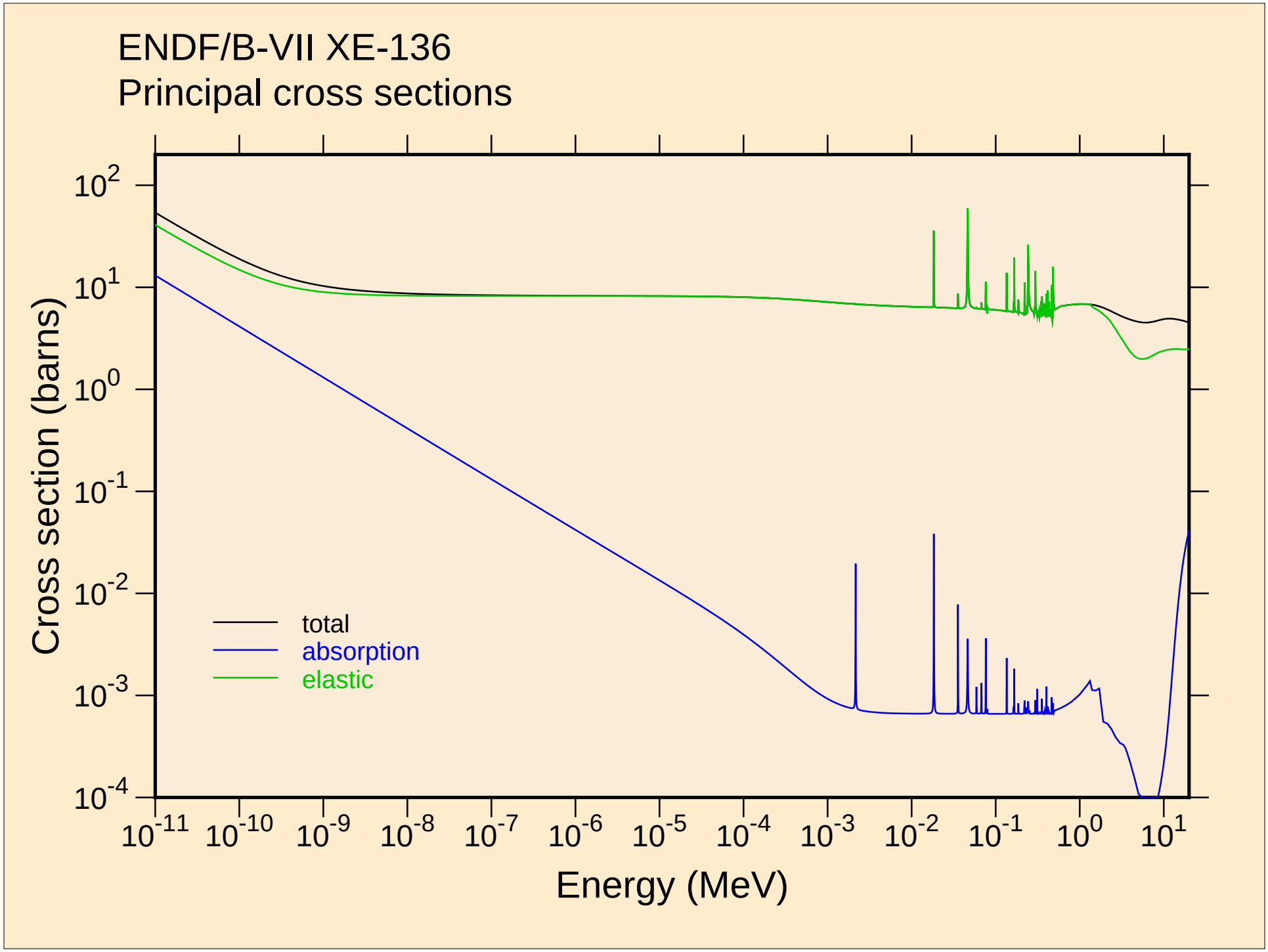
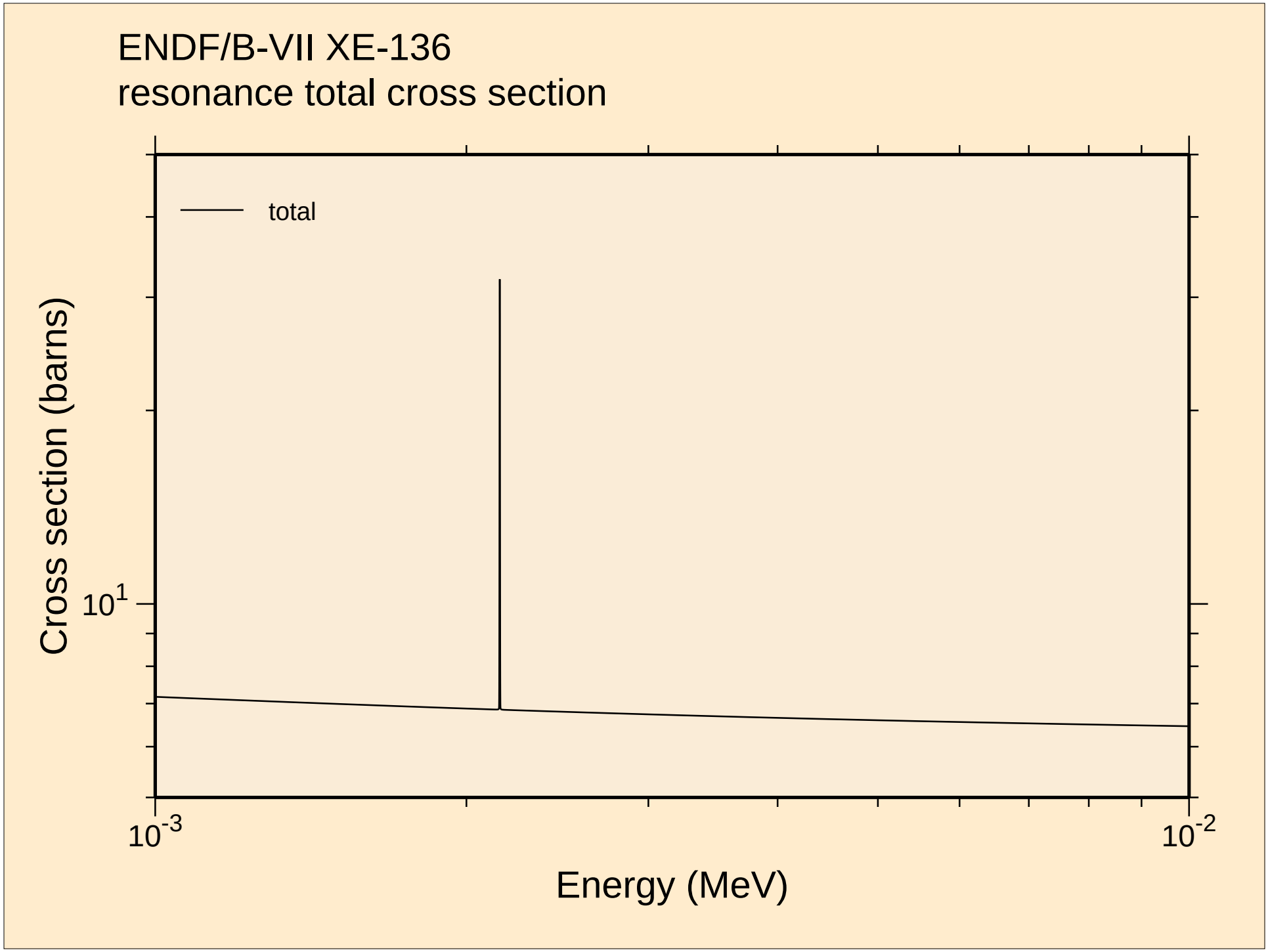
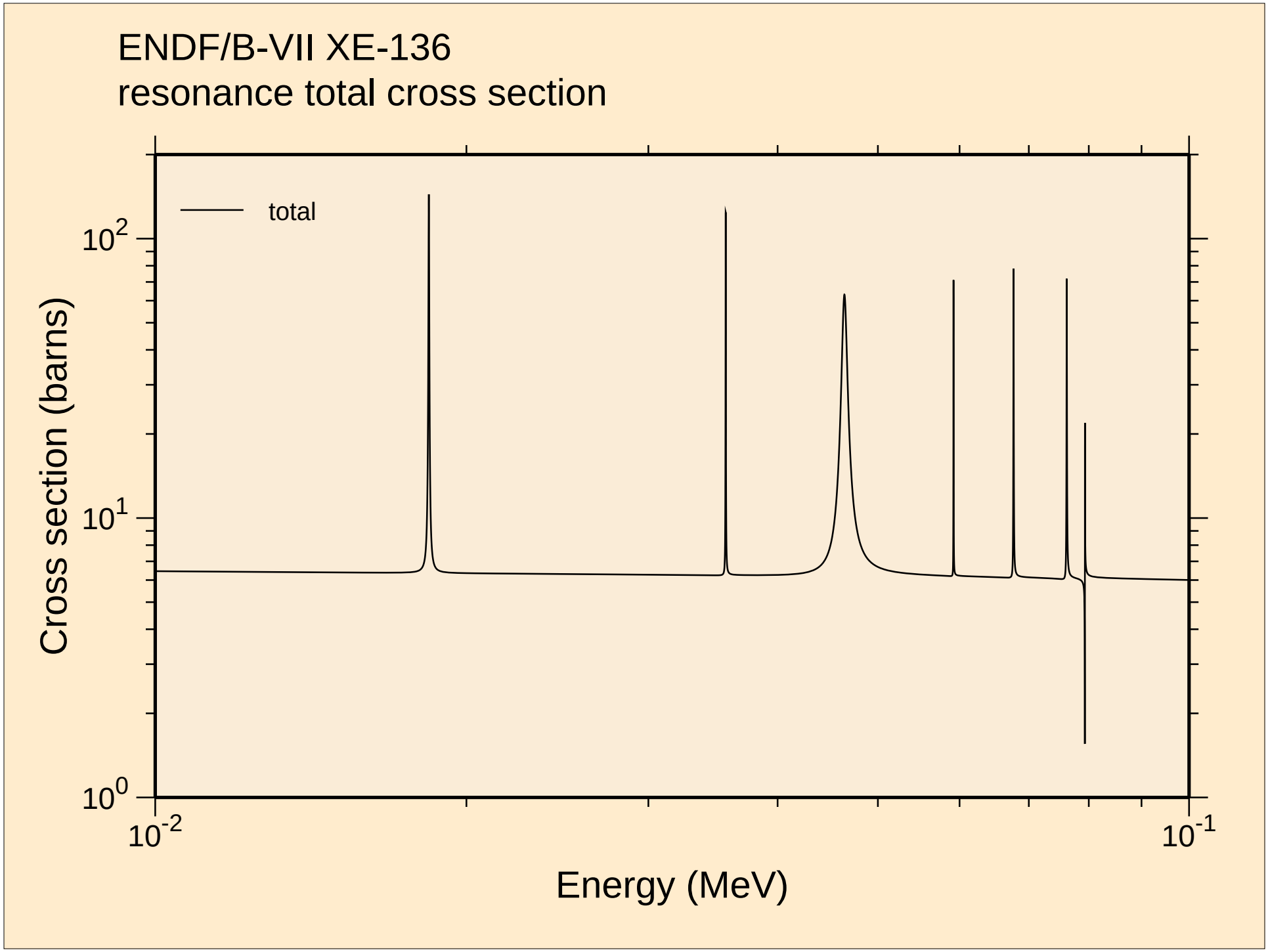
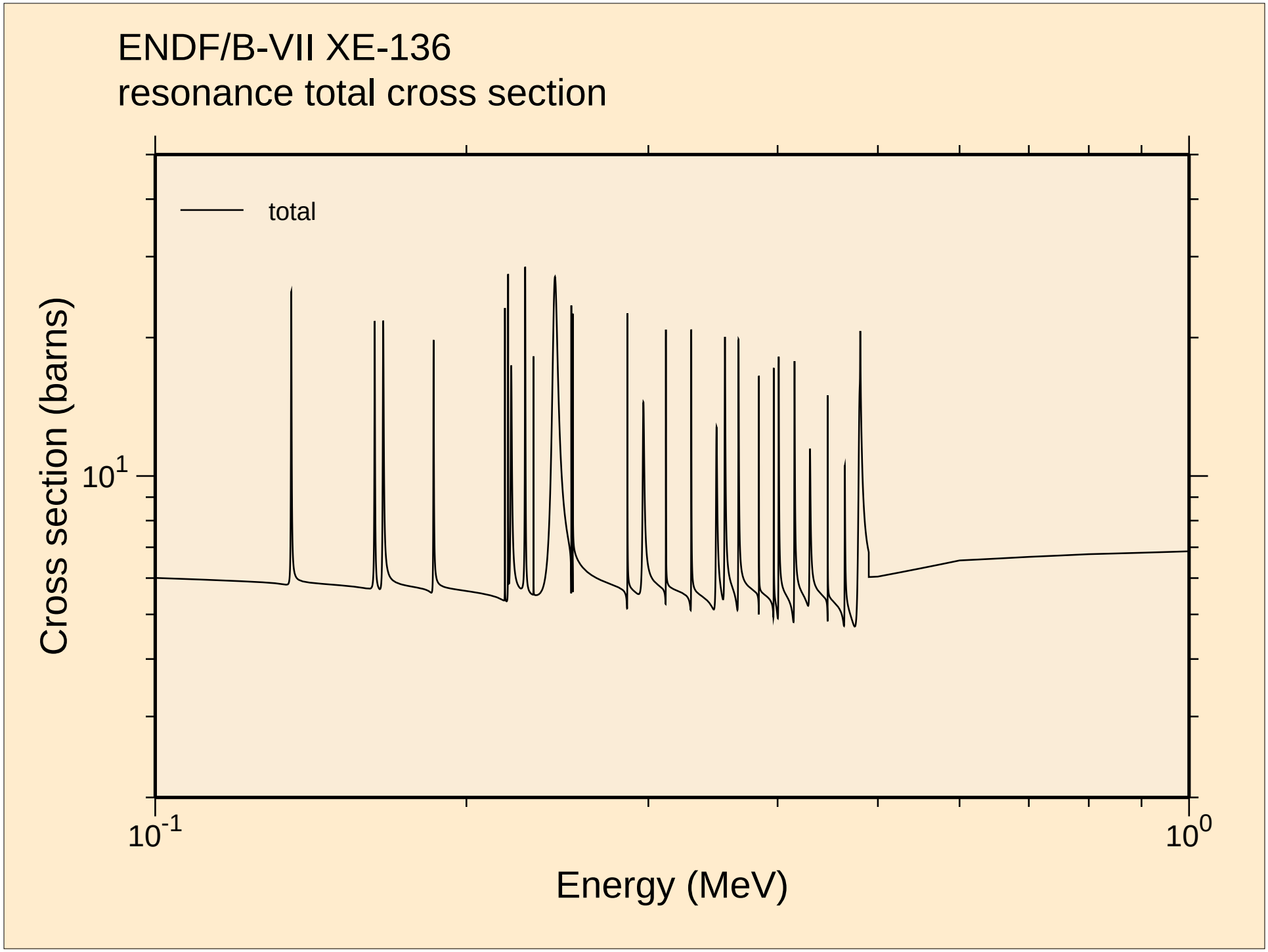
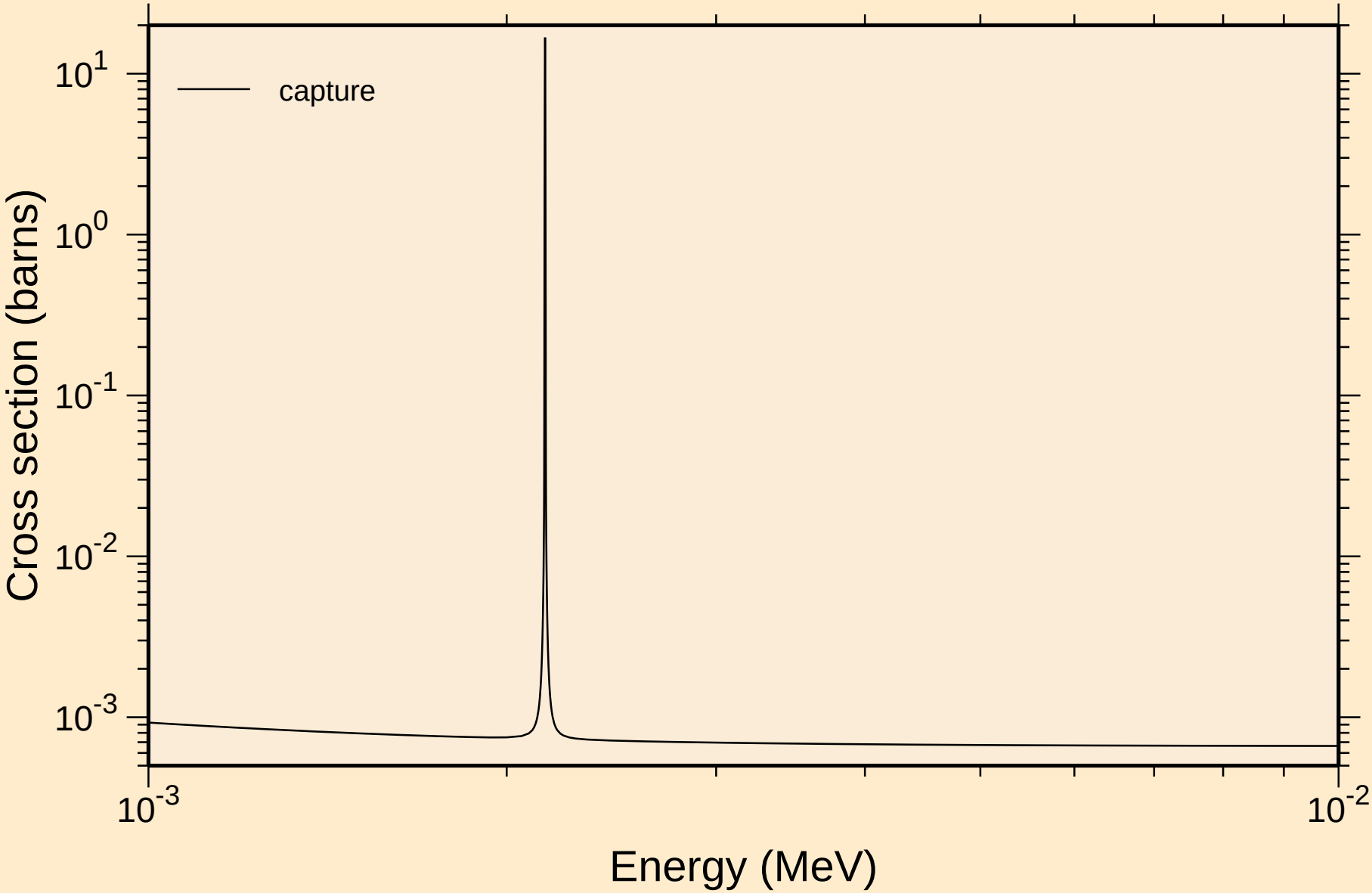

ENDF/B-VII XE-136
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
$10^{2}$
$10^{1}$
$10^{0}$
$10^{-1}$
$10^{-2}$
$10^{-3}$
$10^{-4}$
$10^{-11}$ $10^{-10}$ $10^{-9}$ $10^{-8}$ $10^{-7}$ $10^{-6}$ $10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$


ENDF/B-VII XE-136
resonance total cross section
total
Cross section (barns)
$10^1$
$10^{-3}$
$10^{-2}$
Energy (MeV)

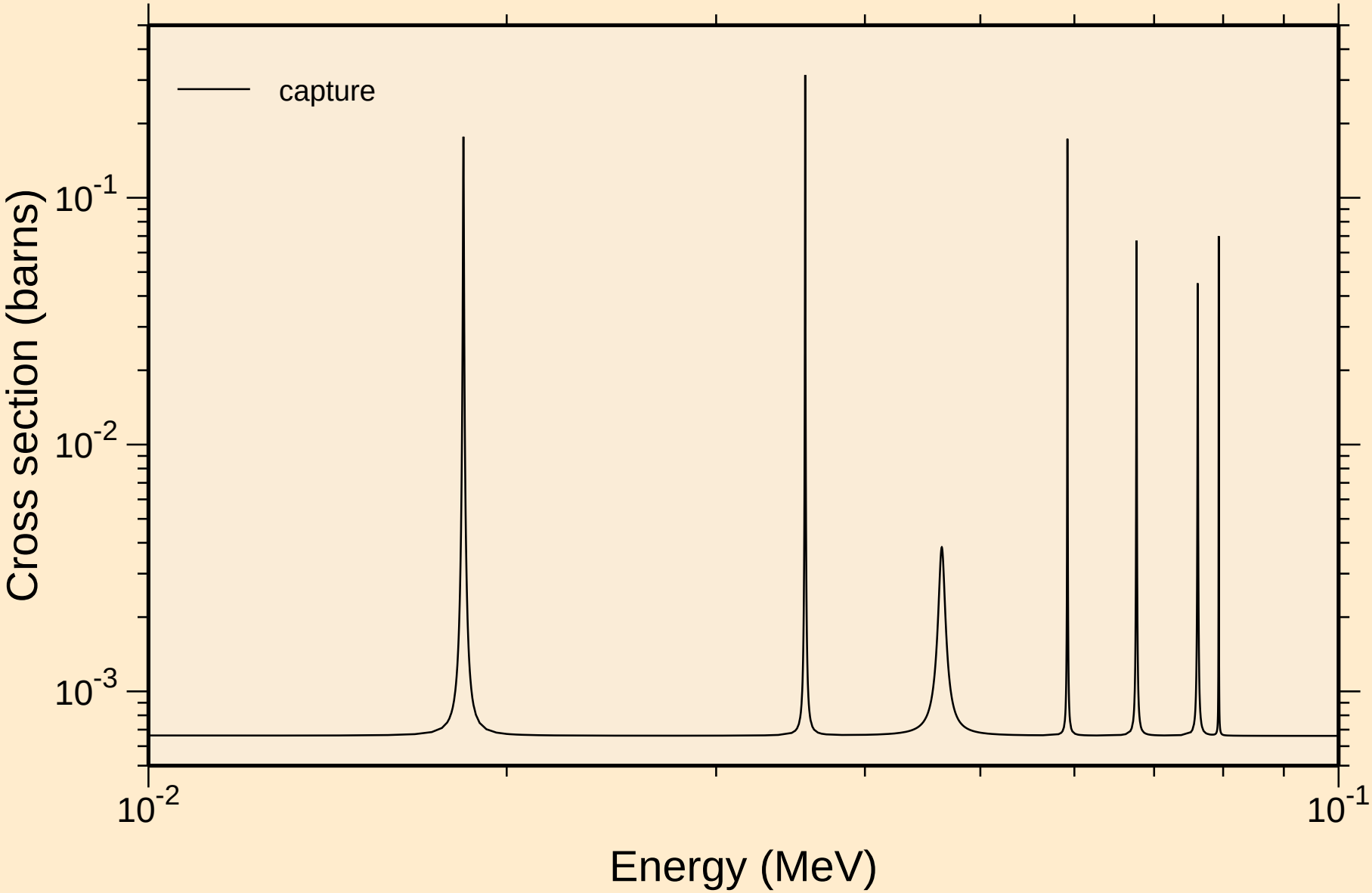

ENDF/B-VII XE-136
resonance total cross section
total
Cross section (barns)
$10^2$
$10^1$
$10^0$
$10^{-2}$
$10^{-1}$
Energy (MeV)


ENDF/B-VII XE-136
resonance total cross section
total
Cross section (barns)
$10^1$
$10^{-1}$
$10^0$
Energy (MeV)

