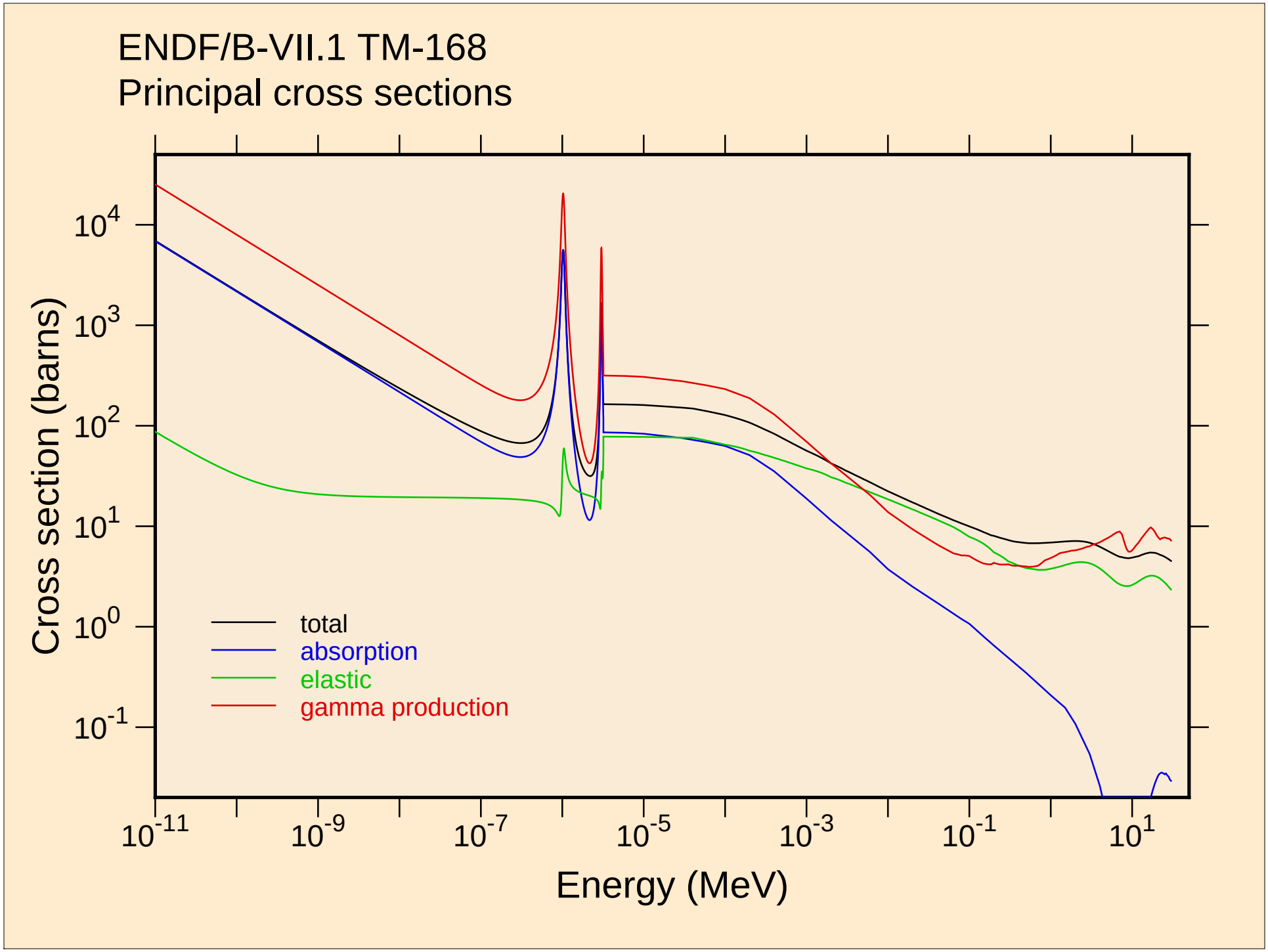
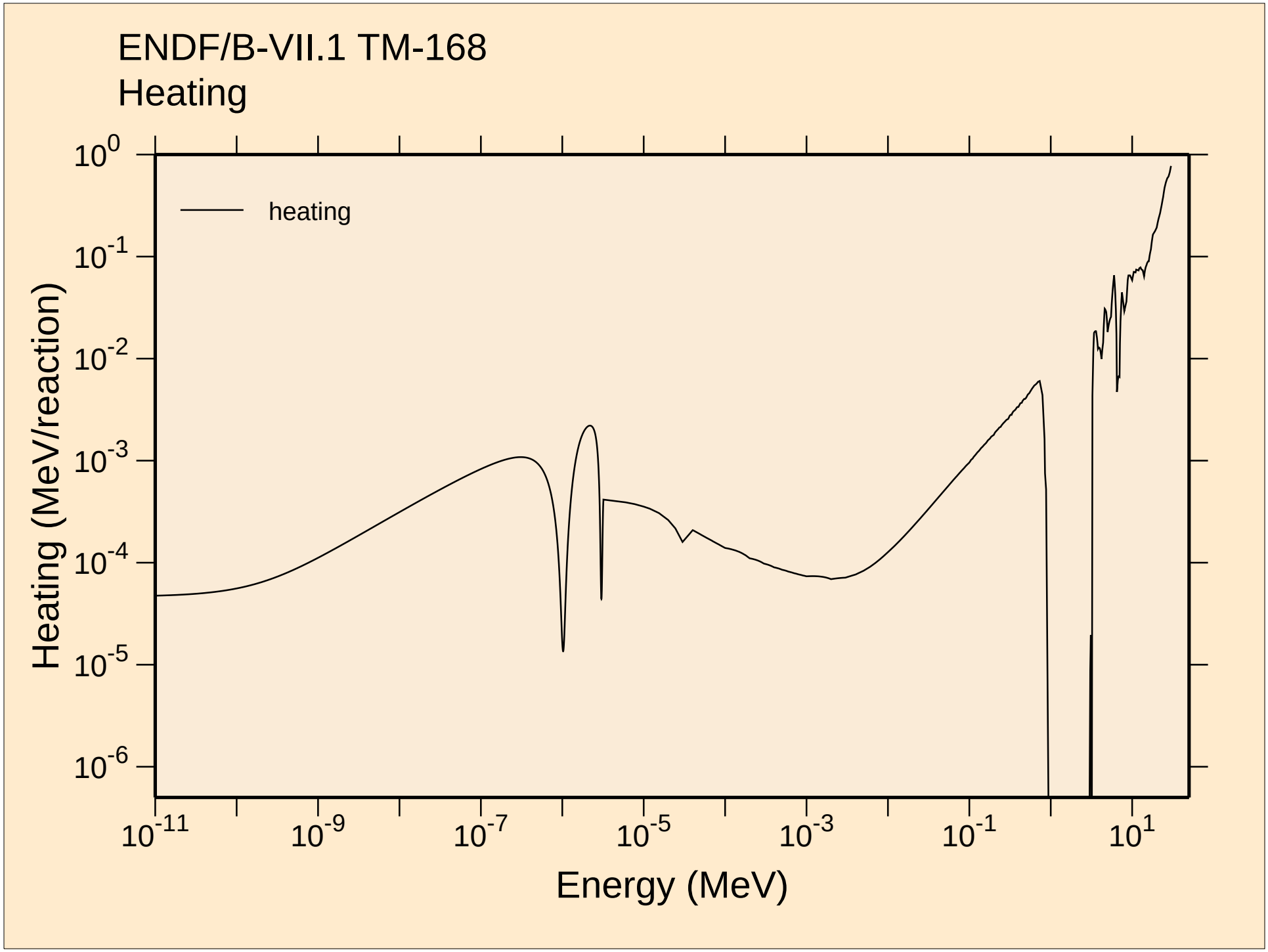
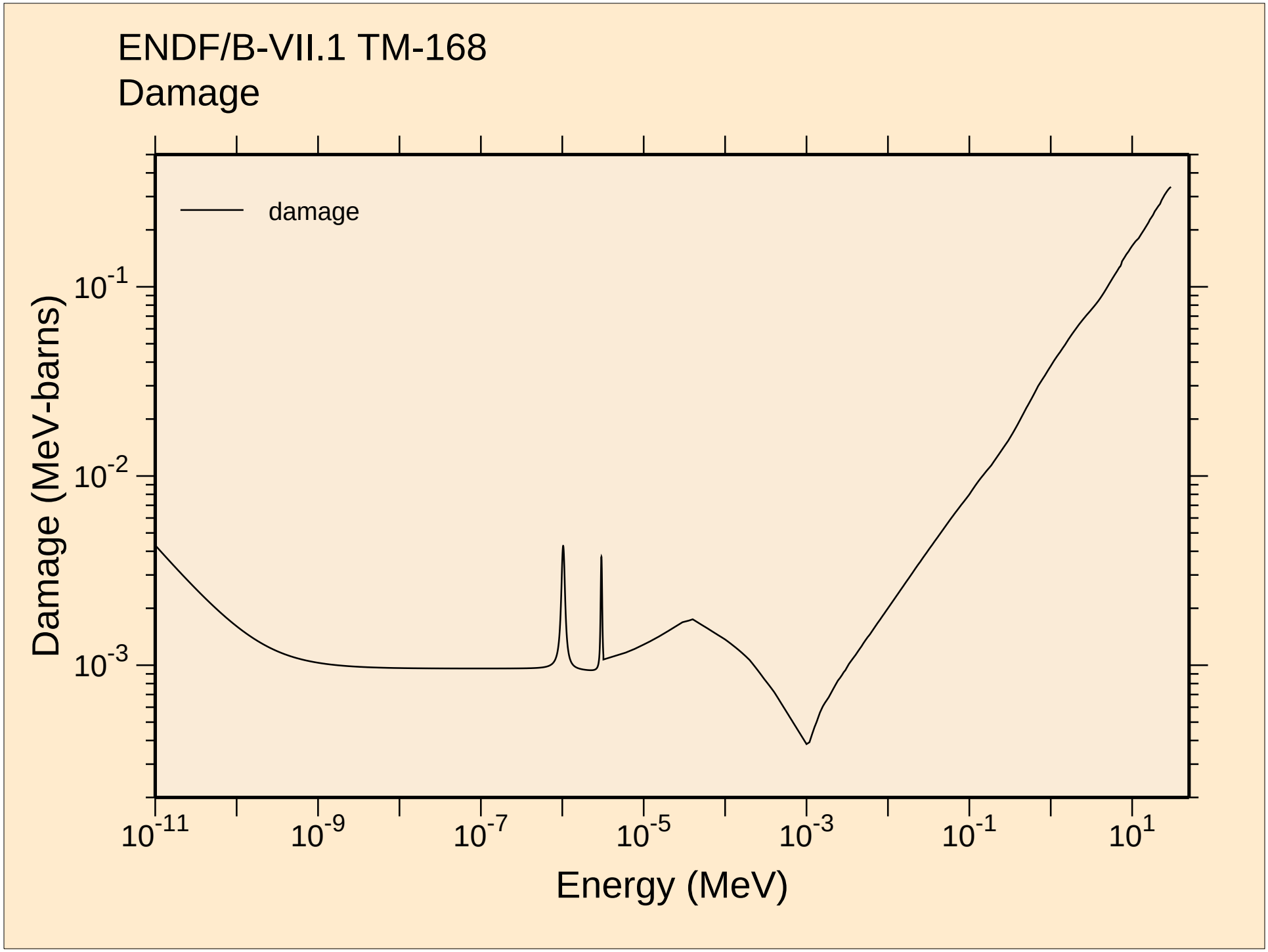
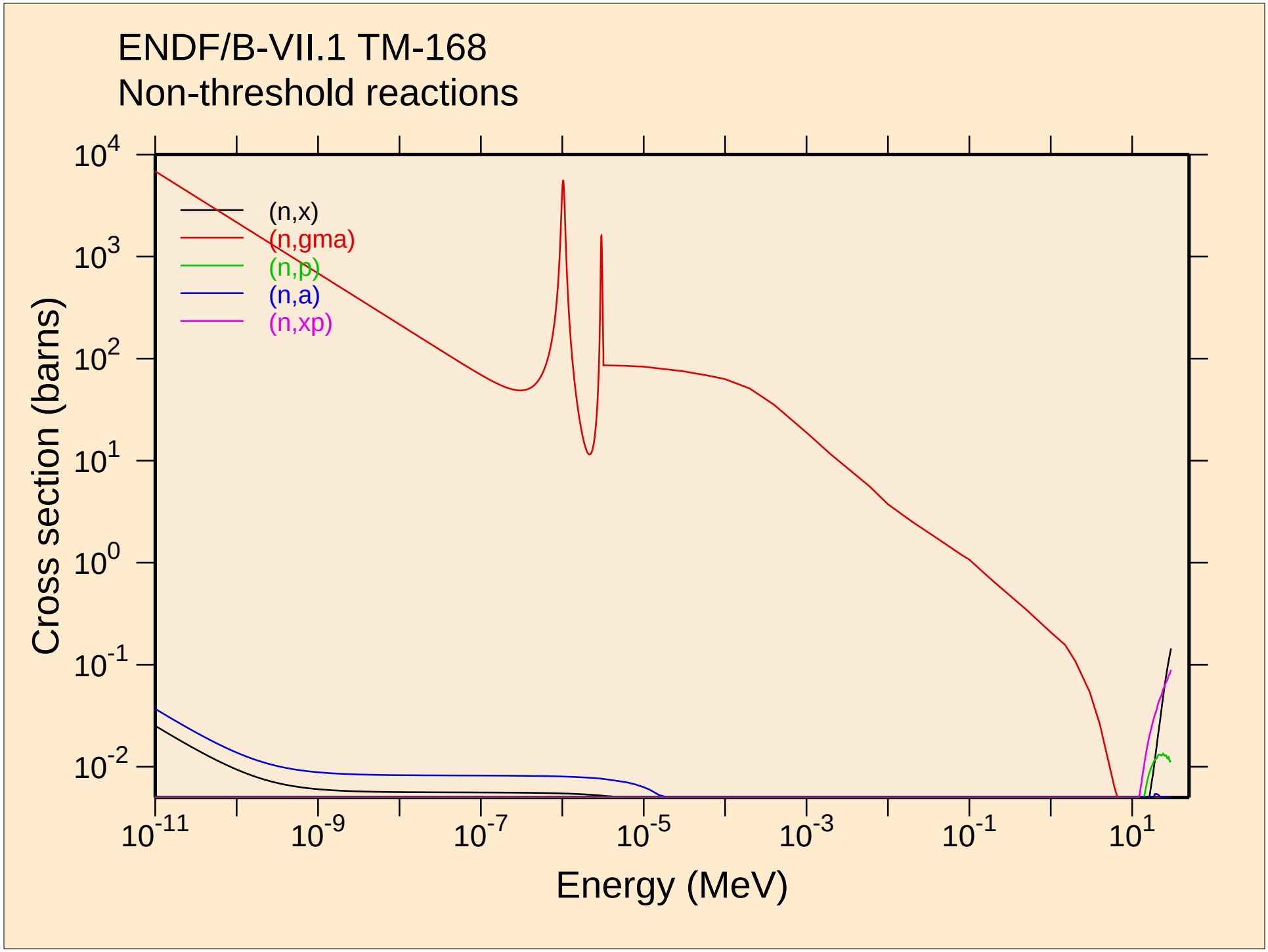
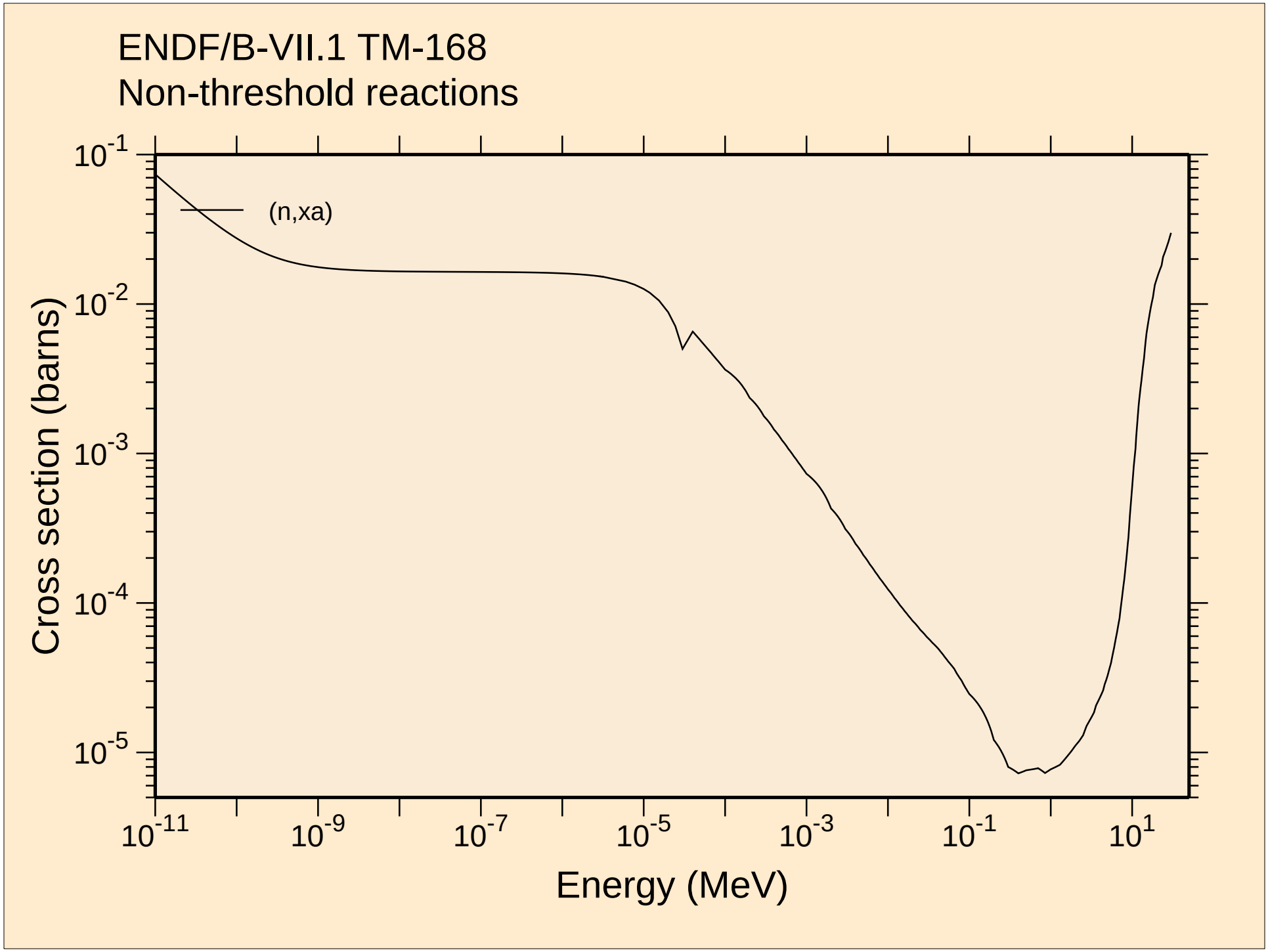
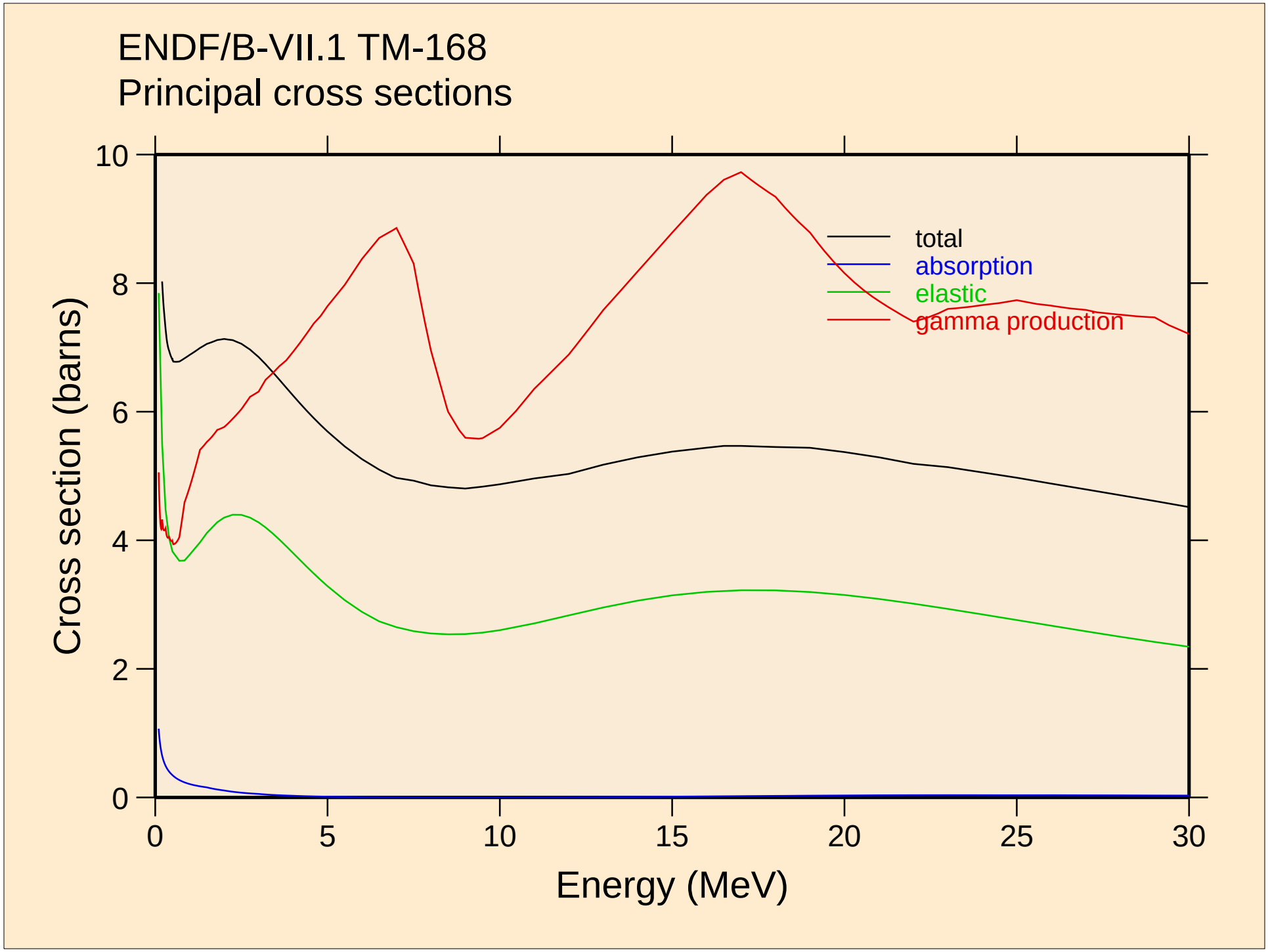

ENDF/B-VII.1 TM-168
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
gamma production

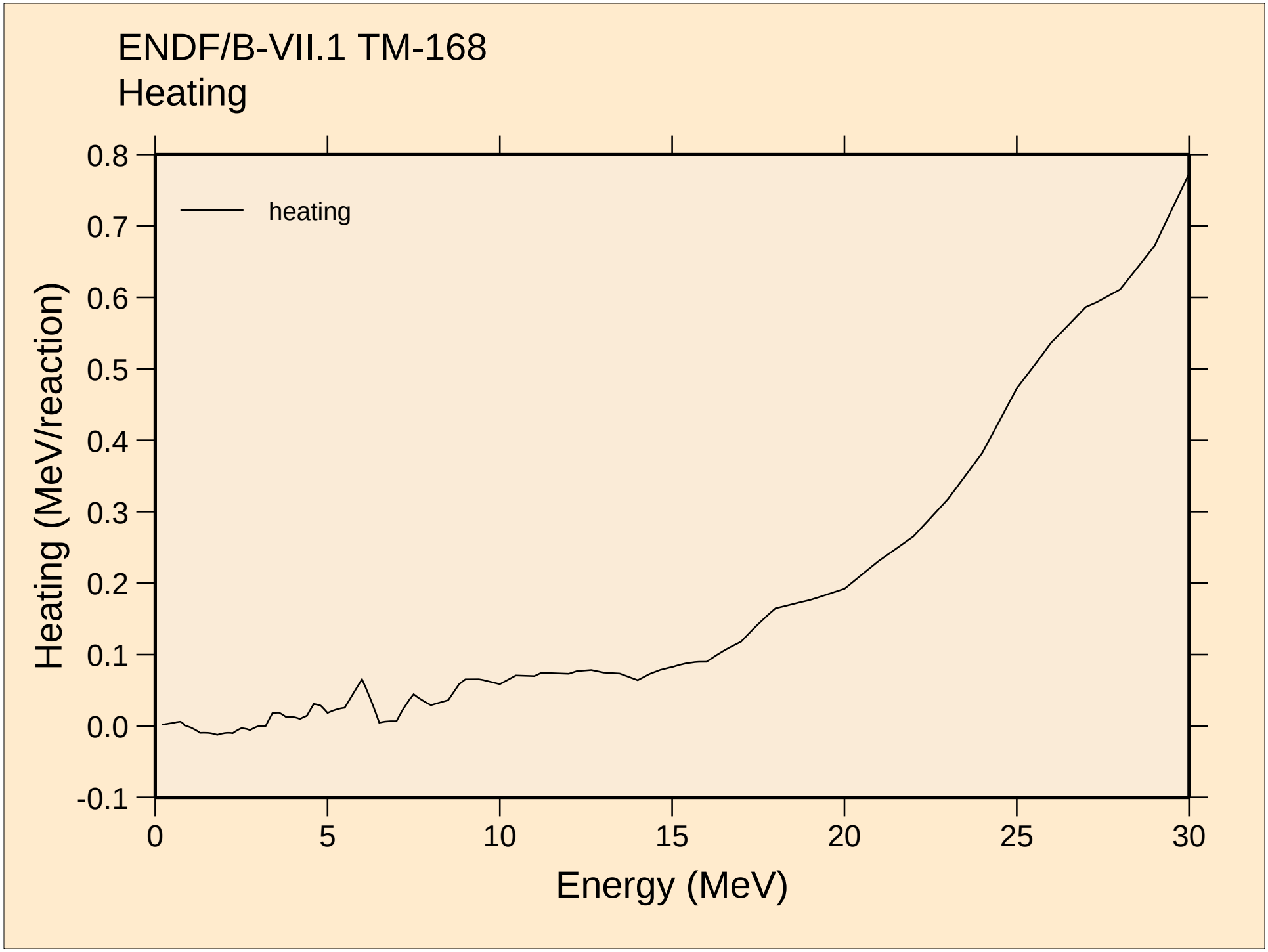

ENDF/B-VII.1 TM-168
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
10^{-11}
10^{-9}
10^{-7}
10^{-5}
10^{-3}
10^{-1}
10^{1}

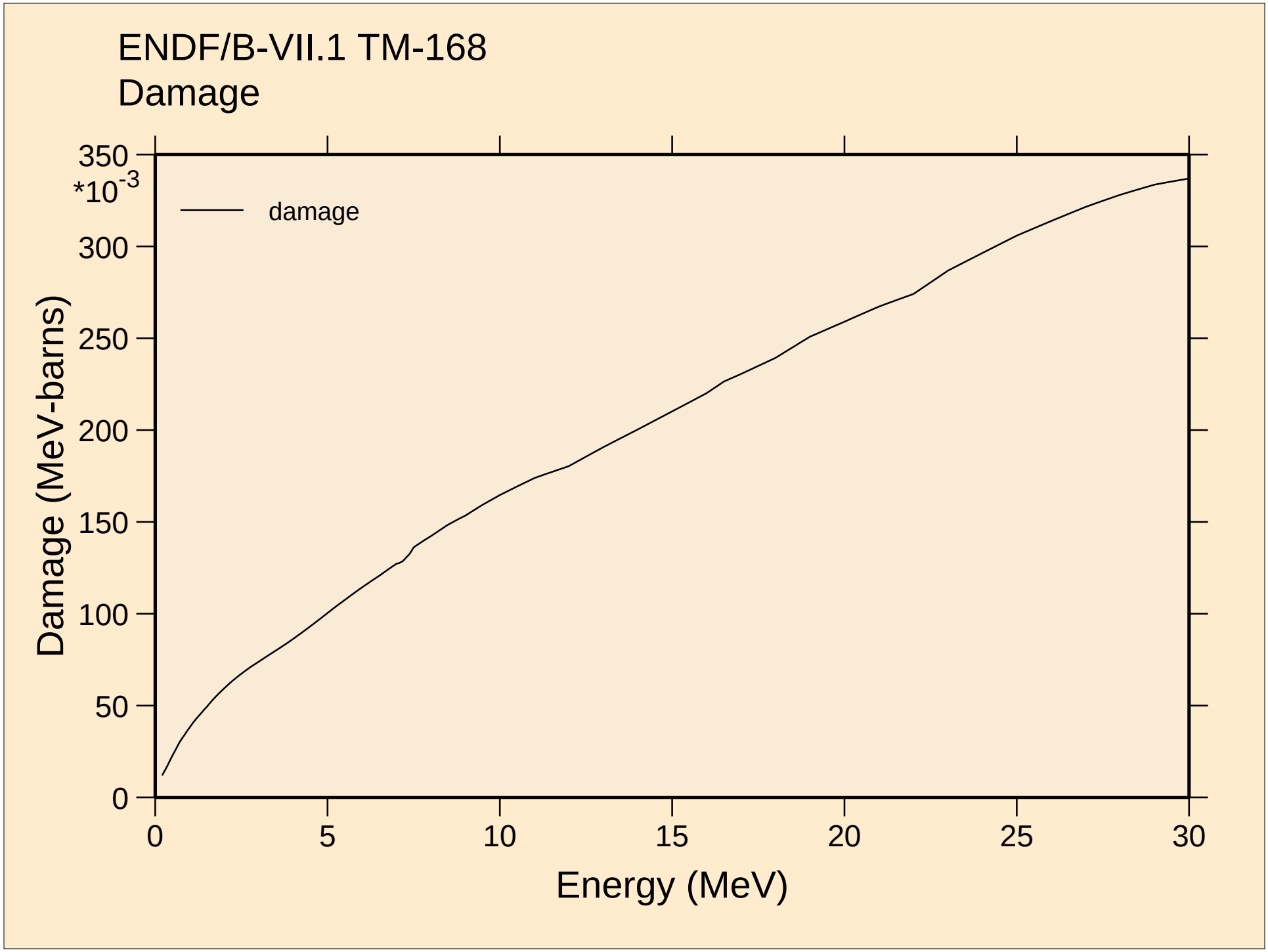

ENDF/B-VII.1 TM-168
Damage
damage
Damage (MeV-barns)
10-1
10-2
10-3
10-11
10-9
10-7
10-5
10-3
10-1
101
Energy (MeV)

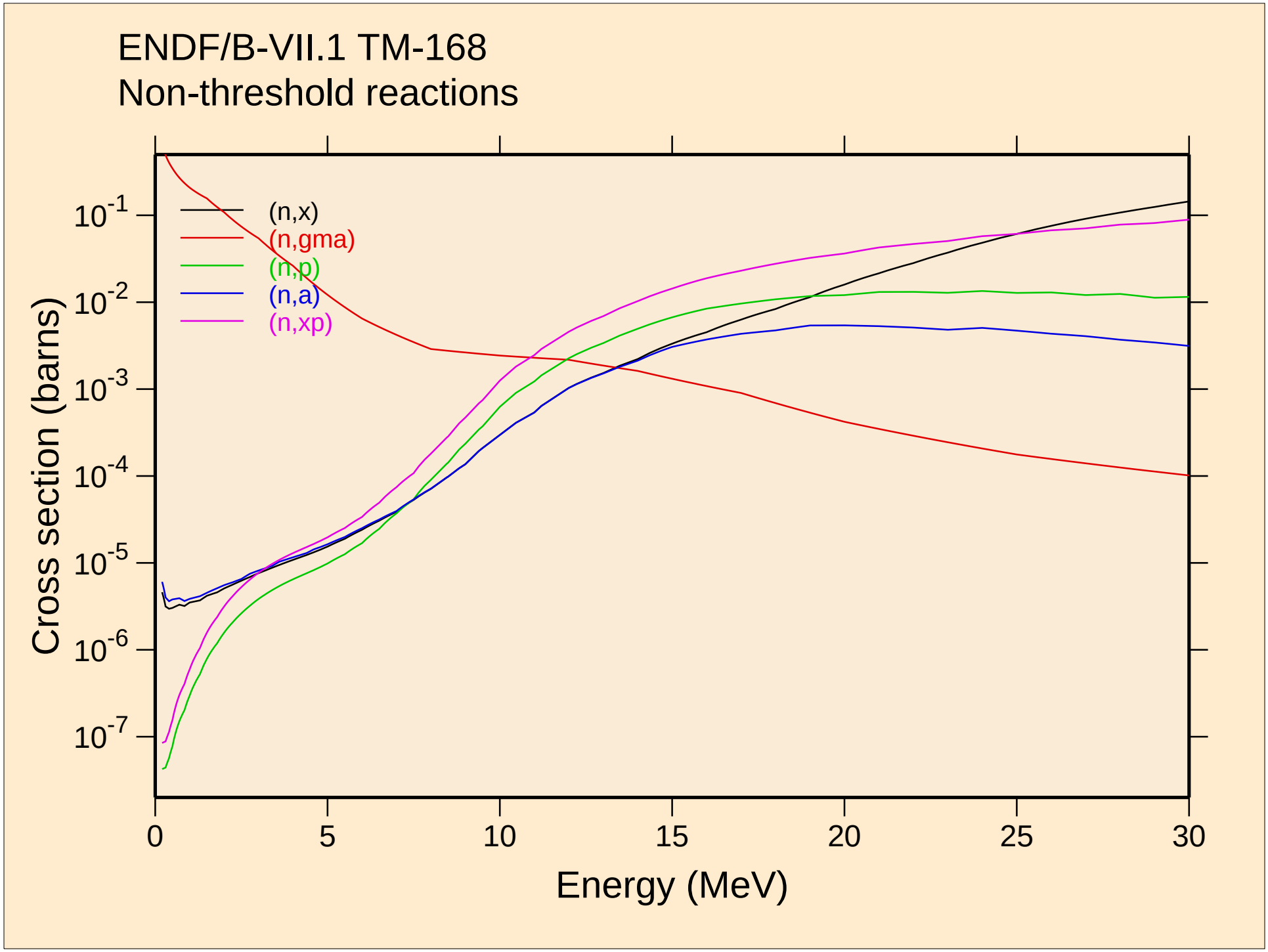

ENDF/B-VII.1 TM-168
Non-threshold reactions
(n,x)
(n,gma)
(n,p)
(n,a)
(n,xp)
Cross section (barns)
Energy (MeV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-11
10^-9
10^-7
10^-5
10^-3
10^-1
10^1

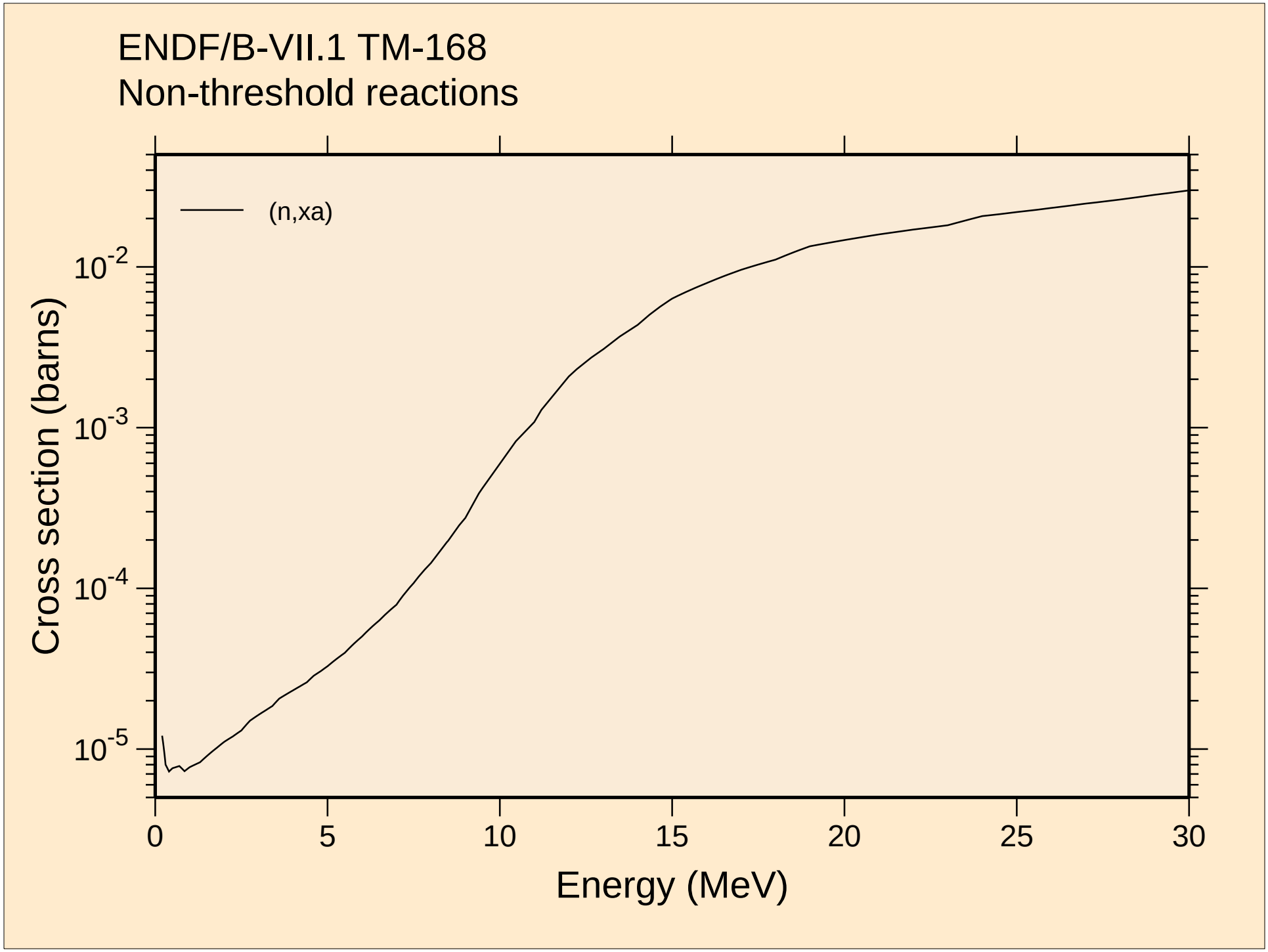

ENDF/B-VII.1 TM-168
Non-threshold reactions
(n,xa)
Cross section (barns)
Energy (MeV)
10-1
10-2
10-3
10-4
10-5
10-11
10-9
10-7
10-5
10-3
10-1
101

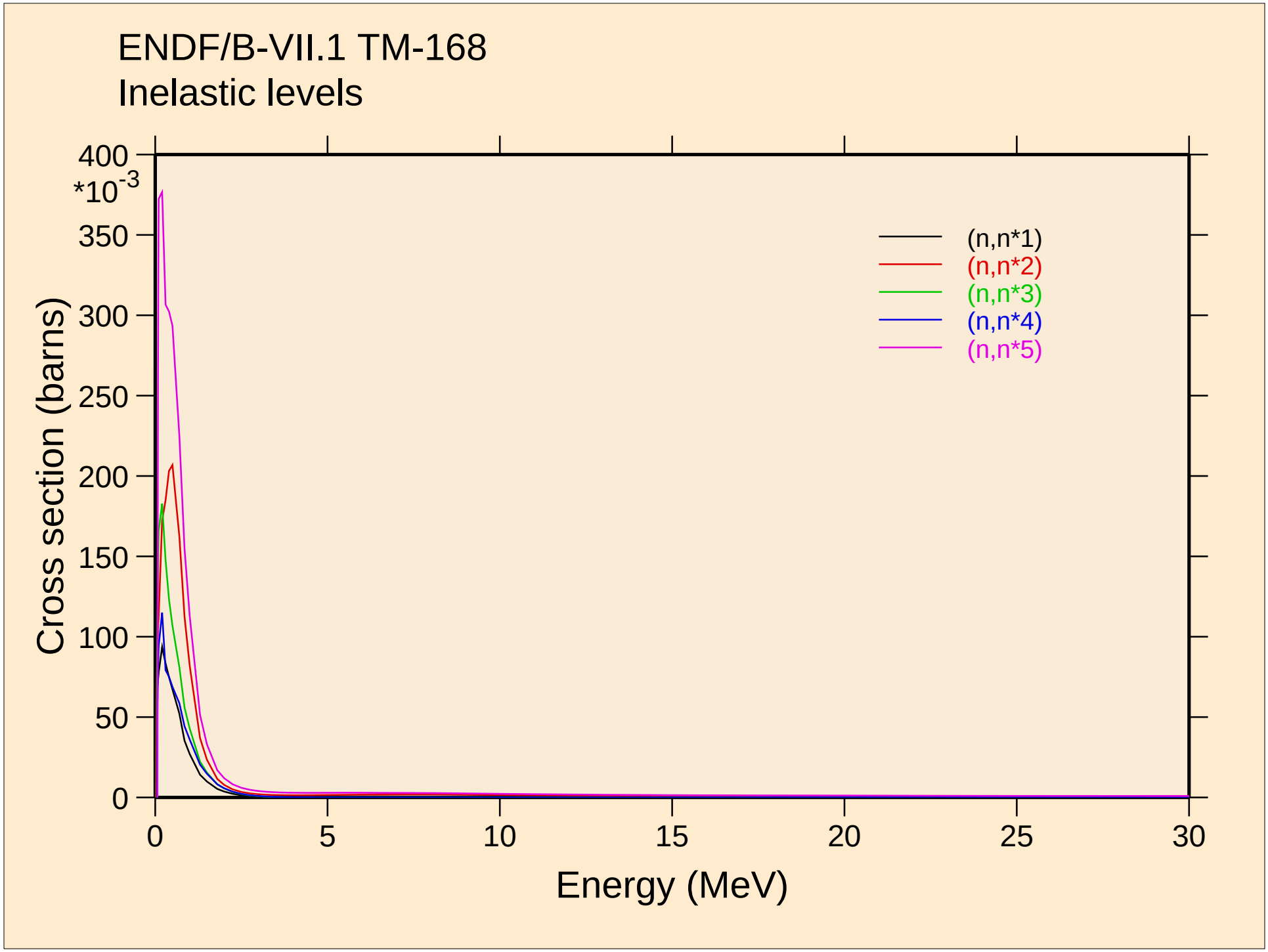

ENDF/B-VII.1 TM-168
Principal cross sections
Cross section (barns)
Energy (MeV)
0
2
4
6
8
10
0
5
10
15
20
25
30
total
absorption
elastic
gamma production

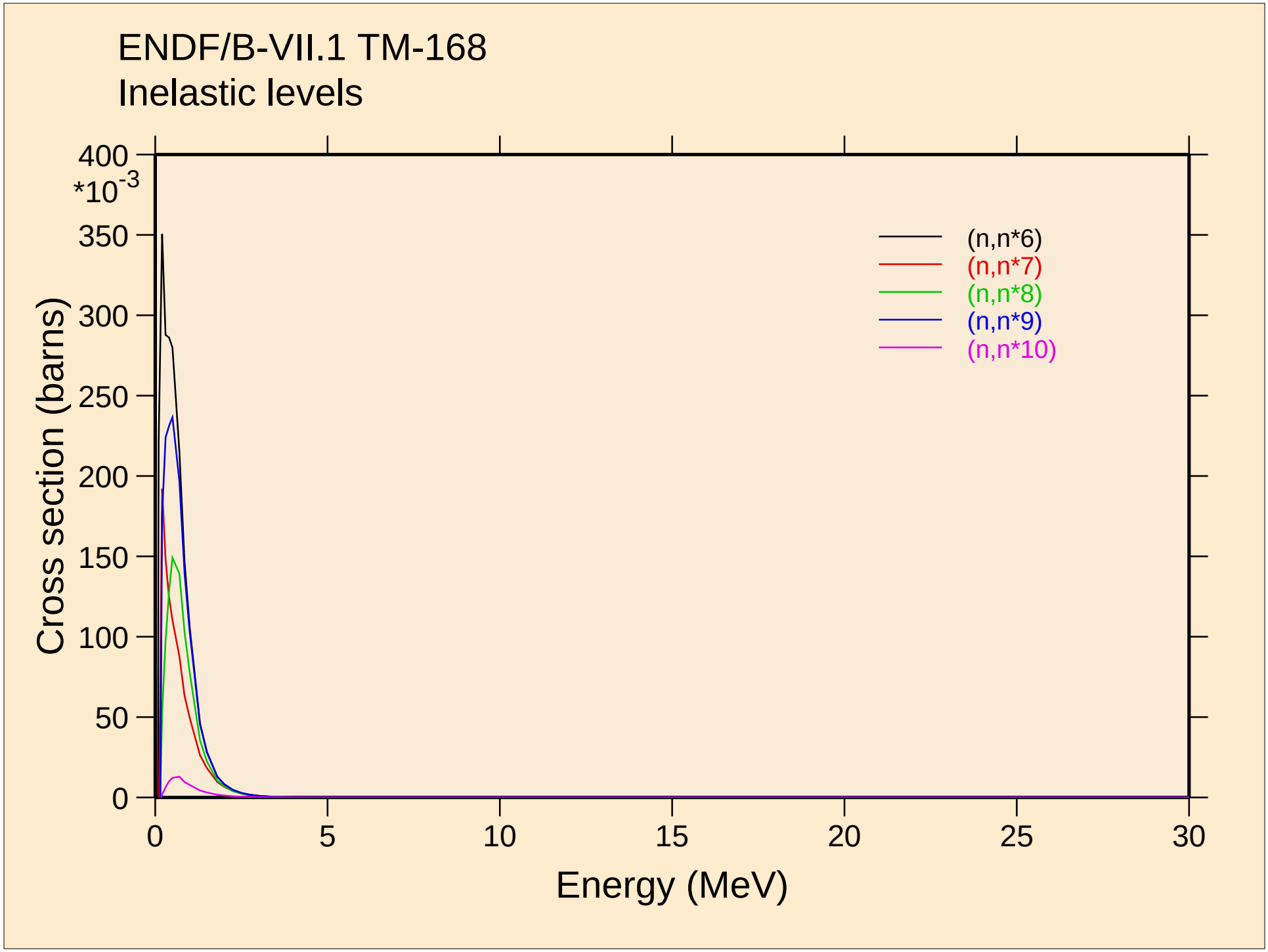

ENDF/B-VII.1 TM-168
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
0
5
10
15
20
25
30

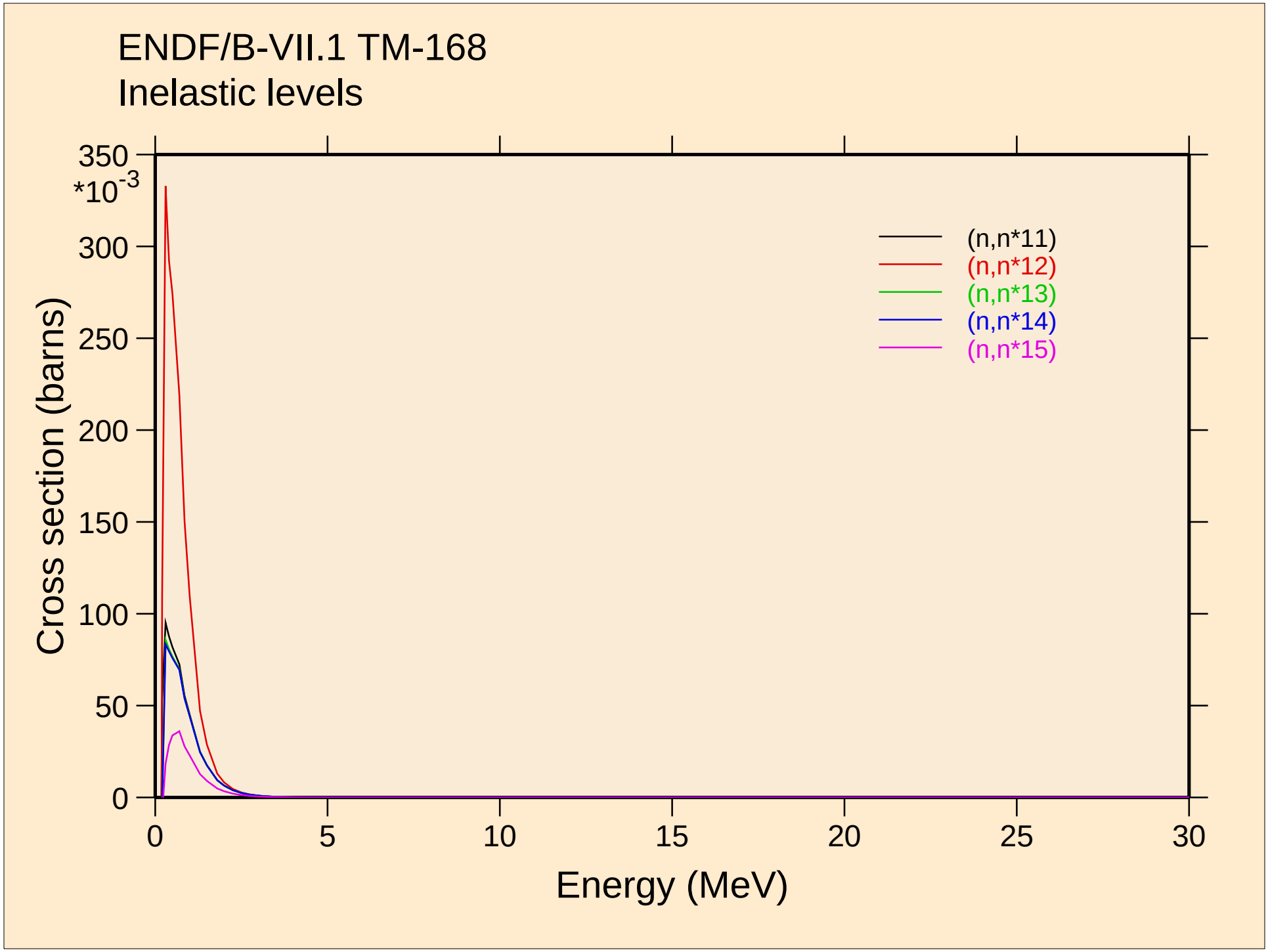

ENDF/B-VII.1 TM-168
Damage
damage
*10^-3
350
300
250
200
150
100
50
0
Damage (MeV-barns)
0
5
10
15
20
25
30
Energy (MeV)

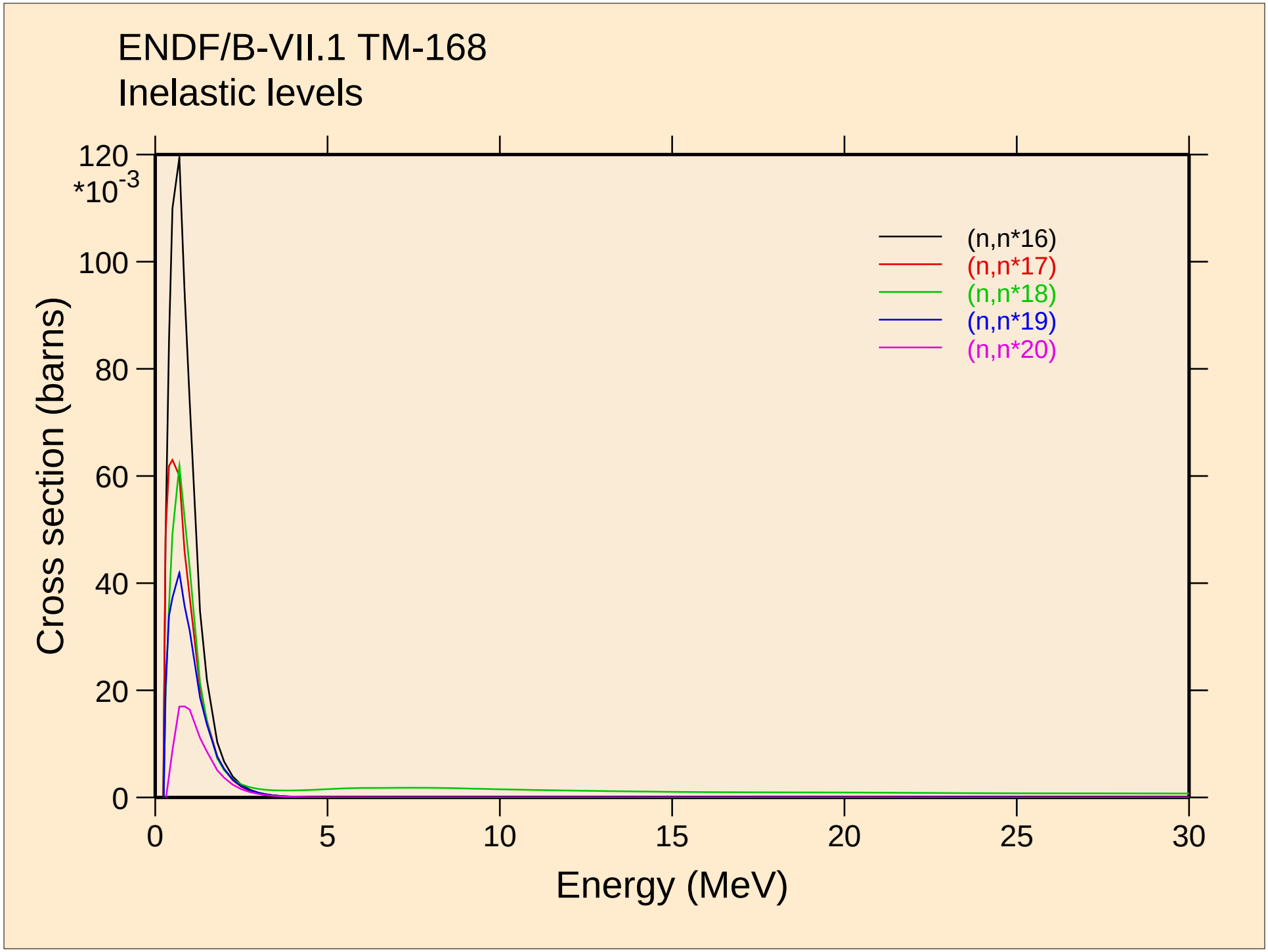

ENDF/B-VII.1 TM-168
Non-threshold reactions
(n,x)
(n,gma)
(n,p)
(n,a)
(n,xp)
Cross section (barns)
10-1
10-2
10-3
10-4
10-5
10-6
10-7
0
5
10
15
20
25
30
Energy (MeV)

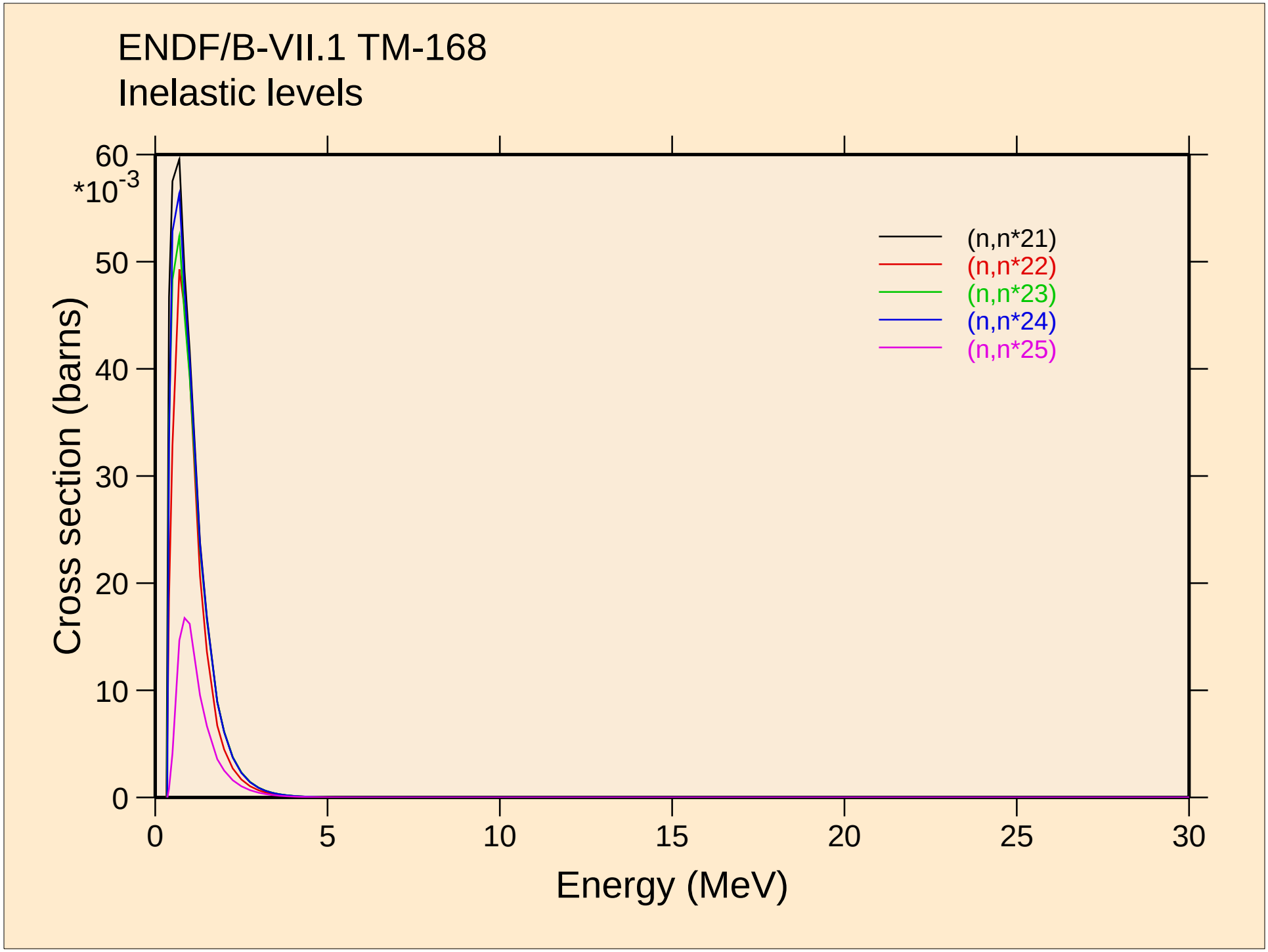

ENDF/B-VII.1 TM-168
Non-threshold reactions
(n,xa)
Cross section (barns)
10-2
10-3
10-4
10-5
0
5
10
15
20
25
30
Energy (MeV)

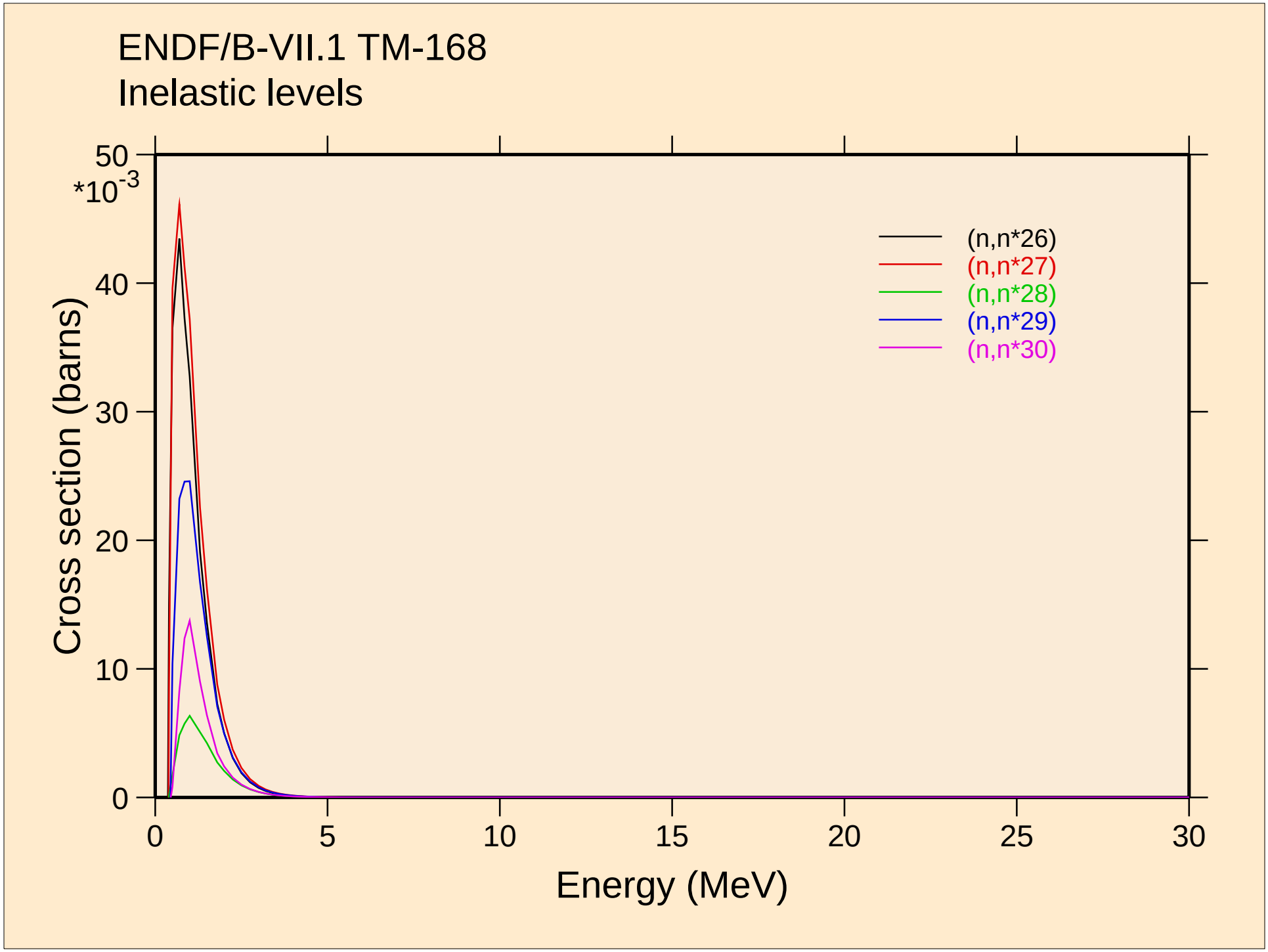

ENDF/B-VII.1 TM-168
Inelastic levels
Cross section (barns)
*10^-3
400
350
300
250
200
150
100
50
0
0
5
10
15
20
25
30
Energy (MeV)
(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)

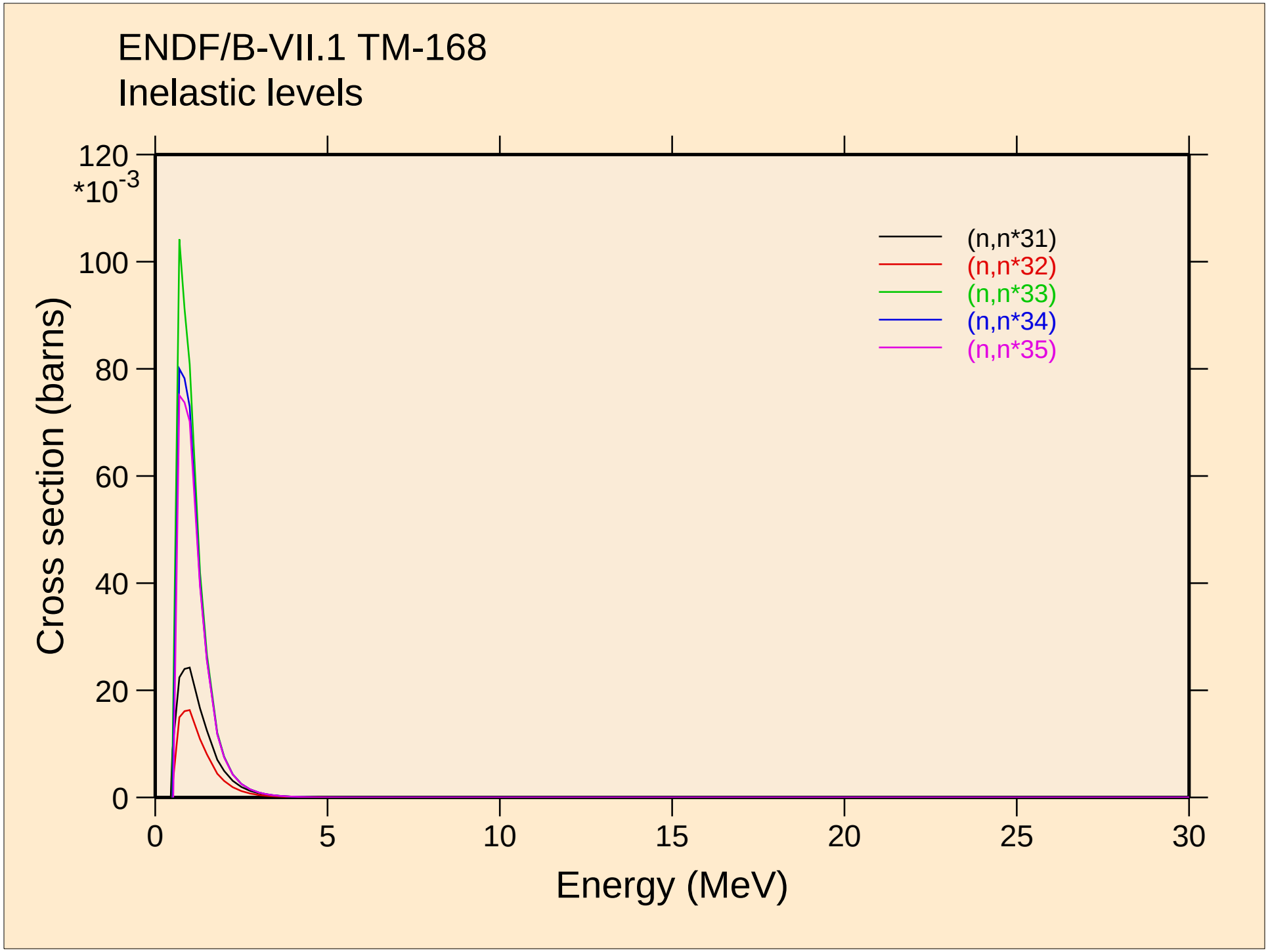

ENDF/B-VII.1 TM-168
Inelastic levels
Cross section (barns)
*10^-3
400
350
300
250
200
150
100
50
0
0
5
10
15
20
25
30
Energy (MeV)
(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
(n,n*10)

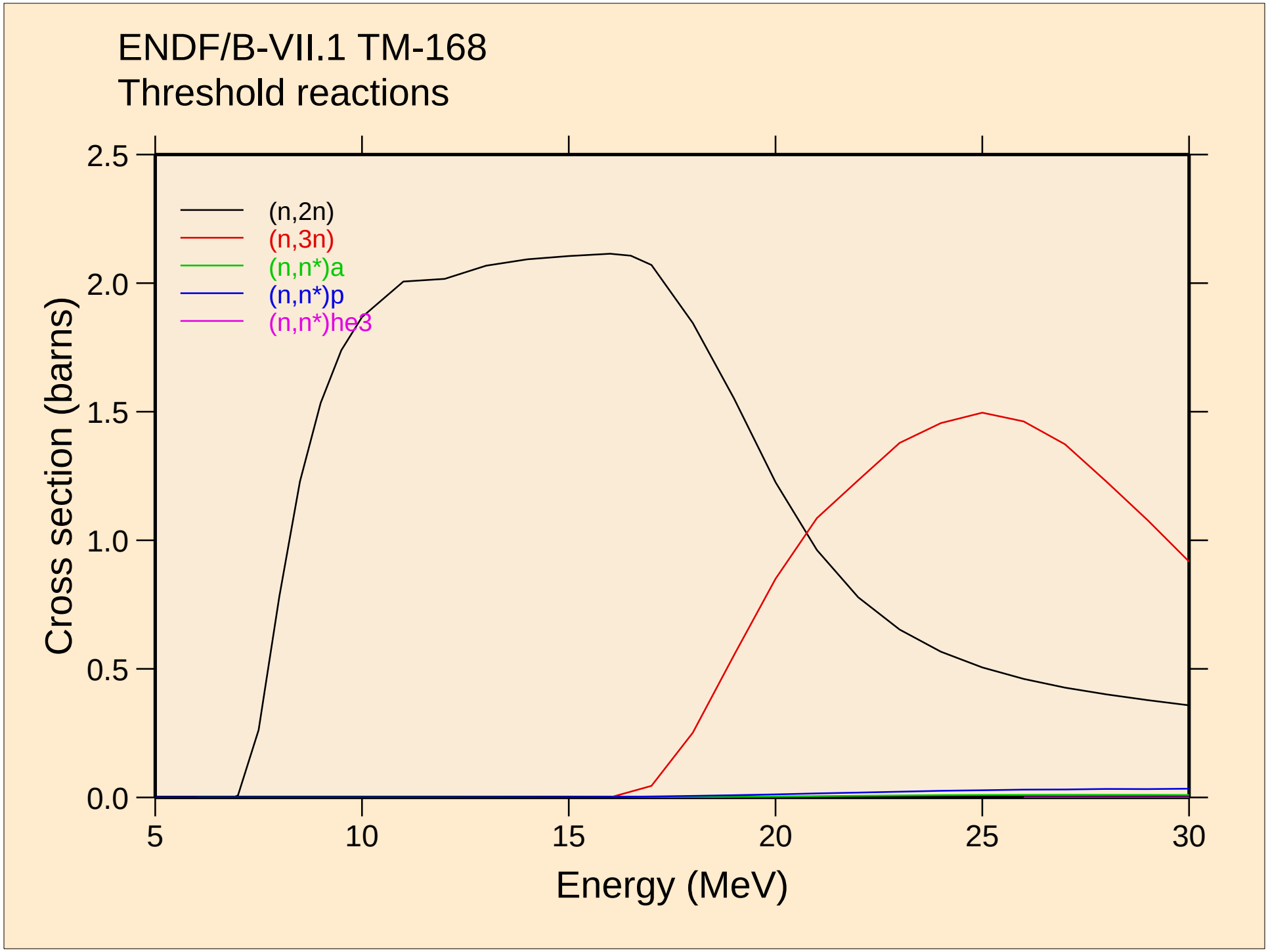

ENDF/B-VII.1 TM-168
Inelastic levels
Cross section (barns)
*10^-3
350
300
250
200
150
100
50
0
0
5
10
15
20
25
30
Energy (MeV)
(n,n*11)
(n,n*12)
(n,n*13)
(n,n*14)
(n,n*15)

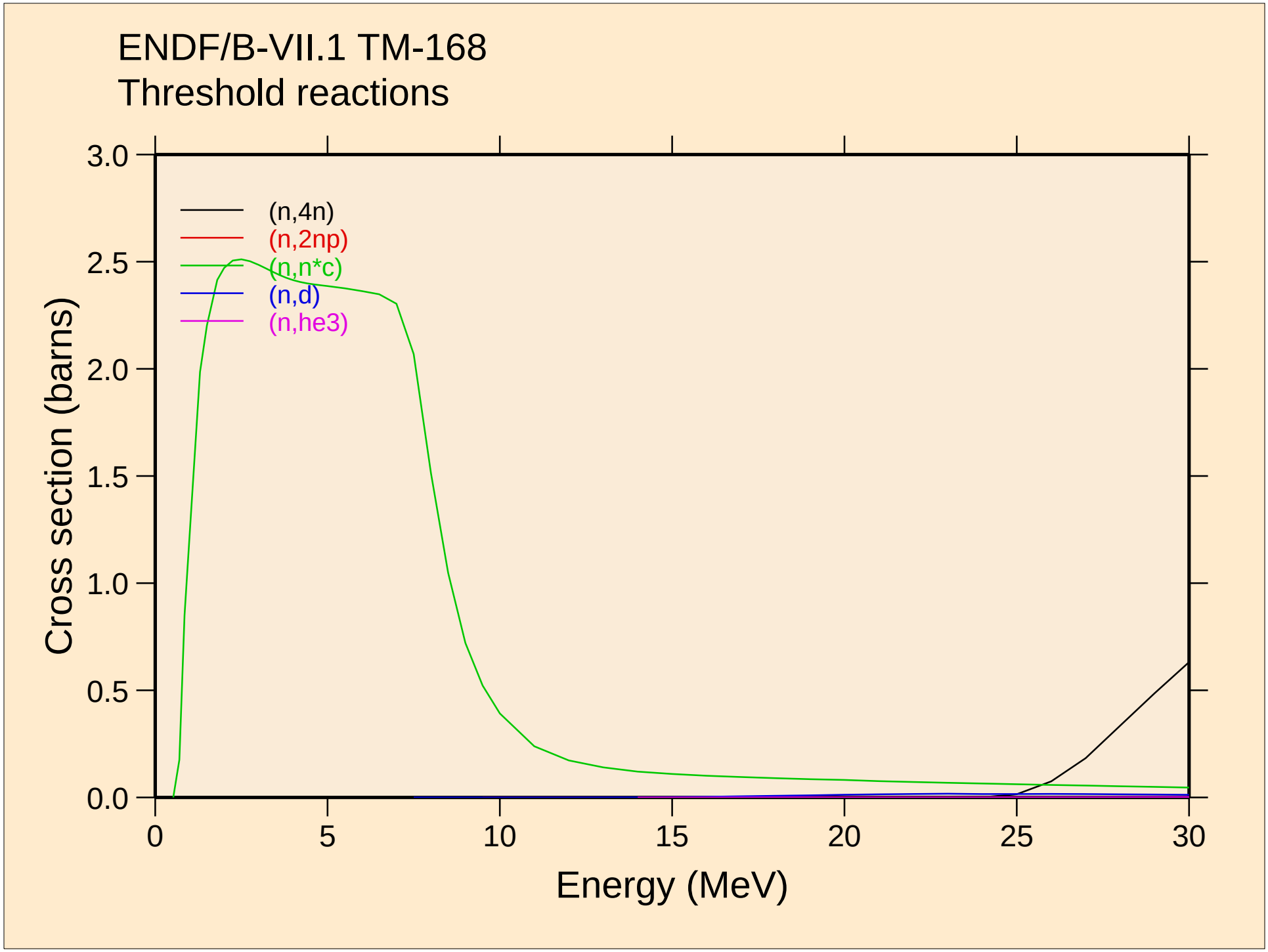

ENDF/B-VII.1 TM-168
Inelastic levels
120
*10-3
100
80
60
40
20
0
Cross section (barns)
0
5
10
15
20
25
30
Energy (MeV)
(n,n*16)
(n,n*17)
(n,n*18)
(n,n*19)
(n,n*20)

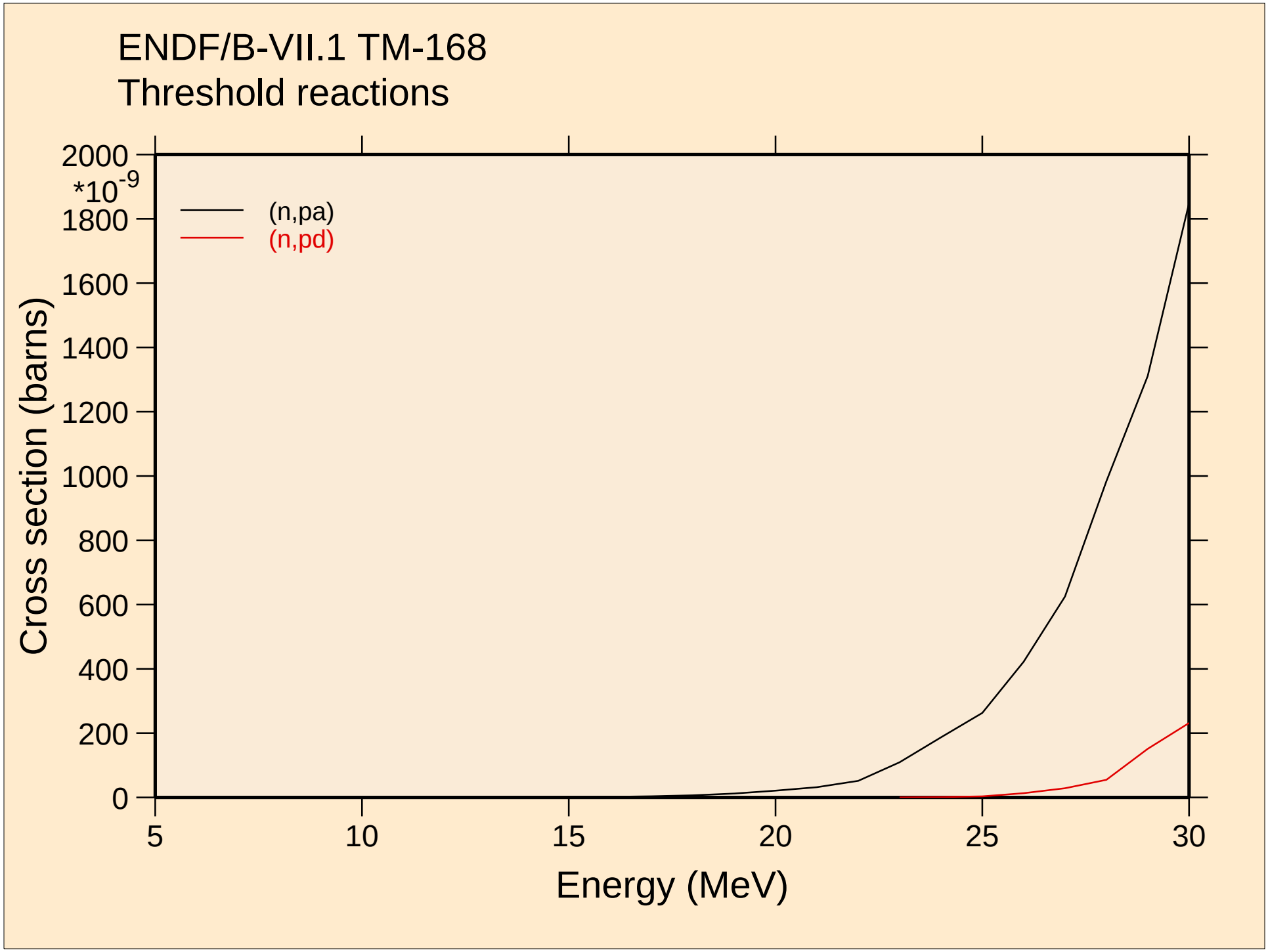

ENDF/B-VII.1 TM-168
Inelastic levels
Cross section (barns)
*10^-3
60
50
40
30
20
10
0
0
5
10
15
20
25
30
Energy (MeV)
(n,n*21)
(n,n*22)
(n,n*23)
(n,n*24)
(n,n*25)

