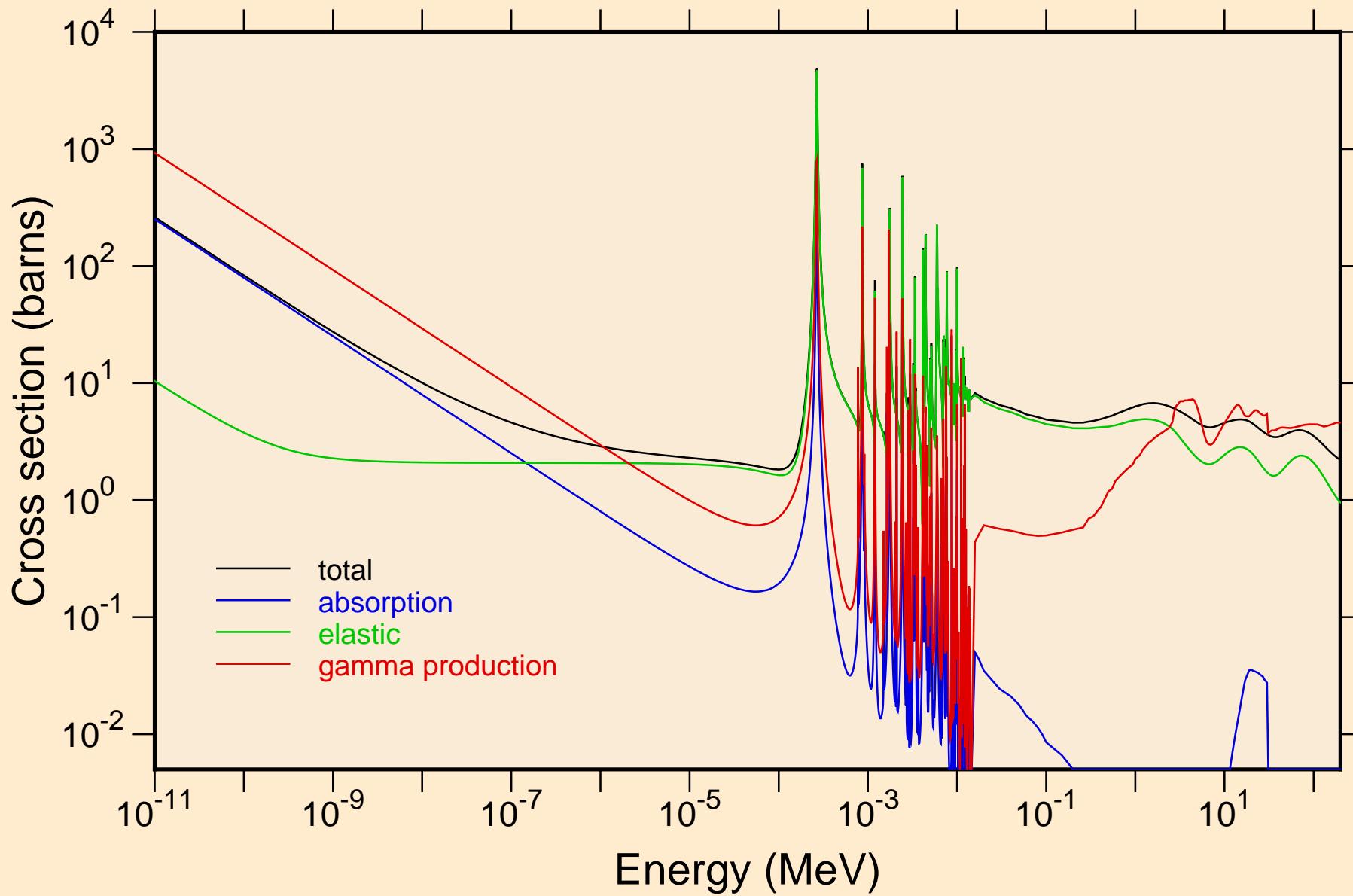
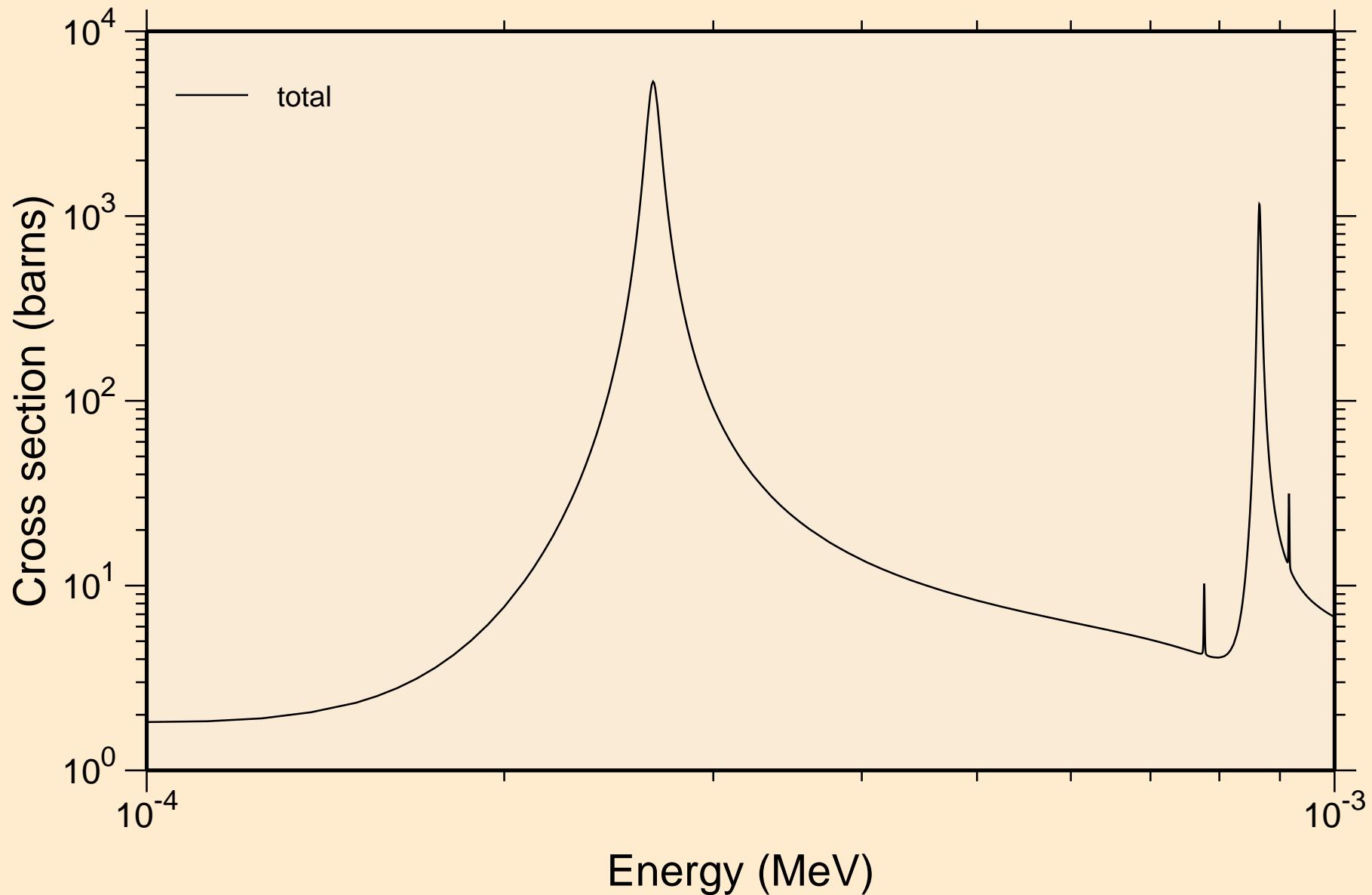


# N-CS138 NRG TENDL-2017, AKONING

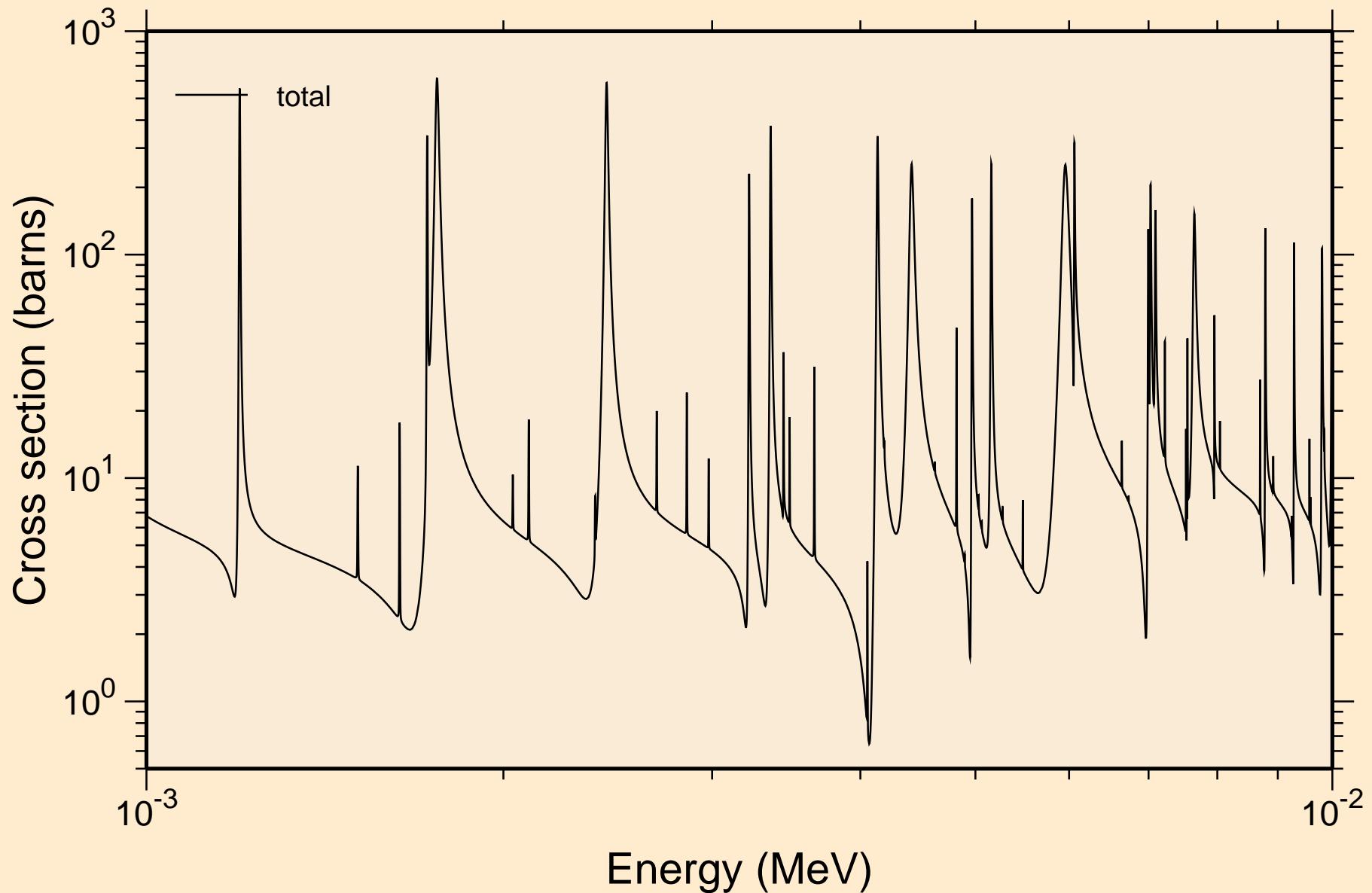
## Principal cross sections



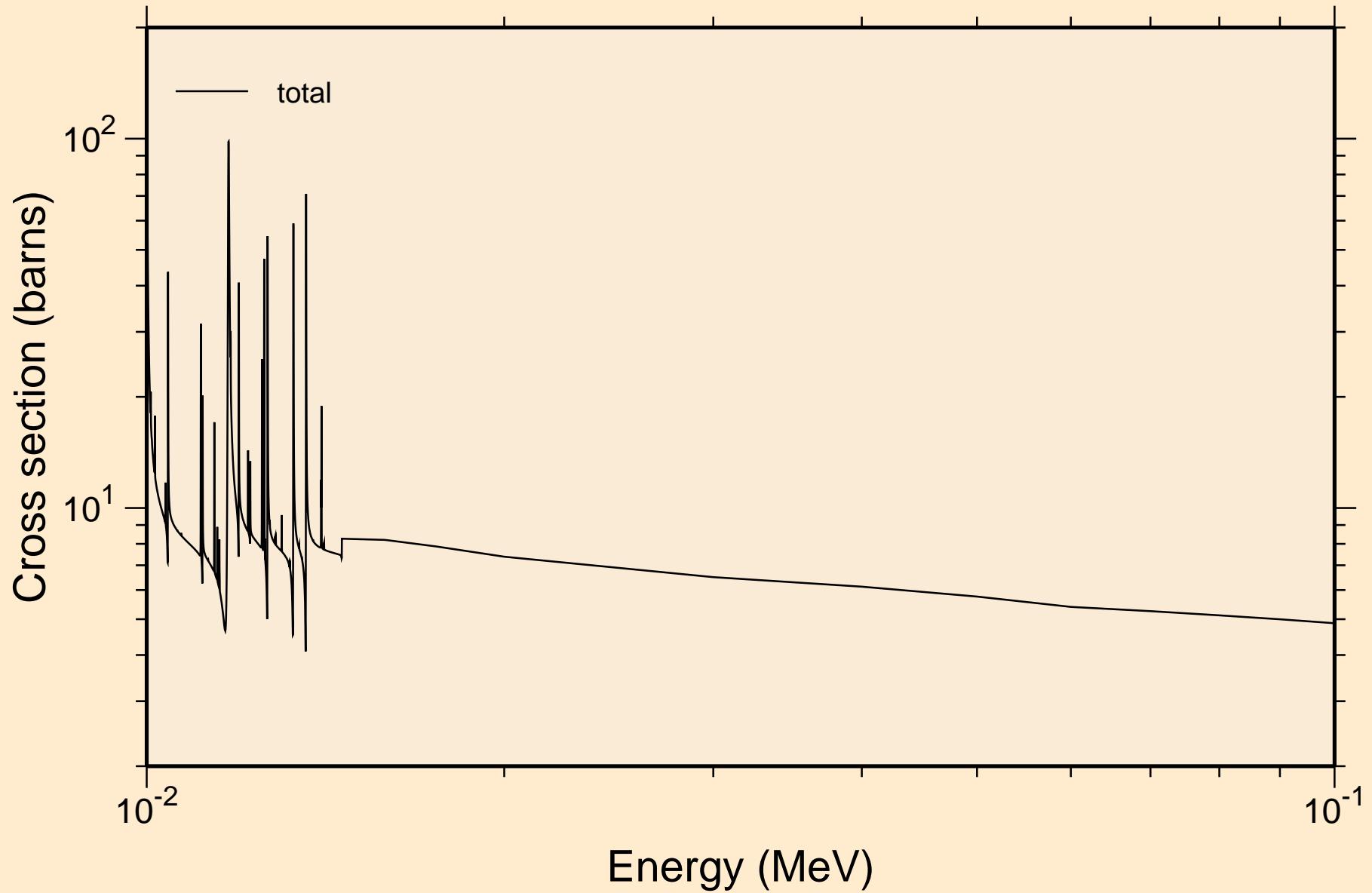
N-CS138 NRG TENDL-2017, AKONING  
resonance total cross section



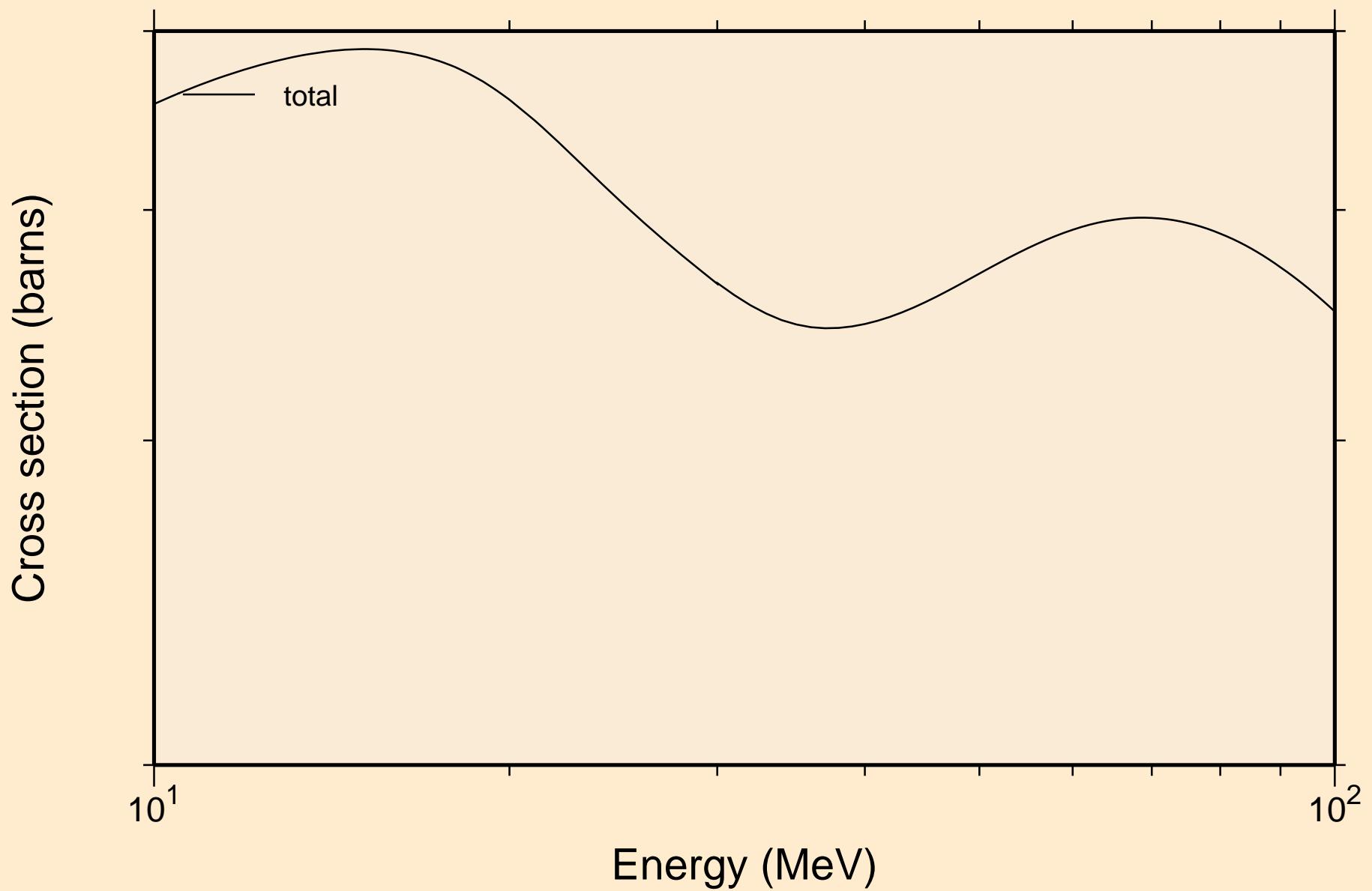
N-CS138 NRG TENDL-2017, AKONING  
resonance total cross section



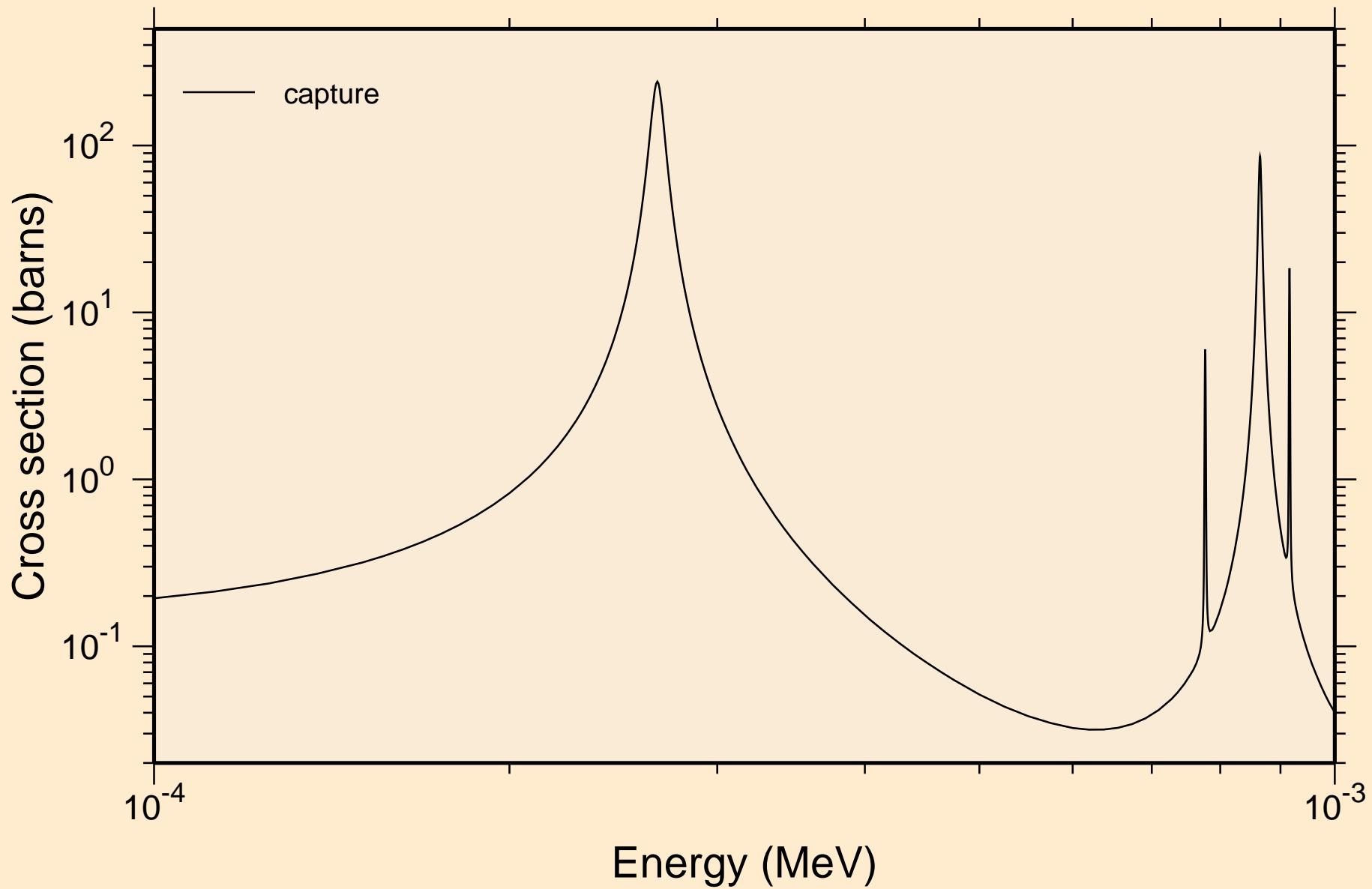
N-CS138 NRG TENDL-2017, AKONING  
resonance total cross section



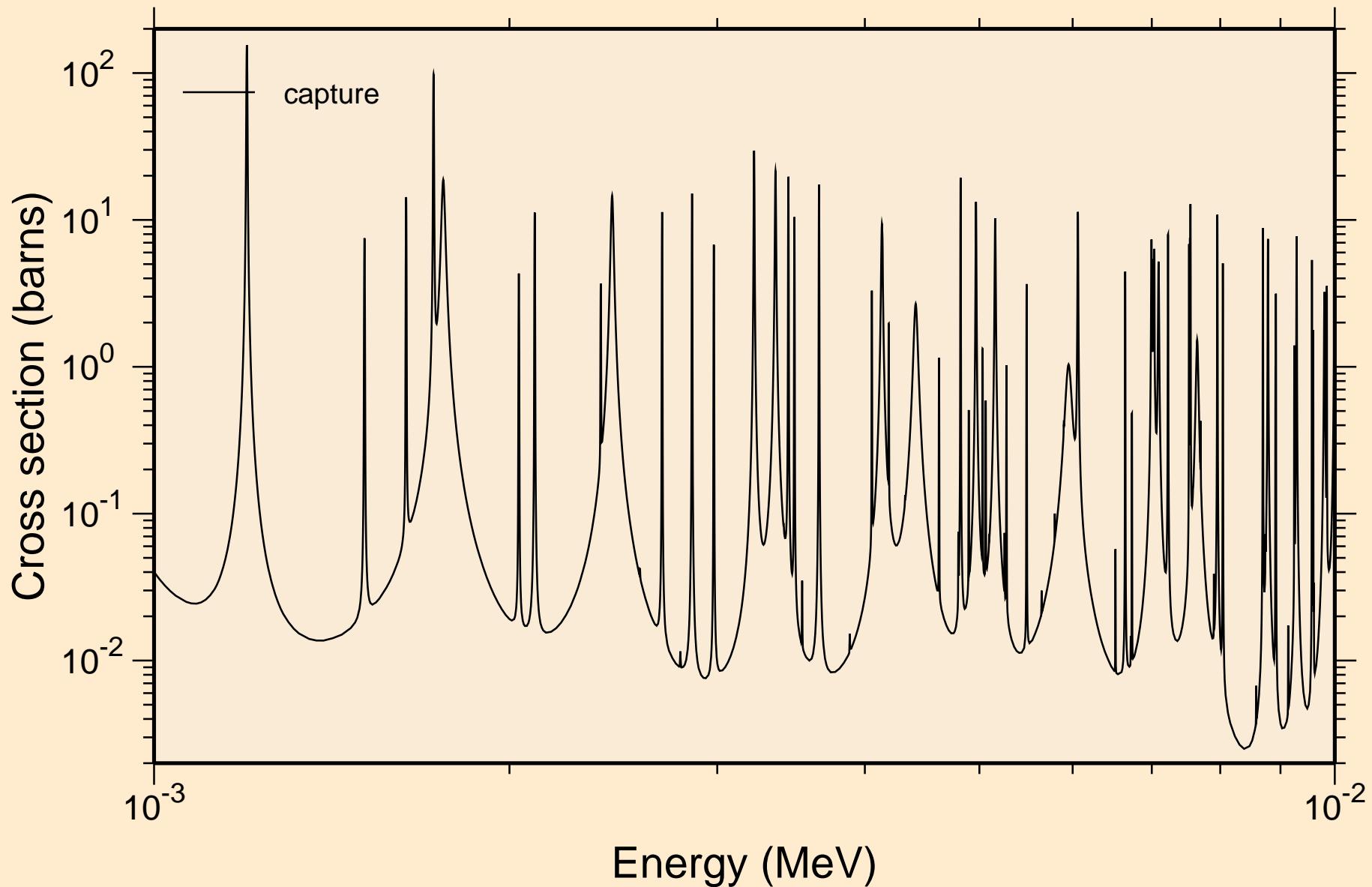
N<sup>-</sup>CS138 NRG TENDL-2017, AKONING  
resonance total cross section



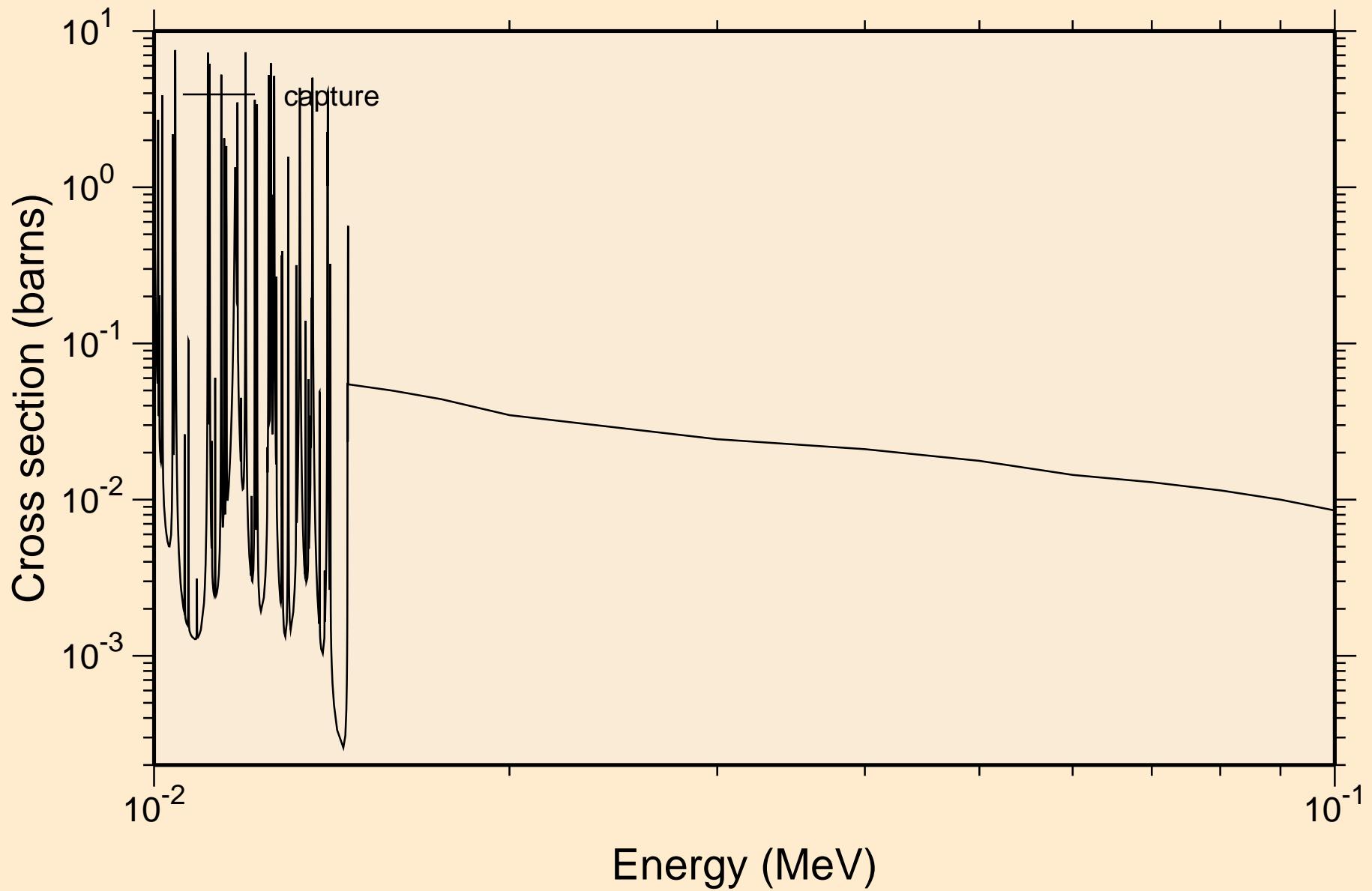
N-CS138 NRG TENDL-2017, AKONING  
resonance absorption cross sections



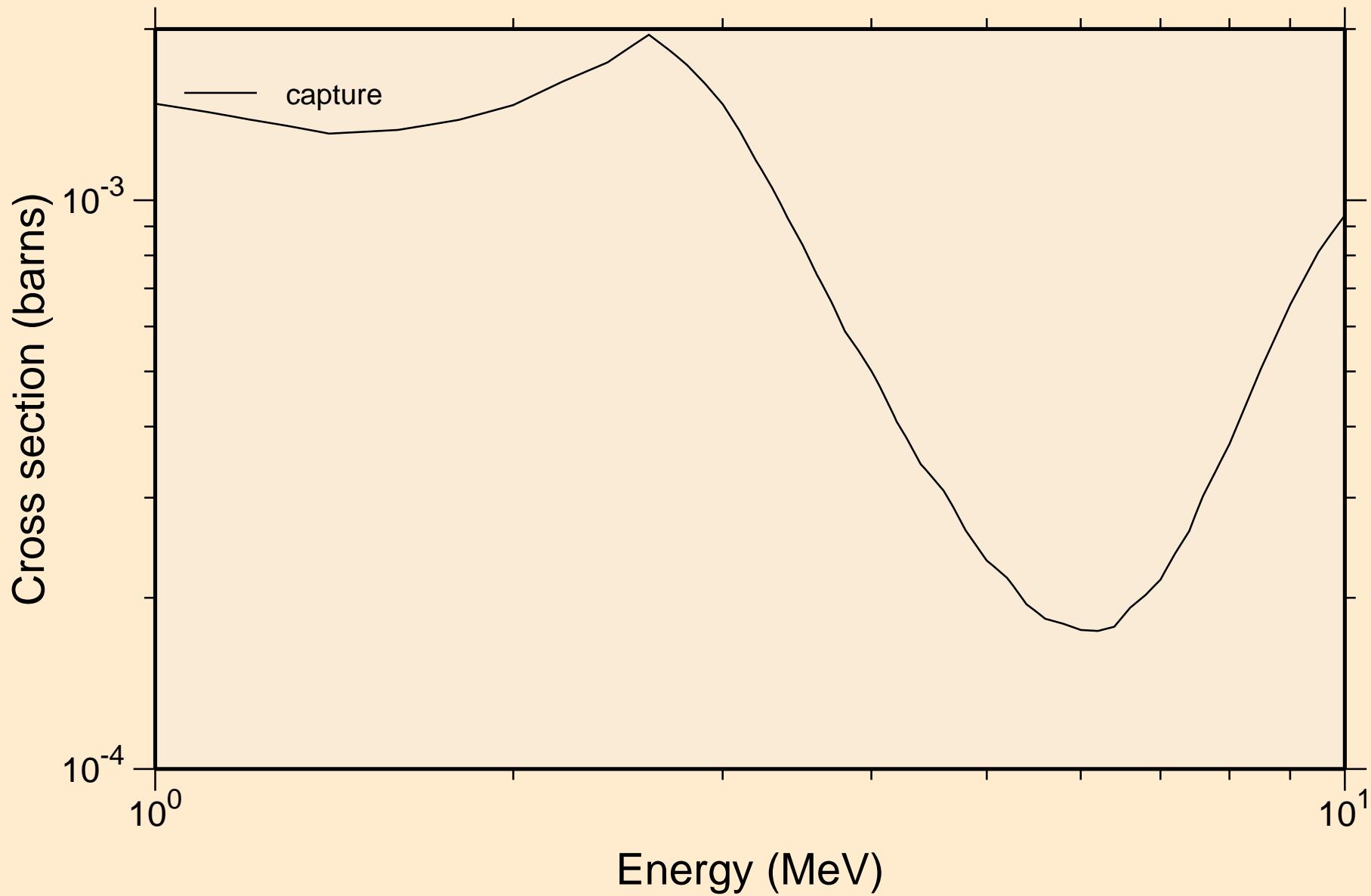
N-CS138 NRG TENDL-2017, AKONING  
resonance absorption cross sections



