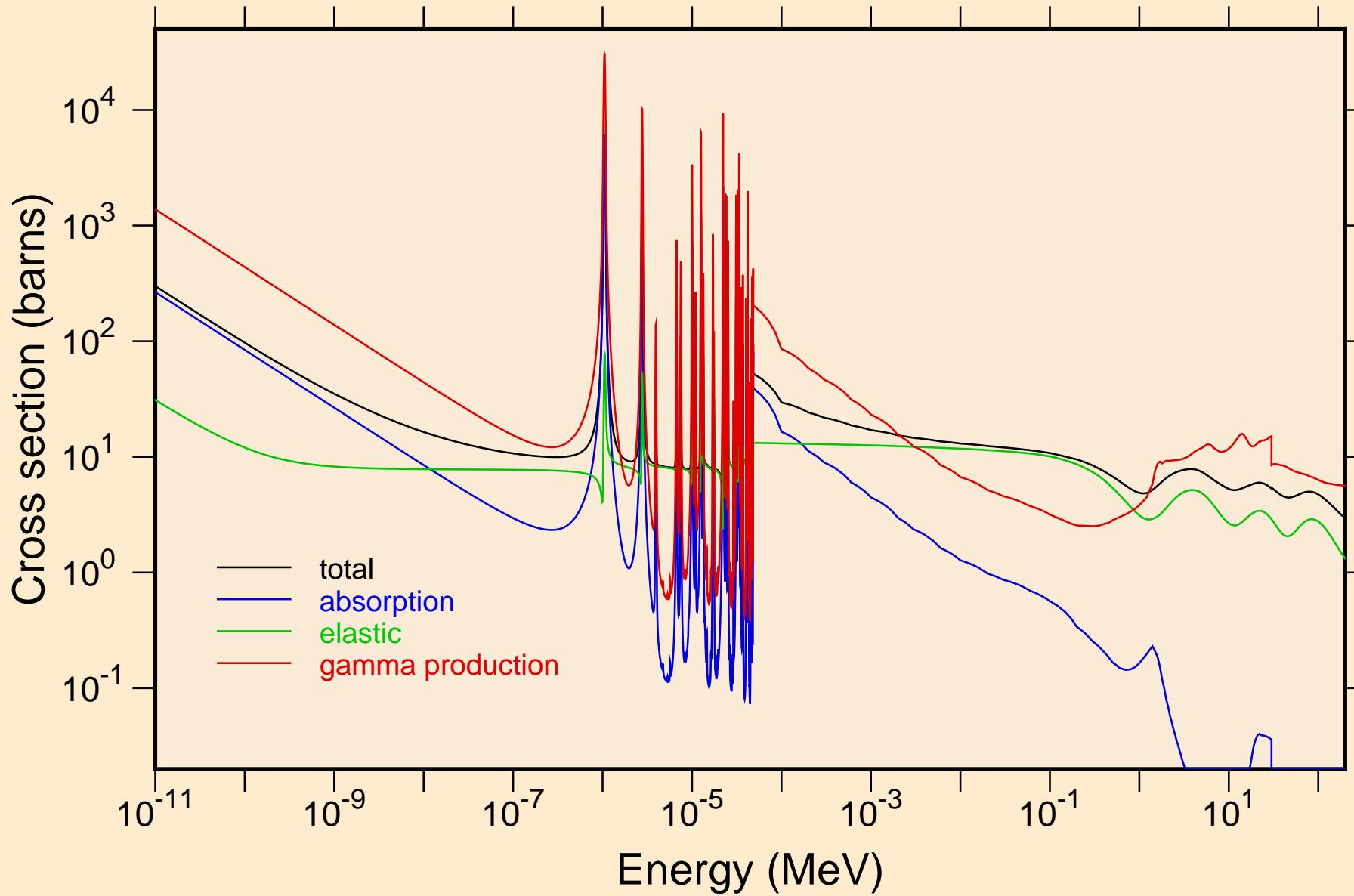
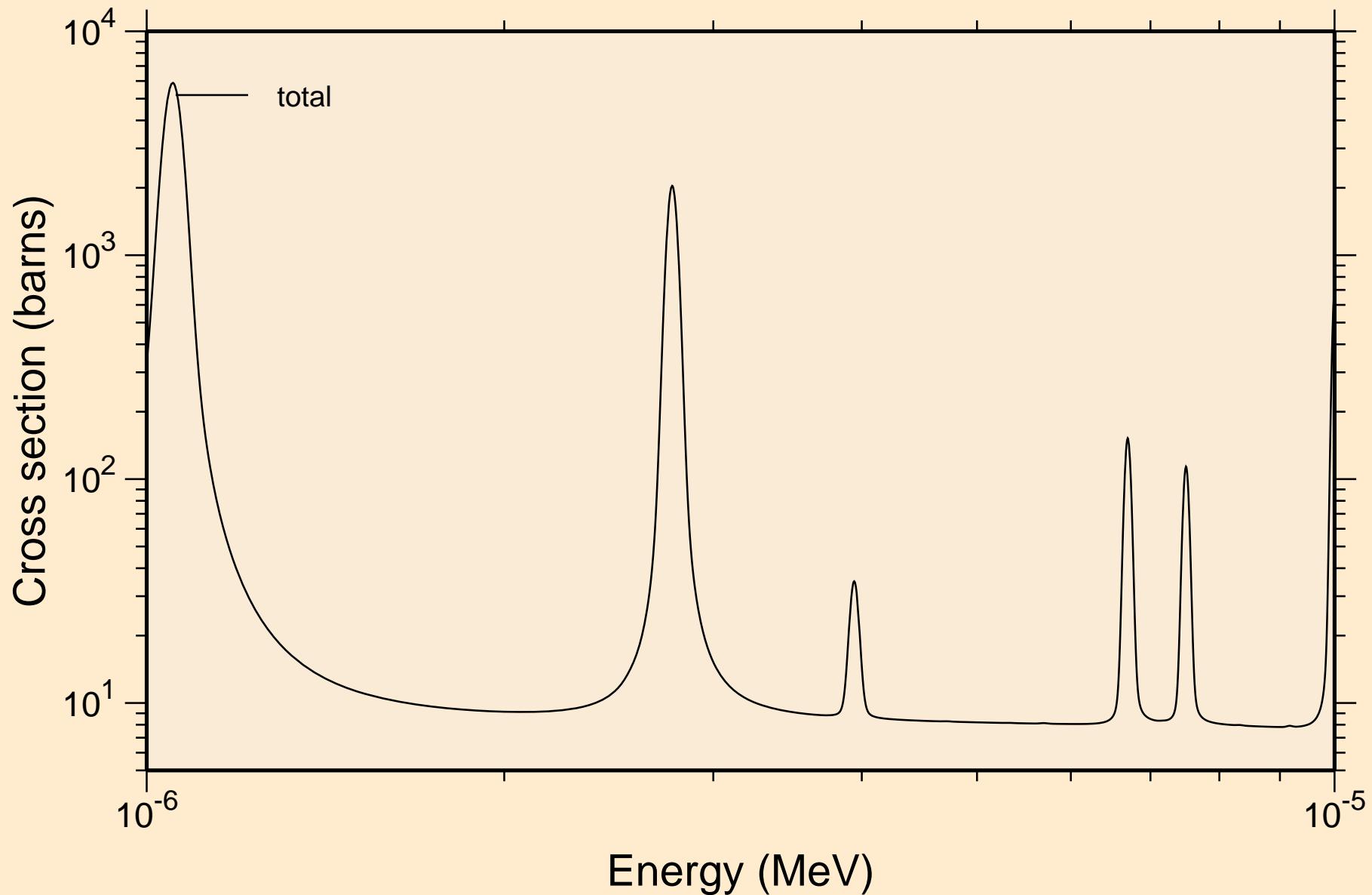


# N-RA221 NRG TENDL-2017, AKONING

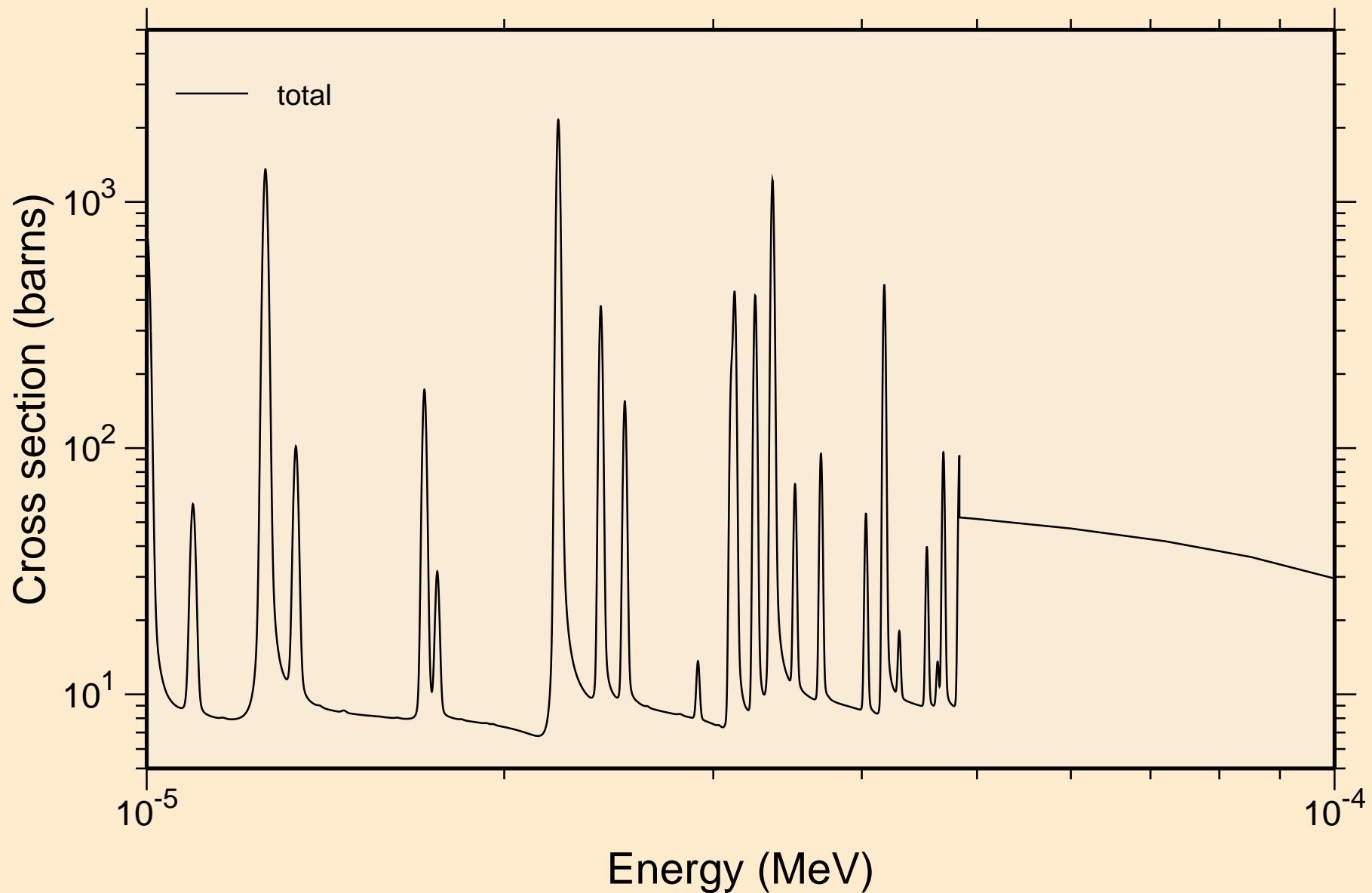
## Principal cross sections



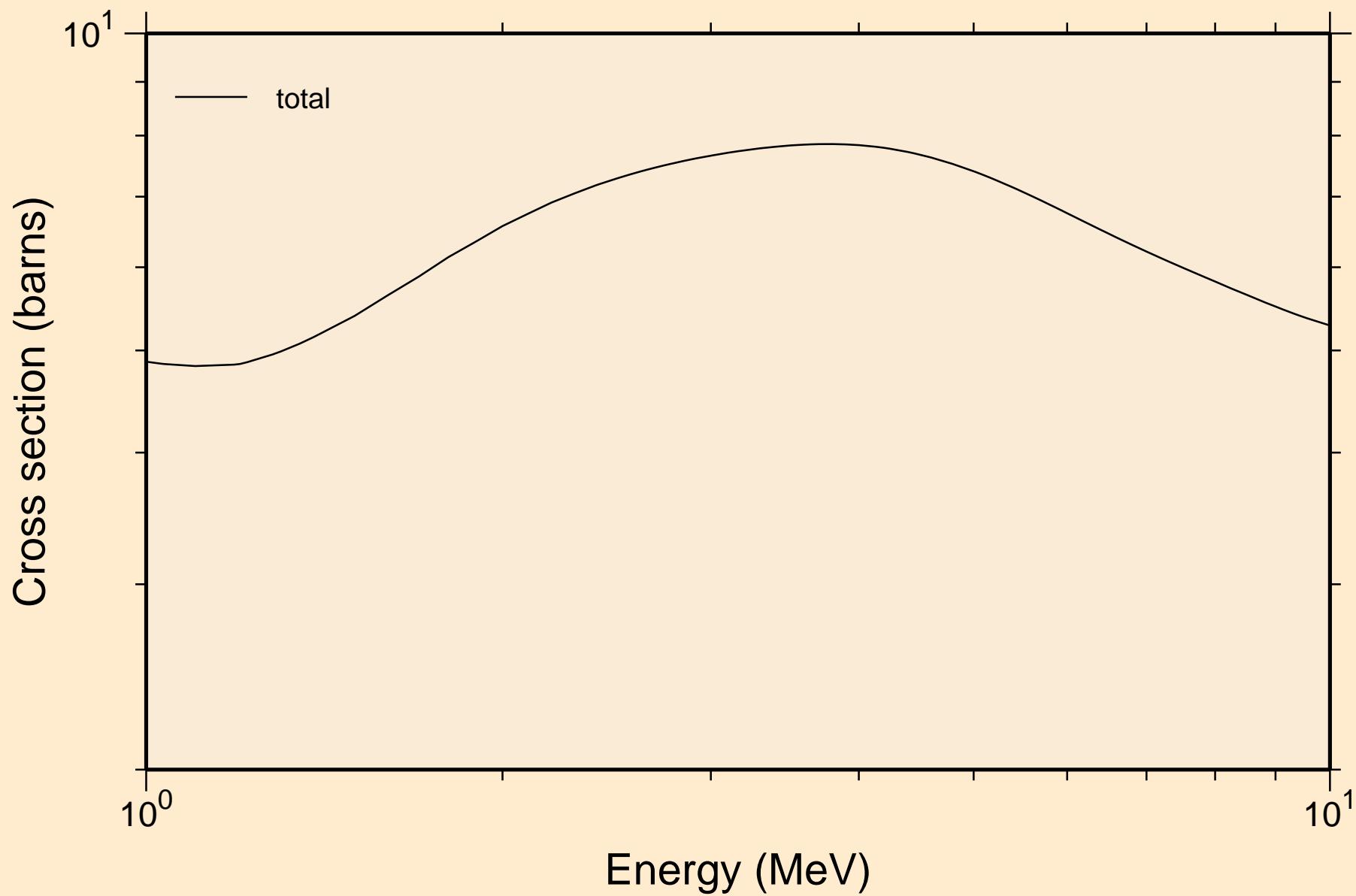
N-RA221 NRG TENDL-2017, AKONING  
resonance total cross section



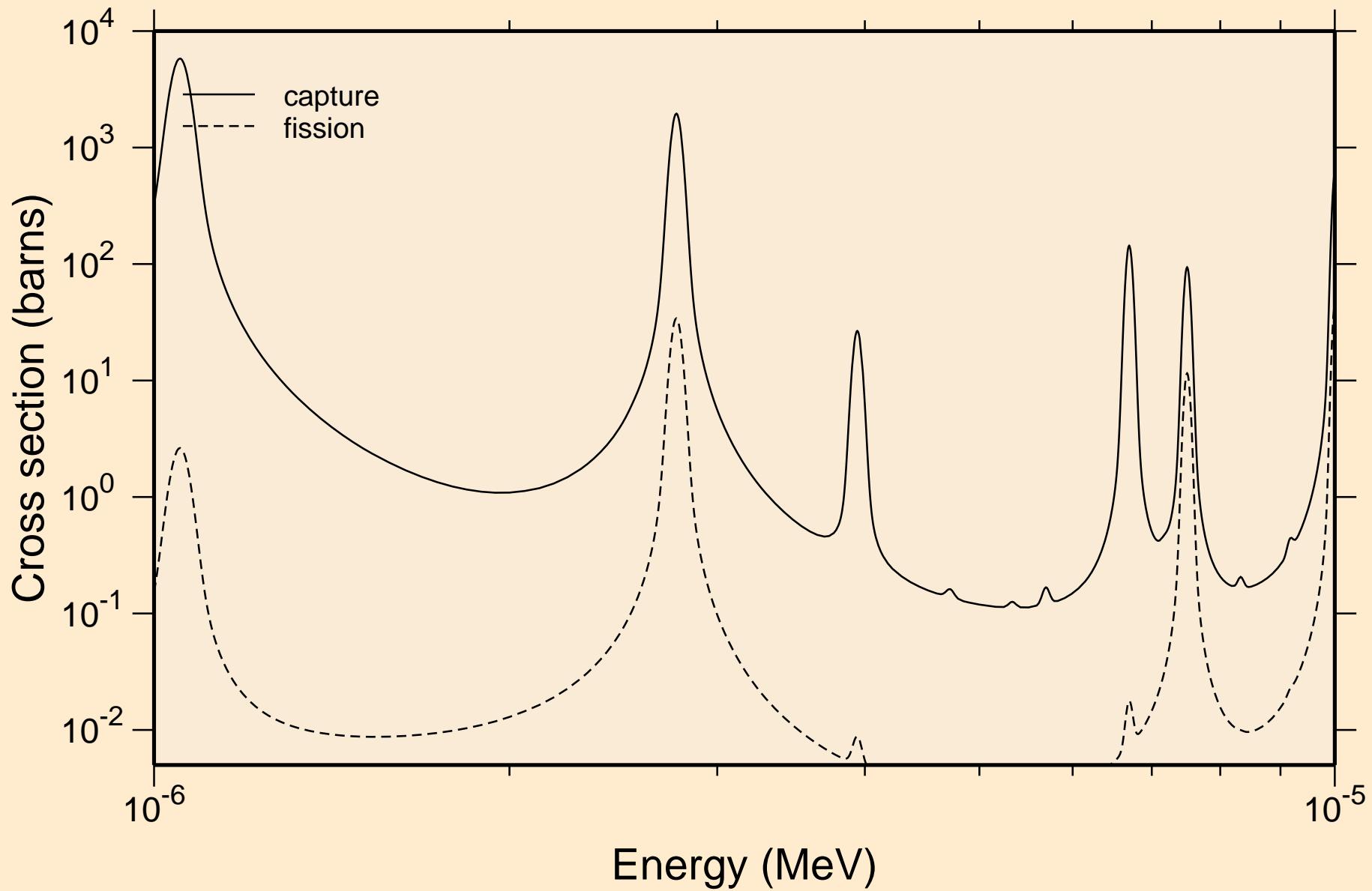
N-RA221 NRG TENDL-2017, AKONING  
resonance total cross section



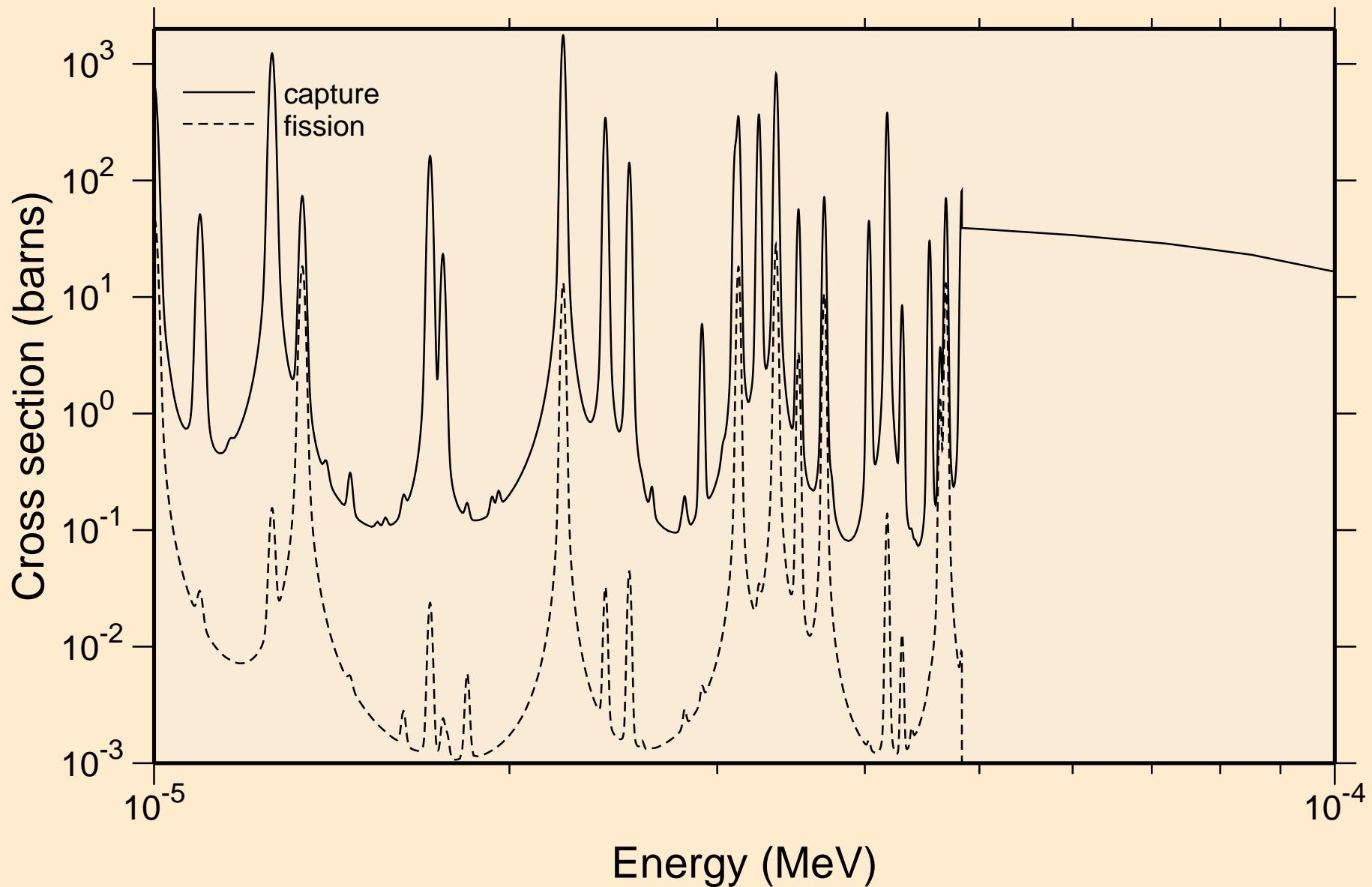
N-RA221 NRG TENDL-2017, AKONING  
resonance total cross section



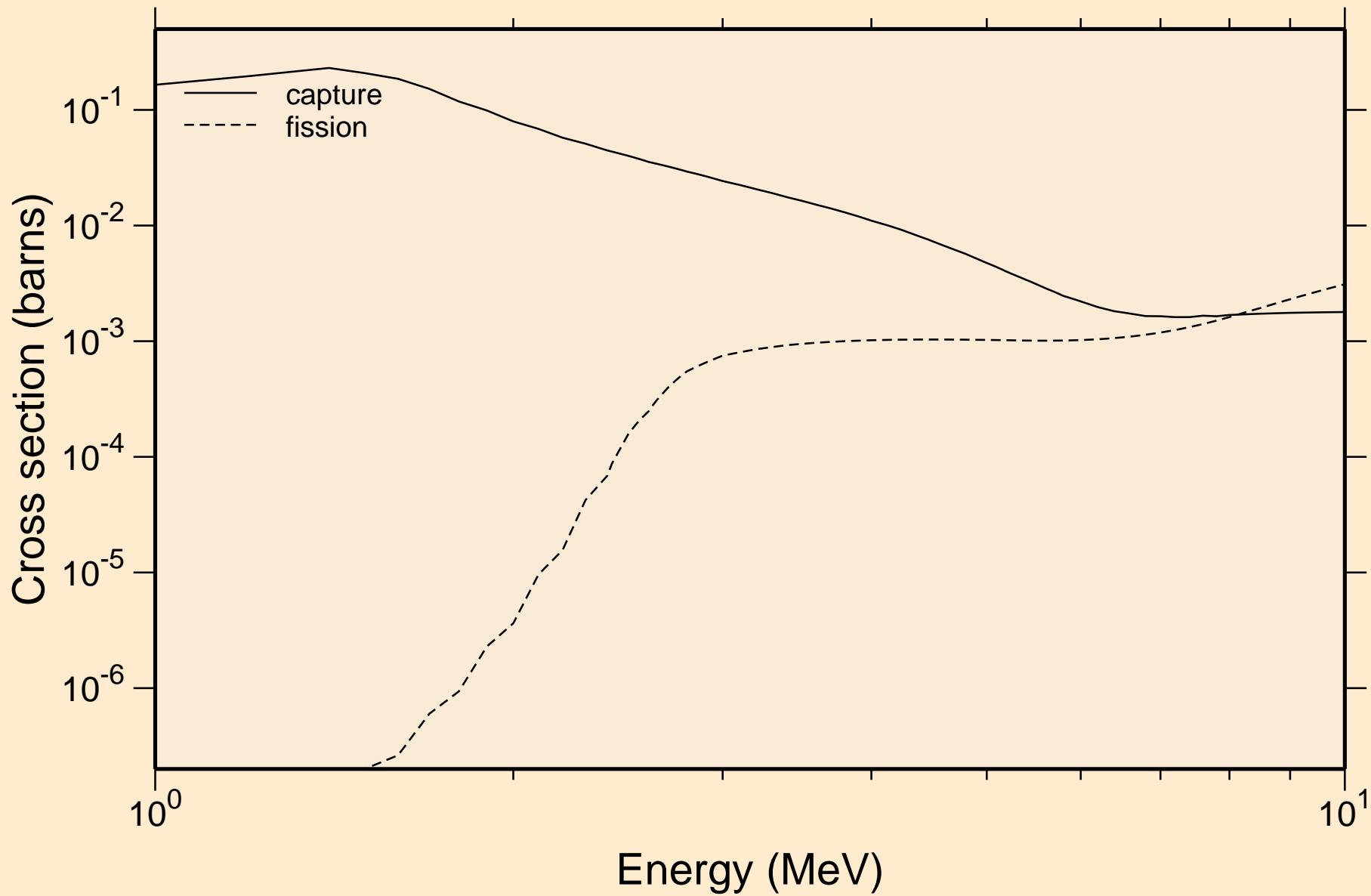
# N-RA221 NRG TENDL-2017, AKONING resonance absorption cross sections



