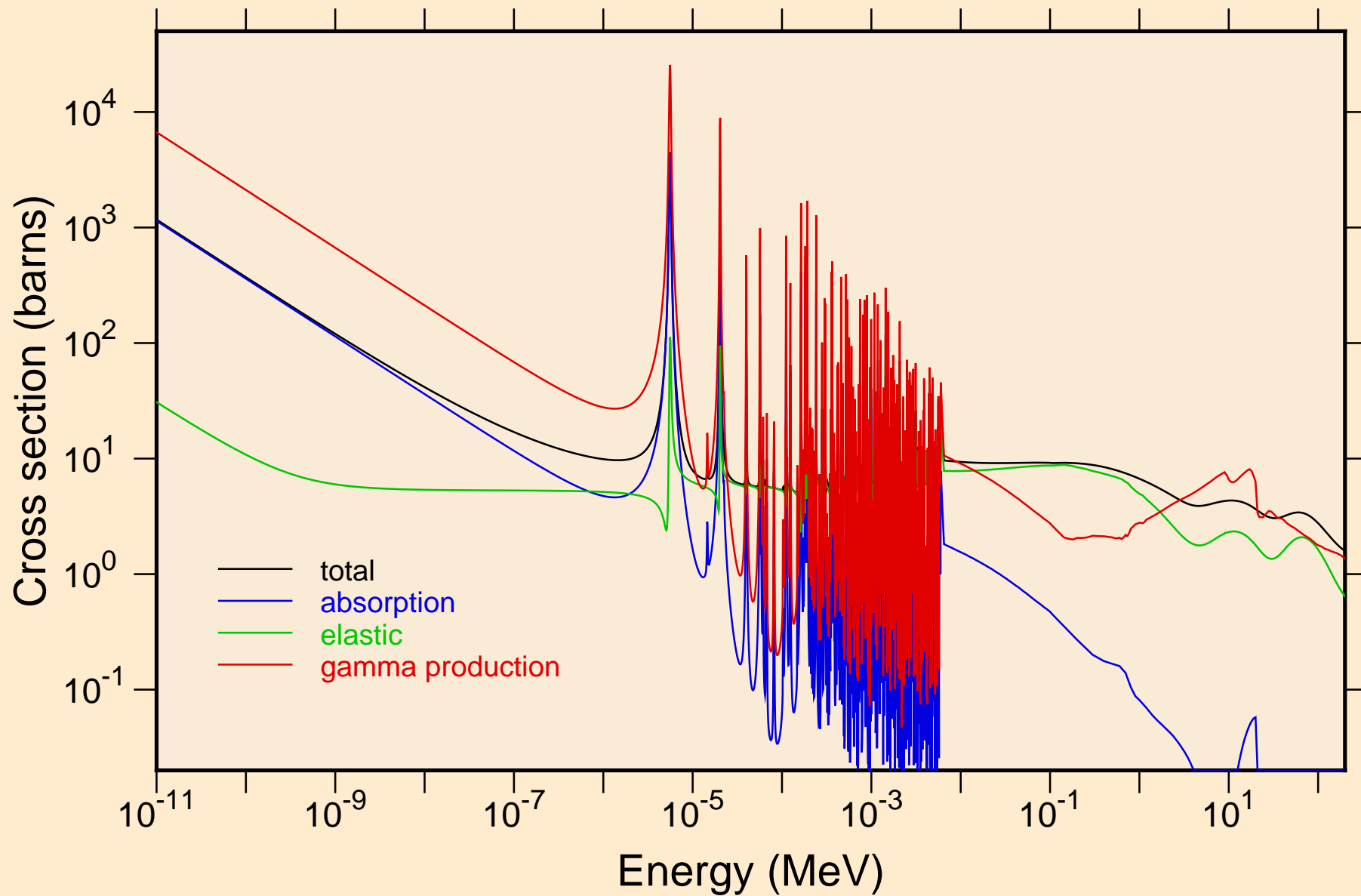
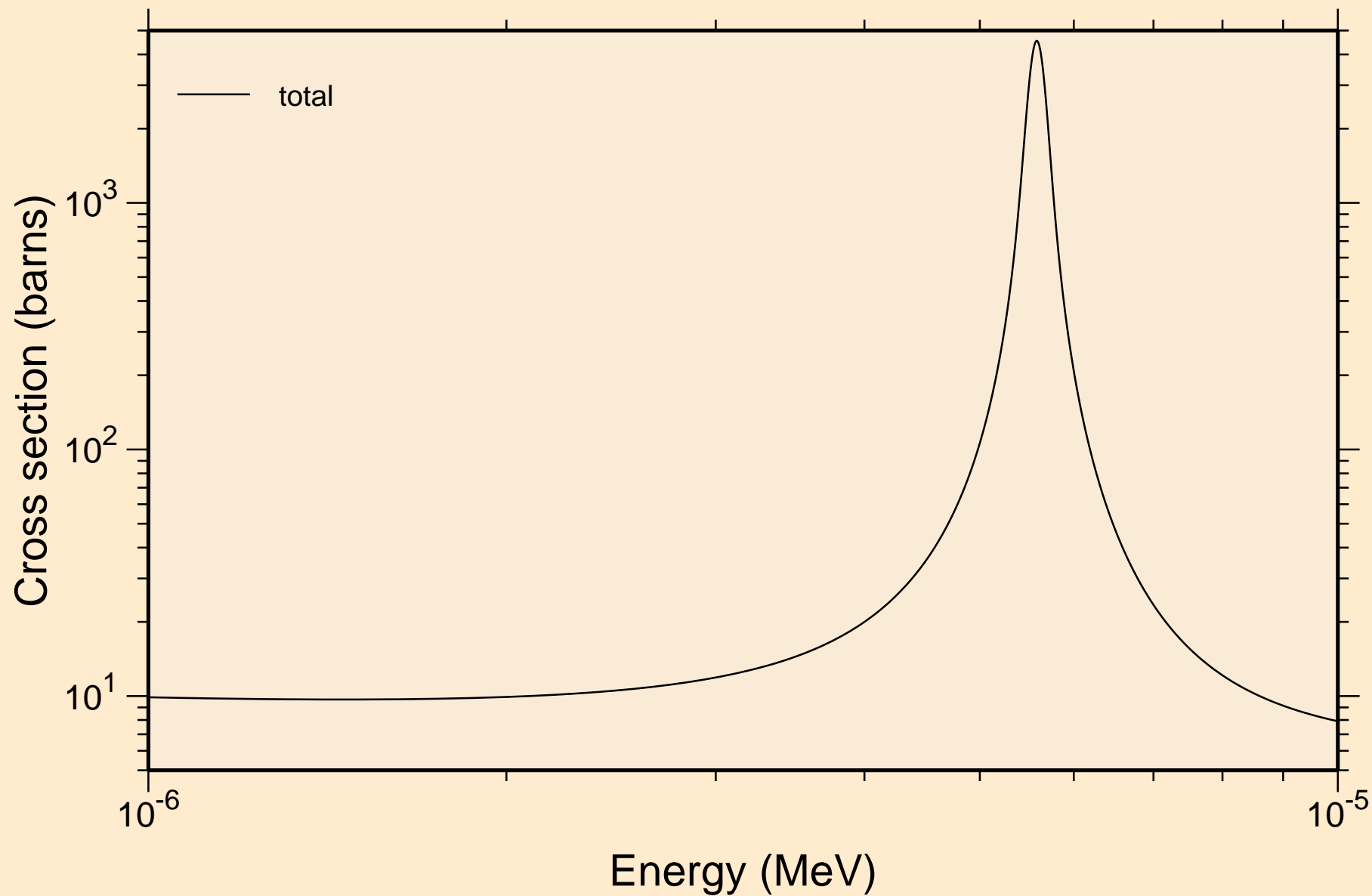


# JEFF-3.1 TC-99

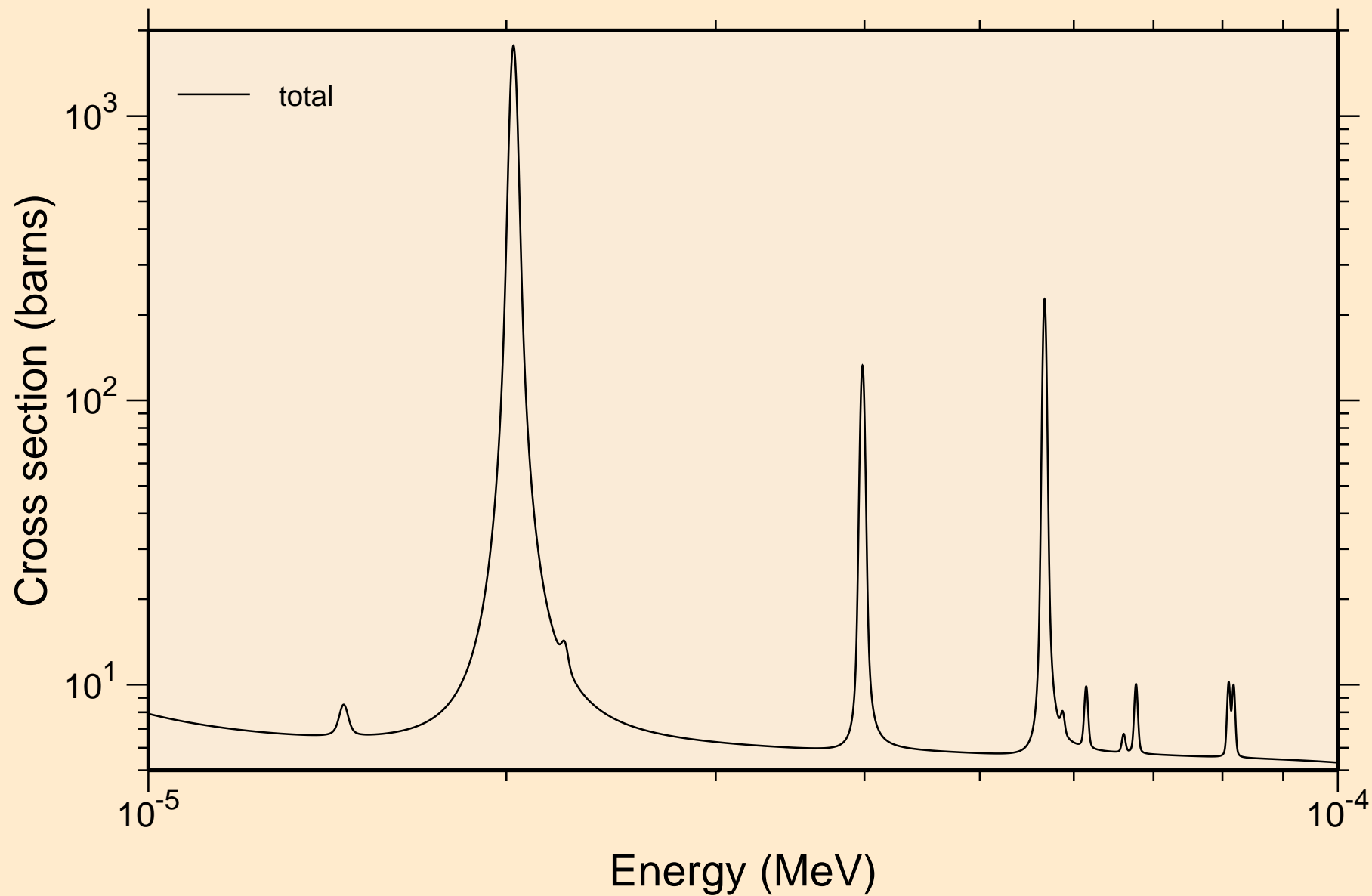
## Principal cross sections



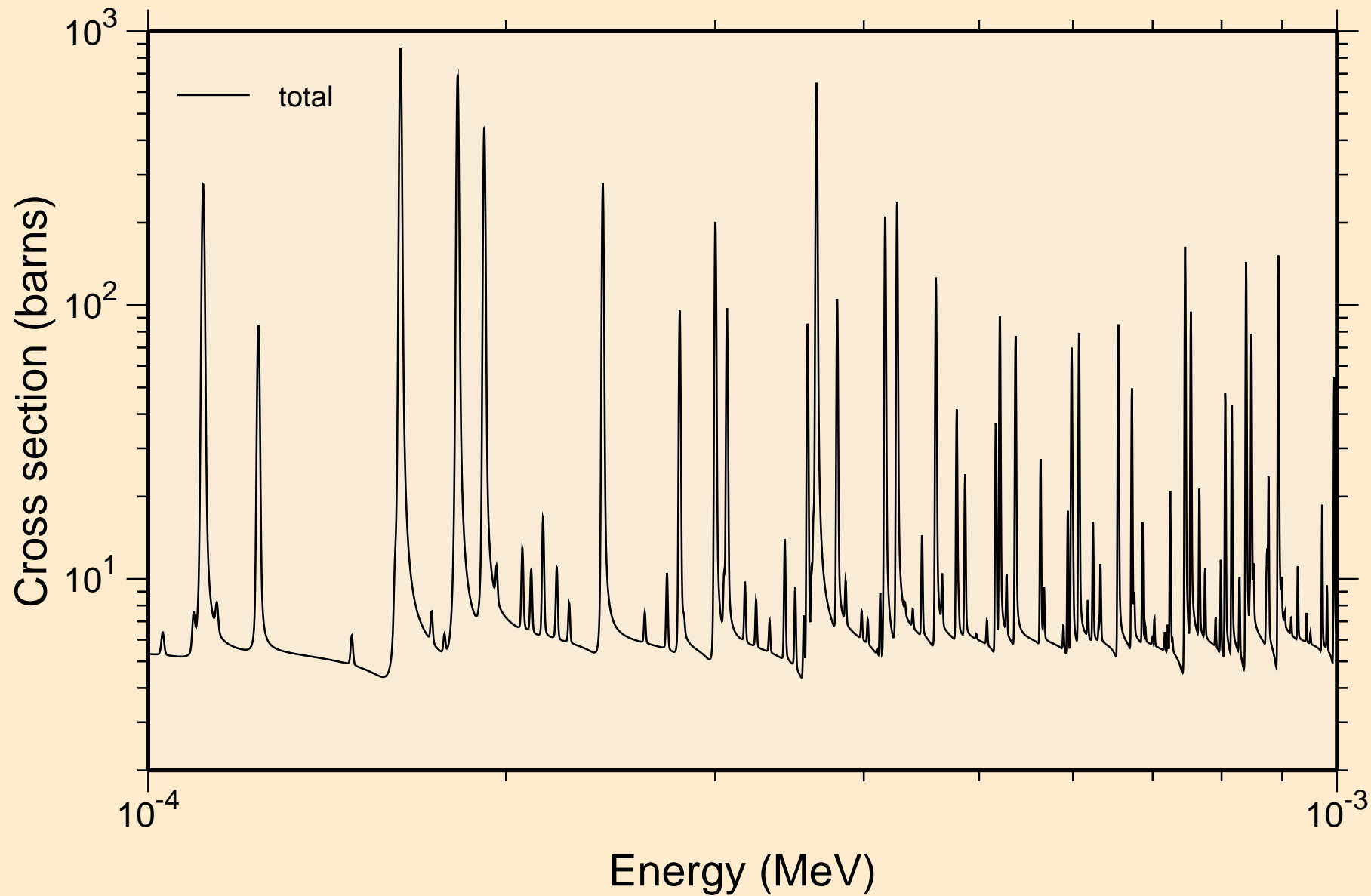
JEFF-3.1 TC-99  
resonance total cross section



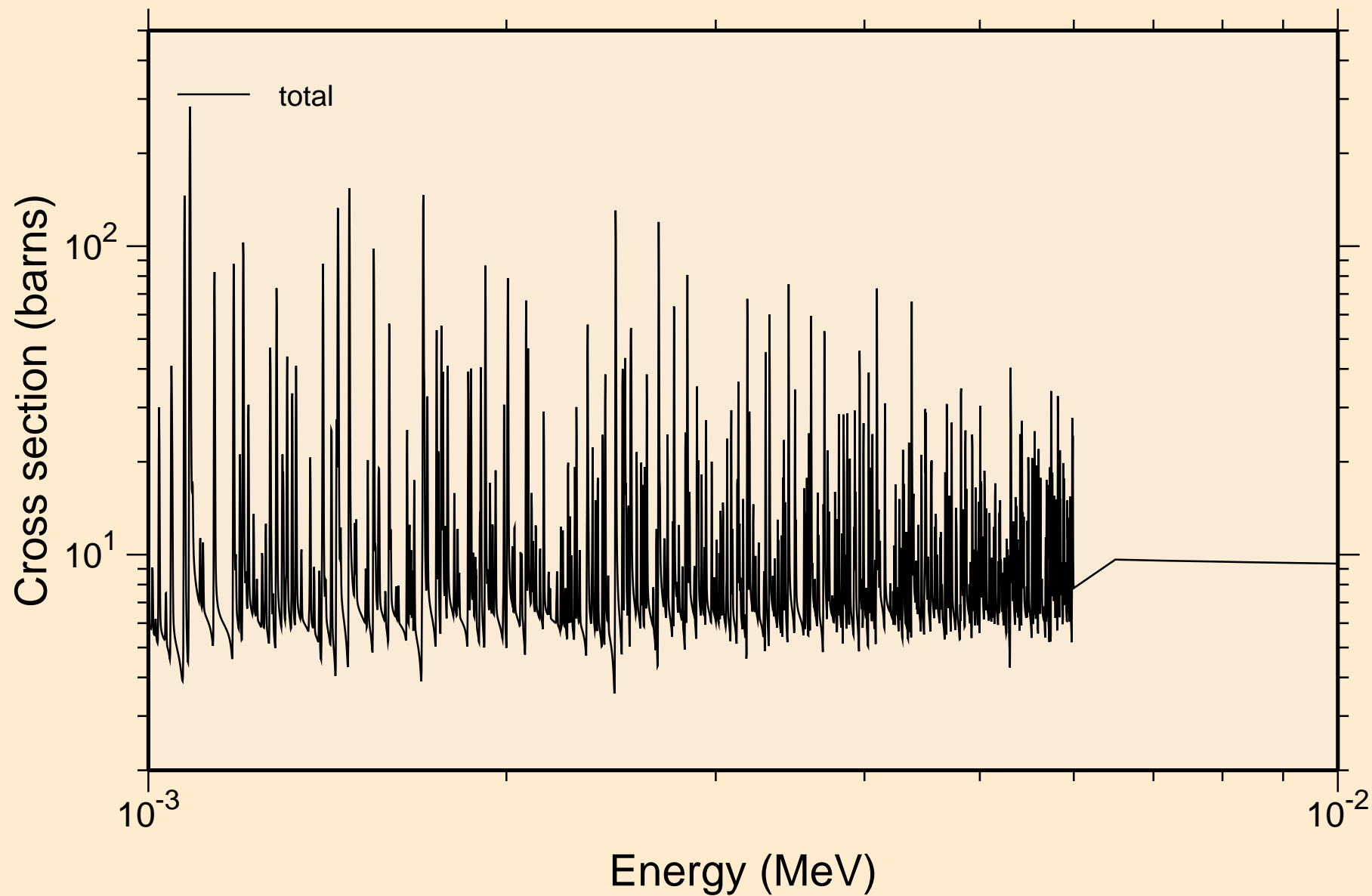
JEFF-3.1 TC-99  
resonance total cross section



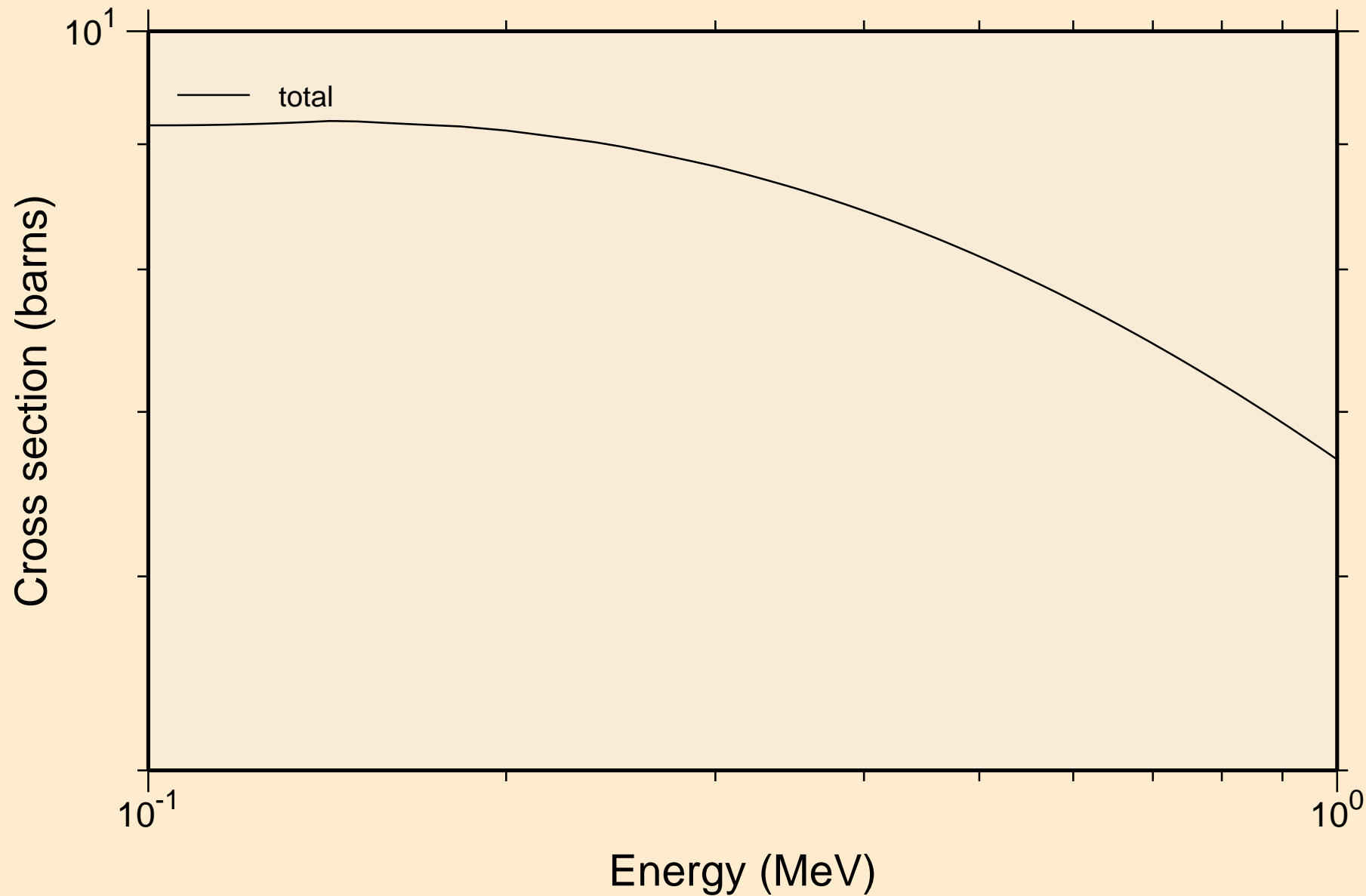
JEFF-3.1 TC-99  
resonance total cross section



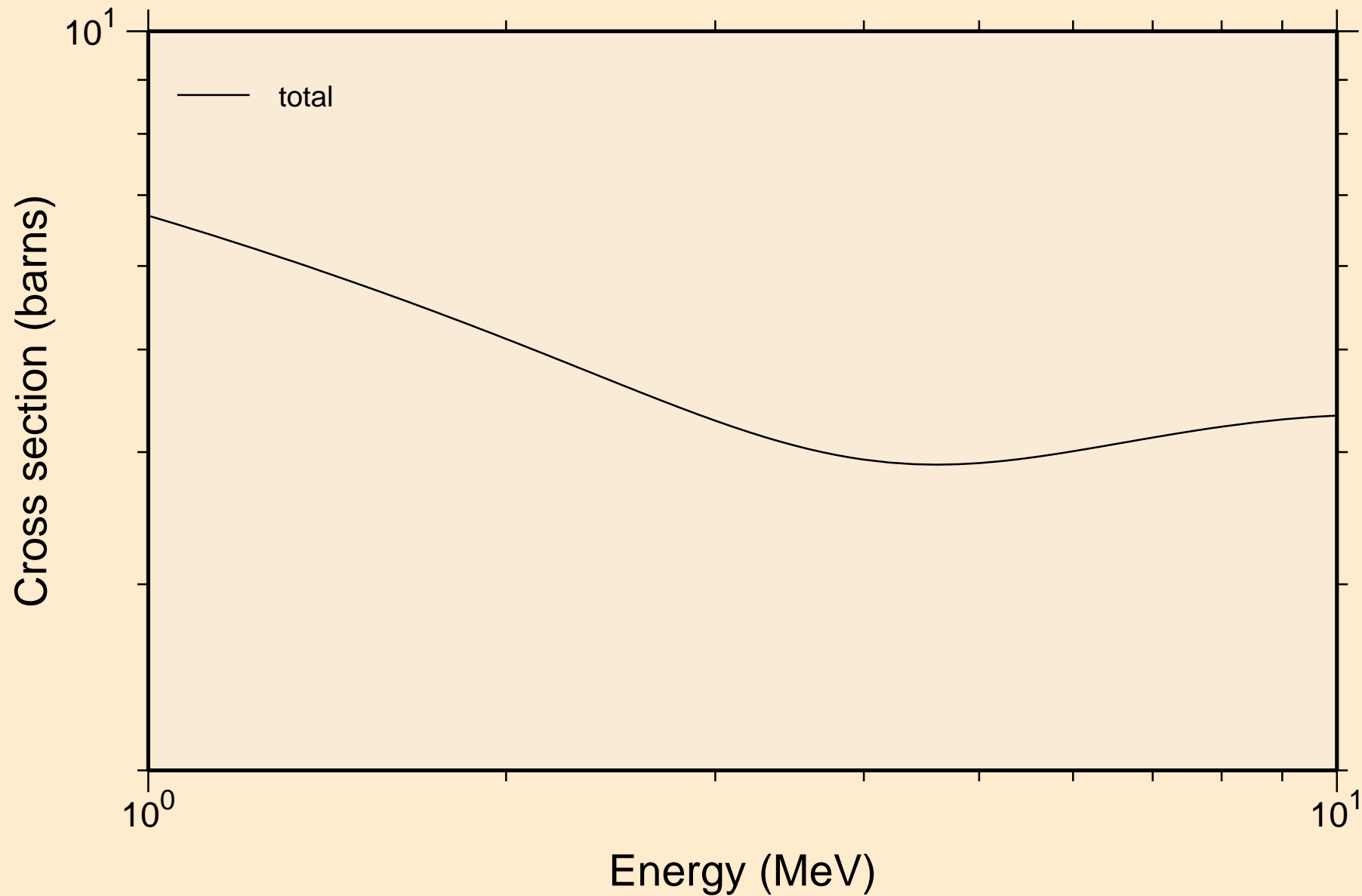
JEFF-3.1 TC-99  
resonance total cross section



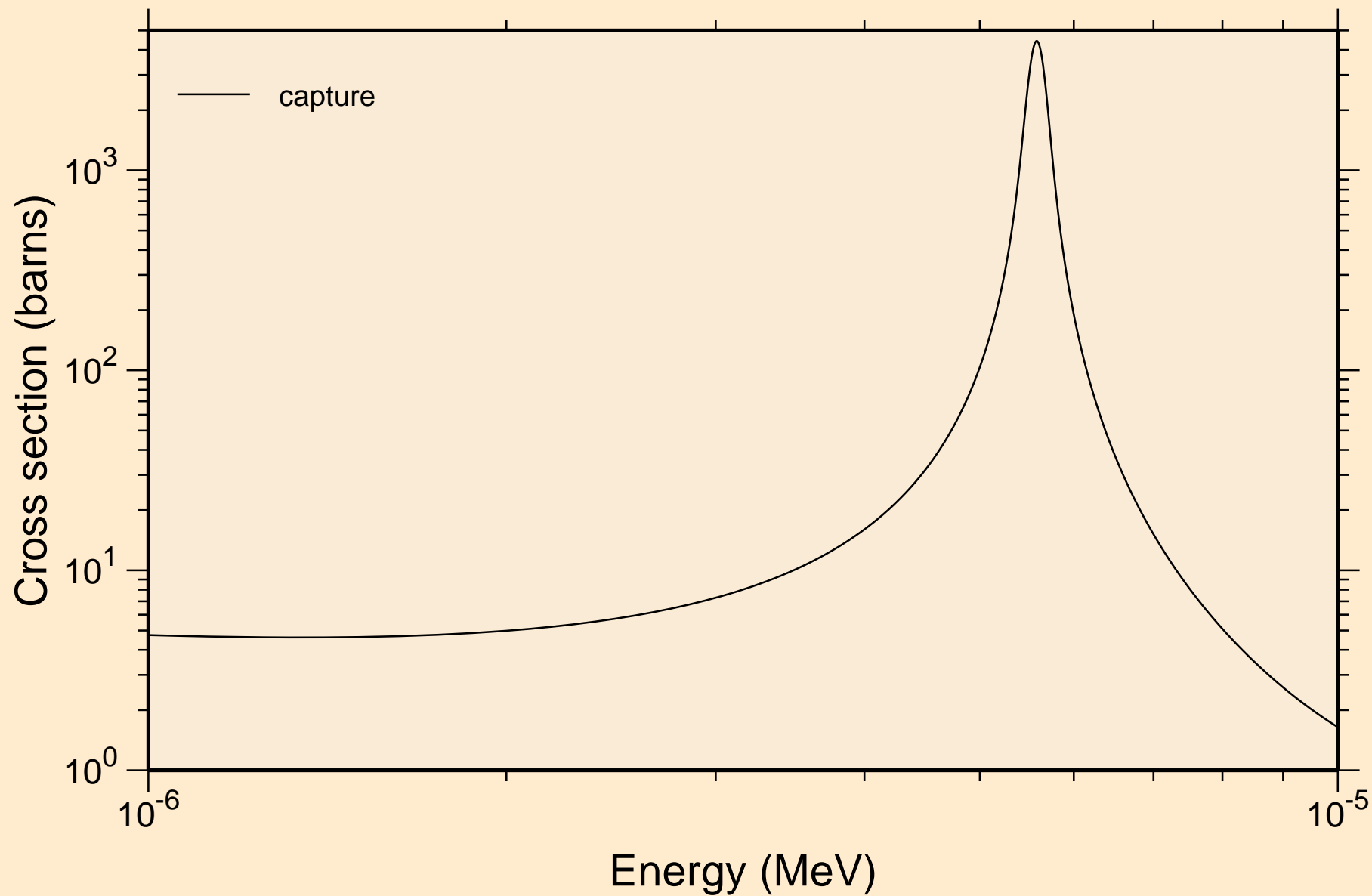
JEFF-3.1 TC-99  
resonance total cross section



JEFF-3.1 TC-99  
resonance total cross section

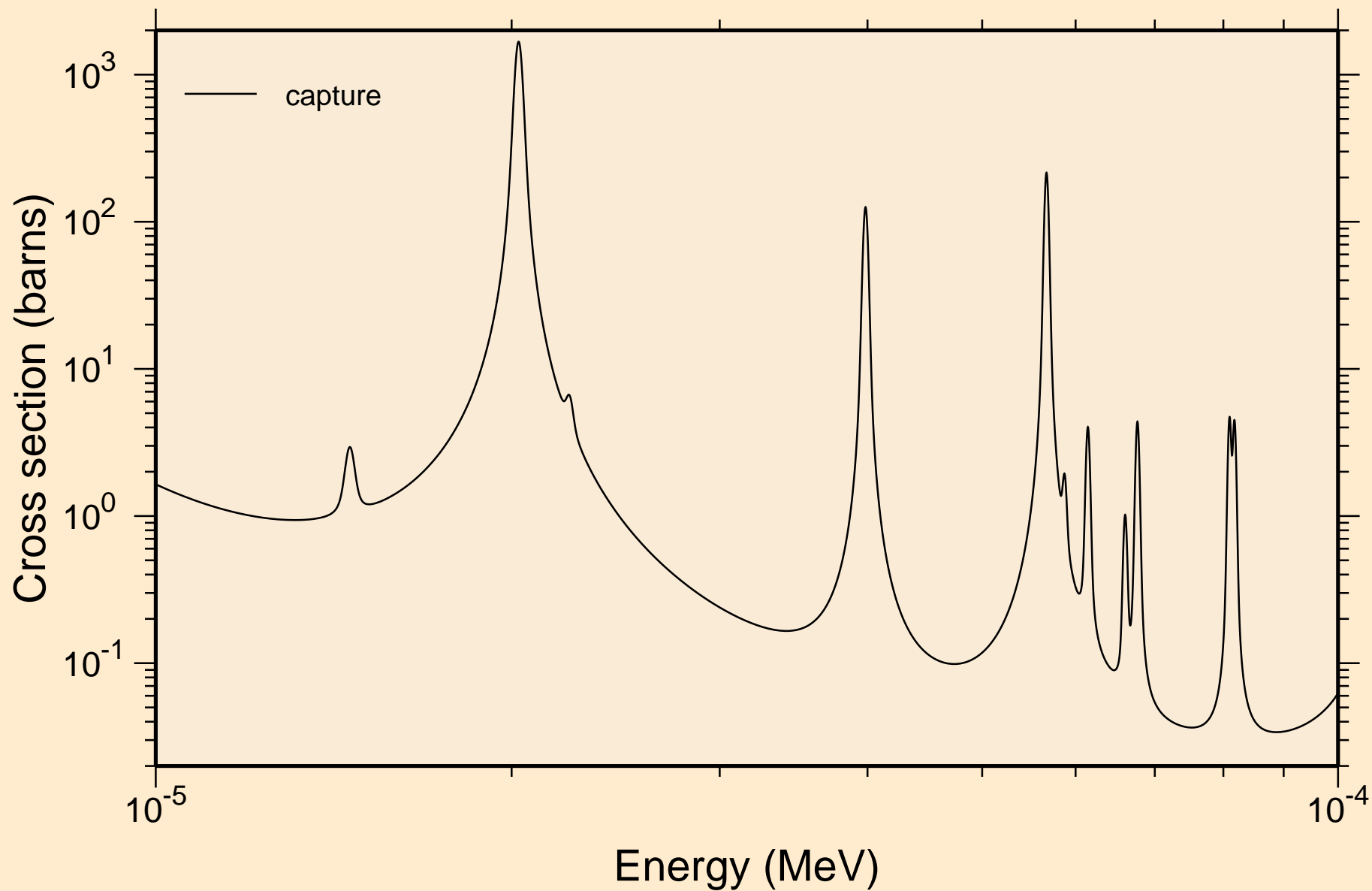


JEFF-3.1 TC-99  
resonance absorption cross sections



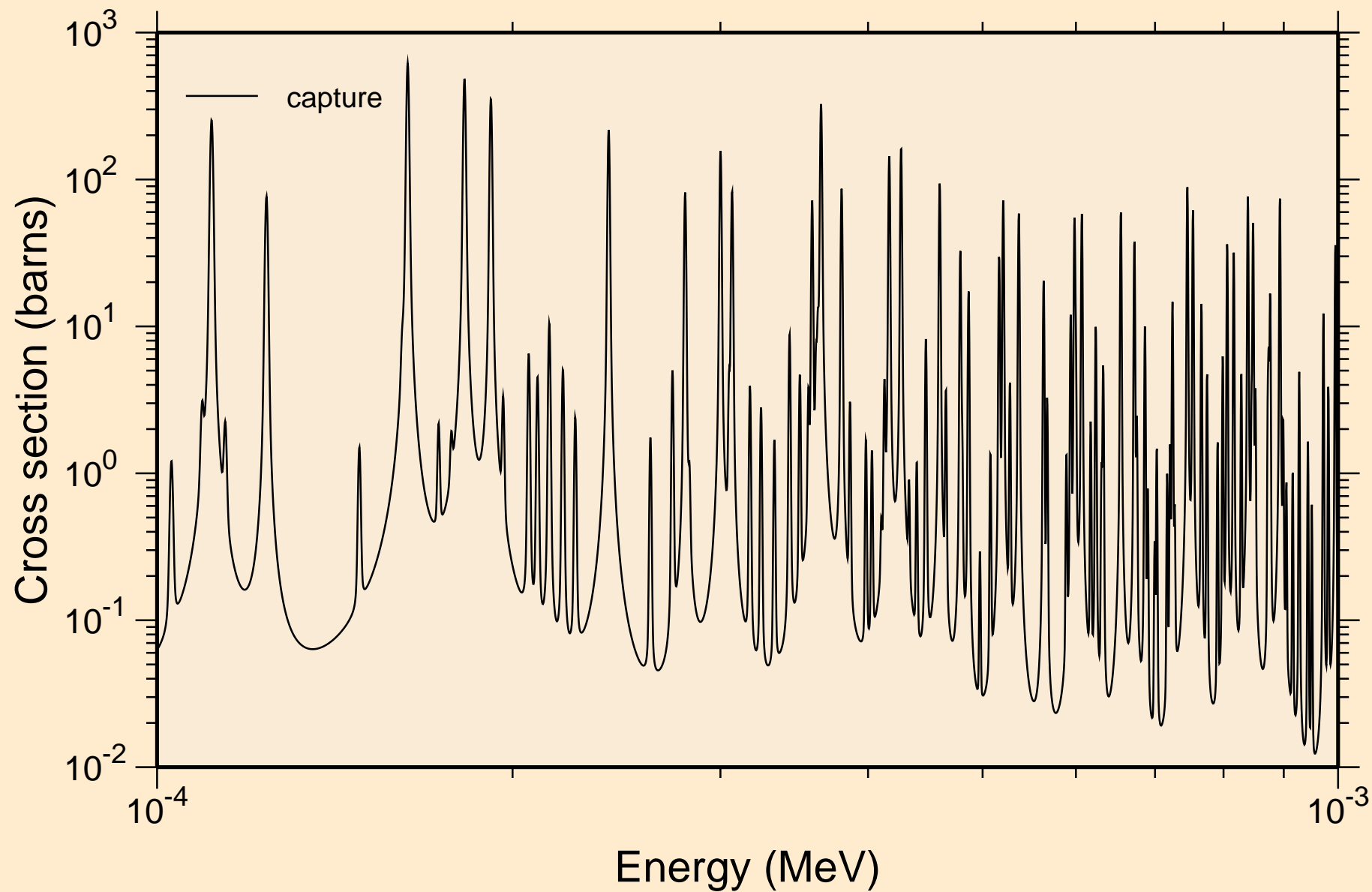


# JEFF-3.1 TC-99 resonance absorption cross sections

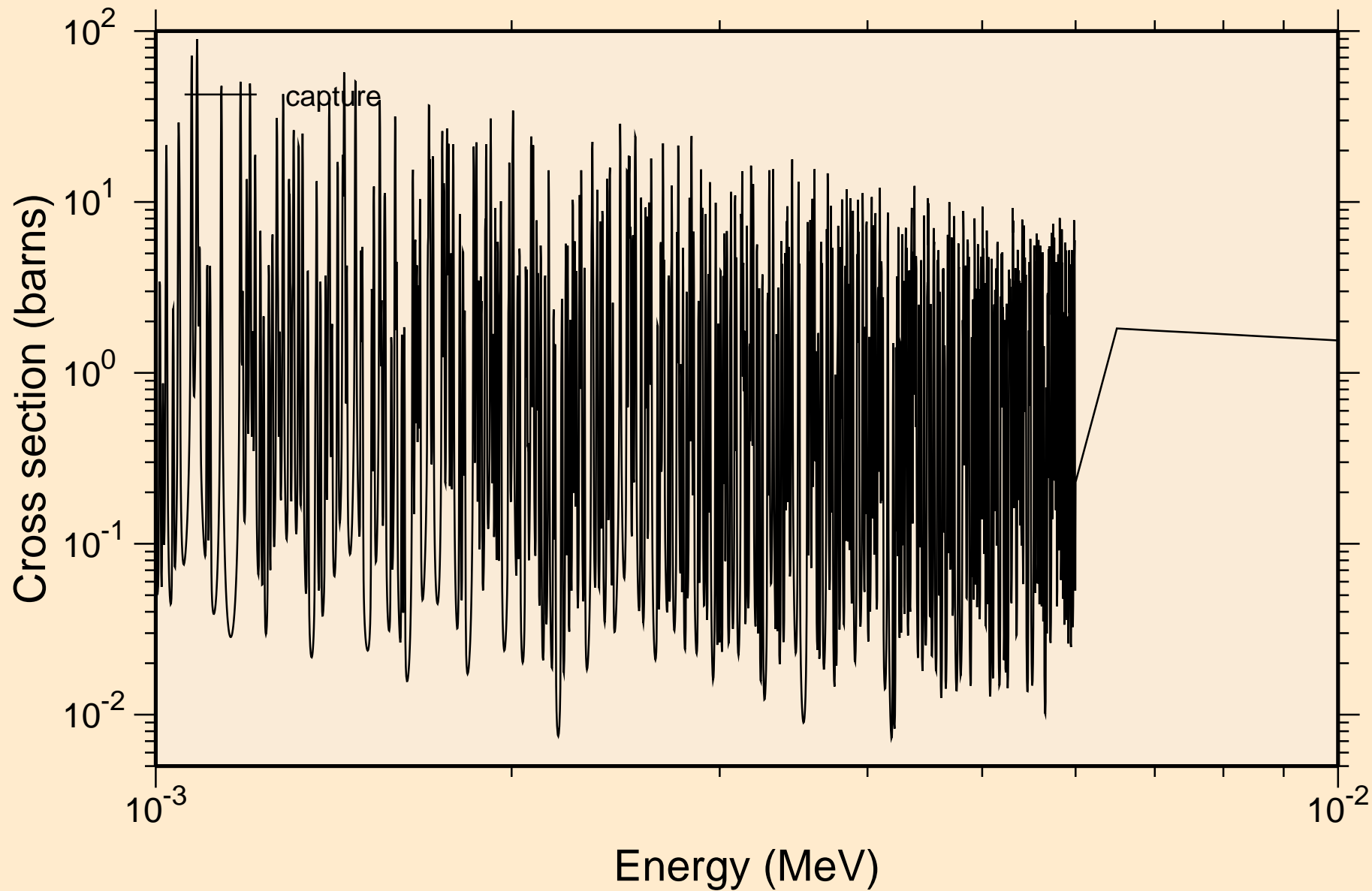


# JEFF-3.1 TC-99

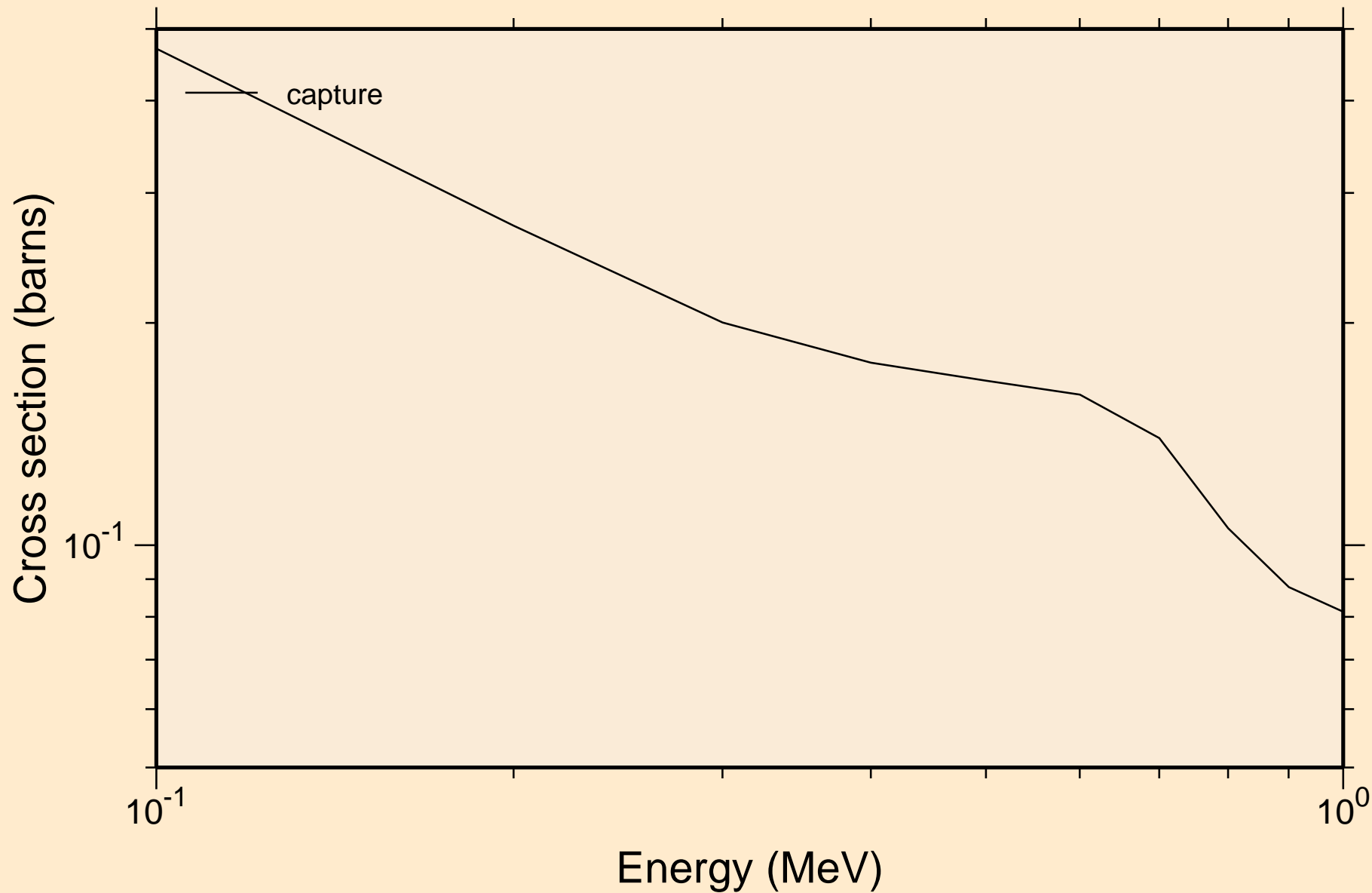
## resonance absorption cross sections



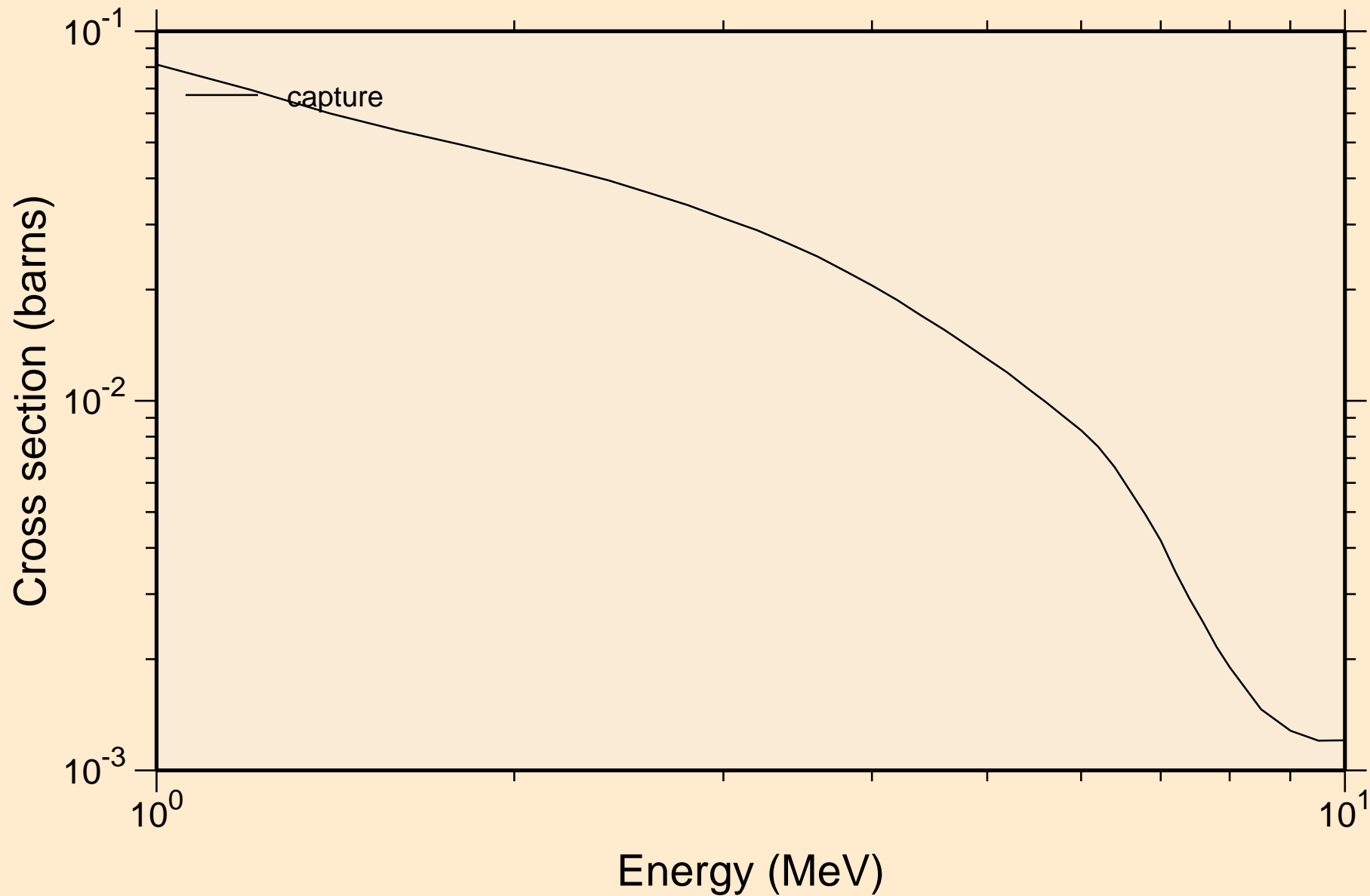
JEFF-3.1 TC-99  
resonance absorption cross sections



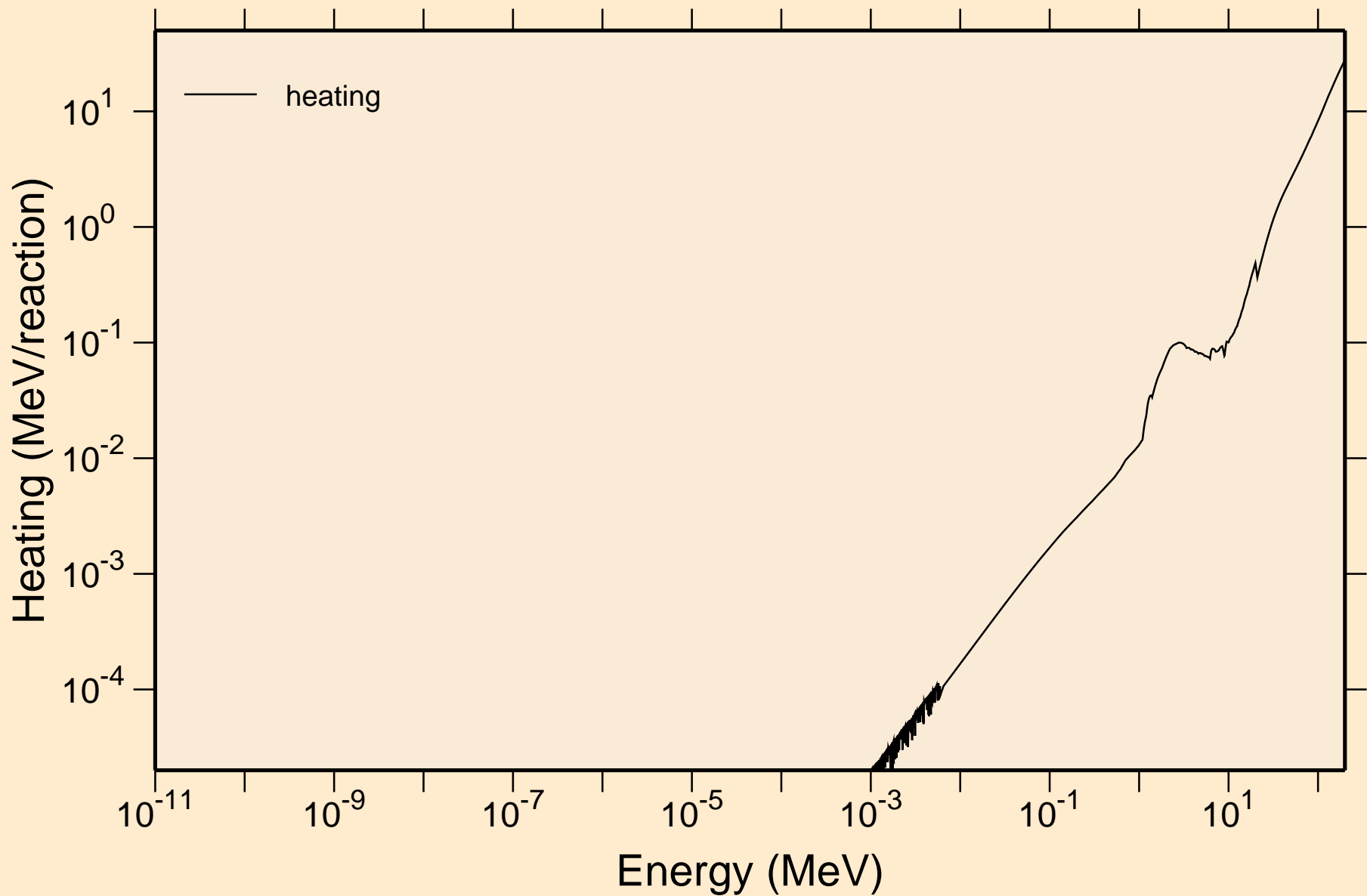
JEFF-3.1 TC-99  
resonance absorption cross sections



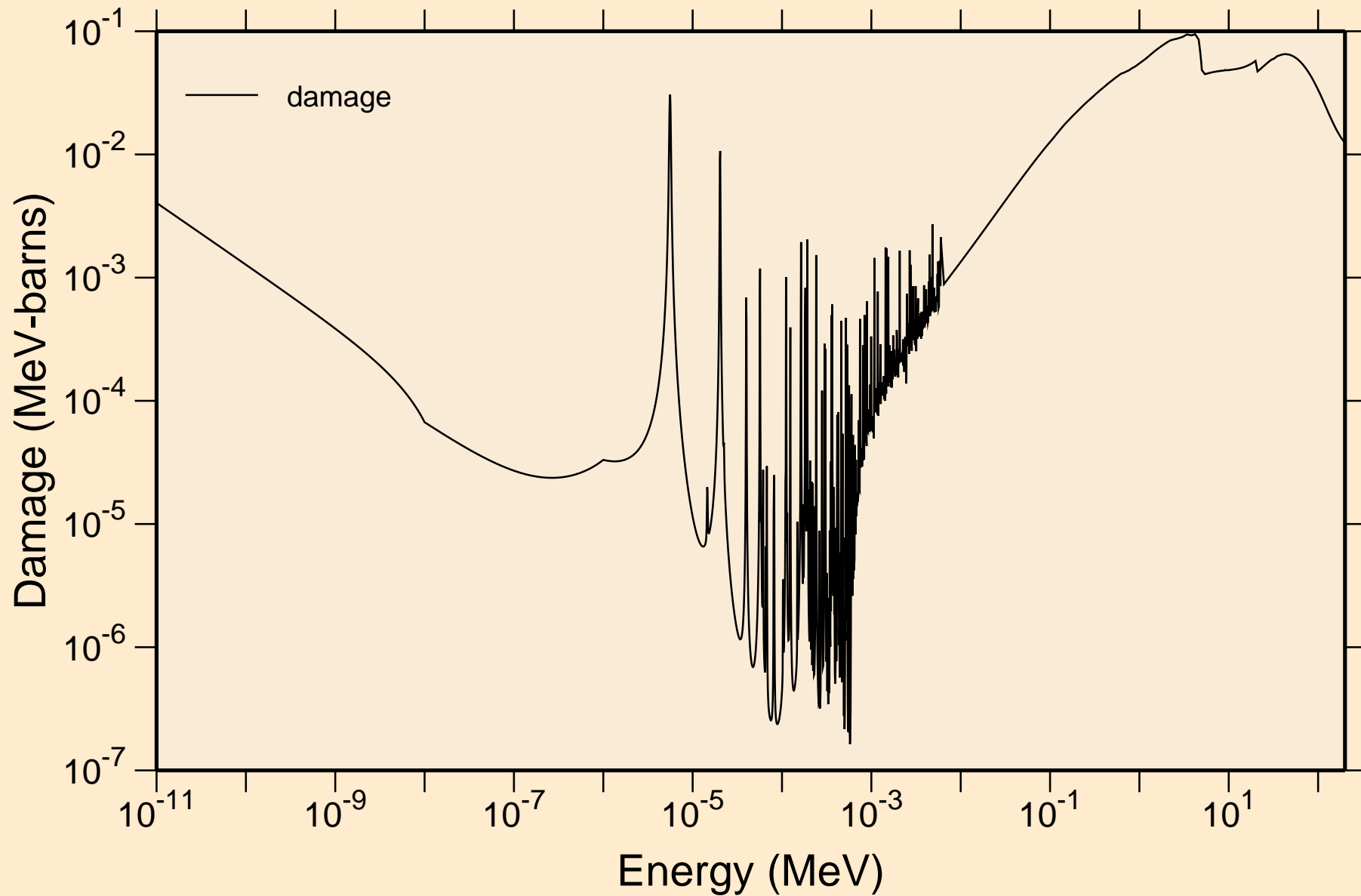
JEFF-3.1 TC-99  
resonance absorption cross sections



