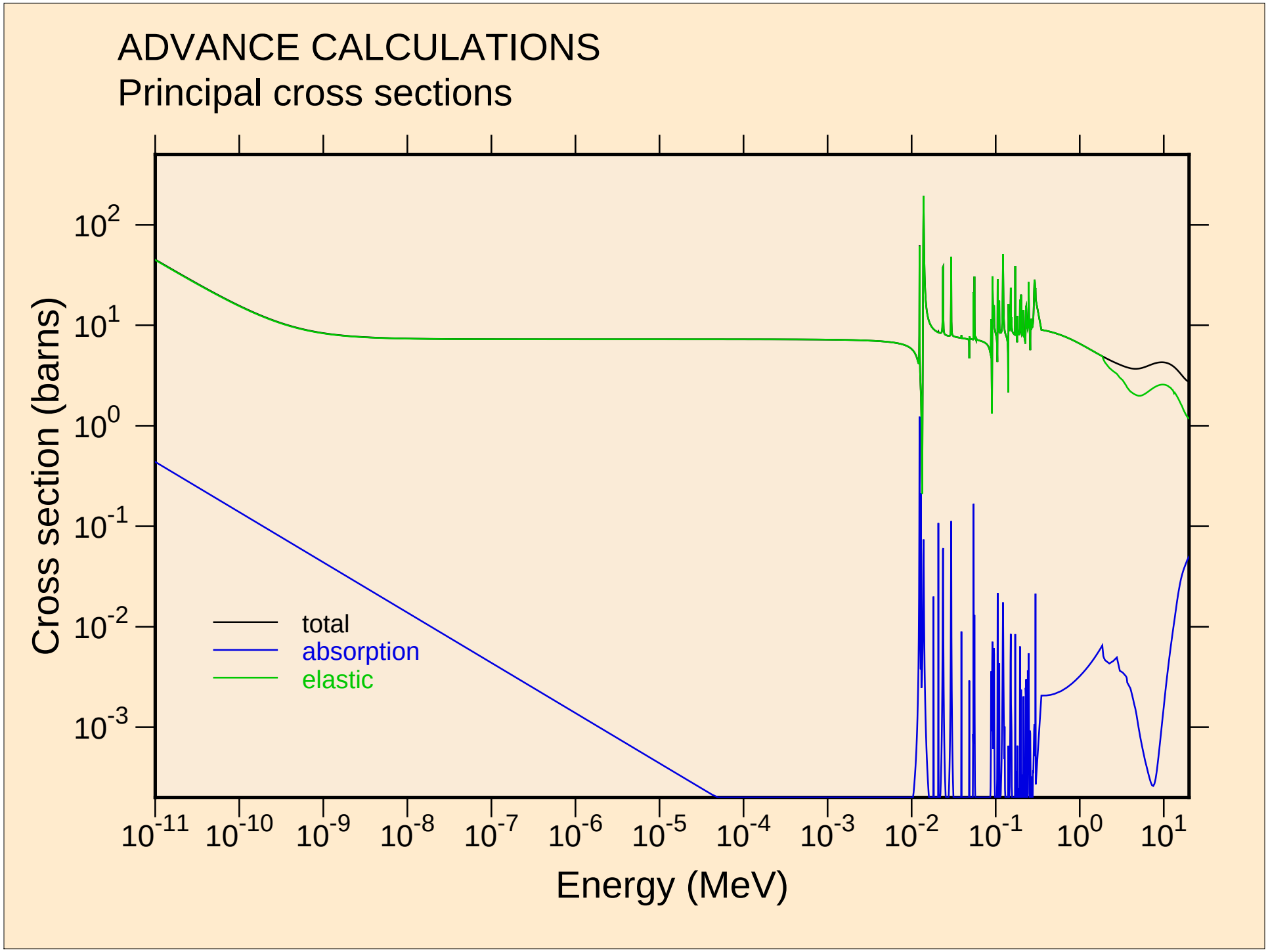
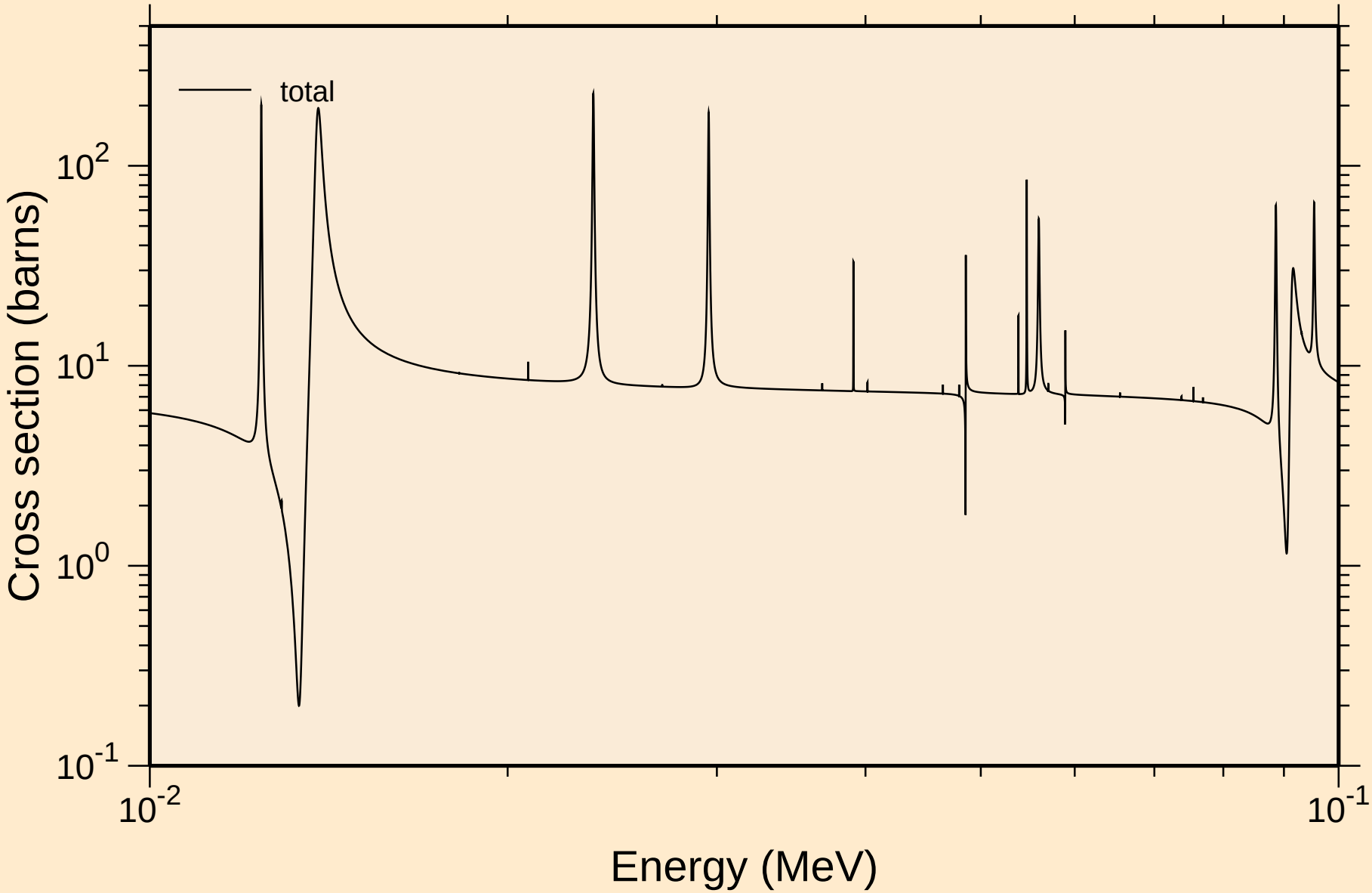
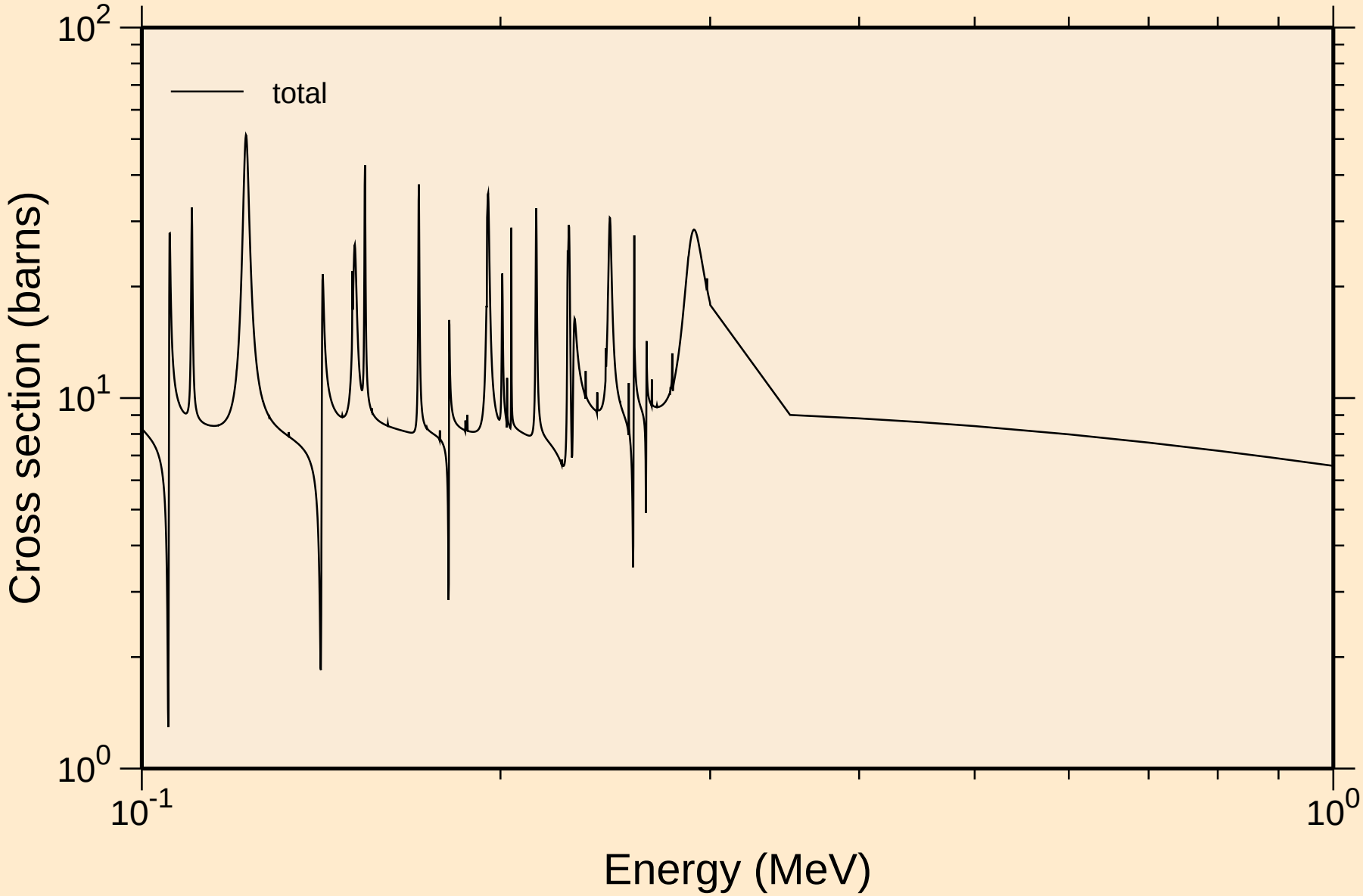

ADVANCE CALCULATIONS
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
10^{-1}
10^{0}
10^{1}

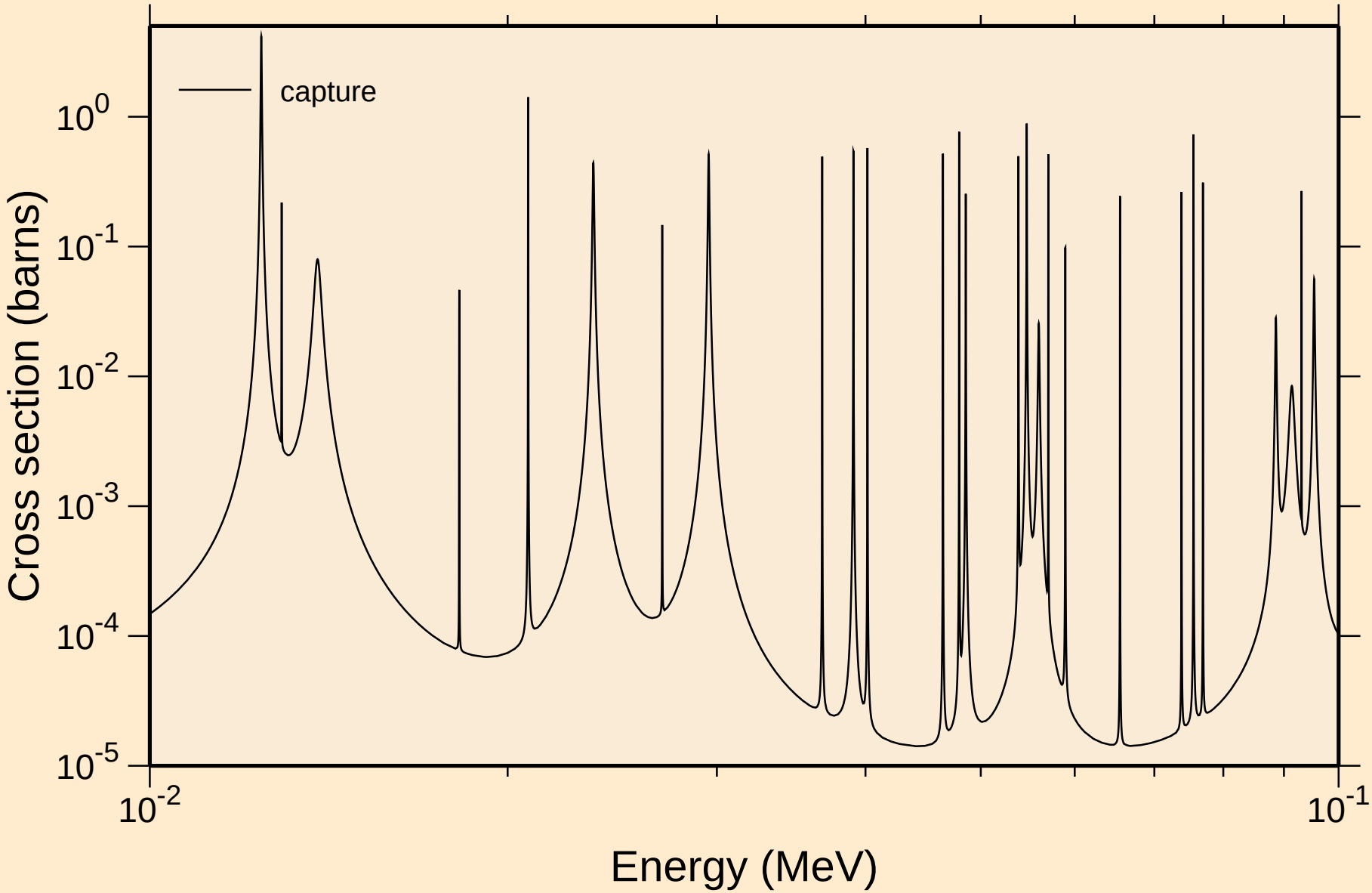
ADVANCE CALCULATIONS
resonance total cross section



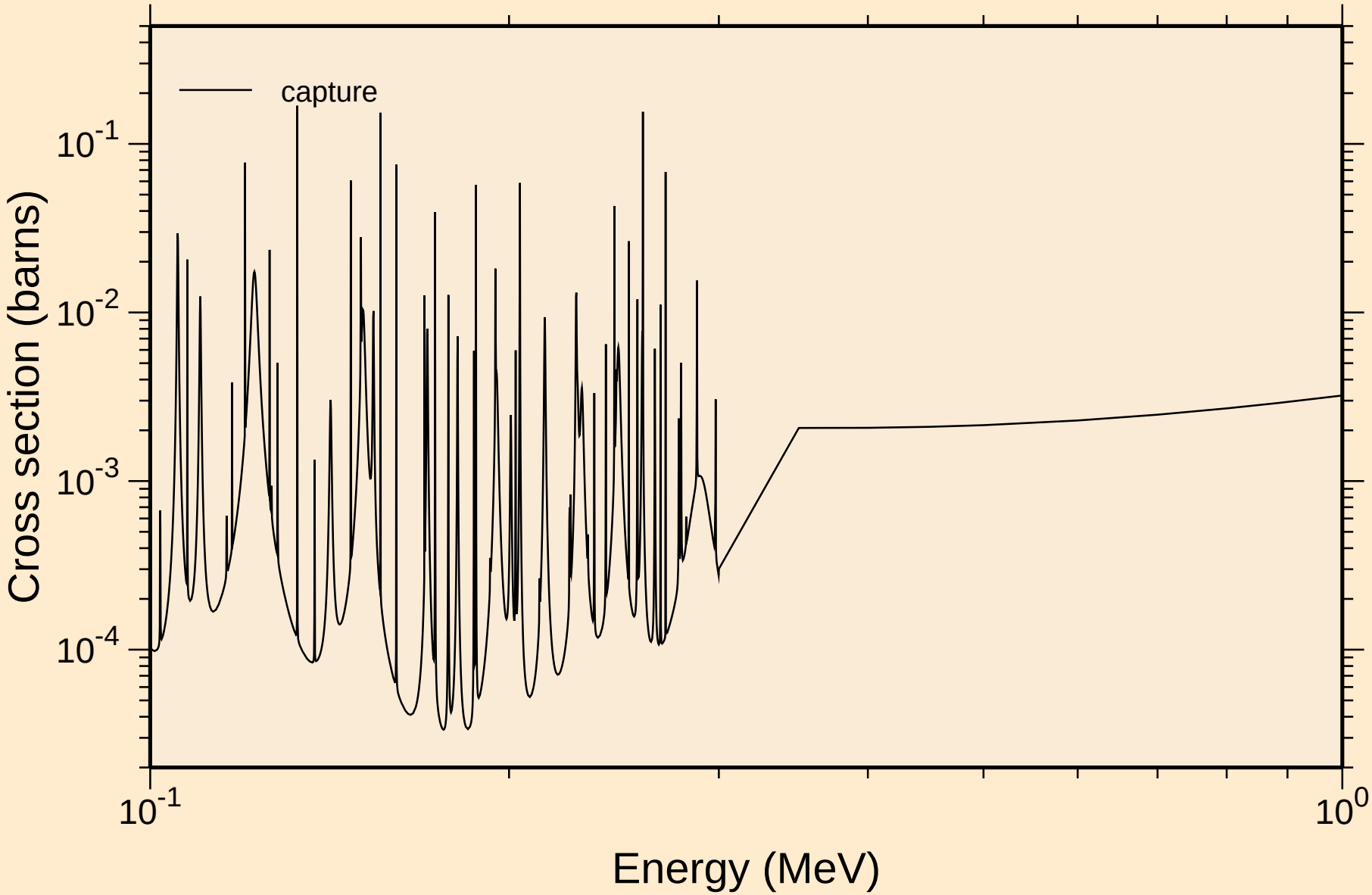
ADVANCE CALCULATIONS
resonance total cross section



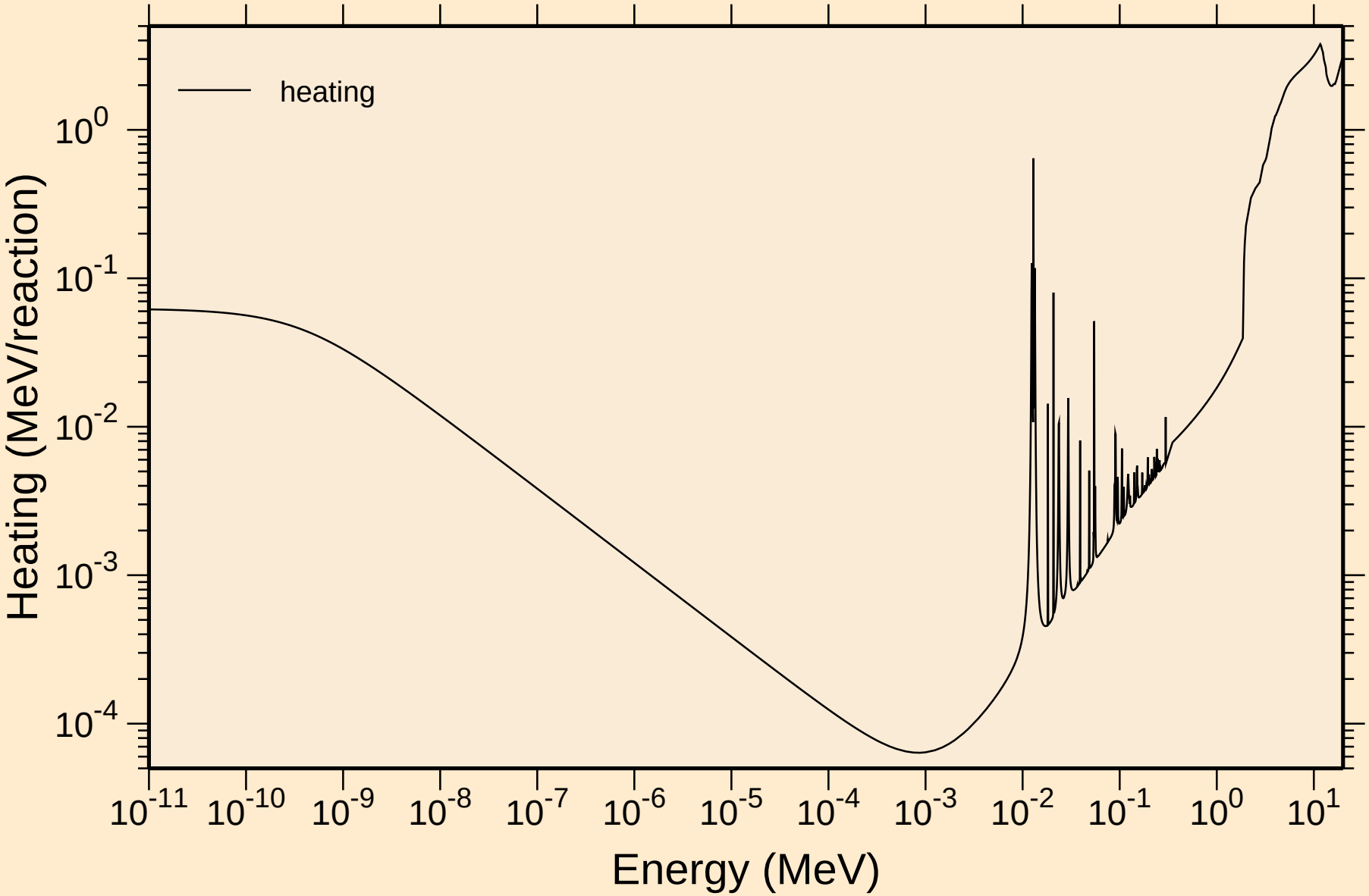
ADVANCE CALCULATIONS
resonance absorption cross sections



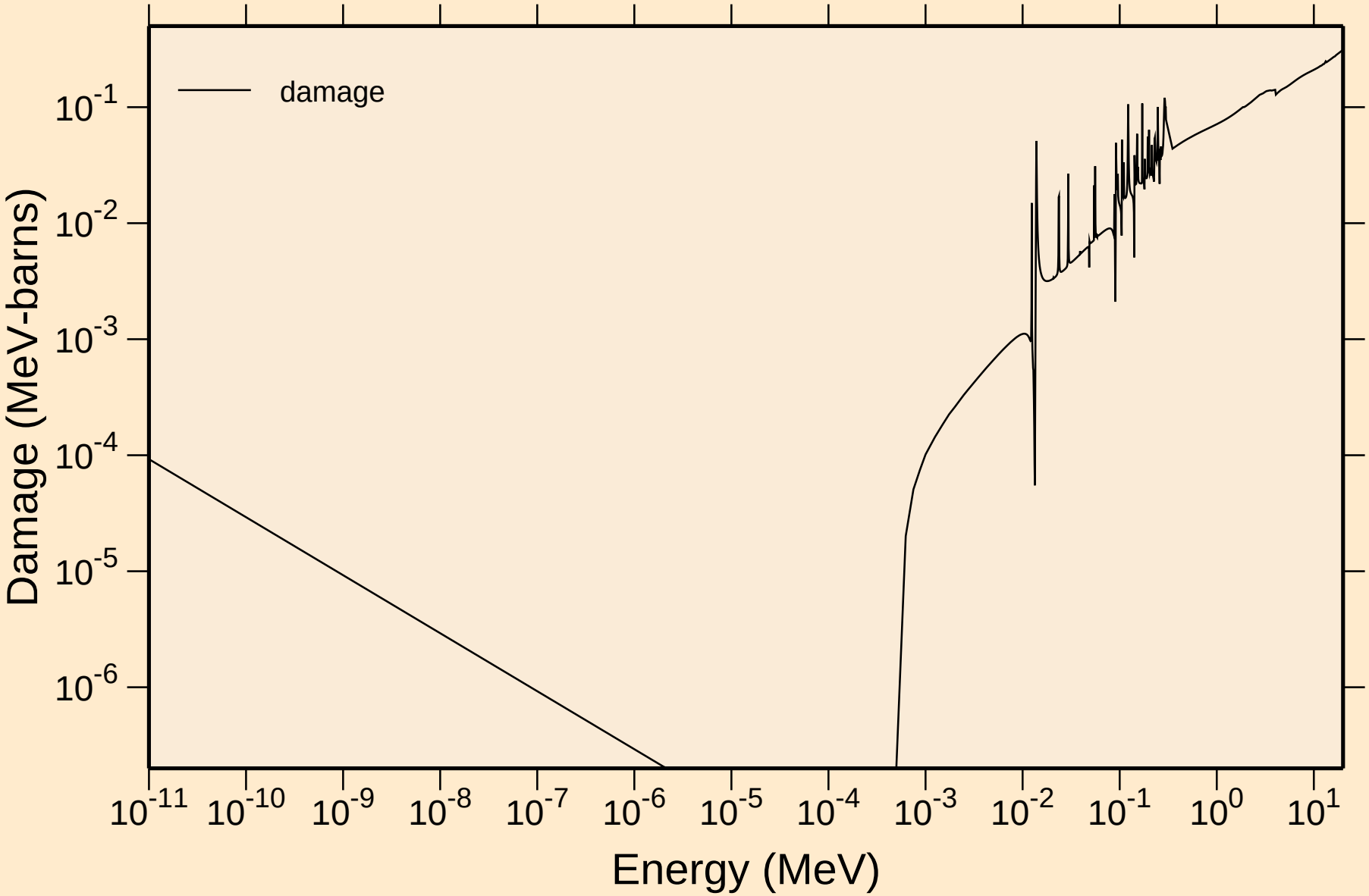
ADVANCE CALCULATIONS
resonance absorption cross sections



