (n,a\*5) alpha



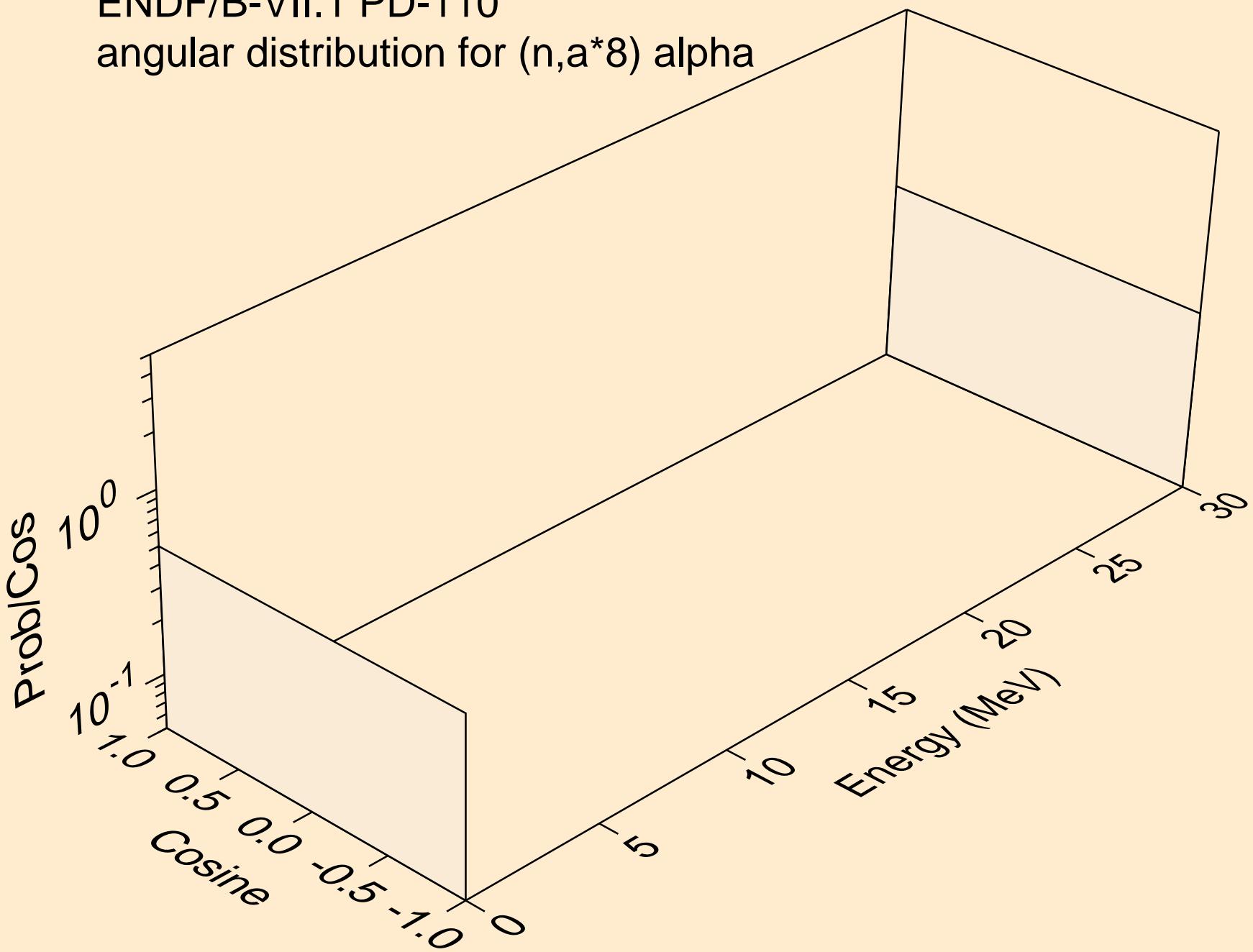
ENDF/B-VII.1 PD-110  
angular distribution for (n,a\*6) alpha



