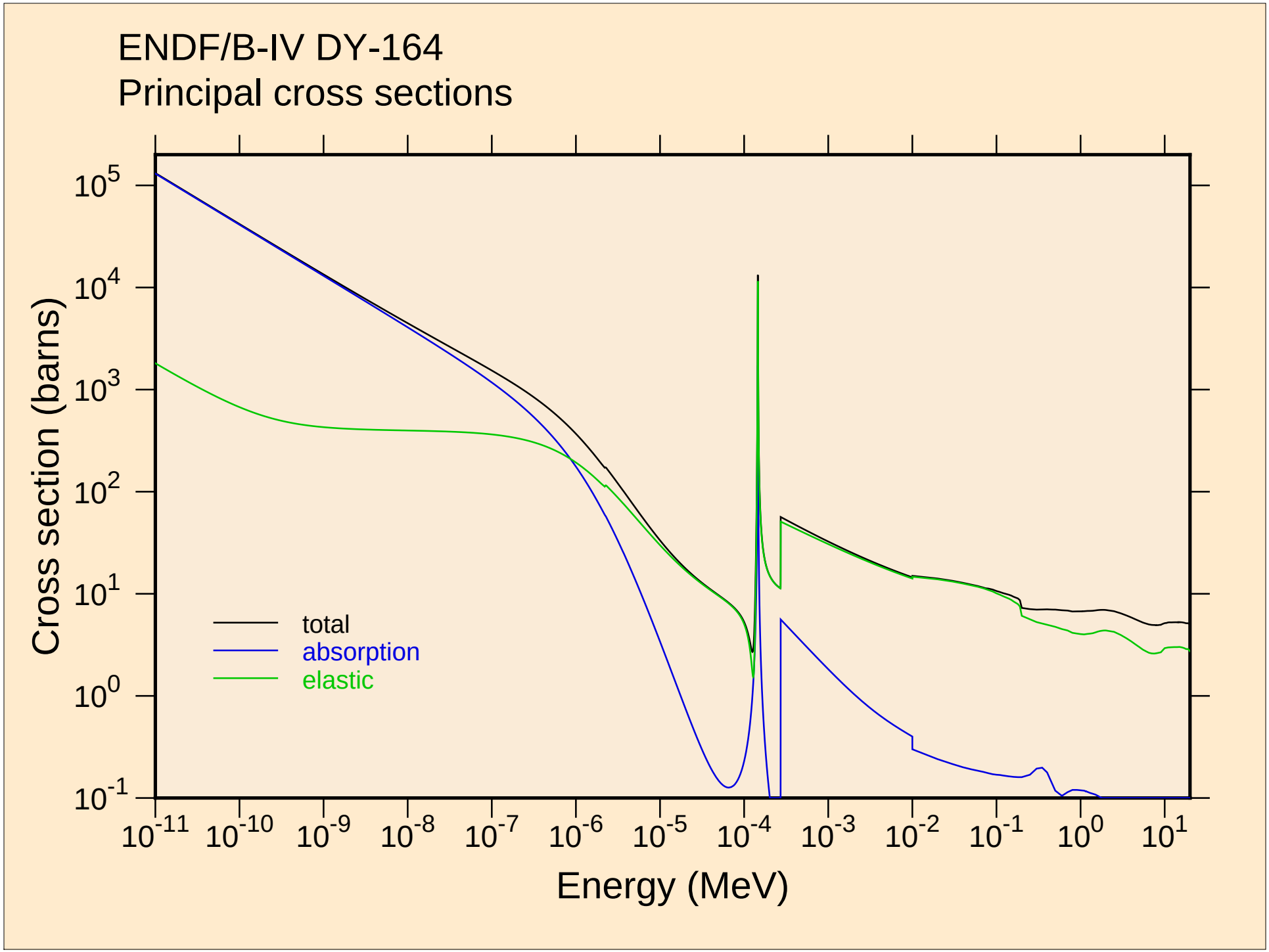
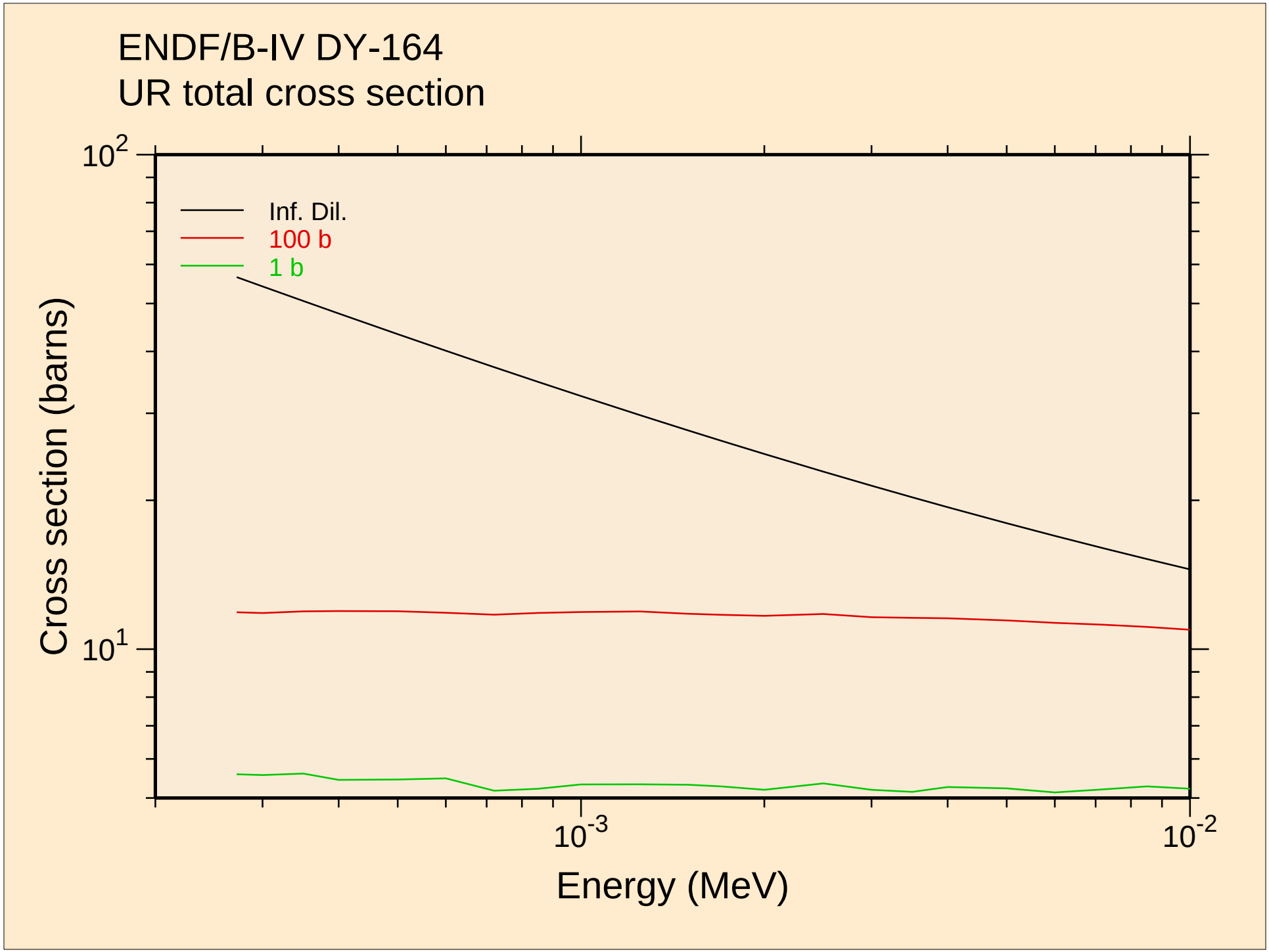
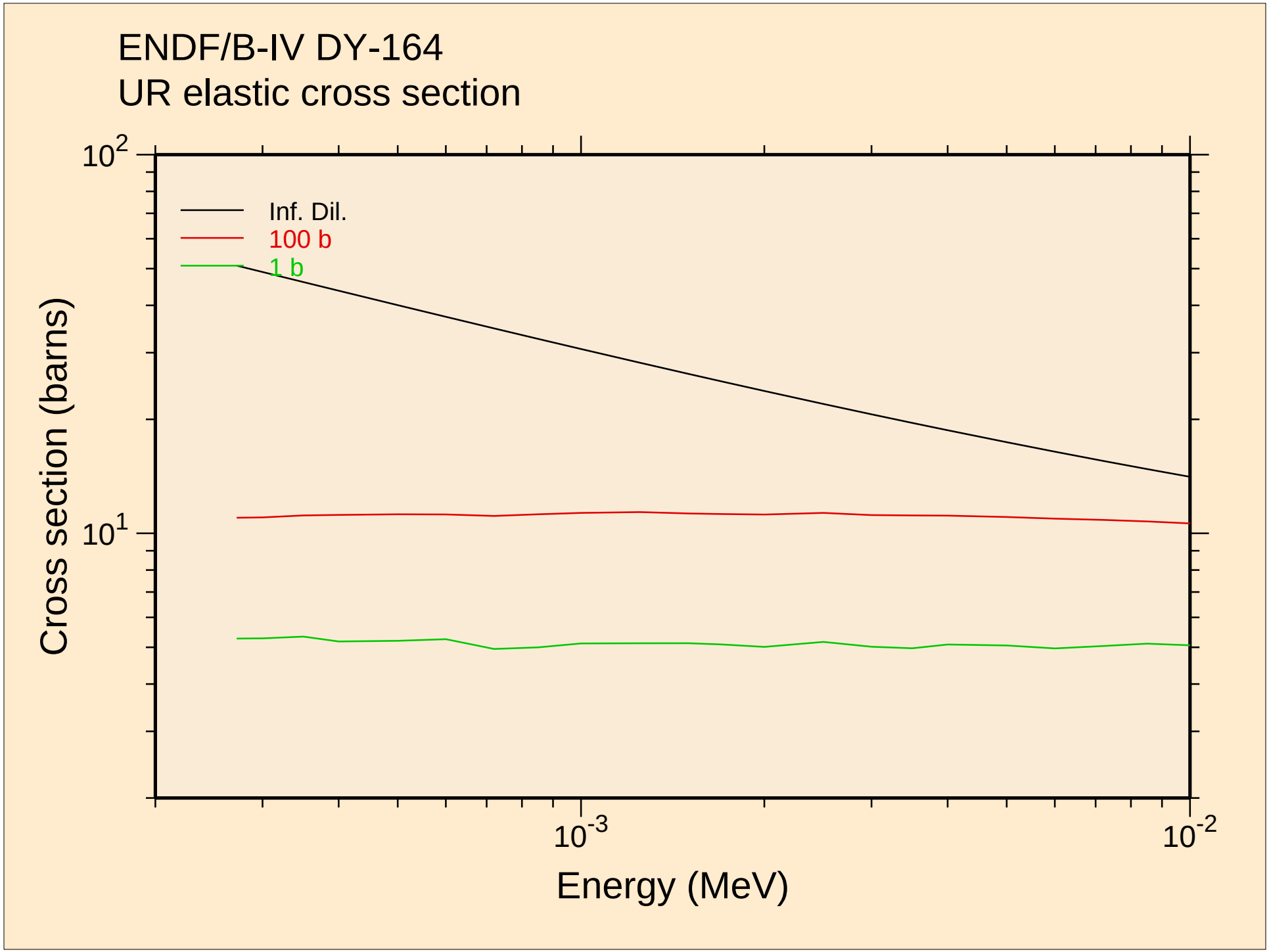
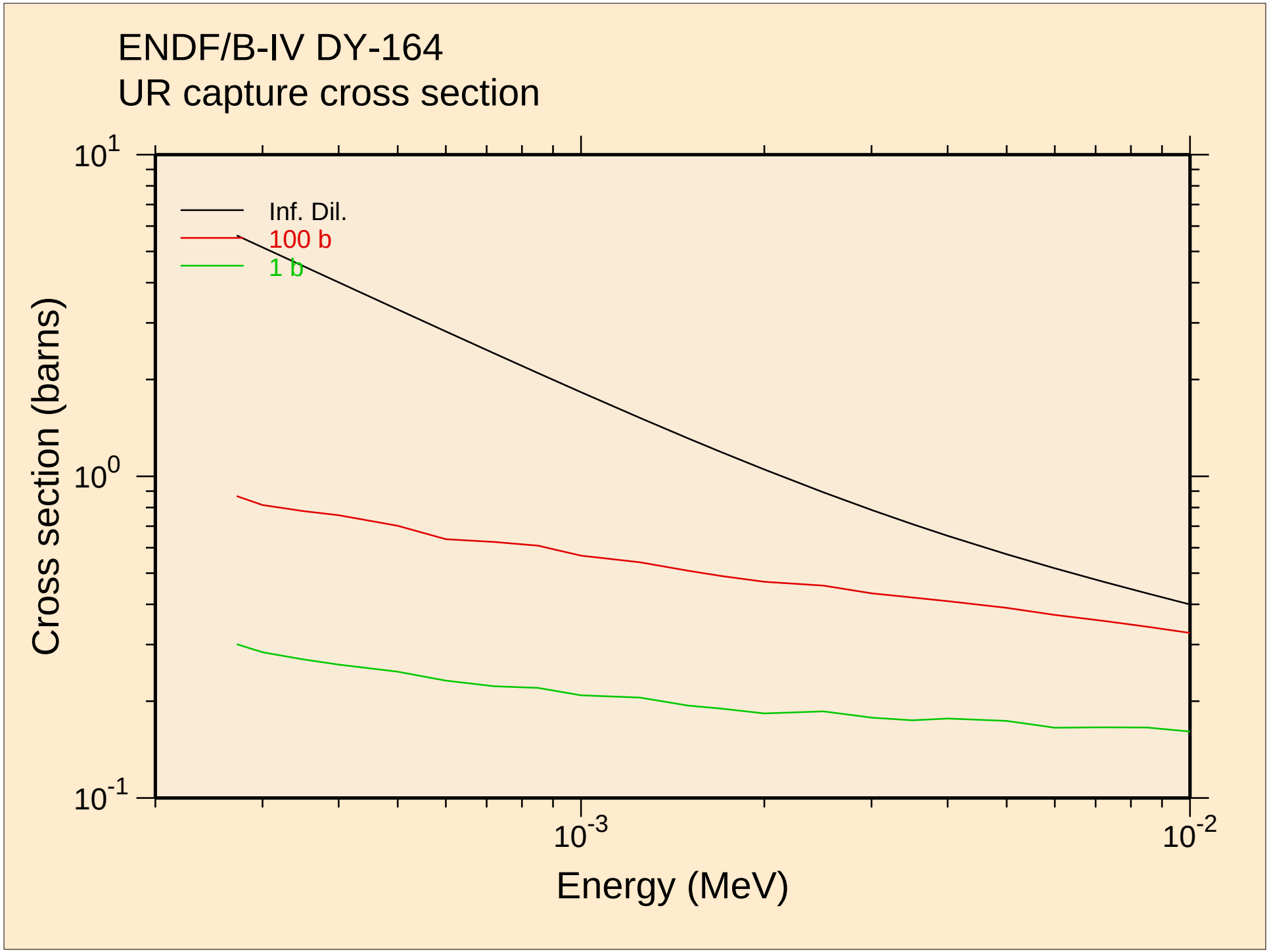
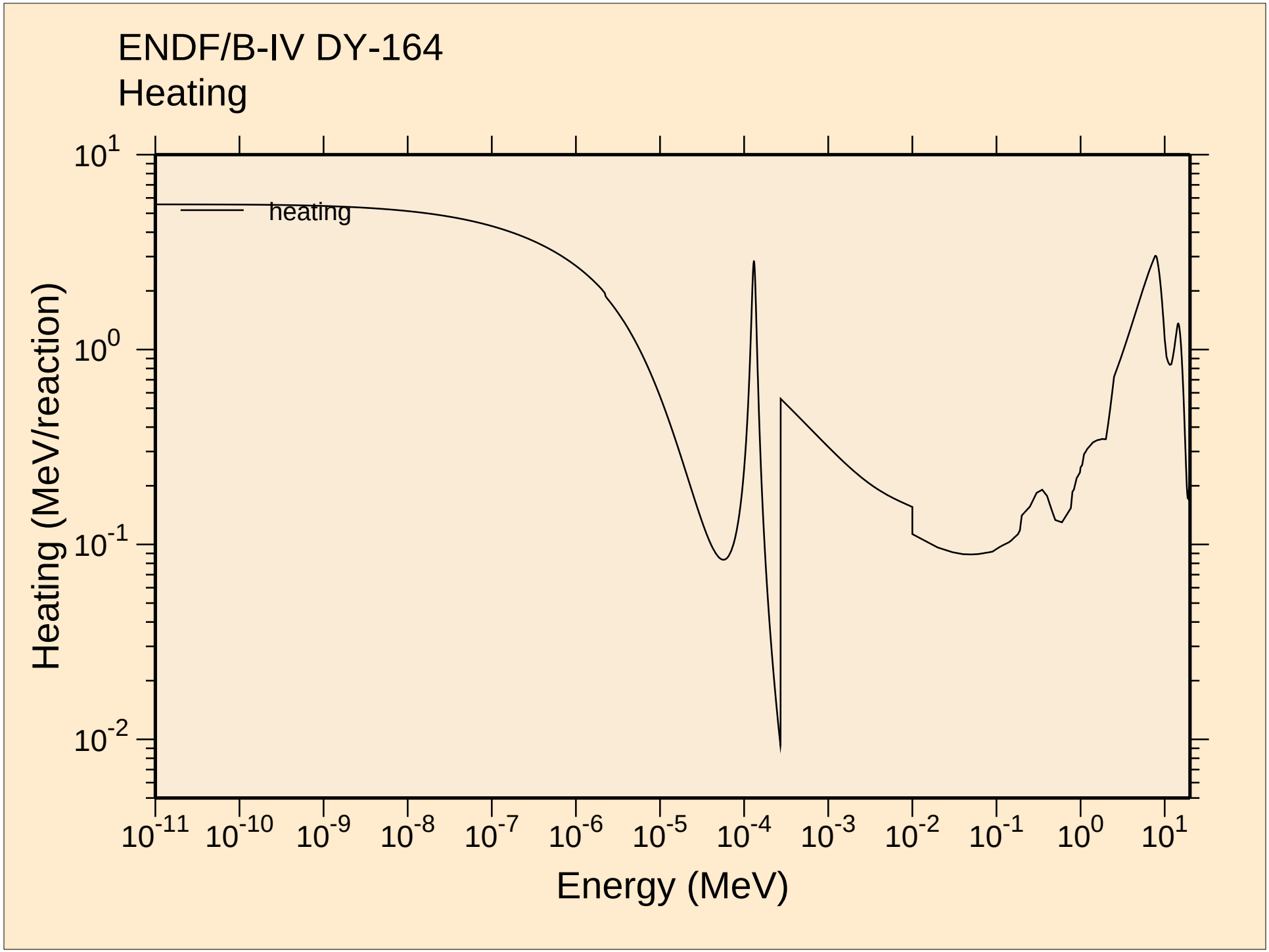
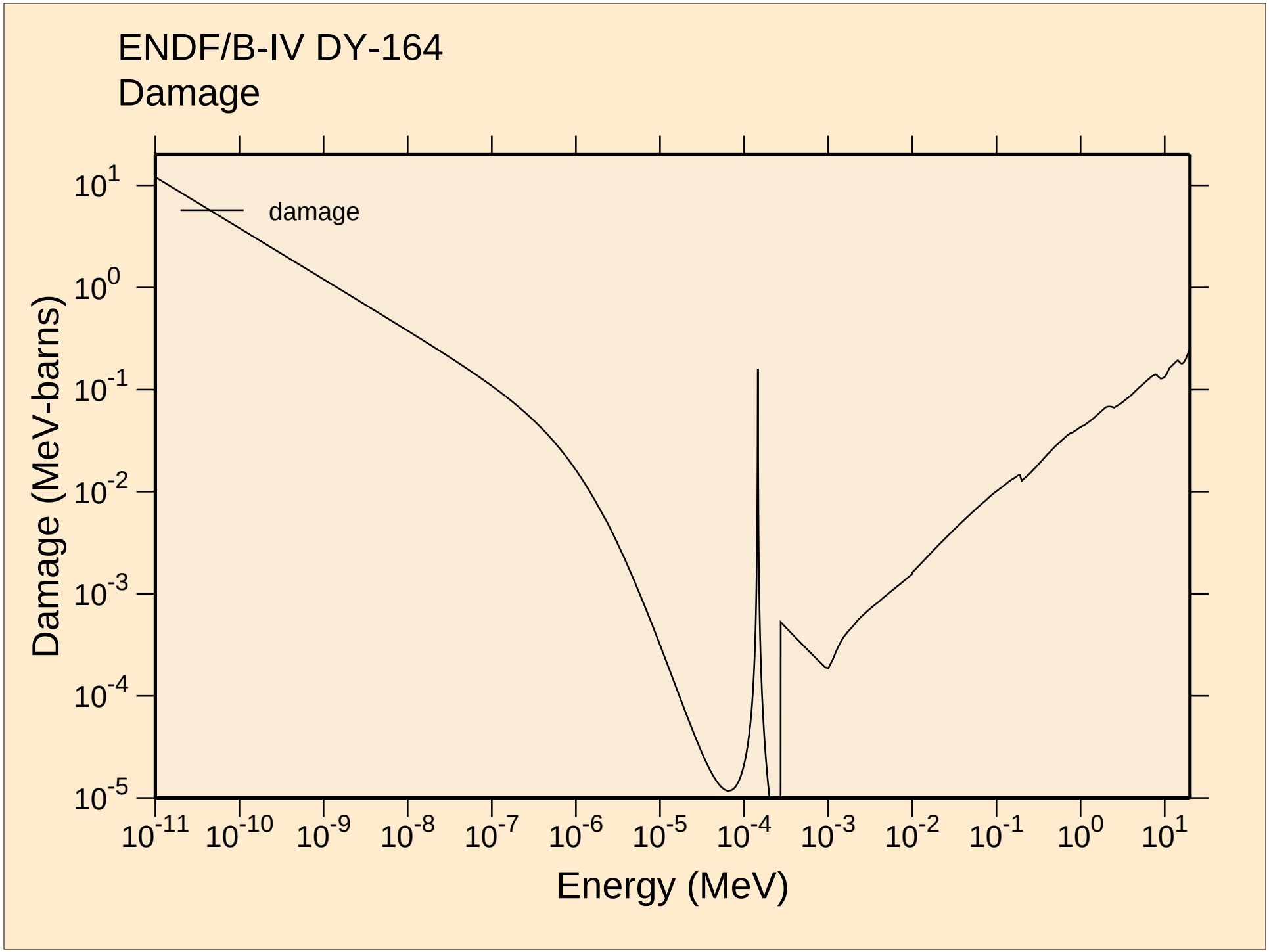