# N-RA221 NRG TENDL-2017, AKONING resonance absorption cross sections

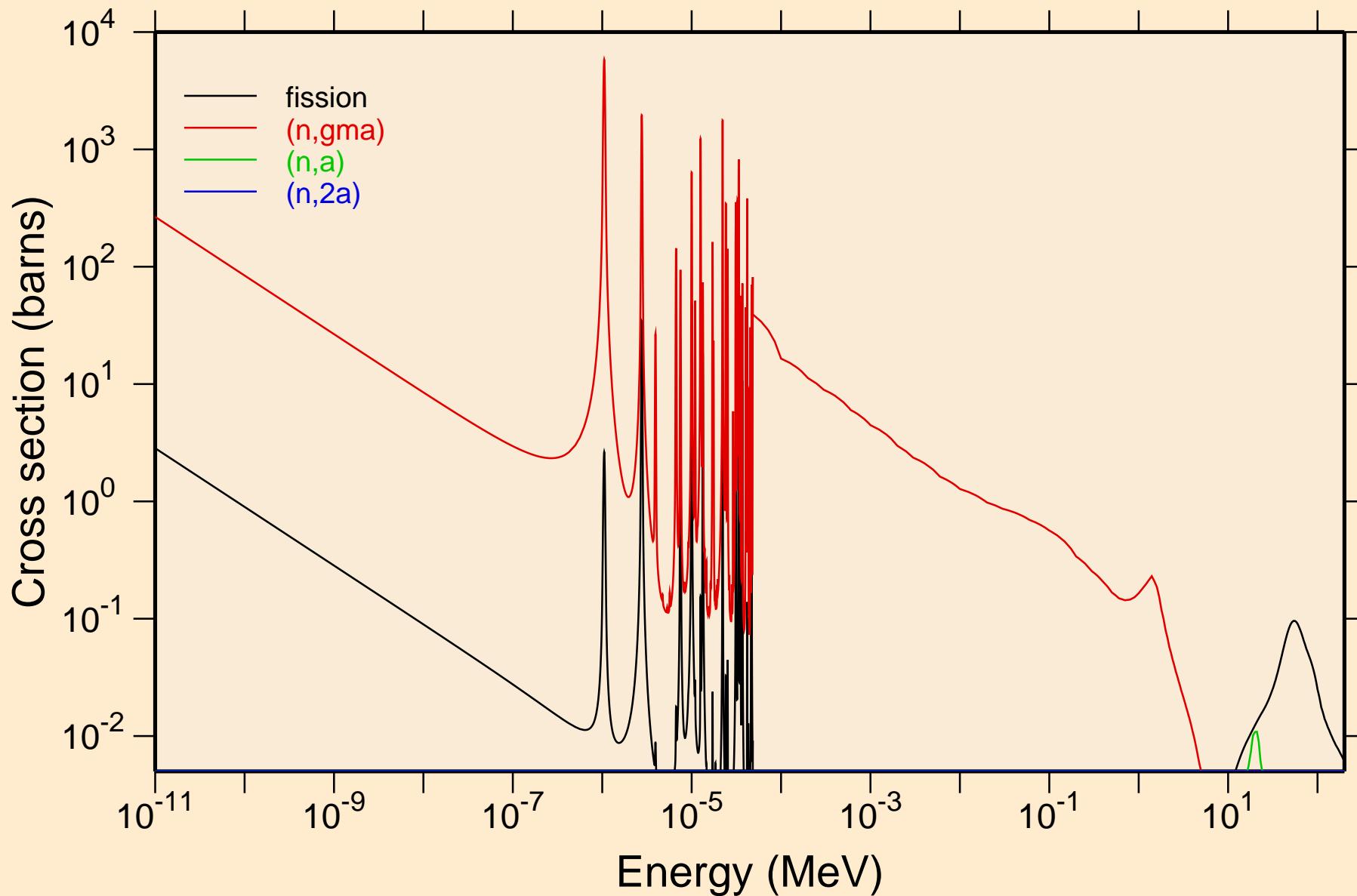


N-RA221 NRG TENDL-2017, AKONING  
resonance absorption cross sections



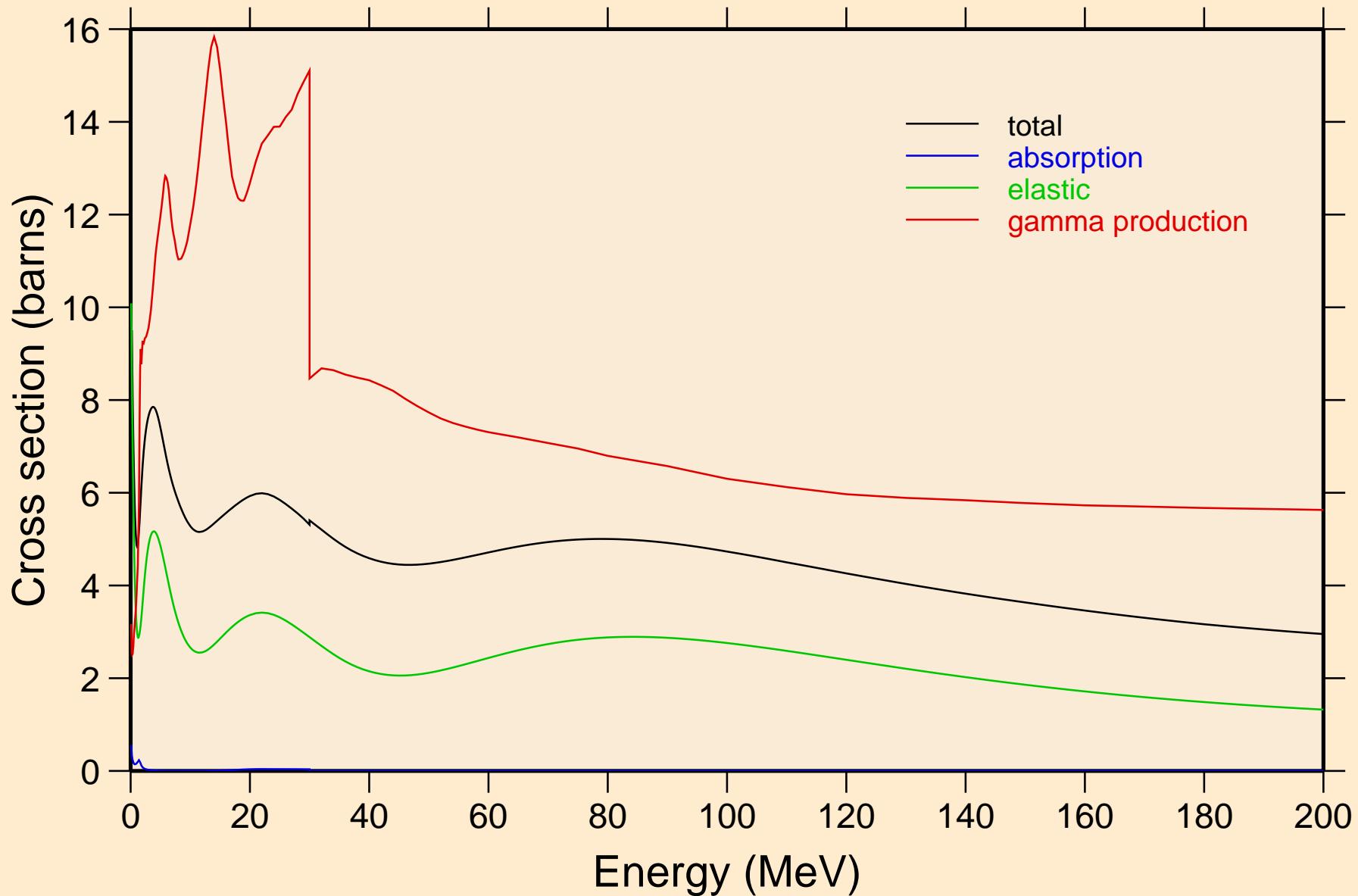
# N-RA221 NRG TENDL-2017, AKONING

## Non-threshold reactions



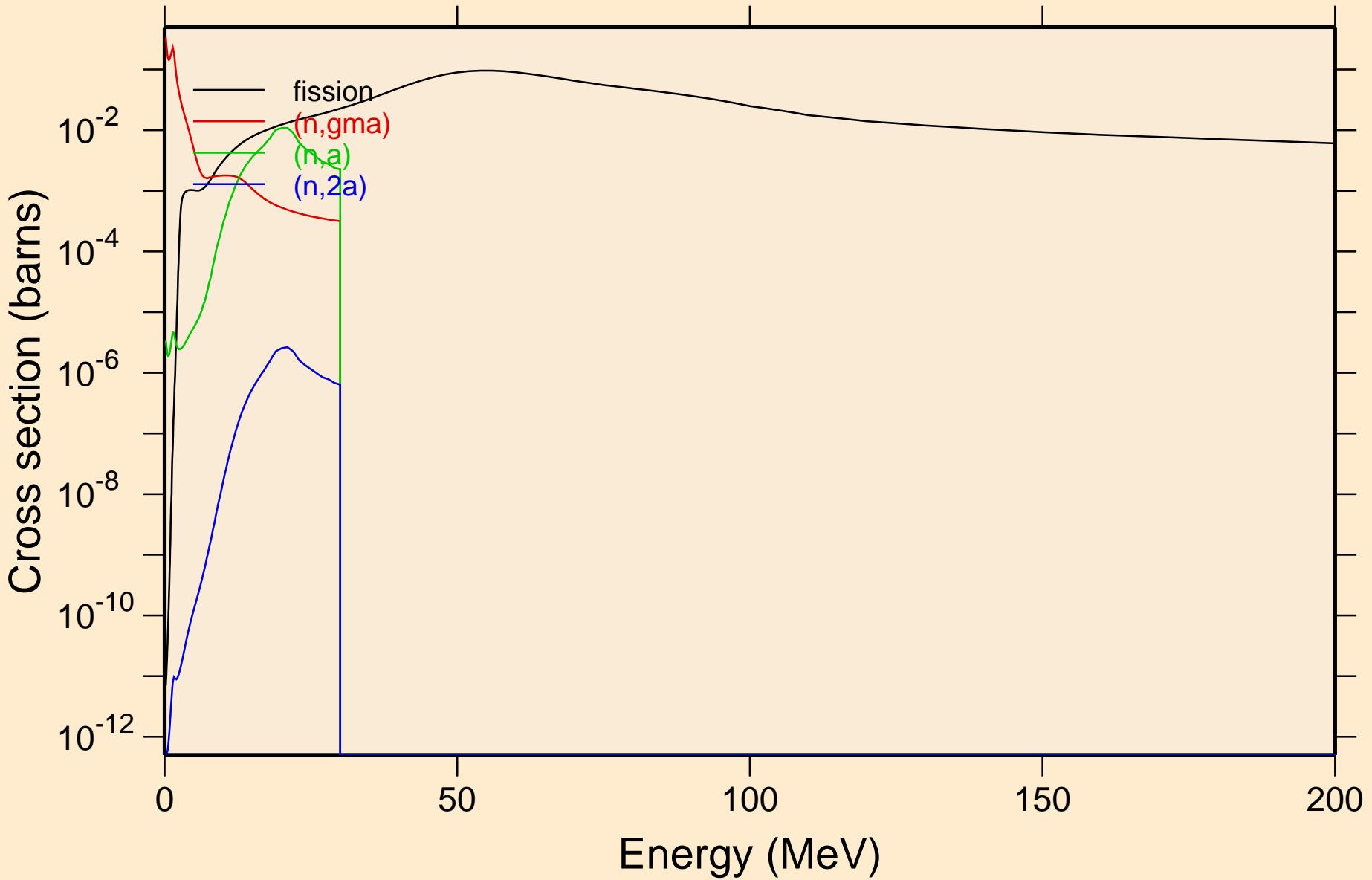
# N-RA221 NRG TENDL-2017, AKONING

## Principal cross sections



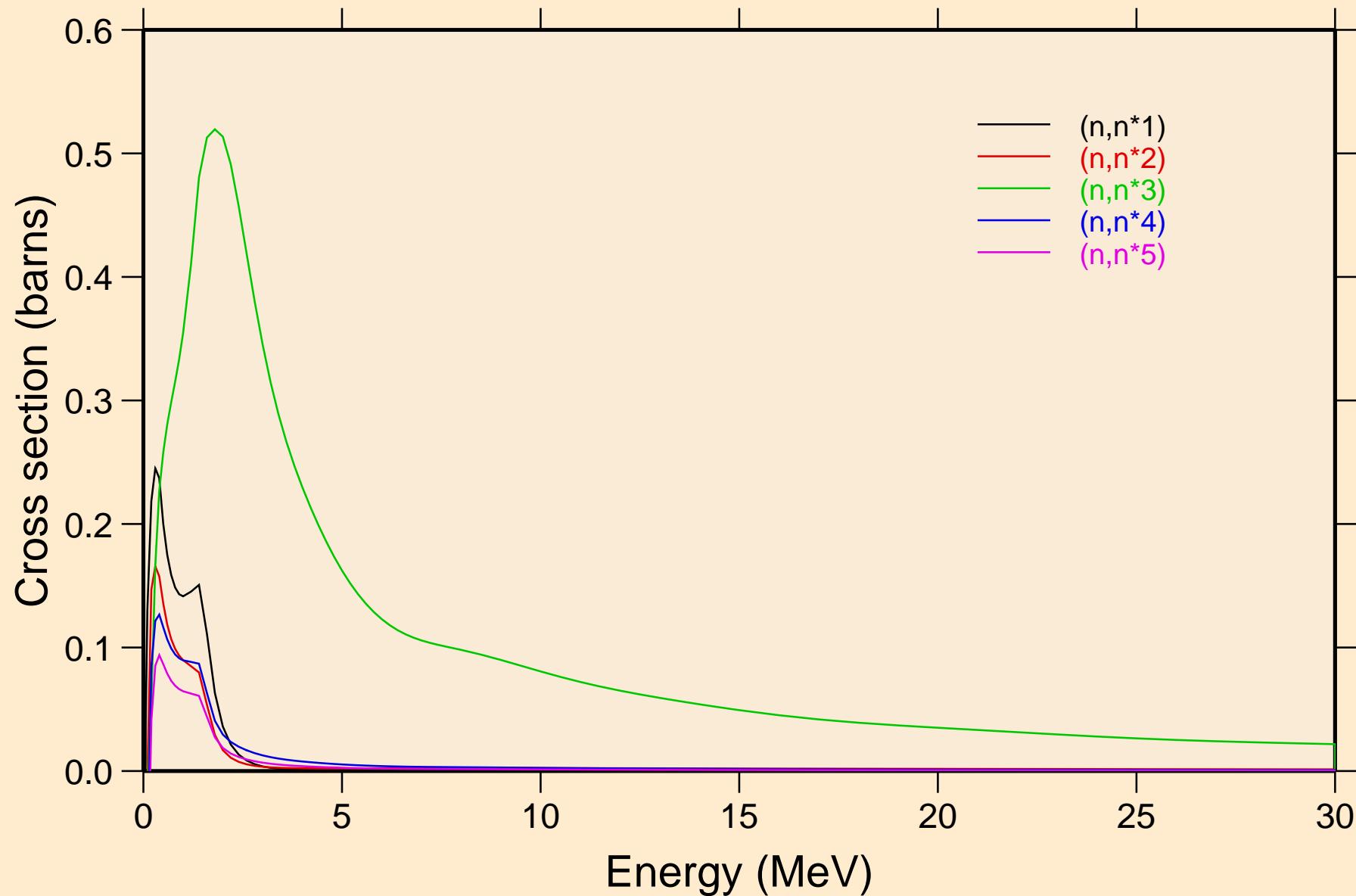
# N-RA221 NRG TENDL-2017, AKONING

## Non-threshold reactions



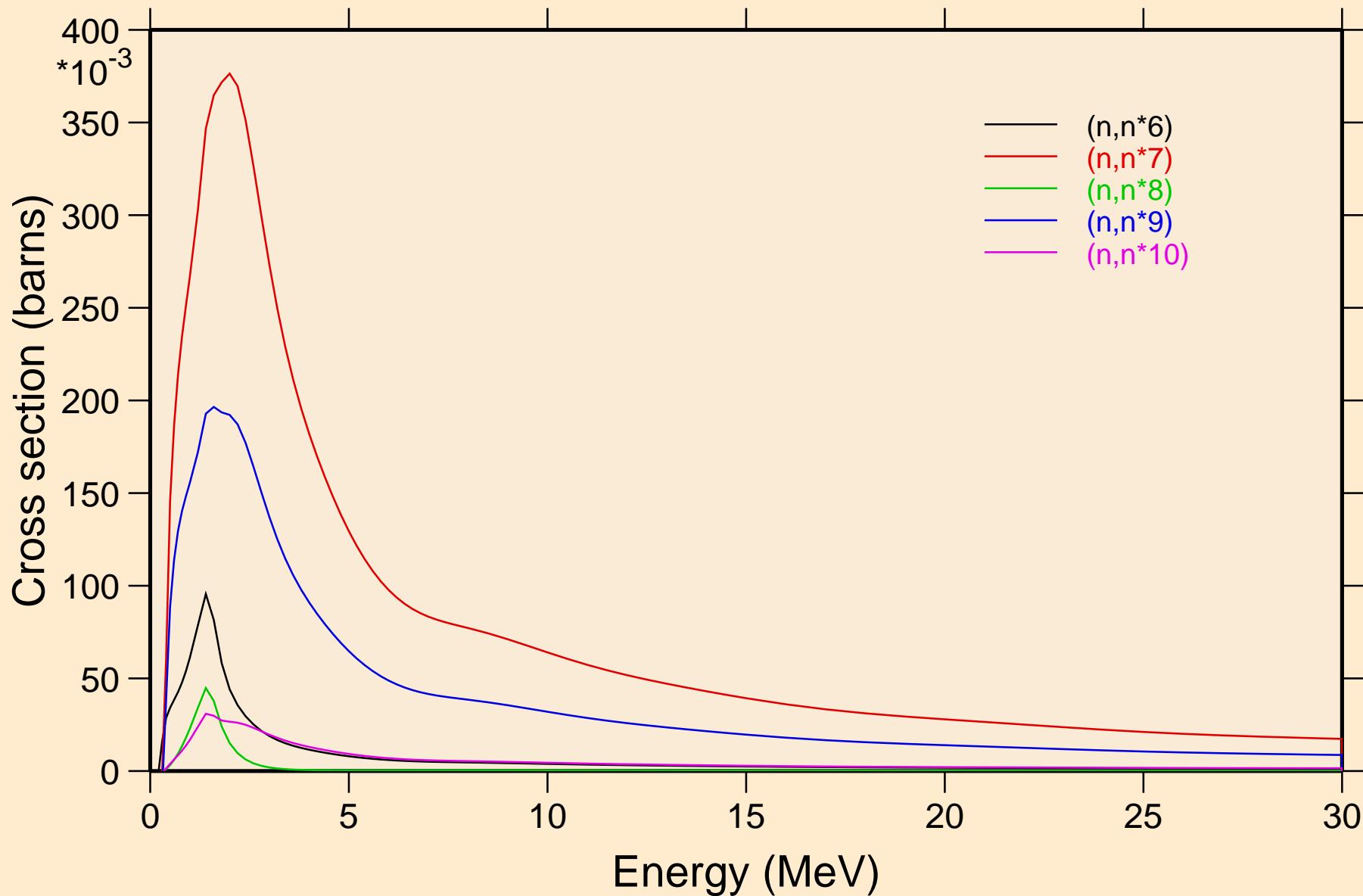
# N-RA221 NRG TENDL-2017, AKONING

## Inelastic levels



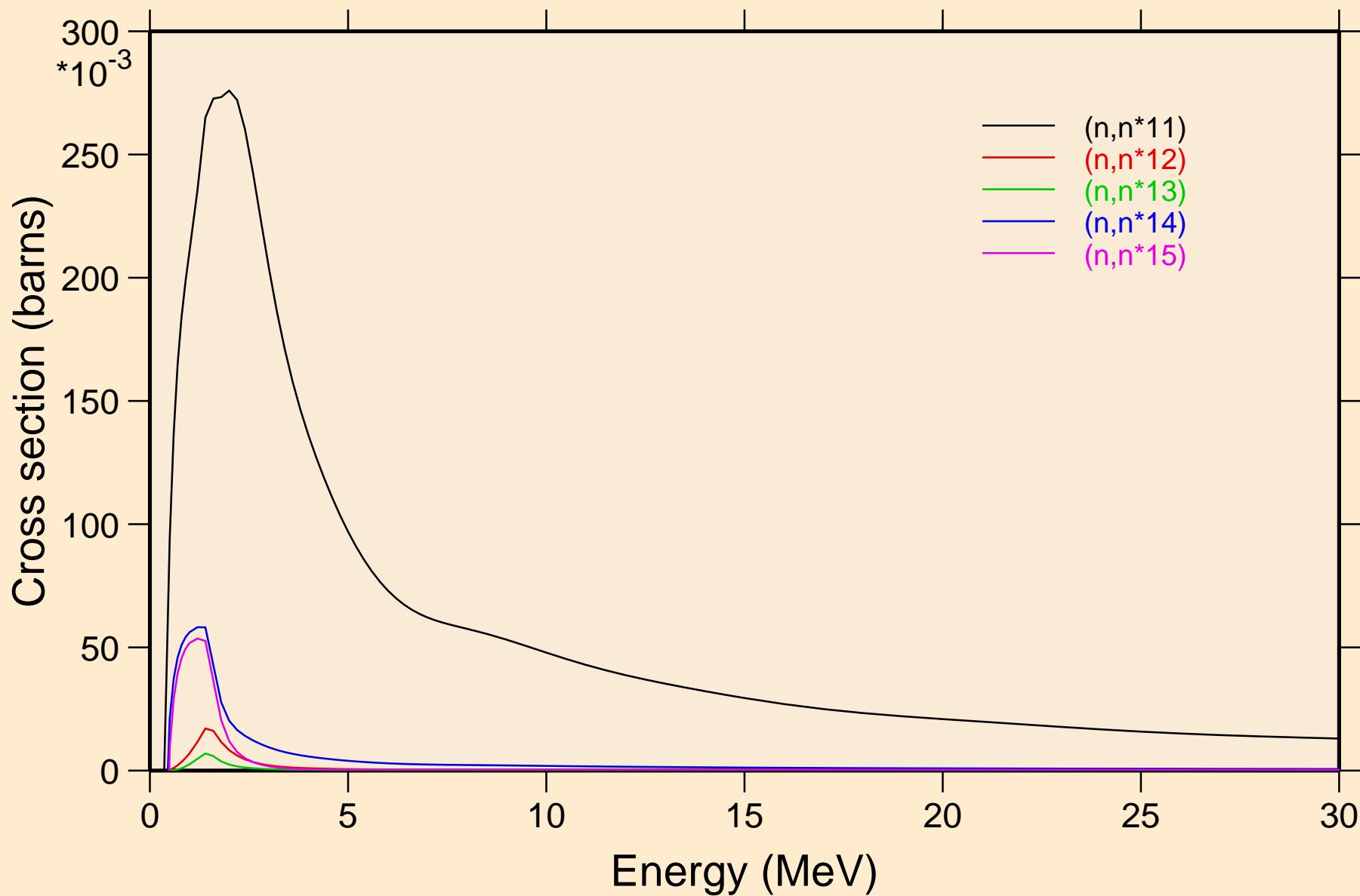
# N-RA221 NRG TENDL-2017, AKONING

## Inelastic levels



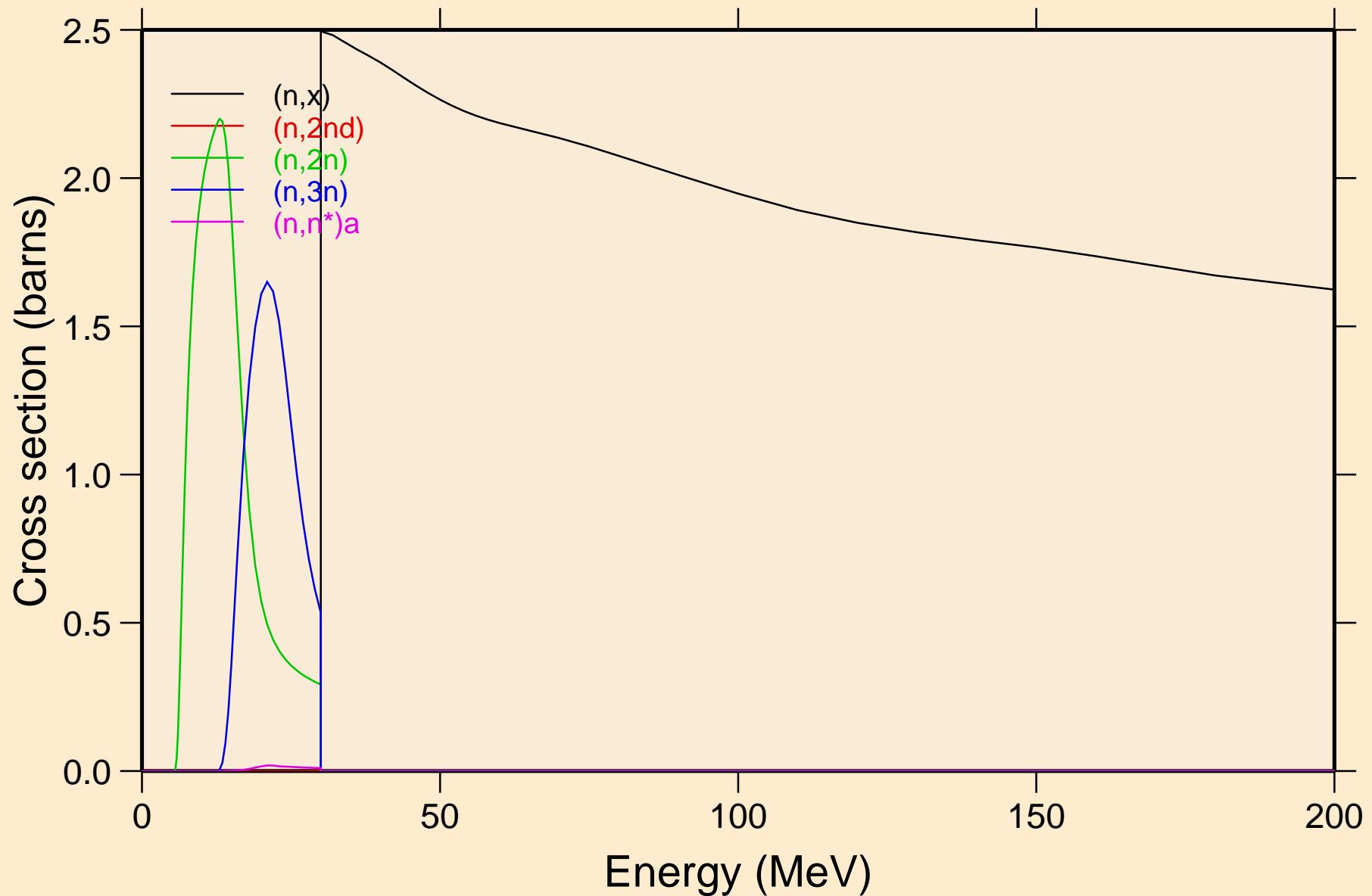
# N-RA221 NRG TENDL-2017, AKONING

## Inelastic levels



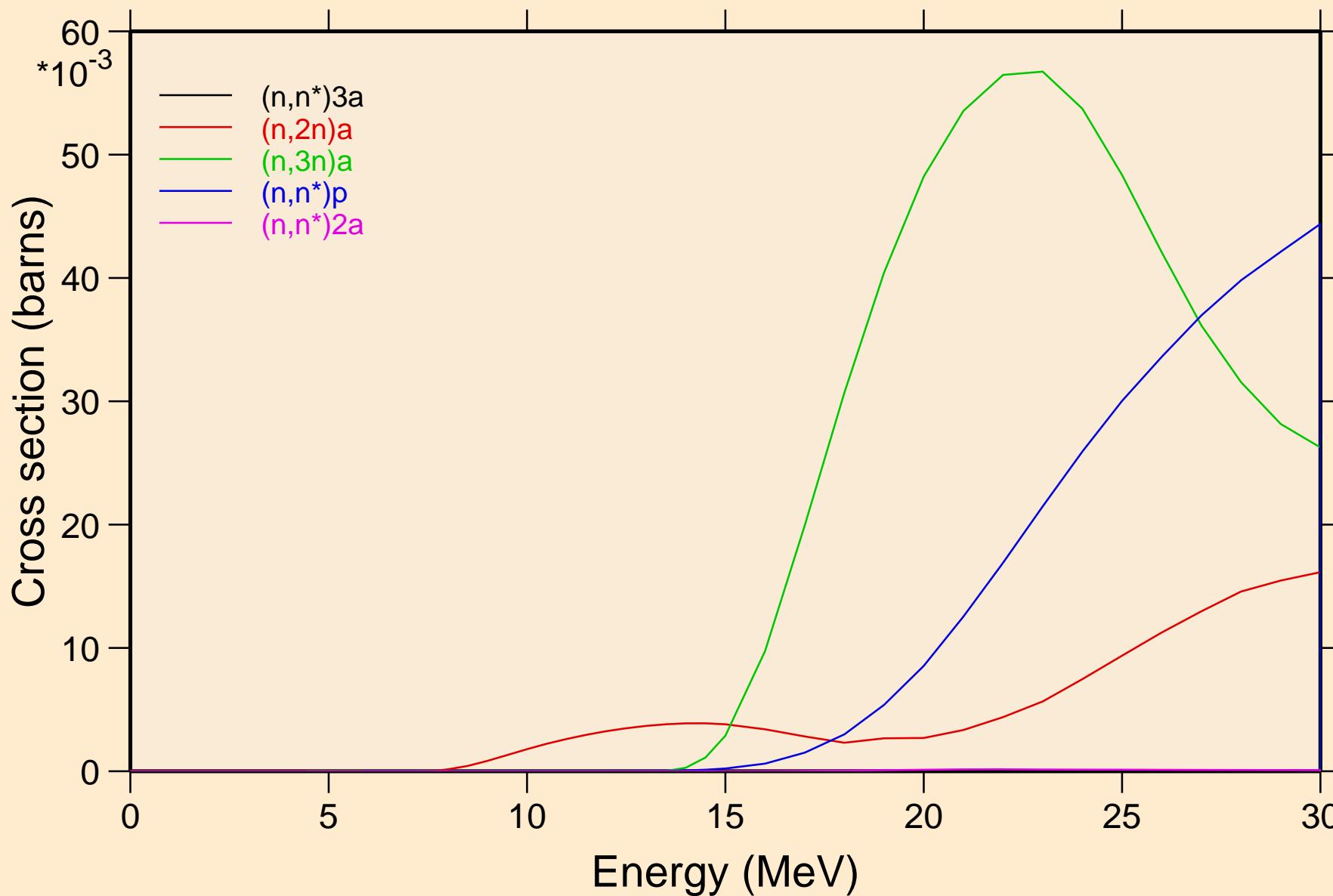
# N-RA221 NRG TENDL-2017, AKONING

## Threshold reactions



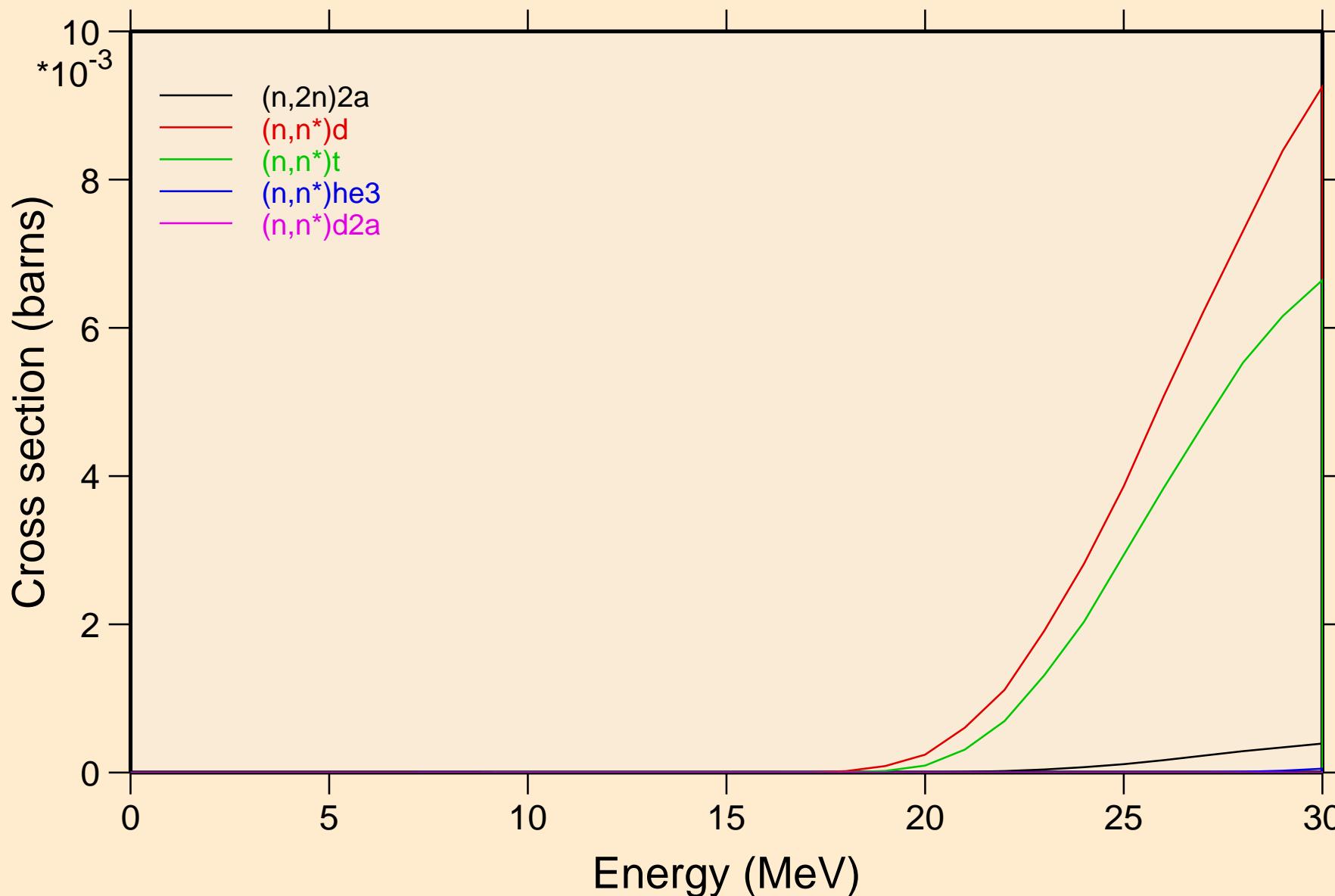
# N-RA221 NRG TENDL-2017, AKONING

## Threshold reactions



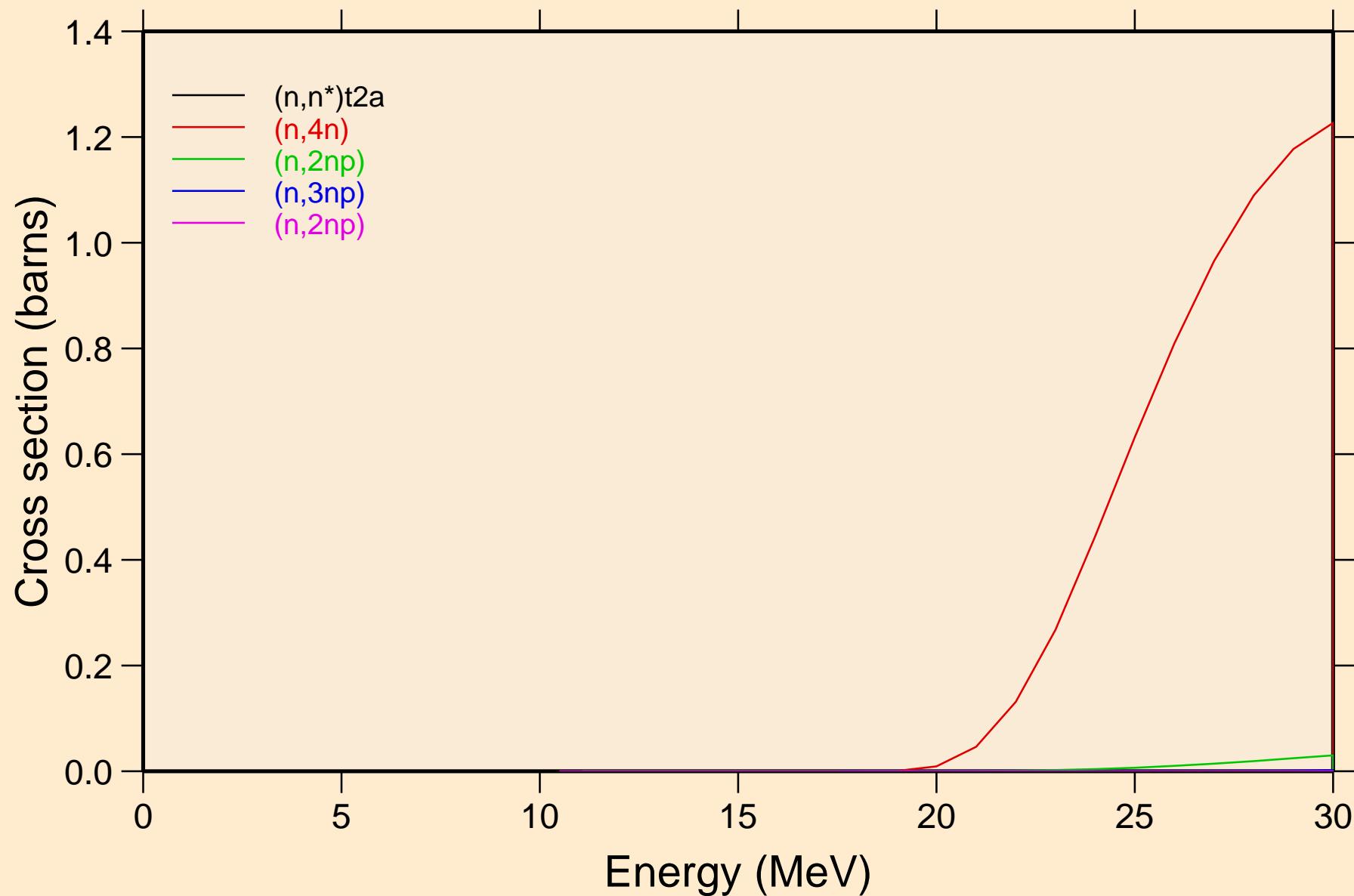
# N-RA221 NRG TENDL-2017, AKONING

## Threshold reactions



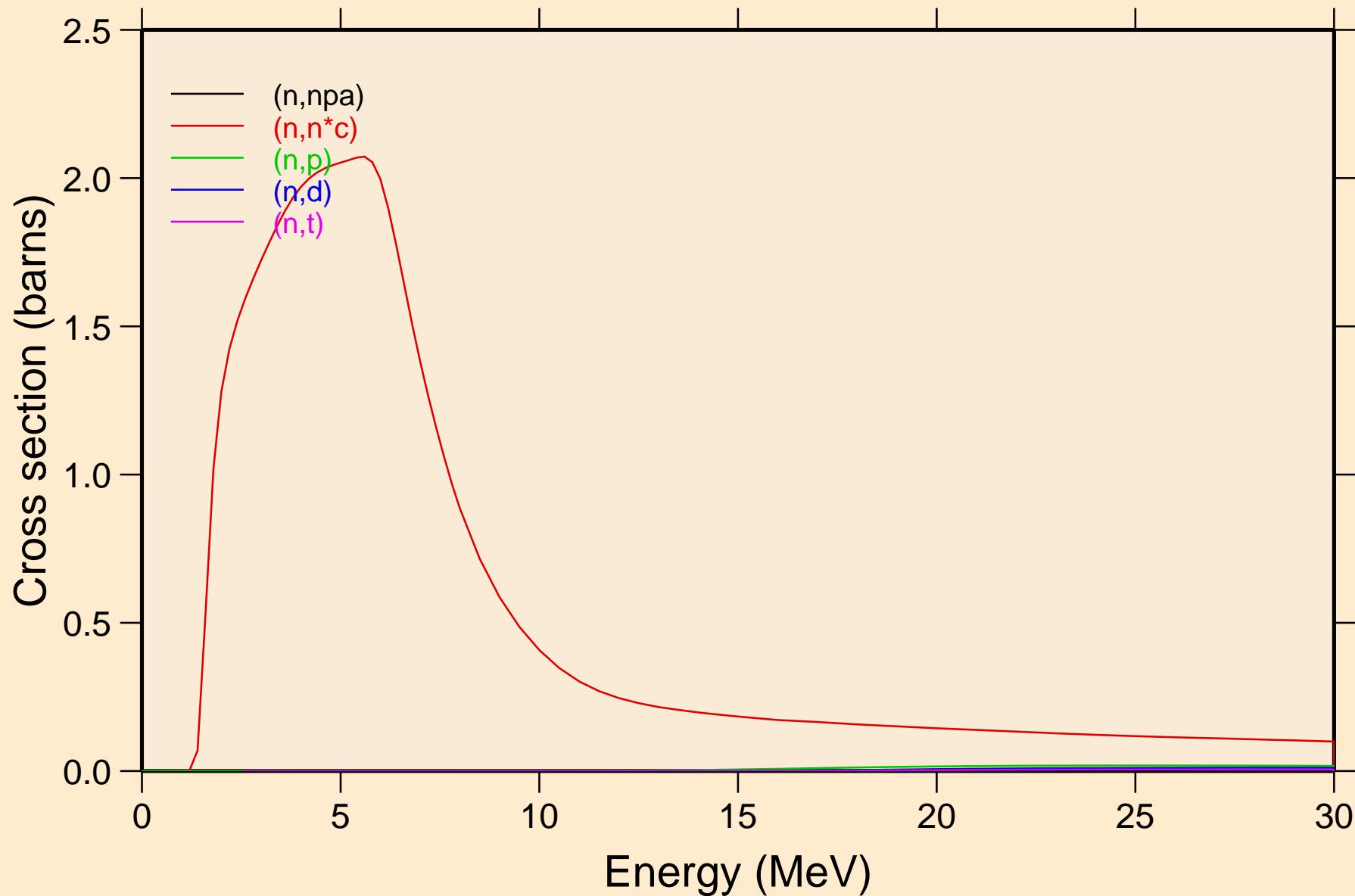
# N-RA221 NRG TENDL-2017, AKONING

## Threshold reactions



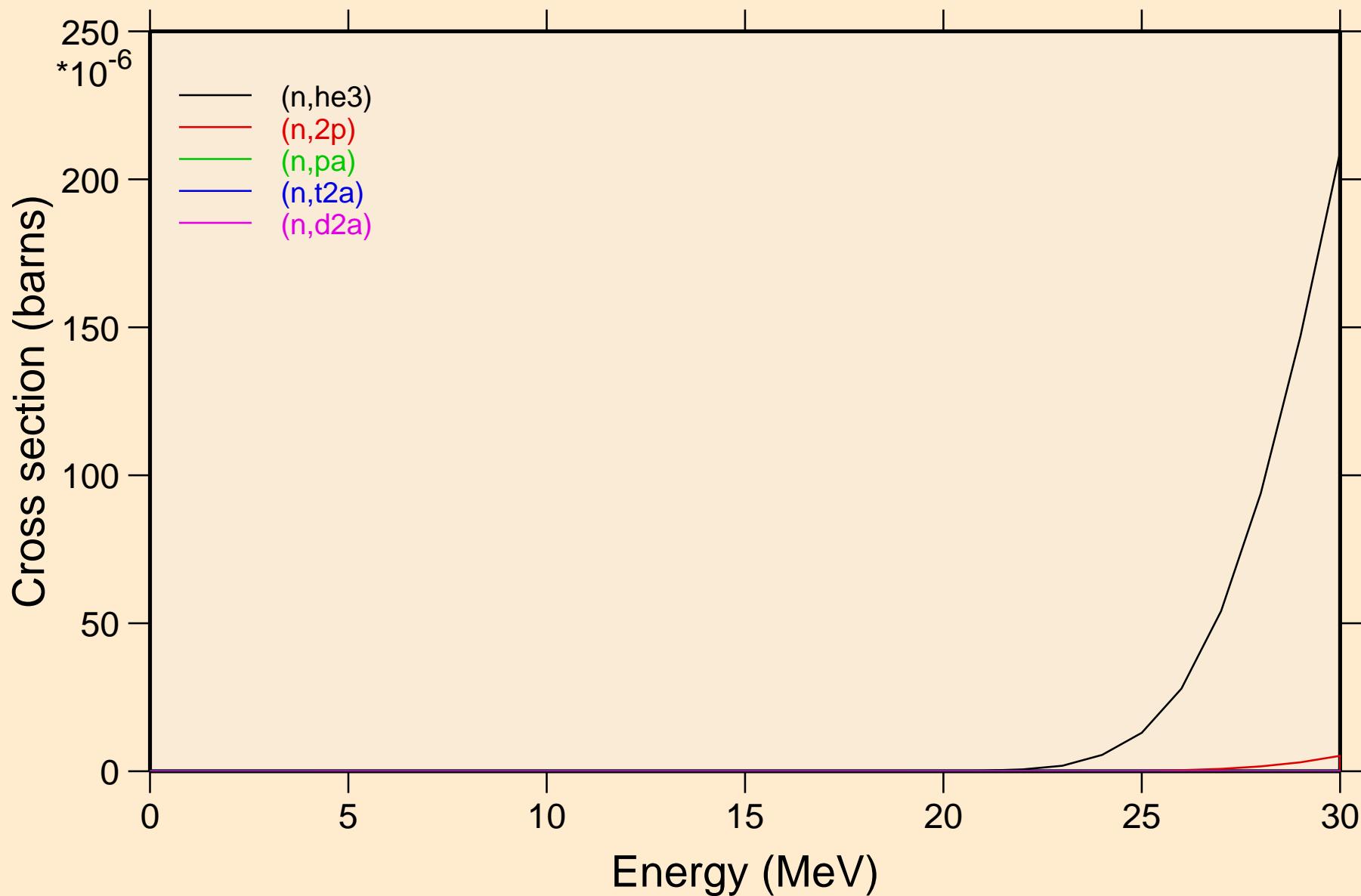
# N-RA221 NRG TENDL-2017, AKONING

## Threshold reactions



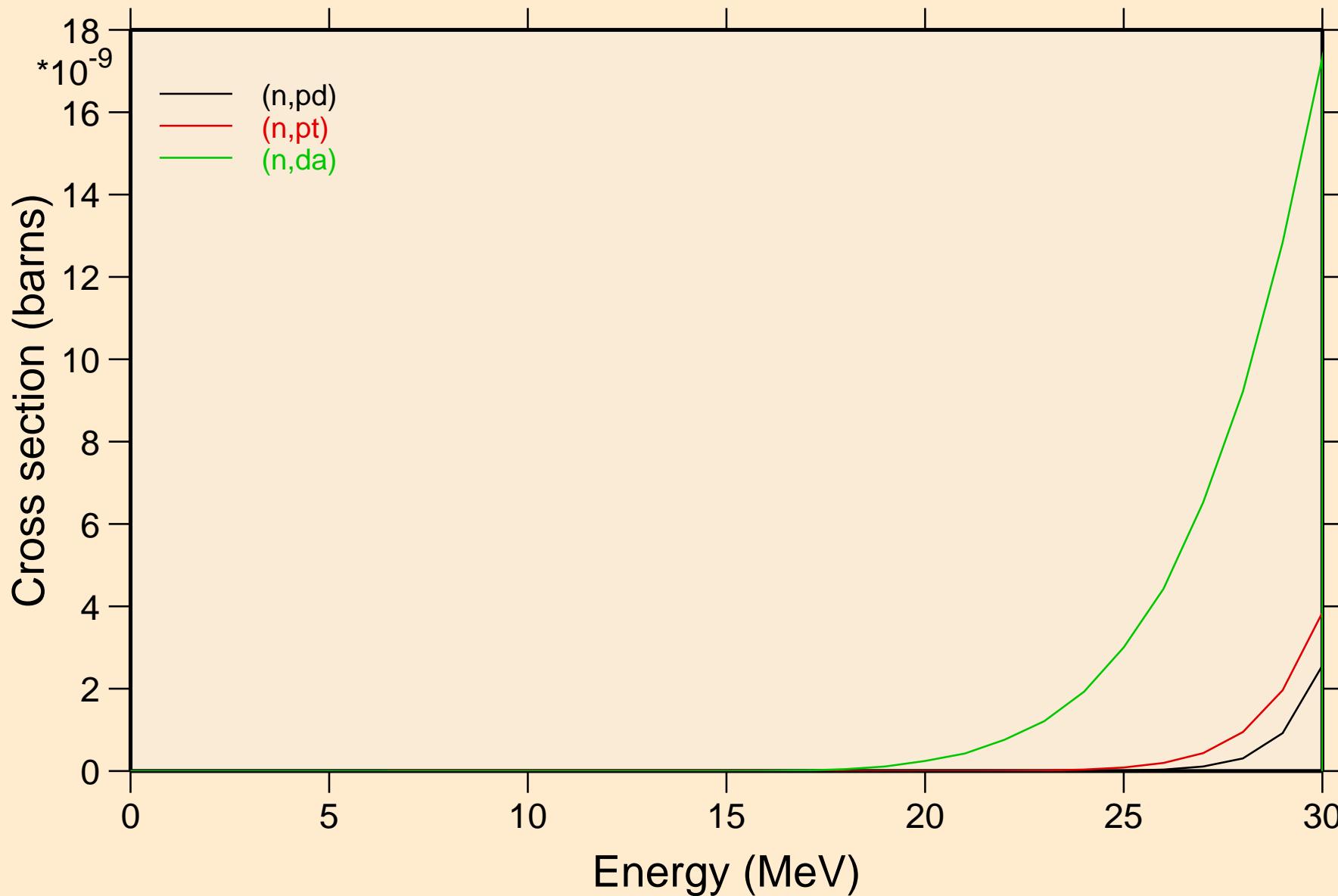
# N-RA221 NRG TENDL-2017, AKONING

## Threshold reactions

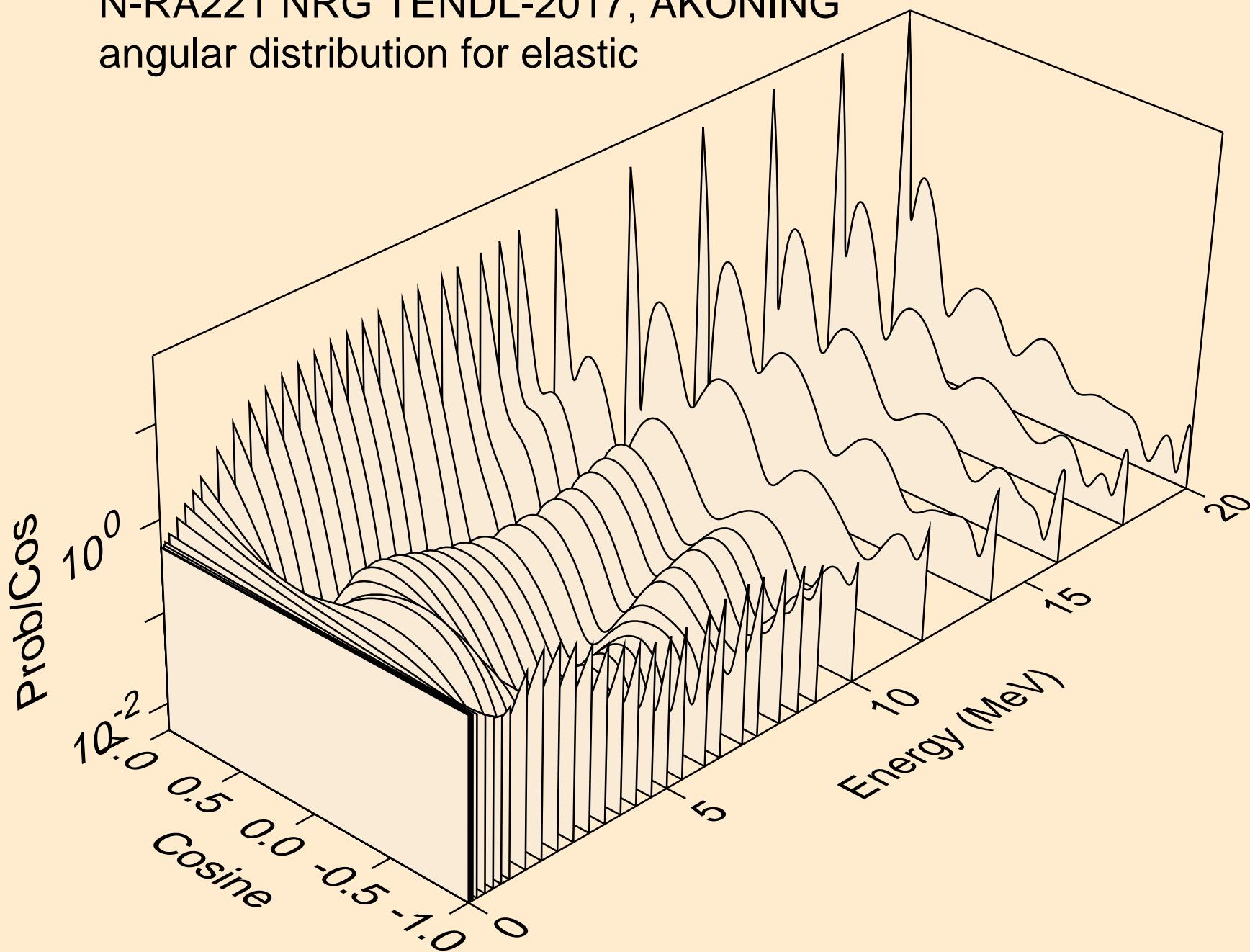


# N-RA221 NRG TENDL-2017, AKONING

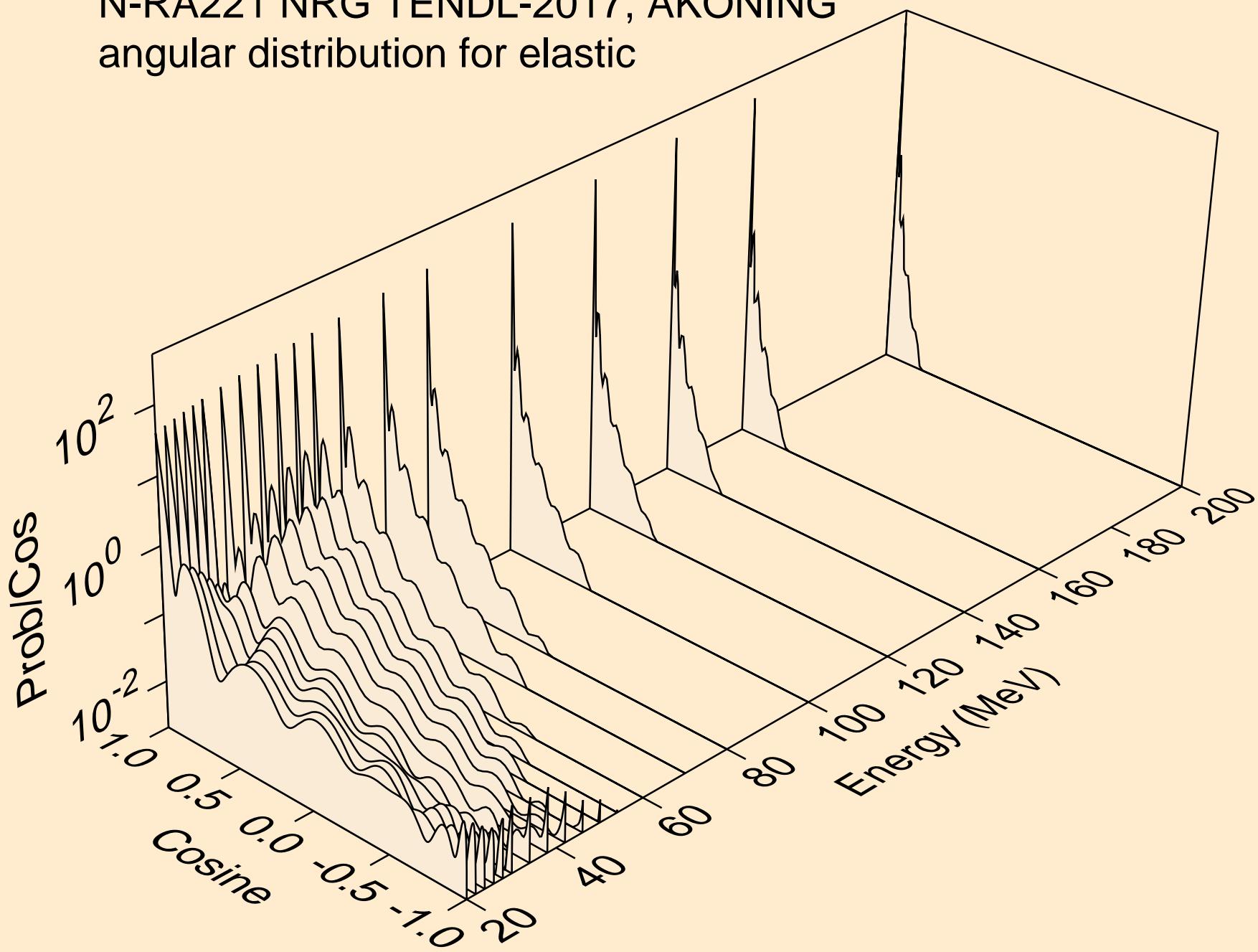
## Threshold reactions



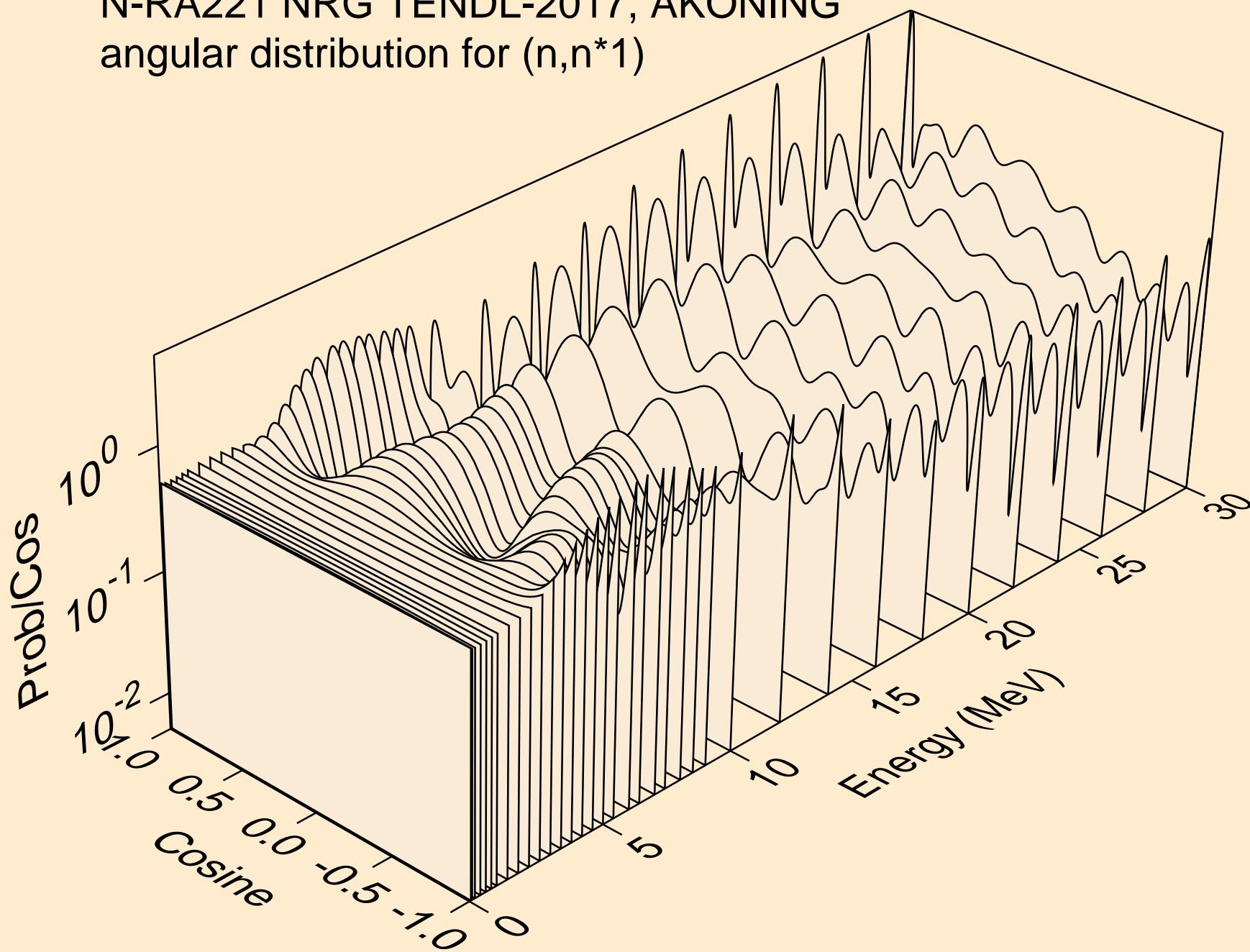
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for elastic



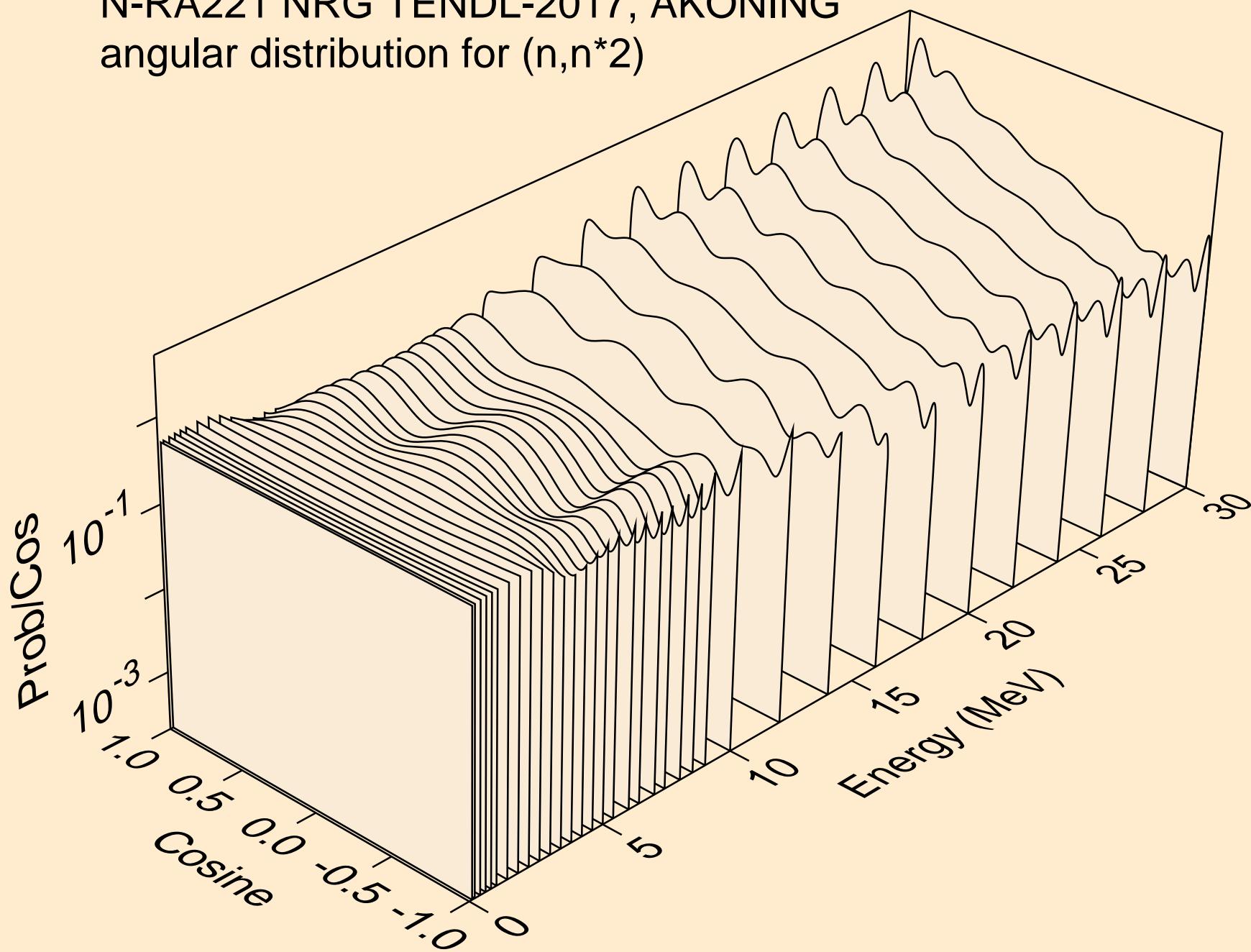
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for elastic



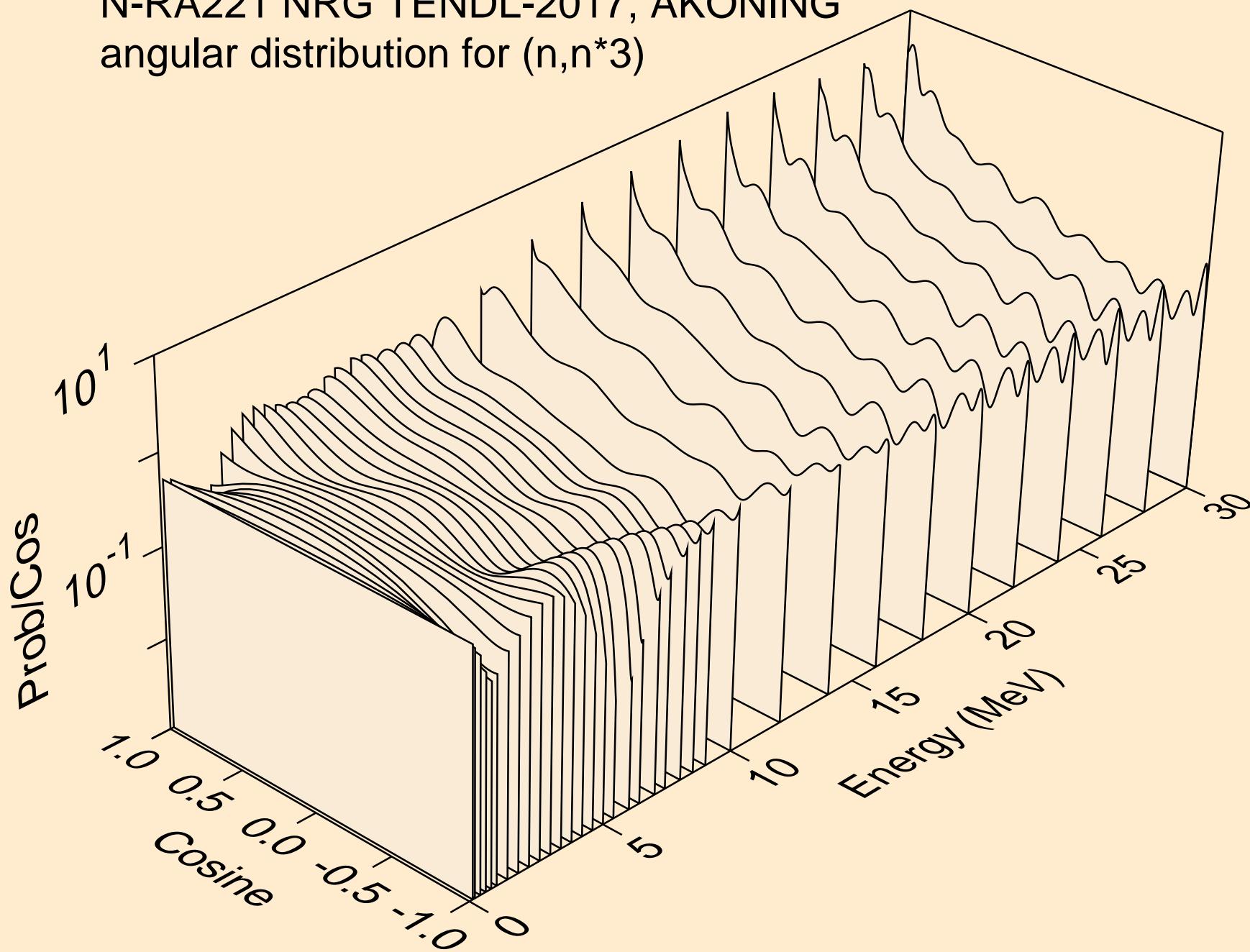
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for (n,n\*1)



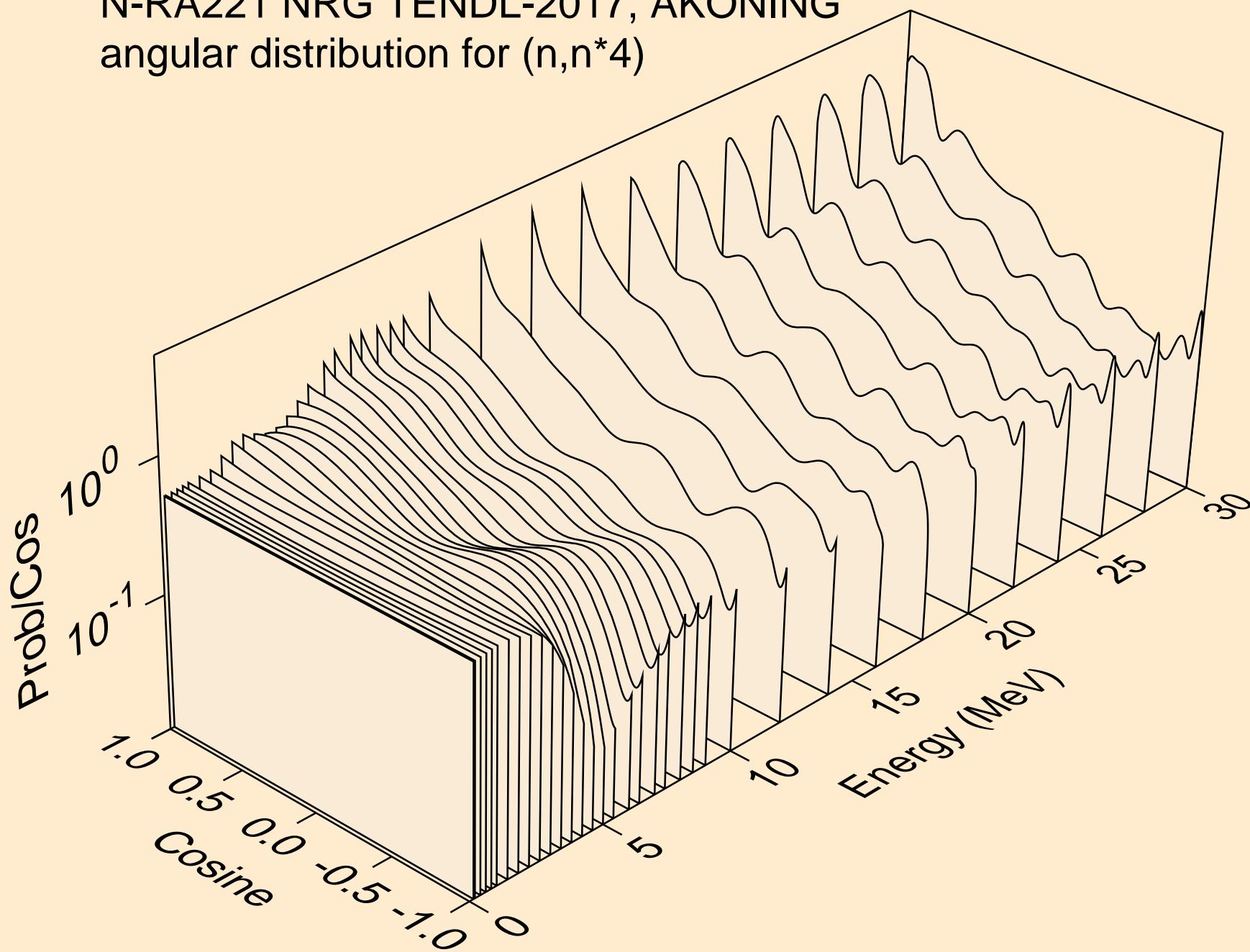
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*)^2$



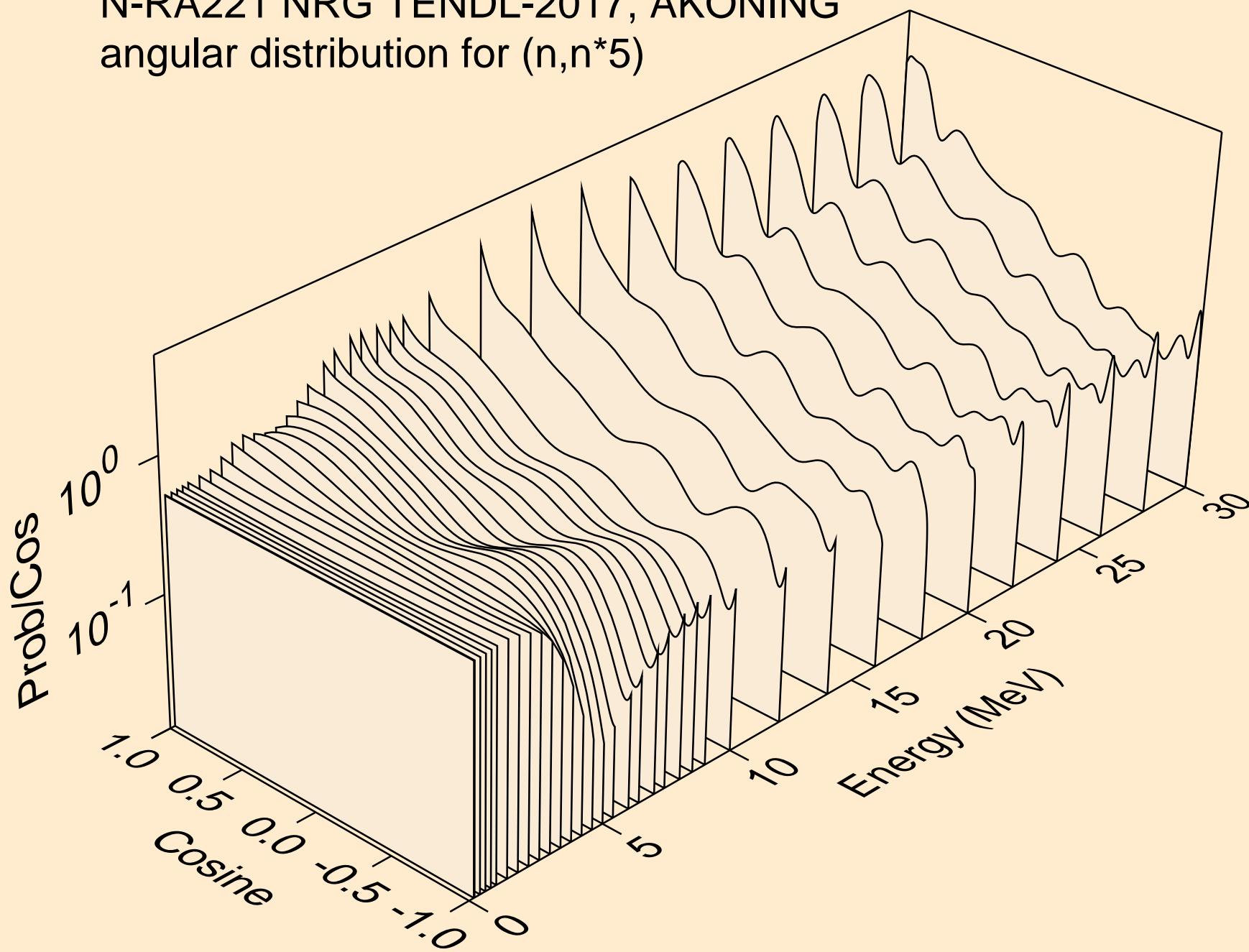
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*3)$



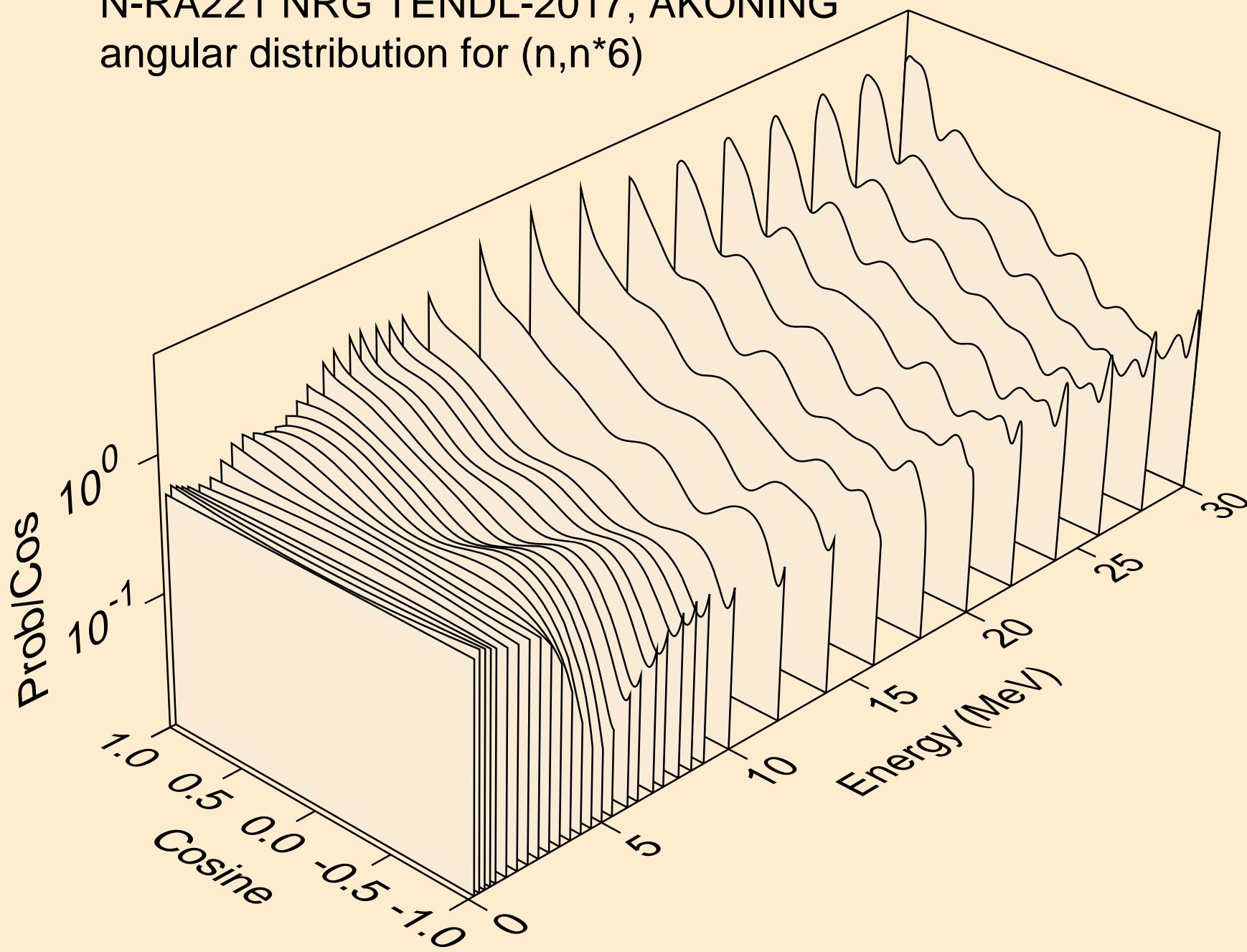
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*4)$



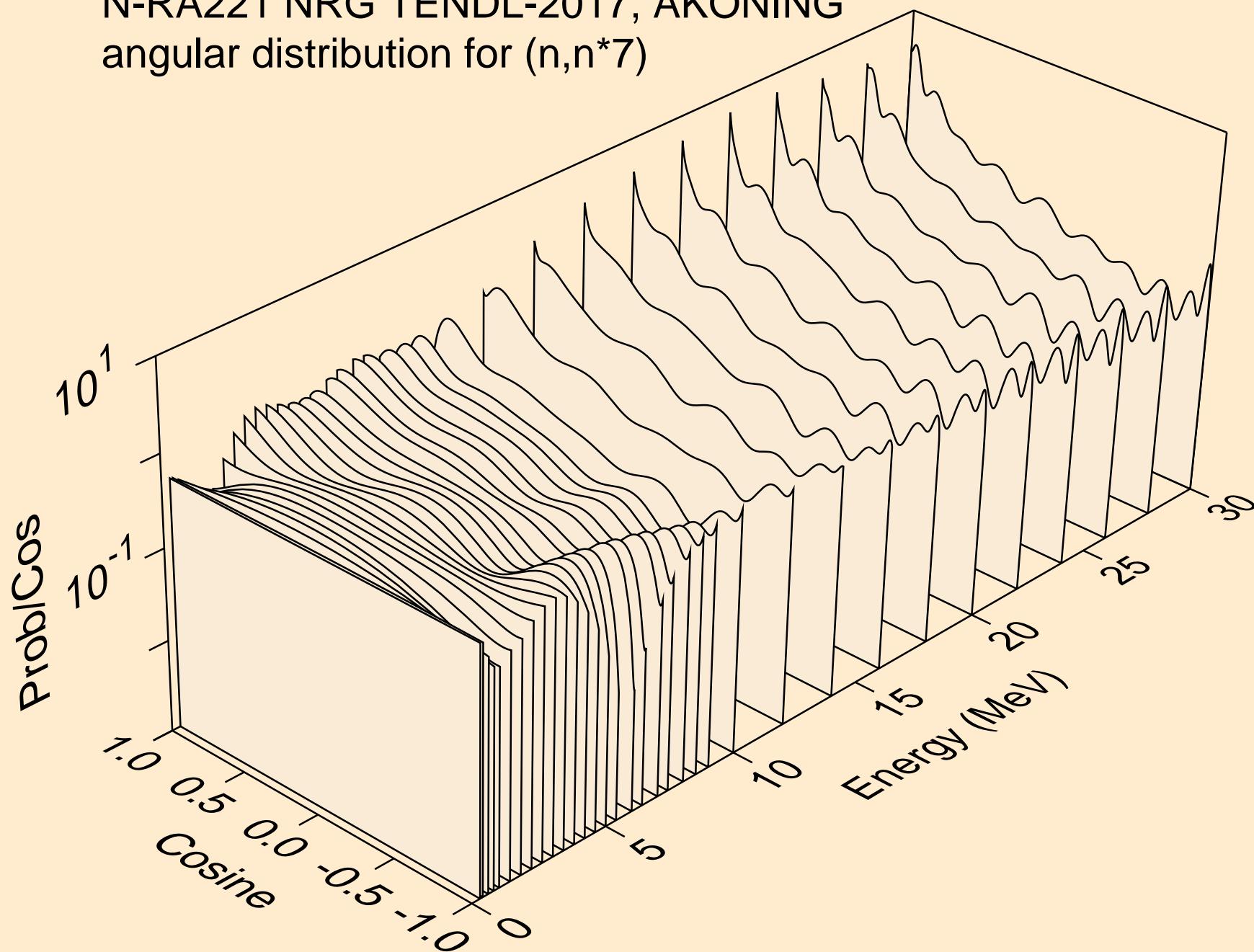
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*)^5$



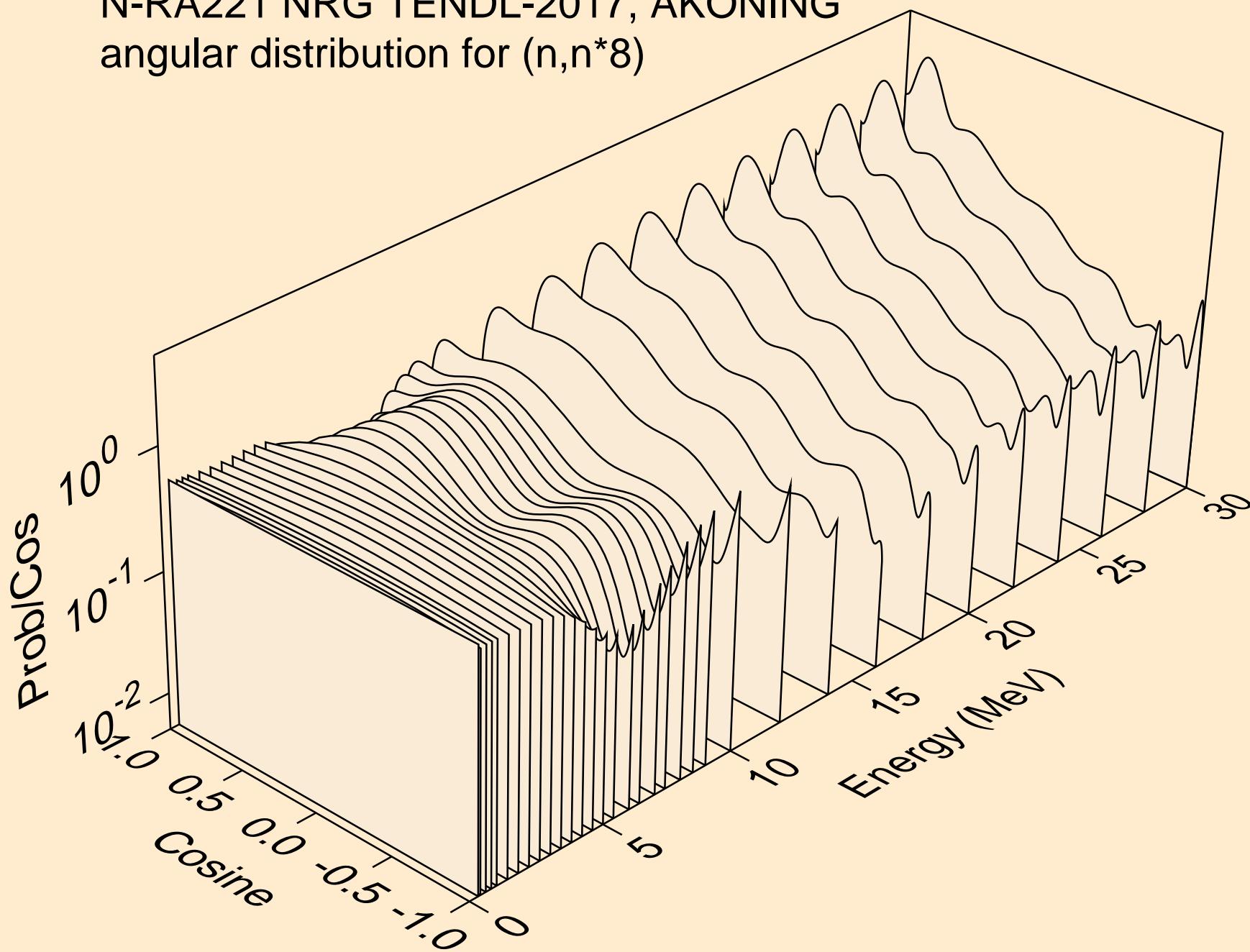
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*6)$



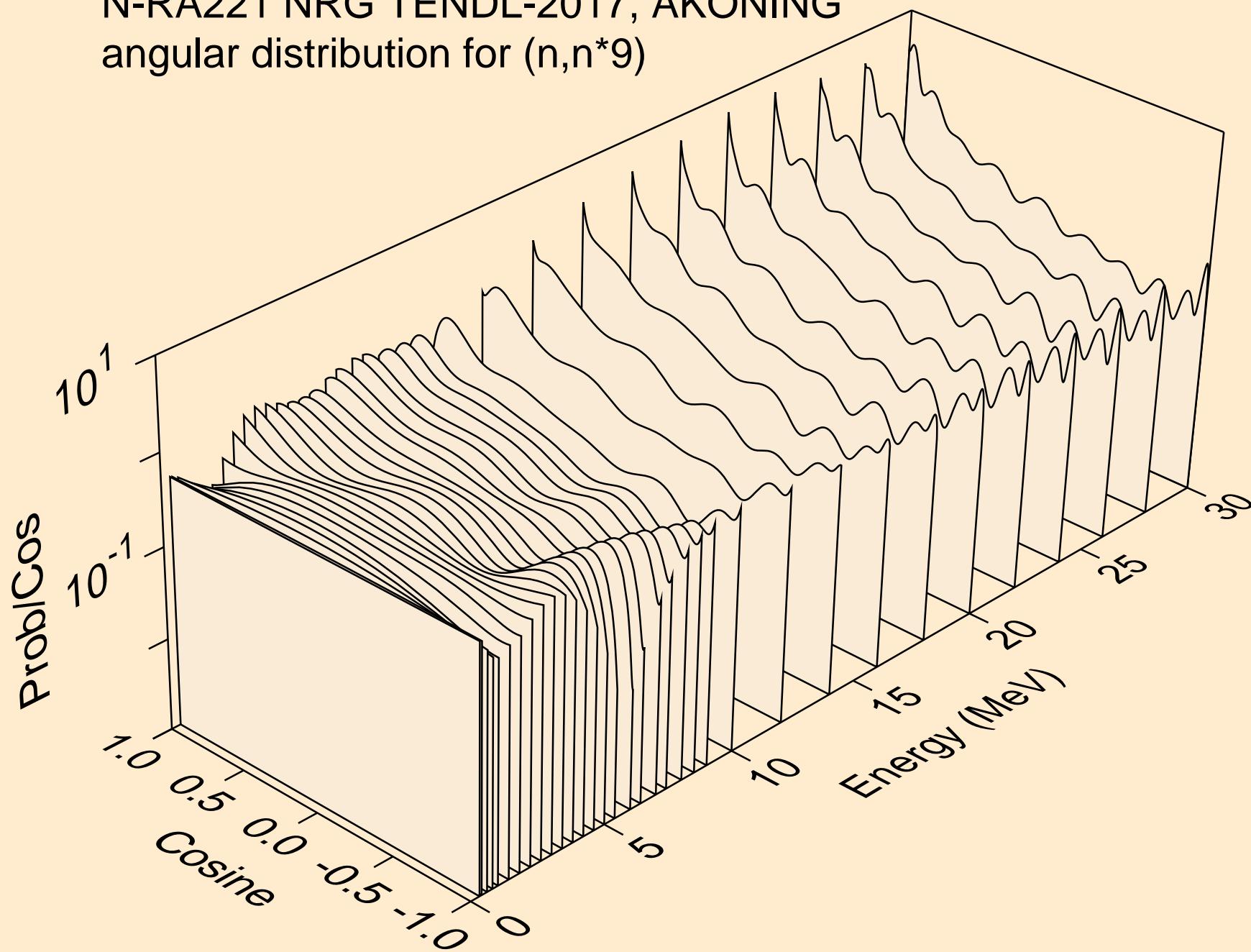
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*)^7$



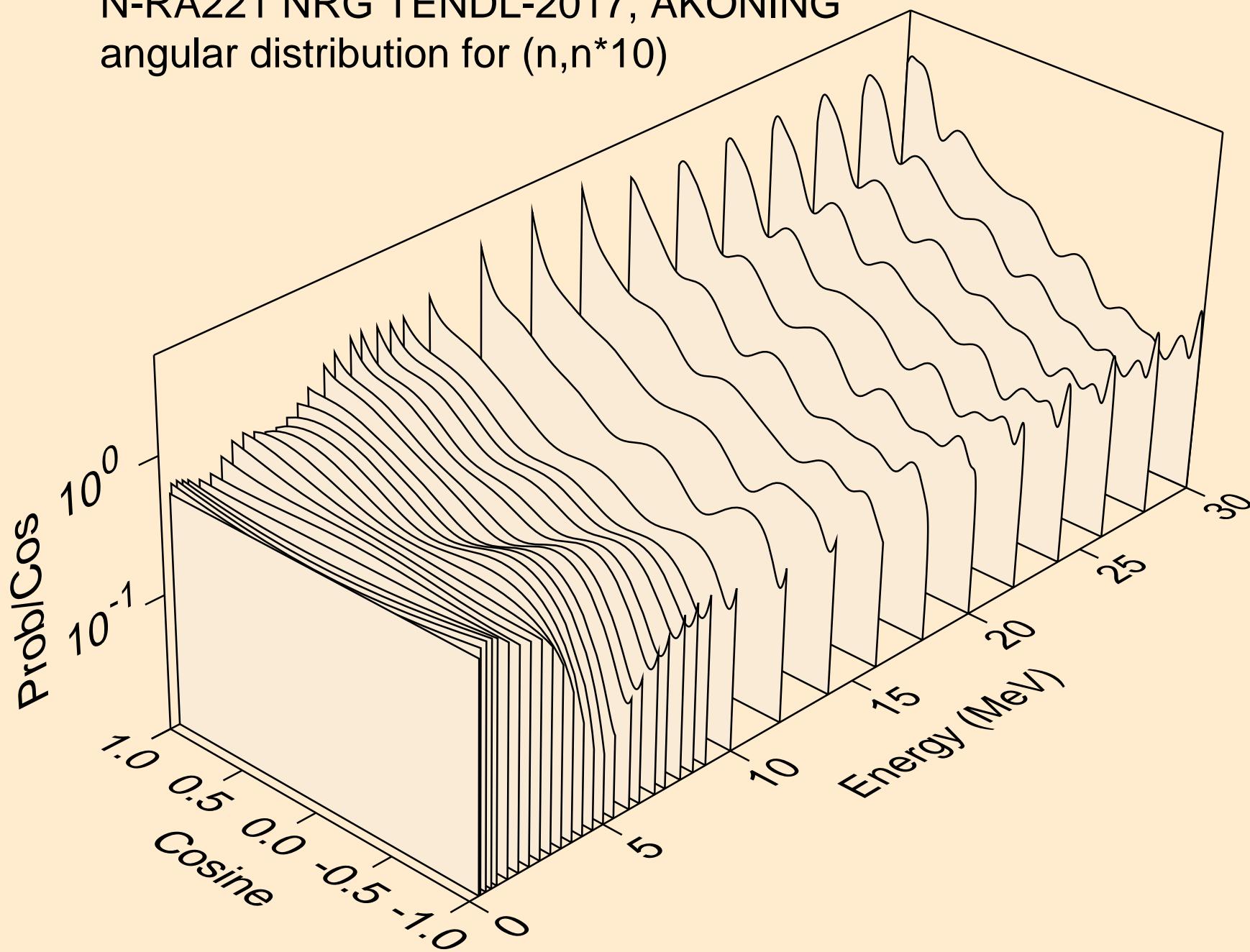
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*)^8$



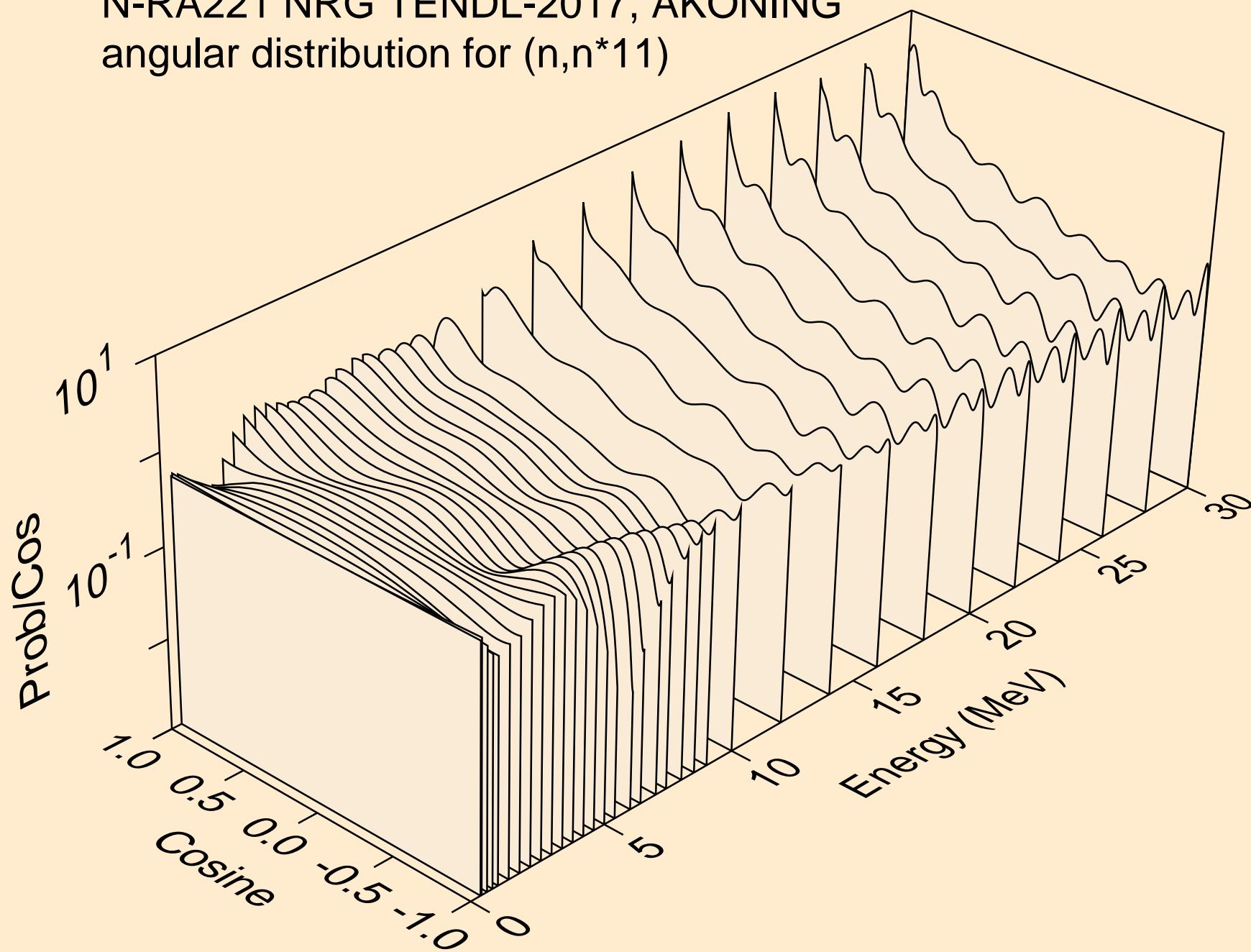
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*)9$



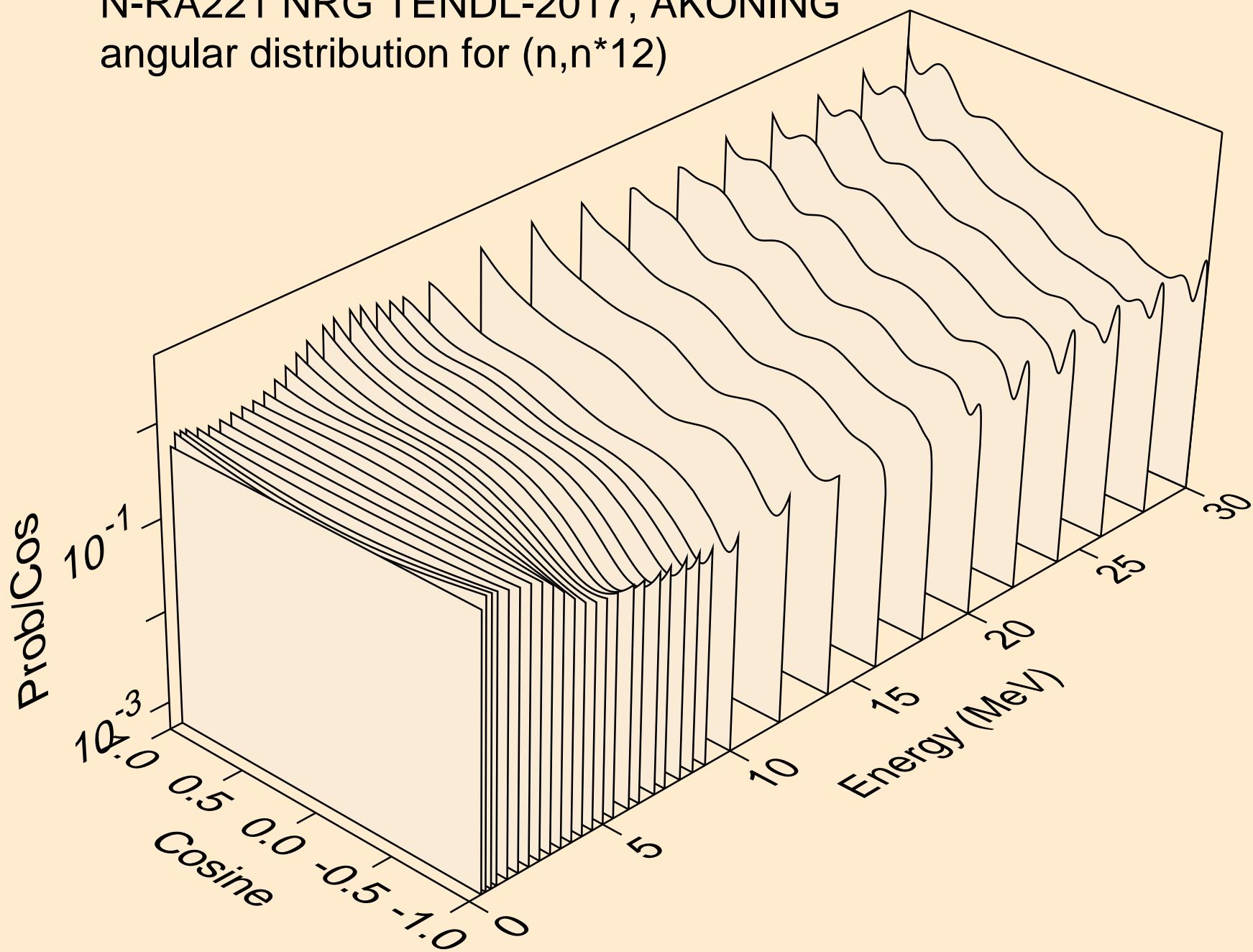
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*10)$



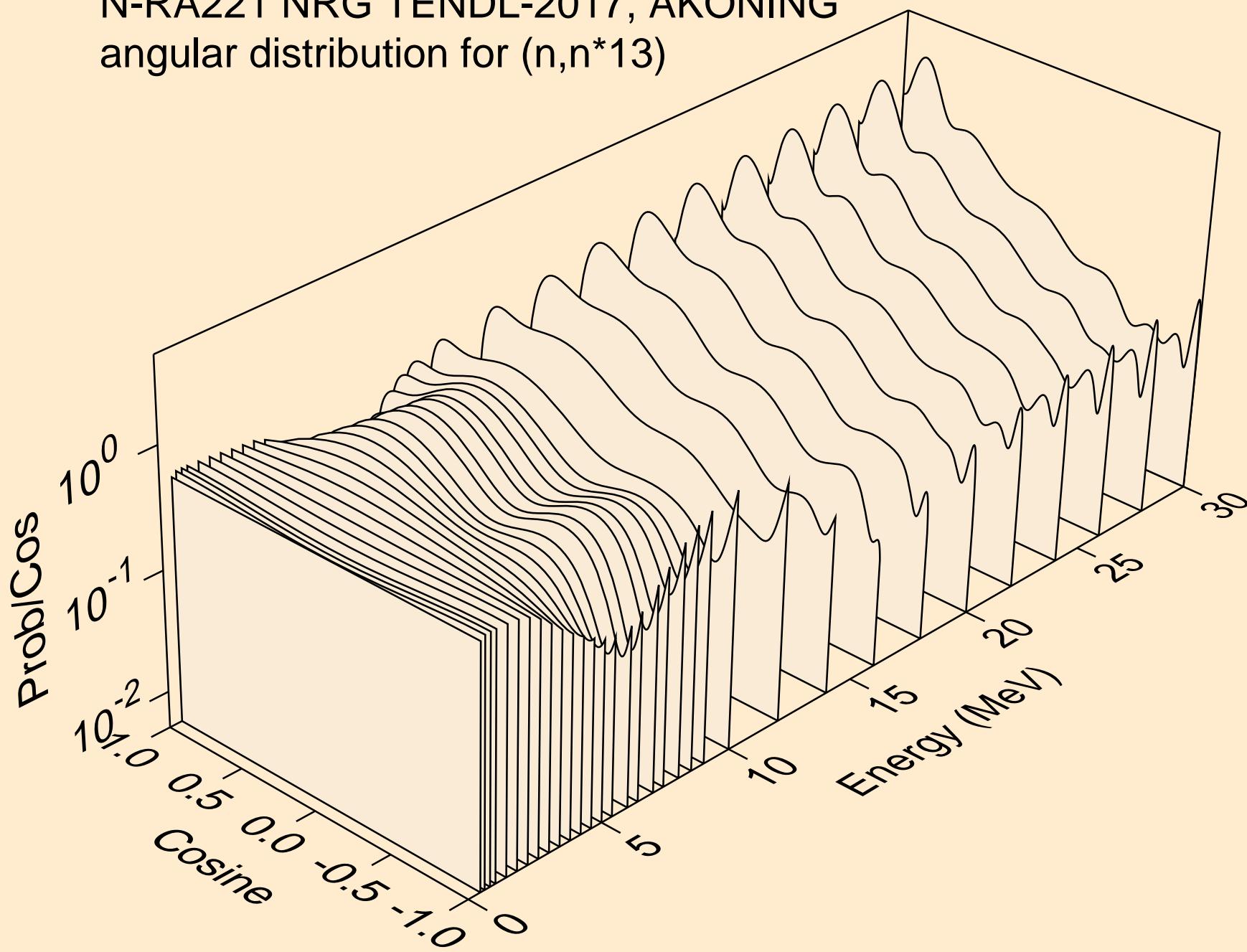
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*11)$



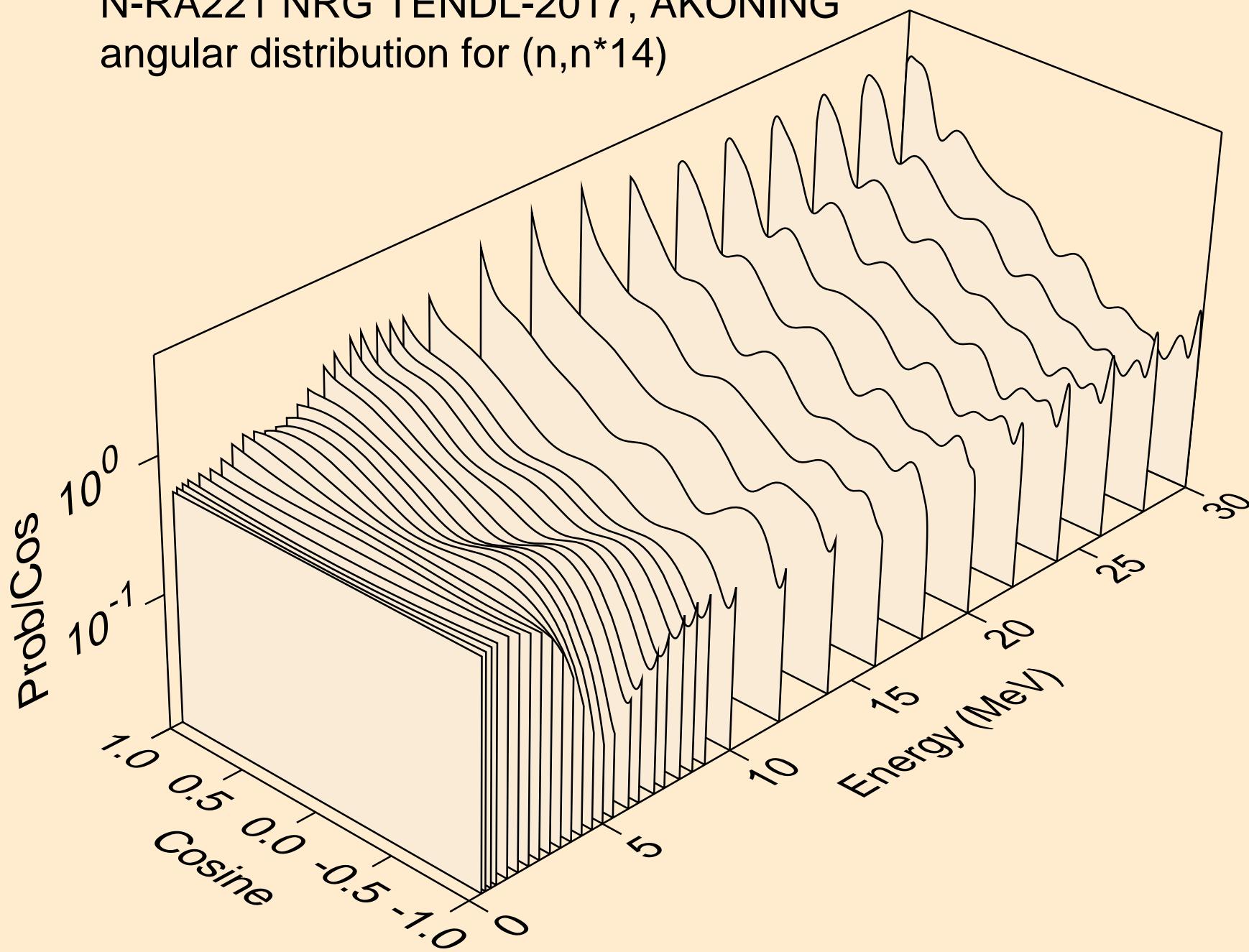
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angular distribution for  $(n,n^*12)$



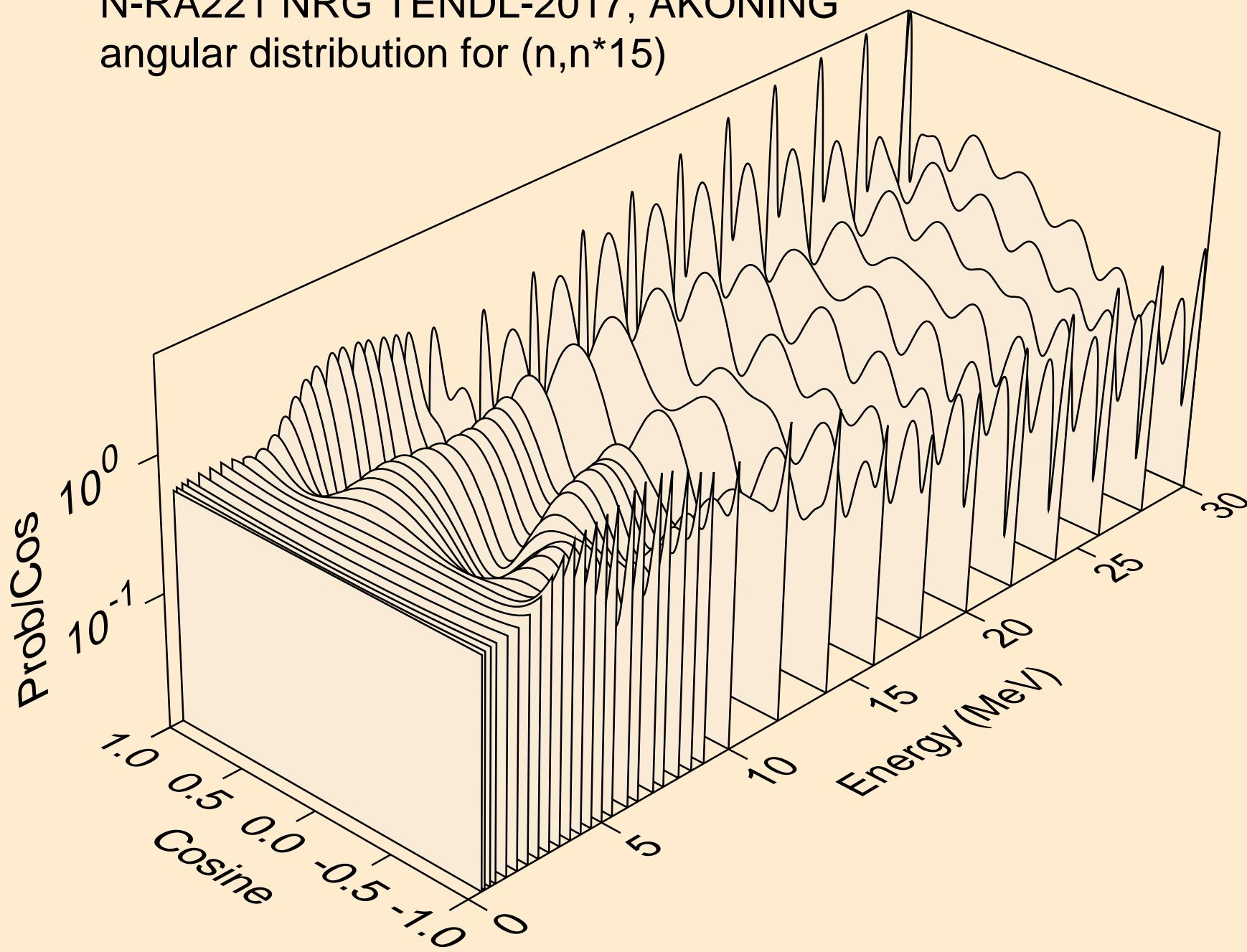
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angular distribution for  $(n,n^*13)$