# JEFF-3.1 TC-99 Heating

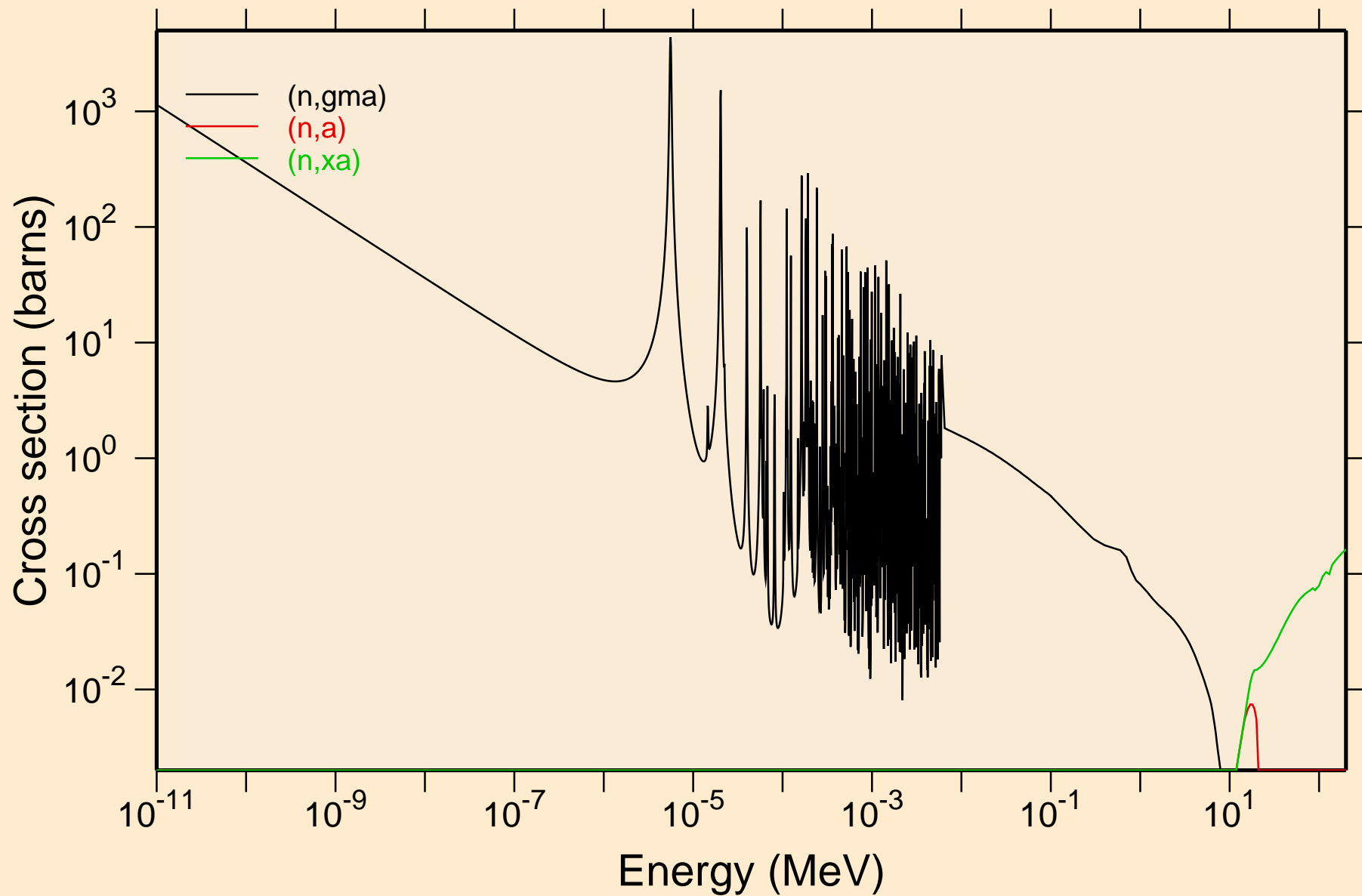


# JEFF-3.1 TC-99 Damage



# JEFF-3.1 TC-99

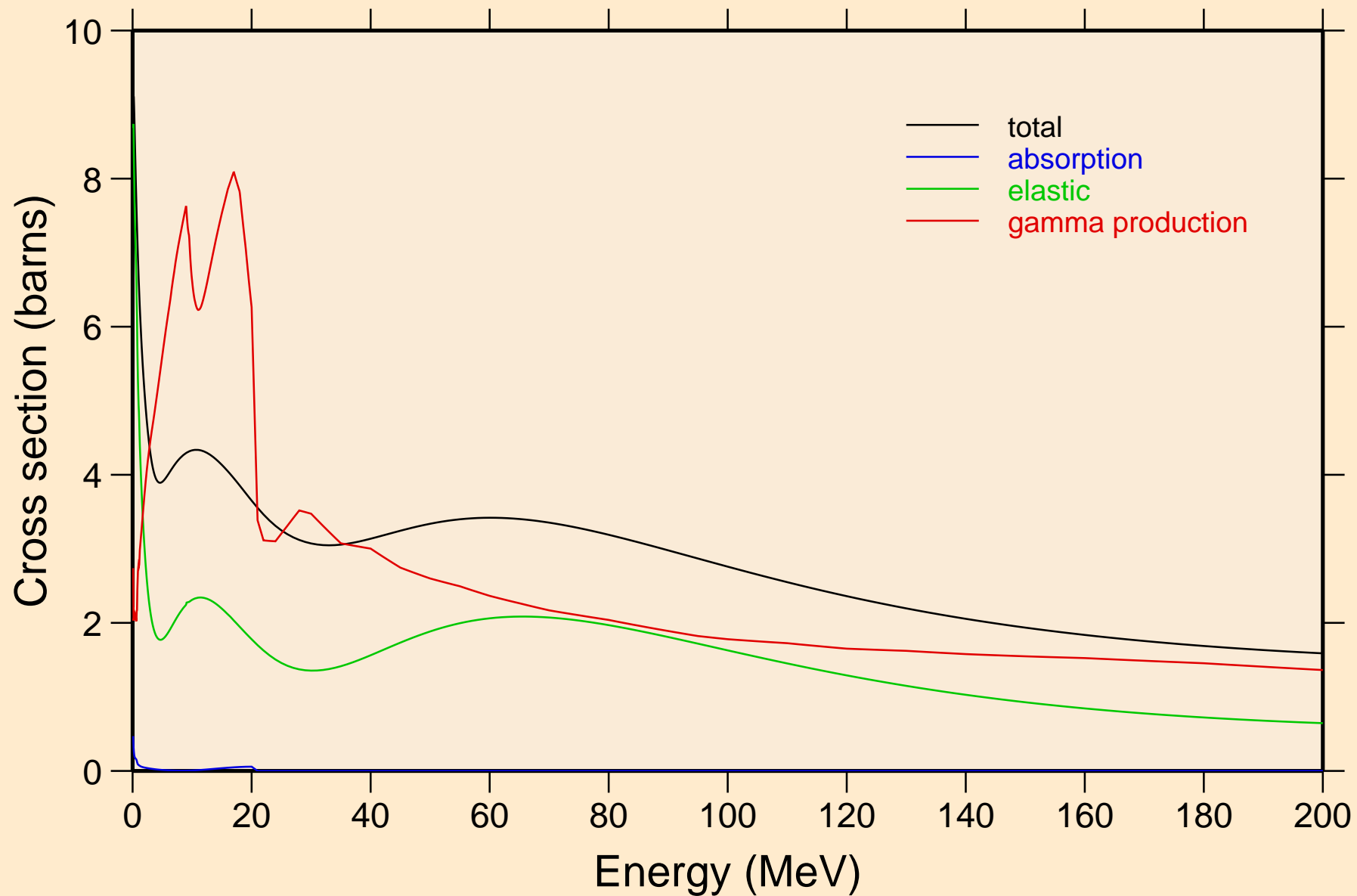
## Non-threshold reactions





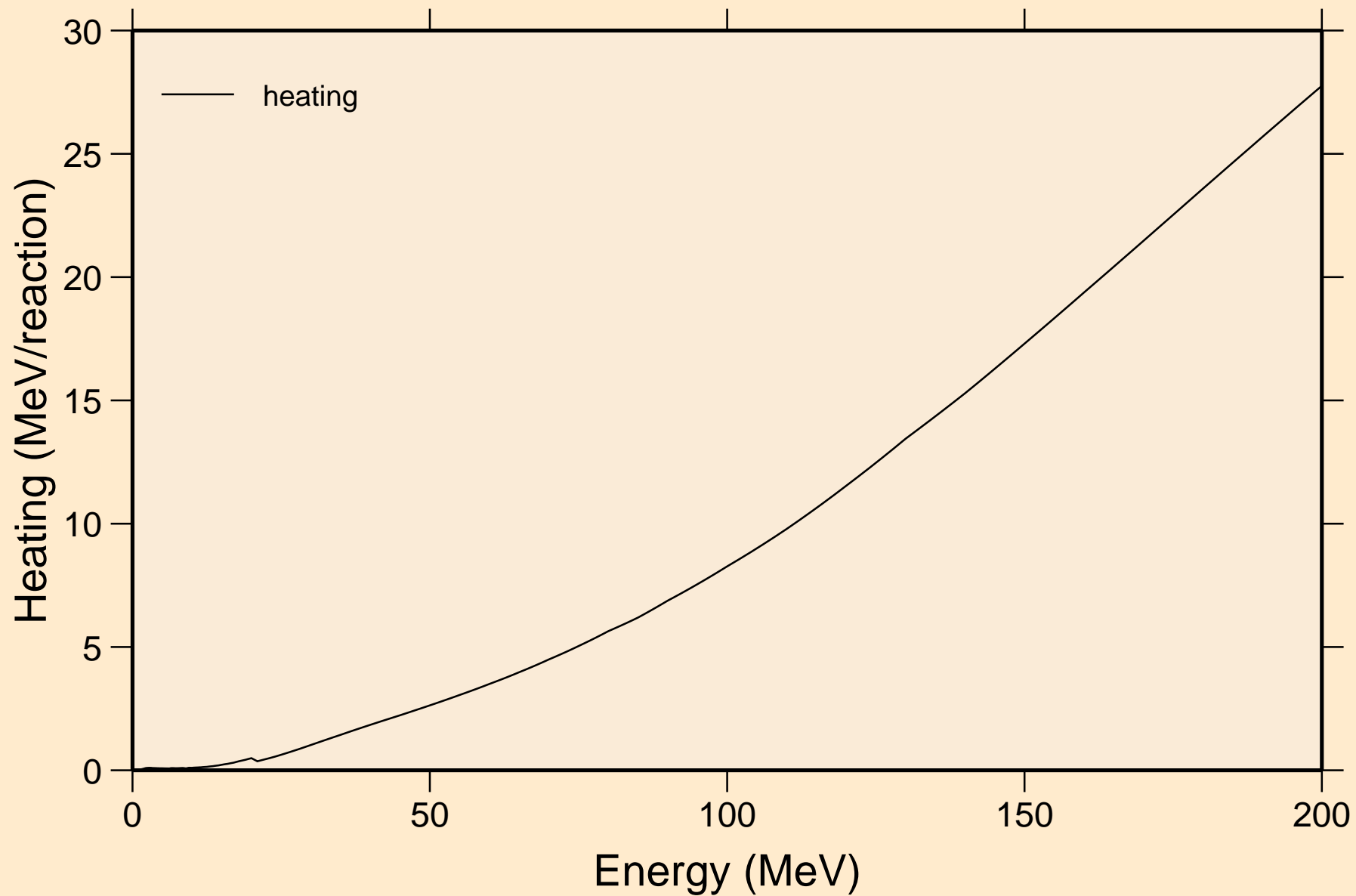
# JEFF-3.1 TC-99

## Principal cross sections

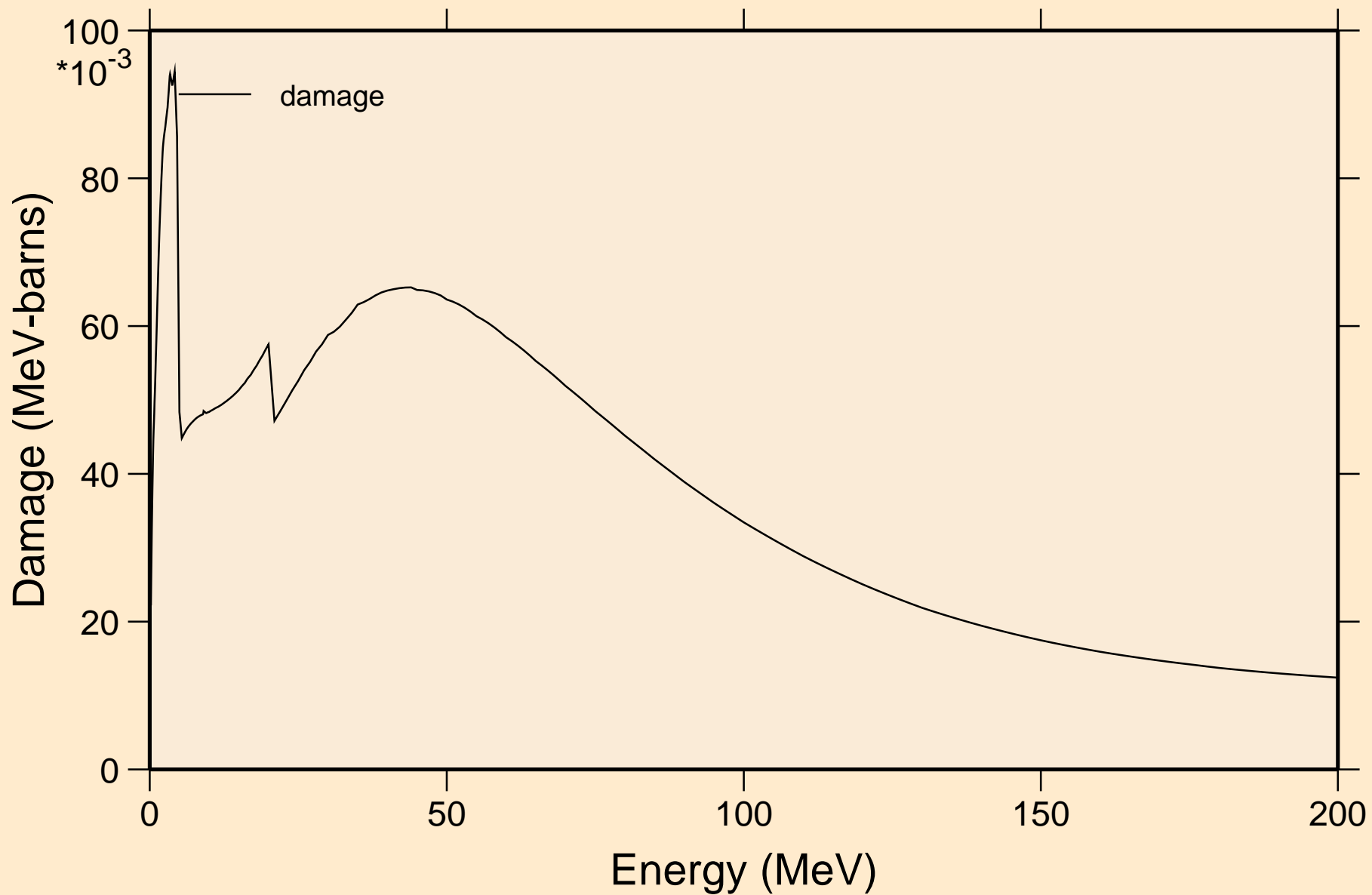


# JEFF-3.1 TC-99

## Heating

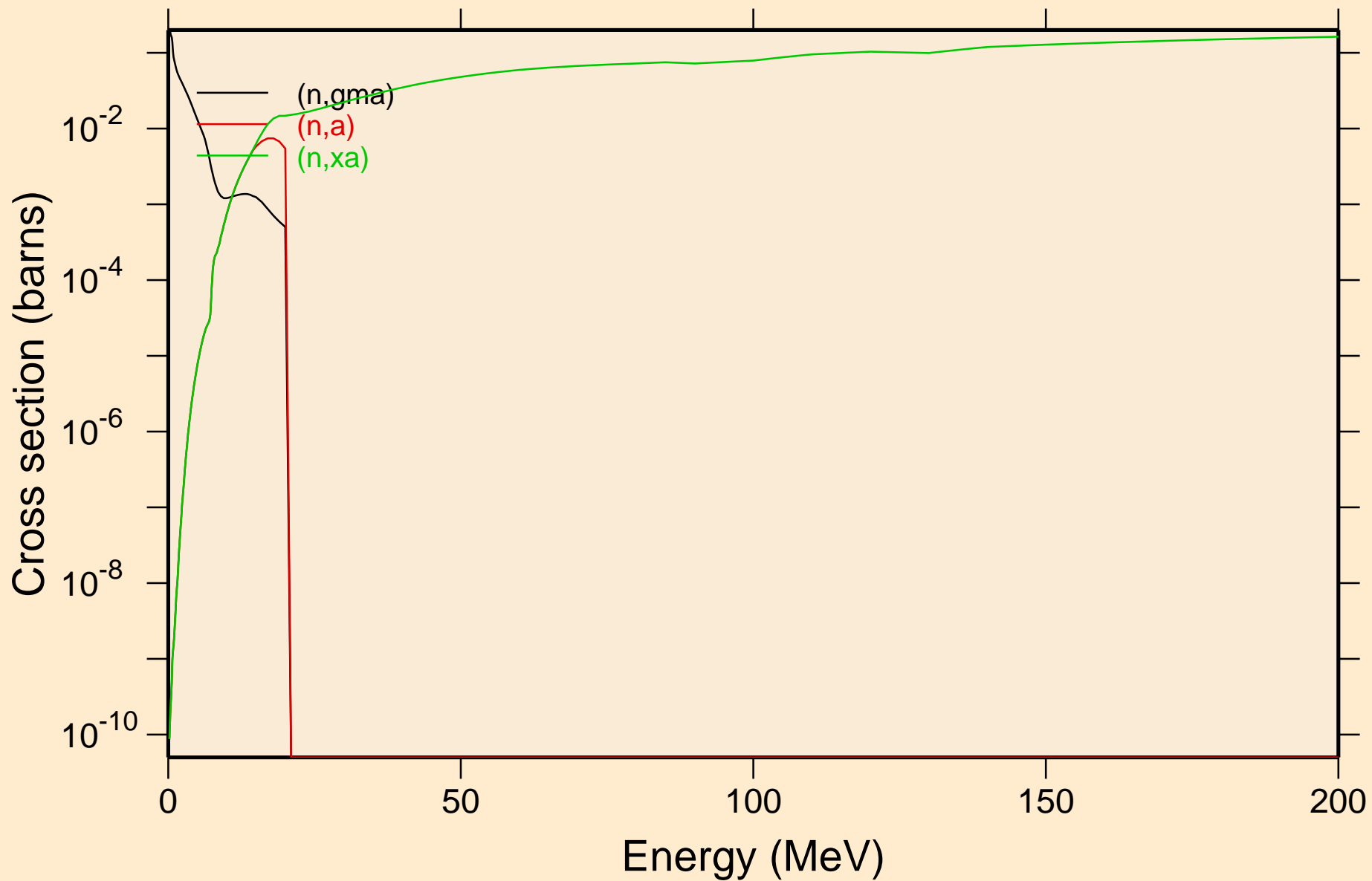


# JEFF-3.1 TC-99 Damage



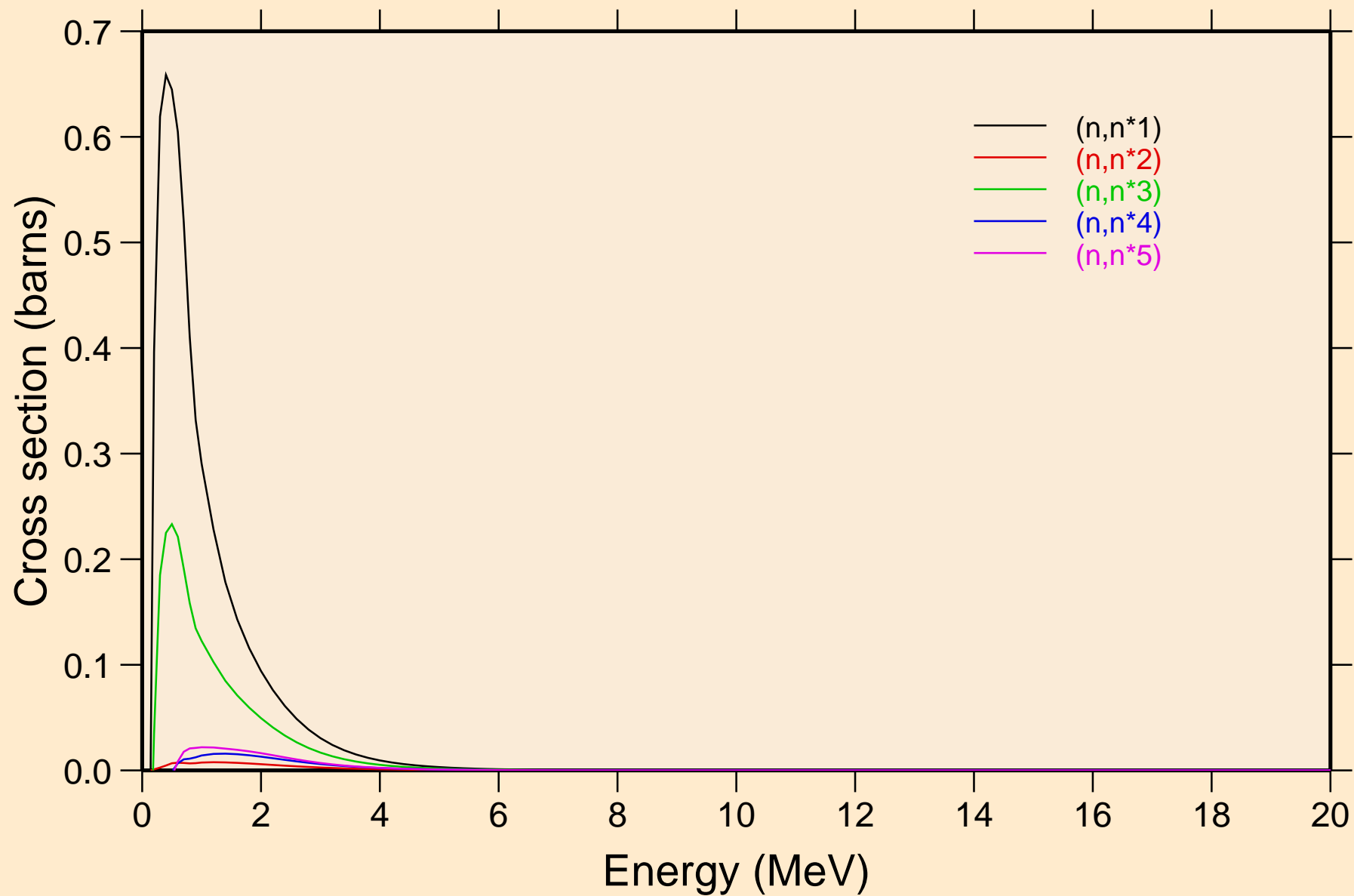
# JEFF-3.1 TC-99

## Non-threshold reactions



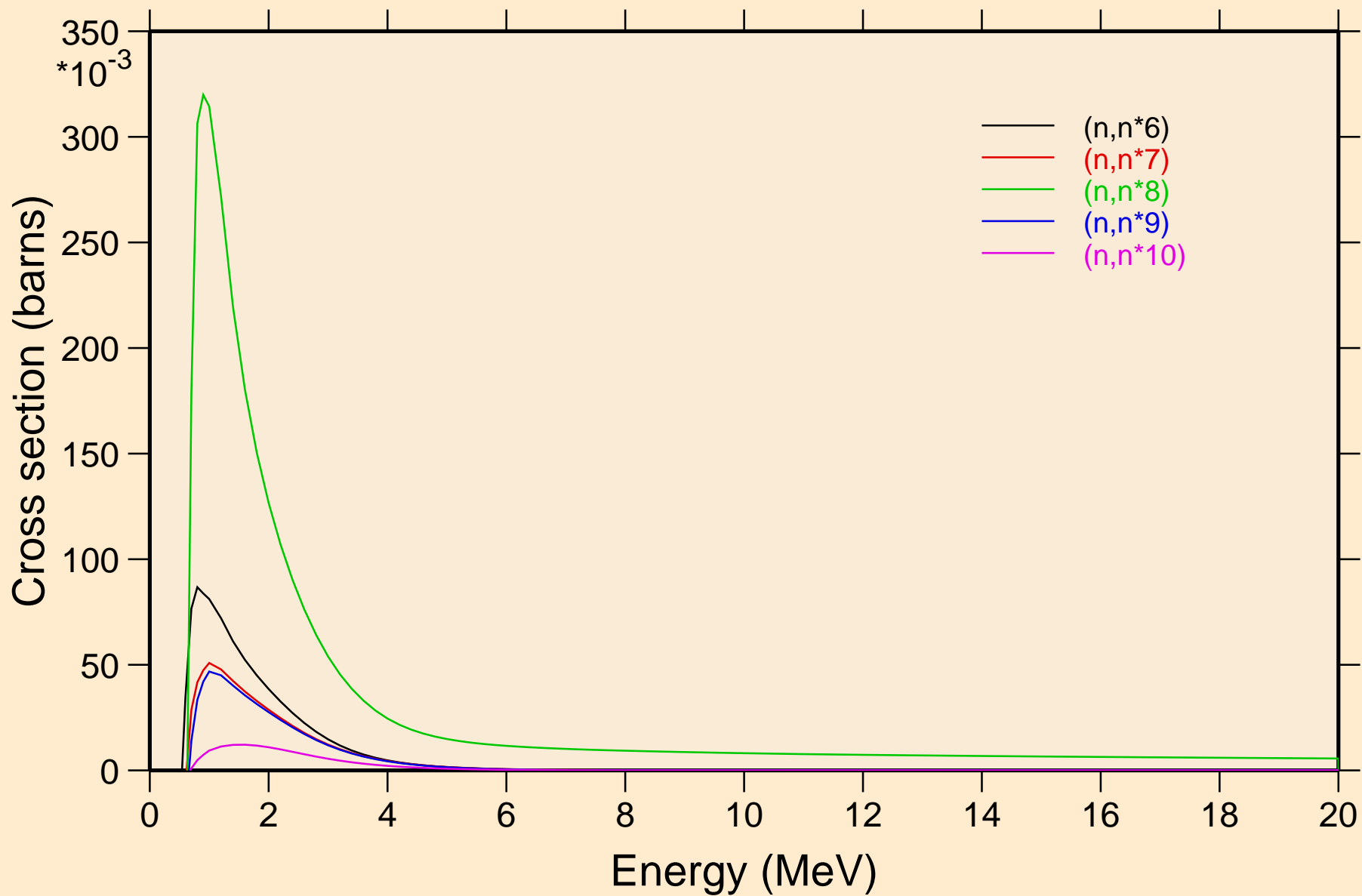
# JEFF-3.1 TC-99

## Inelastic levels

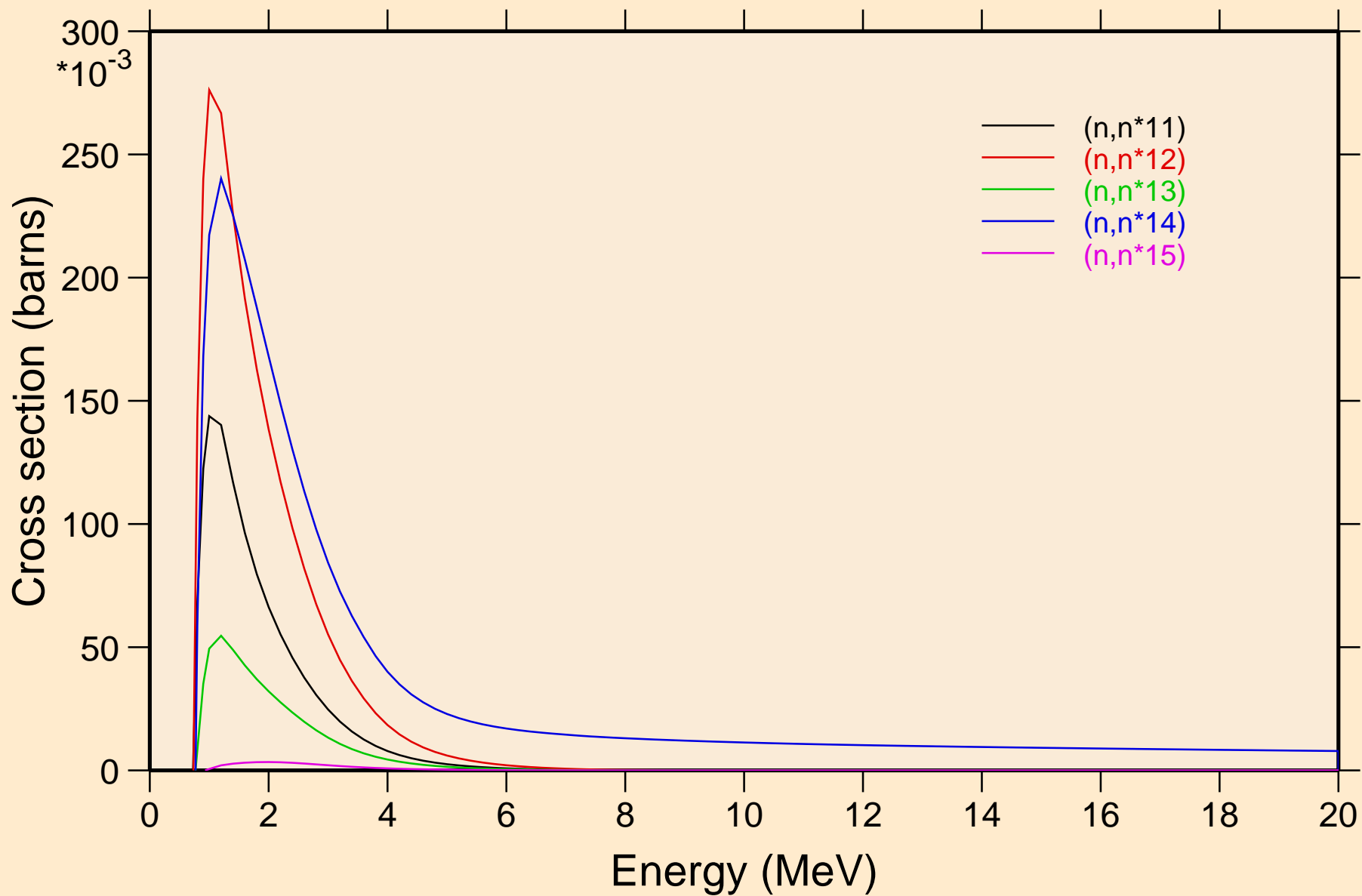


# JEFF-3.1 TC-99

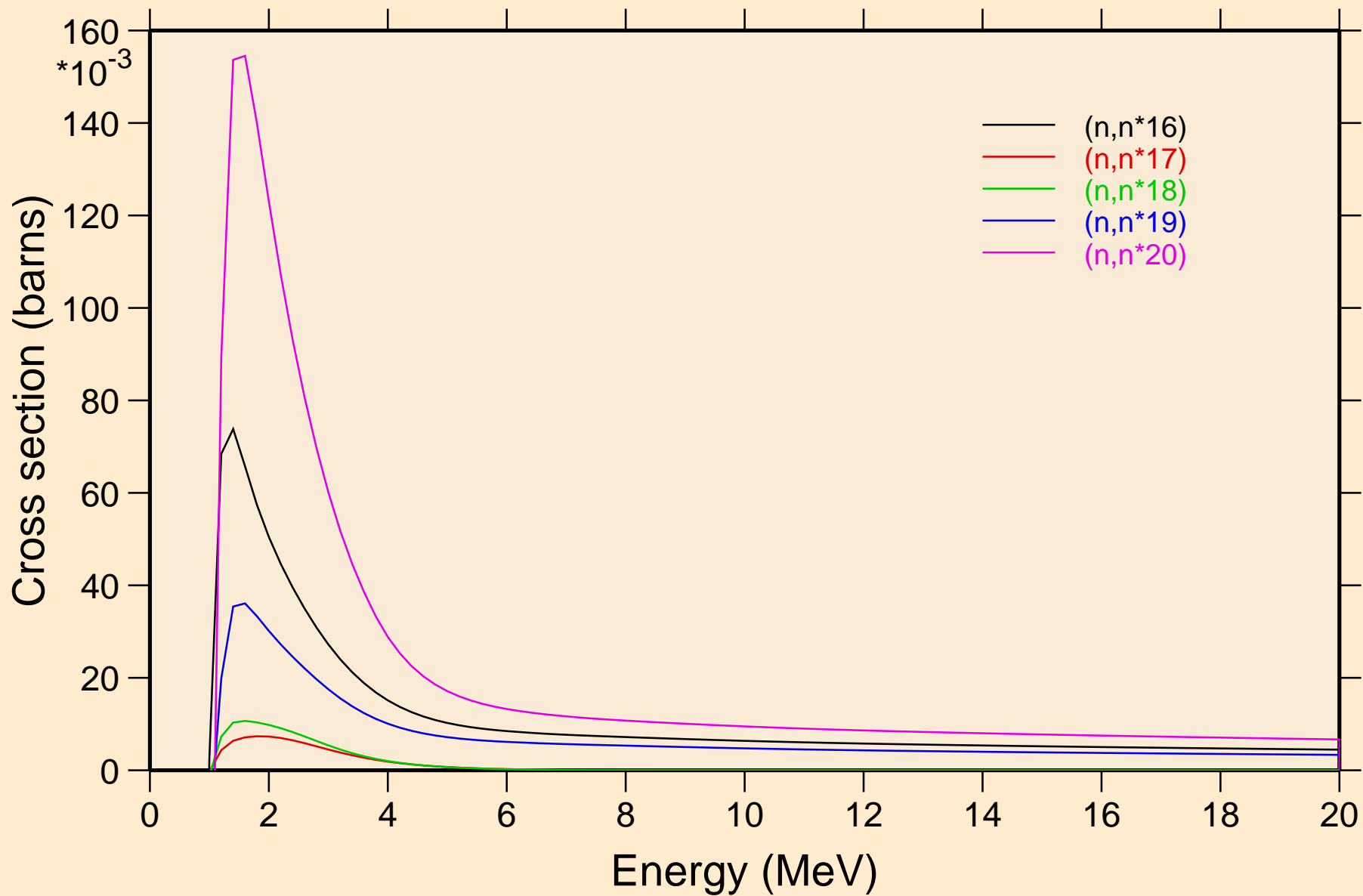
## Inelastic levels



# JEFF-3.1 TC-99 Inelastic levels



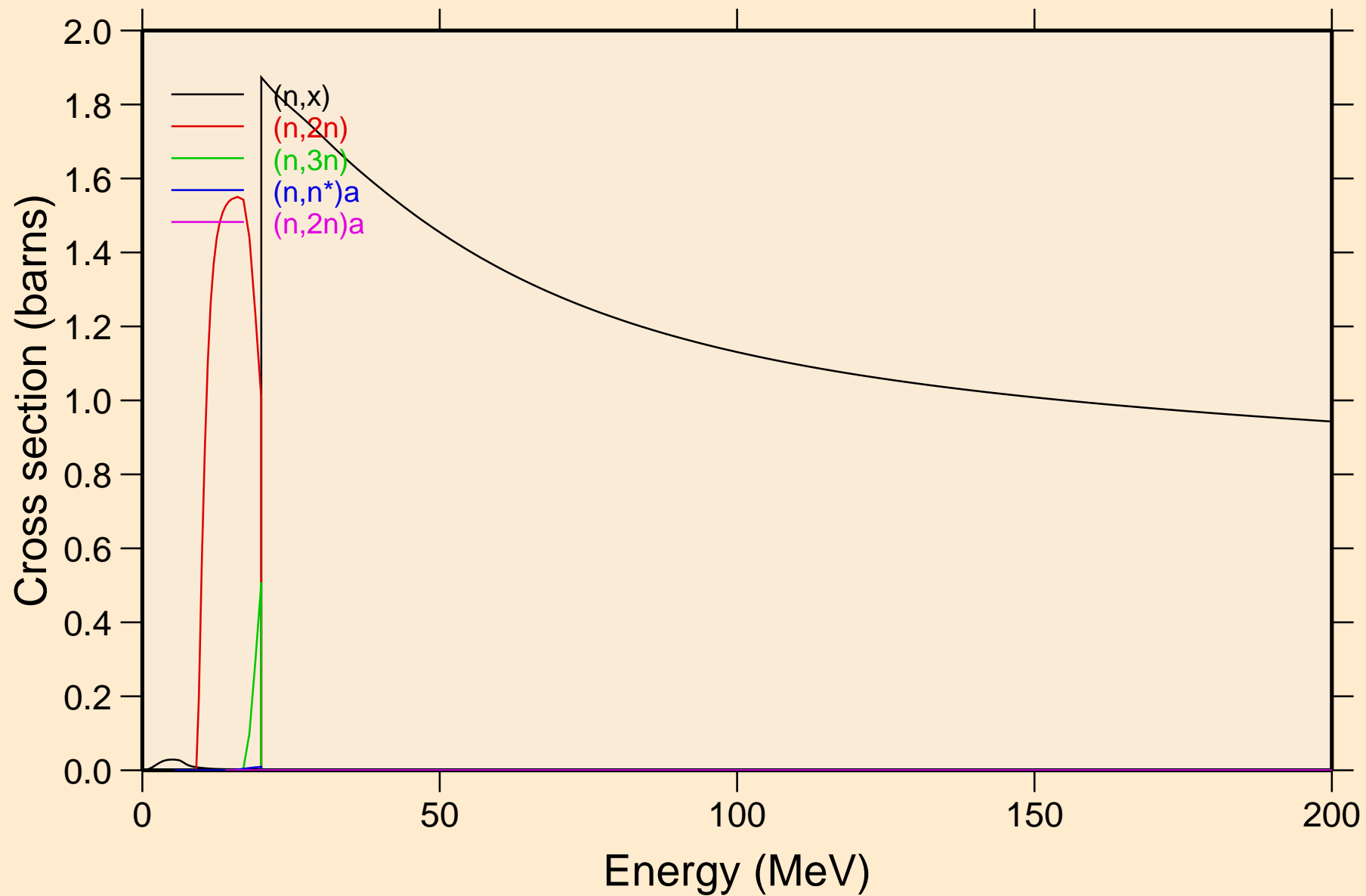
# JEFF-3.1 TC-99 Inelastic levels





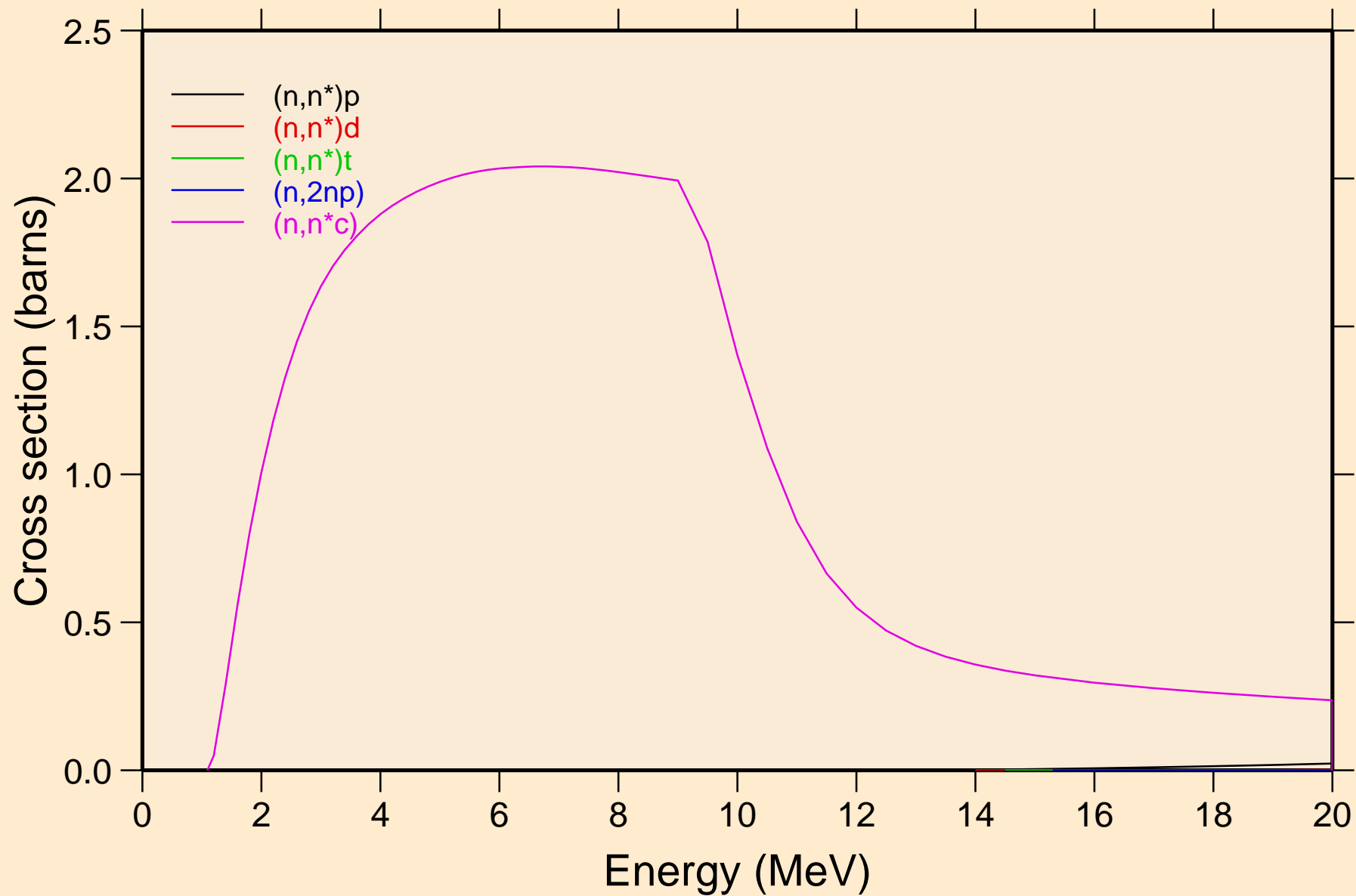
# JEFF-3.1 TC-99

## Threshold reactions



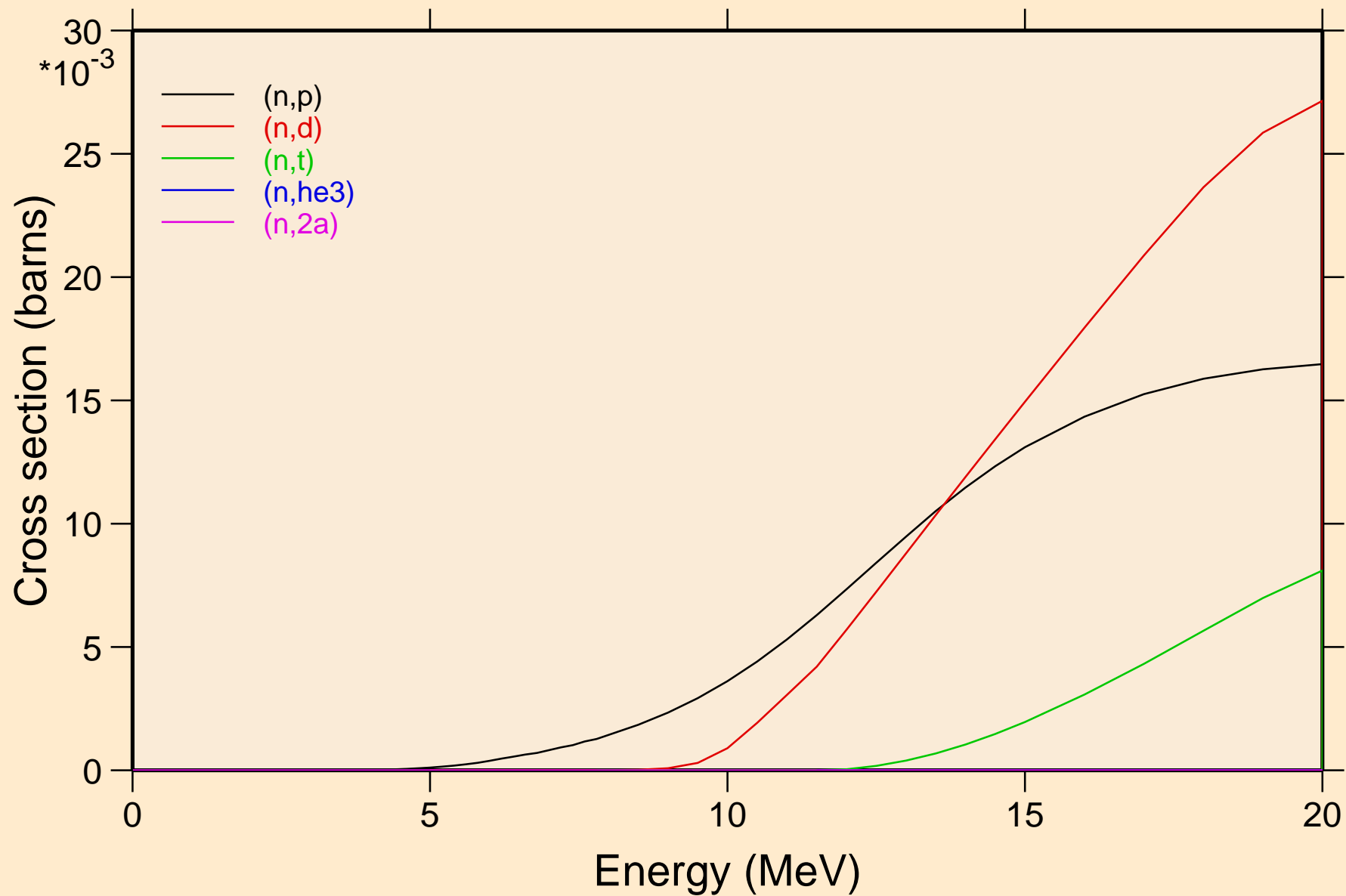
# JEFF-3.1 TC-99

## Threshold reactions



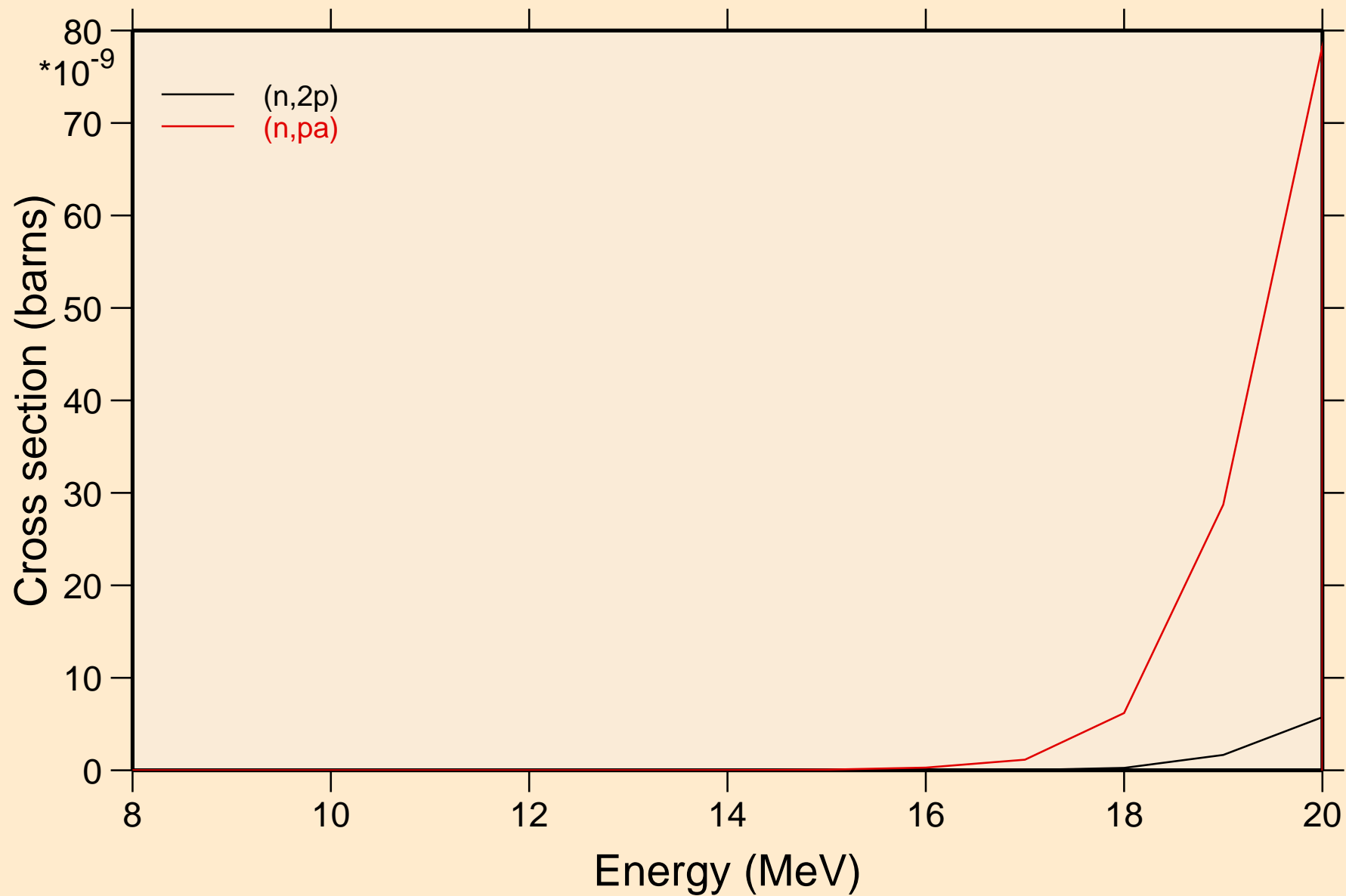
# JEFF-3.1 TC-99

## Threshold reactions



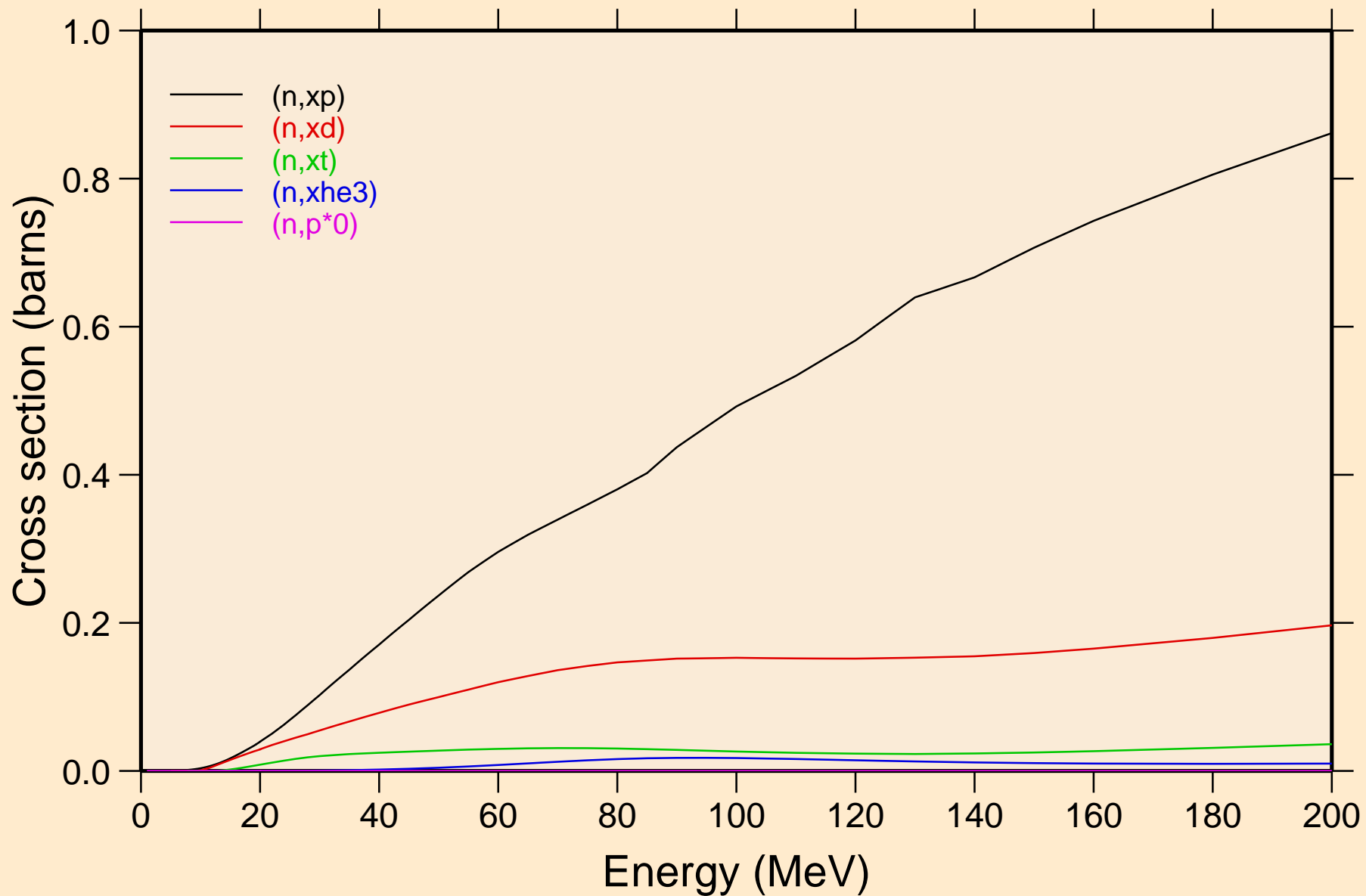
# JEFF-3.1 TC-99

## Threshold reactions



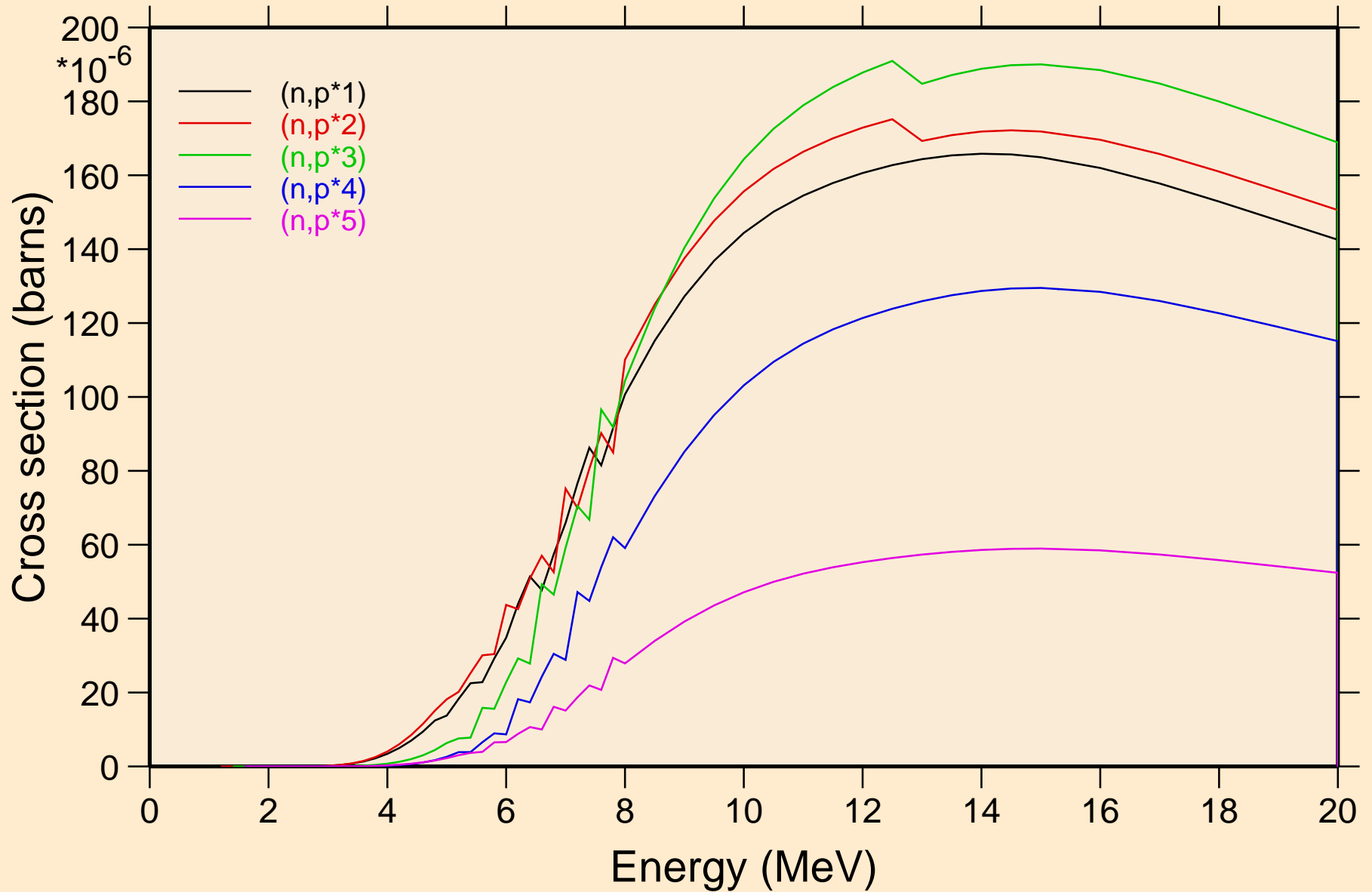
# JEFF-3.1 TC-99

## Threshold reactions



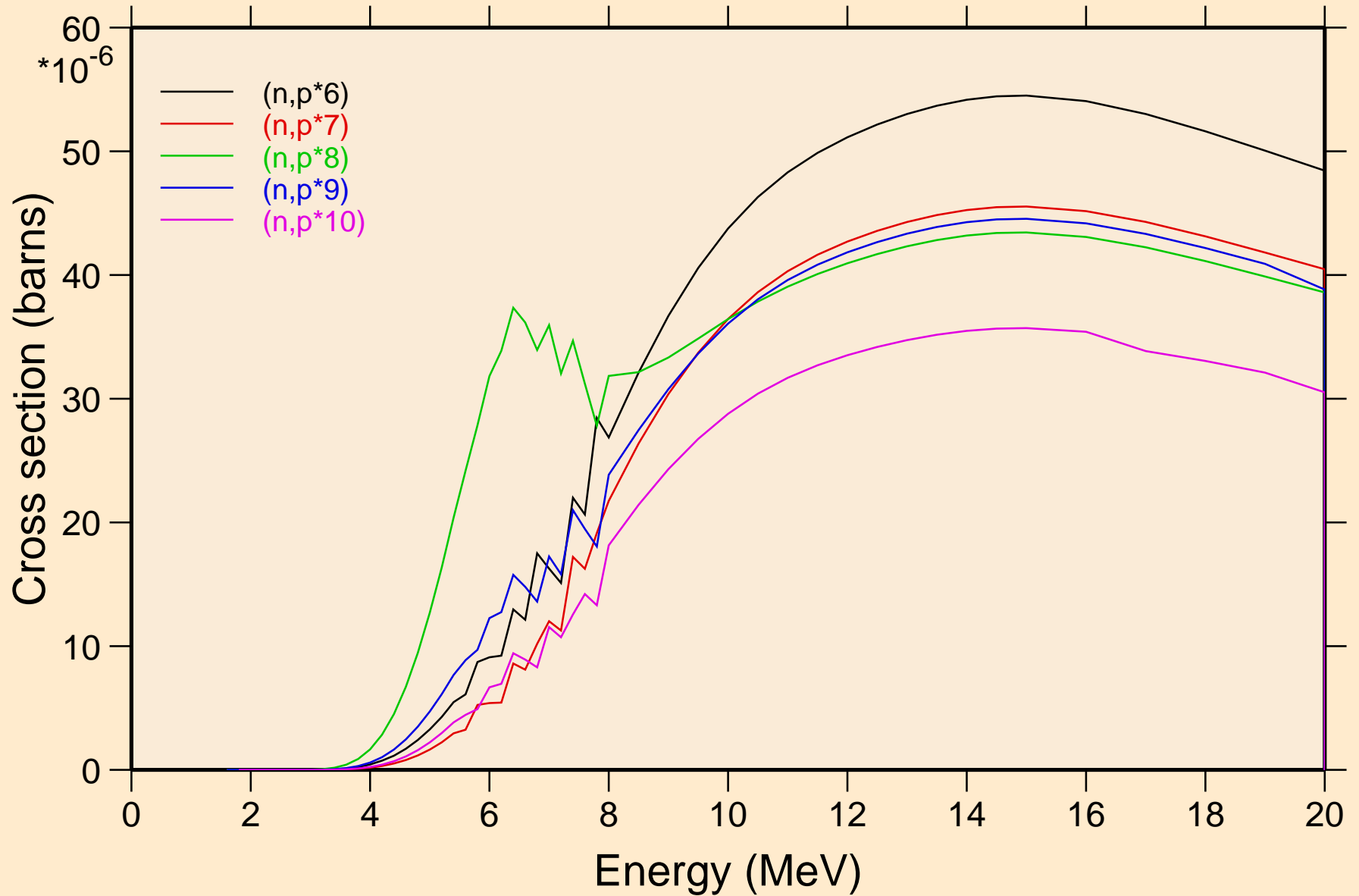
# JEFF-3.1 TC-99

## Threshold reactions



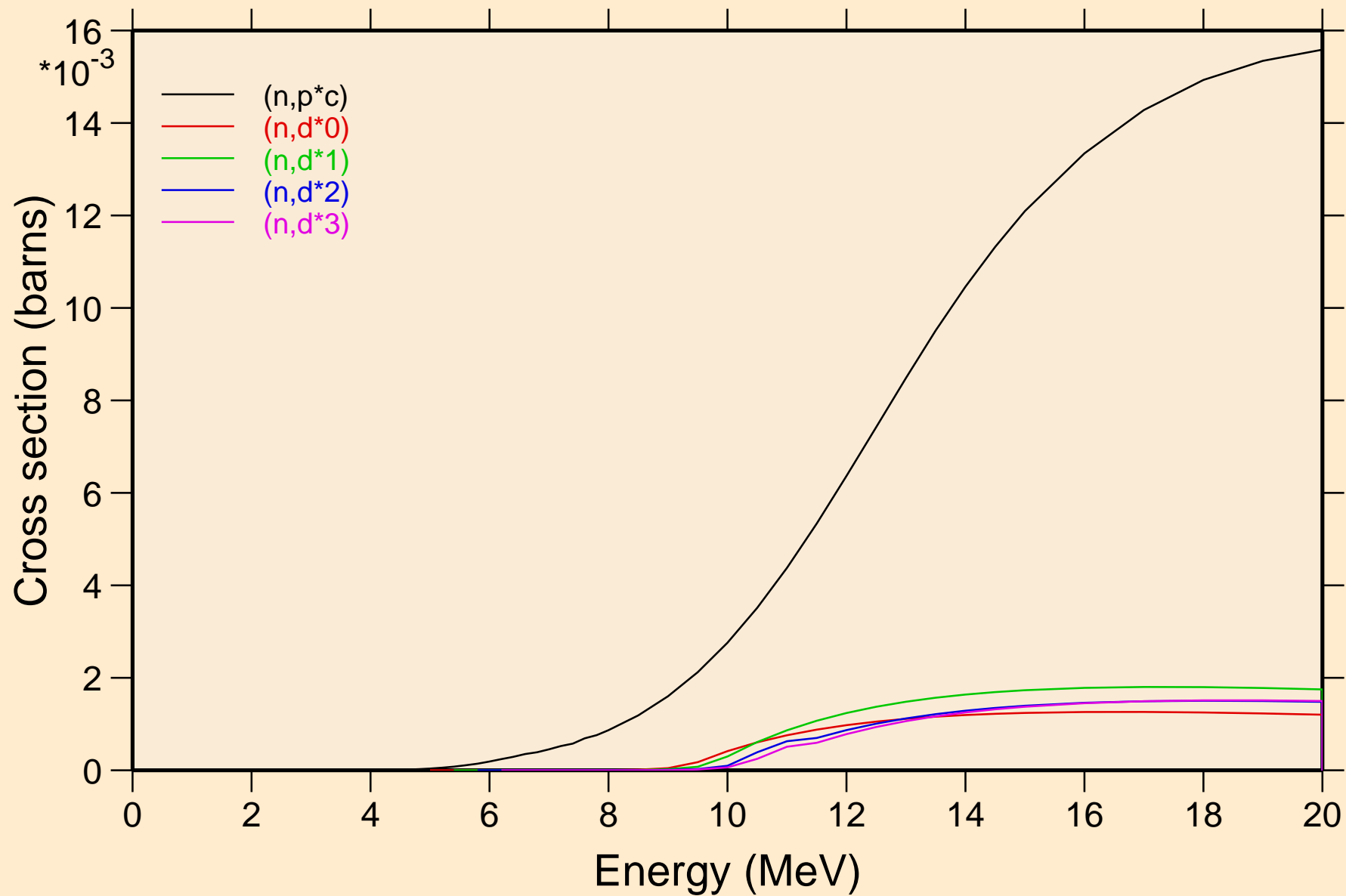
# JEFF-3.1 TC-99

## Threshold reactions



# JEFF-3.1 TC-99

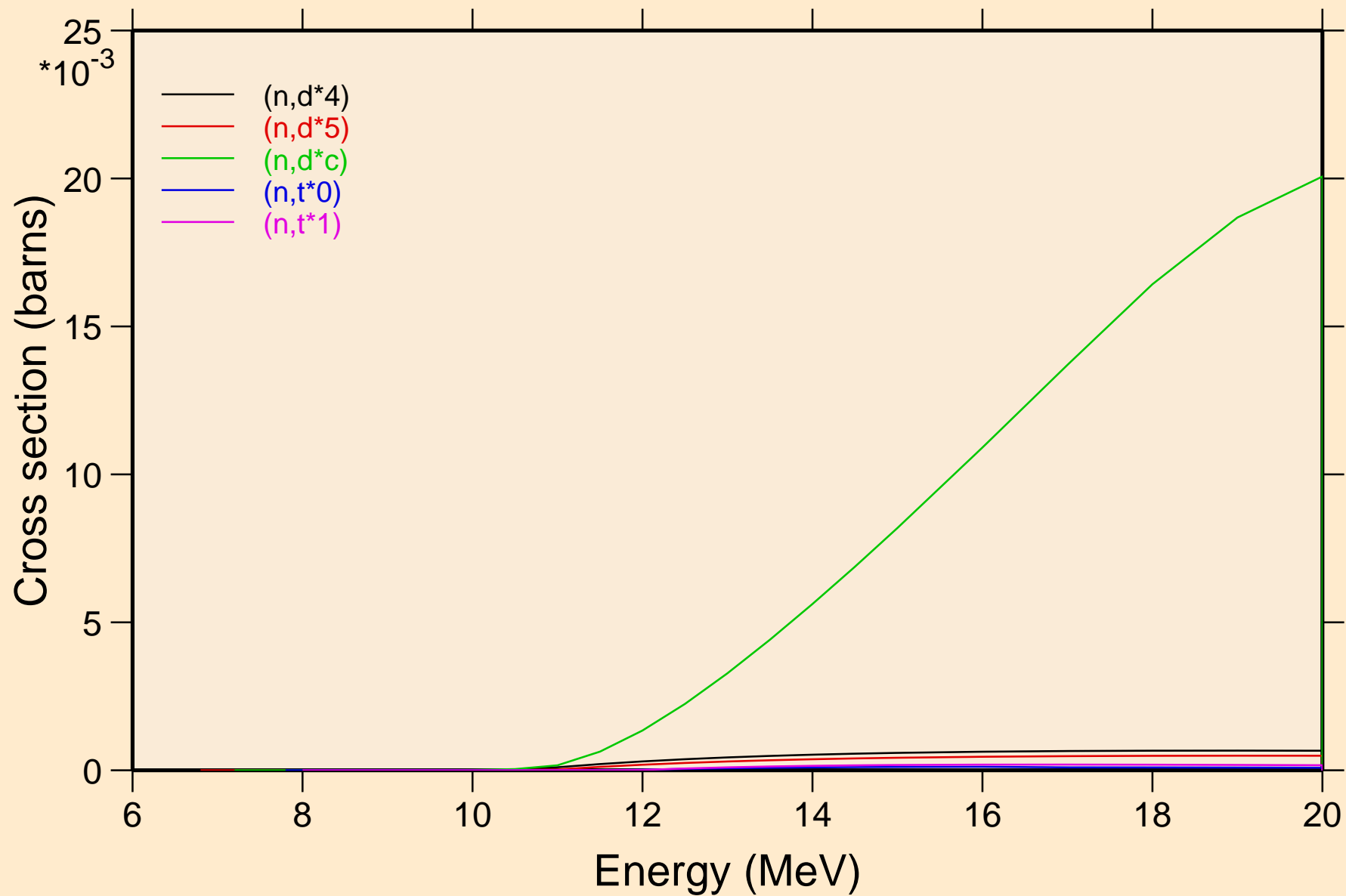
## Threshold reactions





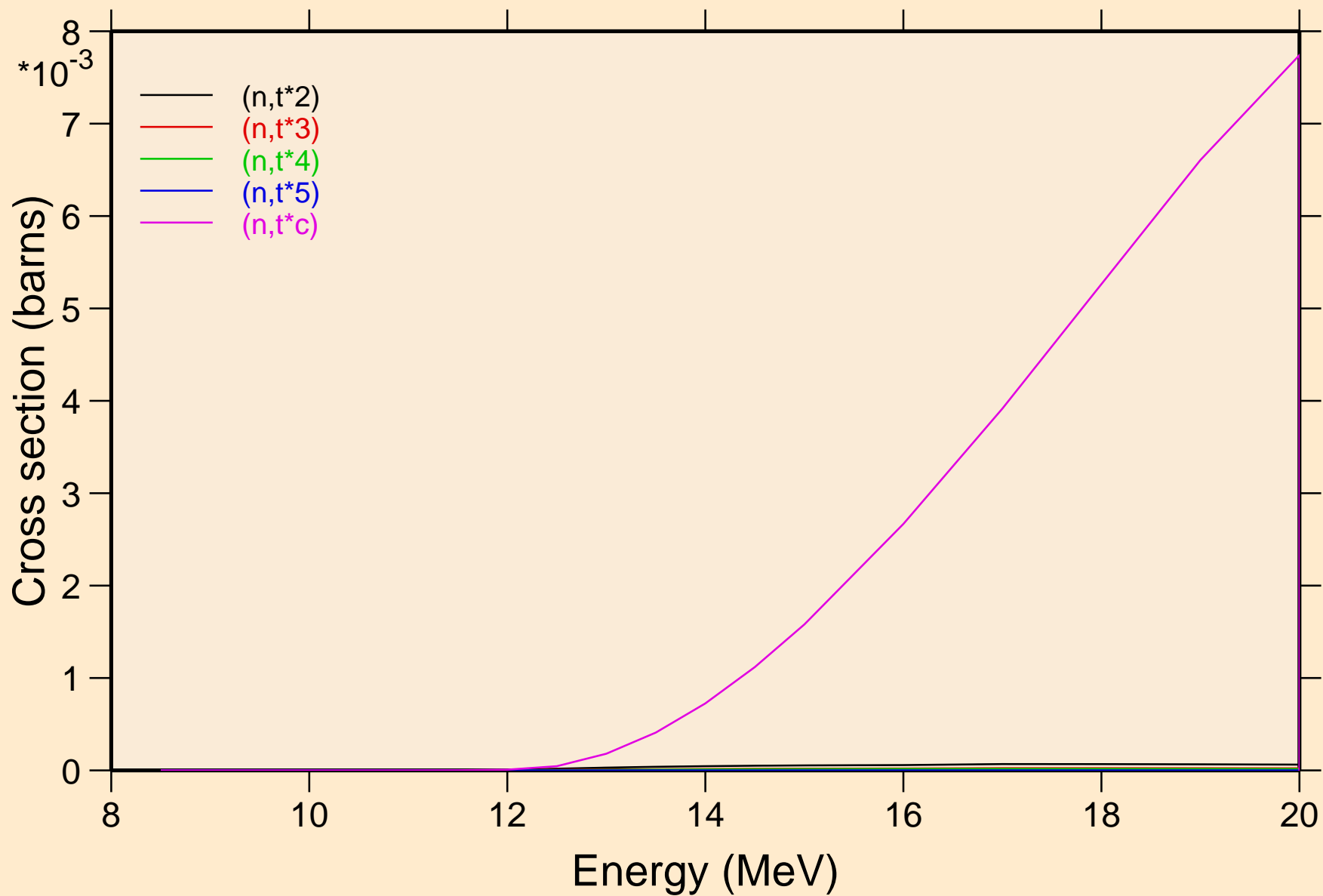
# JEFF-3.1 TC-99

## Threshold reactions

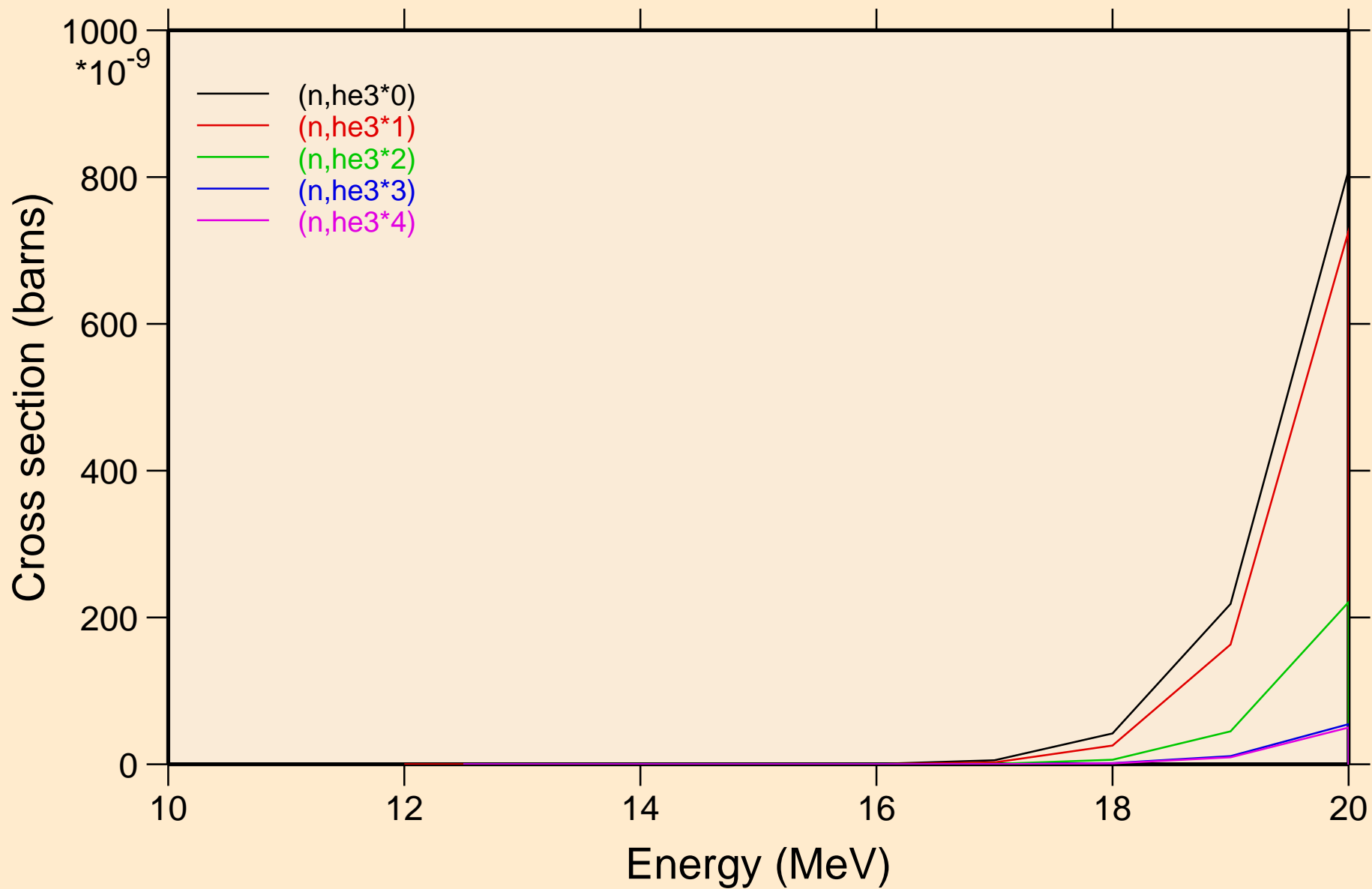


# JEFF-3.1 TC-99

## Threshold reactions

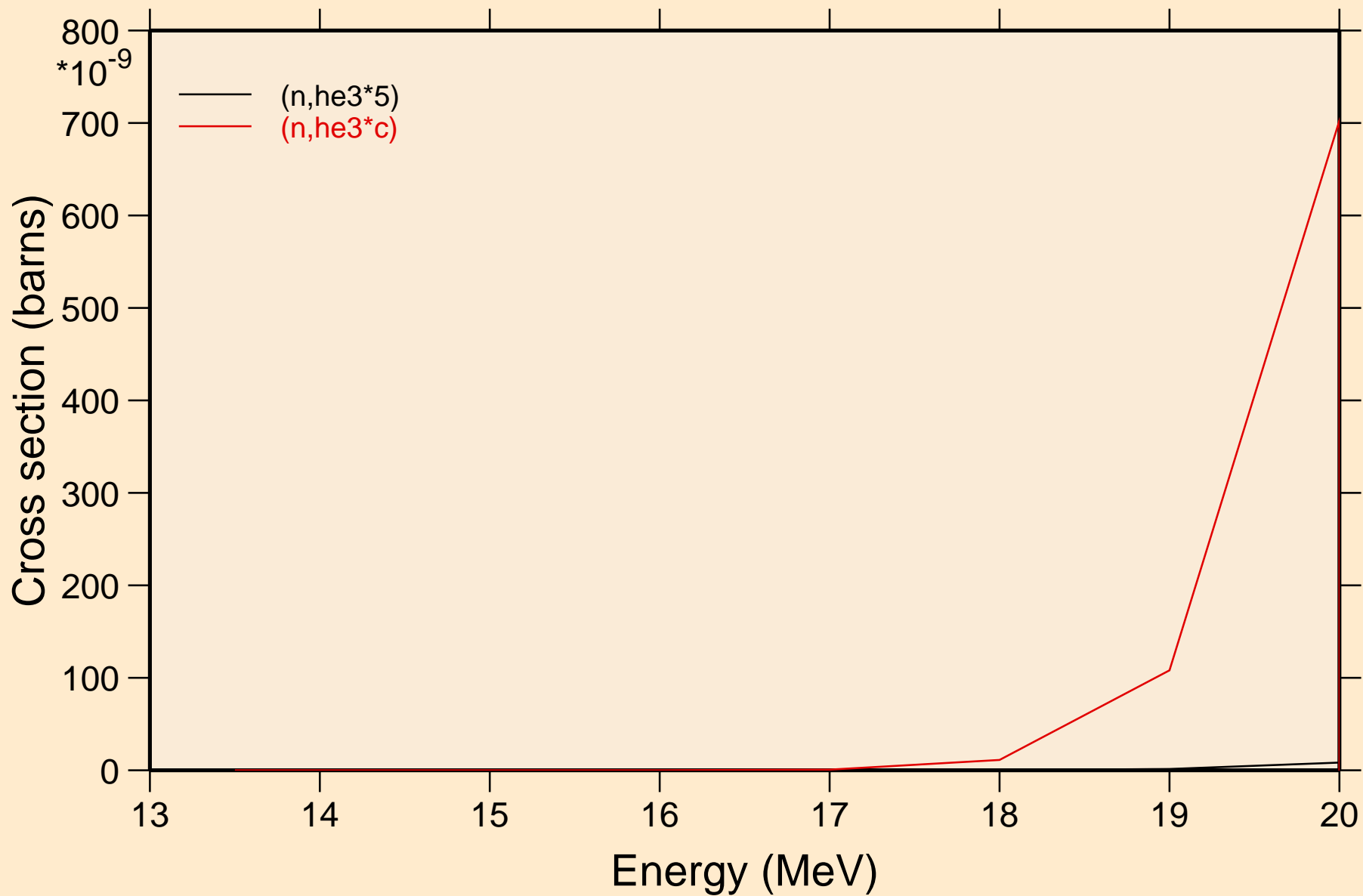


# JEFF-3.1 TC-99 Threshold reactions

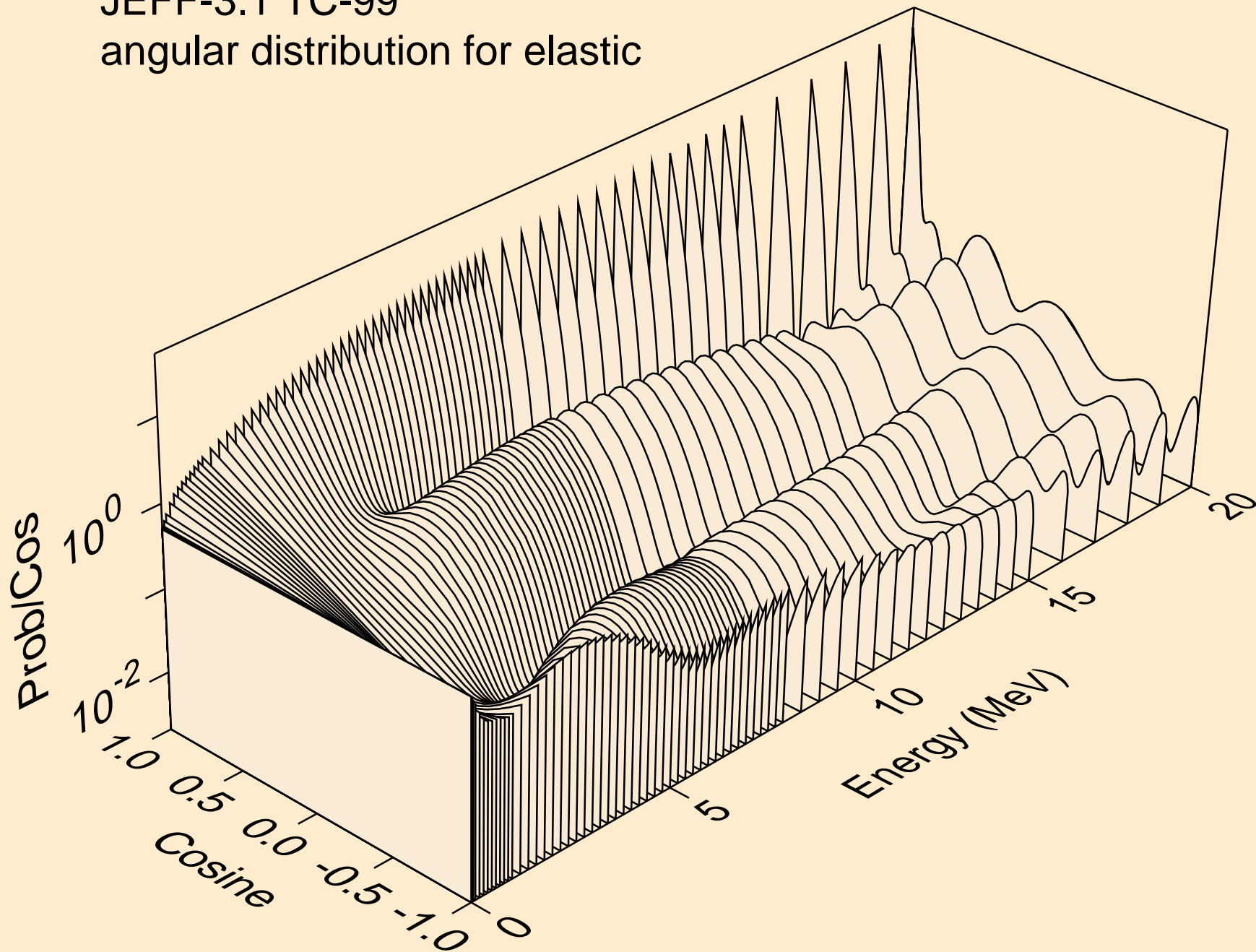


# JEFF-3.1 TC-99

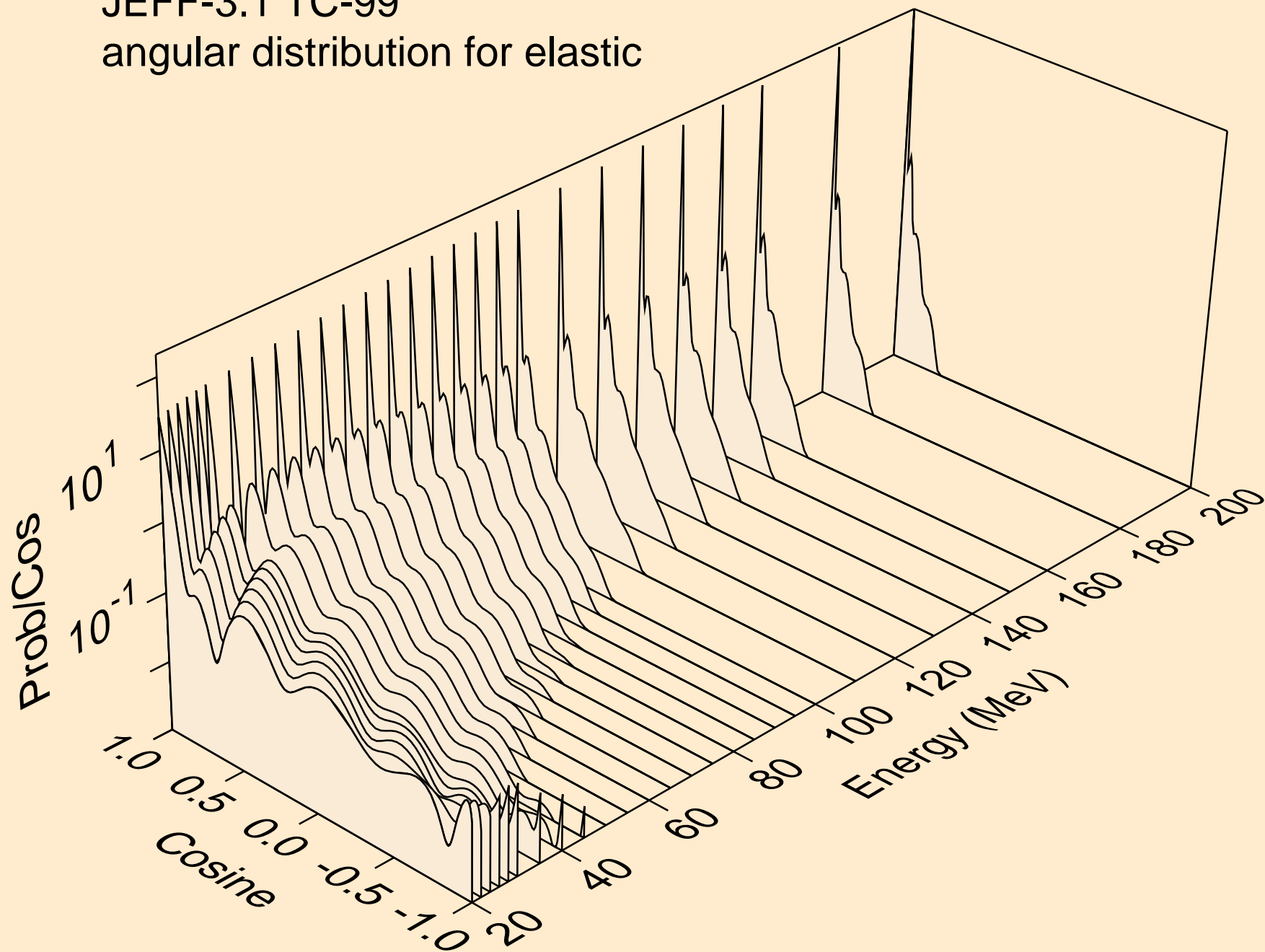
## Threshold reactions



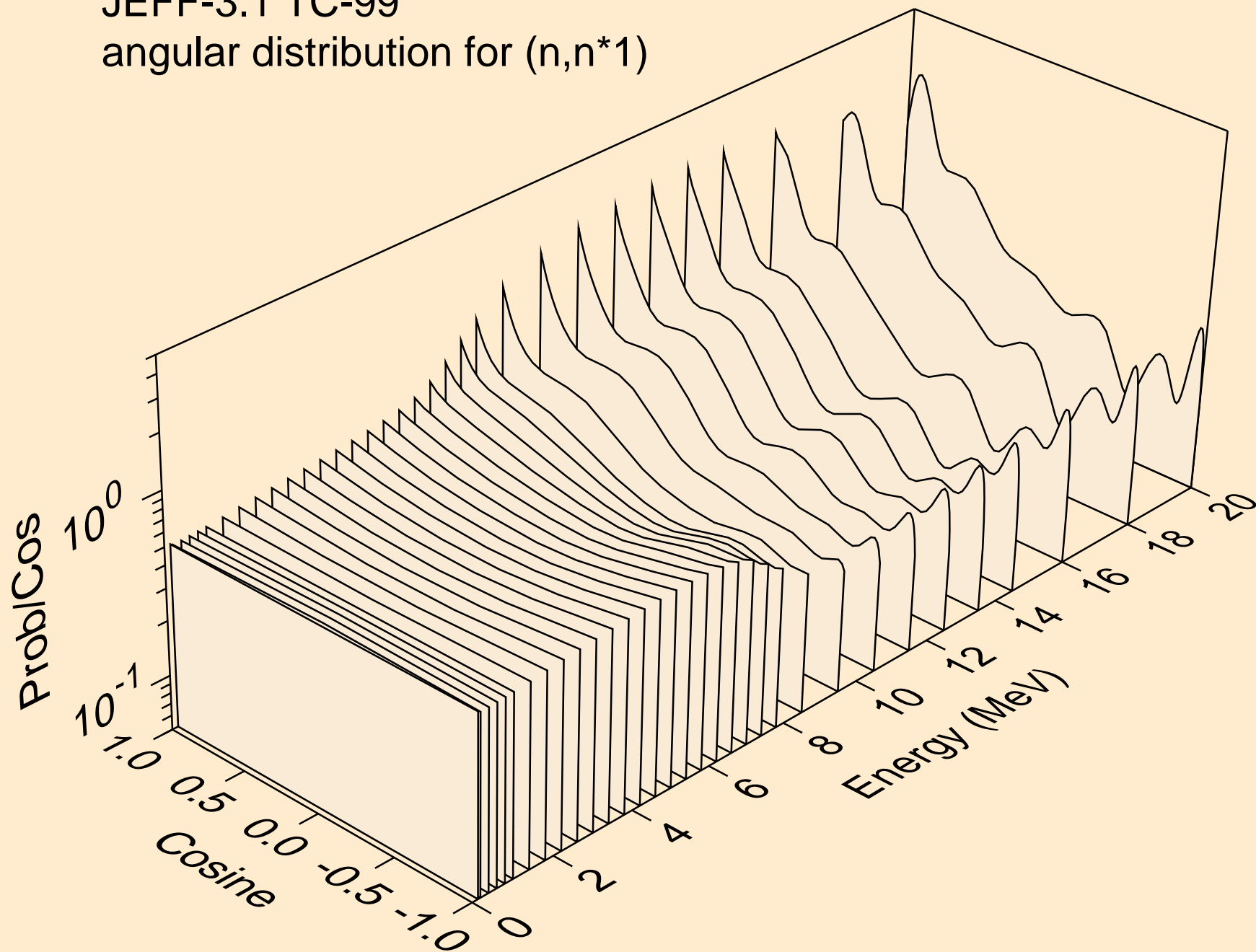
JEFF-3.1 TC-99  
angular distribution for elastic



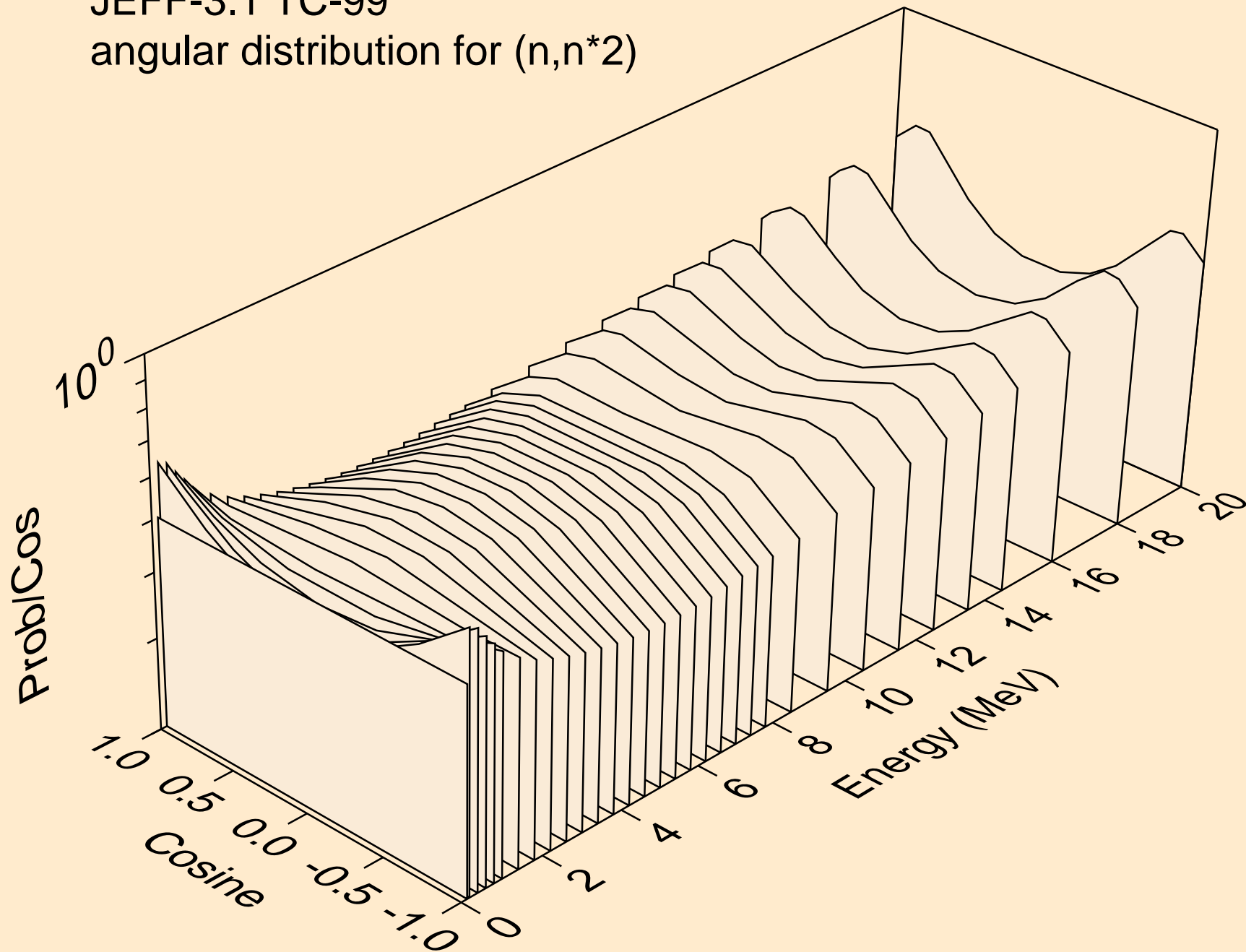
JEFF-3.1 TC-99  
angular distribution for elastic



JEFF-3.1 TC-99  
angular distribution for (n,n\*1)

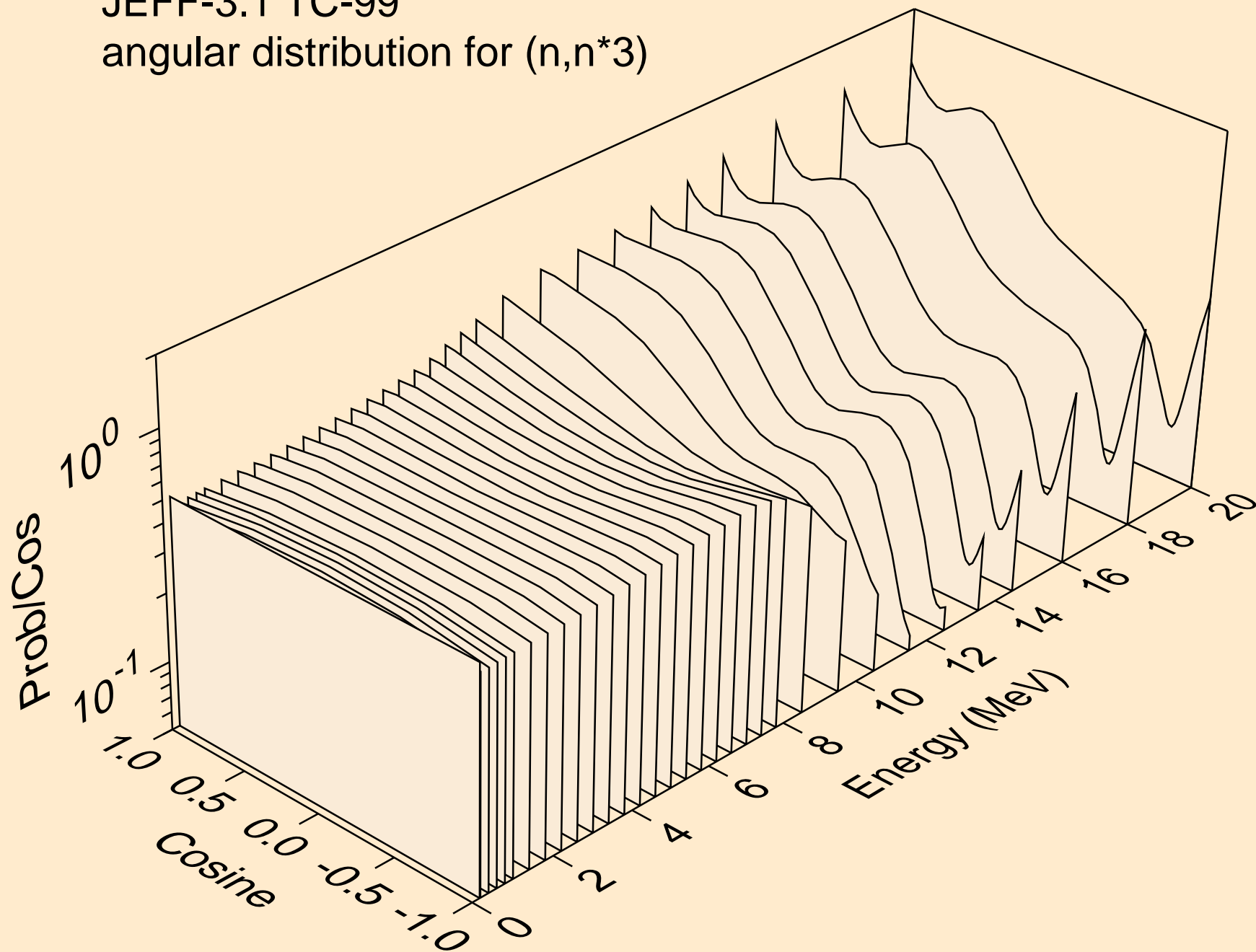


JEFF-3.1 TC-99  
angular distribution for (n,n\*2)

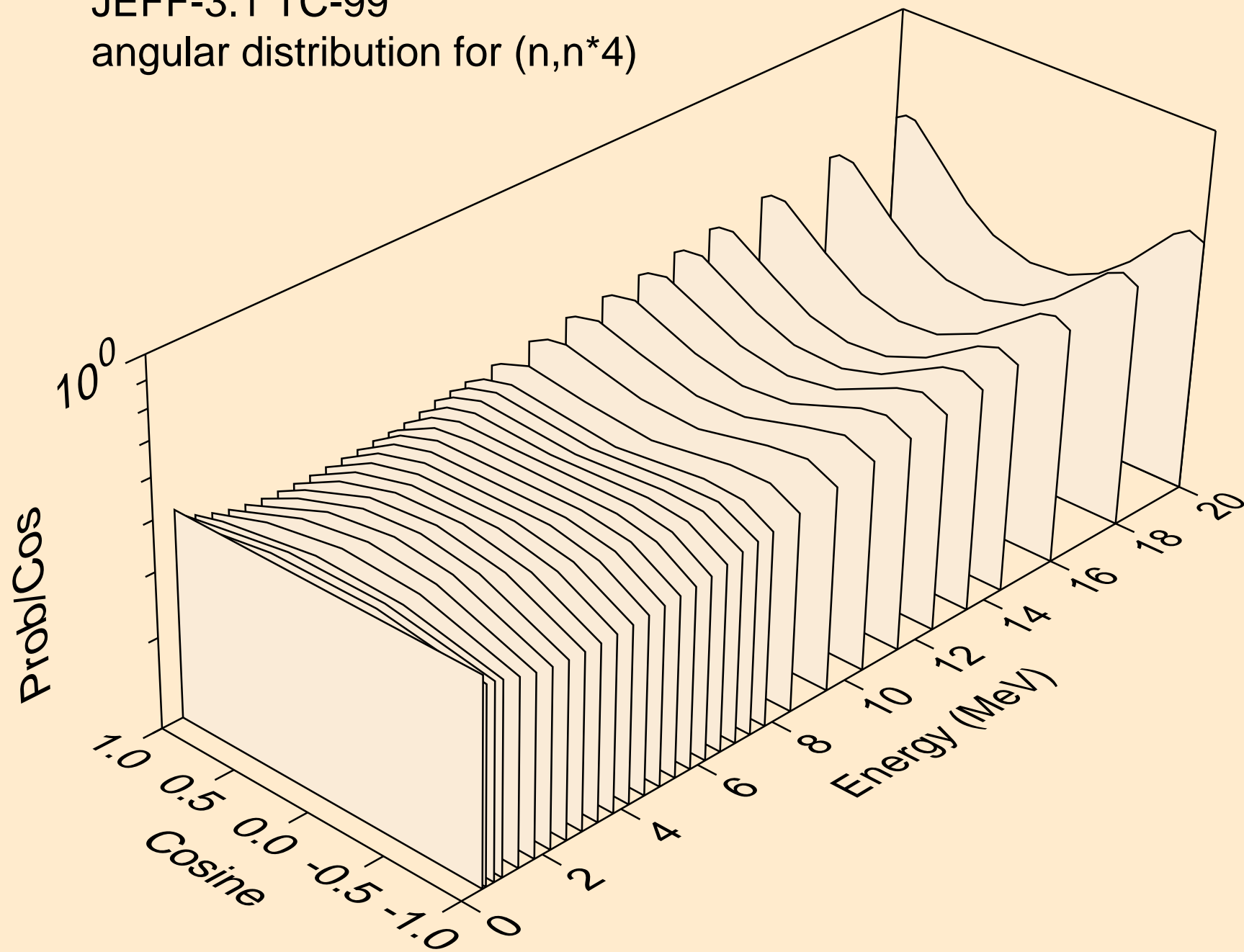




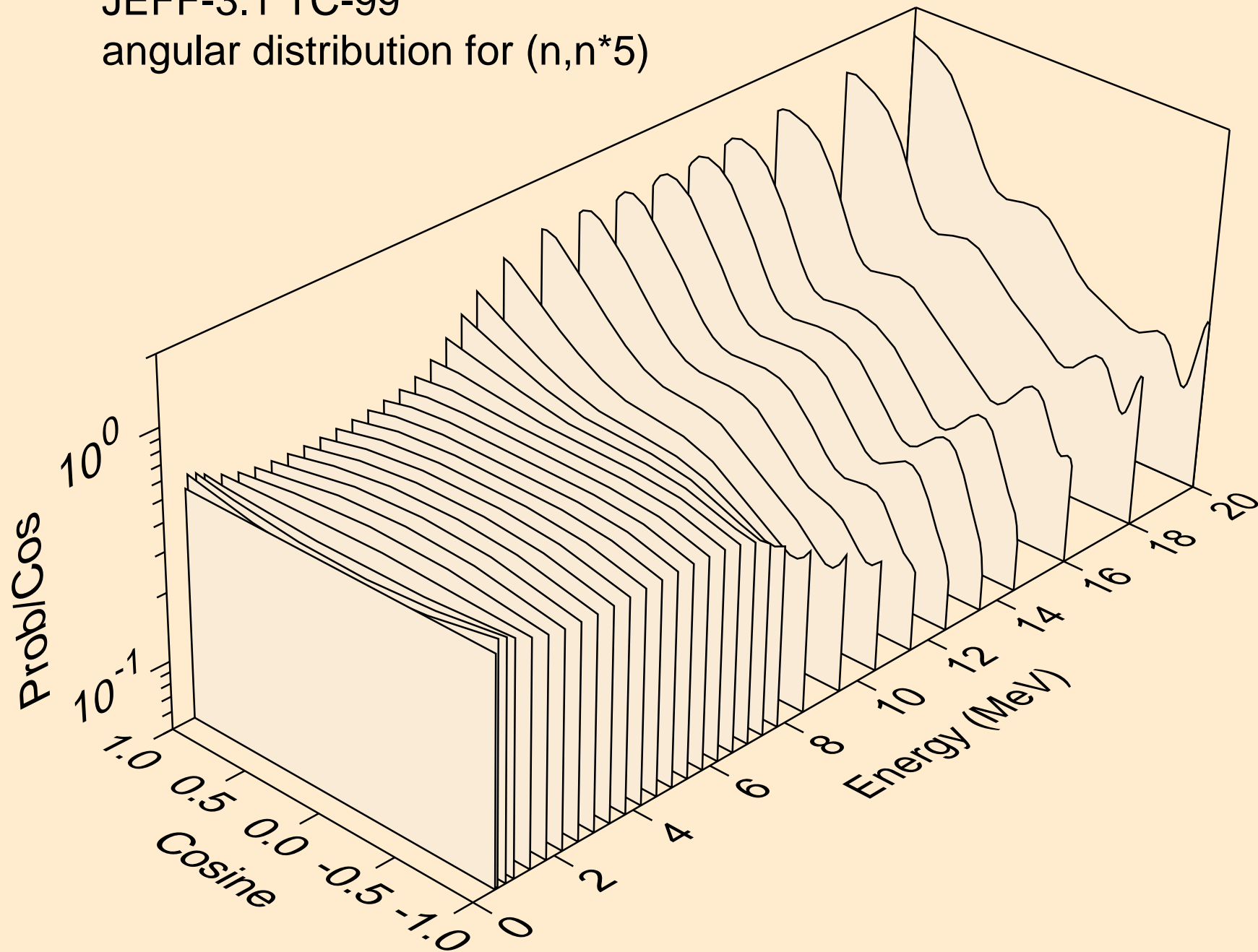
JEFF-3.1 TC-99  
angular distribution for (n,n\*3)



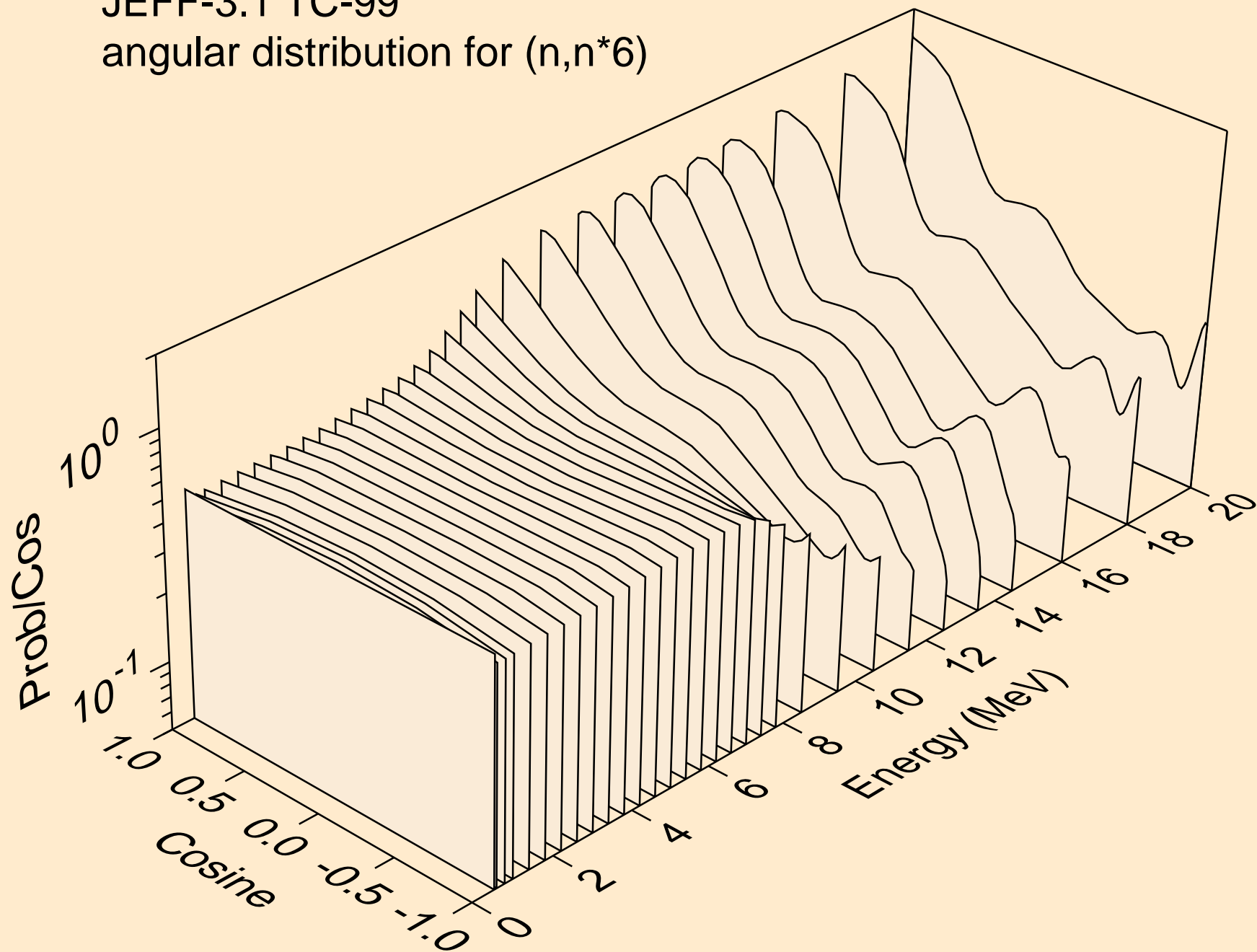
JEFF-3.1 TC-99  
angular distribution for (n,n\*4)



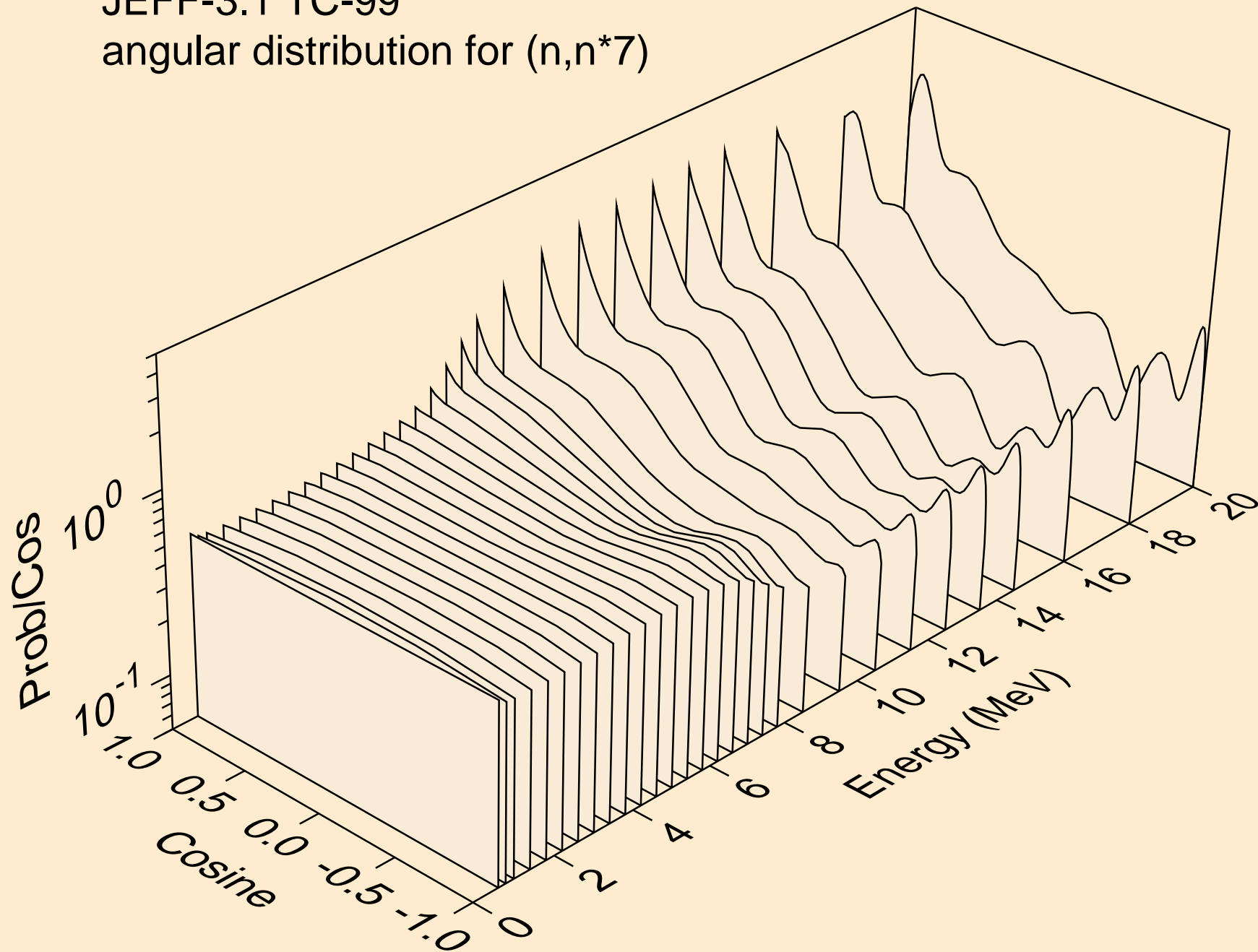
JEFF-3.1 TC-99  
angular distribution for (n,n\*5)



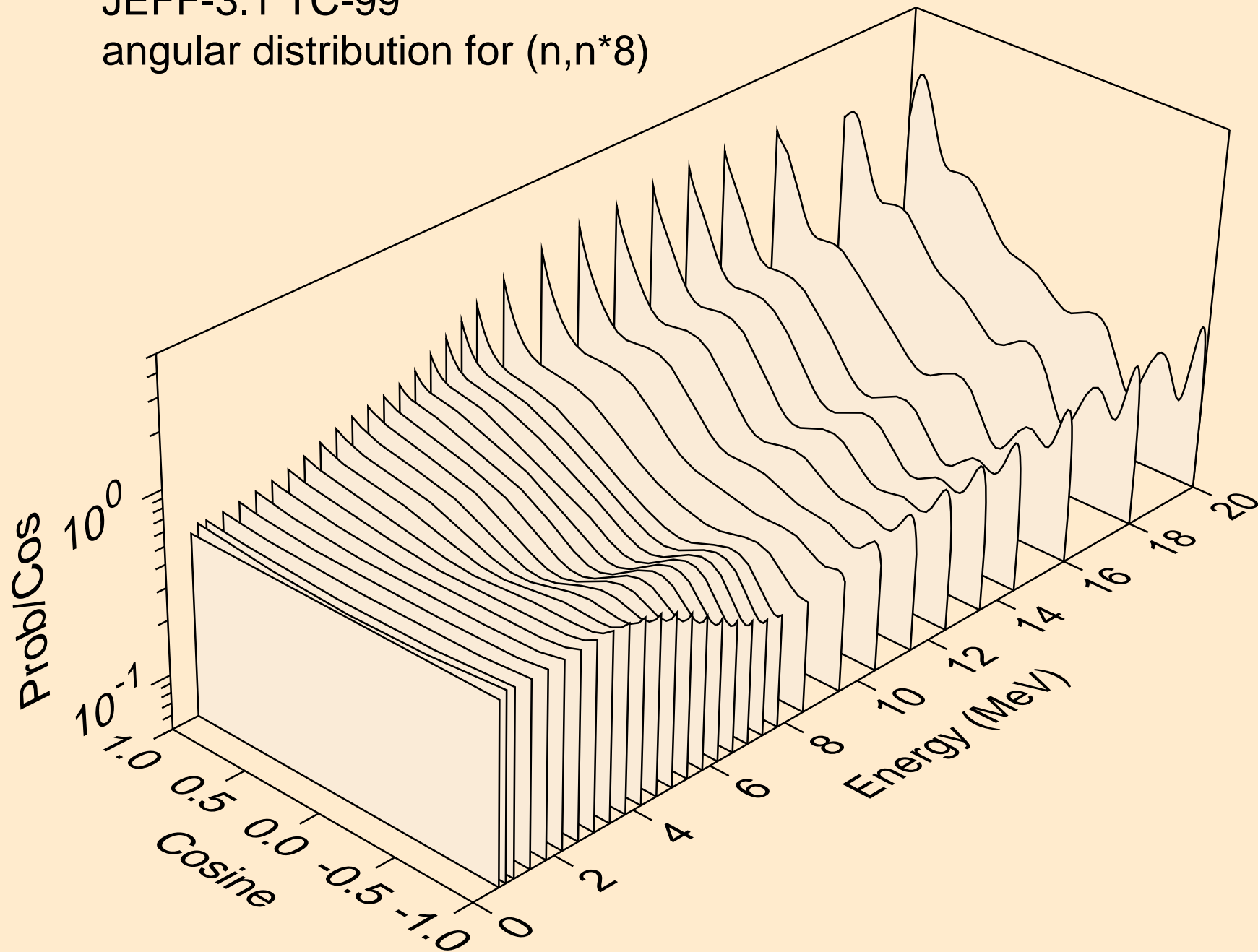
JEFF-3.1 TC-99  
angular distribution for (n,n\*6)



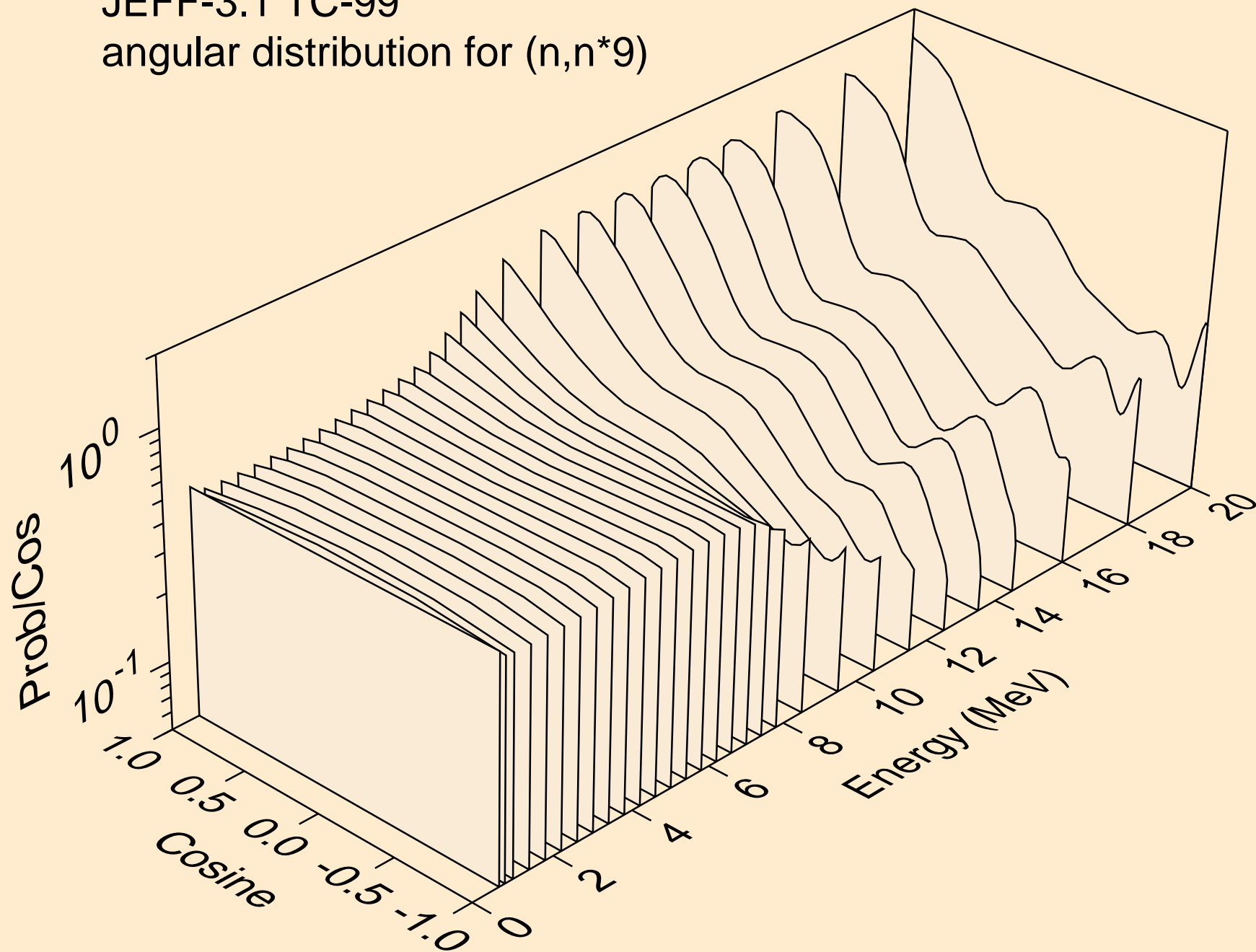
JEFF-3.1 TC-99  
angular distribution for (n,n\*7)



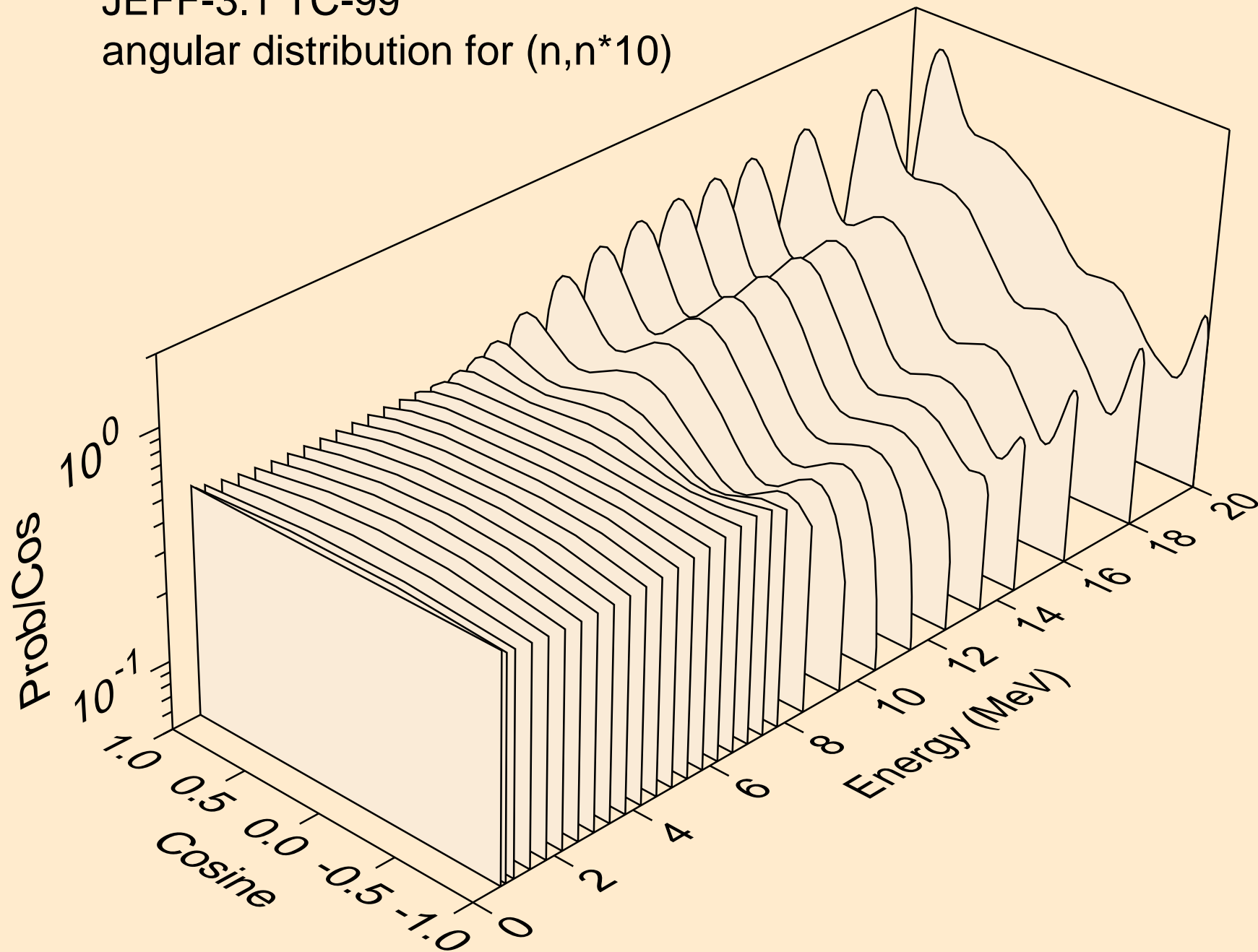
JEFF-3.1 TC-99  
angular distribution for (n,n\*8)



JEFF-3.1 TC-99  
angular distribution for (n,n\*9)

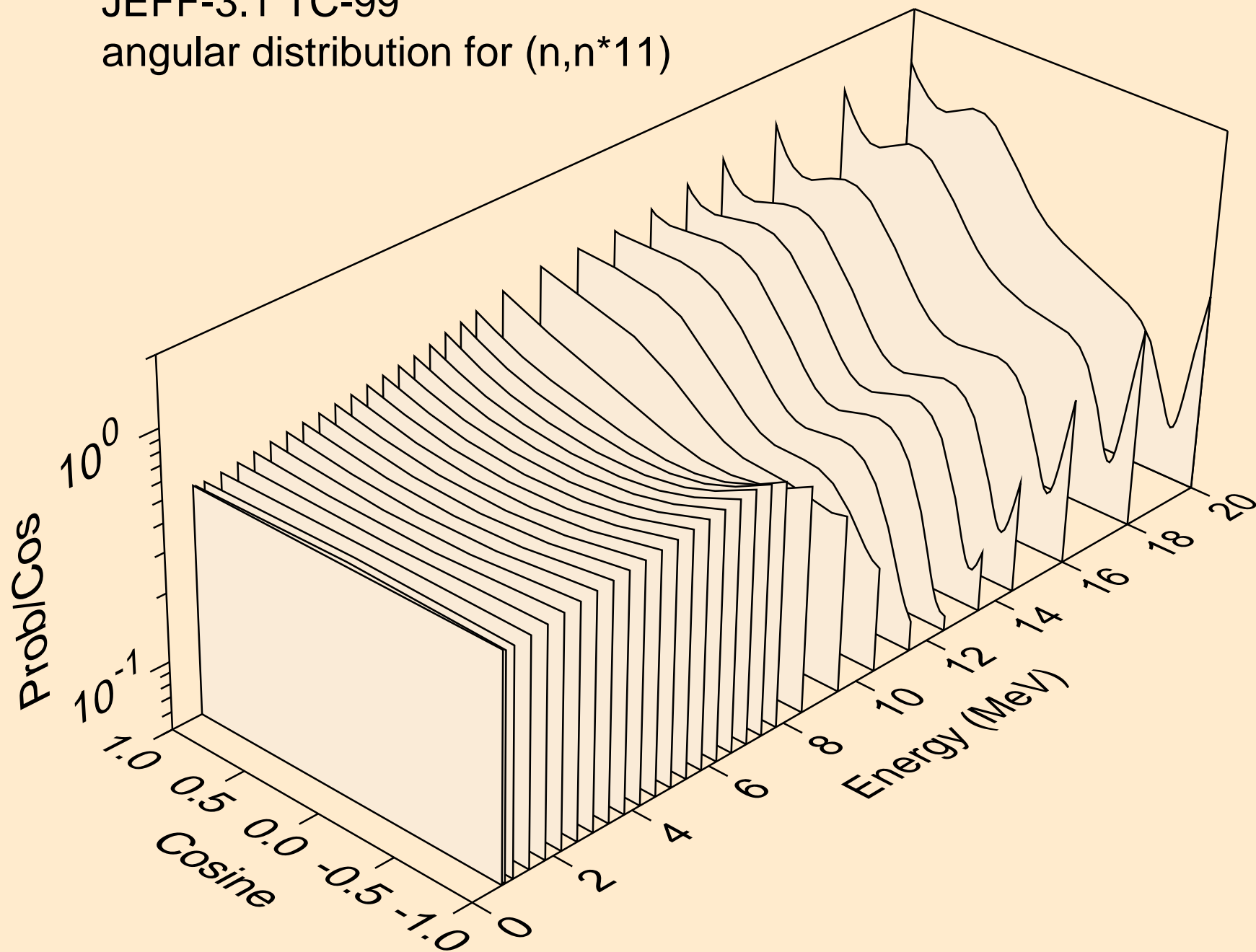


JEFF-3.1 TC-99  
angular distribution for (n,n\*10)

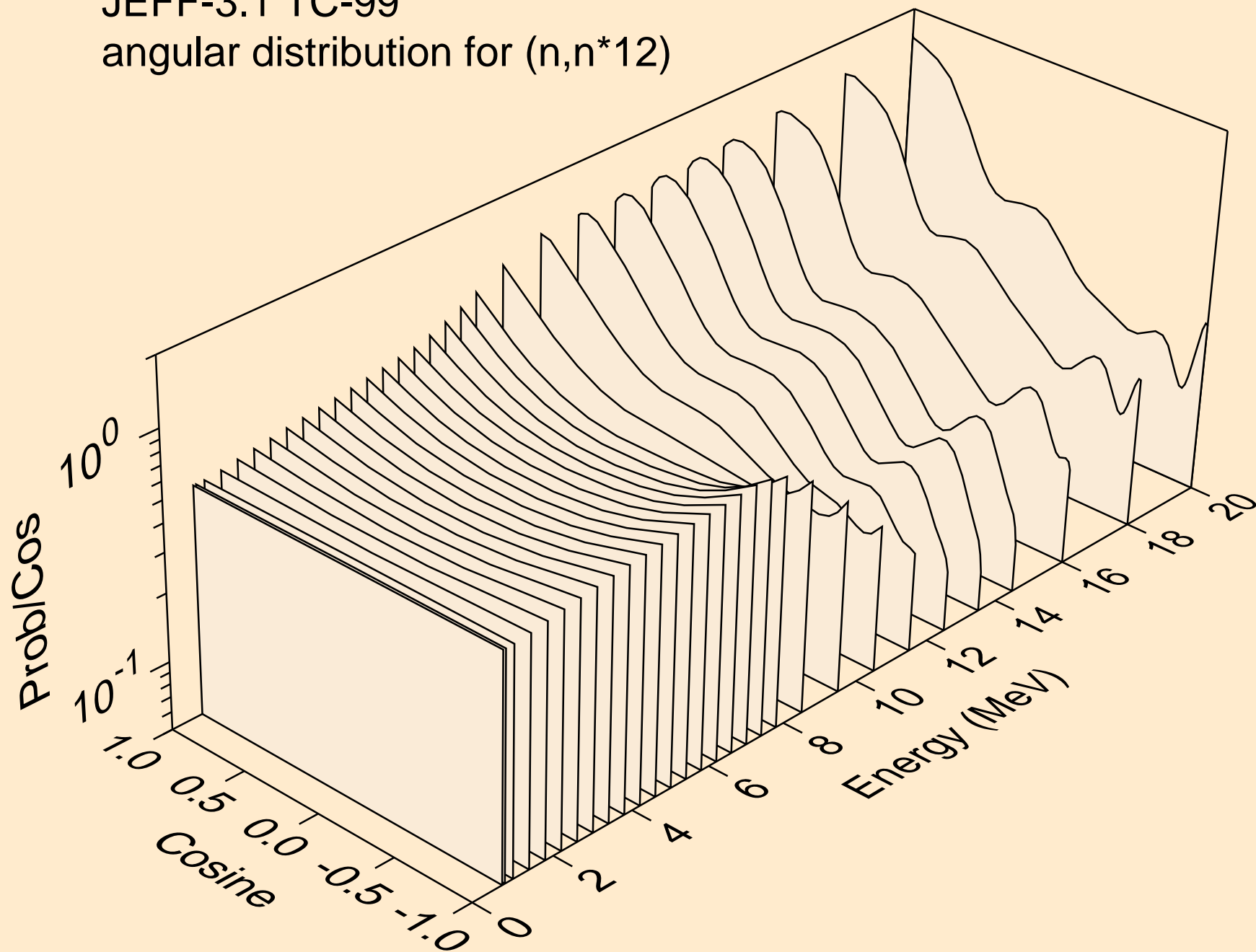




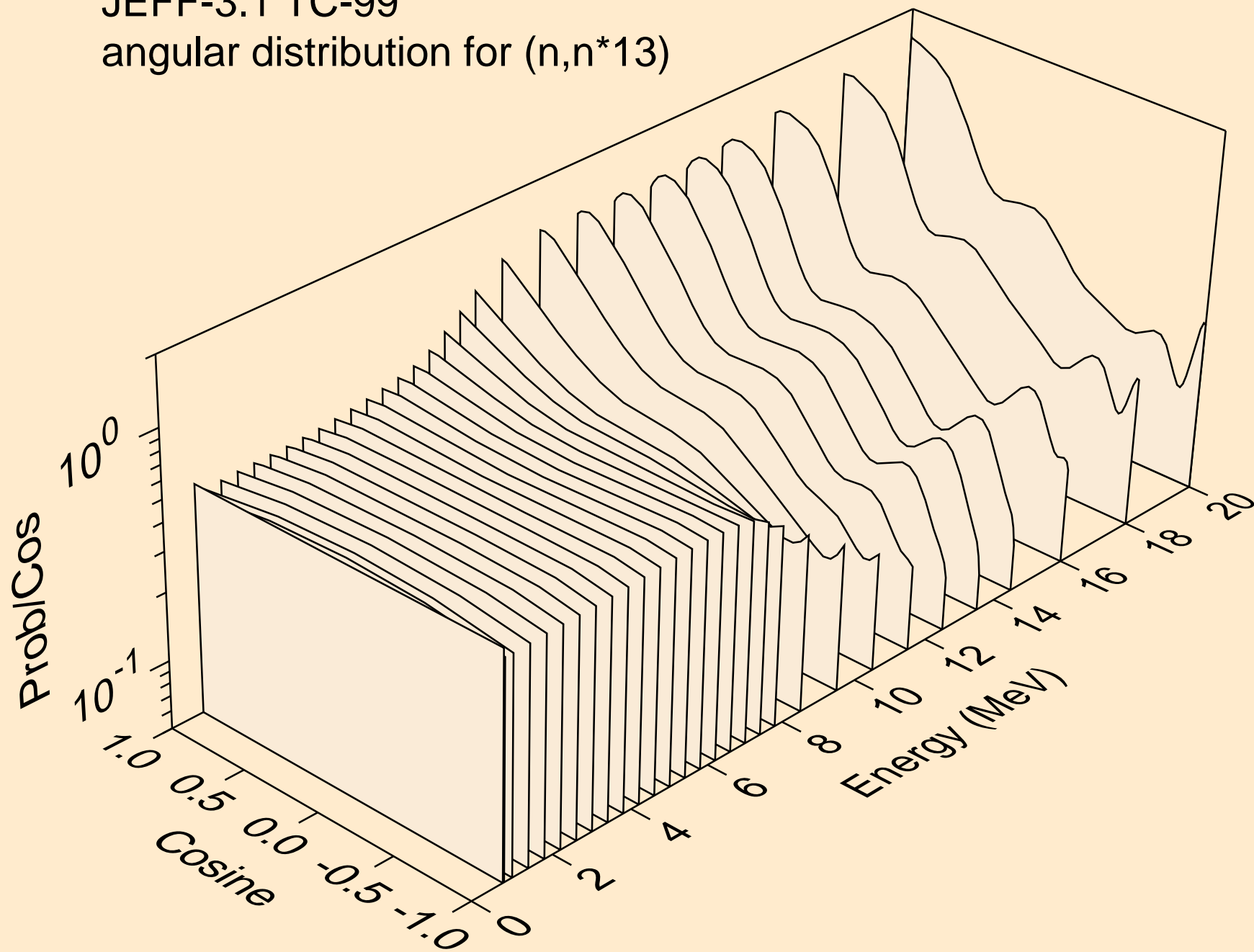
JEFF-3.1 TC-99  
angular distribution for (n,n\*11)