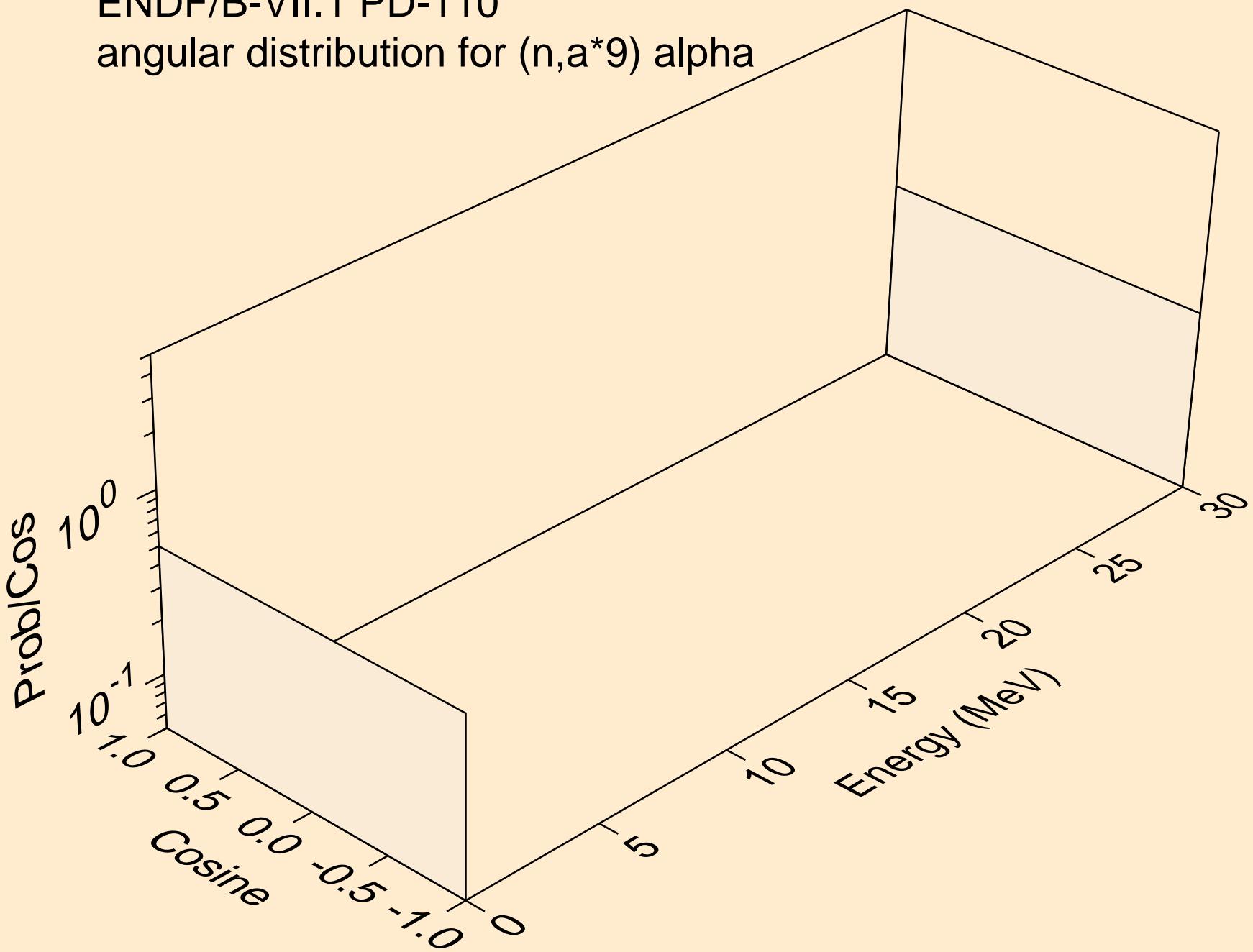
ENDF/B-VII.1 PD-110  
angular distribution for ( $n,a^*7$ ) alpha



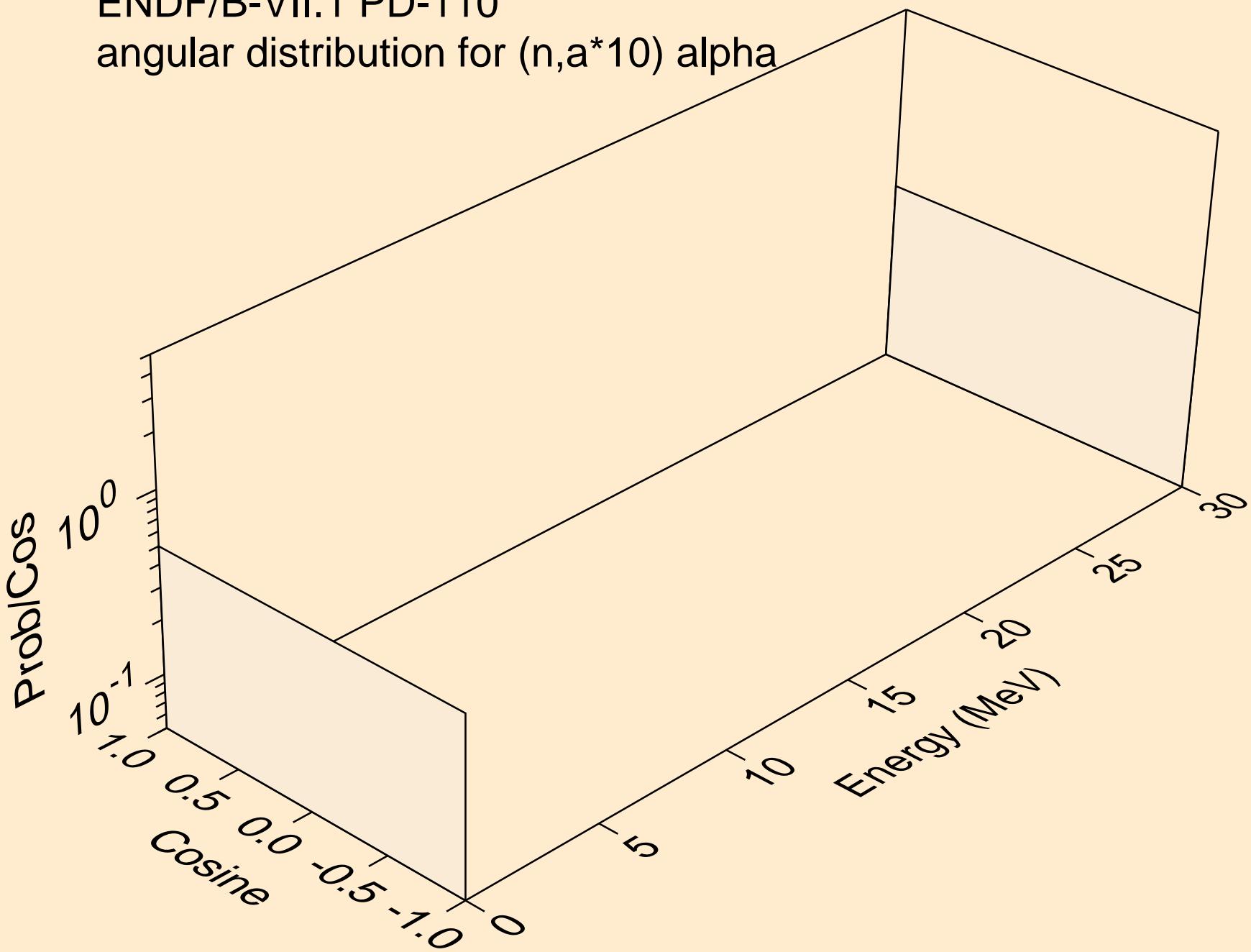
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angular distribution for (n,a\*8) alpha