N-CS138 NRG TENDL-2017, AKONING  
resonance absorption cross sections

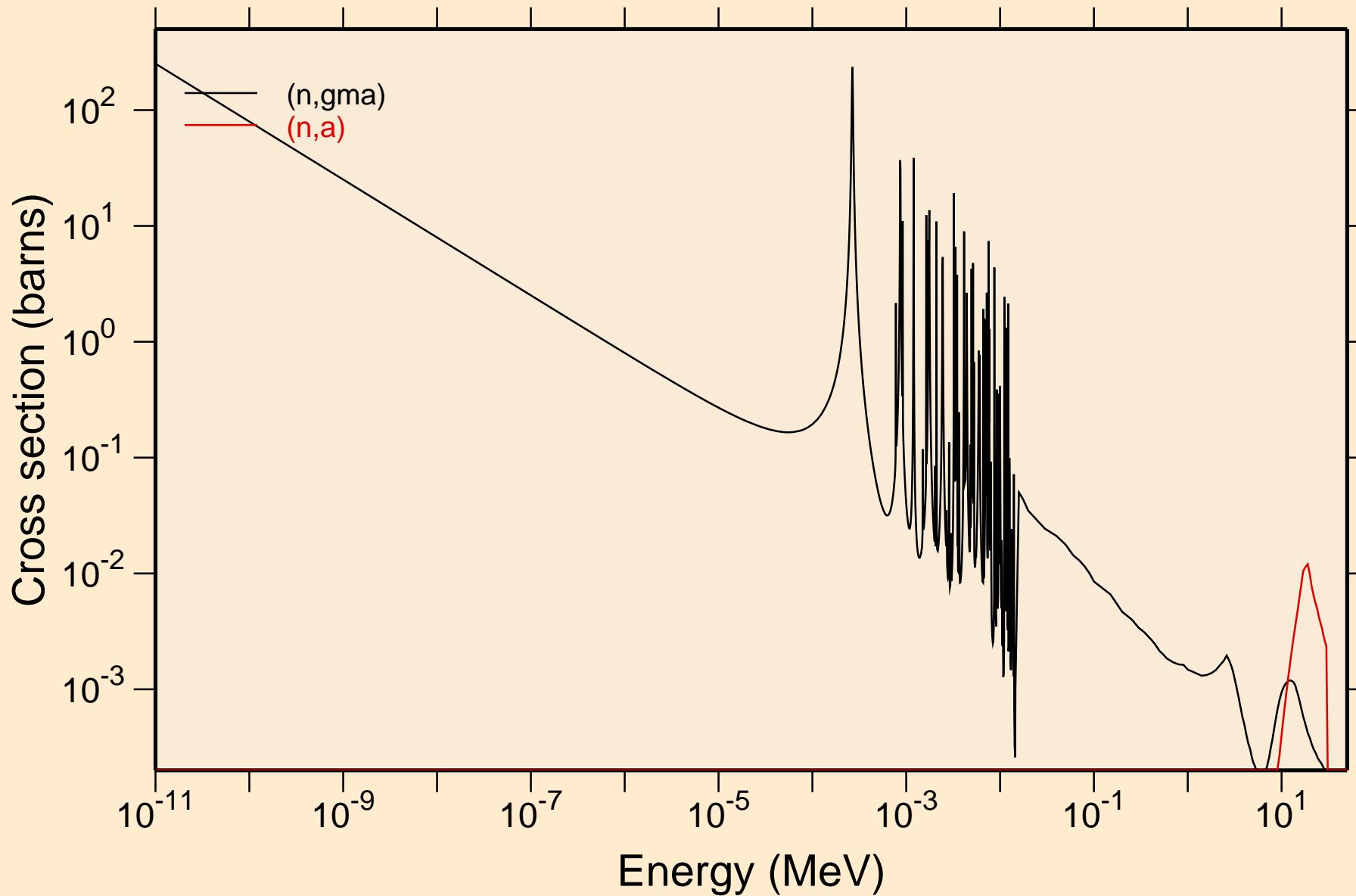


N-CS138 NRG TENDL-2017, AKONING  
resonance absorption cross sections



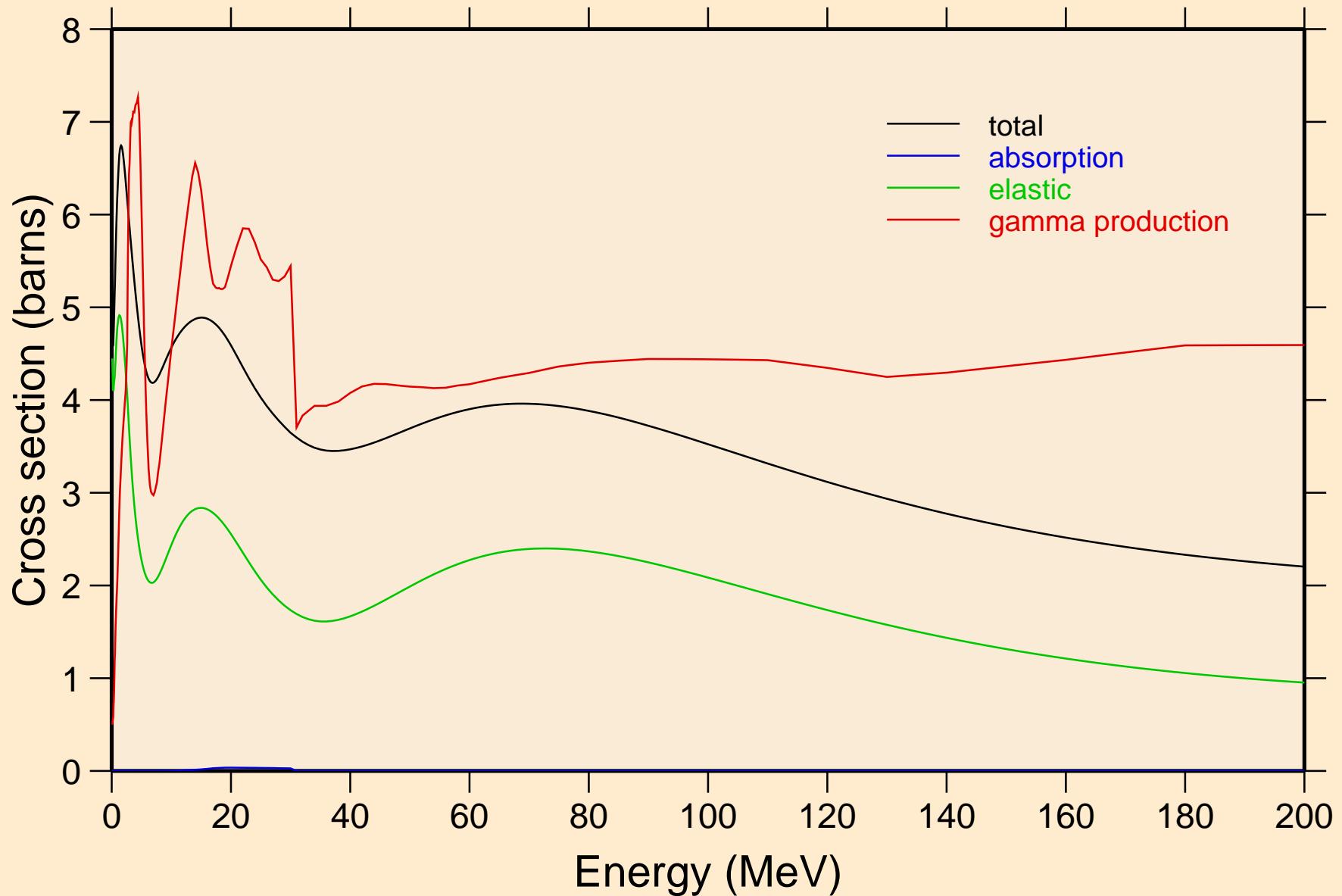
# N-CS138 NRG TENDL-2017, AKONING

## Non-threshold reactions



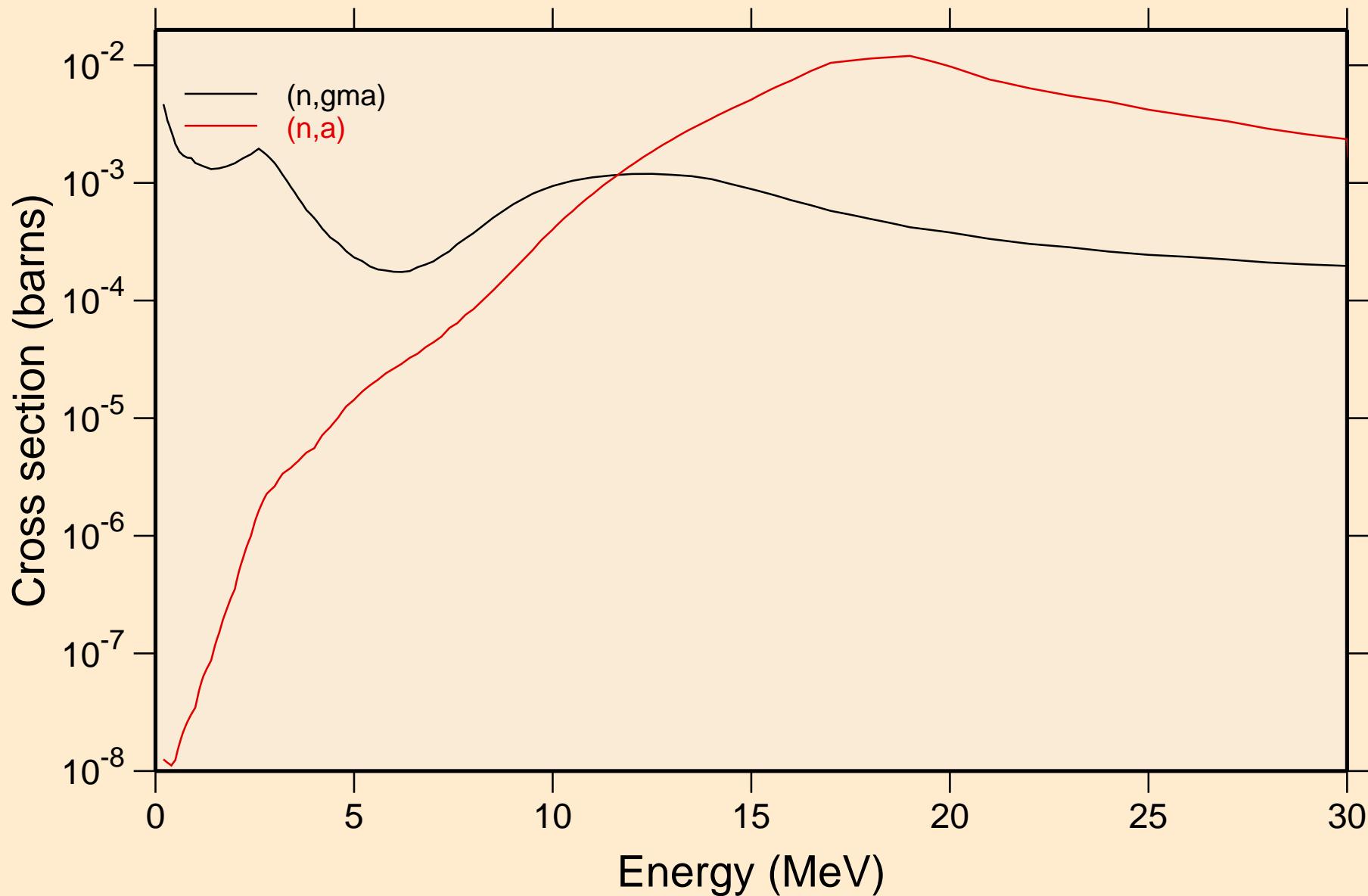
# N-CS138 NRG TENDL-2017, AKONING

## Principal cross sections



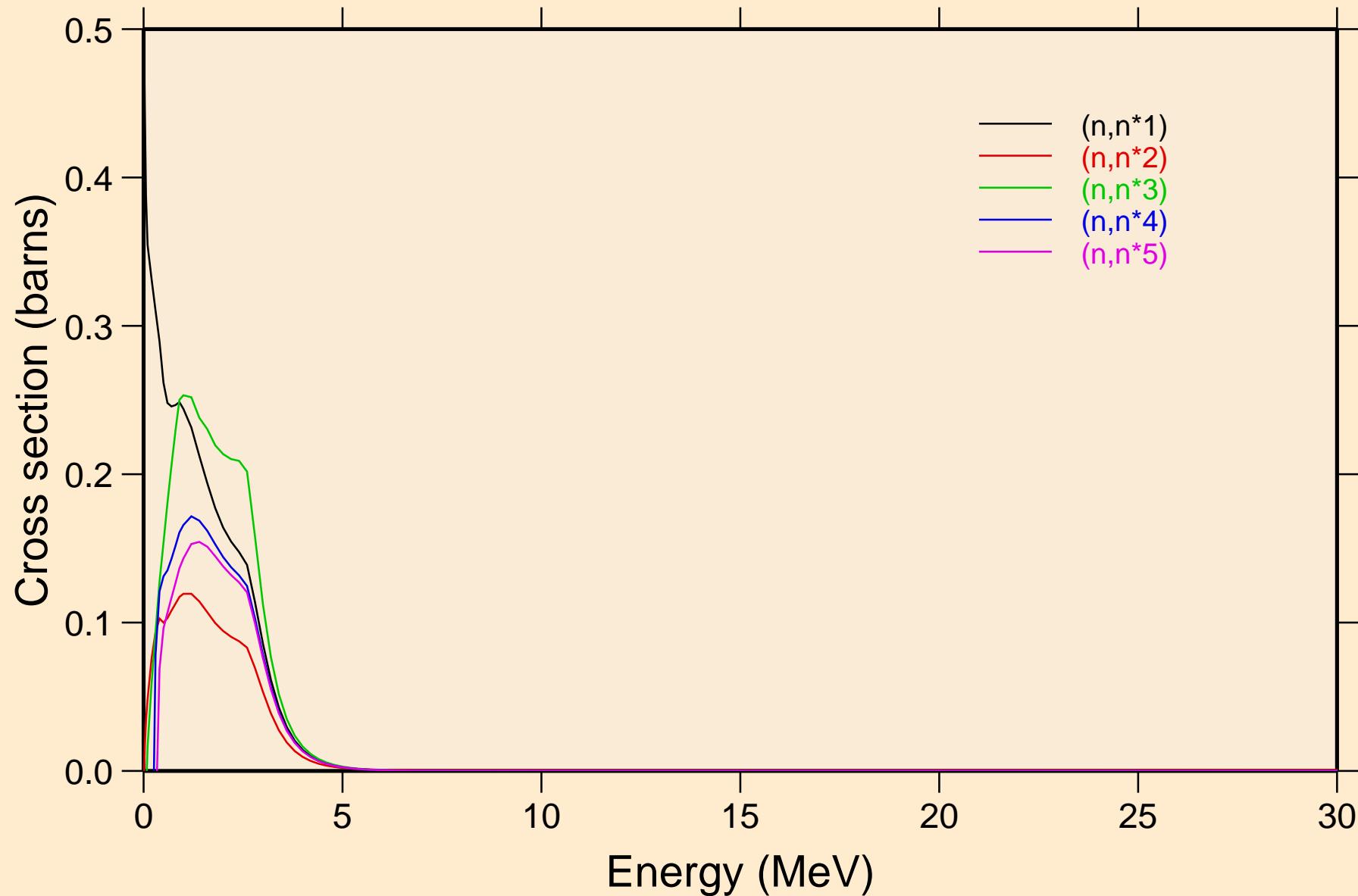
# N-CS138 NRG TENDL-2017, AKONING

## Non-threshold reactions



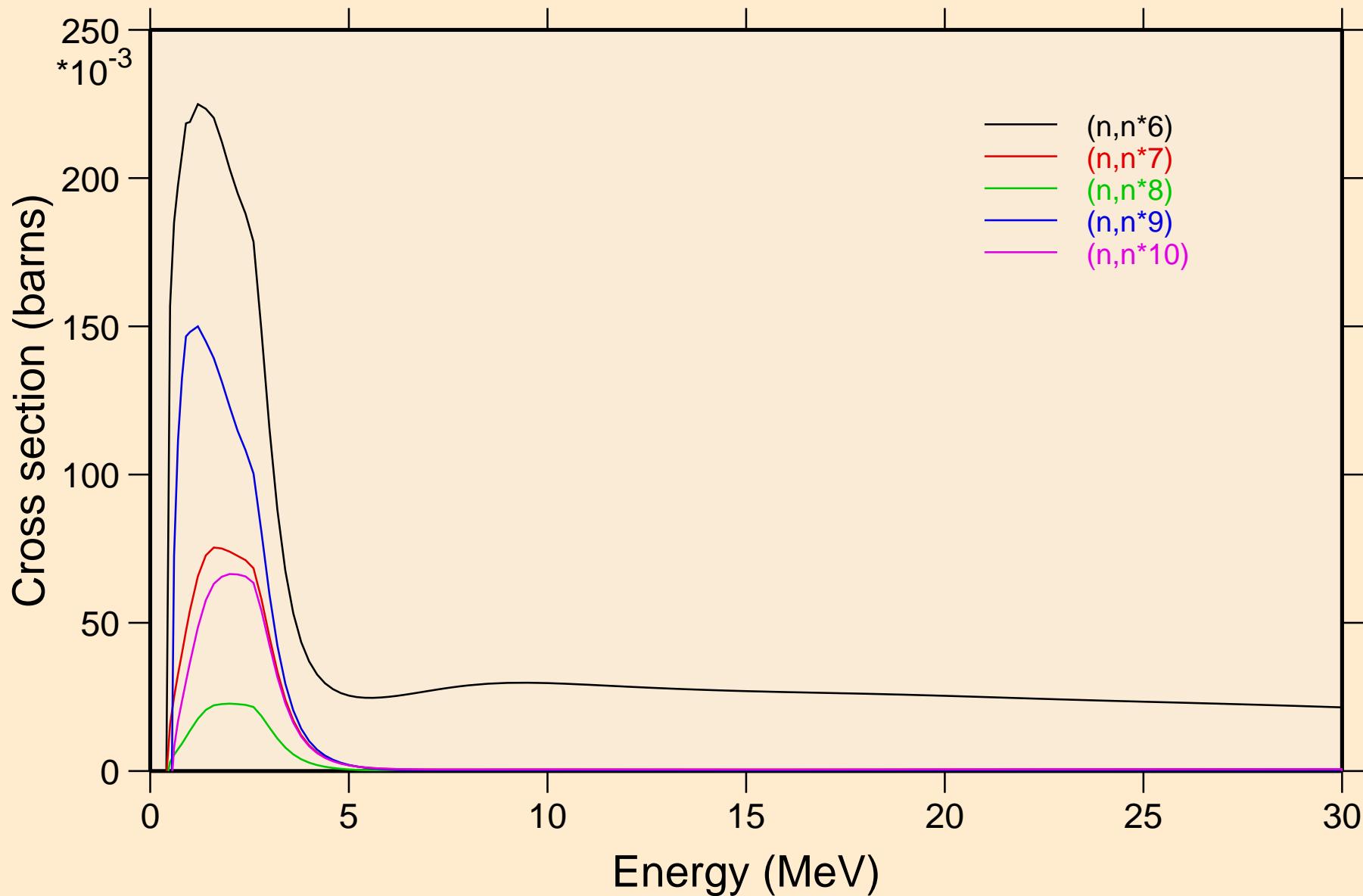
# N-CS138 NRG TENDL-2017, AKONING

## Inelastic levels



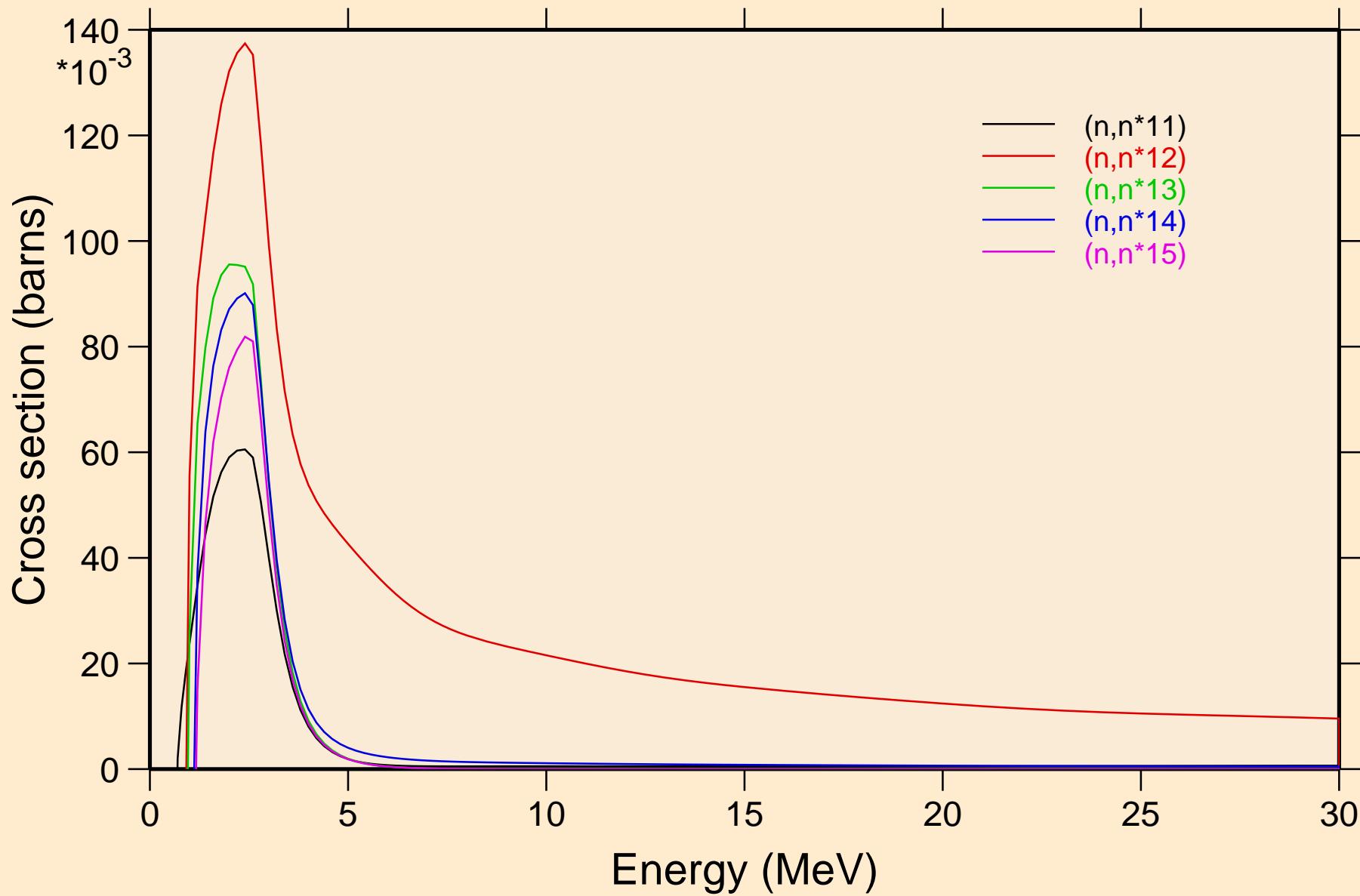
# N-CS138 NRG TENDL-2017, AKONING

## Inelastic levels



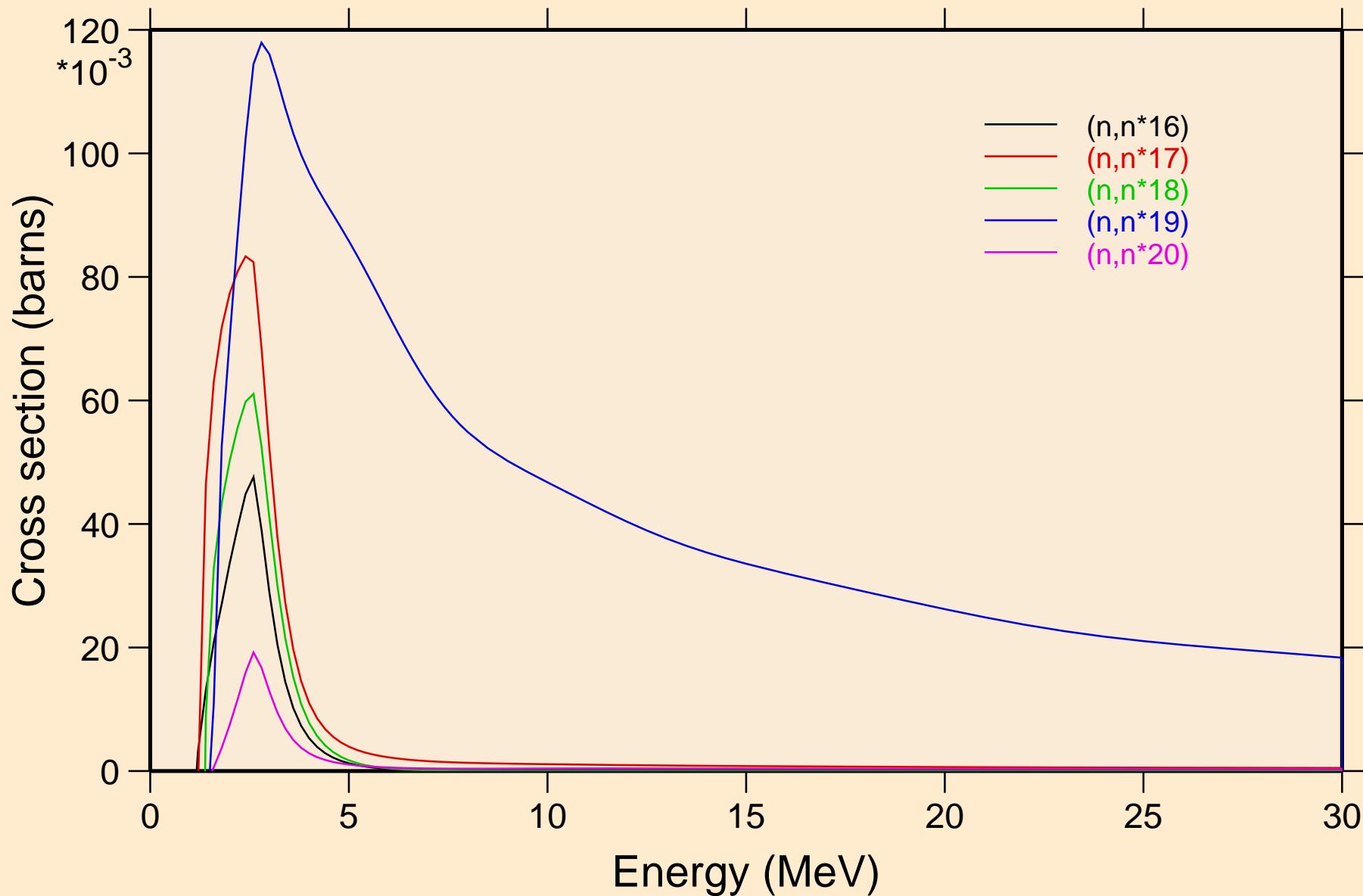
# N-CS138 NRG TENDL-2017, AKONING

## Inelastic levels



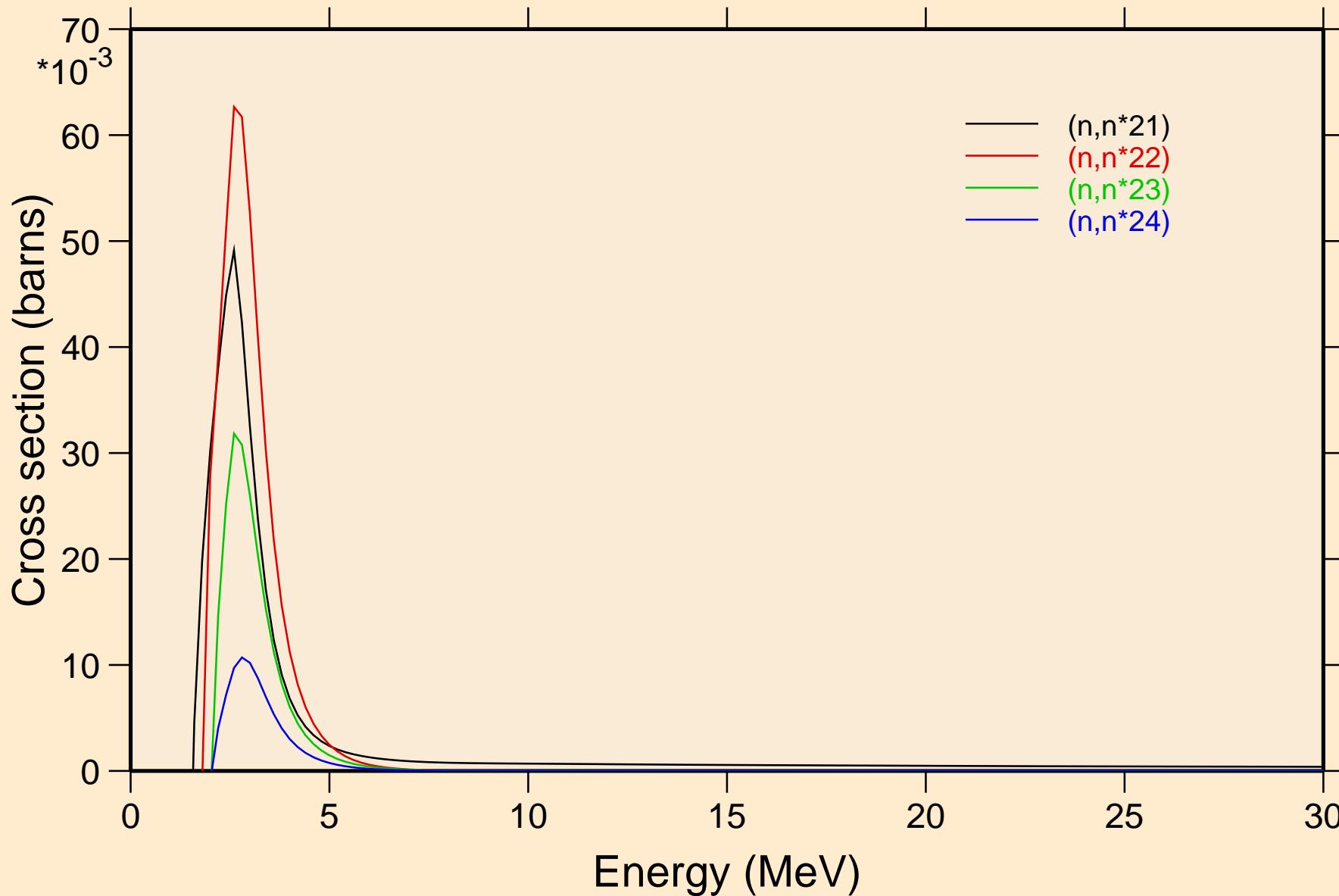
# N-CS138 NRG TENDL-2017, AKONING

## Inelastic levels



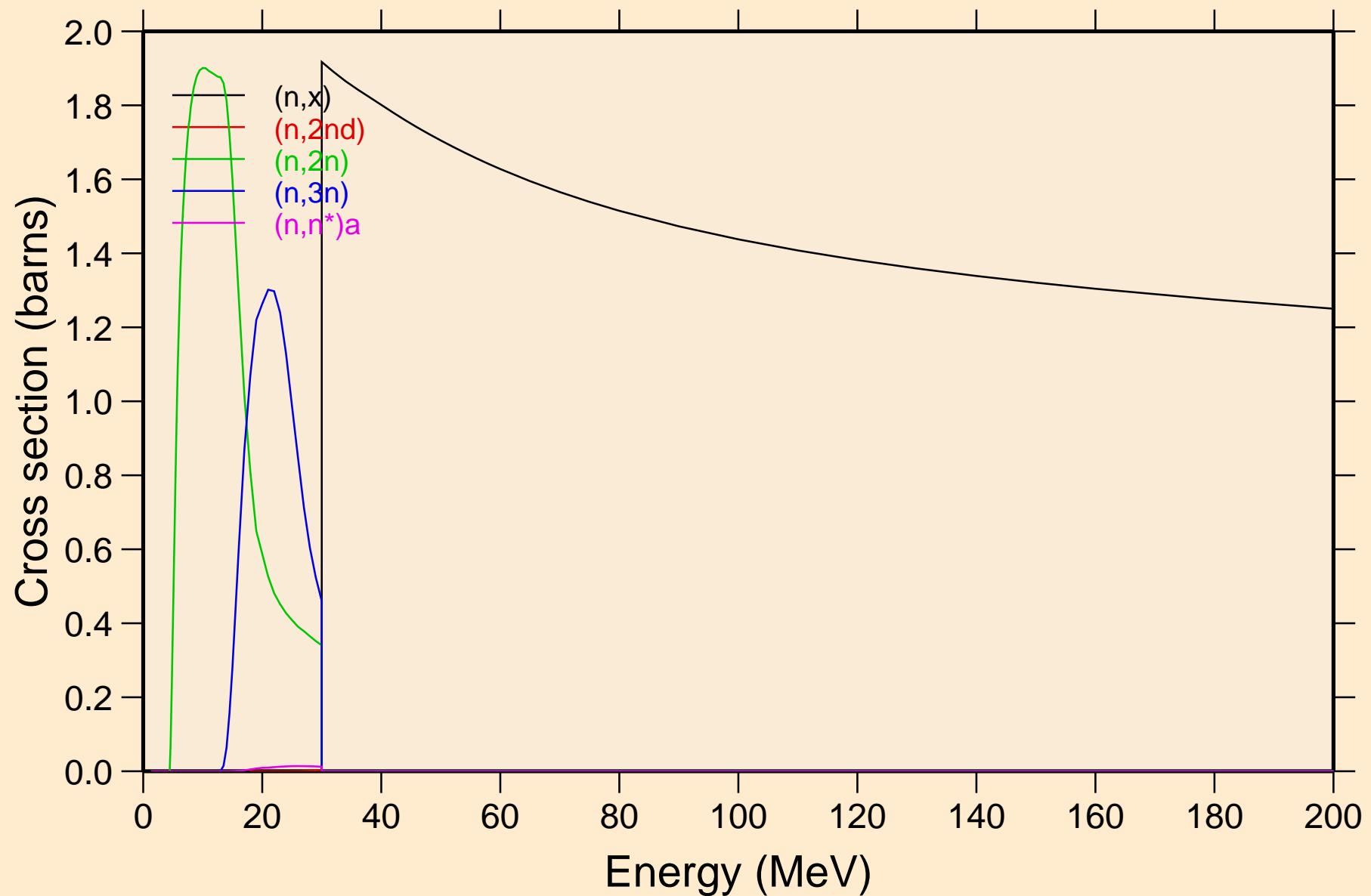
# N-CS138 NRG TENDL-2017, AKONING

## Inelastic levels



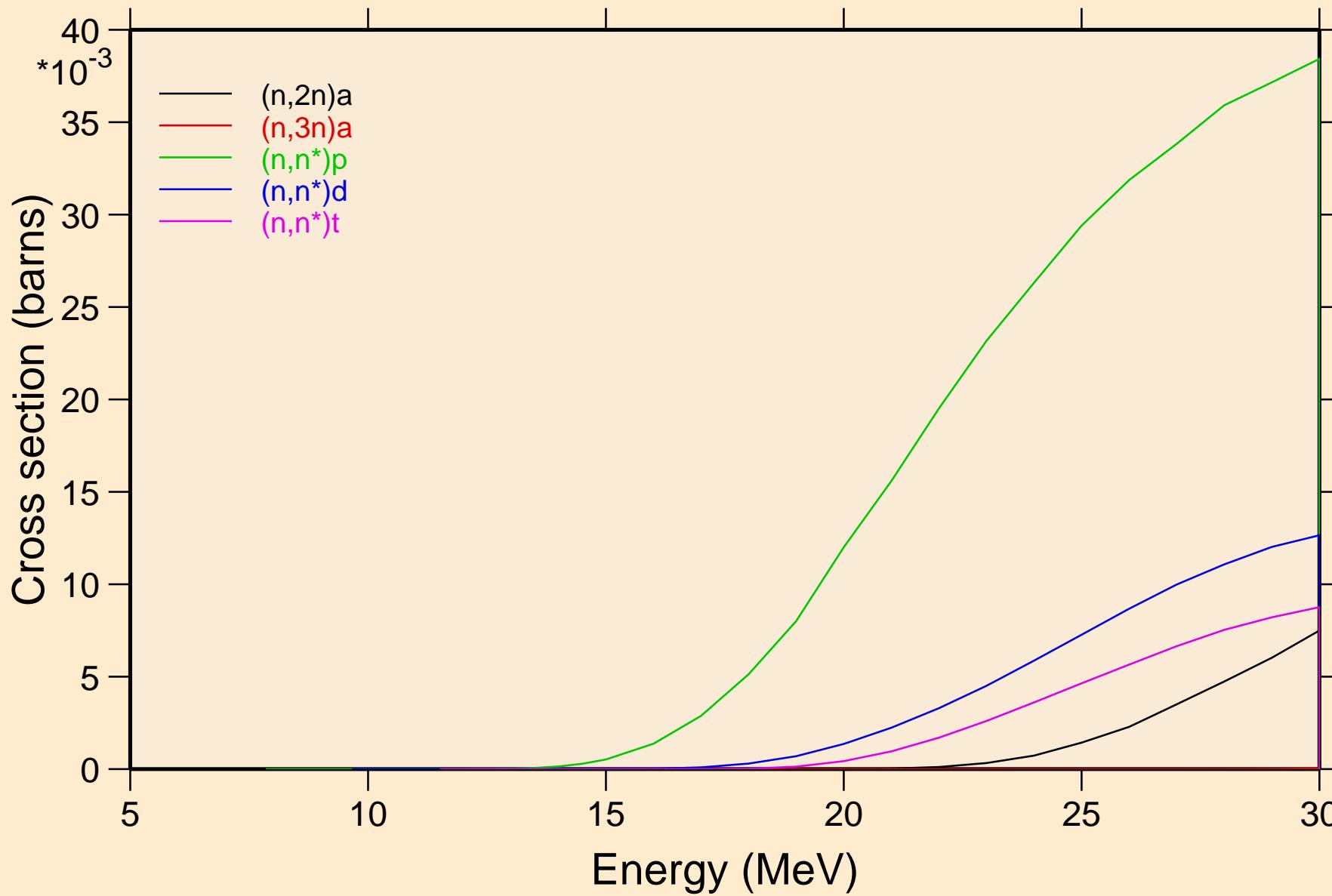
# N-CS138 NRG TENDL-2017, AKONING

## Threshold reactions



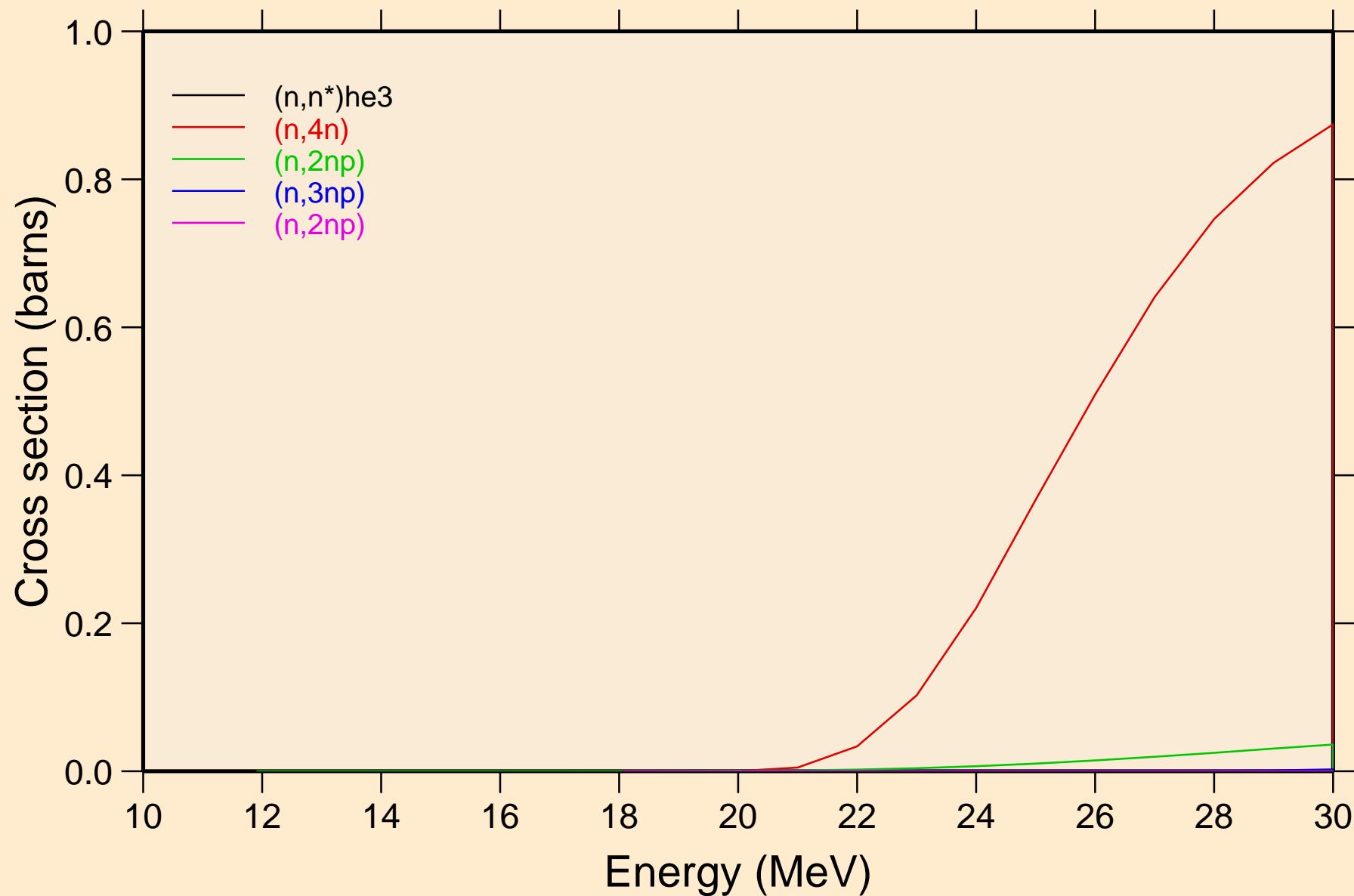
# N-CS138 NRG TENDL-2017, AKONING

## Threshold reactions



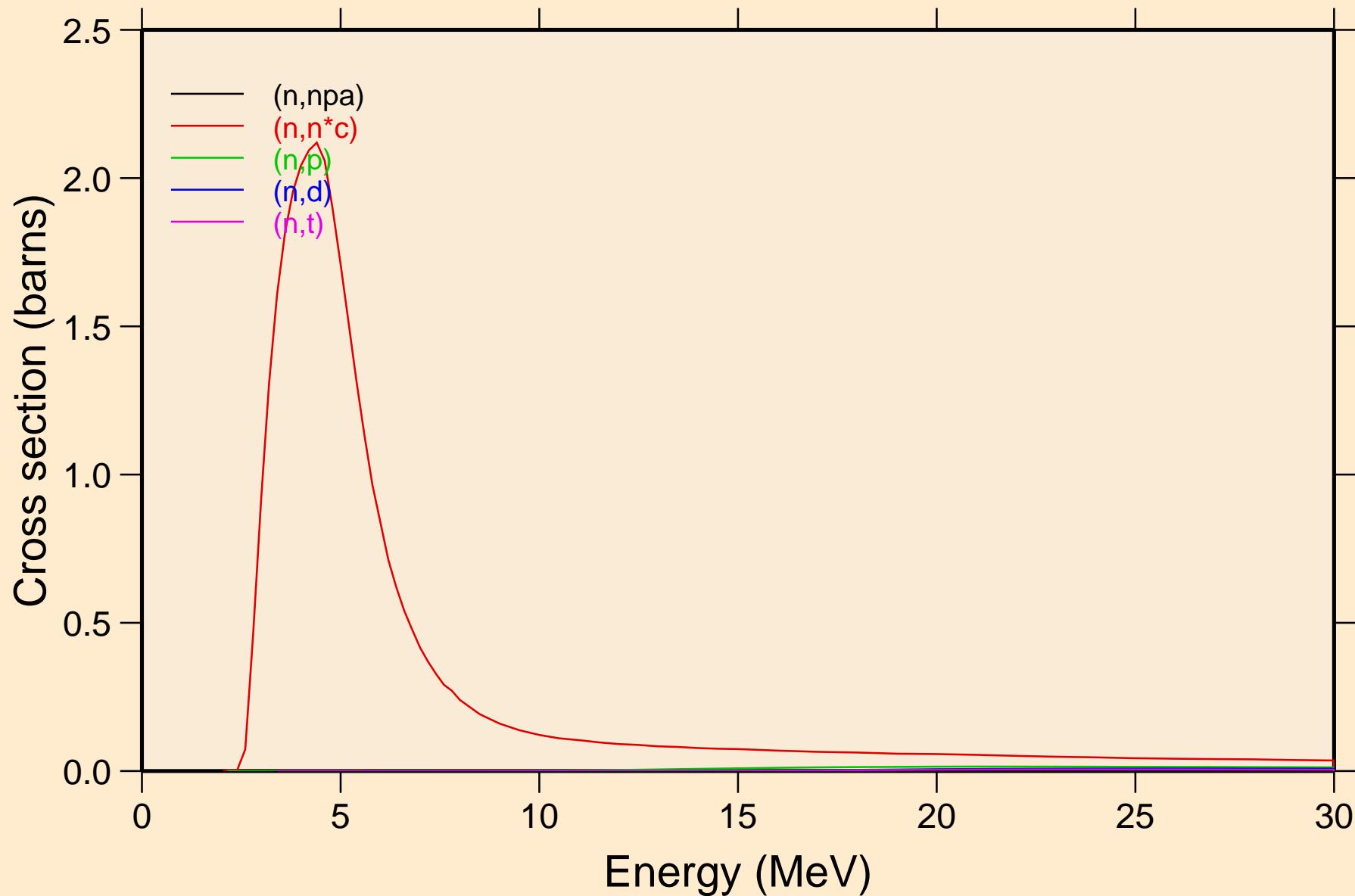
# N-CS138 NRG TENDL-2017, AKONING

## Threshold reactions



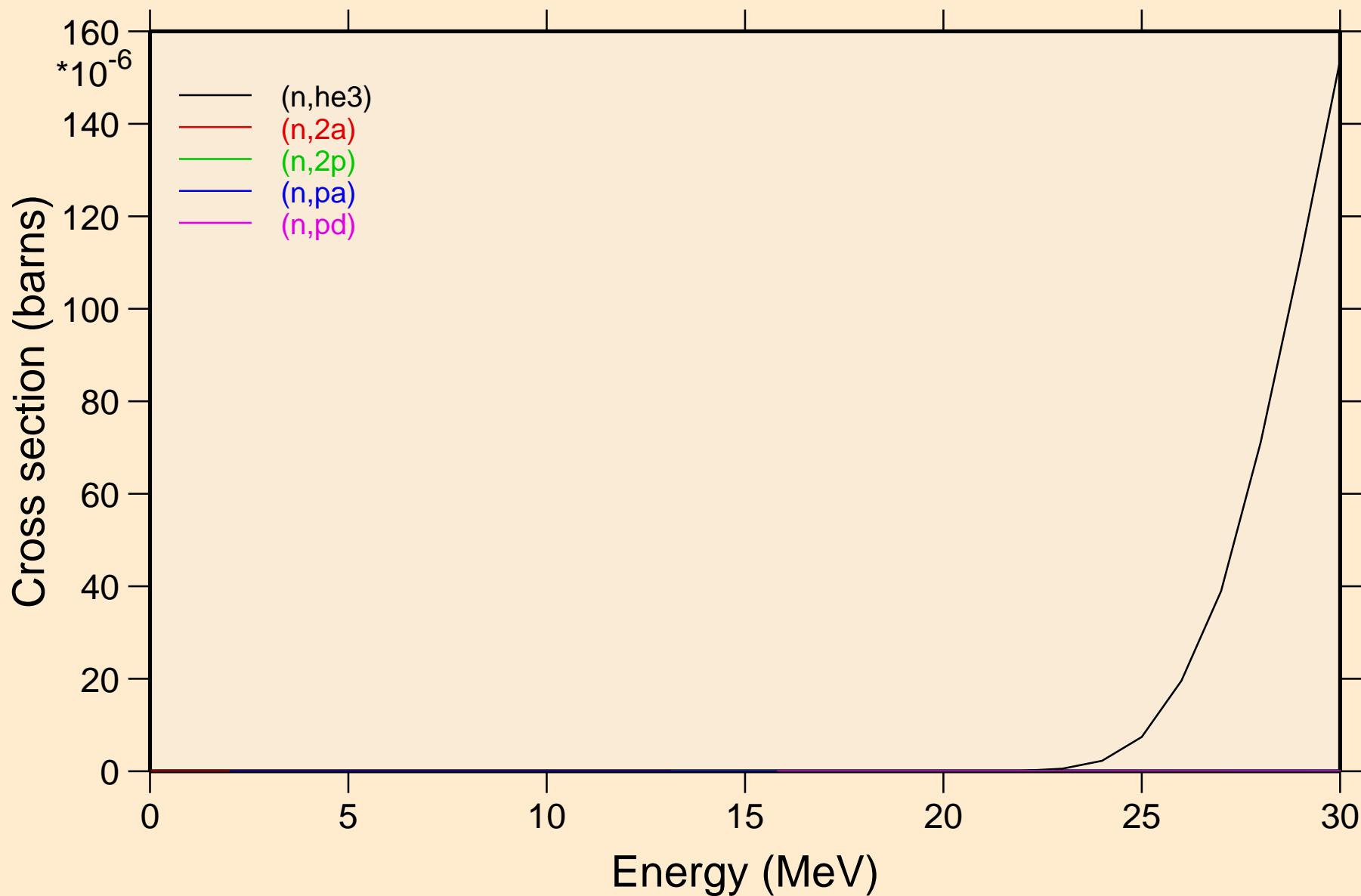
# N-CS138 NRG TENDL-2017, AKONING

## Threshold reactions



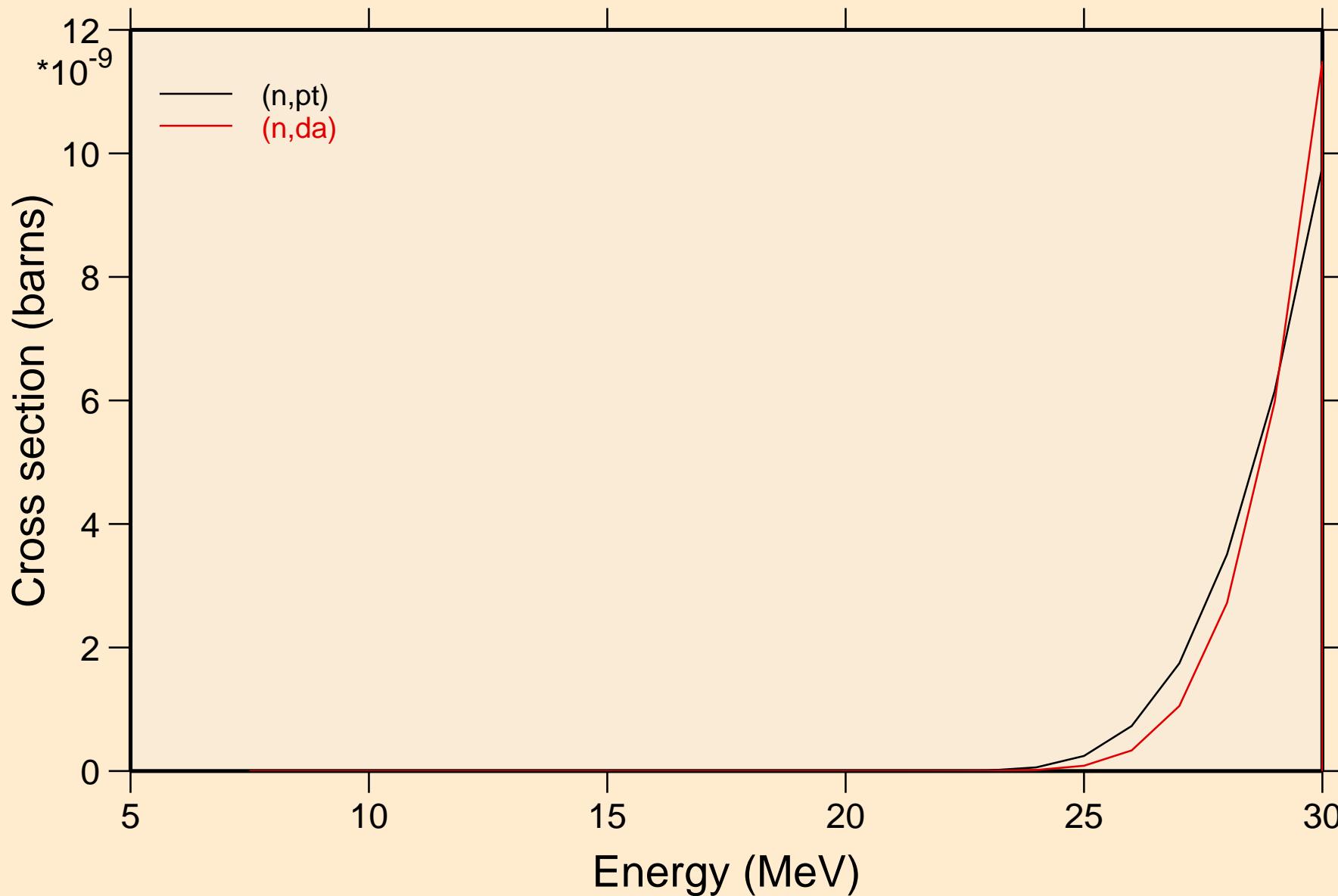
# N-CS138 NRG TENDL-2017, AKONING

## Threshold reactions

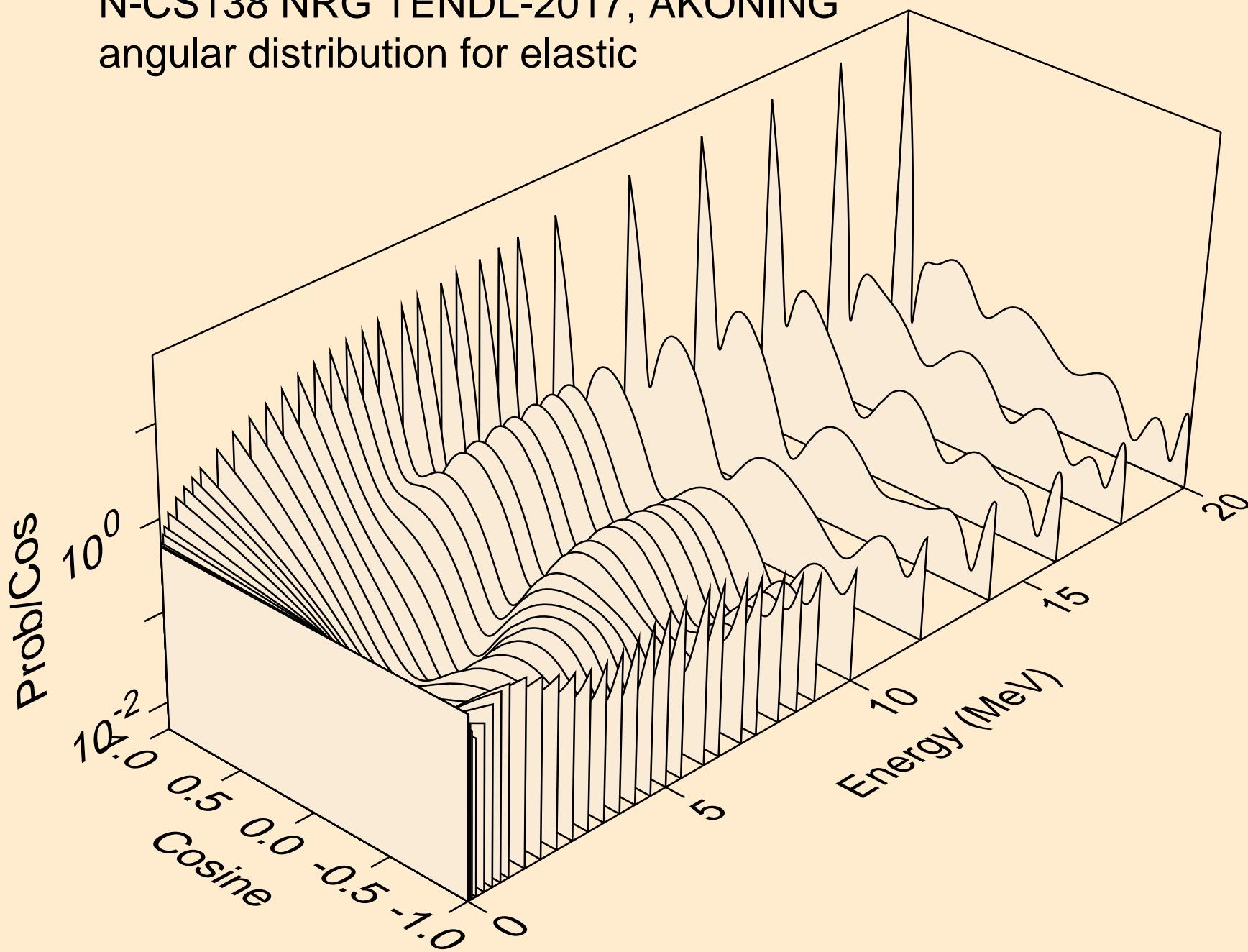


# N-CS138 NRG TENDL-2017, AKONING

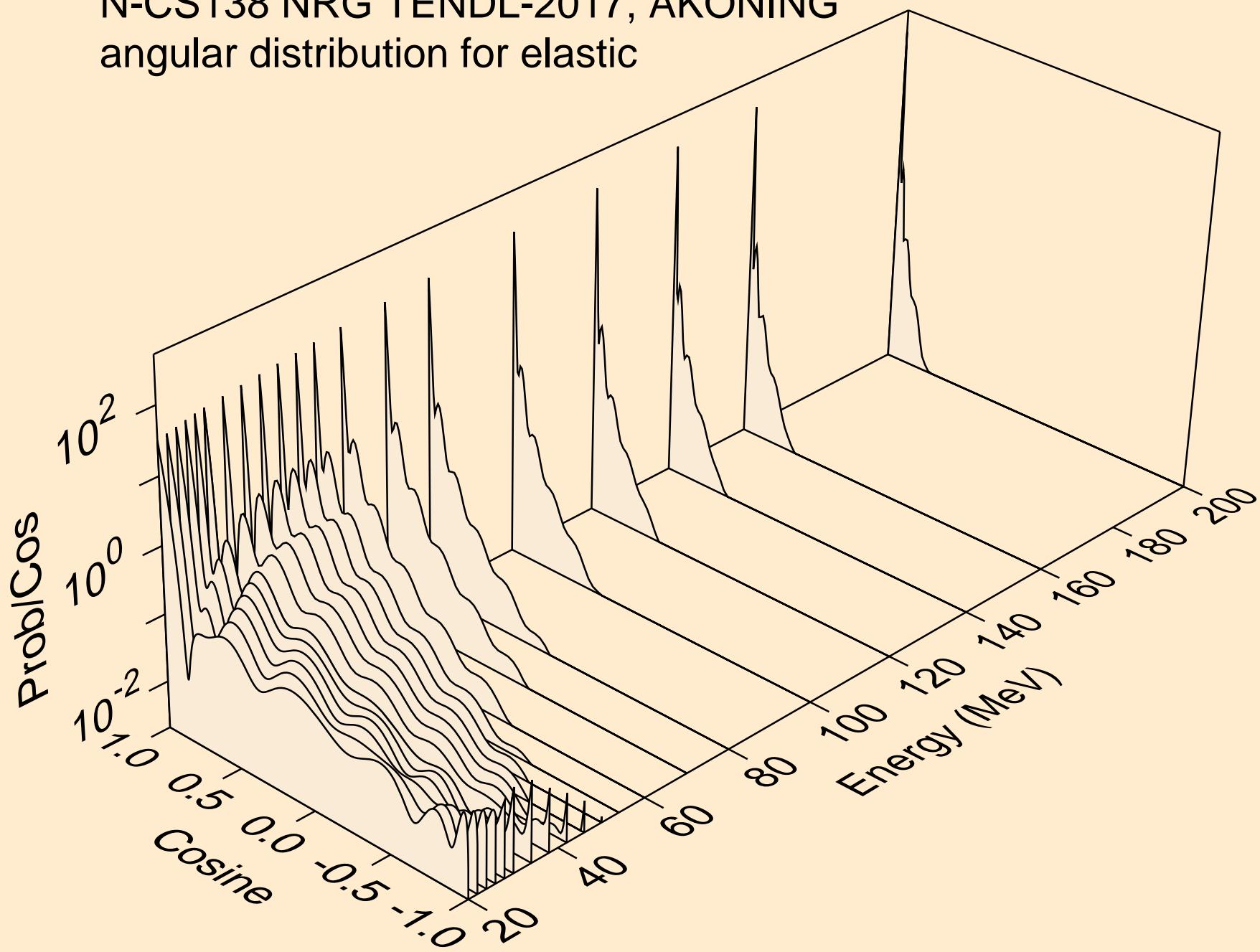
## Threshold reactions



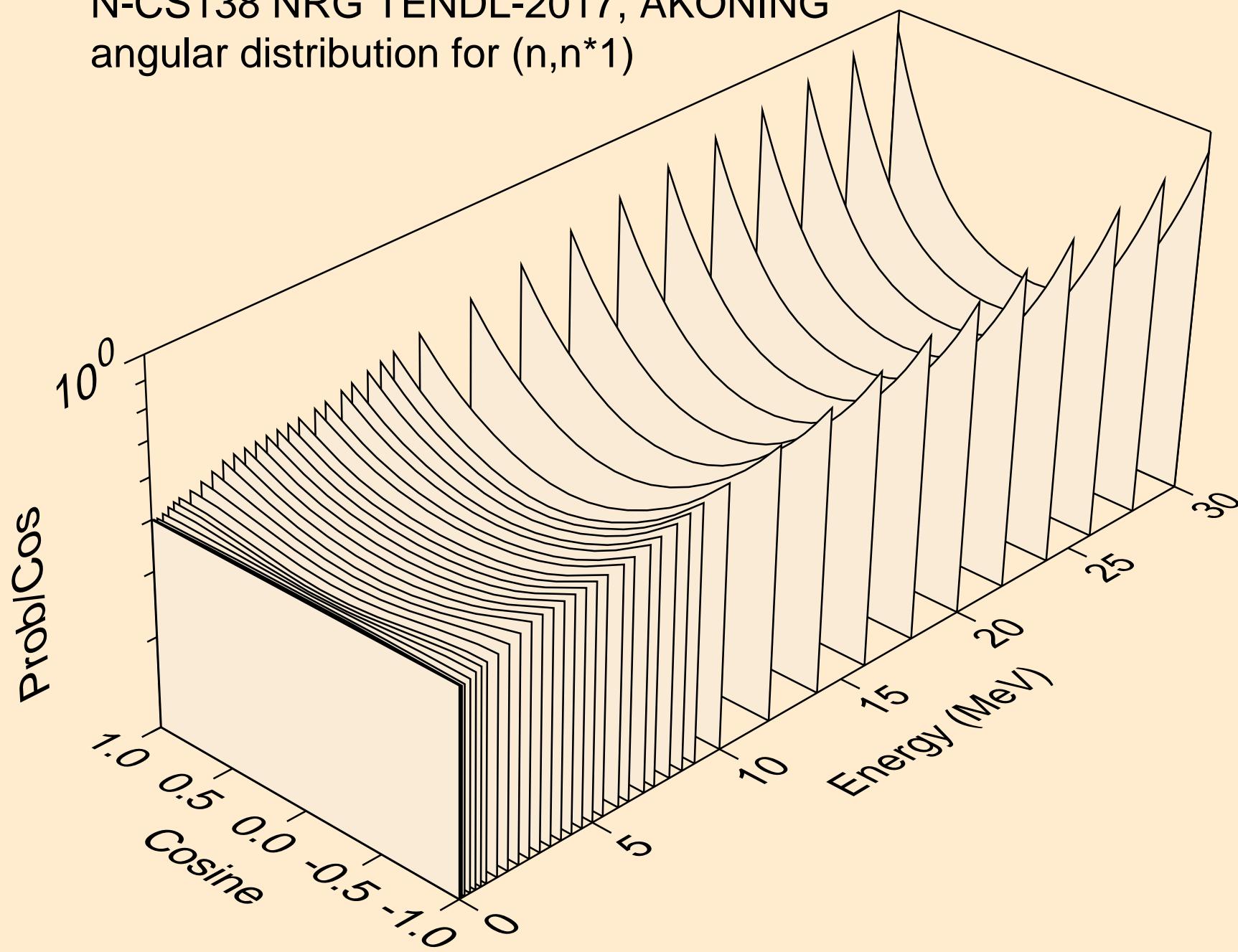
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for elastic



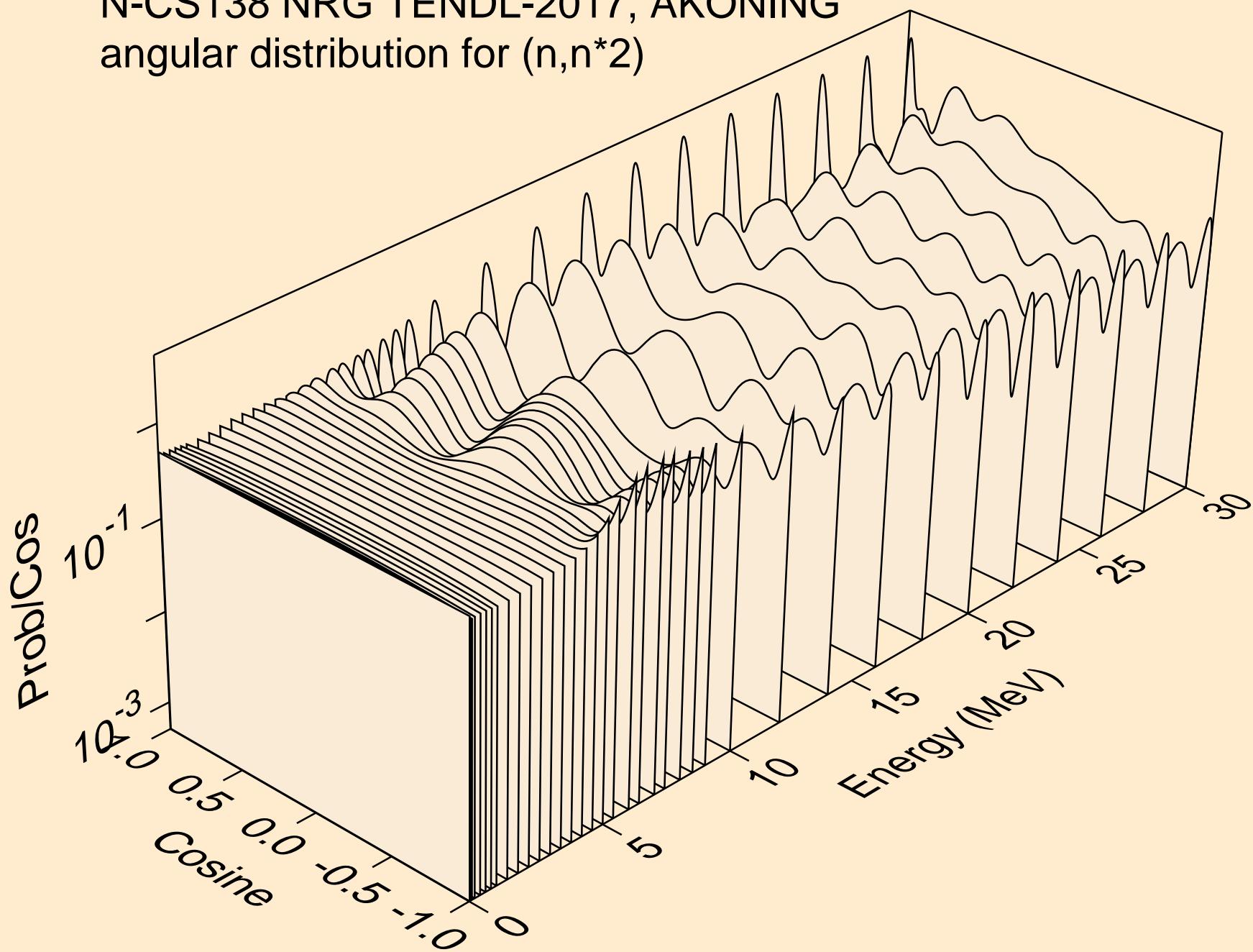
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for elastic



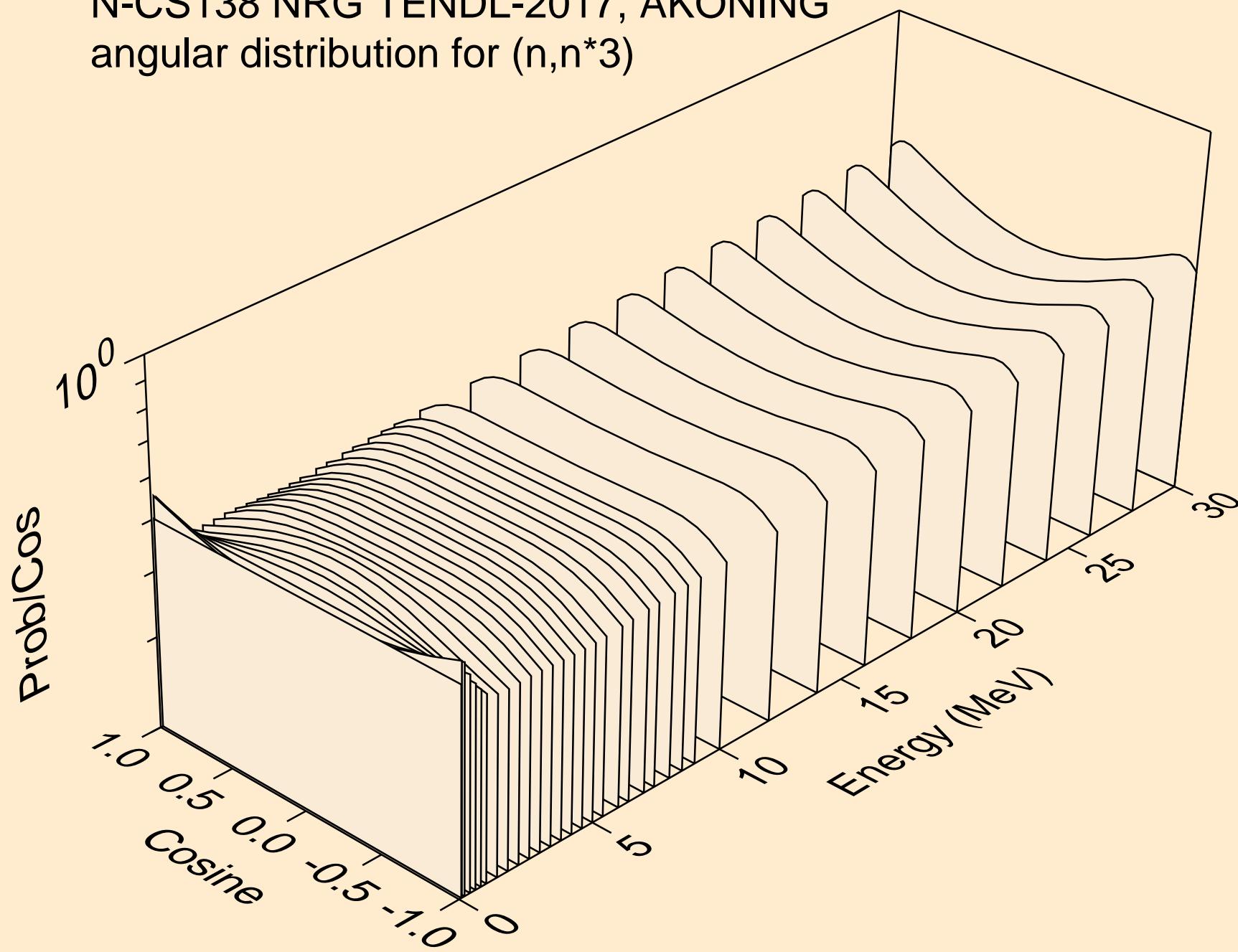
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*1)



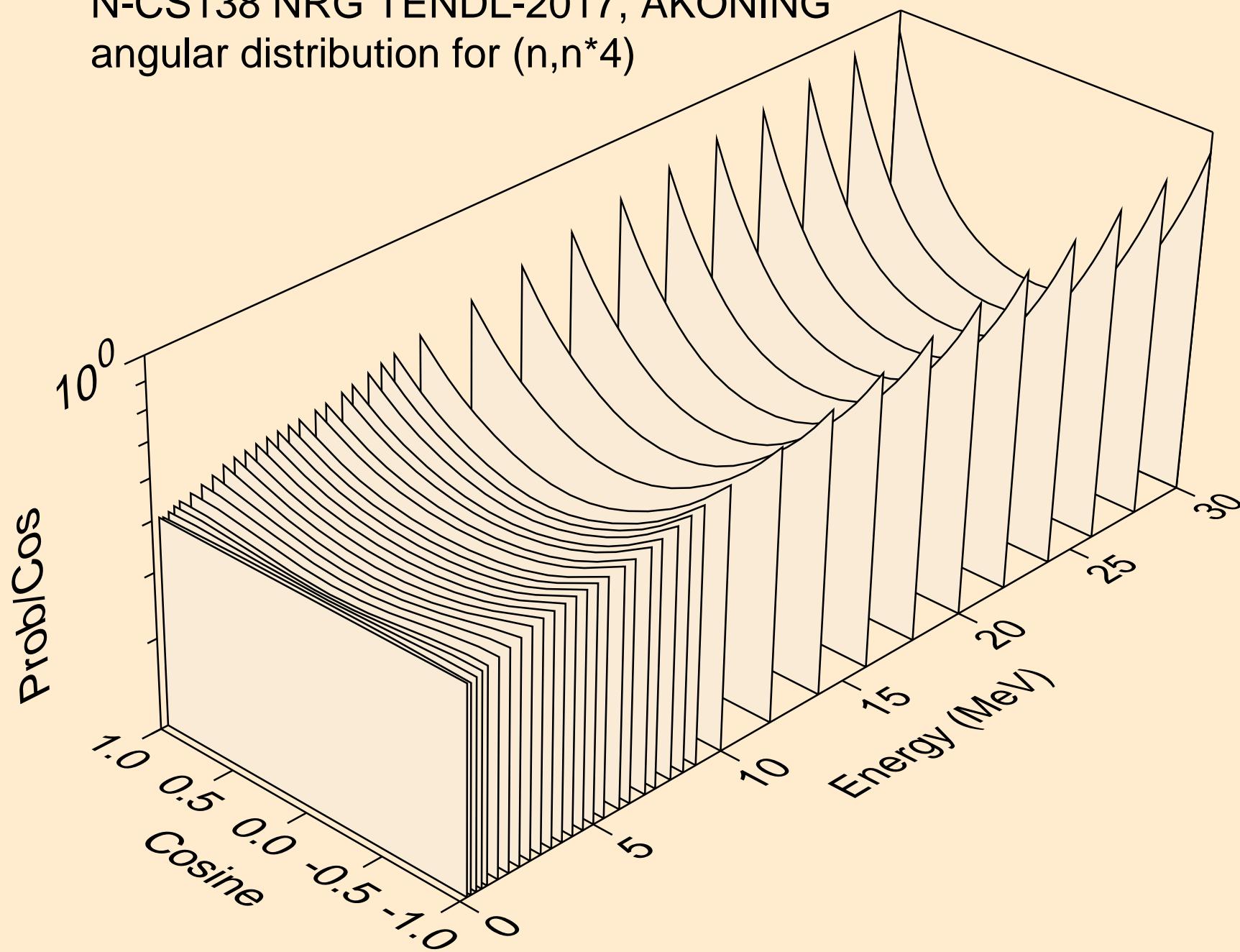
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*)^2$



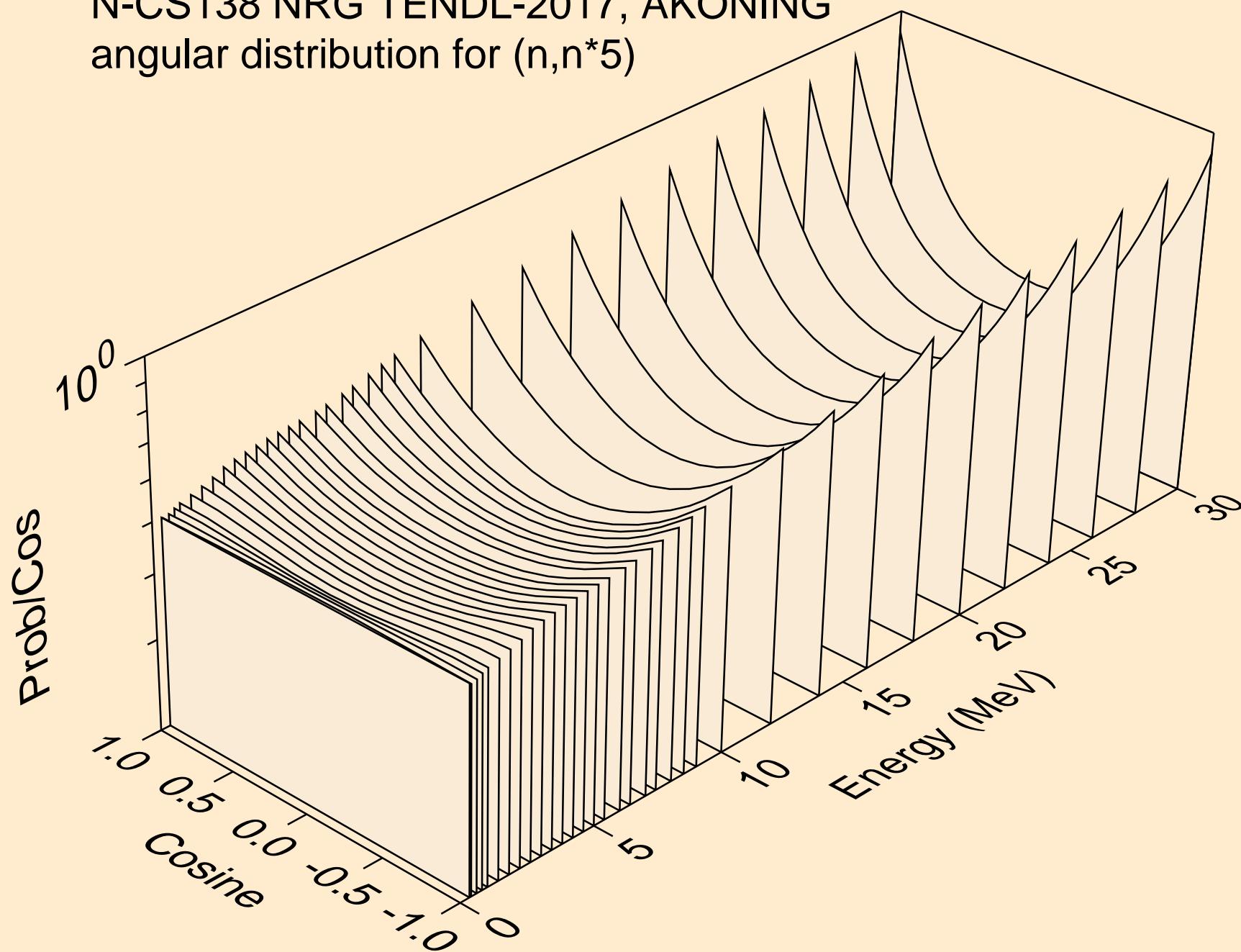
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*3)



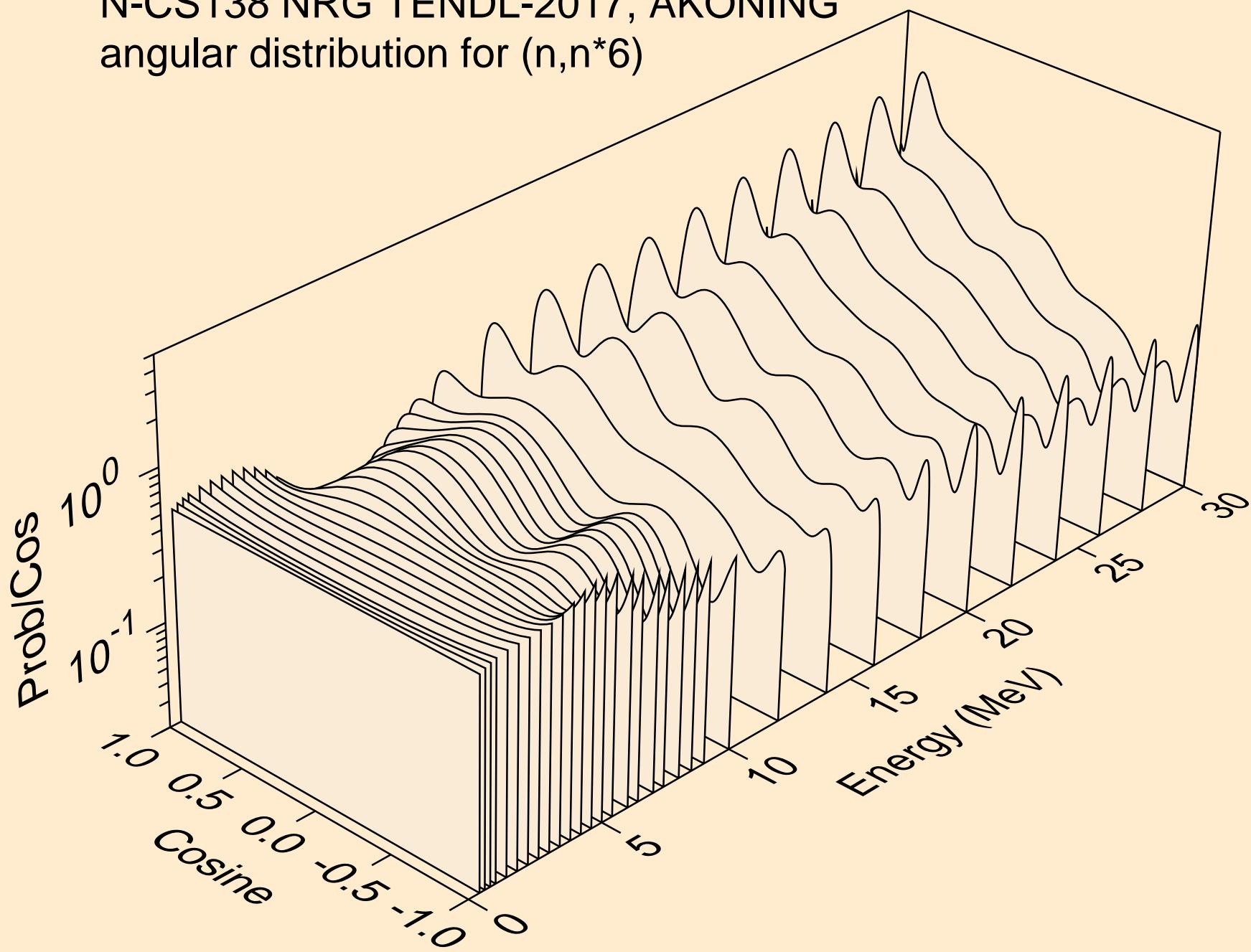
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*4)$



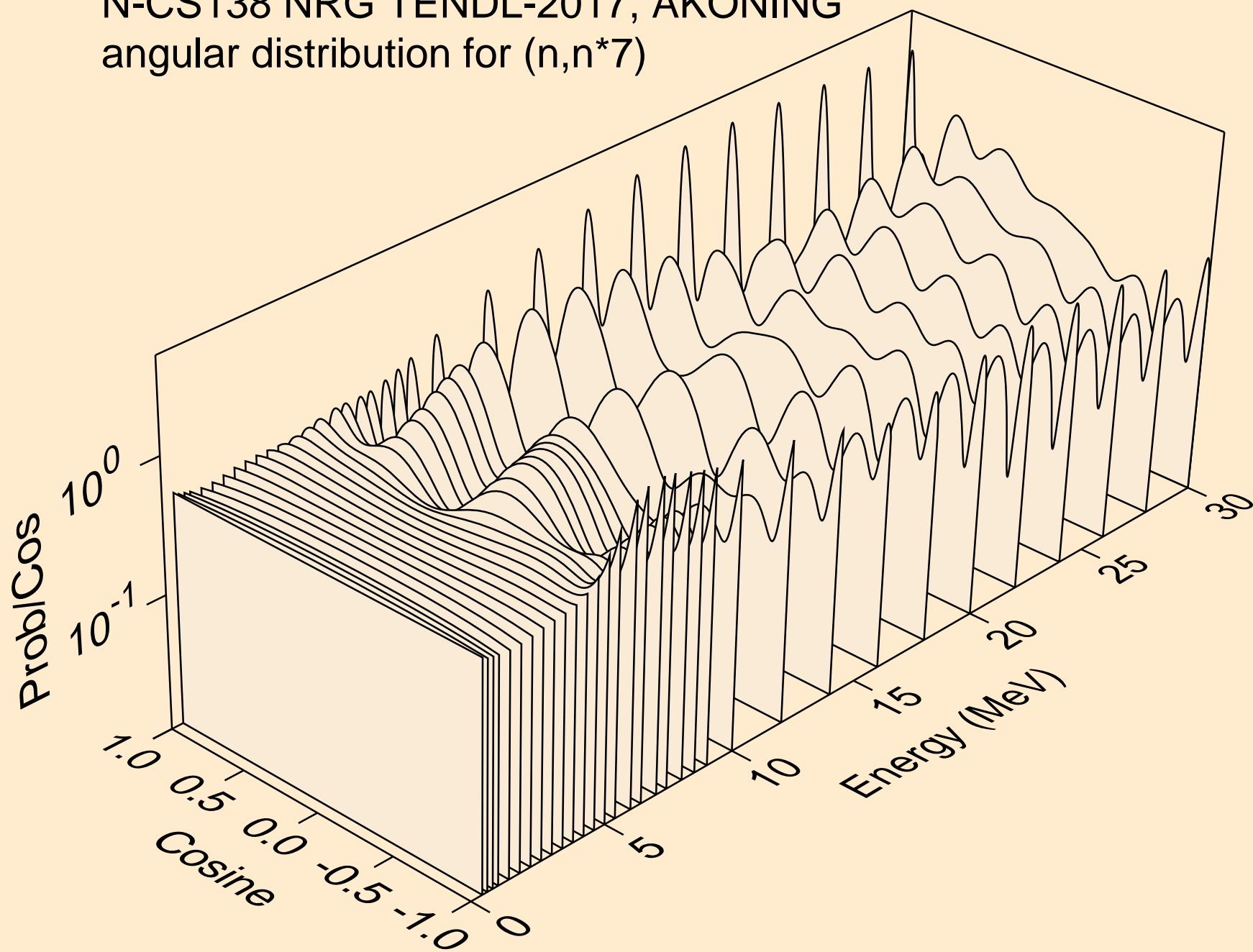
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*5)



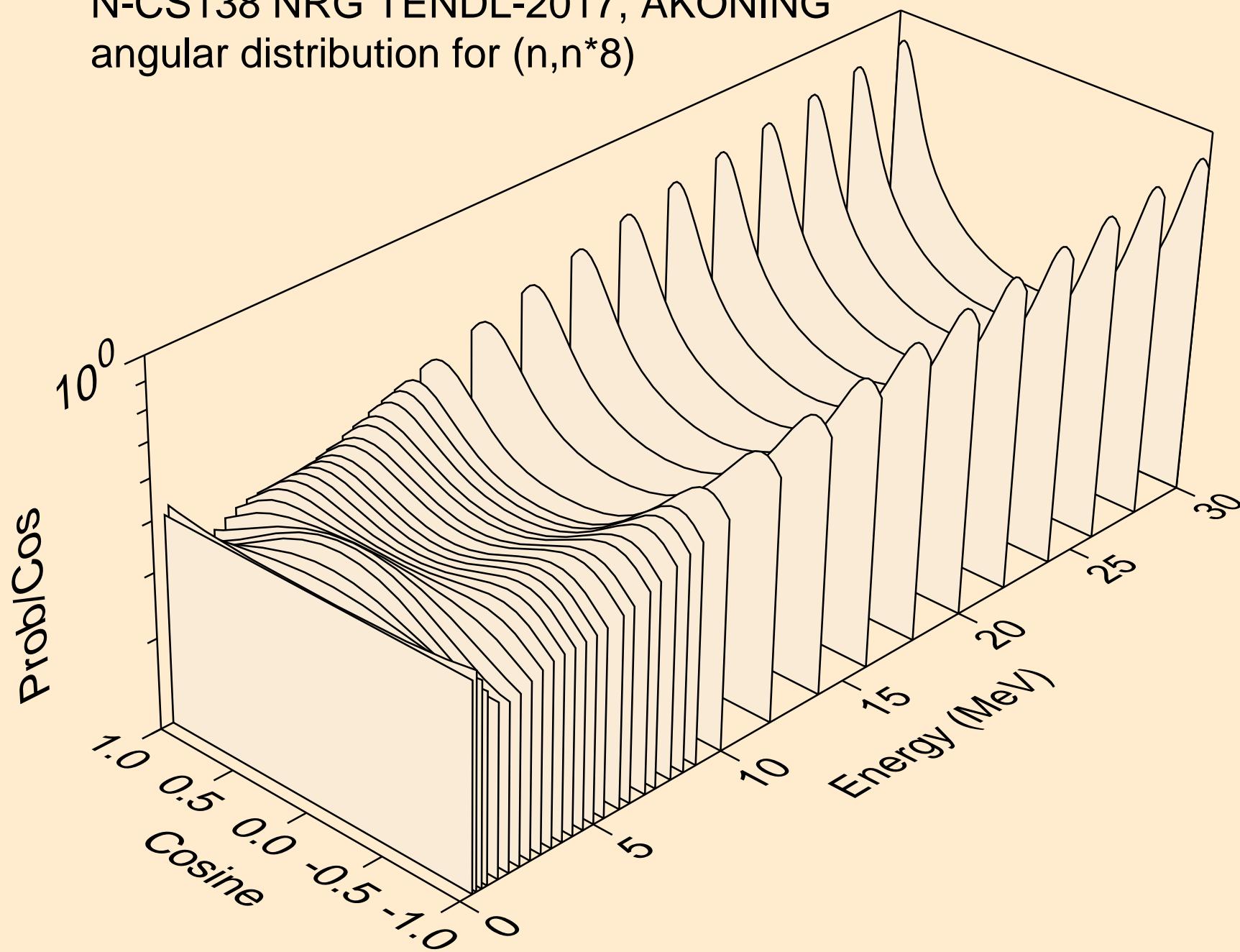
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*6)$