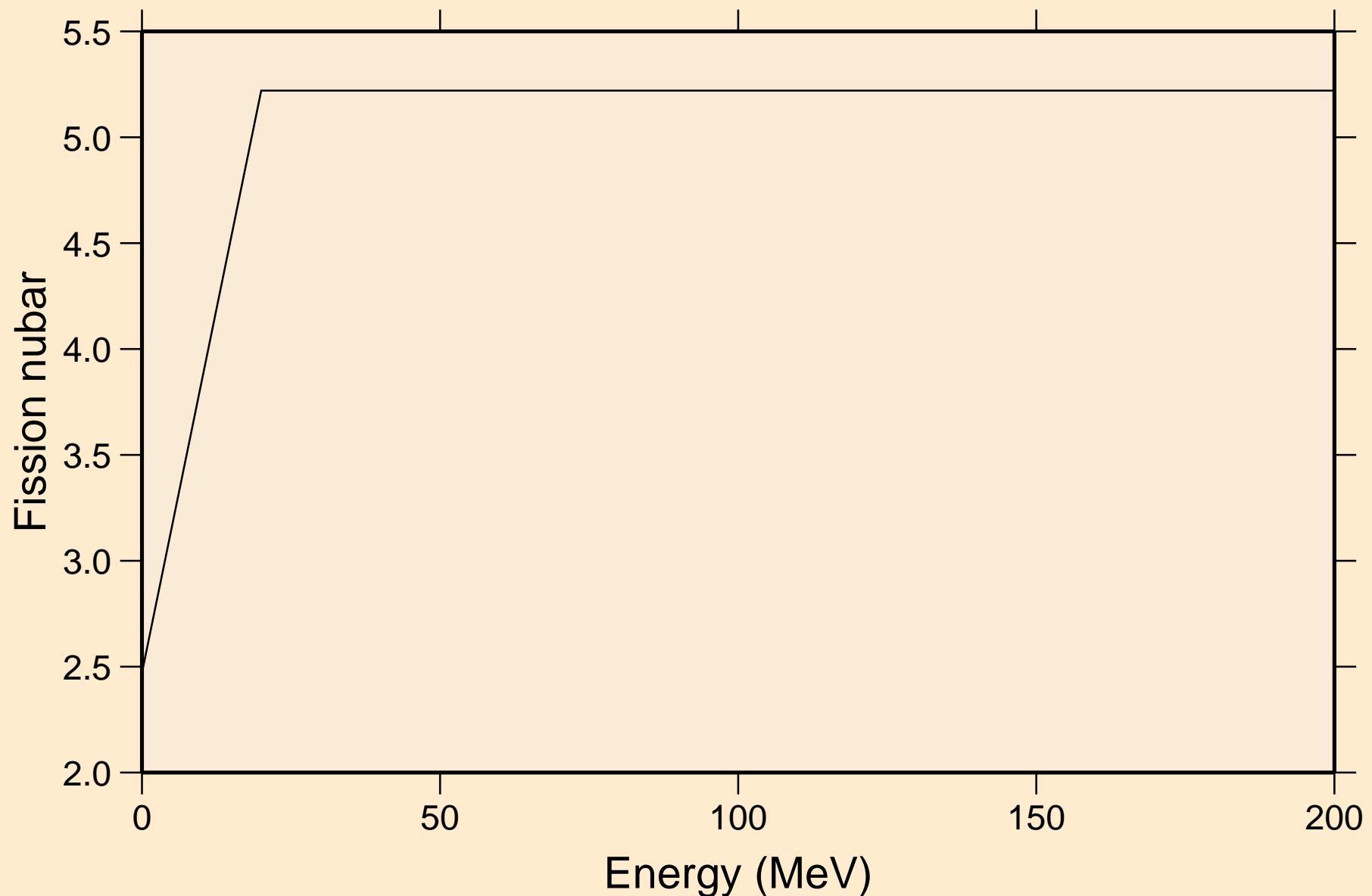
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angular distribution for  $(n,n^*14)$



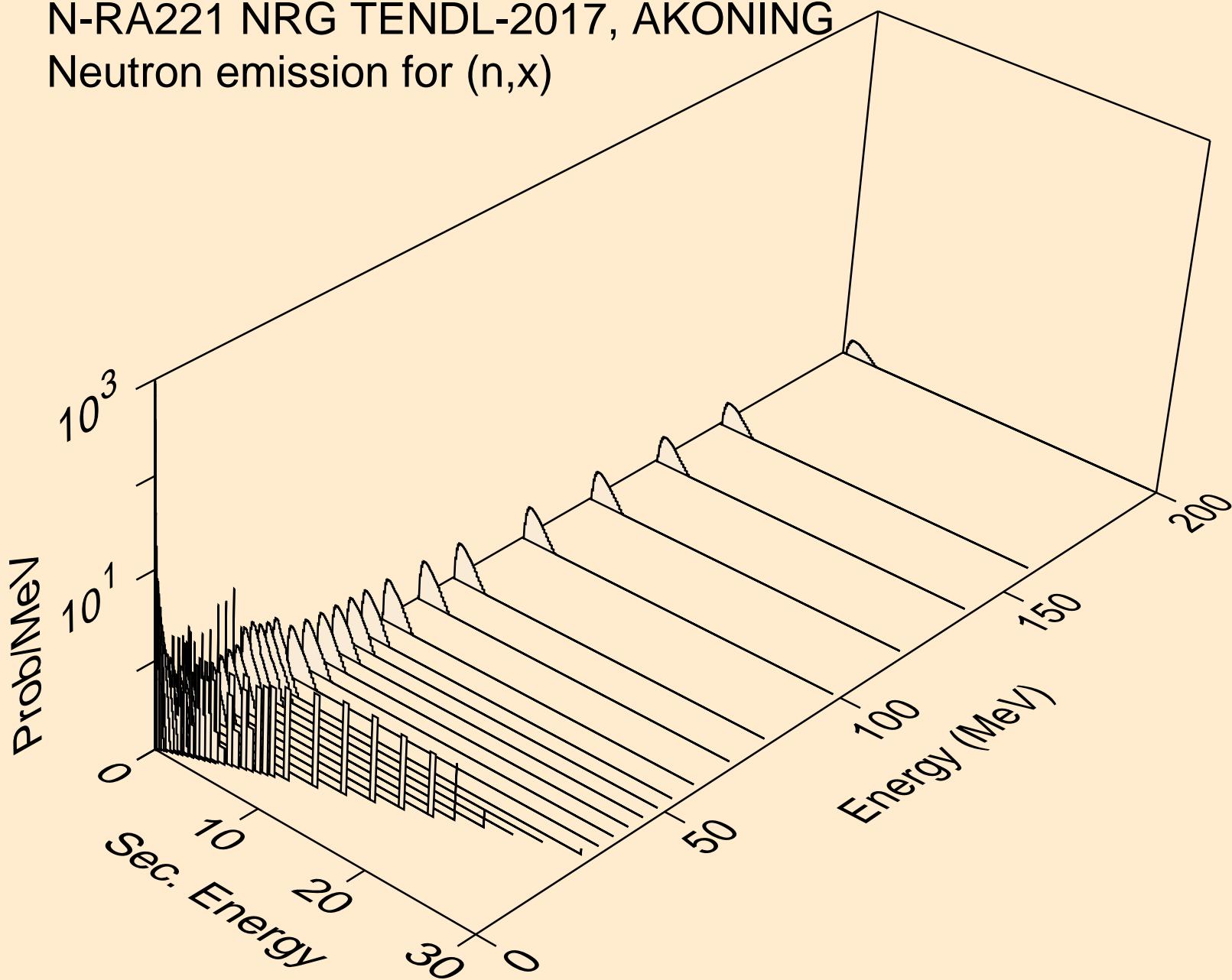
N-RA221 NRG TENDL-2017, AKONING  
angular distribution for  $(n,n^*15)$



N-RA221 NRG TENDL-2017, AKONING  
Total fission nubar

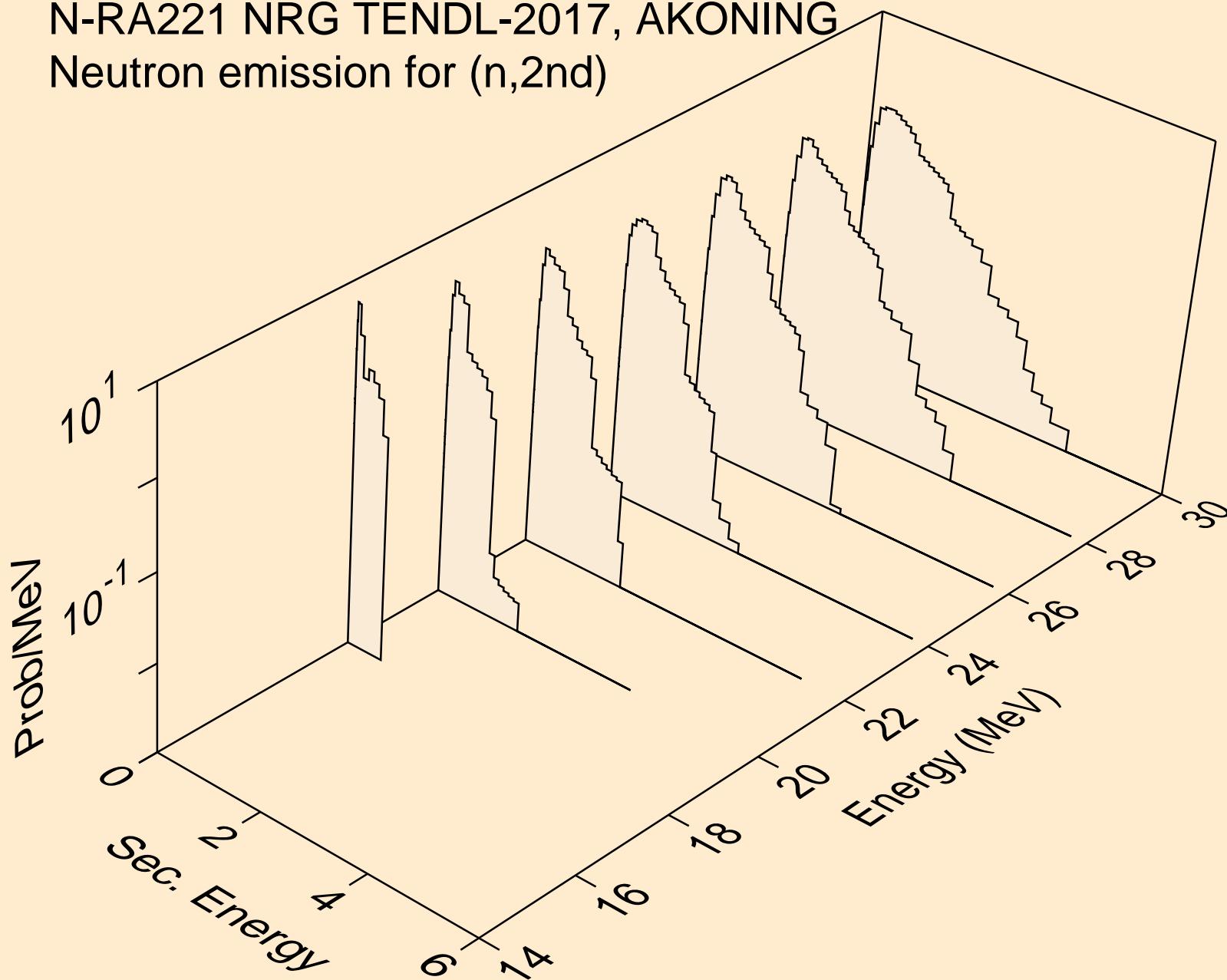


N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for (n,x)

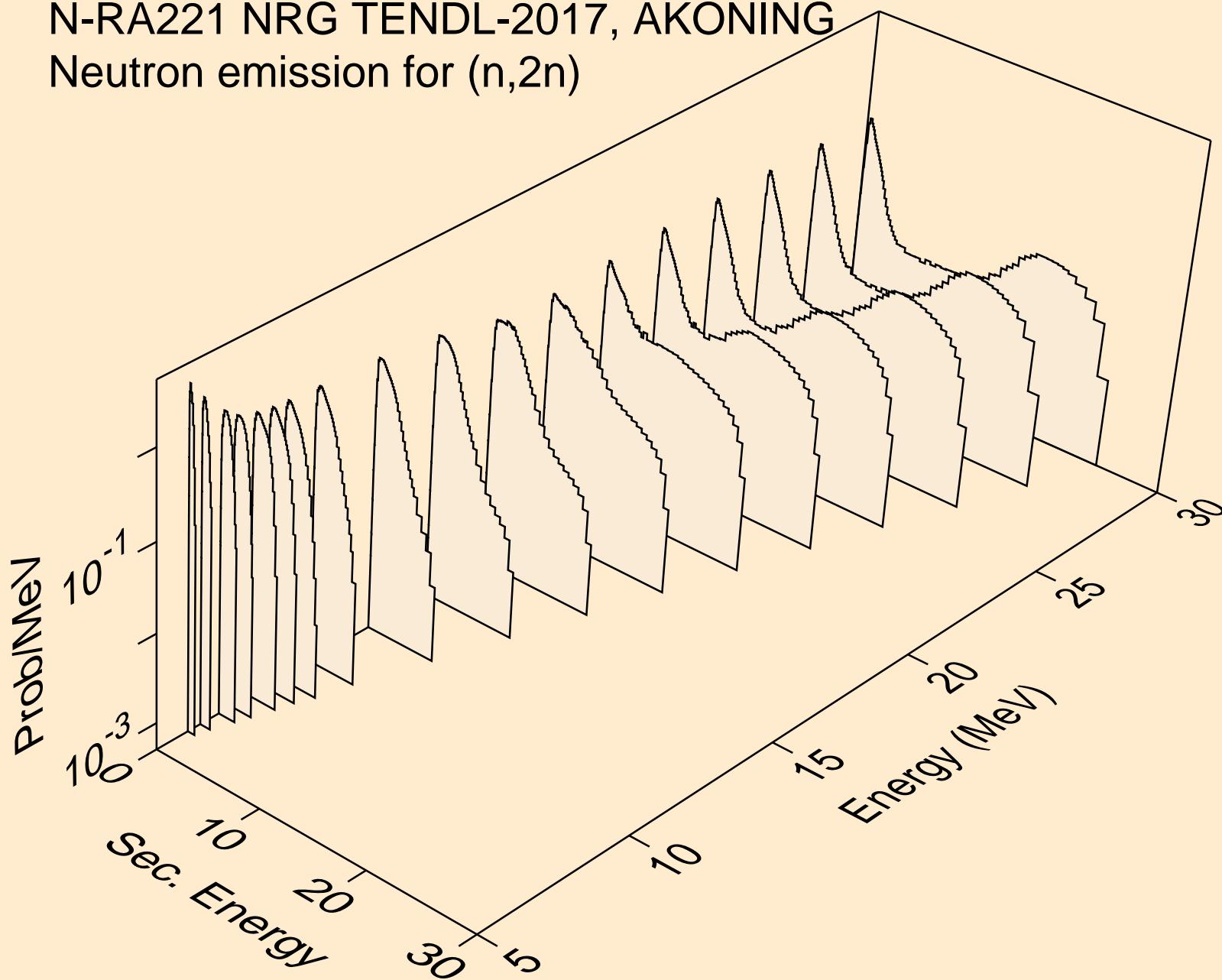


N-RA221 NRG TENDL-2017, AKONING

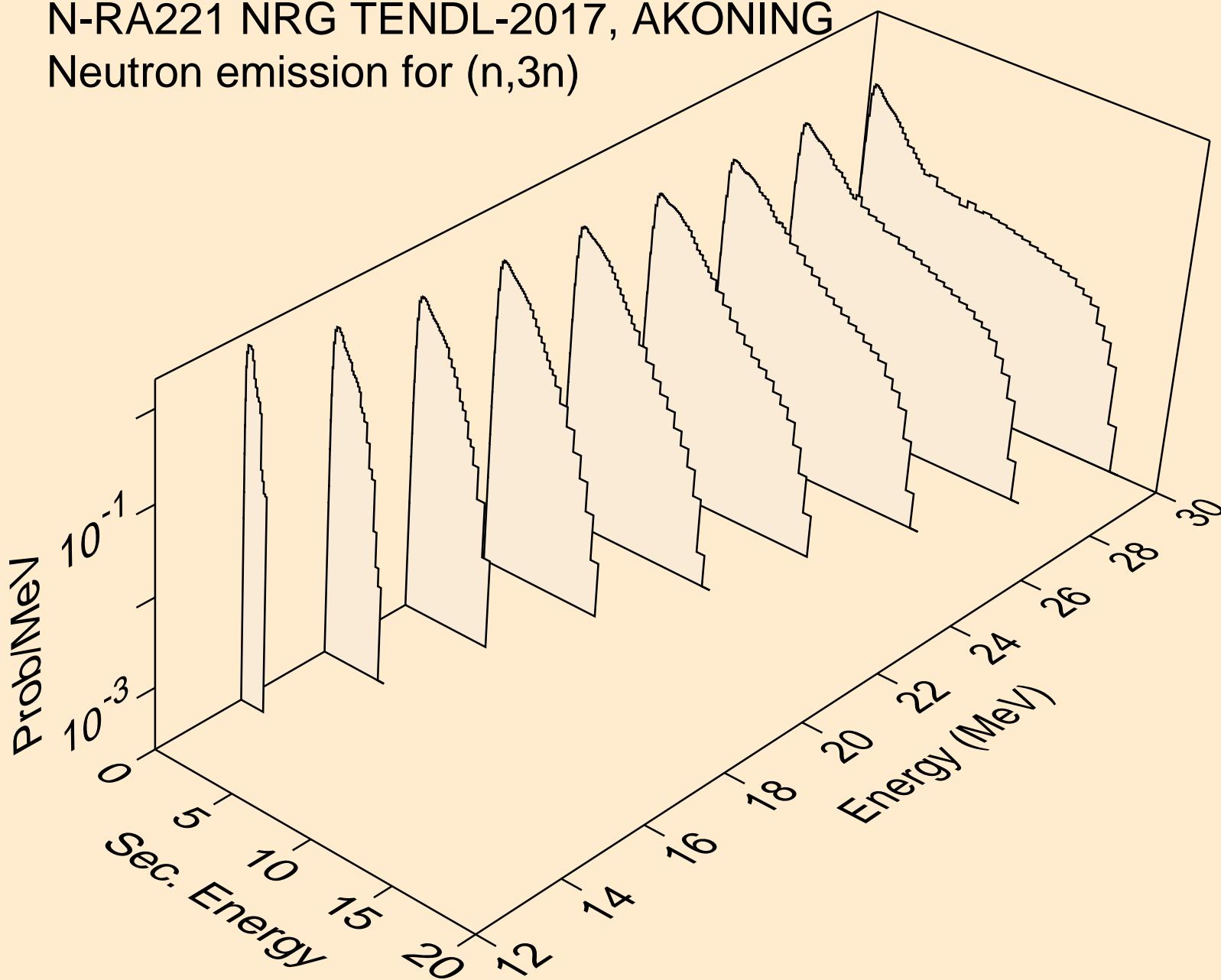
Neutron emission for (n,2nd)



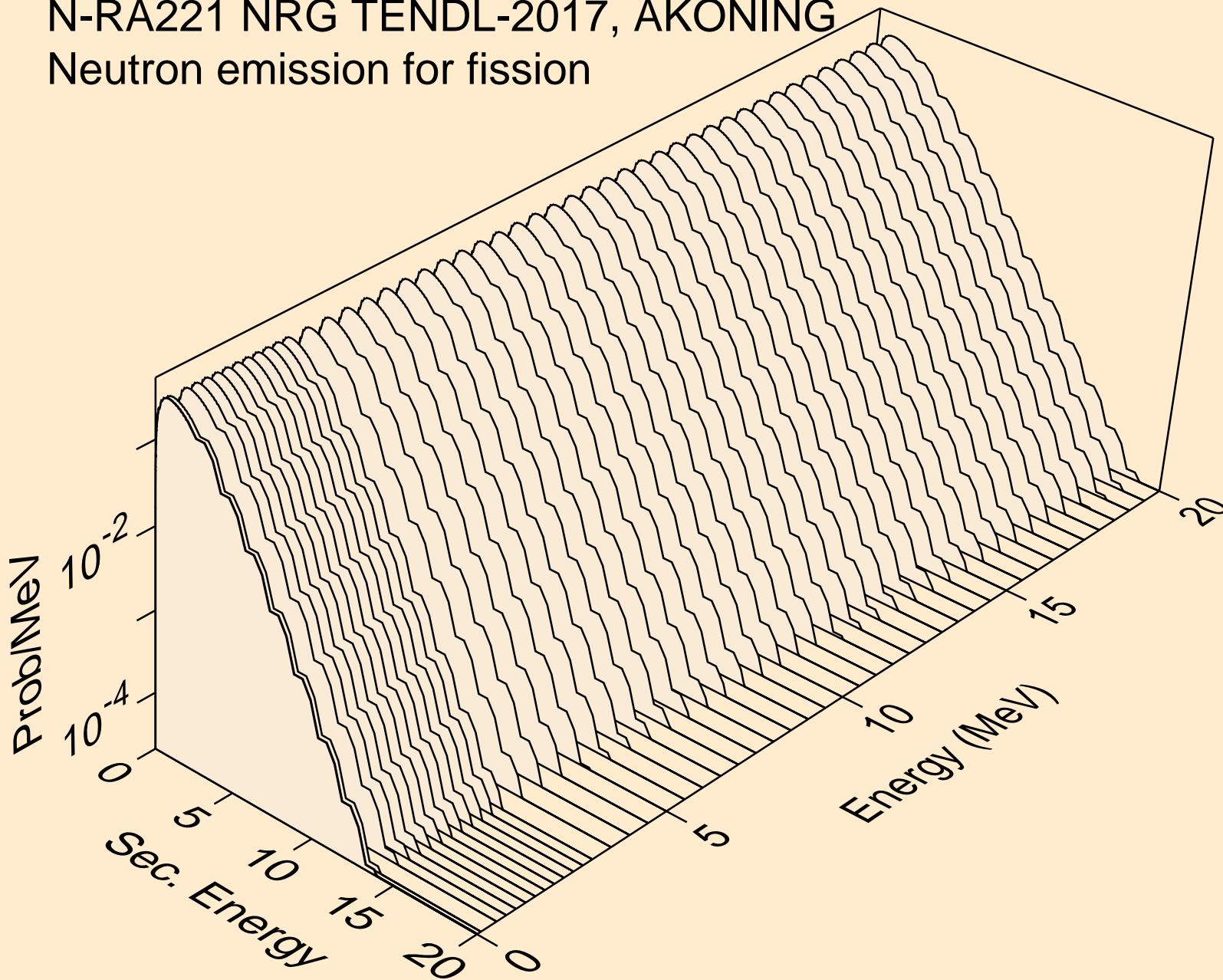
N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for (n,2n)



N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for (n,3n)

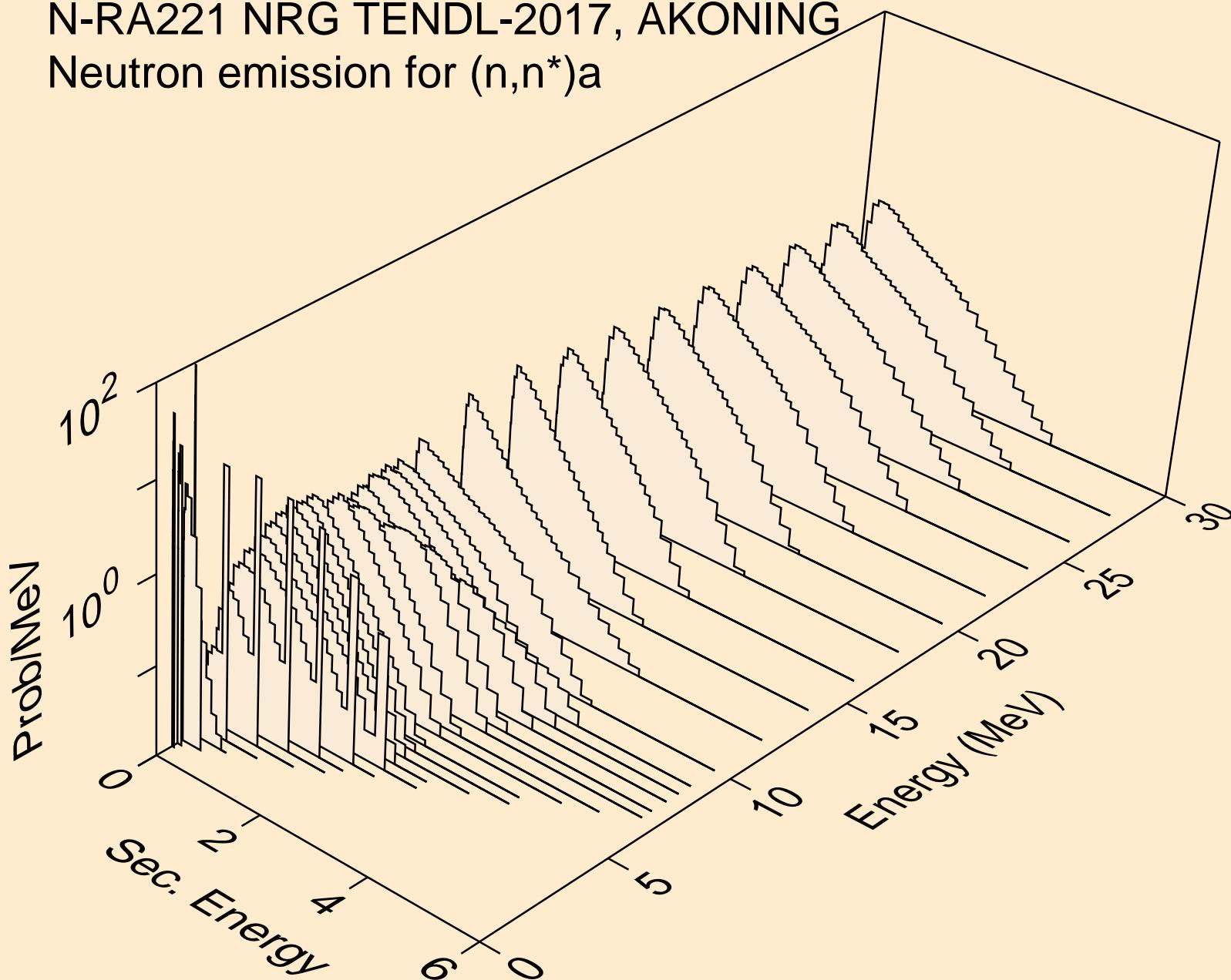


N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for fission

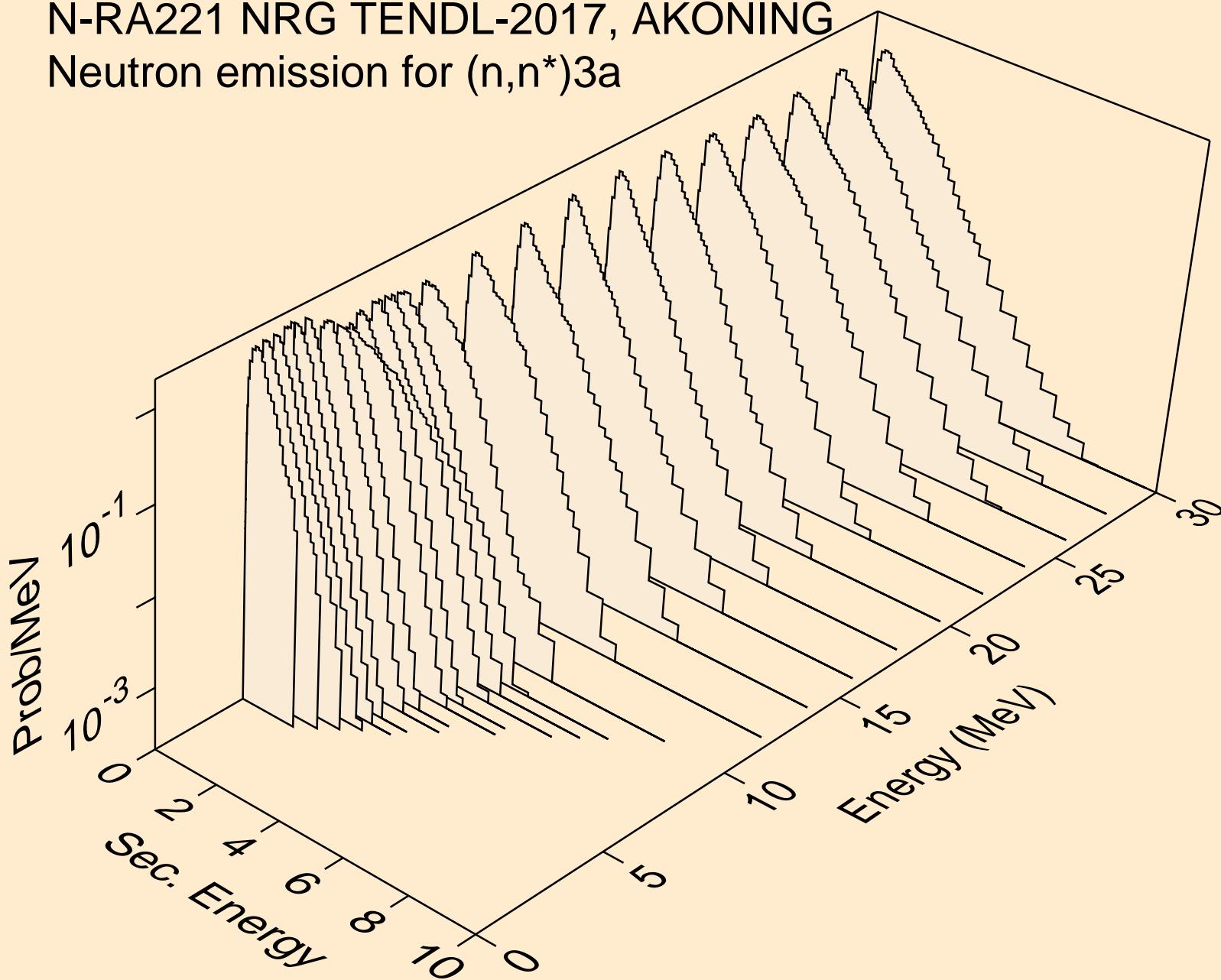


N-RA221 NRG TENDL-2017, AKONING

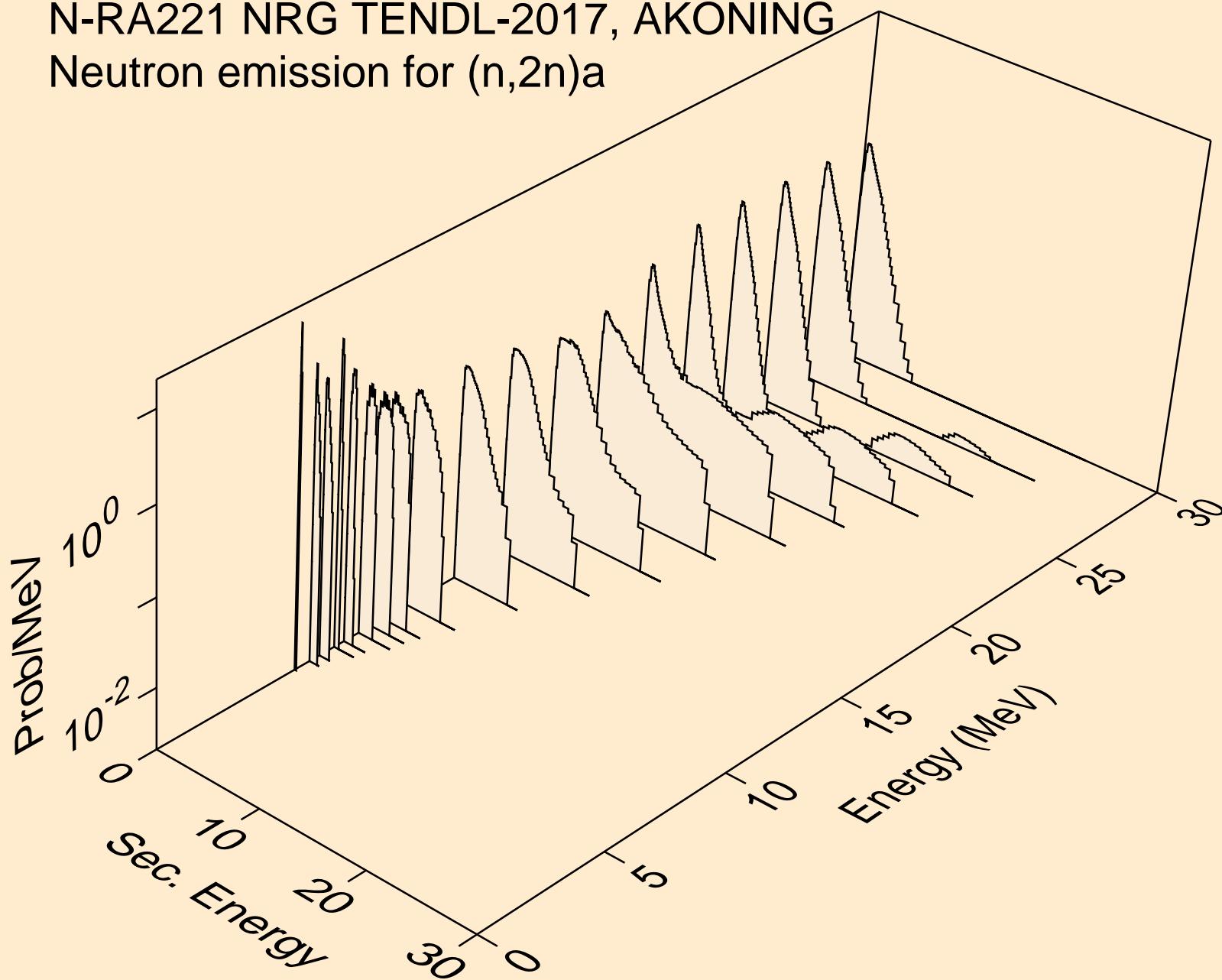
Neutron emission for  $(n,n^*)a$



N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for  $(n,n^*)3a$

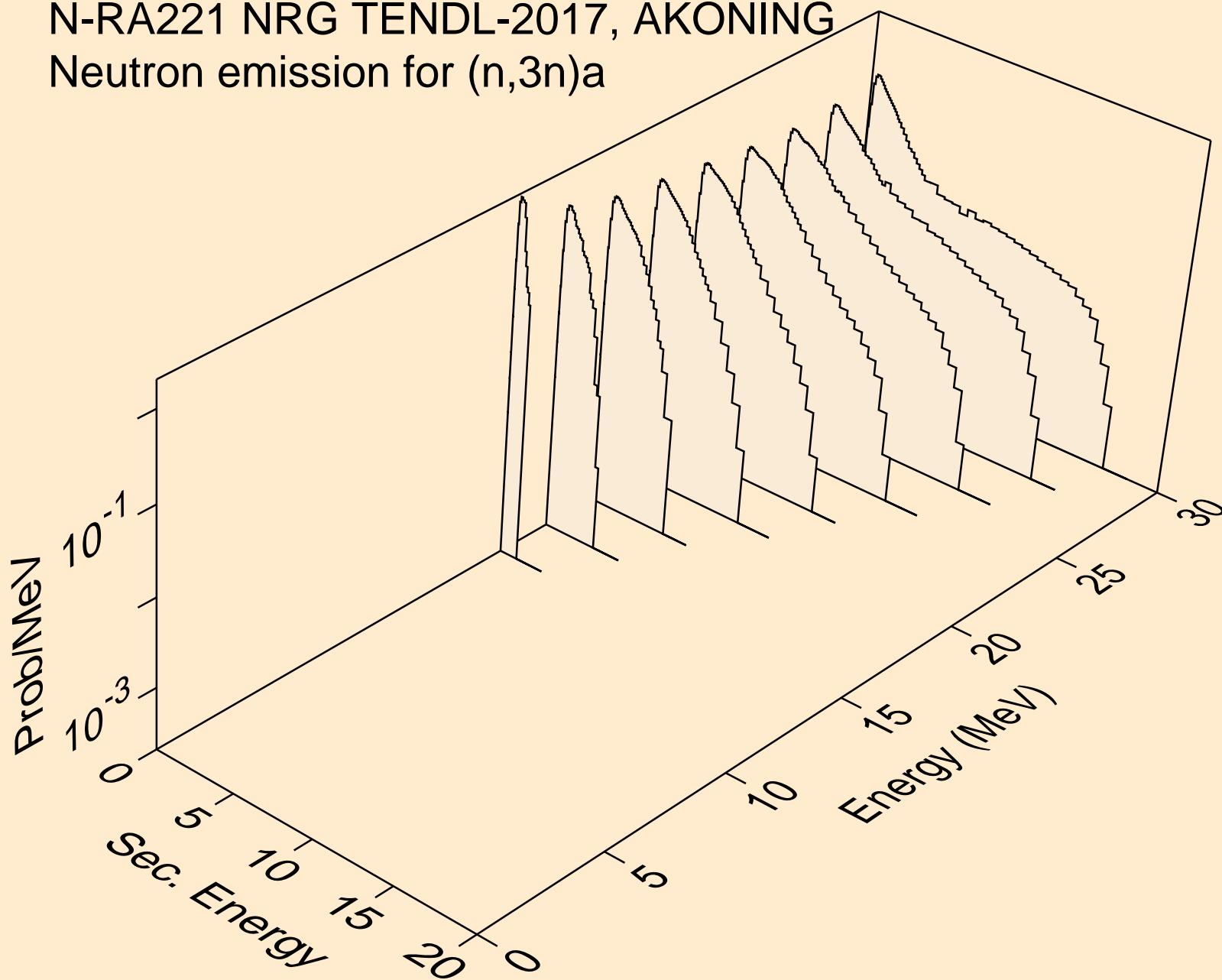


N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for  $(n,2n)a$



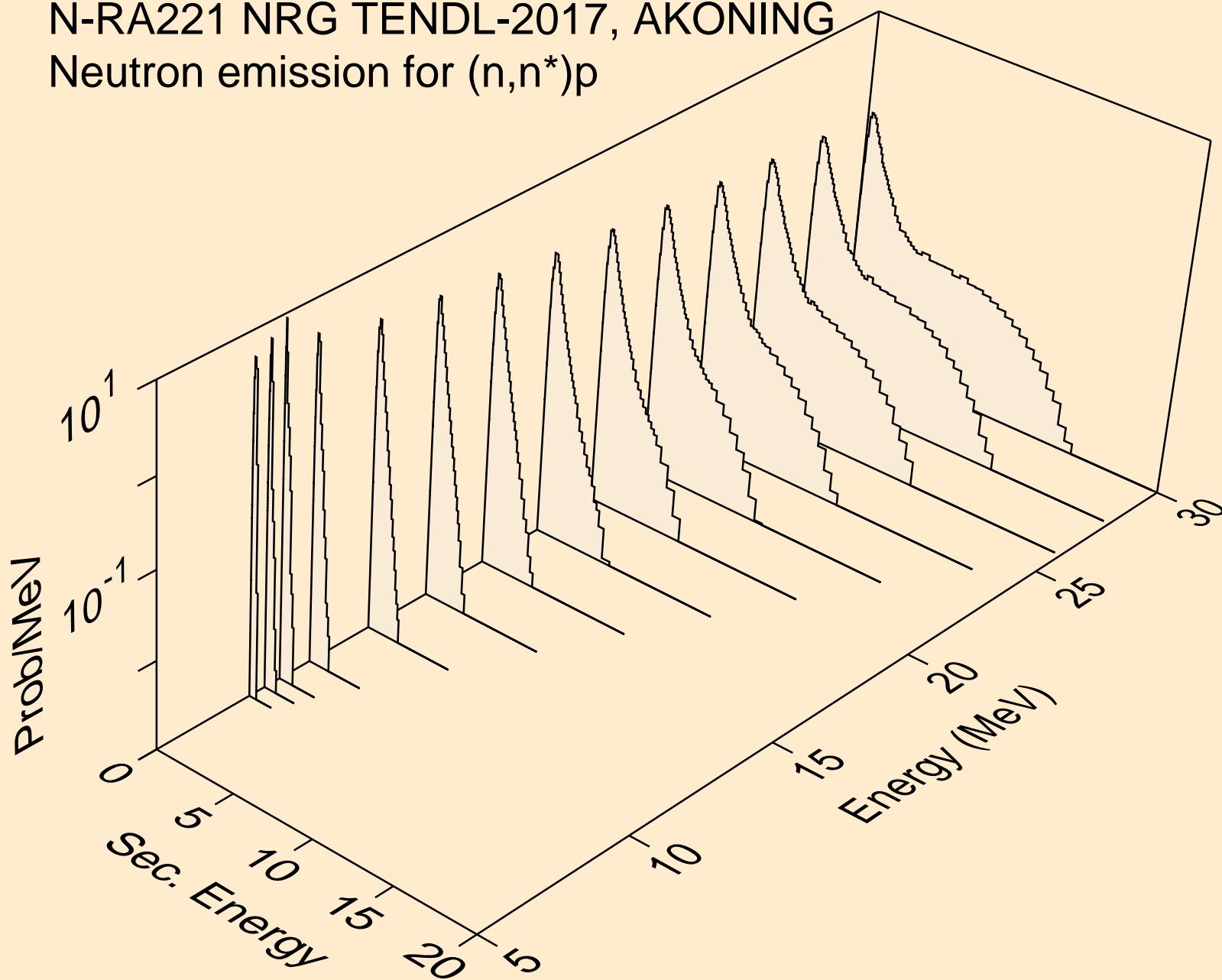
N-RA221 NRG TENDL-2017, AKONING

Neutron emission for (n,3n)a

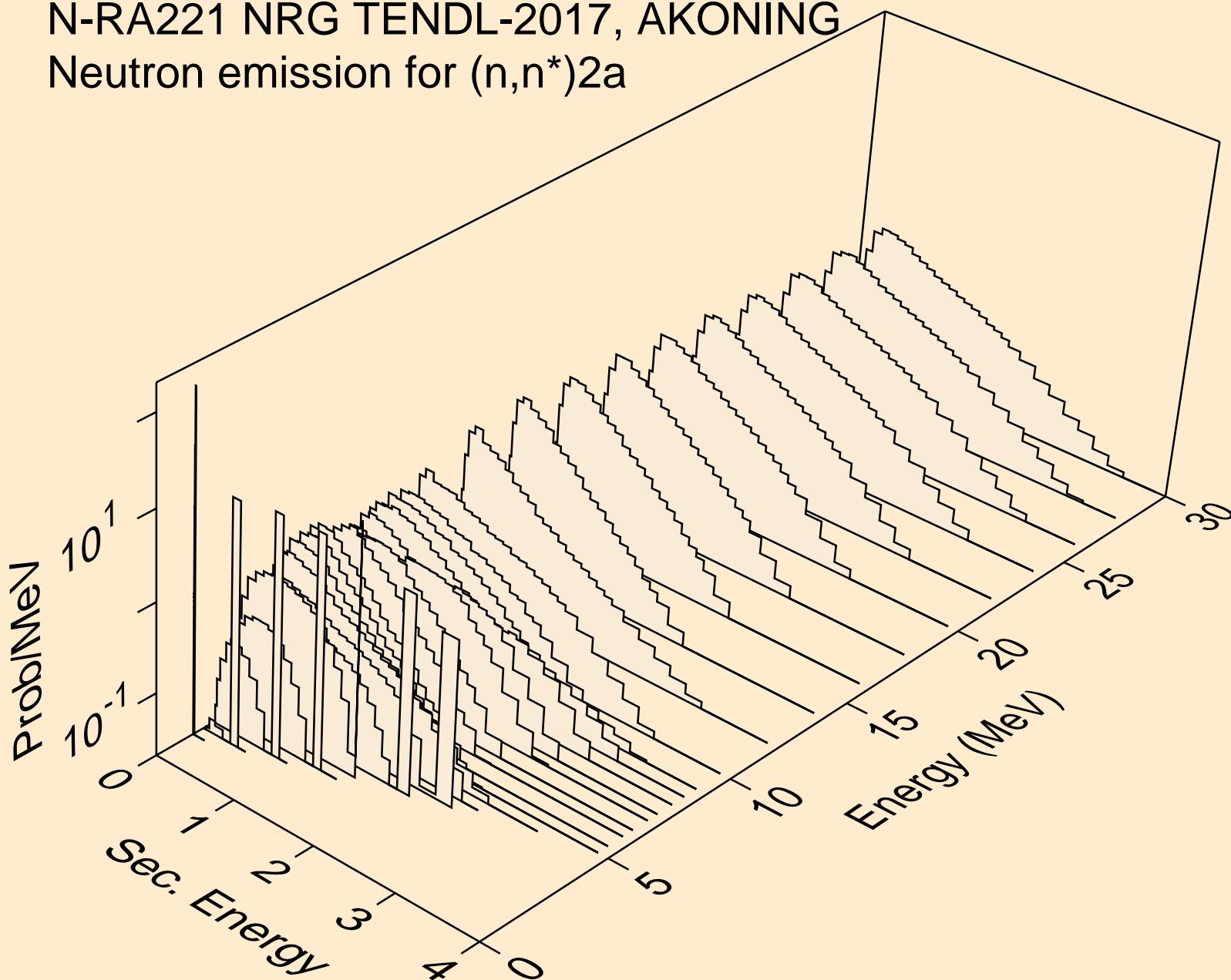


N-RA221 NRG TENDL-2017, AKONING

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

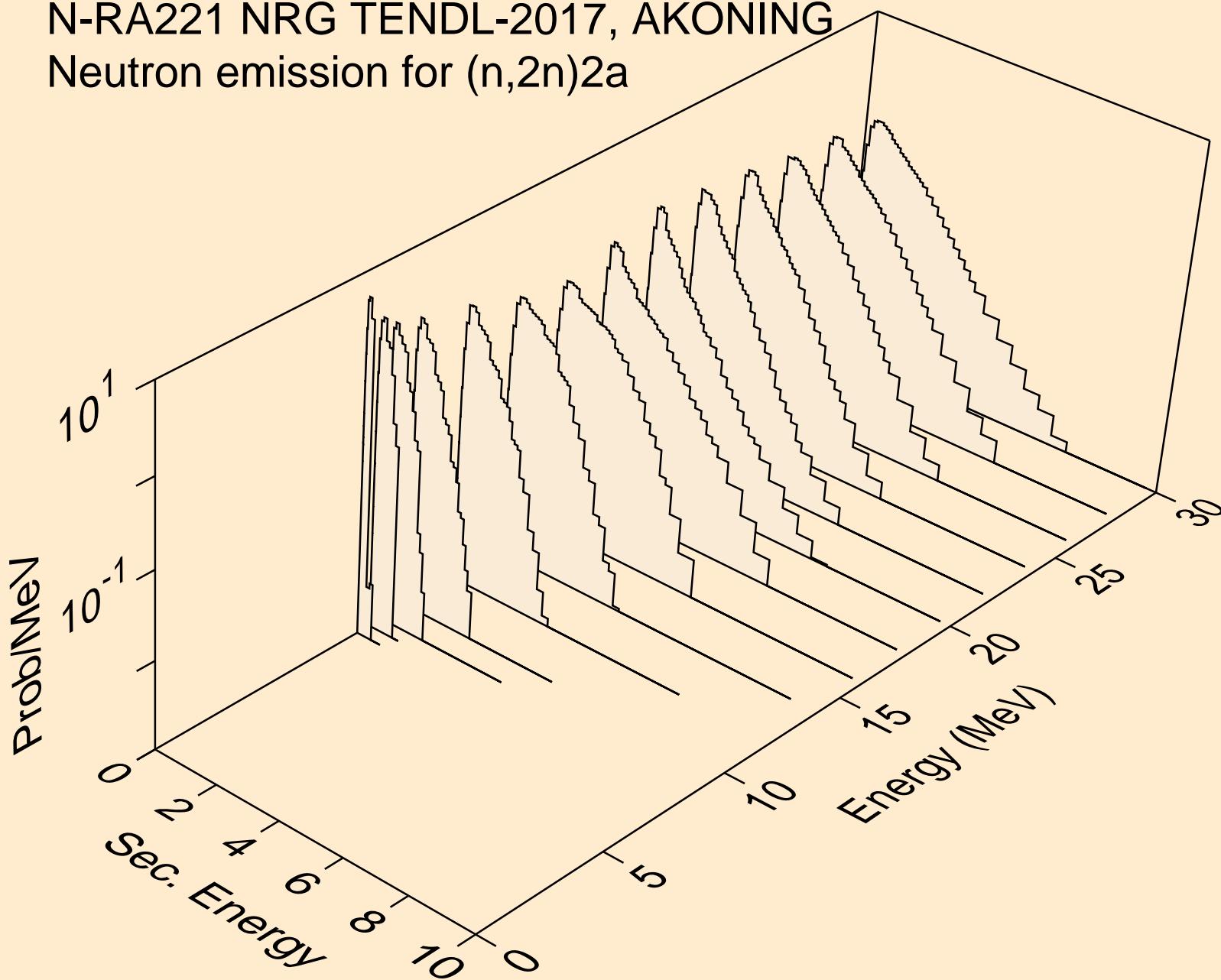


N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for  $(n,n^*)2a$



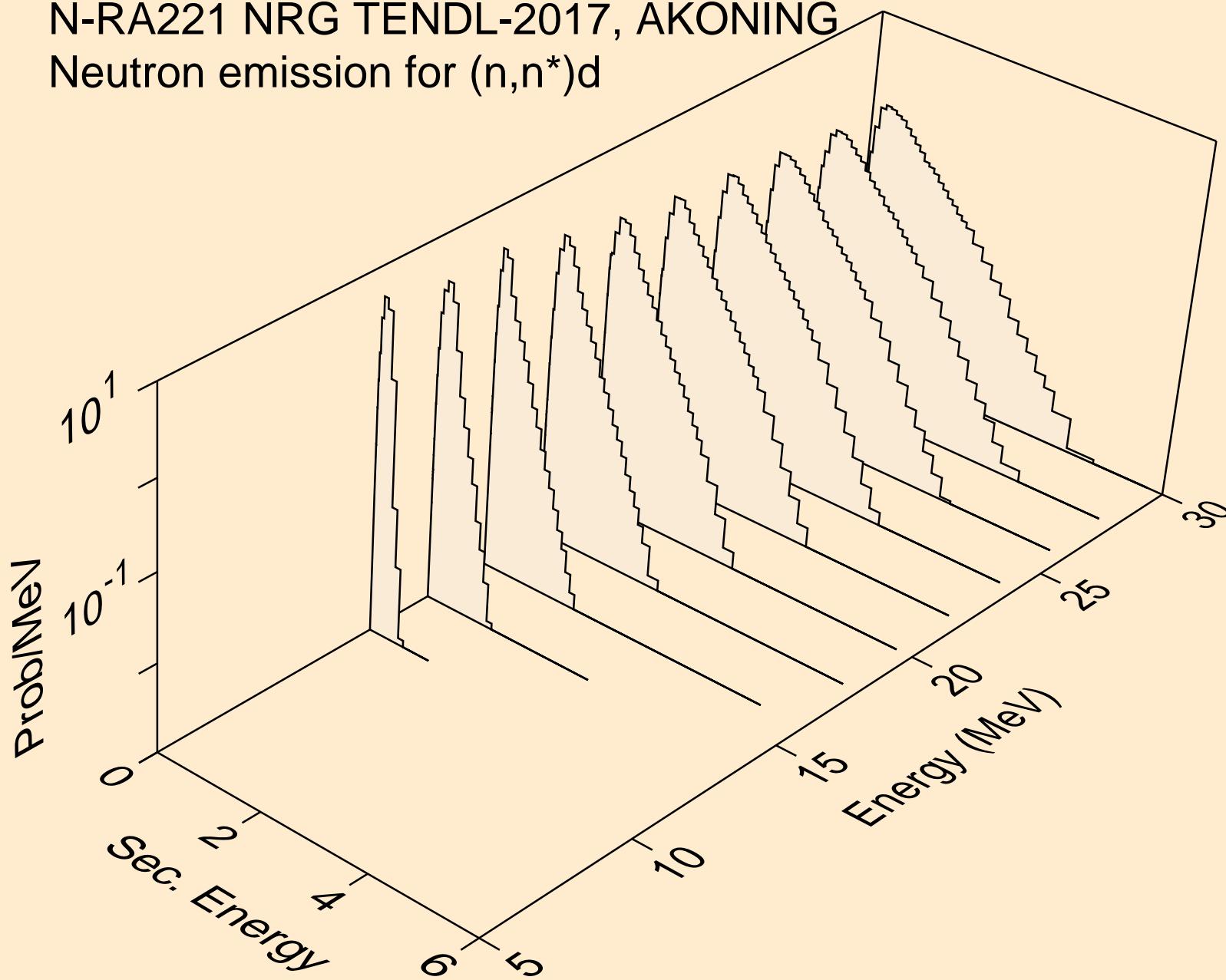
N-RA221 NRG TENDL-2017, AKONING

Neutron emission for  $(n,2n)2a$



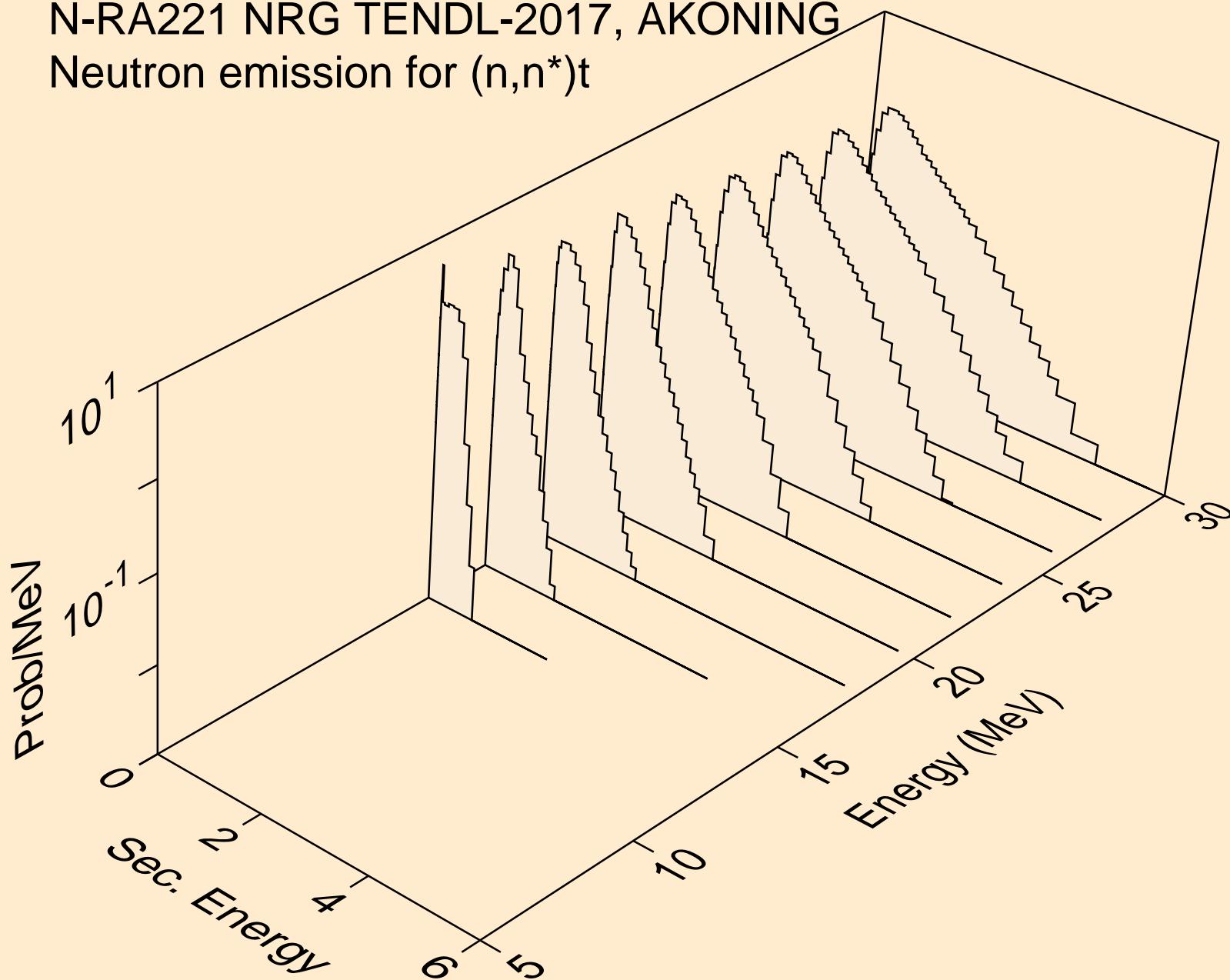
N-RA221 NRG TENDL-2017, AKONING

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

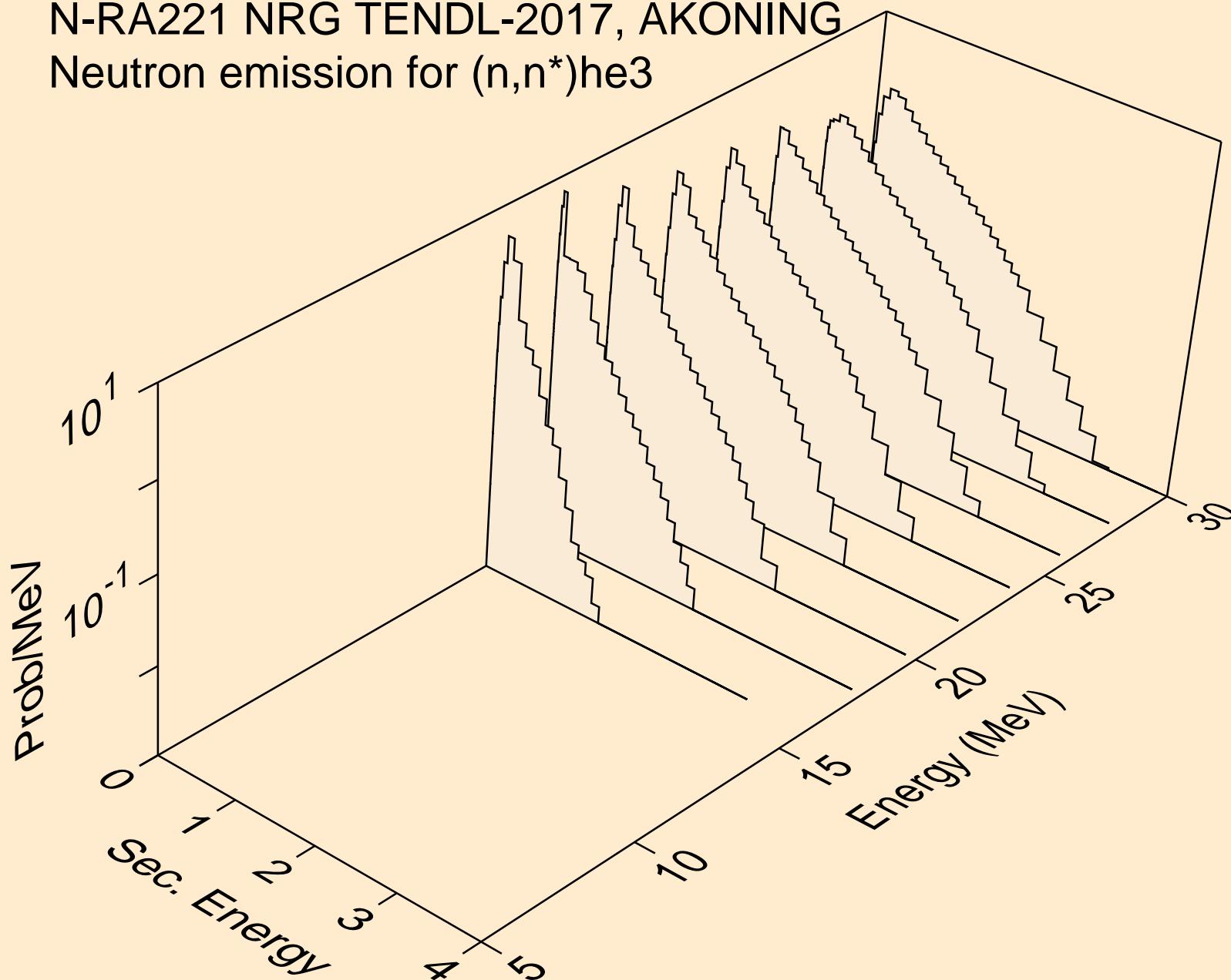


N-RA221 NRG TENDL-2017, AKONING

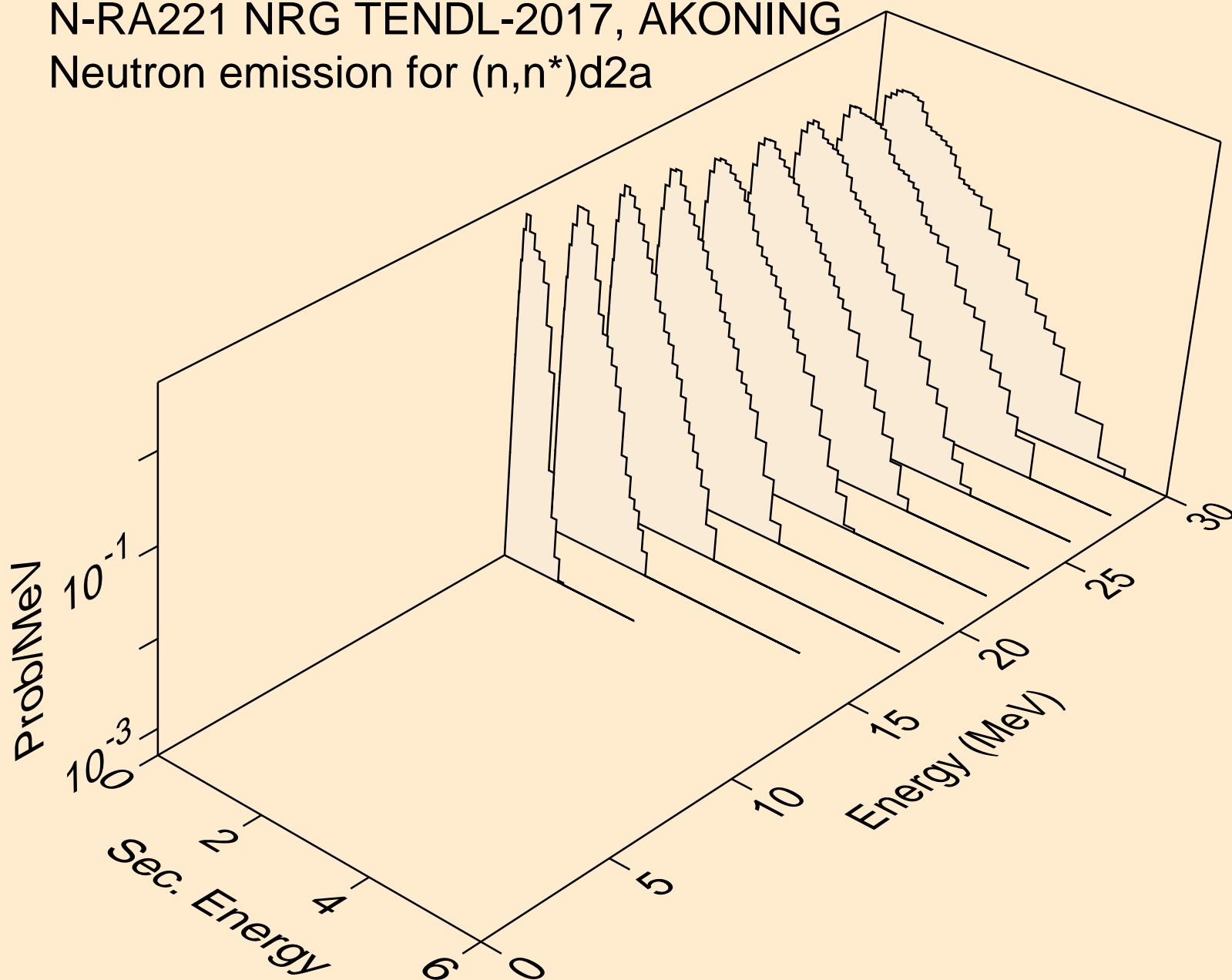
Neutron emission for  $(n,n^*)t$



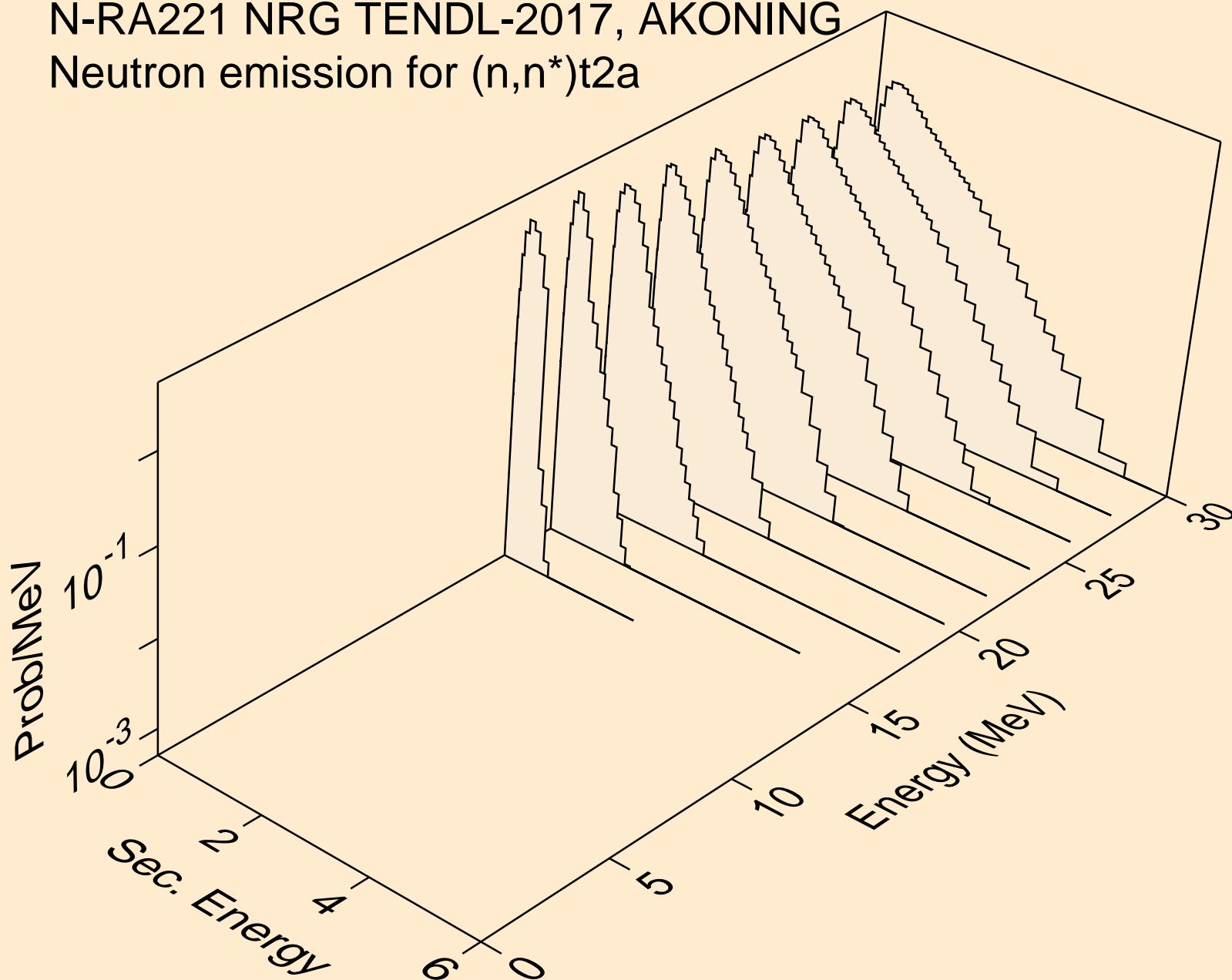
N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for  $(n,n^*)\text{he3}$