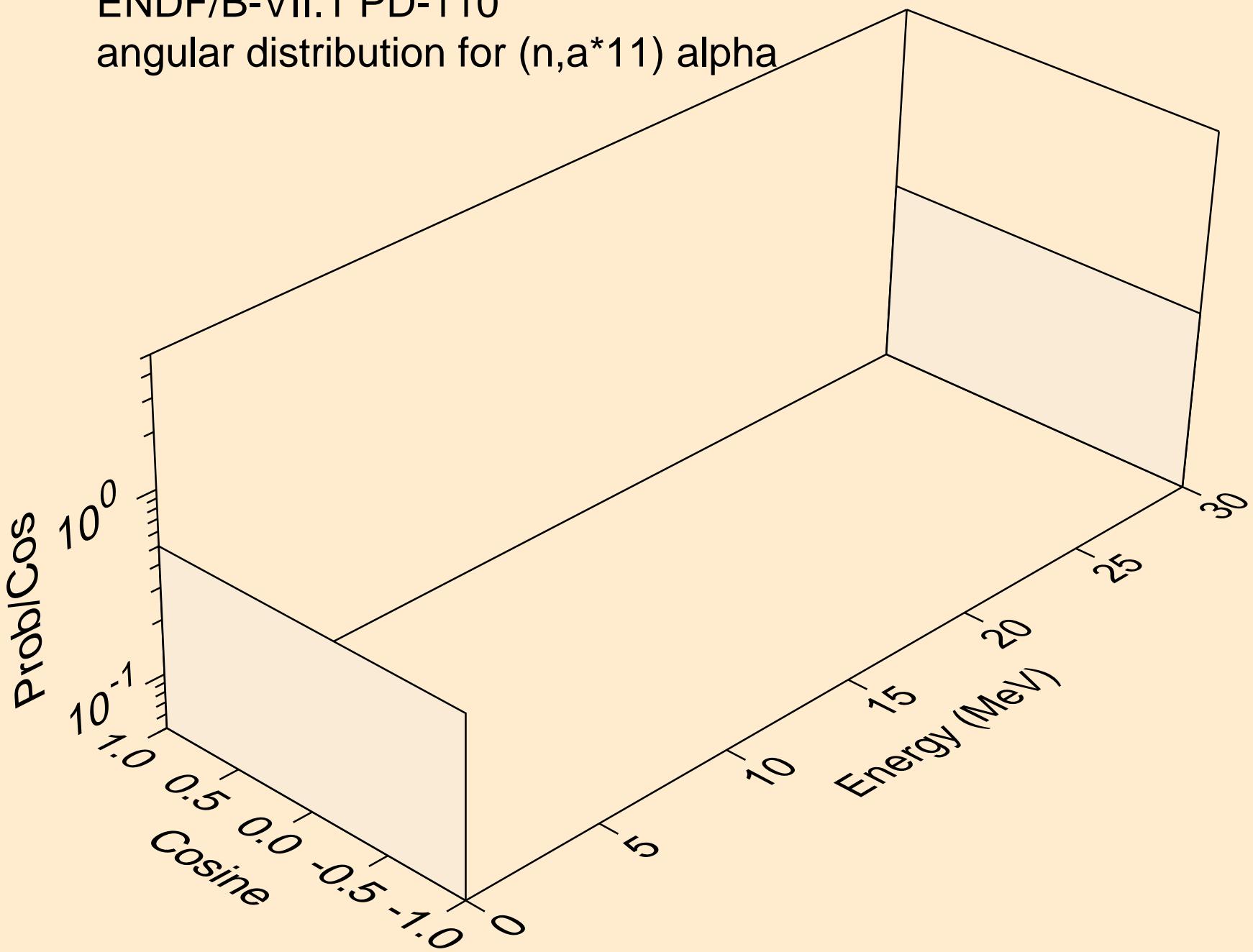
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angular distribution for (n,a\*9) alpha



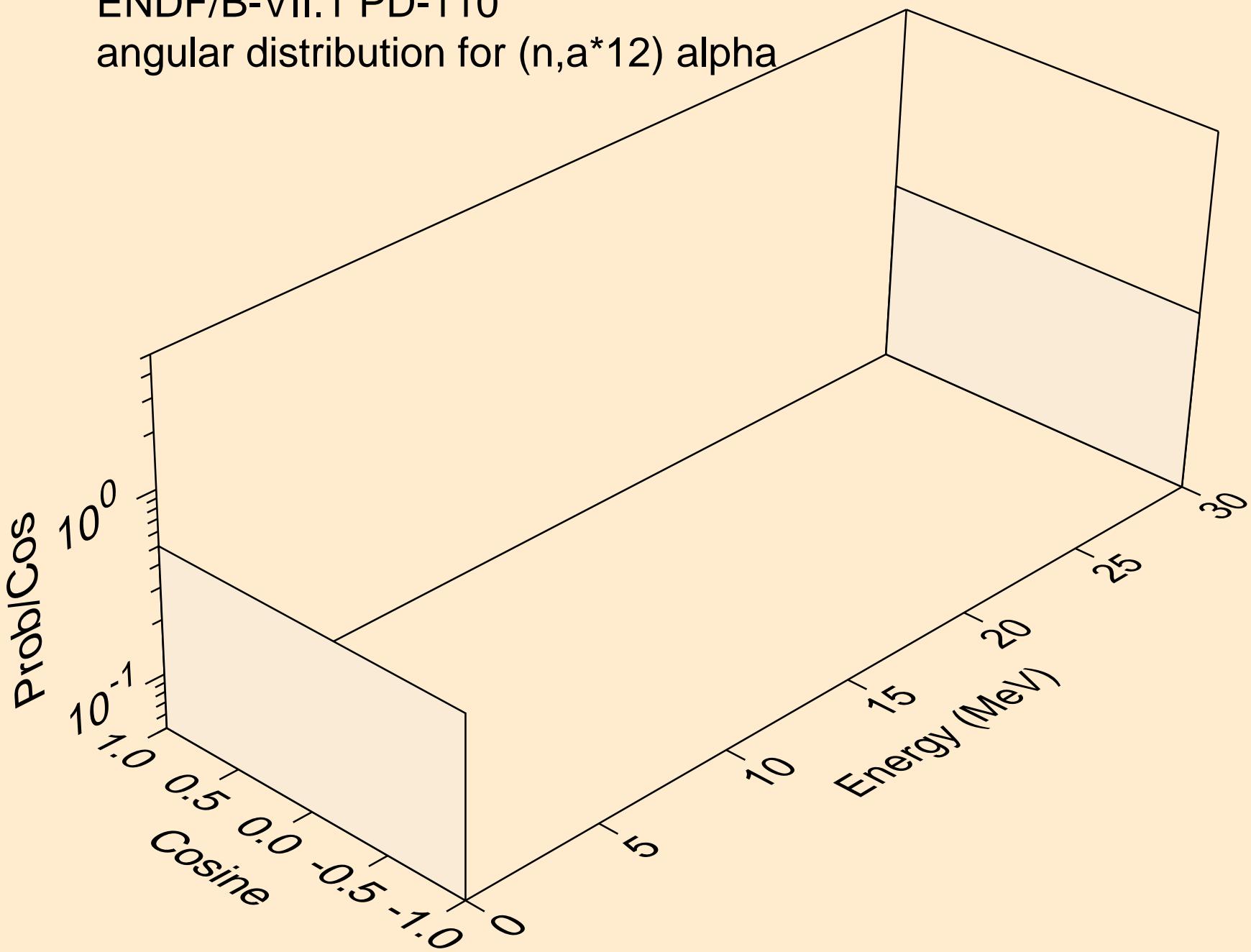
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angular distribution for (n,a\*10) alpha