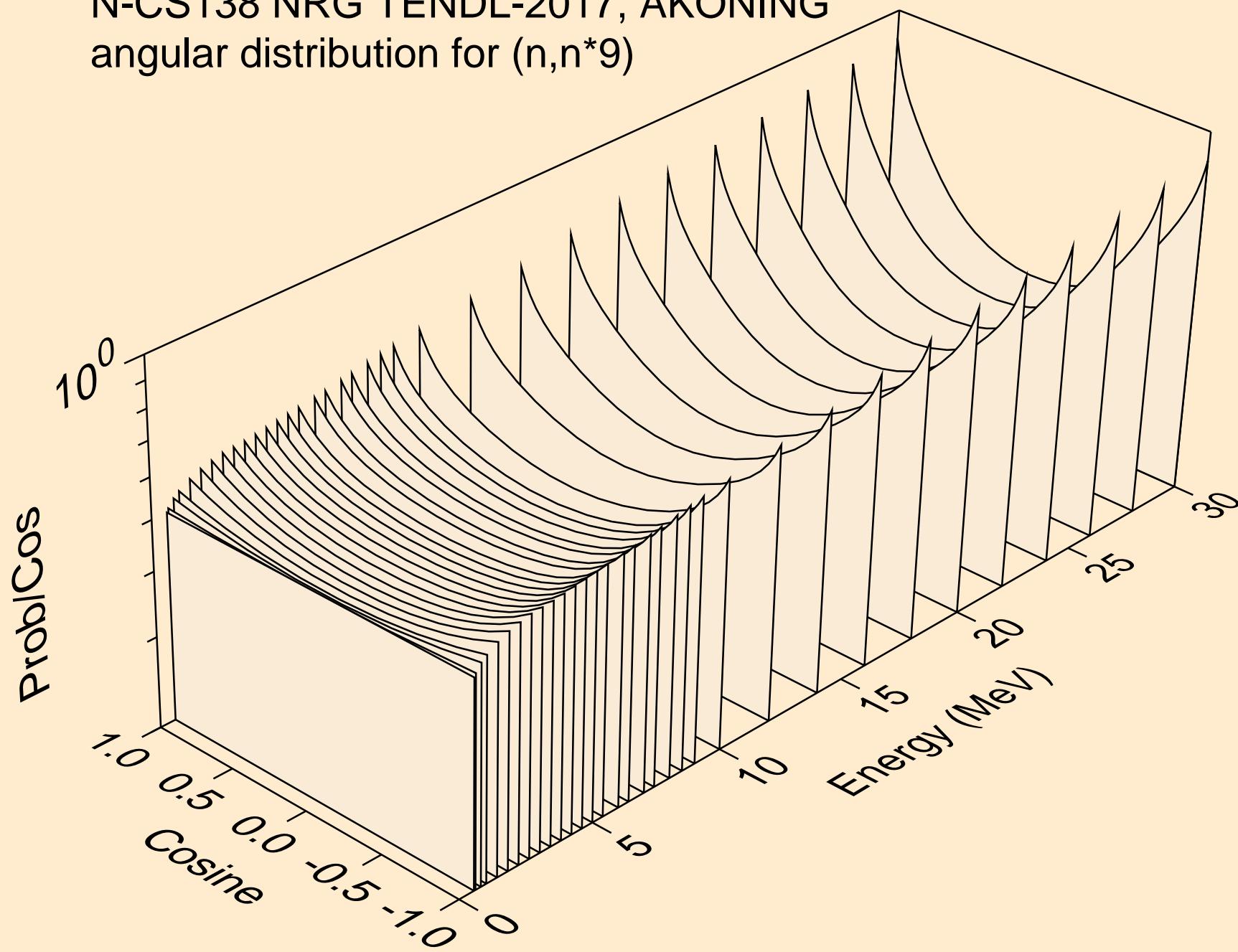
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*)^7$



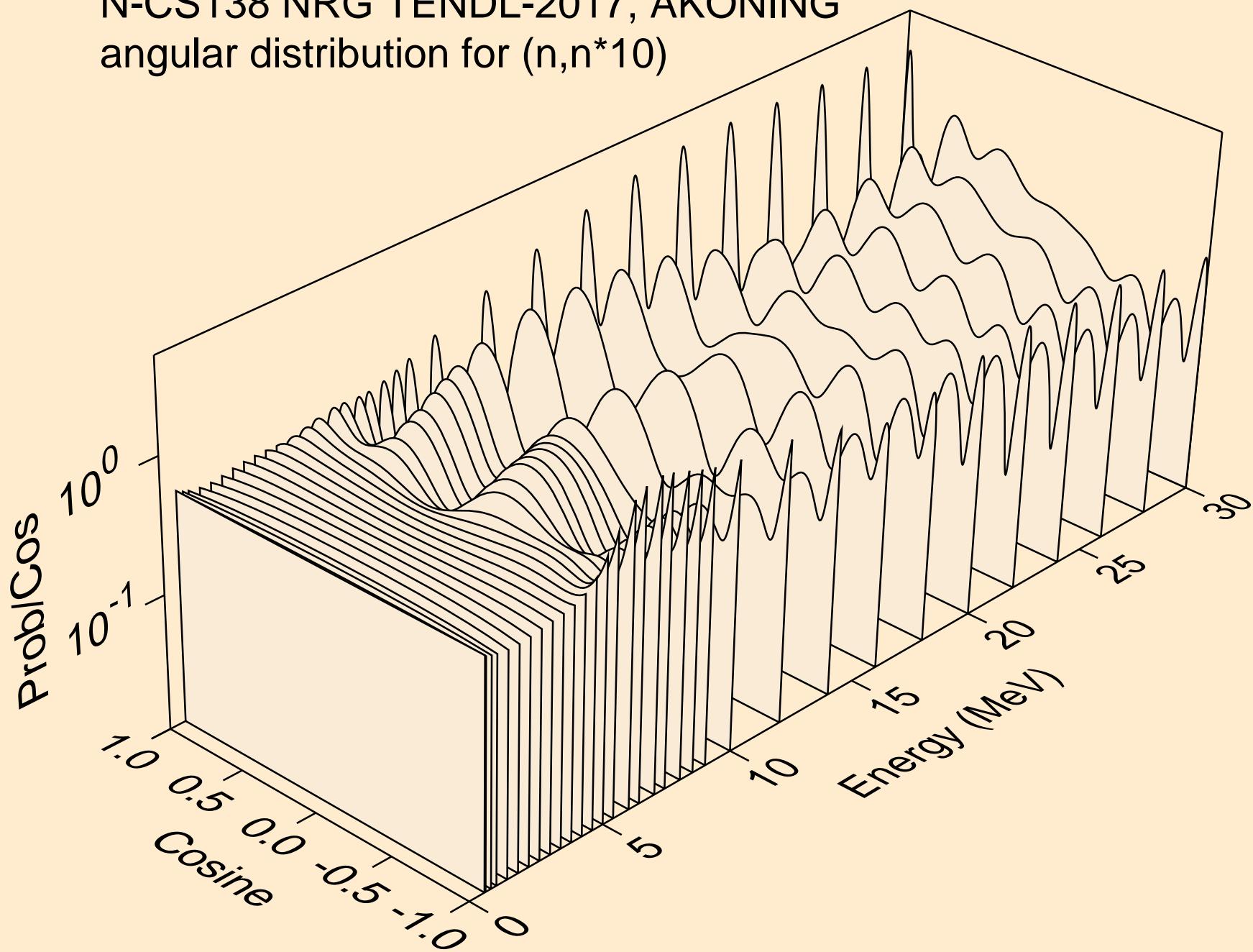
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*)^8$



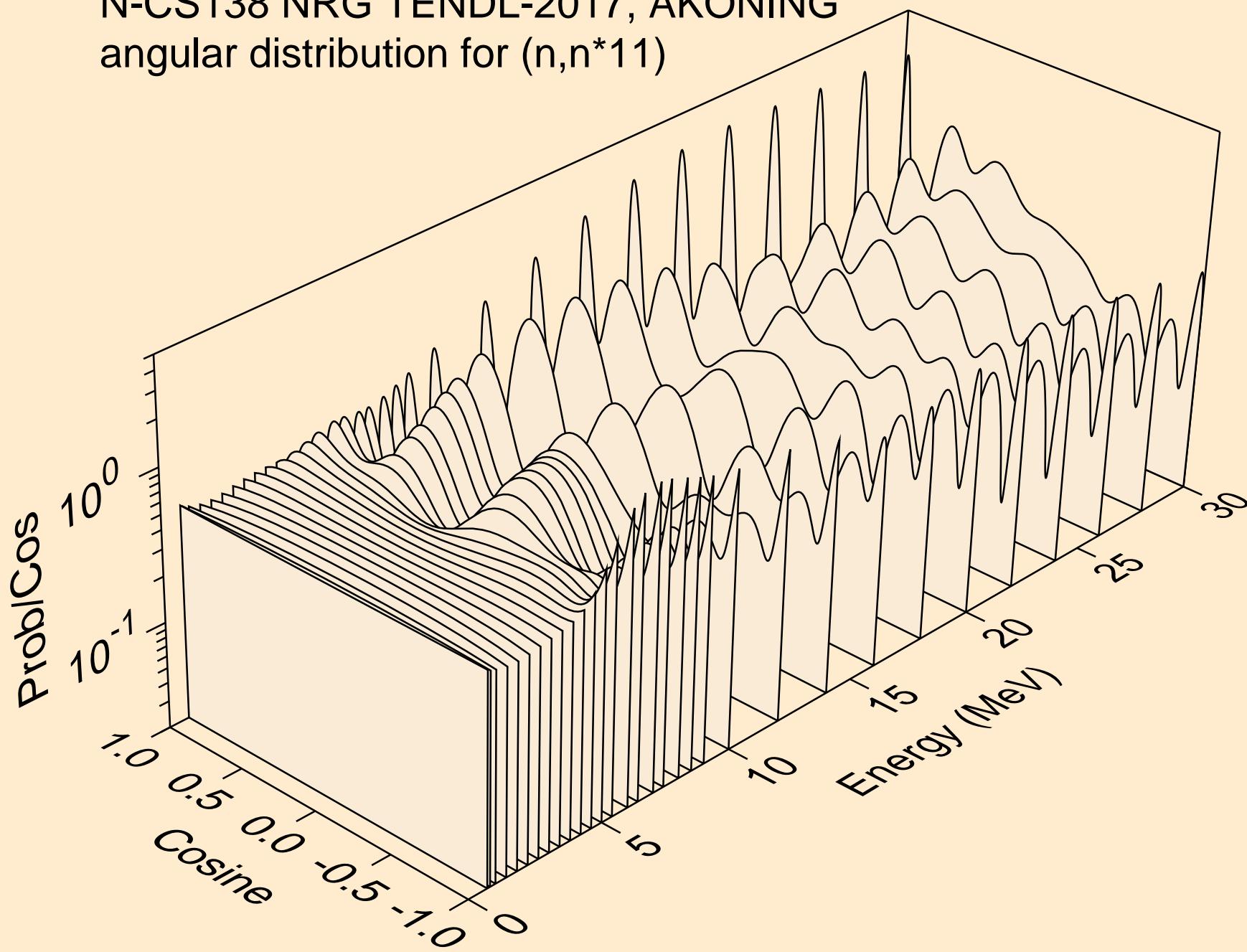
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*9)



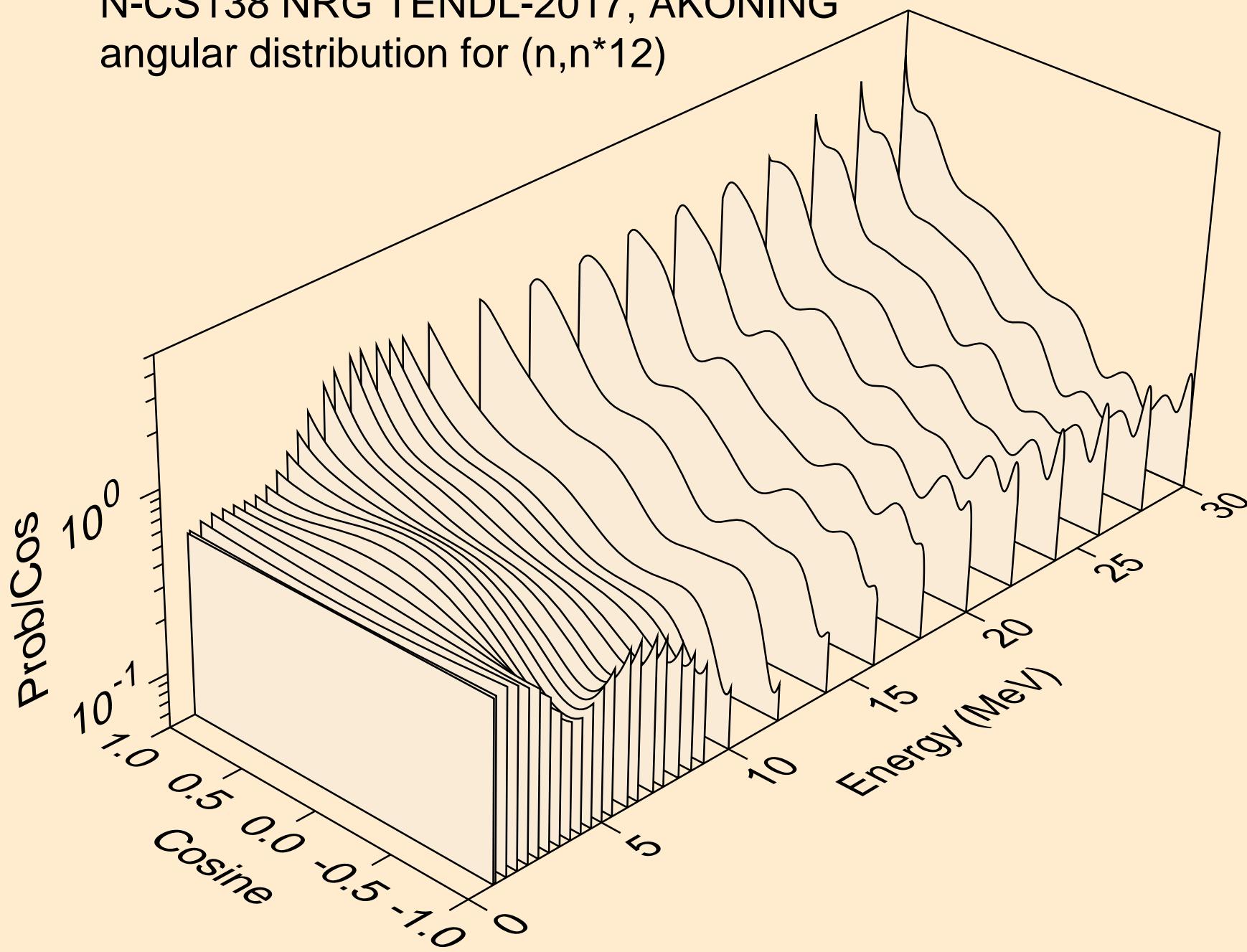
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*10)



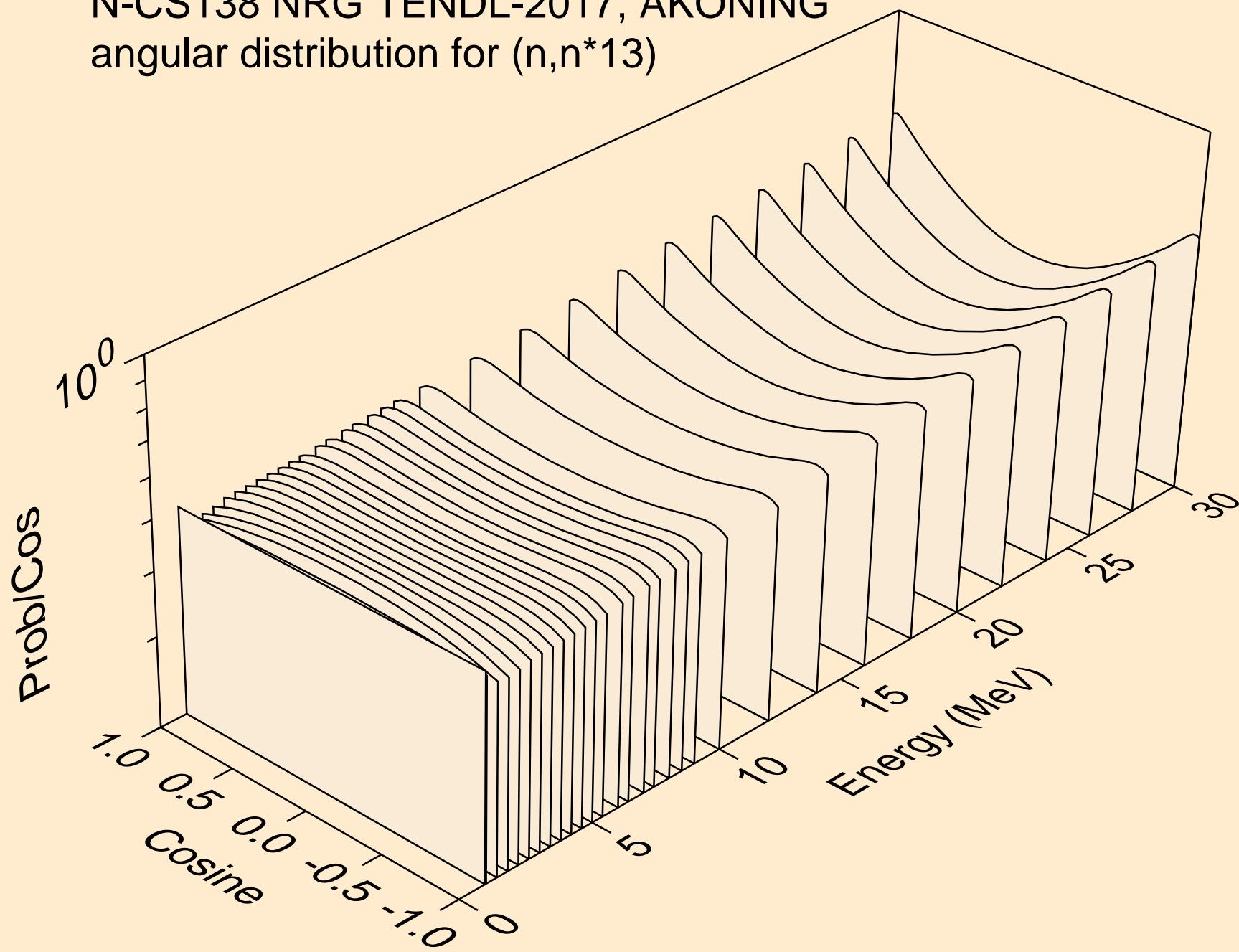
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*11)



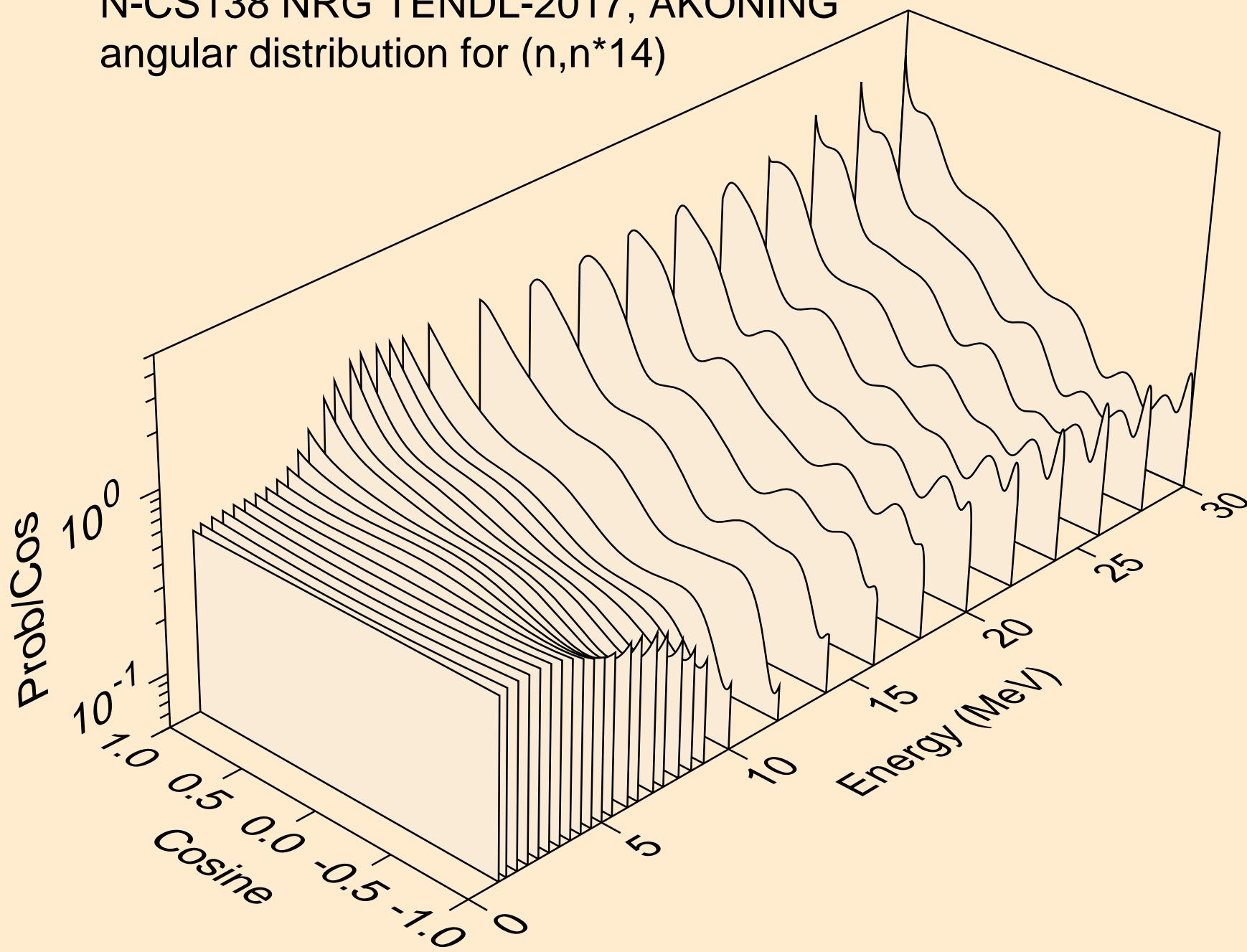
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*12)



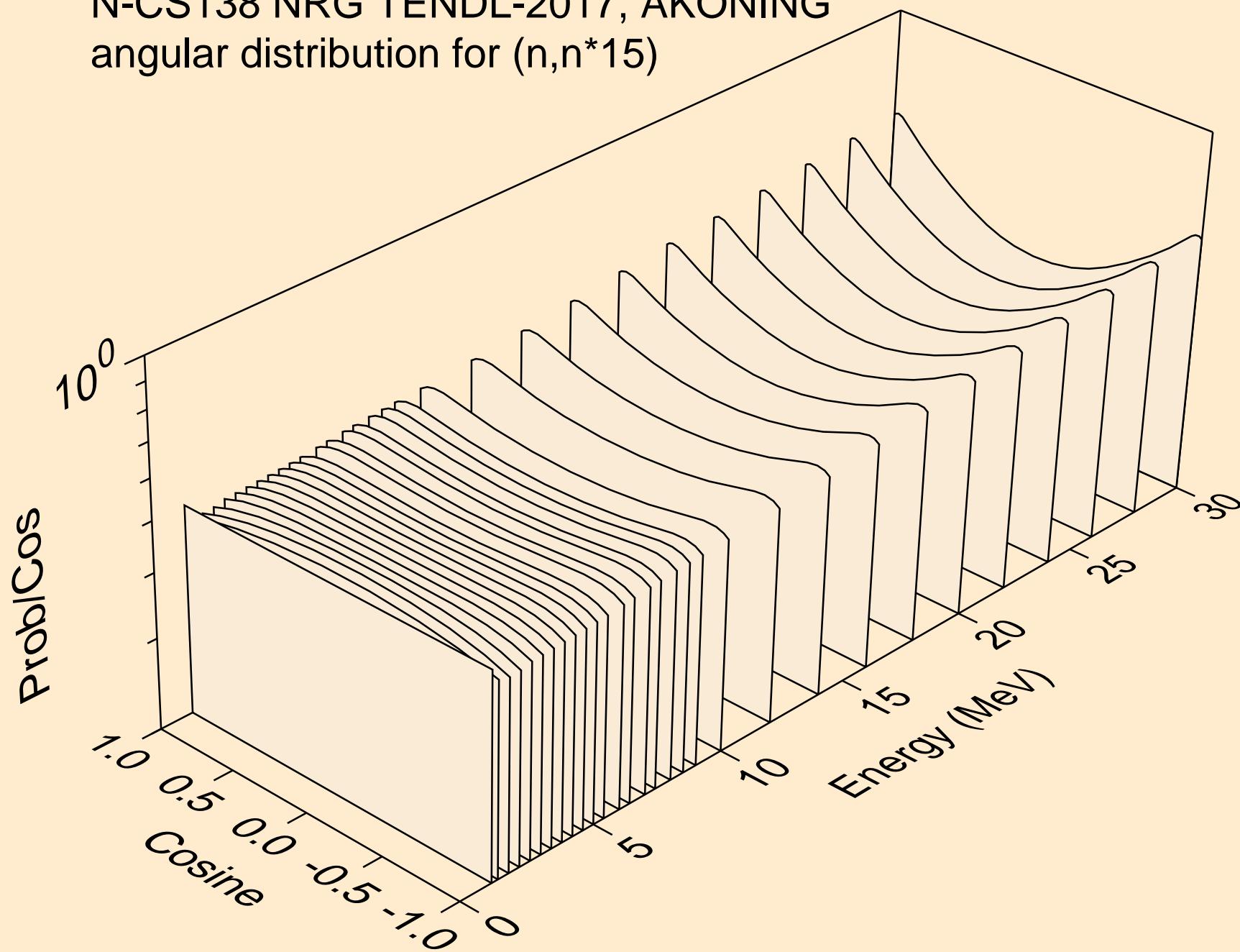
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*13)



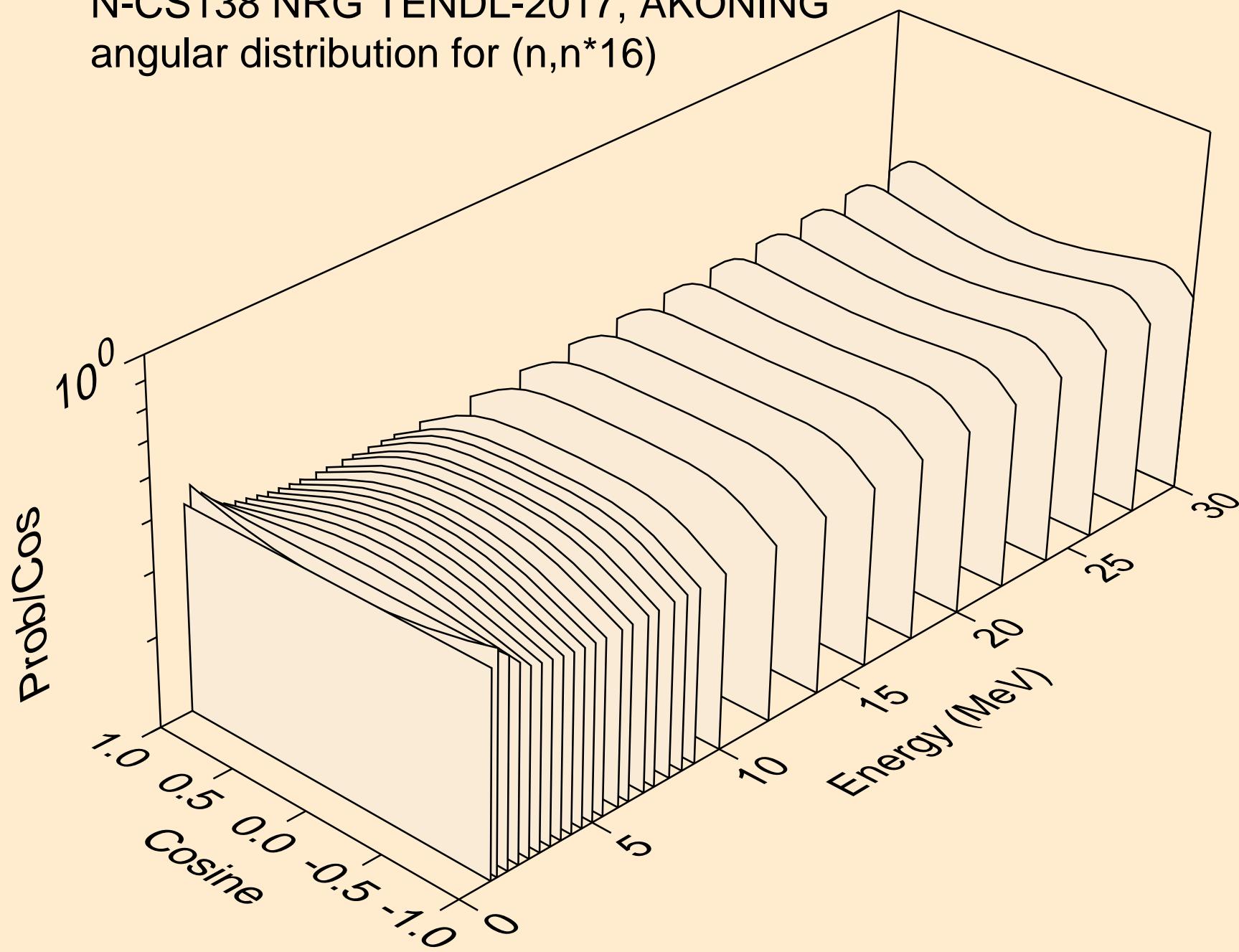
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*14)



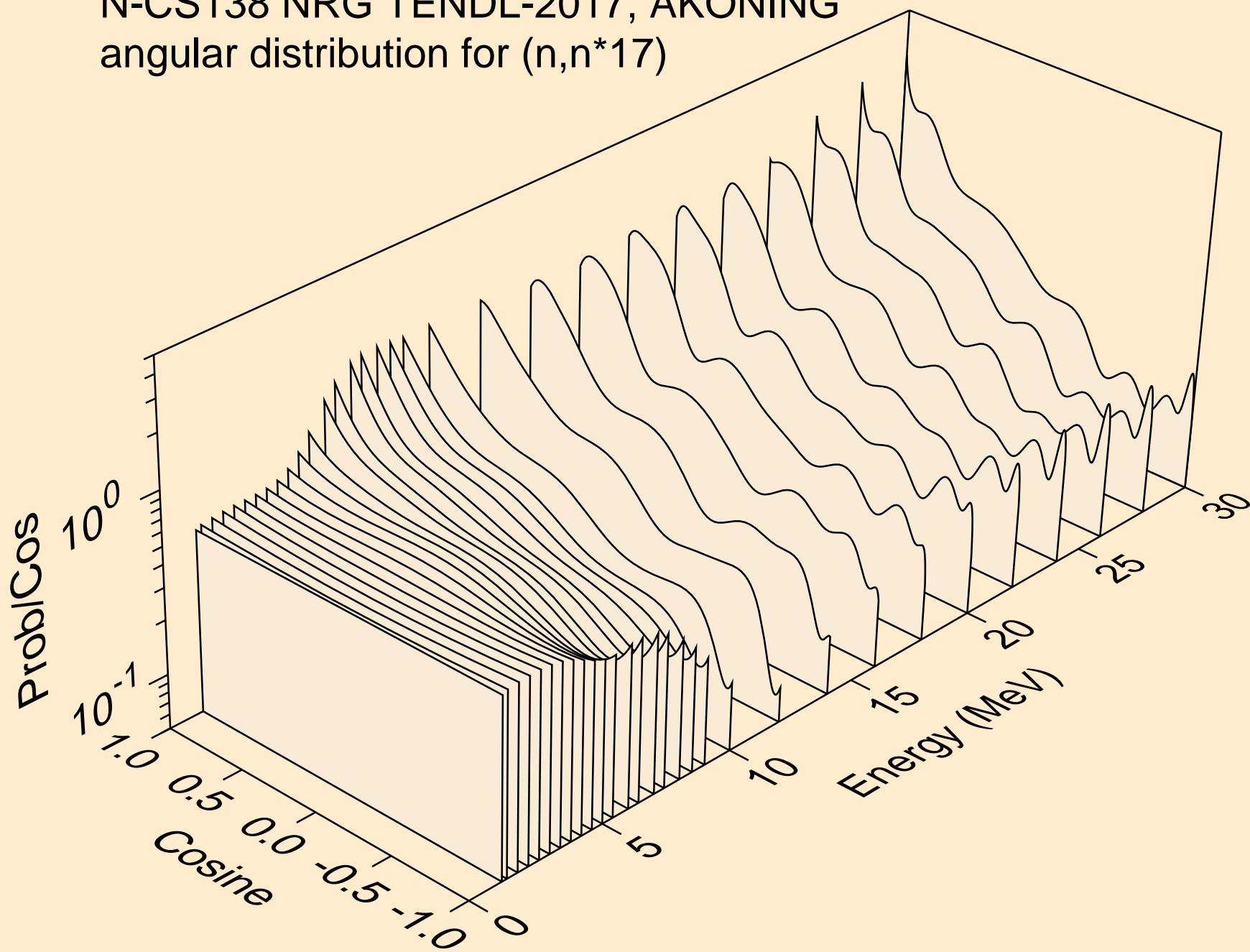
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*15)



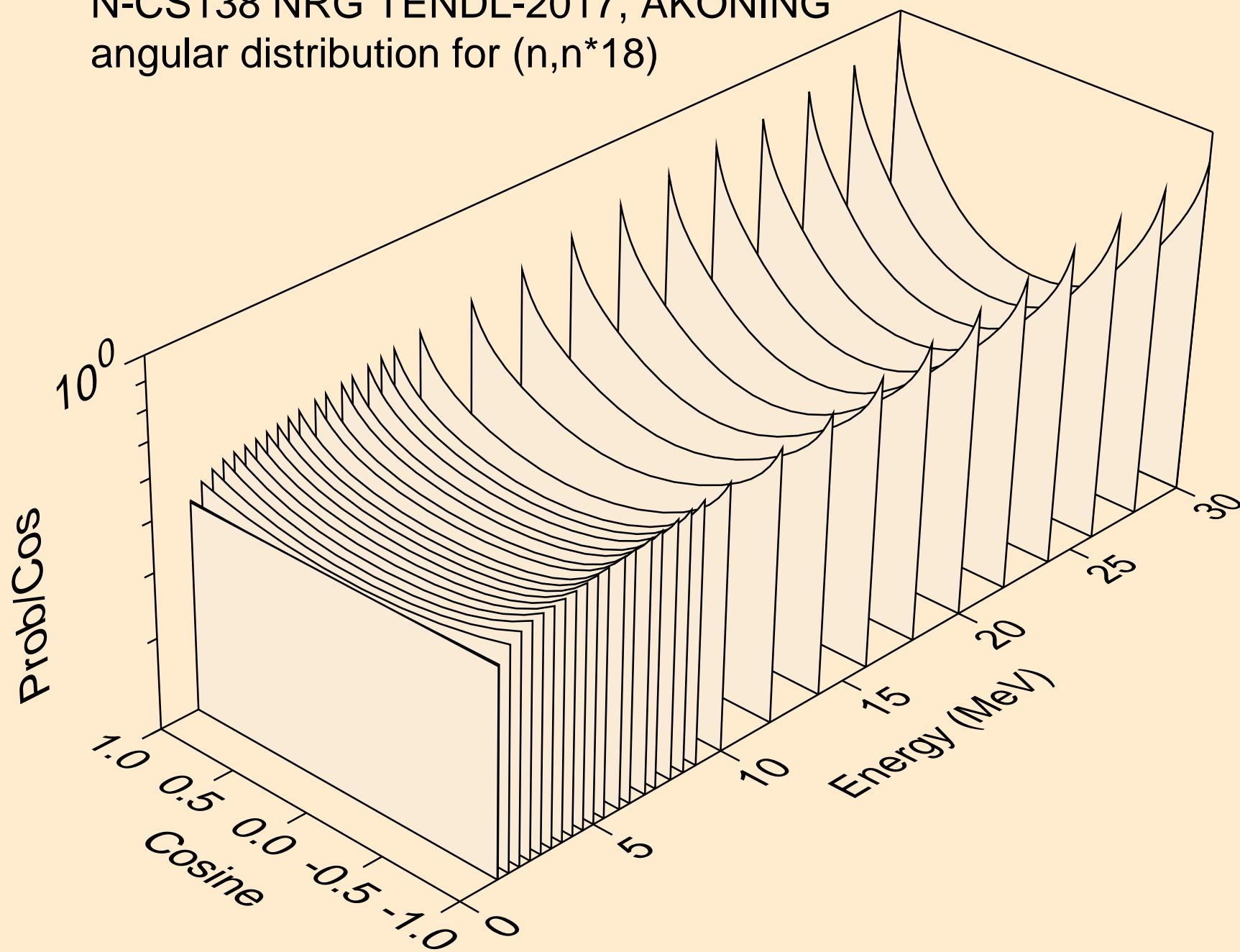
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*16)



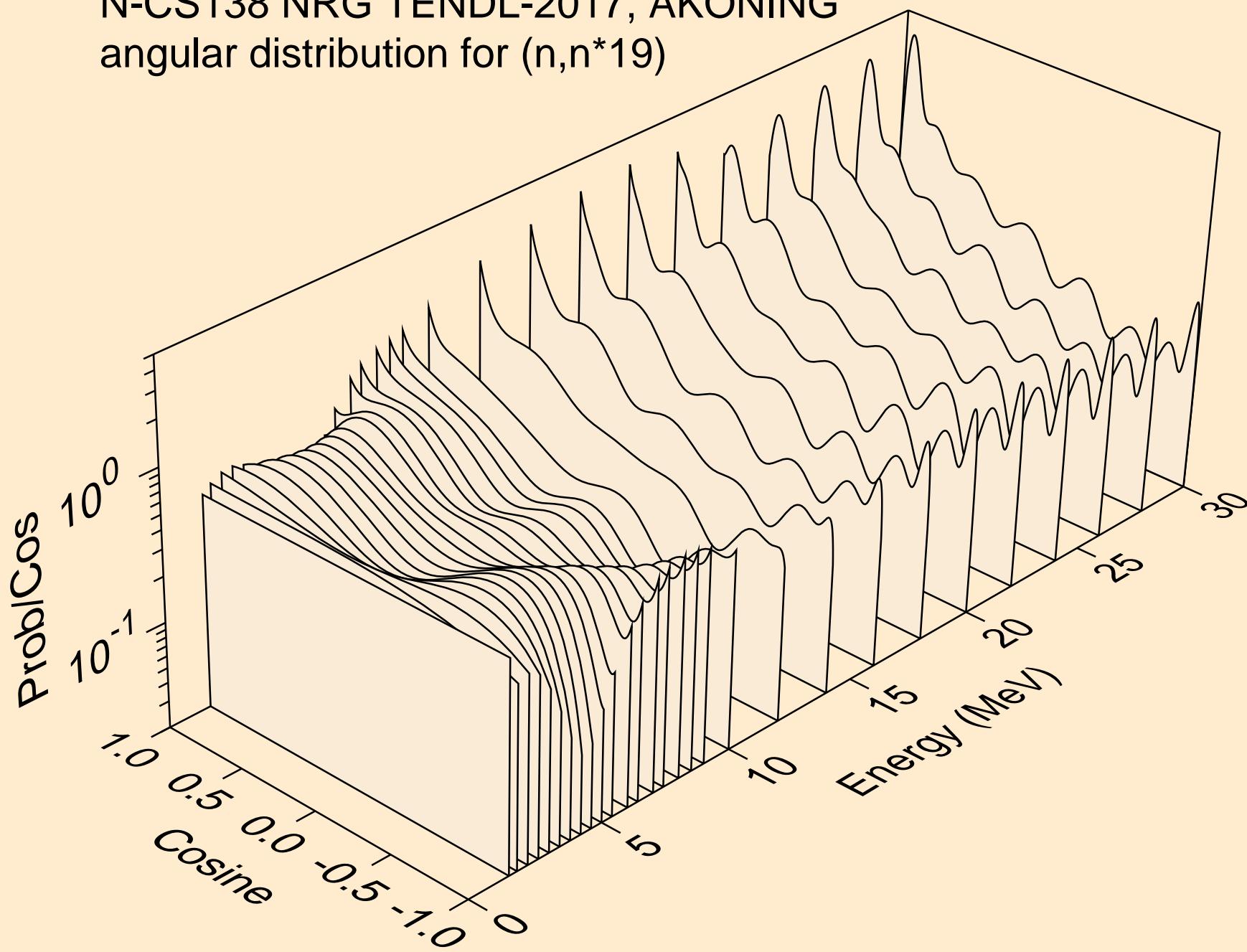
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*17)



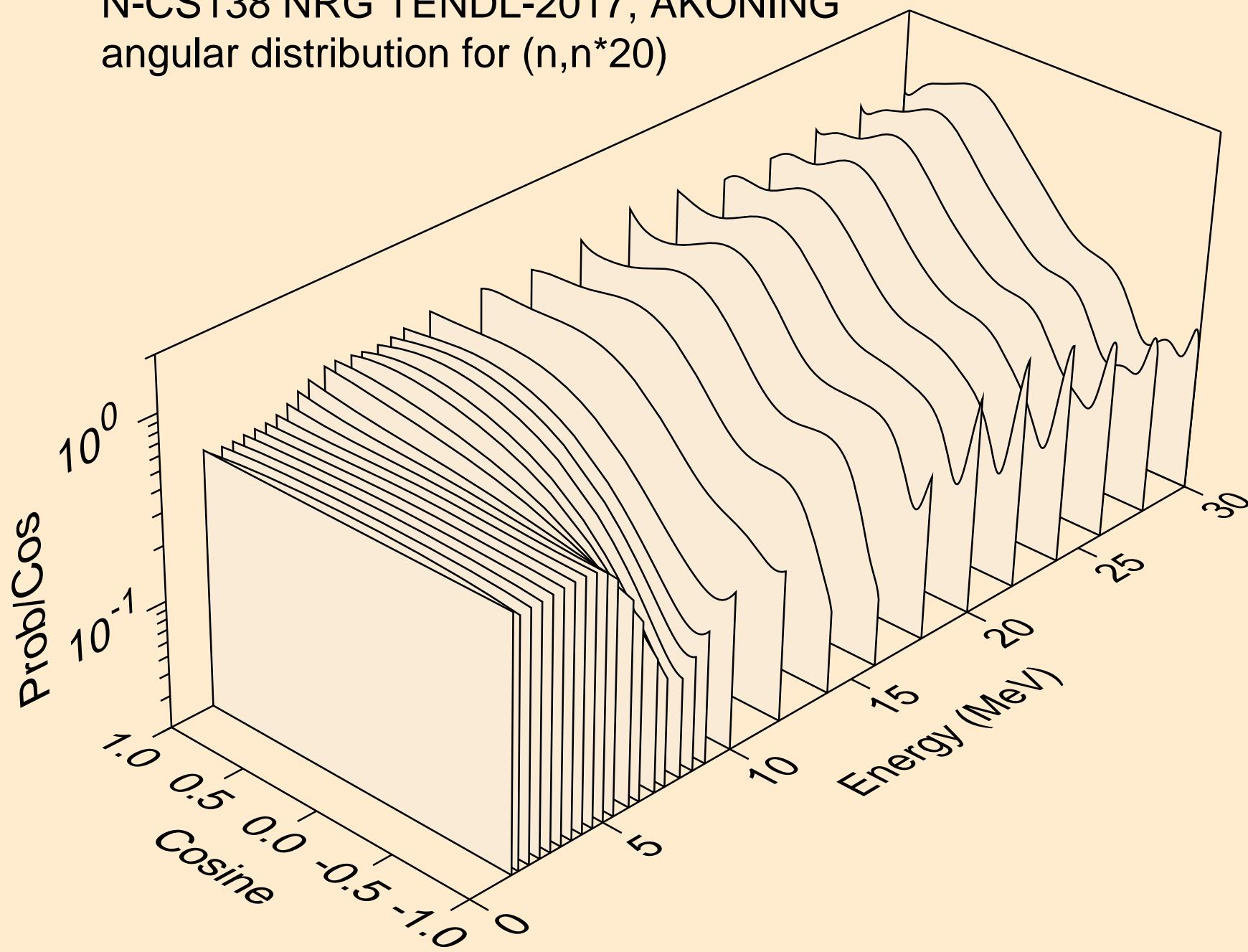
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*18)



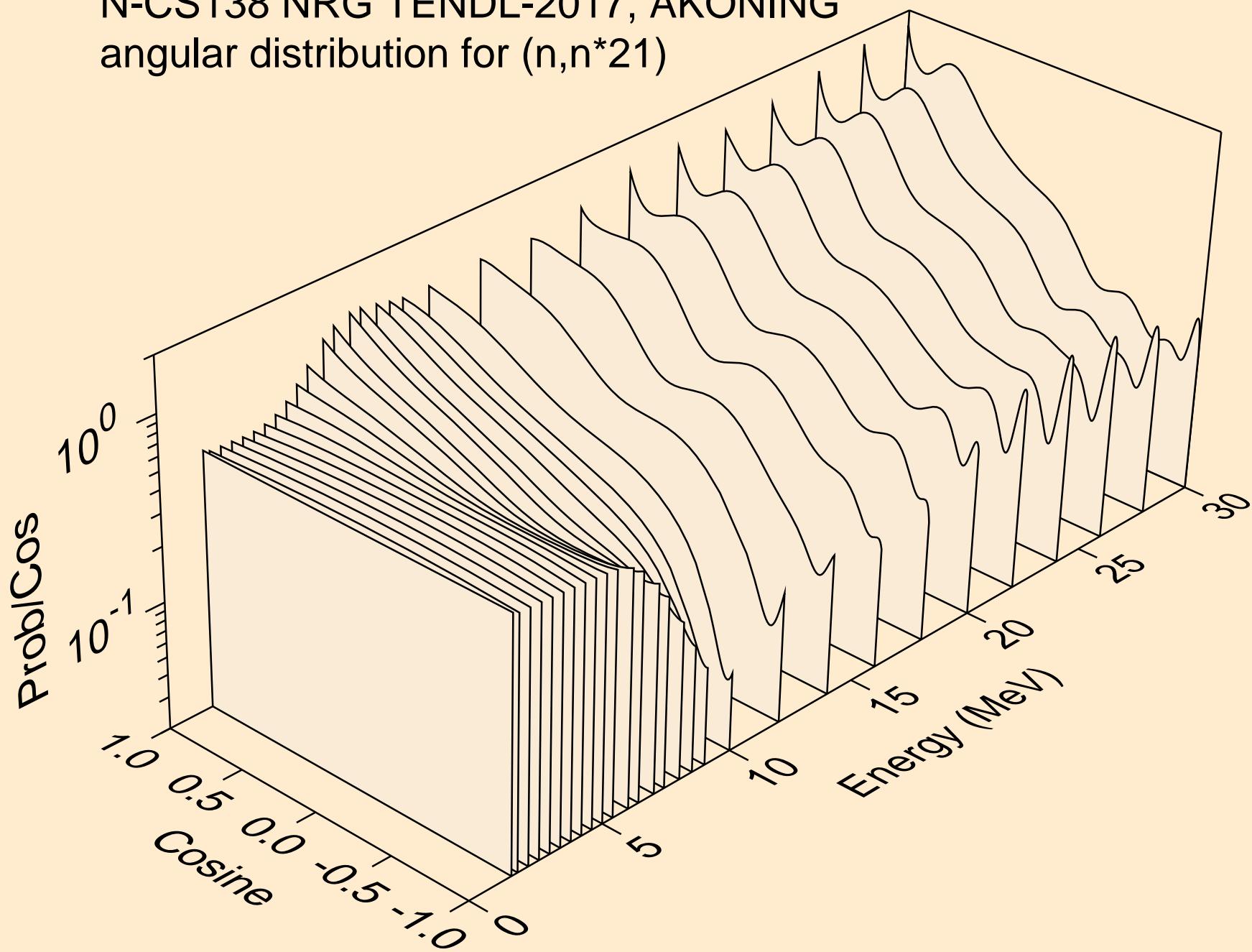
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*19)



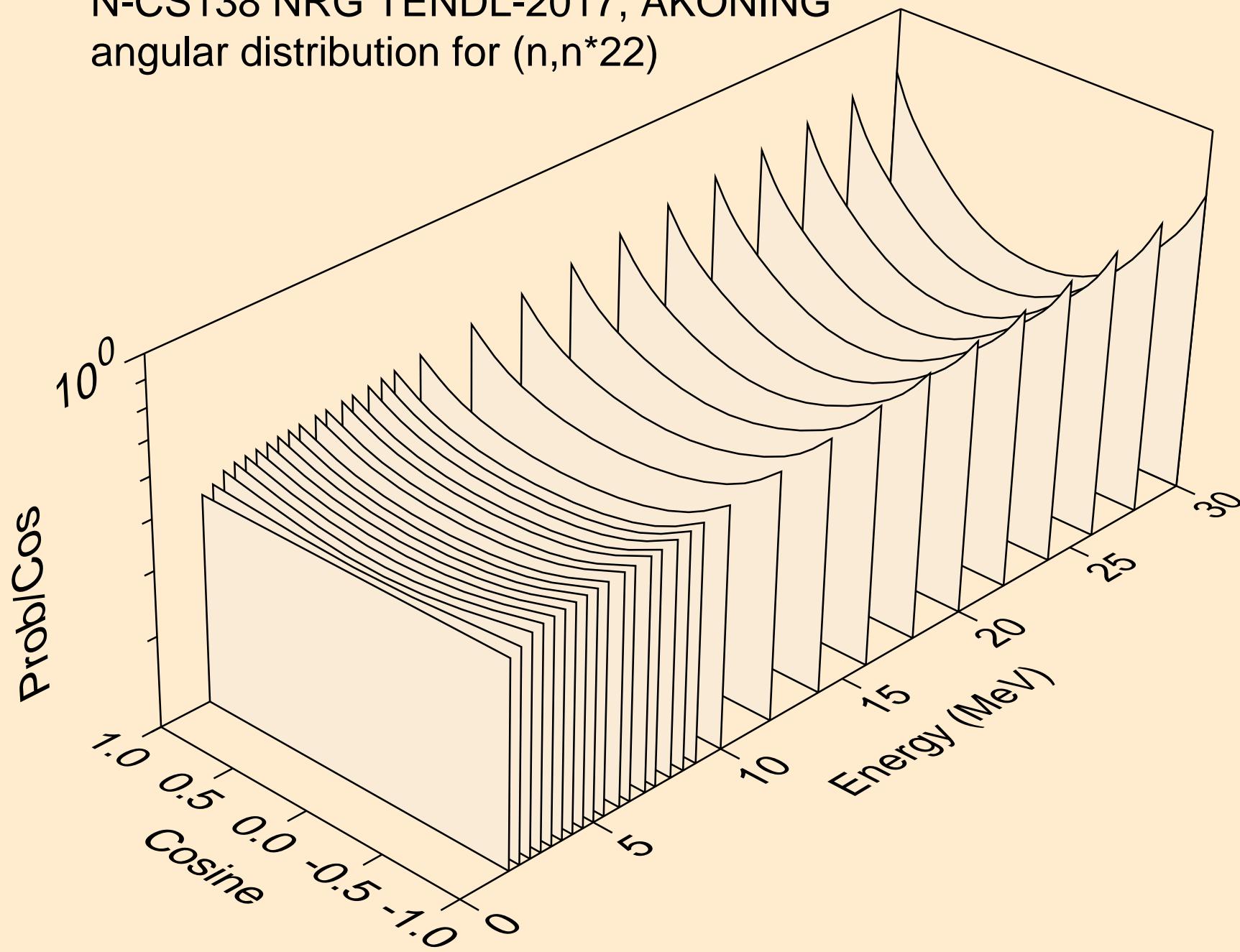
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*20)



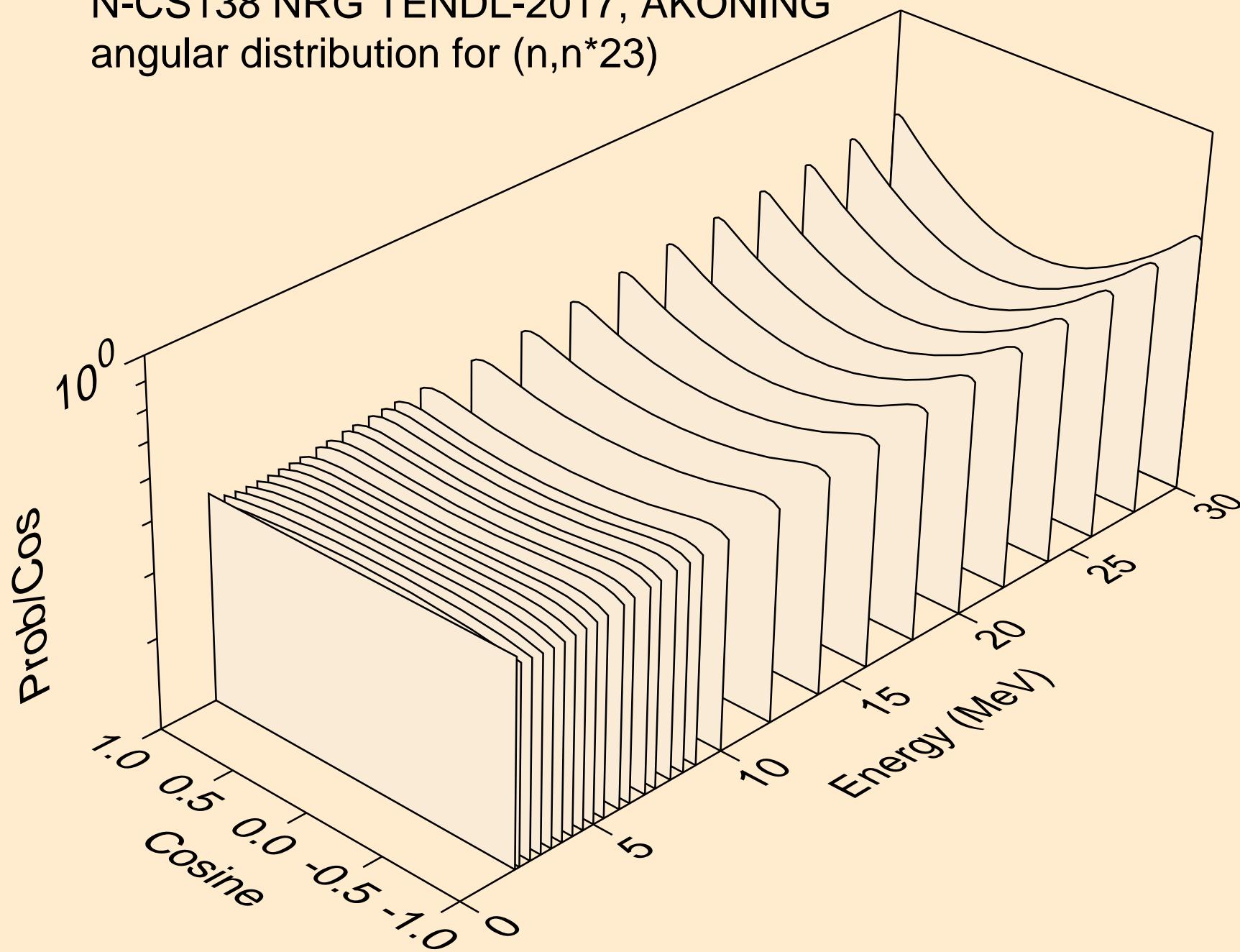
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*21)



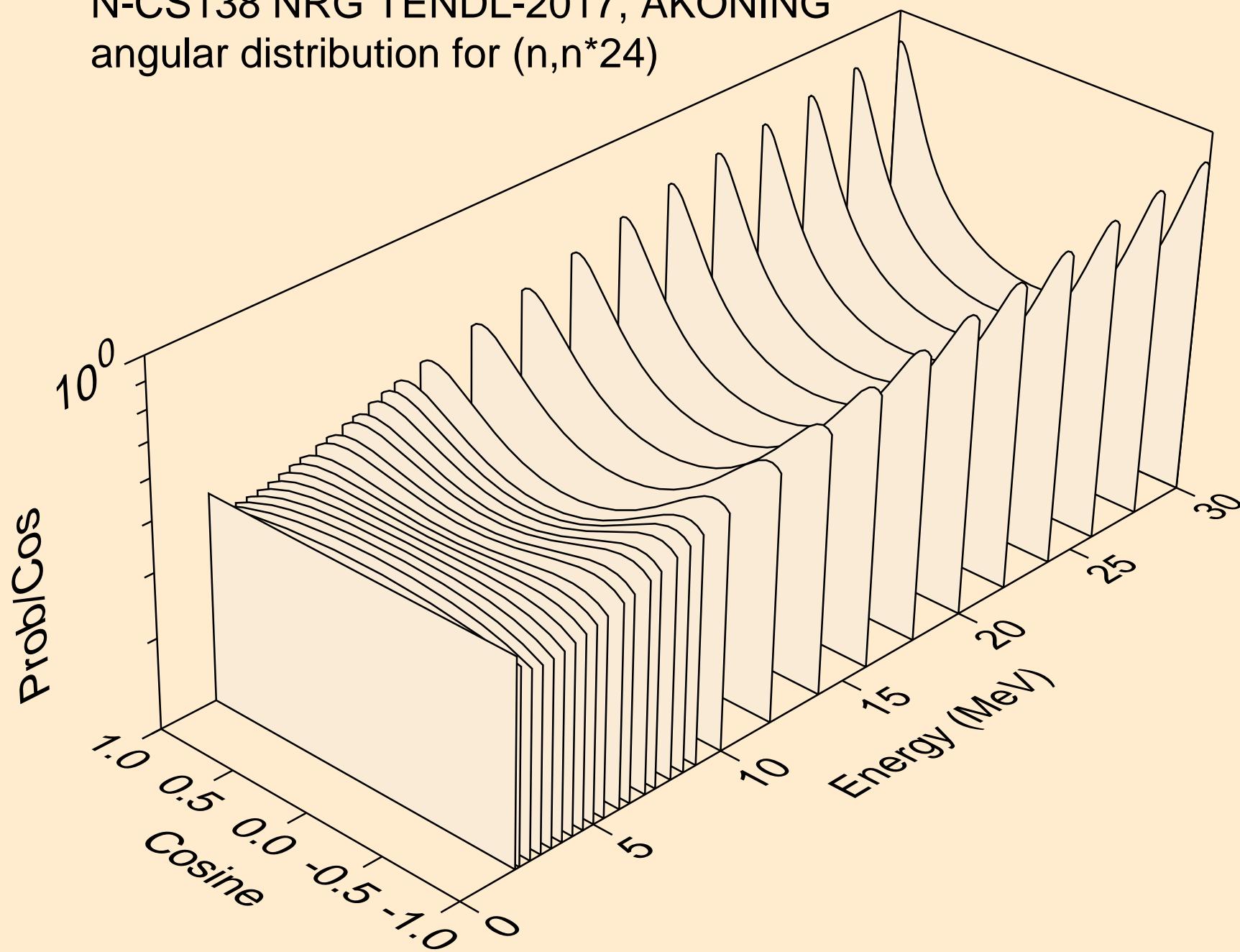
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*22)



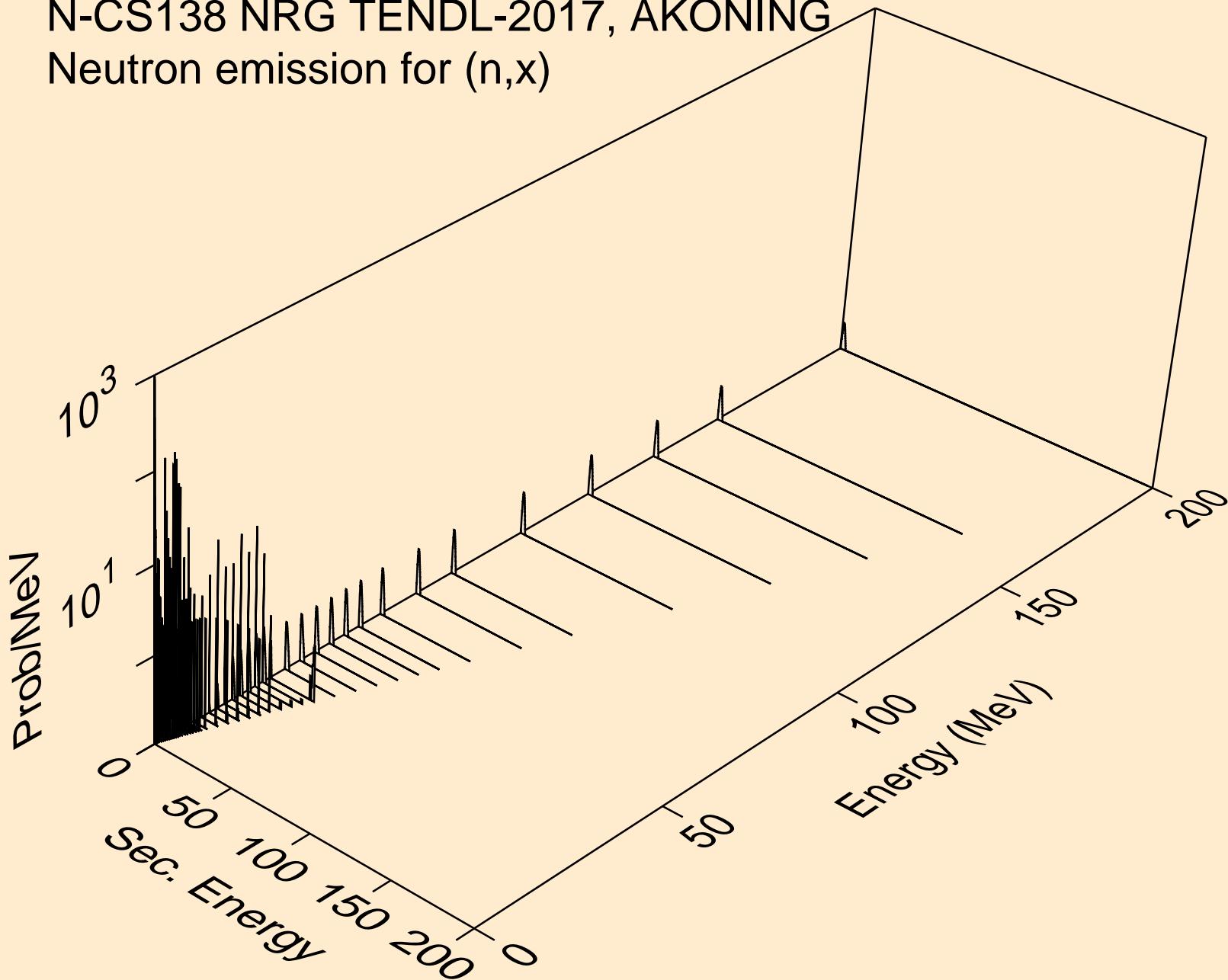
N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*23)