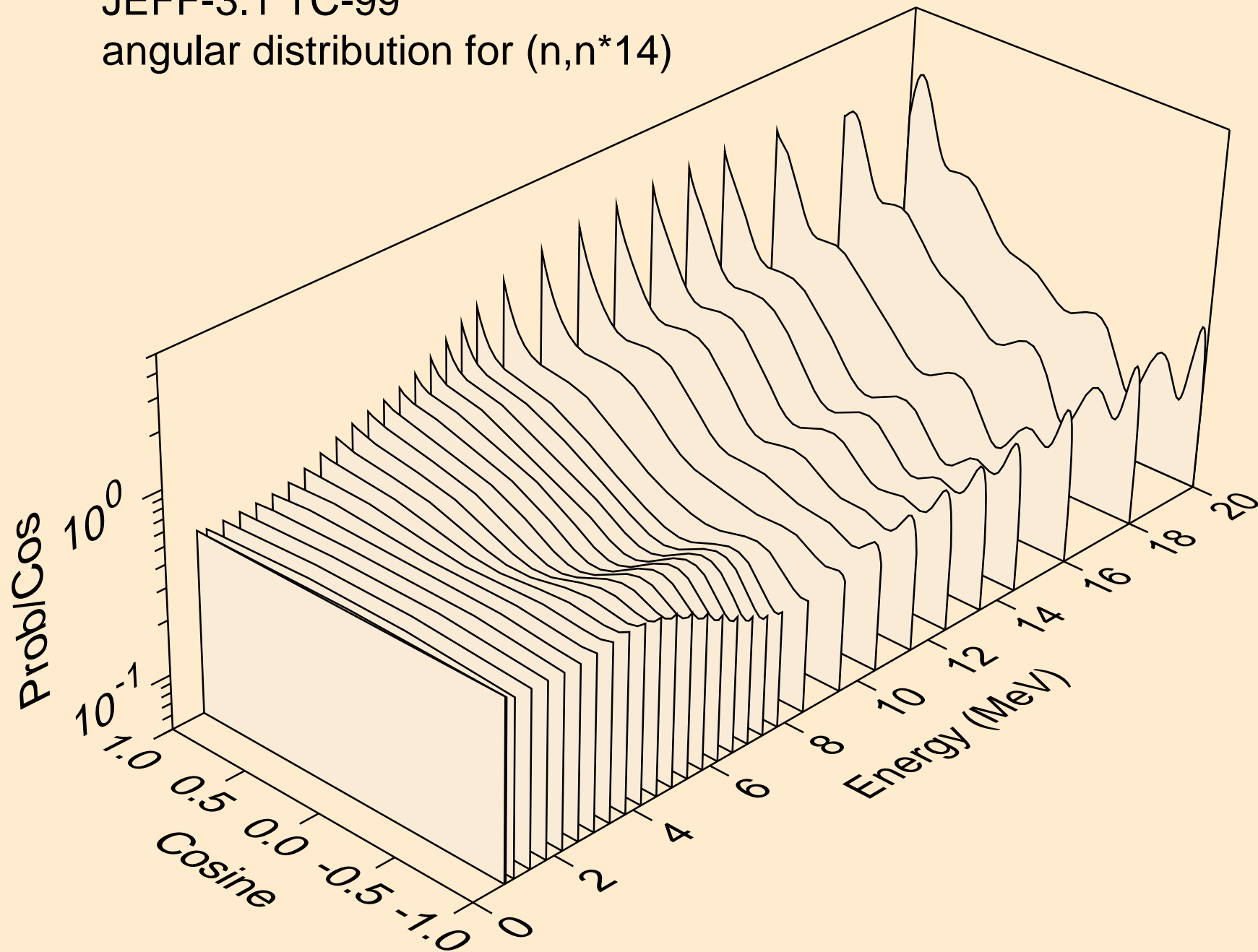
JEFF-3.1 TC-99  
angular distribution for (n,n\*12)



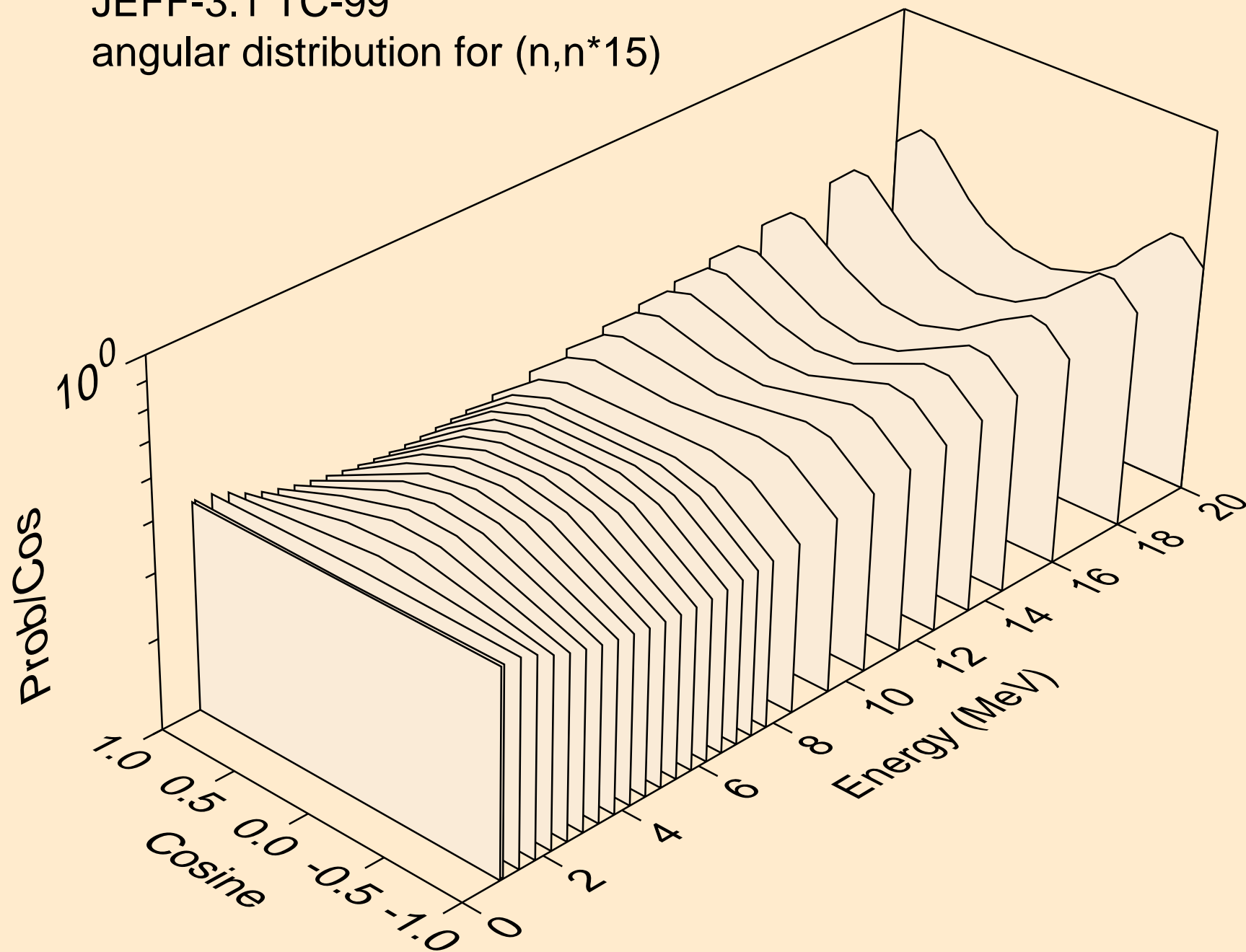
JEFF-3.1 TC-99  
angular distribution for (n,n\*13)



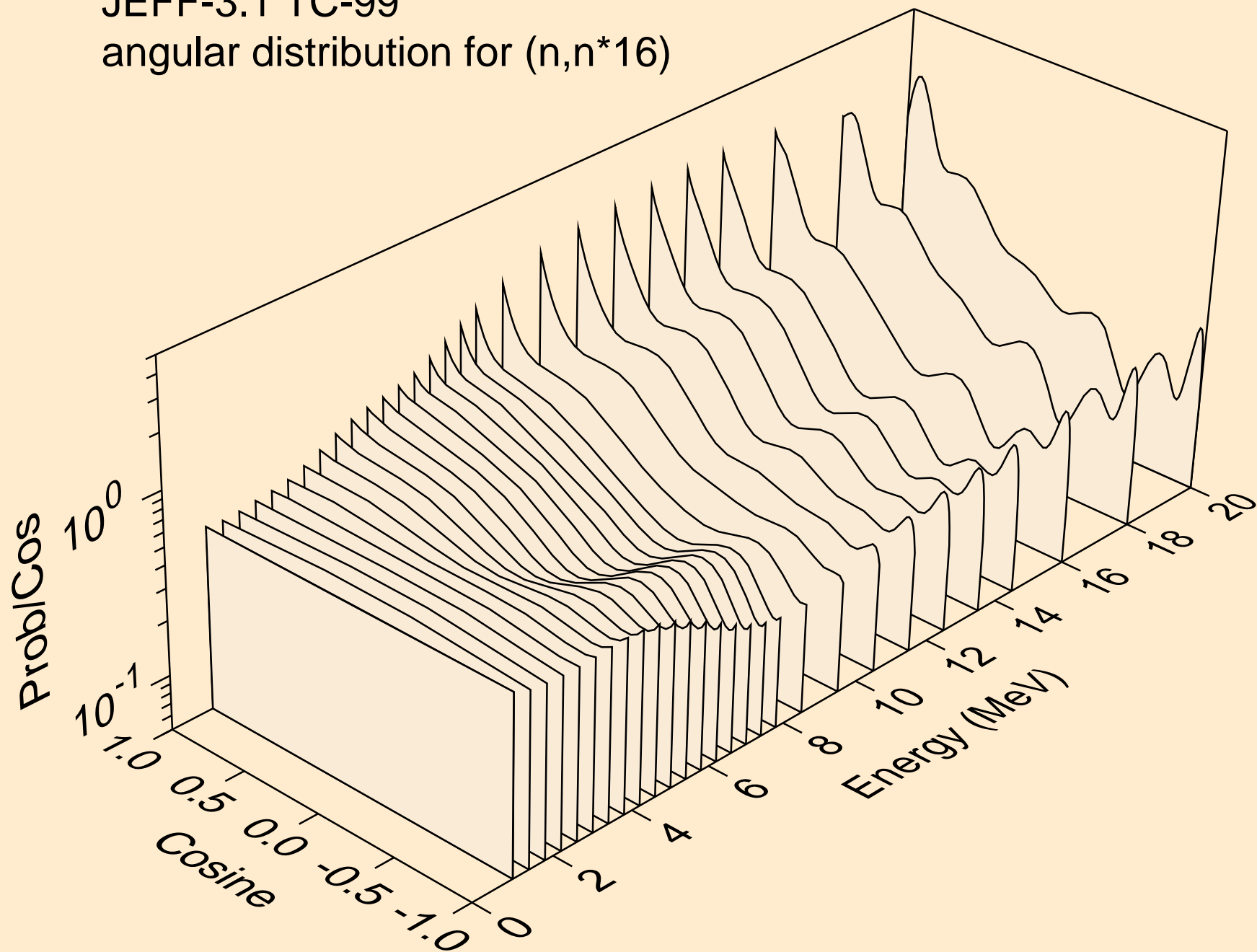
JEFF-3.1 TC-99  
angular distribution for (n,n\*14)



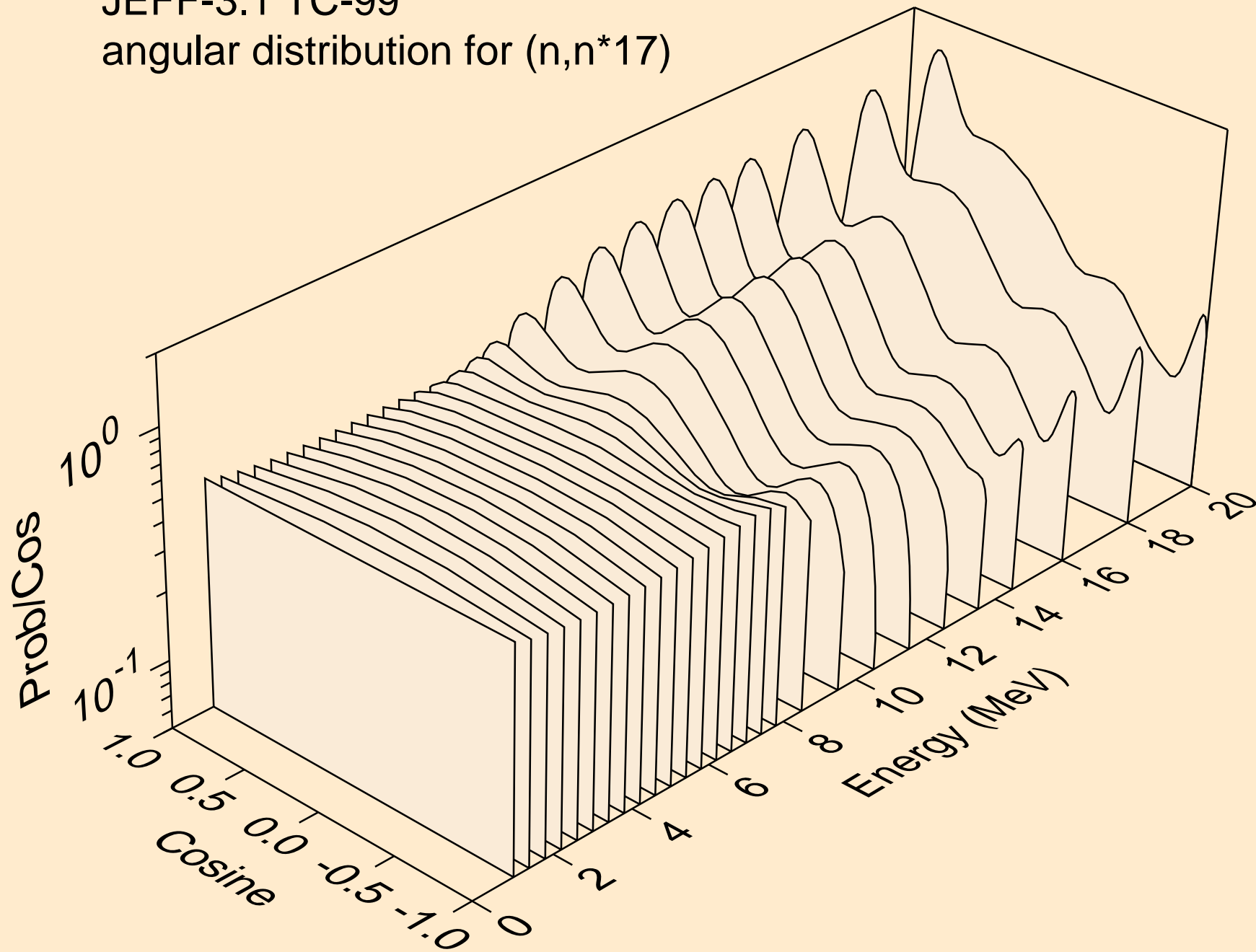
JEFF-3.1 TC-99  
angular distribution for (n,n\*15)



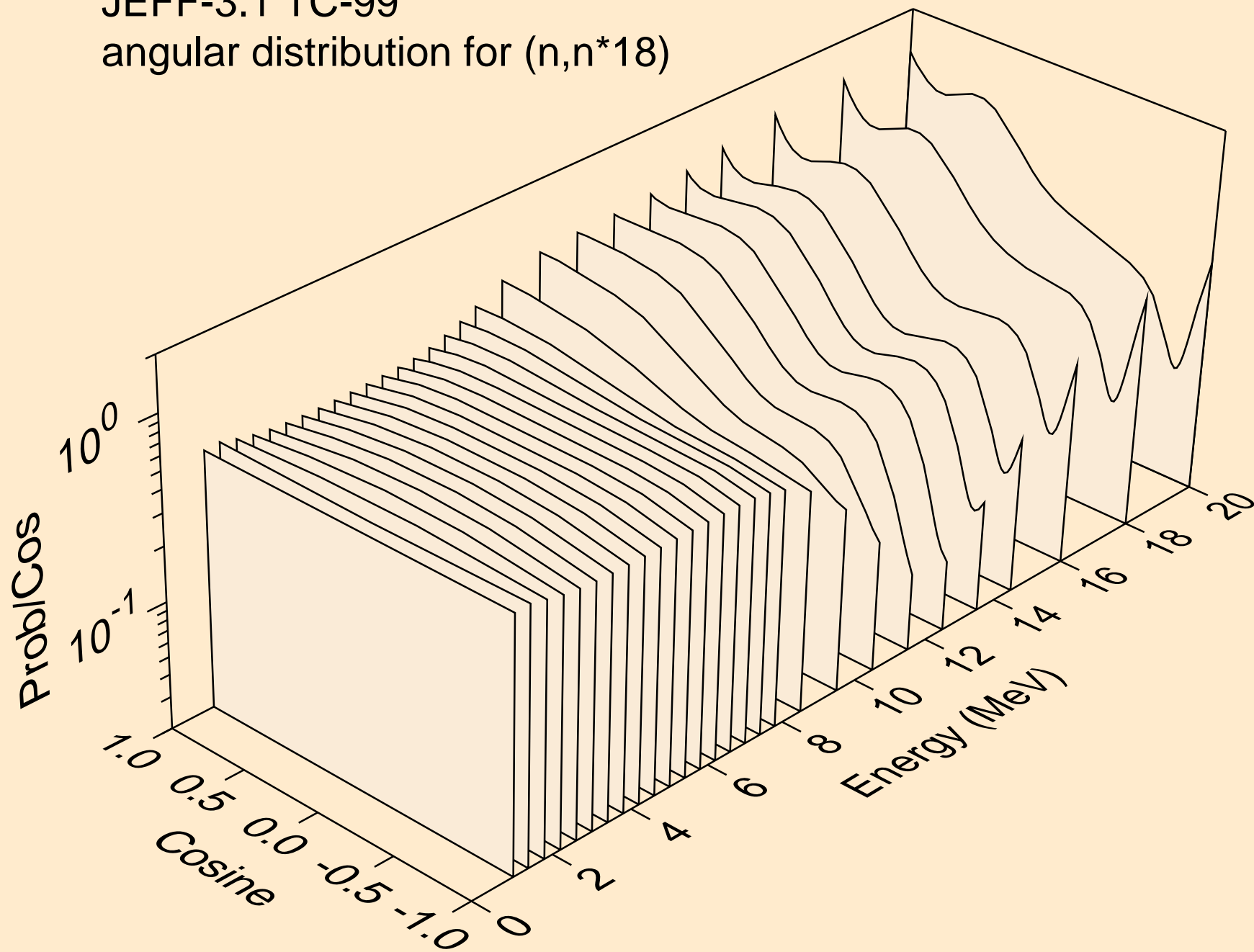
JEFF-3.1 TC-99  
angular distribution for (n,n\*16)



JEFF-3.1 TC-99  
angular distribution for (n,n\*17)

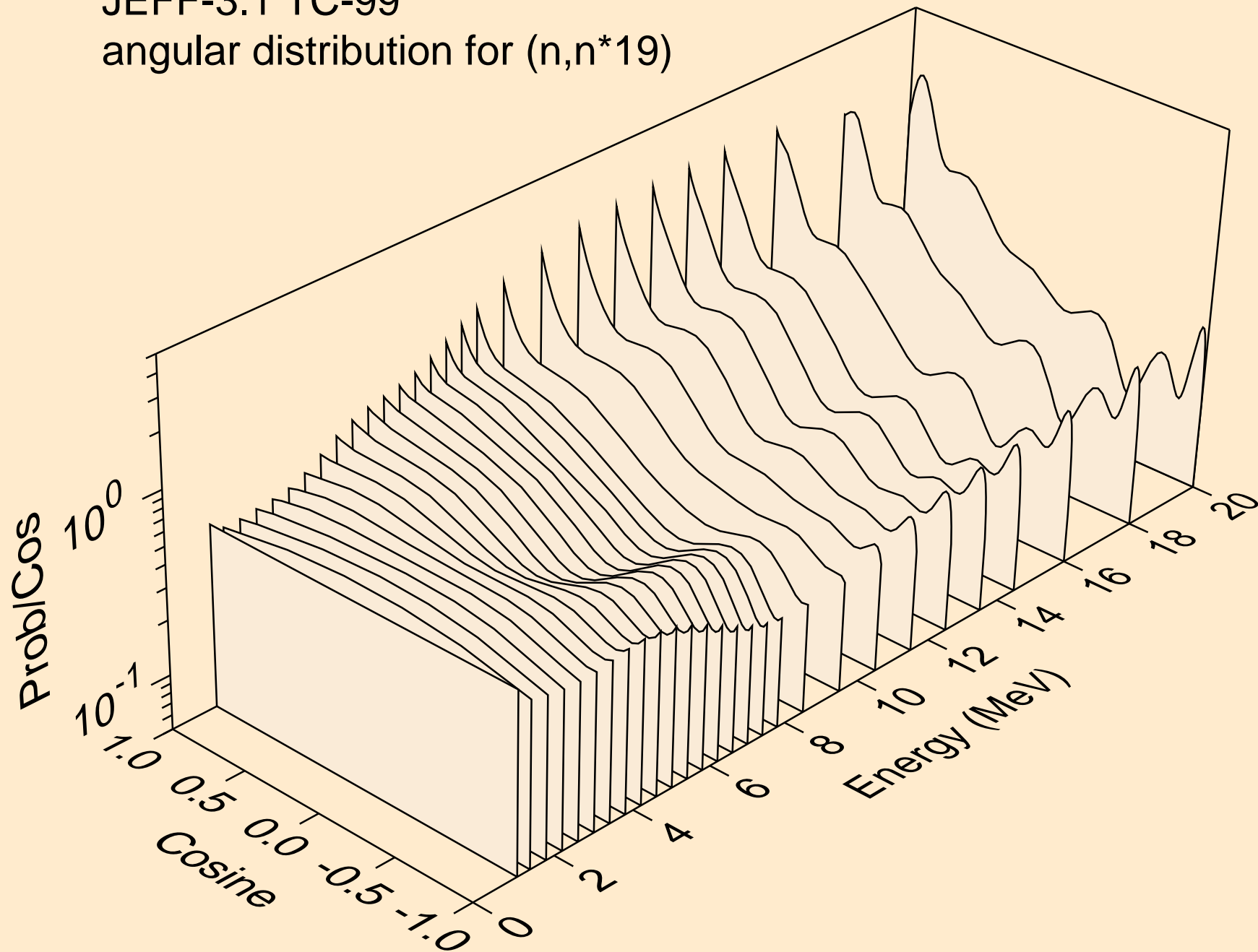


JEFF-3.1 TC-99  
angular distribution for (n,n\*18)

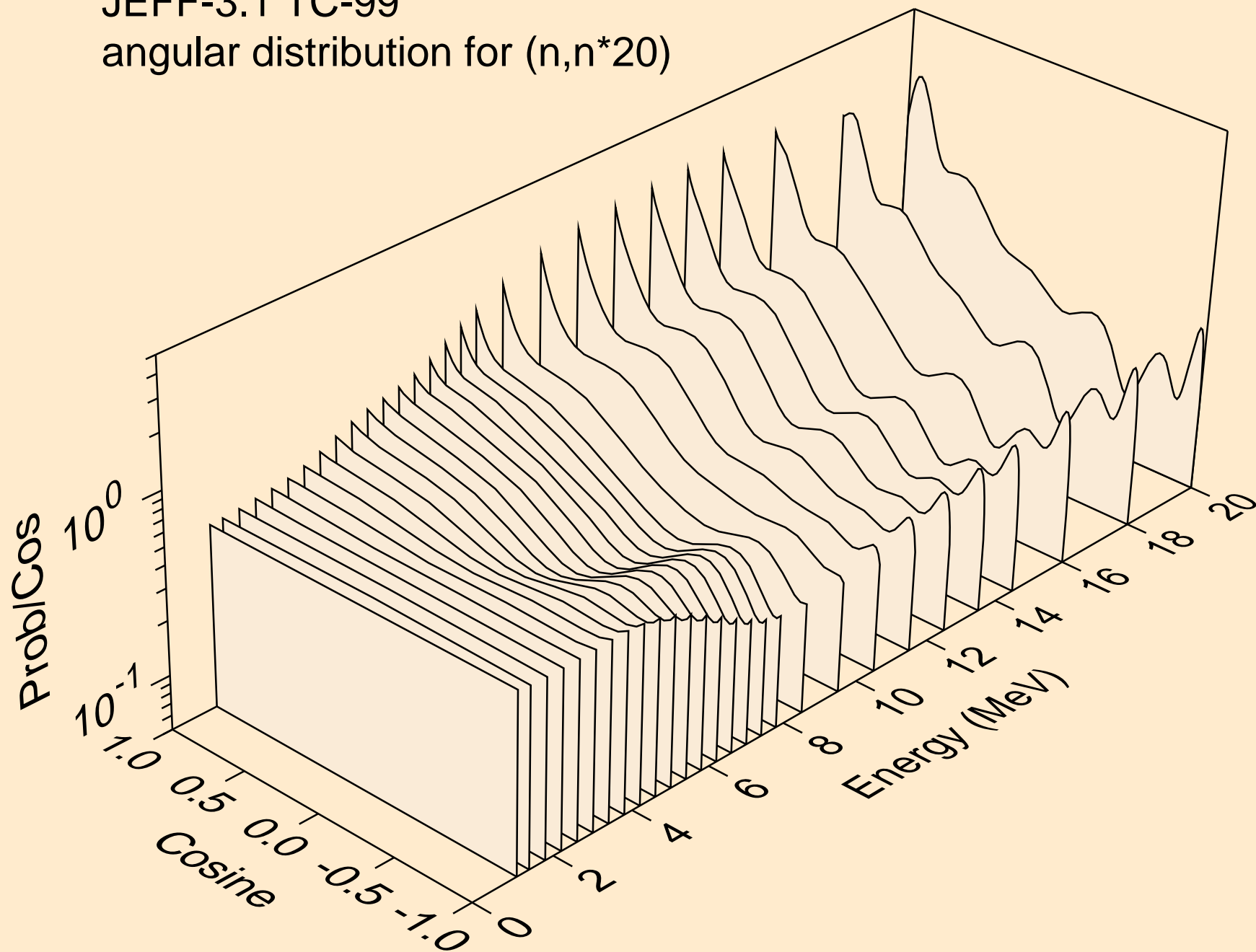




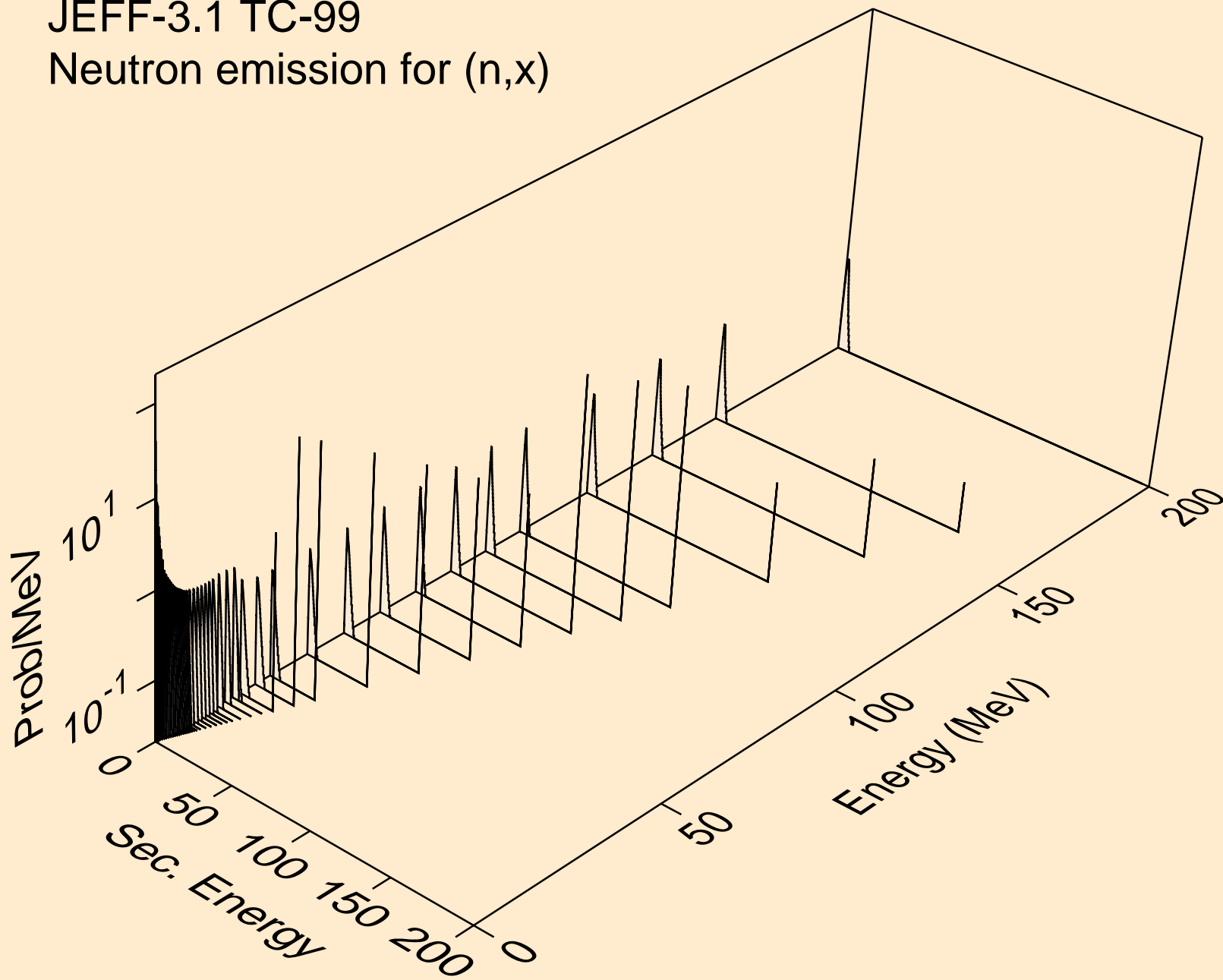
JEFF-3.1 TC-99  
angular distribution for (n,n\*19)



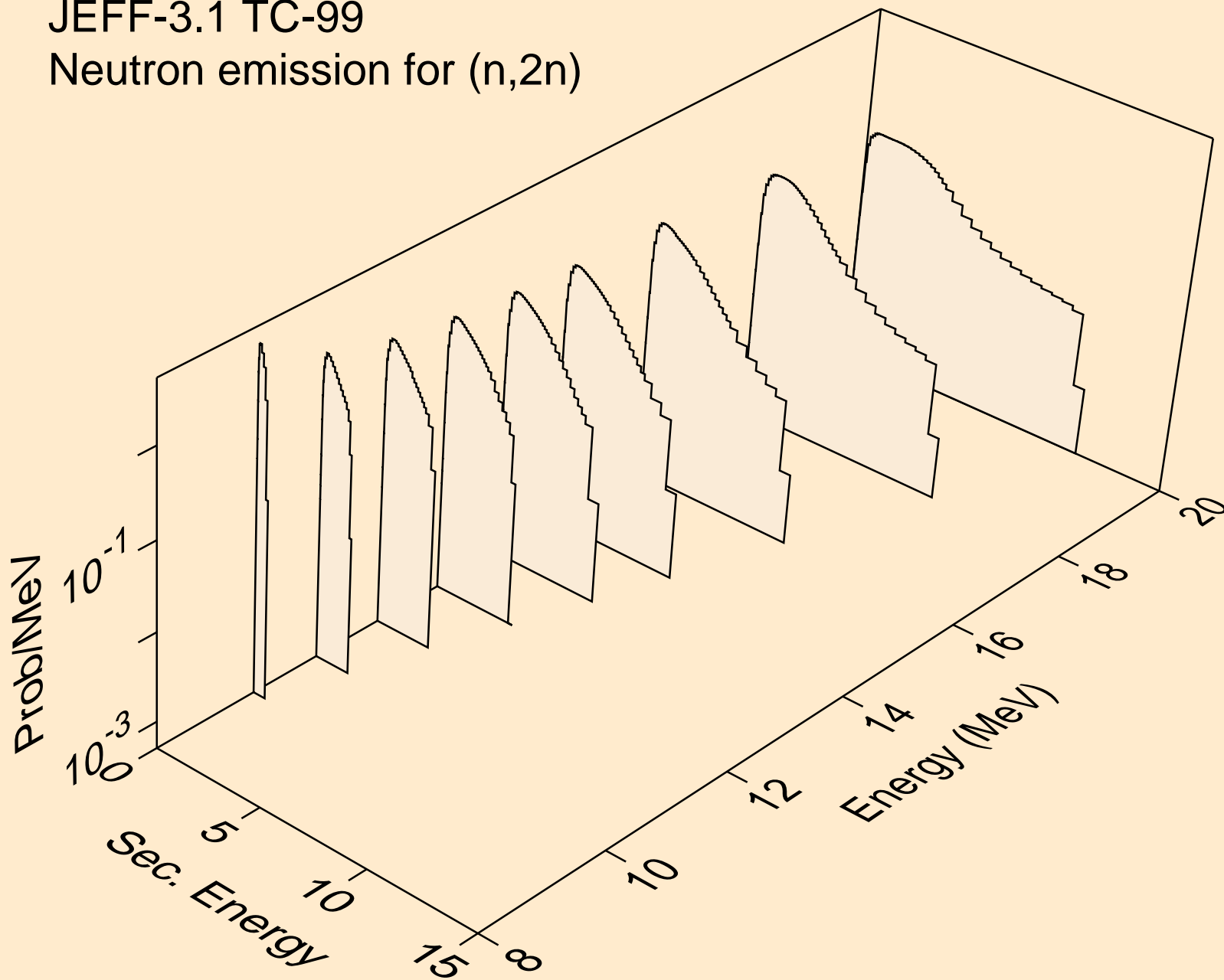
JEFF-3.1 TC-99  
angular distribution for (n,n\*20)



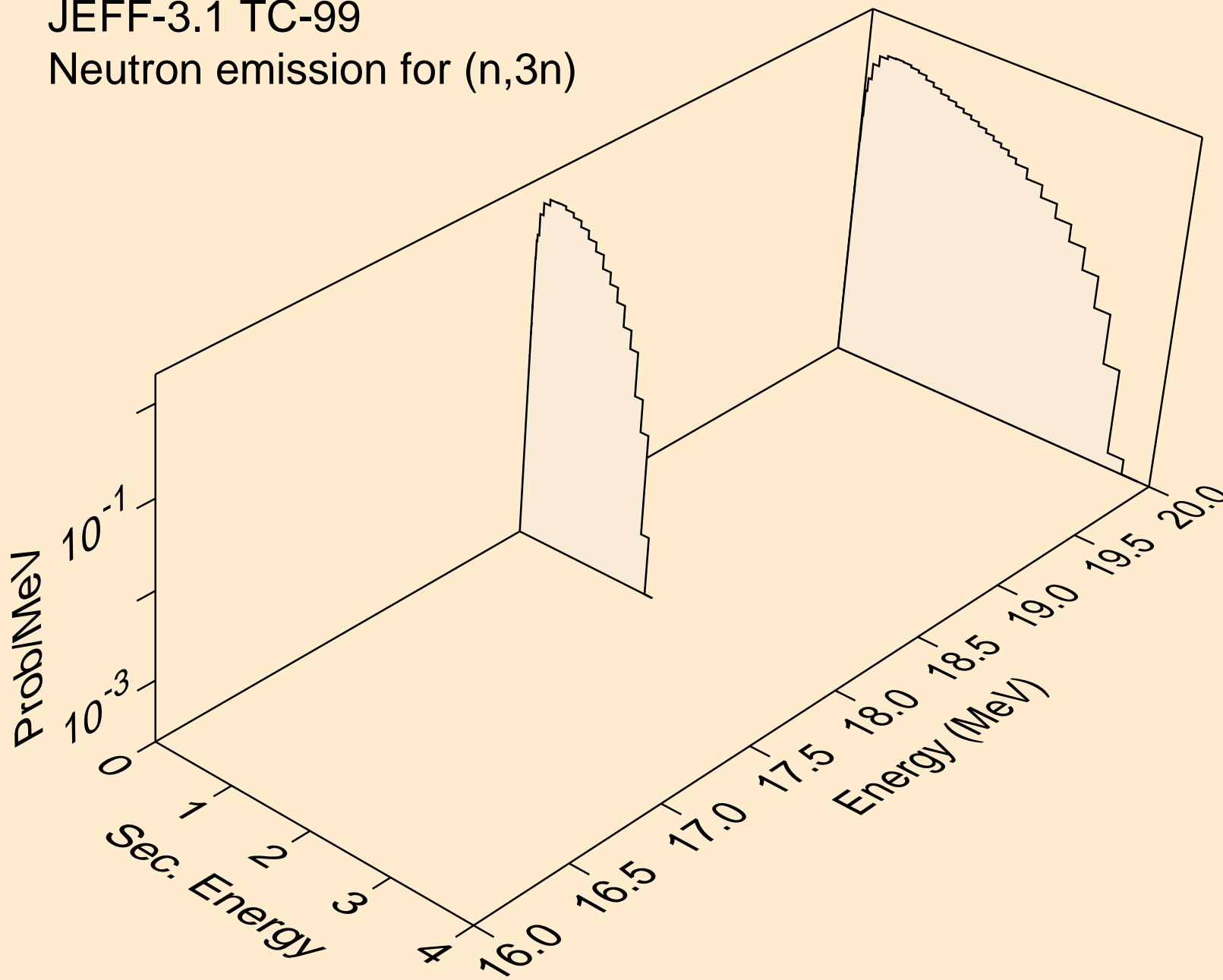
JEFF-3.1 TC-99  
Neutron emission for (n,x)



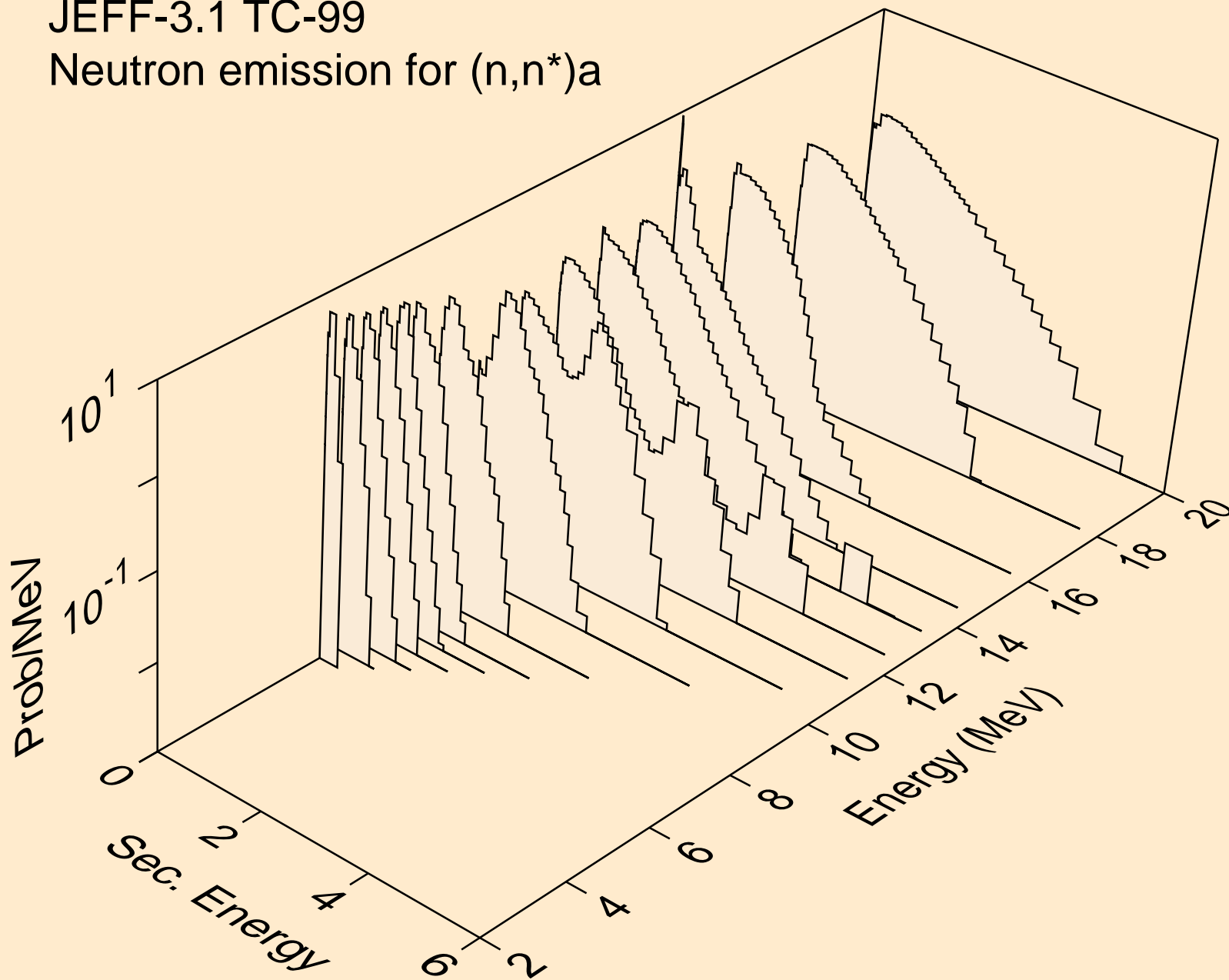
JEFF-3.1 TC-99  
Neutron emission for (n,2n)



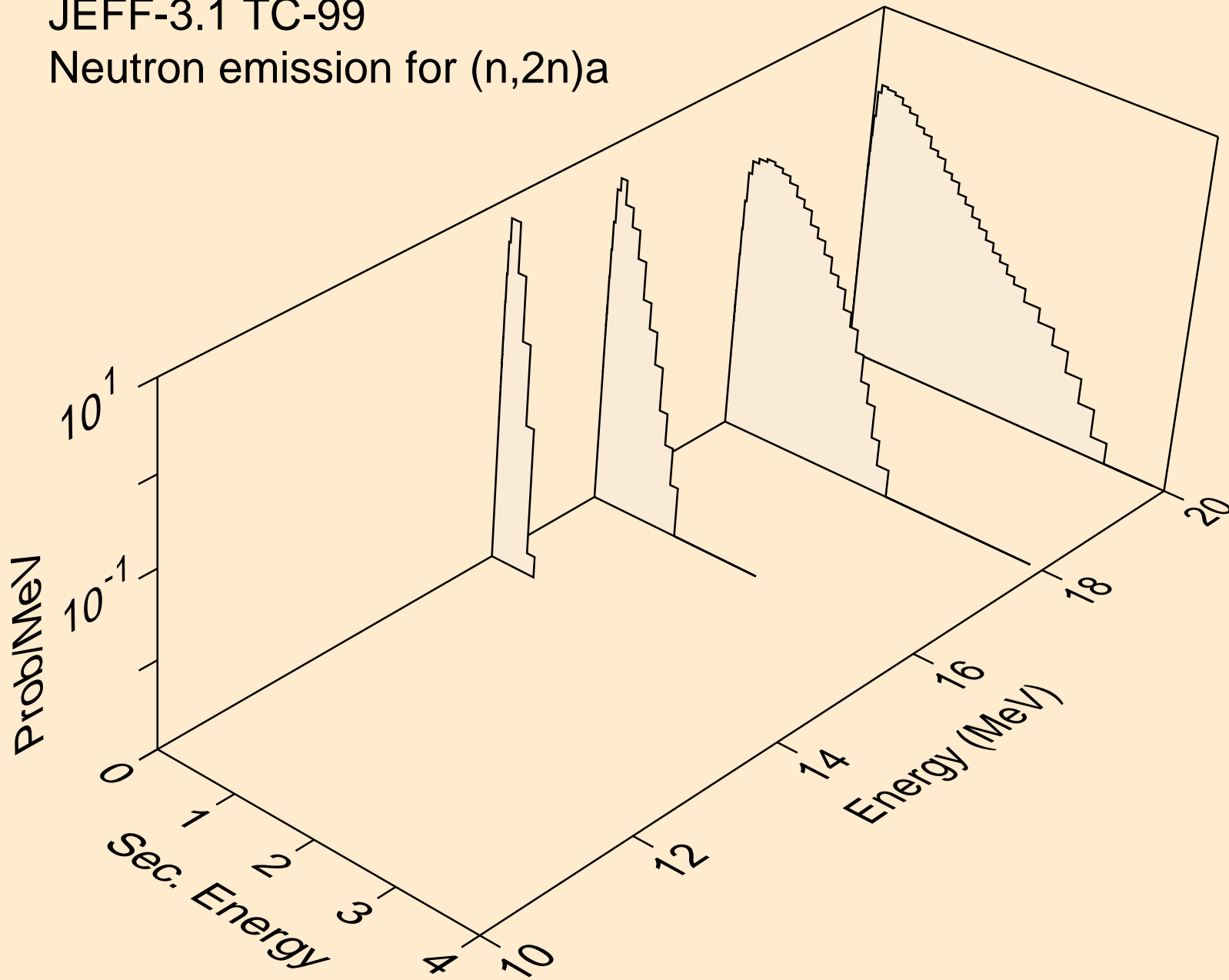
JEFF-3.1 TC-99  
Neutron emission for (n,3n)



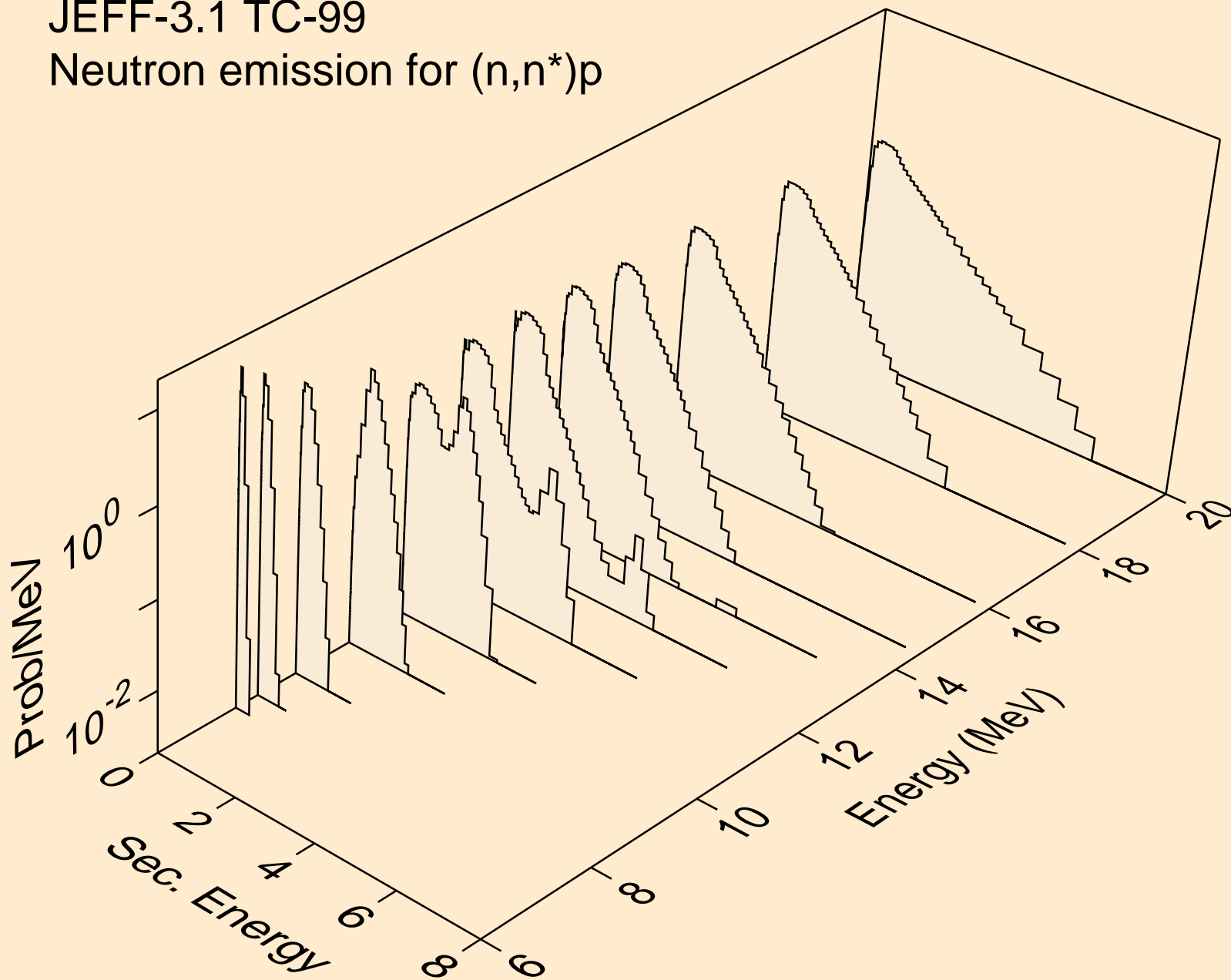
JEFF-3.1 TC-99  
Neutron emission for (n,n\*)a



JEFF-3.1 TC-99  
Neutron emission for (n,2n)a

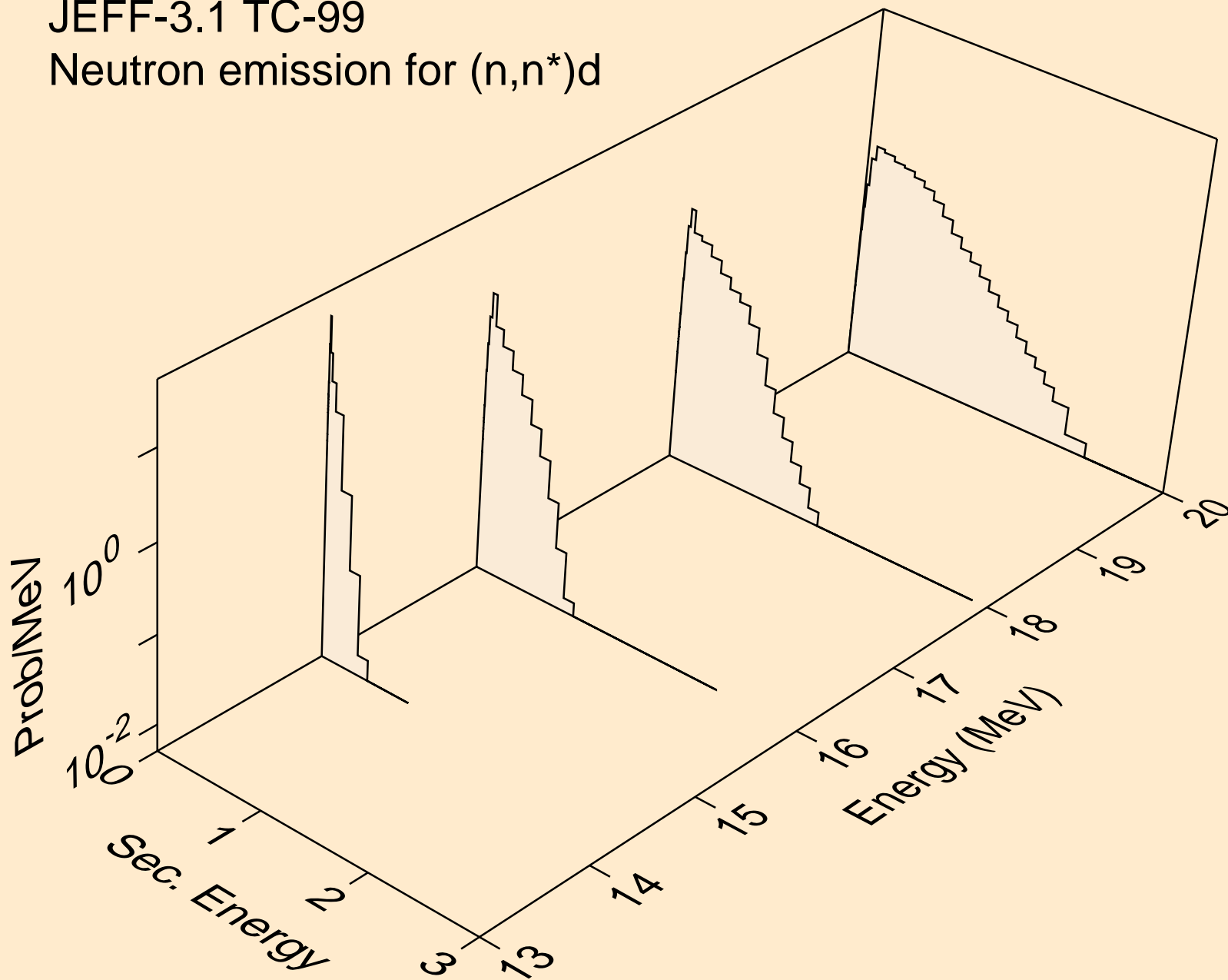


JEFF-3.1 TC-99  
Neutron emission for (n,n\*)p

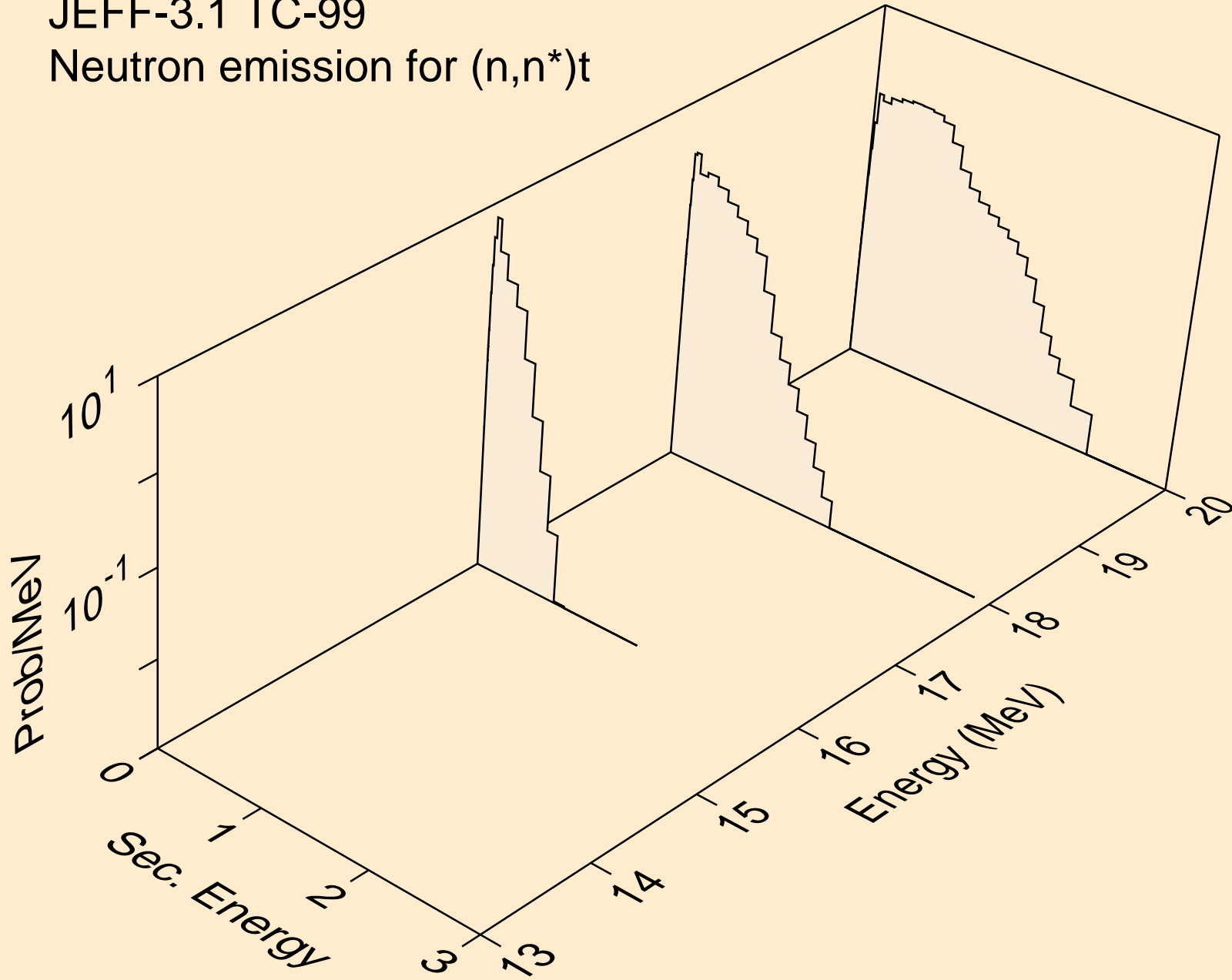




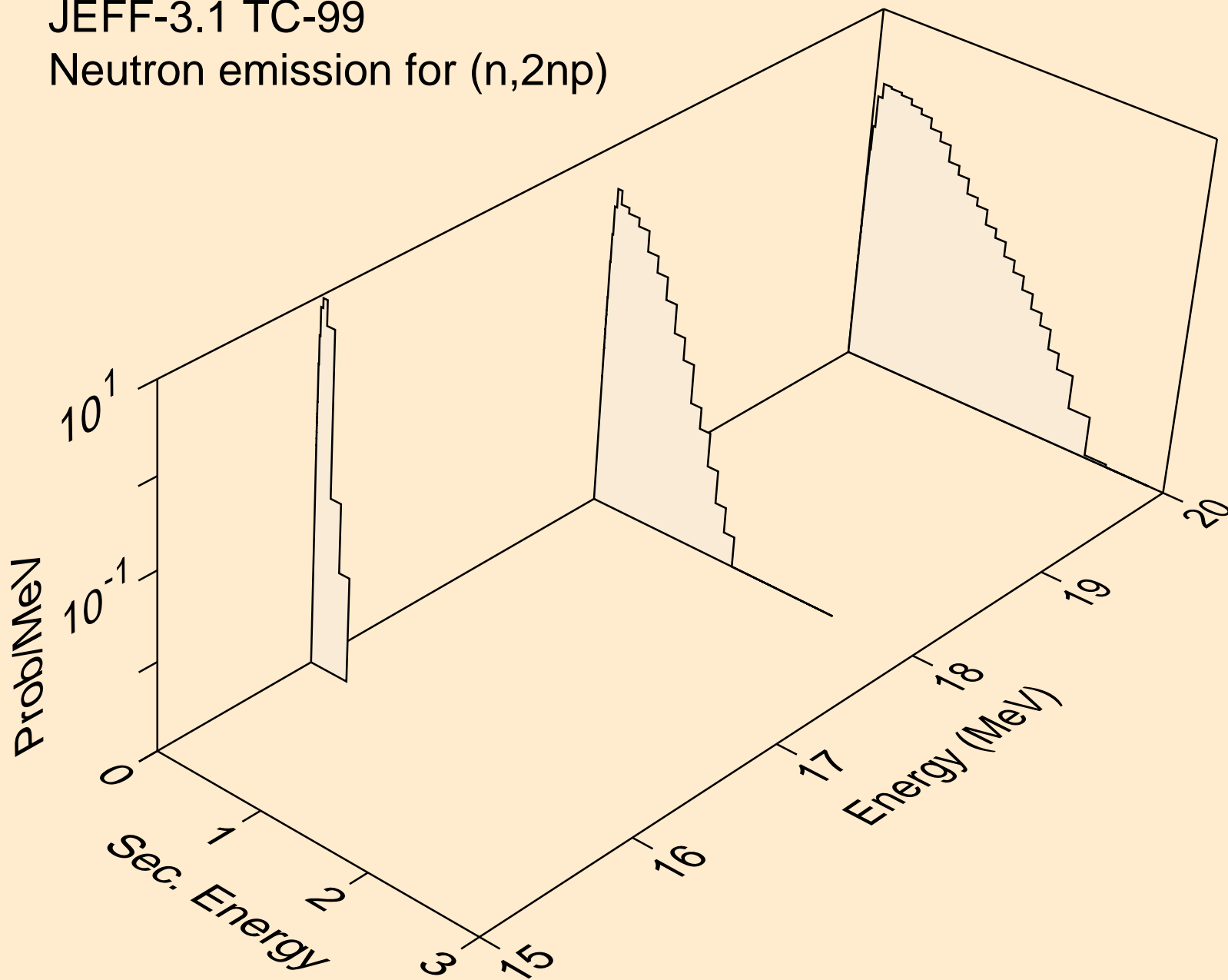
JEFF-3.1 TC-99  
Neutron emission for (n,n\*)d



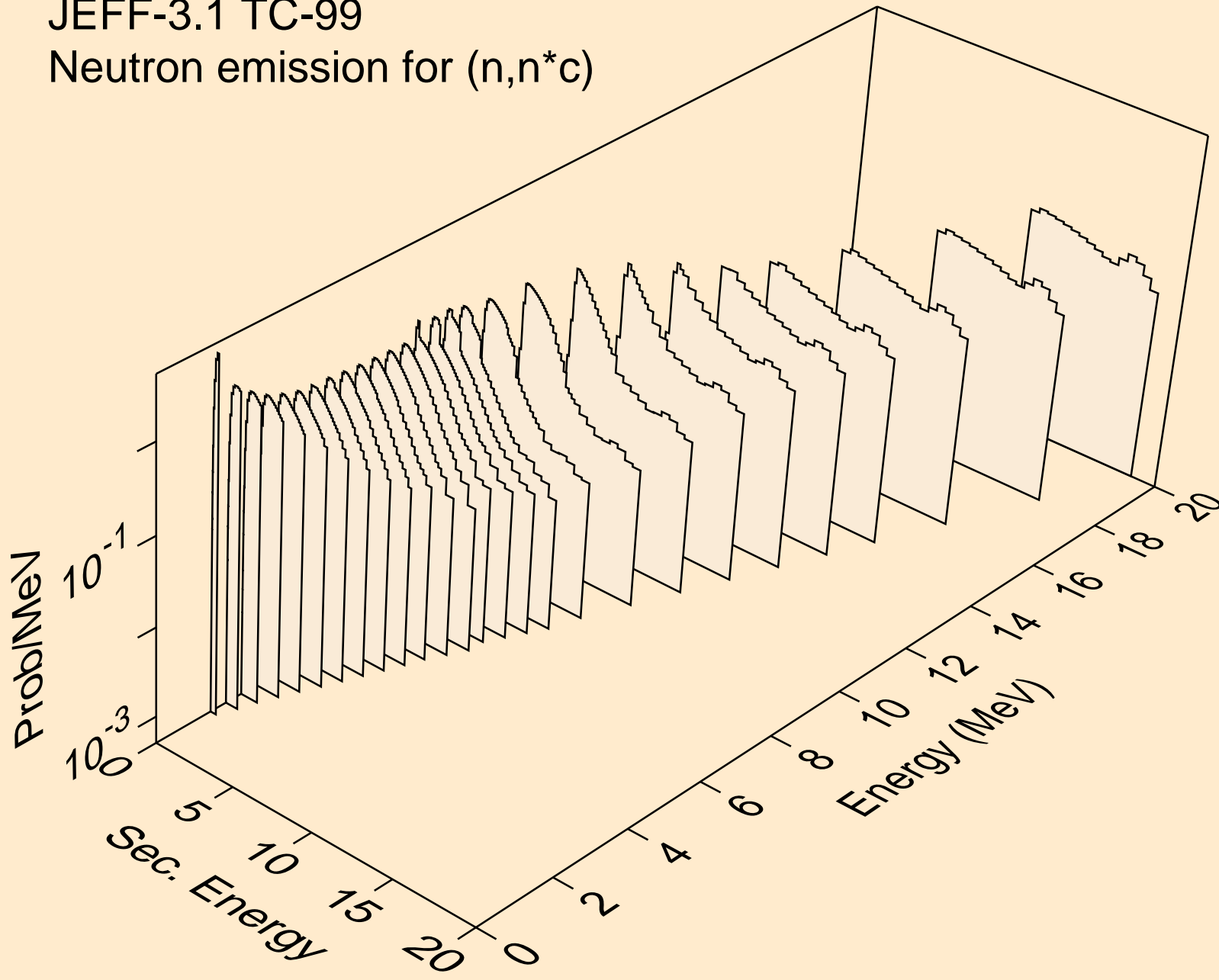
JEFF-3.1 TC-99  
Neutron emission for (n,n\*)t



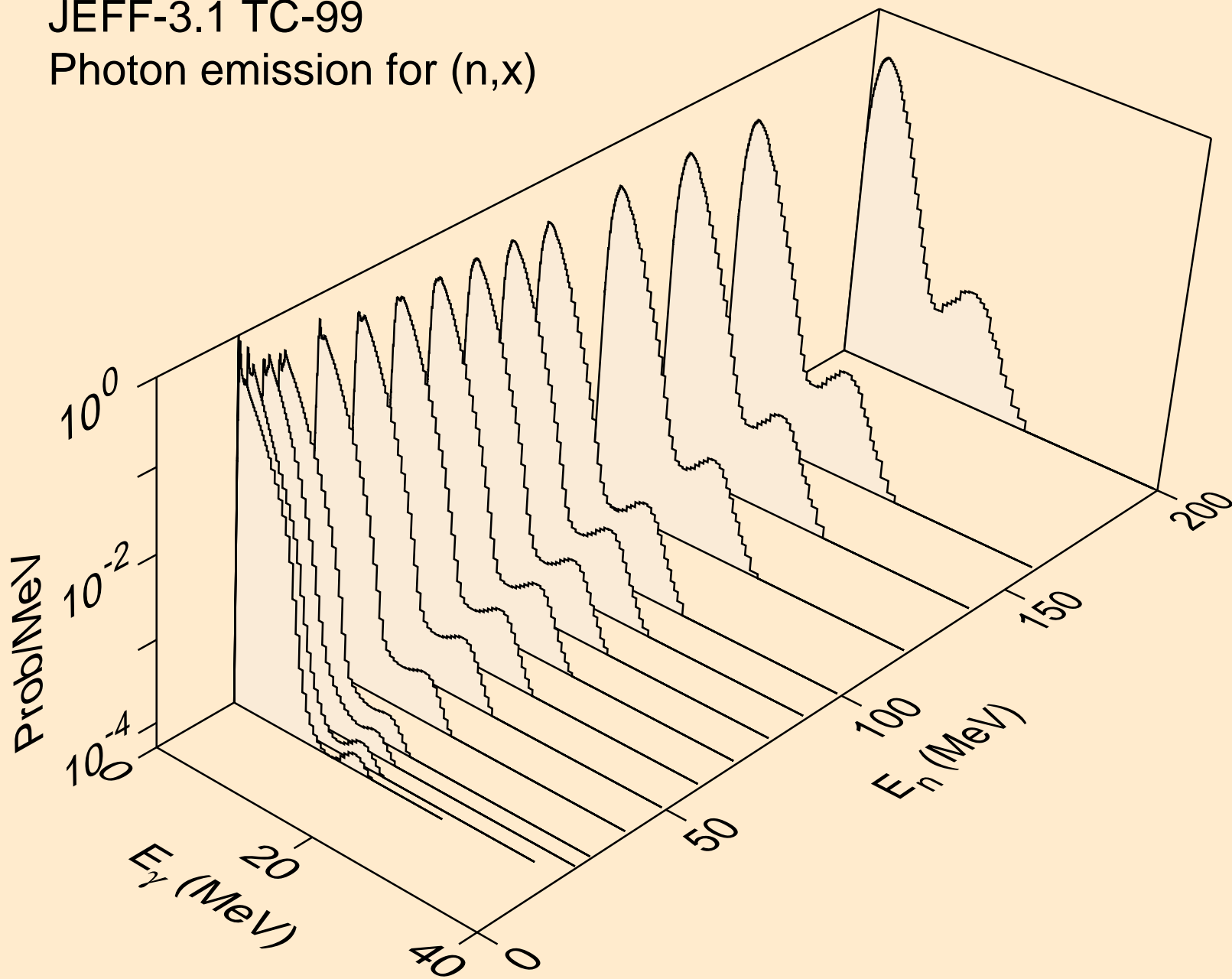
JEFF-3.1 TC-99  
Neutron emission for (n,2np)



JEFF-3.1 TC-99  
Neutron emission for (n,n\*c)

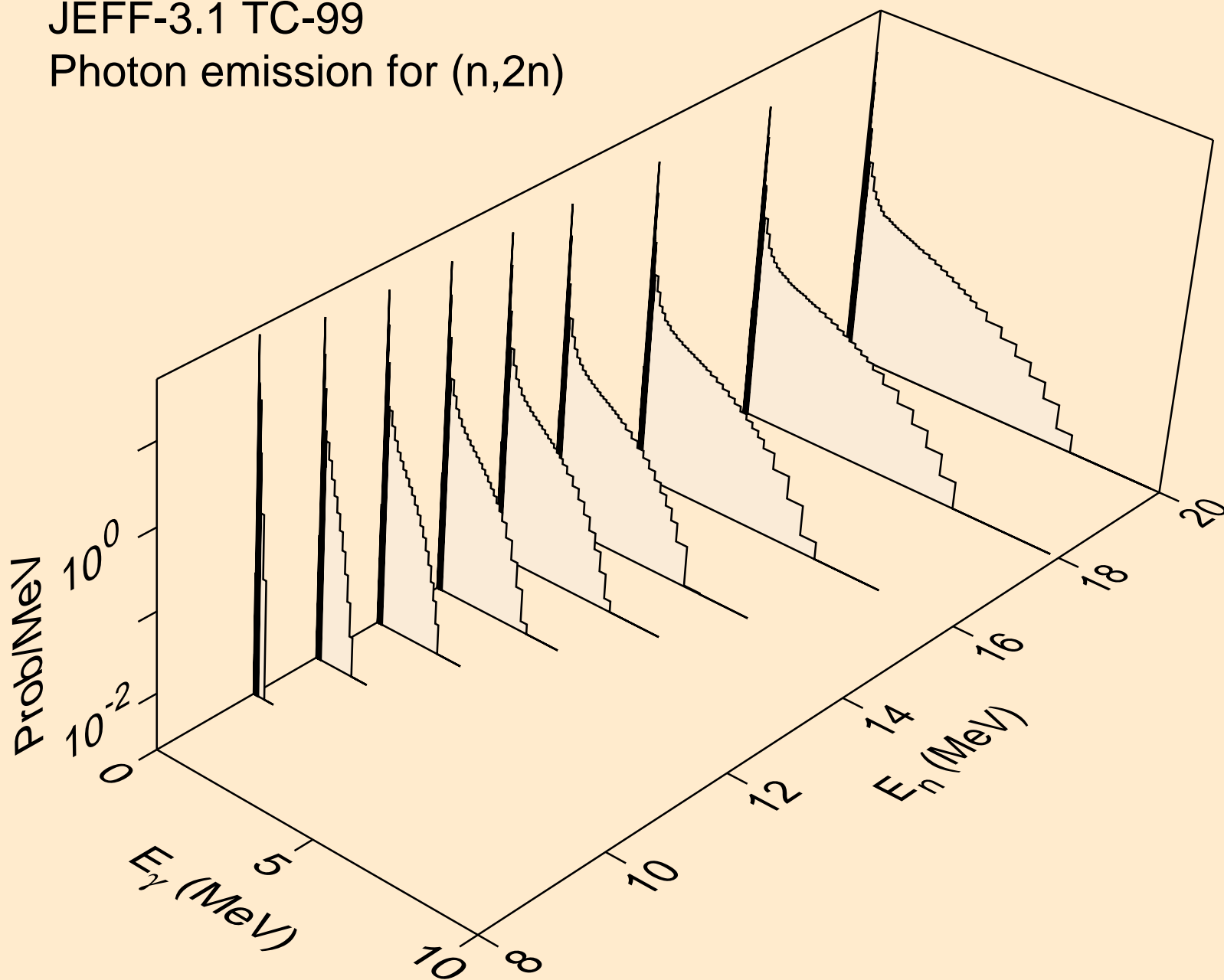


JEFF-3.1 TC-99  
Photon emission for (n,x)

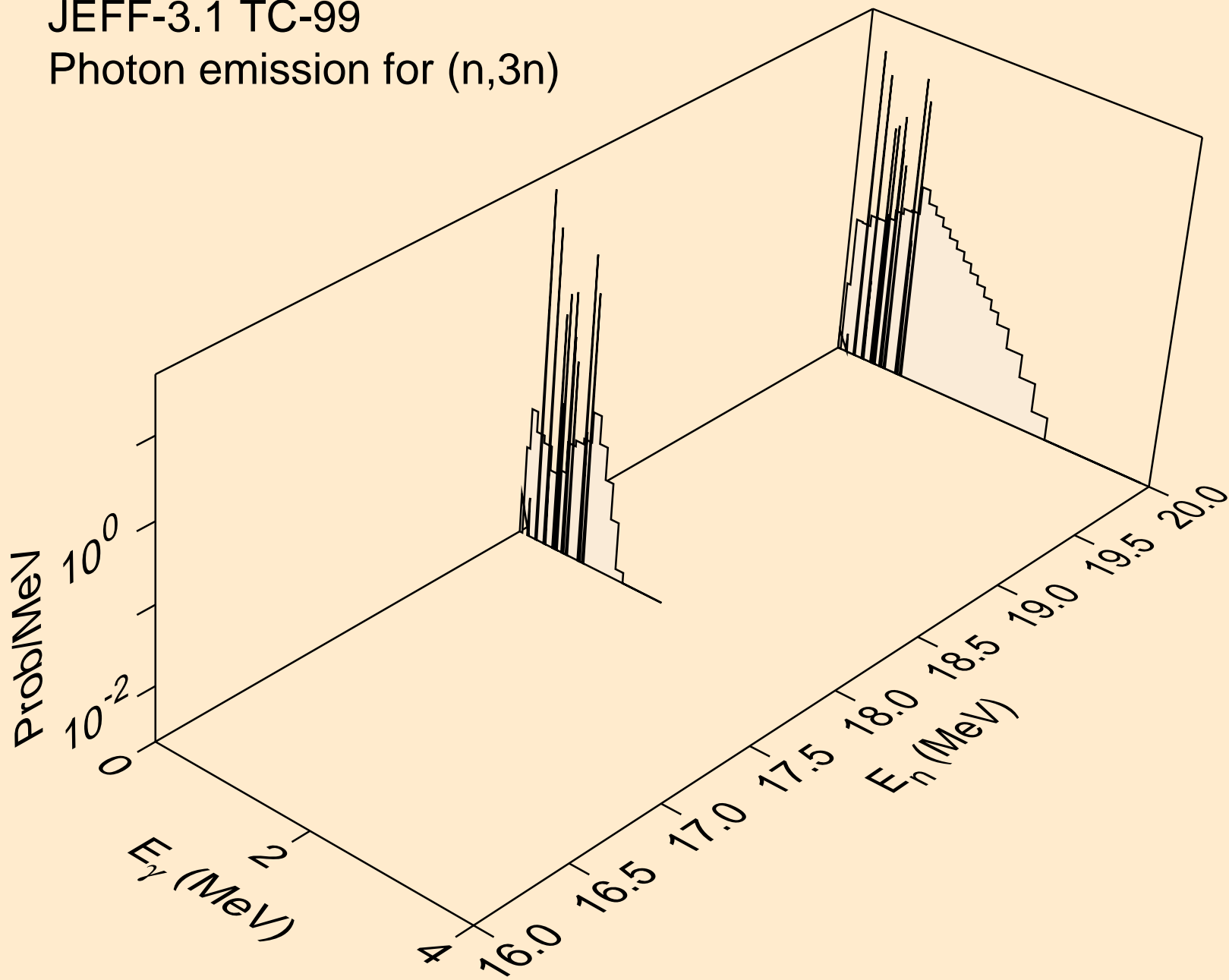


JEFF-3.1 TC-99

Photon emission for (n,2n)

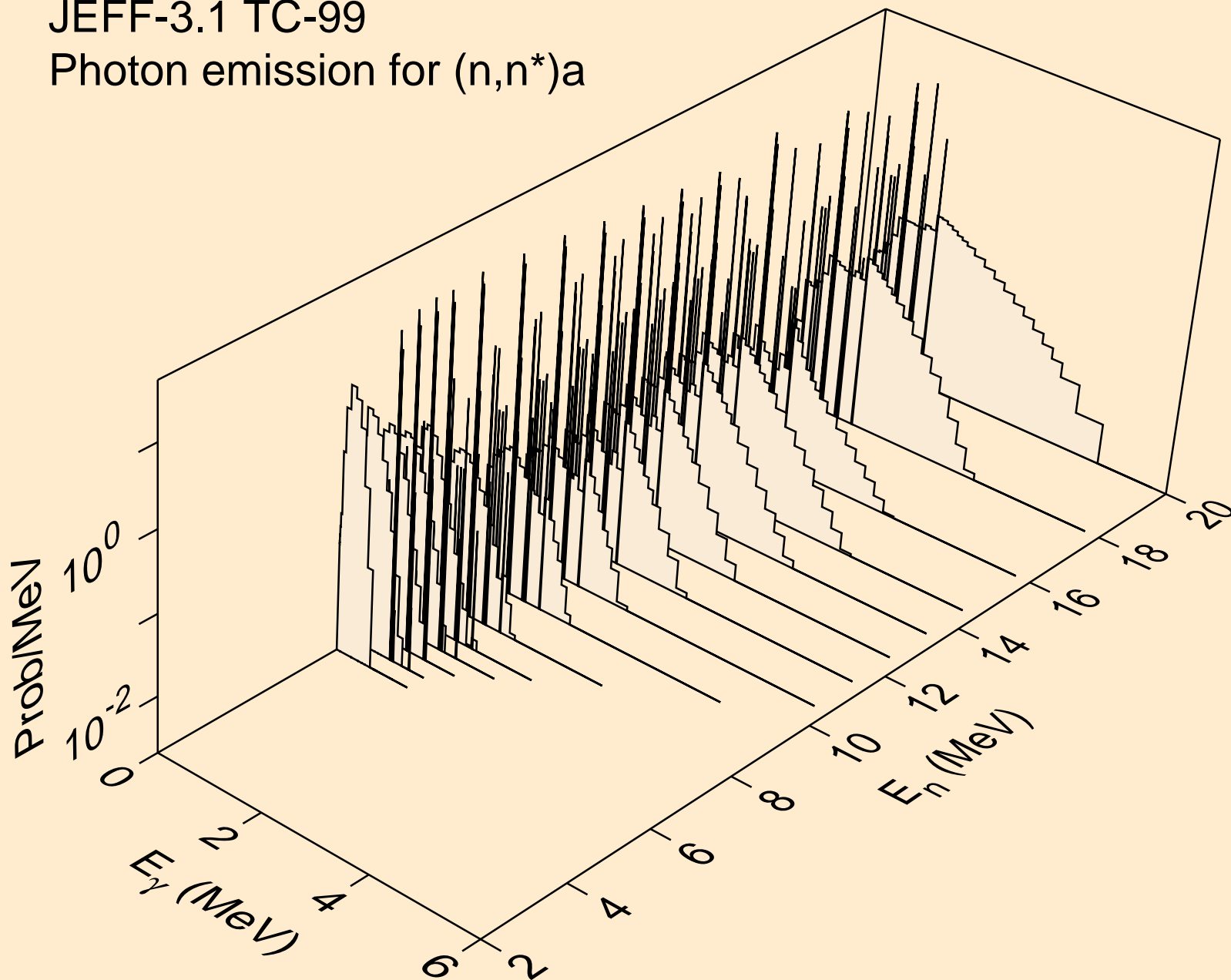


JEFF-3.1 TC-99  
Photon emission for (n,3n)



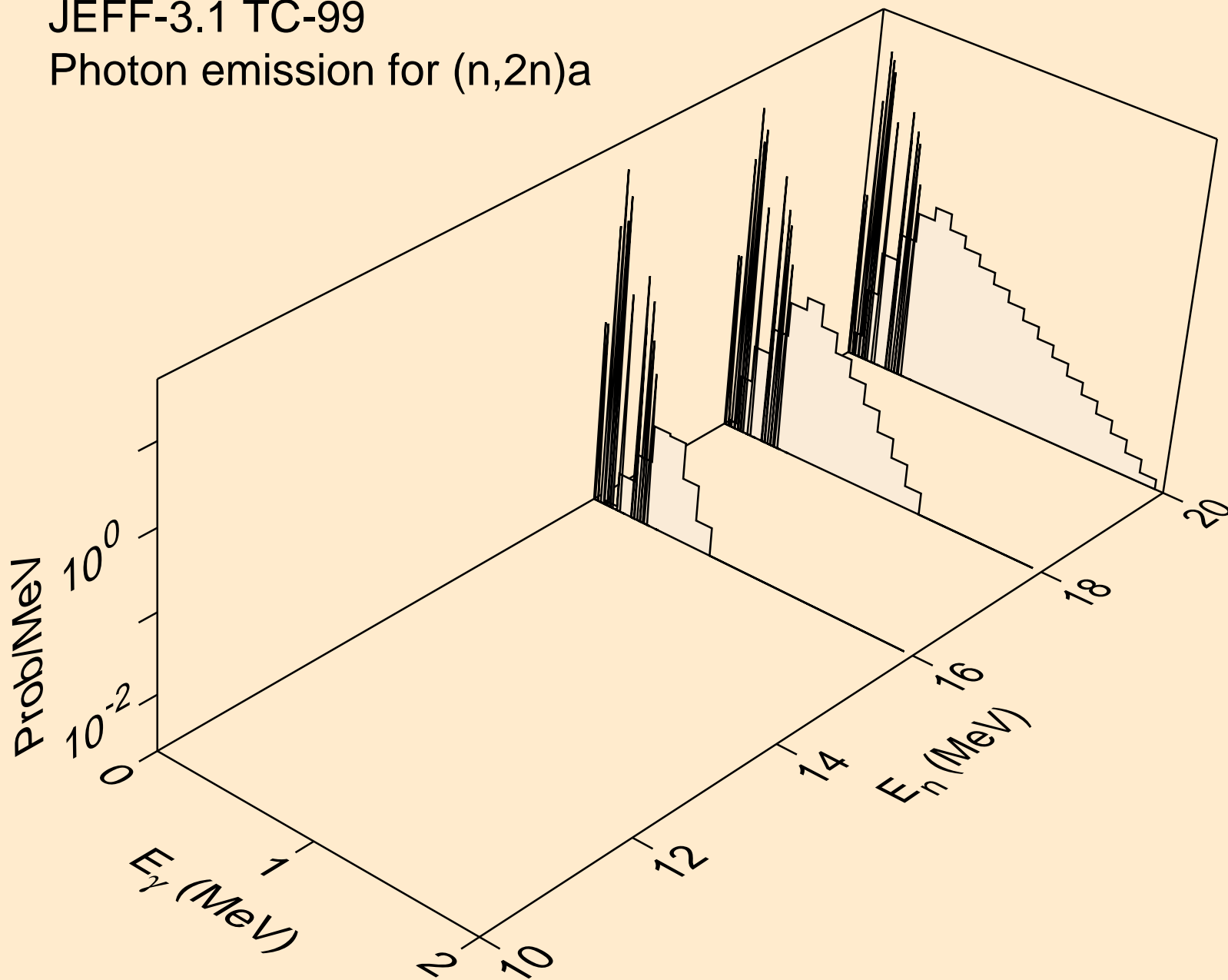
JEFF-3.1 TC-99

Photon emission for (n,n\*)a



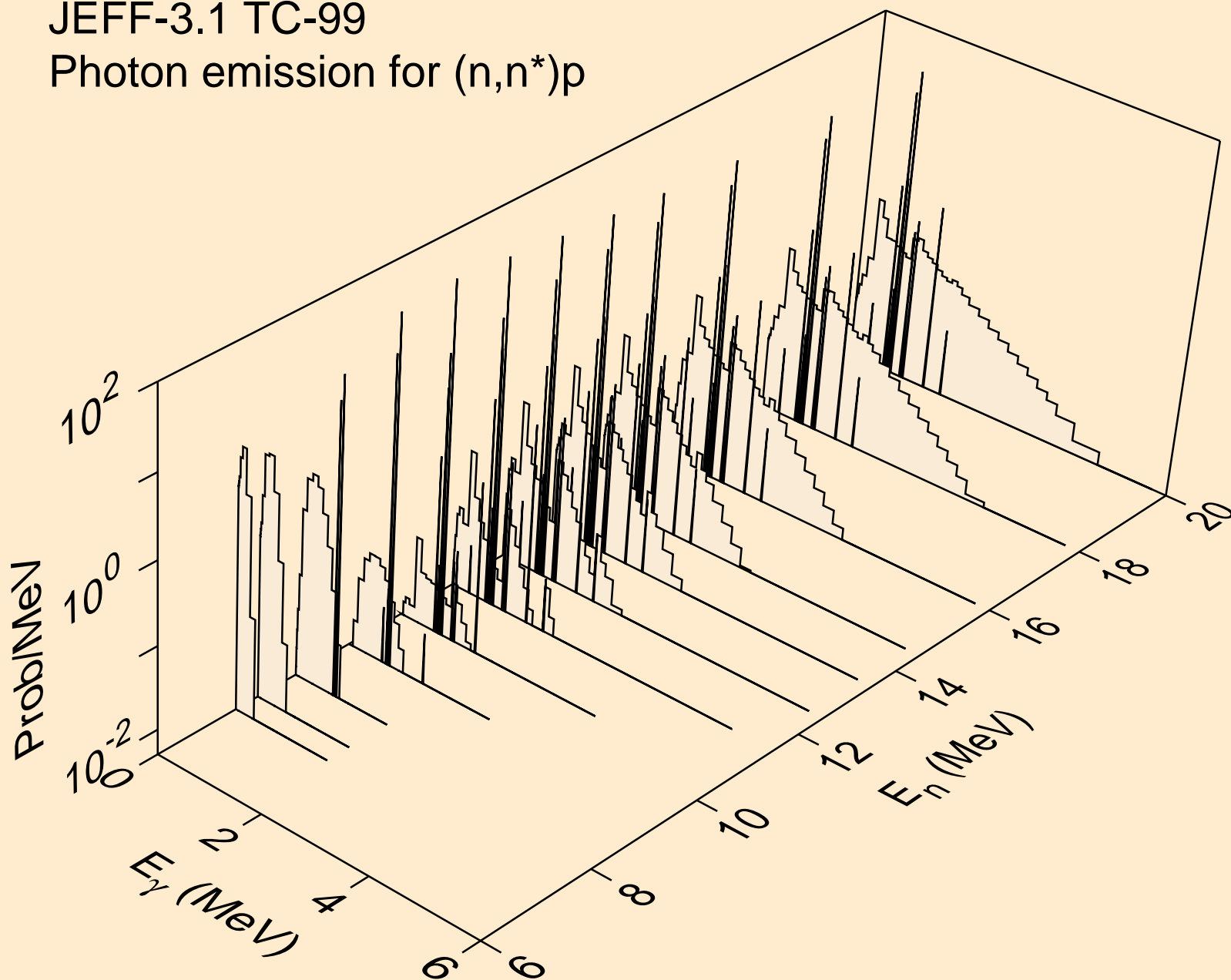


JEFF-3.1 TC-99  
Photon emission for (n,2n)a



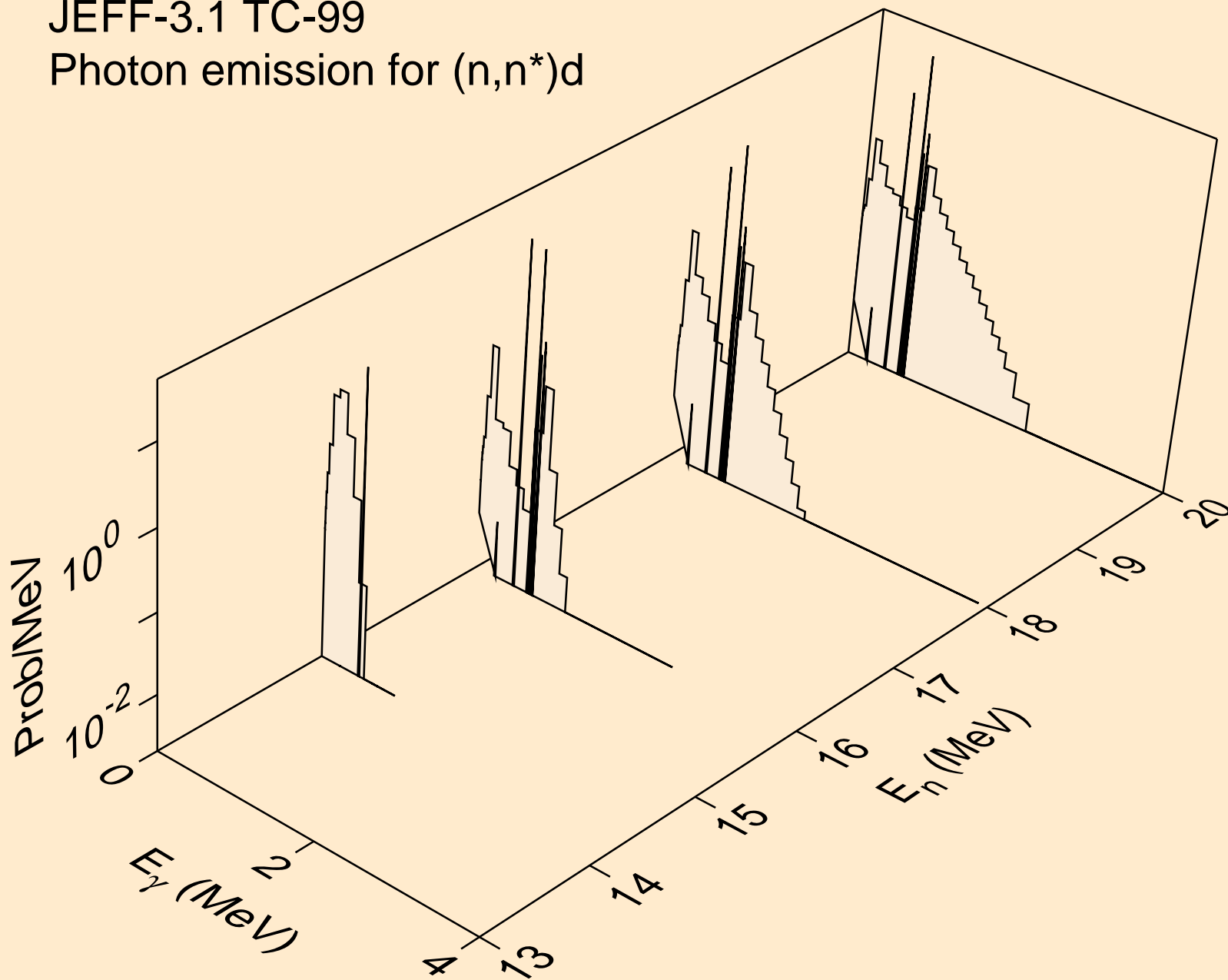
JEFF-3.1 TC-99

Photon emission for (n,n\*)p

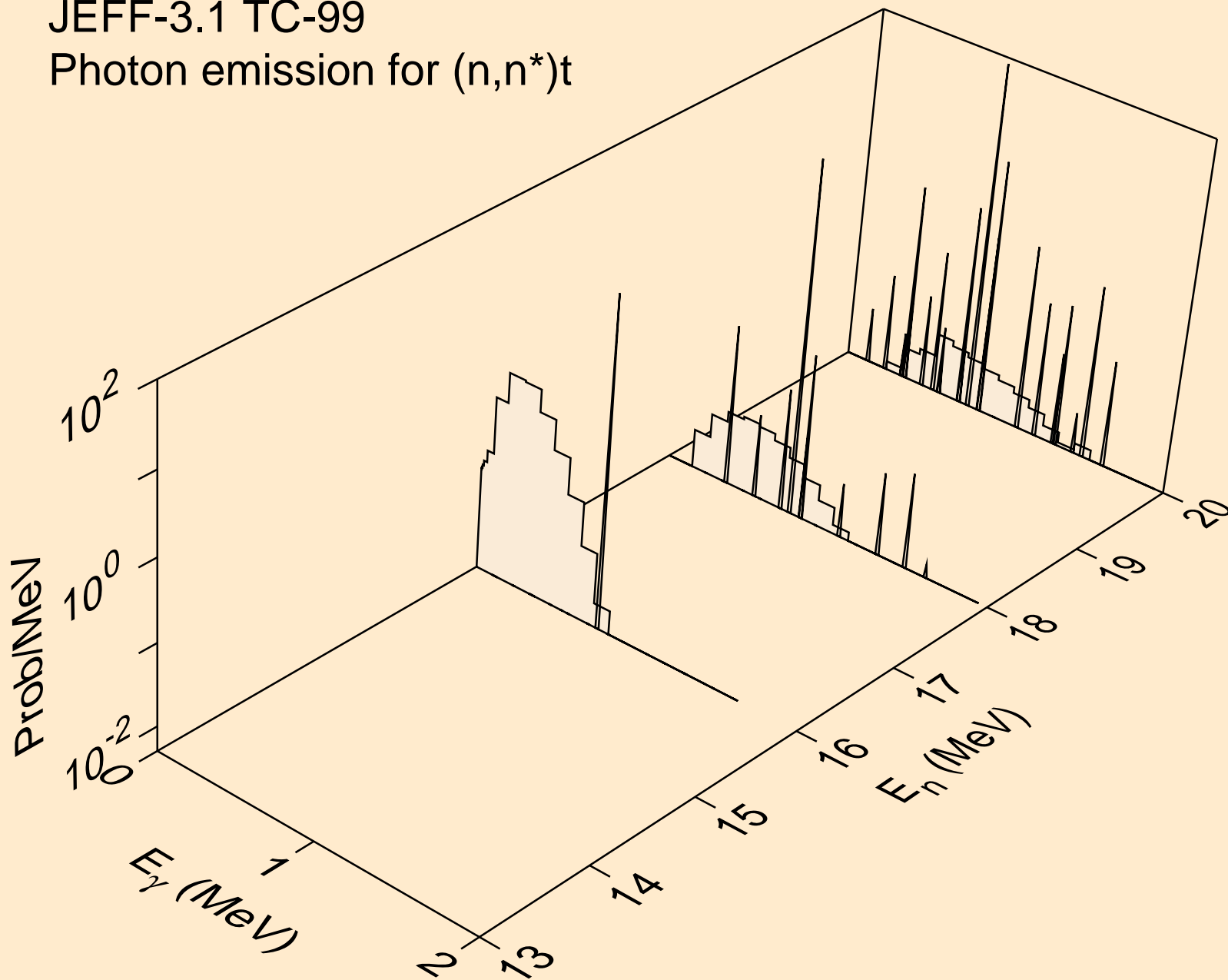


JEFF-3.1 TC-99

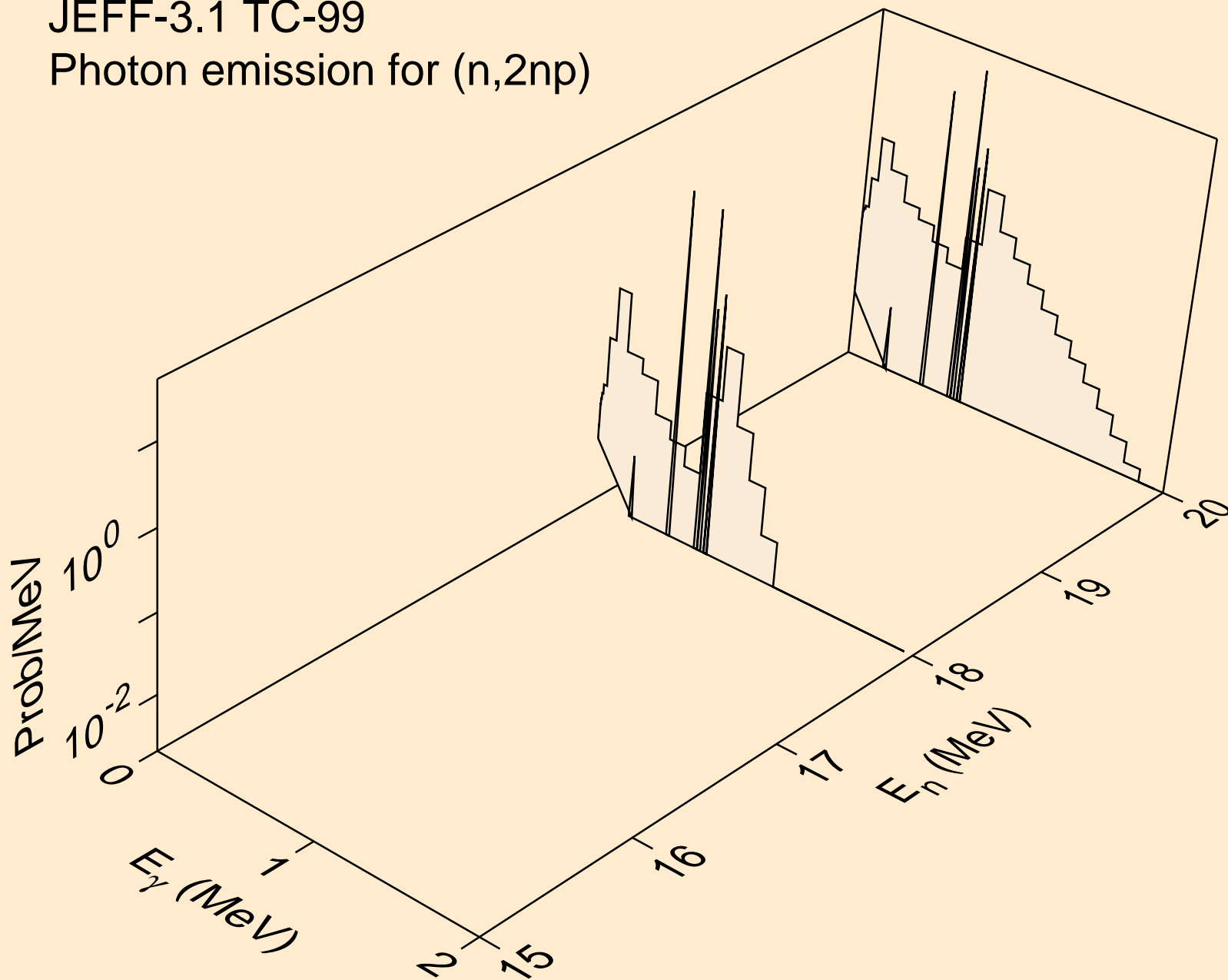
Photon emission for (n,n\*)d



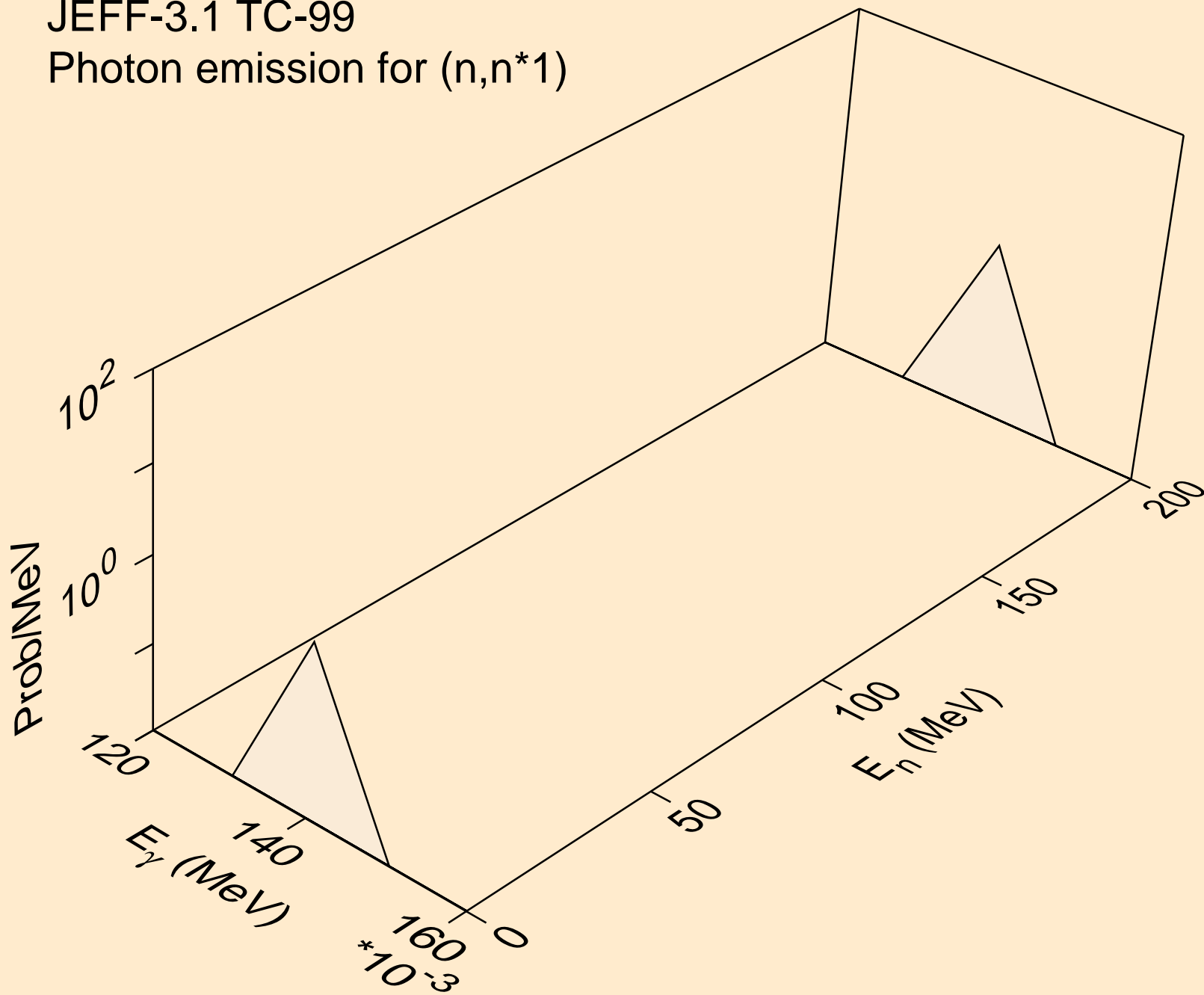
JEFF-3.1 TC-99  
Photon emission for (n,n\*)t