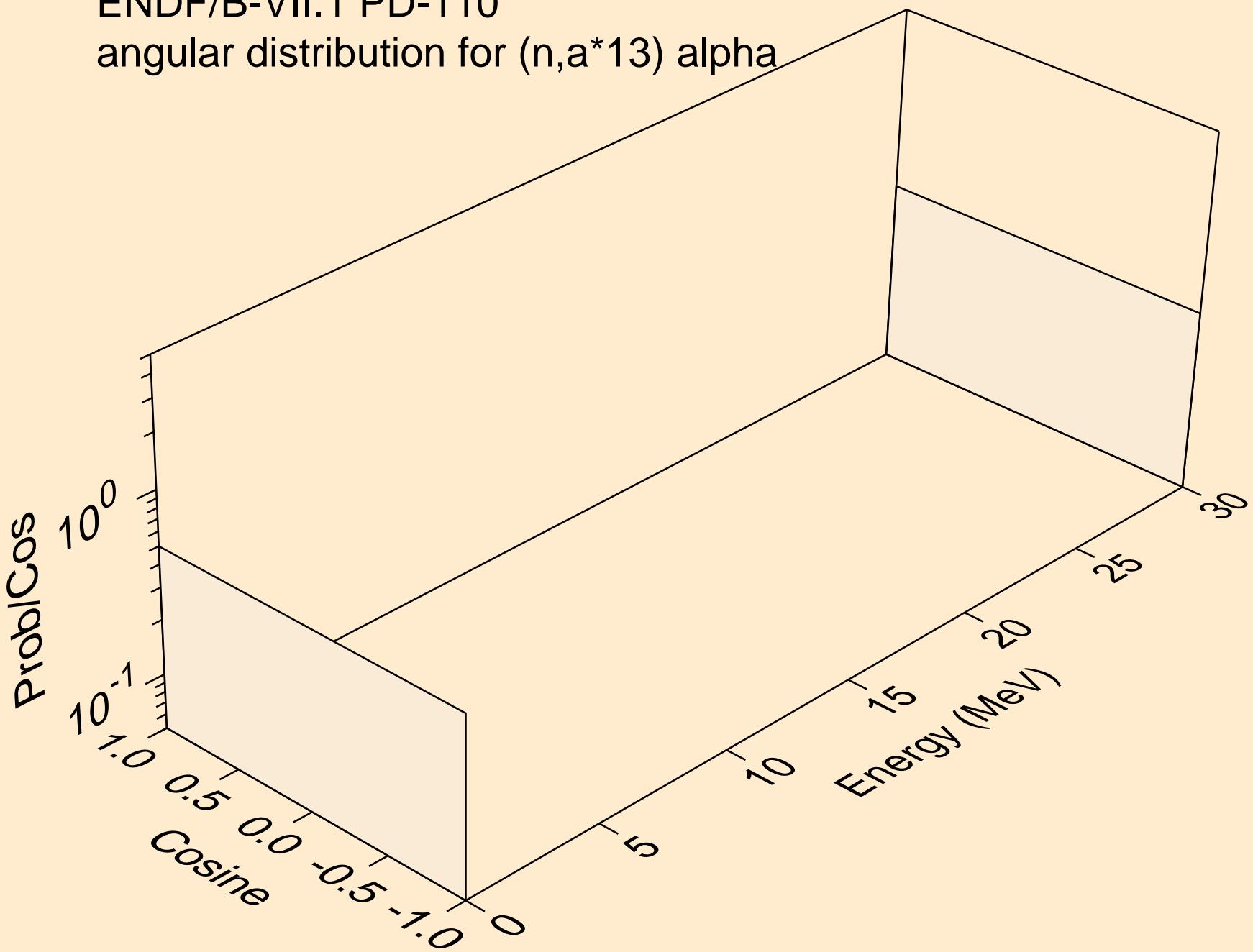
ENDF/B-VII.1 PD-110  
angular distribution for (n,a\*11) alpha