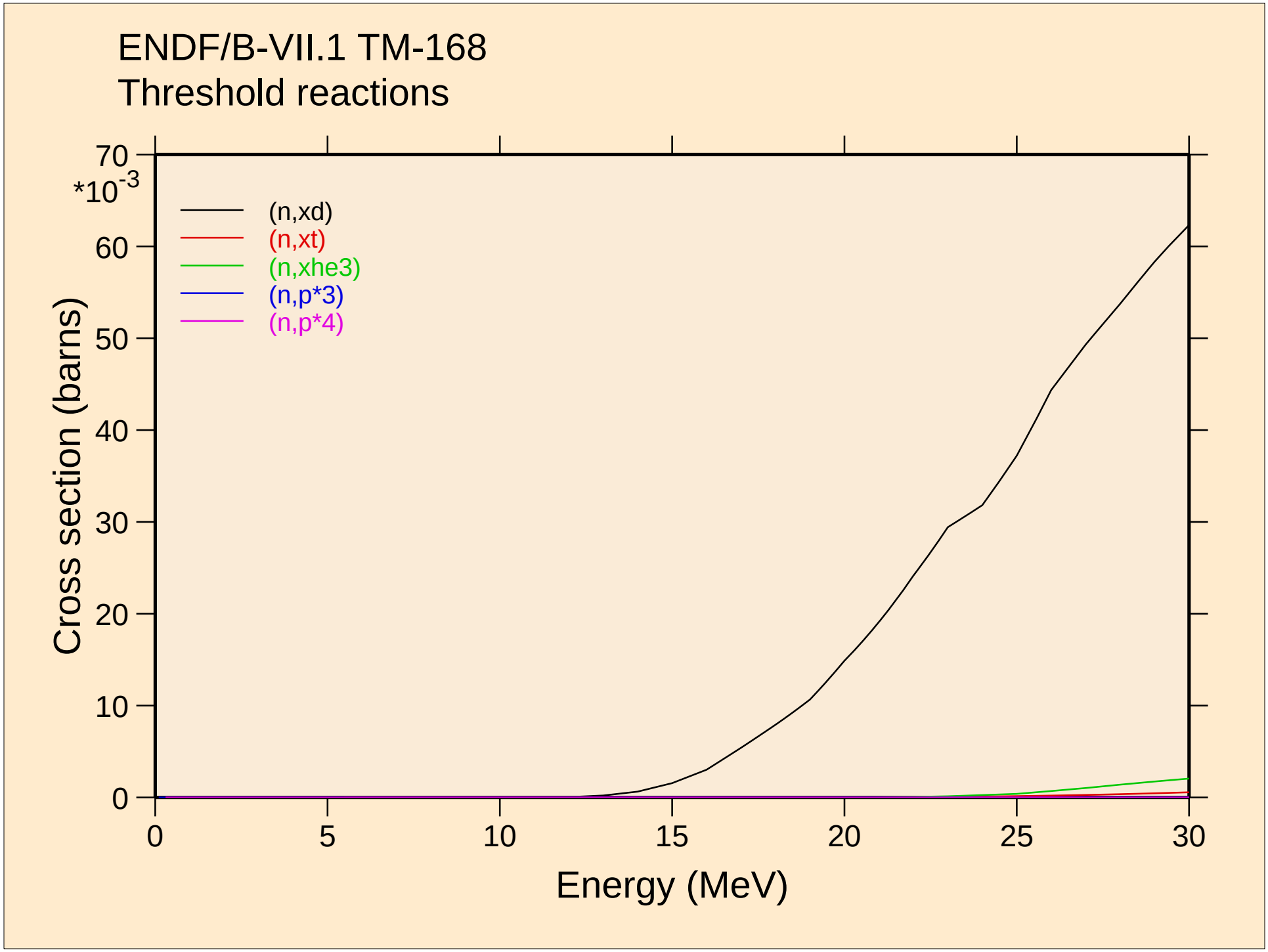

ENDF/B-VII.1 TM-168
Inelastic levels
Cross section (barns)
*10^-3
50
40
30
20
10
0
0
5
10
15
20
25
30
Energy (MeV)
(n,n*26)
(n,n*27)
(n,n*28)
(n,n*29)
(n,n*30)

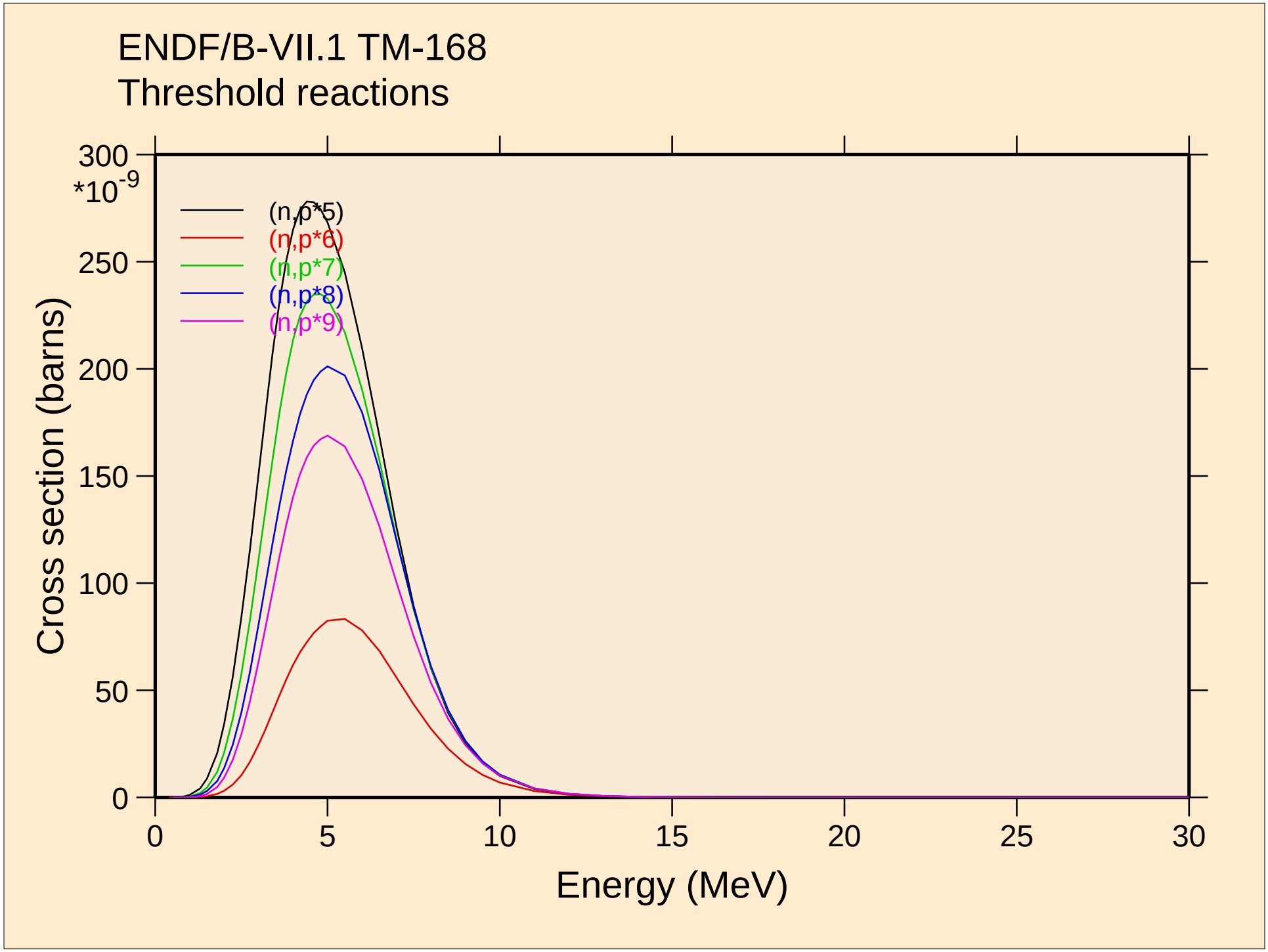

ENDF/B-VII.1 TM-168
Inelastic levels
120
*10-3
100
80
60
40
20
0
Cross section (barns)
0
5
10
15
20
25
30
Energy (MeV)
(n,n*31)
(n,n*32)
(n,n*33)
(n,n*34)
(n,n*35)

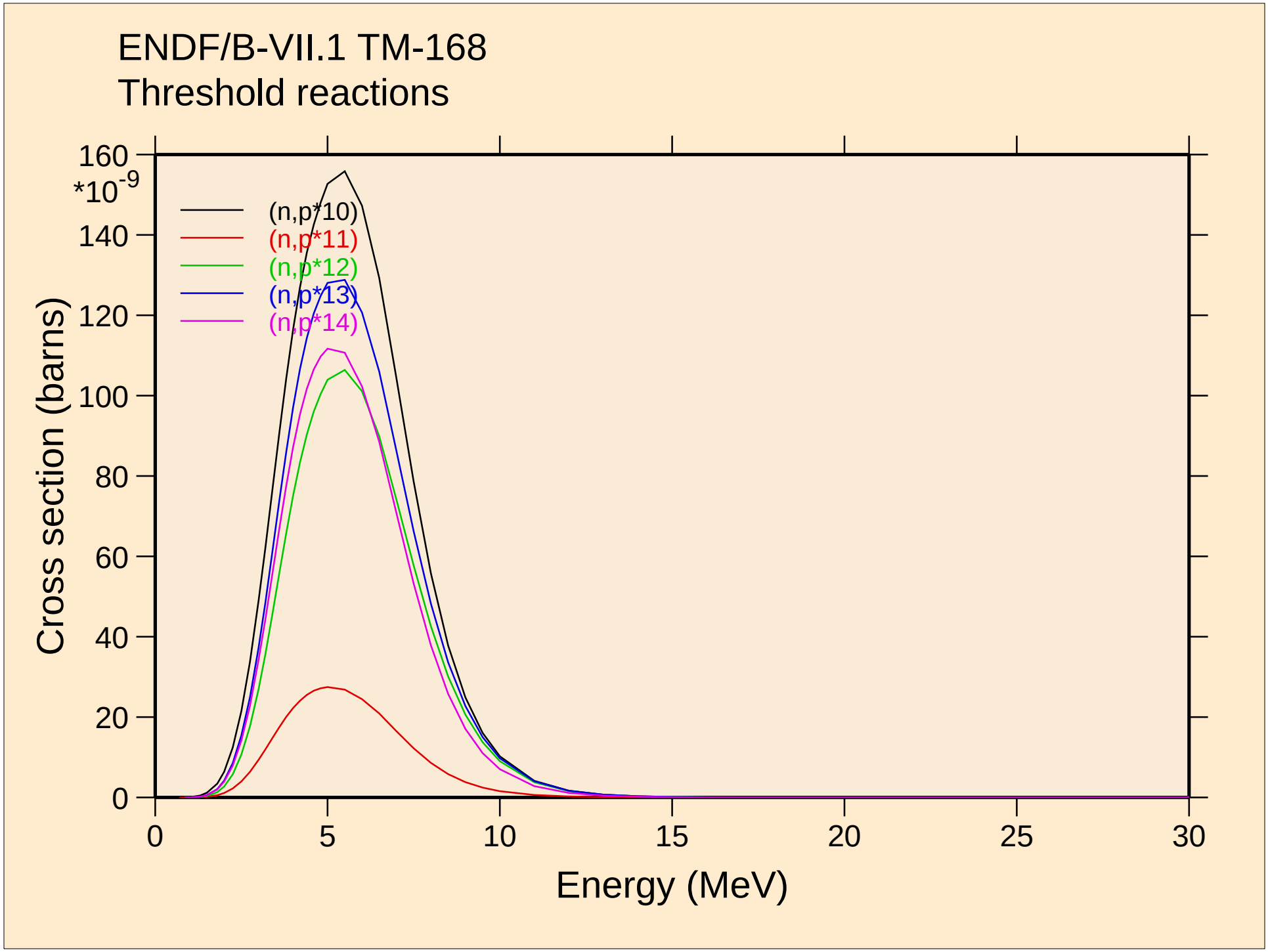

ENDF/B-VII.1 TM-168
Threshold reactions
(n,2n)
(n,3n)
(n,n*)a
(n,n*)p
(n,n*)he3
Cross section (barns)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
5
10
15
20
25
30

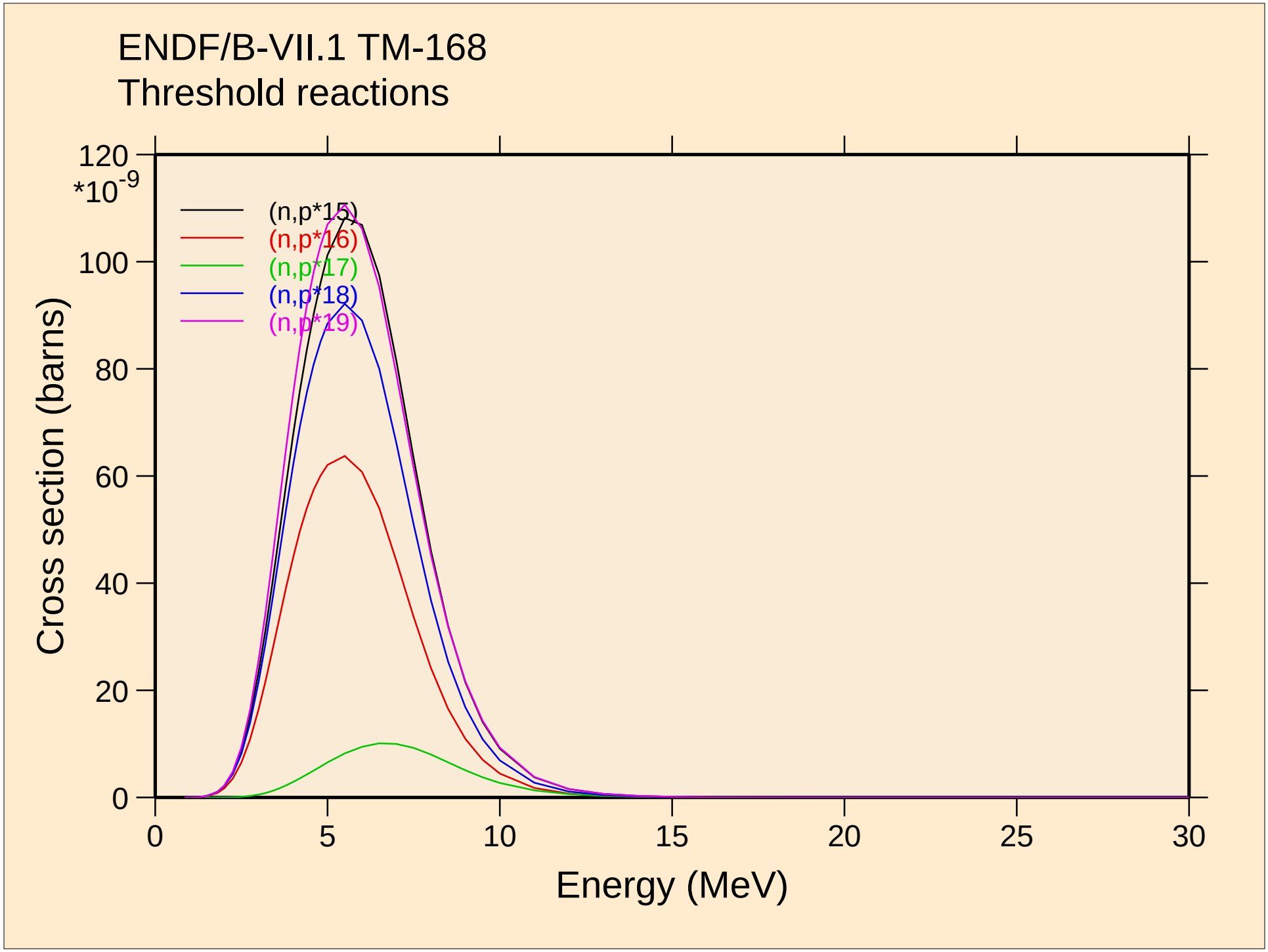

ENDF/B-VII.1 TM-168
Threshold reactions
(n,4n)
(n,2np)
(n,n*c)
(n,d)
(n,he3)
Cross section (barns)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0
5
10
15
20
25
30

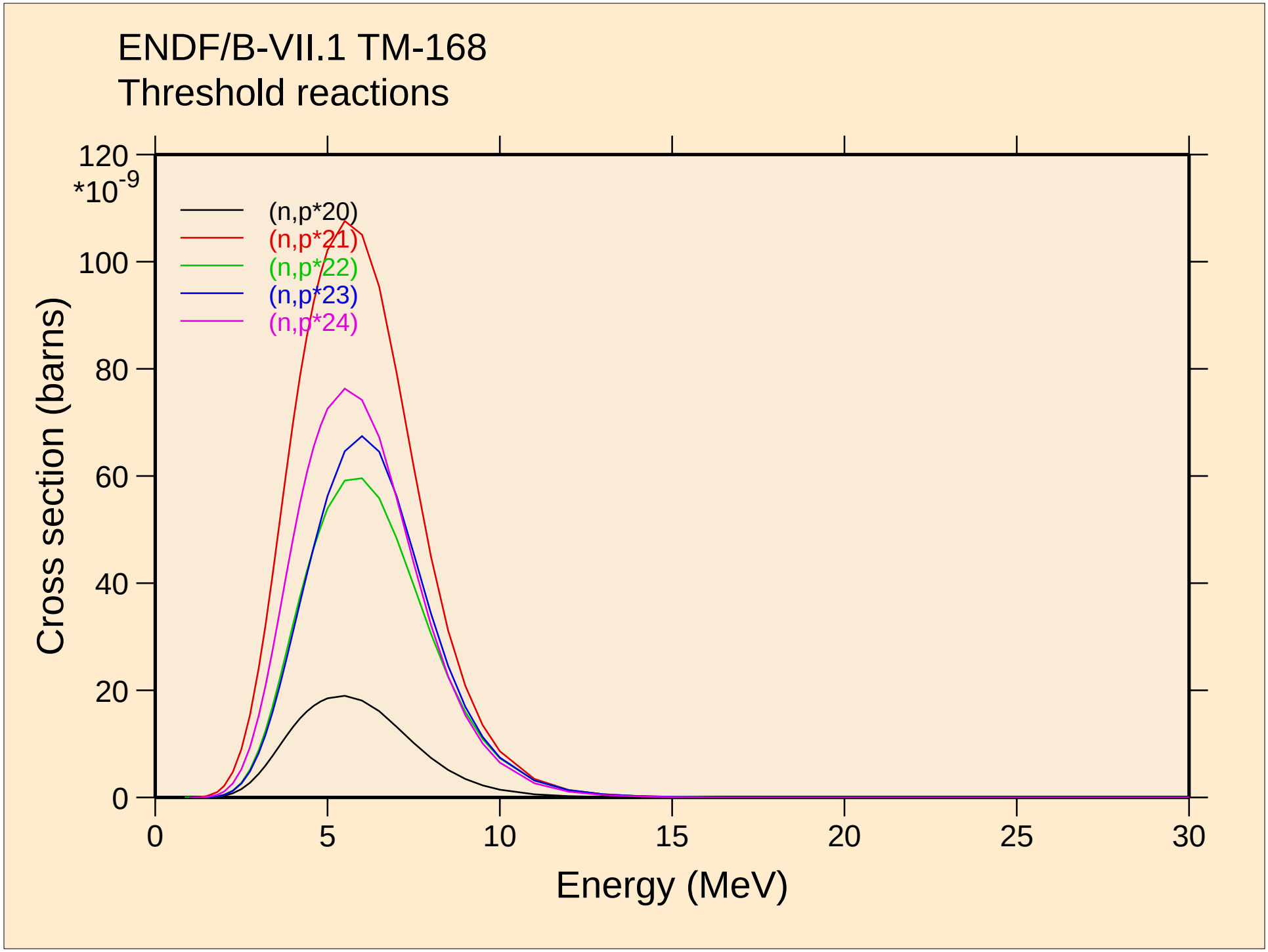

ENDF/B-VII.1 TM-168
Threshold reactions
*10^-9
(n,pa)
(n,pd)
Cross section (barns)
Energy (MeV)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
5
10
15
20
25
30

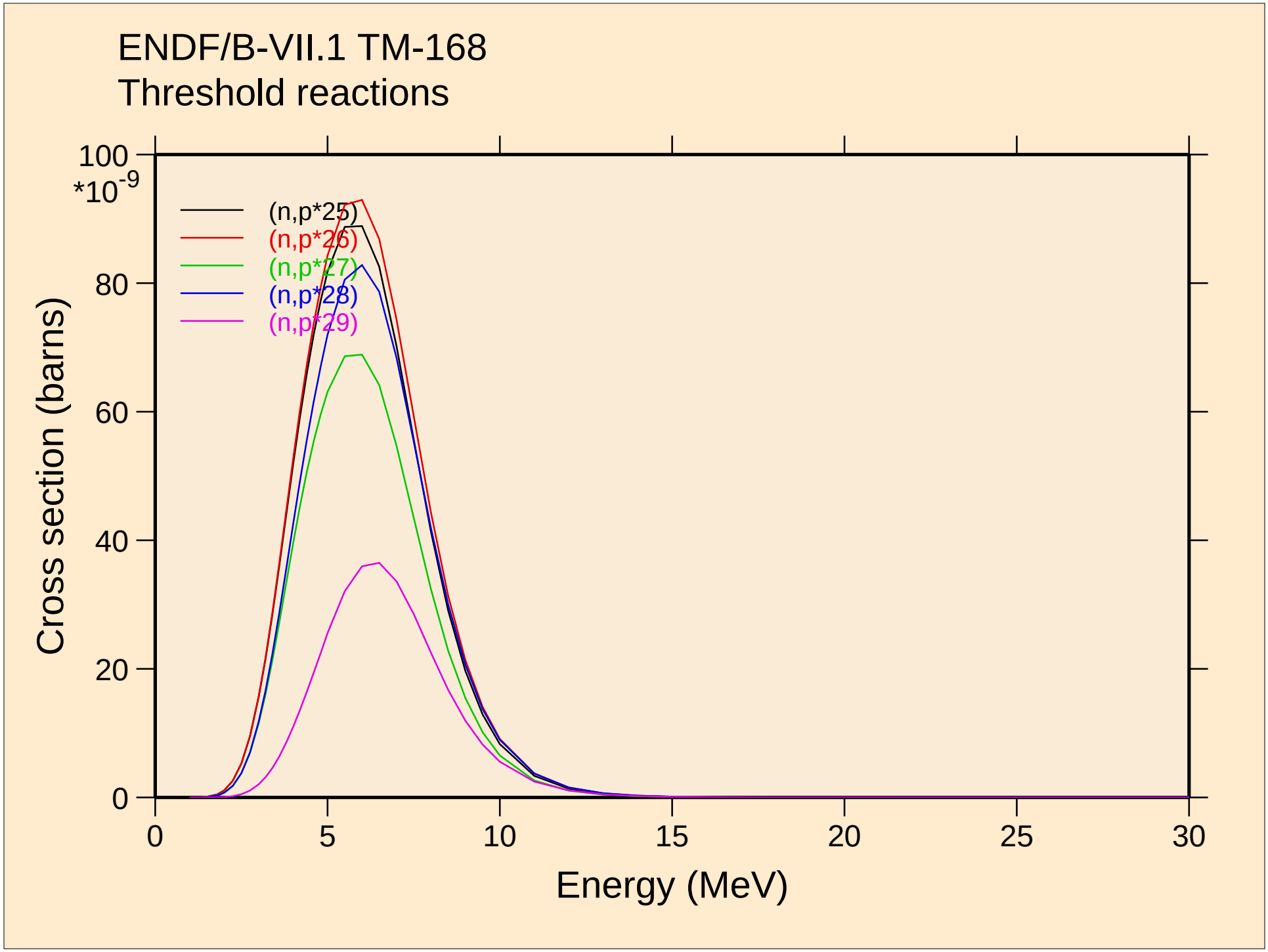

ENDF/B-VII.1 TM-168
Threshold reactions
*10^-3
70
60
50
40
30
20
10
0
Cross section (barns)
(n,xd)
(n,xt)
(n,xhe3)
(n,p*3)
(n,p*4)
0
5
10
15
20
25
30
Energy (MeV)

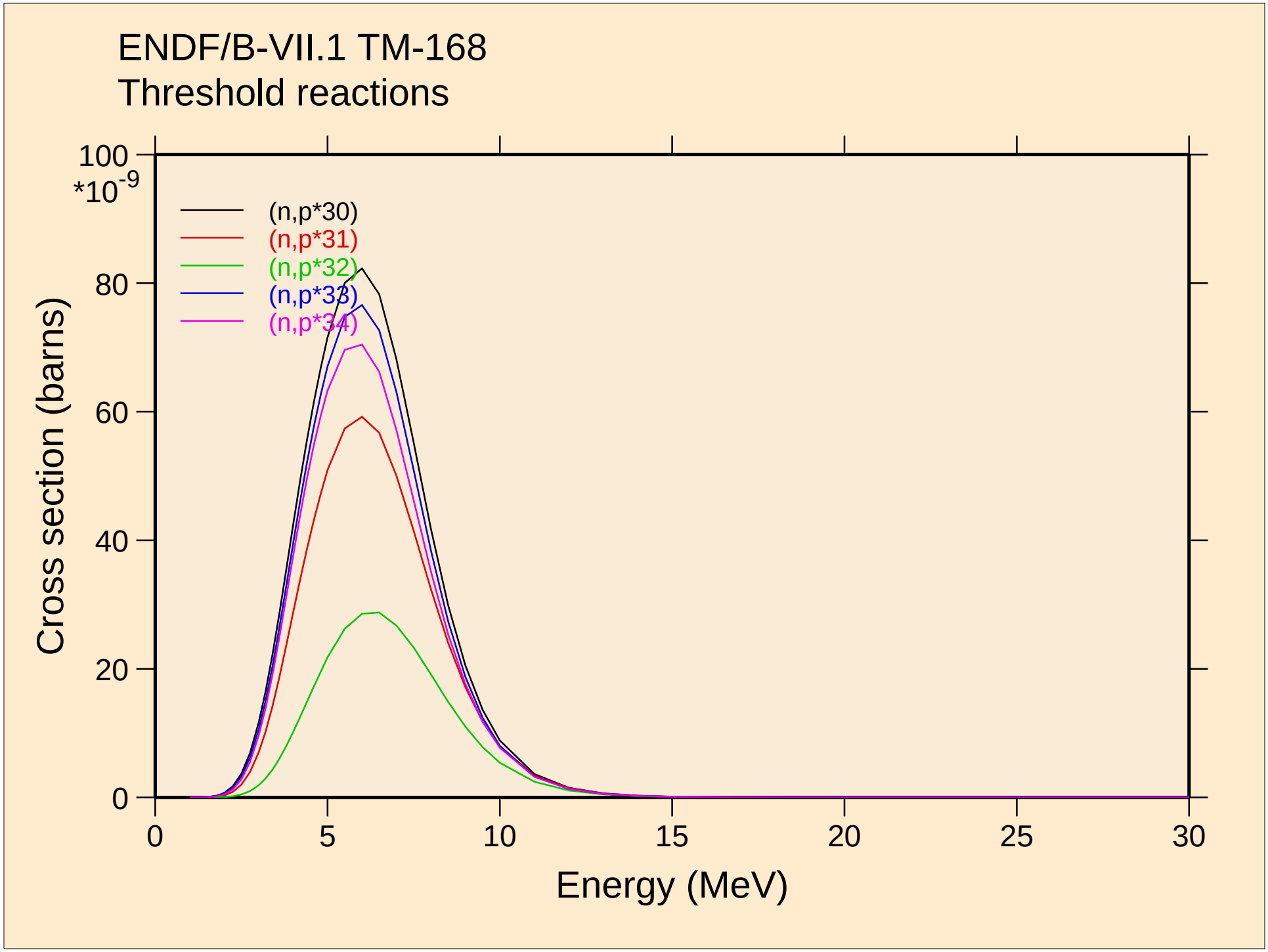

ENDF/B-VII.1 TM-168
Threshold reactions
300
*10-9
250
200
150
100
50
0
Cross section (barns)
(n,p*5)
(n,p*6)
(n,p*7)
(n,p*8)
(n,p*9)
0
5
10
15
20
25
30
Energy (MeV)

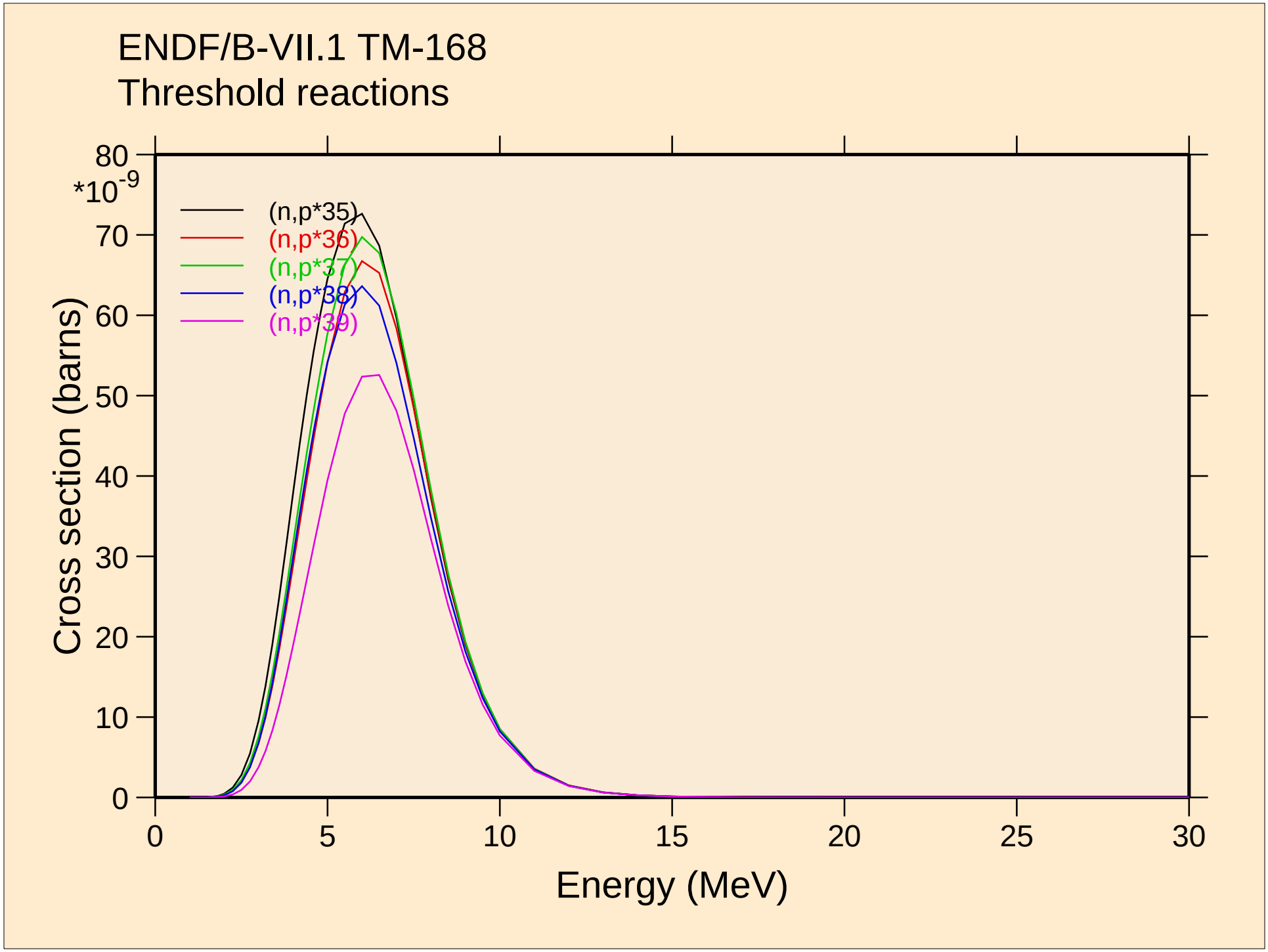

ENDF/B-VII.1 TM-168
Threshold reactions
*10^-9
(n,p*10)
(n,p*11)
(n,p*12)
(n,p*13)
(n,p*14)
Cross section (barns)
Energy (MeV)
0
20
40
60
80
100
120
140
160
0
5
10
15
20
25
30

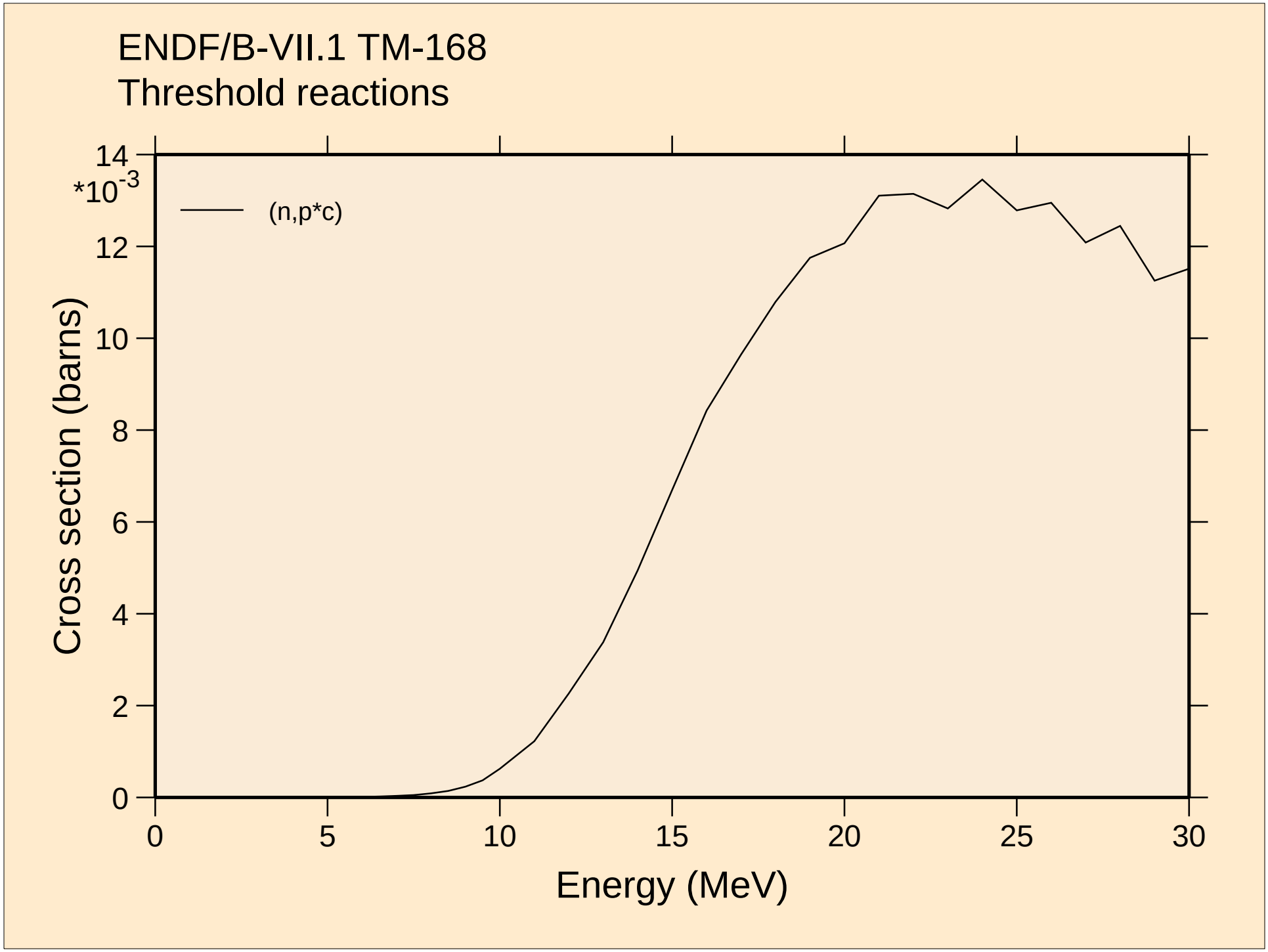

ENDF/B-VII.1 TM-168
Threshold reactions
120
*10-9
100
80
60
40
20
0
Cross section (barns)
(n,p*15)
(n,p*16)
(n,p*17)
(n,p*18)
(n,p*19)
0
5
10
15
20
25
30
Energy (MeV)

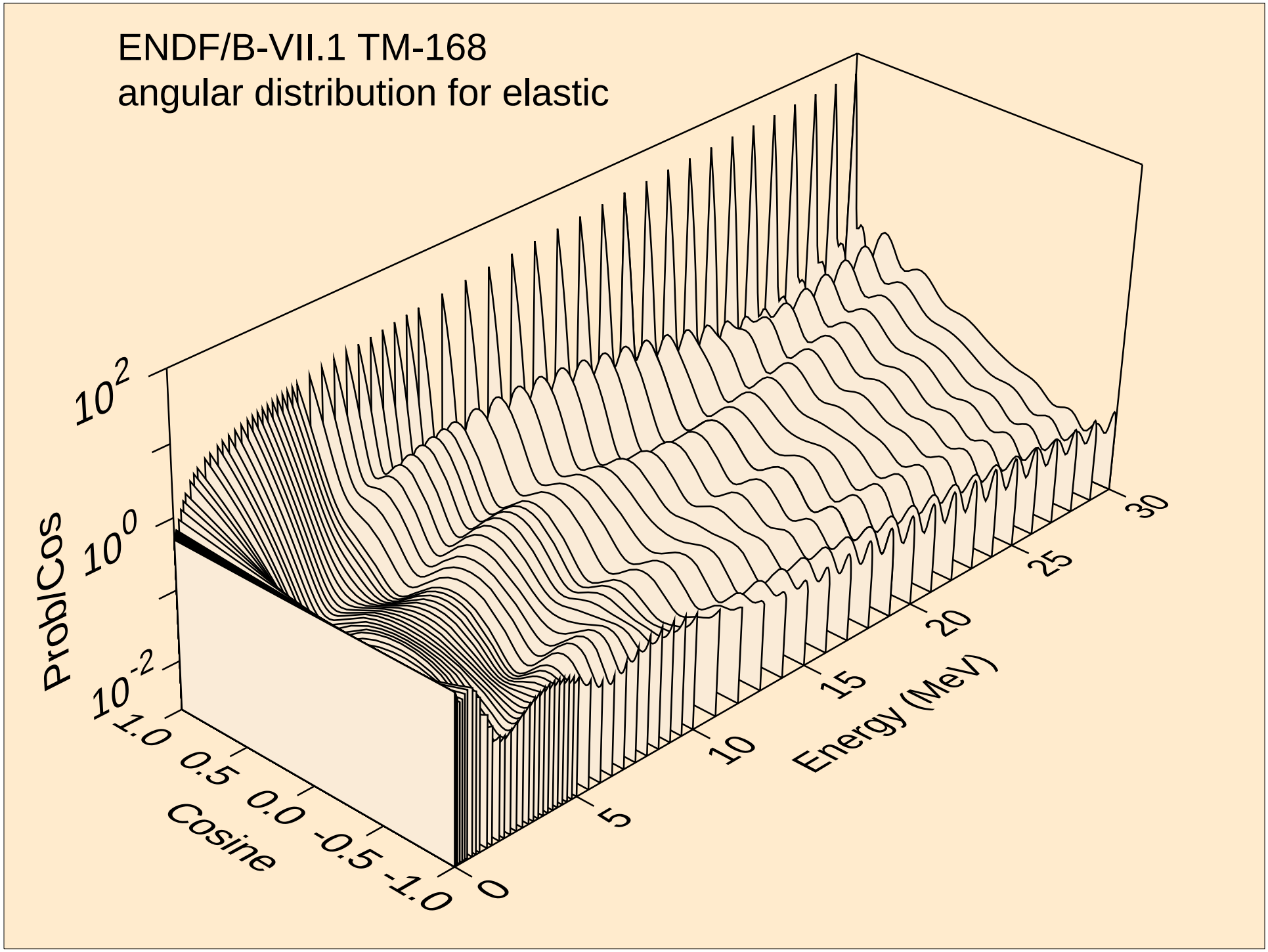

ENDF/B-VII.1 TM-168
Threshold reactions
120
*10-9
100
80
60
40
20
0
Cross section (barns)
(n,p*20)
(n,p*21)
(n,p*22)
(n,p*23)
(n,p*24)
0
5
10
15
20
25
30
Energy (MeV)

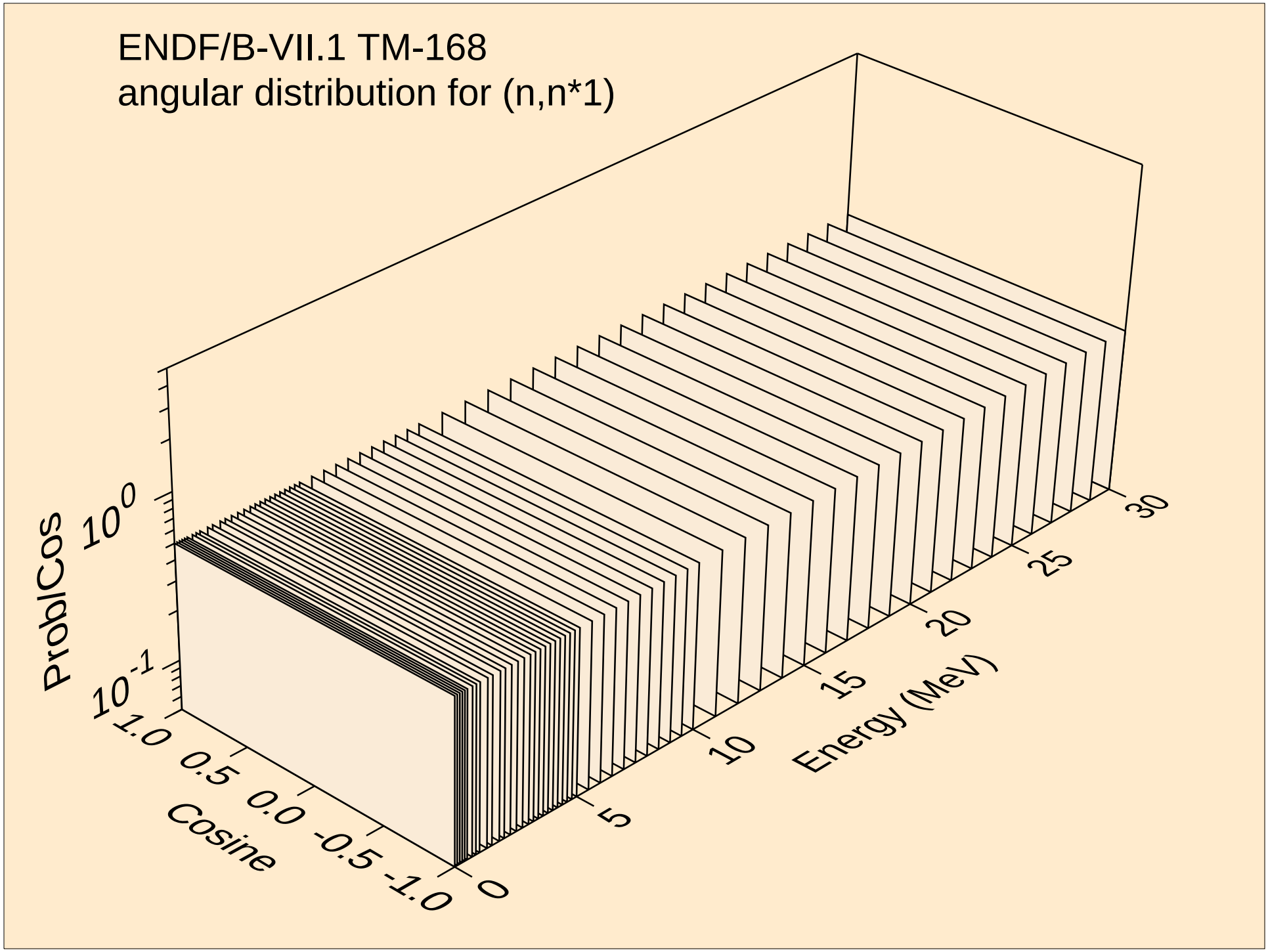

ENDF/B-VII.1 TM-168
Threshold reactions
100
*10-9
80
60
40
20
0
Cross section (barns)
(n,p*25)
(n,p*26)
(n,p*27)
(n,p*28)
(n,p*29)
0
5
10
15
20
25
30
Energy (MeV)

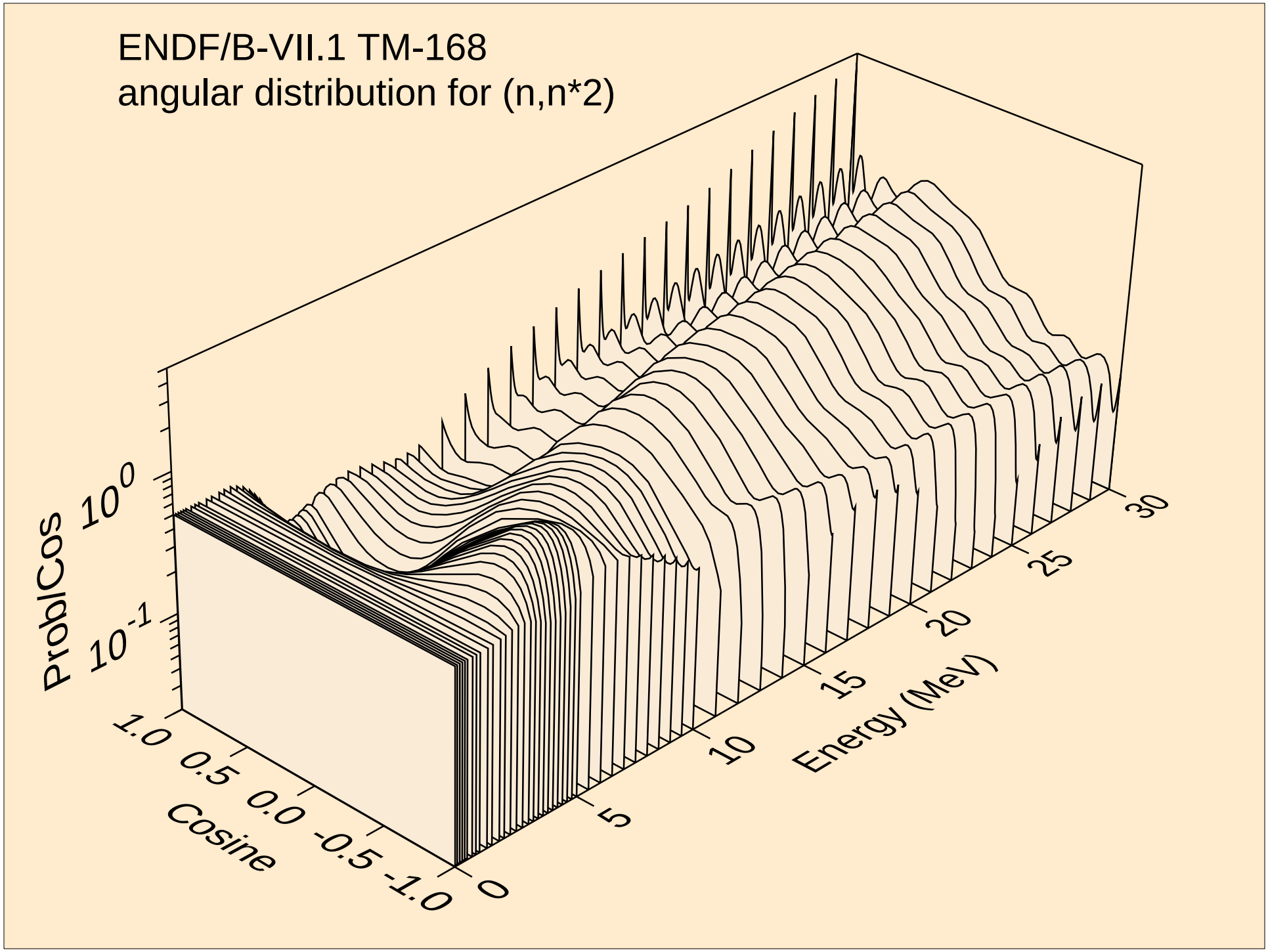

ENDF/B-VII.1 TM-168
Threshold reactions
100
*10-9
80
60
40
20
0
Cross section (barns)
(n,p*30)
(n,p*31)
(n,p*32)
(n,p*33)
(n,p*34)
0
5
10
15
20
25
30
Energy (MeV)

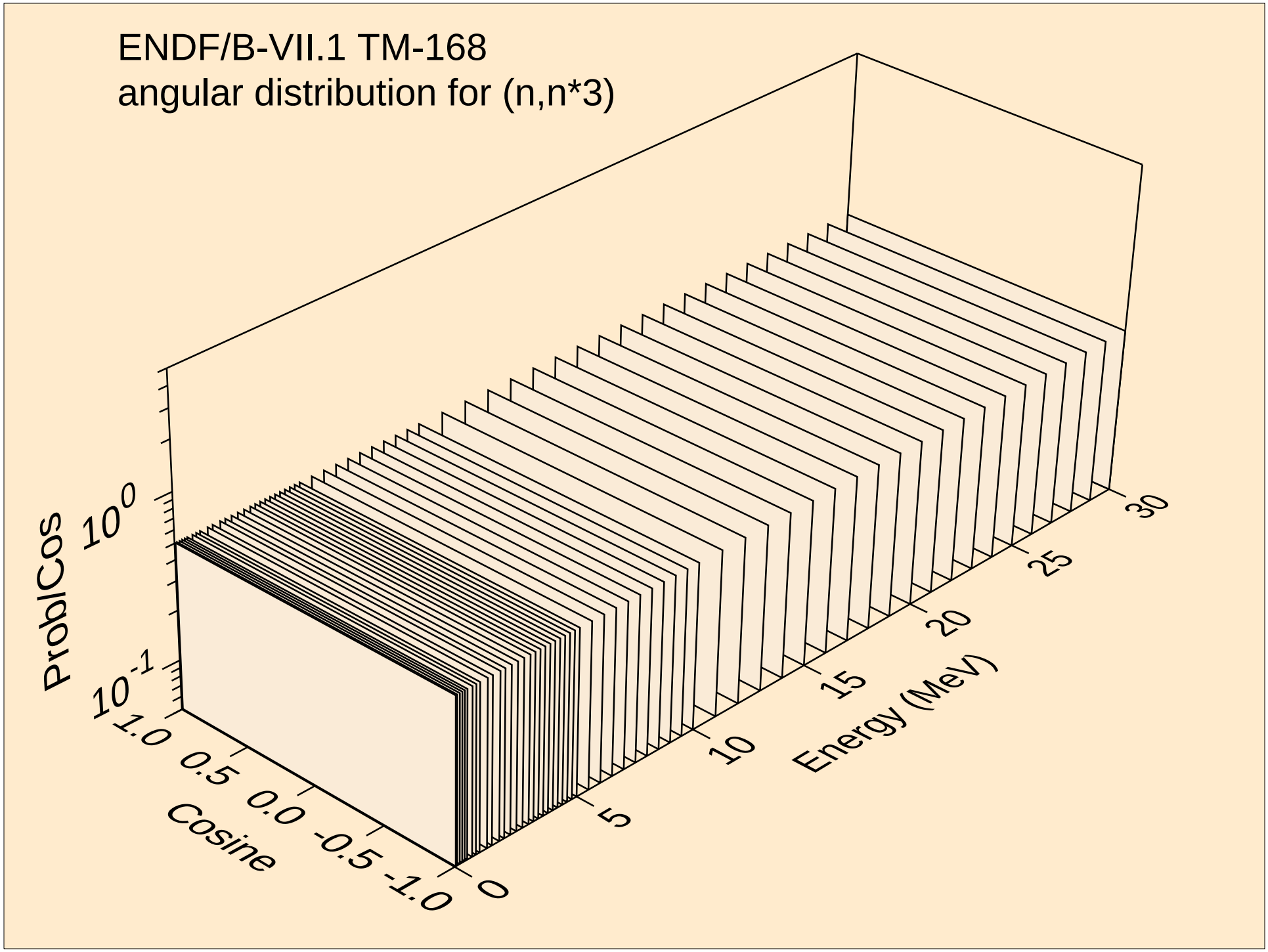

ENDF/B-VII.1 TM-168
Threshold reactions
*10^-9
(n,p*35)
(n,p*36)
(n,p*37)
(n,p*38)
(n,p*39)
Cross section (barns)
Energy (MeV)
0
10
20
30
40
50
60
70
80
0
5
10
15
20
25
30

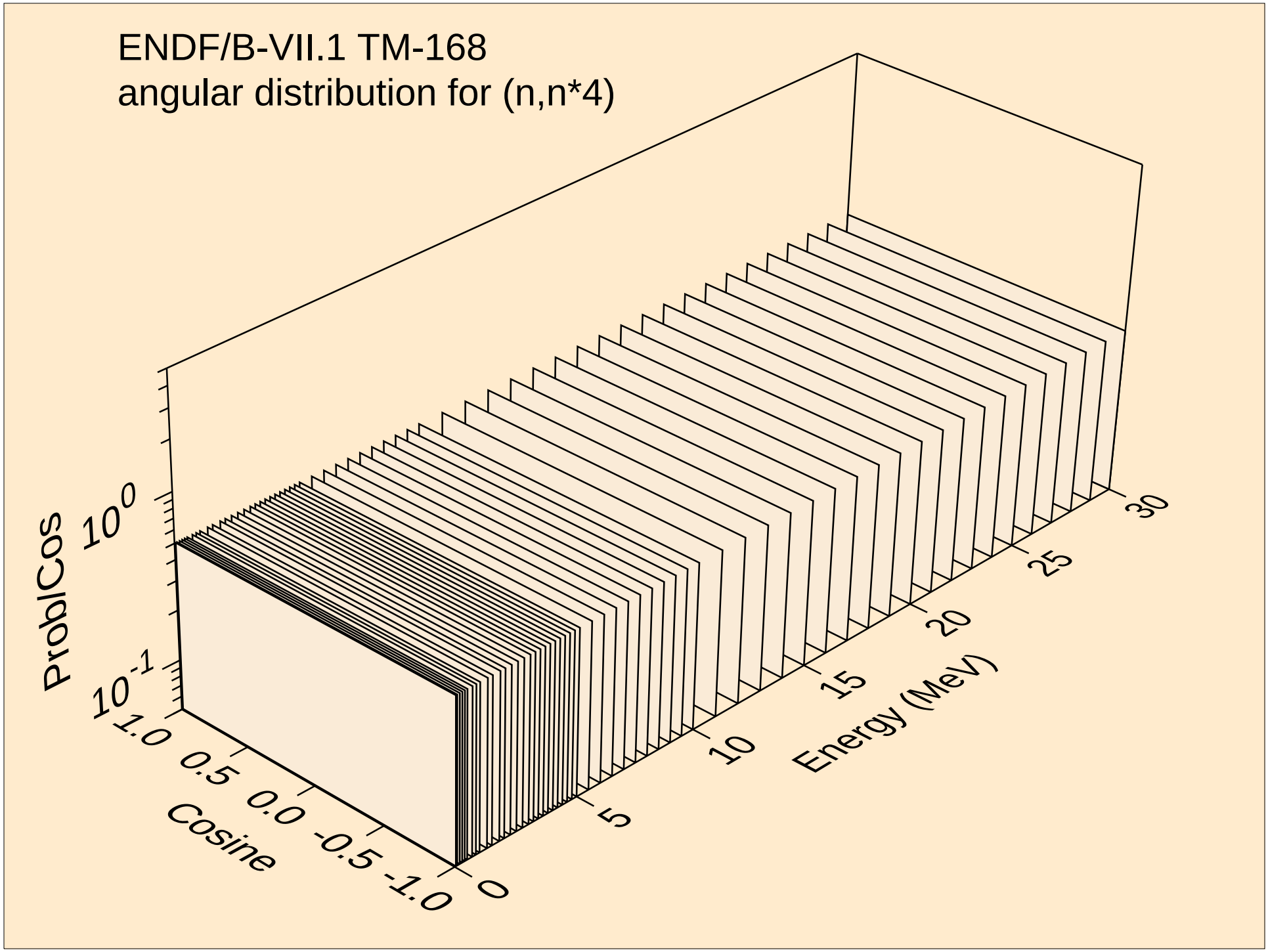

ENDF/B-VII.1 TM-168
Threshold reactions
(n,p*c)
*10^-3
14
12
10
8
6
4
2
0
Cross section (barns)
0
5
10
15
20
25
30
Energy (MeV)

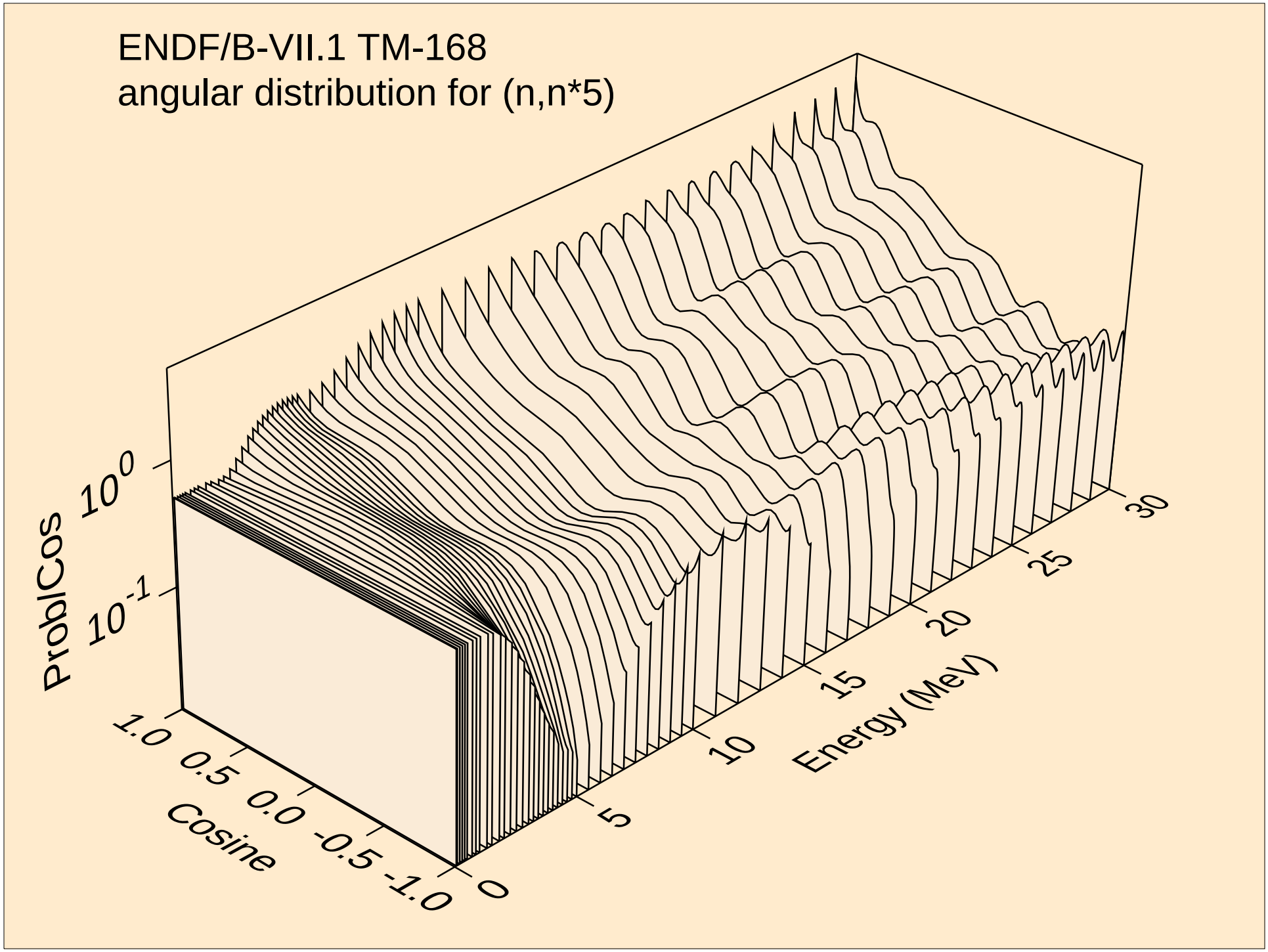

ENDF/B-VII.1 TM-168
angular distribution for elastic
ProblCos
10^2
10^0
10^{-2}
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
5
10
15
20
25
30

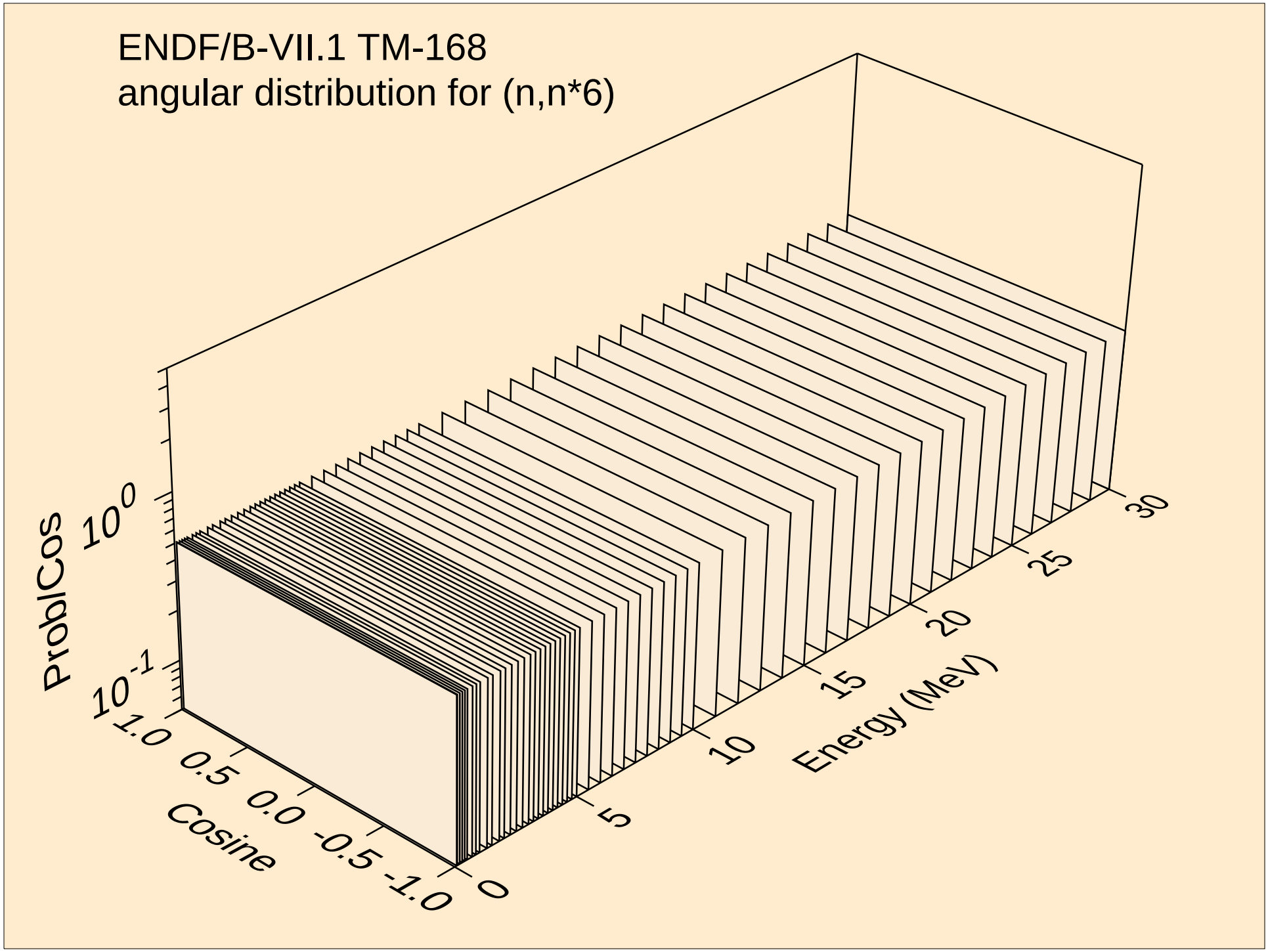

ENDF/B-VII.1 TM-168
angular distribution for (n,n*1)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

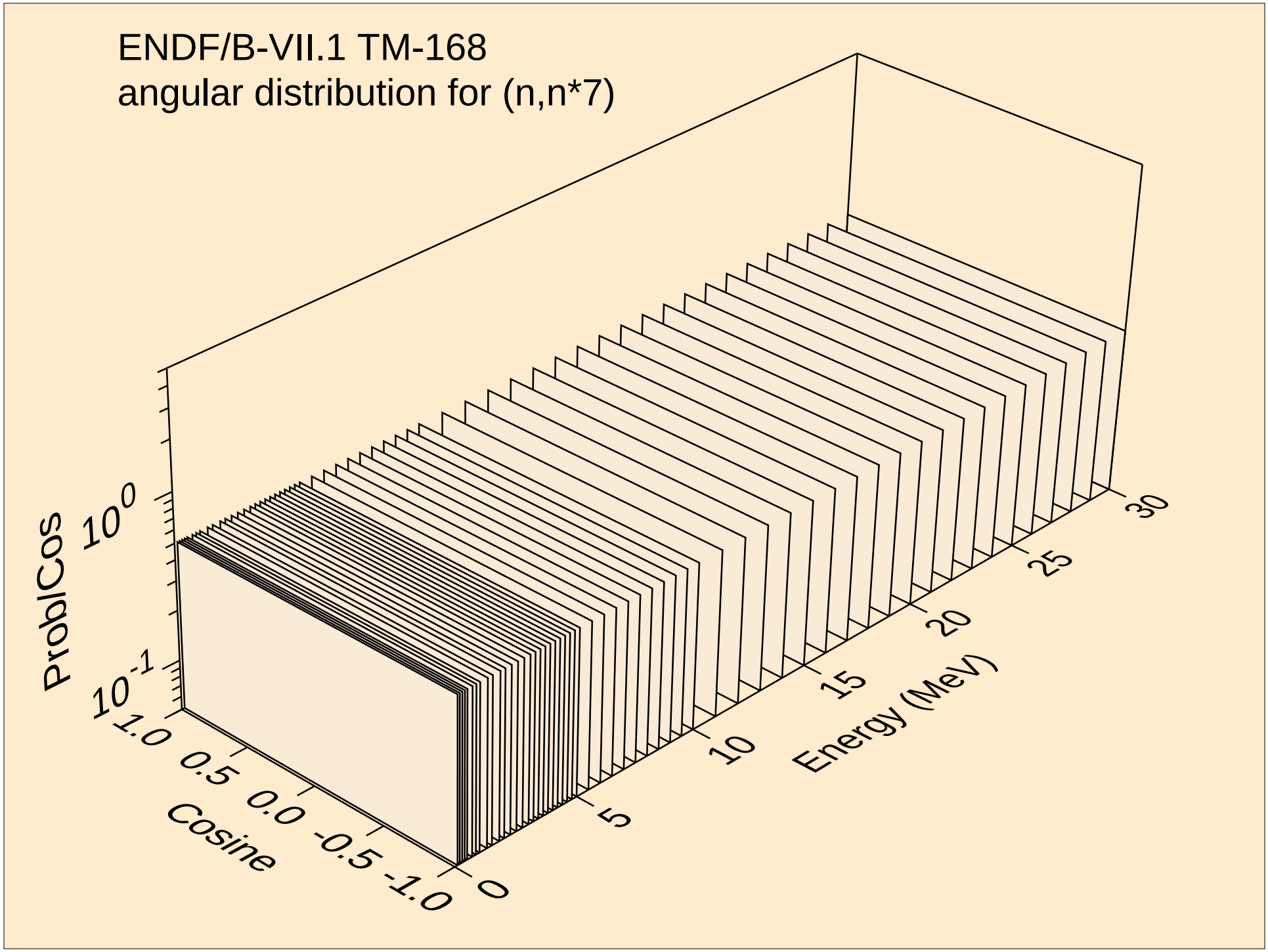

ENDF/B-VII.1 TM-168
angular distribution for (n,n*2)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

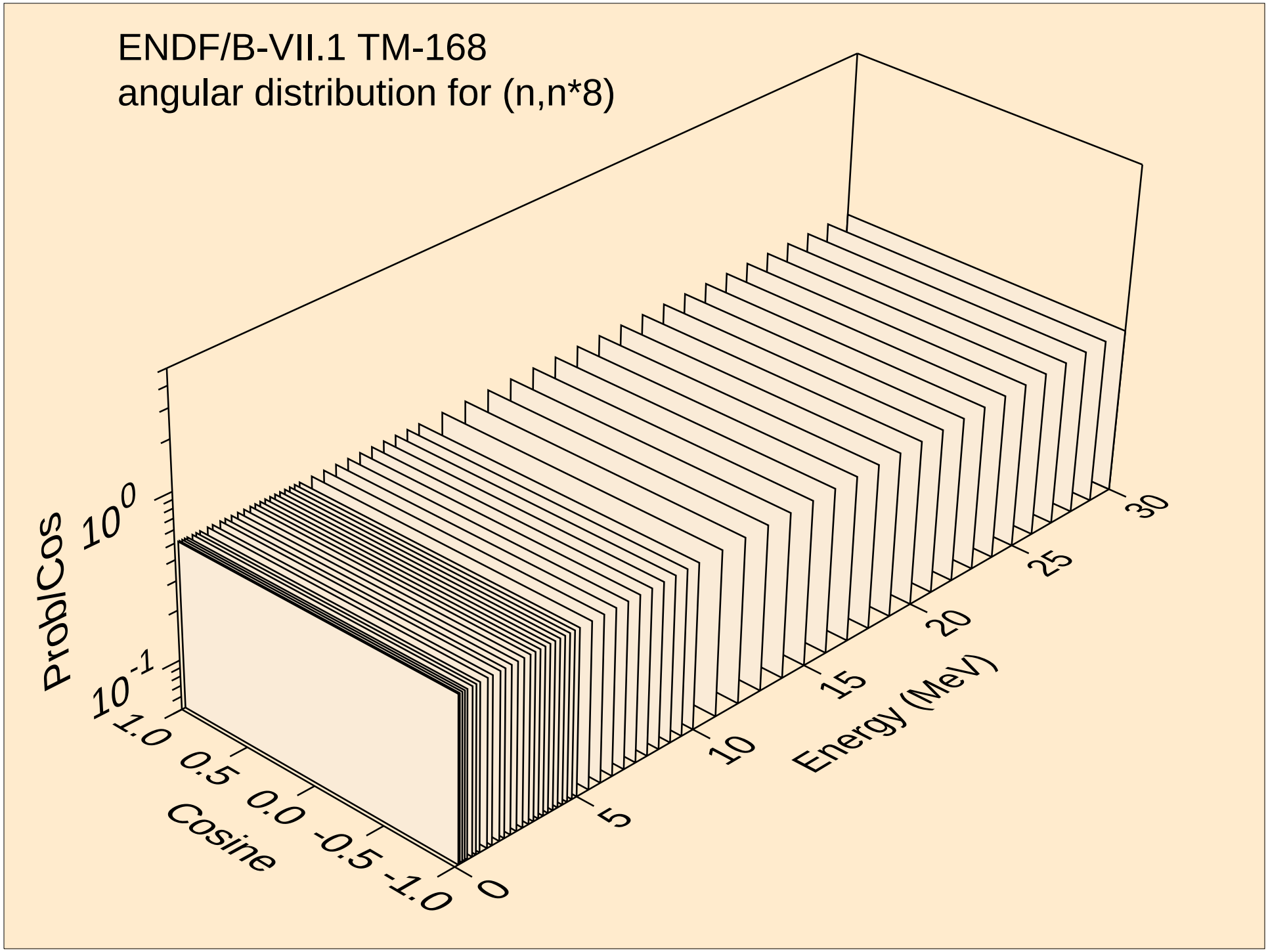

ENDF/B-VII.1 TM-168
angular distribution for (n,n*3)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

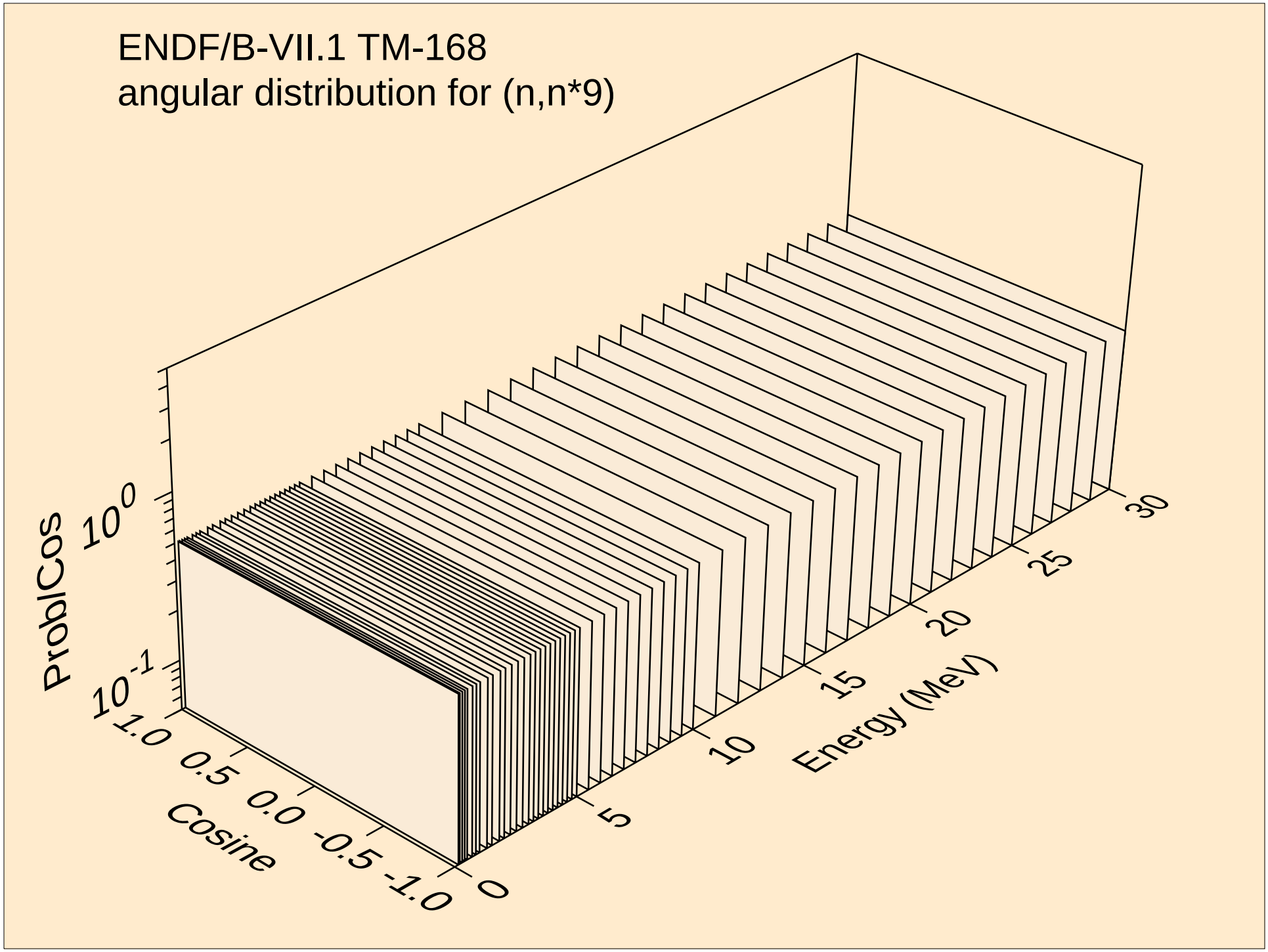

ENDF/B-VII.1 TM-168
angular distribution for (n,n*4)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