ADVANCE CALCULATIONS
Heating

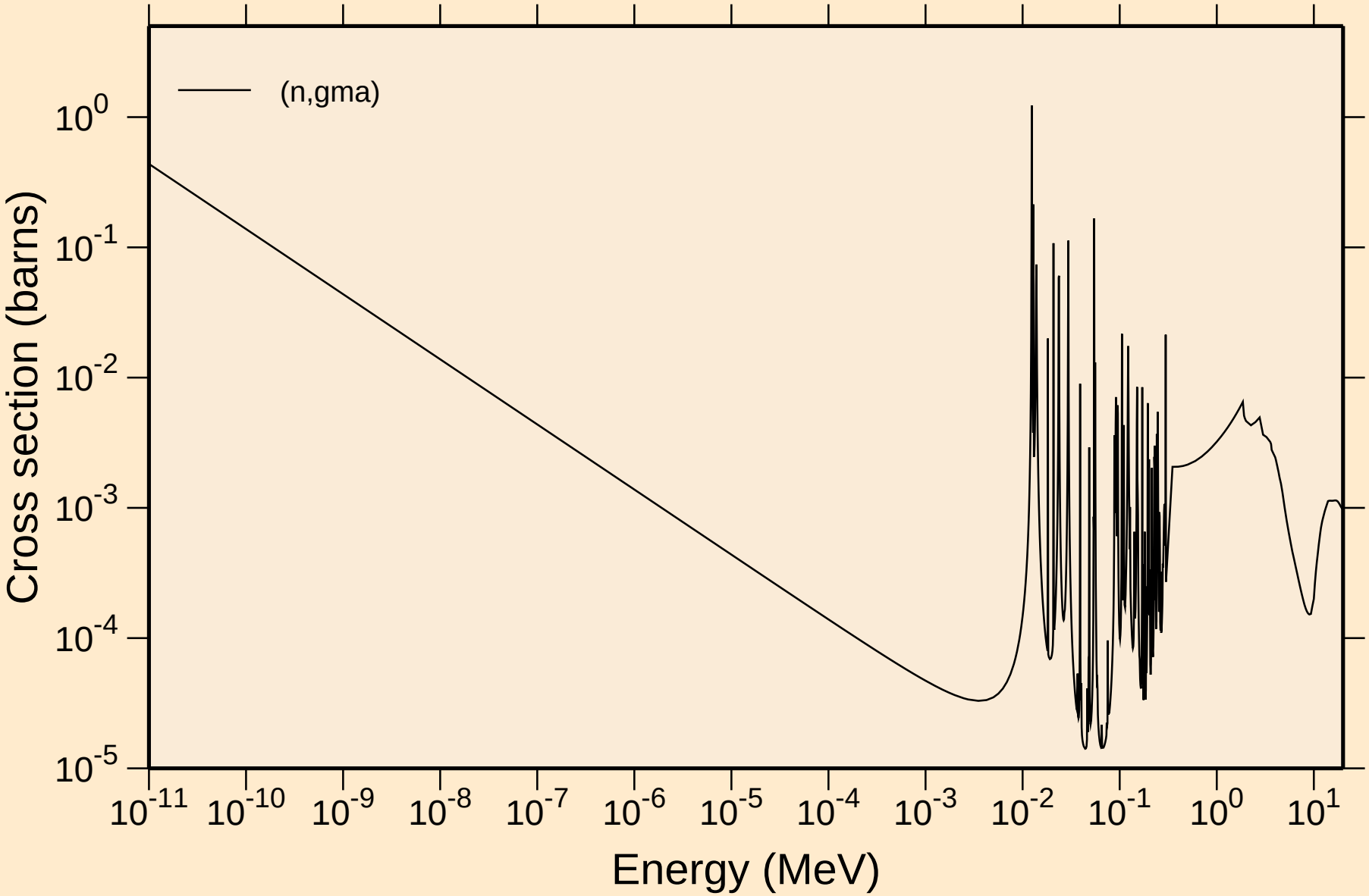


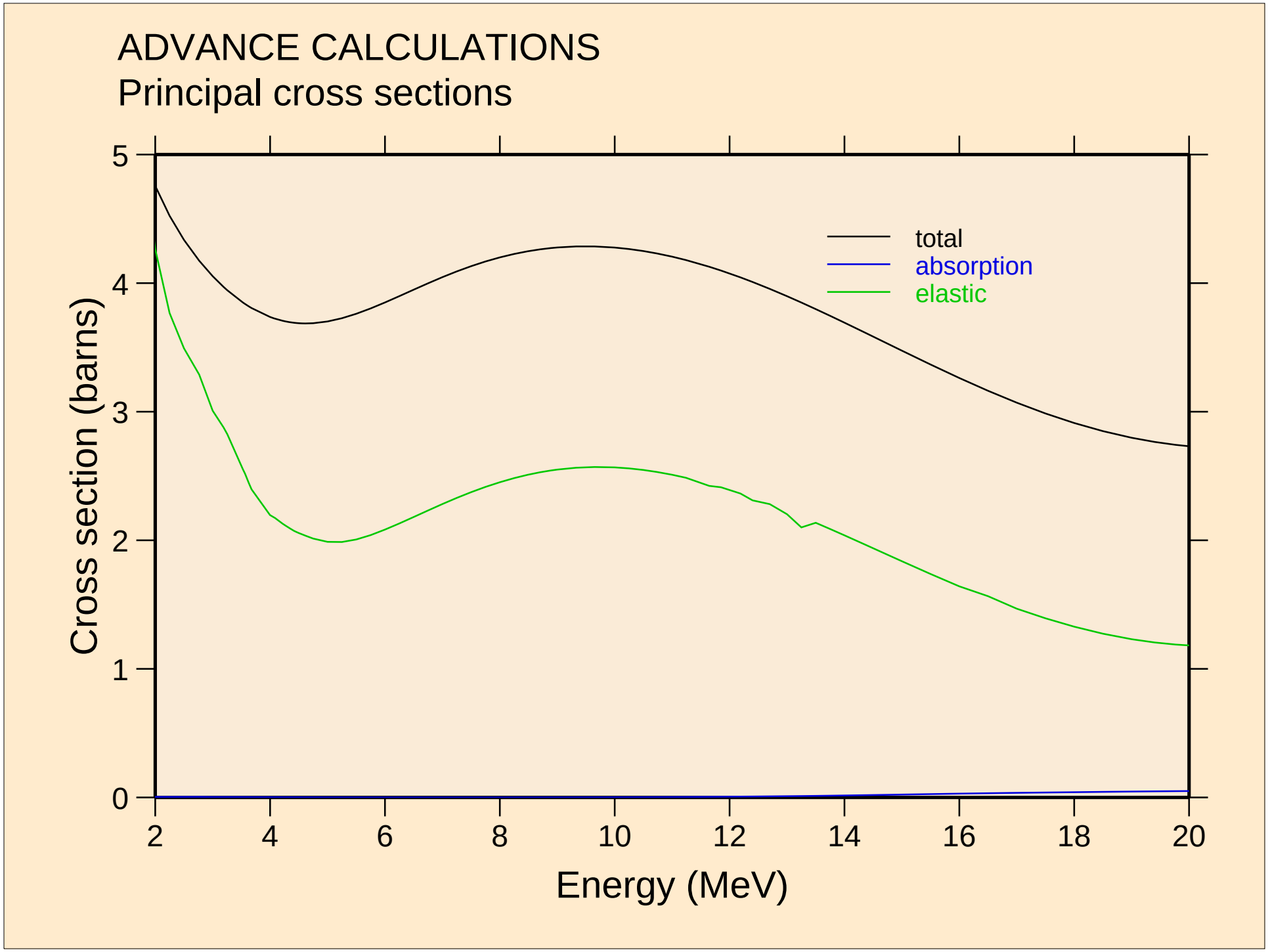
ADVANCE CALCULATIONS
Damage

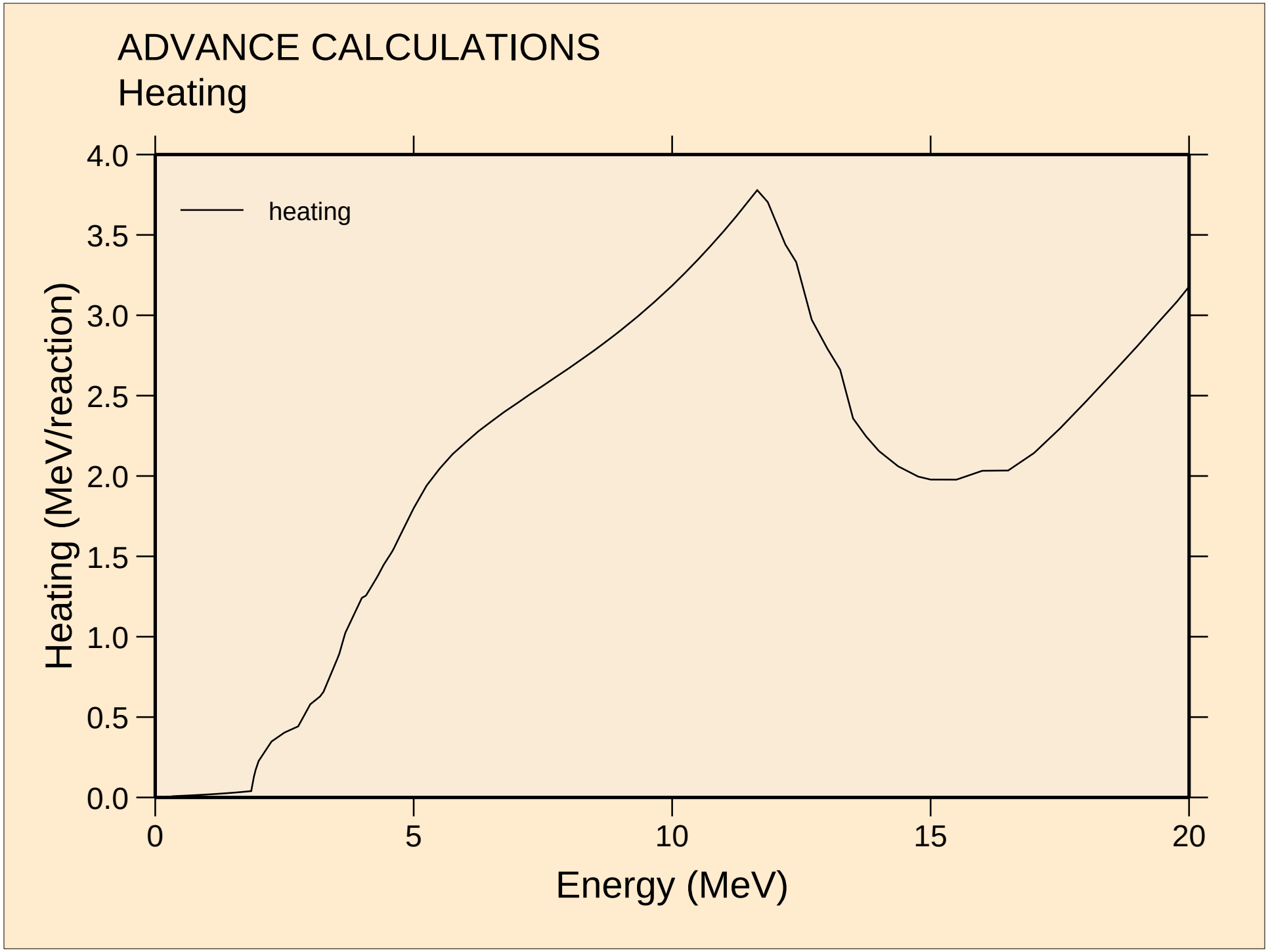


ADVANCE CALCULATIONS

Non-threshold reactions

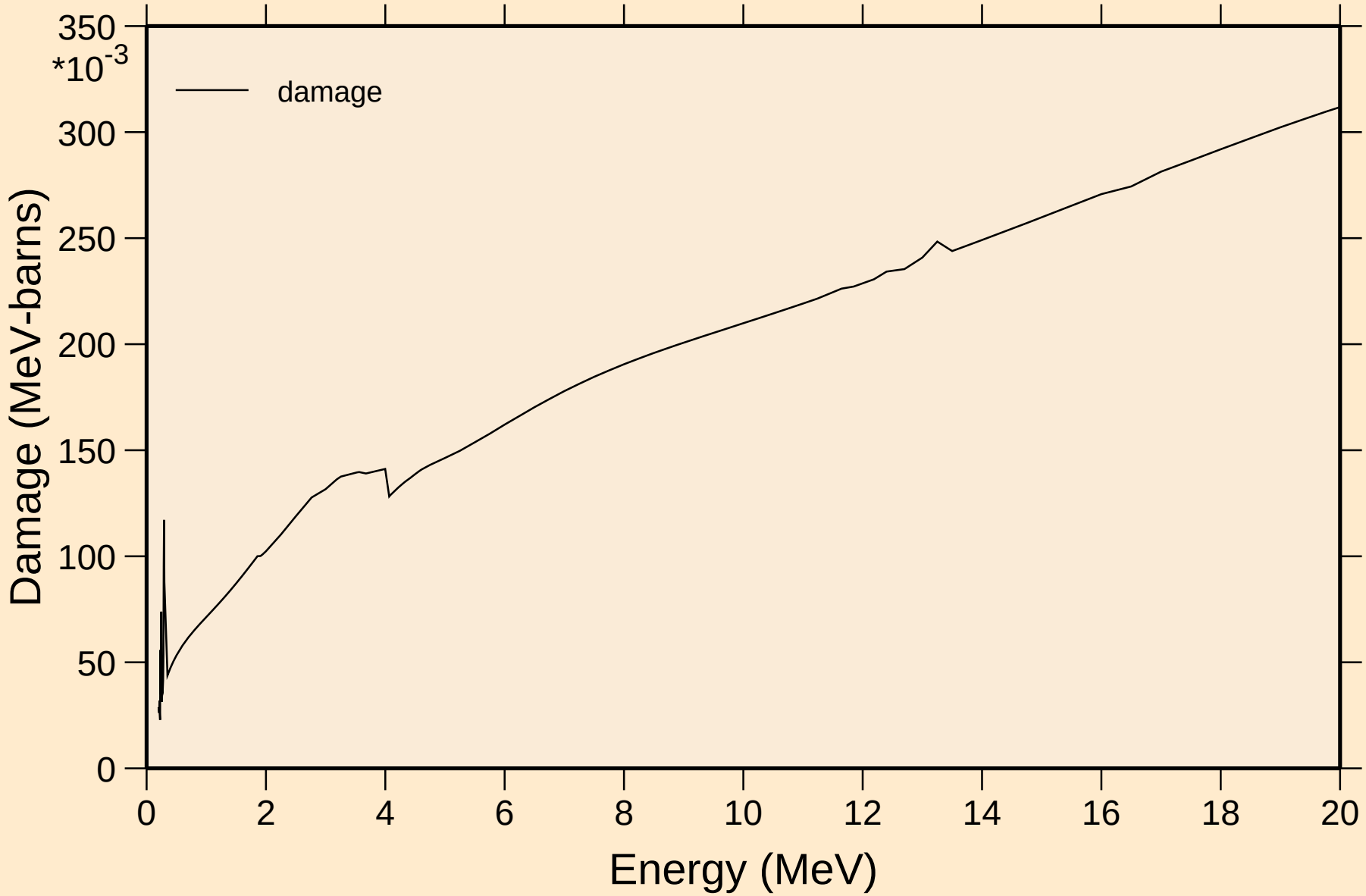



ADVANCE CALCULATIONS
Principal cross sections
total
absorption
elastic
Cross section (barns)
Energy (MeV)
0
1
2
3
4
5
2
4
6
8
10
12
14
16
18
20


ADVANCE CALCULATIONS
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
0
5
10
15
20

