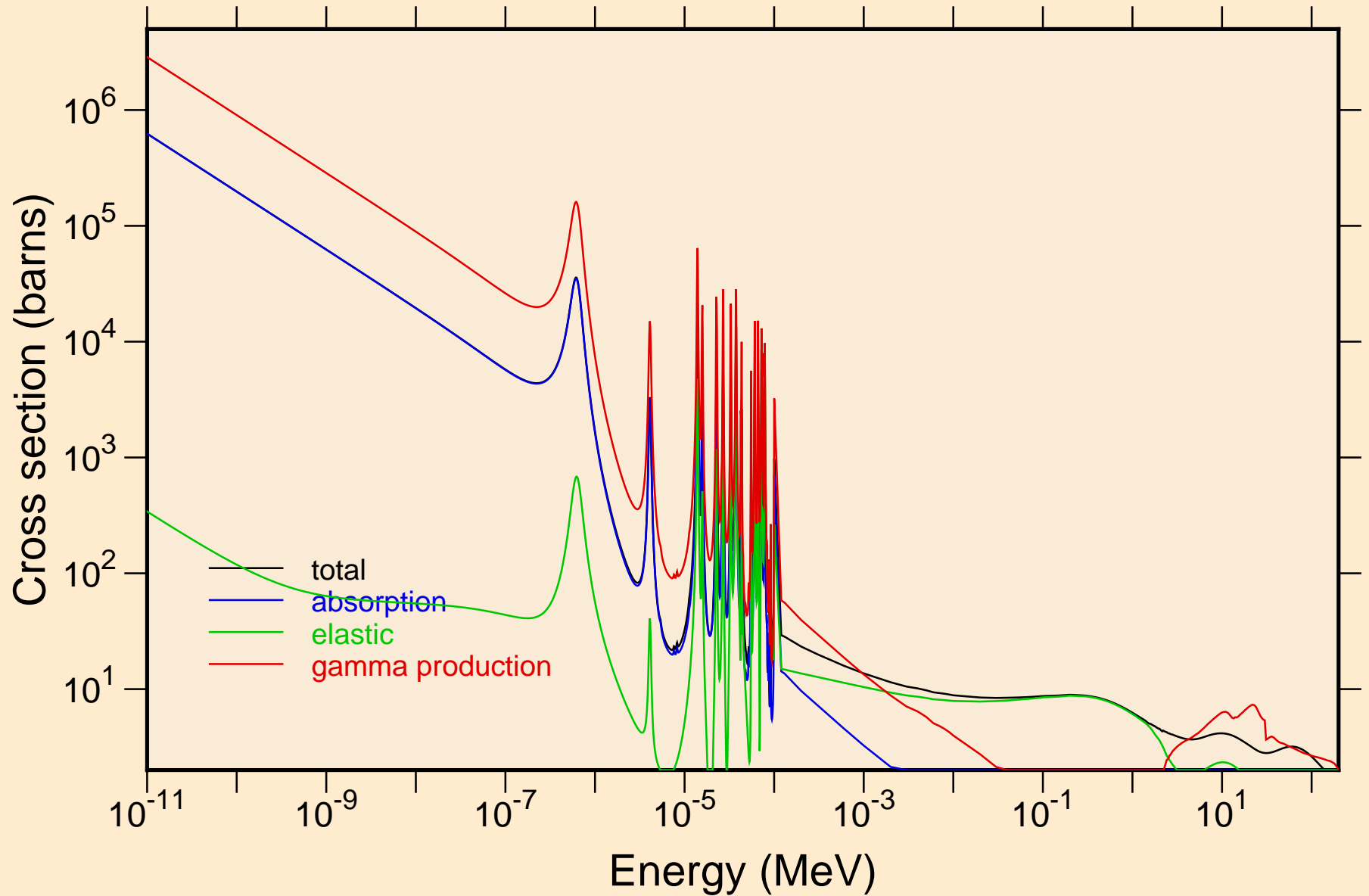
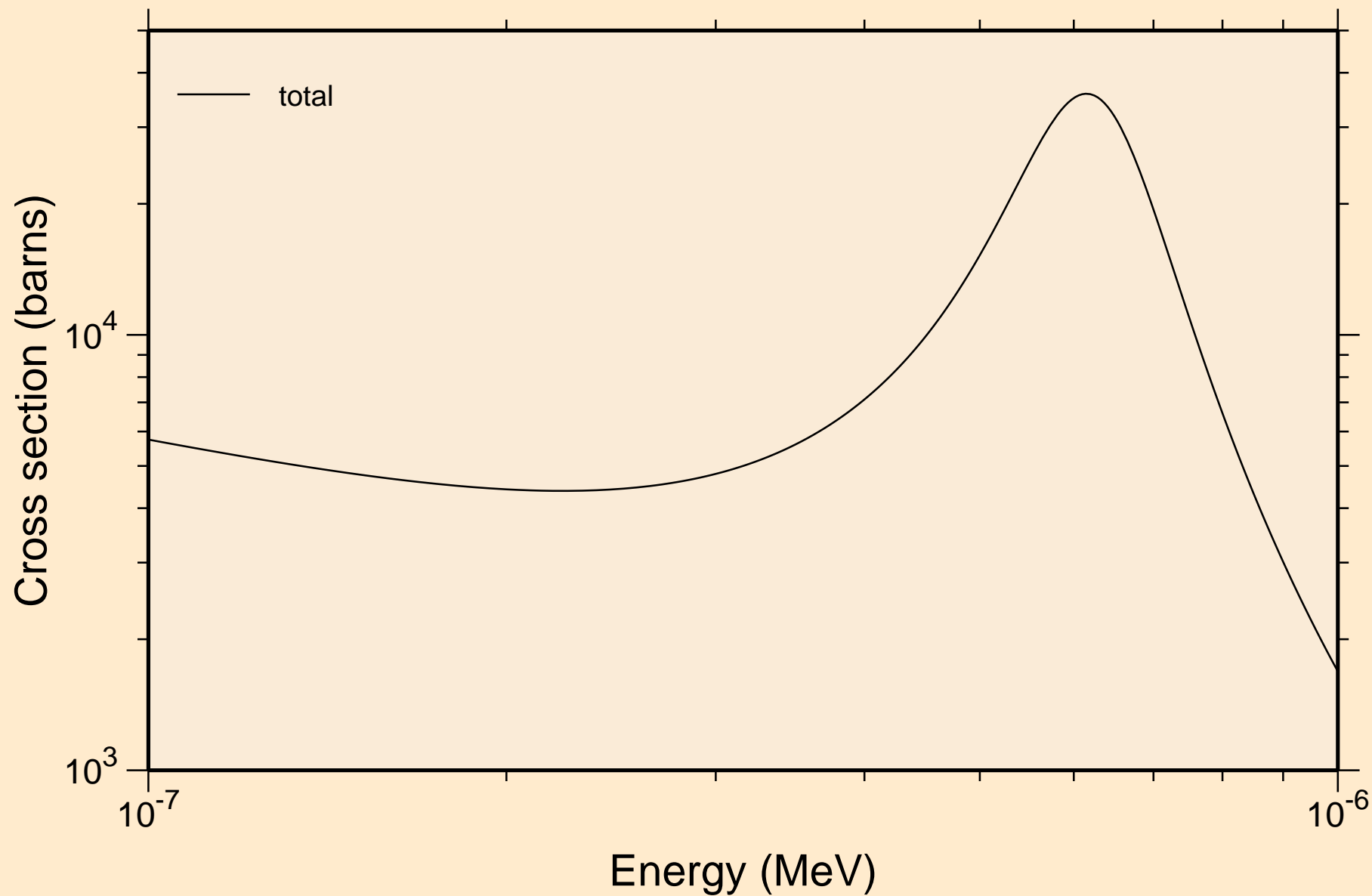


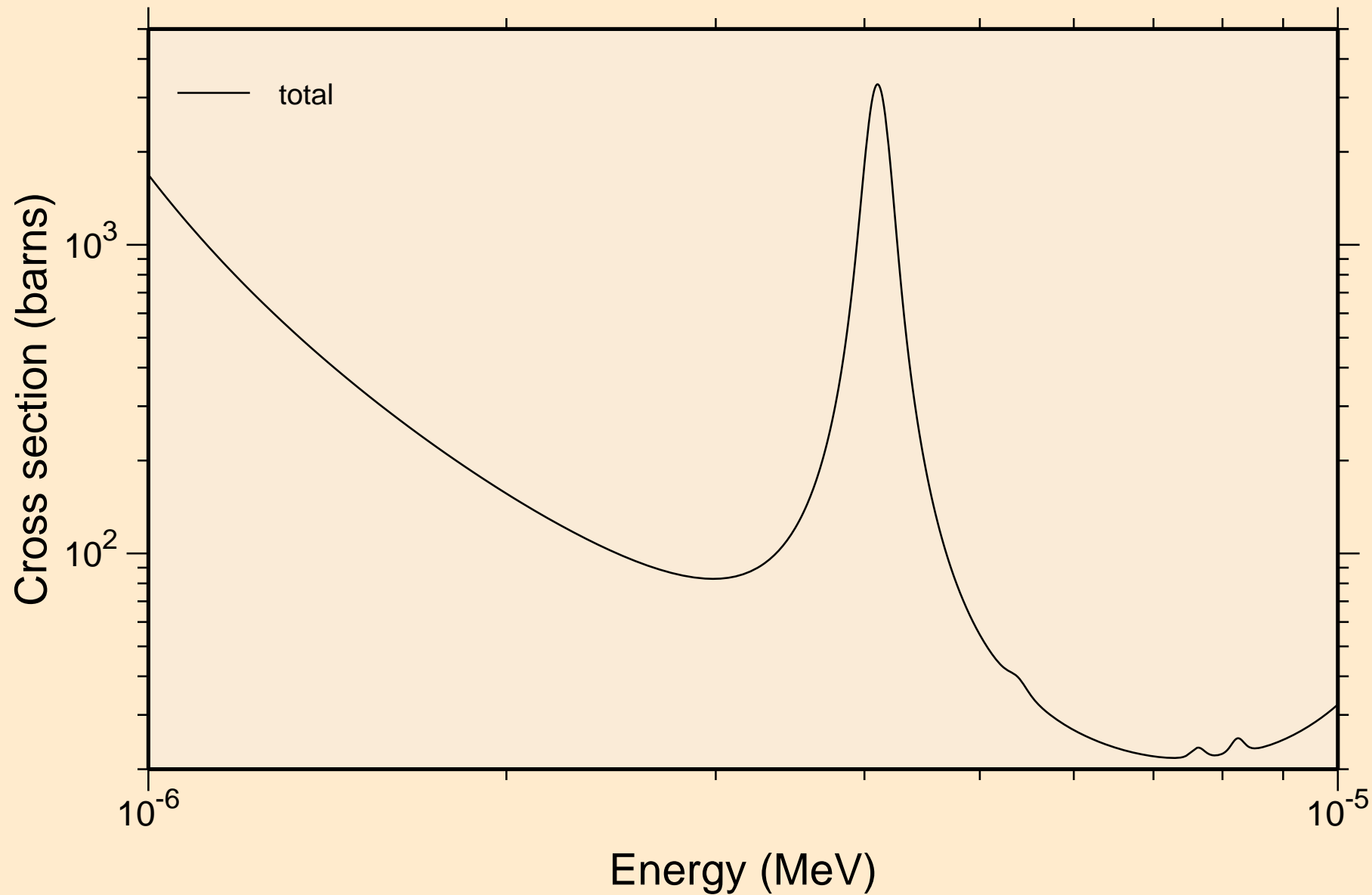
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Principal cross sections



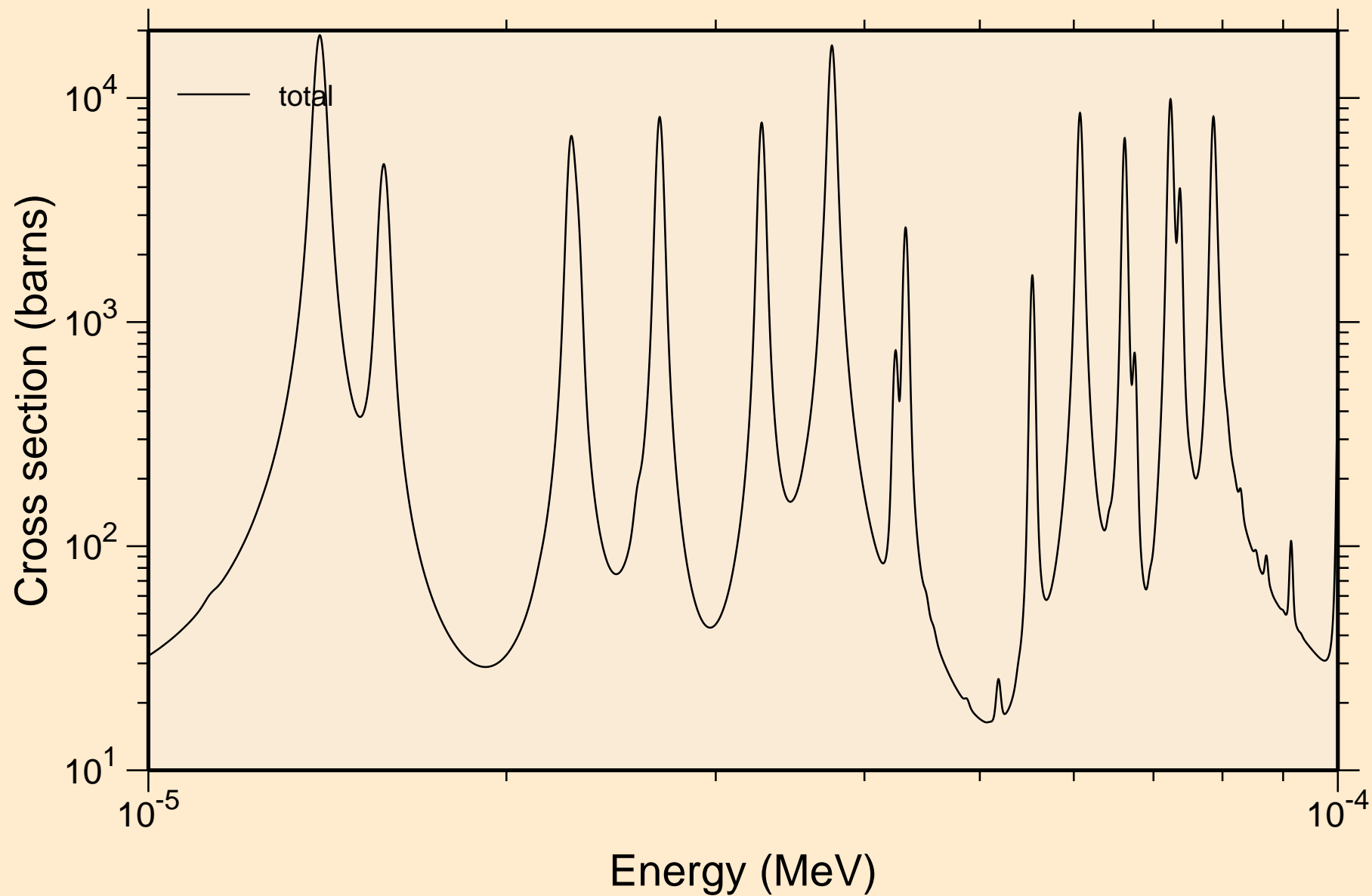
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resonance total cross section



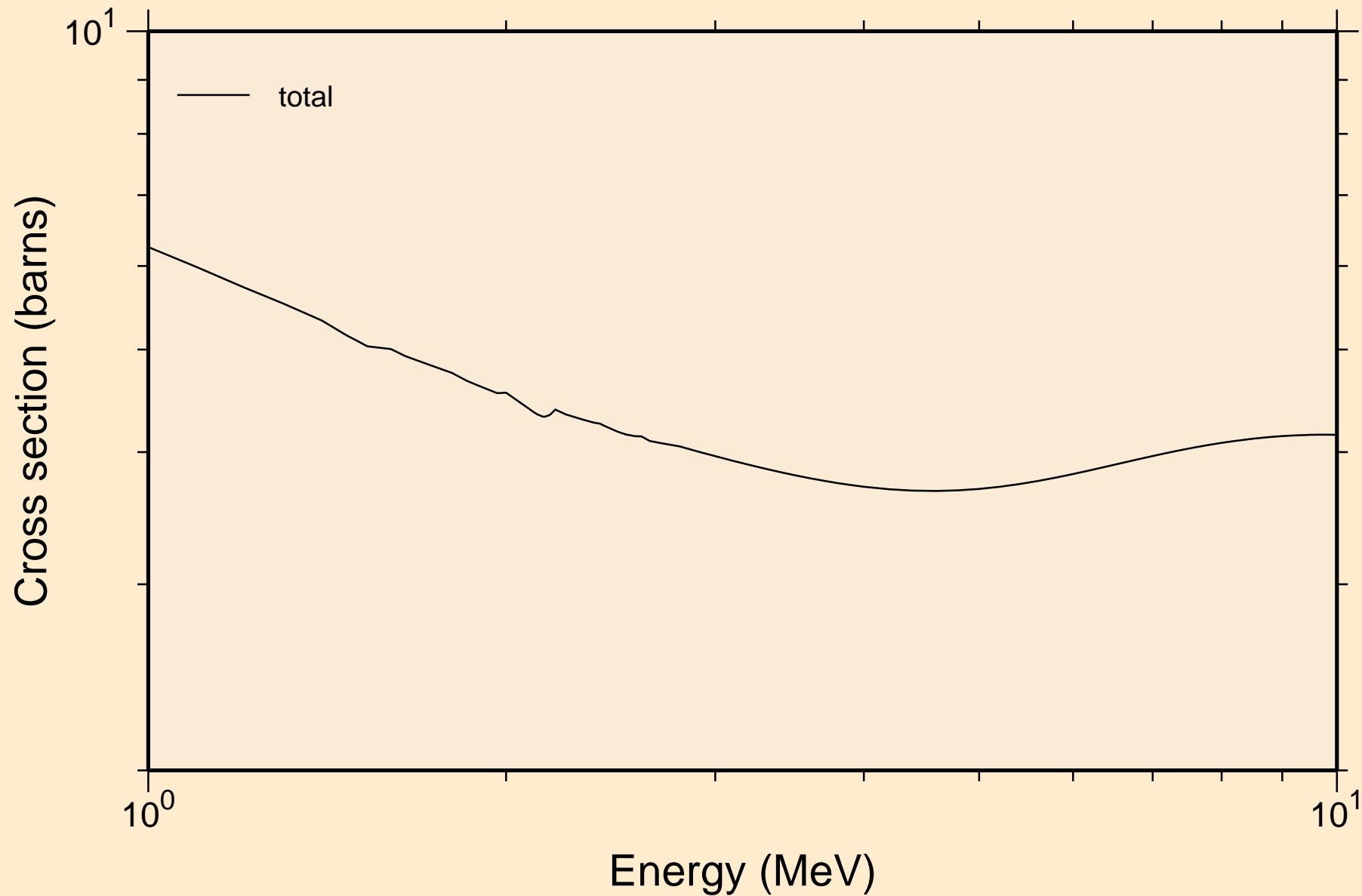
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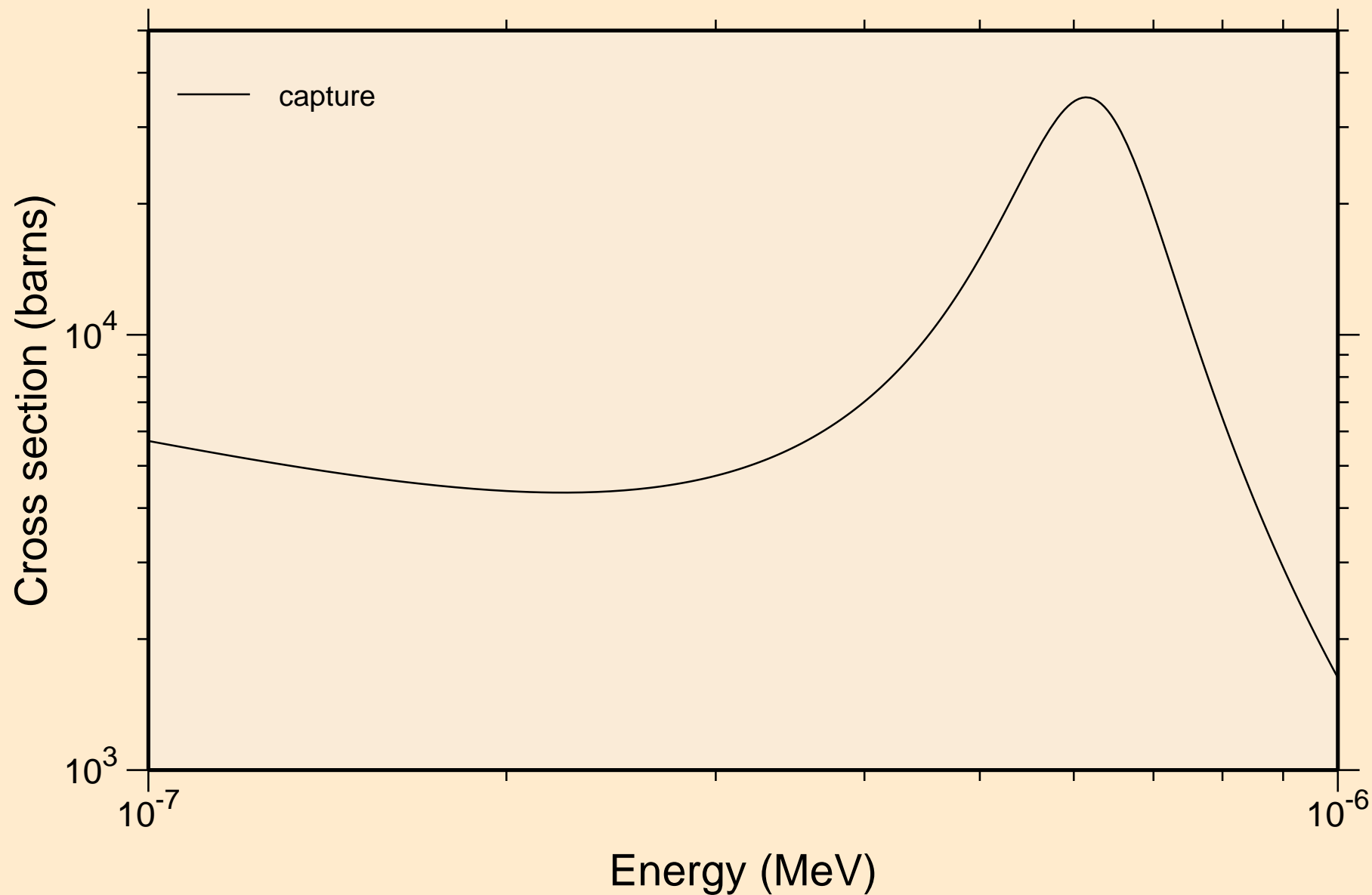
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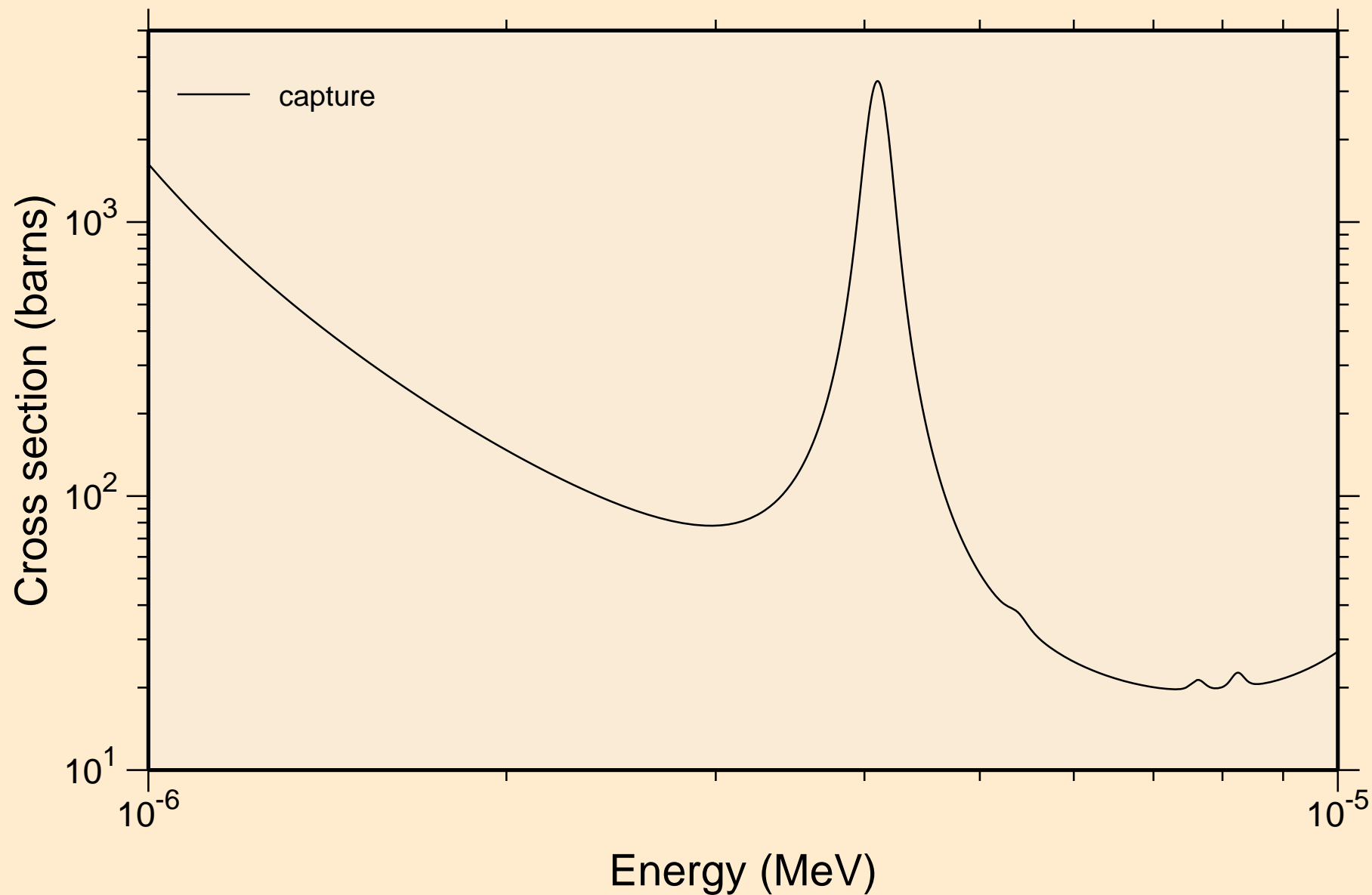
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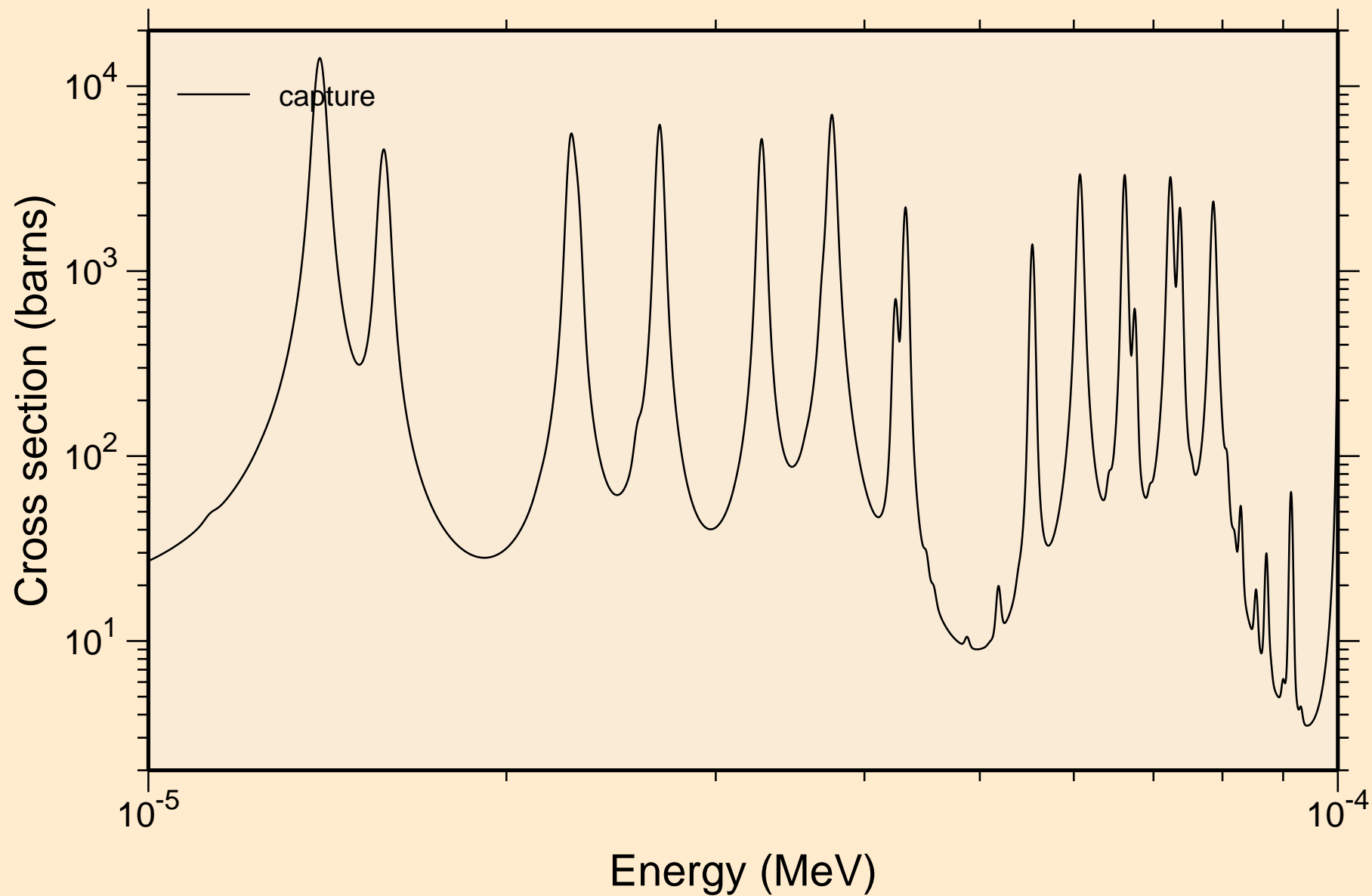
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resonance absorption cross sections



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
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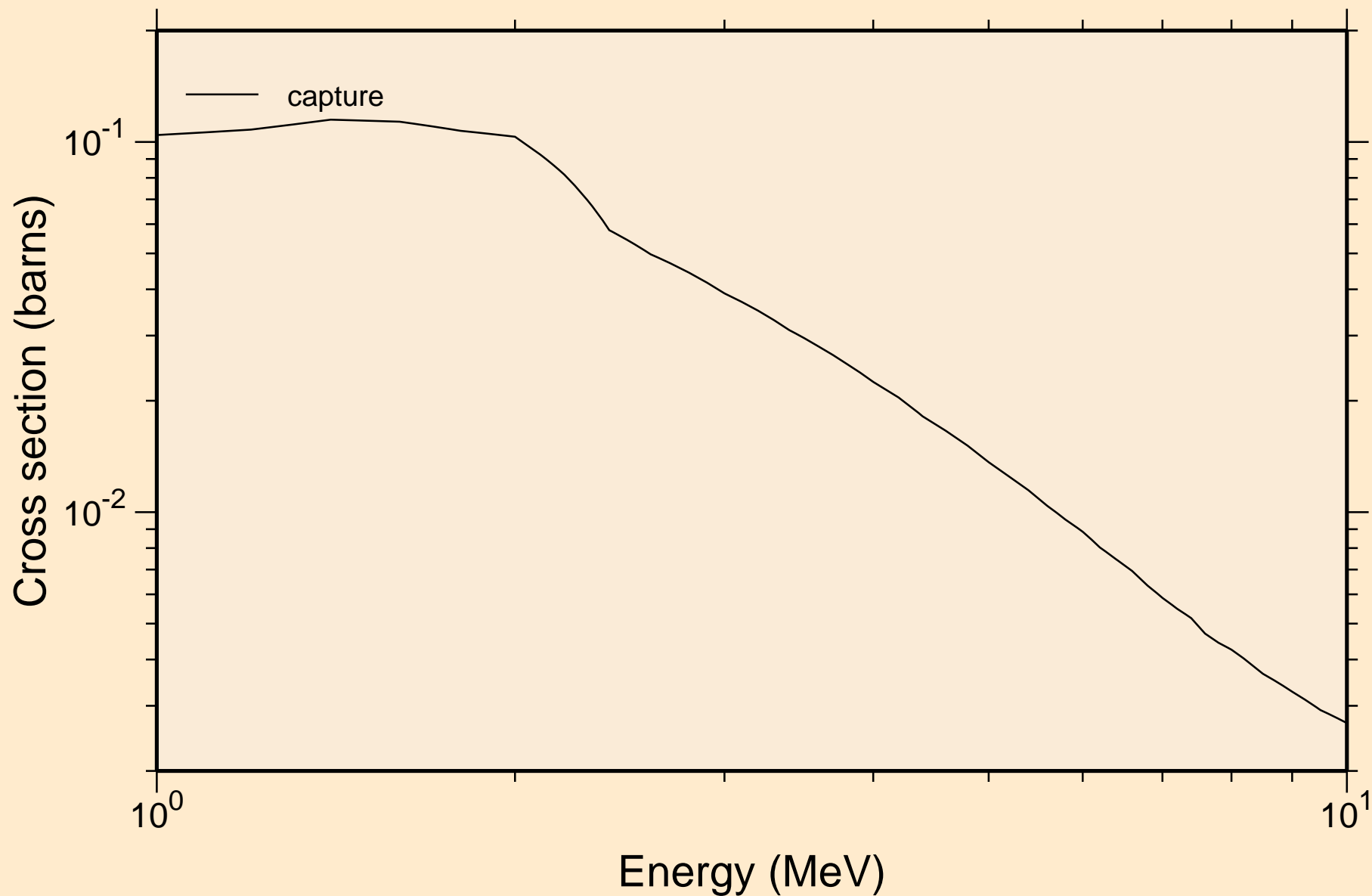


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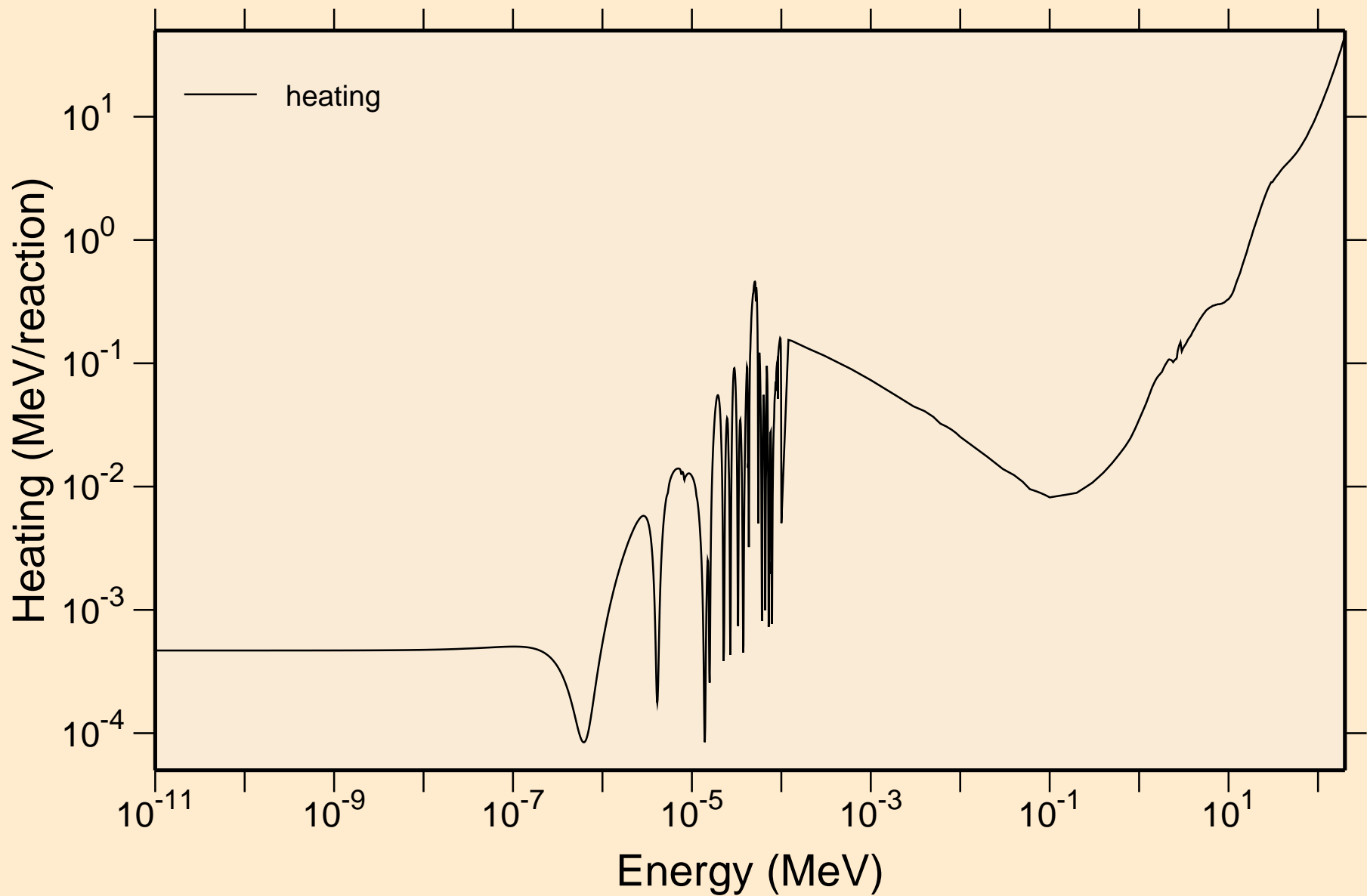




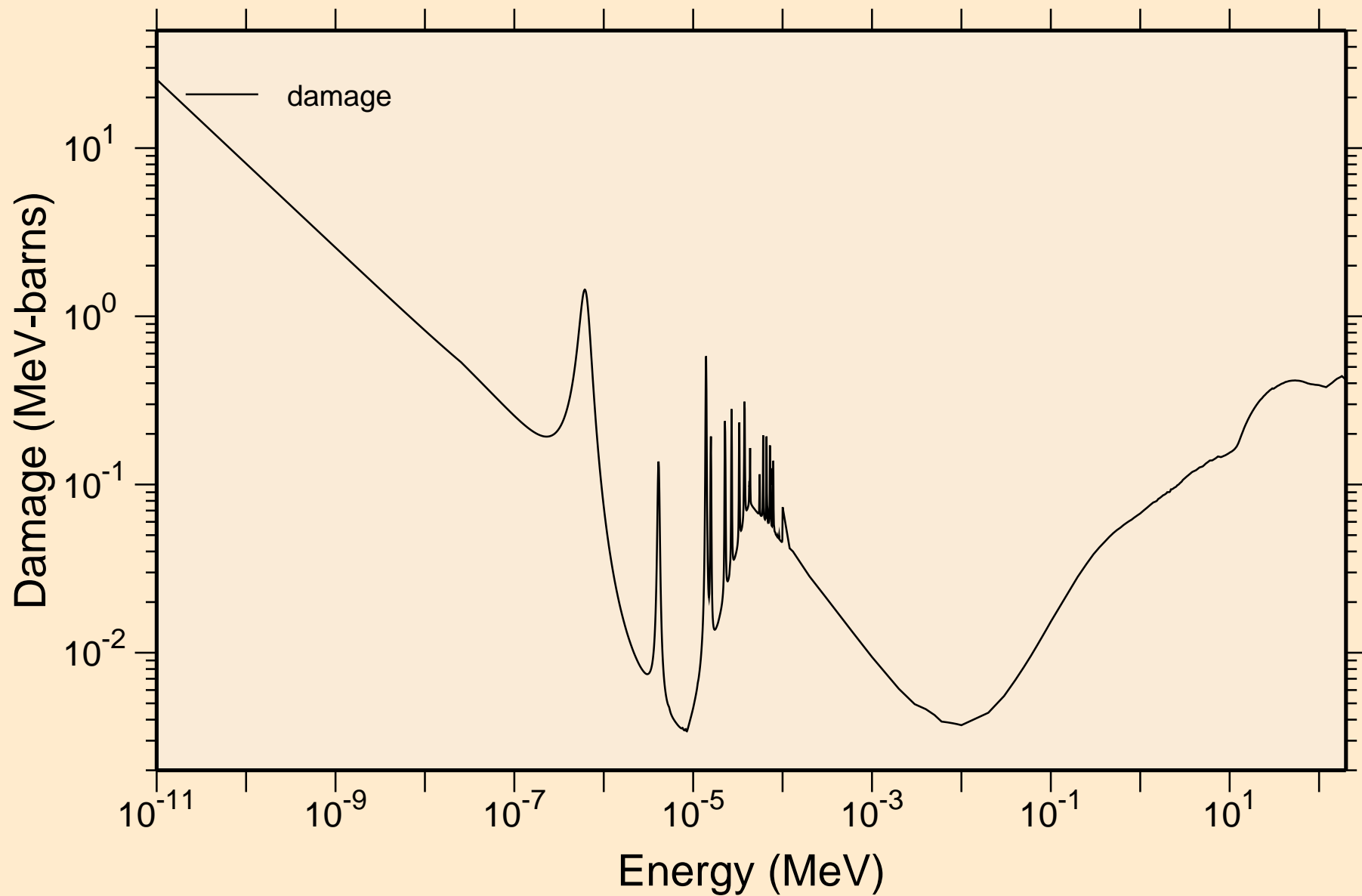
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resonance absorption cross sections



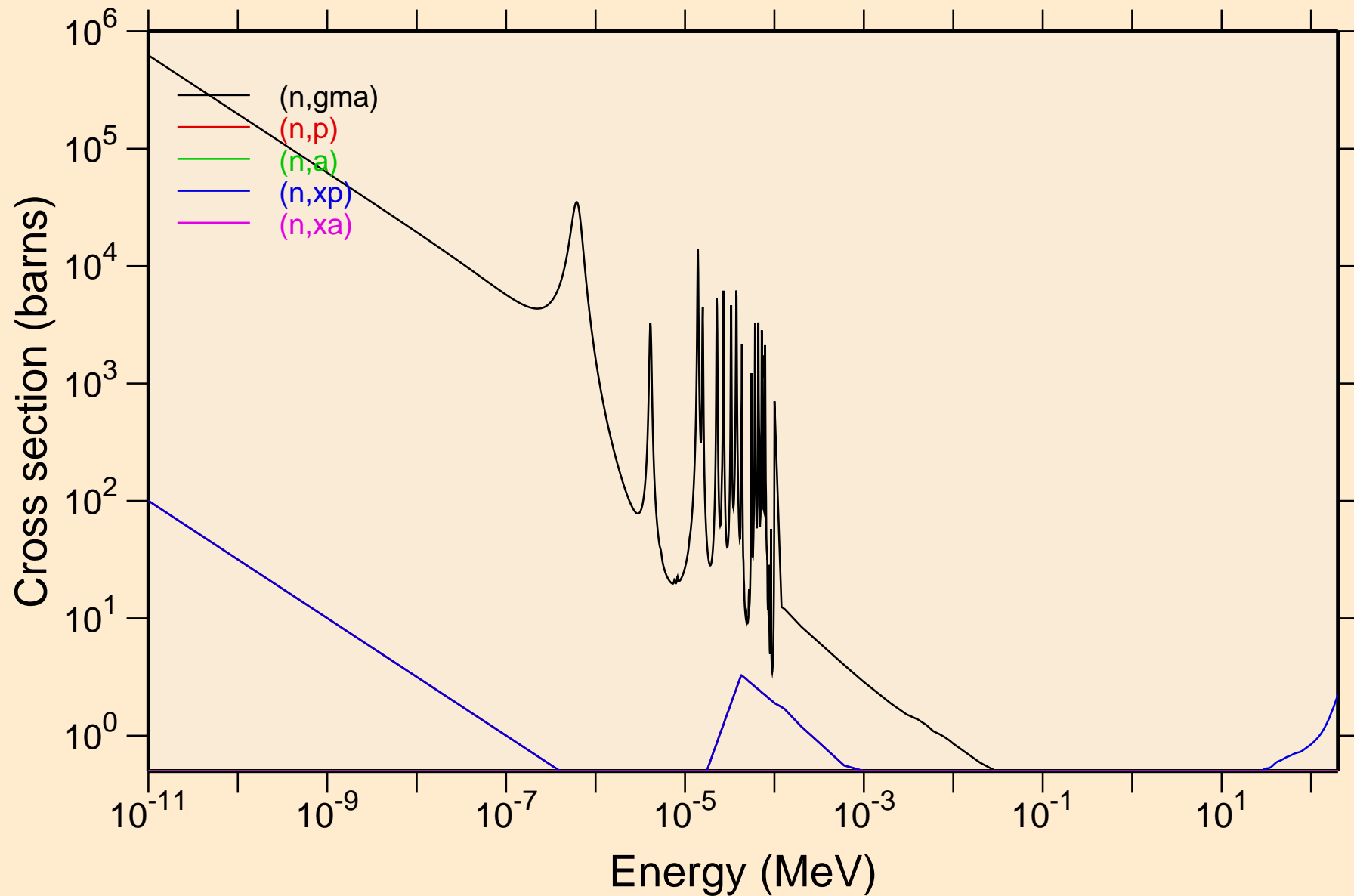
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Heating



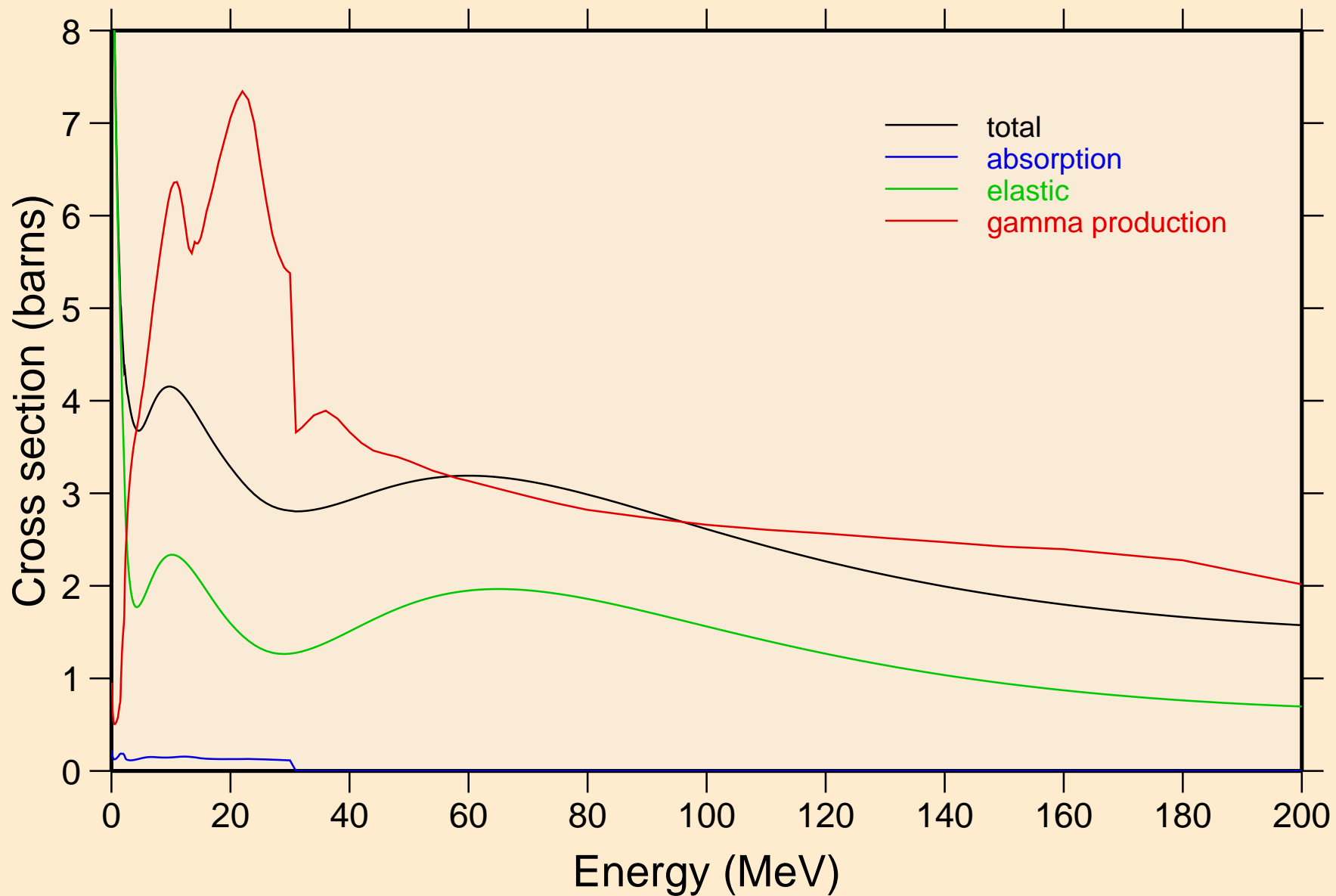
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Damage



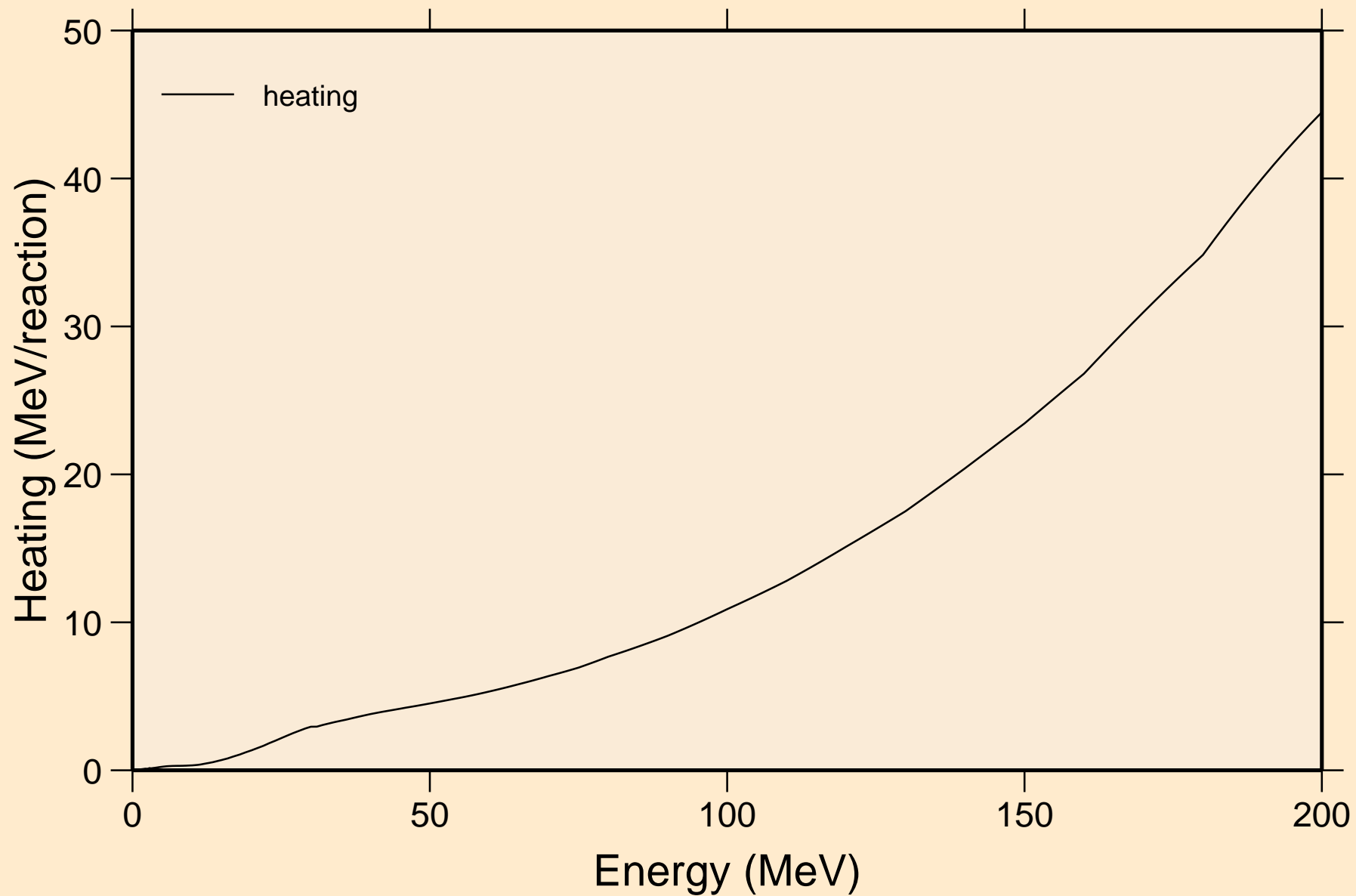
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Non-threshold reactions



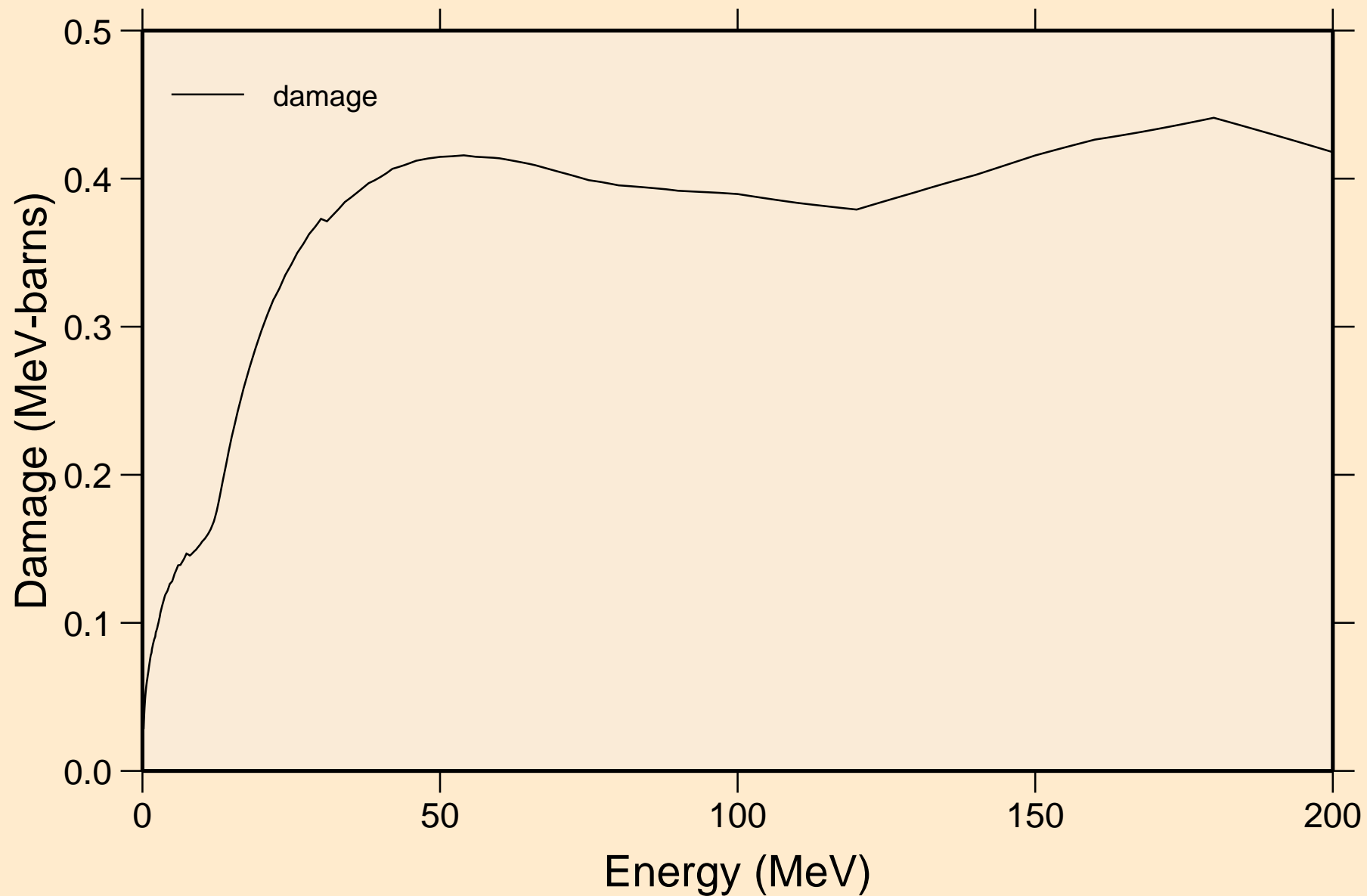
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Principal cross sections



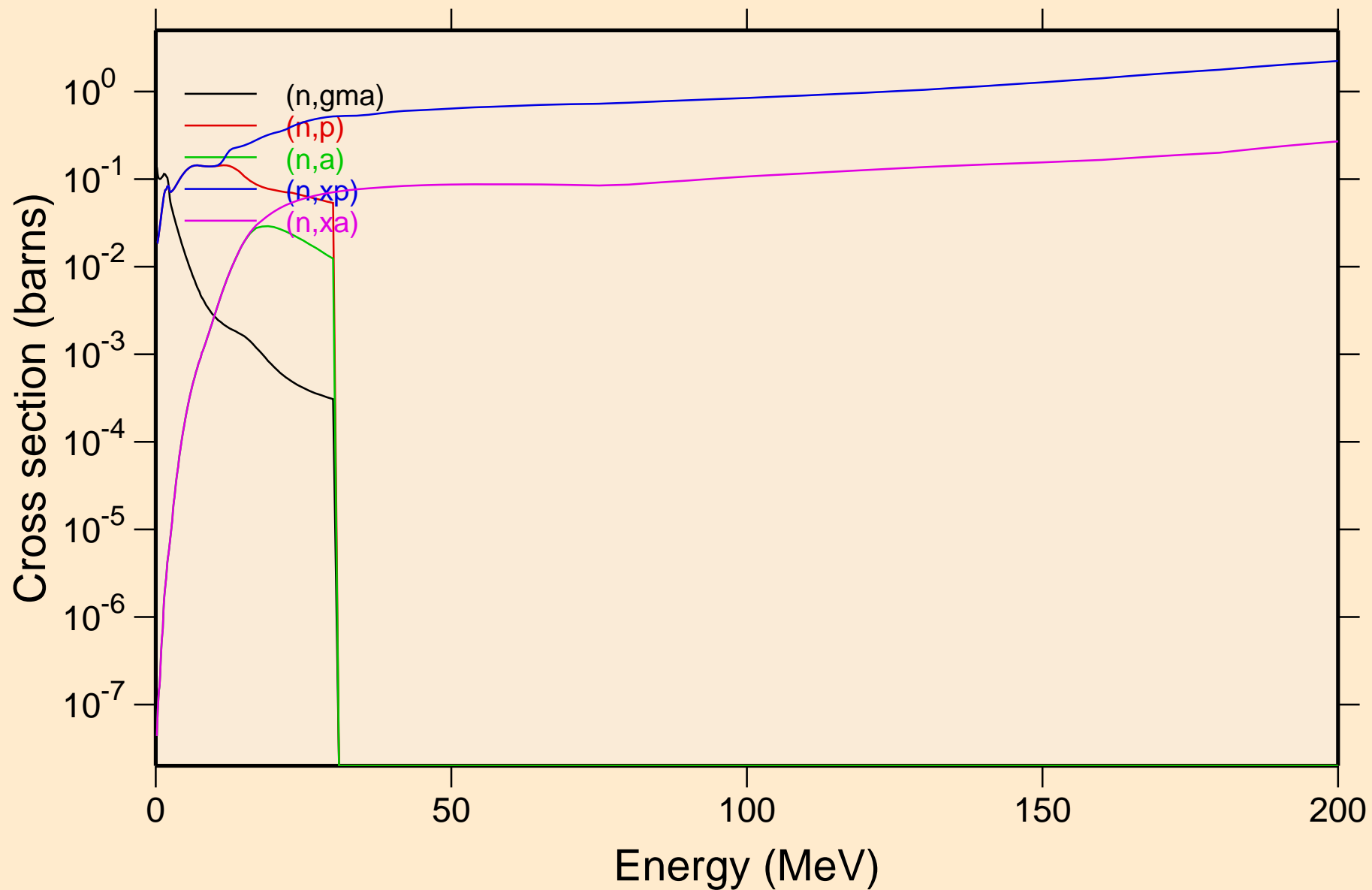
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Heating



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Damage

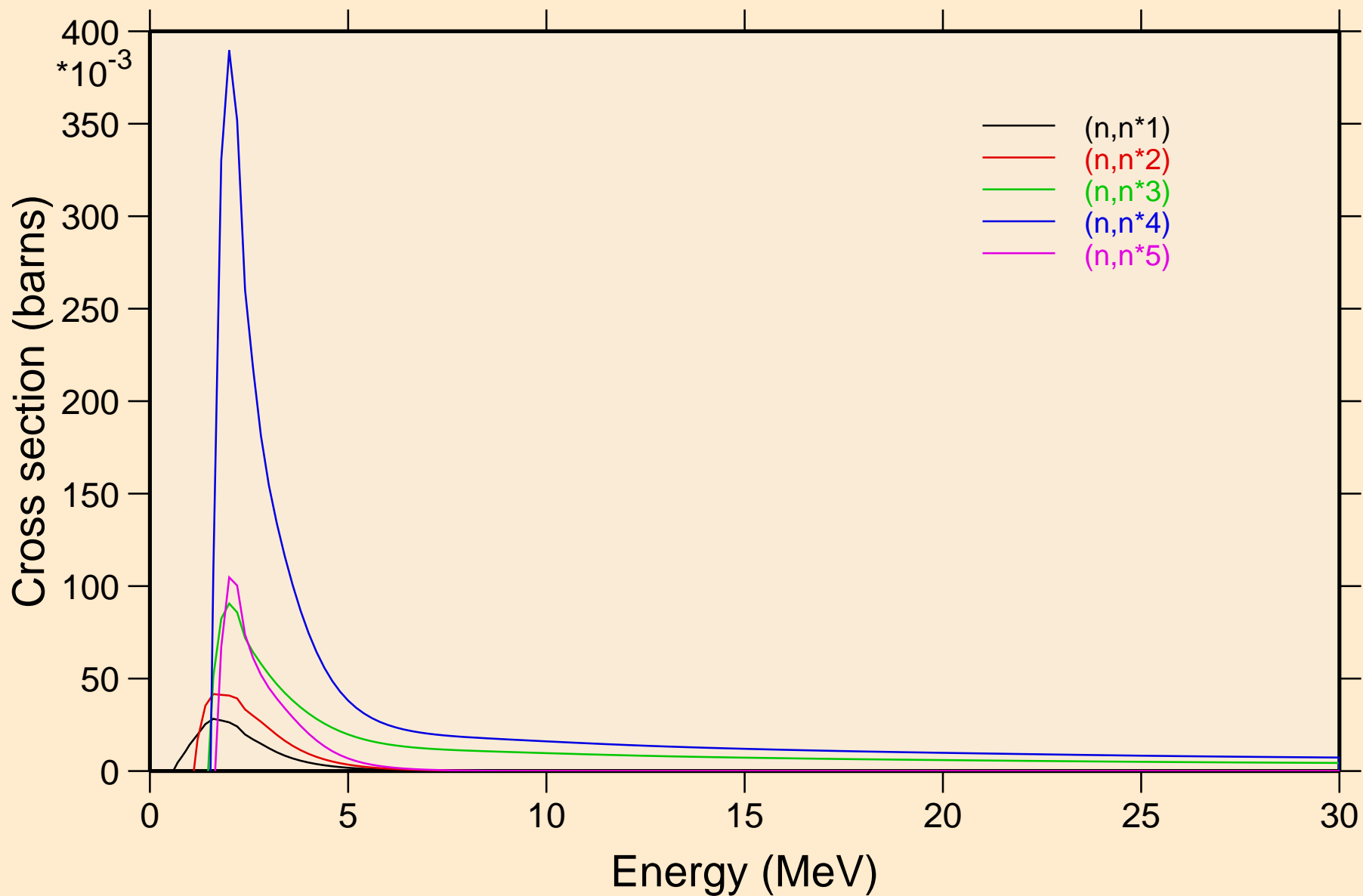


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Non-threshold reactions

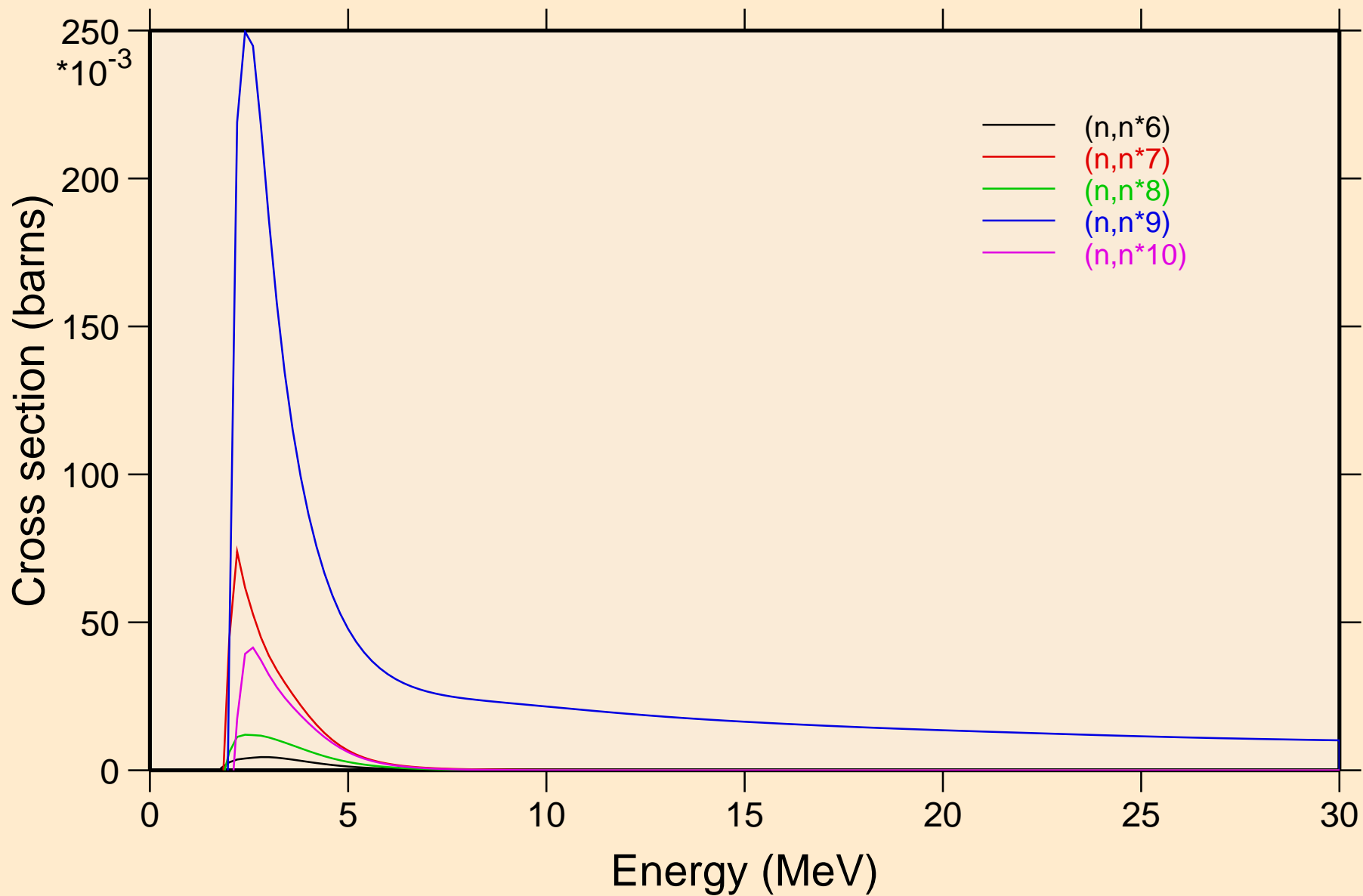




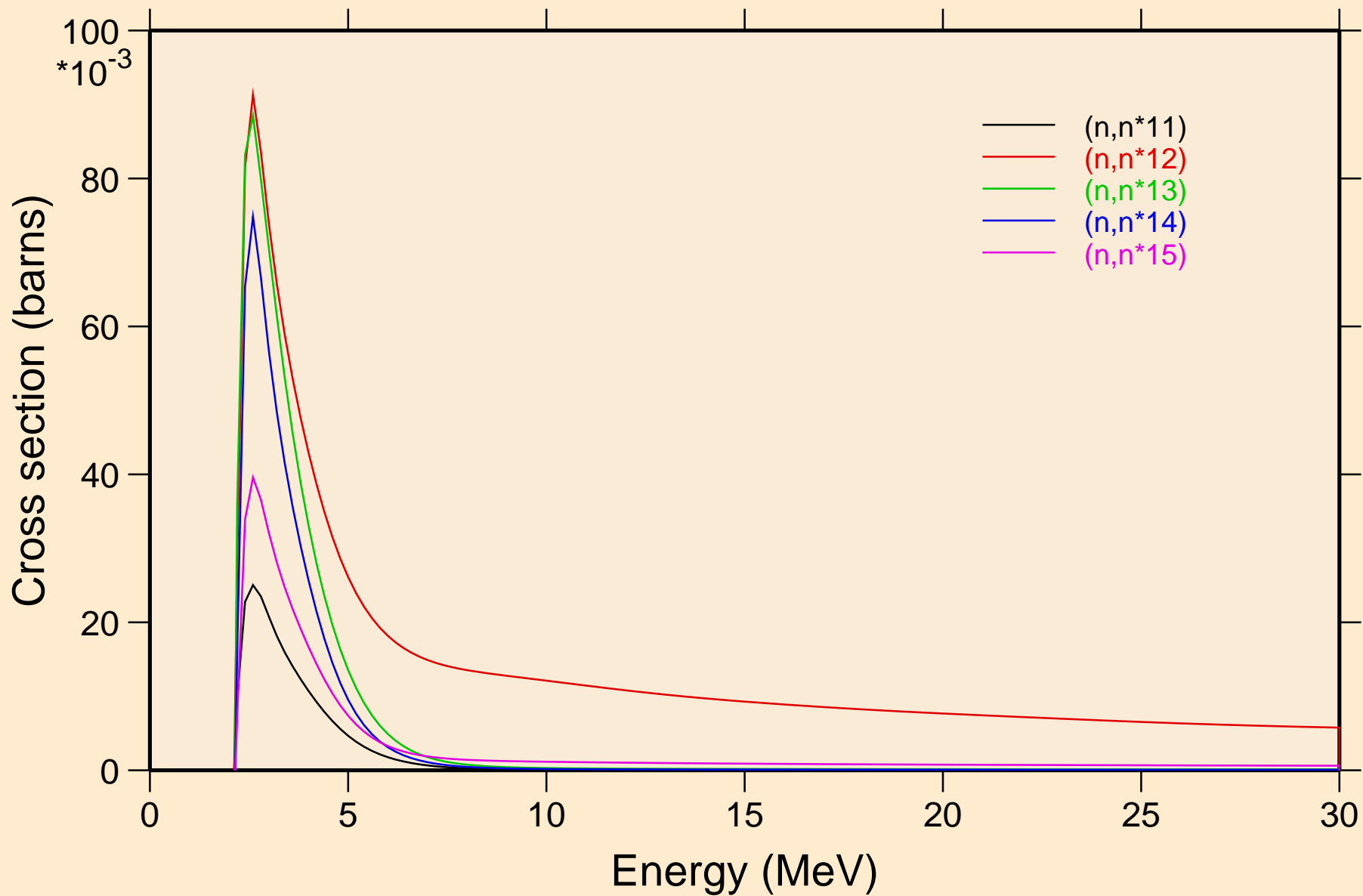
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Inelastic levels