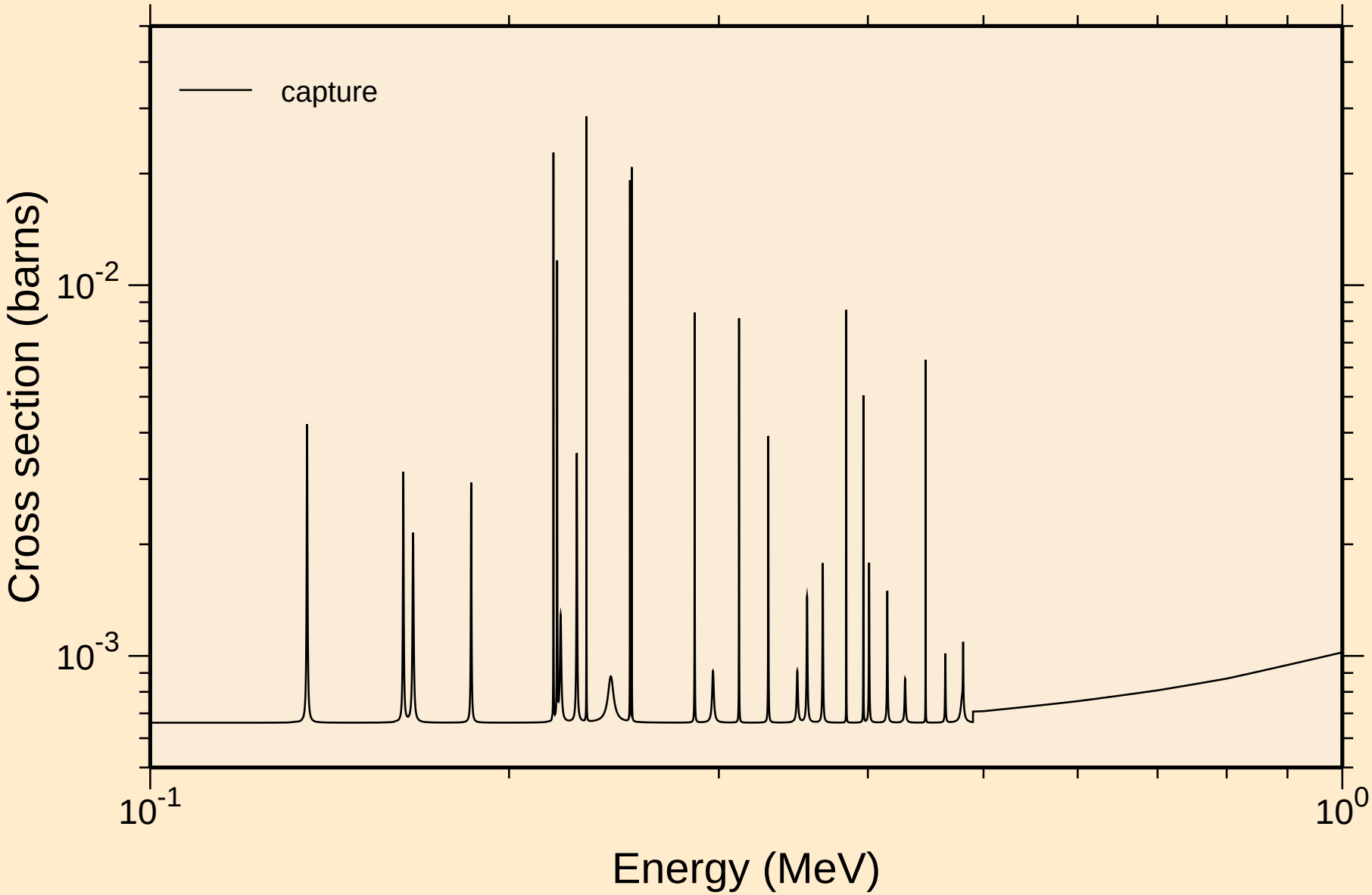
ENDF/B-VII XE-136
resonance absorption cross sections

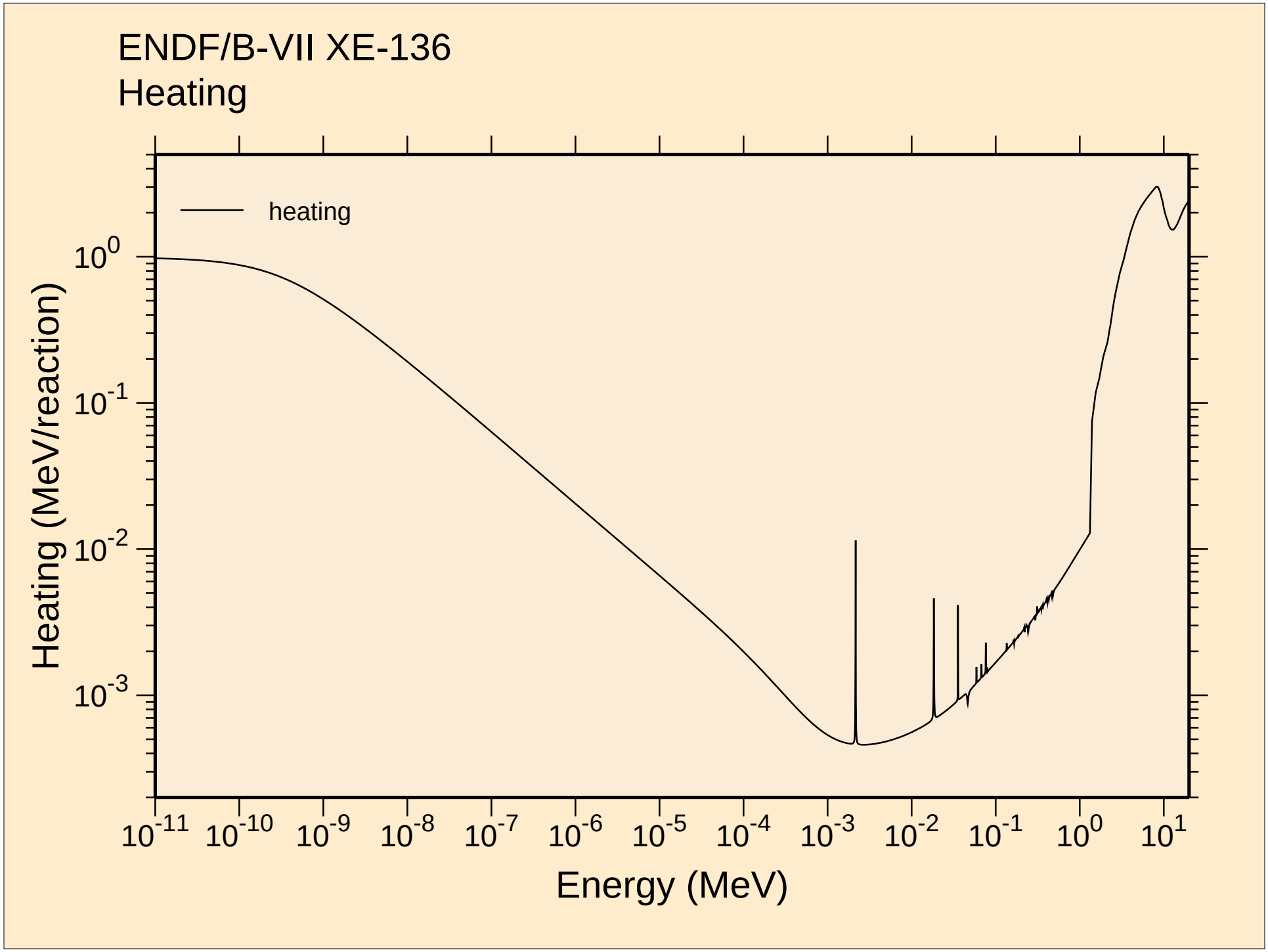


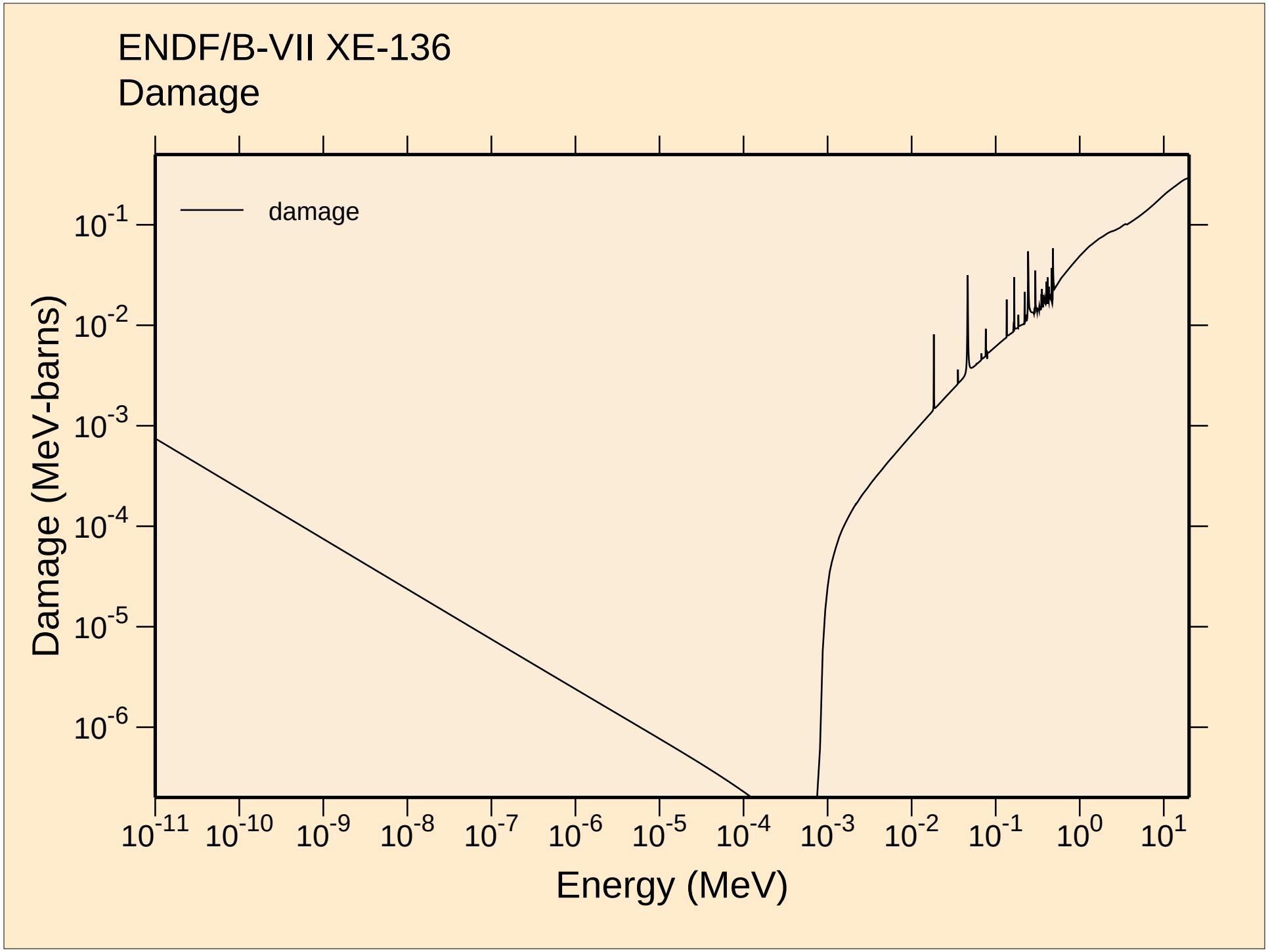
ENDF/B-VII XE-136
resonance absorption cross sections

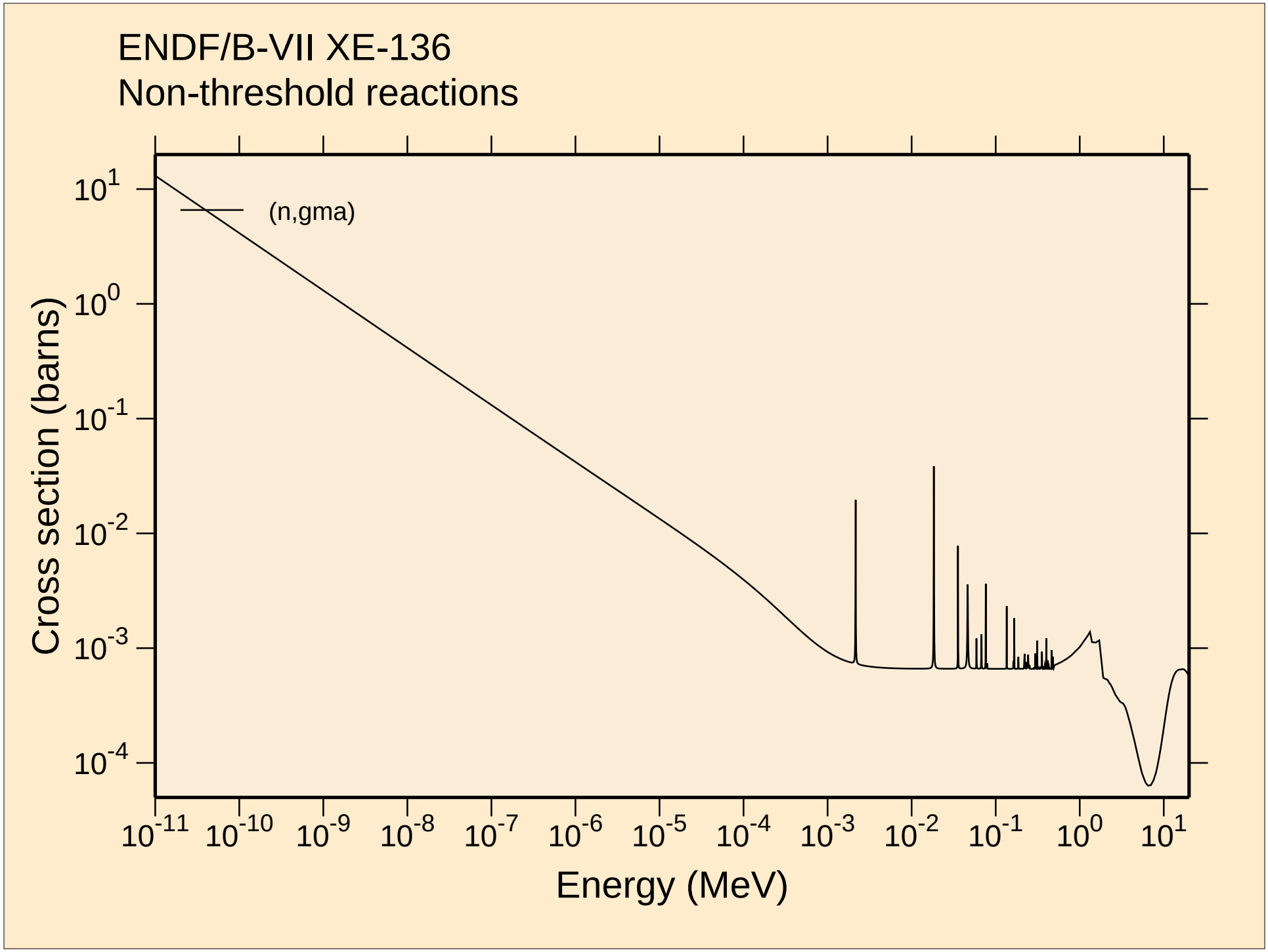


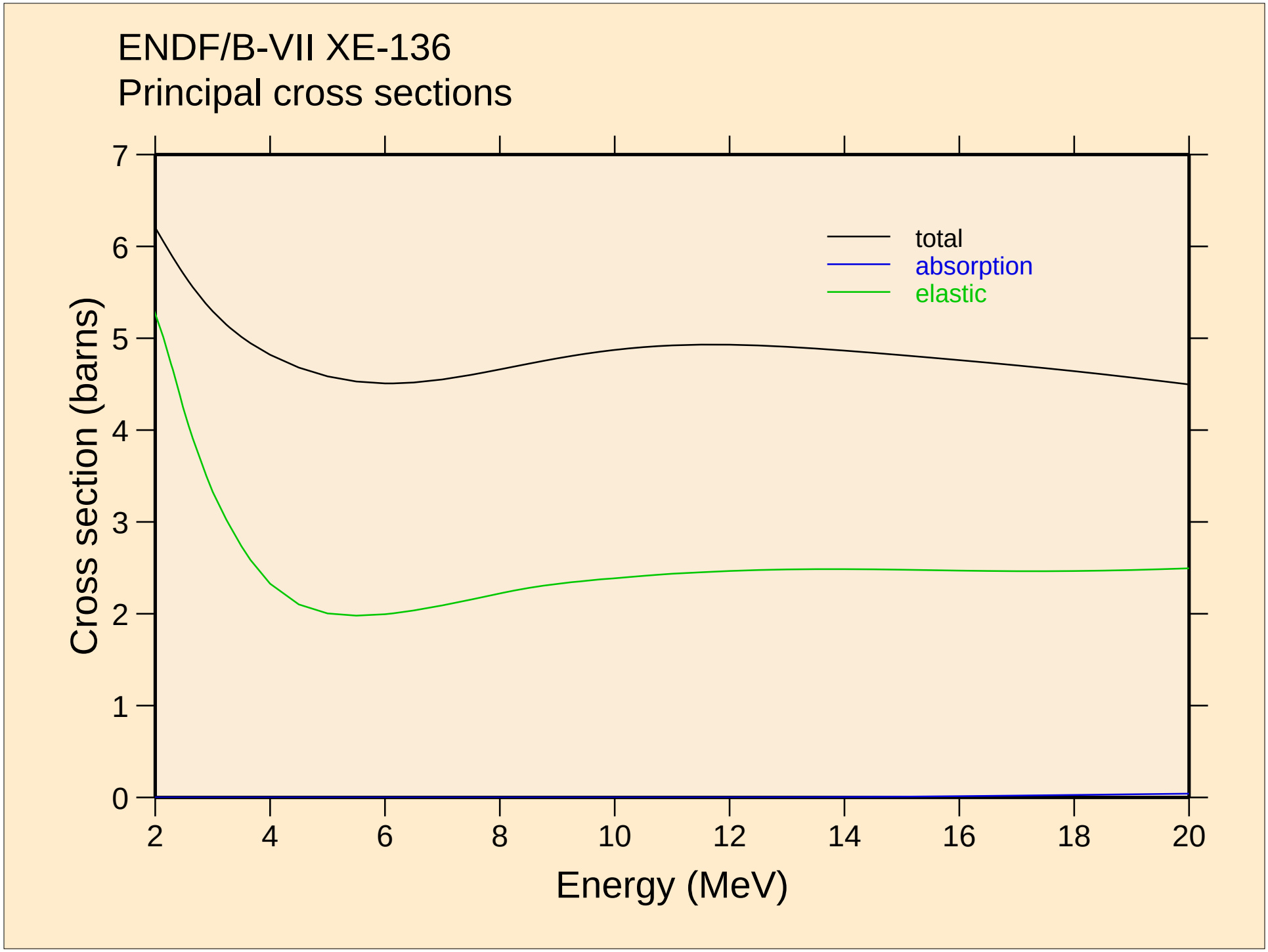
ENDF/B-VII XE-136
resonance absorption cross sections

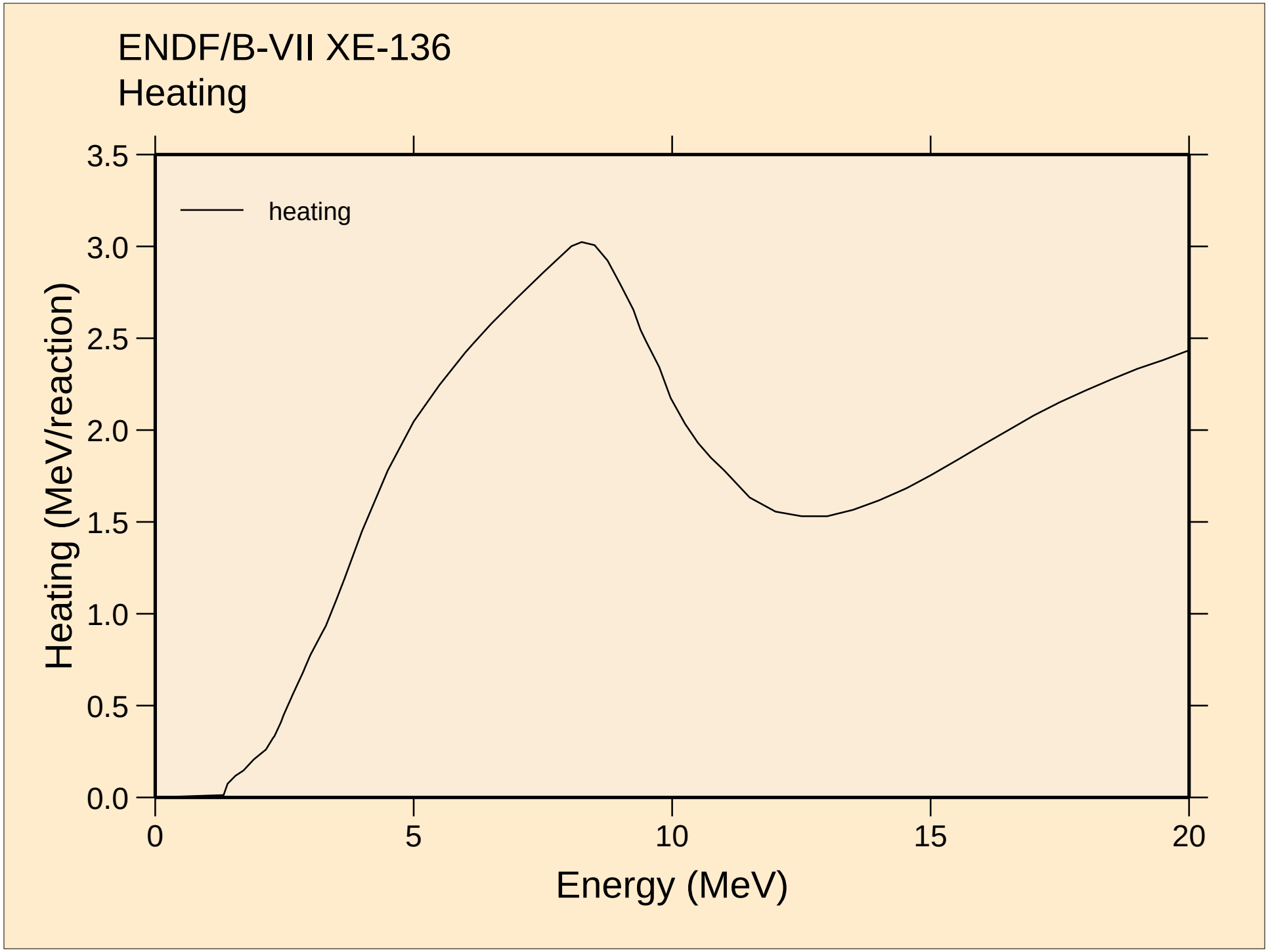


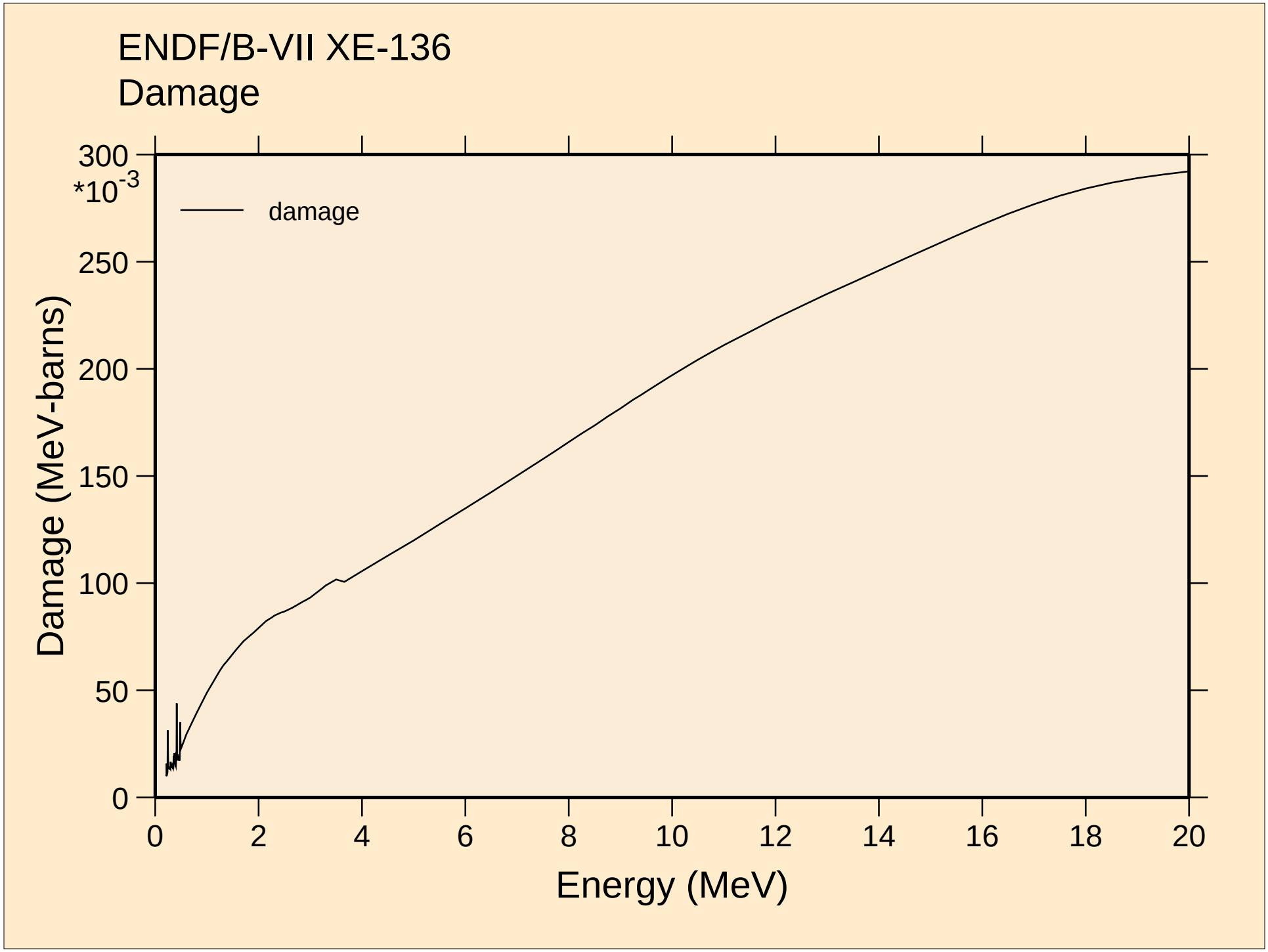

ENDF/B-VII XE-136
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
$10^{0}$
$10^{-1}$
$10^{-2}$
$10^{-3}$
$10^{-11}$ $10^{-10}$ $10^{-9}$ $10^{-8}$ $10^{-7}$ $10^{-6}$ $10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$