N-CS138 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*24)

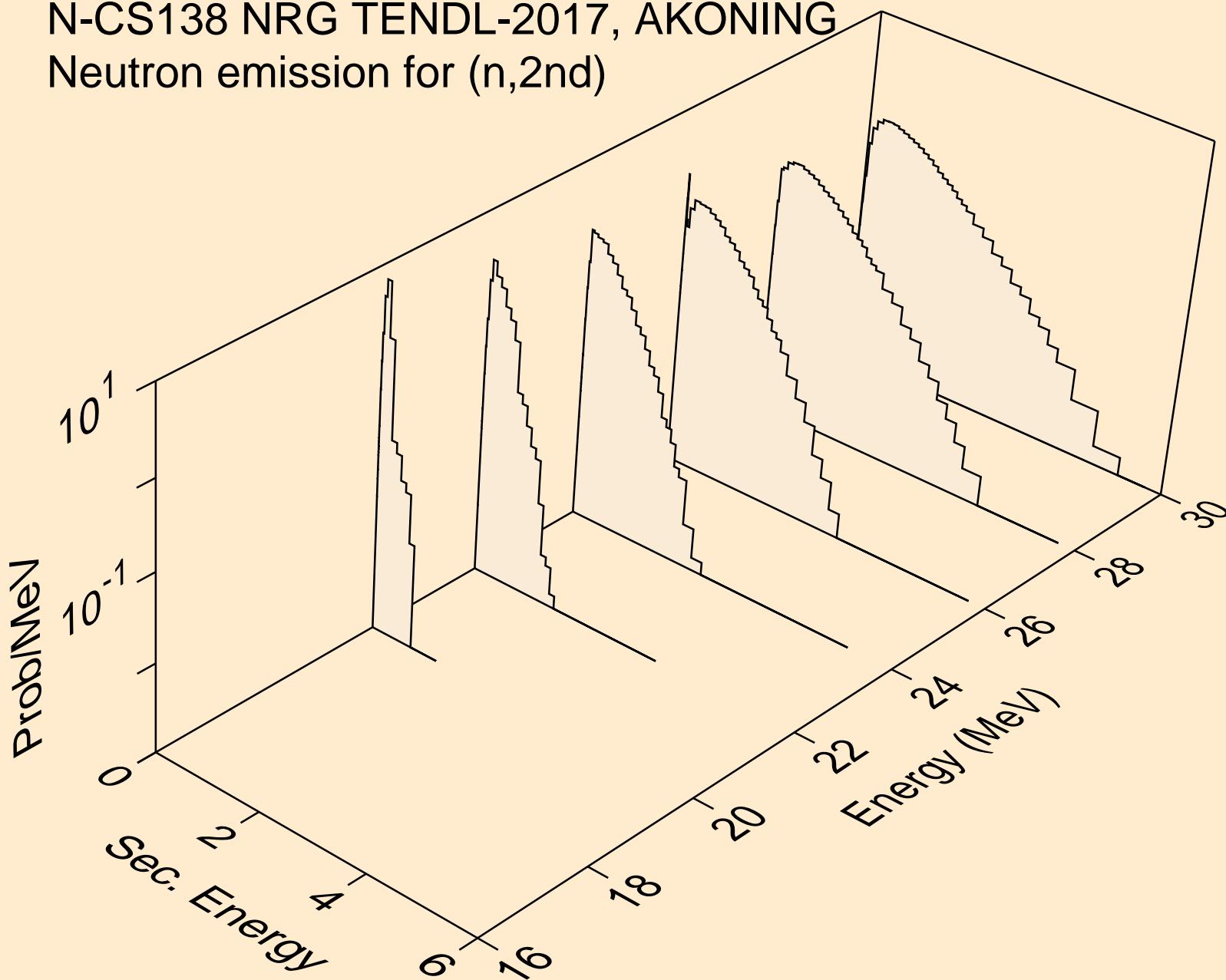


N-<sup>138</sup>N Neutron emission for (n,x)

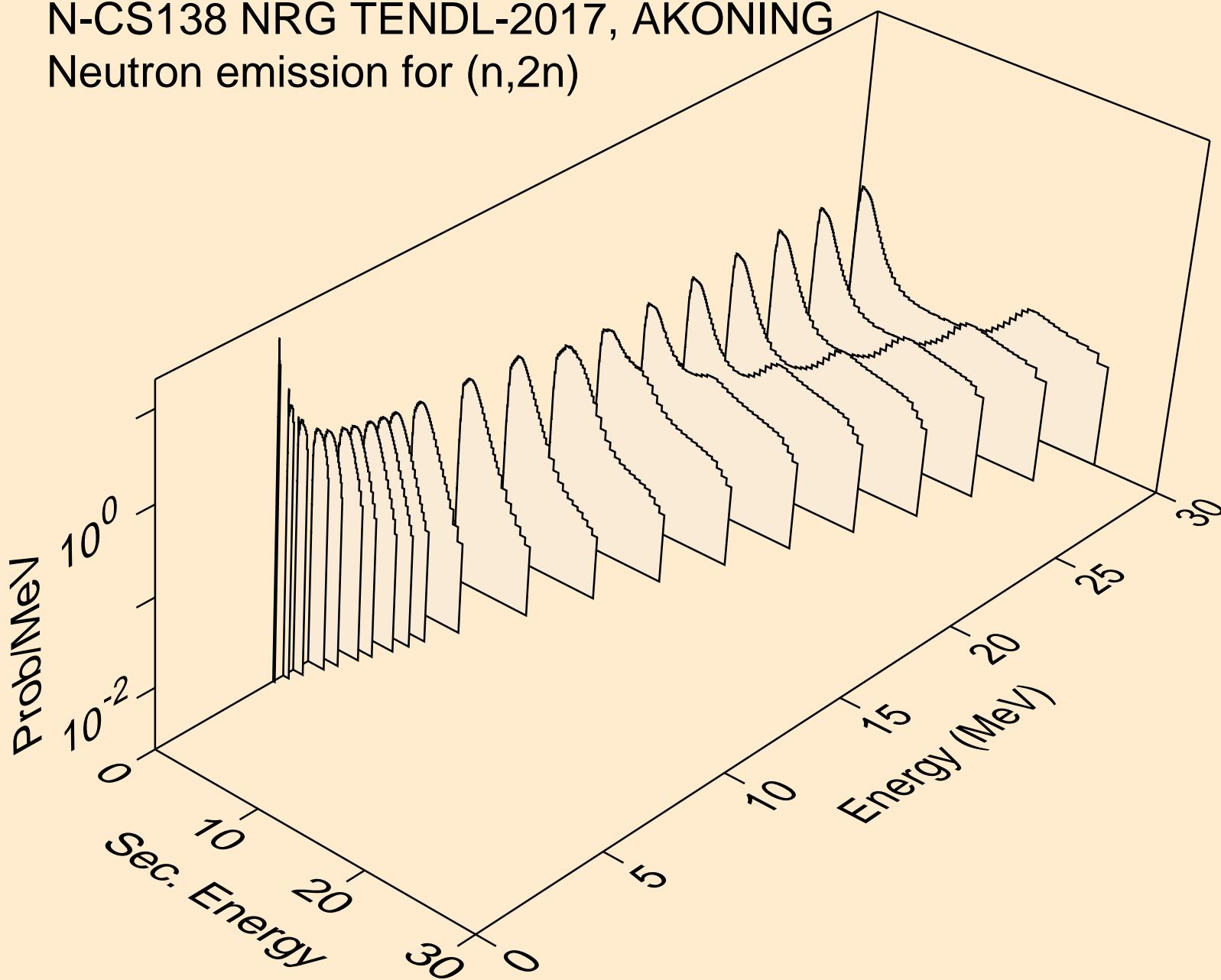


N-CS138 NRG TENDL-2017, AKONING

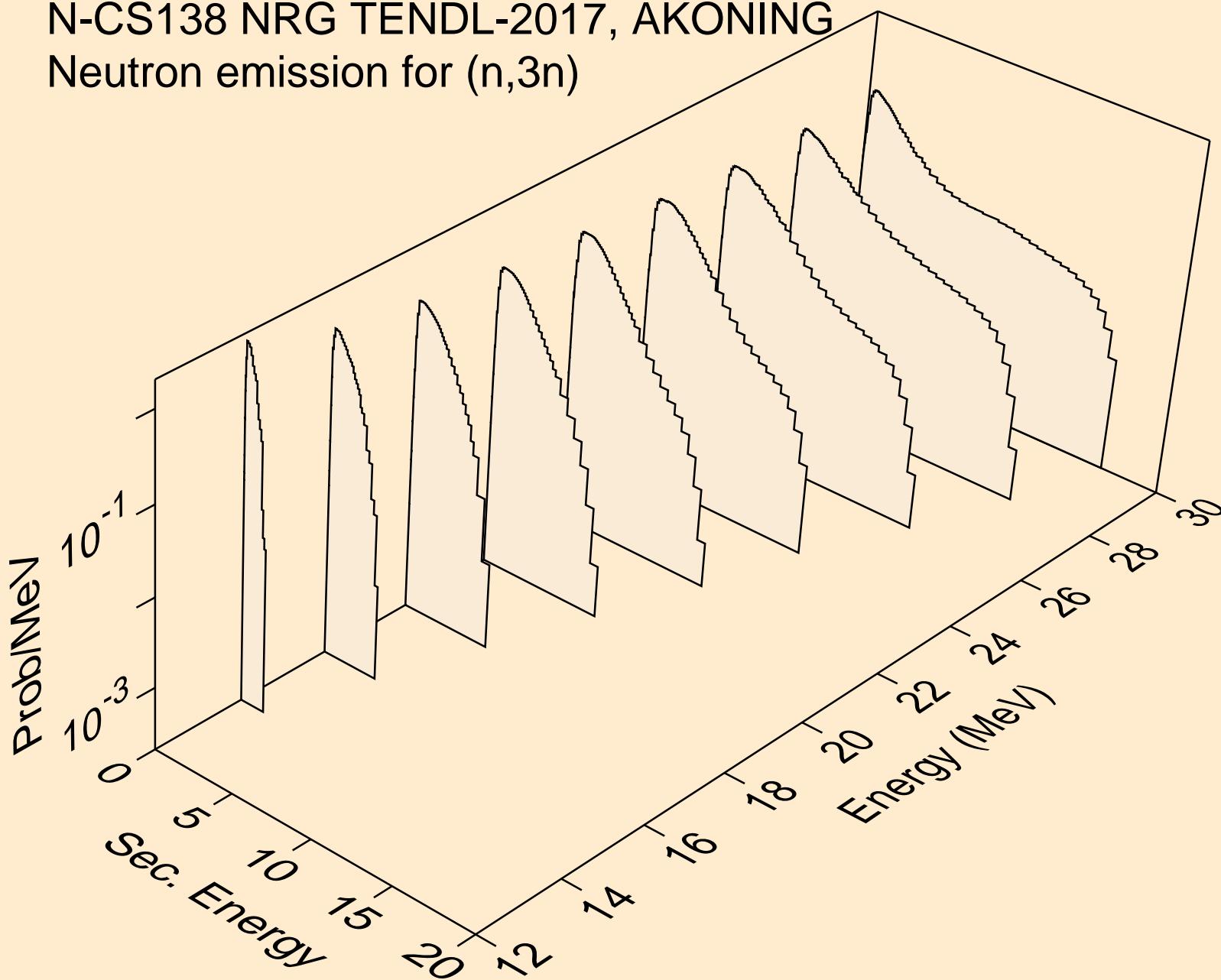
Neutron emission for (n,2nd)



N-CS138 NRG TENDL-2017, AKONING  
Neutron emission for (n,2n)

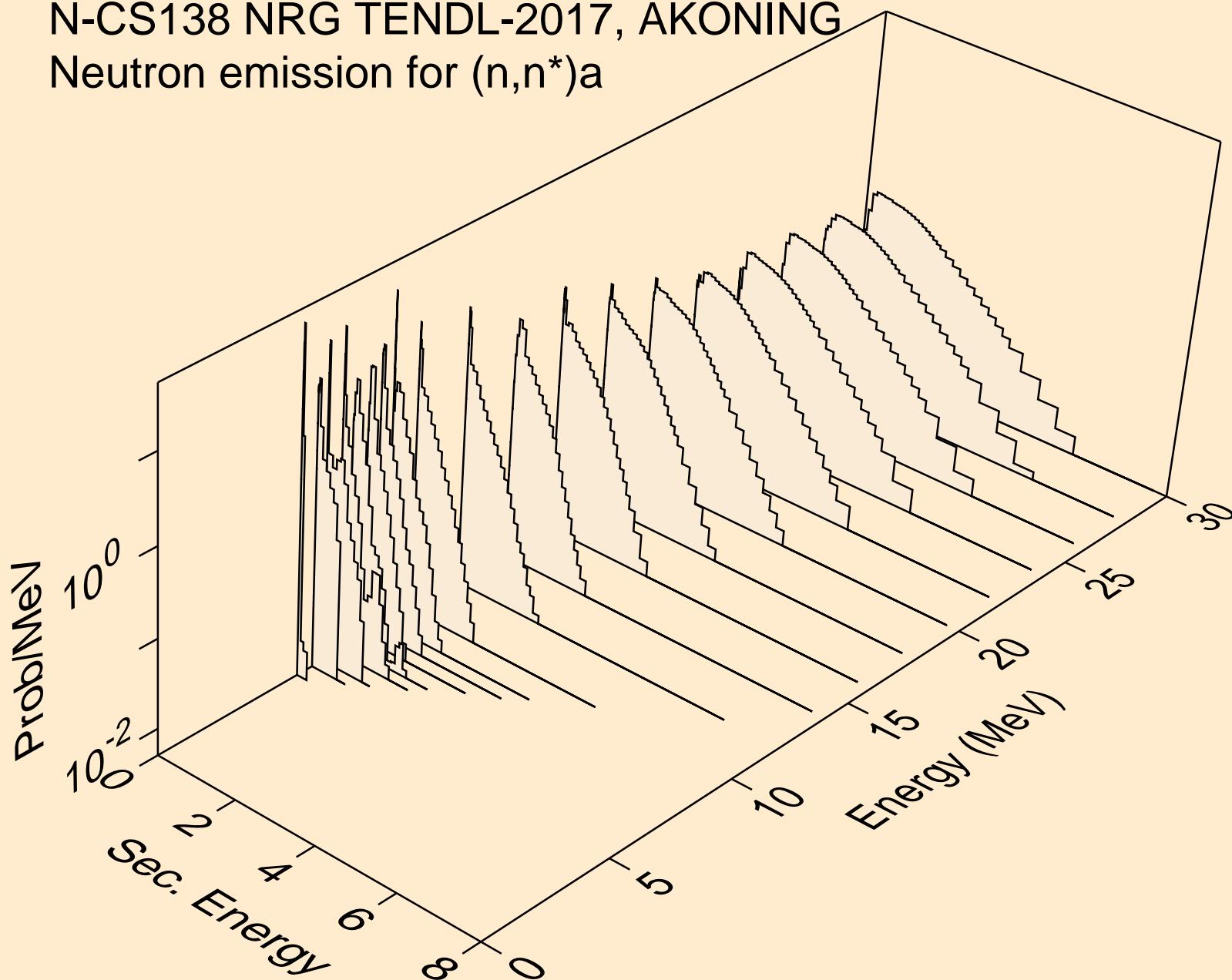


N-CS138 NRG TENDL-2017, AKONING  
Neutron emission for (n,3n)

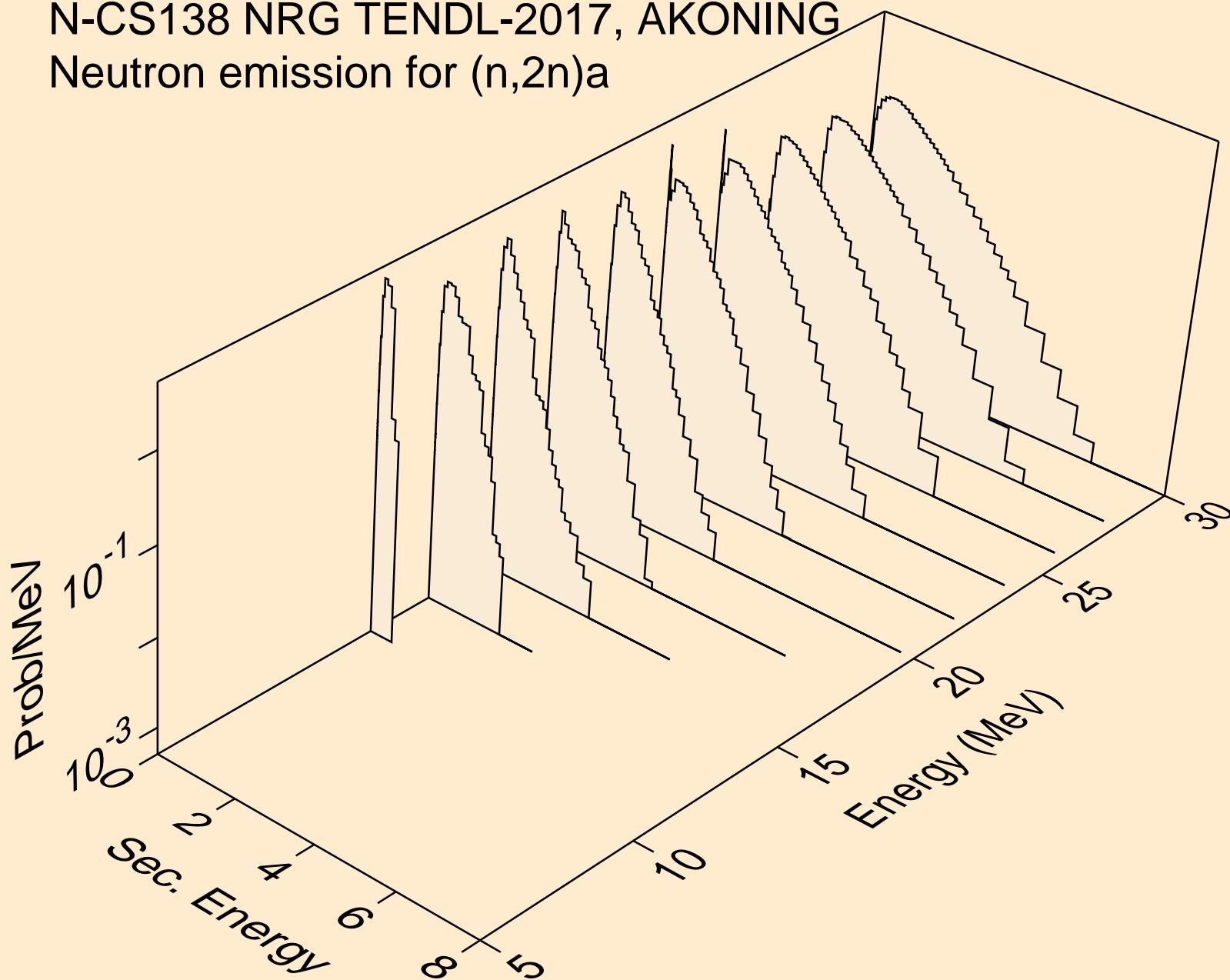


N-CS138 NRG TENDL-2017, AKONING

Neutron emission for  $(n,n^*)a$

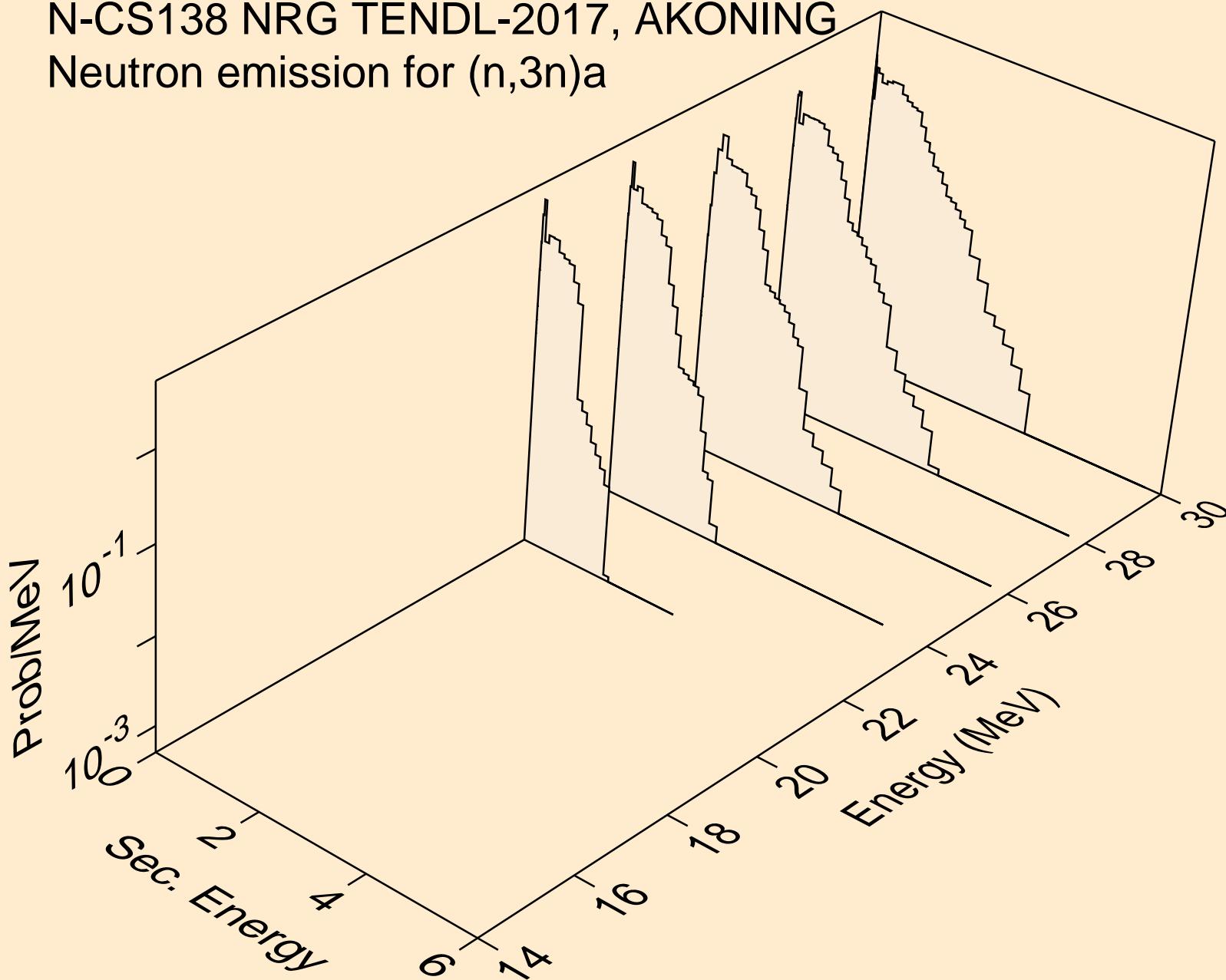


N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Neutron emission for (n,2n)a



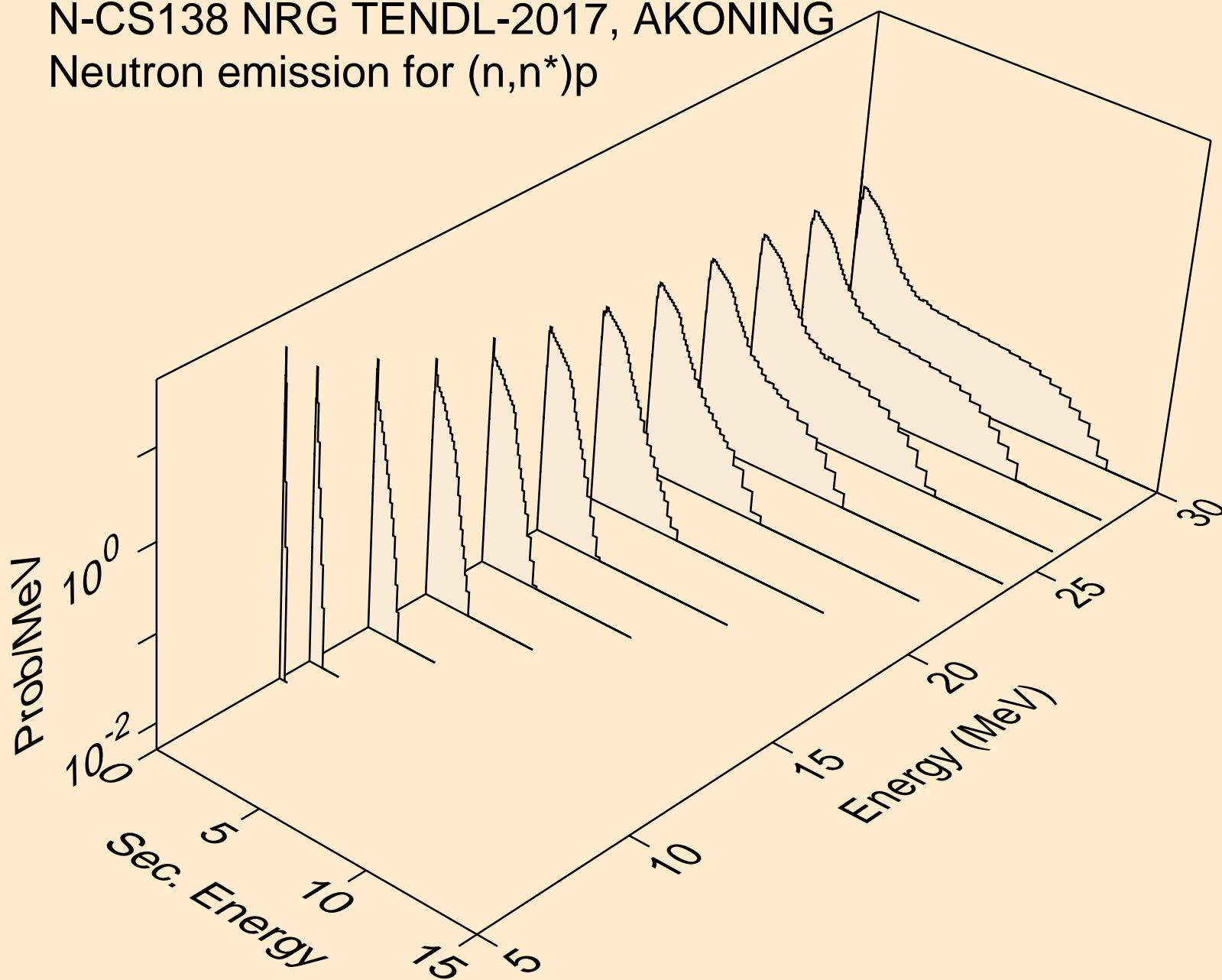
N-CS138 NRG TENDL-2017, AKONING

Neutron emission for (n,3n)a



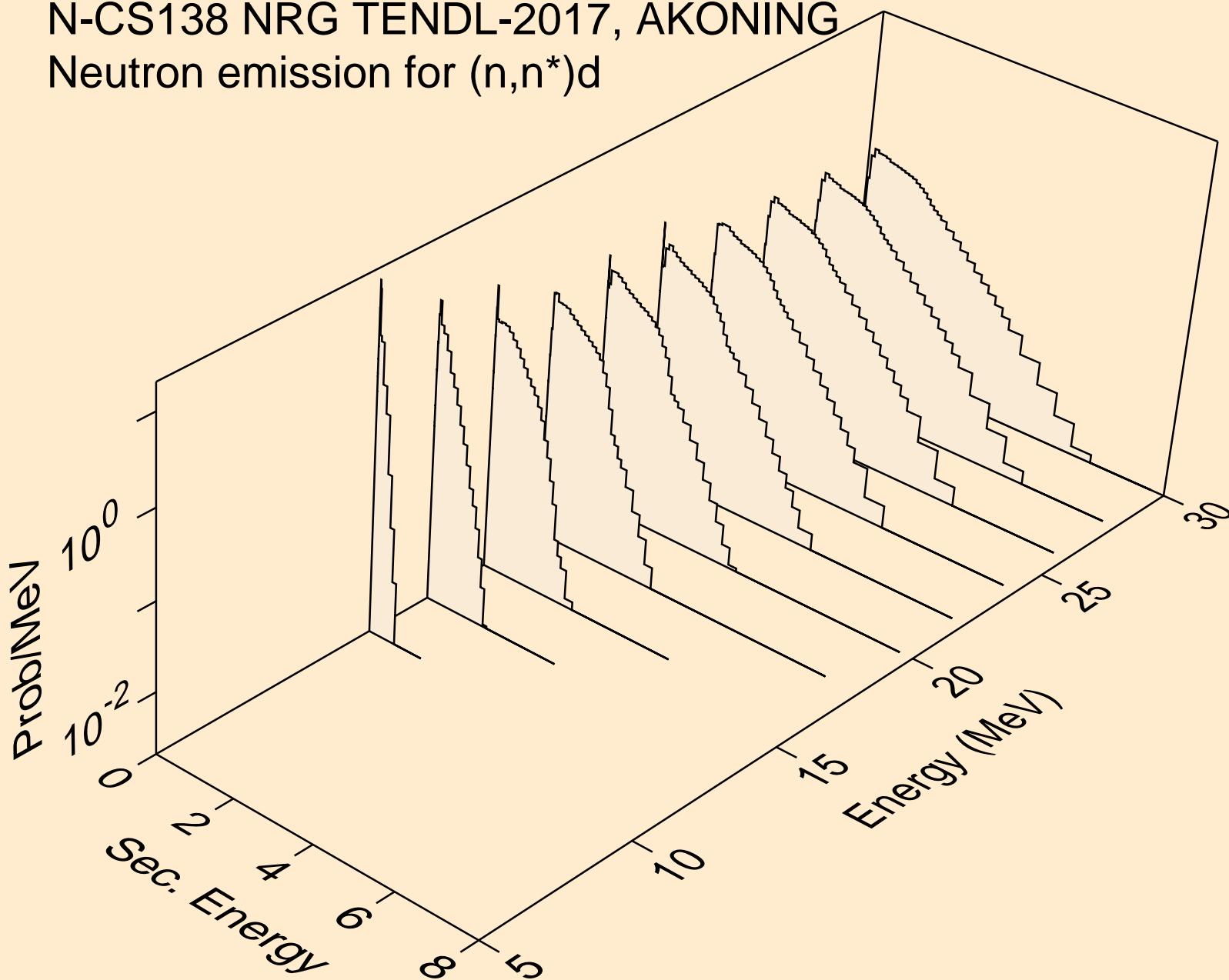
N-CS138 NRG TENDL-2017, AKONING

Neutron emission for  $(n,n^*)p$



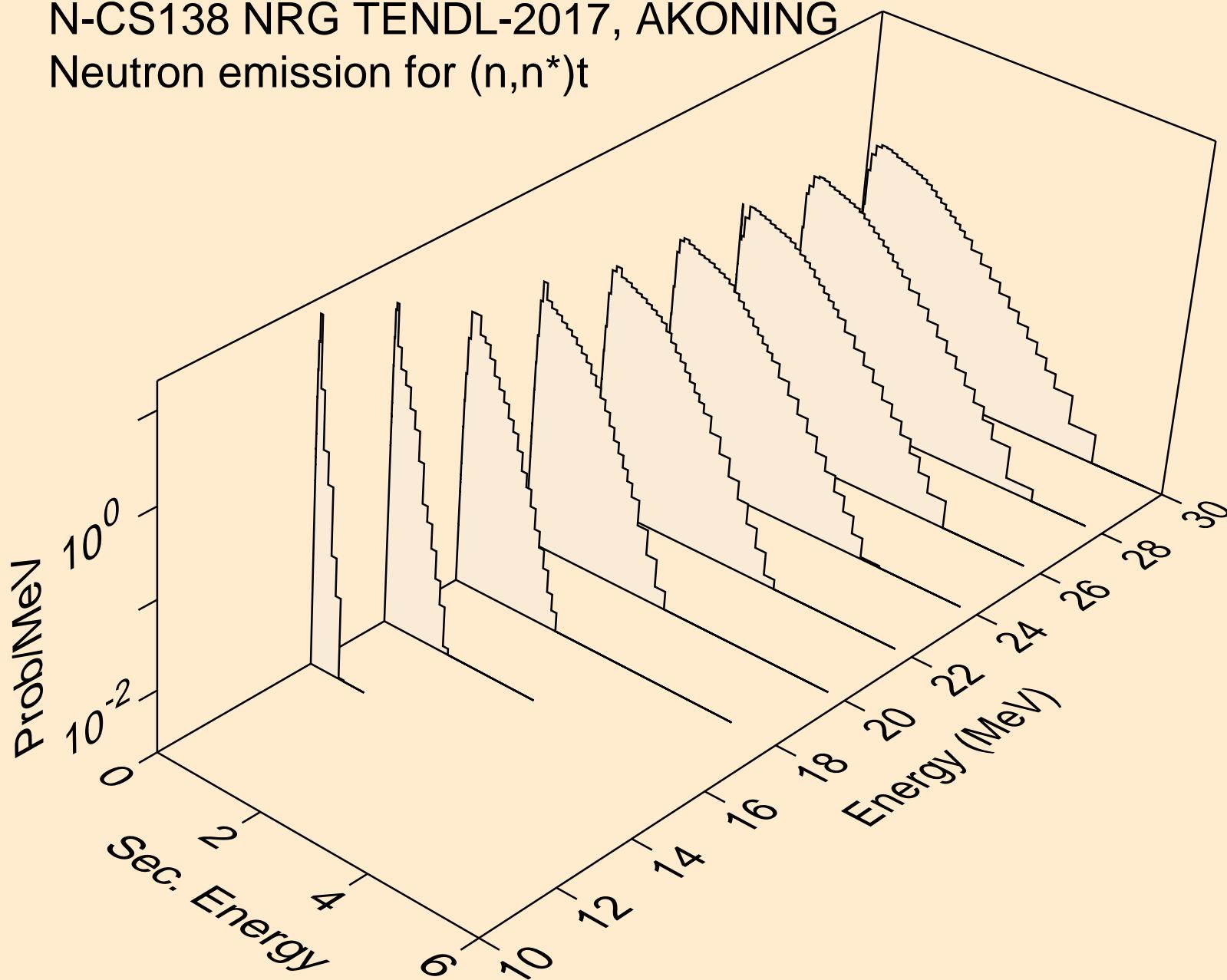
N-CS138 NRG TENDL-2017, AKONING

Neutron emission for  $(n,n^*)d$



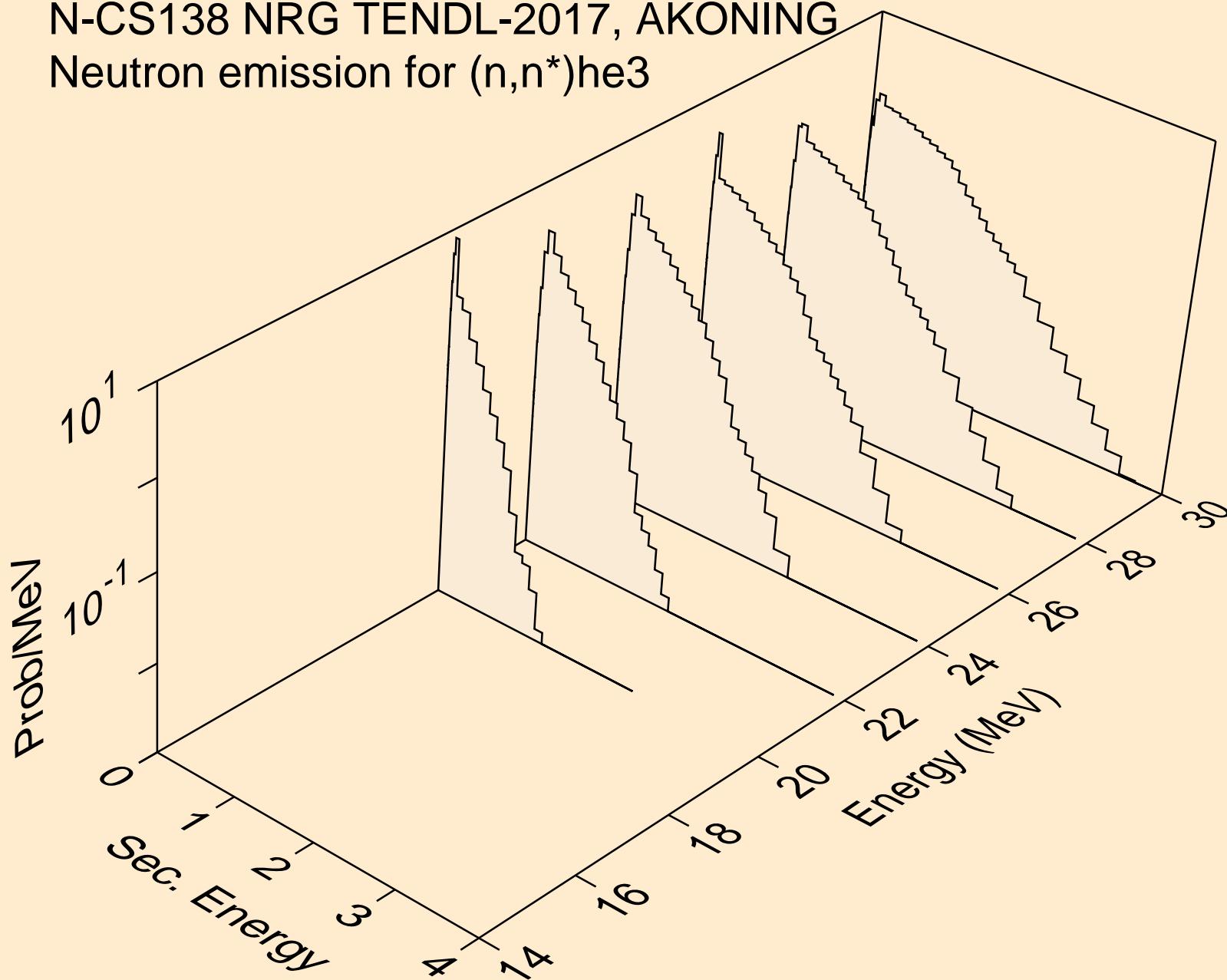
N-<sup>138</sup>CS NRG TENDL-2017, AKONING

Neutron emission for (n,n\*)t

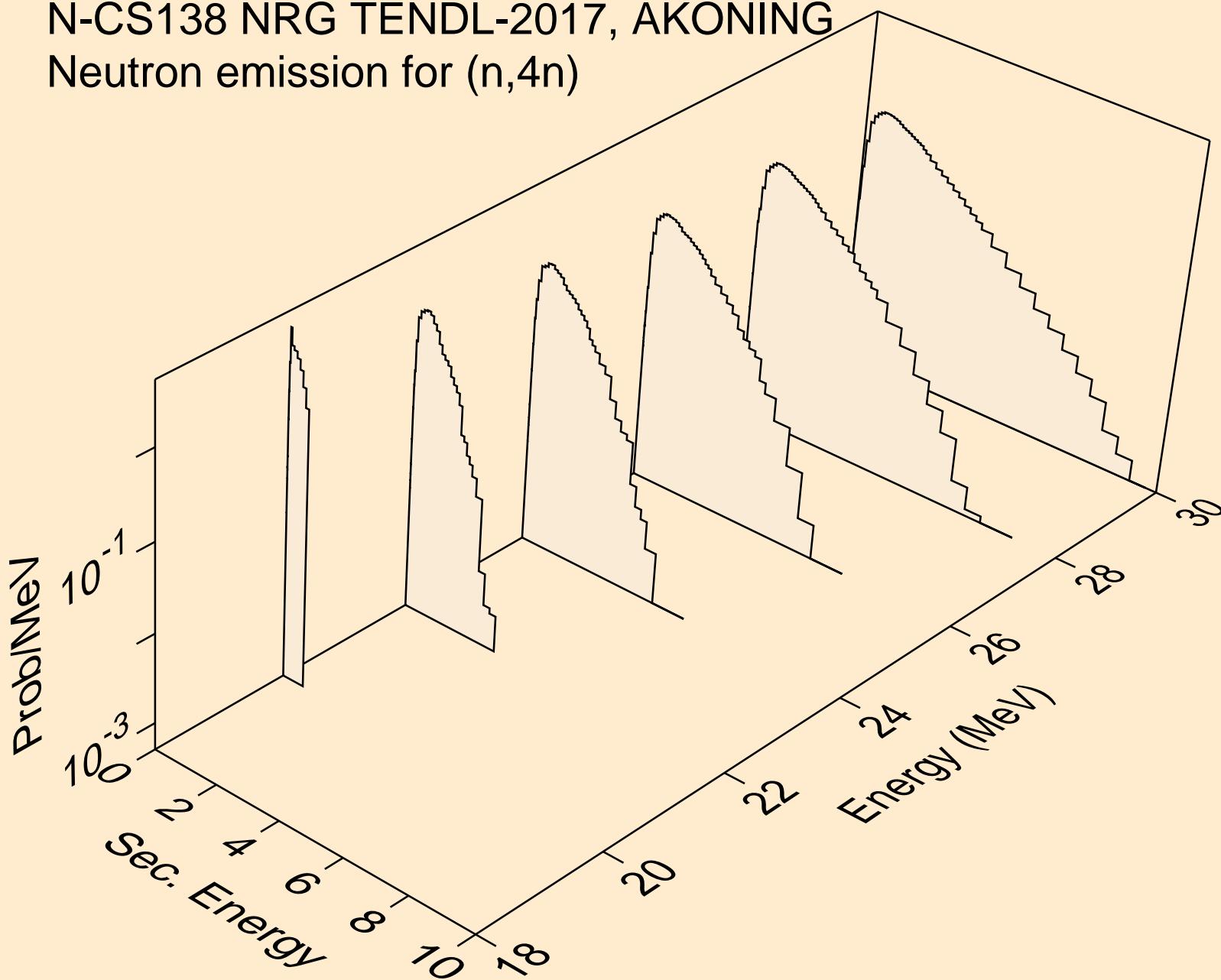


N-CS138 NRG TENDL-2017, AKONING

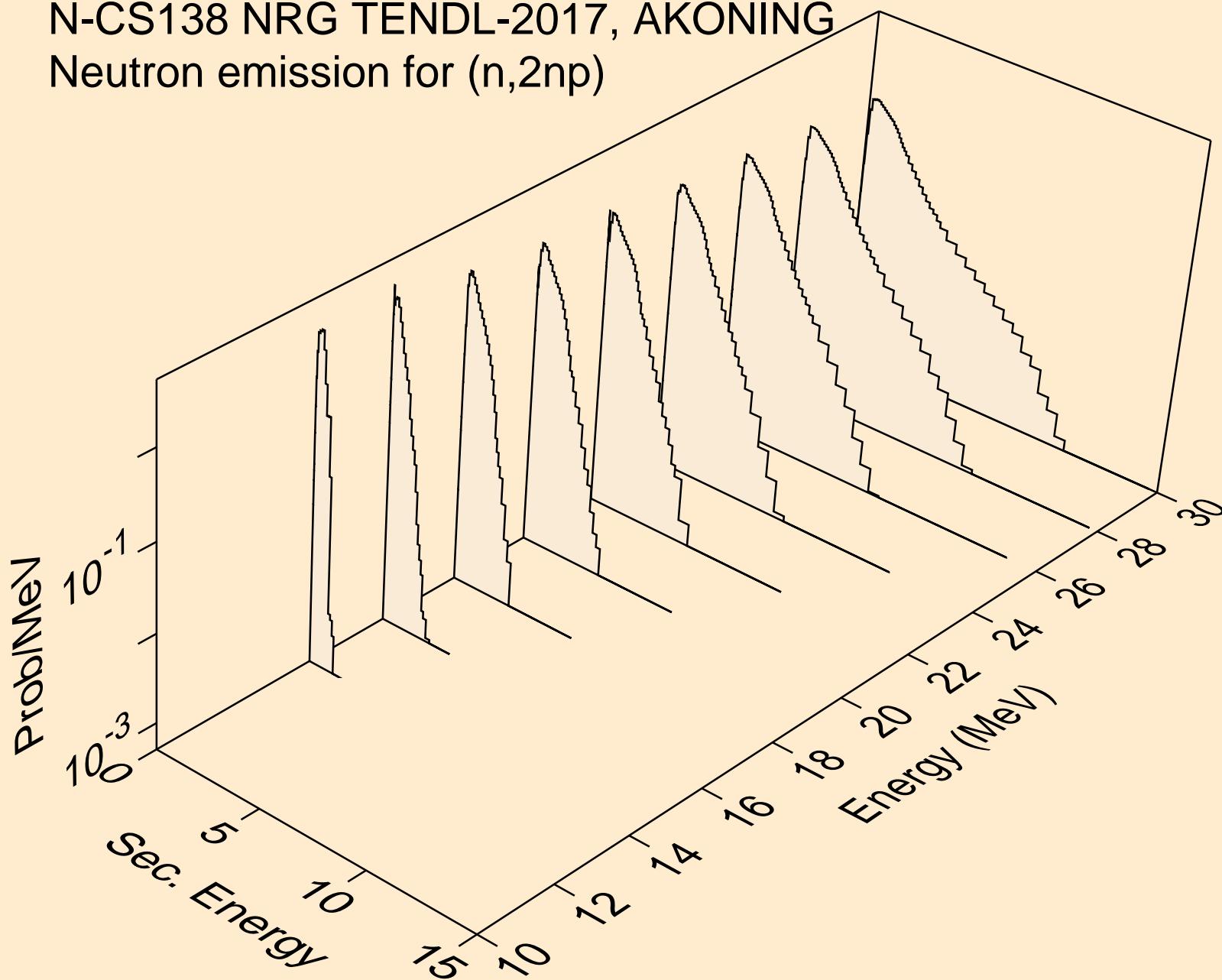
Neutron emission for  $(n,n^*)\text{he3}$



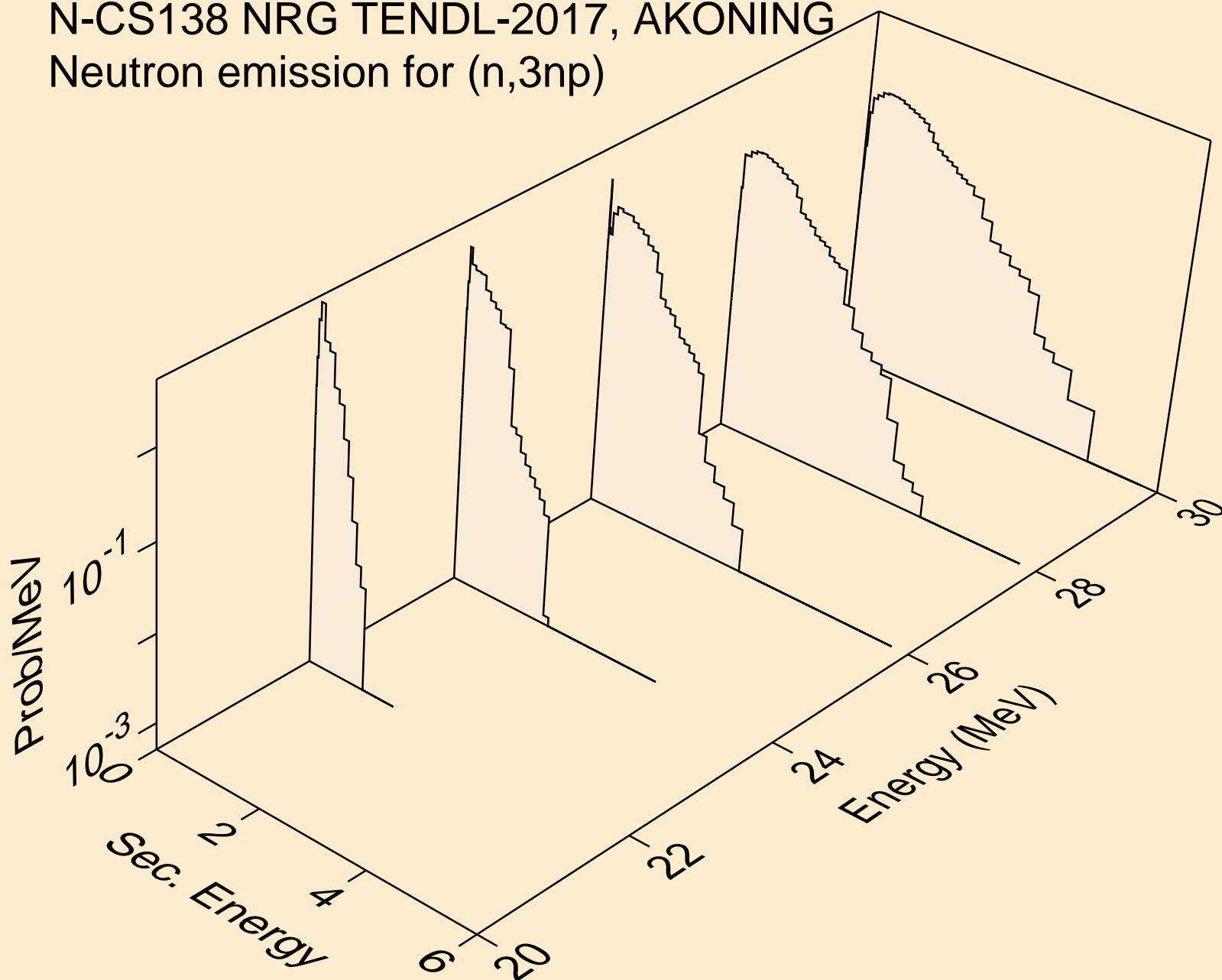
N-CS138 NRG TENDL-2017, AKONING  
Neutron emission for (n,4n)



N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Neutron emission for (n,2np)

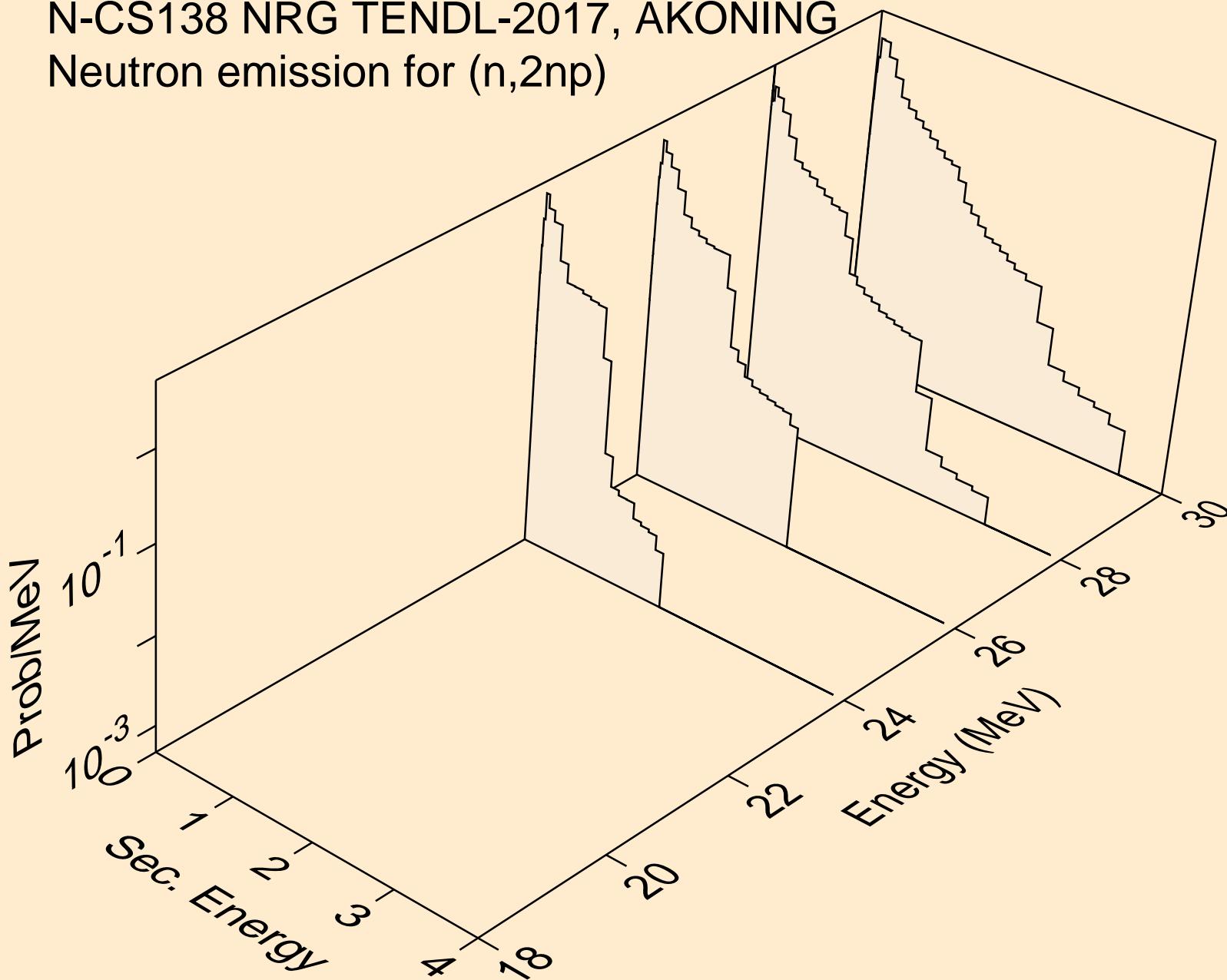


N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Neutron emission for (n,3np)



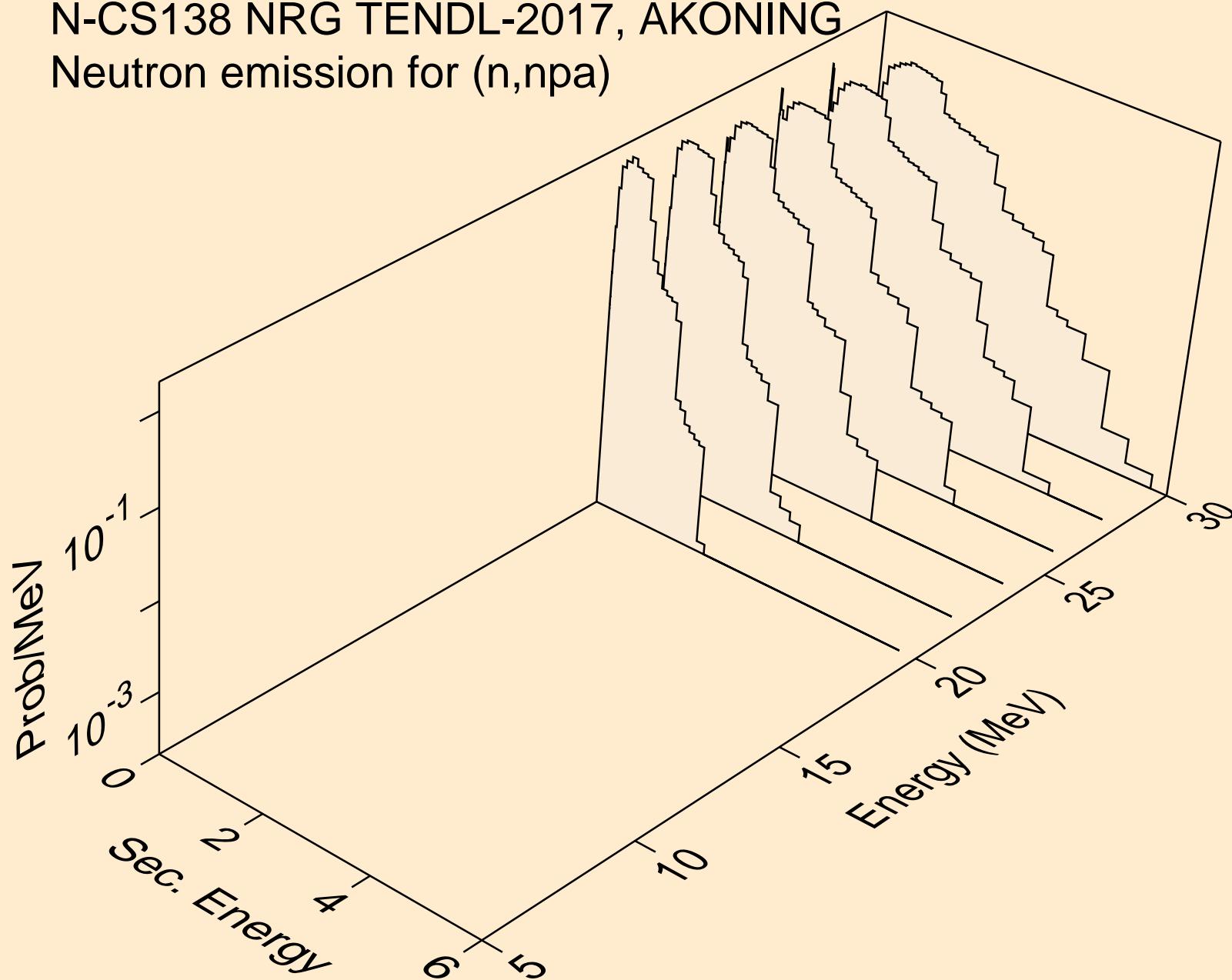
N-CS138 NRG TENDL-2017, AKONING

Neutron emission for (n,2np)

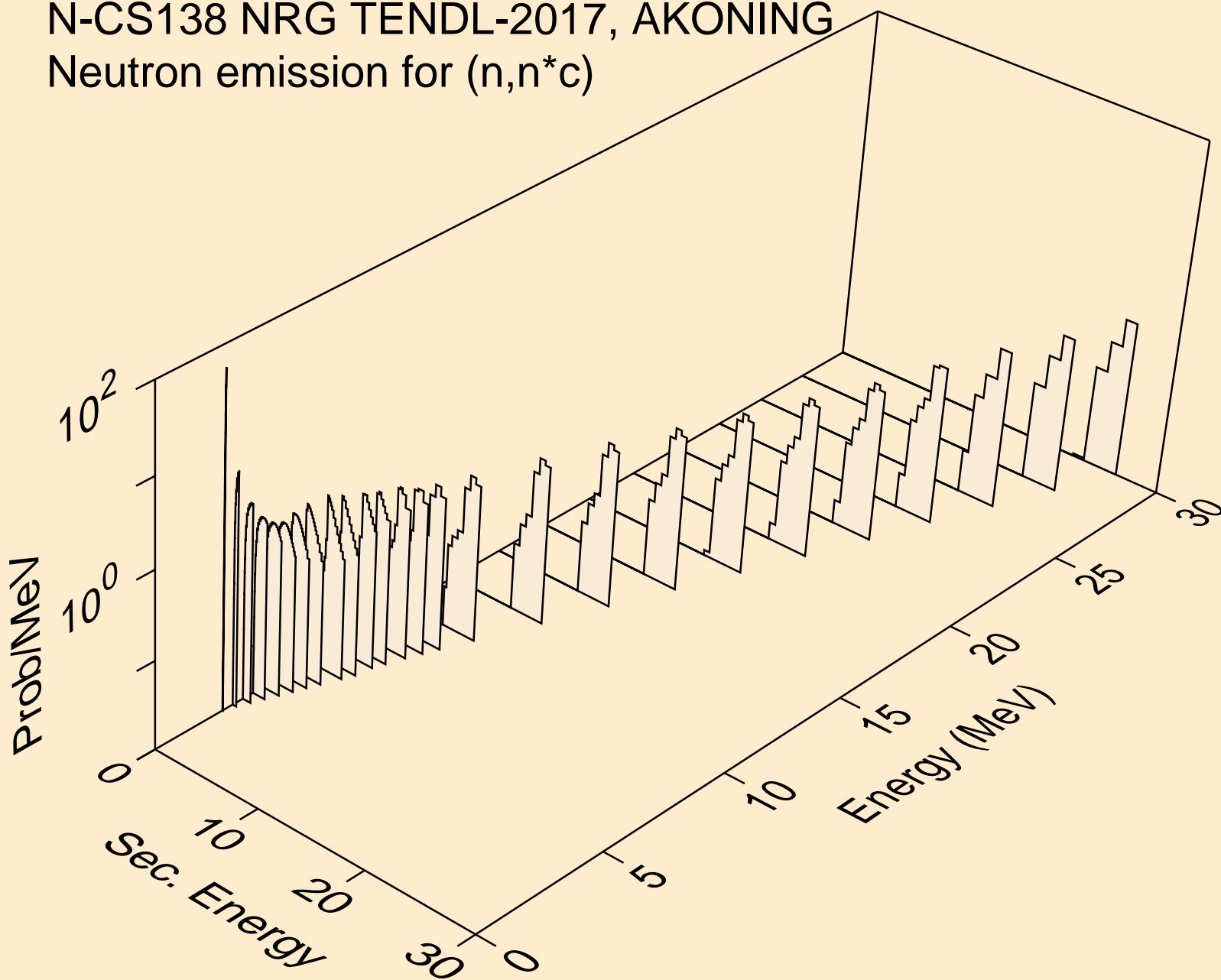


N-<sup>138</sup>CS NRG TENDL-2017, AKONING

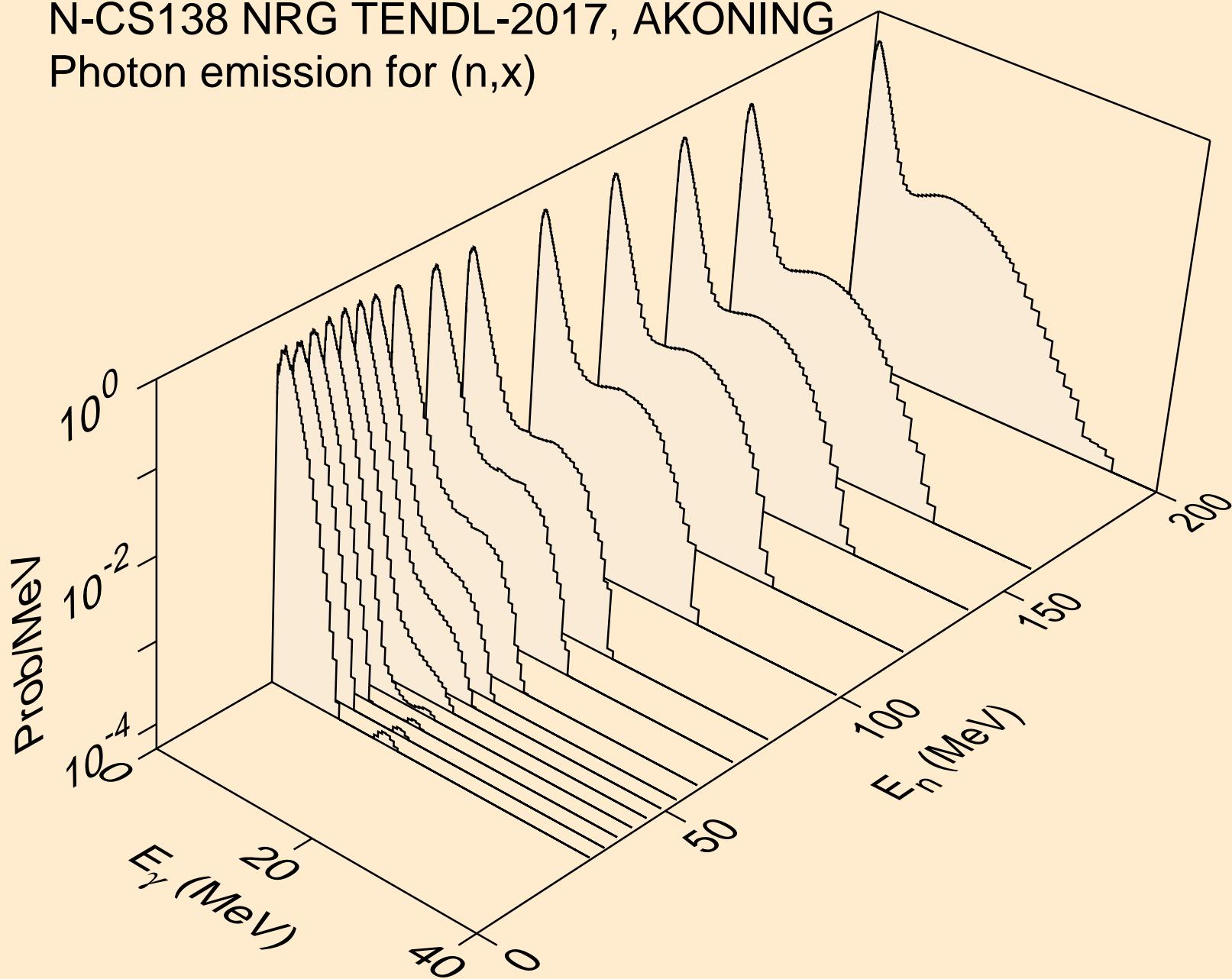
Neutron emission for (n,npa)