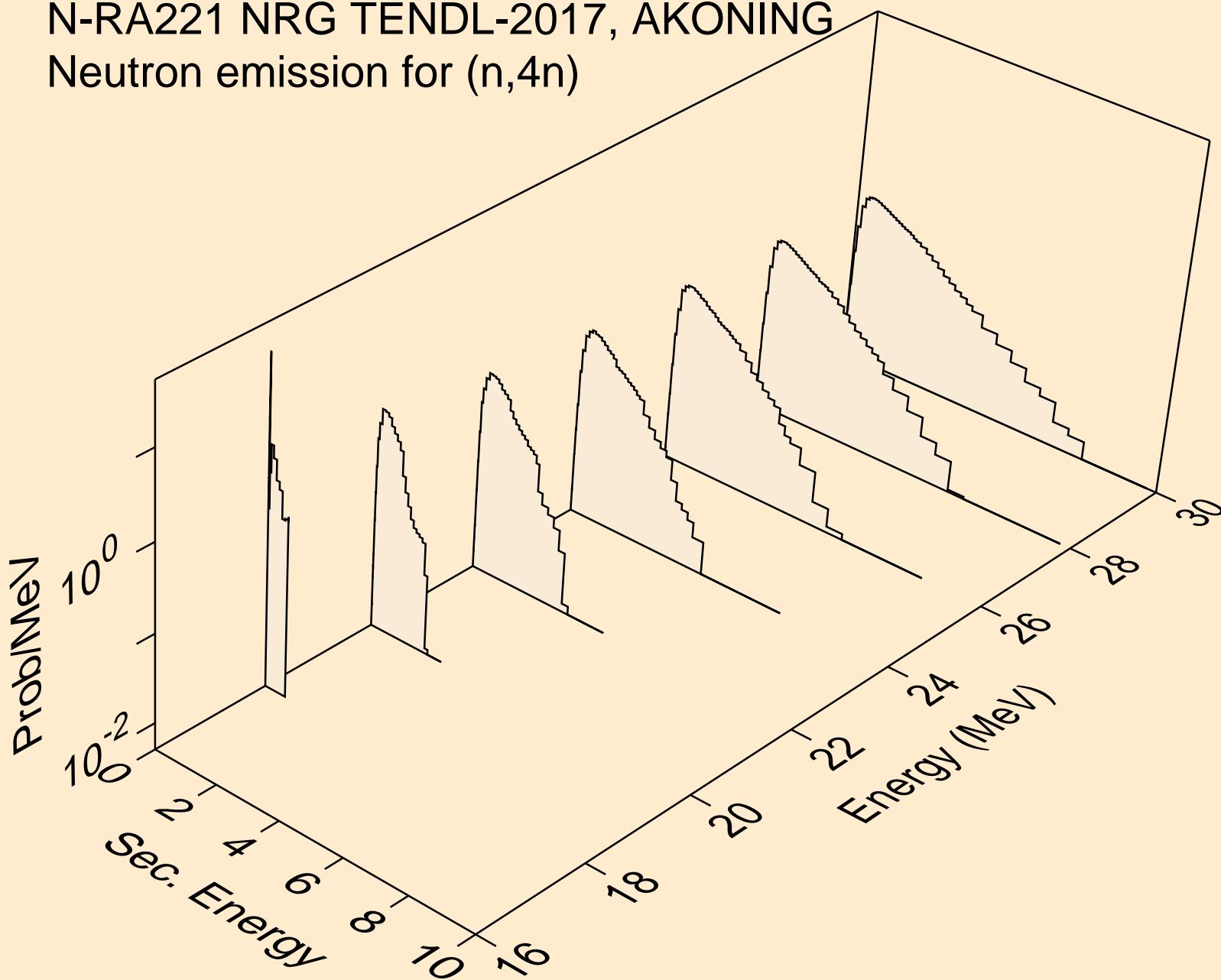
N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for  $(n,n^*)d2a$



N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for  $(n,n^*)t2a$

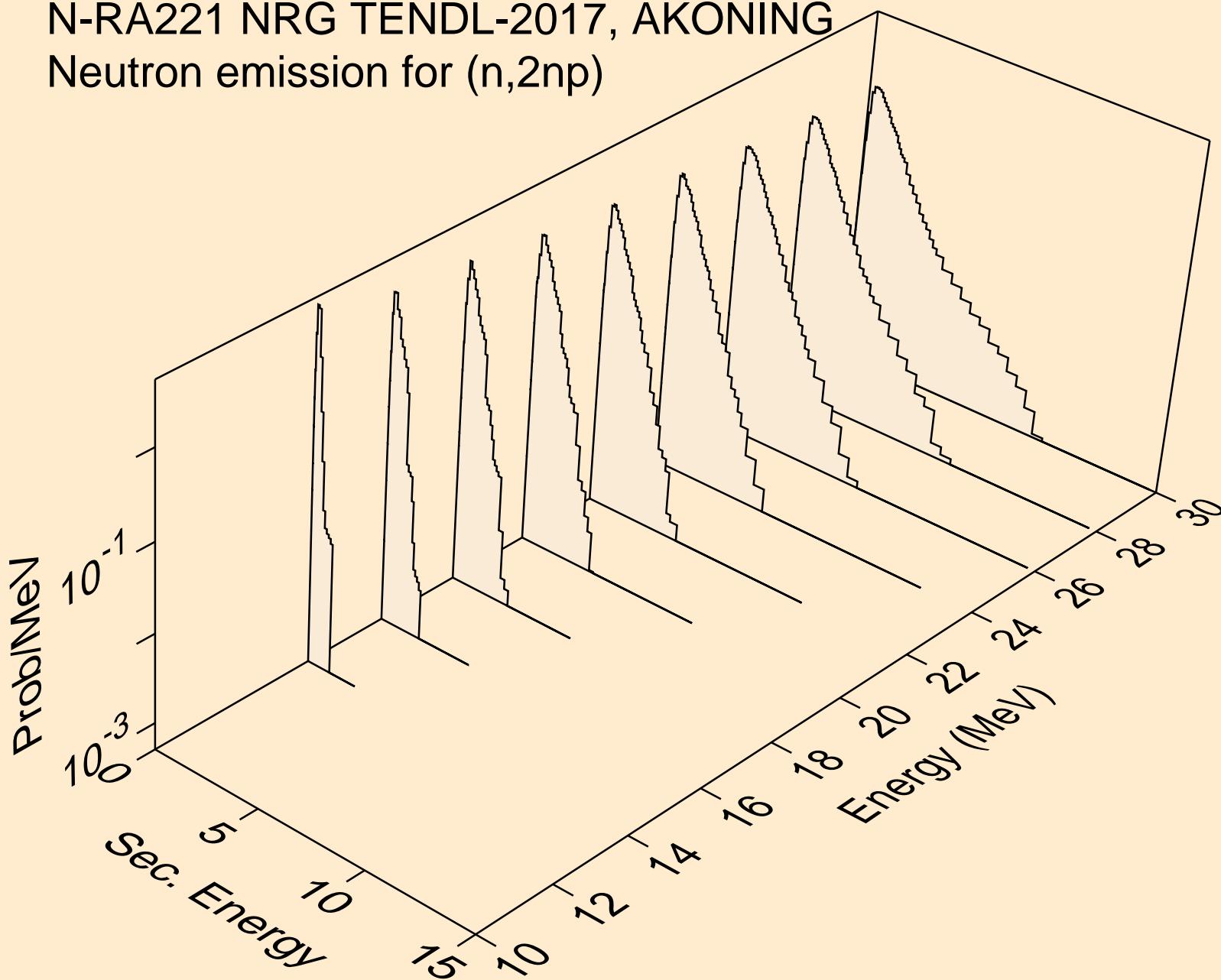


N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for (n,4n)



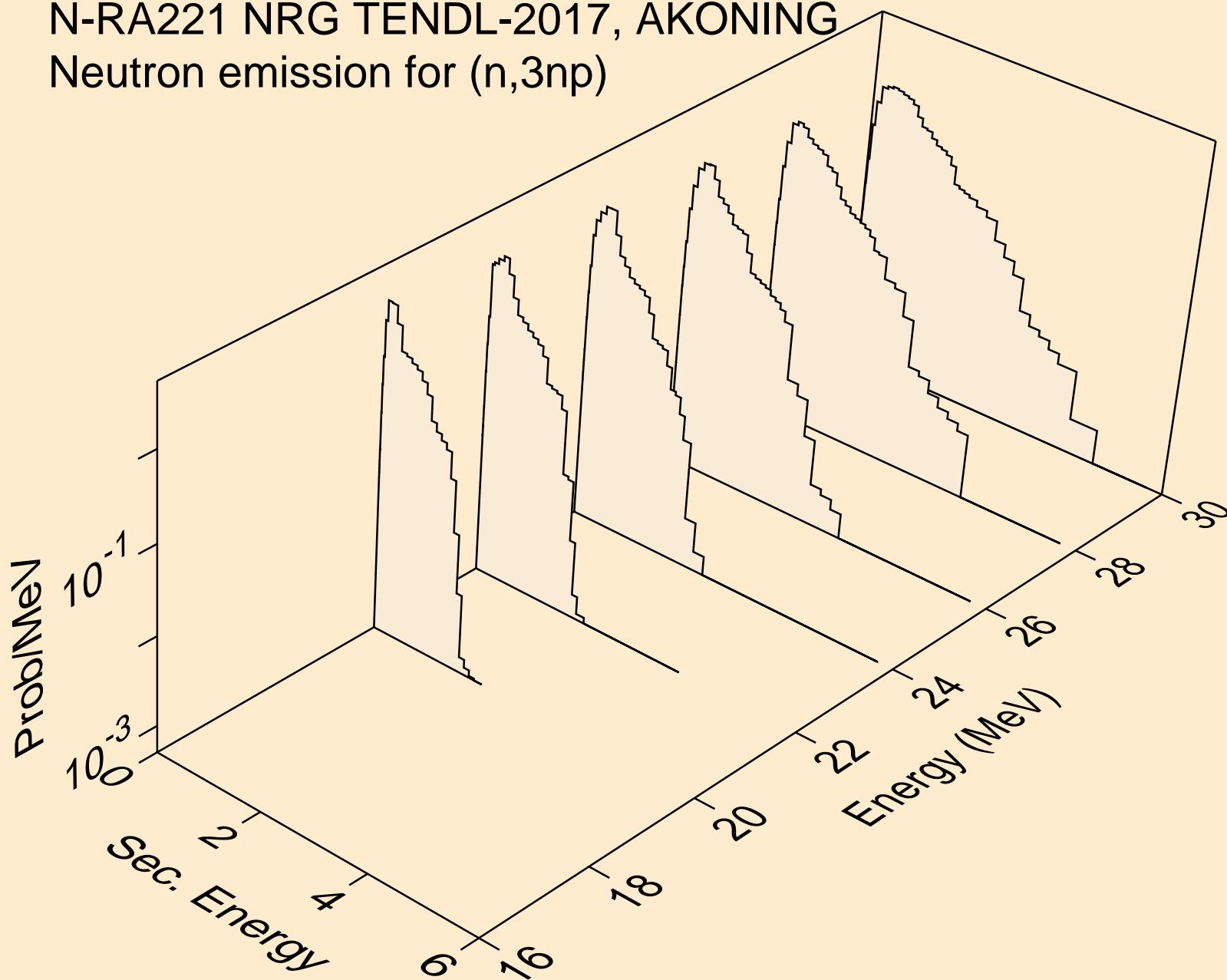
N-RA221 NRG TENDL-2017, AKONING

Neutron emission for (n,2np)



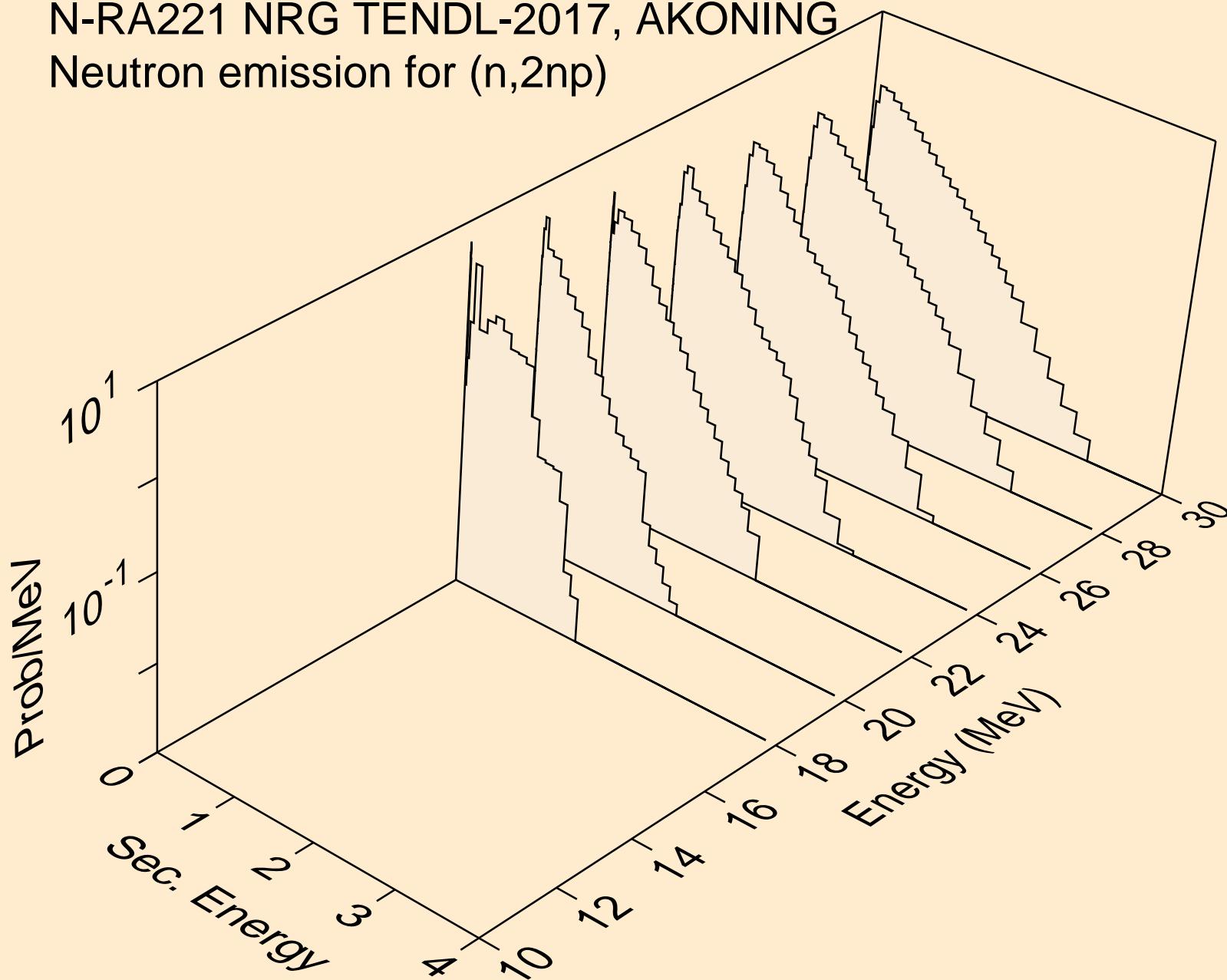
N-RA221 NRG TENDL-2017, AKONING

Neutron emission for (n,3np)



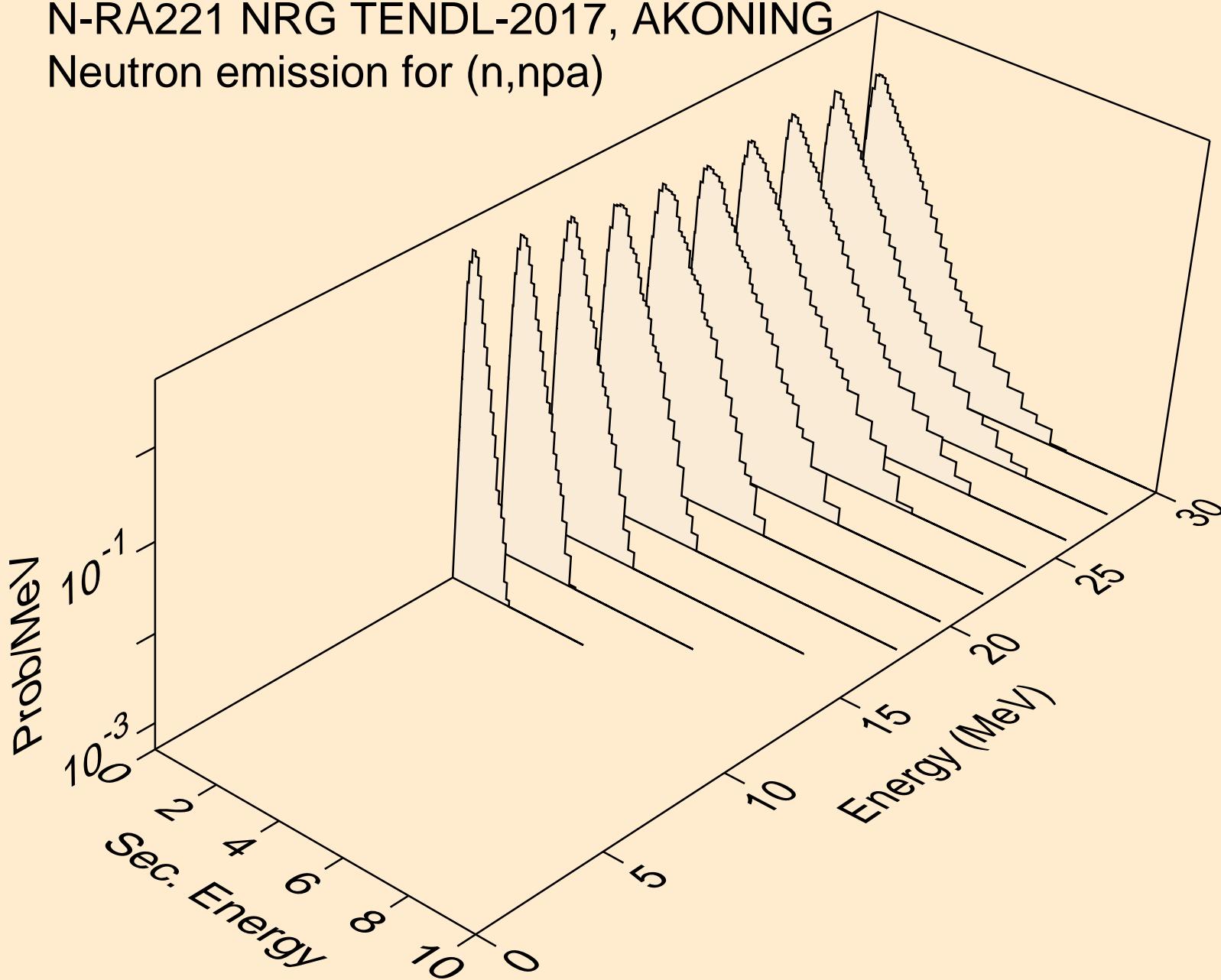
N-RA221 NRG TENDL-2017, AKONING

Neutron emission for (n,2np)

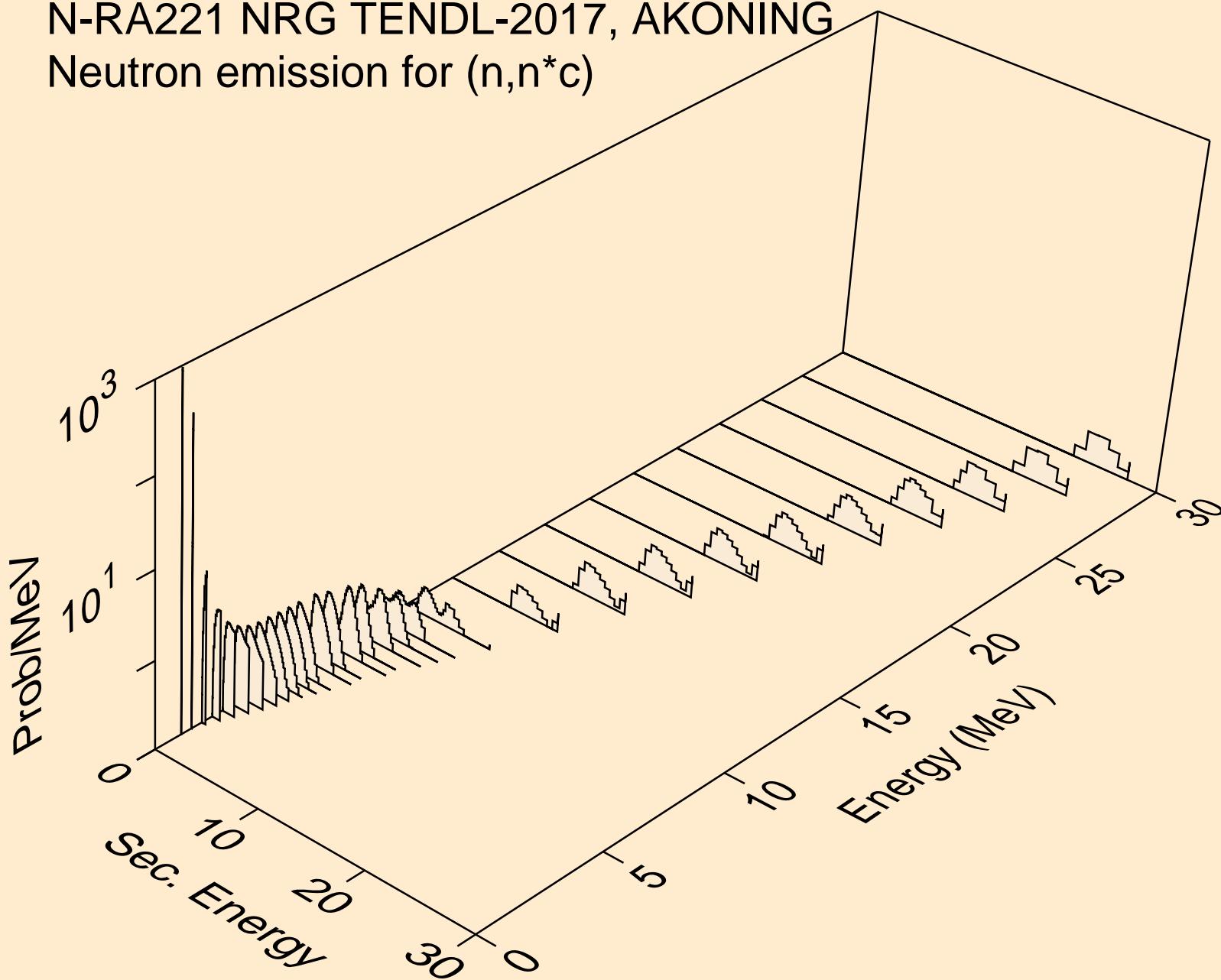


N-RA221 NRG TENDL-2017, AKONING

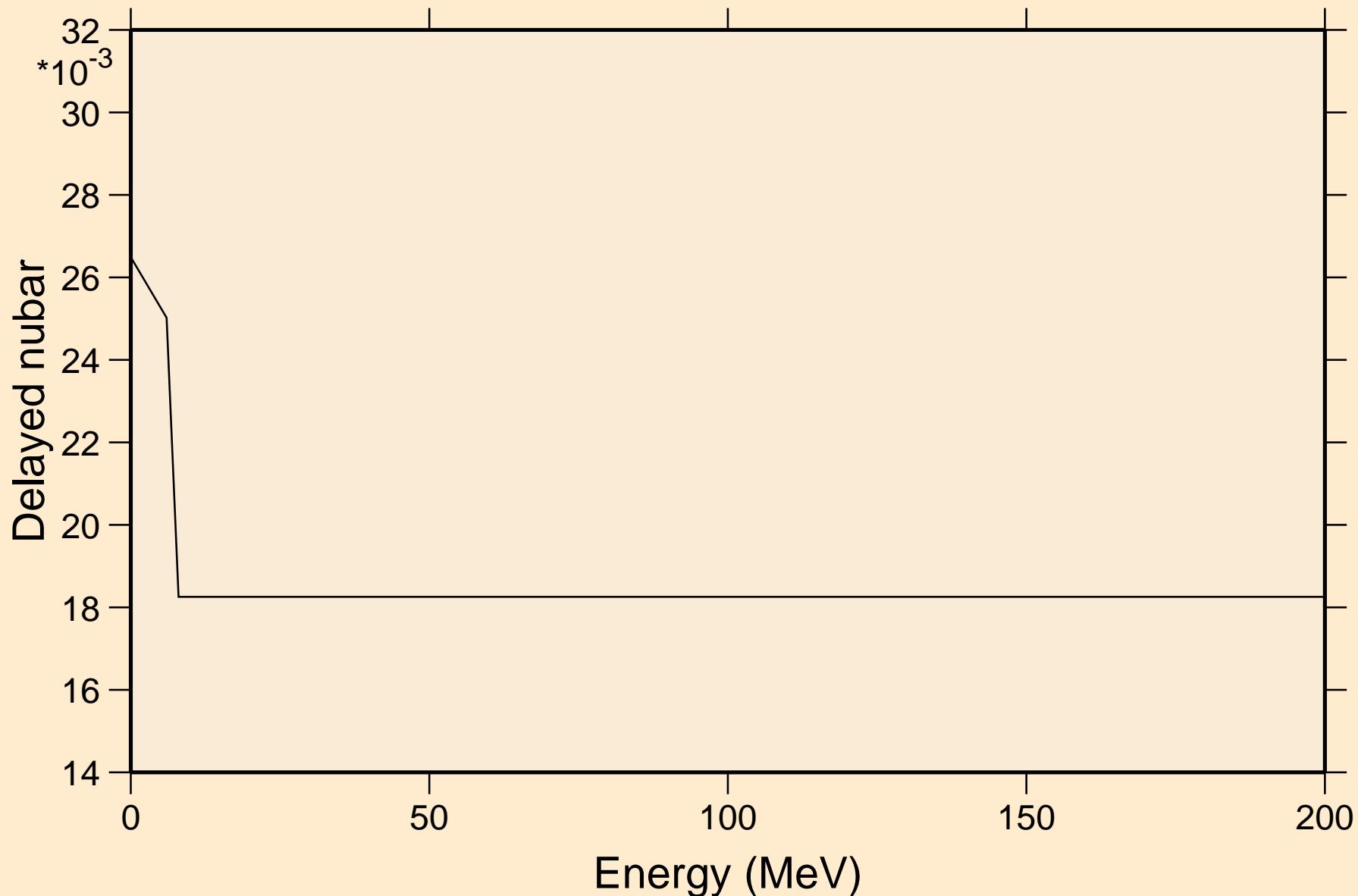
Neutron emission for (n,npa)



N-RA221 NRG TENDL-2017, AKONING  
Neutron emission for  $(n,n^*c)$

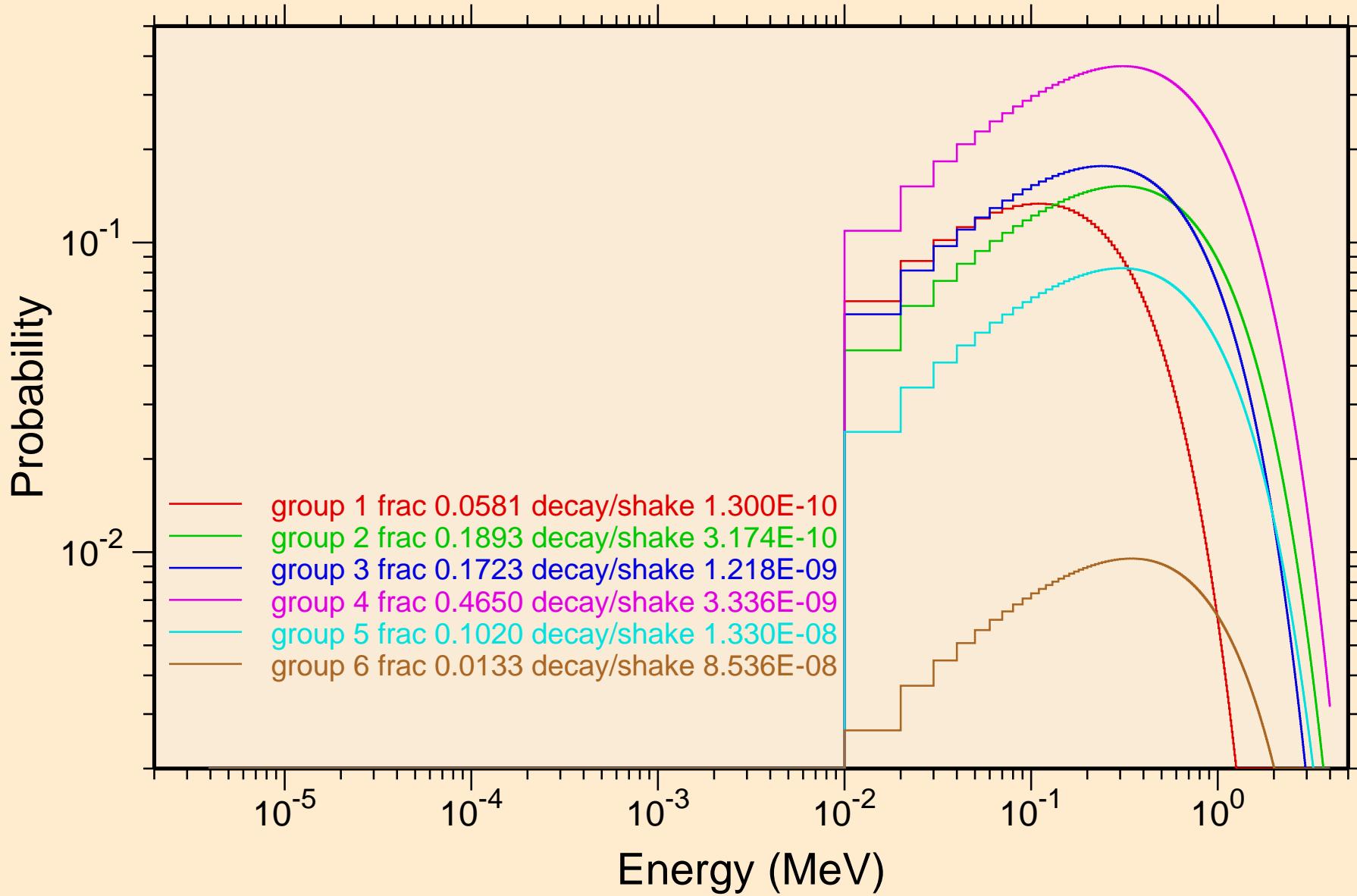


N-RA221 NRG TENDL-2017, AKONING  
Delayed nubar

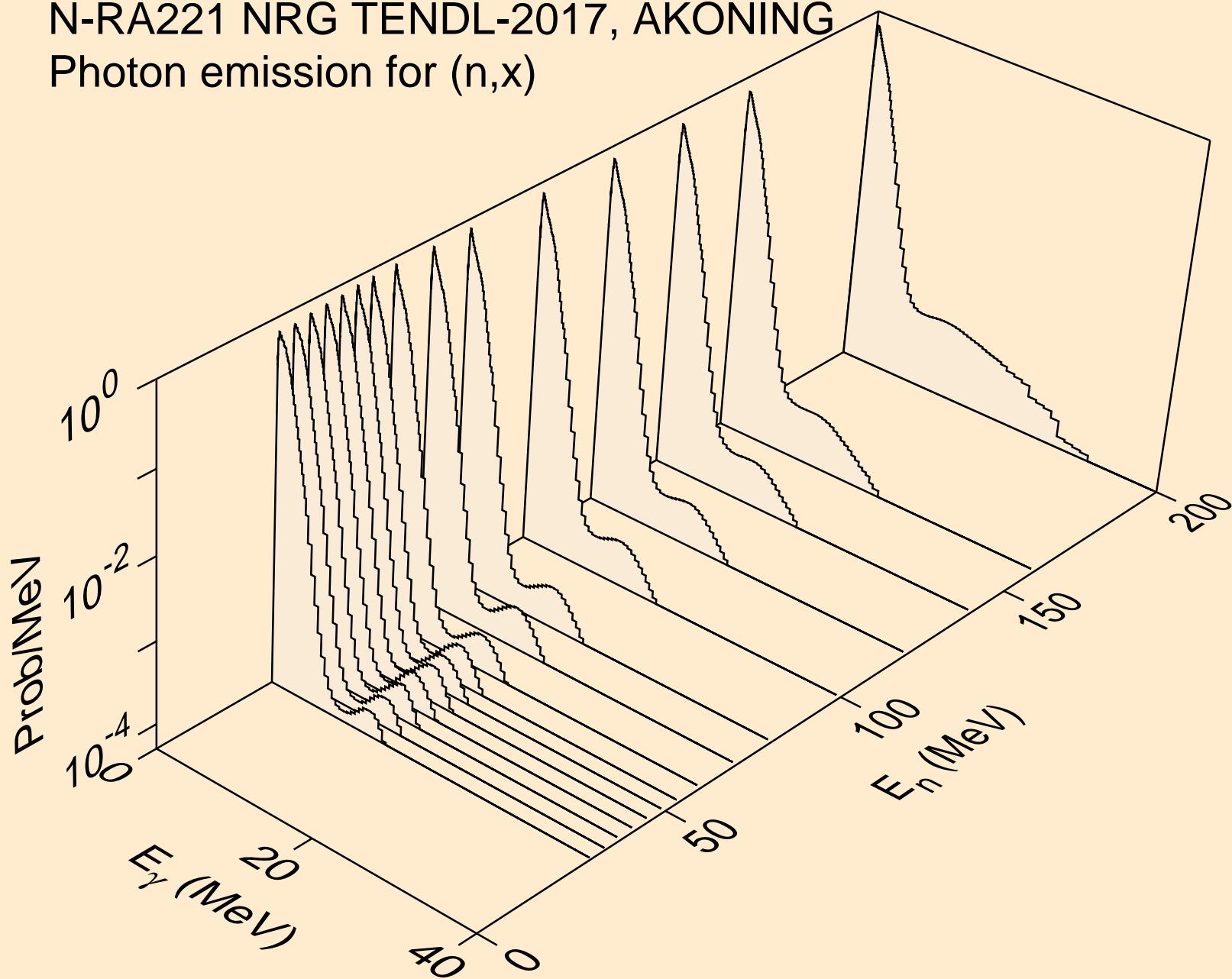


# N-RA221 NRG TENDL-2017, AKONING

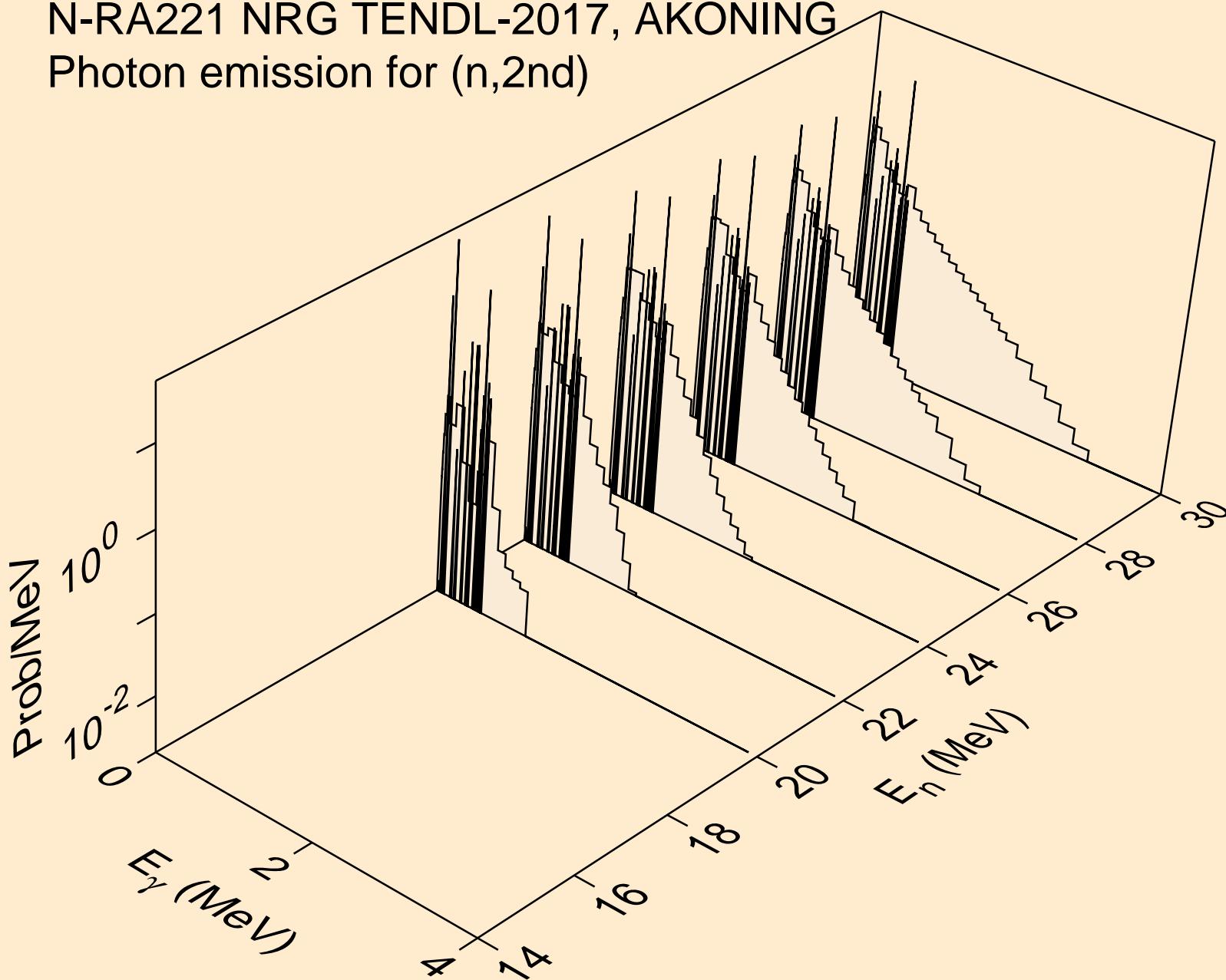
## Delayed neutron spectra



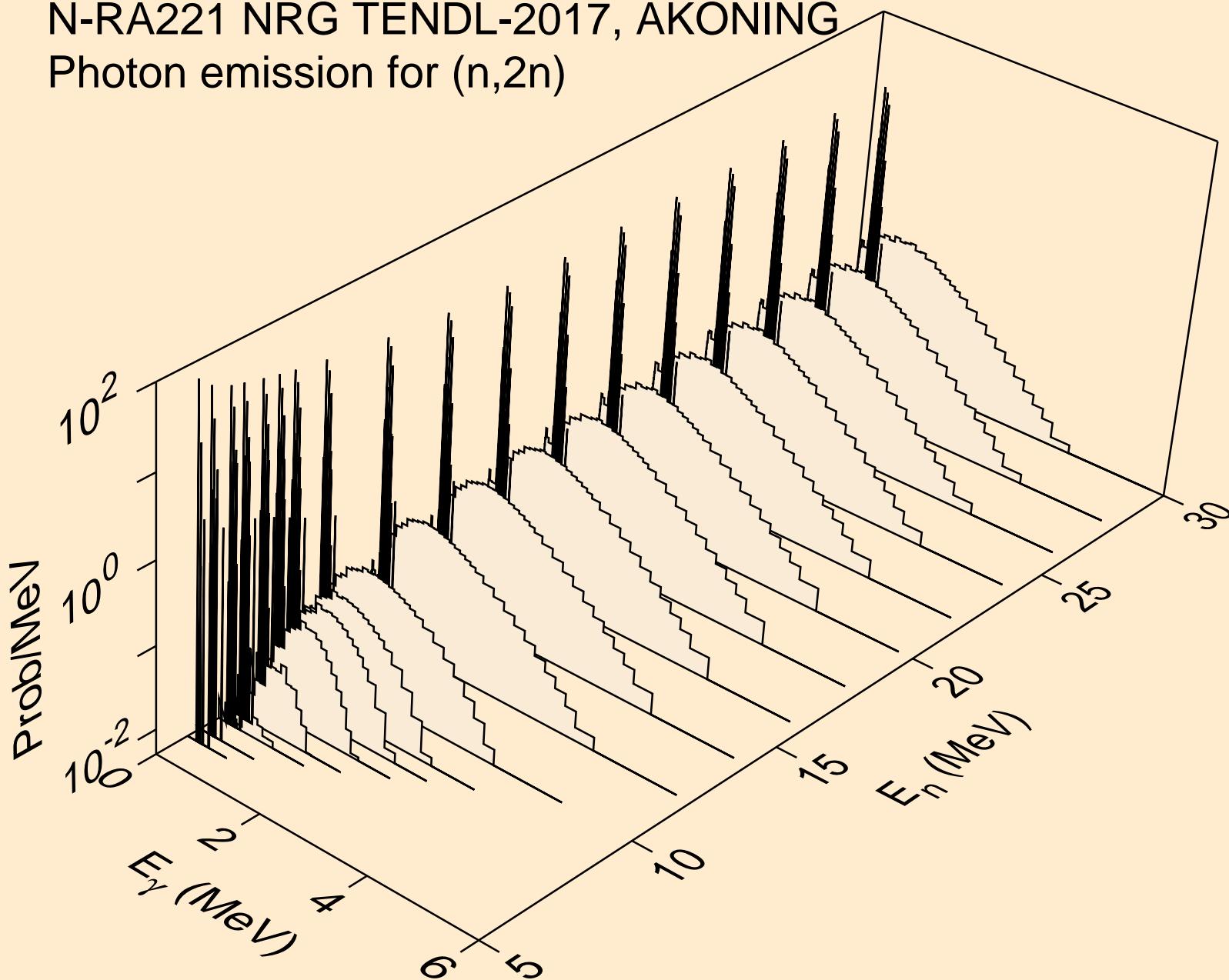
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,x)



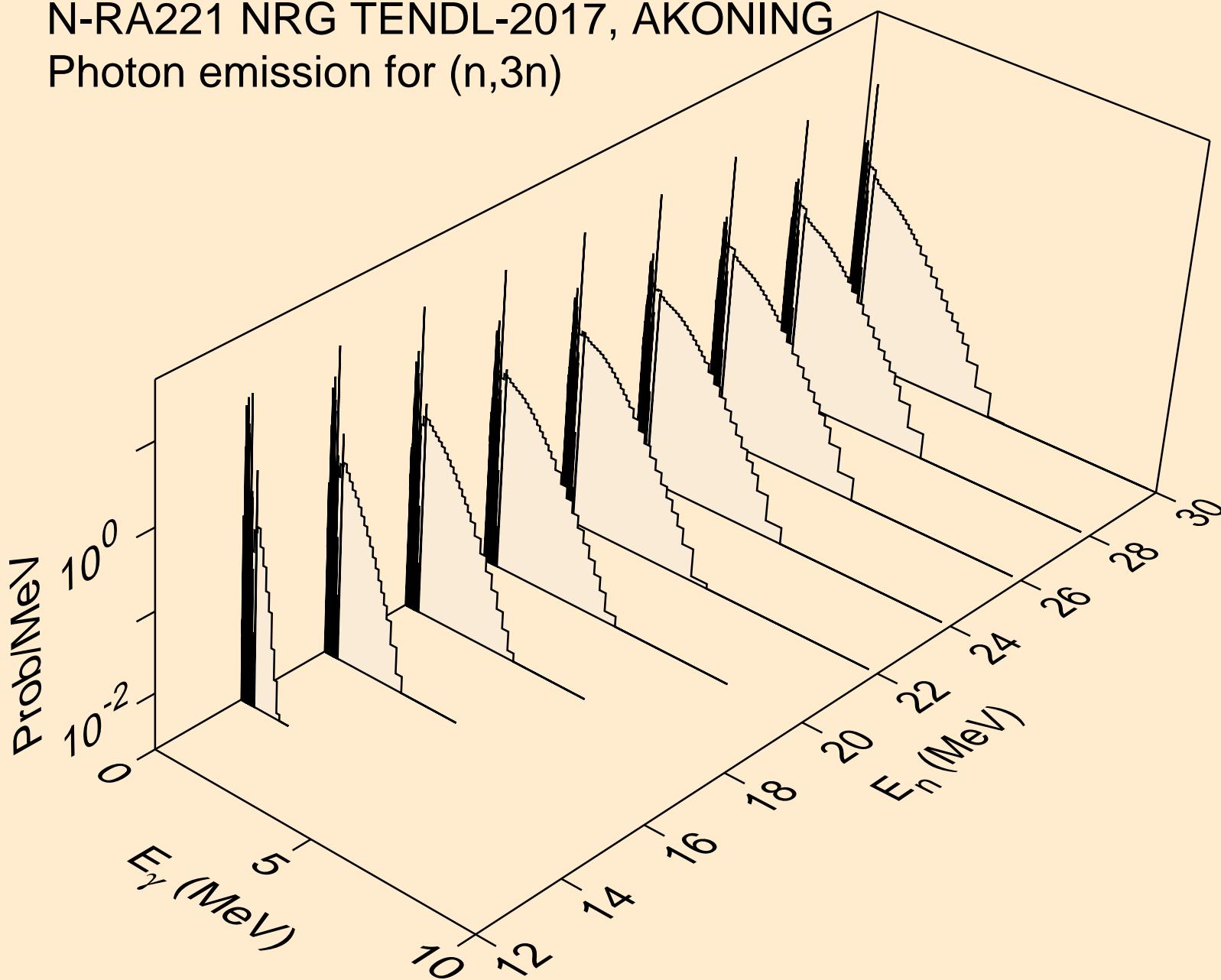
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,2nd)



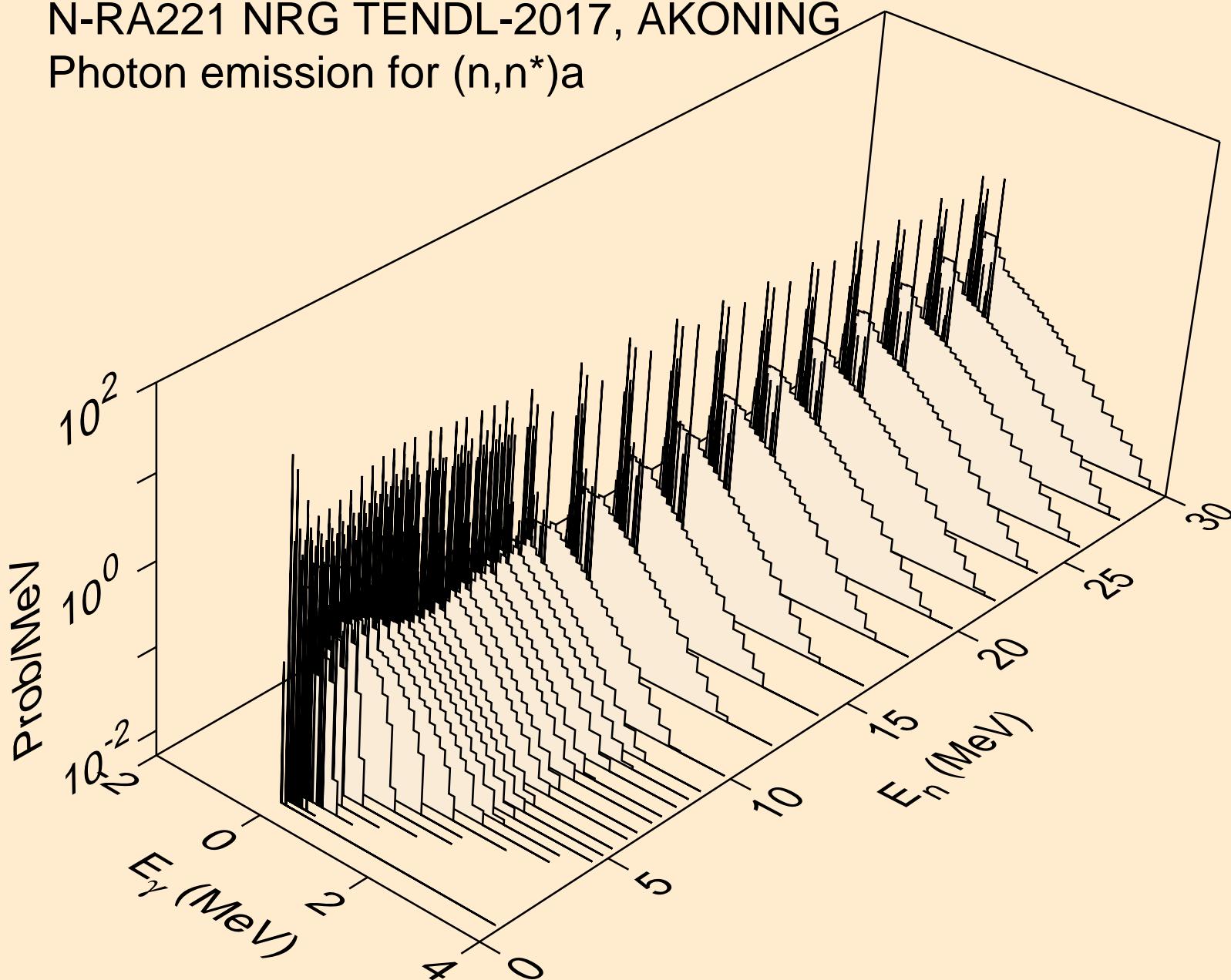
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,2n)



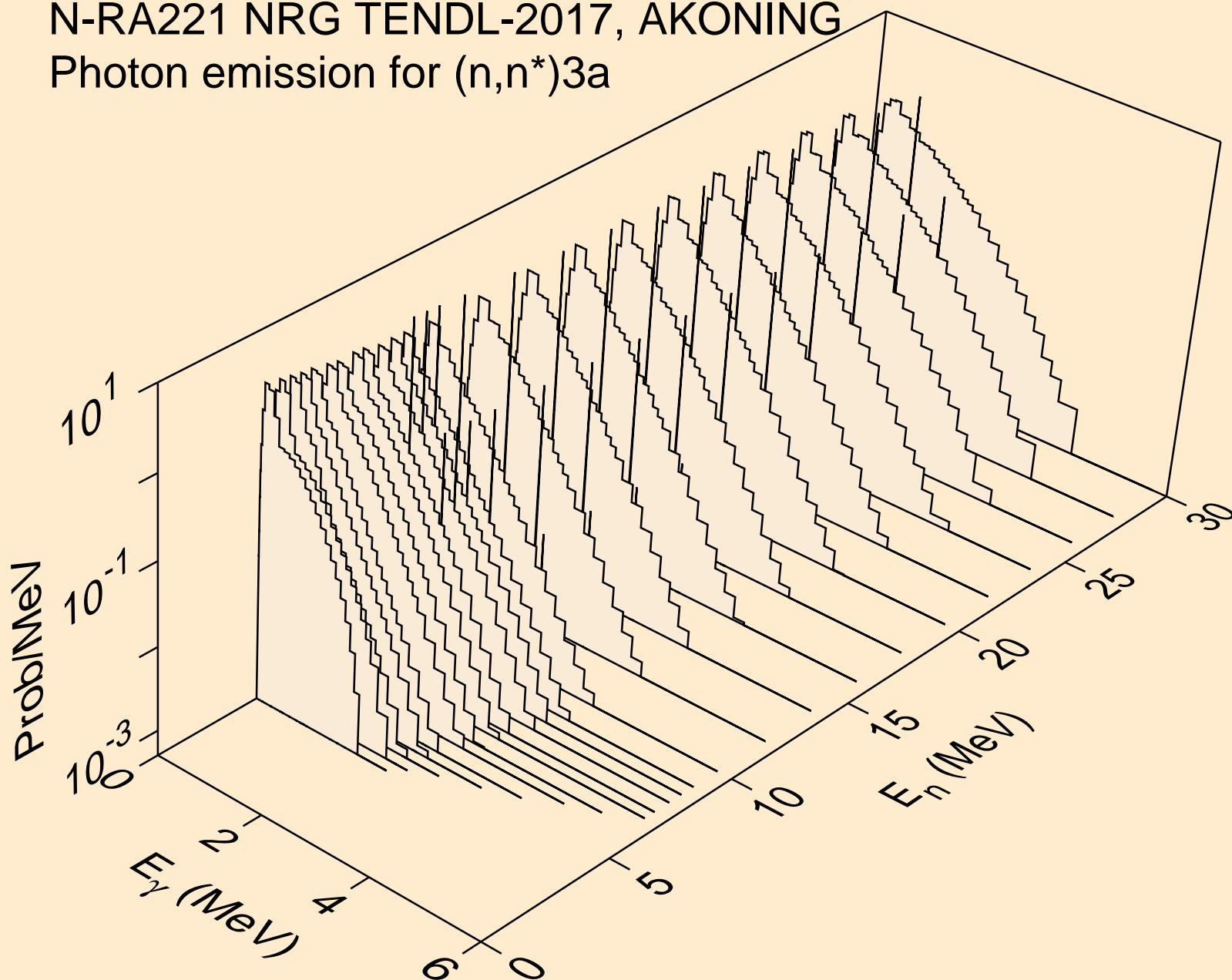
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,3n)



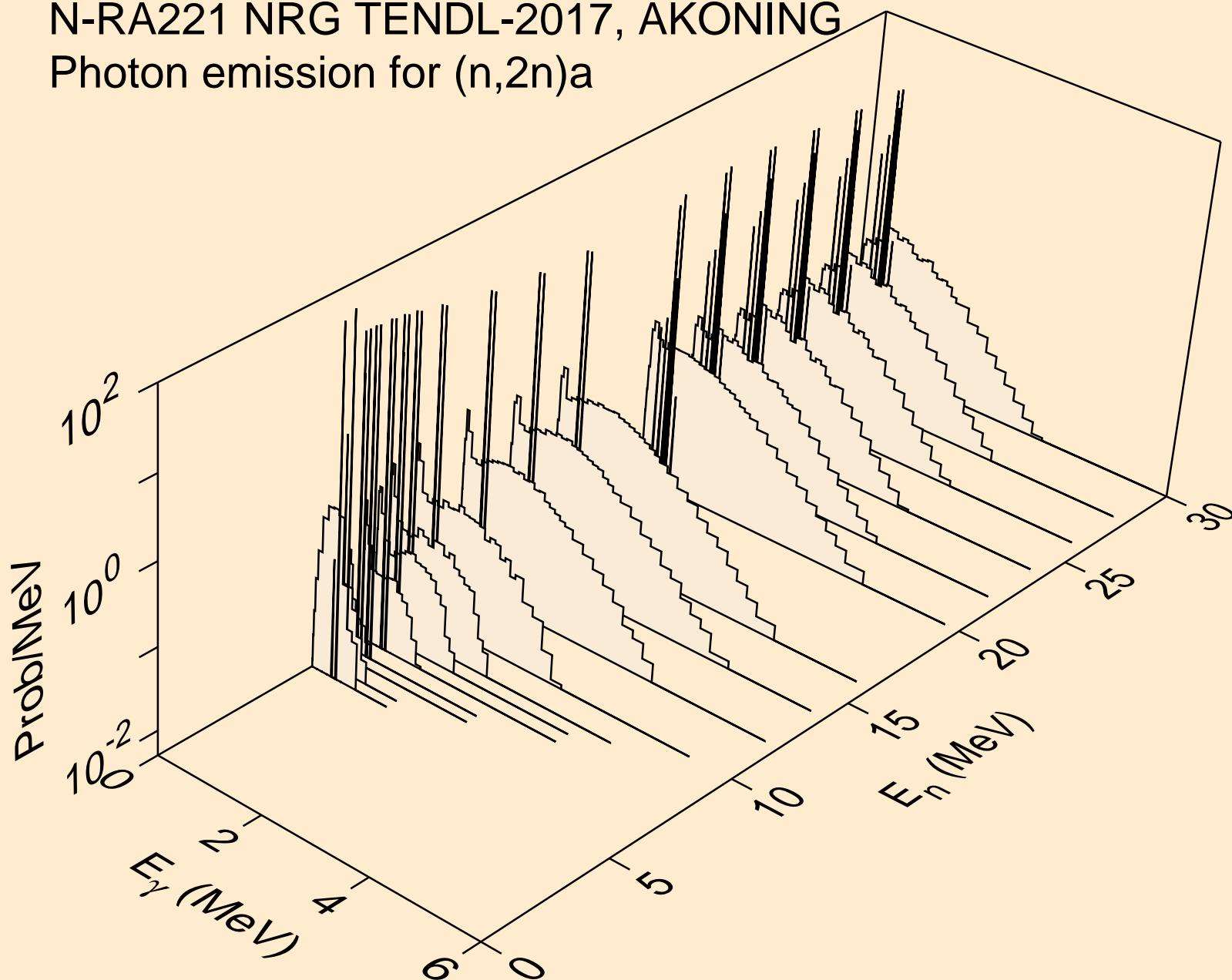
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for  $(n,n^*)a$



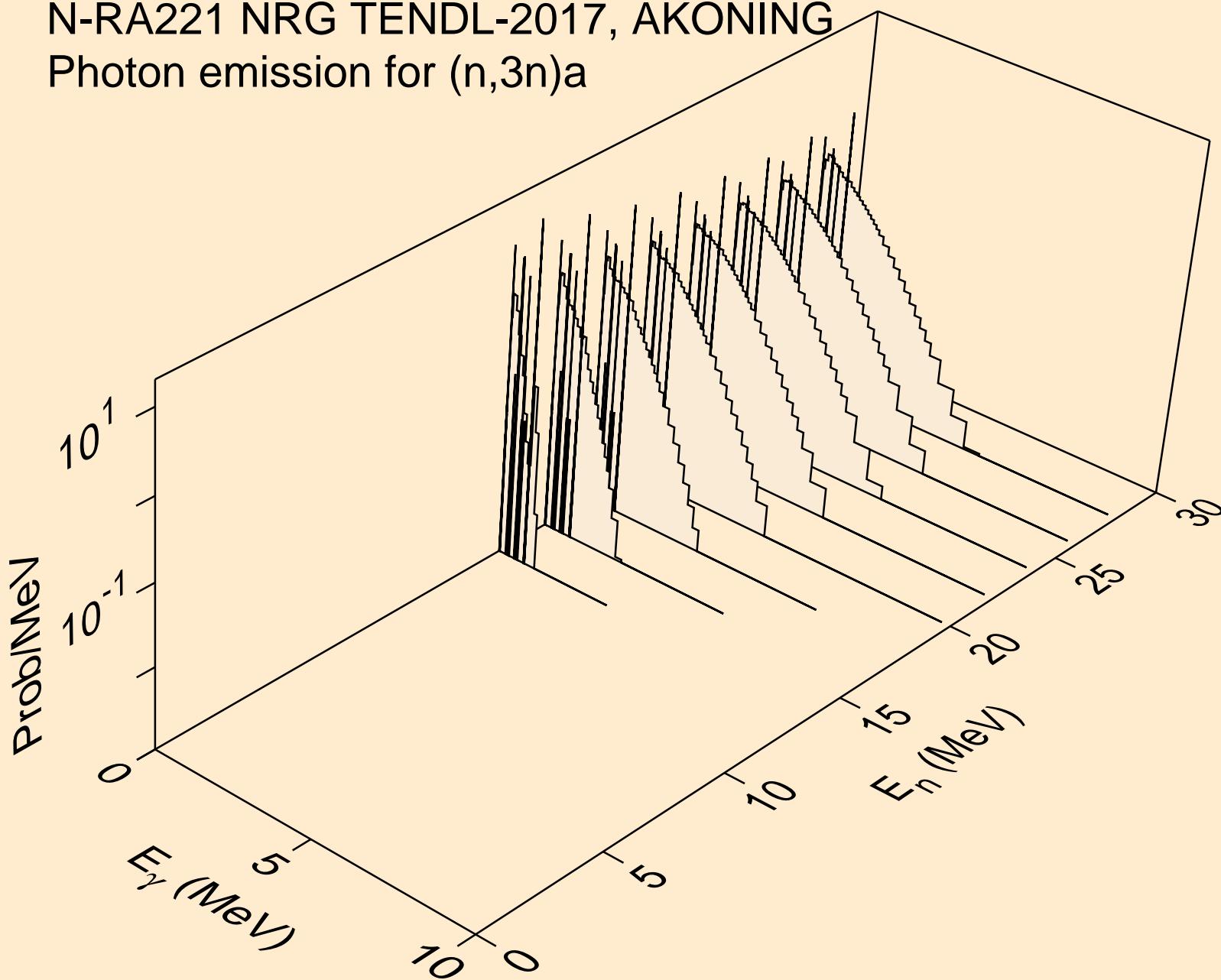
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for  $(n,n^*)3a$



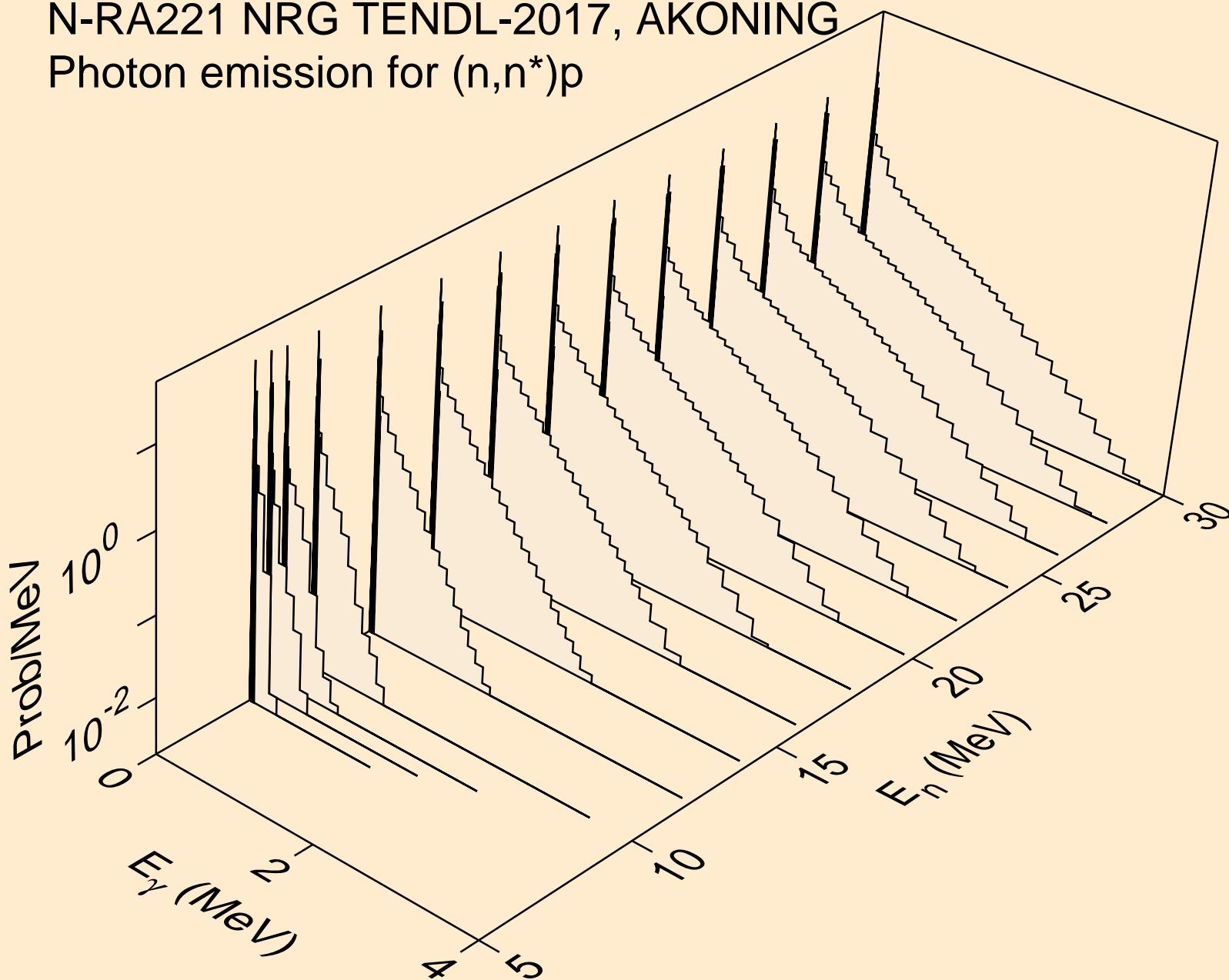
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,2n)a



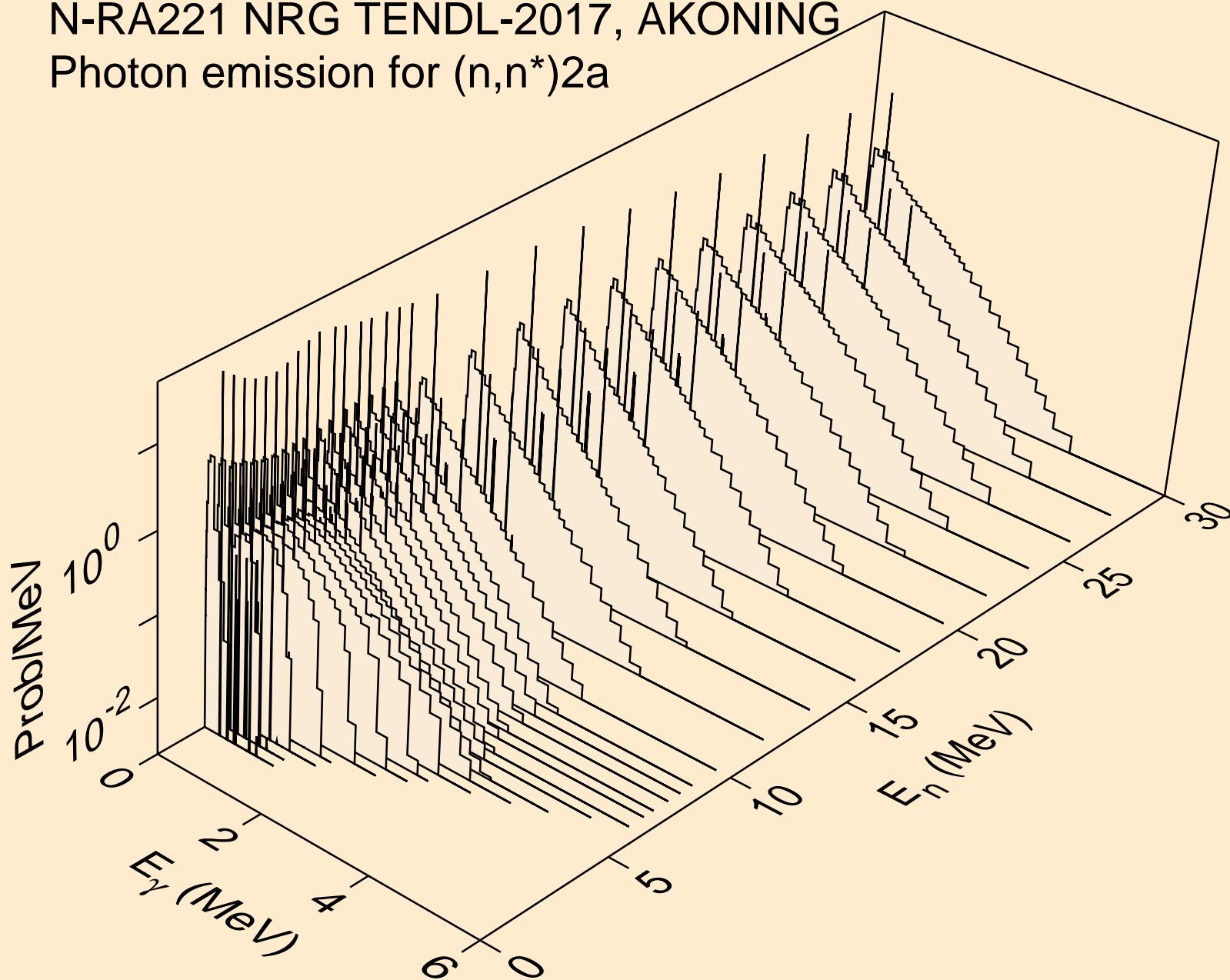
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,3n)a