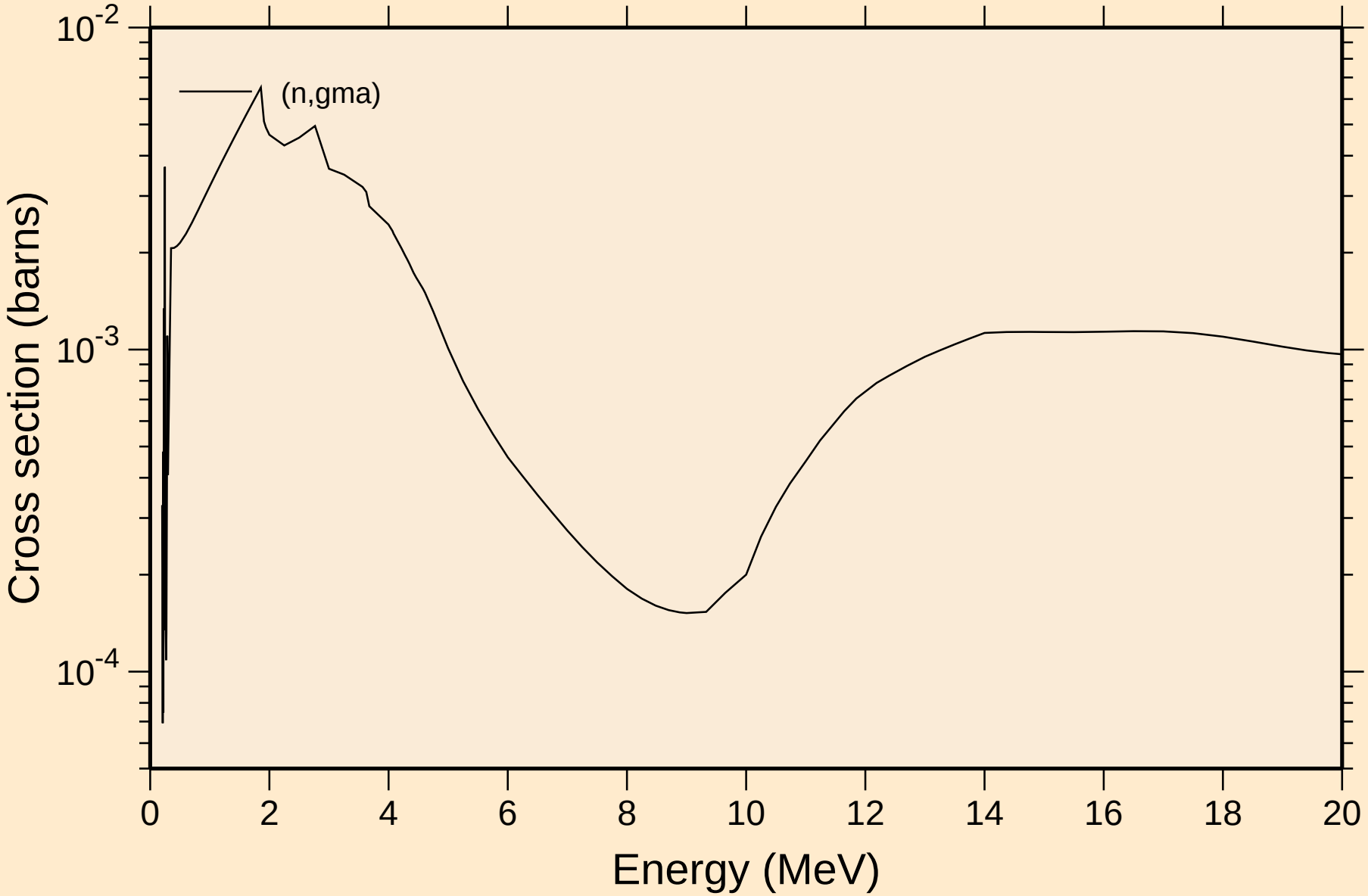
ADVANCE CALCULATIONS

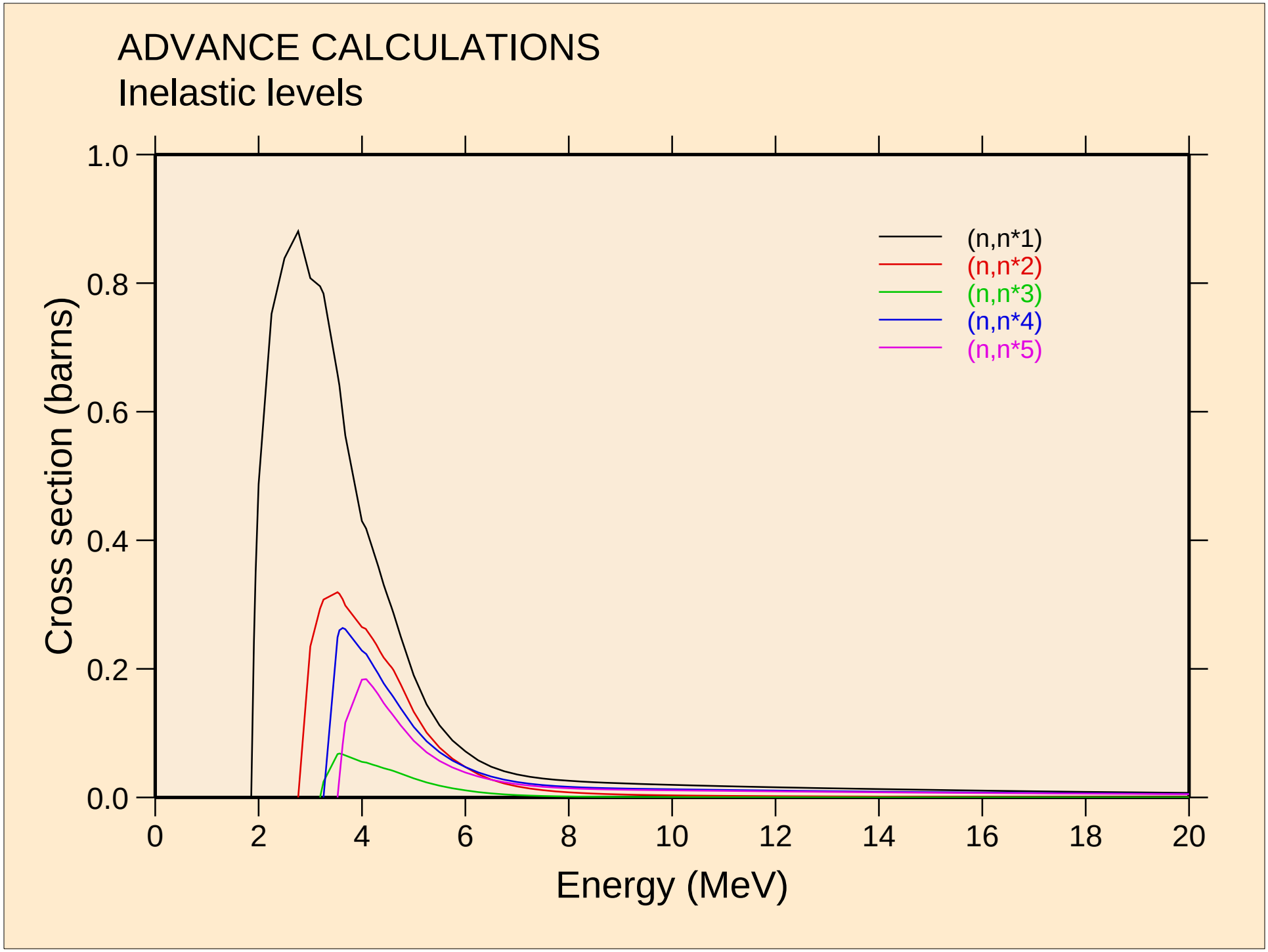
Damage

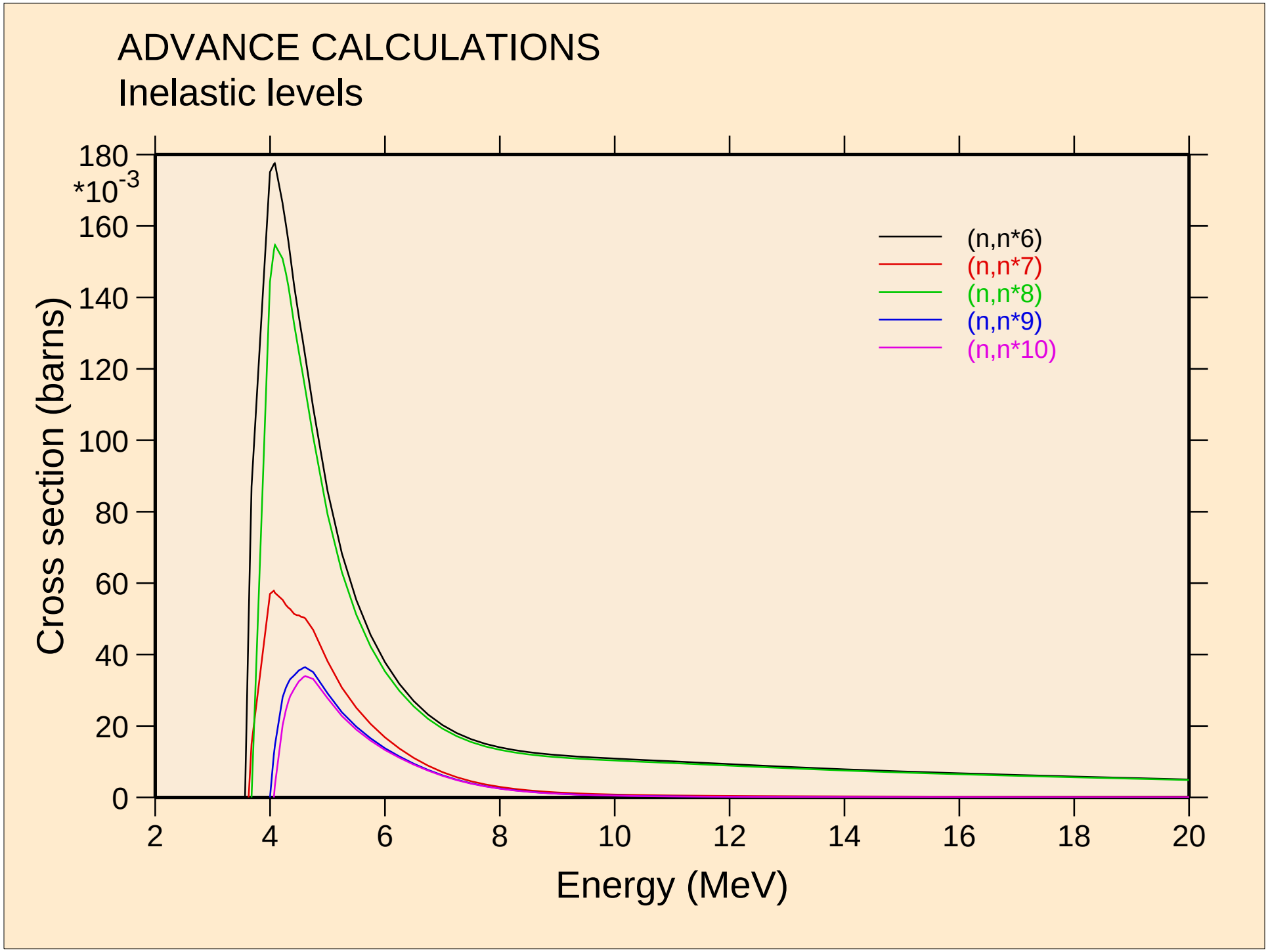


ADVANCE CALCULATIONS

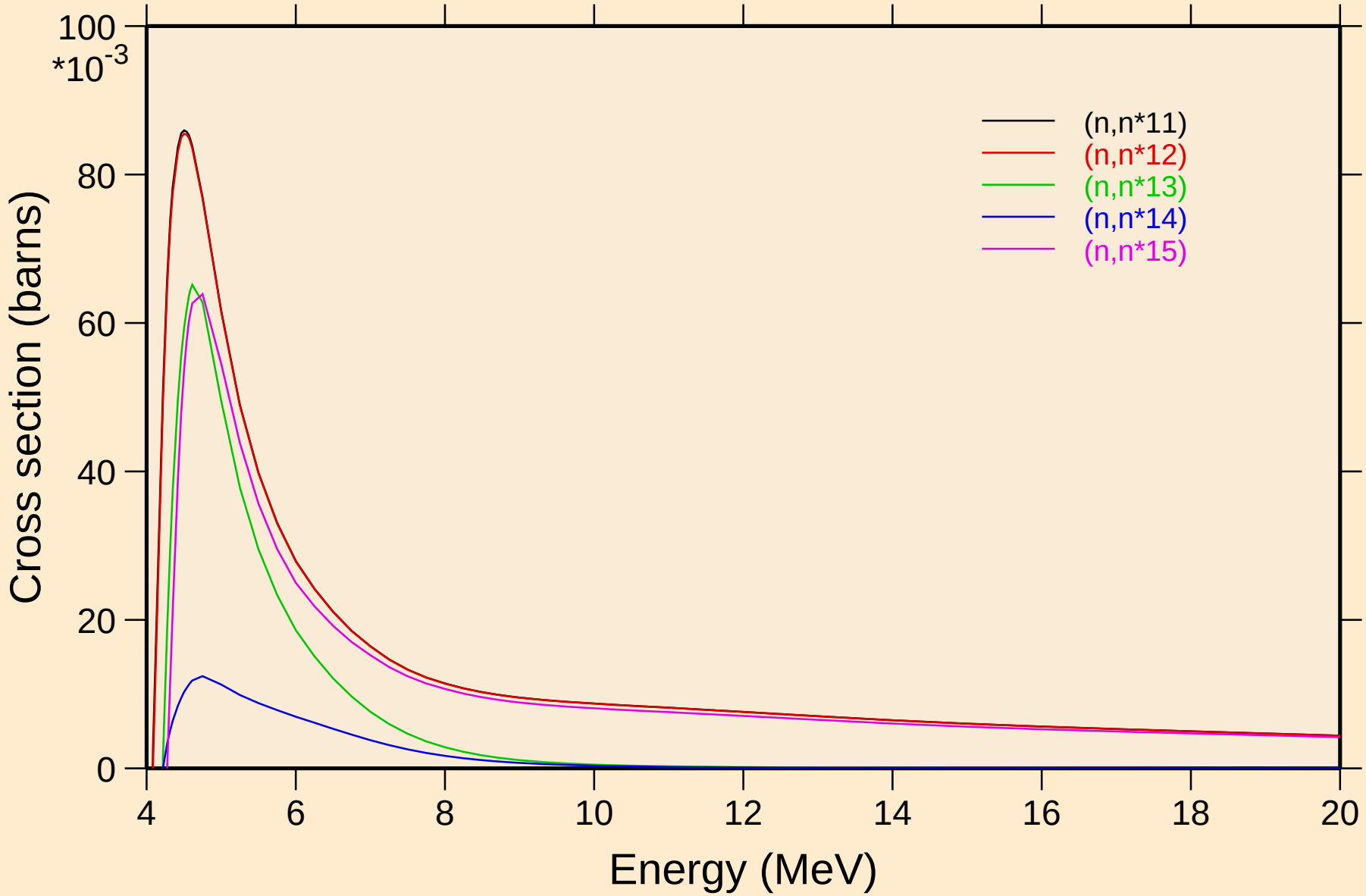
Non-threshold reactions




ADVANCE CALCULATIONS
Inelastic levels
Cross section (barns)
Energy (MeV)
(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)
0.0
0.2
0.4
0.6
0.8
1.0
0
2
4
6
8
10
12
14
16
18
20

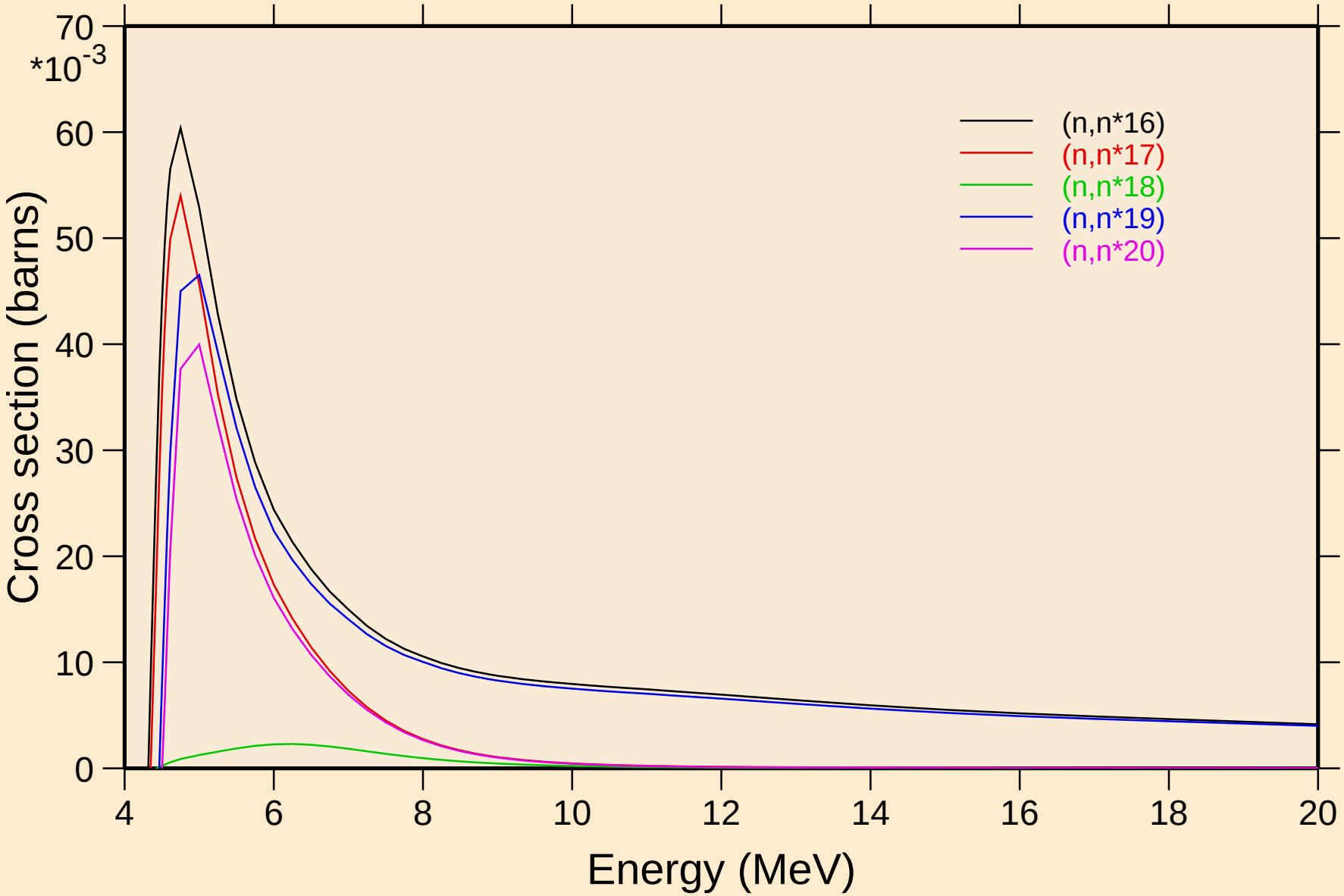

ADVANCE CALCULATIONS
Inelastic levels
Cross section (barns)
*10^-3
180
160
140
120
100
80
60
40
20
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)
(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
(n,n*10)

ADVANCE CALCULATIONS
Inelastic levels



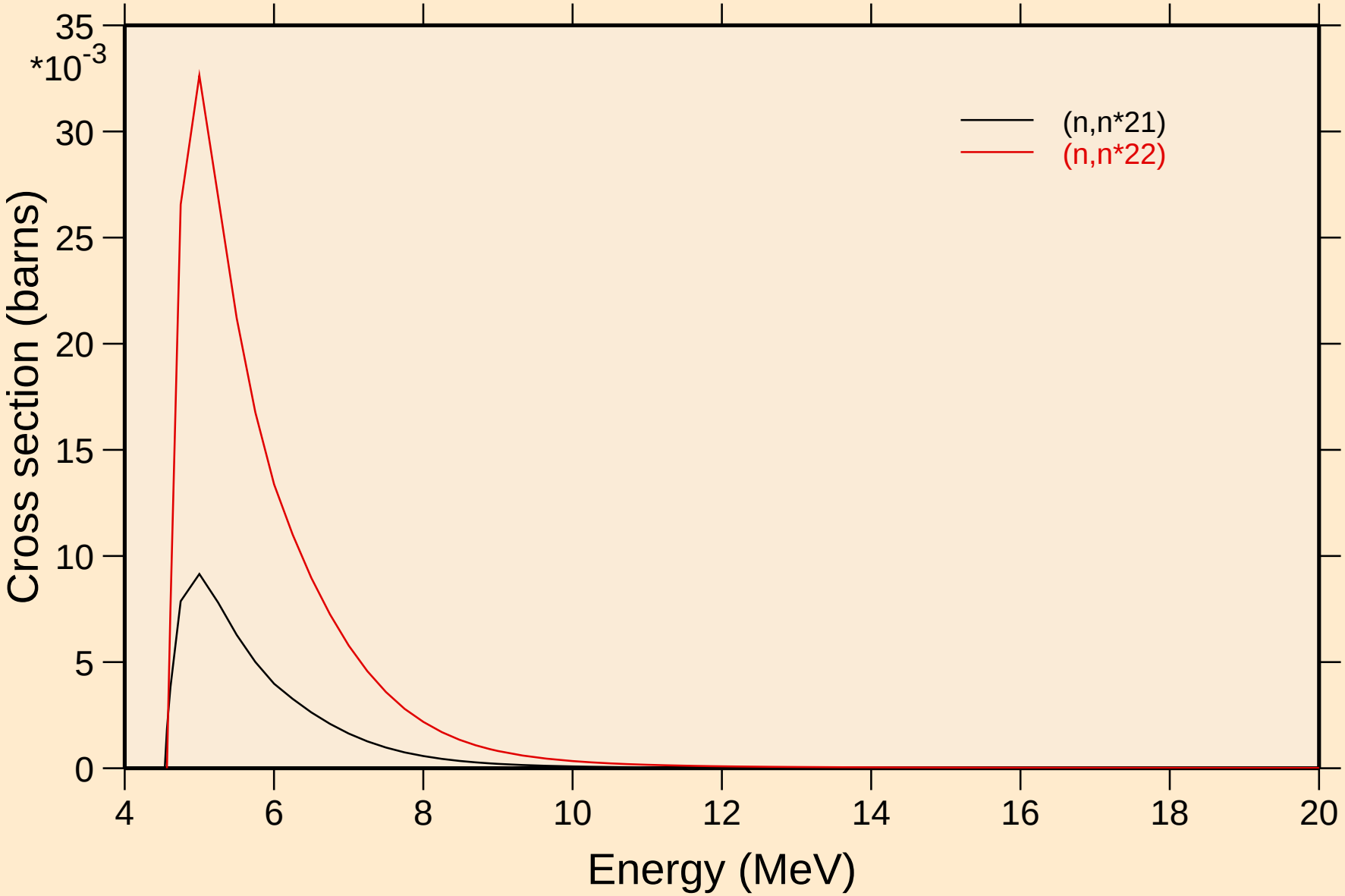
ADVANCE CALCULATIONS

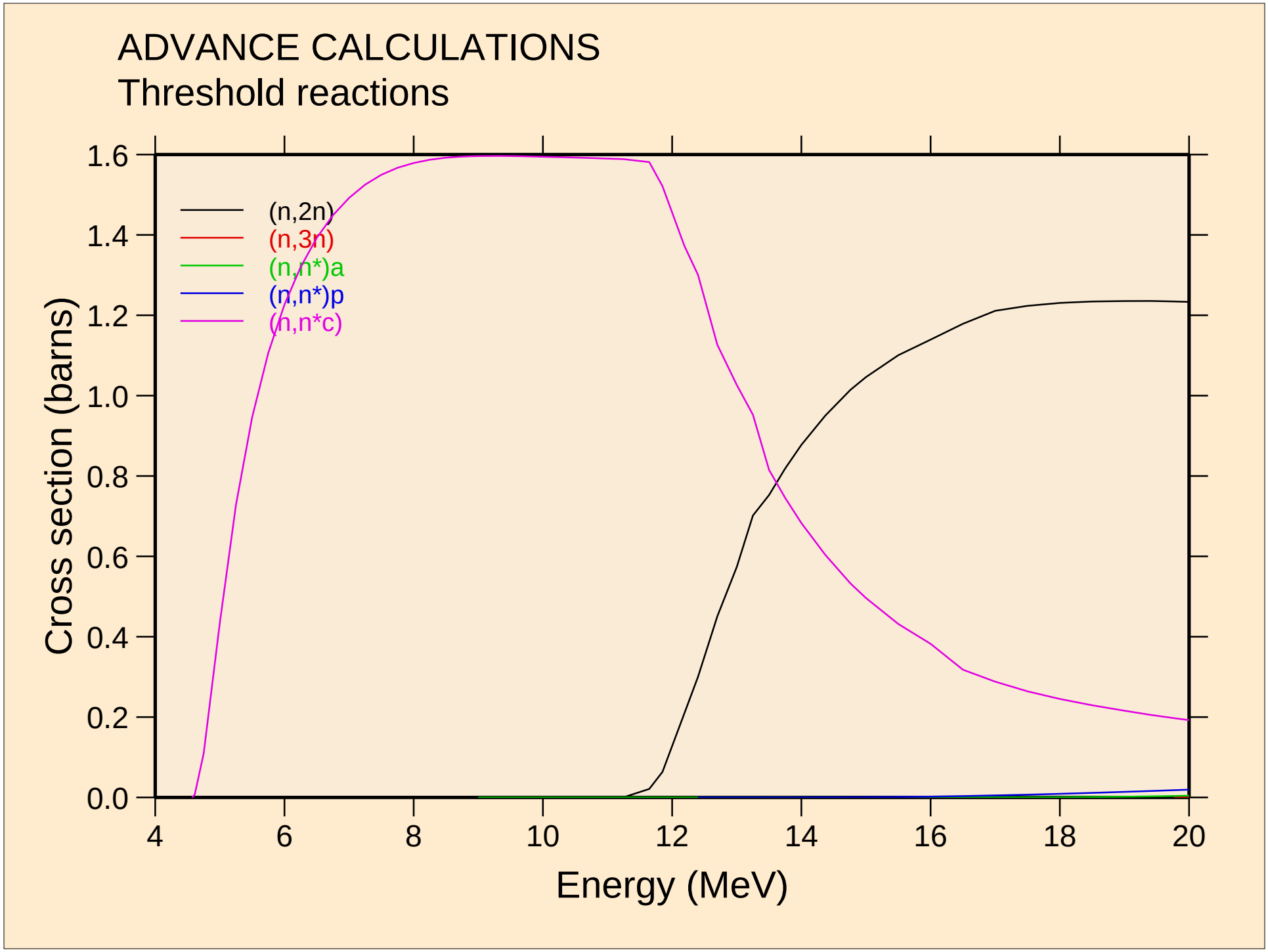
Inelastic levels



ADVANCE CALCULATIONS

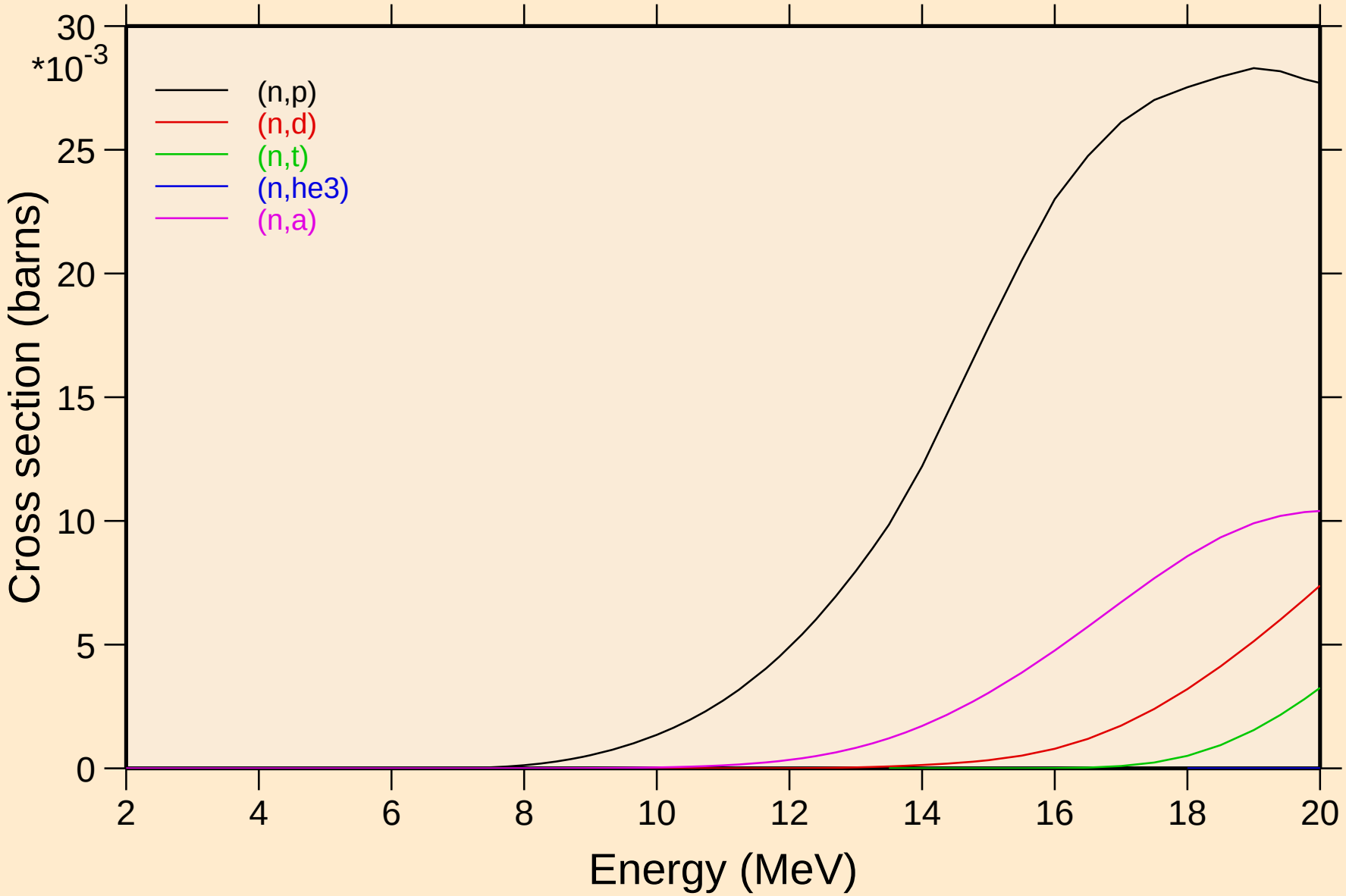
Inelastic levels



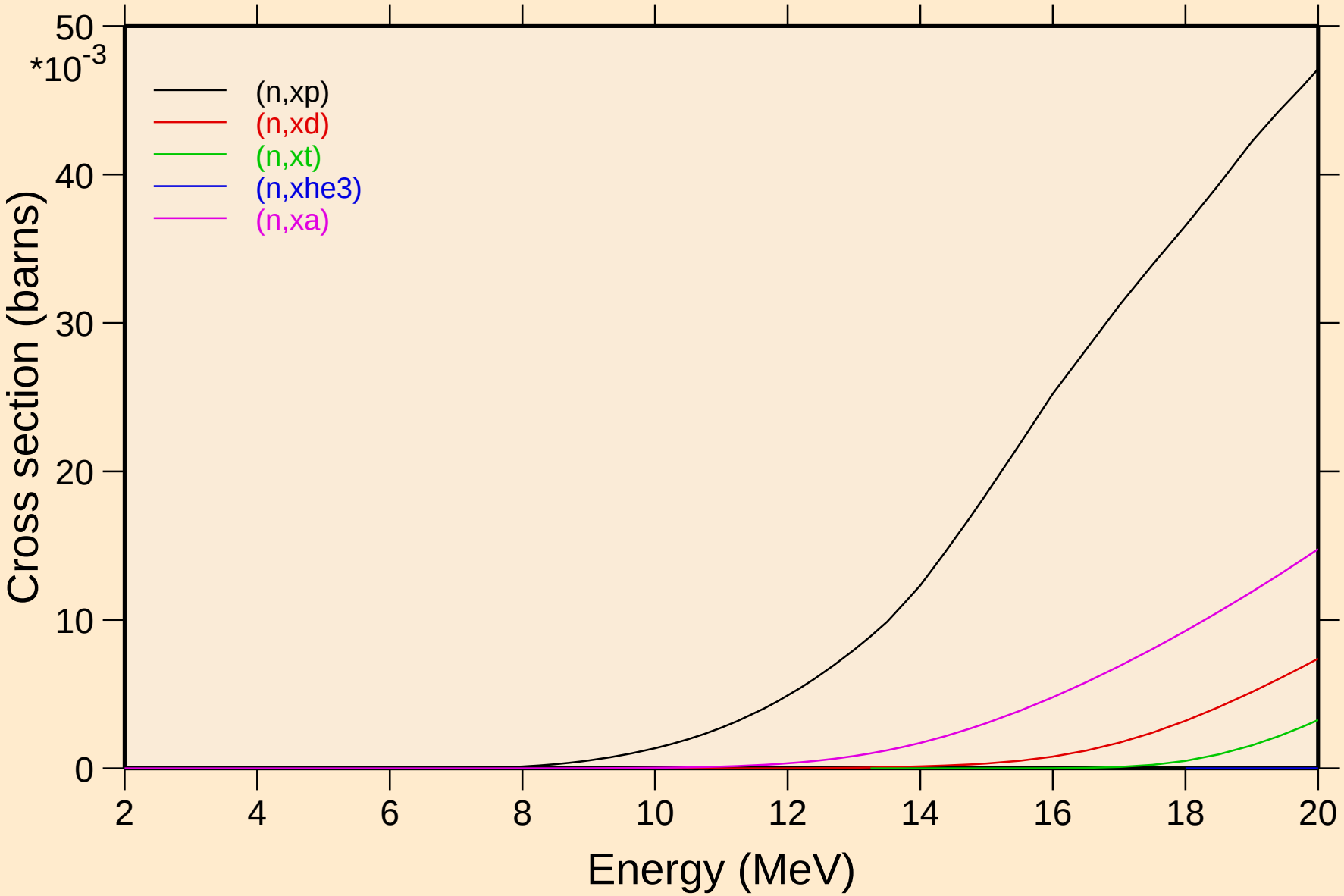

ADVANCE CALCULATIONS
Threshold reactions
(n,2n)
(n,3n)
(n,n*)a
(n,n*)p
(n,n*c)
Cross section (barns)
Energy (MeV)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
4
6
8
10
12
14
16
18
20