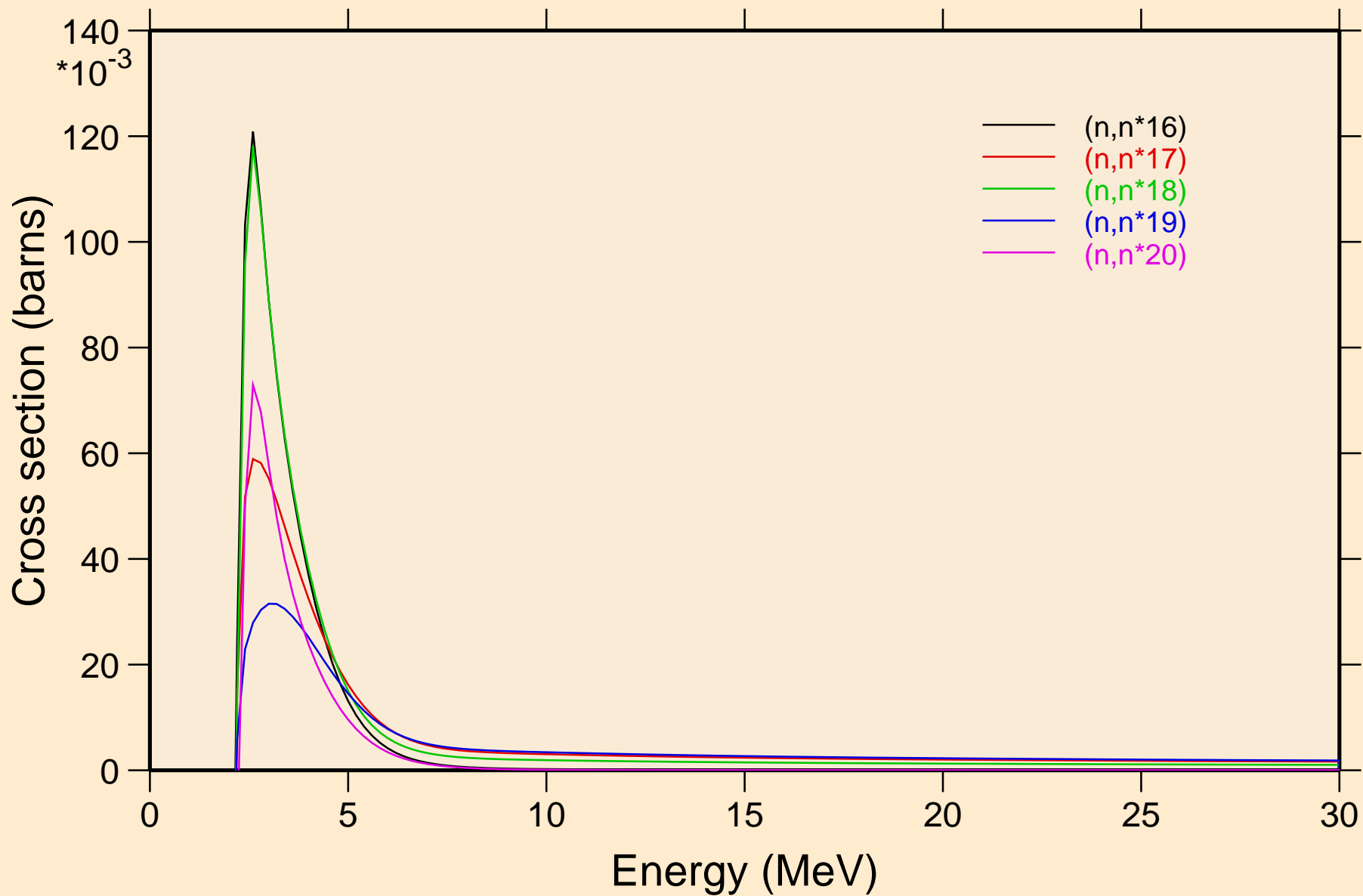
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Inelastic levels



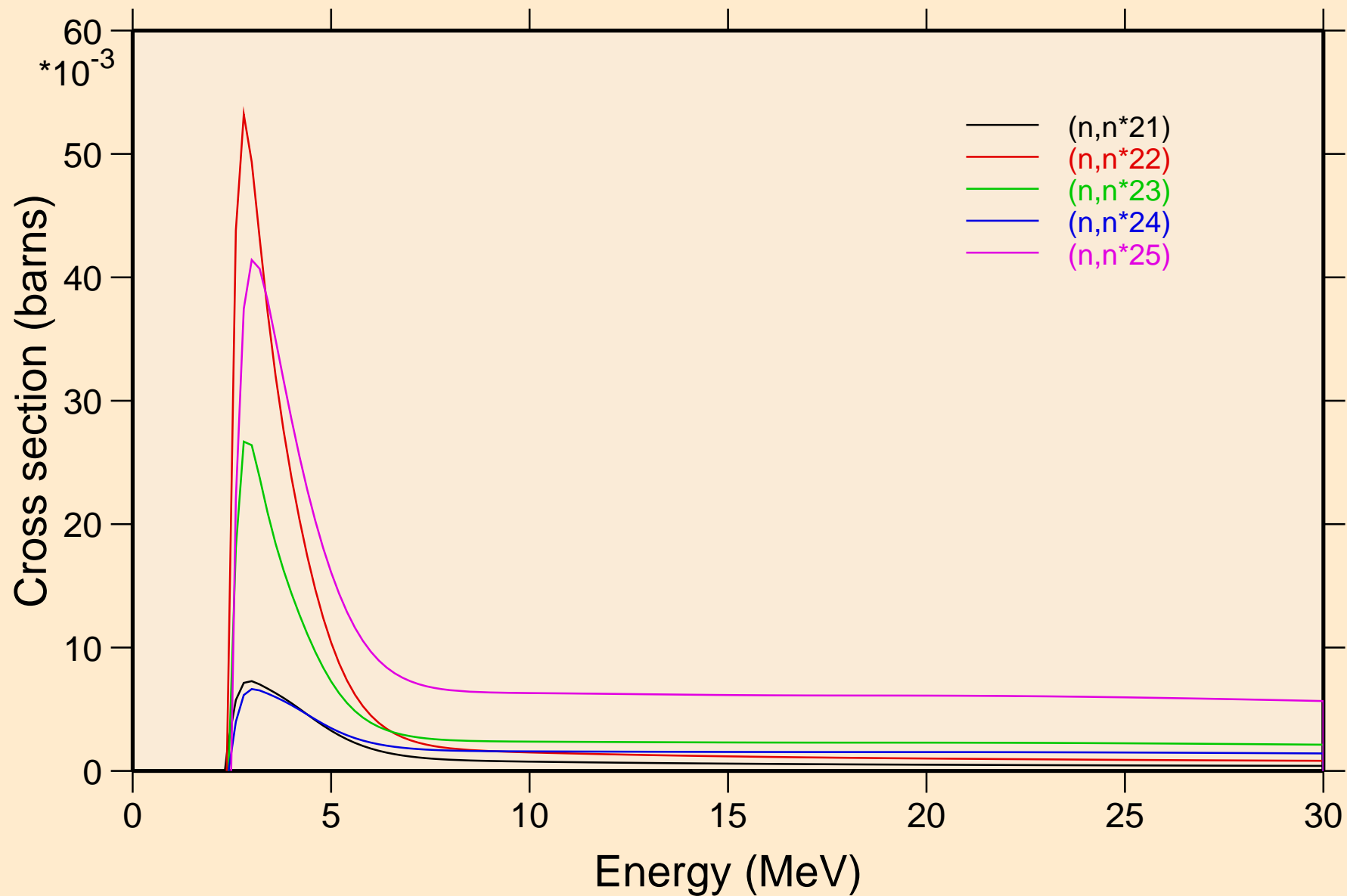
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Inelastic levels



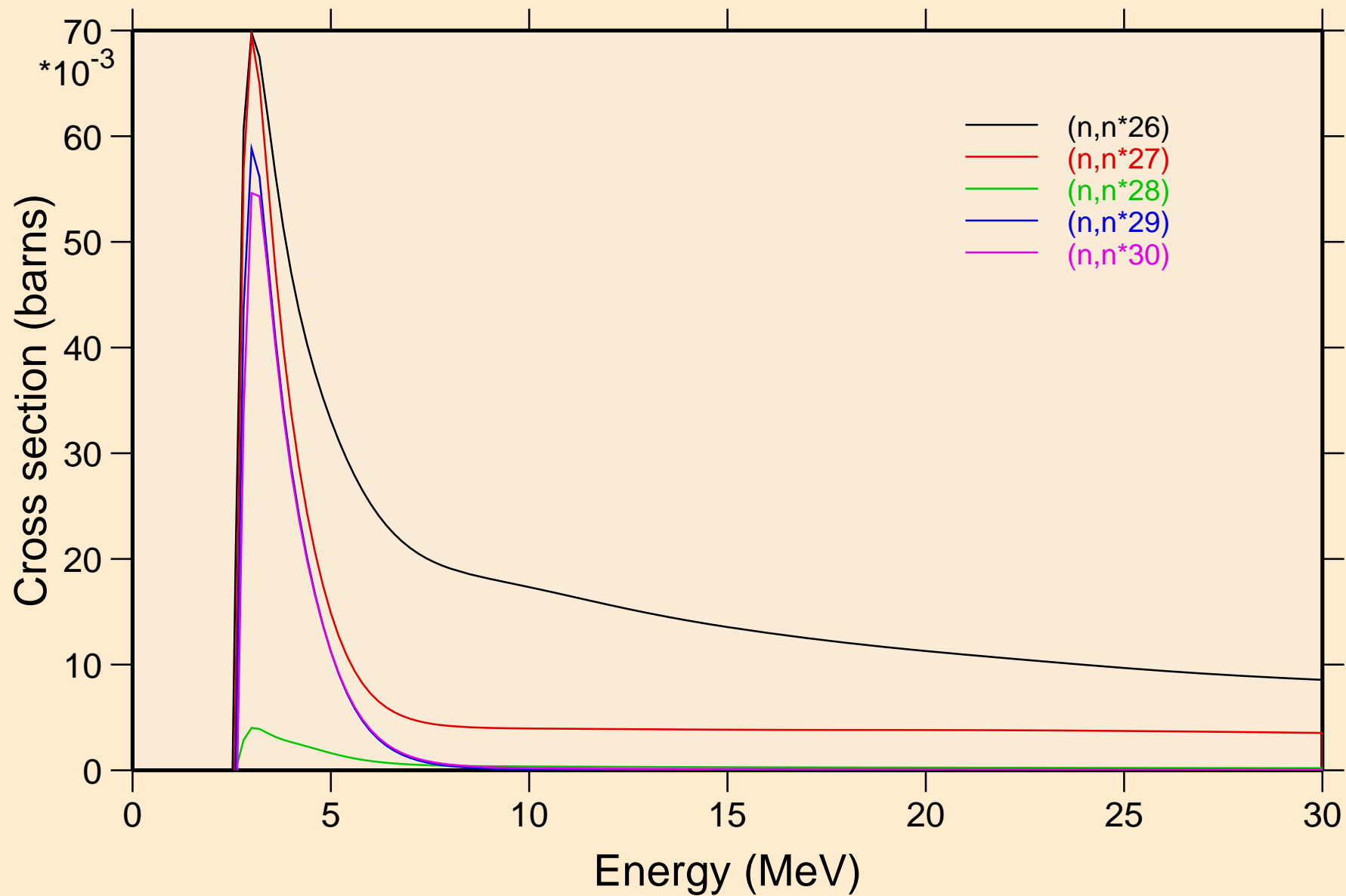
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Inelastic levels



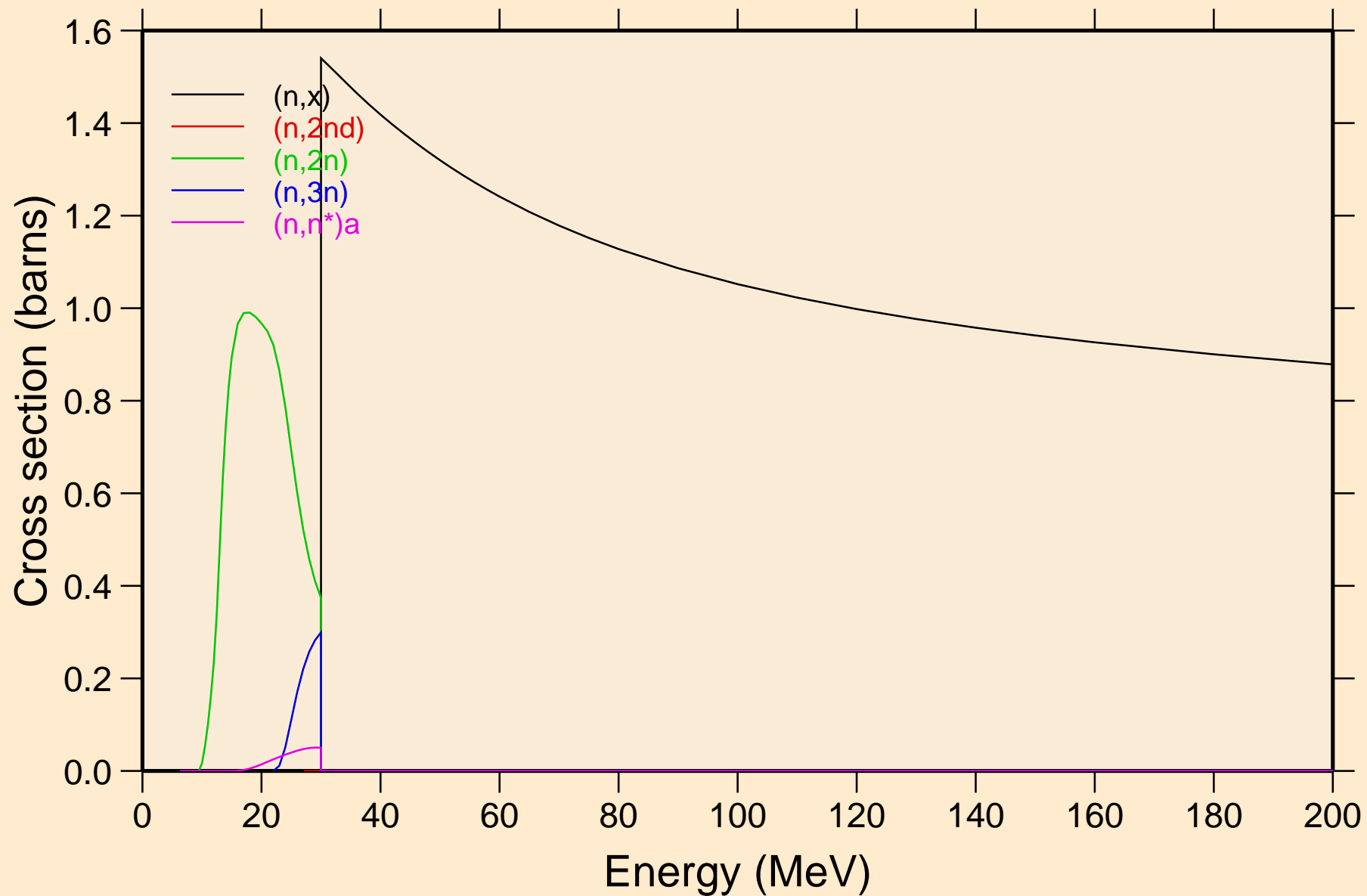
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Inelastic levels



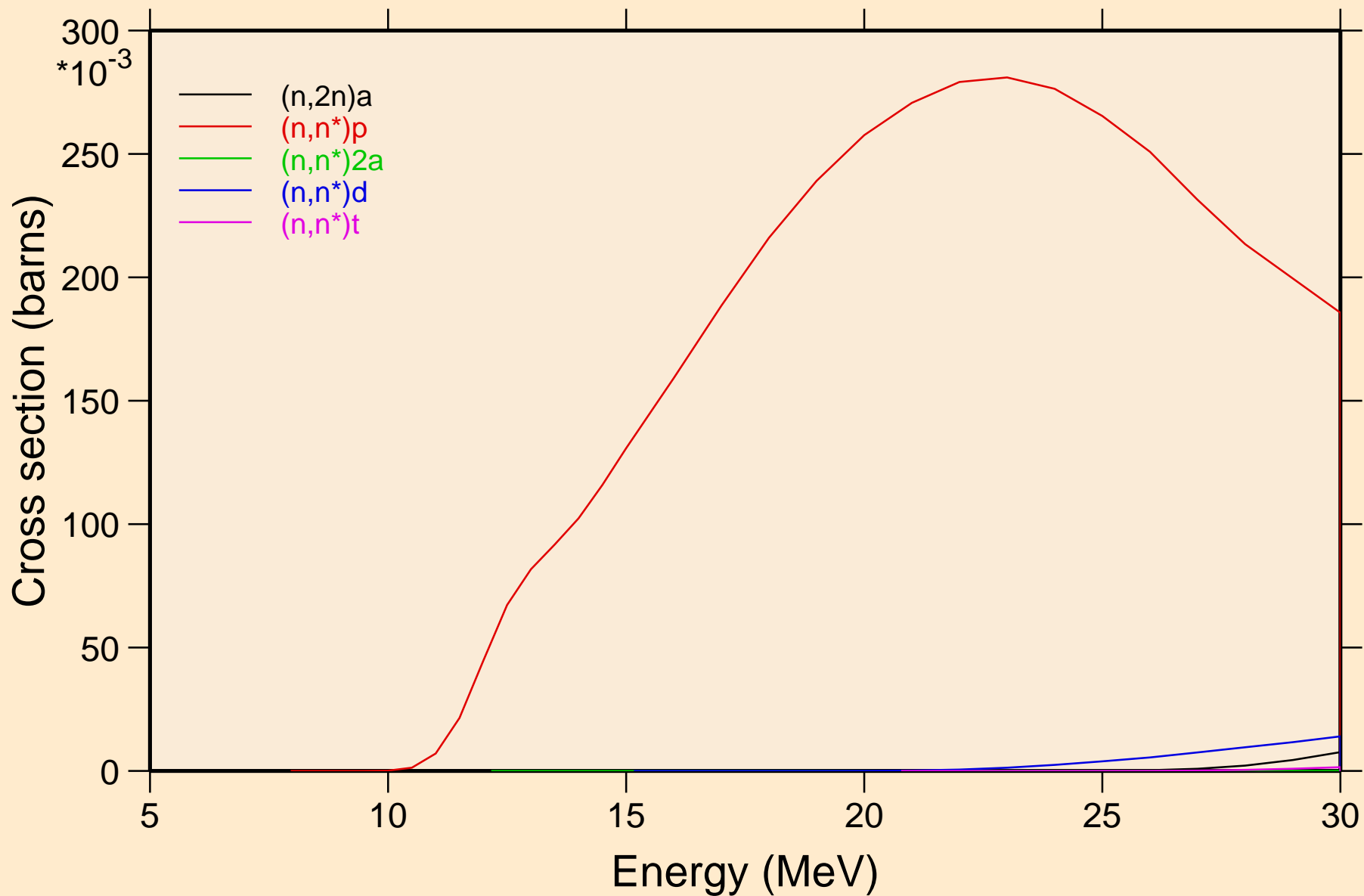
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Inelastic levels



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Threshold reactions

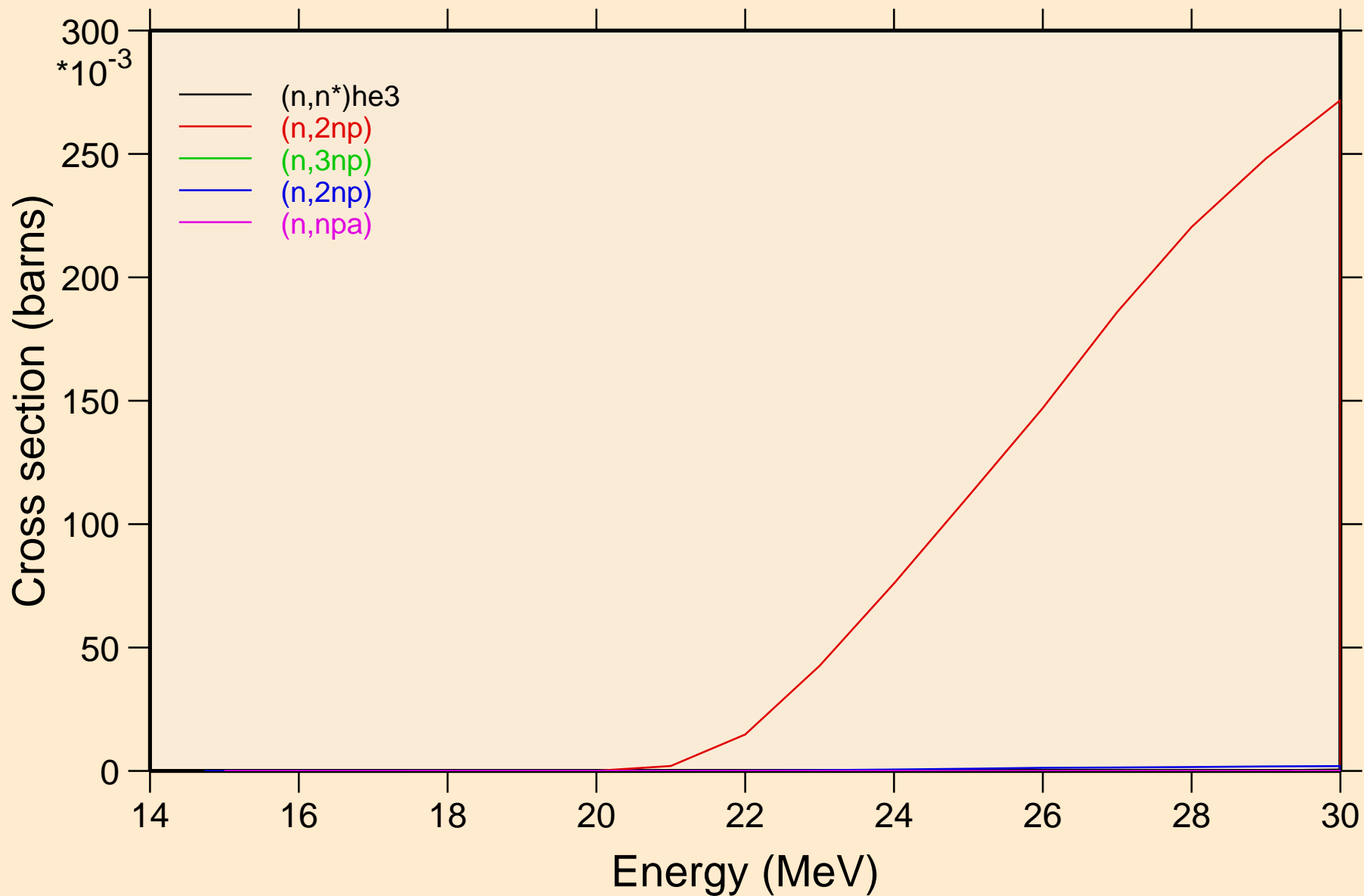


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Threshold reactions

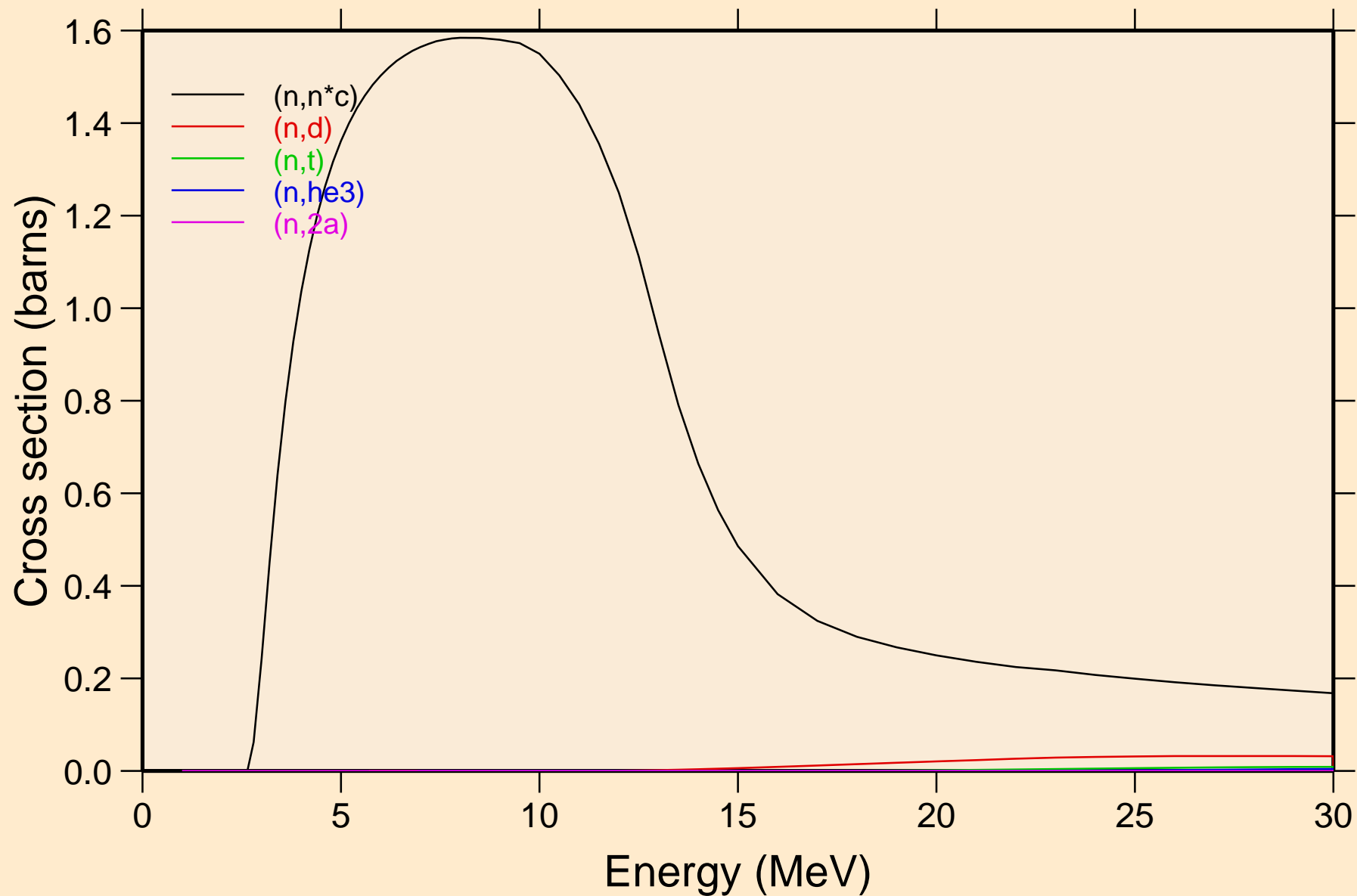




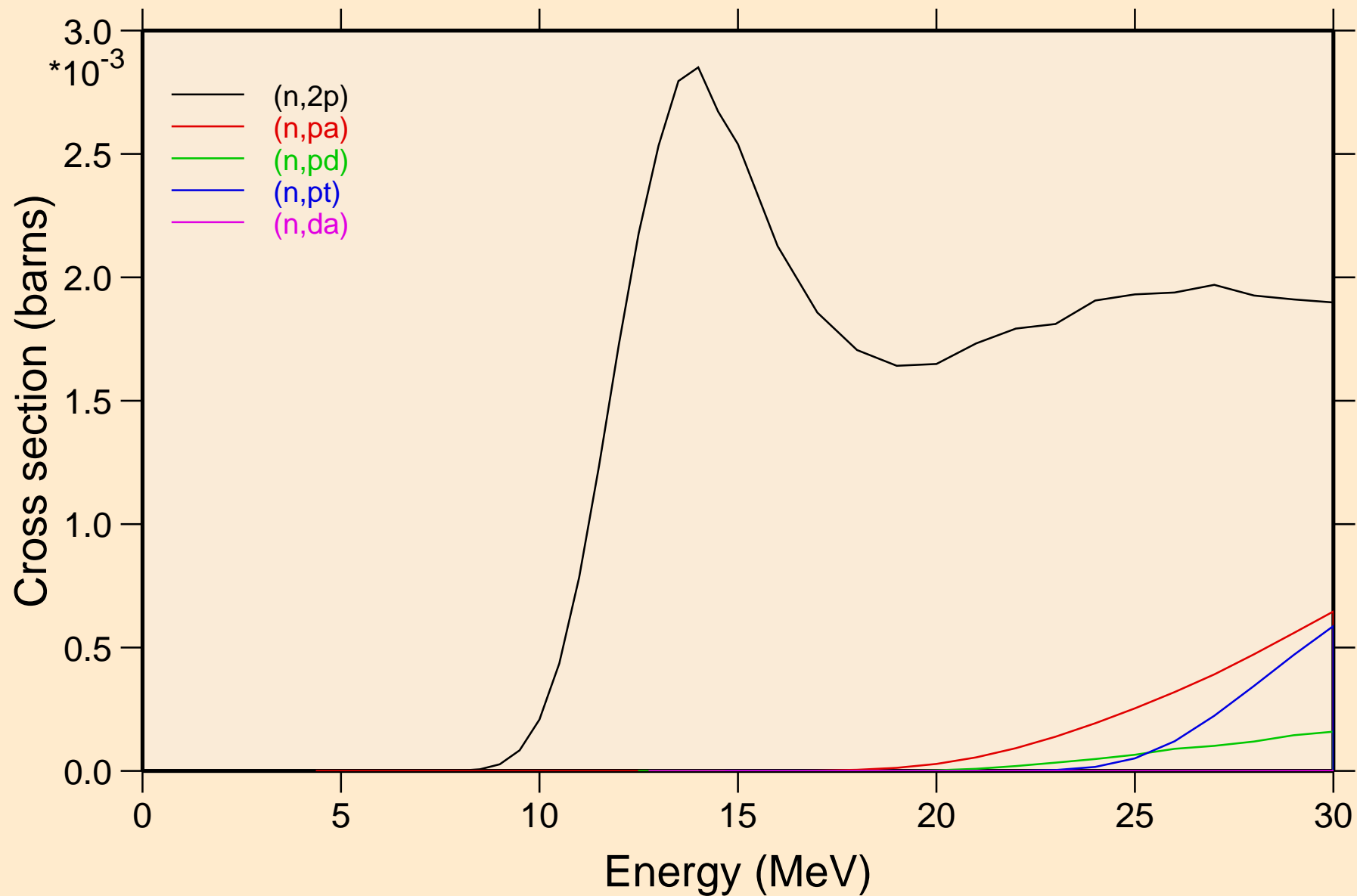
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Threshold reactions



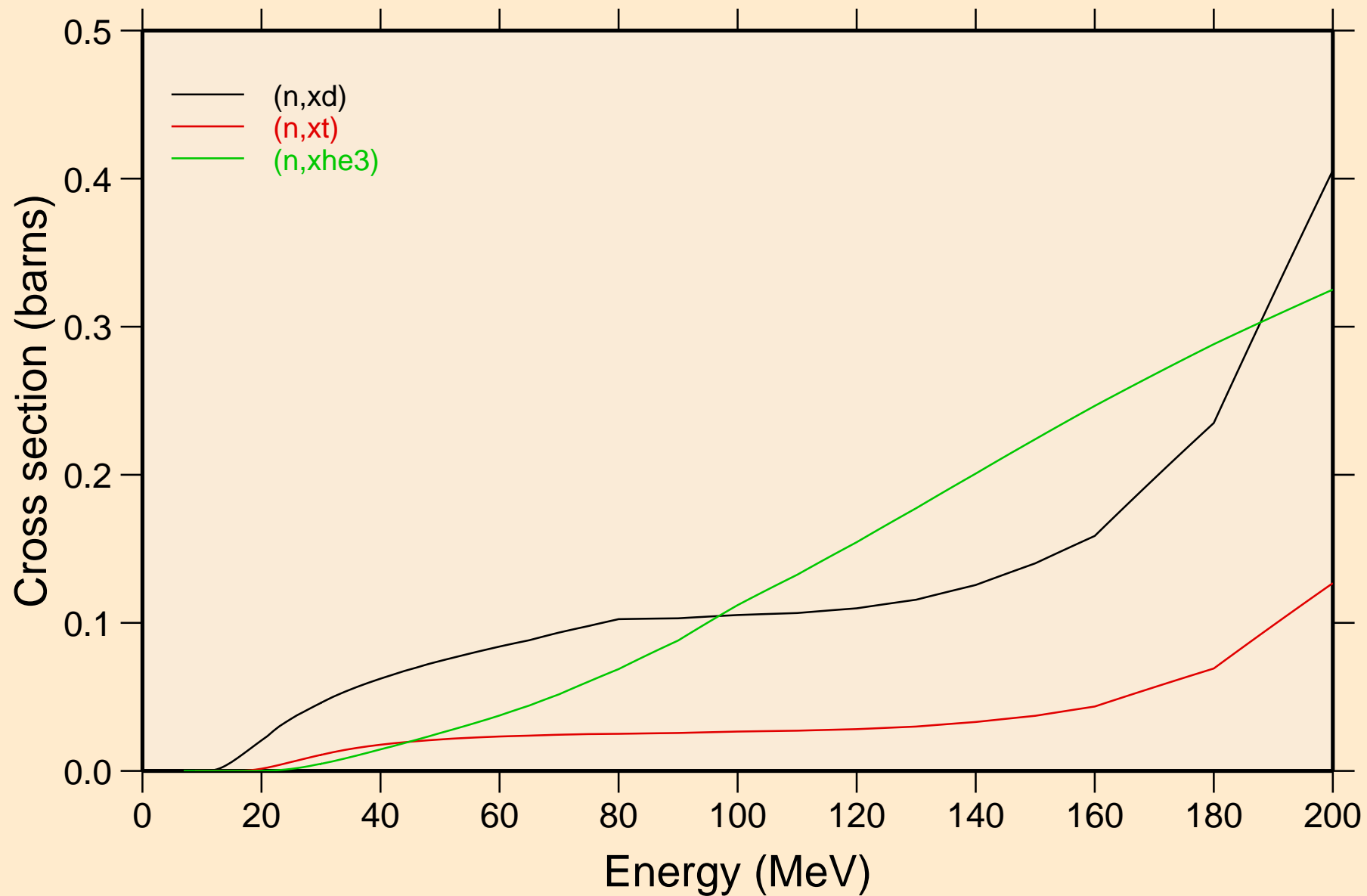
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Threshold reactions



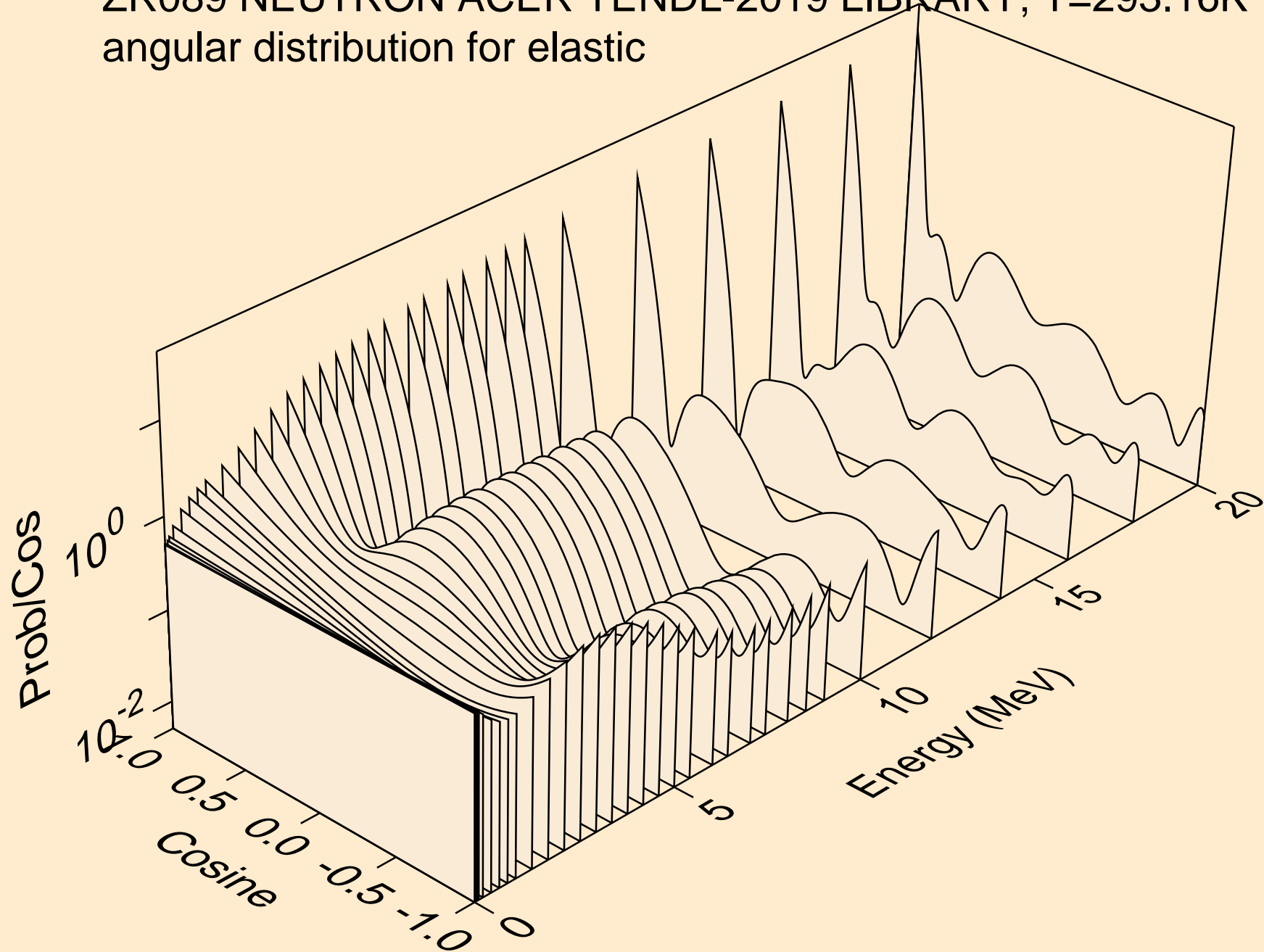
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Threshold reactions



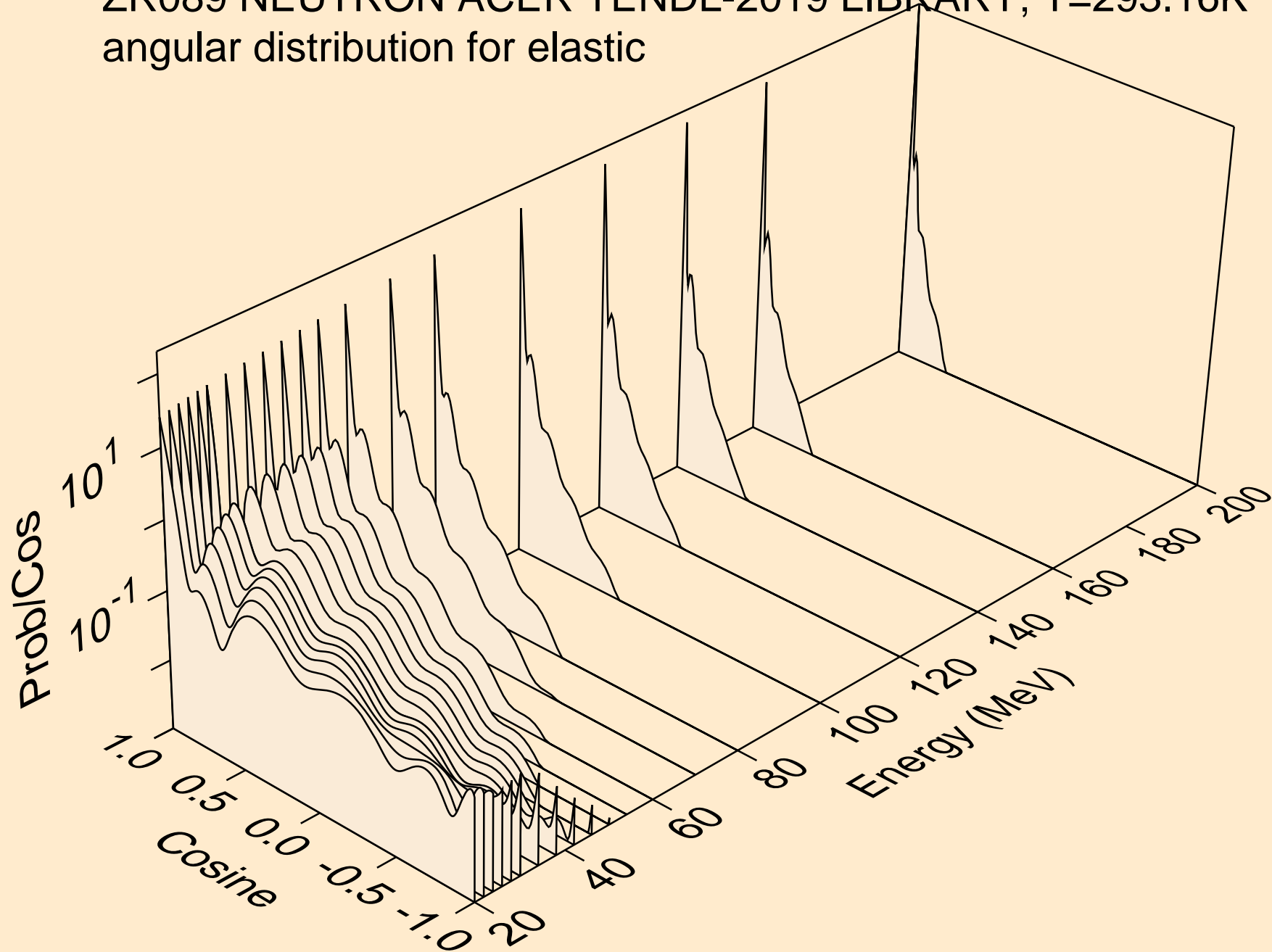
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Threshold reactions



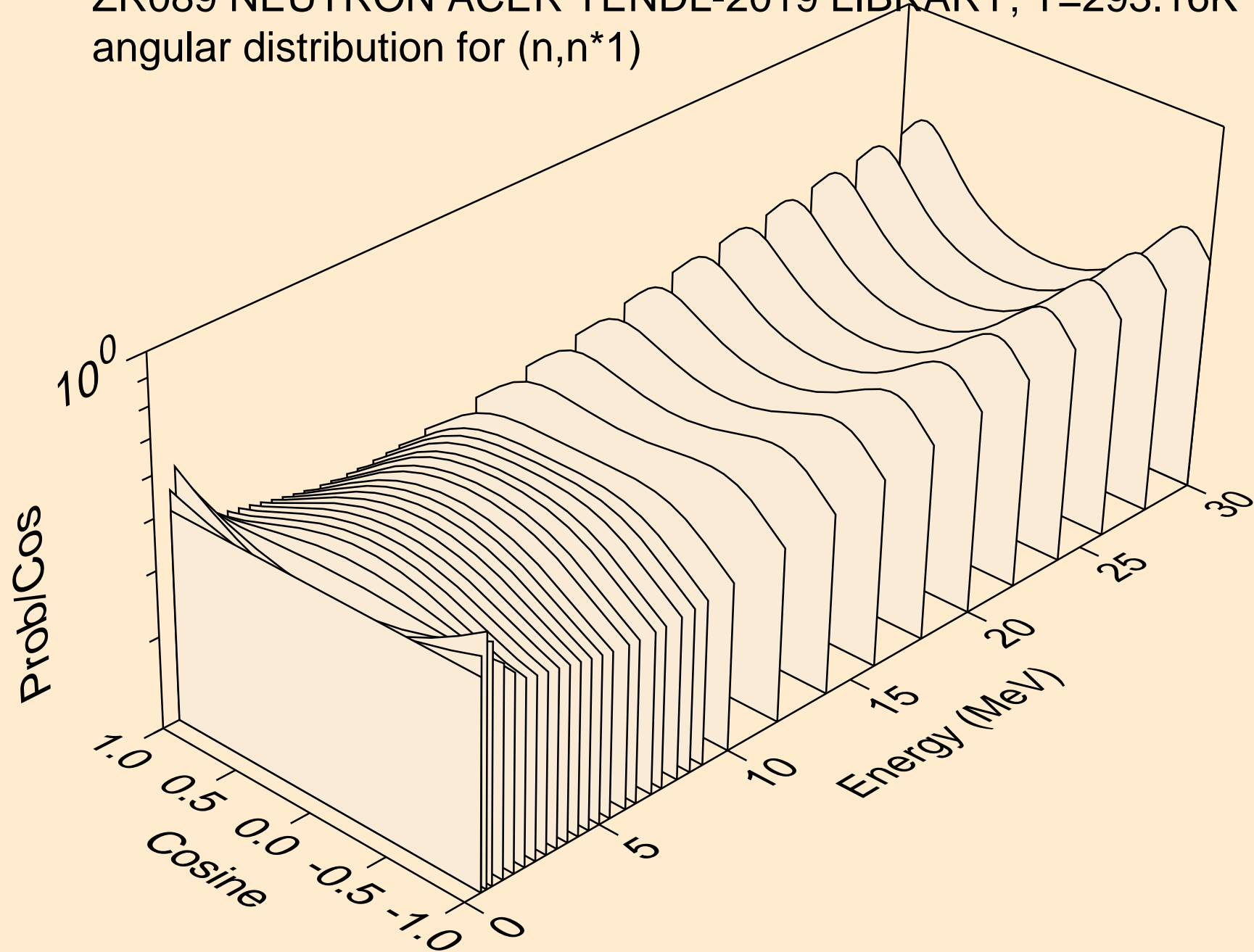
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angular distribution for elastic



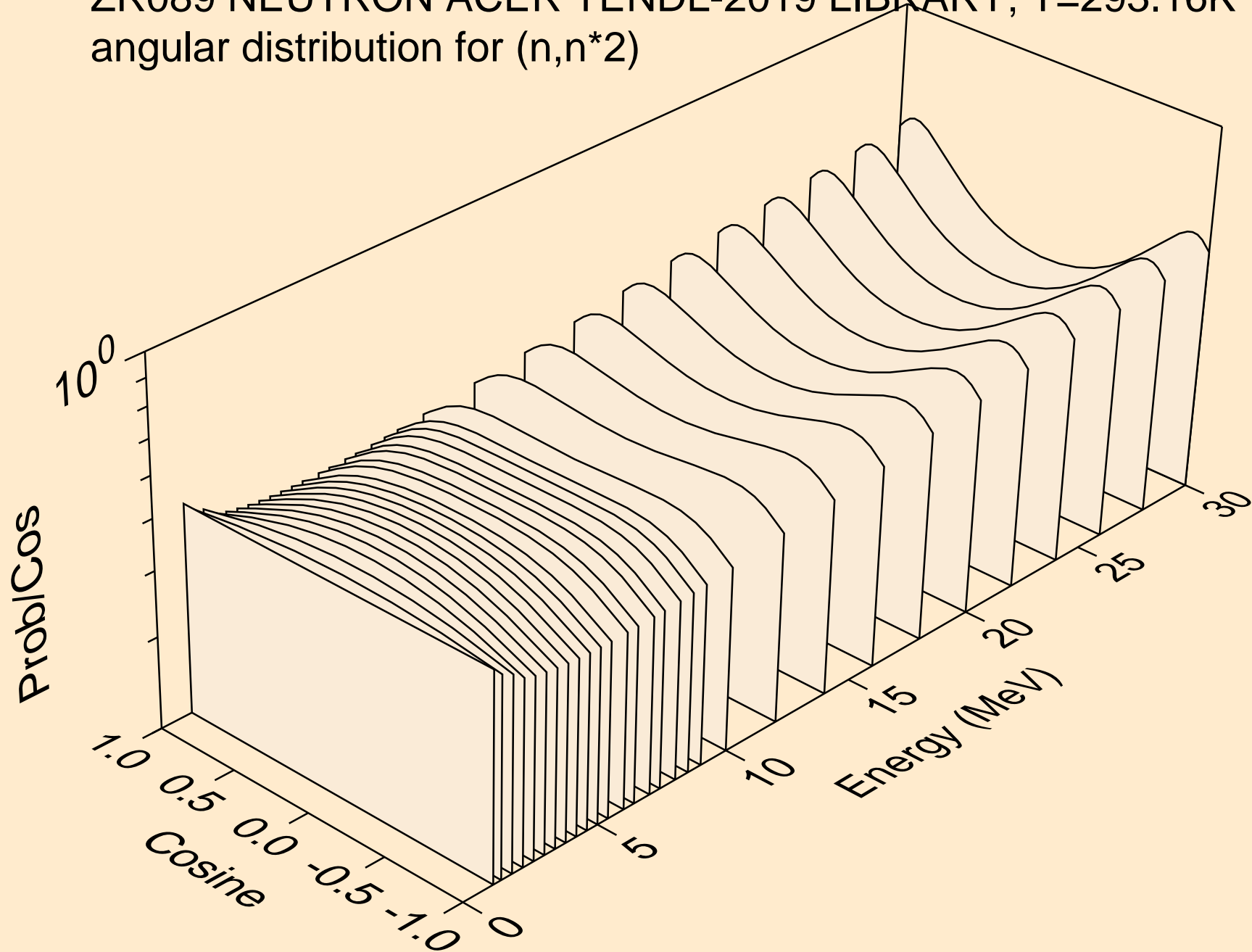
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angular distribution for elastic



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
angular distribution for (n,n\*1)

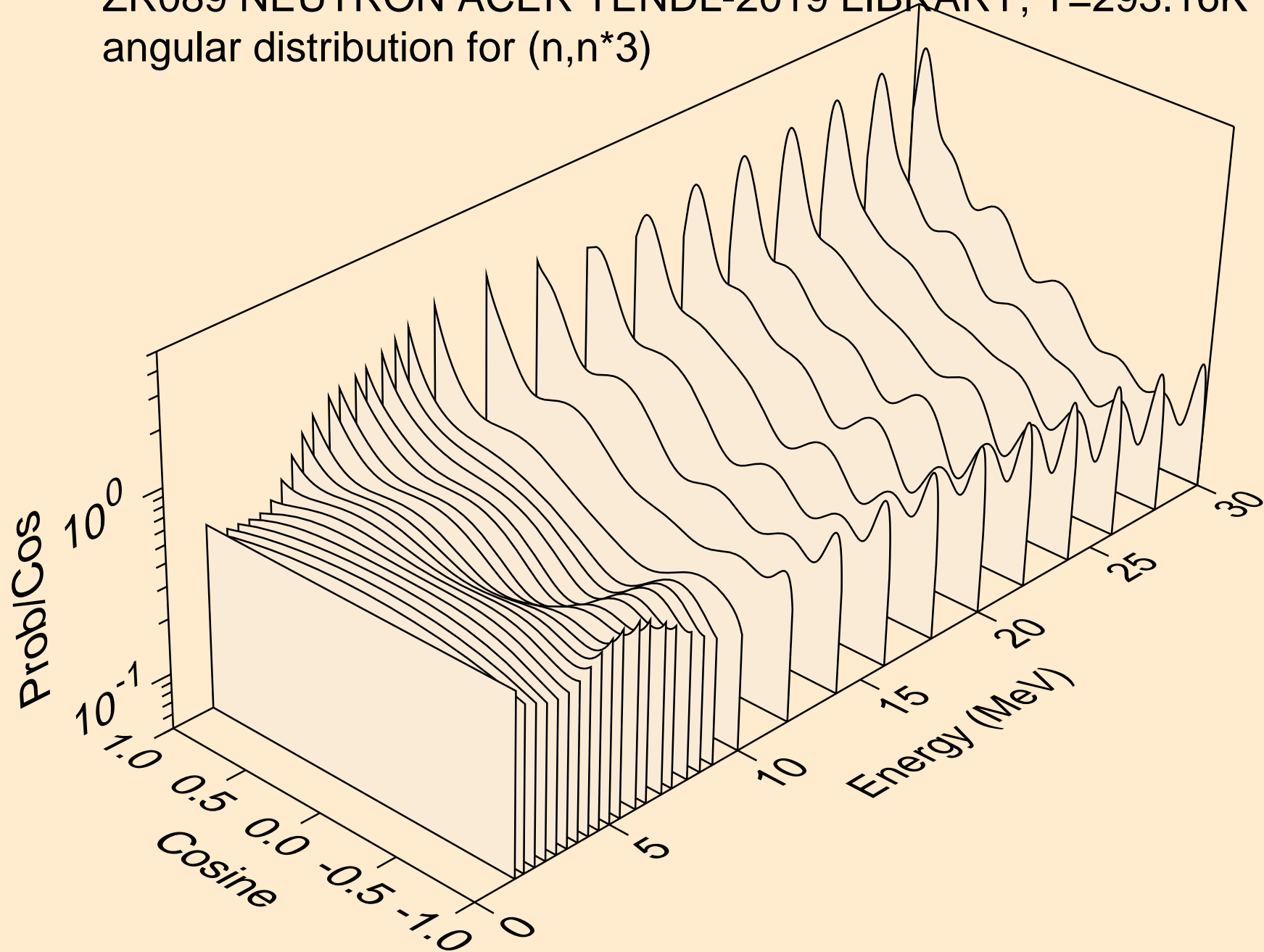


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angular distribution for (n,n\*2)

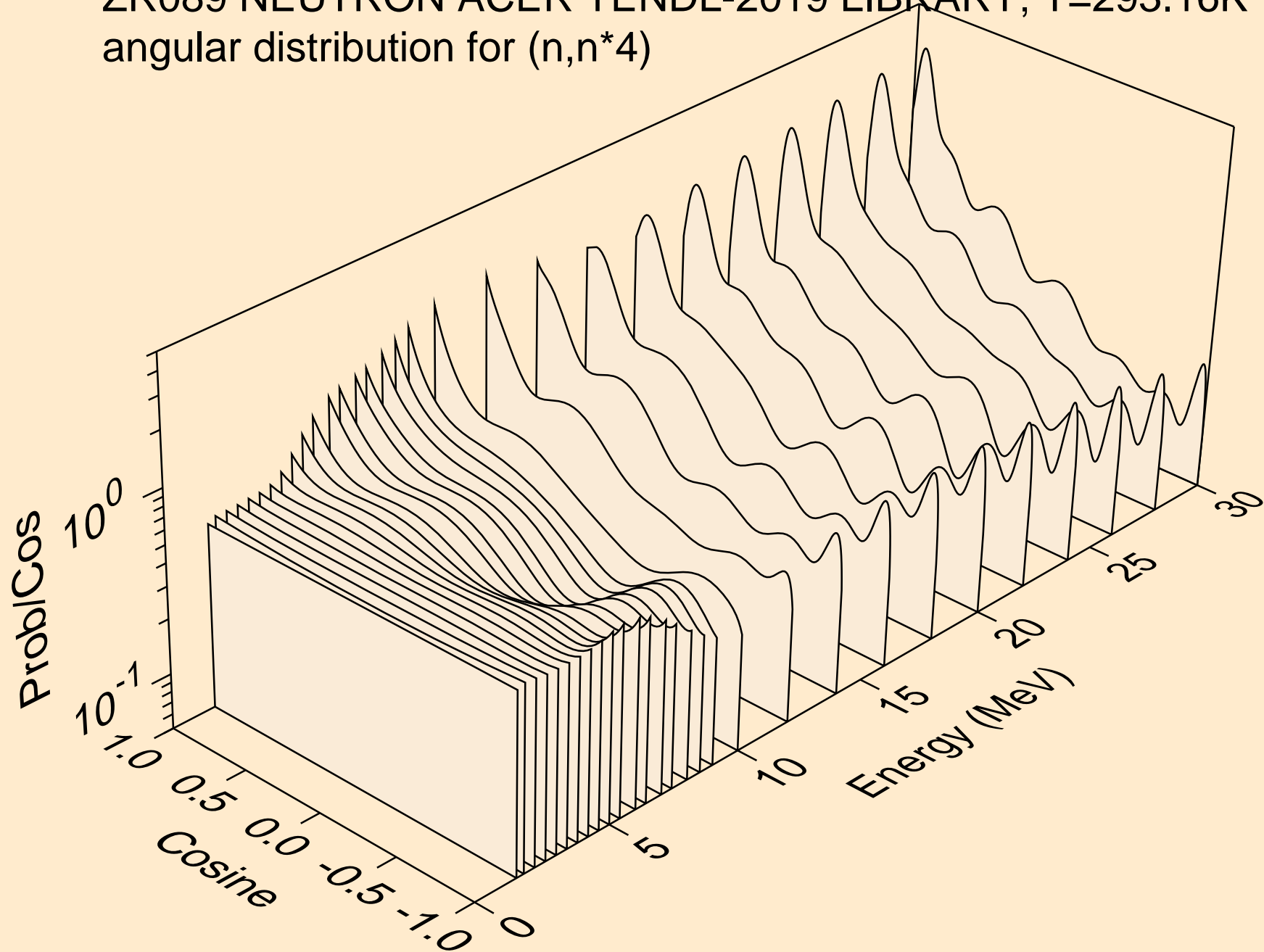




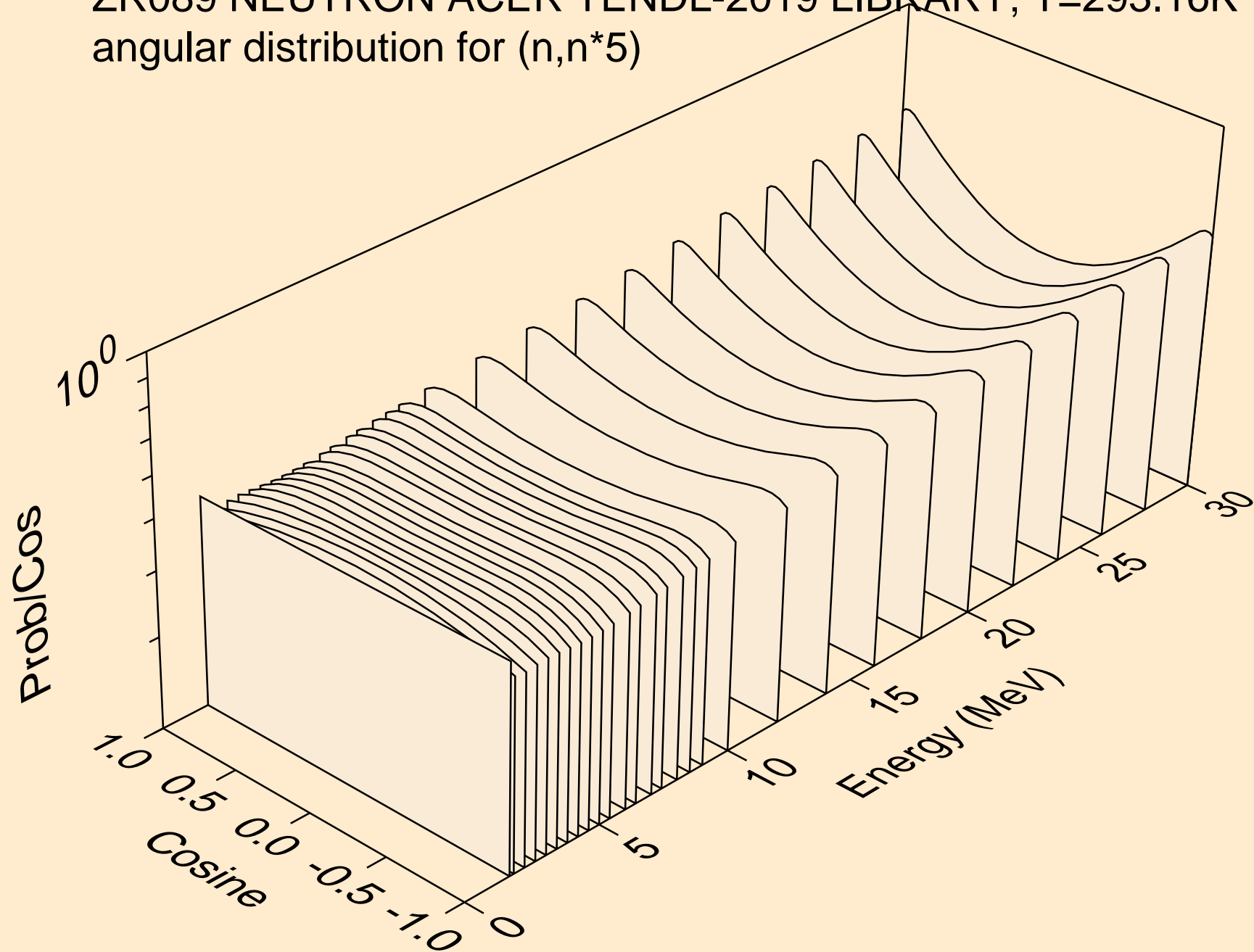
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angular distribution for (n,n\*3)