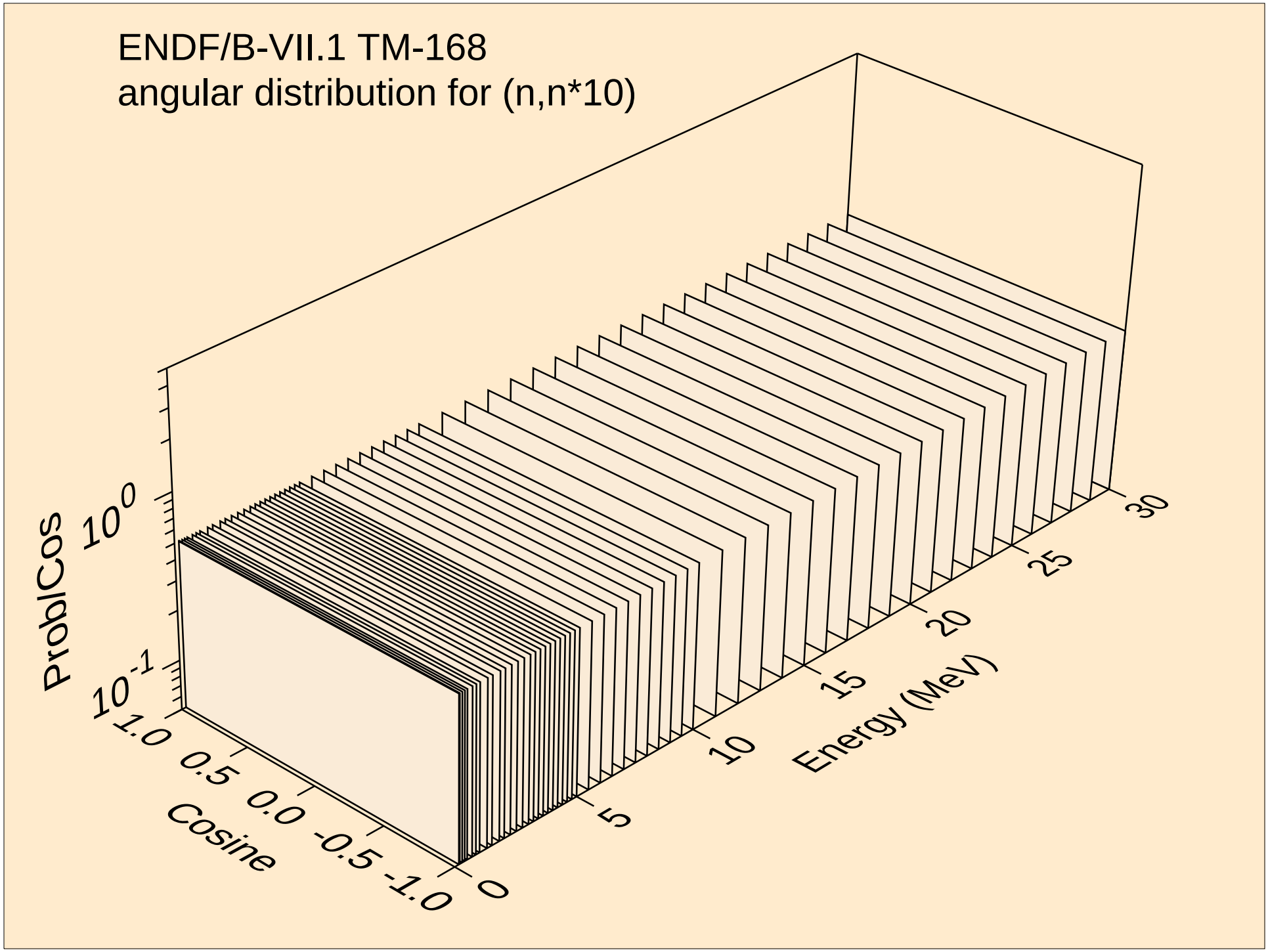

ENDF/B-VII.1 TM-168
angular distribution for (n,n*5)
ProblCos
10^0
10^{-1}
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
5
10
15
20
25
30

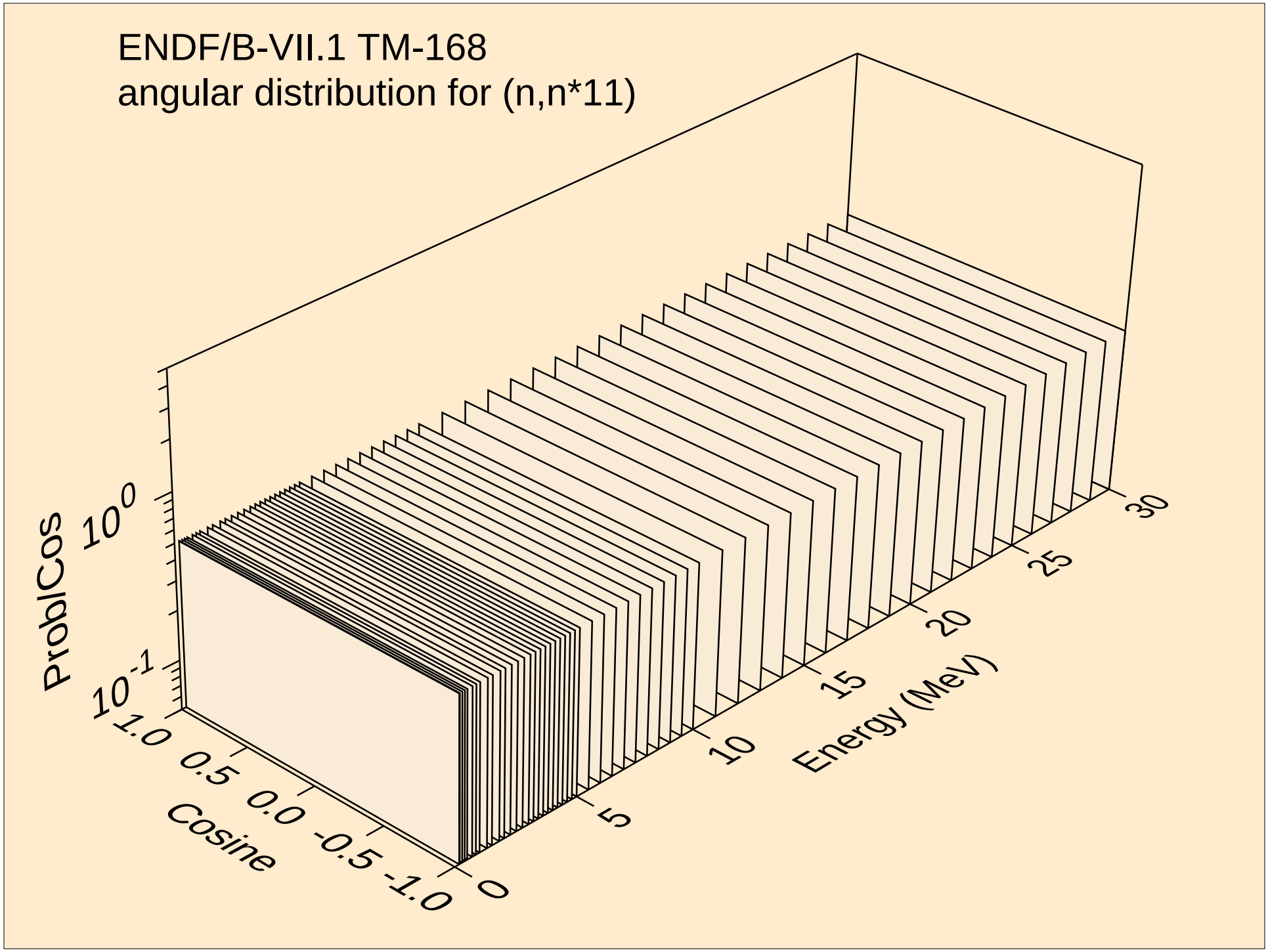

ENDF/B-VII.1 TM-168
angular distribution for (n,n*6)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

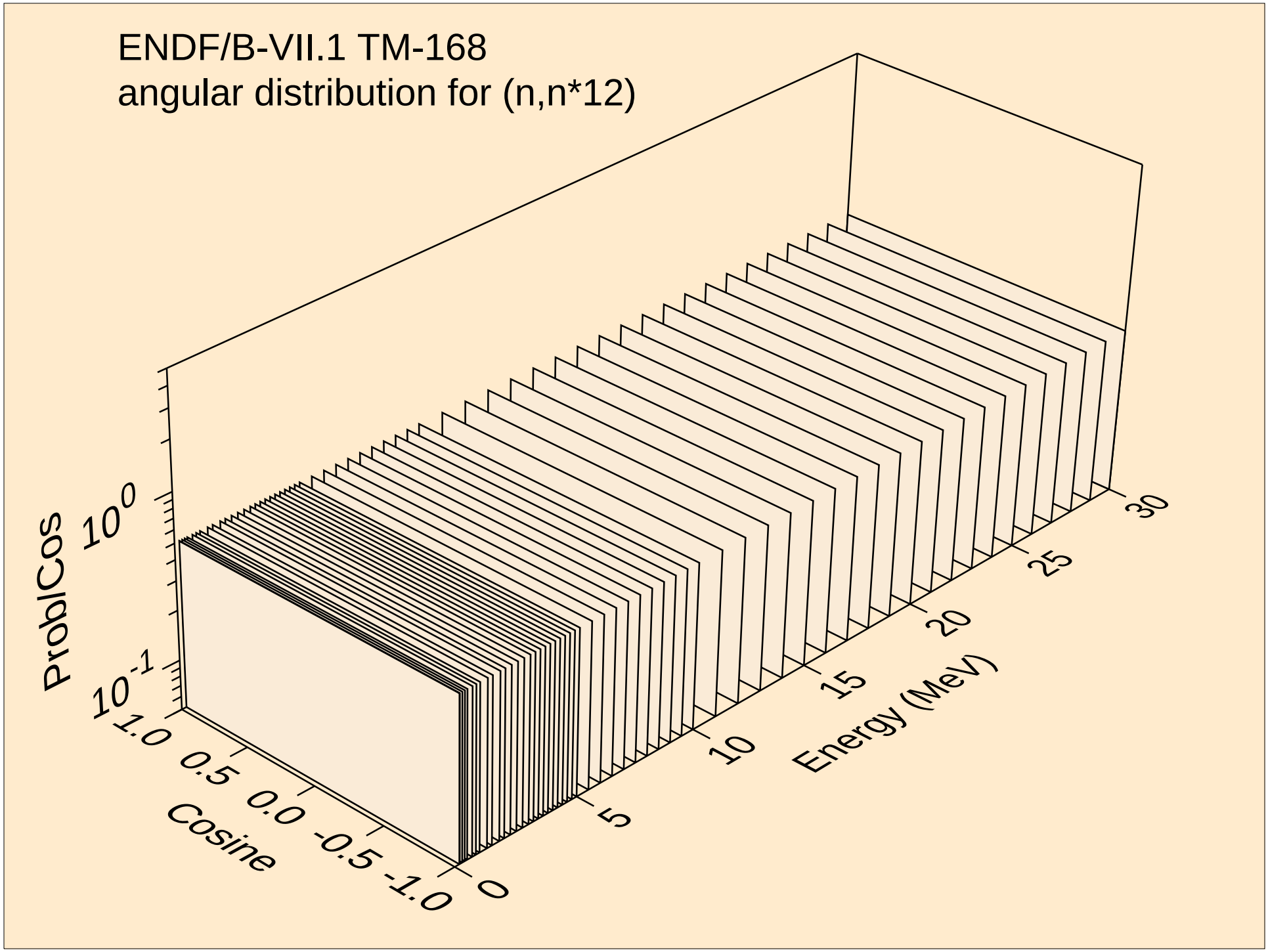

ENDF/B-VII.1 TM-168
angular distribution for (n,n*7)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

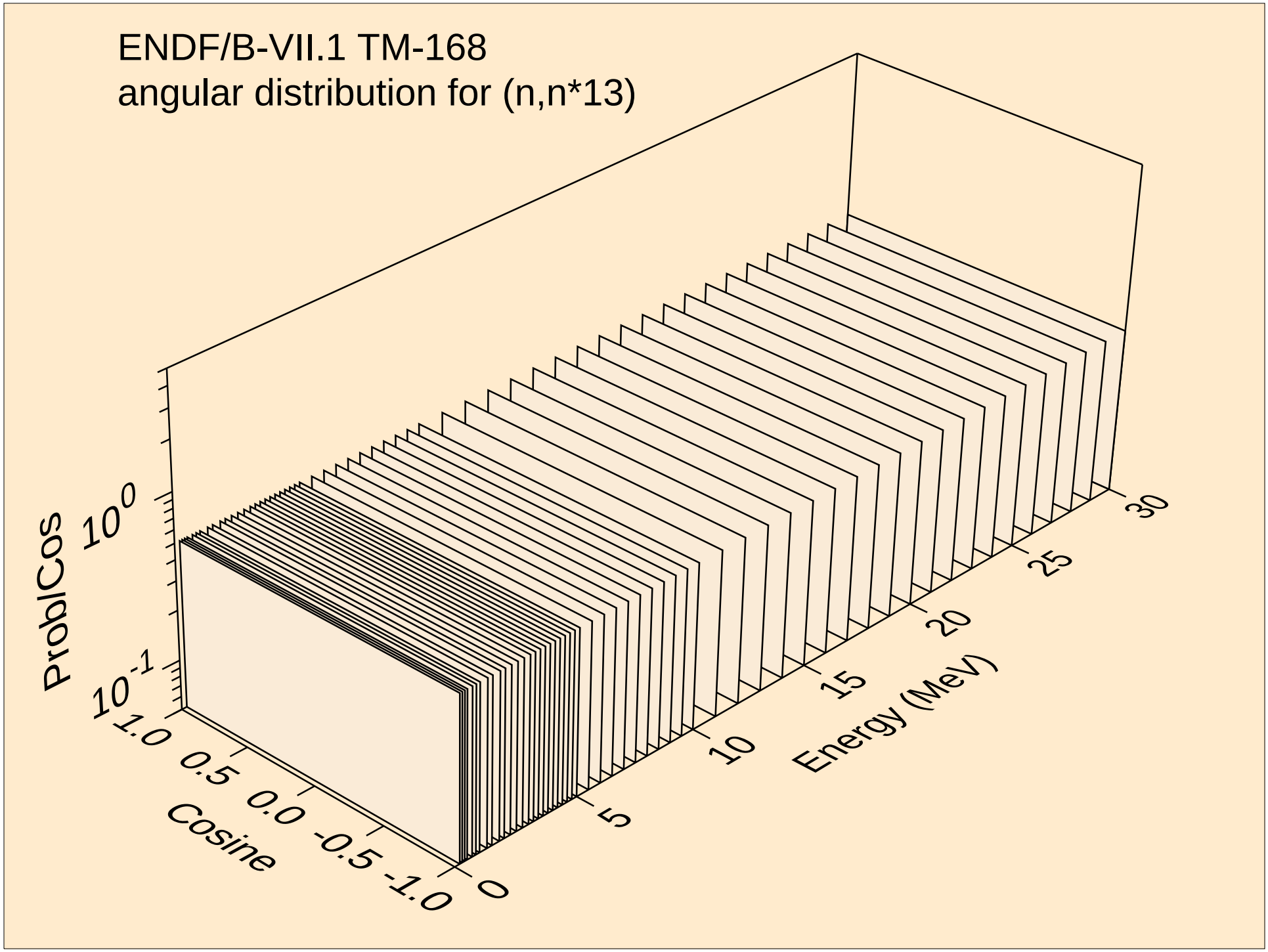

ENDF/B-VII.1 TM-168
angular distribution for (n,n*8)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

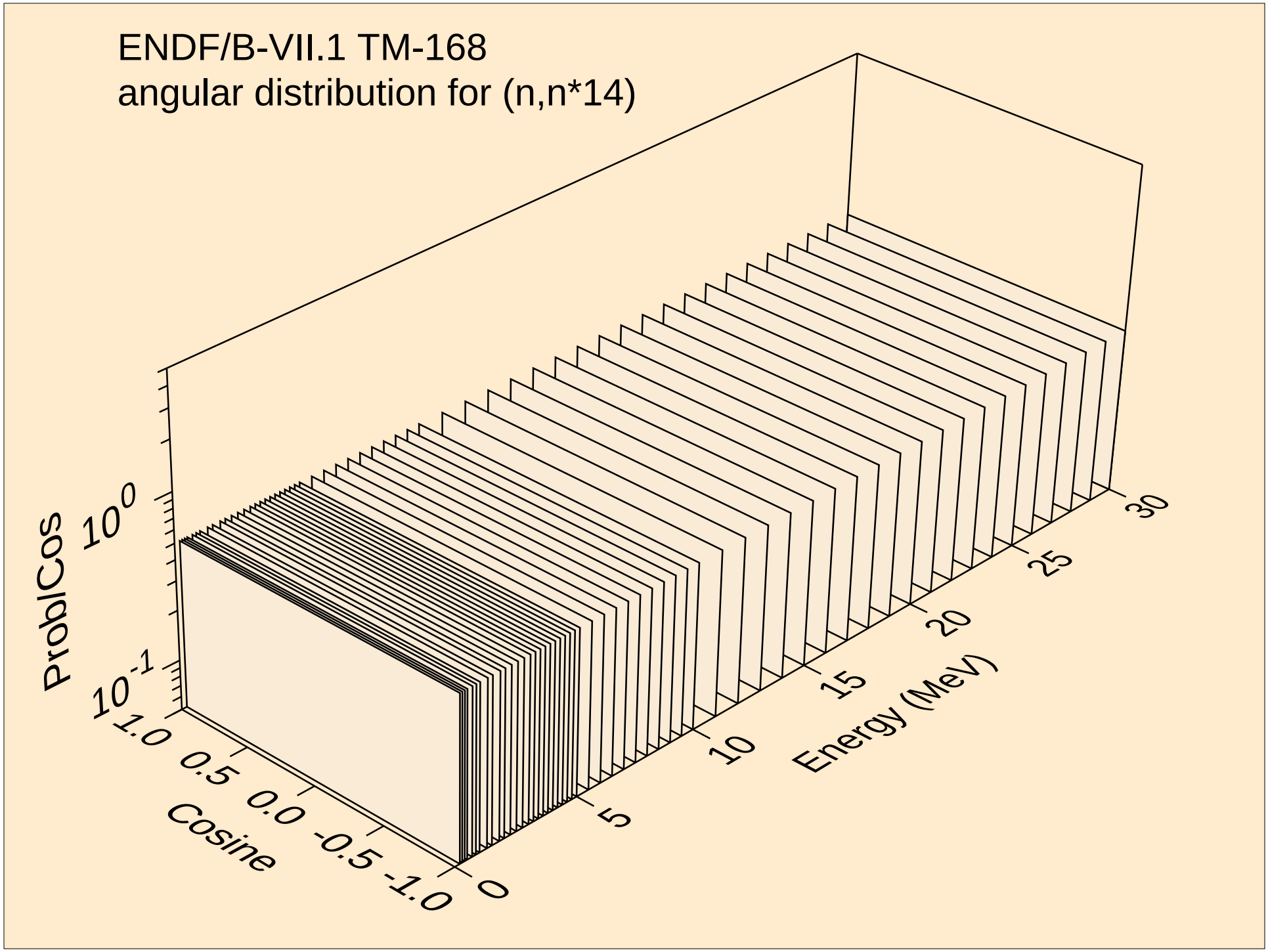

ENDF/B-VII.1 TM-168
angular distribution for (n,n*9)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

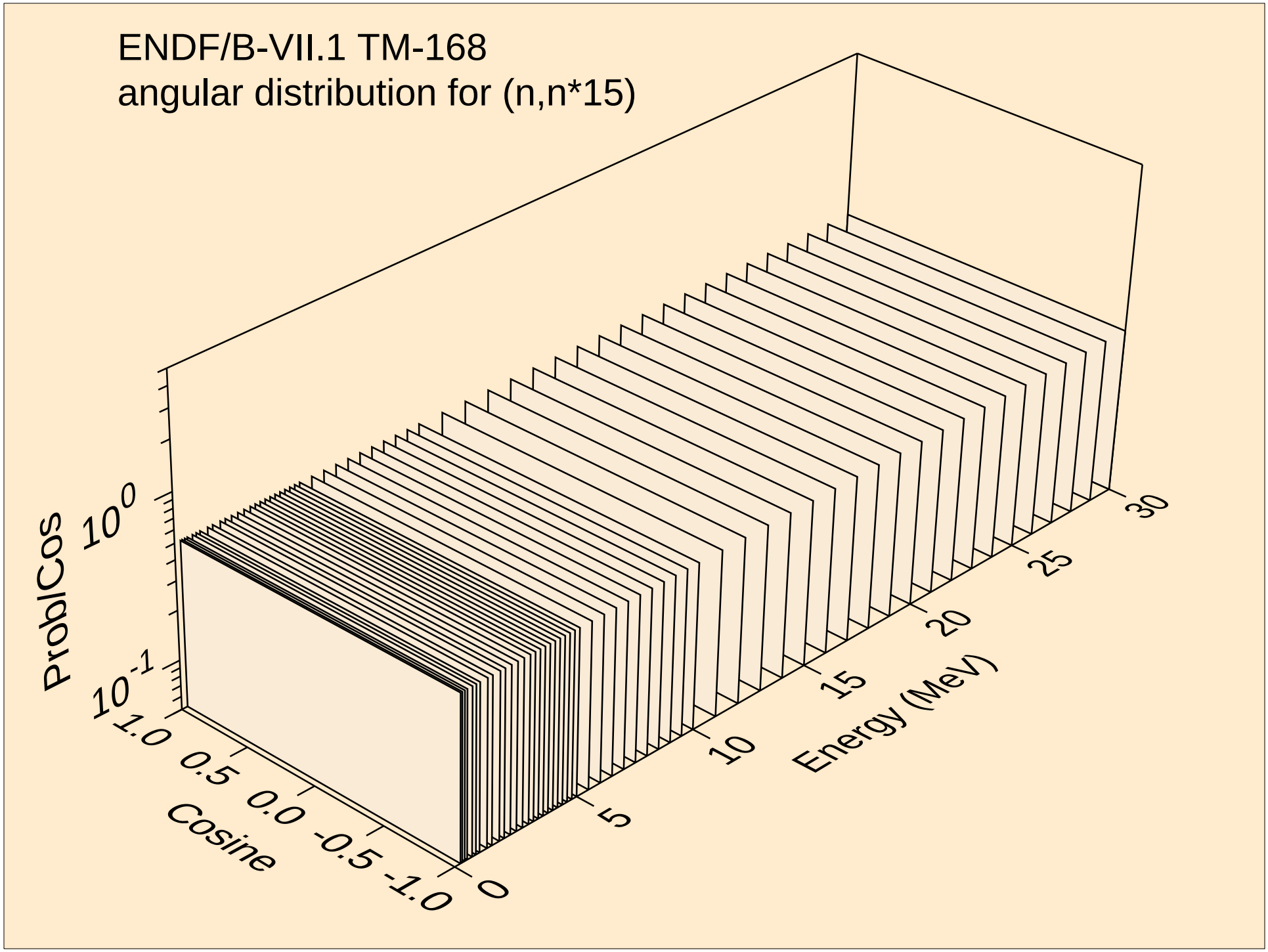

ENDF/B-VII.1 TM-168
angular distribution for (n,n*10)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

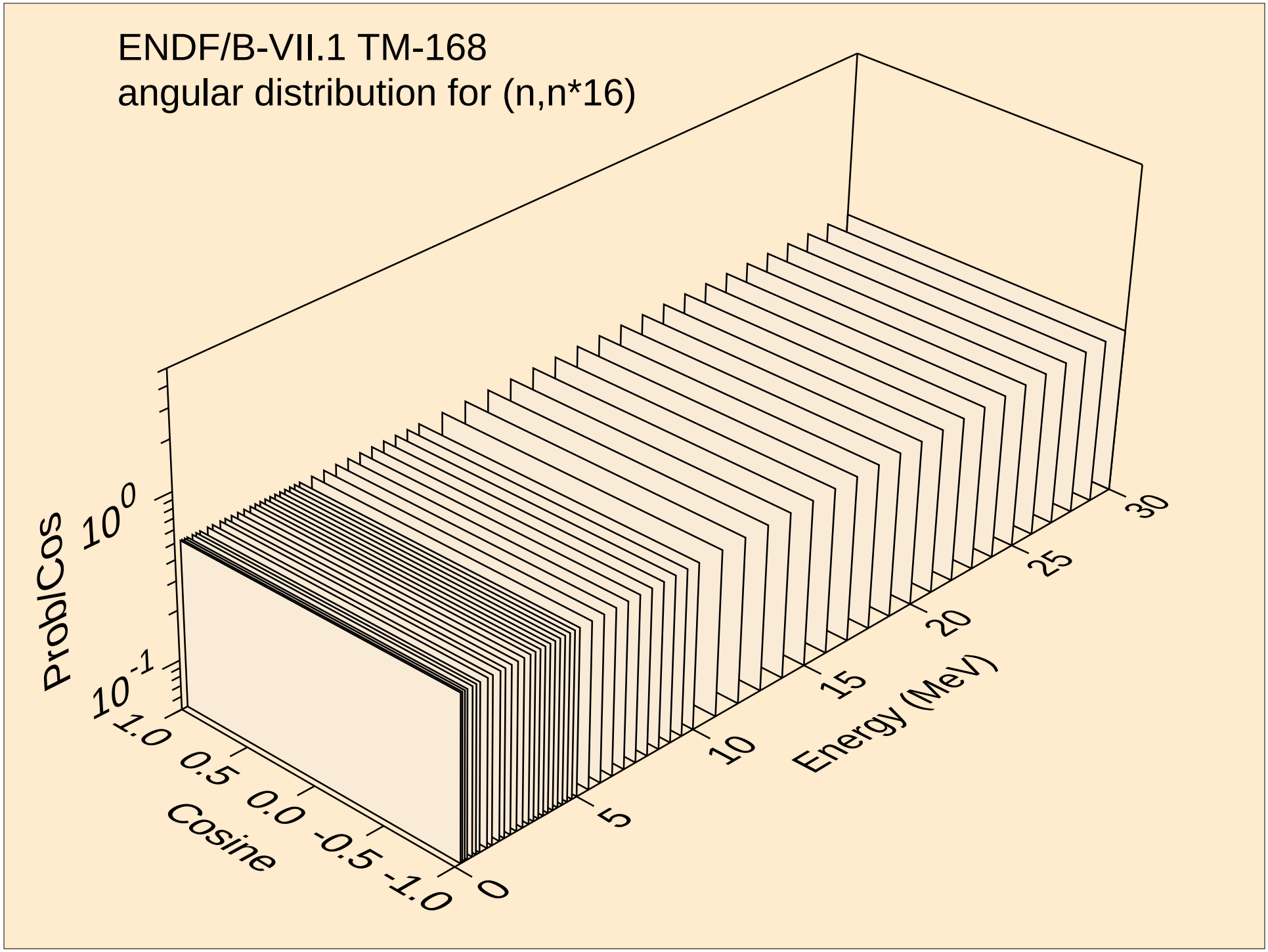

ENDF/B-VII.1 TM-168
angular distribution for (n,n*11)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

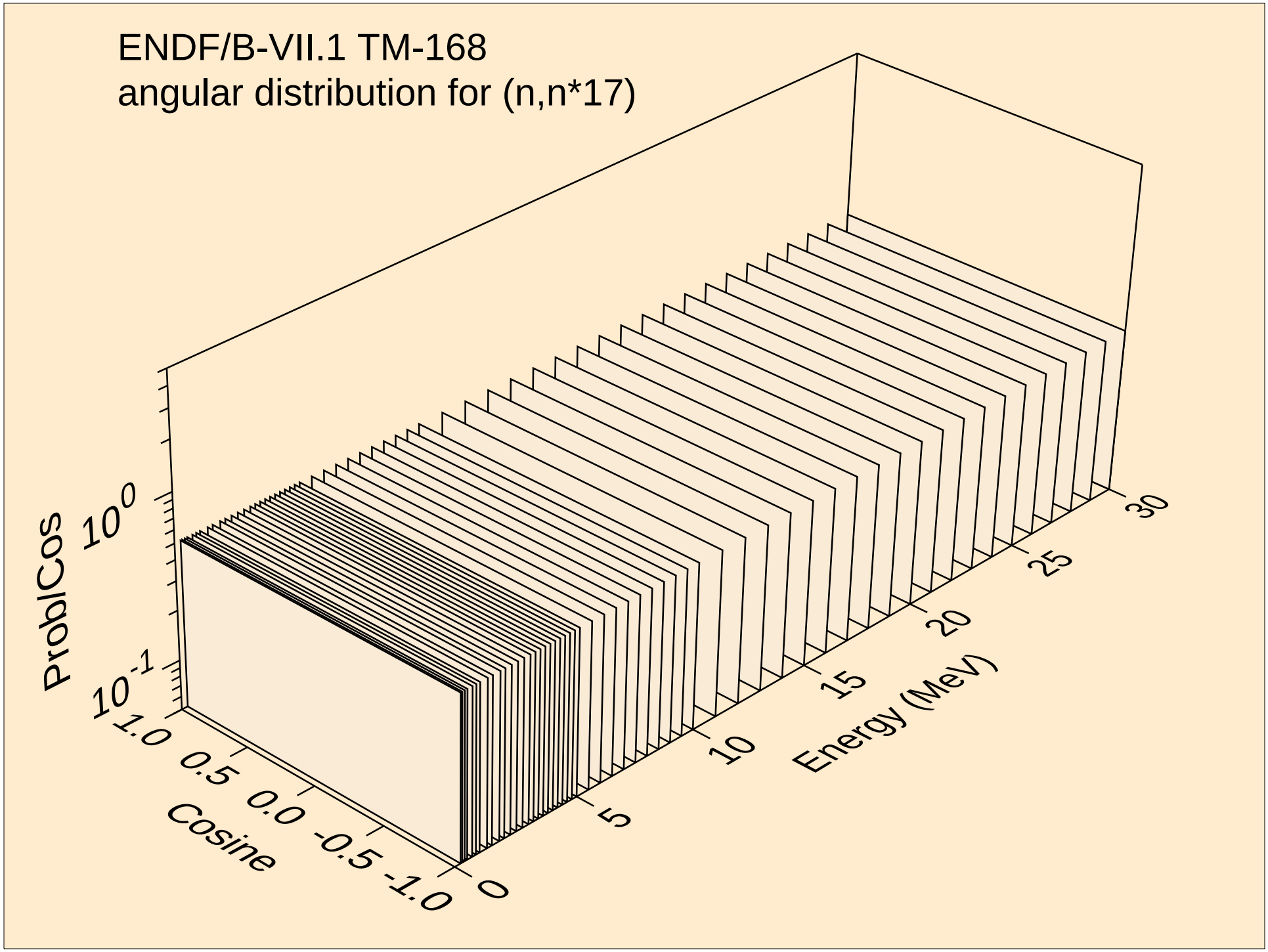

ENDF/B-VII.1 TM-168
angular distribution for (n,n*12)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

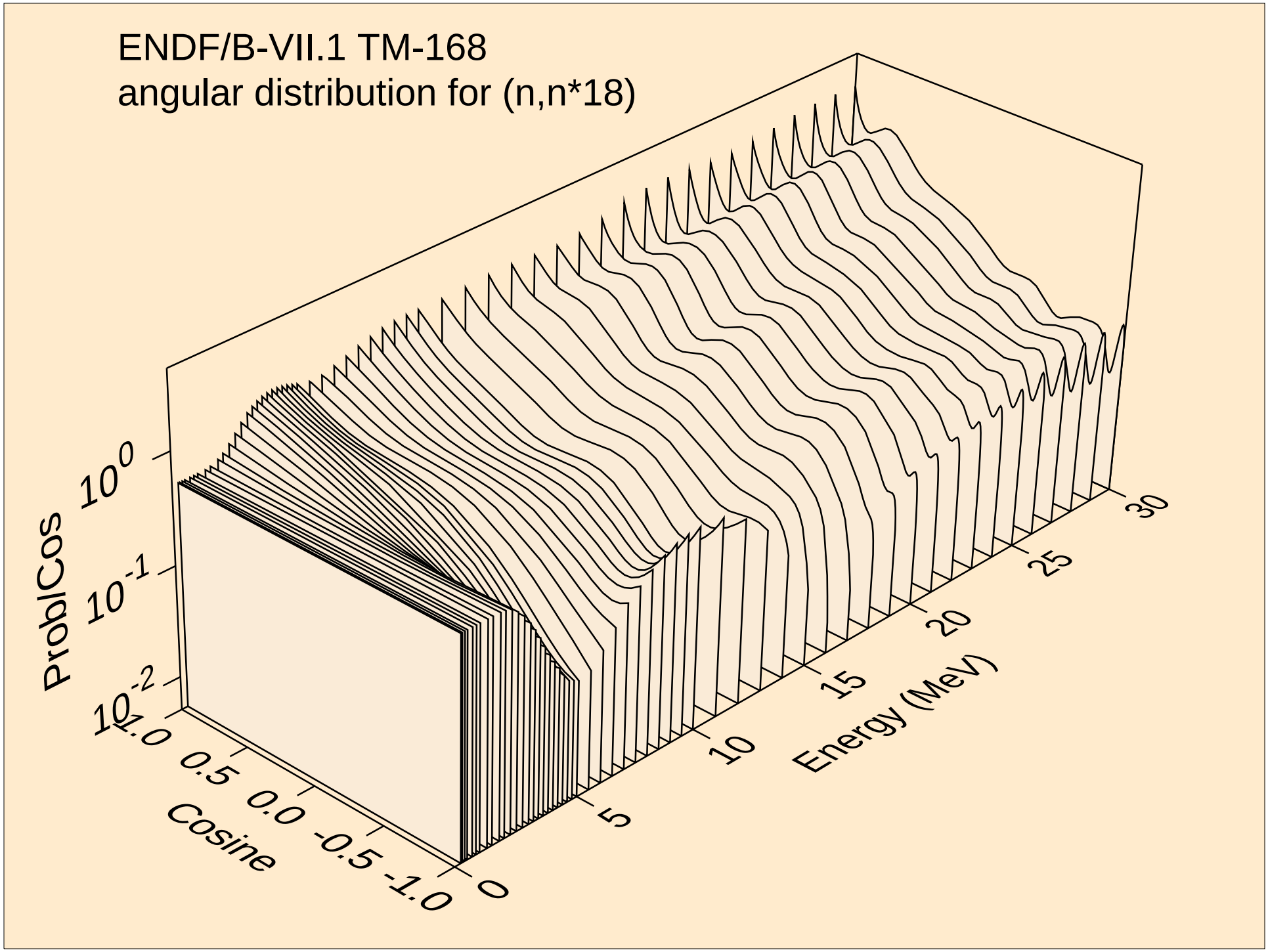

ENDF/B-VII.1 TM-168
angular distribution for (n,n*13)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

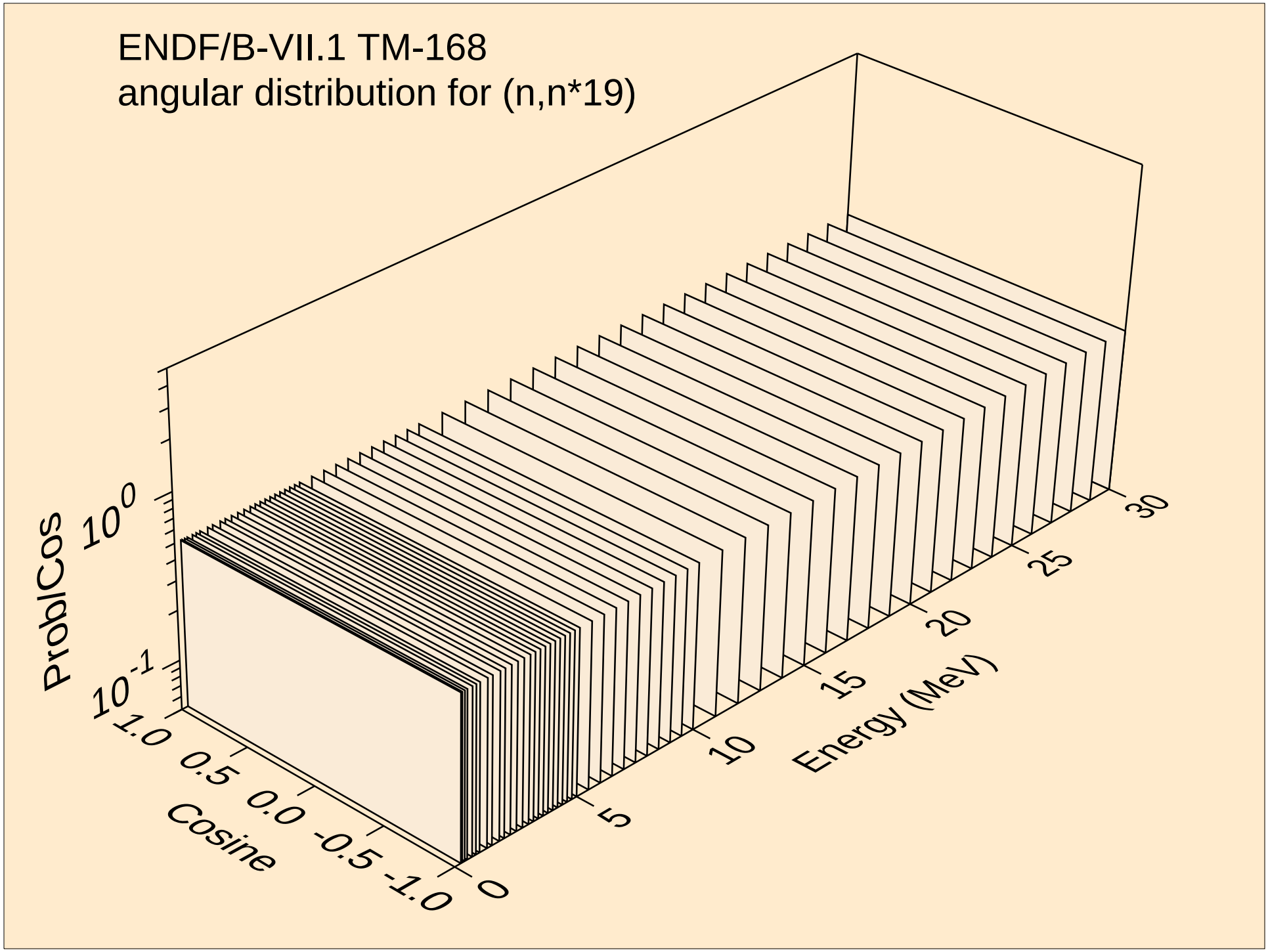

ENDF/B-VII.1 TM-168
angular distribution for (n,n*14)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

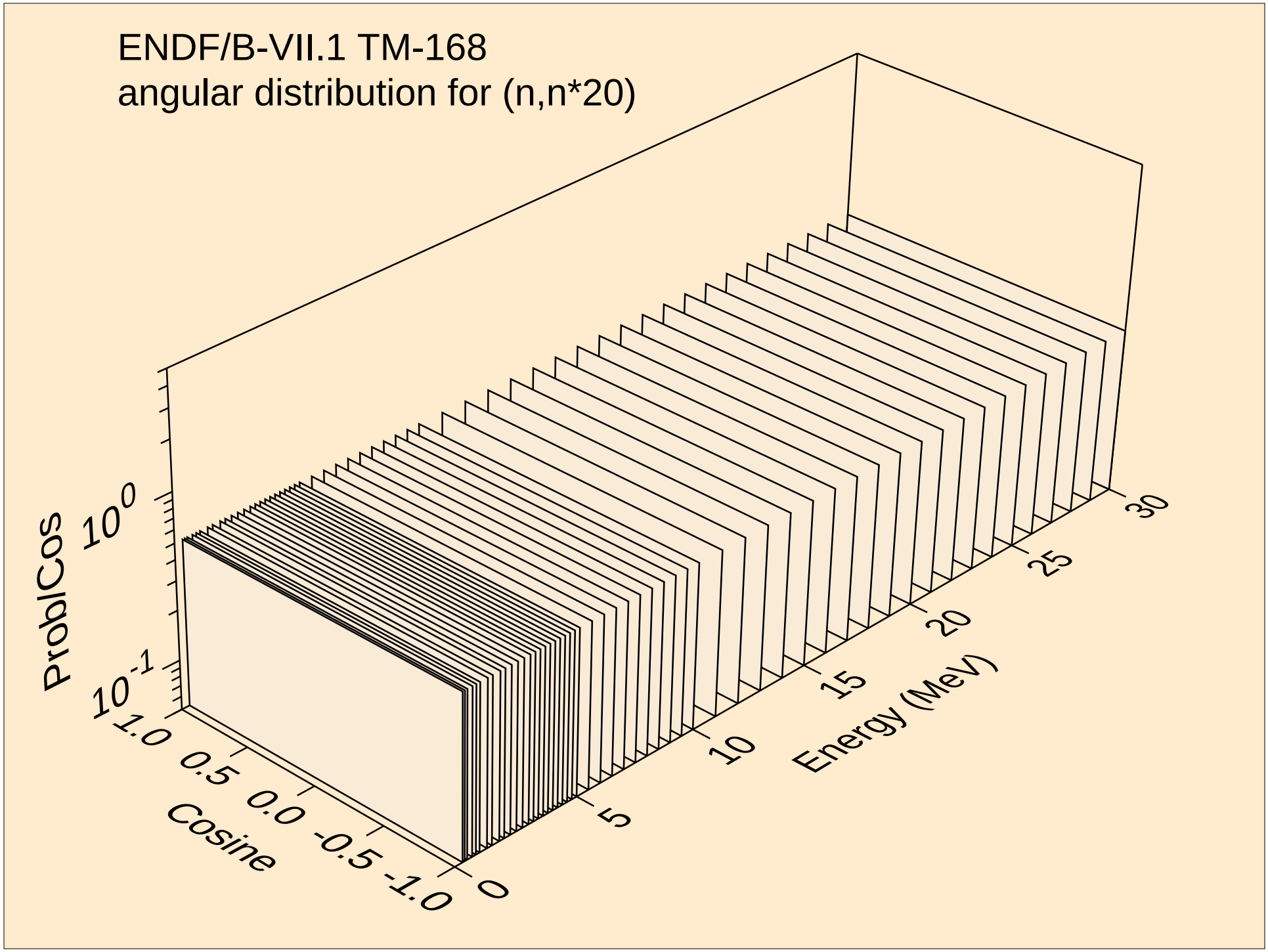

ENDF/B-VII.1 TM-168
angular distribution for (n,n*15)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

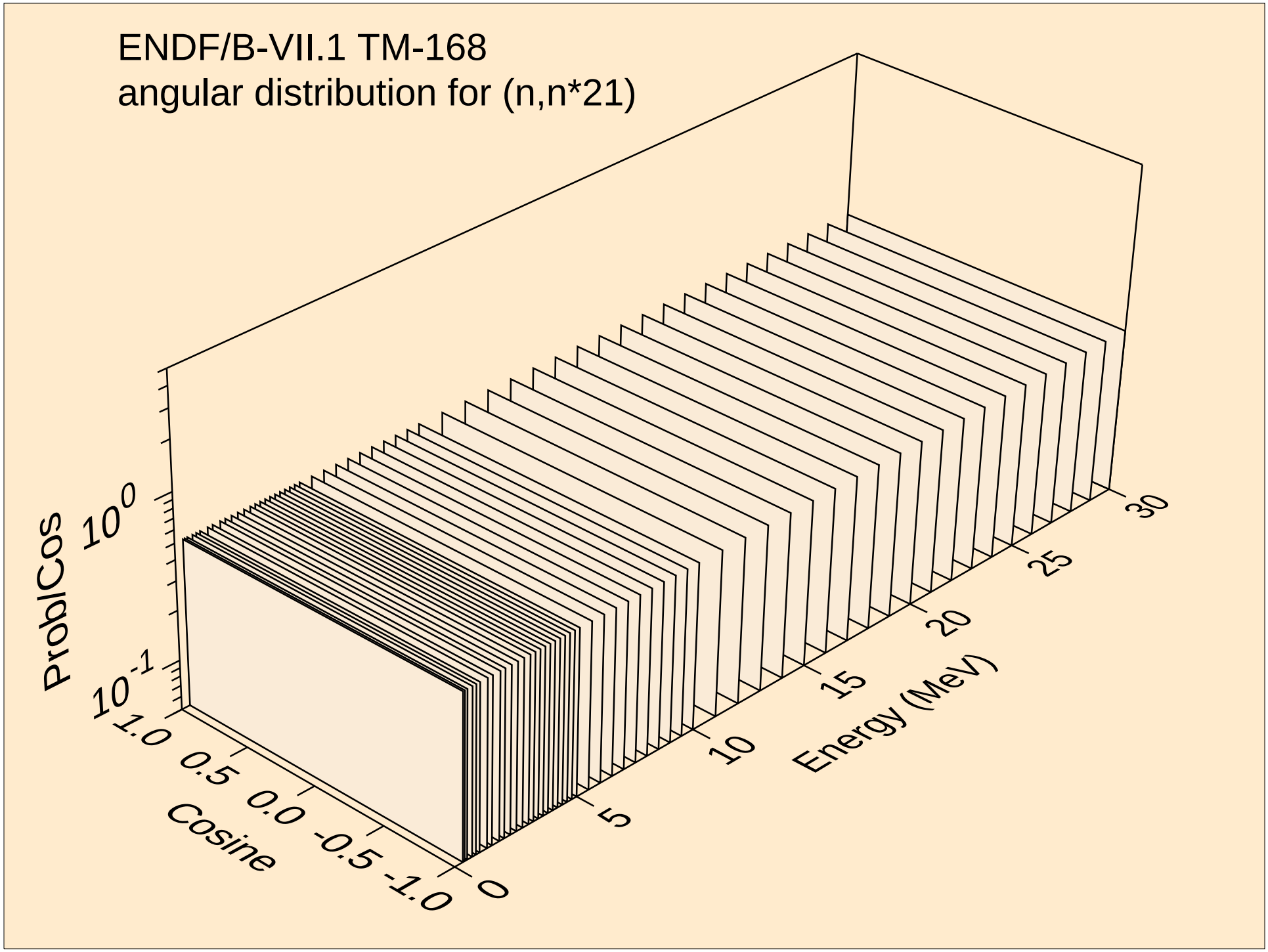

ENDF/B-VII.1 TM-168
angular distribution for (n,n*16)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

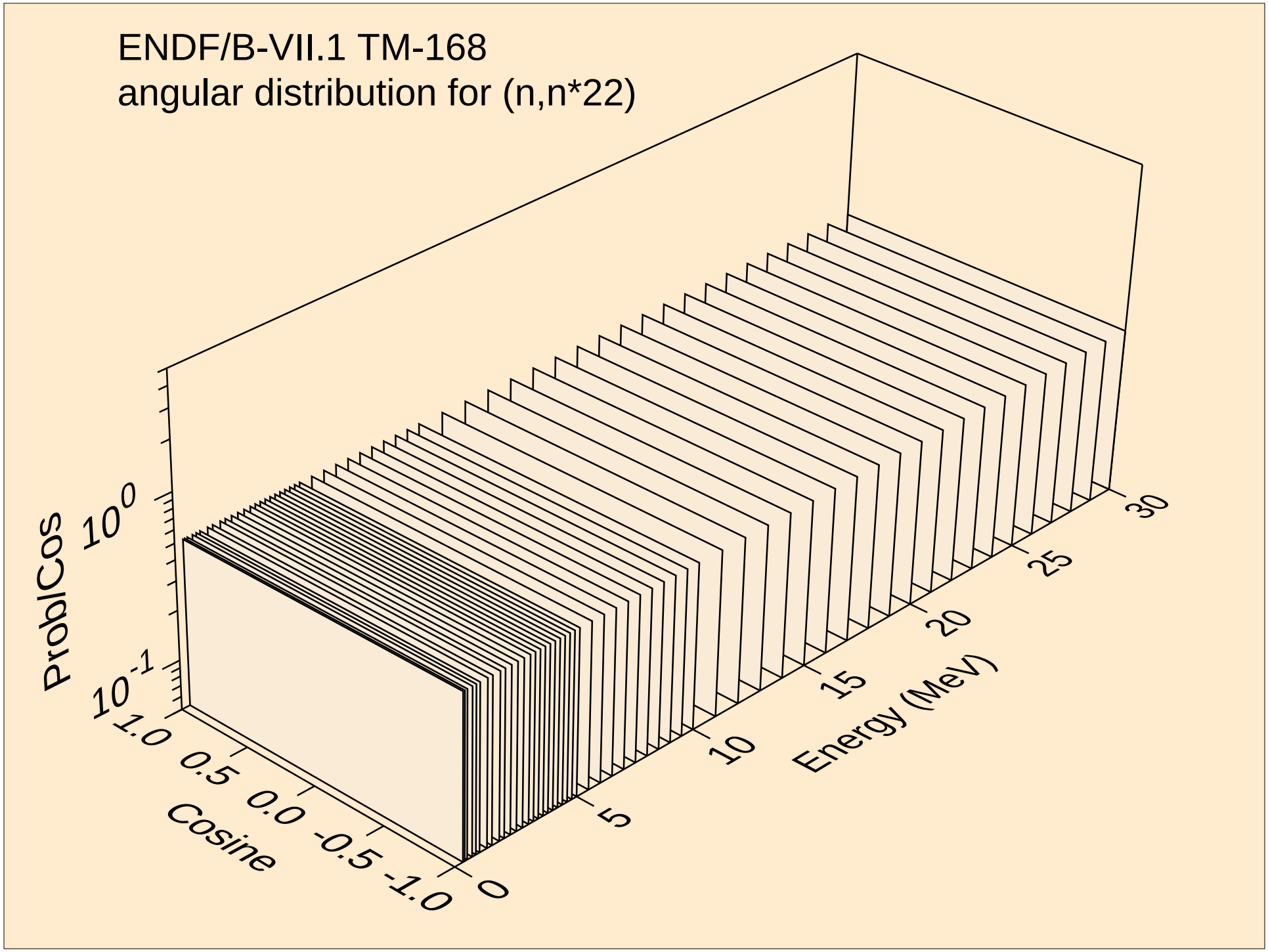

ENDF/B-VII.1 TM-168
angular distribution for (n,n*17)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

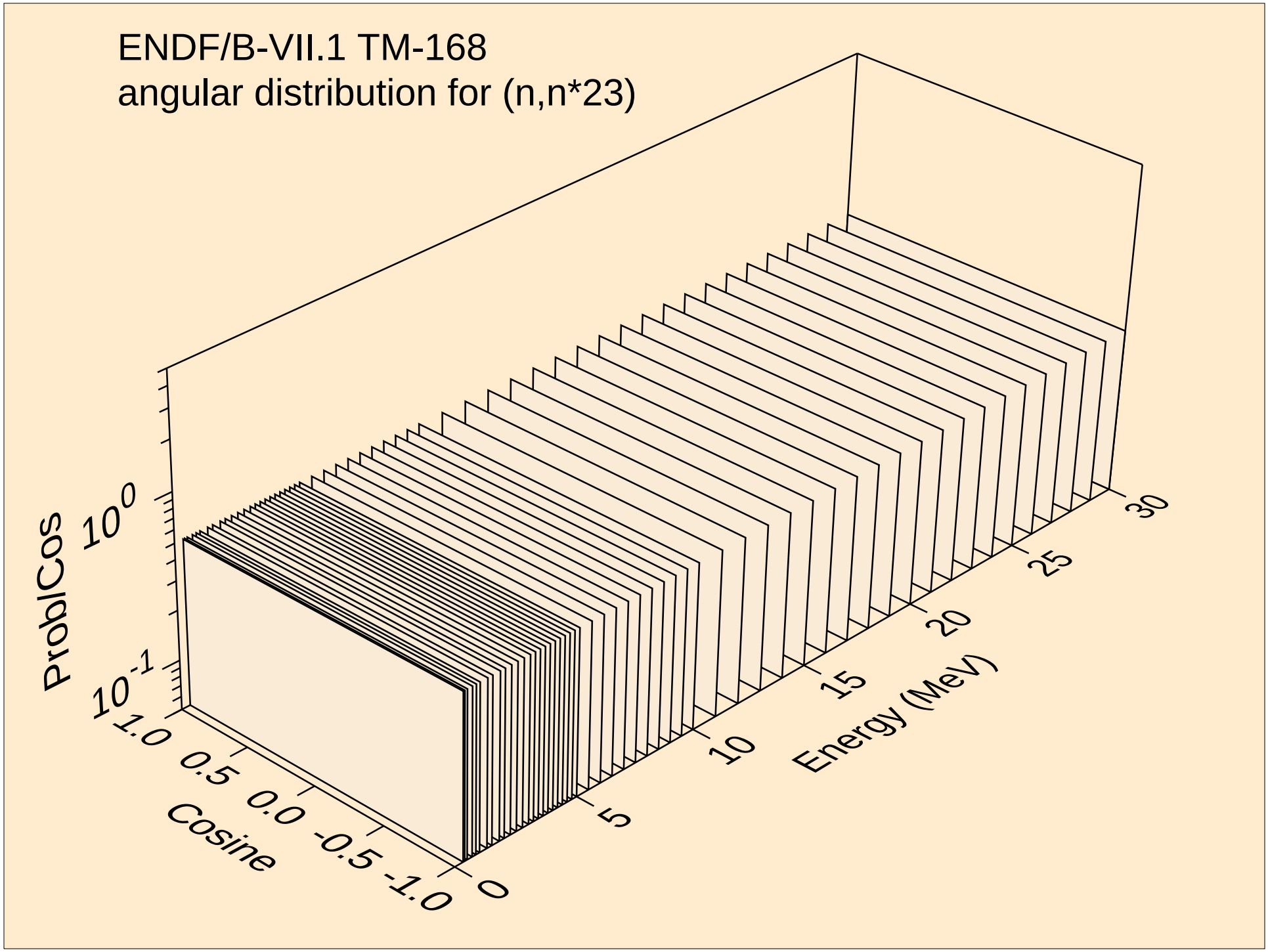

ENDF/B-VII.1 TM-168
angular distribution for (n,n*18)
ProbCos
10^{0}
10^{-1}
10^{-2}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

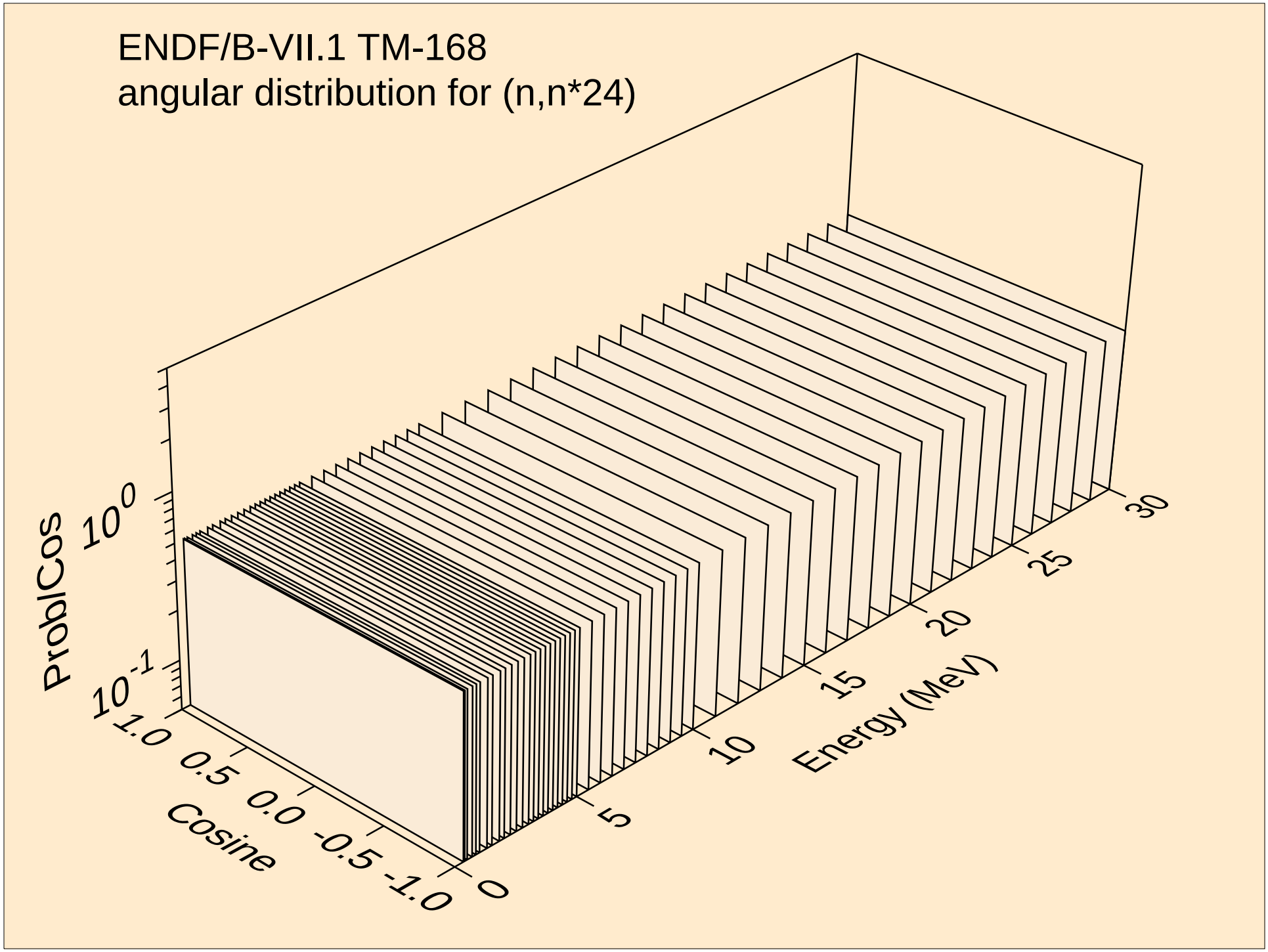

ENDF/B-VII.1 TM-168
angular distribution for (n,n*19)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

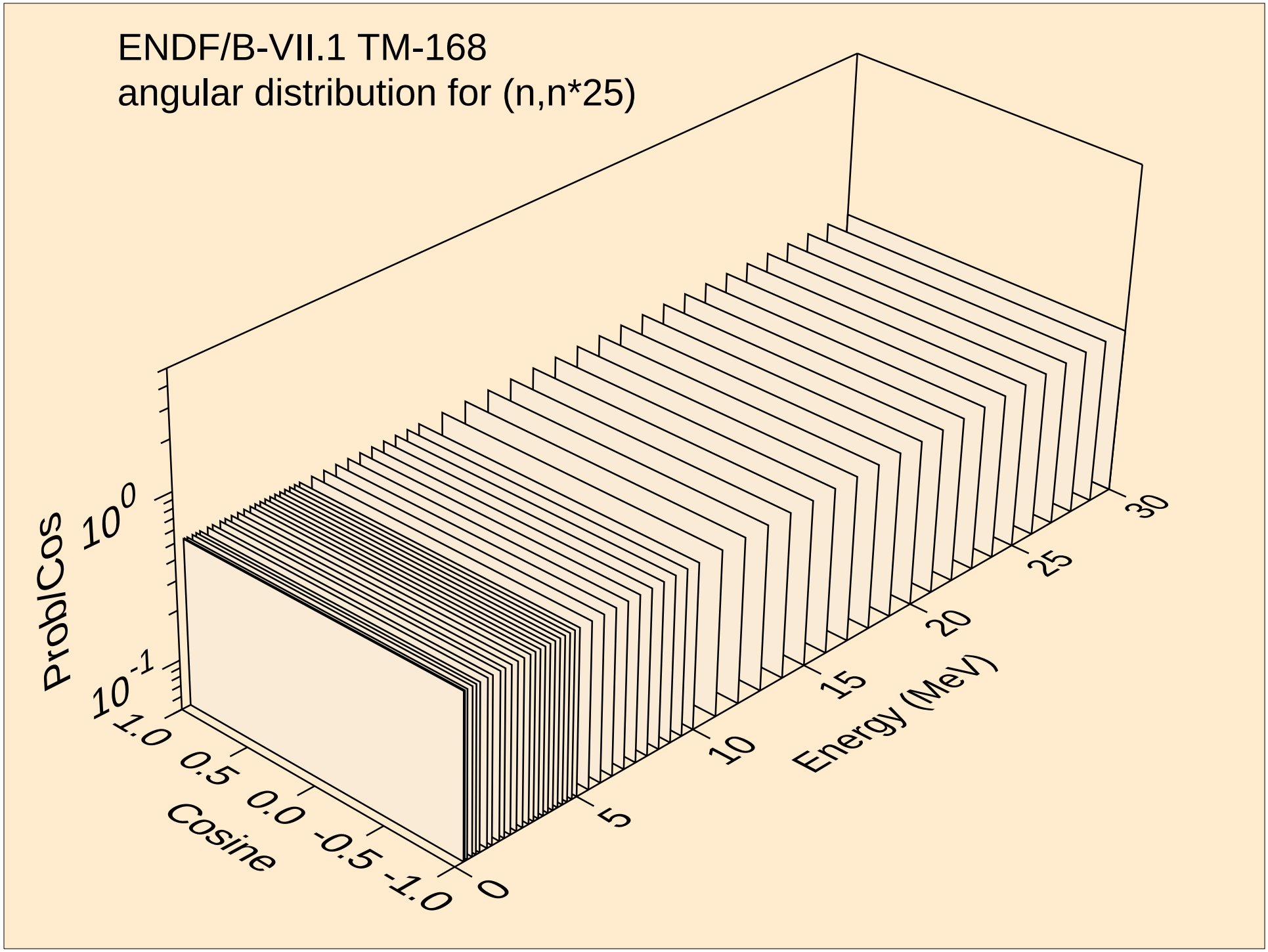

ENDF/B-VII.1 TM-168
angular distribution for (n,n*20)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

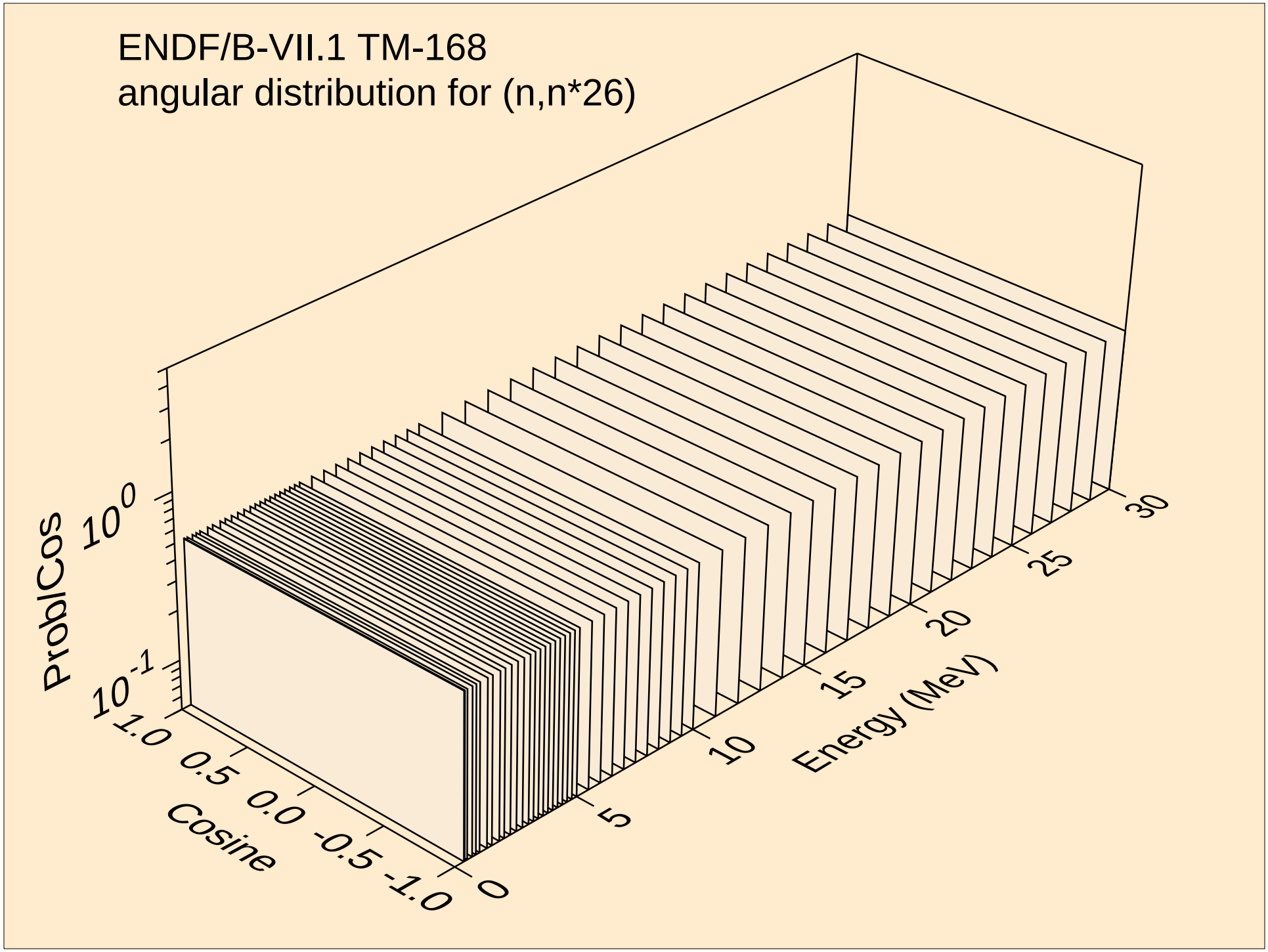

ENDF/B-VII.1 TM-168
angular distribution for (n,n*21)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

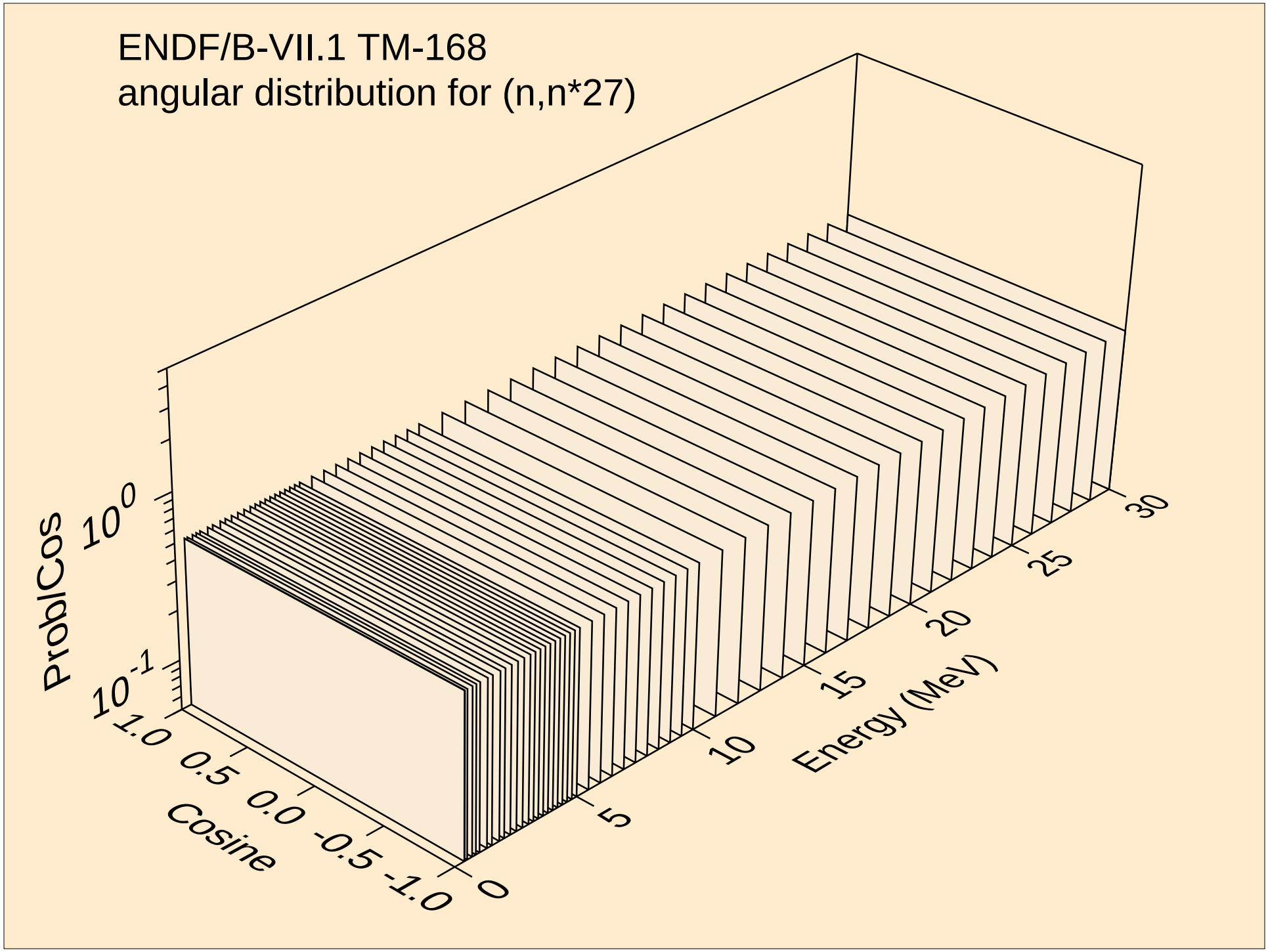

ENDF/B-VII.1 TM-168
angular distribution for (n,n*22)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

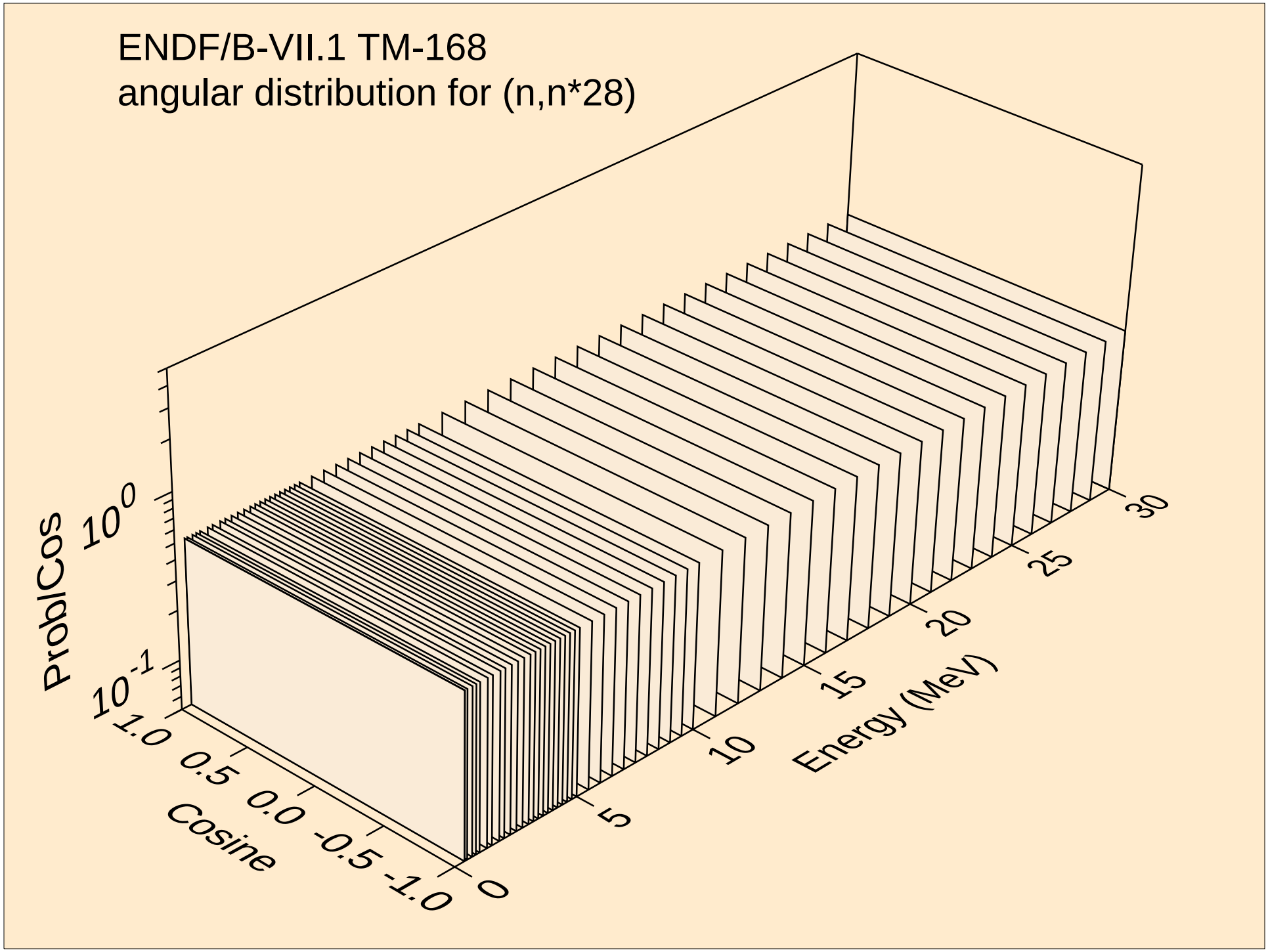

ENDF/B-VII.1 TM-168
angular distribution for (n,n*23)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

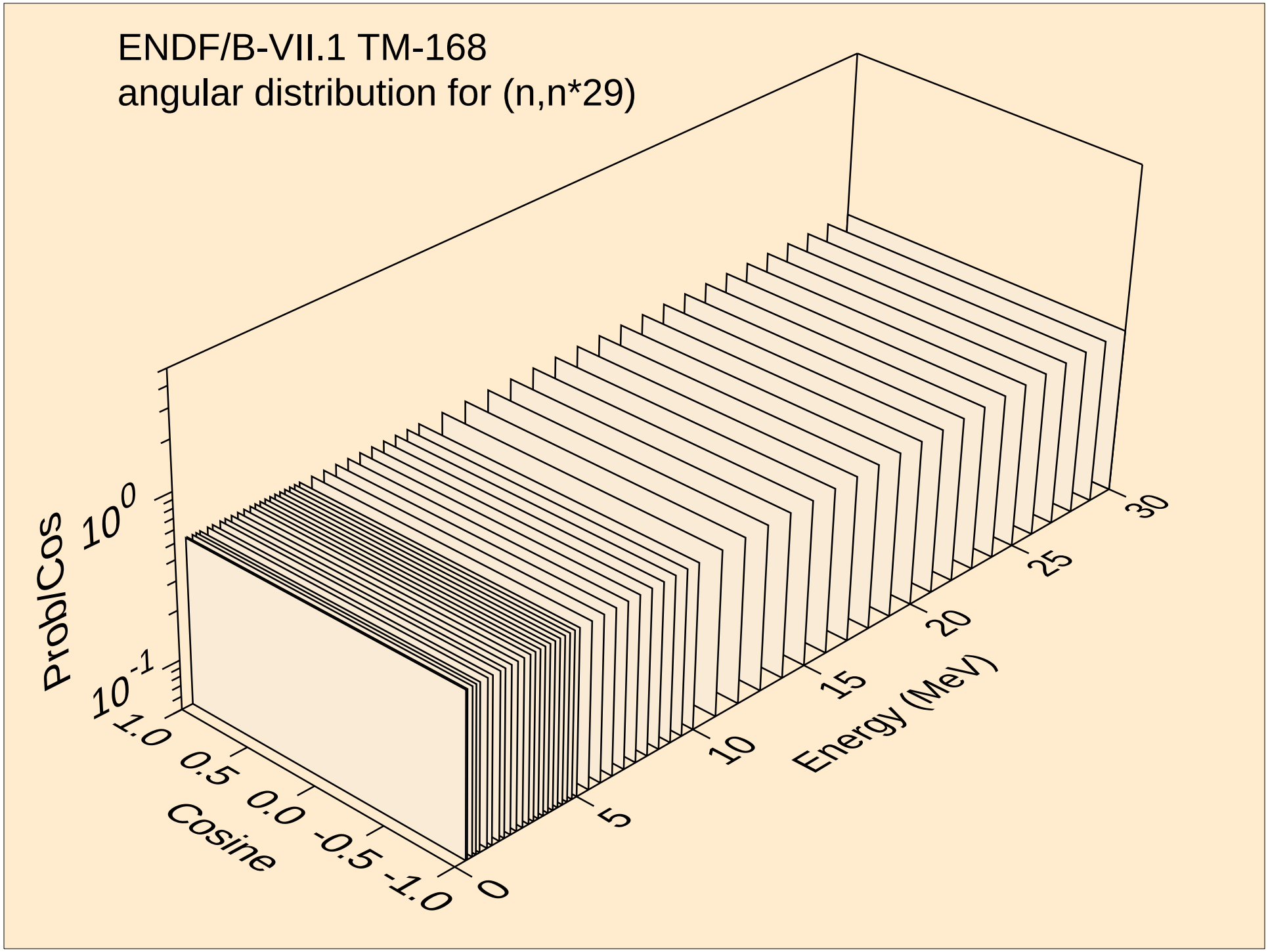

ENDF/B-VII.1 TM-168
angular distribution for (n,n*24)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

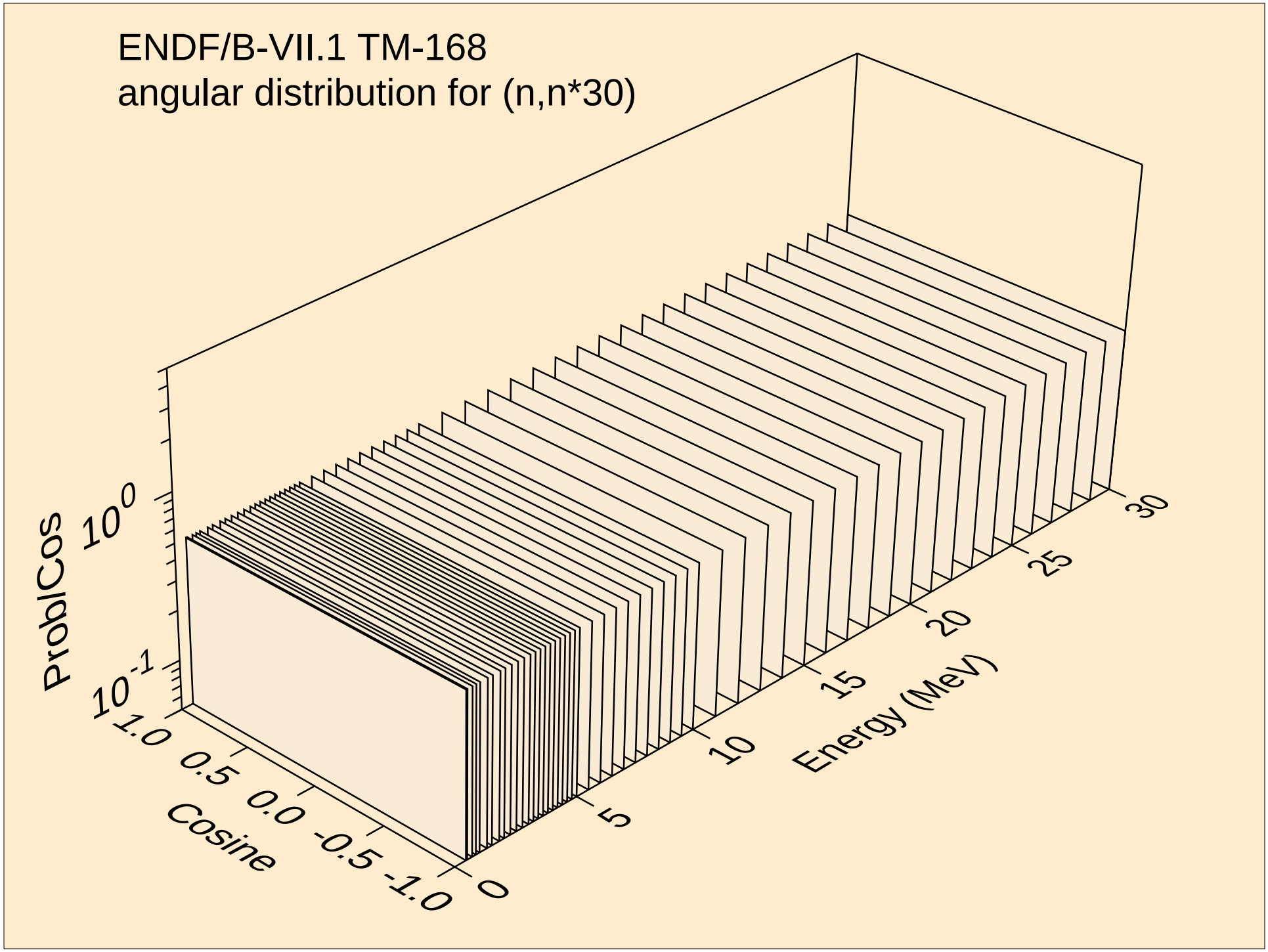

ENDF/B-VII.1 TM-168
angular distribution for (n,n*25)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