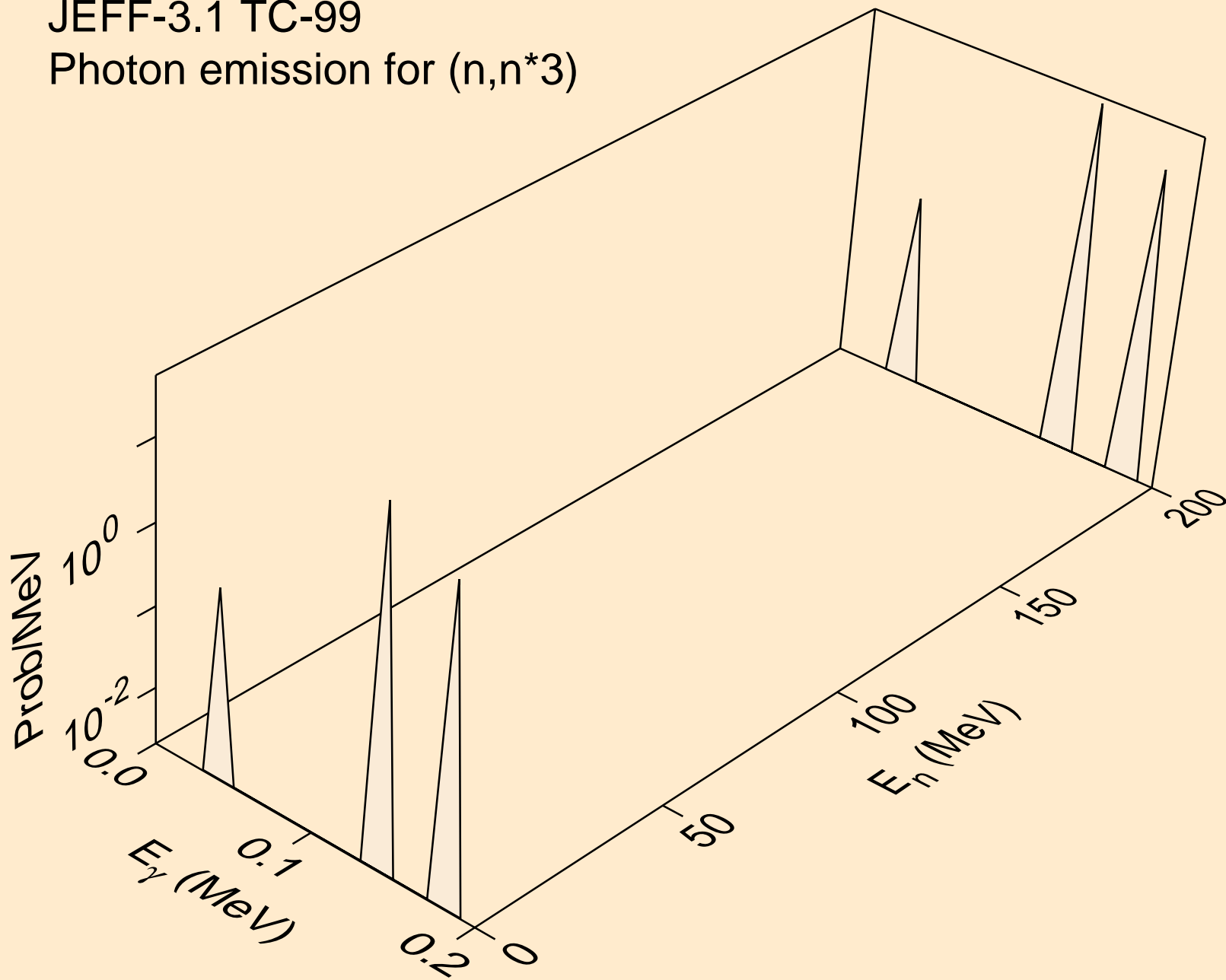
JEFF-3.1 TC-99  
Photon emission for (n,2np)



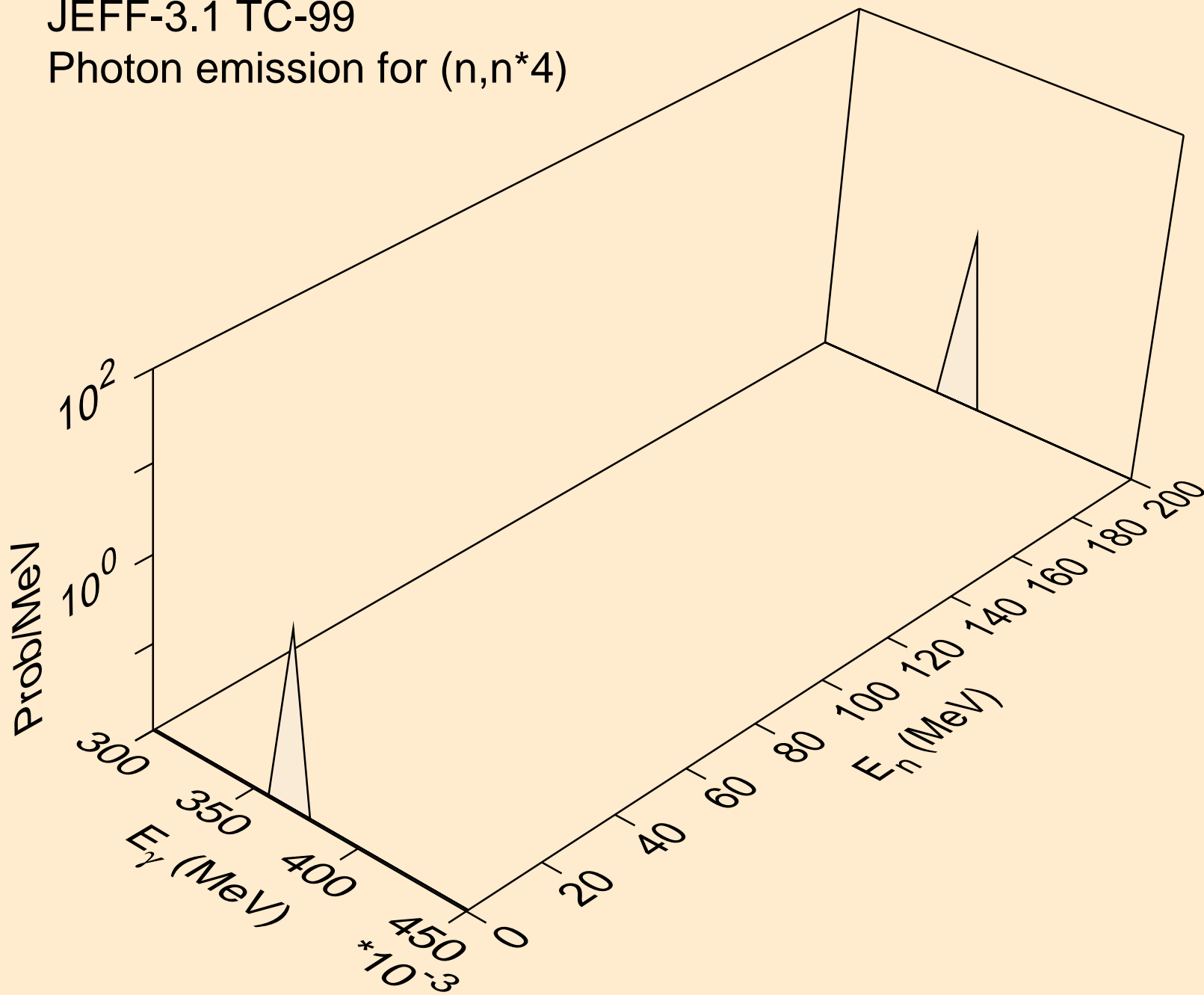
JEFF-3.1 TC-99  
Photon emission for (n,n\*1)



JEFF-3.1 TC-99  
Photon emission for (n,n\*3)

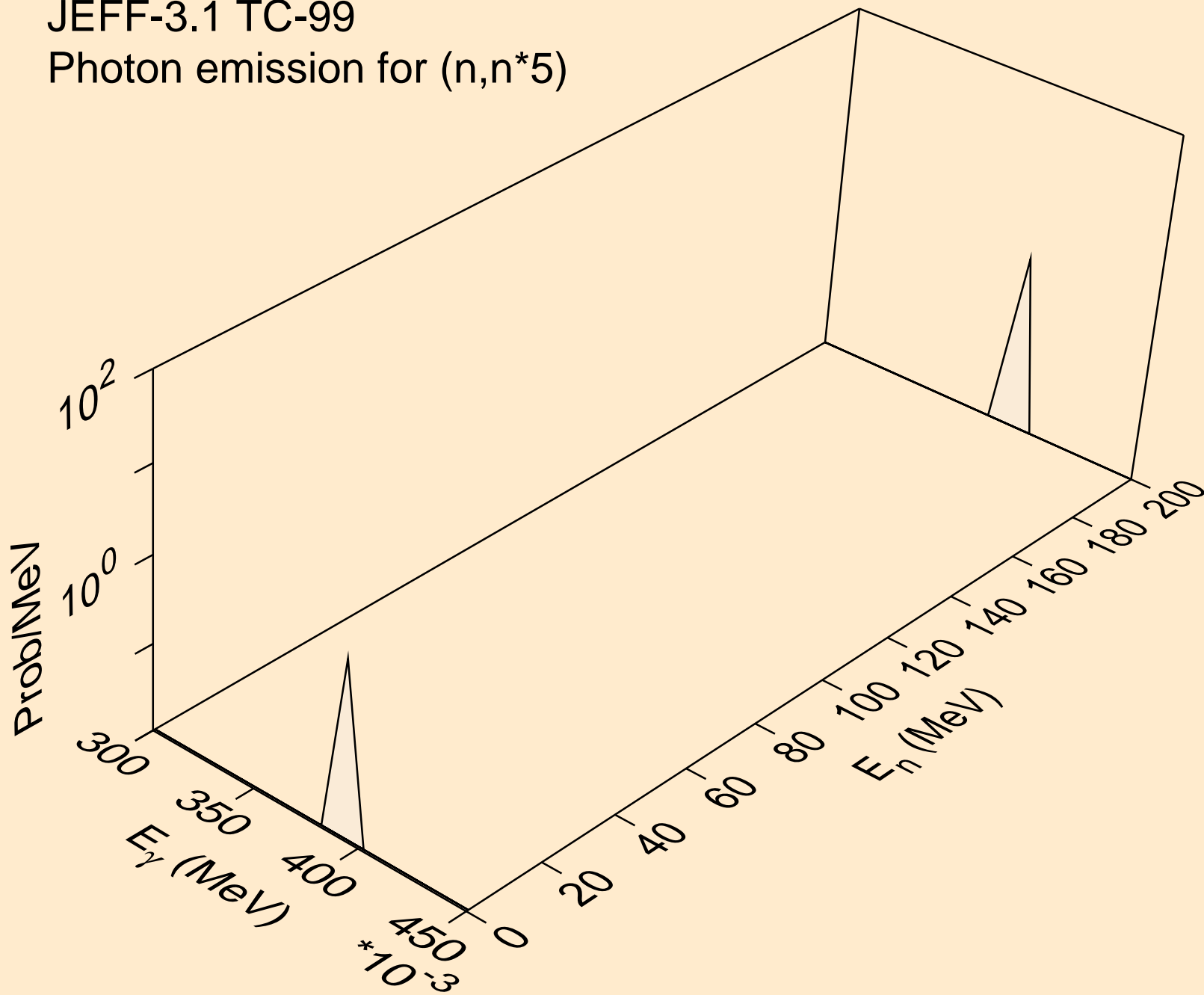


JEFF-3.1 TC-99  
Photon emission for (n,n\*4)

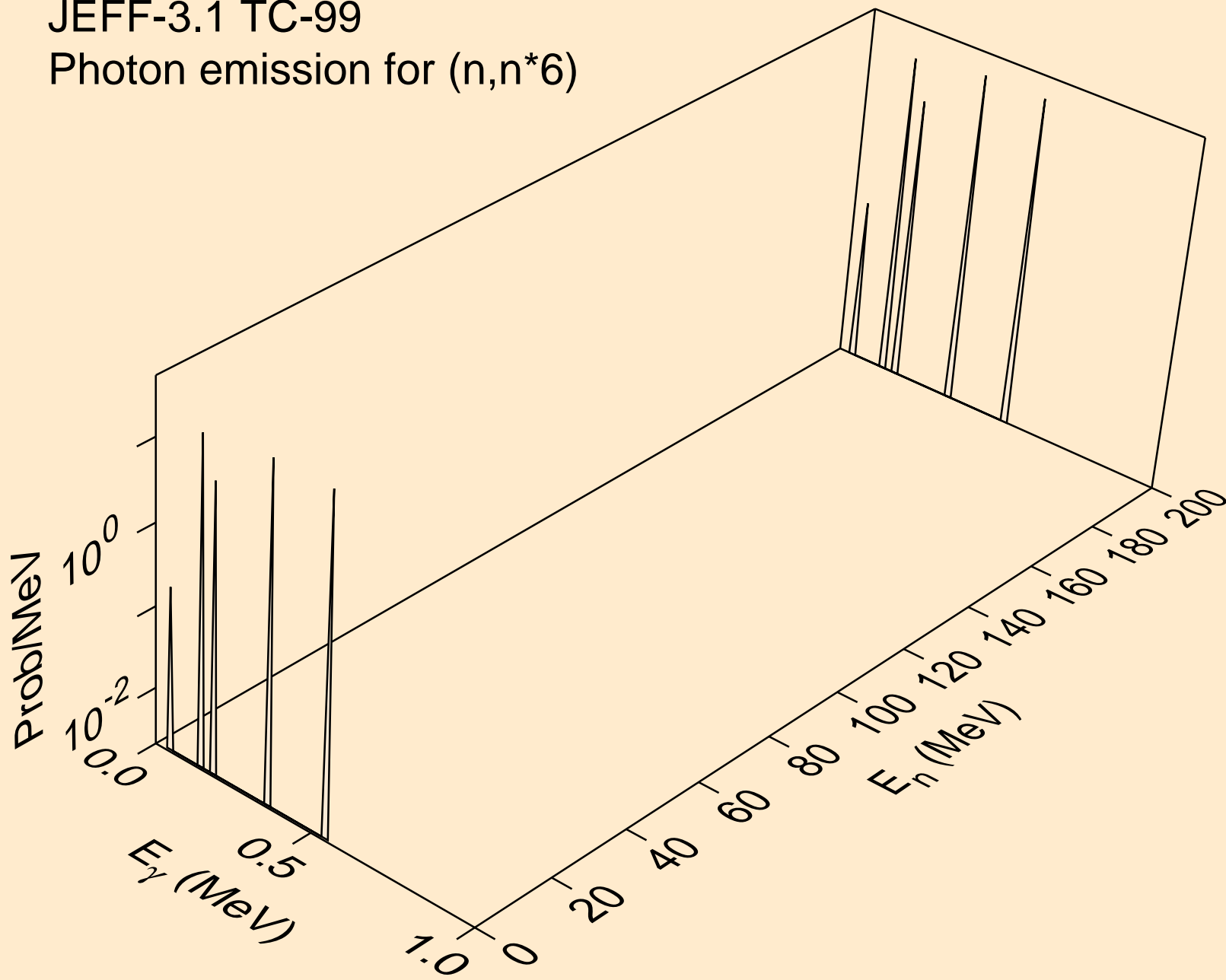




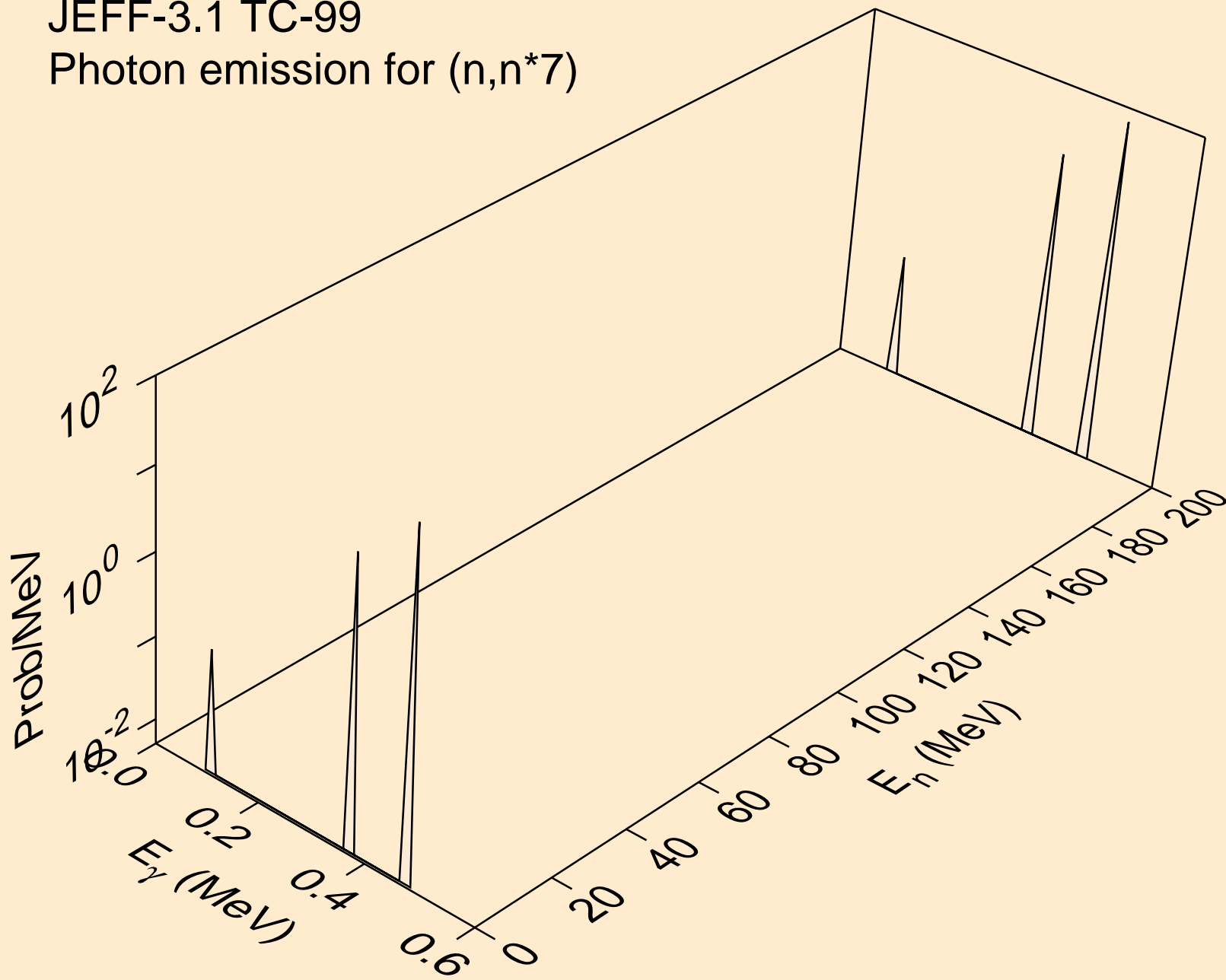
JEFF-3.1 TC-99  
Photon emission for (n,n\*5)



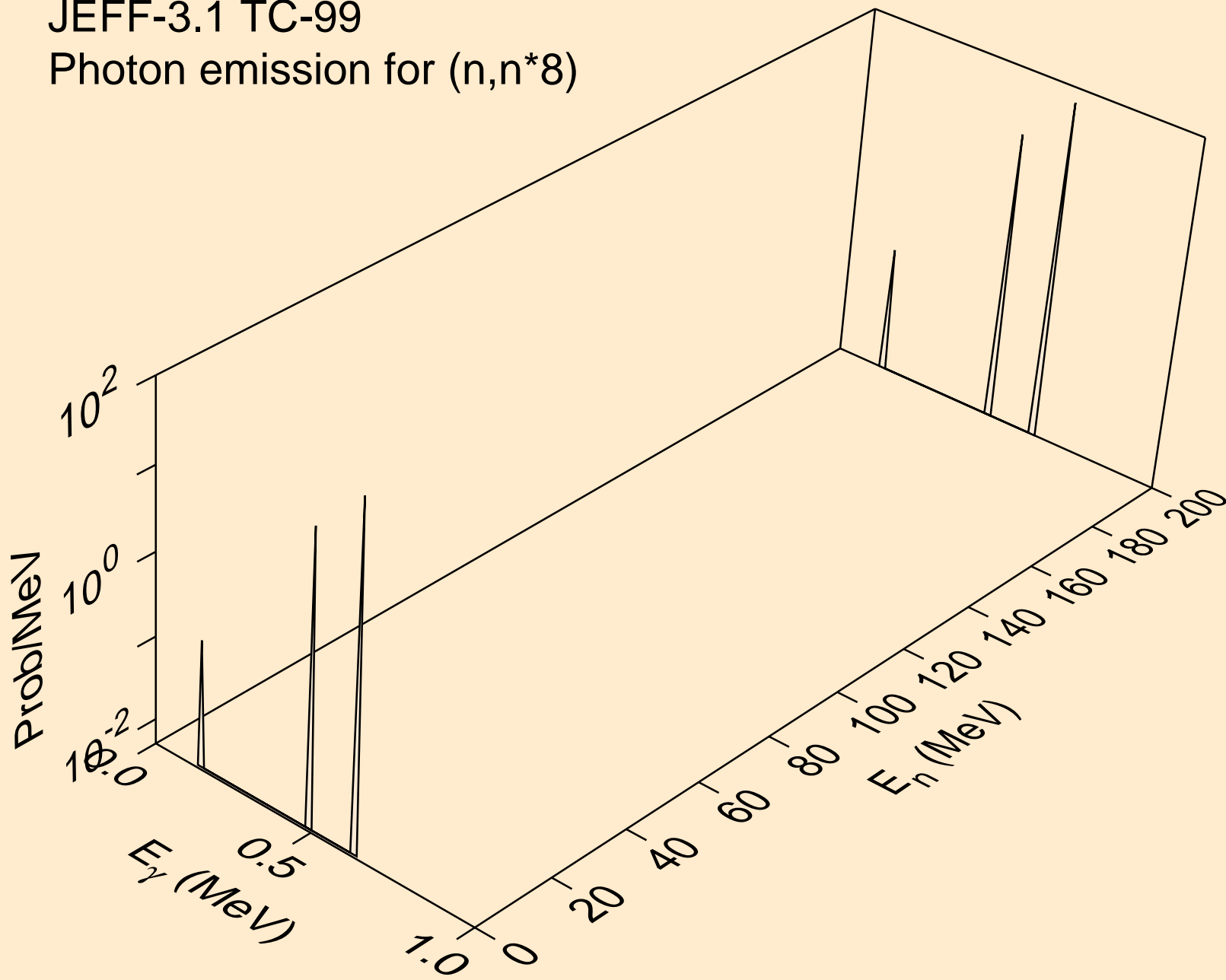
JEFF-3.1 TC-99  
Photon emission for (n,n\*6)



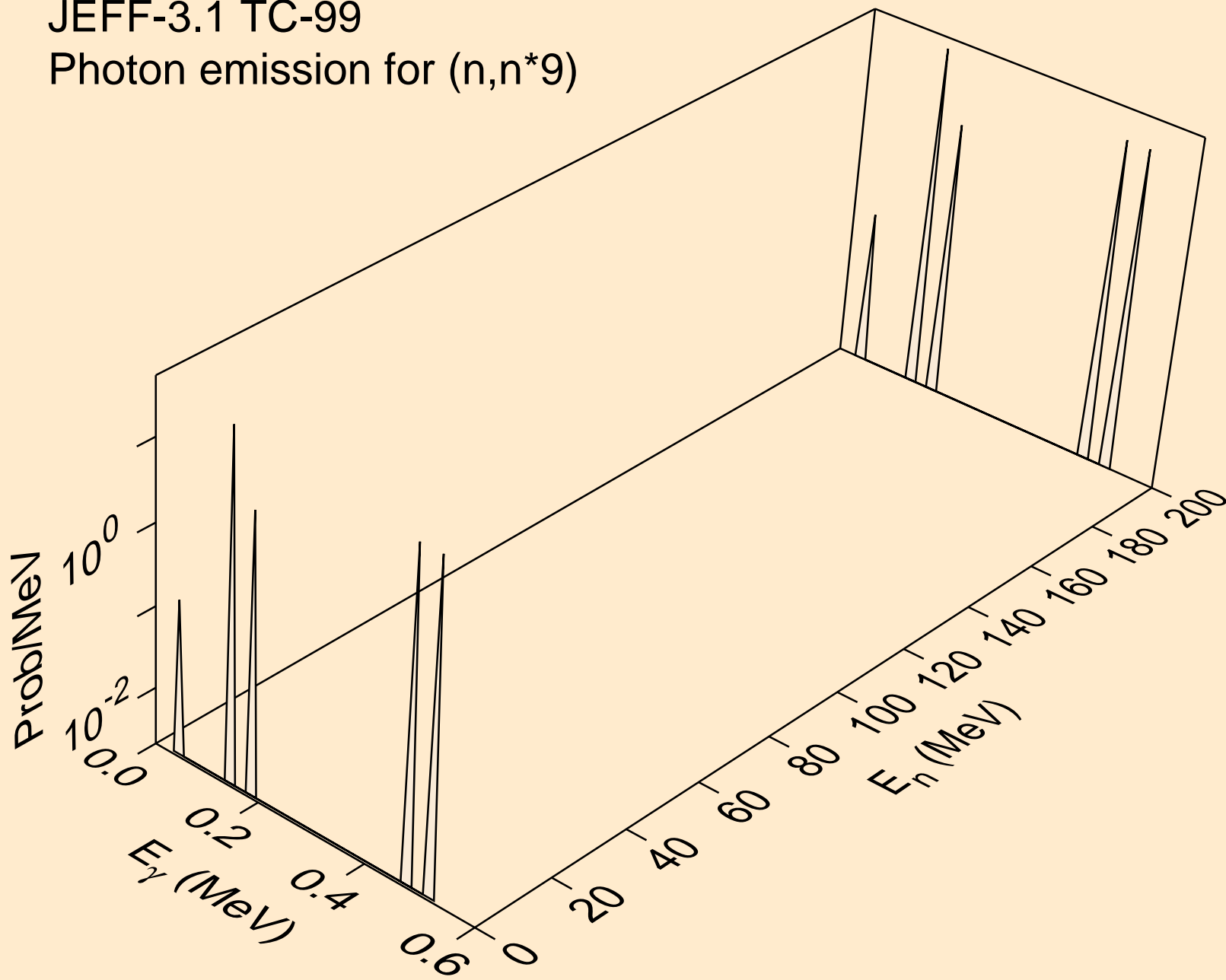
JEFF-3.1 TC-99  
Photon emission for (n,n\*7)



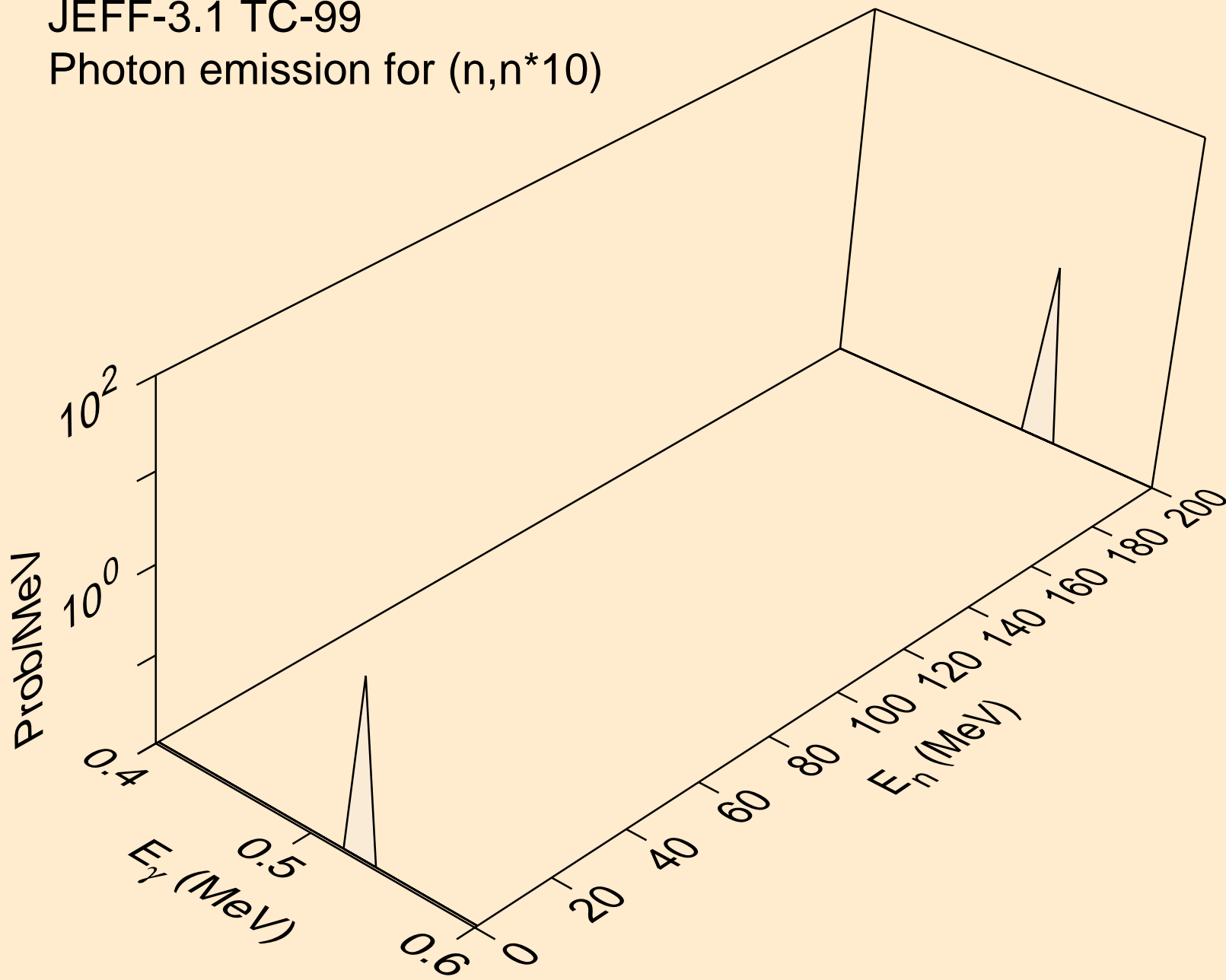
JEFF-3.1 TC-99  
Photon emission for (n,n\*8)



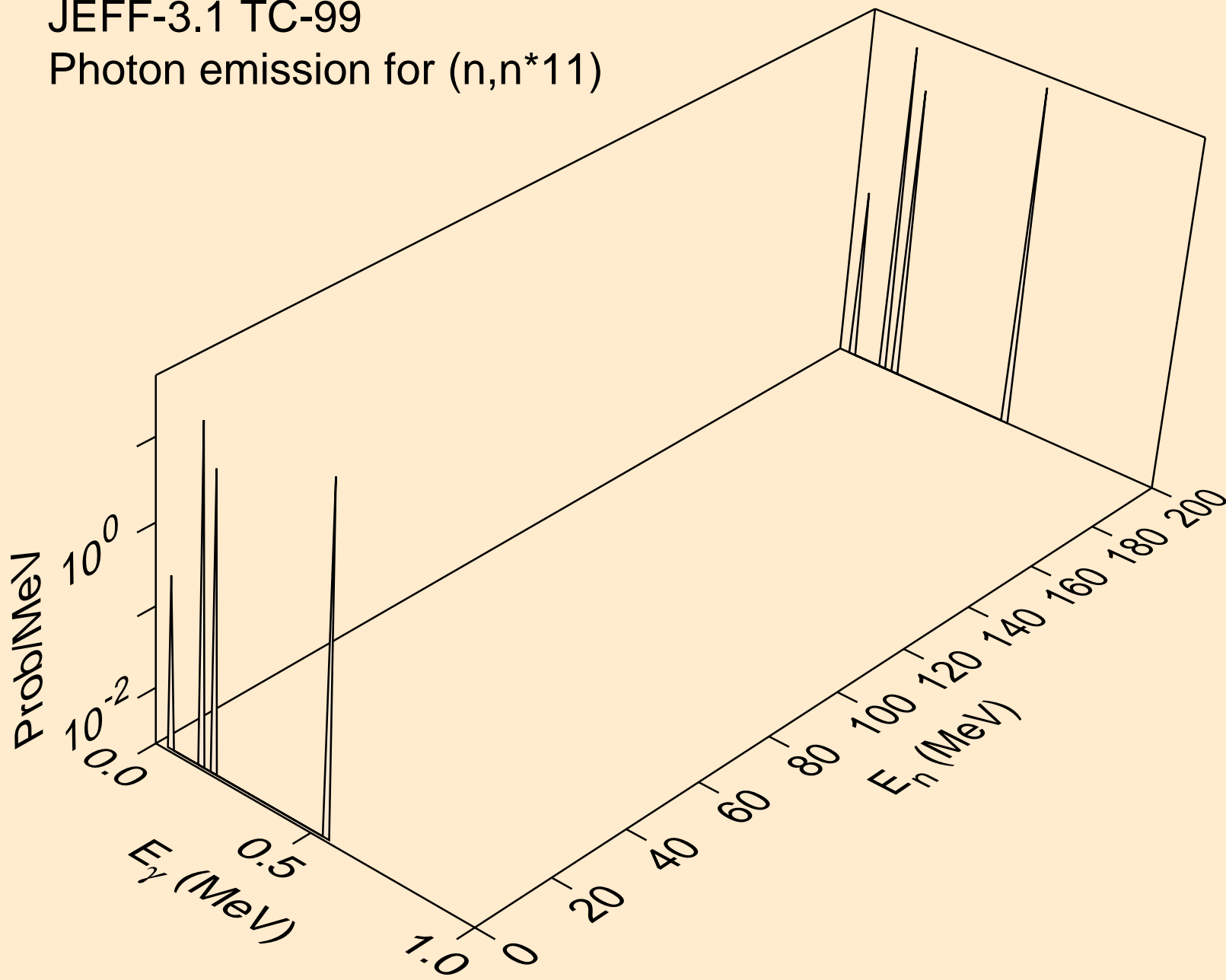
JEFF-3.1 TC-99  
Photon emission for (n,n\*9)



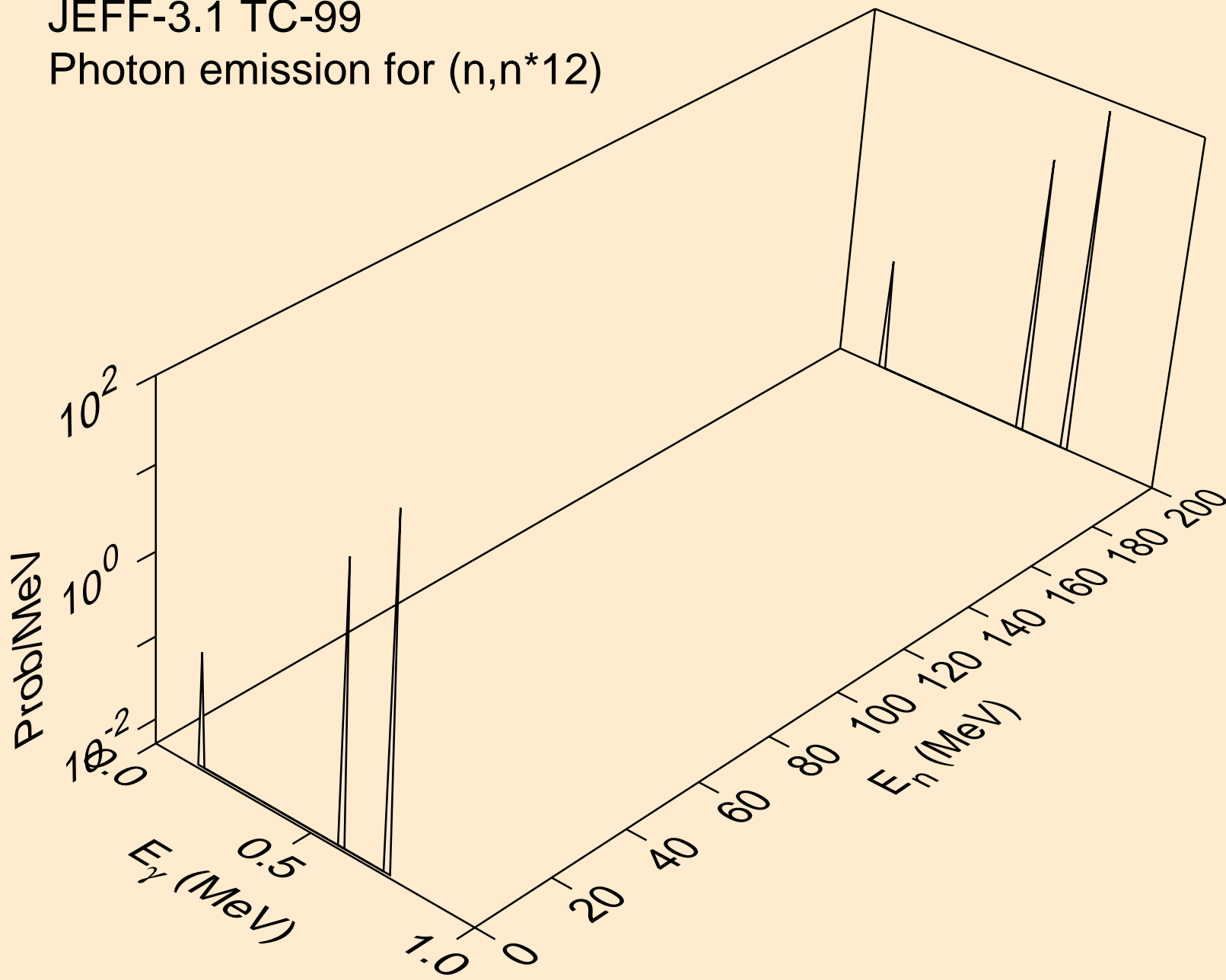
JEFF-3.1 TC-99  
Photon emission for (n,n\*10)



JEFF-3.1 TC-99  
Photon emission for (n,n\*11)

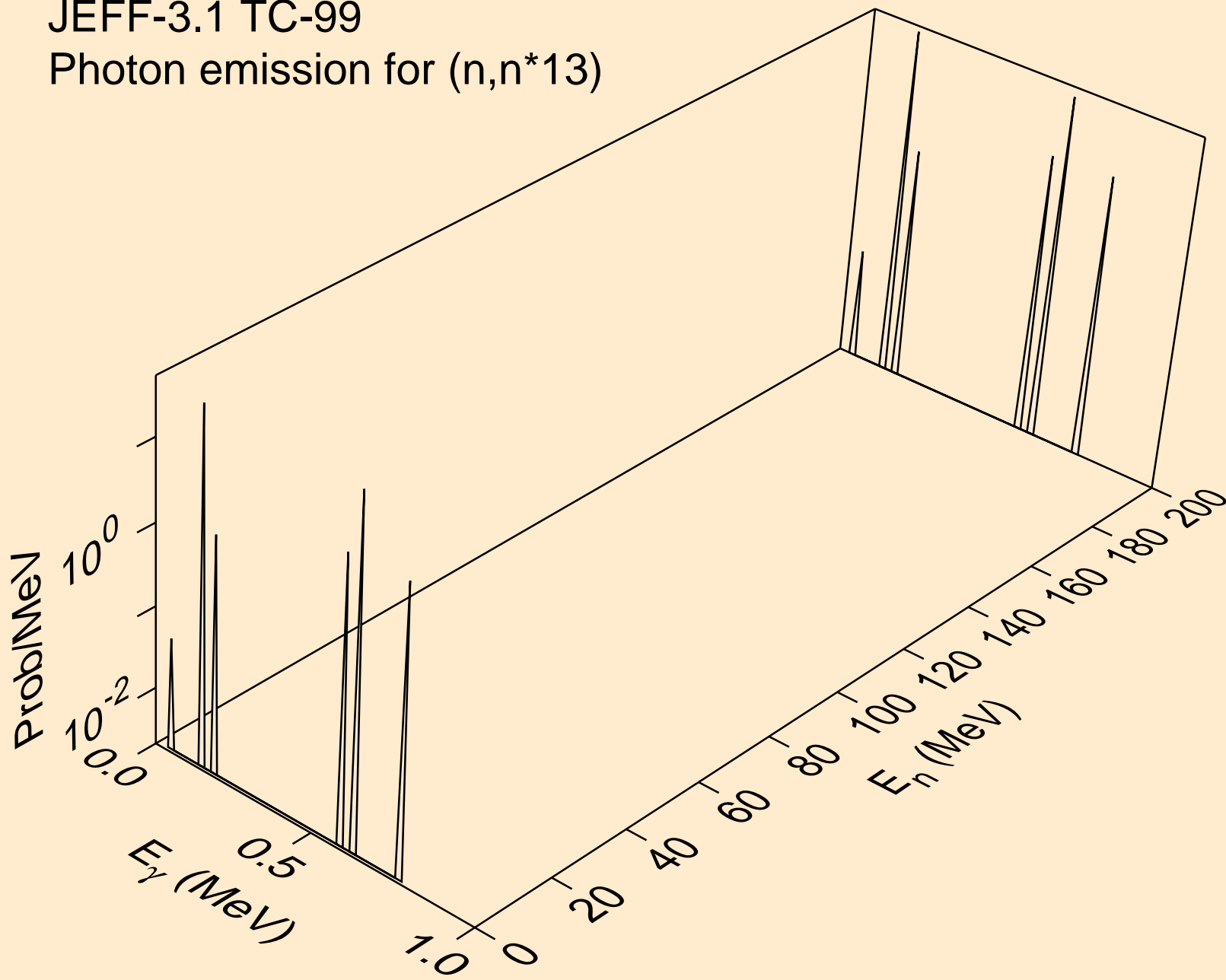


JEFF-3.1 TC-99  
Photon emission for (n,n\*12)

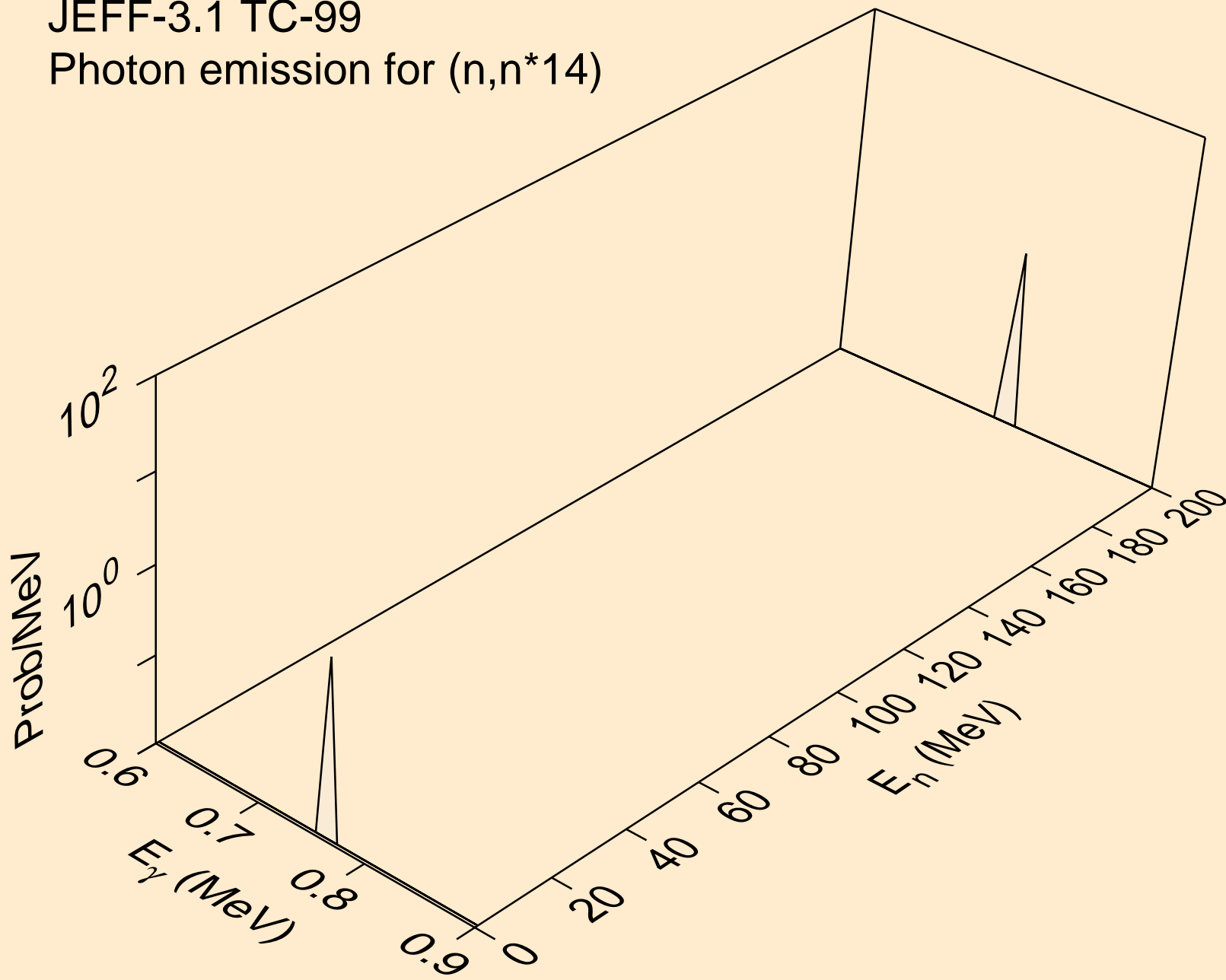




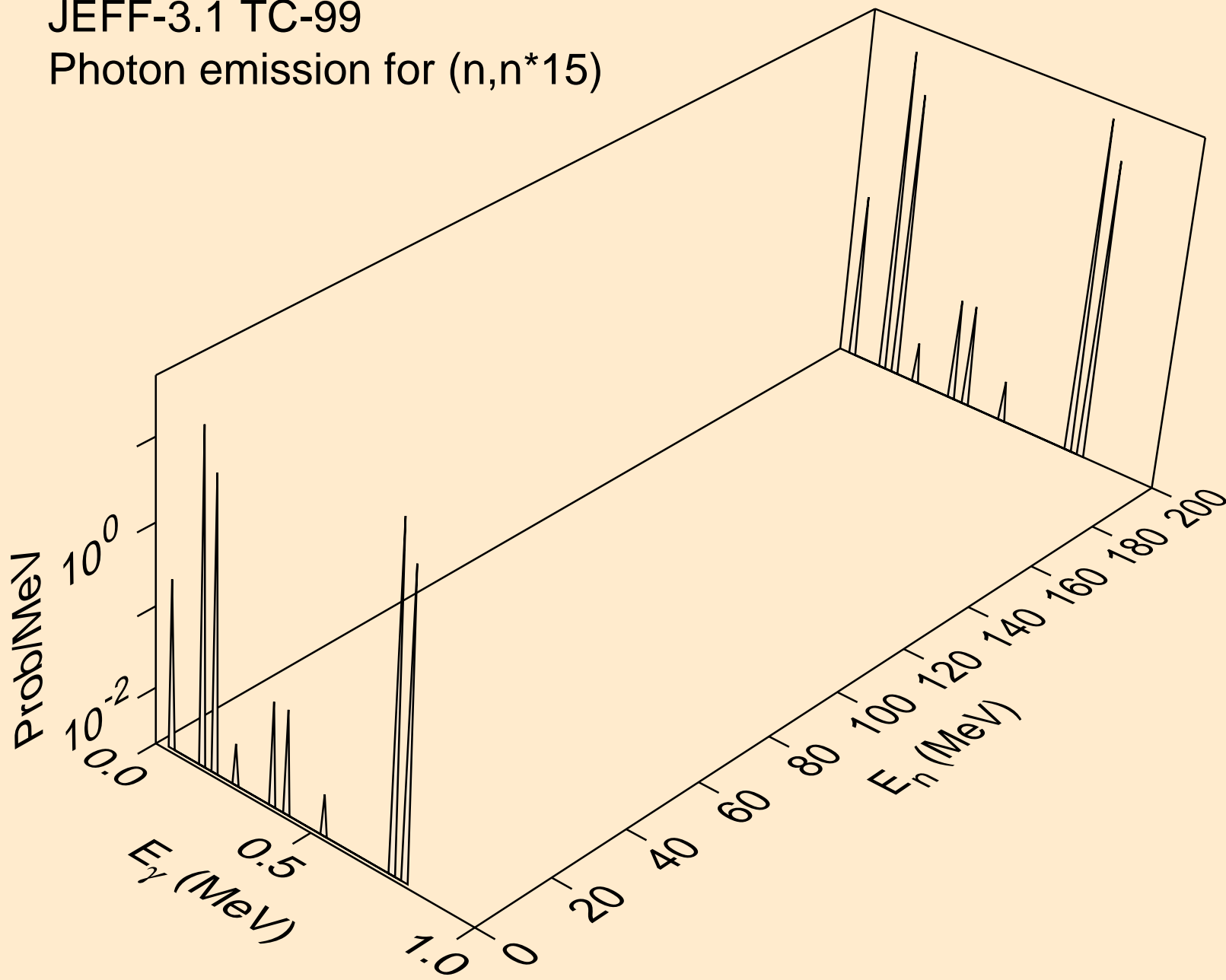
JEFF-3.1 TC-99  
Photon emission for (n,n\*13)



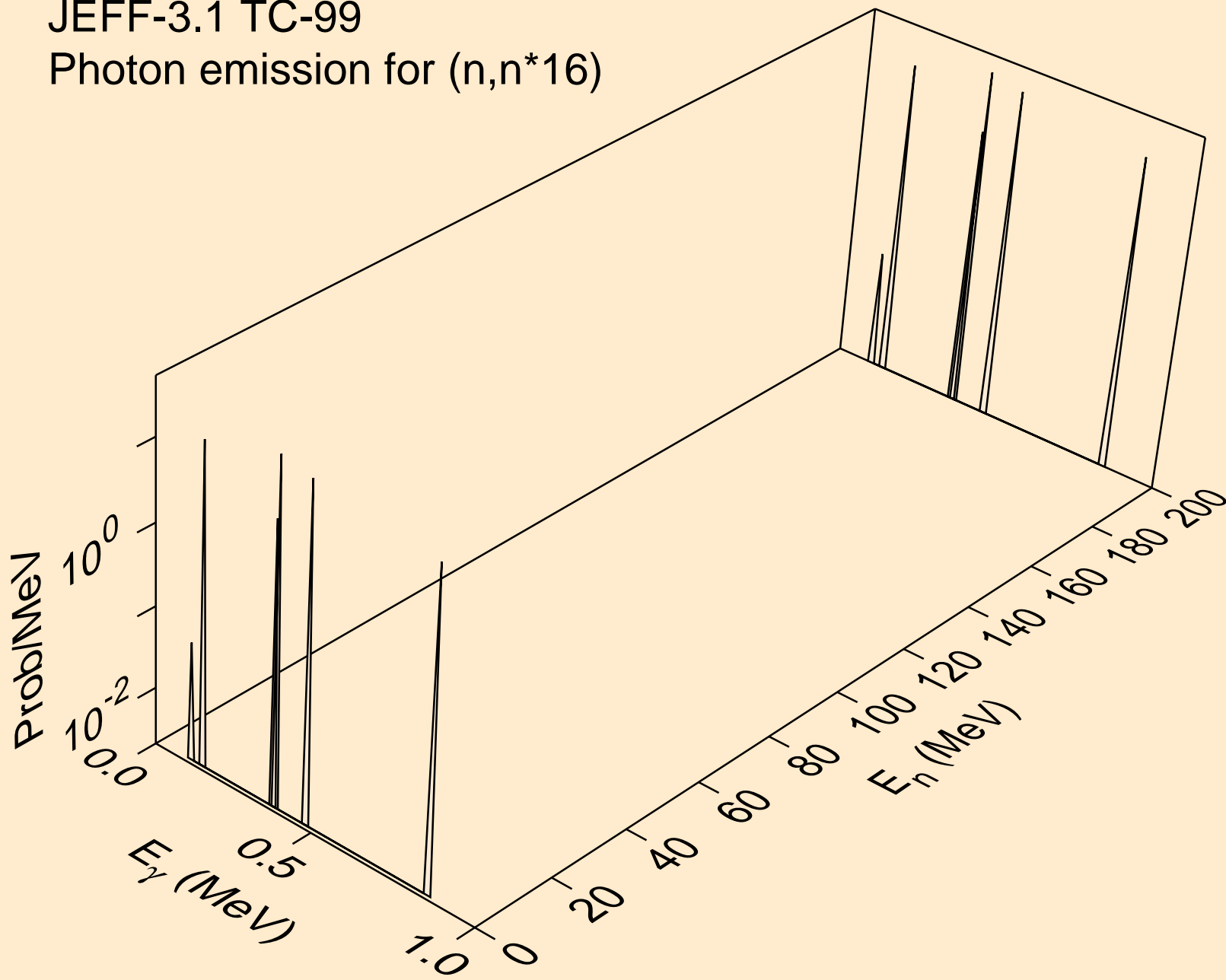
JEFF-3.1 TC-99  
Photon emission for (n,n\*14)



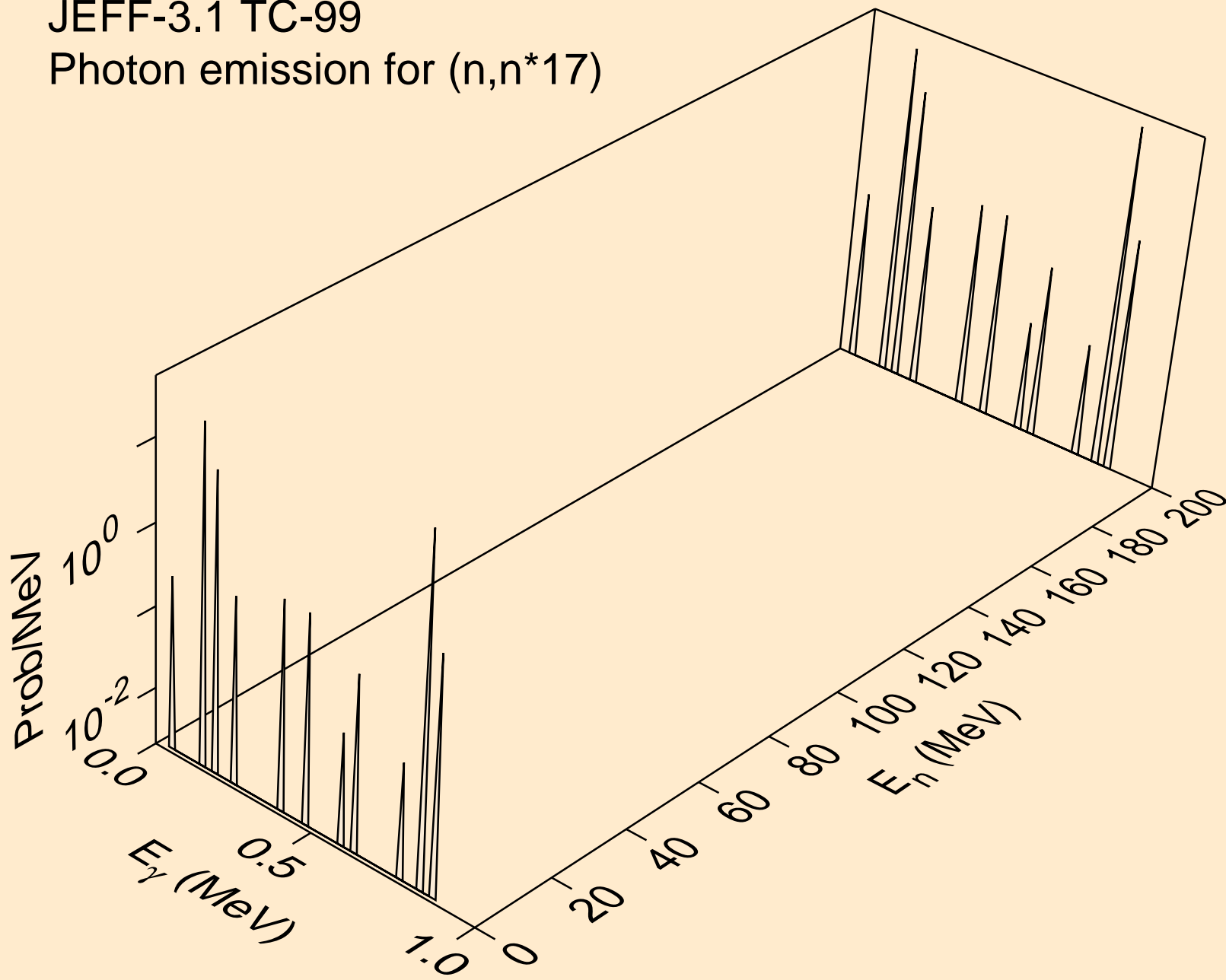
JEFF-3.1 TC-99  
Photon emission for (n,n\*15)



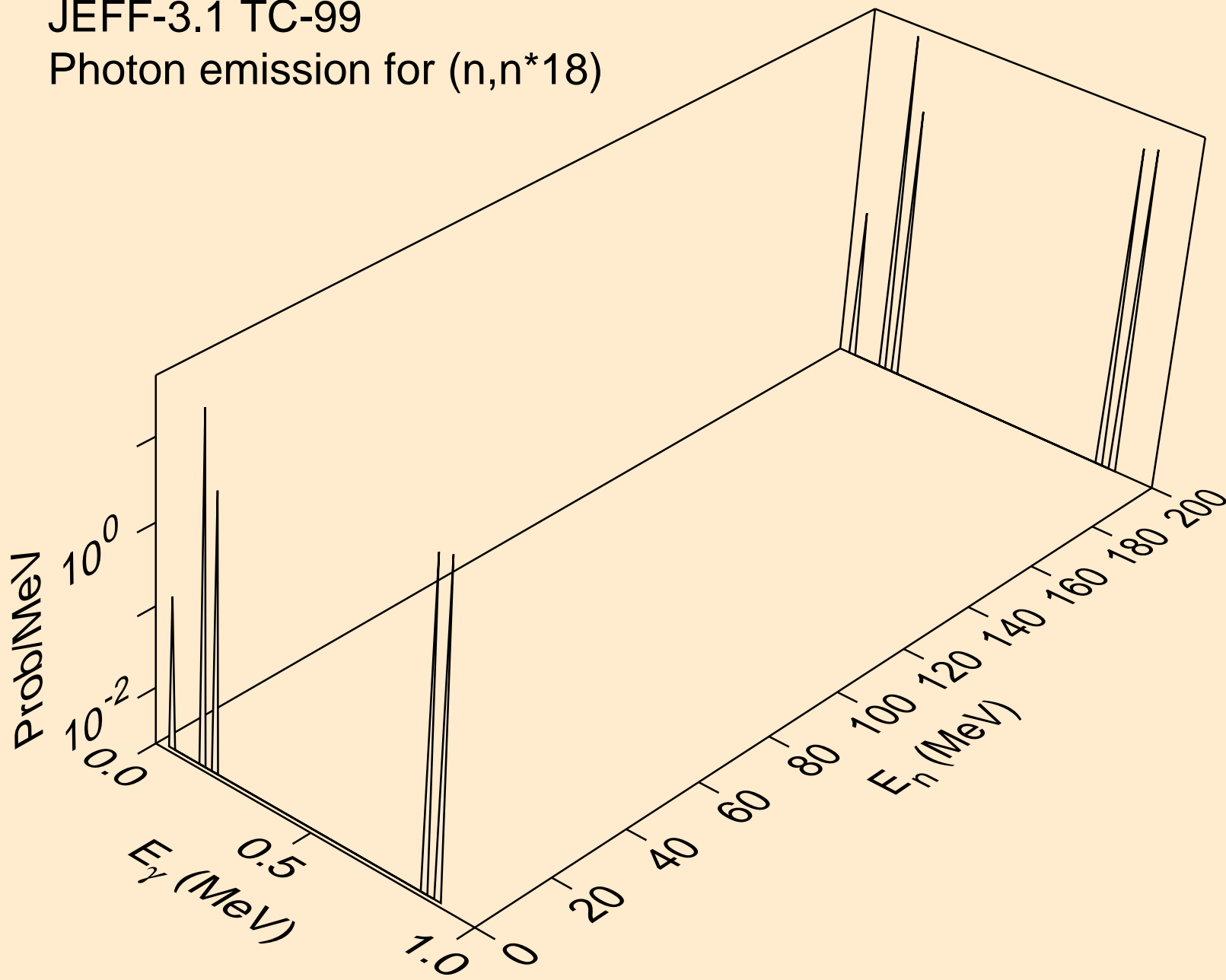
JEFF-3.1 TC-99  
Photon emission for (n,n\*16)



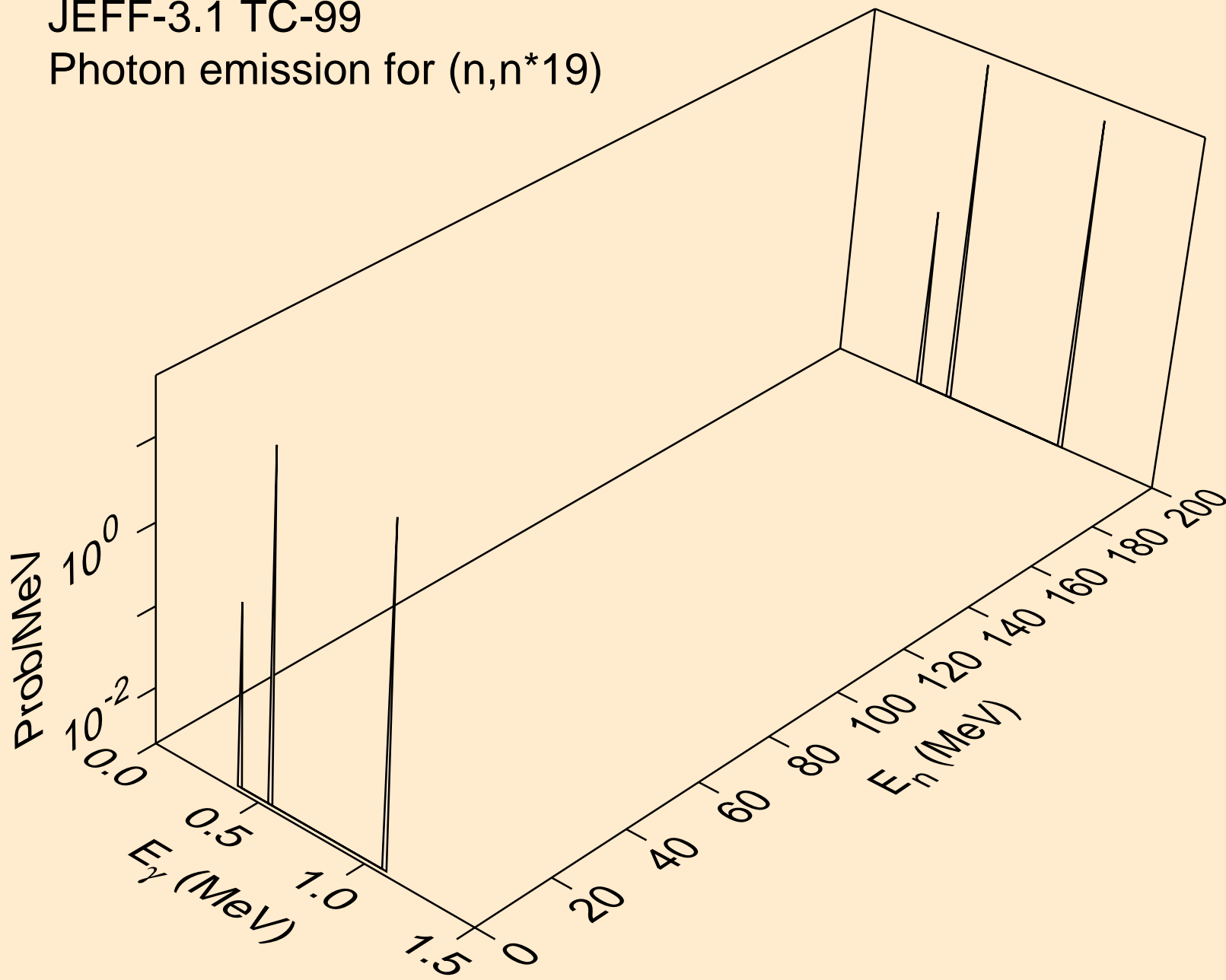
JEFF-3.1 TC-99  
Photon emission for (n,n\*17)



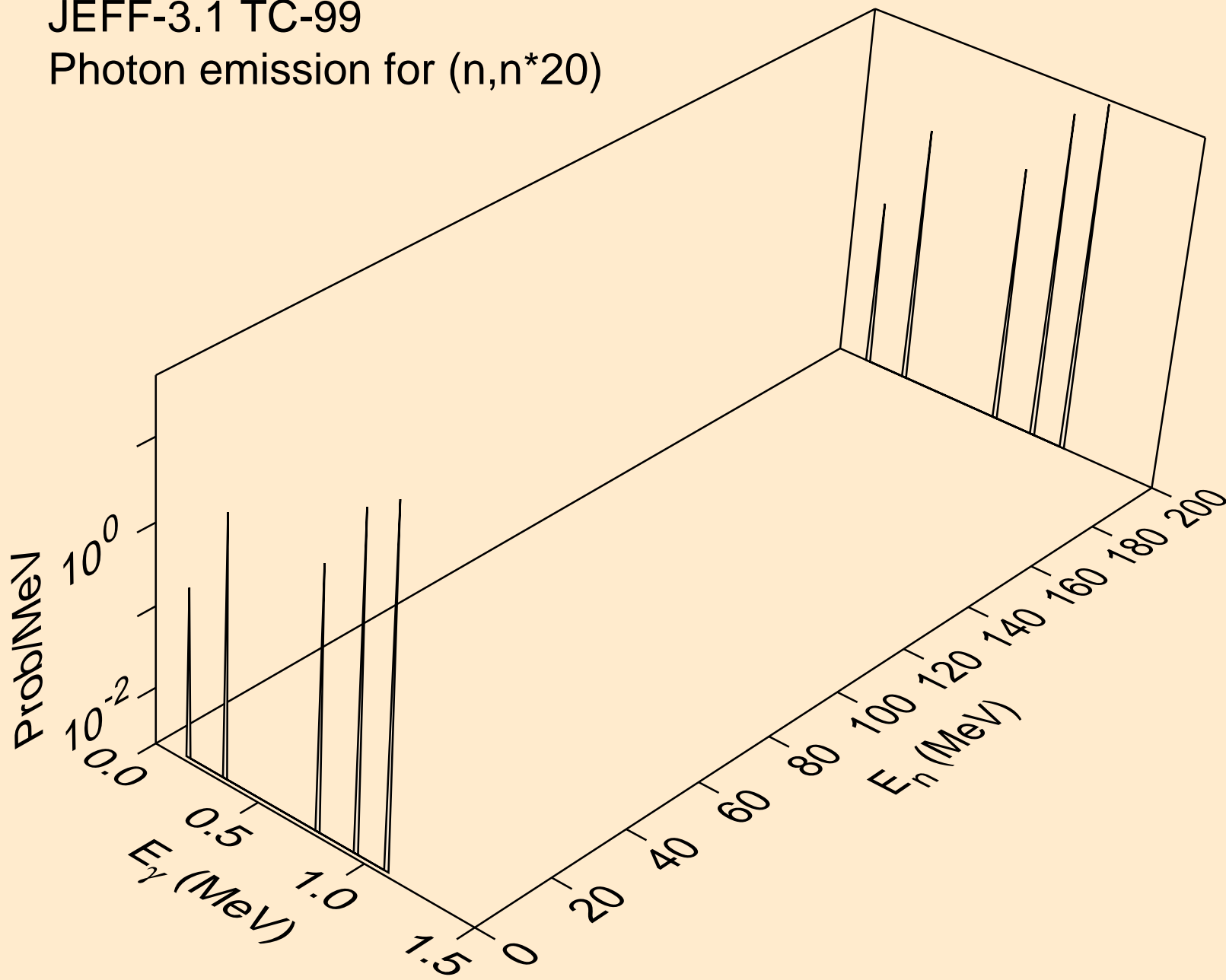
JEFF-3.1 TC-99  
Photon emission for (n,n\*18)



JEFF-3.1 TC-99  
Photon emission for (n,n\*19)

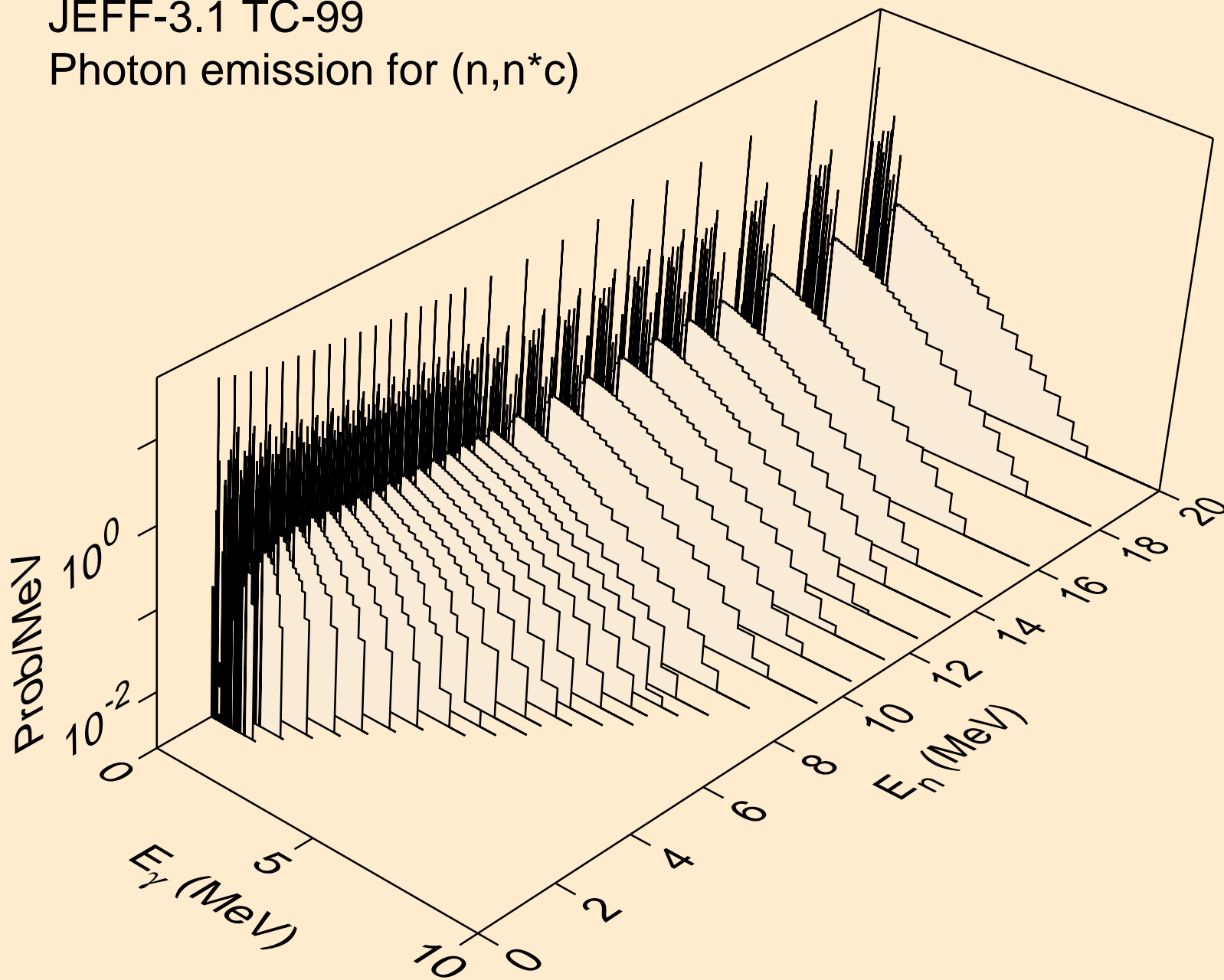


JEFF-3.1 TC-99  
Photon emission for (n,n\*20)

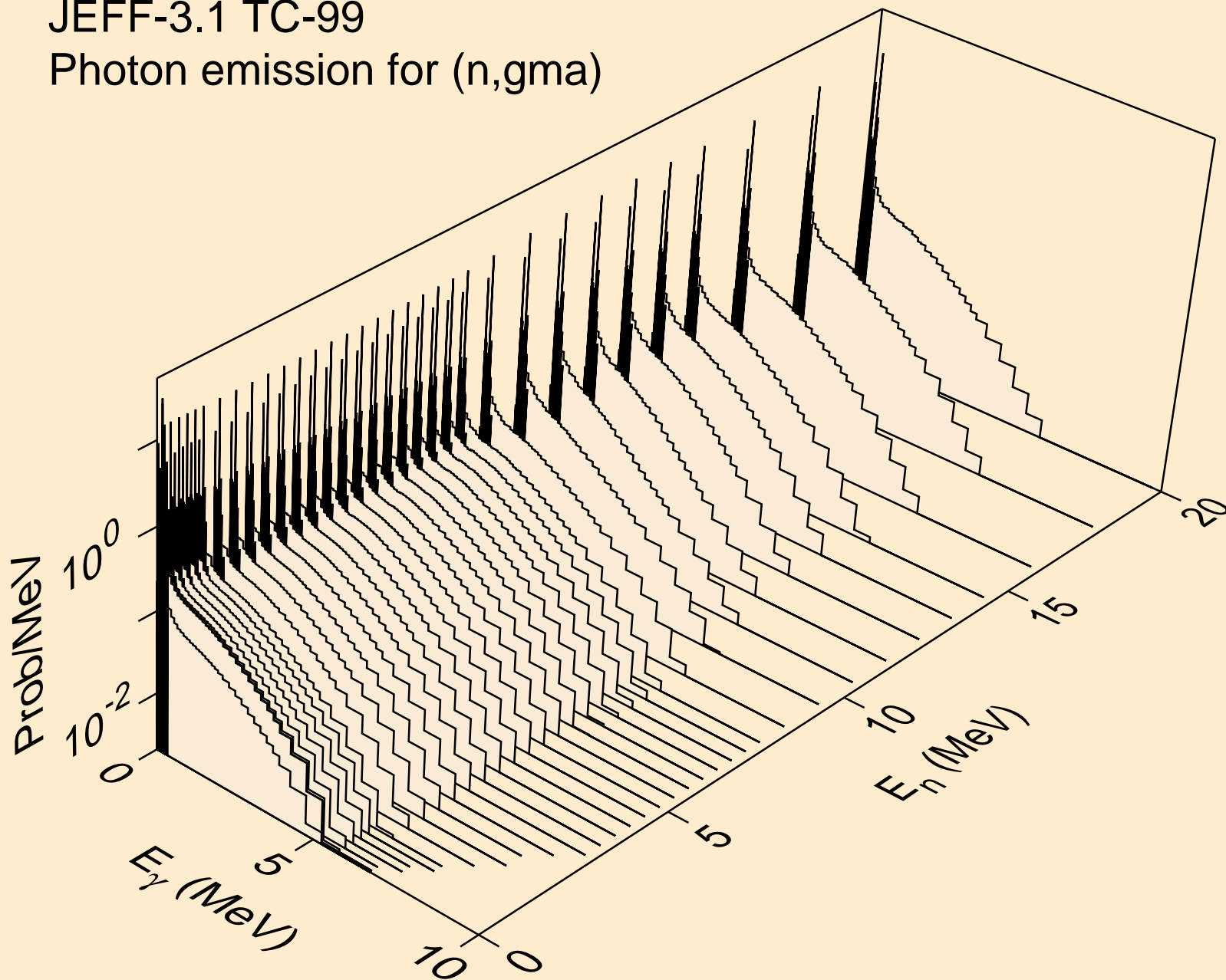




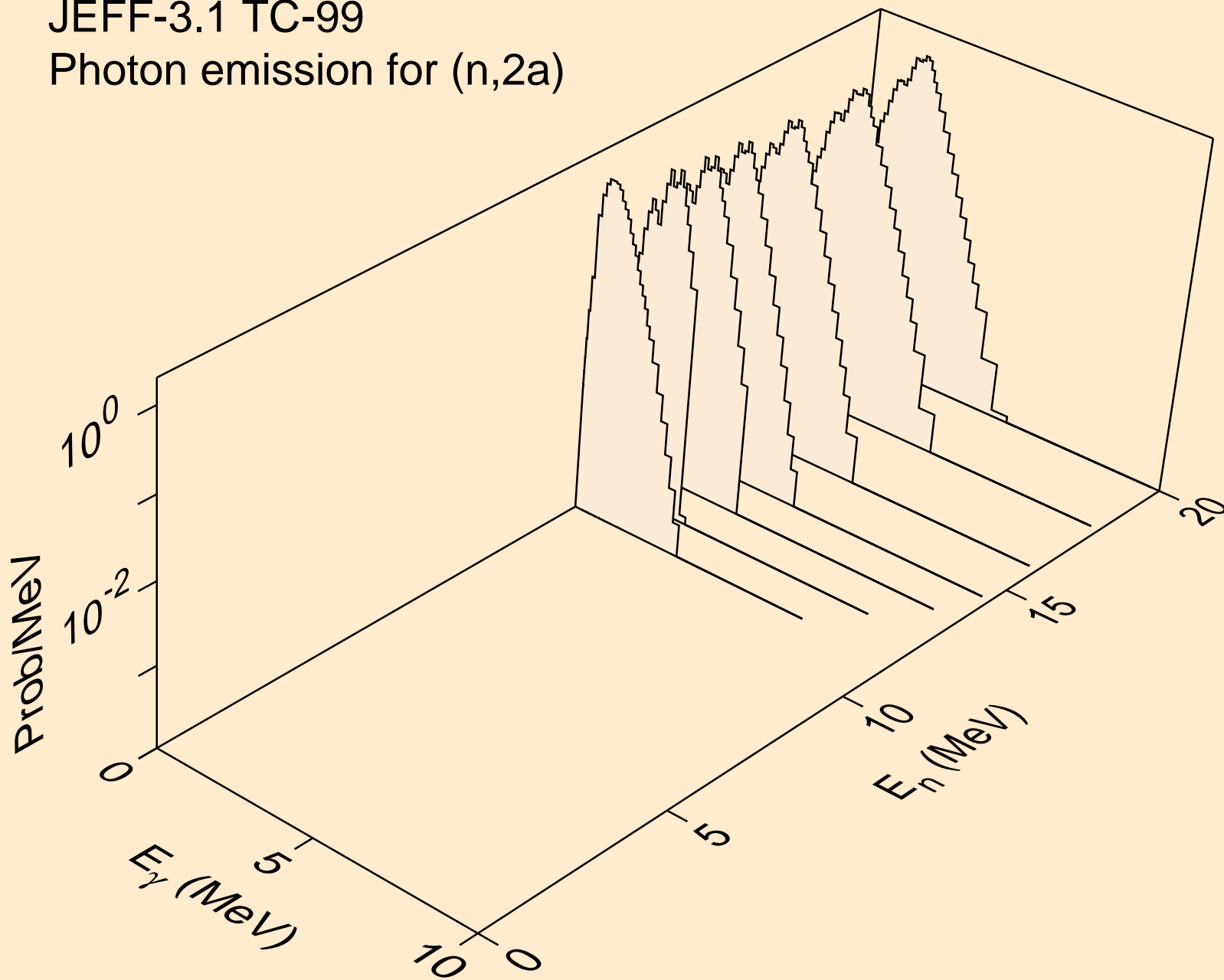
JEFF-3.1 TC-99  
Photon emission for (n,n\*c)



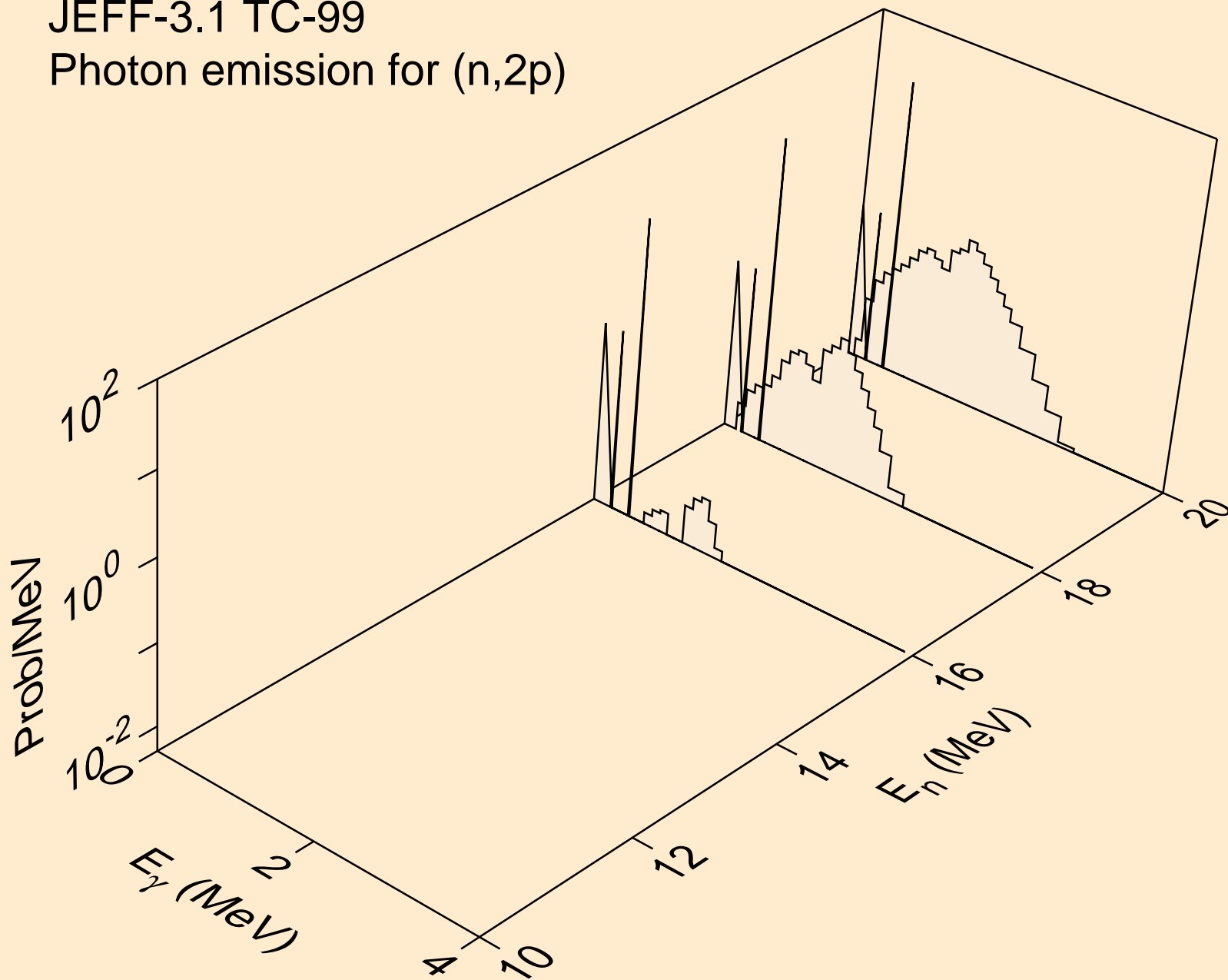
JEFF-3.1 TC-99  
Photon emission for (n,gma)



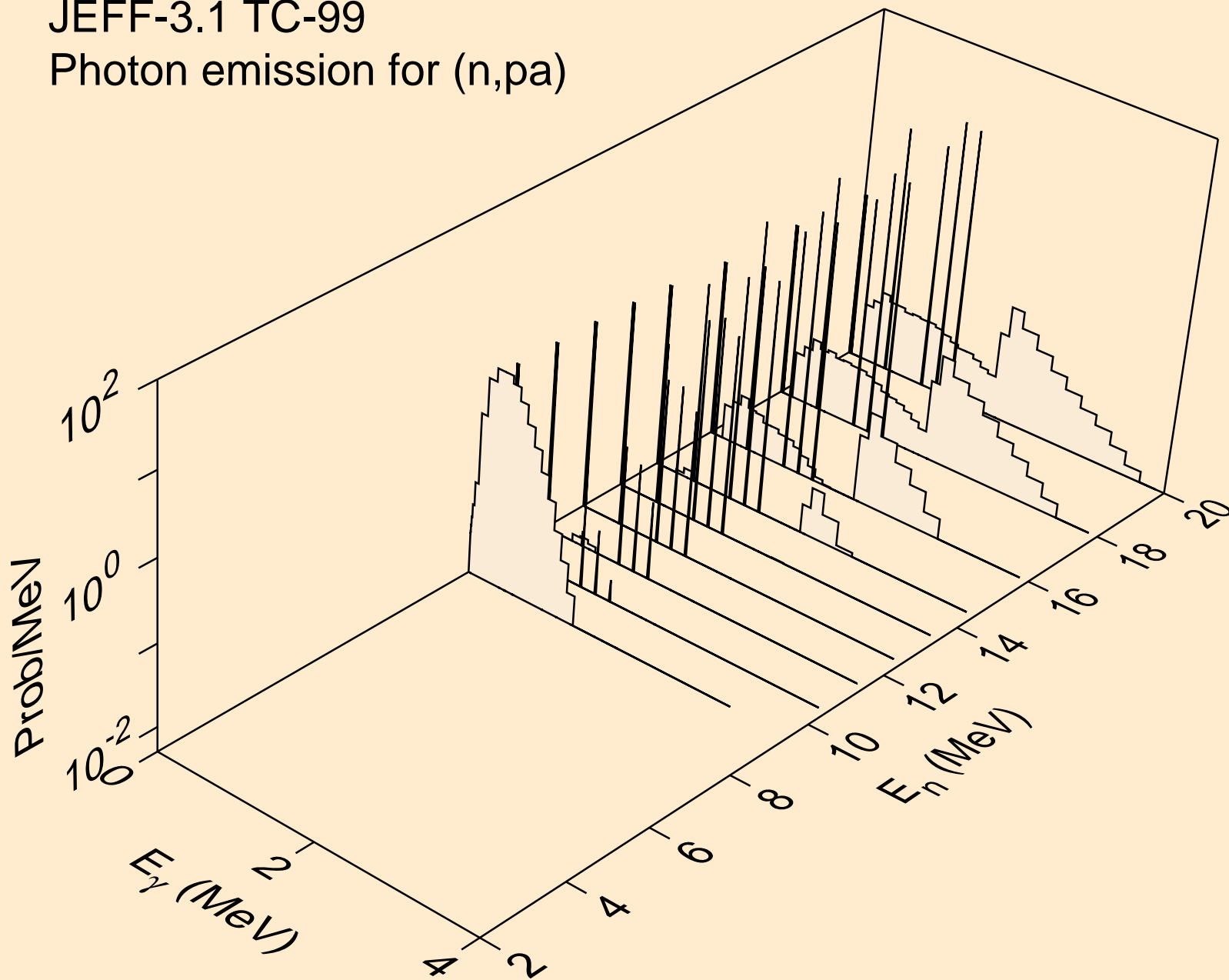
JEFF-3.1 TC-99  
Photon emission for (n,2a)



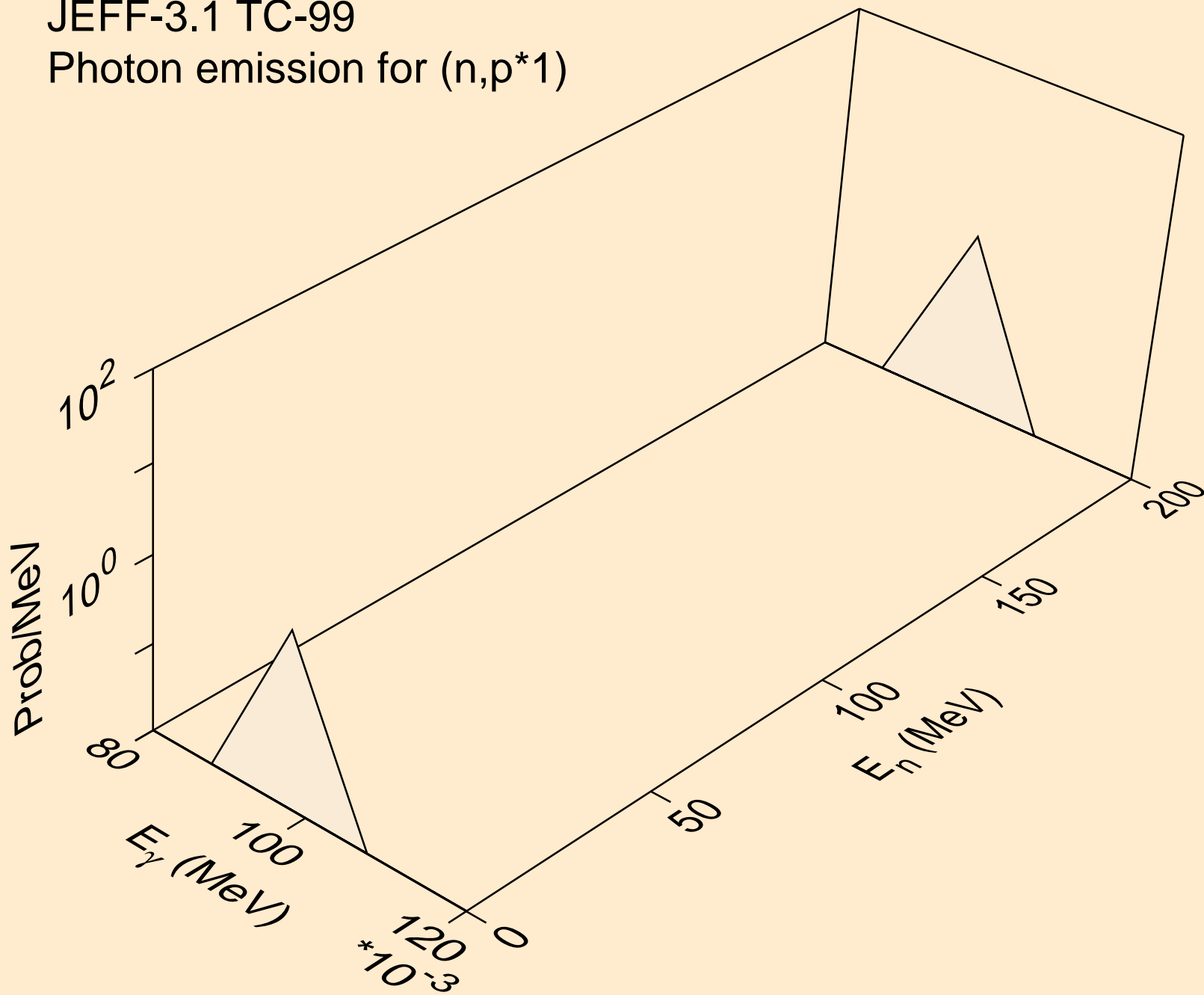
JEFF-3.1 TC-99  
Photon emission for (n,2p)