ADVANCE CALCULATIONS

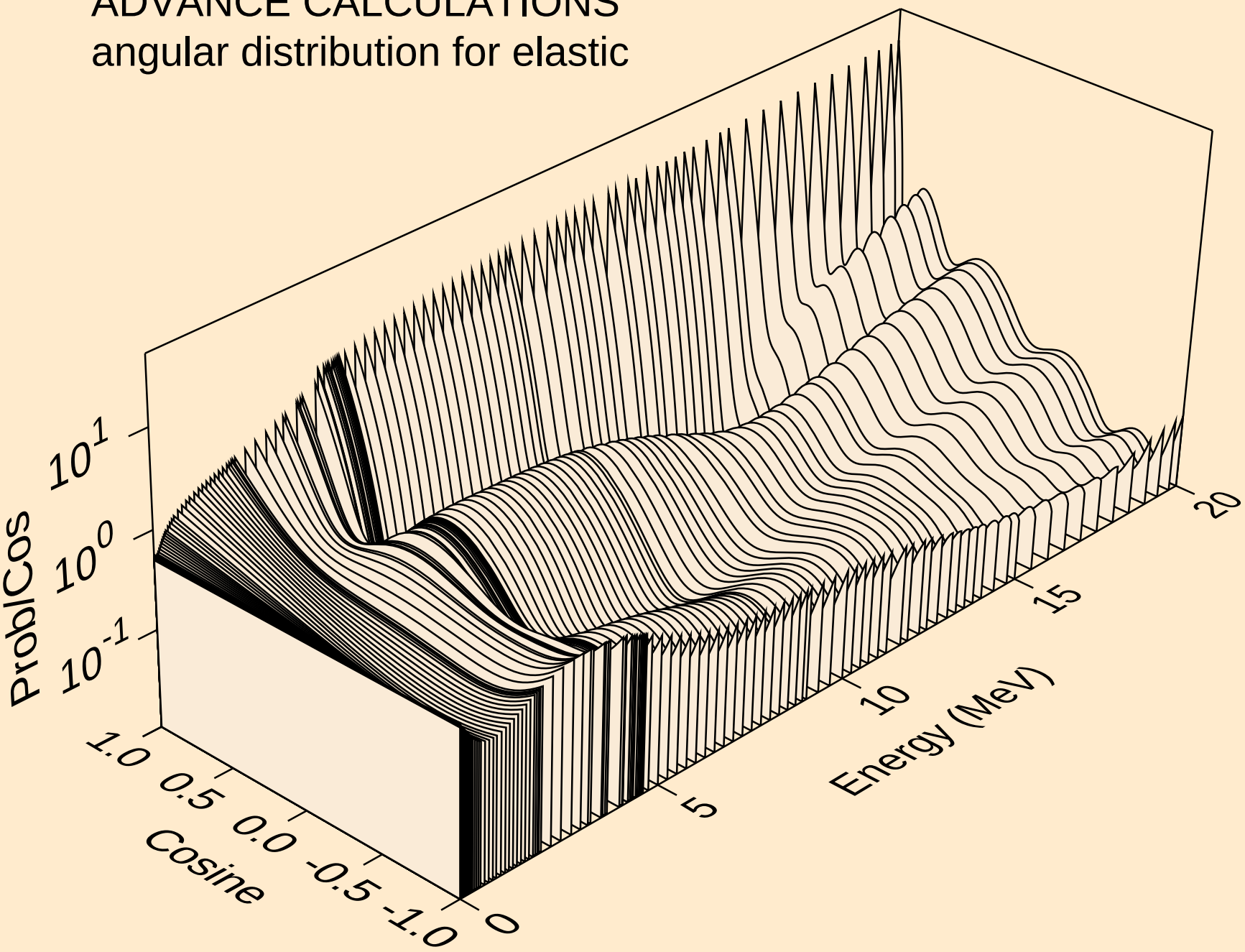
Threshold reactions



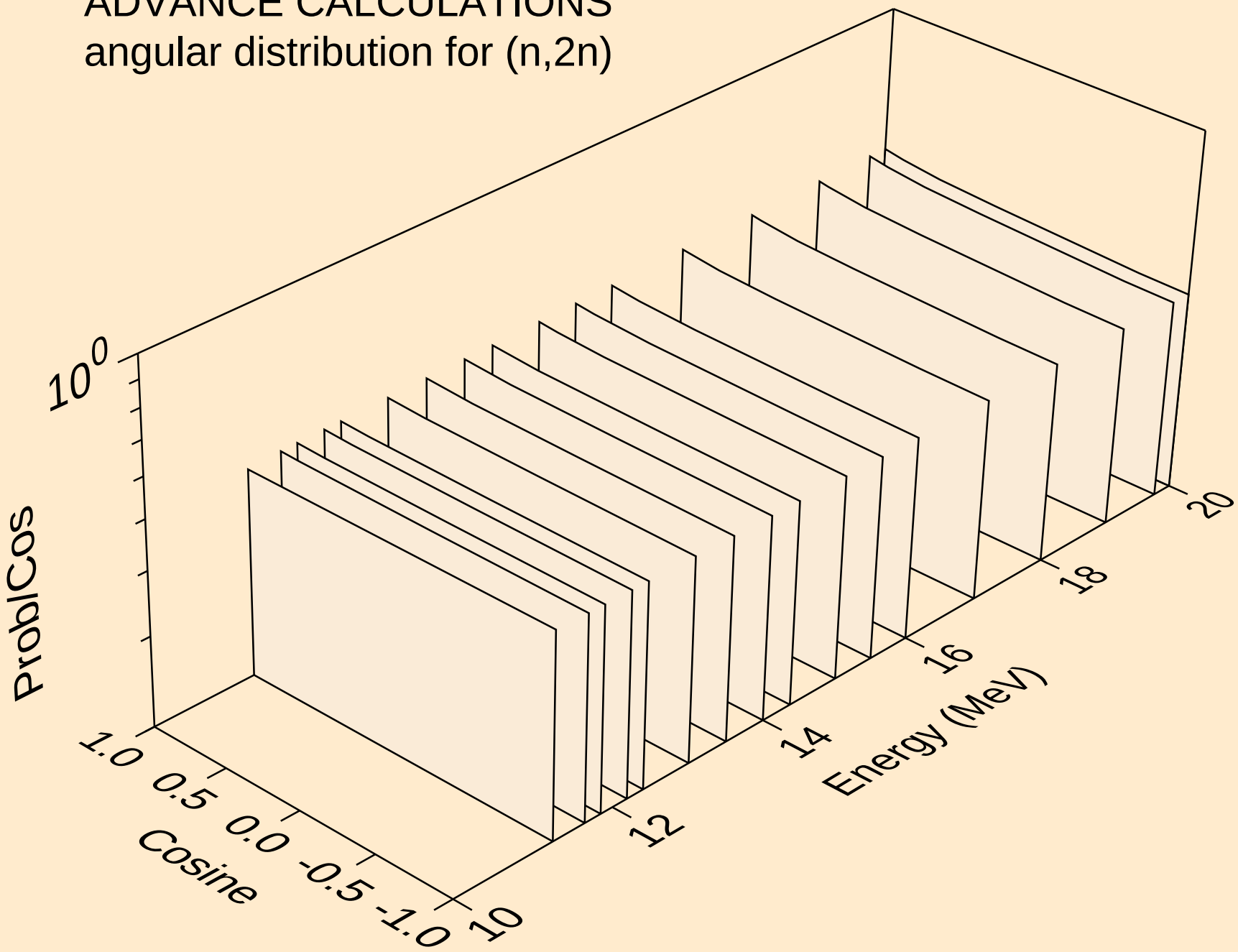
ADVANCE CALCULATIONS
Threshold reactions



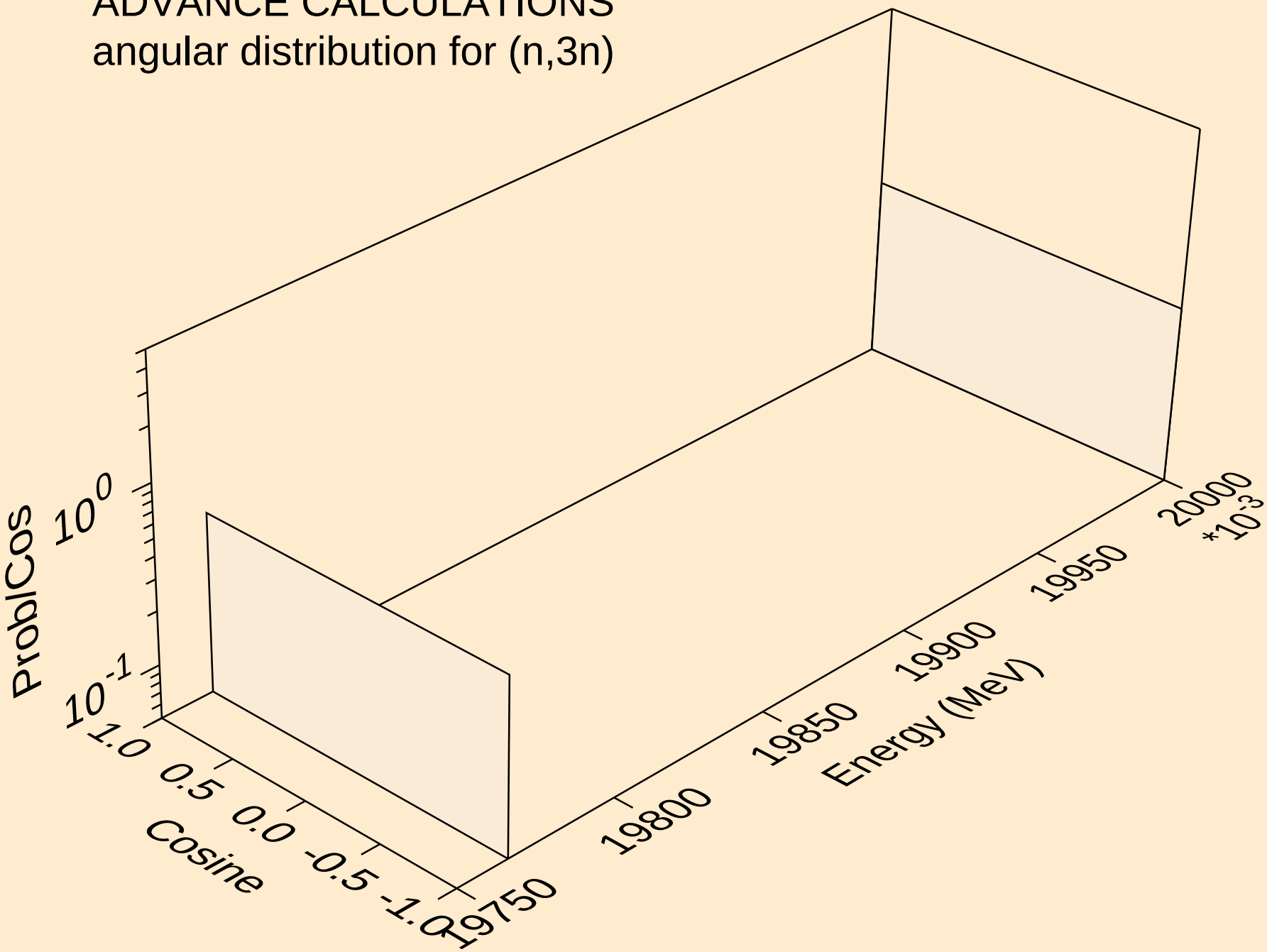
ADVANCE CALCULATIONS
angular distribution for elastic



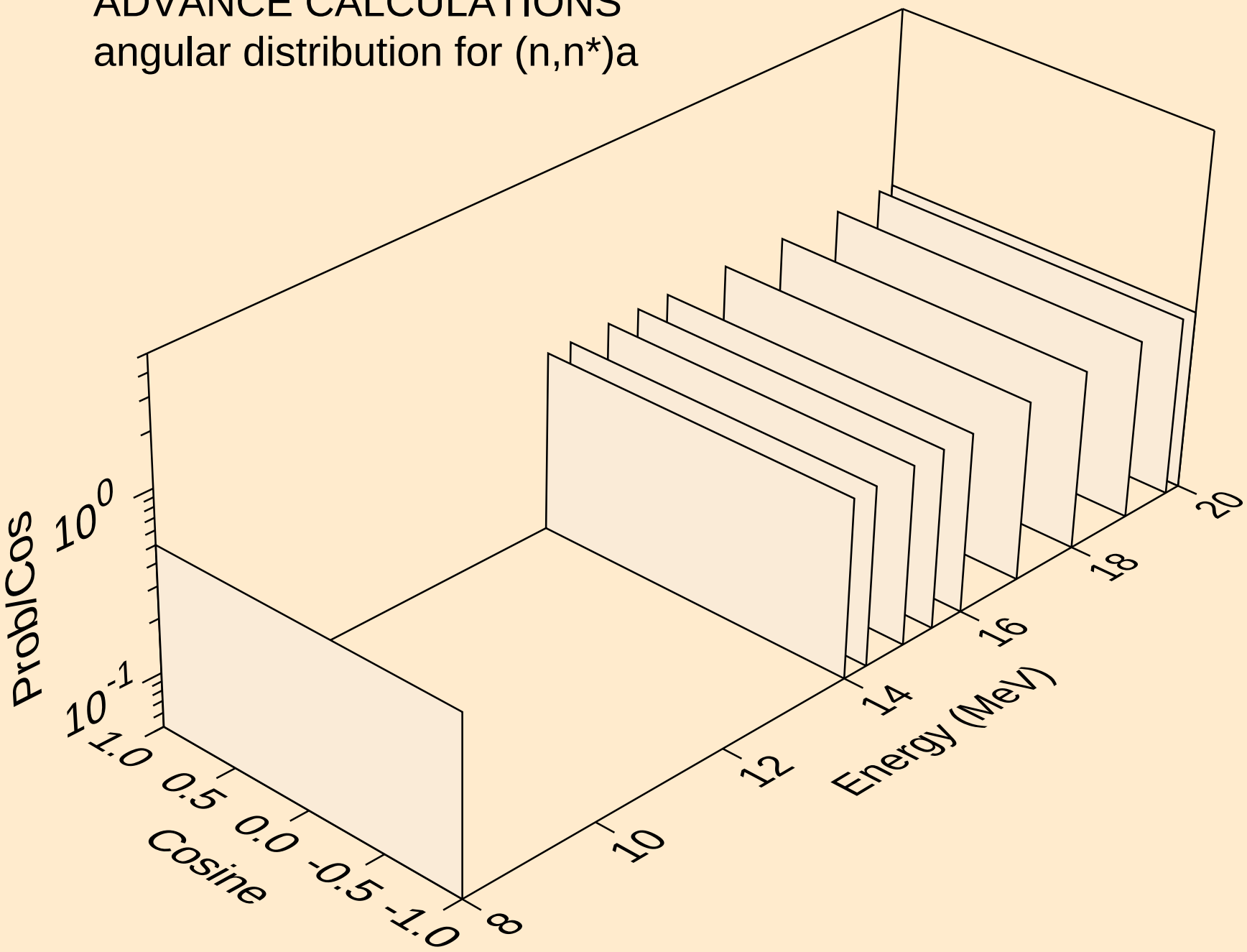
ADVANCE CALCULATIONS
angular distribution for (n,2n)



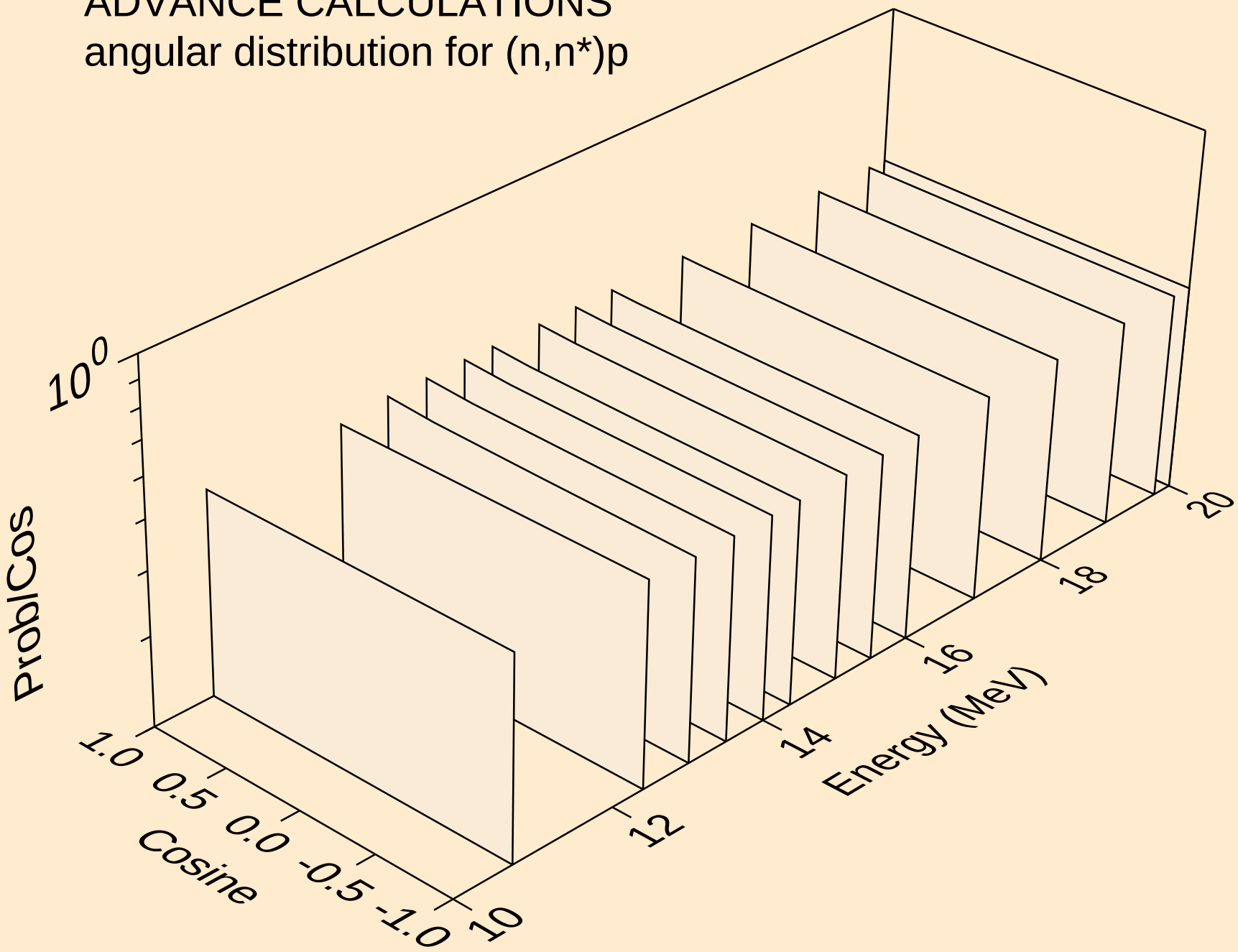
ADVANCE CALCULATIONS
angular distribution for (n,3n)



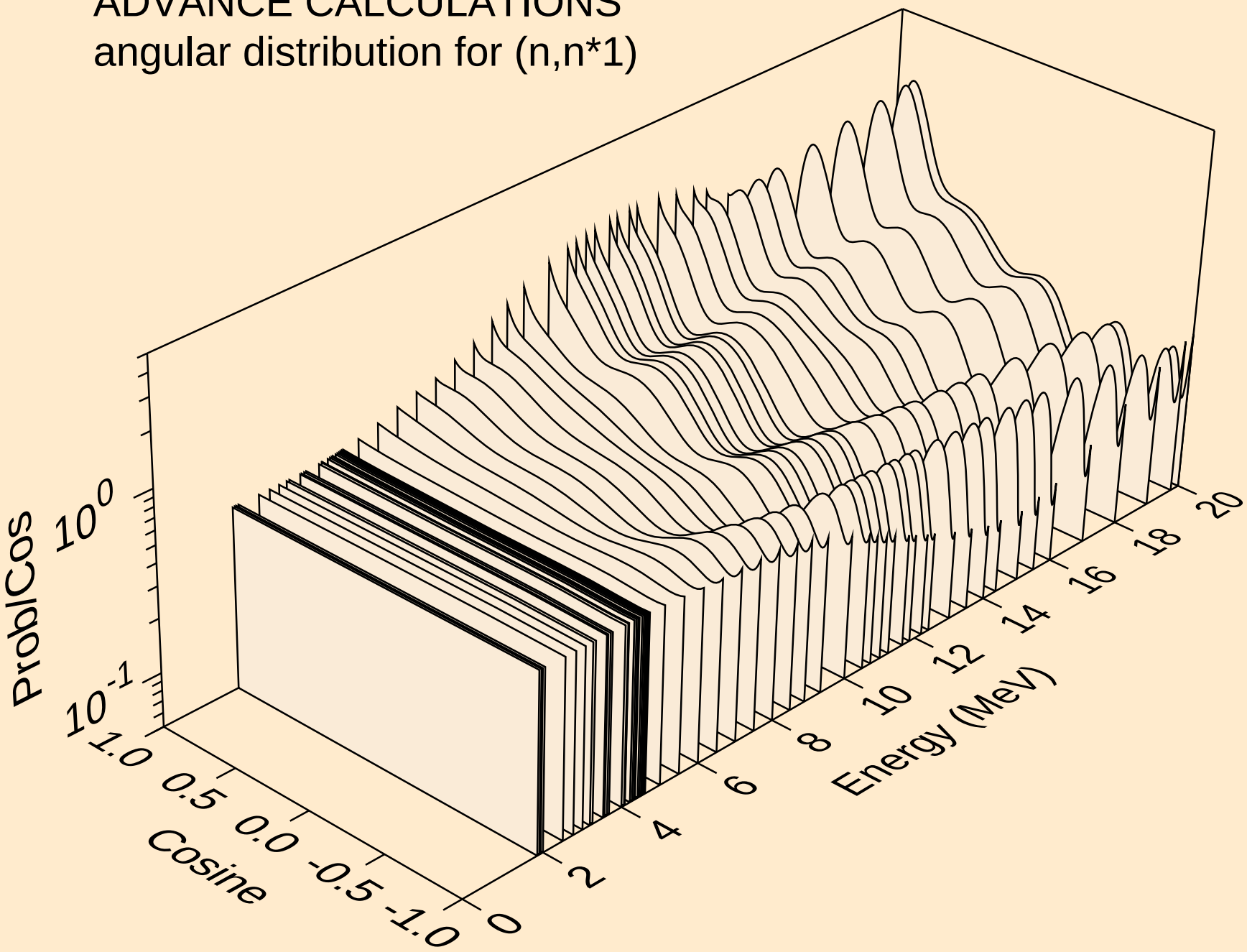
ADVANCE CALCULATIONS
angular distribution for (n,n*)a