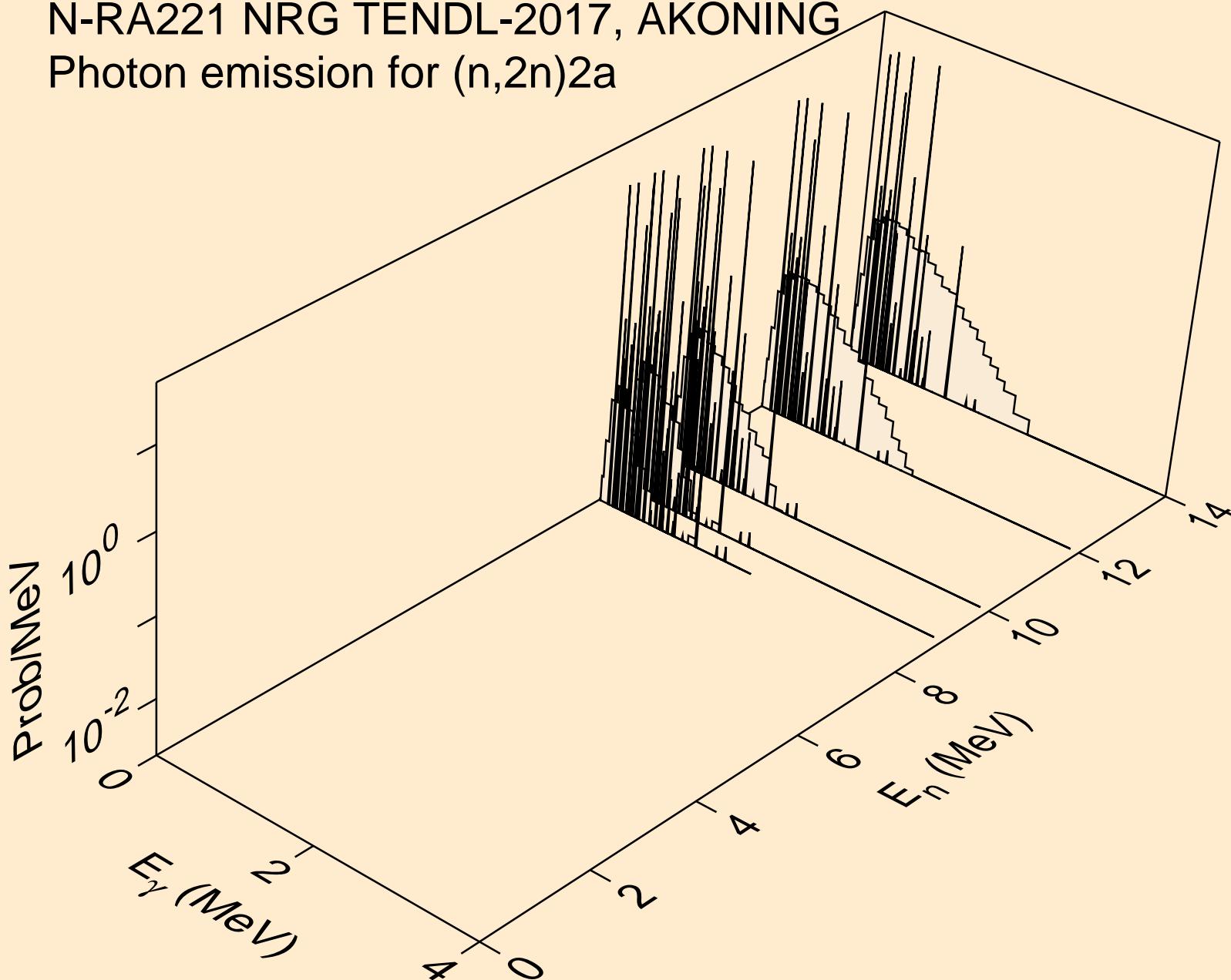
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for  $(n,n^*)p$



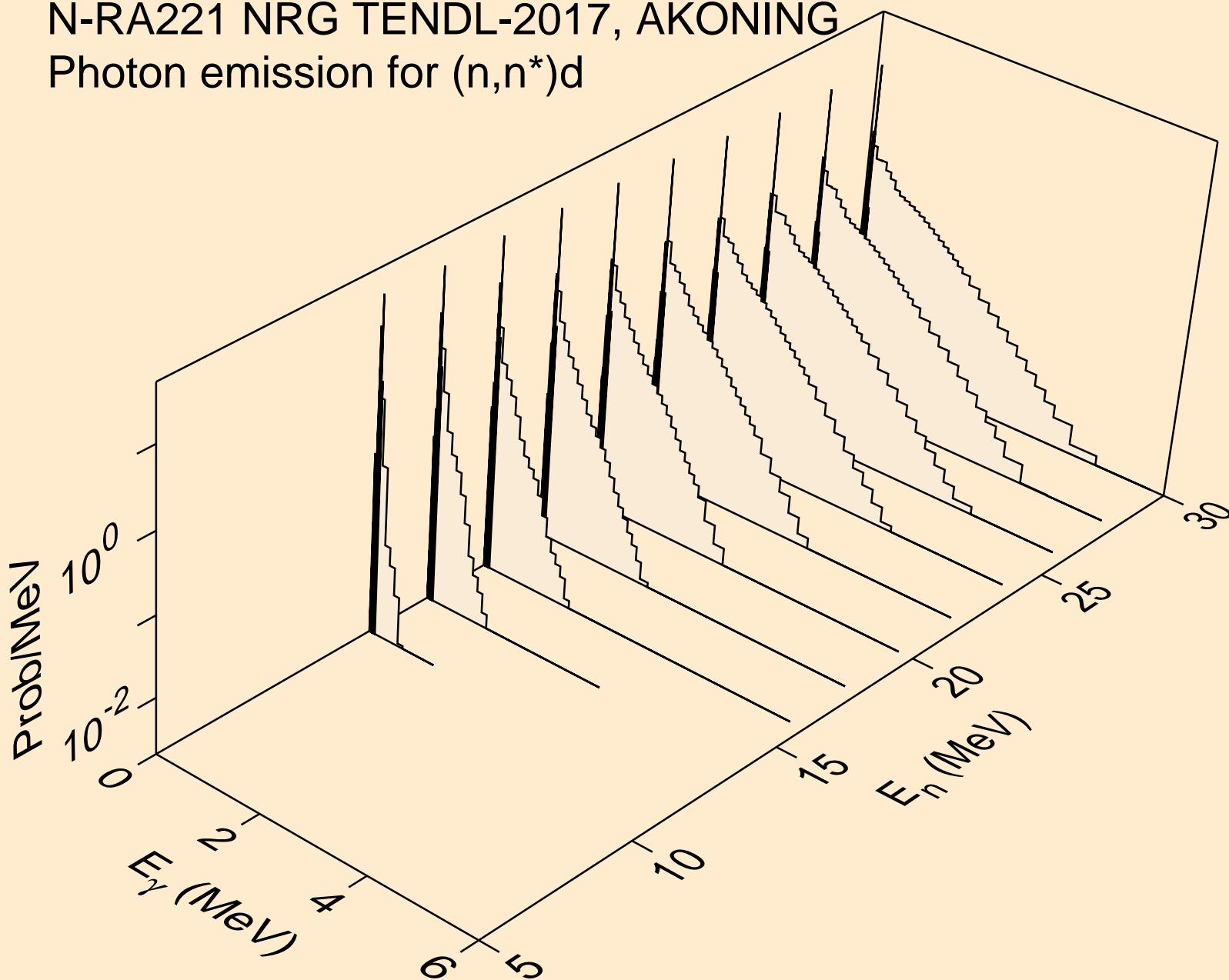
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for  $(n,n^*)2a$



N-RA221 NRG TENDL-2017, AKONING  
Photon emission for  $(n,2n)2a$

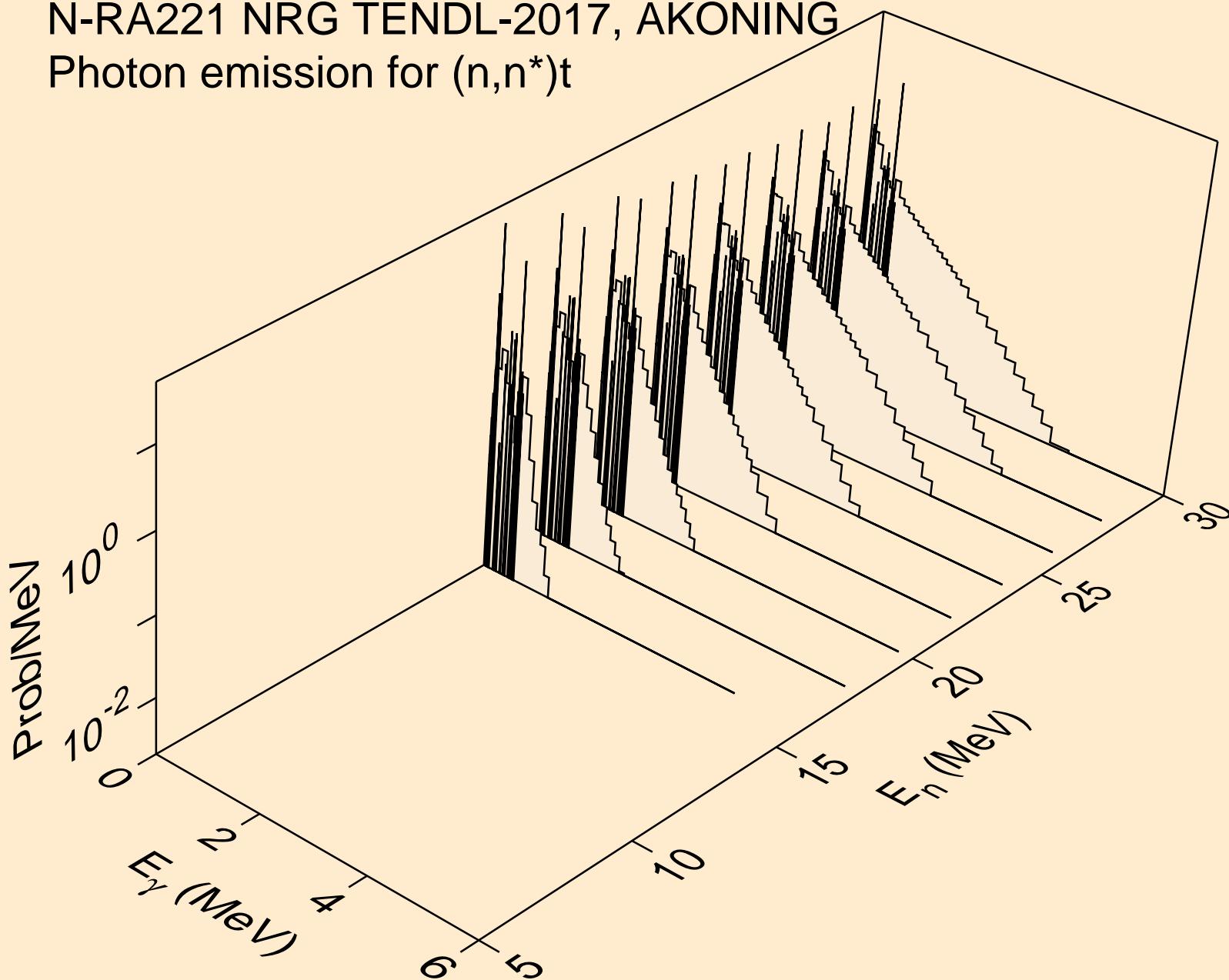


N-RA221 NRG TENDL-2017, AKONING  
Photon emission for  $(n,n^*)d$

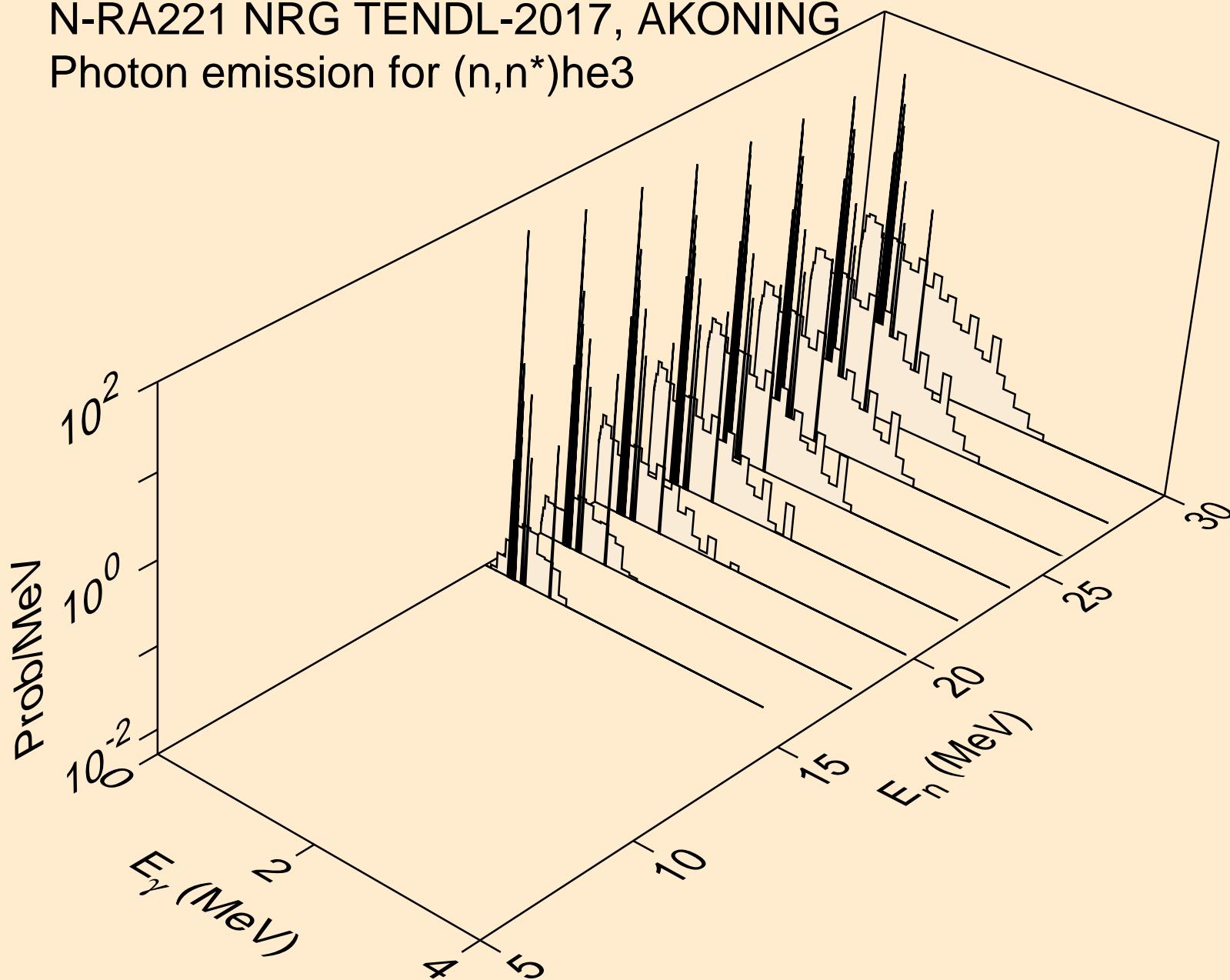


N-RA221 NRG TENDL-2017, AKONING

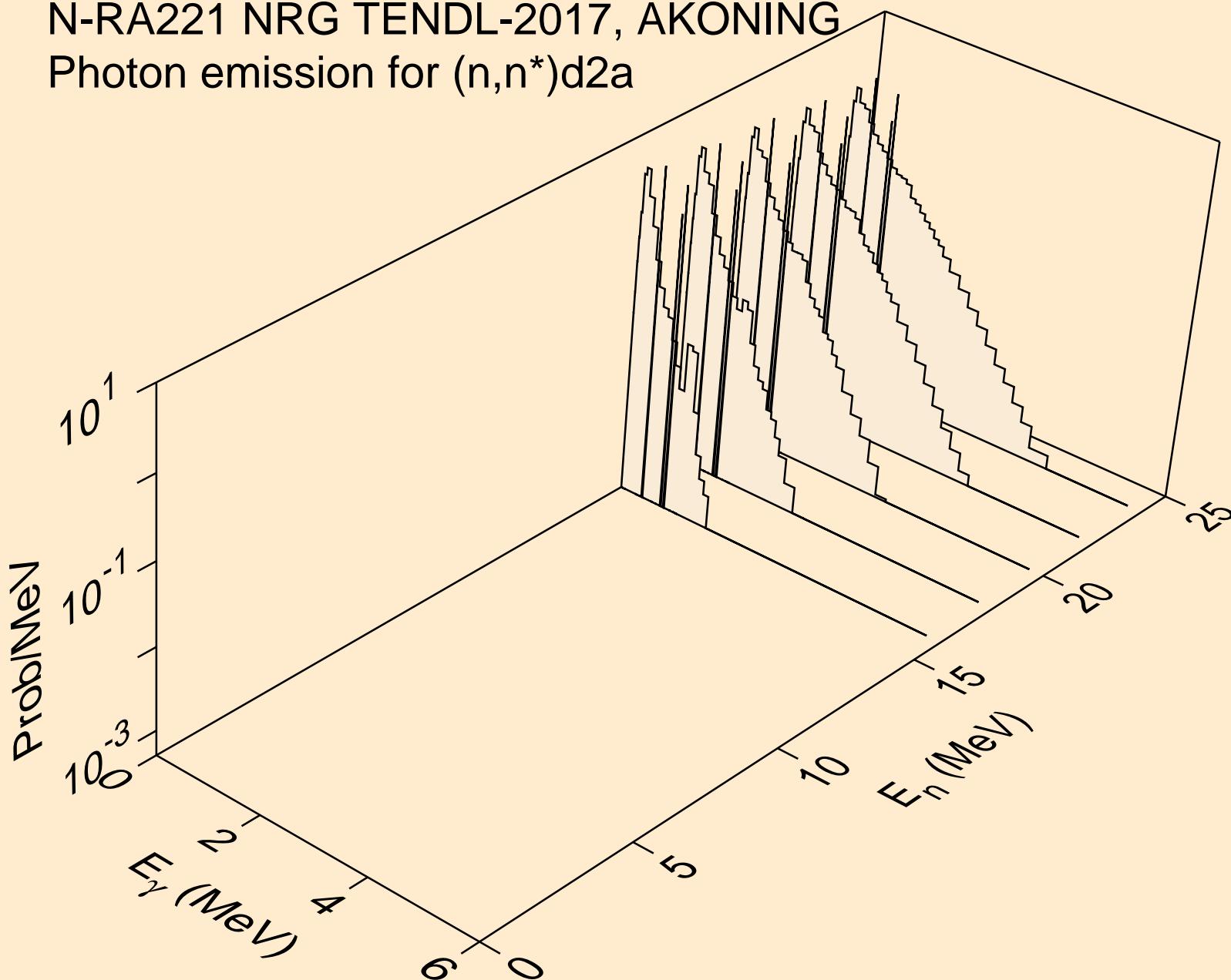
Photon emission for  $(n,n^*)t$



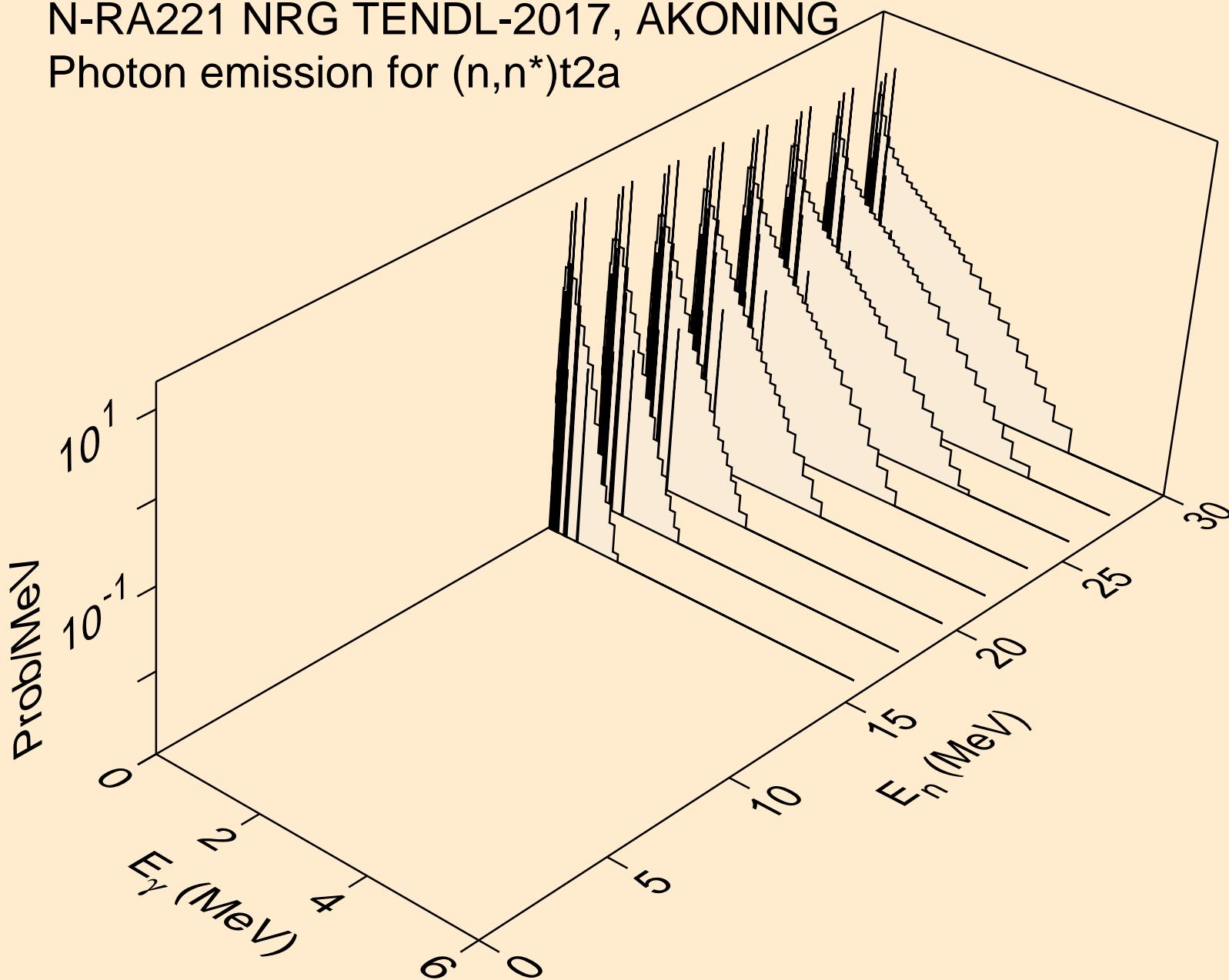
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for  $(n,n^*)\text{he3}$



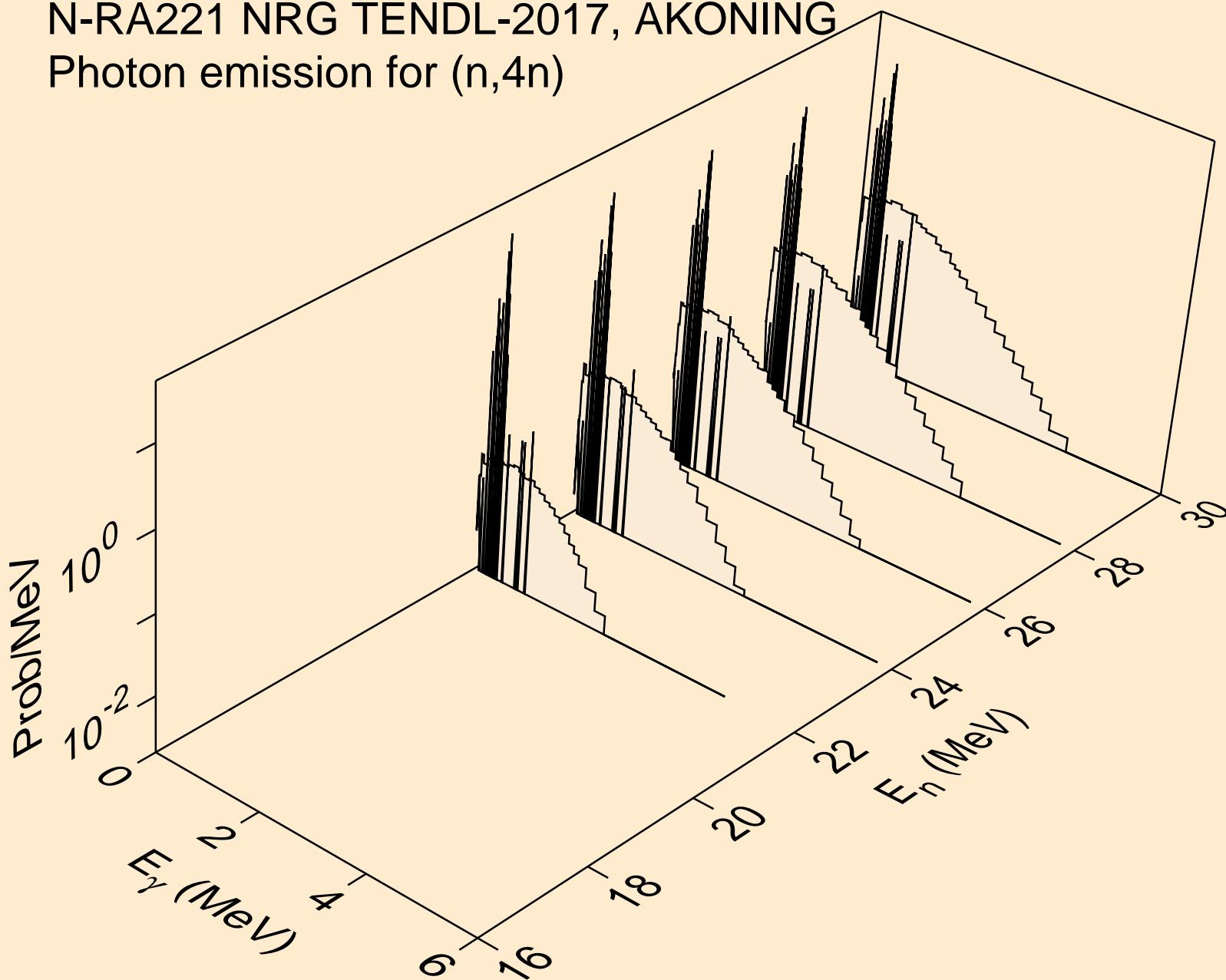
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for  $(n,n^*)d2a$



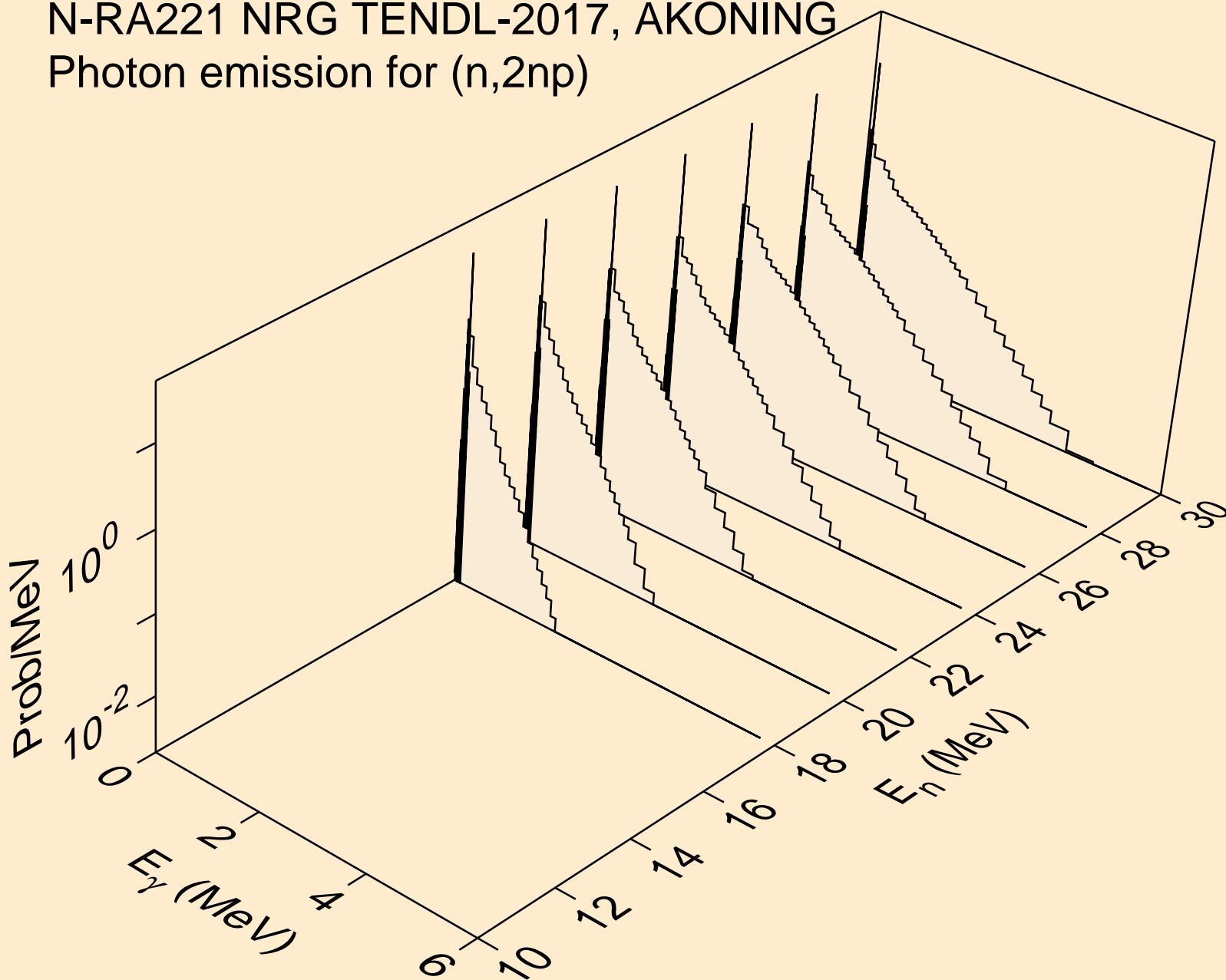
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for  $(n,n^*)t2a$



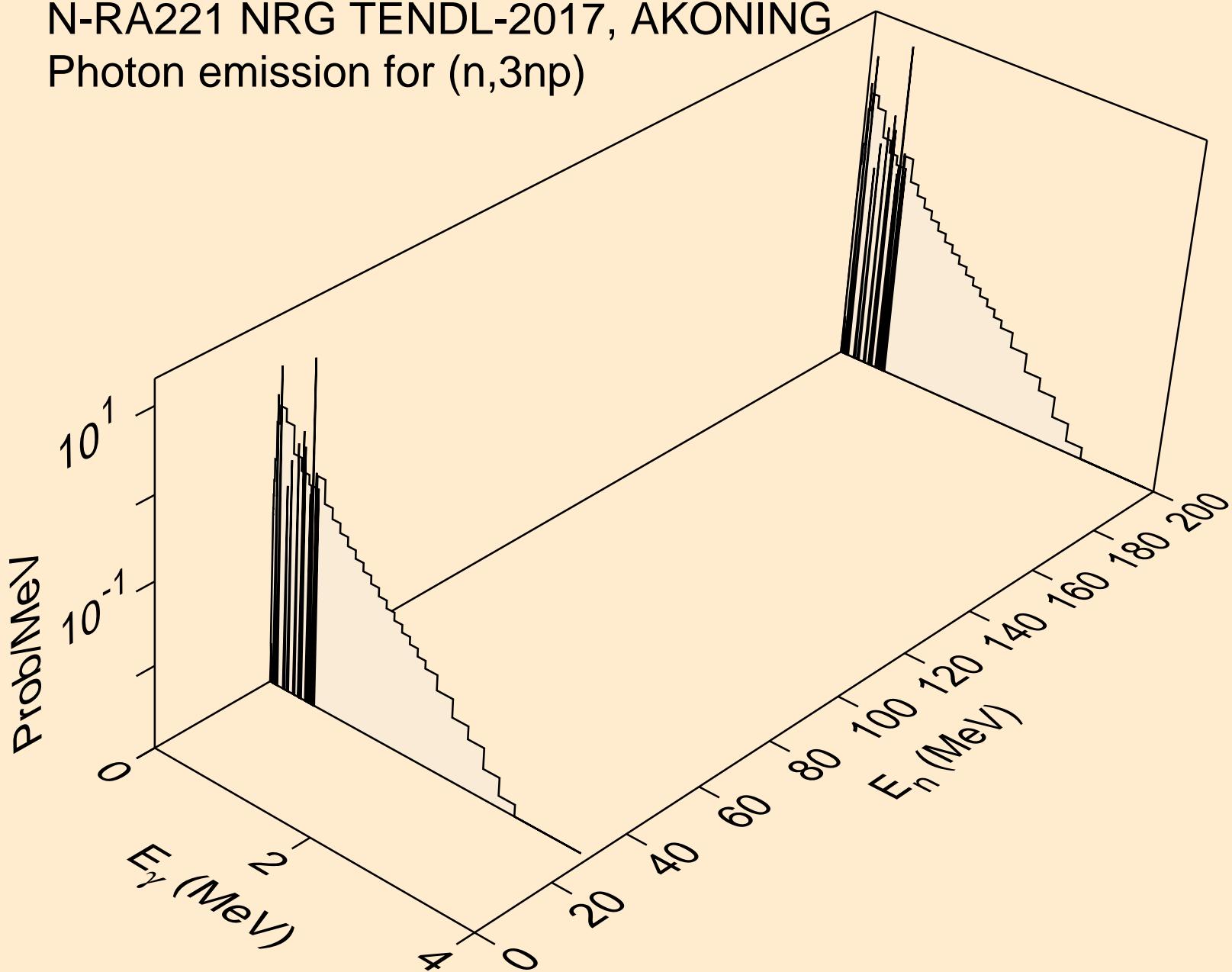
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,4n)



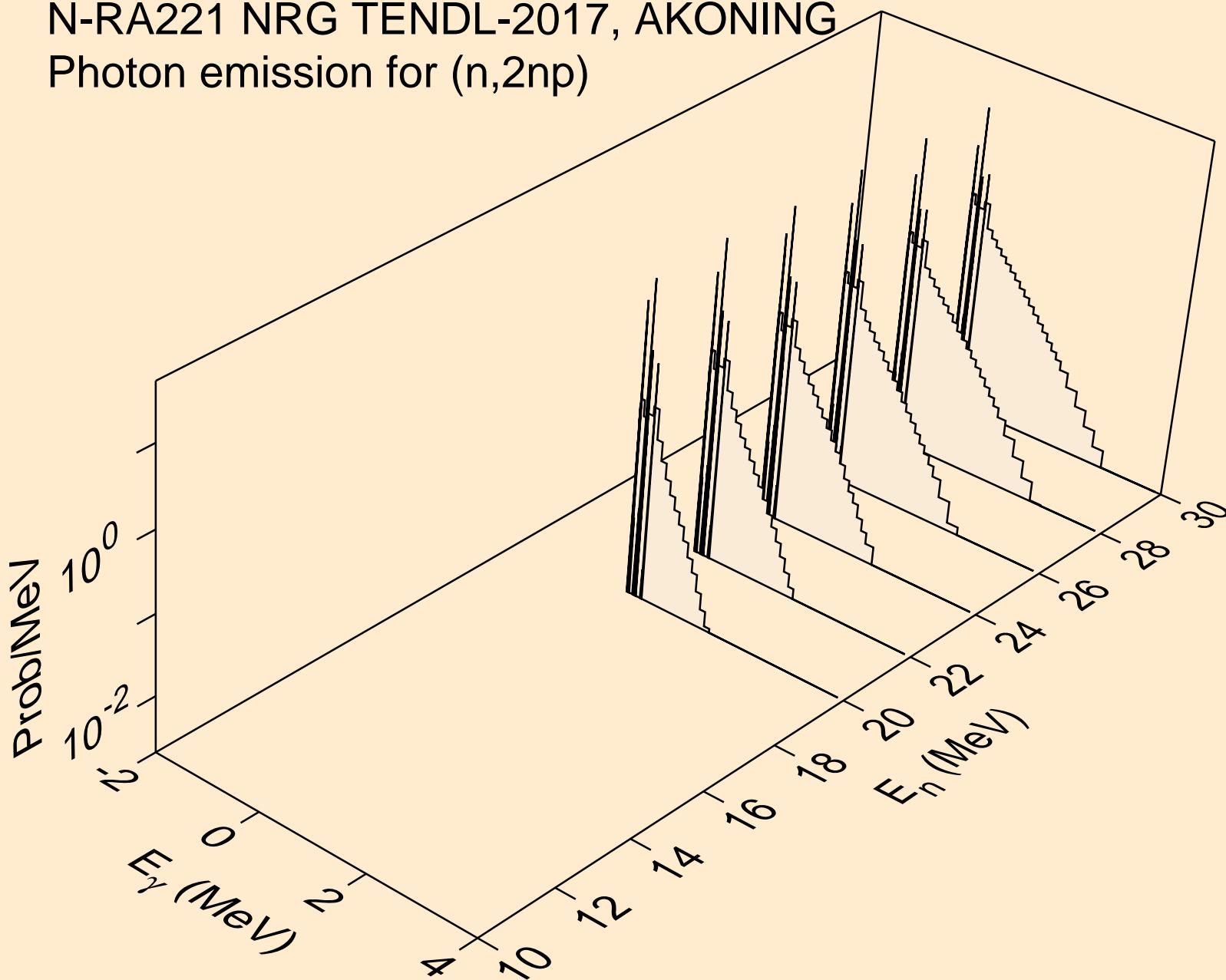
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,2np)



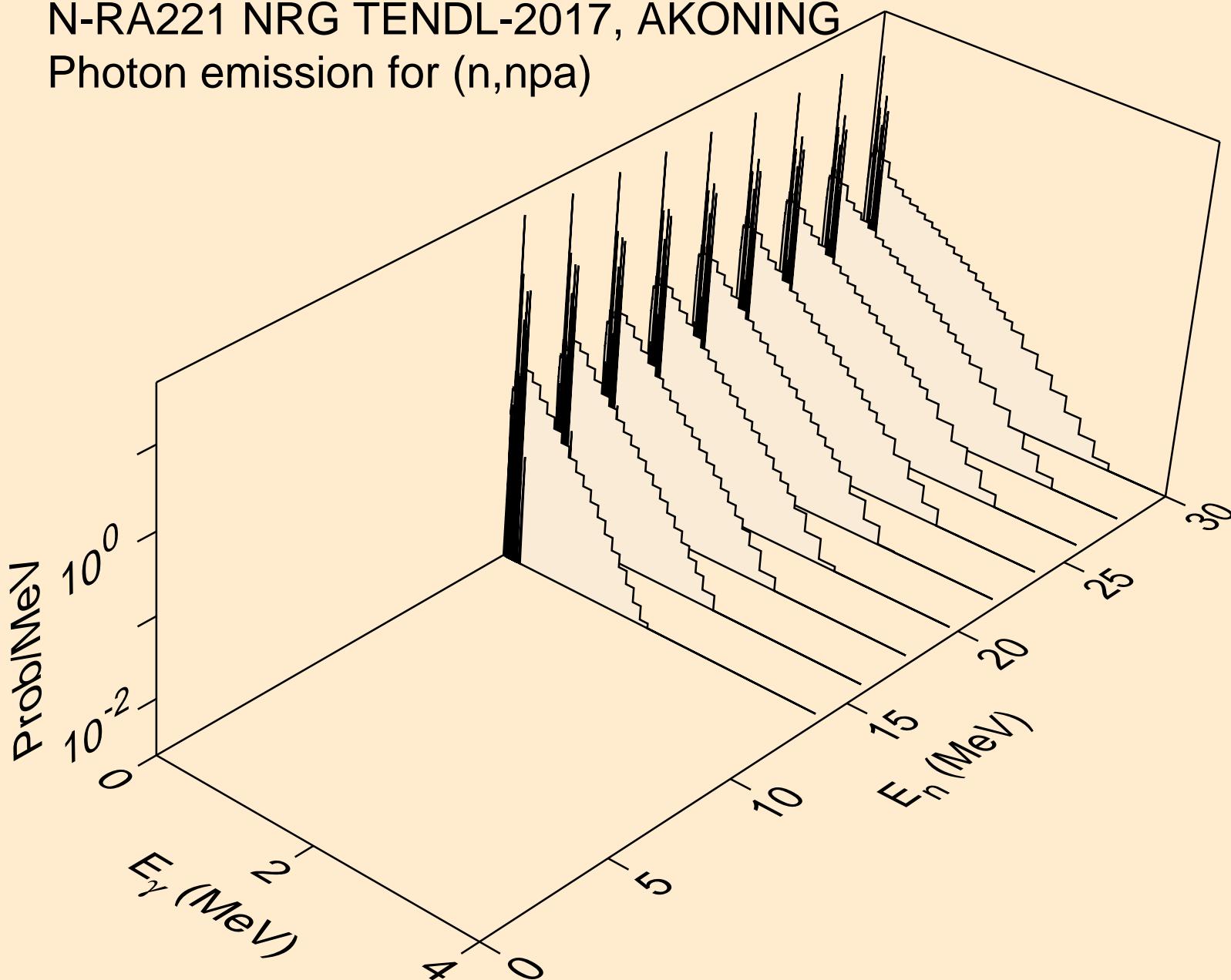
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Photon emission for (n,3np)



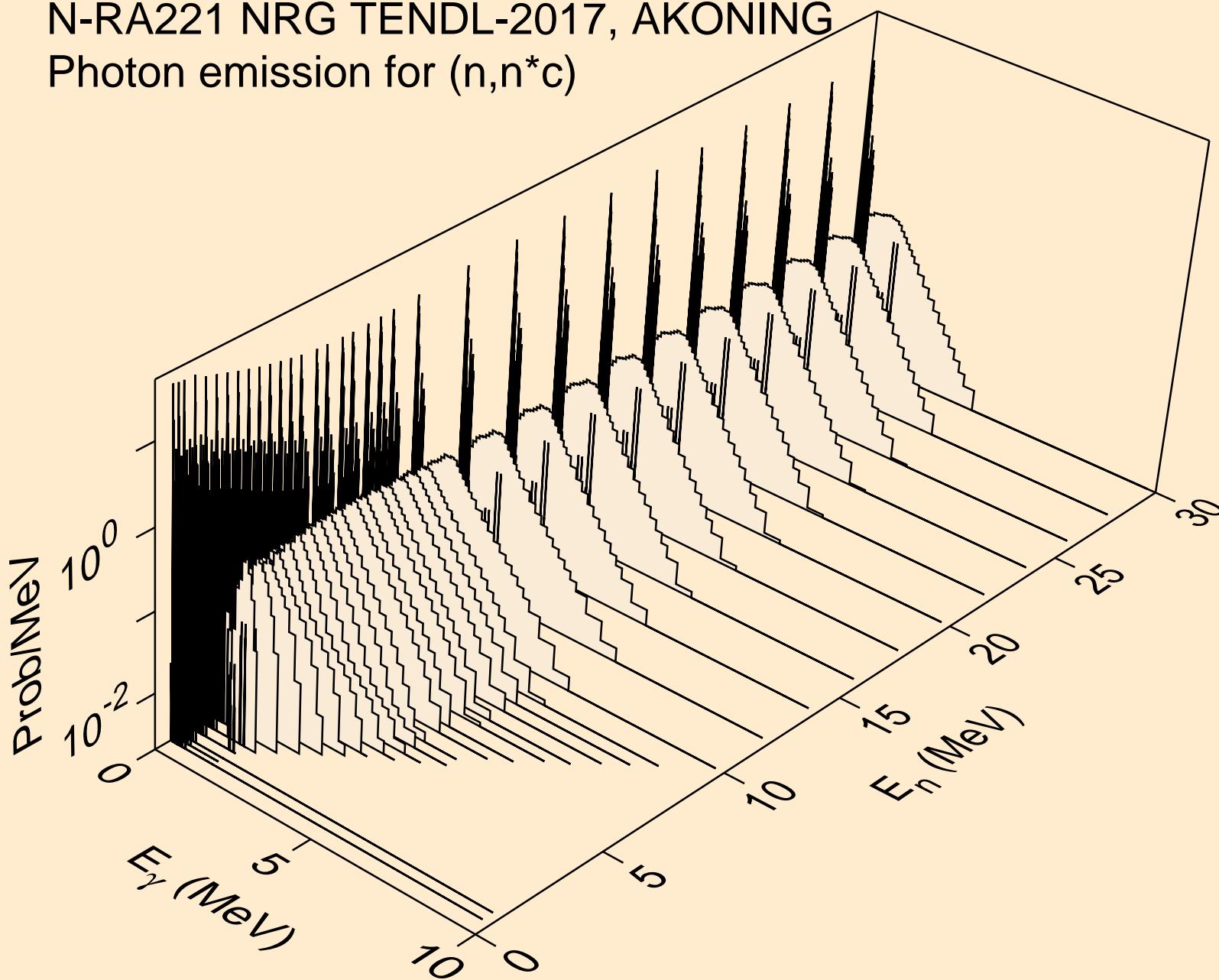
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,2np)



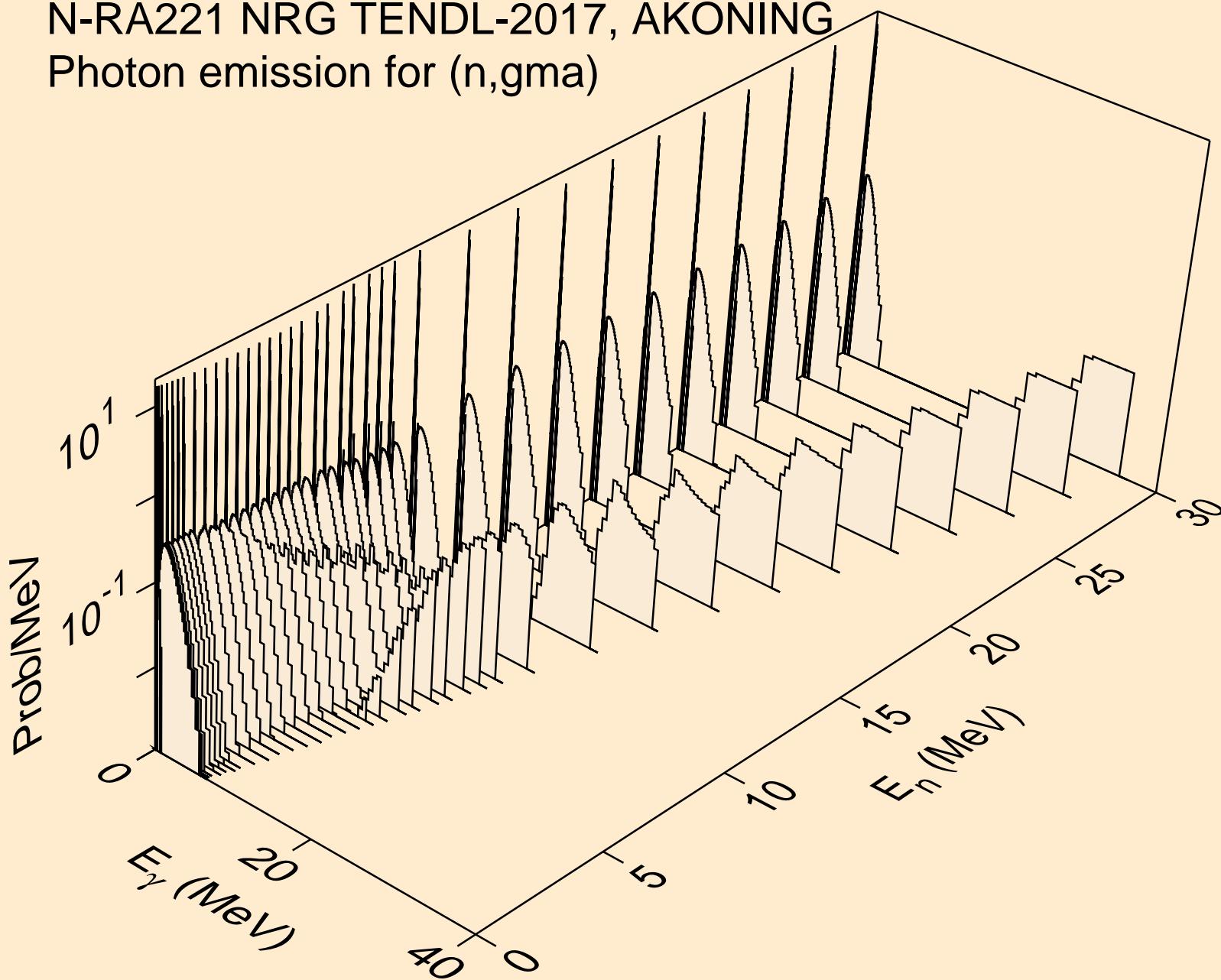
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,npa)



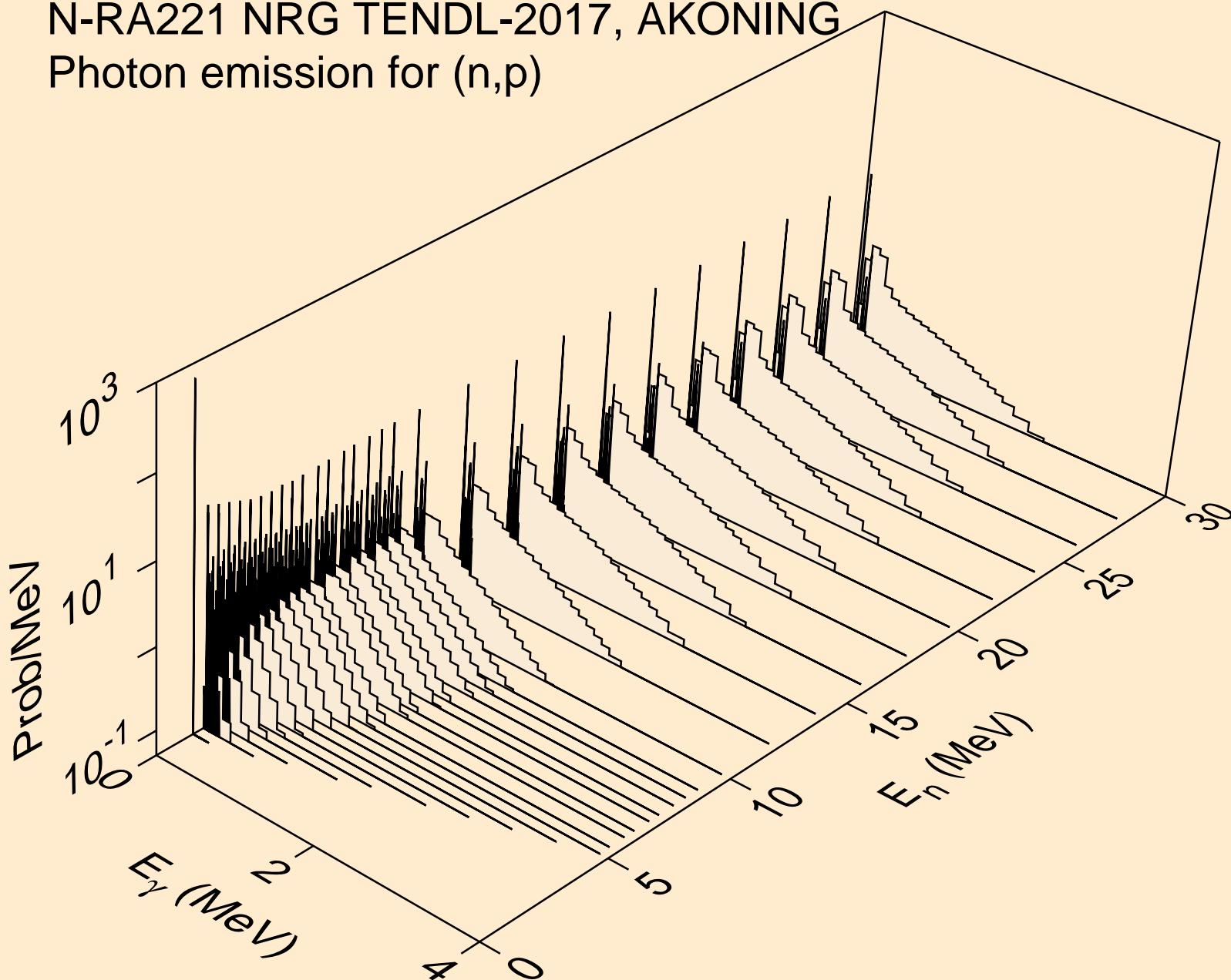
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for ( $n, n^*c$ )



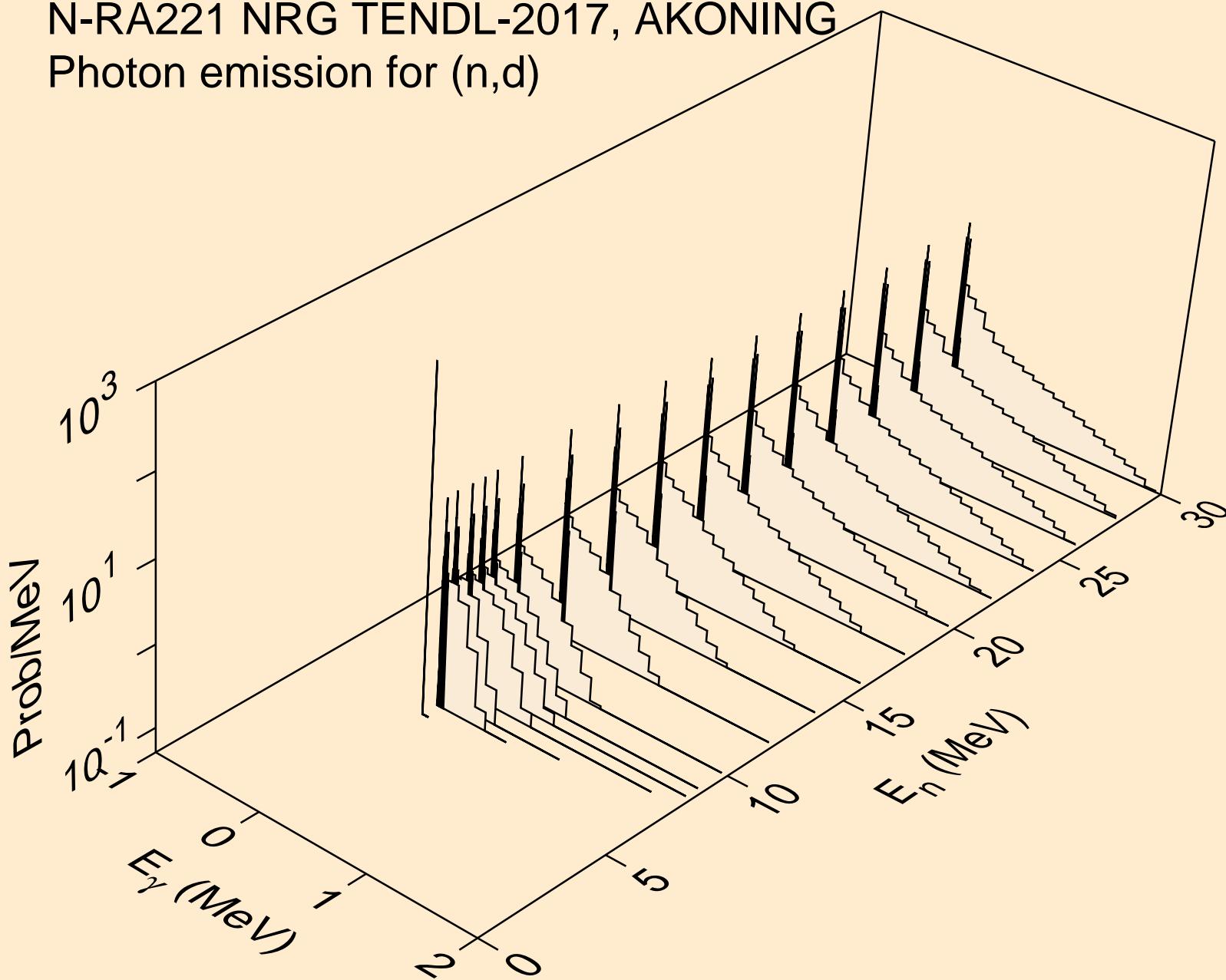
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,gma)



N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,p)

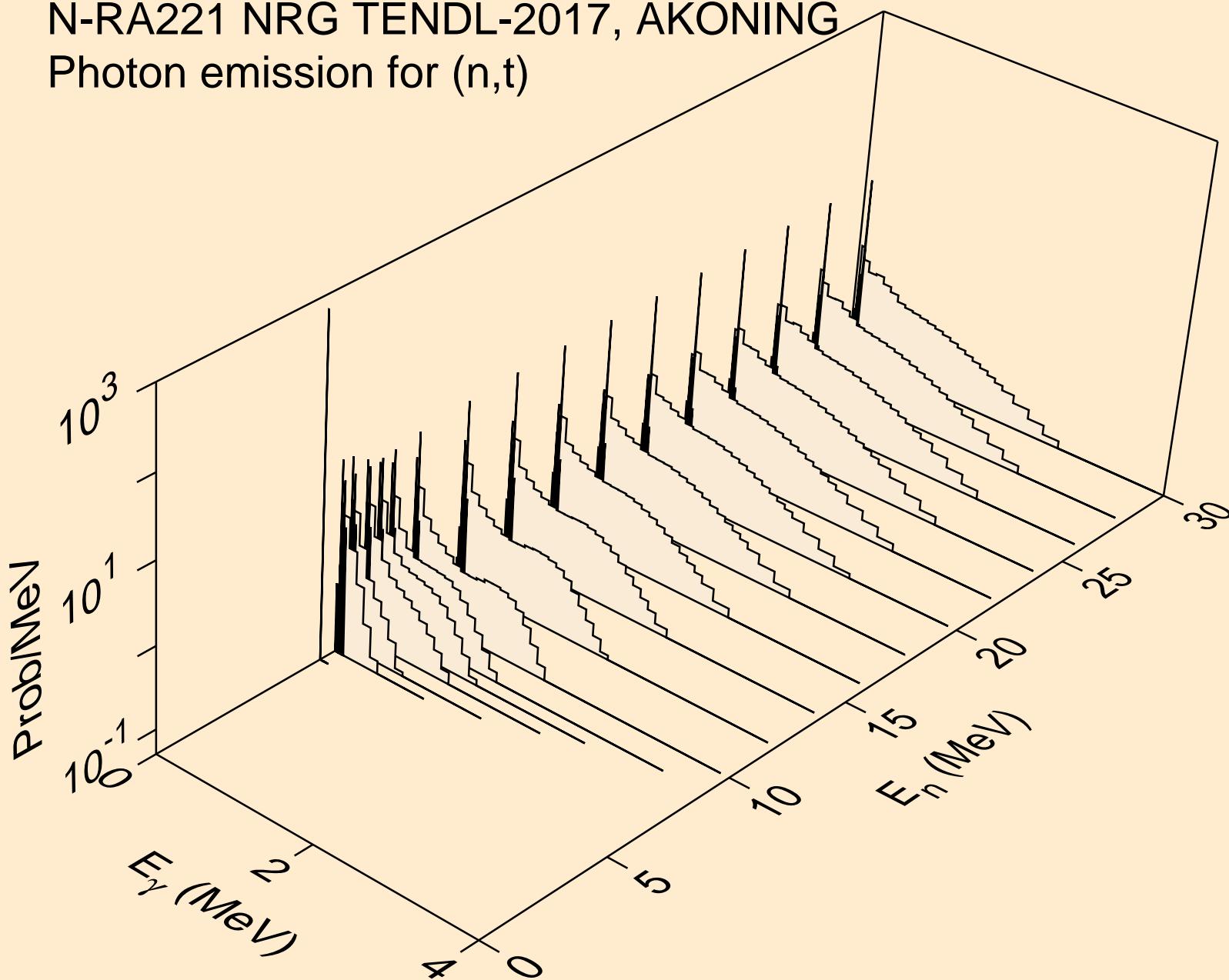


N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,d)

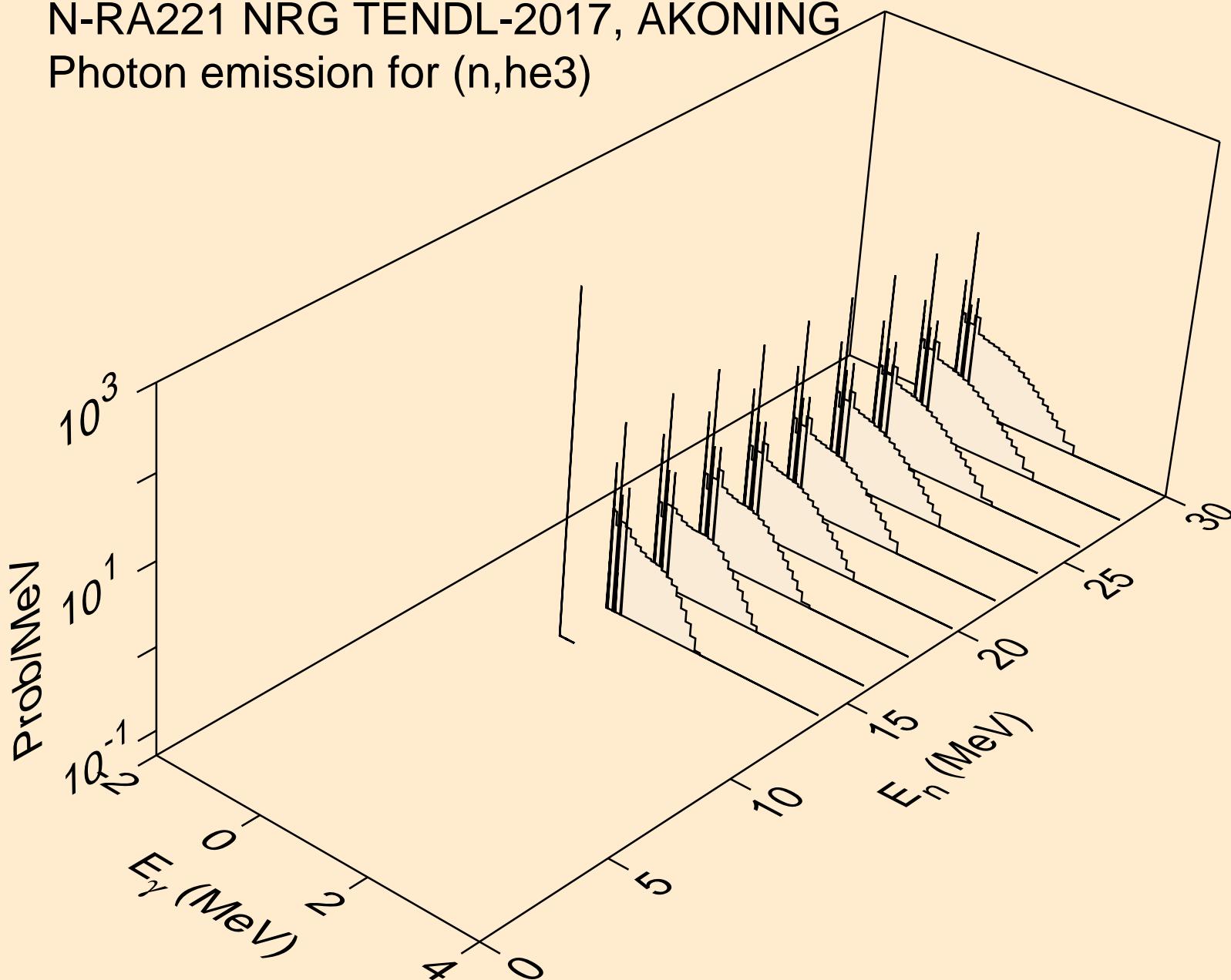


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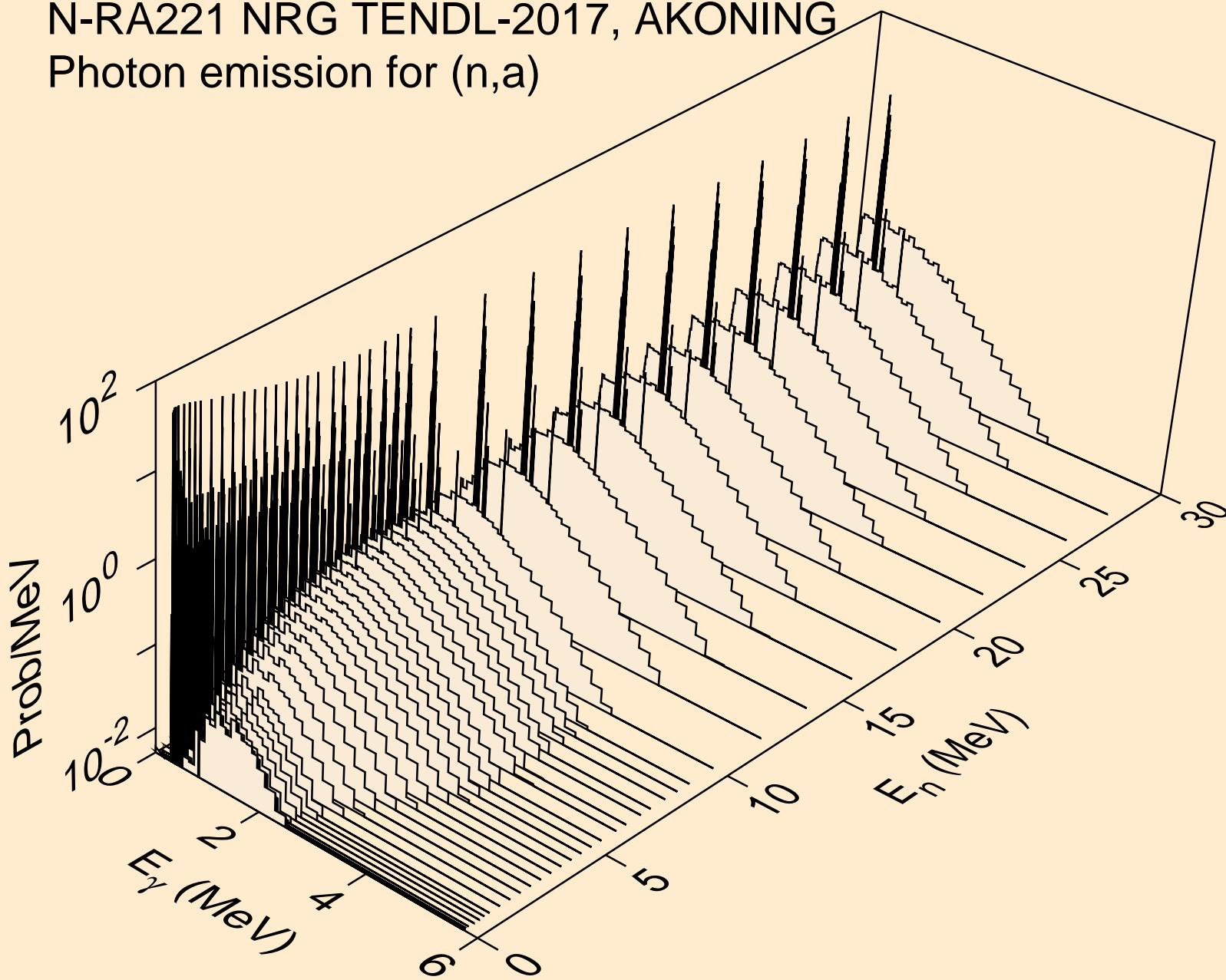
Photon emission for (n,t)



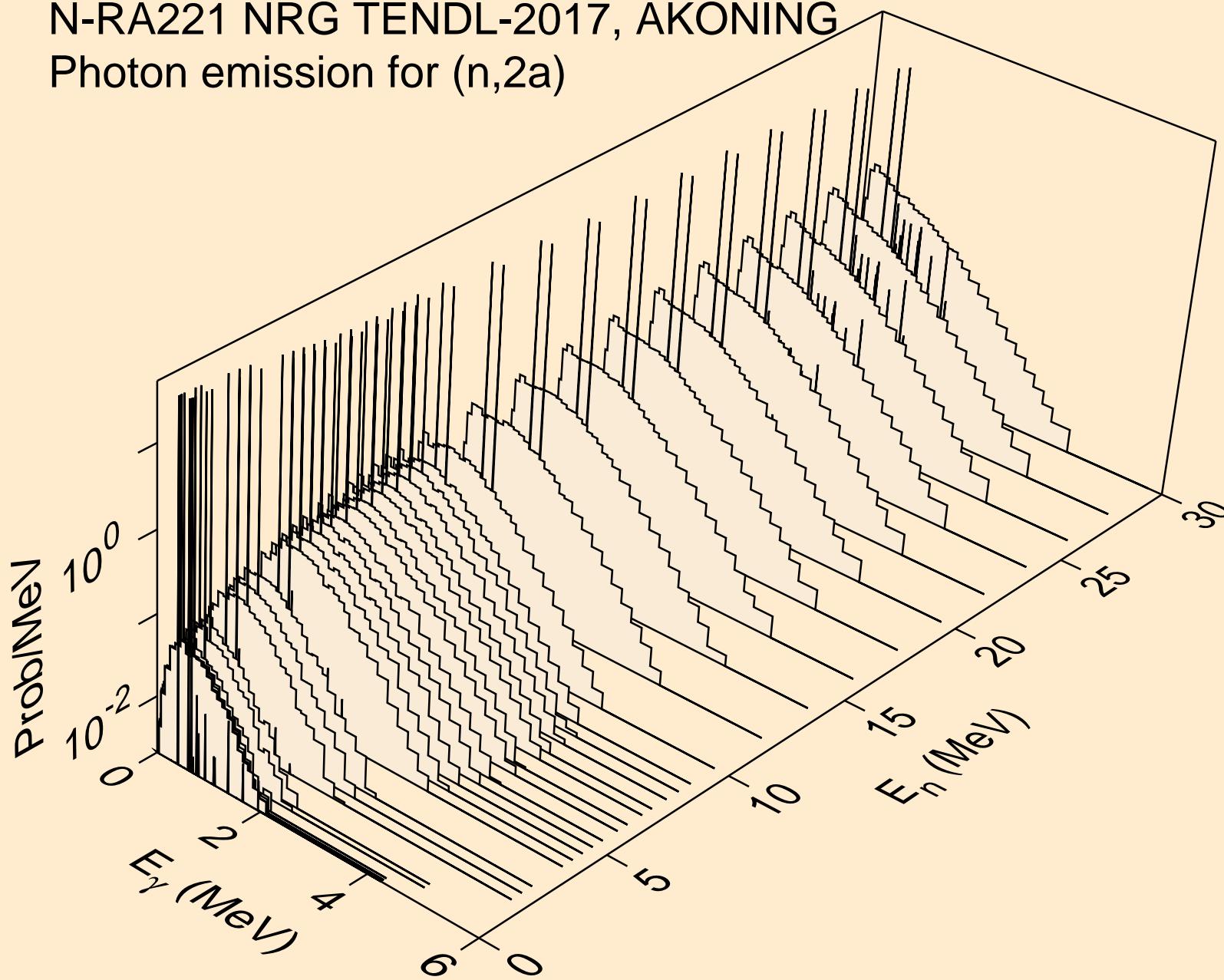
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,he3)