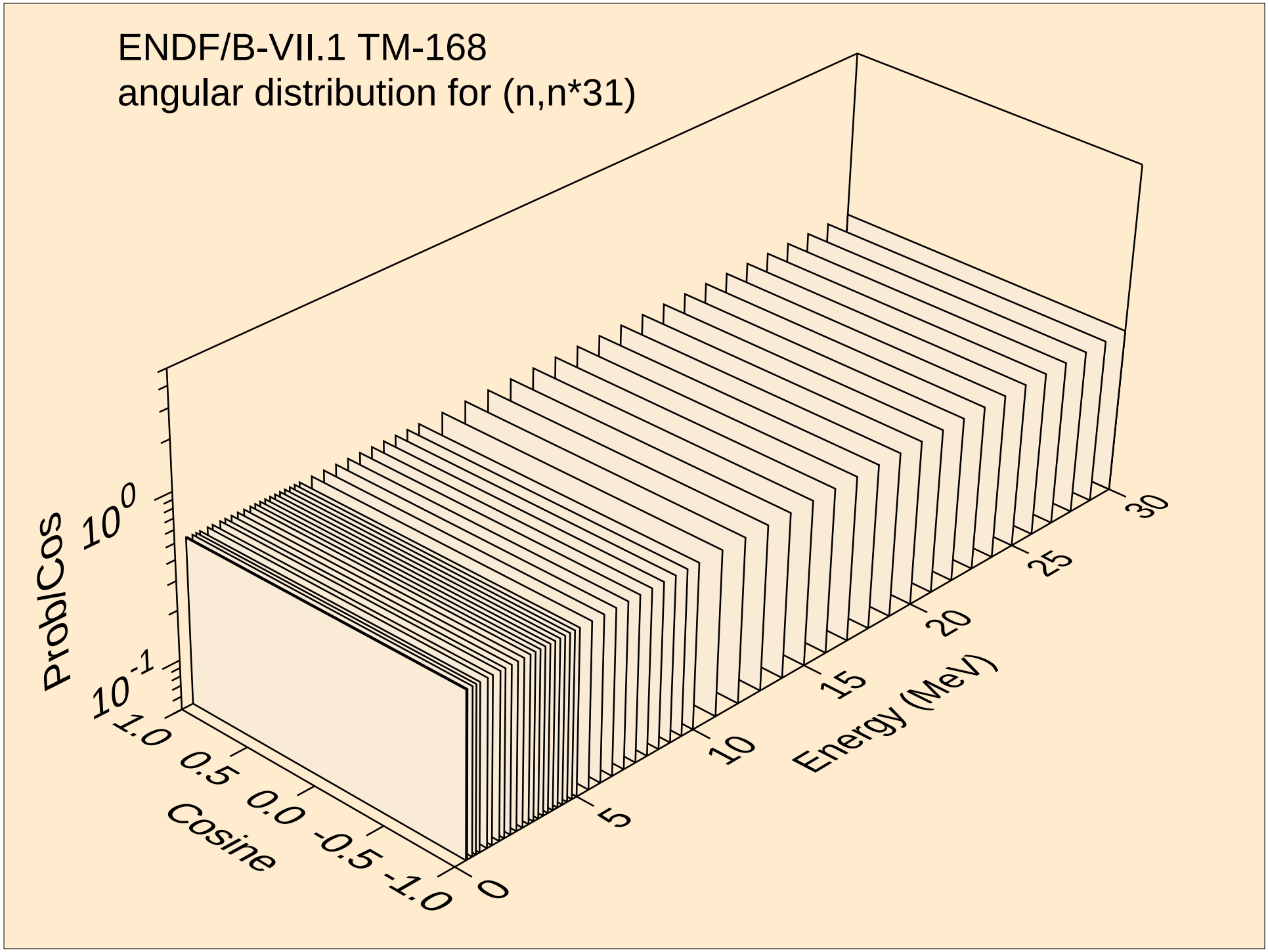

ENDF/B-VII.1 TM-168
angular distribution for (n,n*26)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

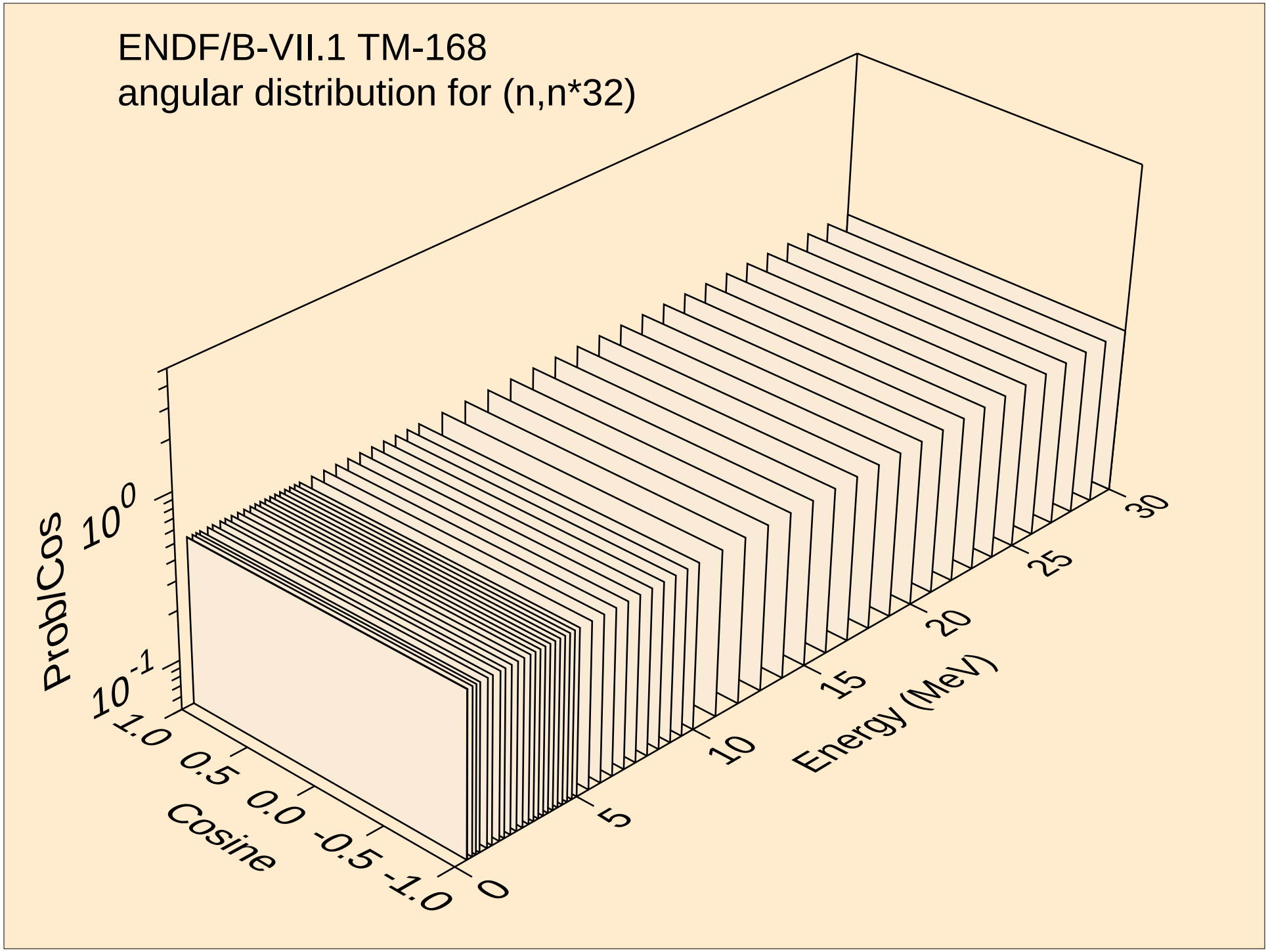

ENDF/B-VII.1 TM-168
angular distribution for (n,n*27)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

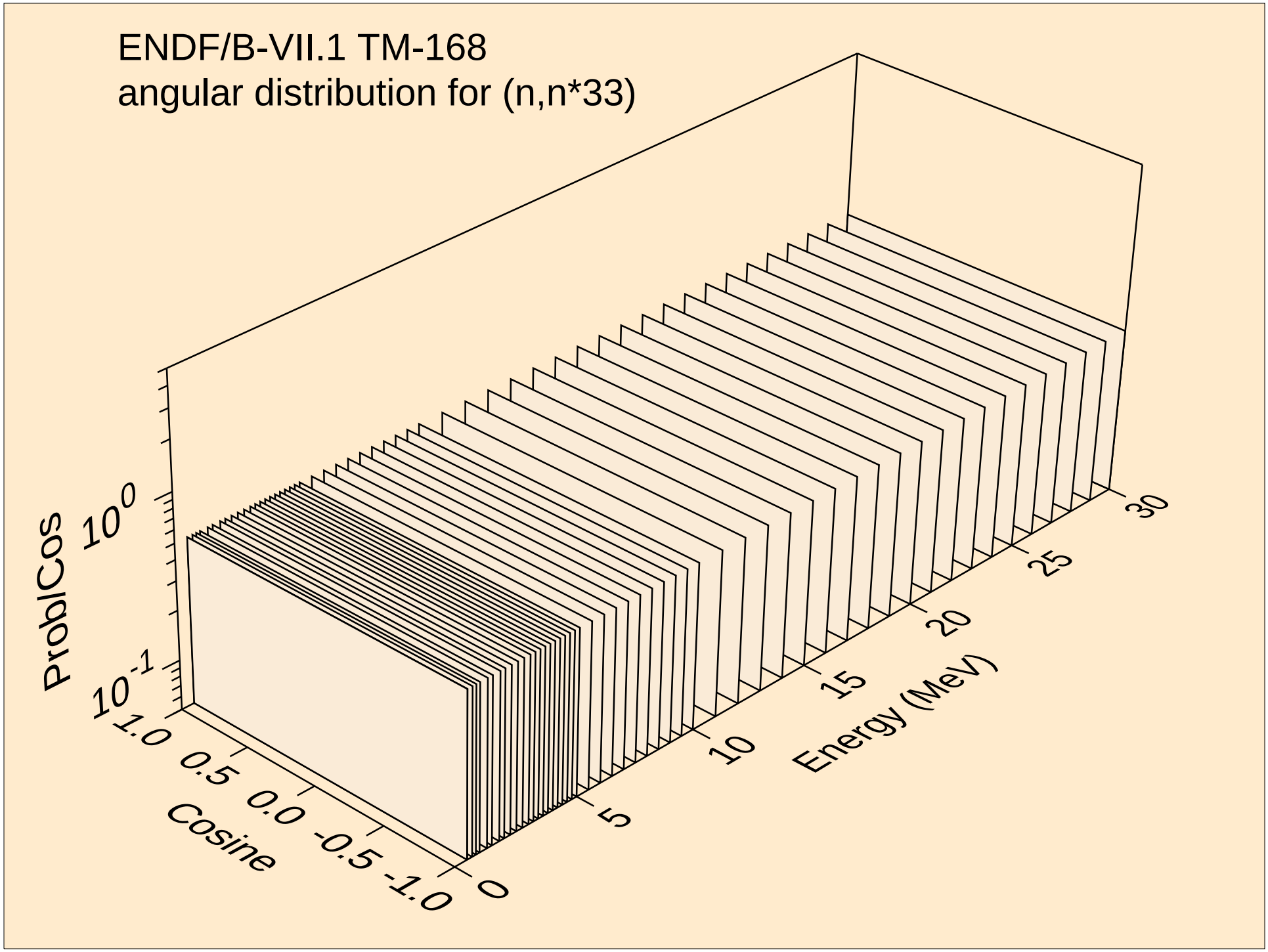

ENDF/B-VII.1 TM-168
angular distribution for (n,n*28)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

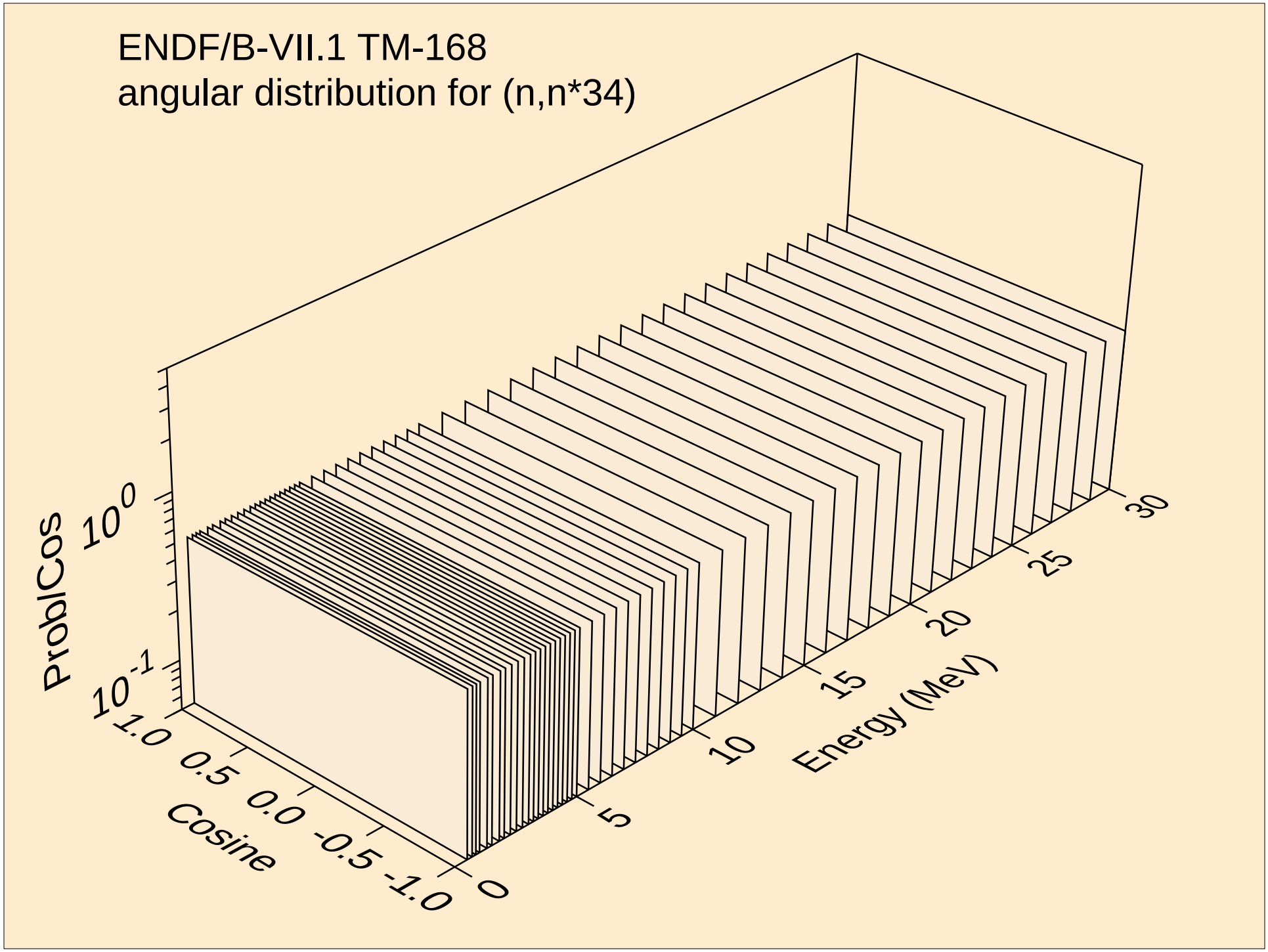

ENDF/B-VII.1 TM-168
angular distribution for (n,n*29)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

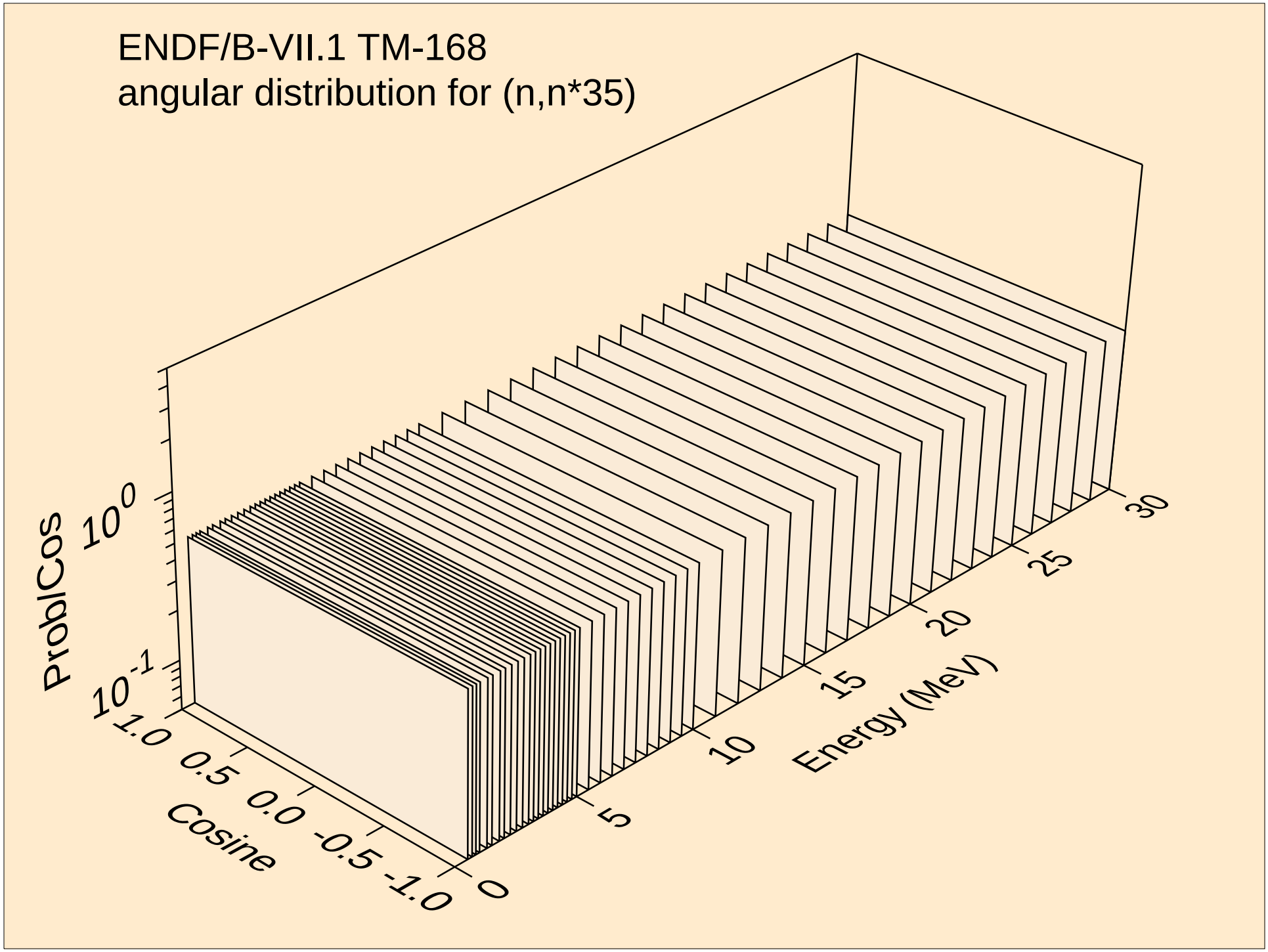

ENDF/B-VII.1 TM-168
angular distribution for (n,n*30)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

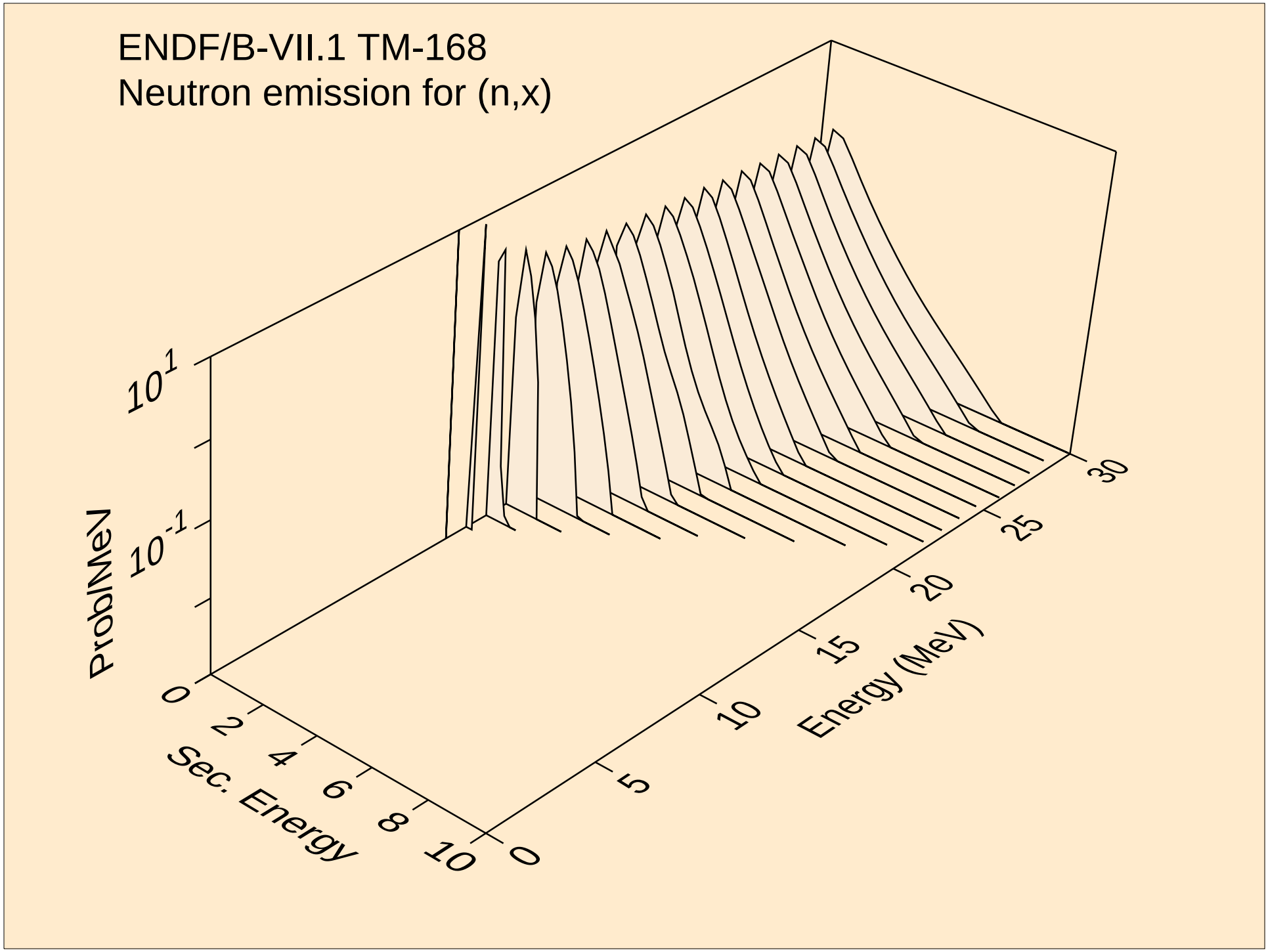

ENDF/B-VII.1 TM-168
angular distribution for (n,n*31)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


ENDF/B-VII.1 TM-168
angular distribution for (n,n*32)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

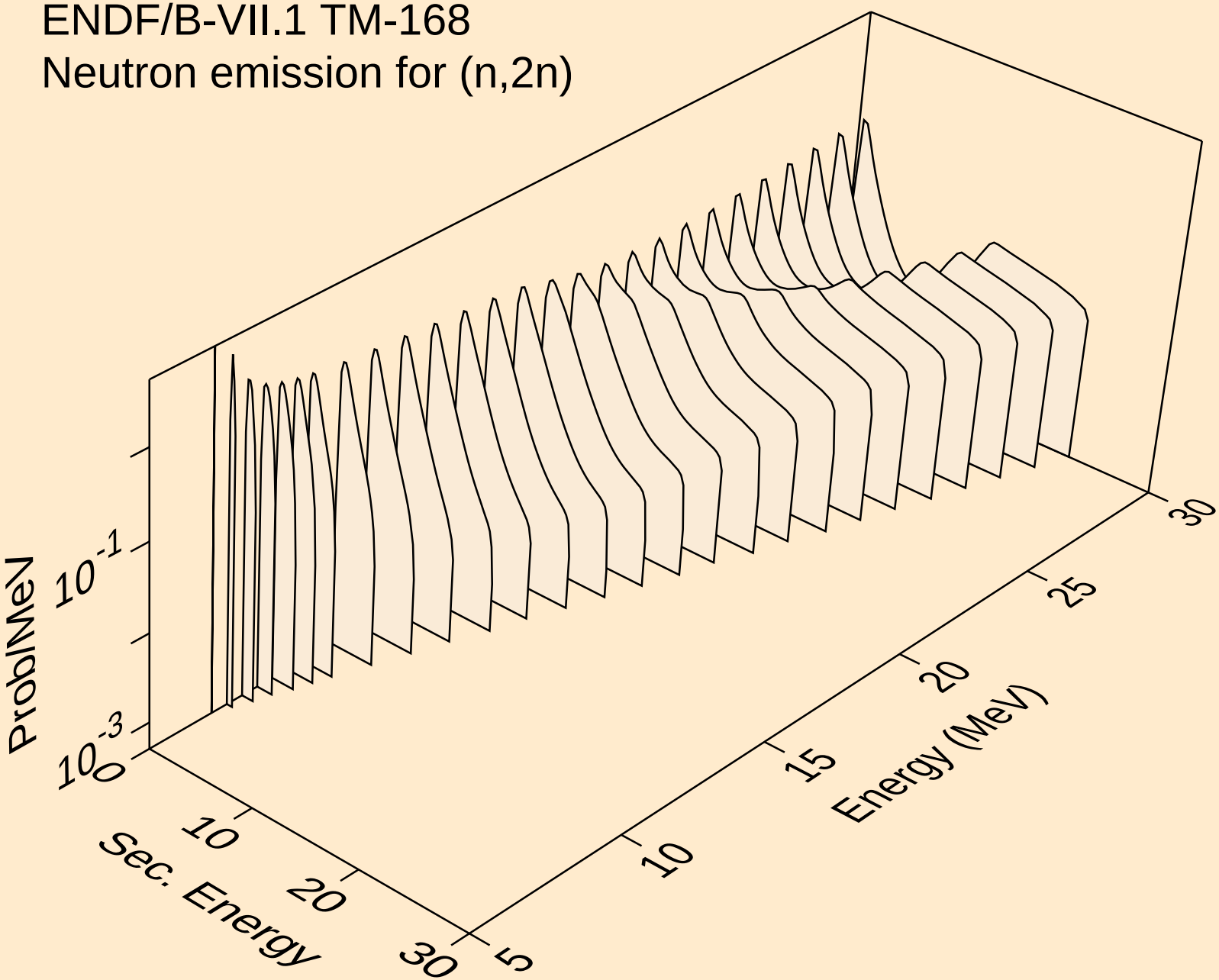

ENDF/B-VII.1 TM-168
angular distribution for (n,n*33)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


ENDF/B-VII.1 TM-168
angular distribution for (n,n*34)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

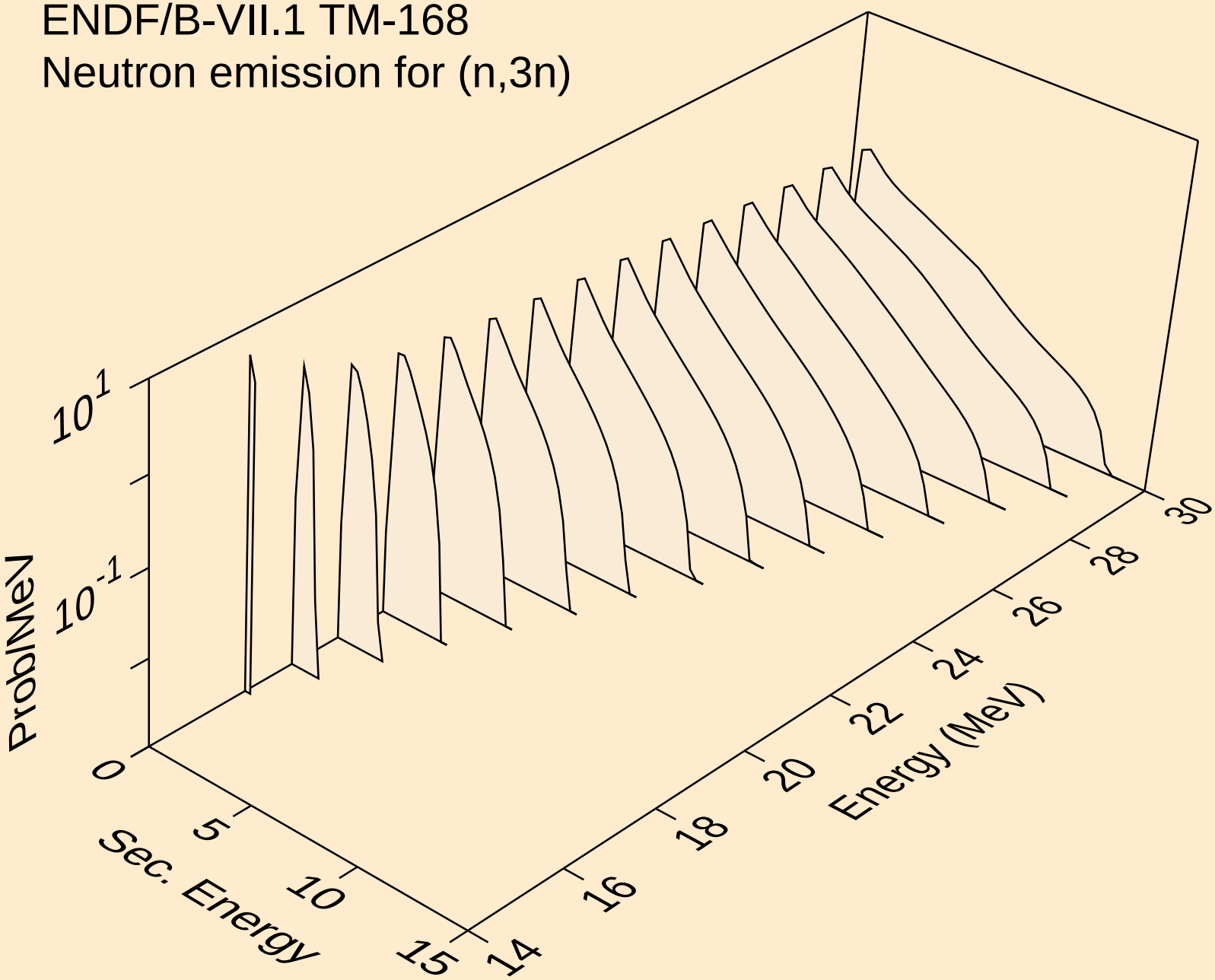

ENDF/B-VII.1 TM-168
angular distribution for (n,n*35)
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


ENDF/B-VII.1 TM-168
Neutron emission for (n,x)
Prob/MeV
10^{1}
10^{-1}
0
2
4
6
8
10
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)

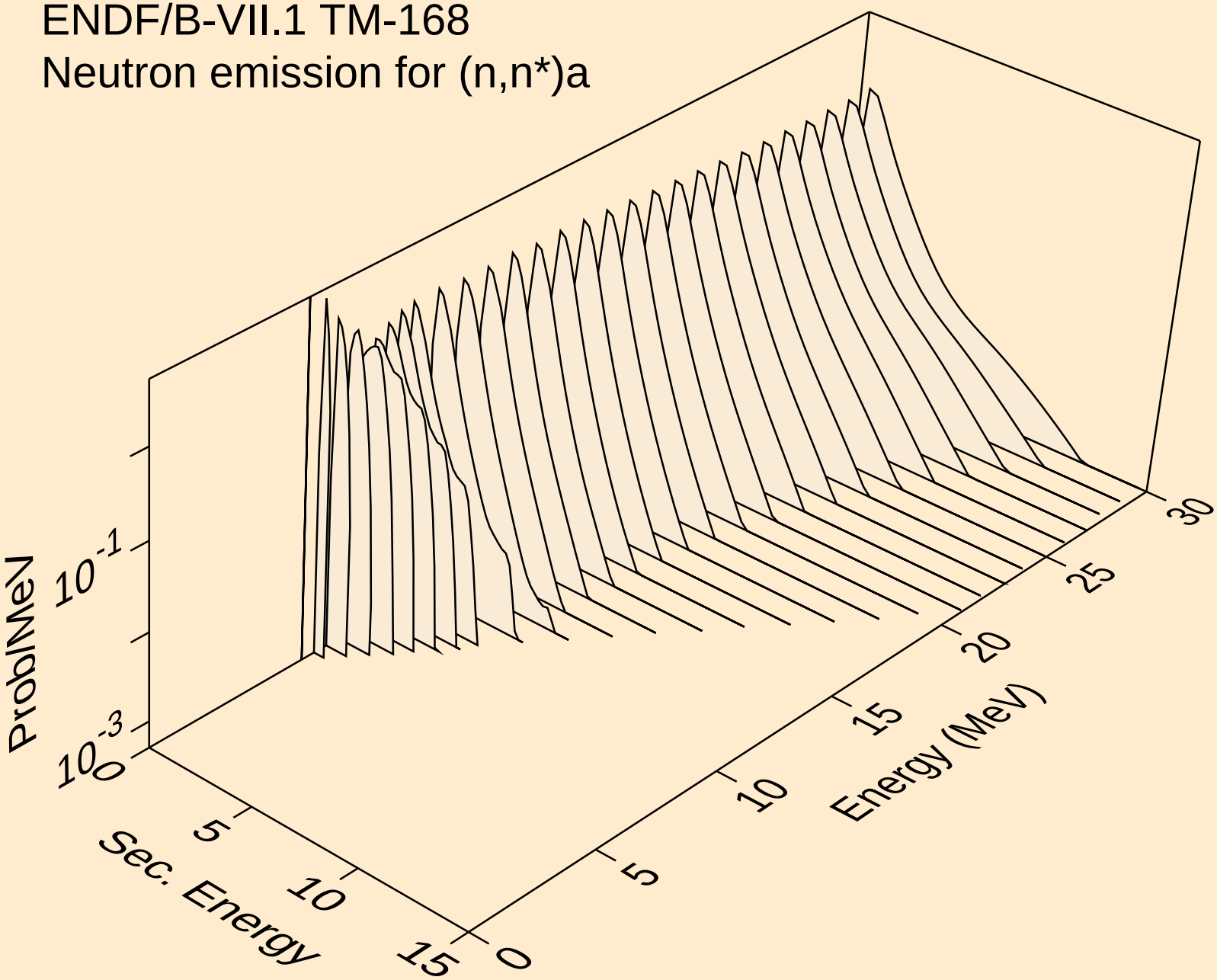
ENDF/B-VII.1 TM-168
Neutron emission for (n,2n)



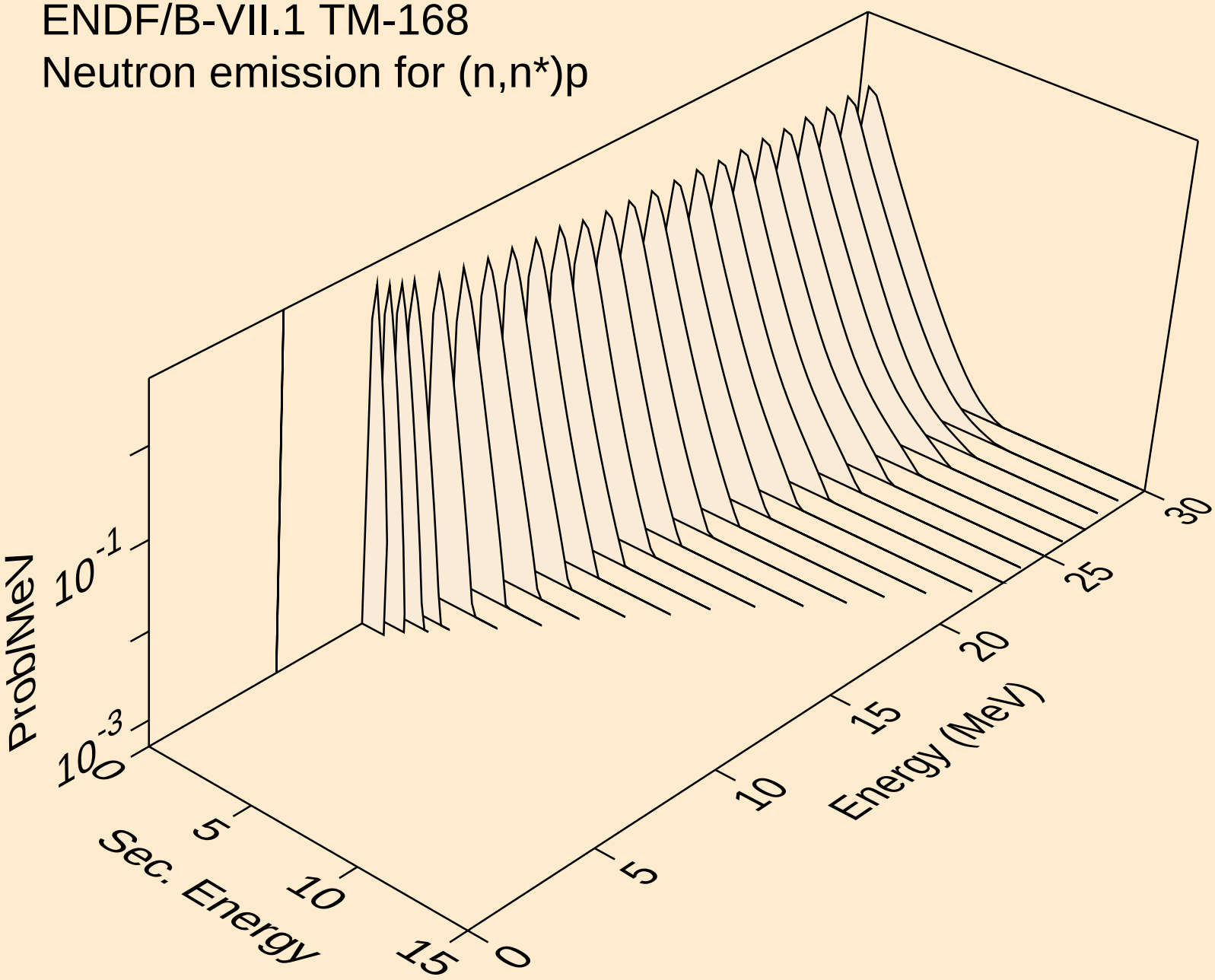
ENDF/B-VII.1 TM-168
Neutron emission for (n,3n)

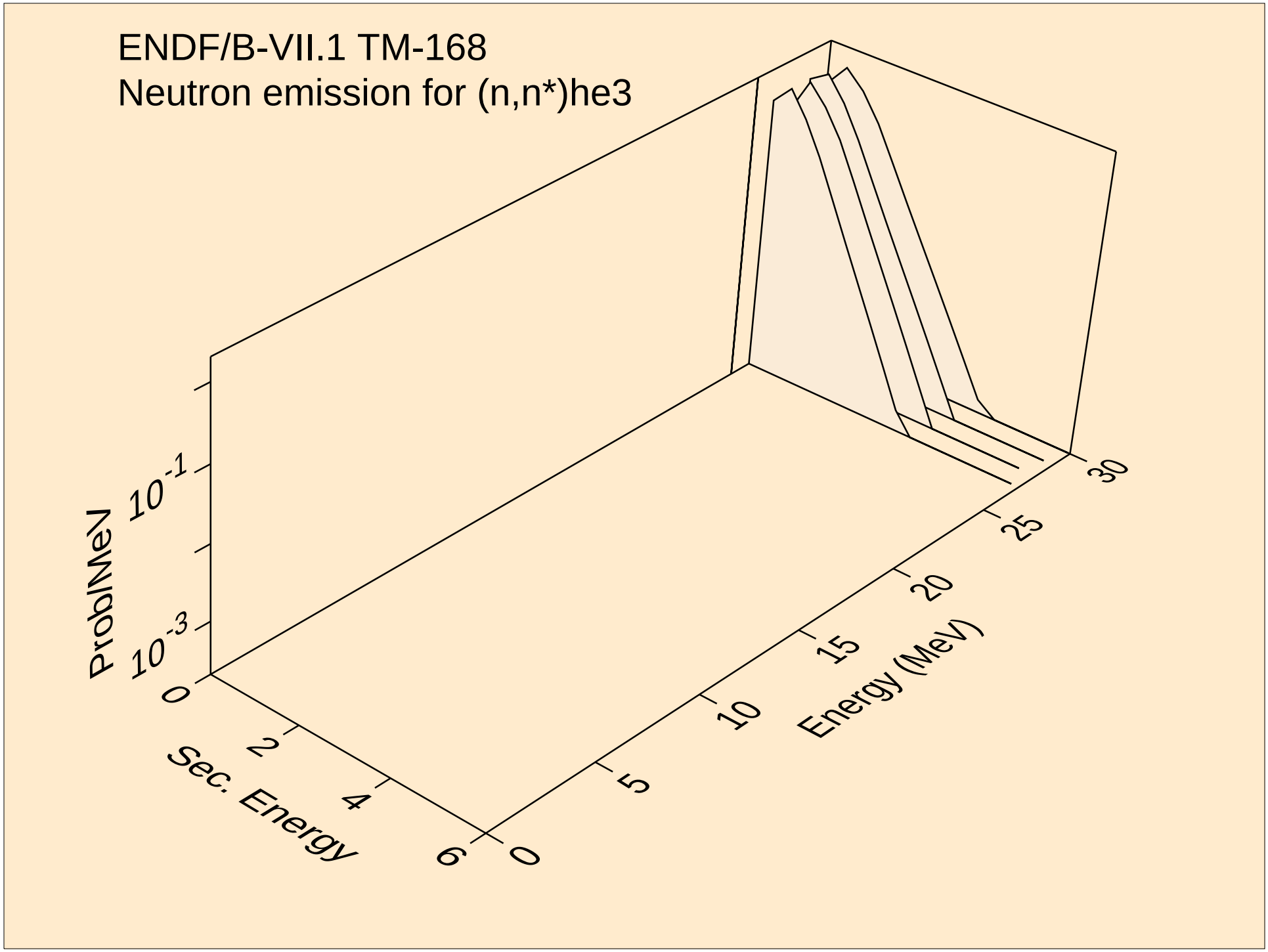


ENDF/B-VII.1 TM-168
Neutron emission for (n,n*)a

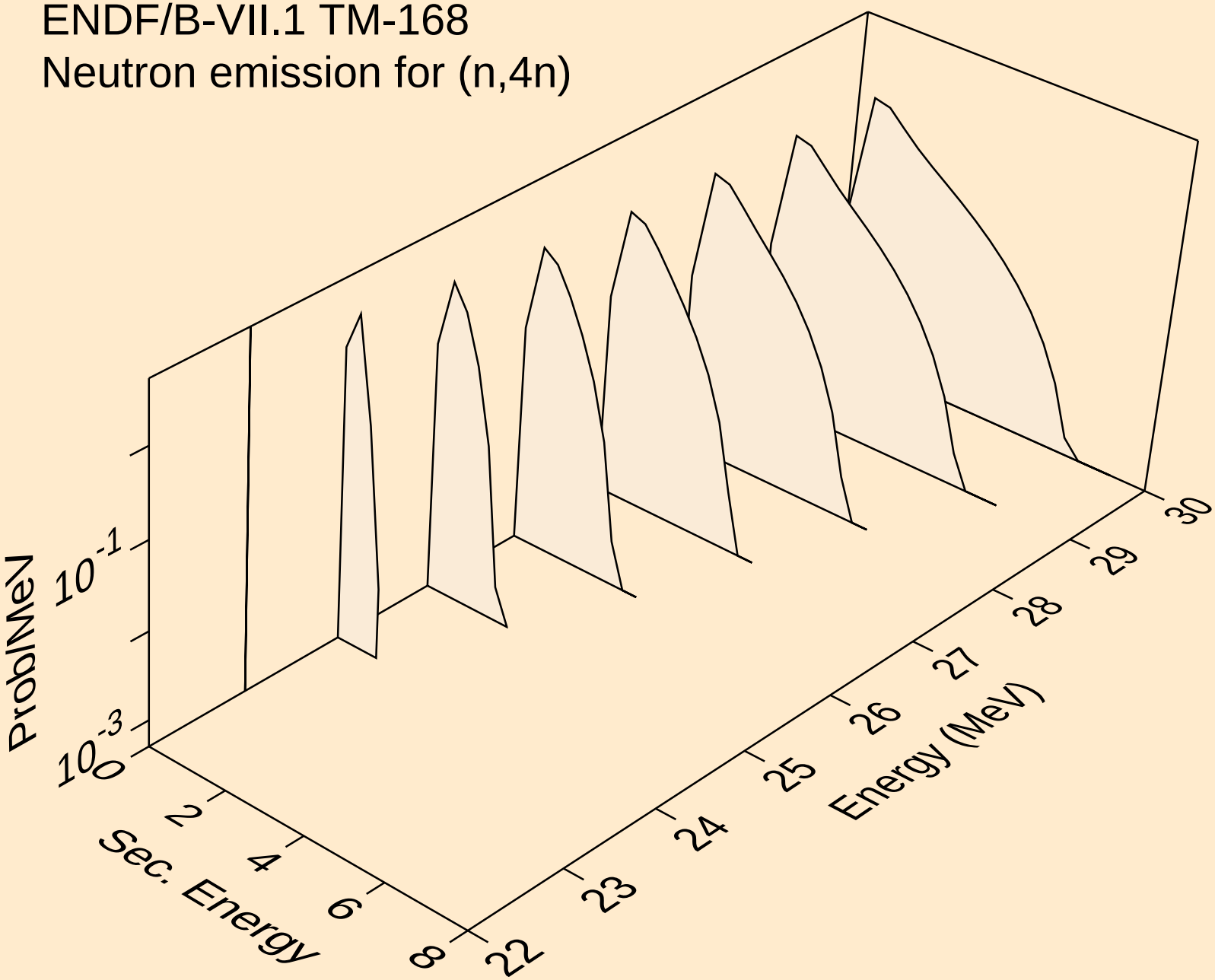


ENDF/B-VII.1 TM-168
Neutron emission for (n,n*)p

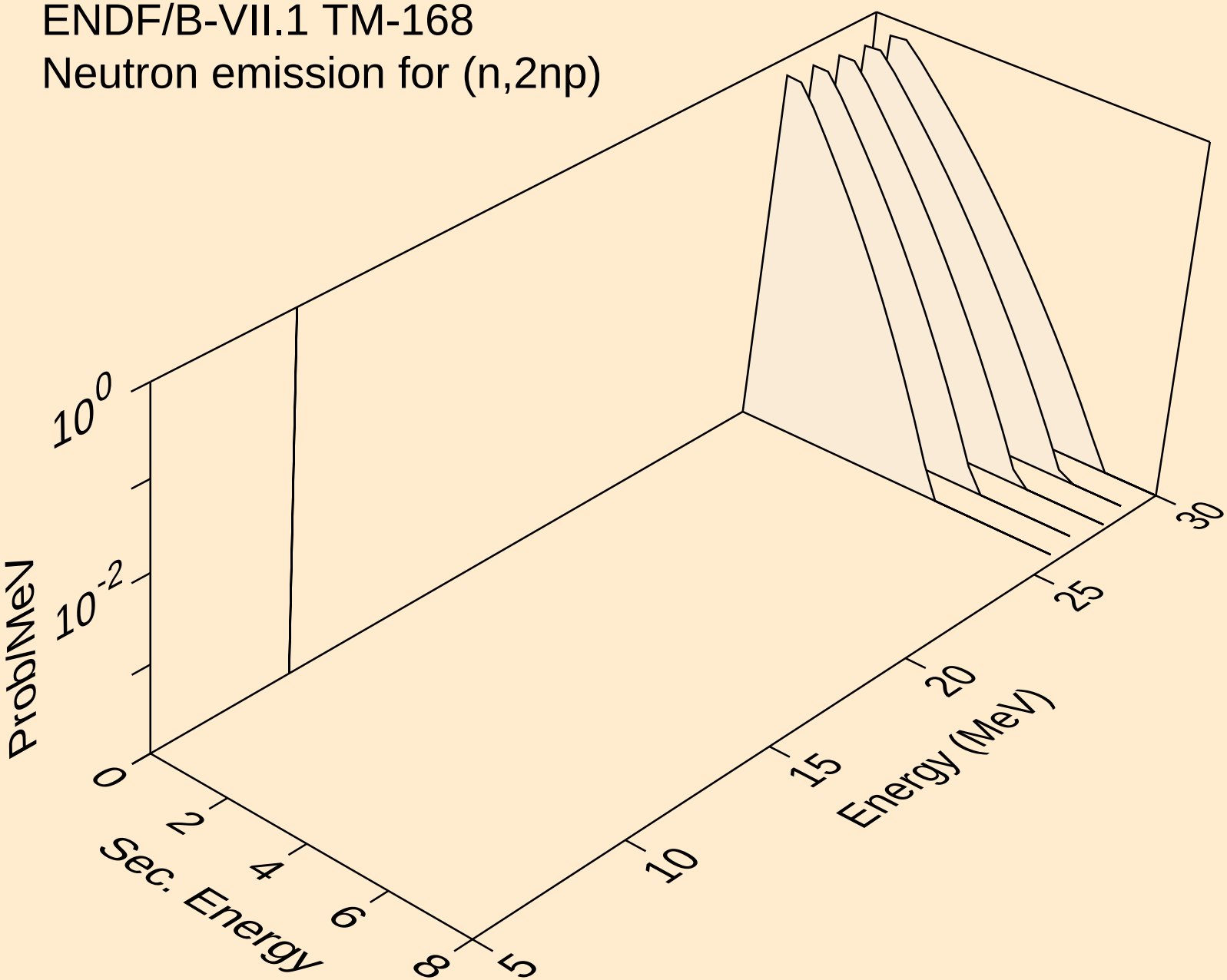


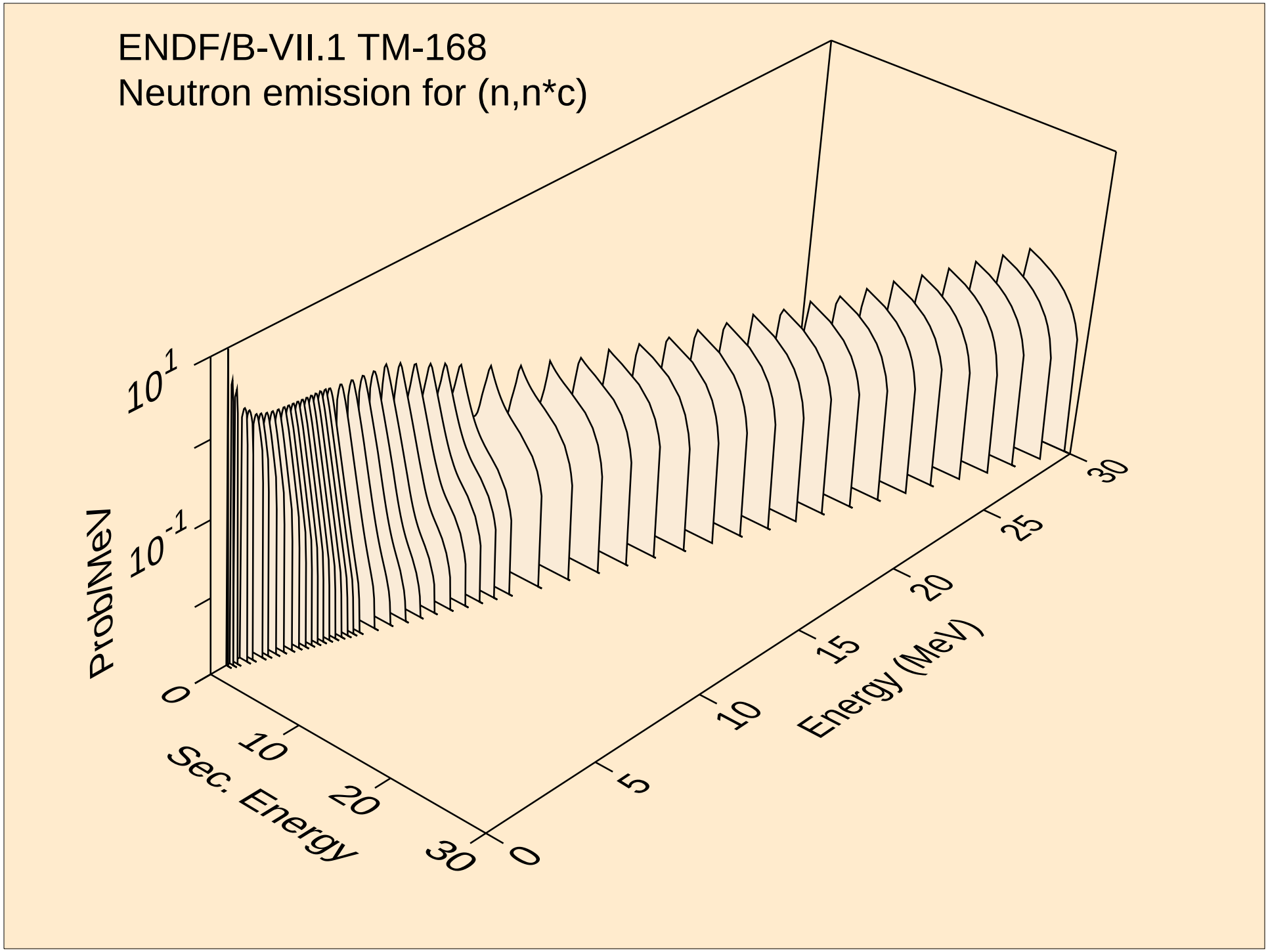

ENDF/B-VII.1 TM-168
Neutron emission for (n,n*)he3
Prob/MeV
10^-1
10^-3
0
2
4
6
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)

ENDF/B-VII.1 TM-168
Neutron emission for (n,4n)

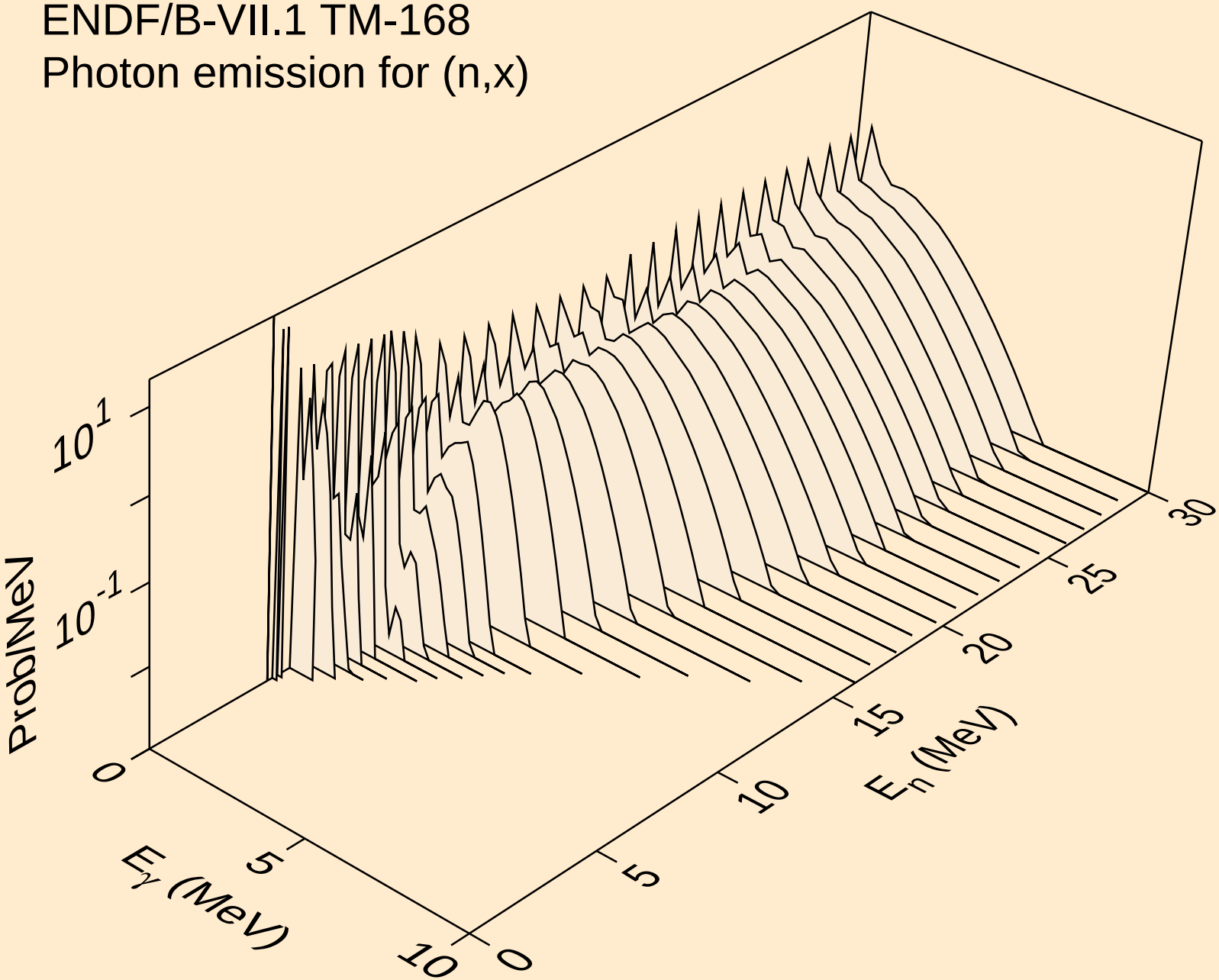


ENDF/B-VII.1 TM-168
Neutron emission for (n,2np)

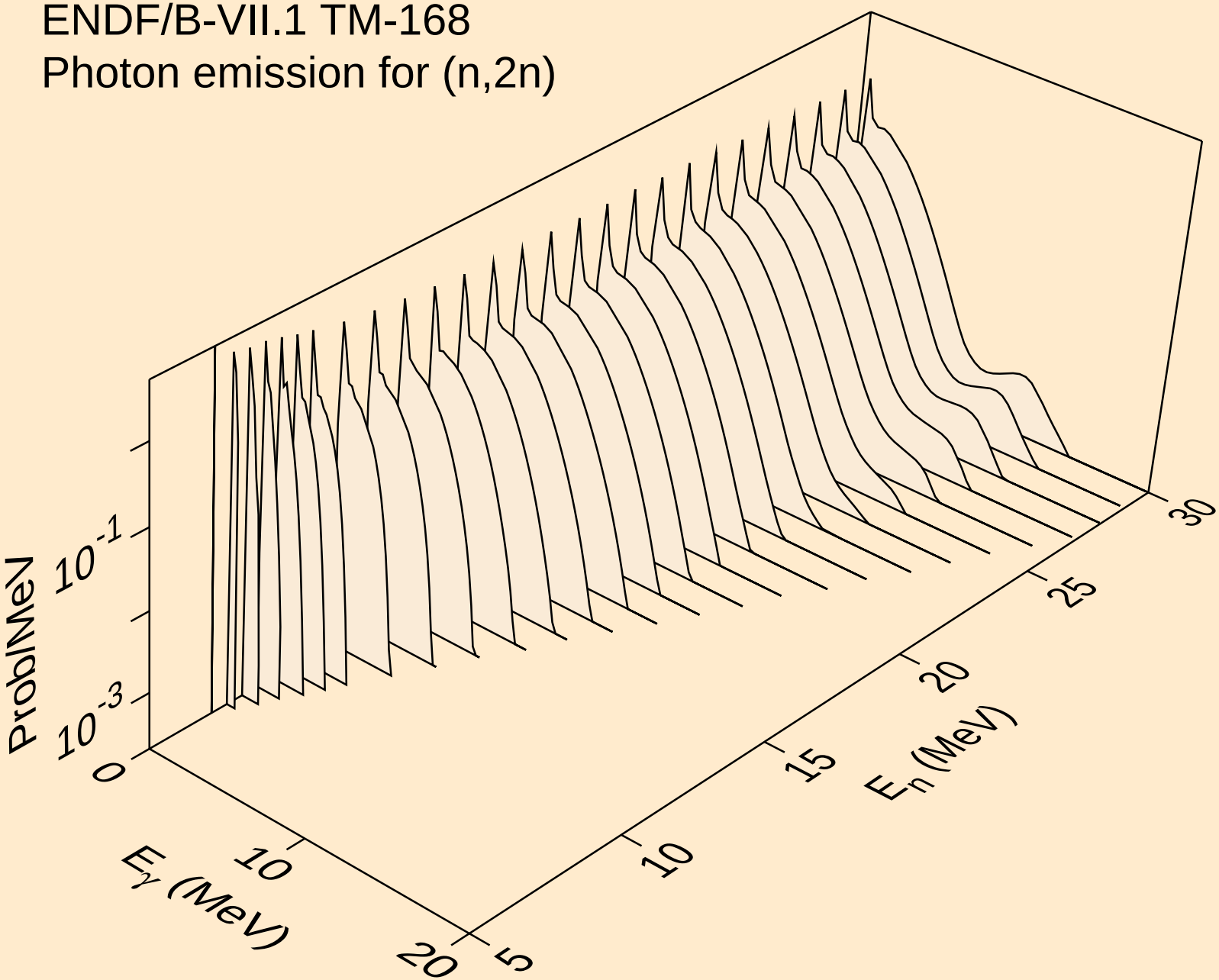



ENDF/B-VII.1 TM-168
Neutron emission for (n,n*c)
Prob/MeV
10^{1}
10^{-1}
0
10
20
30
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)

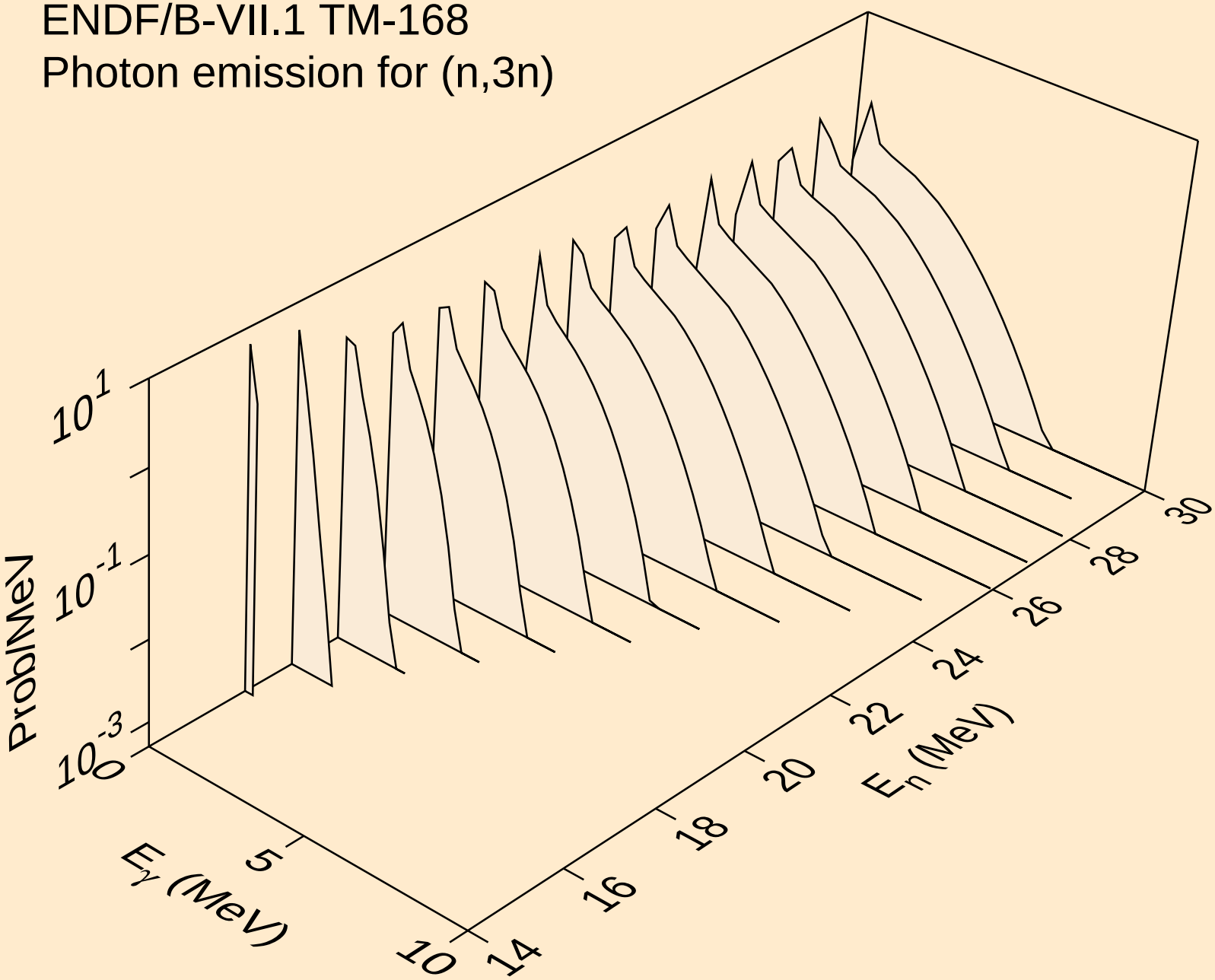
ENDF/B-VII.1 TM-168
Photon emission for (n,x)



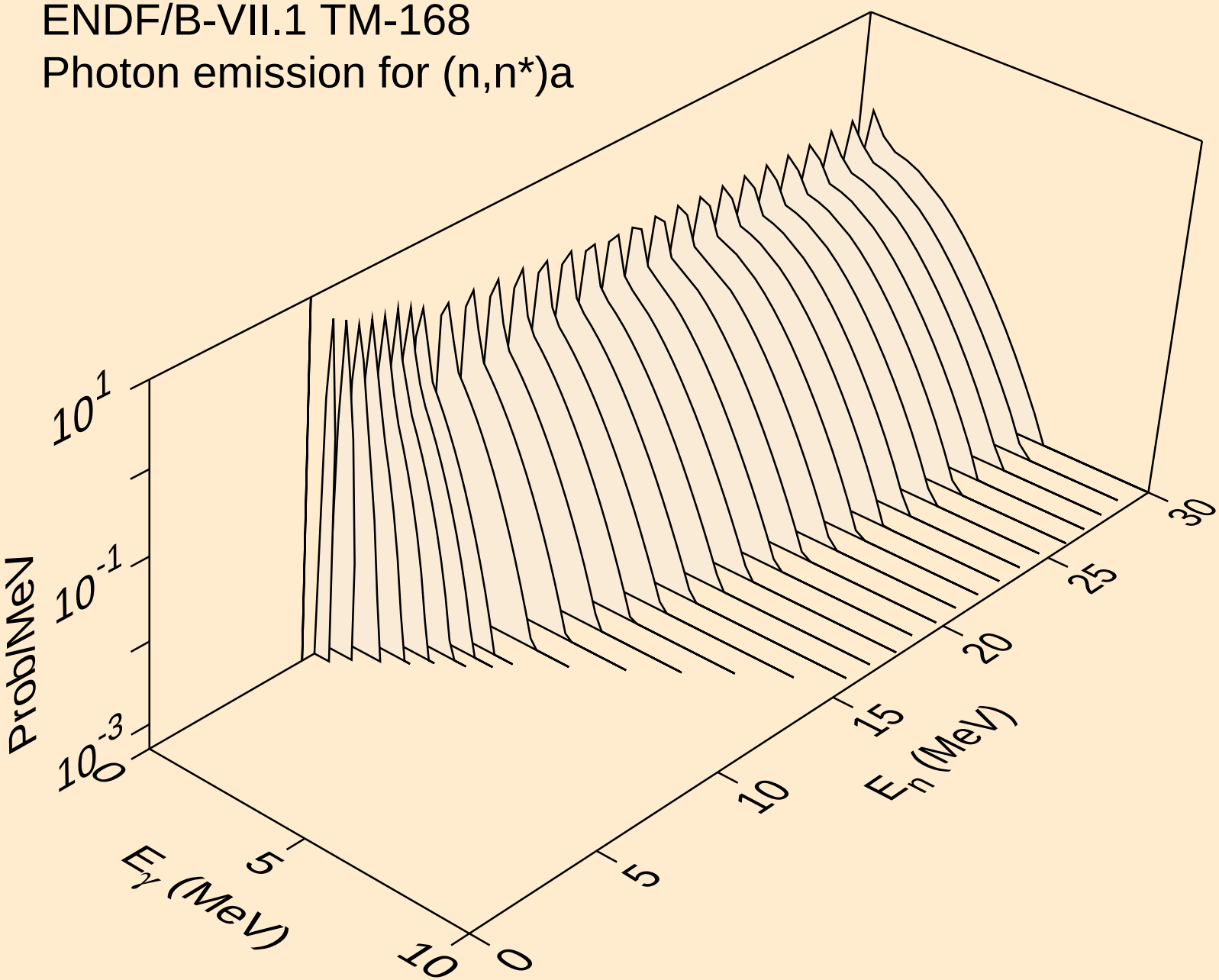
ENDF/B-VII.1 TM-168
Photon emission for (n,2n)



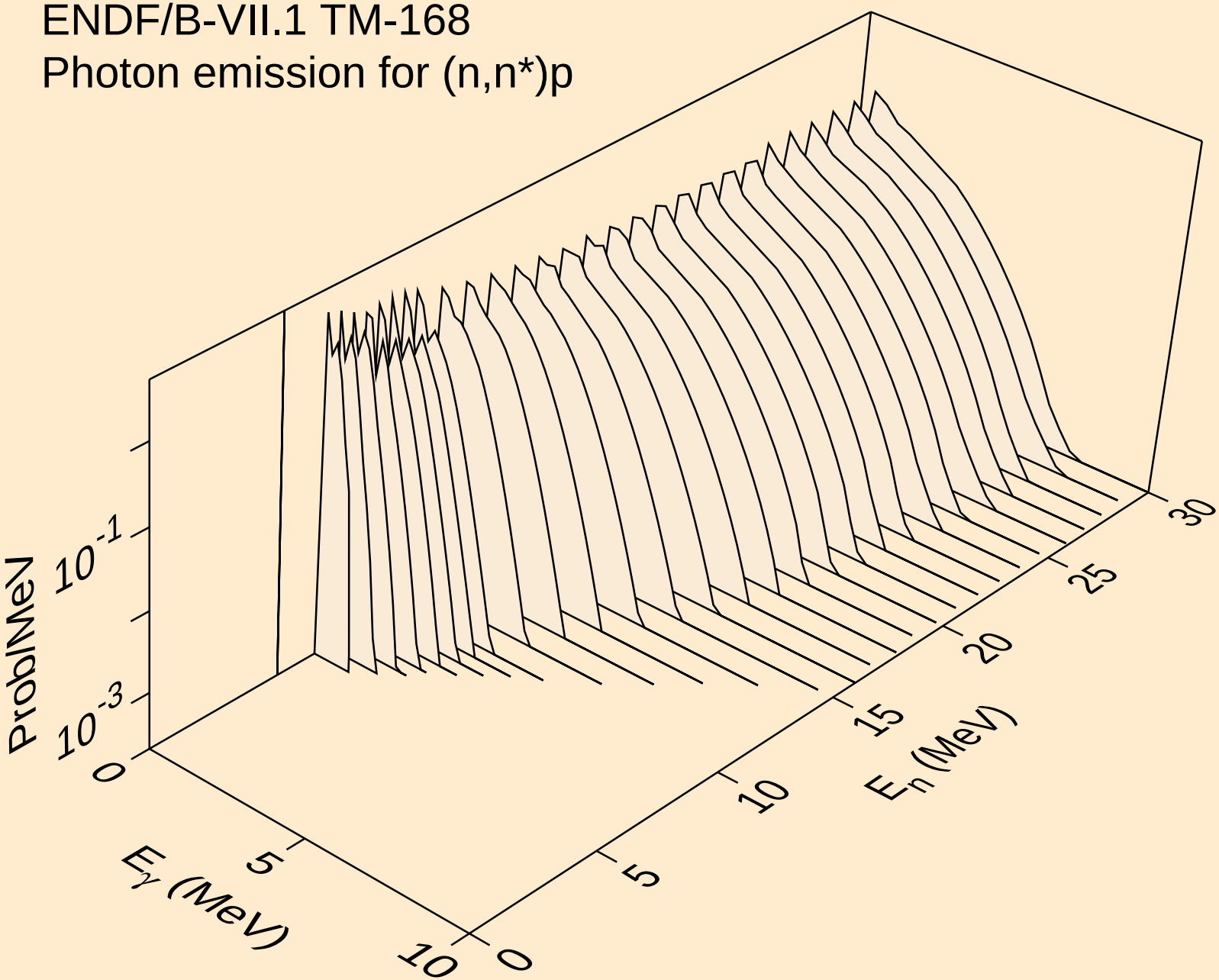
ENDF/B-VII.1 TM-168
Photon emission for (n,3n)