ENDF/B-IV DY-164
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-11
10^-10
10^-9
10^-8
10^-7
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1

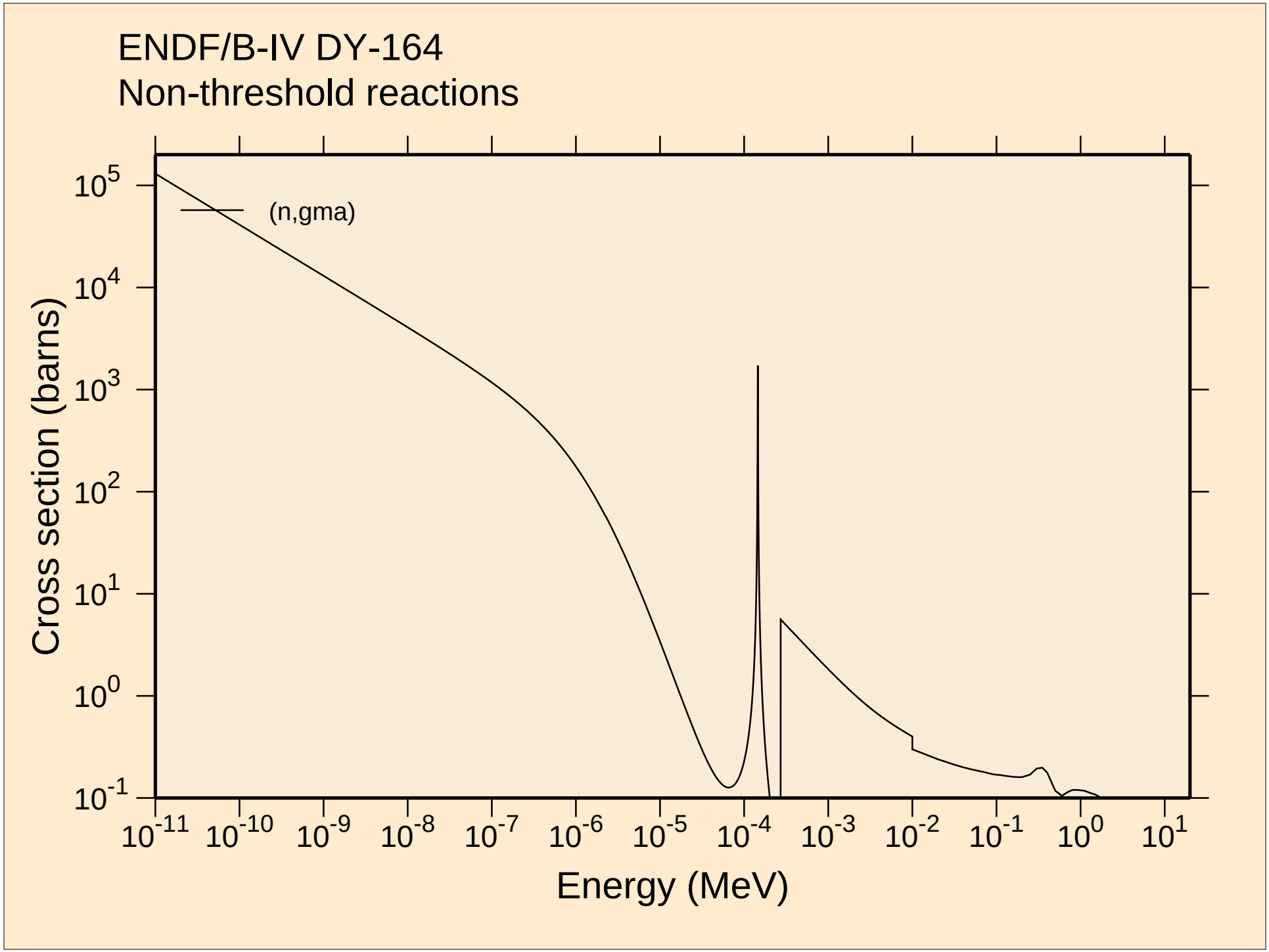

ENDF/B-IV DY-164
UR total cross section
Inf. Dil.
100 b
1 b
Cross section (barns)
10^2
10^1
10^-3
10^-2
Energy (MeV)

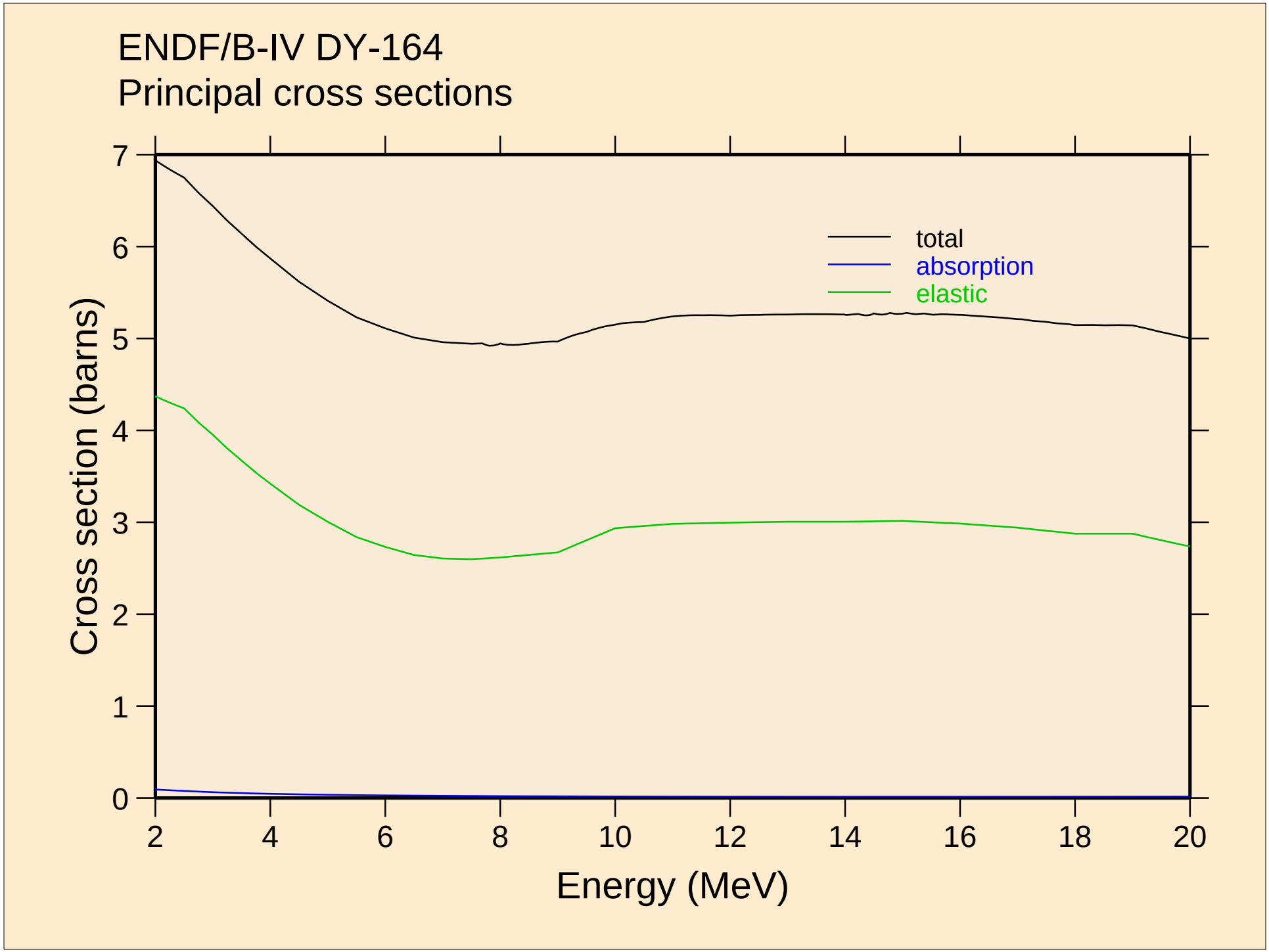

ENDF/B-IV DY-164
UR elastic cross section
Inf. Dil.
100 b
1 b
Cross section (barns)
10^2
10^1
10^-3
10^-2
Energy (MeV)