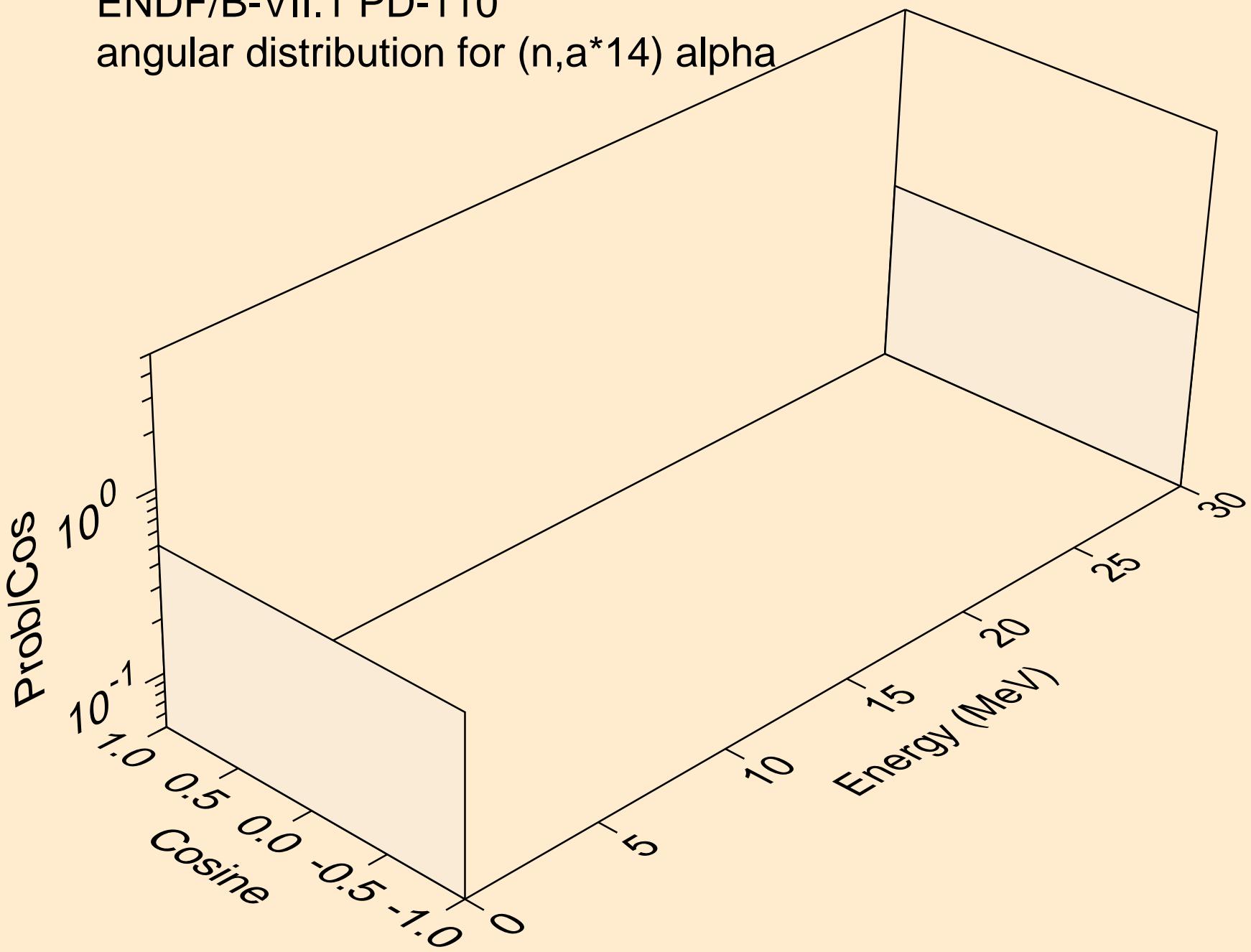
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angular distribution for (n,a\*12) alpha



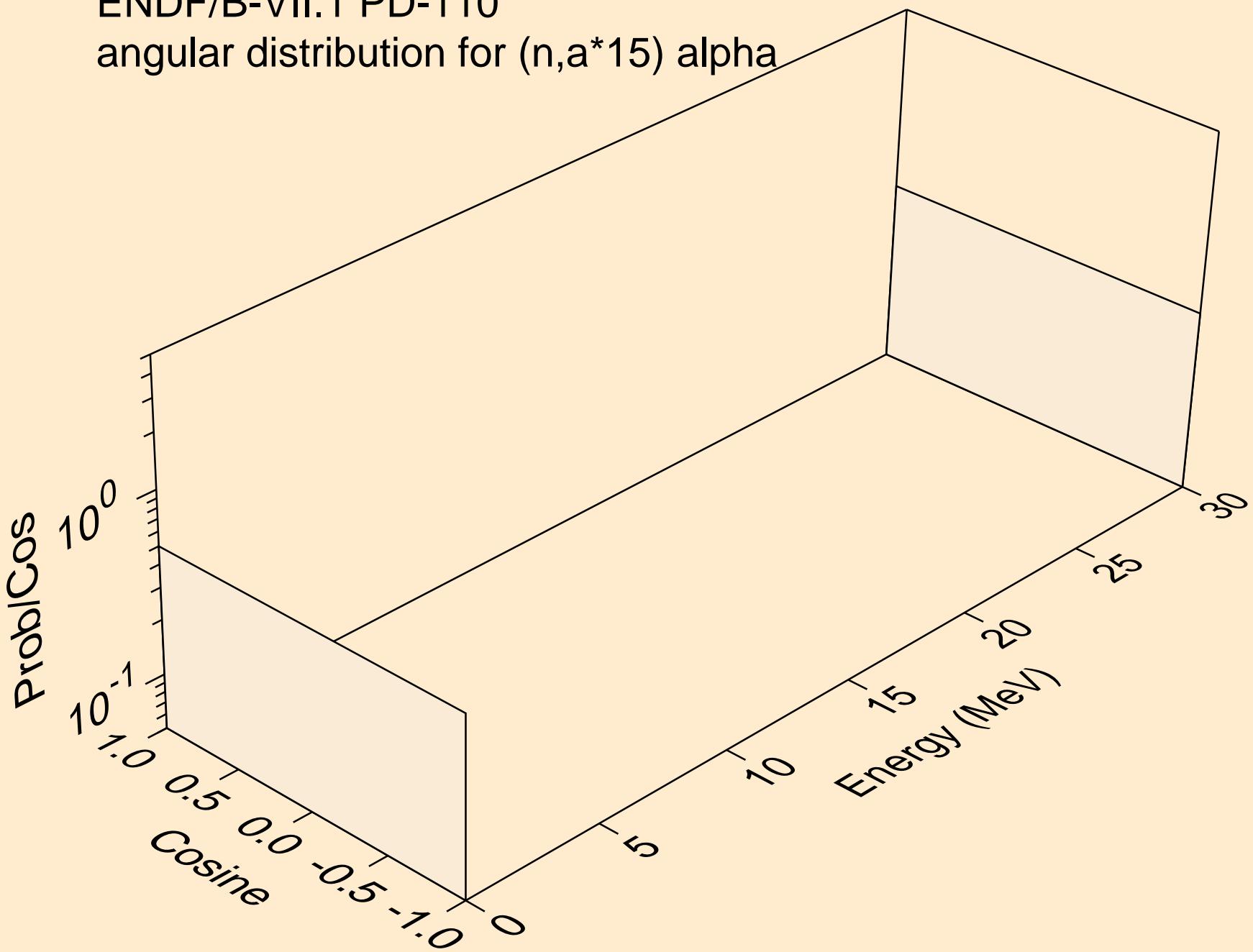
ENDF/B-VII.1 PD-110  
angular distribution for (n,a\*13) alpha