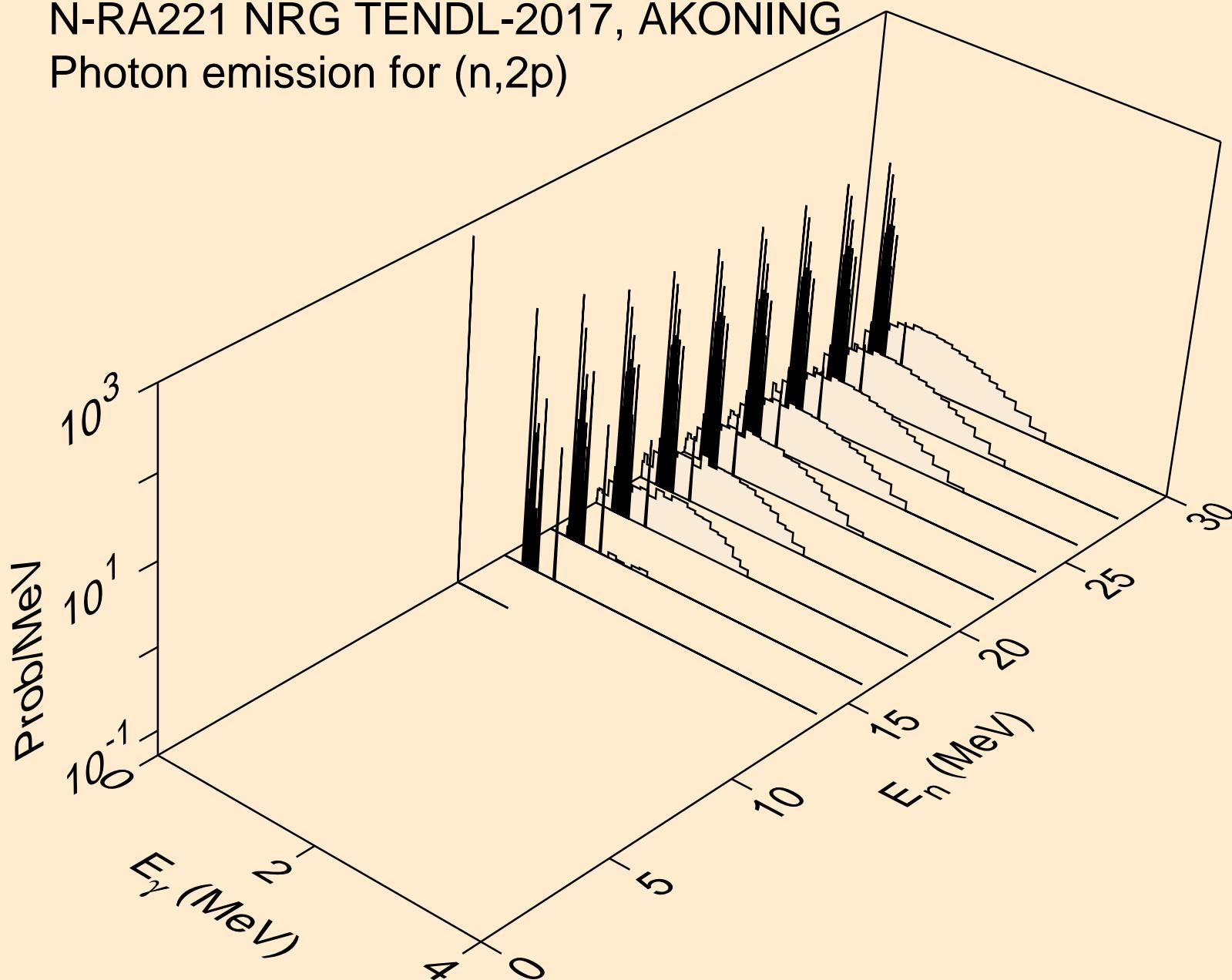
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Photon emission for (n,a)



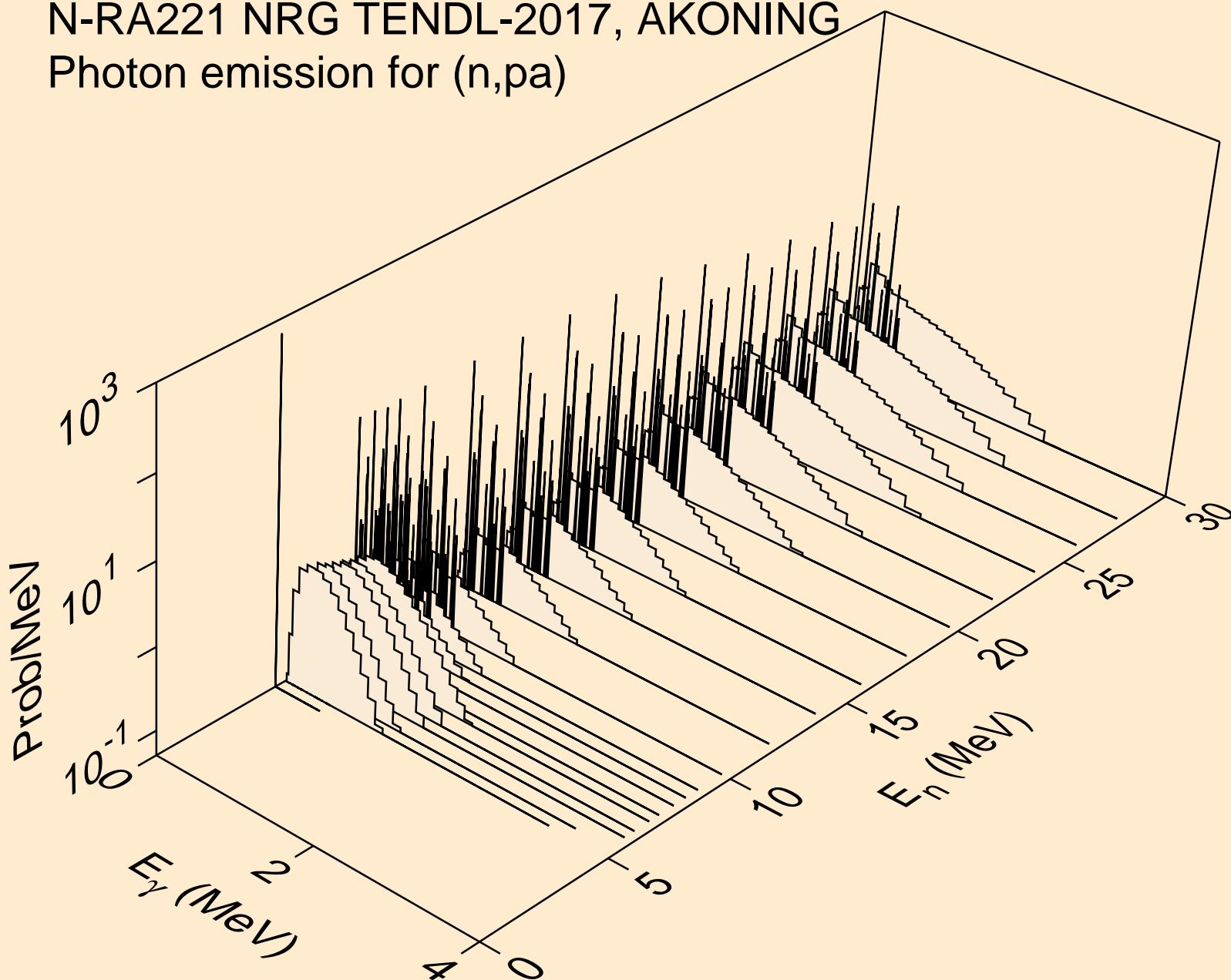
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,2a)



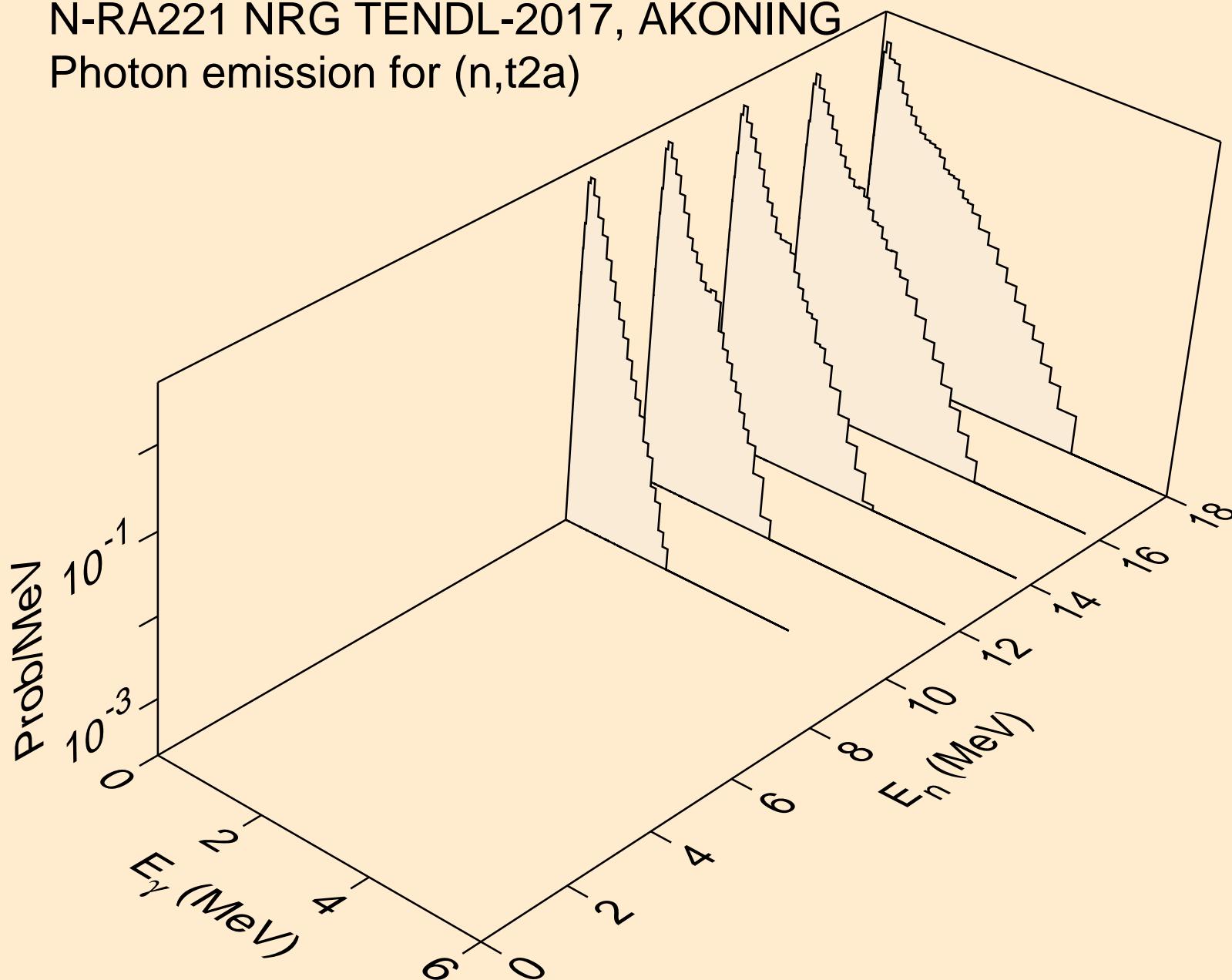
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Photon emission for (n,2p)



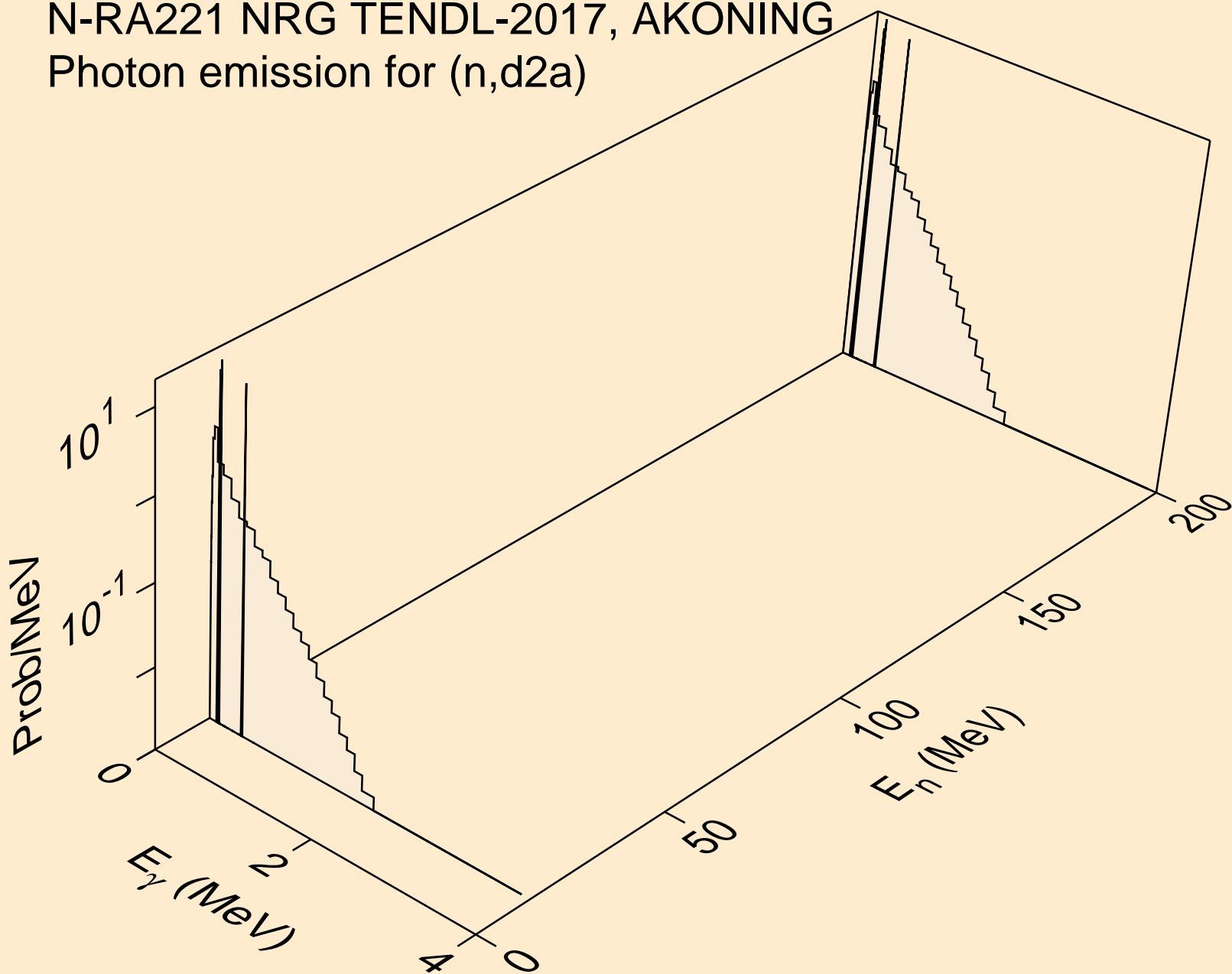
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,pa)



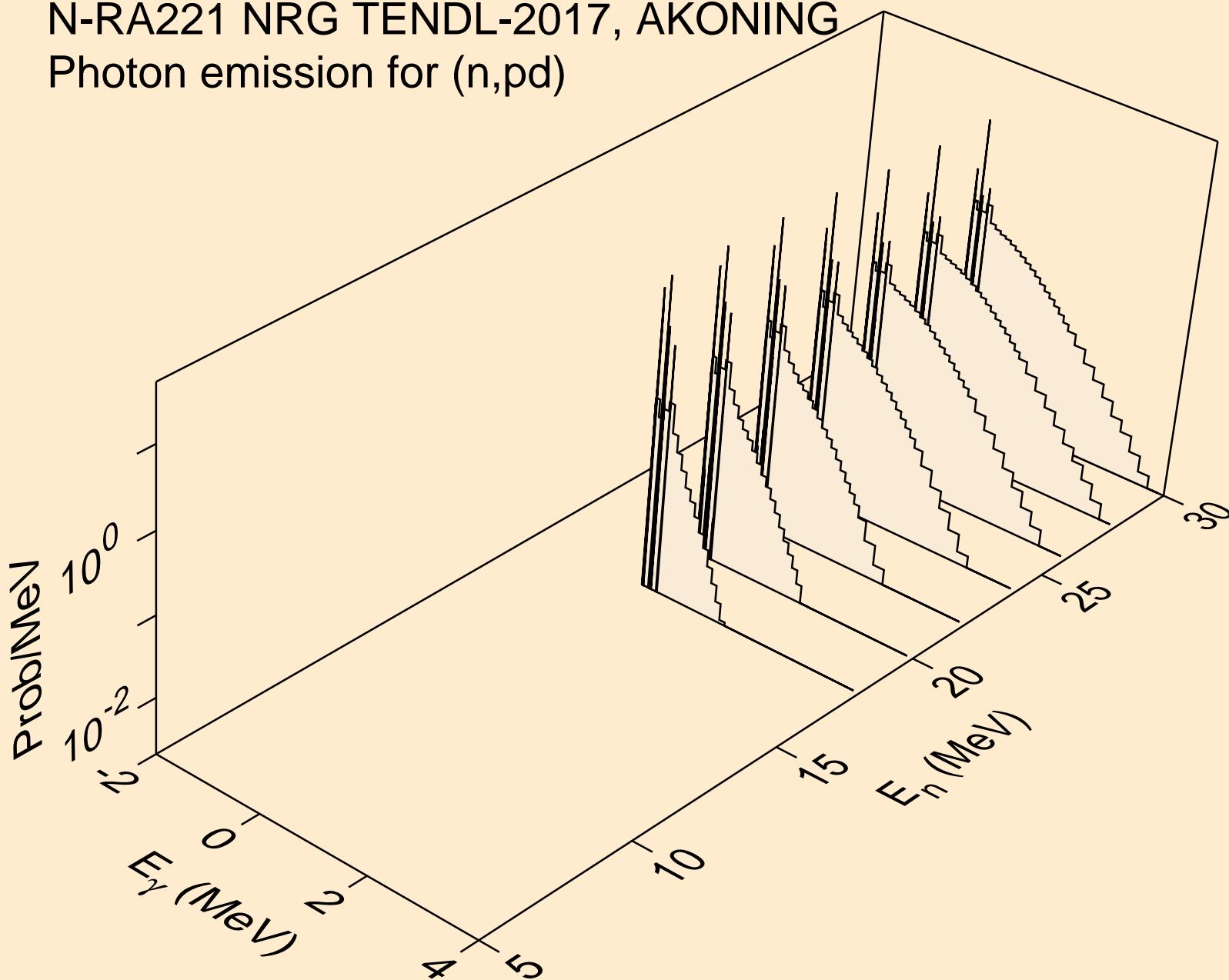
N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,t2a)



N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,d2a)

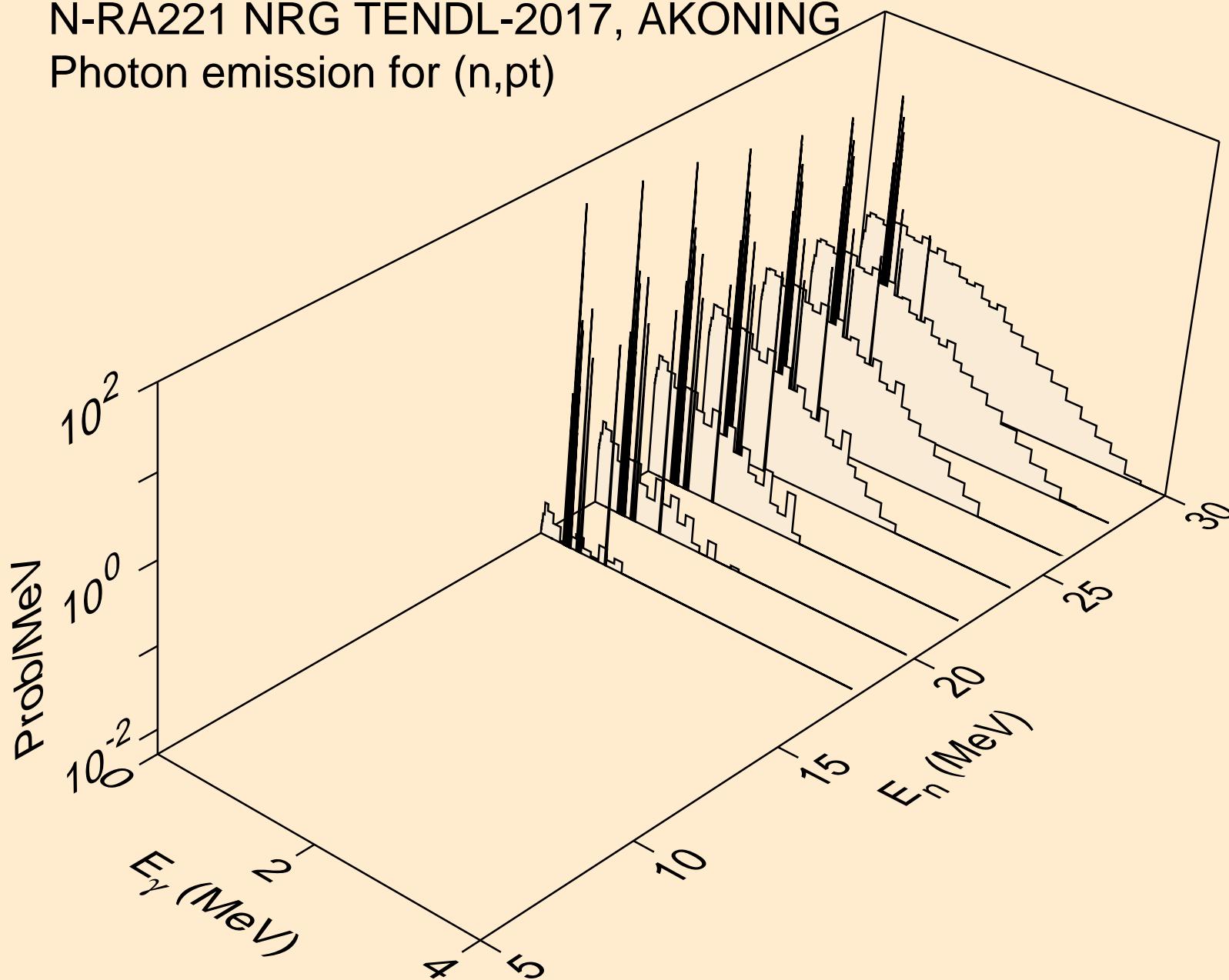


N-RA221 NRG TENDL-2017, AKONING  
Photon emission for (n,pd)



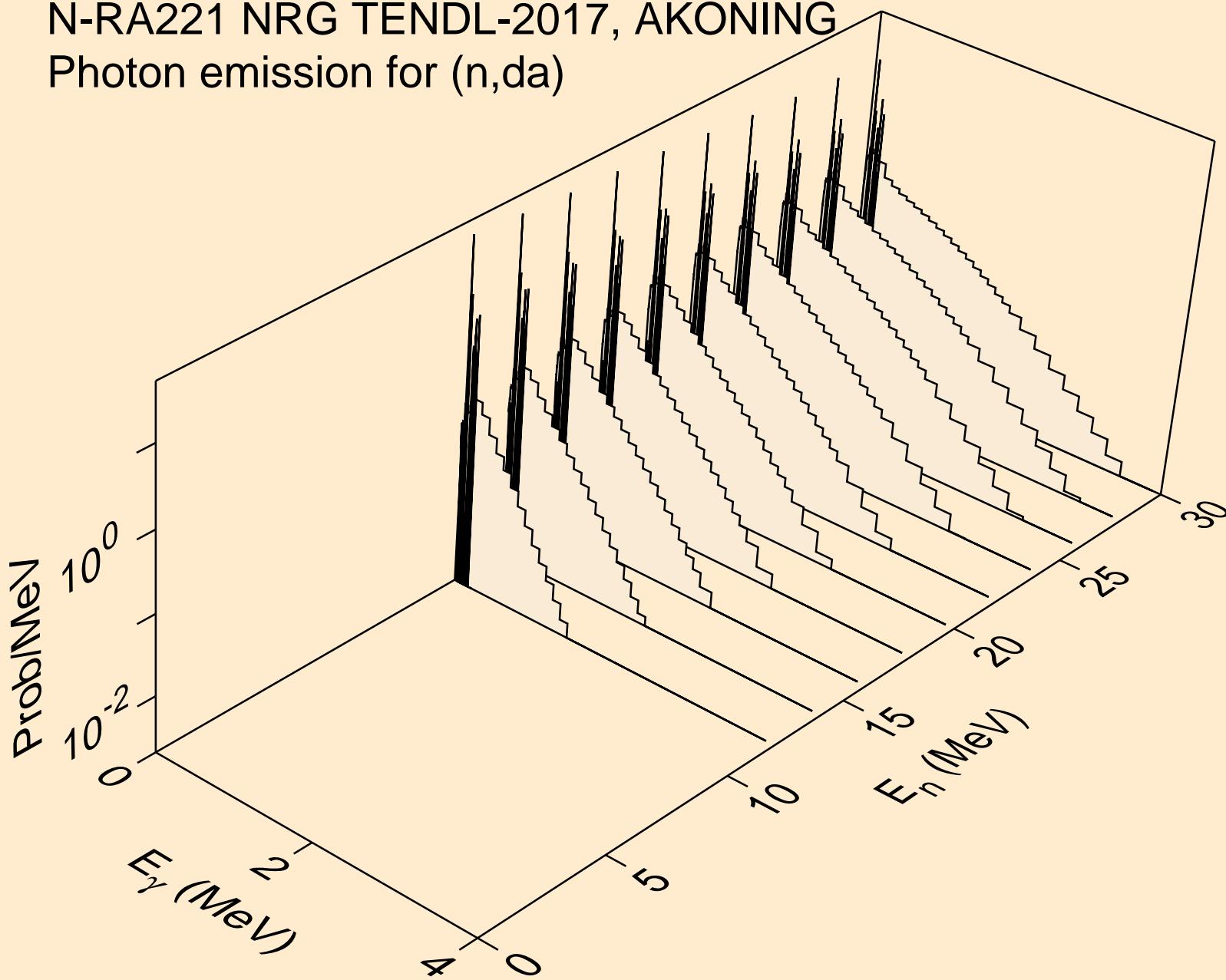
N-RA221 NRG TENDL-2017, AKONING

Photon emission for (n,pt)

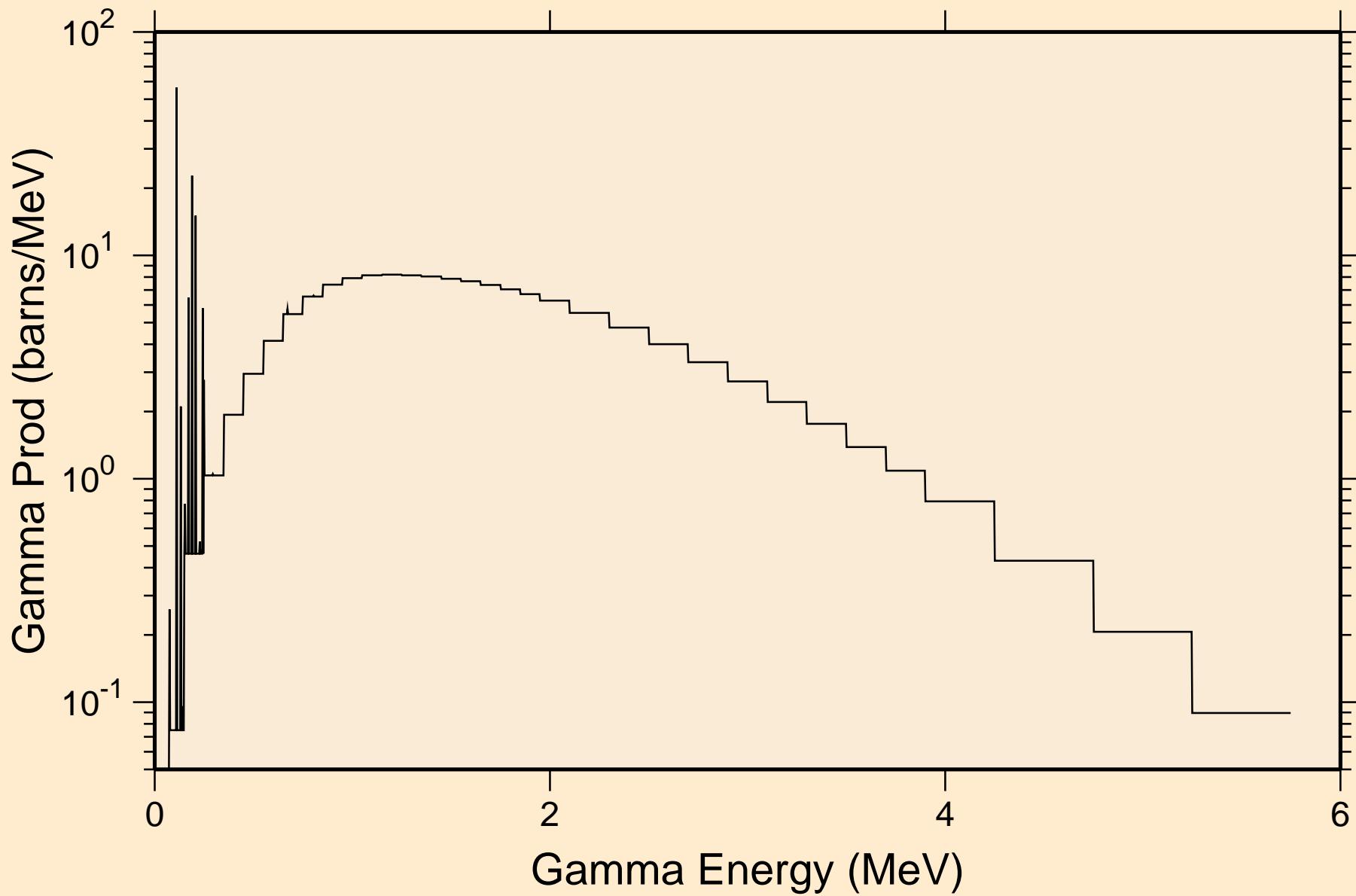


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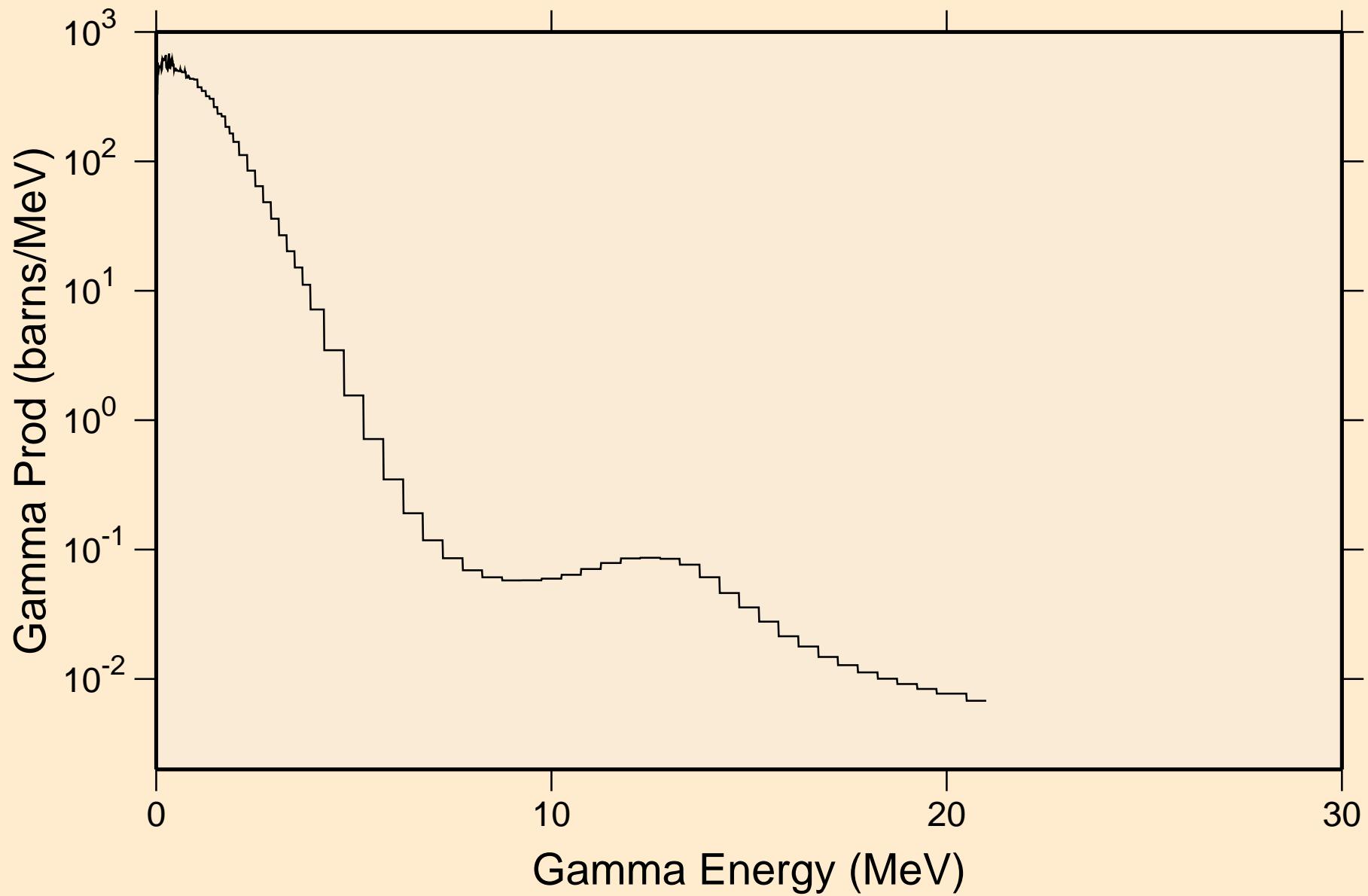
Photon emission for (n,da)



N-RA221 NRG TENDL-2017, AKONING  
thermal capture photon spectrum

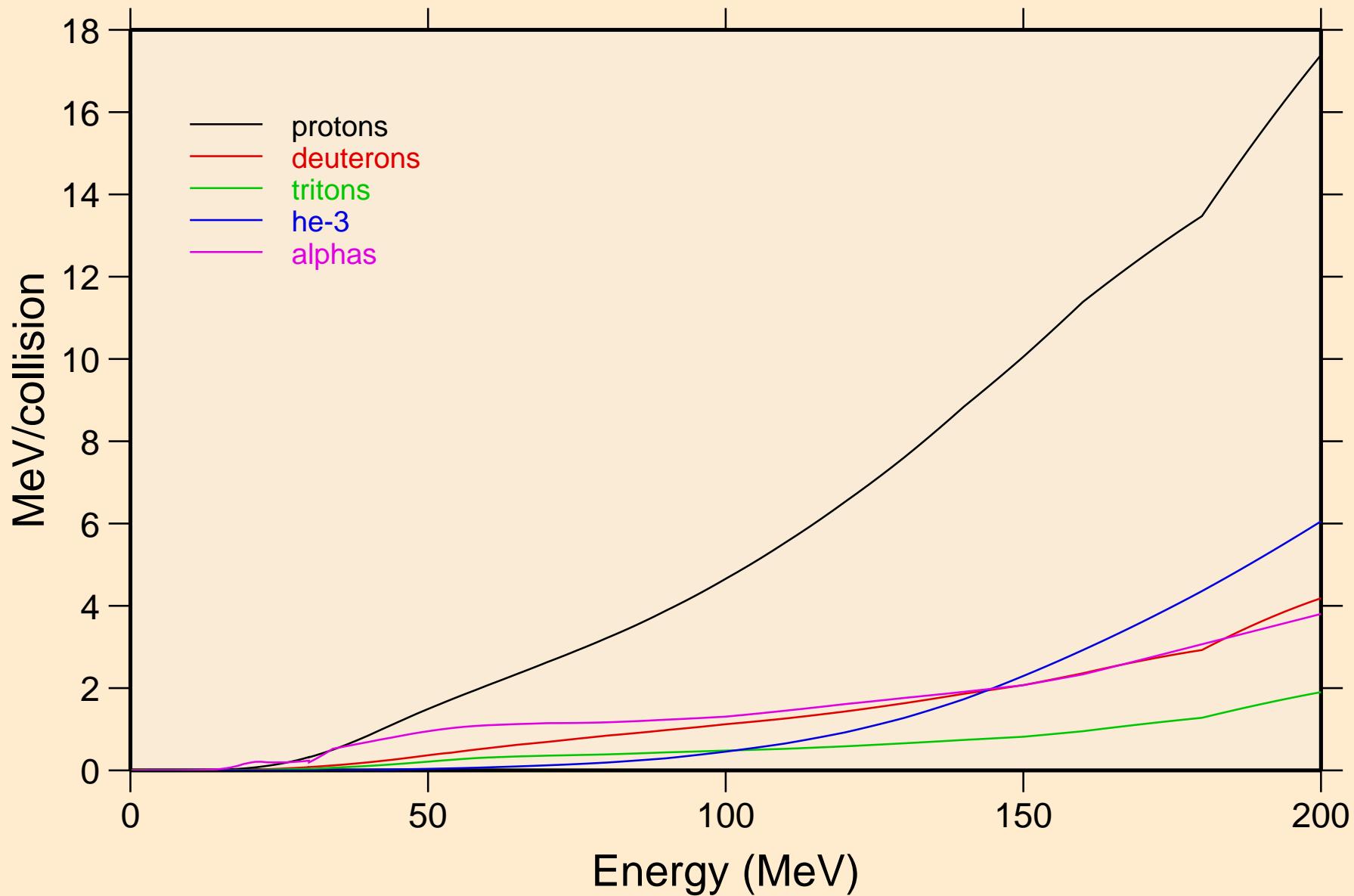


N-RA221 NRG TENDL-2017, AKONING  
14 MeV photon spectrum



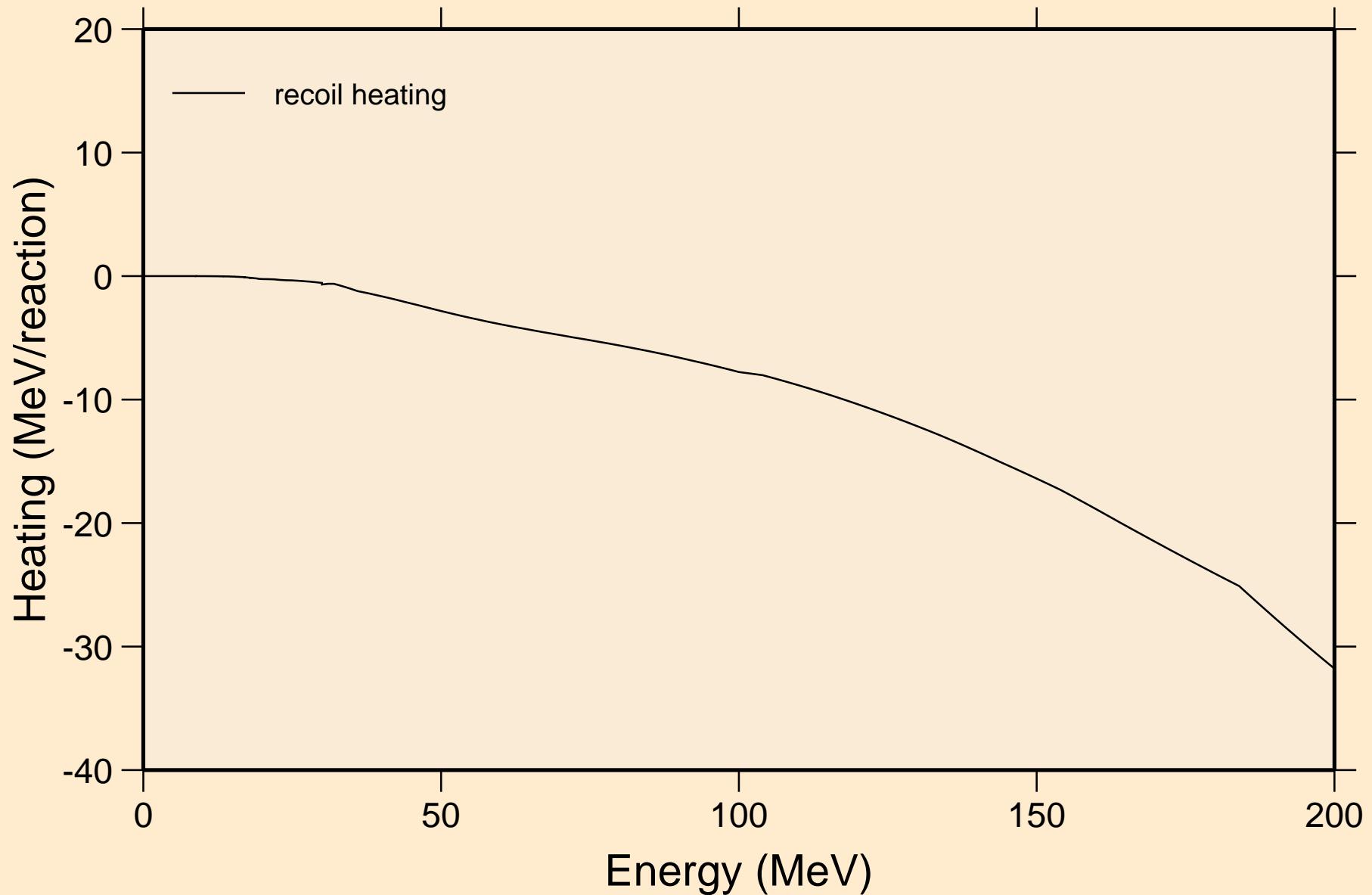
# N-RA221 NRG TENDL-2017, AKONING

## Particle heating contributions



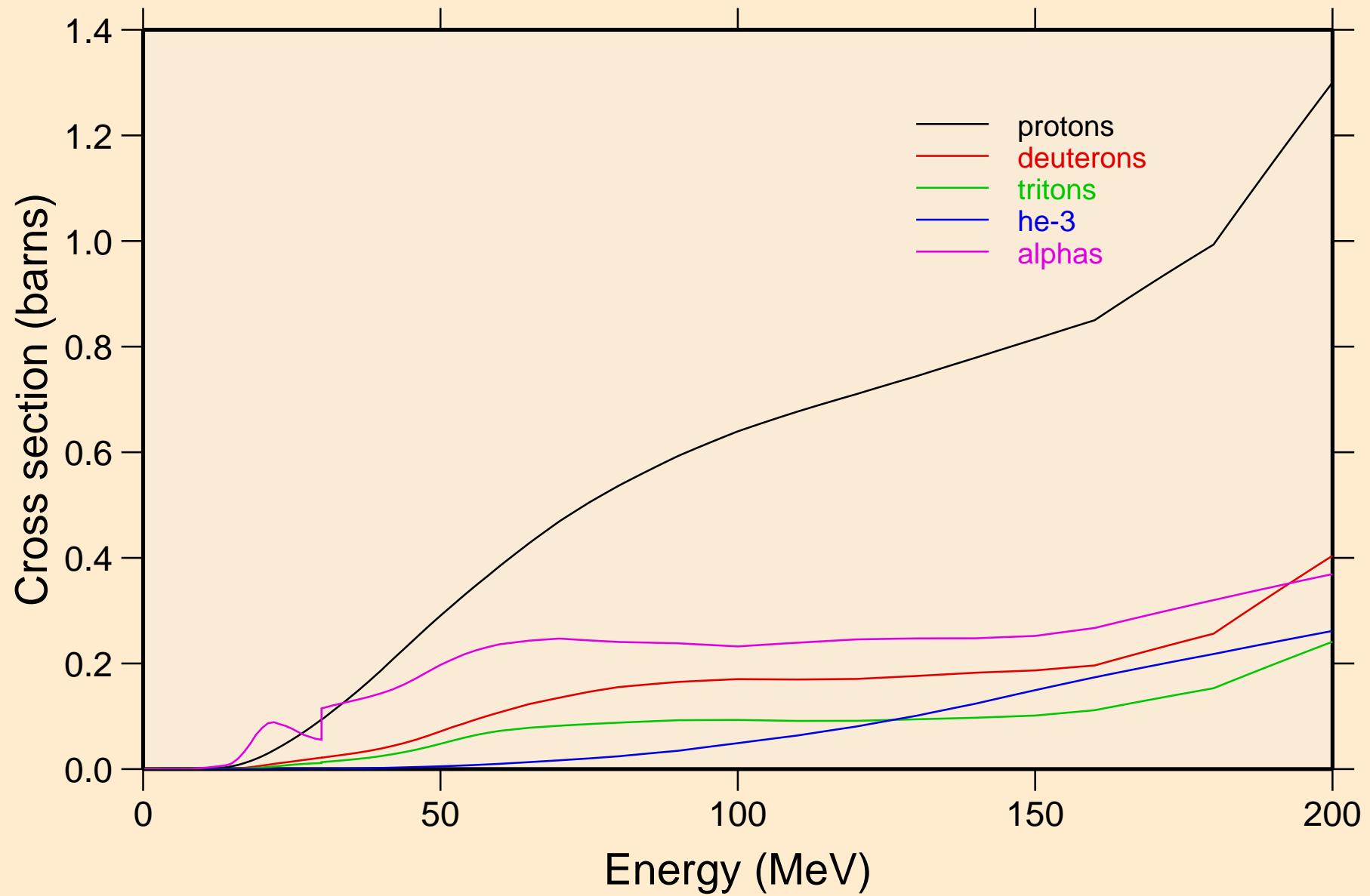
# N-RA221 NRG TENDL-2017, AKONING

## Recoil Heating

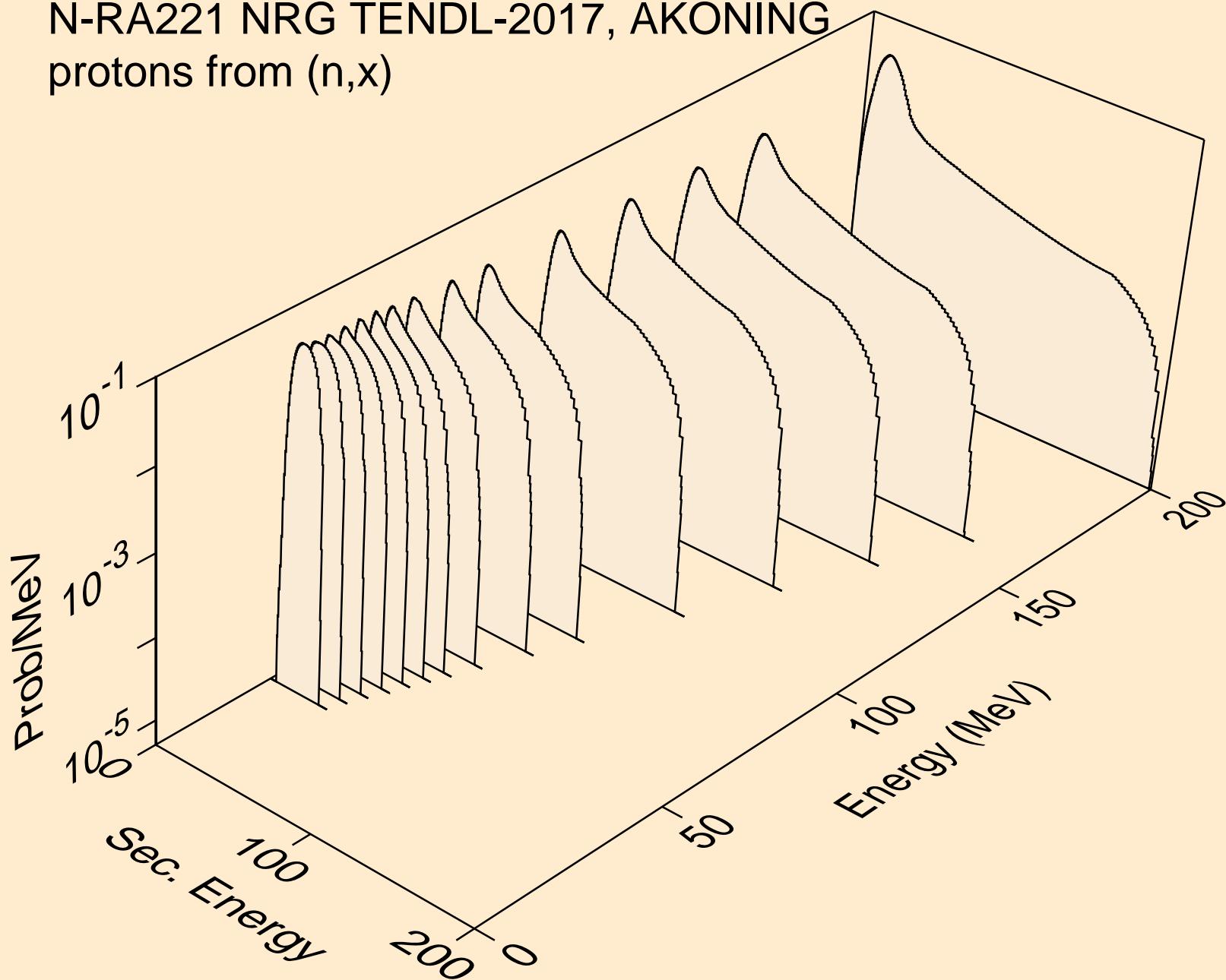


# N-RA221 NRG TENDL-2017, AKONING

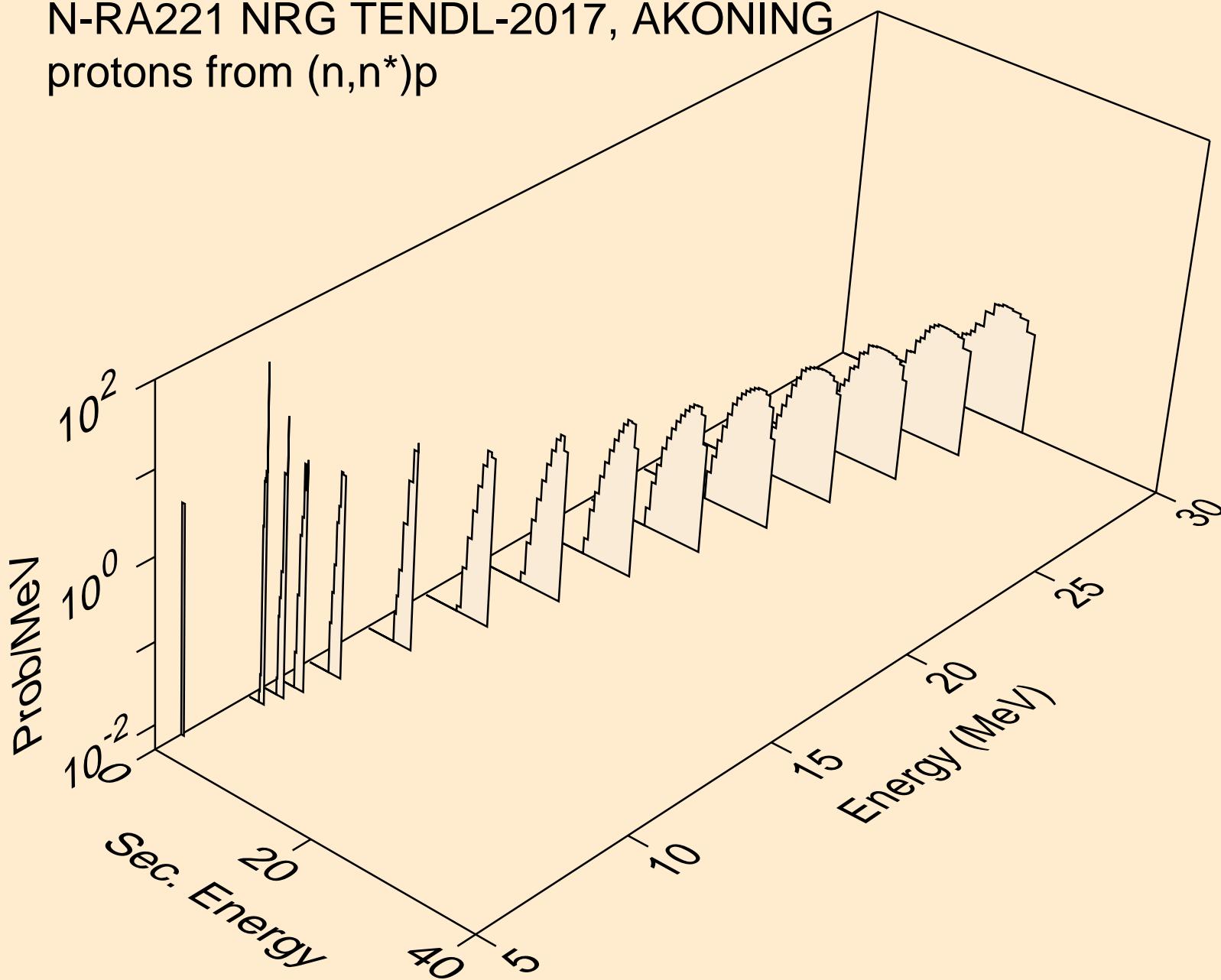
## Particle production cross sections



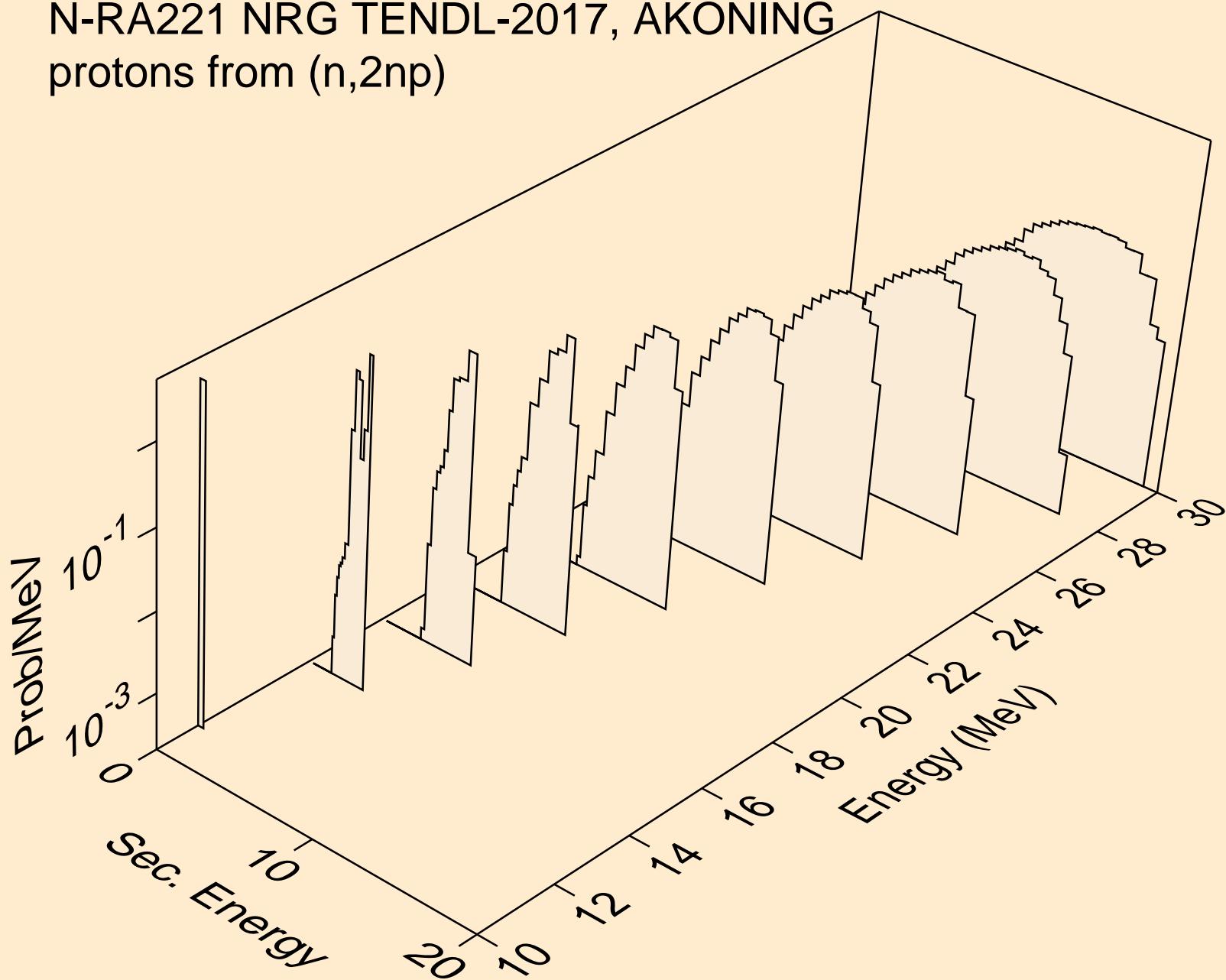
N-RA221 NRG TENDL-2017, AKONING  
protons from ( $n,x$ )



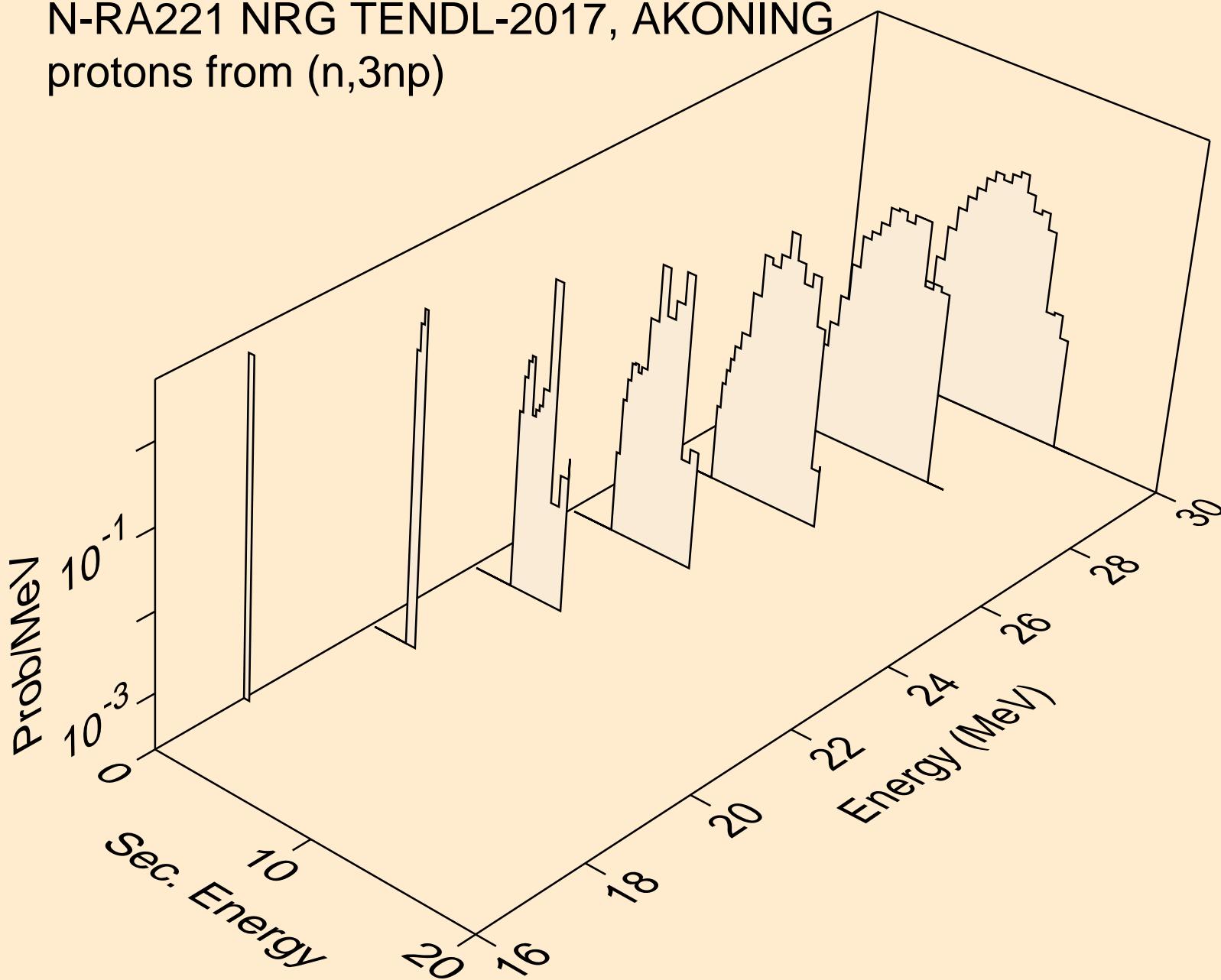
N-RA221 NRG TENDL-2017, AKONING  
protons from  $(n,n^*)p$



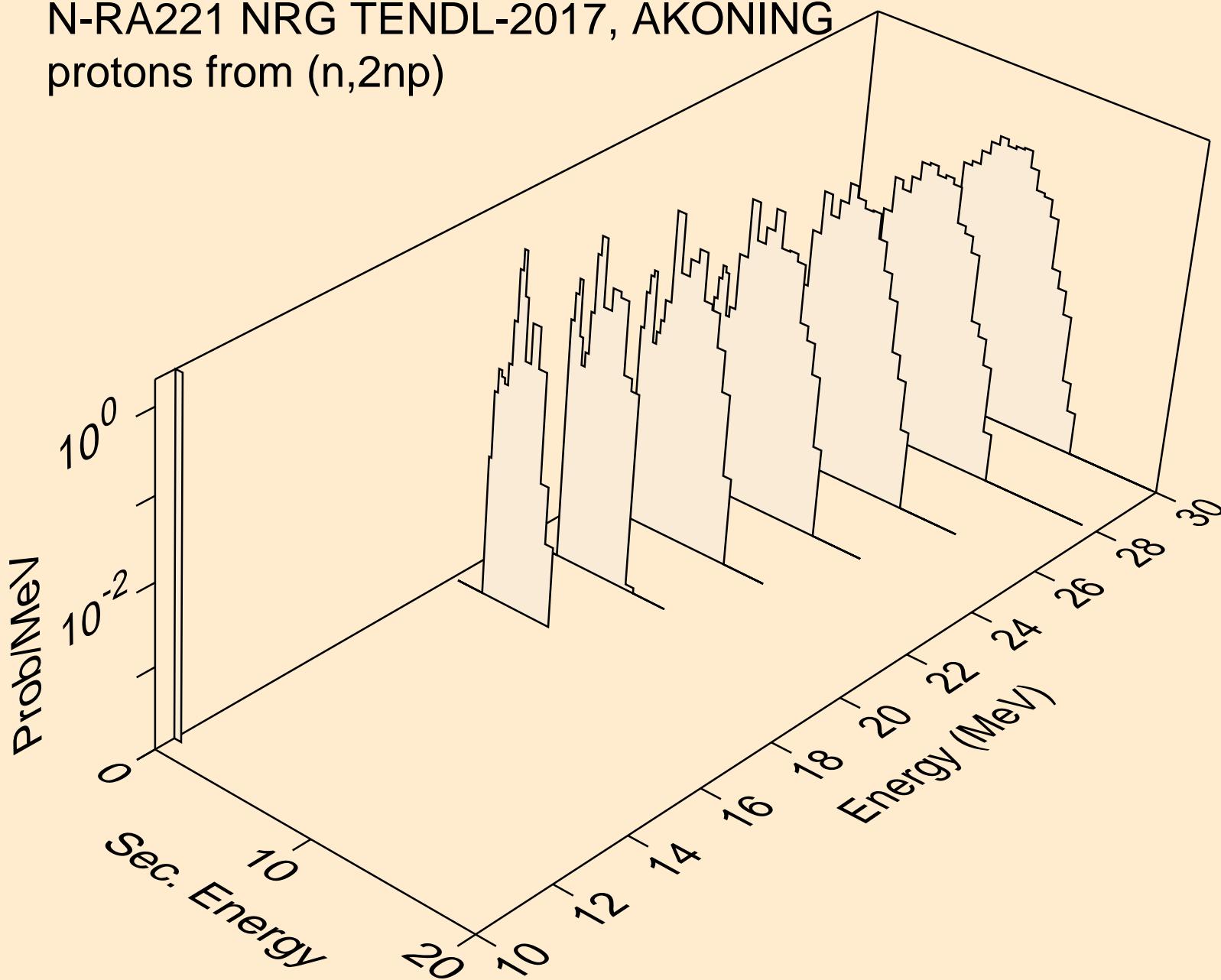
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protons from ( $n,2np$ )



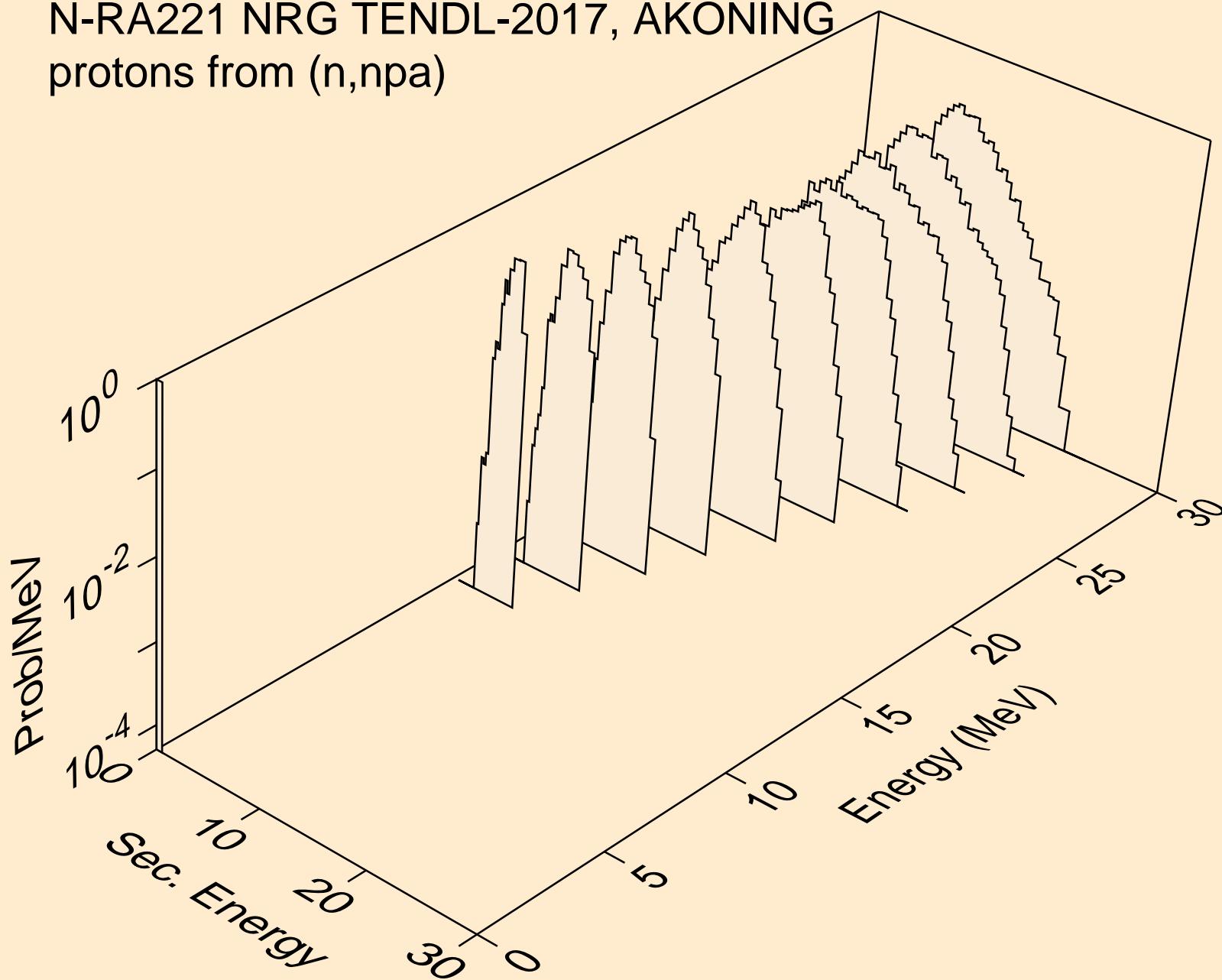
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protons from ( $n,3np$ )