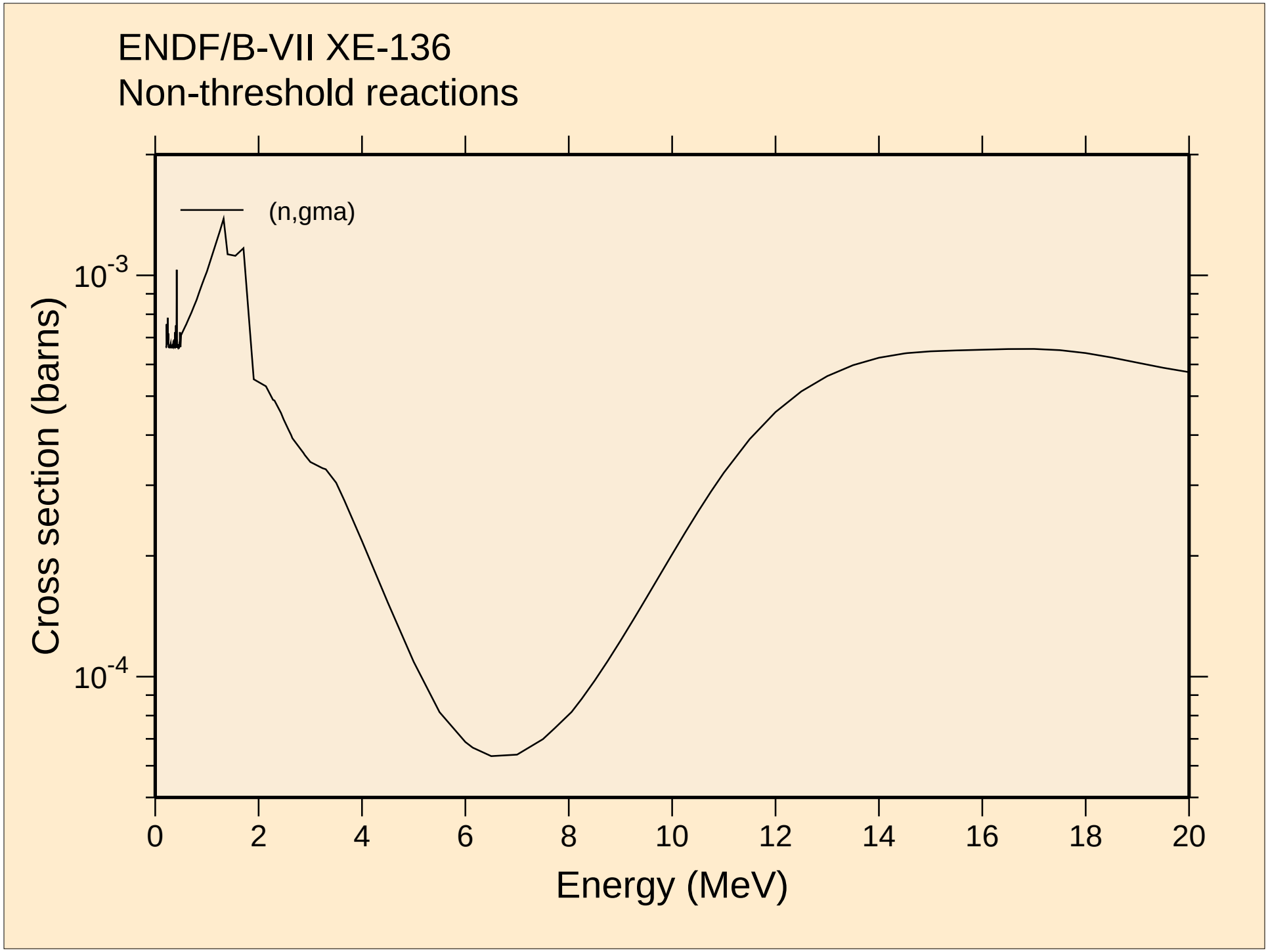

ENDF/B-VII XE-136
Damage
damage
Damage (MeV-barns)
Energy (MeV)
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-11
10^-10
10^-9
10^-8
10^-7
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1

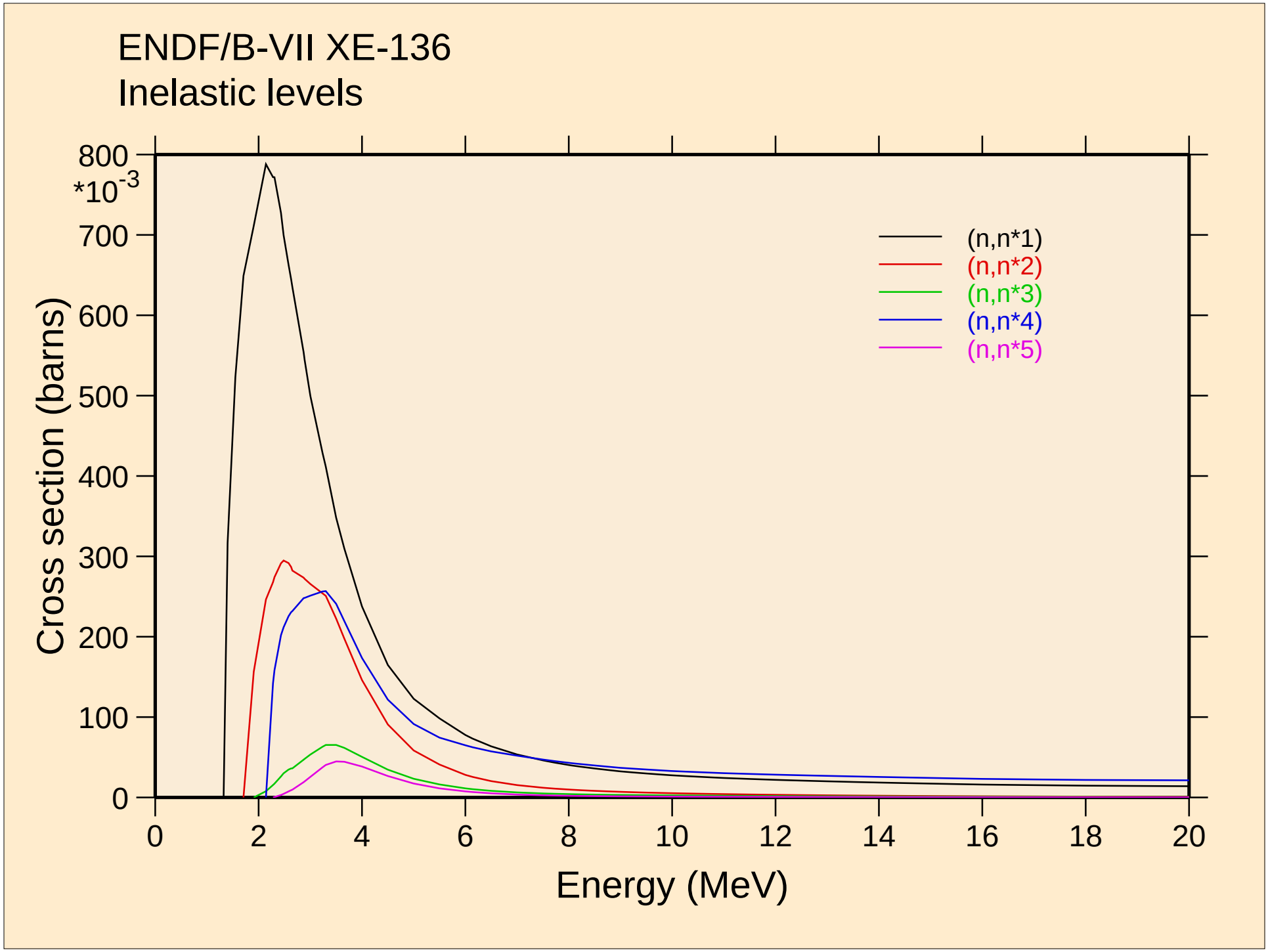

ENDF/B-VII XE-136
Non-threshold reactions
(n,gma)
Cross section (barns)
Energy (MeV)
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-11
10^-10
10^-9
10^-8
10^-7
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1

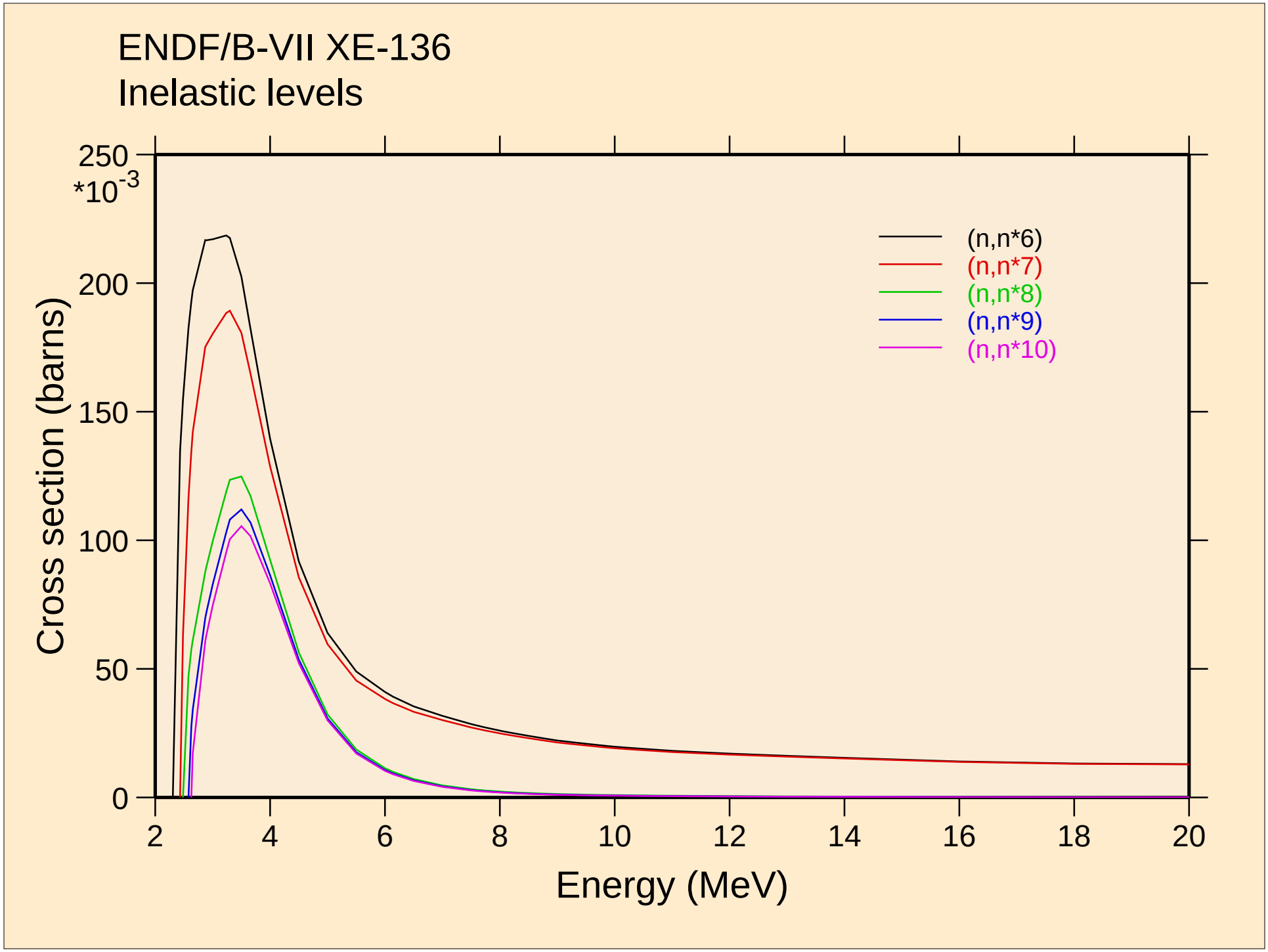

ENDF/B-VII XE-136
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
0
1
2
3
4
5
6
7
2
4
6
8
10
12
14
16
18
20

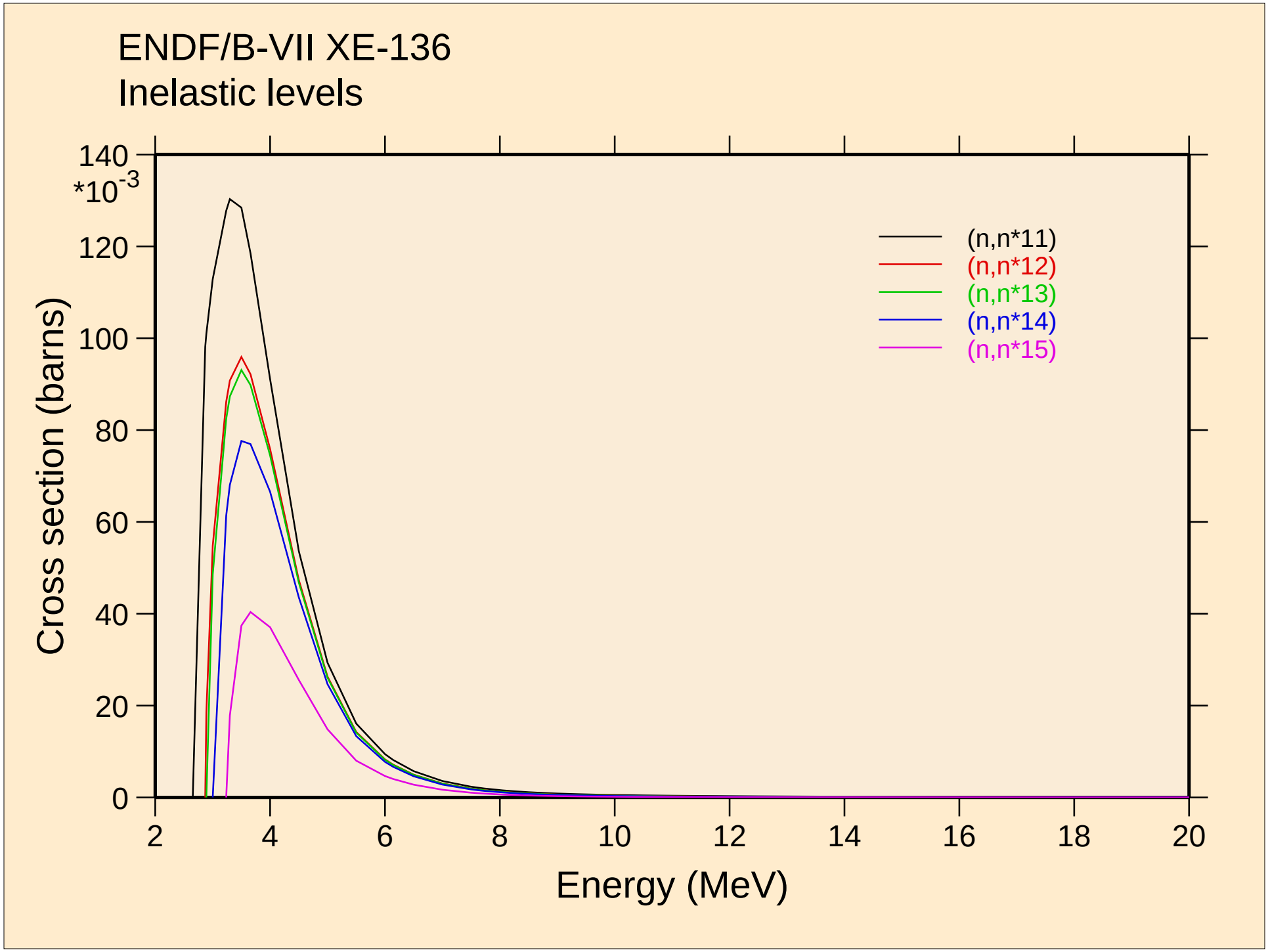

ENDF/B-VII XE-136
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
0
5
10
15
20

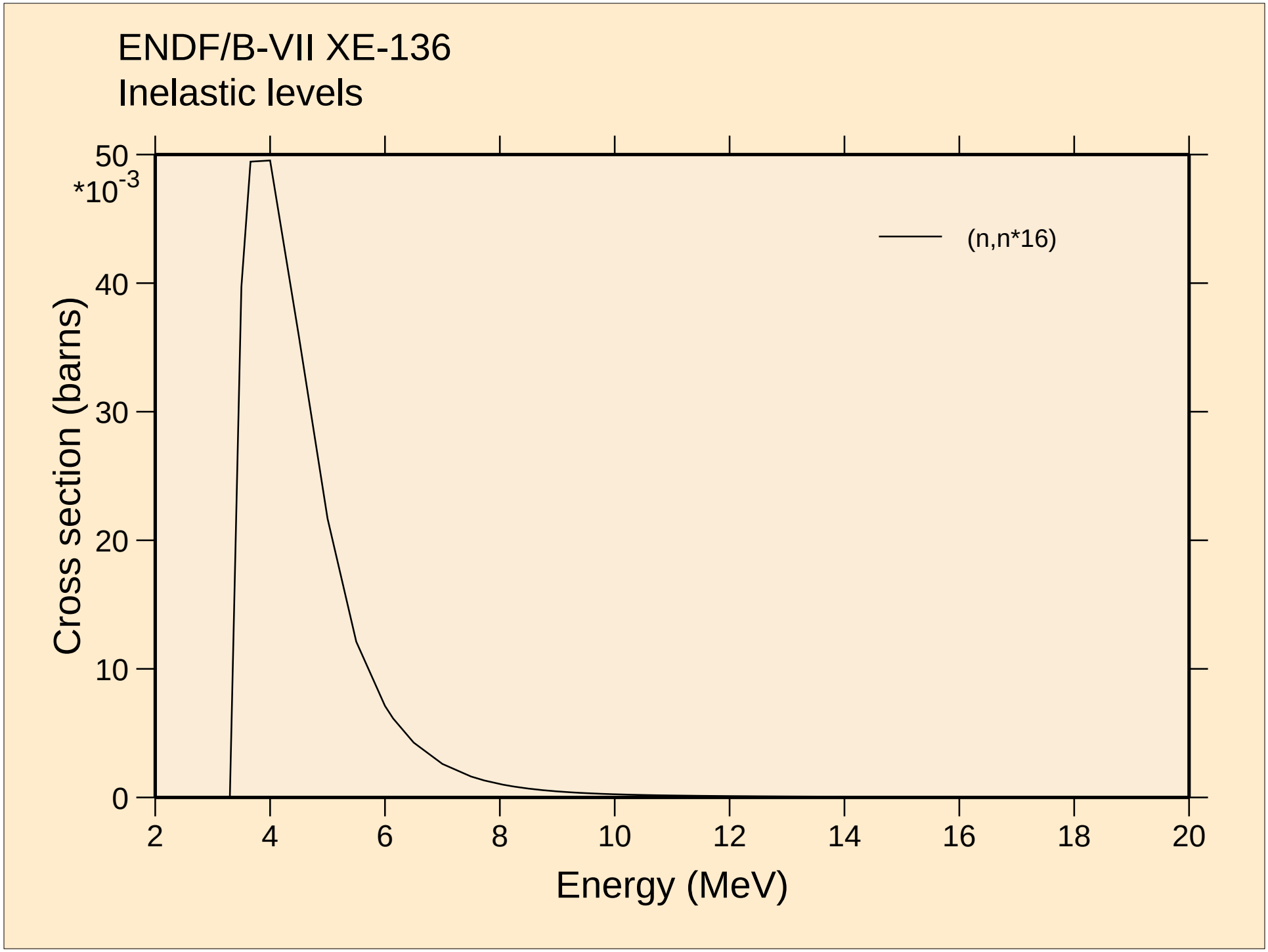

ENDF/B-VII XE-136
Damage
damage
Damage (MeV-barns)
*10^-3
300
250
200
150
100
50
0
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