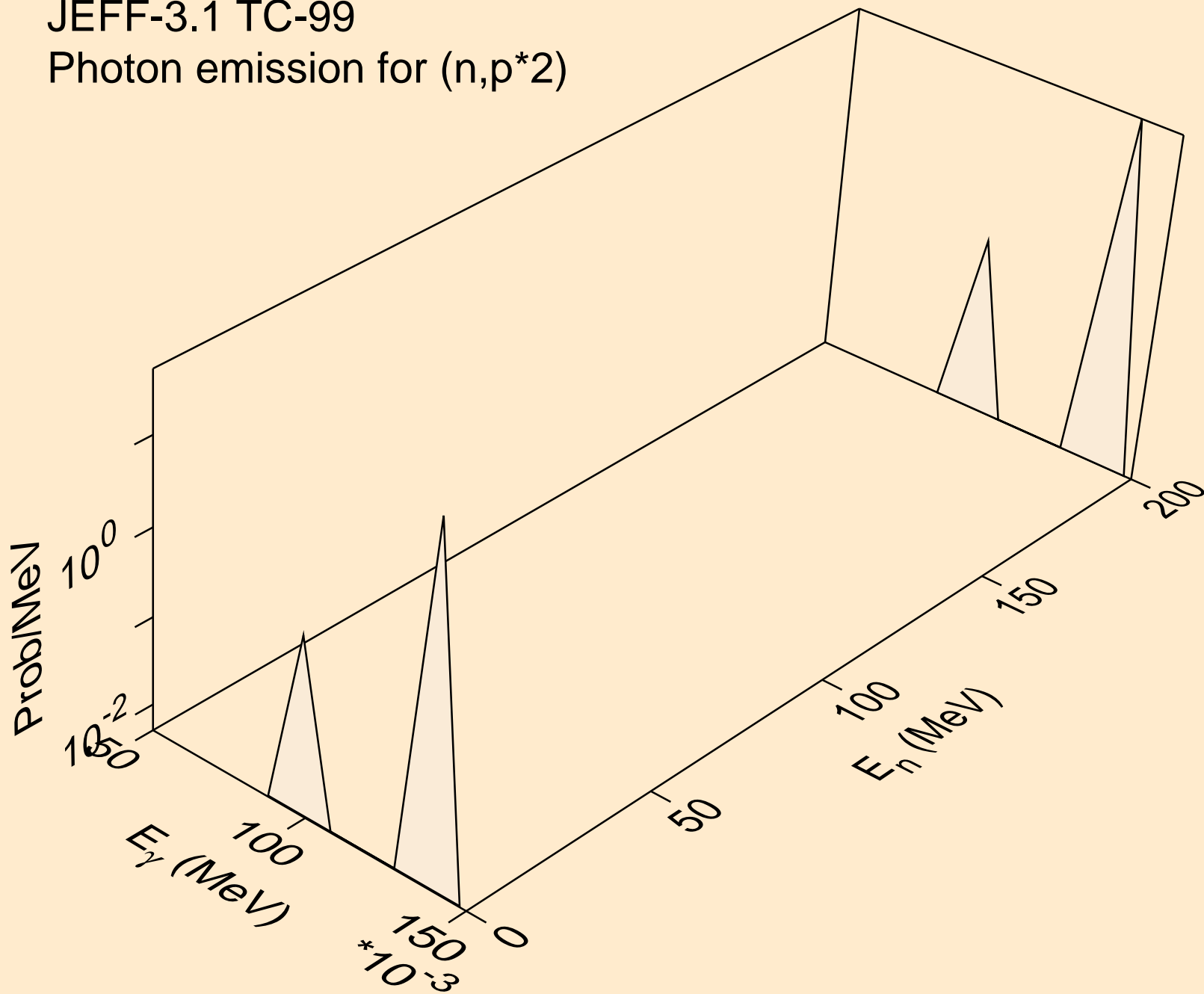
JEFF-3.1 TC-99  
Photon emission for (n,pa)



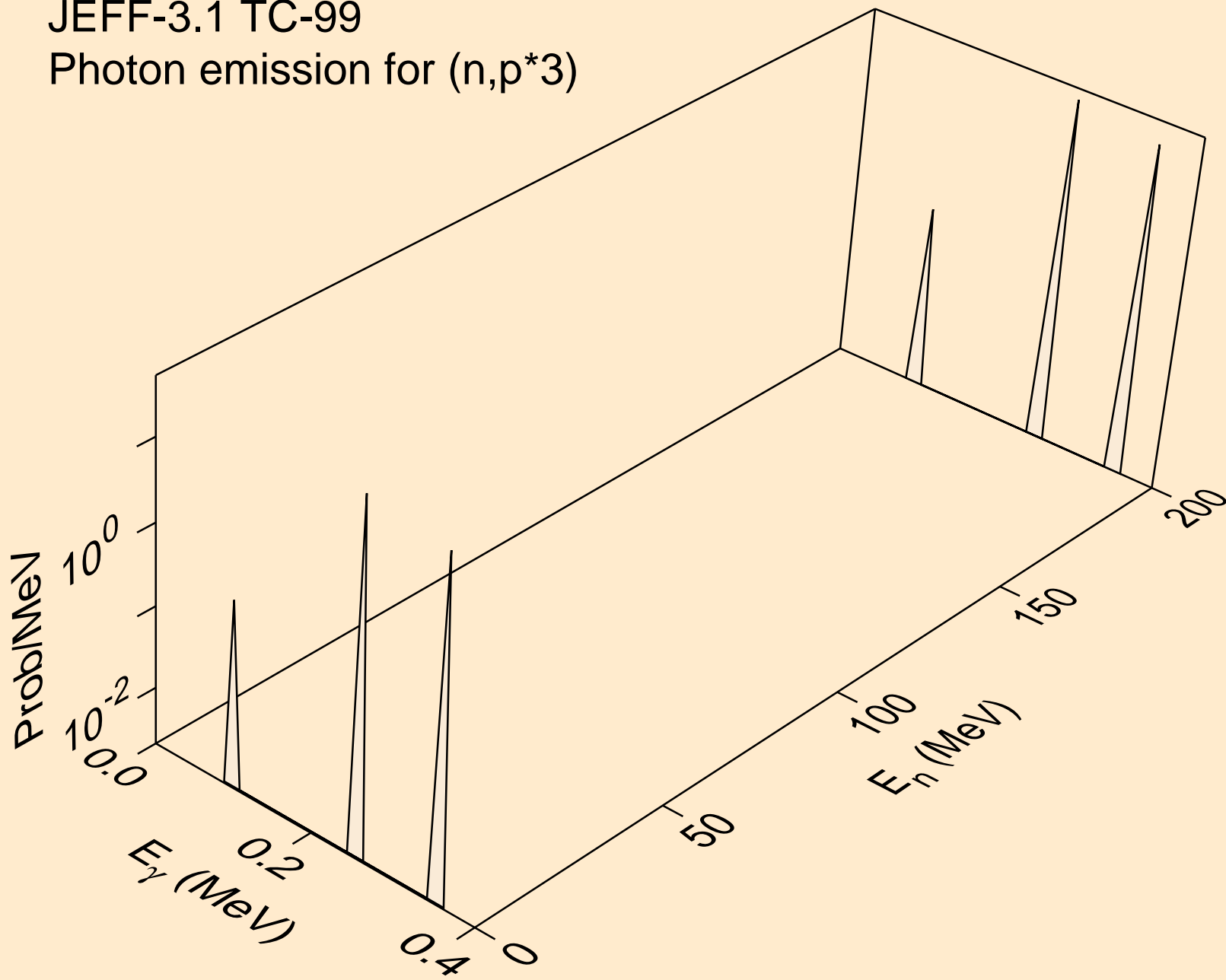
JEFF-3.1 TC-99  
Photon emission for (n,p\*1)



JEFF-3.1 TC-99  
Photon emission for (n,p\*2)

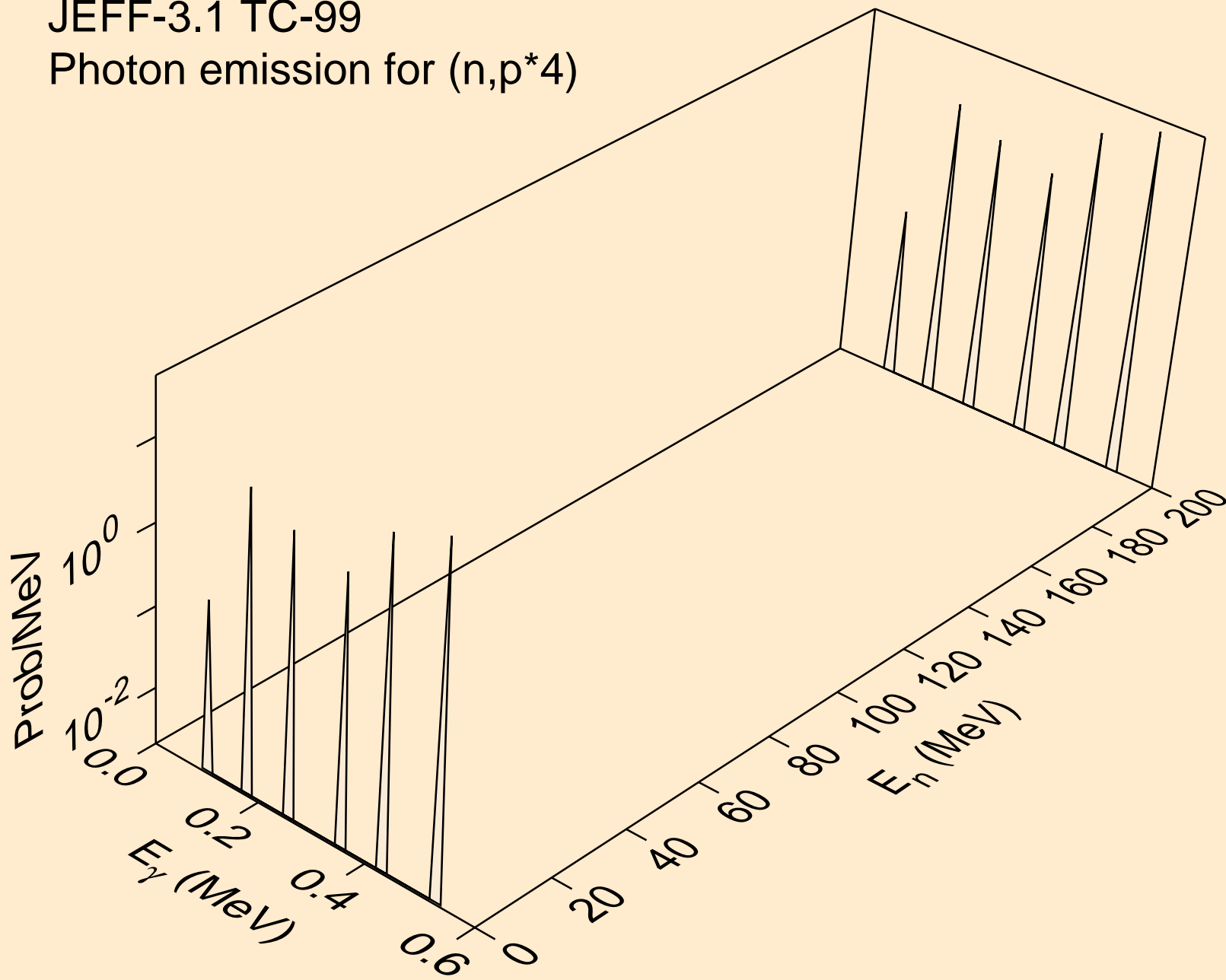


JEFF-3.1 TC-99  
Photon emission for (n,p\*3)

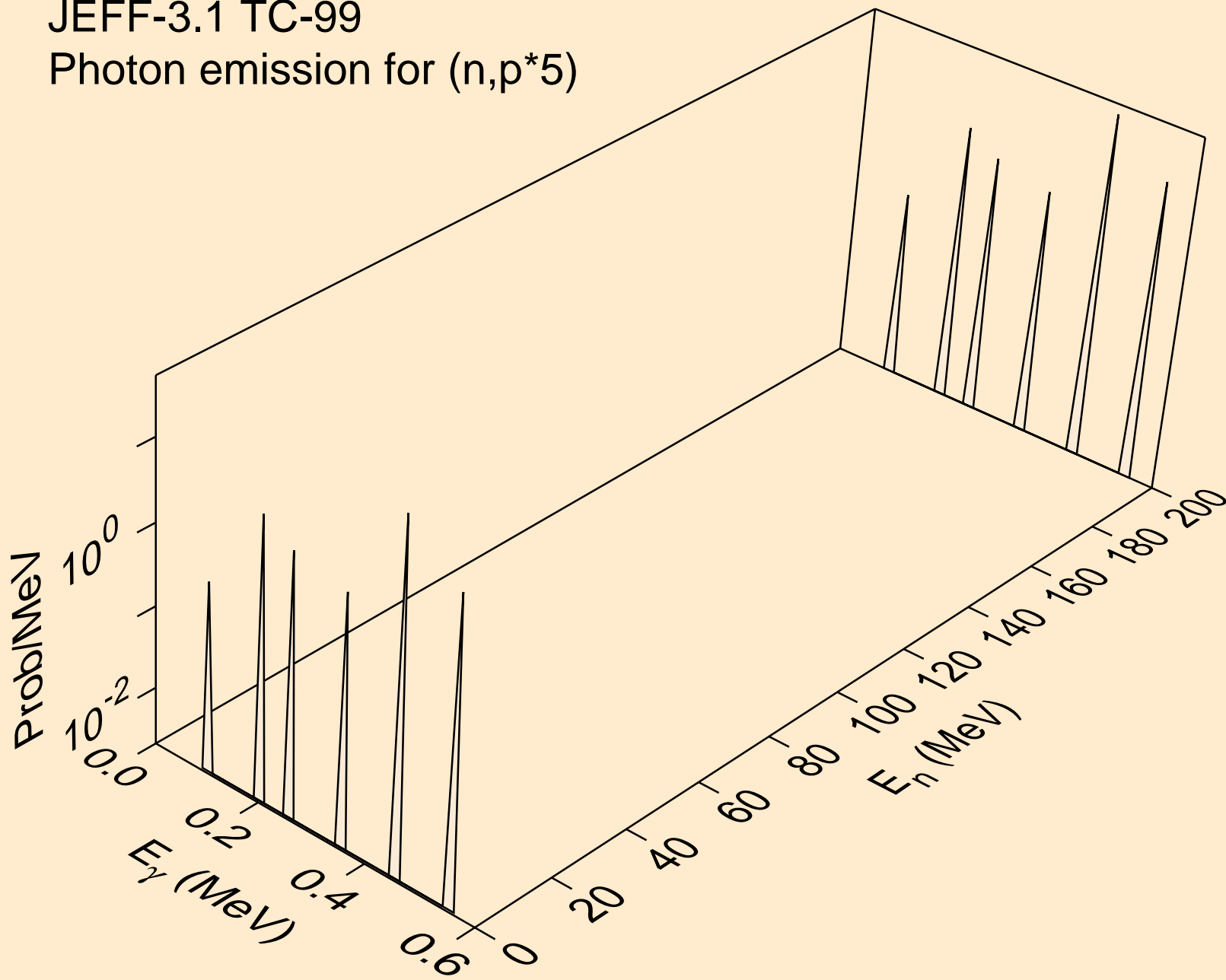




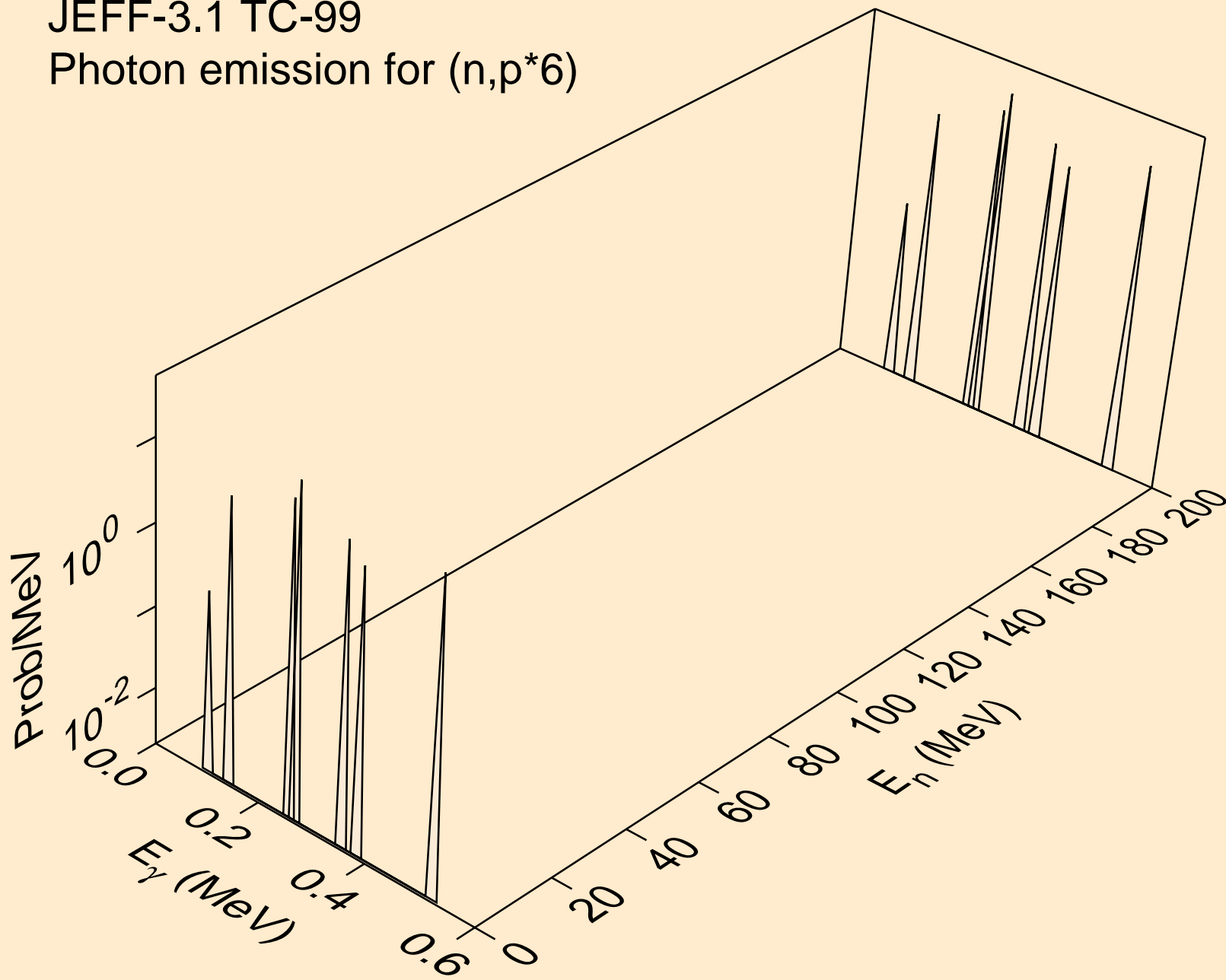
JEFF-3.1 TC-99  
Photon emission for (n,p\*4)



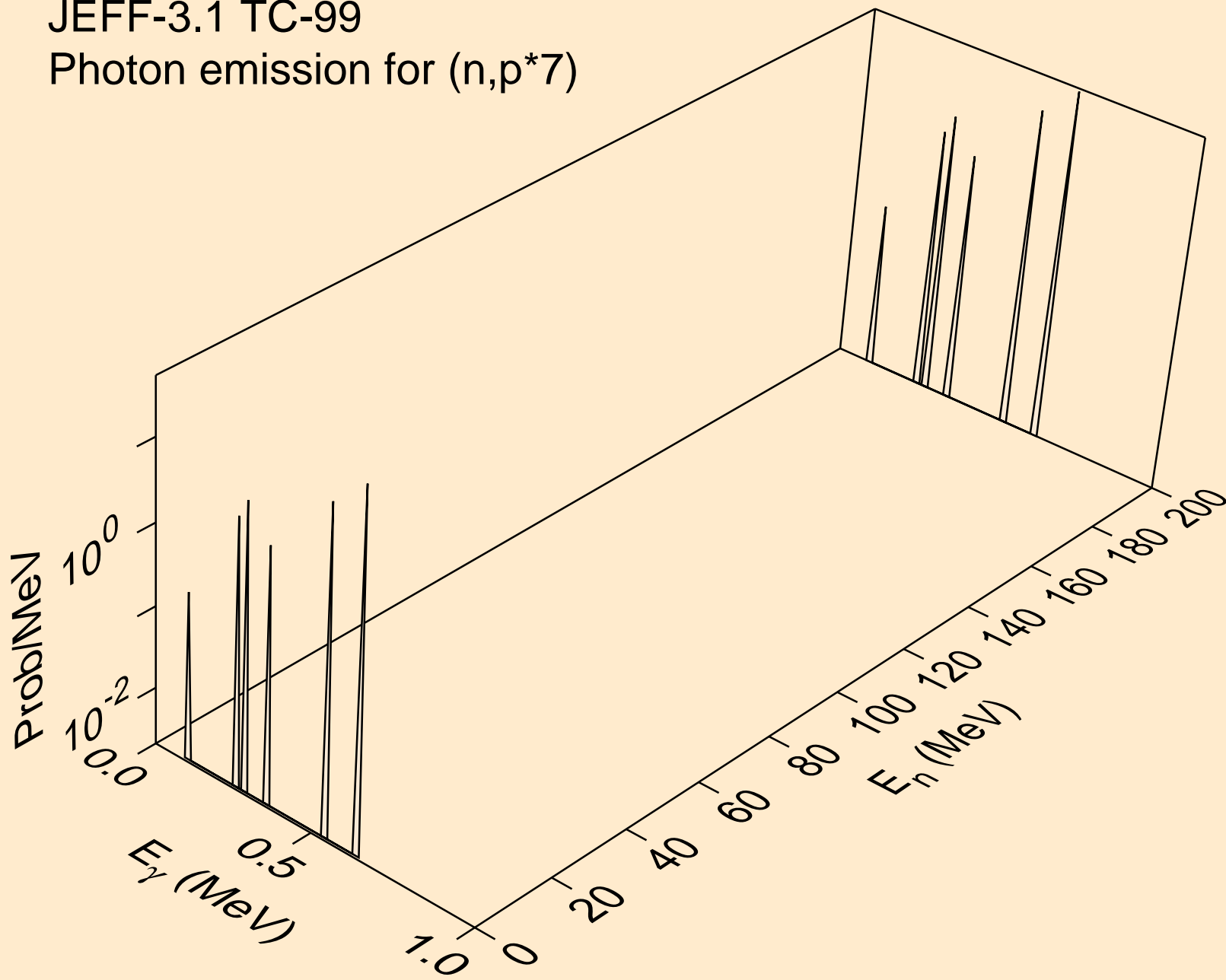
JEFF-3.1 TC-99  
Photon emission for (n,p\*5)



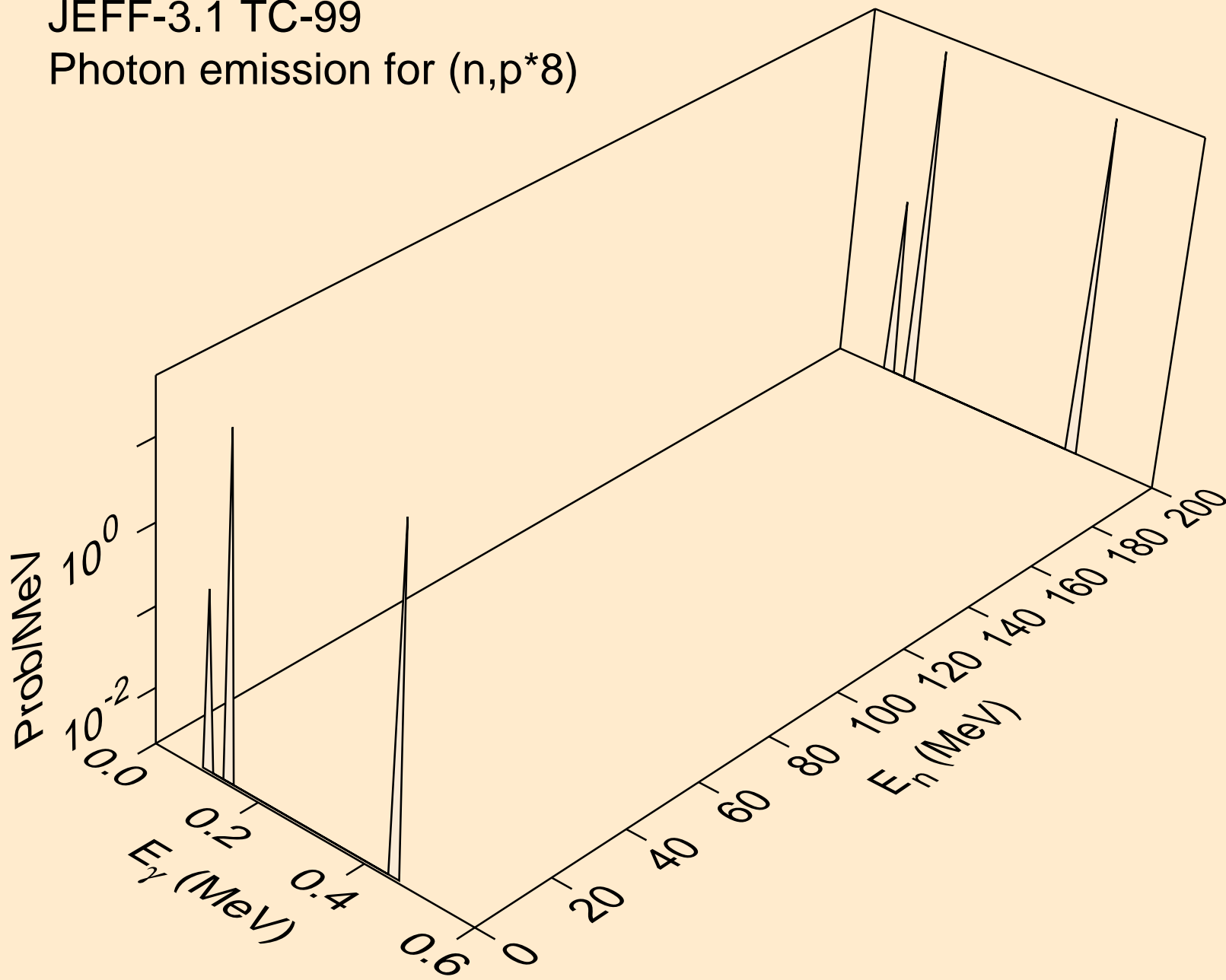
JEFF-3.1 TC-99  
Photon emission for (n,p\*6)



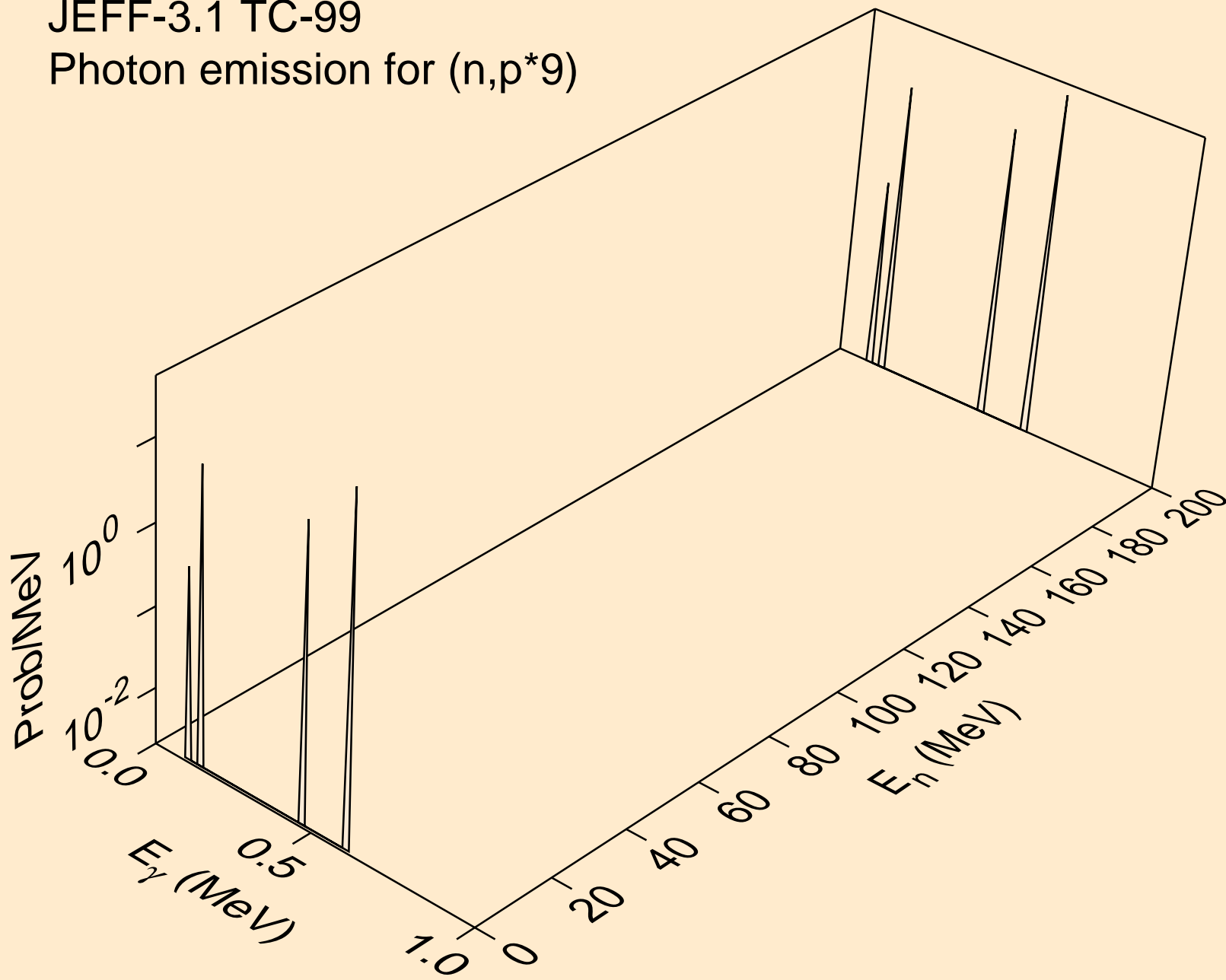
JEFF-3.1 TC-99  
Photon emission for (n,p\*7)



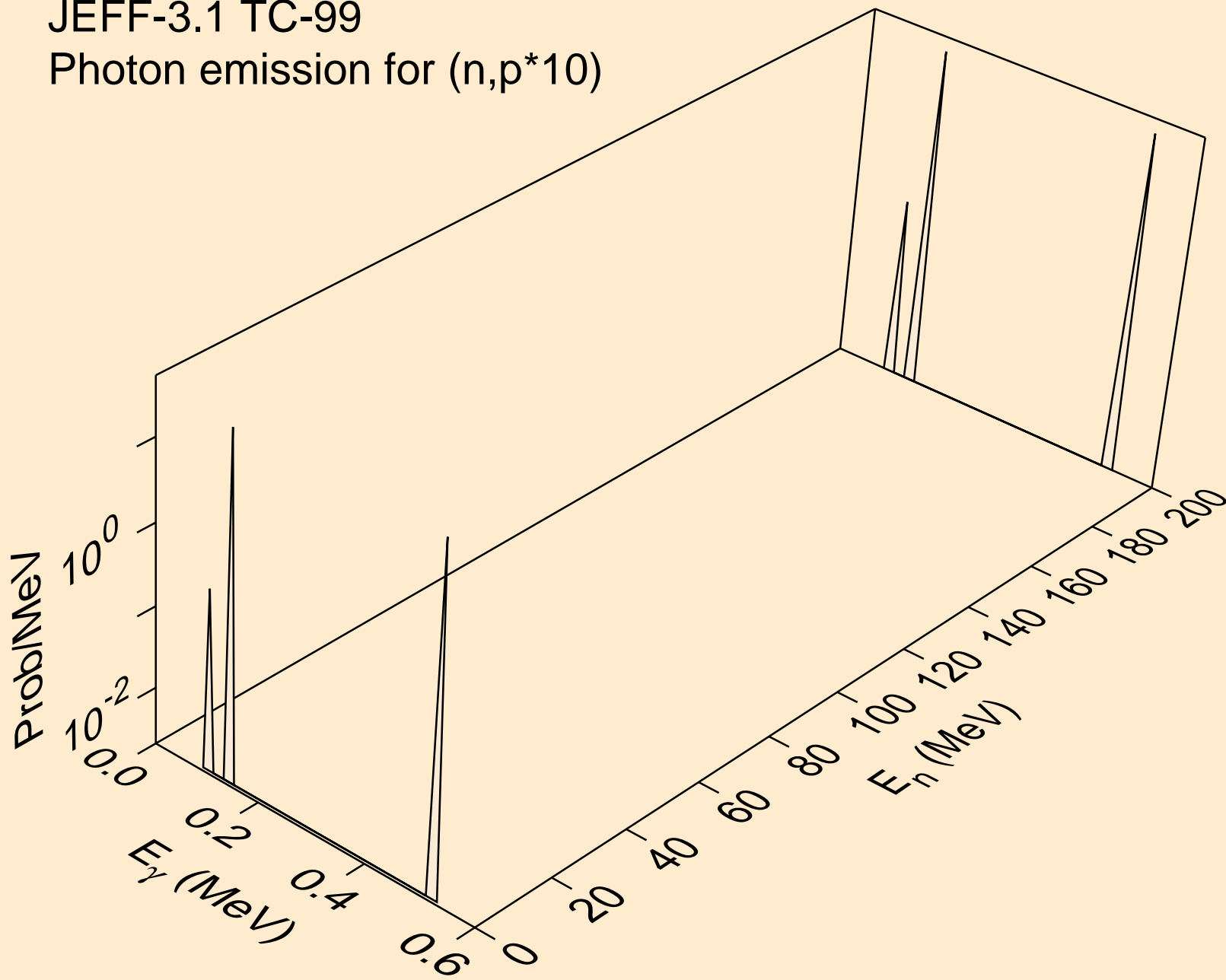
JEFF-3.1 TC-99  
Photon emission for (n,p\*8)



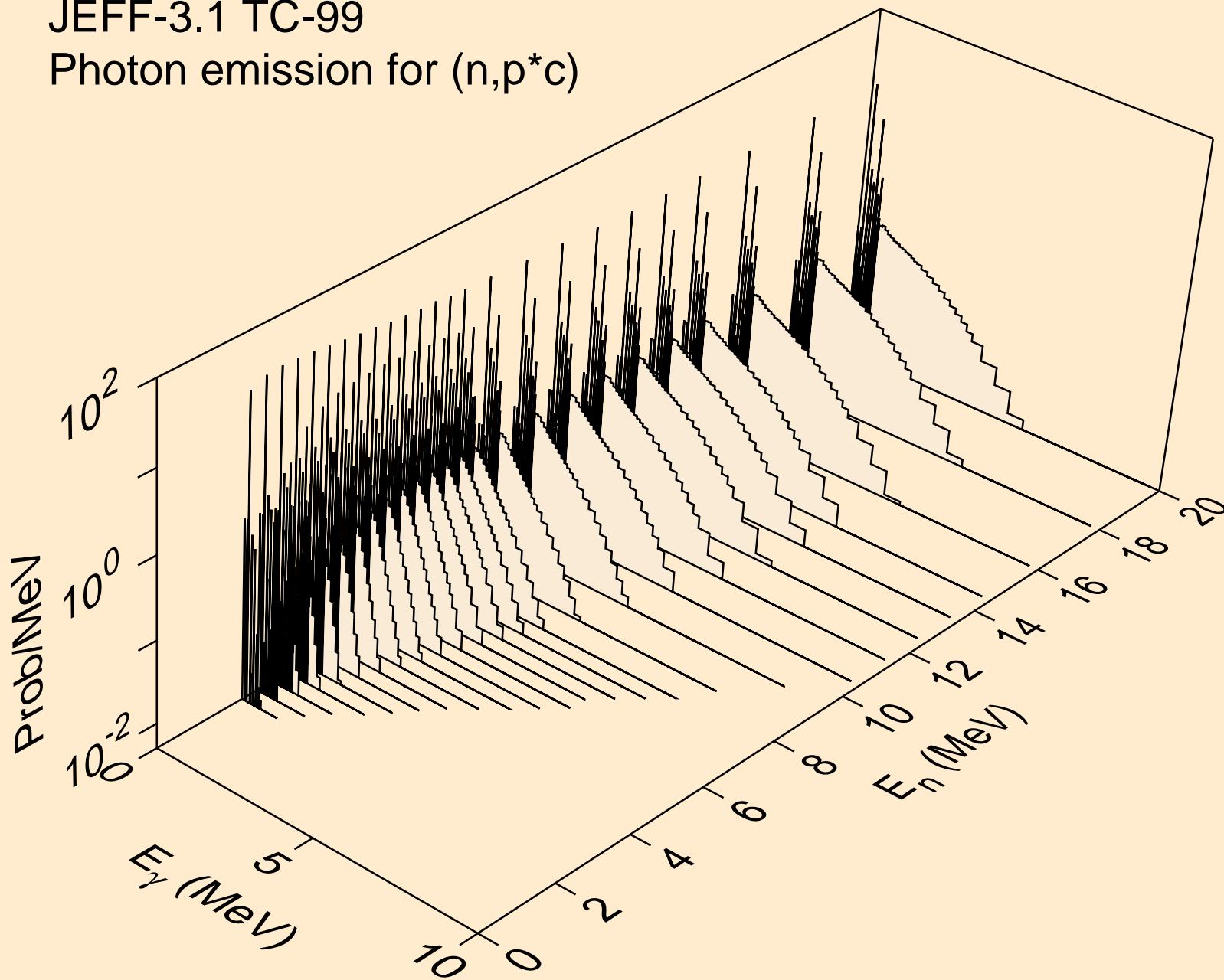
JEFF-3.1 TC-99  
Photon emission for (n,p\*9)



JEFF-3.1 TC-99  
Photon emission for (n,p\*10)

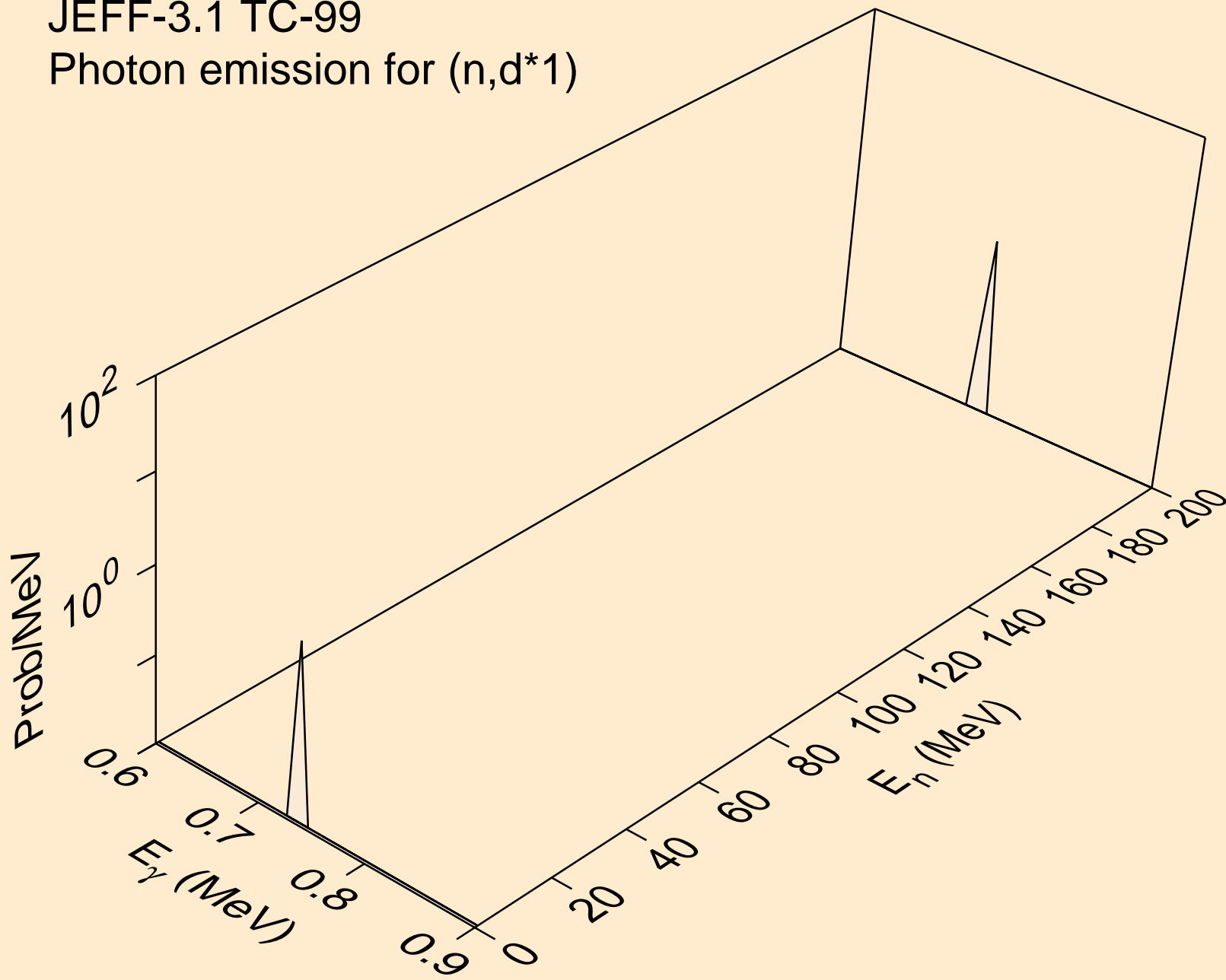


JEFF-3.1 TC-99  
Photon emission for (n,p\*c)

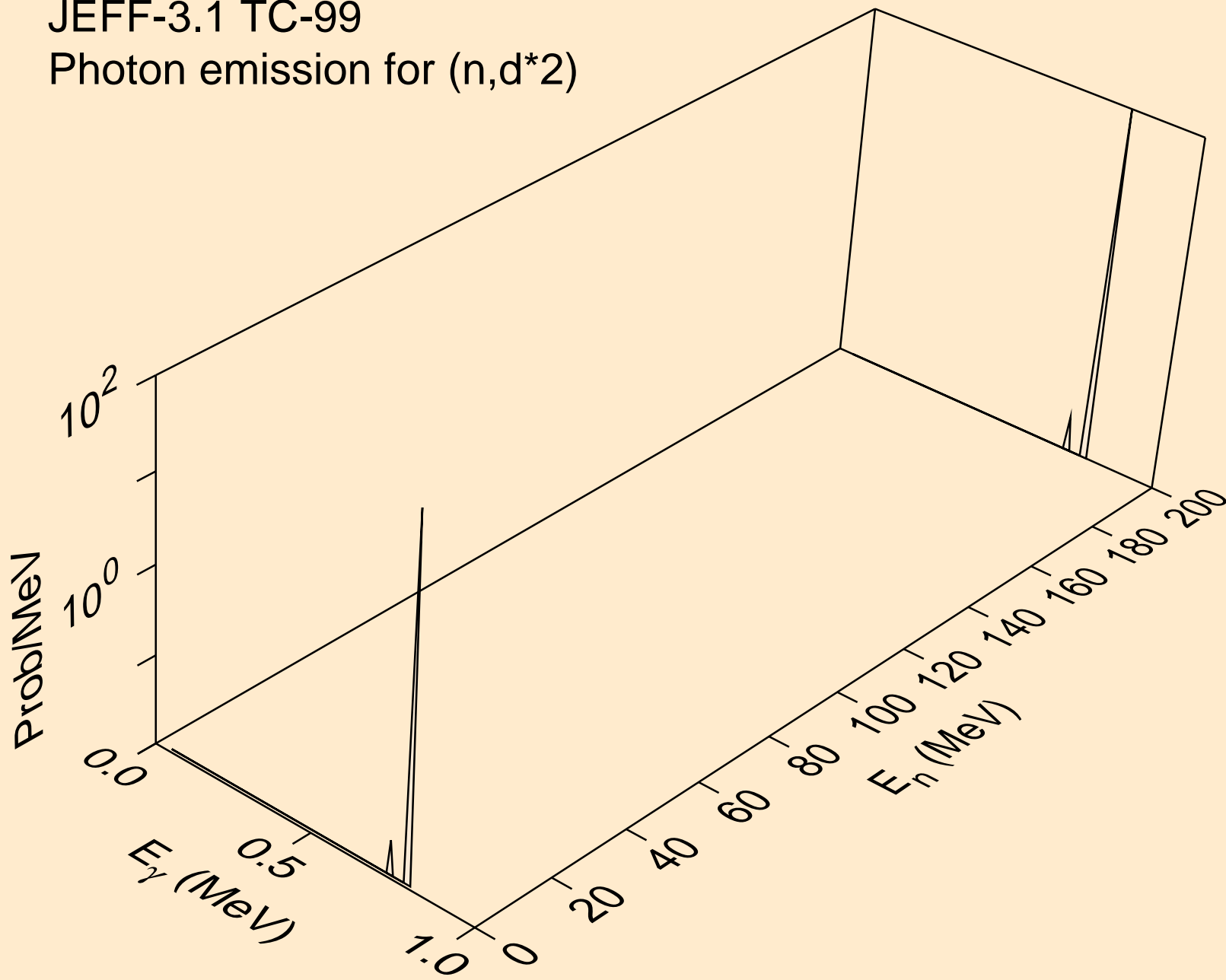




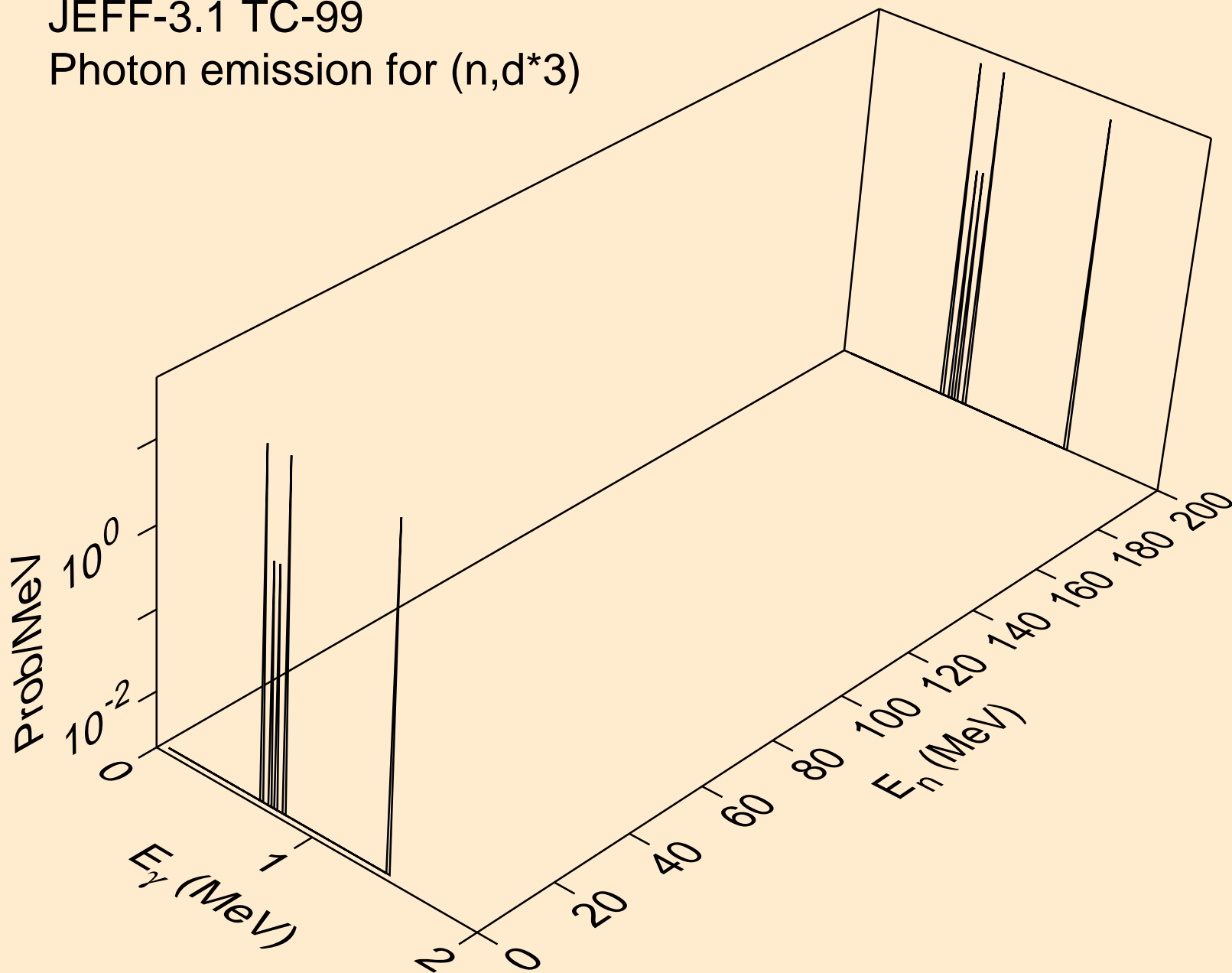
JEFF-3.1 TC-99  
Photon emission for (n,d\*1)



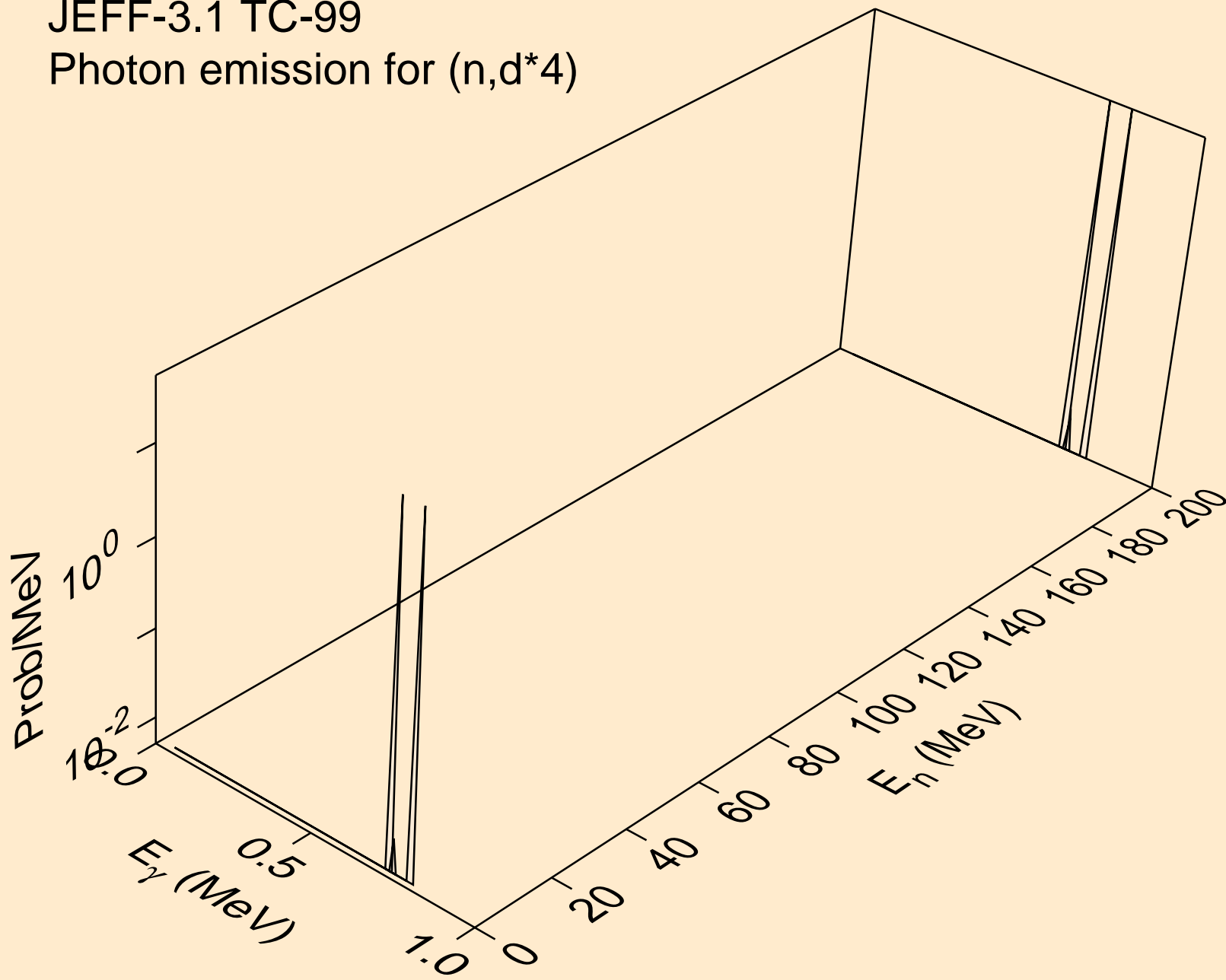
JEFF-3.1 TC-99  
Photon emission for (n,d\*2)



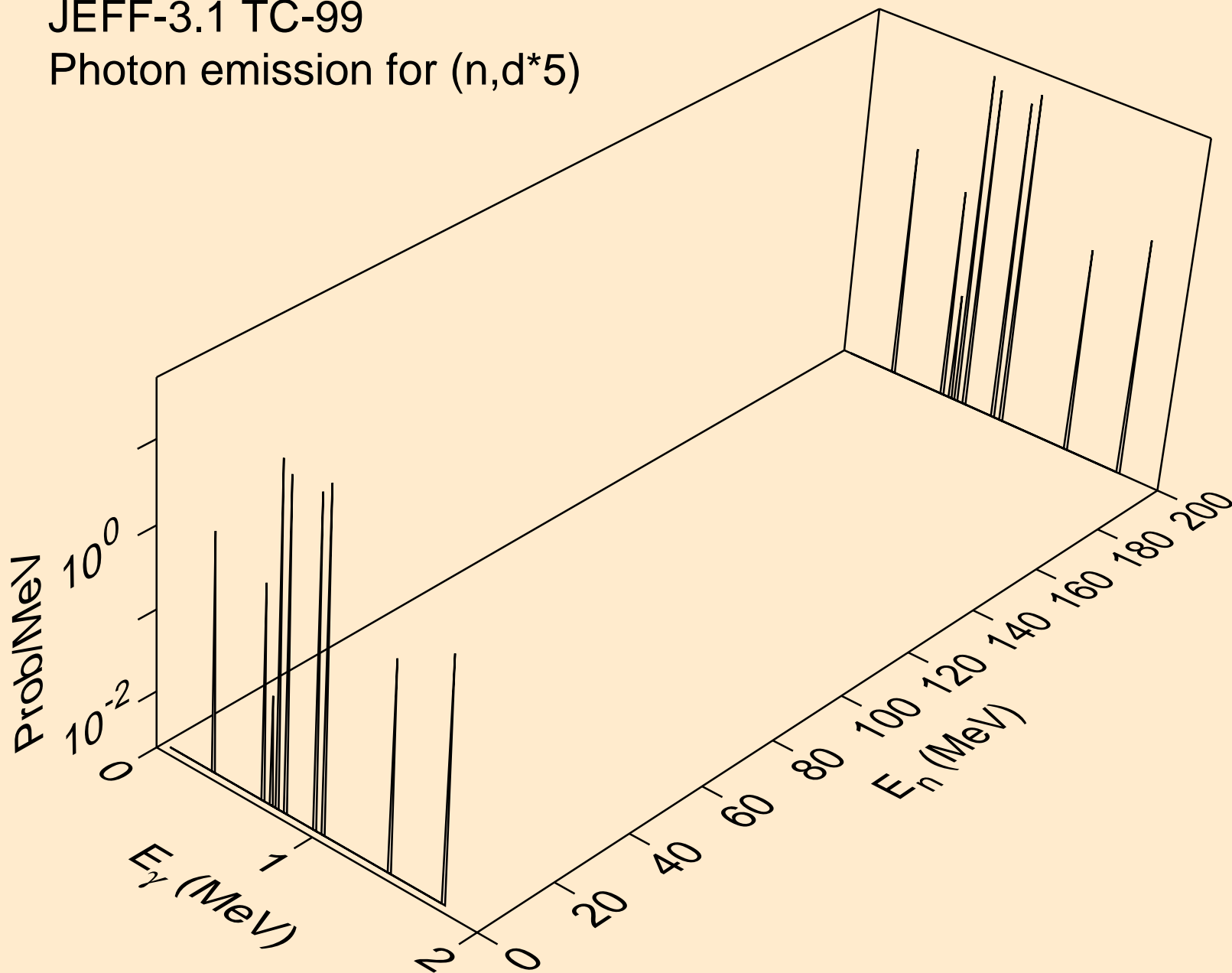
JEFF-3.1 TC-99  
Photon emission for (n,d\*3)



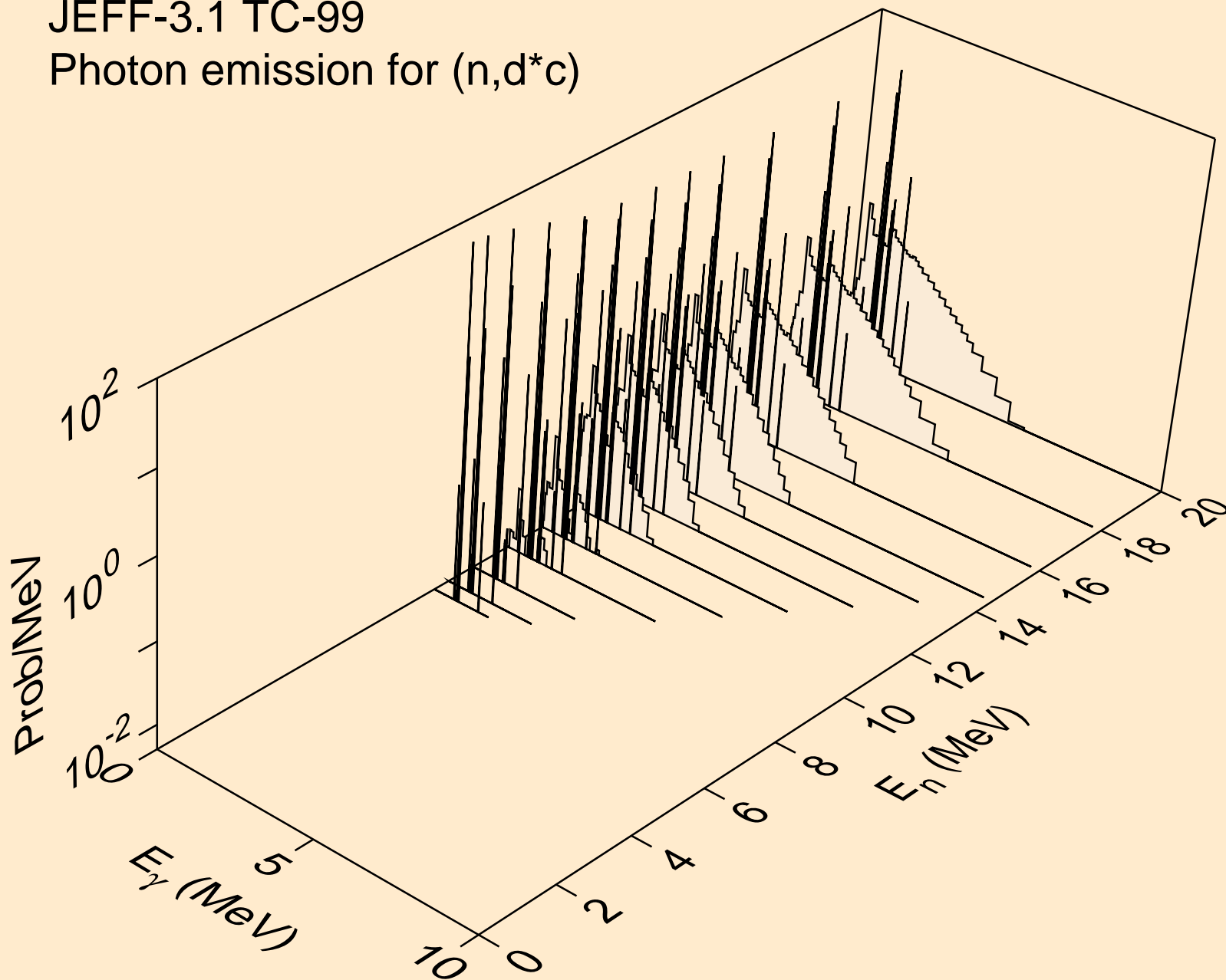
JEFF-3.1 TC-99  
Photon emission for (n,d\*4)



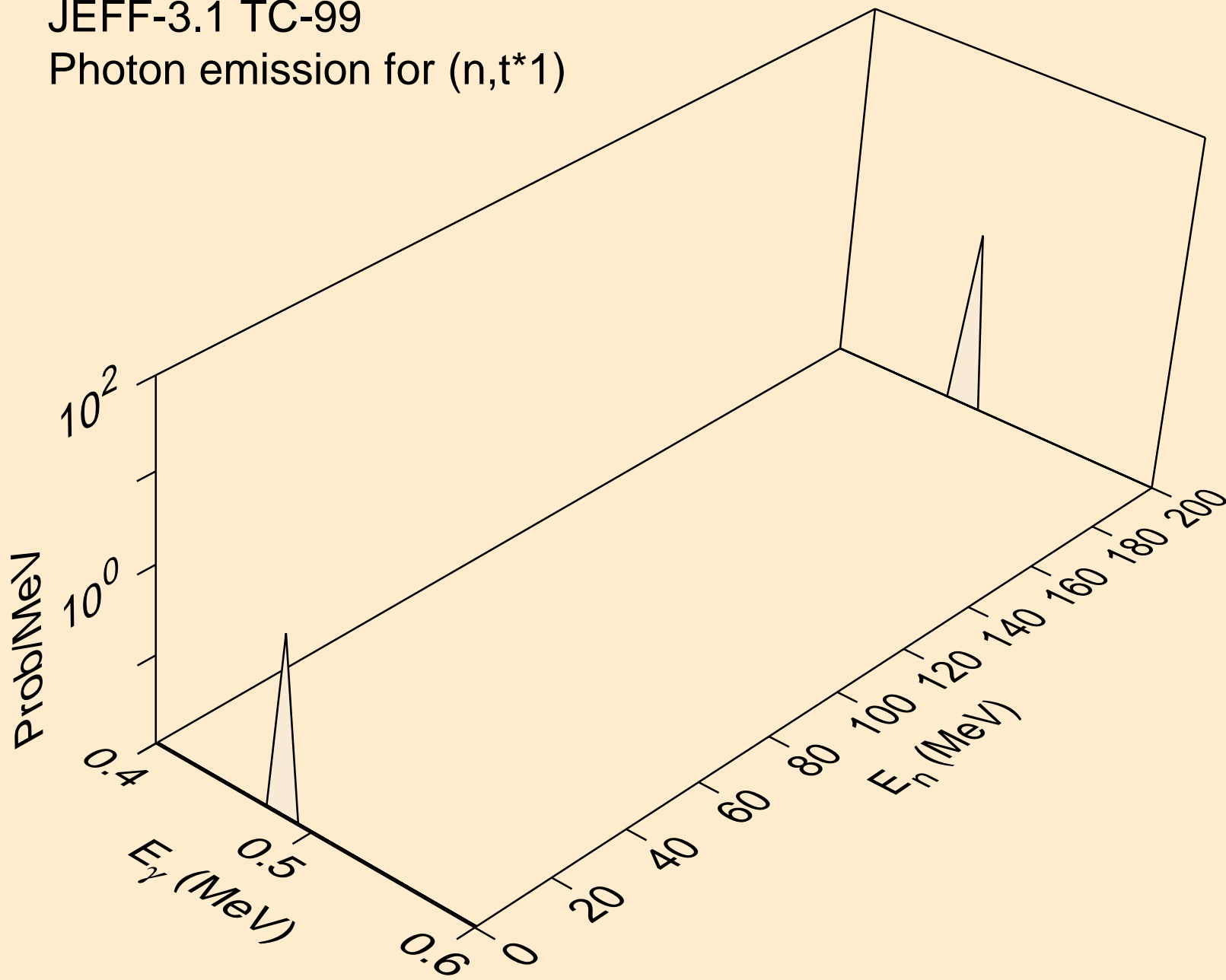
JEFF-3.1 TC-99  
Photon emission for (n,d\*5)



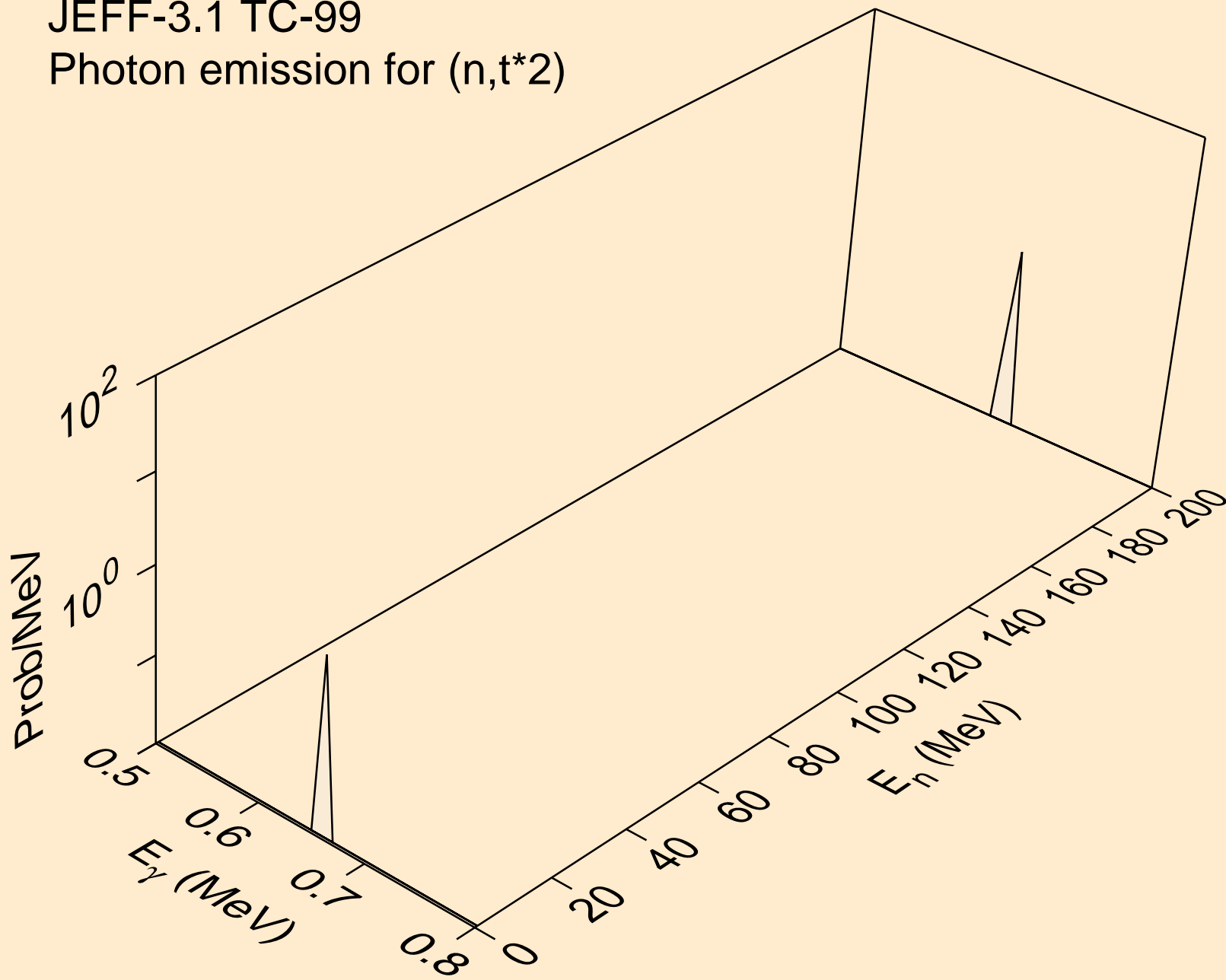
JEFF-3.1 TC-99  
Photon emission for (n,d\*c)



JEFF-3.1 TC-99  
Photon emission for (n,t\*1)

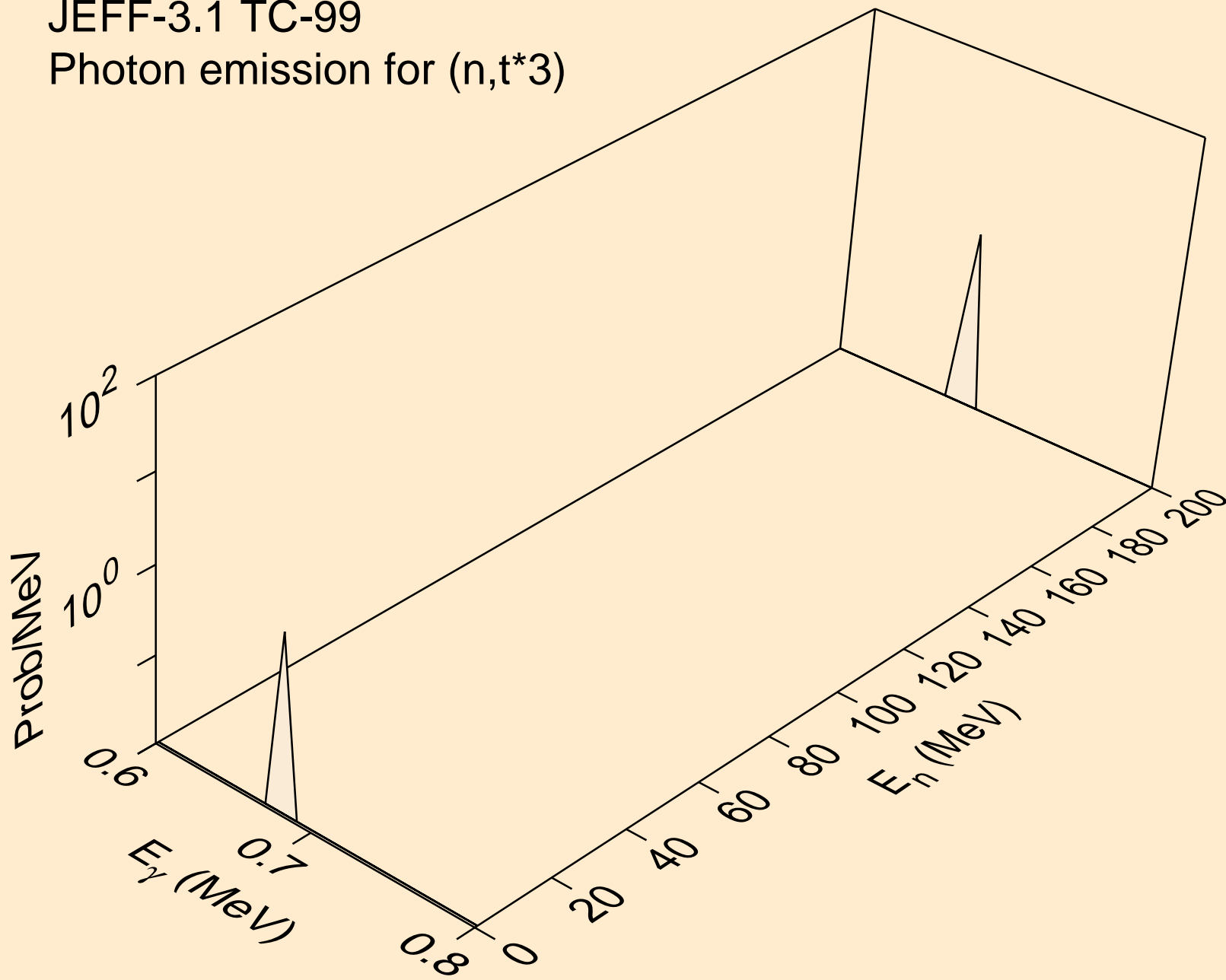


JEFF-3.1 TC-99  
Photon emission for (n,t\*2)

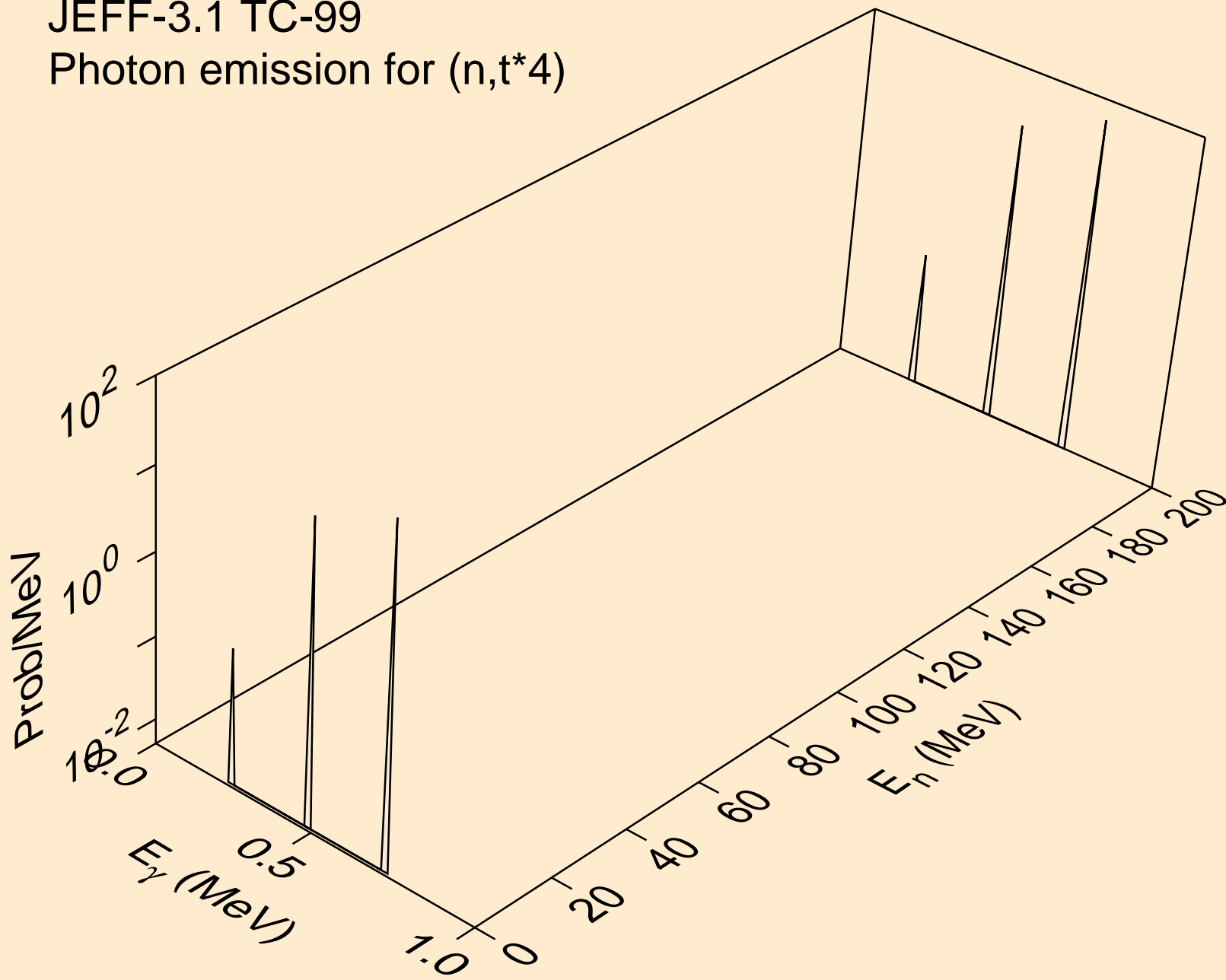




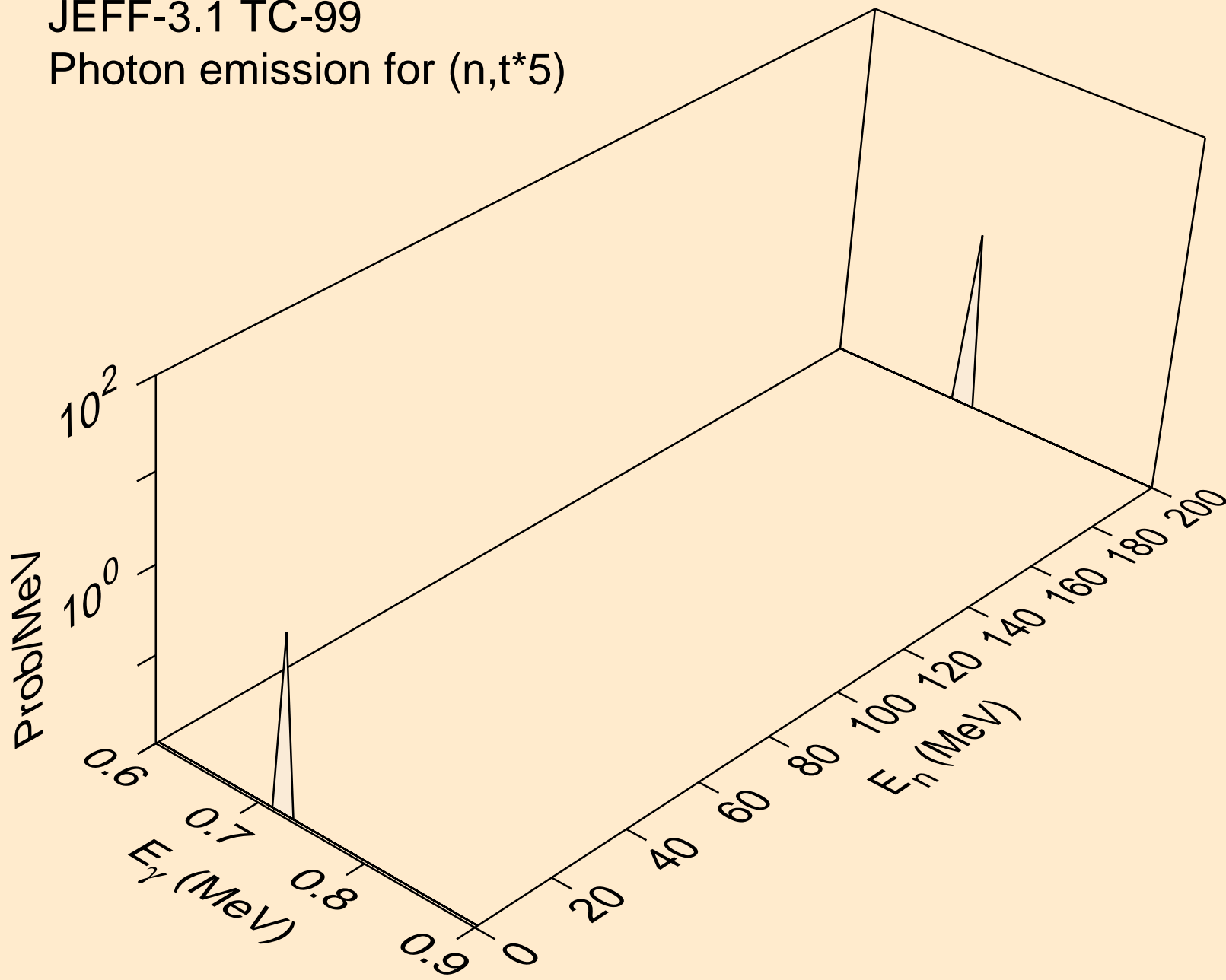
JEFF-3.1 TC-99  
Photon emission for (n,t\*3)



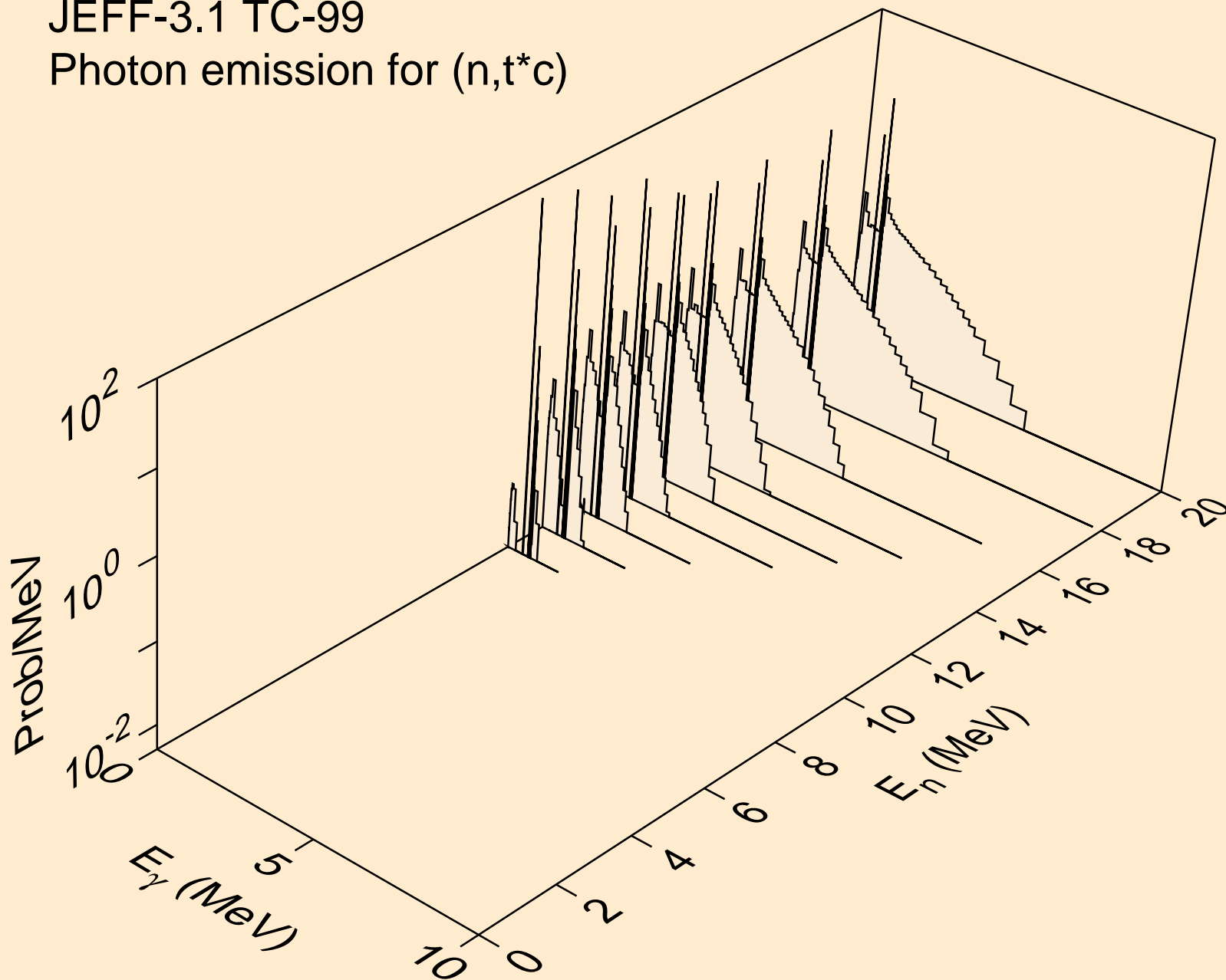
JEFF-3.1 TC-99  
Photon emission for (n,t\*4)



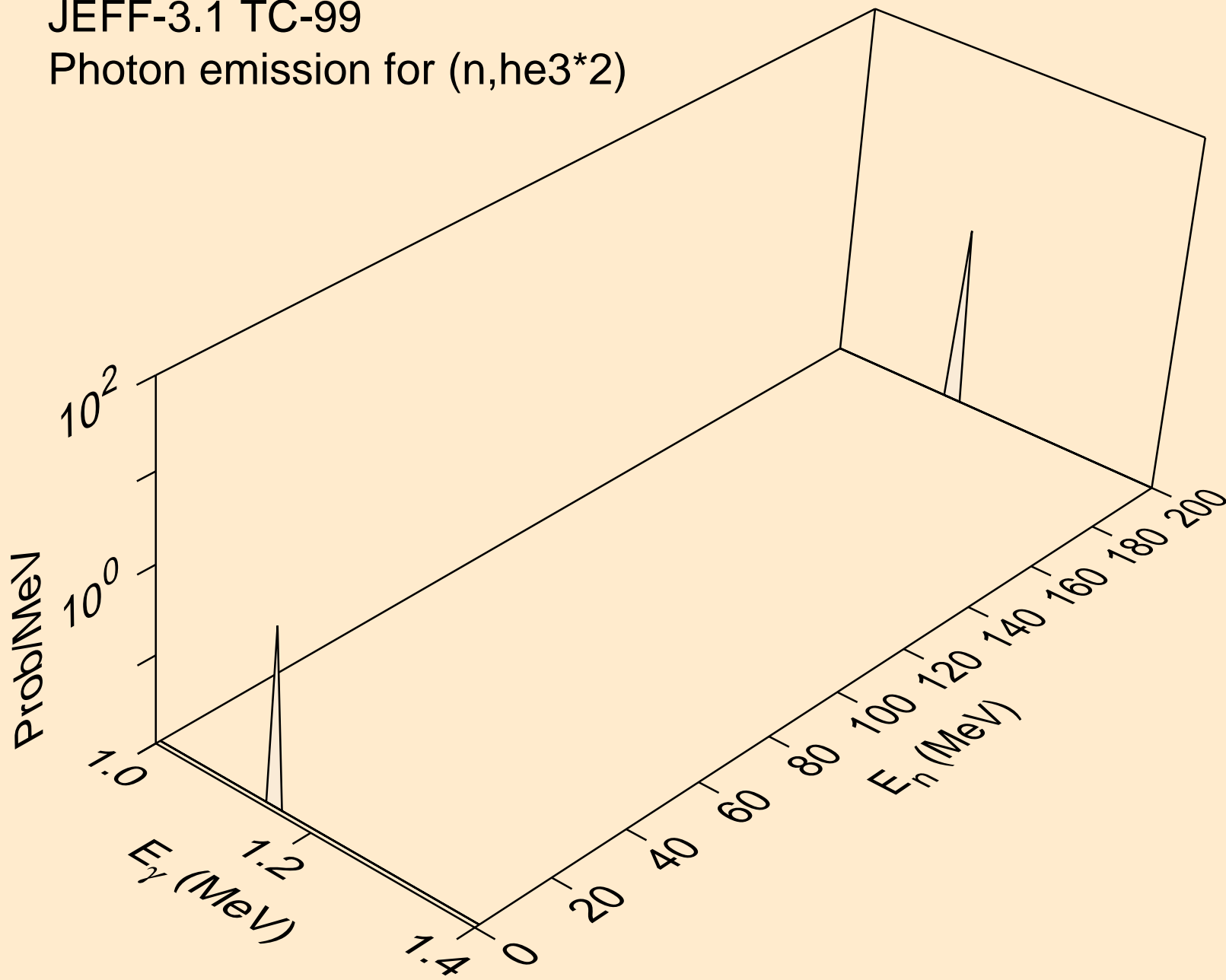
JEFF-3.1 TC-99  
Photon emission for (n,t\*5)



JEFF-3.1 TC-99  
Photon emission for (n,t\*c)

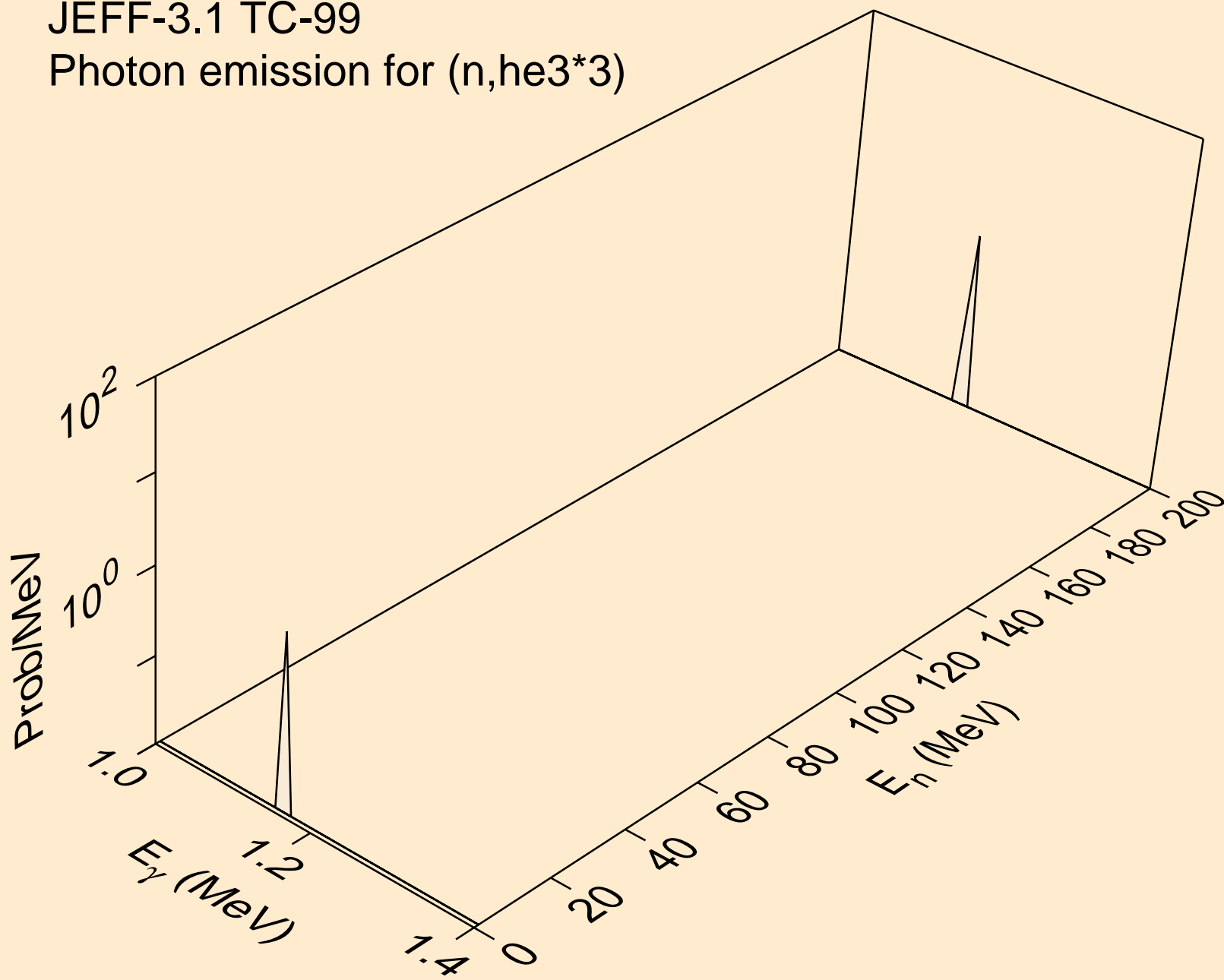


JEFF-3.1 TC-99  
Photon emission for (n,he3\*2)



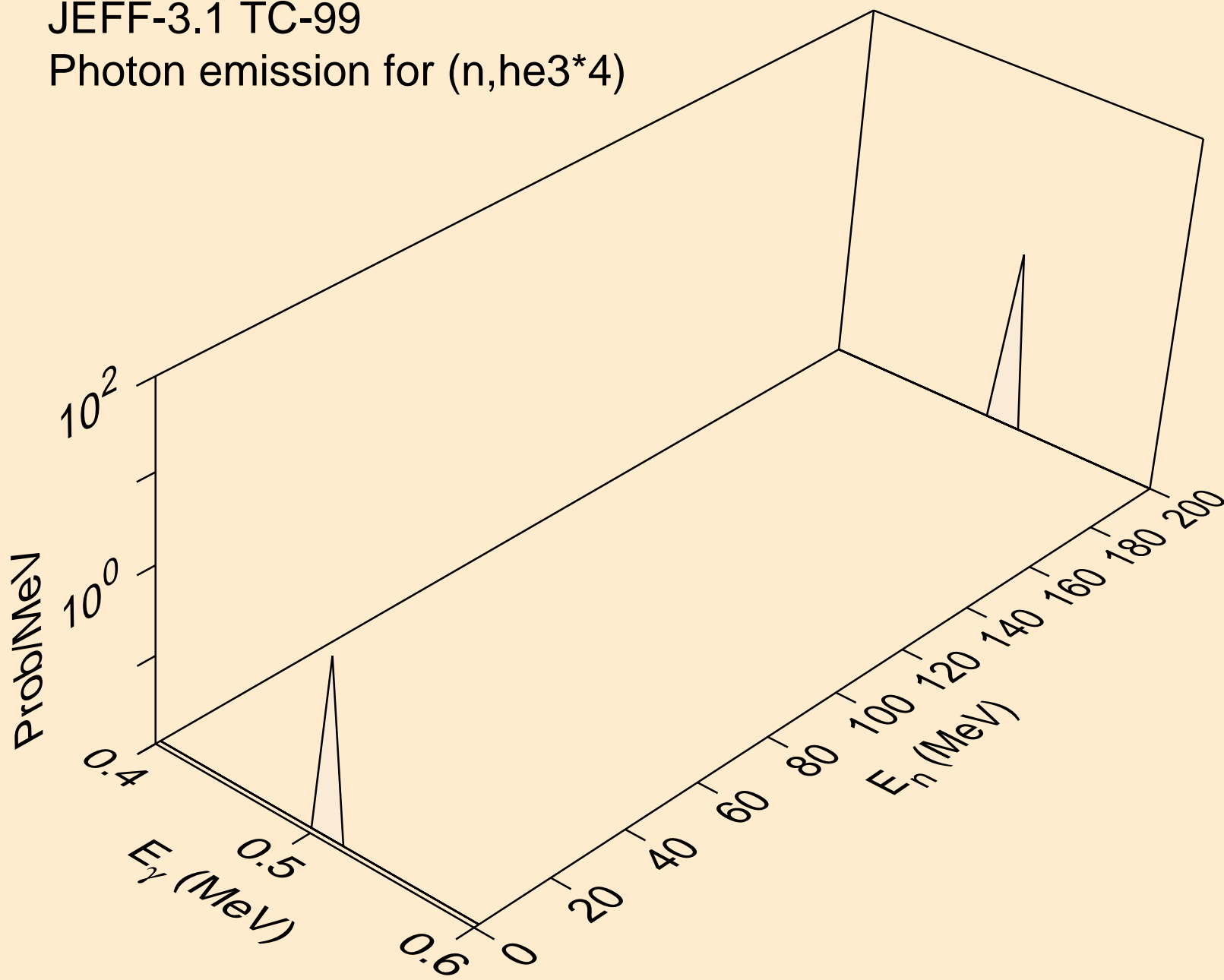
JEFF-3.1 TC-99

Photon emission for (n,he3\*3)