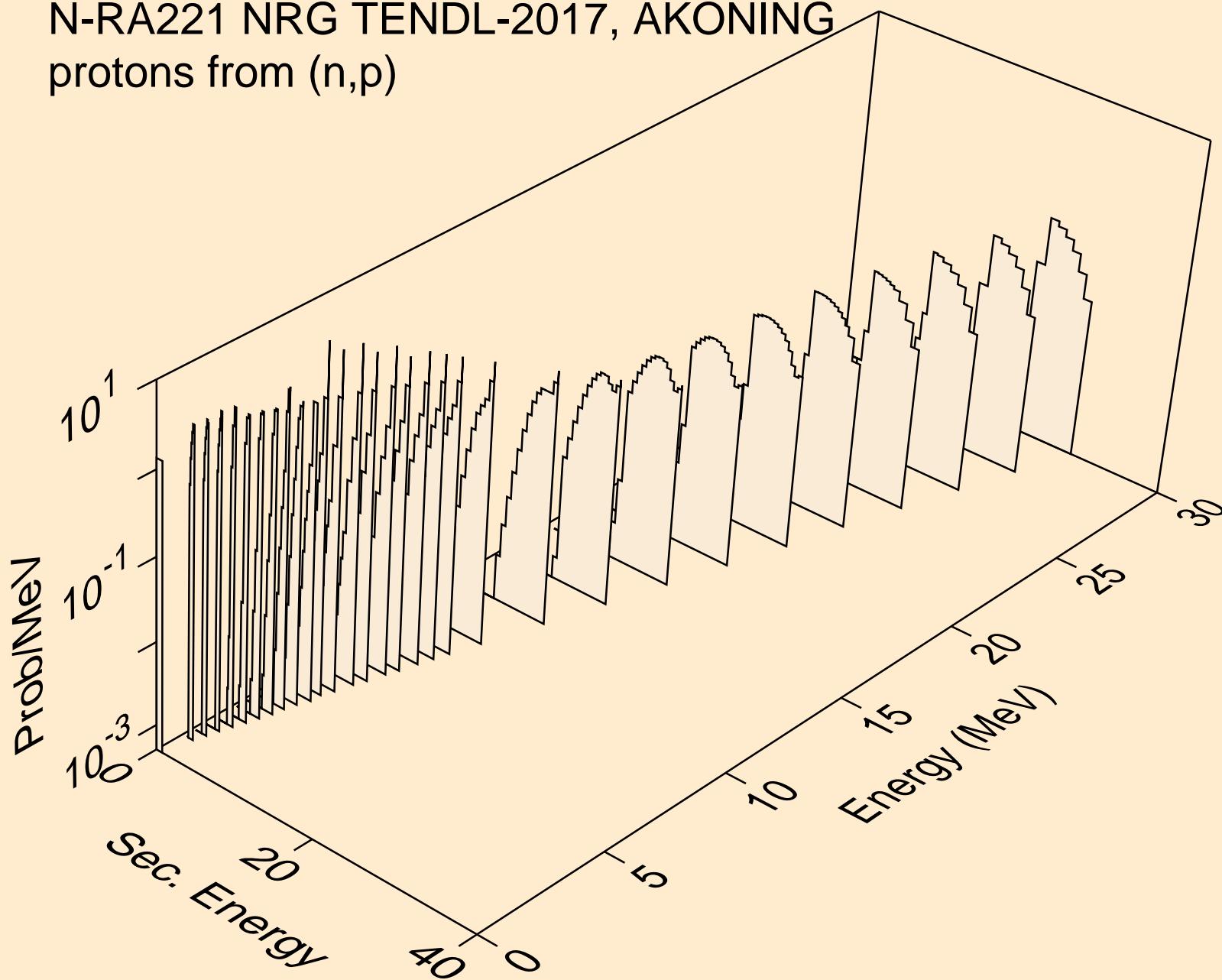
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protons from ( $n,2np$ )



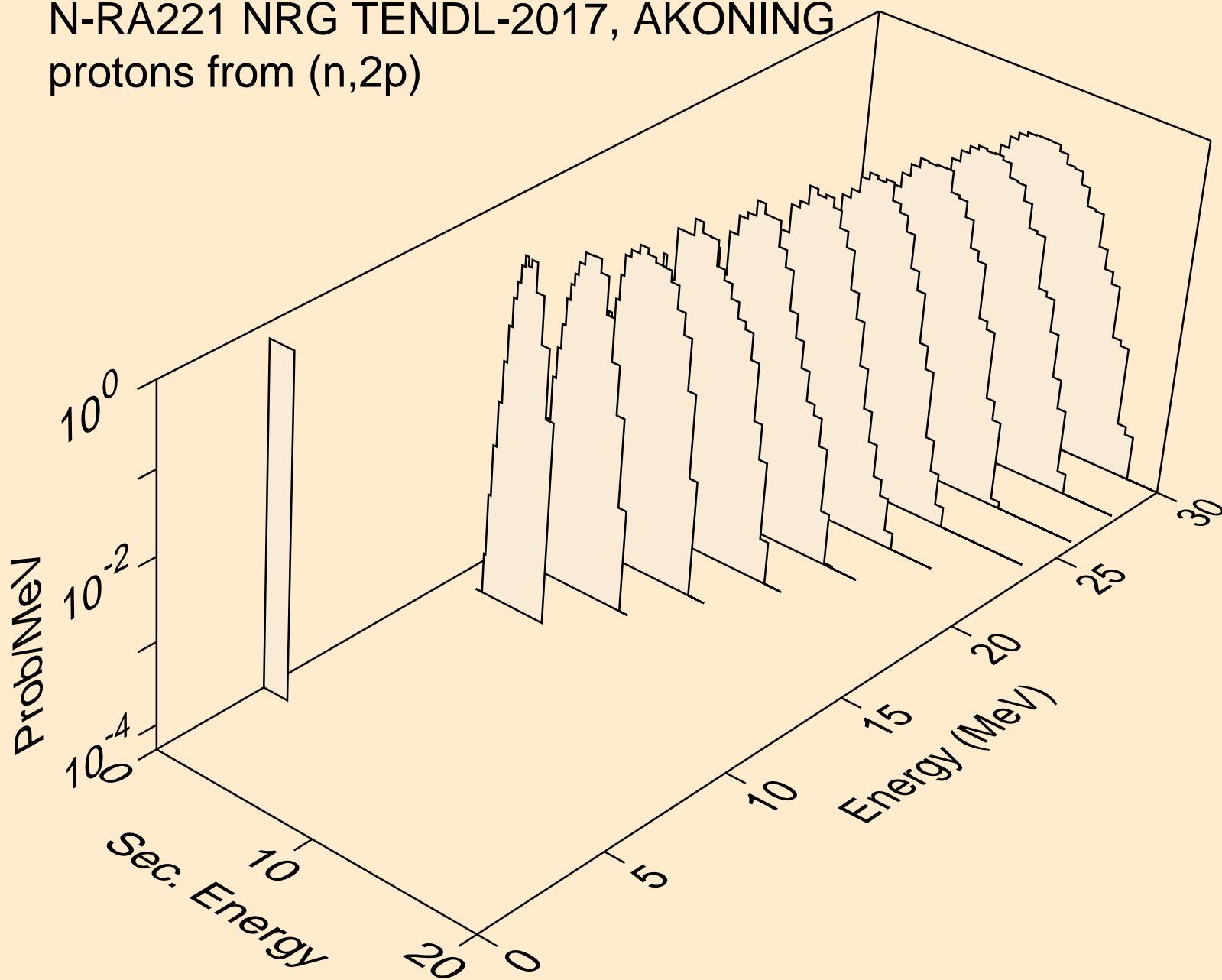
N-RA221 NRG TENDL-2017, AKONING  
protons from (n,npa)



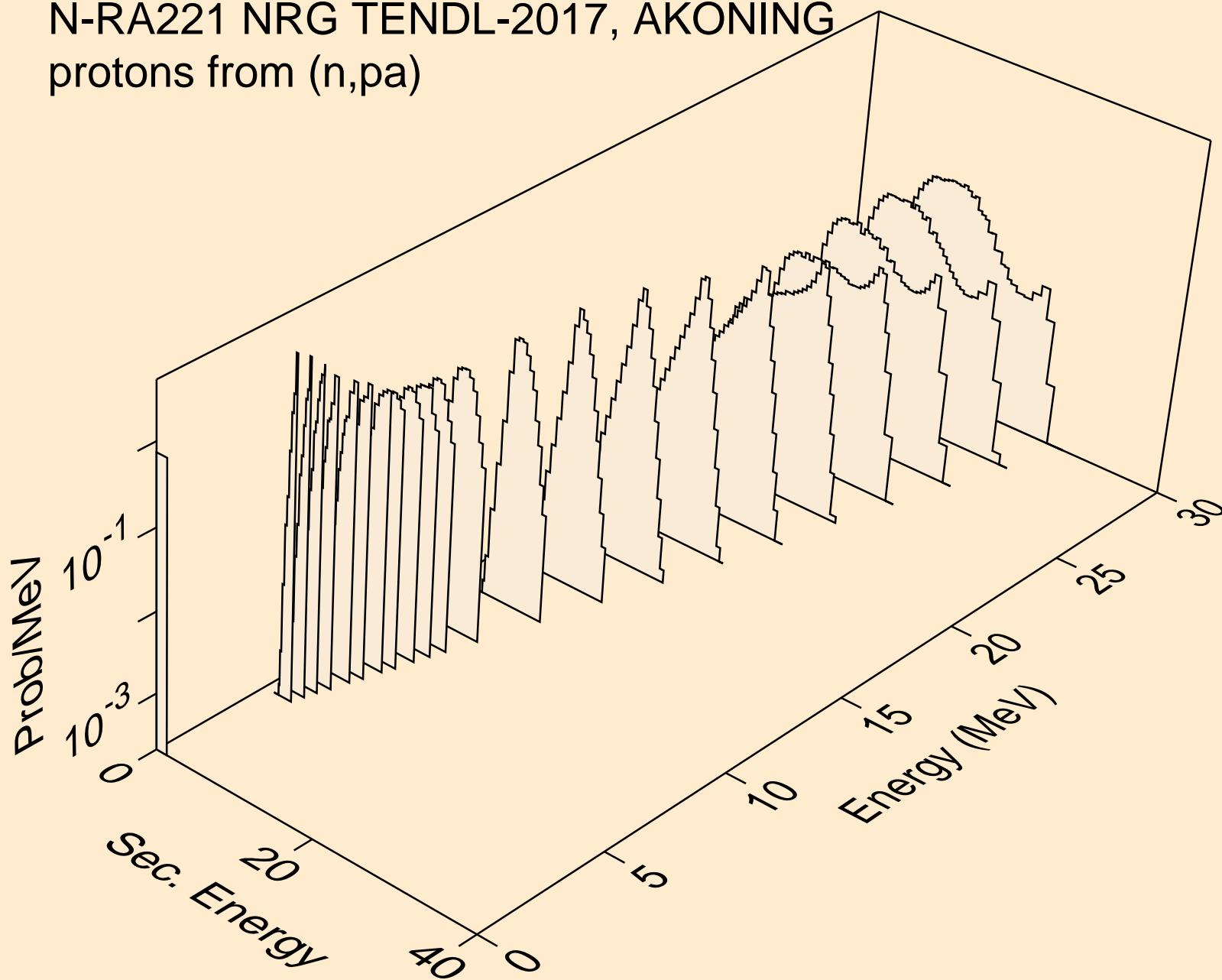
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protons from (n,p)



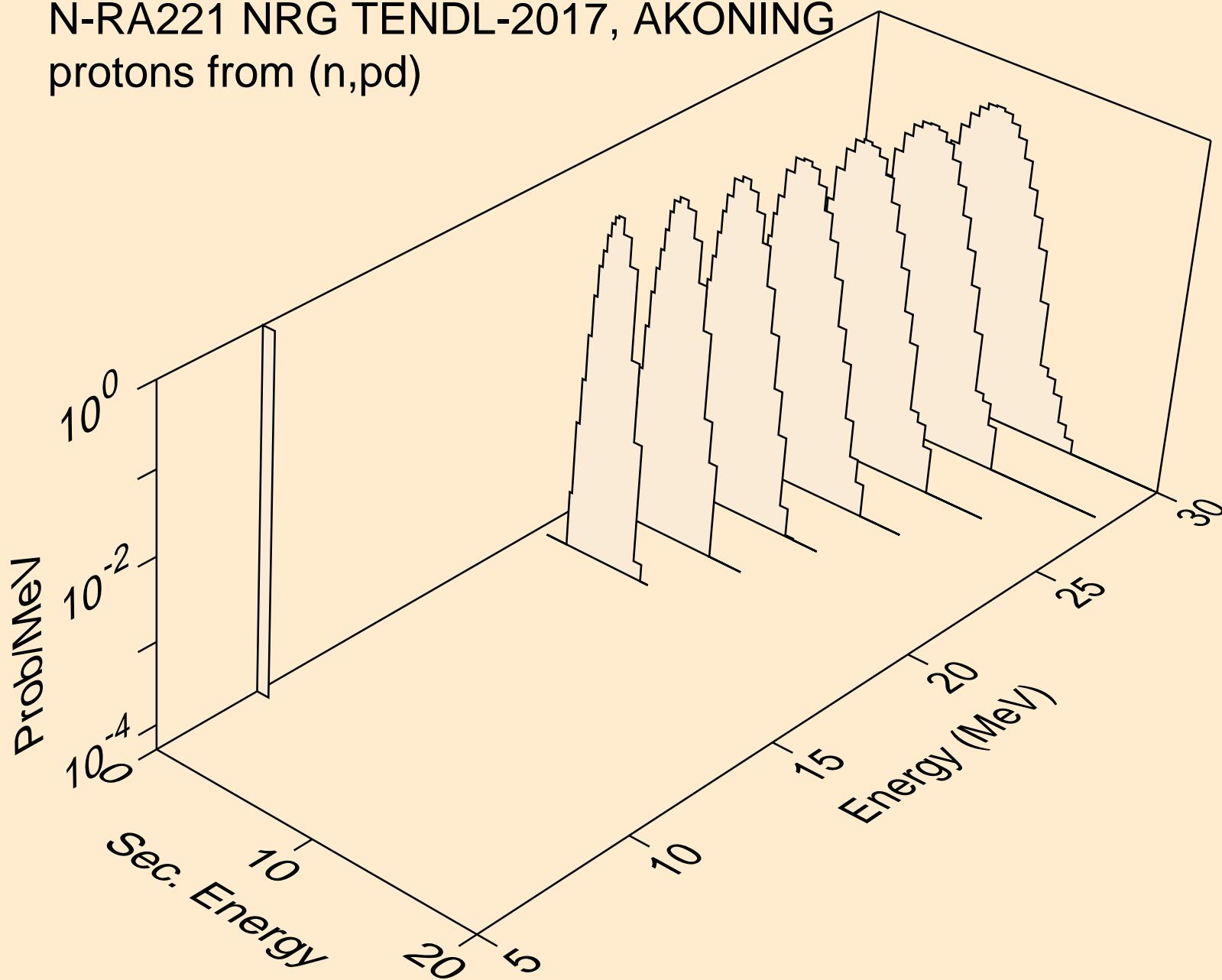
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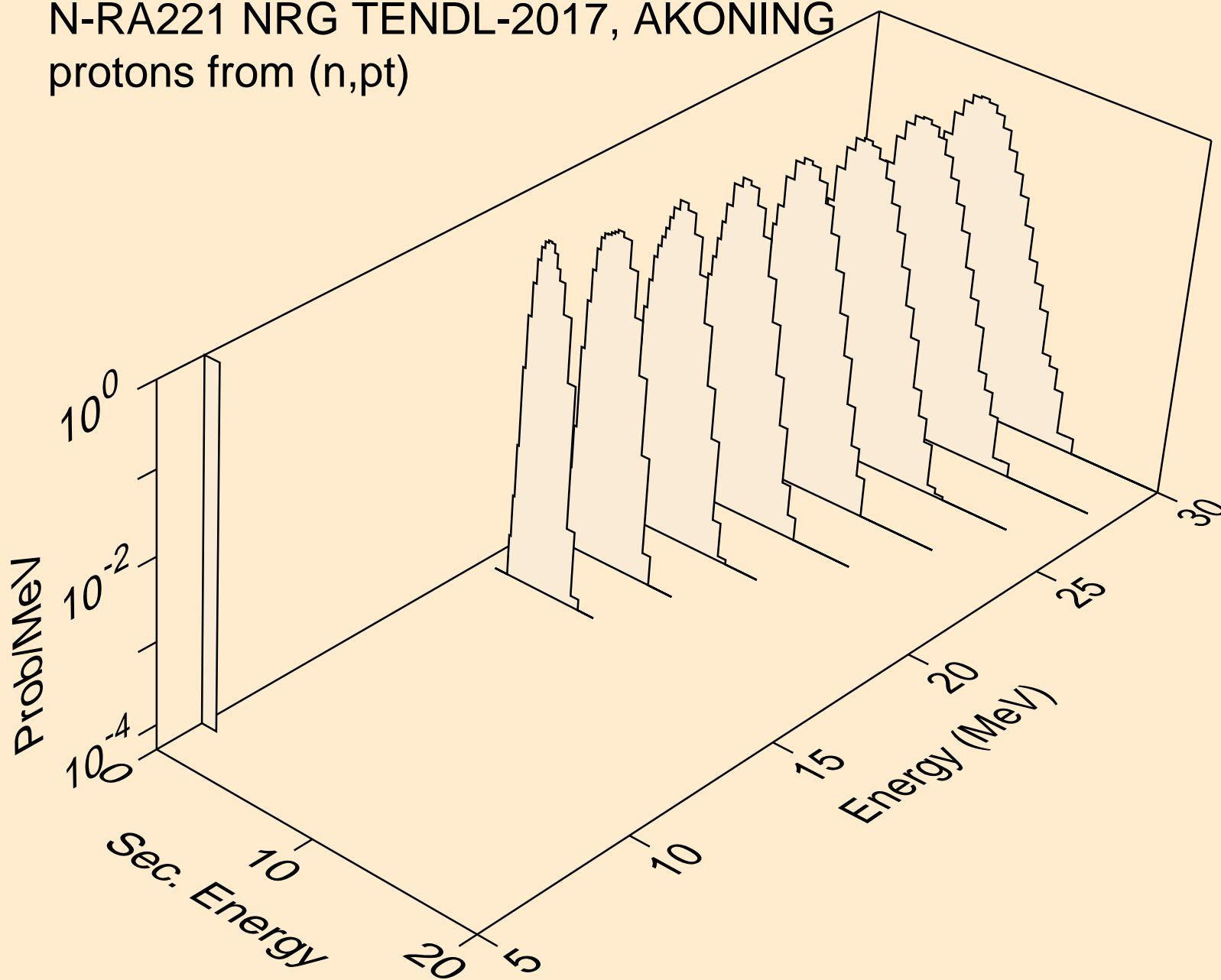
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protons from (n,pa)



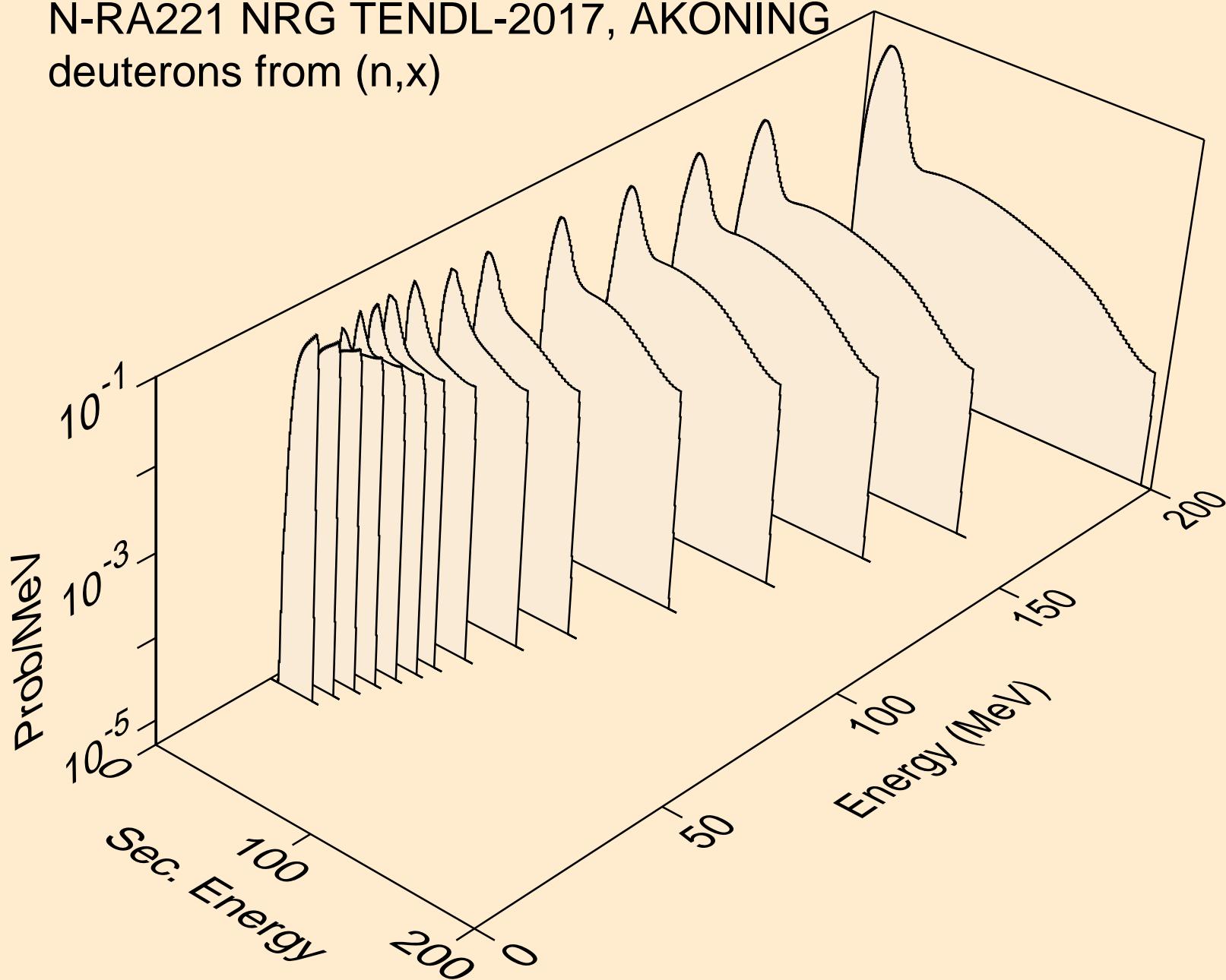
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protons from (n,pd)



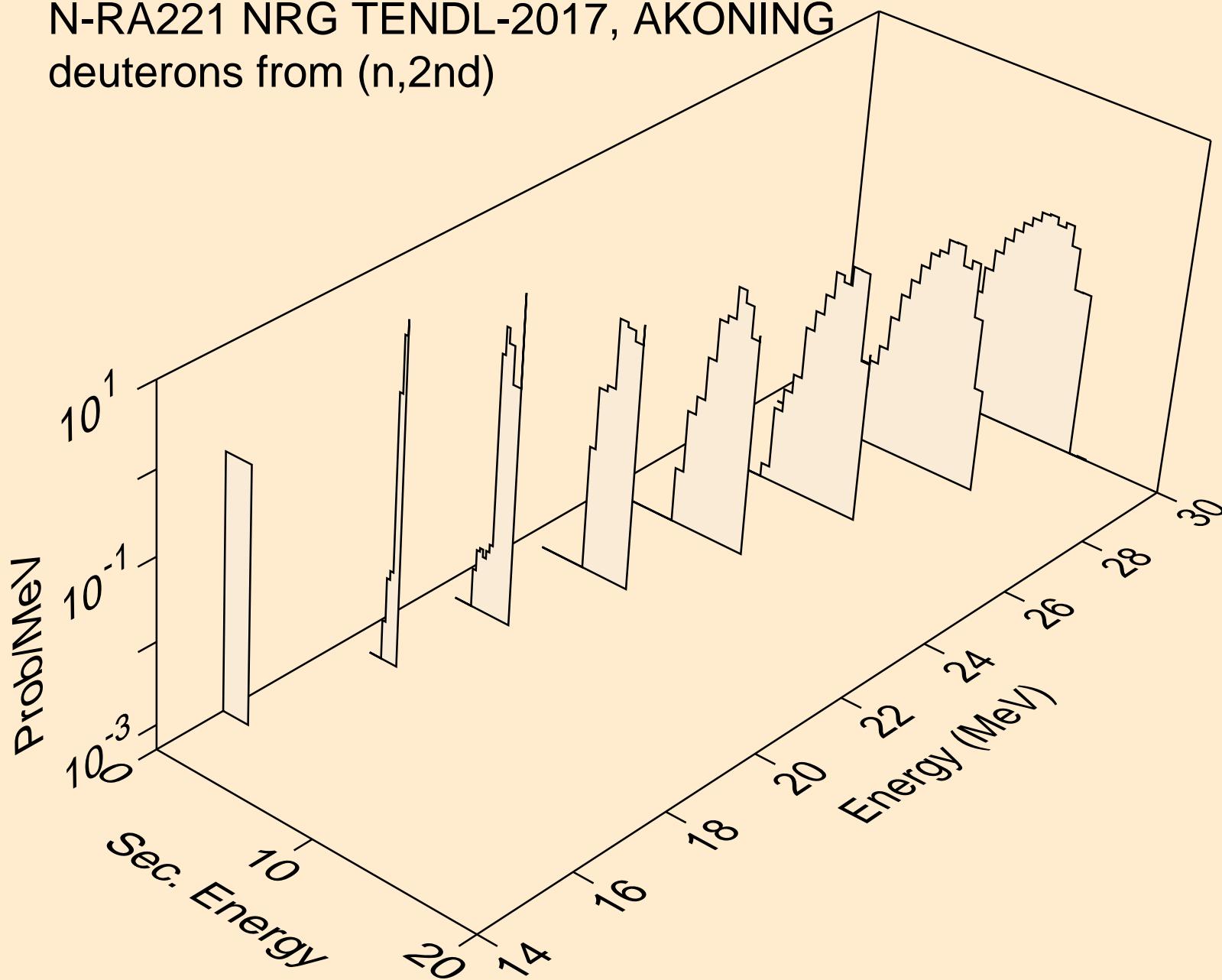
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protons from (n,pt)



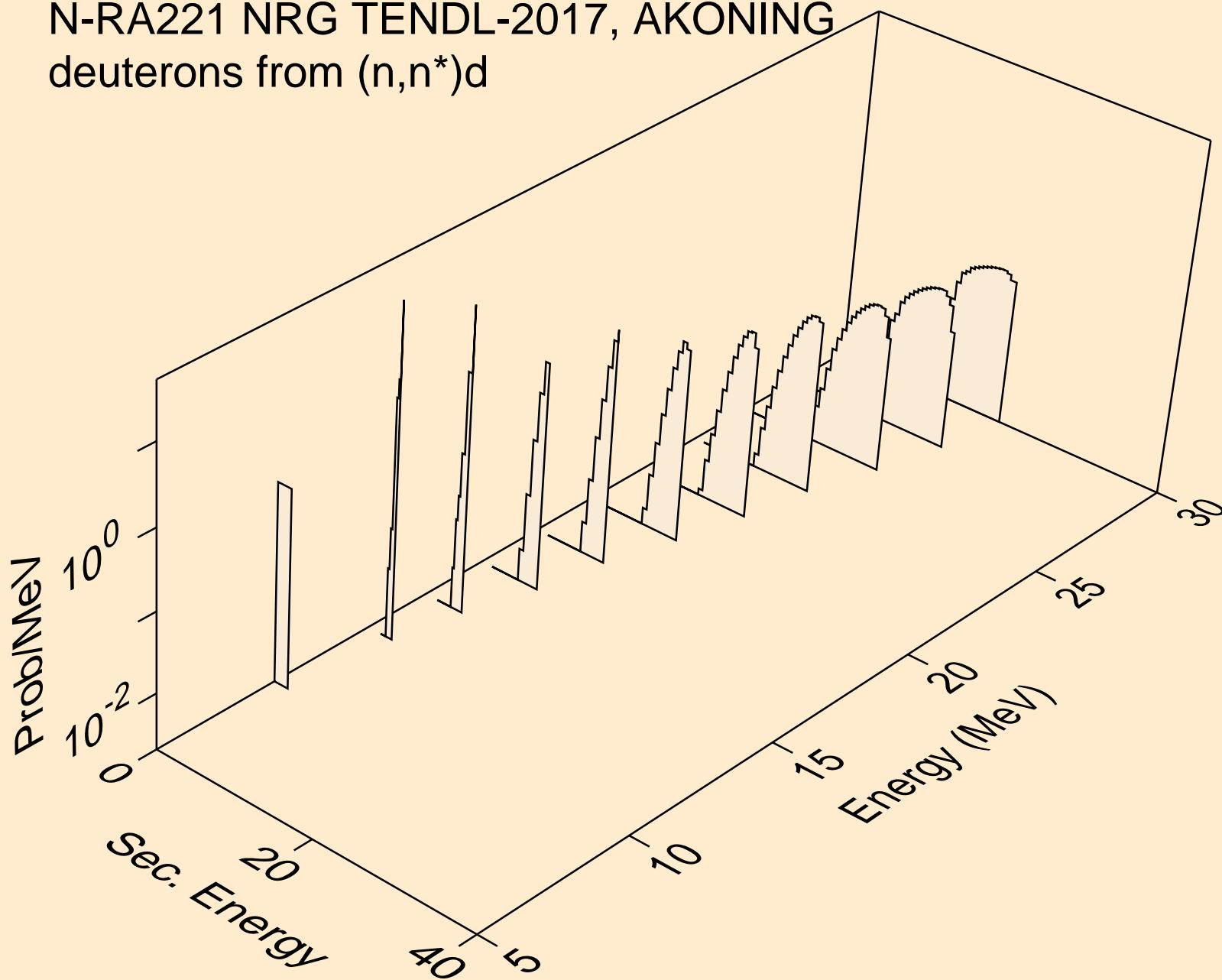
N-RA221 NRG TENDL-2017, AKONING  
deuterons from ( $n, x$ )



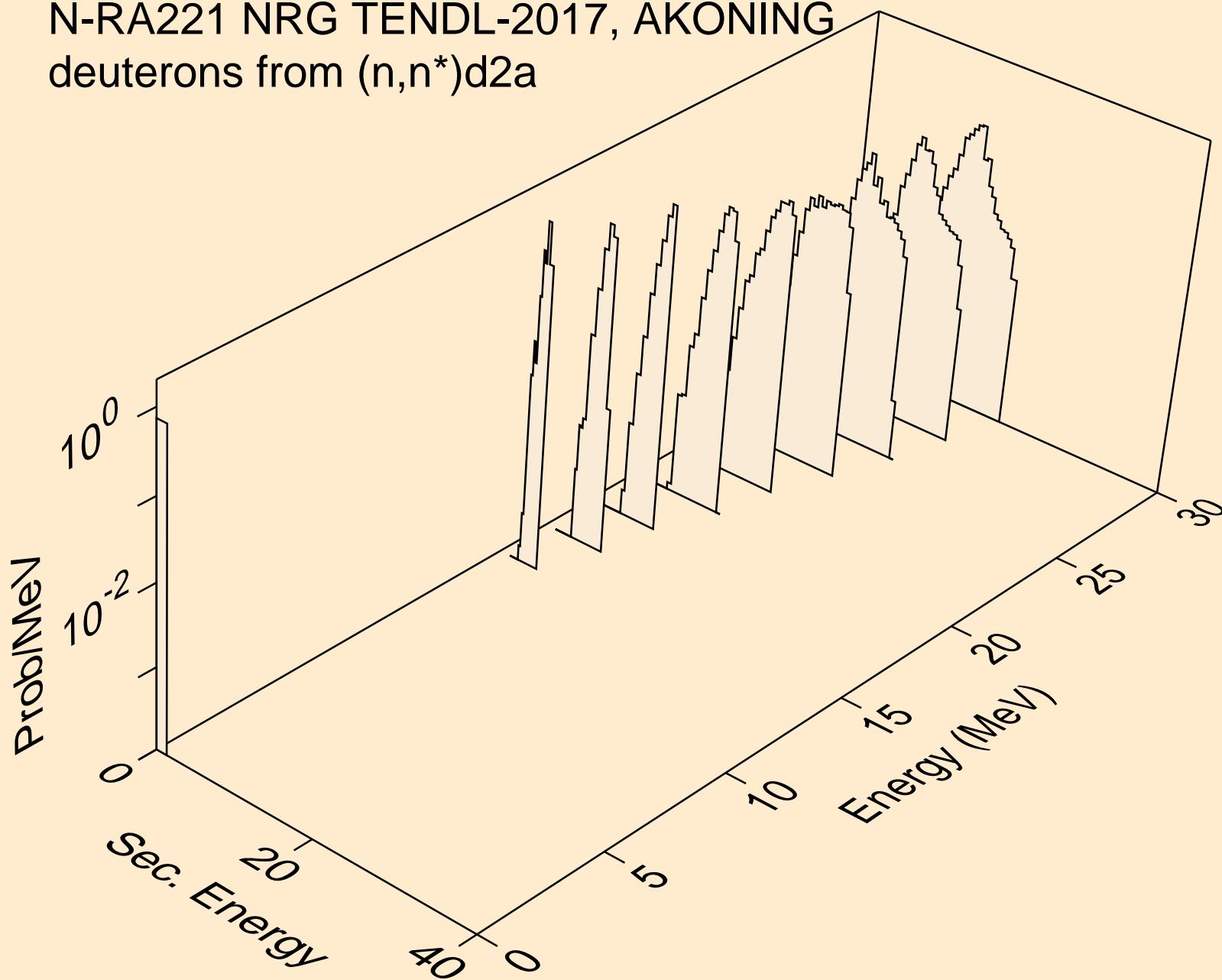
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deuterons from ( $n, 2nd$ )



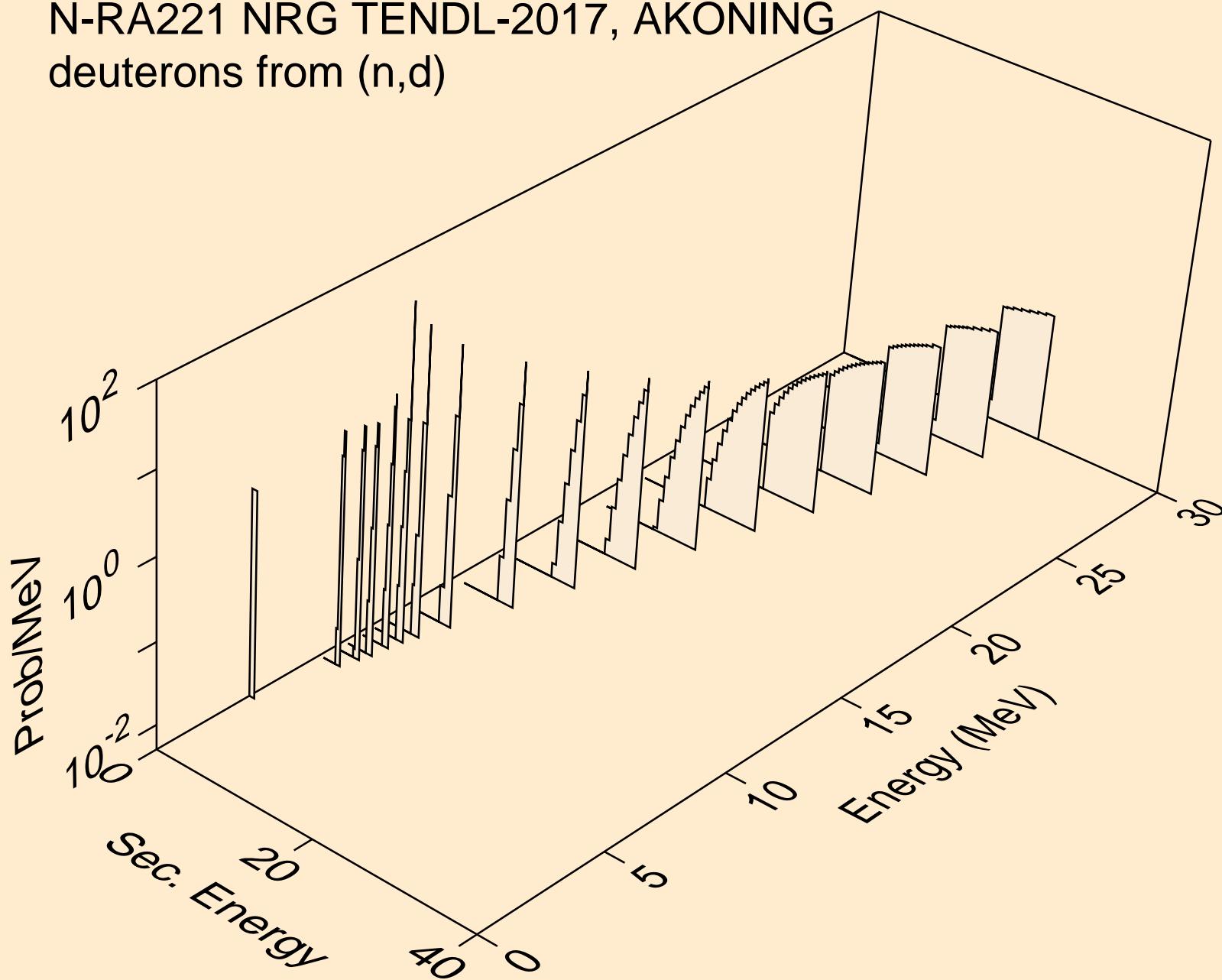
N-RA221 NRG TENDL-2017, AKONING  
deuterons from  $(n,n^*)d$



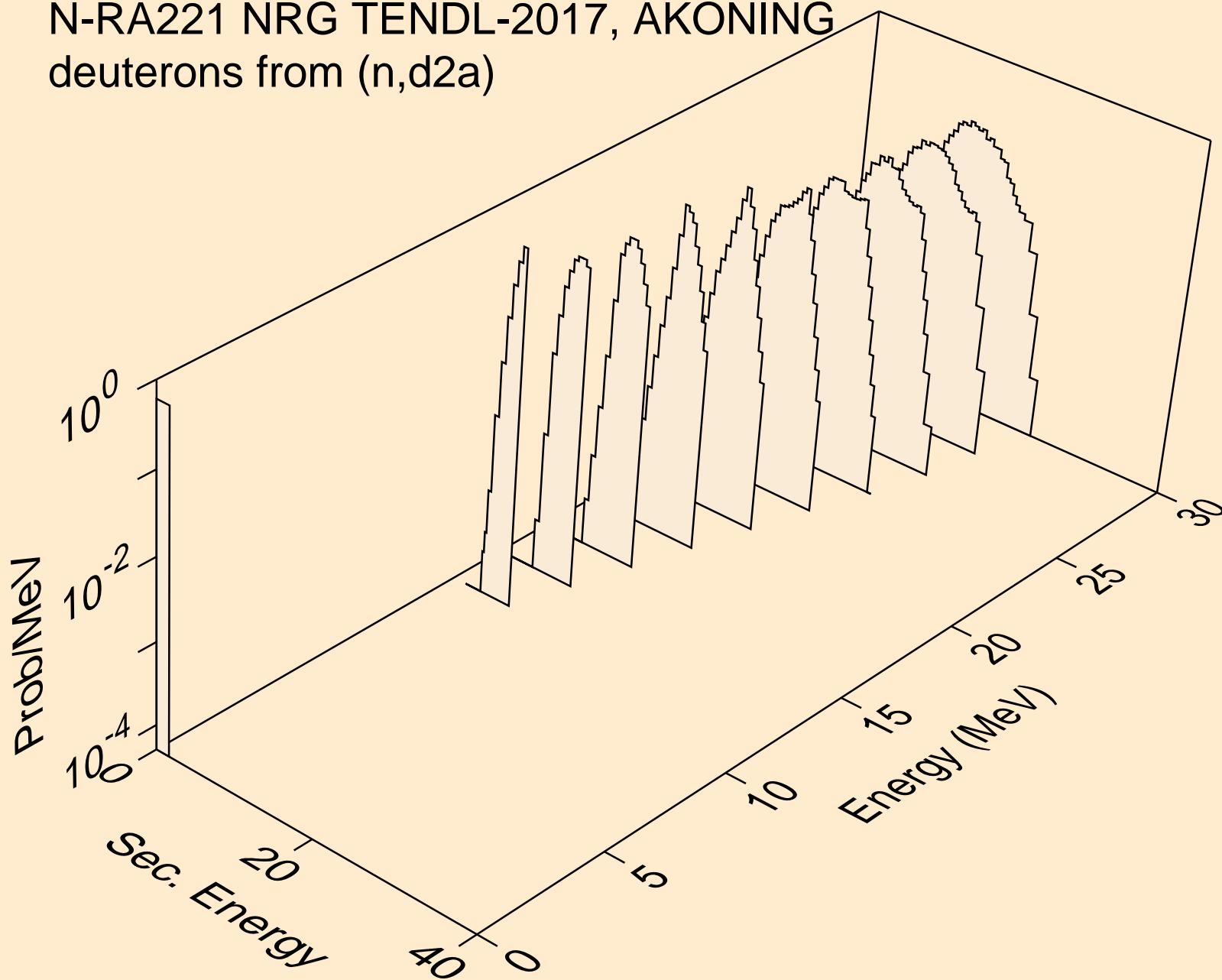
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deuterons from  $(n,n^*)d2a$



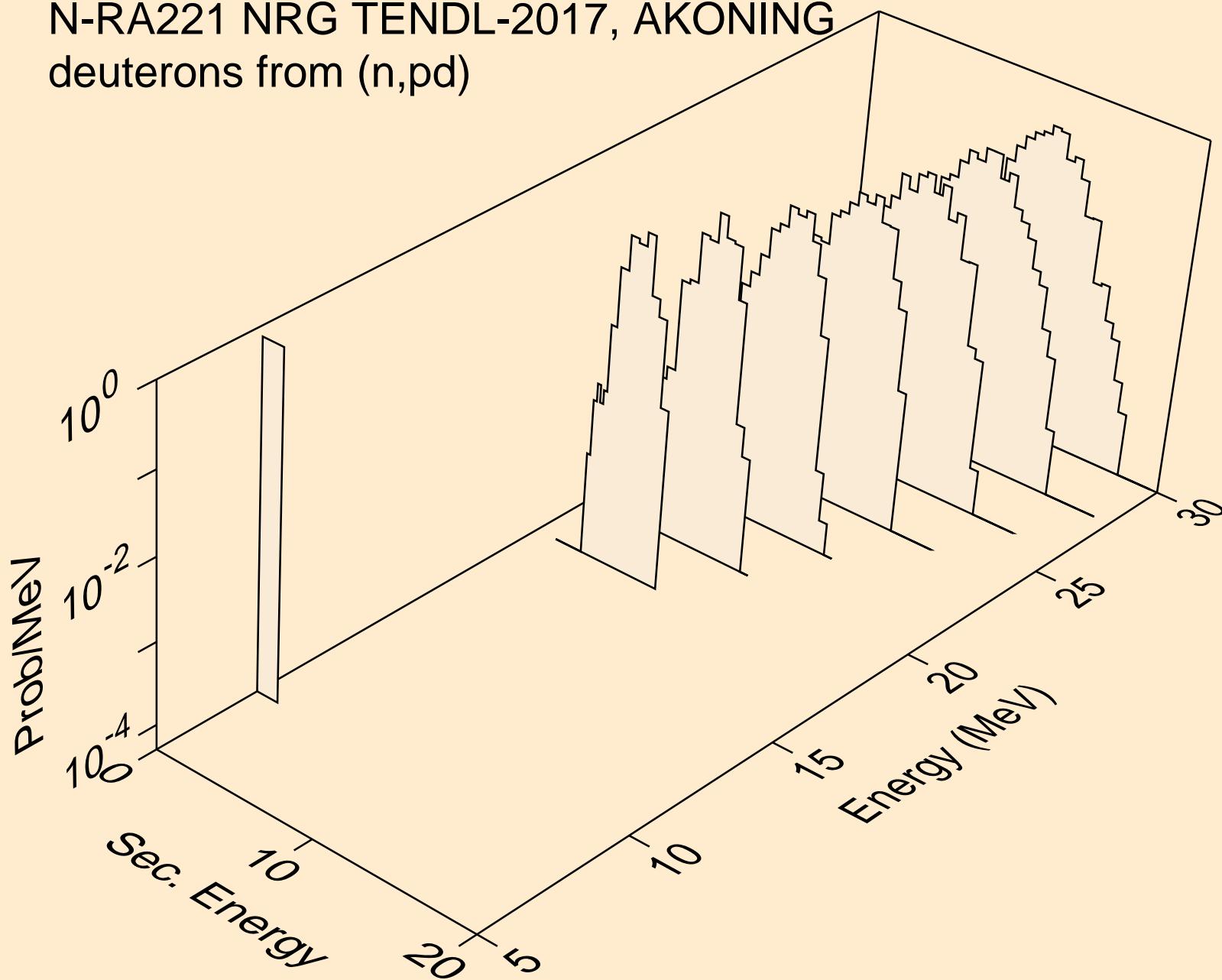
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deuterons from ( $n,d$ )



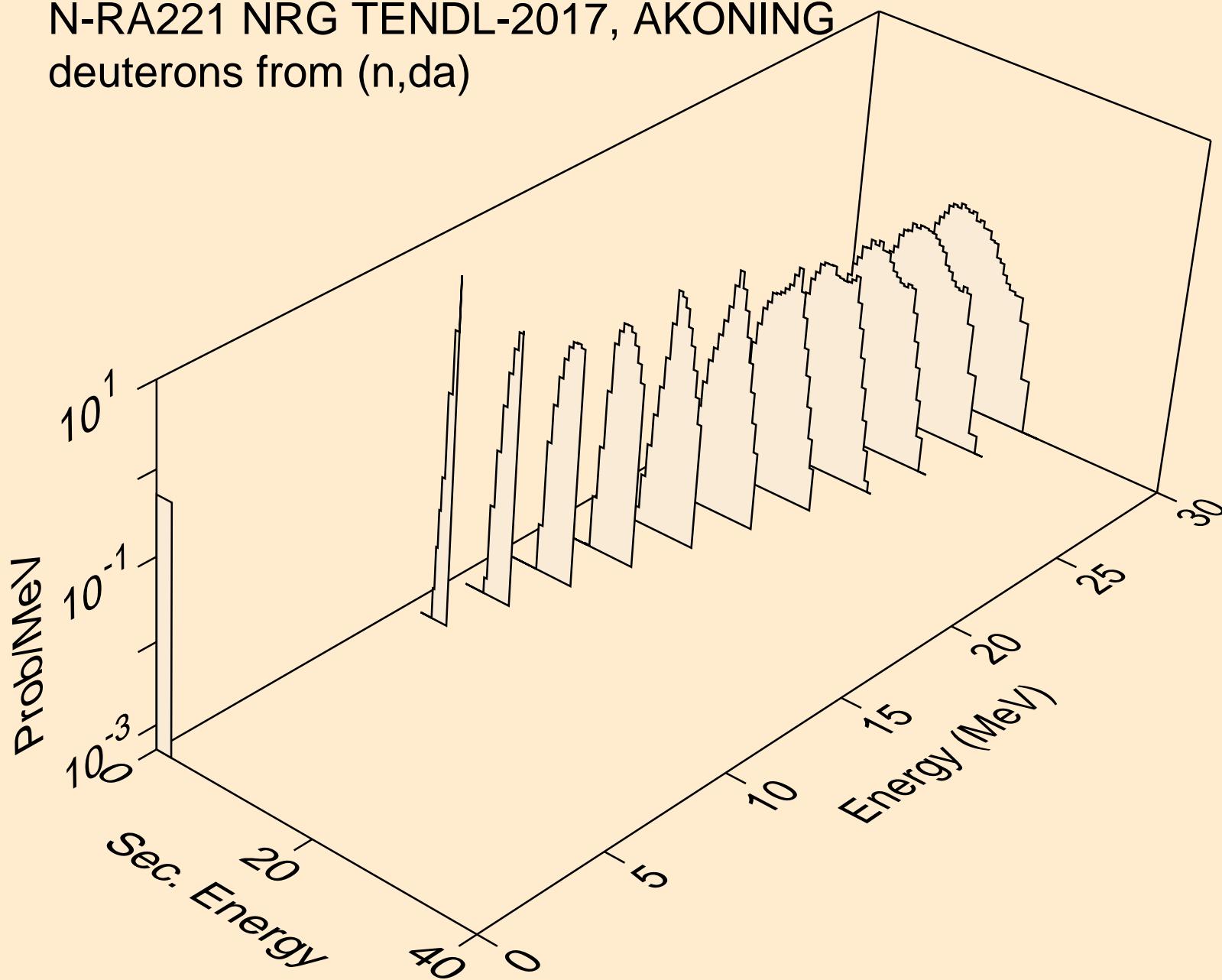
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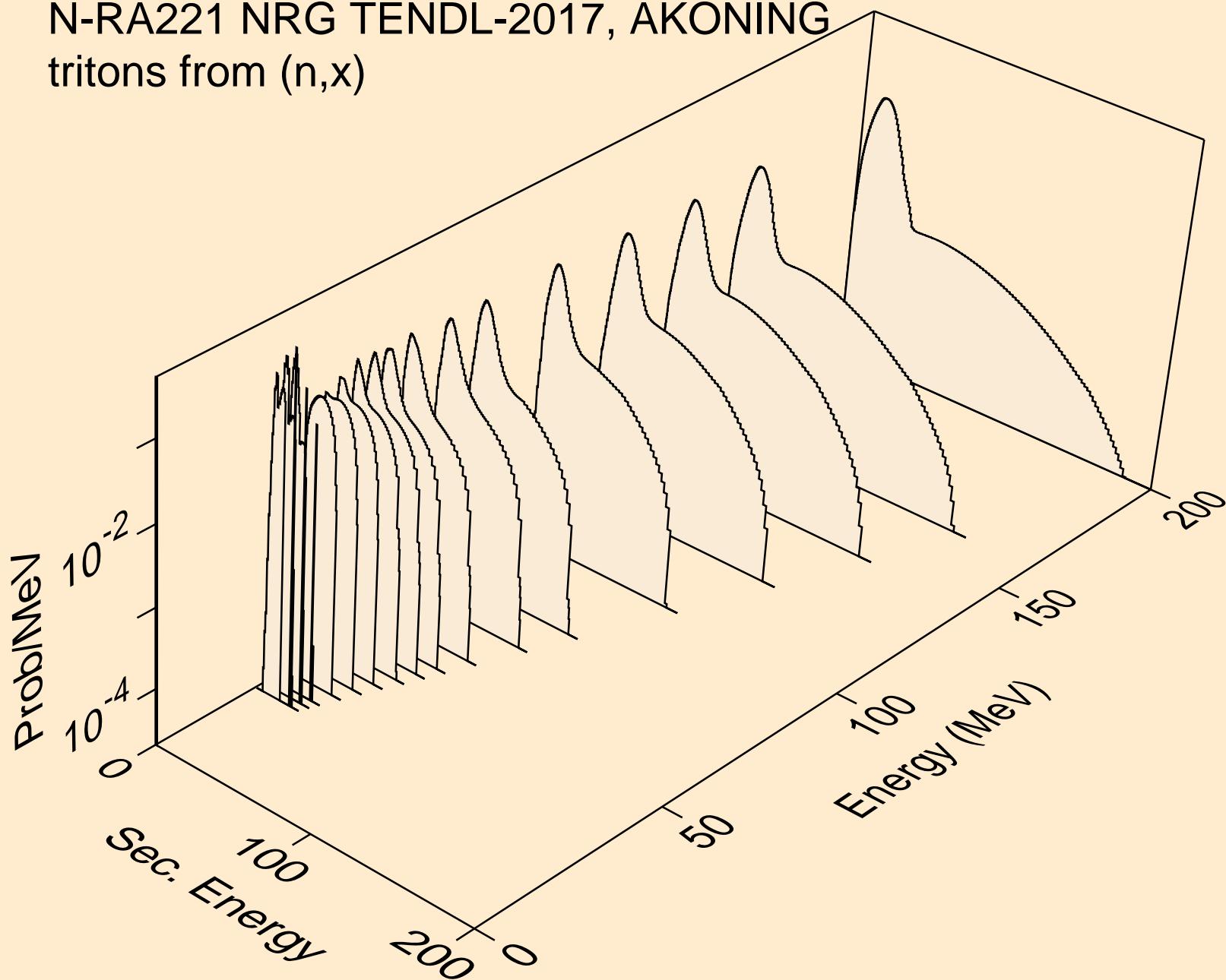
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deuterons from (n,pd)



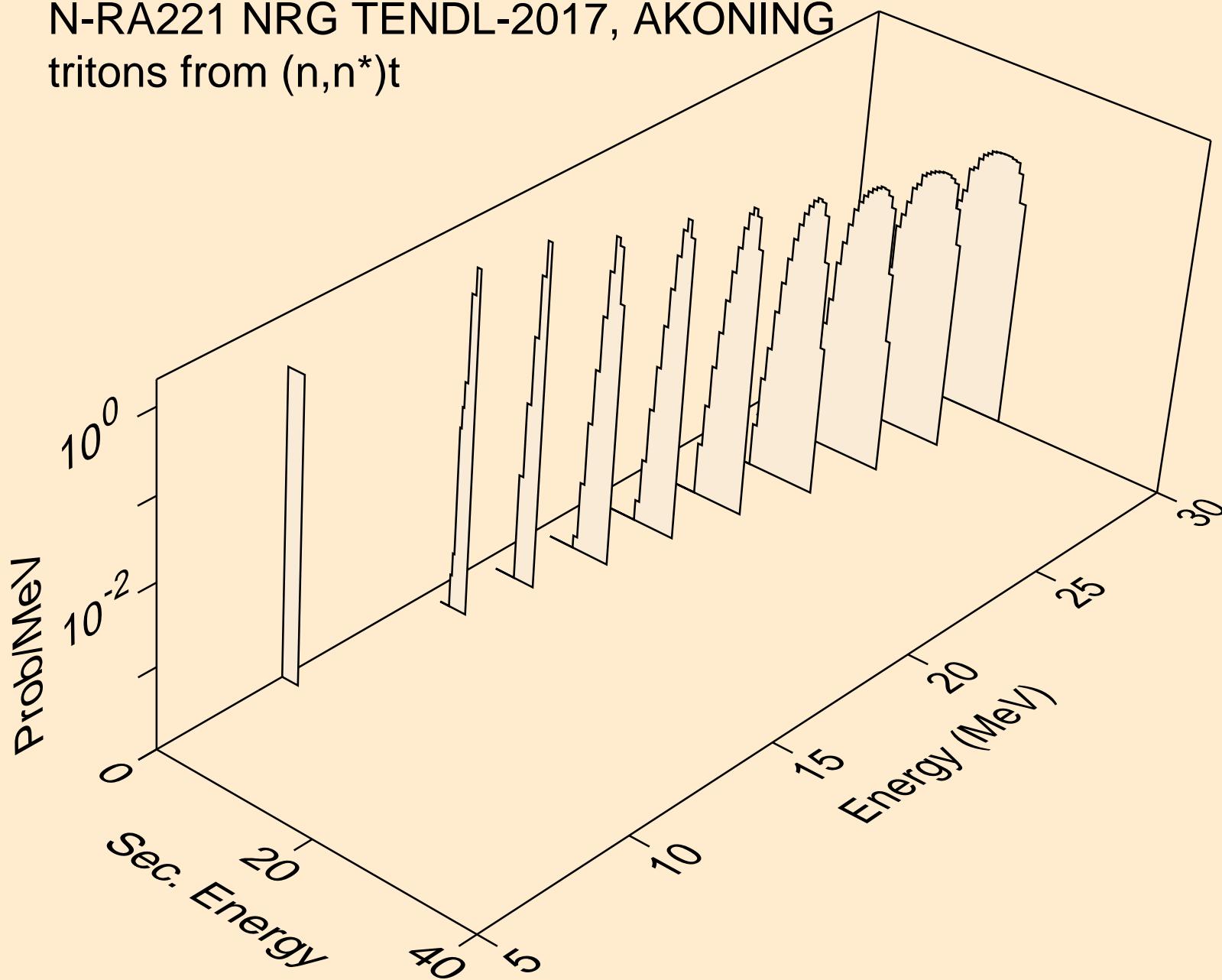
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deuterons from (n,da)



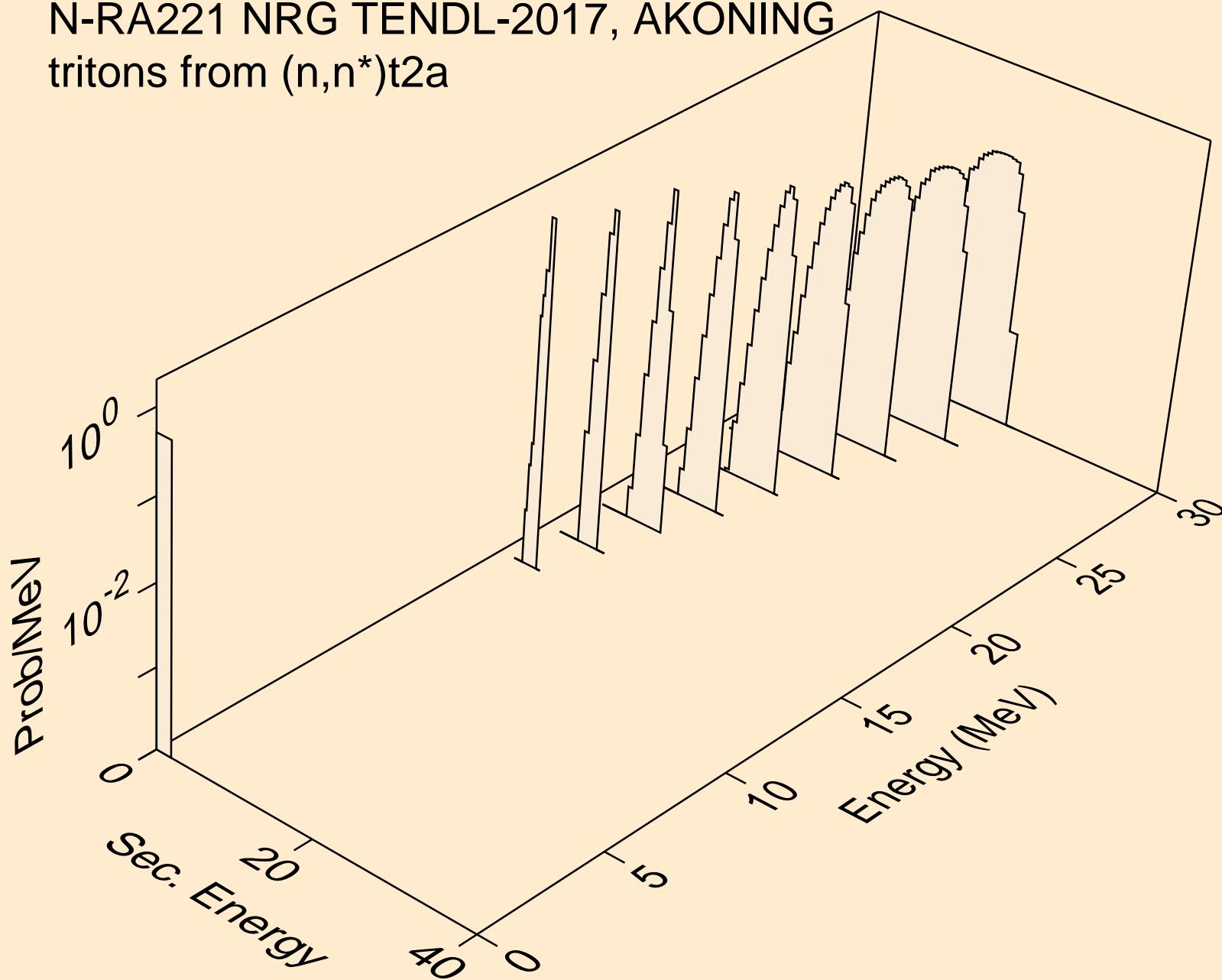
N-RA221 NRG TENDL-2017, AKONING  
tritons from ( $n,x$ )



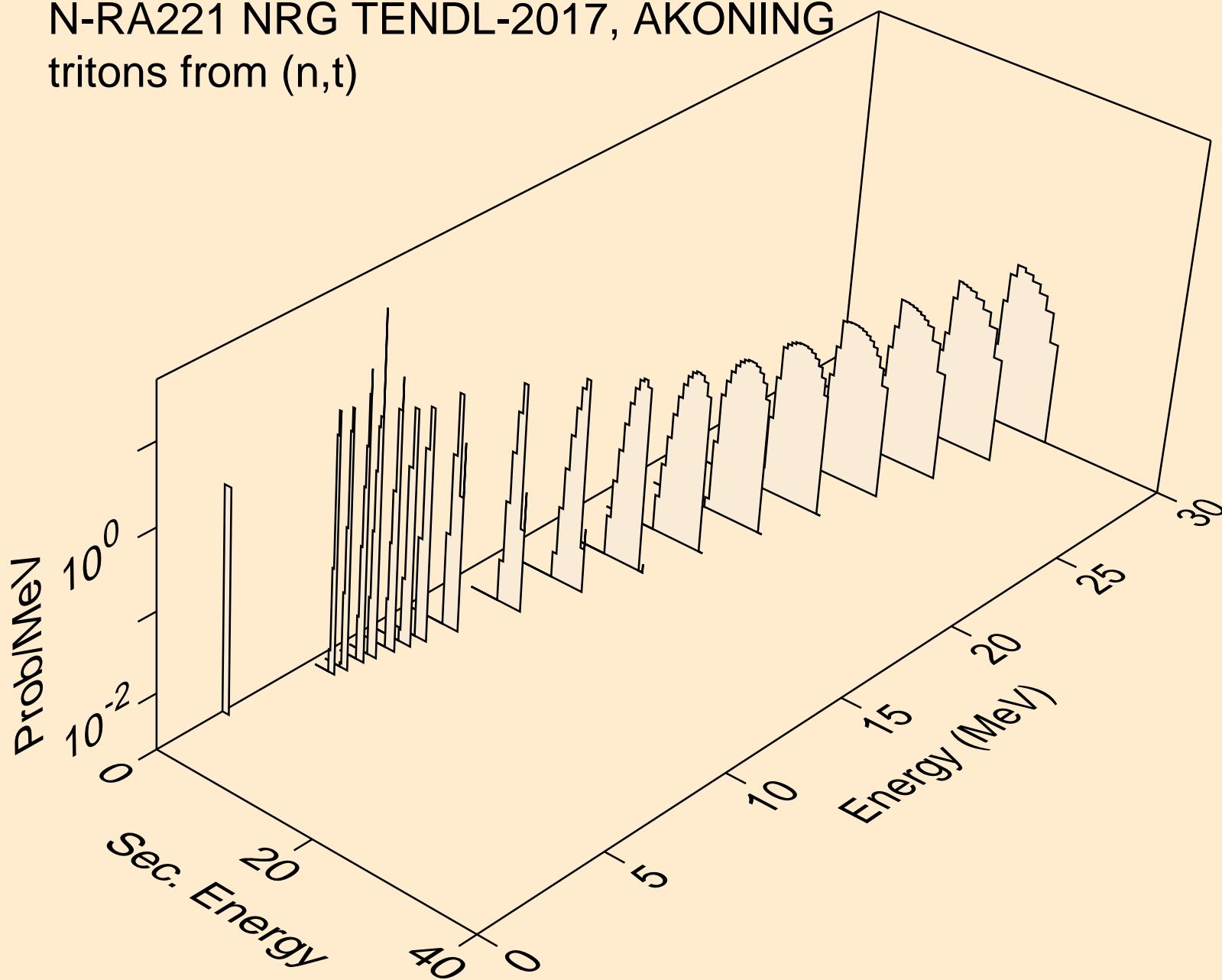
N-RA221 NRG TENDL-2017, AKONING  
tritons from  $(n,n^*)t$



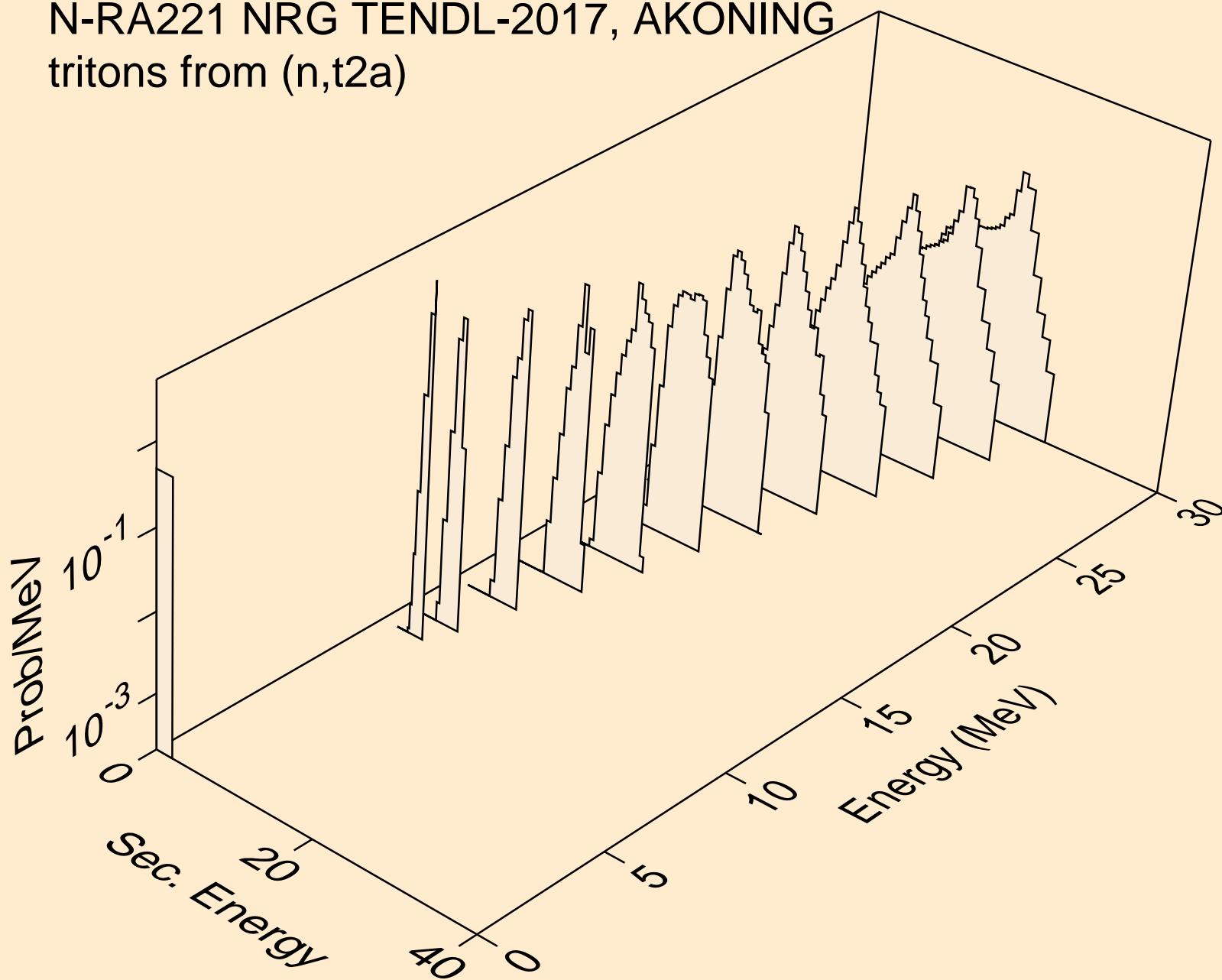
N-RA221 NRG TENDL-2017, AKONING  
tritons from  $(n,n^*)t2a$



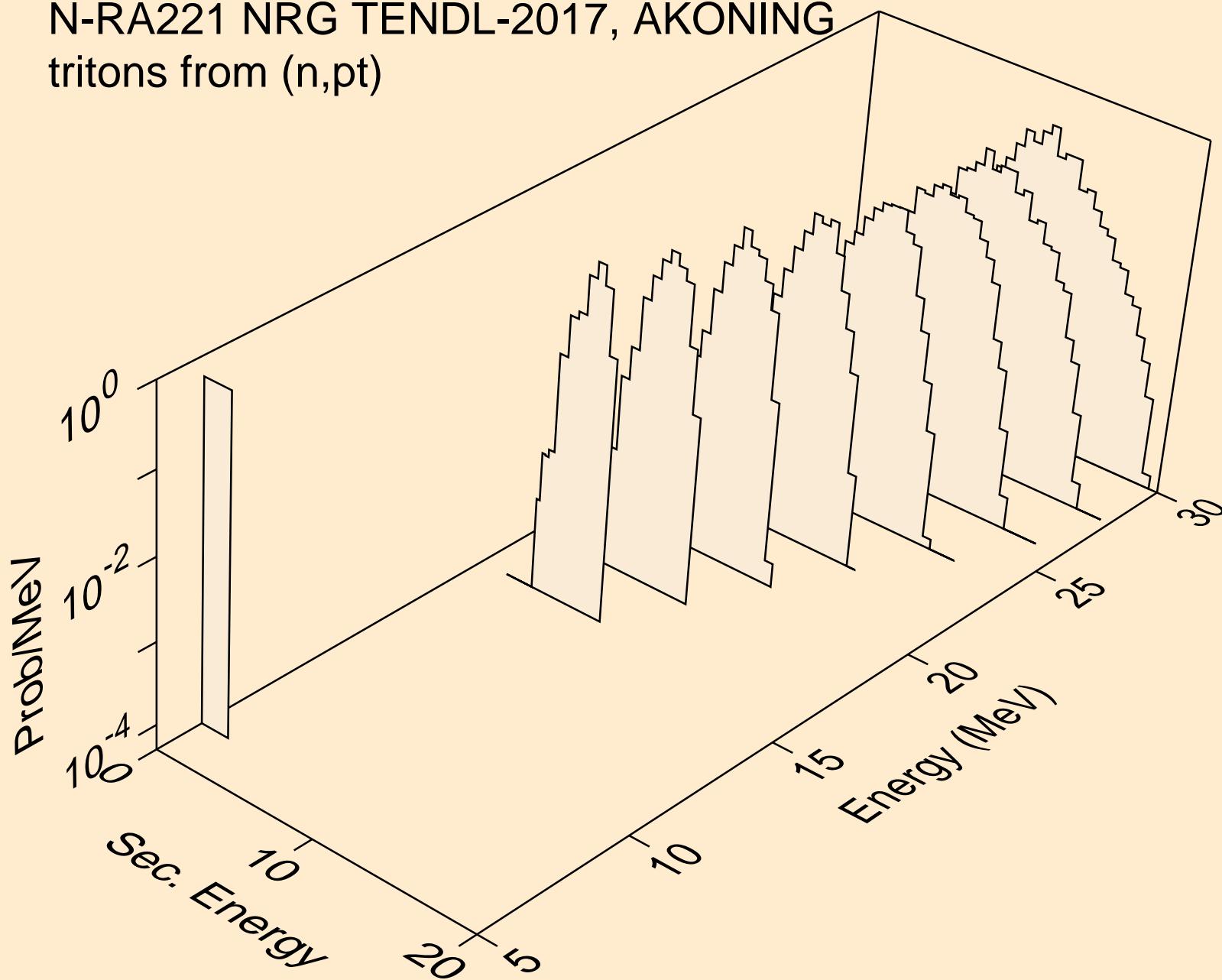
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tritons from (n,t)