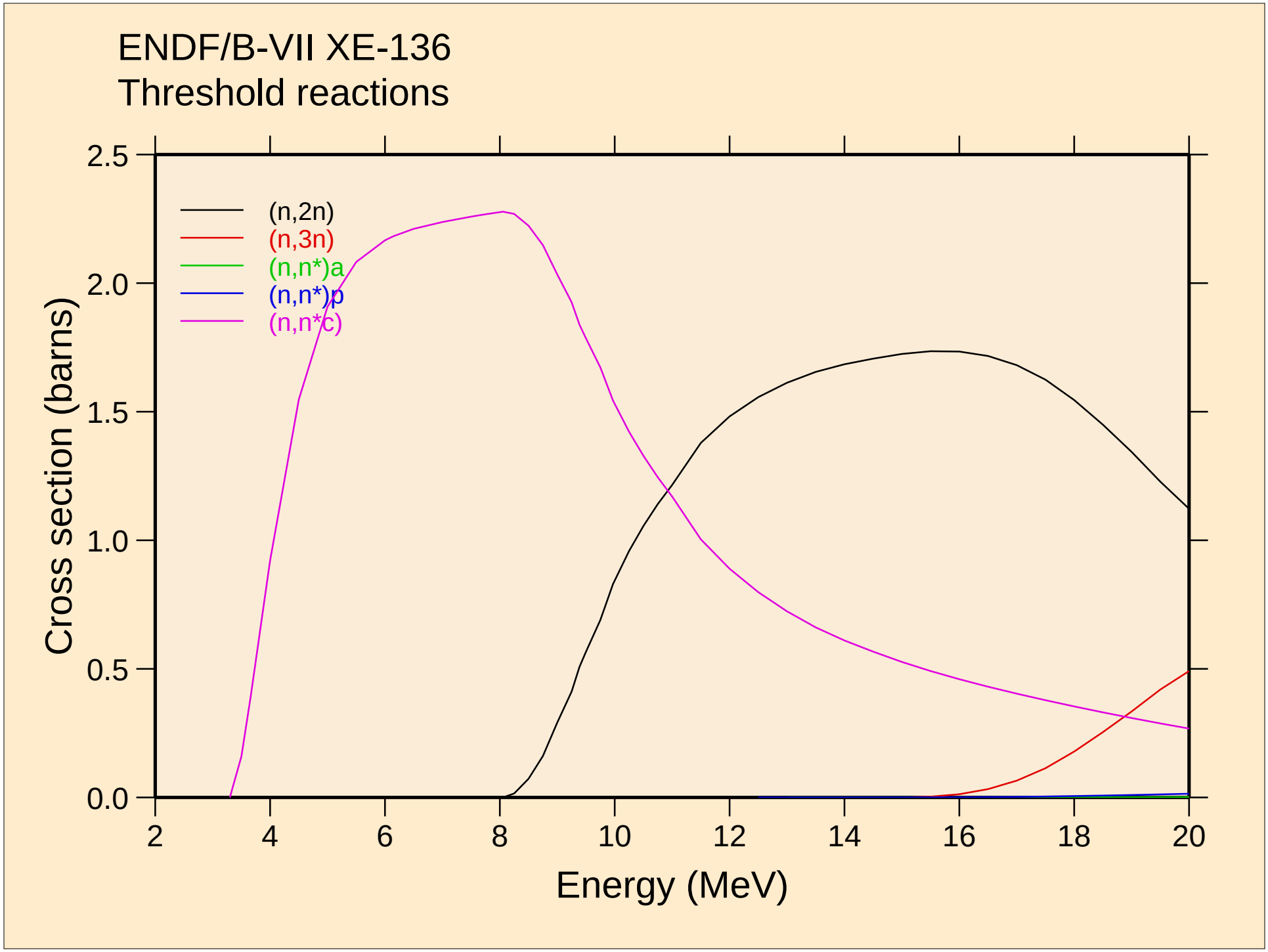

ENDF/B-VII XE-136
Non-threshold reactions
(n,gma)
Cross section (barns)
10-3
10-4
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

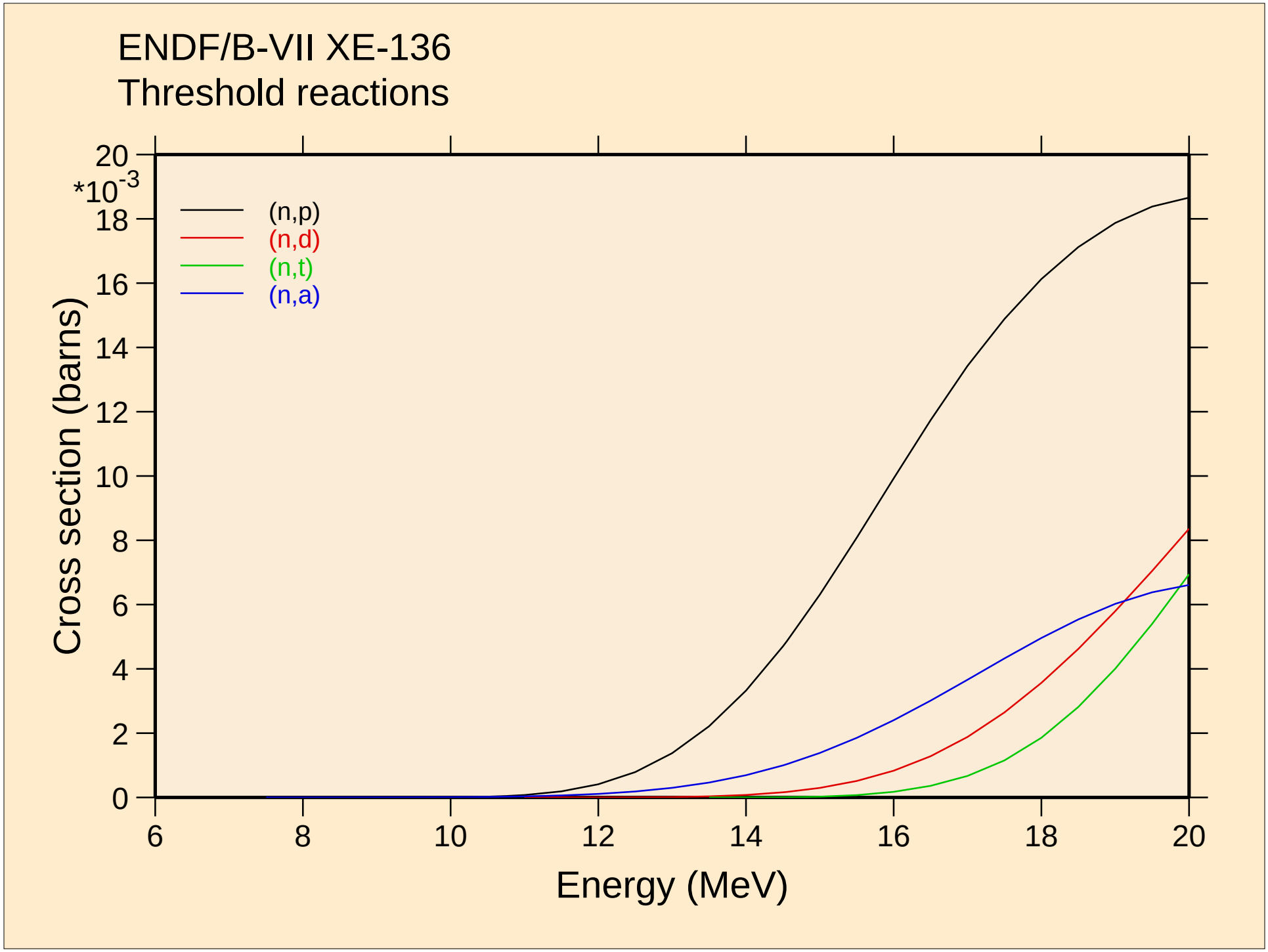

ENDF/B-VII XE-136
Inelastic levels
Cross section (barns)
*10^-3
800
700
600
500
400
300
200
100
0
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)
(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)

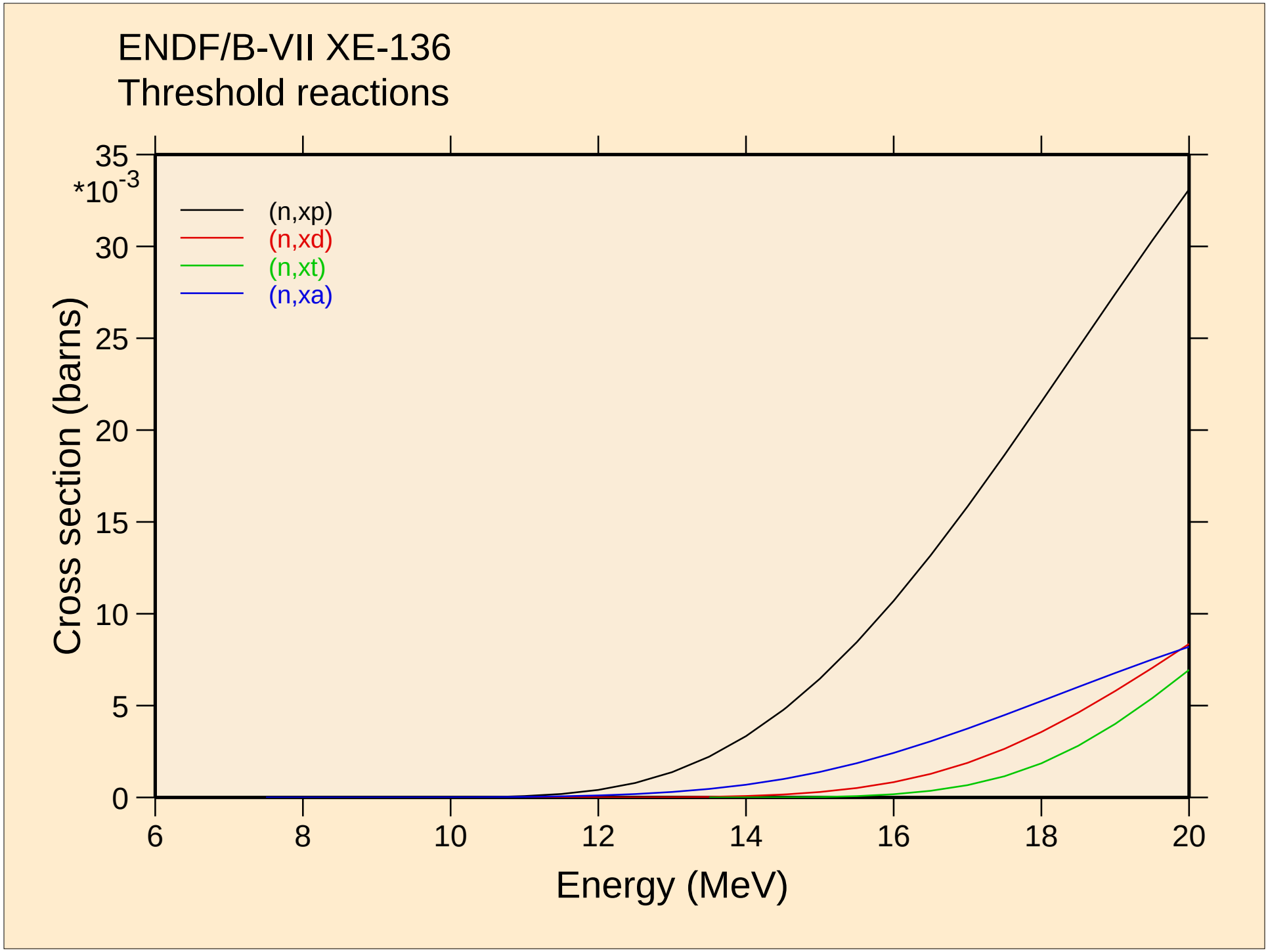

ENDF/B-VII XE-136
Inelastic levels
250
*10-3
200
150
100
50
0
Cross section (barns)
2
4
6
8
10
12
14
16
18
20
Energy (MeV)
(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
(n,n*10)

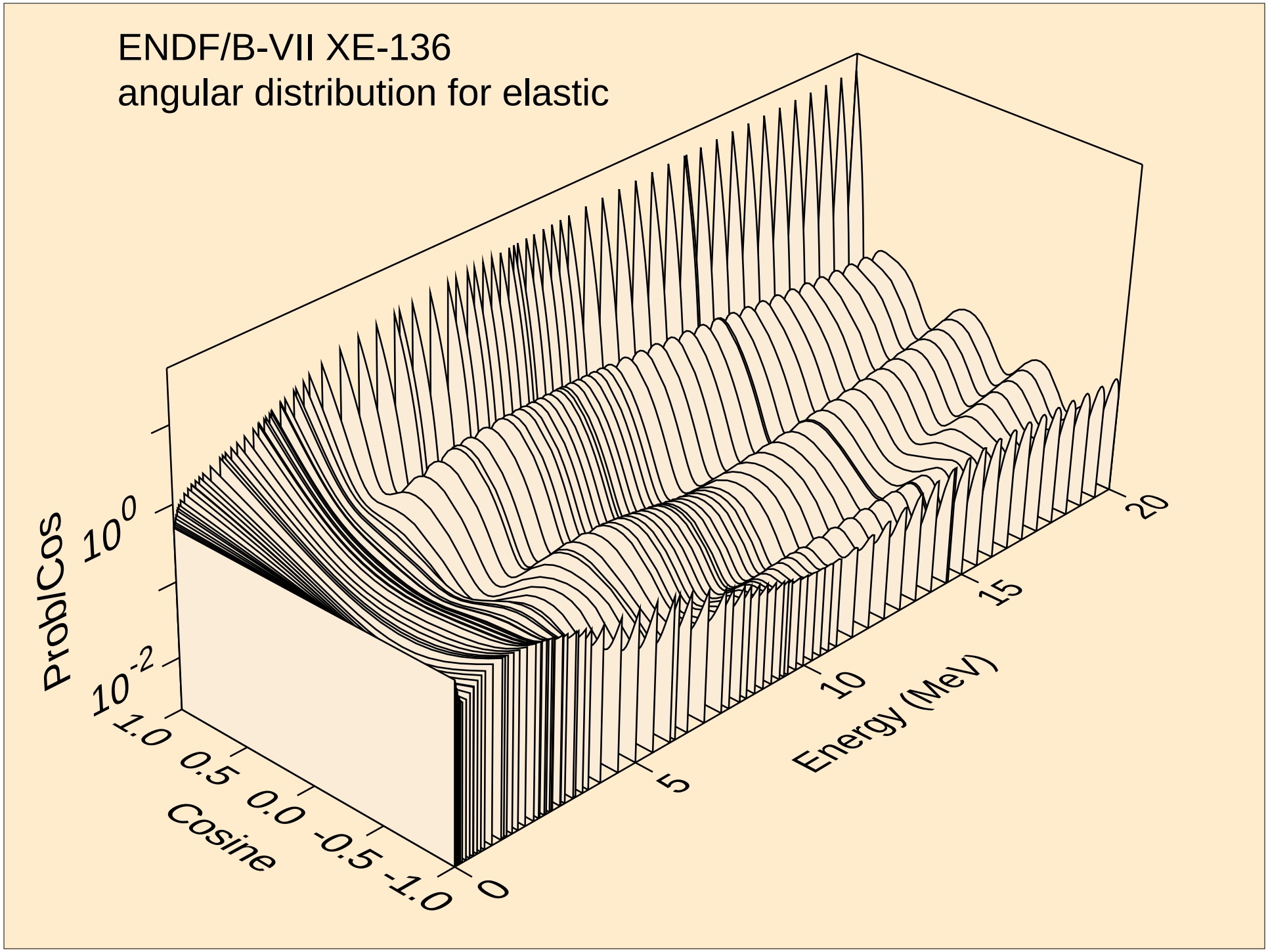

ENDF/B-VII XE-136
Inelastic levels
Cross section (barns)
*10^-3
140
120
100
80
60
40
20
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)
(n,n*11)
(n,n*12)
(n,n*13)
(n,n*14)
(n,n*15)

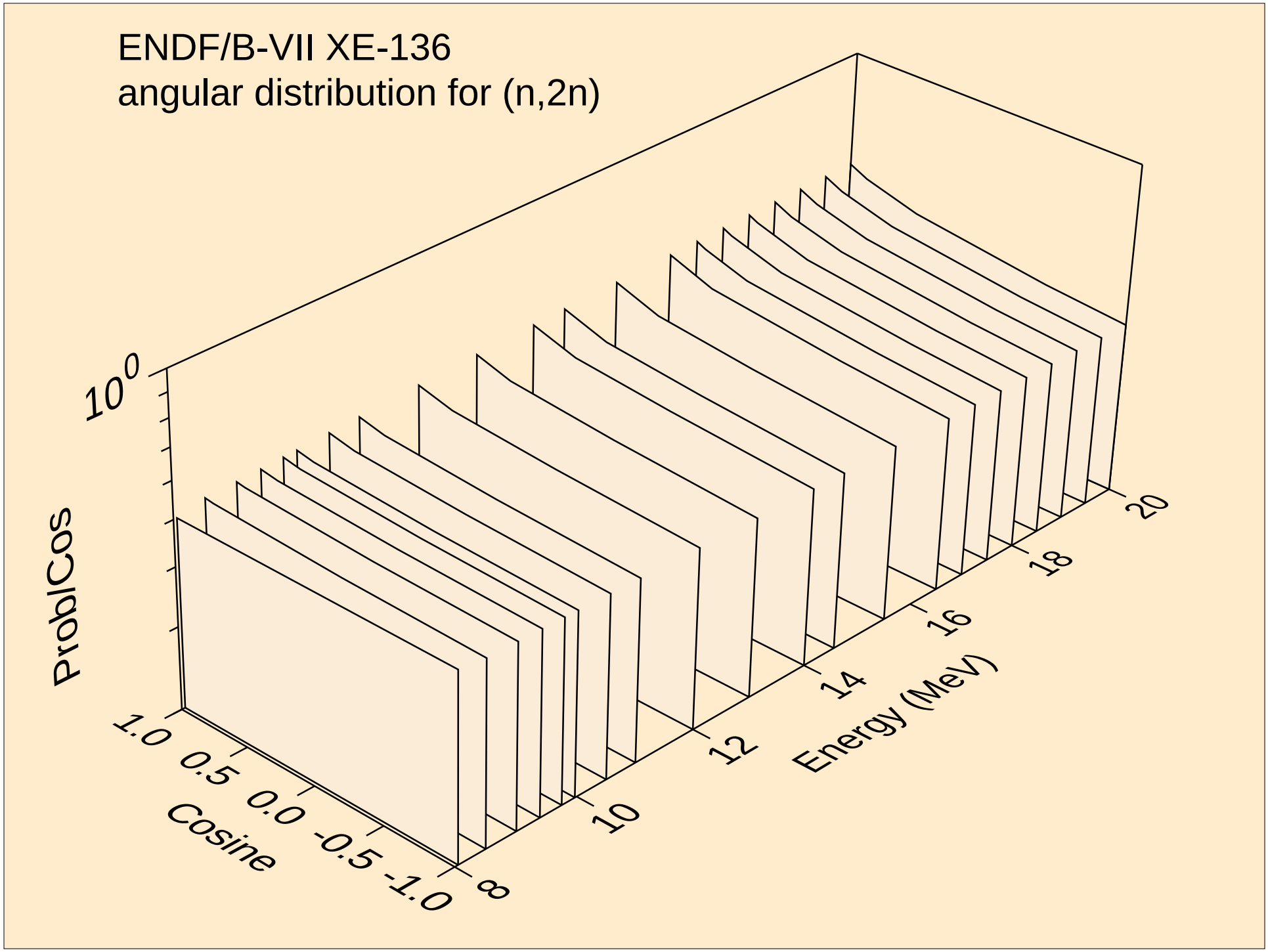

ENDF/B-VII XE-136
Inelastic levels
50
*10-3
40
30
20
10
0
Cross section (barns)
(n,n*16)
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

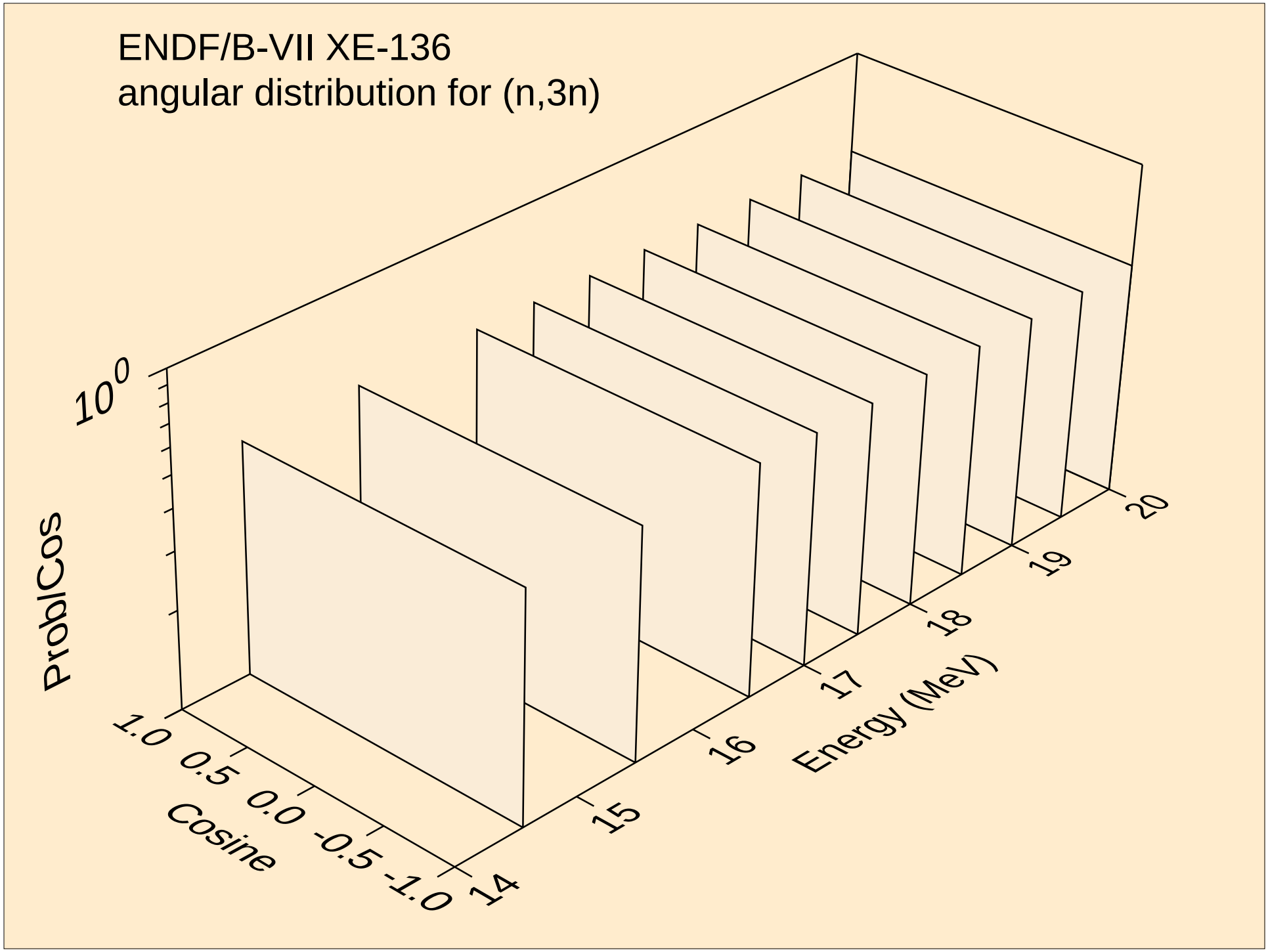

ENDF/B-VII XE-136
Threshold reactions
(n,2n)
(n,3n)
(n,n*)a
(n,n*)p
(n,n*c)
Cross section (barns)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
2
4
6
8
10
12
14
16
18
20