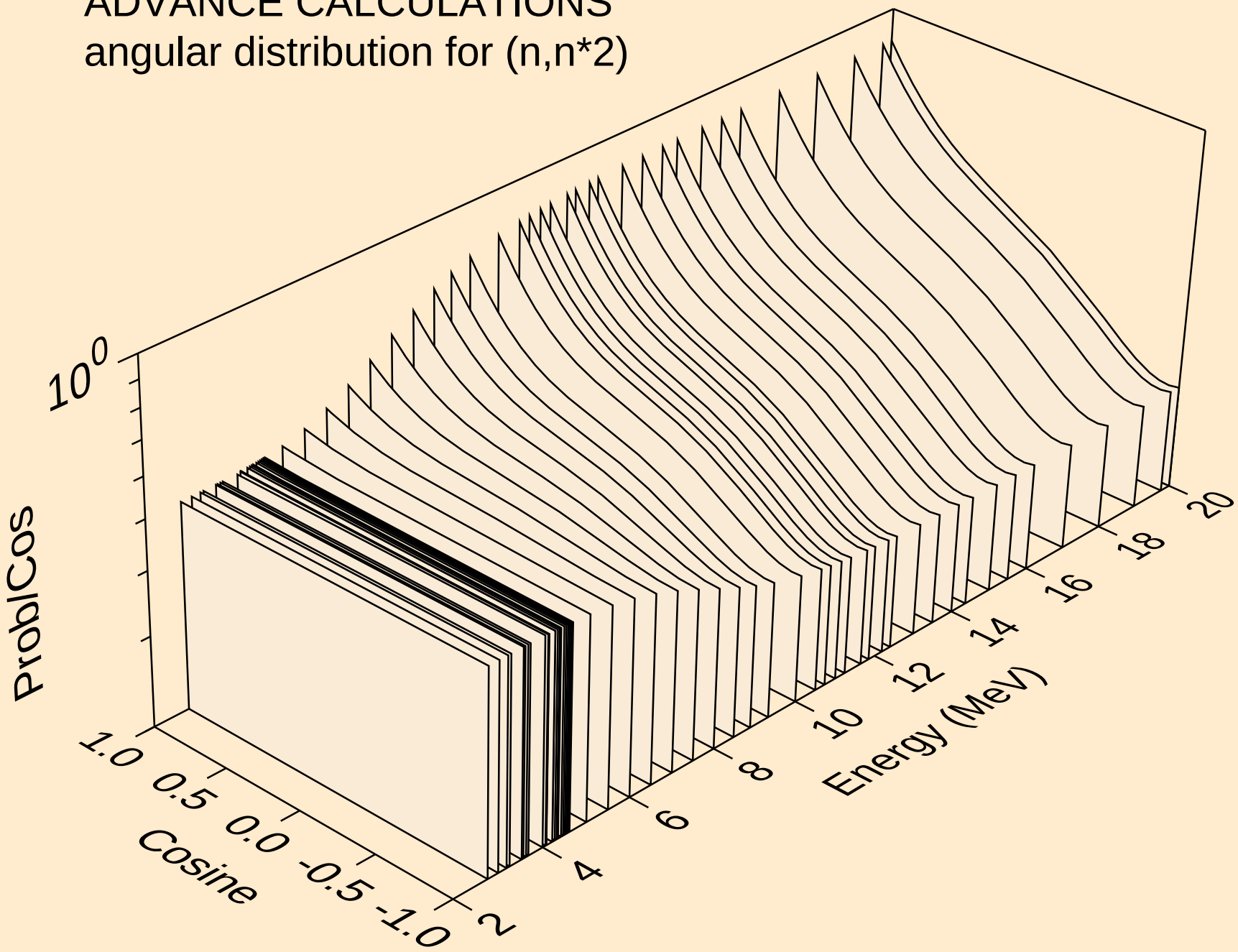
ADVANCE CALCULATIONS
angular distribution for (n,n*)p



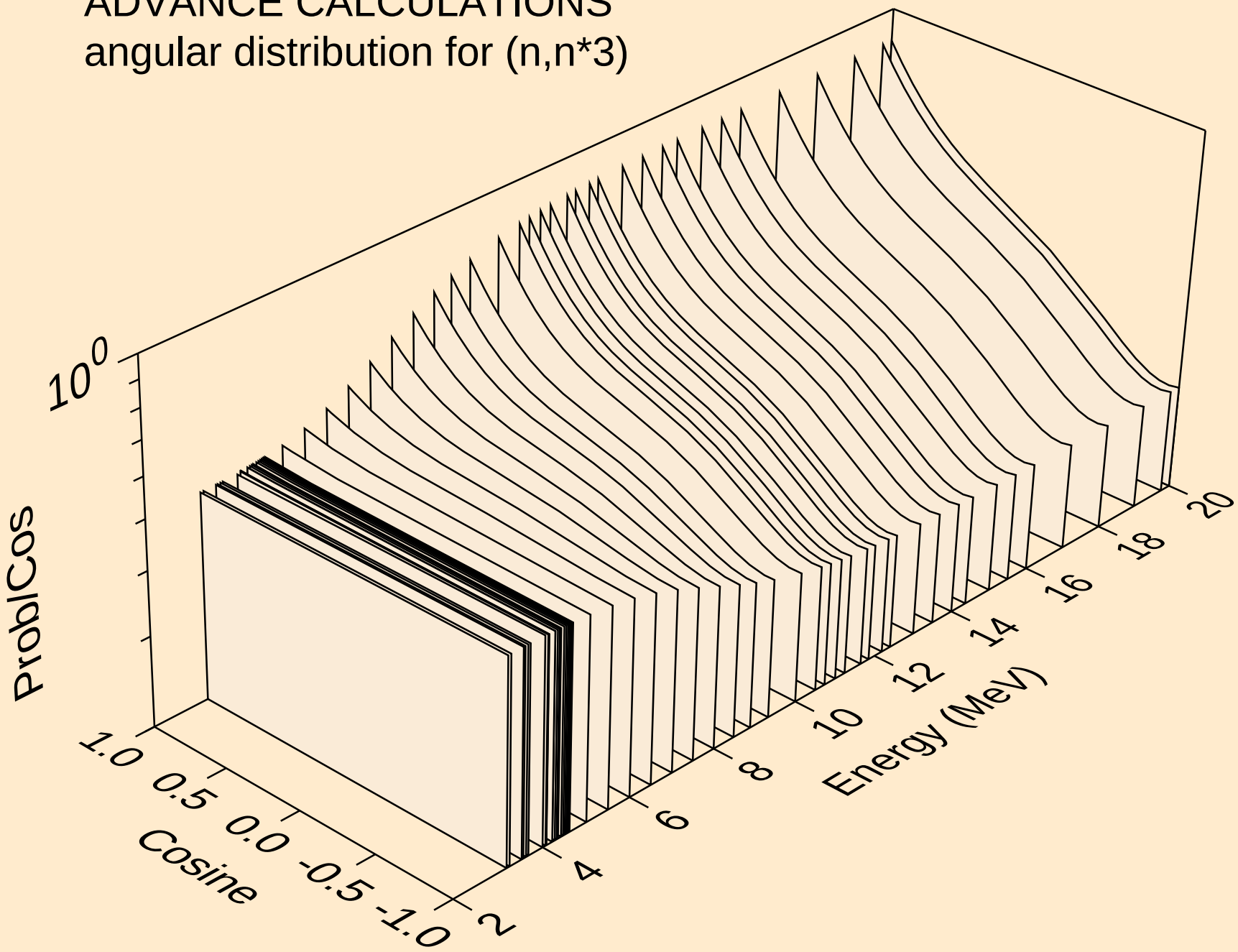
ADVANCE CALCULATIONS
angular distribution for (n,n*1)



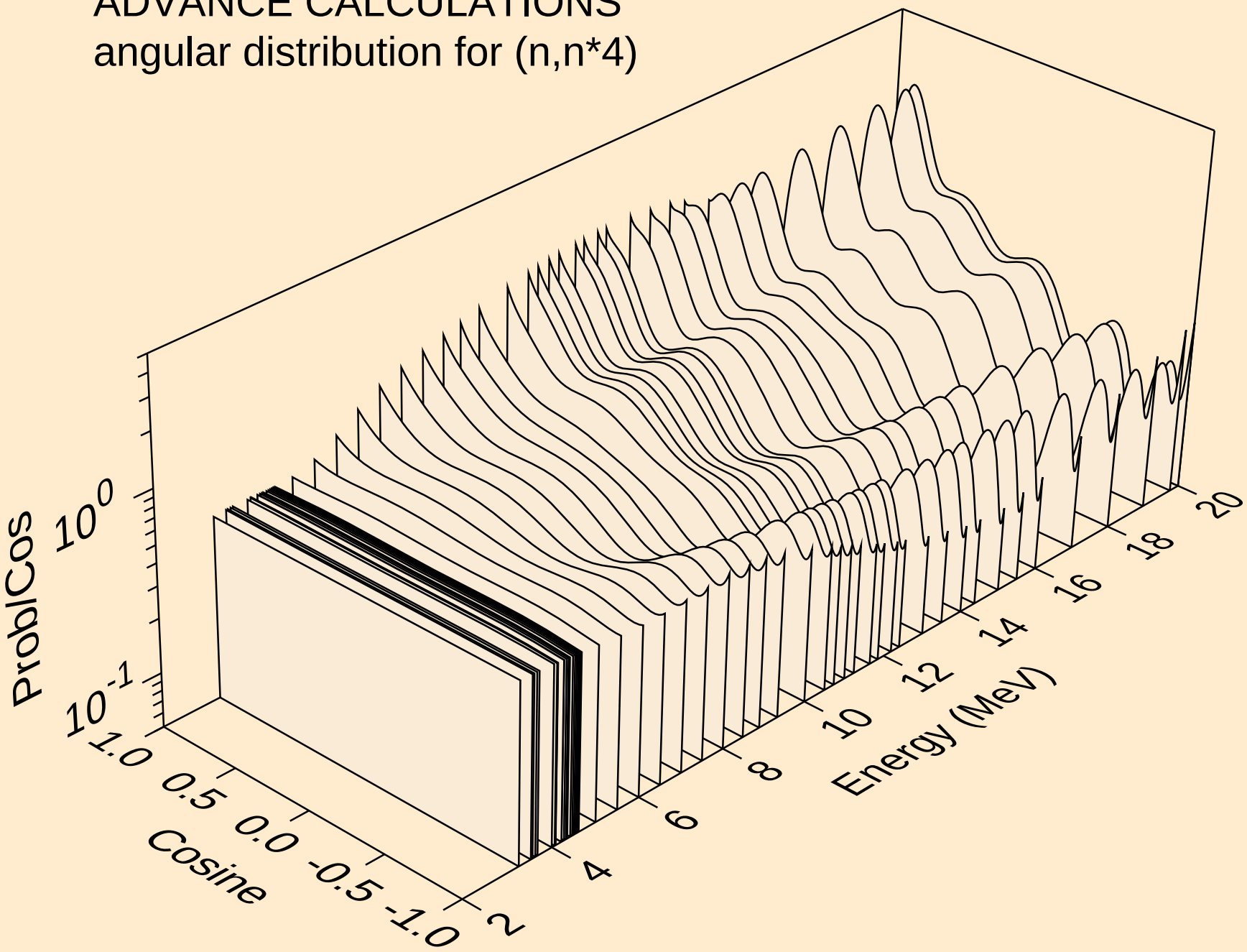
ADVANCE CALCULATIONS
angular distribution for (n,n*2)



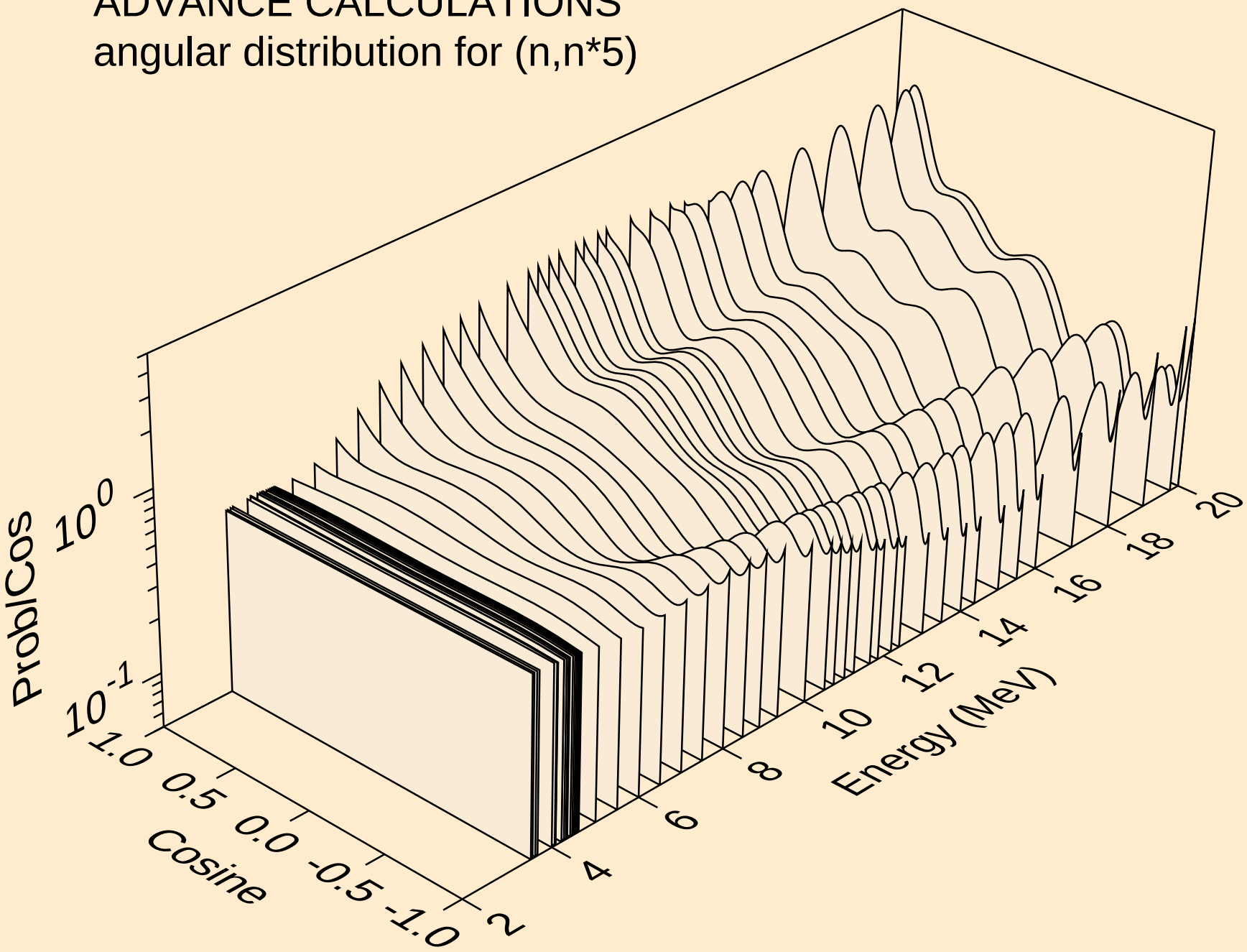
ADVANCE CALCULATIONS
angular distribution for (n,n*3)



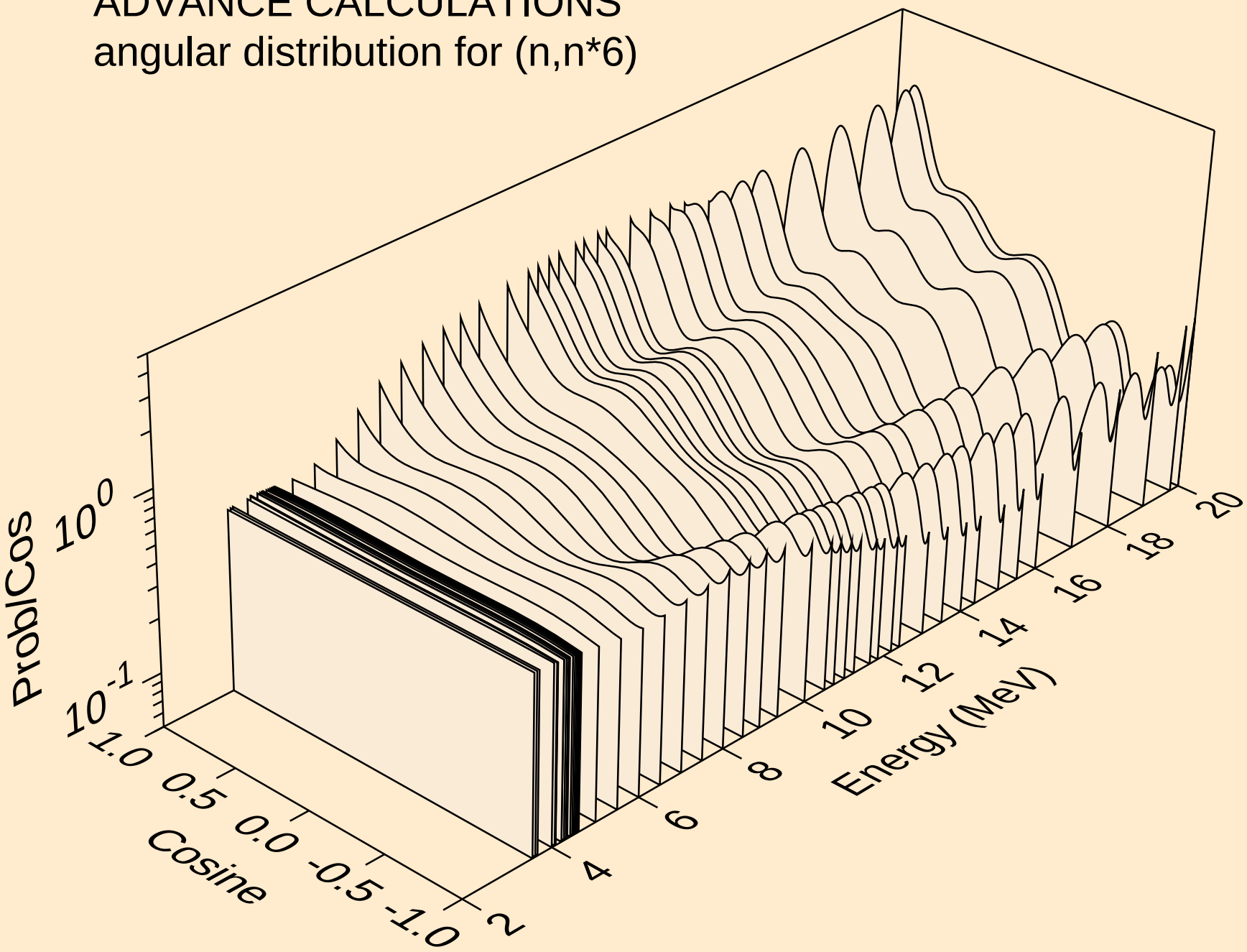
ADVANCE CALCULATIONS
angular distribution for (n,n*4)



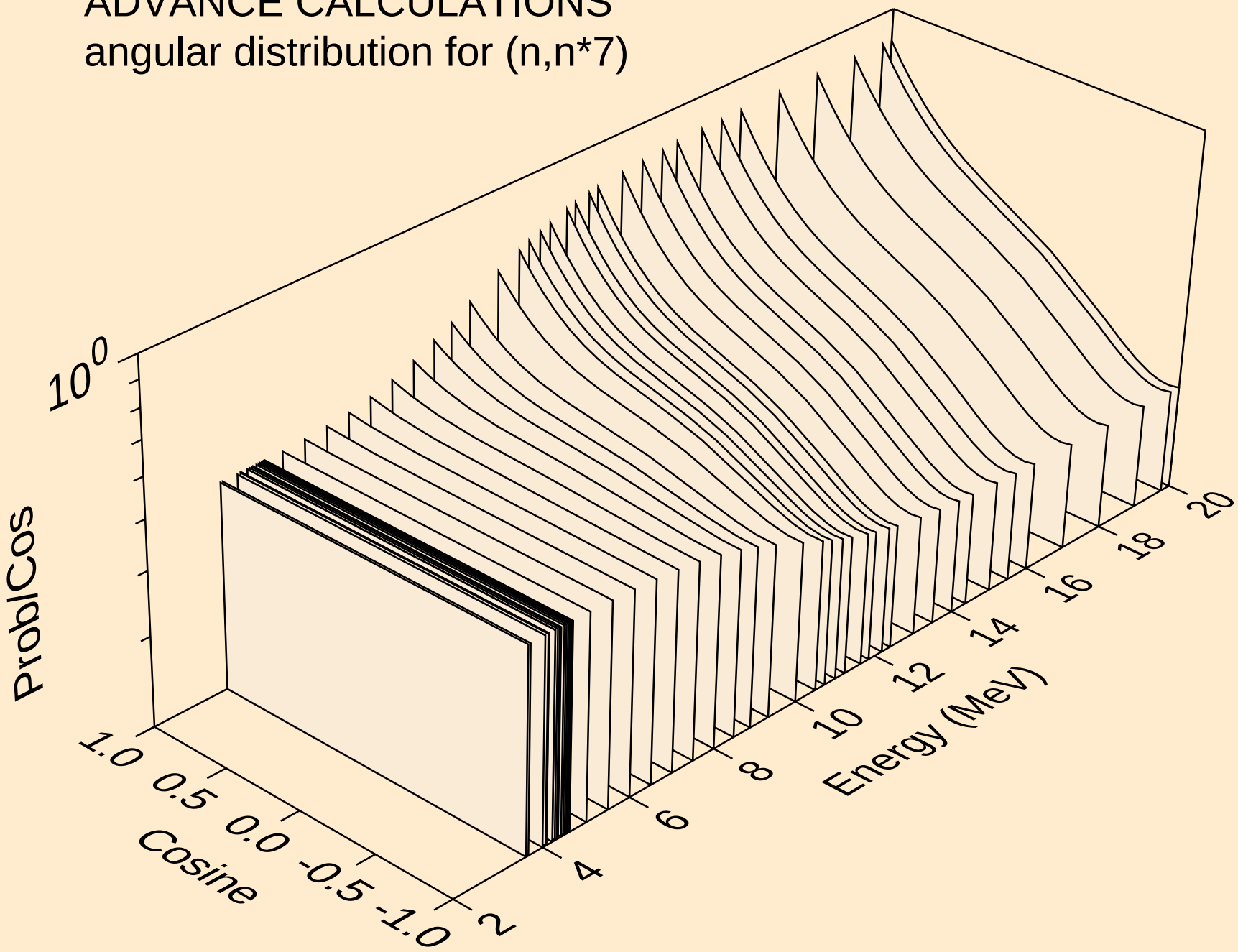
ADVANCE CALCULATIONS
angular distribution for (n,n*5)



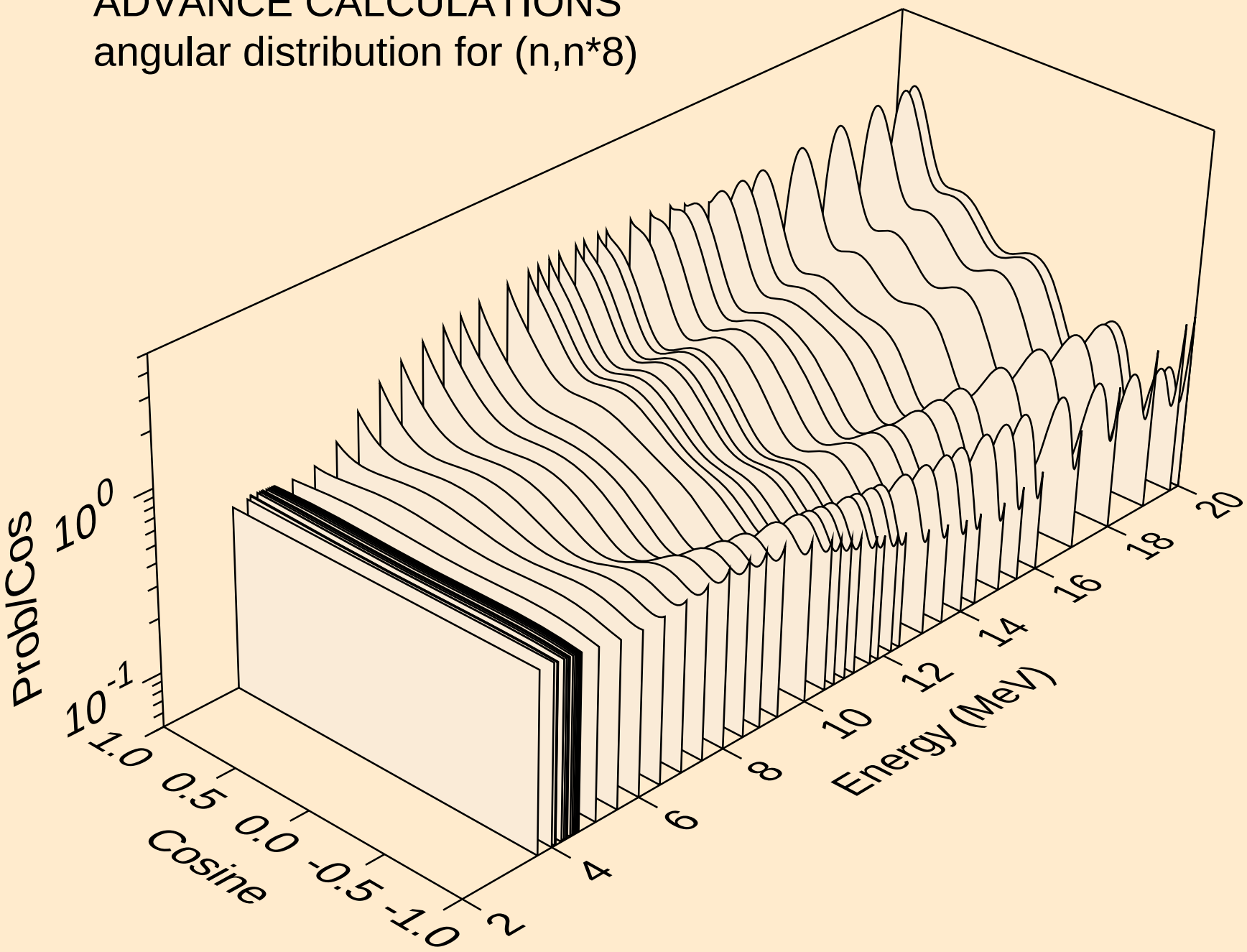
ADVANCE CALCULATIONS
angular distribution for (n,n*6)