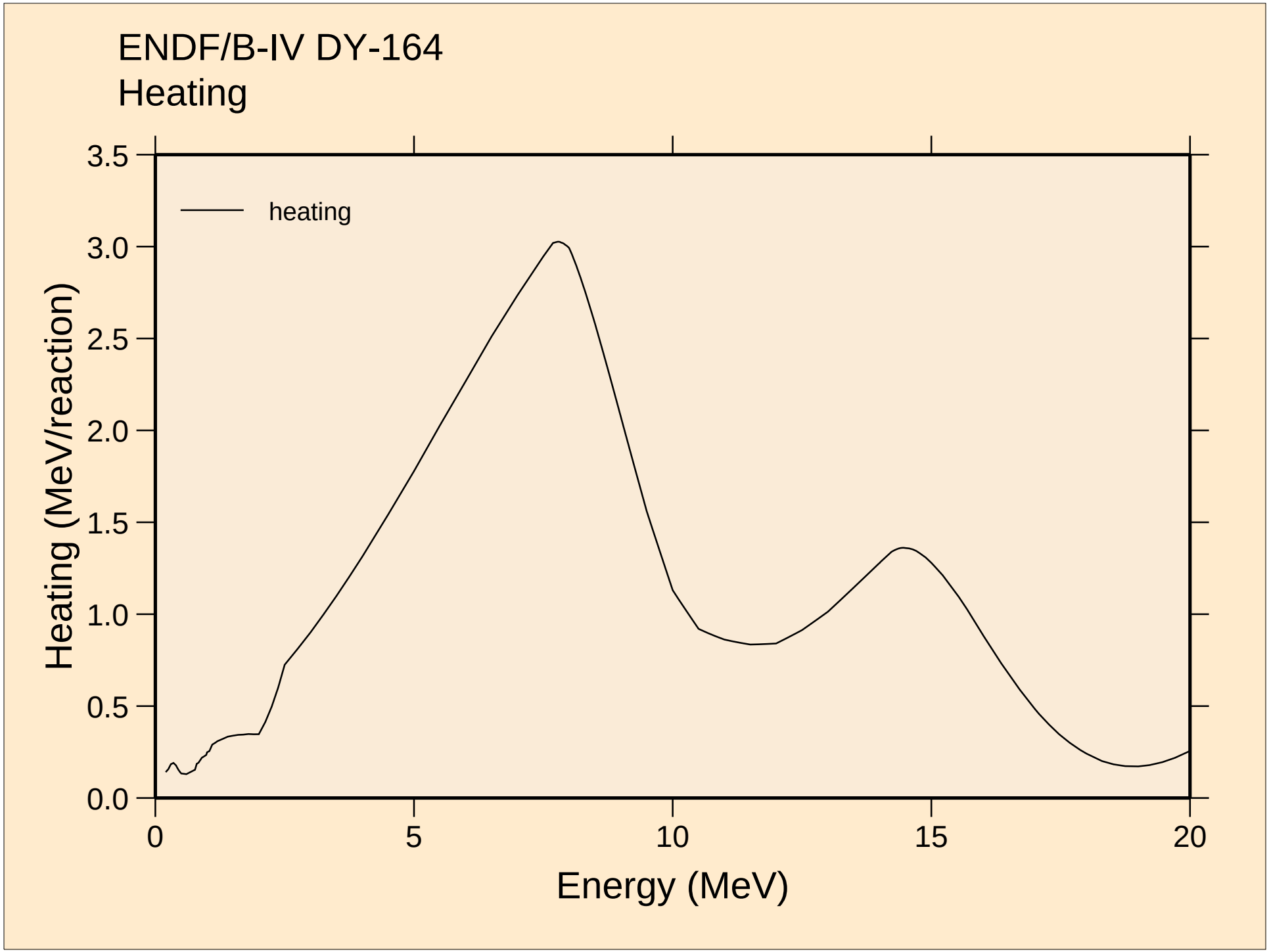

ENDF/B-IV DY-164
UR capture cross section
Inf. Dil.
100 b
1 b
Cross section (barns)
10^1
10^0
10^-1
10^-3
10^-2
Energy (MeV)

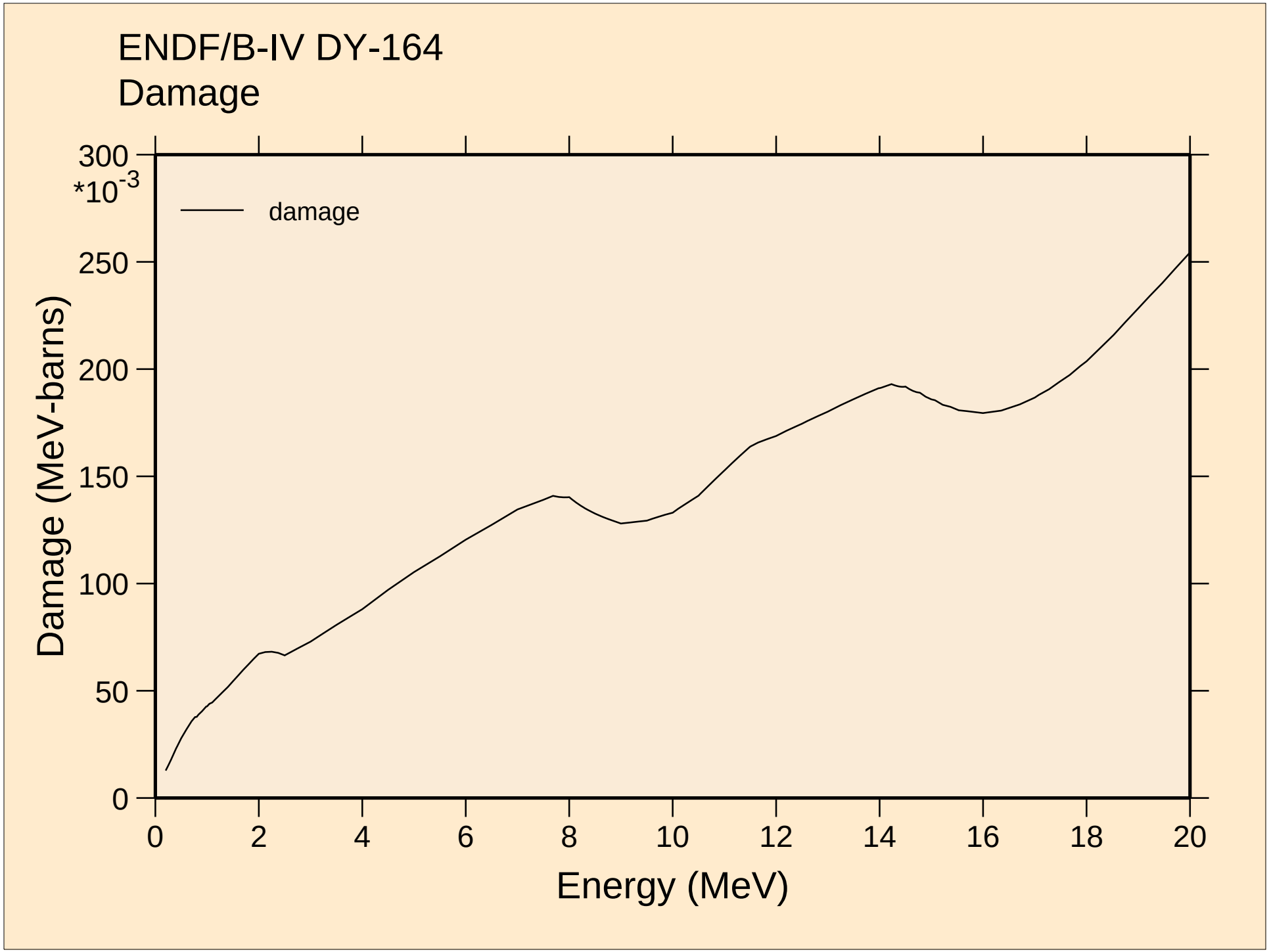

ENDF/B-IV DY-164
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
10^1
10^0
10^-1
10^-2
10^-11 10^-10 10^-9 10^-8 10^-7 10^-6 10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1

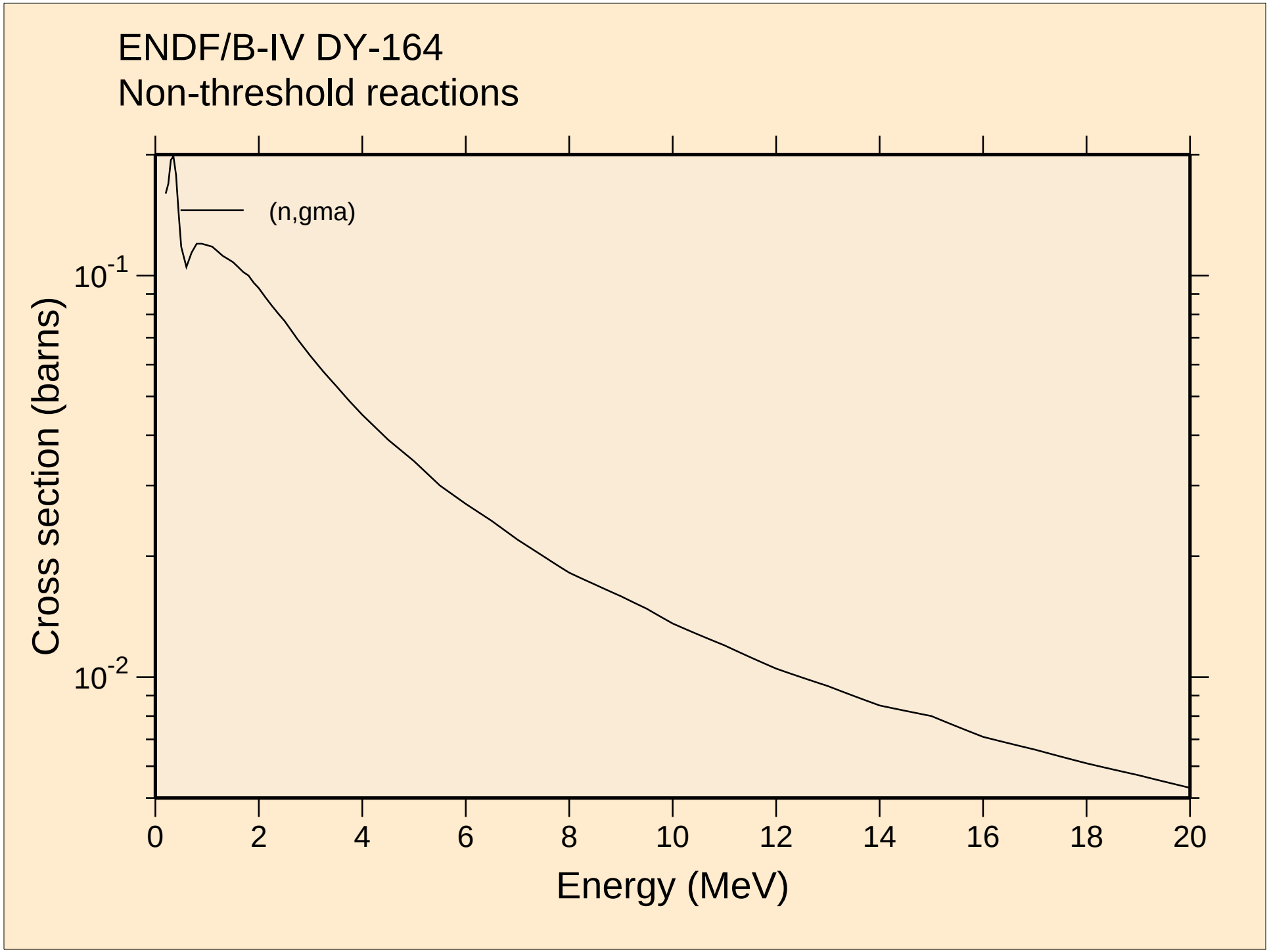

ENDF/B-IV DY-164
Damage
damage
Damage (MeV-barns)
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-11} 10^{-10} 10^{-9} 10^{-8} 10^{-7} 10^{-6} 10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1}
Energy (MeV)

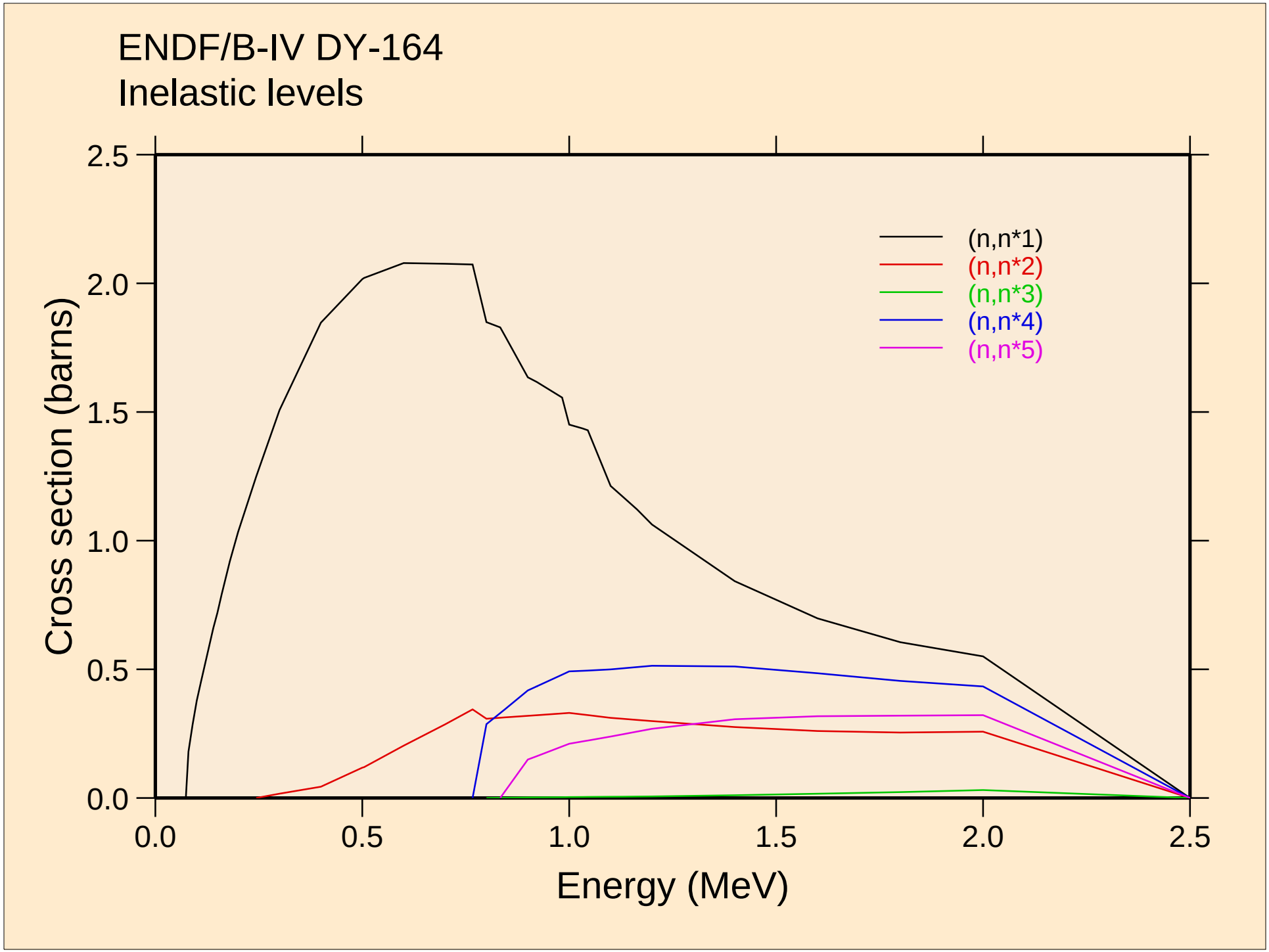

ENDF/B-IV DY-164
Non-threshold reactions
(n,gma)
Cross section (barns)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-11} 10^{-10} 10^{-9} 10^{-8} 10^{-7} 10^{-6} 10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1}
Energy (MeV)