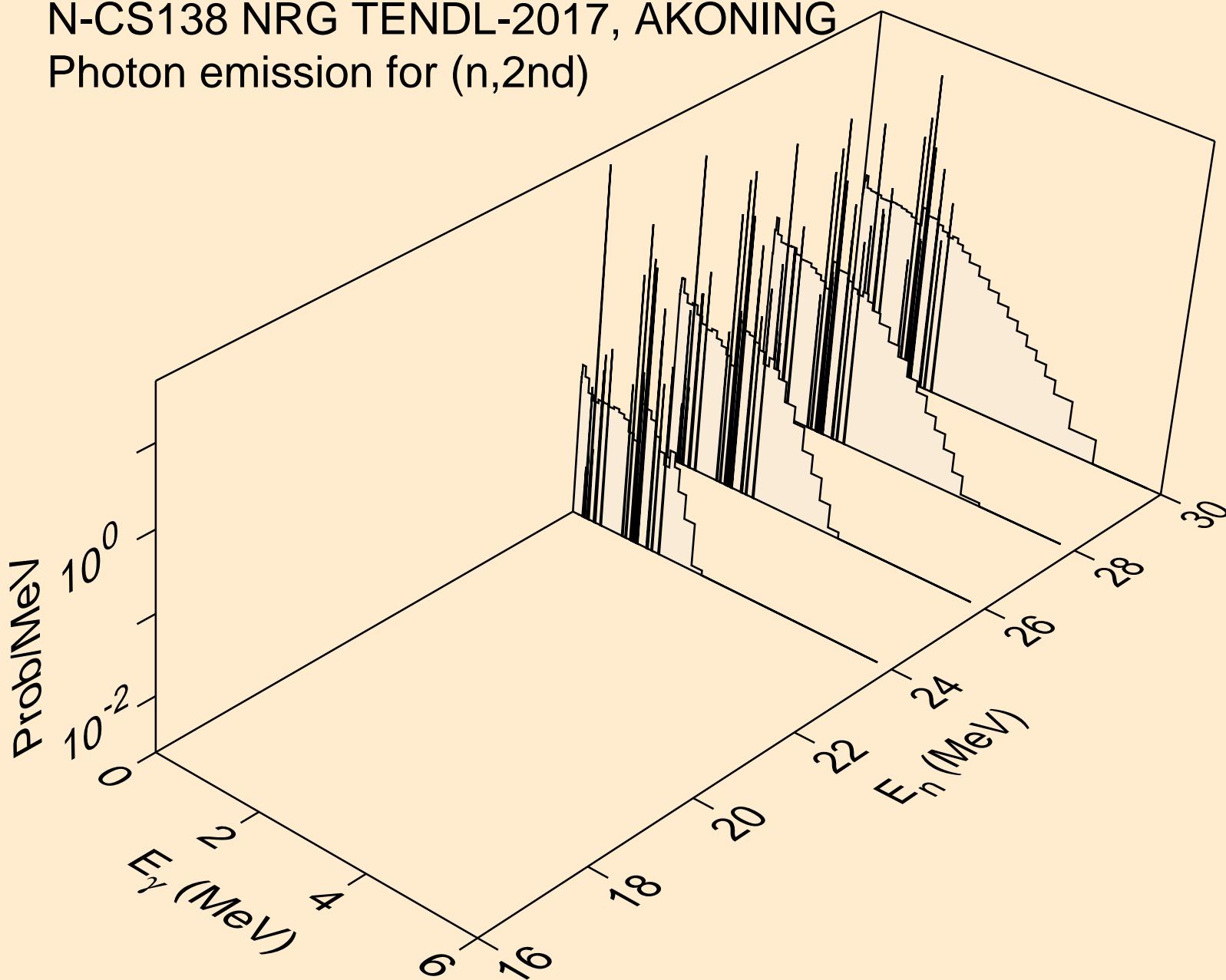
N-<sup>138</sup>NRG TENDL-2017, AKONING  
Neutron emission for (n,n\*c)



N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Photon emission for (n,x)

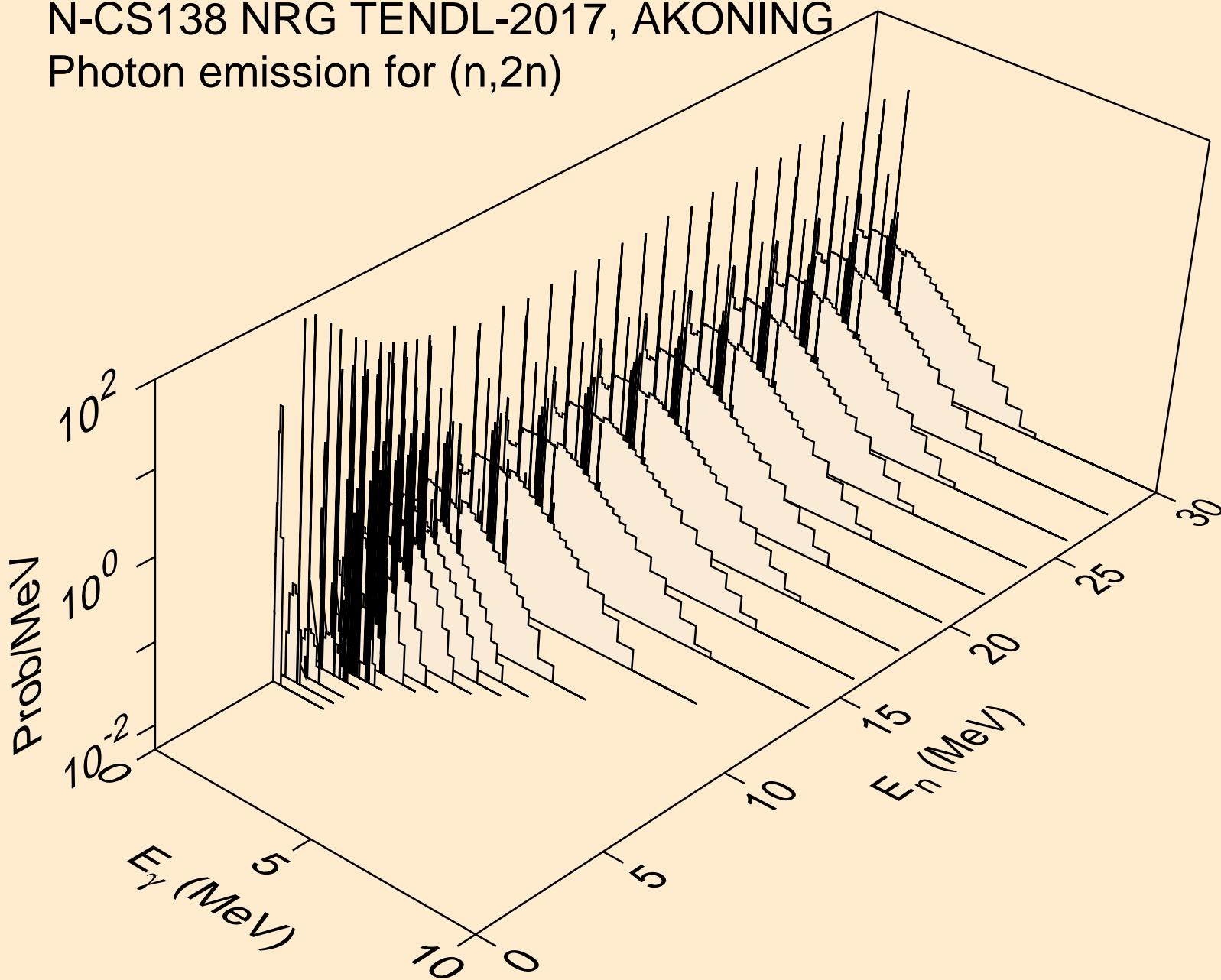


N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Photon emission for (n,2nd)



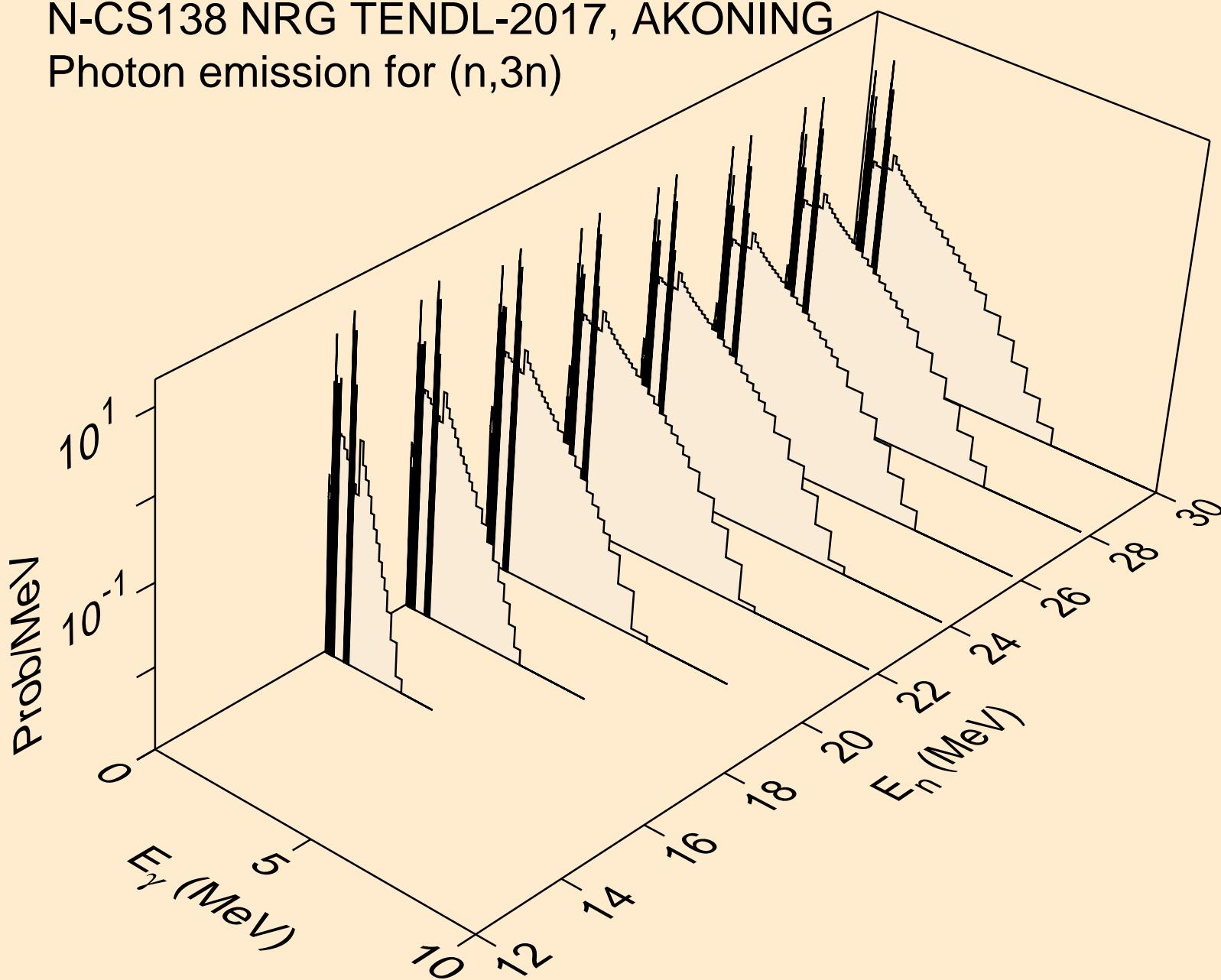
N-CS138 NRG TENDL-2017, AKONING

Photon emission for (n,2n)

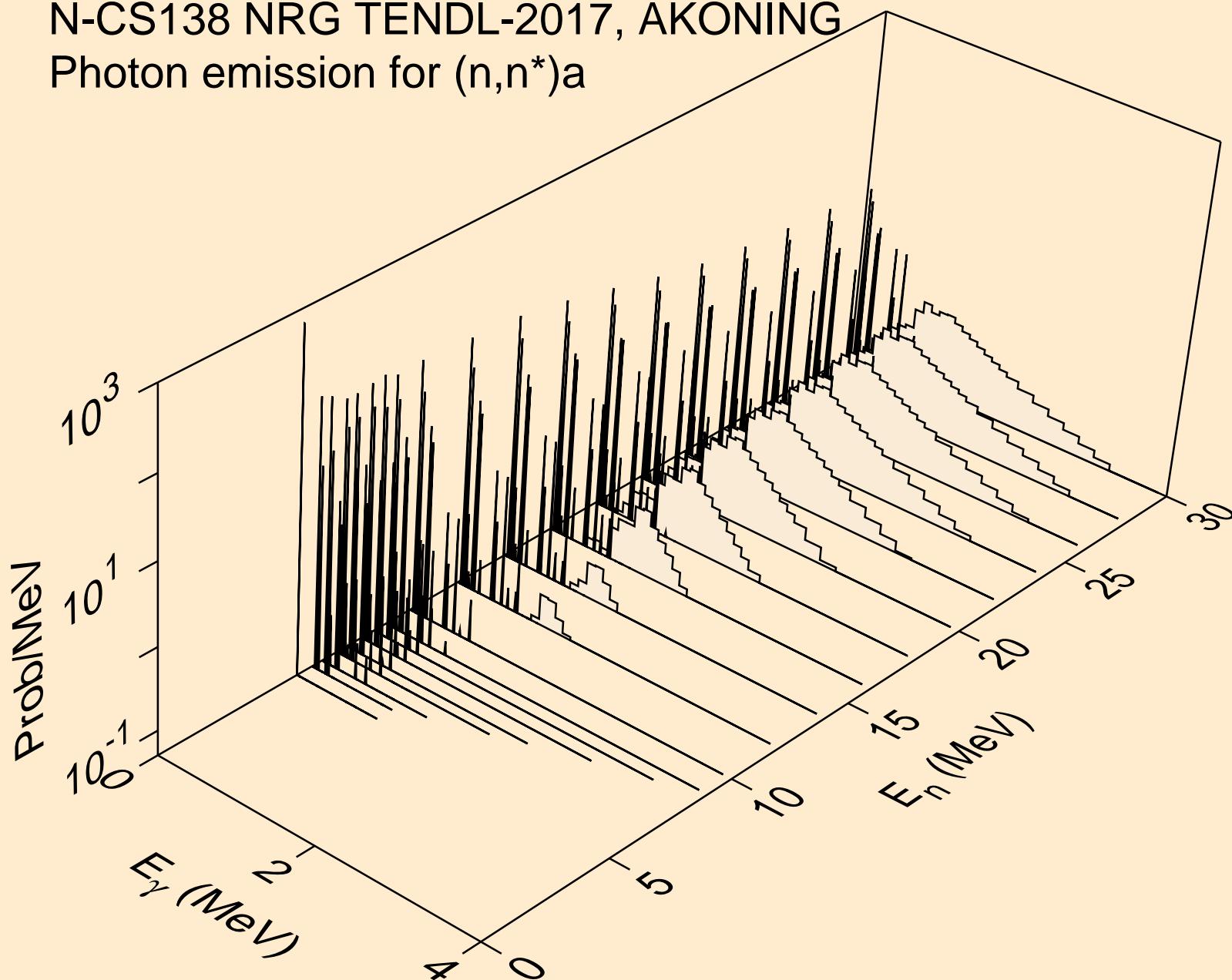


# N-<sup>138</sup>CS NRG TENDL-2017, AKONING

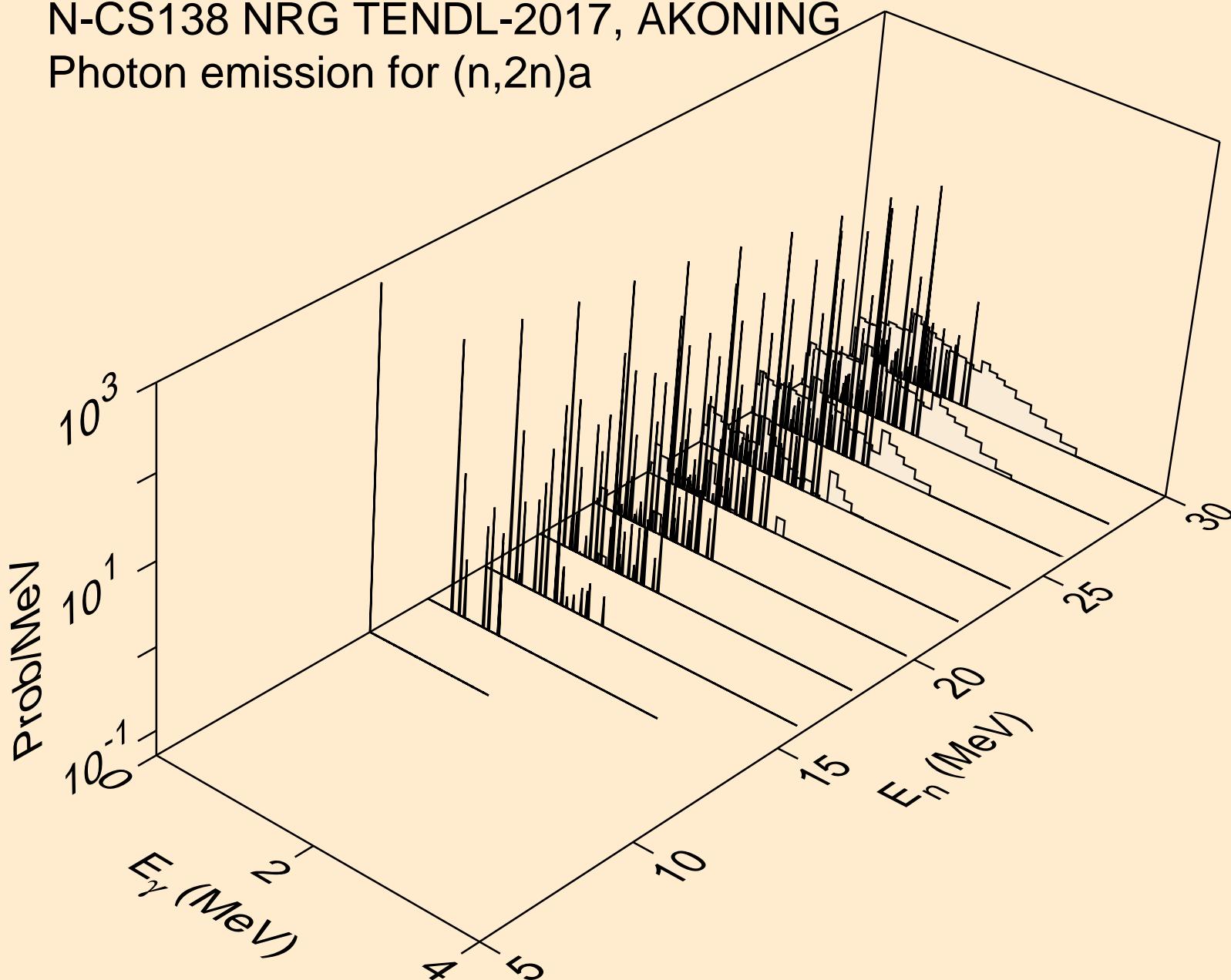
Photon emission for (n,3n)



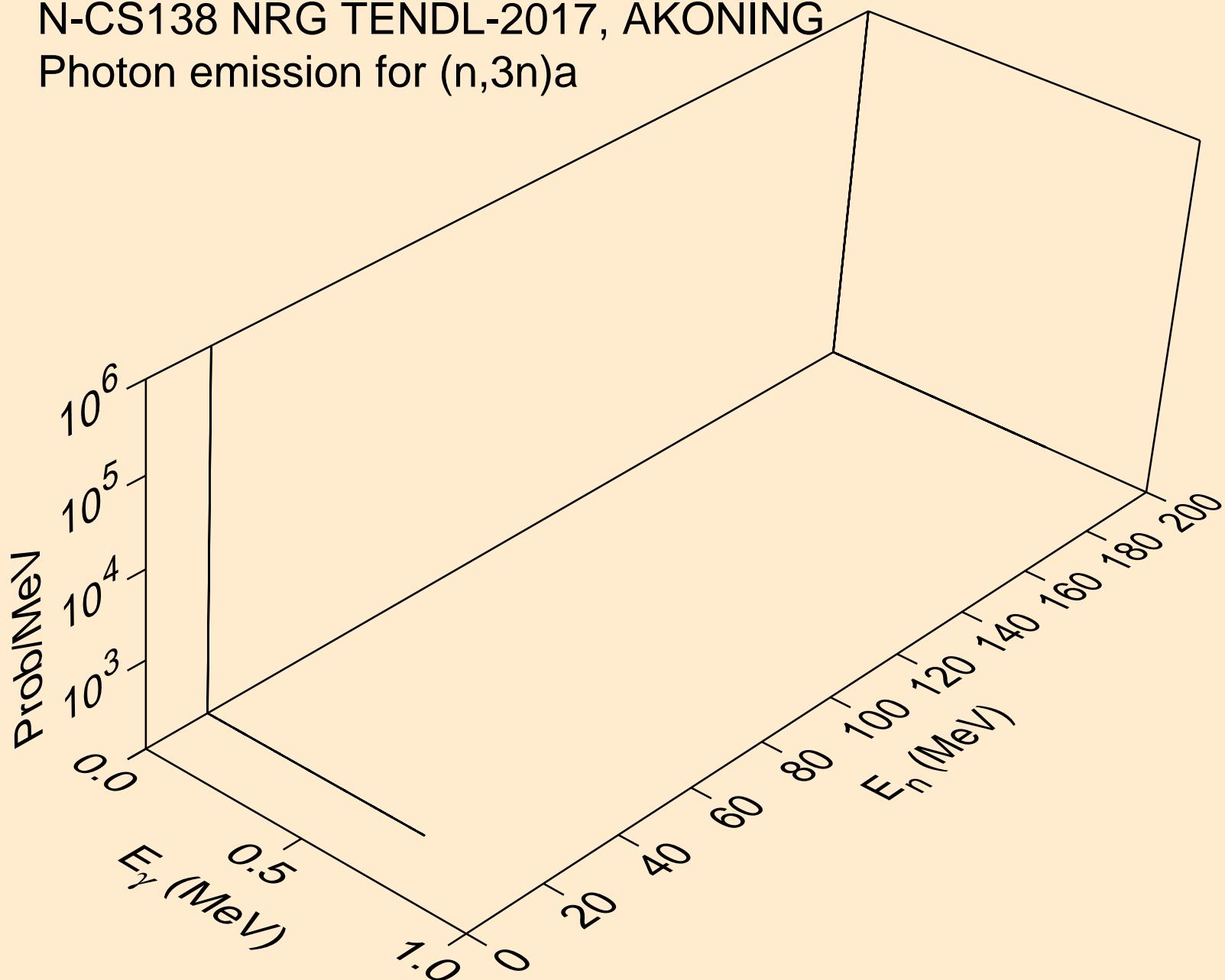
N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Photon emission for (n,n\*)a



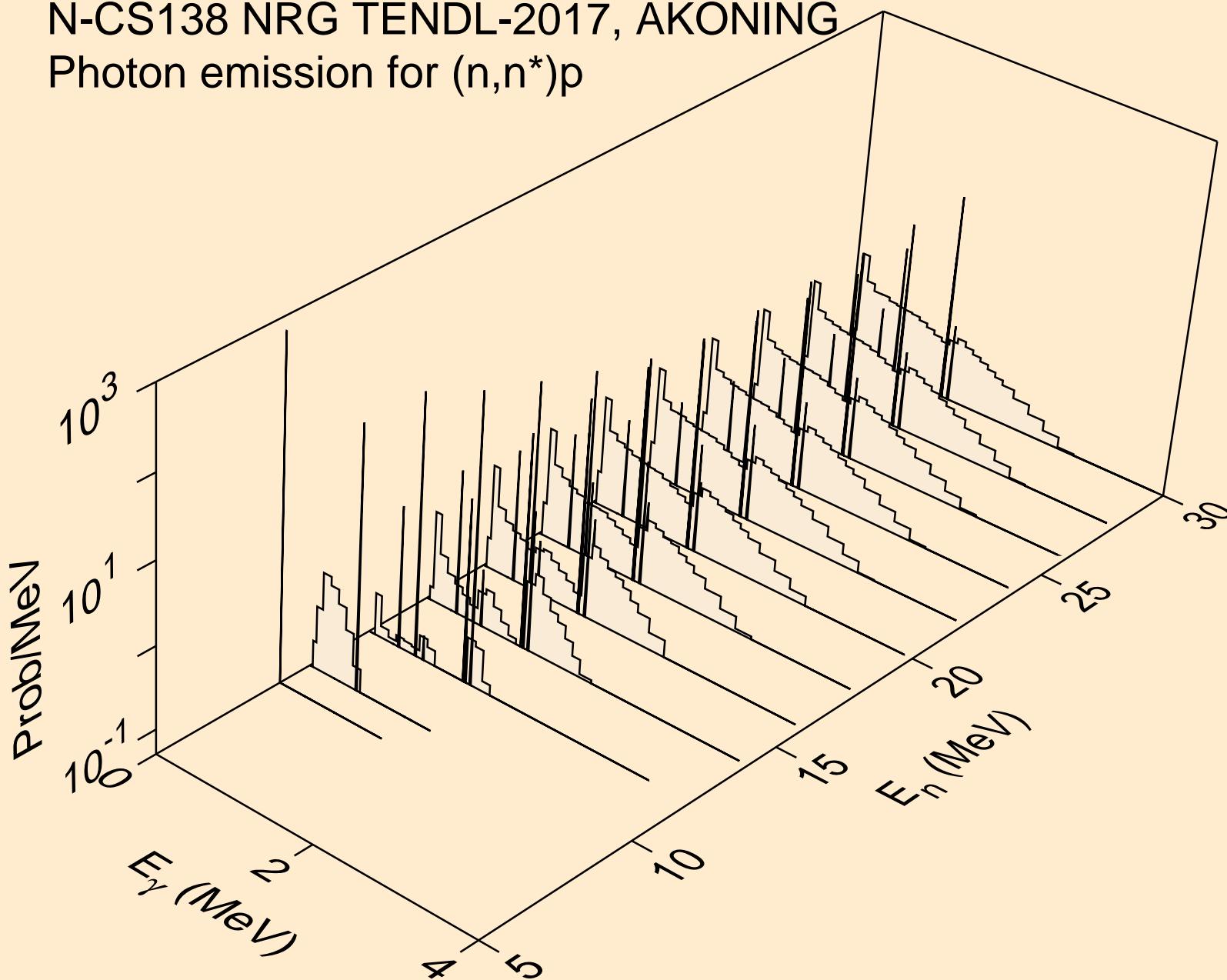
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,2n)a



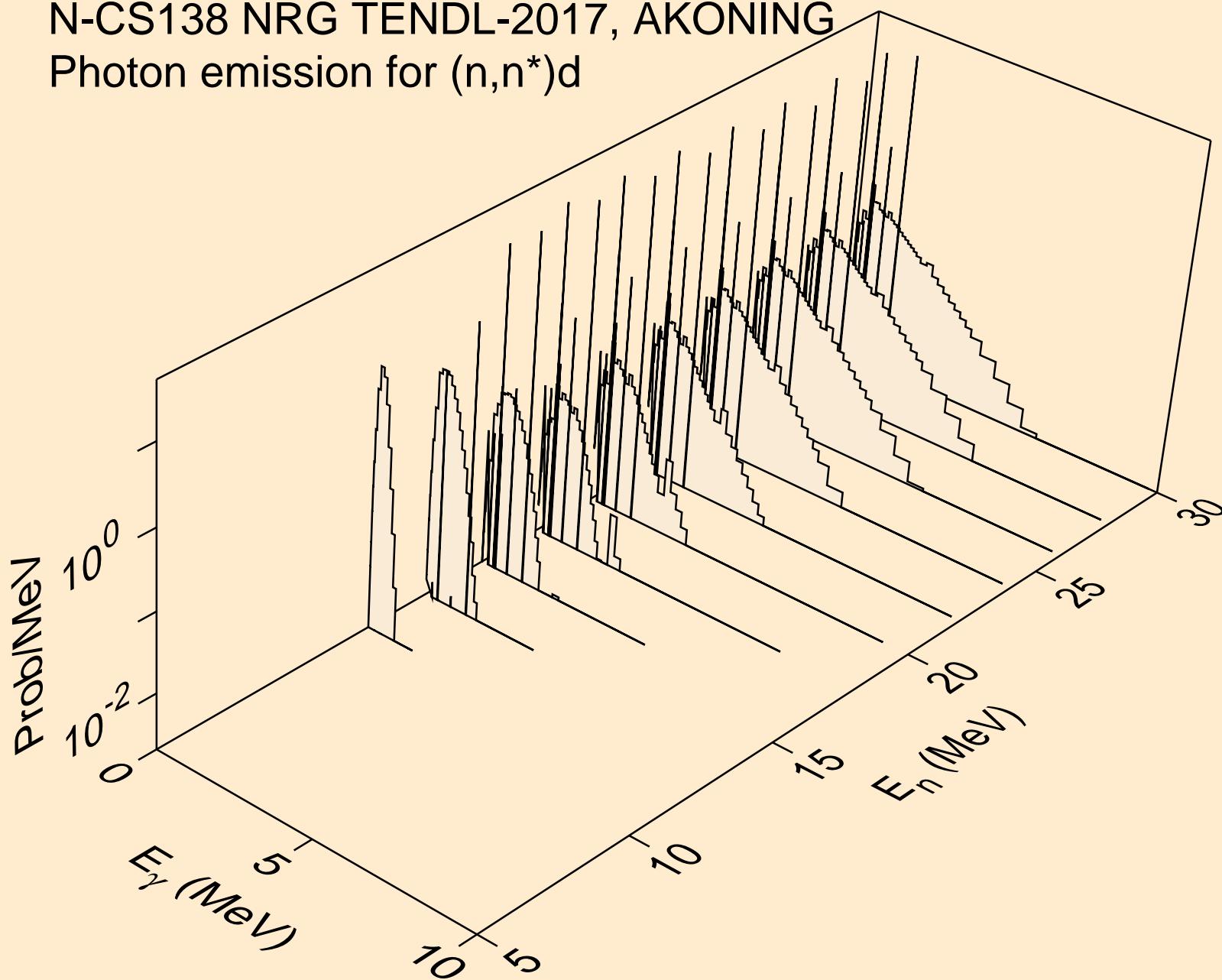
N-<sup>138</sup>NRG TENDL-2017, AKONING  
Photon emission for (n,3n)a



N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Photon emission for (n,n\*)p

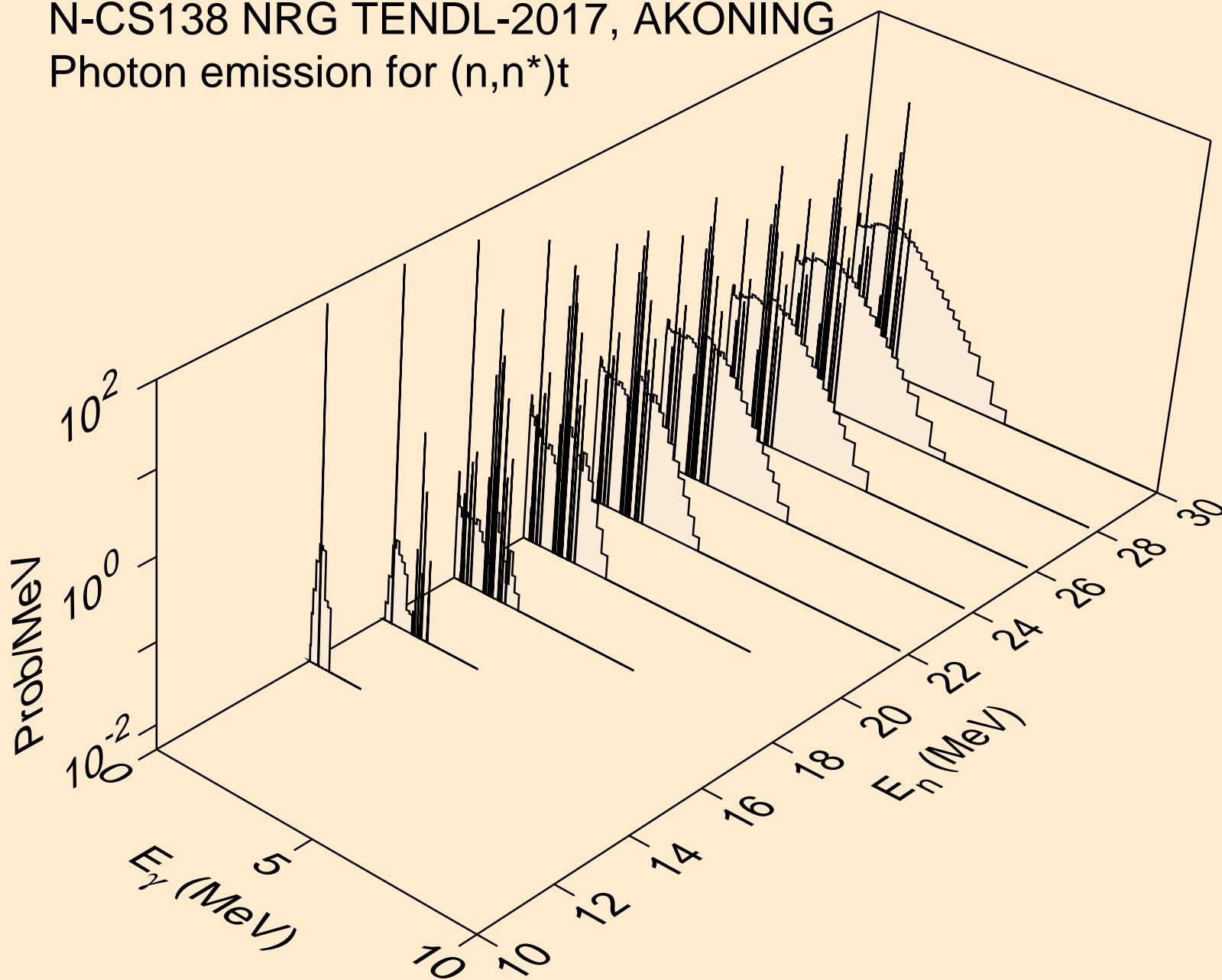


N-CS138 NRG TENDL-2017, AKONING  
Photon emission for  $(n,n^*)d$

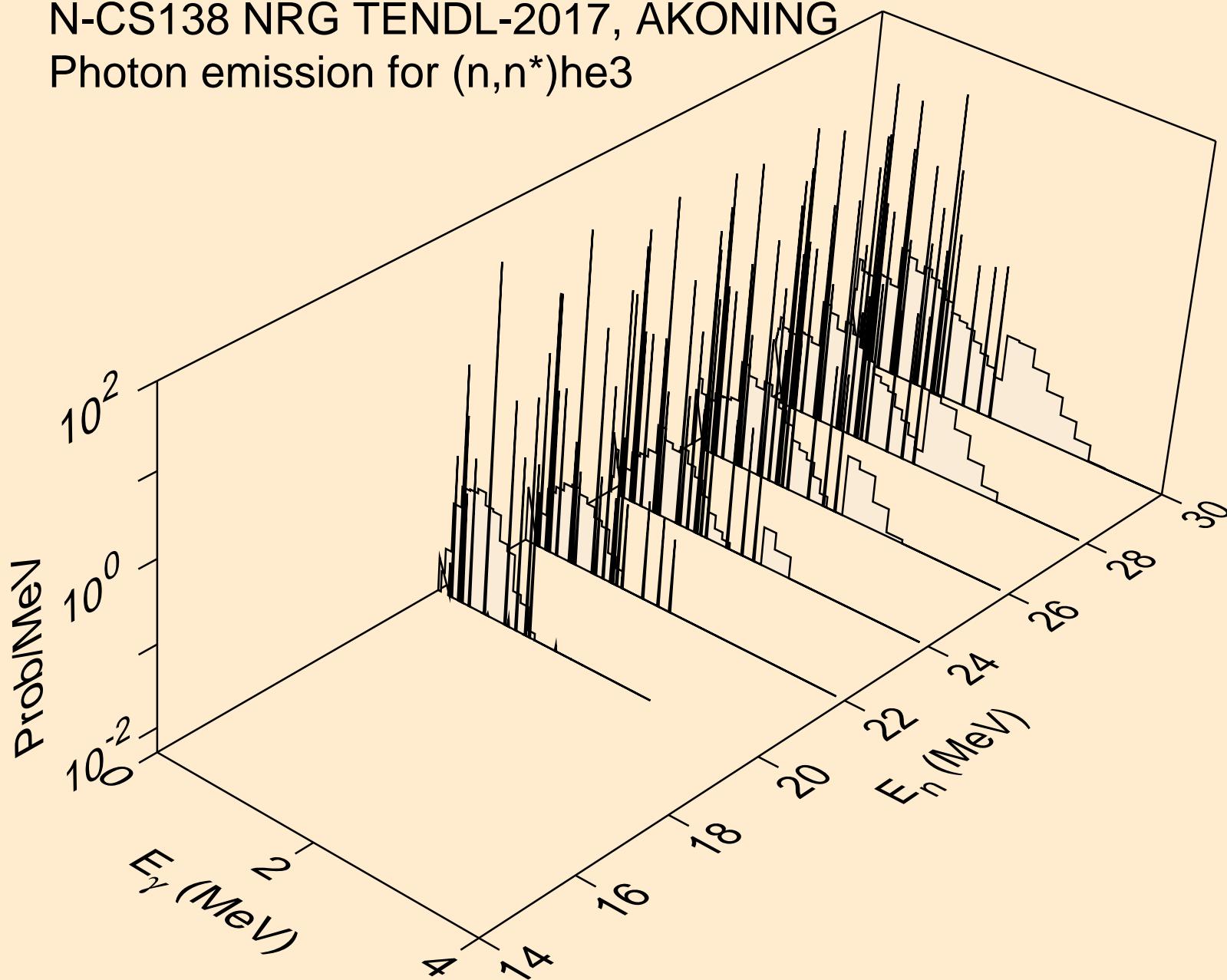


N-CS138 NRG TENDL-2017, AKONING

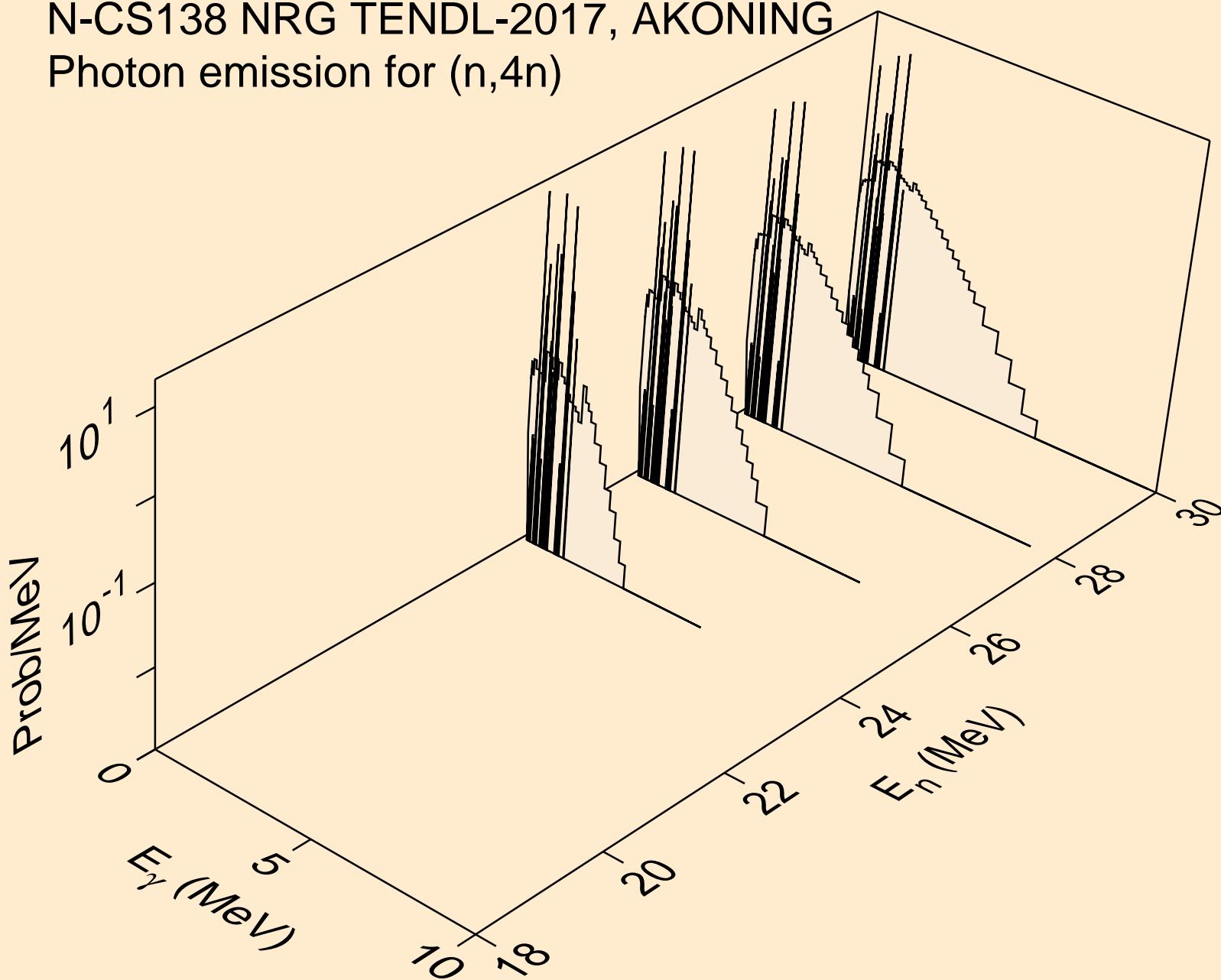
Photon emission for  $(n,n^*)t$



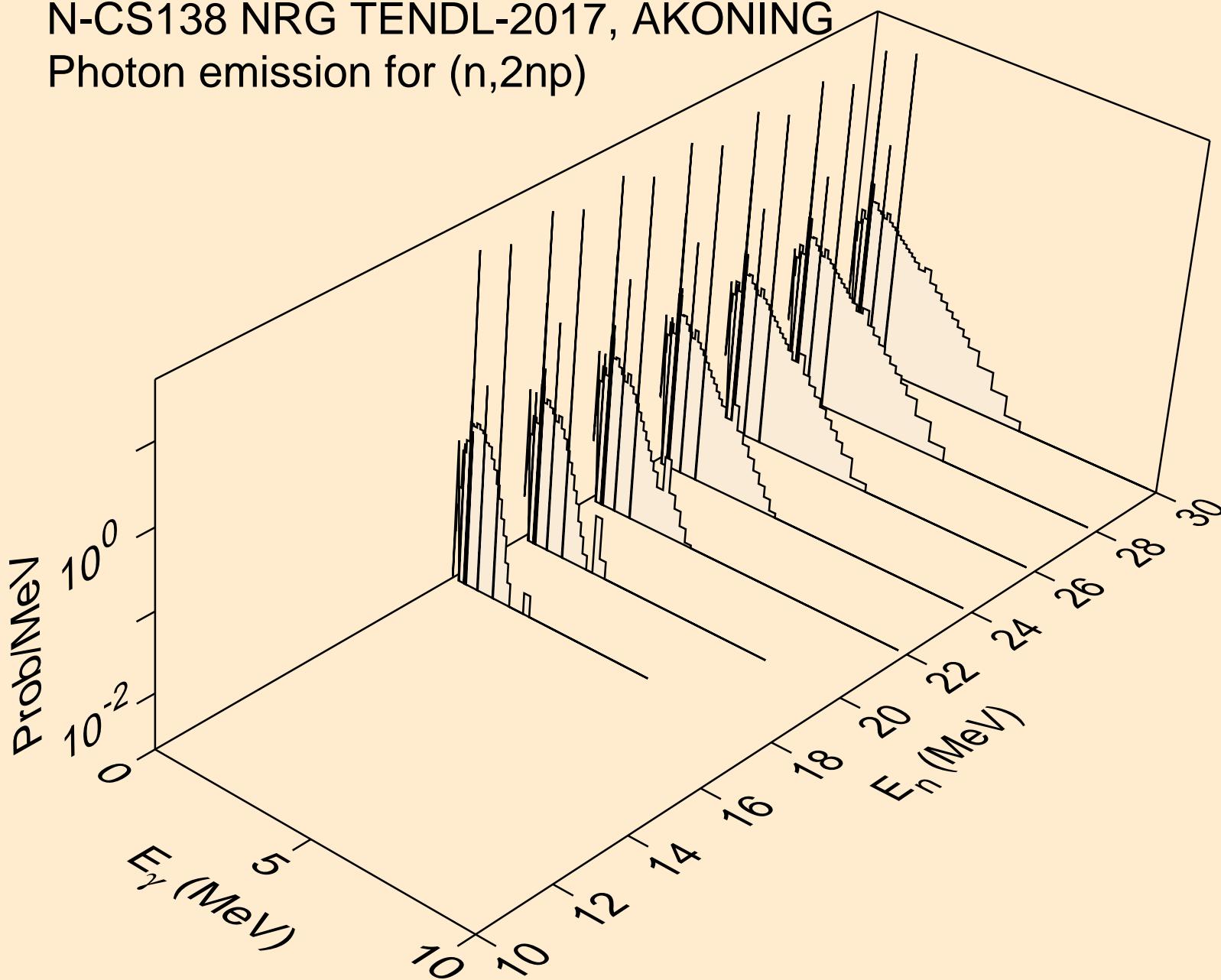
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,n\*)he3



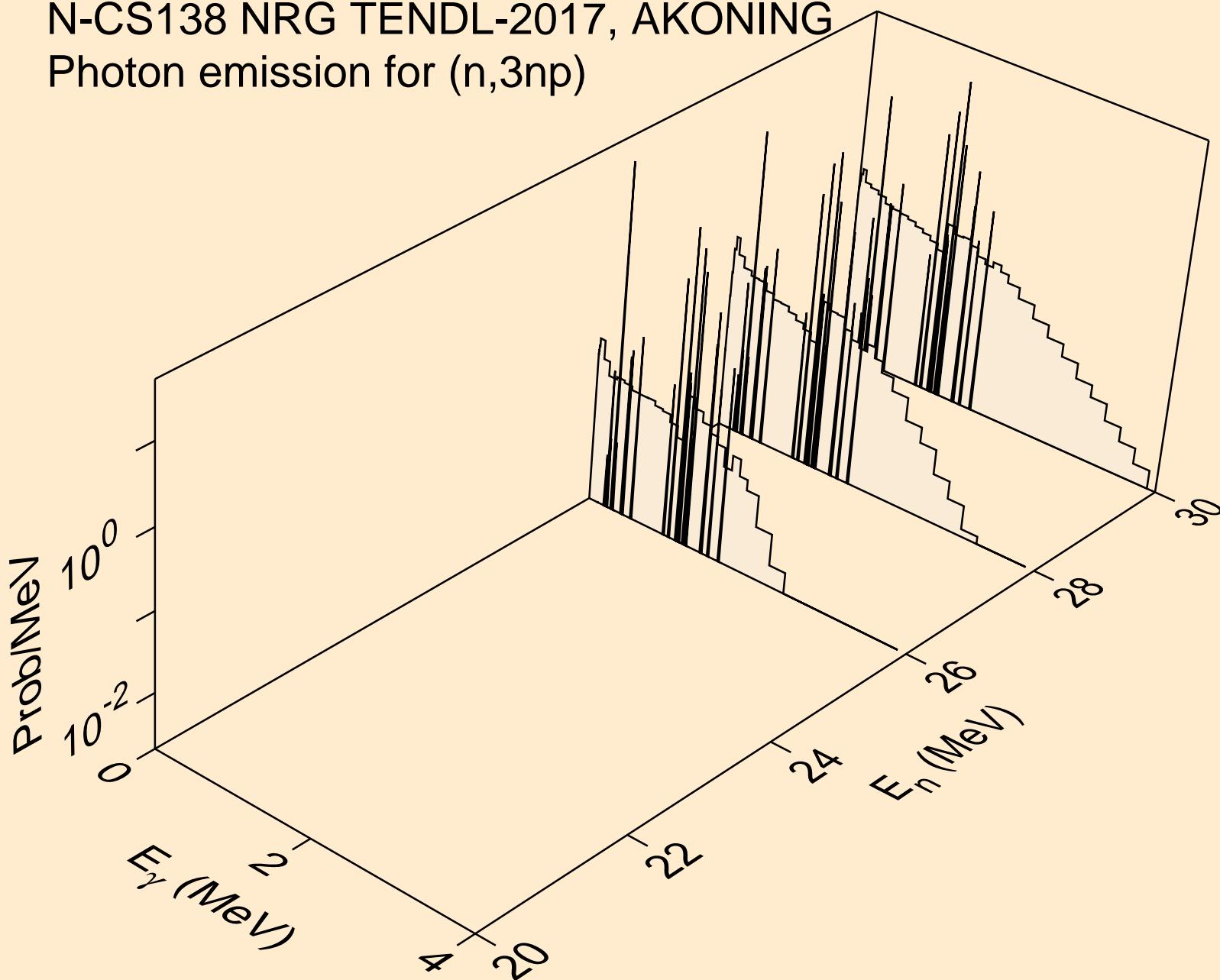
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,4n)



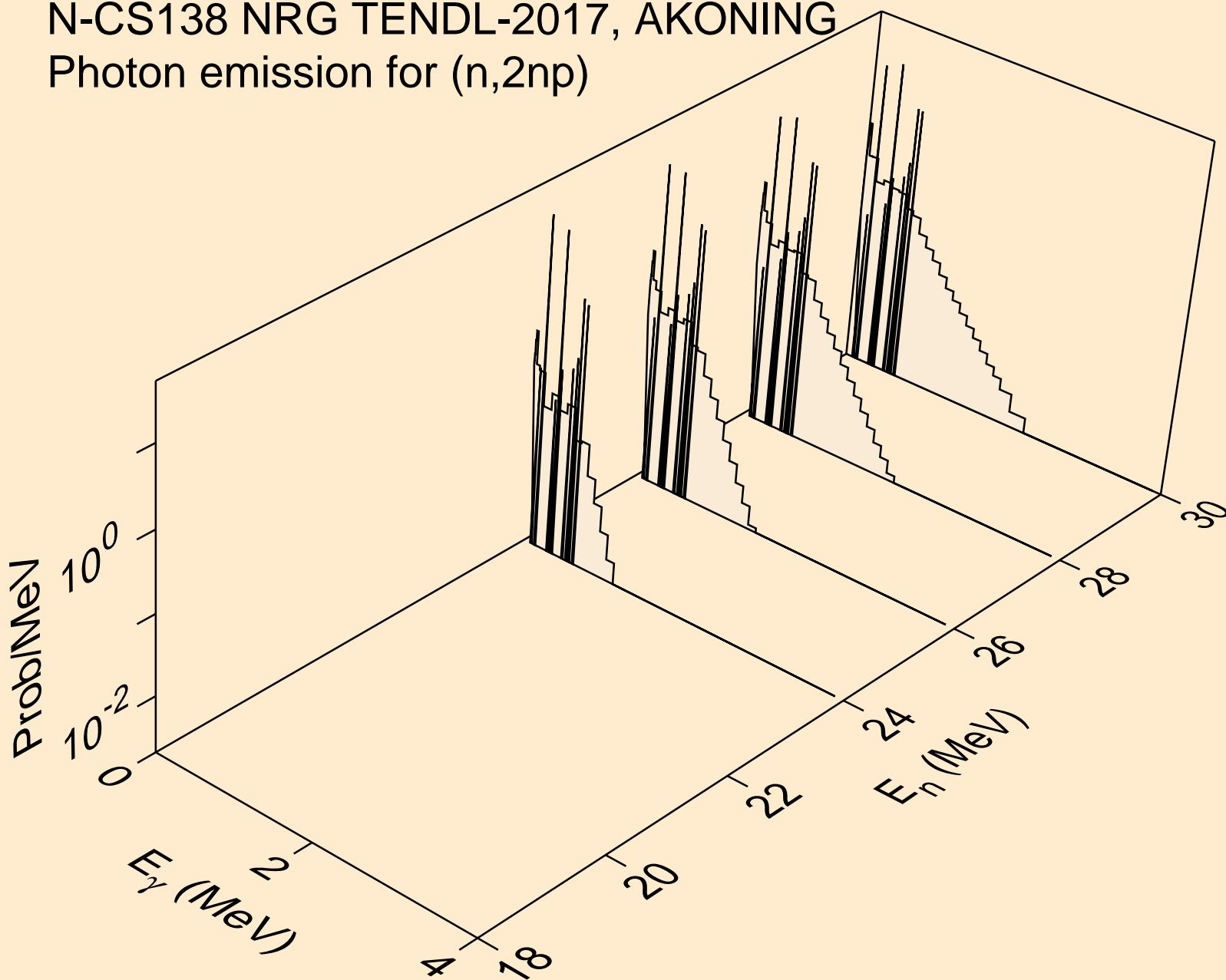
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,2np)



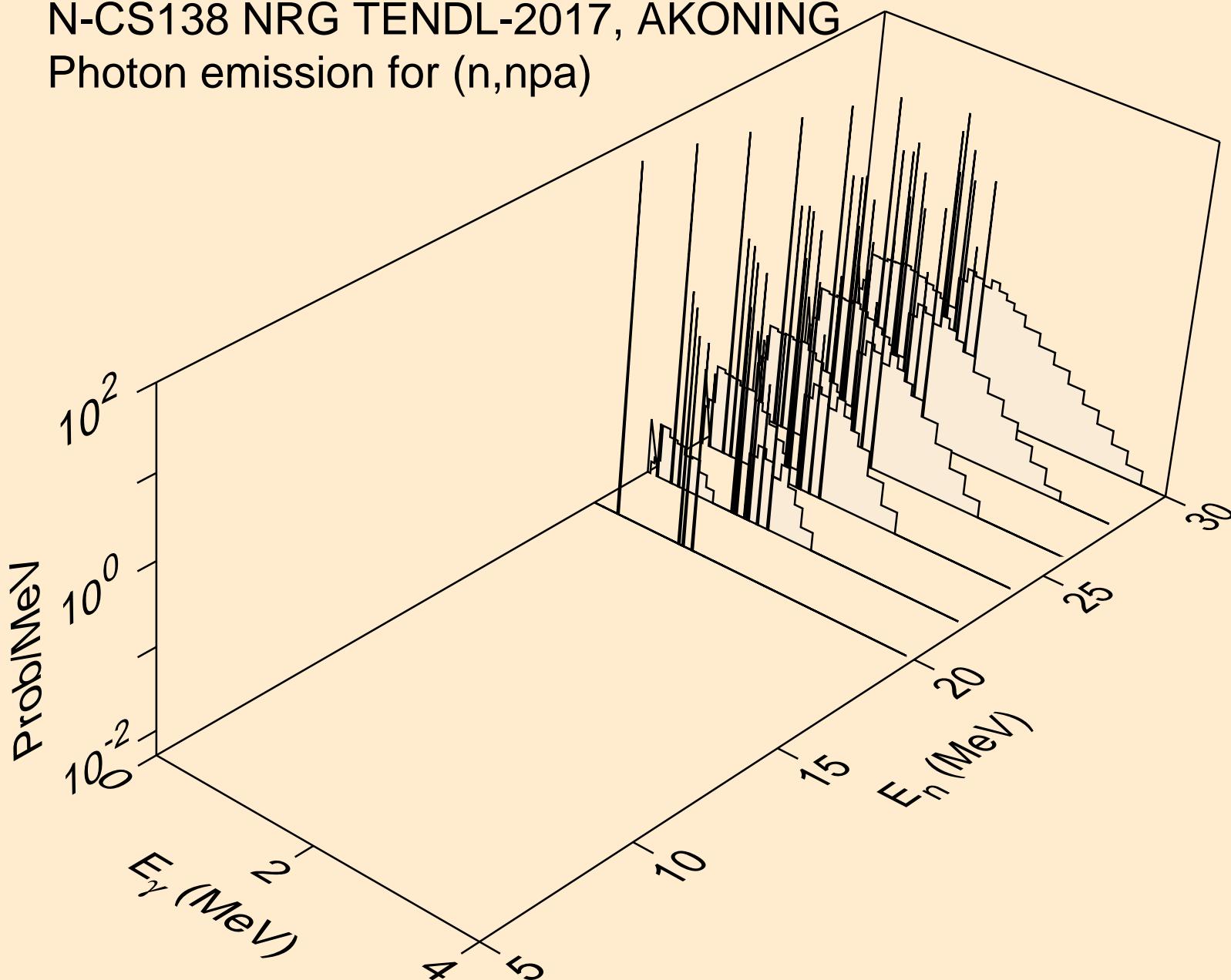
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,3np)



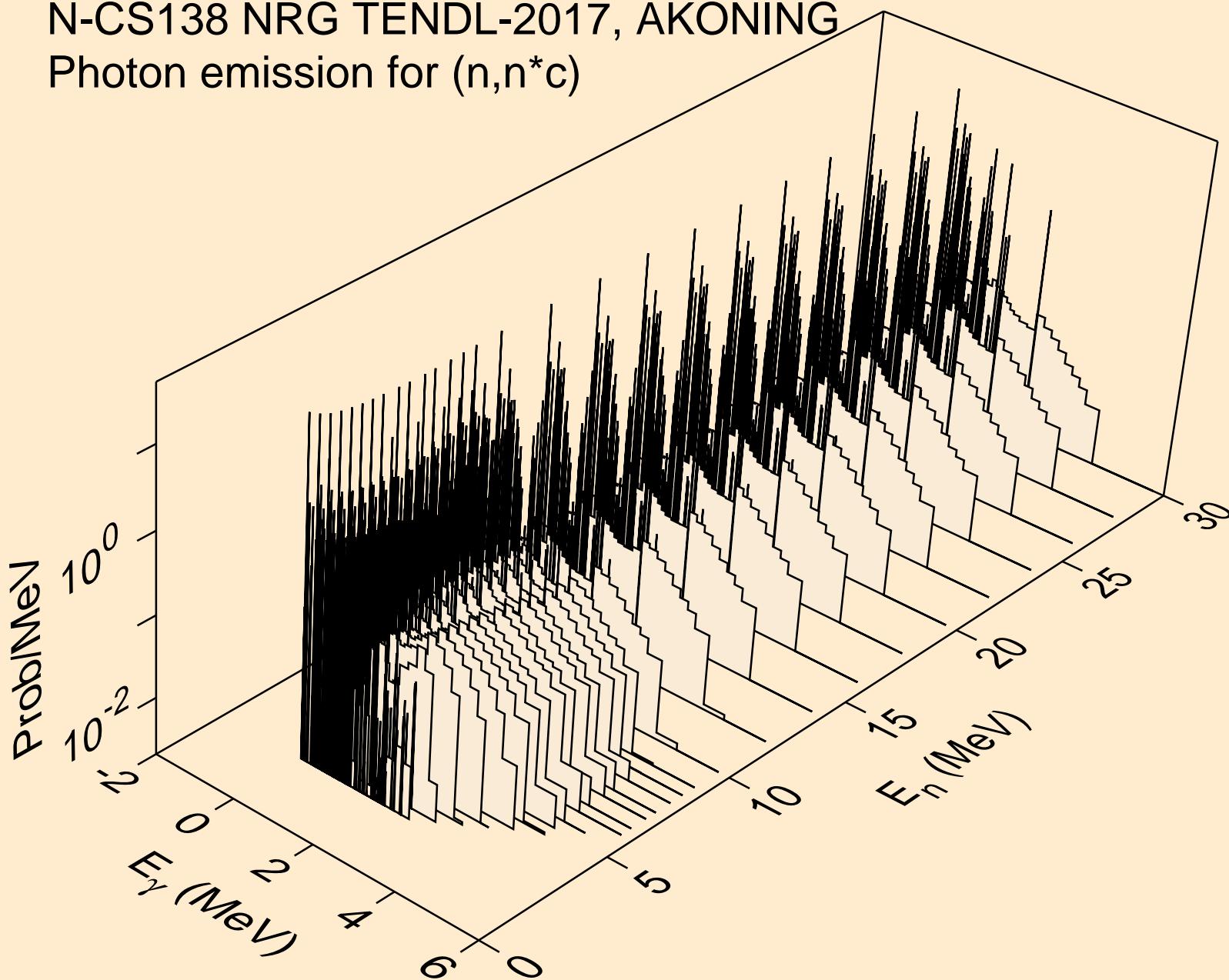
N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Photon emission for (n,2np)