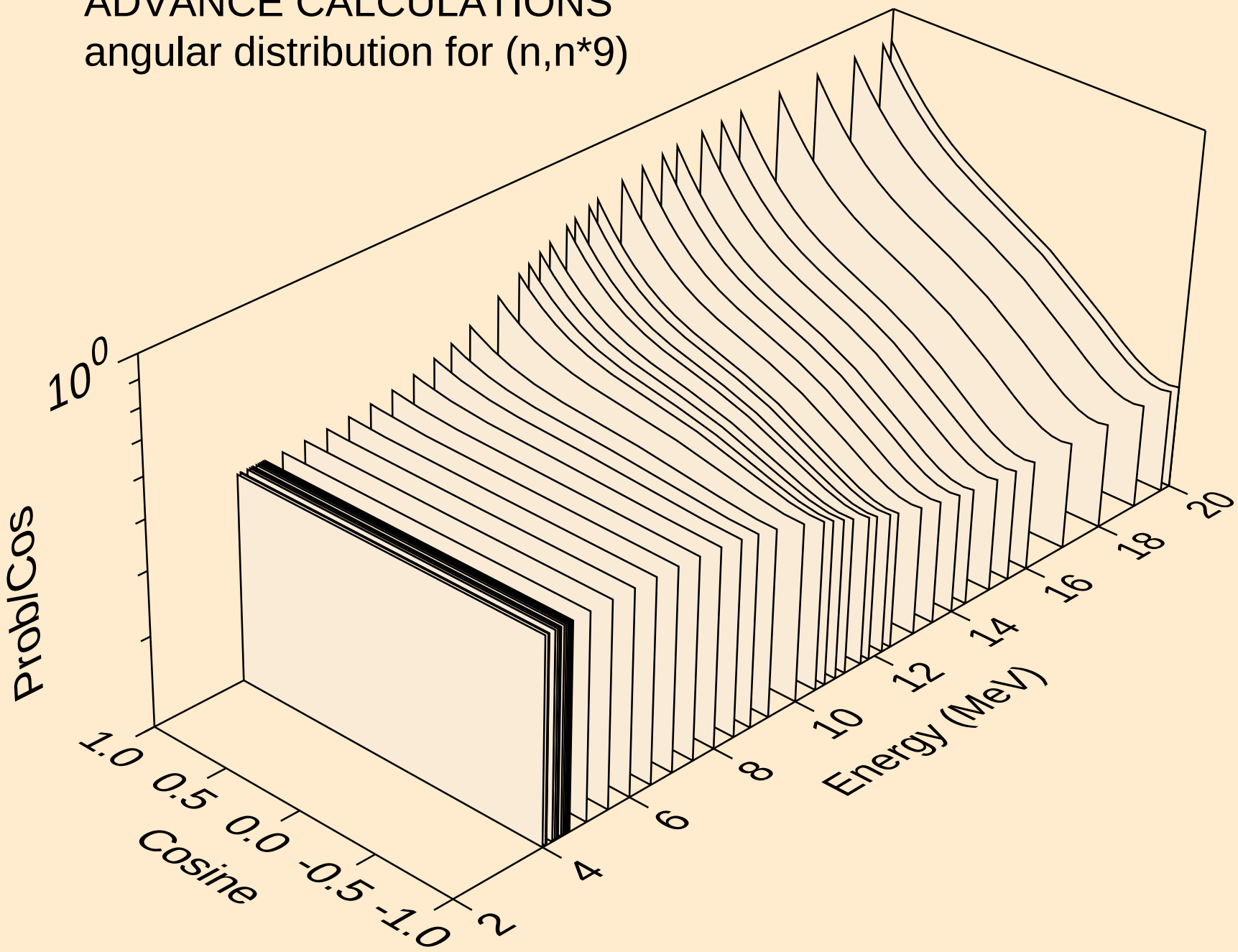
ADVANCE CALCULATIONS
angular distribution for (n,n*7)



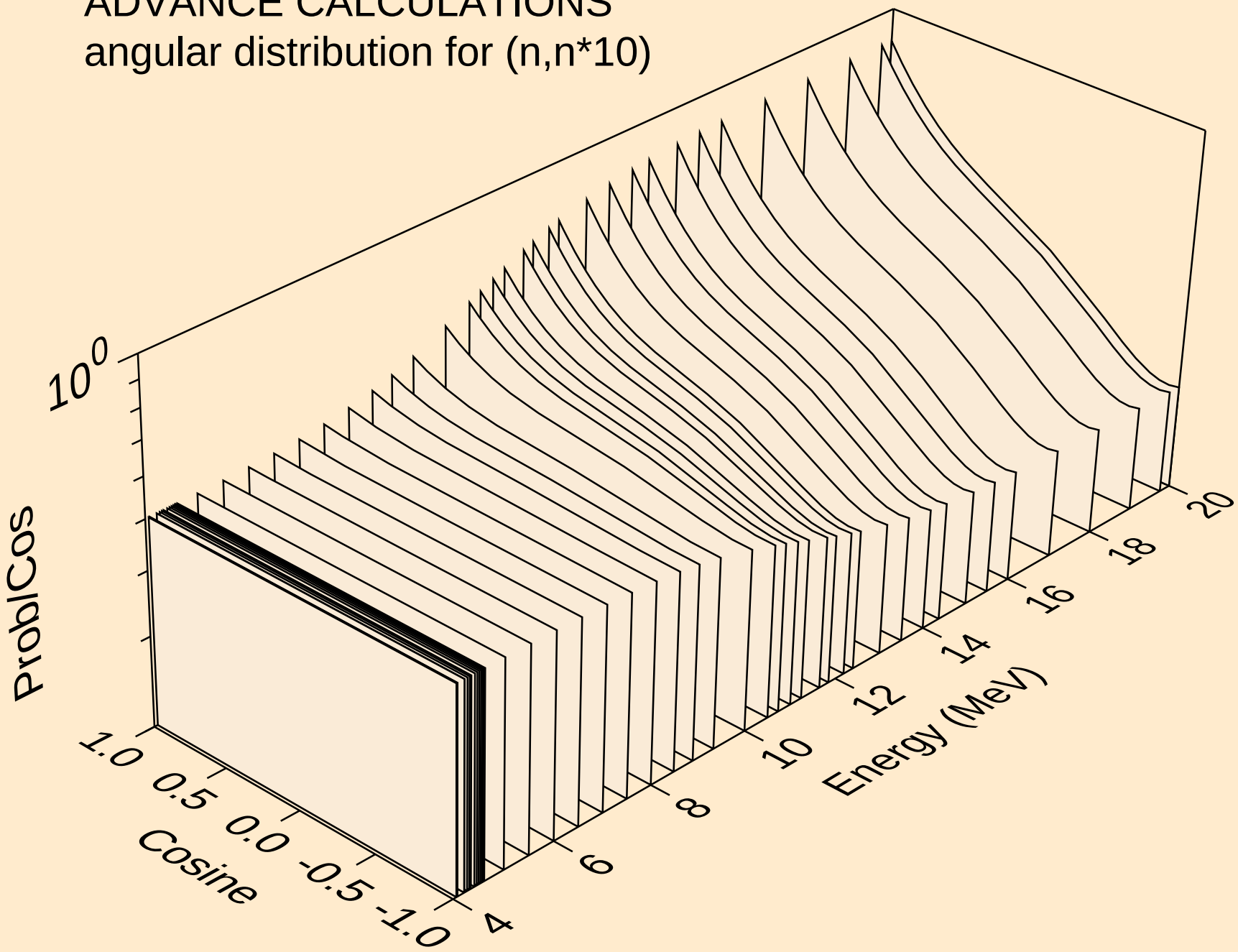
ADVANCE CALCULATIONS
angular distribution for (n,n*8)



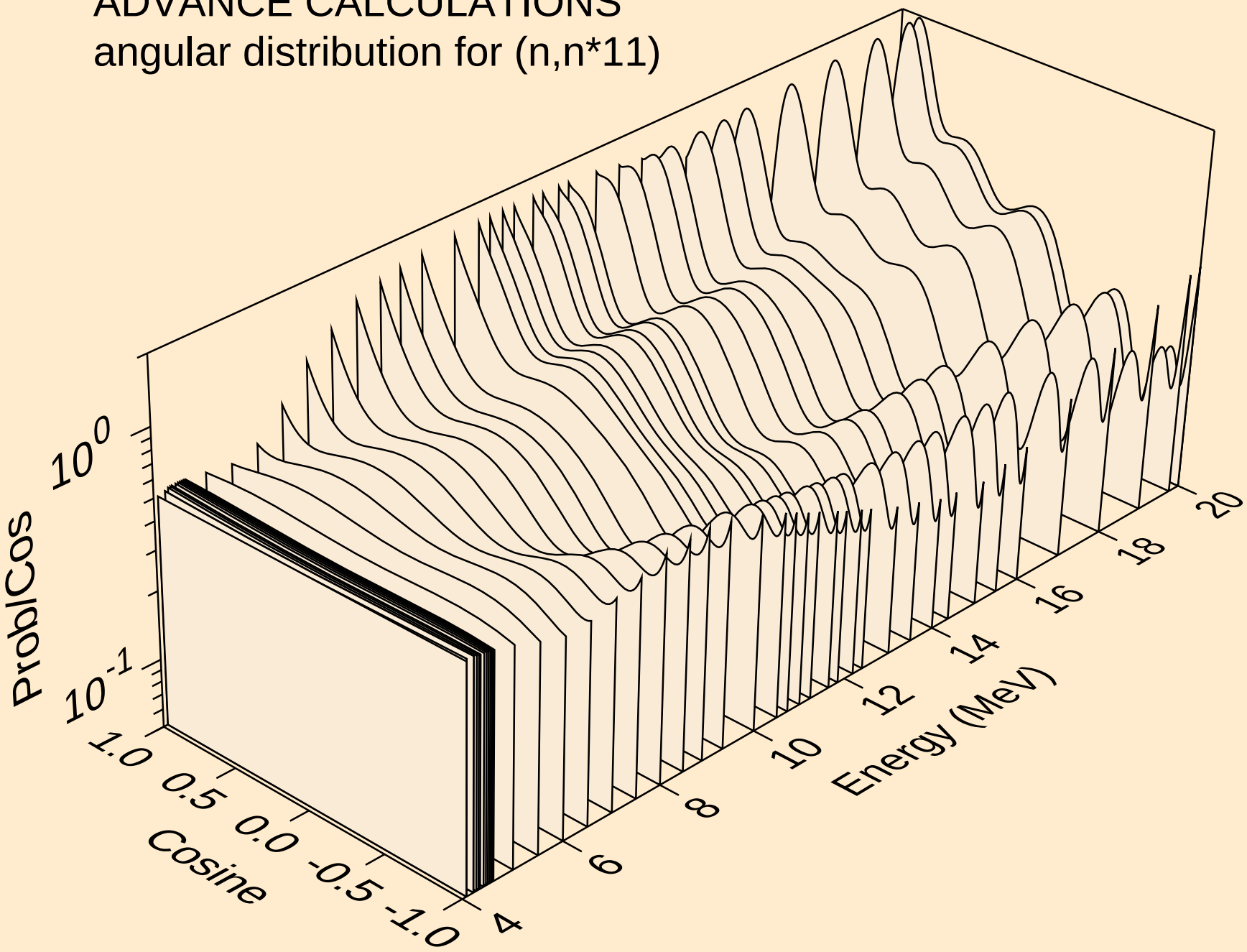
ADVANCE CALCULATIONS
angular distribution for (n,n*9)



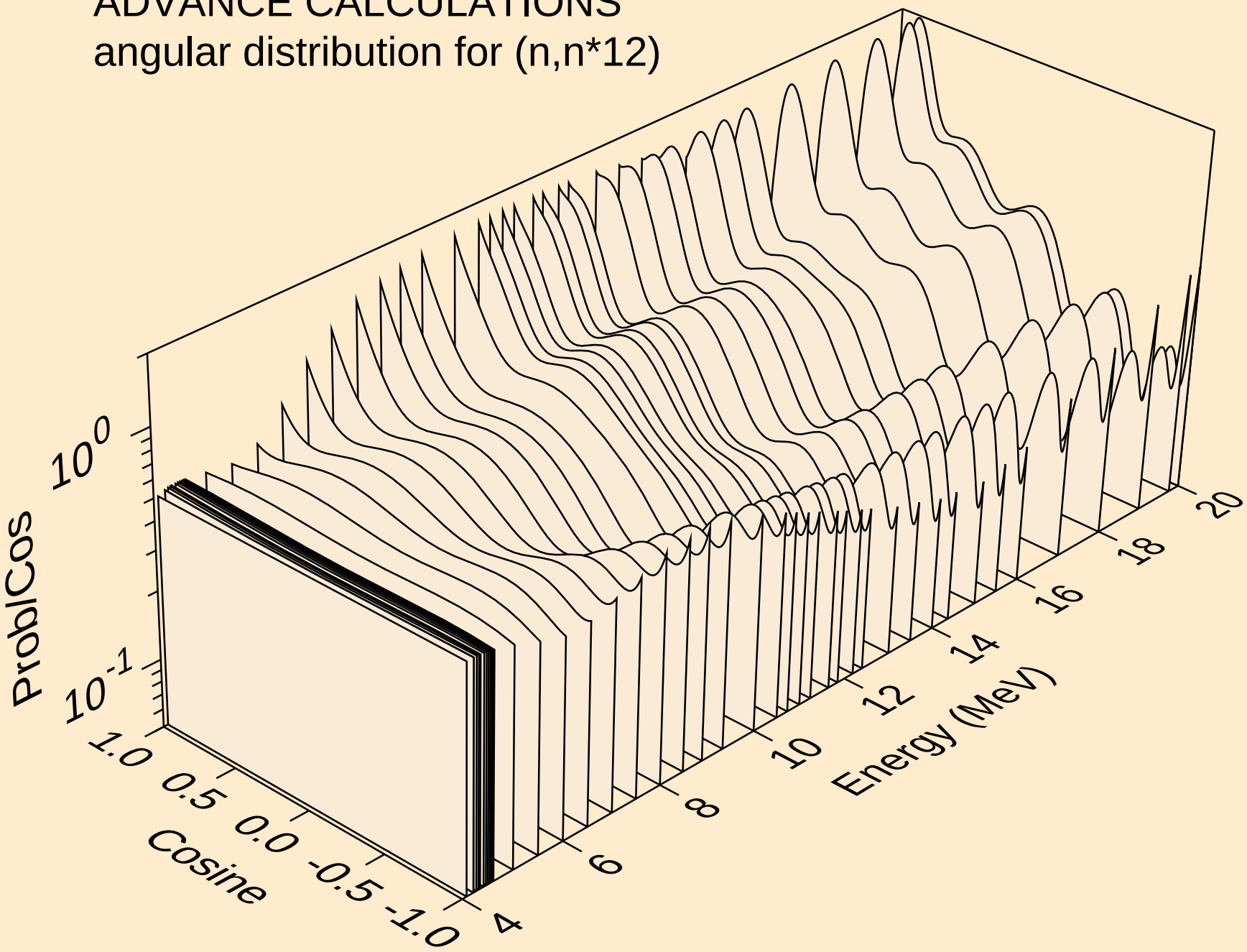
ADVANCE CALCULATIONS
angular distribution for (n,n*10)



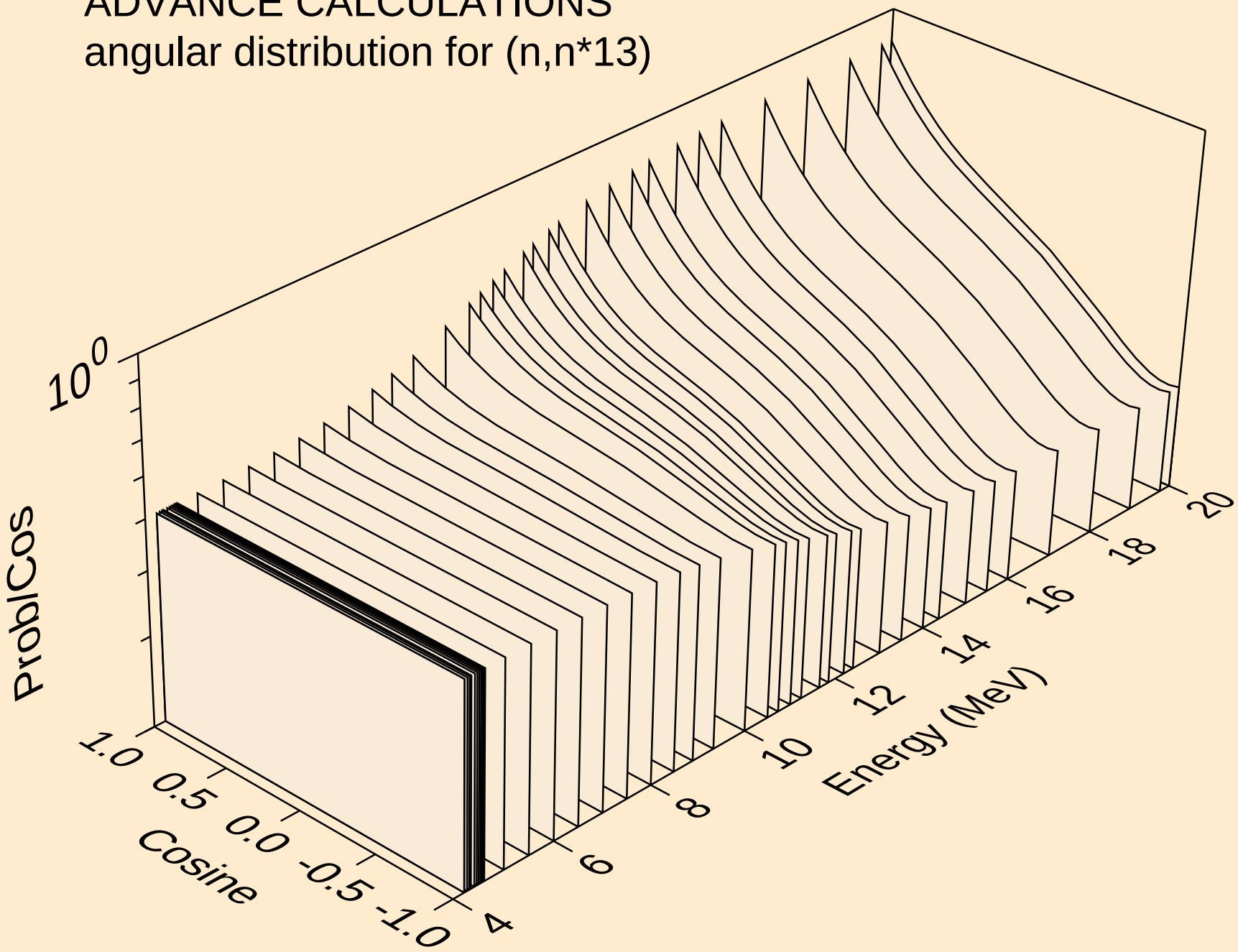
ADVANCE CALCULATIONS
angular distribution for (n,n*11)



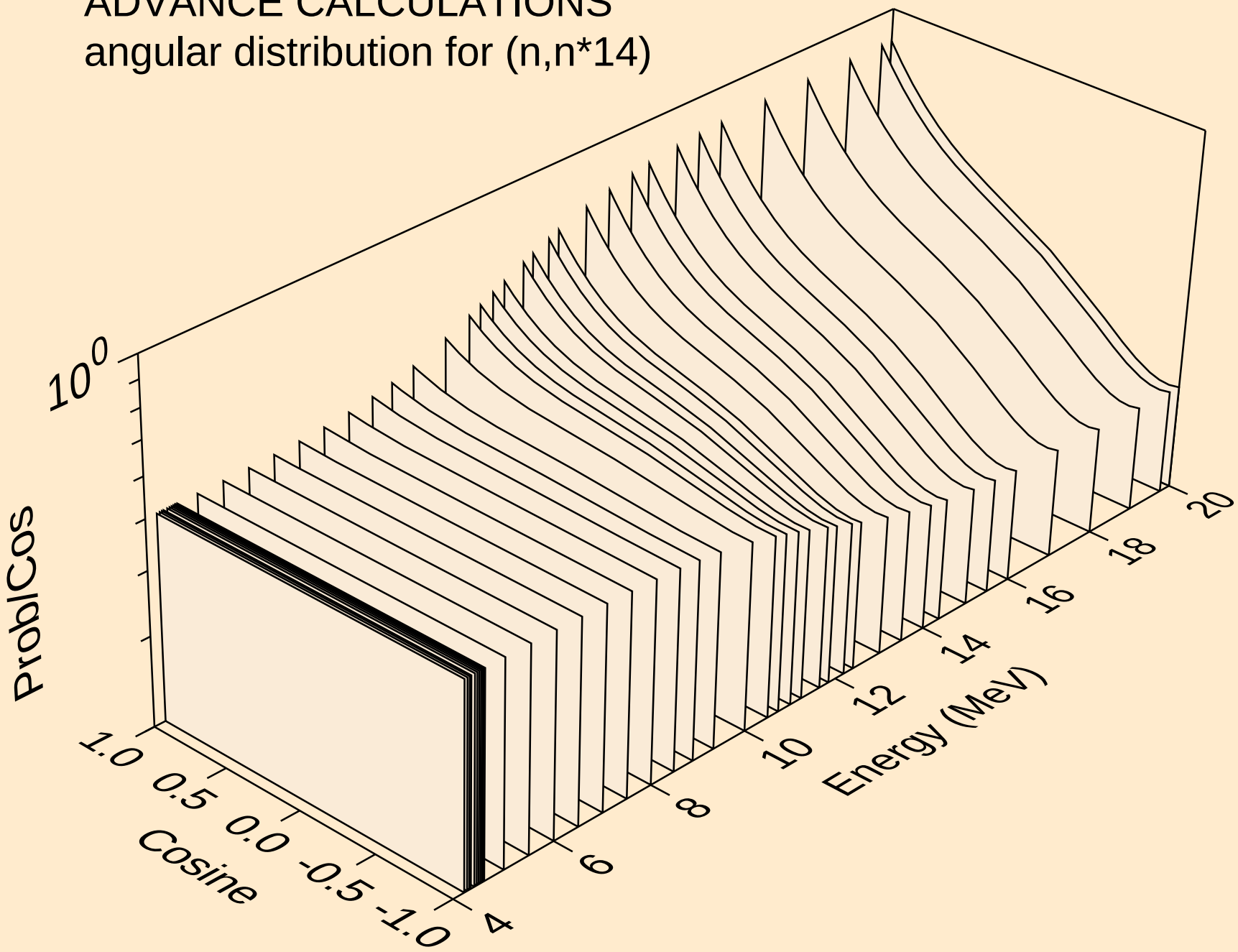
ADVANCE CALCULATIONS
angular distribution for (n,n*12)



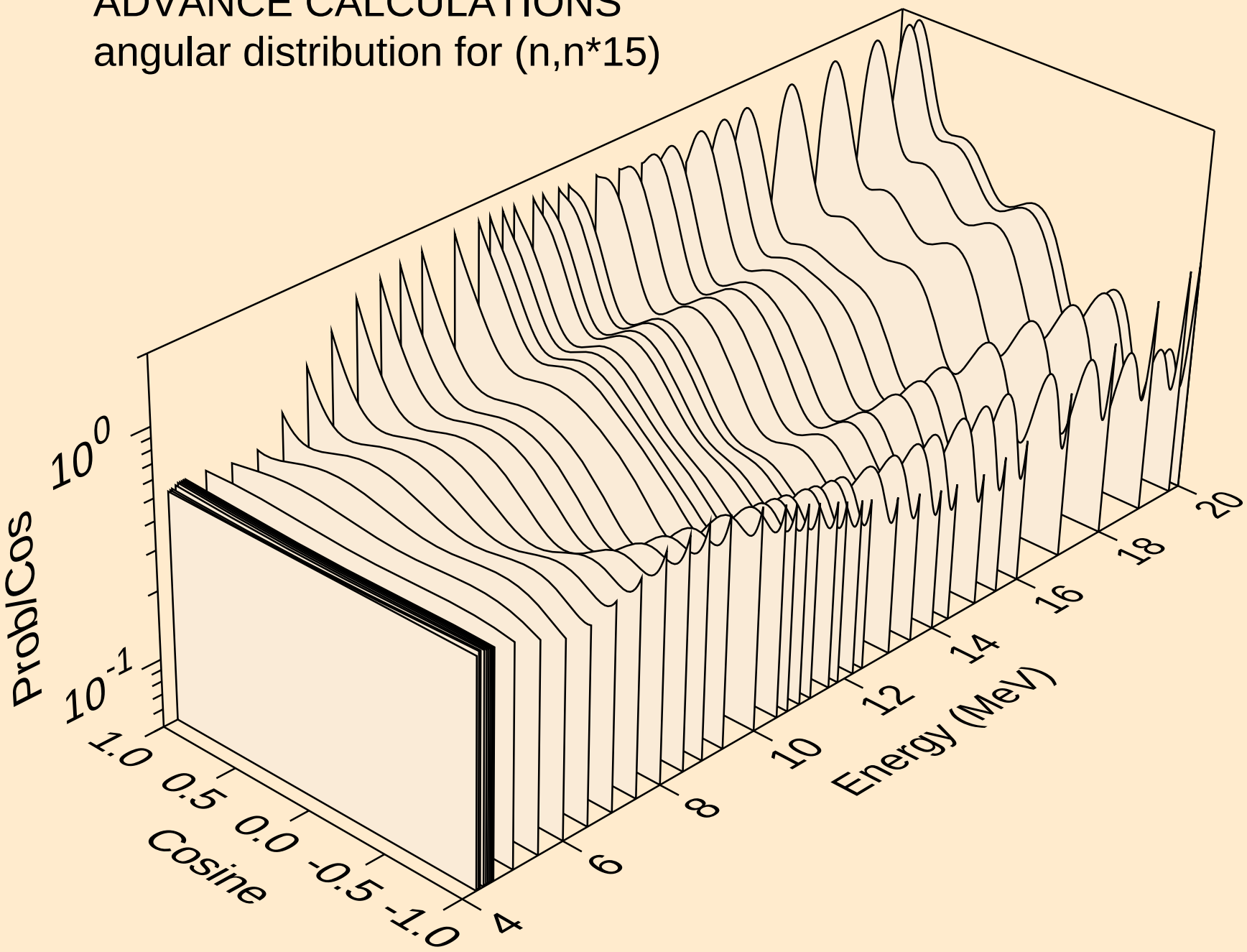
ADVANCE CALCULATIONS
angular distribution for (n,n*13)