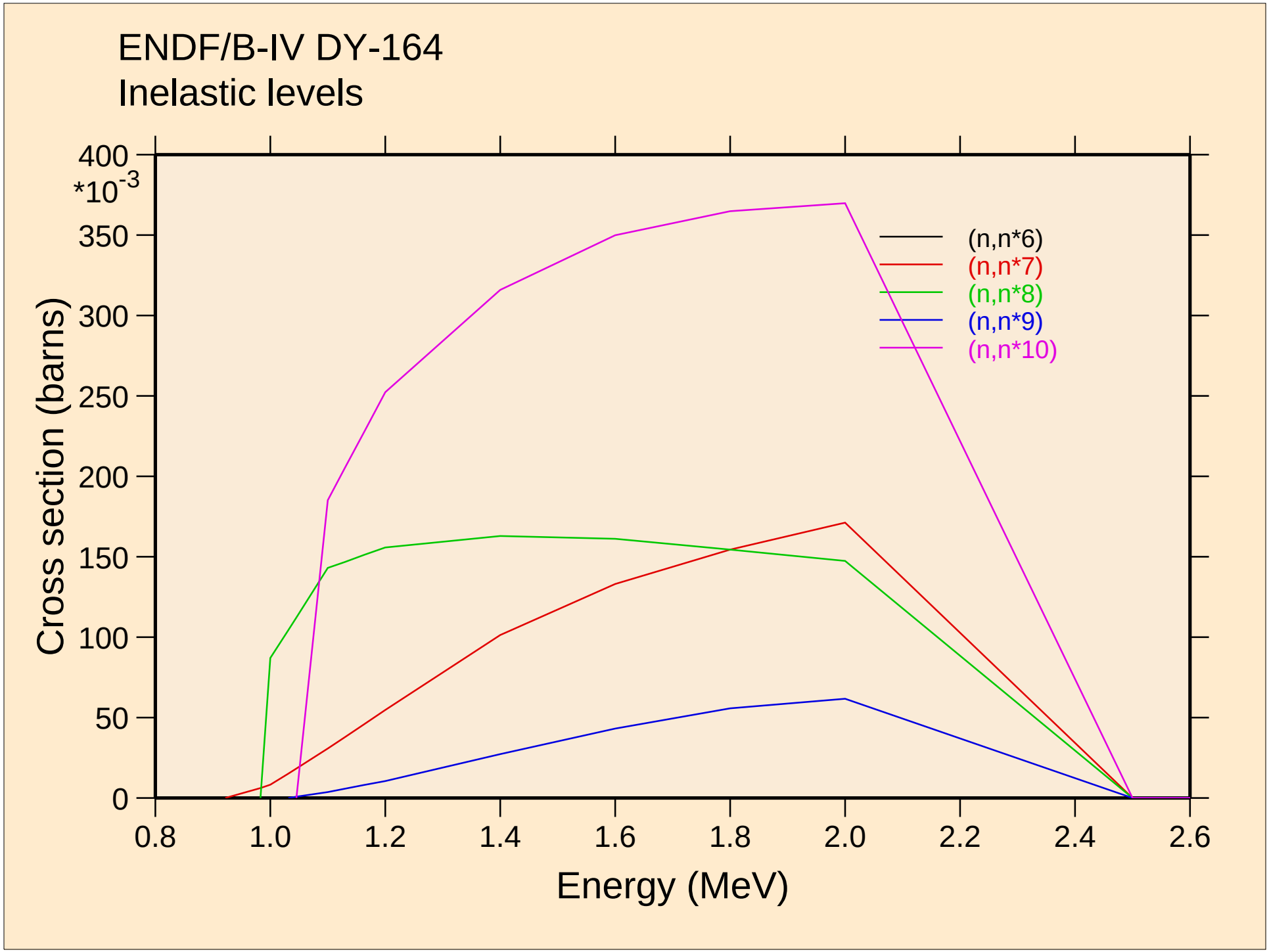

ENDF/B-IV DY-164
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
0
1
2
3
4
5
6
7
2
4
6
8
10
12
14
16
18
20

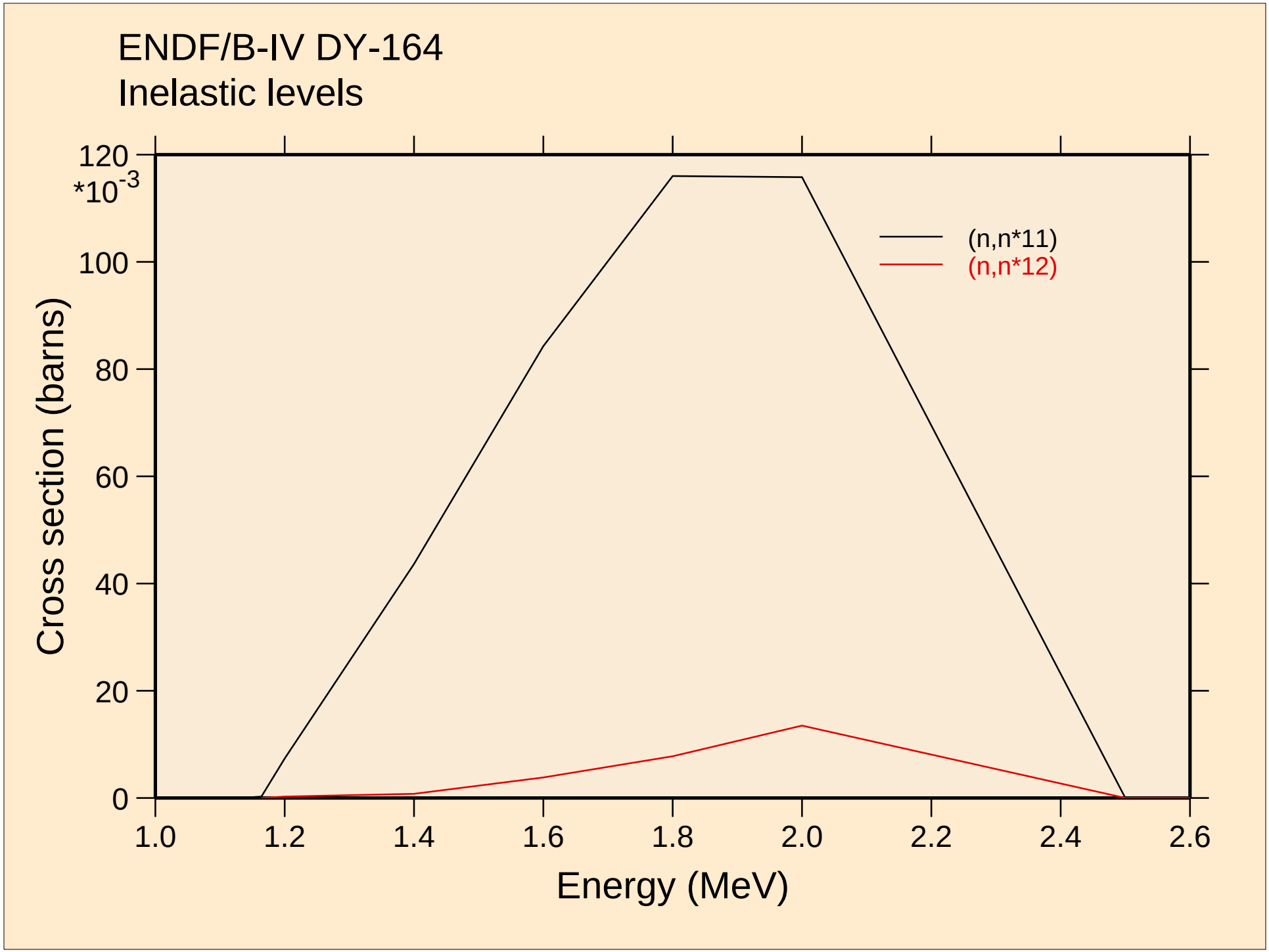

ENDF/B-IV DY-164
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
0
5
10
15
20

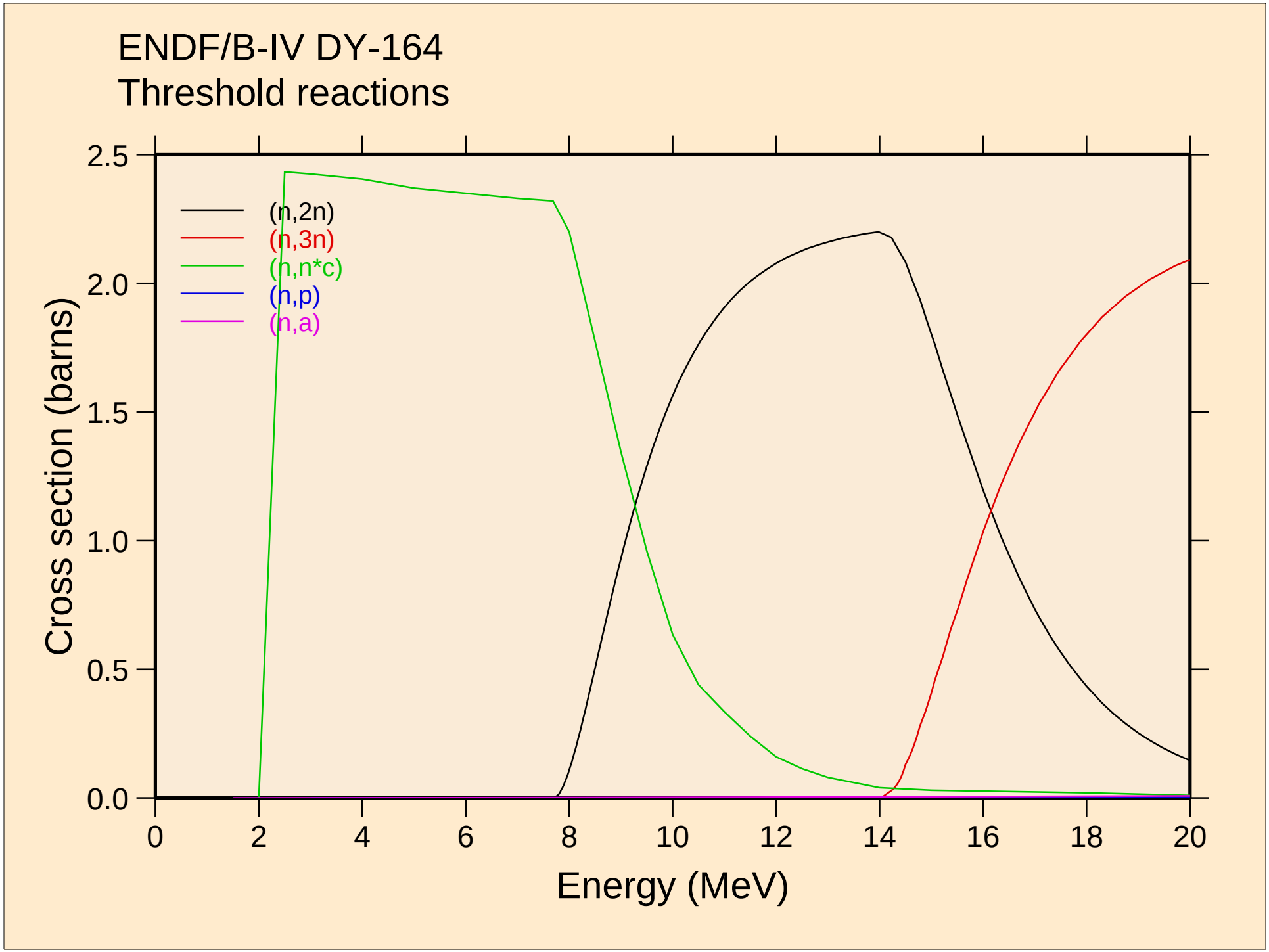

ENDF/B-IV DY-164
Damage
300
*10-3
250
200
150
100
50
0
damage
Damage (MeV-barns)
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

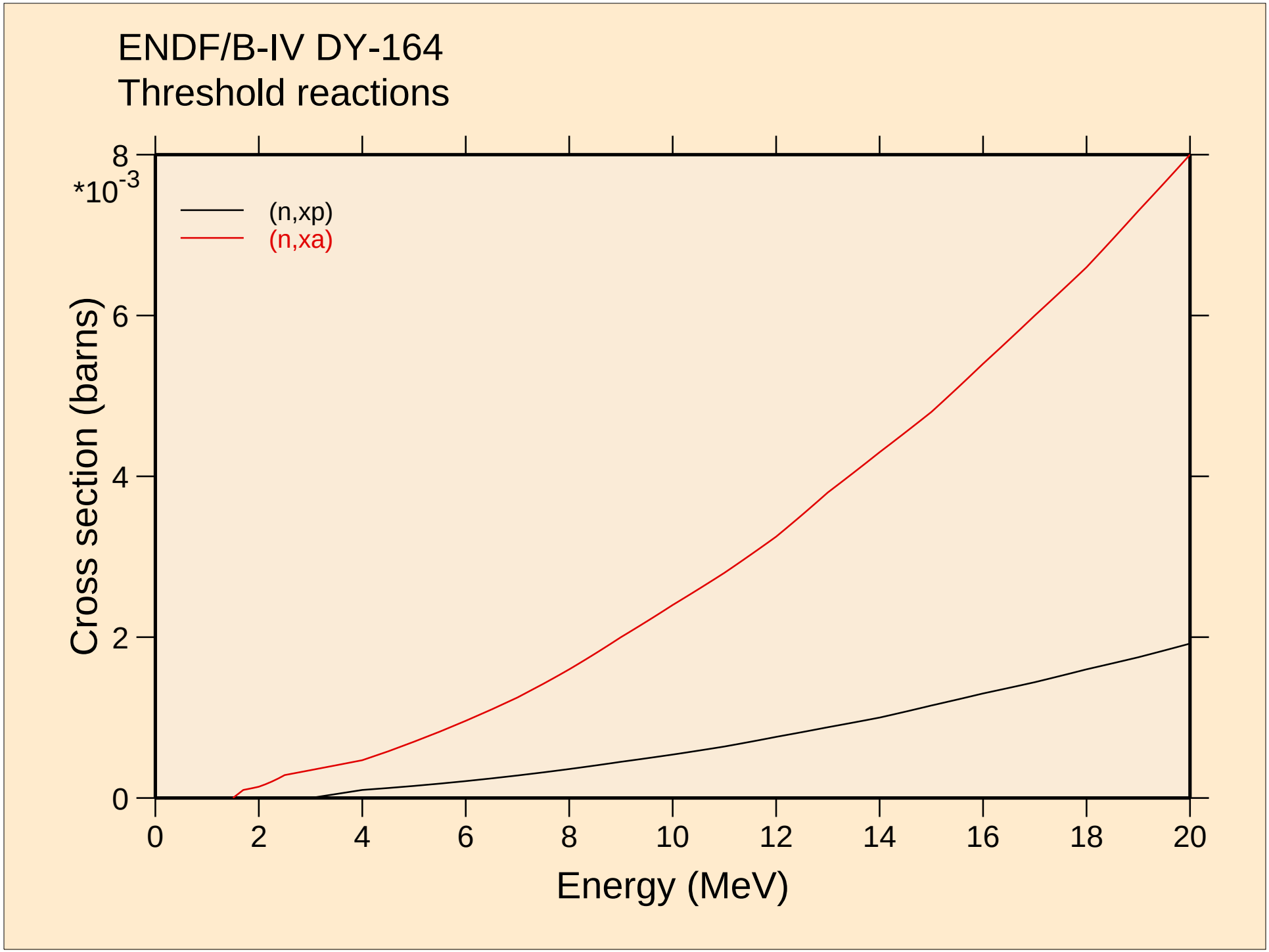

ENDF/B-IV DY-164
Non-threshold reactions
(n,gma)
Cross section (barns)
10-1
10-2
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