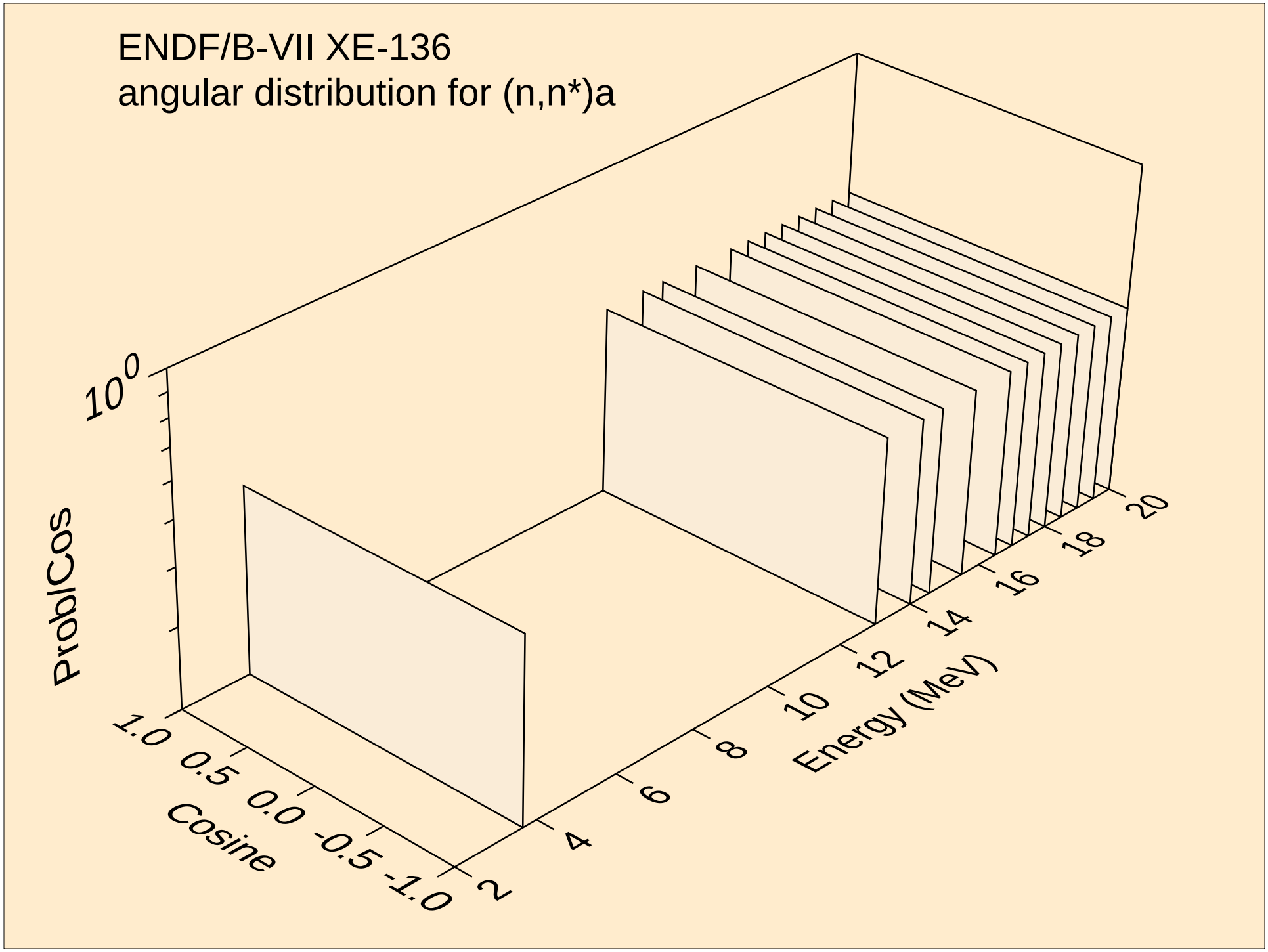

ENDF/B-VII XE-136
Threshold reactions
*10-3
(n,p)
(n,d)
(n,t)
(n,a)
Cross section (barns)
Energy (MeV)
0
2
4
6
8
10
12
14
16
18
20
6
8
10
12
14
16
18
20

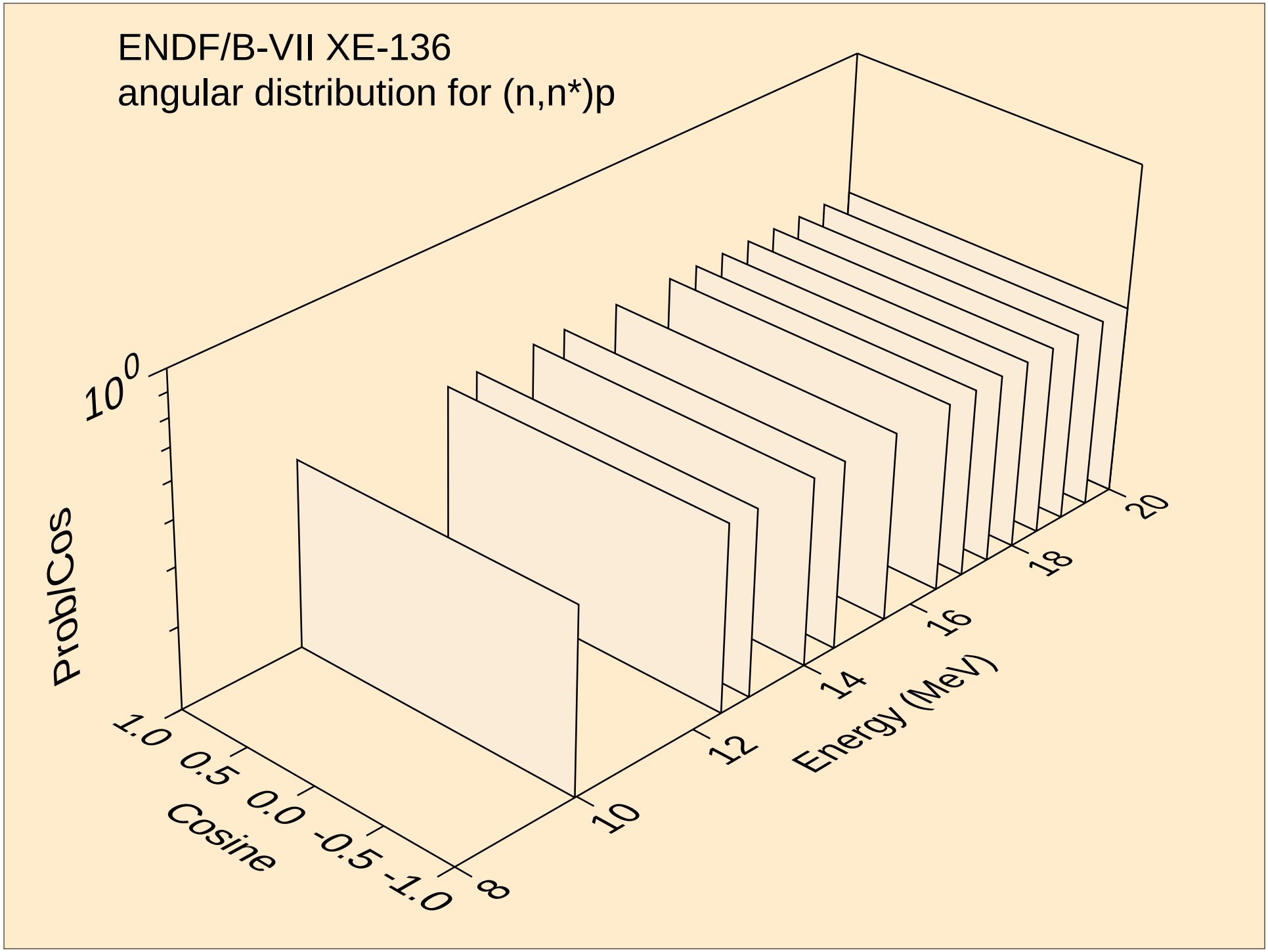

ENDF/B-VII XE-136
Threshold reactions
*10^-3
(n,xp)
(n,xd)
(n,xt)
(n,xa)
Cross section (barns)
Energy (MeV)
0
5
10
15
20
25
30
35
6
8
10
12
14
16
18
20

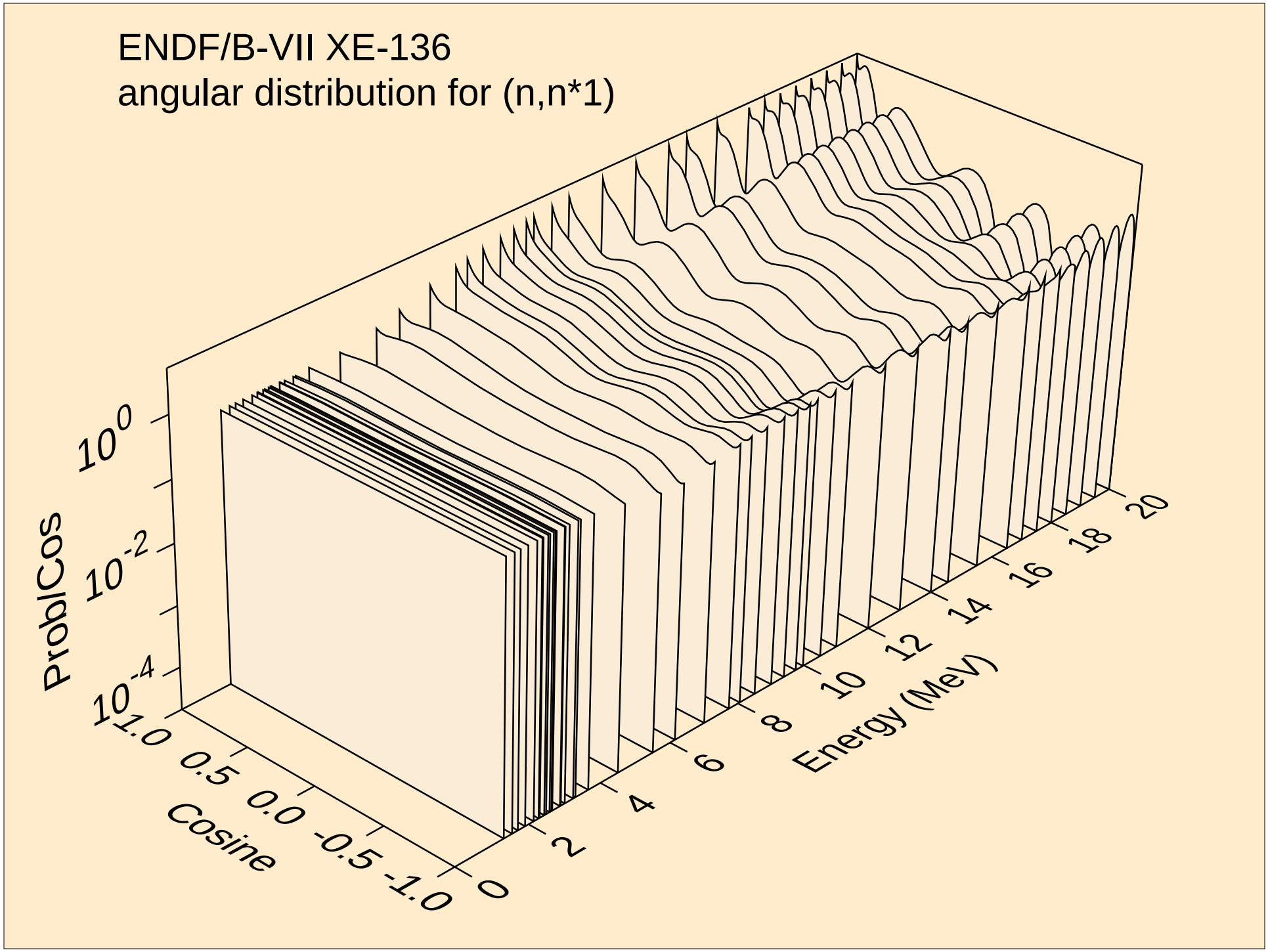

ENDF/B-VII XE-136
angular distribution for elastic
ProblCos
$10^0$
$10^{-2}$
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

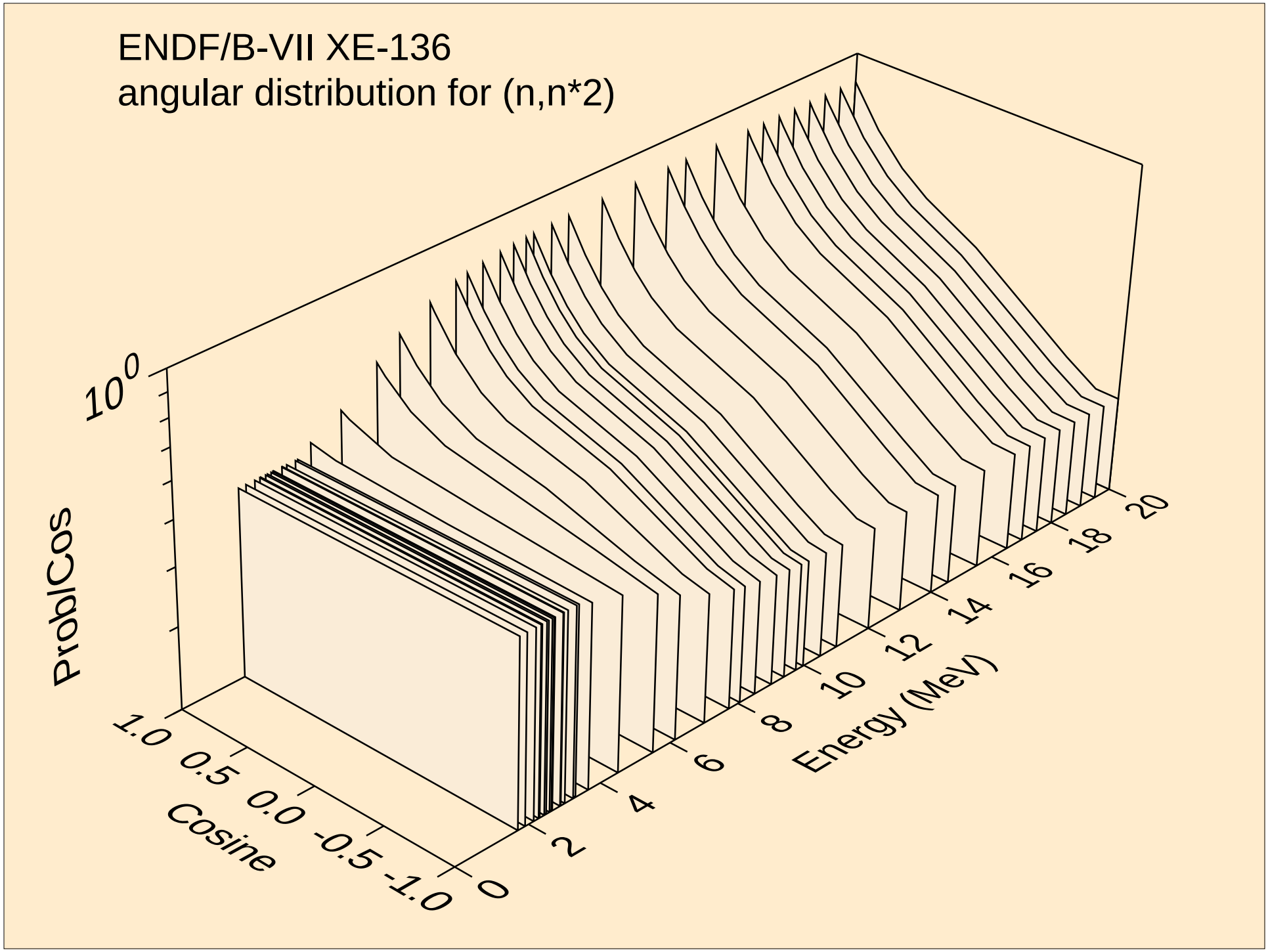

ENDF/B-VII XE-136
angular distribution for (n,2n)
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
8
10
12
14
16
18
20
Energy (MeV)

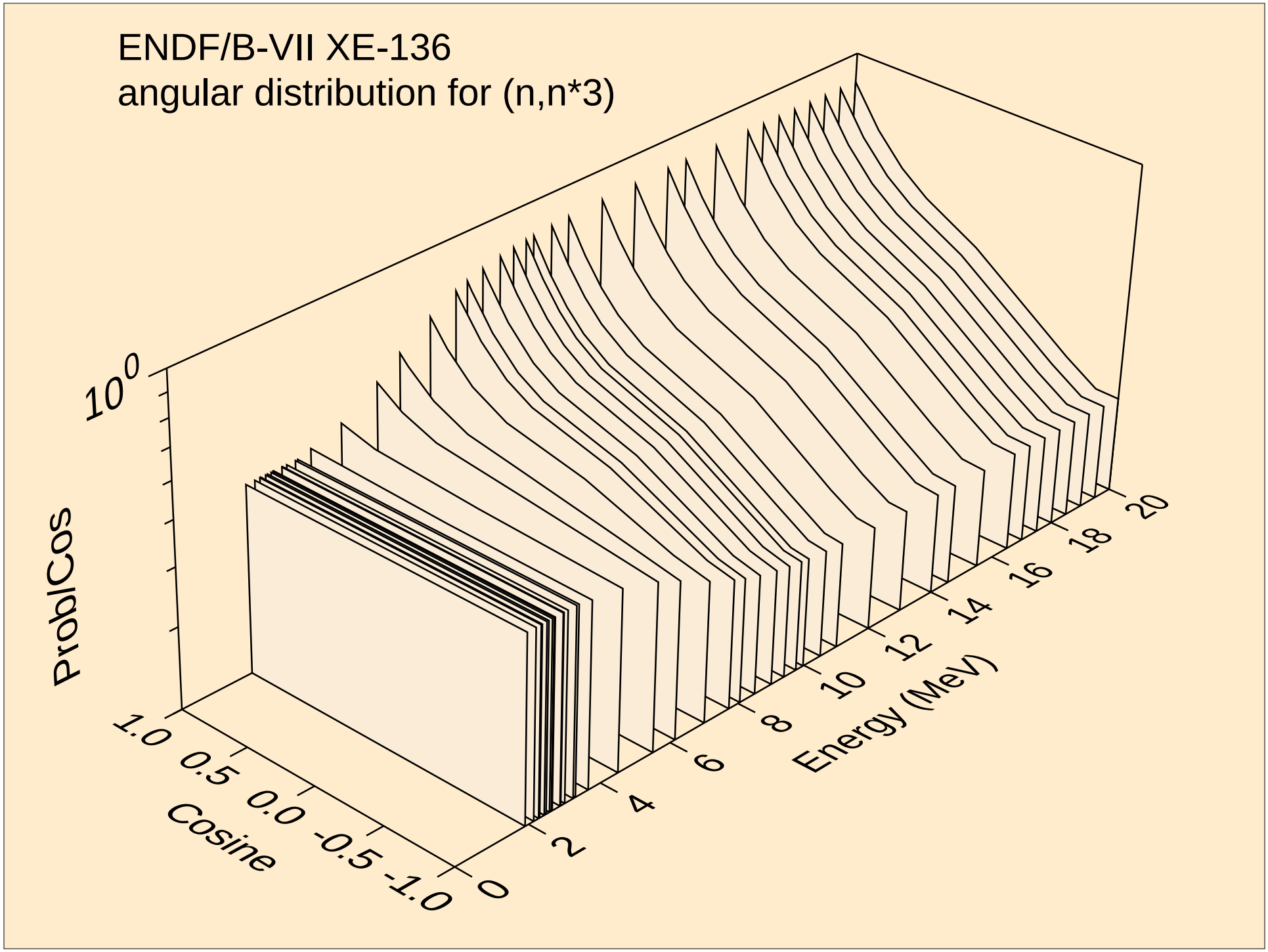

ENDF/B-VII XE-136
angular distribution for (n,3n)
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
14
15
16
17
18
19
20
Energy (MeV)

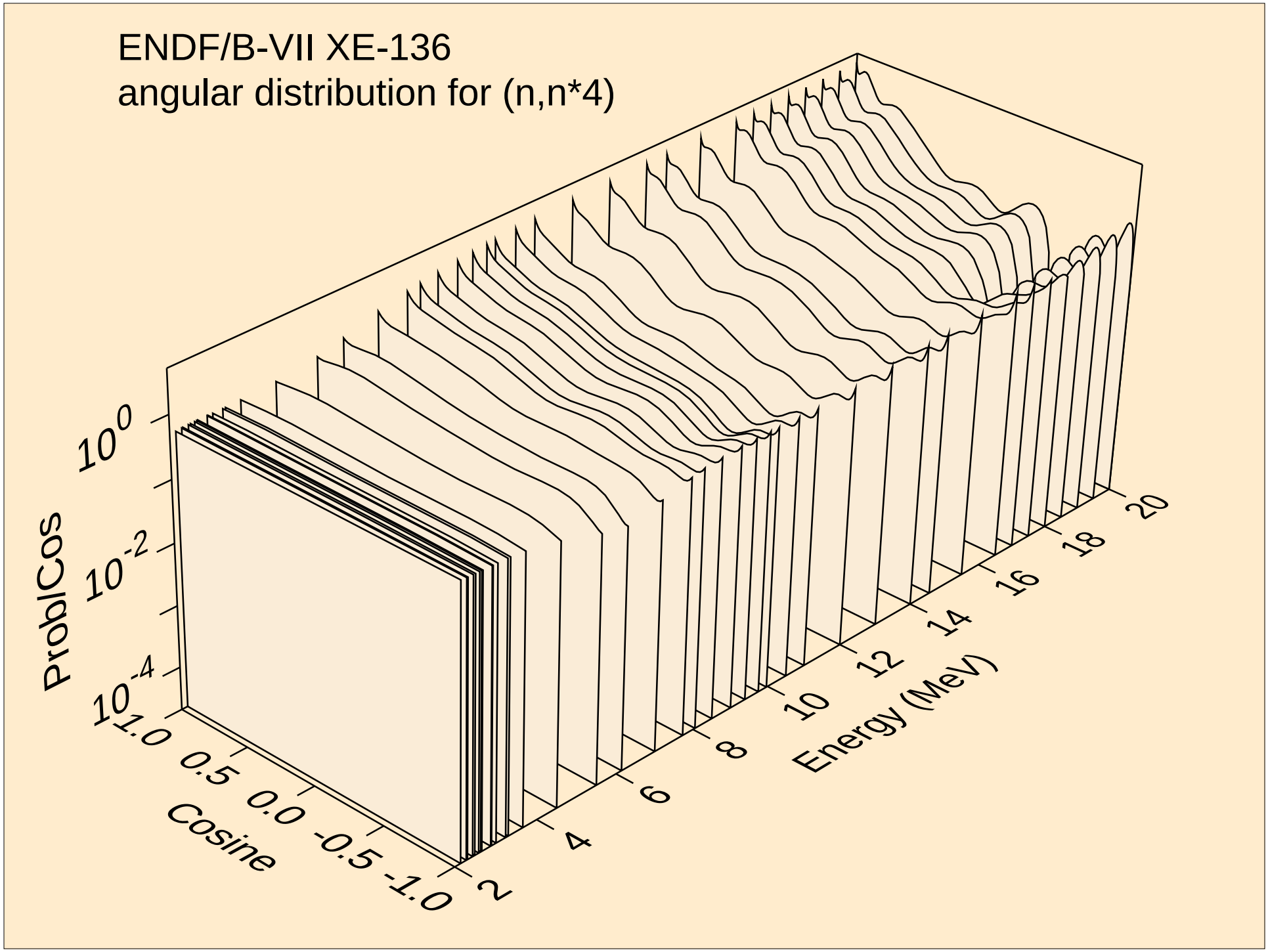

ENDF/B-VII XE-136
angular distribution for (n,n*)a
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