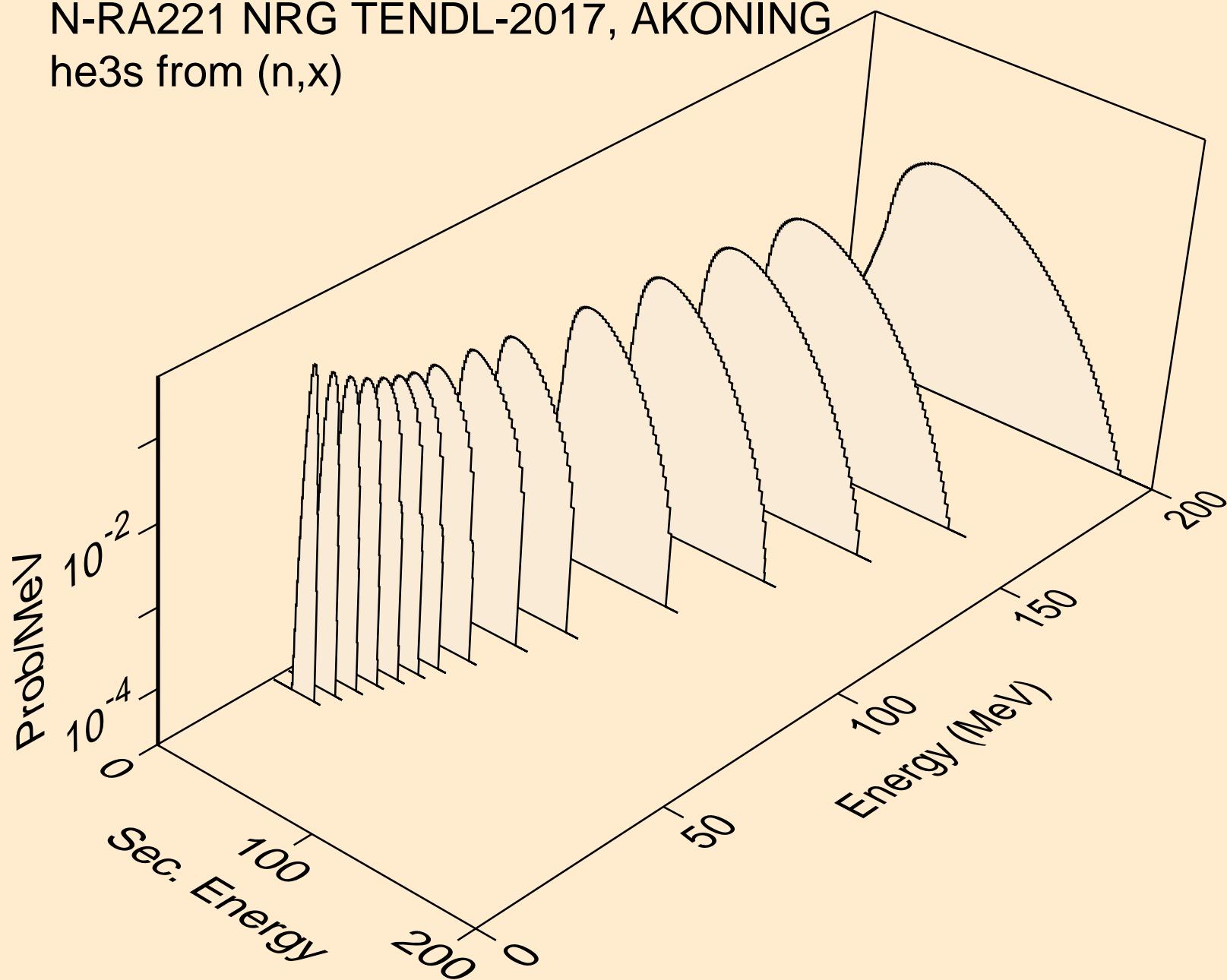
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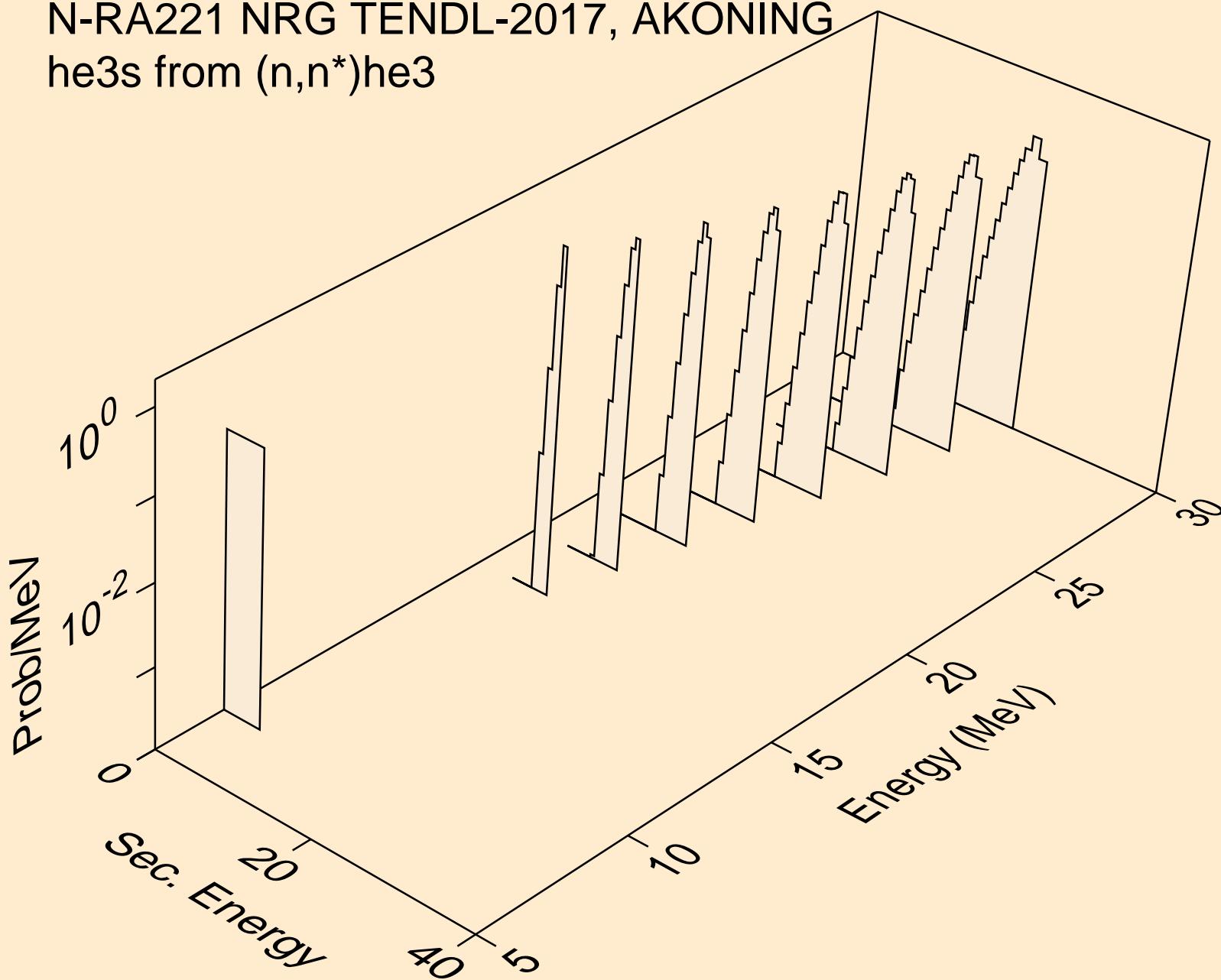
N-RA221 NRG TENDL-2017, AKONING  
tritons from (n,pt)



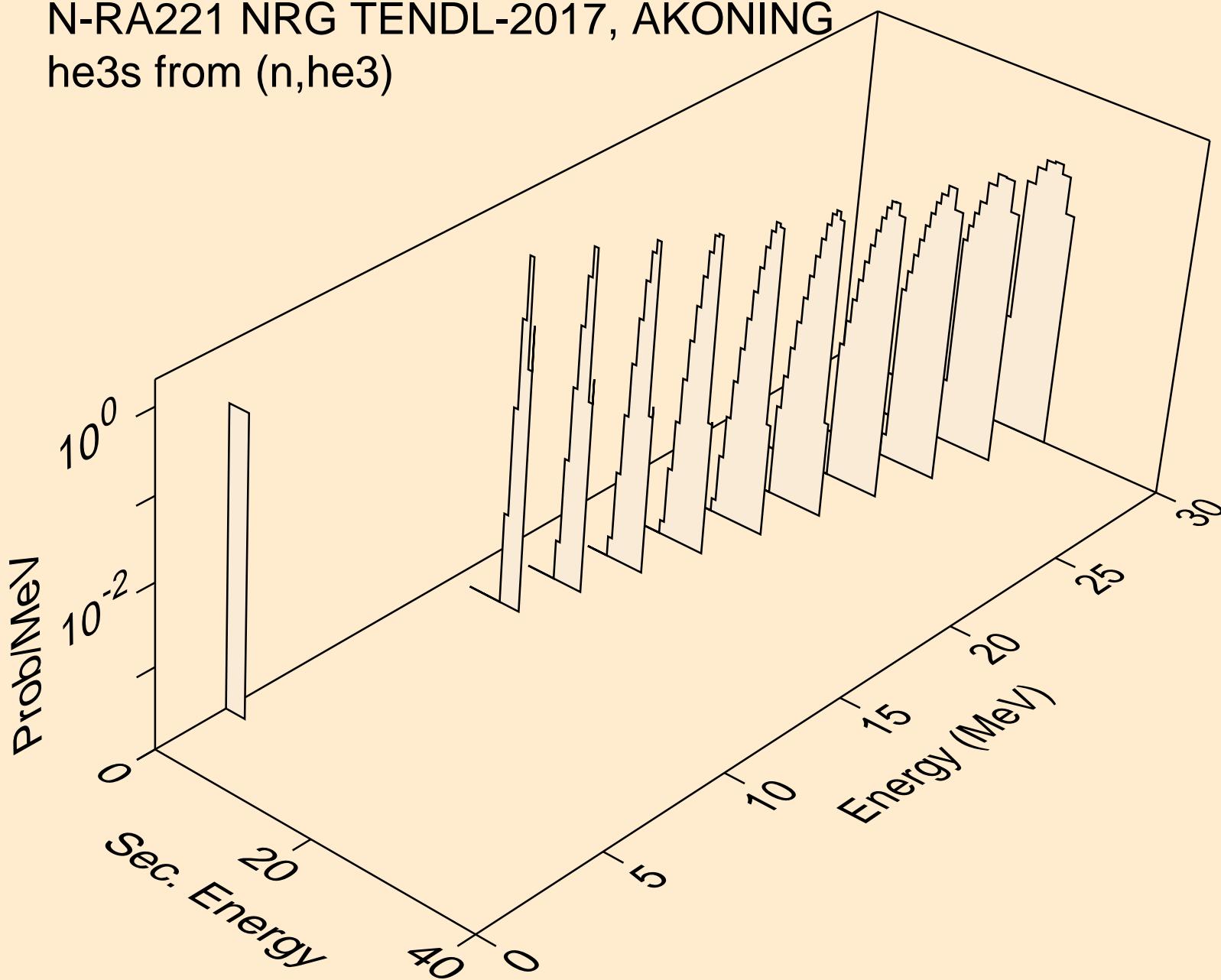
N-RA221 NRG TENDL-2017, AKONING  
he3s from (n,x)



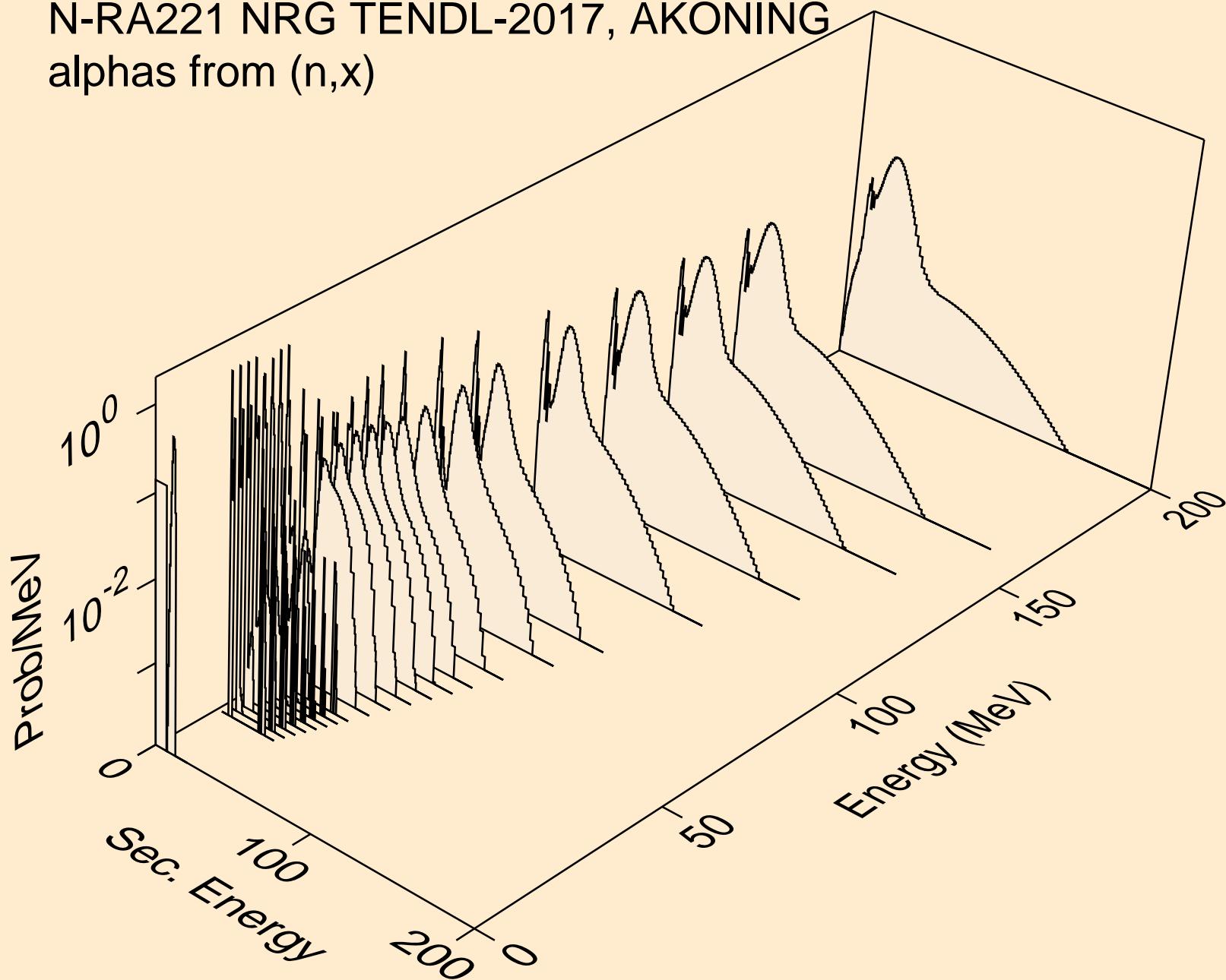
N-RA221 NRG TENDL-2017, AKONING  
he3s from  $(n,n^*)\text{he3}$



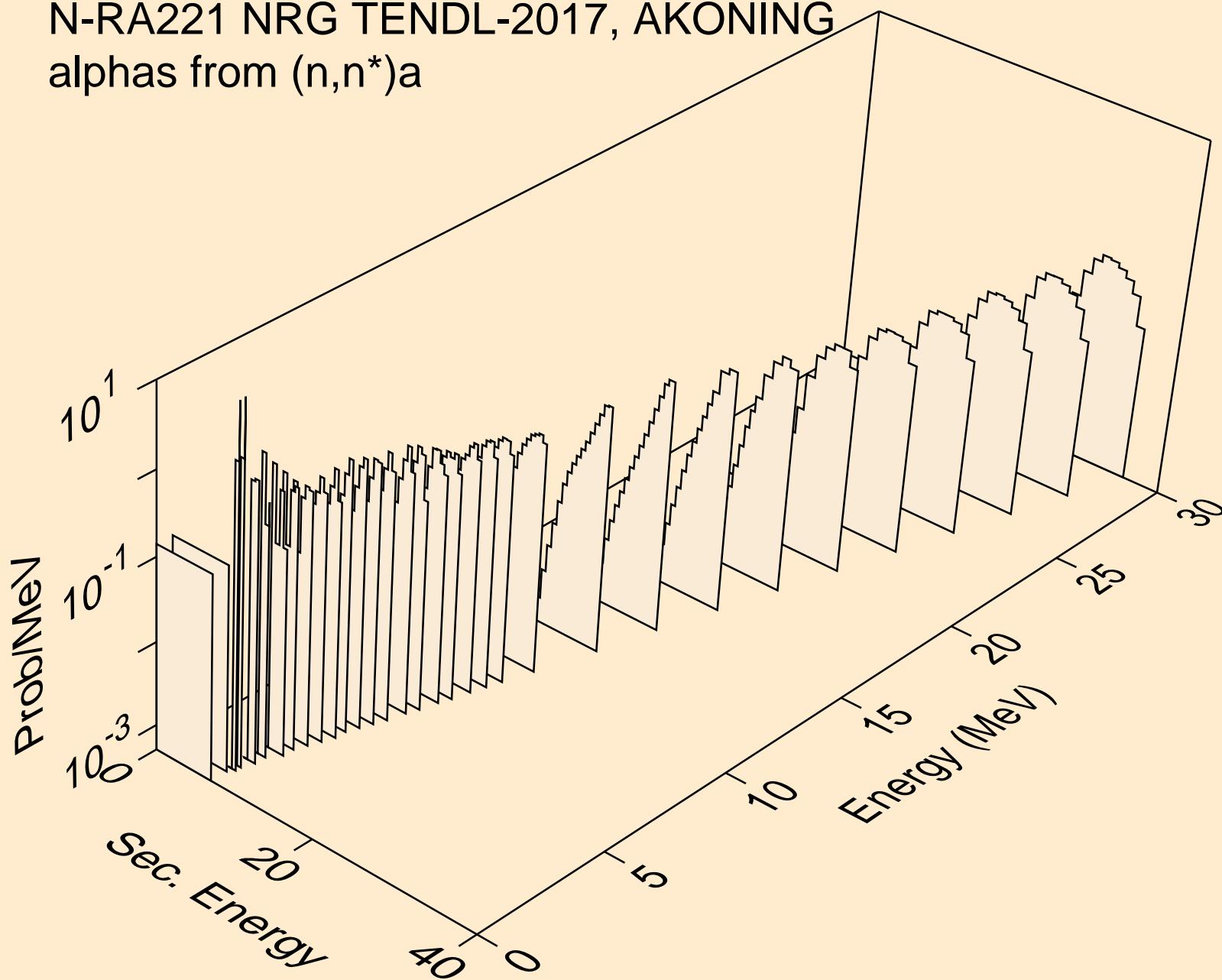
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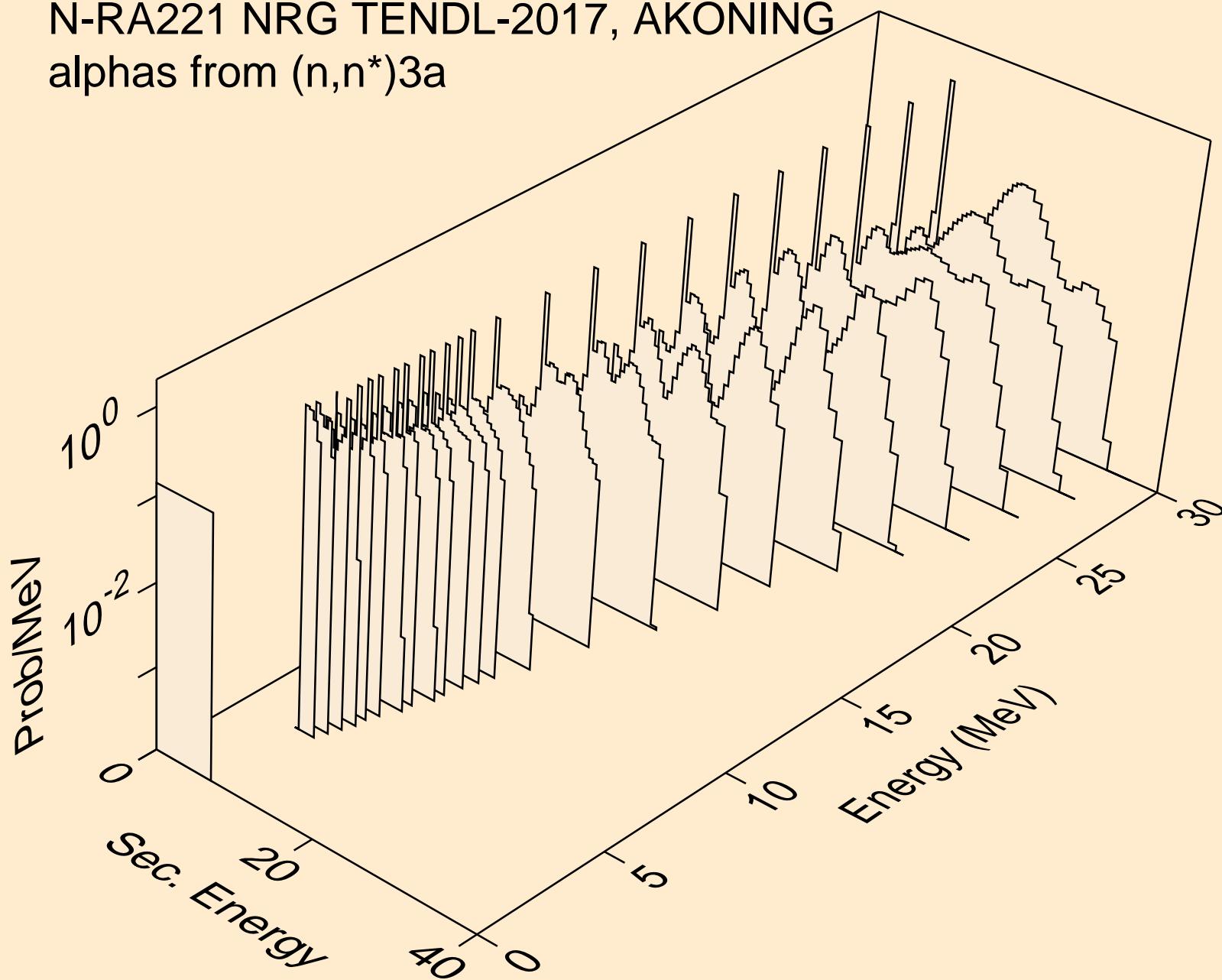
N-RA221 NRG TENDL-2017, AKONING  
alphas from (n,x)



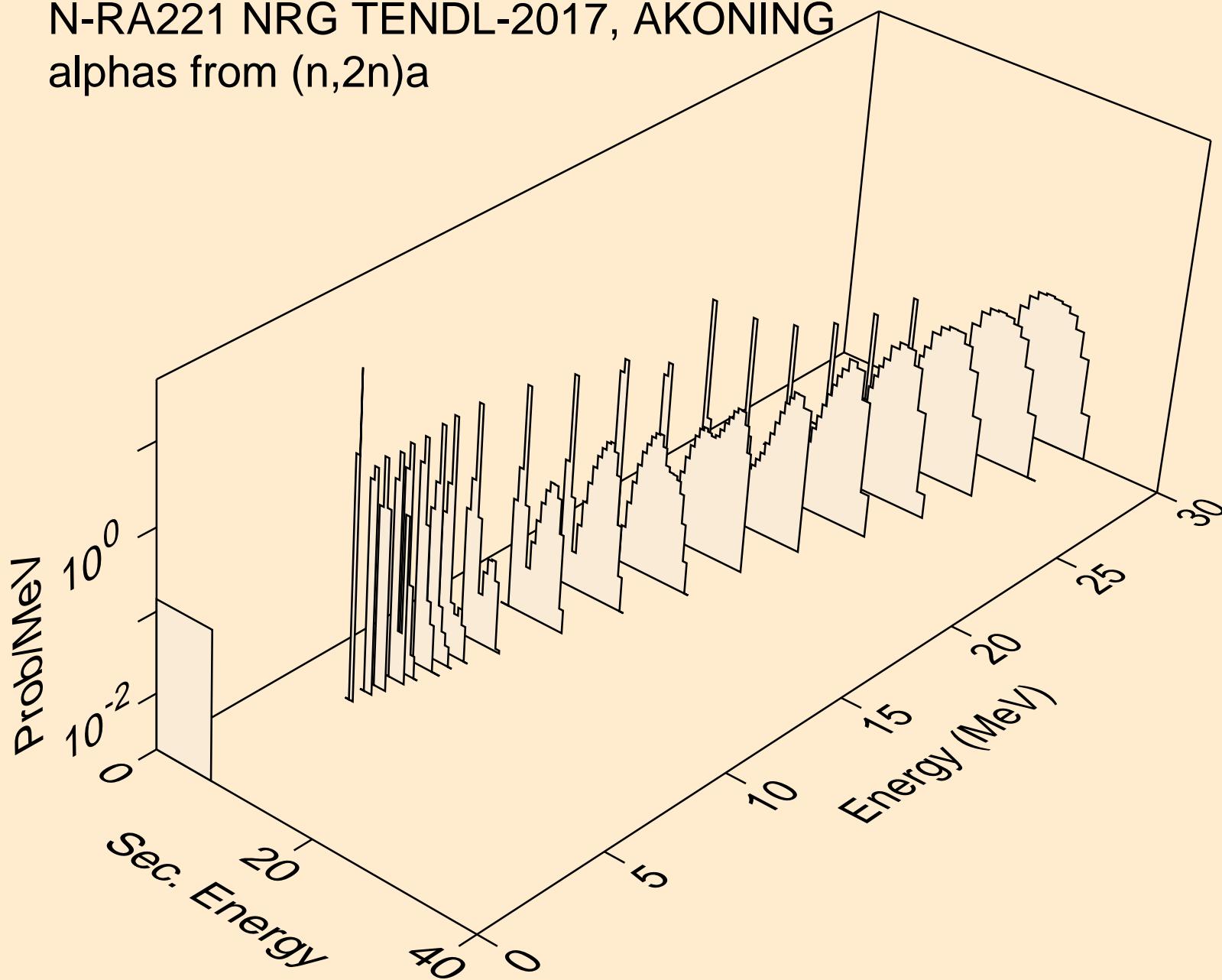
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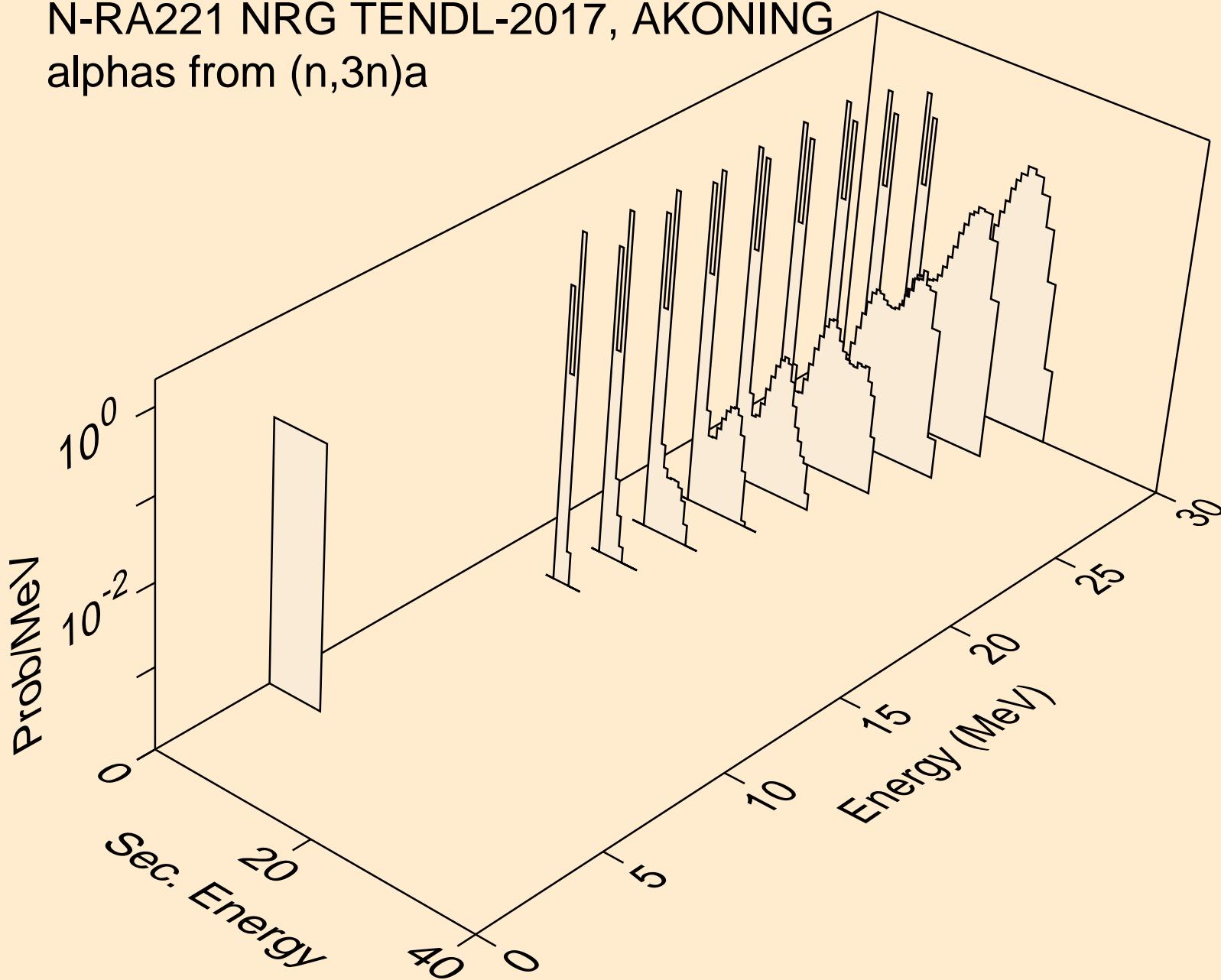
N-RA221 NRG TENDL-2017, AKONING  
alphas from  $(n,n^*)3a$



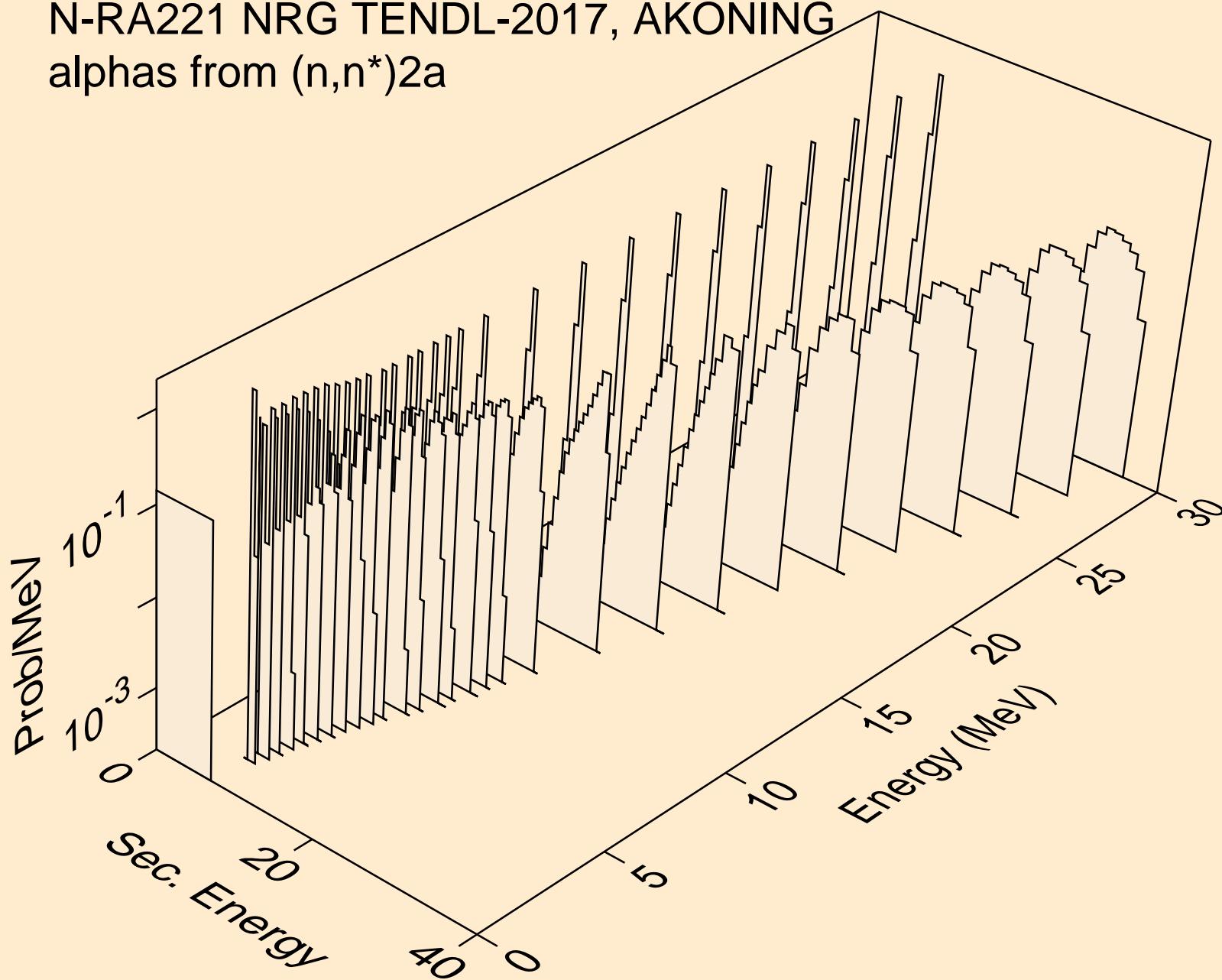
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alphas from ( $n,2n$ )a



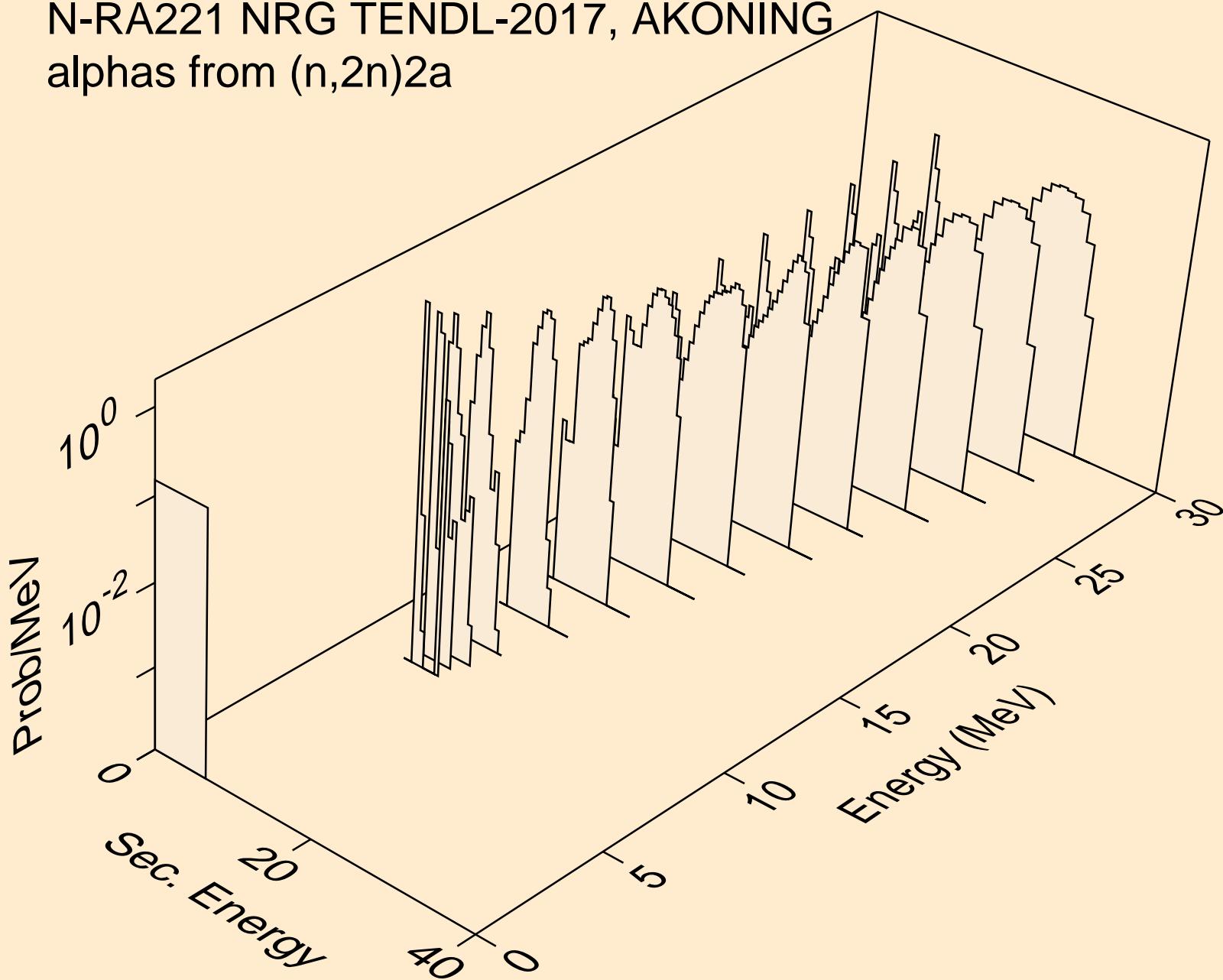
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alphas from ( $n,3n$ )a



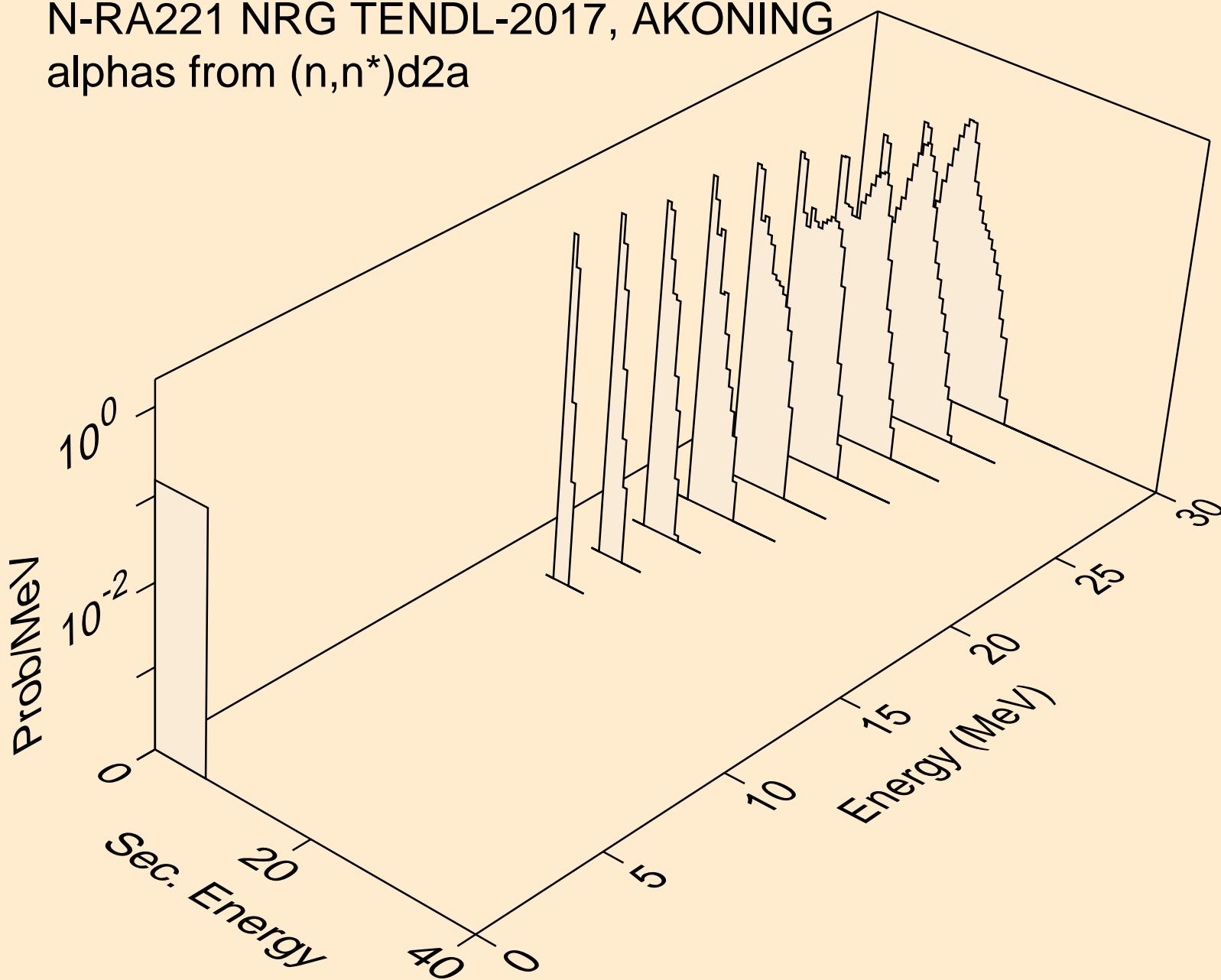
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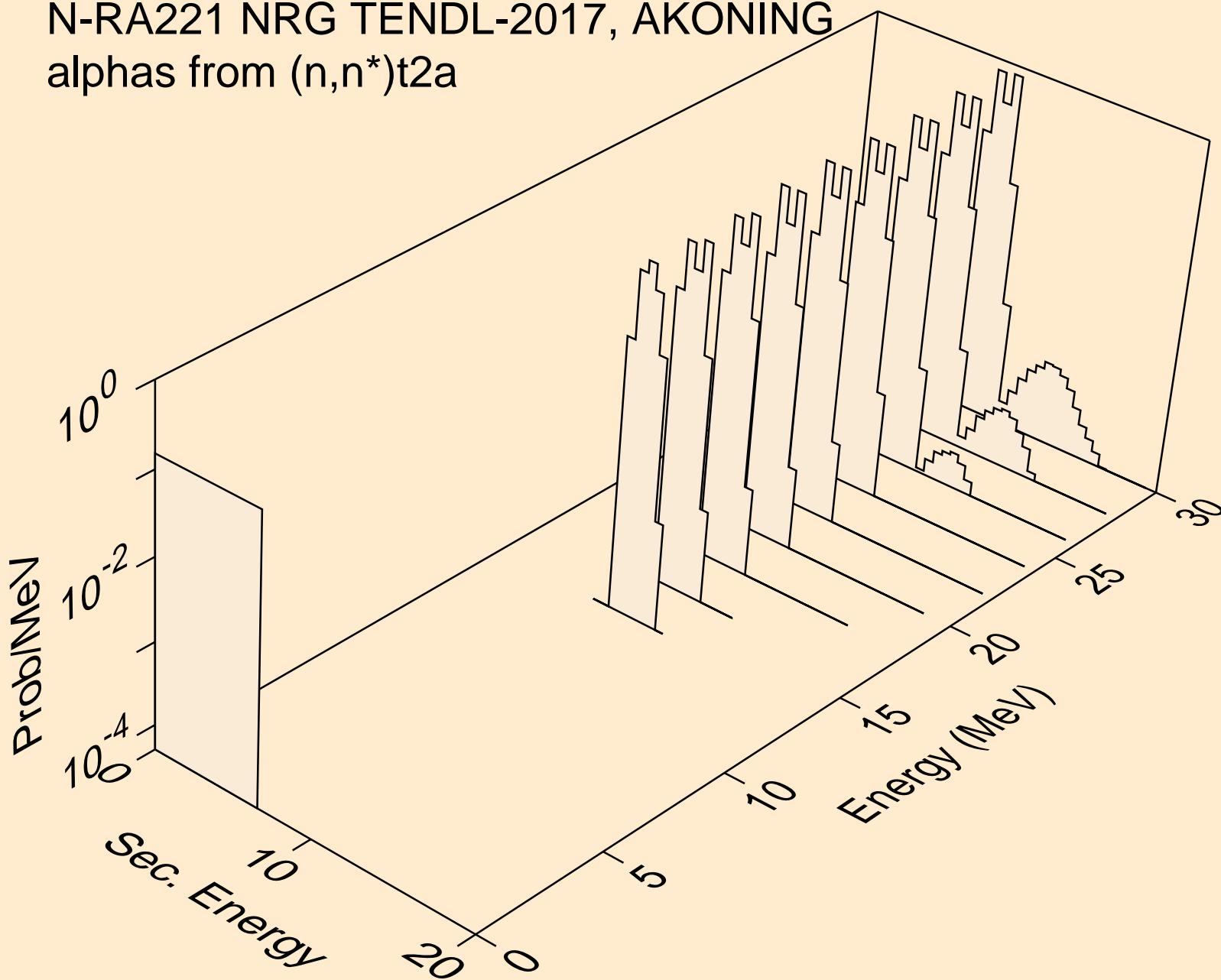
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alphas from  $(n,2n)2a$



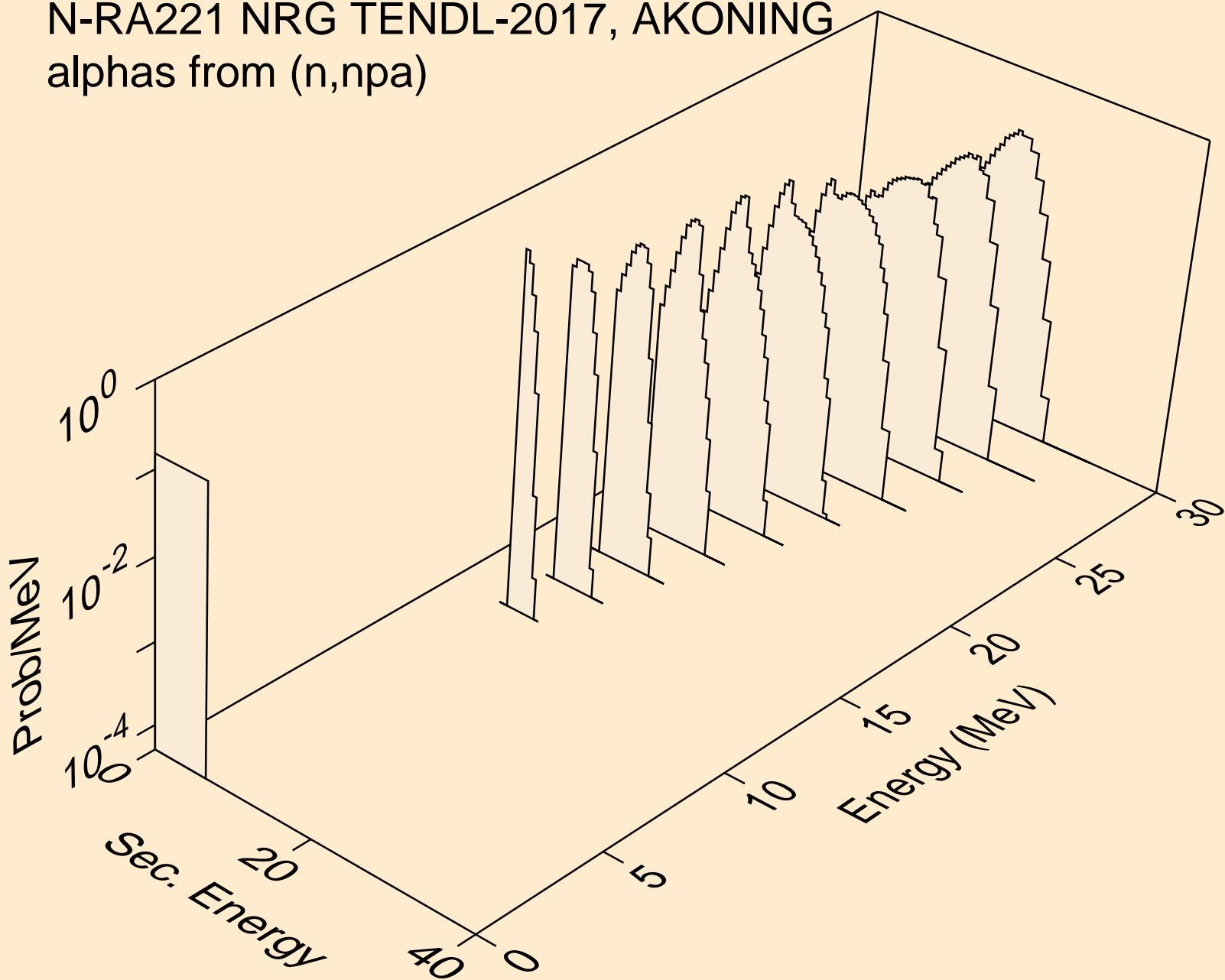
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alphas from  $(n,n^*)d2a$



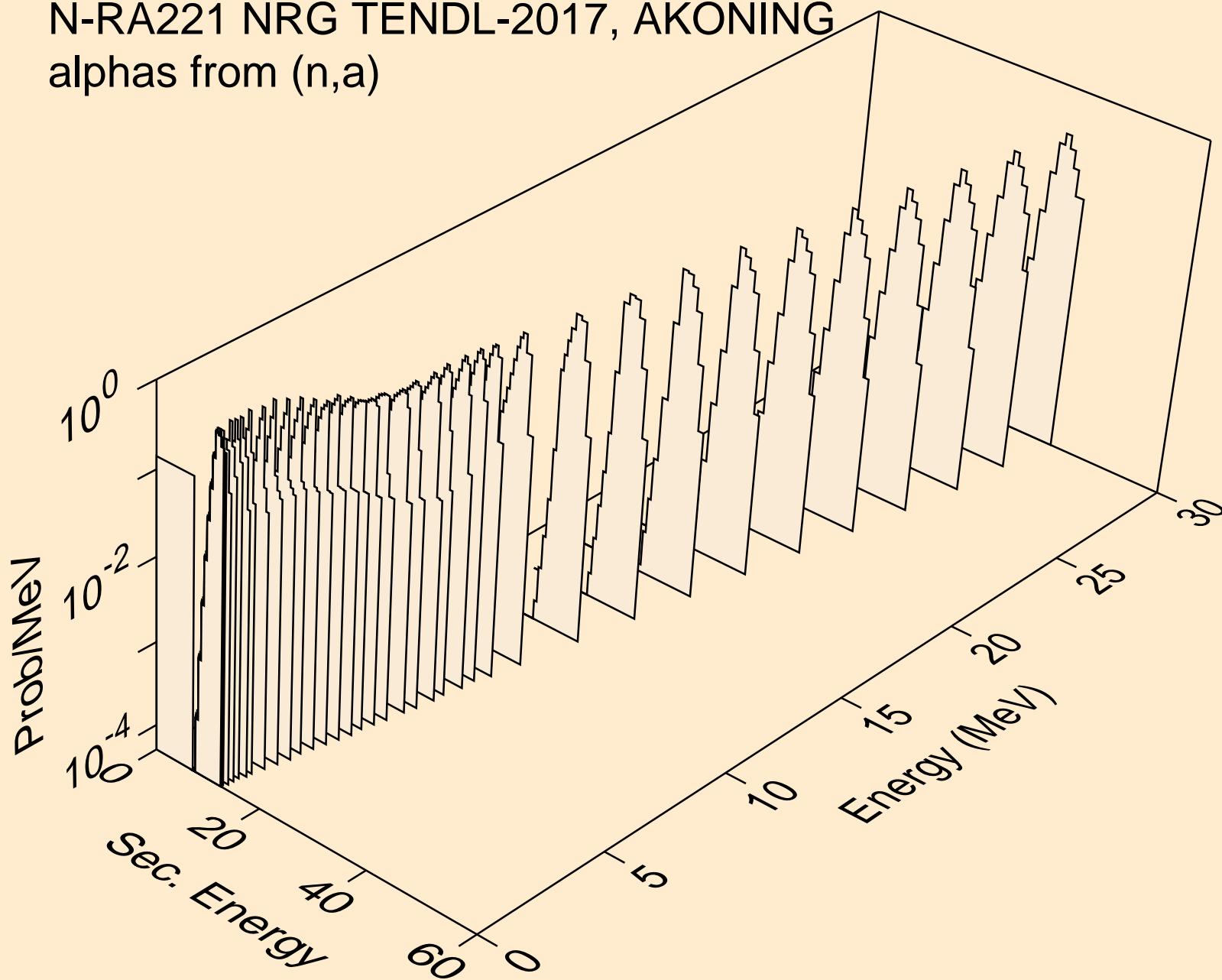
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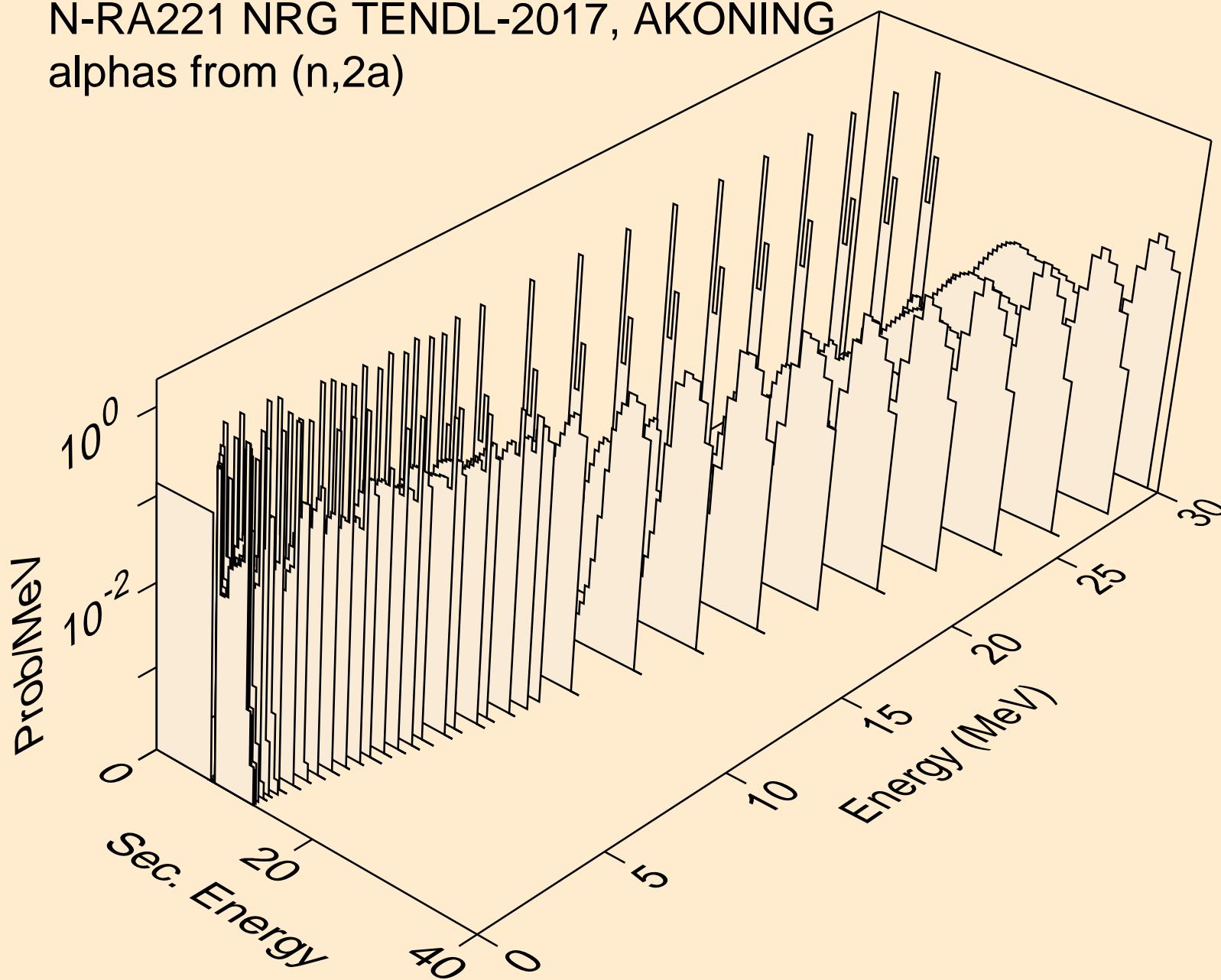
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alphas from (n,npa)



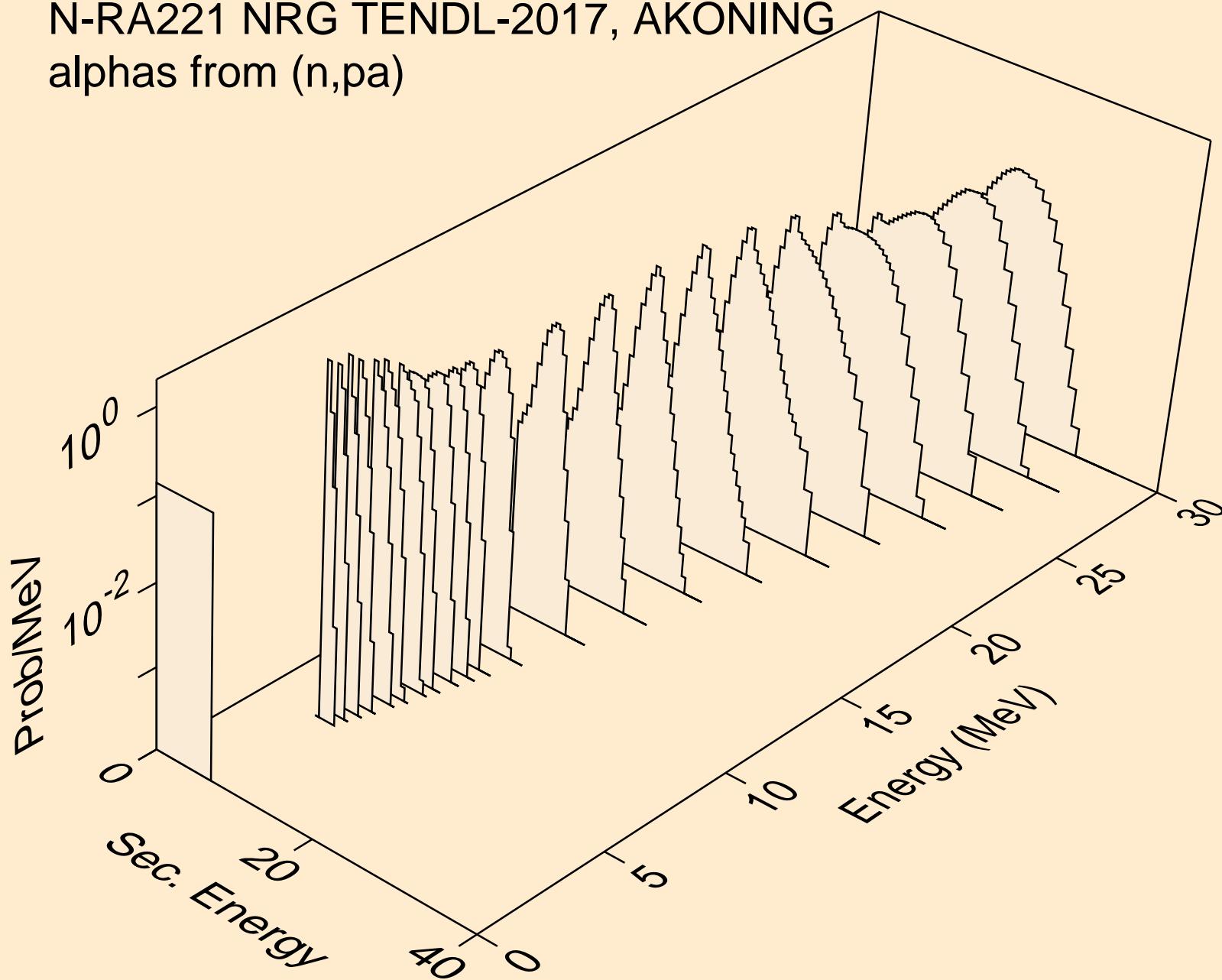
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alphas from (n,a)



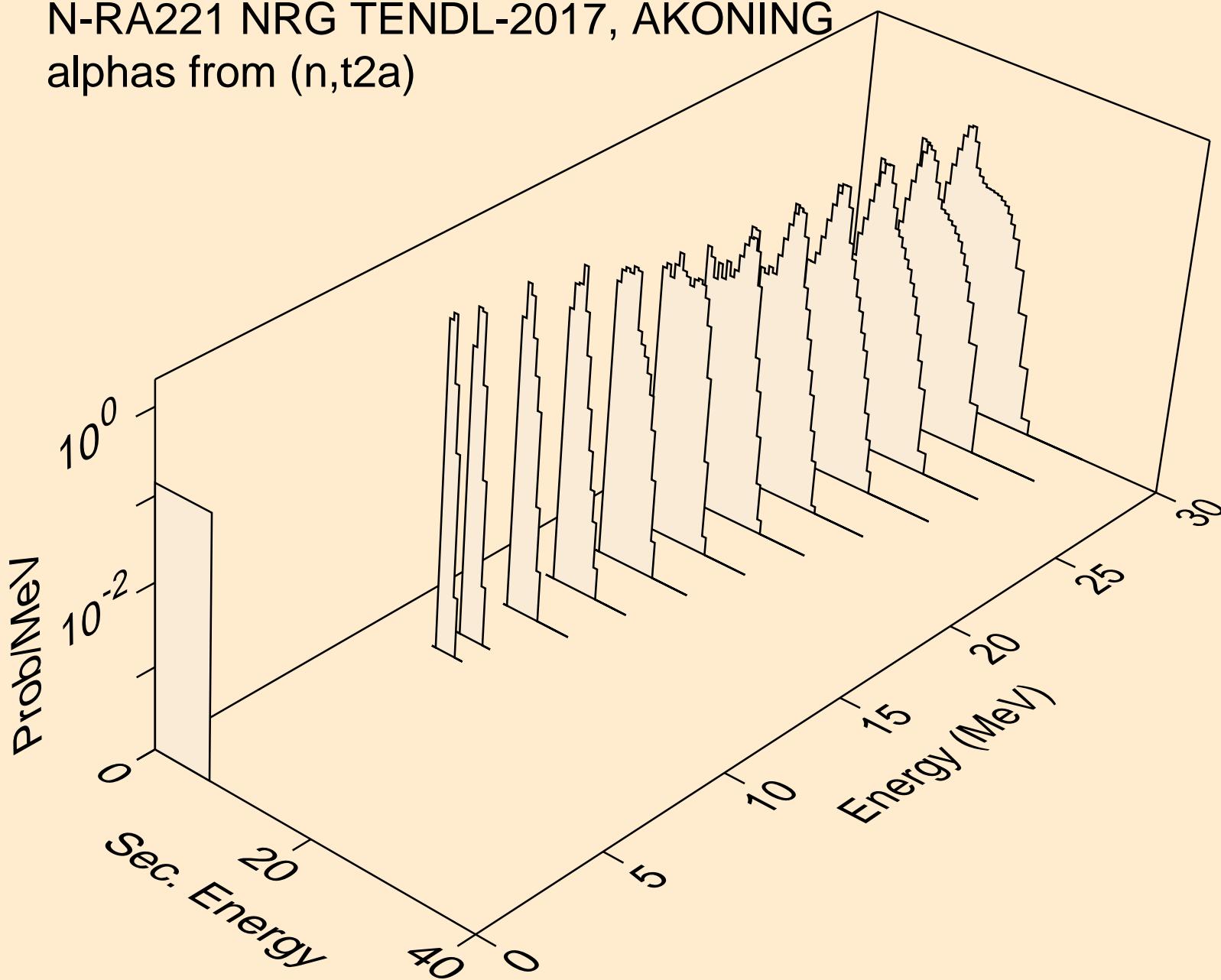
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alphas from (n,2a)



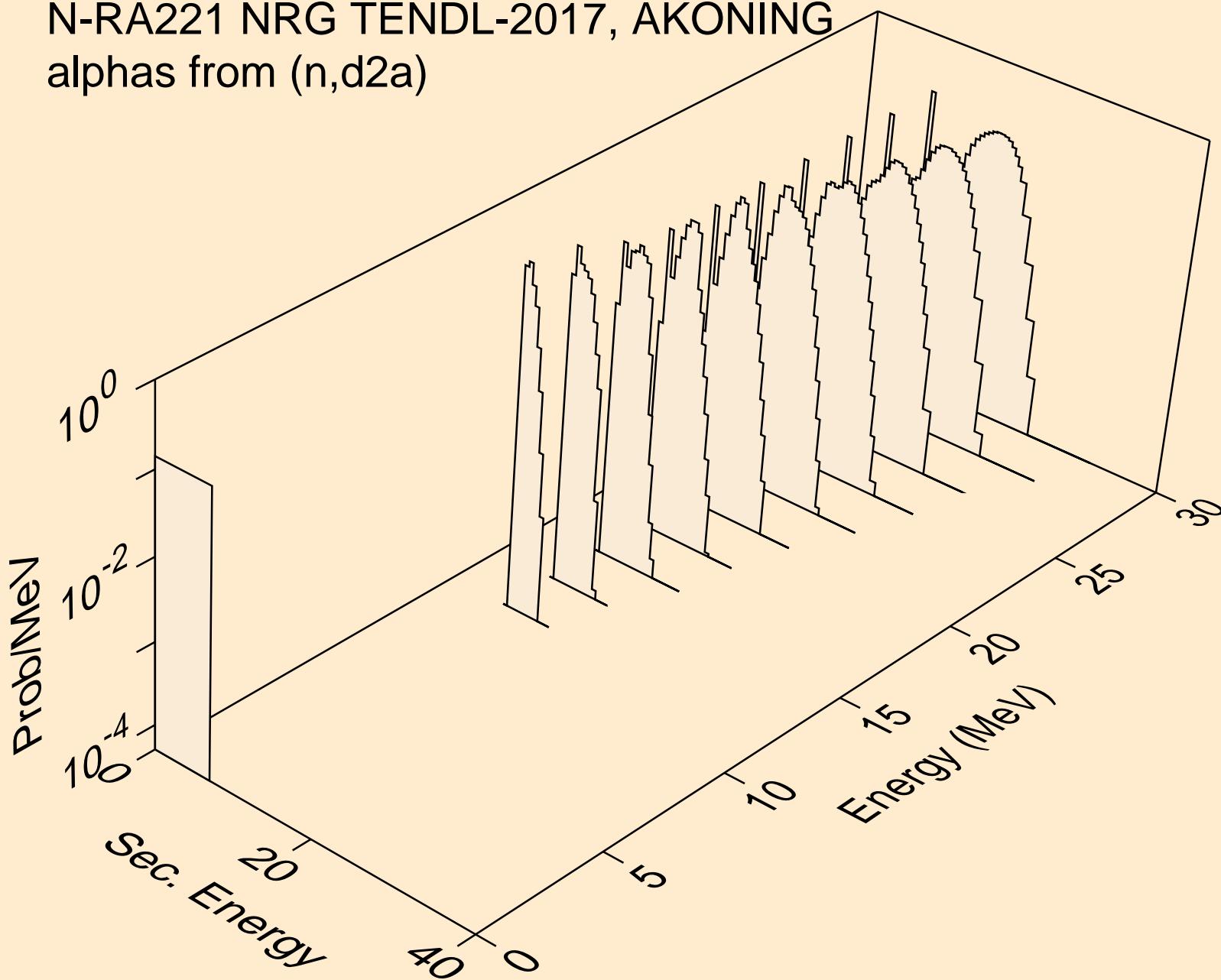
N-RA221 NRG TENDL-2017, AKONING  
alphas from (n,pa)



N-RA221 NRG TENDL-2017, AKONING  
alphas from (n,t2a)



N-RA221 NRG TENDL-2017, AKONING  
alphas from (n,d2a)



N-RA221 NRG TENDL-2017, AKONING  
alphas from (n,da)