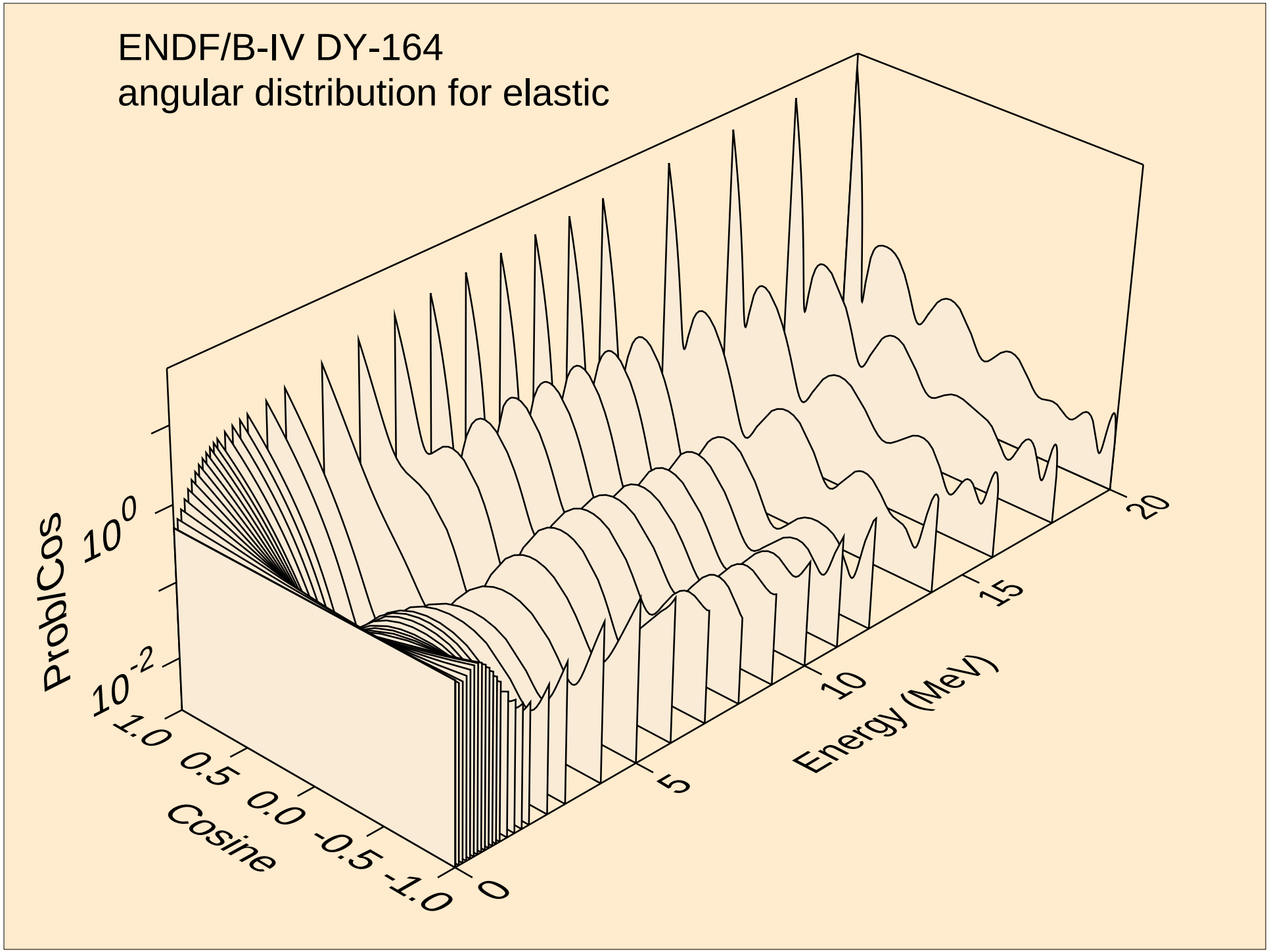

ENDF/B-IV DY-164
Inelastic levels
Cross section (barns)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)

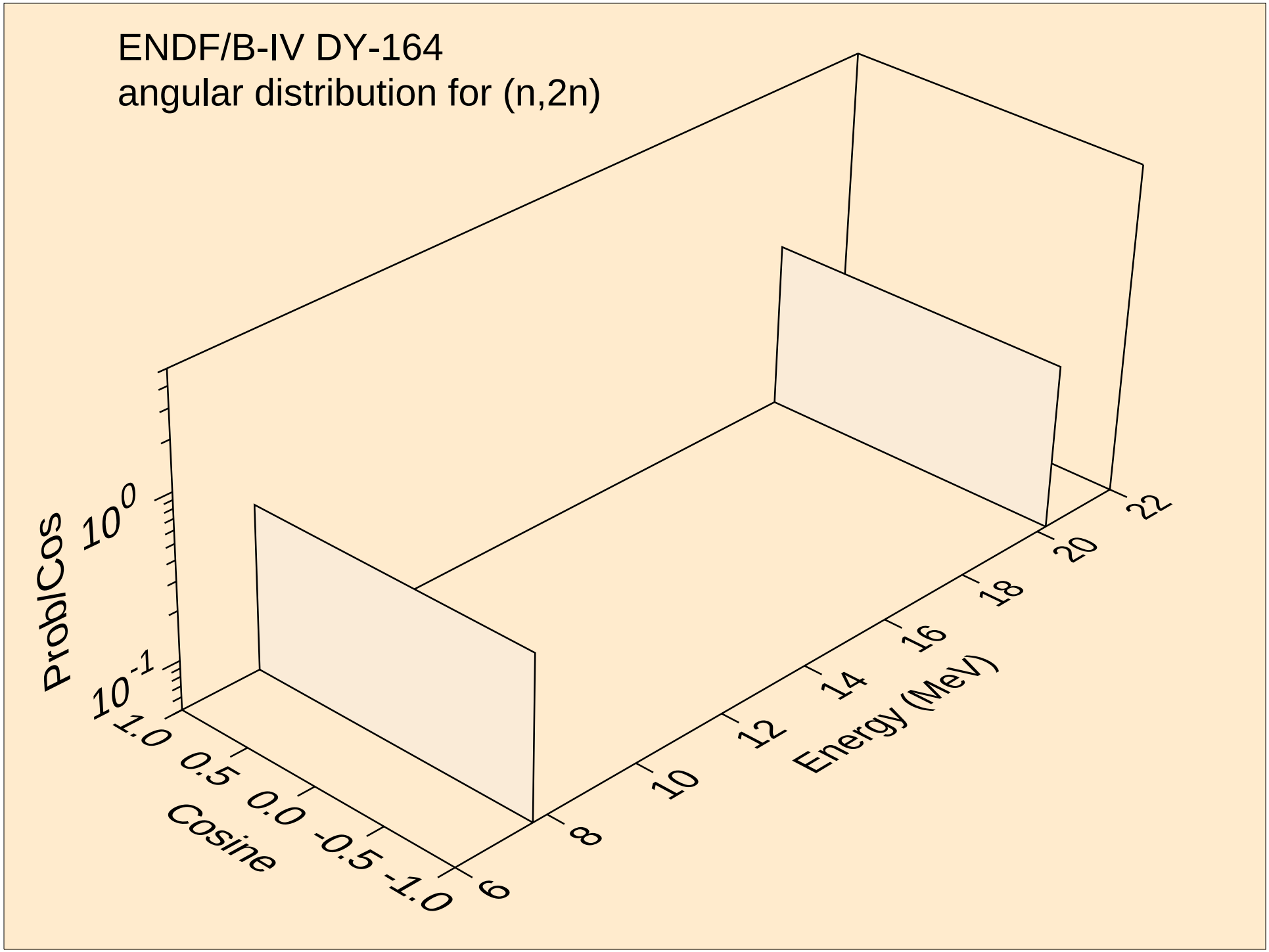

ENDF/B-IV DY-164
Inelastic levels
Cross section (barns)
*10-3
400
350
300
250
200
150
100
50
0
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
Energy (MeV)
(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
(n,n*10)

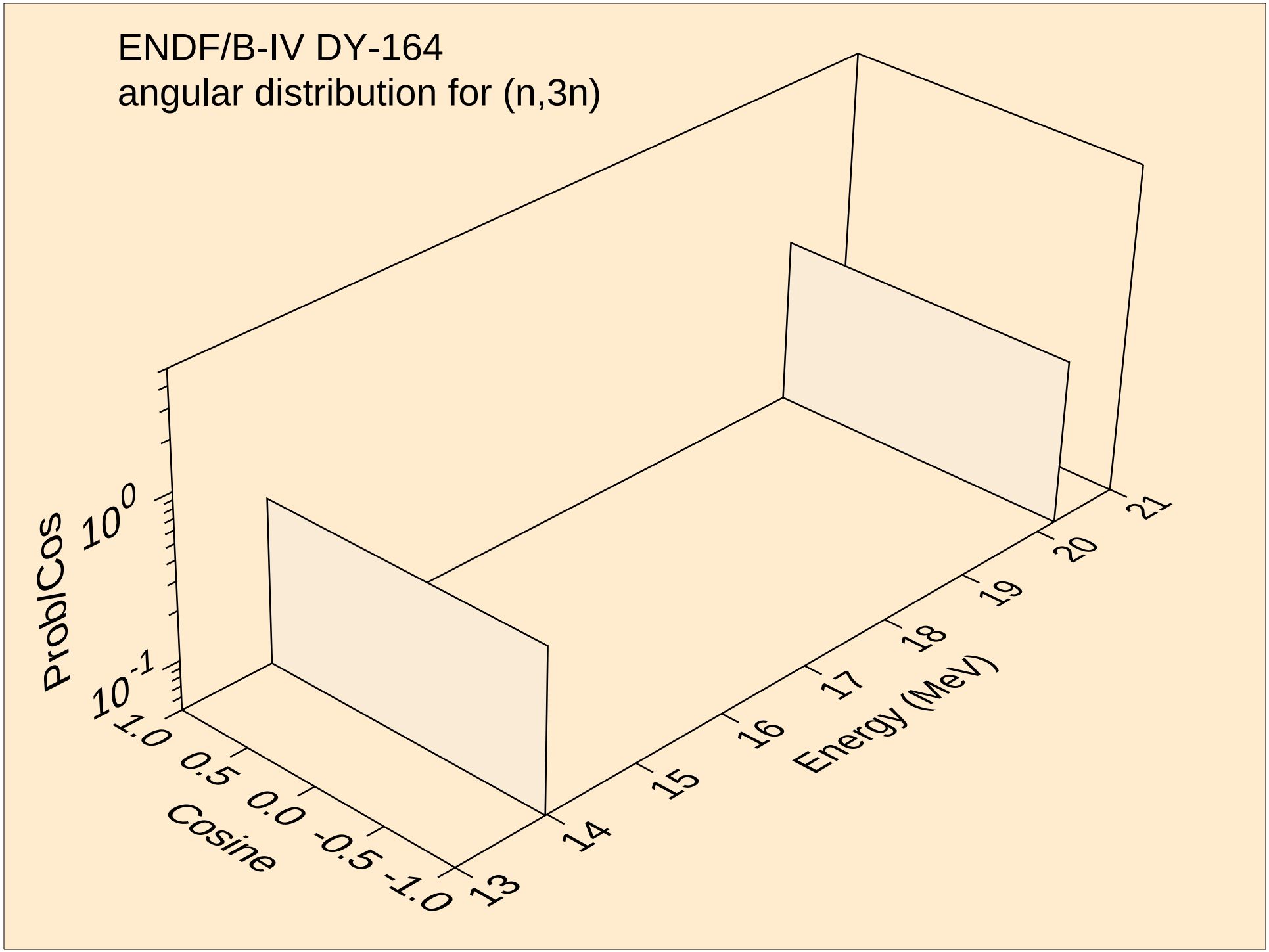

ENDF/B-IV DY-164
Inelastic levels
120
*10-3
100
80
60
40
20
0
Cross section (barns)
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
Energy (MeV)
(n,n*11)
(n,n*12)

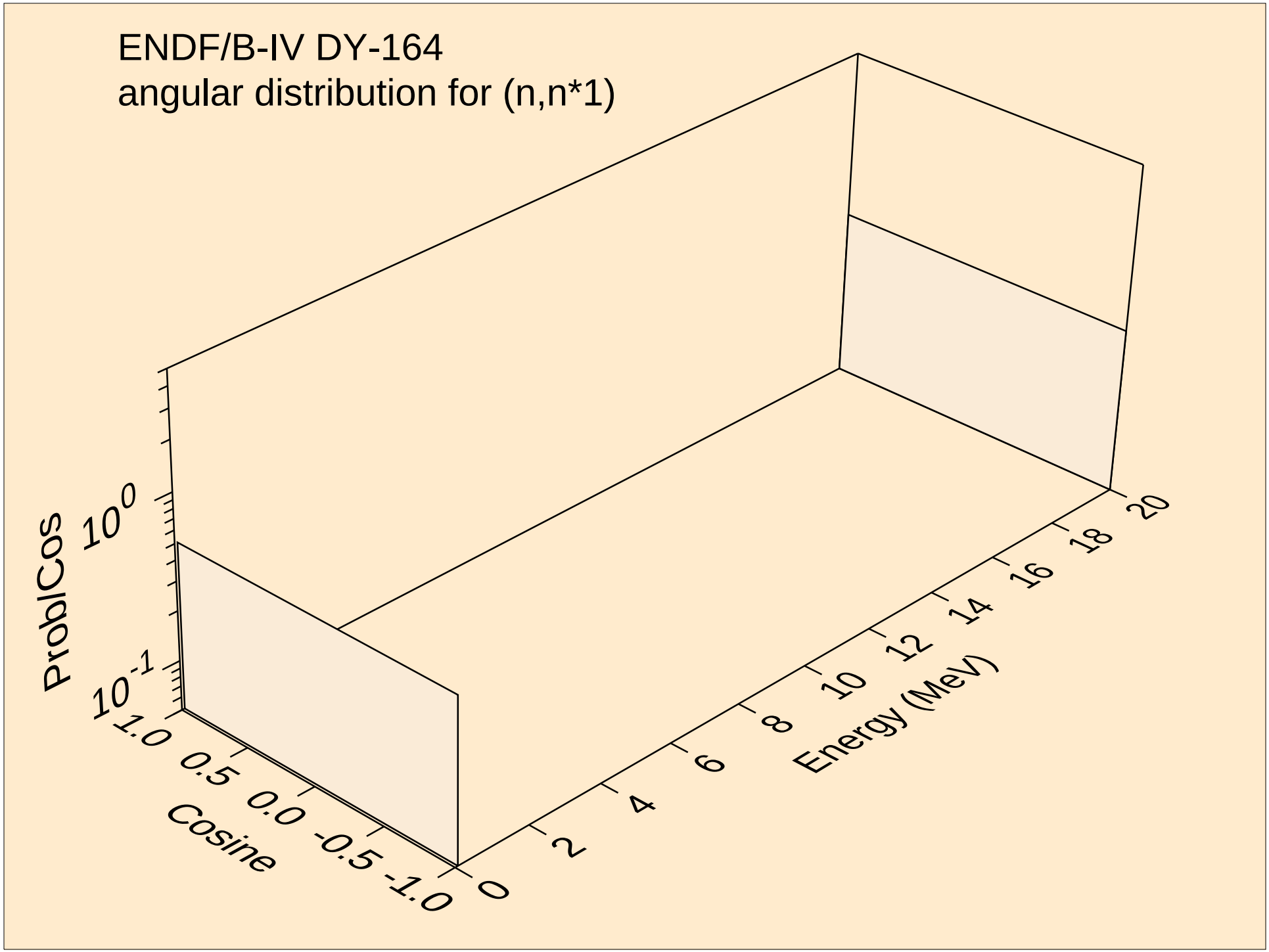

ENDF/B-IV DY-164
Threshold reactions
(n,2n)
(n,3n)
(n,n*c)
(n,p)
(n,a)
Cross section (barns)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
0
2
4
6
8
10
12
14
16
18
20