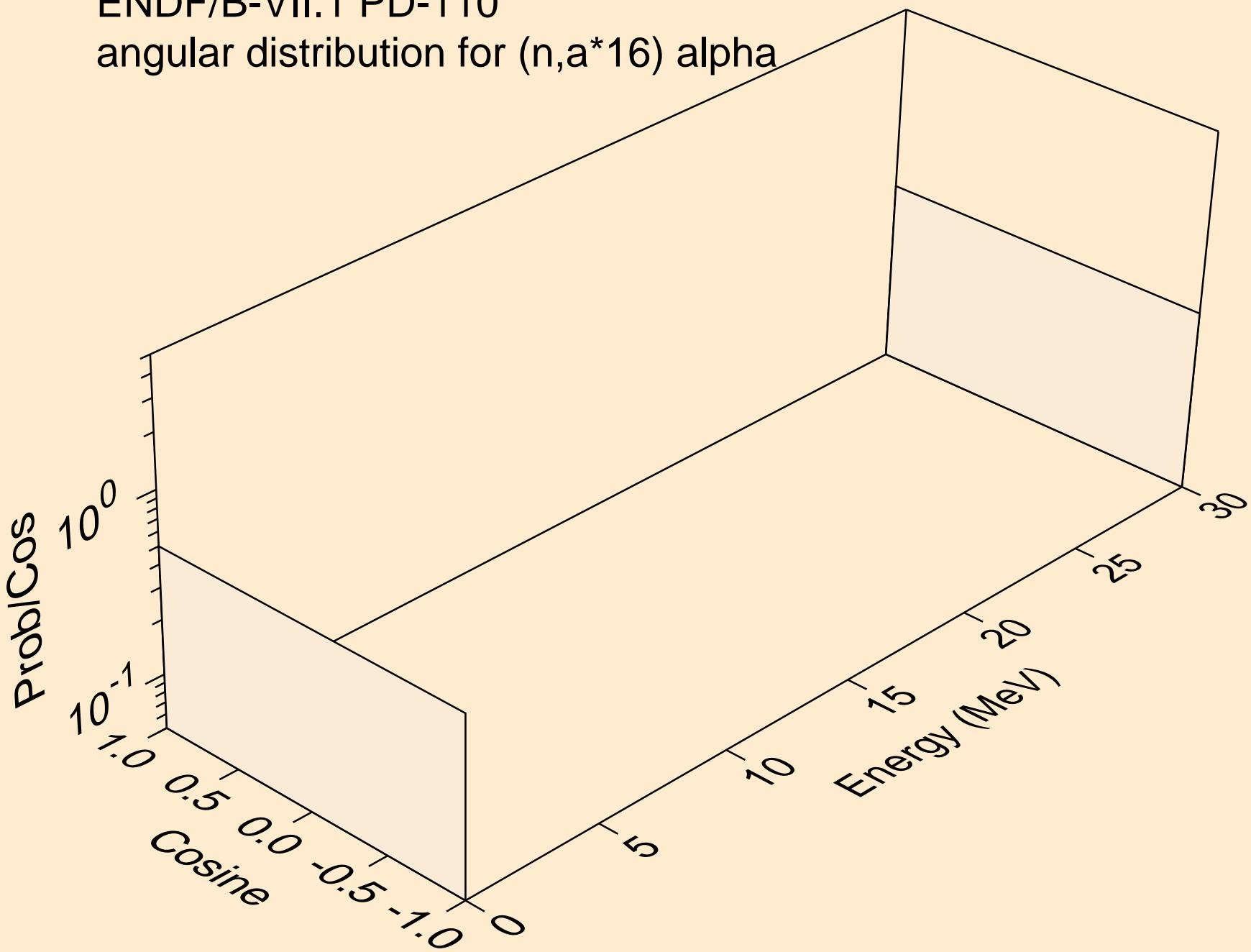
ENDF/B-VII.1 PD-110  
angular distribution for ( $n,a^*14$ ) alpha