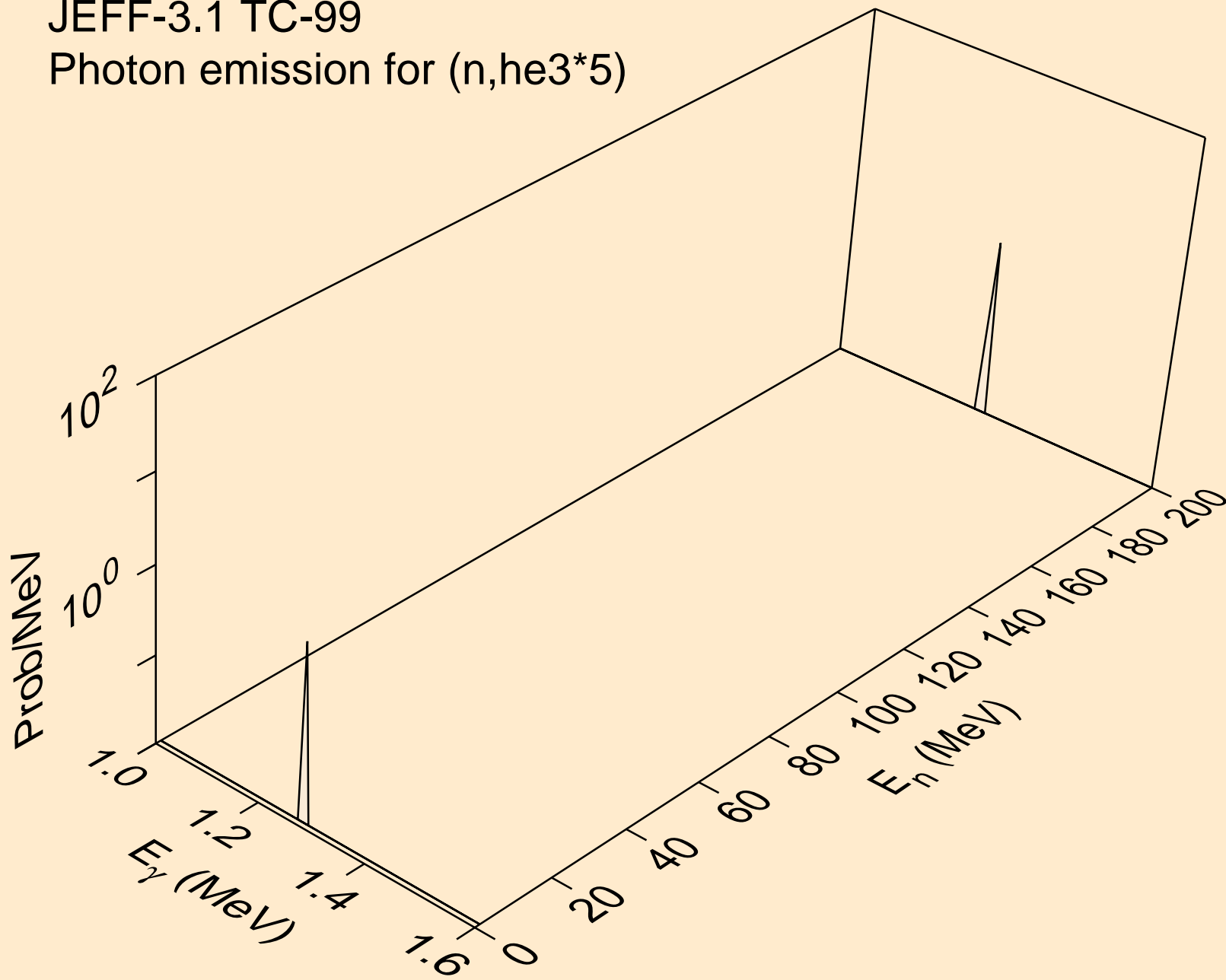


JEFF-3.1 TC-99

Photon emission for (n,he3\*4)



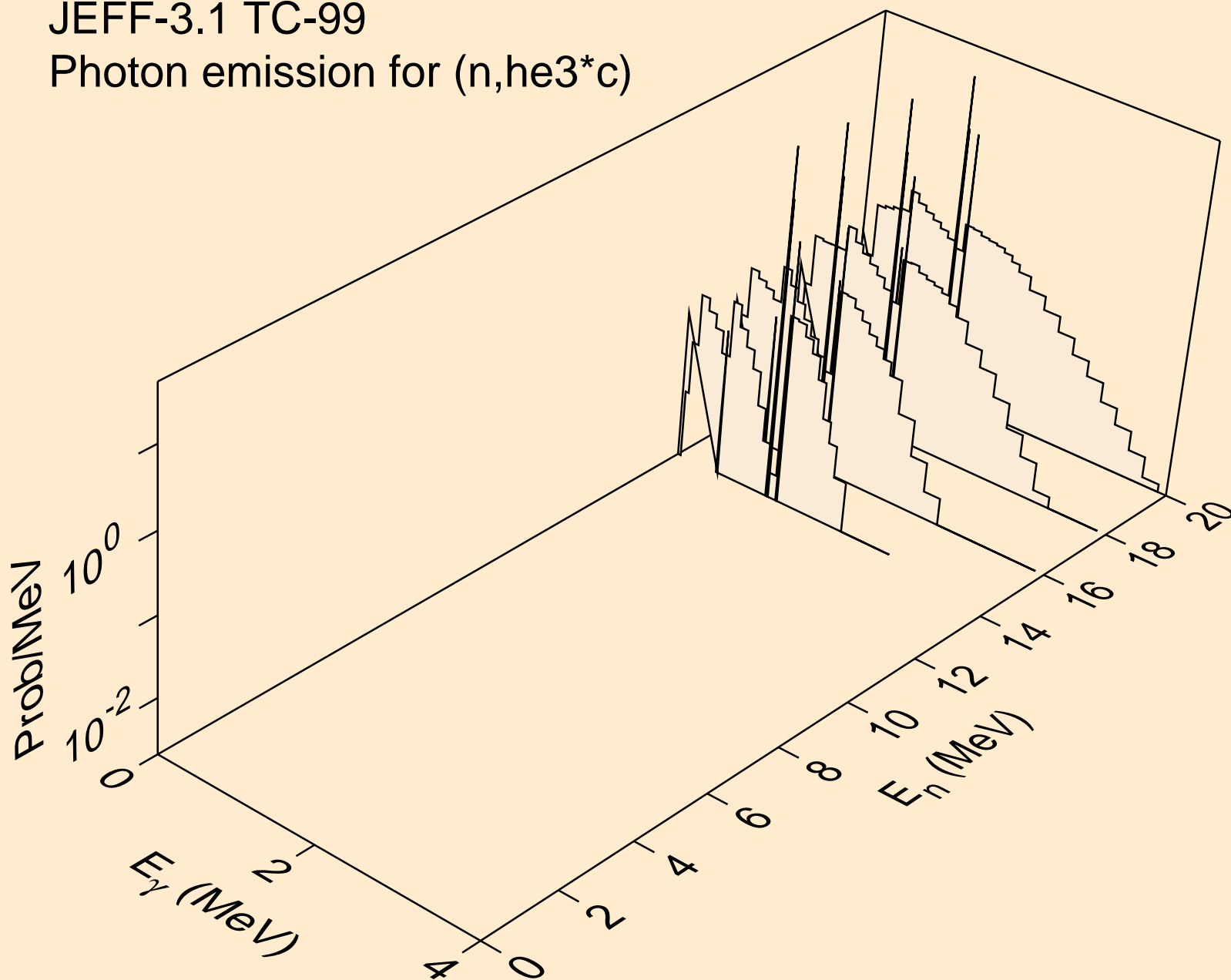
JEFF-3.1 TC-99  
Photon emission for (n,he3\*5)



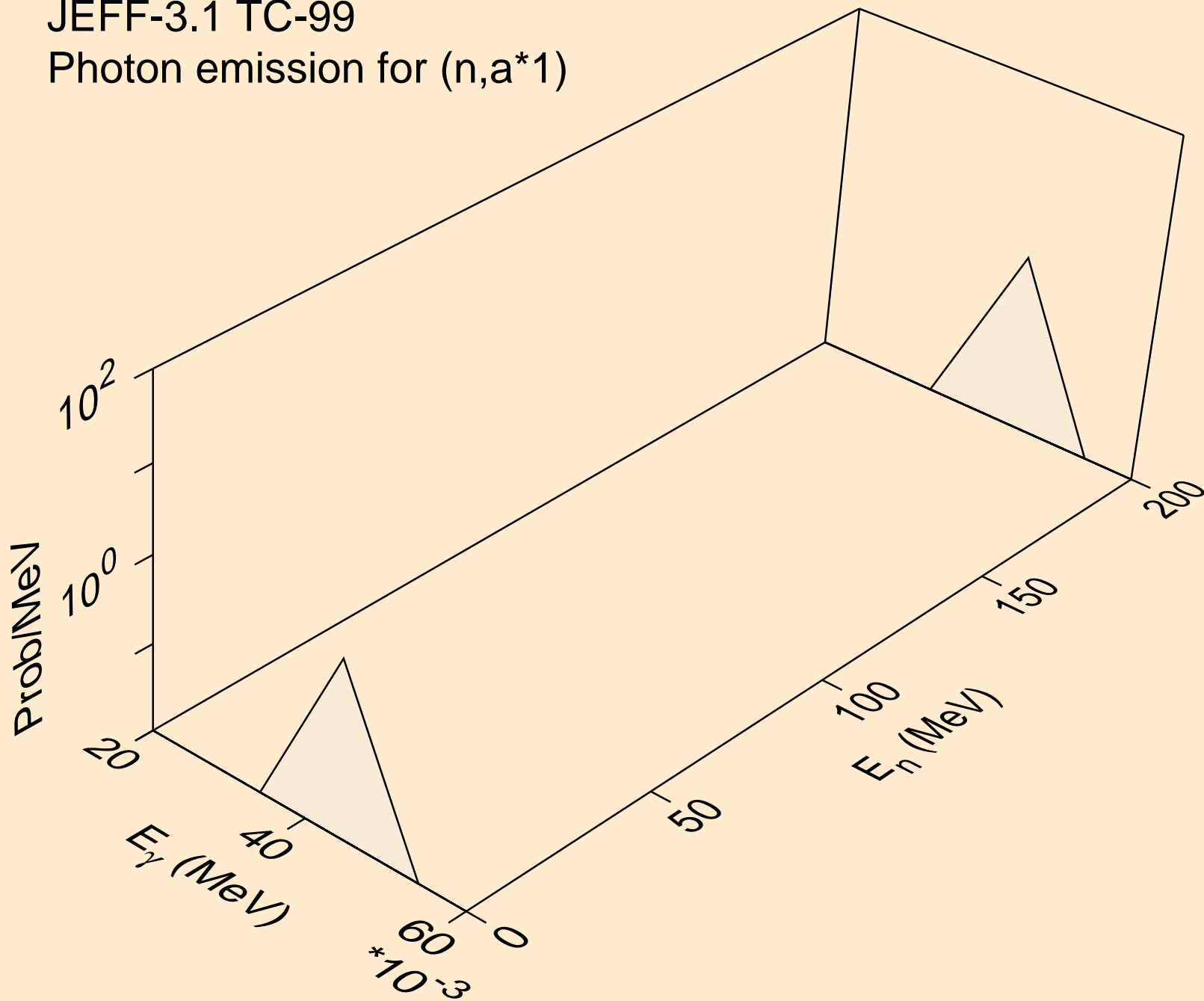


JEFF-3.1 TC-99

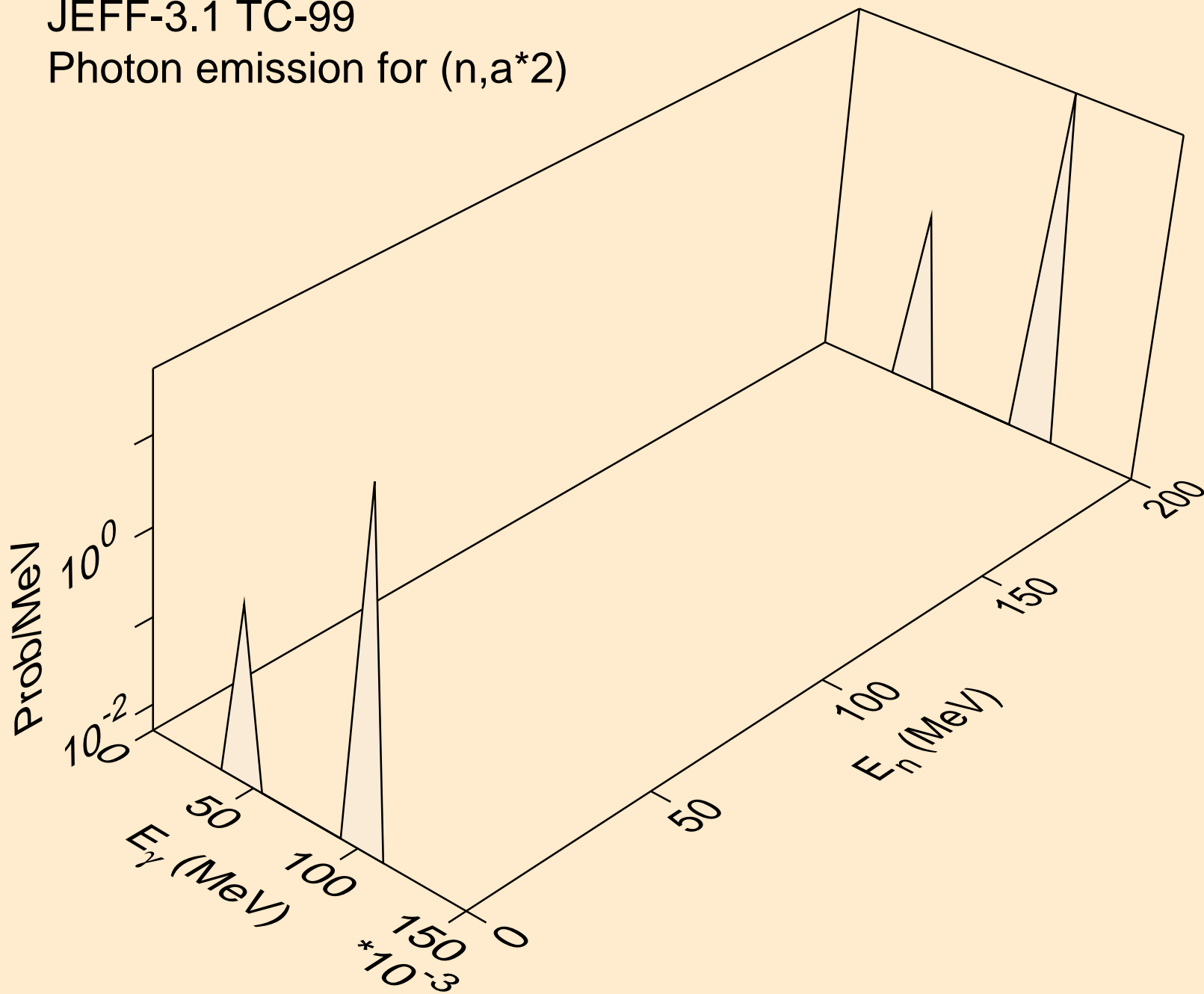
Photon emission for (n,he3\*c)



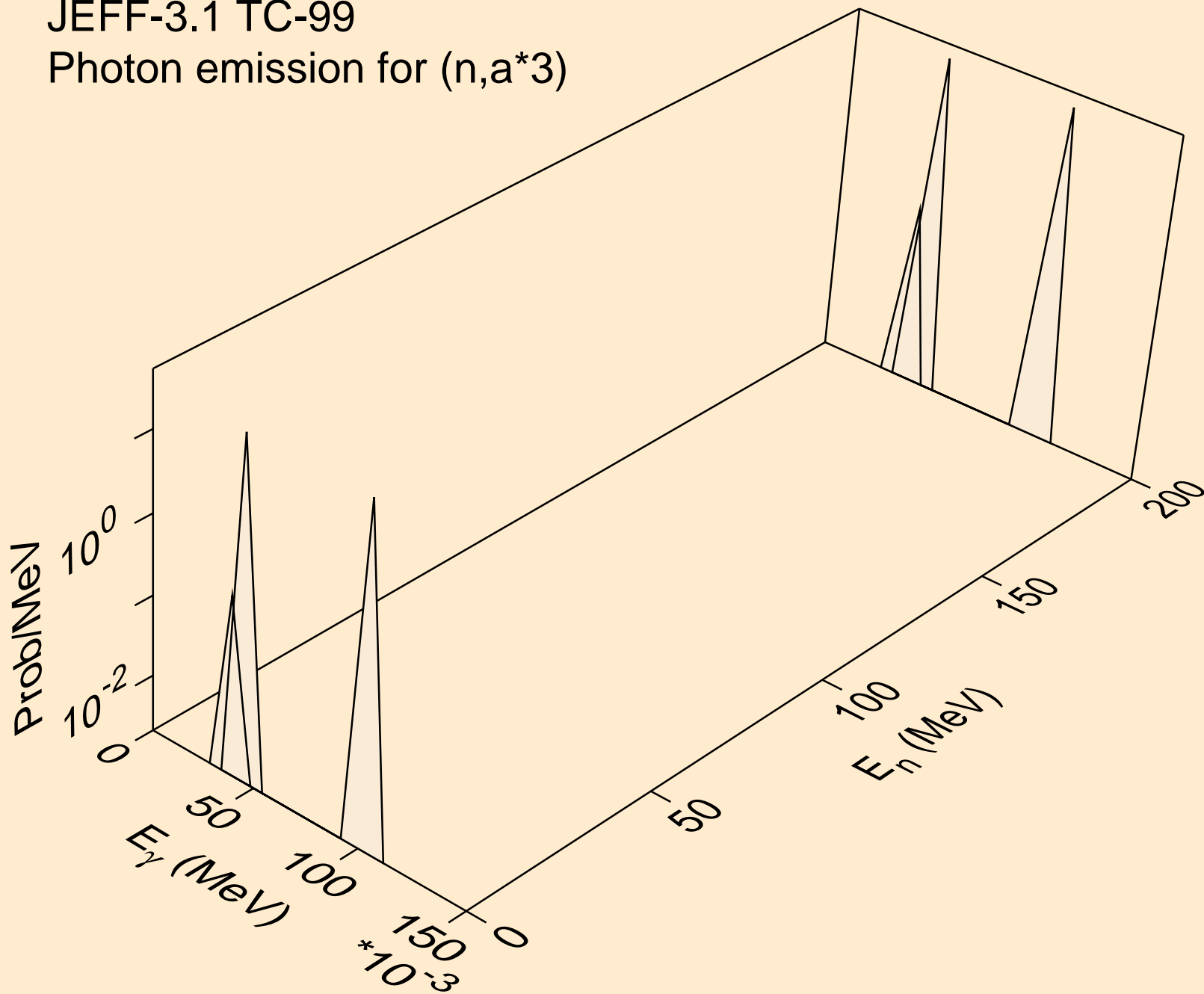
JEFF-3.1 TC-99  
Photon emission for (n,a\*1)



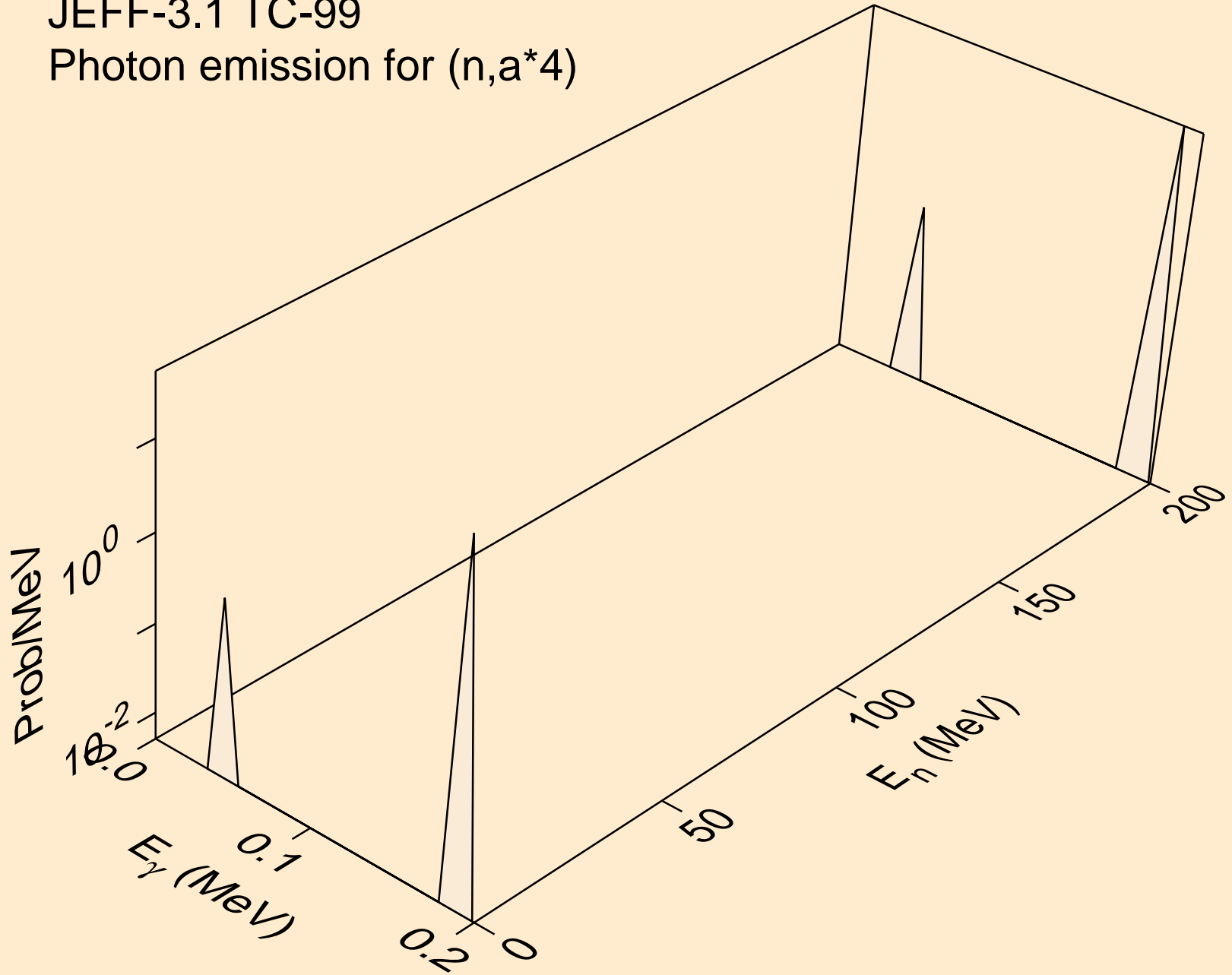
JEFF-3.1 TC-99  
Photon emission for (n,a\*2)



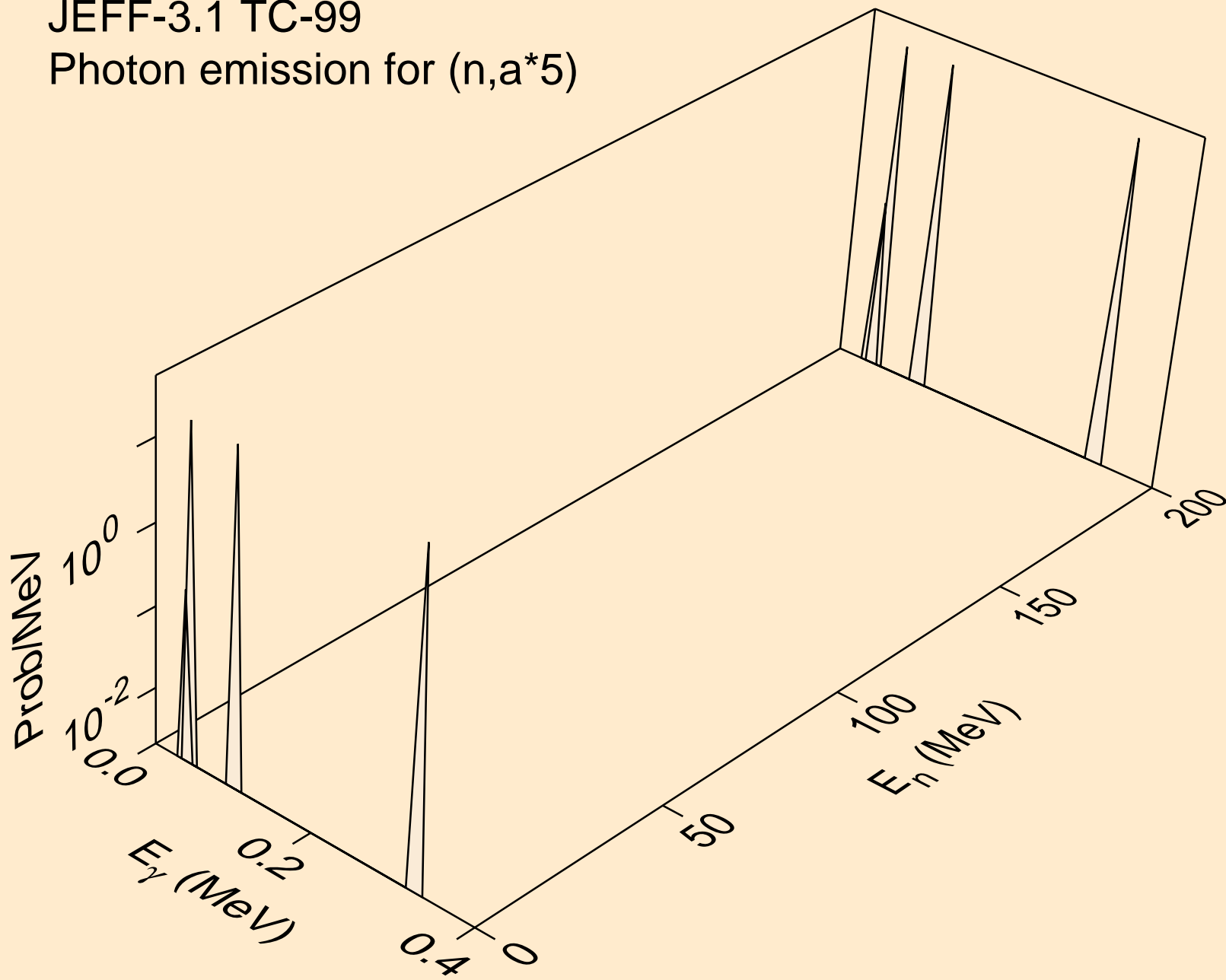
JEFF-3.1 TC-99  
Photon emission for (n,a\*3)



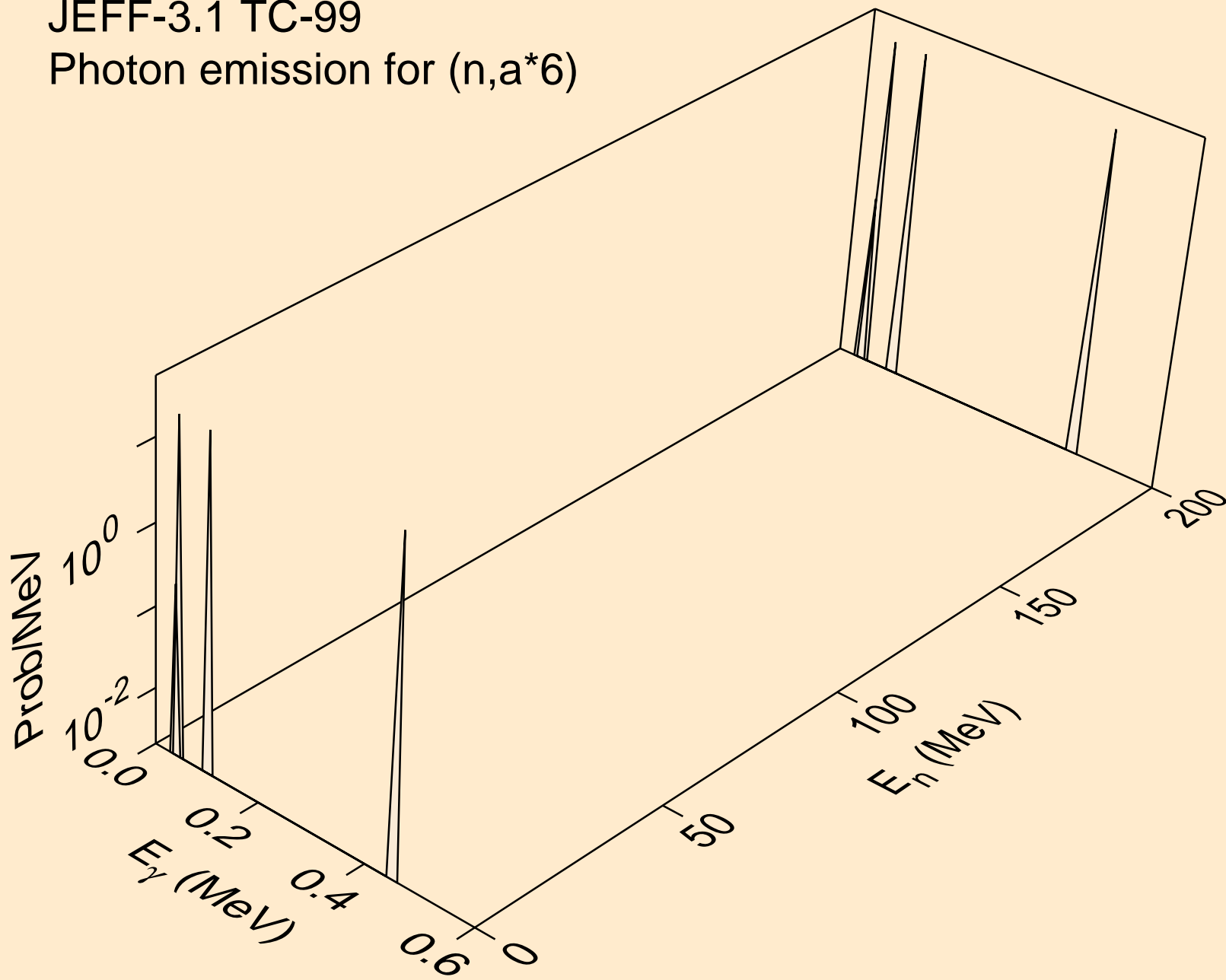
JEFF-3.1 TC-99  
Photon emission for (n,a\*4)



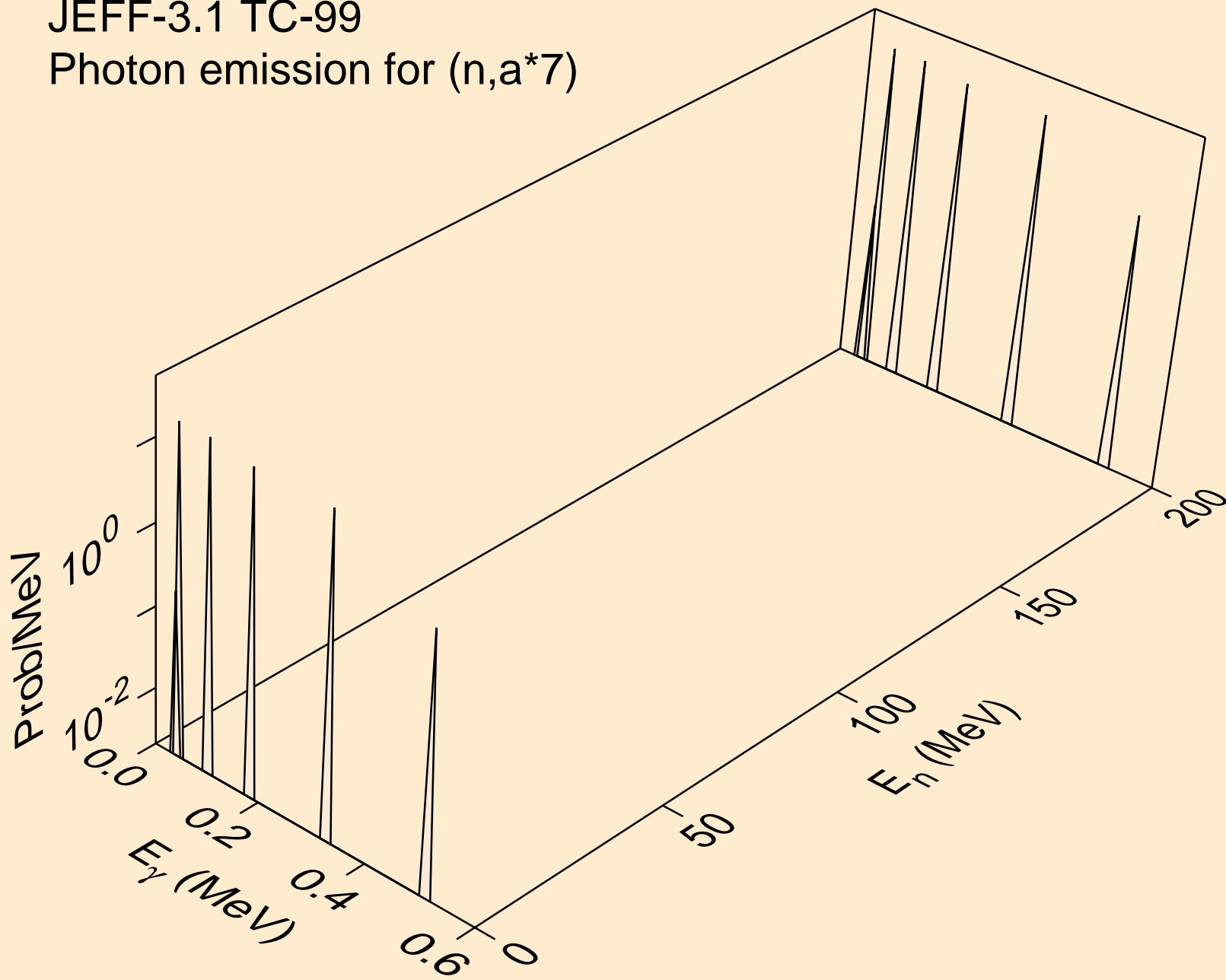
JEFF-3.1 TC-99  
Photon emission for (n,a\*5)



JEFF-3.1 TC-99  
Photon emission for (n,a\*6)

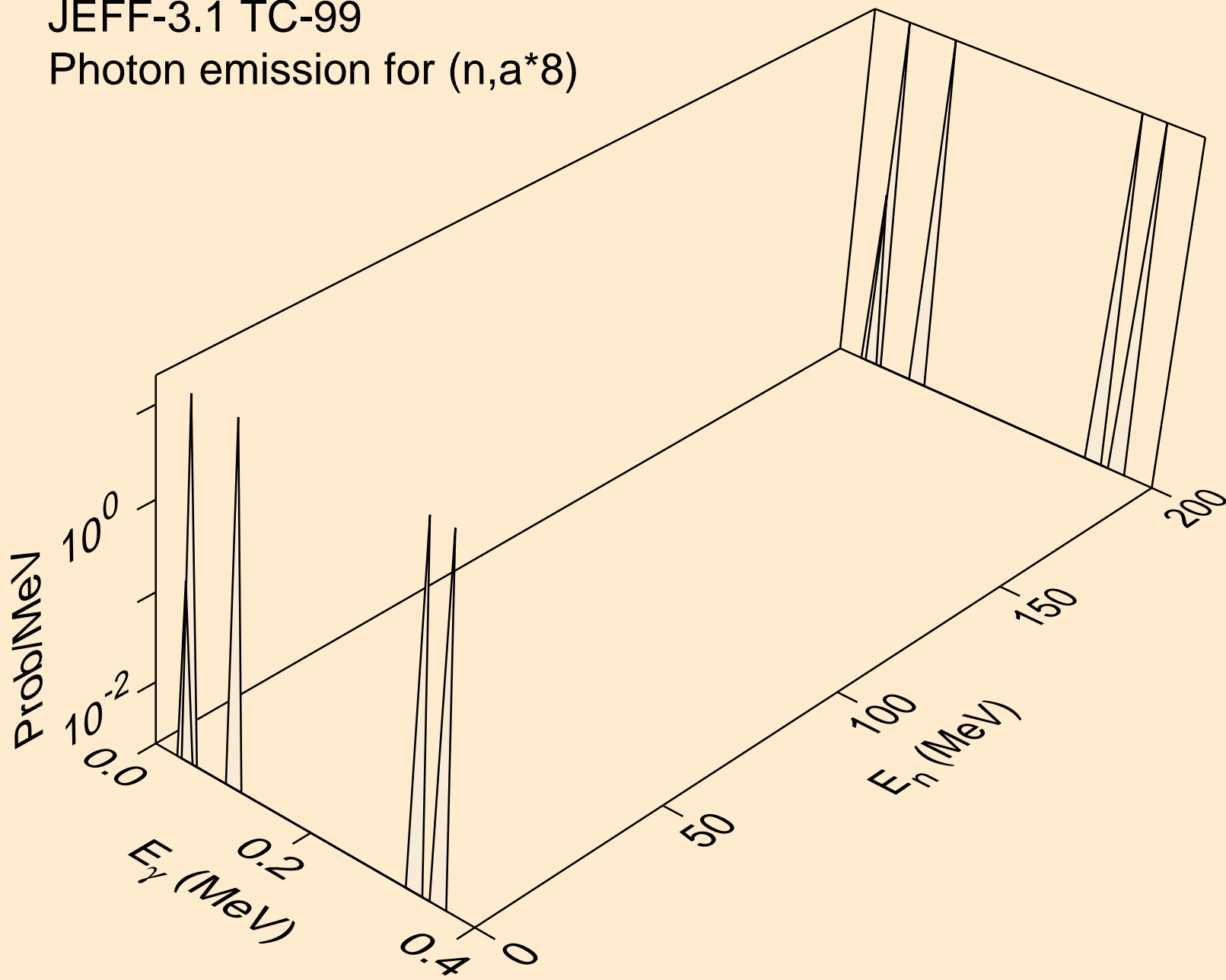


JEFF-3.1 TC-99  
Photon emission for (n,a\*7)

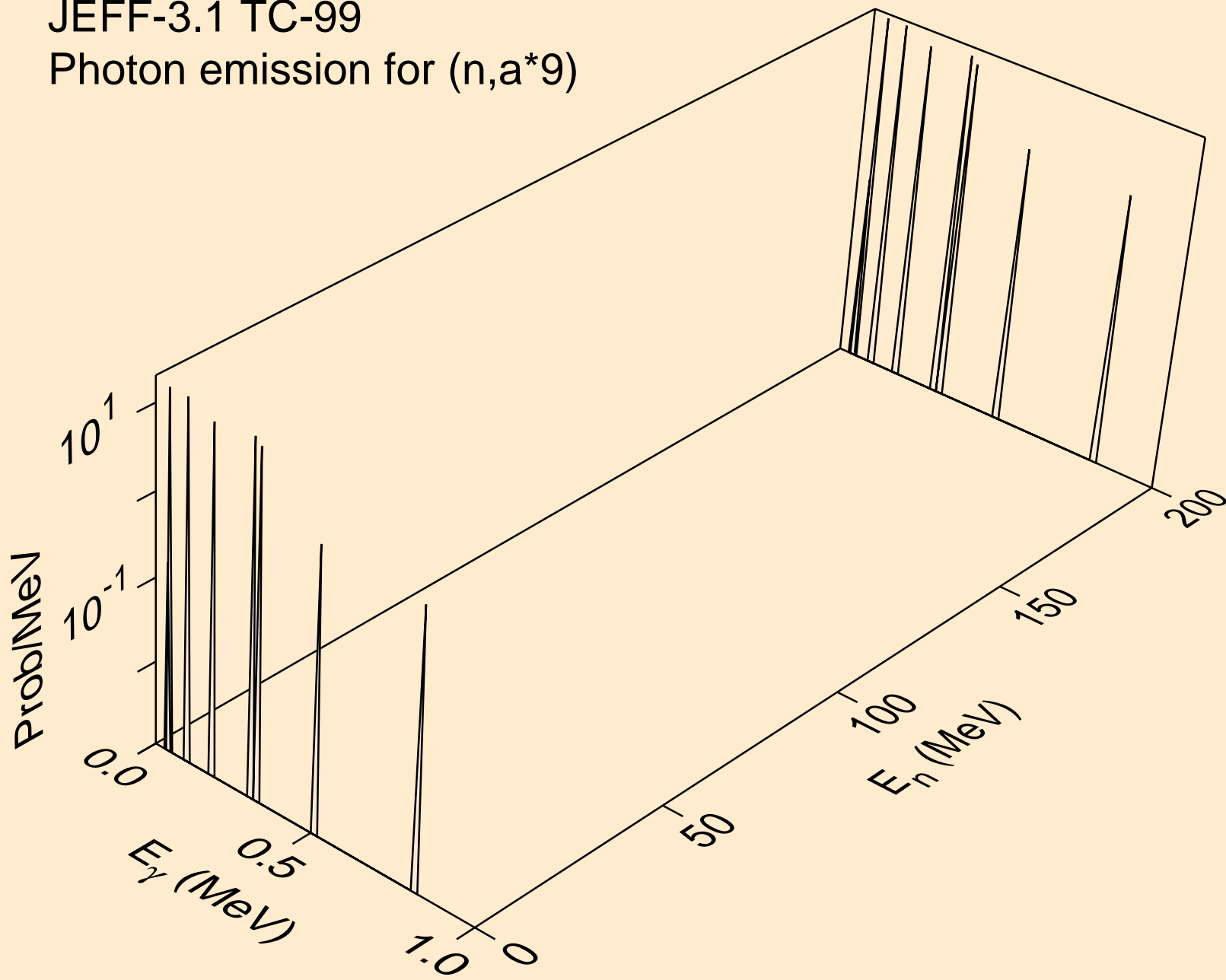




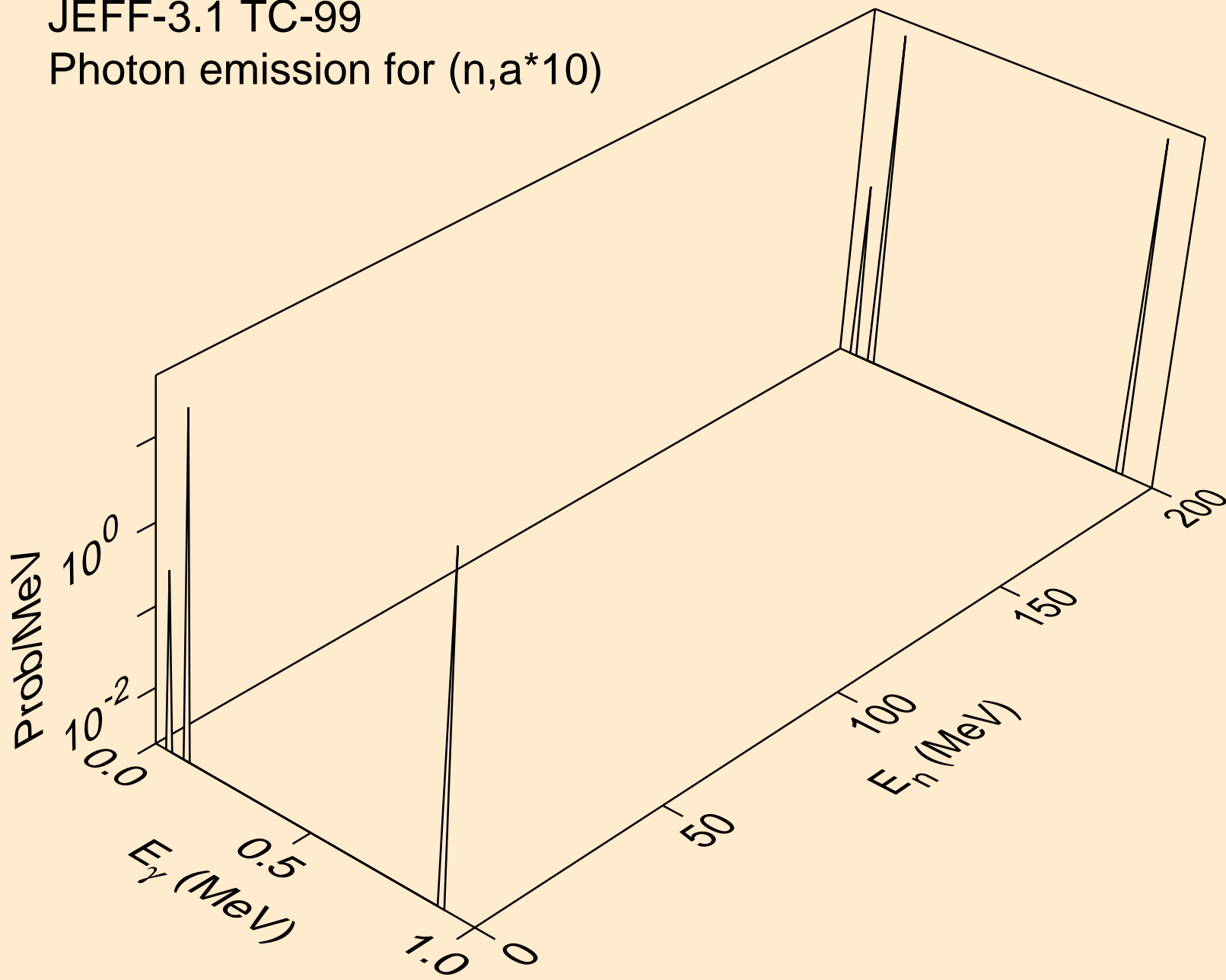
JEFF-3.1 TC-99  
Photon emission for (n,a\*8)



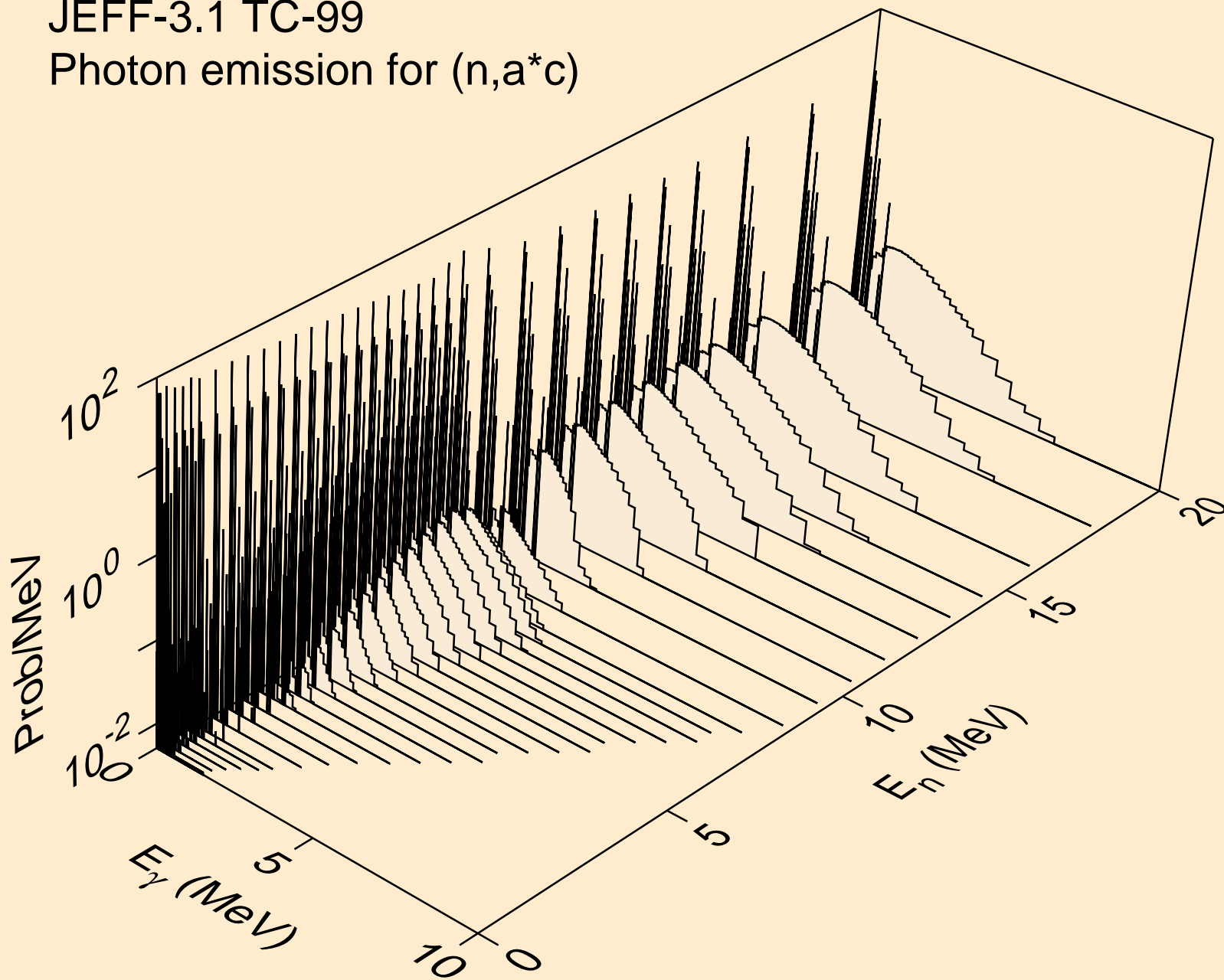
JEFF-3.1 TC-99  
Photon emission for (n,a\*9)



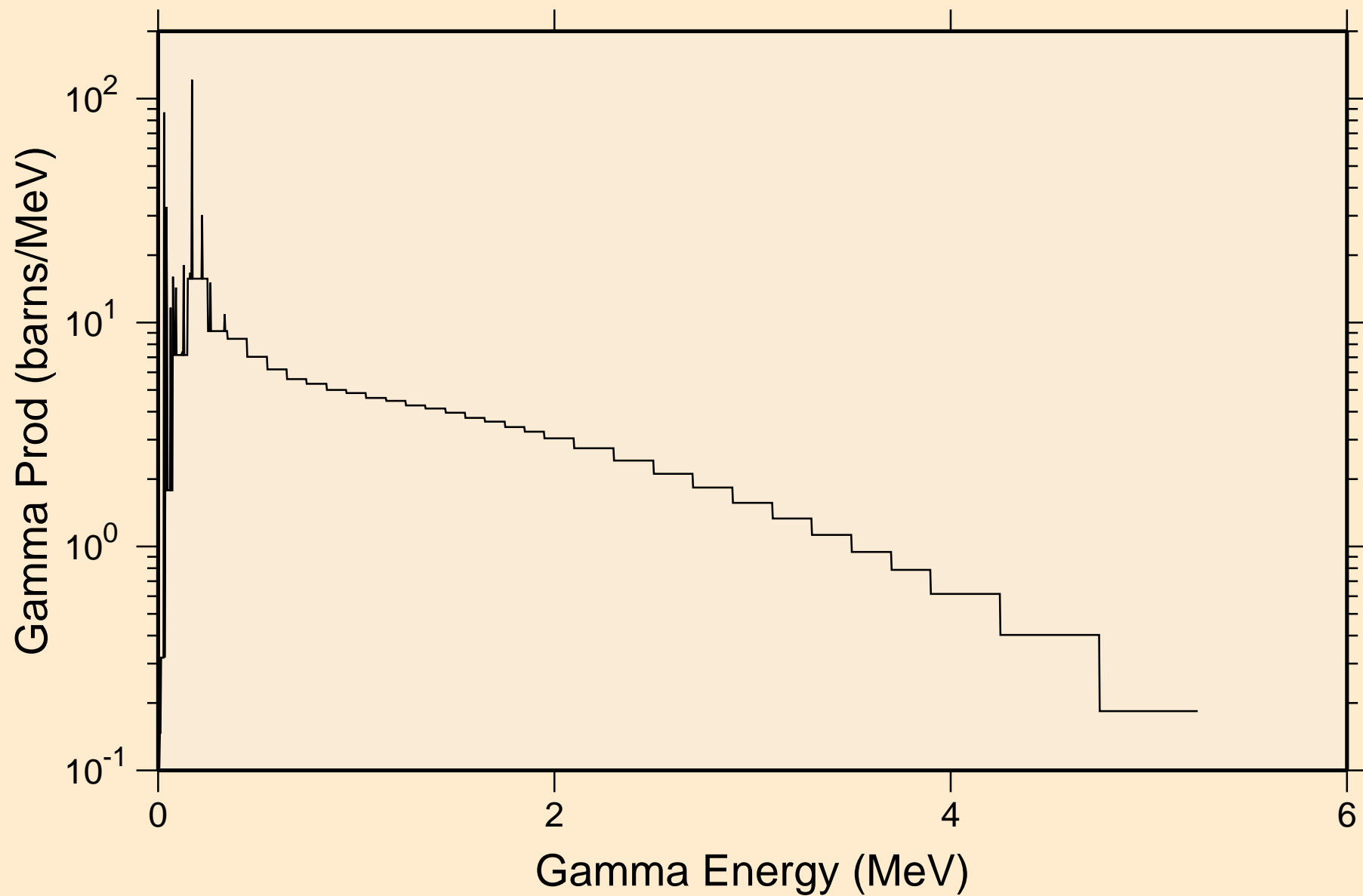
JEFF-3.1 TC-99  
Photon emission for (n,a\*10)



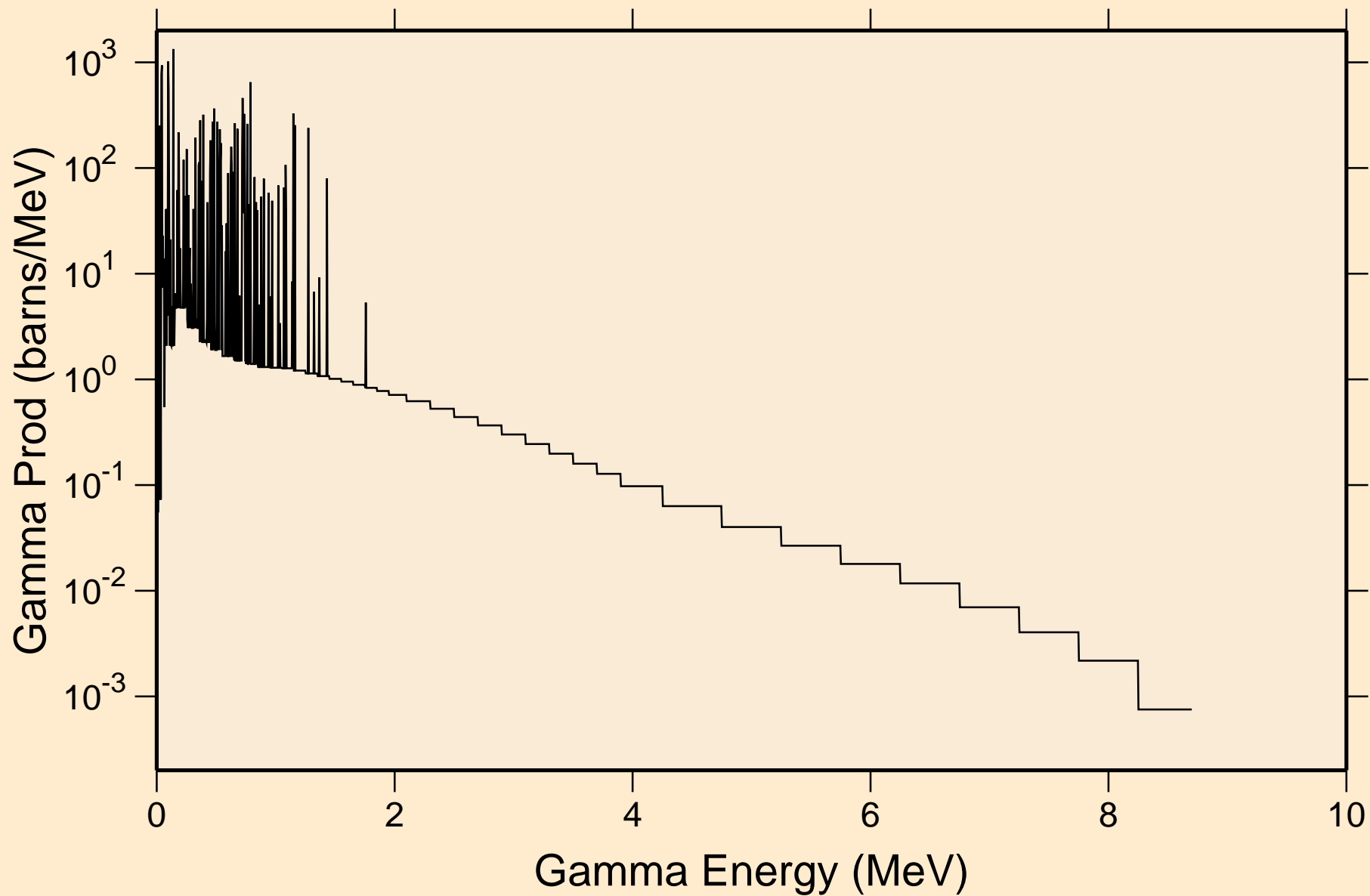
JEFF-3.1 TC-99  
Photon emission for (n,a\*c)



JEFF-3.1 TC-99  
thermal capture photon spectrum

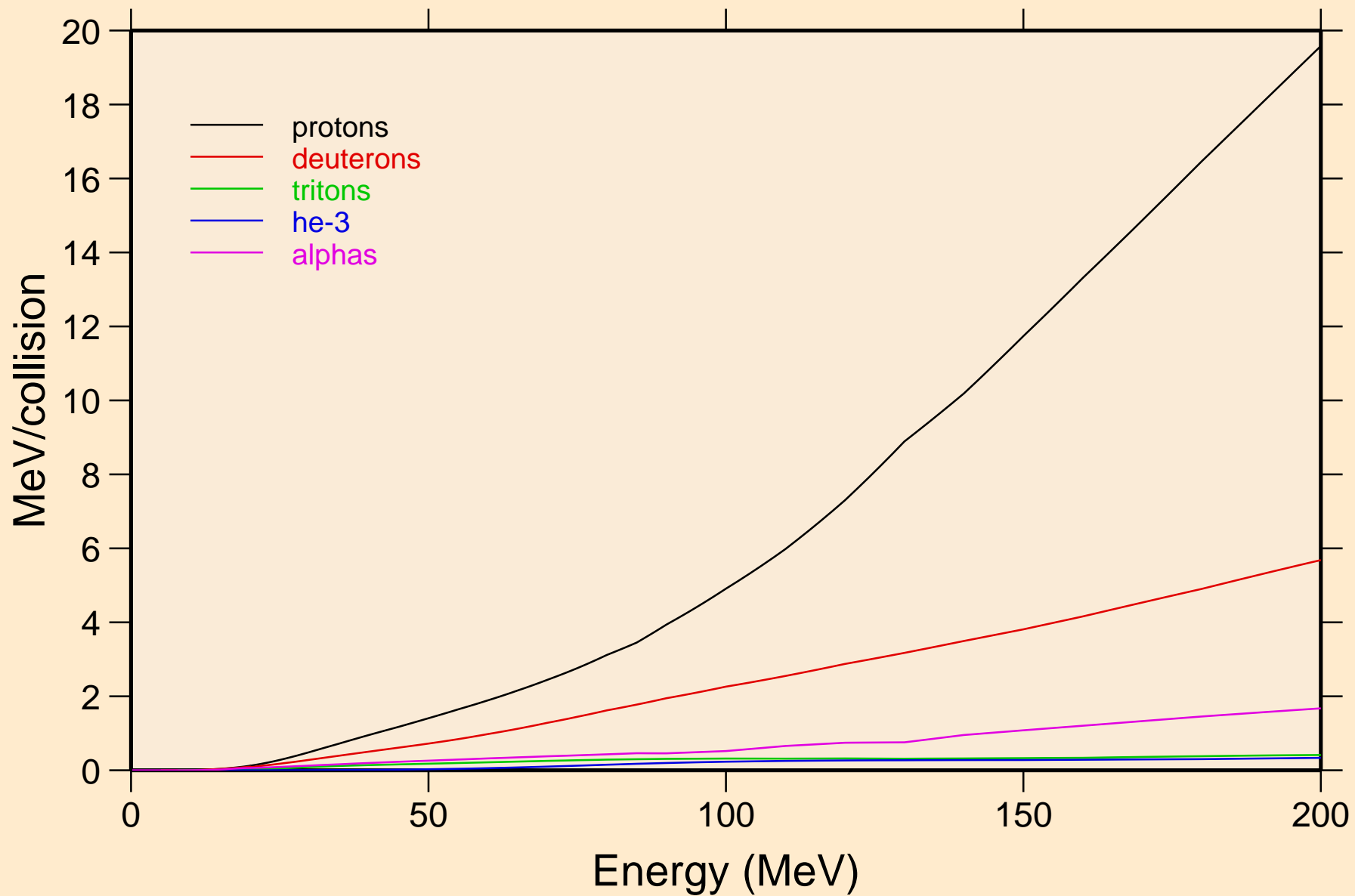


JEFF-3.1 TC-99  
14 MeV photon spectrum

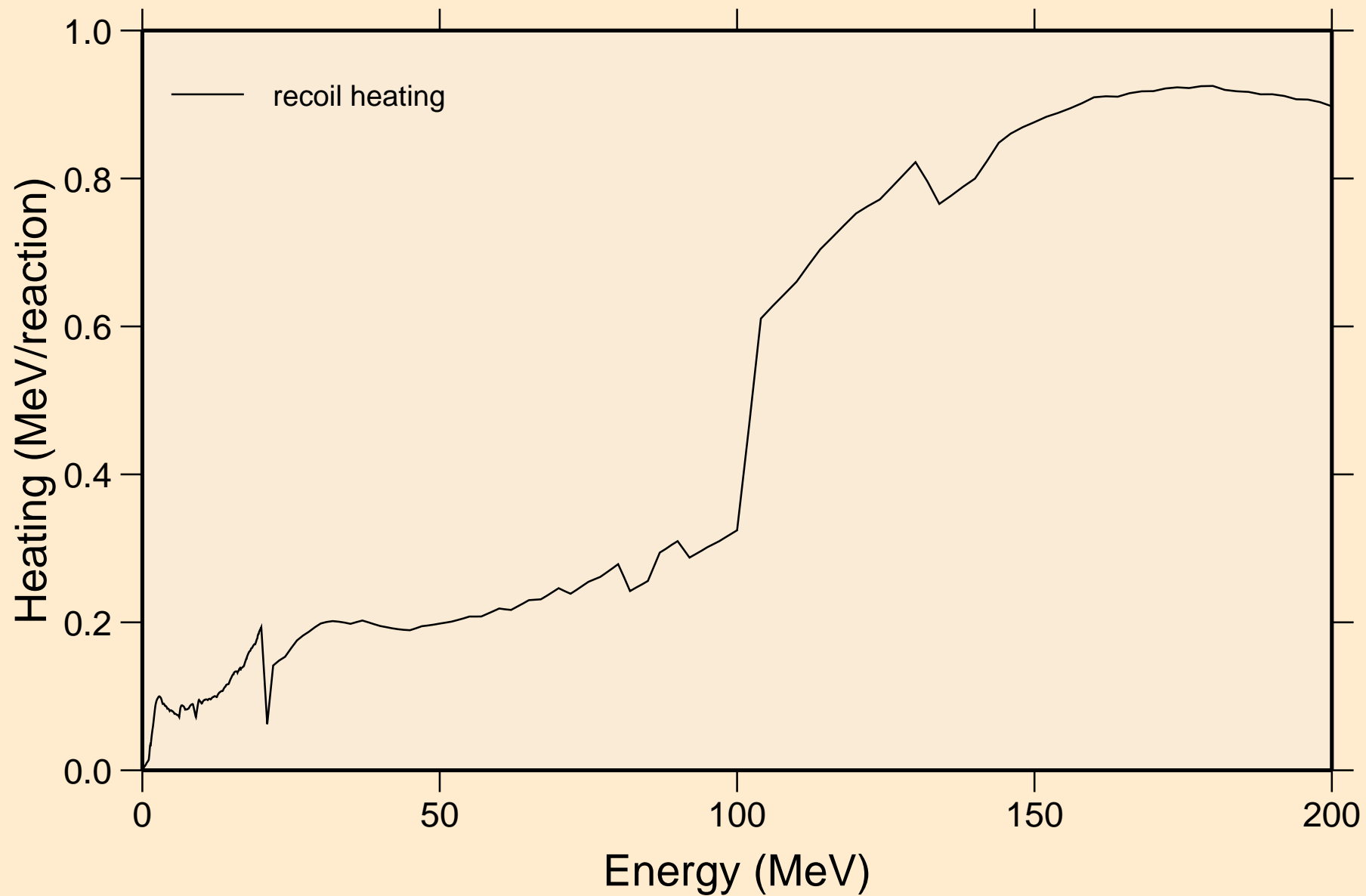


# JEFF-3.1 TC-99

## Particle heating contributions



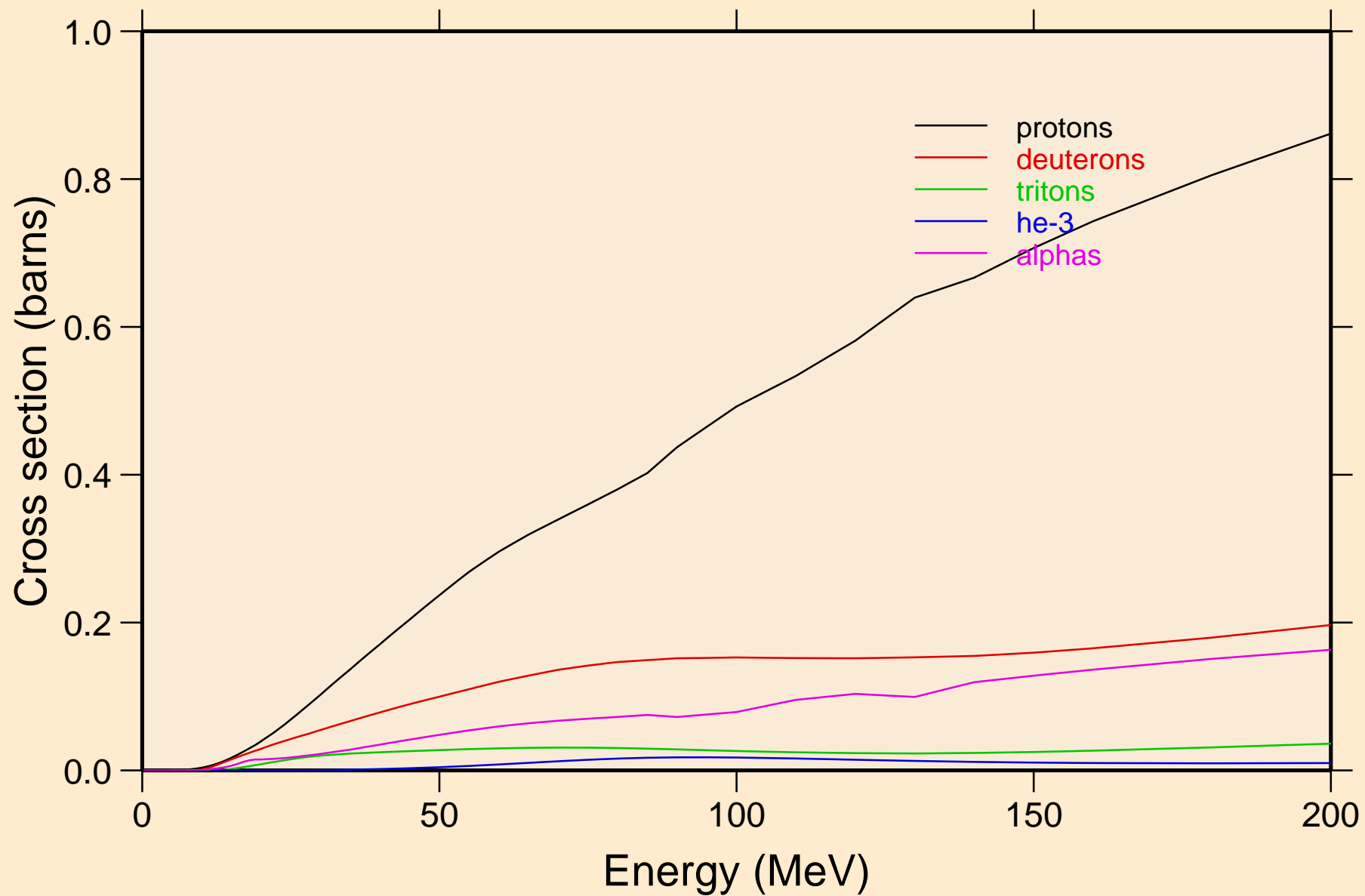
# JEFF-3.1 TC-99 Recoil Heating



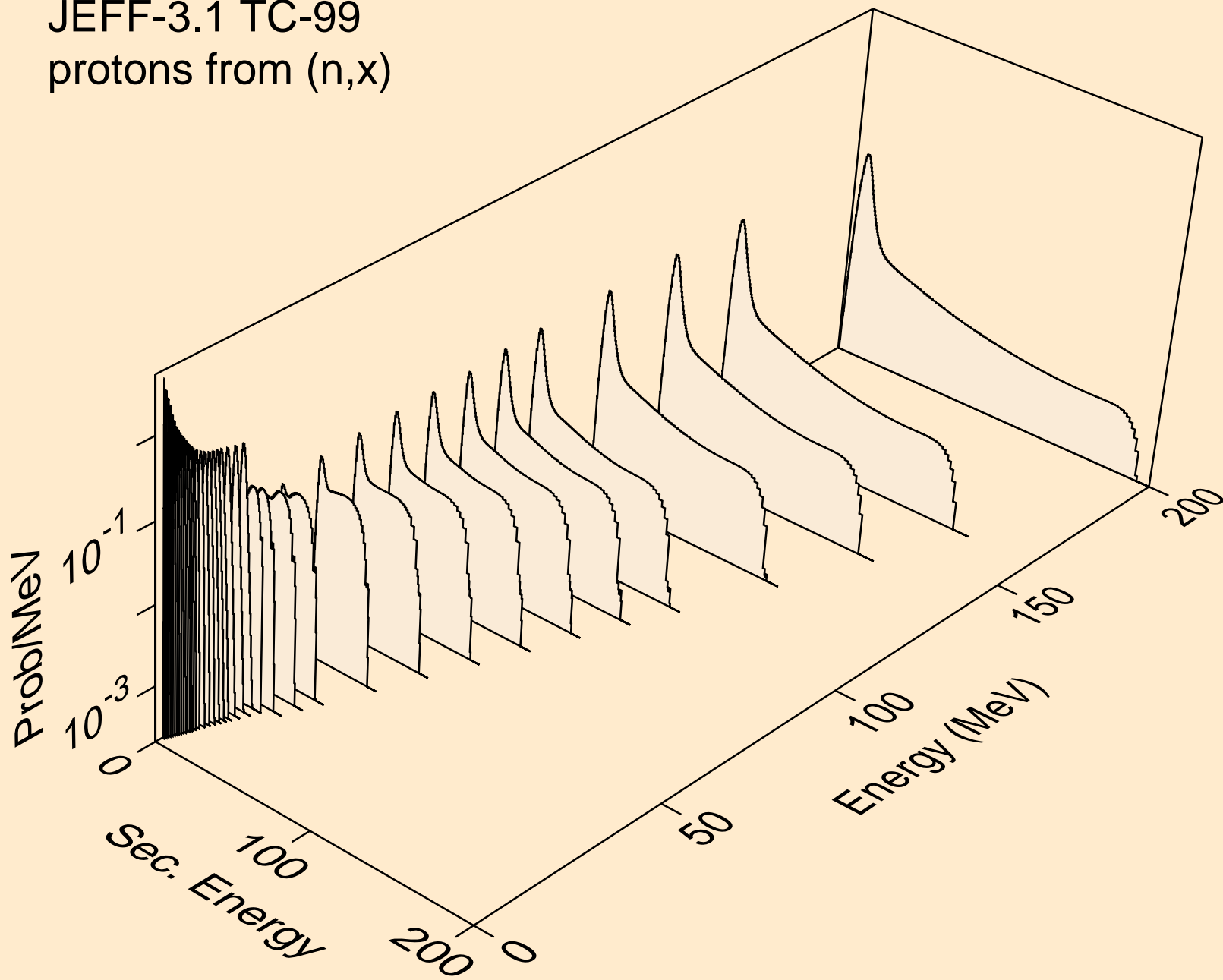


# JEFF-3.1 TC-99

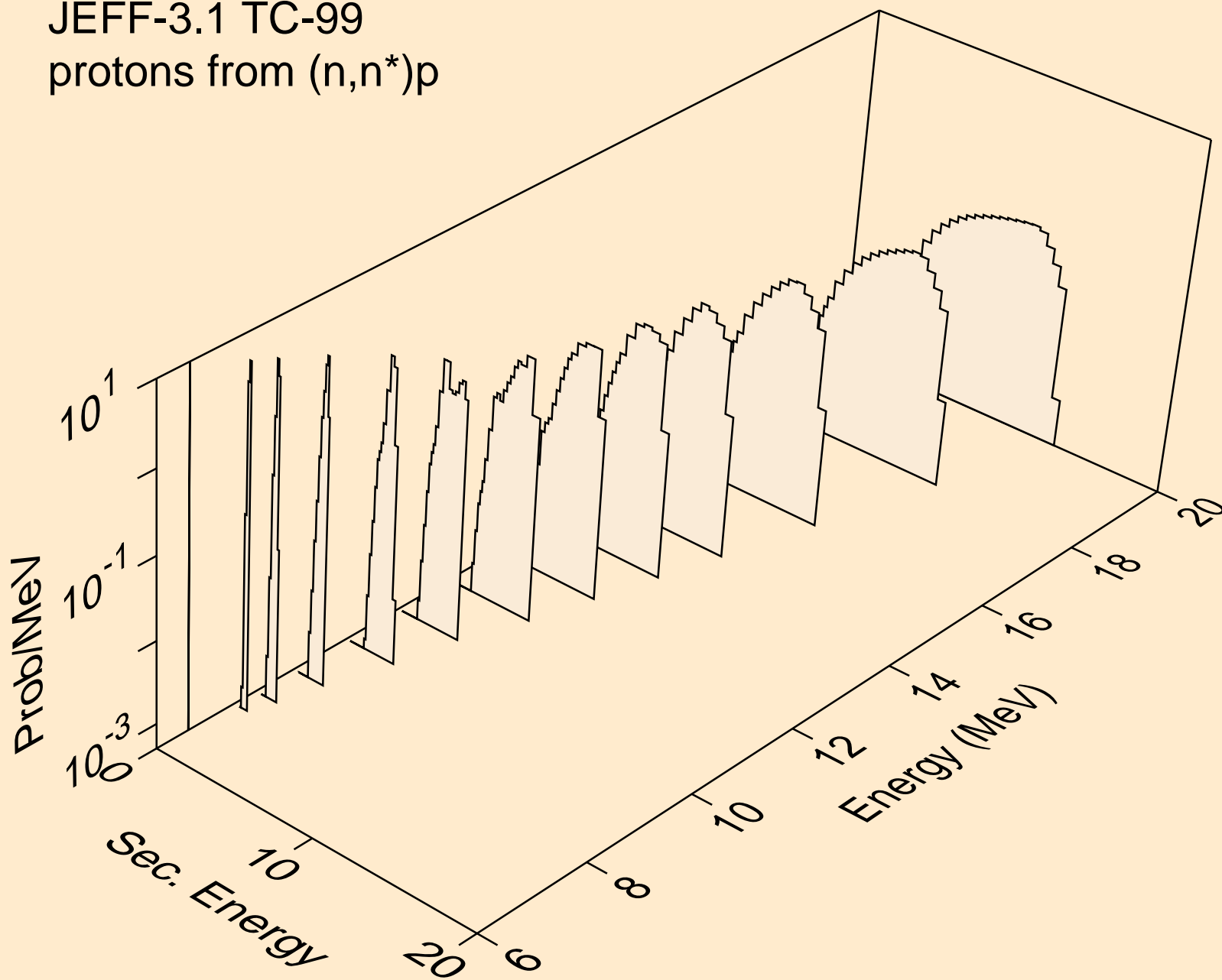
## Particle production cross sections



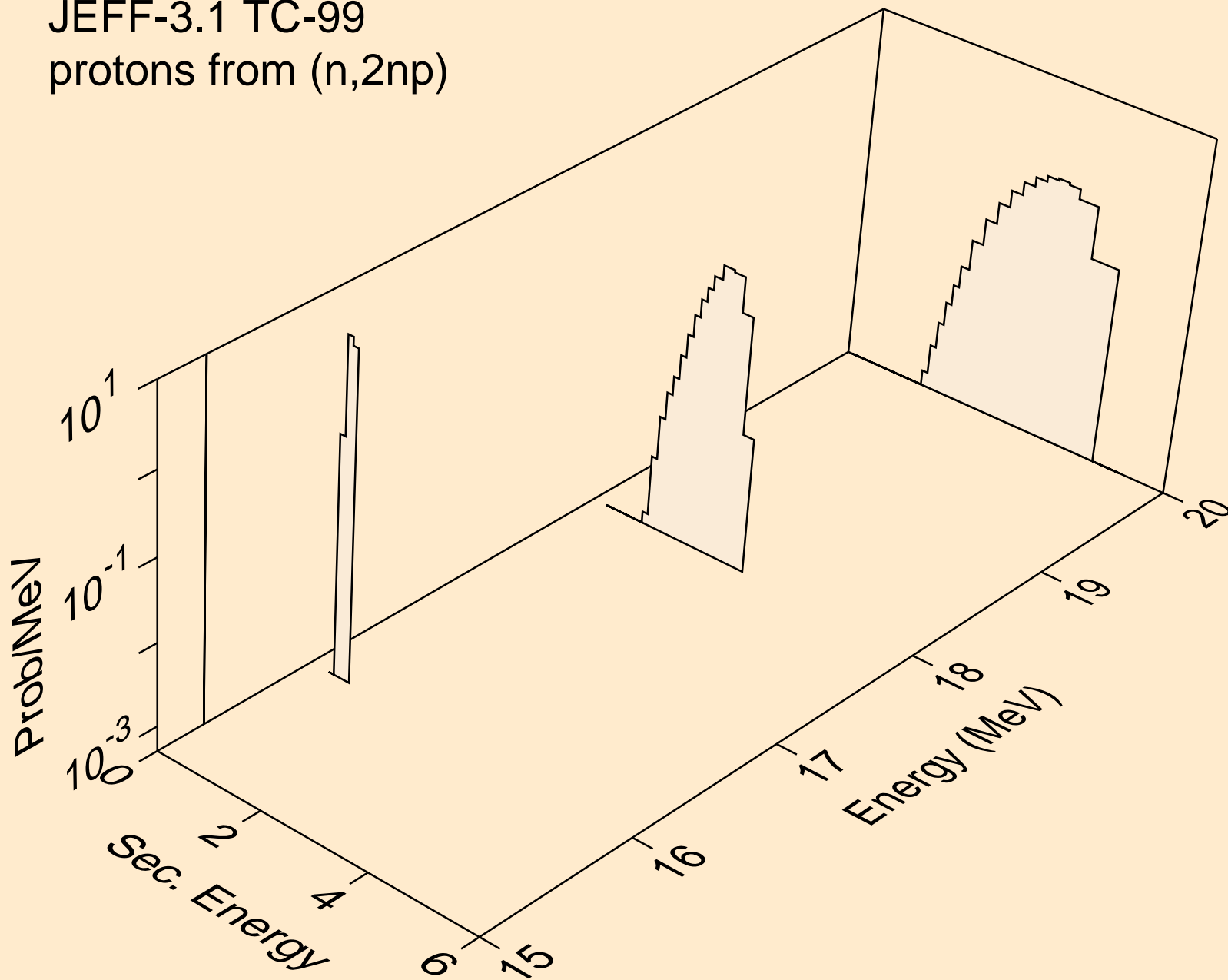
JEFF-3.1 TC-99  
protons from (n,x)



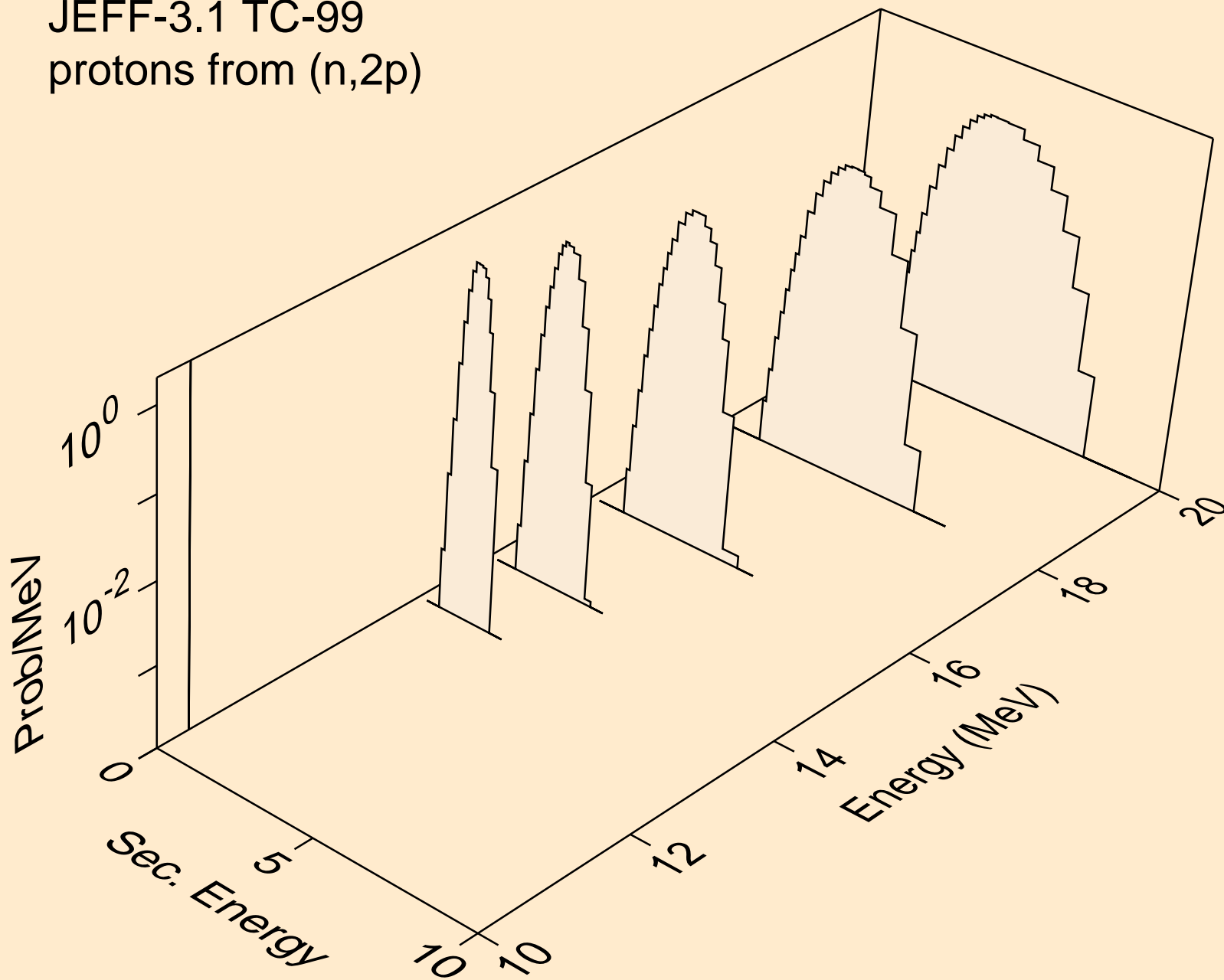
JEFF-3.1 TC-99  
protons from (n,n\*)p



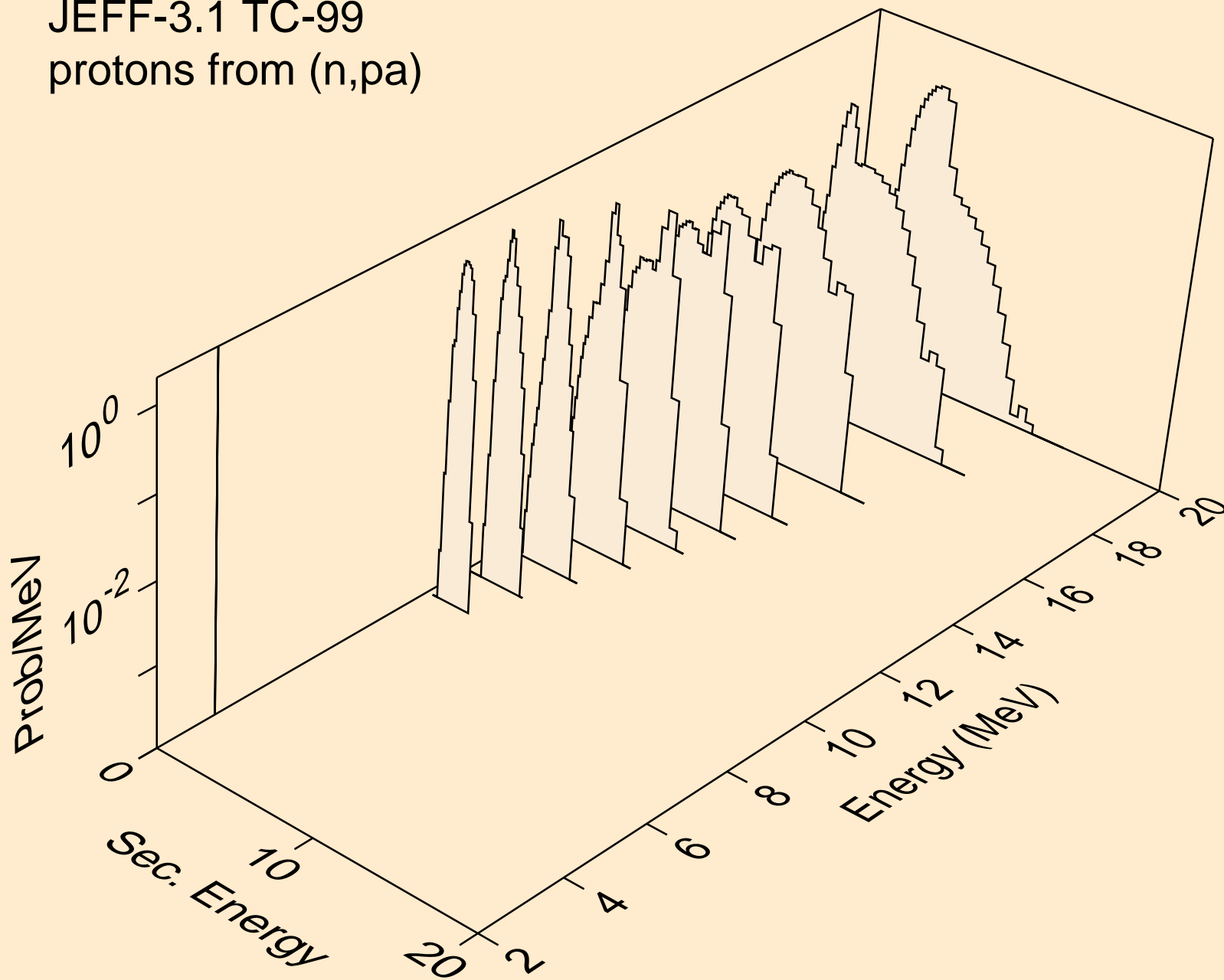
JEFF-3.1 TC-99  
protons from (n,2np)



JEFF-3.1 TC-99  
protons from (n,2p)

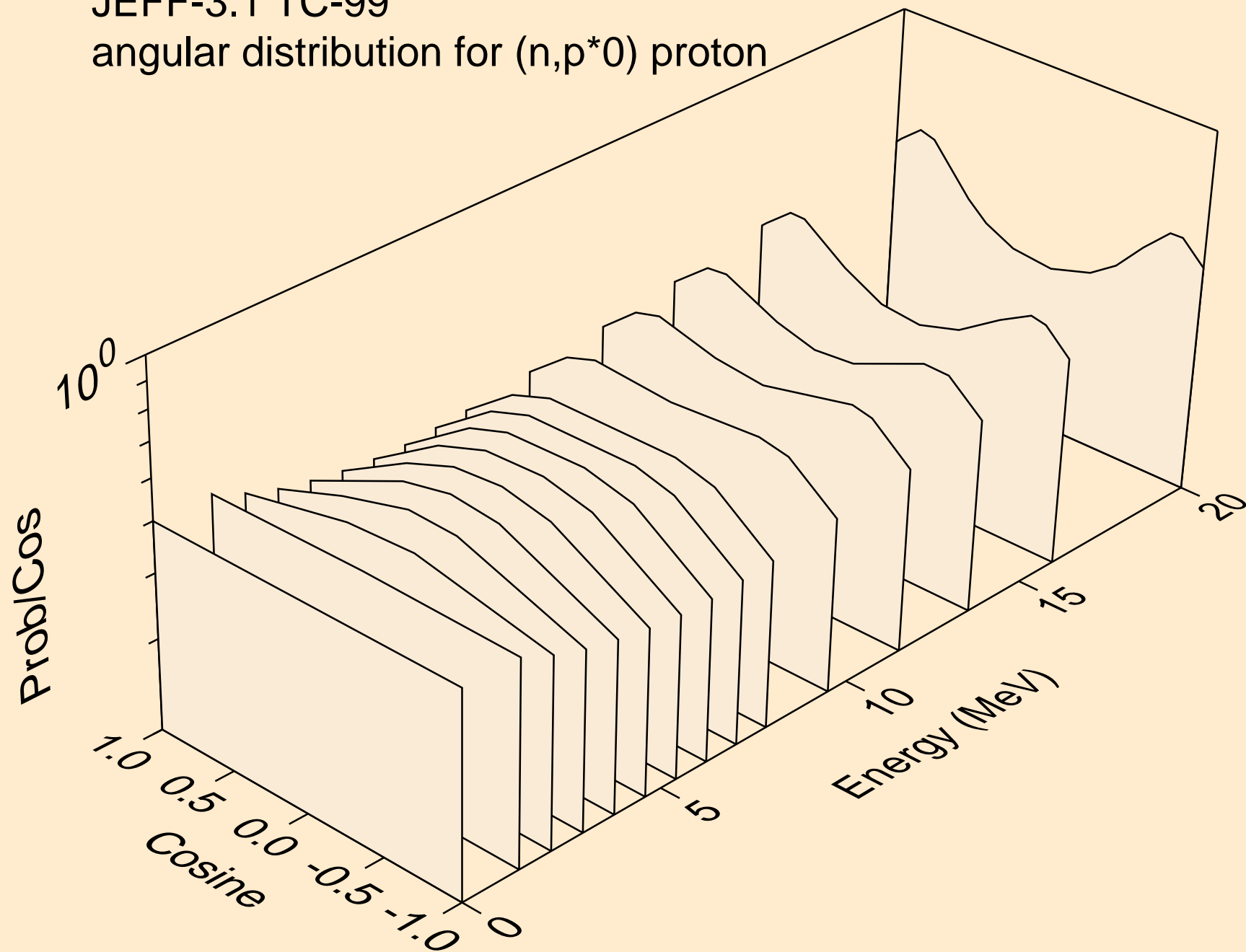


JEFF-3.1 TC-99  
protons from (n,pa)



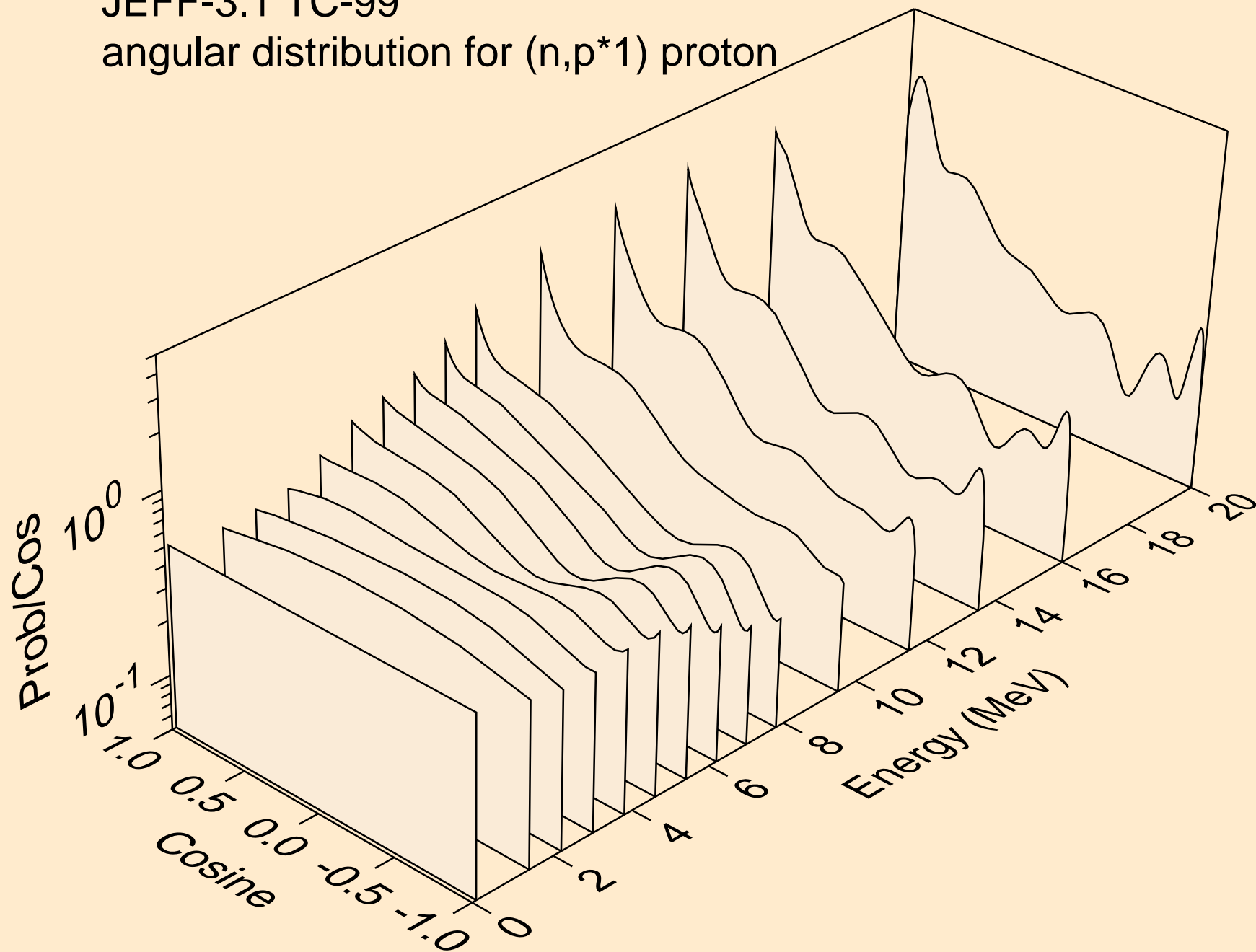
JEFF-3.1 TC-99

angular distribution for (n,p\*0) proton



JEFF-3.1 TC-99

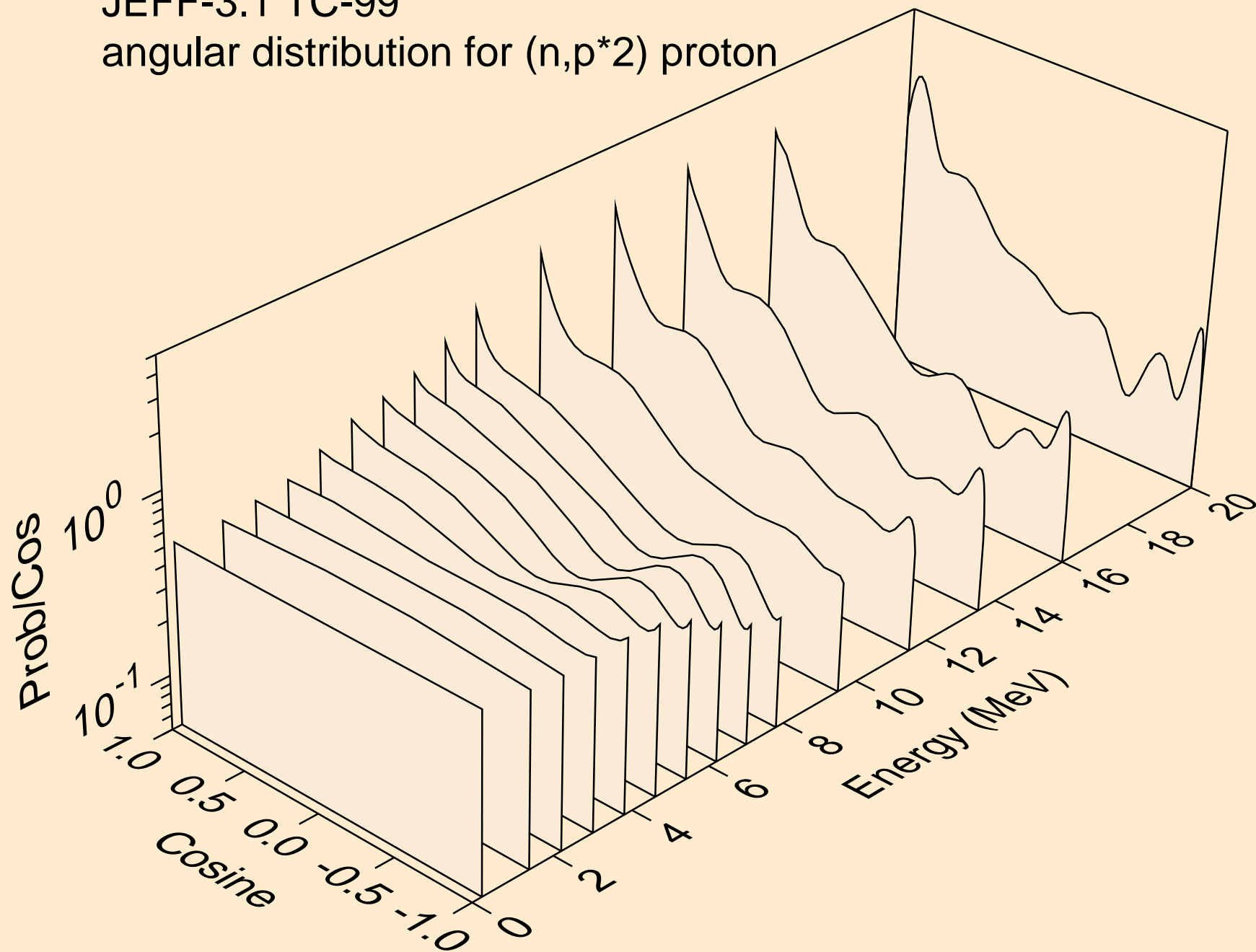
angular distribution for (n,p\*1) proton