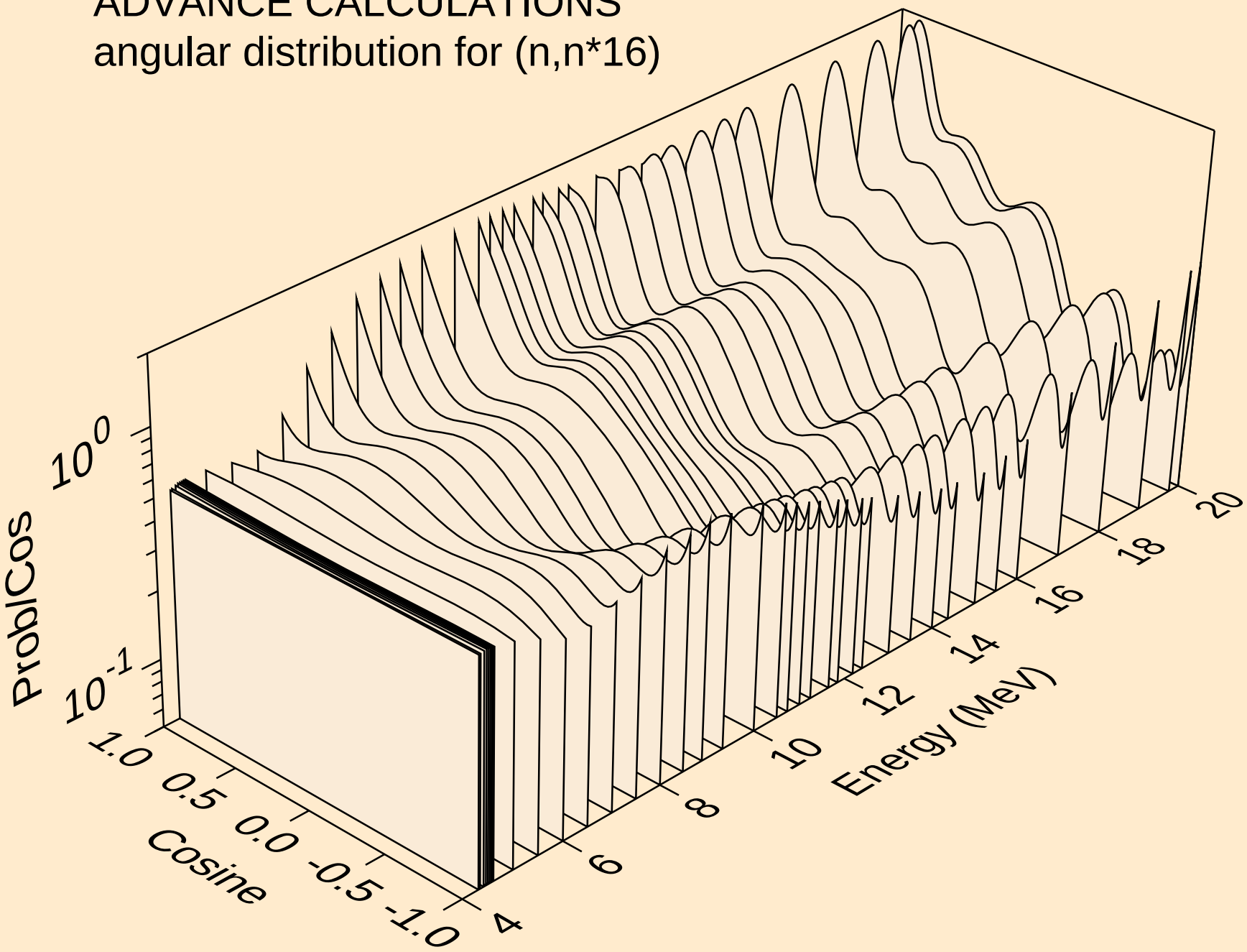
ADVANCE CALCULATIONS
angular distribution for (n,n*14)



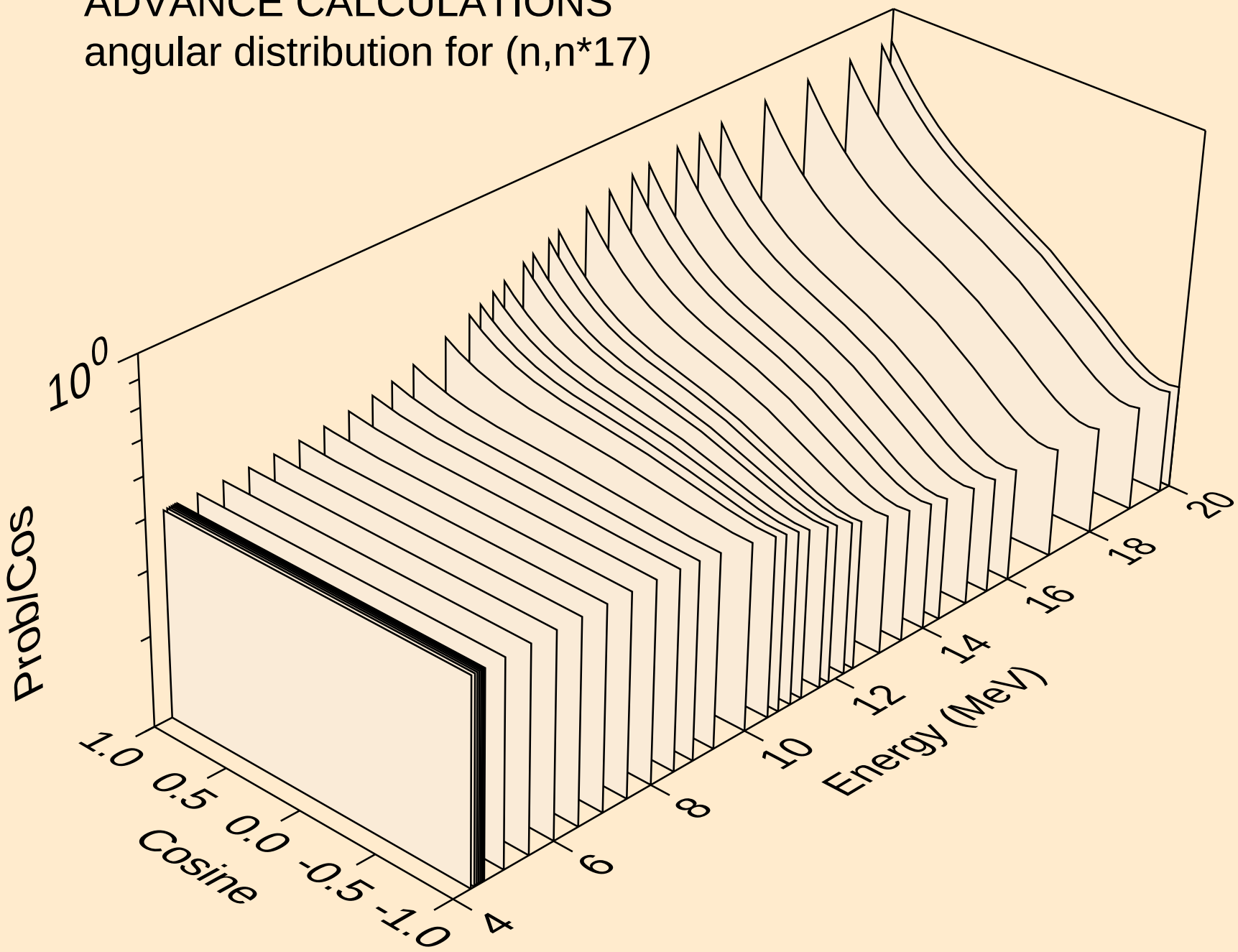
ADVANCE CALCULATIONS
angular distribution for (n,n*15)



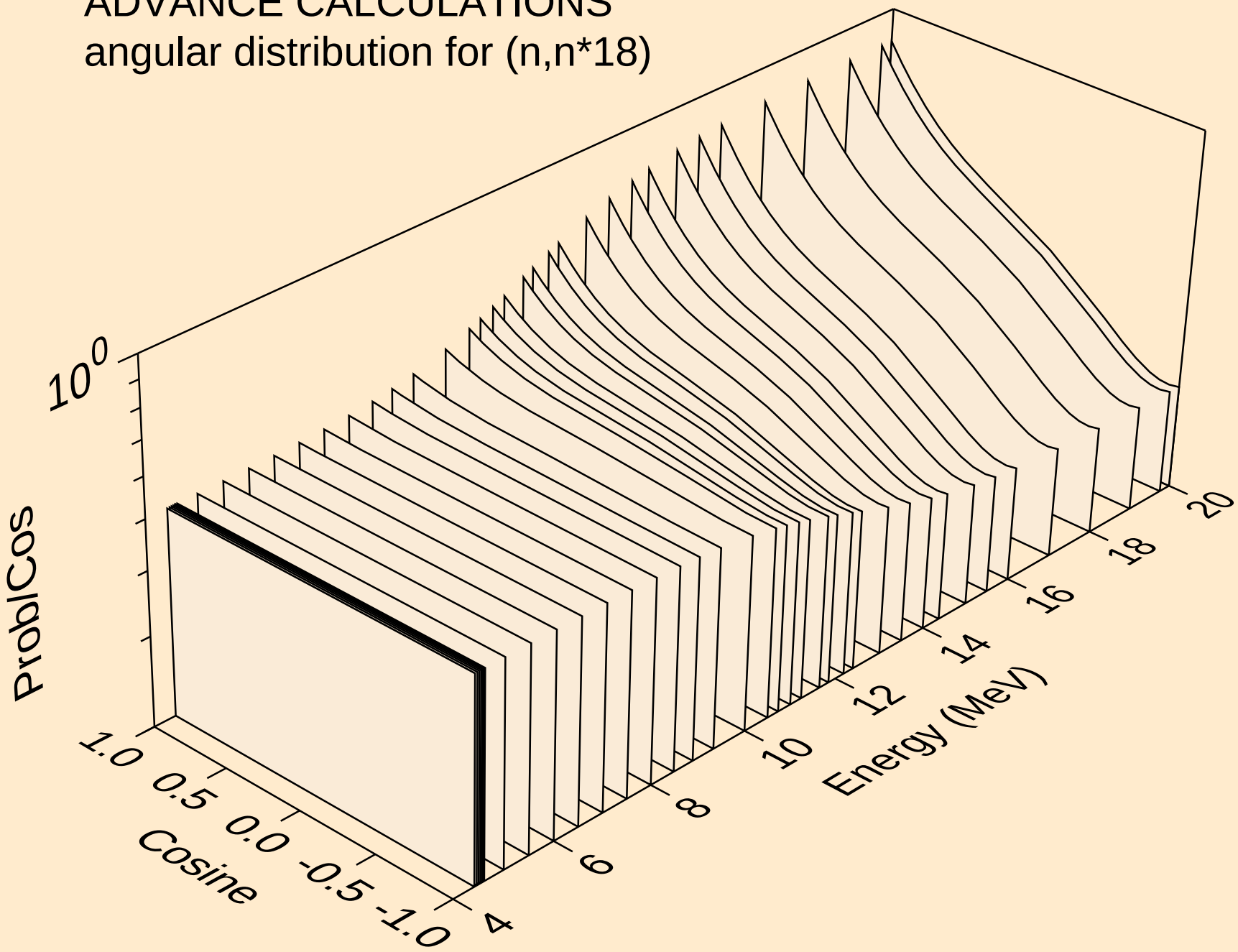
ADVANCE CALCULATIONS
angular distribution for (n,n*16)



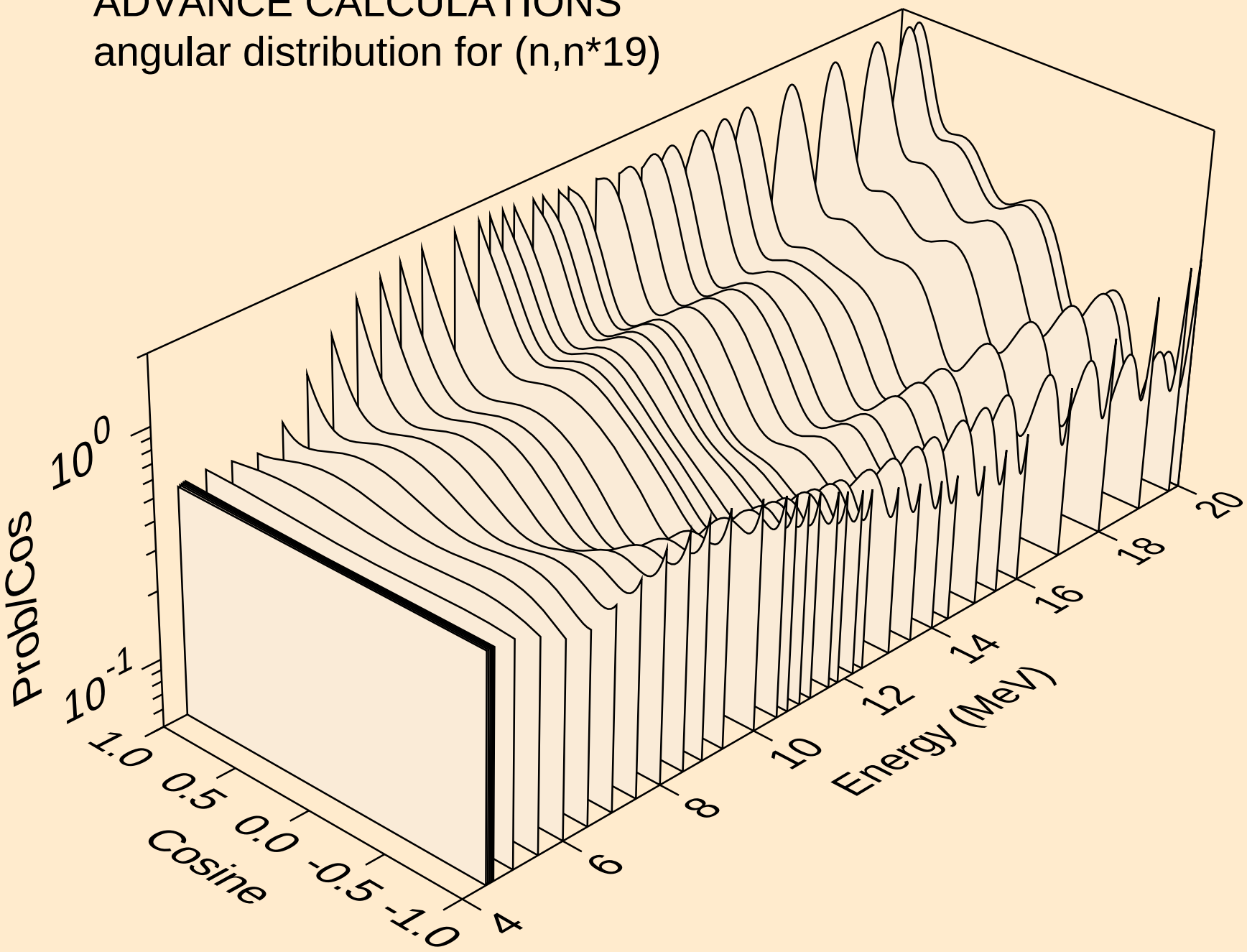
ADVANCE CALCULATIONS
angular distribution for (n,n*17)



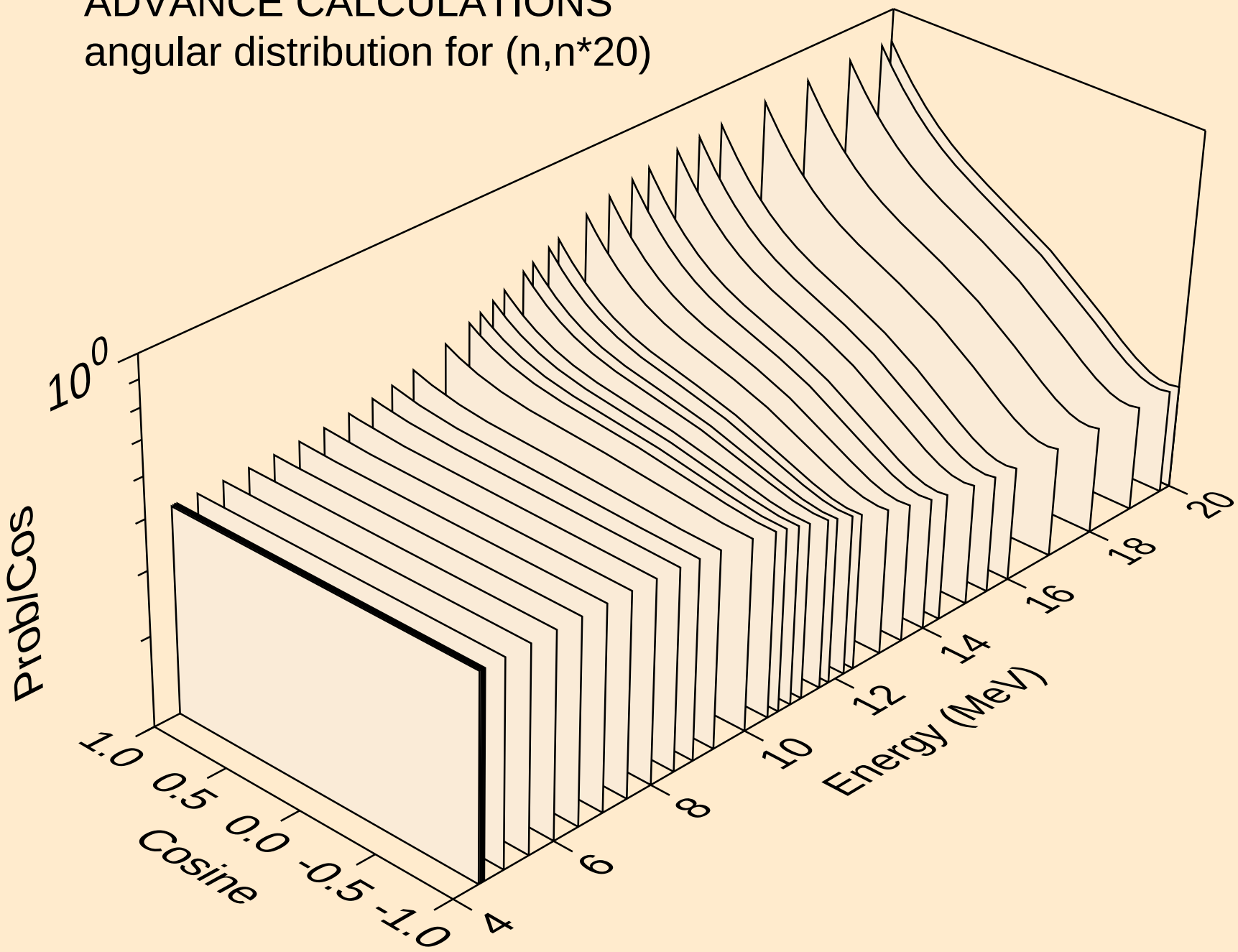
ADVANCE CALCULATIONS
angular distribution for (n,n*18)



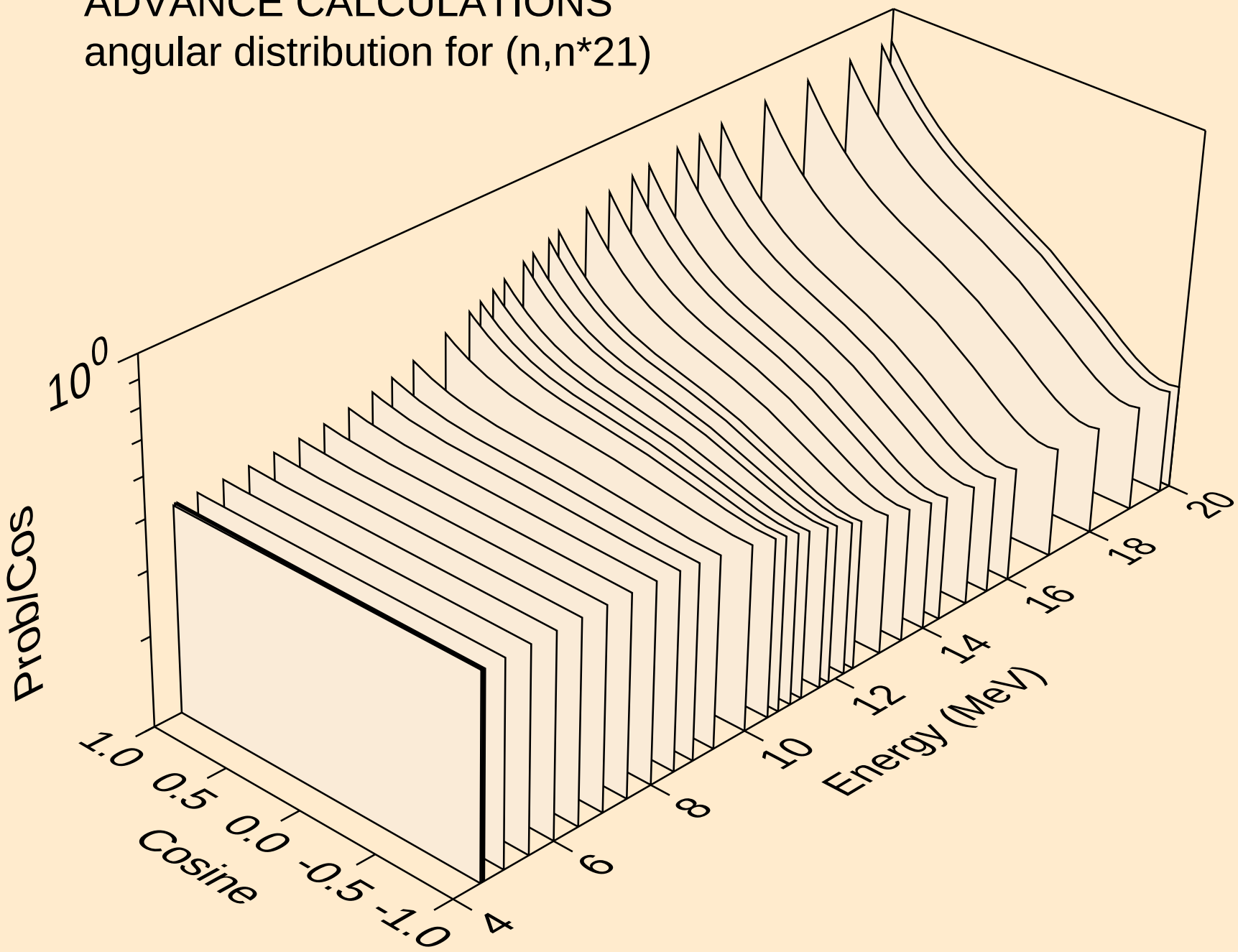
ADVANCE CALCULATIONS
angular distribution for (n,n*19)