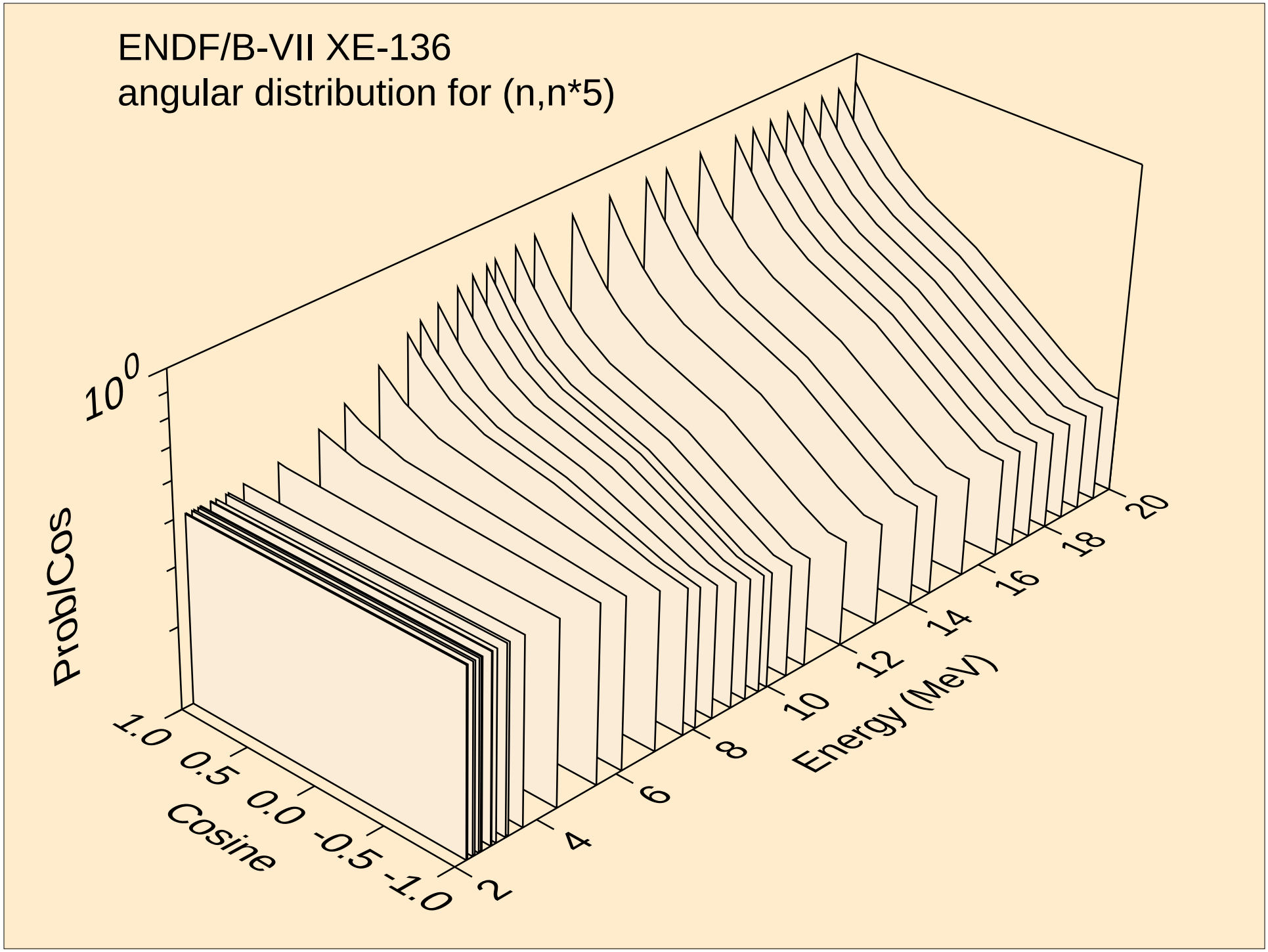

ENDF/B-VII XE-136
angular distribution for (n,n*)p
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
8
10
12
14
16
18
20
Energy (MeV)

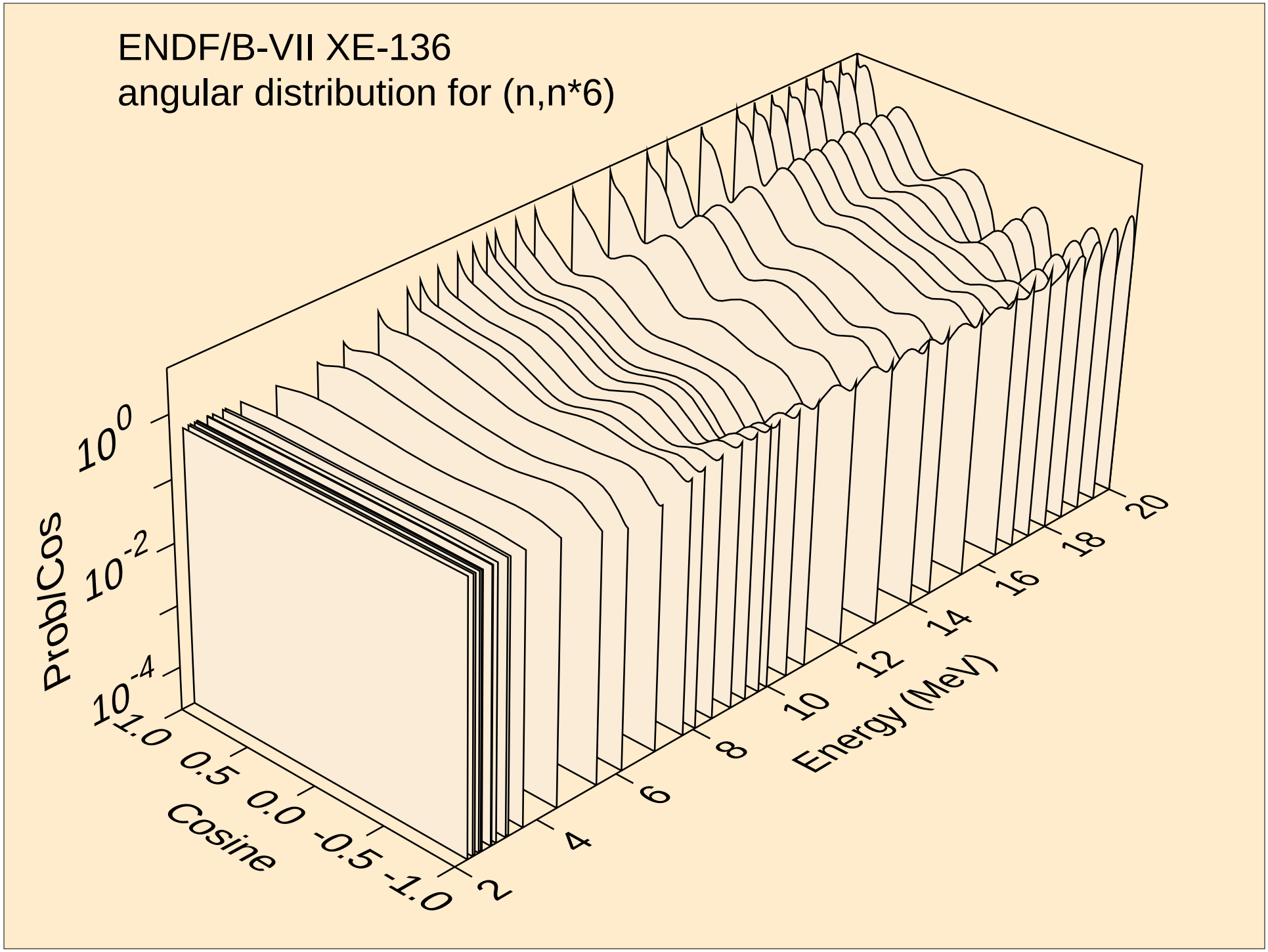

ENDF/B-VII XE-136
angular distribution for (n,n*1)
ProbCos
$10^{0}$
$10^{-2}$
$10^{-4}$
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
2
4
6
8
10
12
14
16
18
20

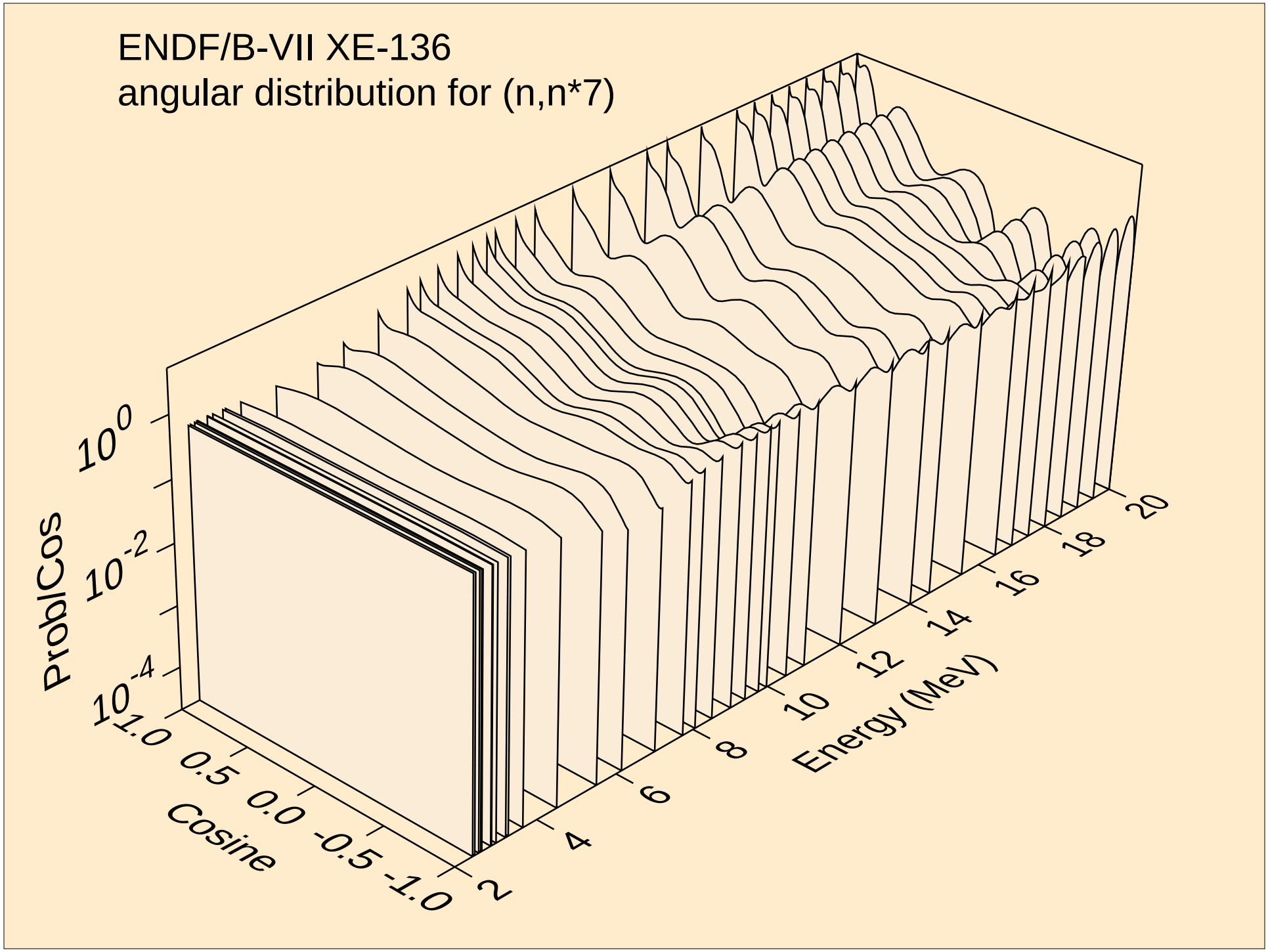

ENDF/B-VII XE-136
angular distribution for (n,n*2)
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

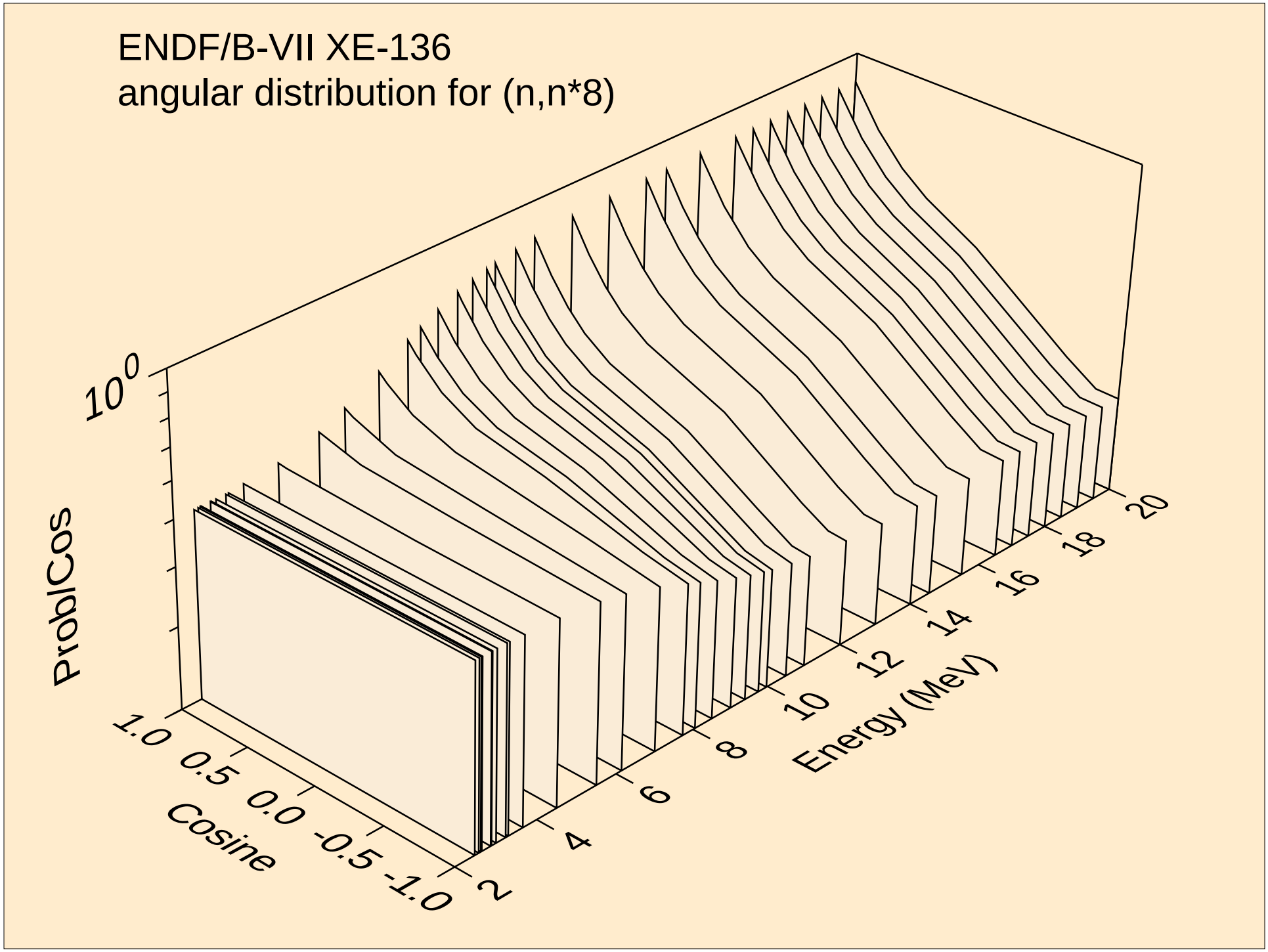

ENDF/B-VII XE-136
angular distribution for (n,n*3)
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

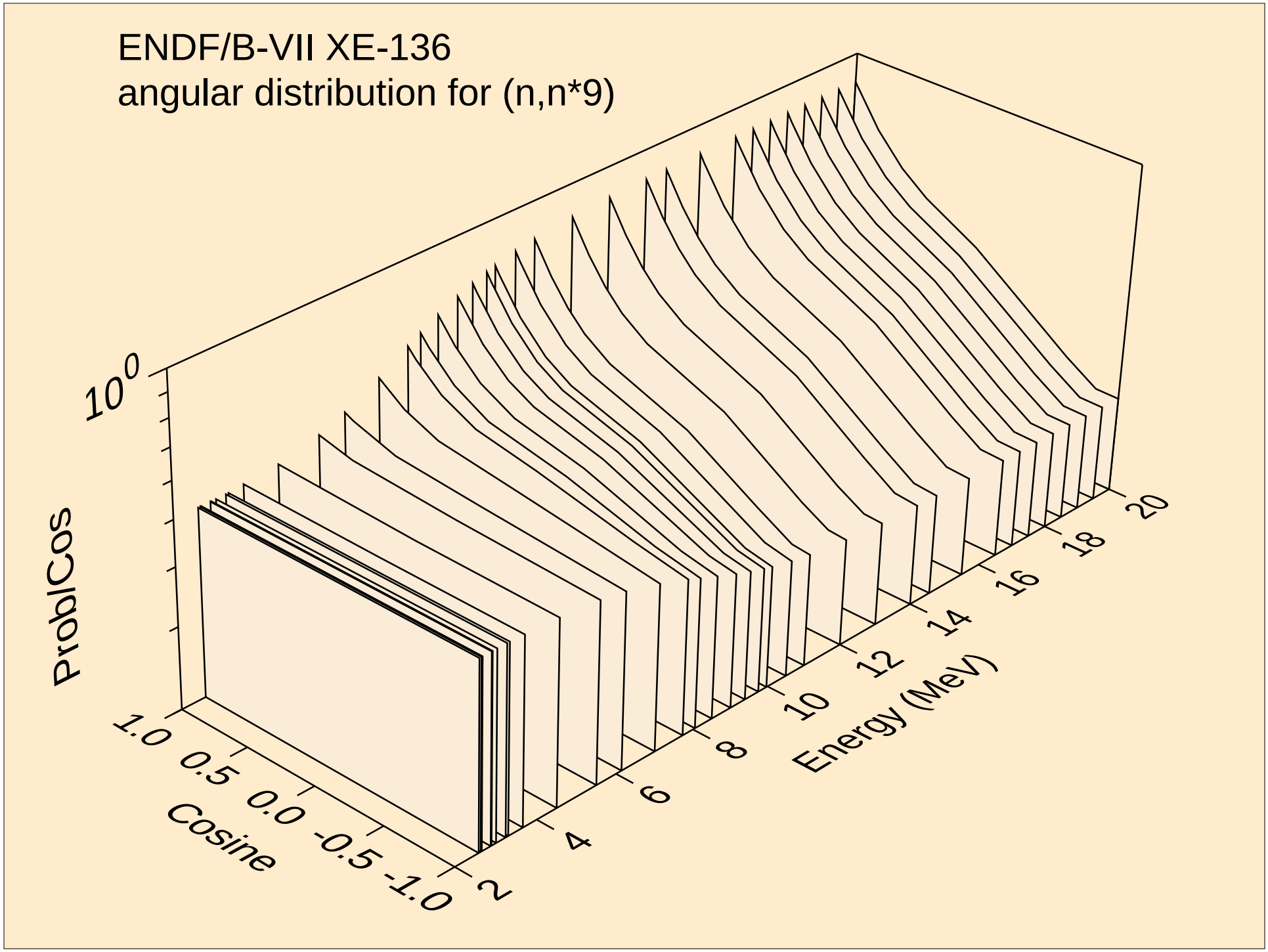

ENDF/B-VII XE-136
angular distribution for (n,n*4)
Prob/Cos
$10^{0}$
$10^{-2}$
$10^{-4}$
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
2
4
6
8
10
12
14
16
18
20

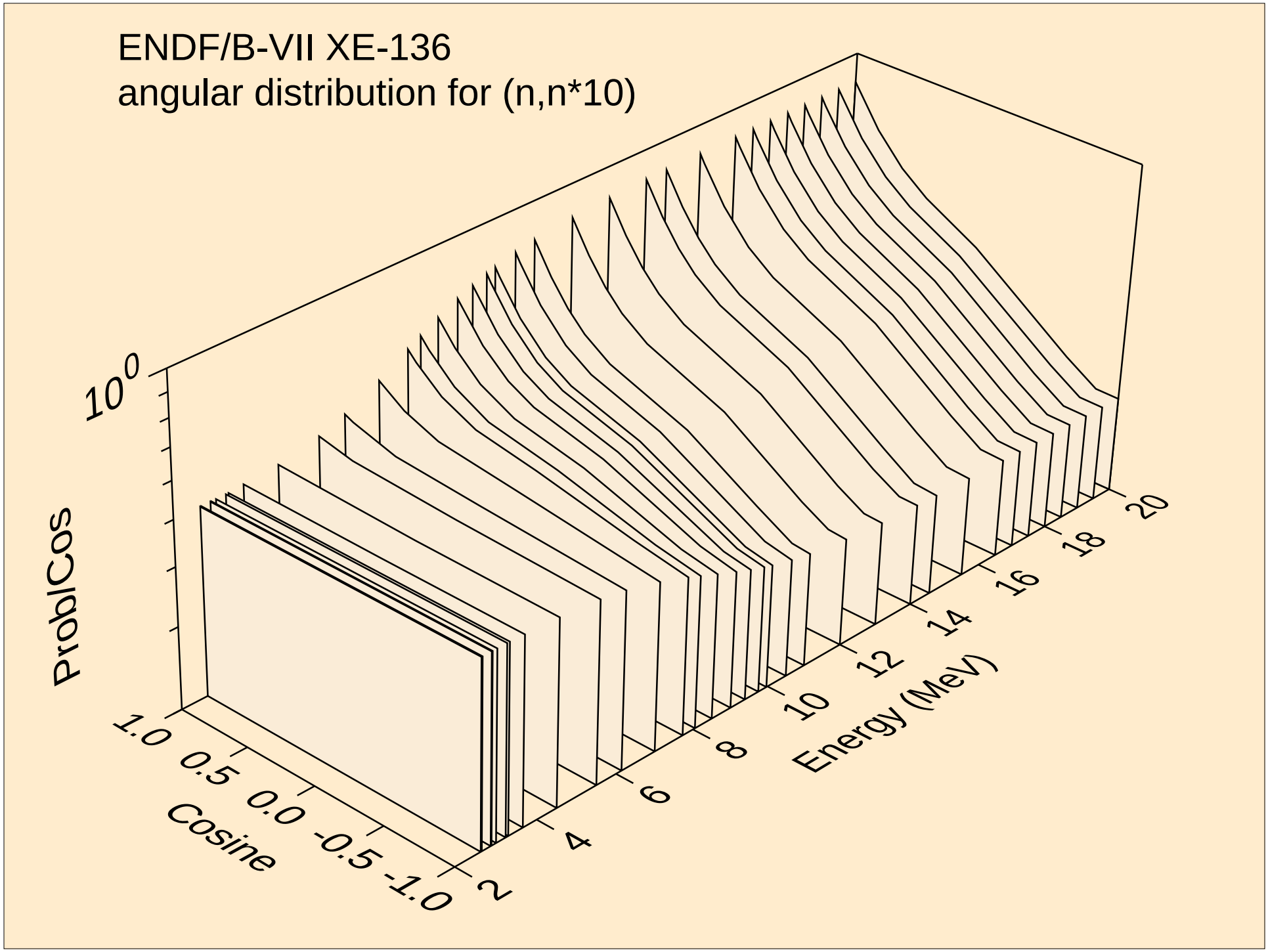

ENDF/B-VII XE-136
angular distribution for (n,n*5)
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