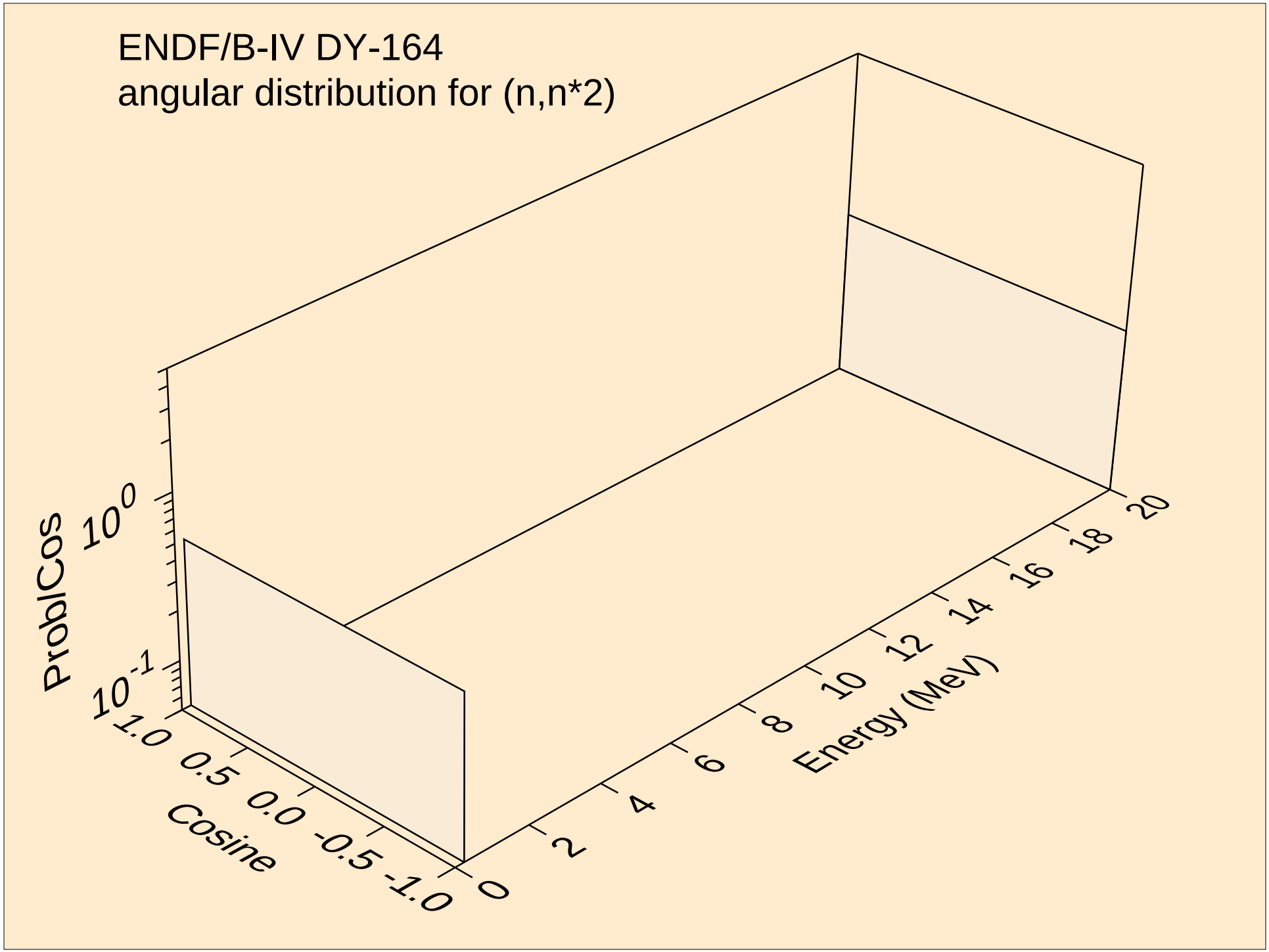

ENDF/B-IV DY-164
Threshold reactions
*10-3
8
6
4
2
0
(n,xp)
(n,xa)
Cross section (barns)
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

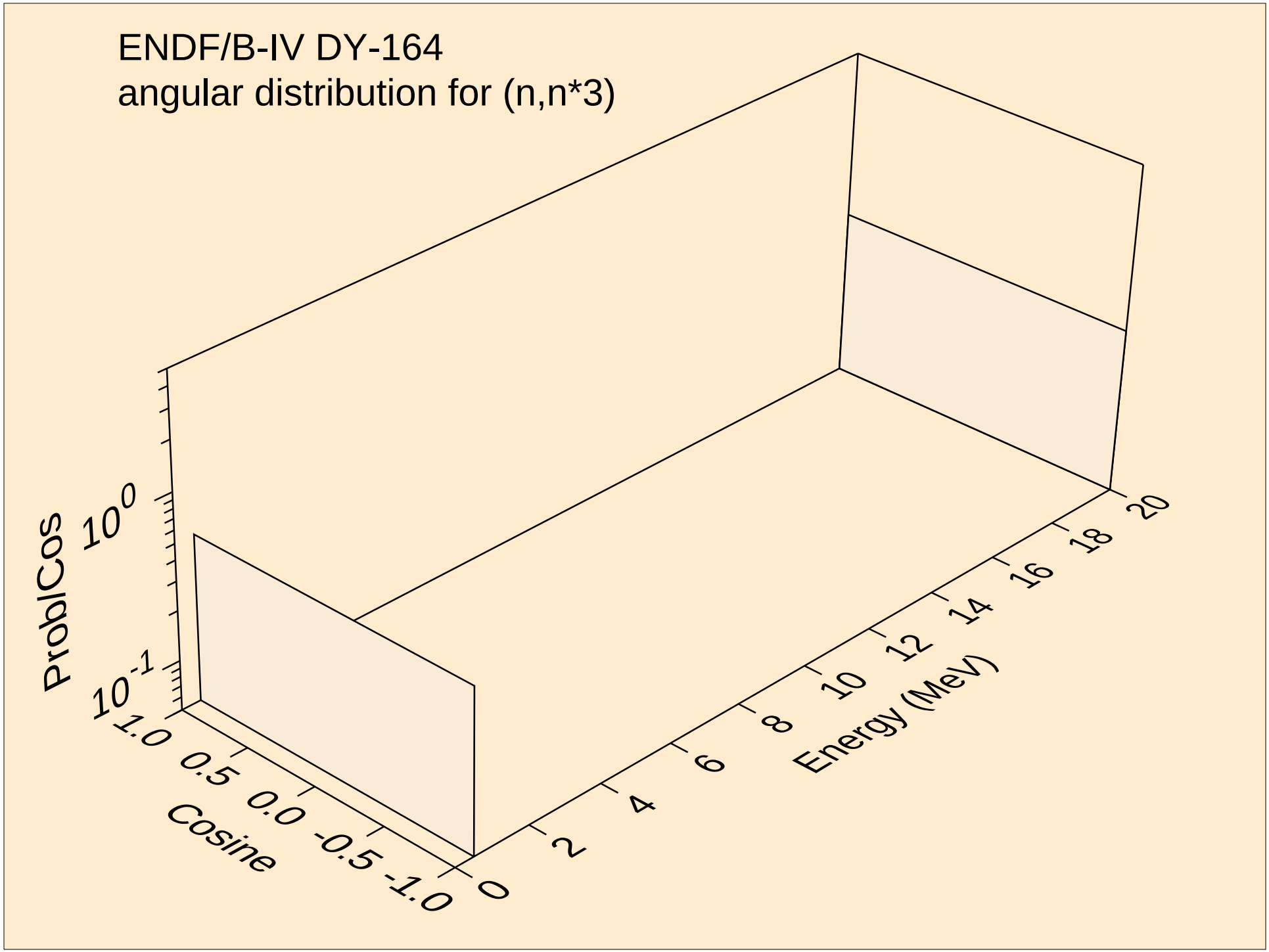

ENDF/B-IV DY-164
angular distribution for elastic
Prob\Cos
10^0
10^{-2}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

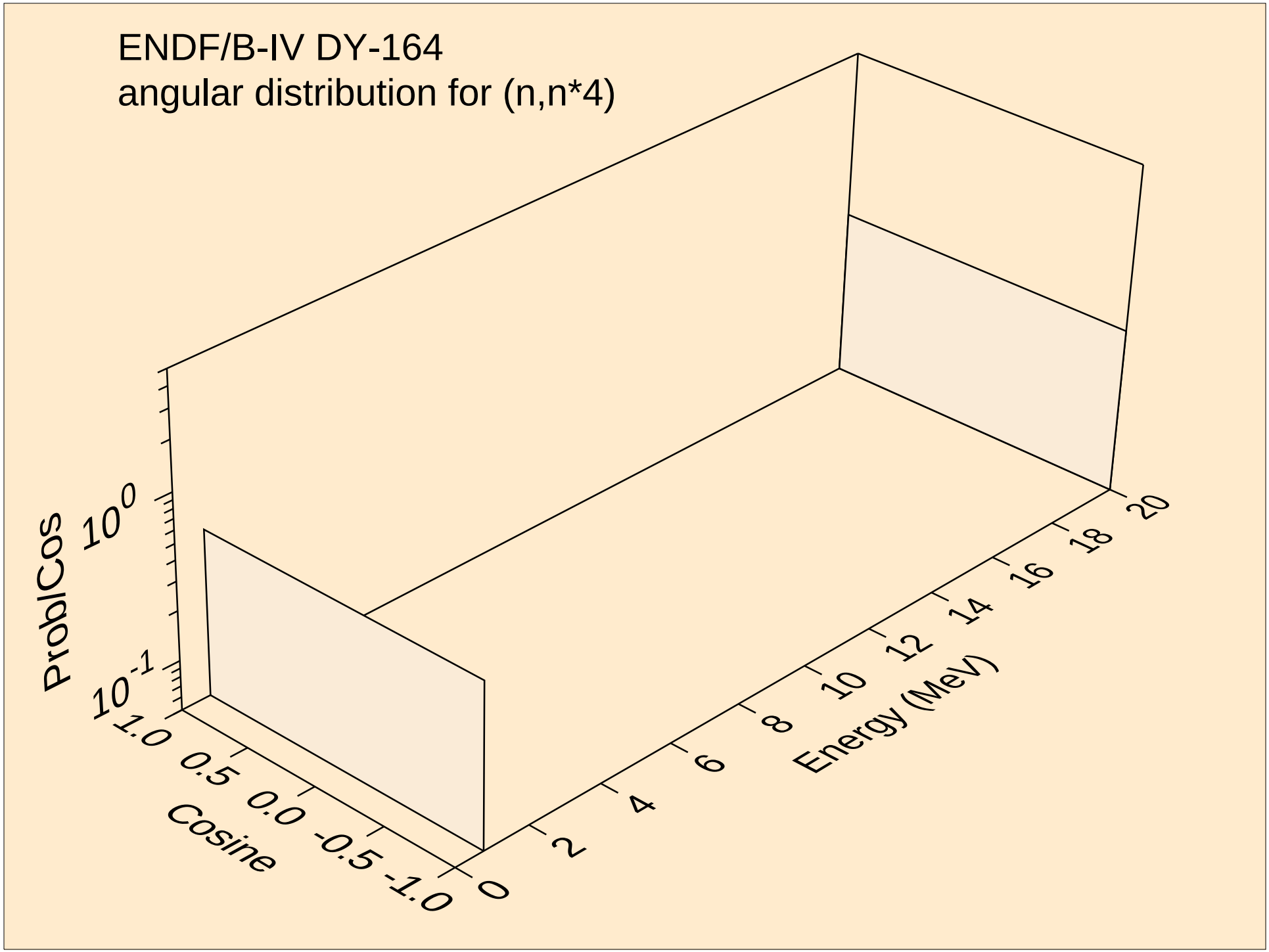

ENDF/B-IV DY-164
angular distribution for (n,2n)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
6
8
10
12
14
16
18
20
22
Energy (MeV)

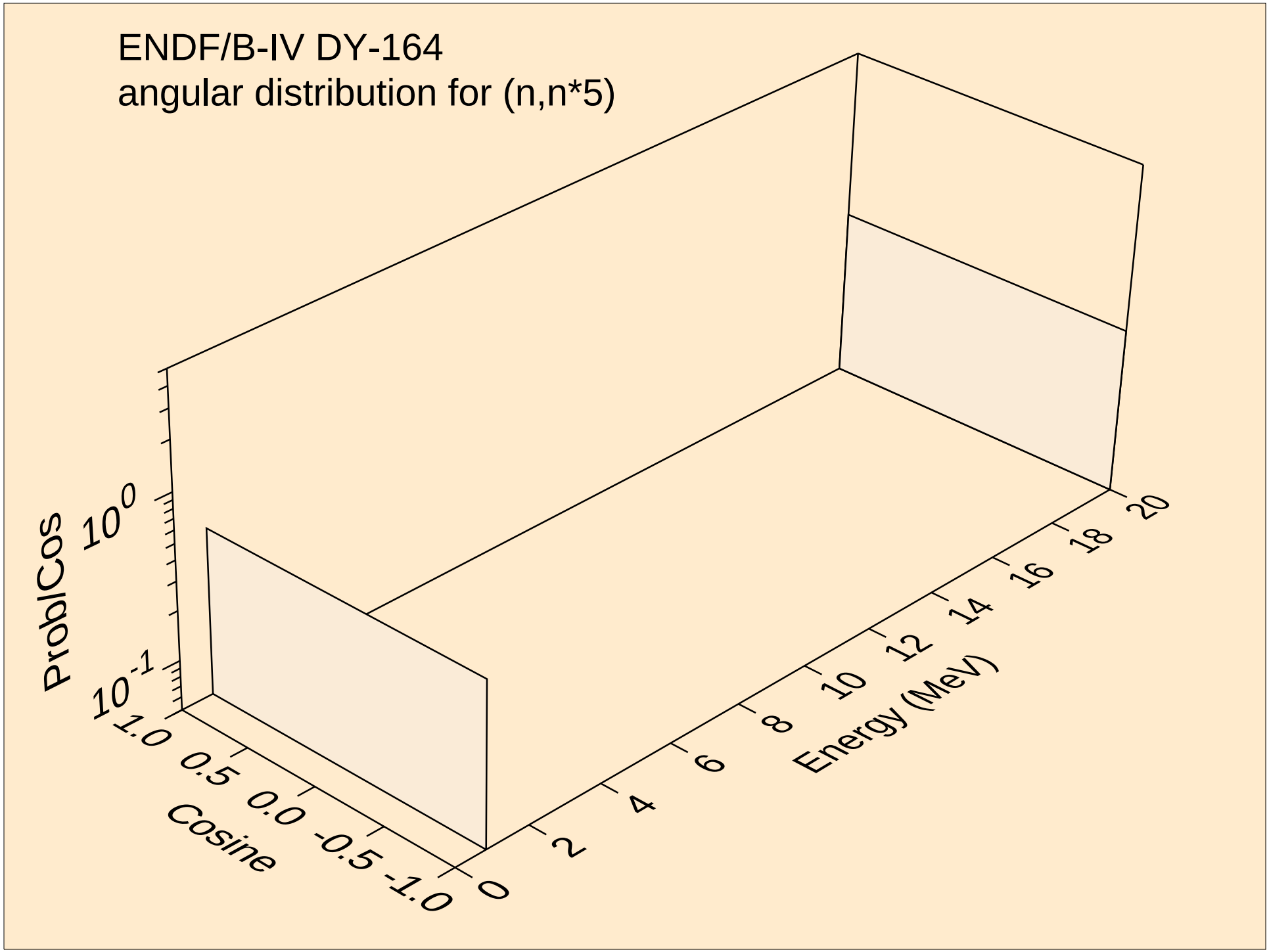

ENDF/B-IV DY-164
angular distribution for (n,3n)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
13
14
15
16
17
18
19
20
21
Energy (MeV)