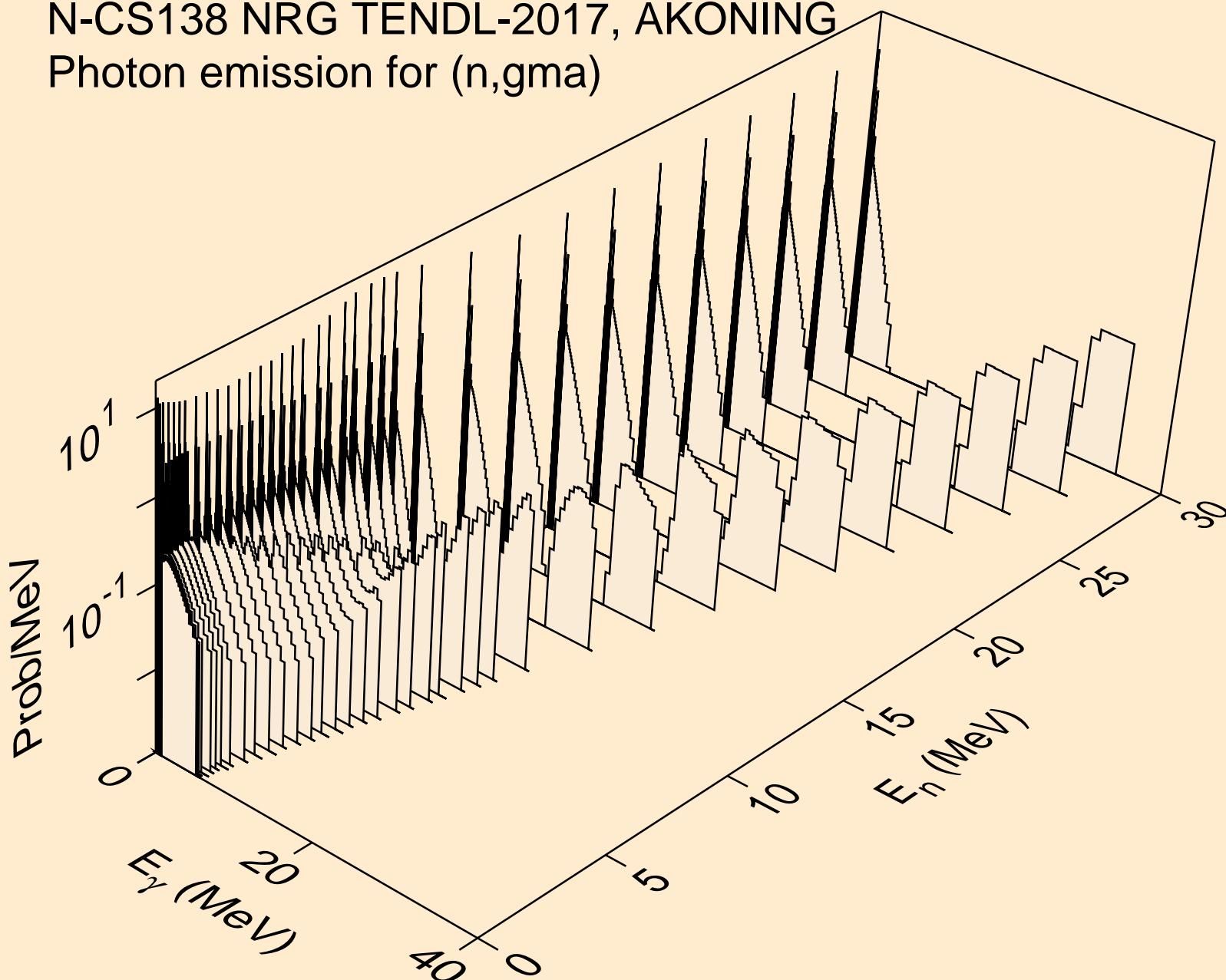
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,npa)



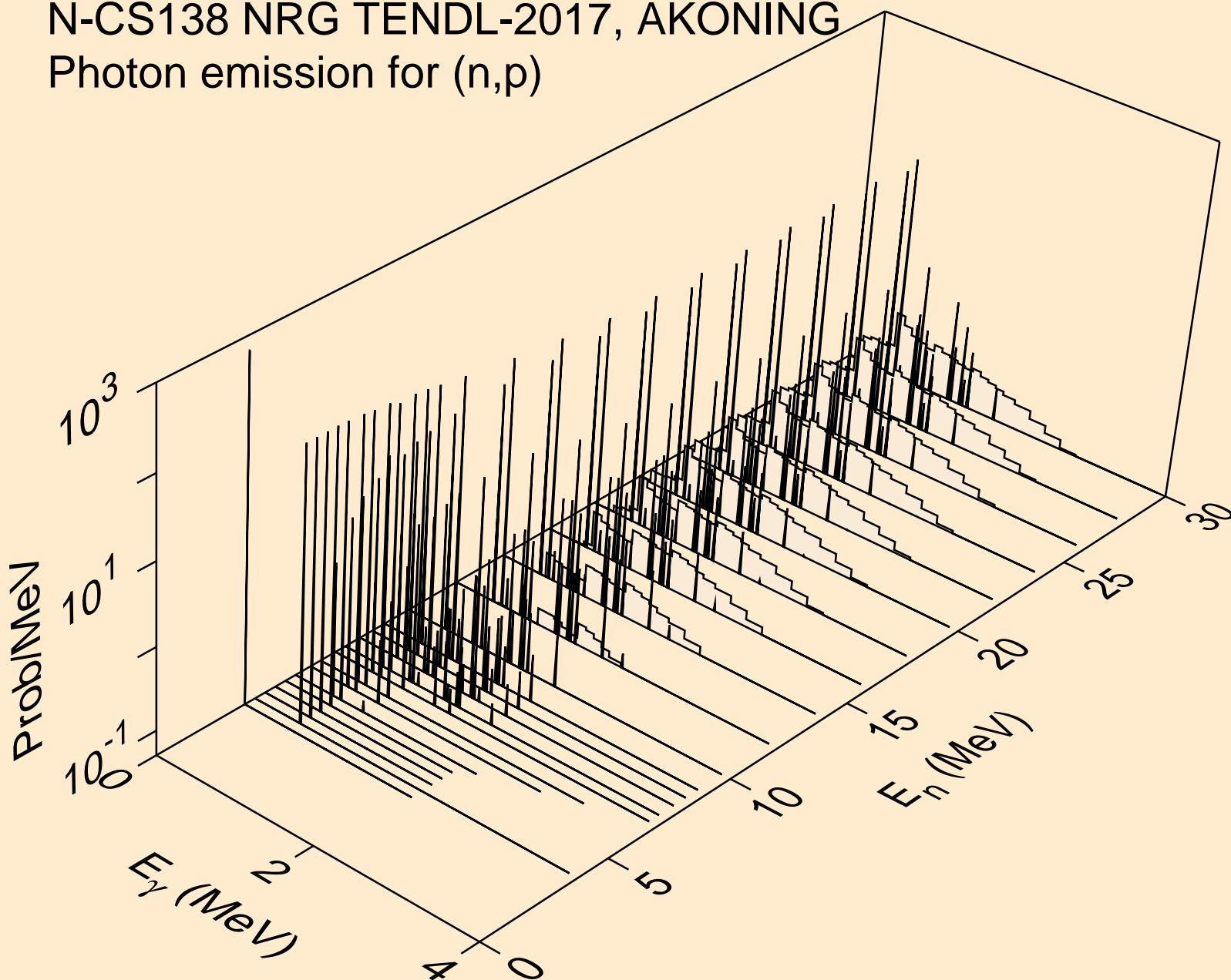
N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Photon emission for (n,n\*c)



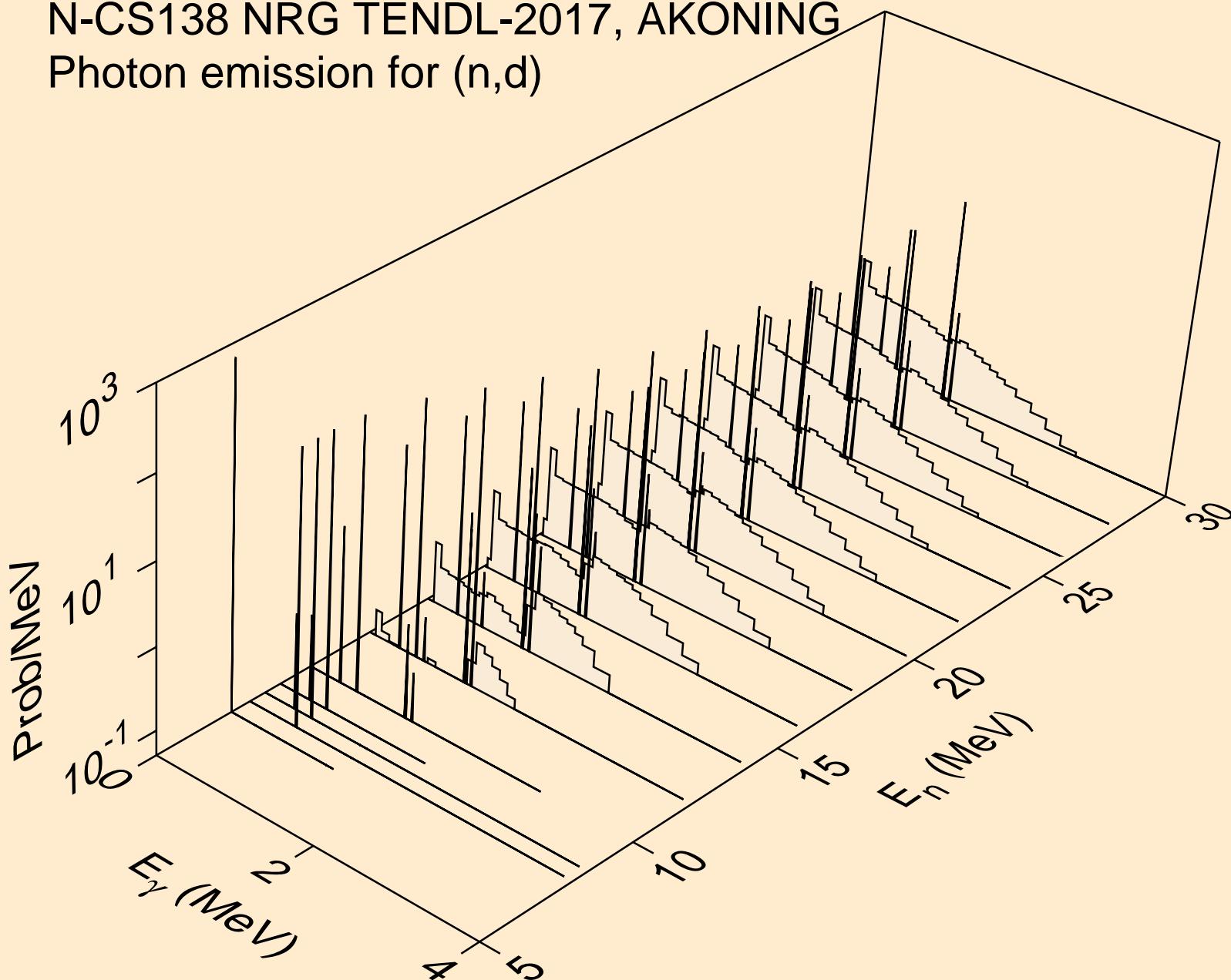
N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Photon emission for (n,gma)



N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,p)

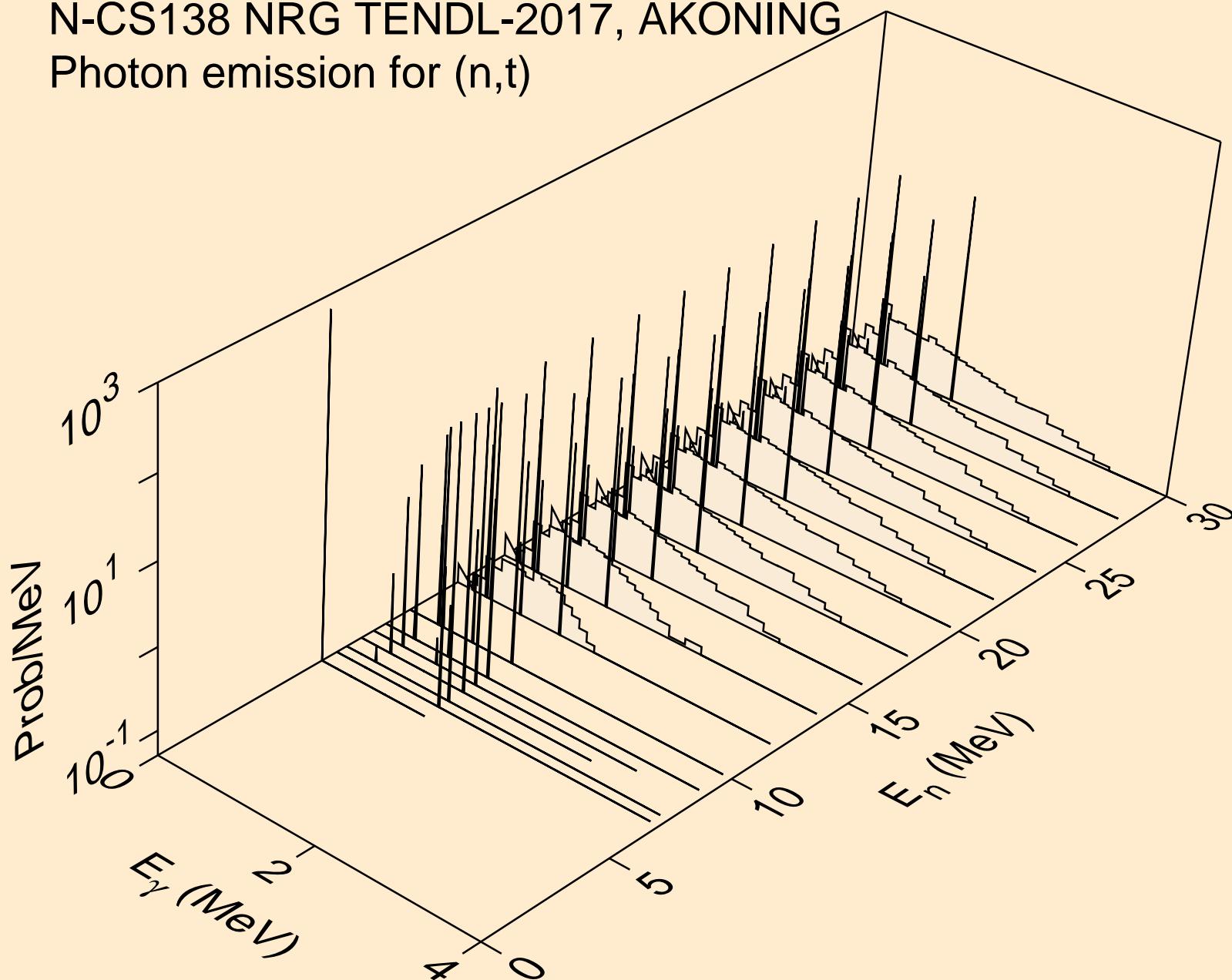


N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,d)

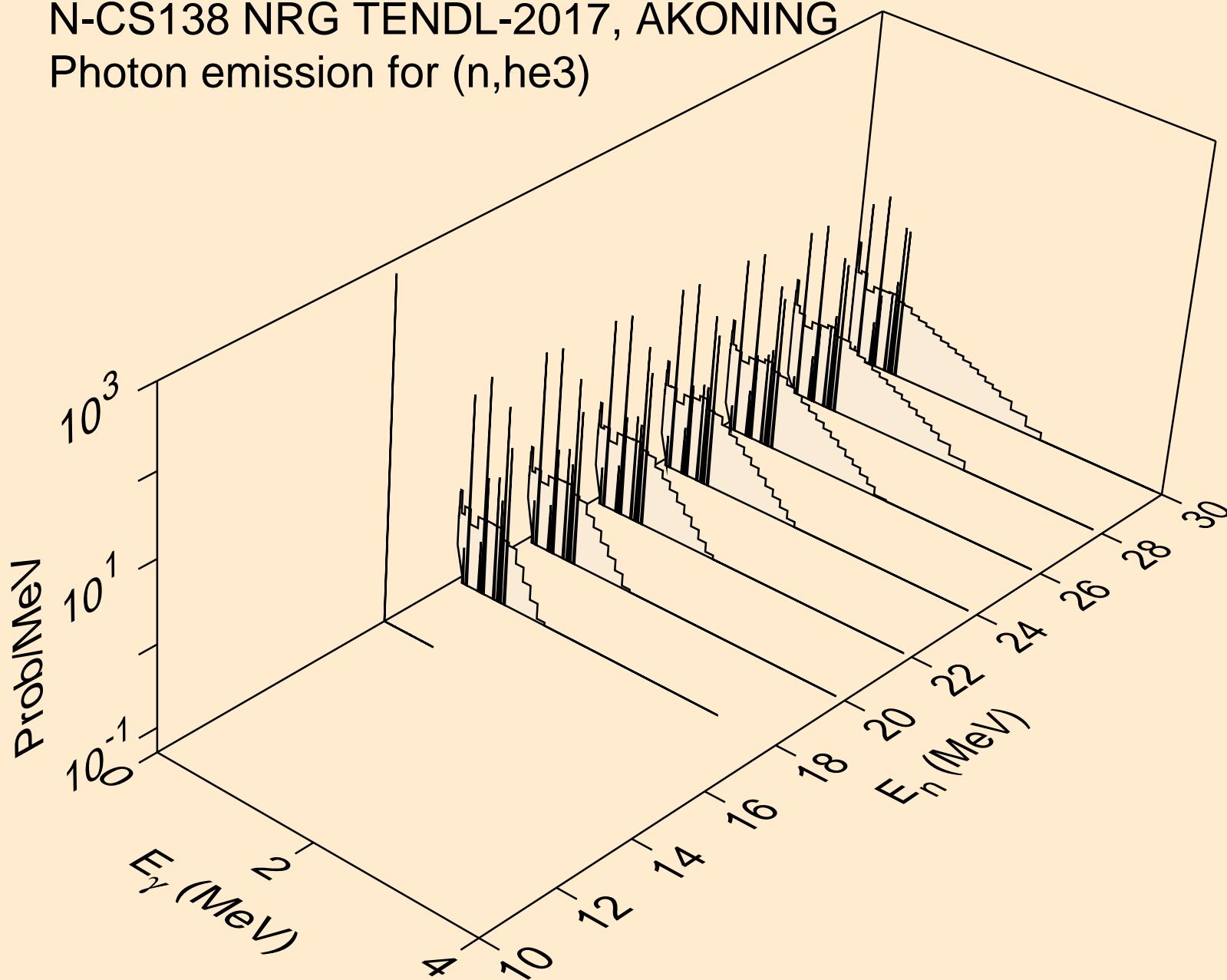


N-CS138 NRG TENDL-2017, AKONING

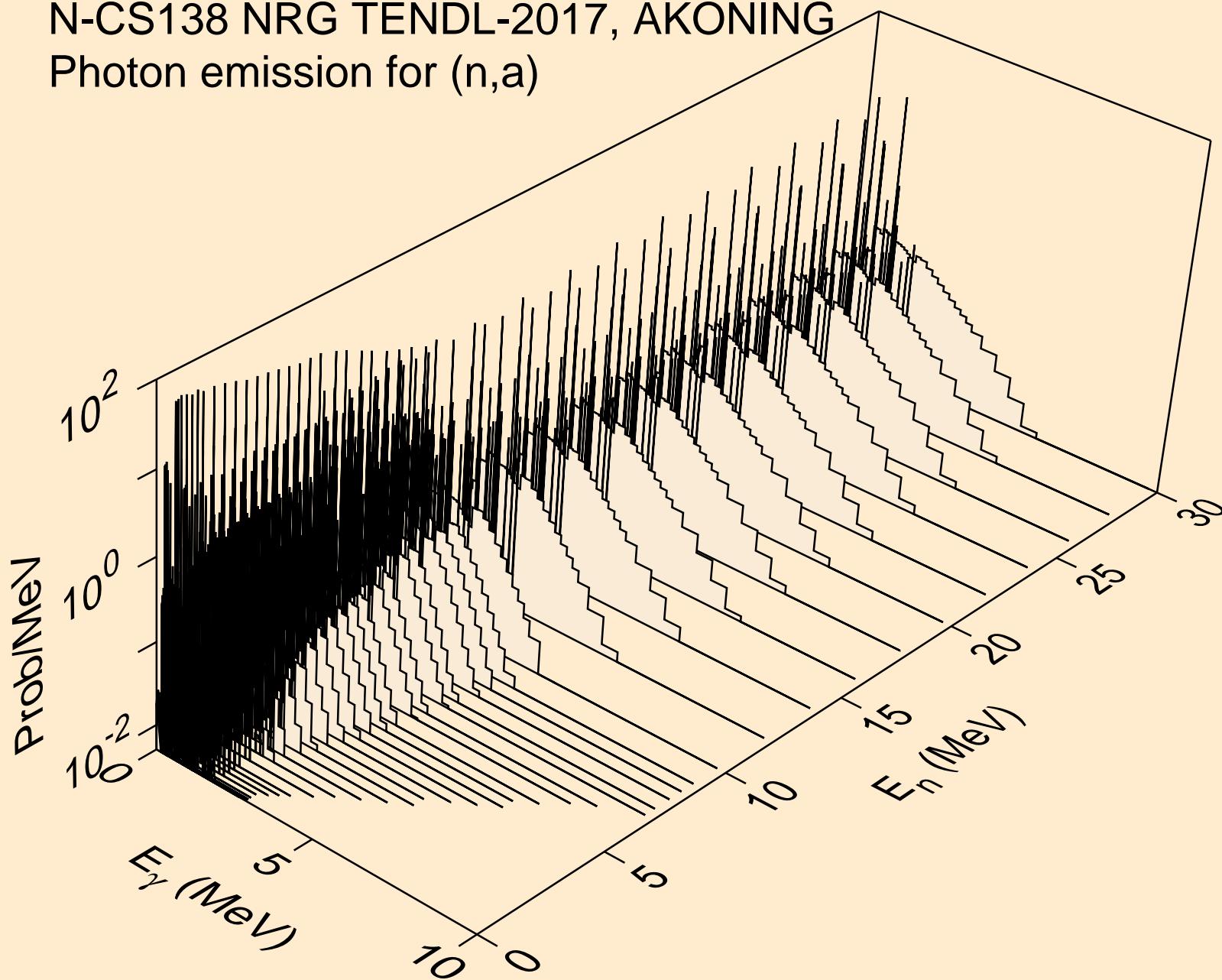
Photon emission for (n,t)



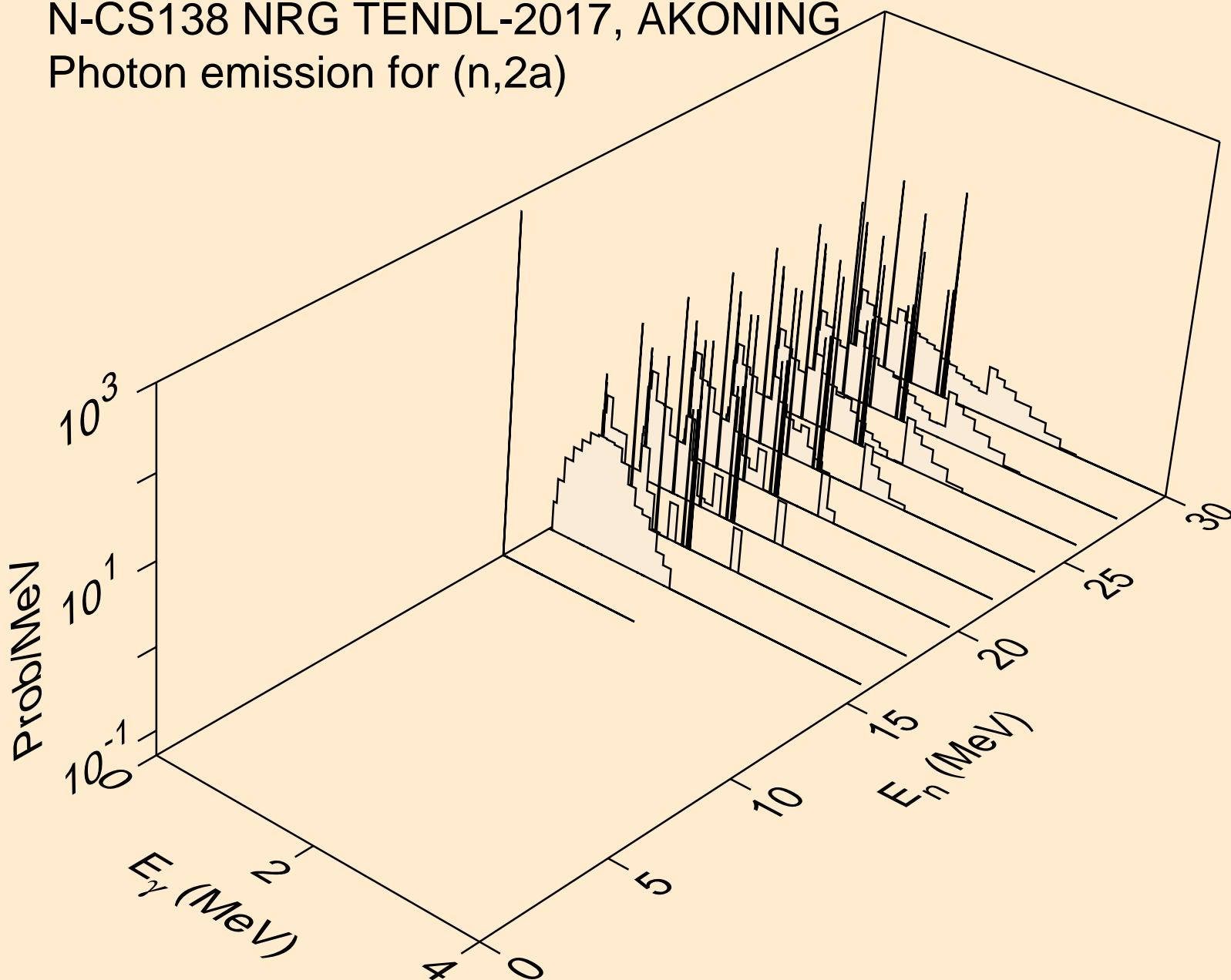
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,he3)



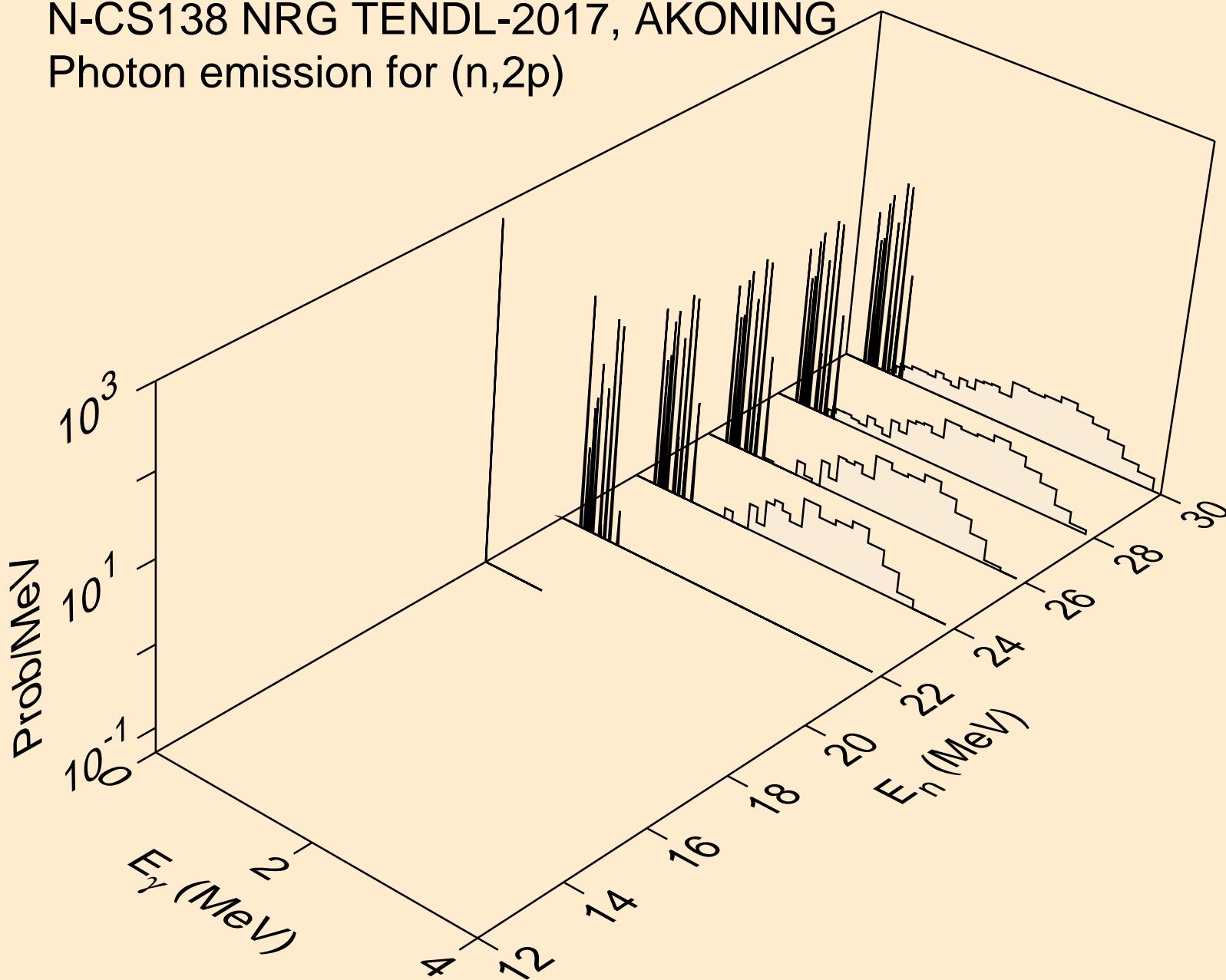
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,a)



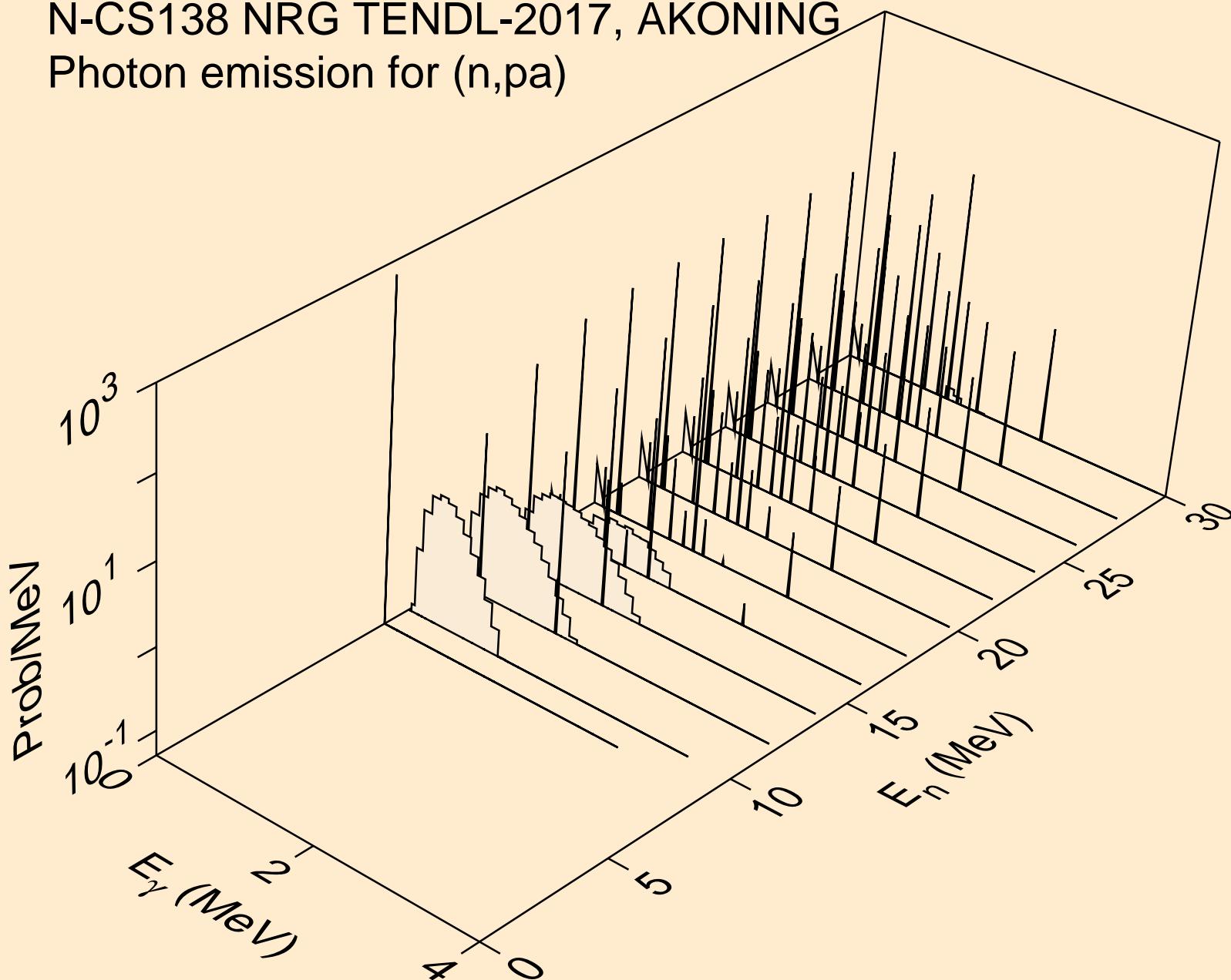
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,2a)



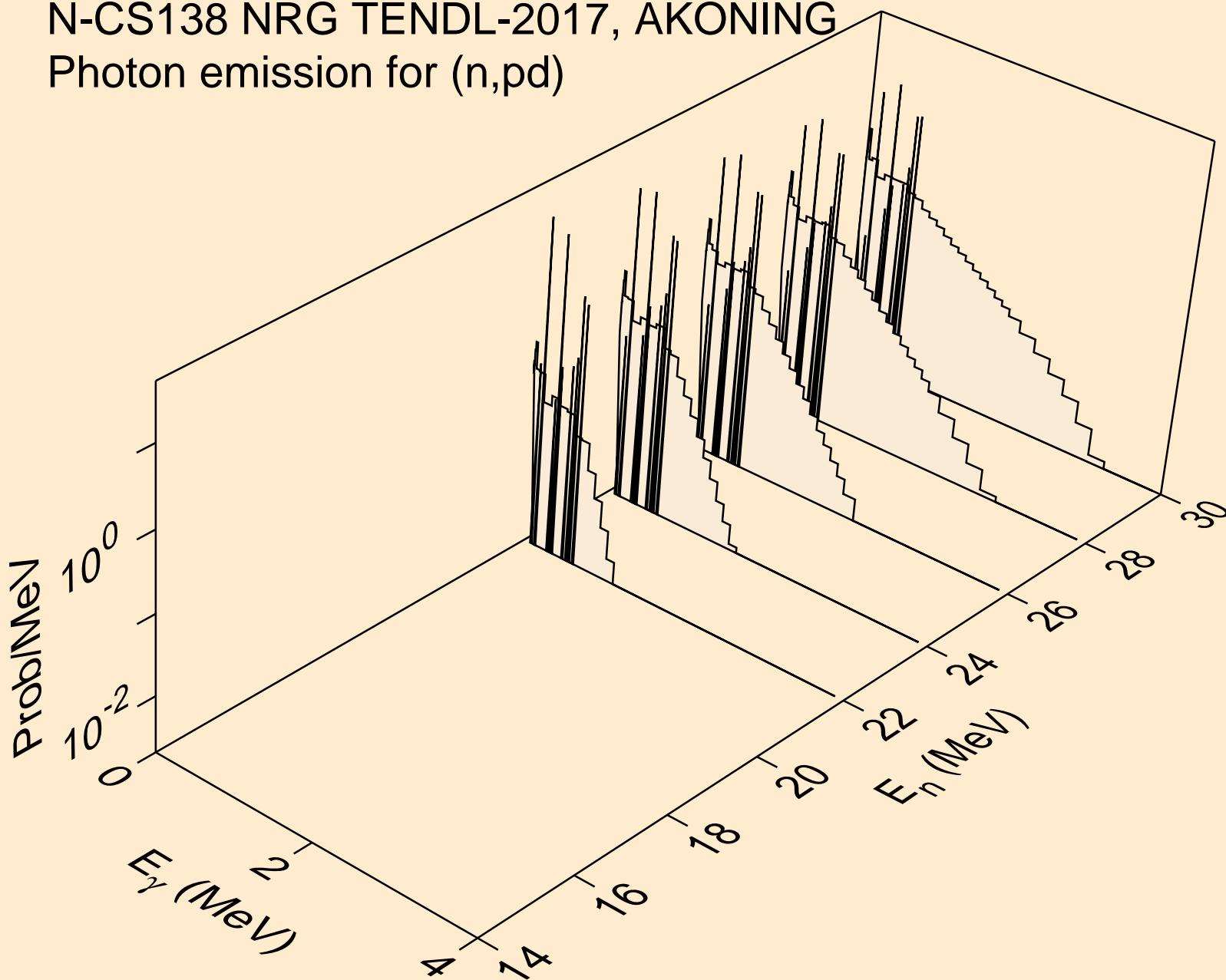
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,2p)



N-<sup>138</sup>CS NRG TENDL-2017, AKONING  
Photon emission for (n,pa)

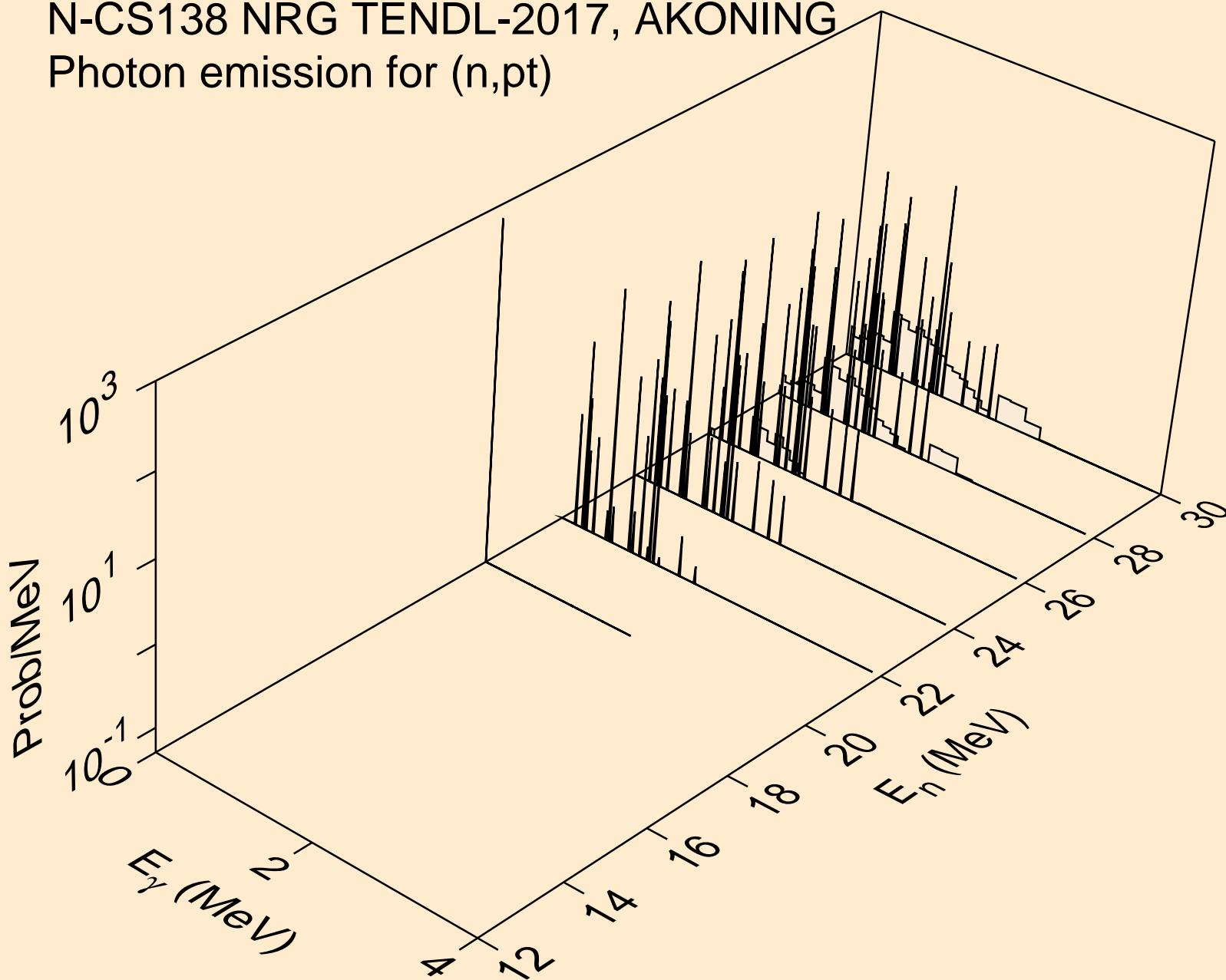


N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,pd)

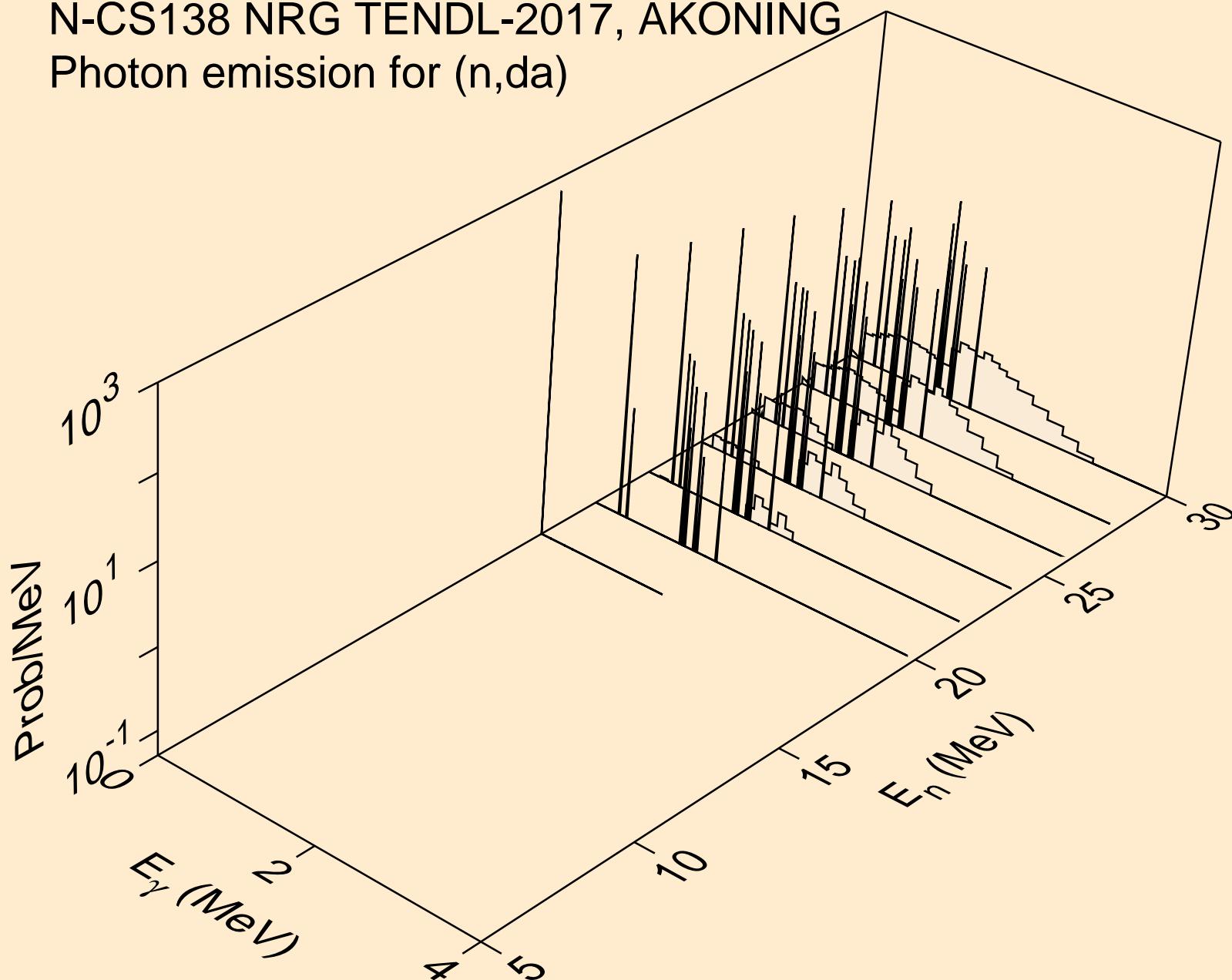


N-CS138 NRG TENDL-2017, AKONING

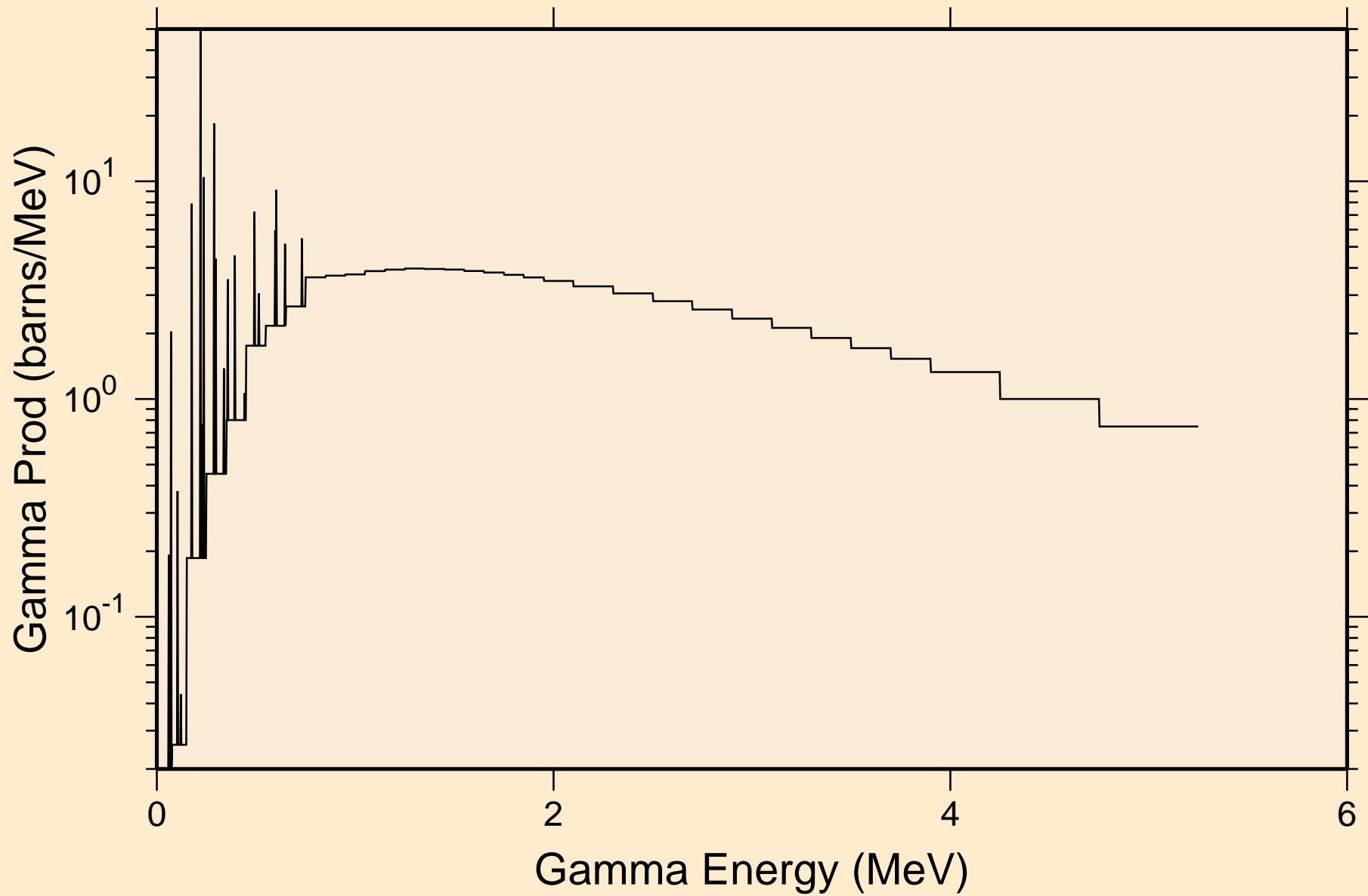
Photon emission for (n,pt)



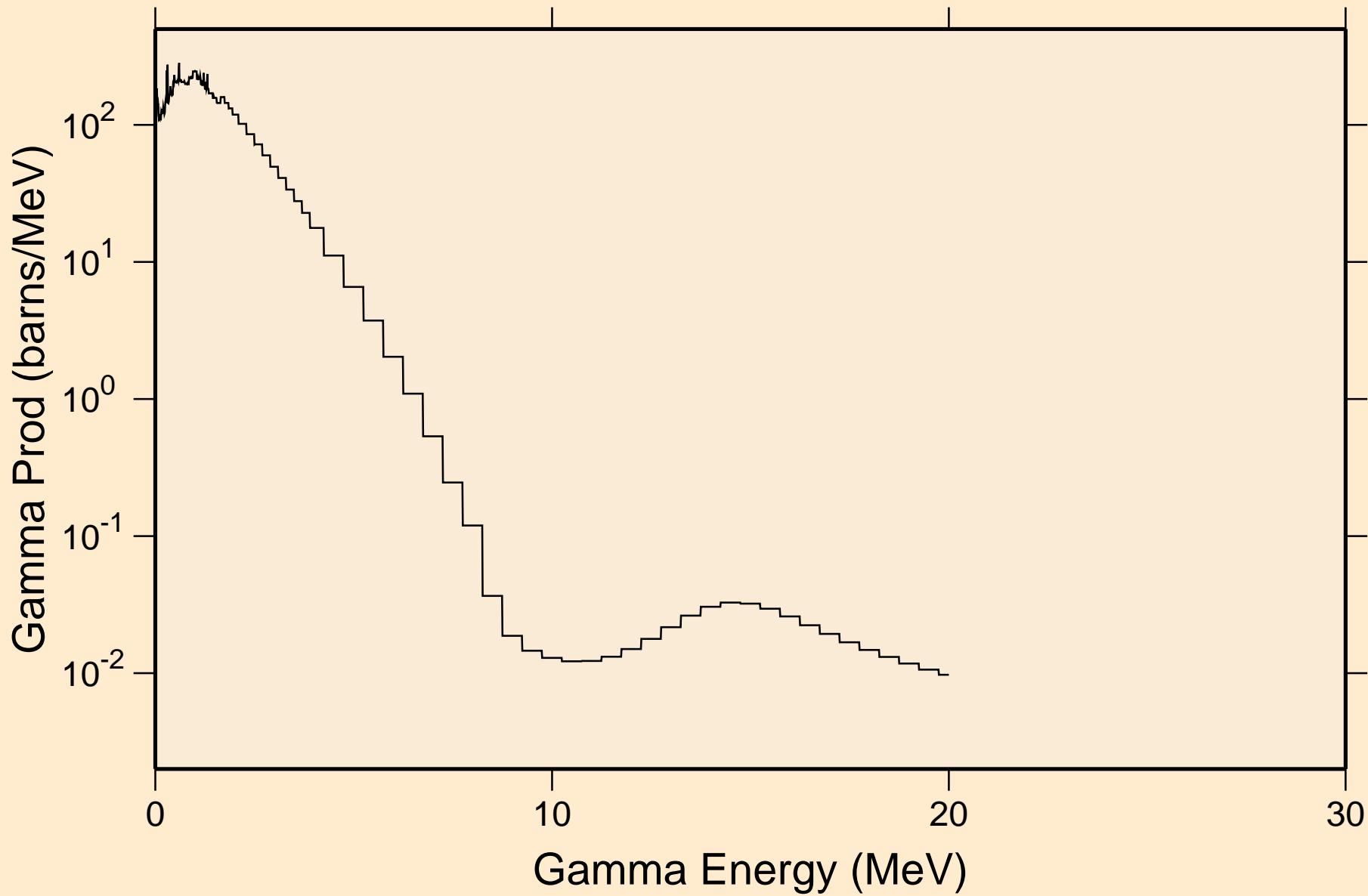
N-CS138 NRG TENDL-2017, AKONING  
Photon emission for (n,da)



N-CS138 NRG TENDL-2017, AKONING  
thermal capture photon spectrum

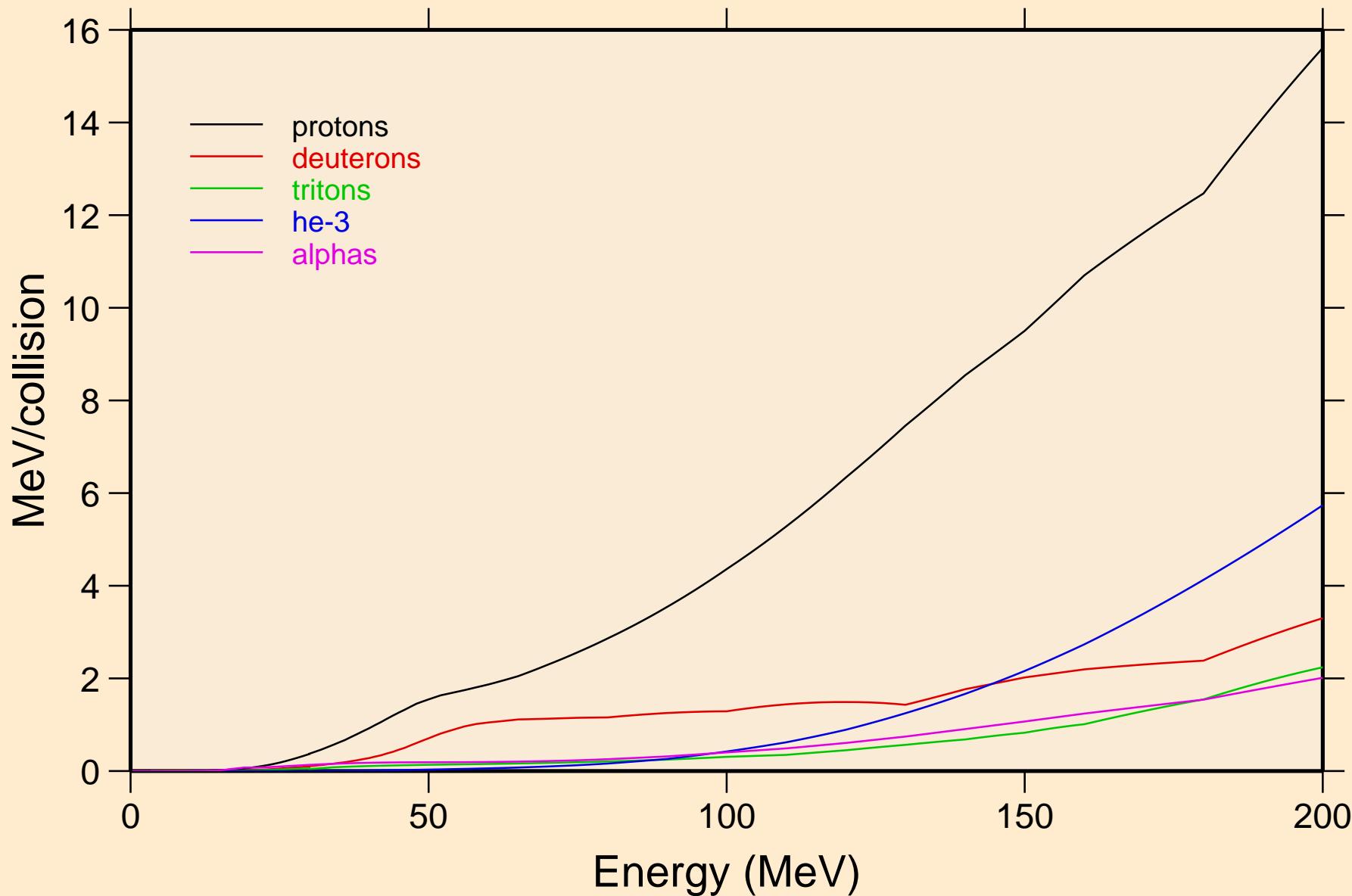


N-CS138 NRG TENDL-2017, AKONING  
14 MeV photon spectrum



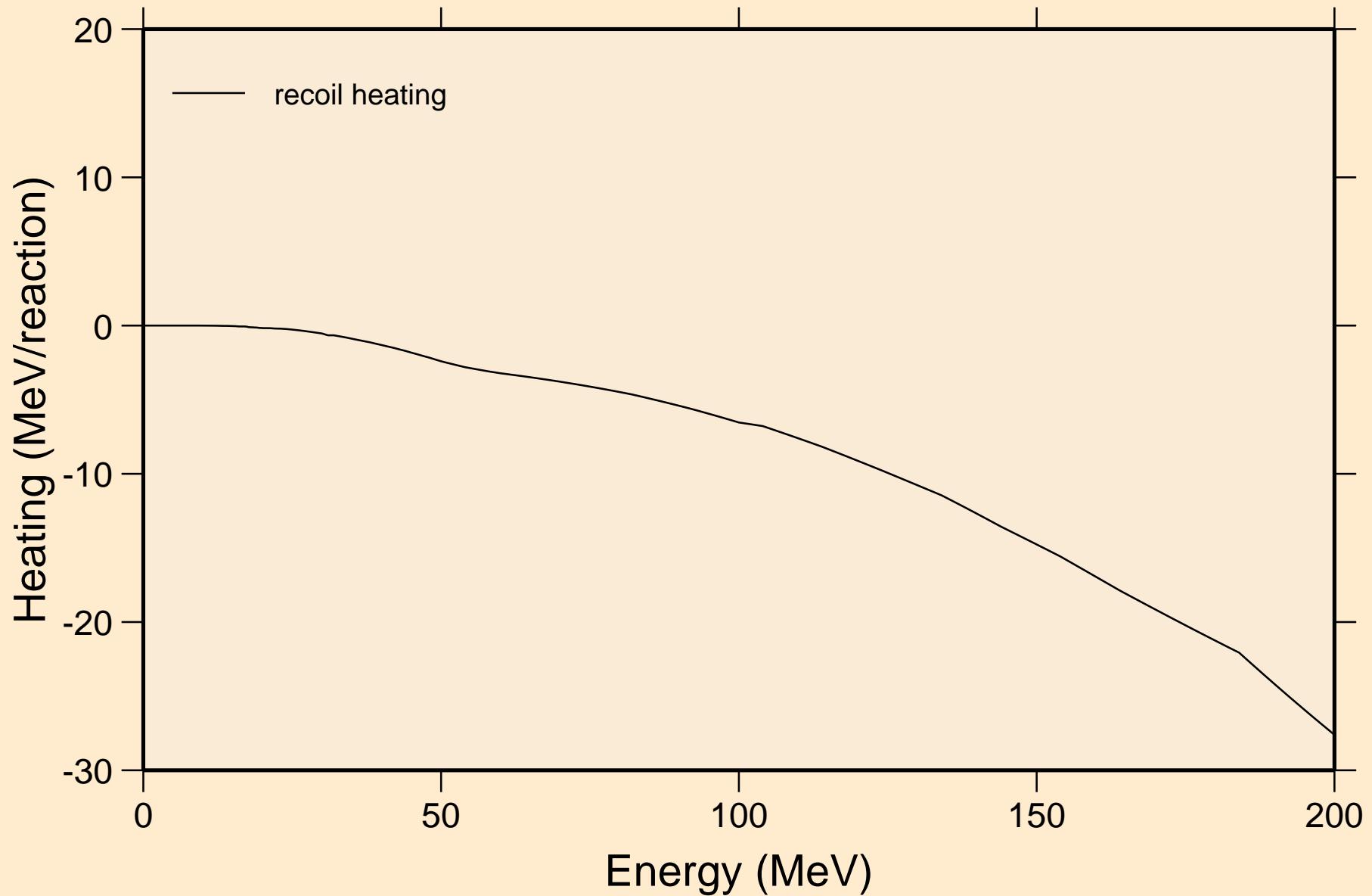
# N-<sup>138</sup>N RNR TENDL-2017, AKONING