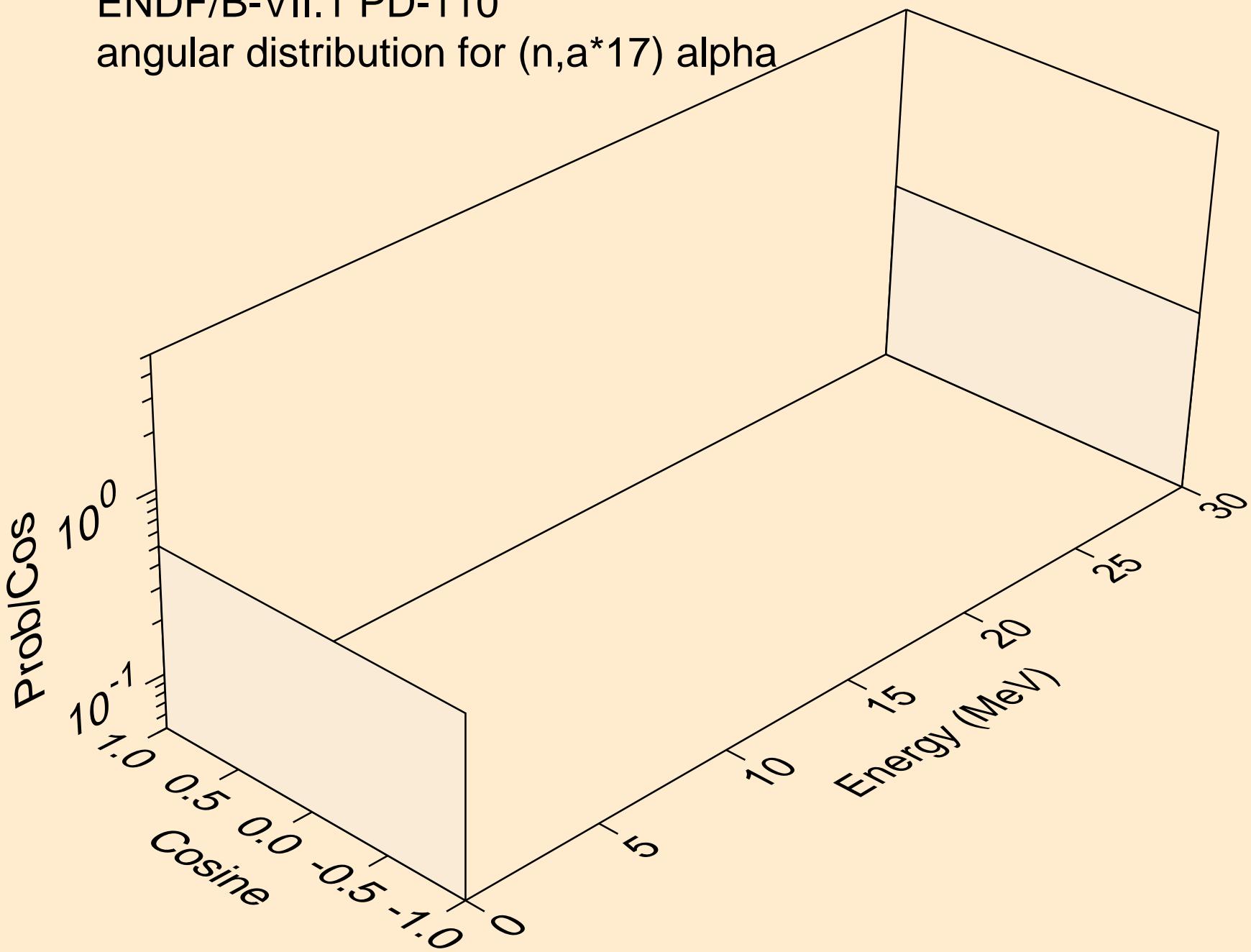
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angular distribution for (n,a\*15) alpha



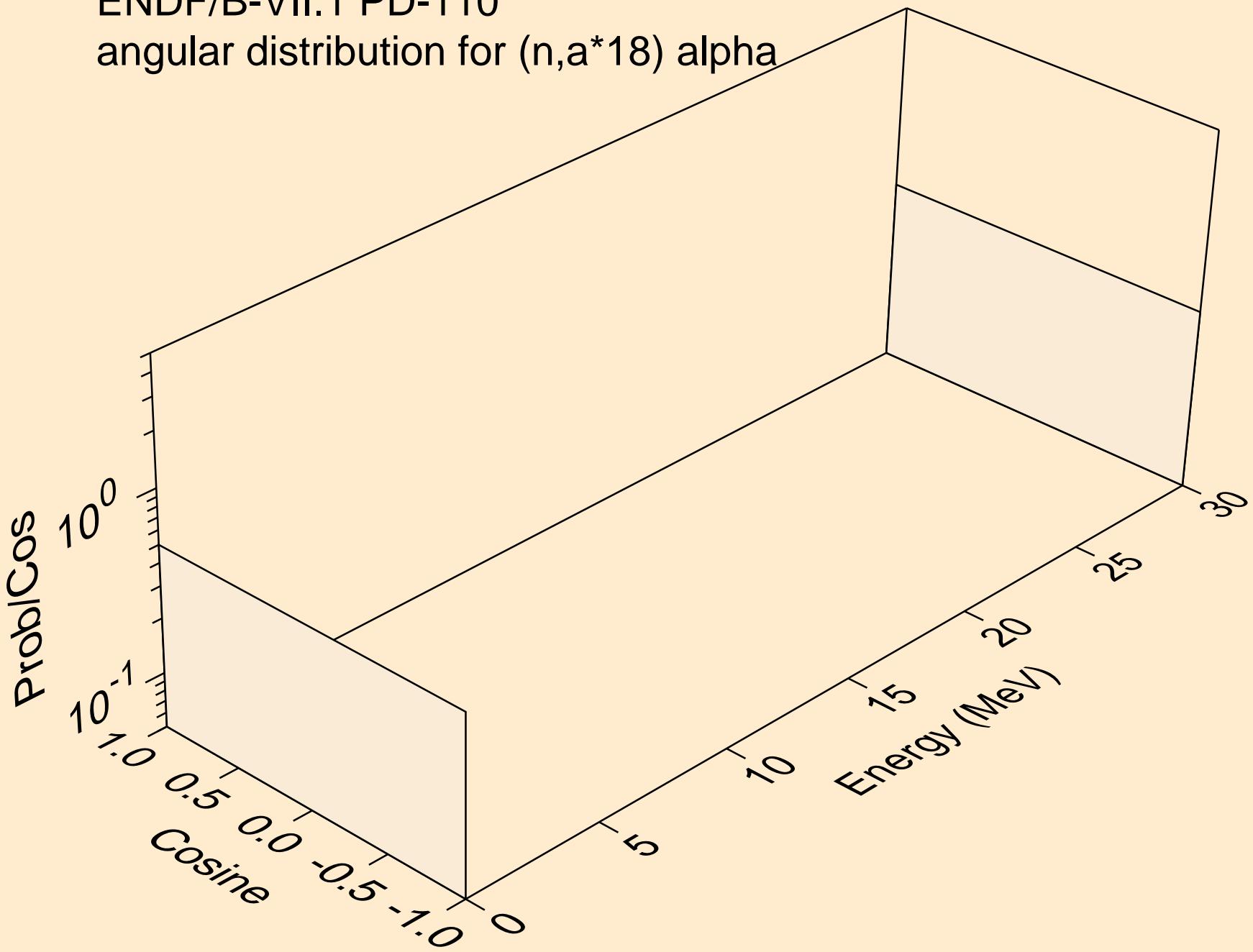
ENDF/B-VII.1 PD-110  
angular distribution for (n,a\*16) alpha