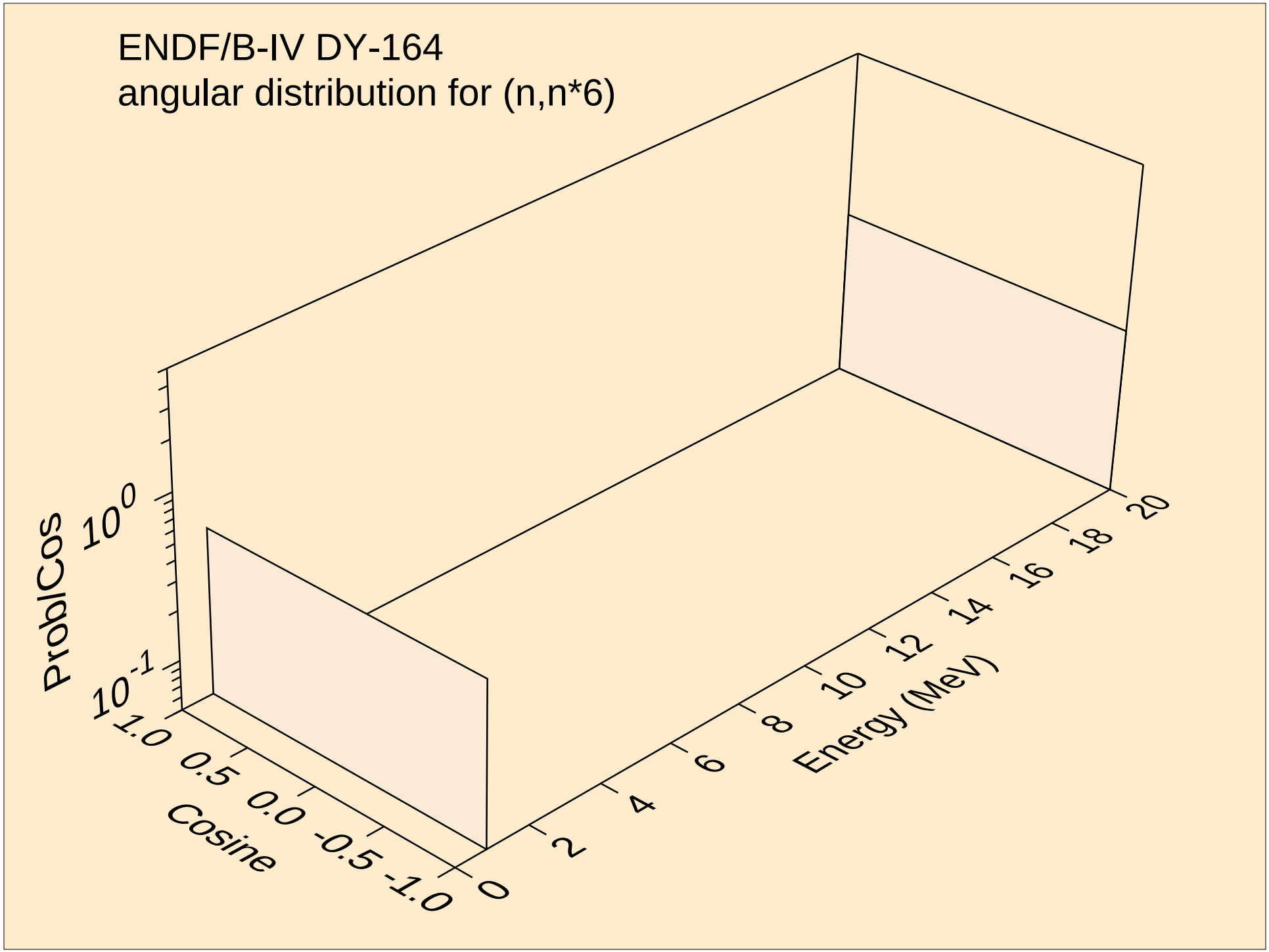

ENDF/B-IV DY-164
angular distribution for (n,n*1)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

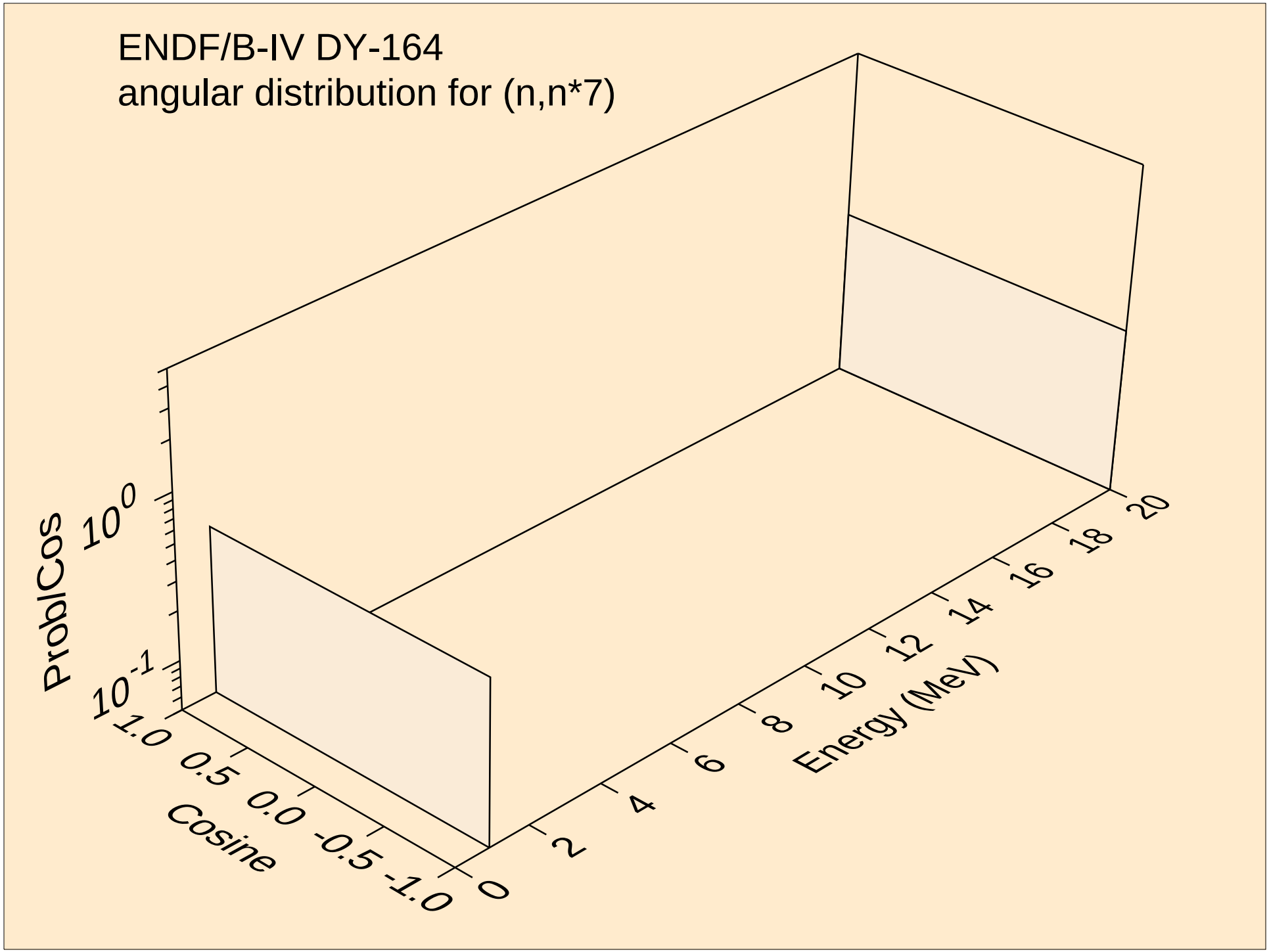

ENDF/B-IV DY-164
angular distribution for (n,n*2)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

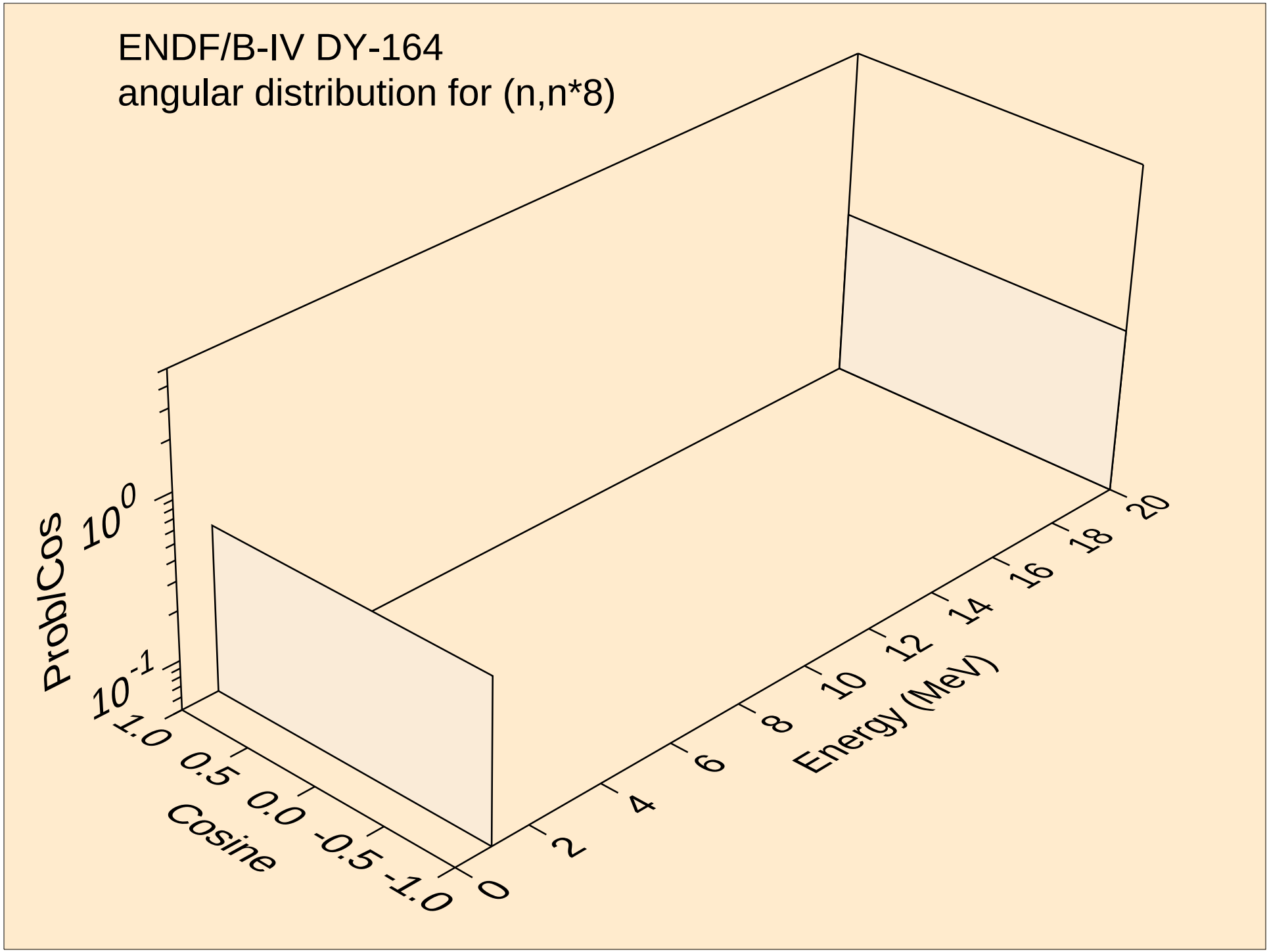

ENDF/B-IV DY-164
angular distribution for (n,n*3)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

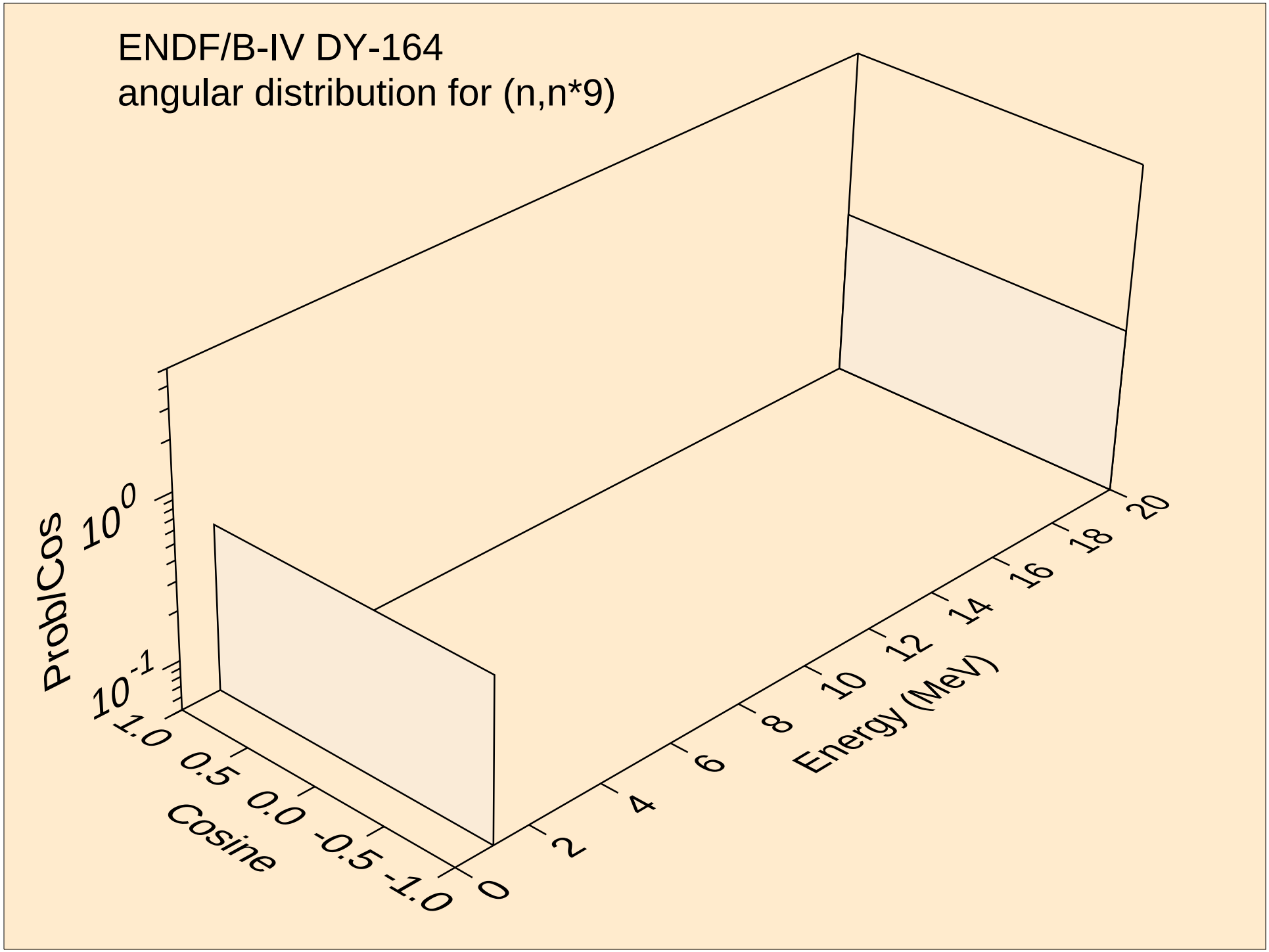

ENDF/B-IV DY-164
angular distribution for (n,n*4)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