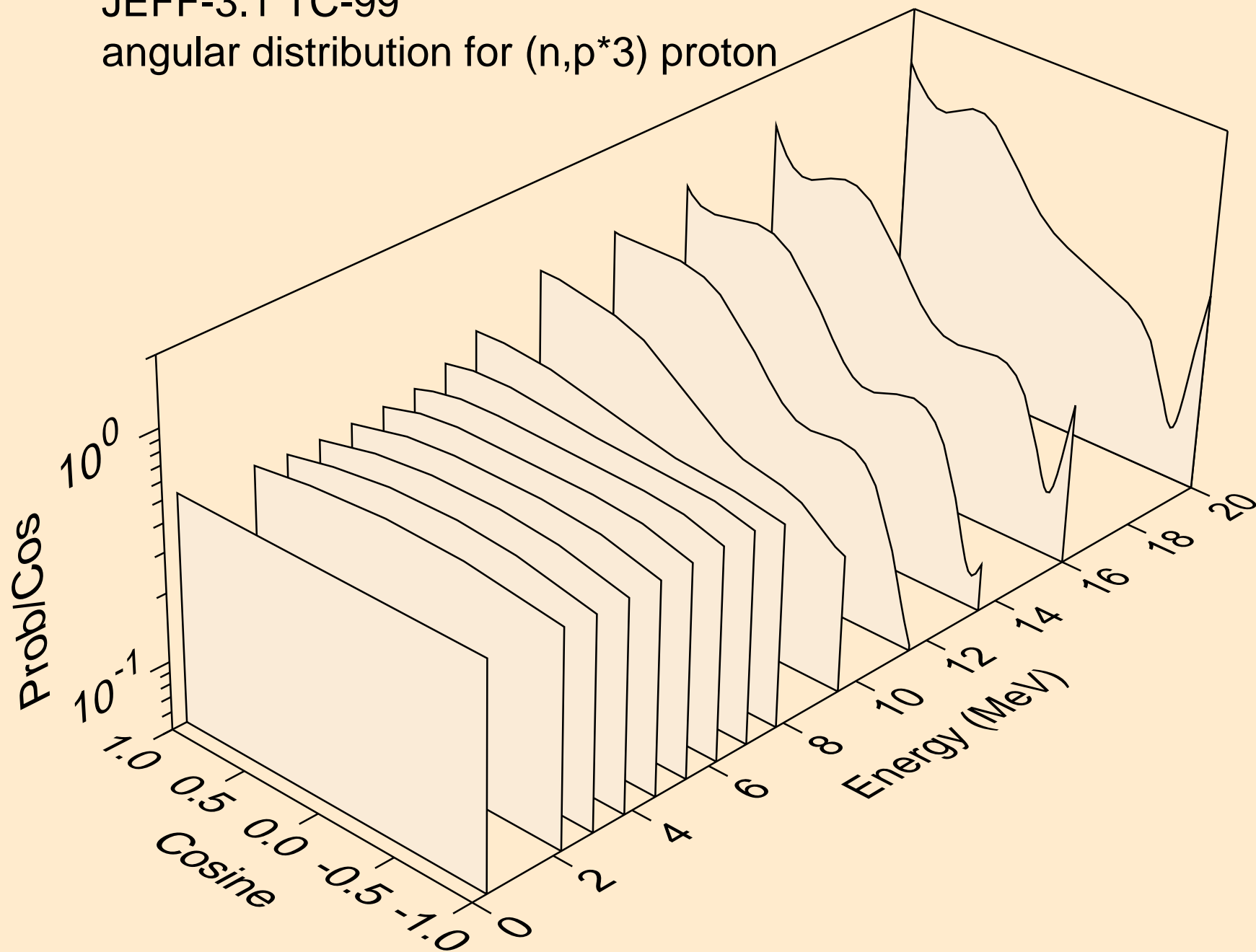
JEFF-3.1 TC-99

angular distribution for (n,p\*2) proton

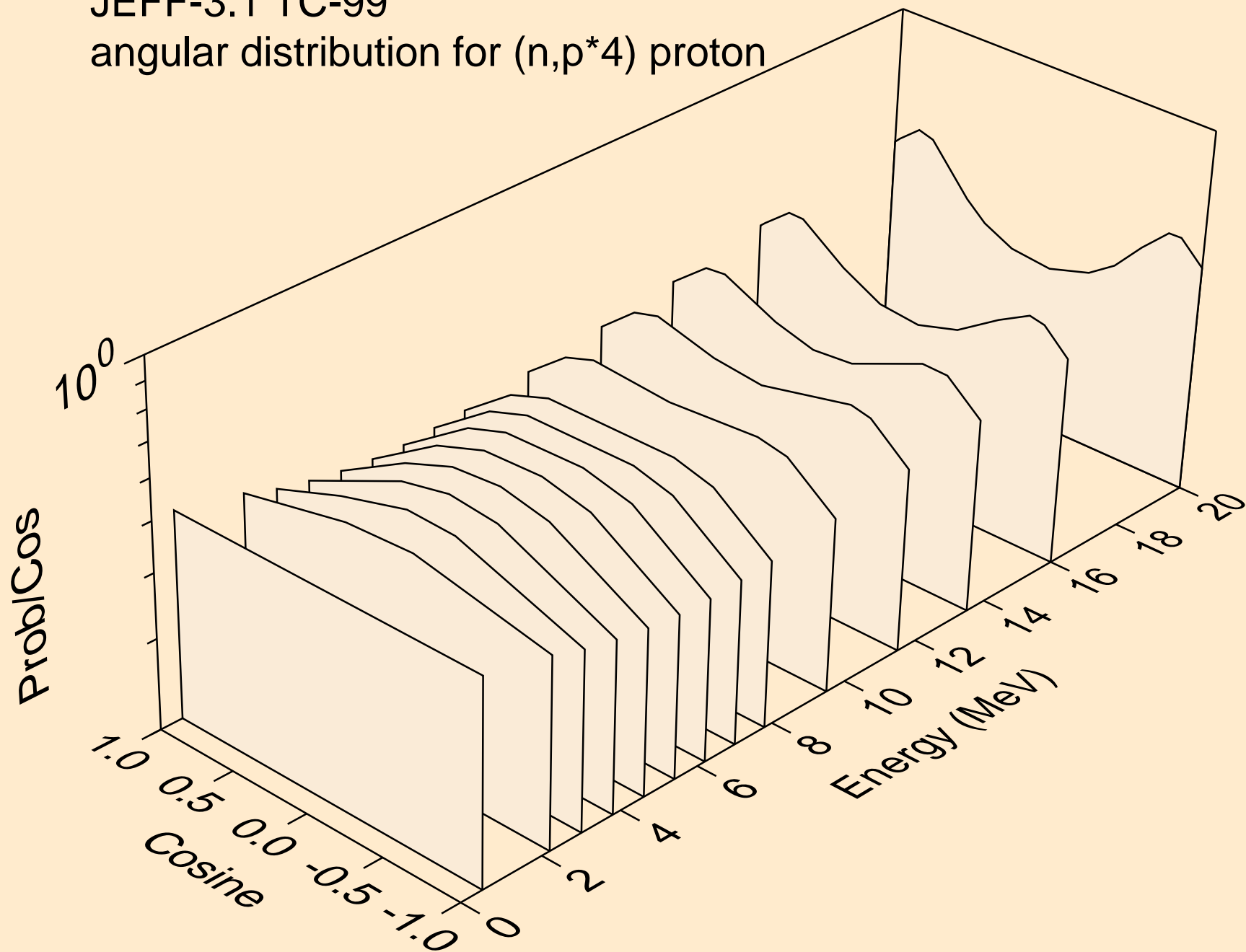


JEFF-3.1 TC-99

angular distribution for (n,p\*3) proton

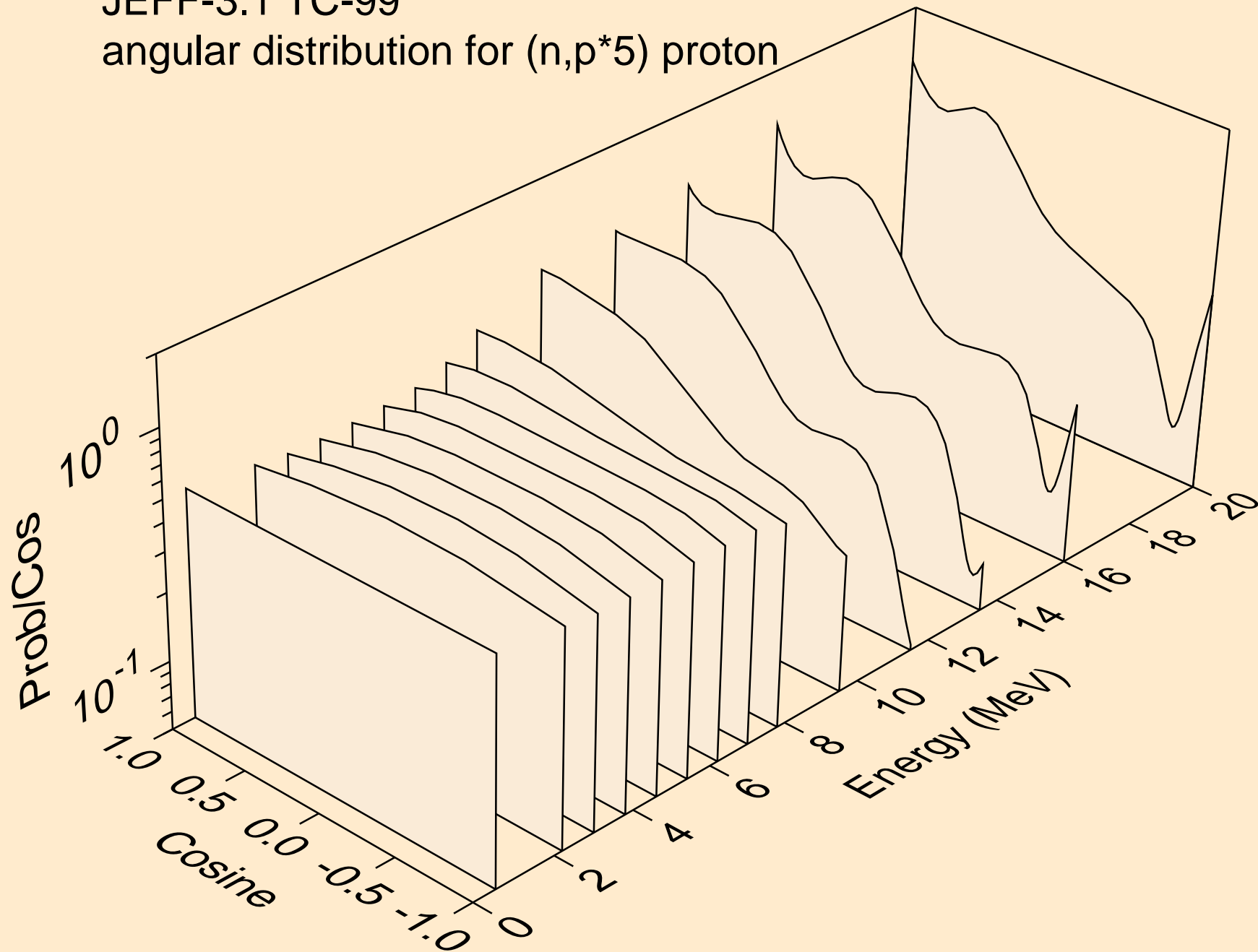


JEFF-3.1 TC-99  
angular distribution for (n,p\*4) proton



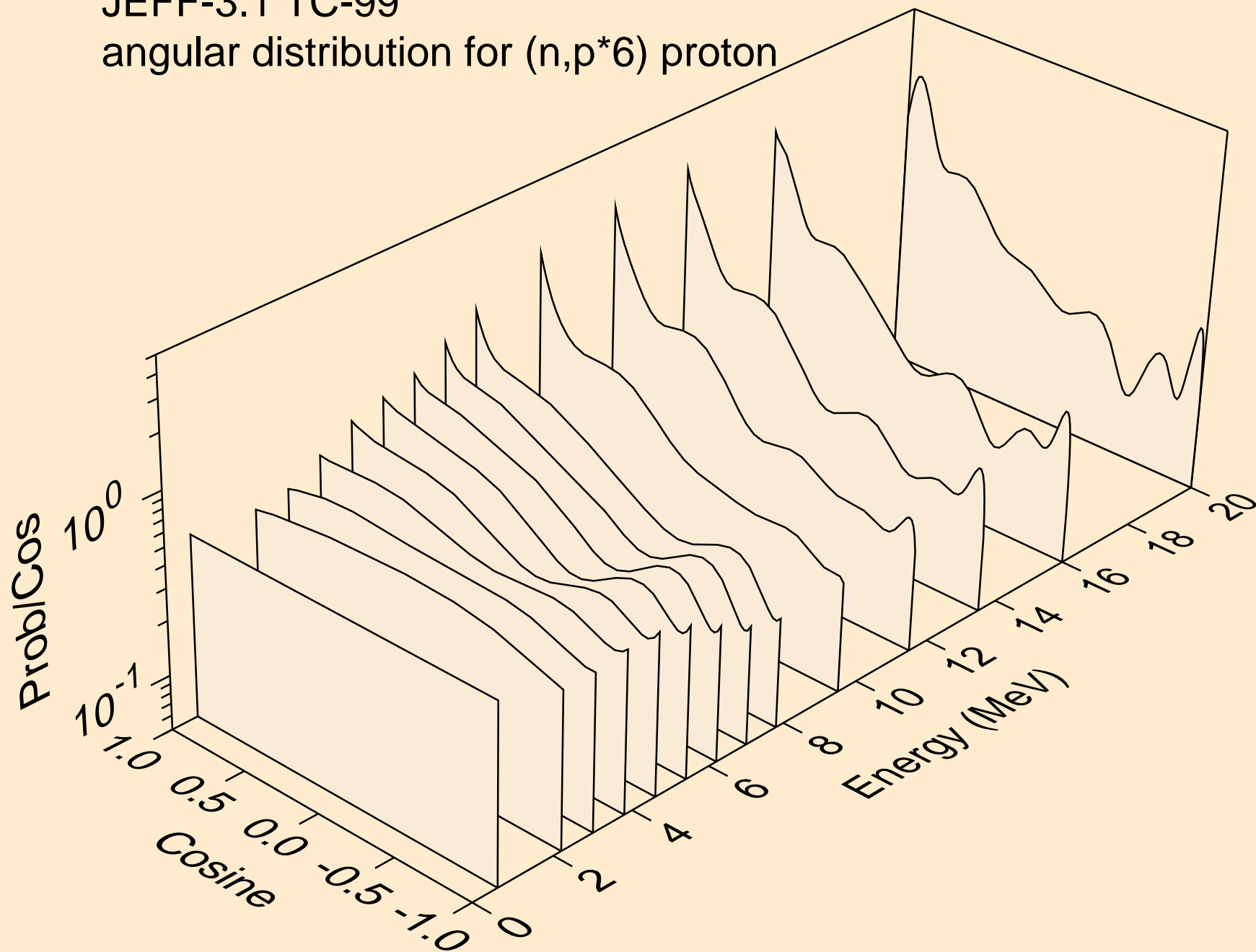
JEFF-3.1 TC-99

angular distribution for (n,p\*5) proton



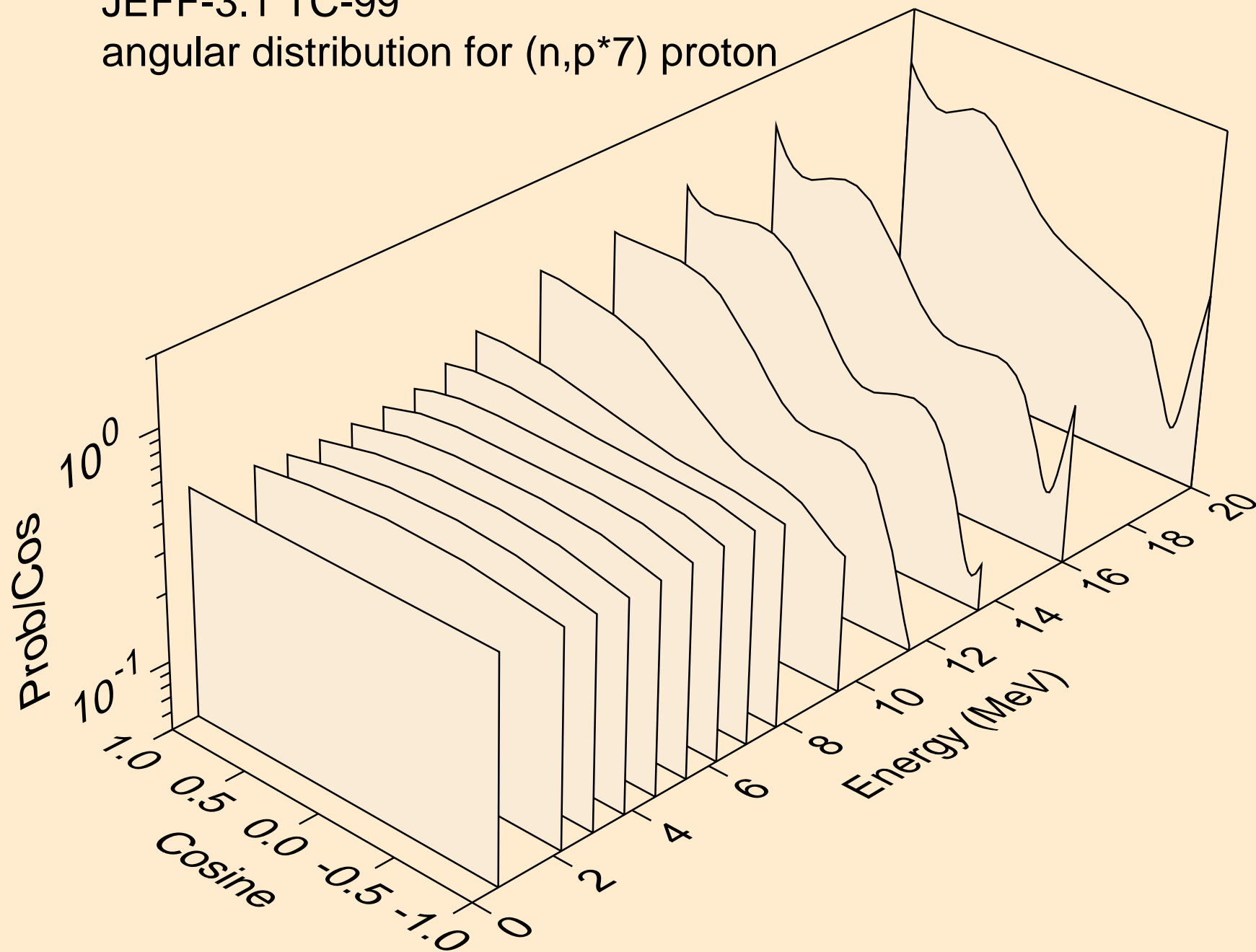
JEFF-3.1 TC-99

angular distribution for (n,p\*6) proton



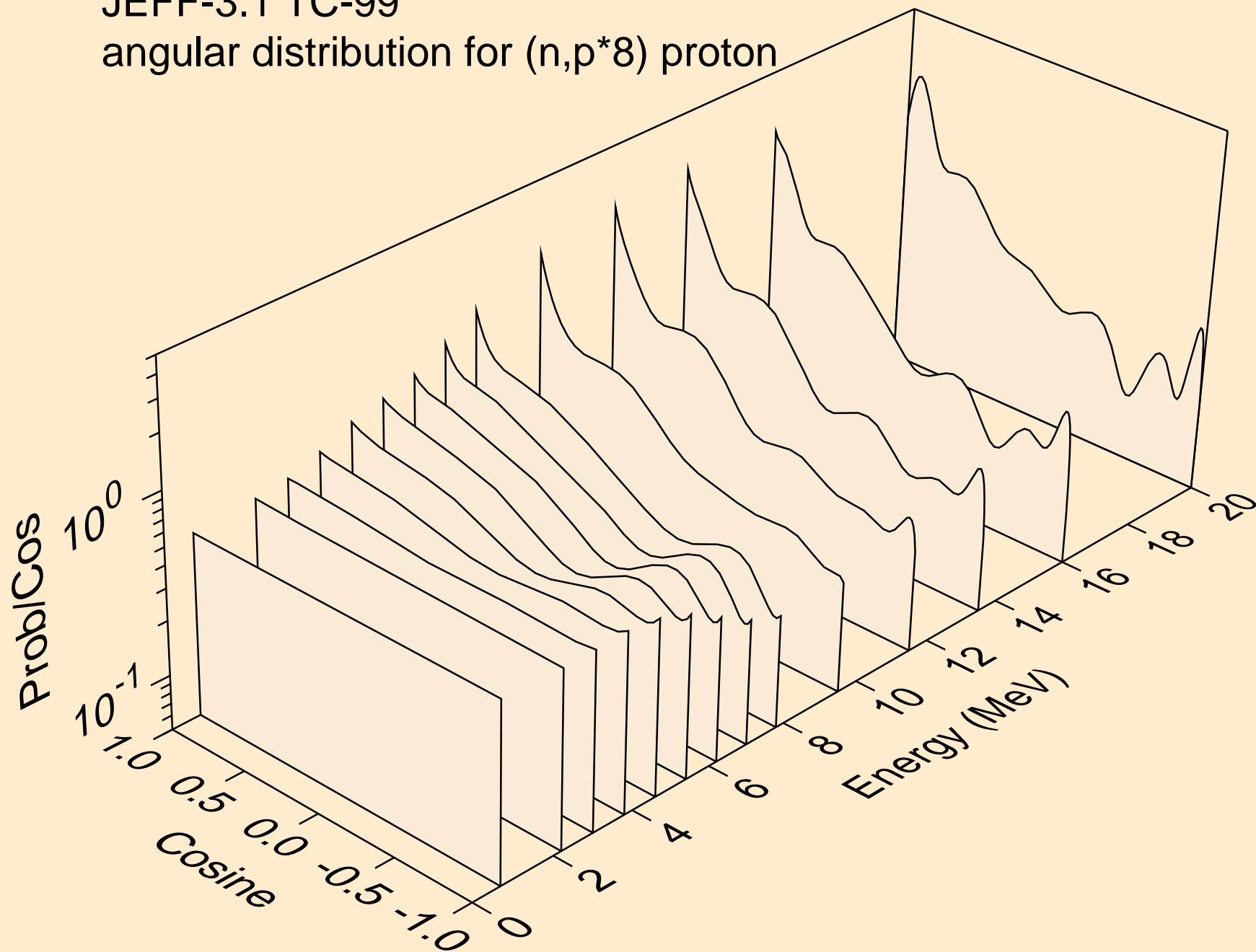
JEFF-3.1 TC-99

angular distribution for (n,p\*7) proton



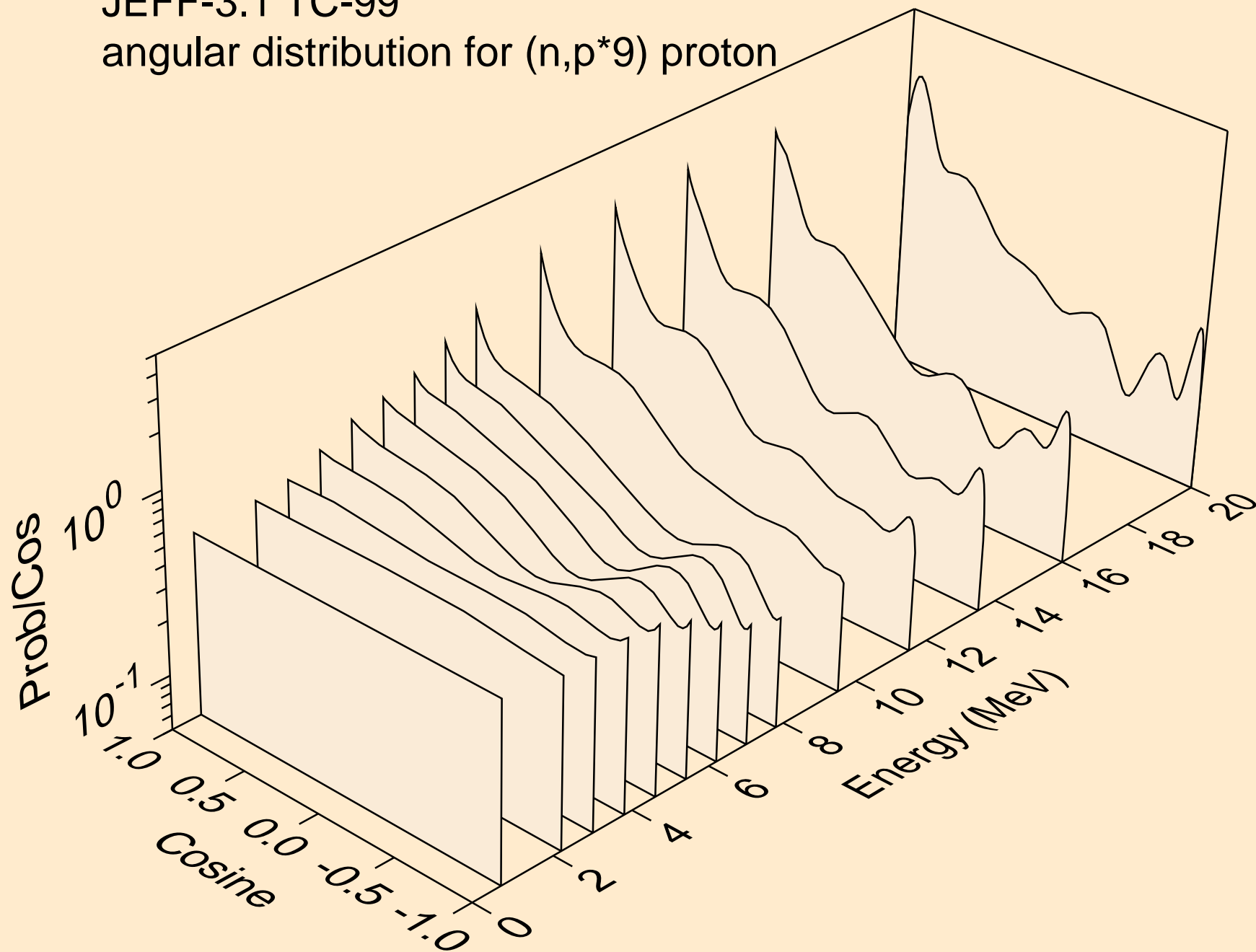
JEFF-3.1 TC-99

angular distribution for (n,p\*8) proton



JEFF-3.1 TC-99

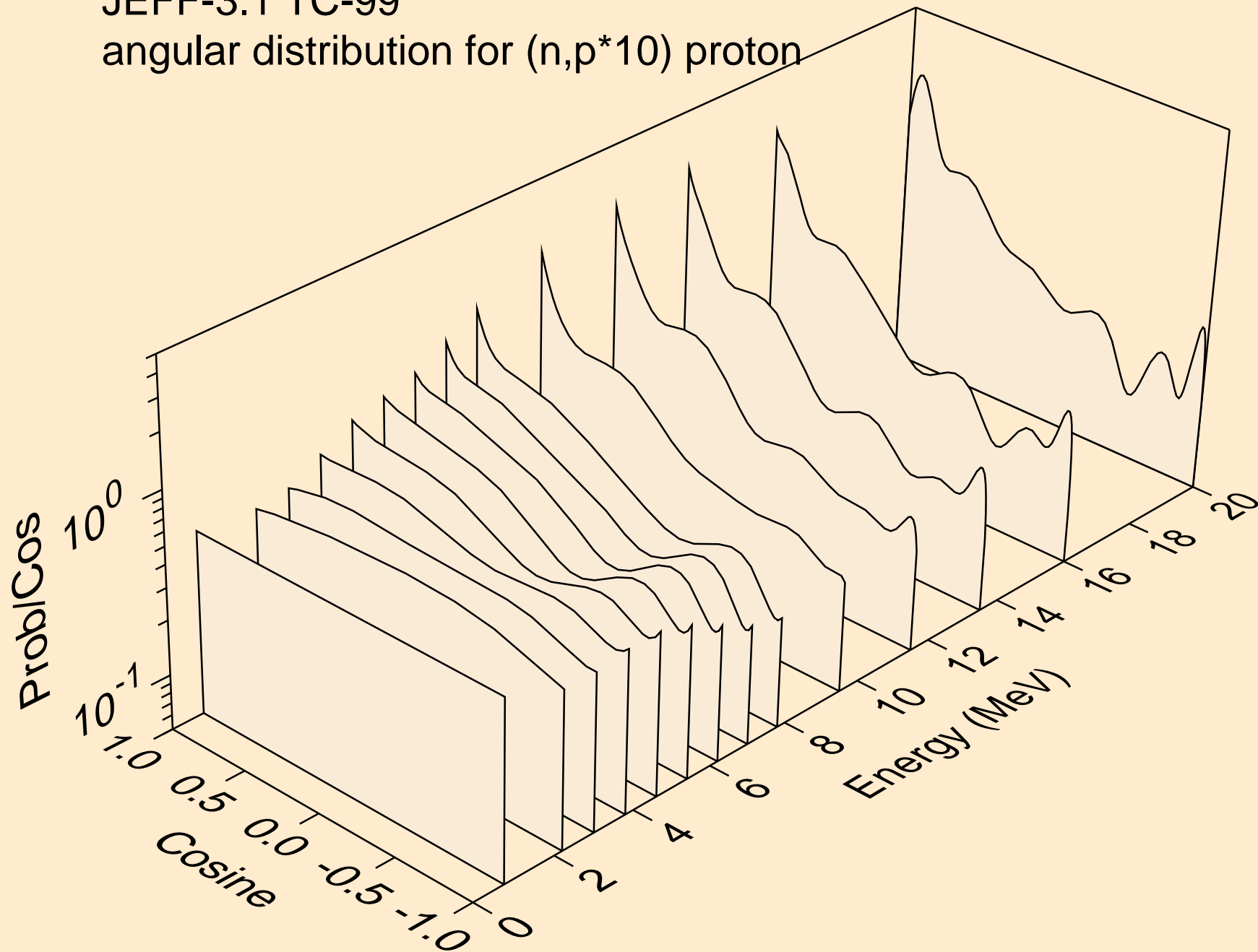
angular distribution for (n,p\*9) proton



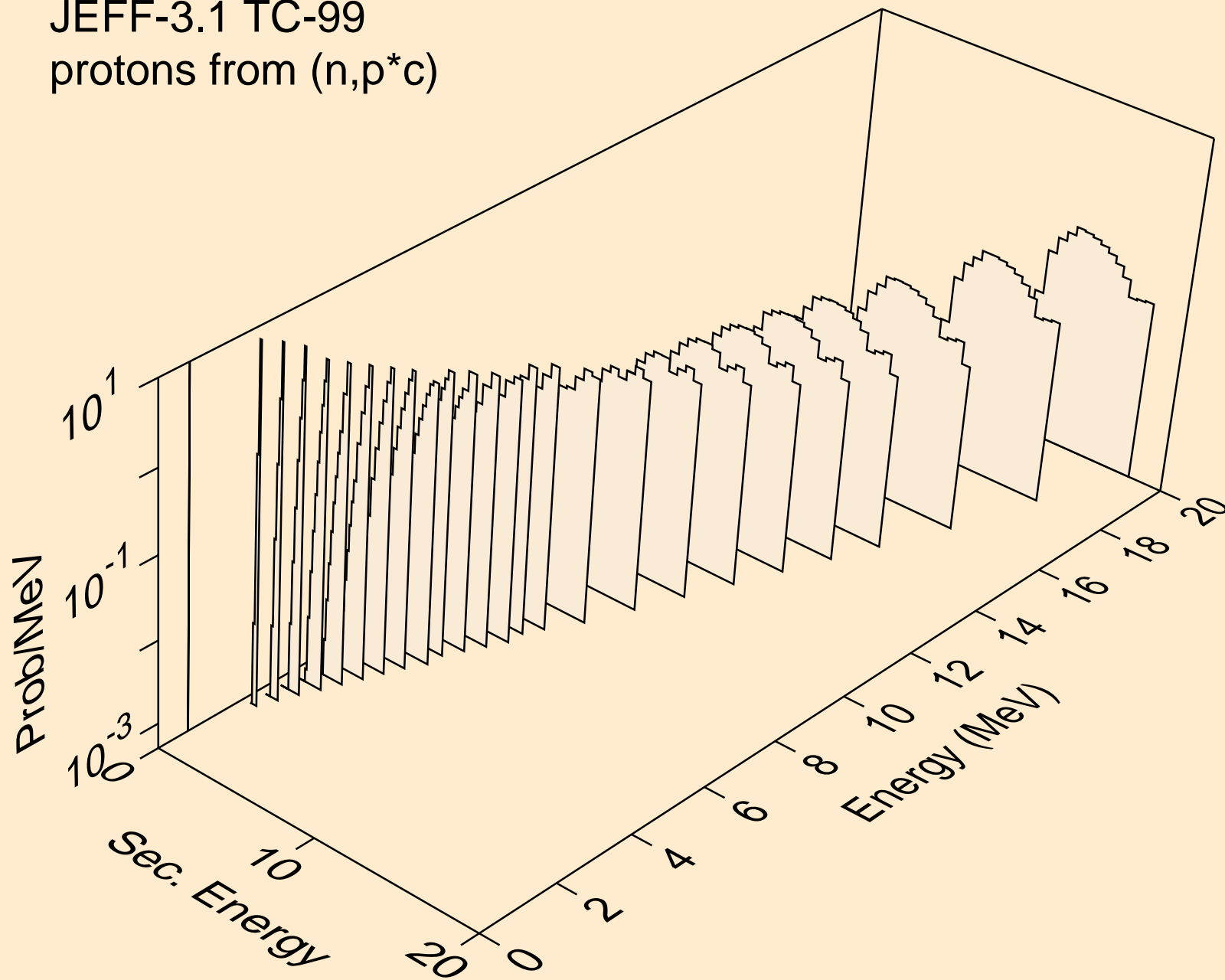


JEFF-3.1 TC-99

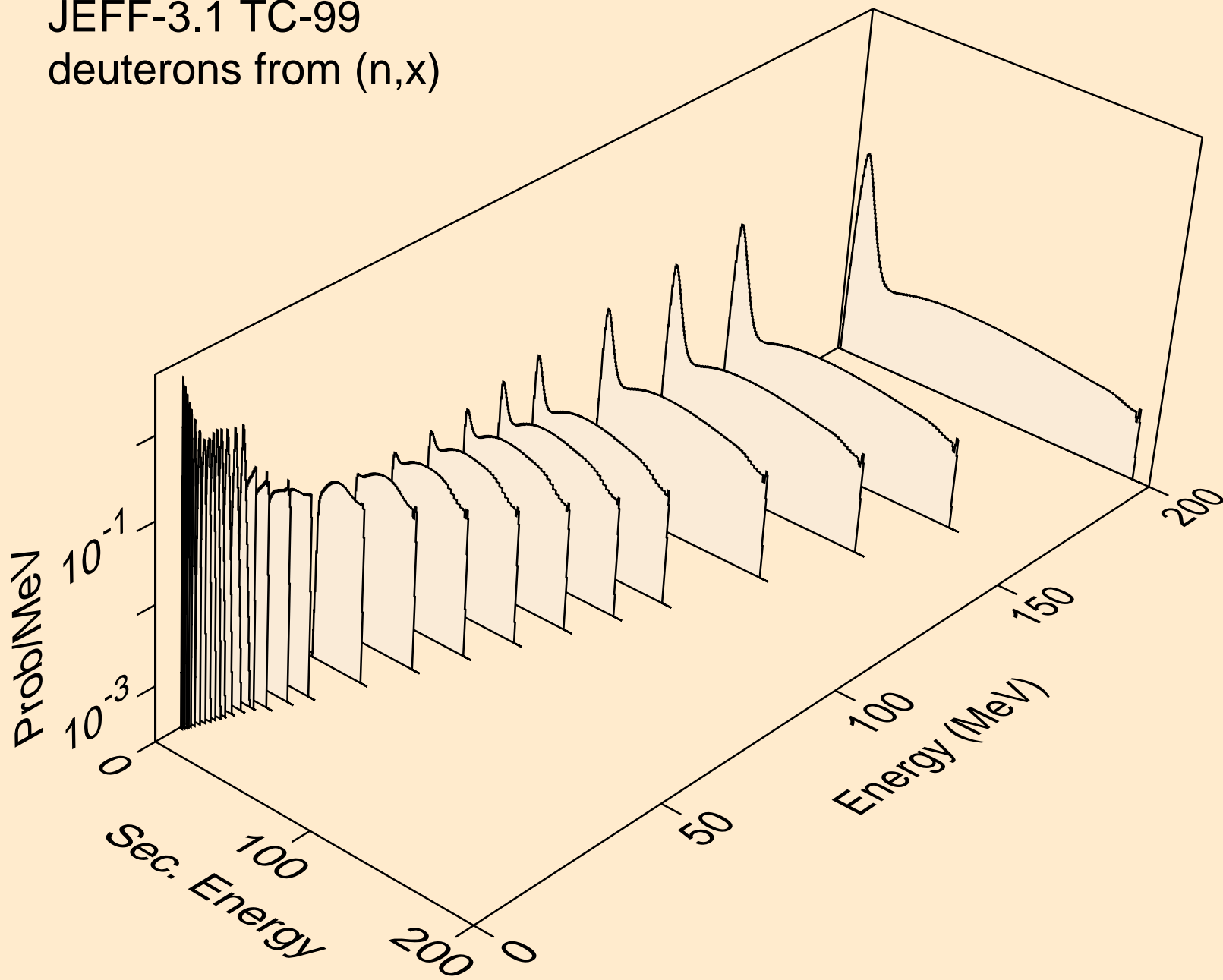
angular distribution for (n,p\*10) proton



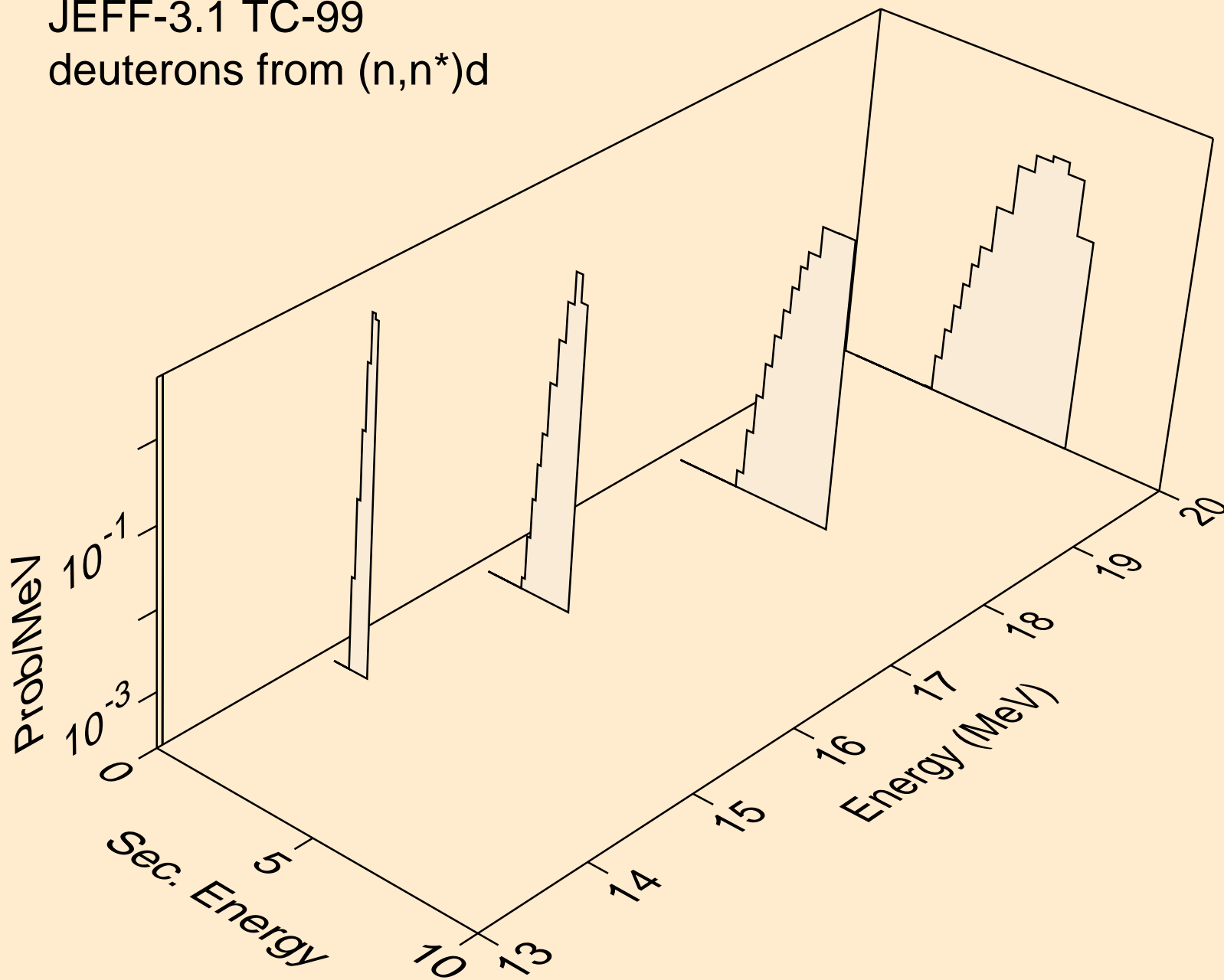
JEFF-3.1 TC-99  
protons from (n,p\*c)



JEFF-3.1 TC-99  
deuterons from (n,x)

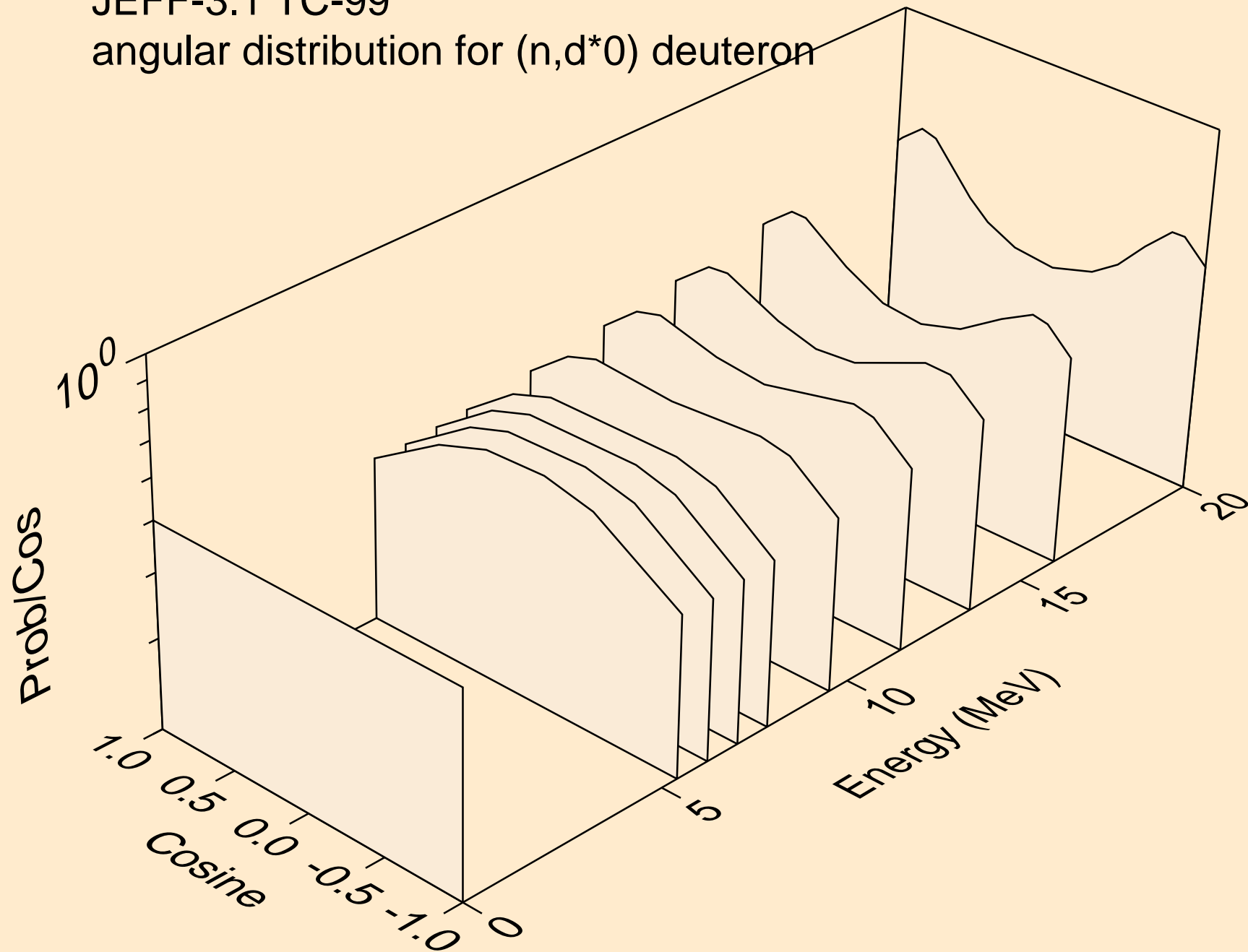


JEFF-3.1 TC-99  
deuterons from (n,n\*)d



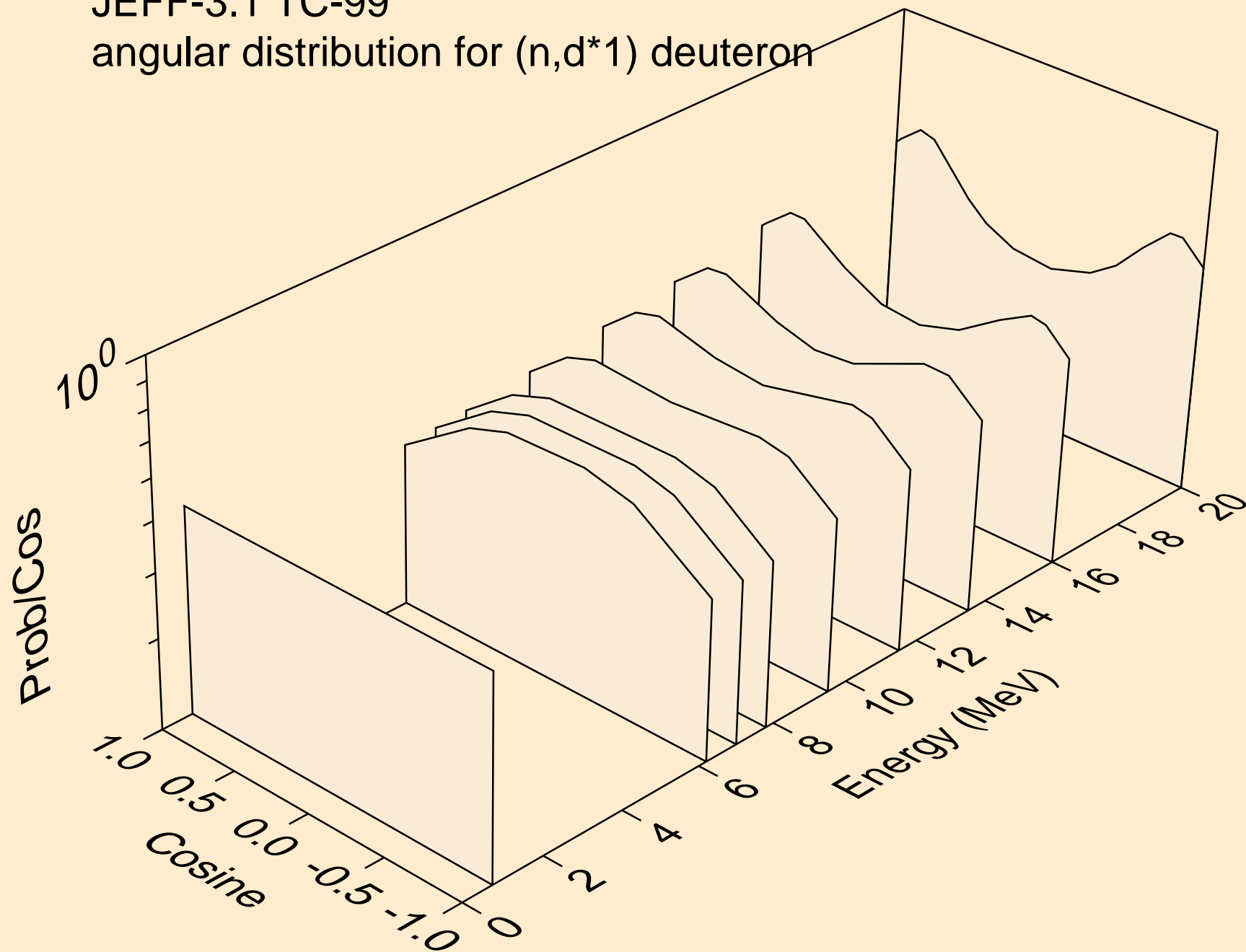
JEFF-3.1 TC-99

angular distribution for (n,d\*0) deuteron



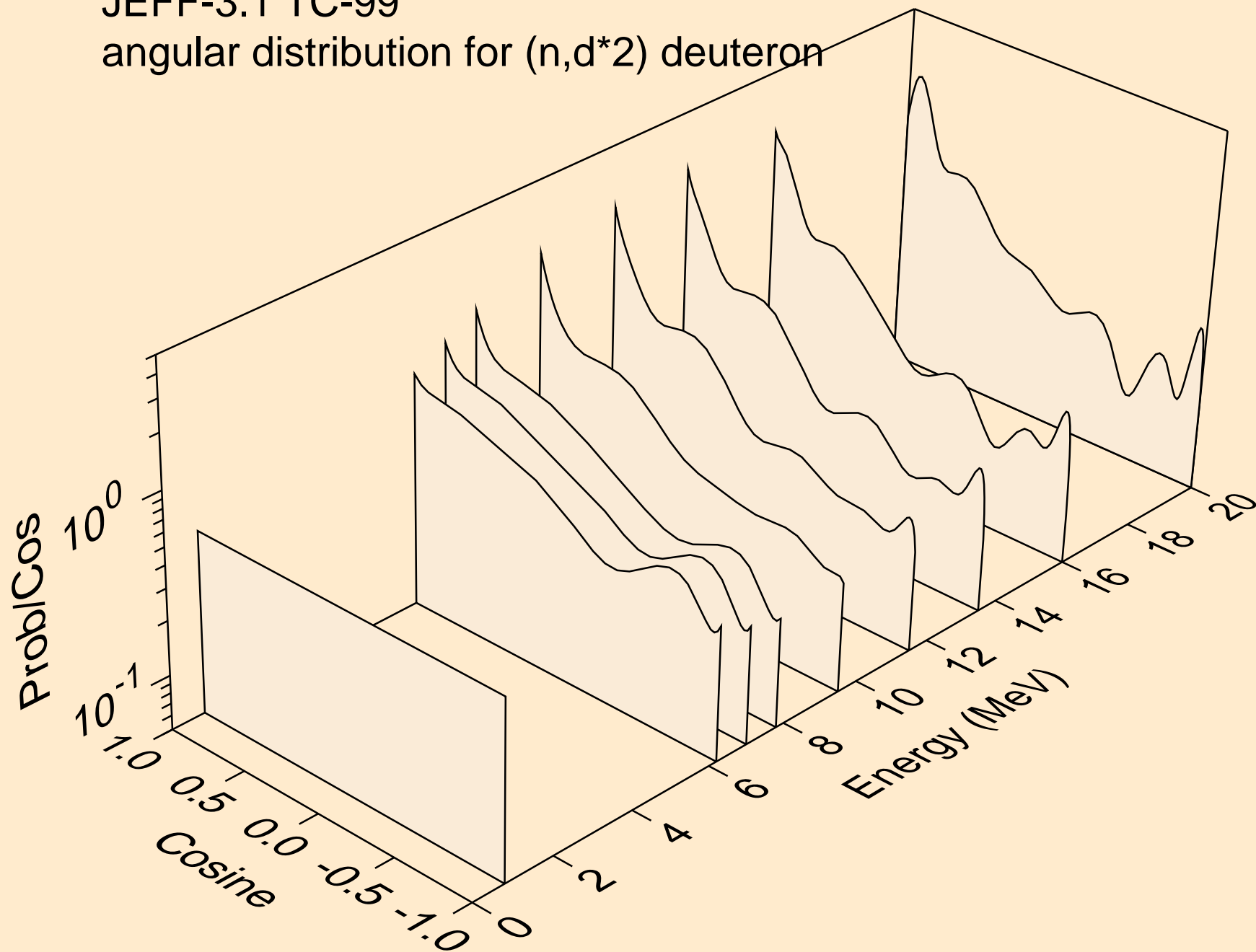
JEFF-3.1 TC-99

angular distribution for (n,d\*1) deuteron



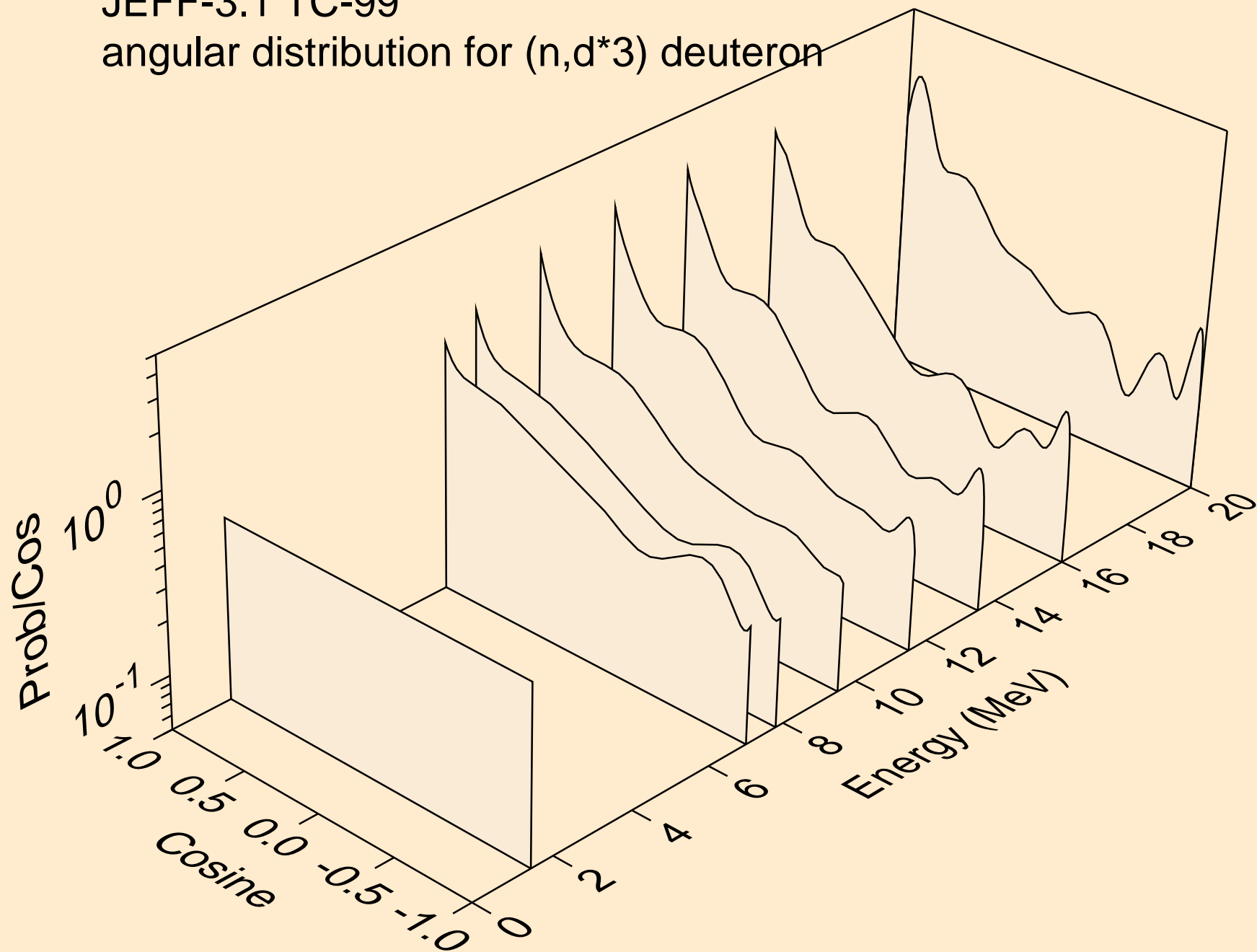
JEFF-3.1 TC-99

angular distribution for (n,d\*2) deuteron



JEFF-3.1 TC-99

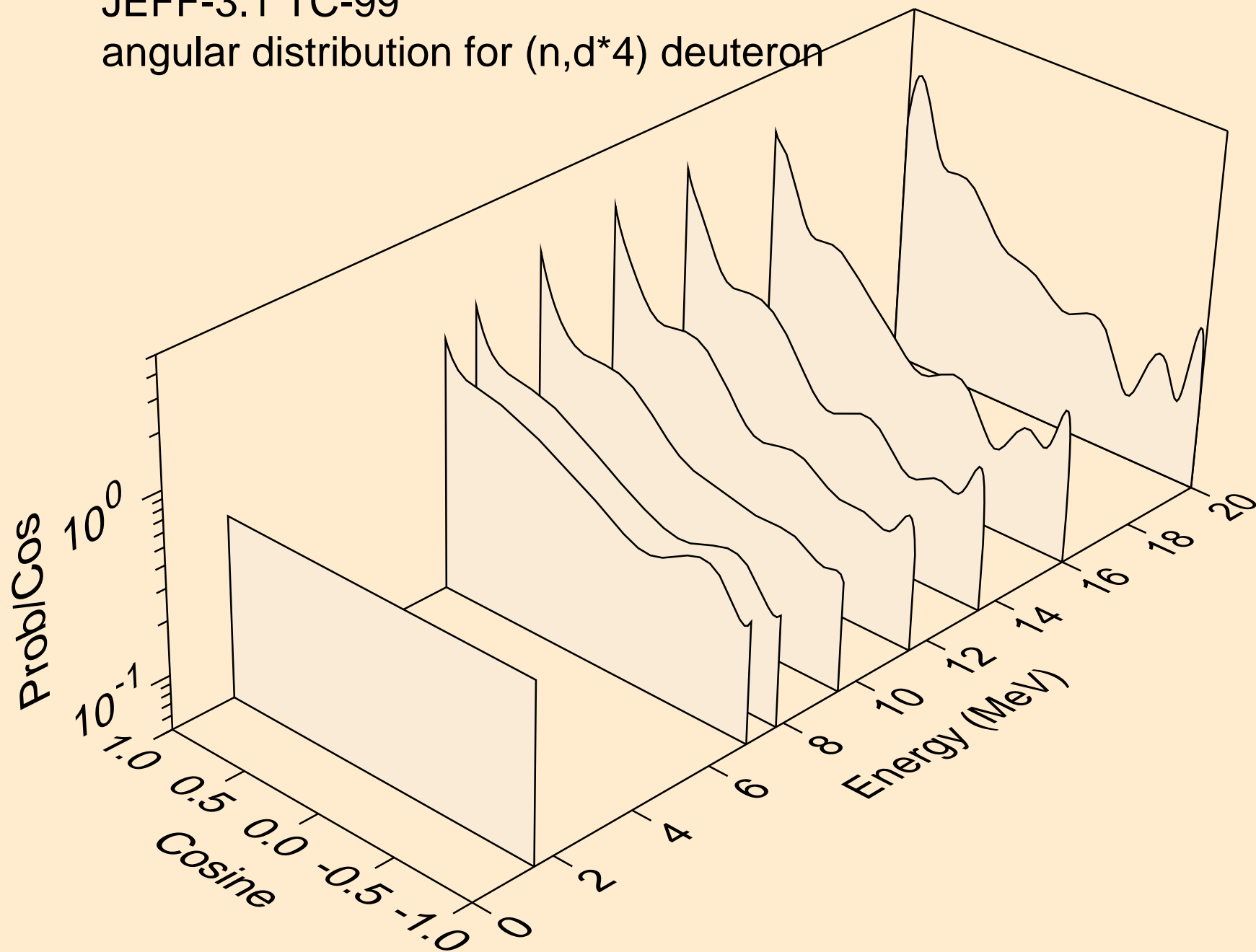
angular distribution for (n,d\*3) deuteron





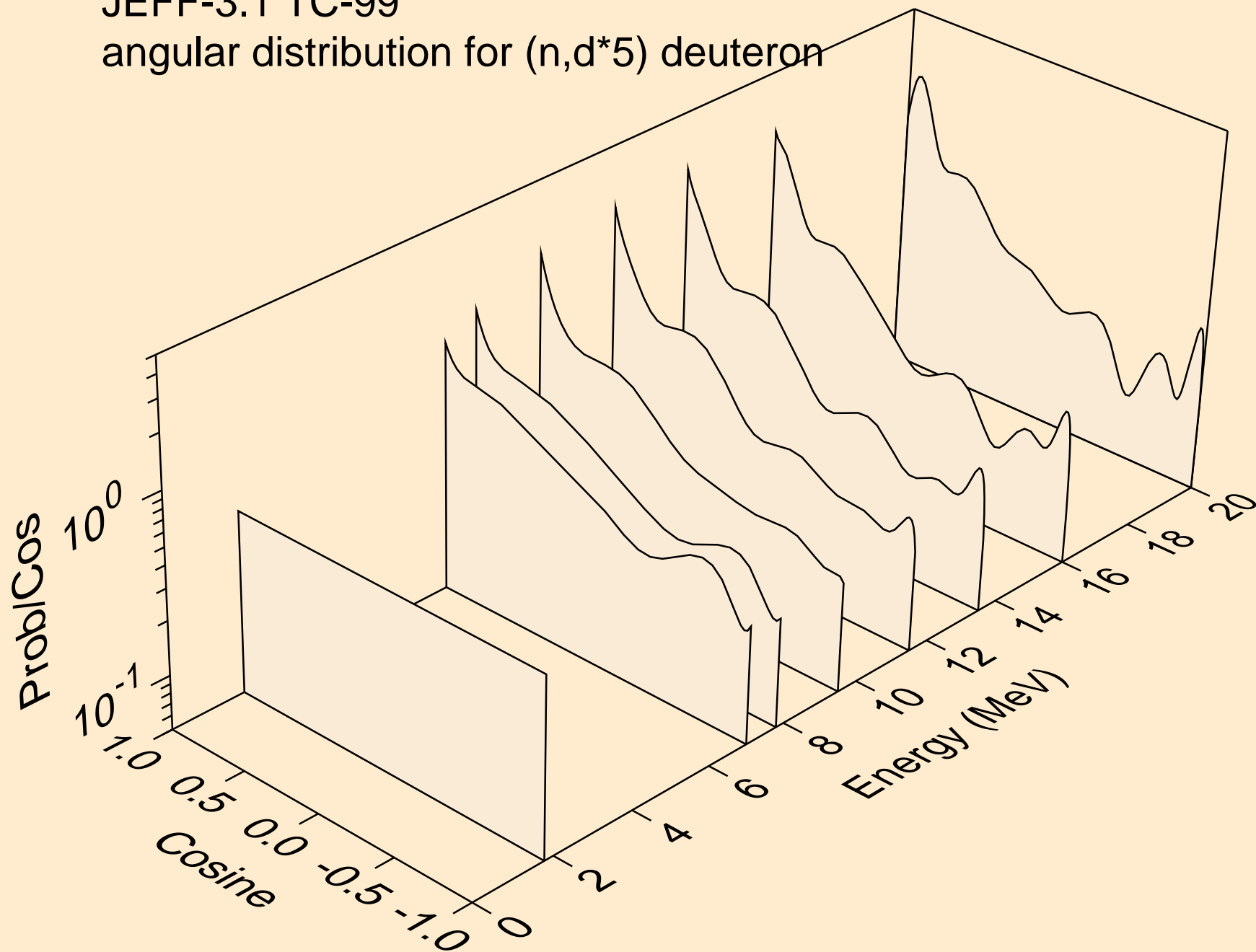
JEFF-3.1 TC-99

angular distribution for (n,d\*4) deuteron

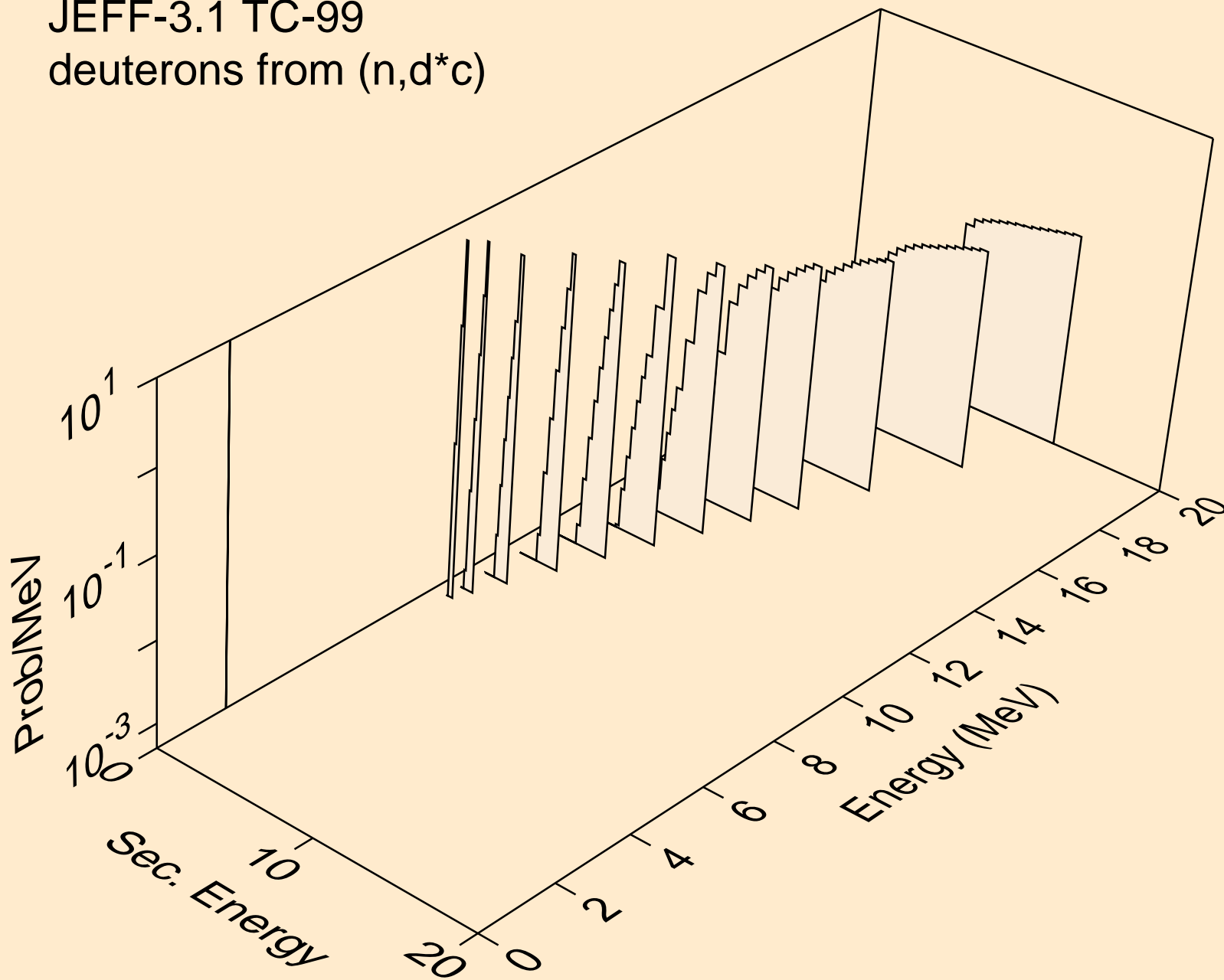


JEFF-3.1 TC-99

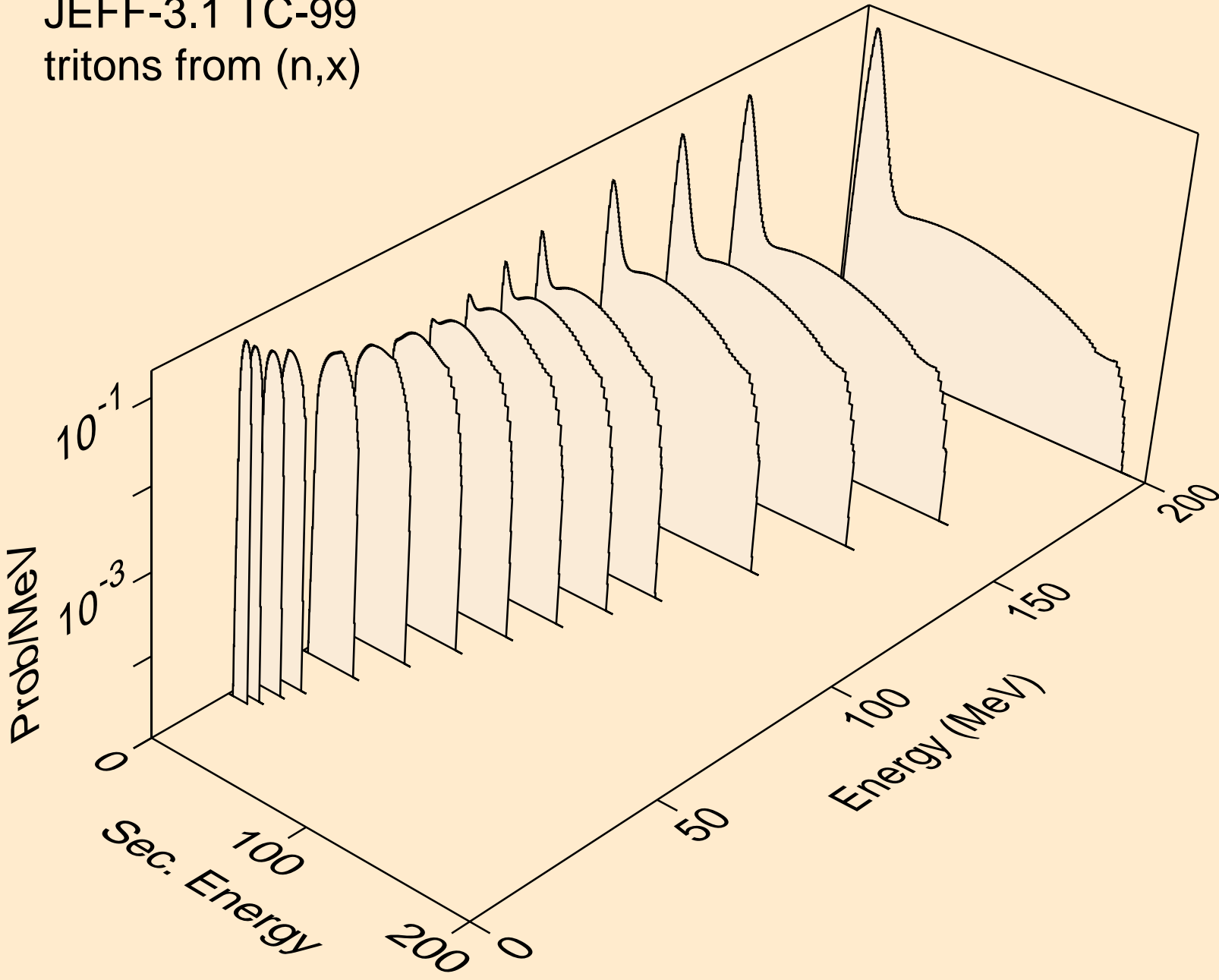
angular distribution for (n,d\*5) deuteron



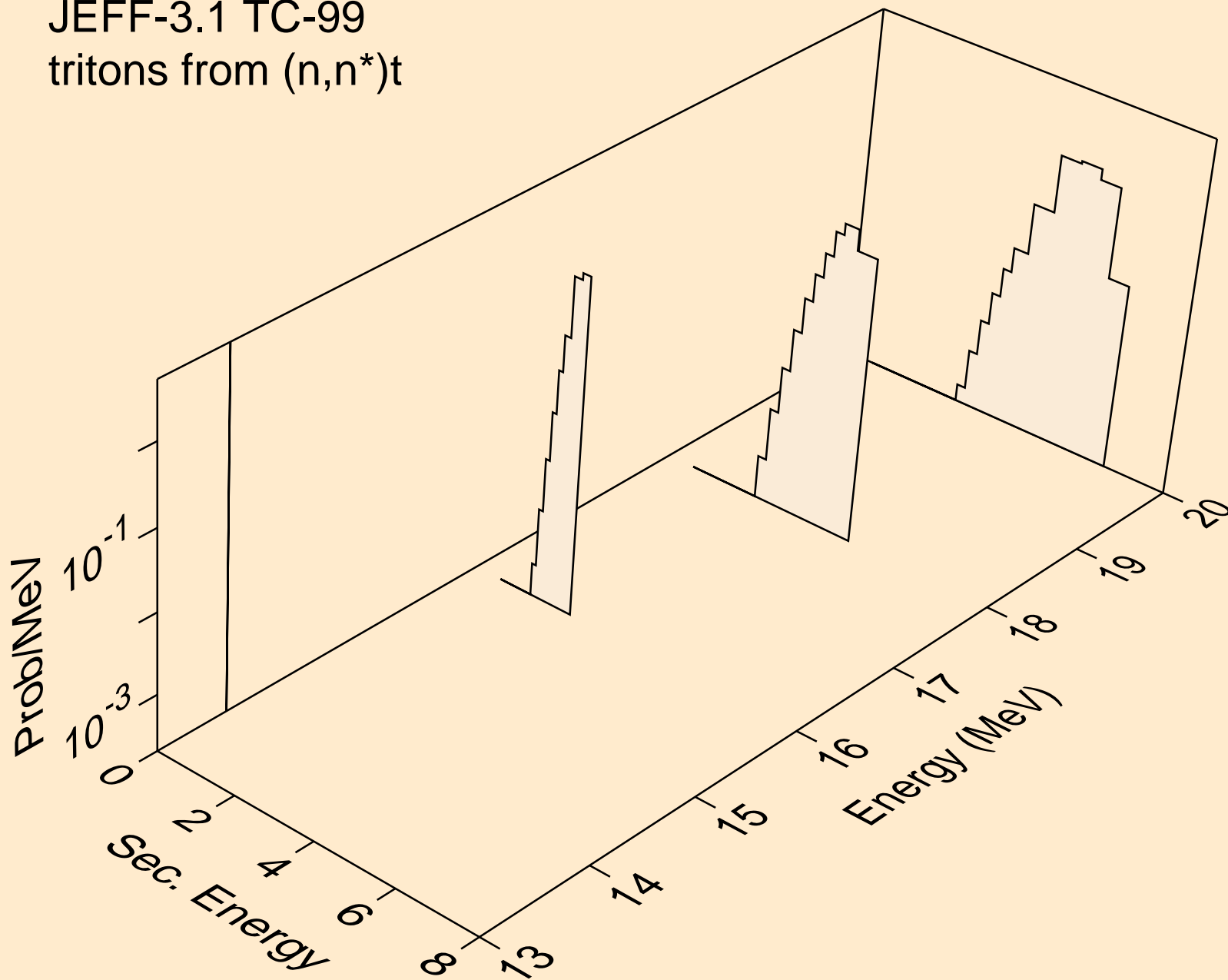
JEFF-3.1 TC-99  
deuterons from (n,d\*c)



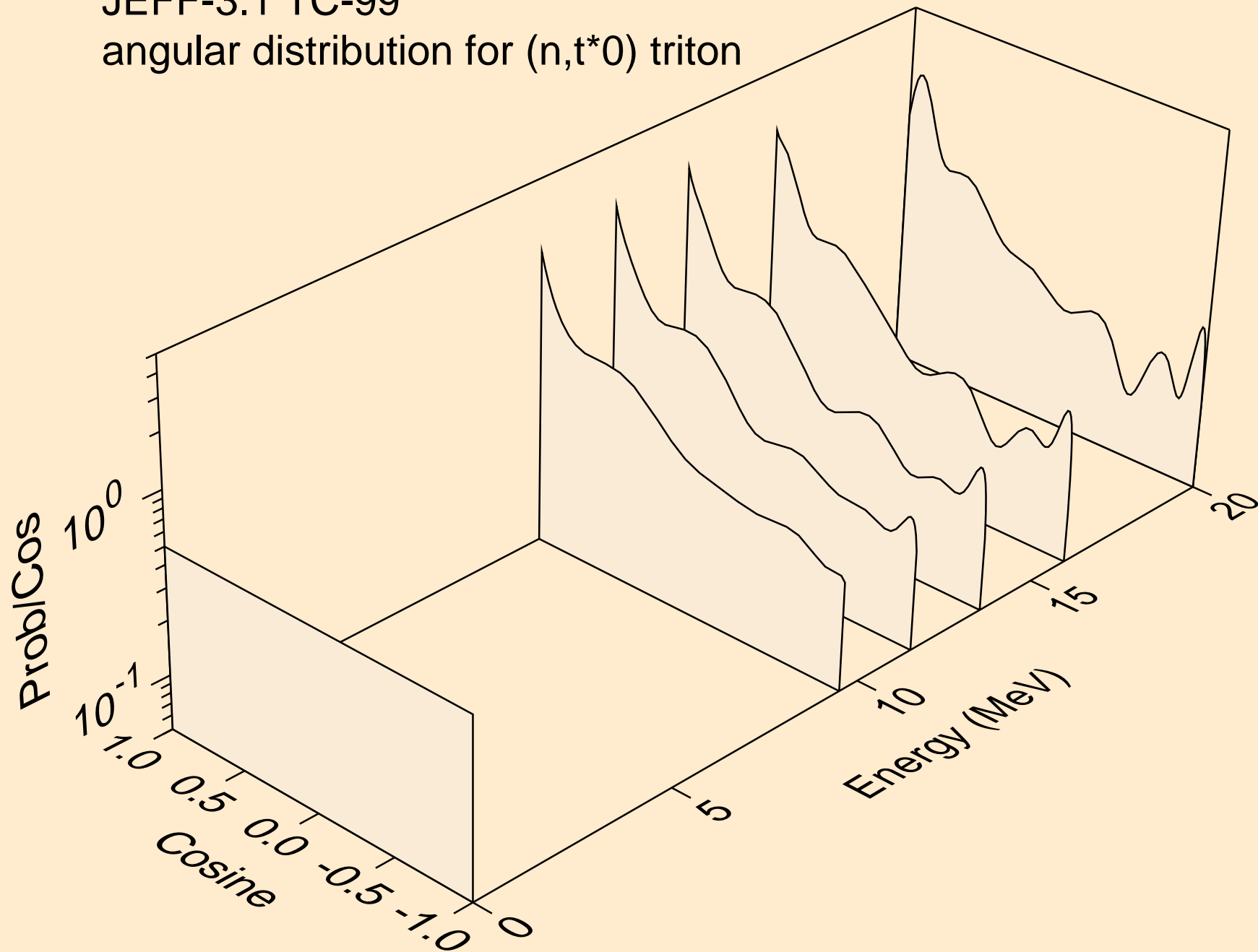
JEFF-3.1 TC-99  
tritons from (n,x)



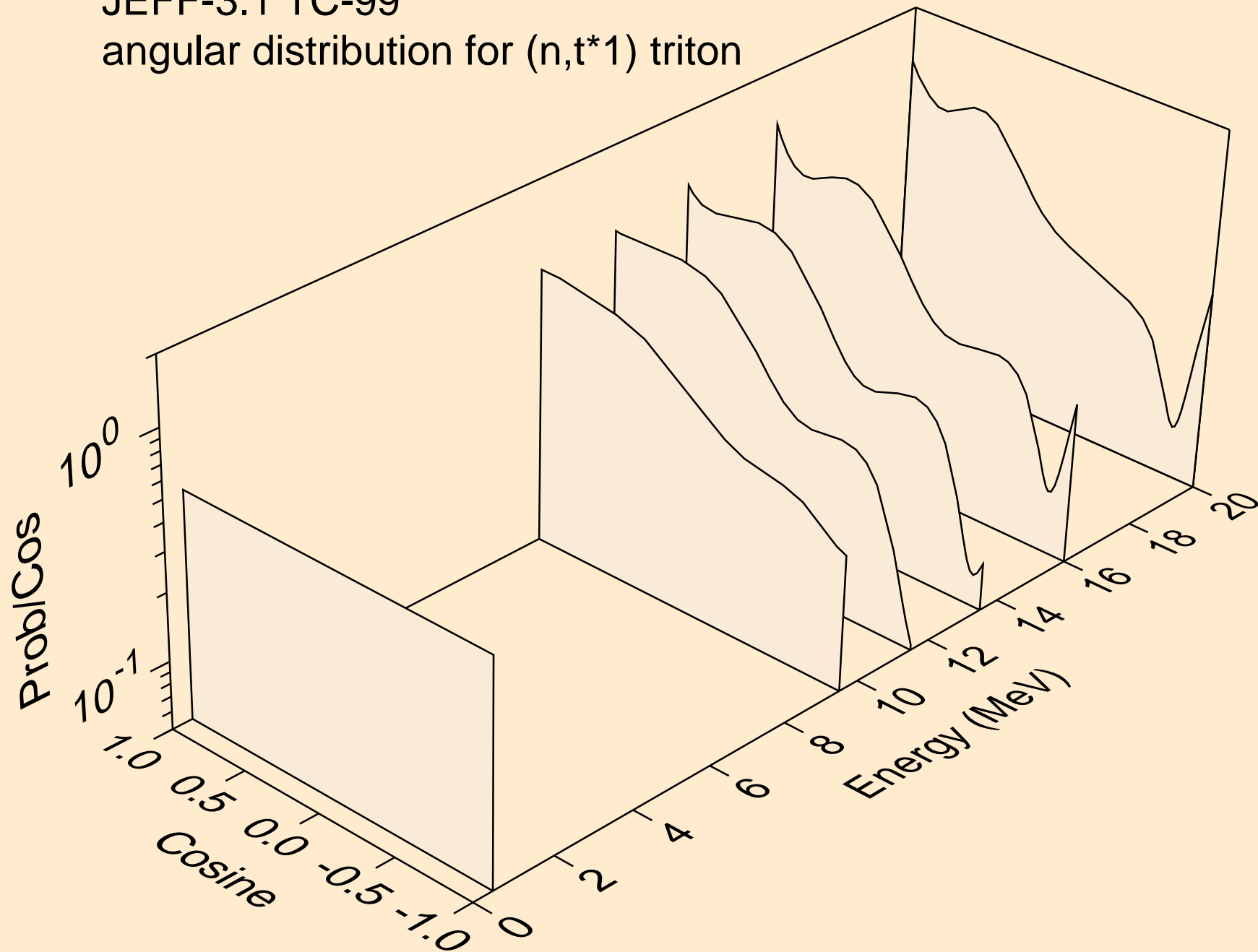
JEFF-3.1 TC-99  
tritons from (n,n\*)t



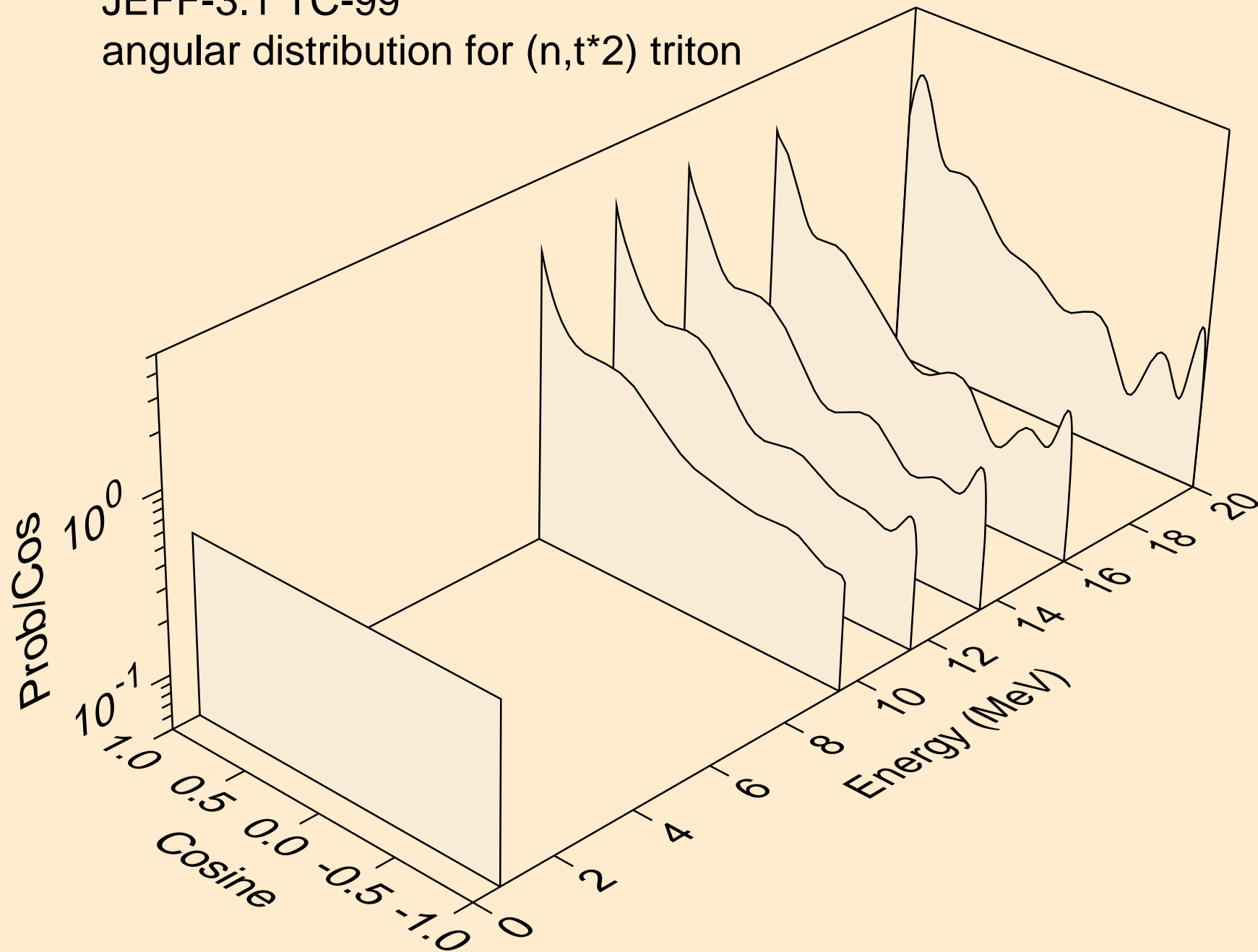
JEFF-3.1 TC-99  
angular distribution for (n,t\*0) triton



JEFF-3.1 TC-99  
angular distribution for (n,t\*1) triton

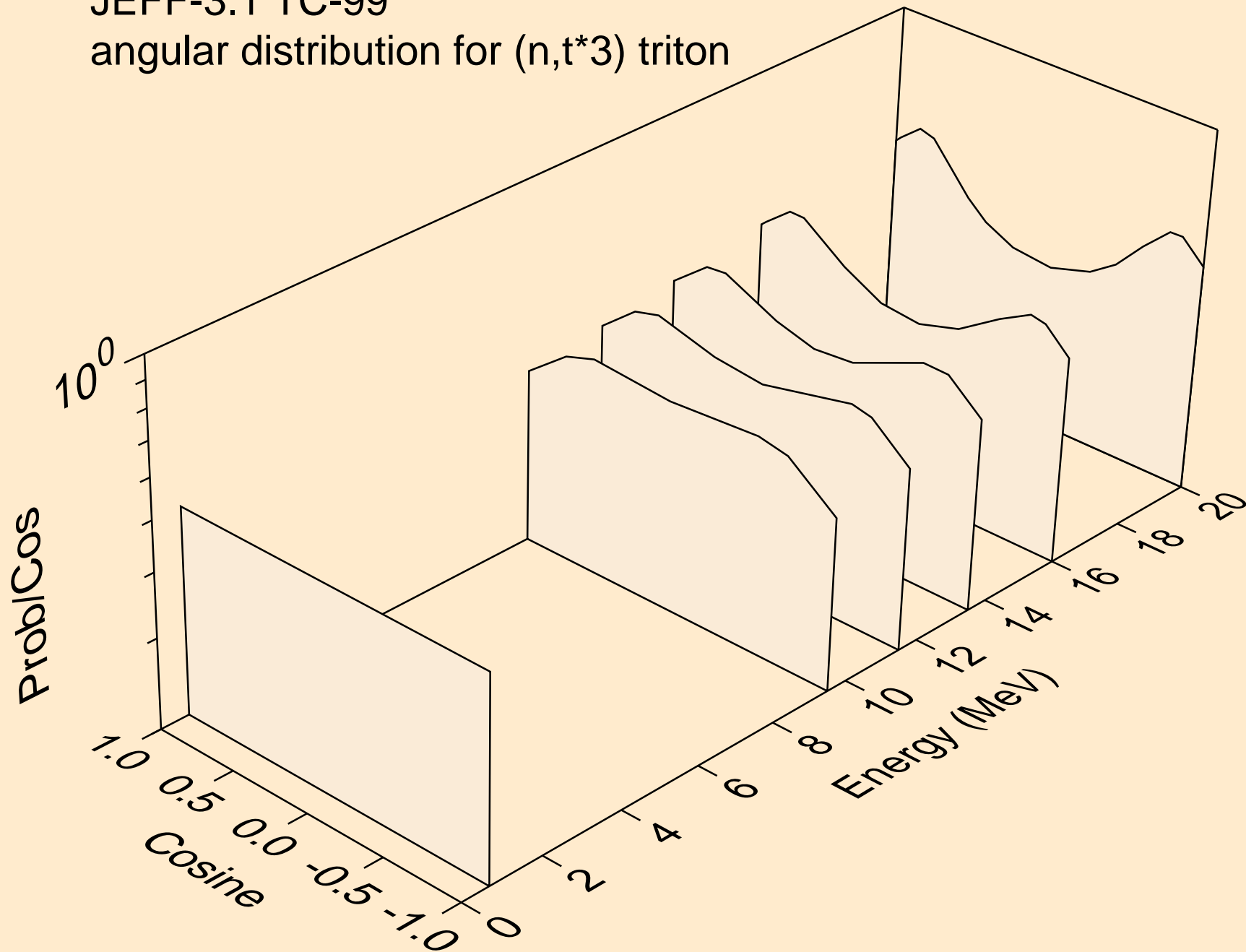


JEFF-3.1 TC-99  
angular distribution for (n,t\*2) triton

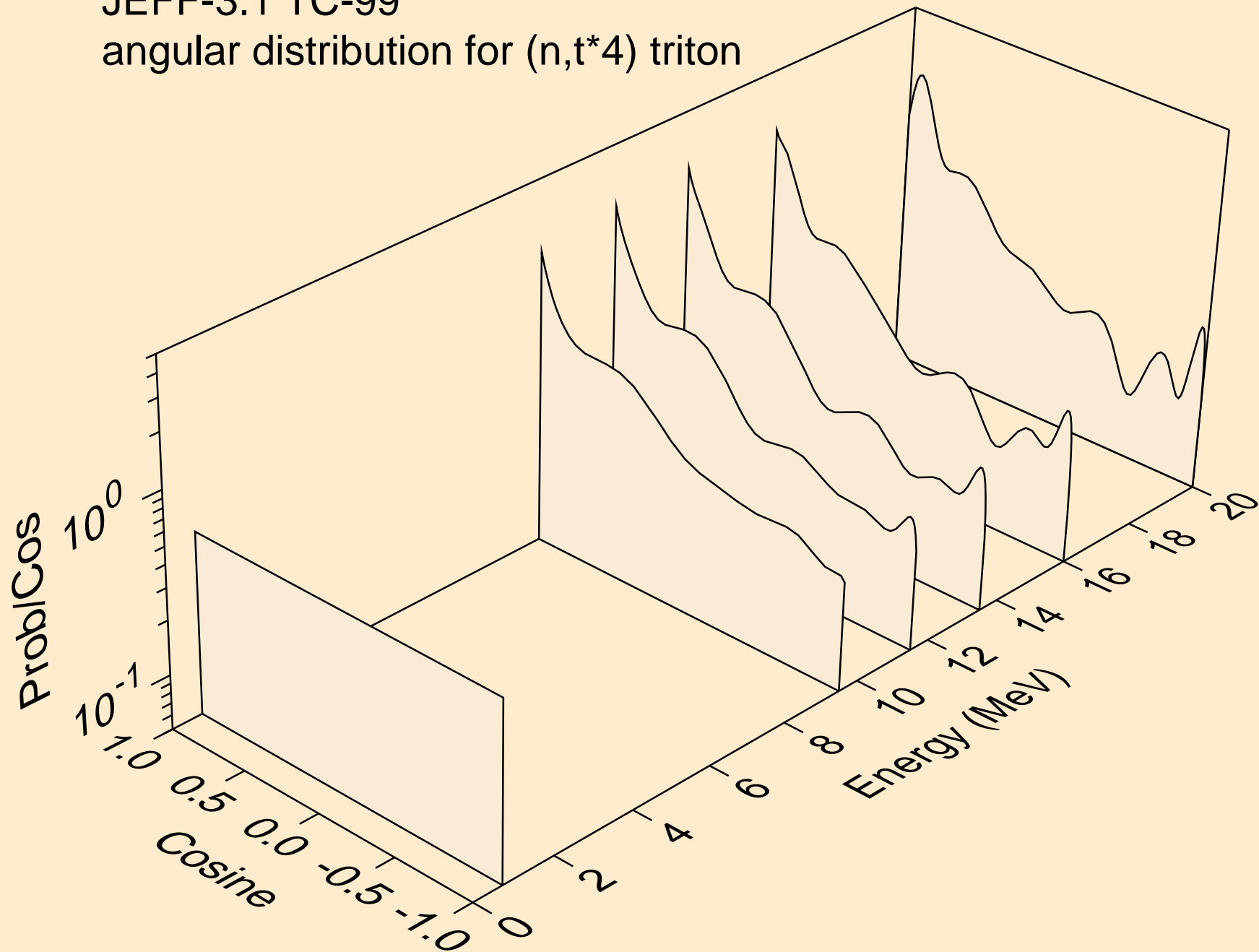




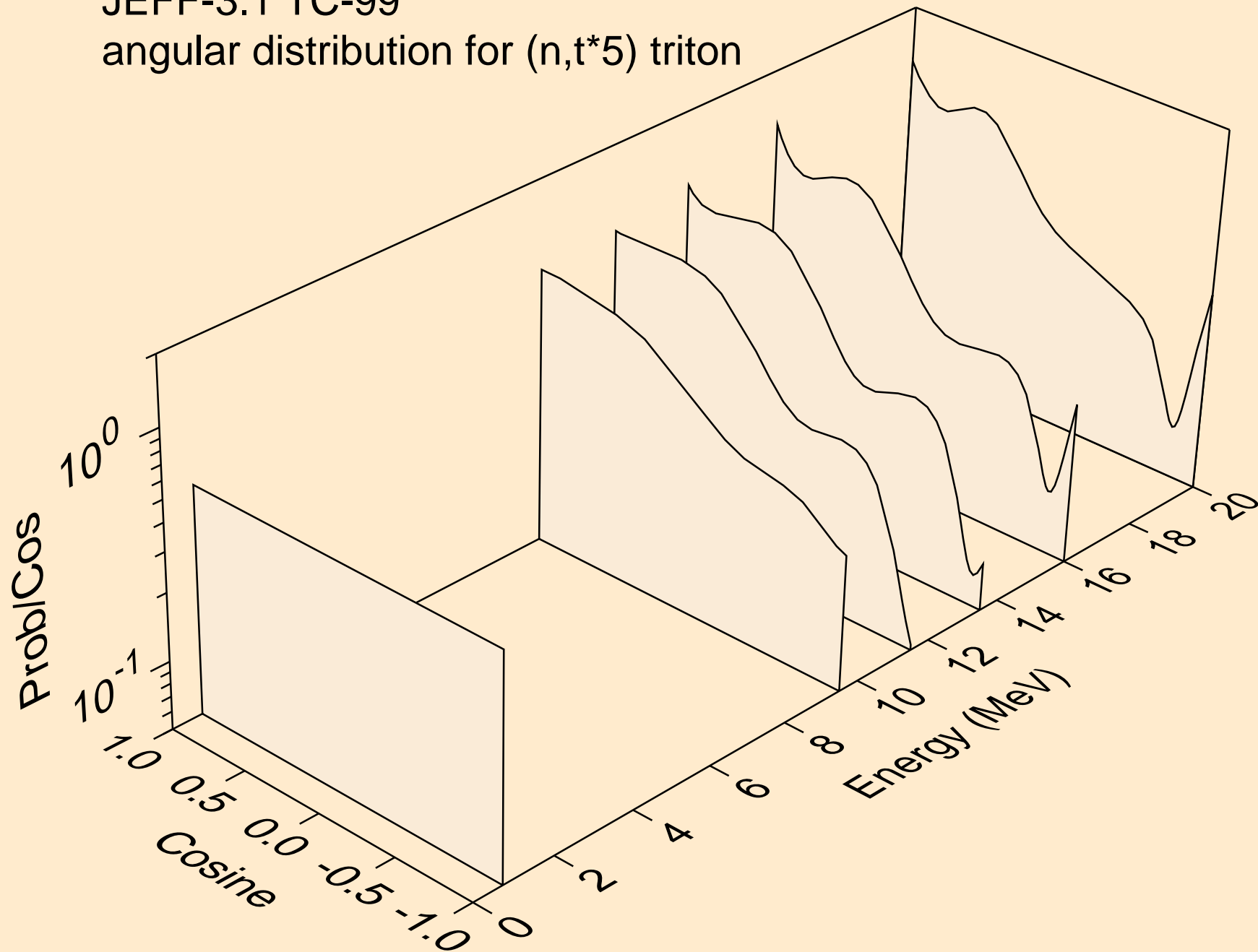
JEFF-3.1 TC-99  
angular distribution for (n,t\*3) triton