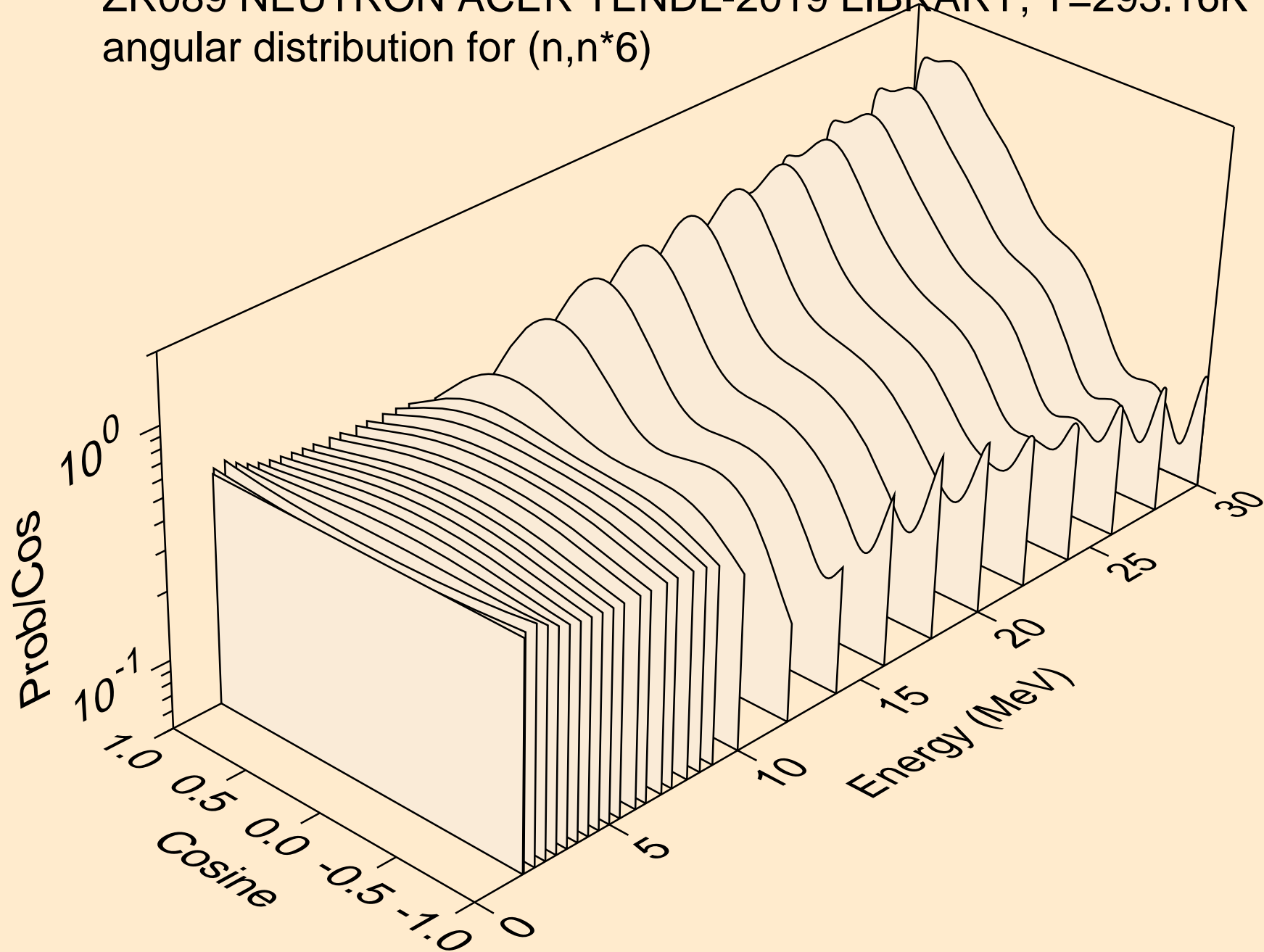
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angular distribution for (n,n\*4)



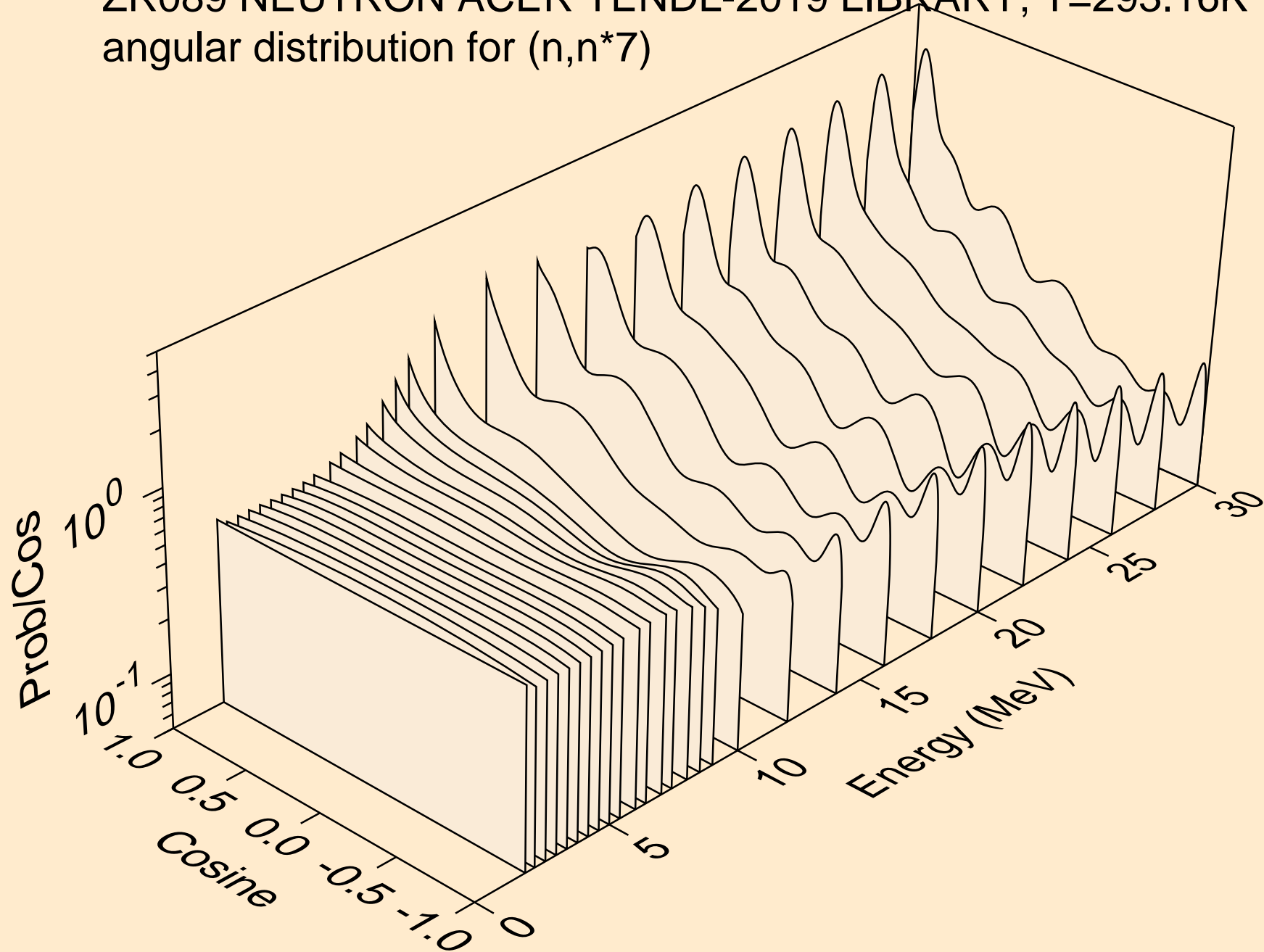
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angular distribution for (n,n\*5)



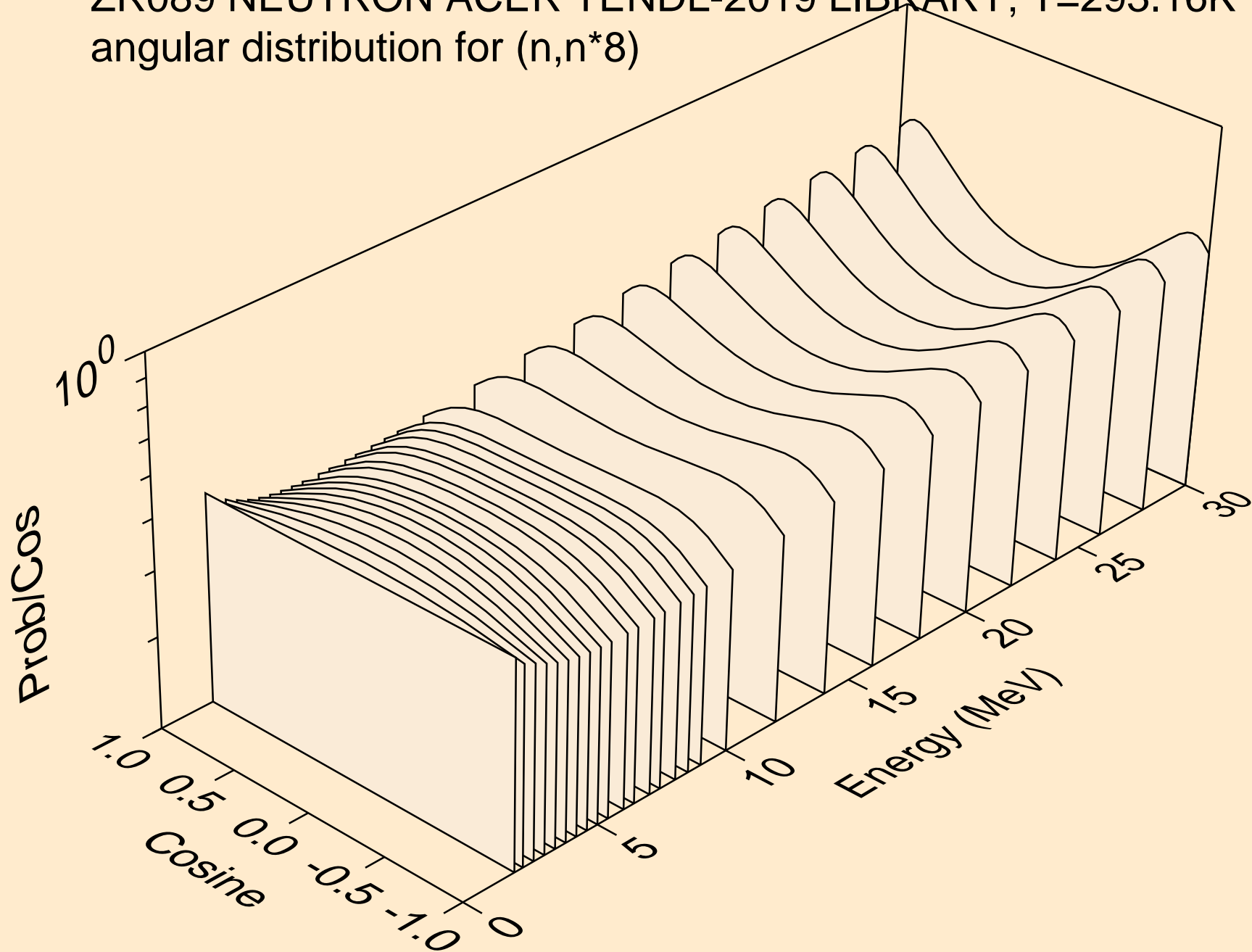
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angular distribution for (n,n\*6)



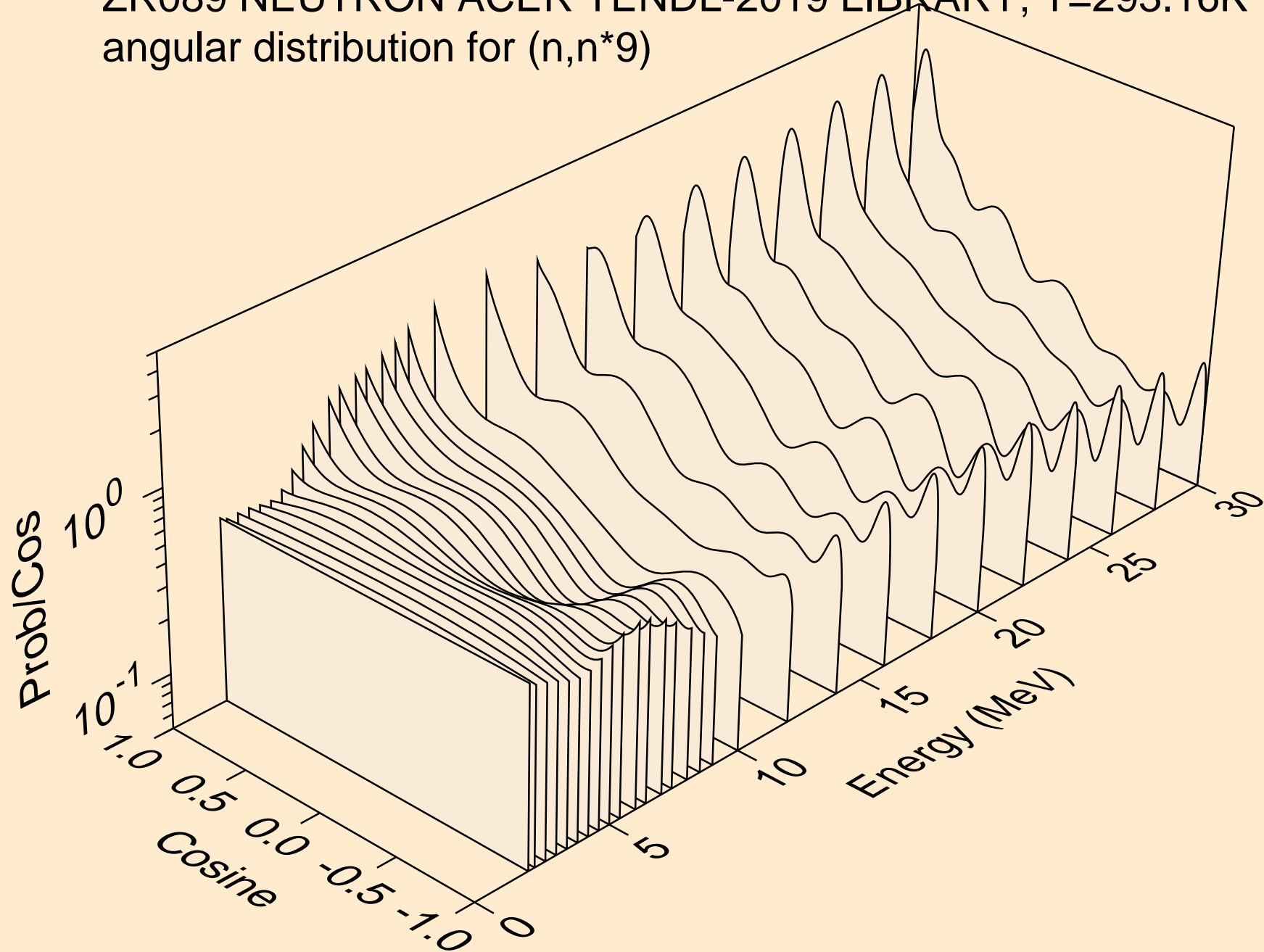
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angular distribution for (n,n\*7)



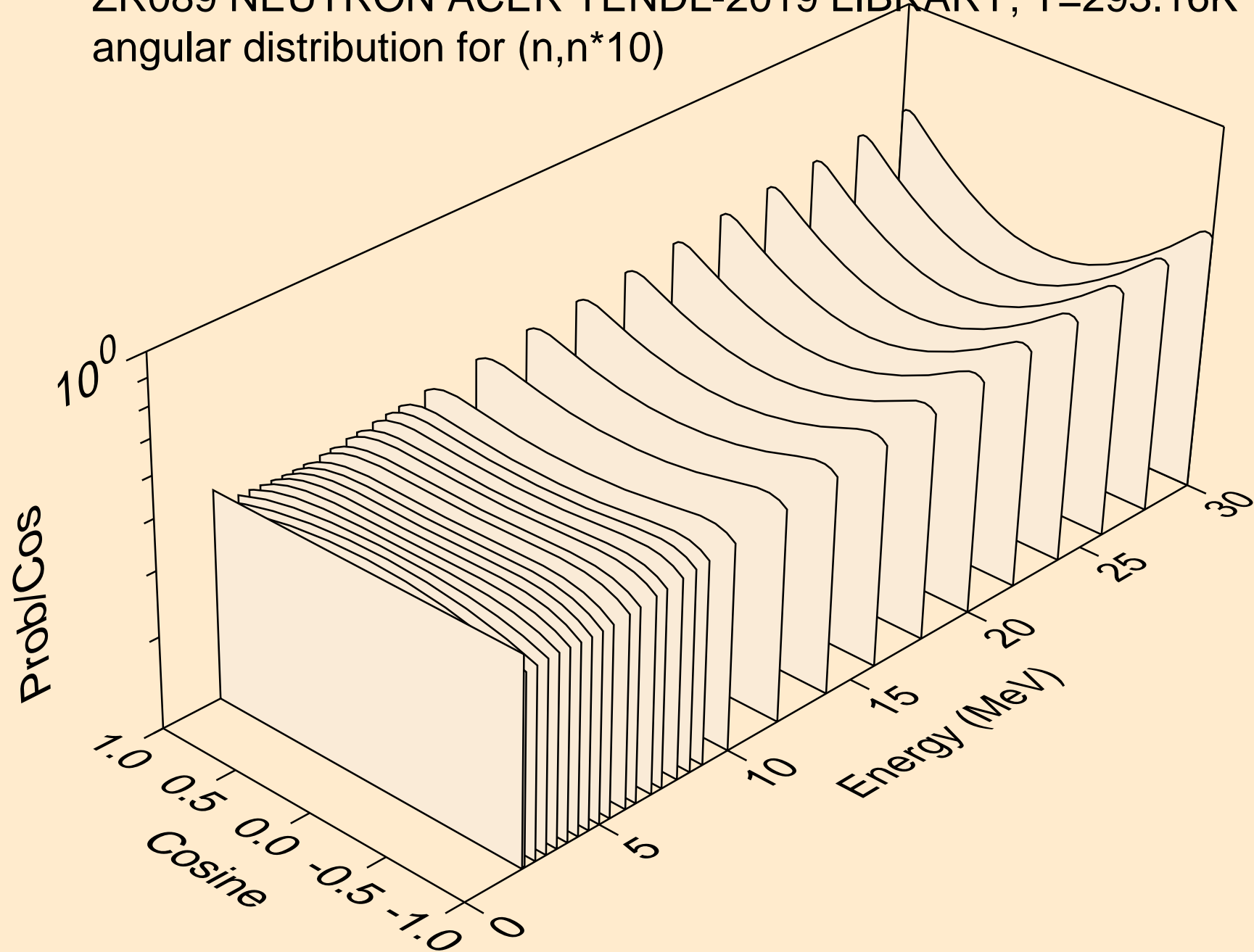
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angular distribution for (n,n\*8)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
angular distribution for (n,n\*9)

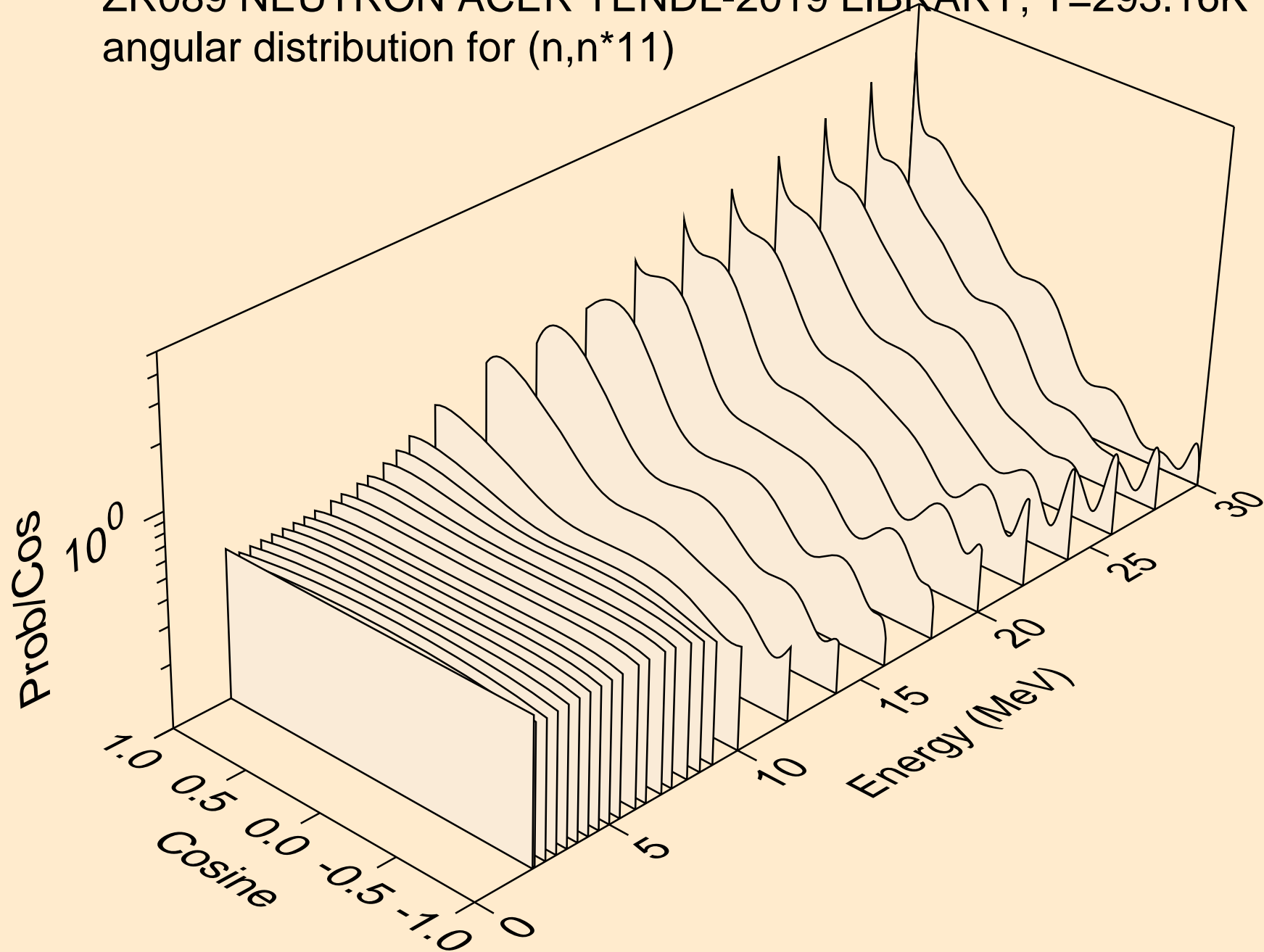


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angular distribution for (n,n\*10)

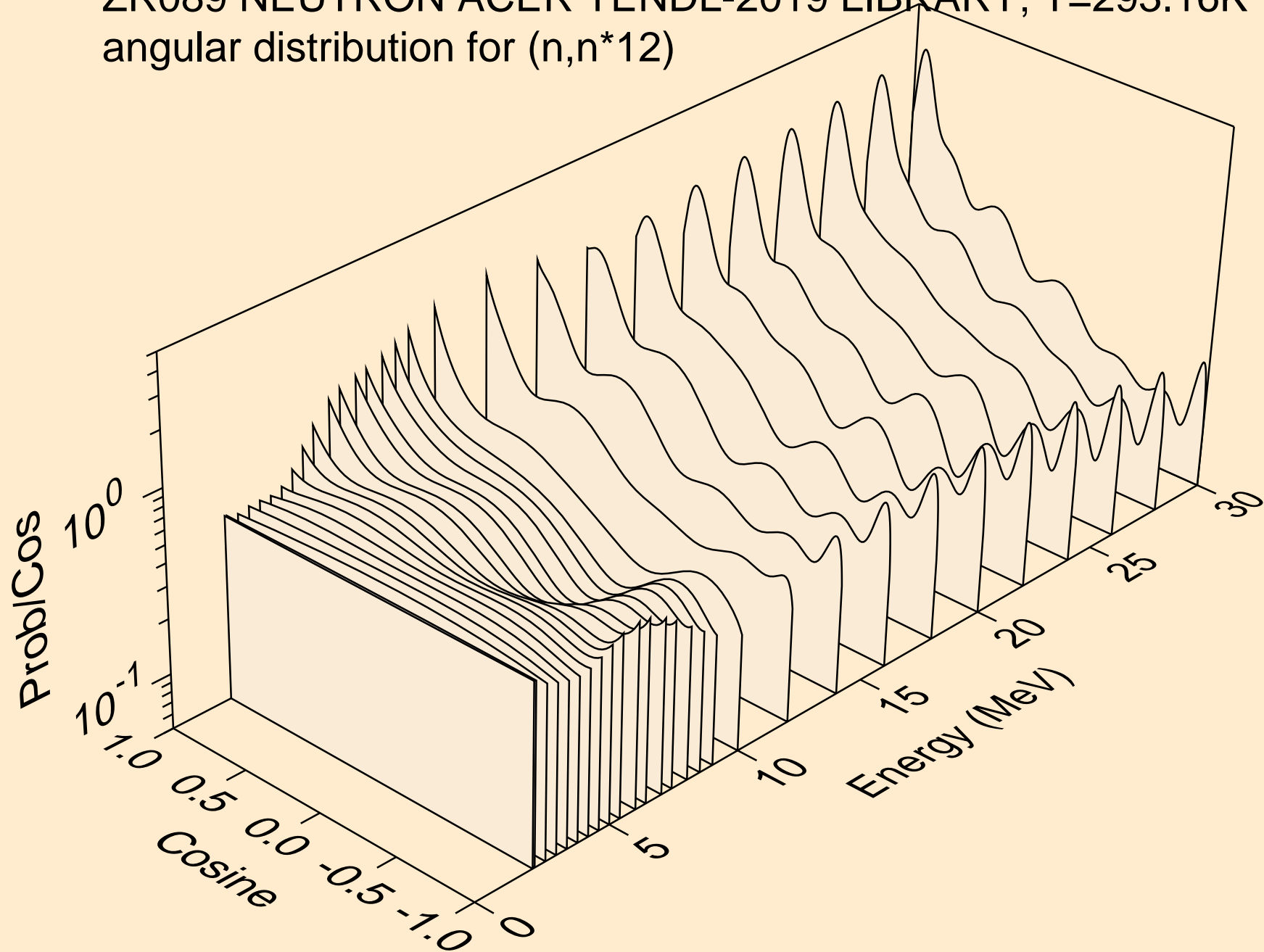




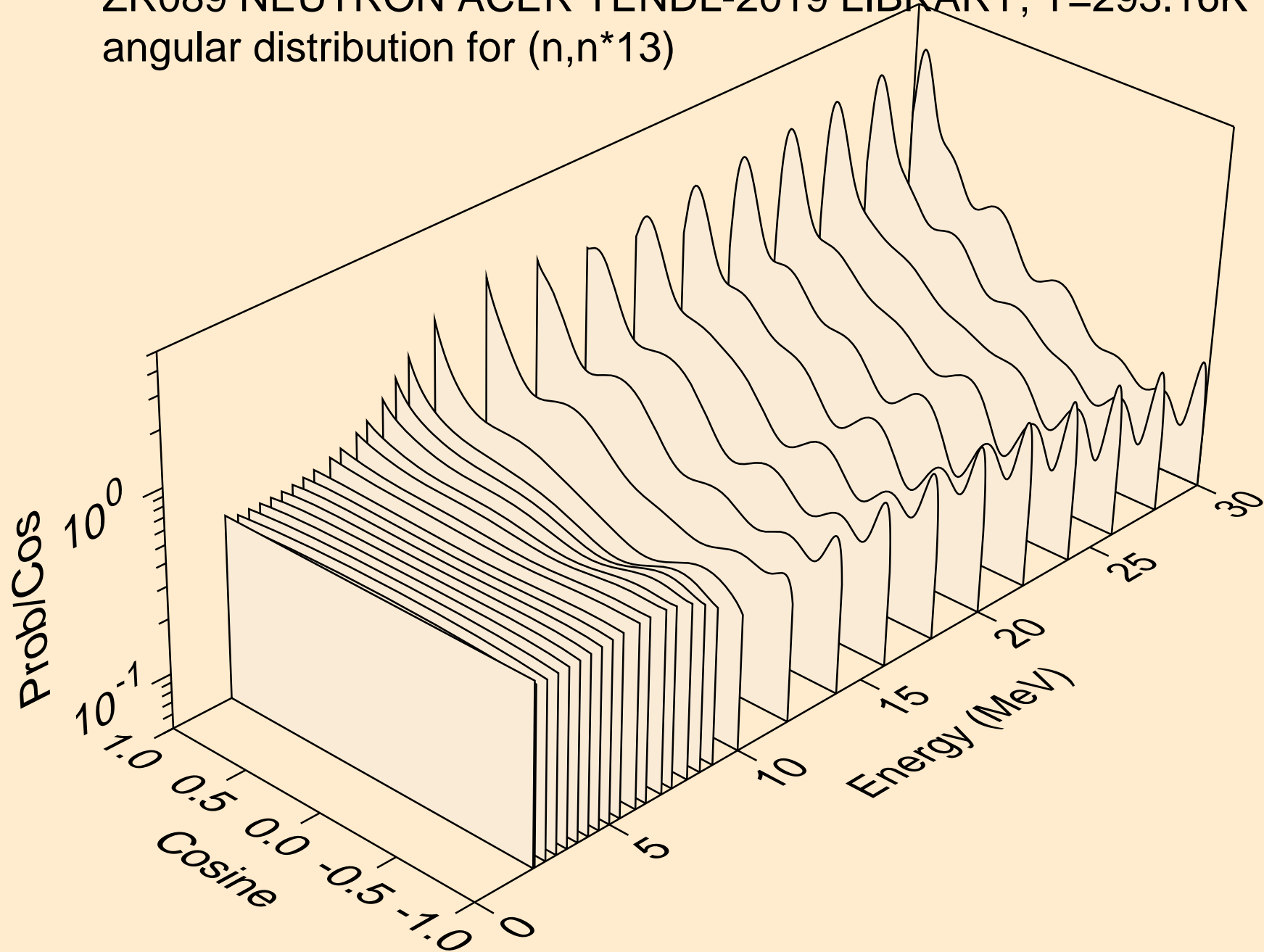
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angular distribution for (n,n\*11)



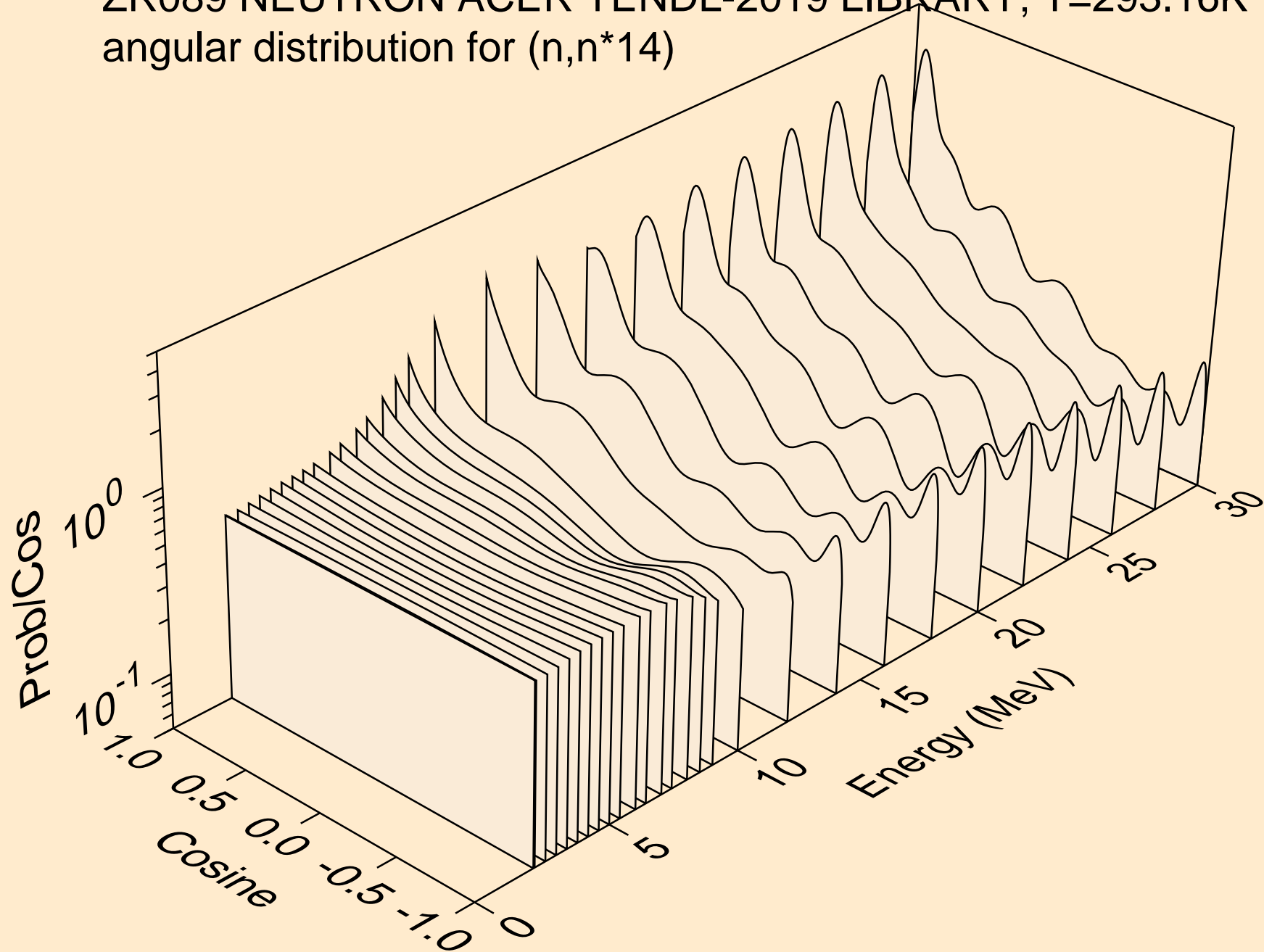
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angular distribution for (n,n\*12)



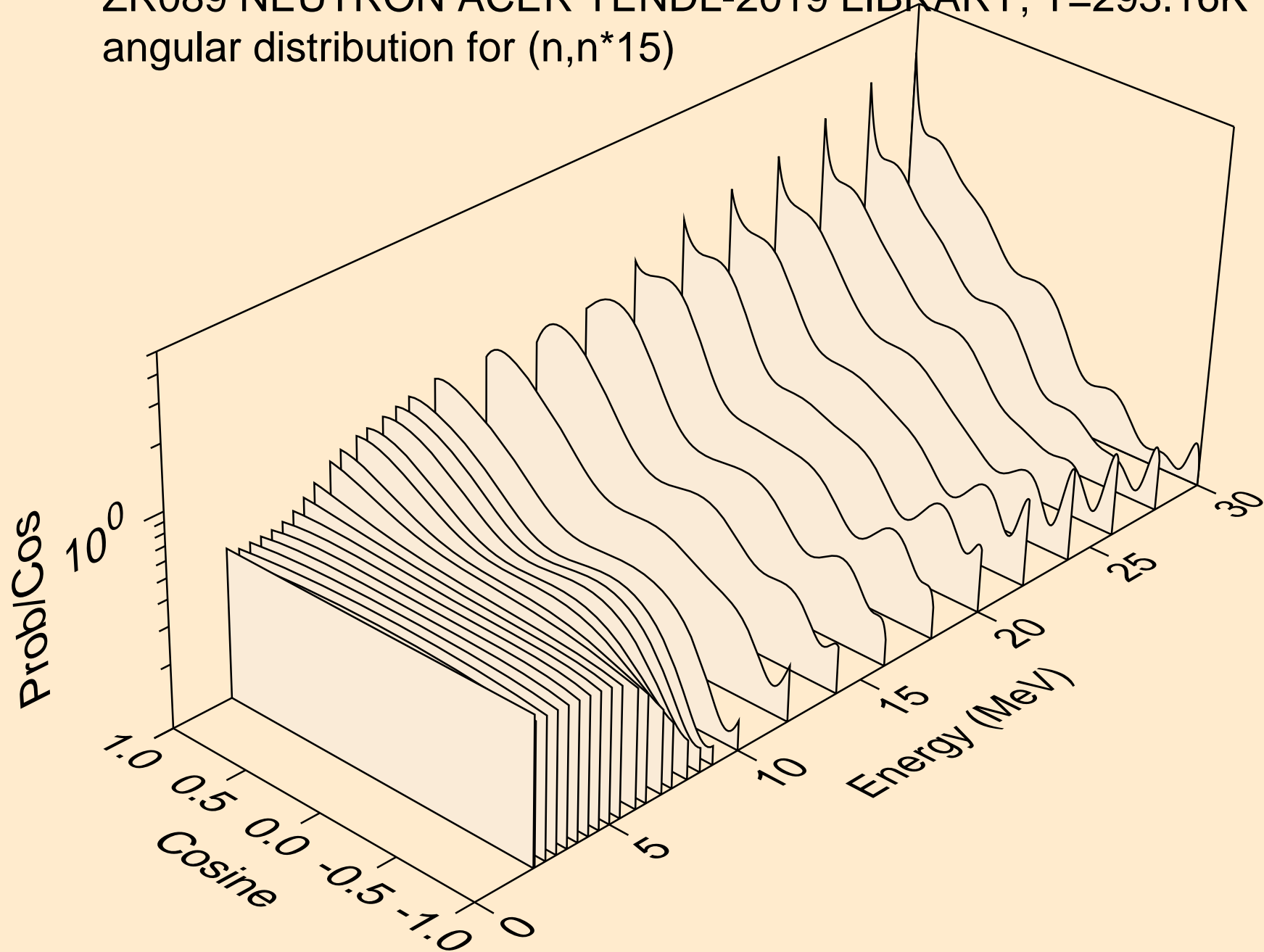
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angular distribution for (n,n\*13)



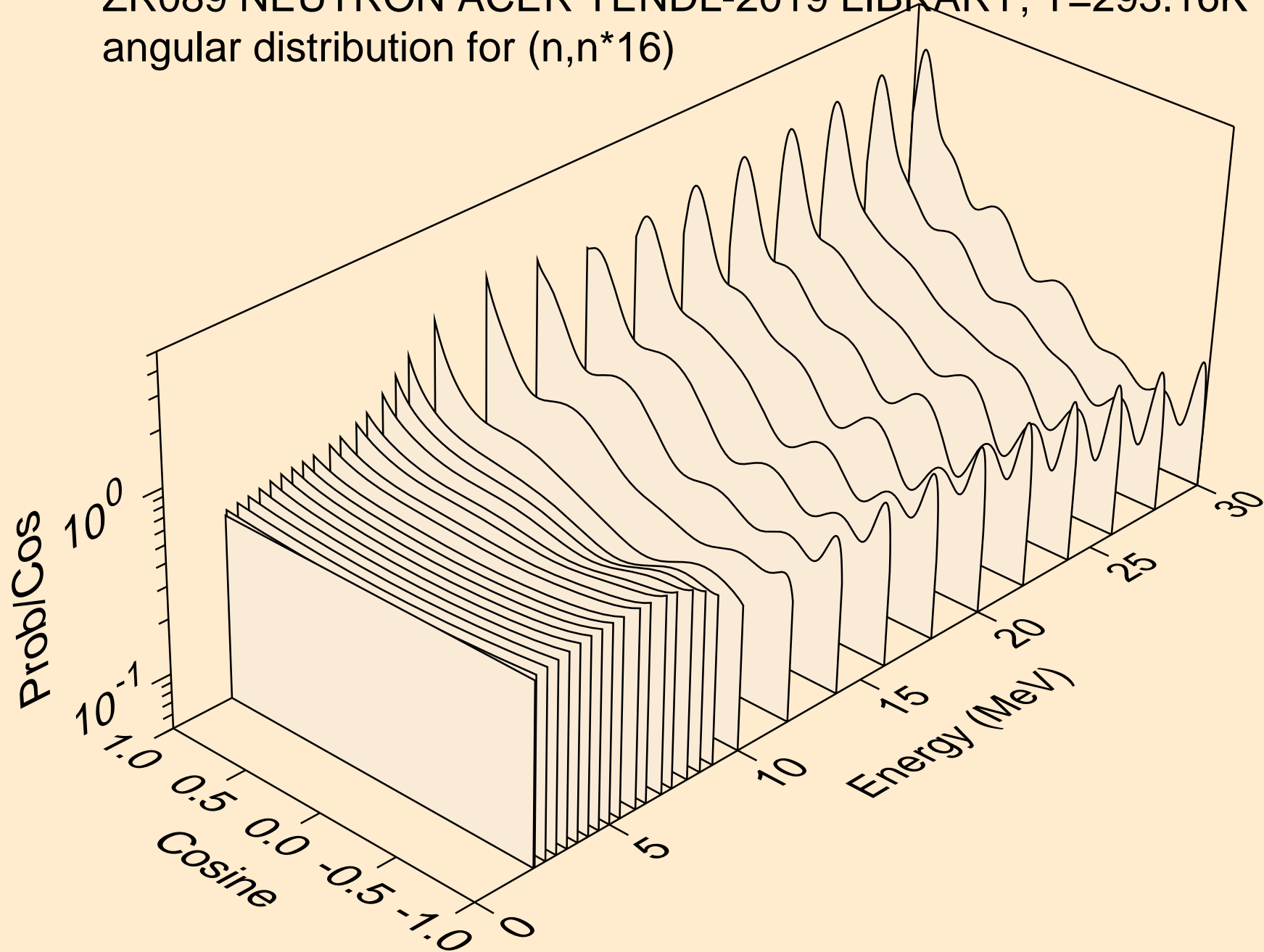
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angular distribution for (n,n\*14)



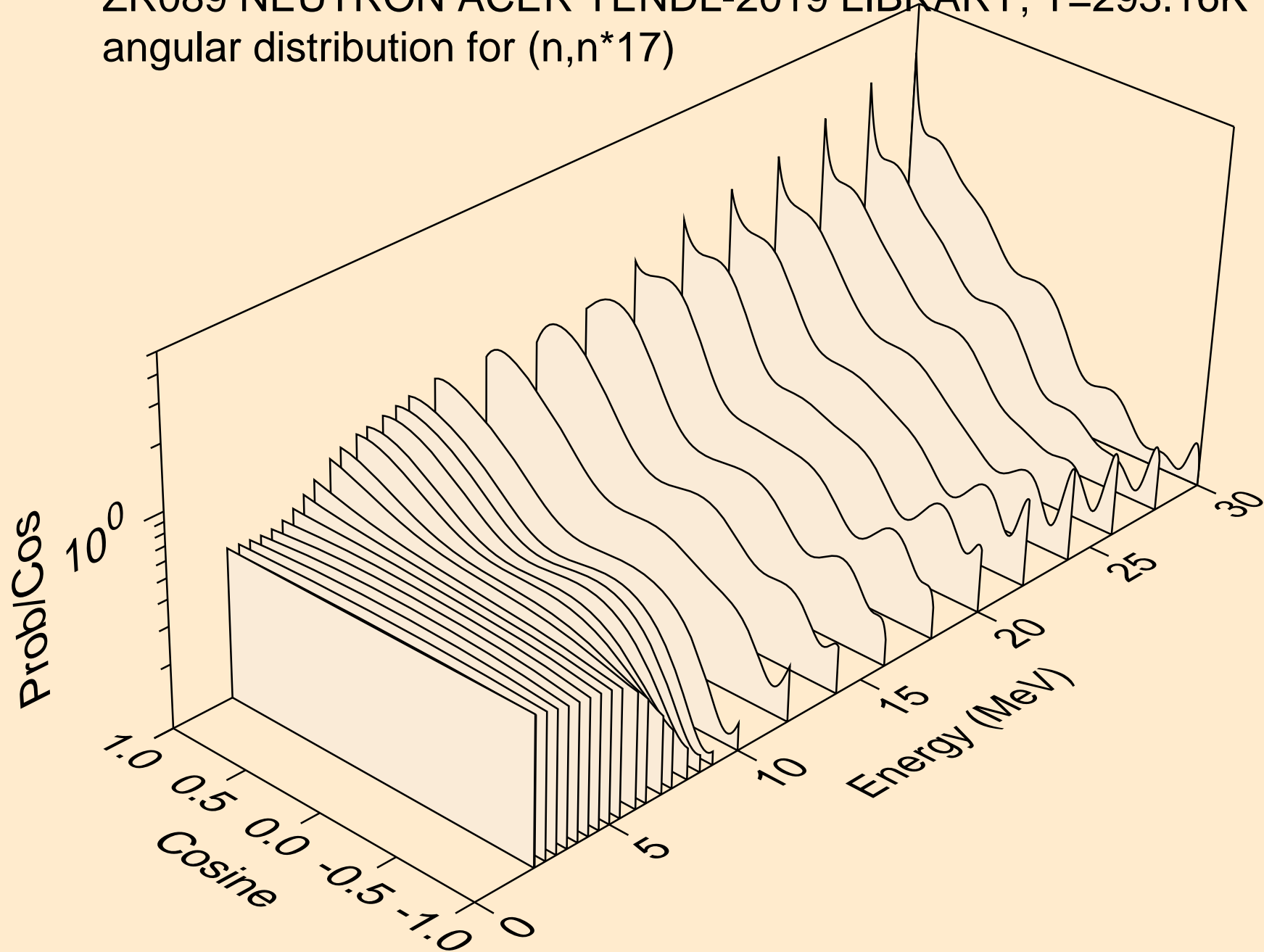
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angular distribution for (n,n\*15)



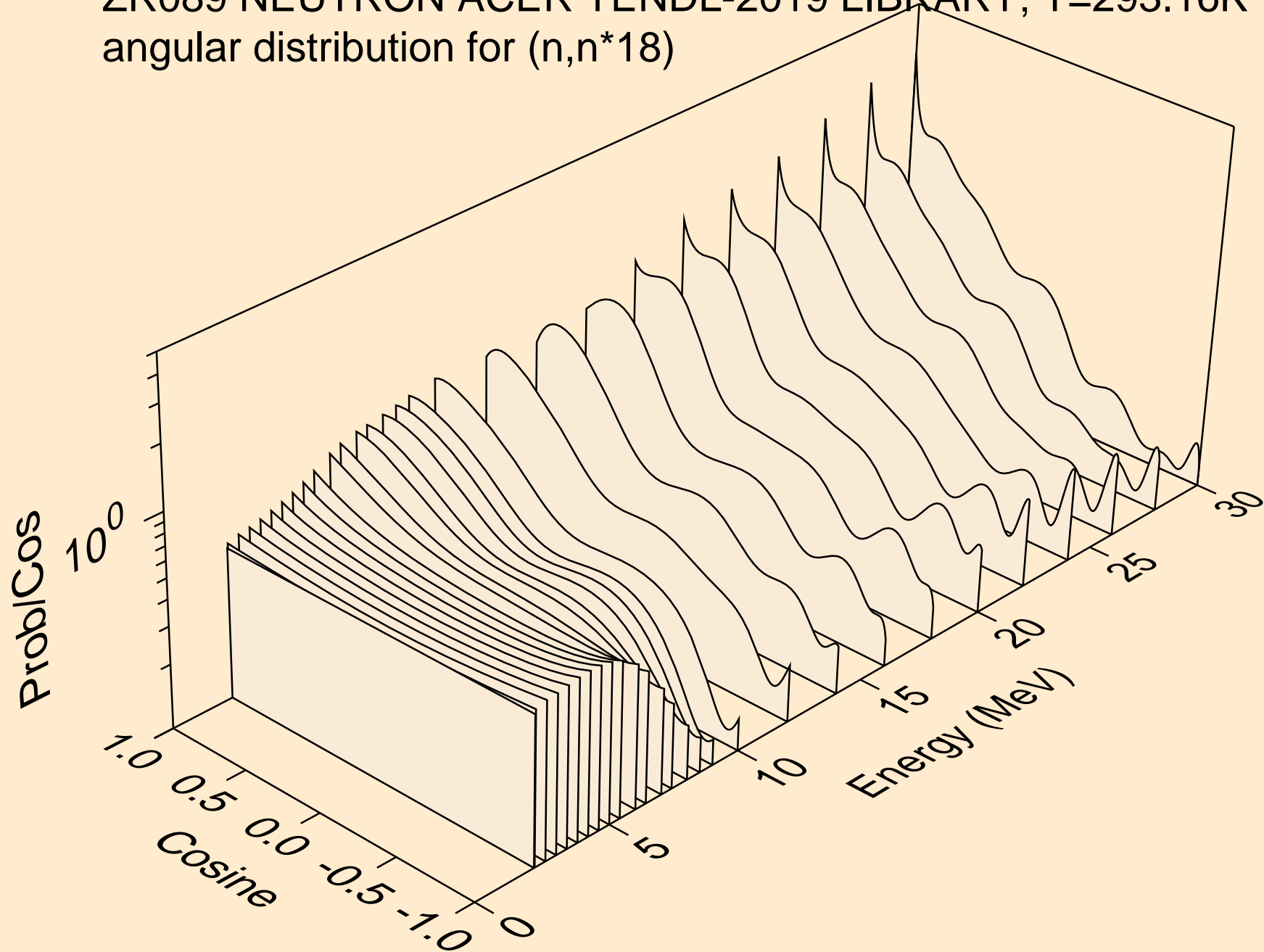
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angular distribution for (n,n\*16)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
angular distribution for (n,n\*17)

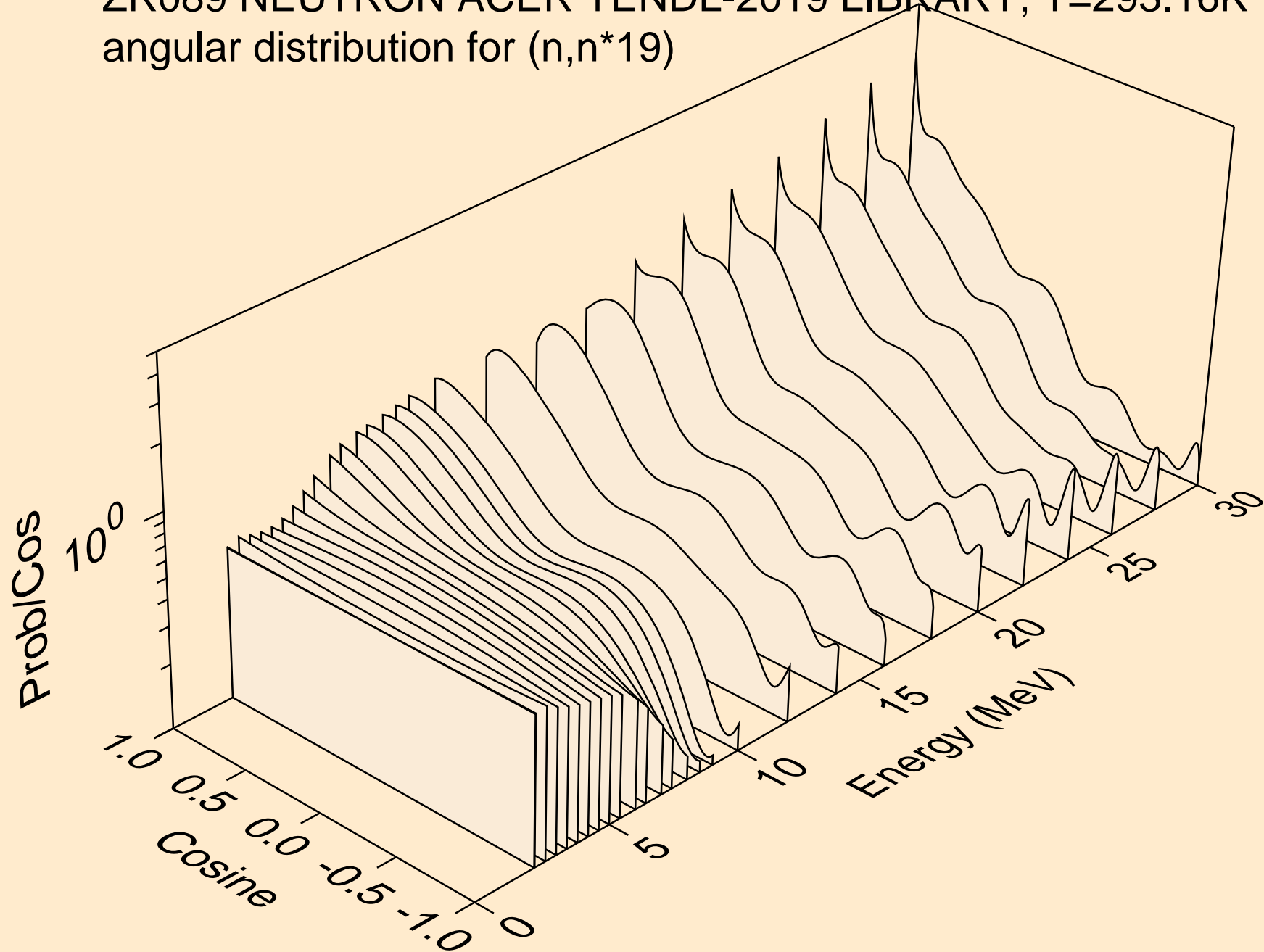


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angular distribution for (n,n\*18)

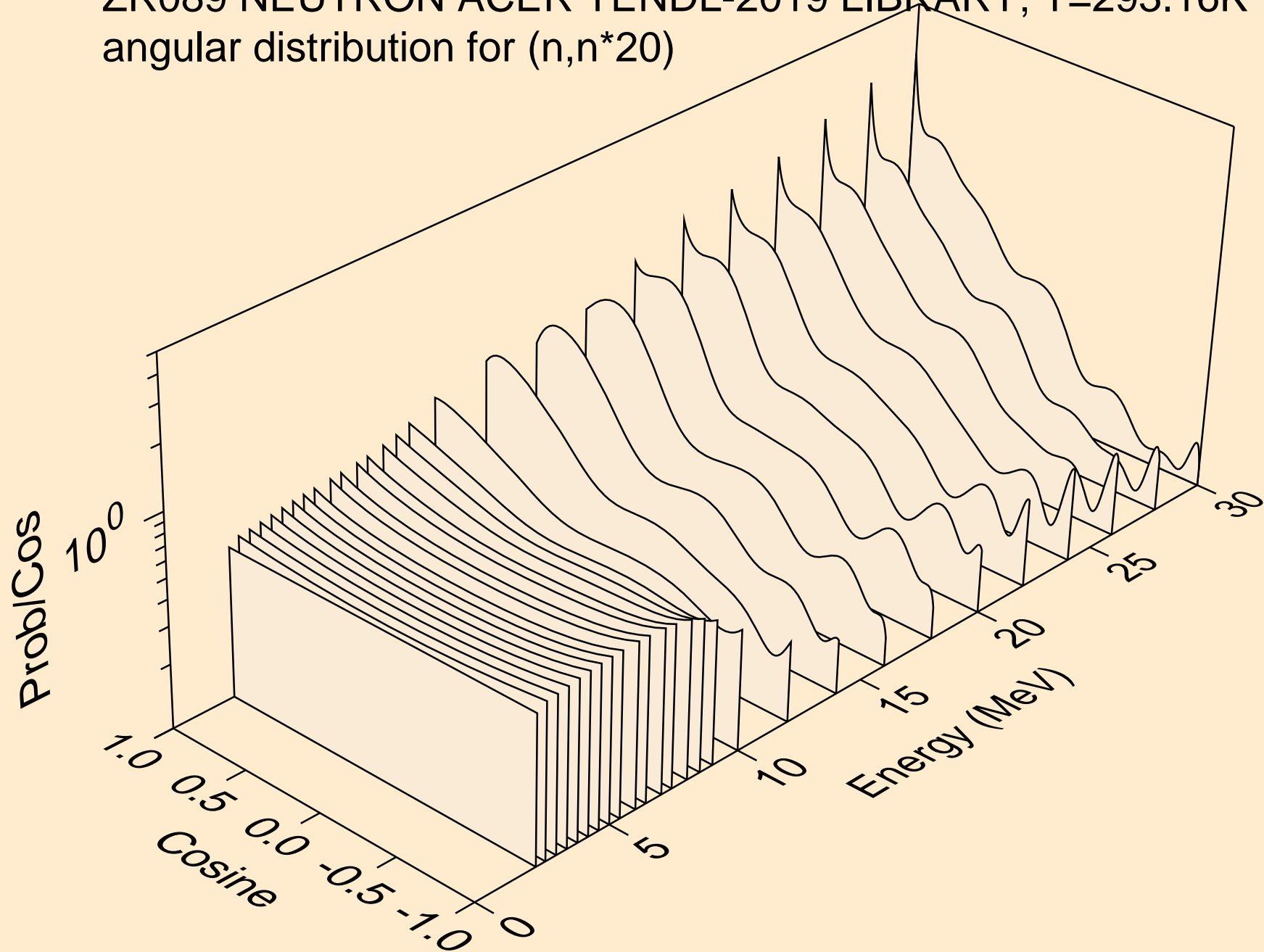




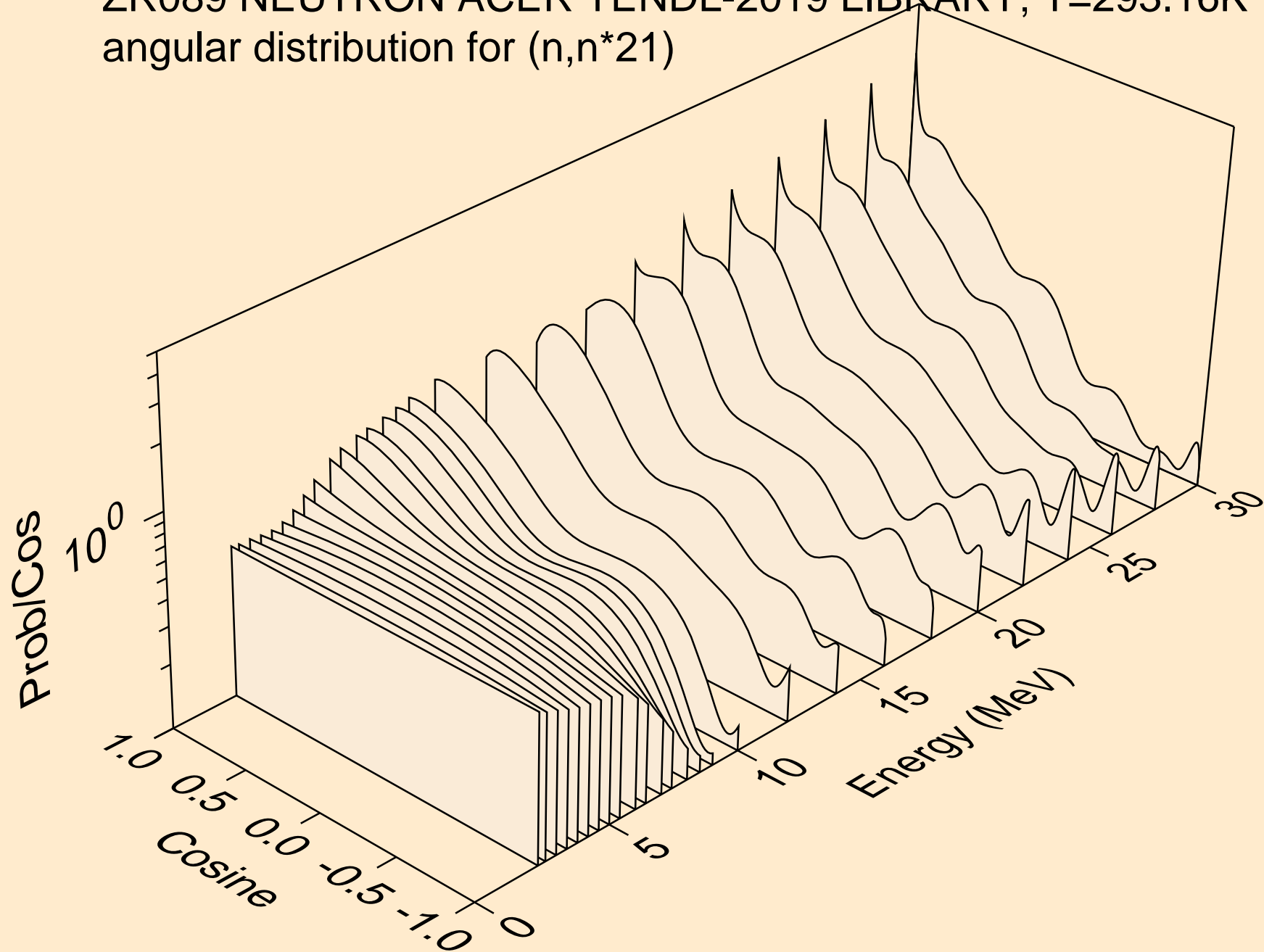
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angular distribution for (n,n\*19)



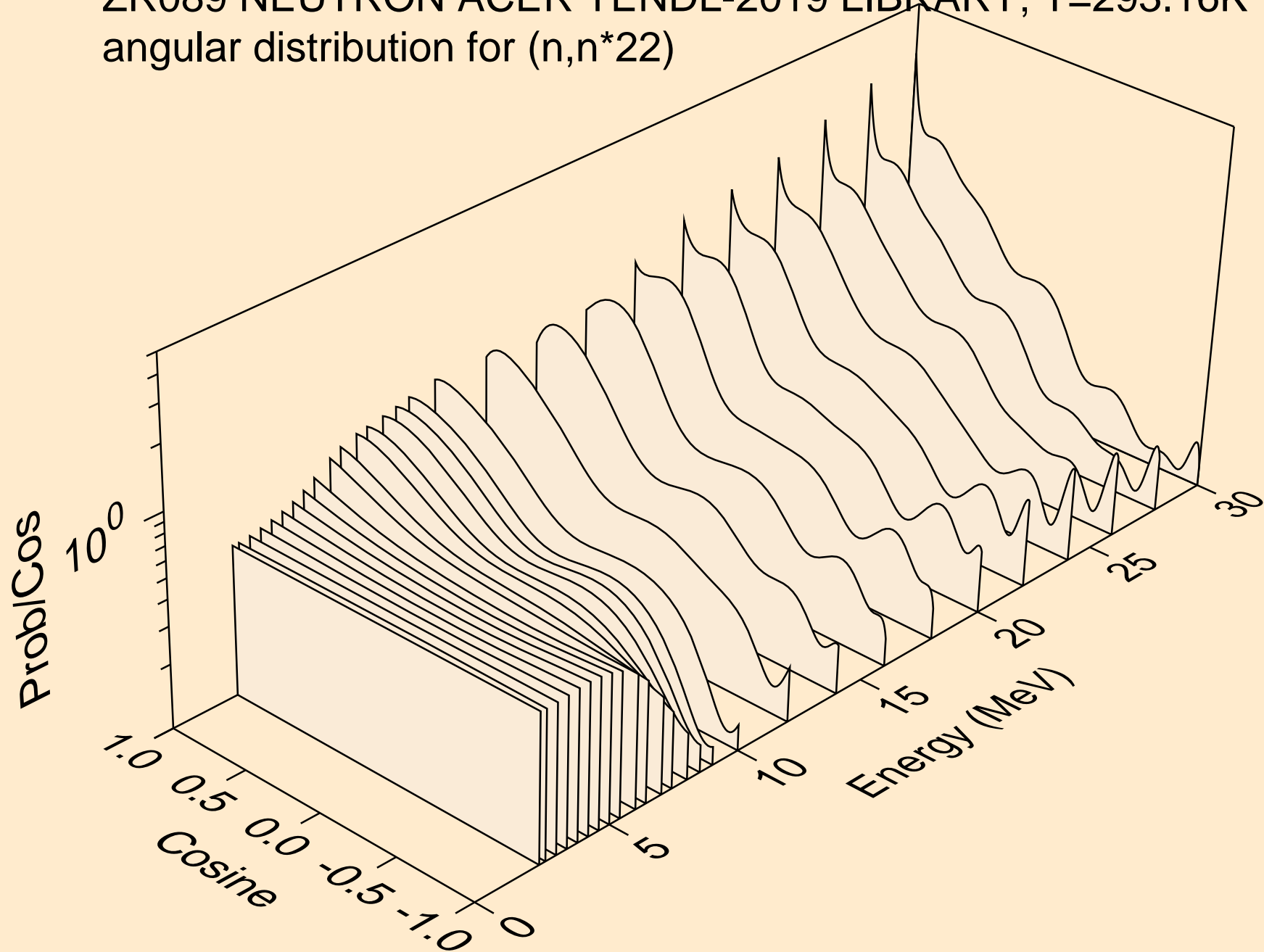
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angular distribution for (n,n\*20)



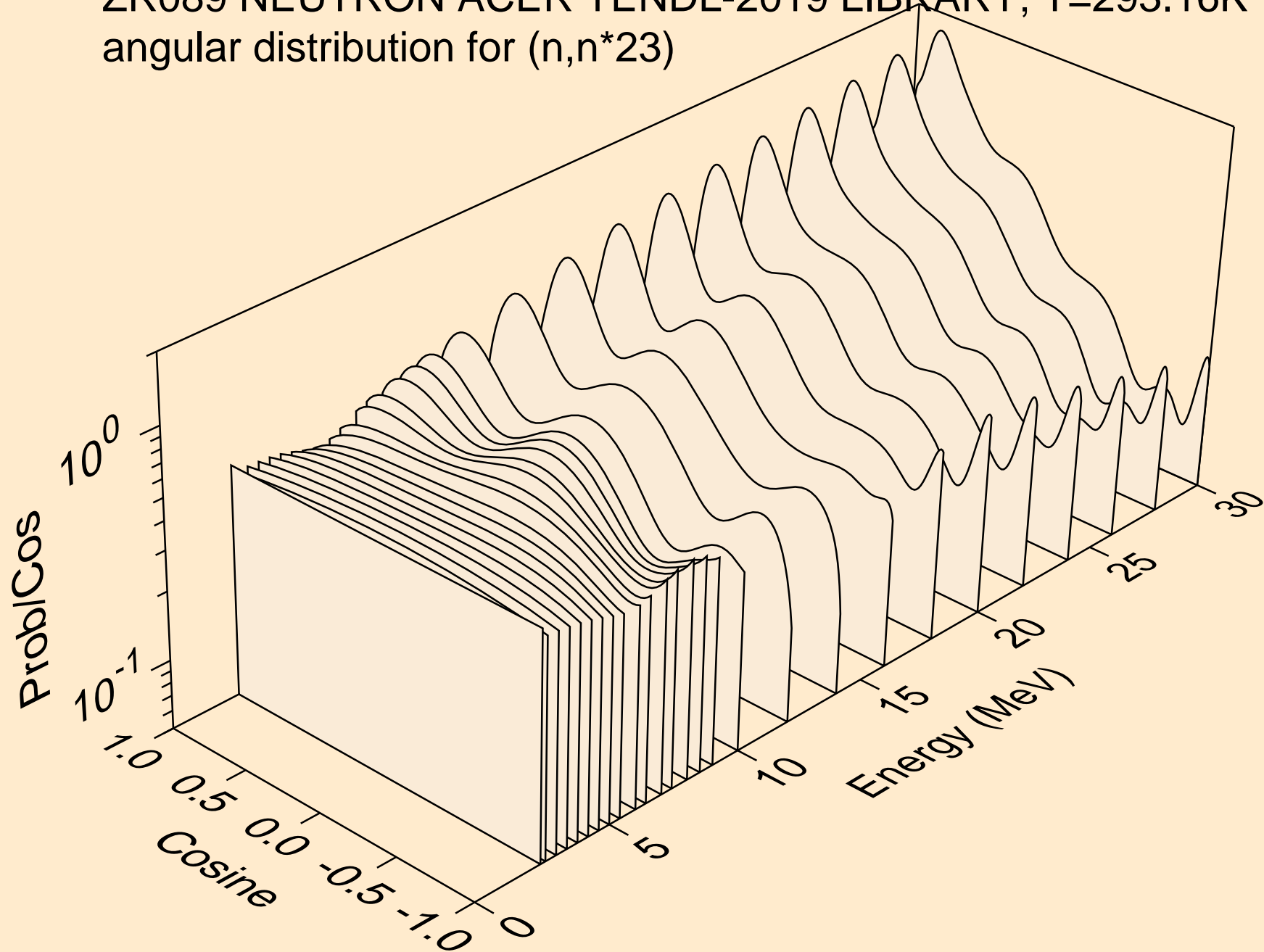
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angular distribution for (n,n\*21)