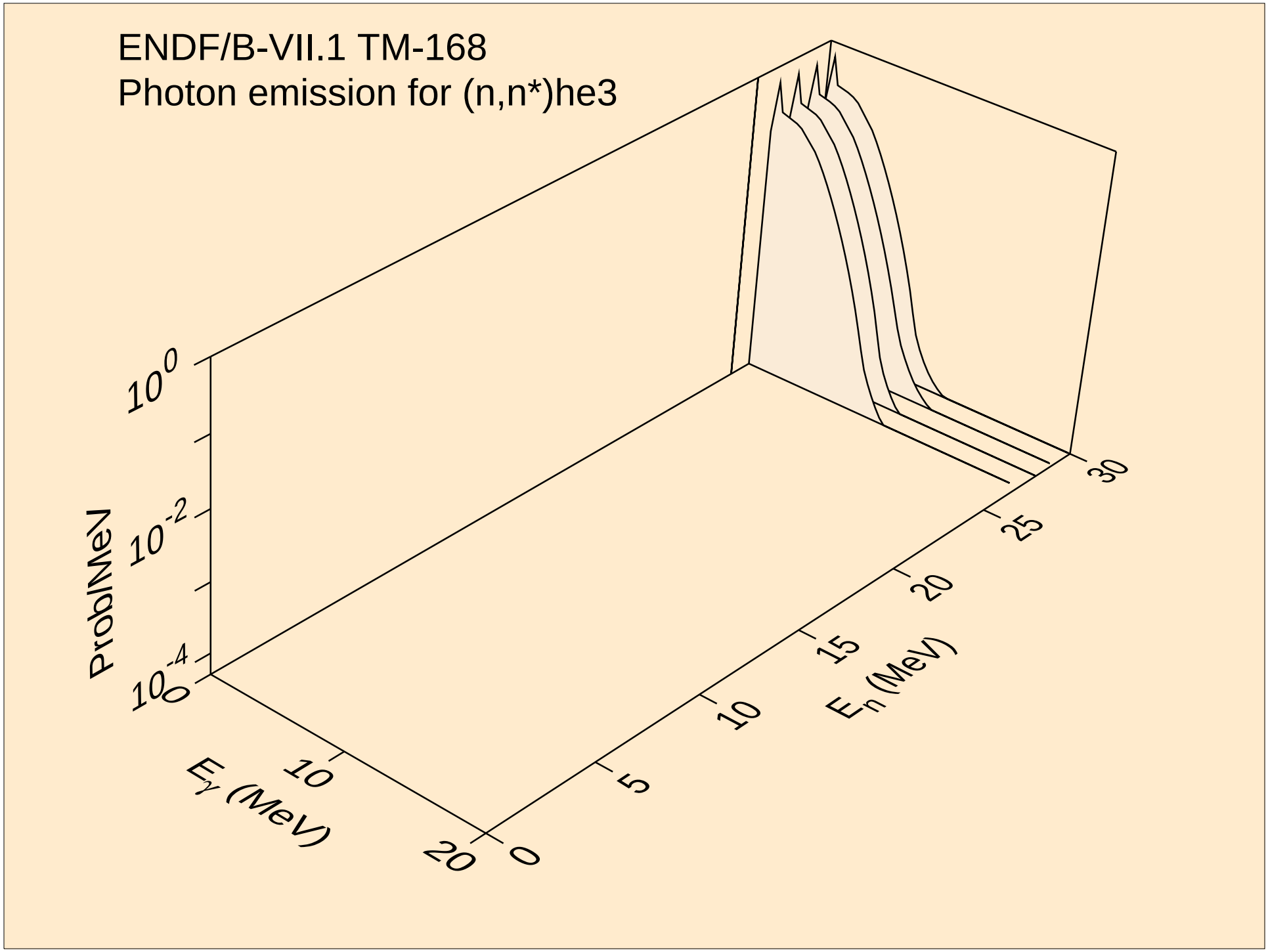


ENDF/B-VII.1 TM-168
Photon emission for (n,n*)a

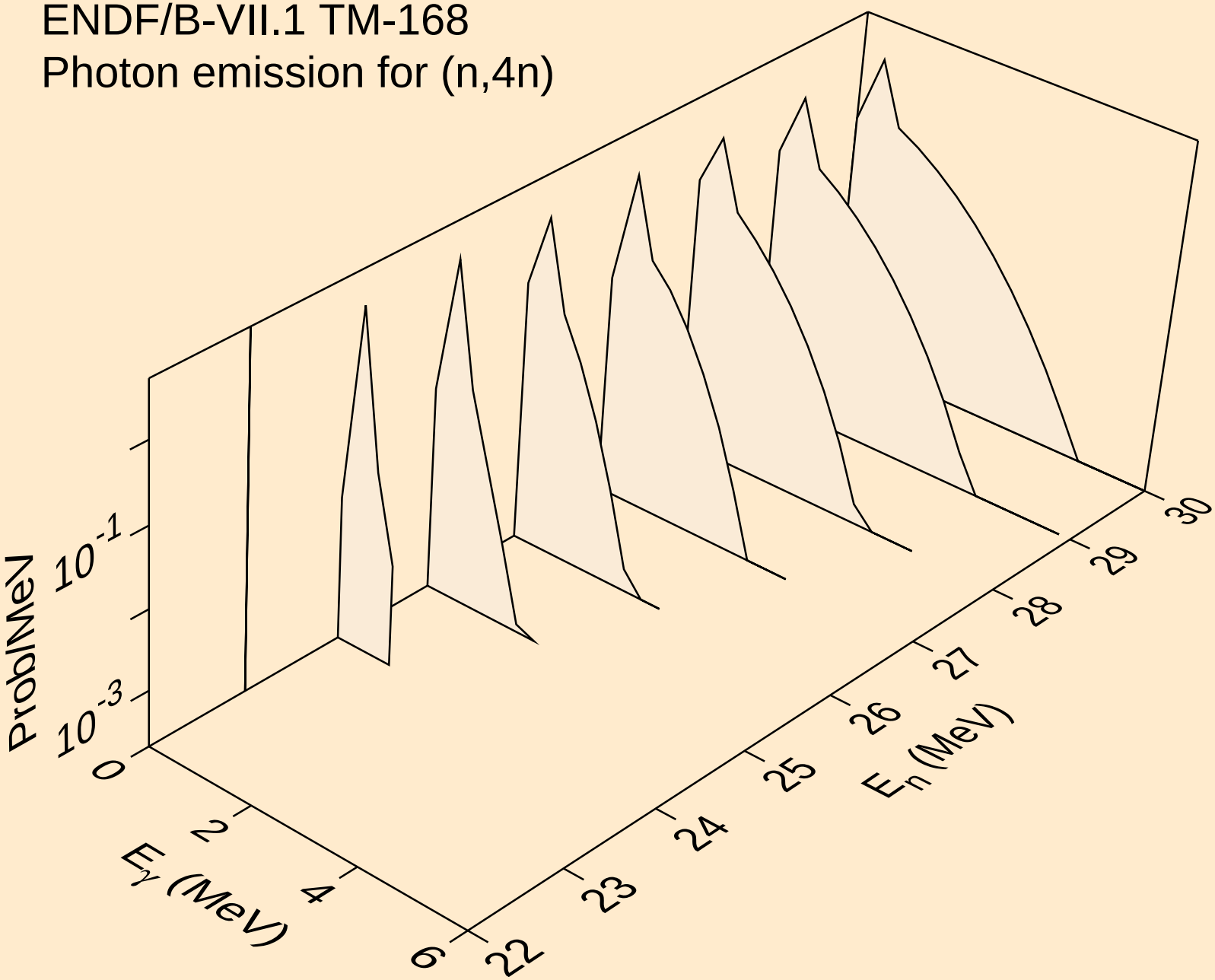


ENDF/B-VII.1 TM-168
Photon emission for (n,n*)p

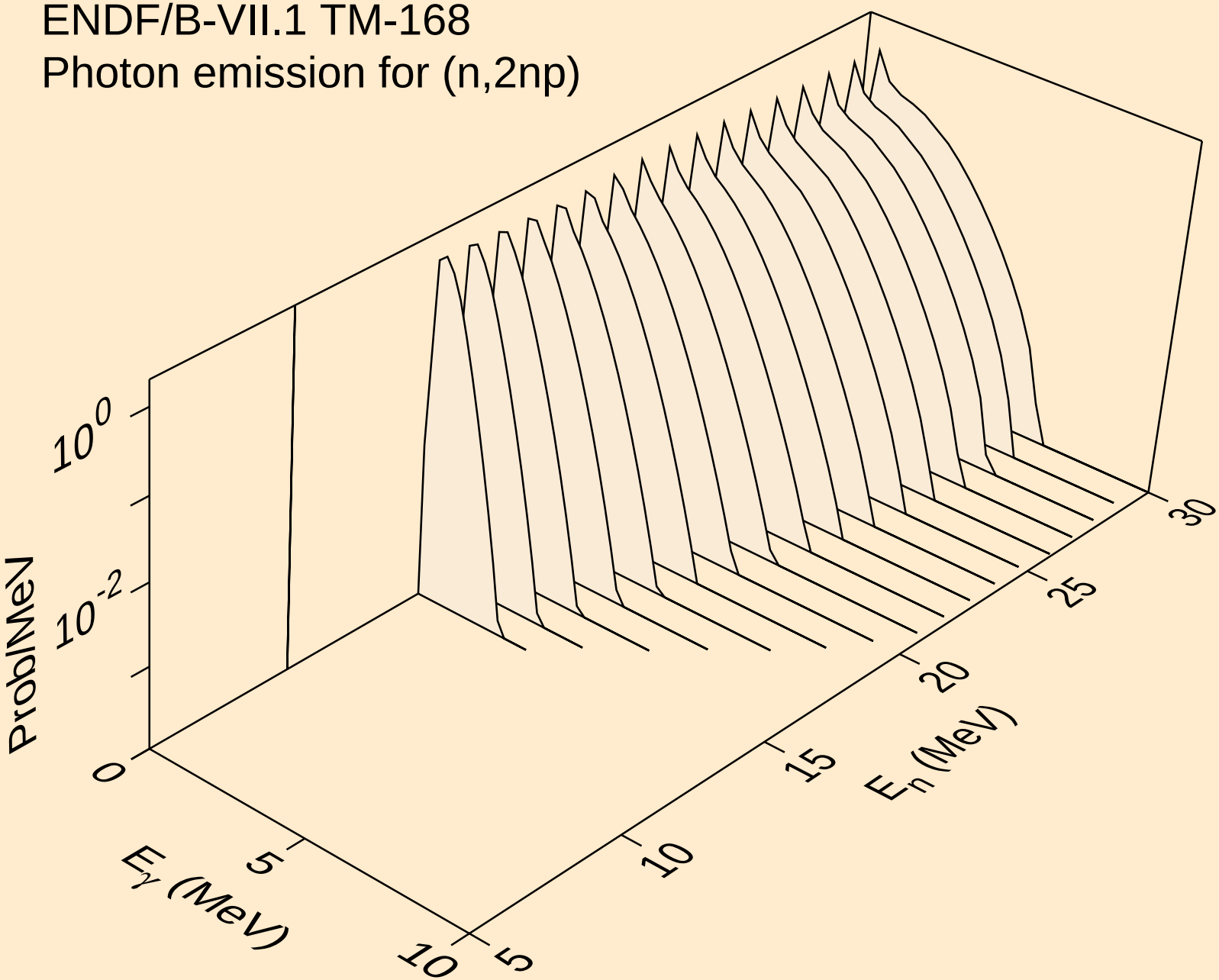



ENDF/B-VII.1 TM-168
Photon emission for (n,n*)he3
Prob/MeV
10^0
10^{-2}
10^{-4}
E_γ (MeV)
0
10
20
E_n (MeV)
0
5
10
15
20
25
30

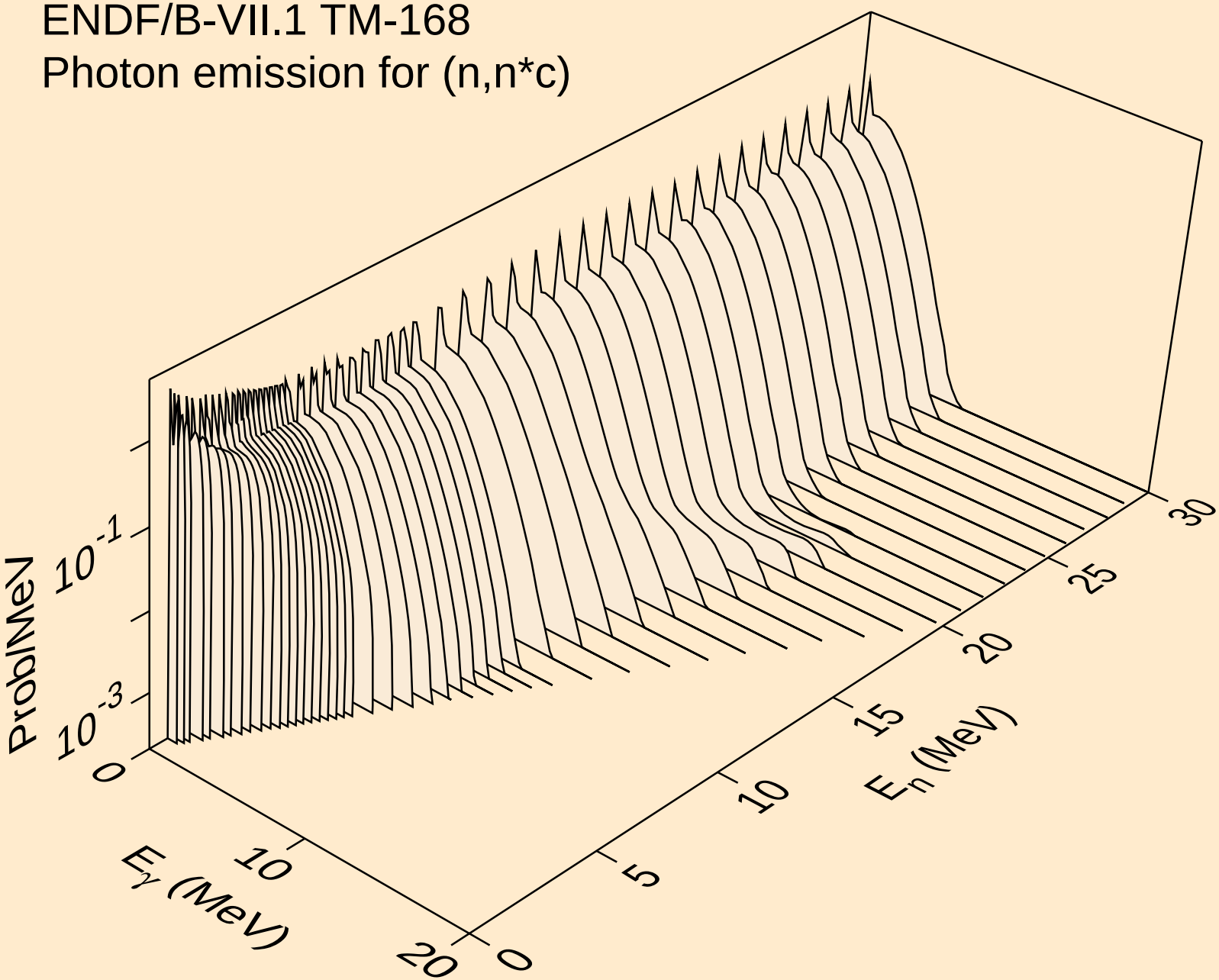
ENDF/B-VII.1 TM-168
Photon emission for (n,4n)



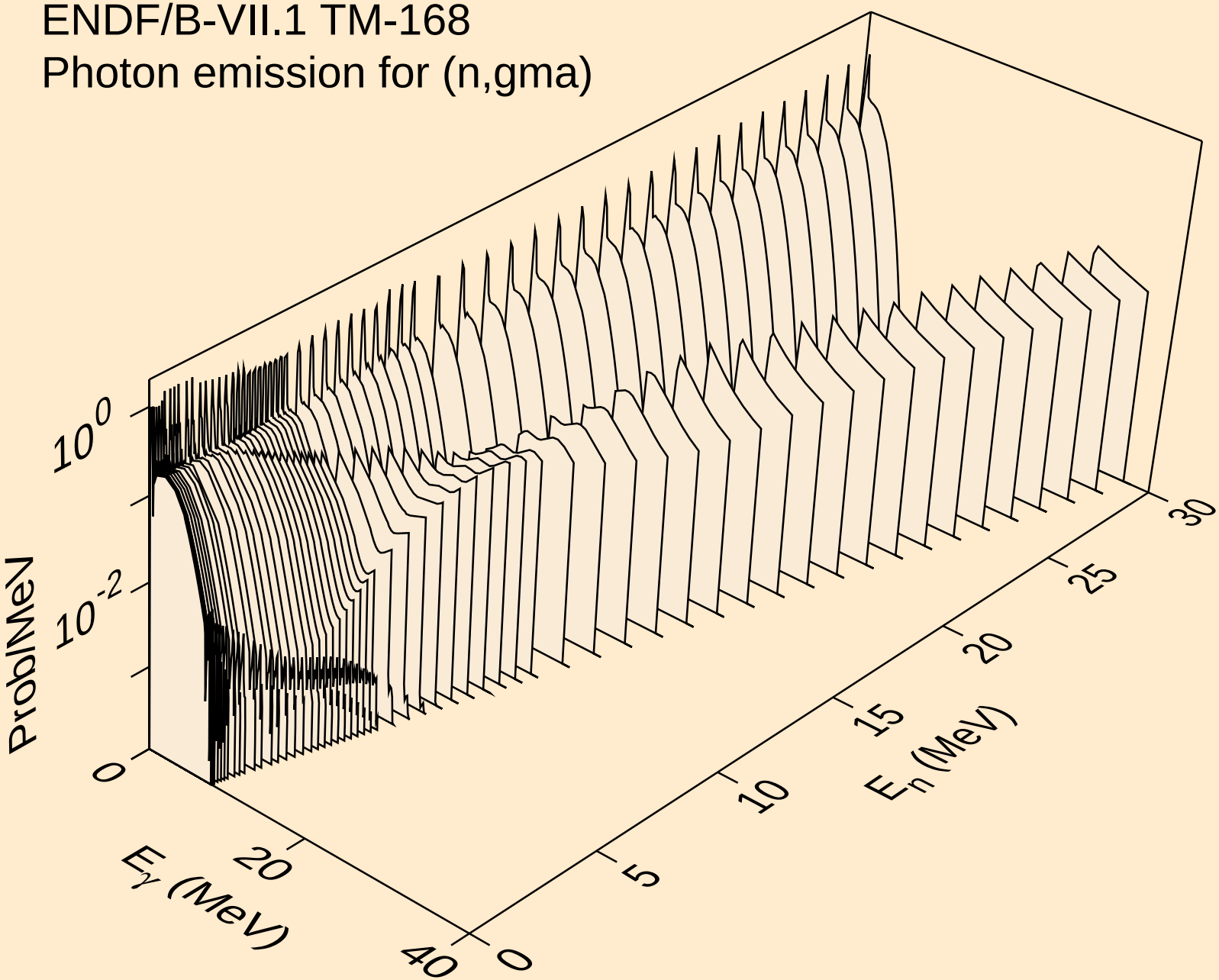
ENDF/B-VII.1 TM-168
Photon emission for (n,2np)

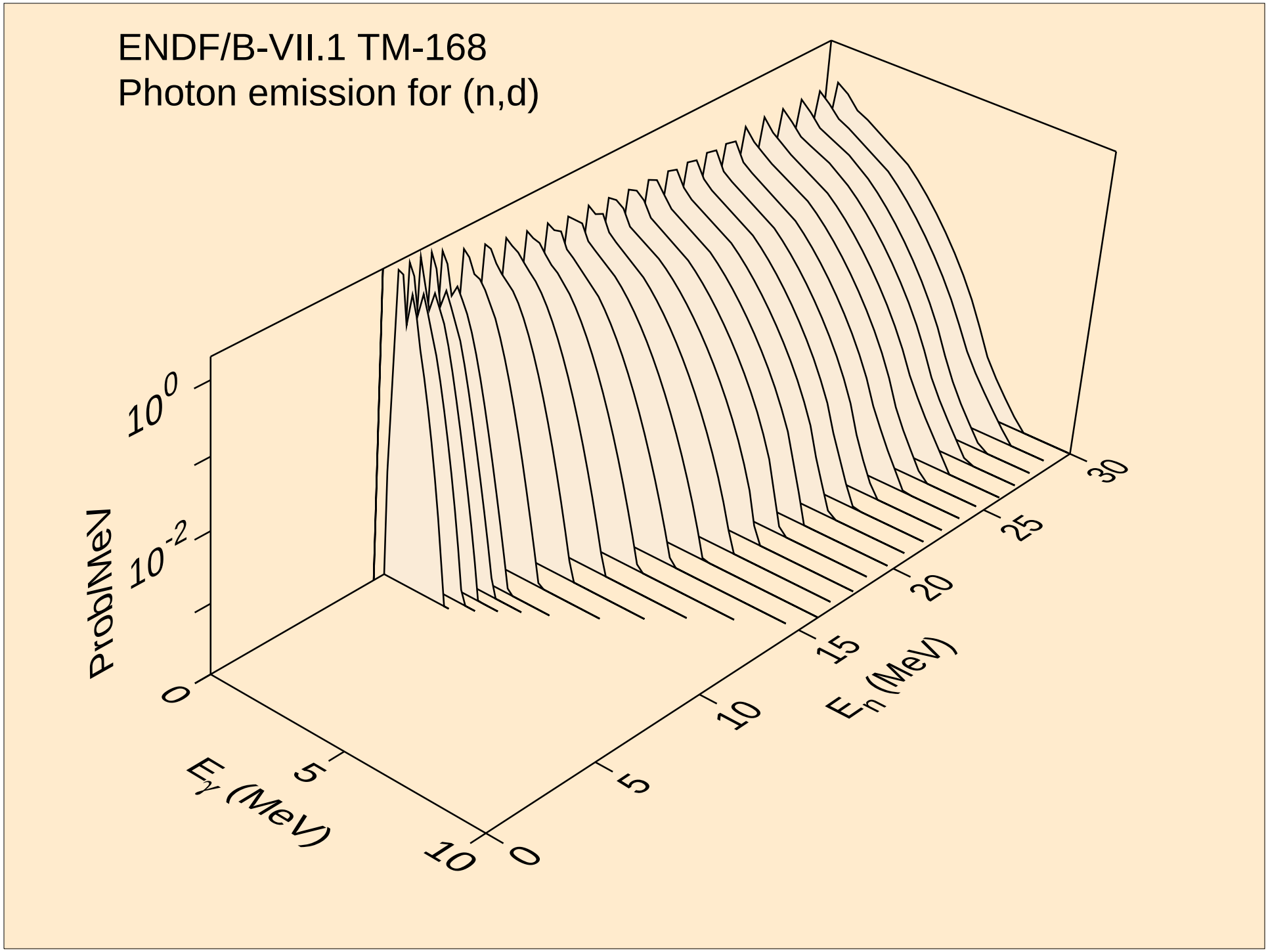


ENDF/B-VII.1 TM-168
Photon emission for (n,n*c)

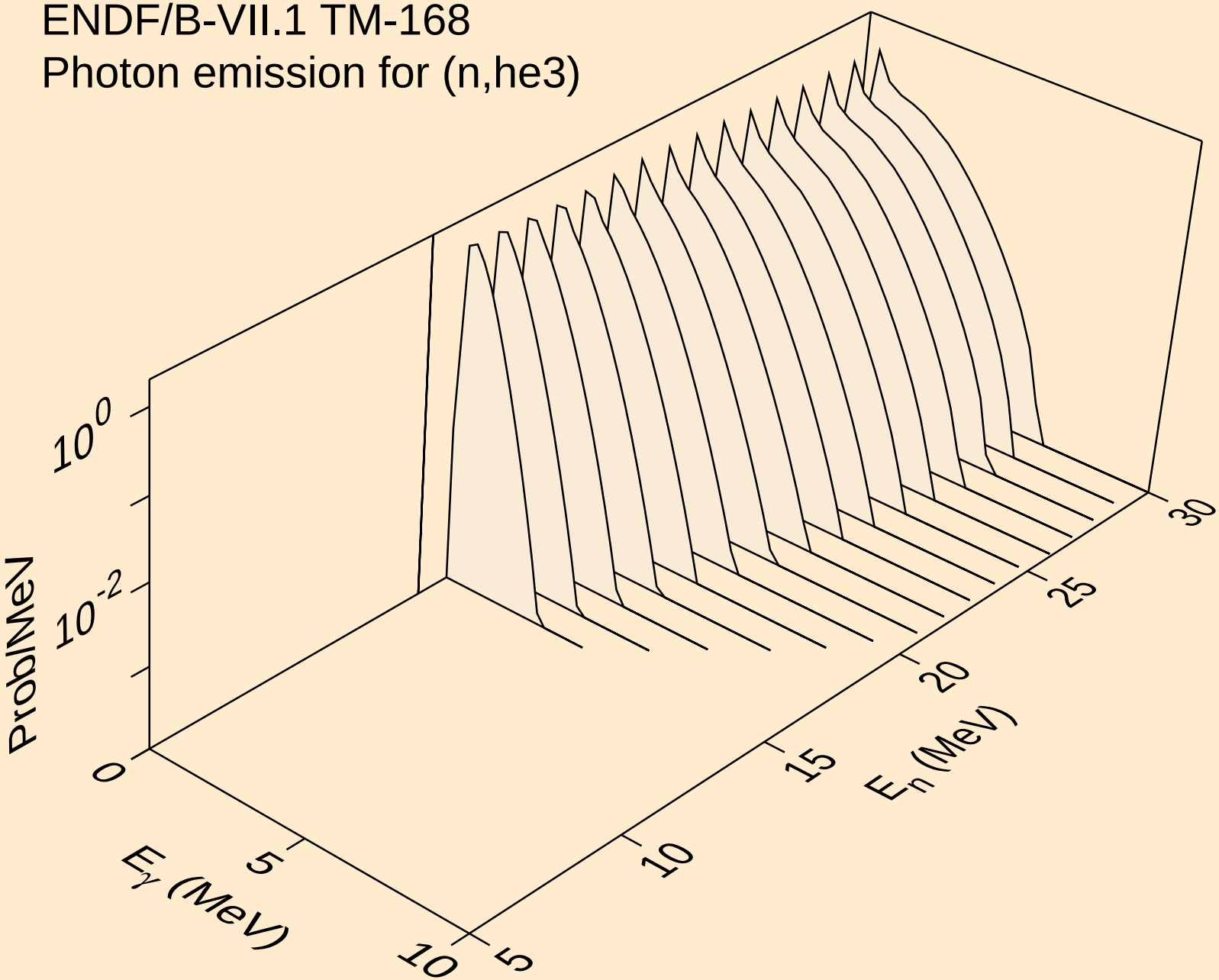


ENDF/B-VII.1 TM-168
Photon emission for (n,gma)

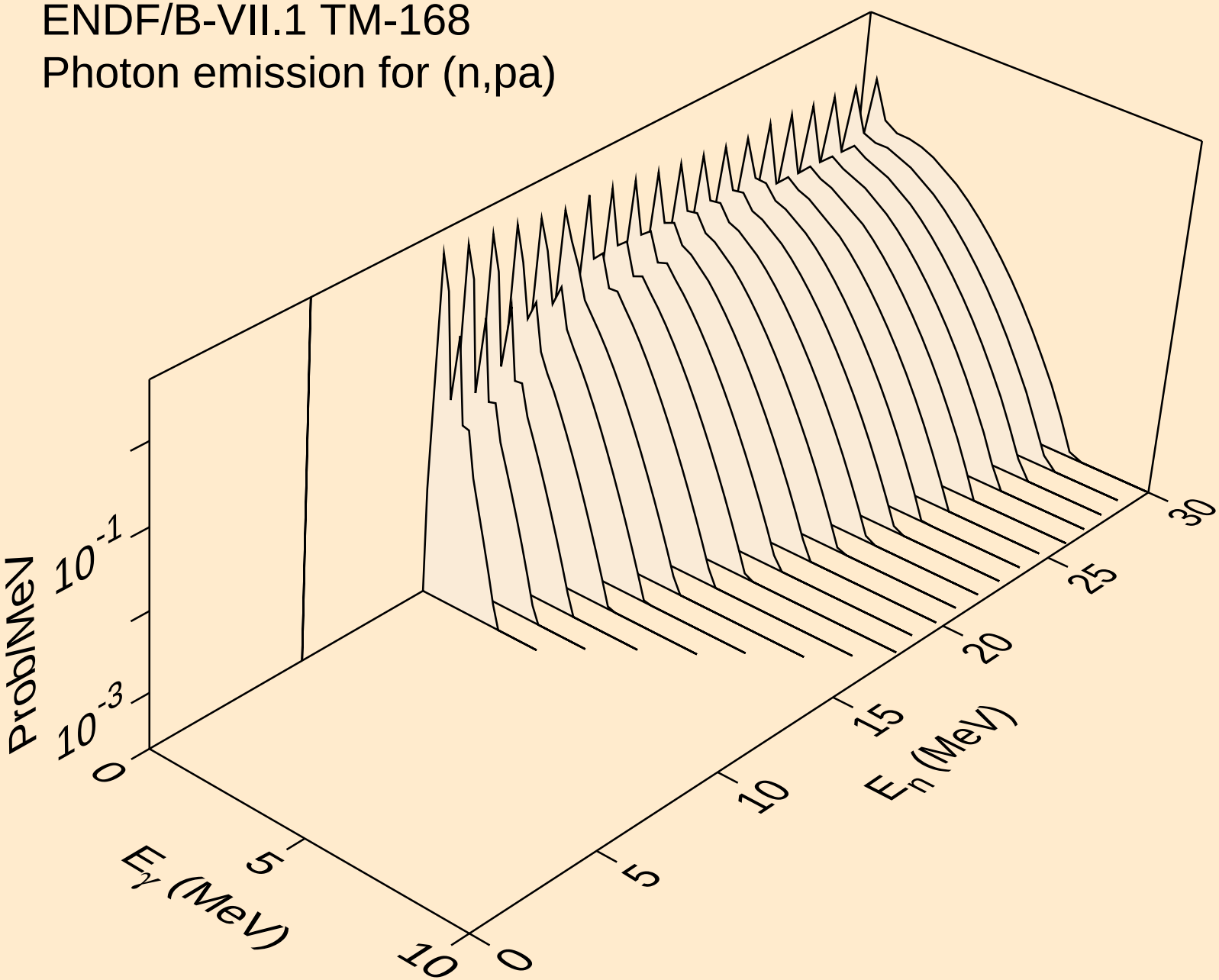



ENDF/B-VII.1 TM-168
Photon emission for (n,d)
Prob/MeV
10^0
10^{-2}
0
5
10
E_γ (MeV)
0
5
10
15
20
25
30
E_n (MeV)

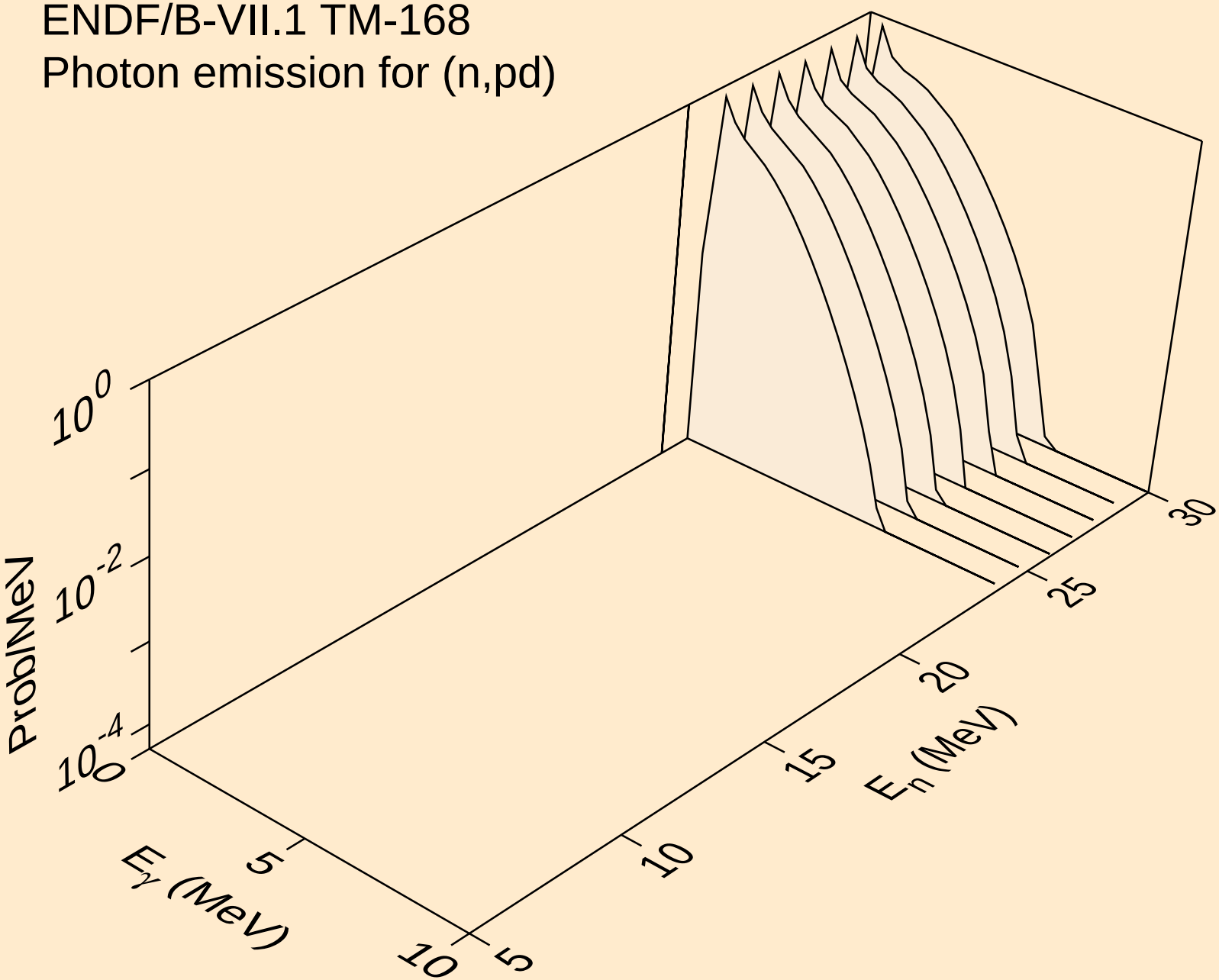
ENDF/B-VII.1 TM-168
Photon emission for (n,he3)

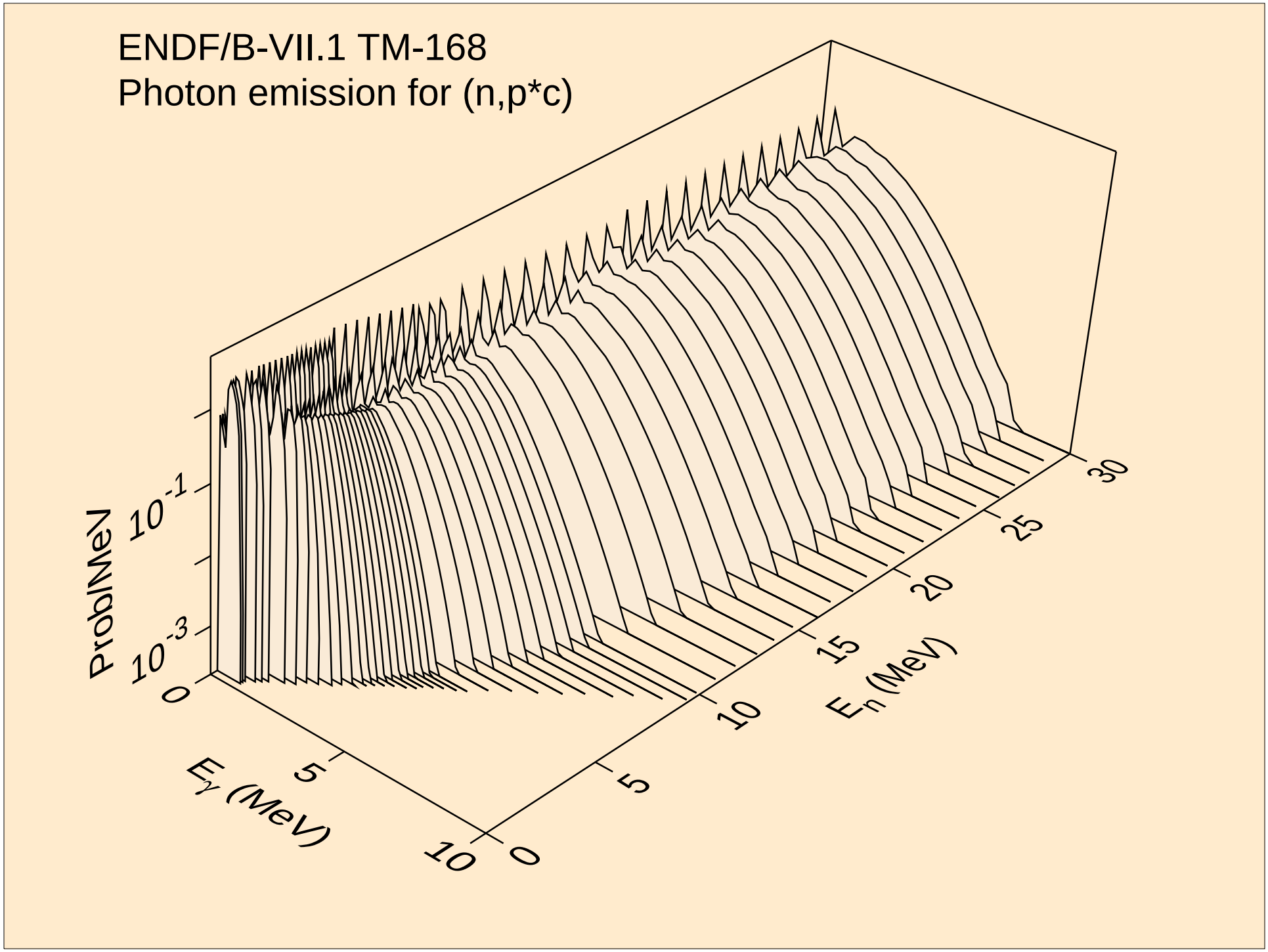


ENDF/B-VII.1 TM-168
Photon emission for (n,pa)

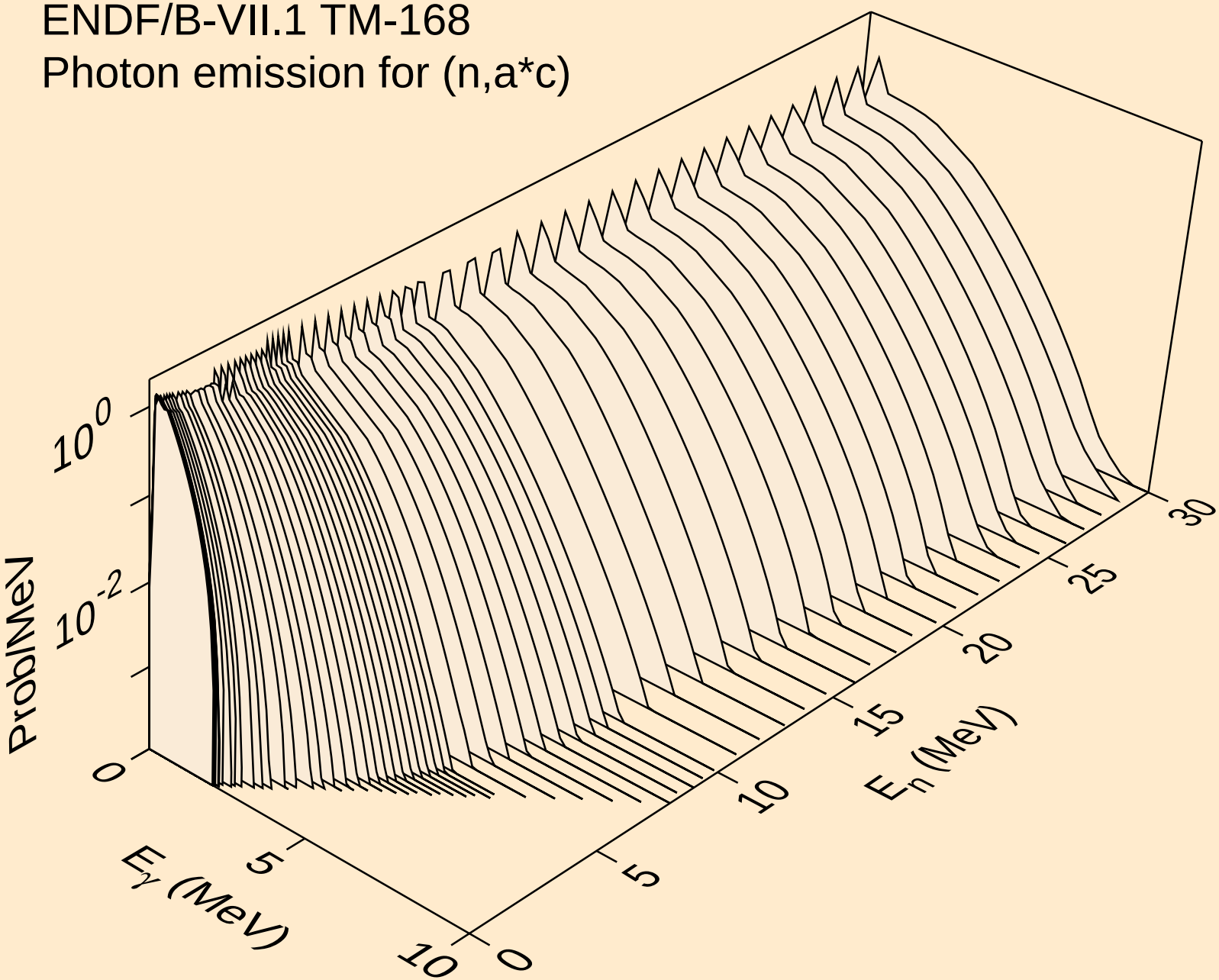


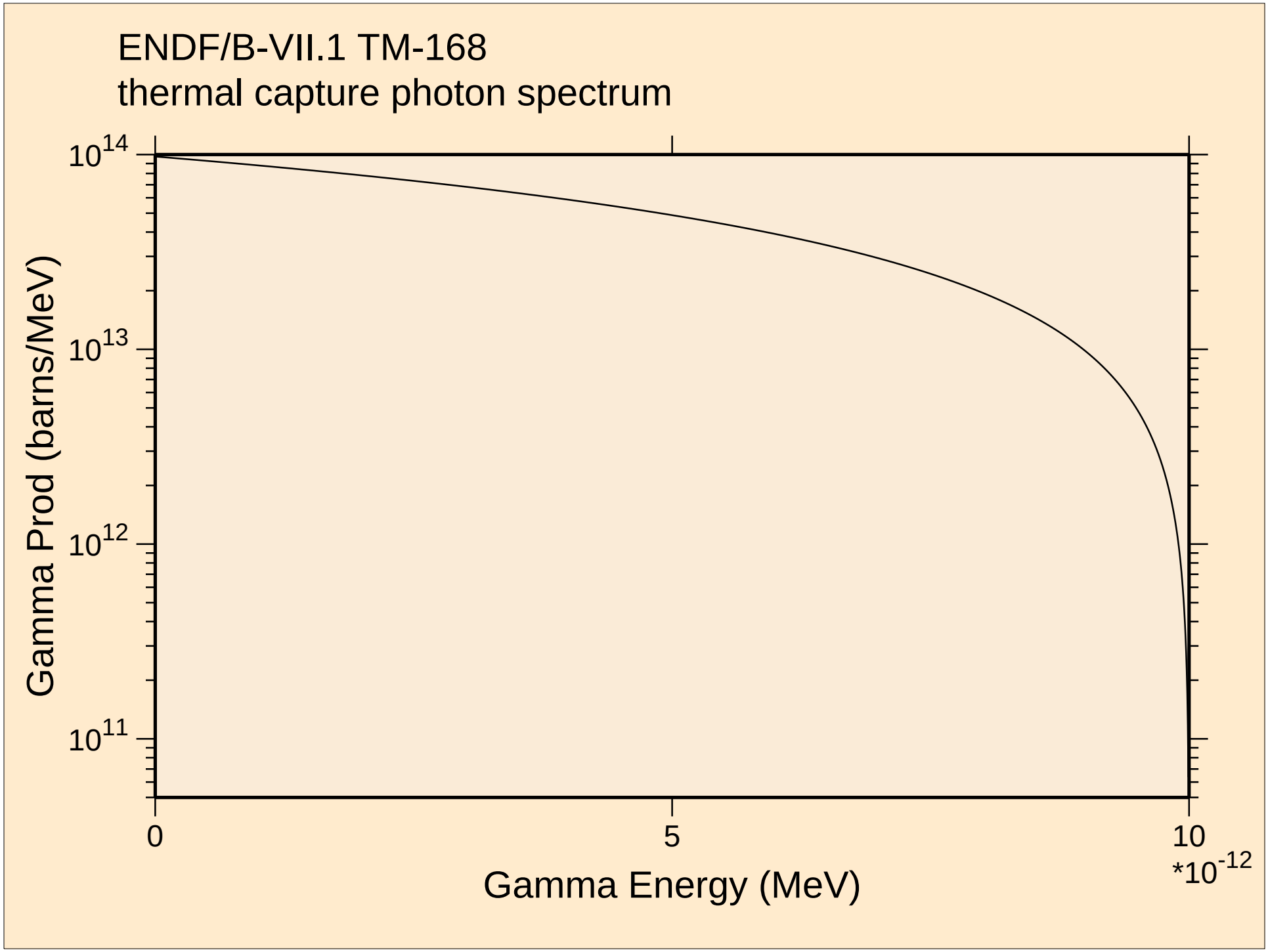
ENDF/B-VII.1 TM-168
Photon emission for (n,pd)

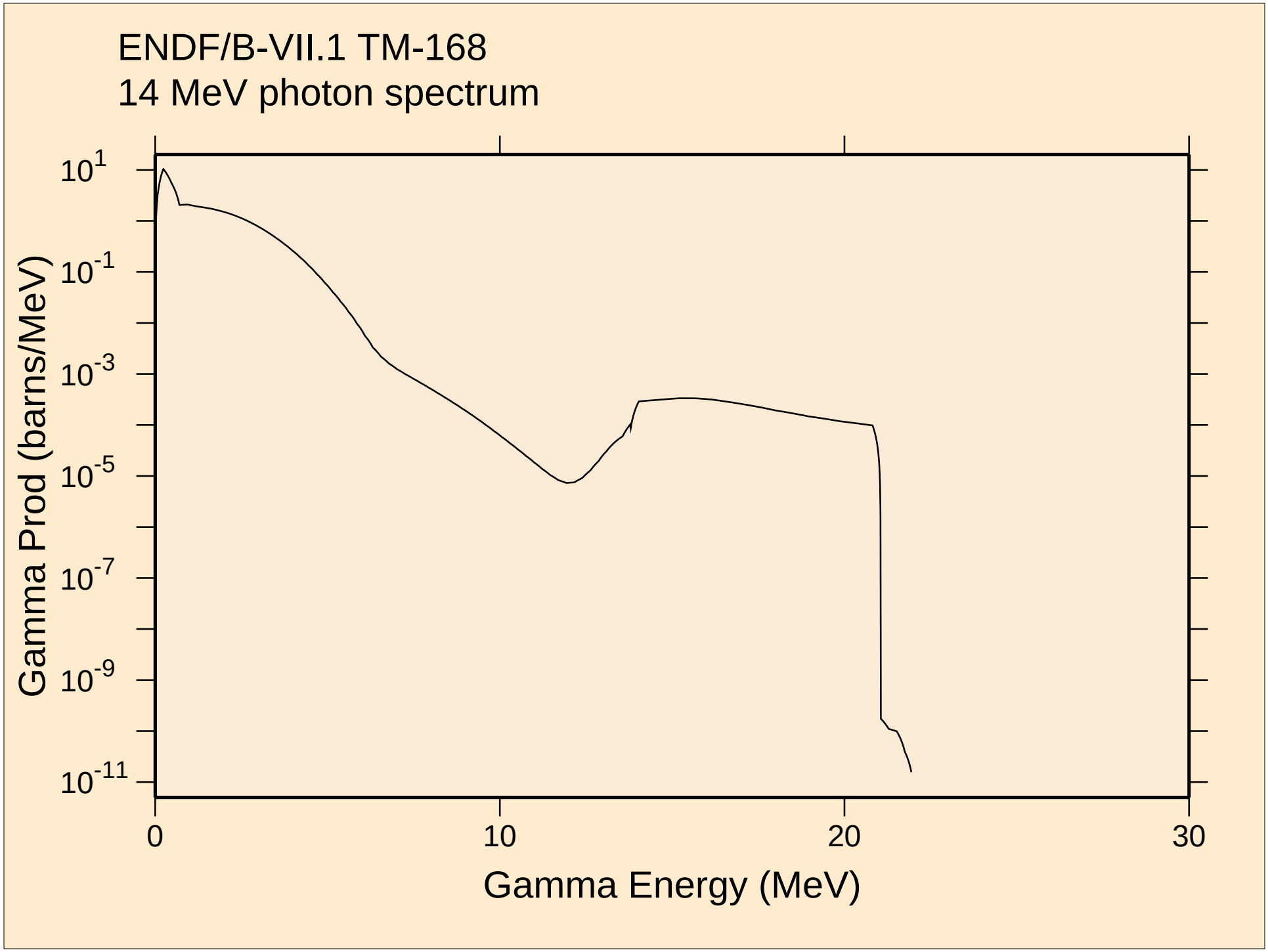


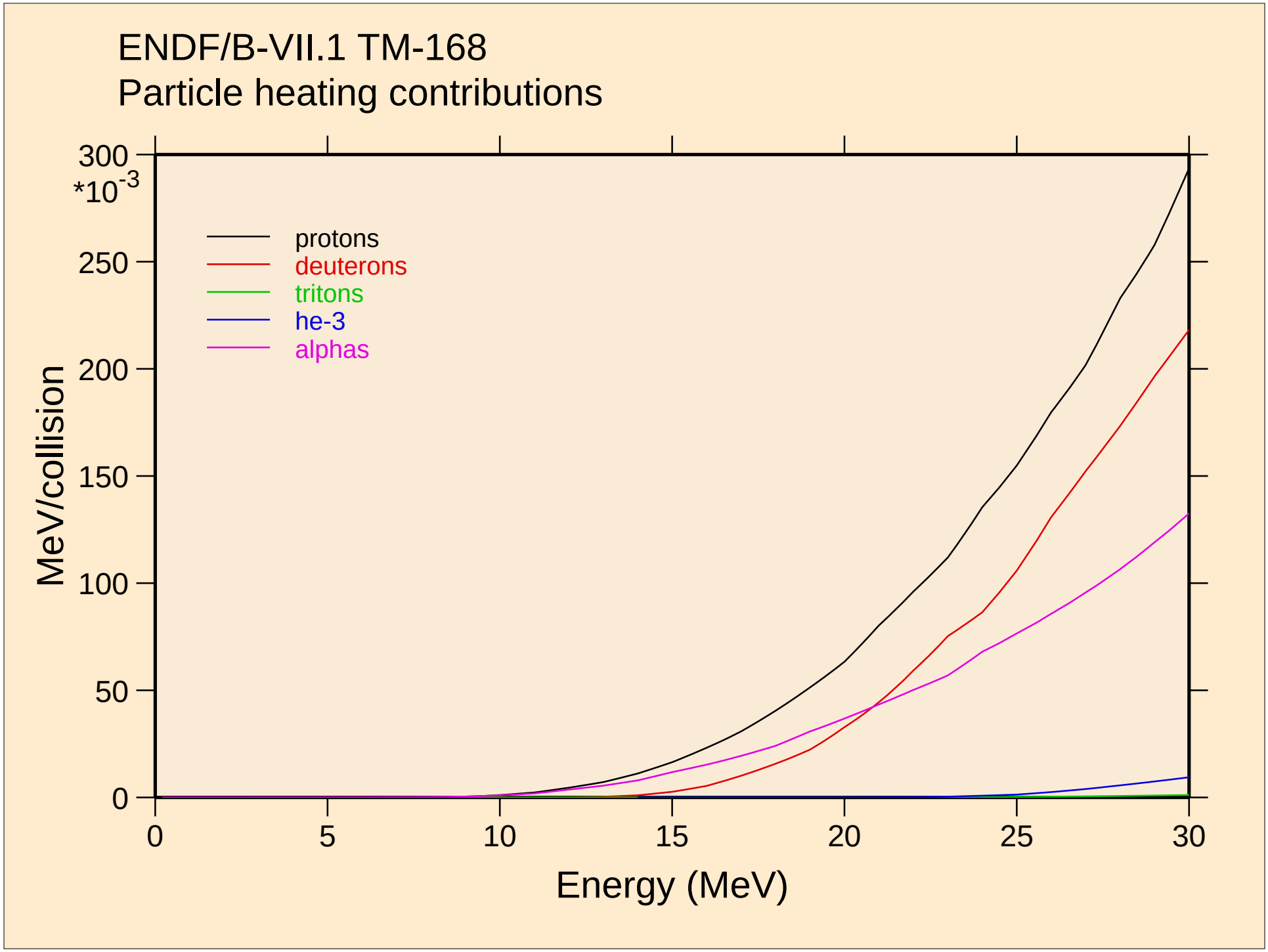

ENDF/B-VII.1 TM-168
Photon emission for (n,p*c)
Prob/MeV
10^-1
10^-3
0
5
10
Eγ (MeV)
0
5
10
15
20
25
30
En (MeV)

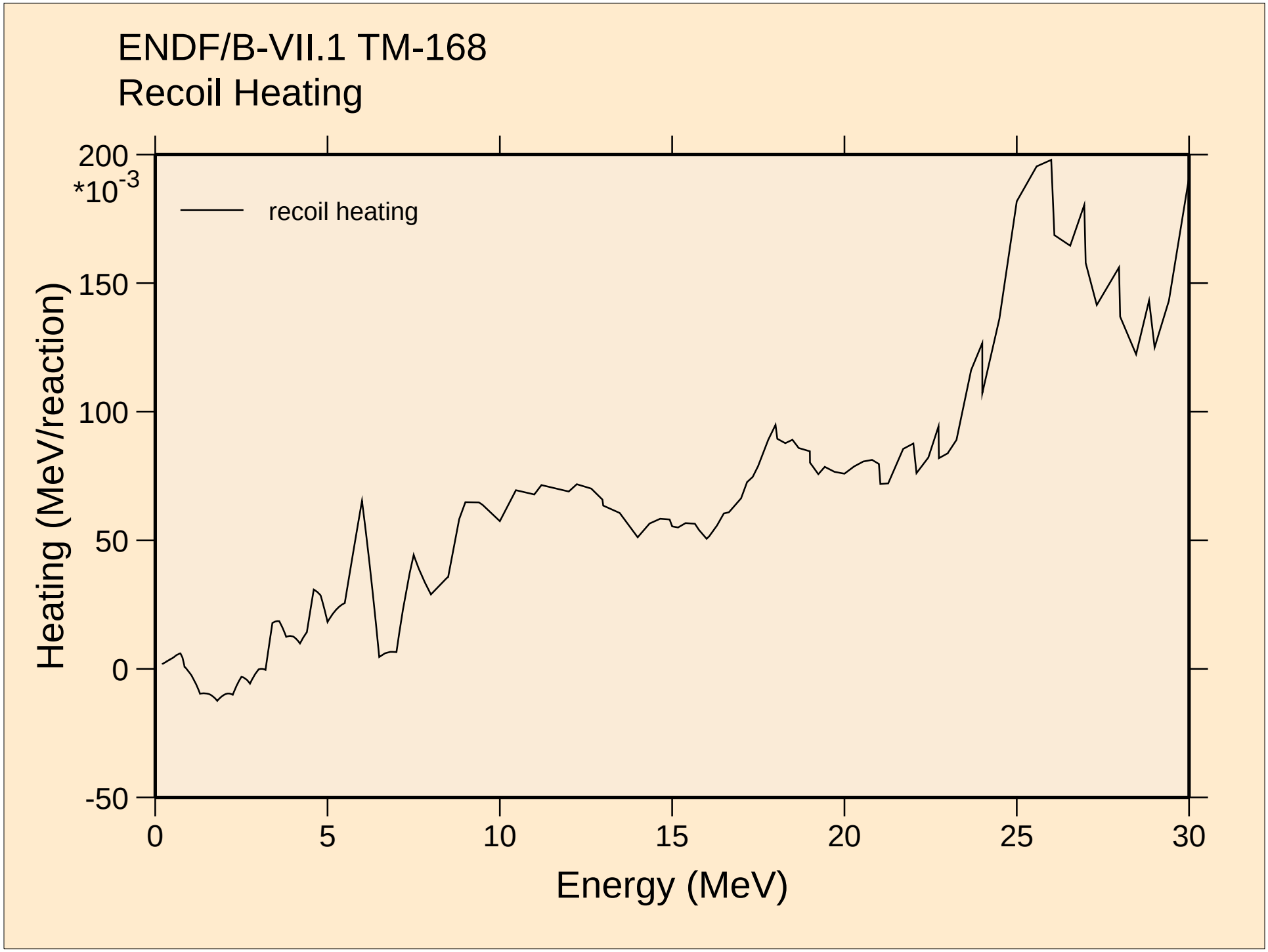
ENDF/B-VII.1 TM-168
Photon emission for (n,a*c)

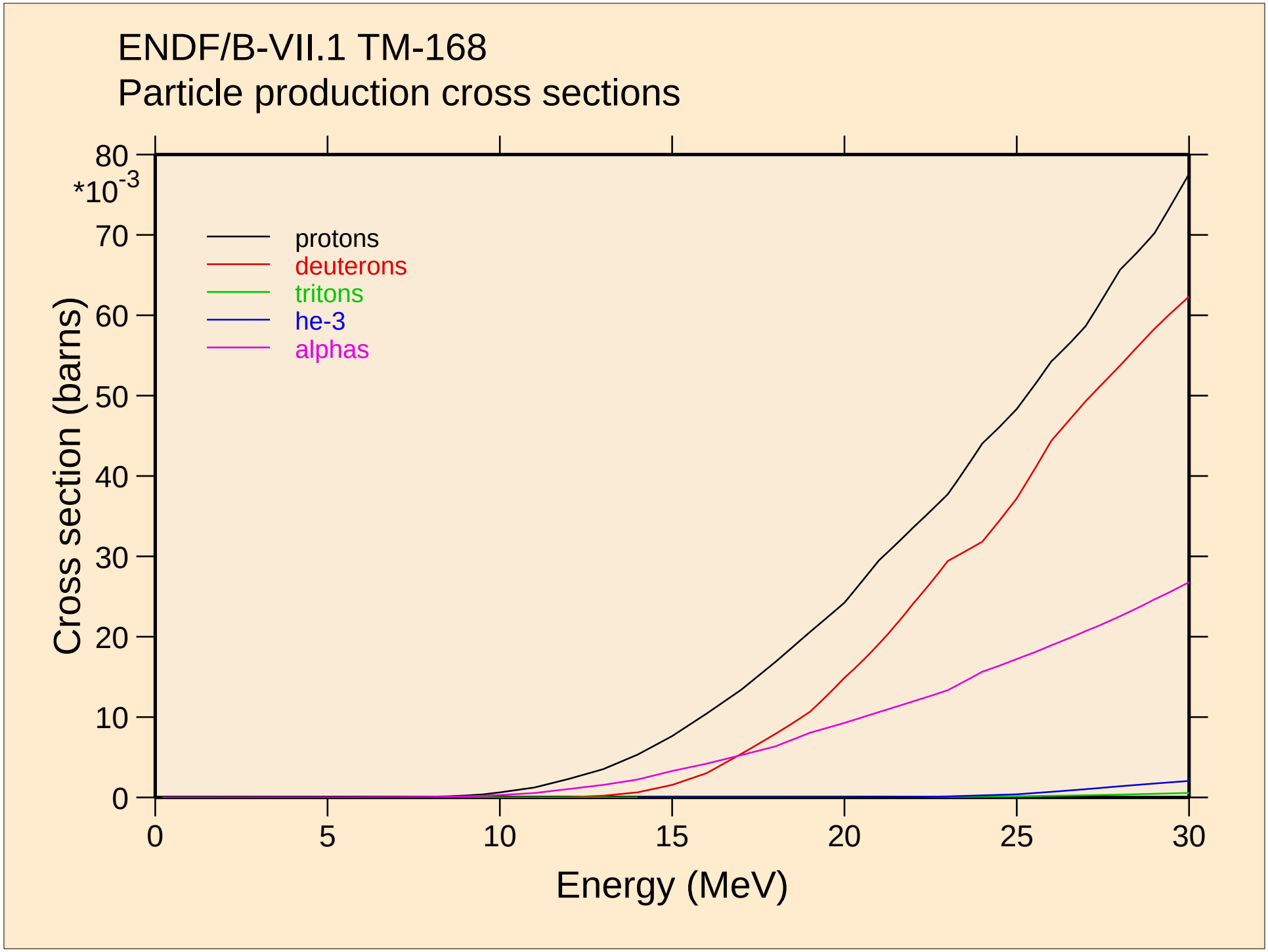


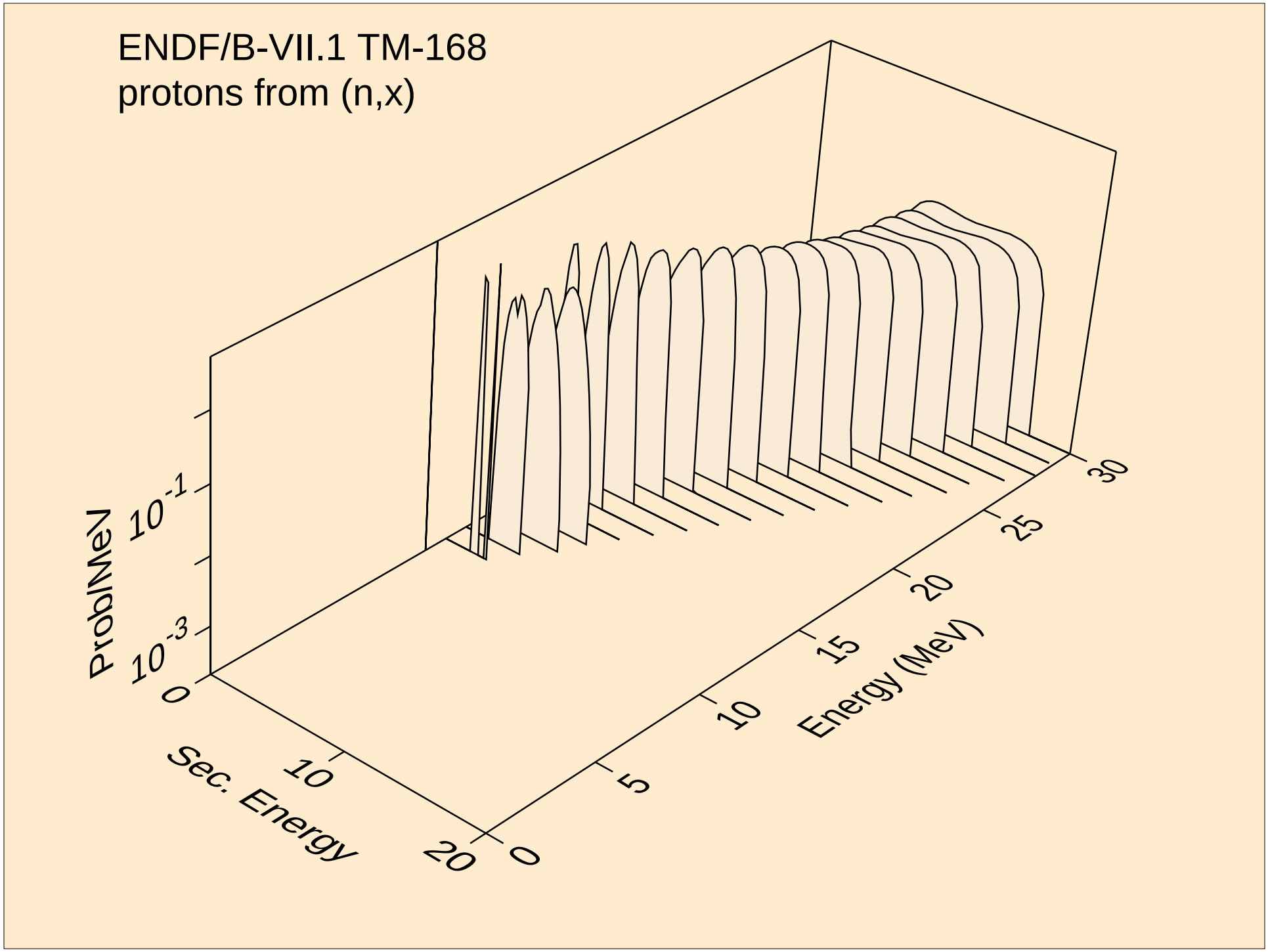

ENDF/B-VII.1 TM-168
thermal capture photon spectrum
Gamma Prod (barns/MeV)
10^14
10^13
10^12
10^11
0
5
10
*10^-12
Gamma Energy (MeV)

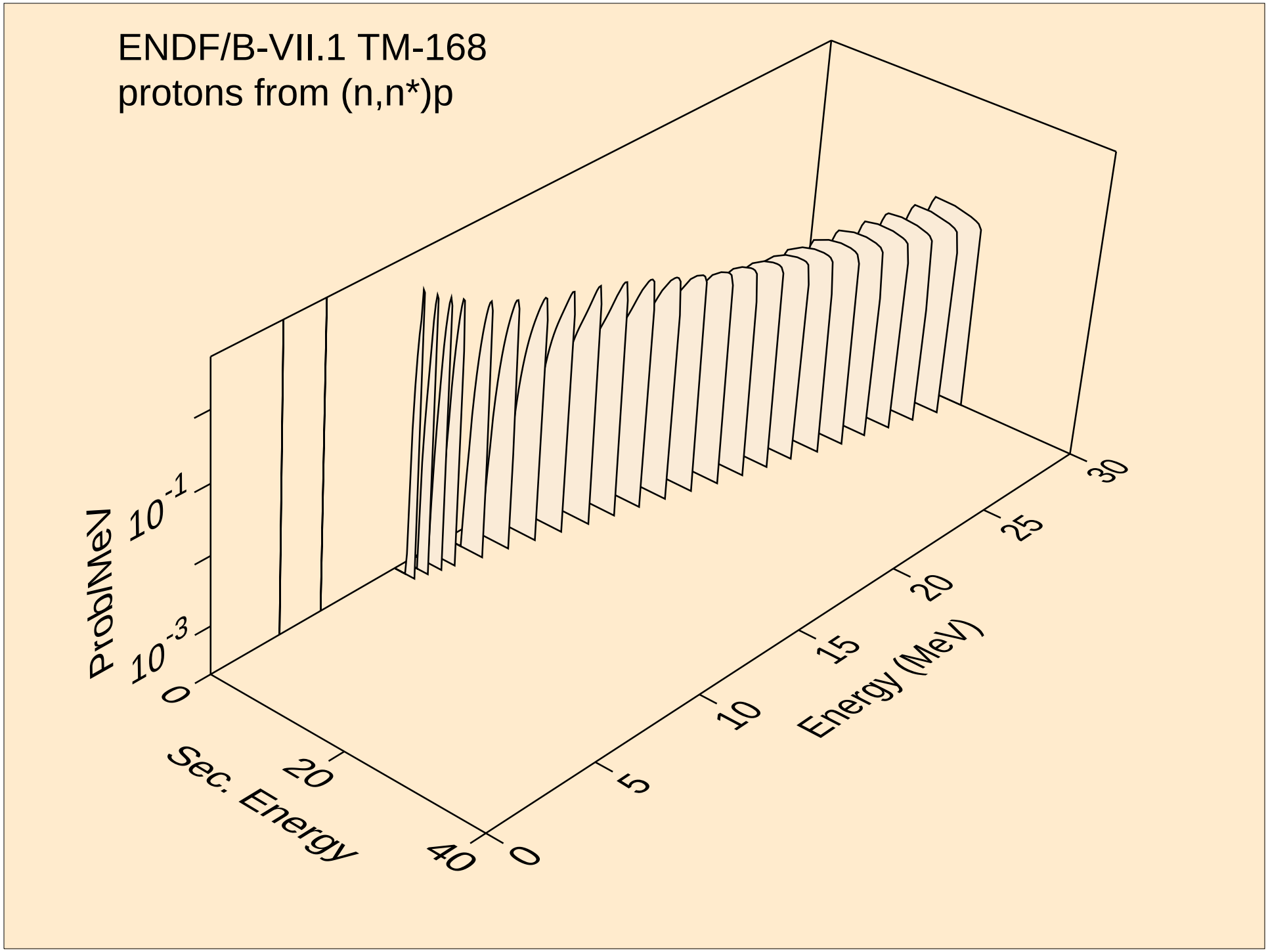

ENDF/B-VII.1 TM-168
14 MeV photon spectrum
Gamma Prod (barns/MeV)
10^1
10^-1
10^-3
10^-5
10^-7
10^-9
10^-11
0
10
20
30
Gamma Energy (MeV)

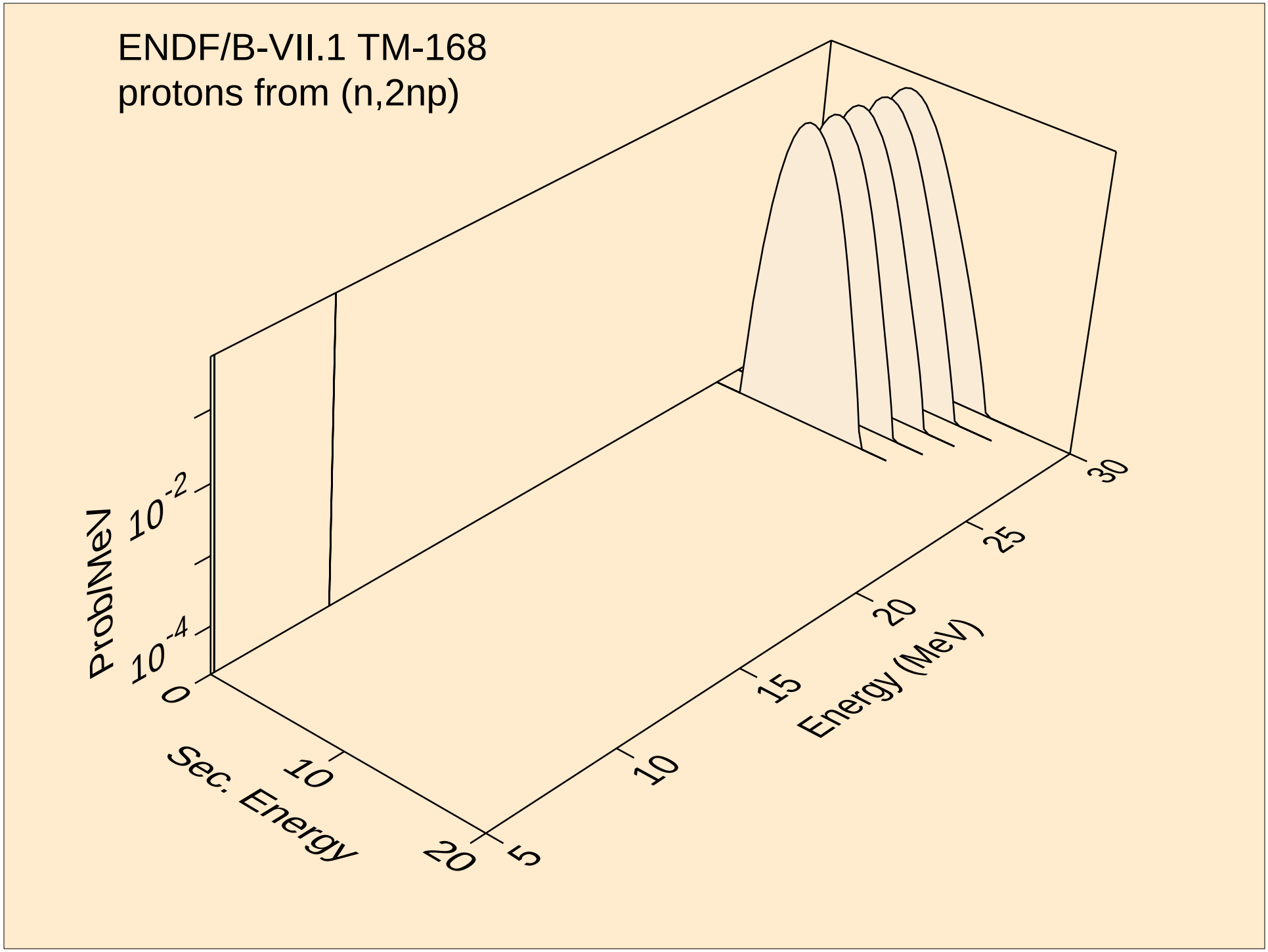

ENDF/B-VII.1 TM-168
Particle heating contributions
300
*10-3
250
200
150
100
50
0
MeV/collision
protons
deuterons
tritons
he-3
alphas
0
5
10
15
20
25
30
Energy (MeV)

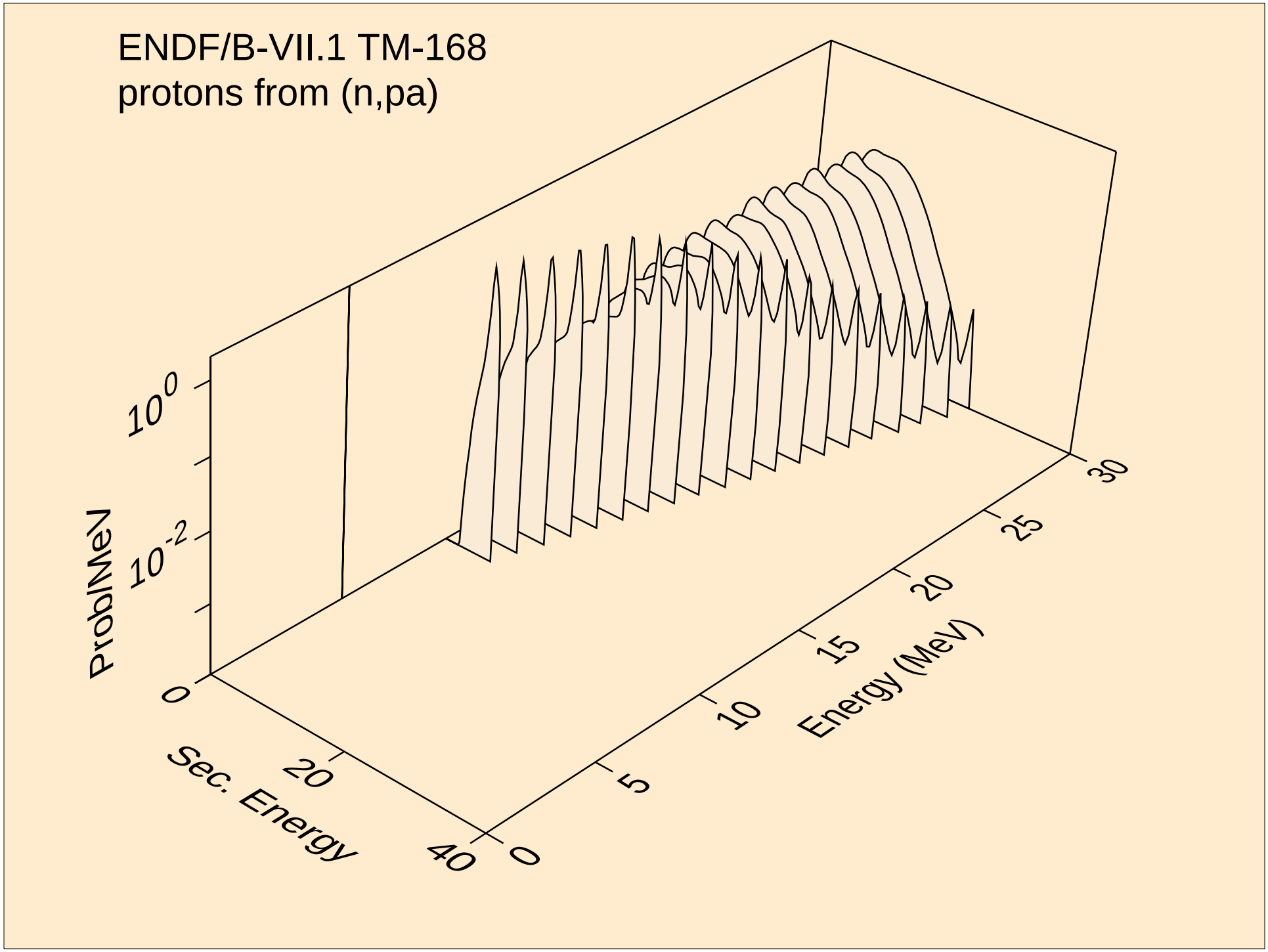

ENDF/B-VII.1 TM-168
Recoil Heating
recoil heating
Heating (MeV/reaction)
*10^-3
200
150
100
50
0
-50
0
5
10
15
20
25
30
Energy (MeV)

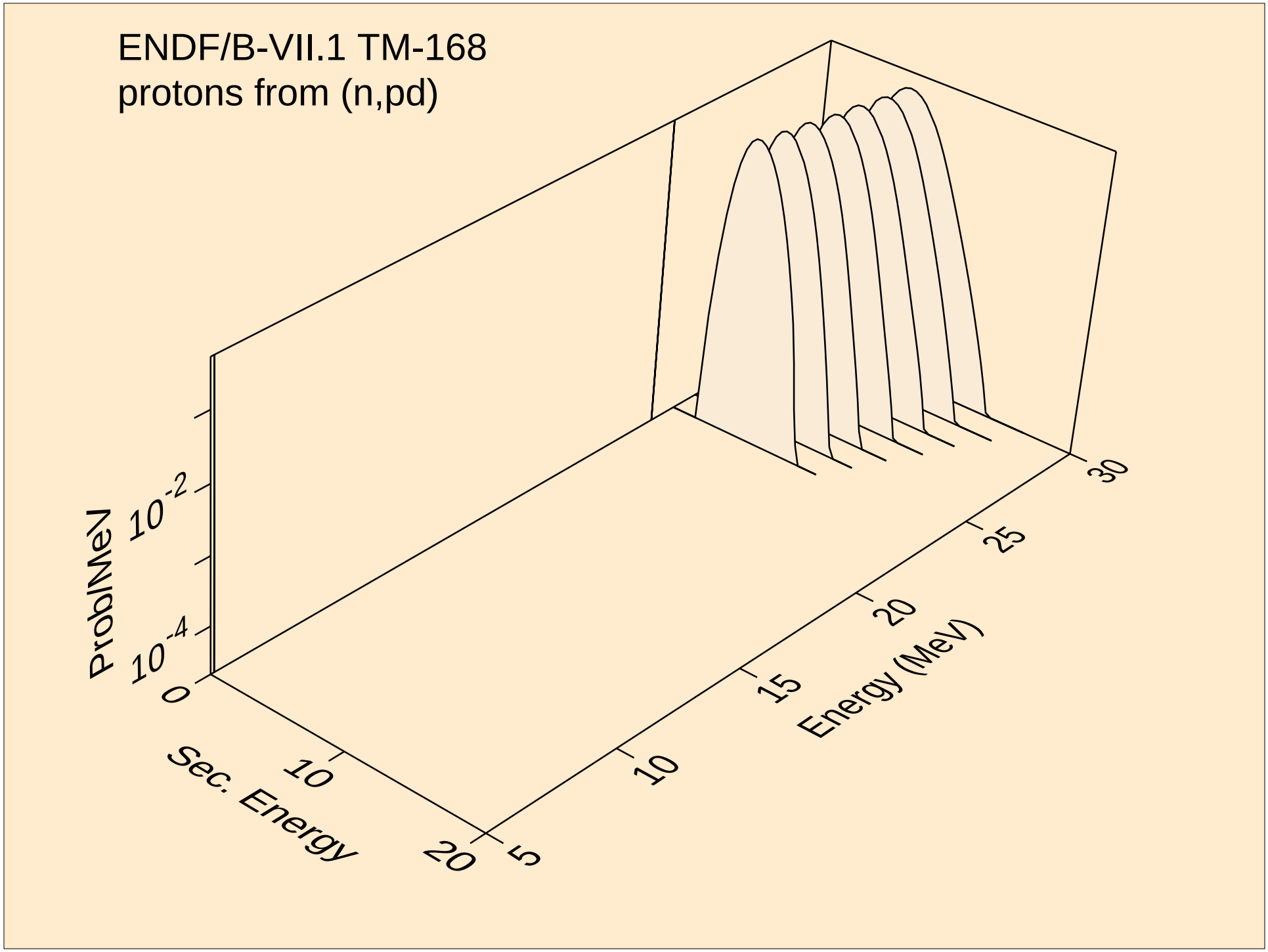

ENDF/B-VII.1 TM-168
Particle production cross sections
*10-3
80
70
60
50
40
30
20
10
0
Cross section (barns)
protons
deuterons
tritons
he-3
alphas
0
5
10
15
20
25
30
Energy (MeV)