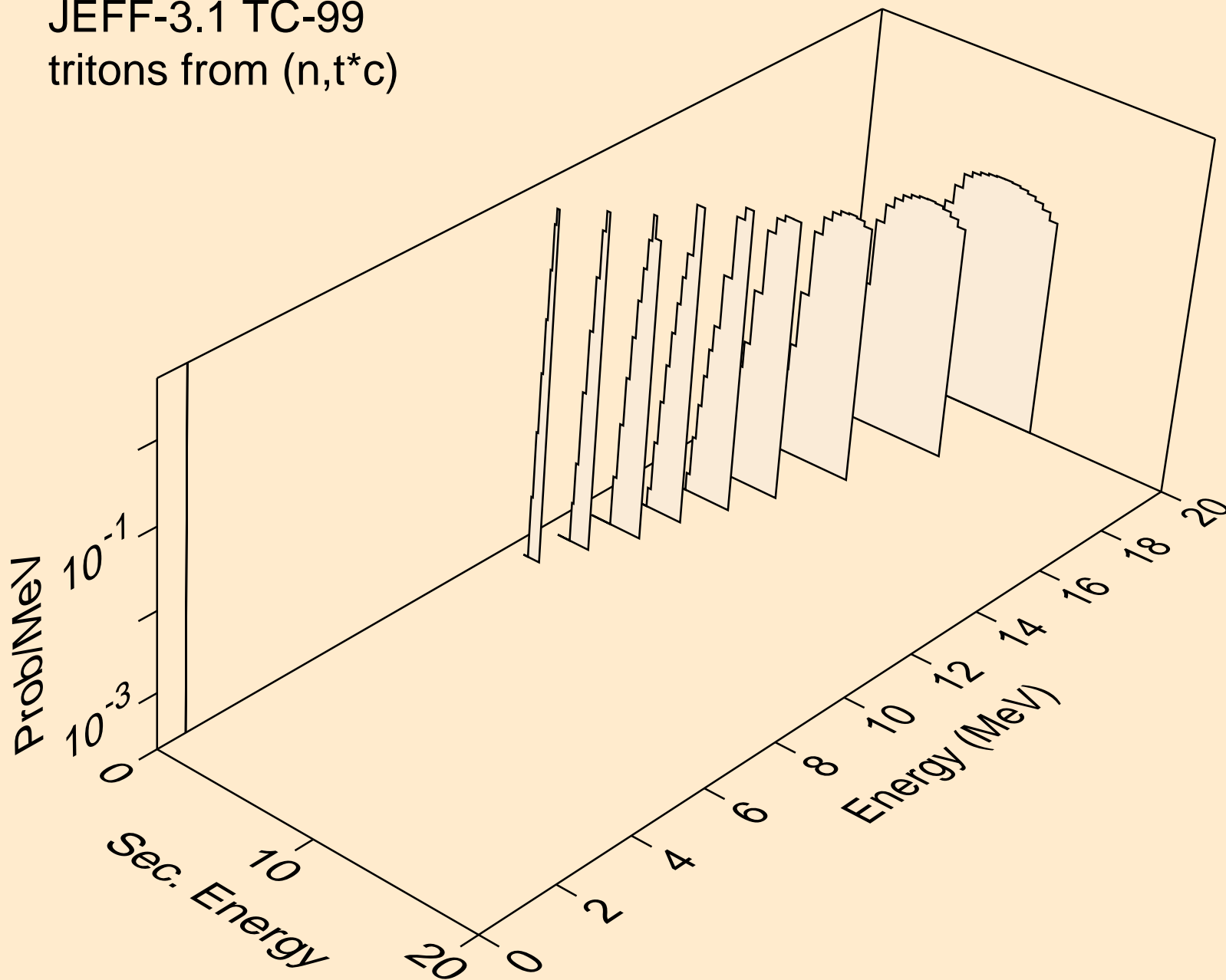
JEFF-3.1 TC-99  
angular distribution for (n,t\*4) triton



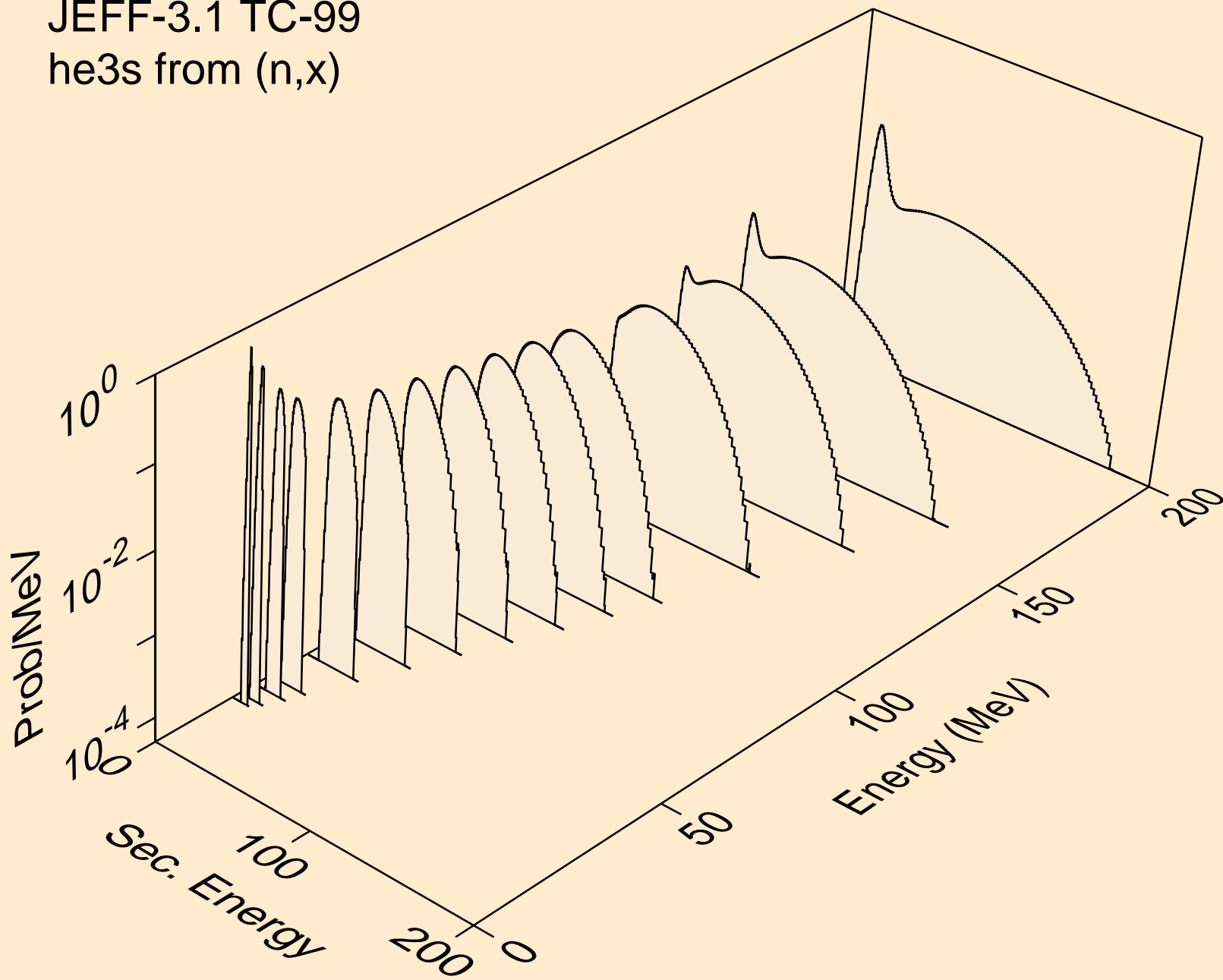
JEFF-3.1 TC-99  
angular distribution for (n,t\*5) triton



JEFF-3.1 TC-99  
tritons from (n,t\*c)

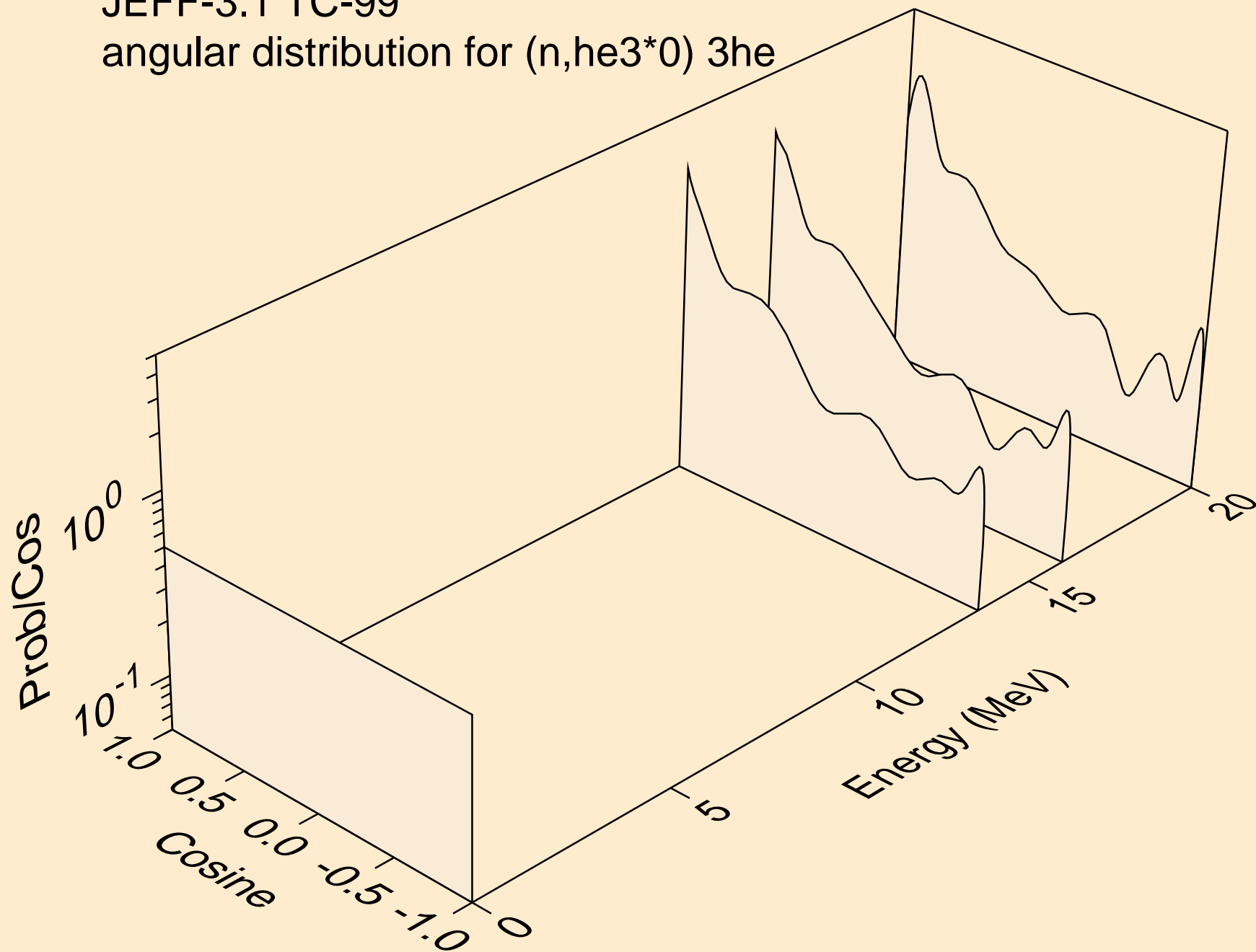


JEFF-3.1 TC-99  
he3s from (n,x)

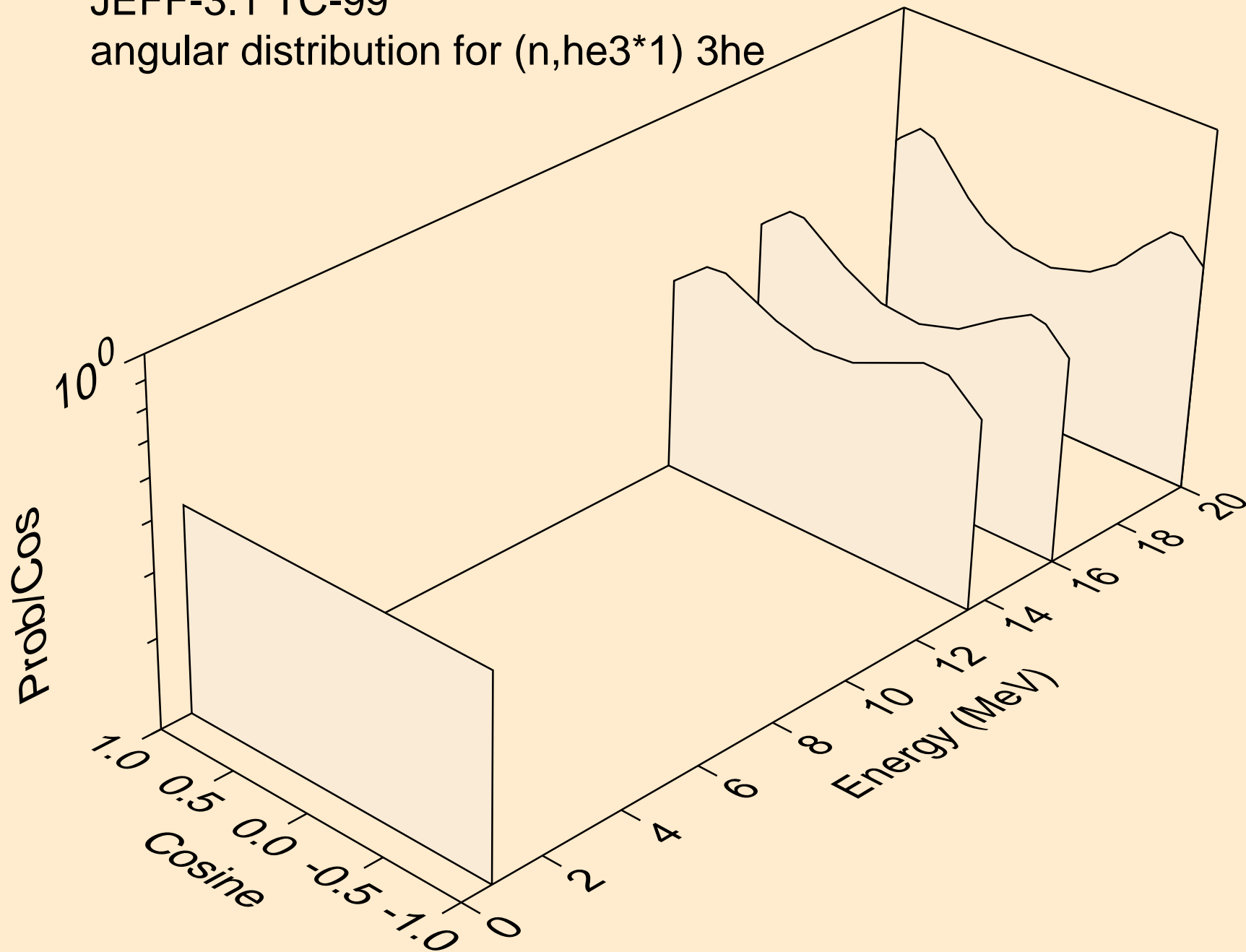


JEFF-3.1 TC-99

angular distribution for (n,he3\*0) 3he

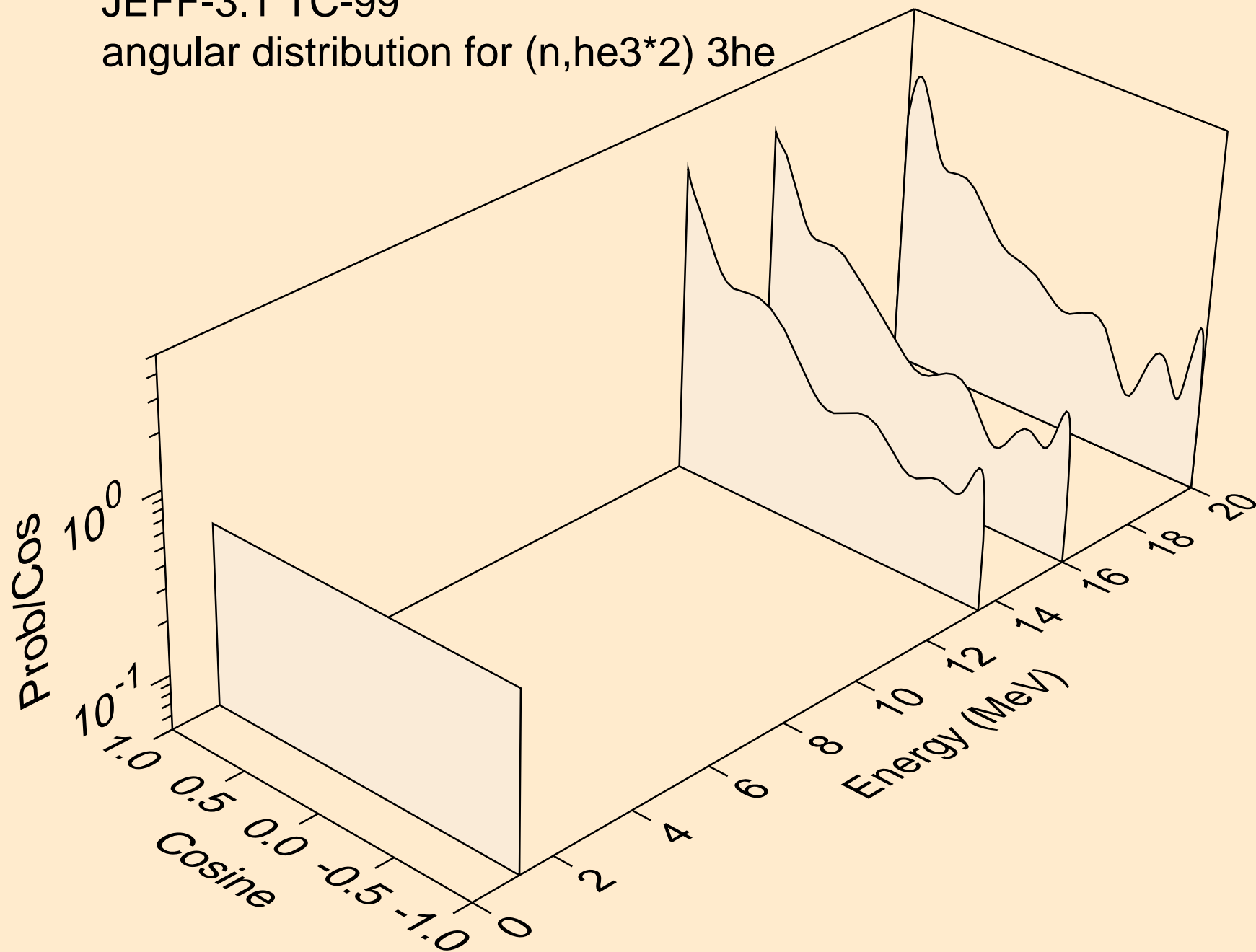


JEFF-3.1 TC-99  
angular distribution for (n,he3\*1) 3he



JEFF-3.1 TC-99

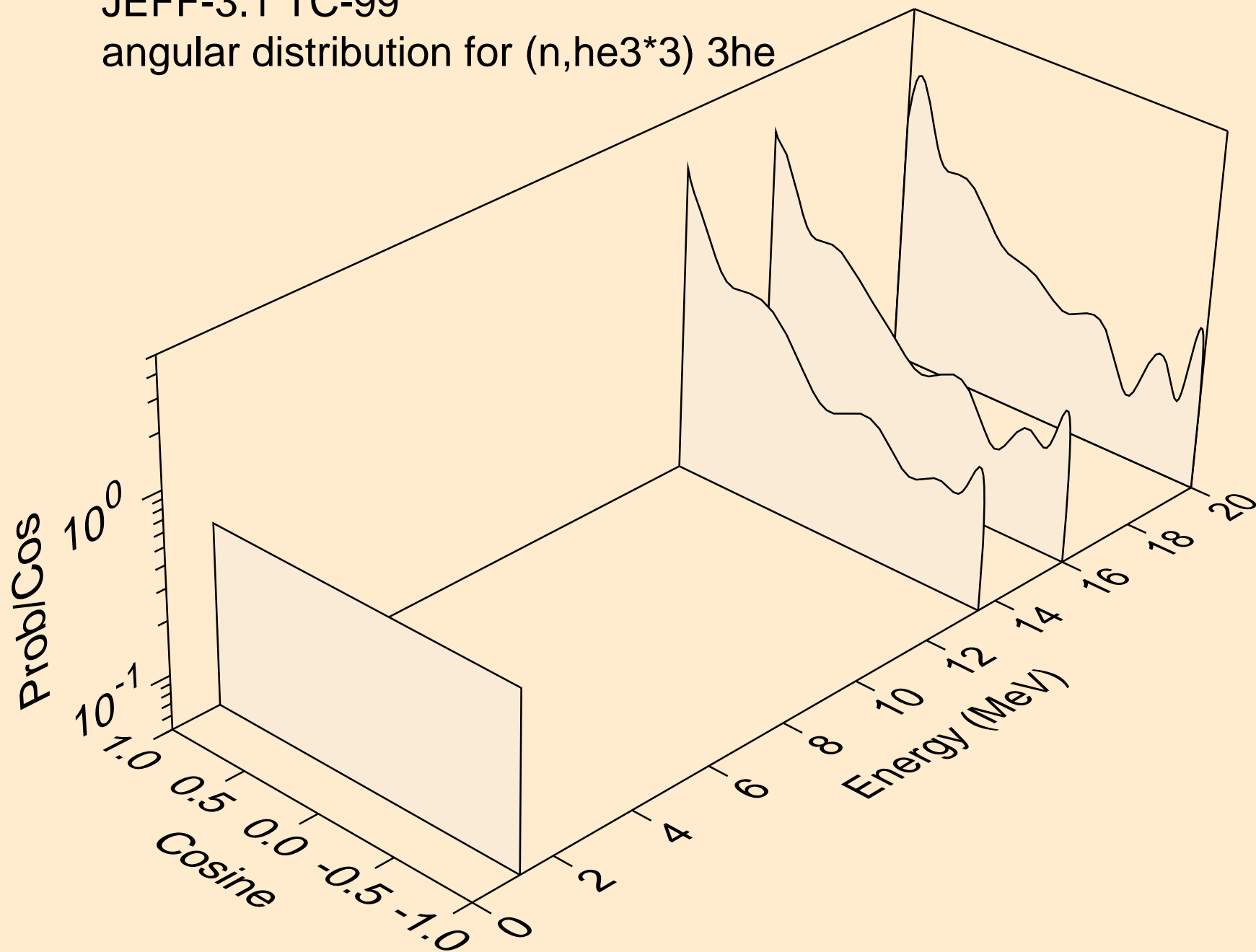
angular distribution for (n,he3\*2) 3he





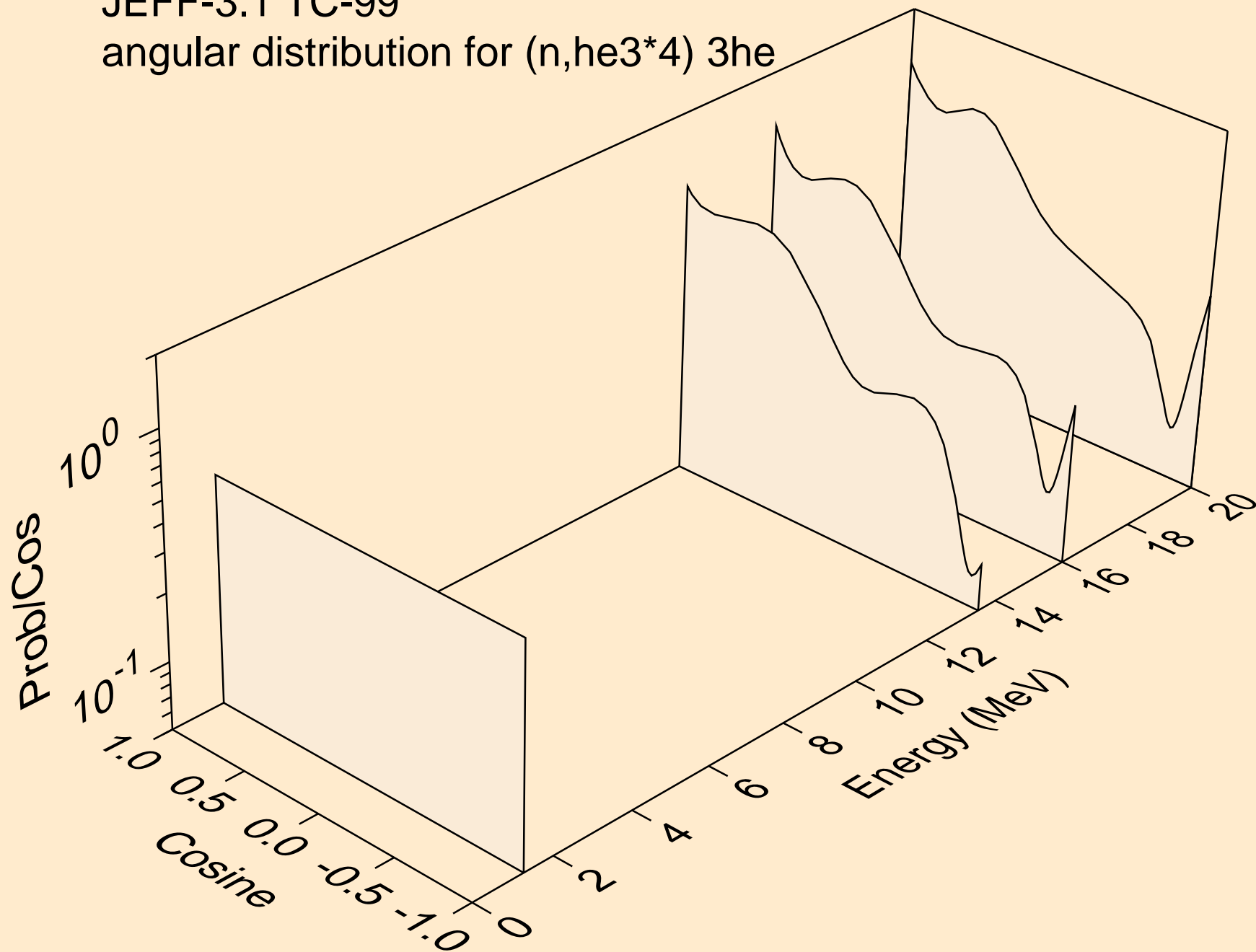
JEFF-3.1 TC-99

angular distribution for (n,he3\*3) 3he



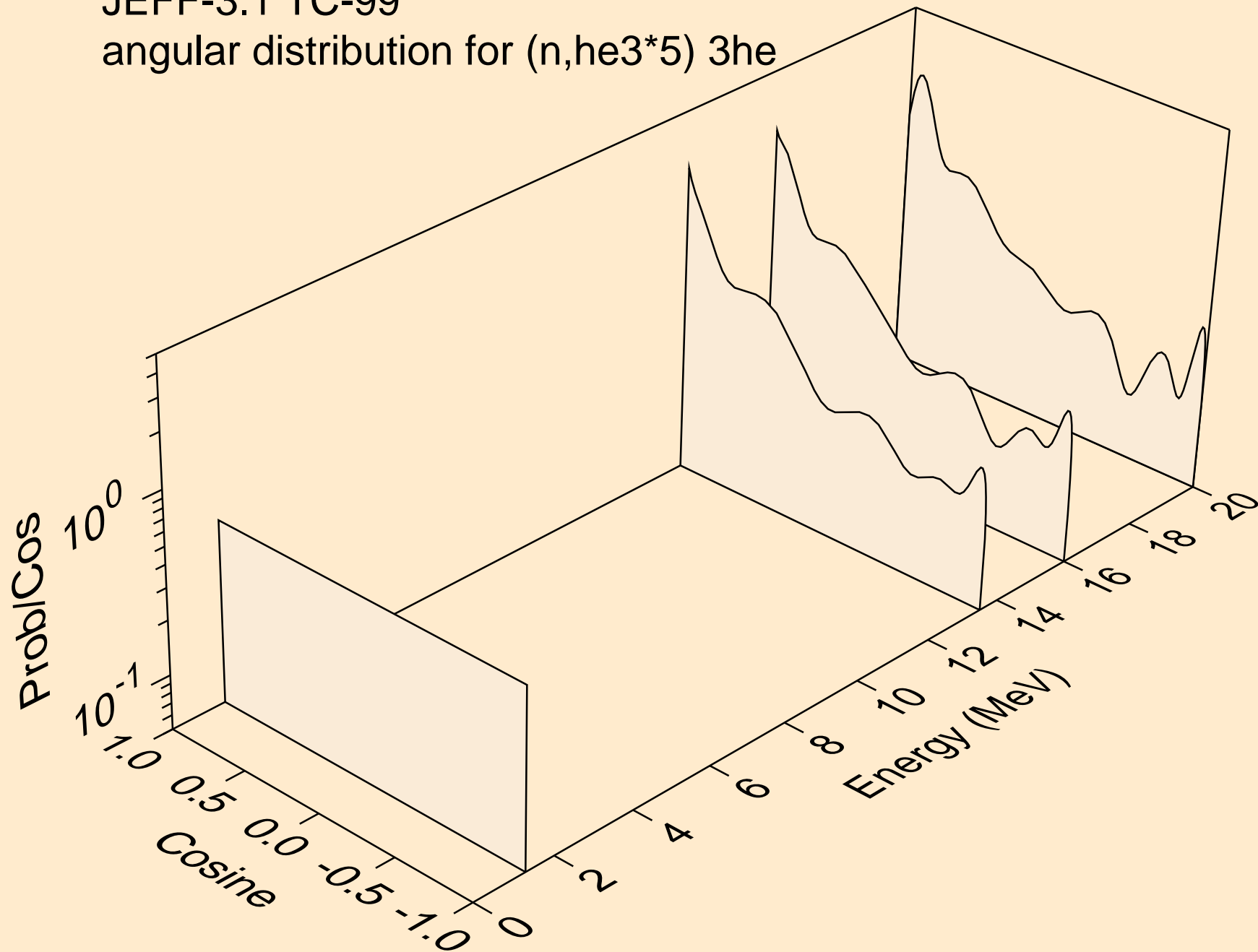
JEFF-3.1 TC-99

angular distribution for (n,he3\*4) 3he

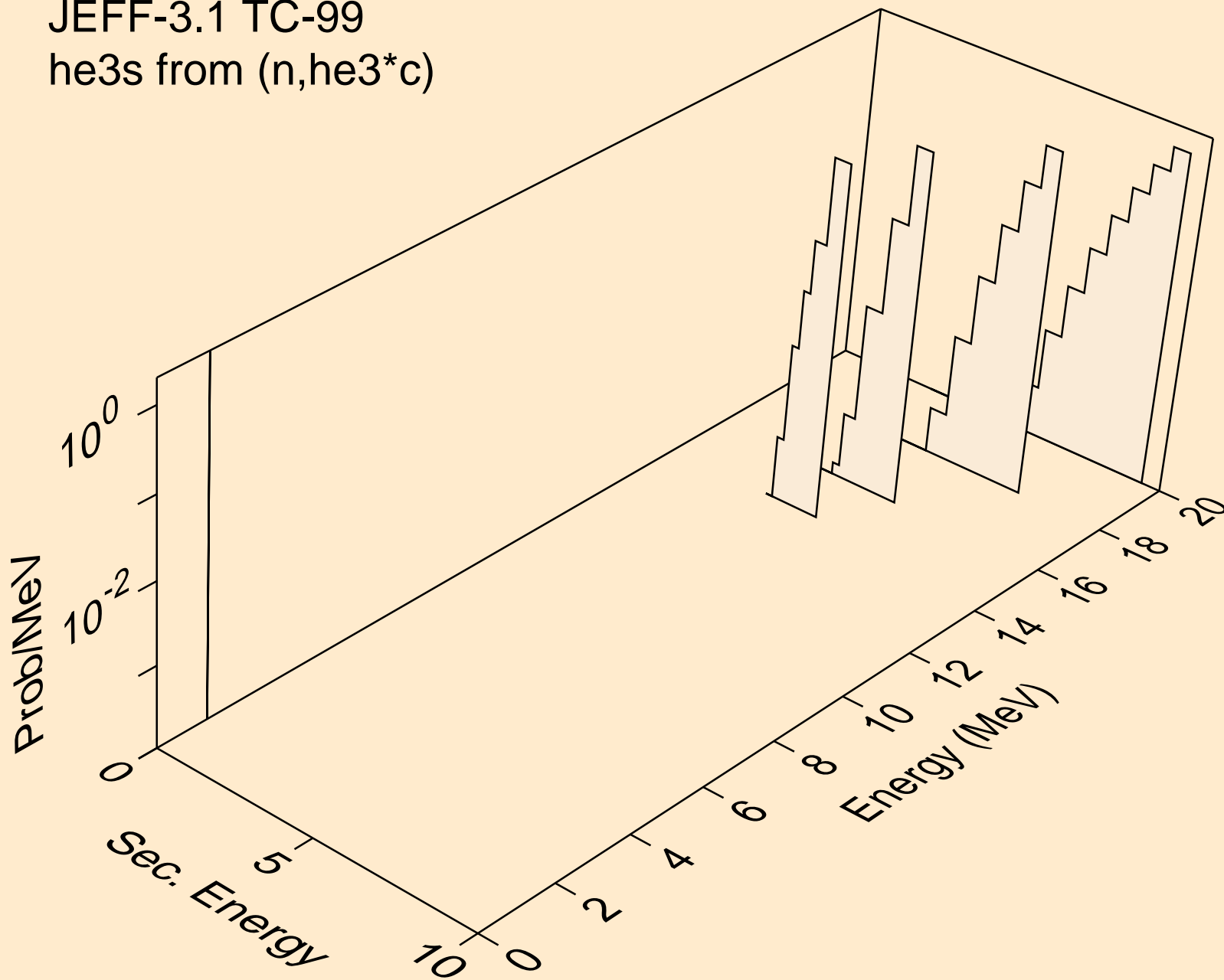


JEFF-3.1 TC-99

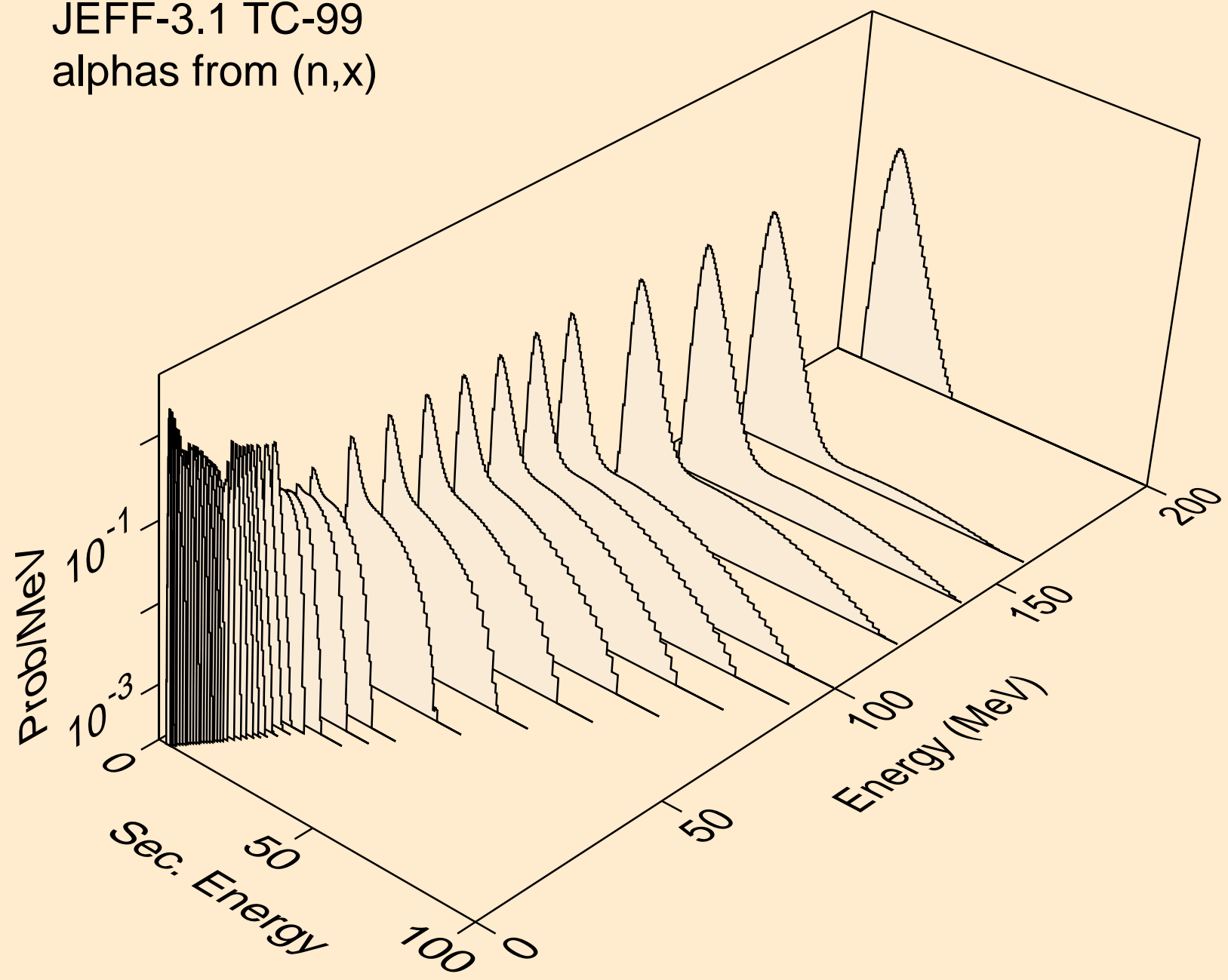
angular distribution for (n,he3\*5) 3he



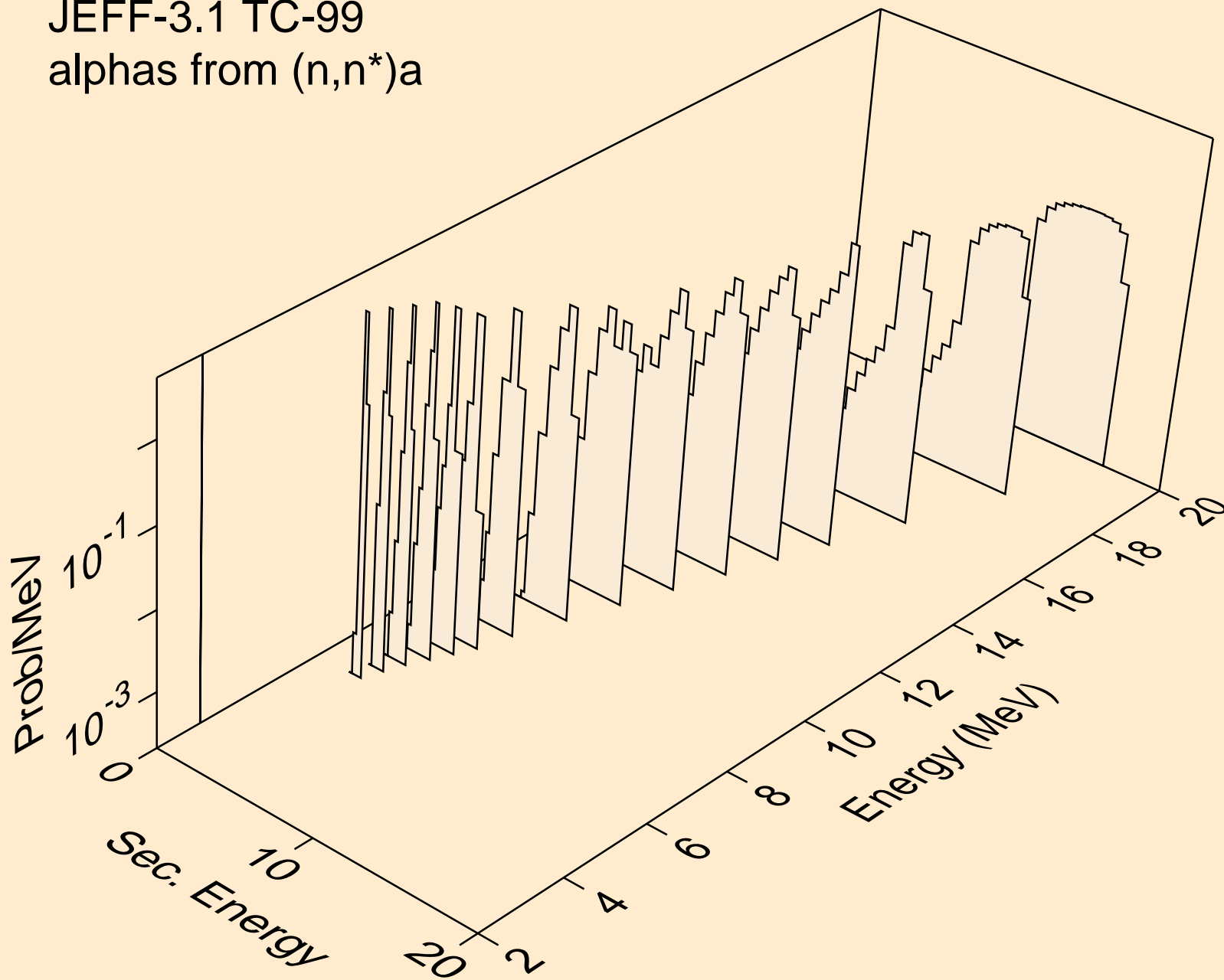
JEFF-3.1 TC-99  
he3s from (n,he3\*c)



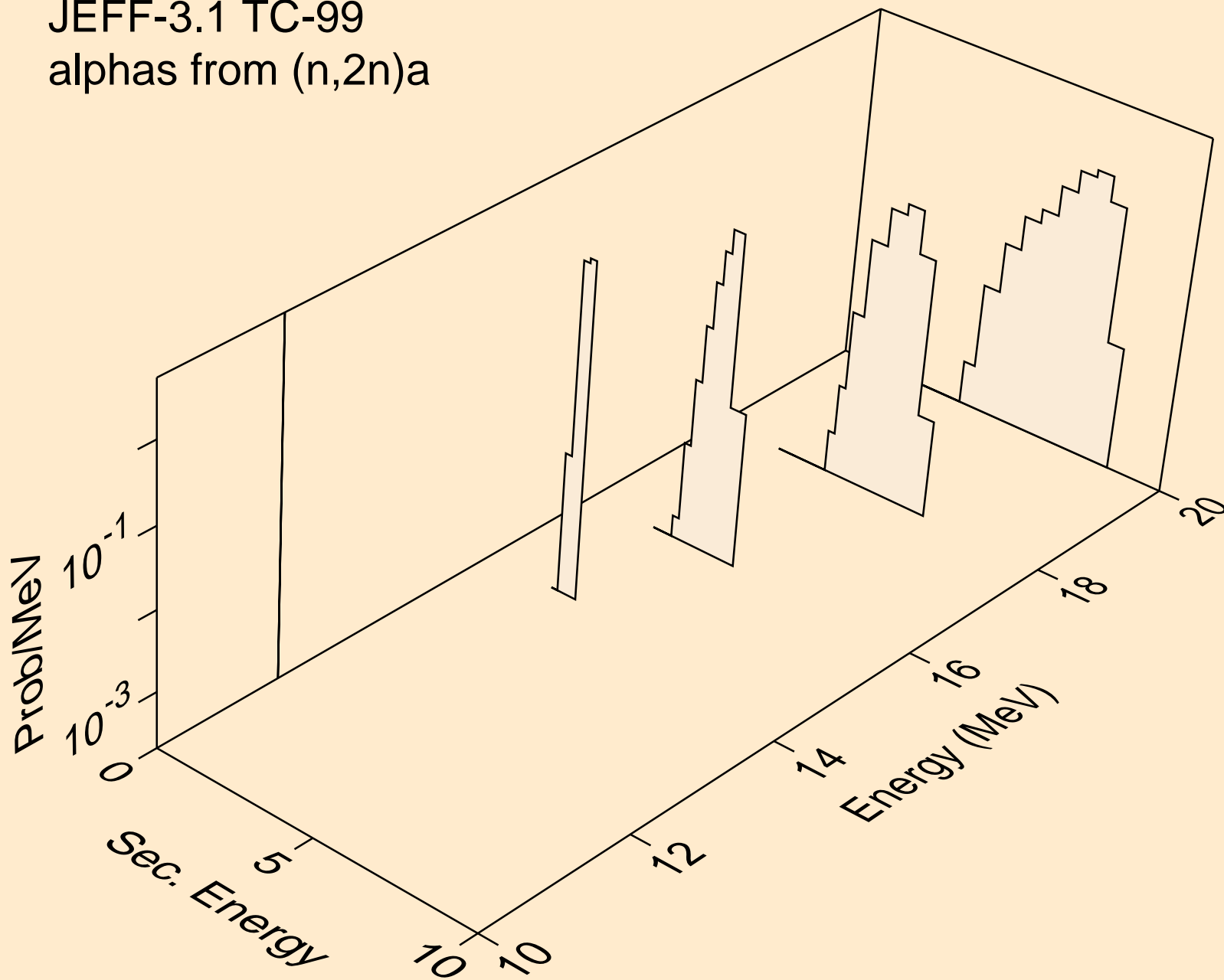
JEFF-3.1 TC-99  
alphas from (n,x)



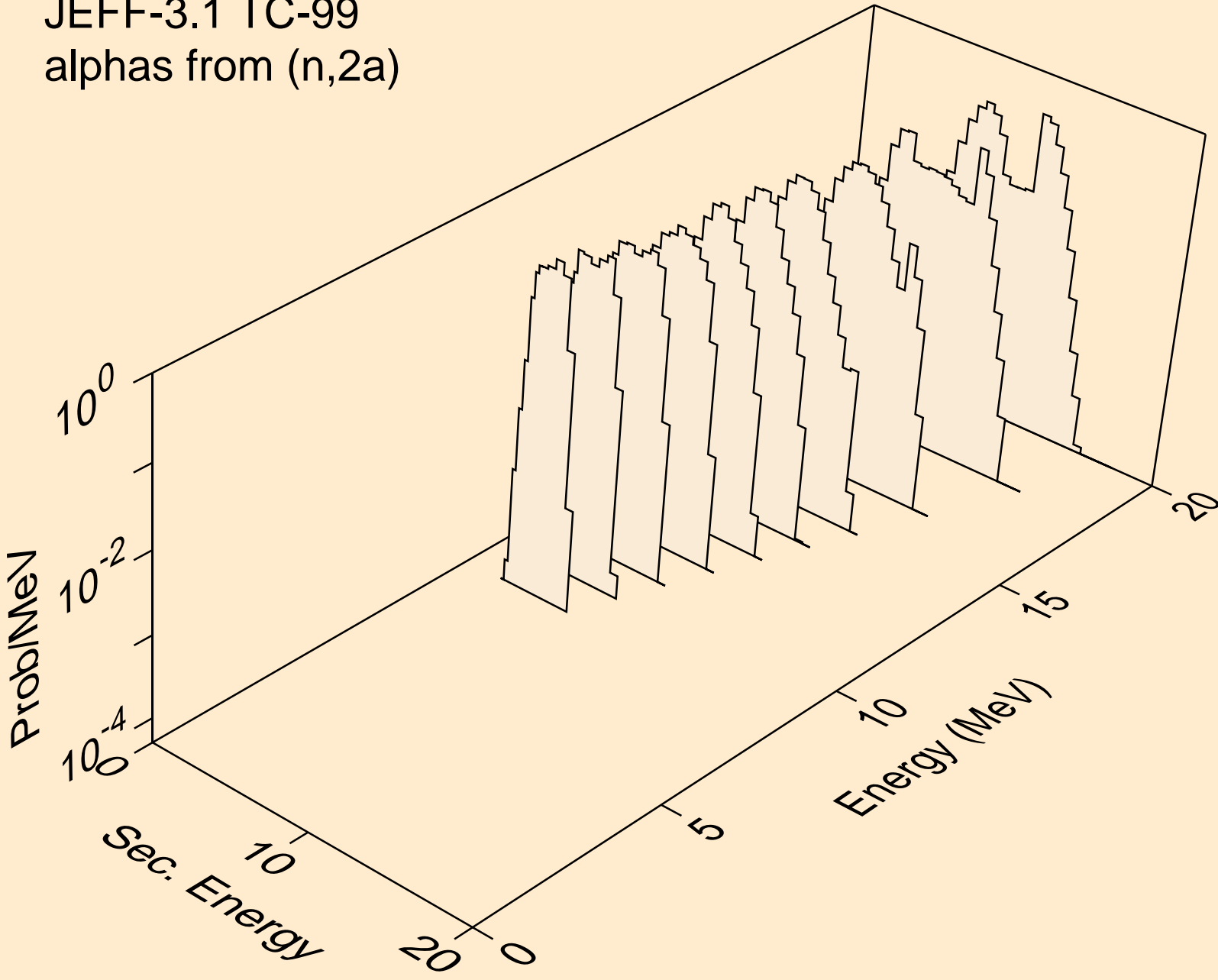
JEFF-3.1 TC-99  
alphas from (n,n\*)a



JEFF-3.1 TC-99  
alphas from (n,2n)a

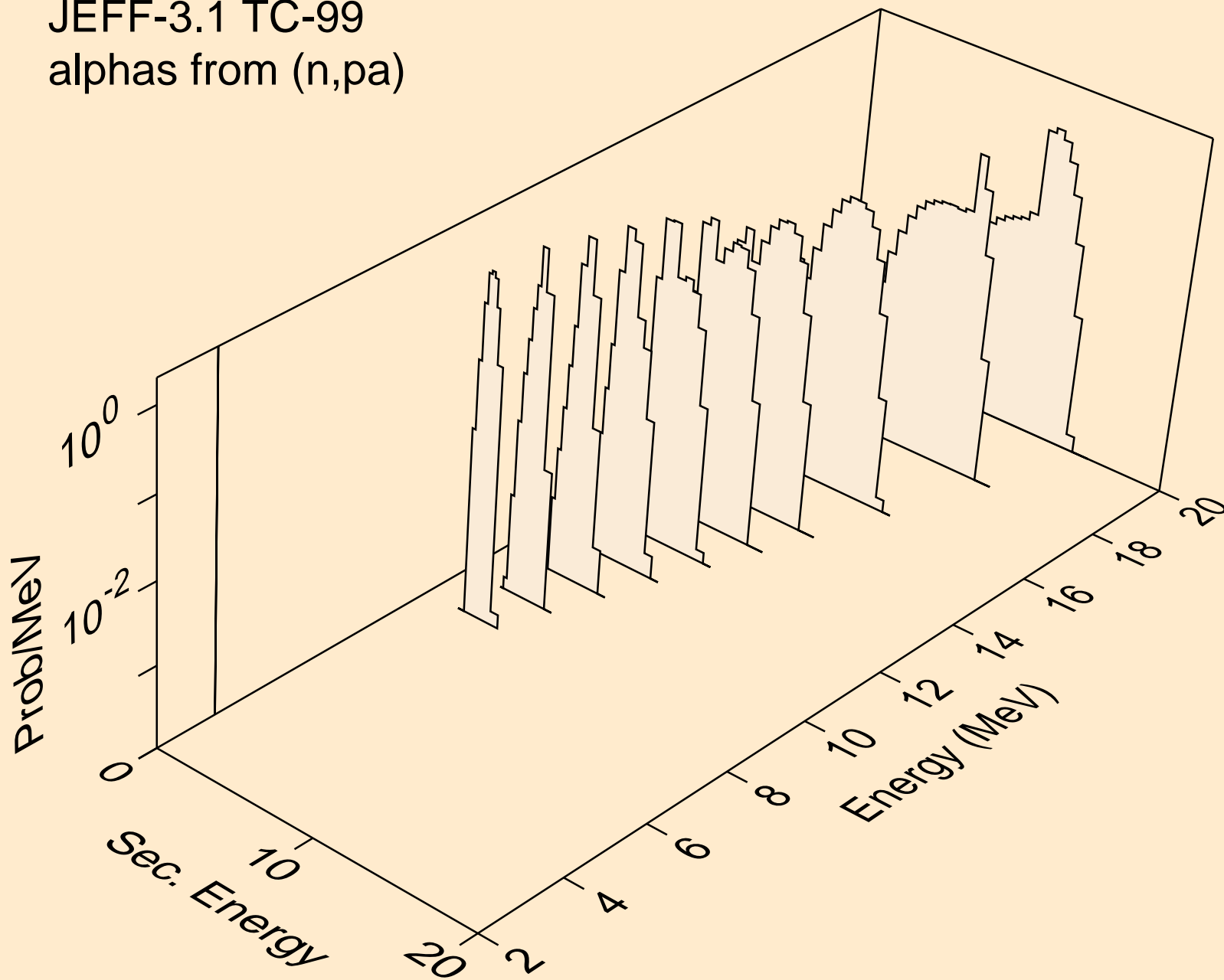


JEFF-3.1 TC-99  
alphas from (n,2a)

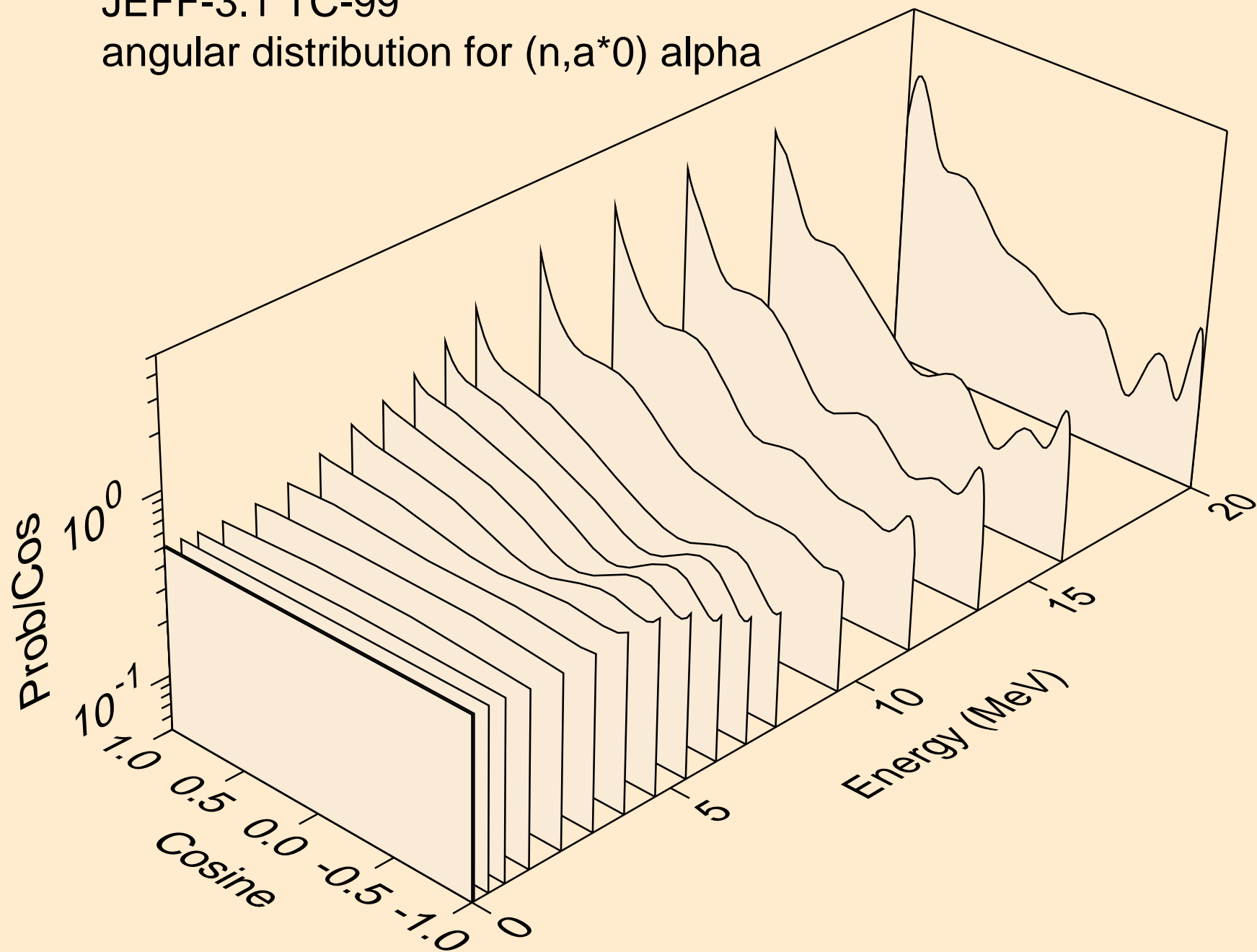




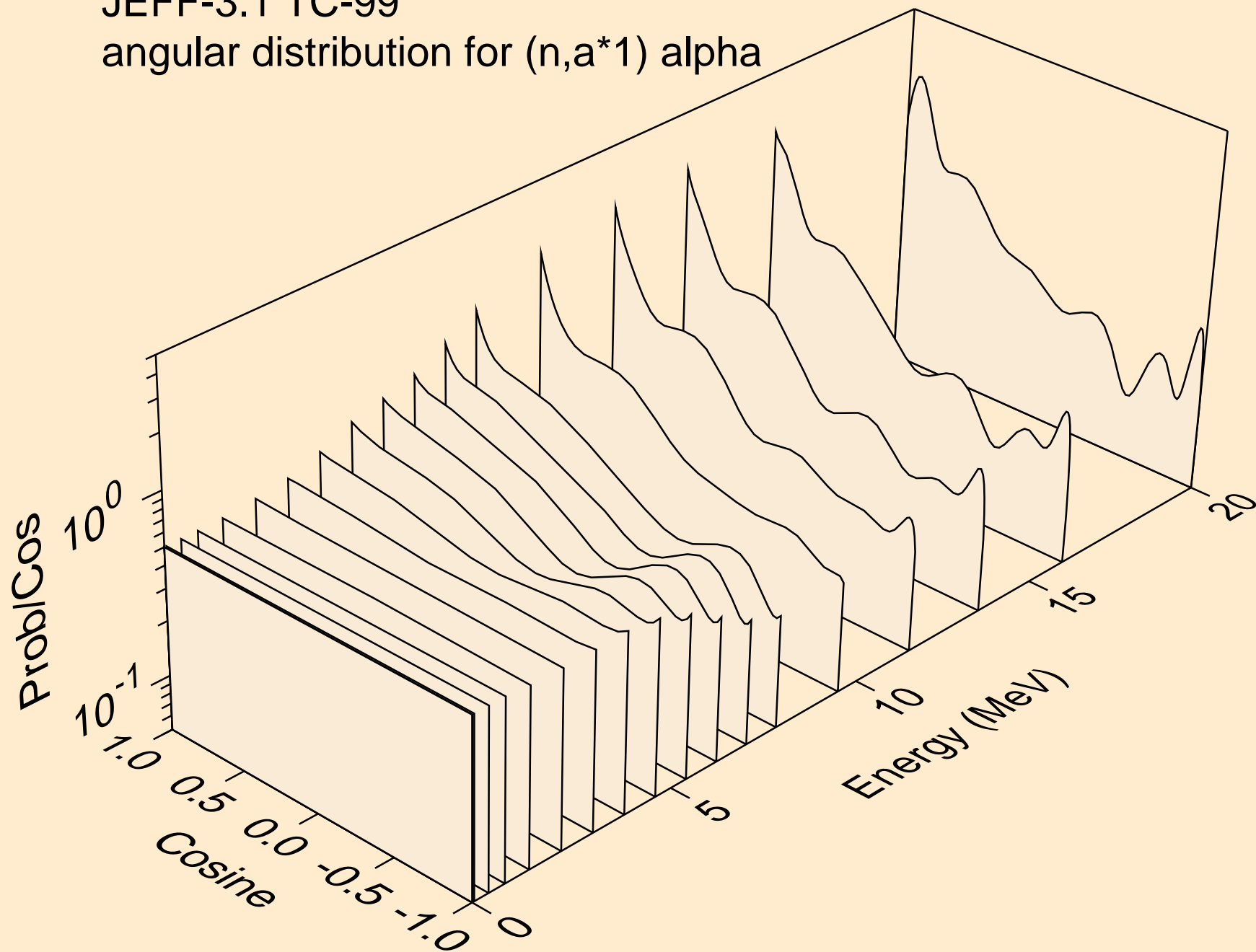
JEFF-3.1 TC-99  
alphas from (n,pa)



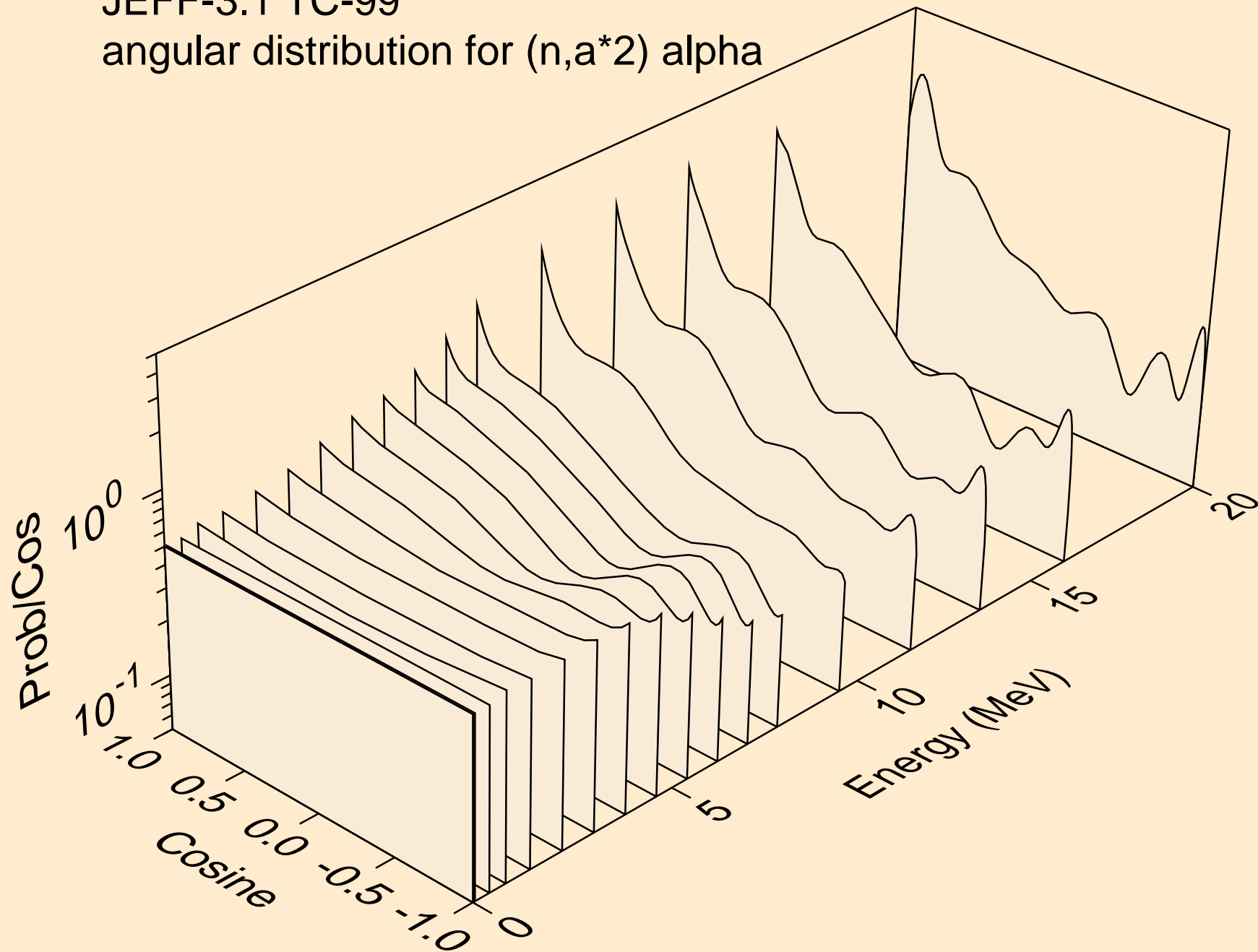
JEFF-3.1 TC-99  
angular distribution for (n,a\*0) alpha



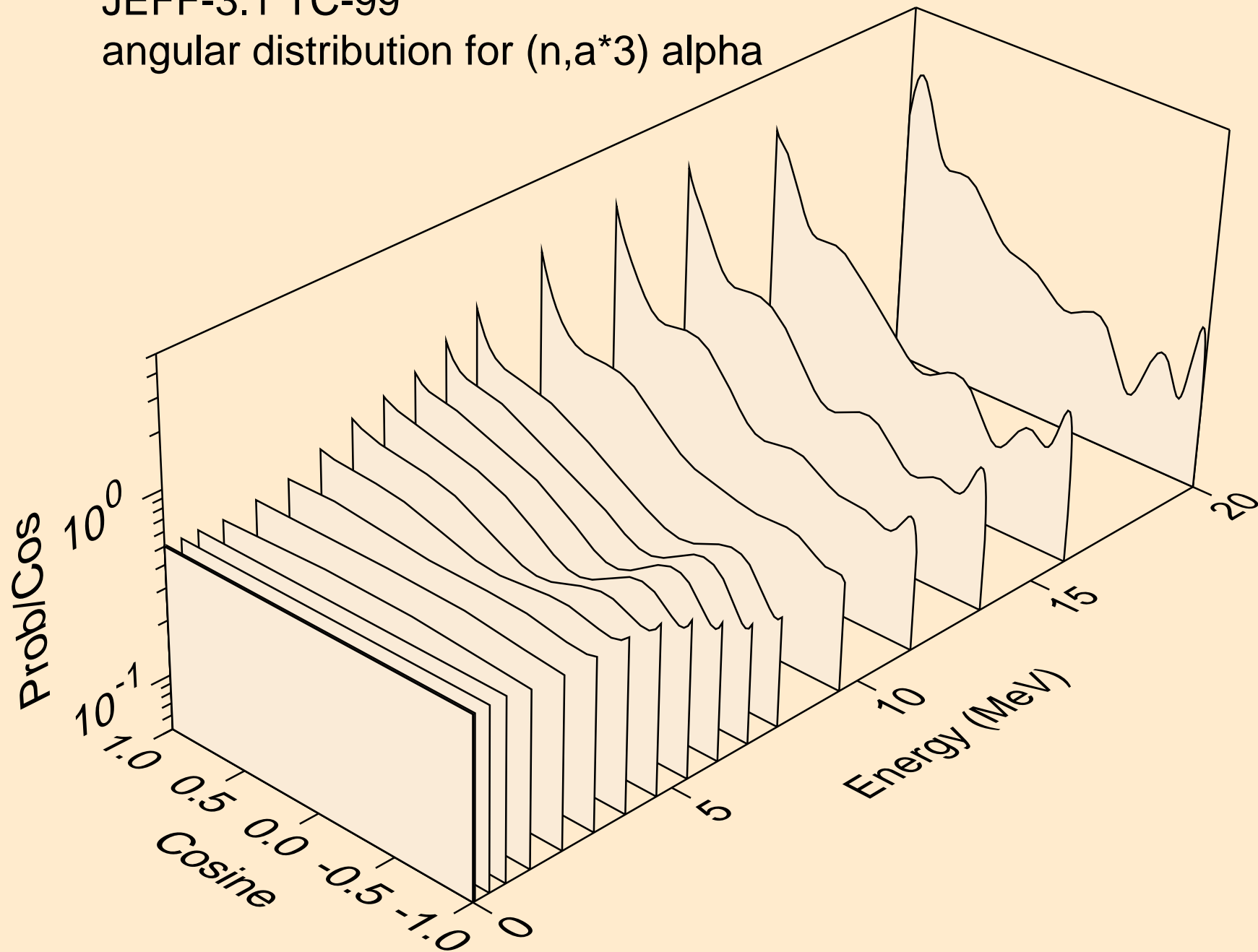
JEFF-3.1 TC-99  
angular distribution for (n,a\*1) alpha



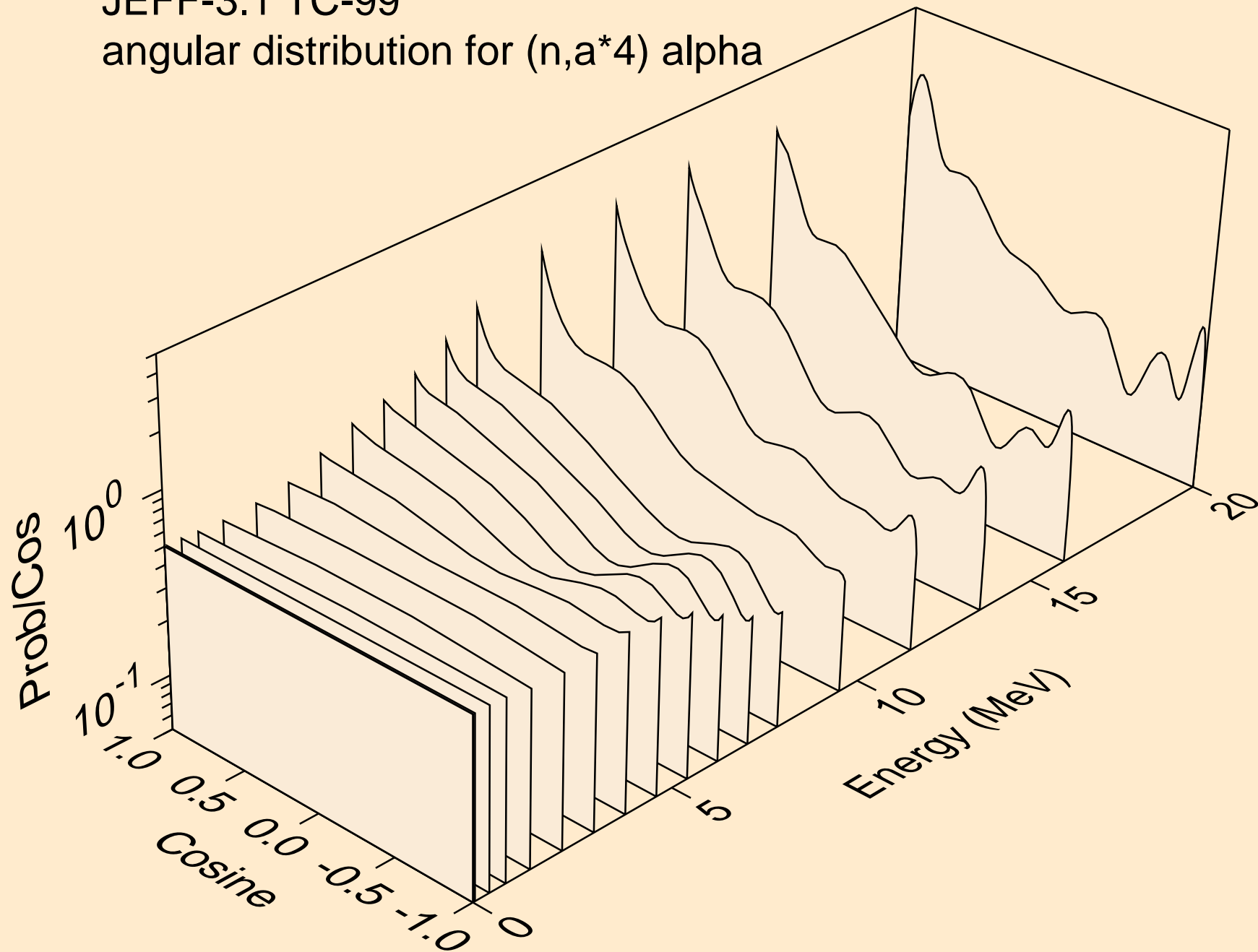
JEFF-3.1 TC-99  
angular distribution for (n,a\*2) alpha



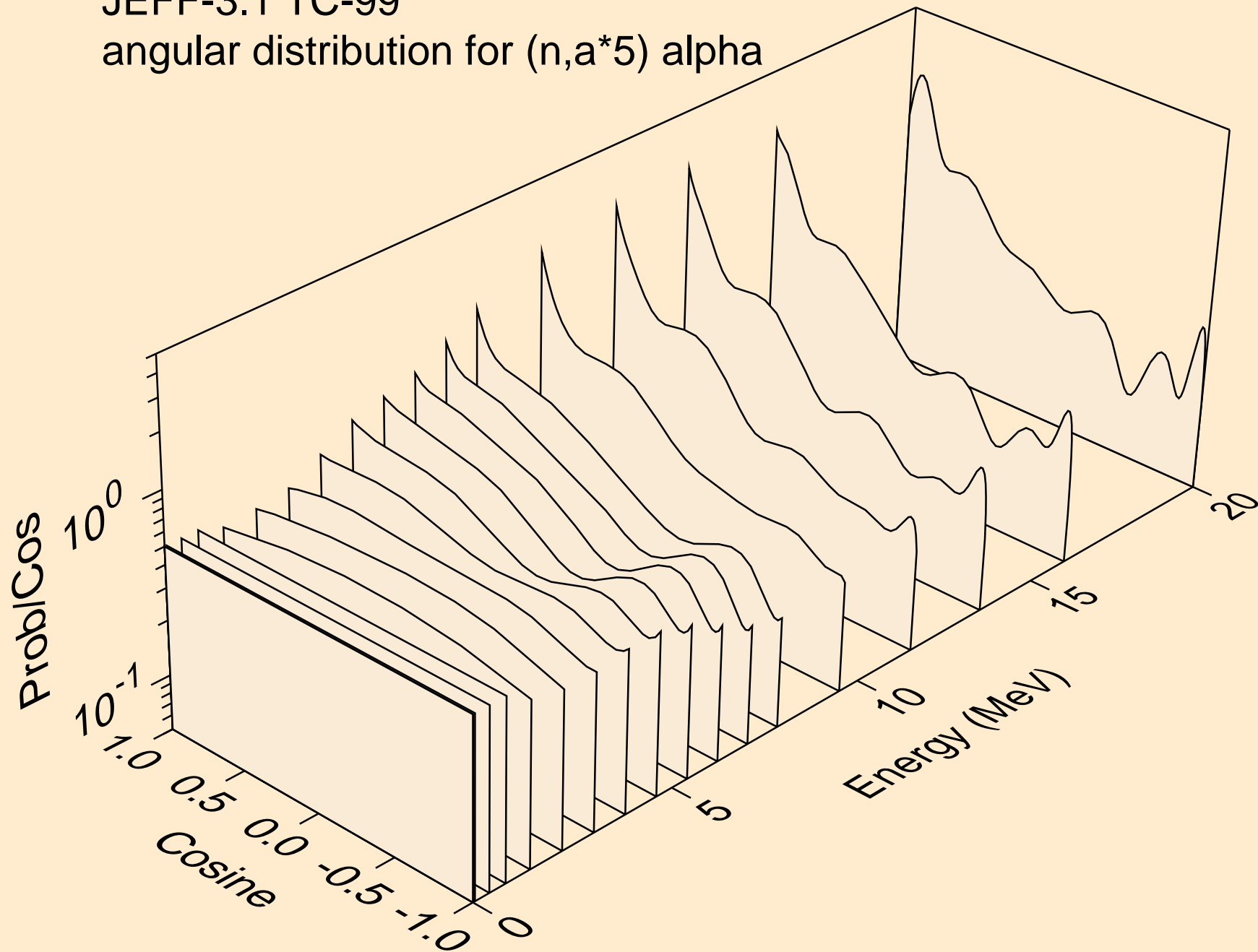
JEFF-3.1 TC-99  
angular distribution for (n,a\*3) alpha



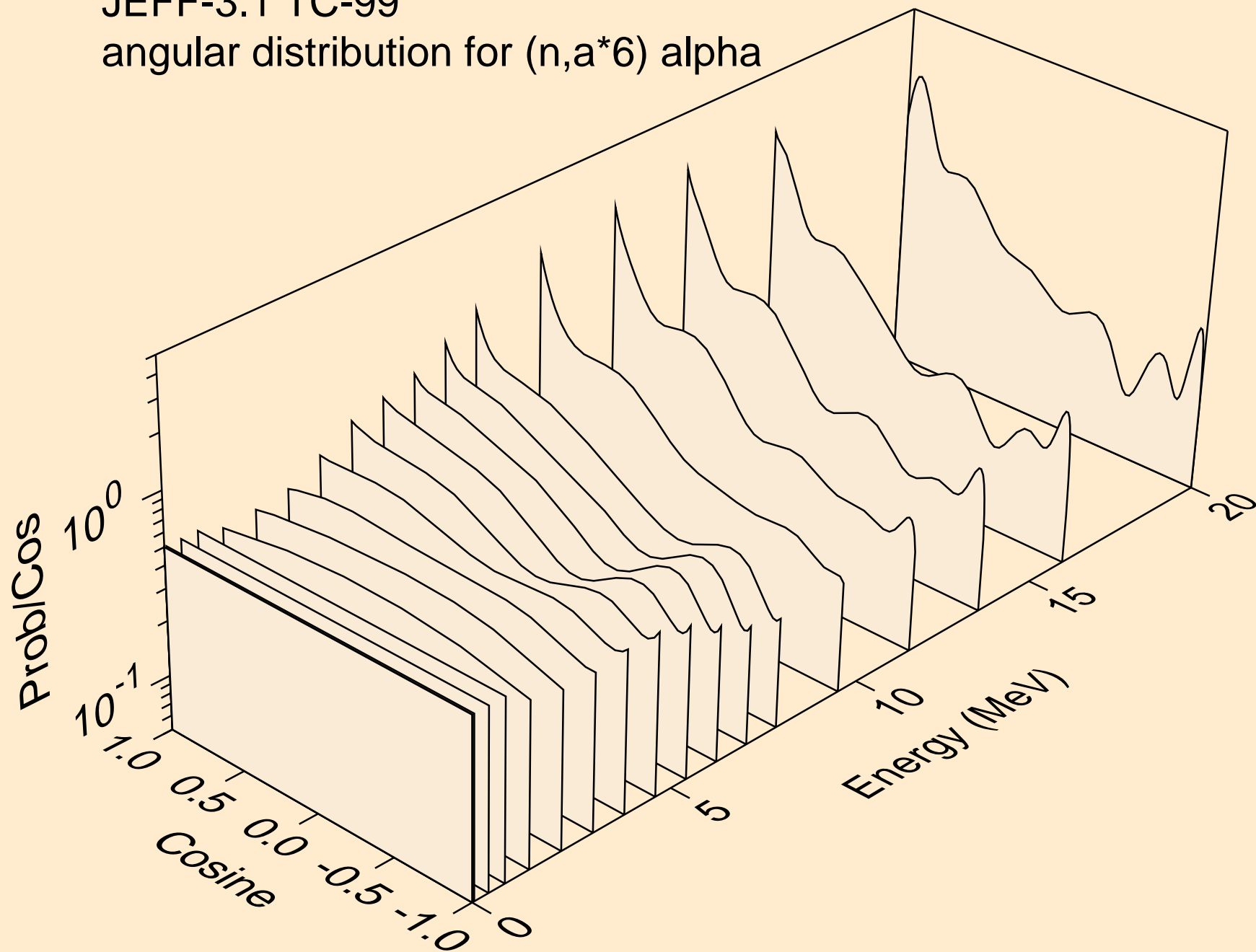
JEFF-3.1 TC-99  
angular distribution for (n,a\*4) alpha



JEFF-3.1 TC-99  
angular distribution for (n,a\*5) alpha

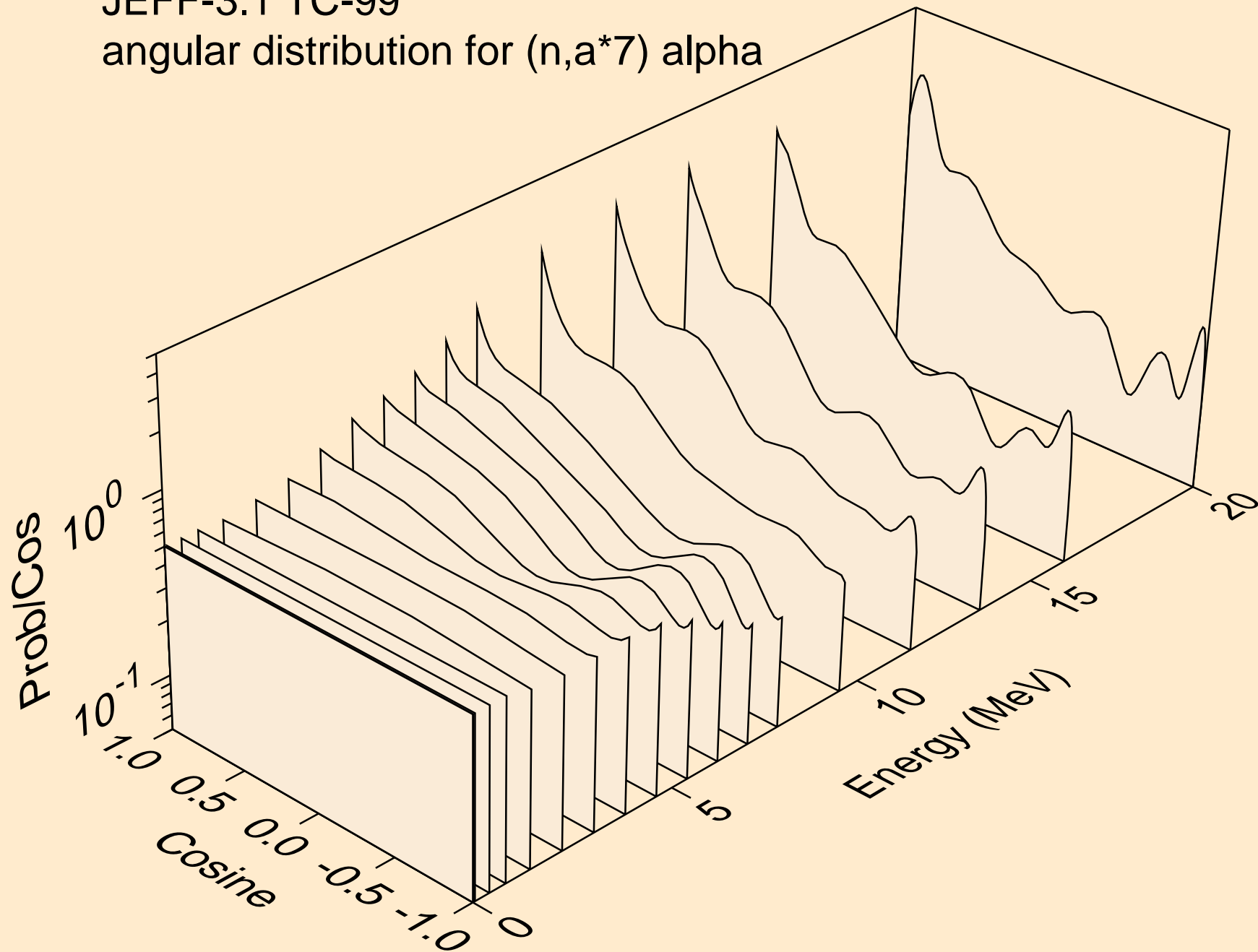


JEFF-3.1 TC-99  
angular distribution for (n,a\*6) alpha

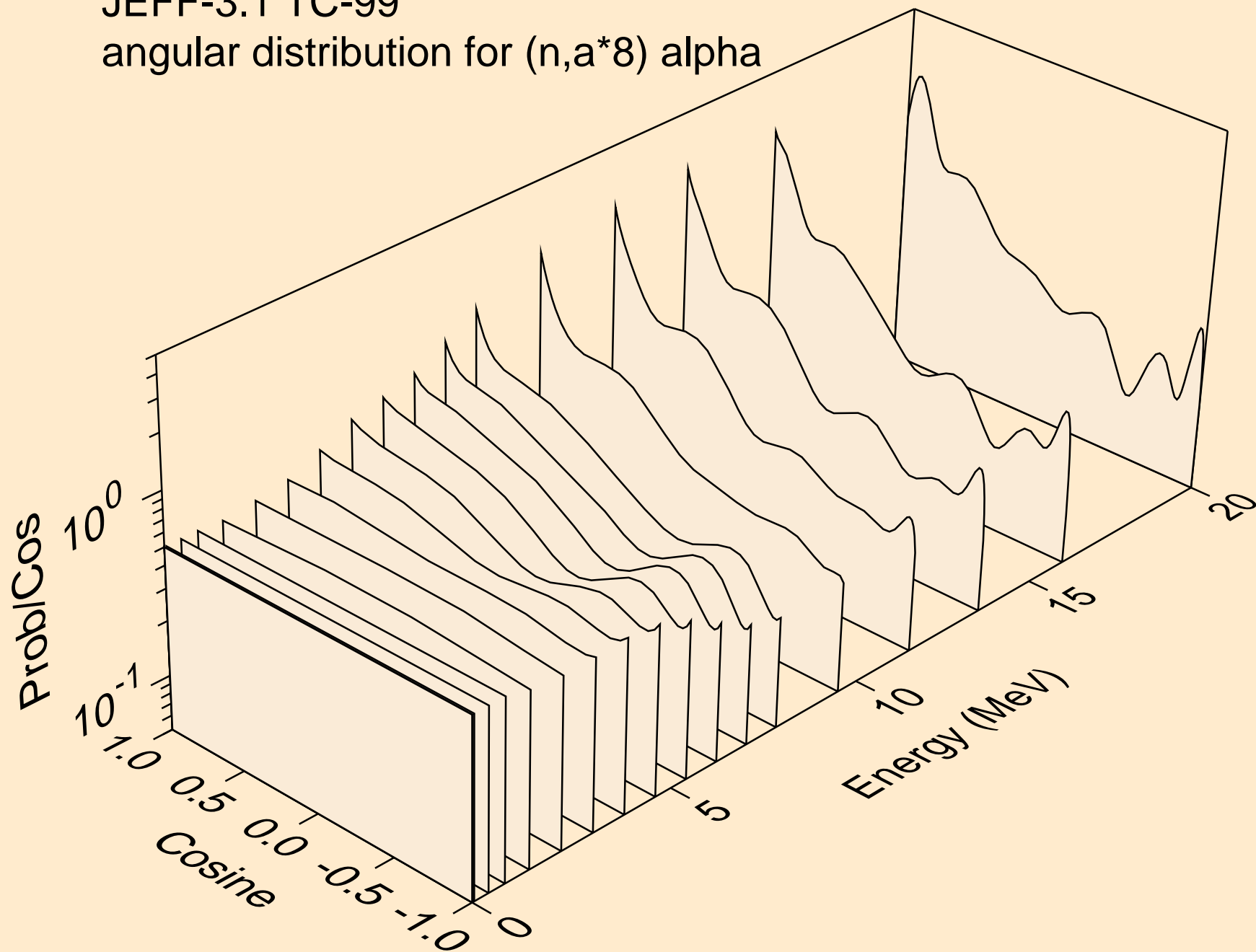




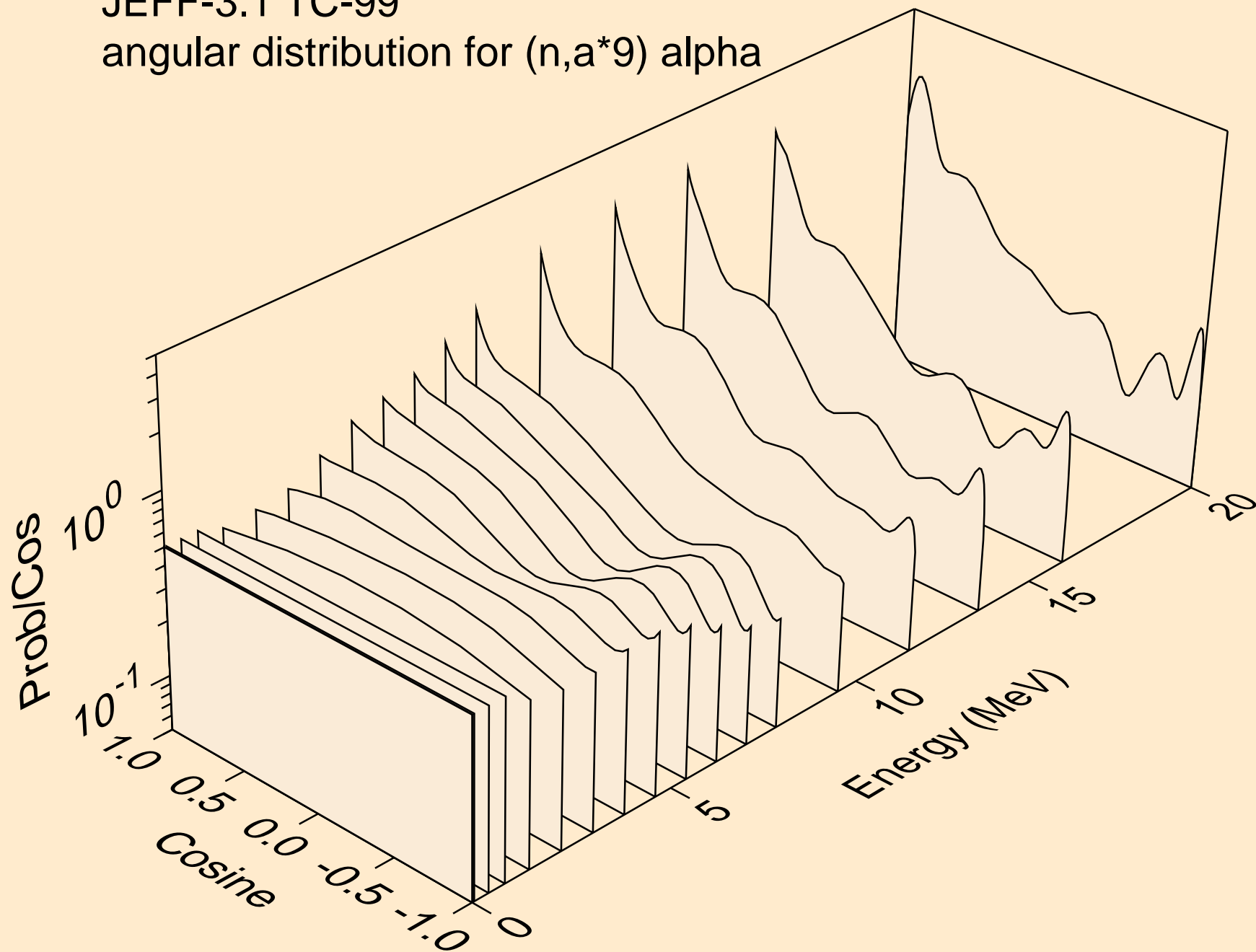
JEFF-3.1 TC-99  
angular distribution for (n,a\*7) alpha



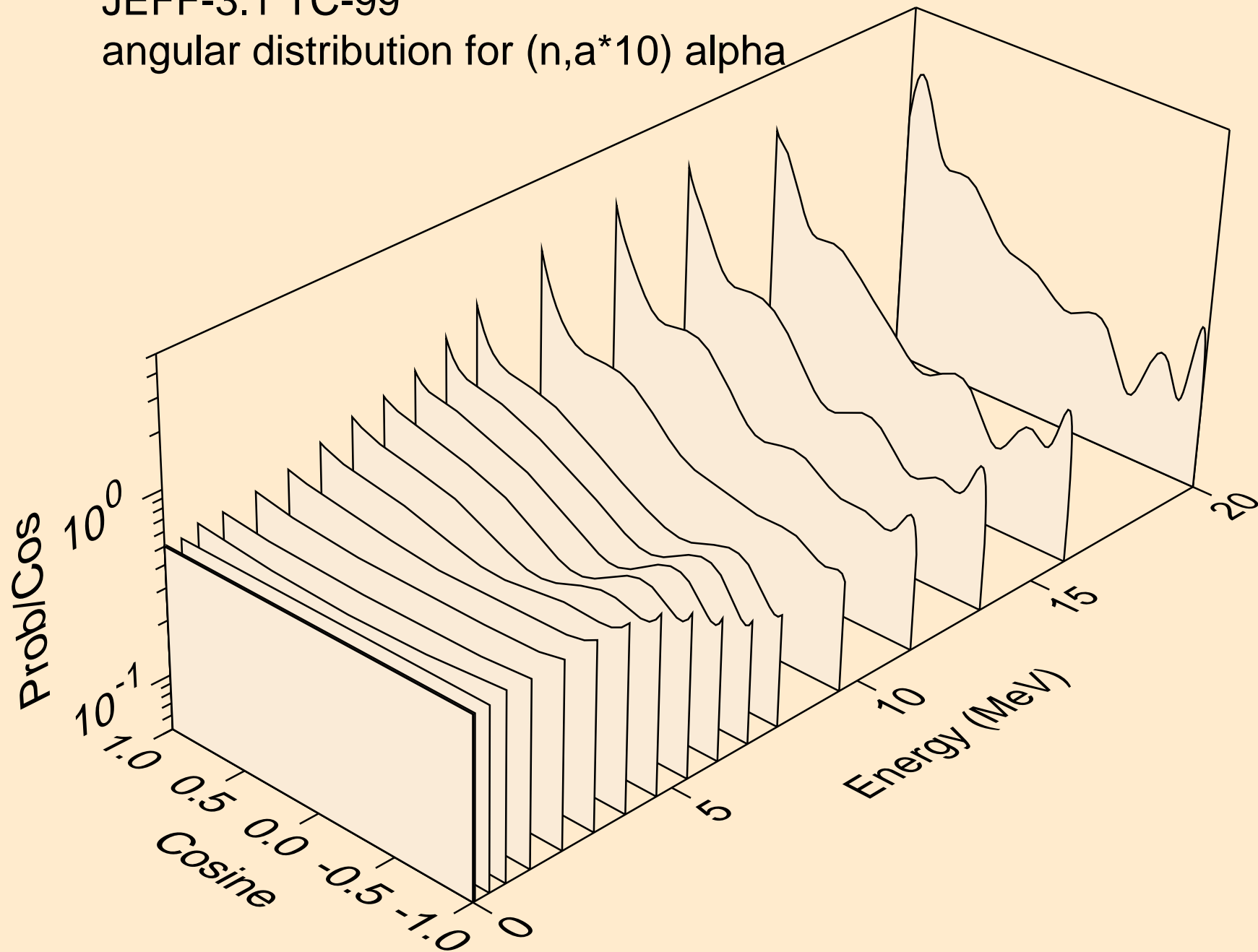
JEFF-3.1 TC-99  
angular distribution for (n,a\*8) alpha



JEFF-3.1 TC-99  
angular distribution for (n,a\*9) alpha



JEFF-3.1 TC-99  
angular distribution for (n,a\*10) alpha



JEFF-3.1 TC-99  
alphas from (n,a\*c)