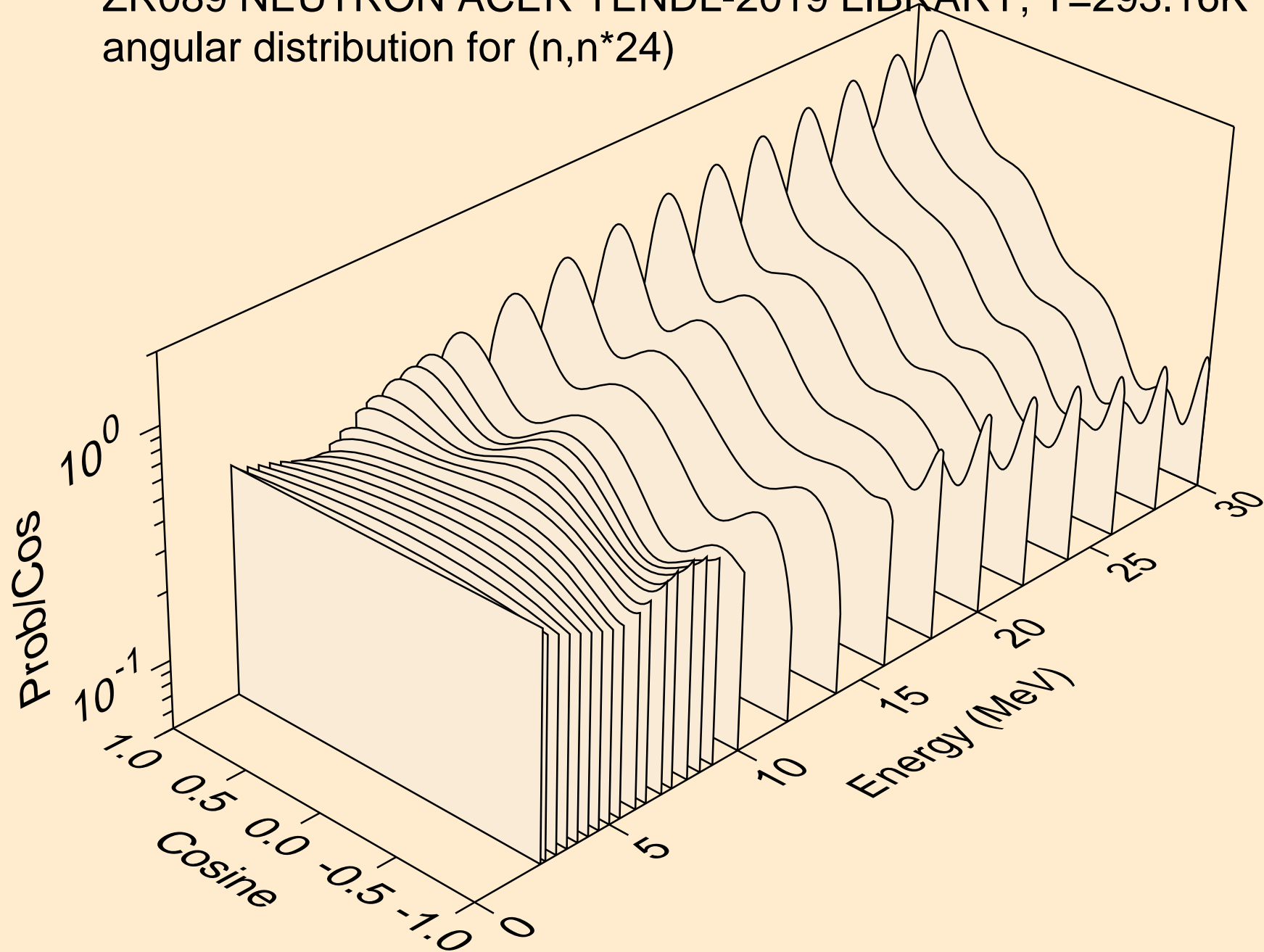
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angular distribution for (n,n\*22)



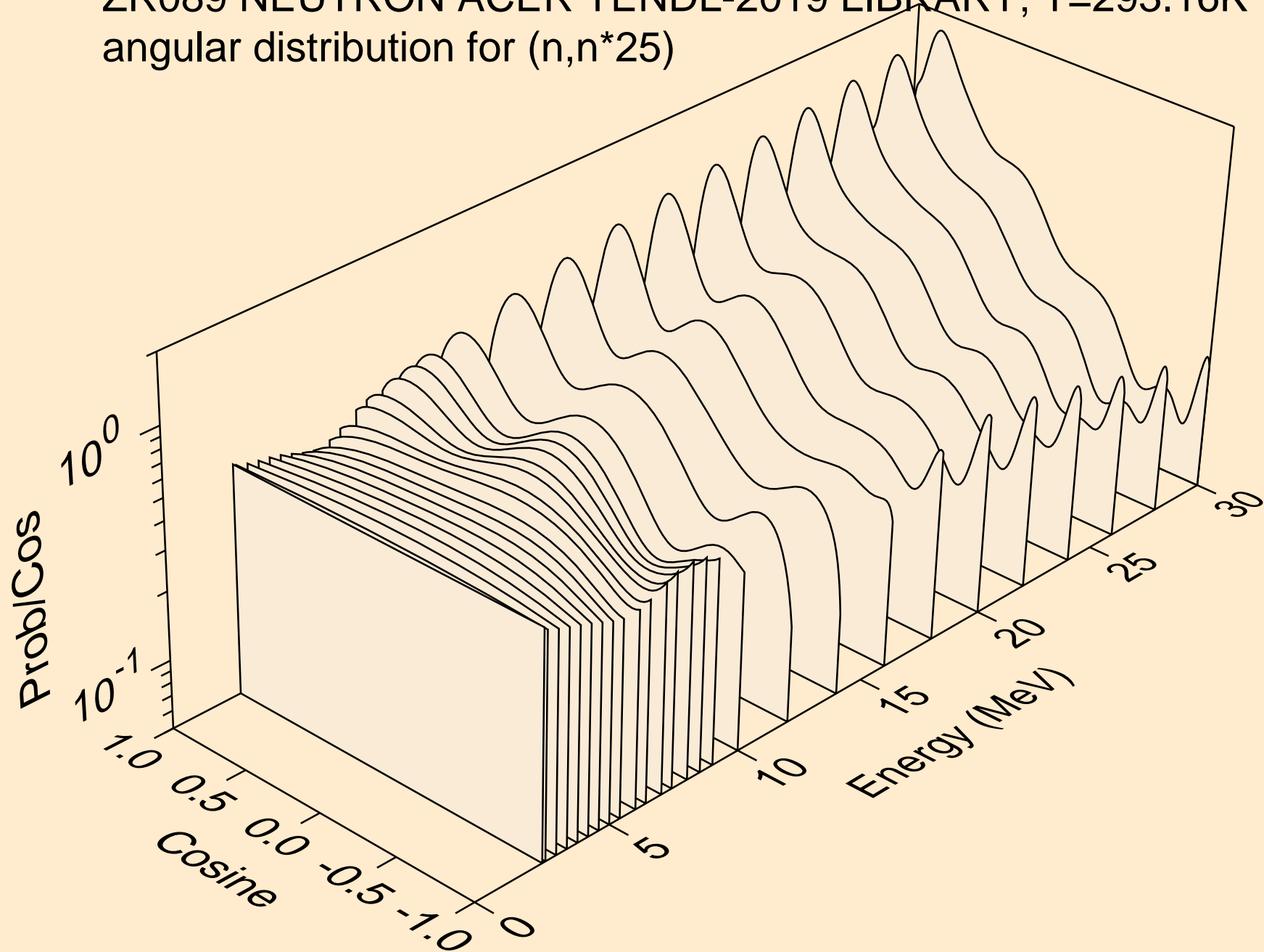
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angular distribution for (n,n\*23)



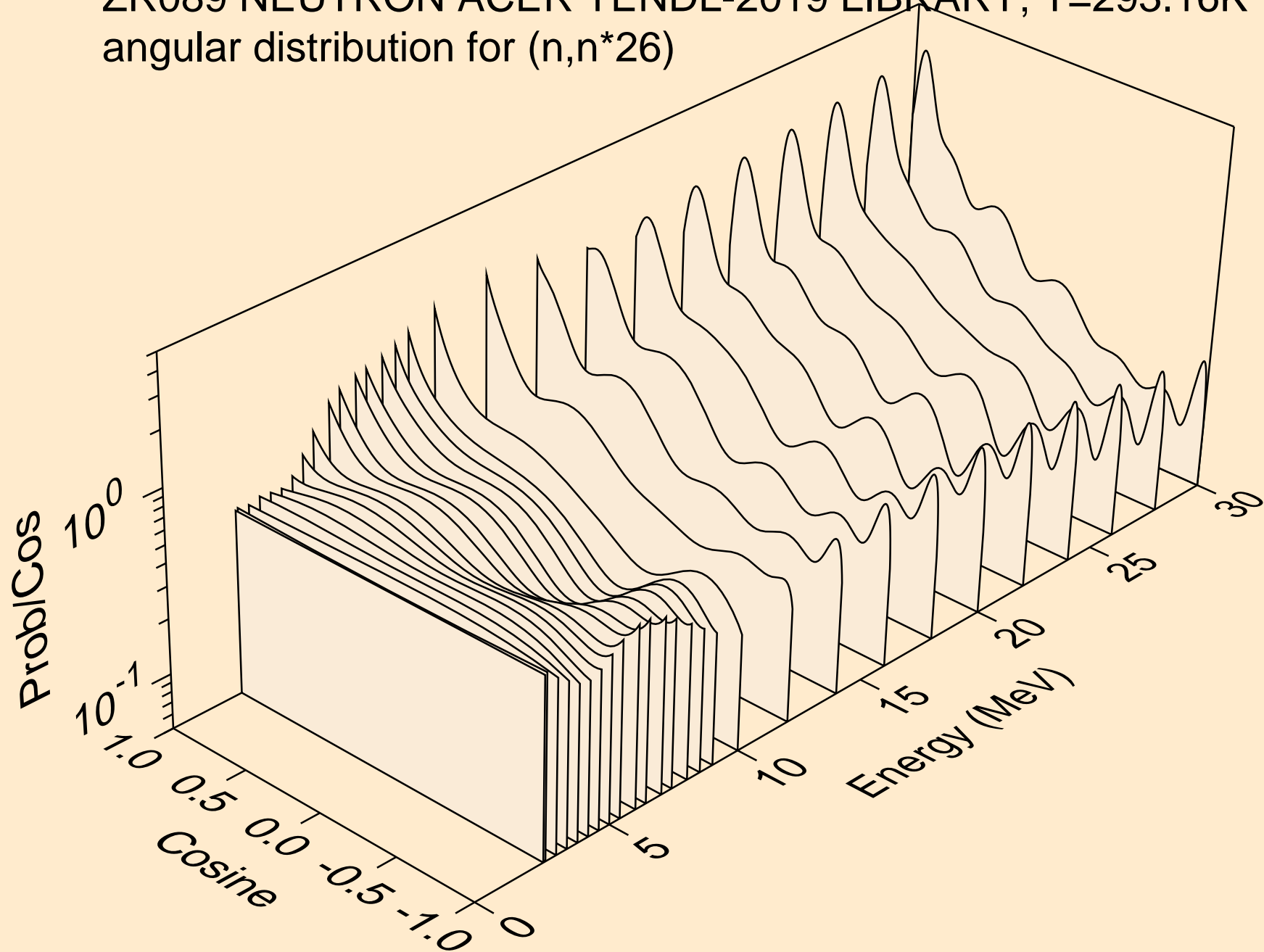
ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
angular distribution for (n,n\*24)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
angular distribution for (n,n\*25)

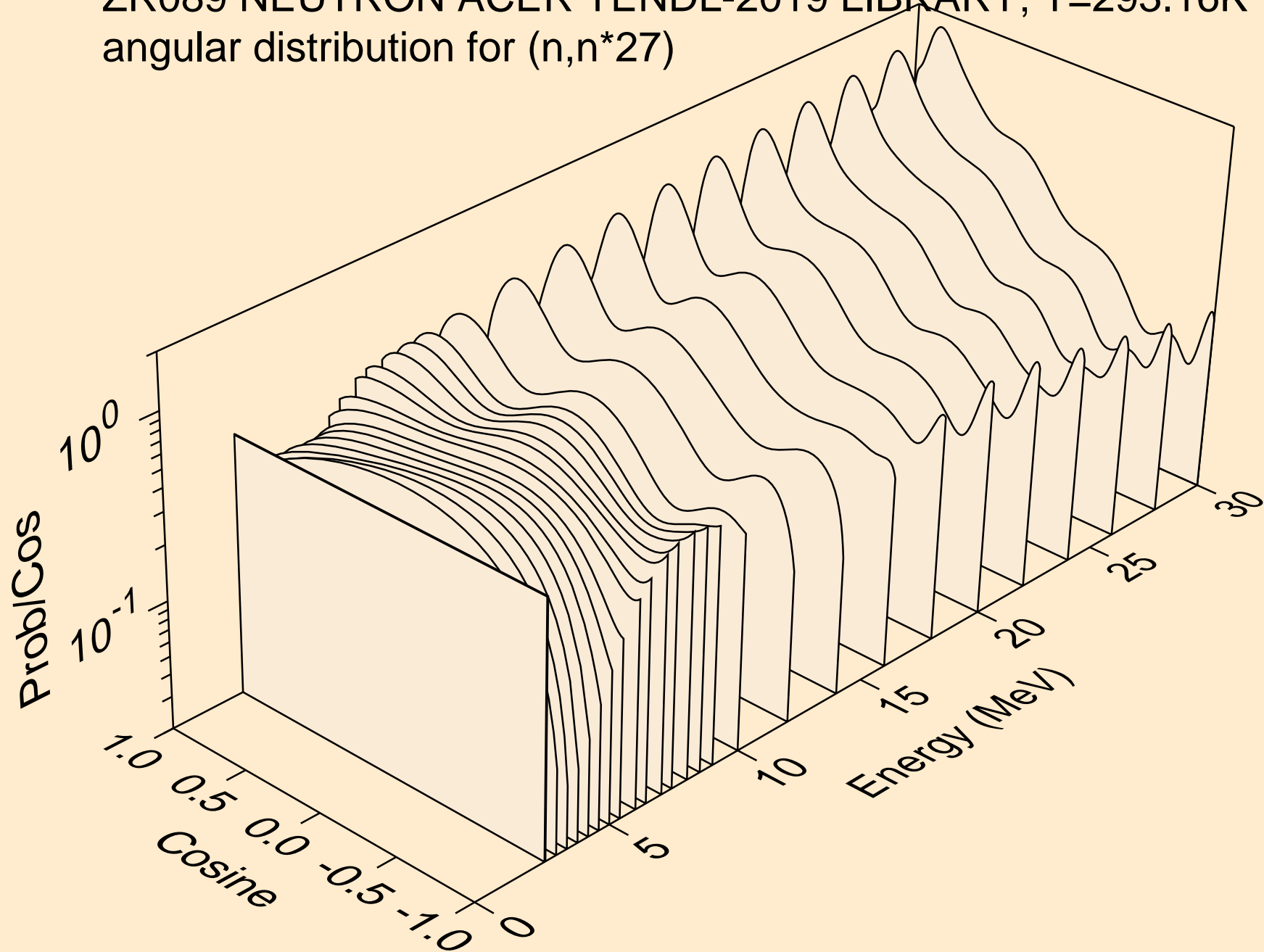


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angular distribution for (n,n\*26)

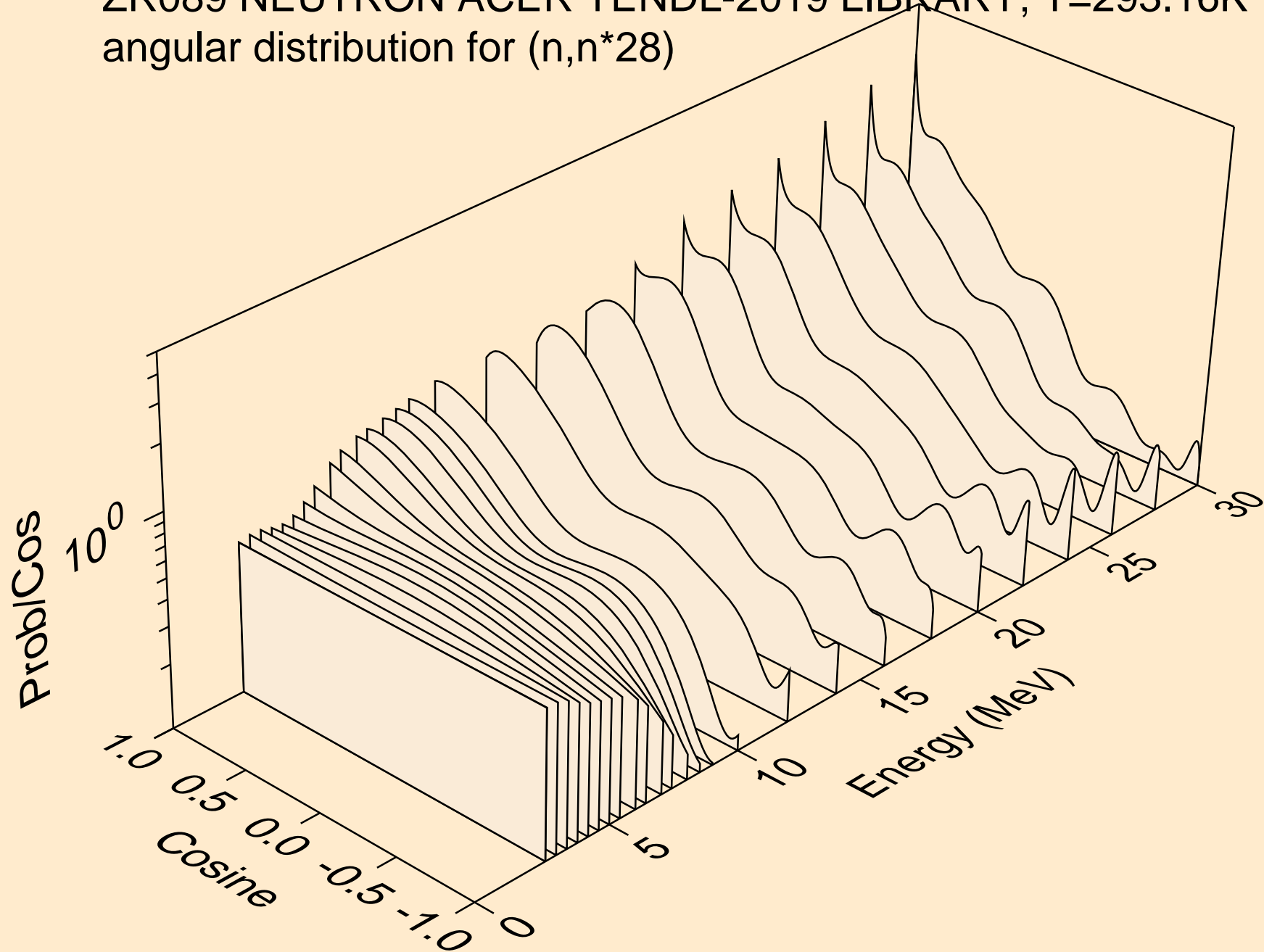




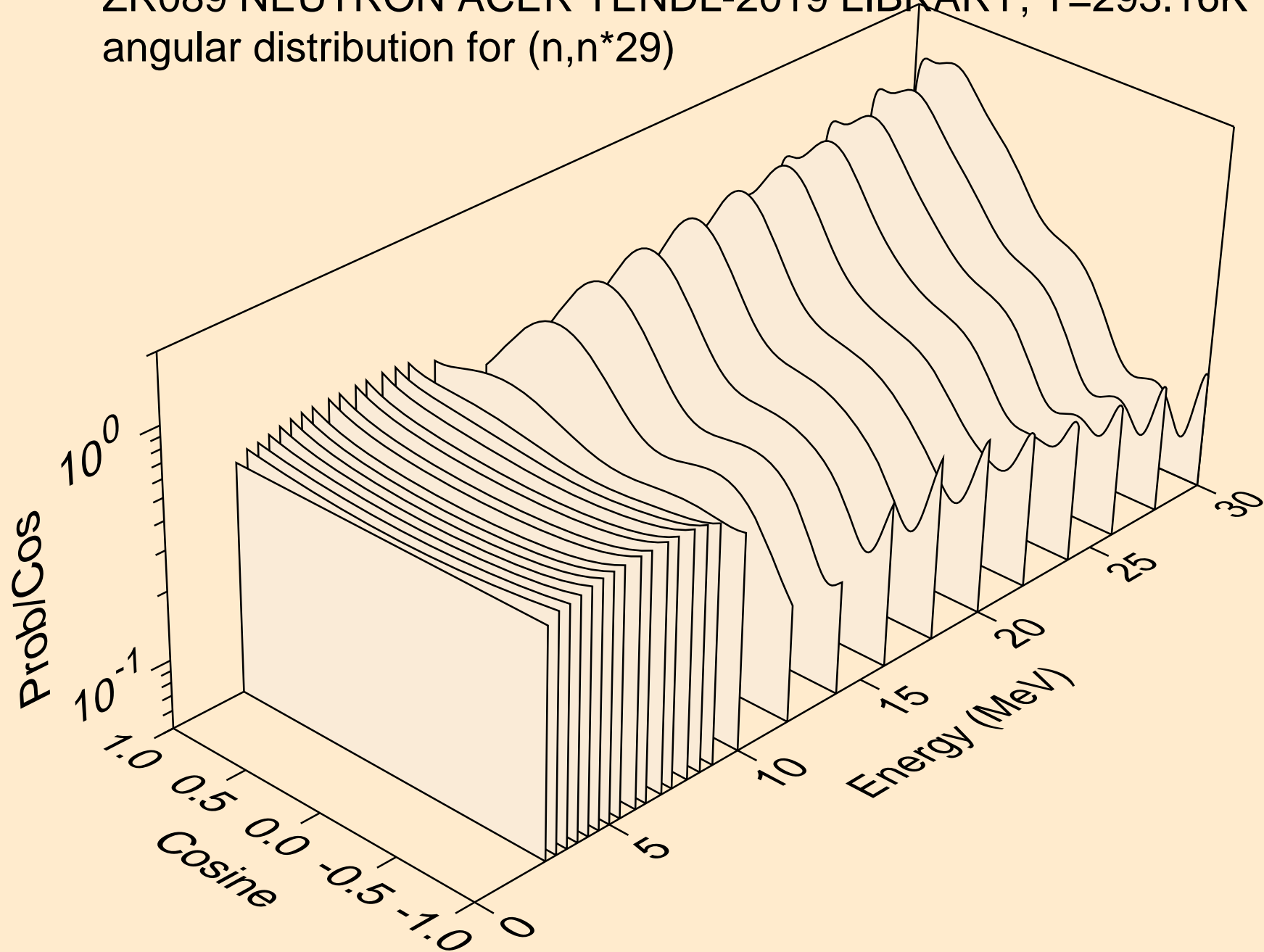
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angular distribution for (n,n\*27)



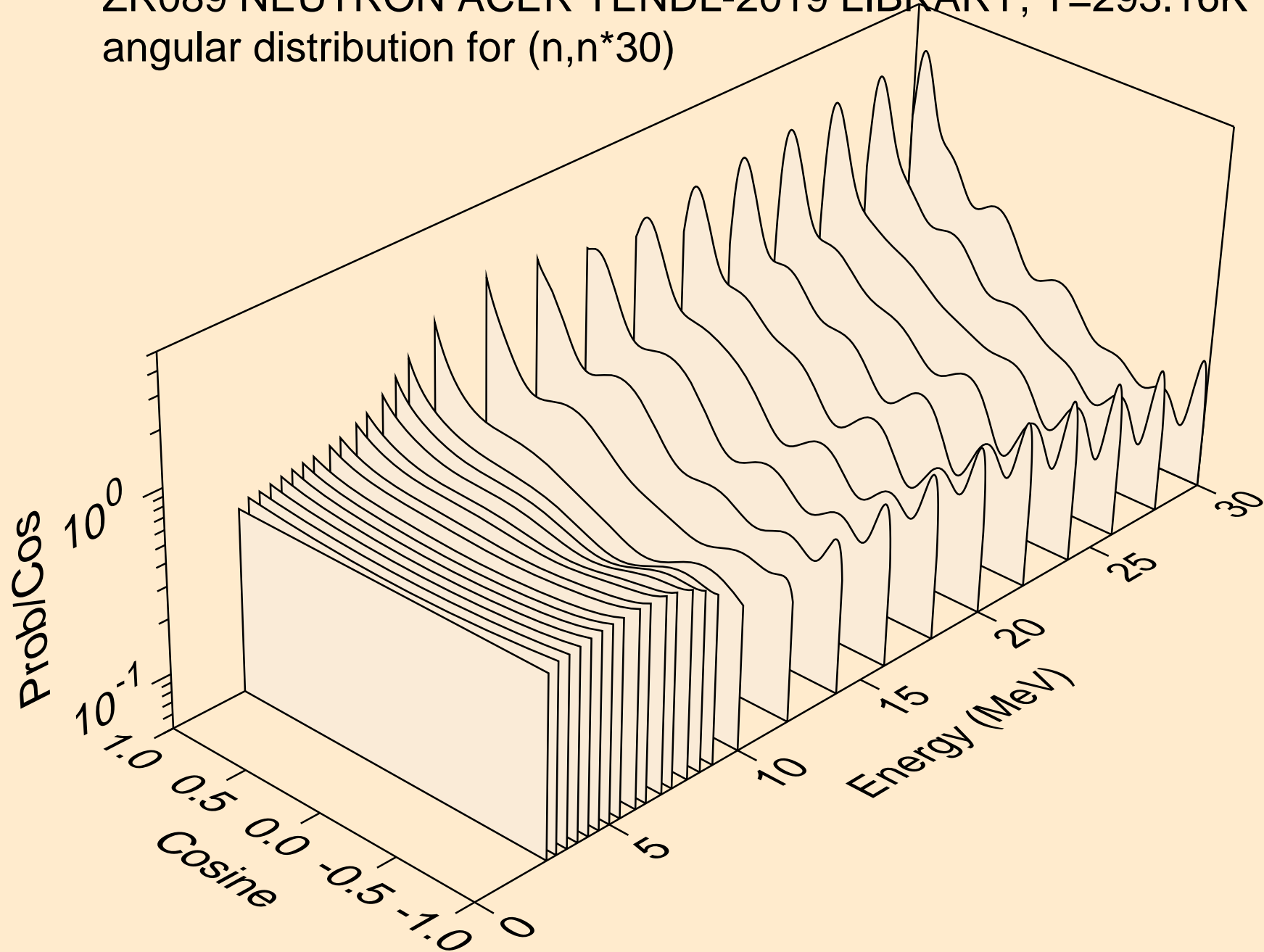
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angular distribution for (n,n\*28)



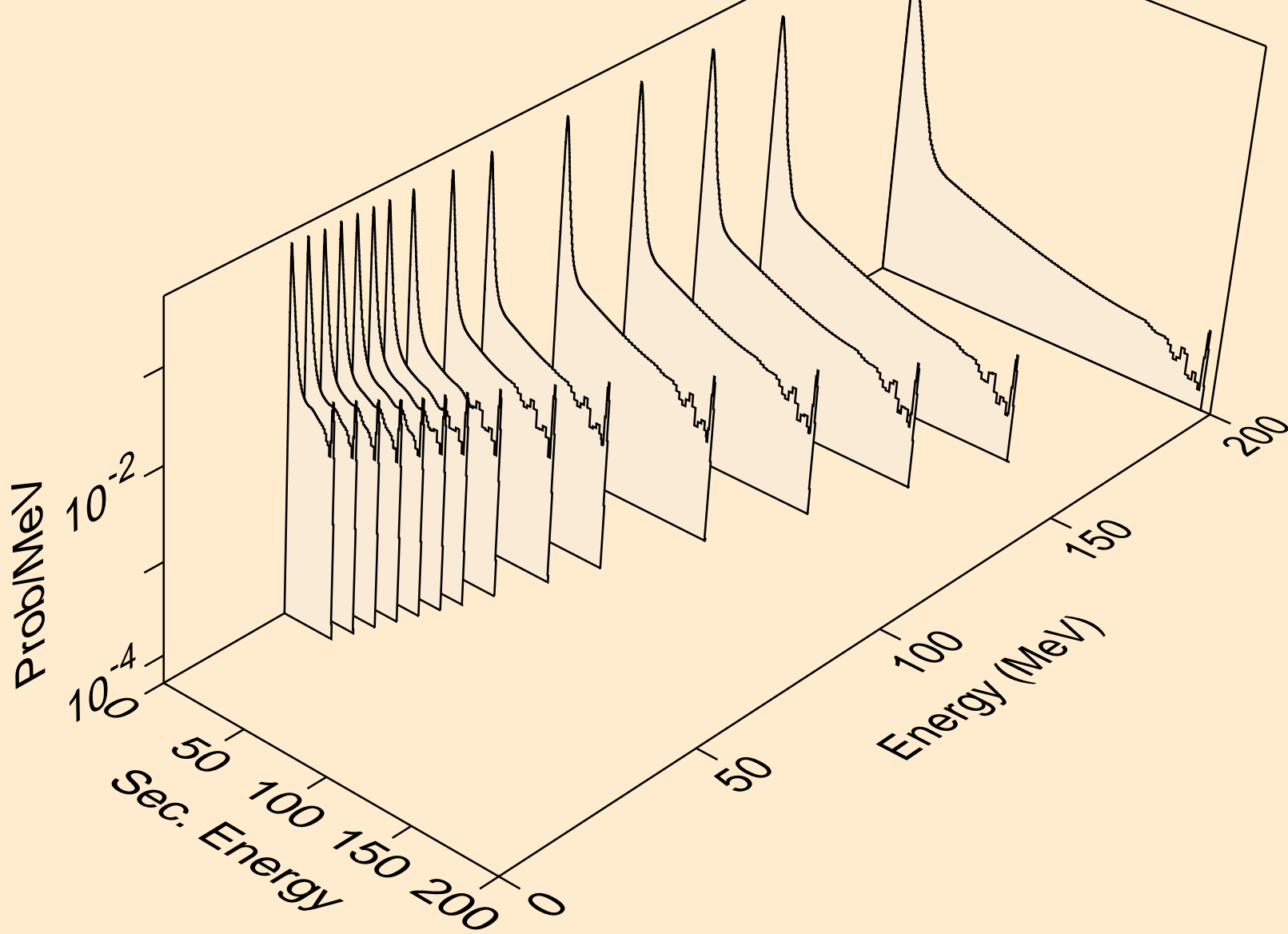
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angular distribution for (n,n\*29)



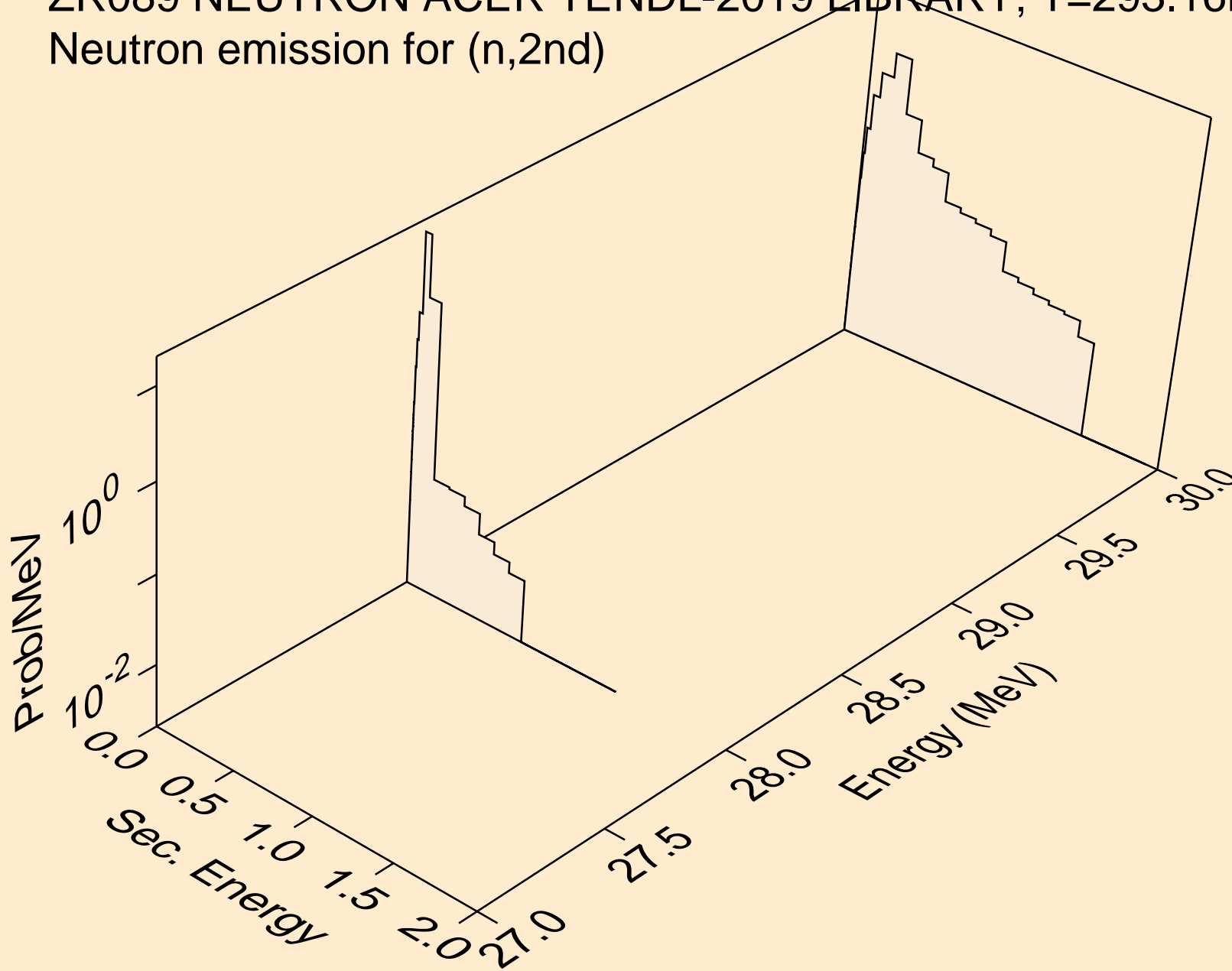
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angular distribution for (n,n\*30)



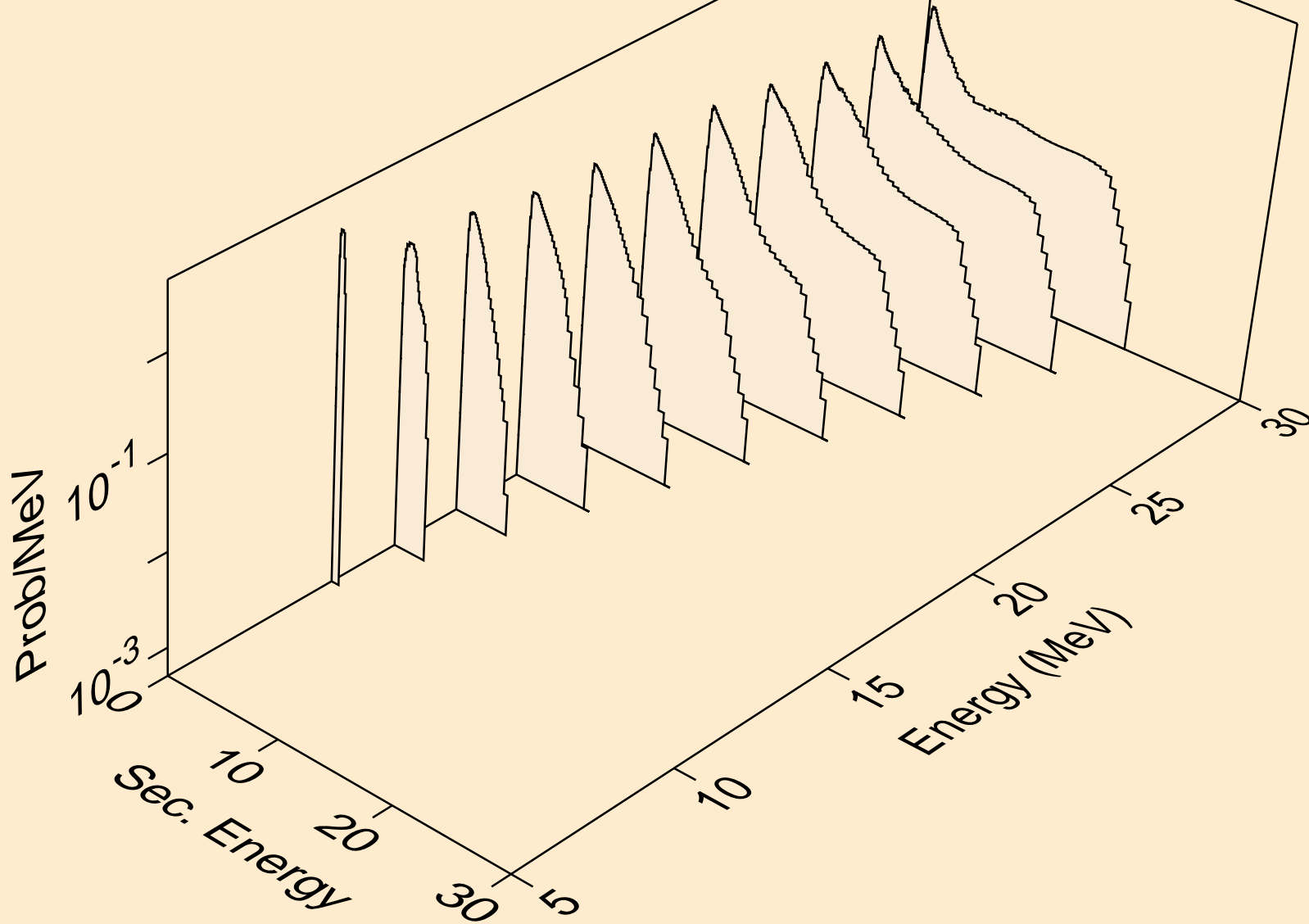
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Neutron emission for (n,x)



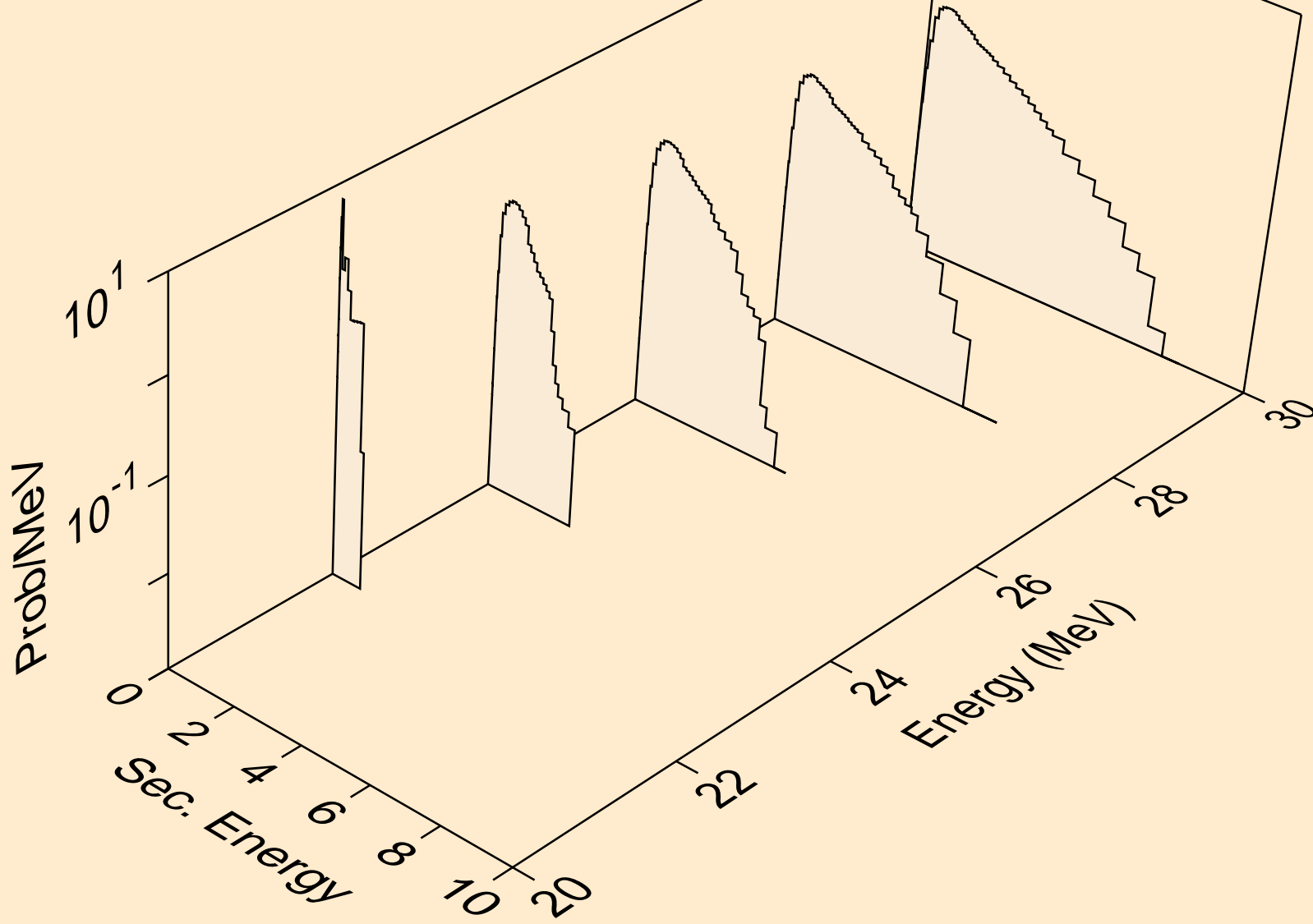
ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Neutron emission for (n,2nd)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Neutron emission for (n,2n)

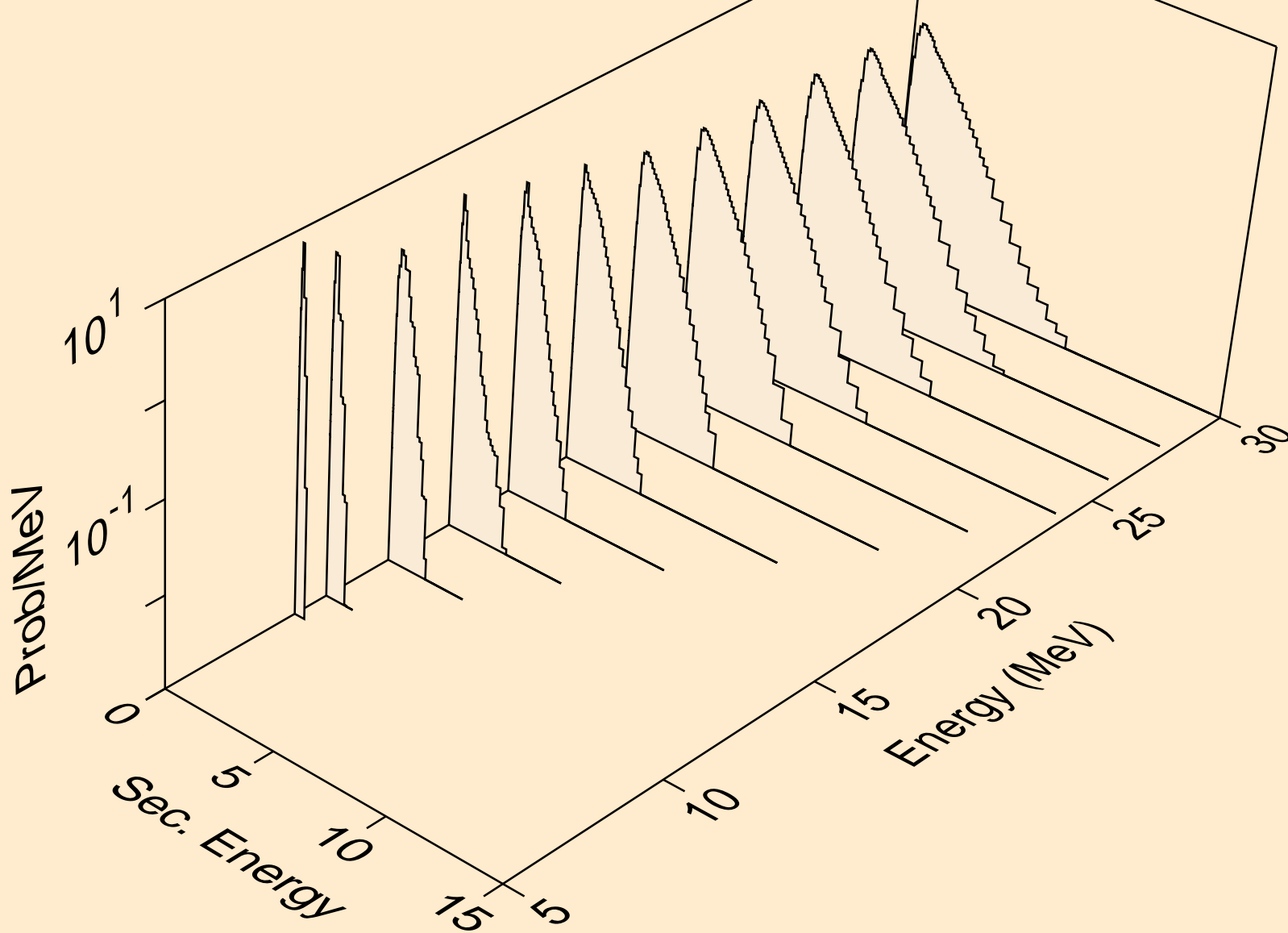


ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Neutron emission for (n,3n)

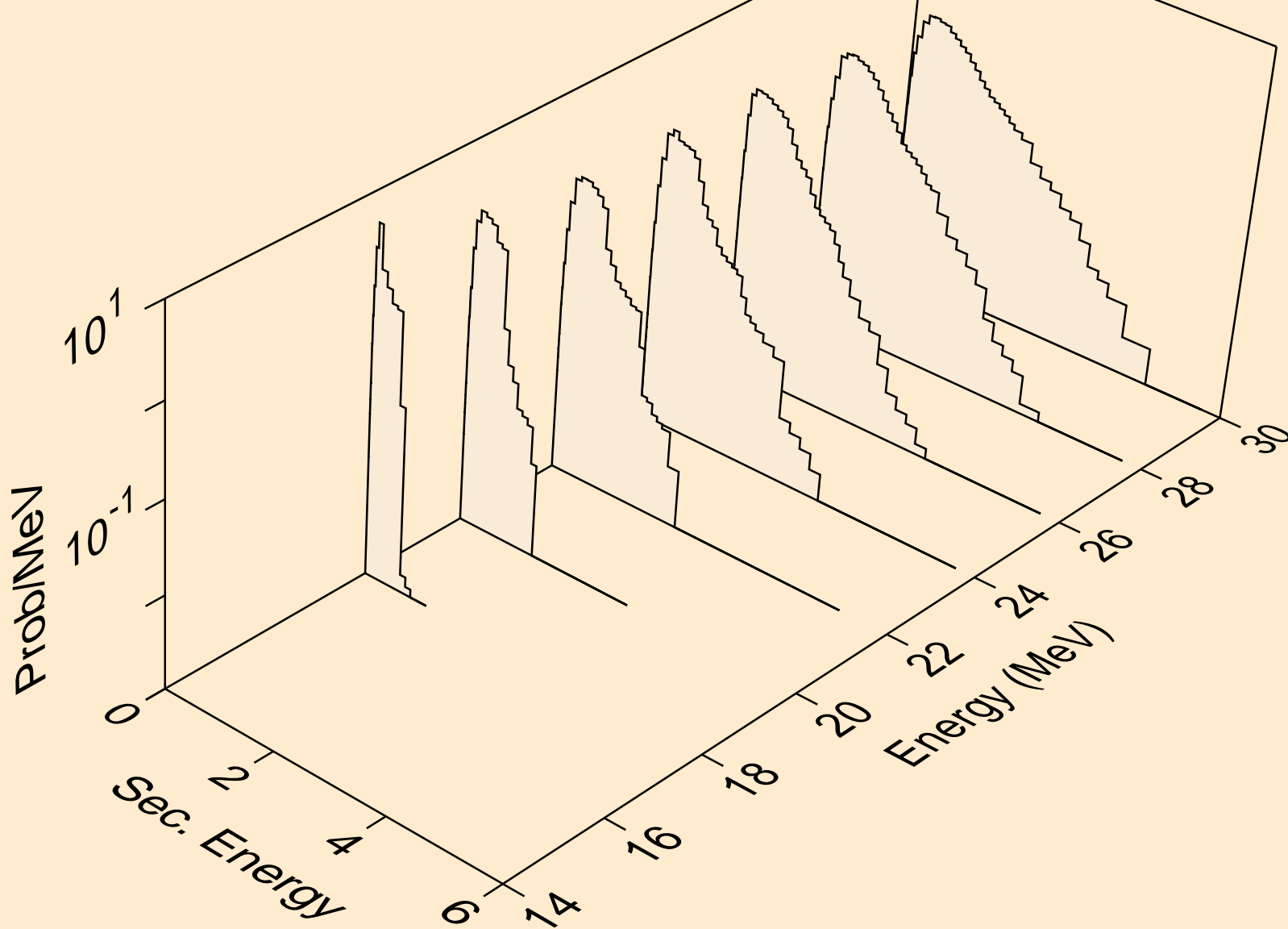




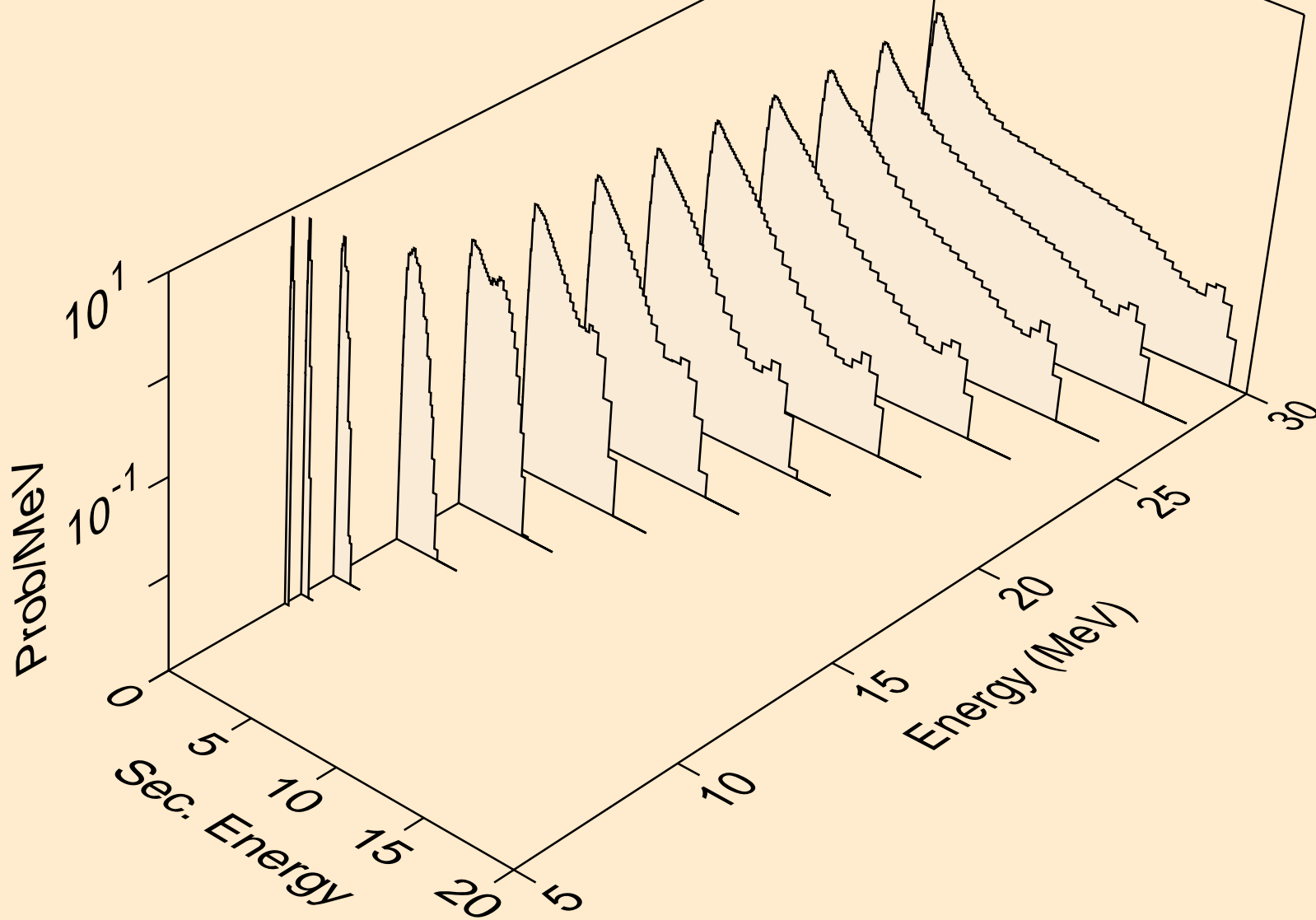
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Neutron emission for (n,n\*)a



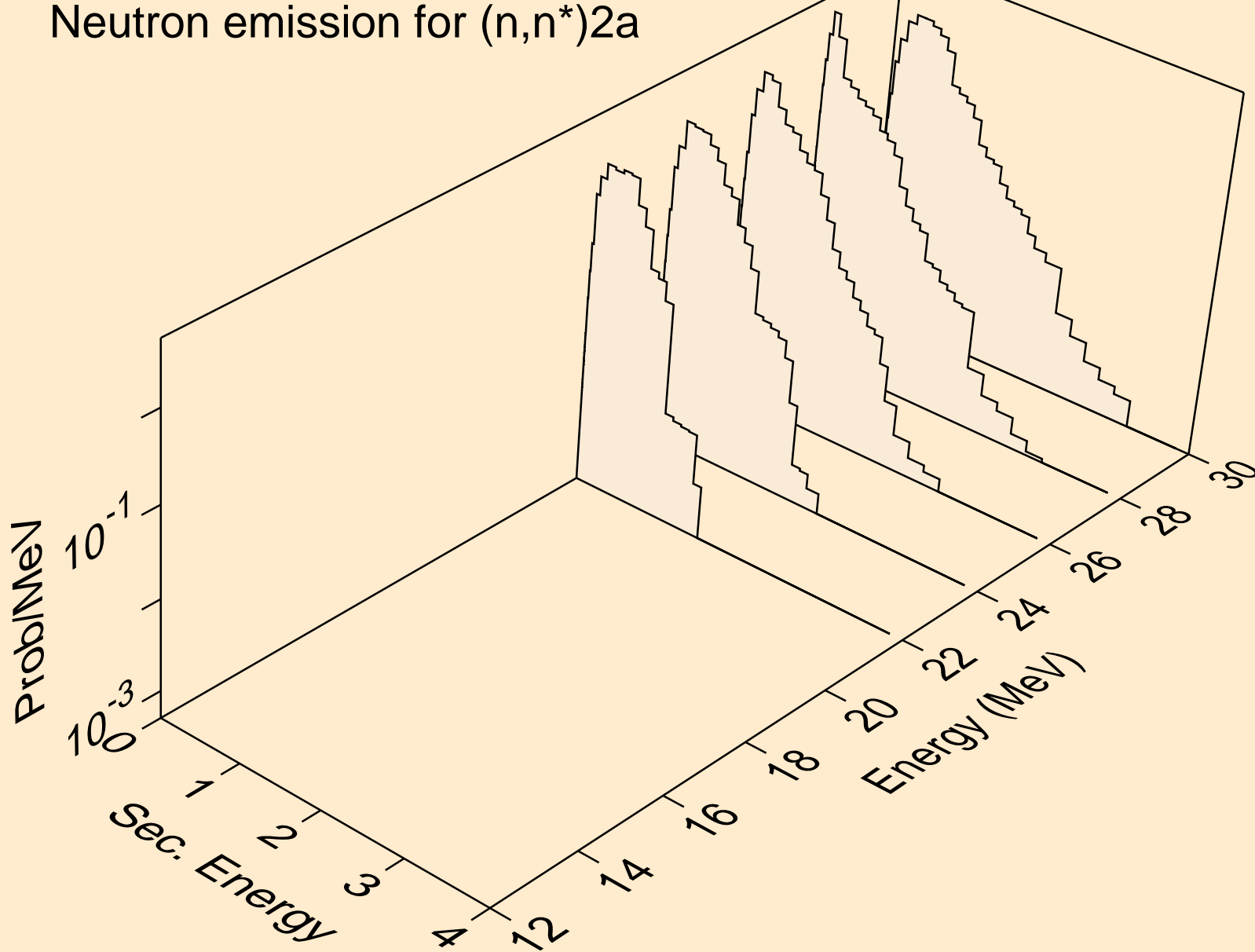
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Neutron emission for (n,2n)<sub>a</sub>



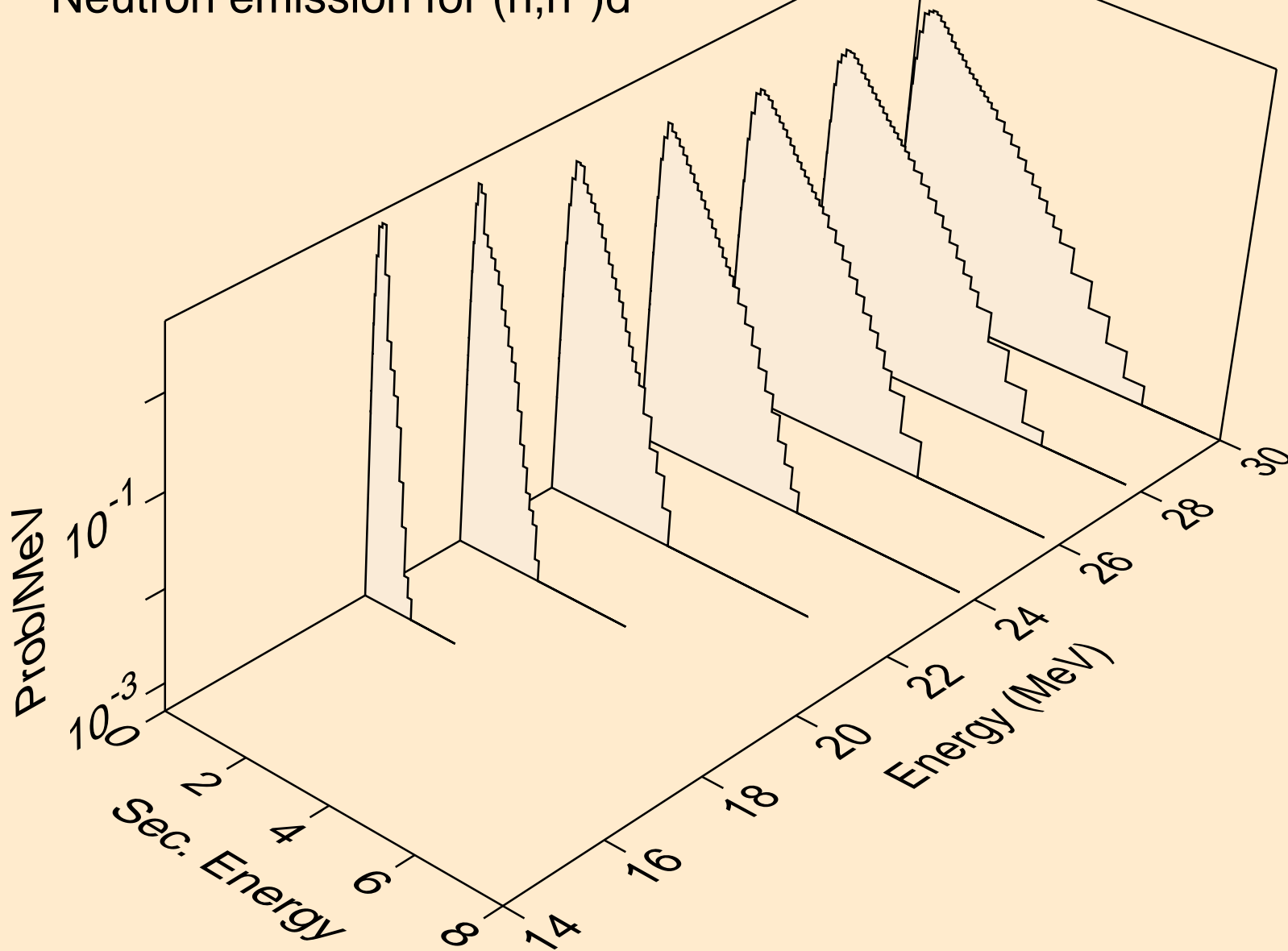
ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Neutron emission for (n,n\*)p



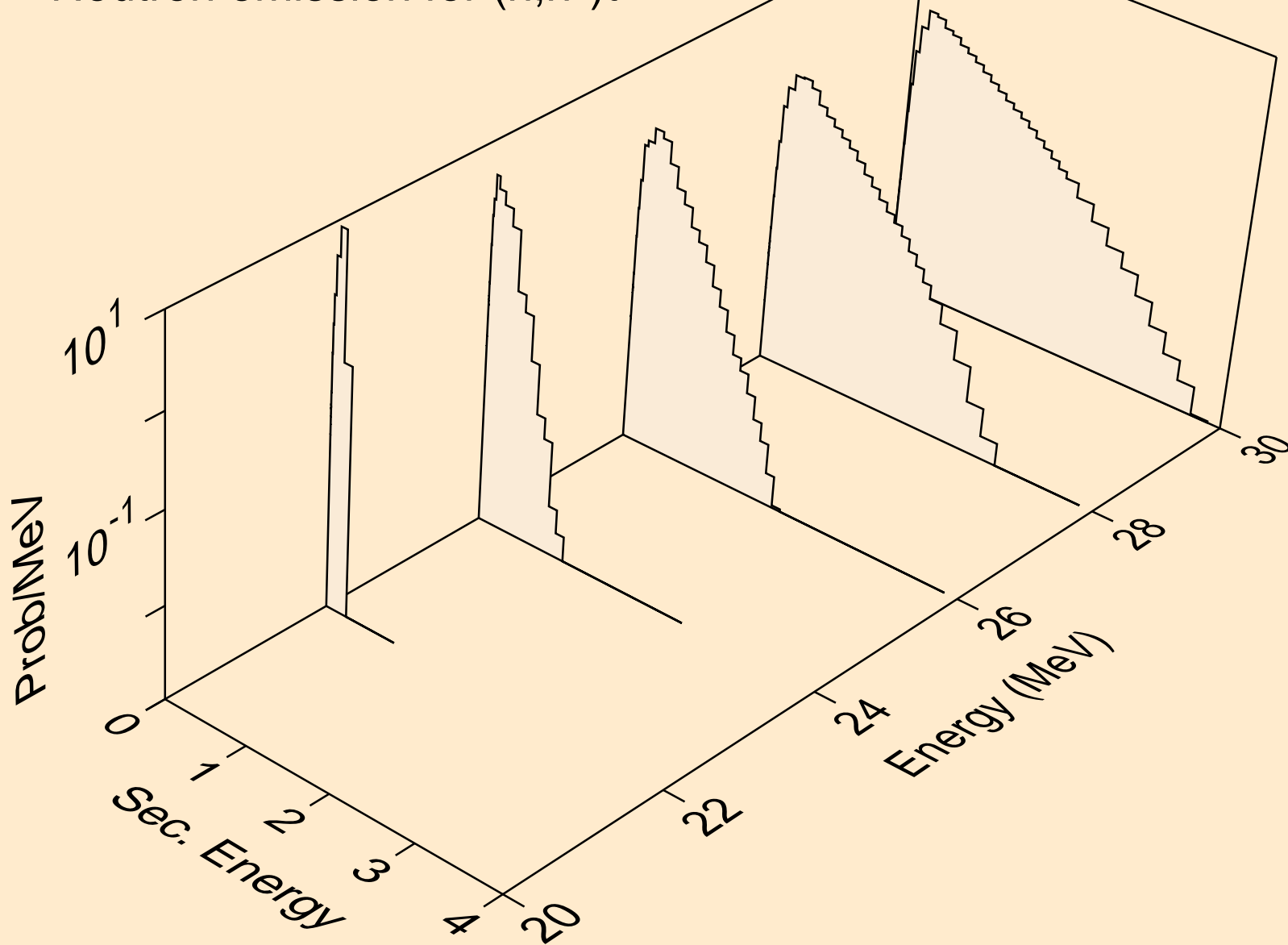
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Neutron emission for (n,n\*)2a