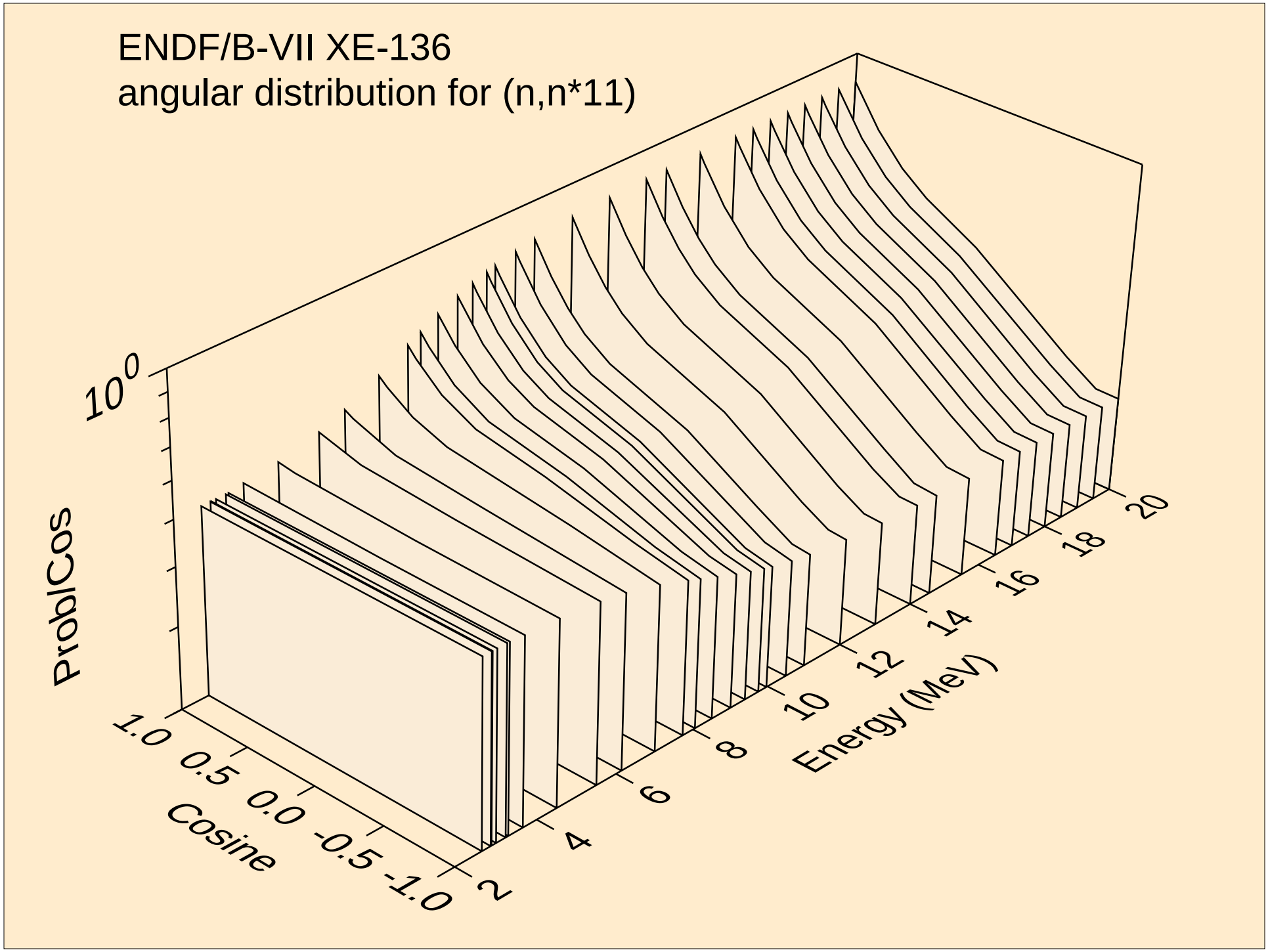

ENDF/B-VII XE-136
angular distribution for (n,n*6)
ProbCos
$10^{0}$
$10^{-2}$
$10^{-4}$
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
2
4
6
8
10
12
14
16
18
20

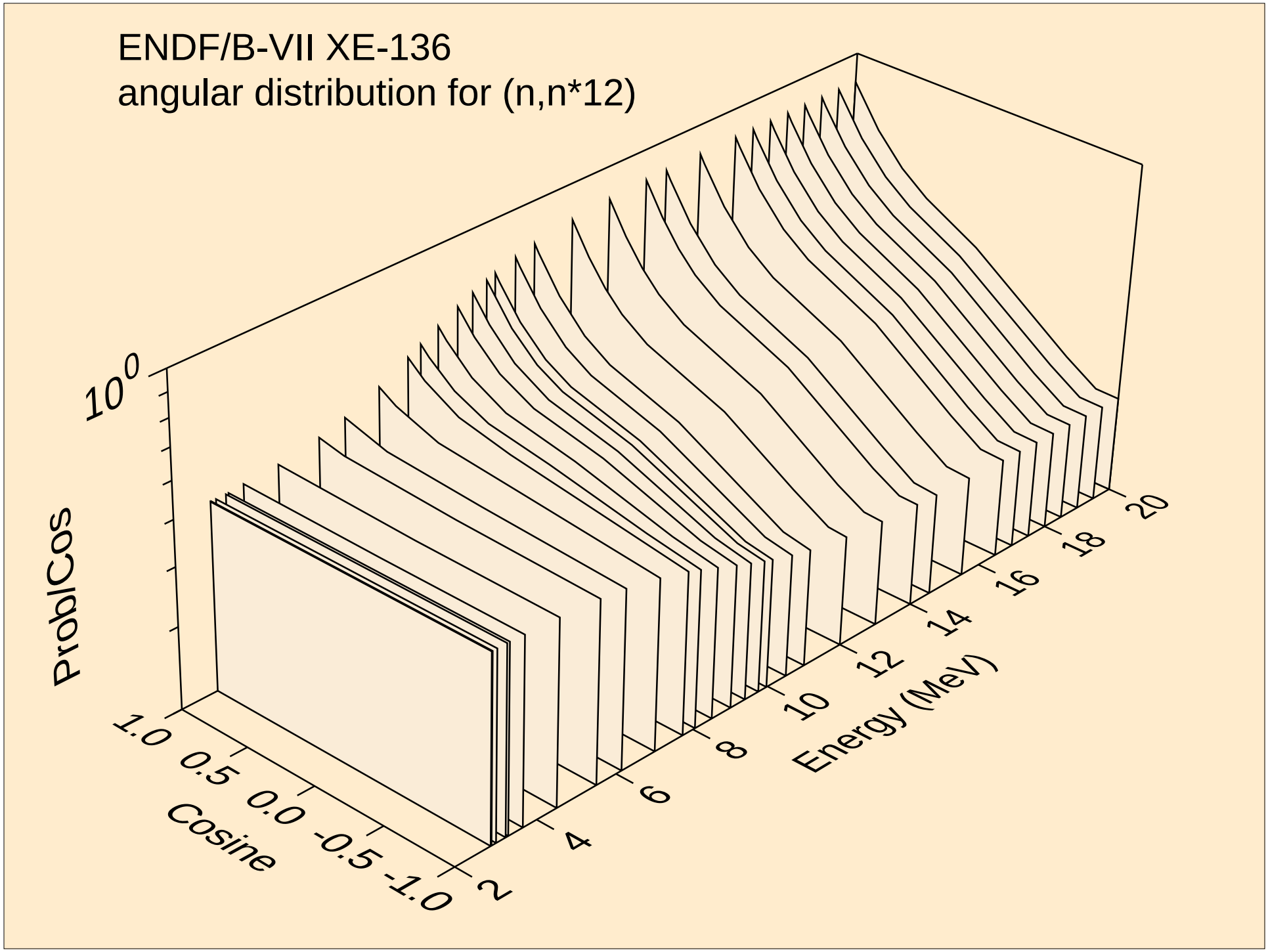

ENDF/B-VII XE-136
angular distribution for (n,n*7)
ProbCos
$10^{0}$
$10^{-2}$
$10^{-4}$
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
2
4
6
8
10
12
14
16
18
20

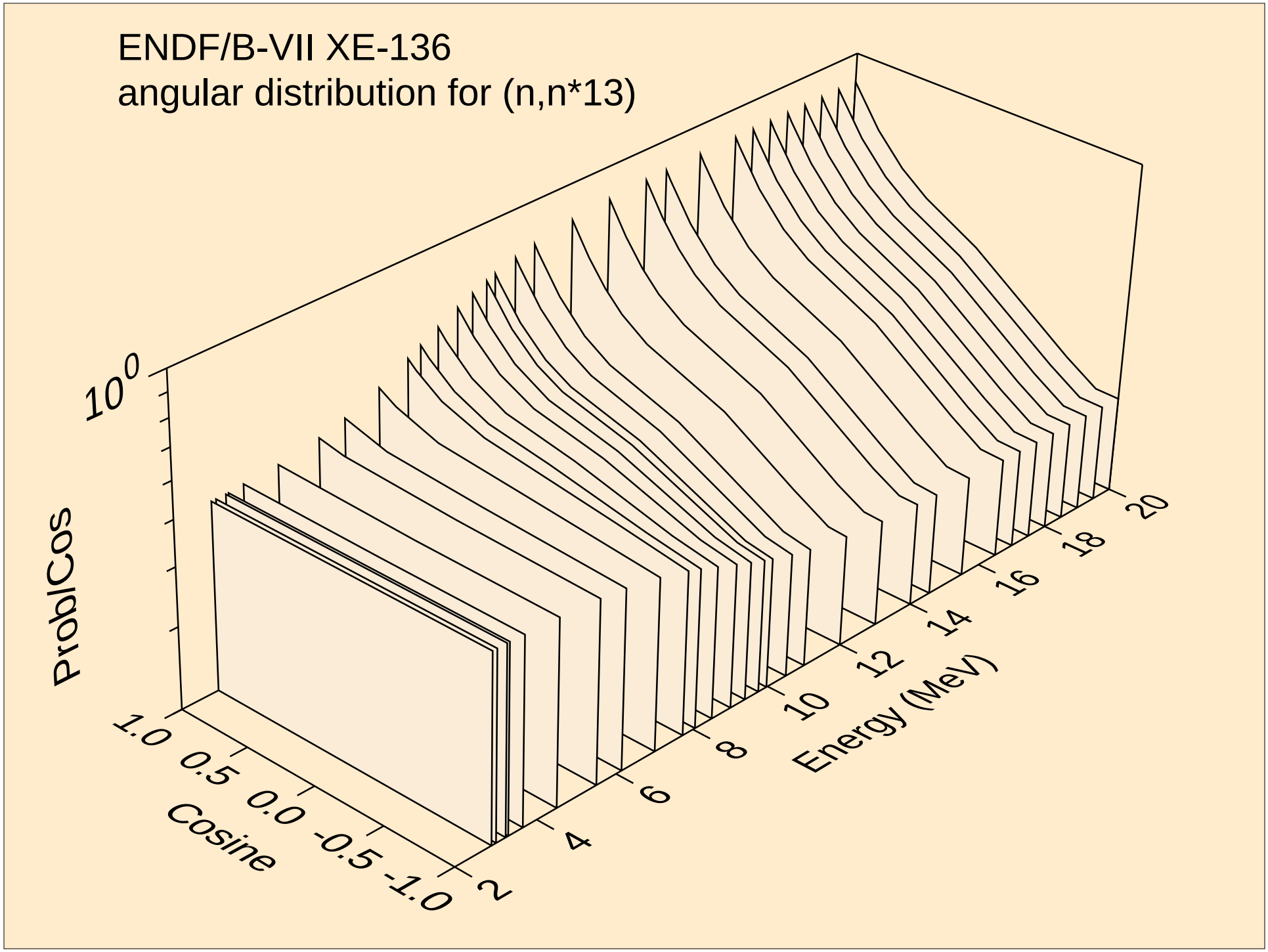

ENDF/B-VII XE-136
angular distribution for (n,n*8)
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

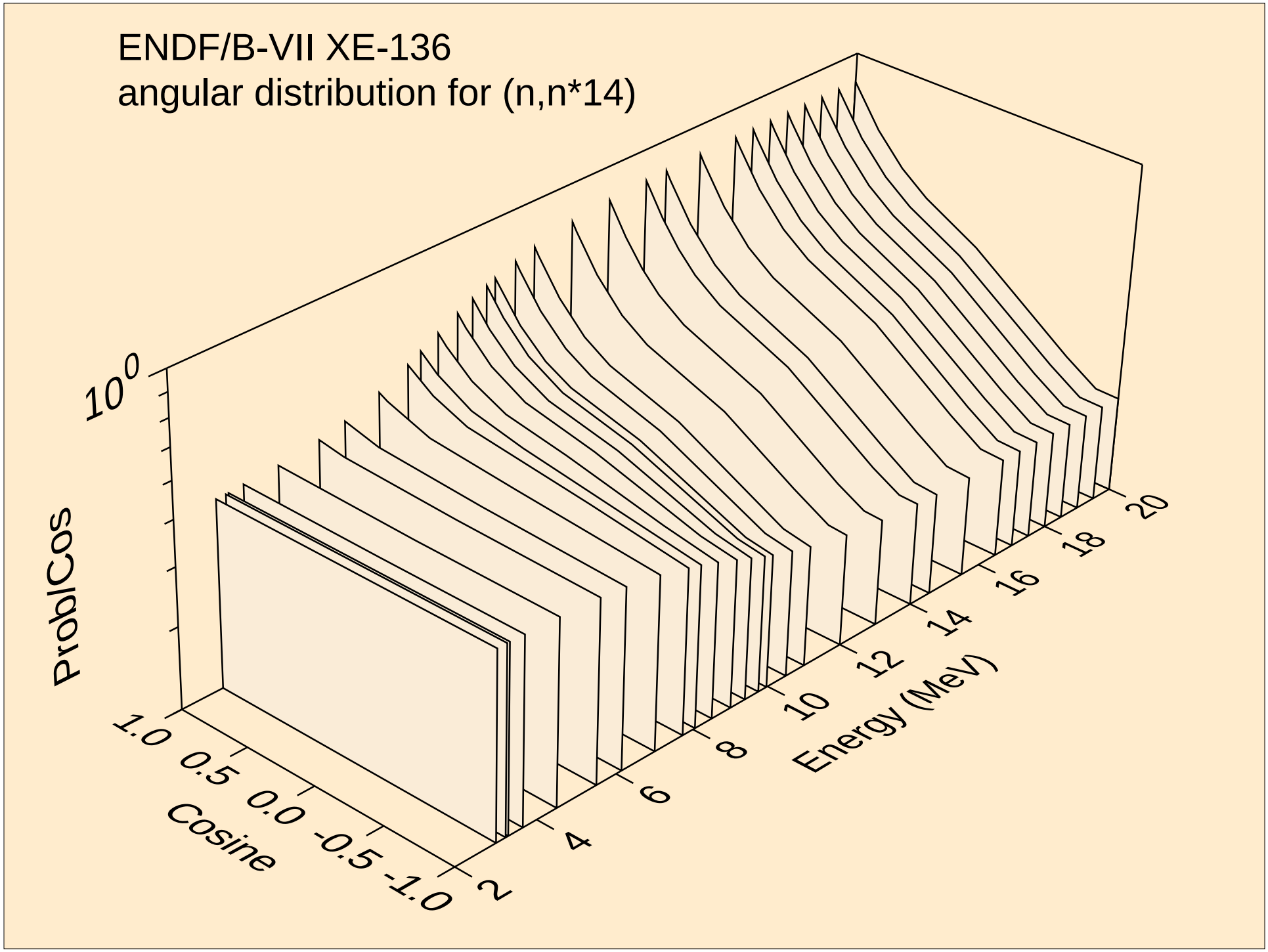

ENDF/B-VII XE-136
angular distribution for (n,n*9)
ProbCos
$10^0$
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
2
4
6
8
10
12
14
16
18
20

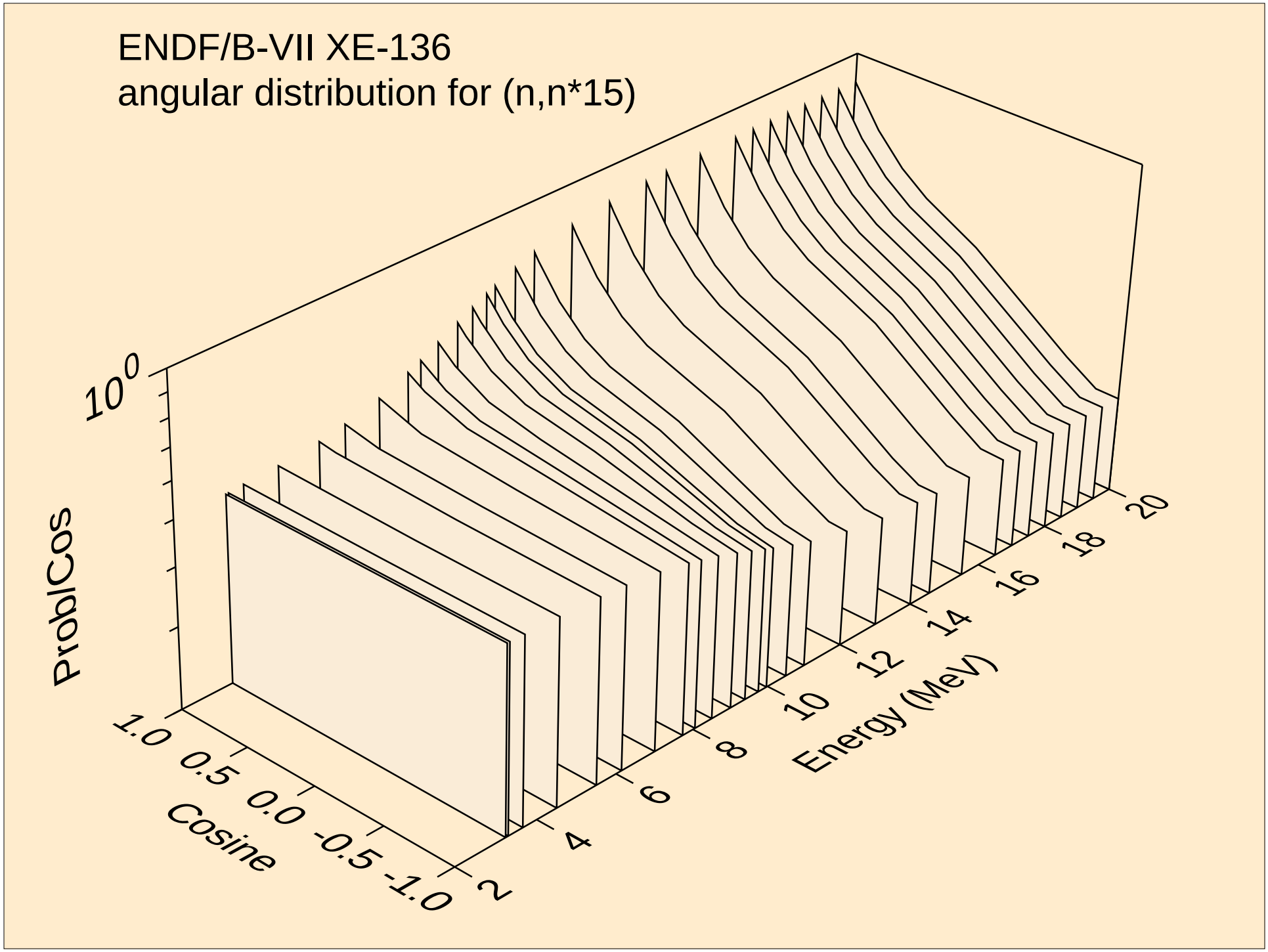

ENDF/B-VII XE-136
angular distribution for (n,n*10)
ProbCos
$10^0$
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
2
4
6
8
10
12
14
16
18
20

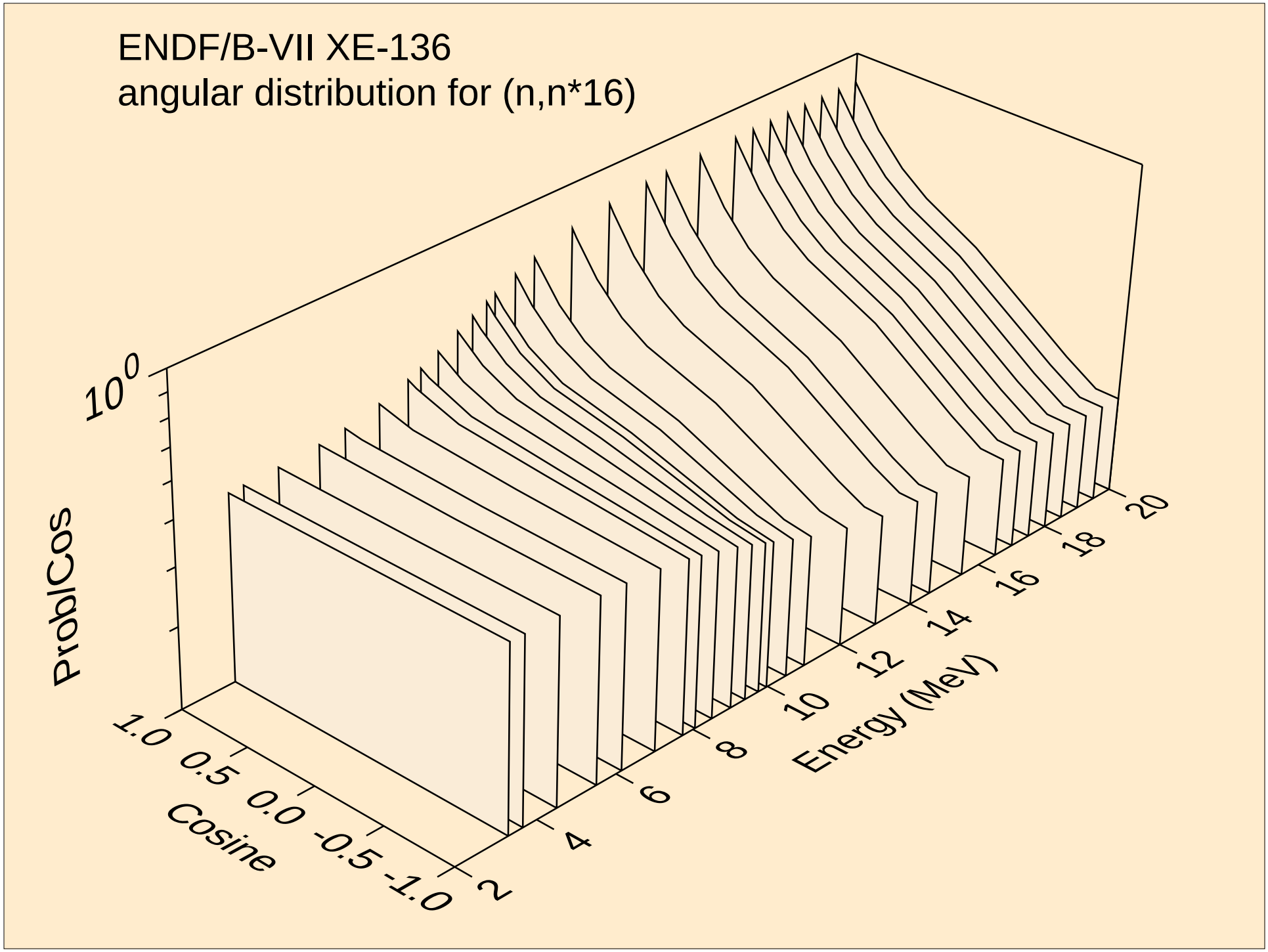

ENDF/B-VII XE-136
angular distribution for (n,n*11)
ProbCos
$10^0$
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
2
4
6
8
10
12
14
16
18
20