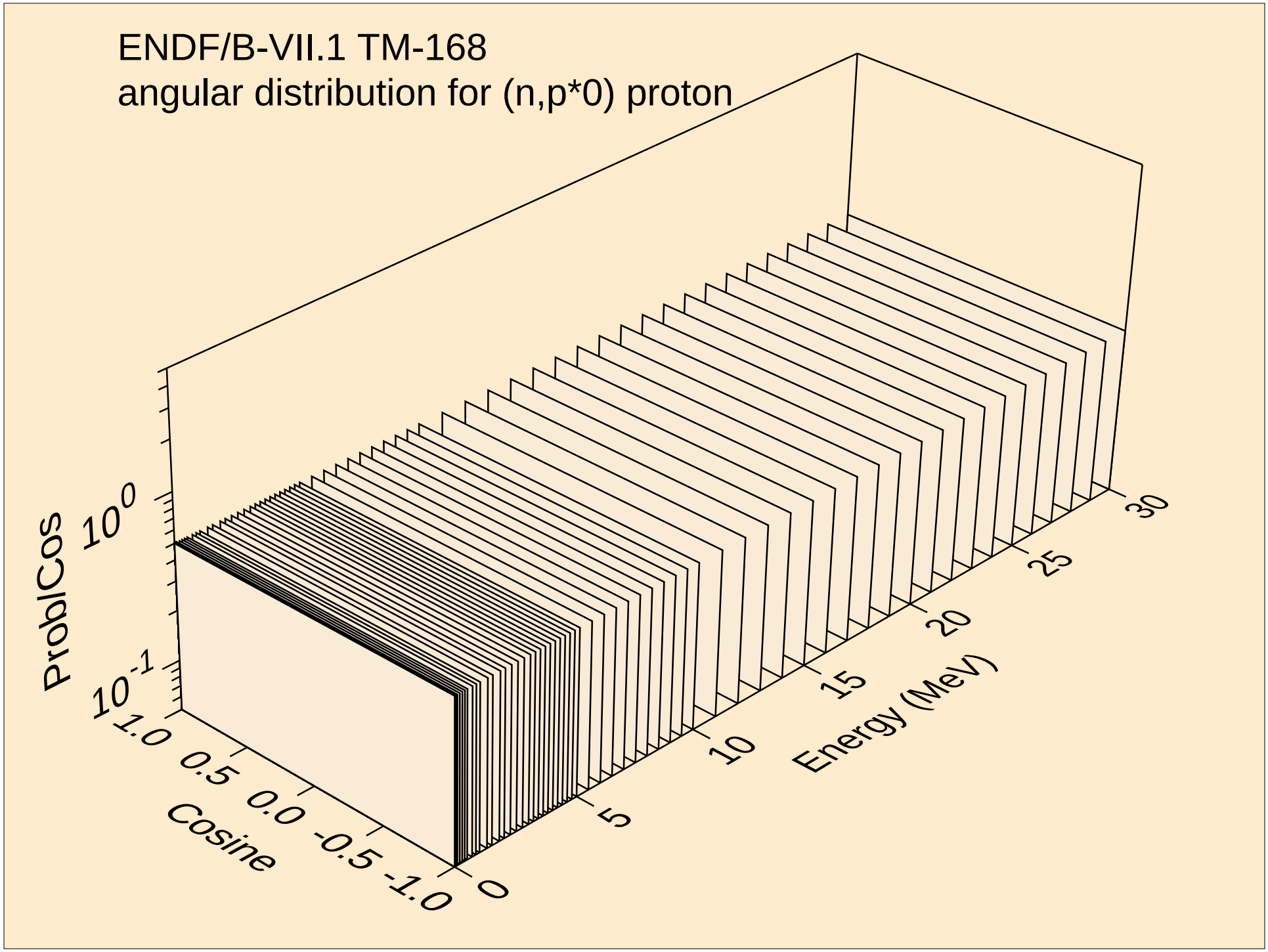

ENDF/B-VII.1 TM-168
protons from (n,x)
Prob/MeV
10^-1
10^-3
0
Sec. Energy
10
20
0
5
10
15
20
25
30
Energy (MeV)

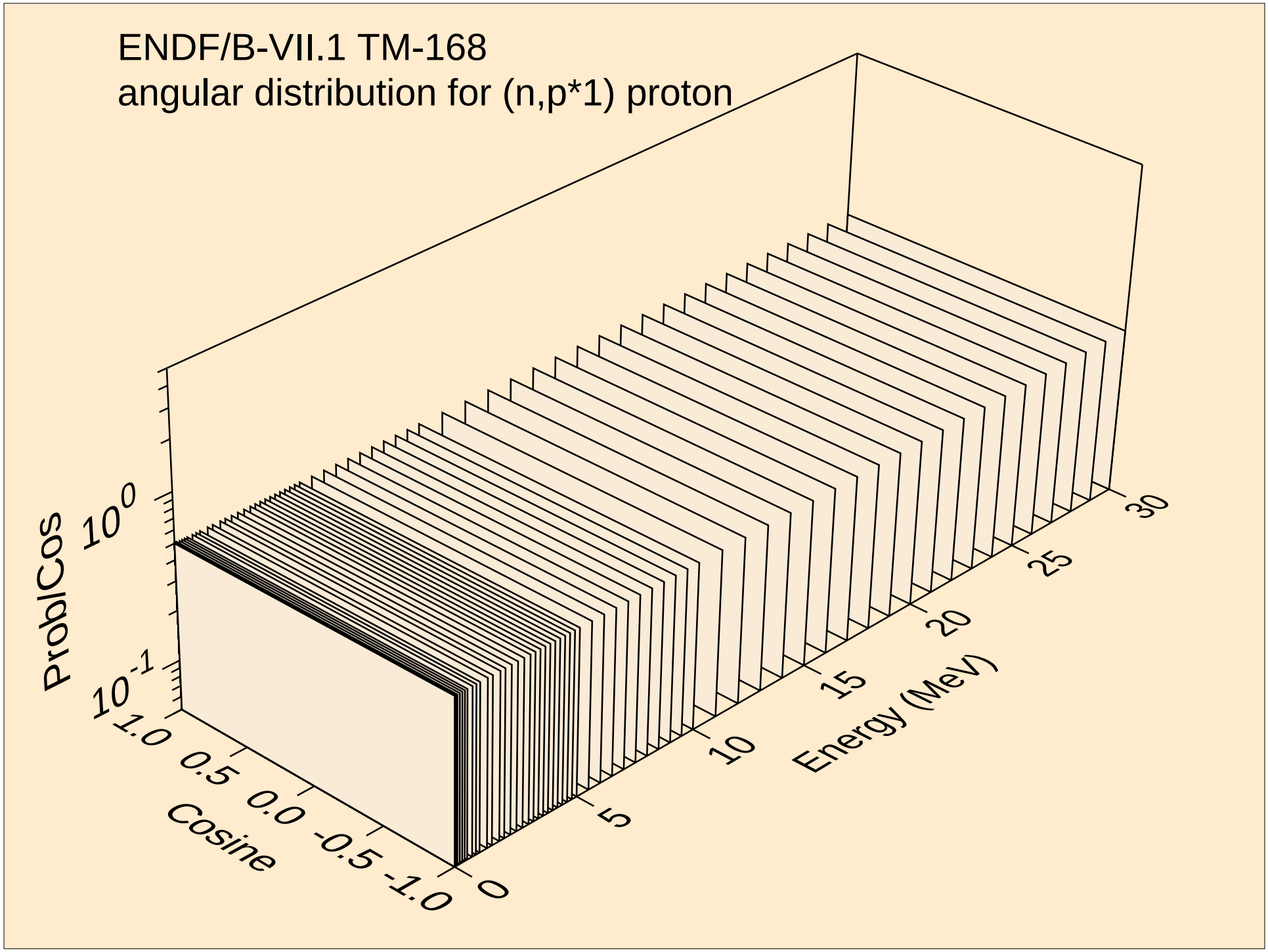

ENDF/B-VII.1 TM-168
protons from (n,n*)p
Prob/MeV
10^-1
10^-3
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)

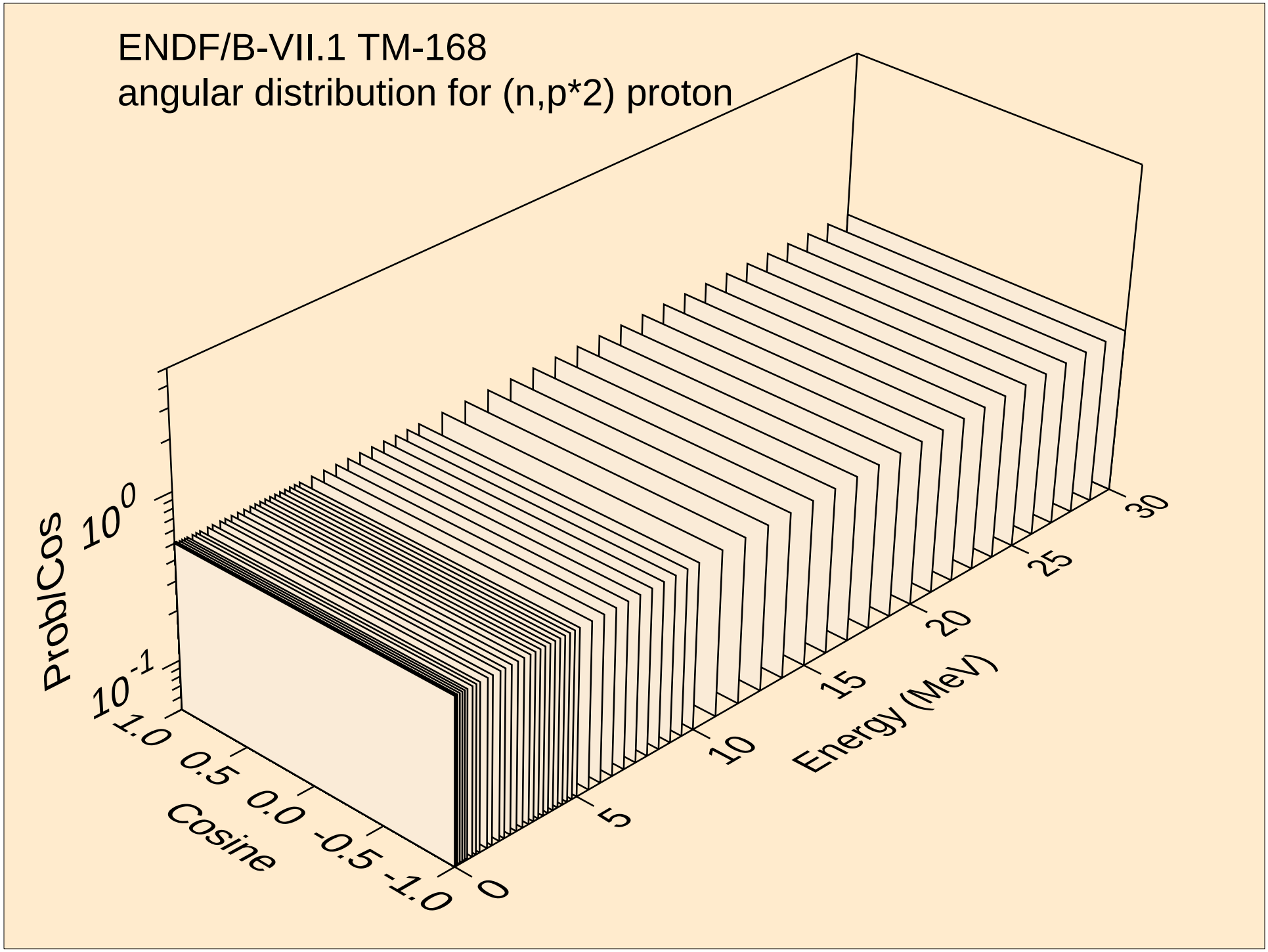

ENDF/B-VII.1 TM-168
protons from (n,2np)
Prob/MeV
10^{-2}
10^{-4}
0
10
20
Sec. Energy
5
10
15
20
25
30
Energy (MeV)

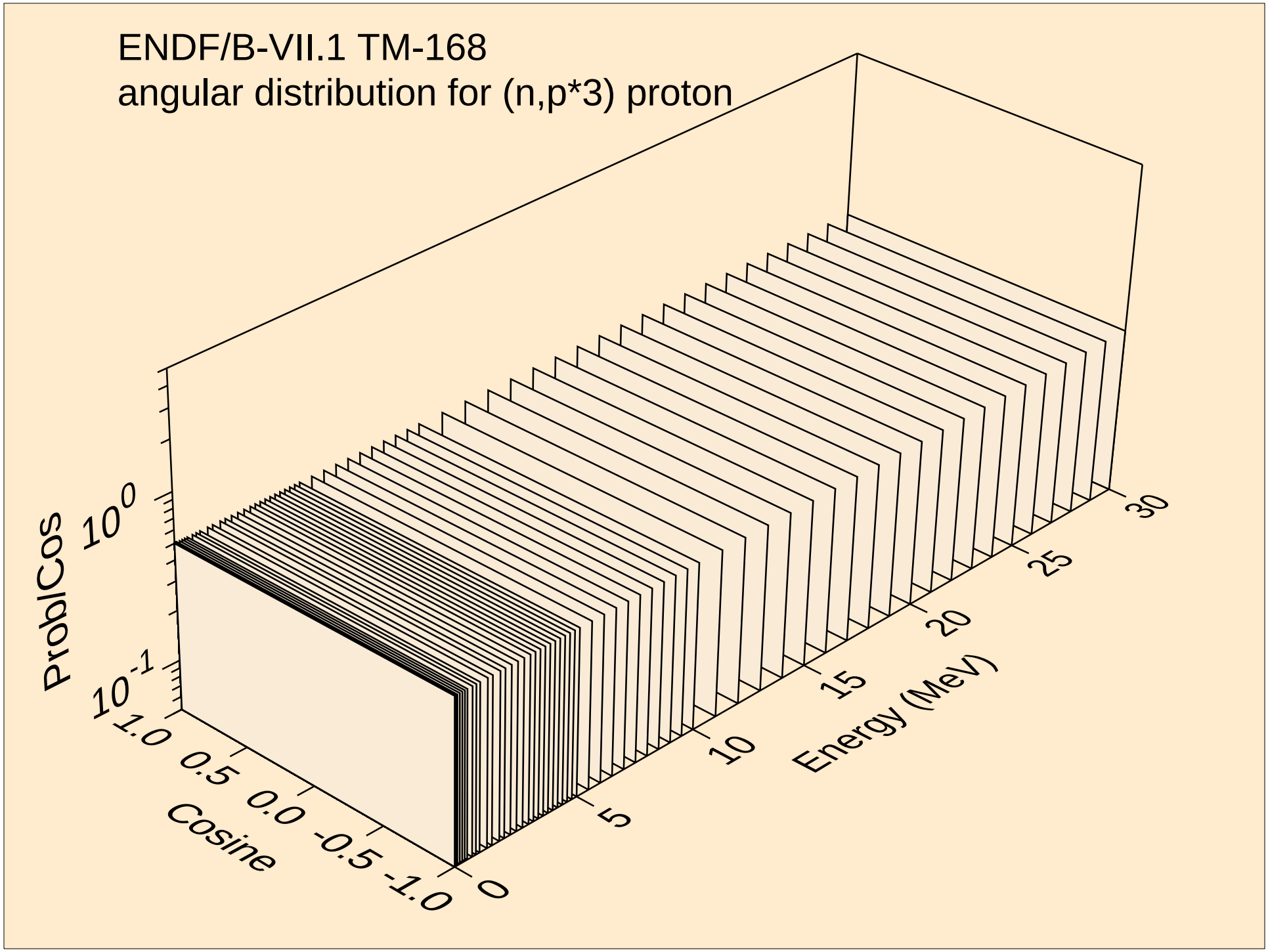

ENDF/B-VII.1 TM-168
protons from (n,pa)
Prob/MeV
10^0
10^{-2}
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)

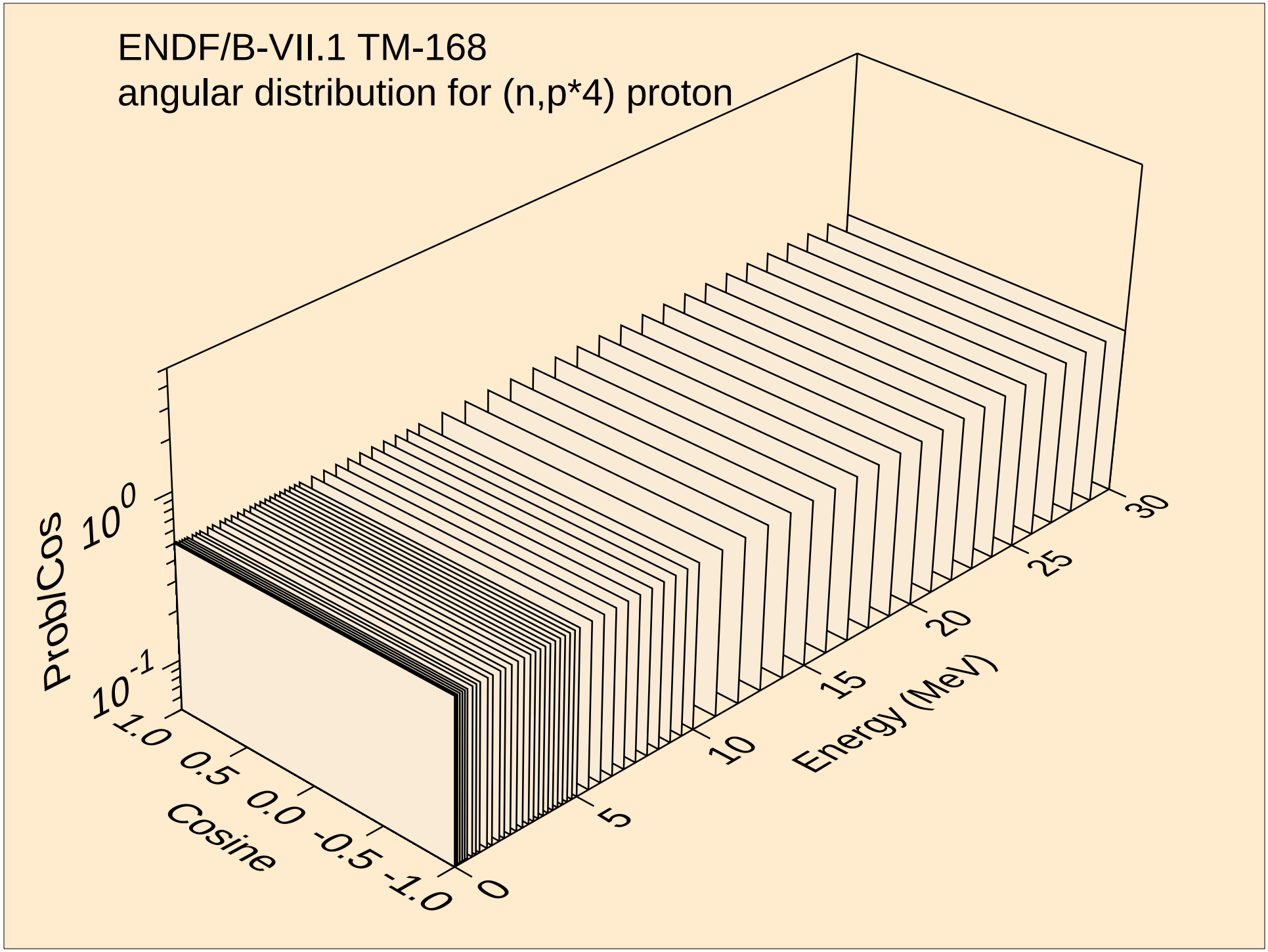

ENDF/B-VII.1 TM-168
protons from (n,pd)
Prob/MeV
10^-2
10^-4
0
Sec. Energy
10
20
5
10
15
20
25
30
Energy (MeV)

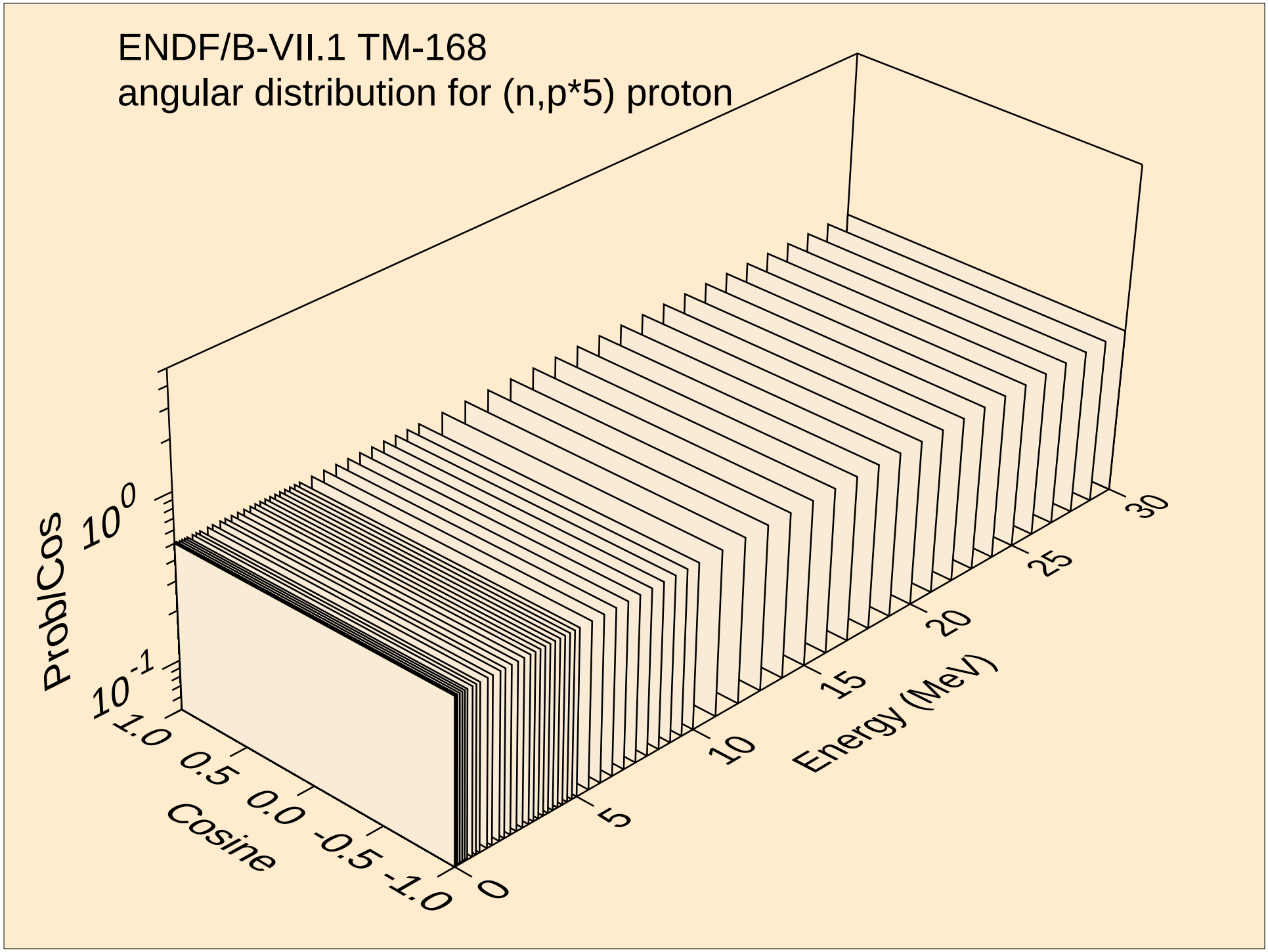

ENDF/B-VII.1 TM-168
angular distribution for (n,p*0) proton
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

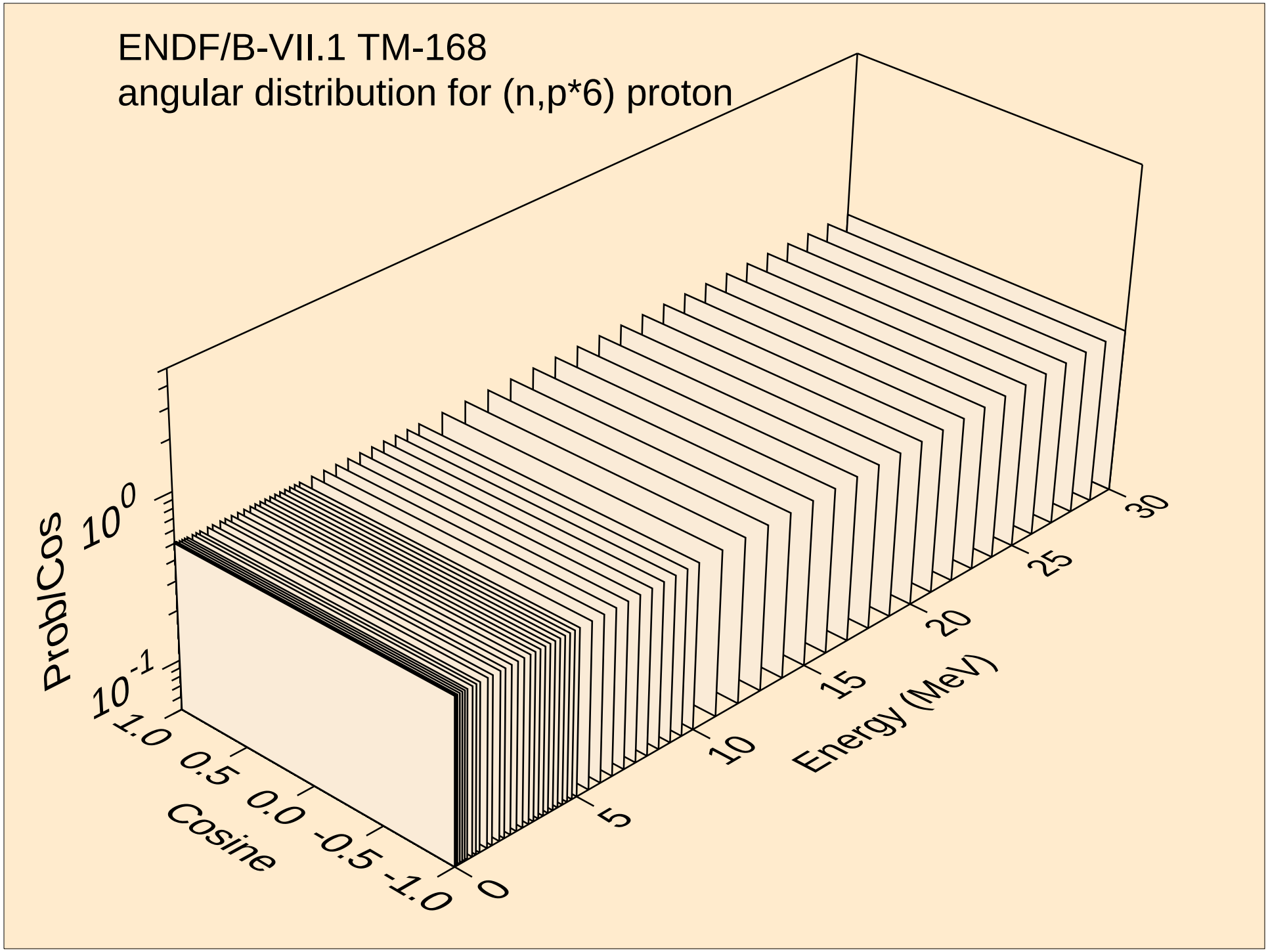

ENDF/B-VII.1 TM-168
angular distribution for (n,p*1) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

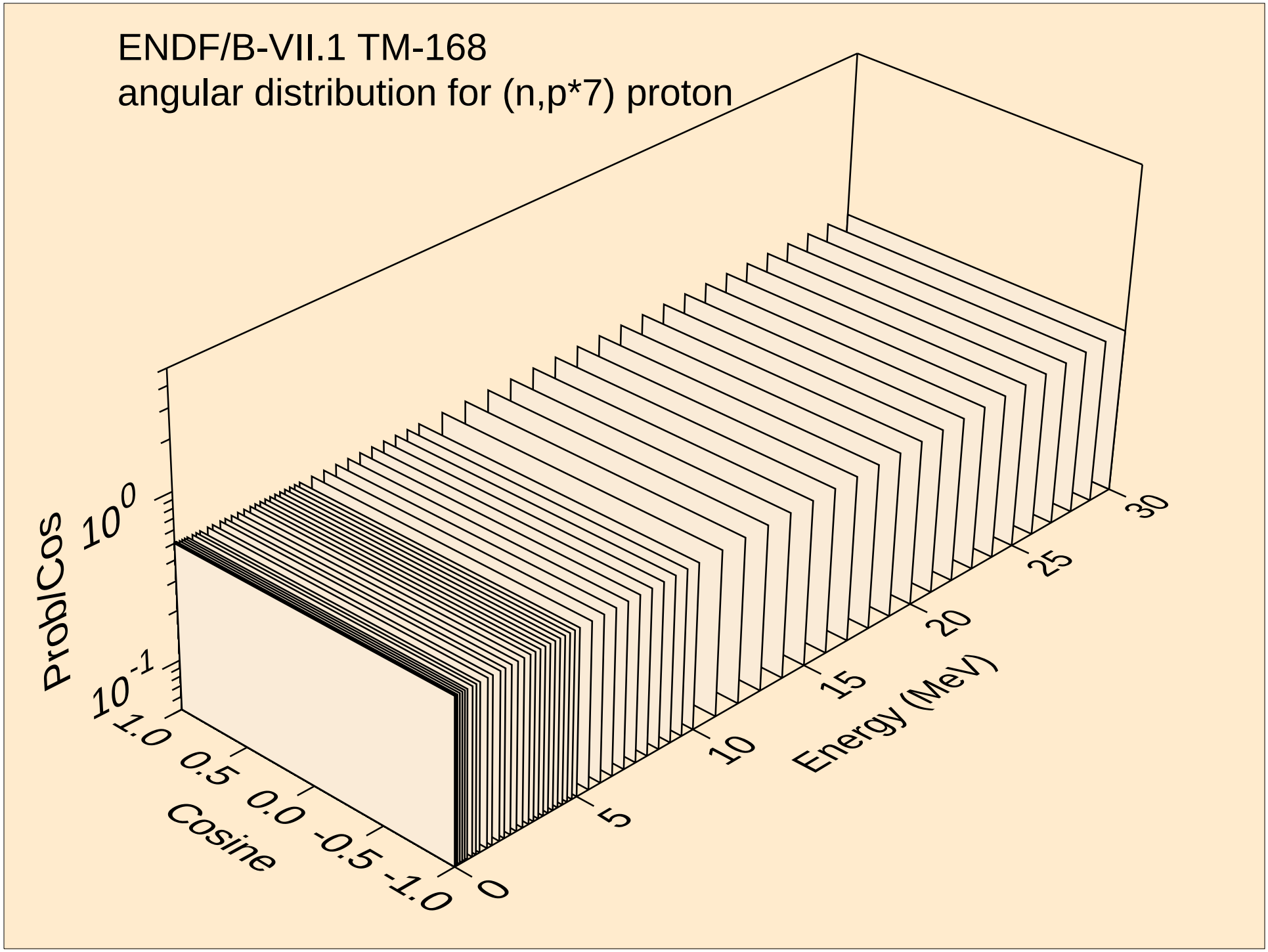

ENDF/B-VII.1 TM-168
angular distribution for (n,p*2) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


ENDF/B-VII.1 TM-168
angular distribution for (n,p*3) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

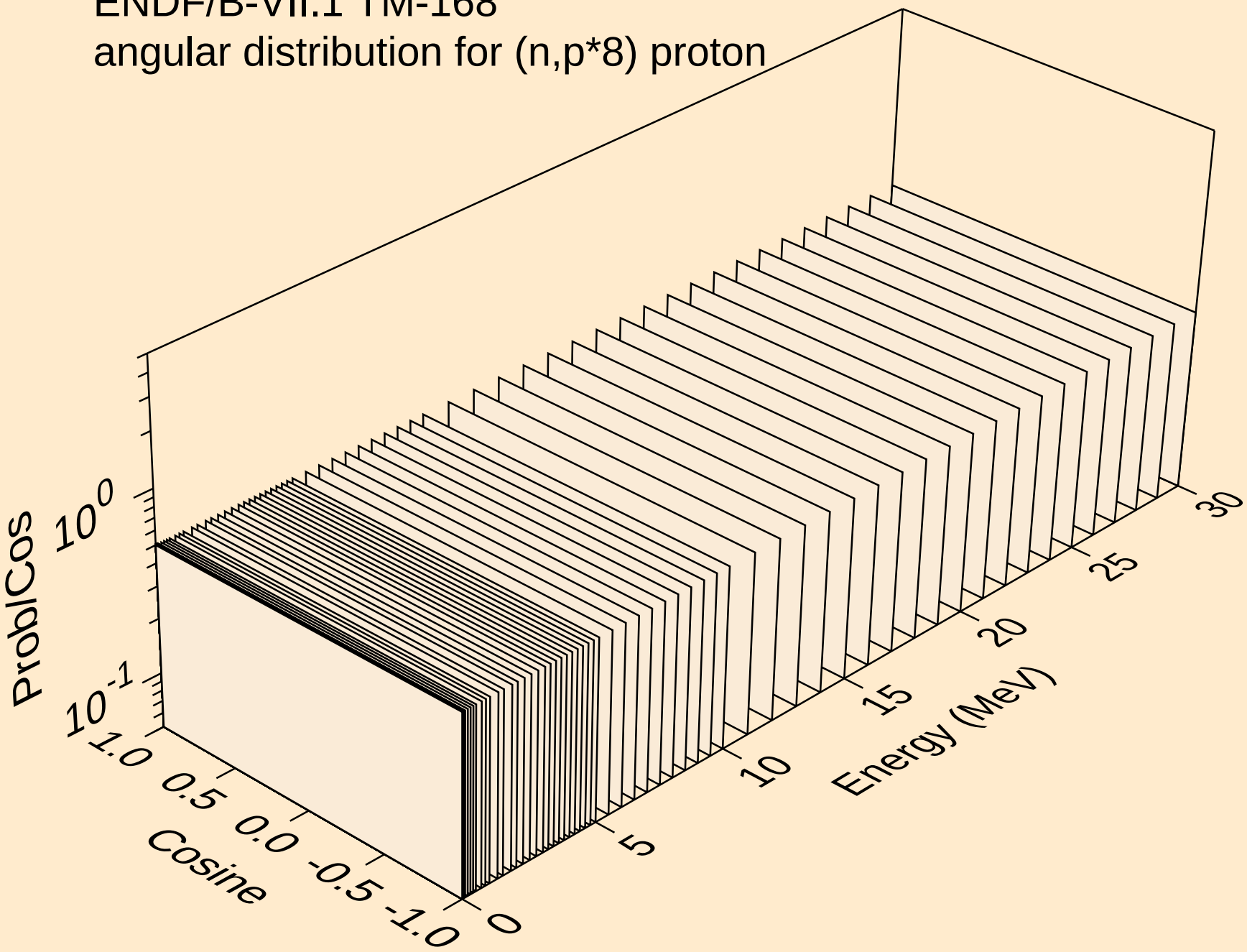

ENDF/B-VII.1 TM-168
angular distribution for (n,p*4) proton
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

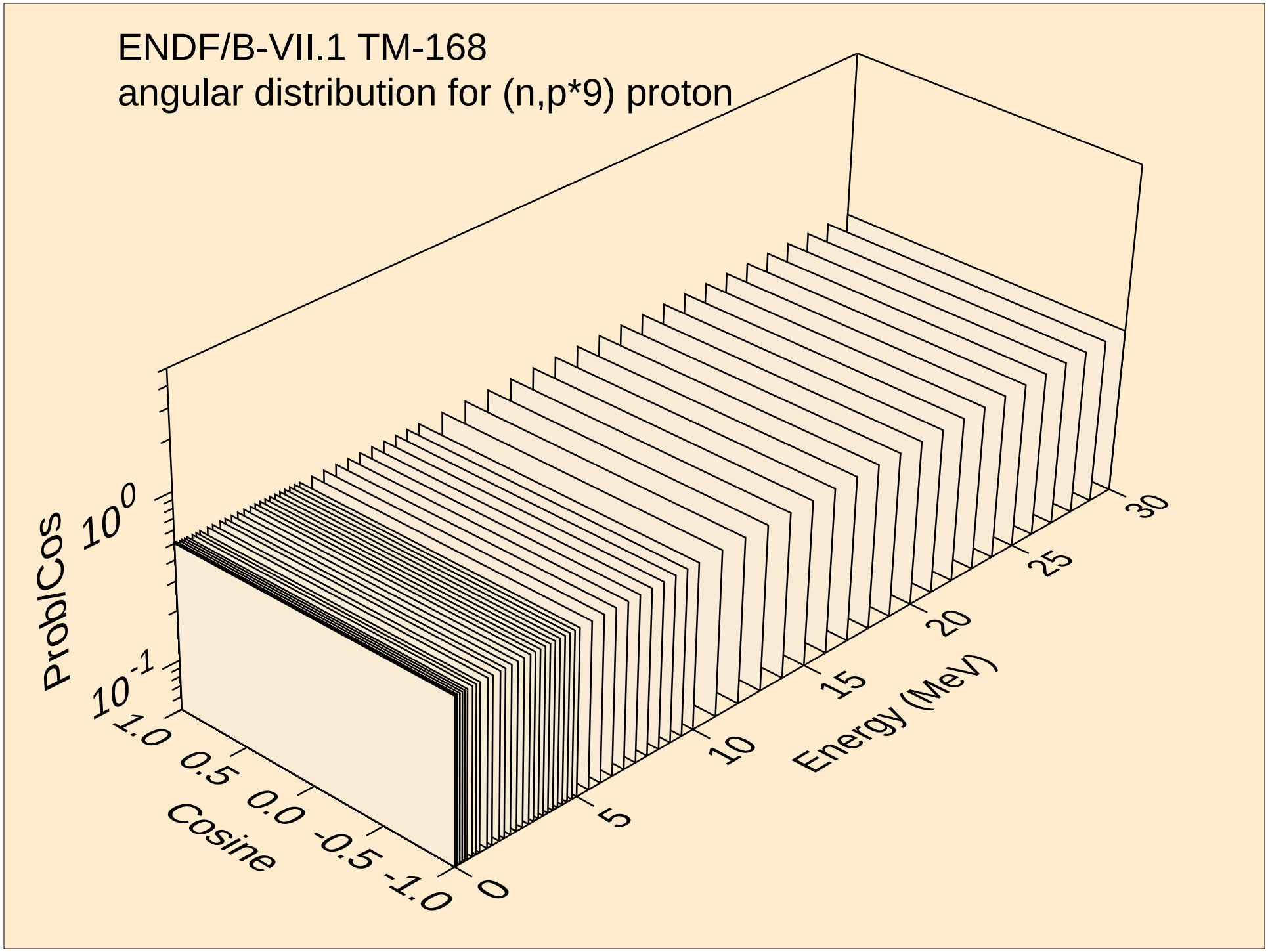

ENDF/B-VII.1 TM-168
angular distribution for (n,p*5) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

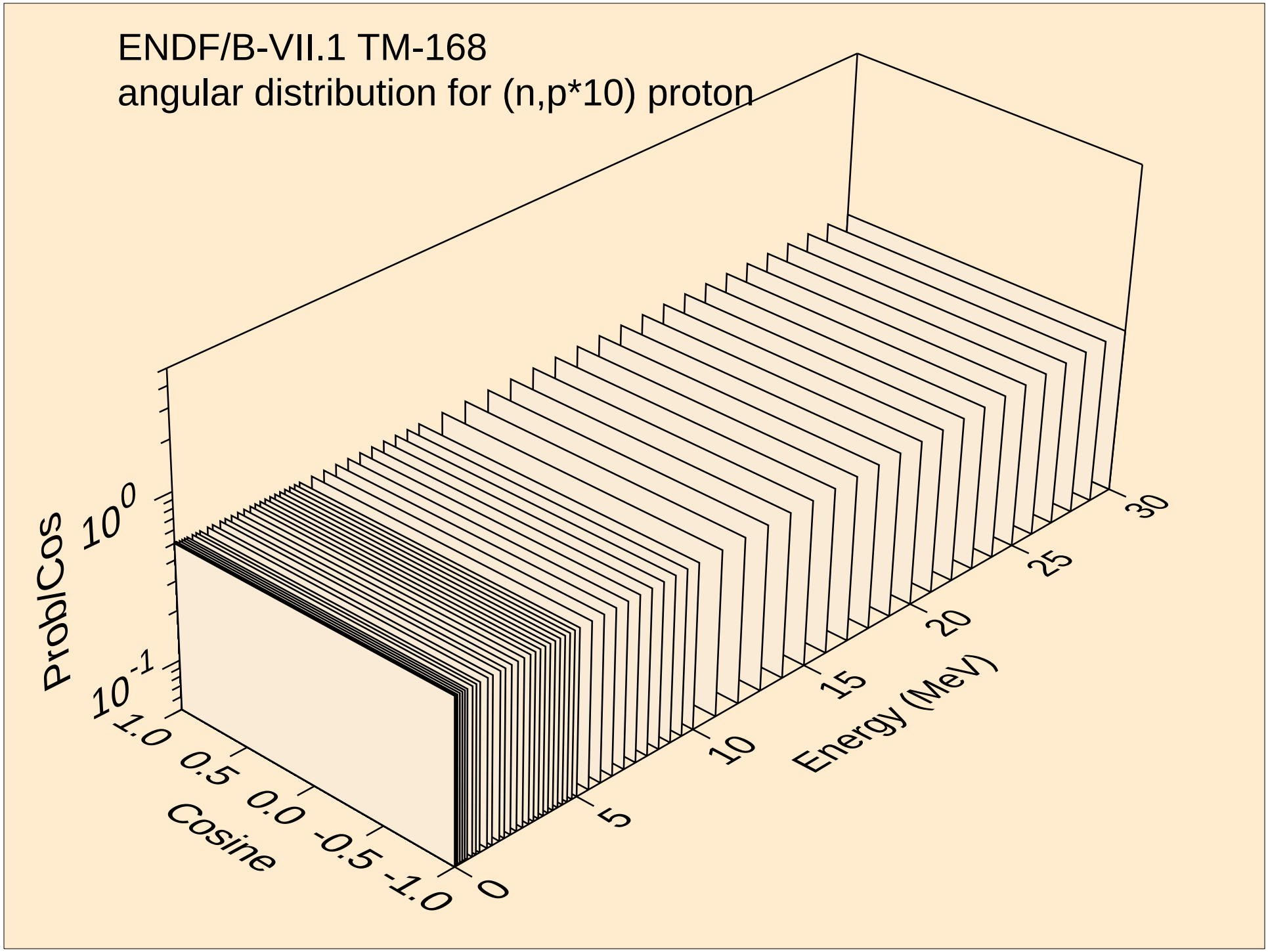

ENDF/B-VII.1 TM-168
angular distribution for (n,p*6) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

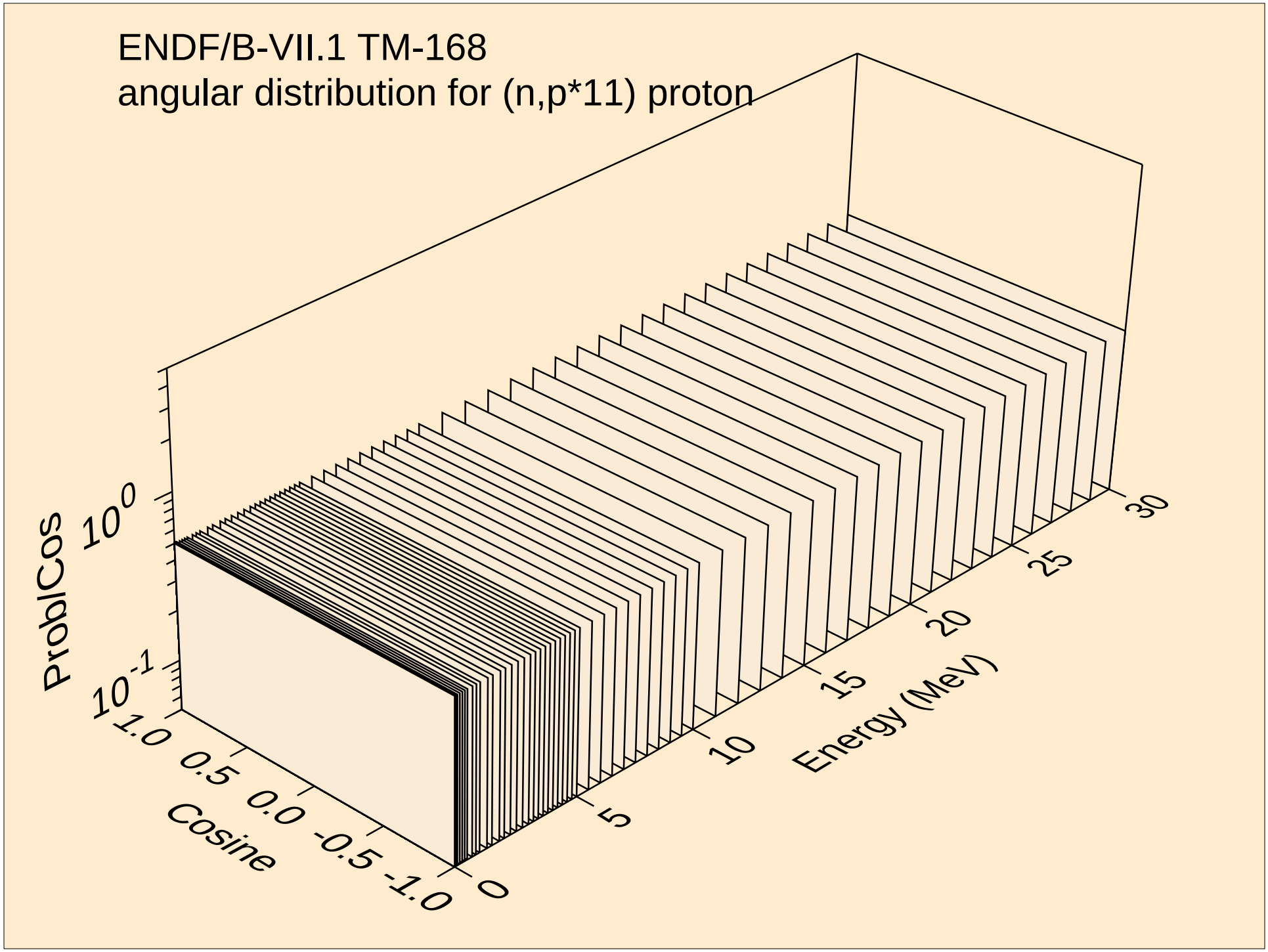

ENDF/B-VII.1 TM-168
angular distribution for (n,p*7) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

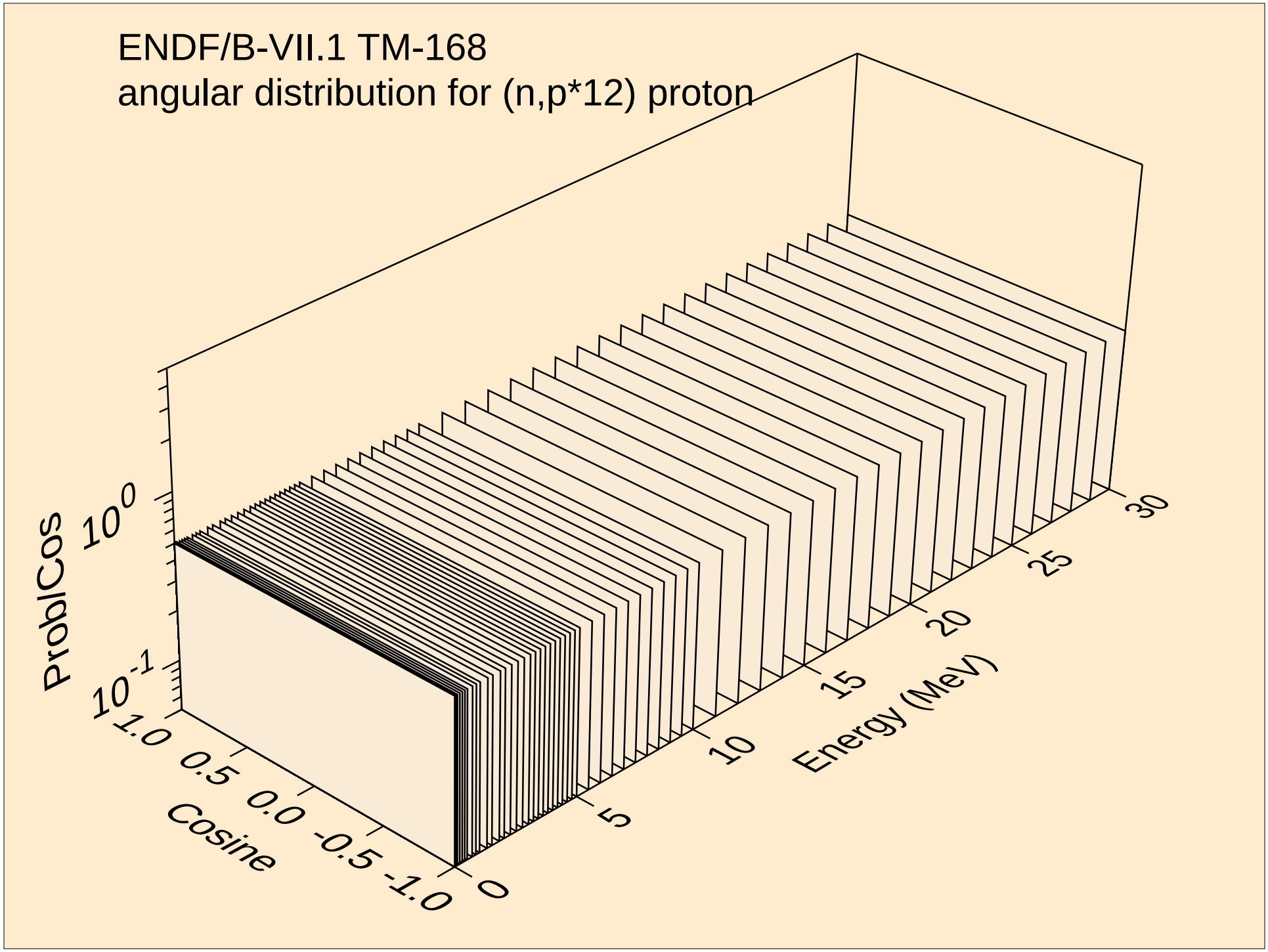
ENDF/B-VII.1 TM-168
angular distribution for (n,p*8) proton

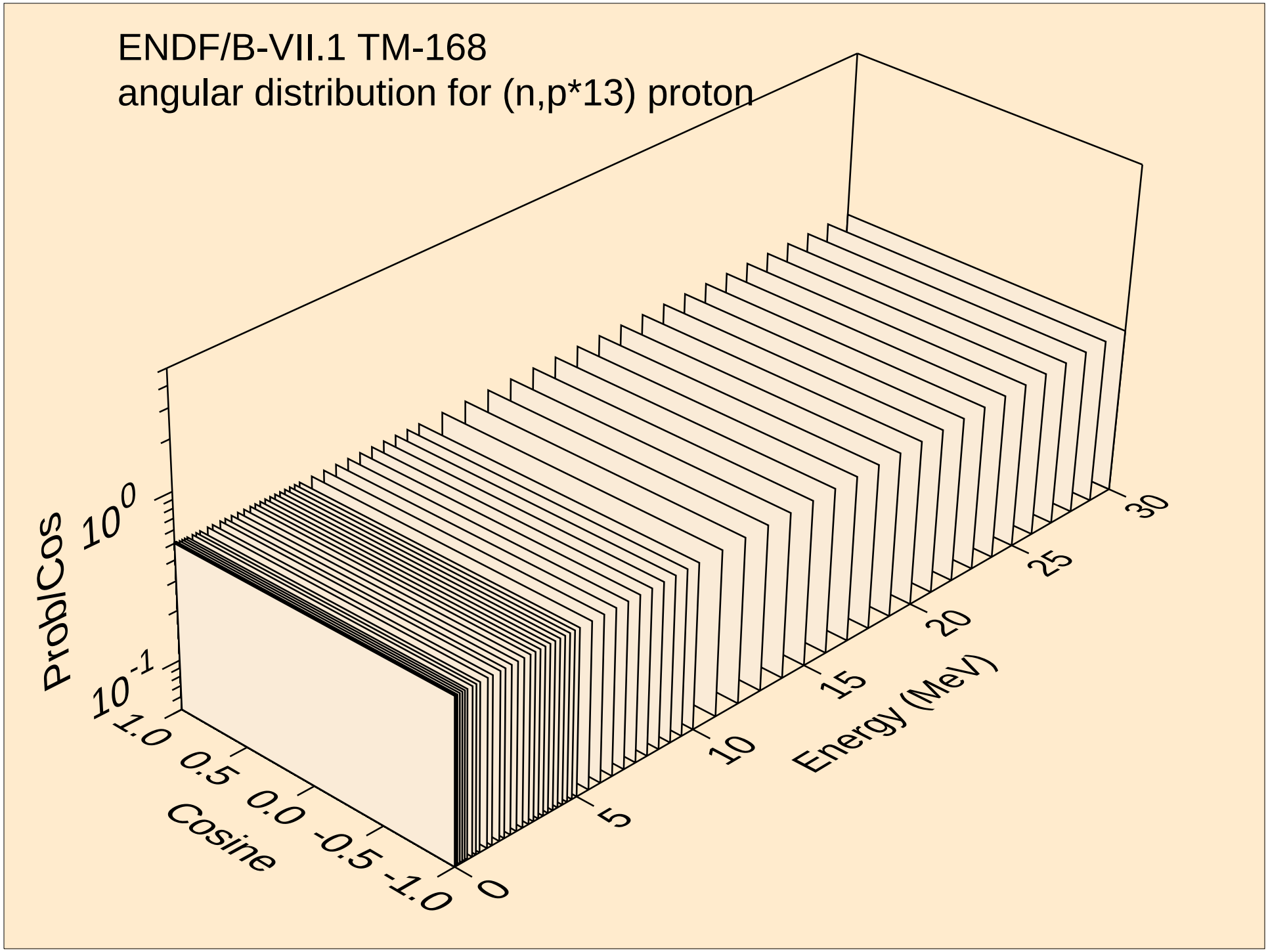


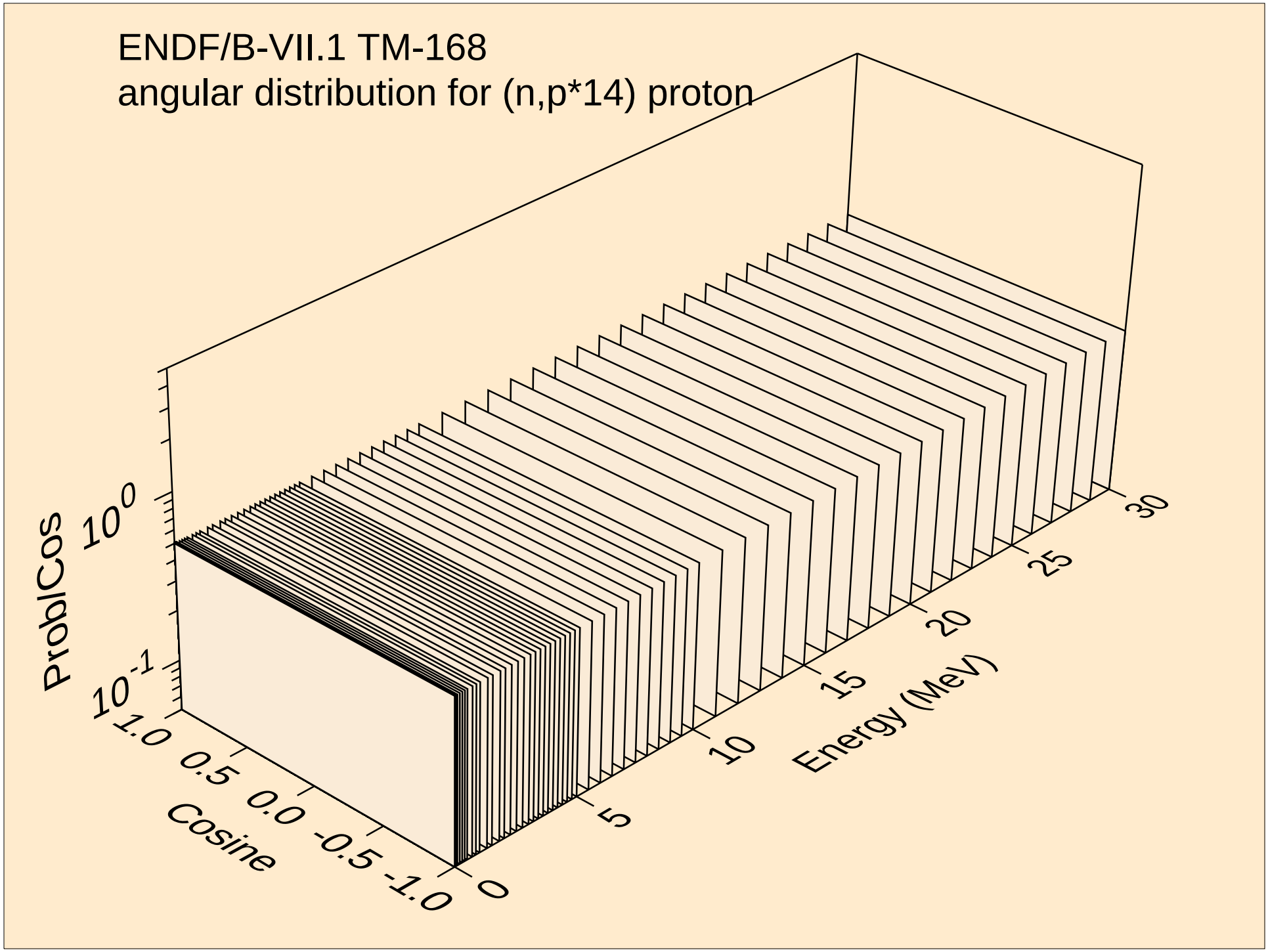

ENDF/B-VII.1 TM-168
angular distribution for (n,p*9) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

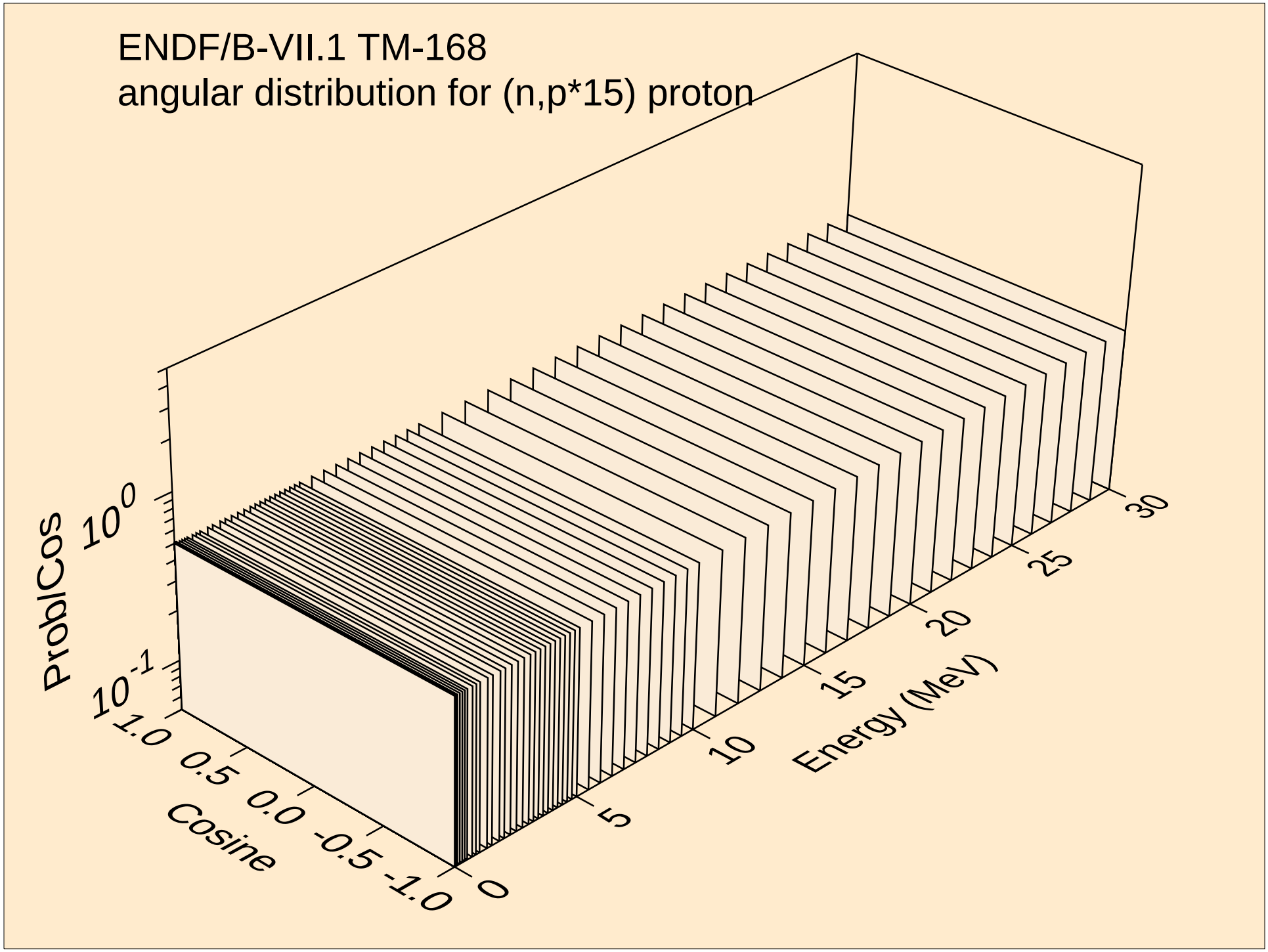

ENDF/B-VII.1 TM-168
angular distribution for (n,p*10) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

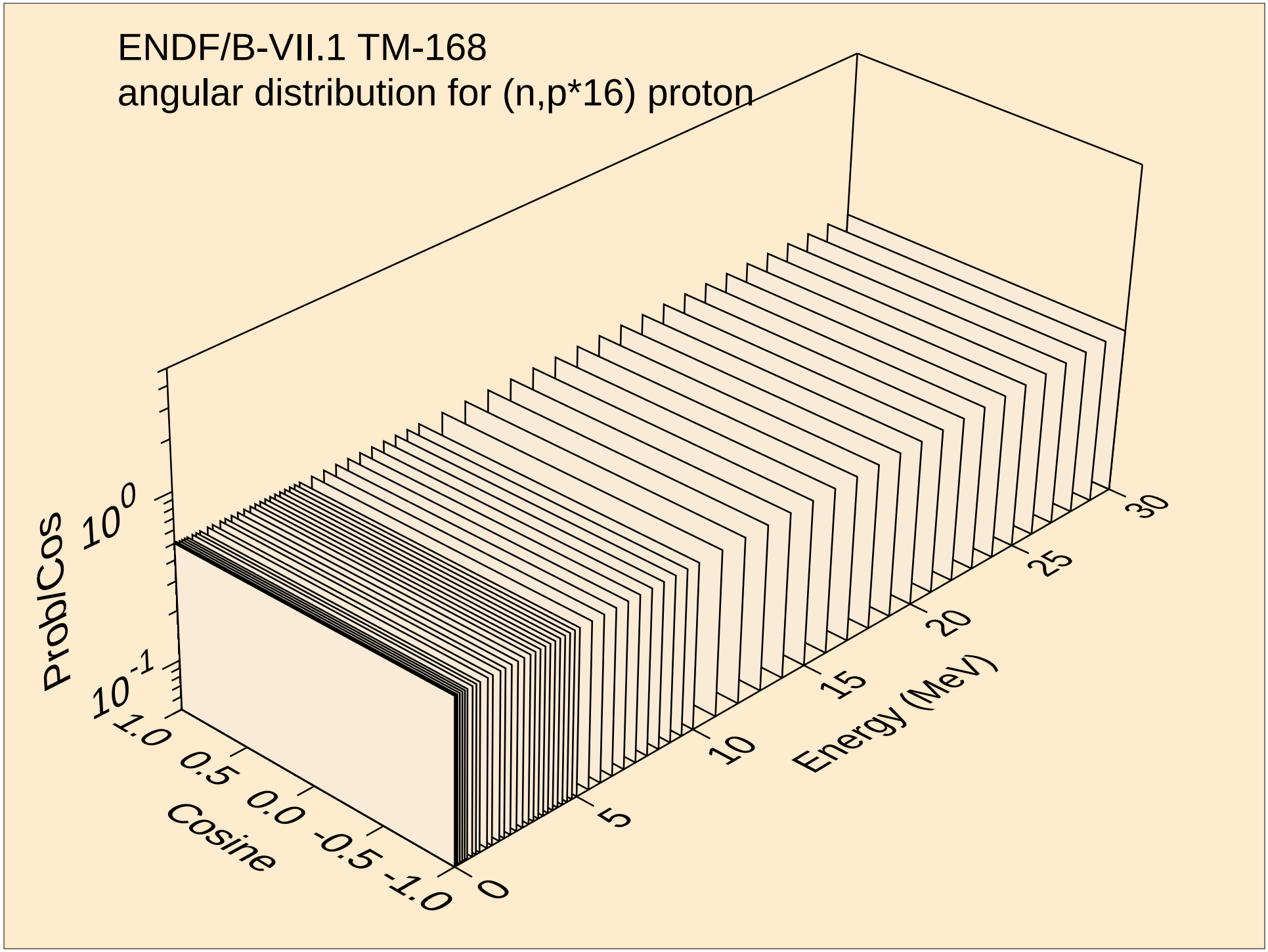

ENDF/B-VII.1 TM-168
angular distribution for (n,p*11) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

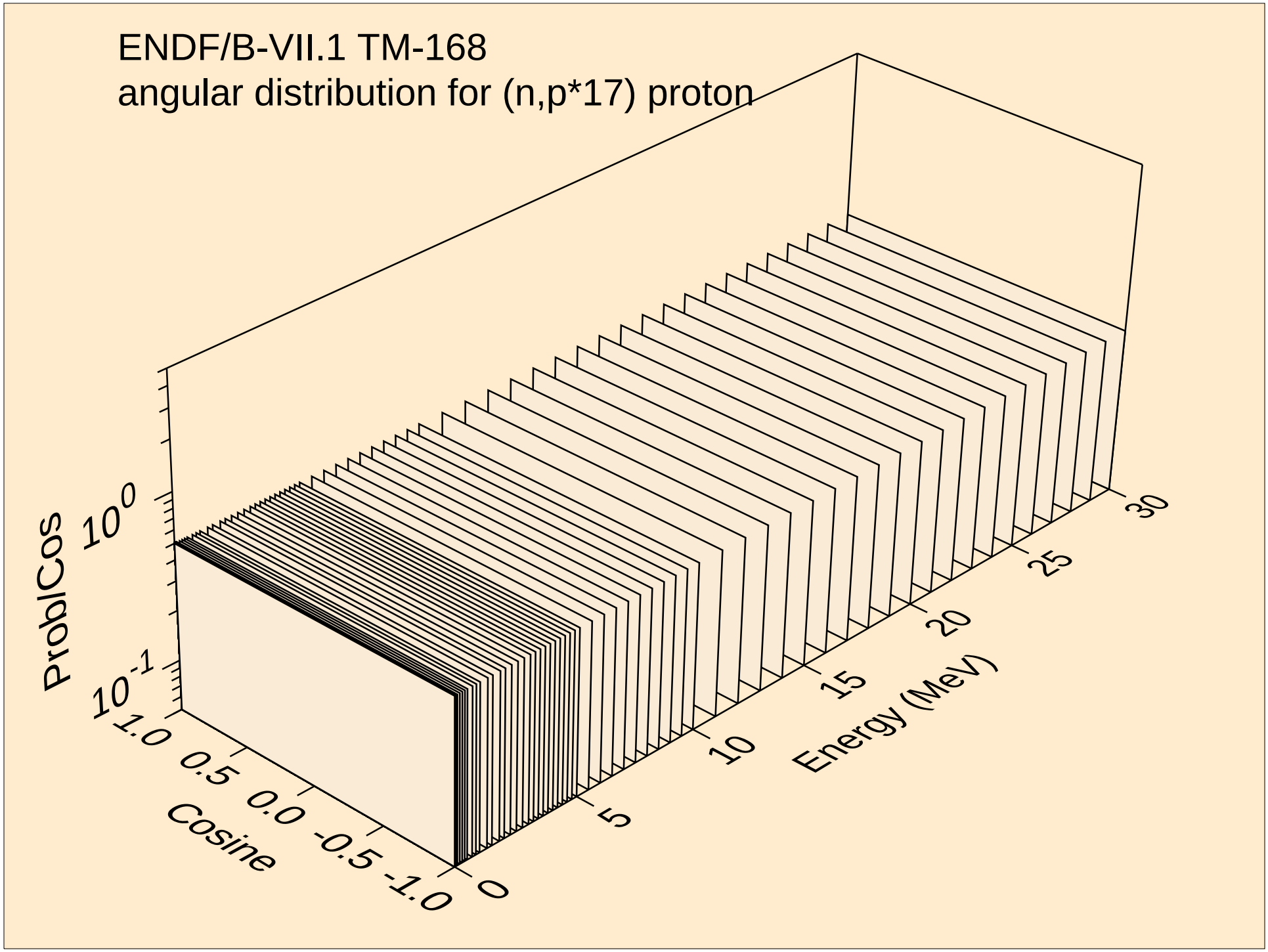

ENDF/B-VII.1 TM-168
angular distribution for (n,p*12) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

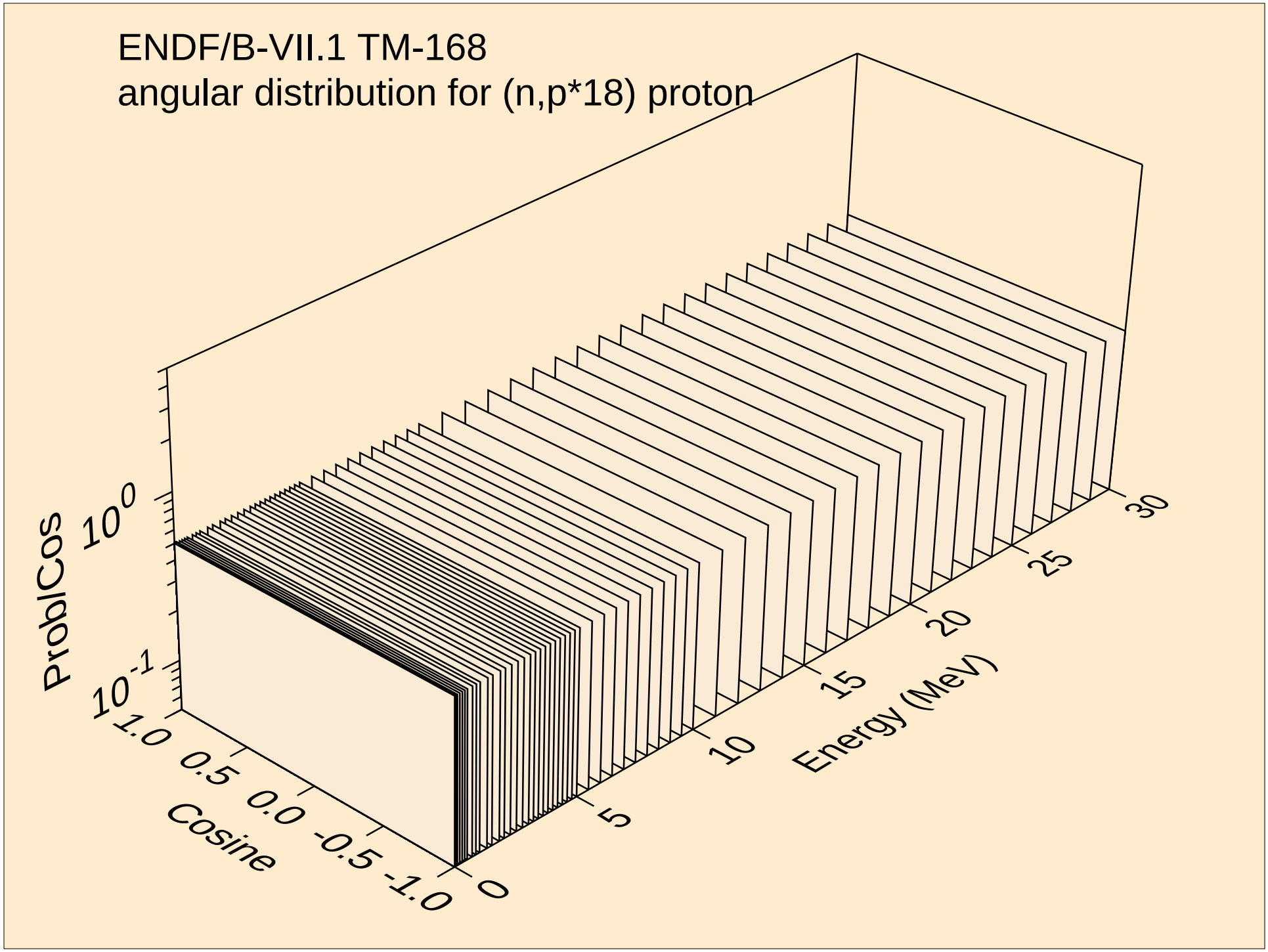

ENDF/B-VII.1 TM-168
angular distribution for (n,p*13) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

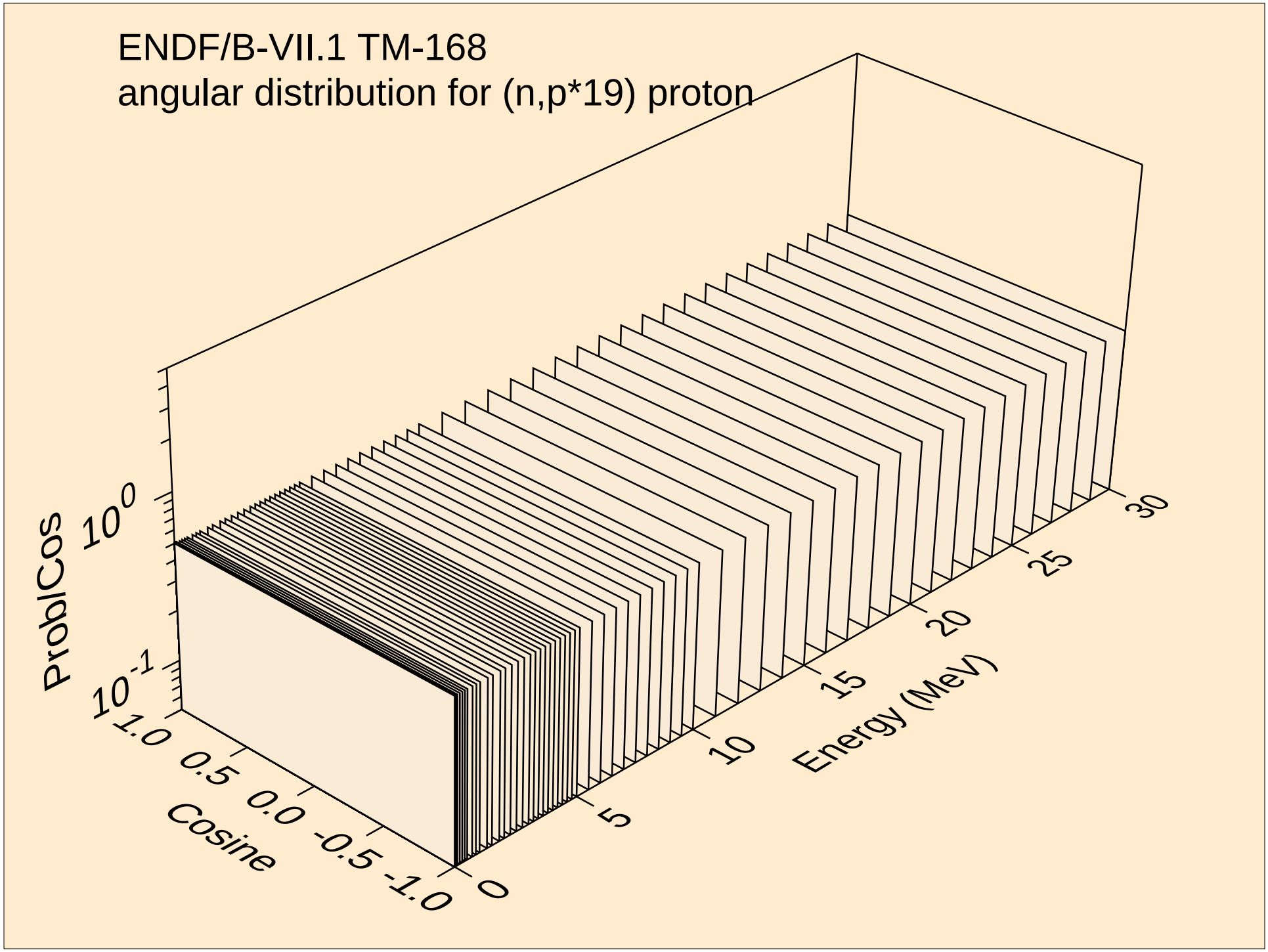

ENDF/B-VII.1 TM-168
angular distribution for (n,p*14) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