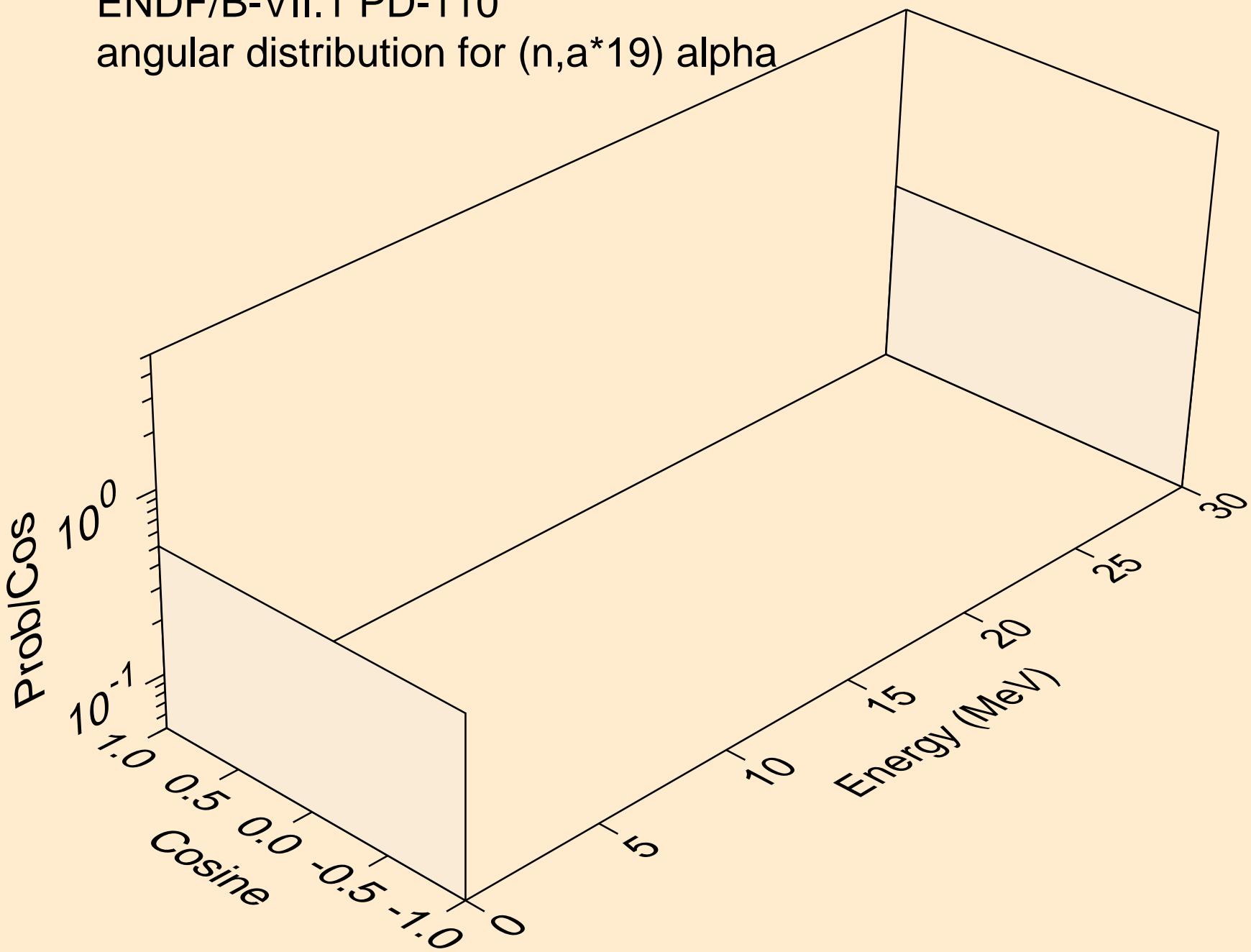
ENDF/B-VII.1 PD-110  
angular distribution for ( $n,a^*17$ ) alpha



ENDF/B-VII.1 PD-110  
angular distribution for (n,a\*18) alpha



ENDF/B-VII.1 PD-110  
angular distribution for (n,a\*19) alpha



ENDF/B-VII.1 PD-110  
alphas from  $(n, a^* c)$