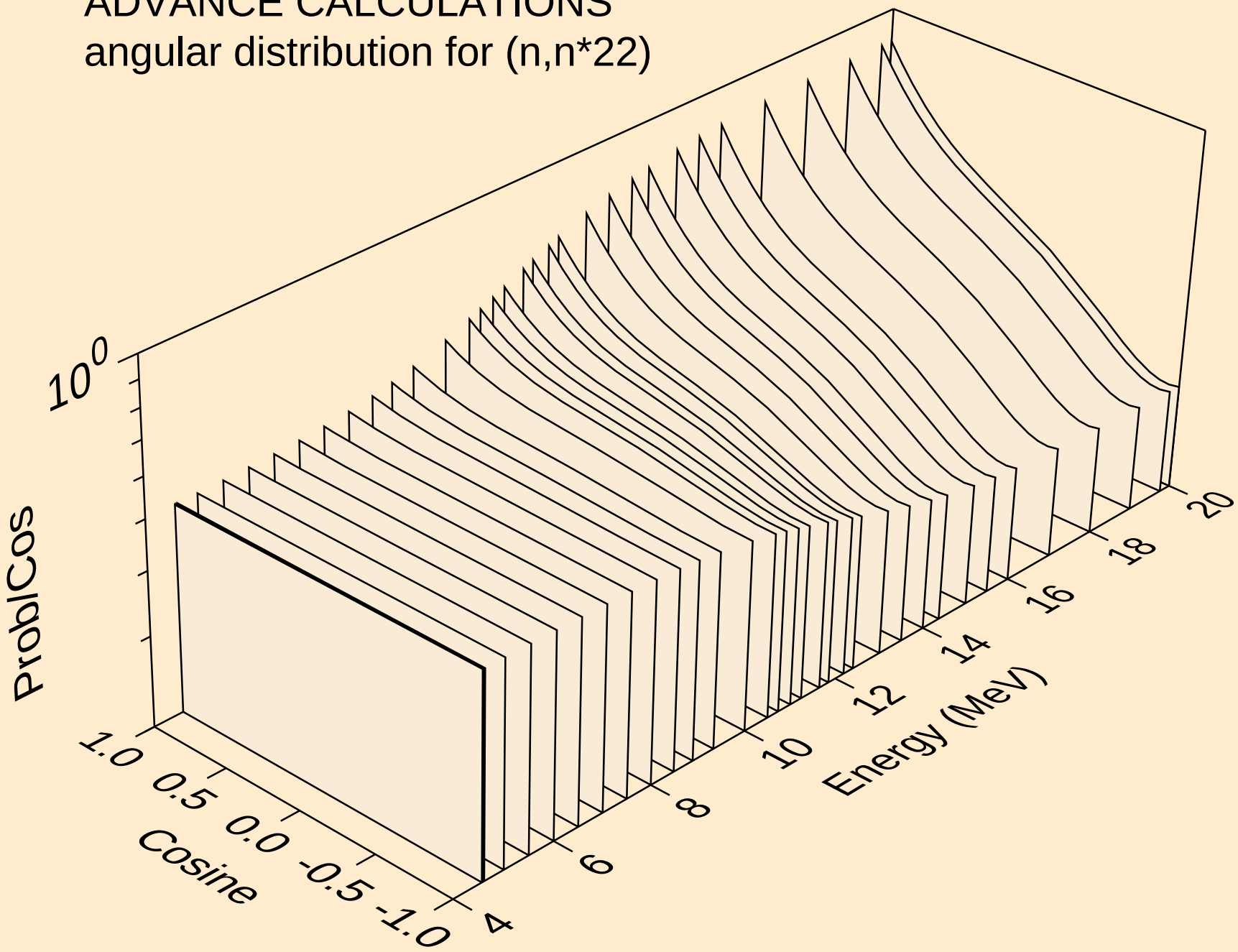
ADVANCE CALCULATIONS
angular distribution for (n,n*20)



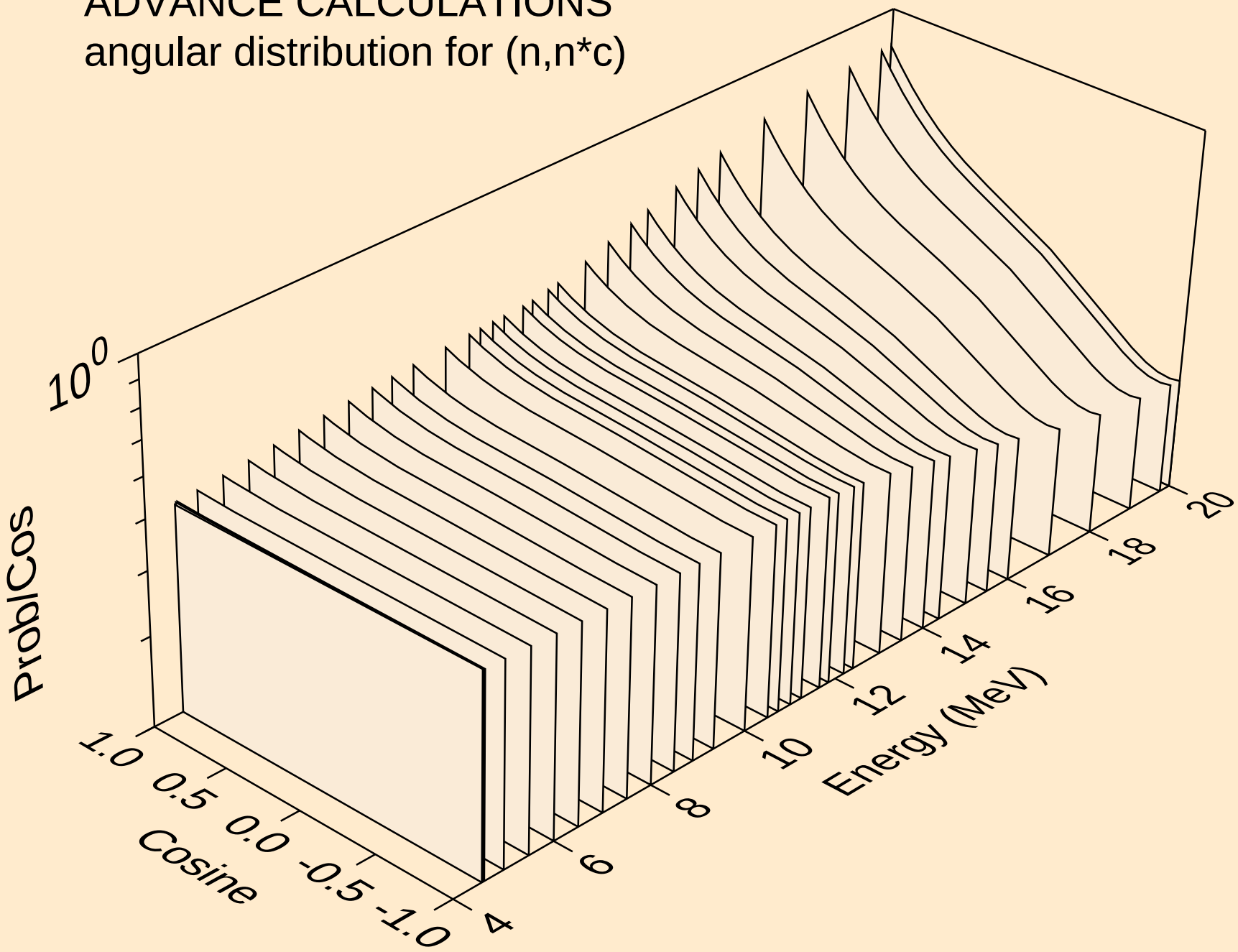
ADVANCE CALCULATIONS
angular distribution for (n,n*21)



ADVANCE CALCULATIONS
angular distribution for (n,n*22)

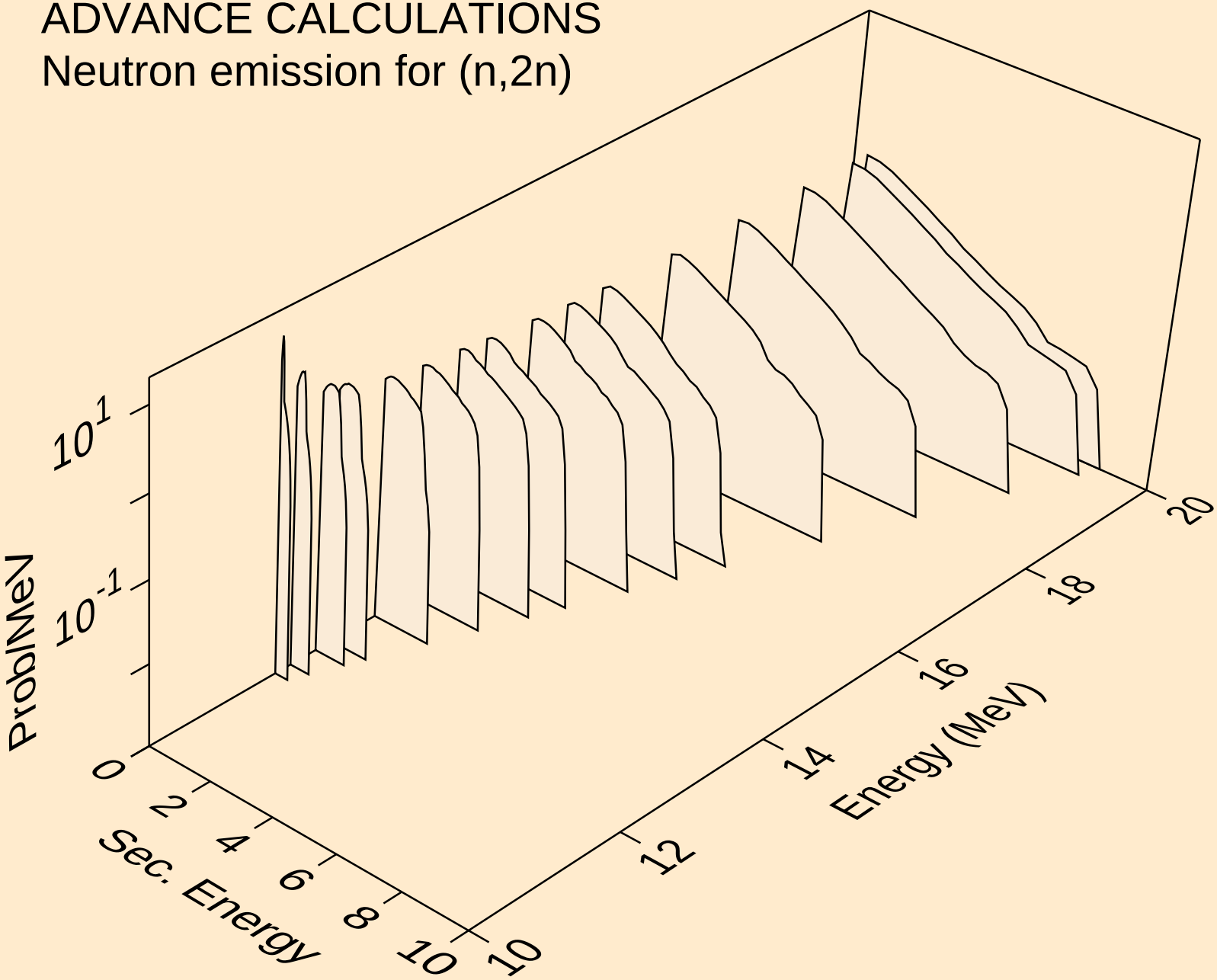


ADVANCE CALCULATIONS
angular distribution for (n,n*c)



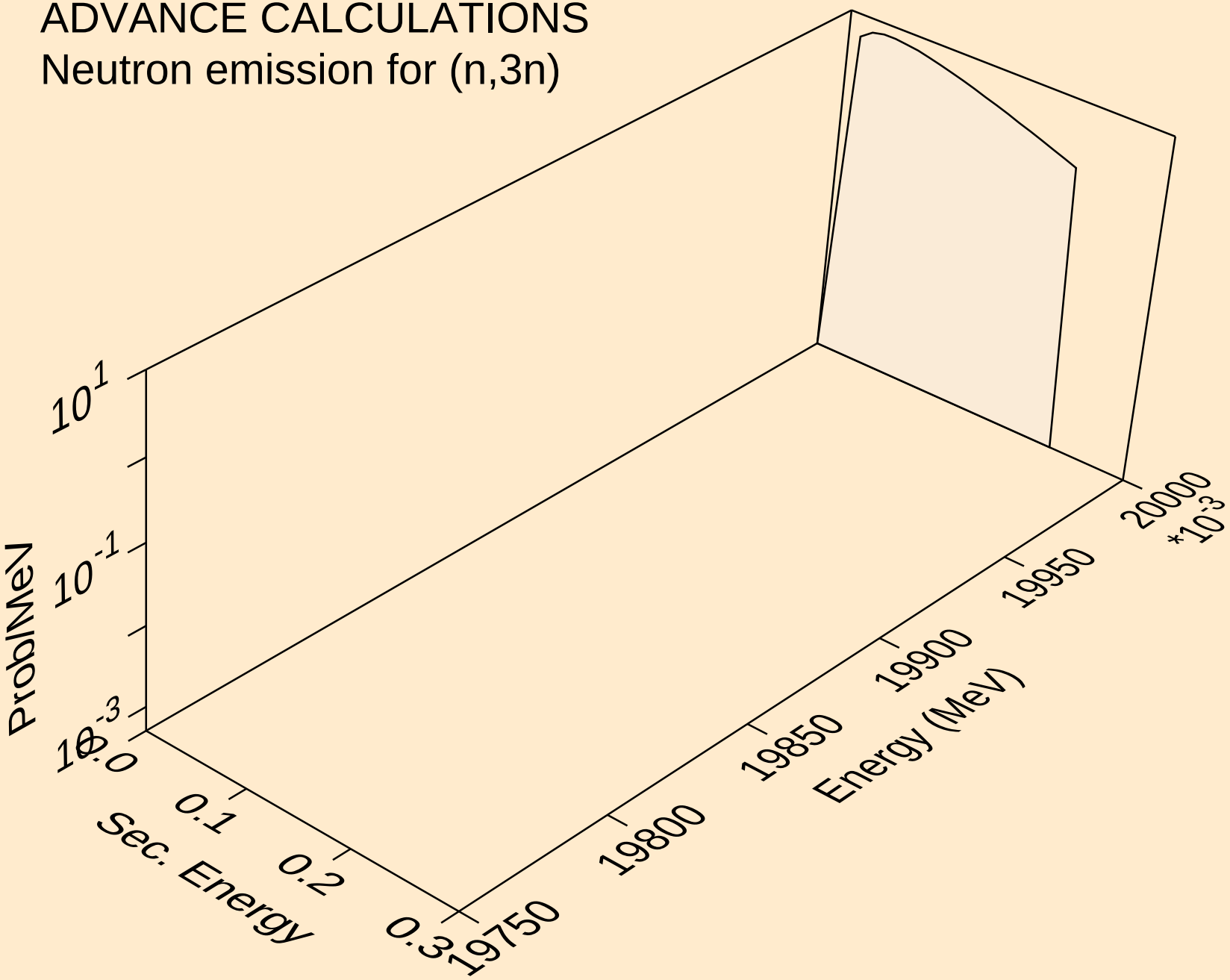
ADVANCE CALCULATIONS

Neutron emission for (n,2n)



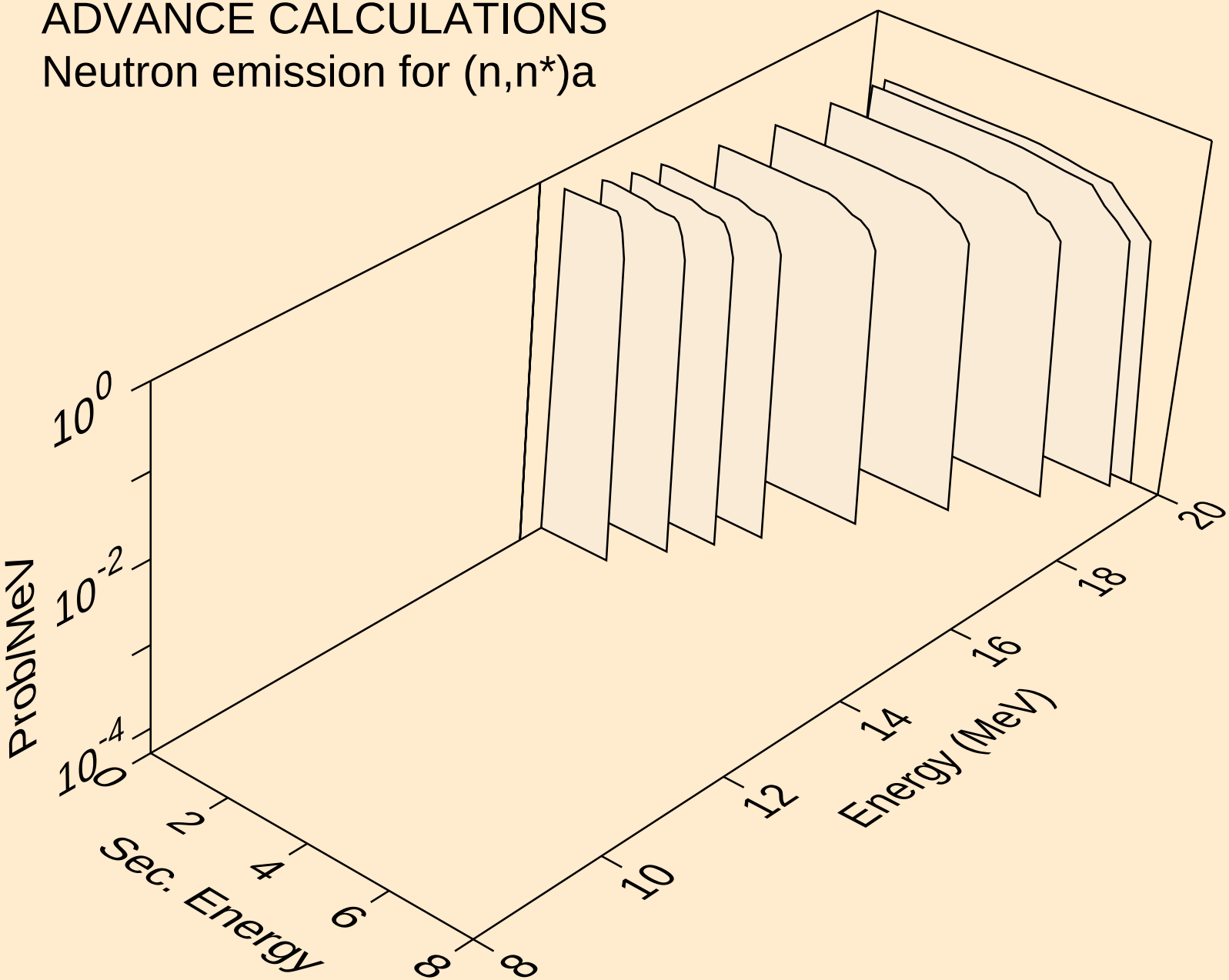
ADVANCE CALCULATIONS

Neutron emission for (n,3n)



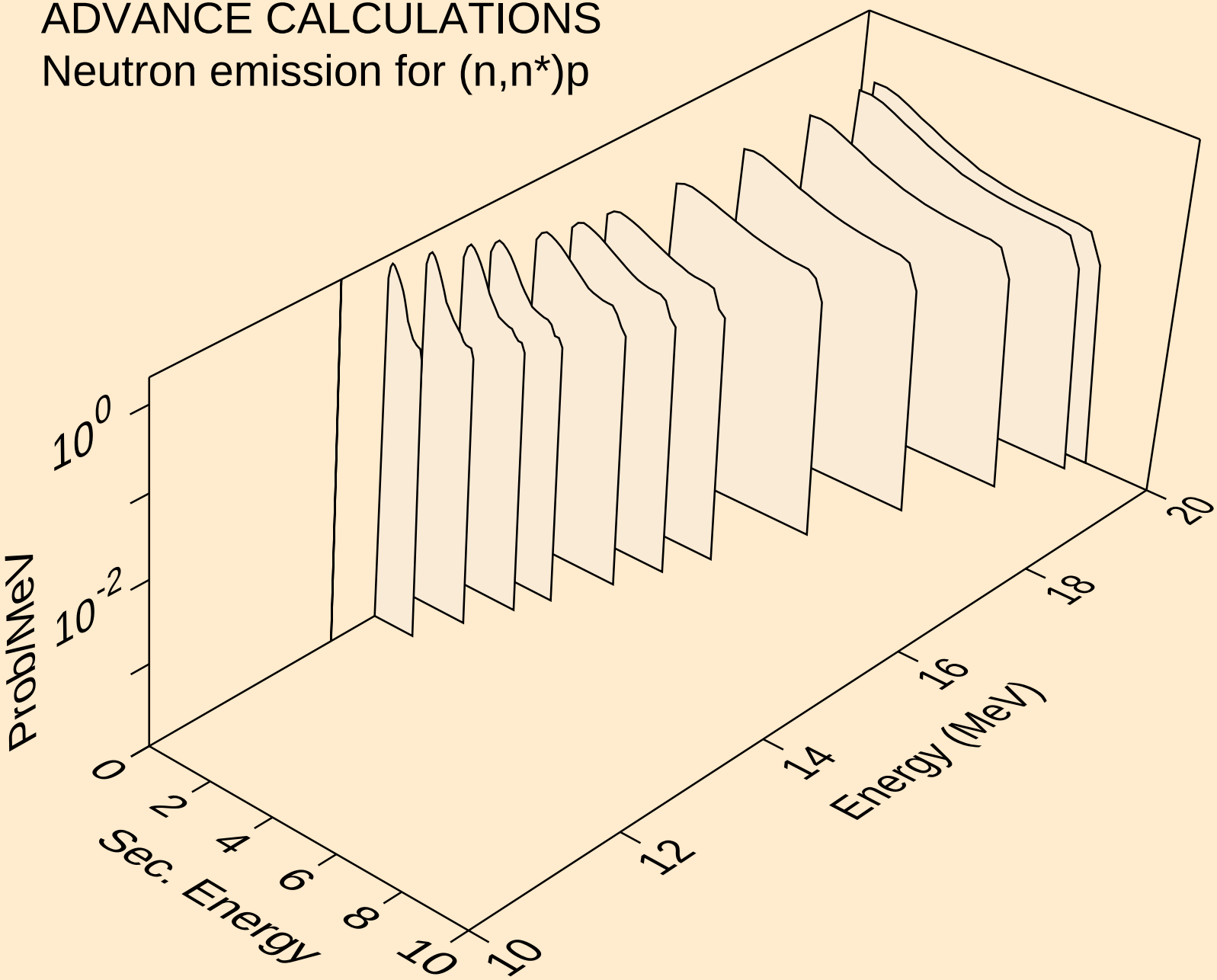
ADVANCE CALCULATIONS

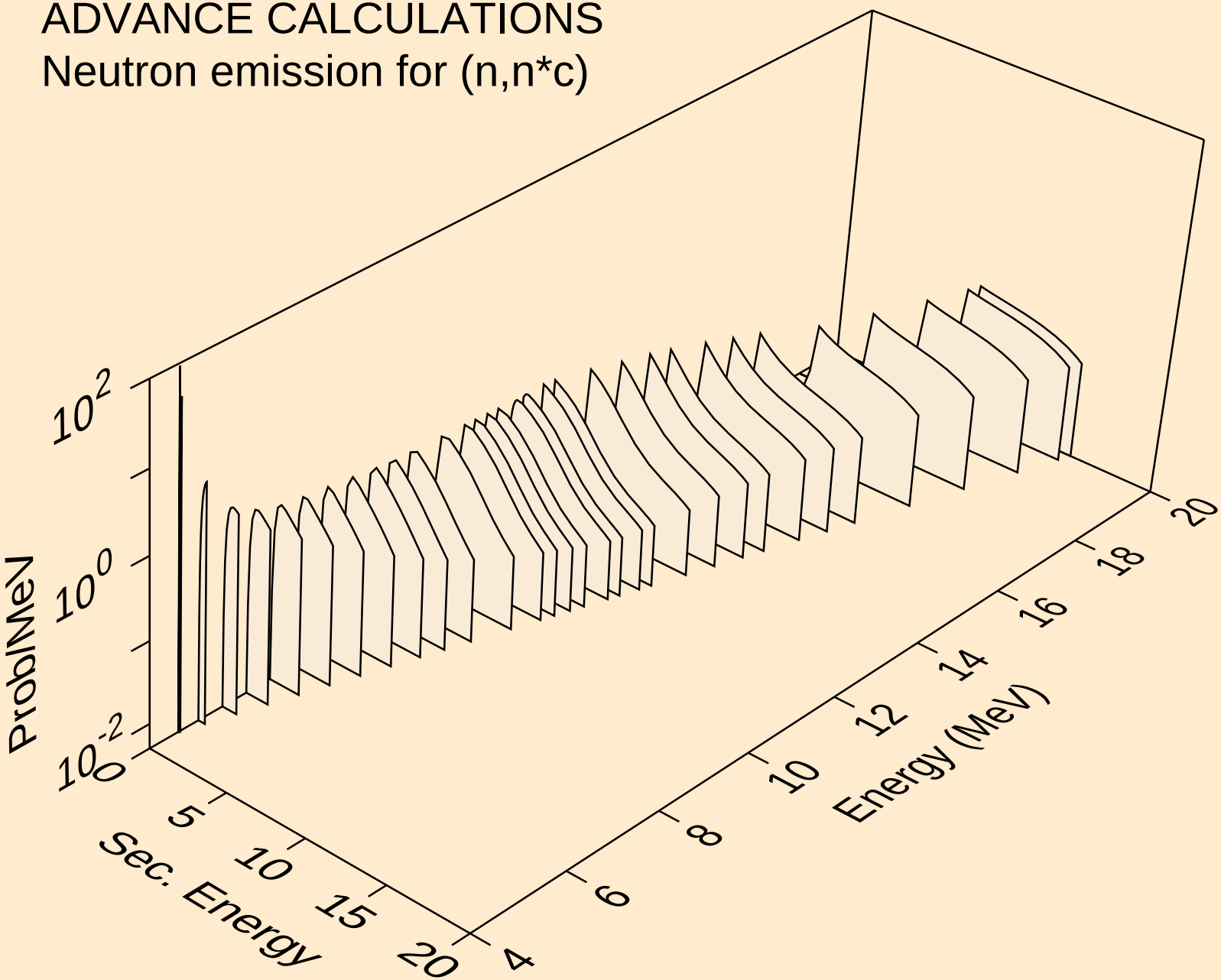
Neutron emission for (n,n*)a



ADVANCE CALCULATIONS

Neutron emission for (n,n*)p



ADVANCE CALCULATIONS

Neutron emission for (n,n*c)