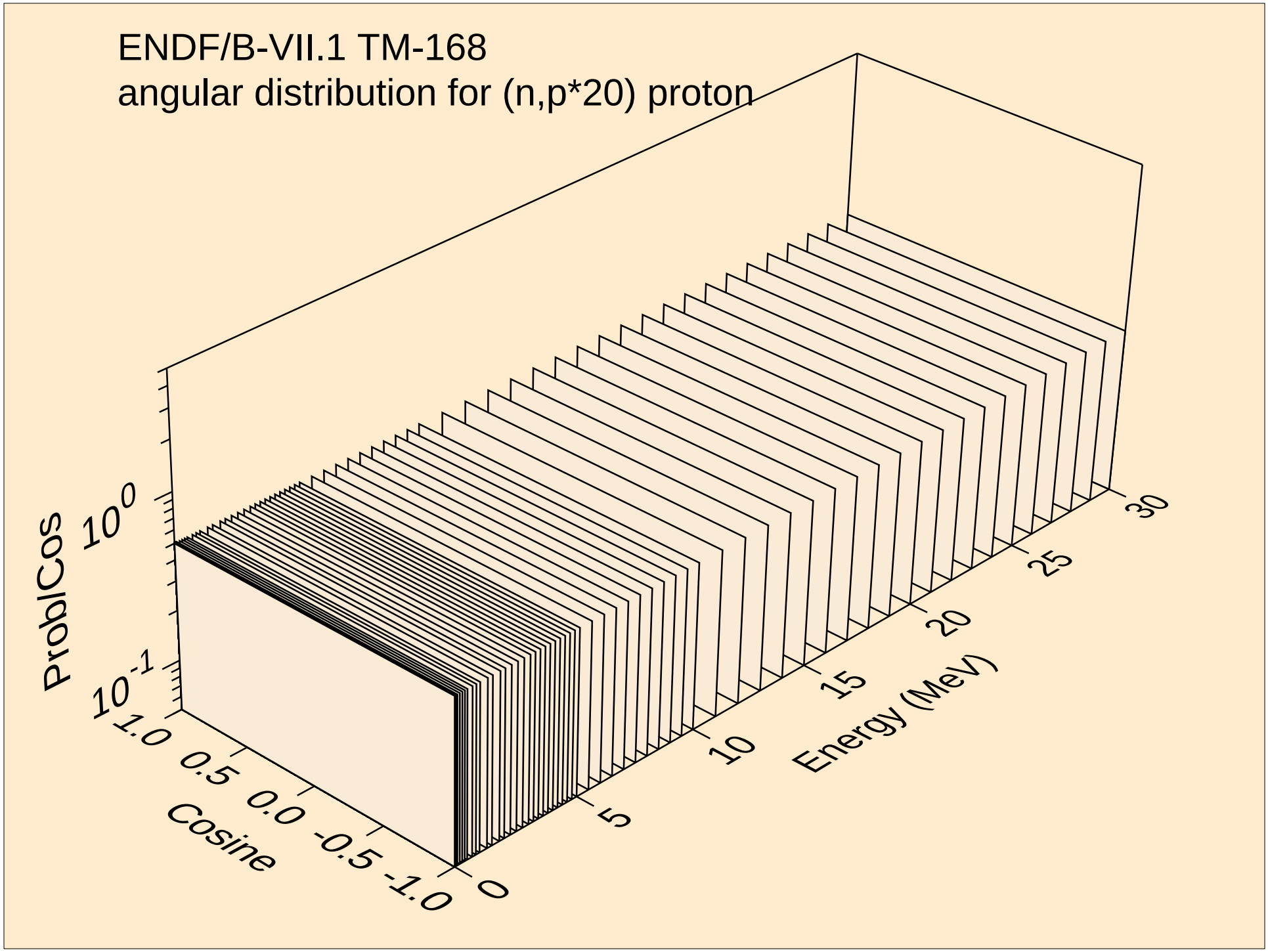

ENDF/B-VII.1 TM-168
angular distribution for (n,p*15) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

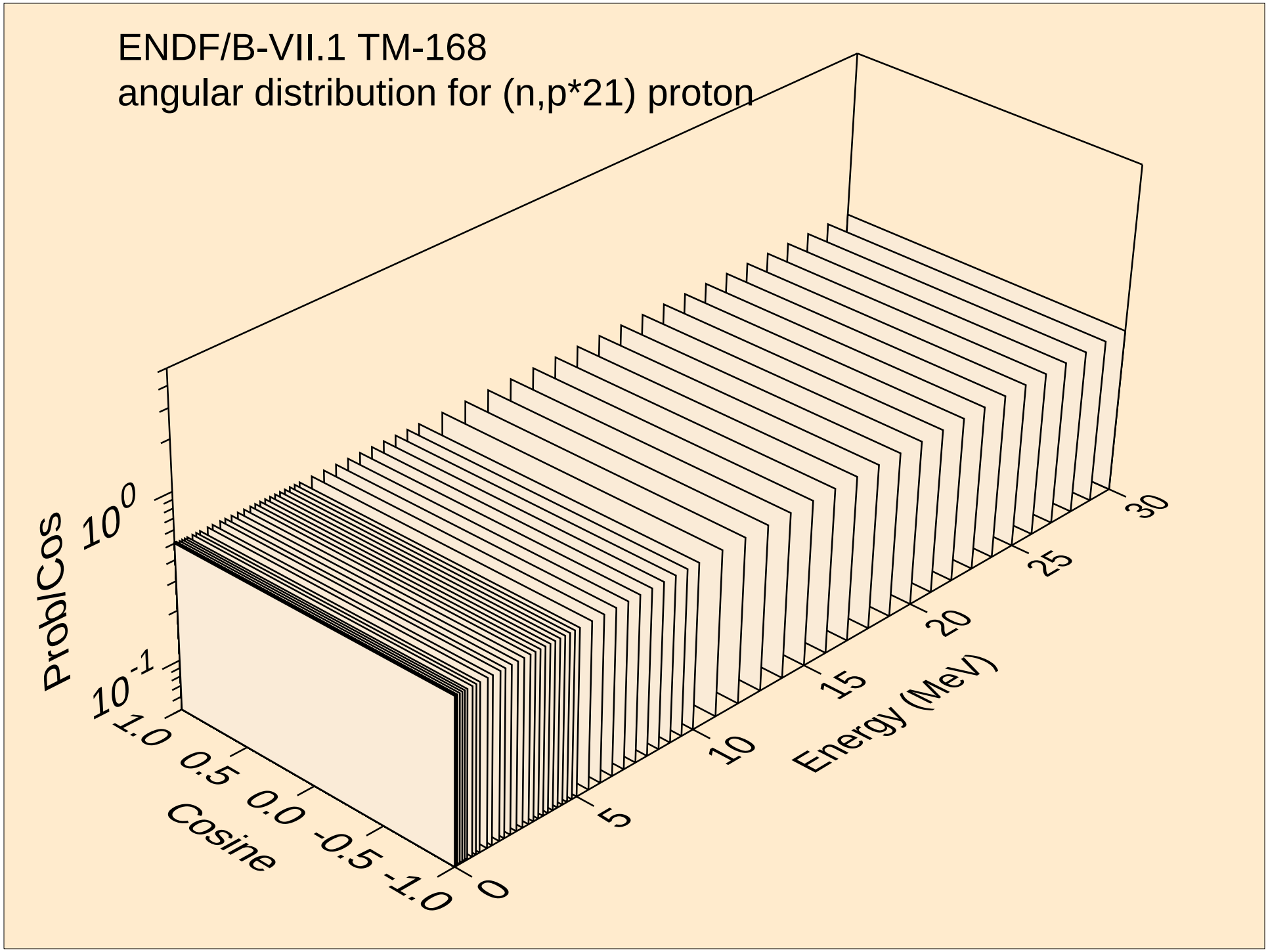

ENDF/B-VII.1 TM-168
angular distribution for (n,p*16) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

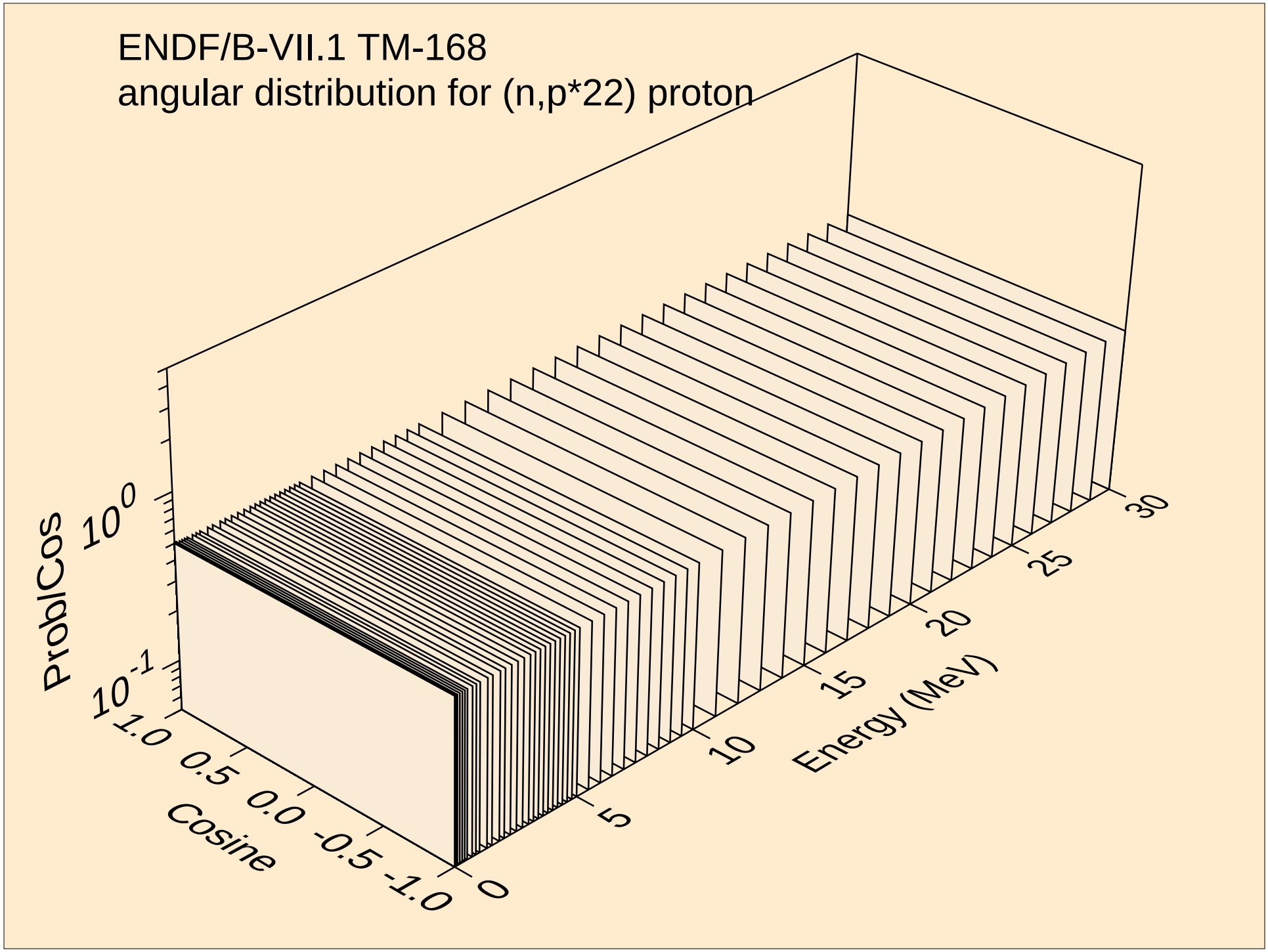

ENDF/B-VII.1 TM-168
angular distribution for (n,p*17) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

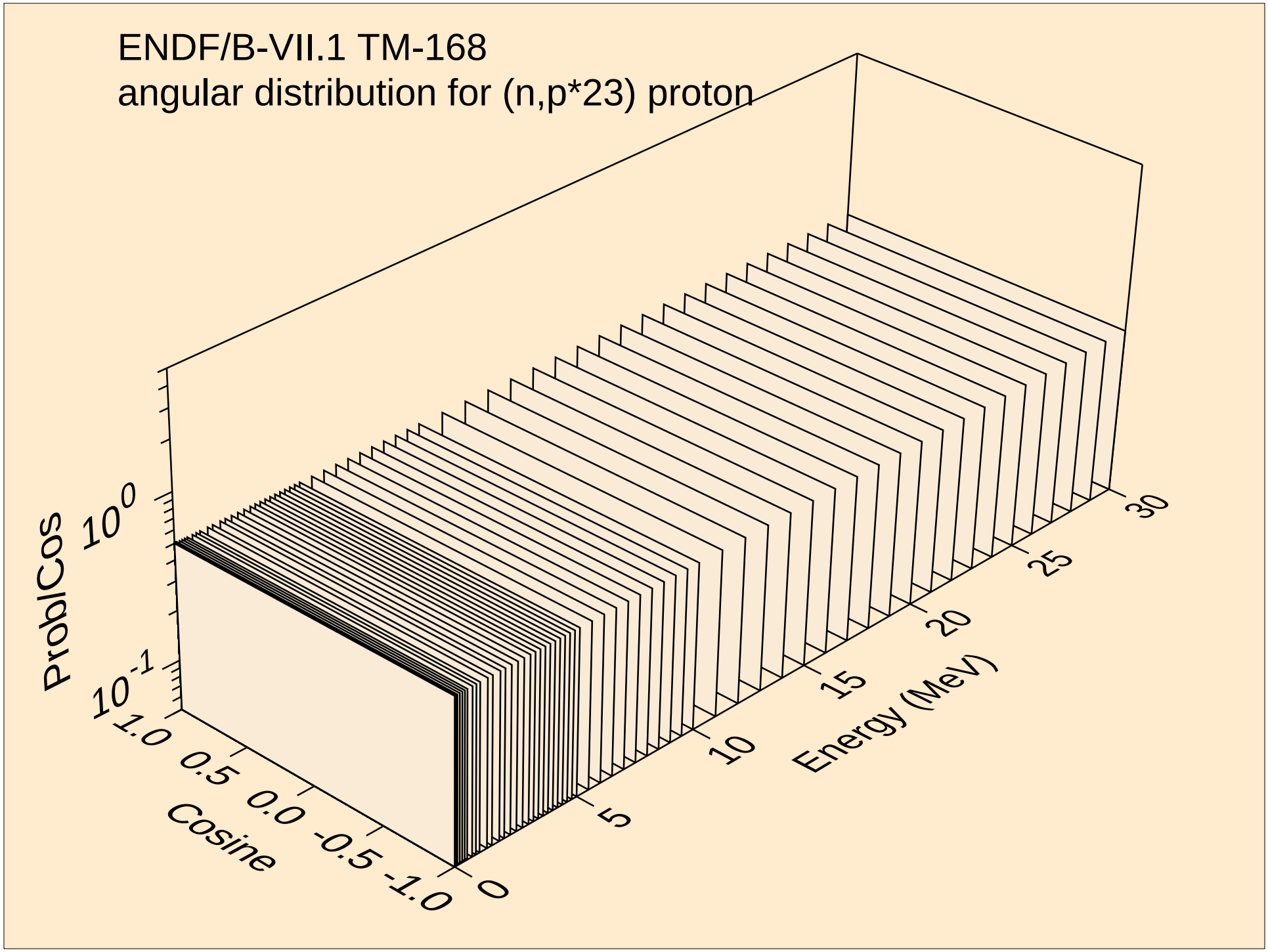

ENDF/B-VII.1 TM-168
angular distribution for (n,p*18) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

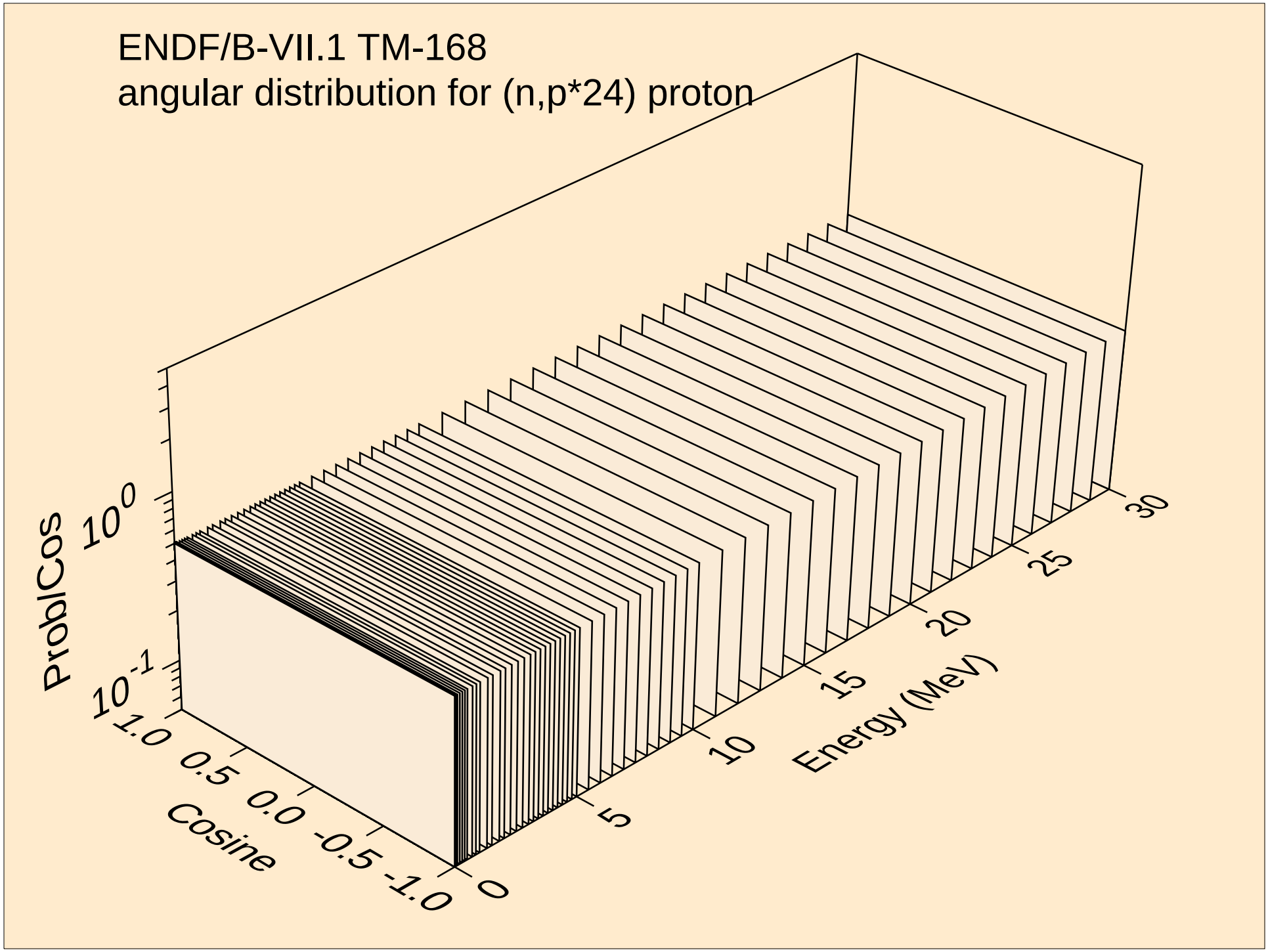

ENDF/B-VII.1 TM-168
angular distribution for (n,p*19) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

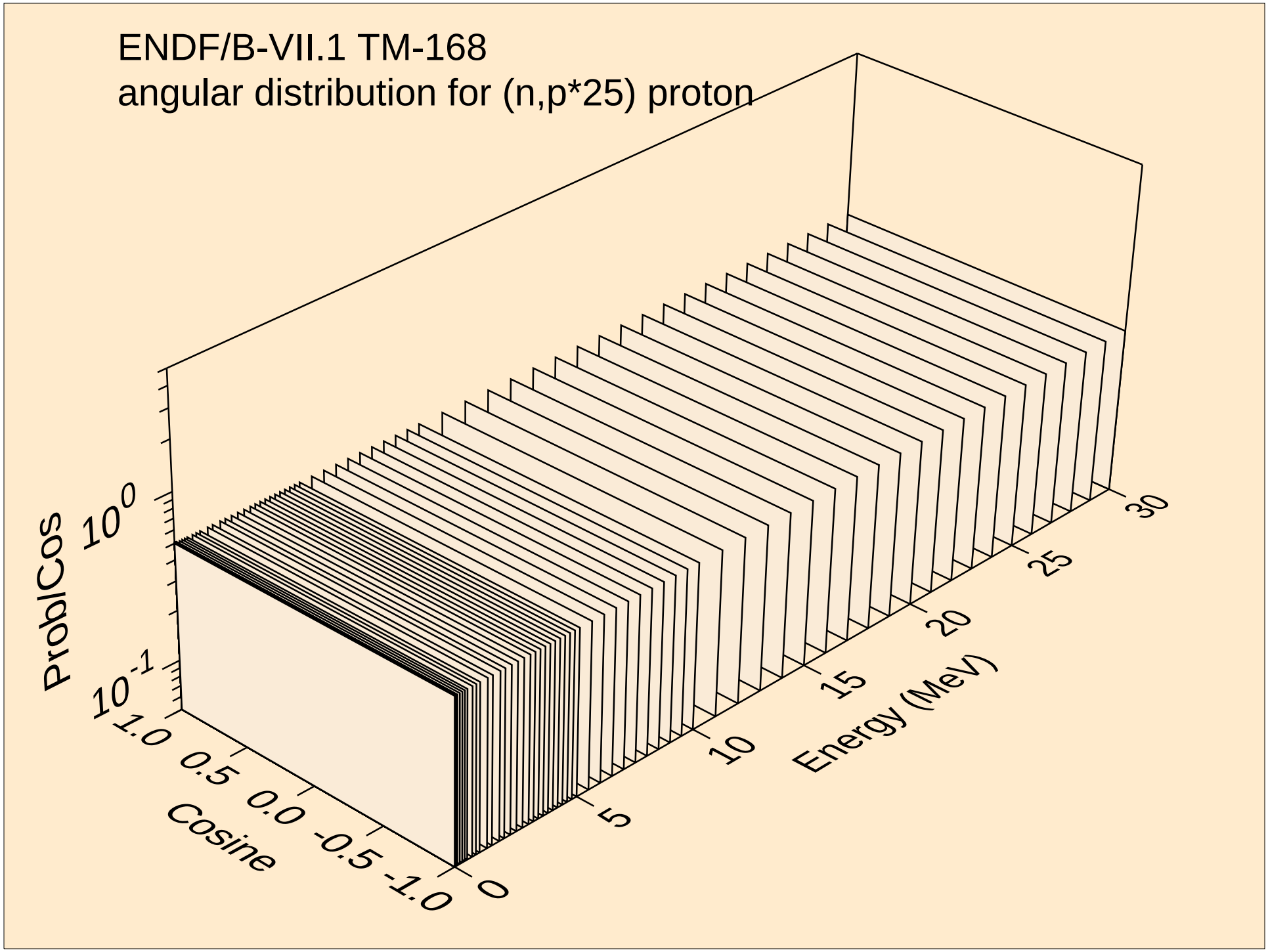

ENDF/B-VII.1 TM-168
angular distribution for (n,p*20) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

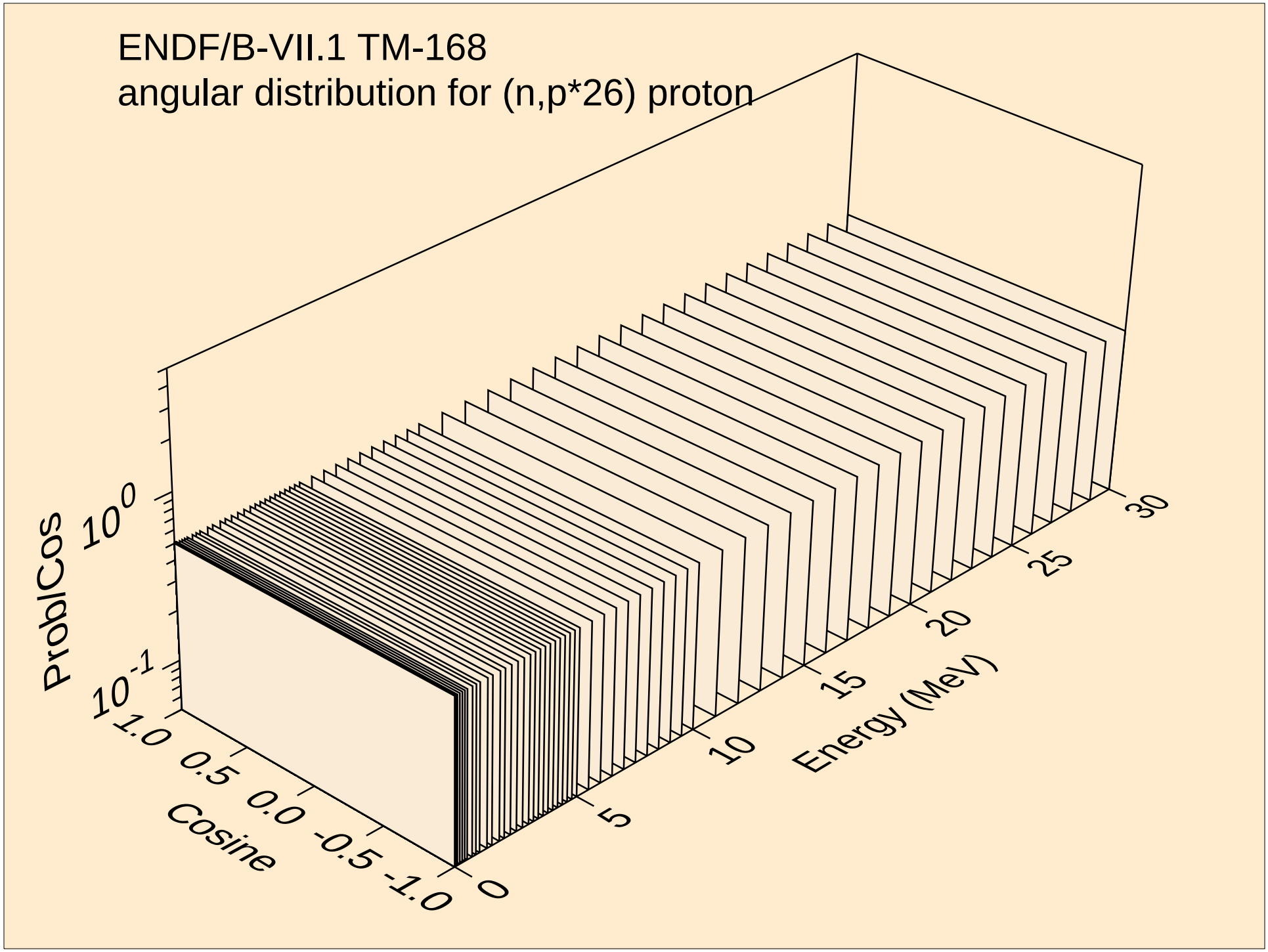

ENDF/B-VII.1 TM-168
angular distribution for (n,p*21) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

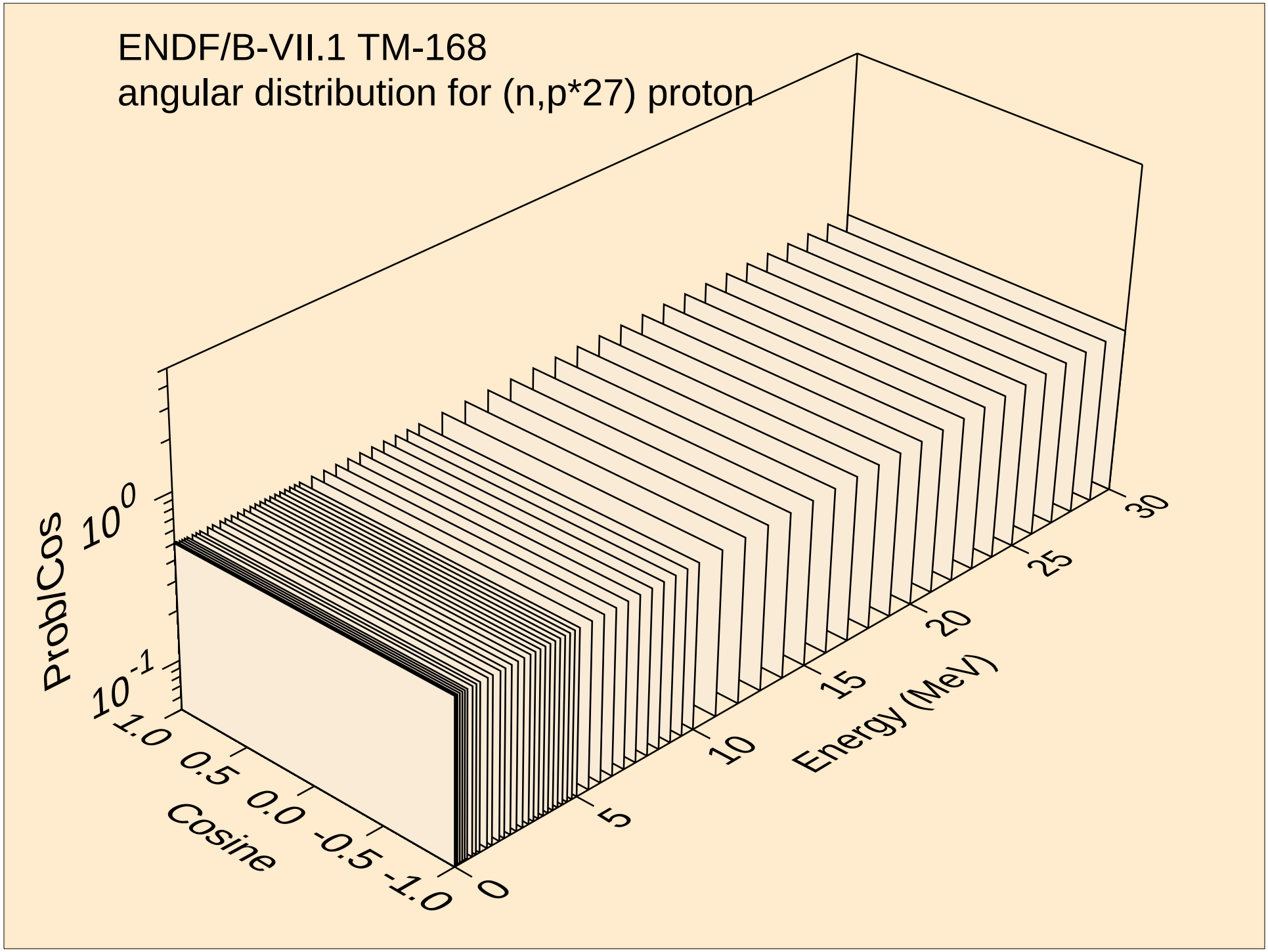

ENDF/B-VII.1 TM-168
angular distribution for (n,p*22) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

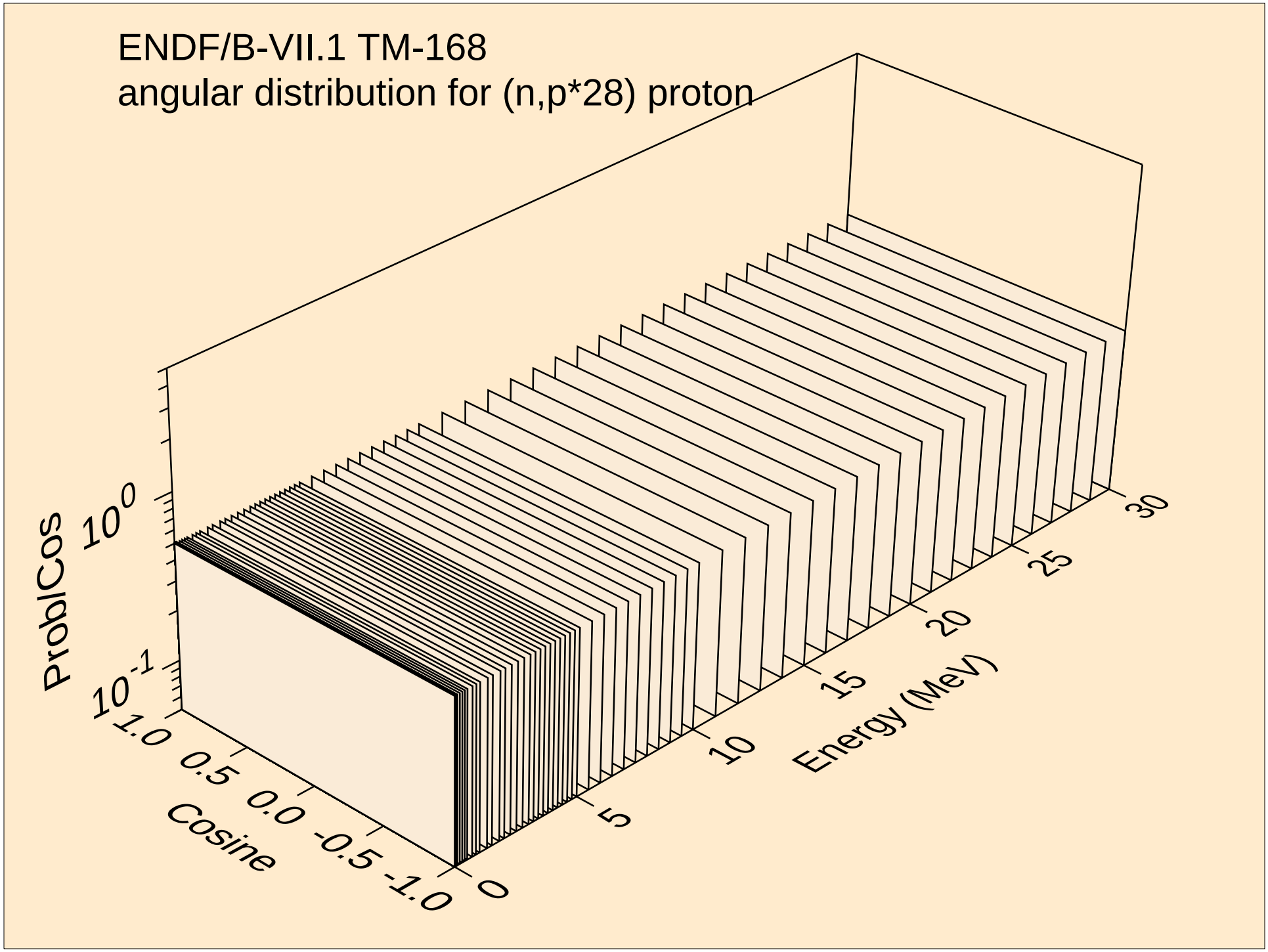

ENDF/B-VII.1 TM-168
angular distribution for (n,p*23) proton
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

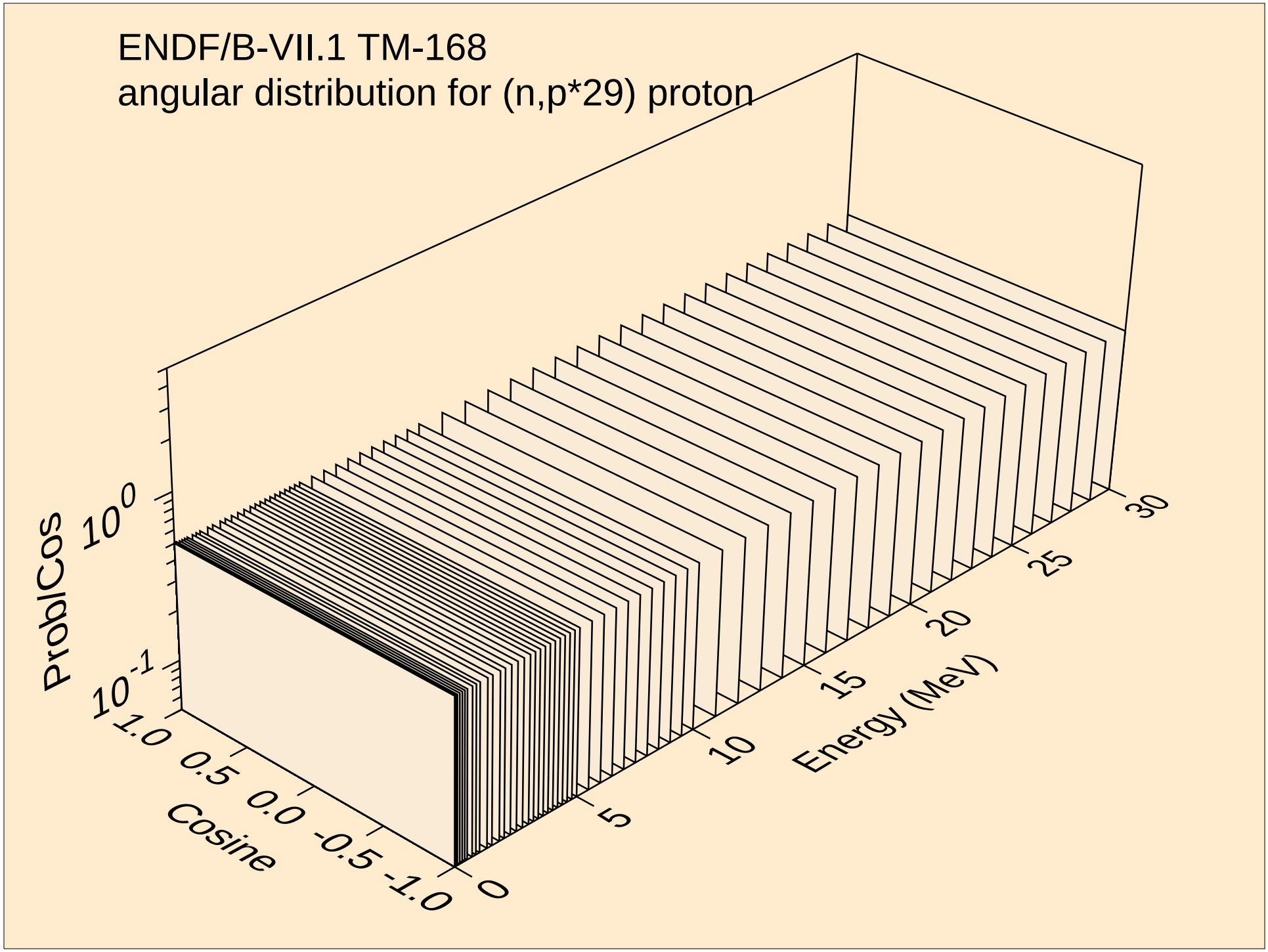

ENDF/B-VII.1 TM-168
angular distribution for (n,p*24) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

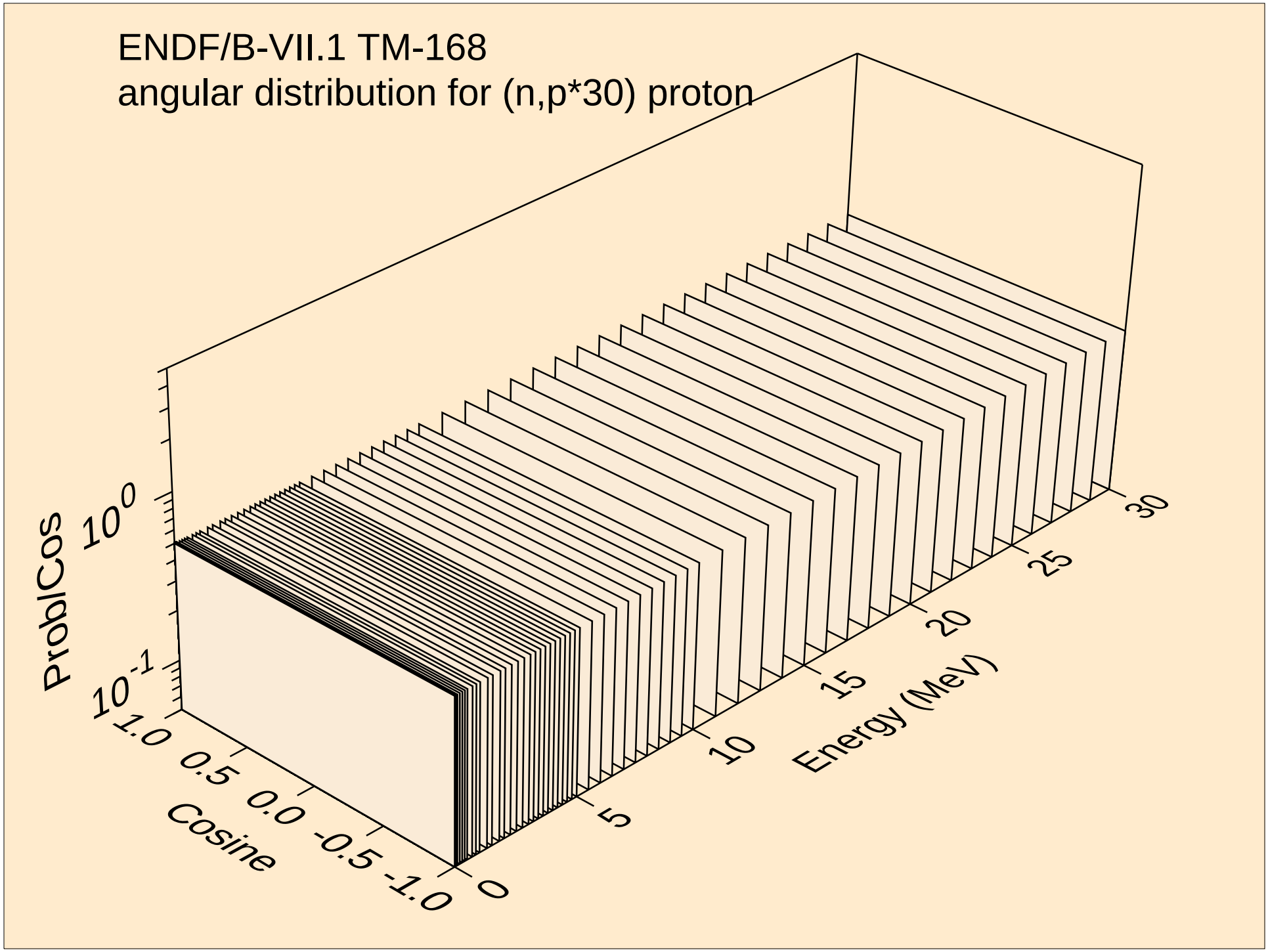

ENDF/B-VII.1 TM-168
angular distribution for (n,p*25) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

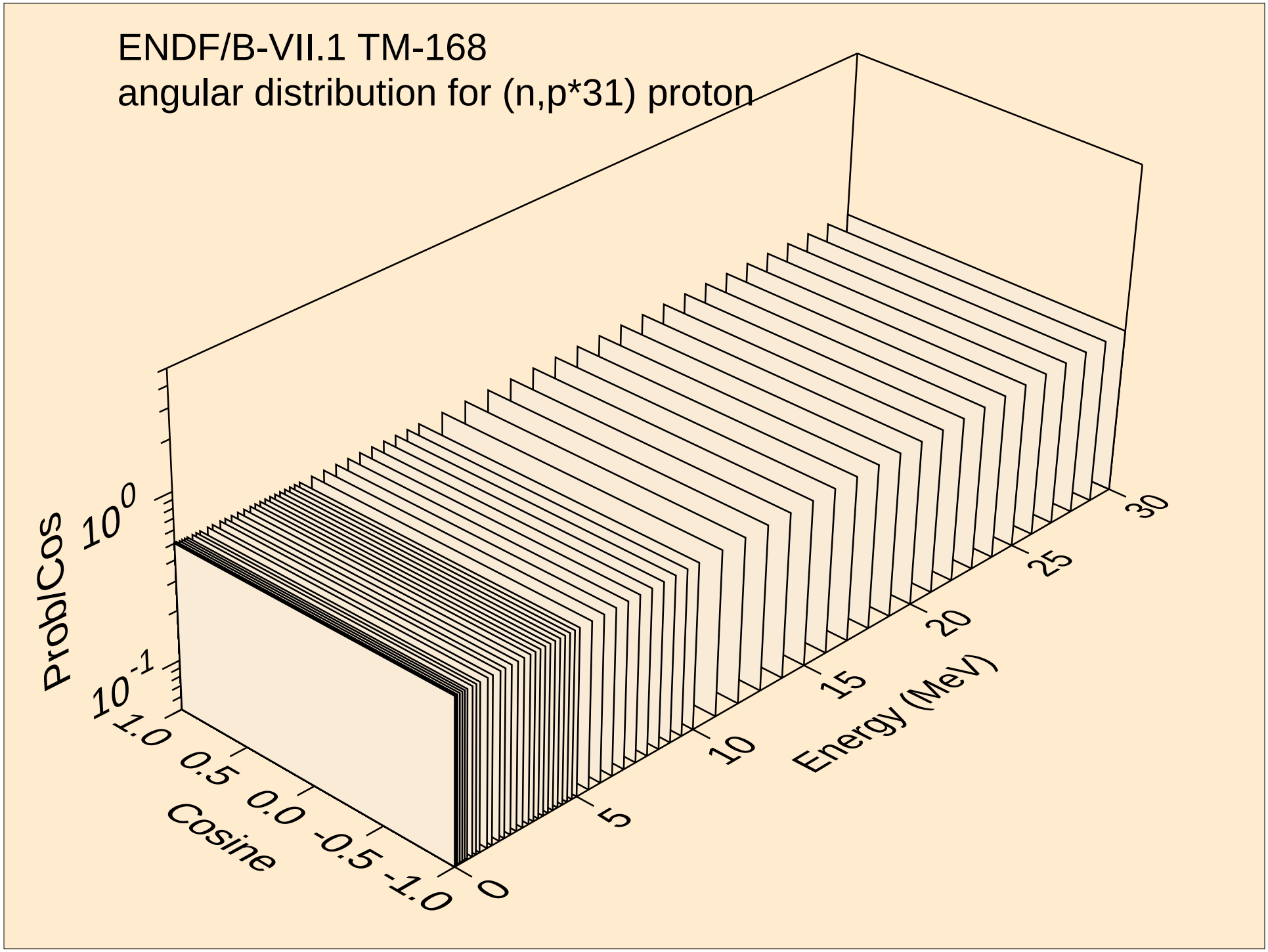

ENDF/B-VII.1 TM-168
angular distribution for (n,p*26) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

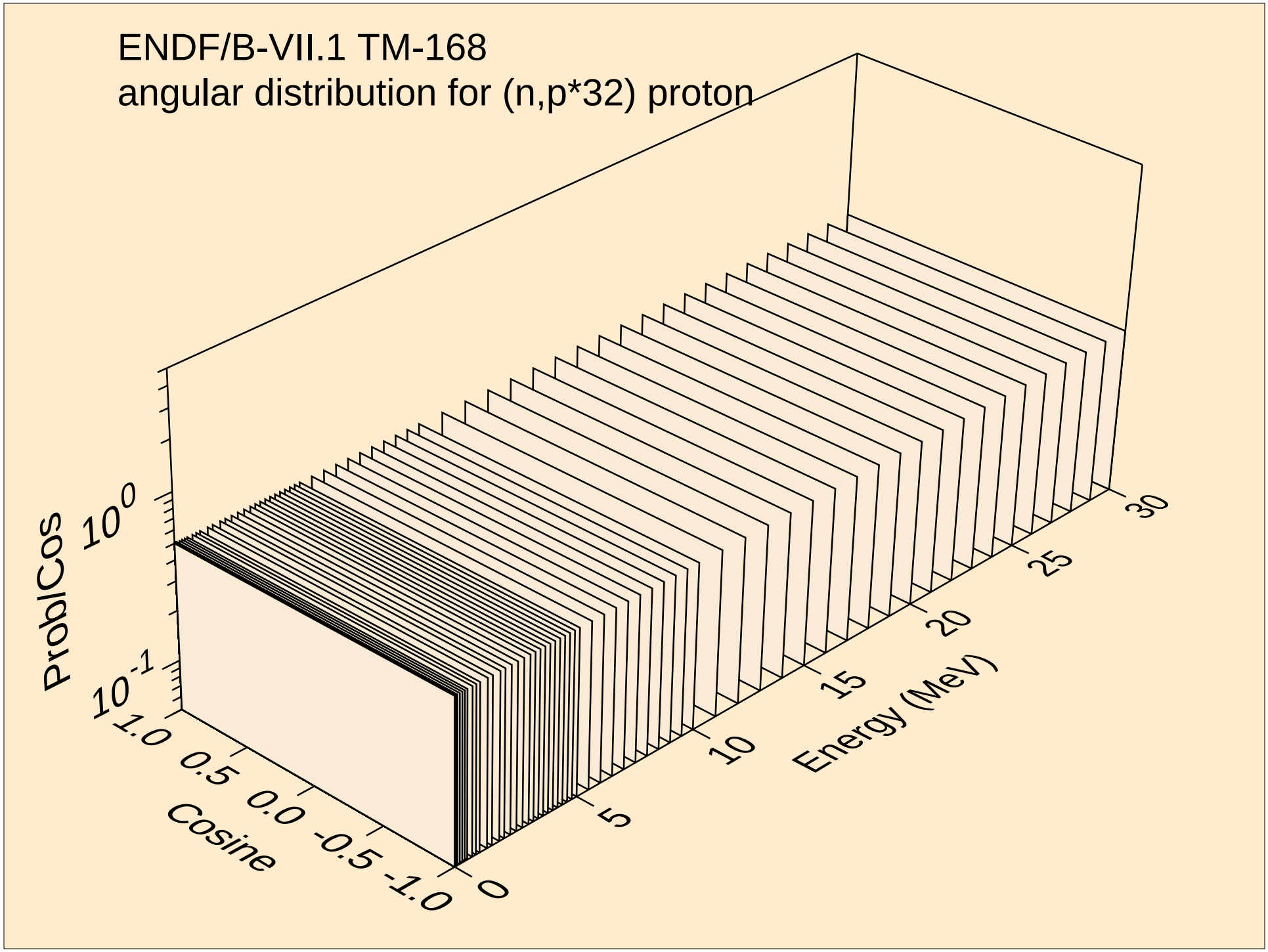

ENDF/B-VII.1 TM-168
angular distribution for (n,p*27) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

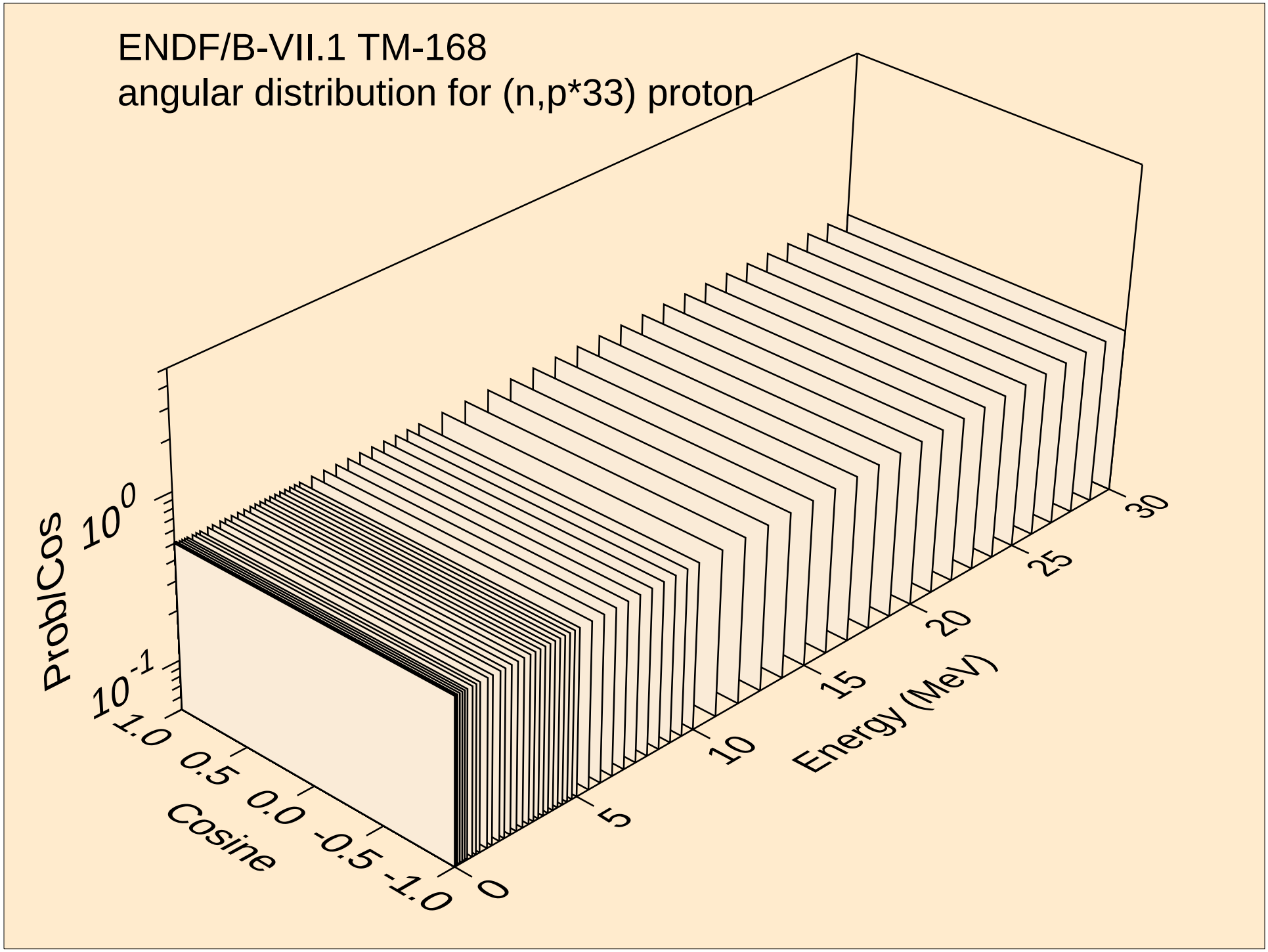

ENDF/B-VII.1 TM-168
angular distribution for (n,p*28) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

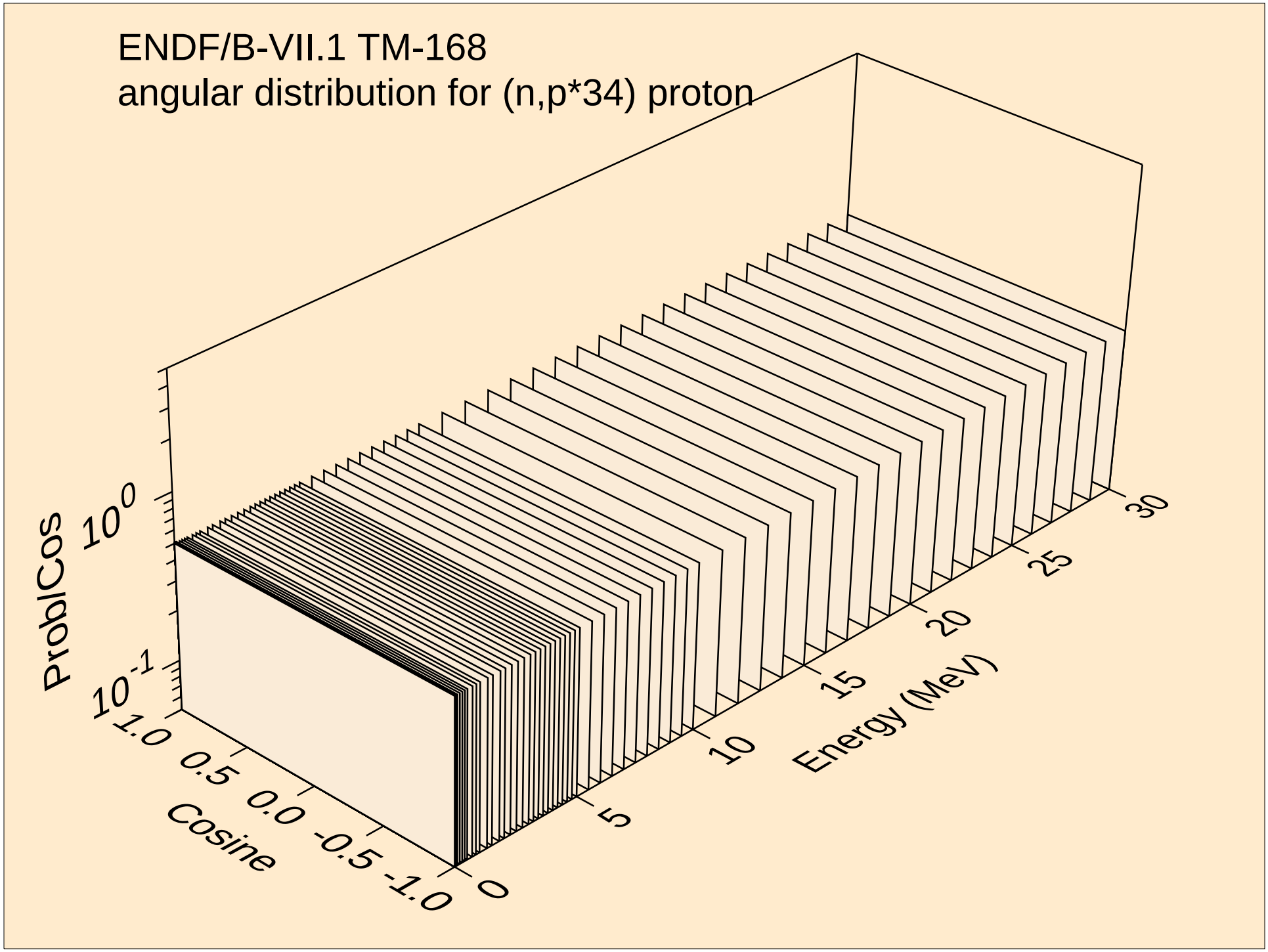

ENDF/B-VII.1 TM-168
angular distribution for (n,p*29) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

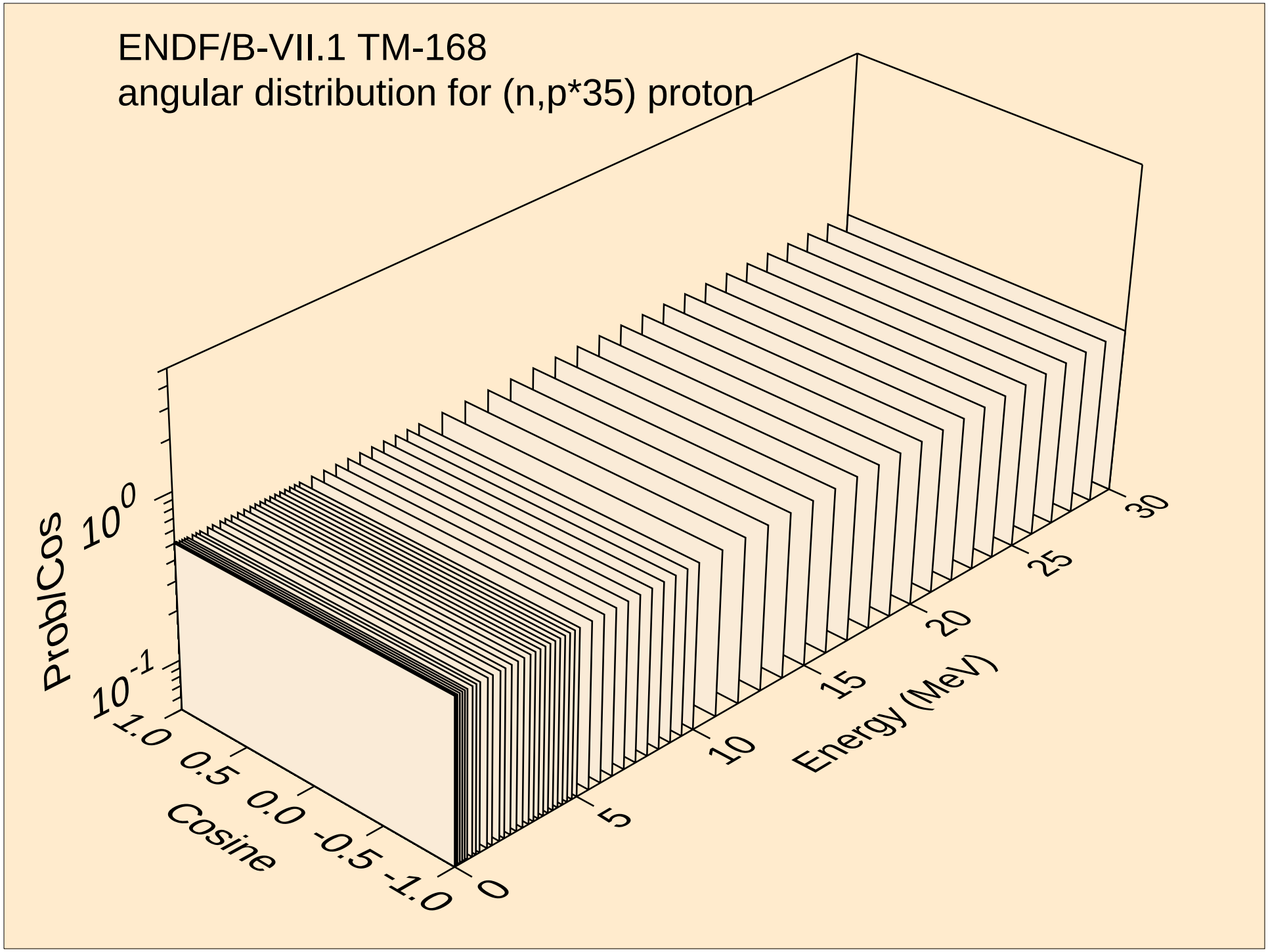

ENDF/B-VII.1 TM-168
angular distribution for (n,p*30) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

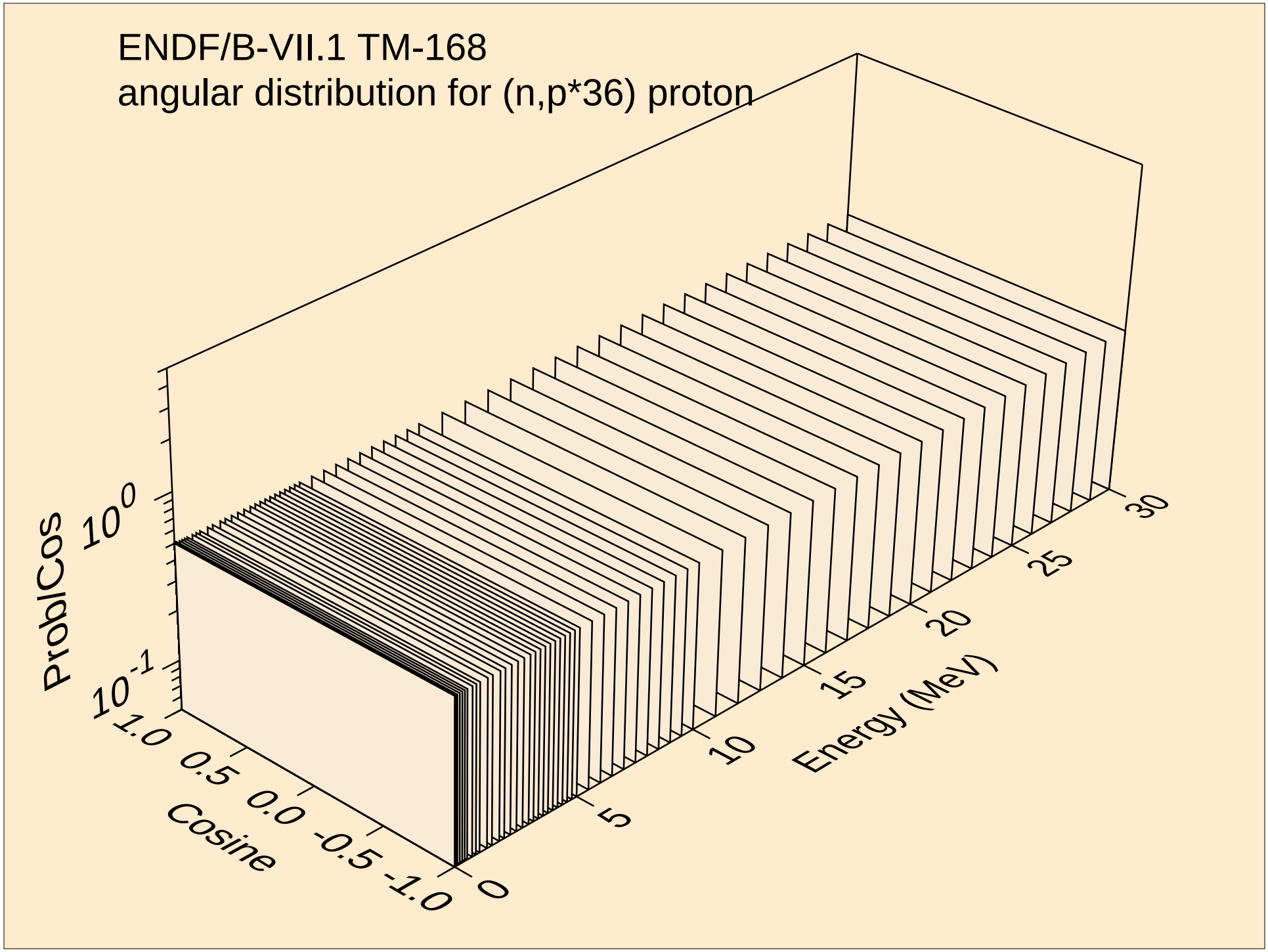

ENDF/B-VII.1 TM-168
angular distribution for (n,p*31) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

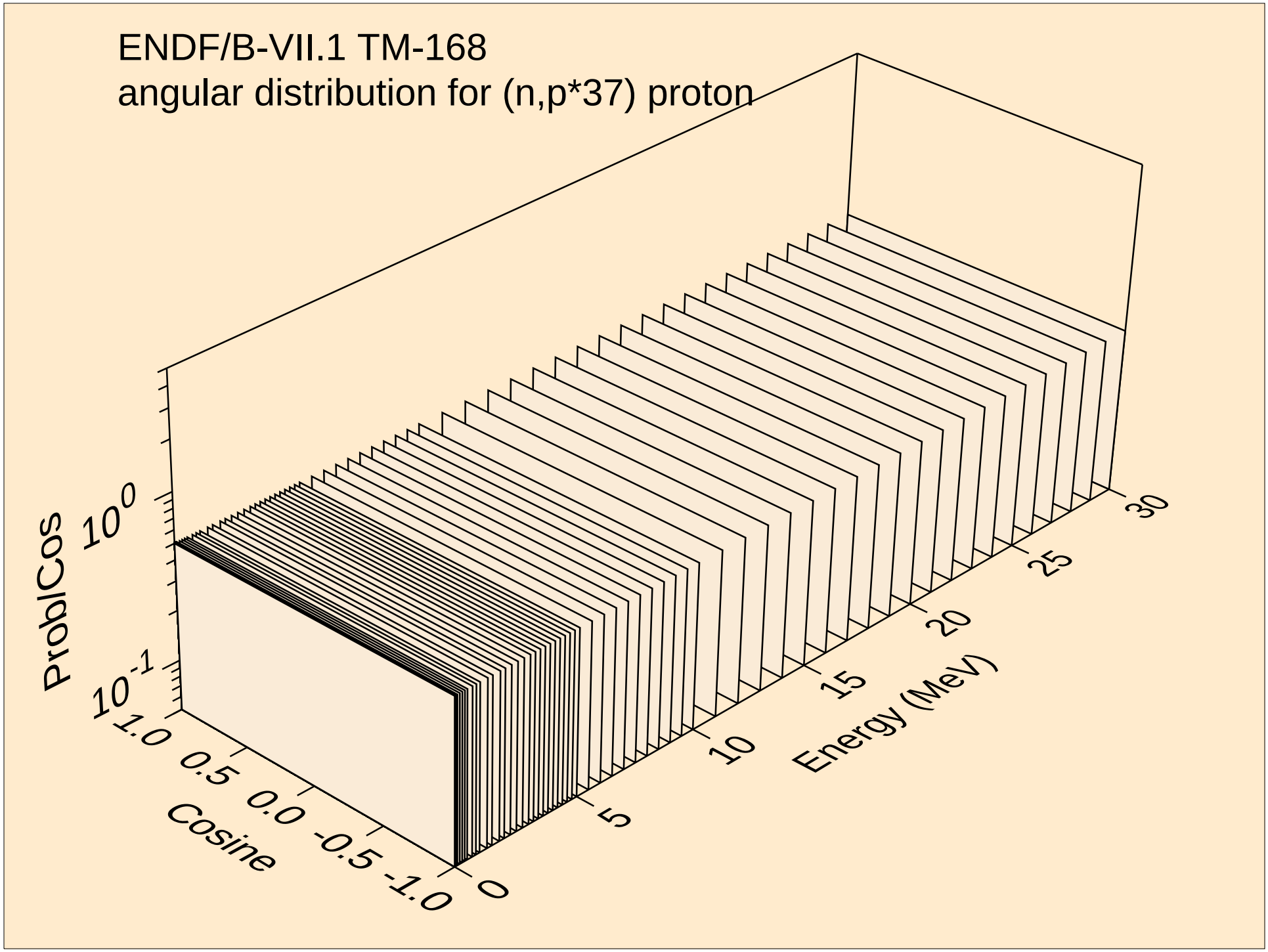

ENDF/B-VII.1 TM-168
angular distribution for (n,p*32) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

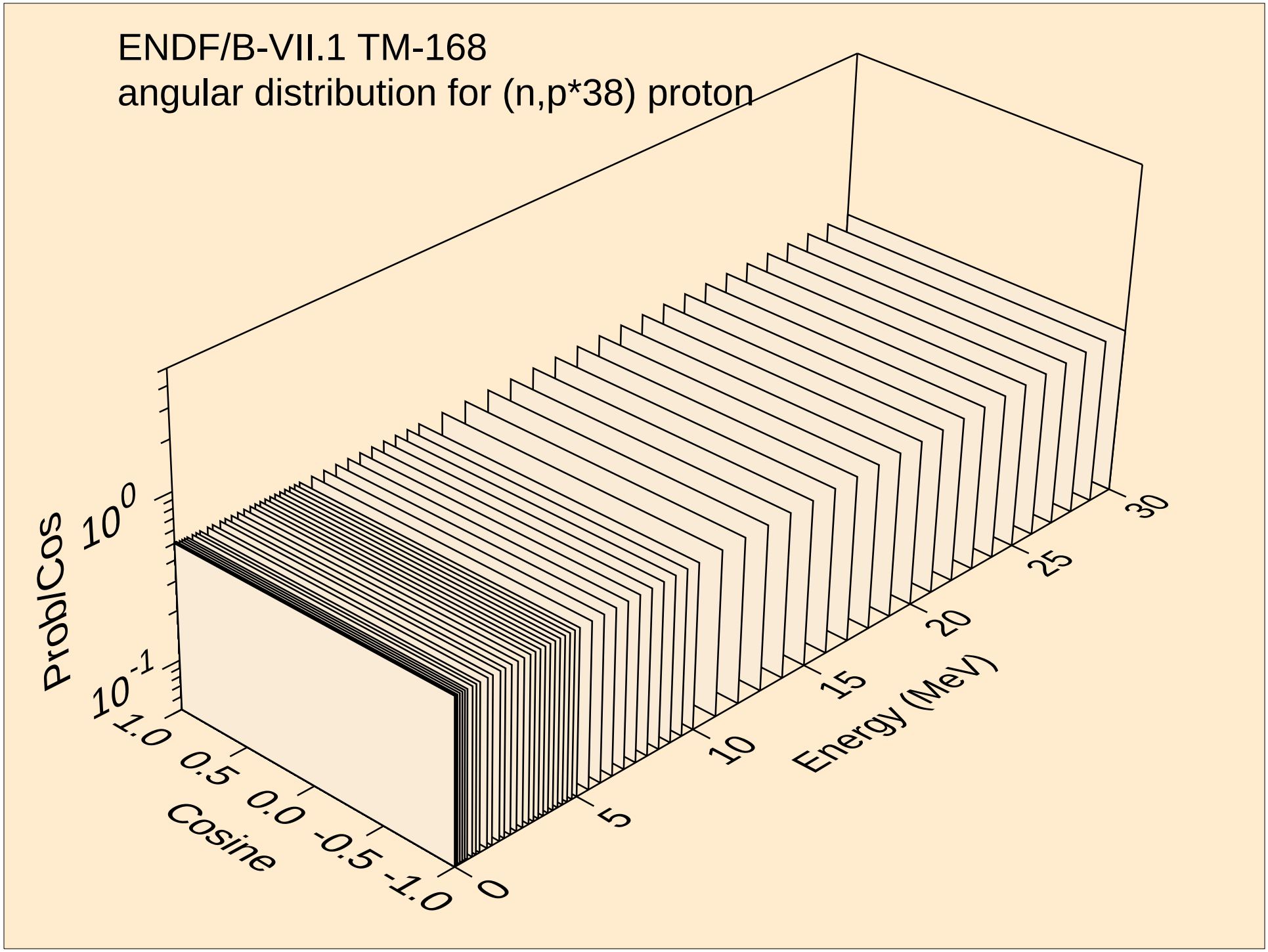

ENDF/B-VII.1 TM-168
angular distribution for (n,p*33) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

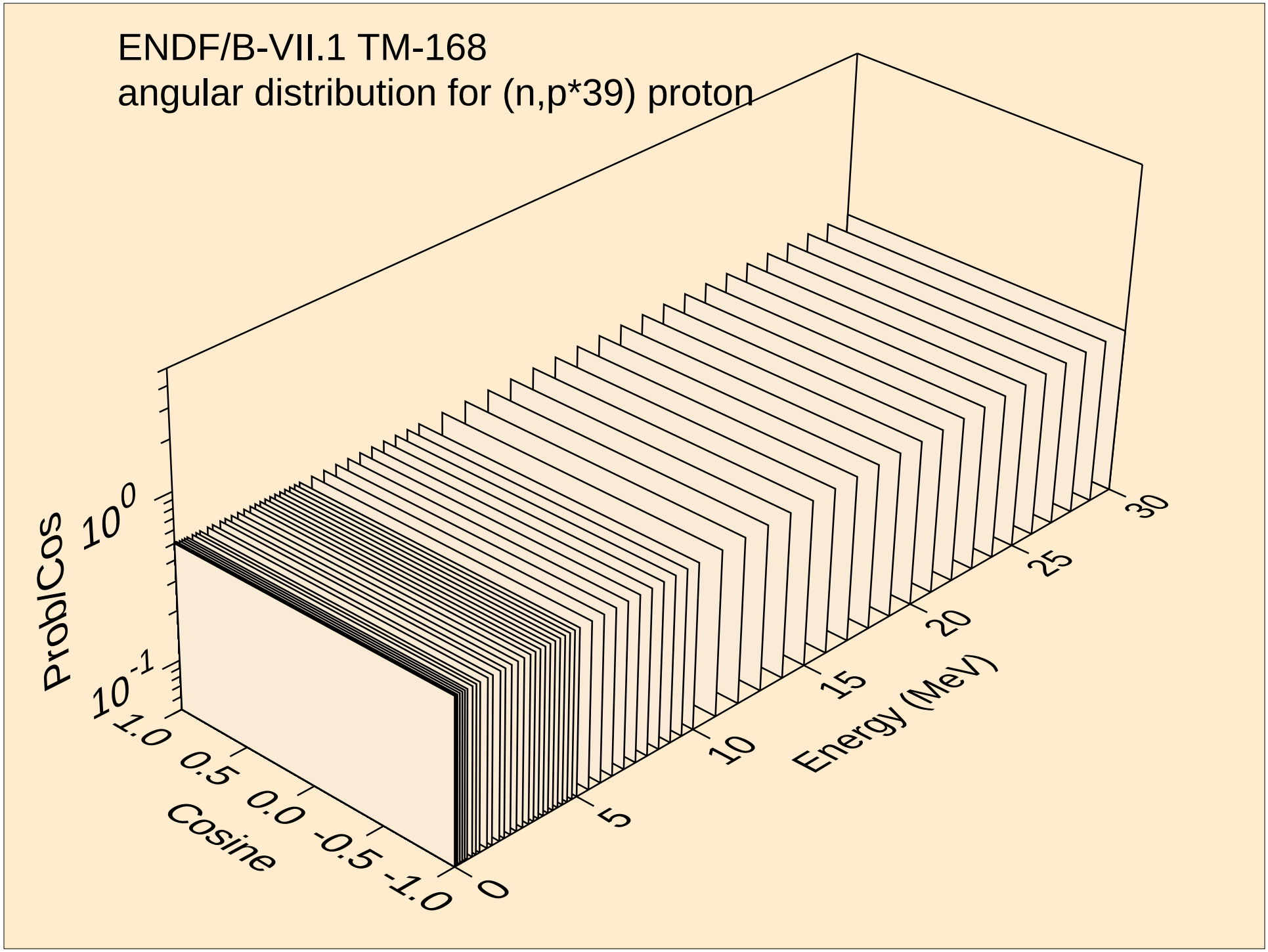

ENDF/B-VII.1 TM-168
angular distribution for (n,p*34) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