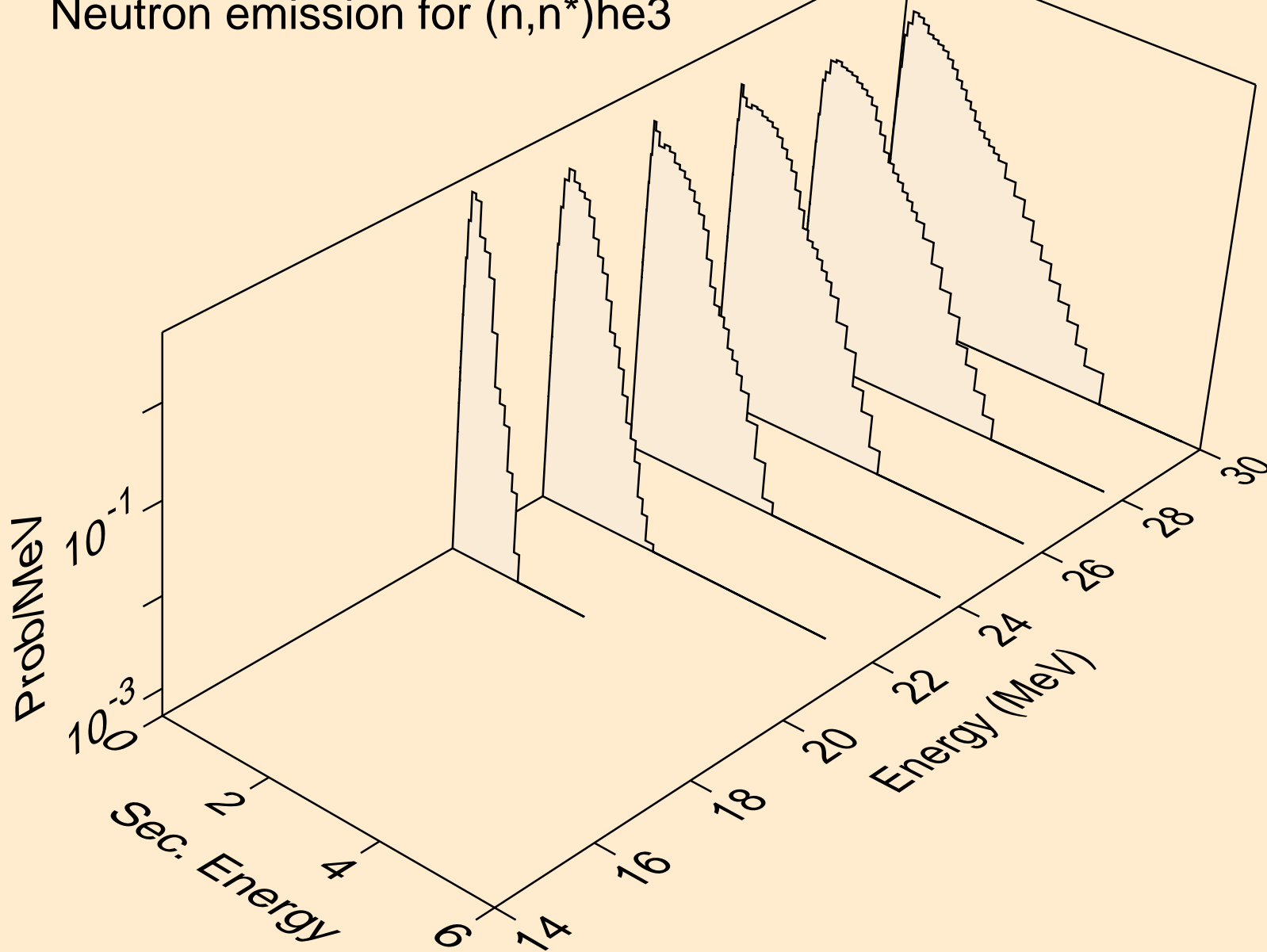
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Neutron emission for (n,n\*)d



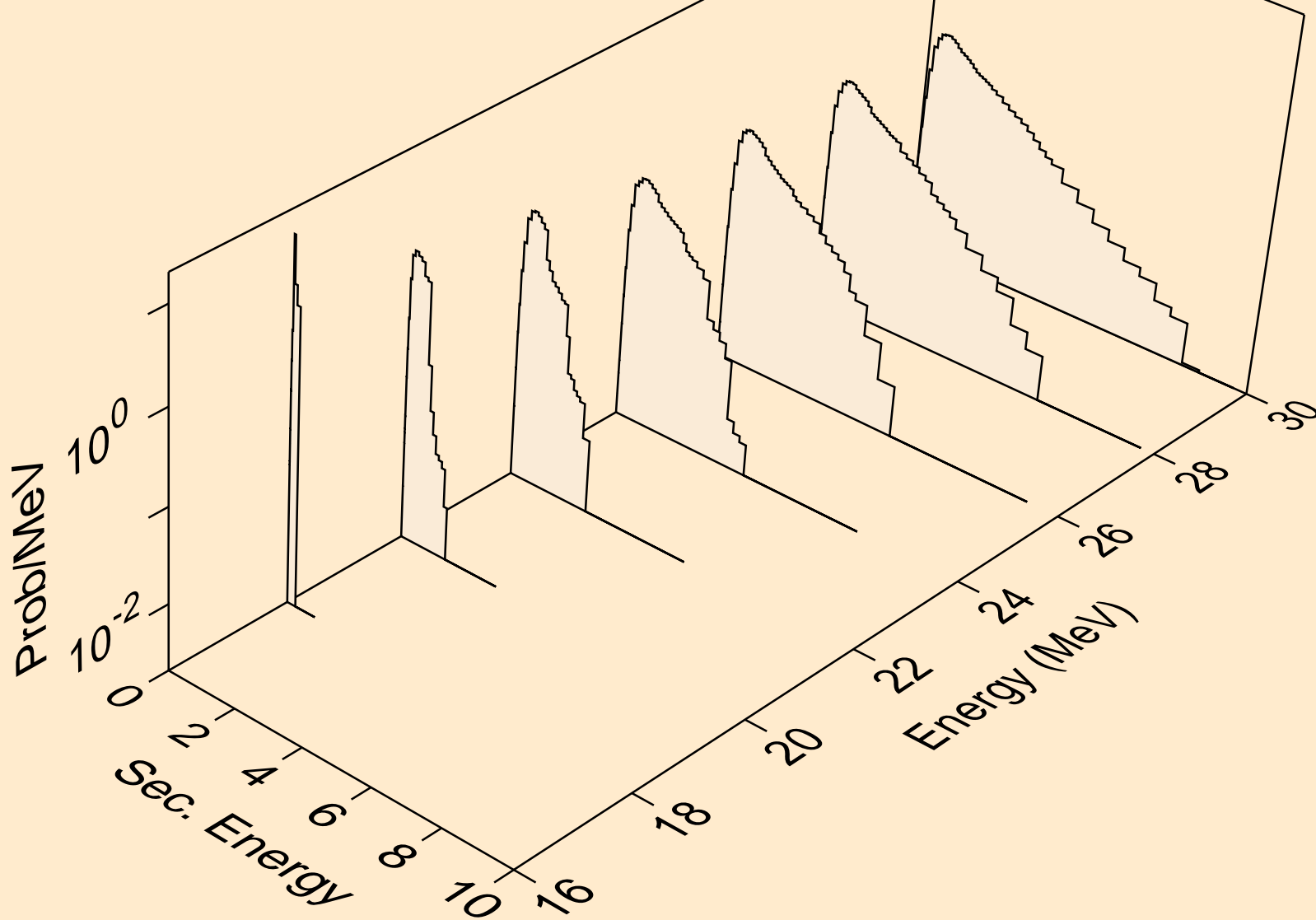
ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Neutron emission for (n,n\*)t



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Neutron emission for (n,n\*)he3

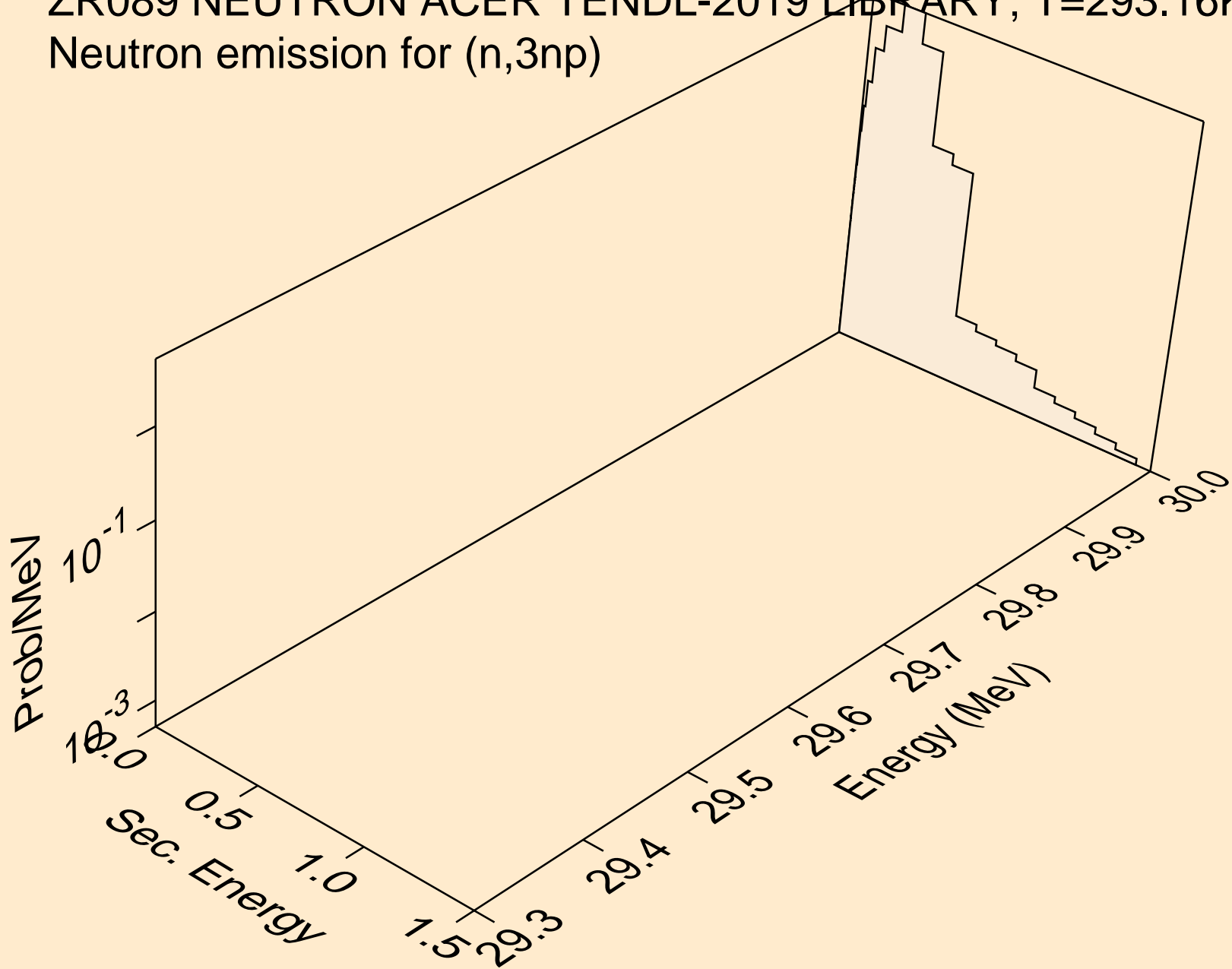


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Neutron emission for (n,2np)

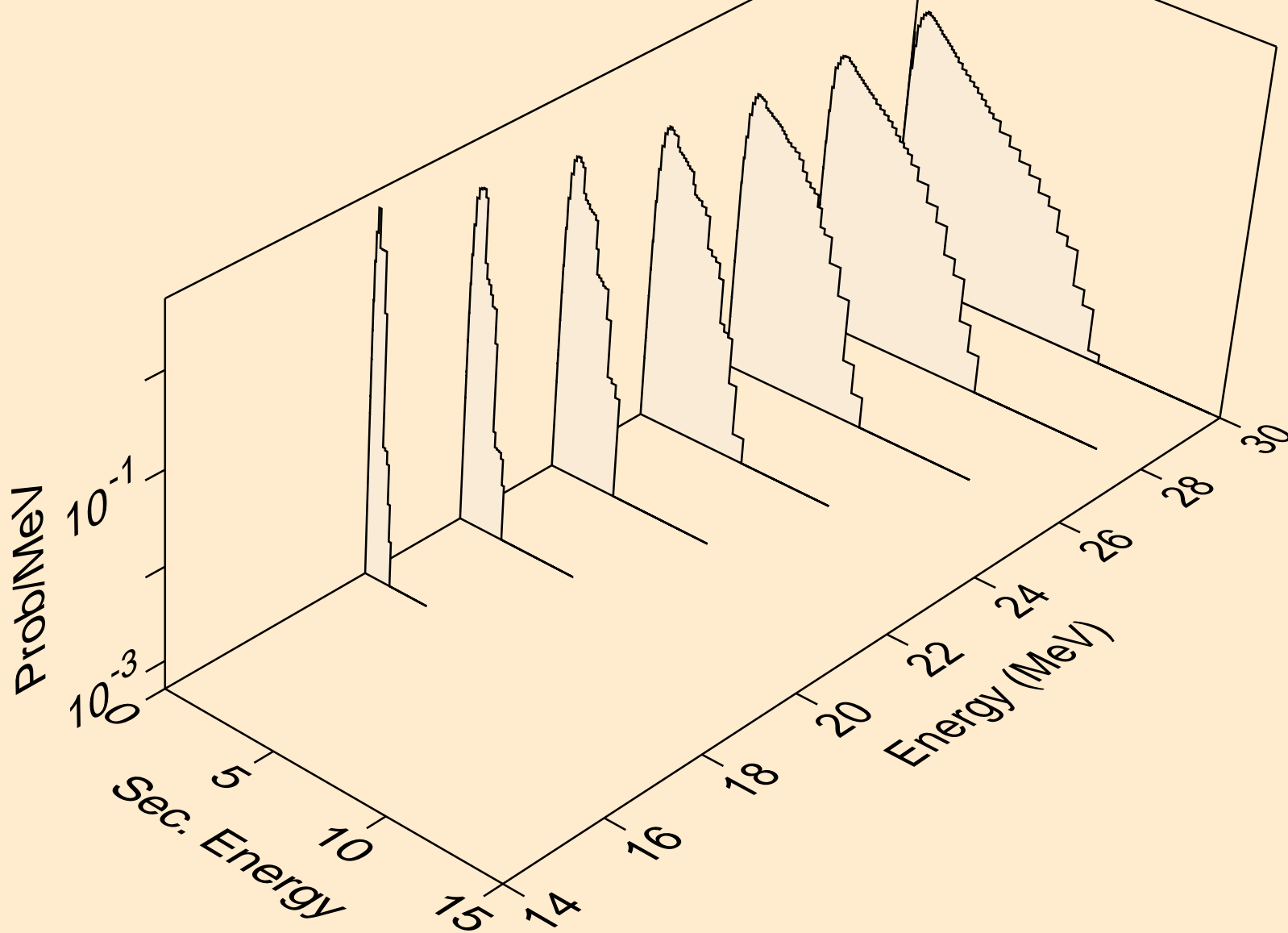




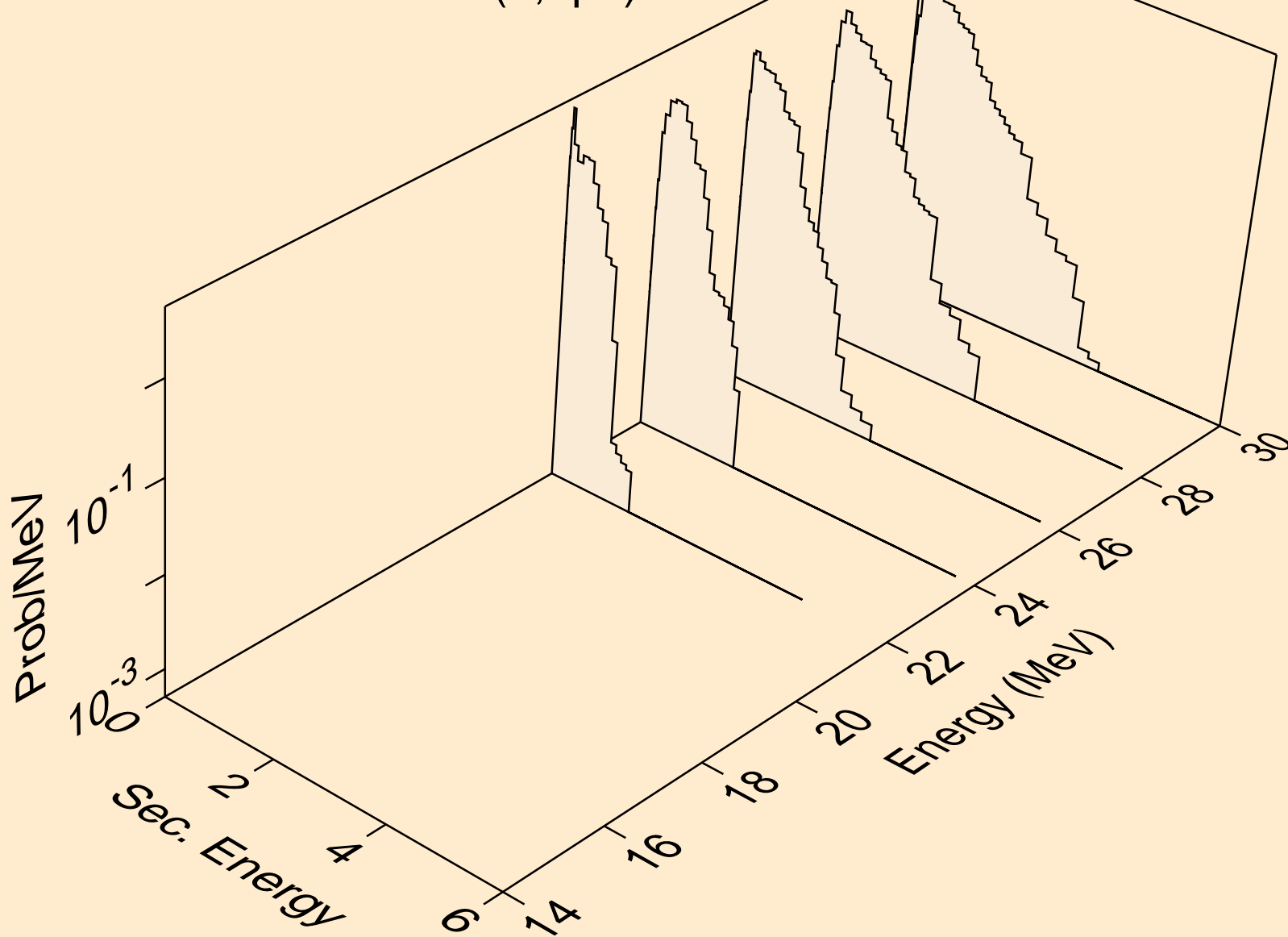
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Neutron emission for (n,3np)



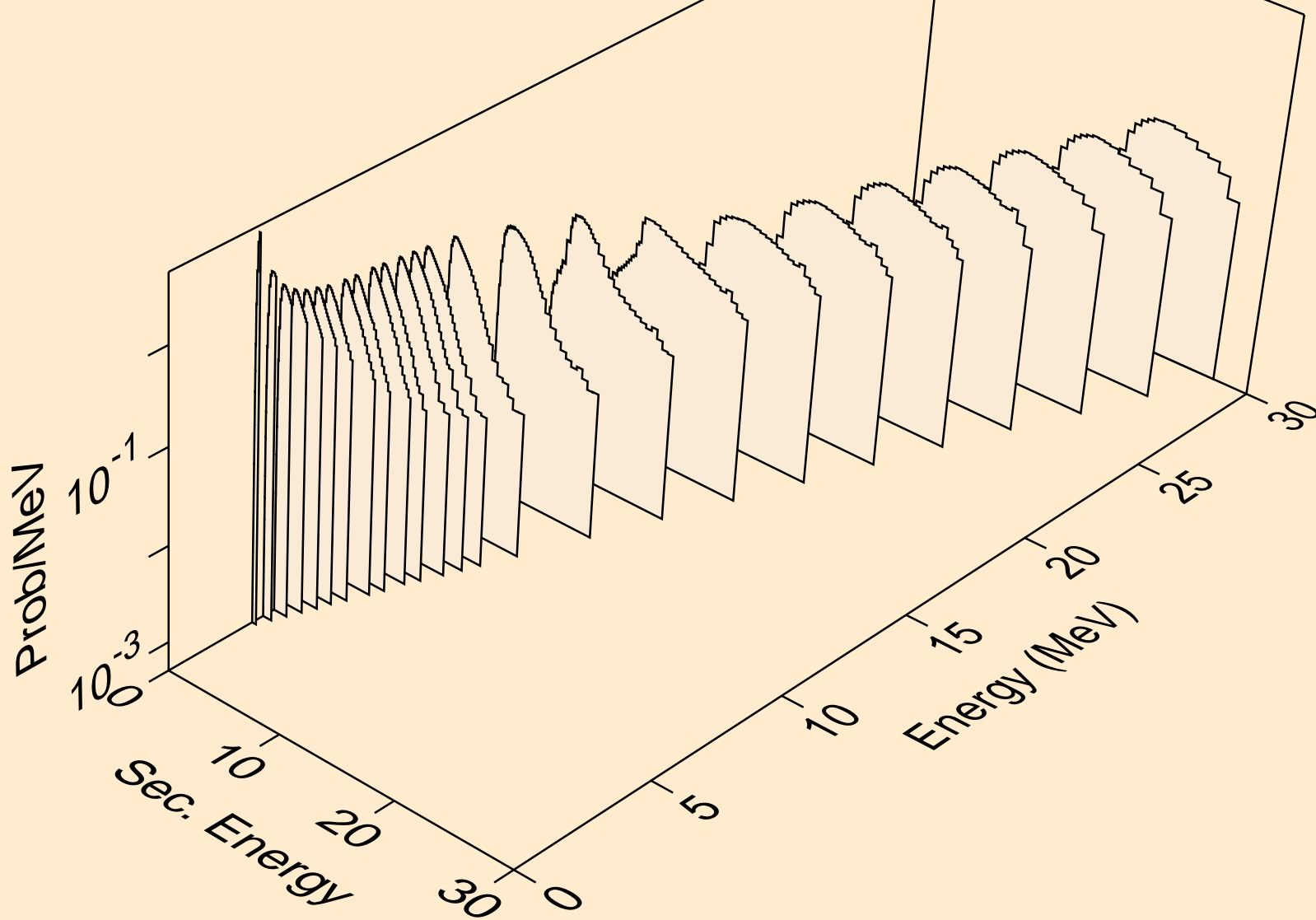
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Neutron emission for (n,2np)



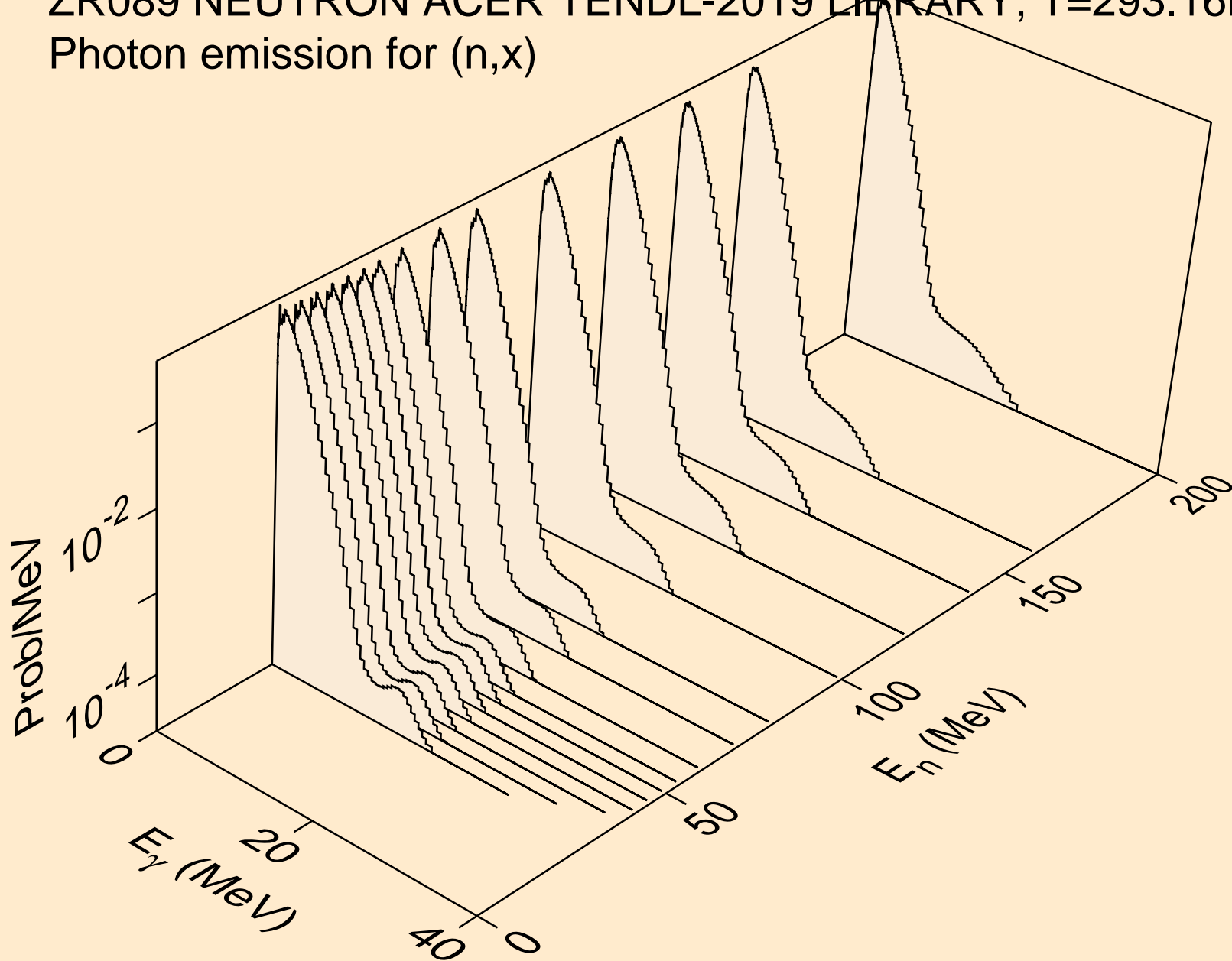
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Neutron emission for (n,npa)



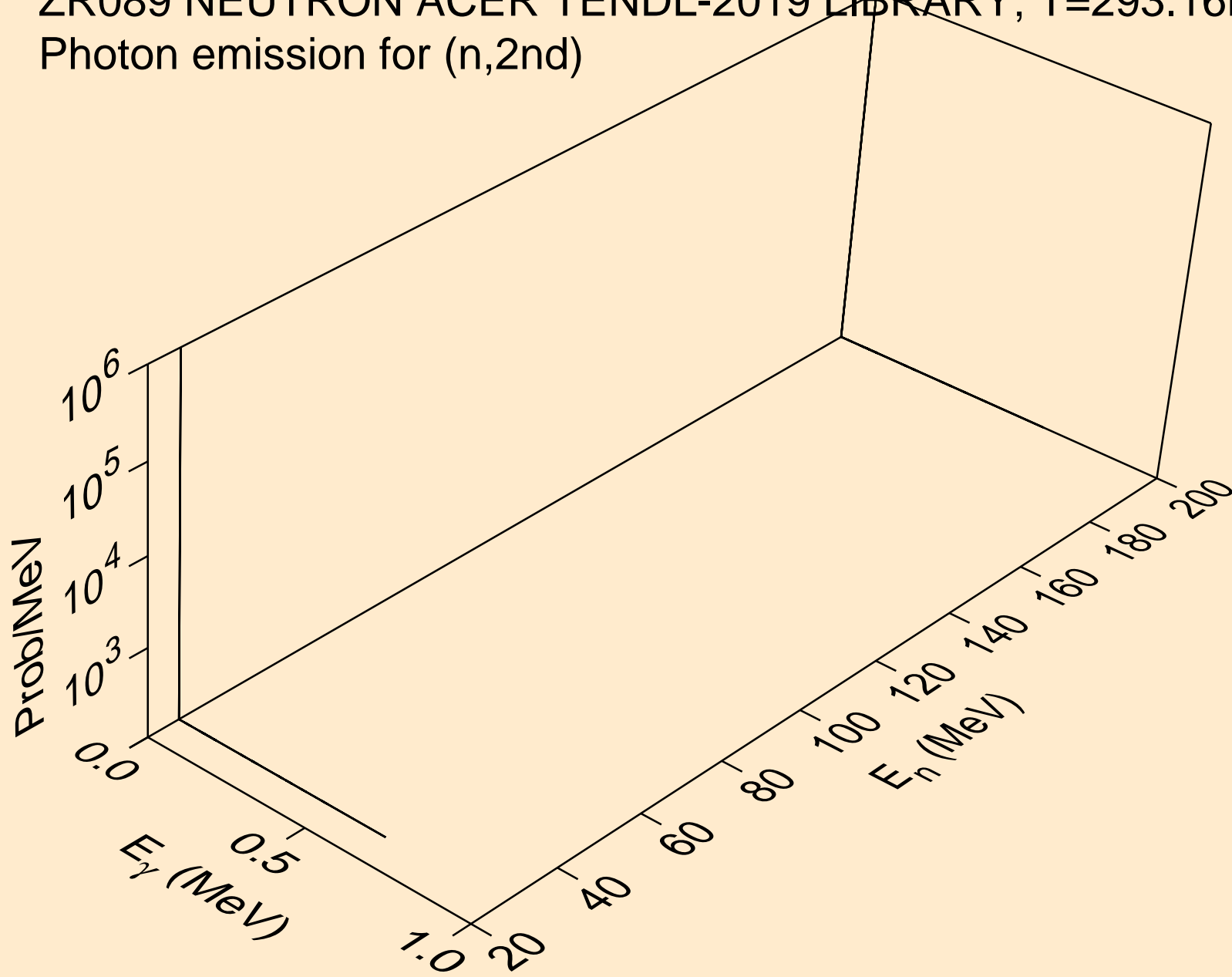
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Neutron emission for (n,n\*c)



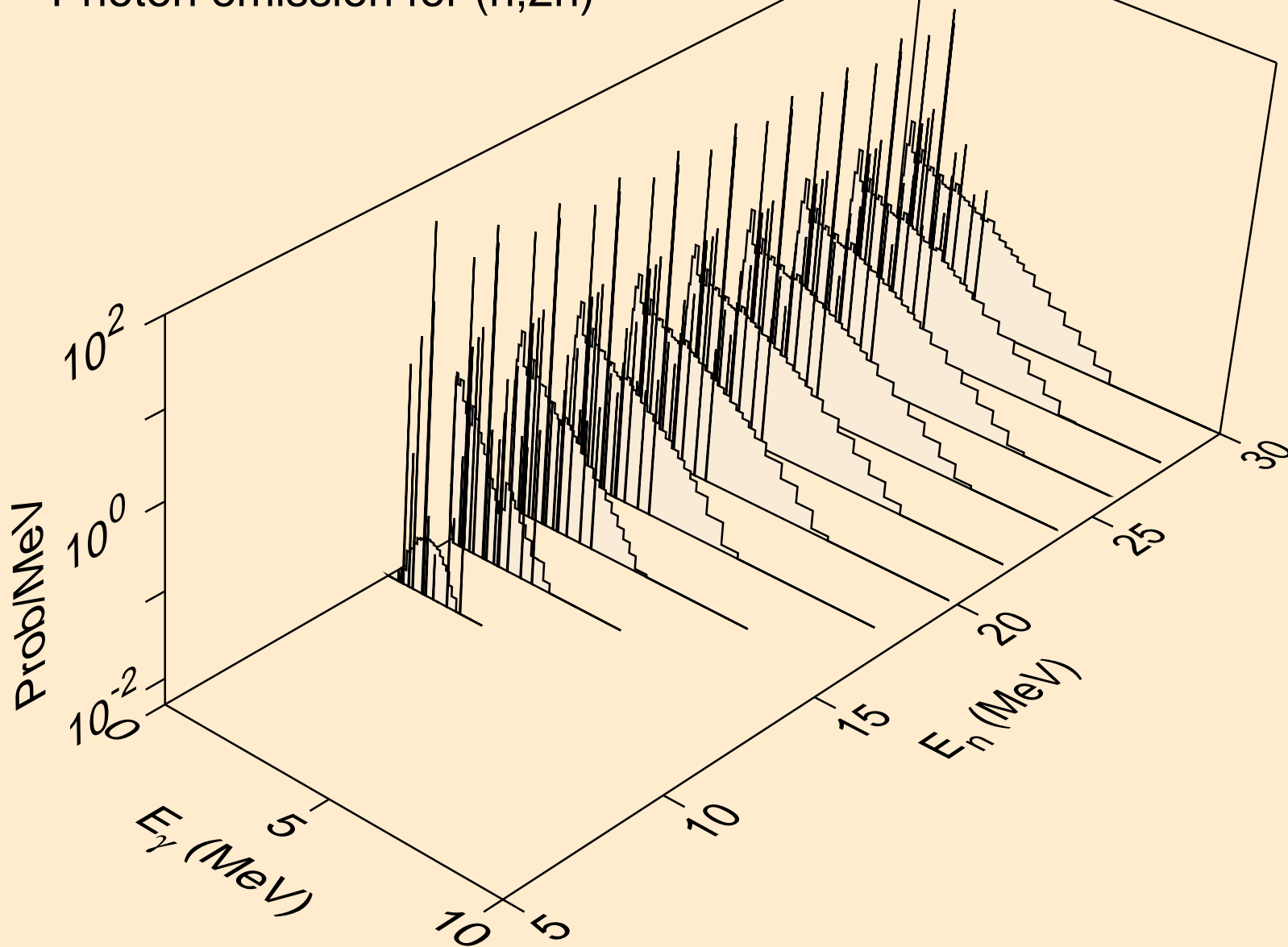
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Photon emission for (n,x)



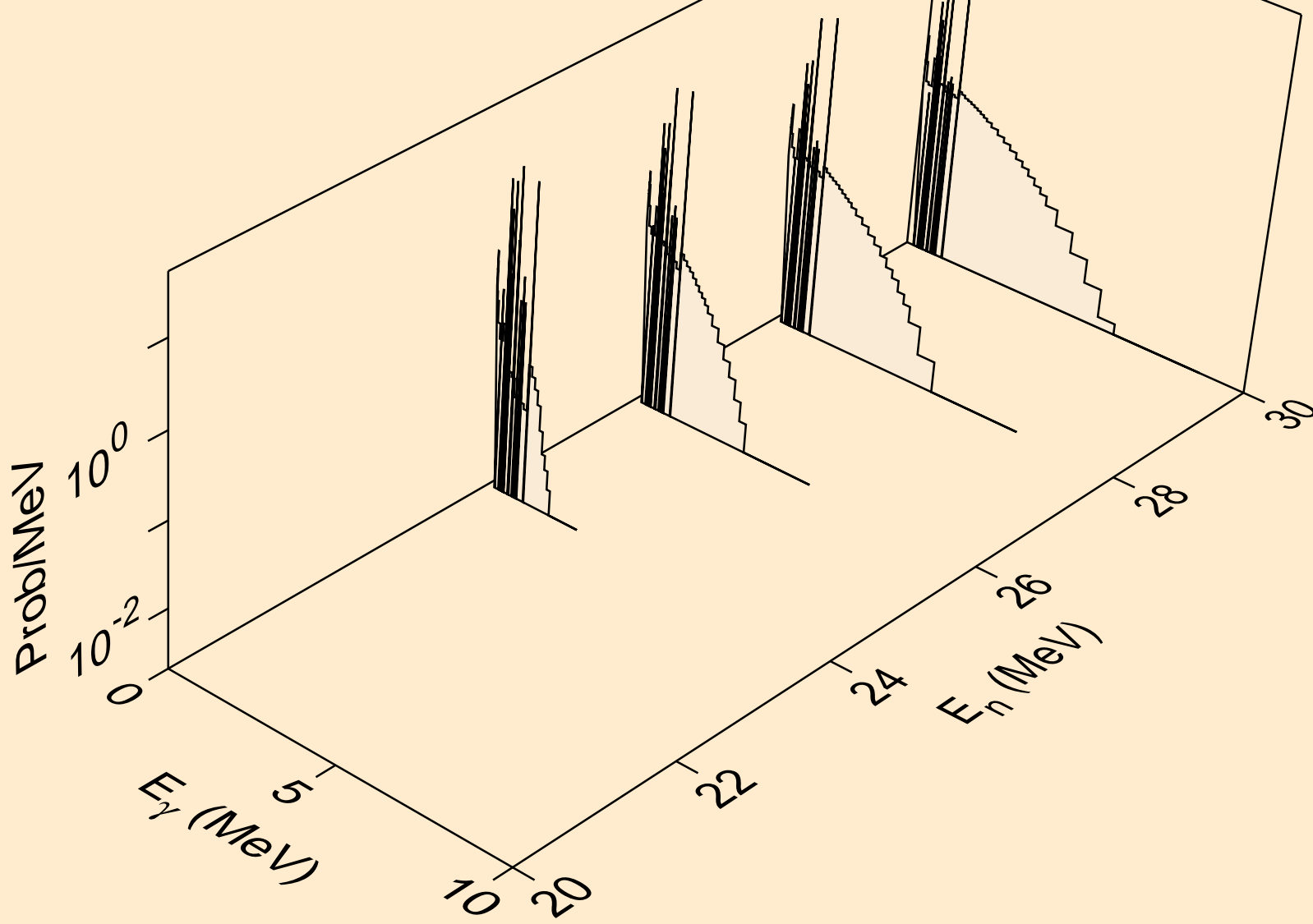
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Photon emission for (n,2nd)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,2n)

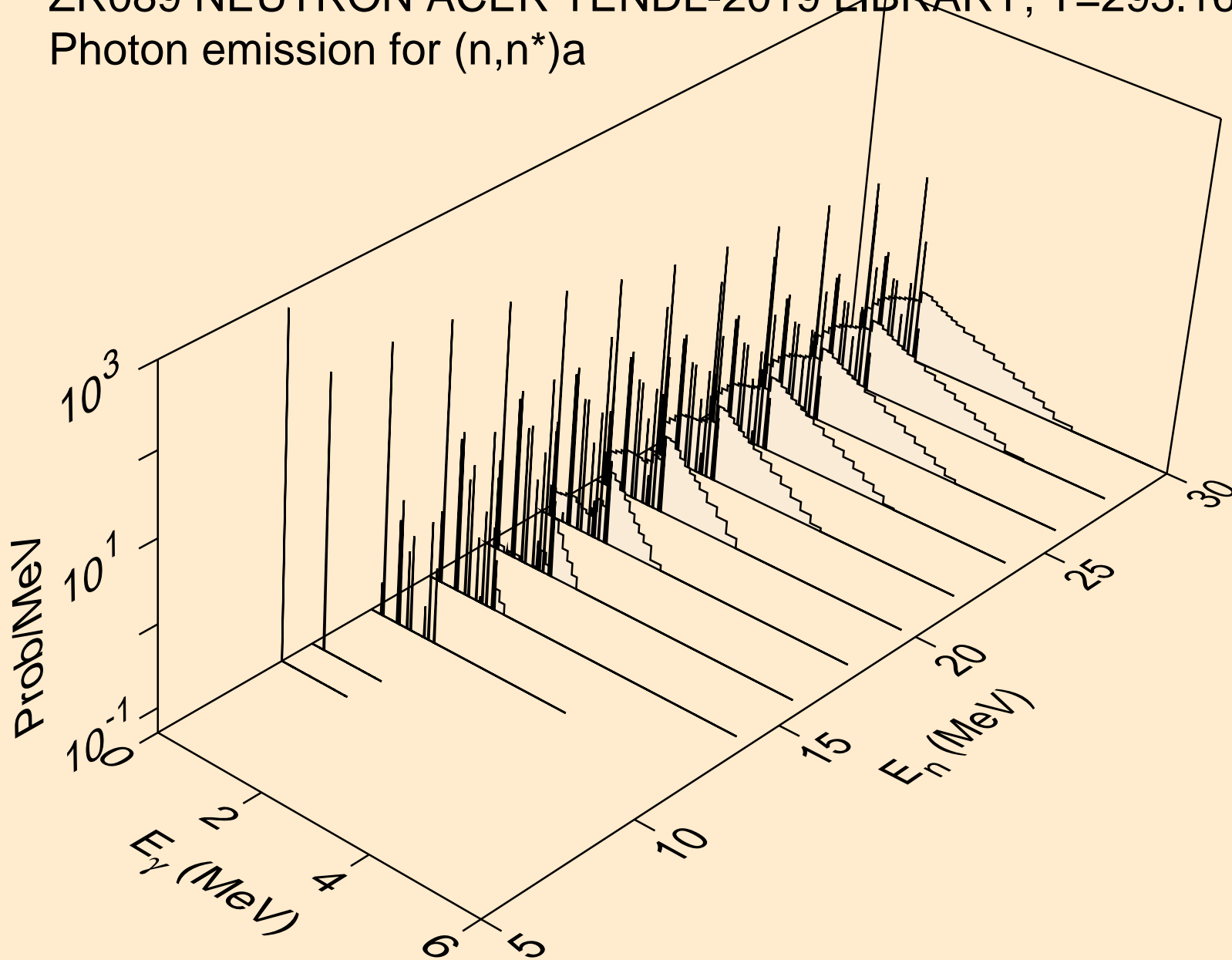


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Photon emission for (n,3n)

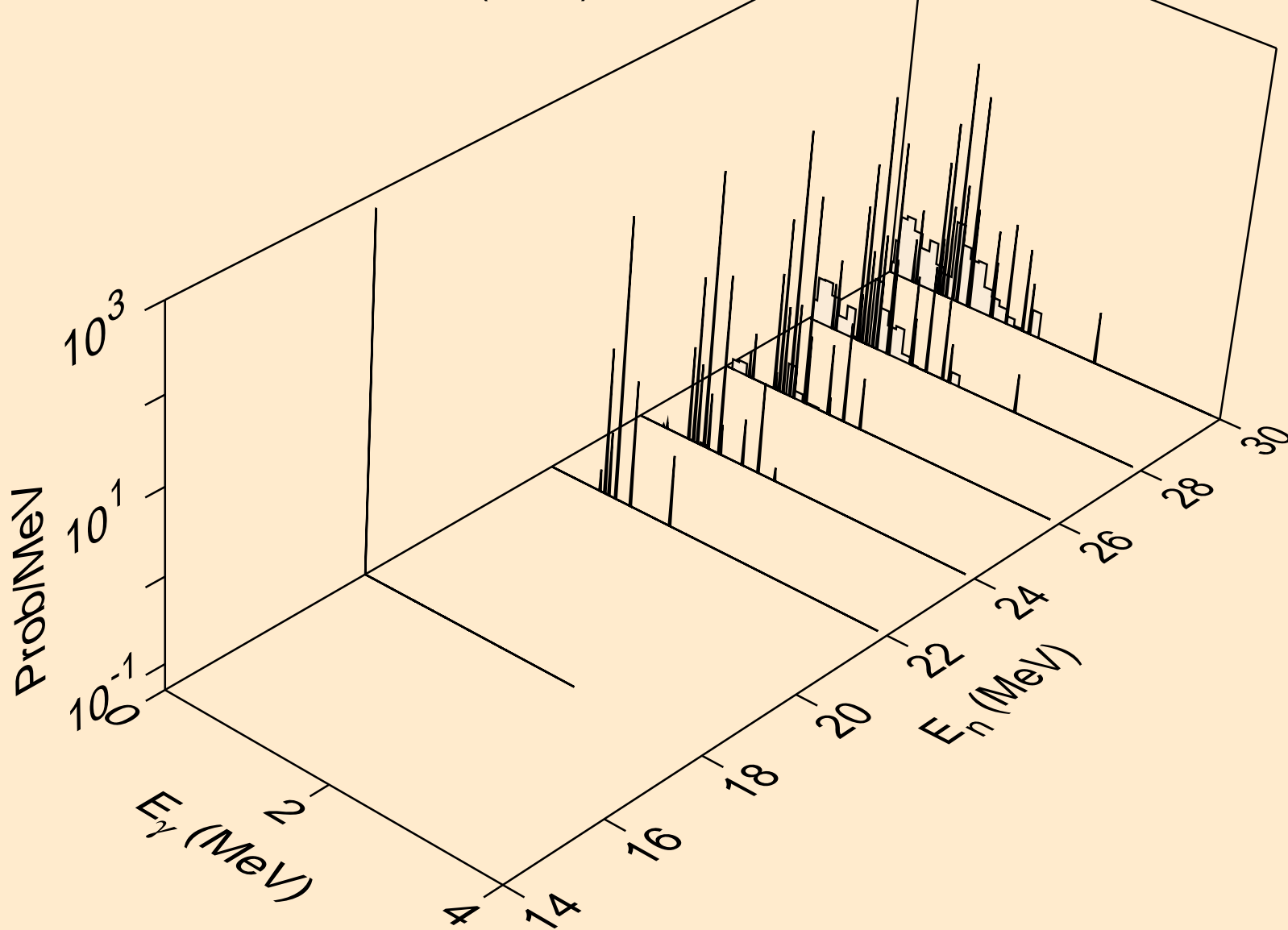




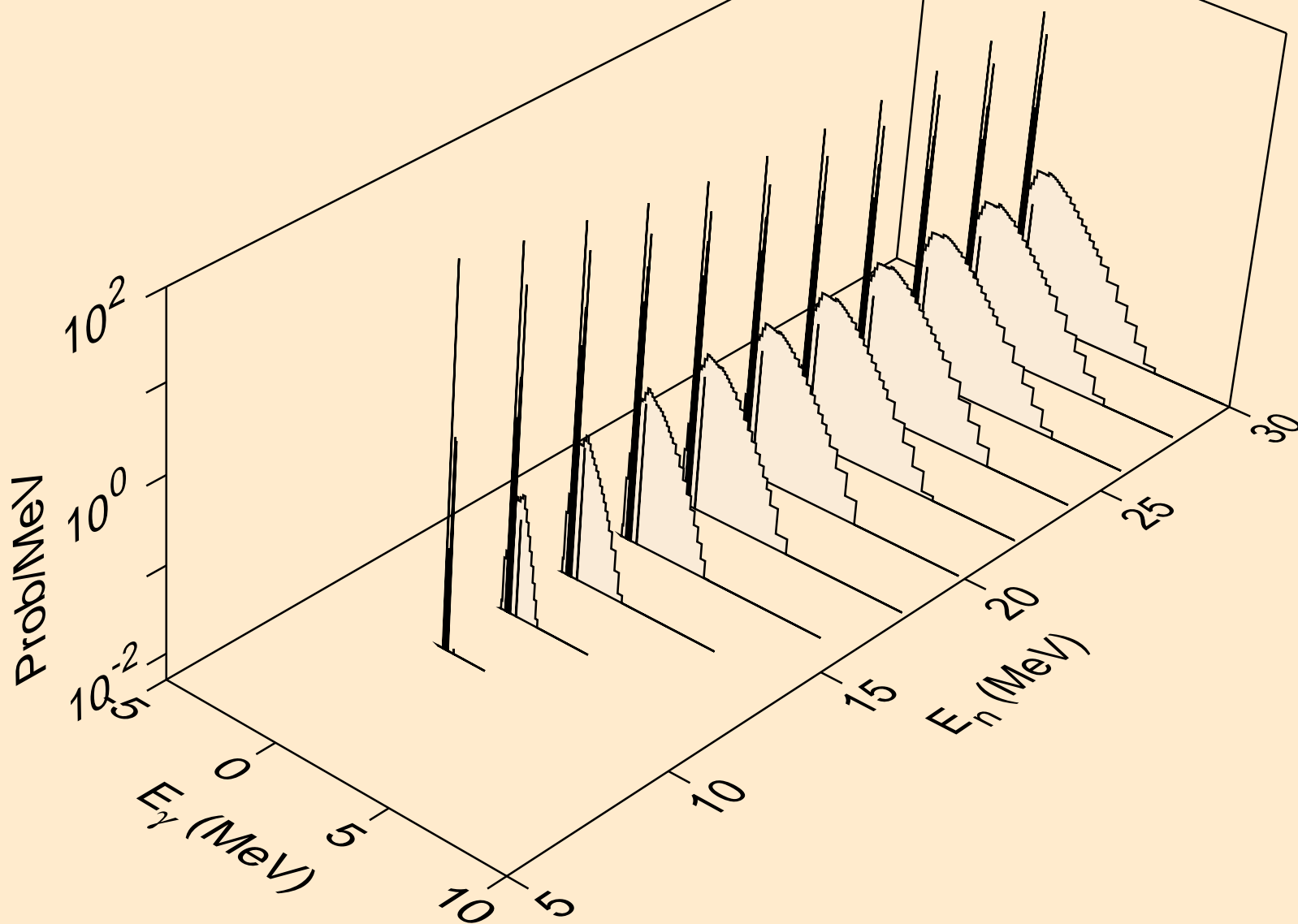
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Photon emission for (n,n\*)a



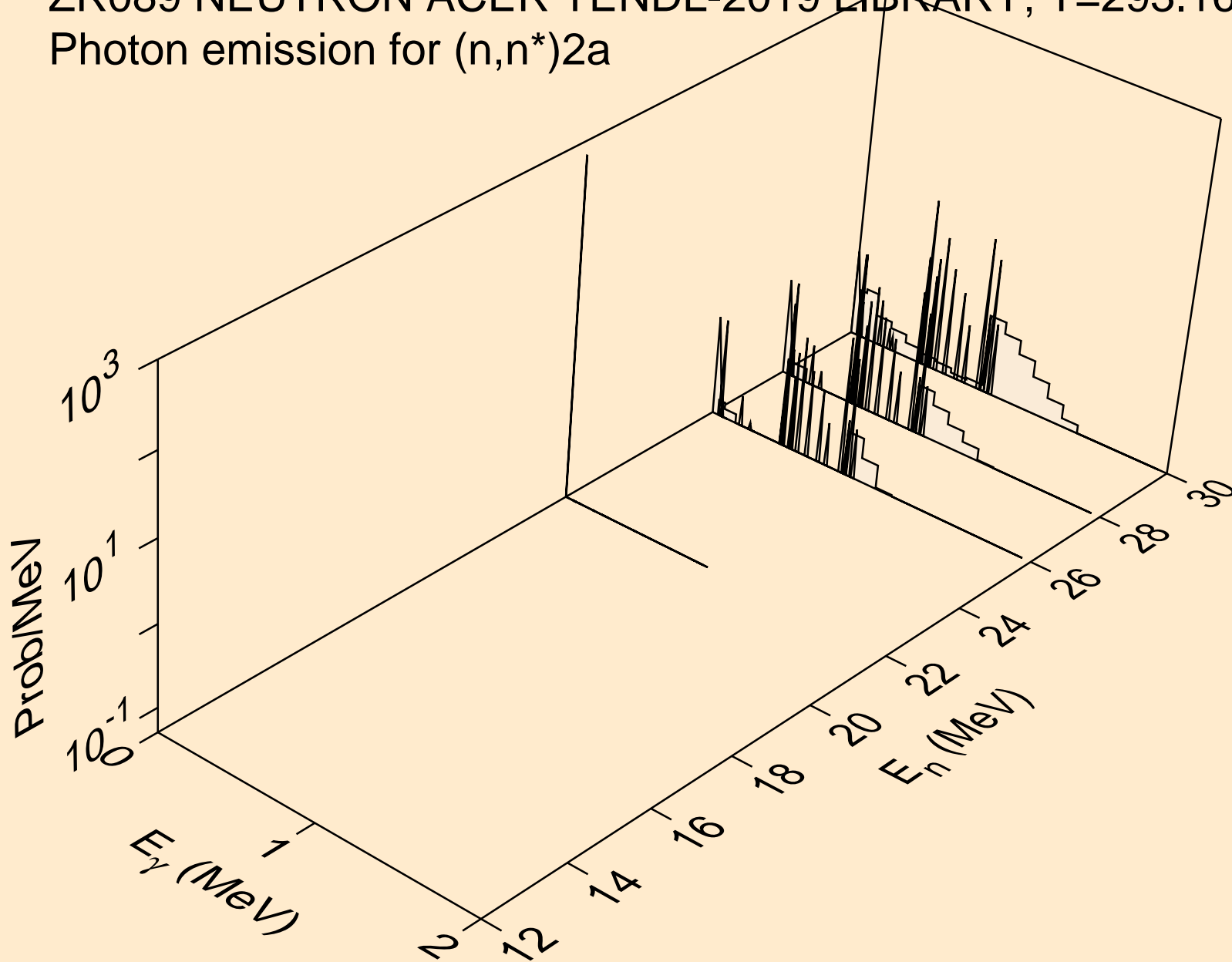
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Photon emission for (n,2n)a



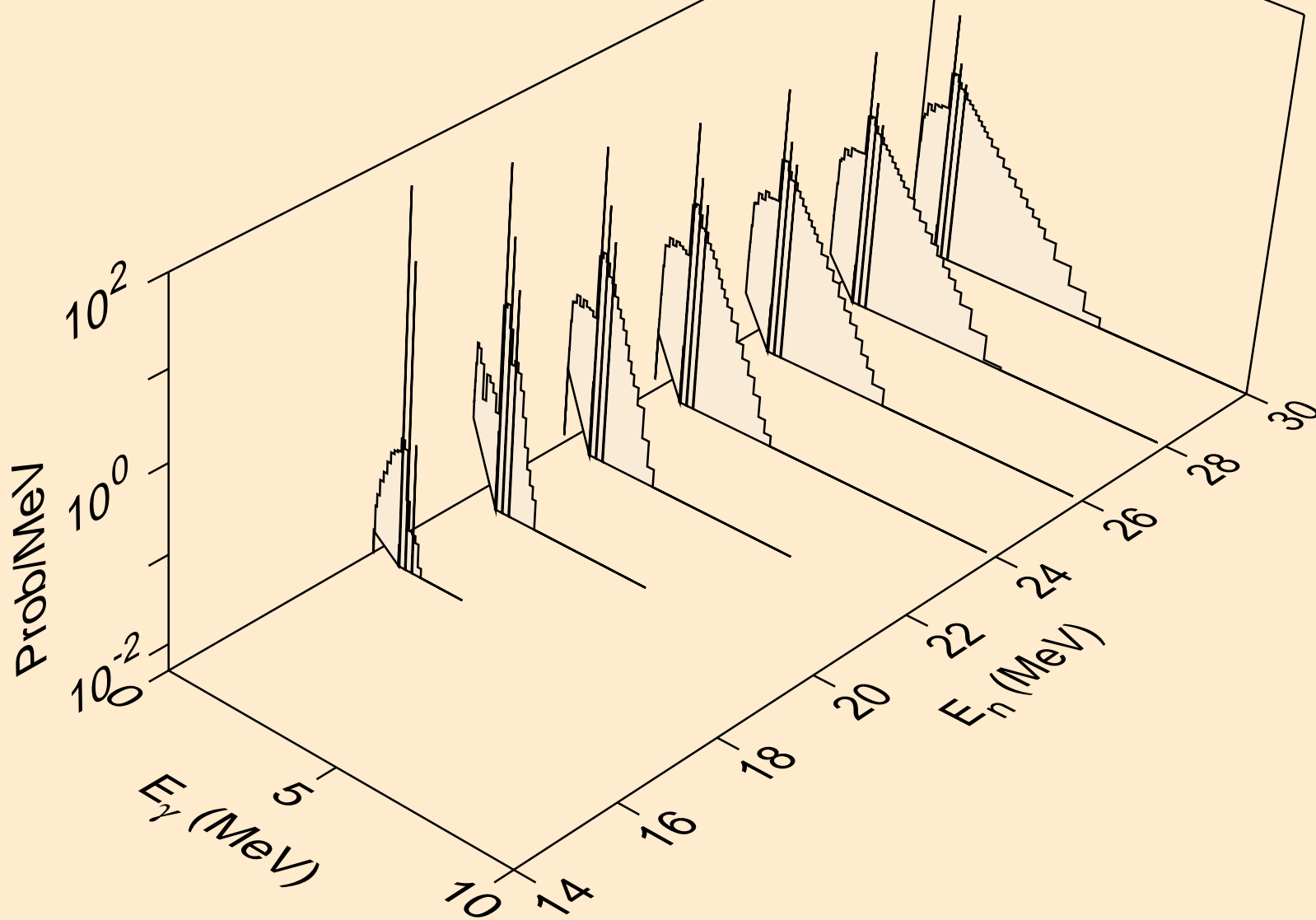
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Photon emission for (n,n\*)p



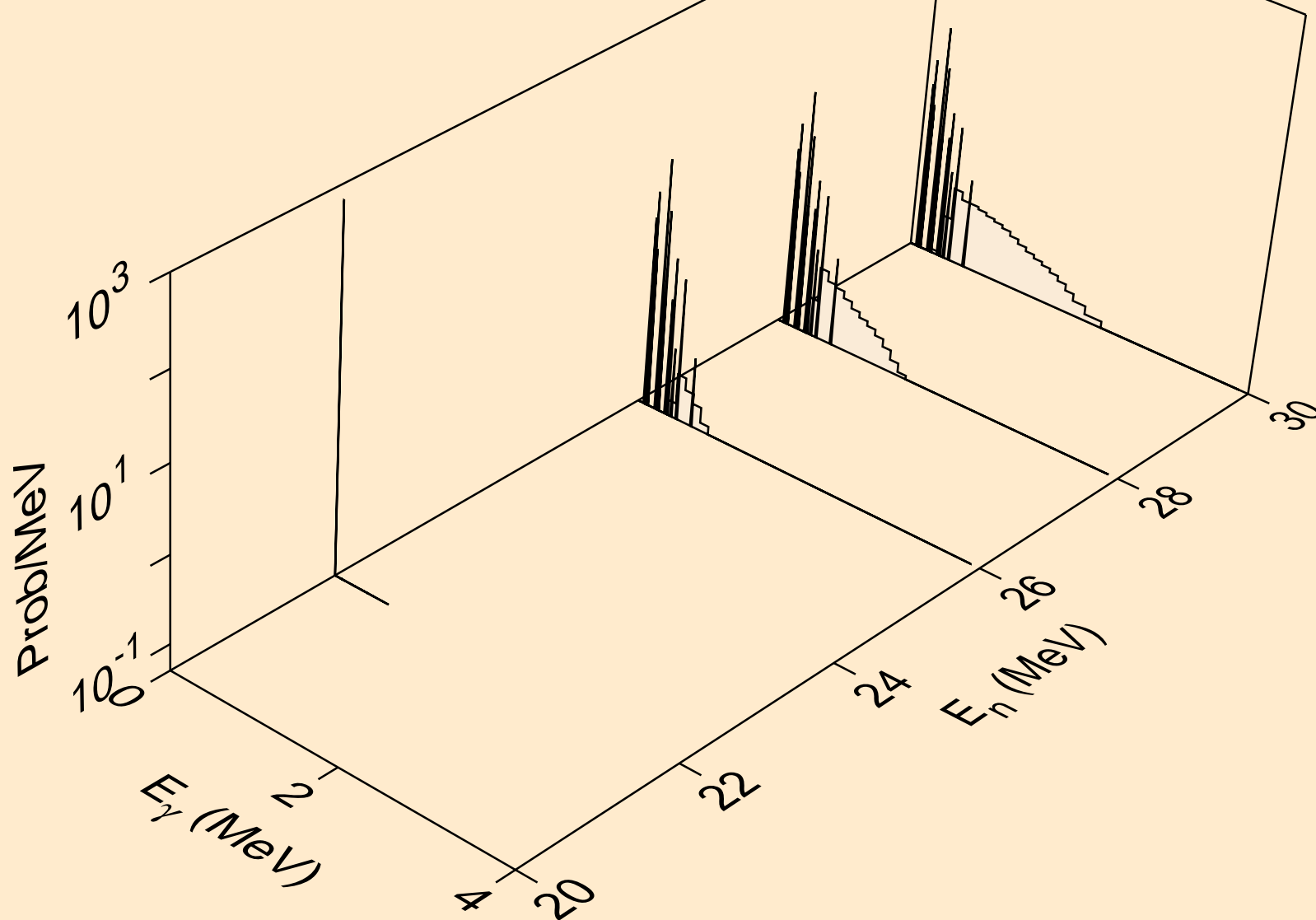
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Photon emission for (n,n\*)2a



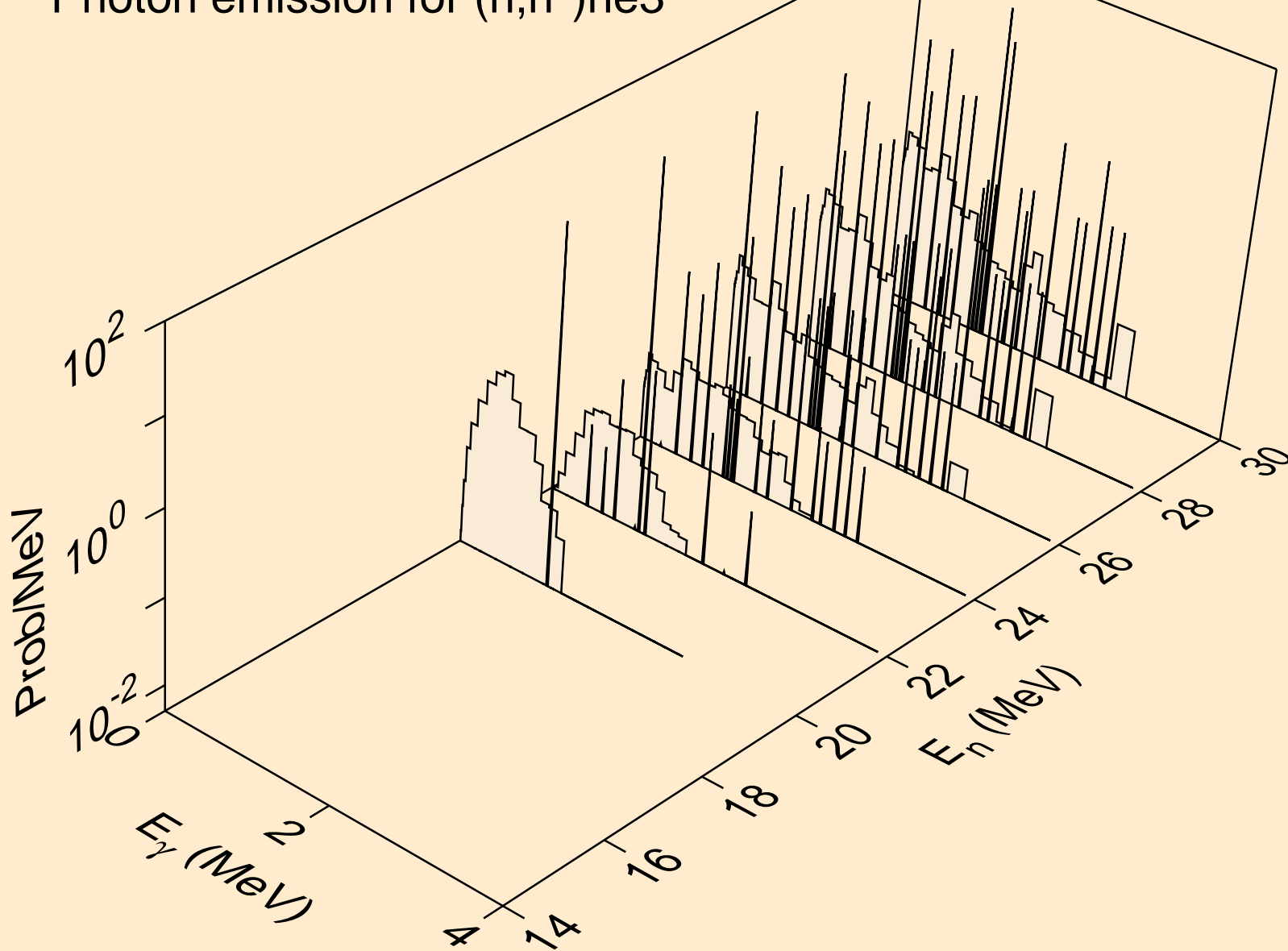
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Photon emission for (n,n\*)d



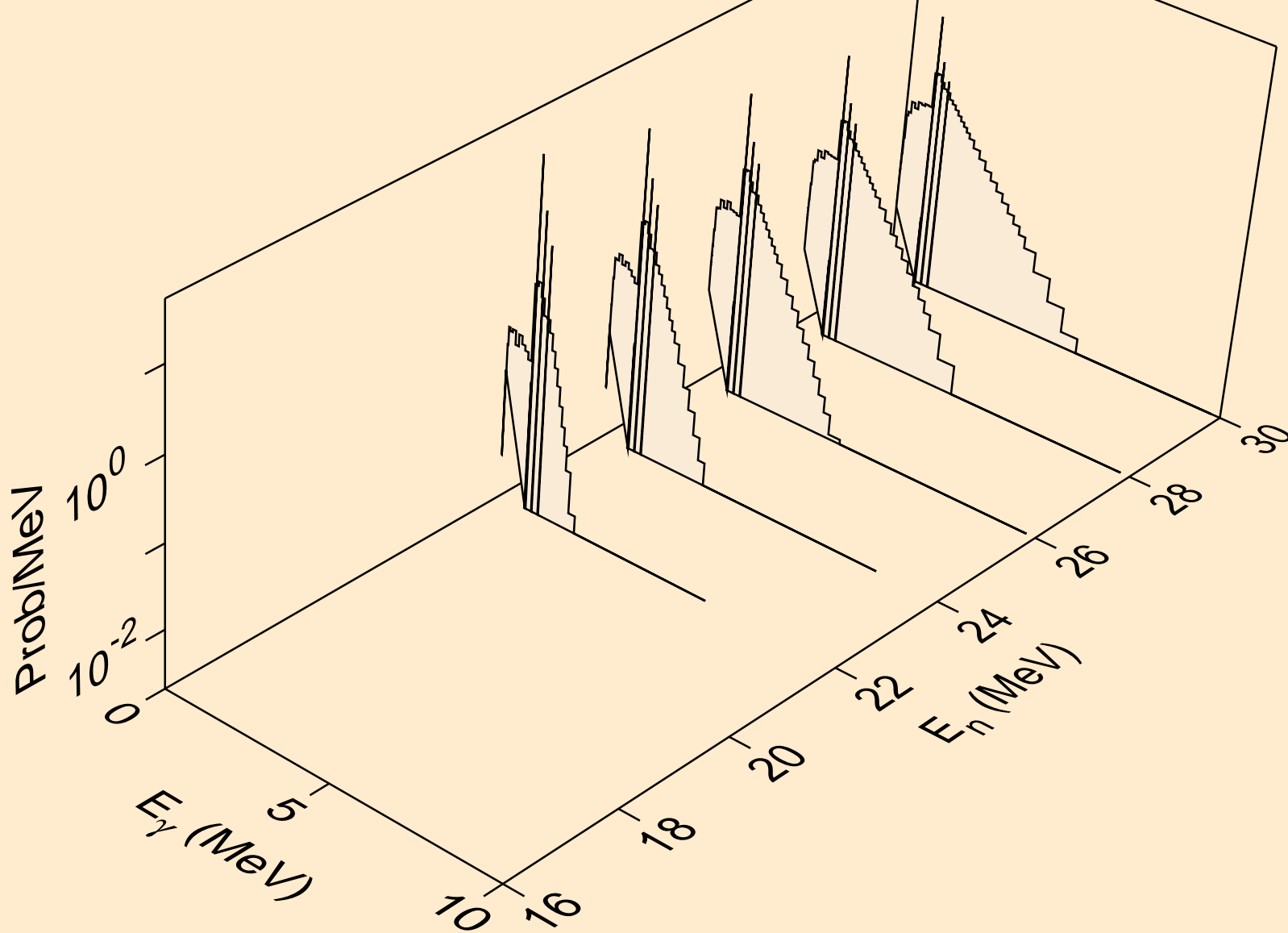
ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,n\*)t