## Particle heating contributions



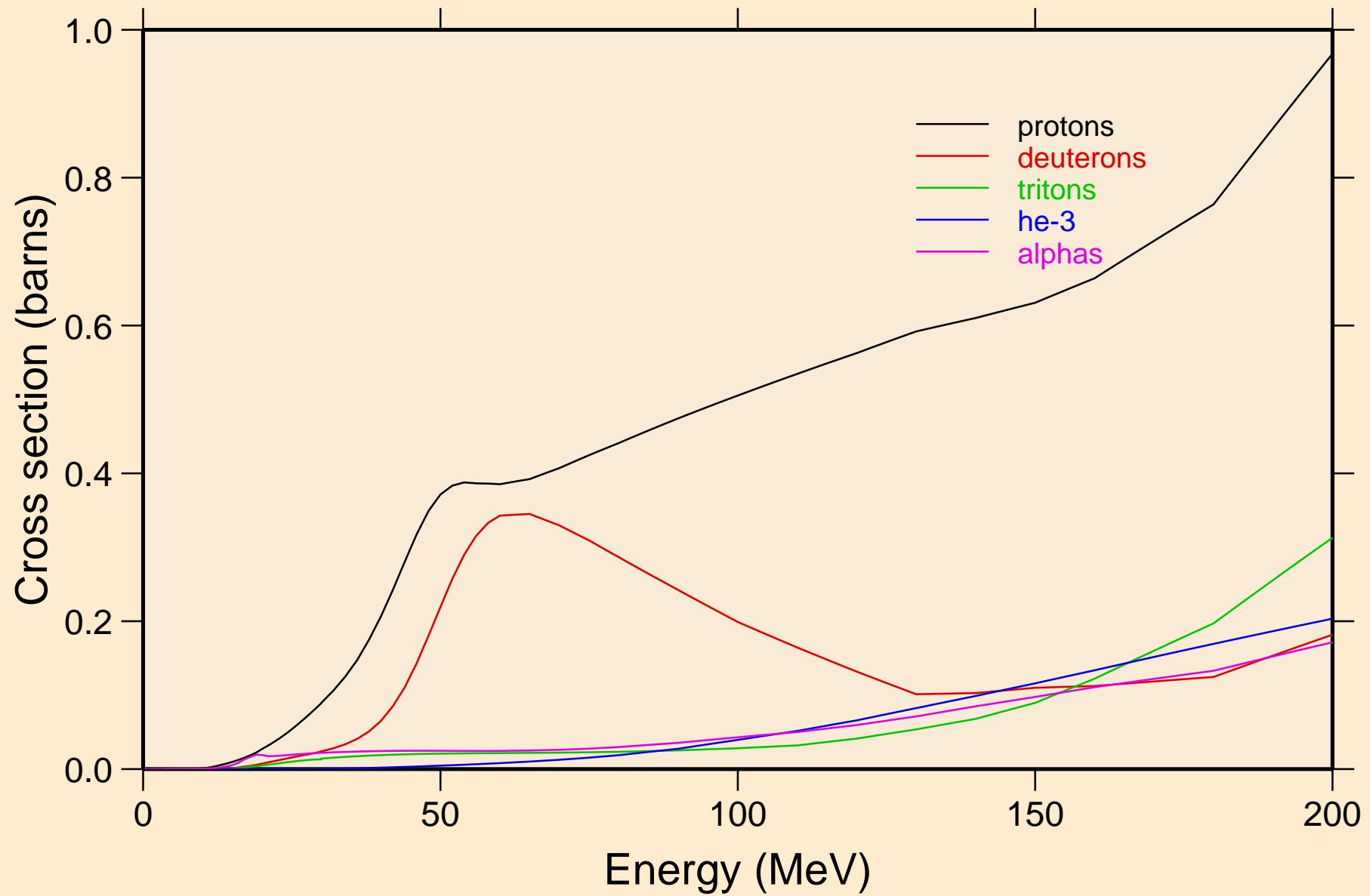
# N-CS138 NRG TENDL-2017, AKONING

## Recoil Heating

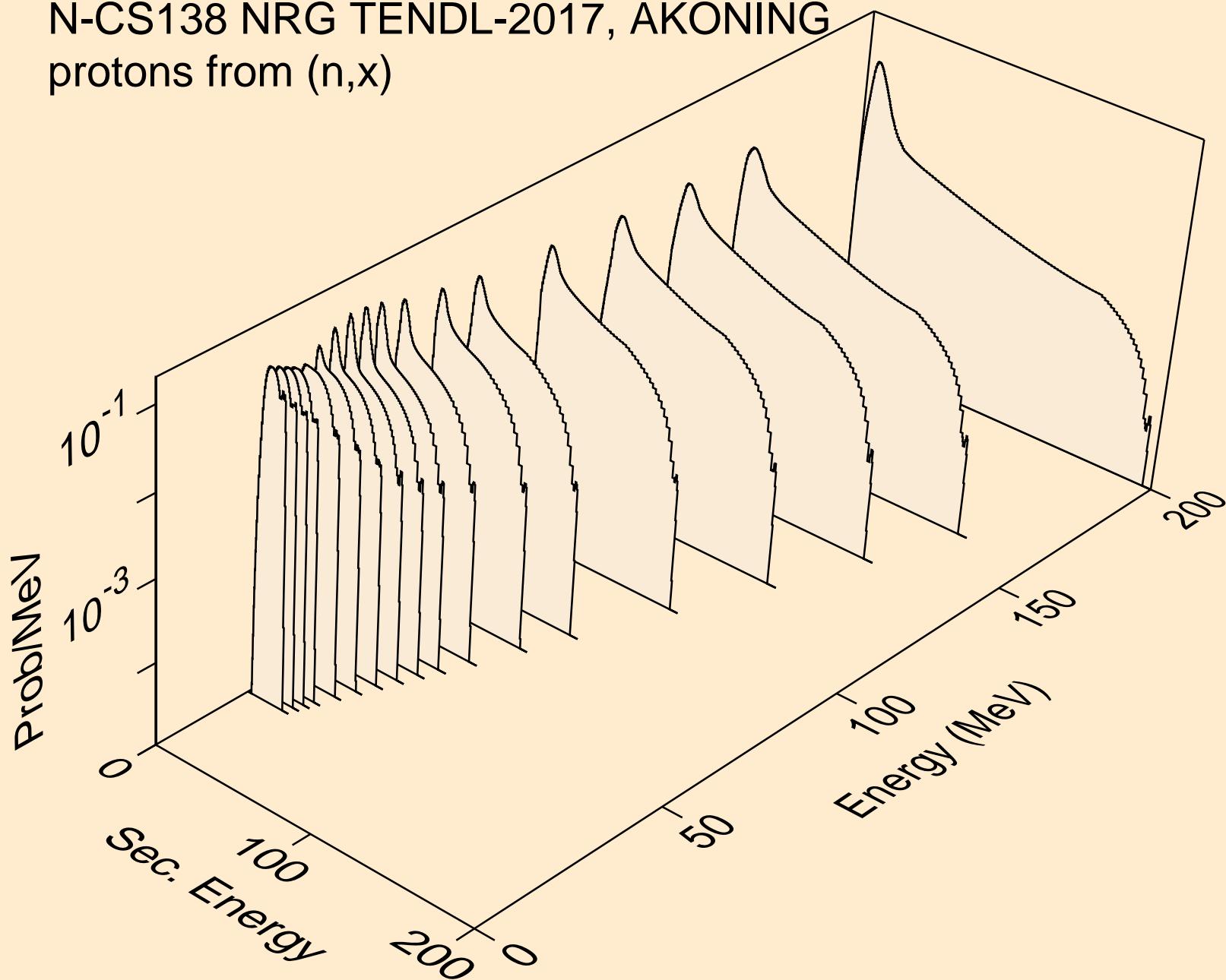


# N-CS138 NRG TENDL-2017, AKONING

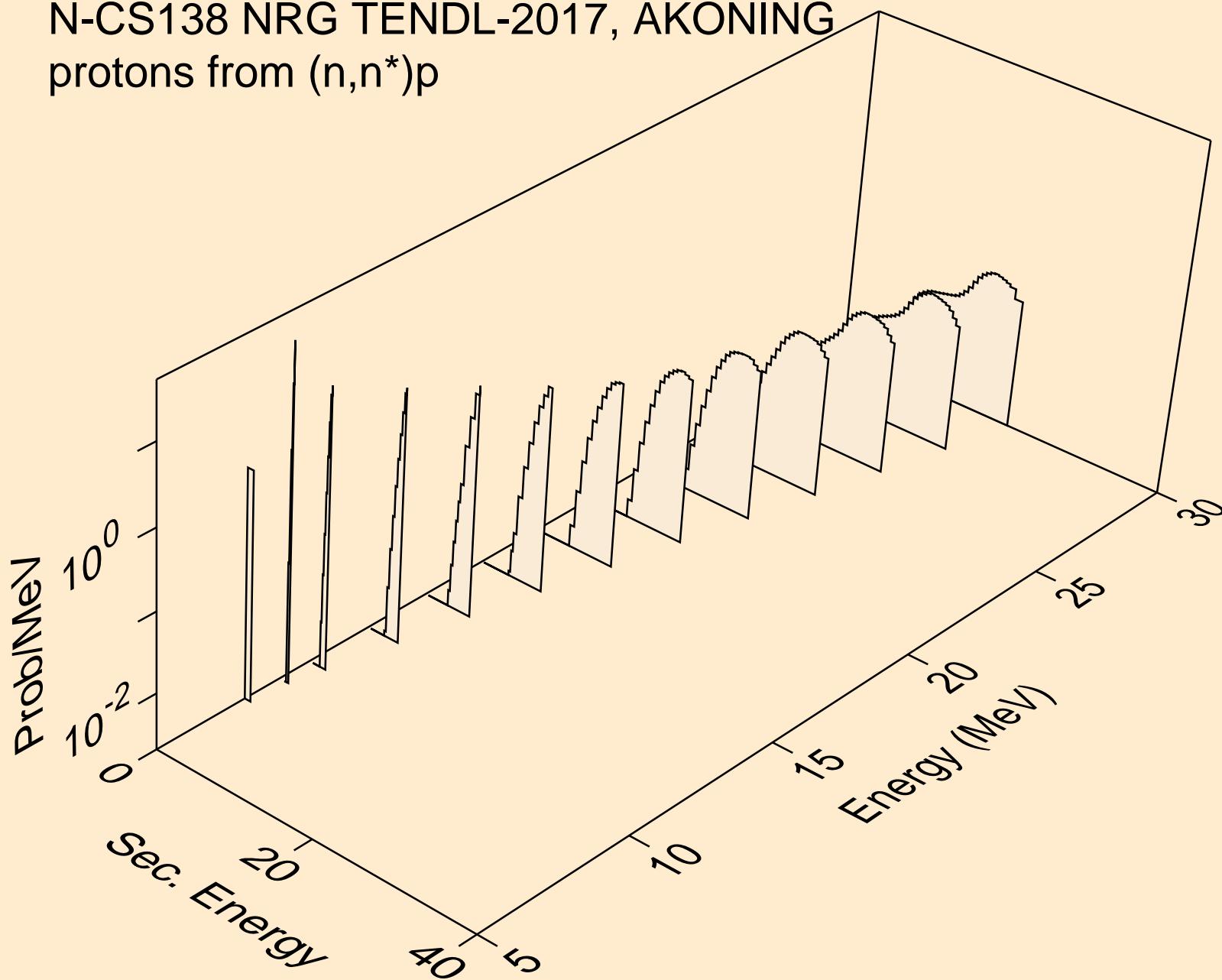
## Particle production cross sections



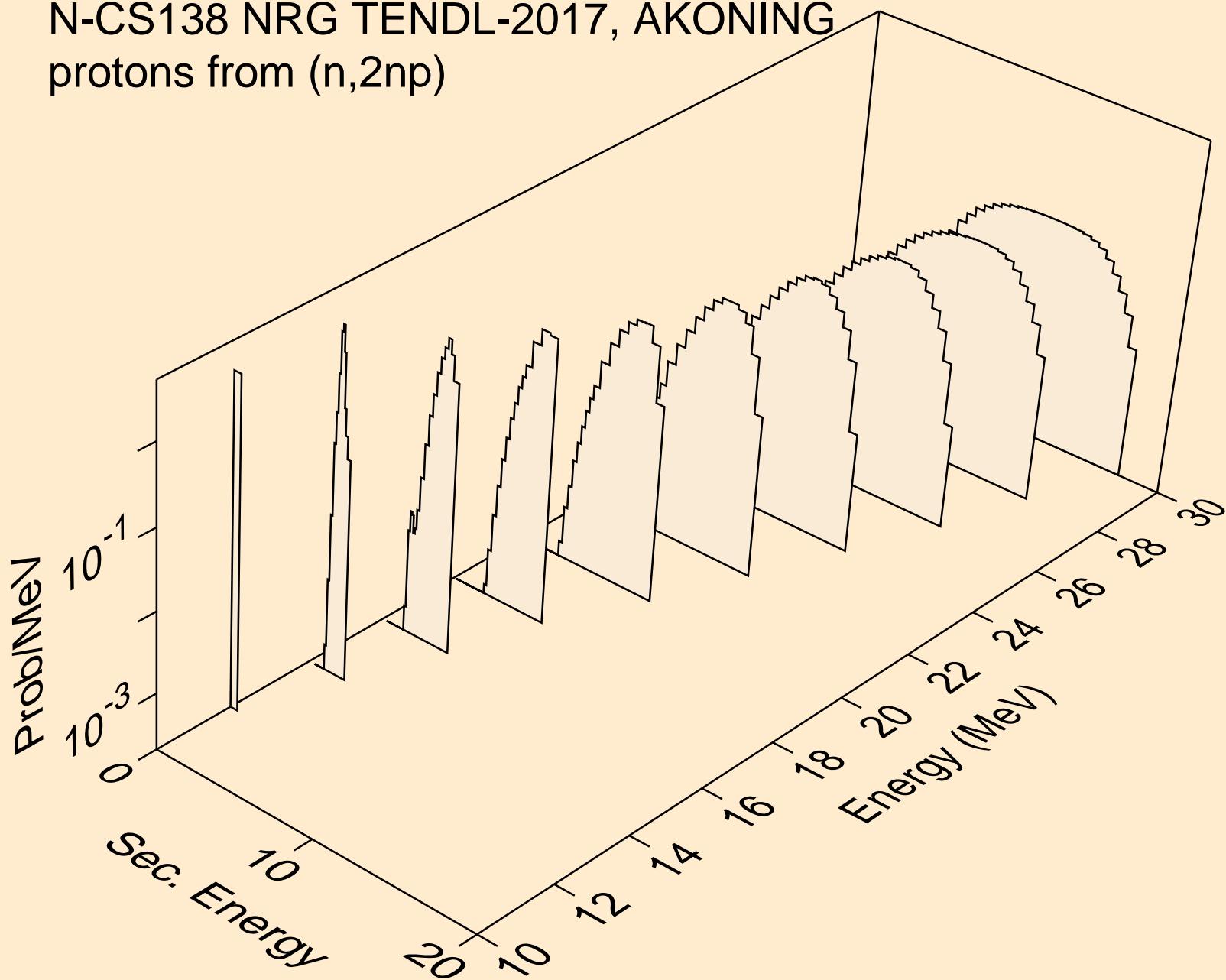
N-CS138 NRG TENDL-2017, AKONING  
protons from ( $n,x$ )



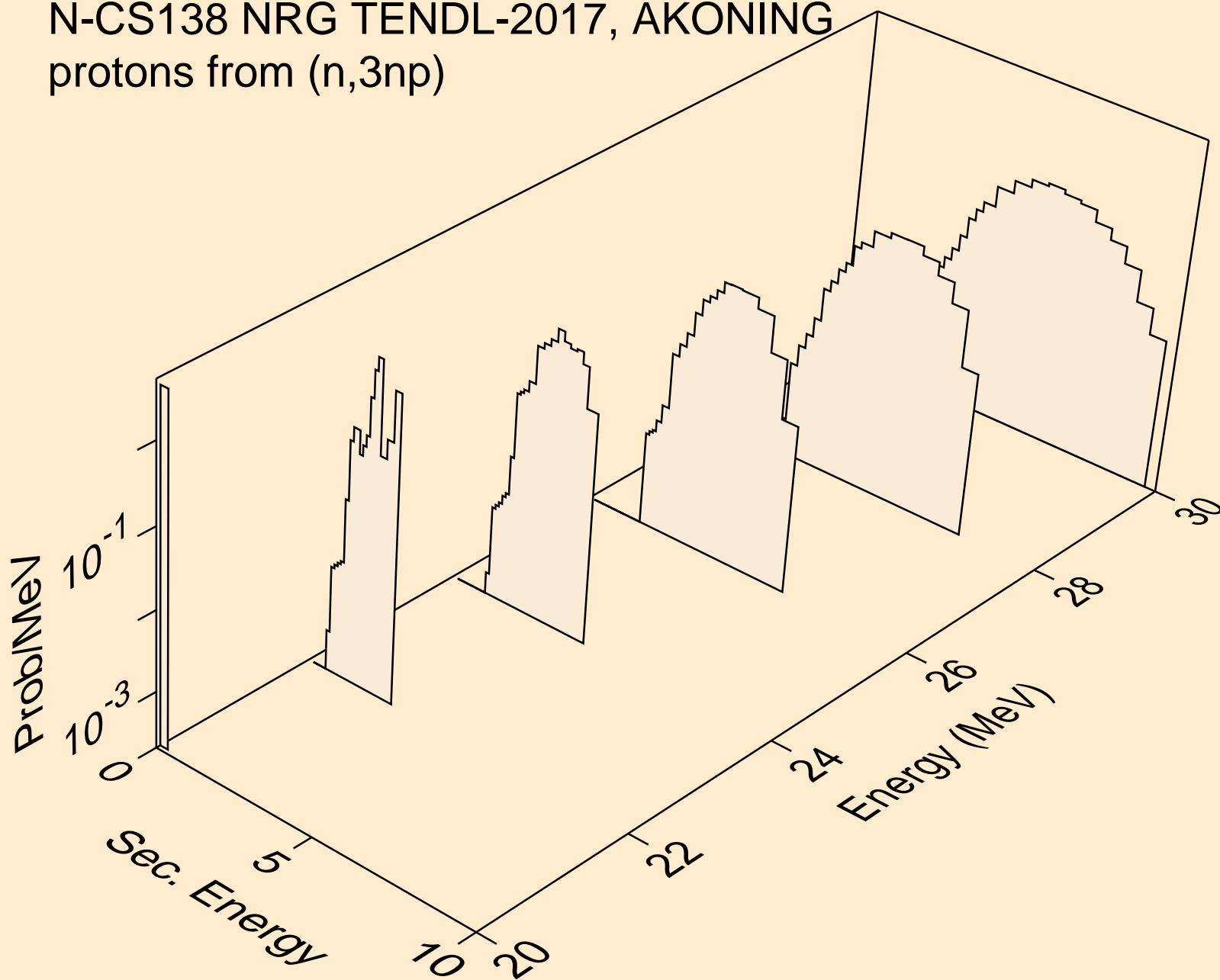
N-CS138 NRG TENDL-2017, AKONING  
protons from  $(n,n^*)p$



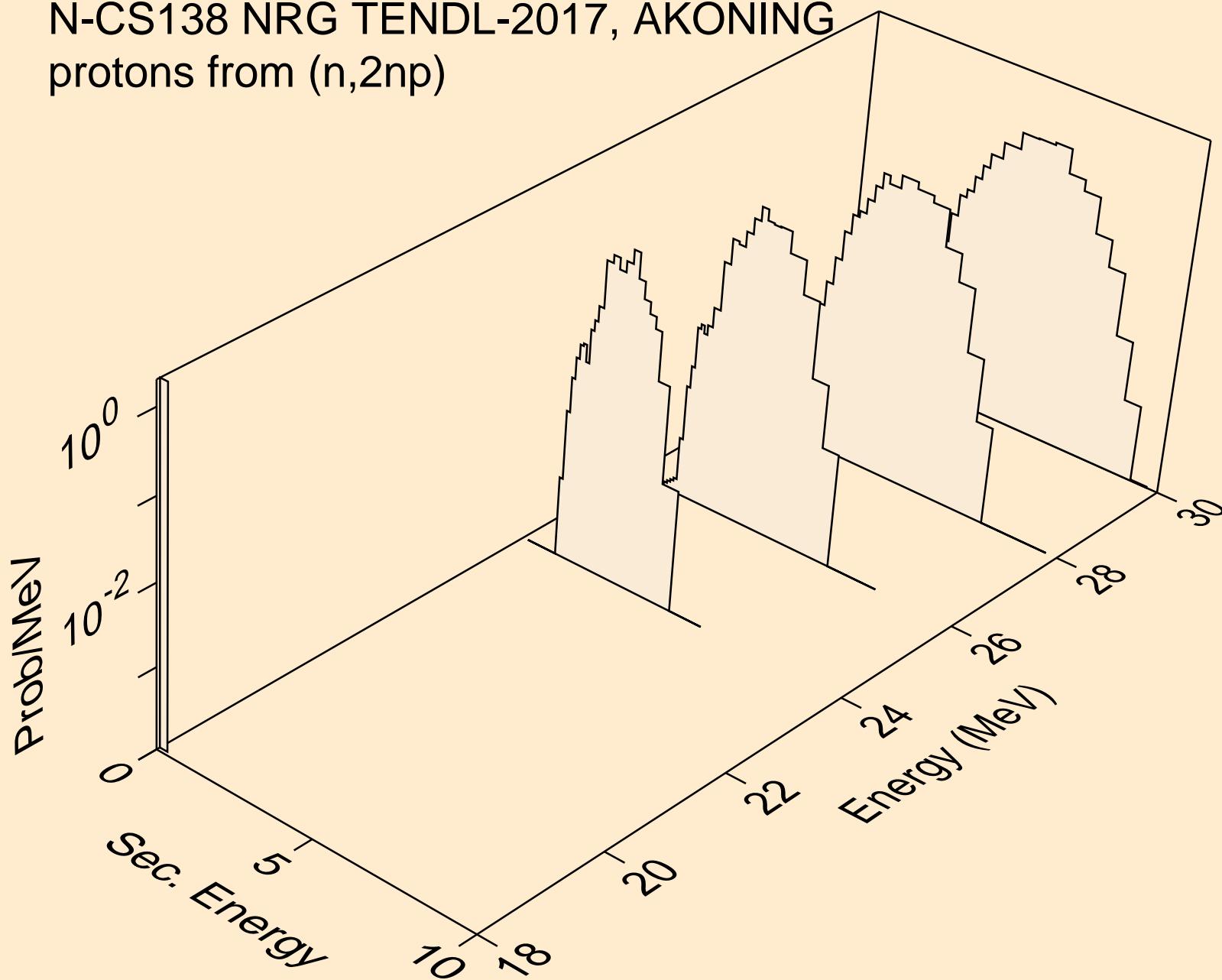
N-CS138 NRG TENDL-2017, AKONING  
protons from ( $n,2np$ )



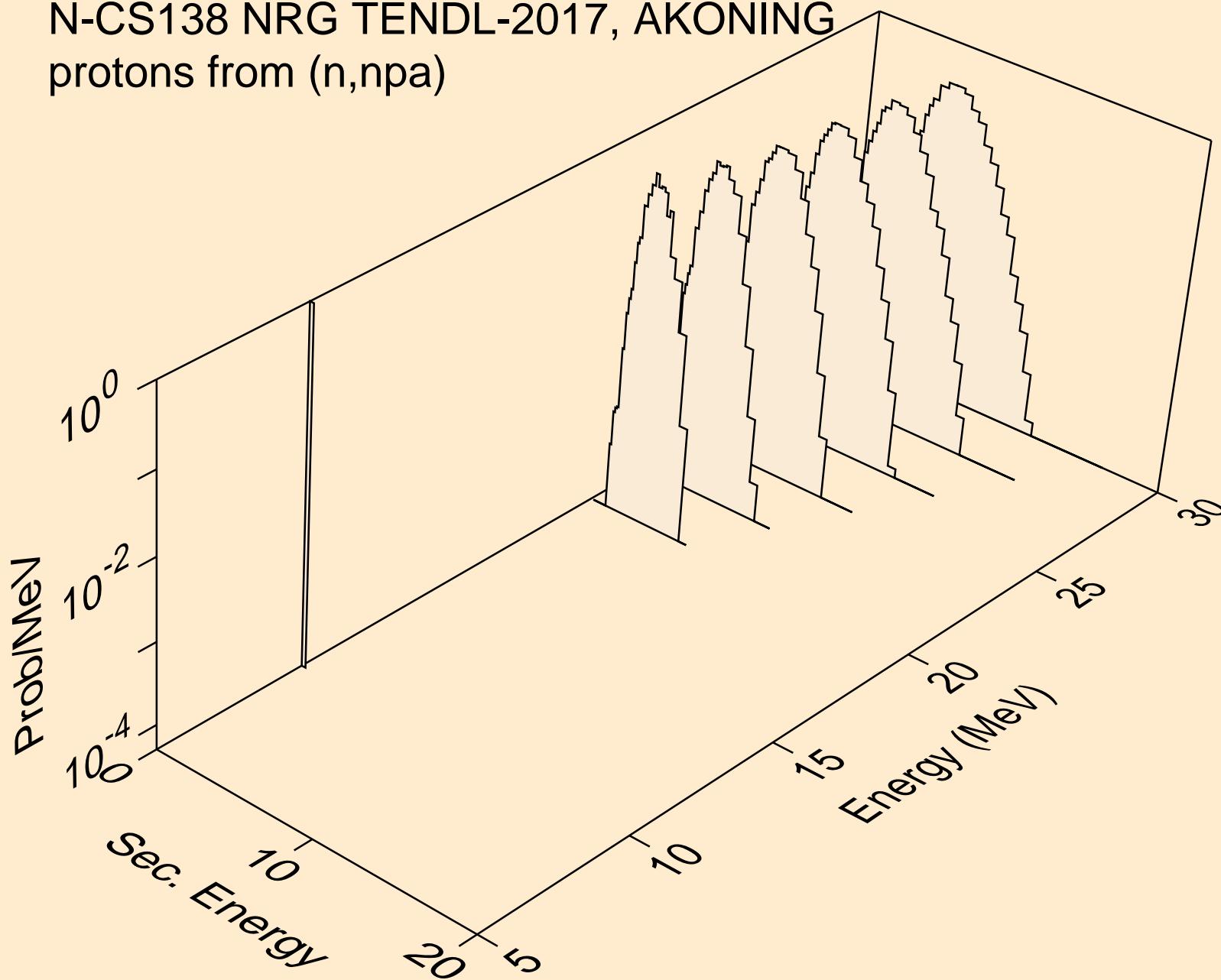
N-CS138 NRG TENDL-2017, AKONING  
protons from ( $n,3np$ )



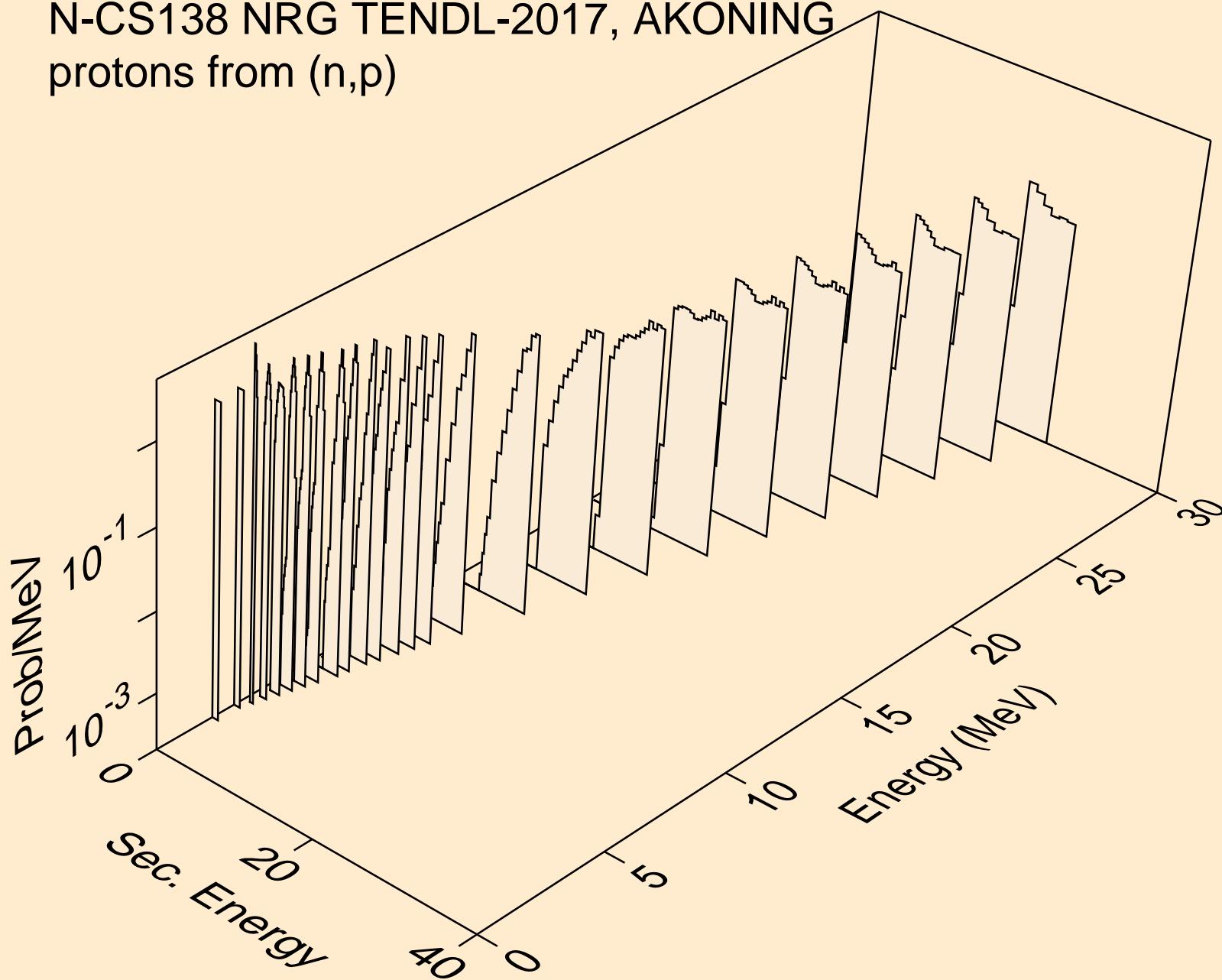
N-CS138 NRG TENDL-2017, AKONING  
protons from ( $n,2np$ )



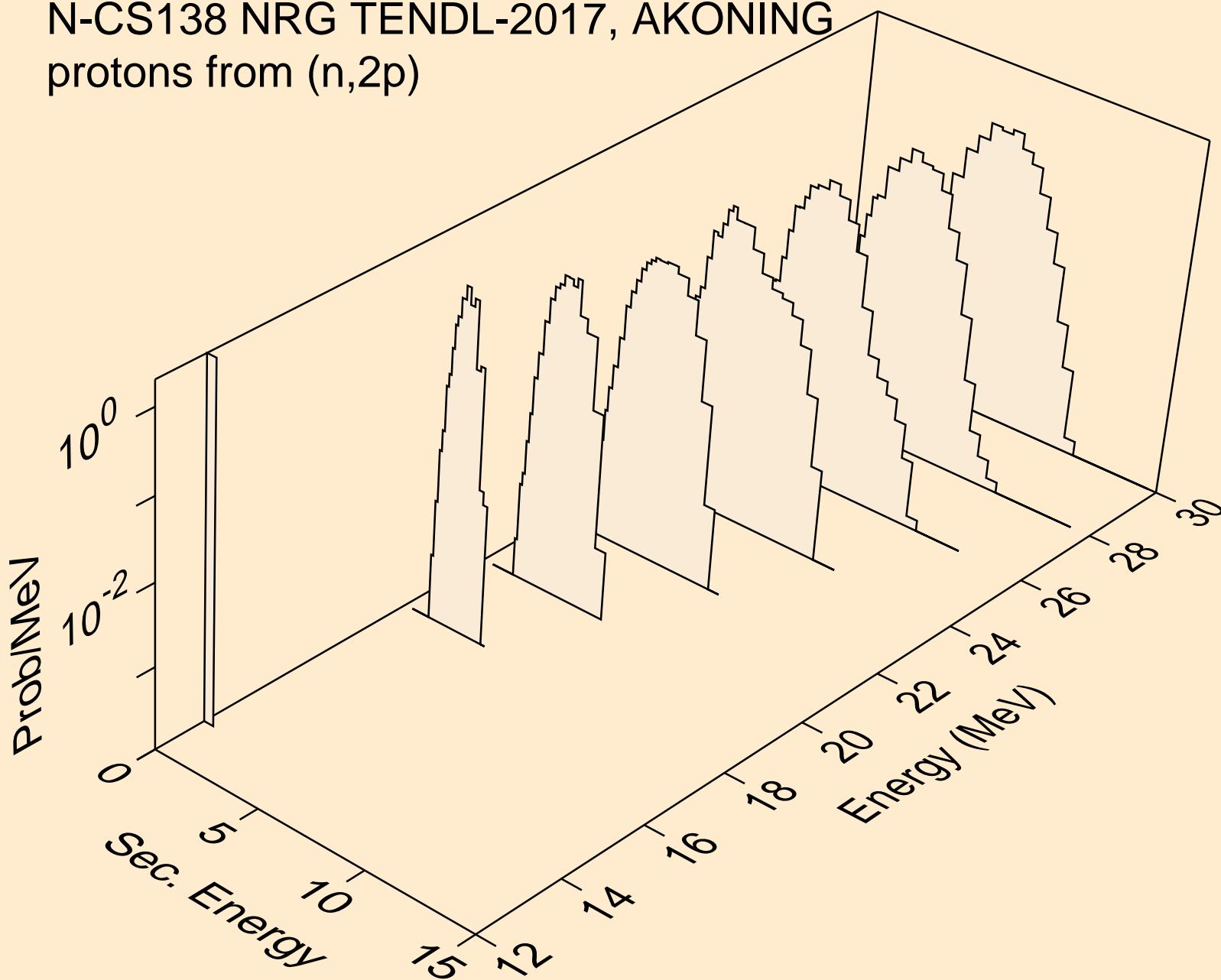
N-CS138 NRG TENDL-2017, AKONING  
protons from (n,npa)



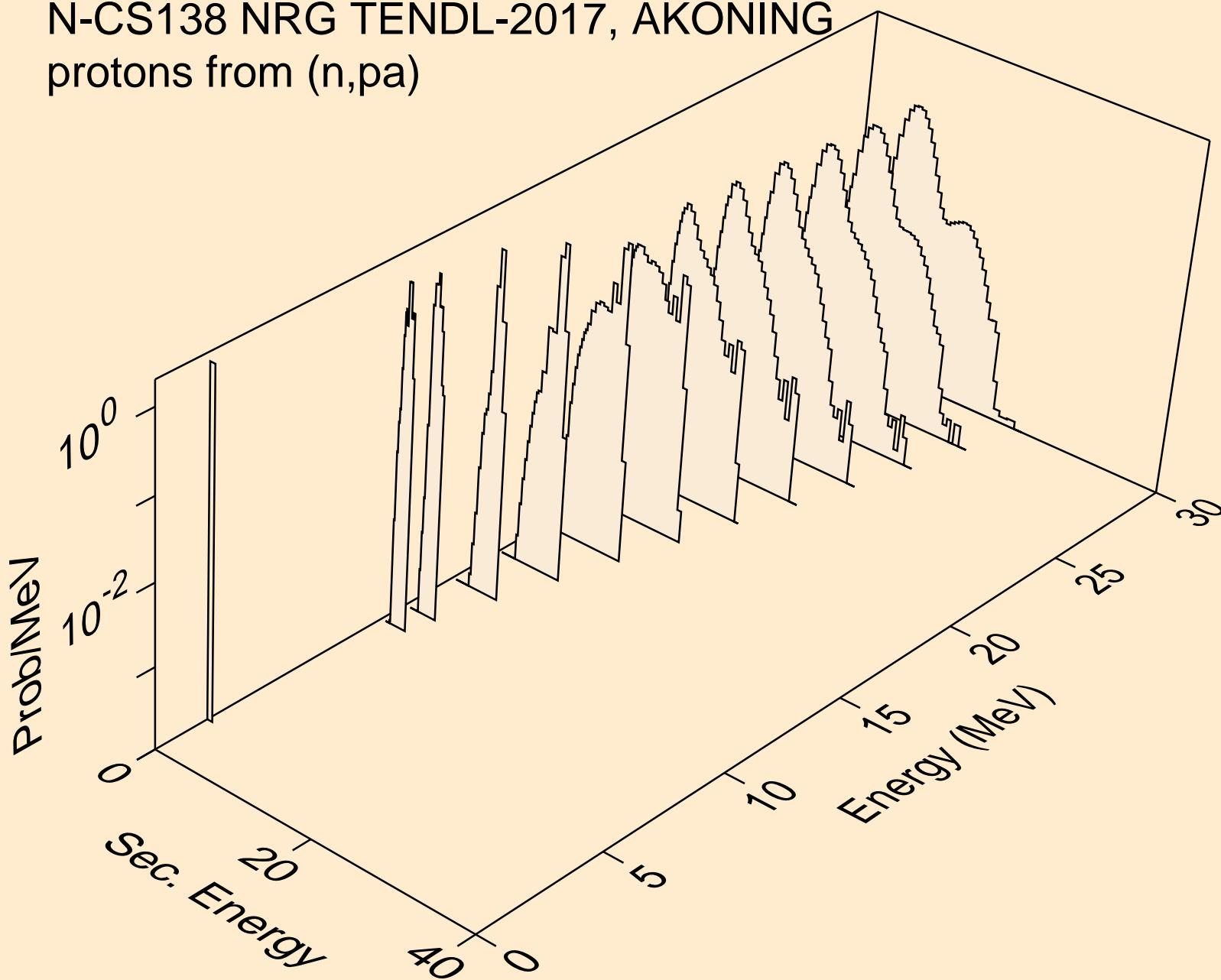
N-CS138 NRG TENDL-2017, AKONING  
protons from (n,p)



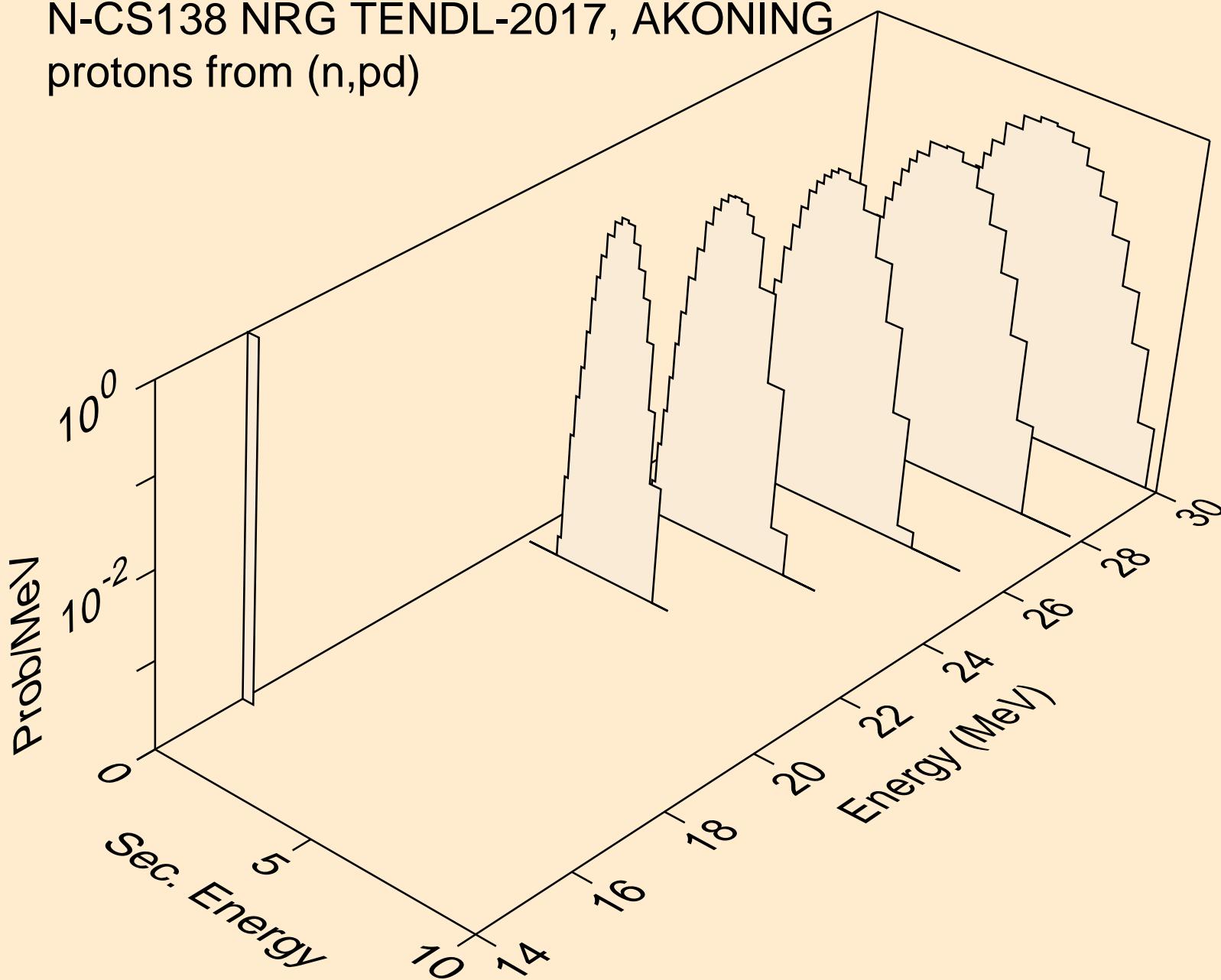
N-CS138 NRG TENDL-2017, AKONING  
protons from (n,2p)



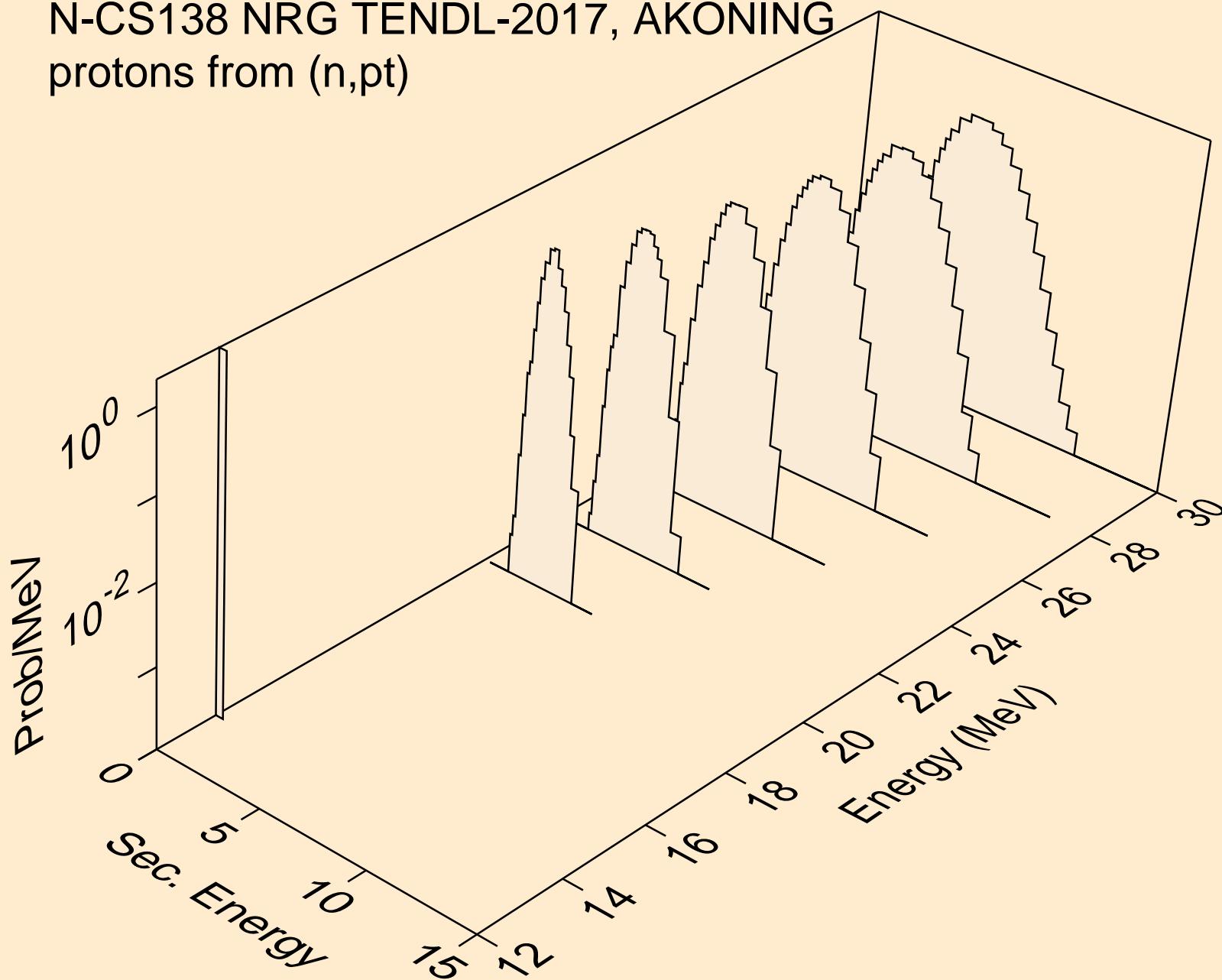
N-CS138 NRG TENDL-2017, AKONING  
protons from (n,pa)



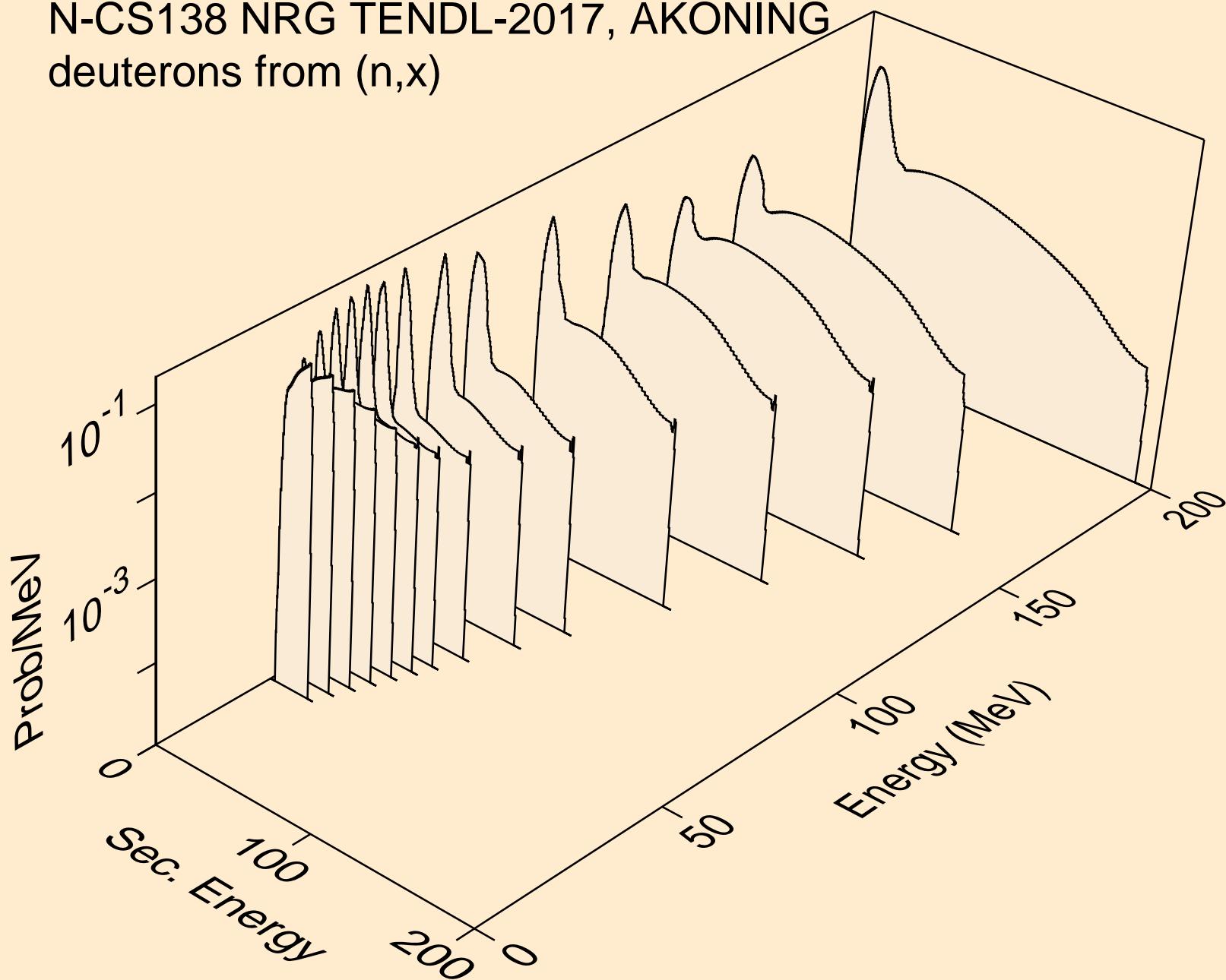
N-CS138 NRG TENDL-2017, AKONING  
protons from (n,pd)



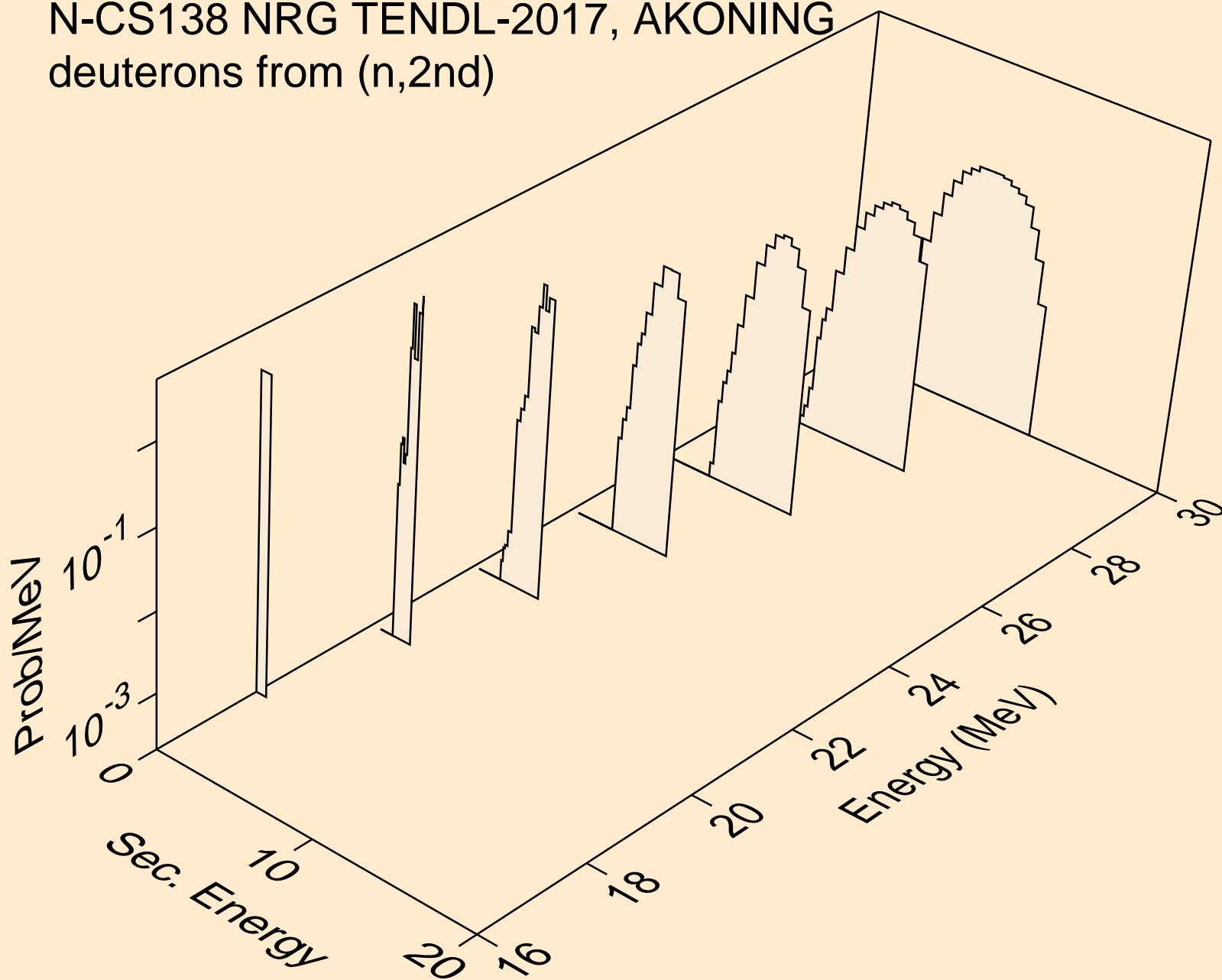
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protons from (n,pt)



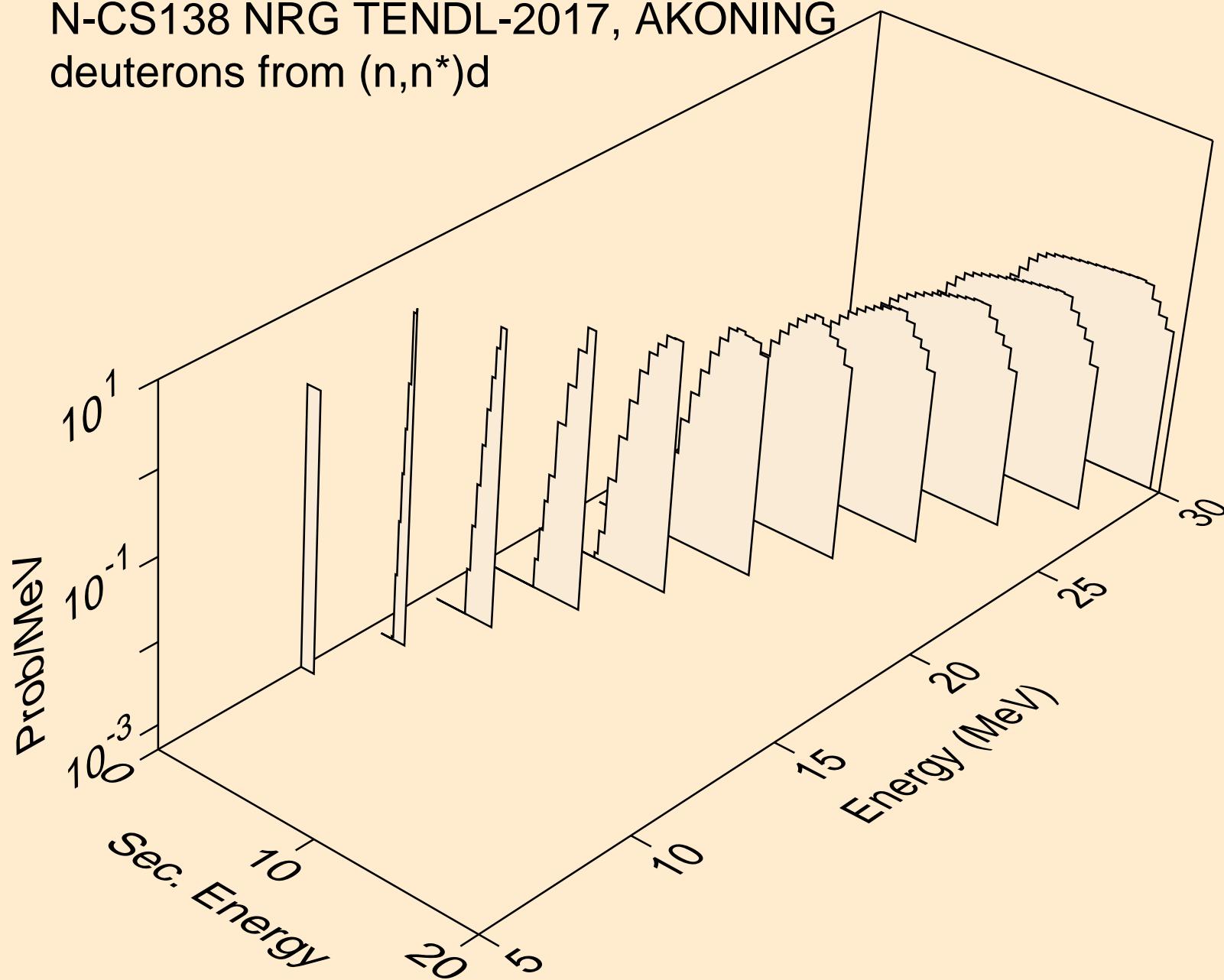
N-CS138 NRG TENDL-2017, AKONING  
deuterons from ( $n,x$ )



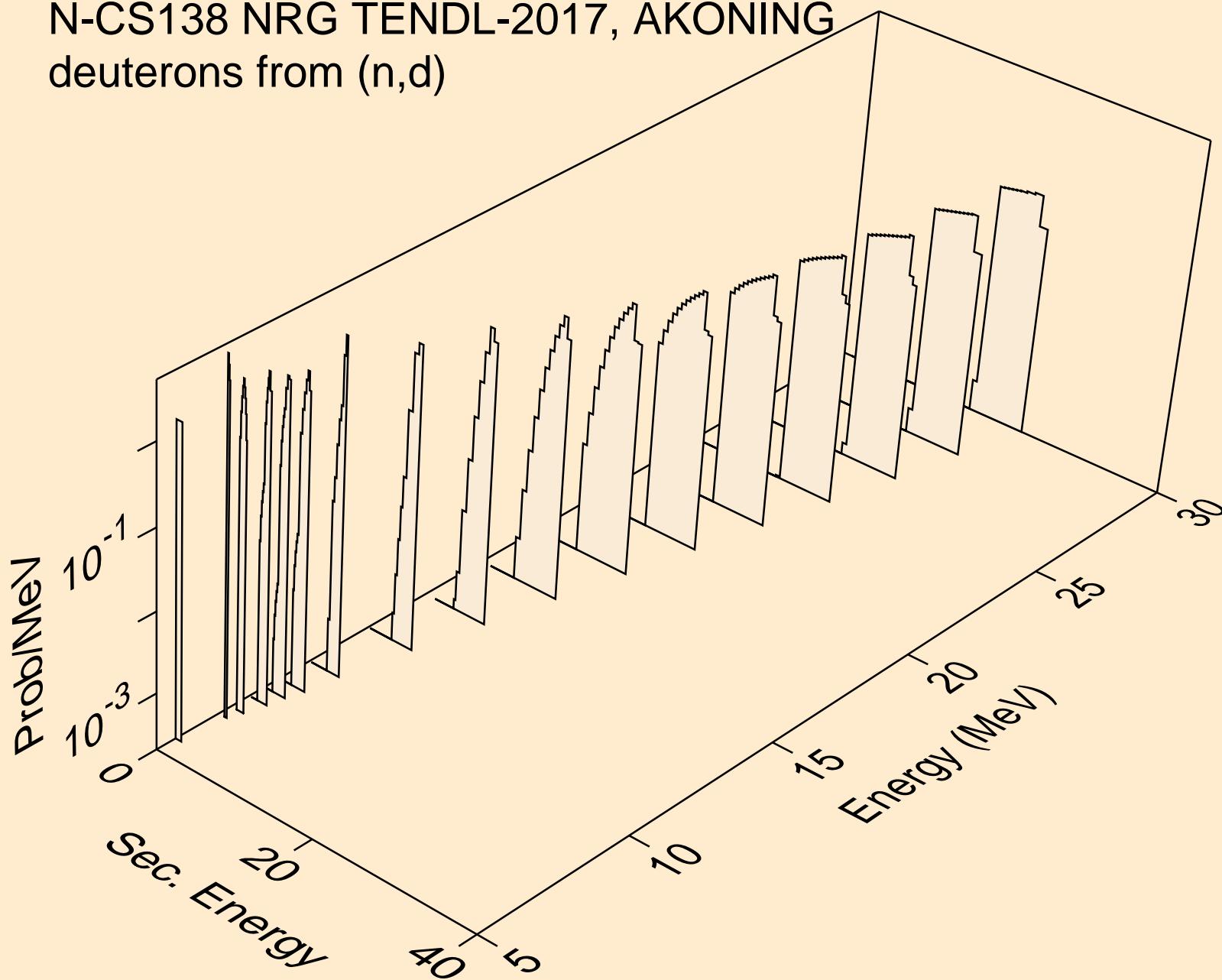
N-CS138 NRG TENDL-2017, AKONING  
deuterons from ( $n,2\text{nd}$ )



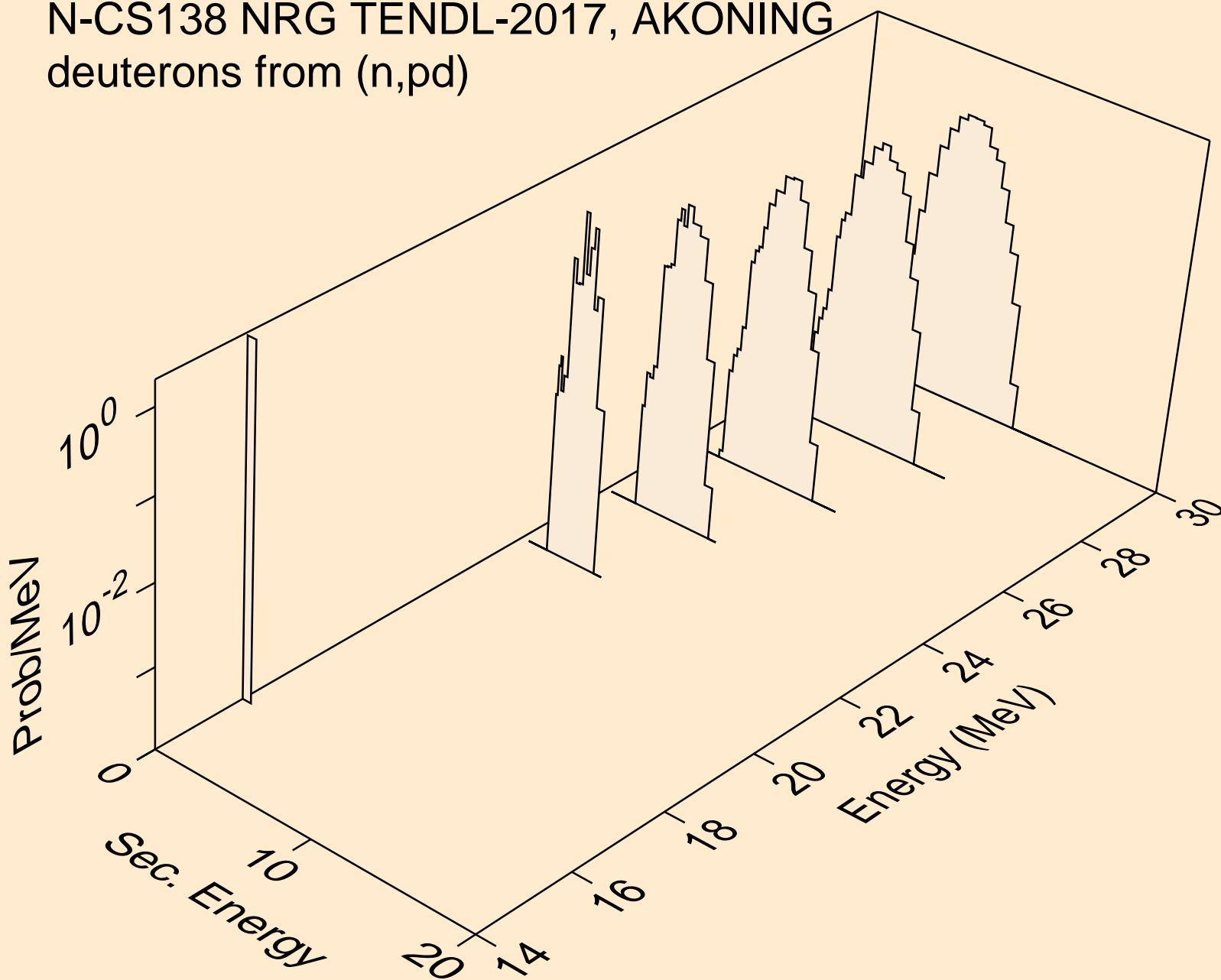
N-CS138 NRG TENDL-2017, AKONING  
deuterons from  $(n,n^*)d$