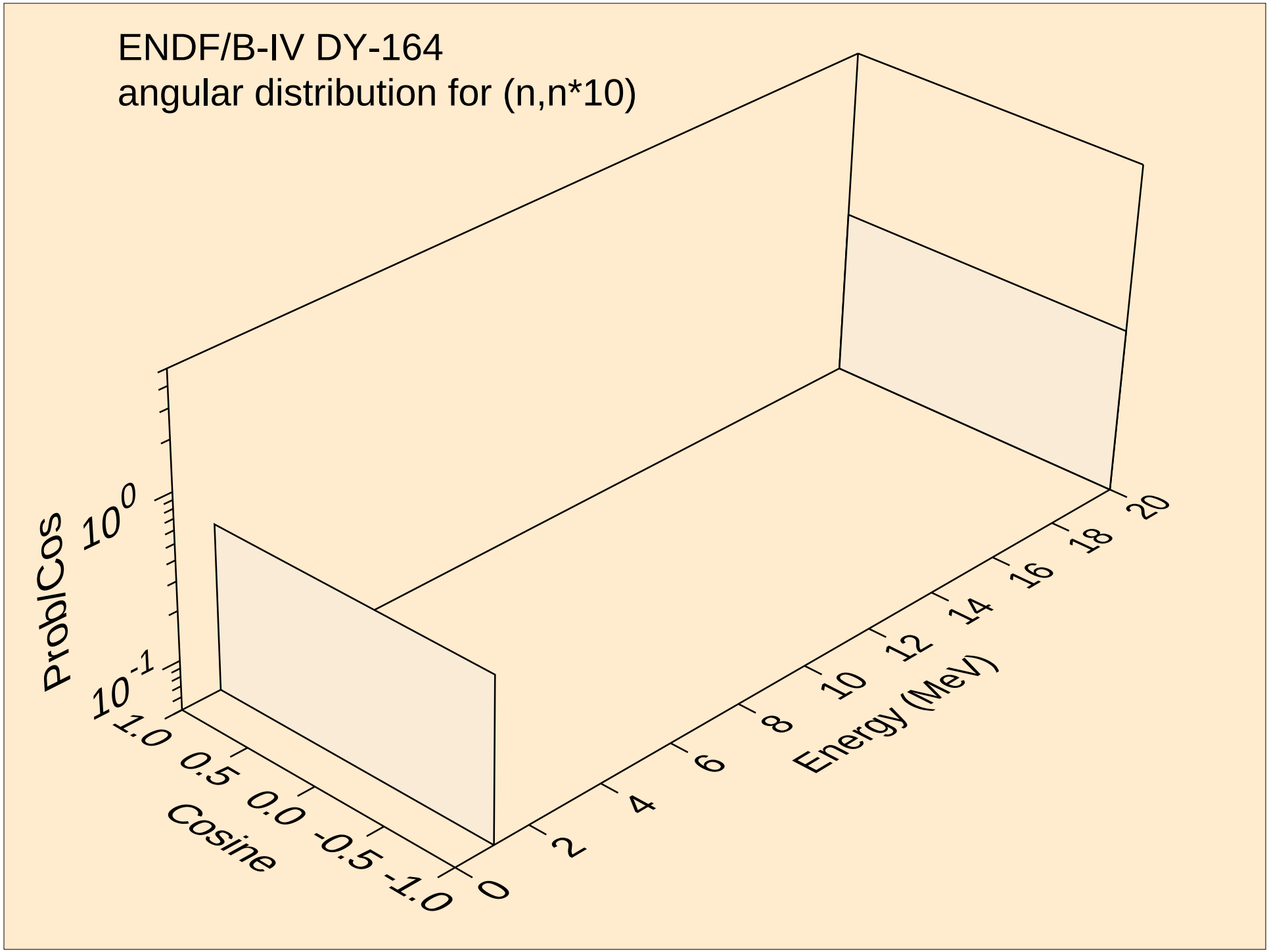

ENDF/B-IV DY-164
angular distribution for (n,n*5)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

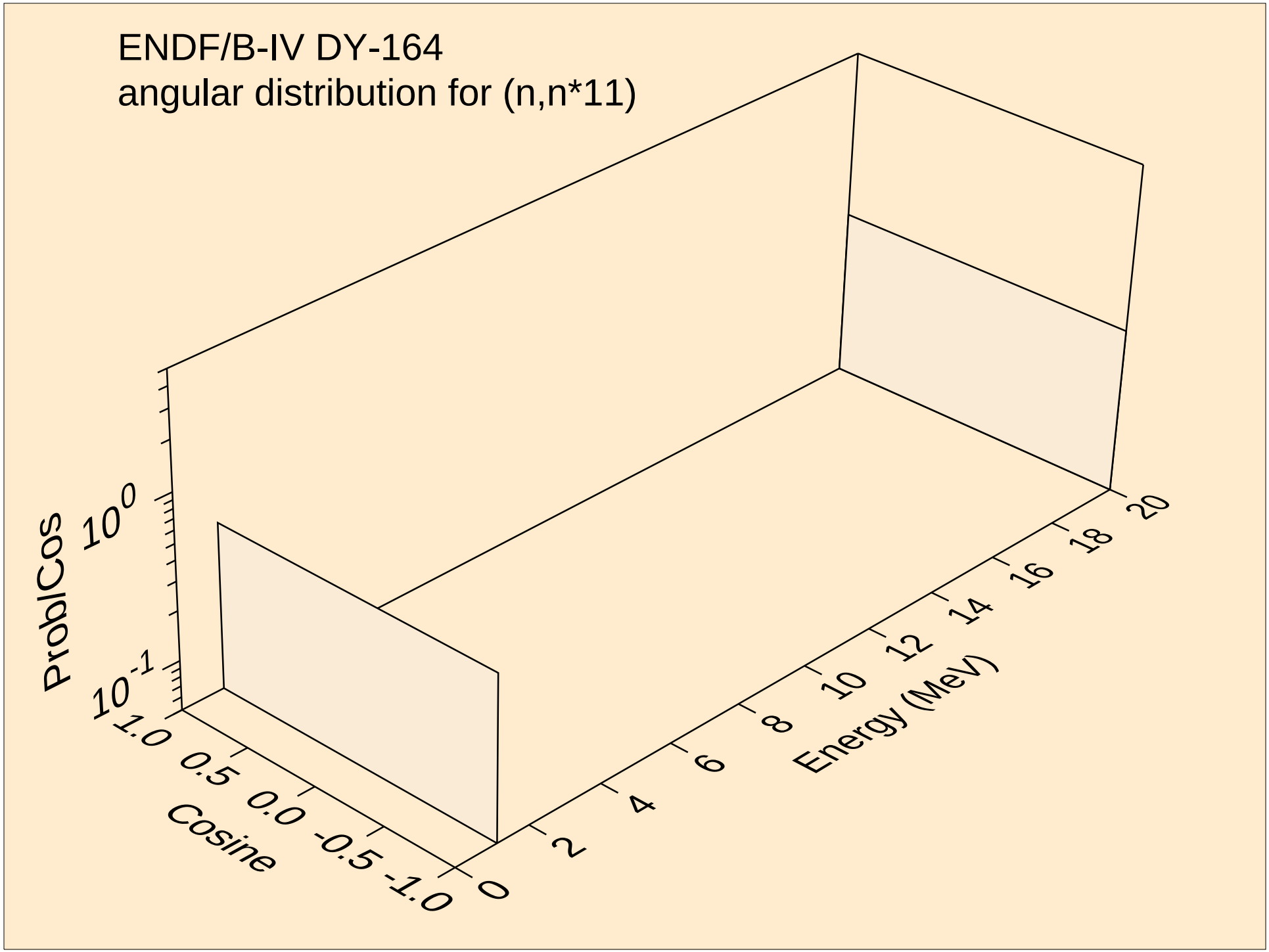

ENDF/B-IV DY-164
angular distribution for (n,n*6)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

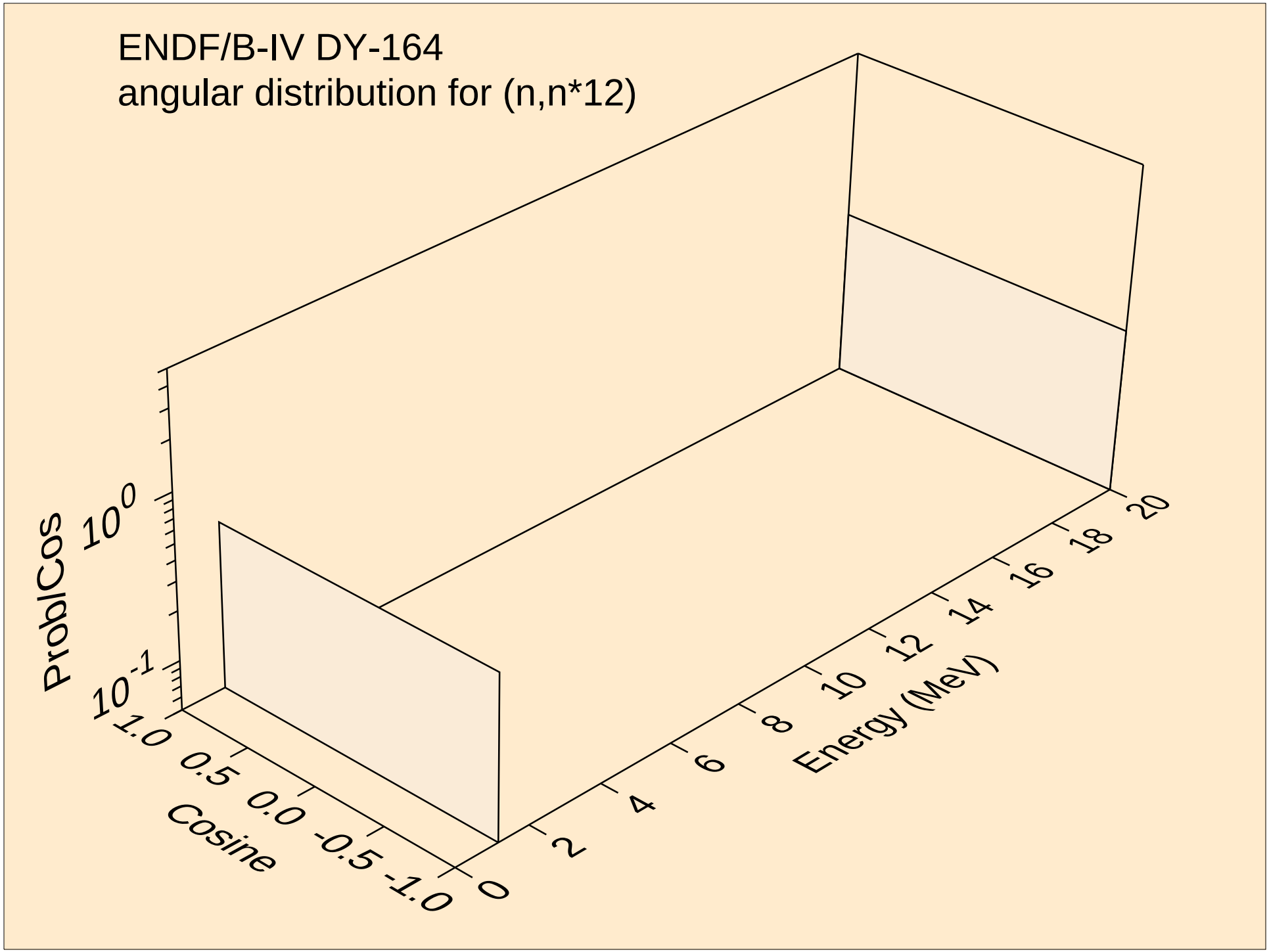

ENDF/B-IV DY-164
angular distribution for (n,n*7)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

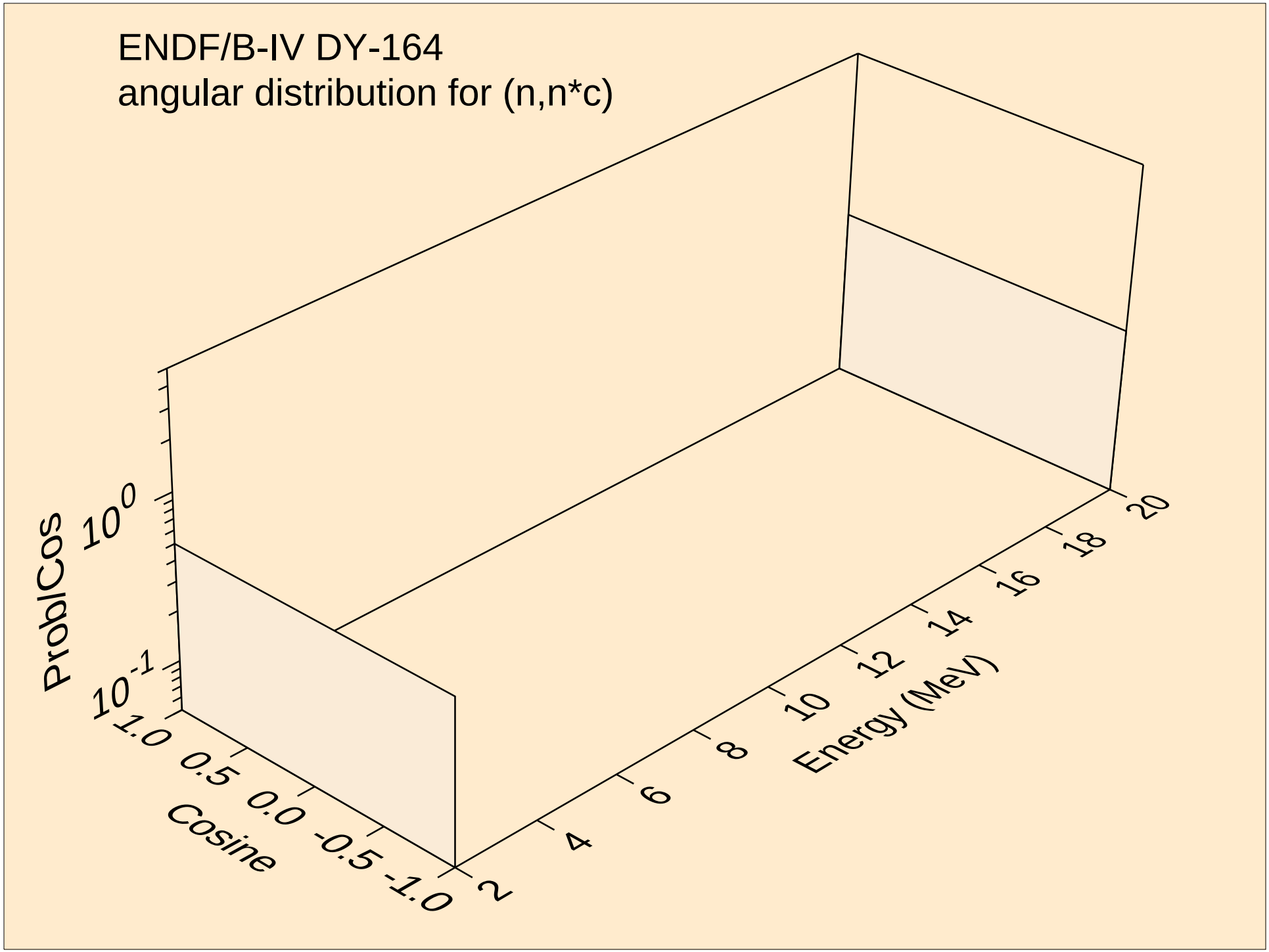

ENDF/B-IV DY-164
angular distribution for (n,n*8)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)


ENDF/B-IV DY-164
angular distribution for (n,n*9)
Prob\Cos
10^{0}
10^{-1}
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-IV DY-164
angular distribution for (n,n*10)
Prob\Cos
10^{0}
10^{-1}
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-IV DY-164
angular distribution for (n,n*11)
Prob\Cos
10^{0}
10^{-1}
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-IV DY-164
angular distribution for (n,n*12)
Prob\Cos
10^{0}
10^{-1}
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-IV DY-164
angular distribution for (n,n*c)
Prob\Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)