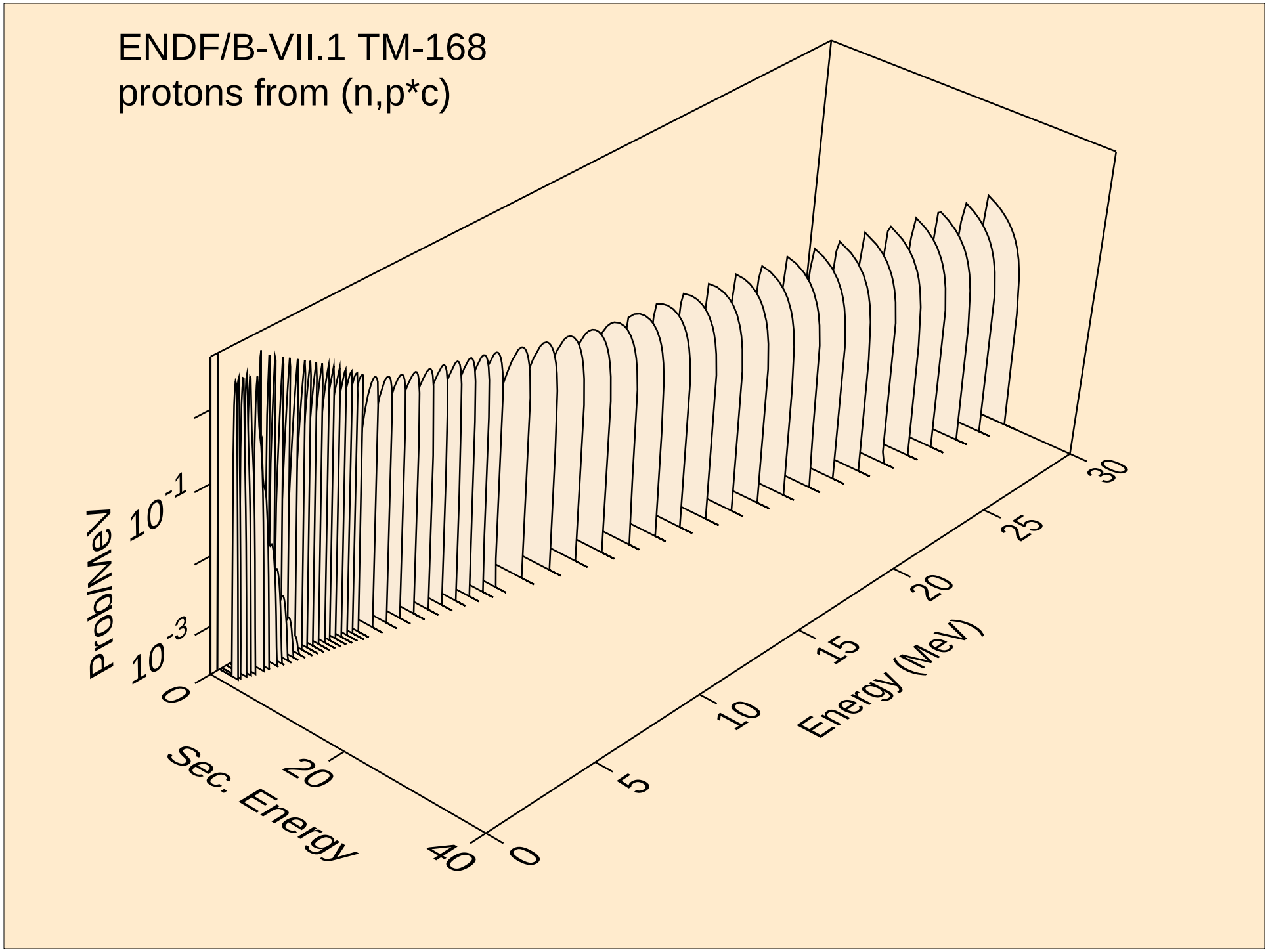

ENDF/B-VII.1 TM-168
angular distribution for (n,p*35) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

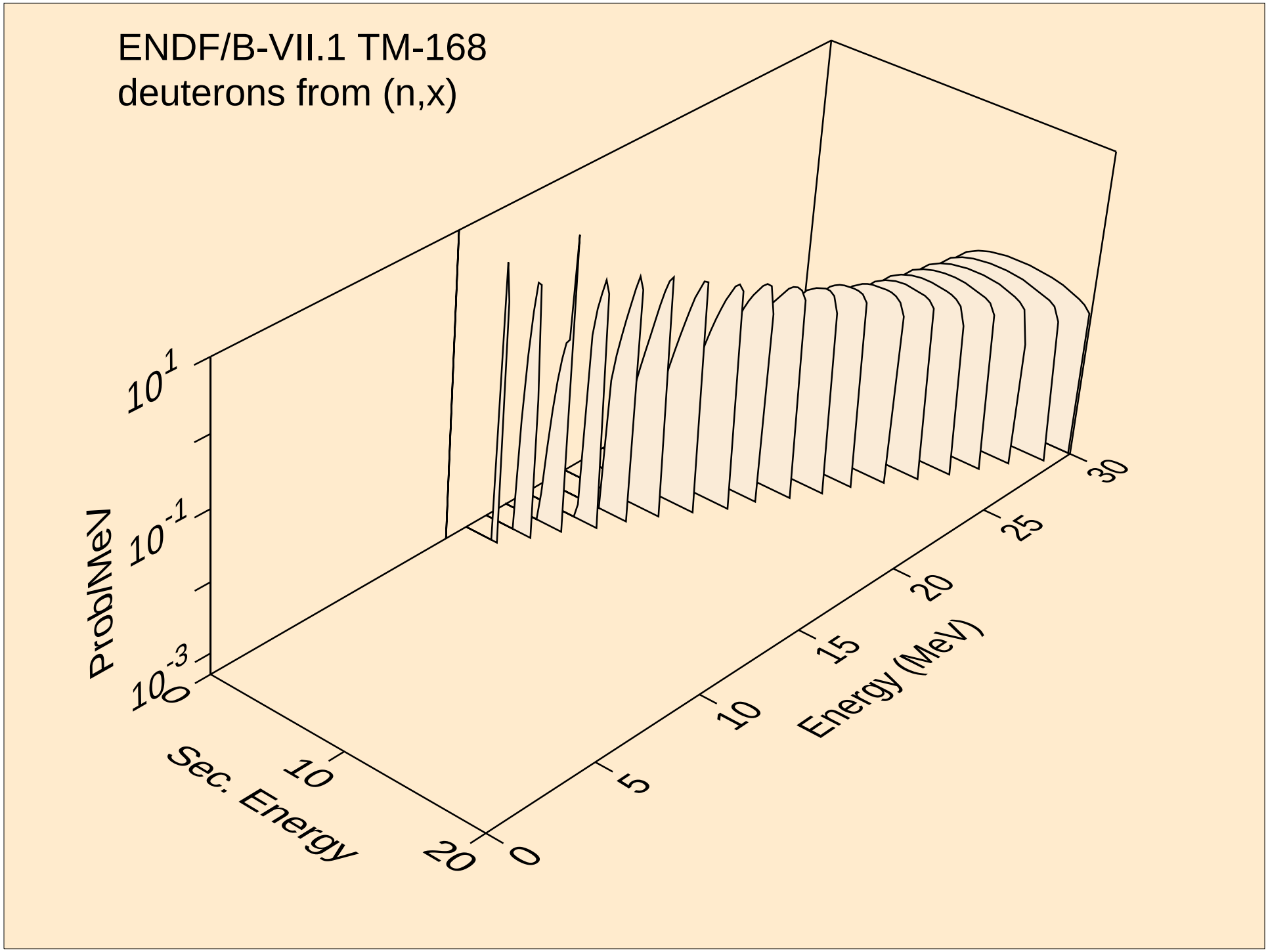

ENDF/B-VII.1 TM-168
angular distribution for (n,p*36) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

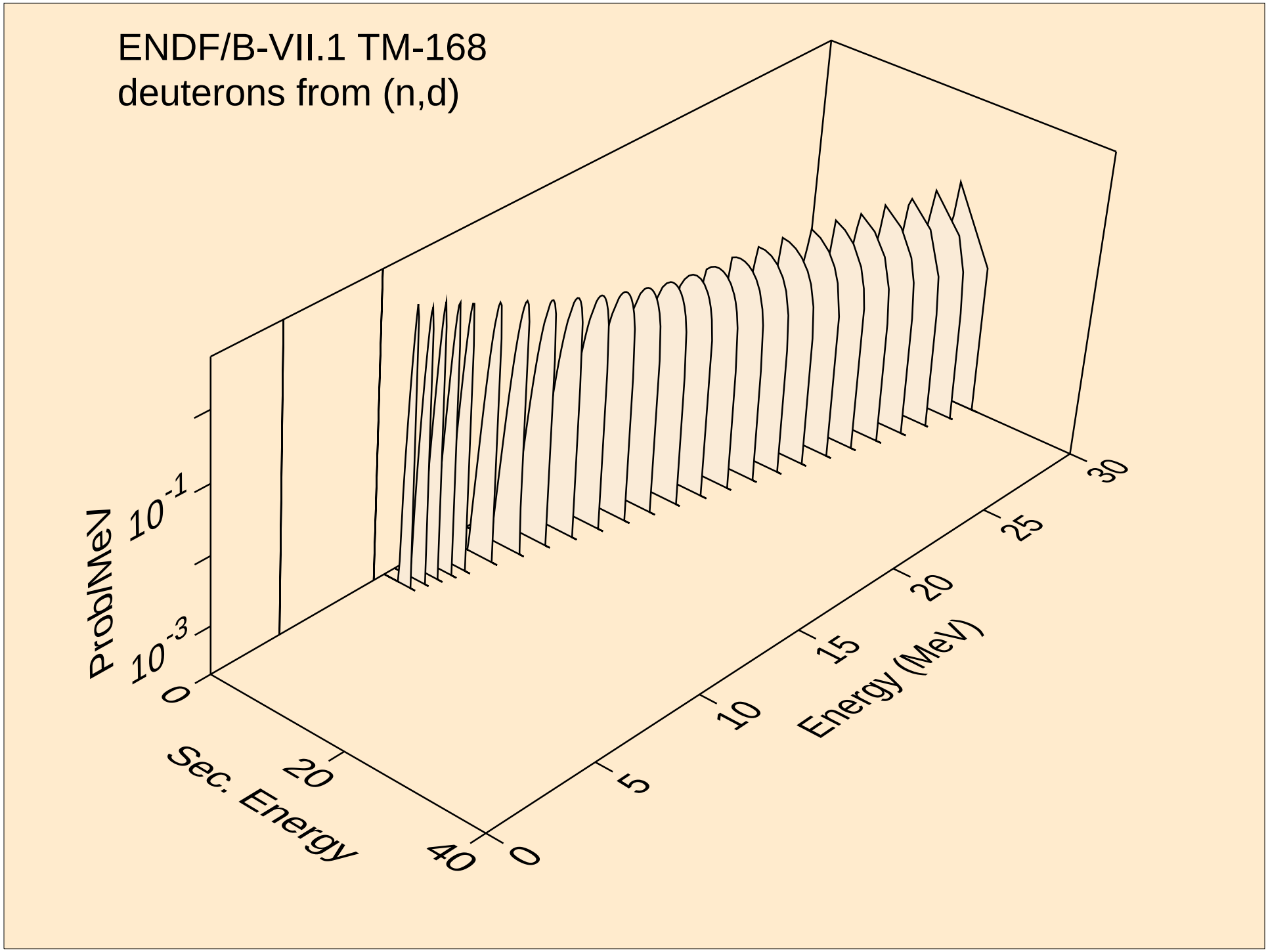

ENDF/B-VII.1 TM-168
angular distribution for (n,p*37) proton
ProbCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

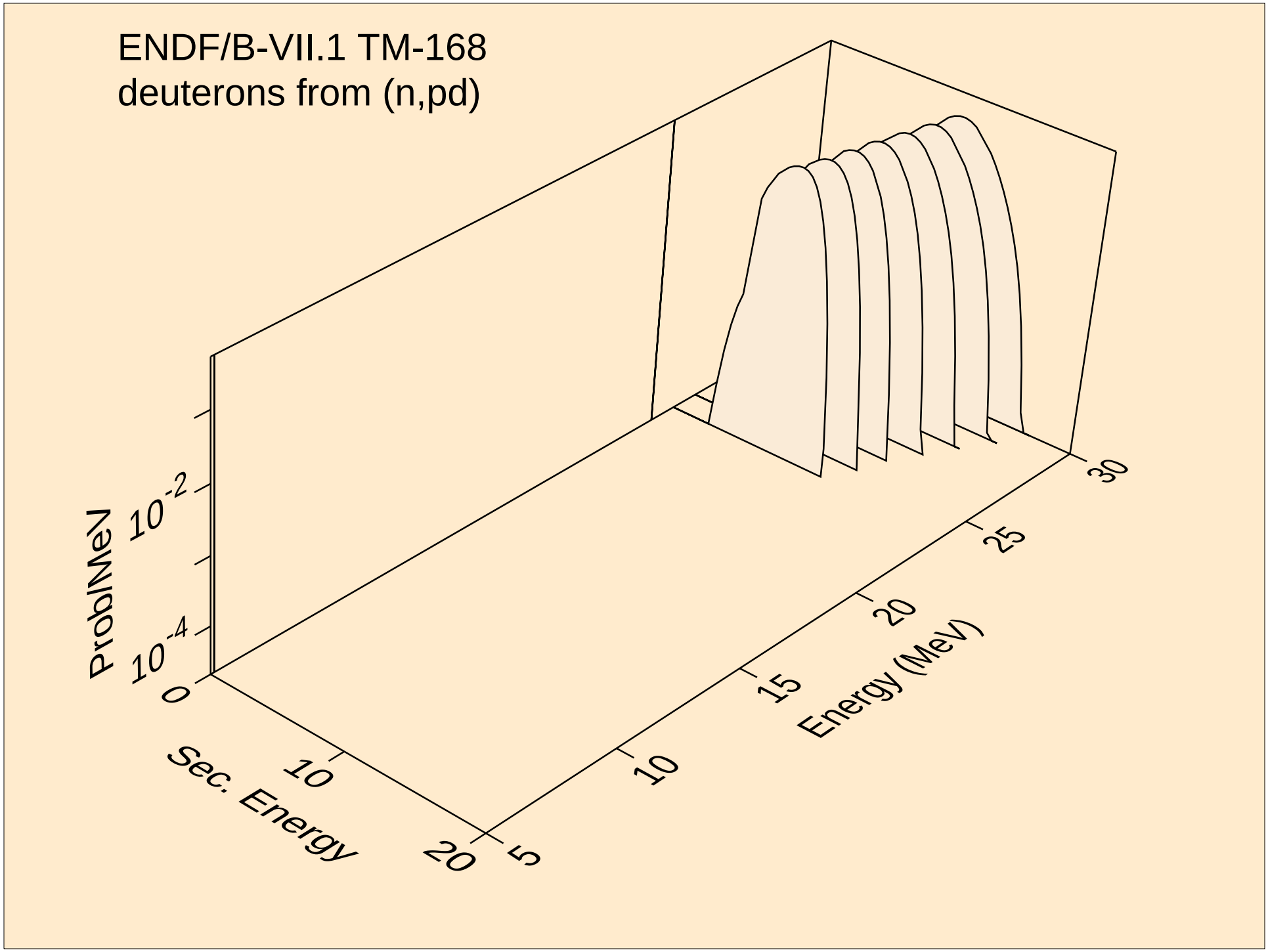

ENDF/B-VII.1 TM-168
angular distribution for (n,p*38) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

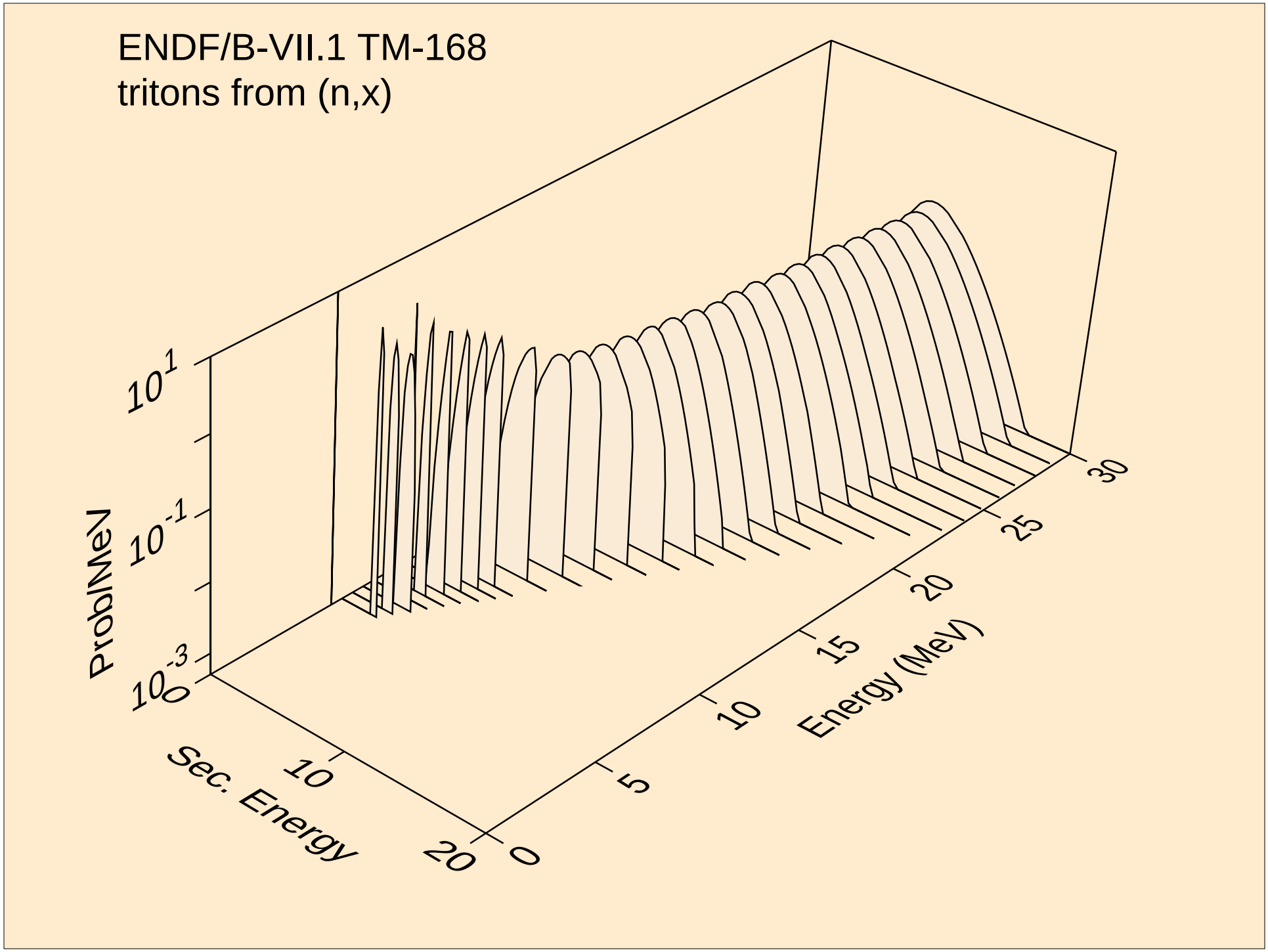

ENDF/B-VII.1 TM-168
angular distribution for (n,p*39) proton
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

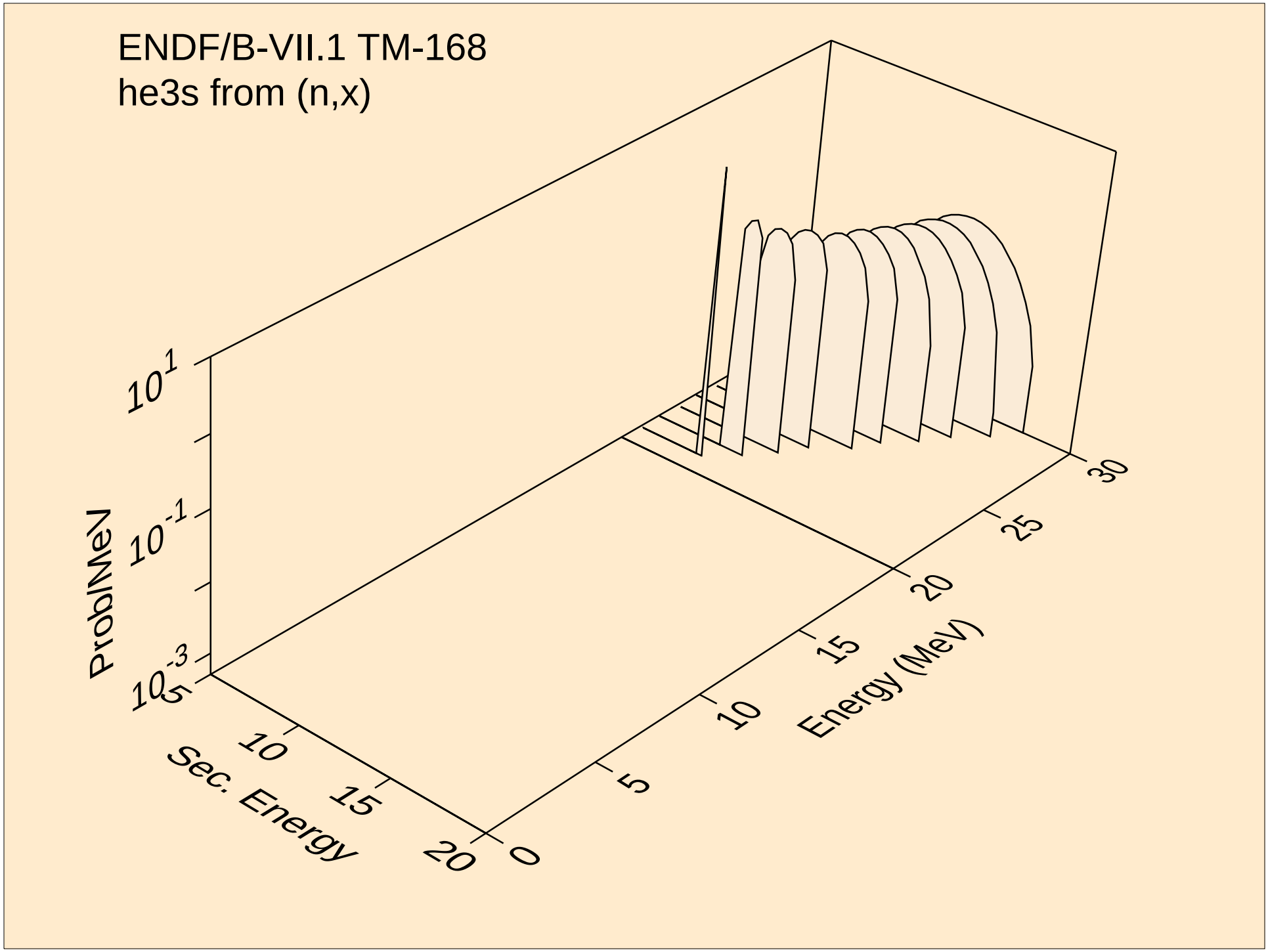

ENDF/B-VII.1 TM-168
protons from (n,p*c)
Prob/MeV
10^-1
10^-3
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)

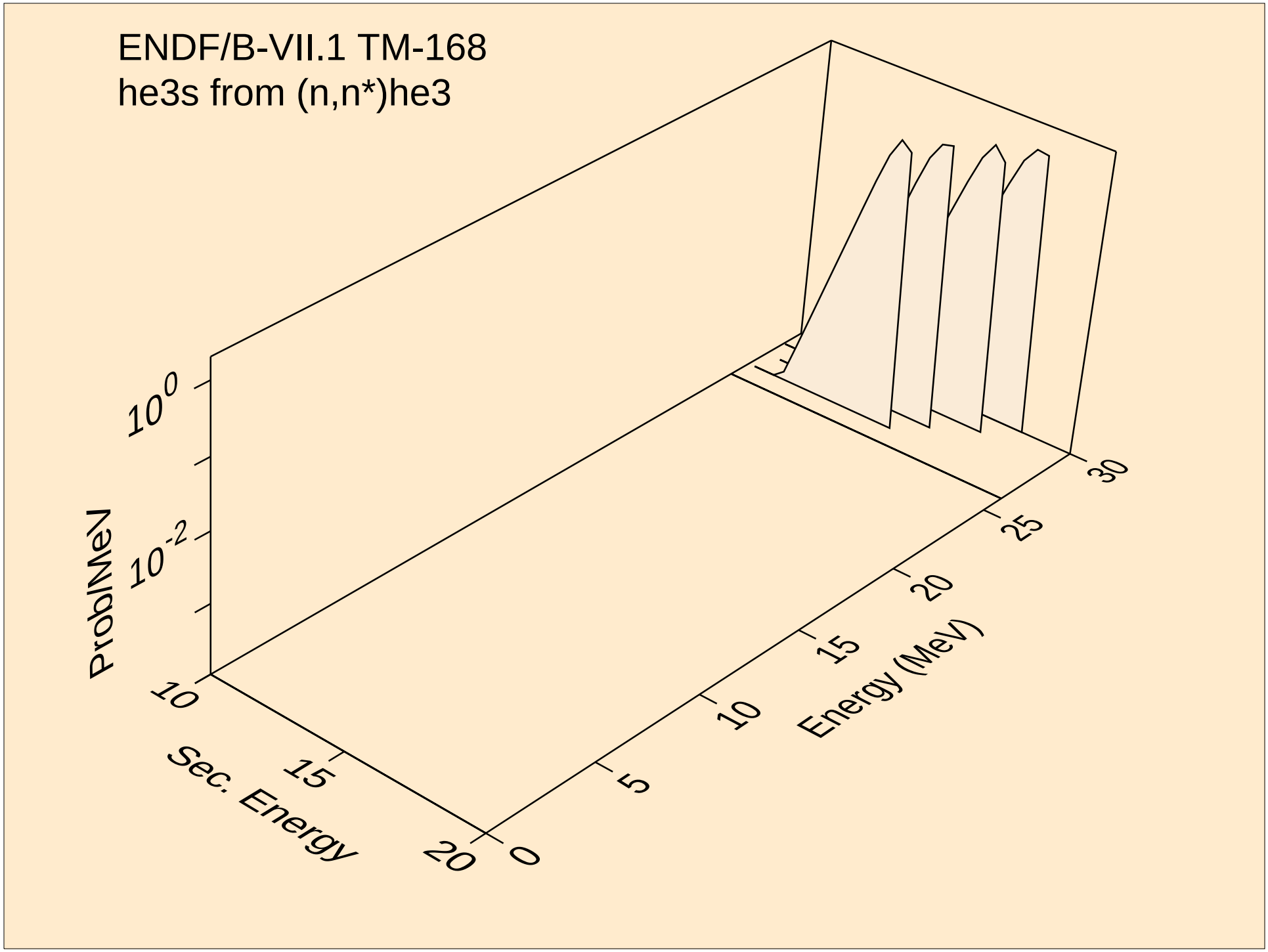

ENDF/B-VII.1 TM-168
deuterons from (n,x)
Prob/MeV
10^{1}
10^{-1}
10^{-3}
Sec. Energy
0
10
20
Energy (MeV)
0
5
10
15
20
25
30

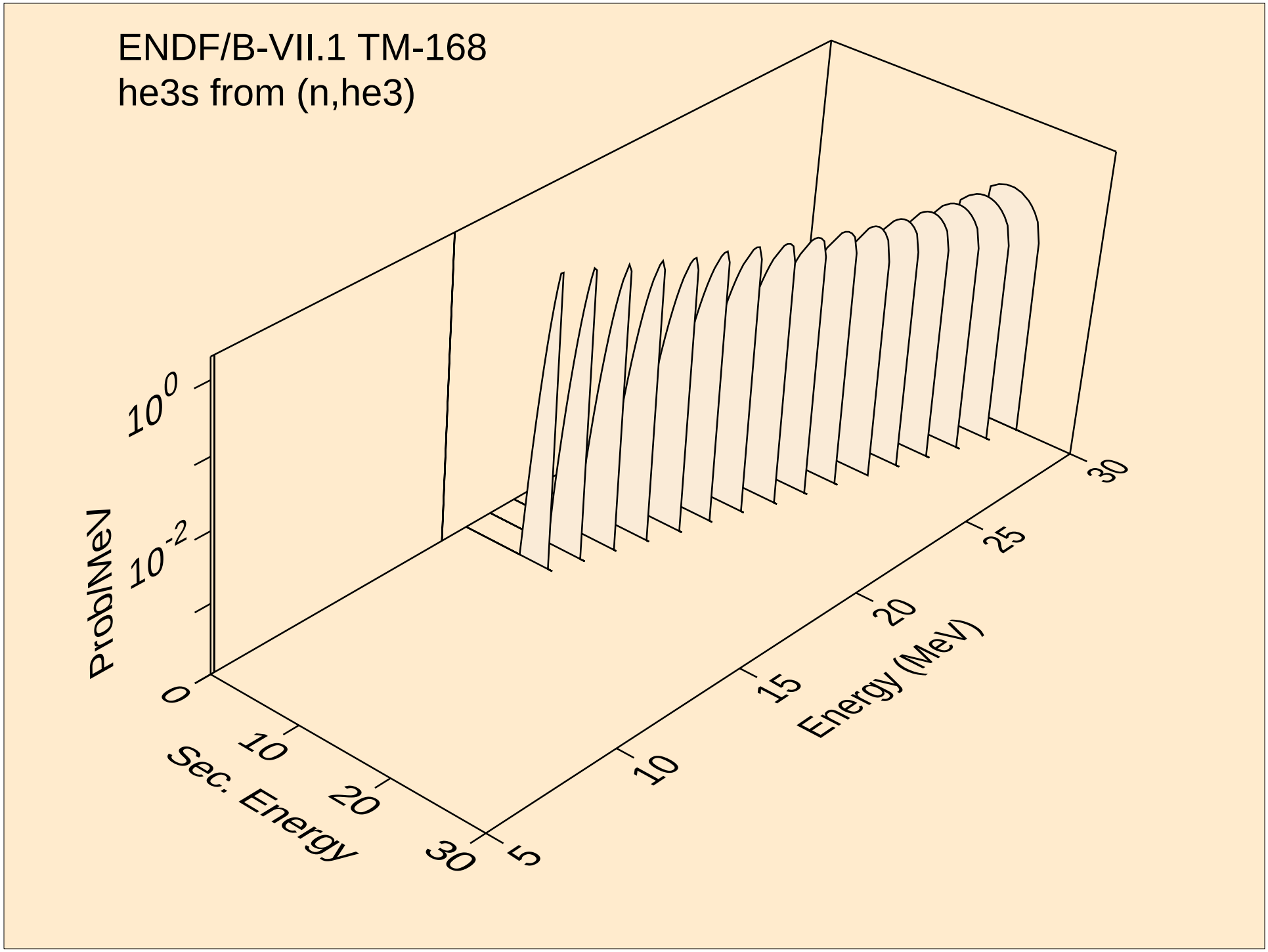

ENDF/B-VII.1 TM-168
deuterons from (n,d)
Prob/MeV
10^-1
10^-3
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)

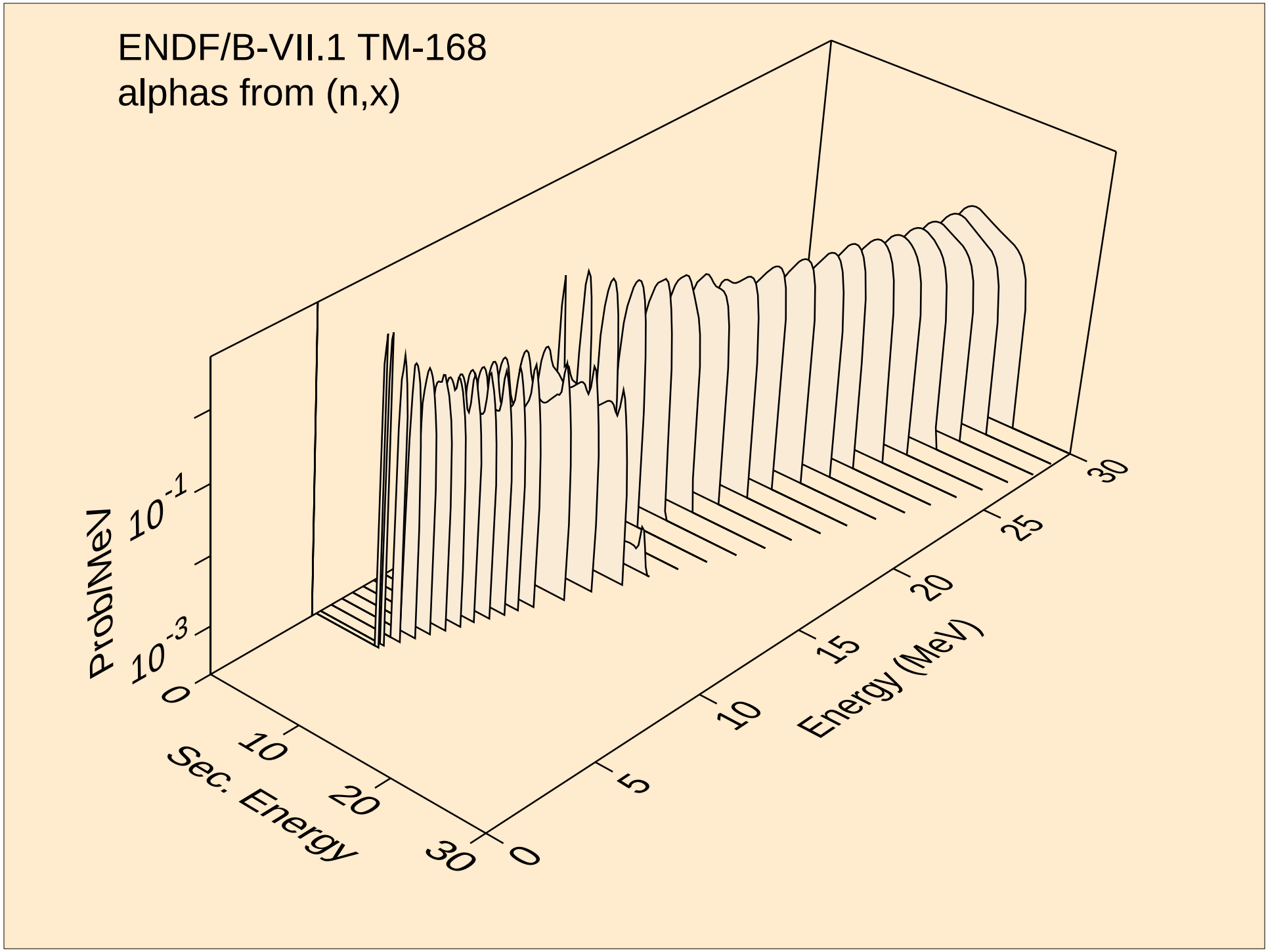

ENDF/B-VII.1 TM-168
deuterons from (n,pd)
Prob/MeV
10^{-2}
10^{-4}
0
Sec. Energy
10
20
5
10
15
20
25
30
Energy (MeV)

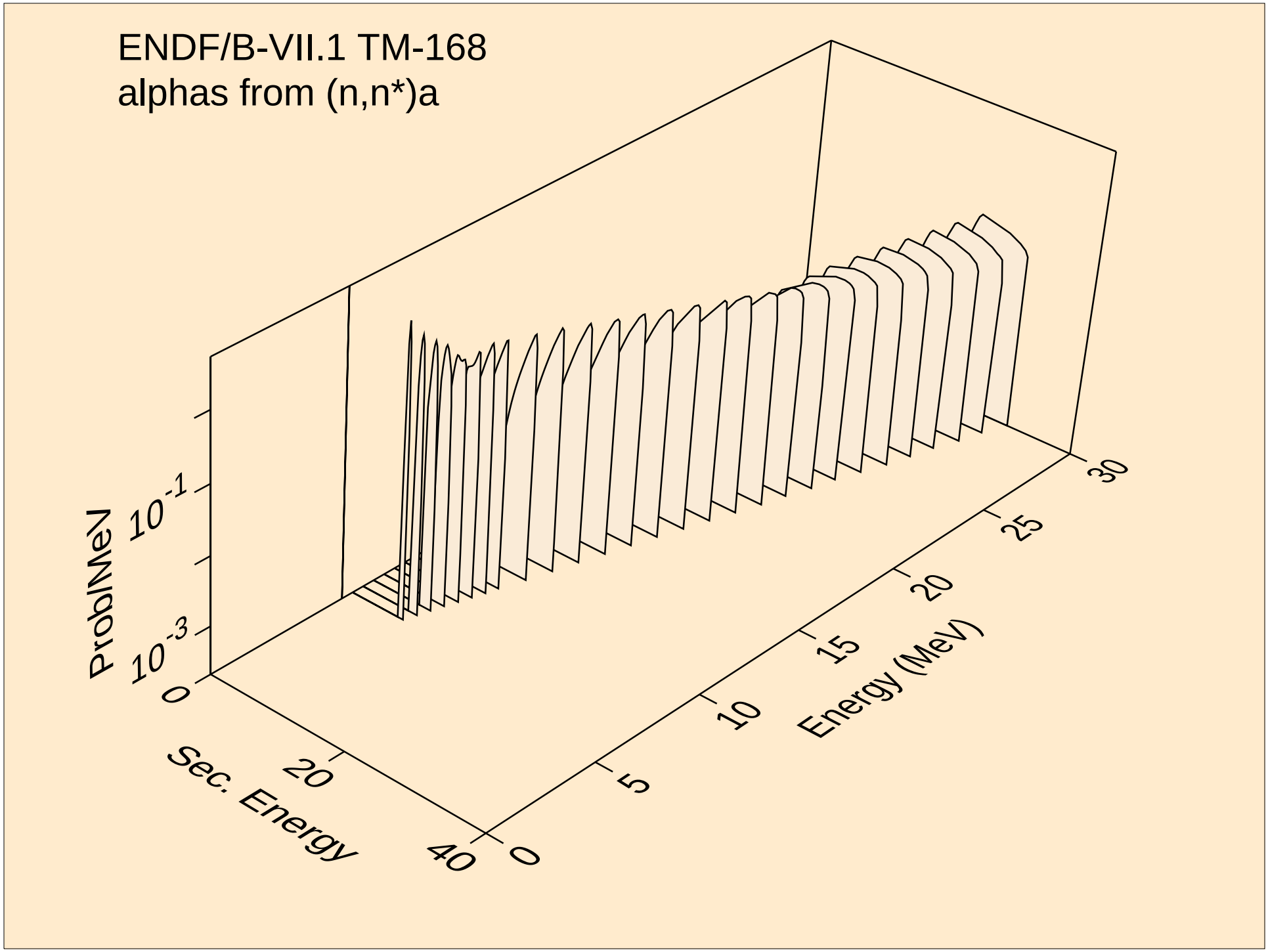

ENDF/B-VII.1 TM-168
tritons from (n,x)
Prob/MeV
10^{1}
10^{-1}
10^{-3}
Sec. Energy
0
10
20
Energy (MeV)
0
5
10
15
20
25
30

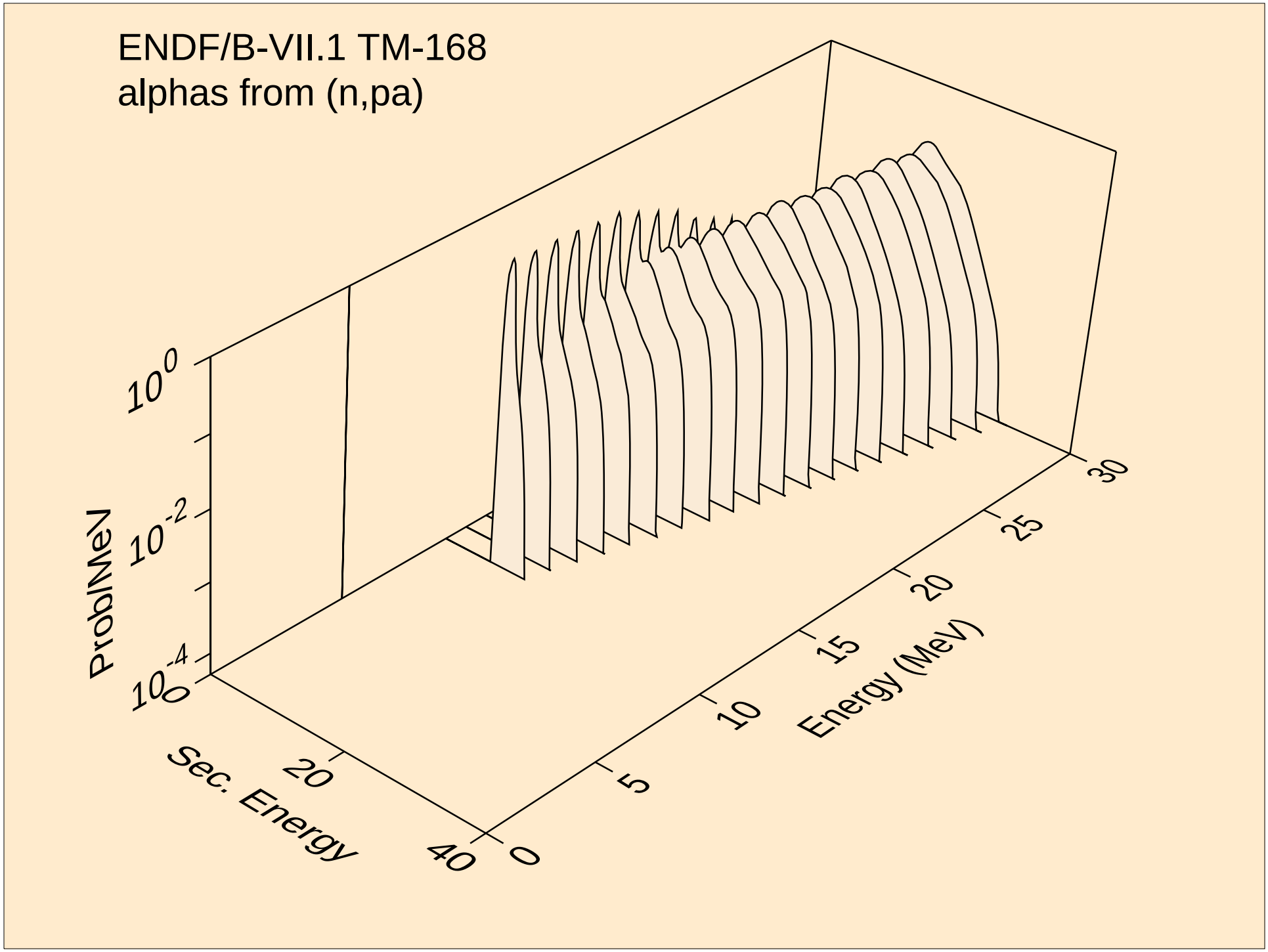

ENDF/B-VII.1 TM-168
he3s from (n,x)
Prob/MeV
10^1
10^-1
10^-3
Sec. Energy
5
10
15
20
Energy (MeV)
0
5
10
15
20
25
30

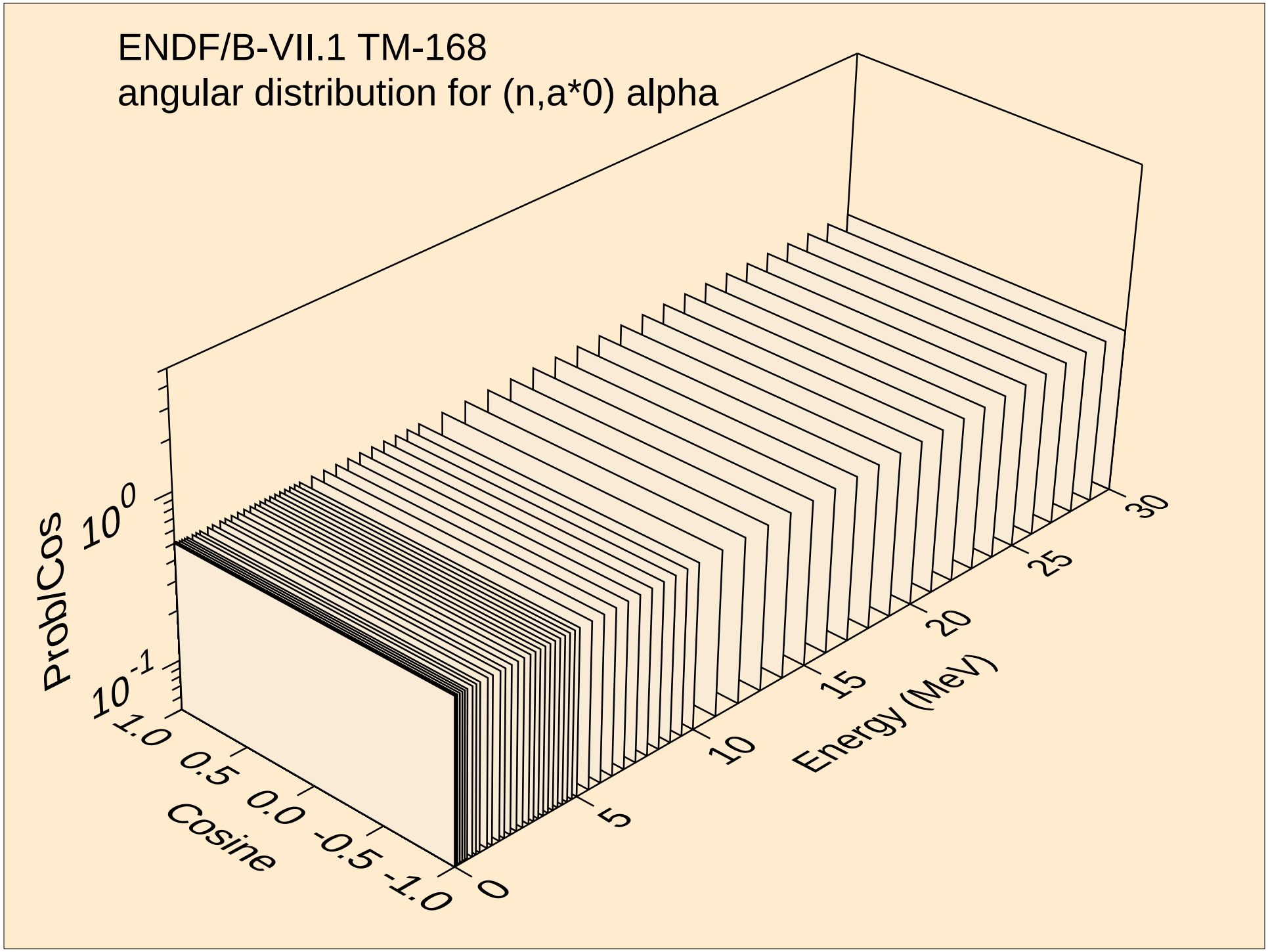

ENDF/B-VII.1 TM-168
he3s from (n,n*)he3
Prob/MeV
10^0
10^{-2}
Sec. Energy
10
15
20
Energy (MeV)
0
5
10
15
20
25
30

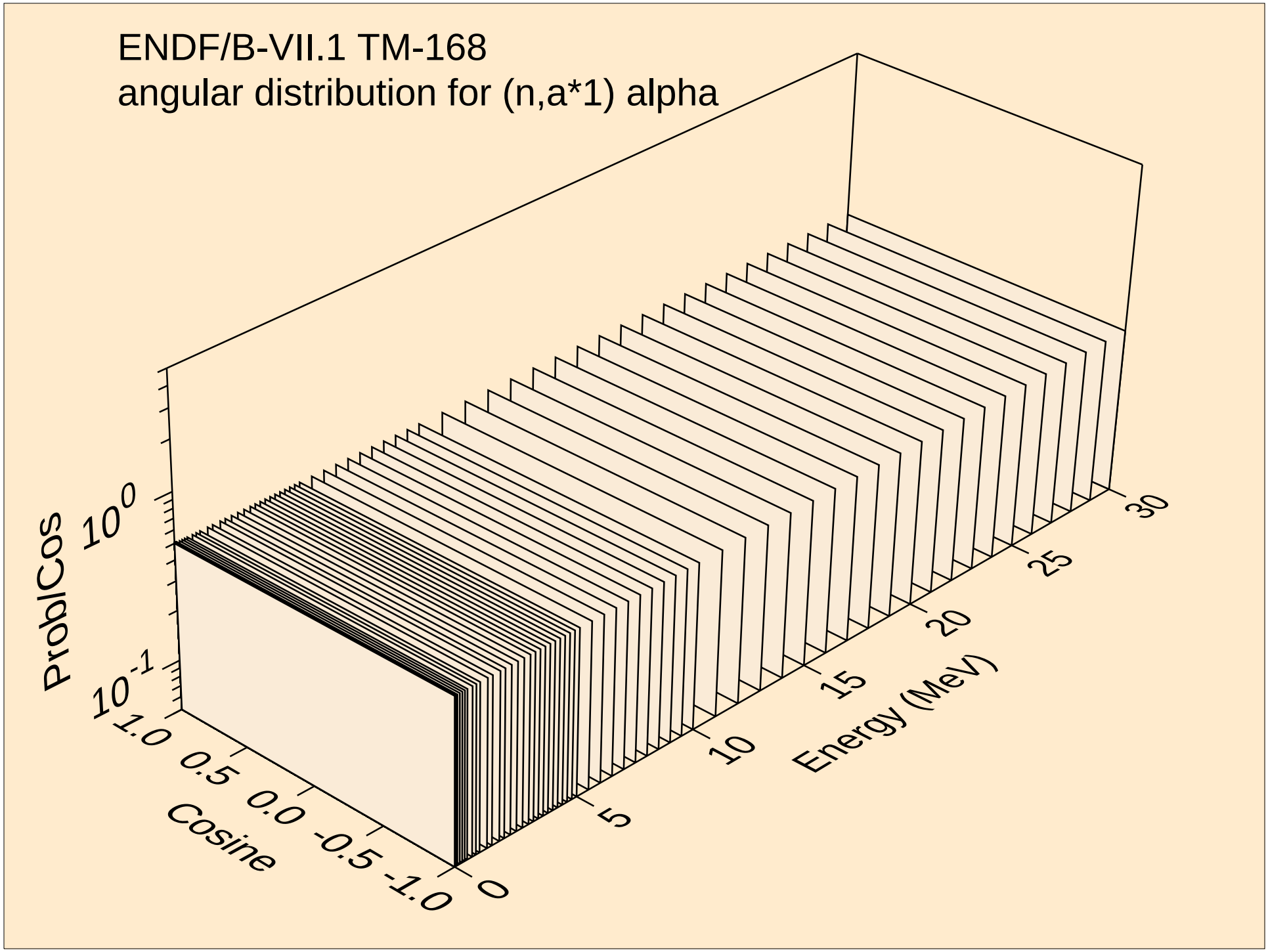

ENDF/B-VII.1 TM-168
he3s from (n,he3)
Prob/MeV
10^0
10^{-2}
0
10
20
30
Sec. Energy
5
10
15
20
25
30
Energy (MeV)

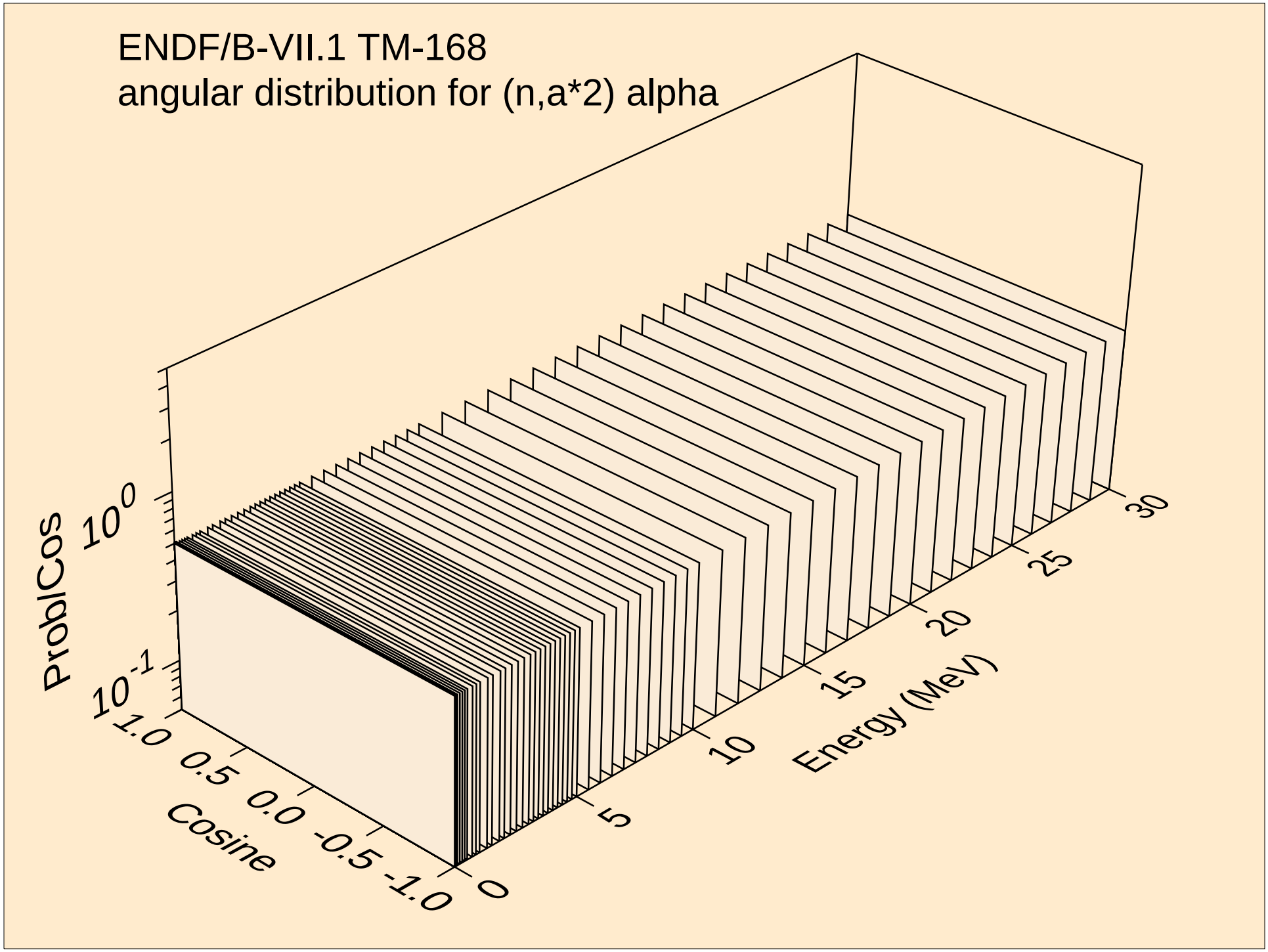

ENDF/B-VII.1 TM-168
alphas from (n,x)
Prob/MeV
10^{-1}
10^{-3}
0
10
20
30
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)

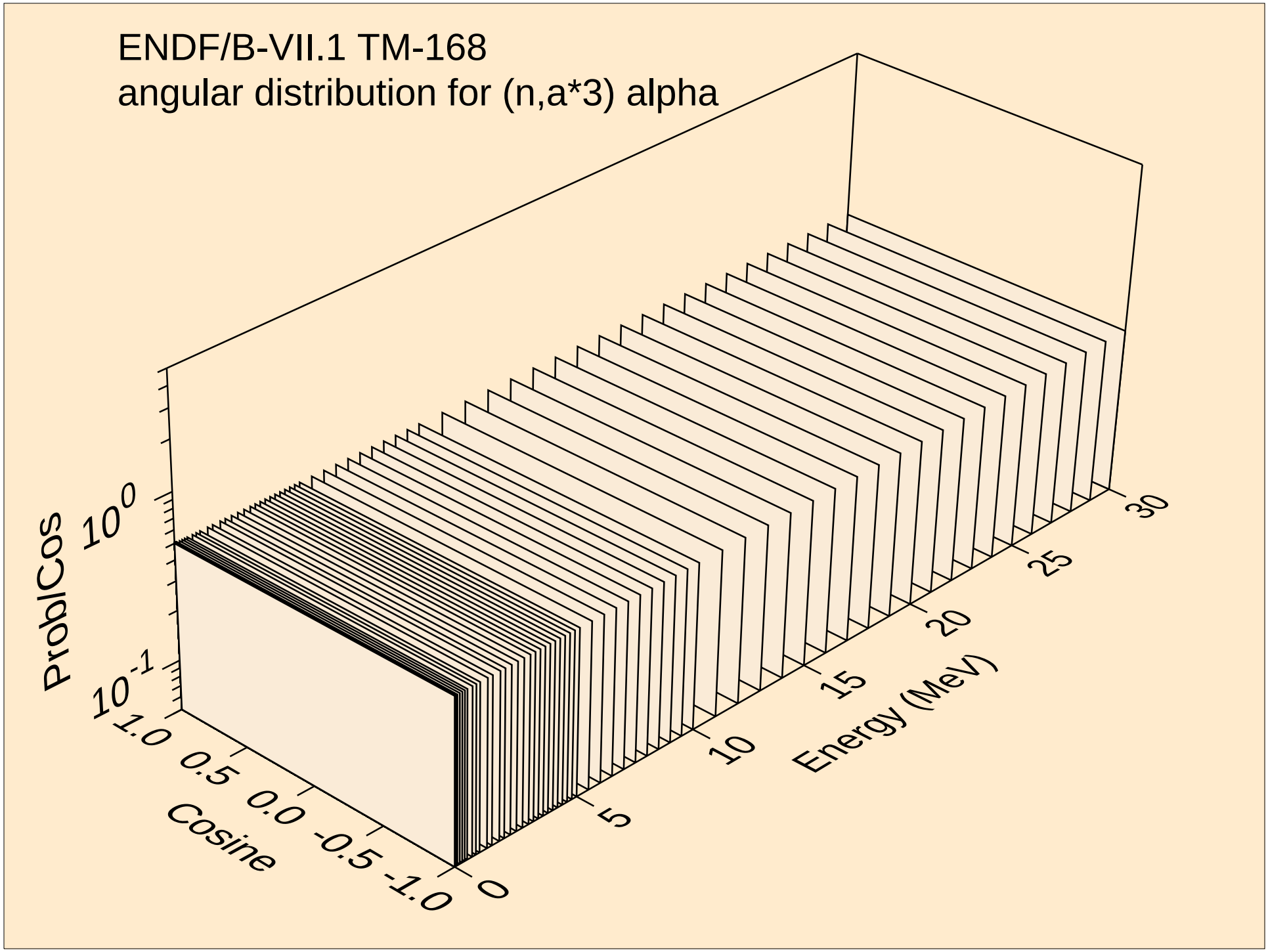

ENDF/B-VII.1 TM-168
alphas from (n,n*)a
Prob/MeV
10^-1
10^-3
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)

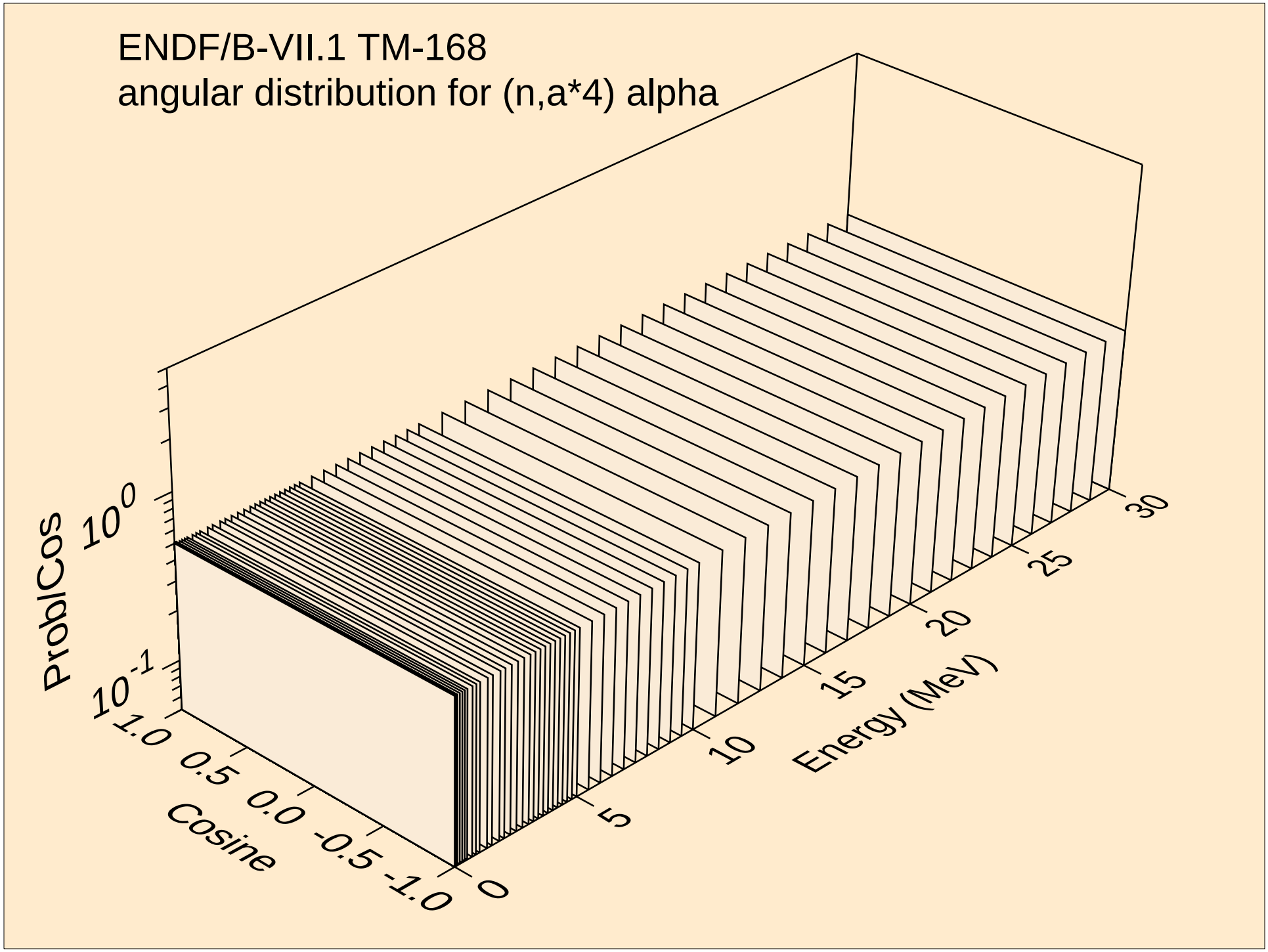

ENDF/B-VII.1 TM-168
alphas from (n,pa)
Prob/MeV
10^{0}
10^{-2}
10^{-4}
Sec. Energy
0
20
40
Energy (MeV)
0
5
10
15
20
25
30

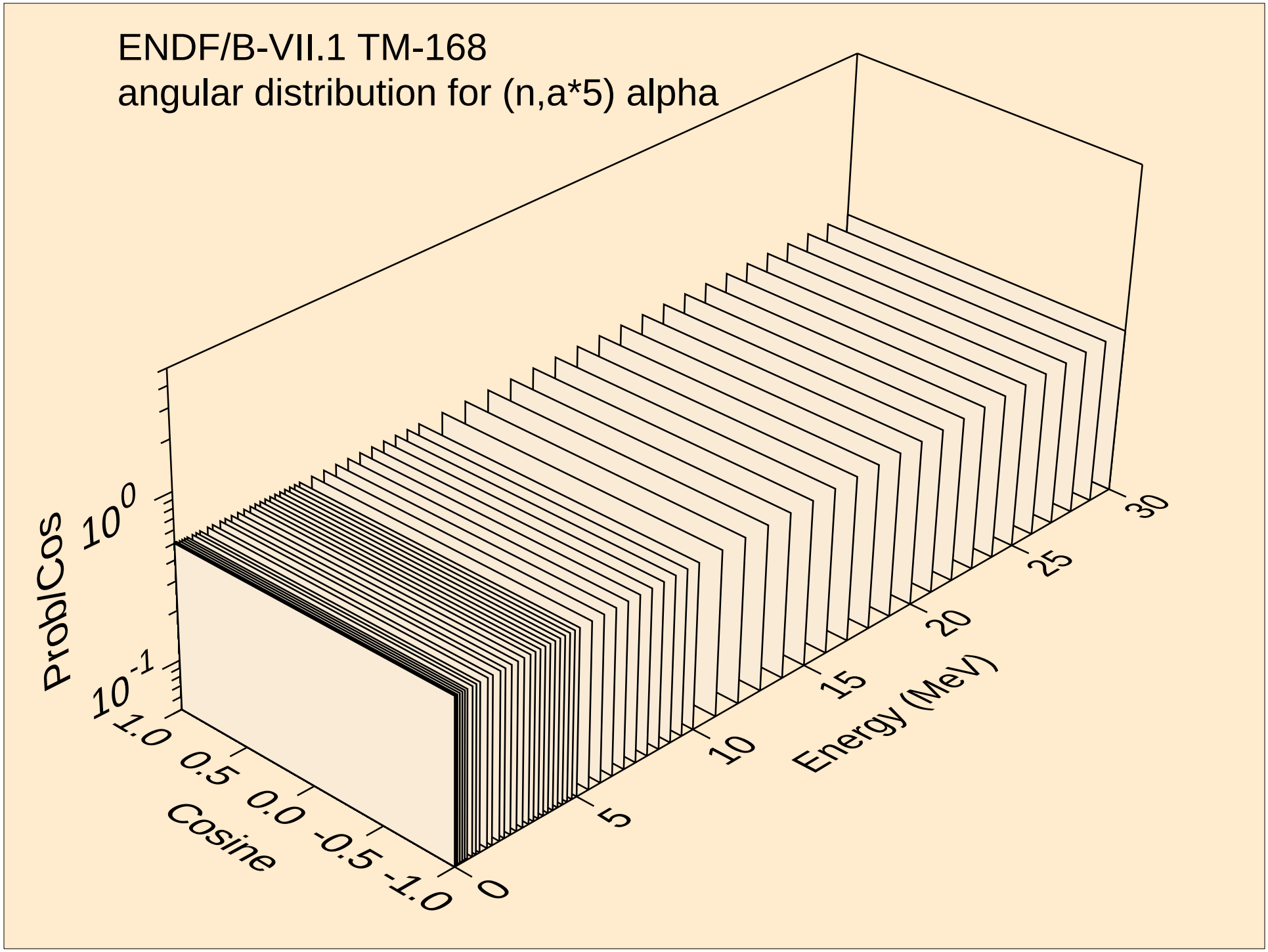

ENDF/B-VII.1 TM-168
angular distribution for (n,a*0) alpha
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

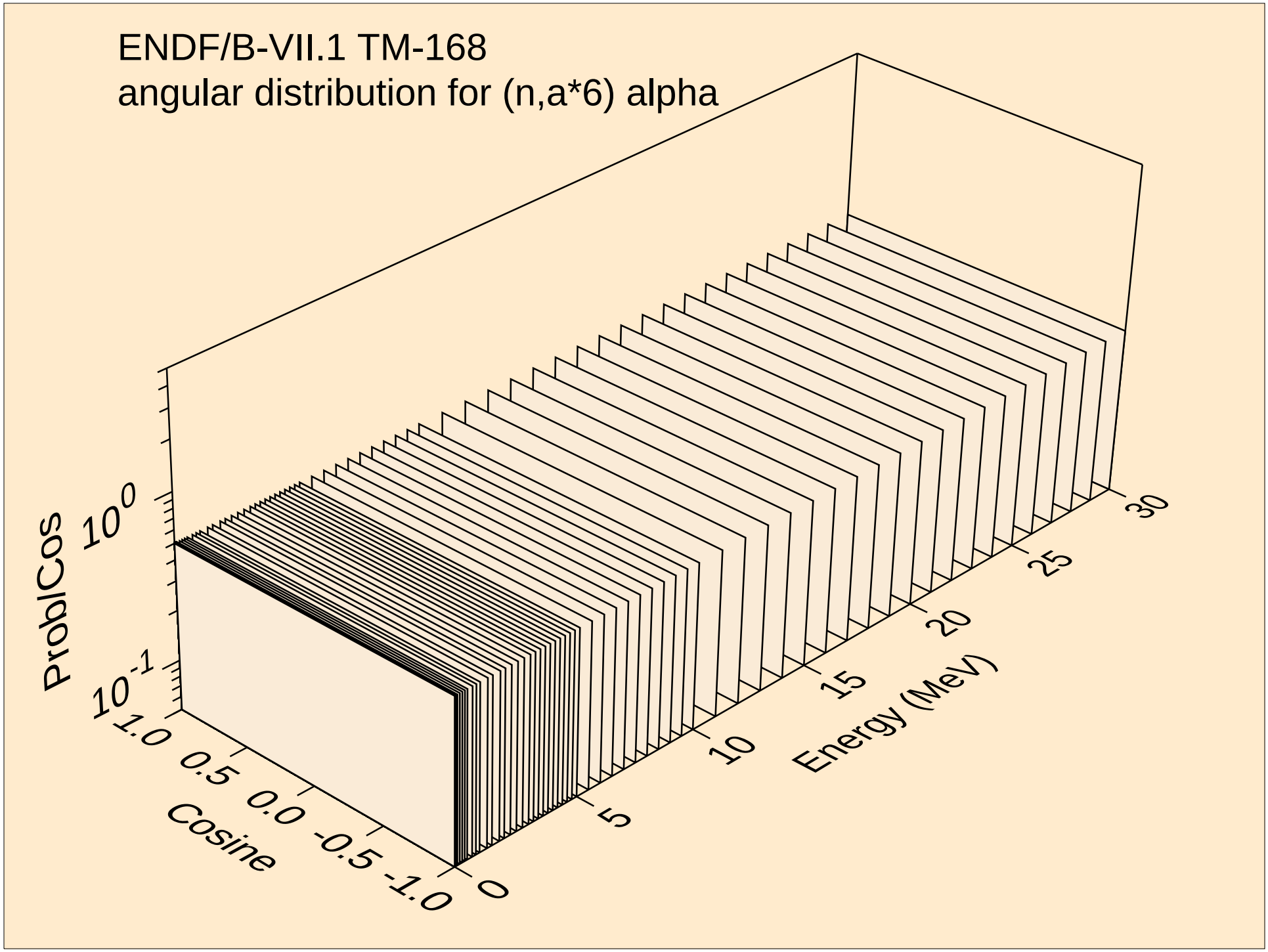

ENDF/B-VII.1 TM-168
angular distribution for (n,a*1) alpha
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

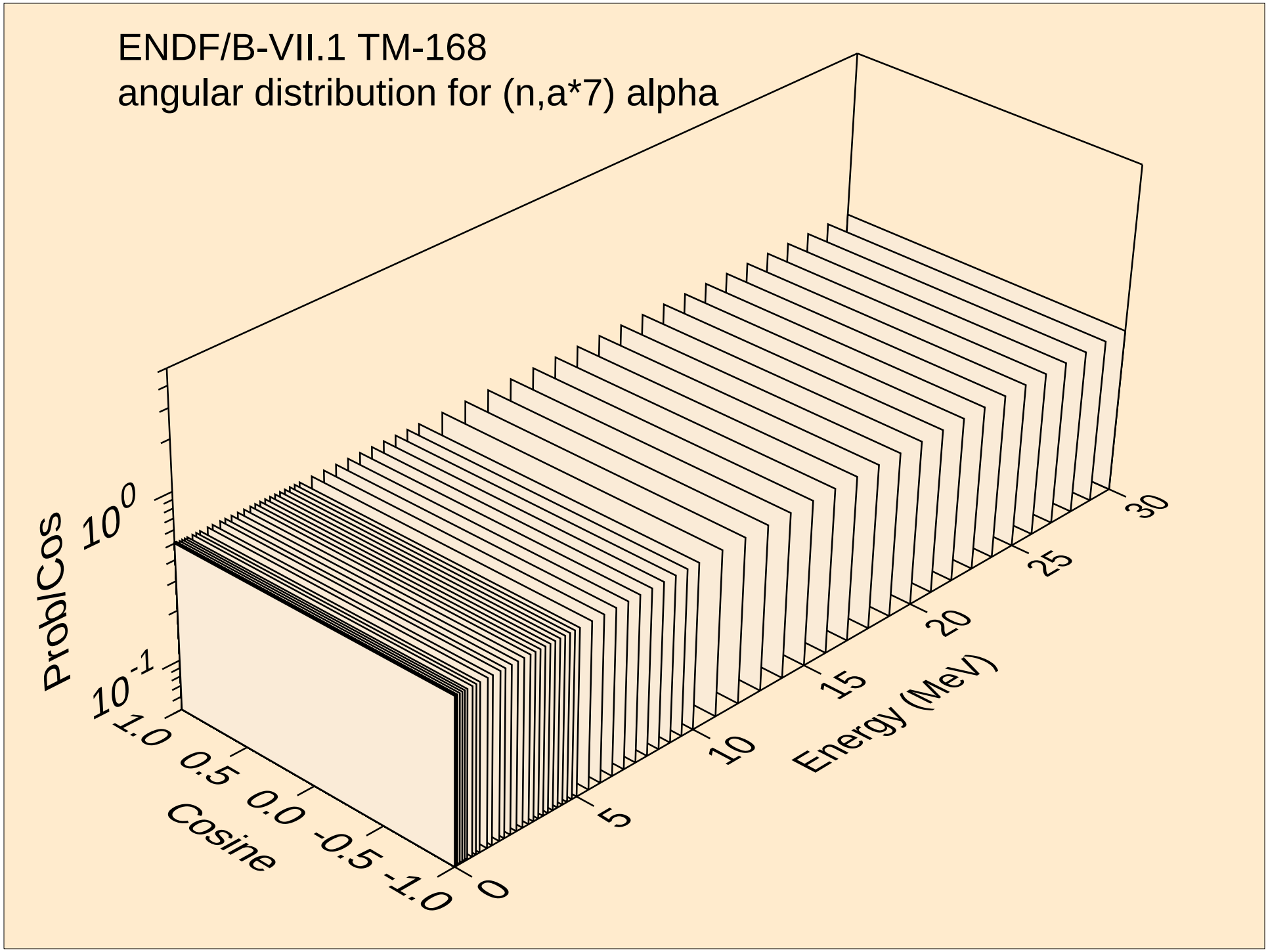

ENDF/B-VII.1 TM-168
angular distribution for (n,a*2) alpha
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

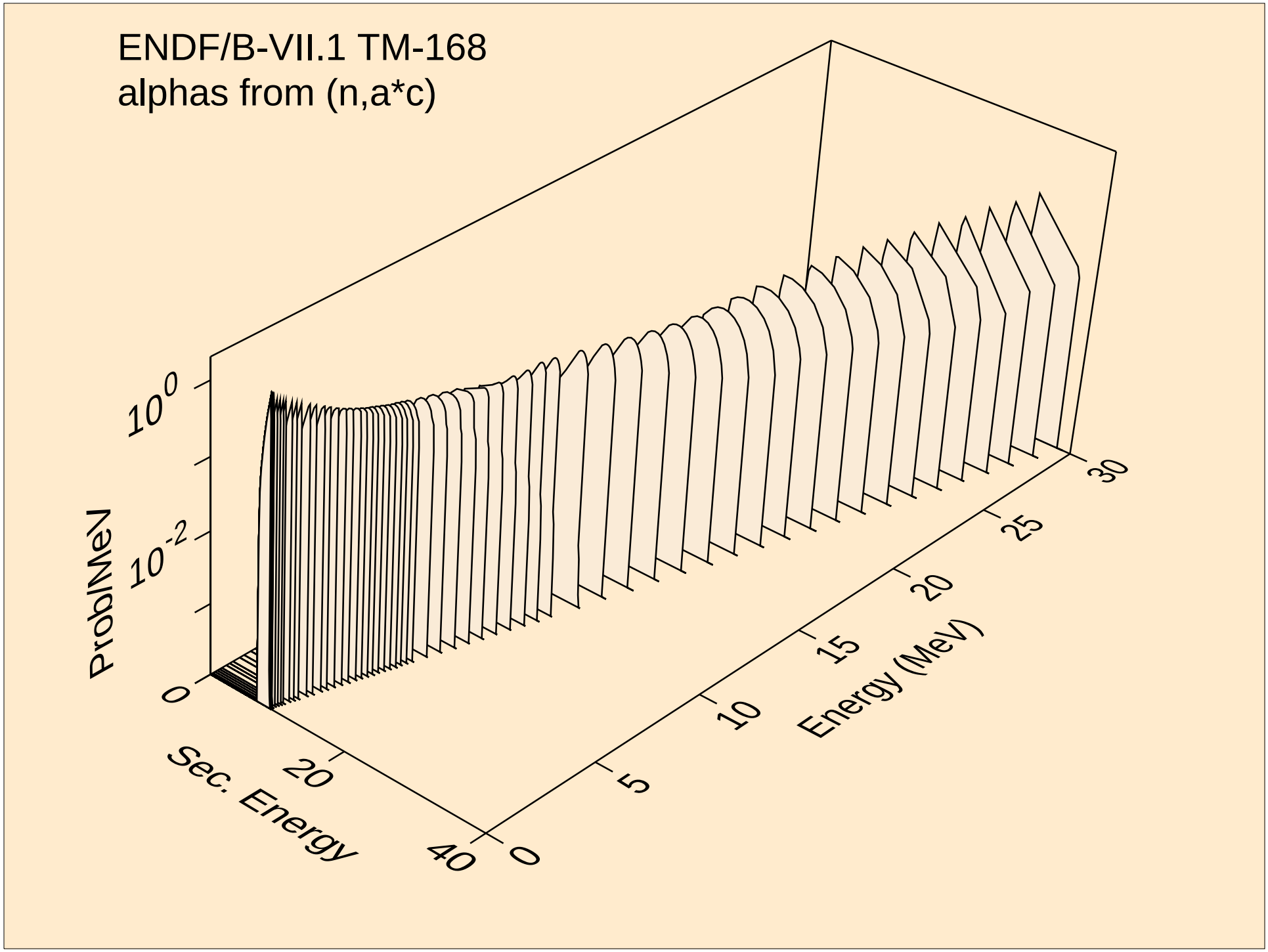

ENDF/B-VII.1 TM-168
angular distribution for (n,a*3) alpha
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


ENDF/B-VII.1 TM-168
angular distribution for (n,a*4) alpha
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


ENDF/B-VII.1 TM-168
angular distribution for (n,a*5) alpha
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


ENDF/B-VII.1 TM-168
angular distribution for (n,a*6) alpha
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


ENDF/B-VII.1 TM-168
angular distribution for (n,a*7) alpha
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


ENDF/B-VII.1 TM-168
alphas from (n,a*c)
Prob/MeV
10^0
10^{-2}
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)