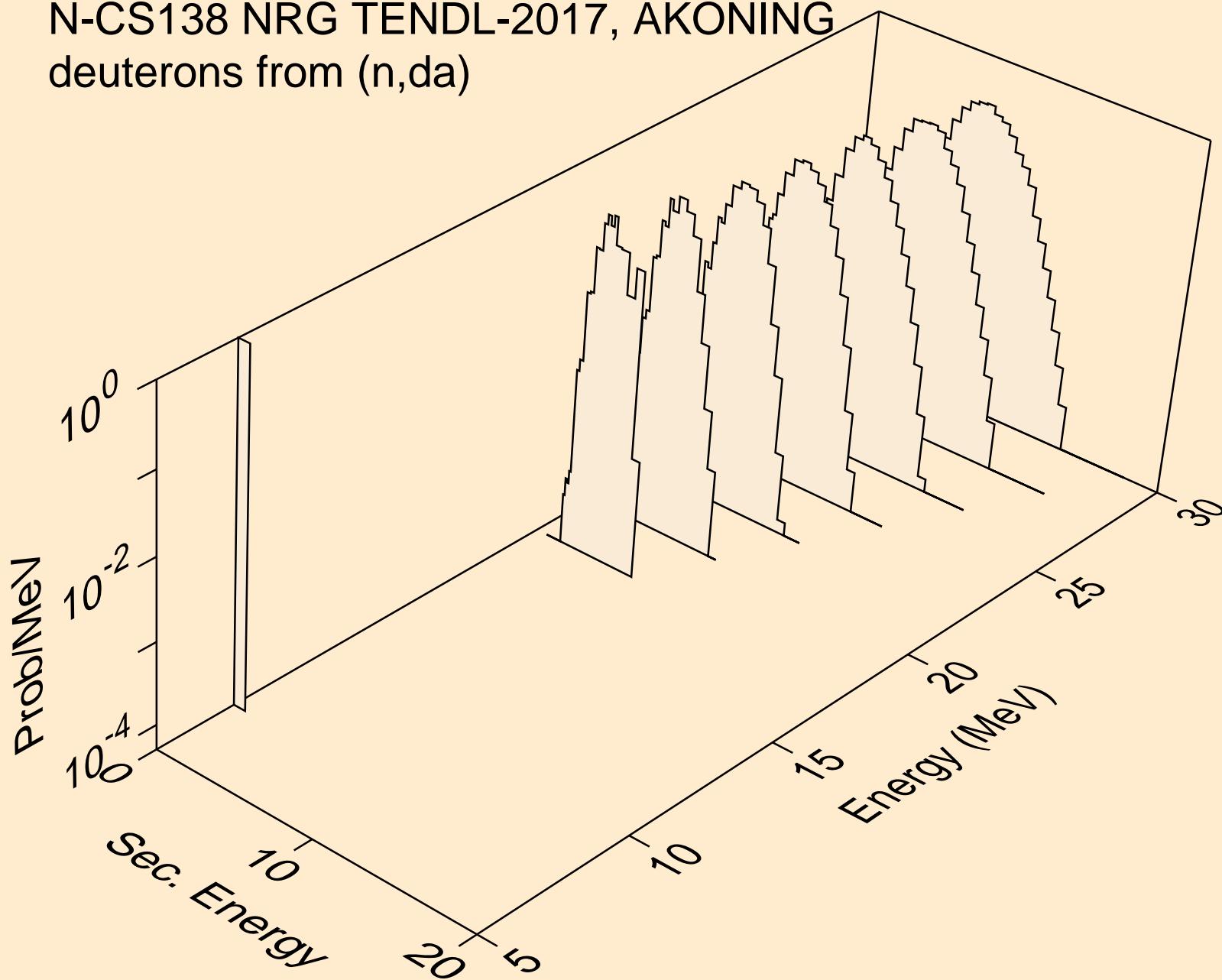
N-CS138 NRG TENDL-2017, AKONING  
deuterons from ( $n, d$ )



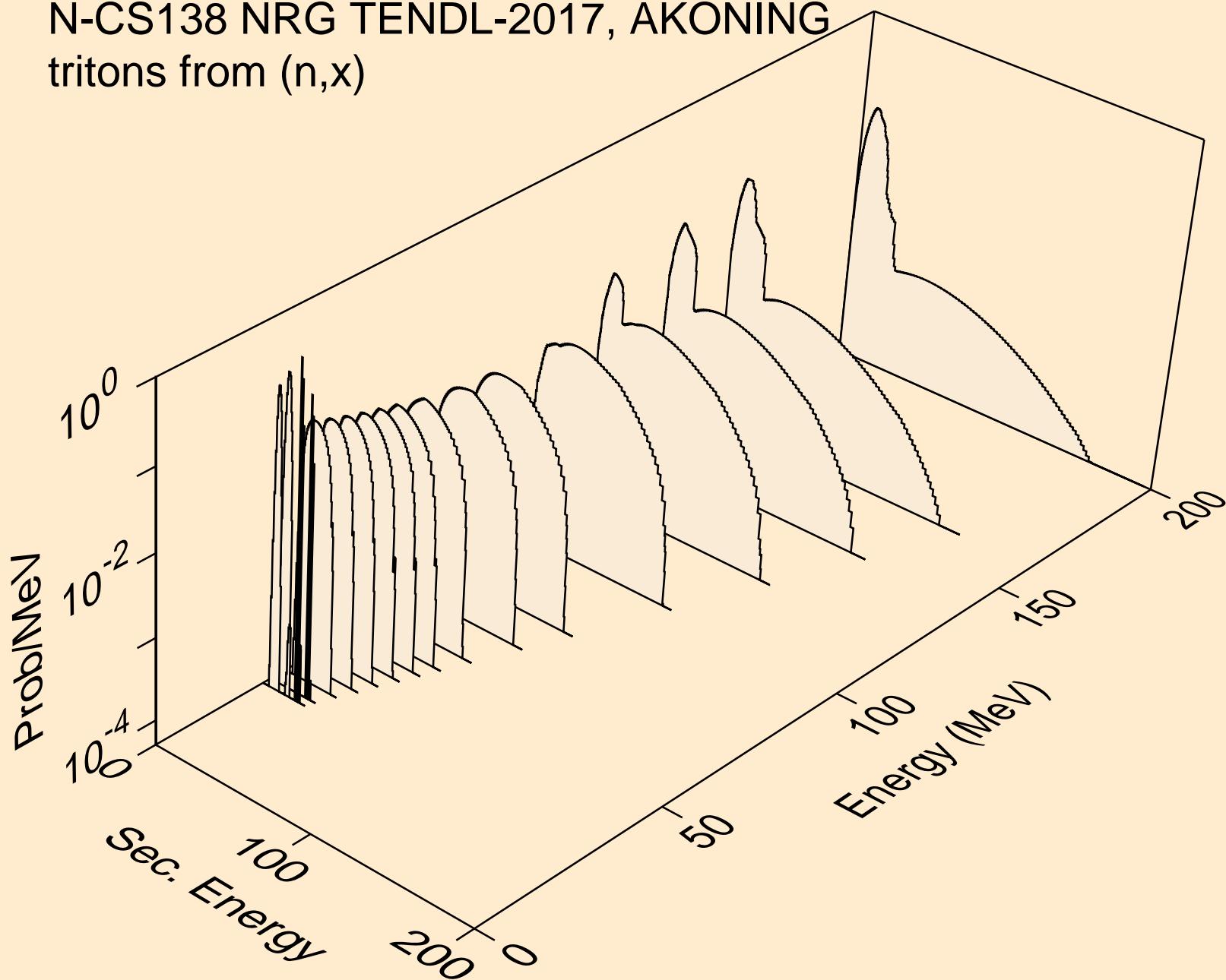
N-CS138 NRG TENDL-2017, AKONING  
deuterons from (n,pd)



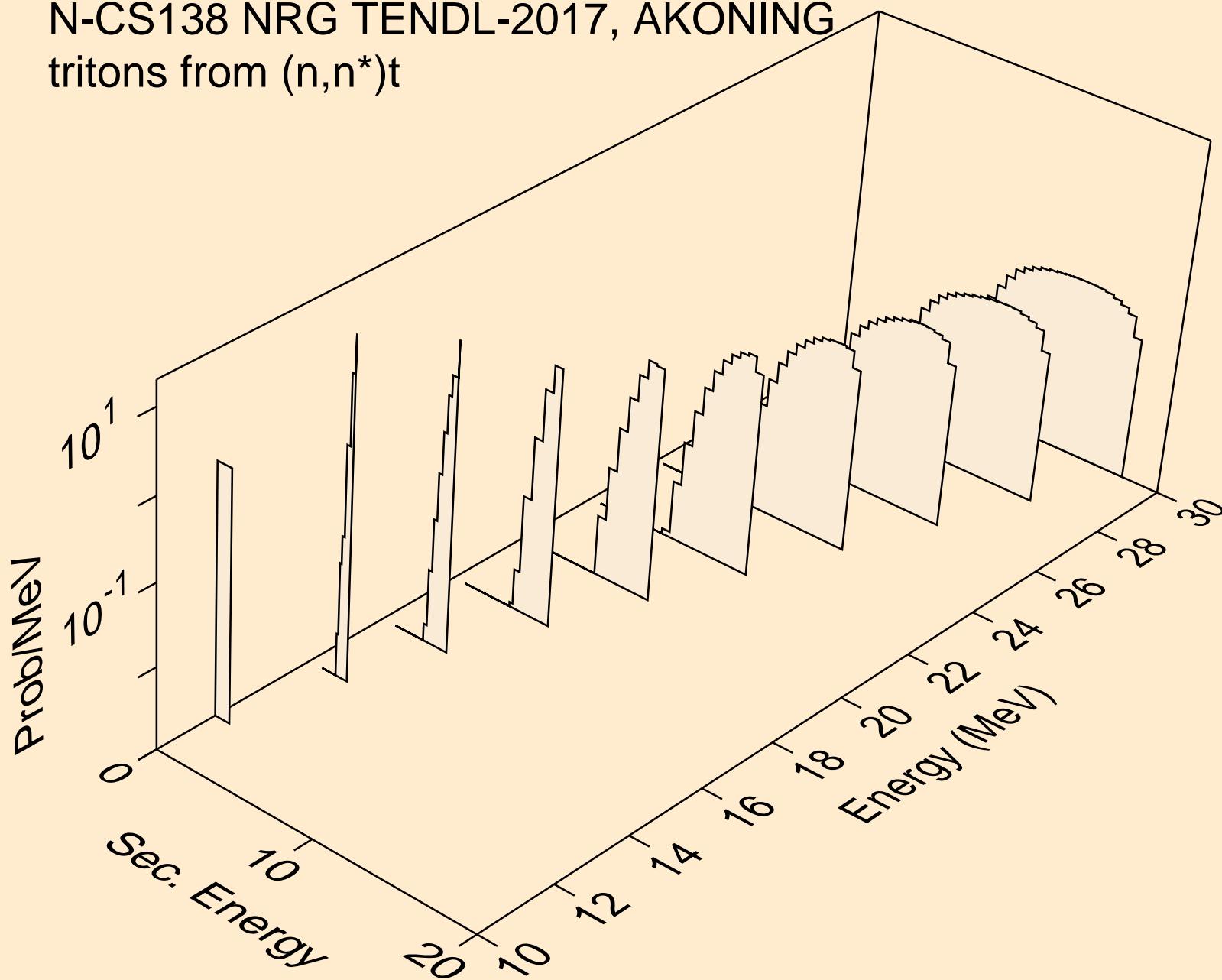
N-CS138 NRG TENDL-2017, AKONING  
deuterons from (n,da)



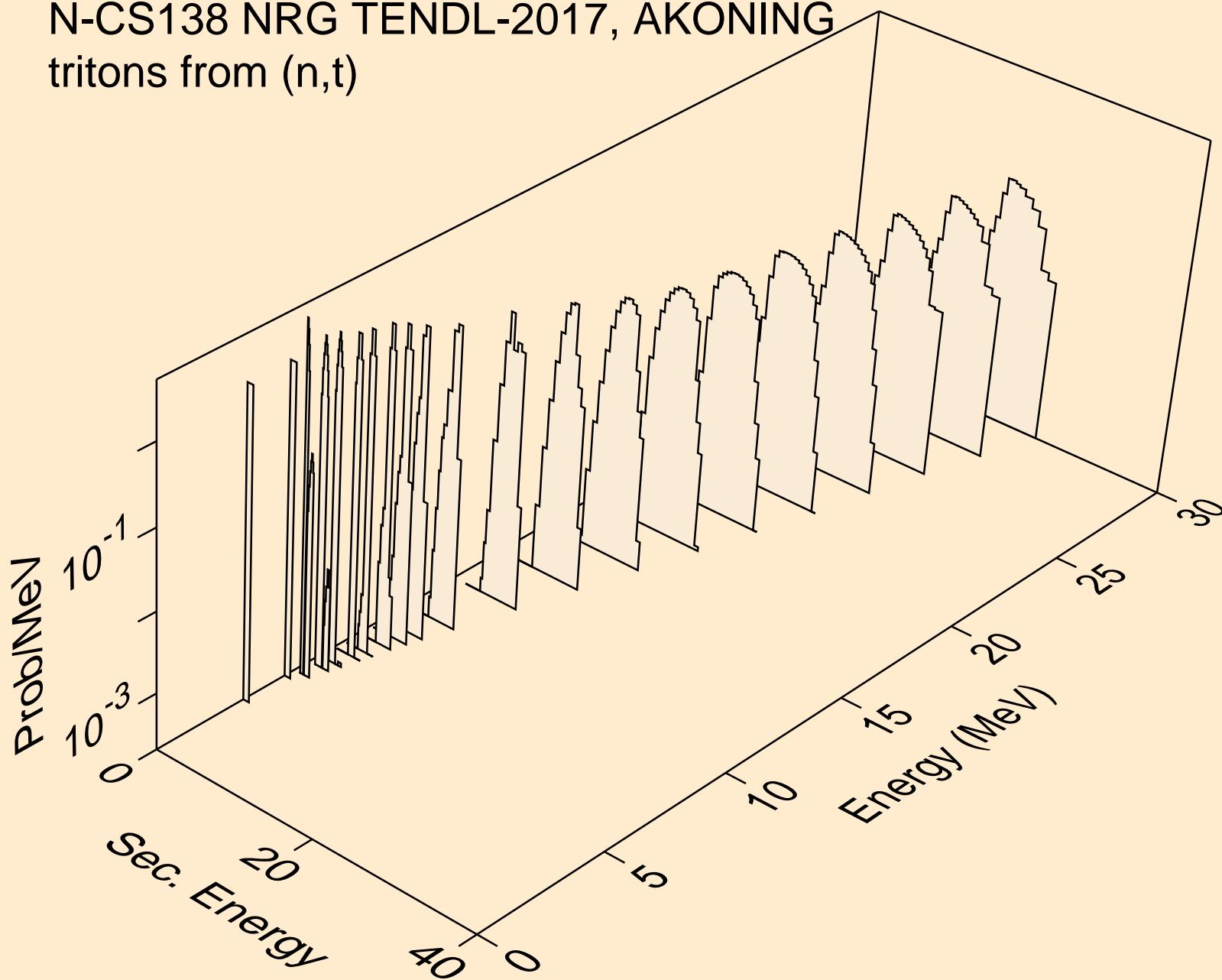
N-CS138 NRG TENDL-2017, AKONING  
tritons from ( $n,x$ )



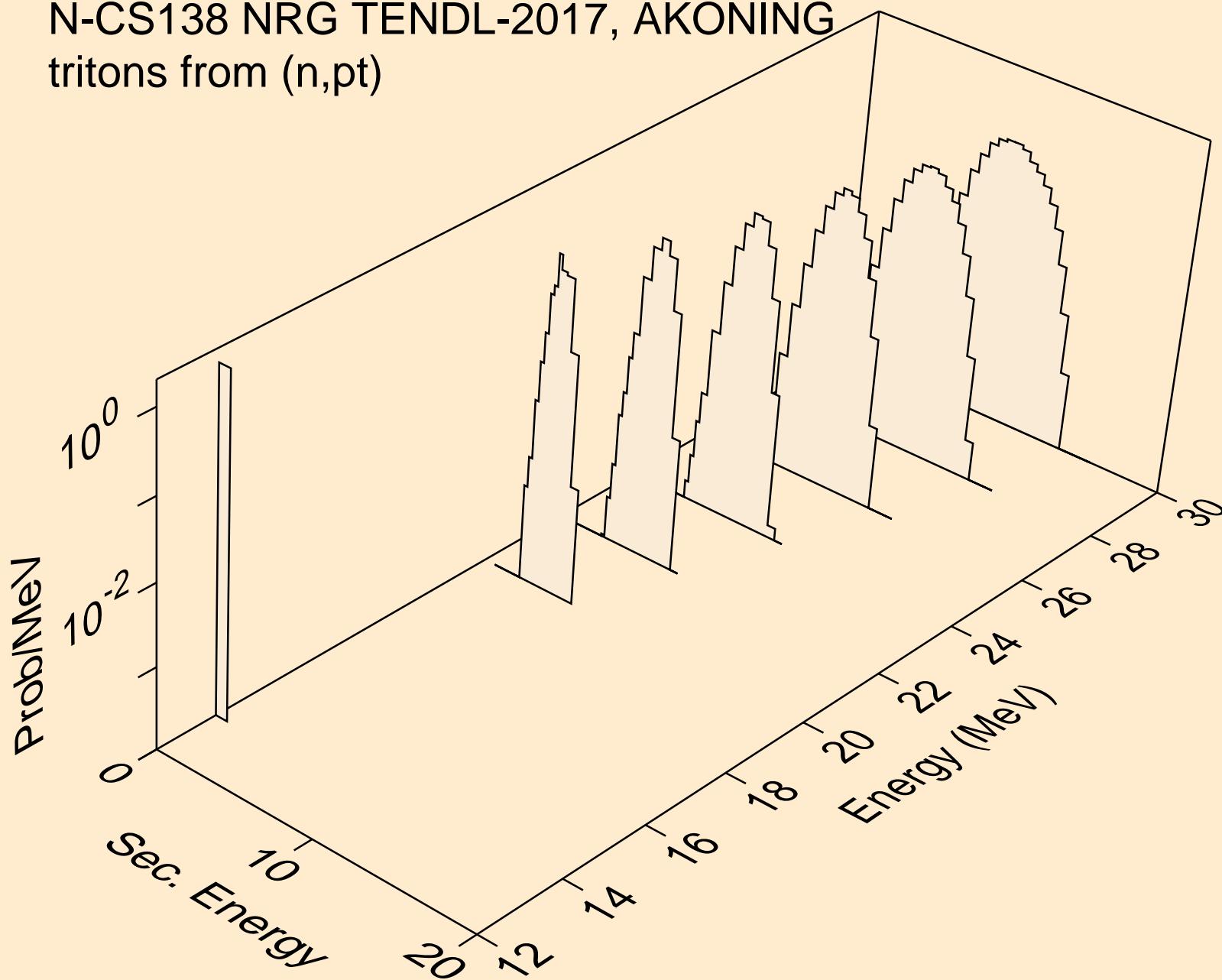
N-CS138 NRG TENDL-2017, AKONING  
tritons from  $(n,n^*)t$



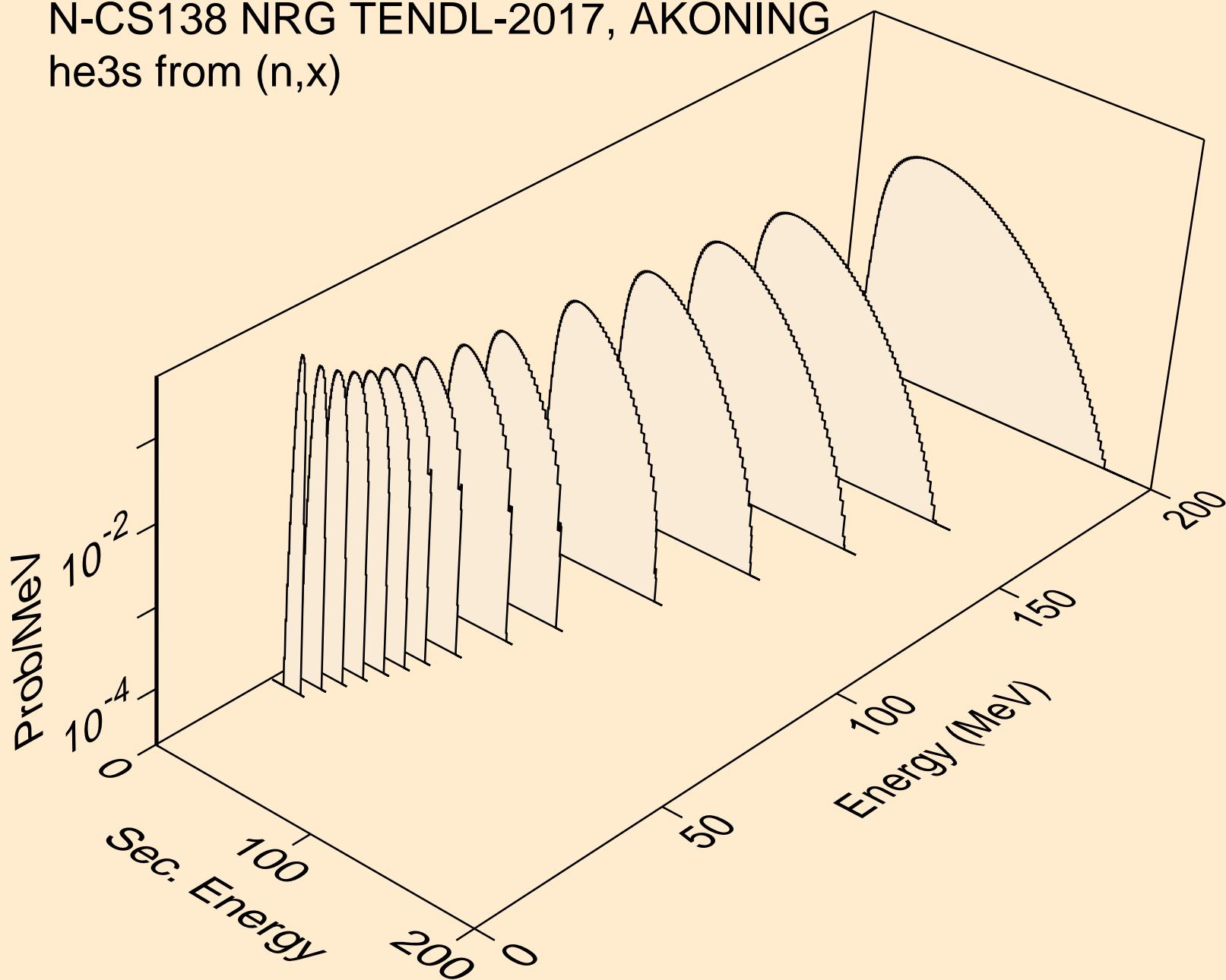
N-CS138 NRG TENDL-2017, AKONING  
tritons from ( $n,t$ )



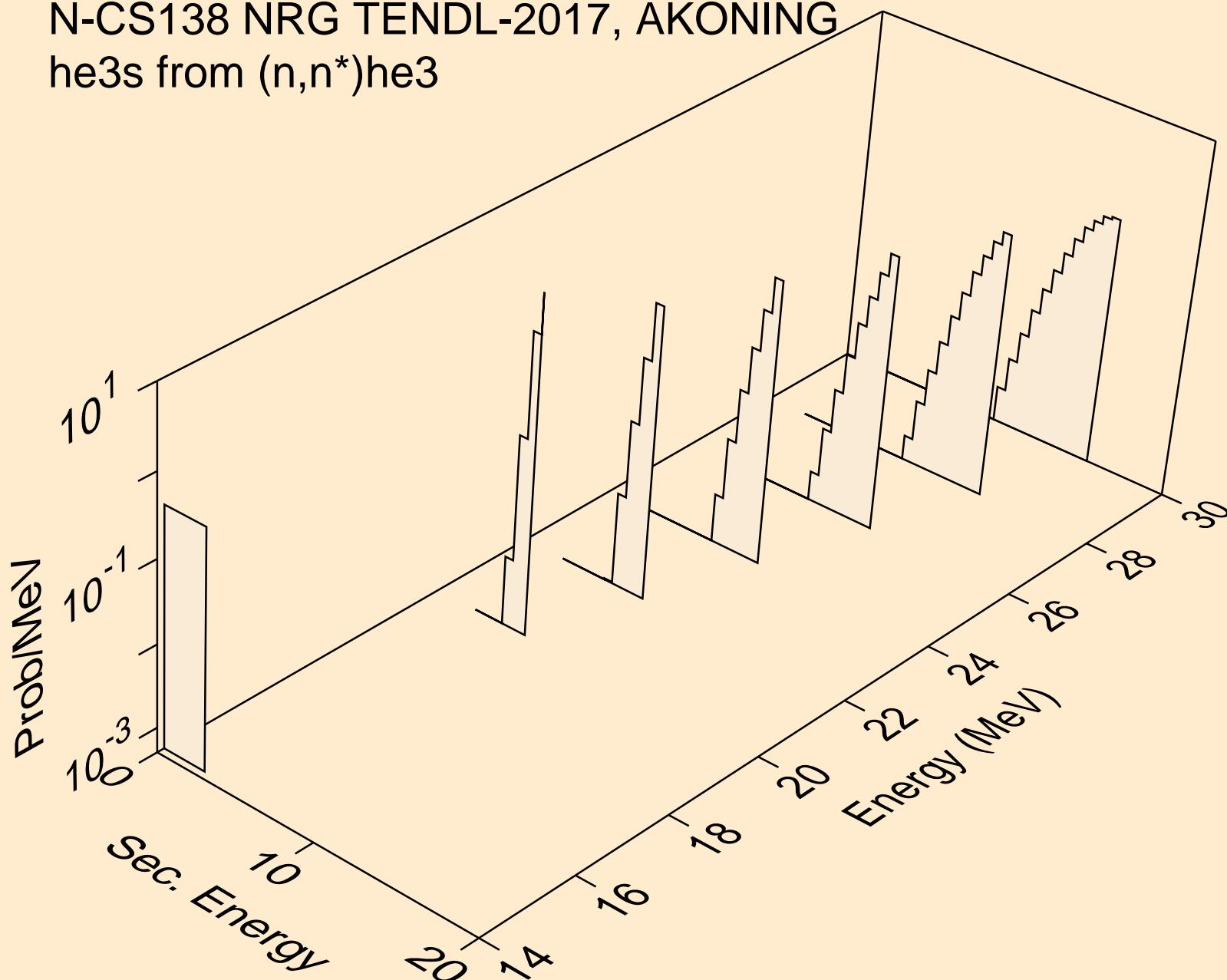
N-CS138 NRG TENDL-2017, AKONING  
tritons from (n,pt)



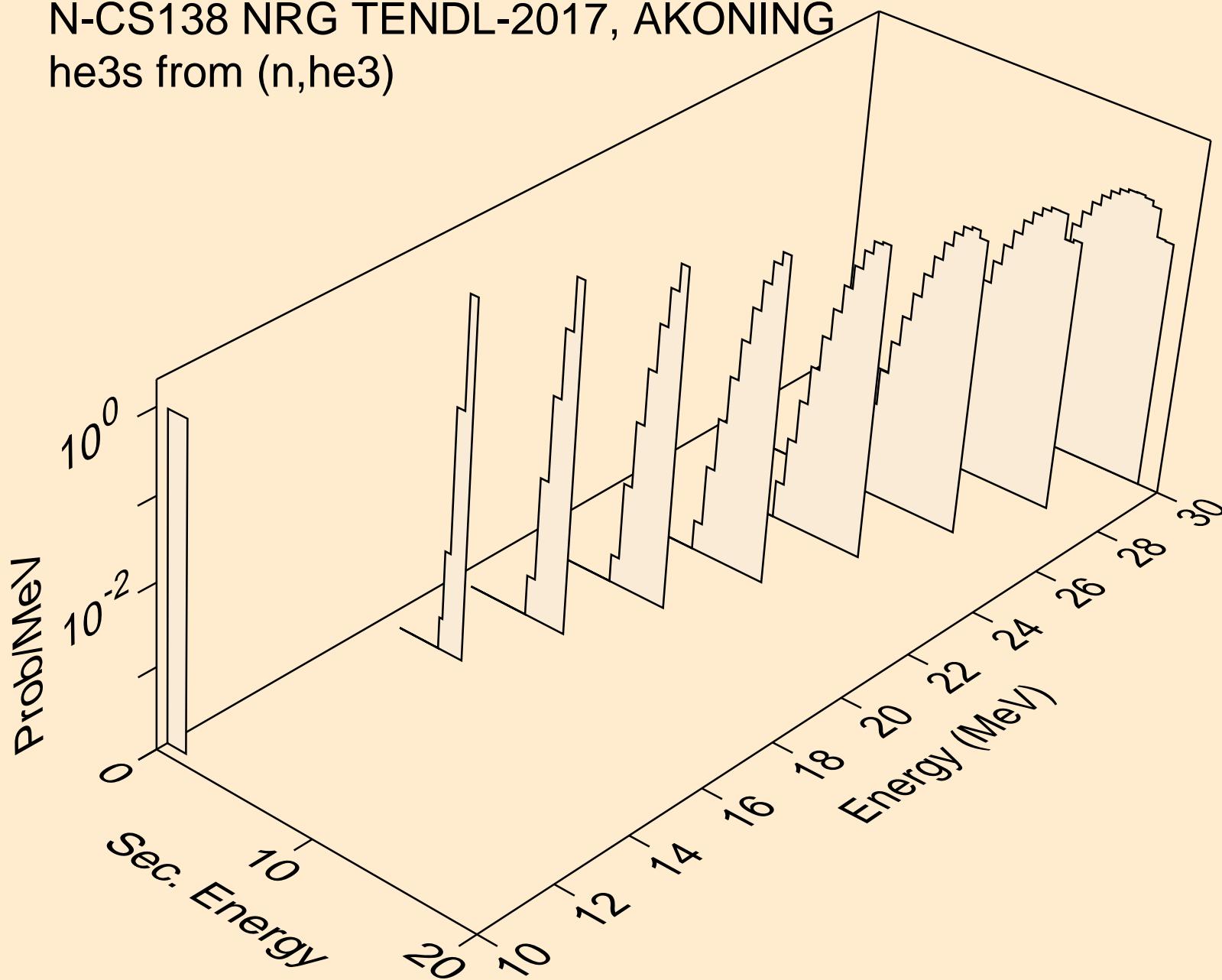
N-CS138 NRG TENDL-2017, AKONING  
he3s from (n,x)



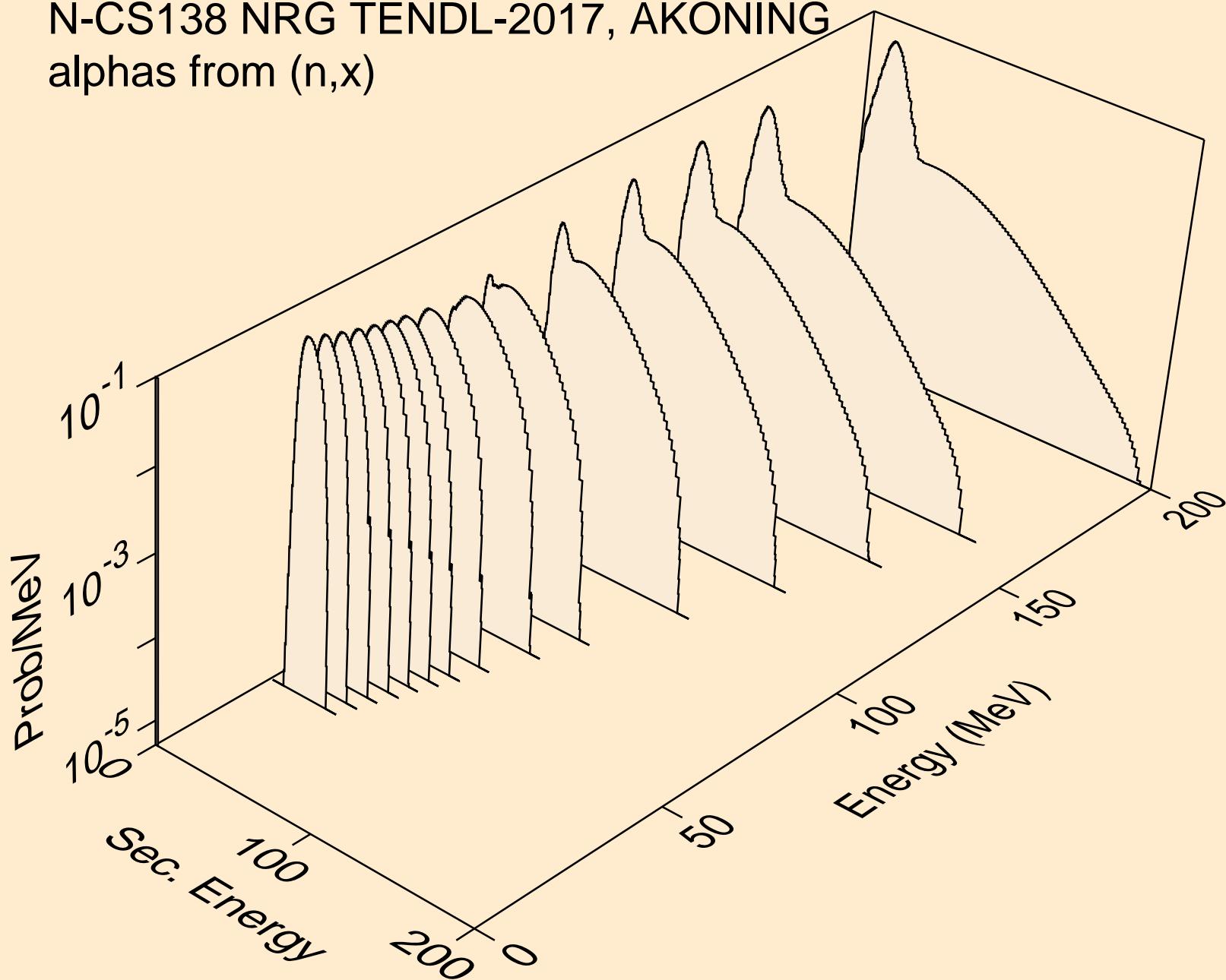
N-CS138 NRG TENDL-2017, AKONING  
he3s from ( $n, n^*$ )he3



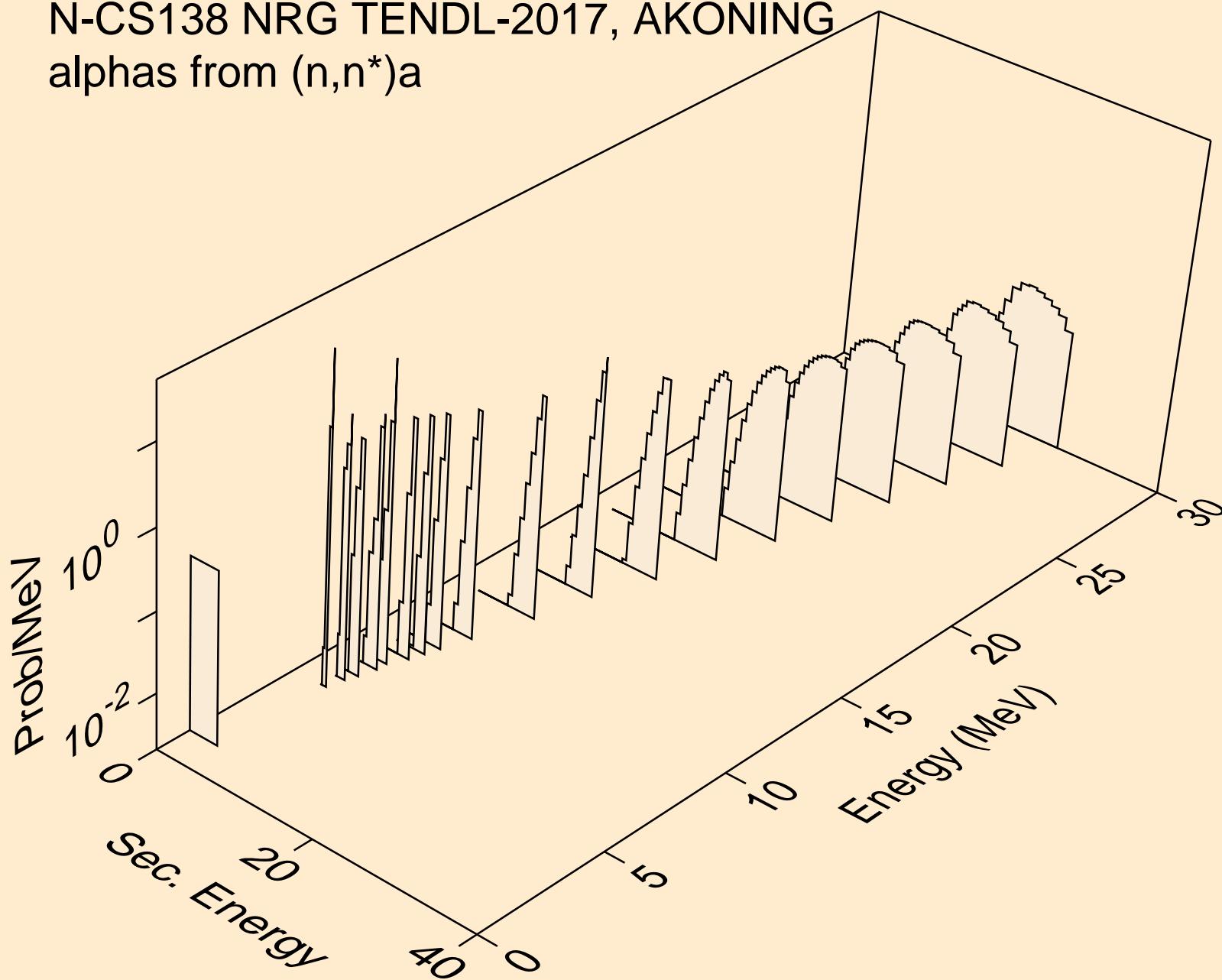
N-CS138 NRG TENDL-2017, AKONING  
he3s from (n,he3)



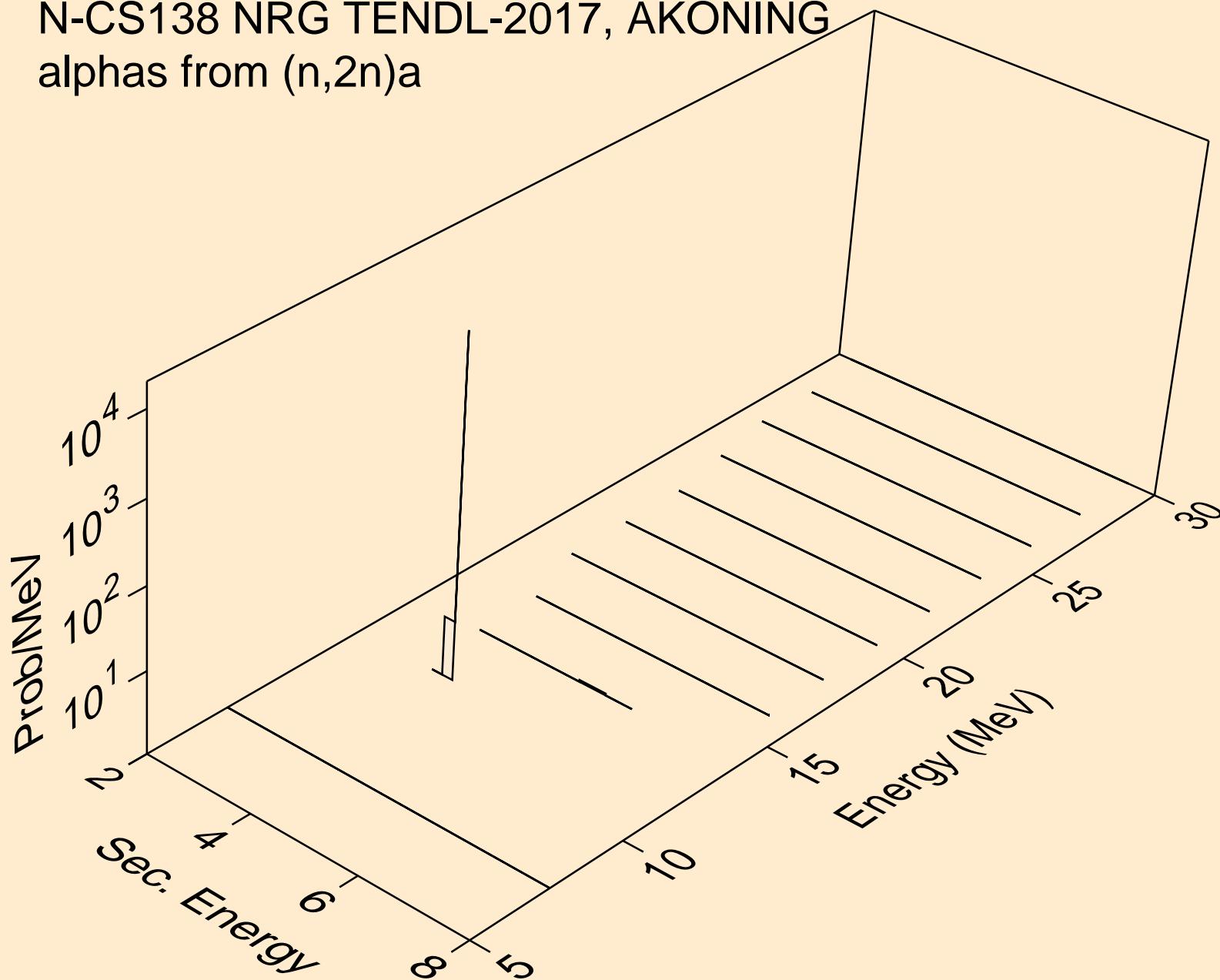
N-CS138 NRG TENDL-2017, AKONING  
alphas from (n,x)



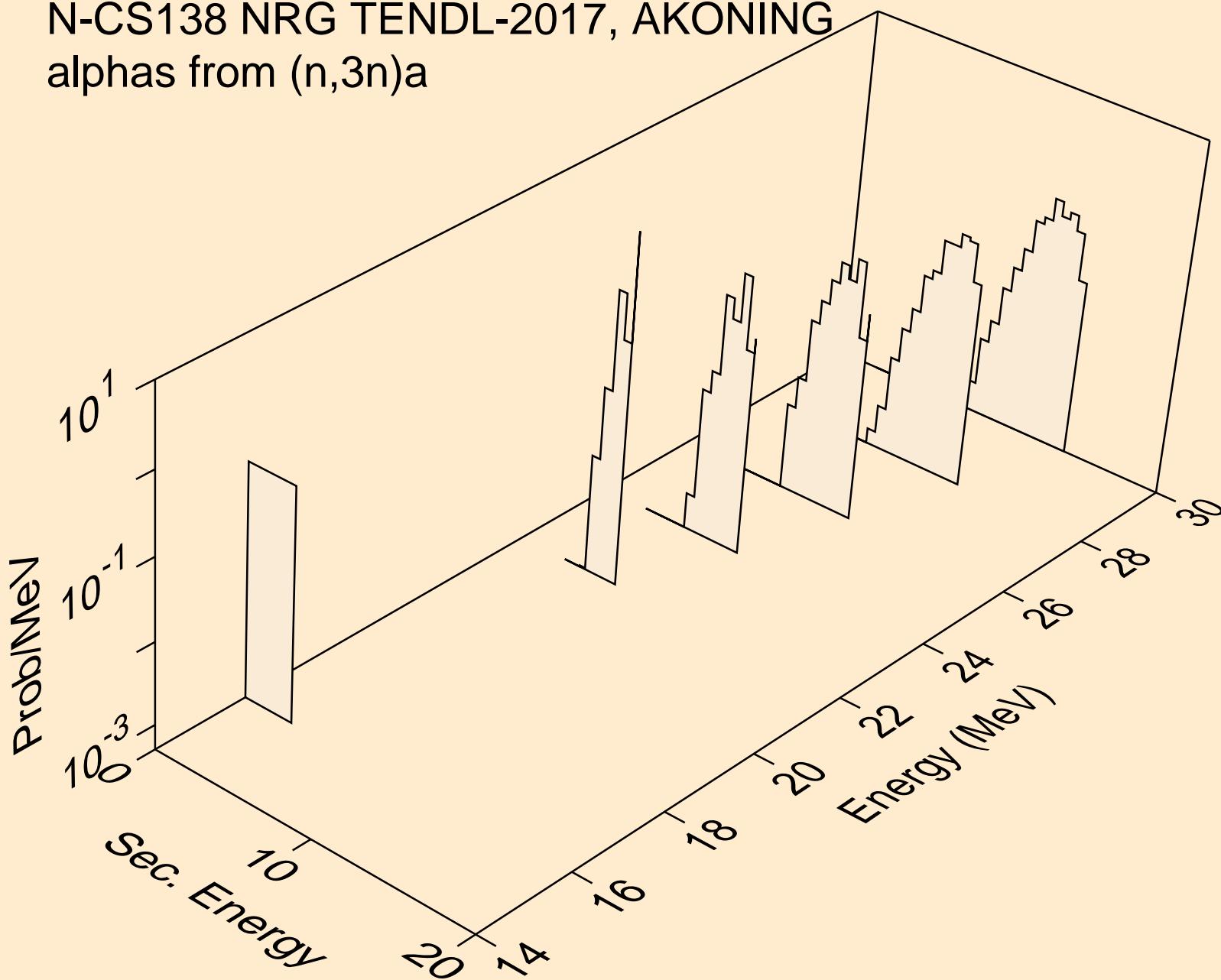
N-CS138 NRG TENDL-2017, AKONING  
alphas from  $(n,n^*)a$



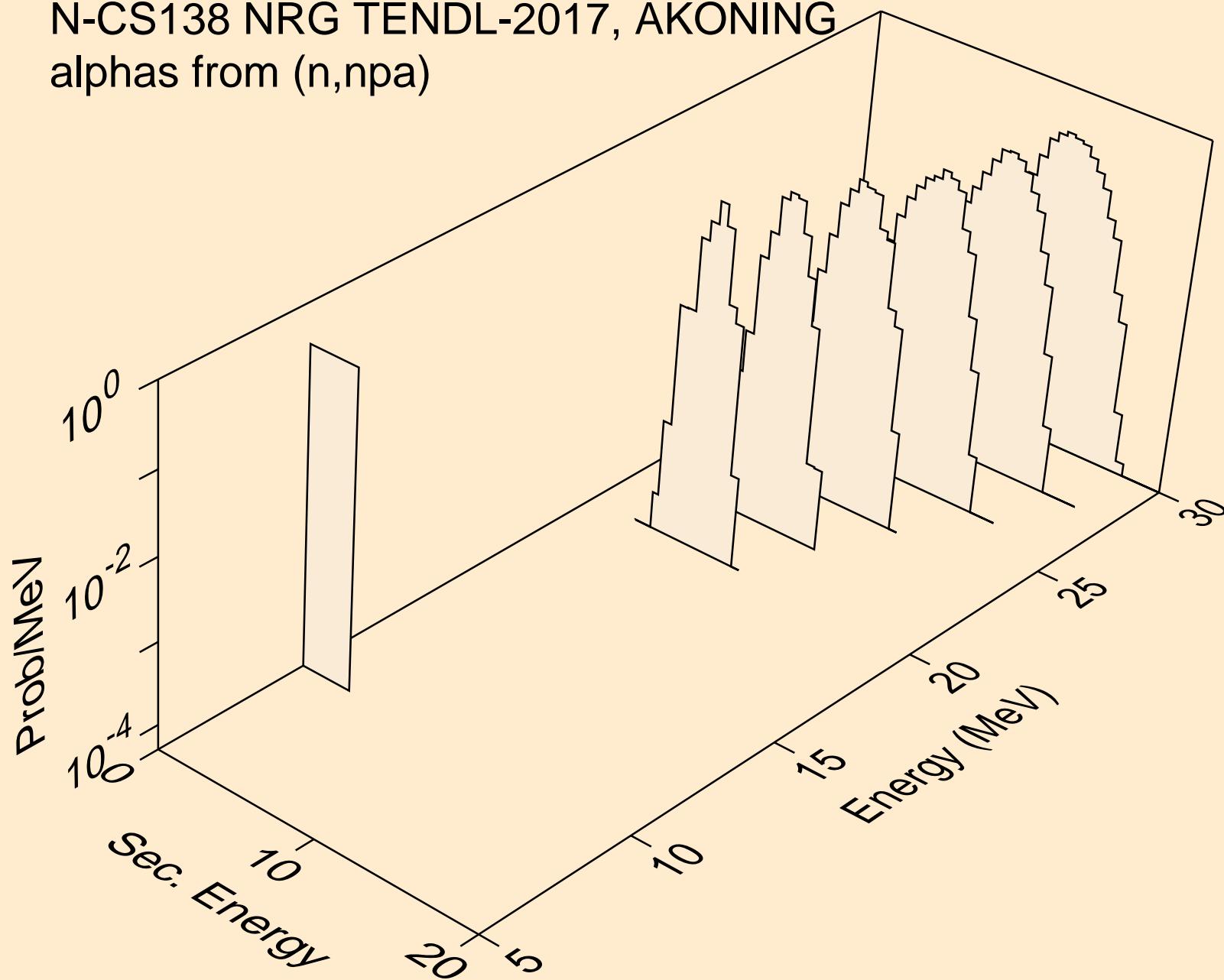
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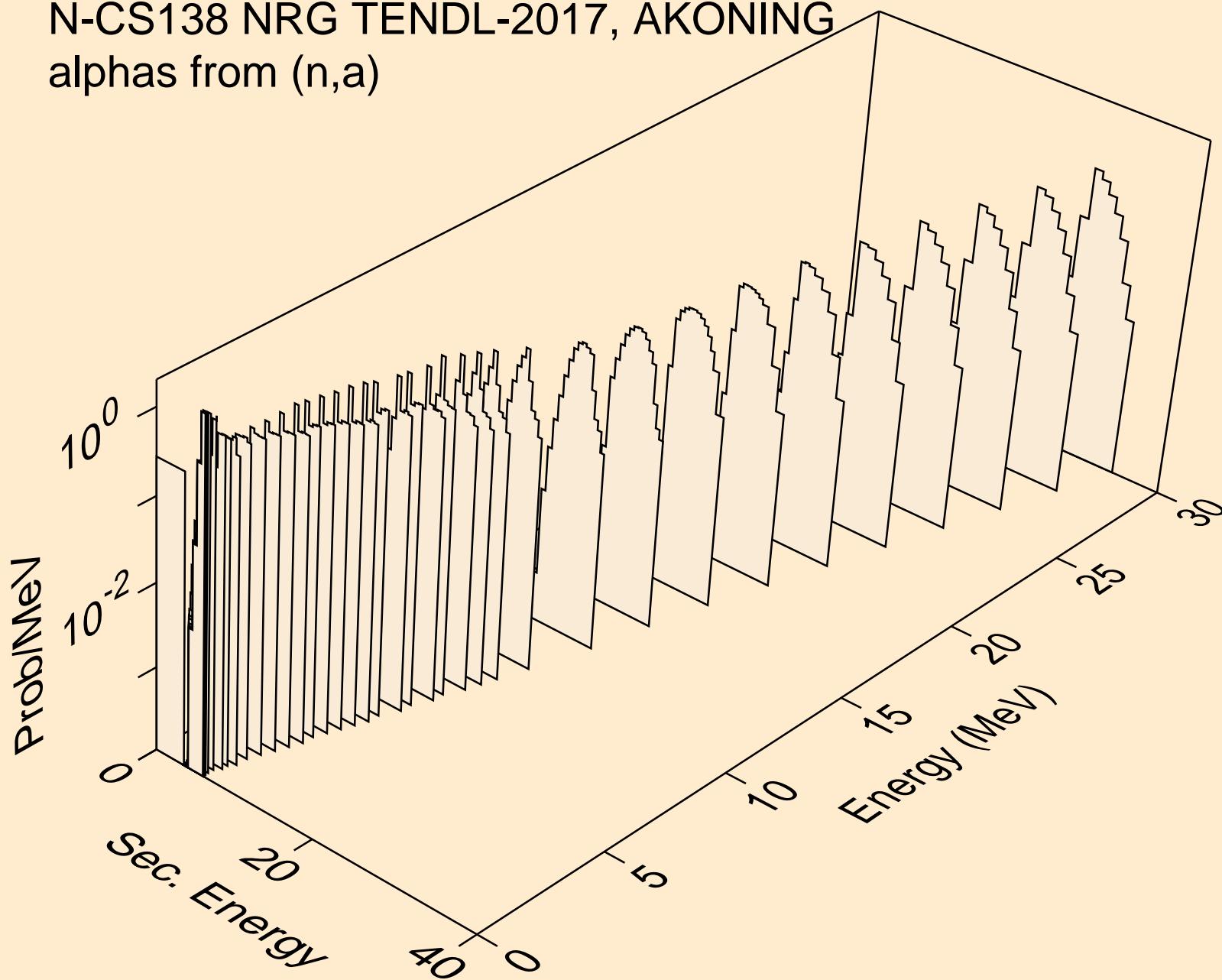
N-CS138 NRG TENDL-2017, AKONING  
alphas from  $(n,3n)a$



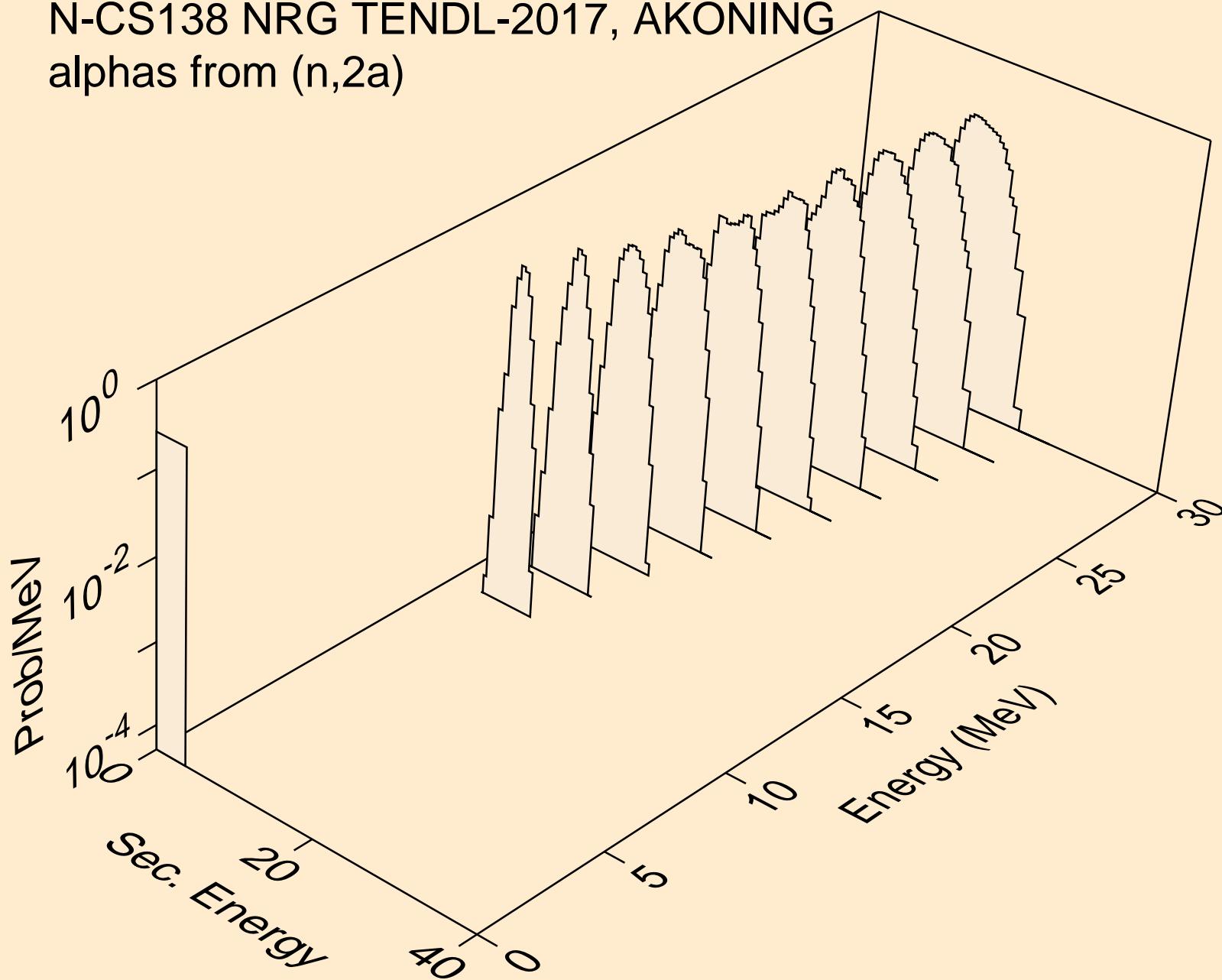
N-CS138 NRG TENDL-2017, AKONING  
alphas from (n,npa)



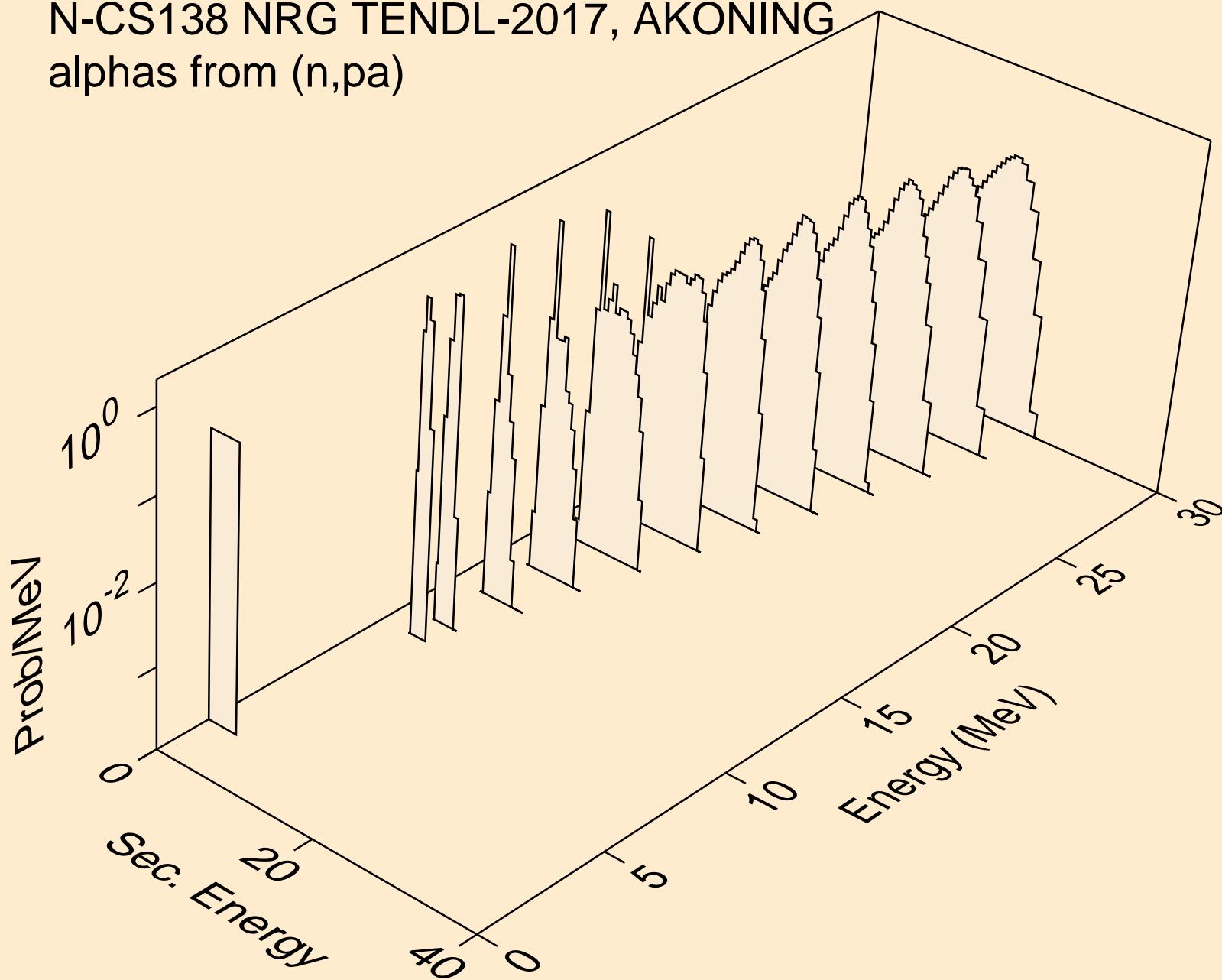
N-CS138 NRG TENDL-2017, AKONING  
alphas from (n,a)



N-CS138 NRG TENDL-2017, AKONING  
alphas from (n,2a)



N-CS138 NRG TENDL-2017, AKONING  
alphas from (n,pa)



N-CS138 NRG TENDL-2017, AKONING  
alphas from (n,da)