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,n\*)he3

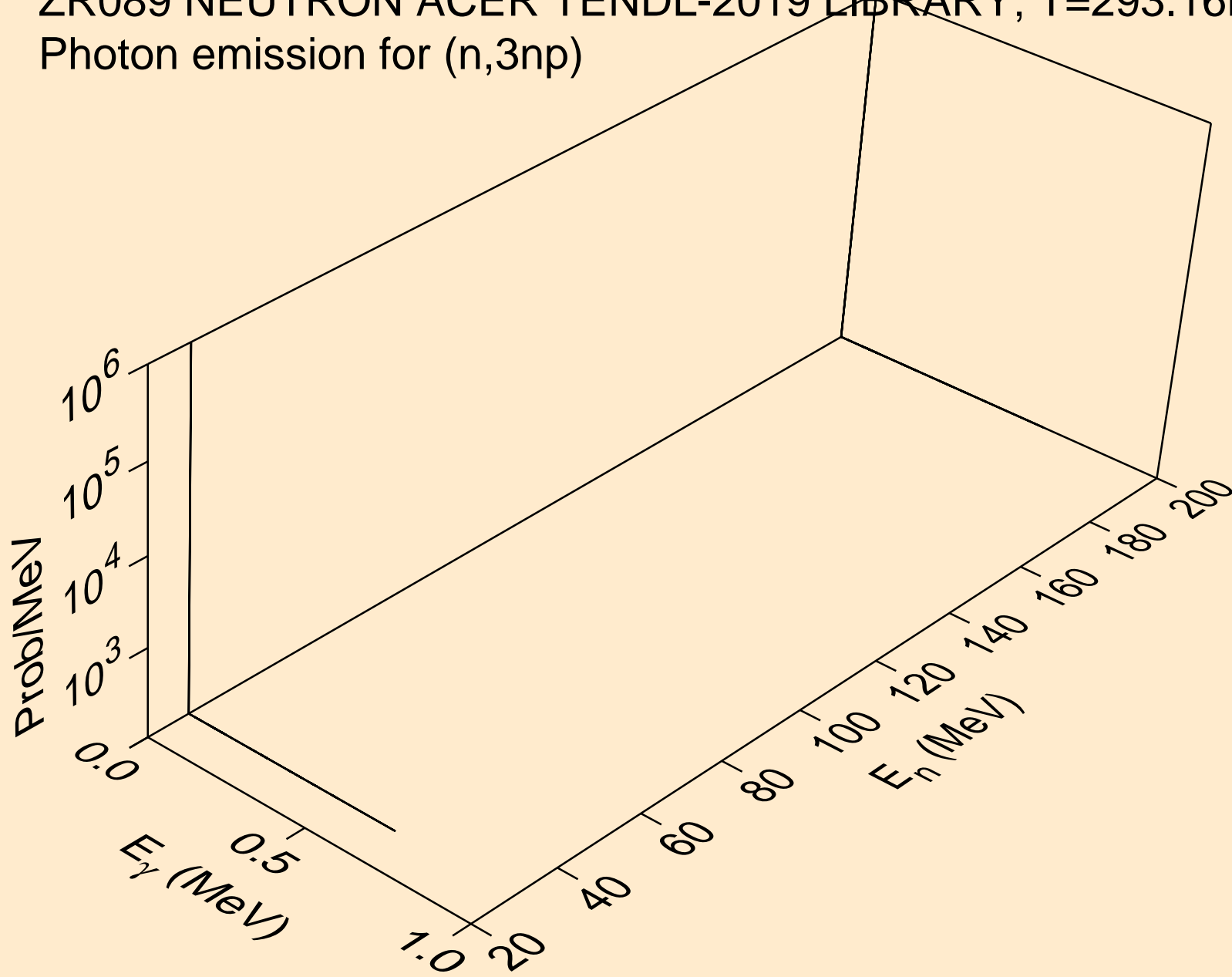


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Photon emission for (n,2np)

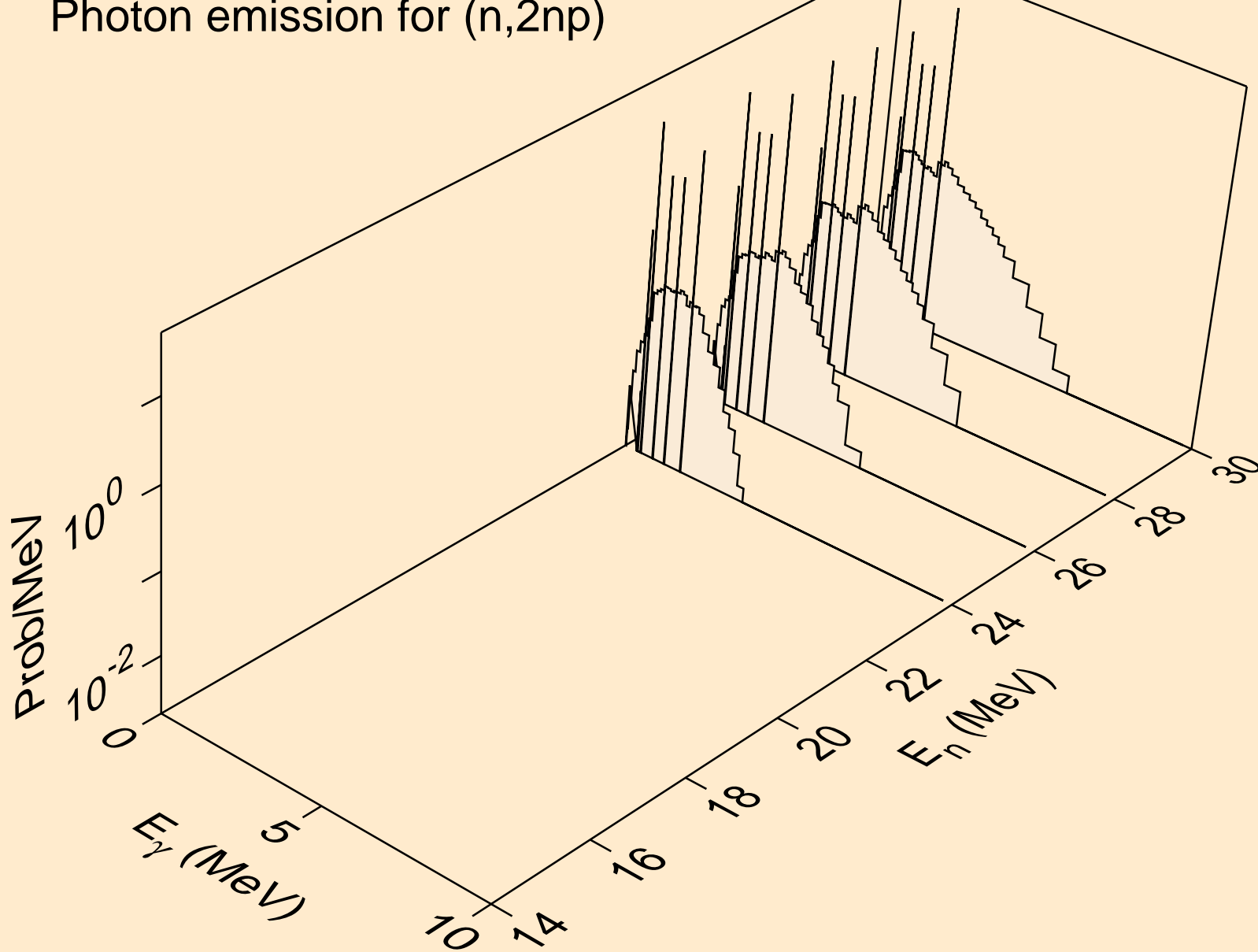




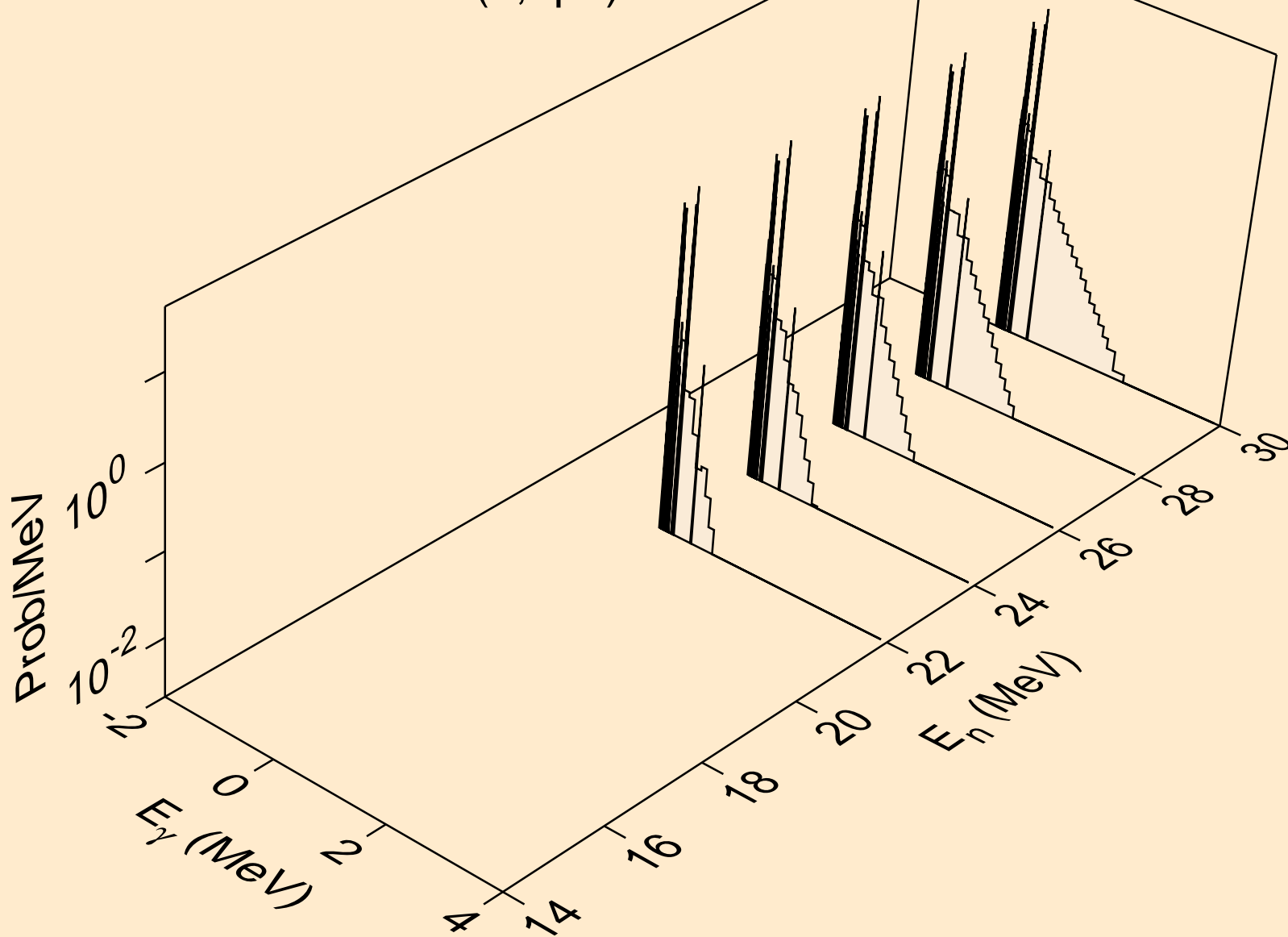
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Photon emission for (n,3np)



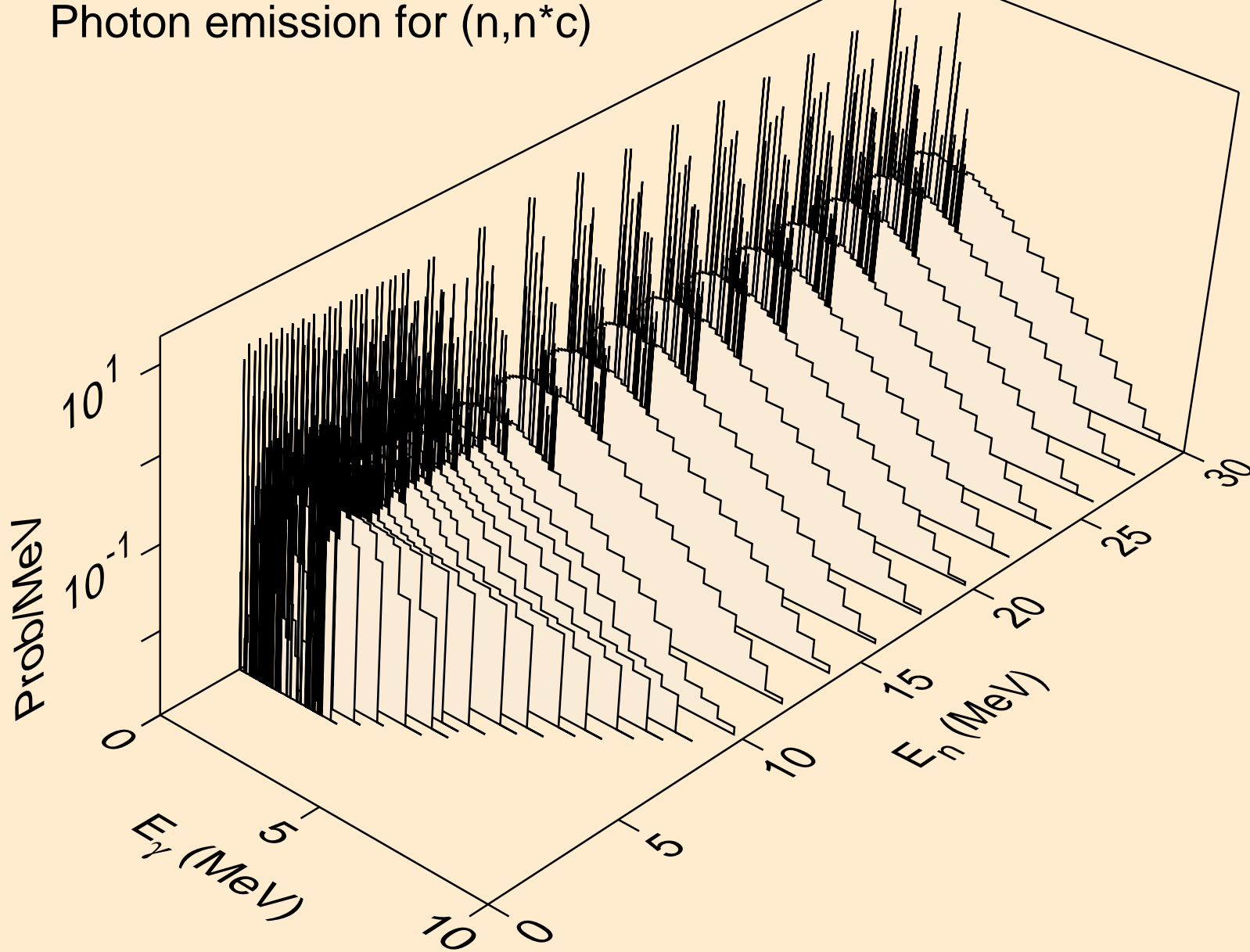
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Photon emission for (n,2np)



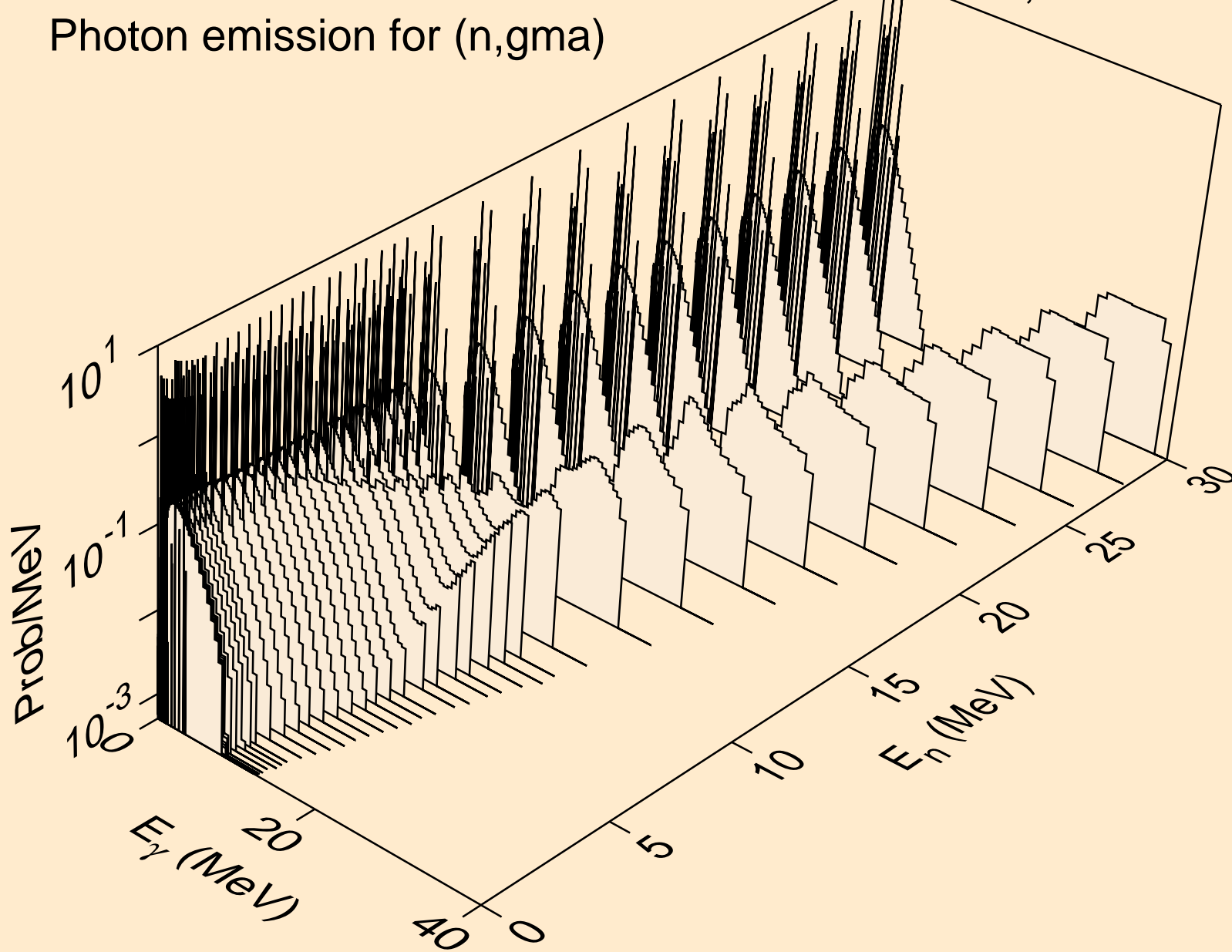
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Photon emission for (n,npa)



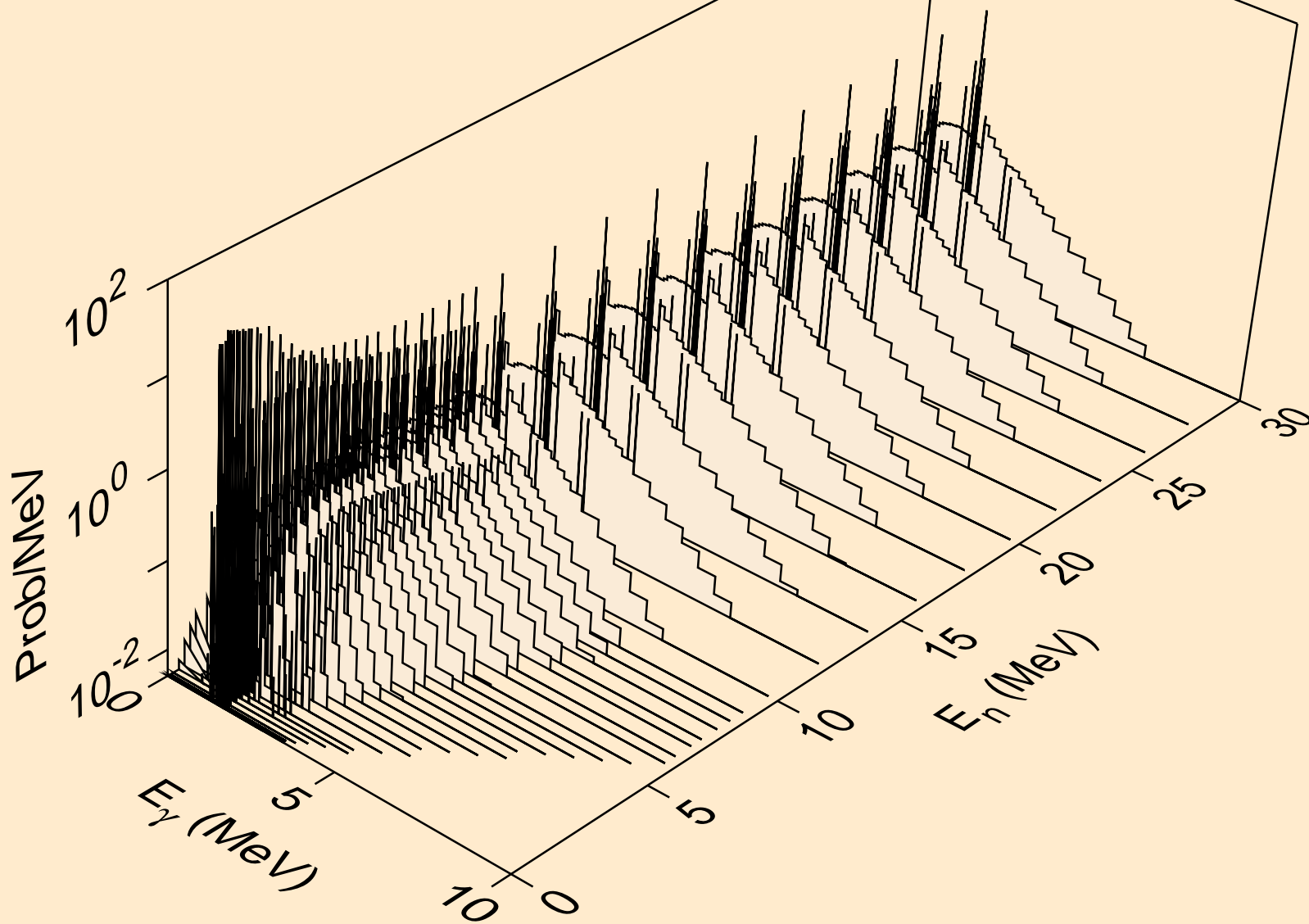
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Photon emission for (n,n\*c)



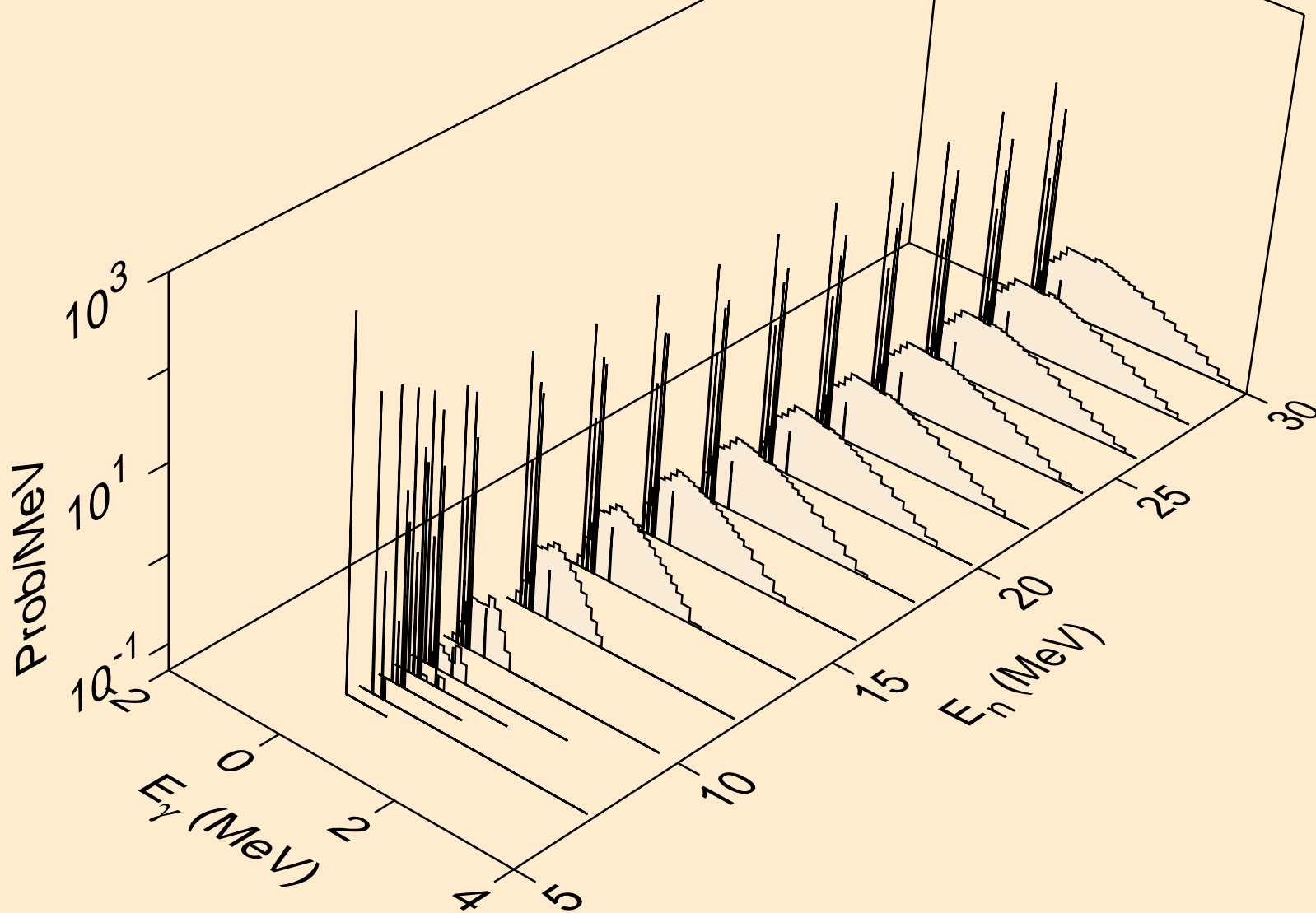
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Photon emission for (n,gma)



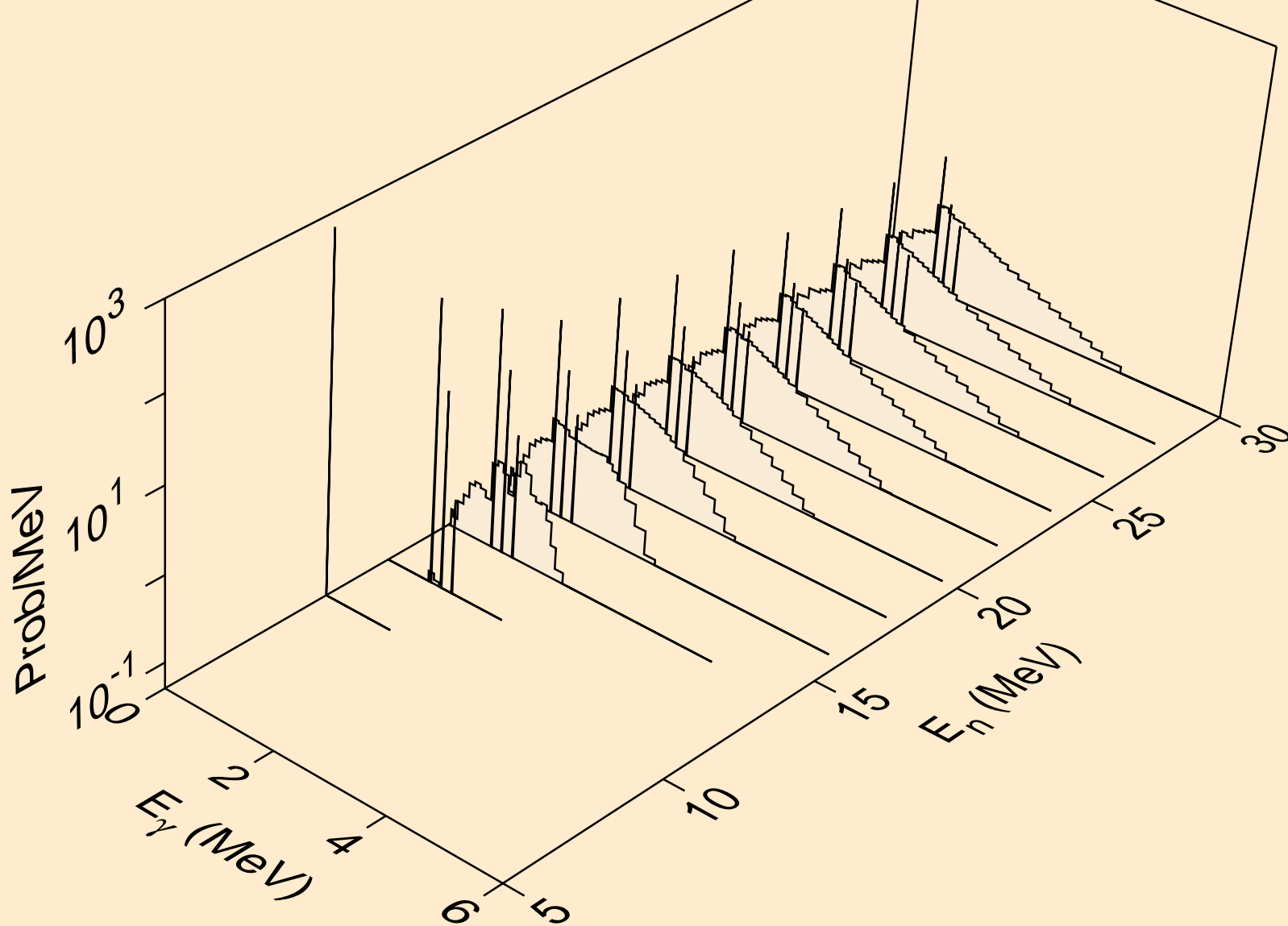
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Photon emission for (n,p)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,d)

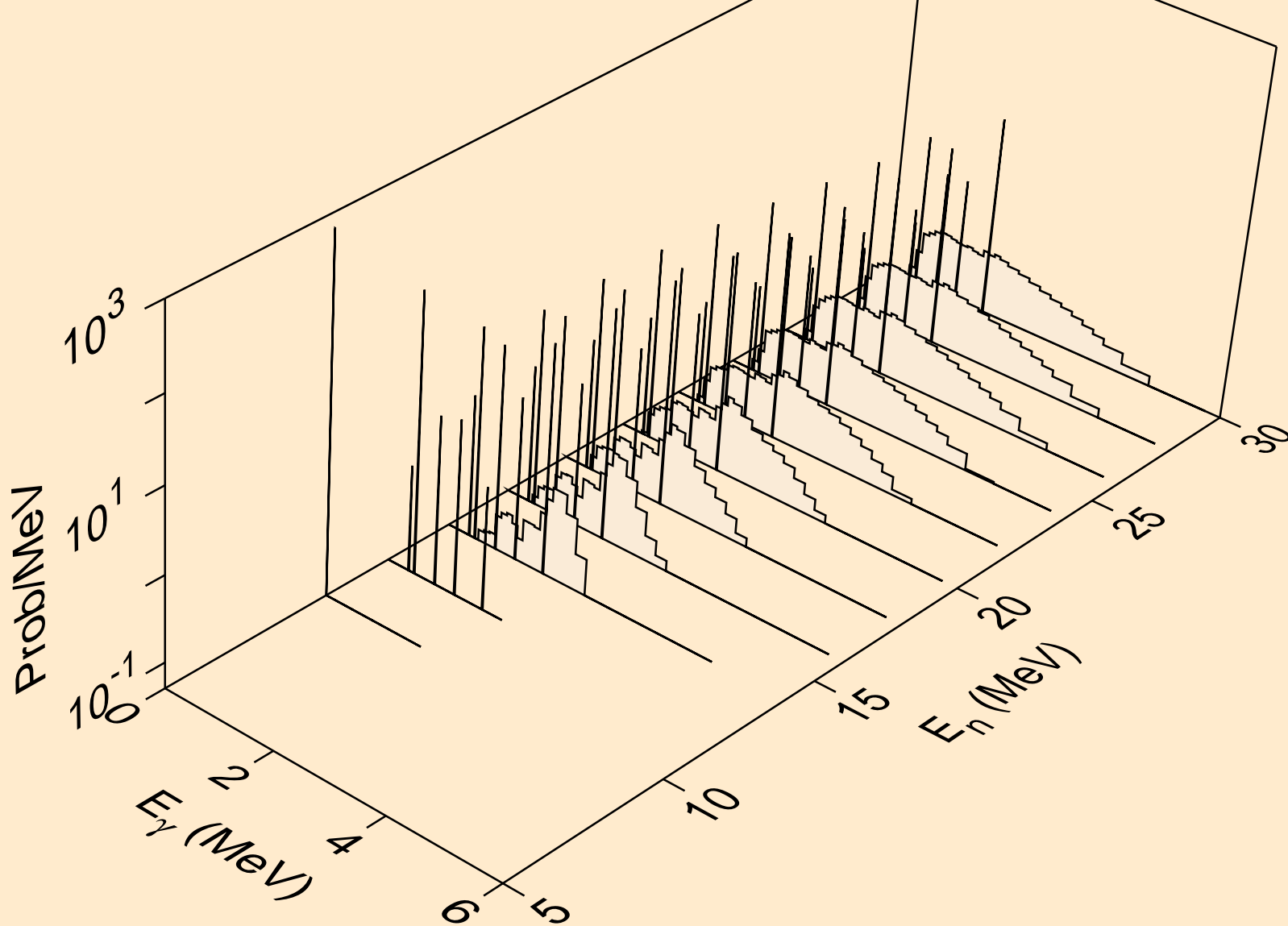


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Photon emission for (n,t)

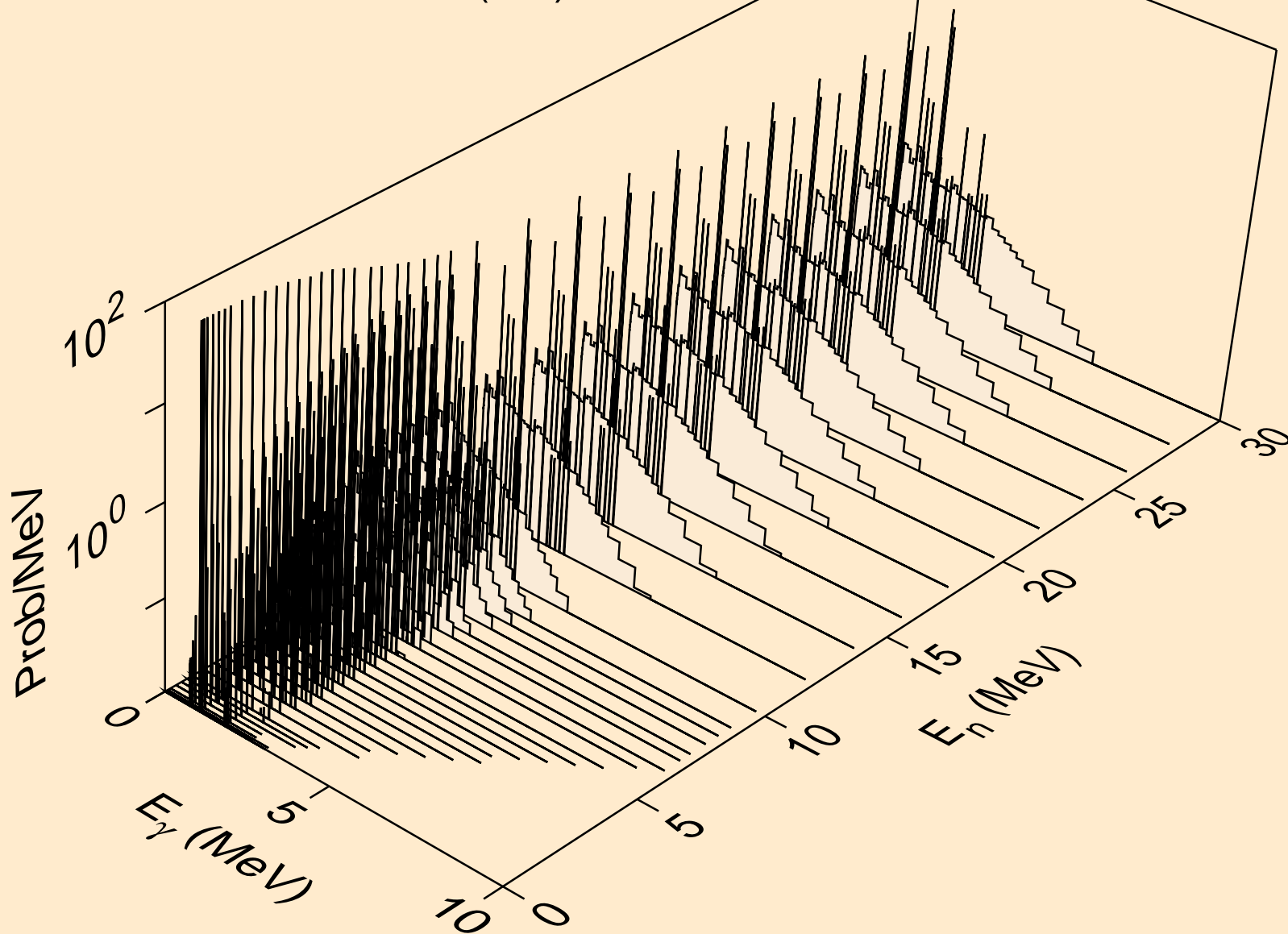




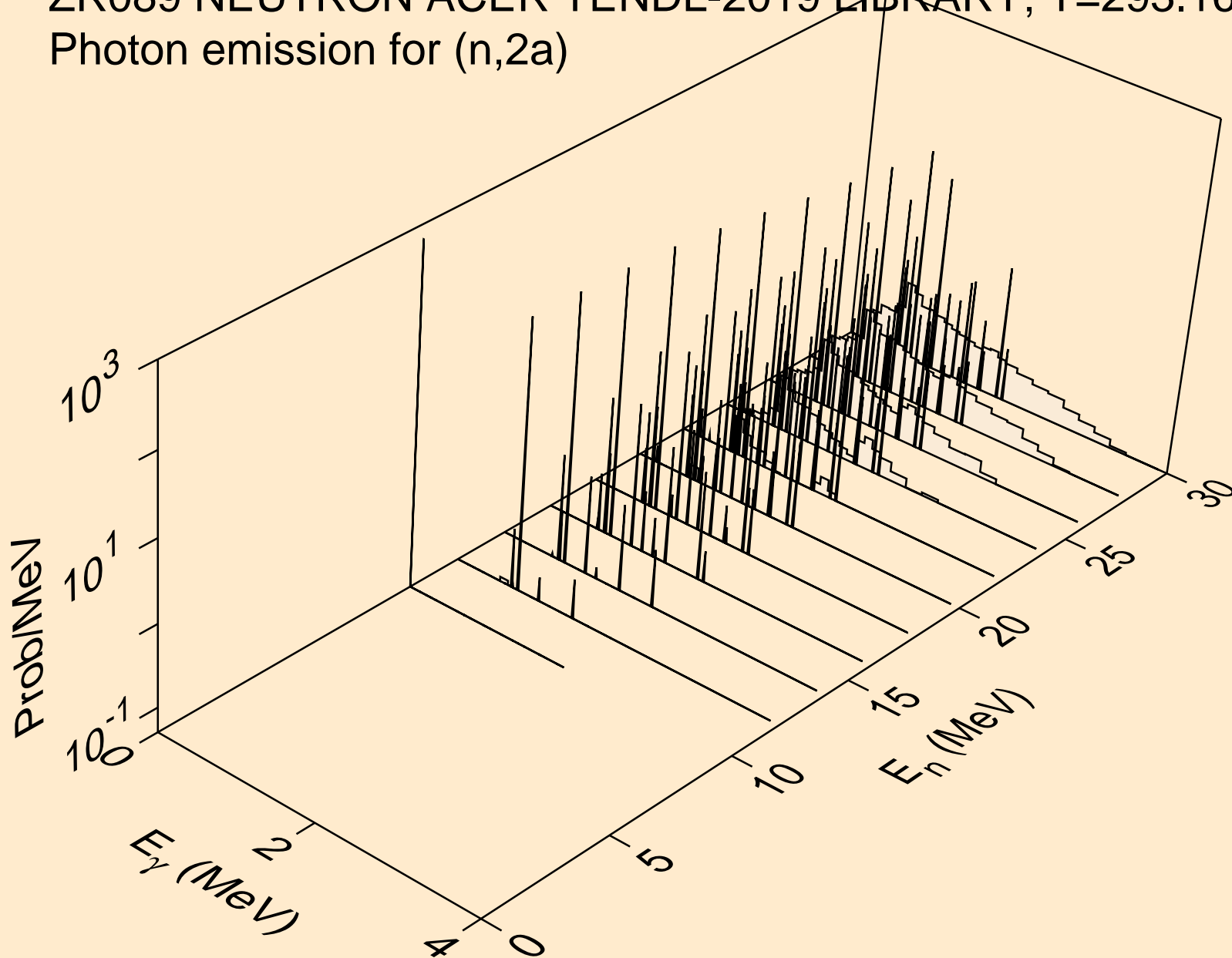
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Photon emission for (n,he3)



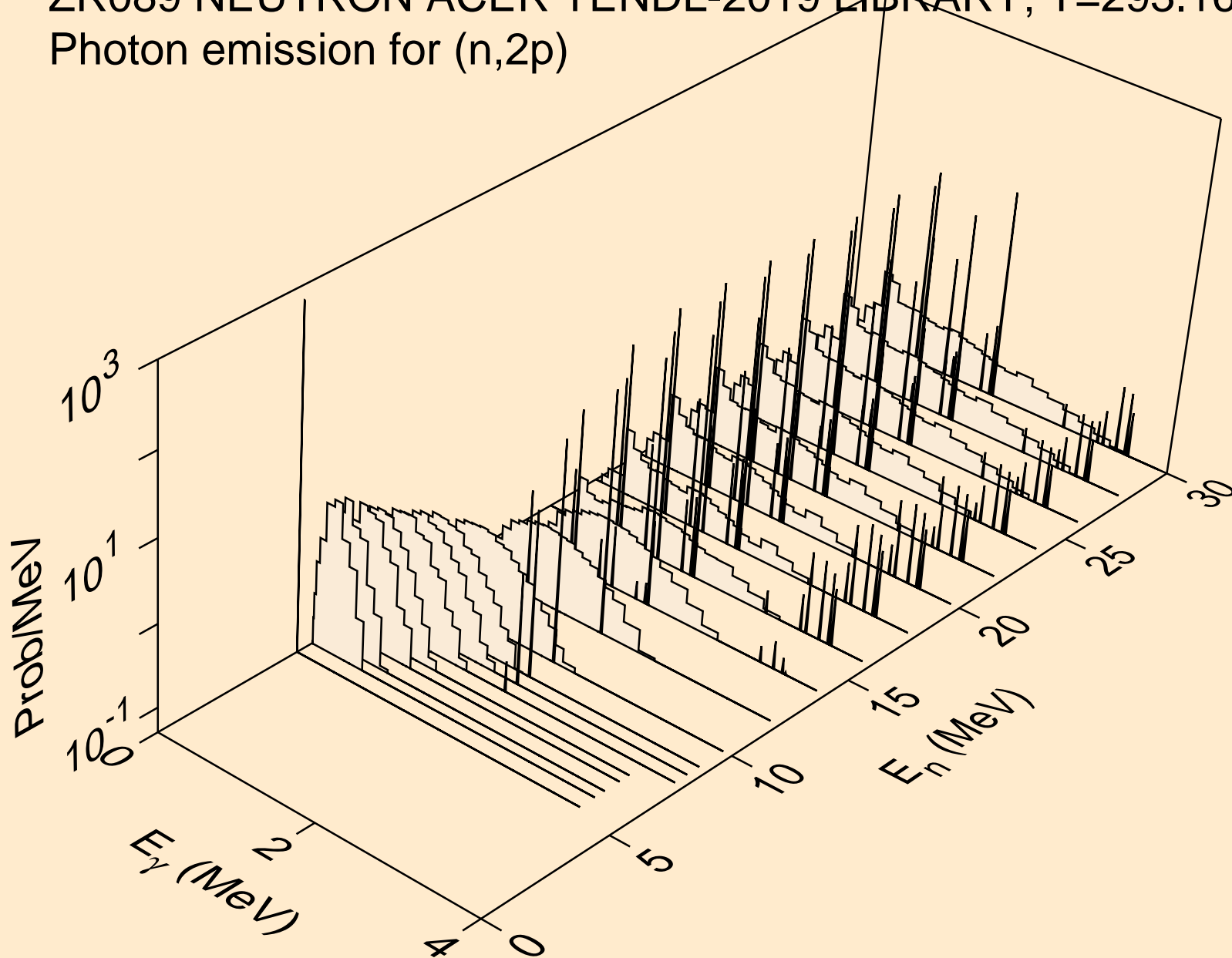
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Photon emission for (n,a)



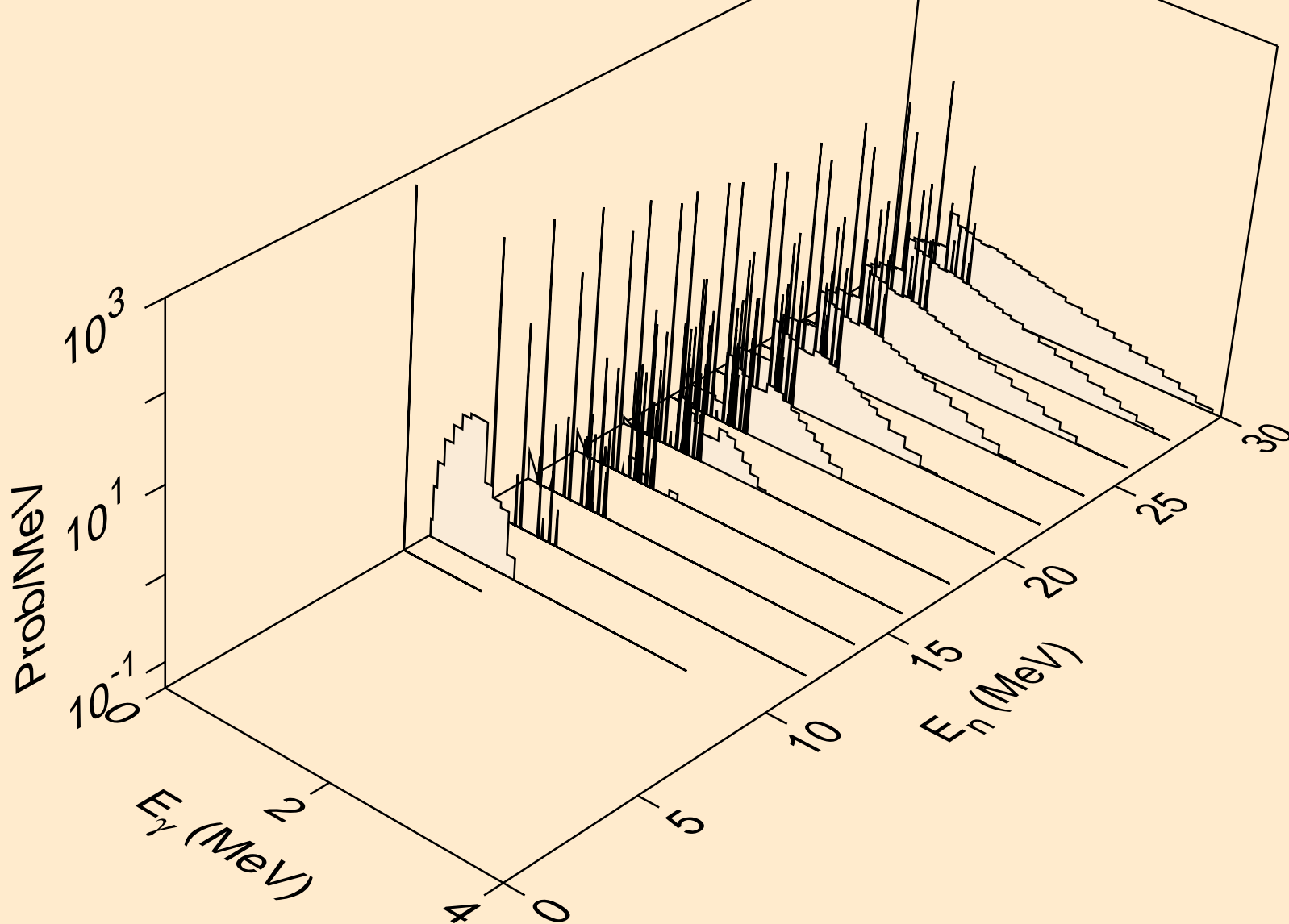
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Photon emission for (n,2a)



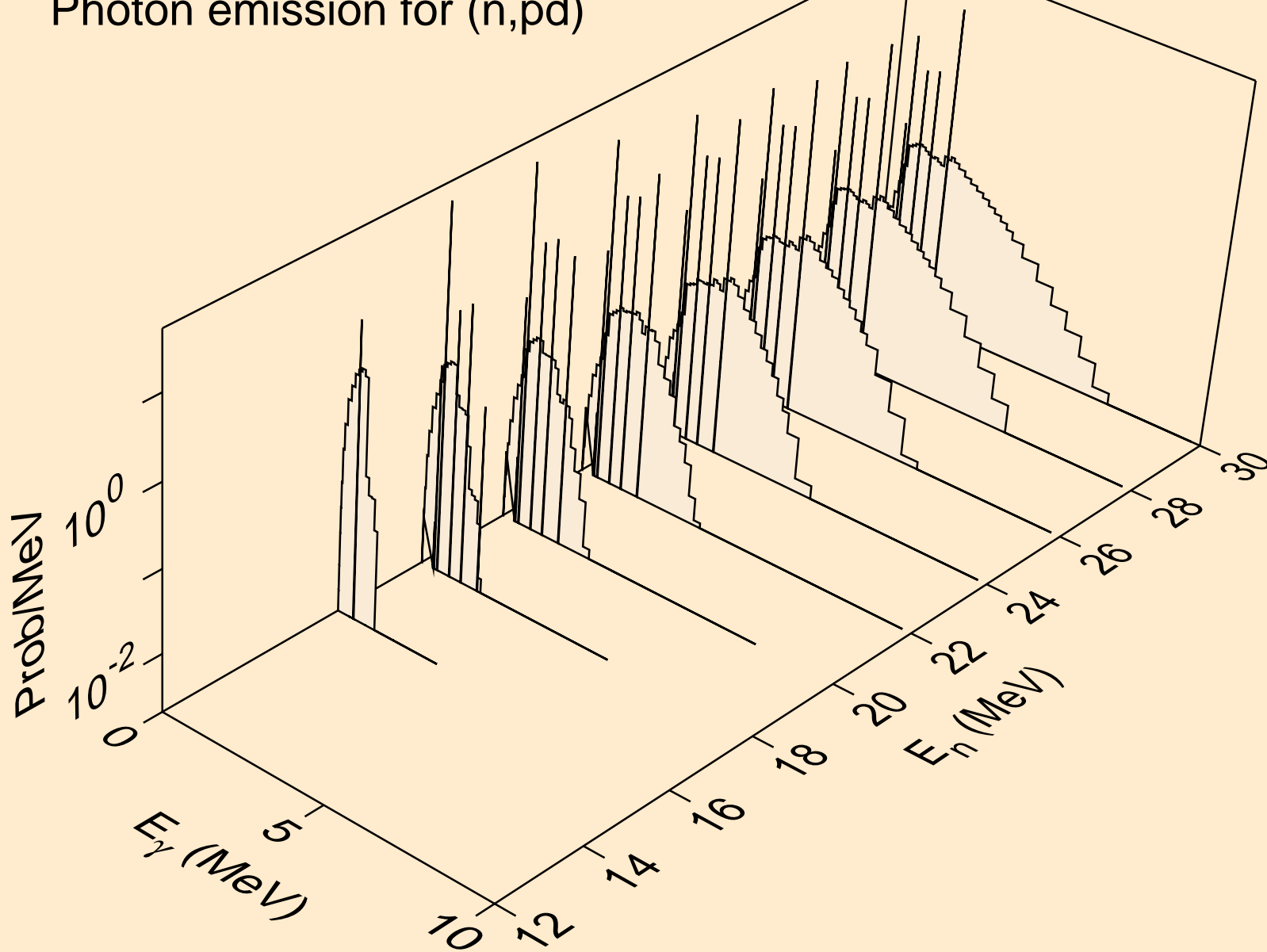
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Photon emission for (n,2p)



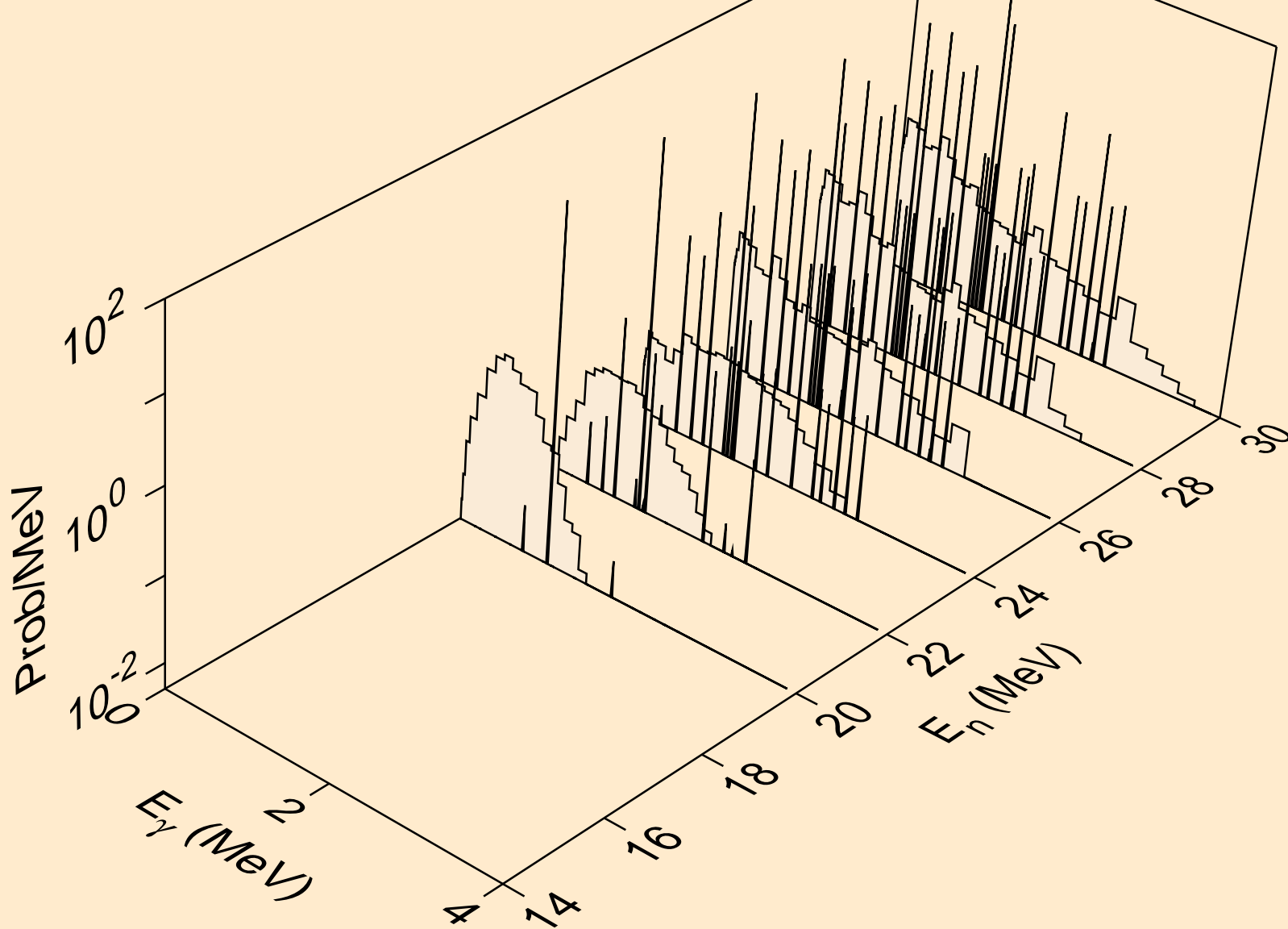
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Photon emission for (n,p $\alpha$ )



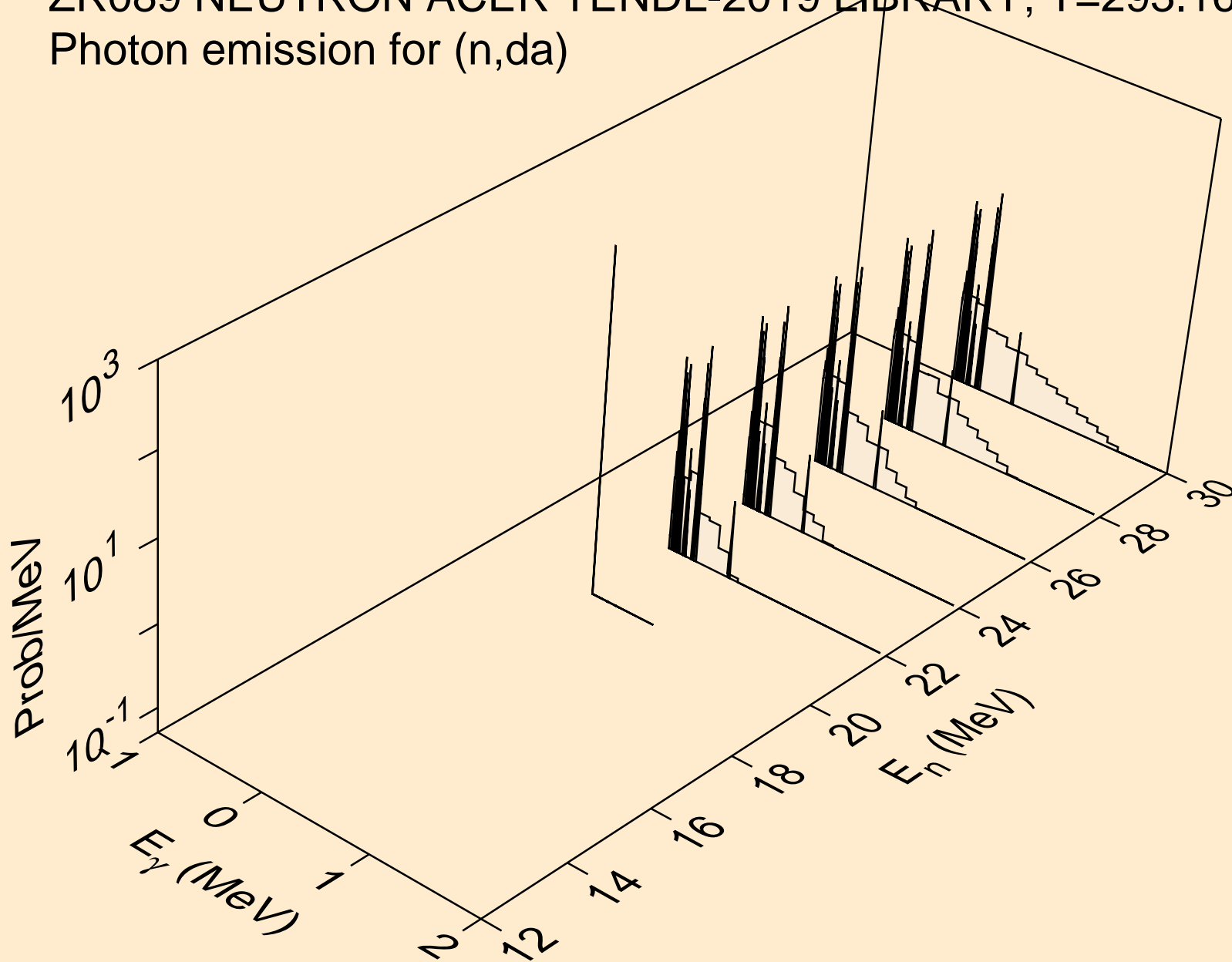
ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,pd)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,pt)

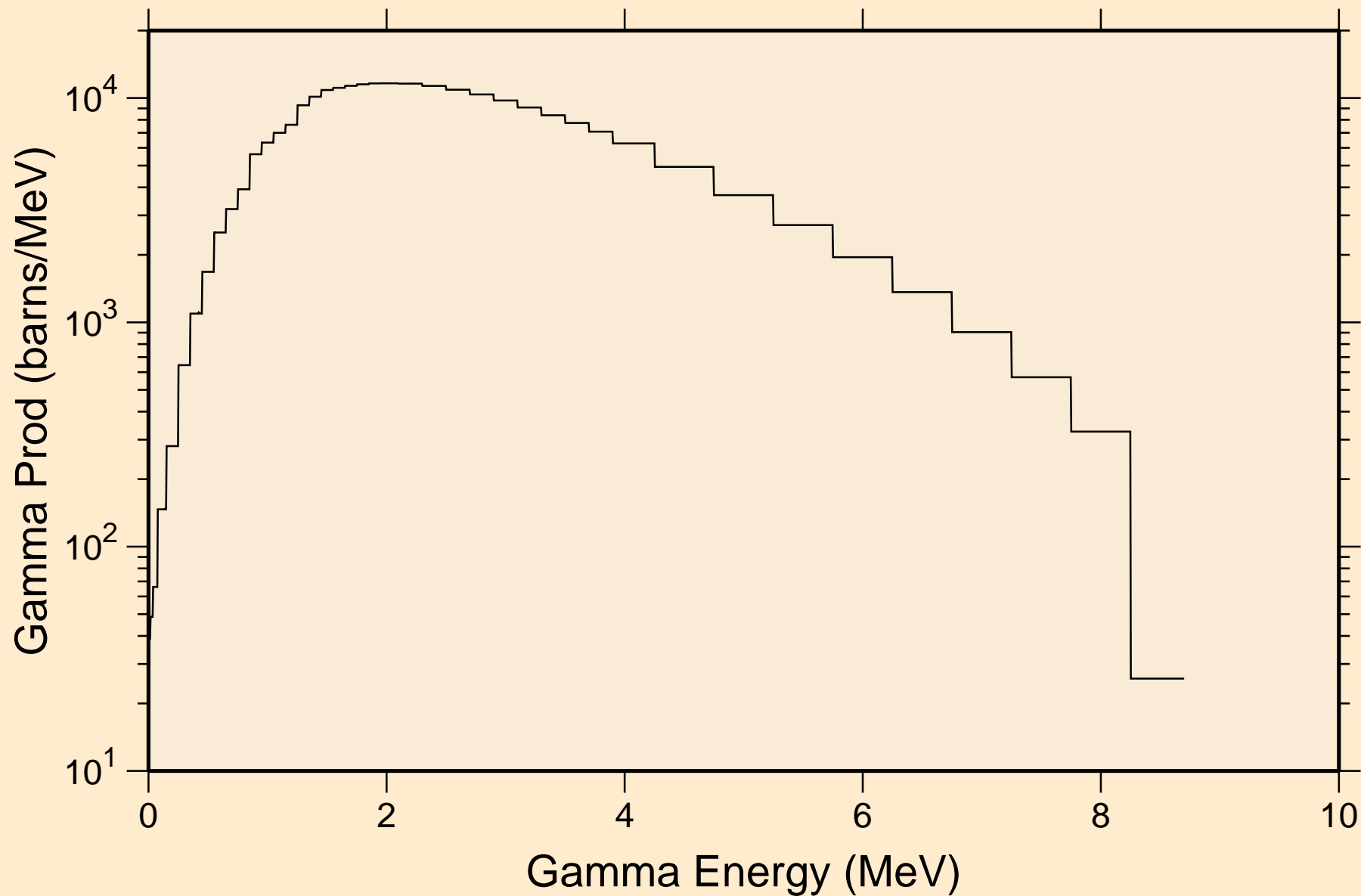


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Photon emission for (n,da)