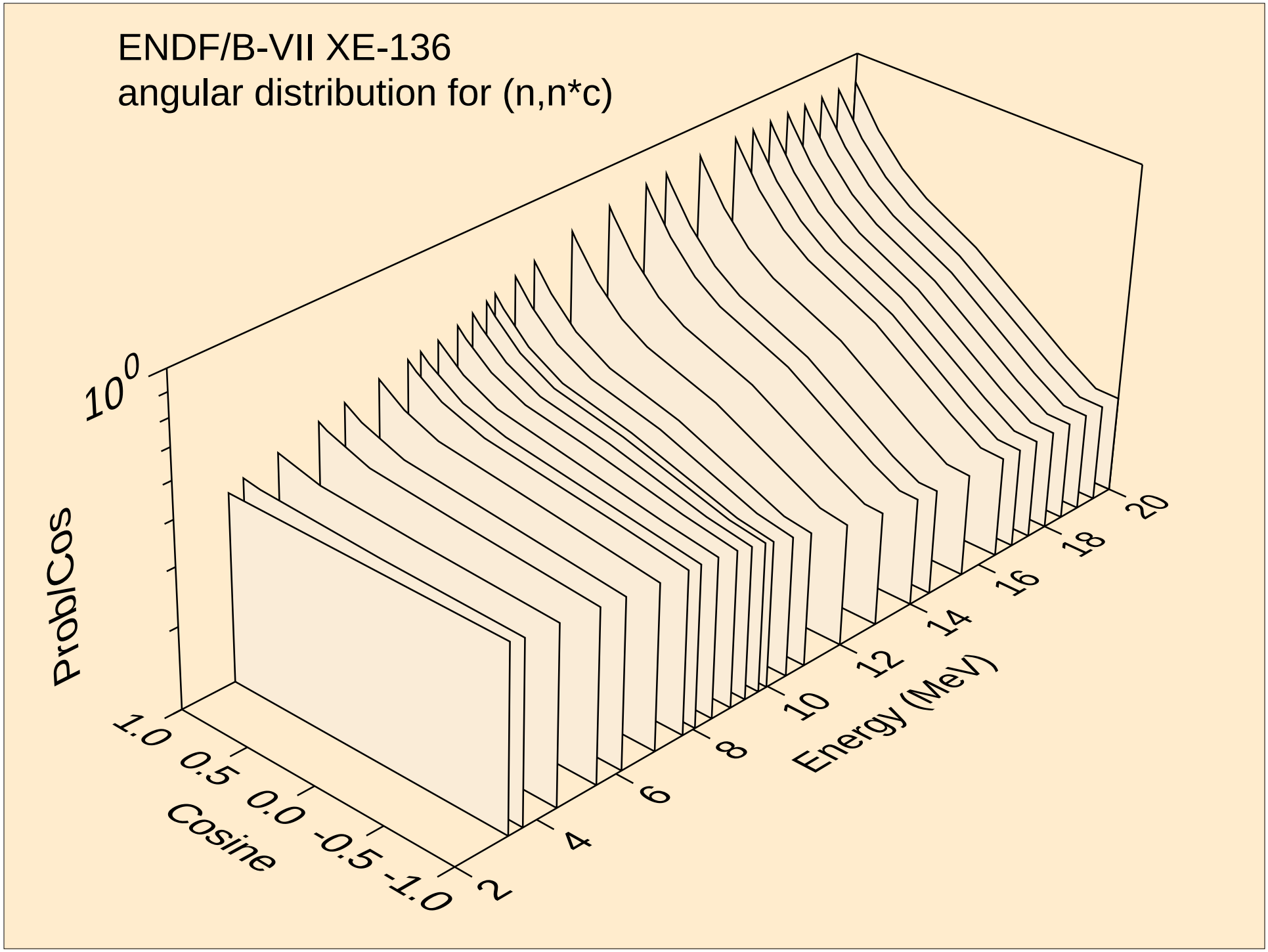

ENDF/B-VII XE-136
angular distribution for (n,n*12)
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

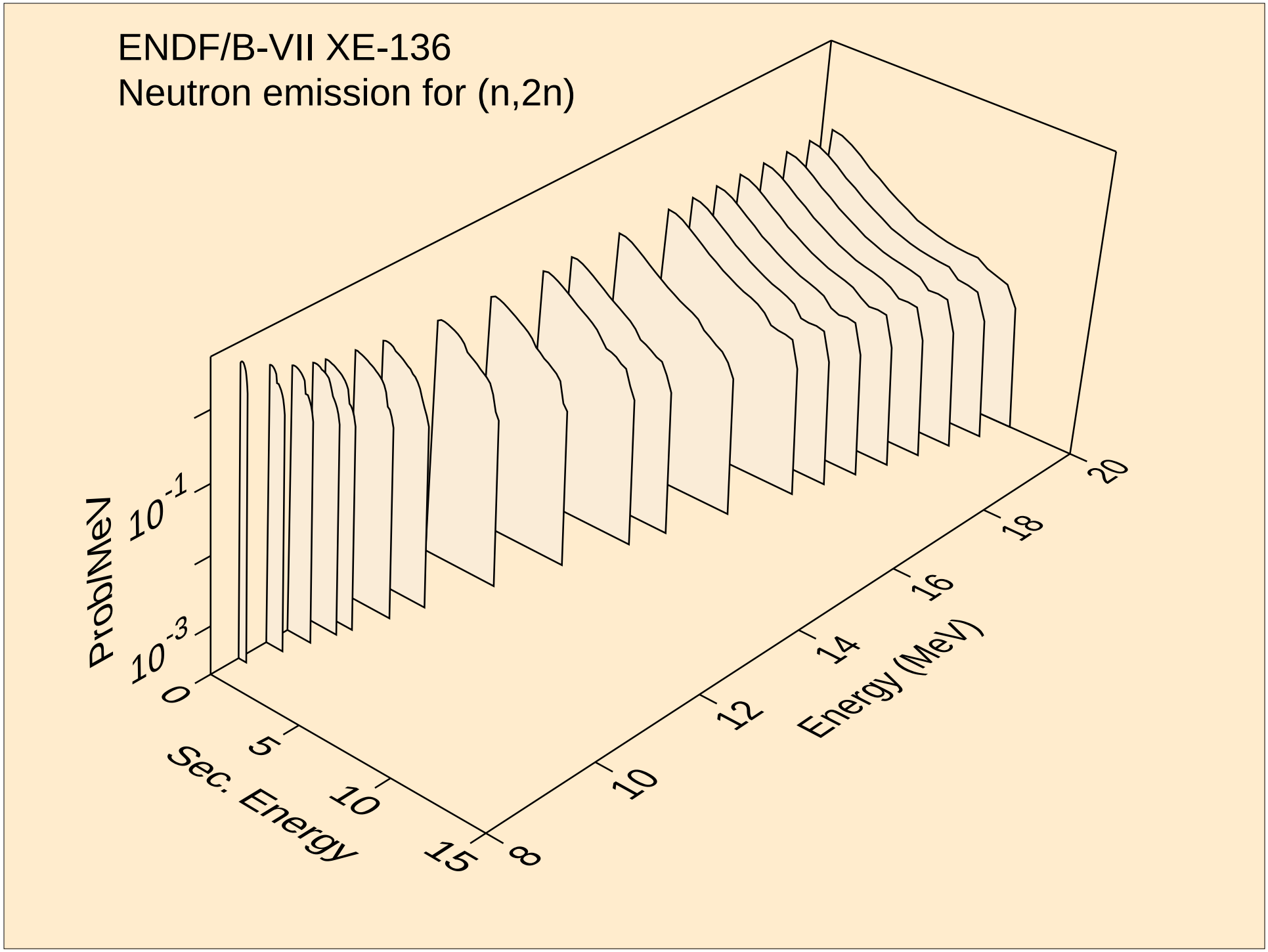

ENDF/B-VII XE-136
angular distribution for (n,n*13)
ProbCos
$10^0$
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
2
4
6
8
10
12
14
16
18
20

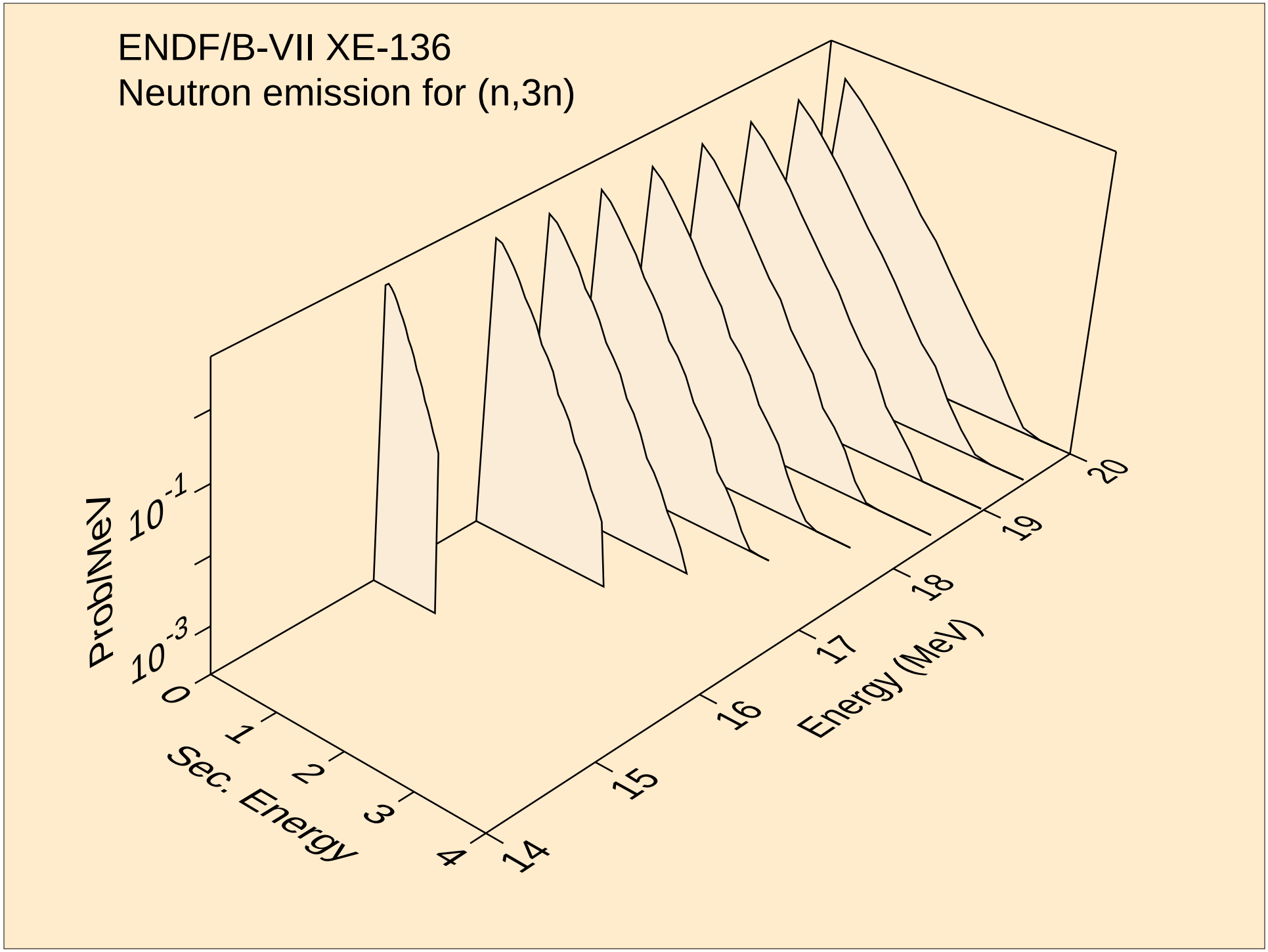

ENDF/B-VII XE-136
angular distribution for (n,n*14)
ProbCos
$10^0$
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
2
4
6
8
10
12
14
16
18
20


ENDF/B-VII XE-136
angular distribution for (n,n*15)
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

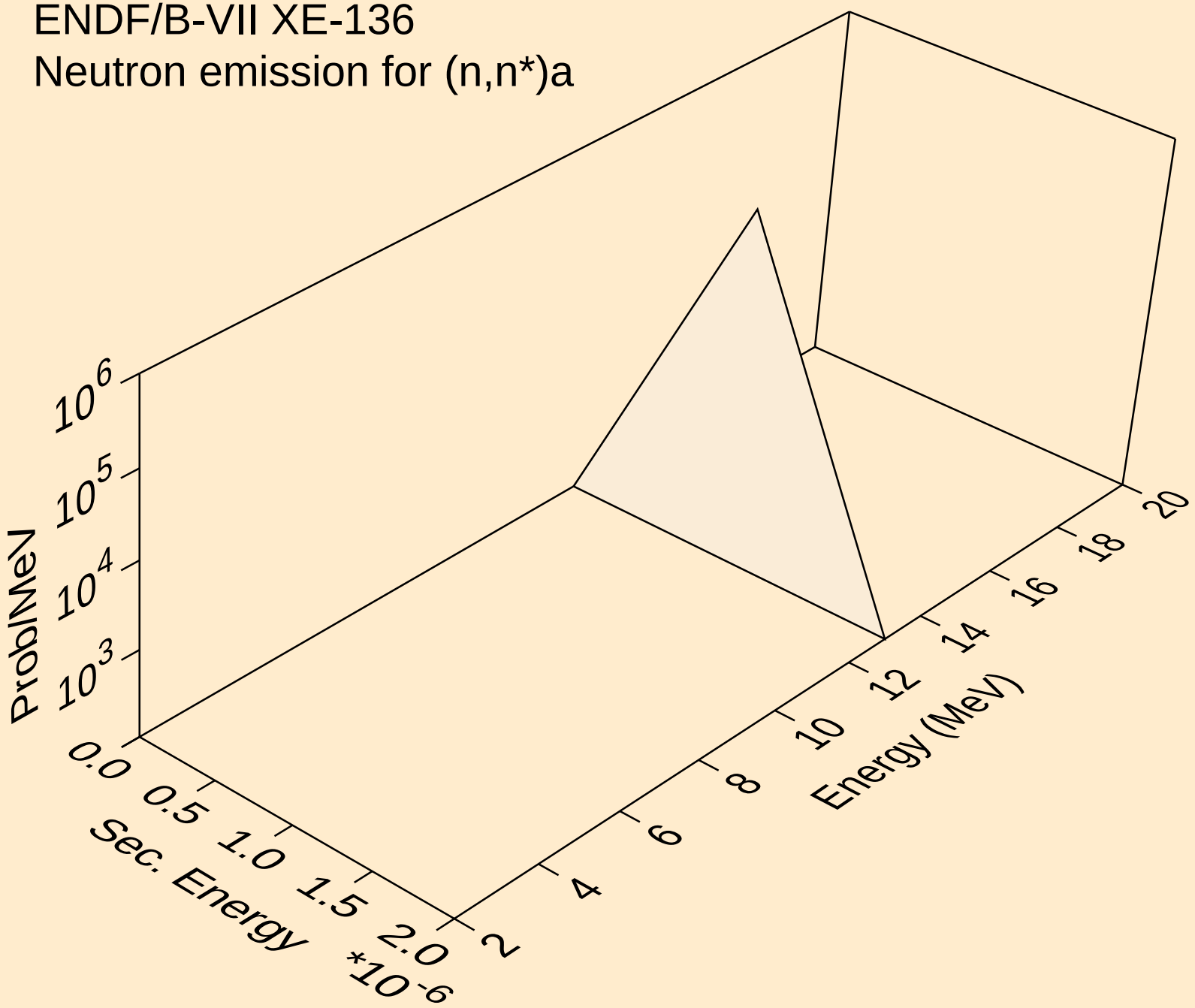

ENDF/B-VII XE-136
angular distribution for (n,n*16)
$10^0$
ProbCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)


ENDF/B-VII XE-136
angular distribution for (n,n*c)
$10^0$
Prob|Cos
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

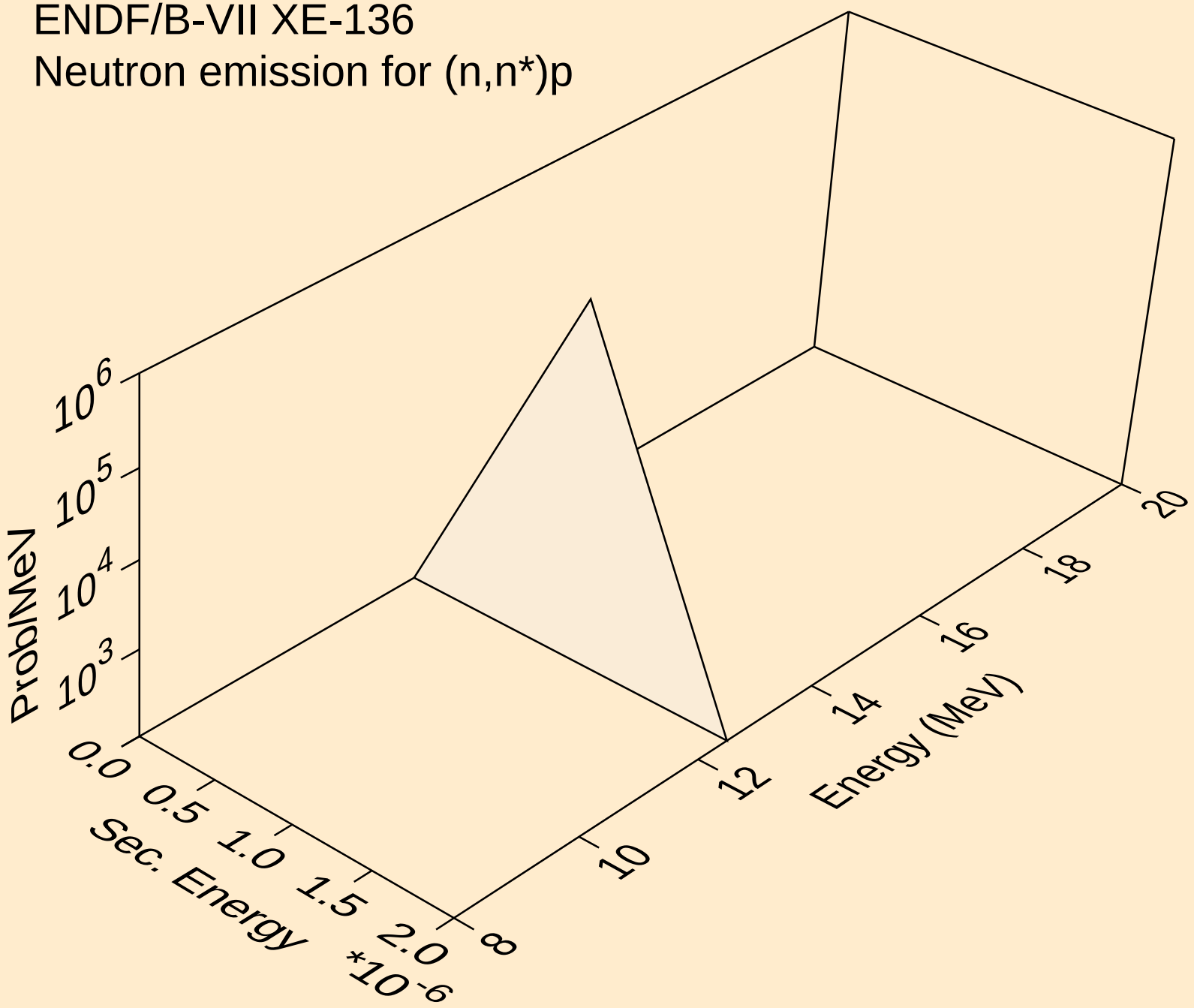

ENDF/B-VII XE-136
Neutron emission for (n,2n)
Prob/MeV
10^-1
10^-3
0
5
10
15
Sec. Energy
8
10
12
14
16
18
20
Energy (MeV)

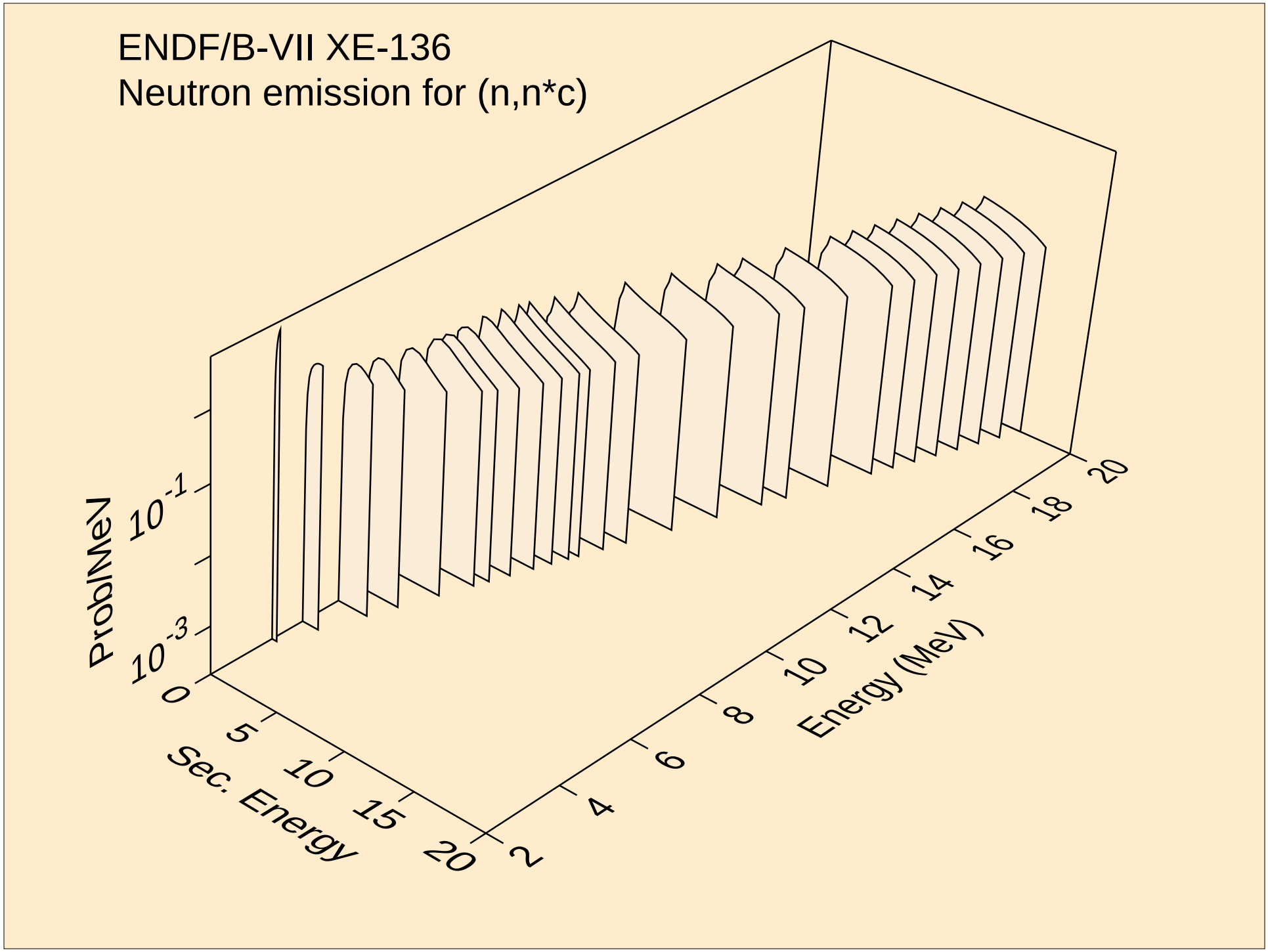

ENDF/B-VII XE-136
Neutron emission for (n,3n)
Prob/MeV
$10^{-1}$
$10^{-3}$
0
1
2
3
4
Sec. Energy
14
15
16
17
18
19
20
Energy (MeV)

ENDF/B-VII XE-136
Neutron emission for (n,n*)a



ENDF/B-VII XE-136
Neutron emission for (n,n*)p




ENDF/B-VII XE-136
Neutron emission for (n,n*c)
Prob/MeV
$10^{-1}$
$10^{-3}$
0
5
10
15
20
Sec. Energy
2
4
6
8
10
12
14
16
18
20
Energy (MeV)