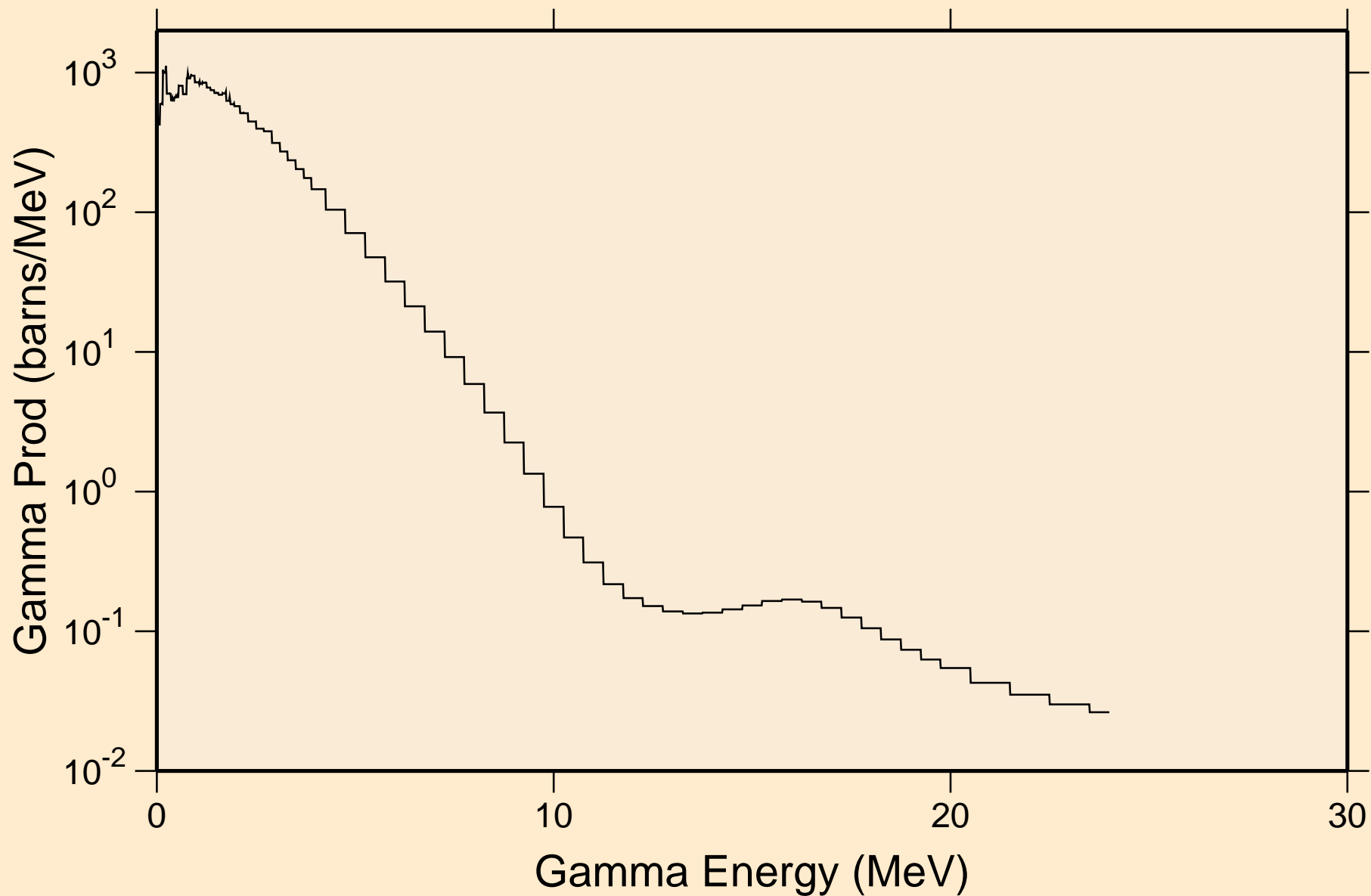




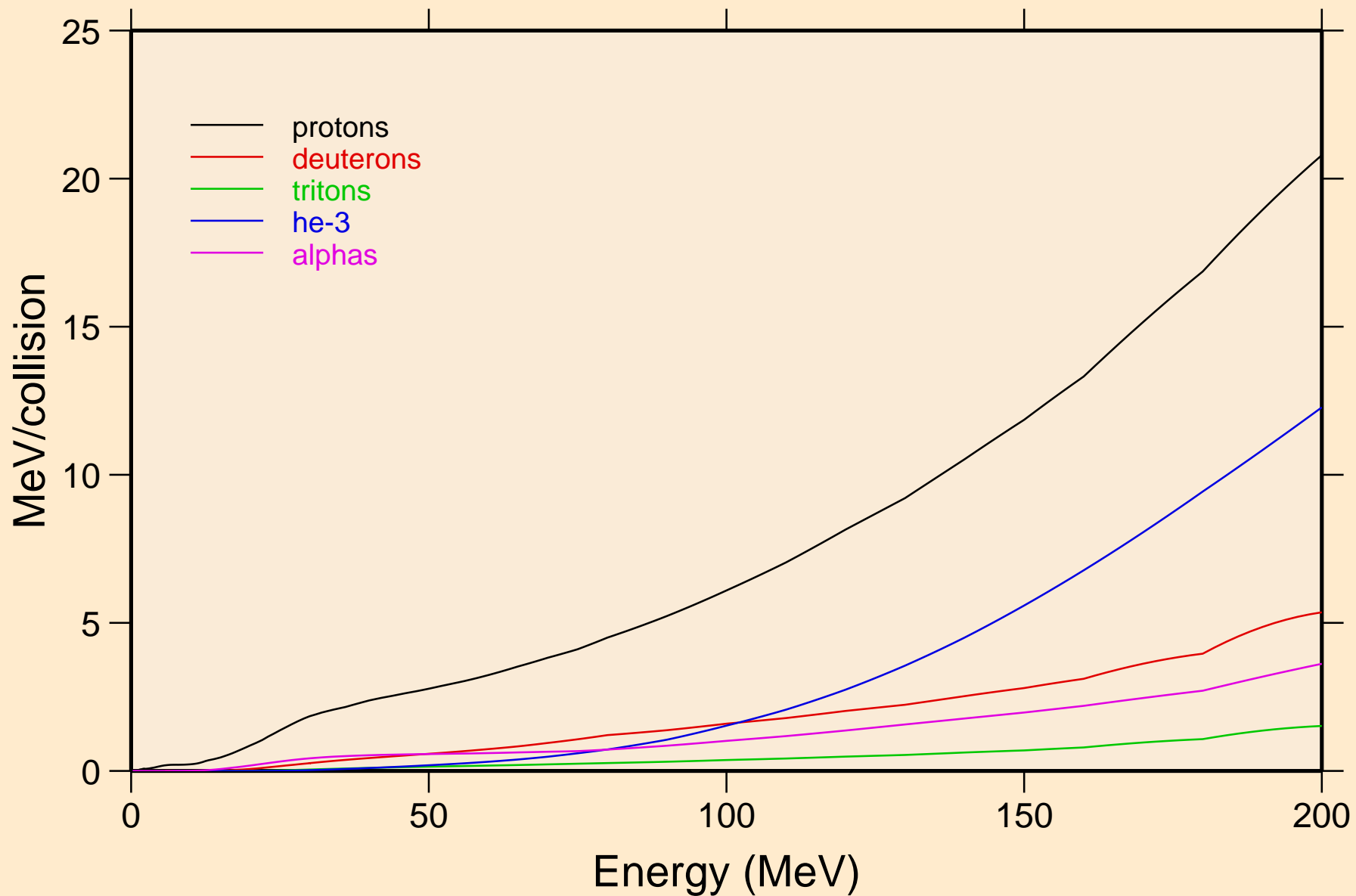
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thermal capture photon spectrum



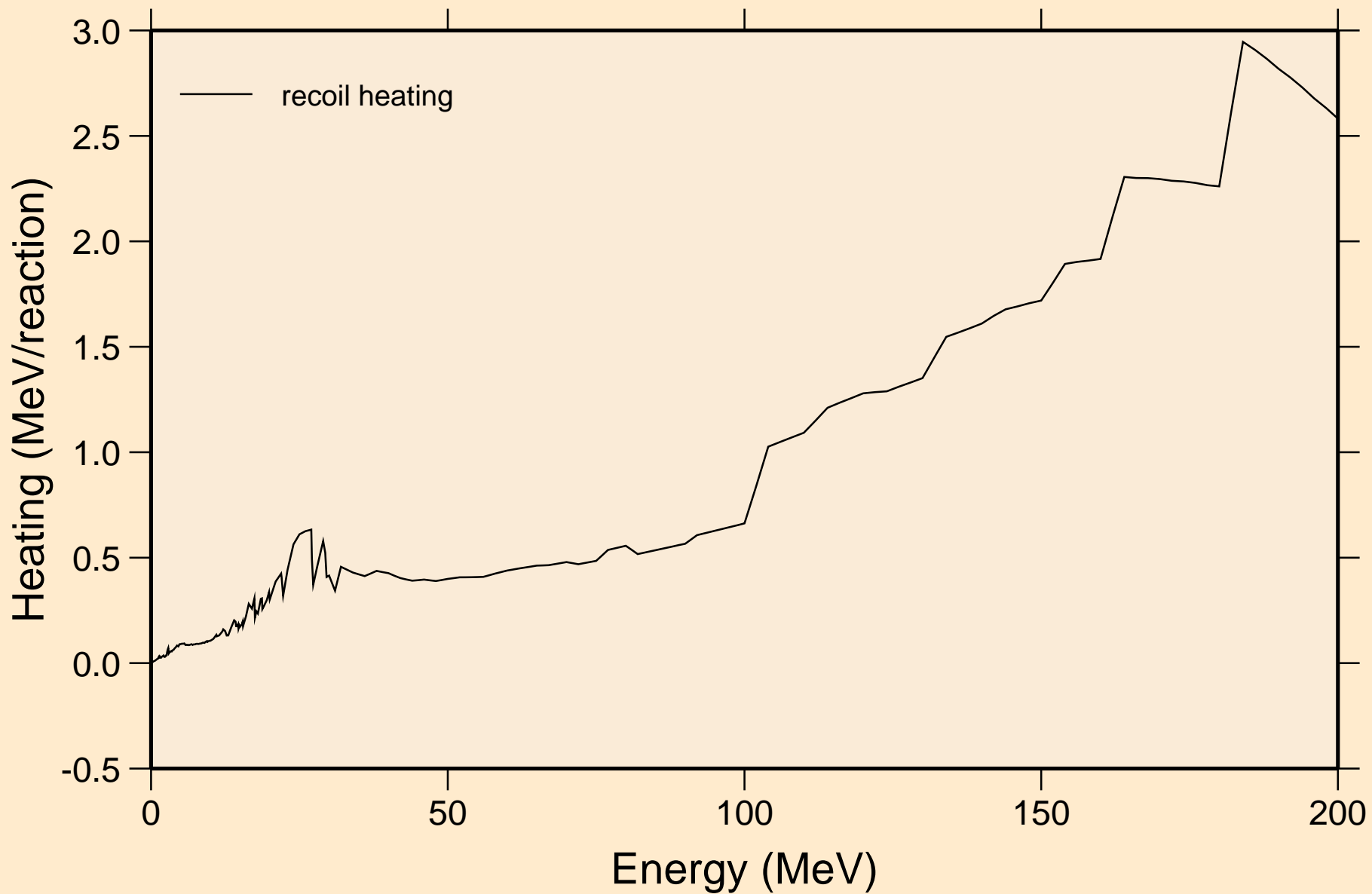
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14 MeV photon spectrum



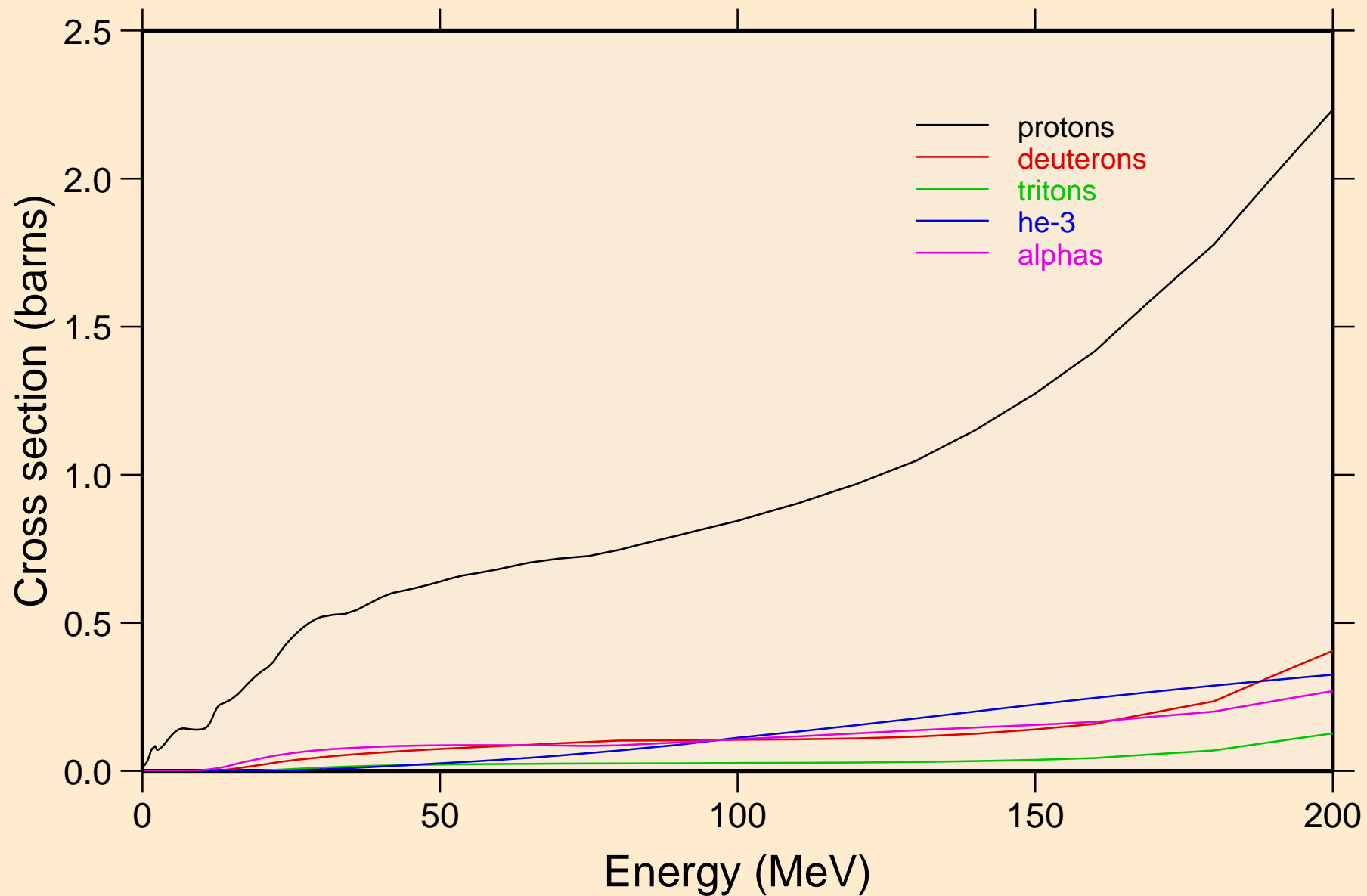
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Particle heating contributions



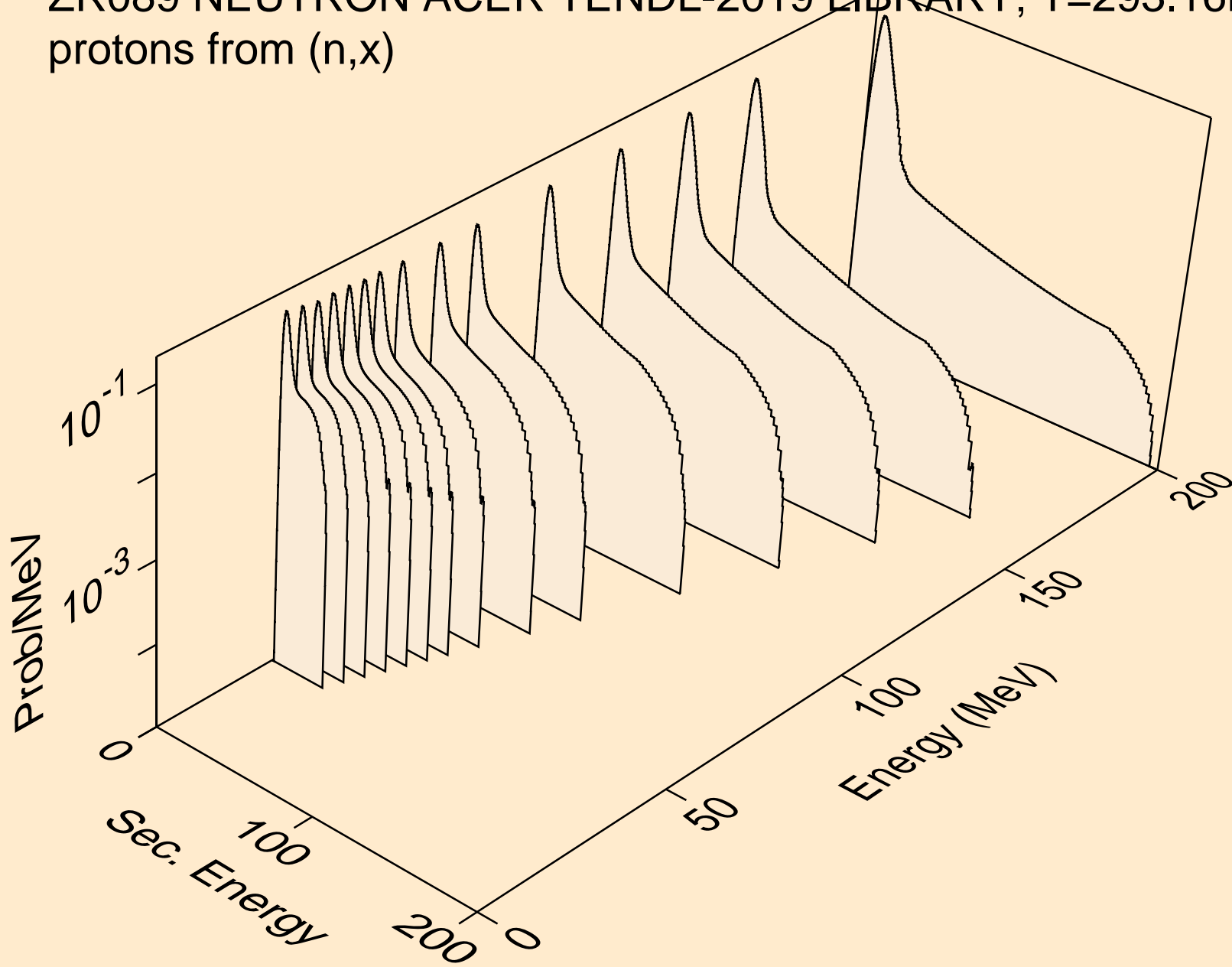
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Recoil Heating



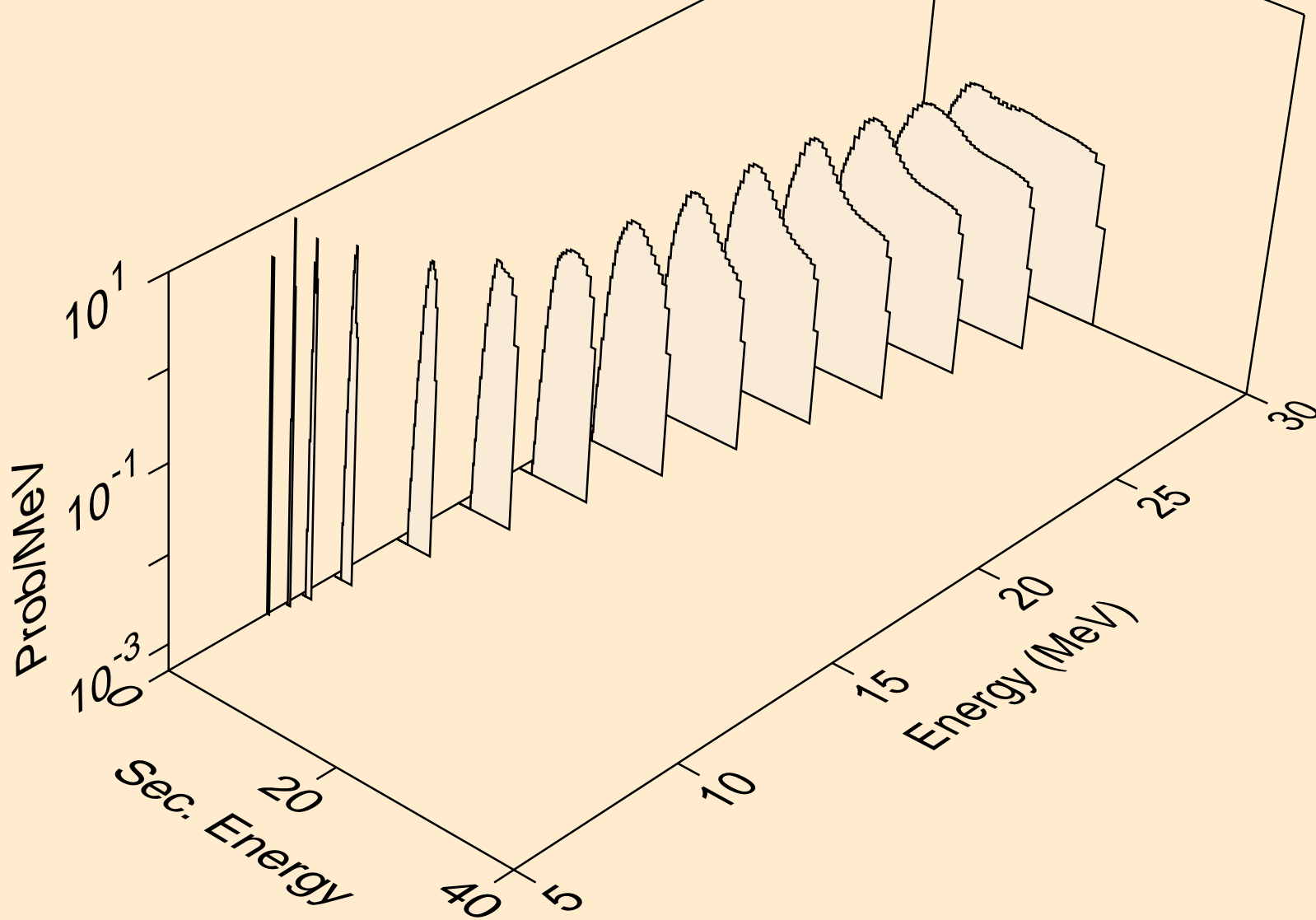
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Particle production cross sections



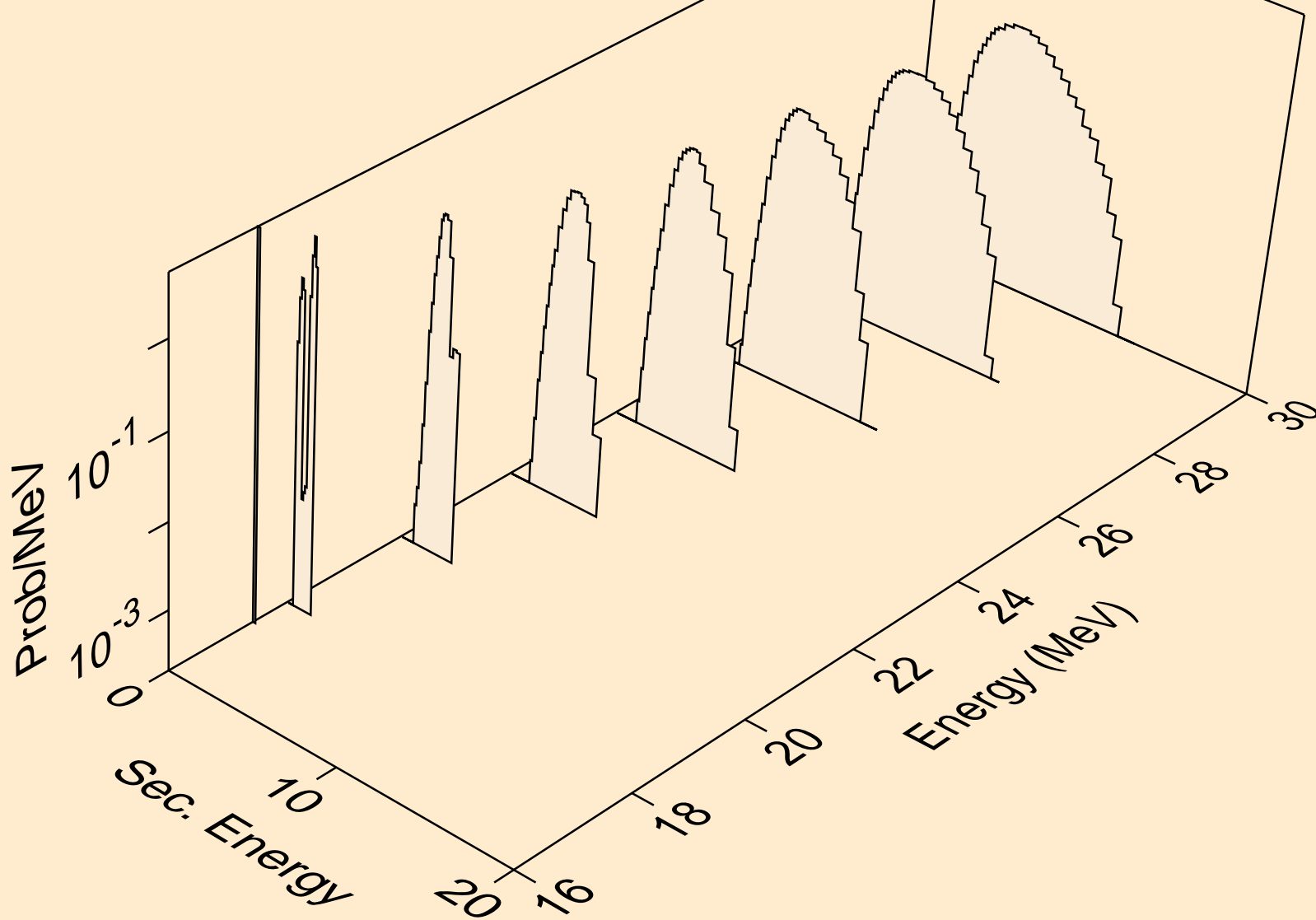
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protons from (n,x)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
protons from (n,n\*)p

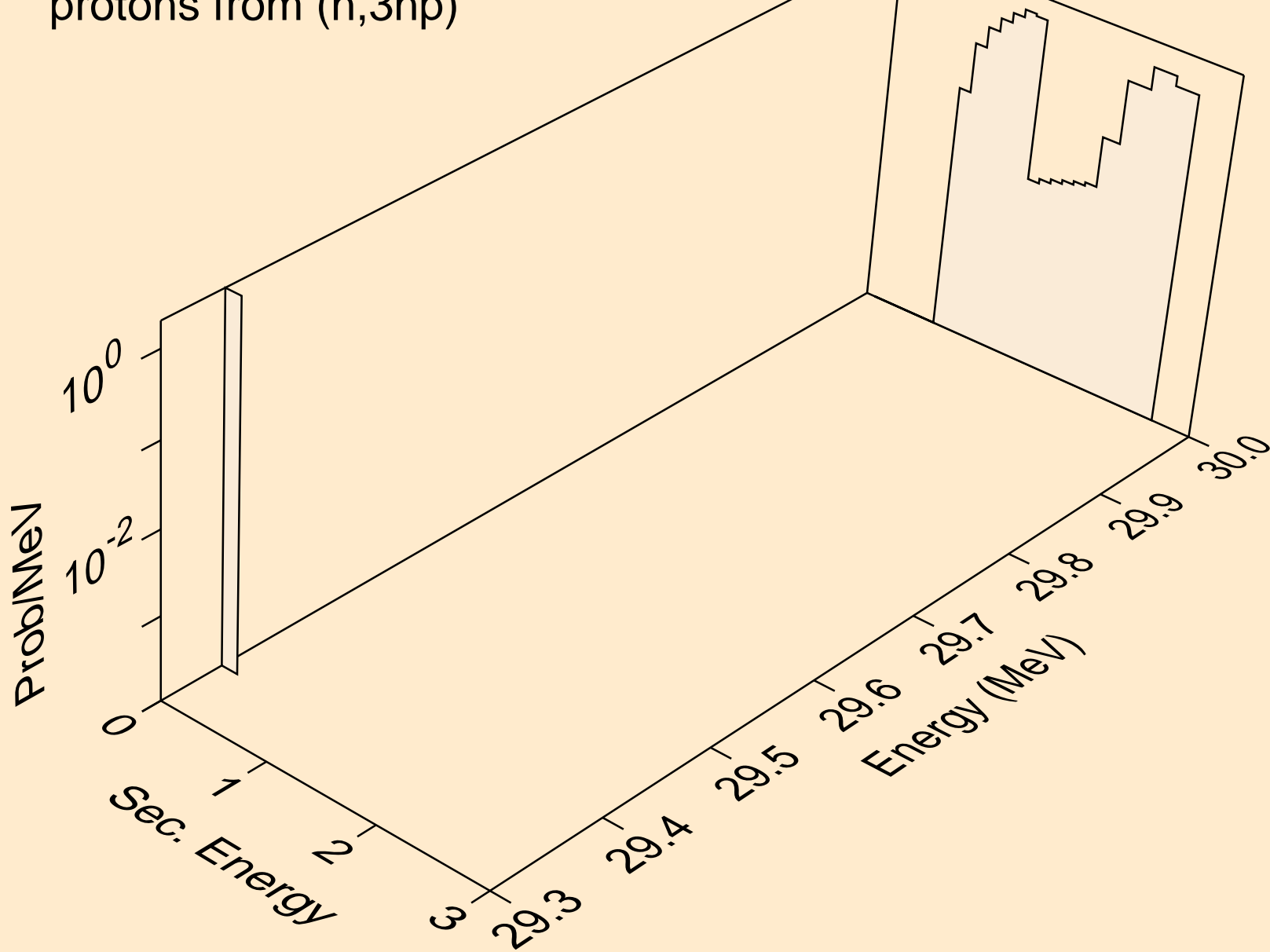


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protons from (n,2np)

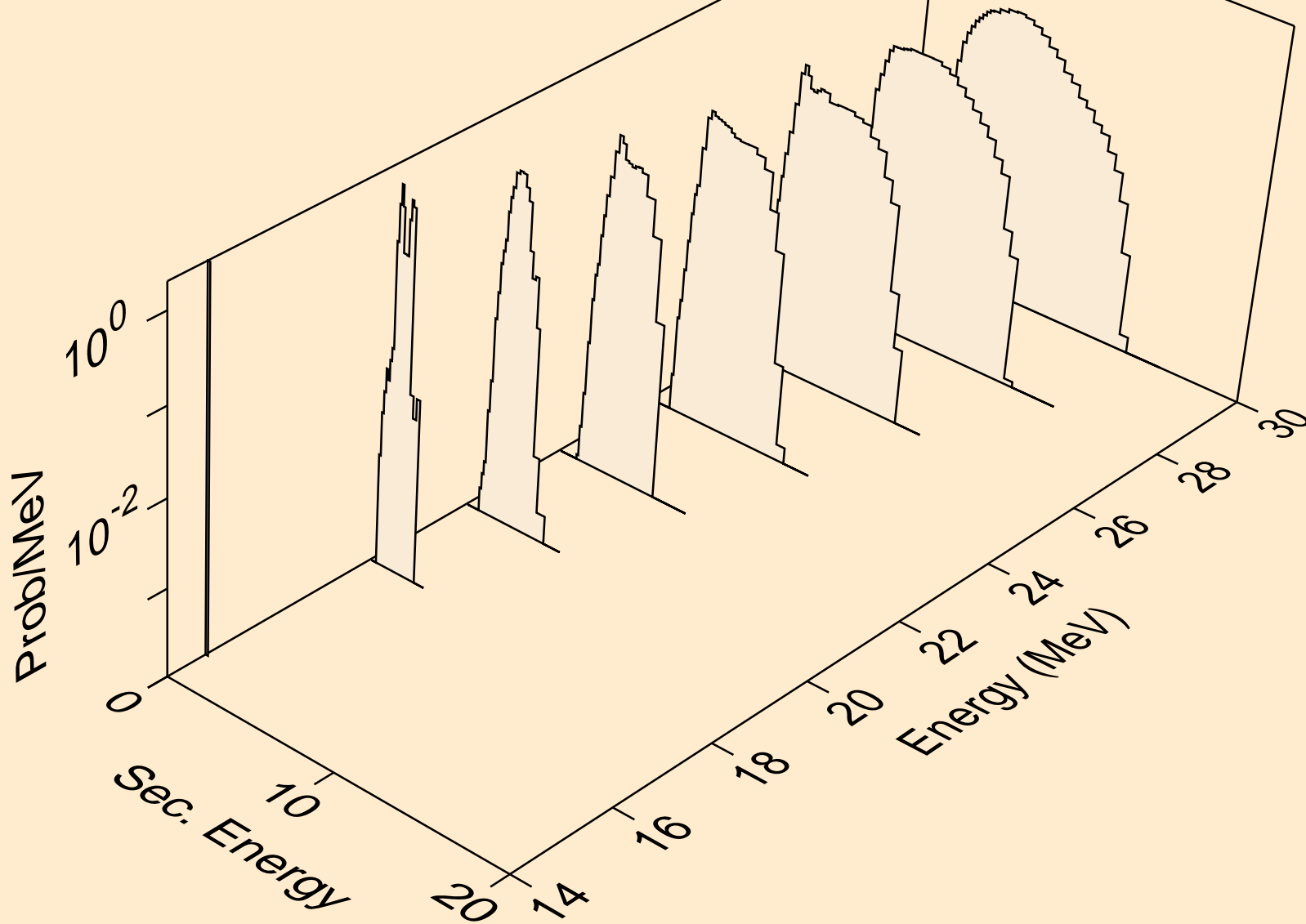




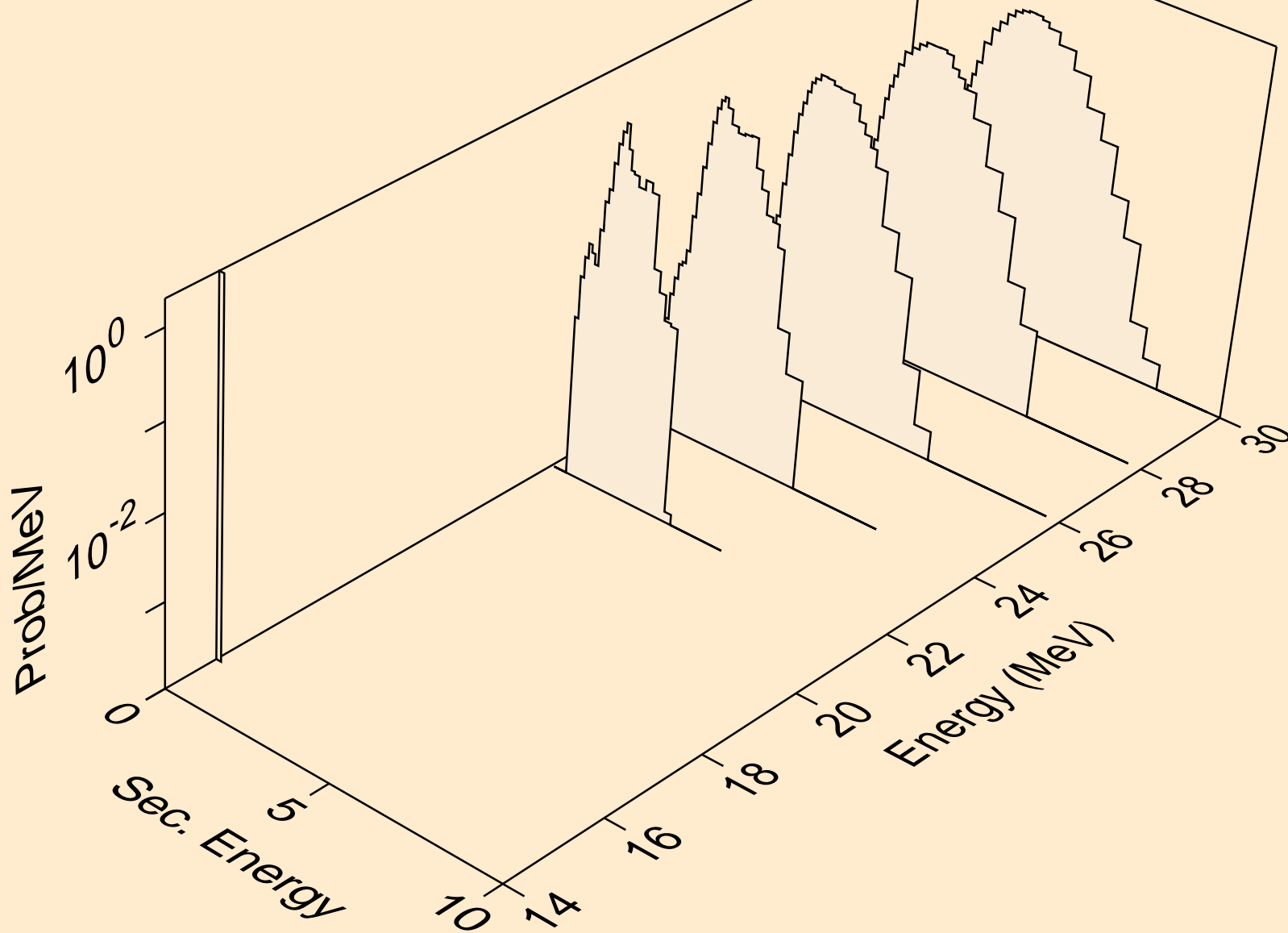
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protons from (n,3np)



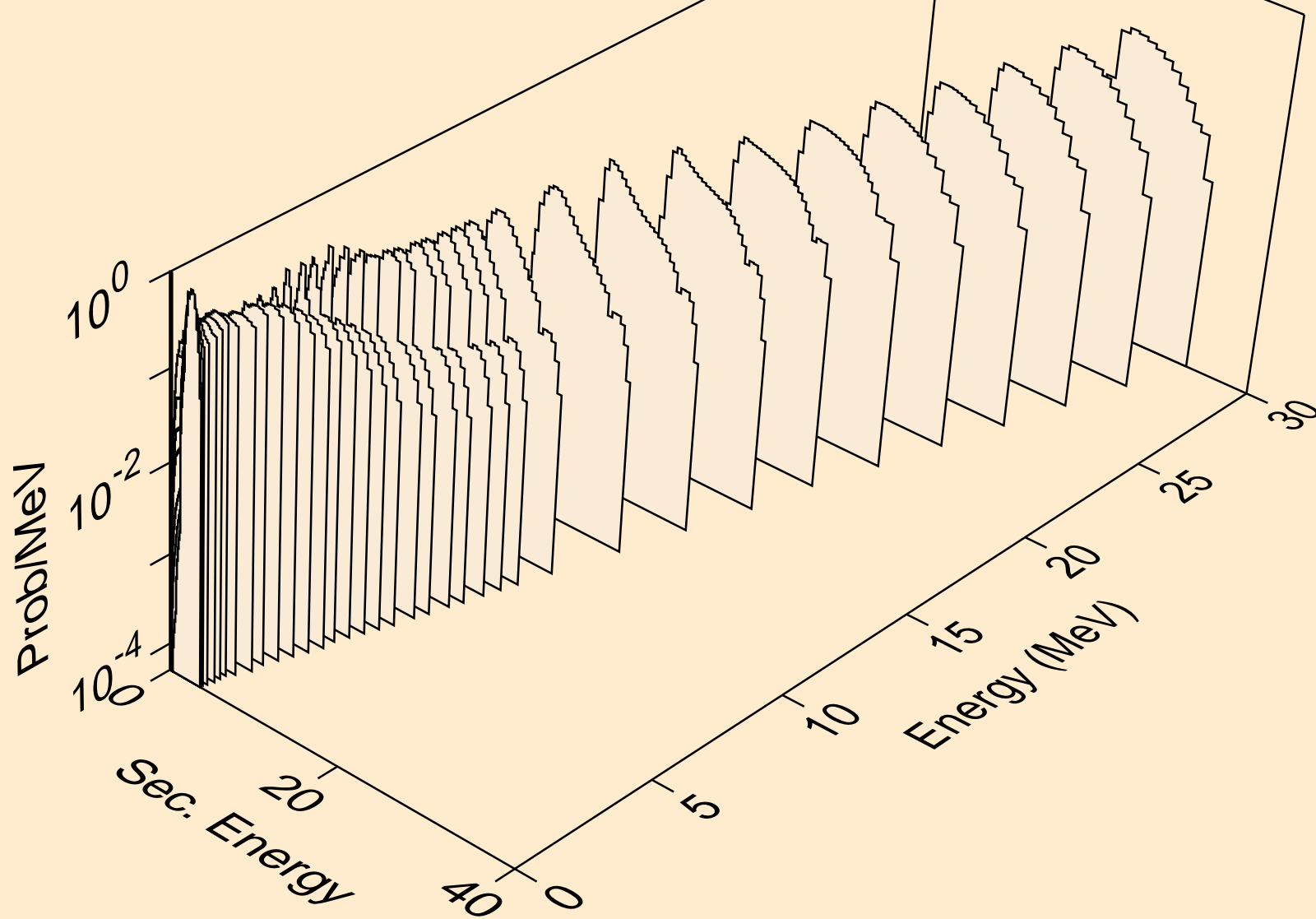
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protons from (n,2np)



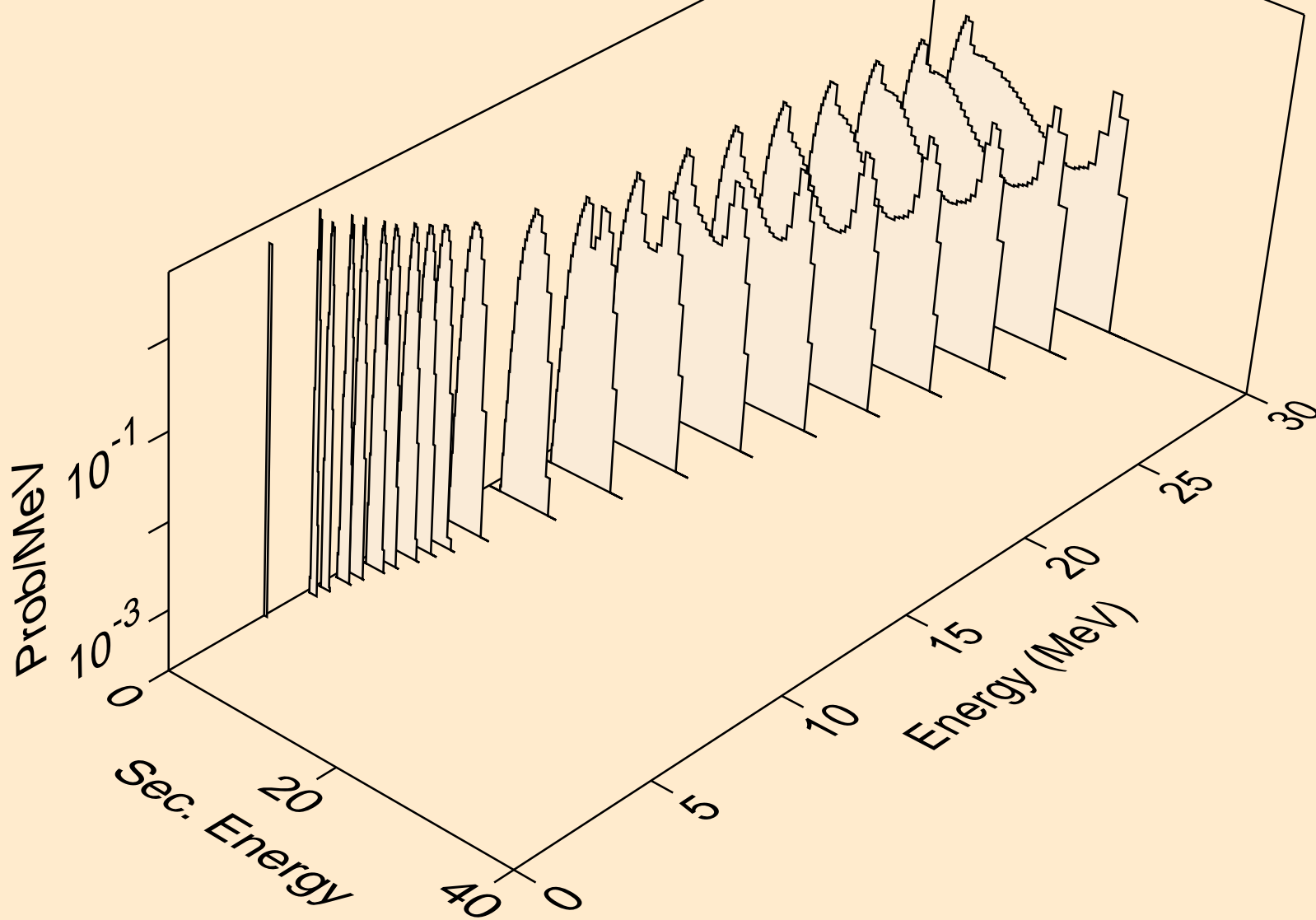
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protons from (n,npa)



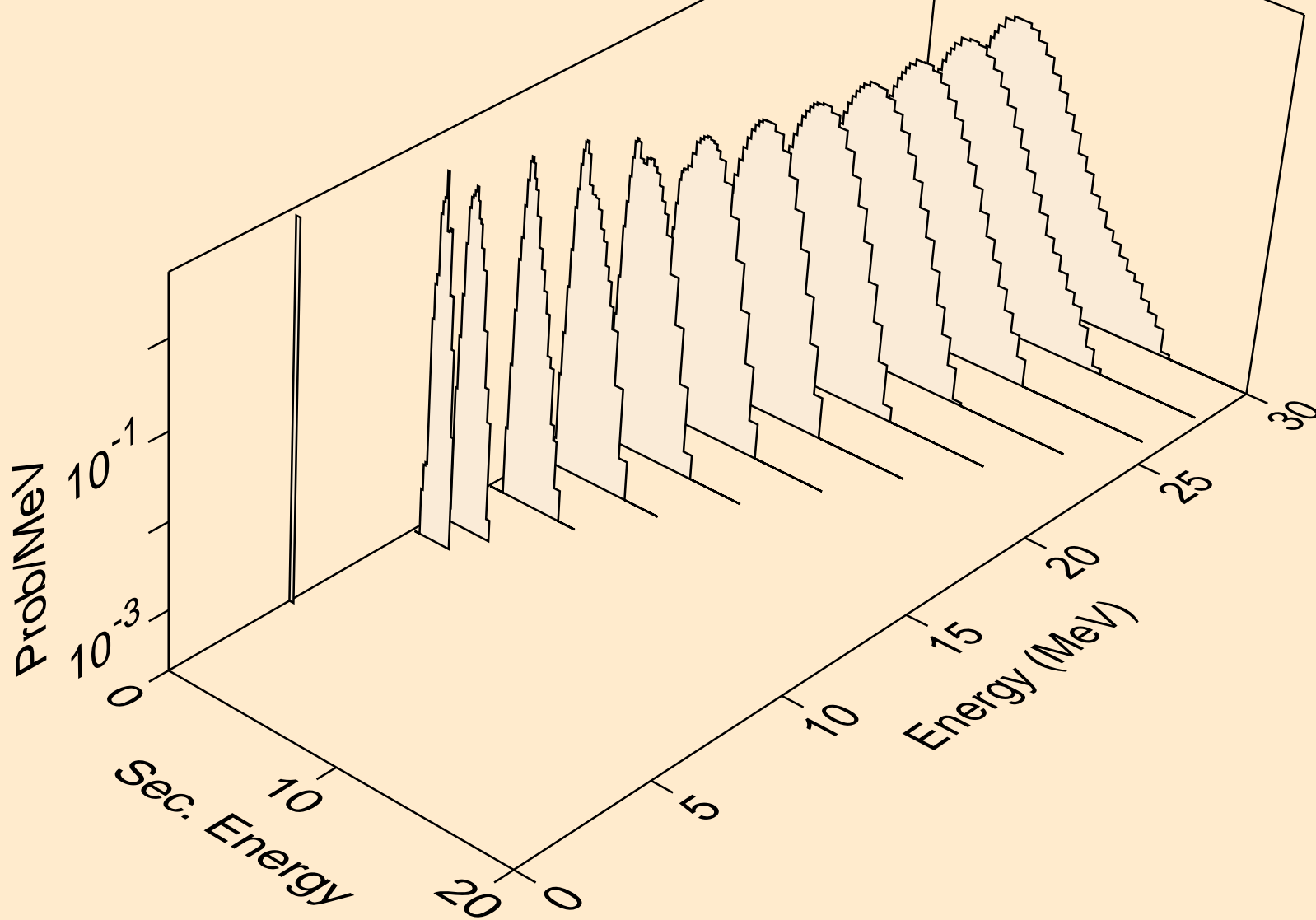
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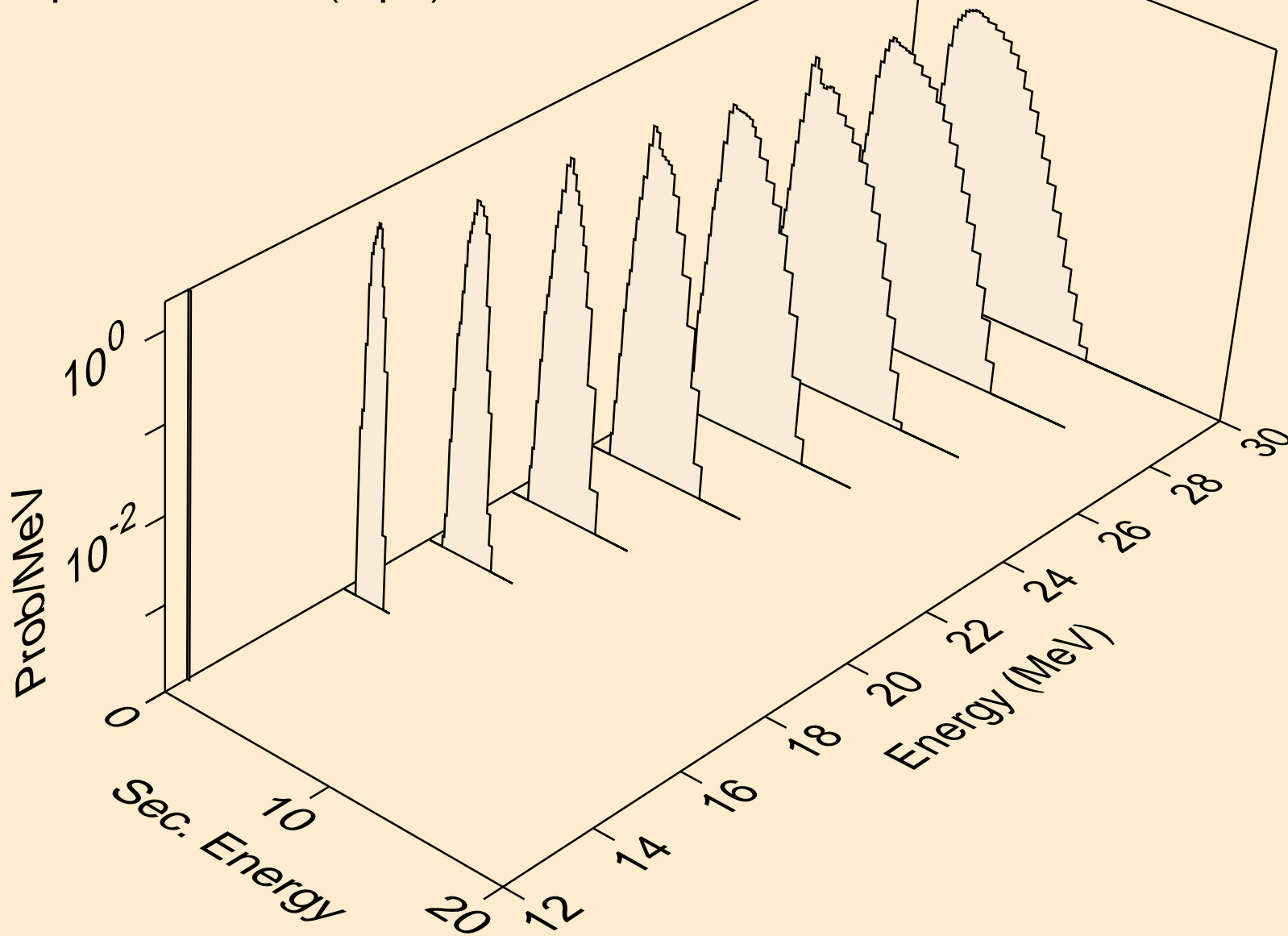
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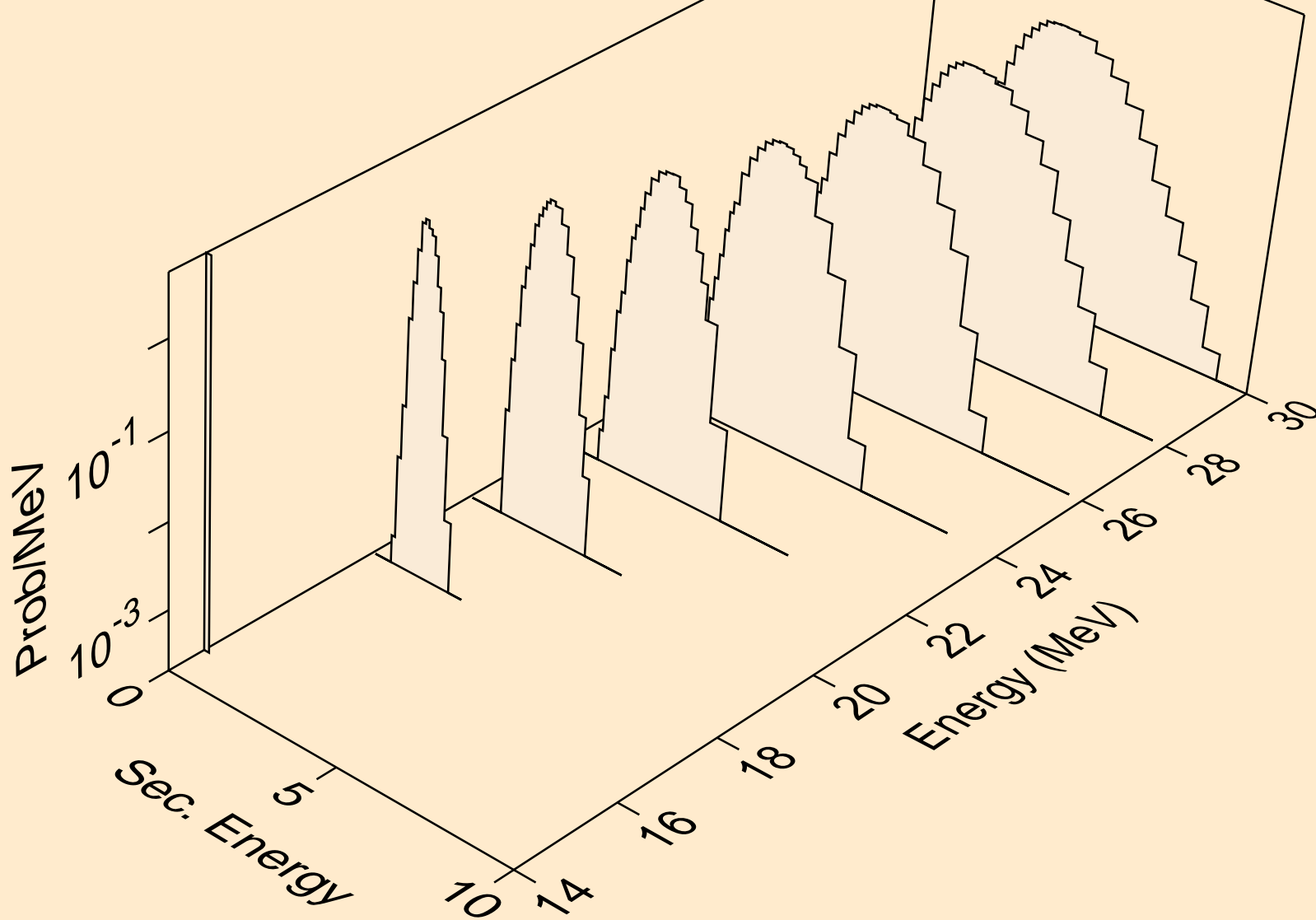
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protons from (n,p)



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protons from (n,pd)

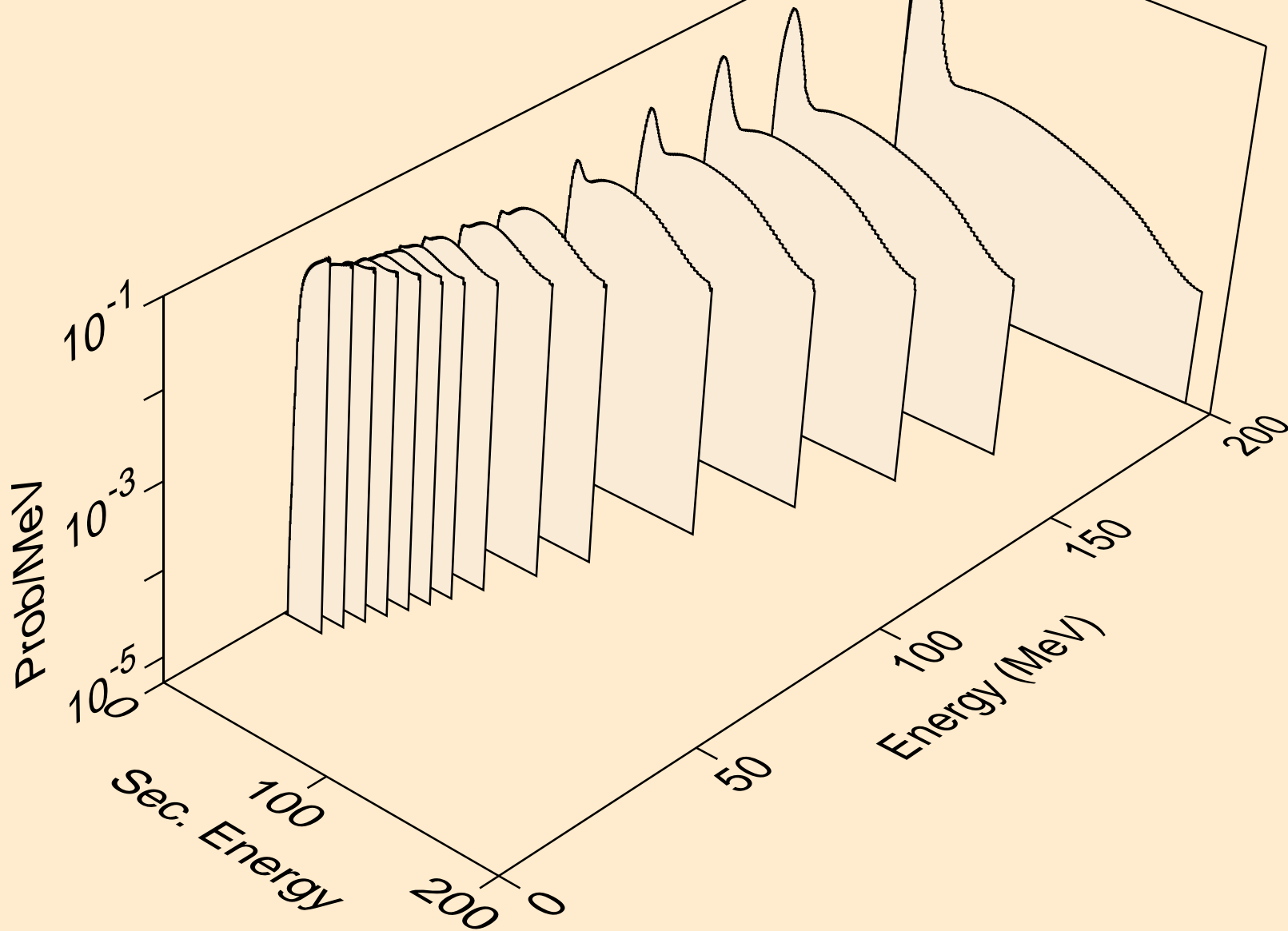


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protons from (n,pt)

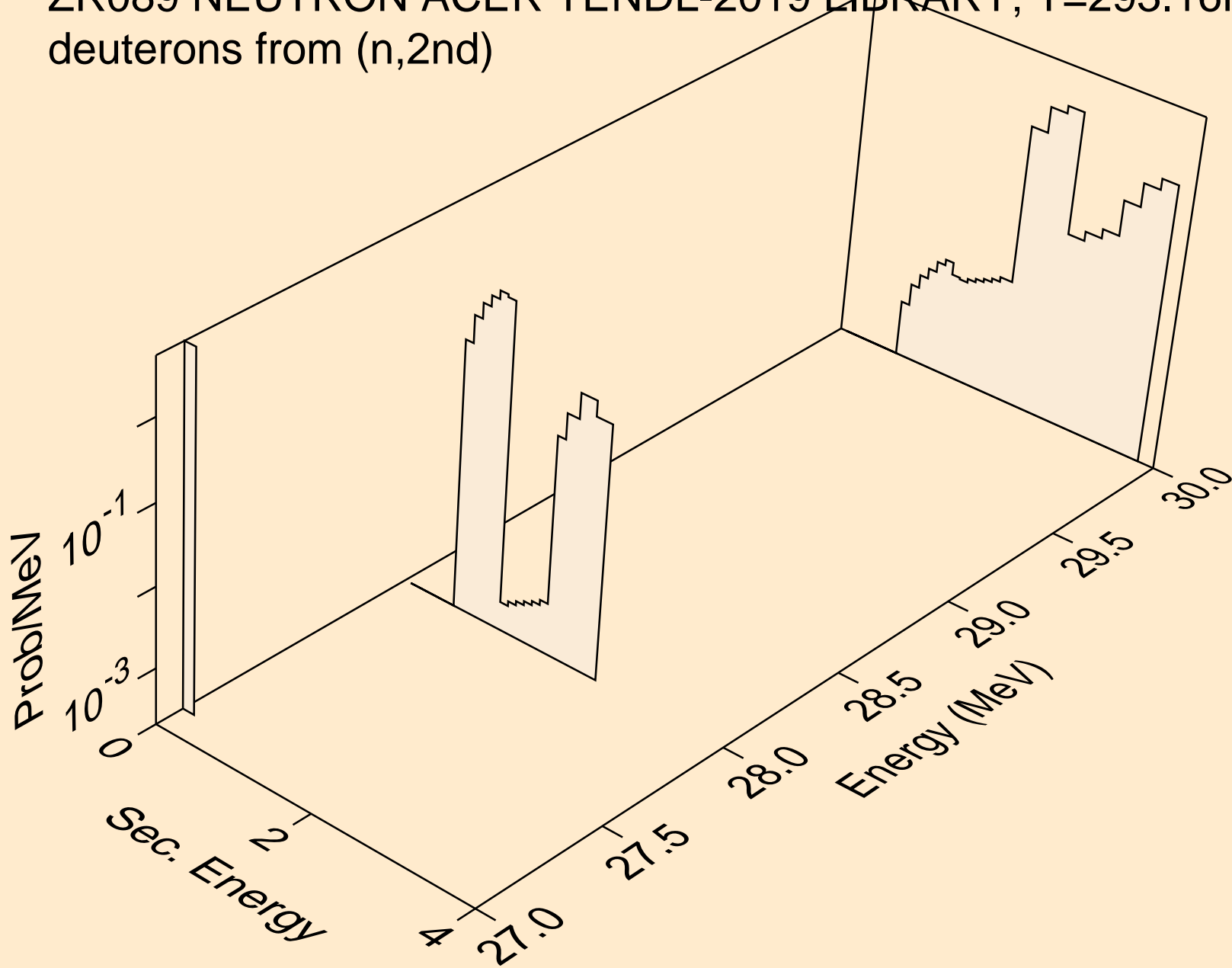




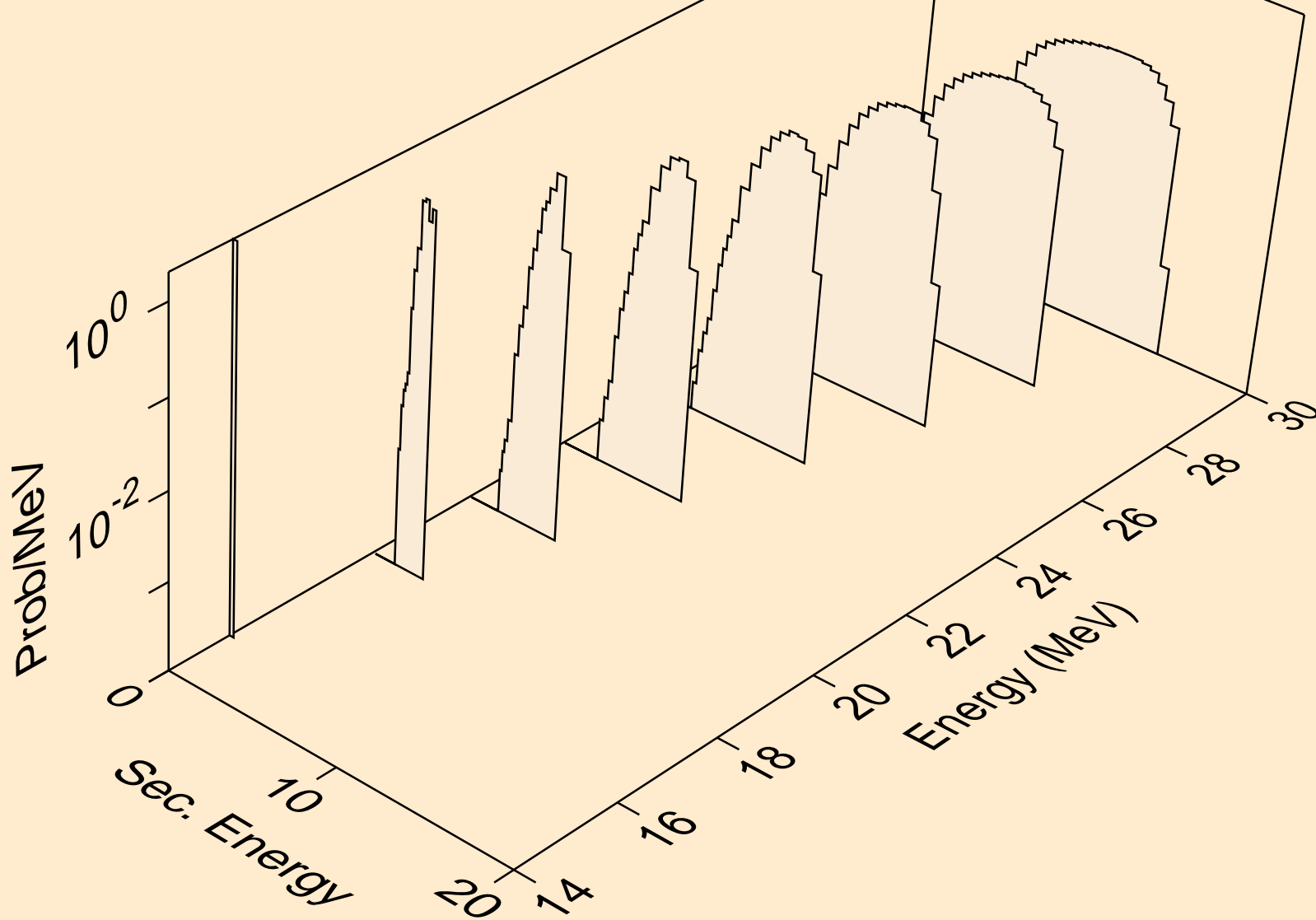
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deuterons from (n,x)



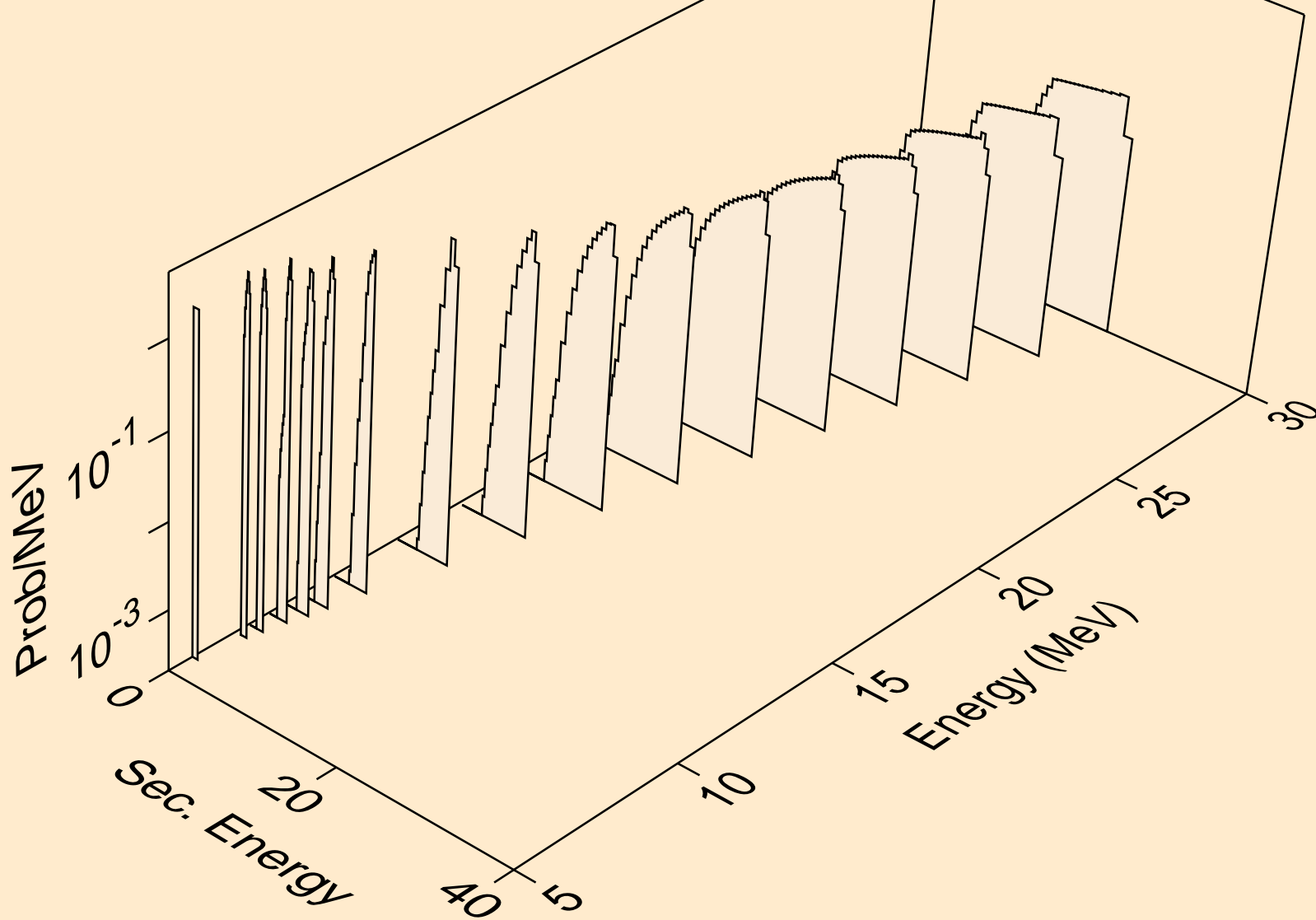
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deuterons from (n,2nd)



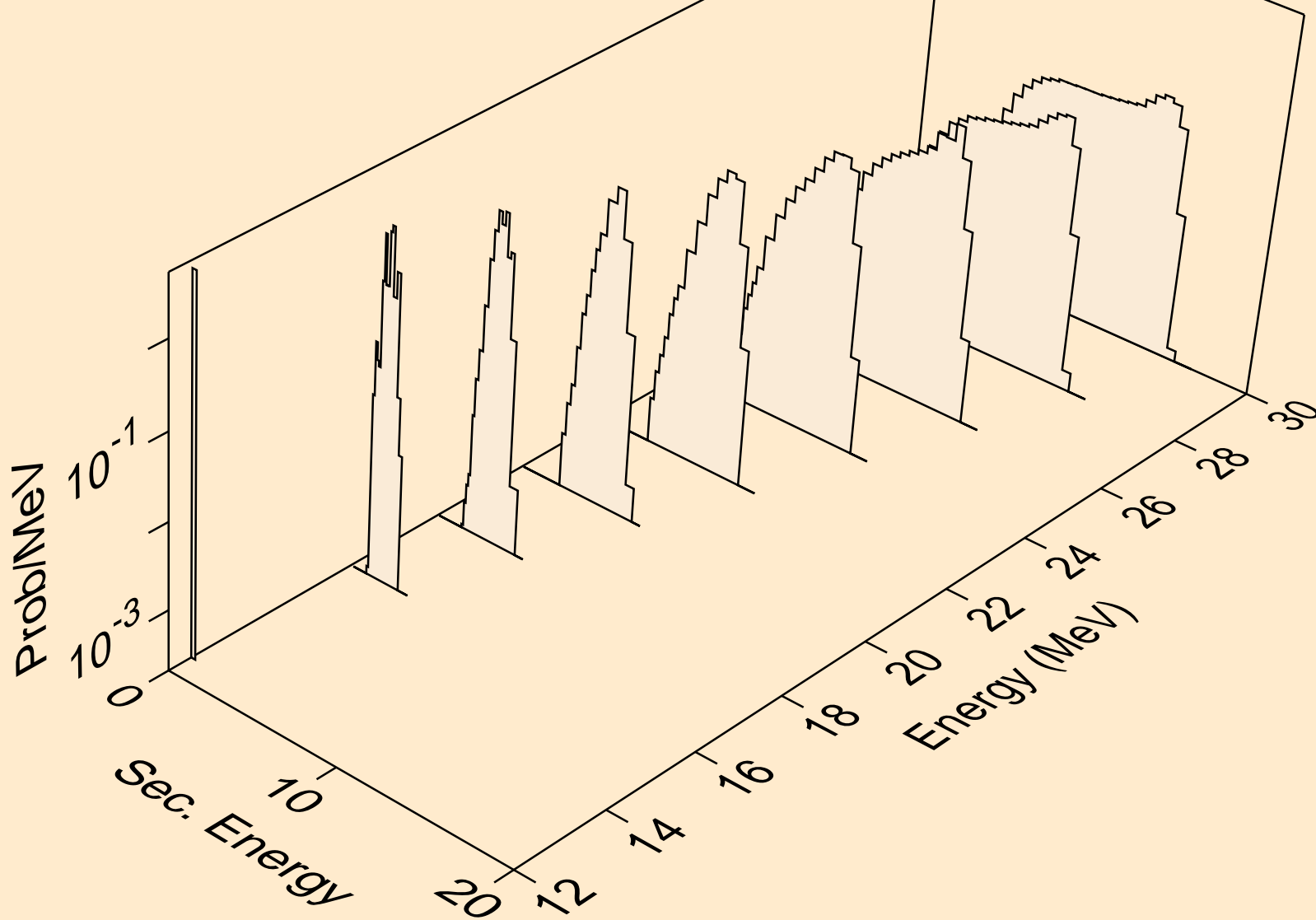
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deuterons from (n,n\*)d



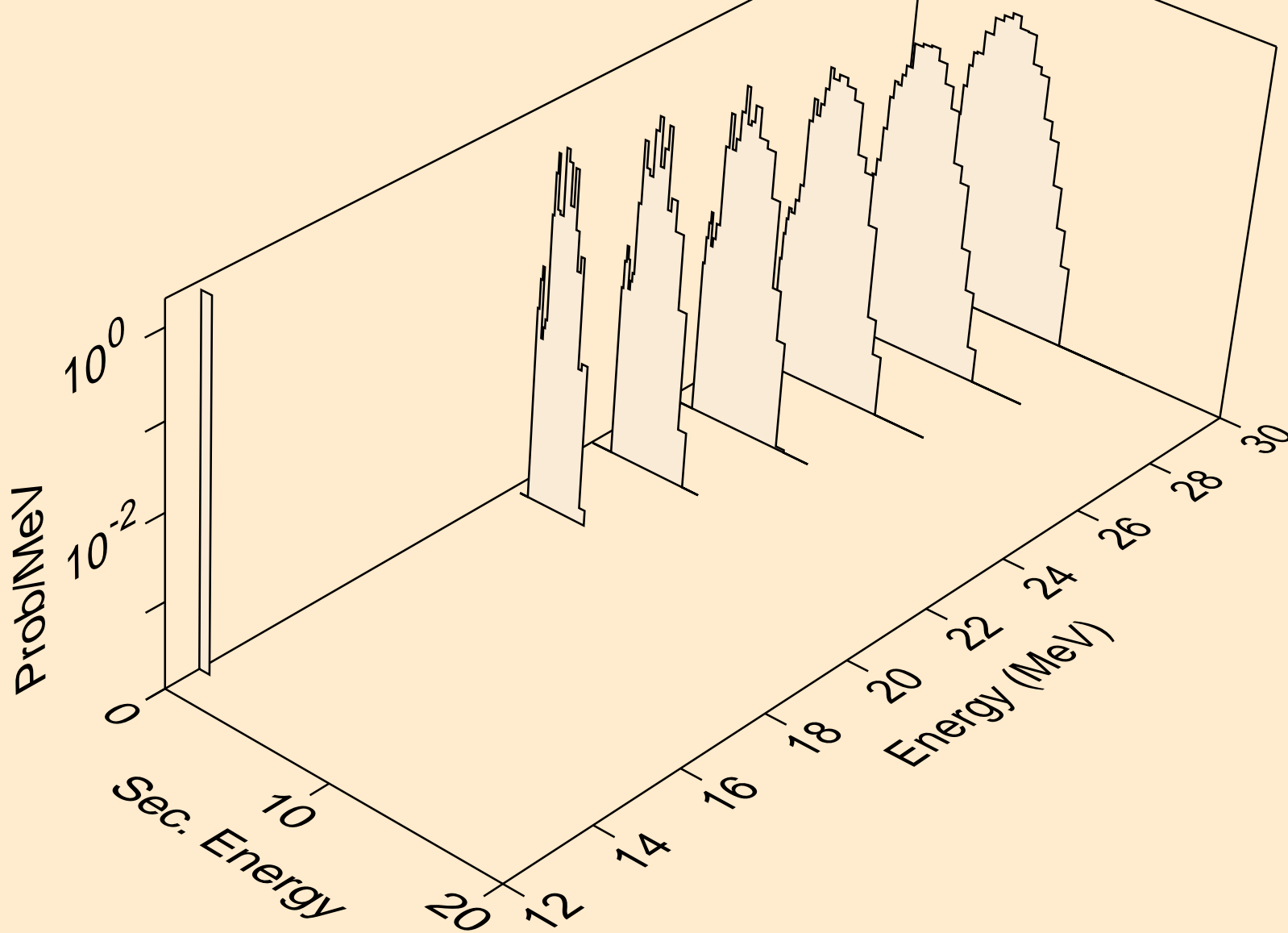
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deuterons from (n,d)



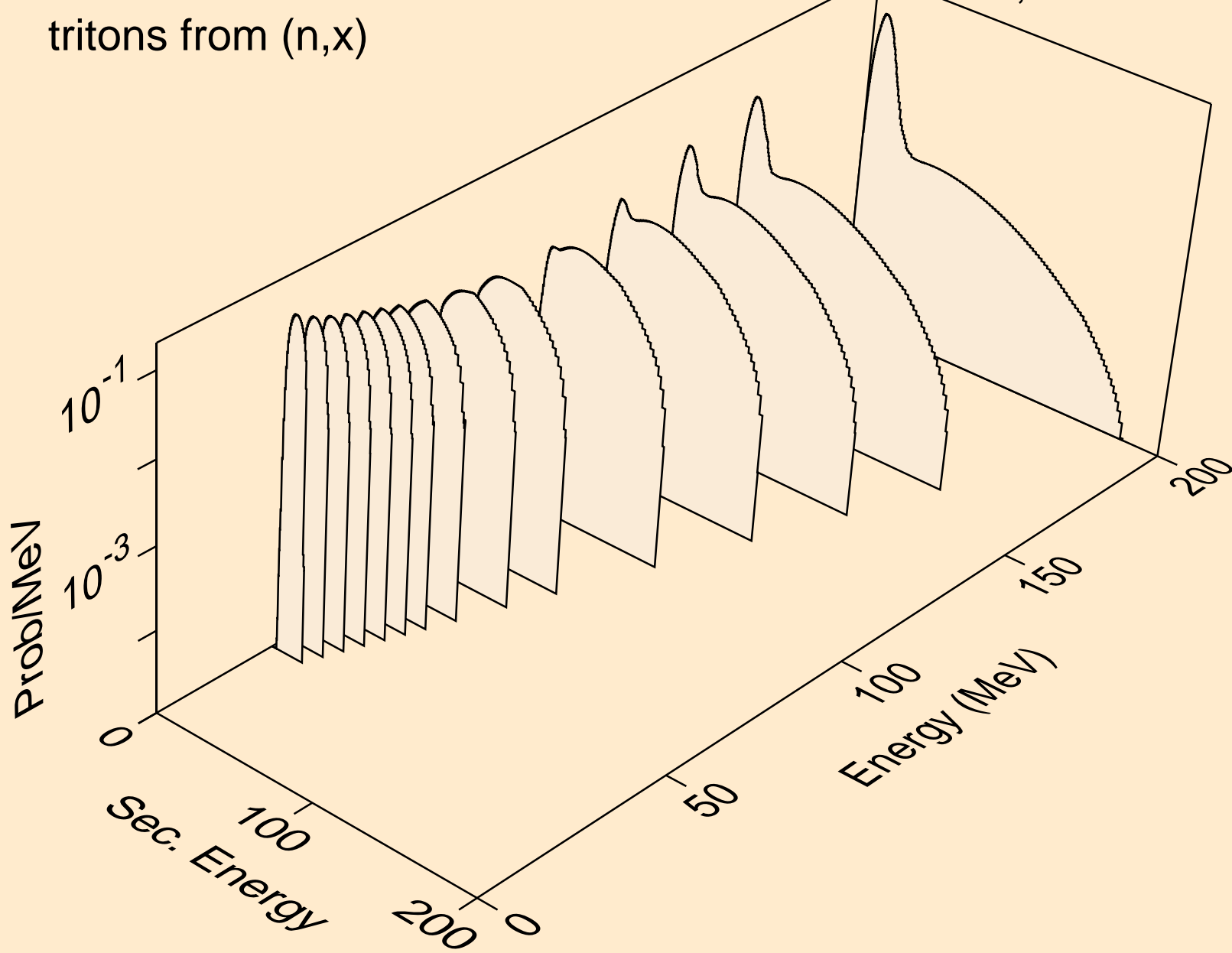
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deuterons from (n,pd)



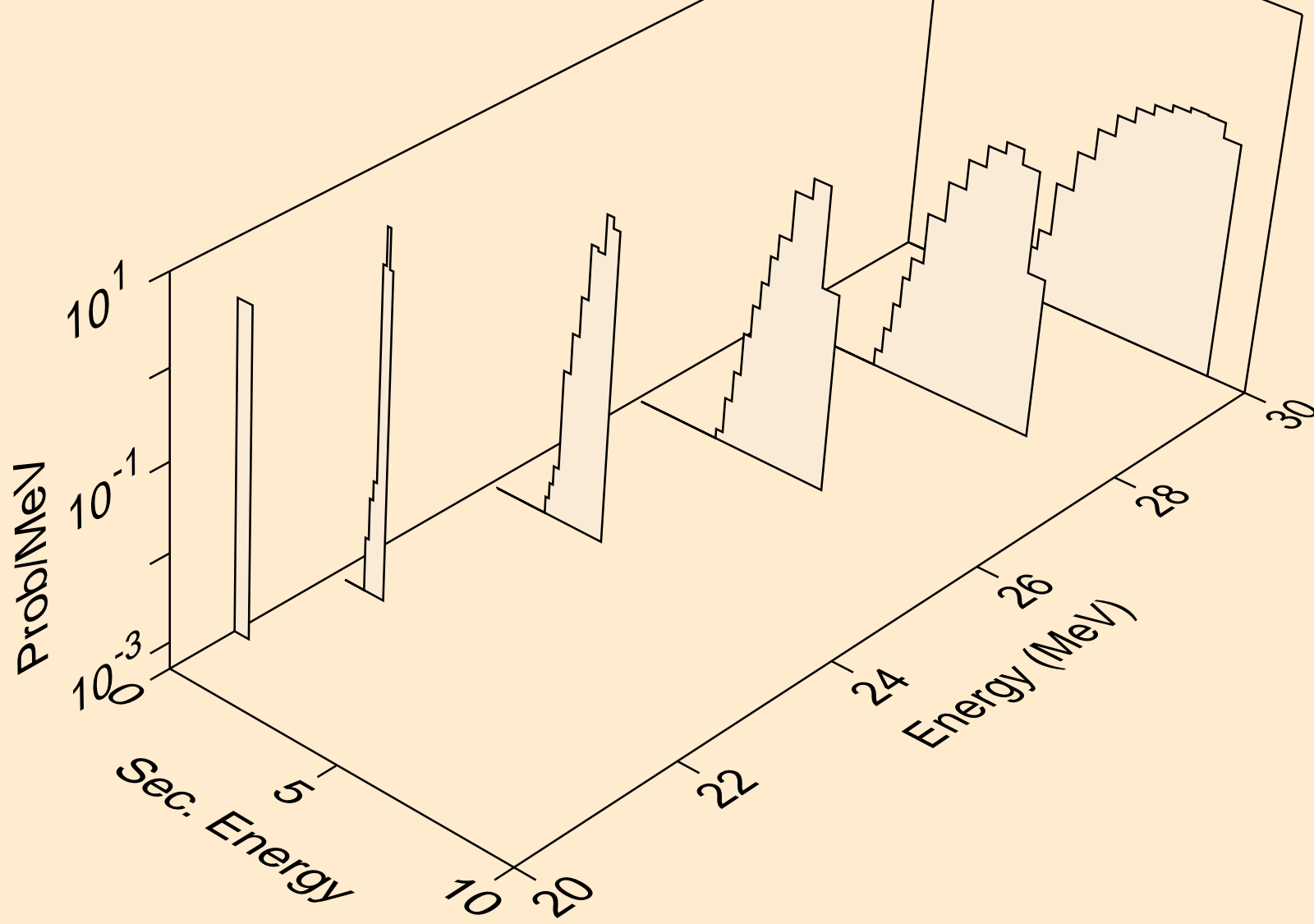
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deuterons from (n,da)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
tritons from (n,x)

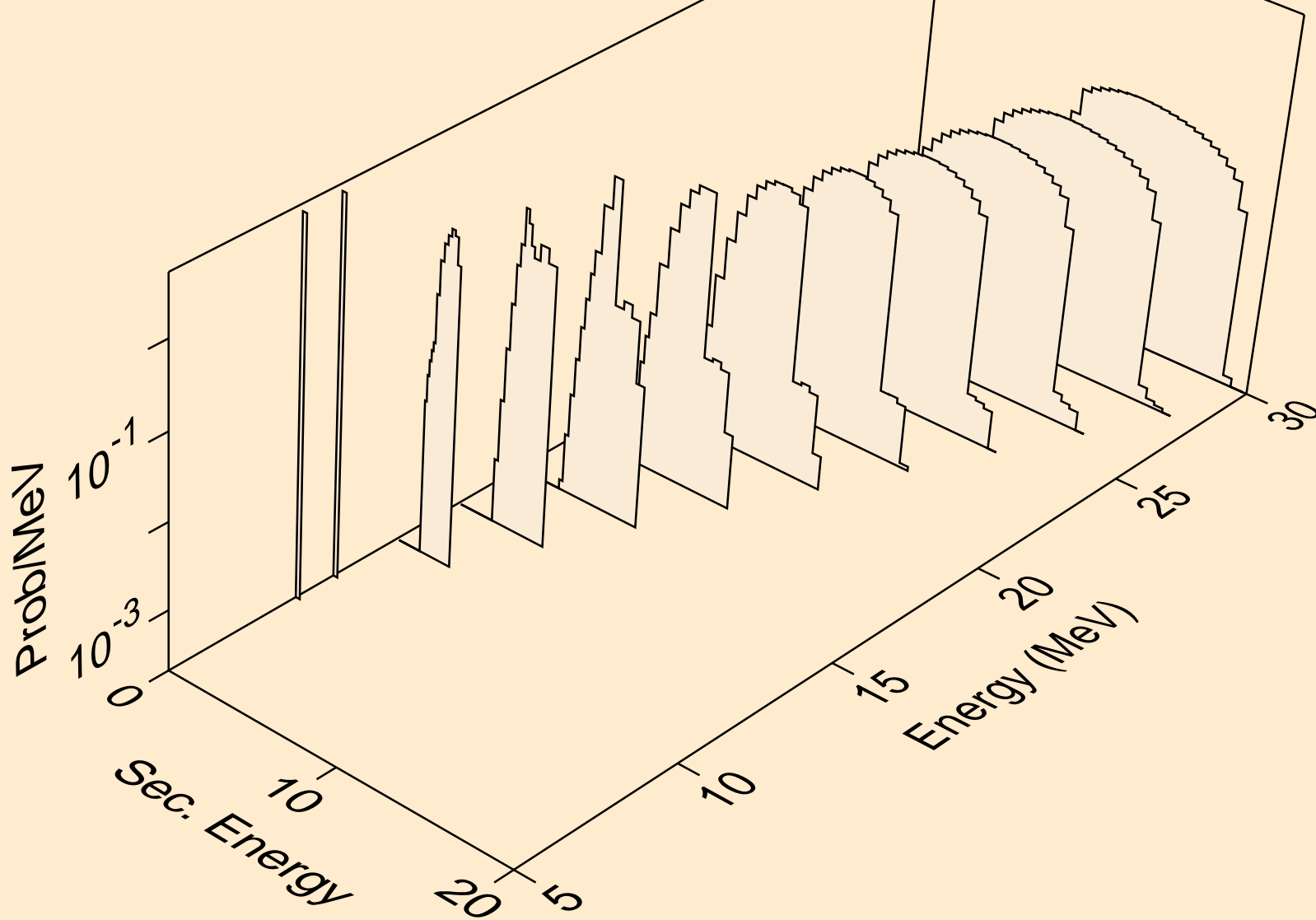


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tritons from (n,n\*)t

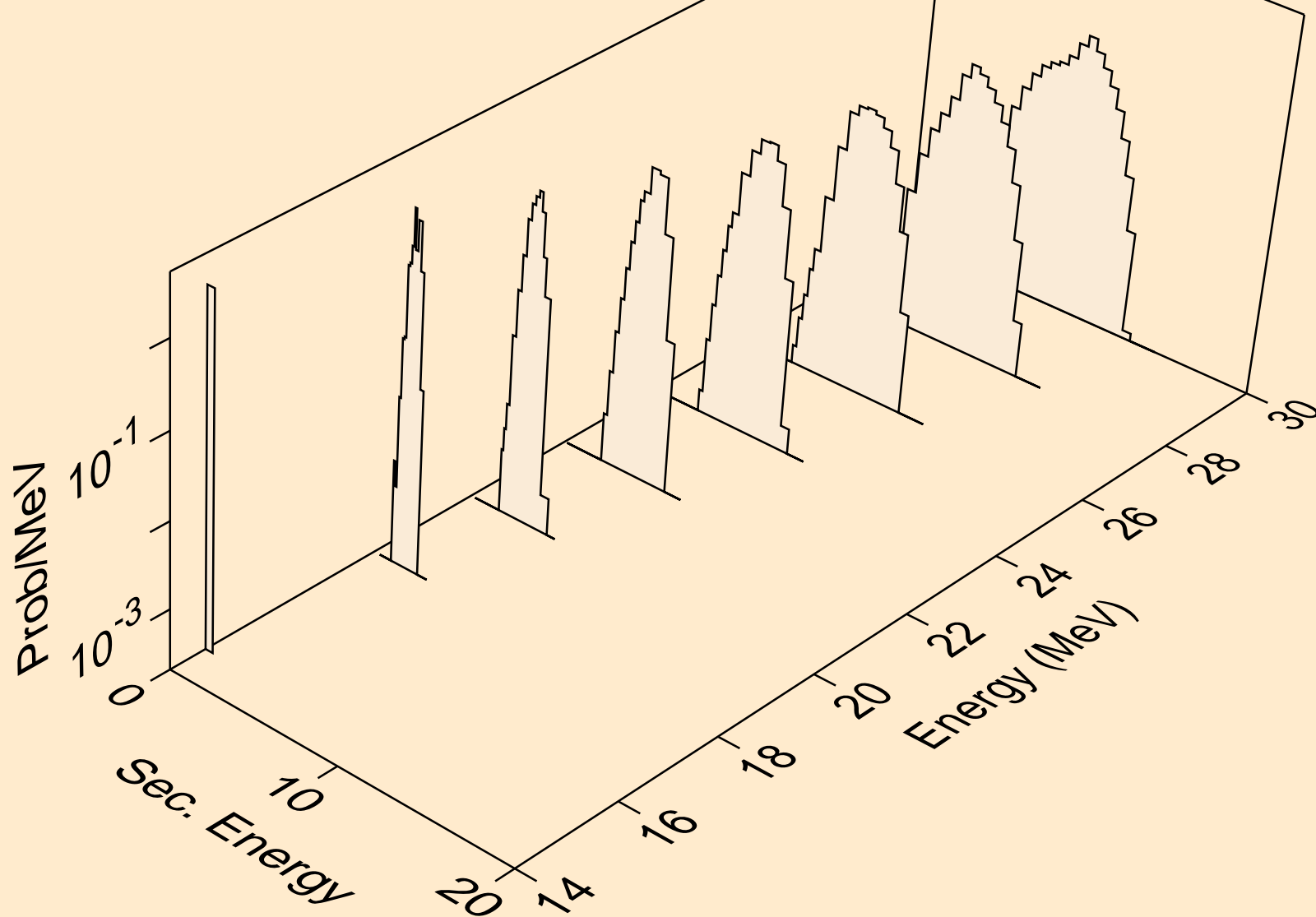




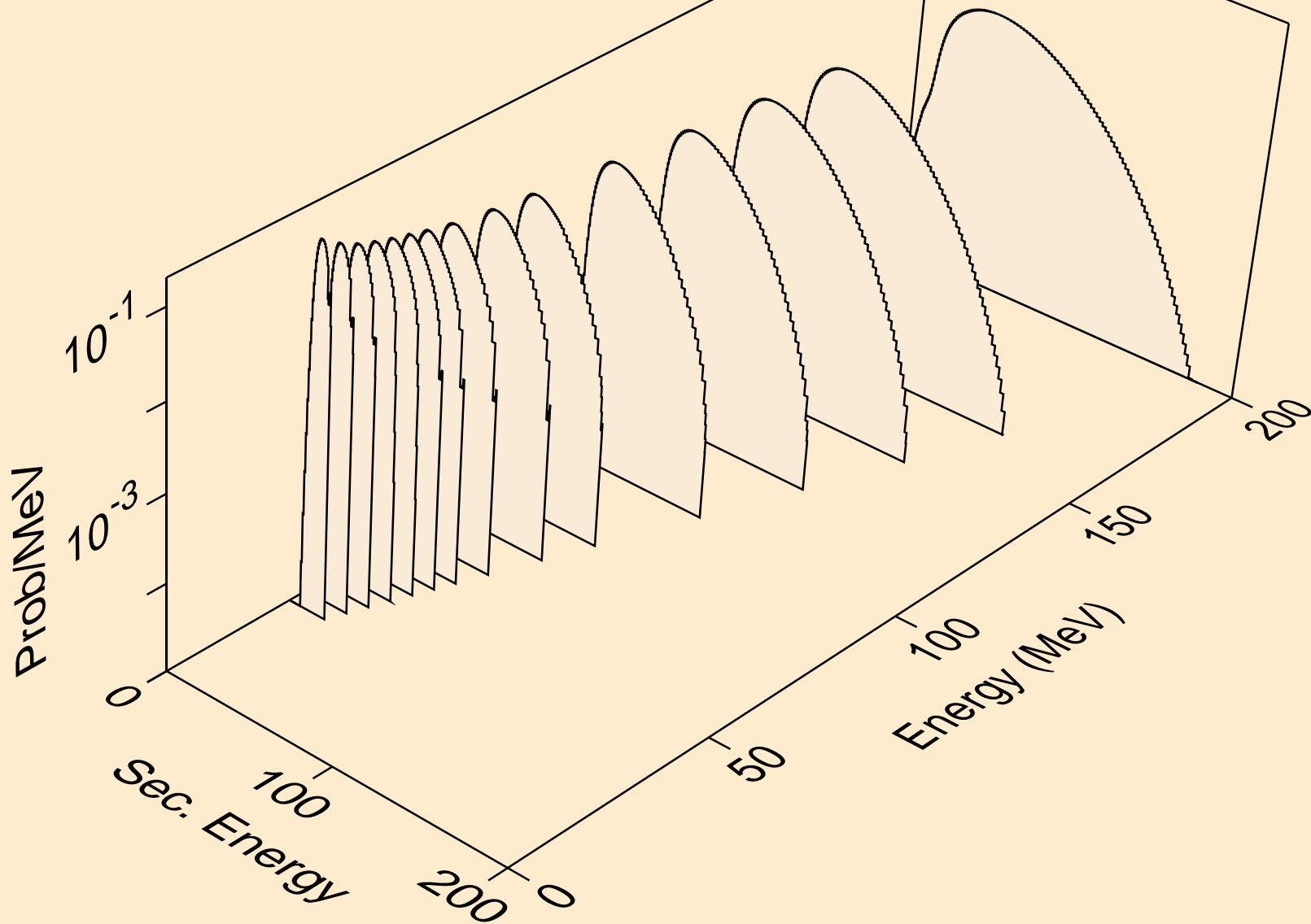
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tritons from (n,t)



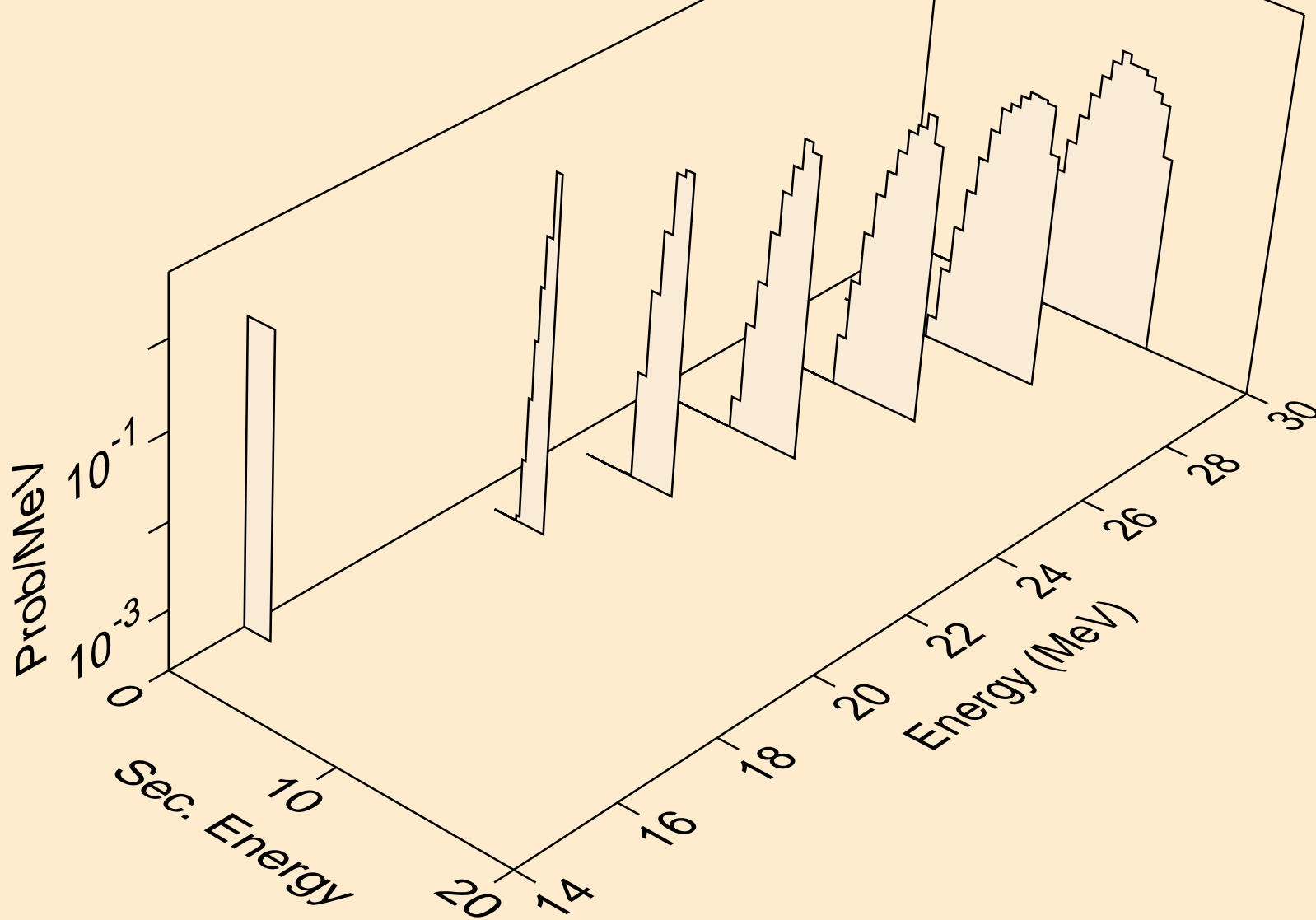
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tritons from (n,pt)



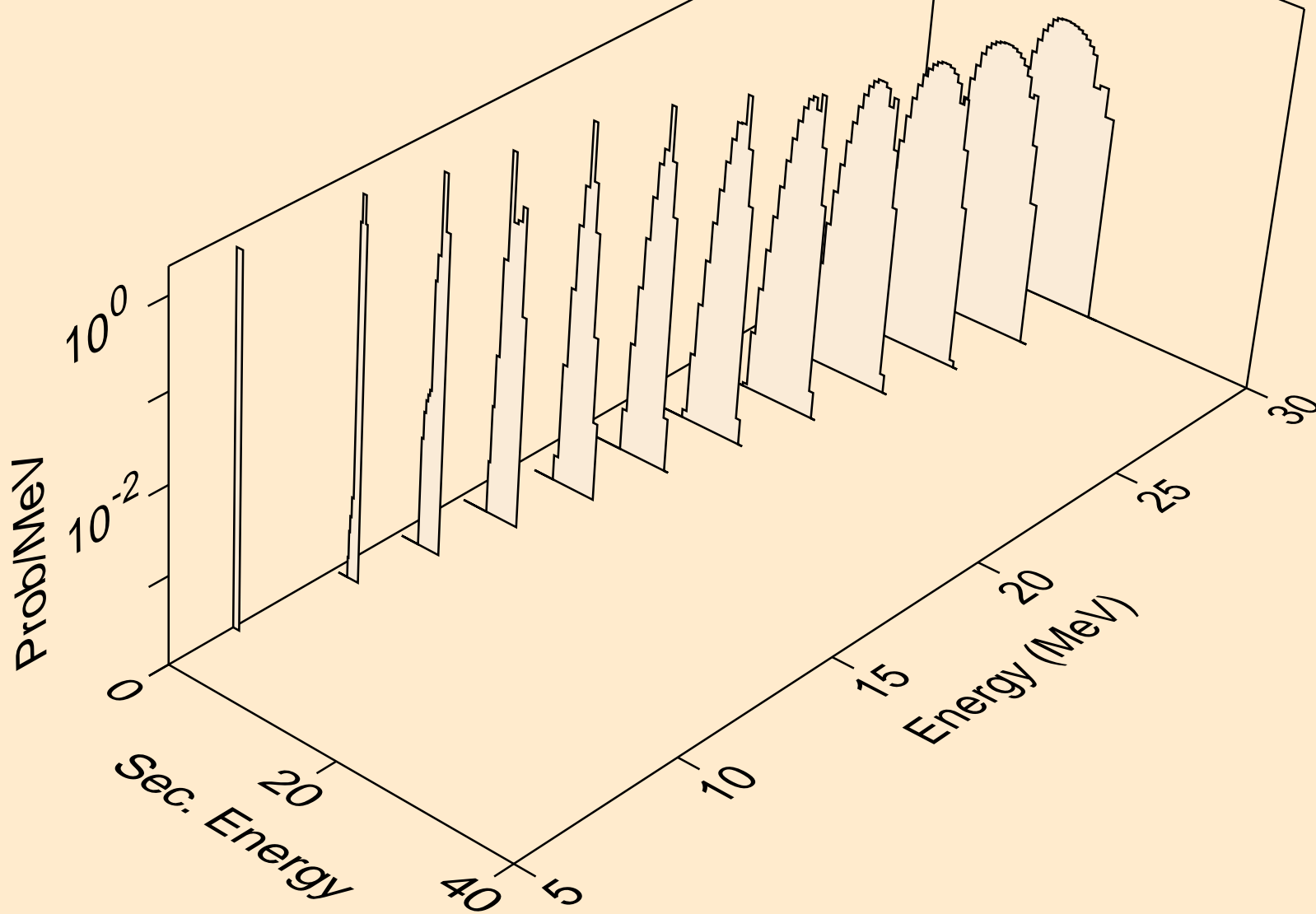
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he3s from (n,x)



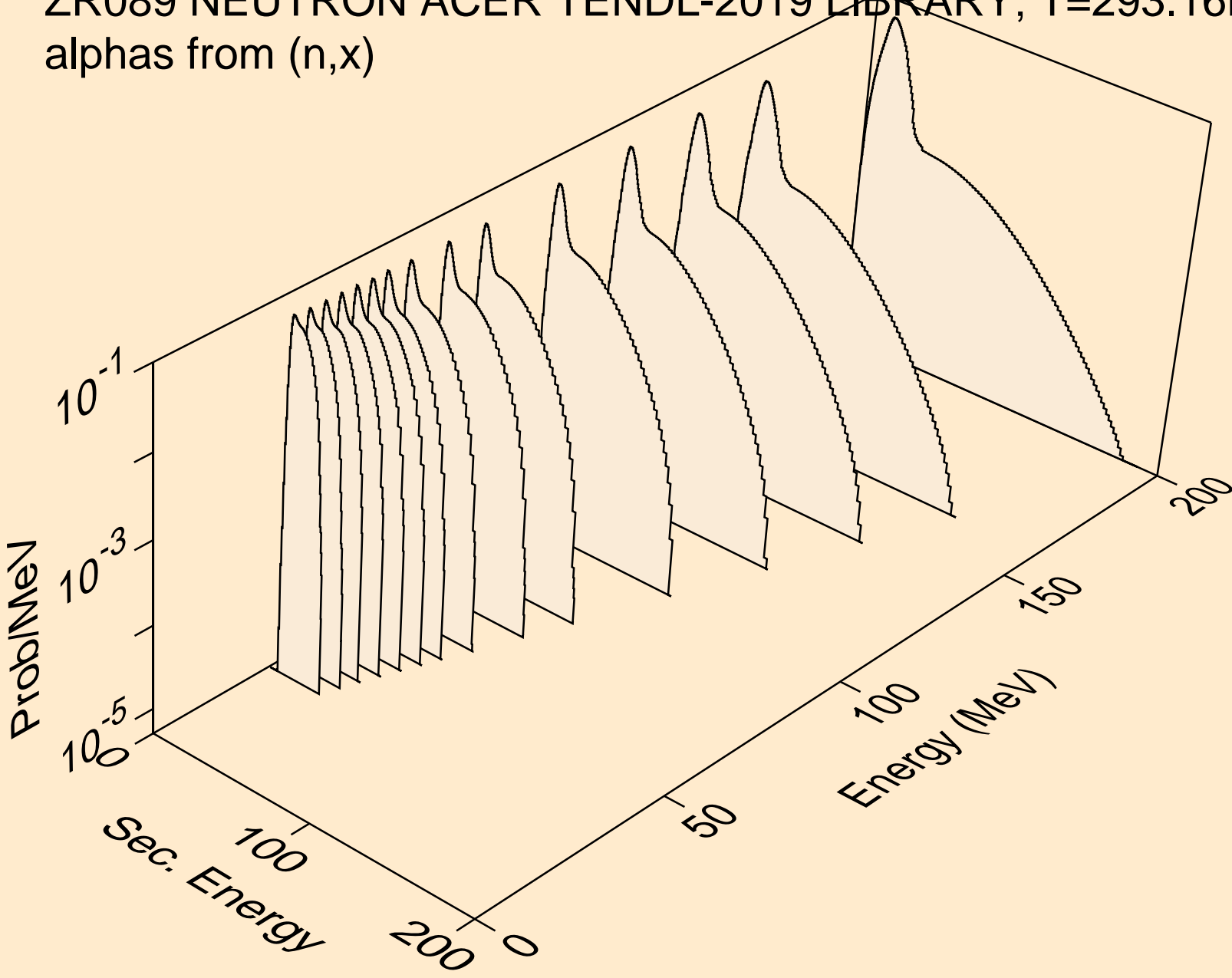
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he3s from (n,n\*)he3



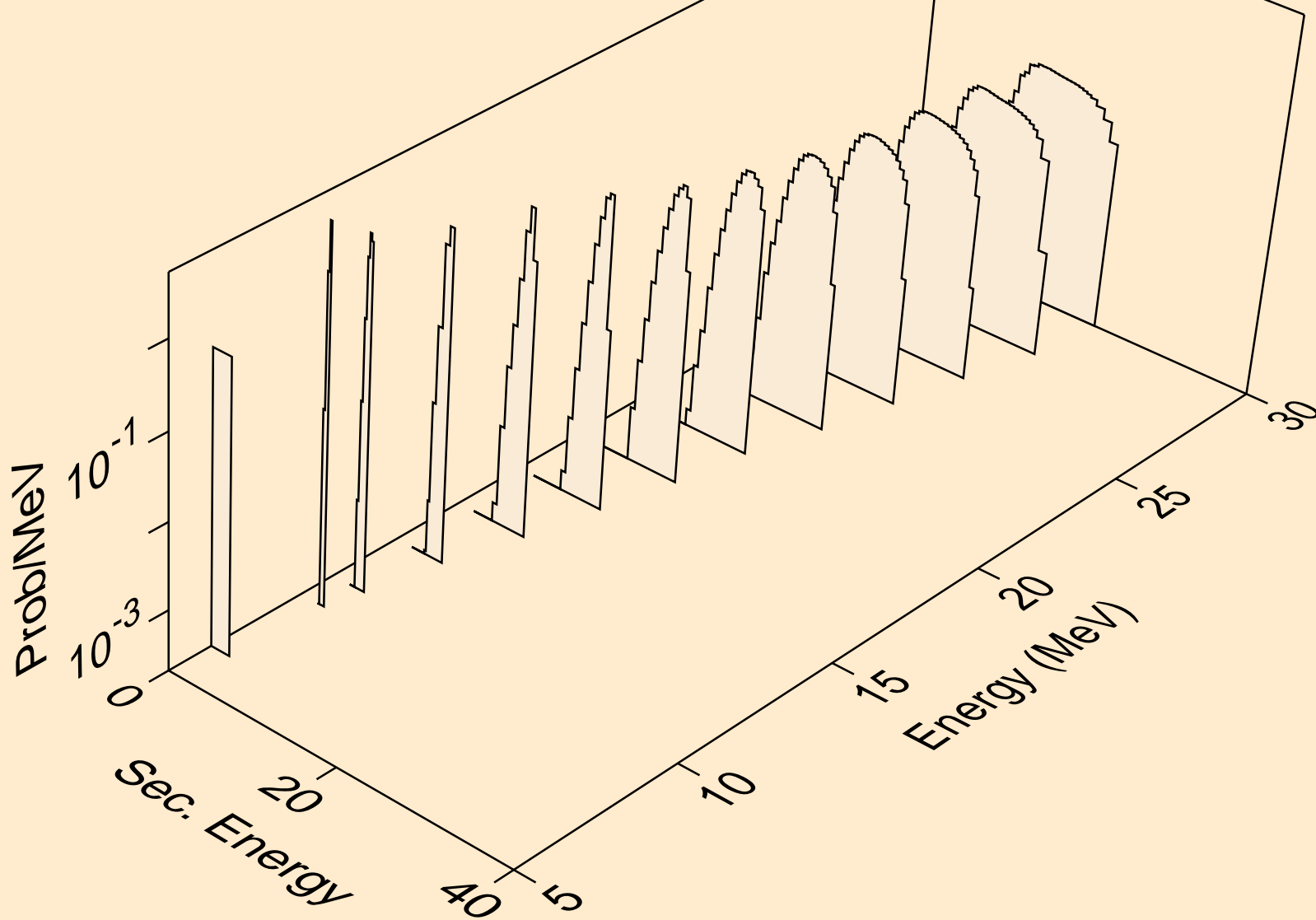
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he3s from (n,he3)



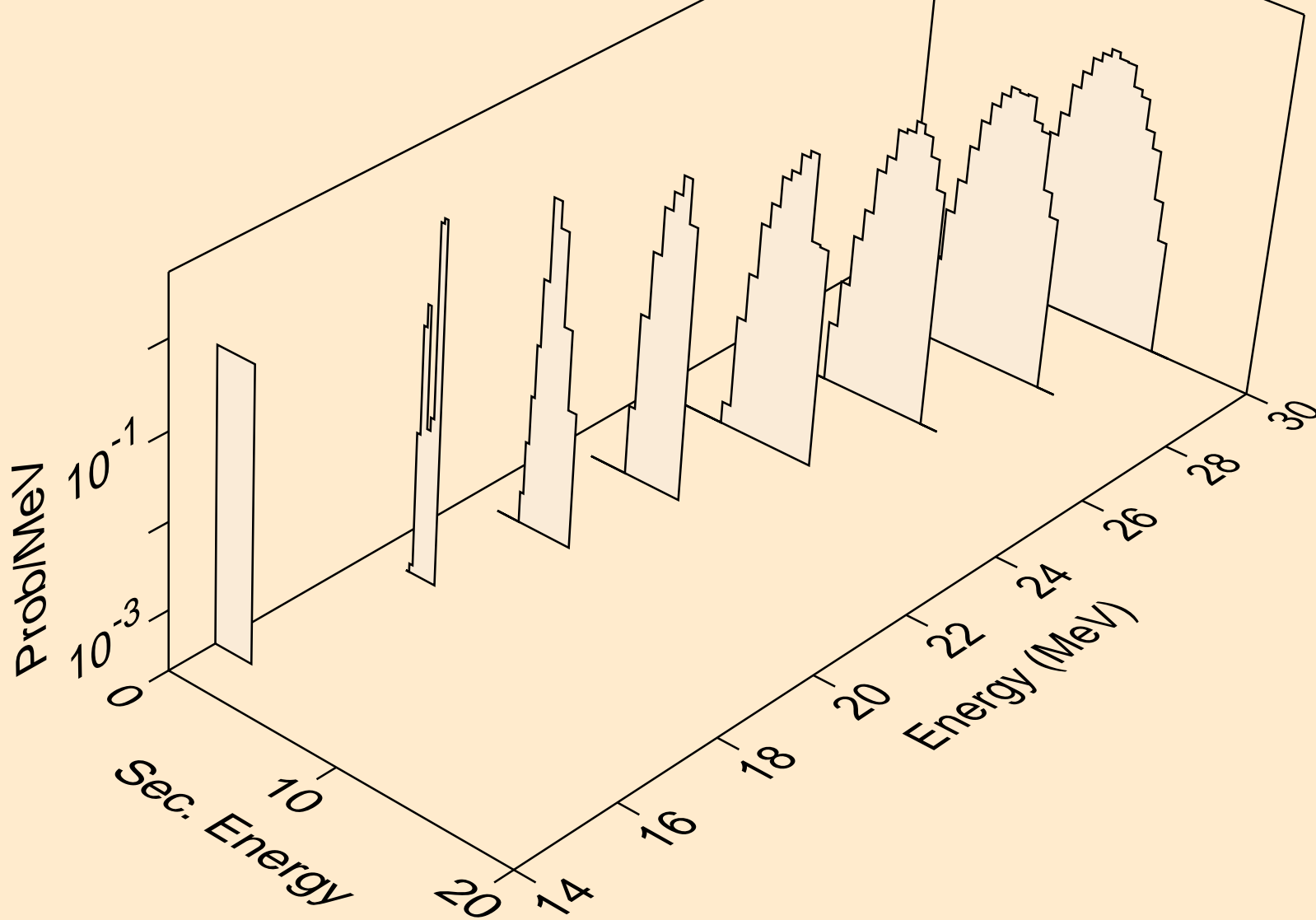
ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,x)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,n\*)a

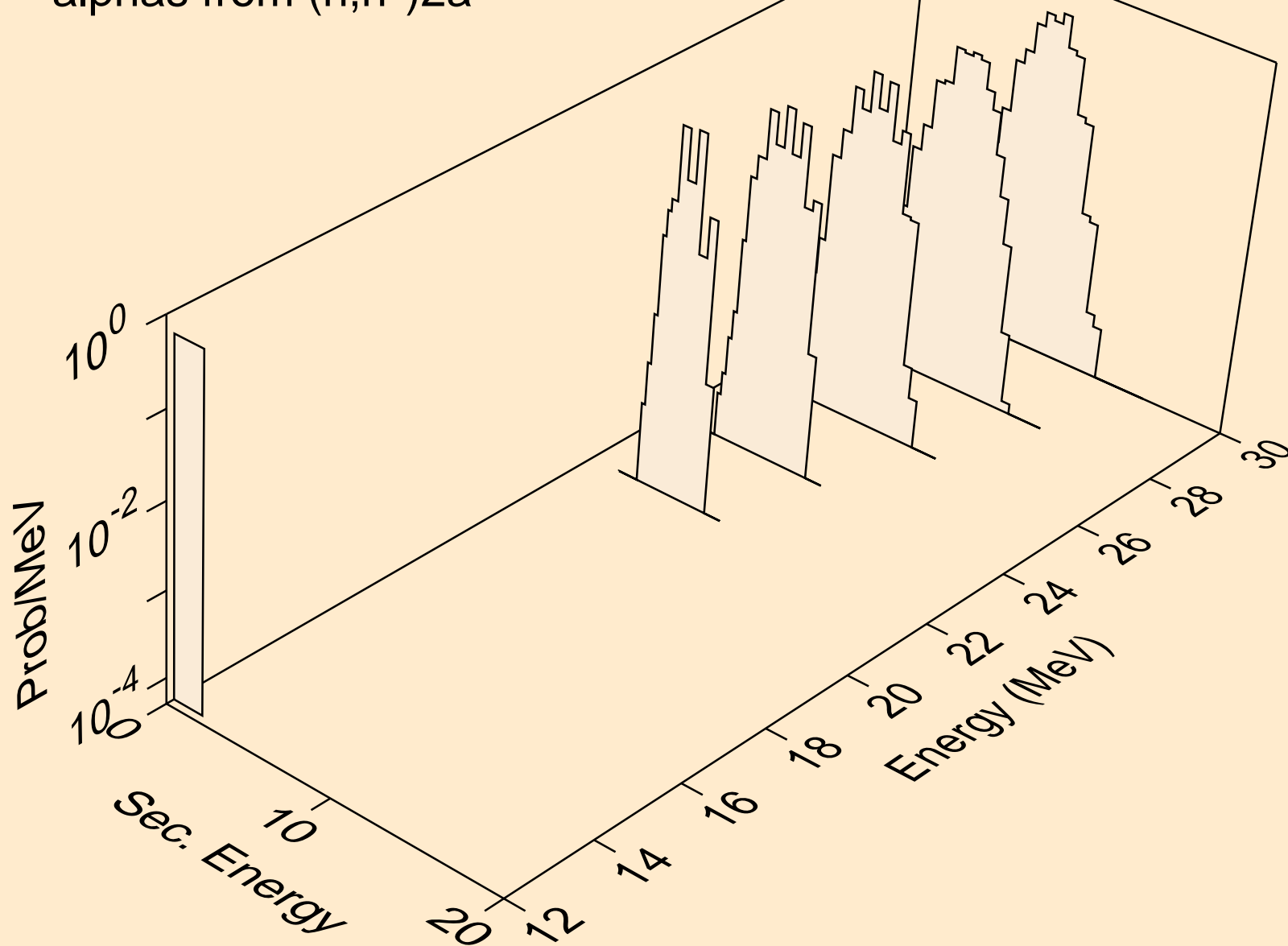


ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,2n)a

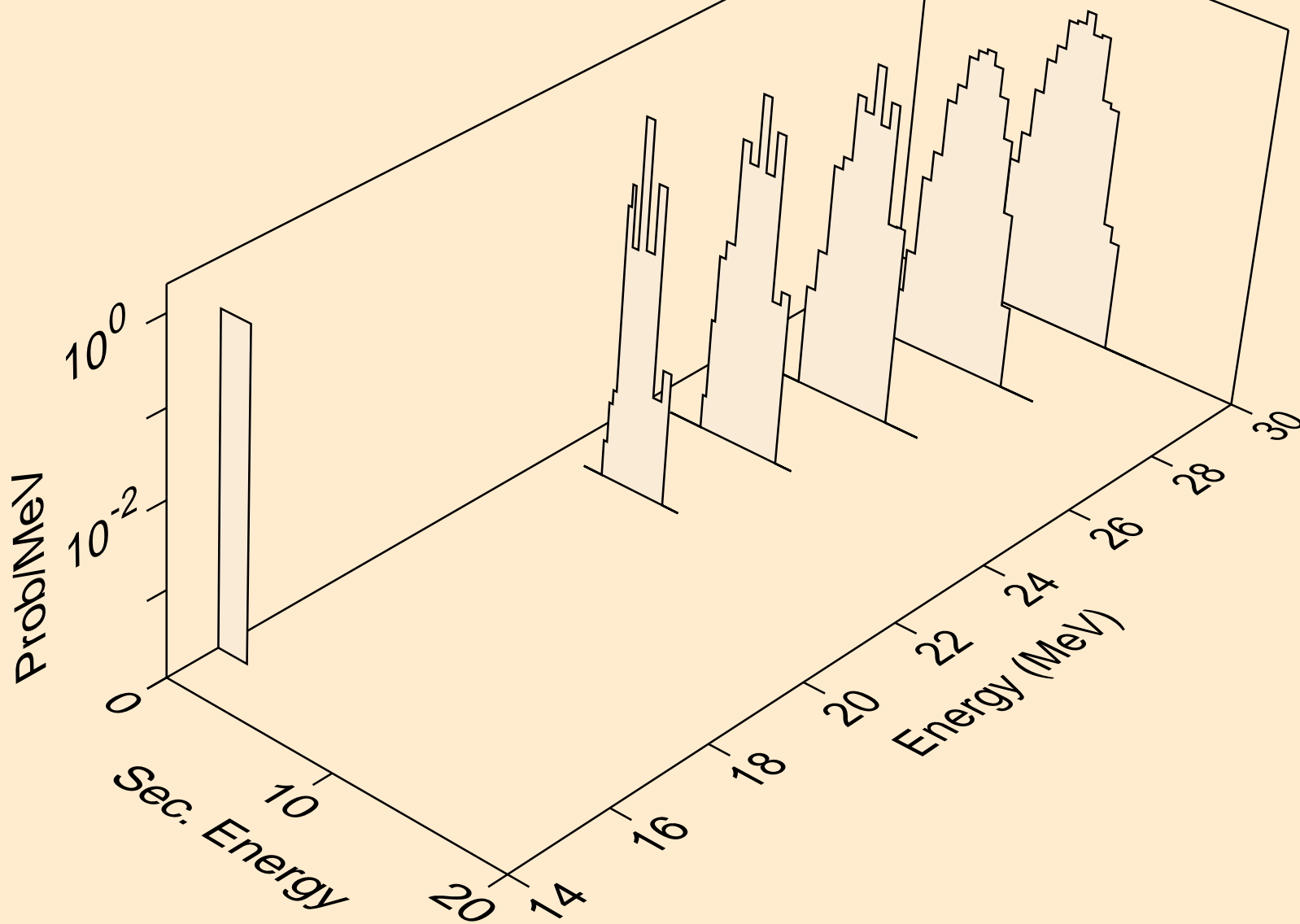




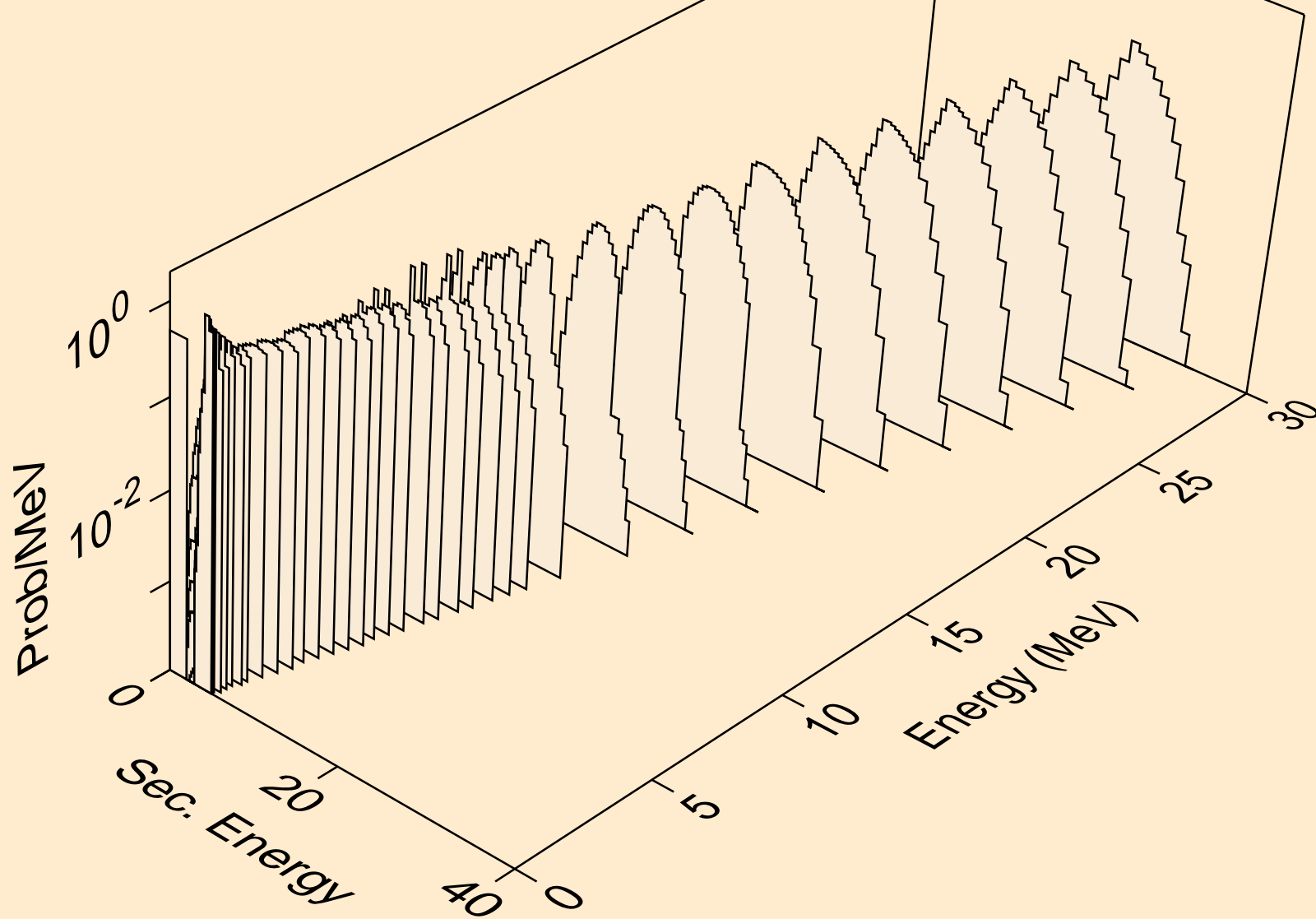
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alphas from (n,n\*)2a



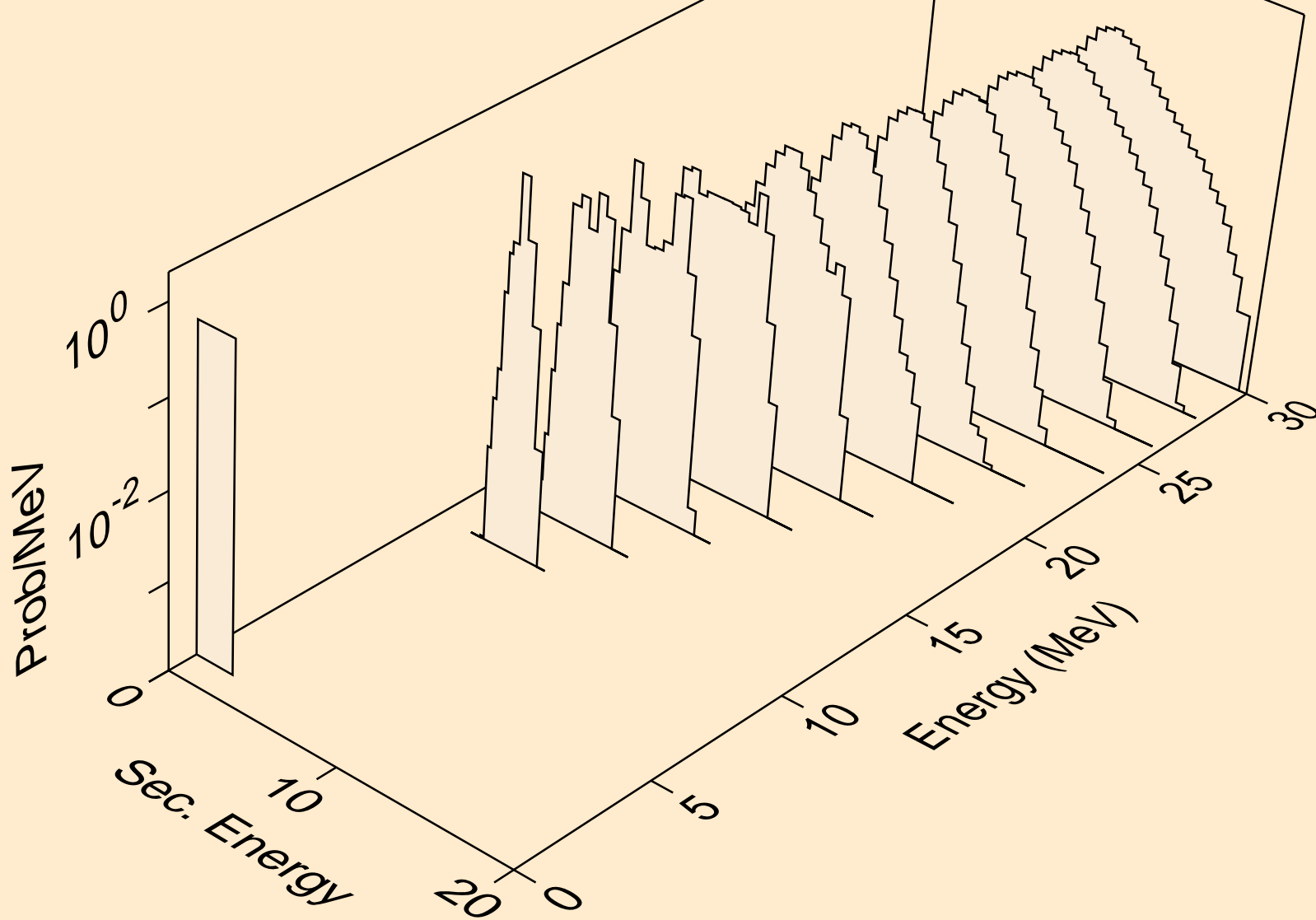
ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,npa)



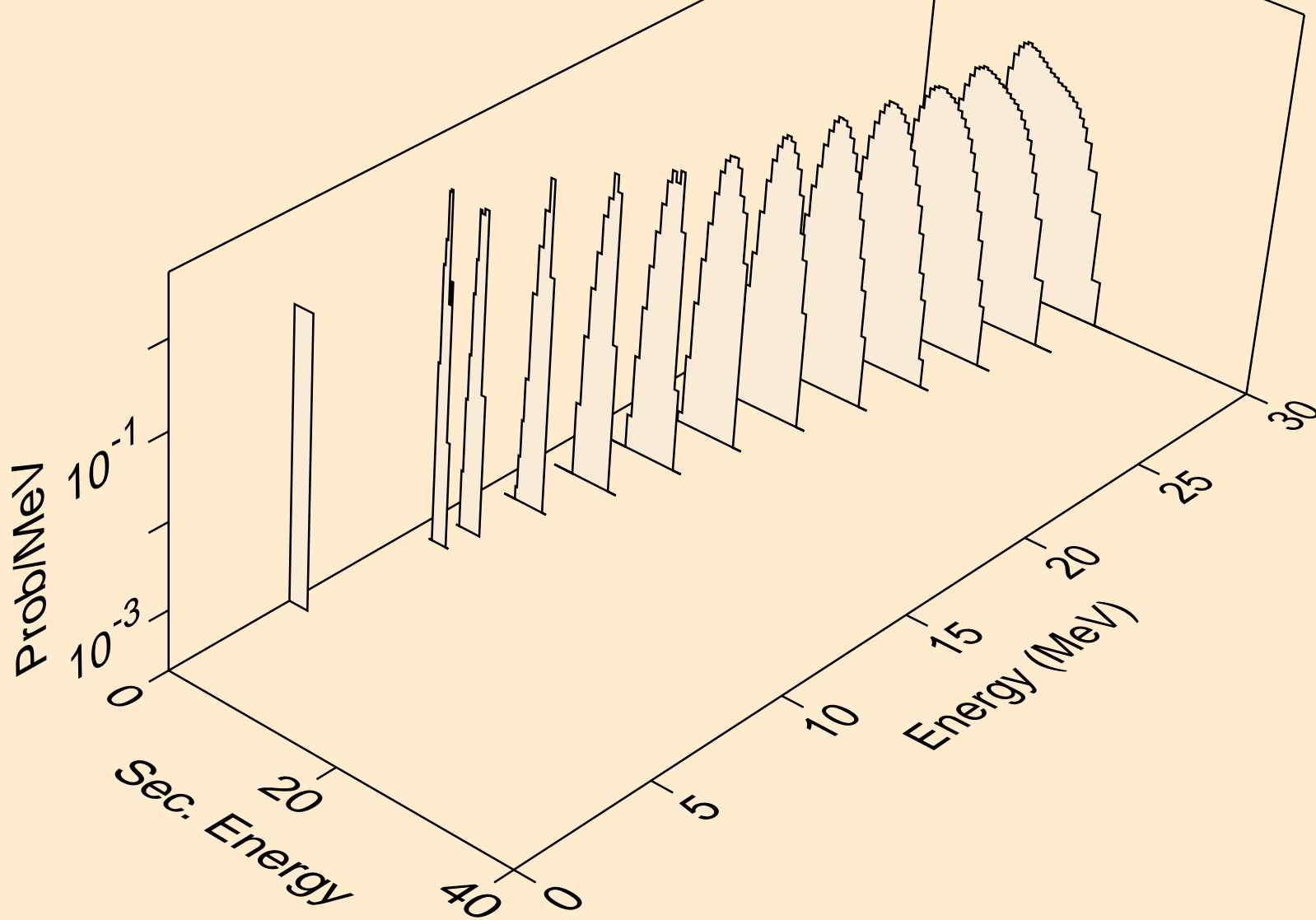
ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,a)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,2a)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,pa)



ZR089 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,da)

