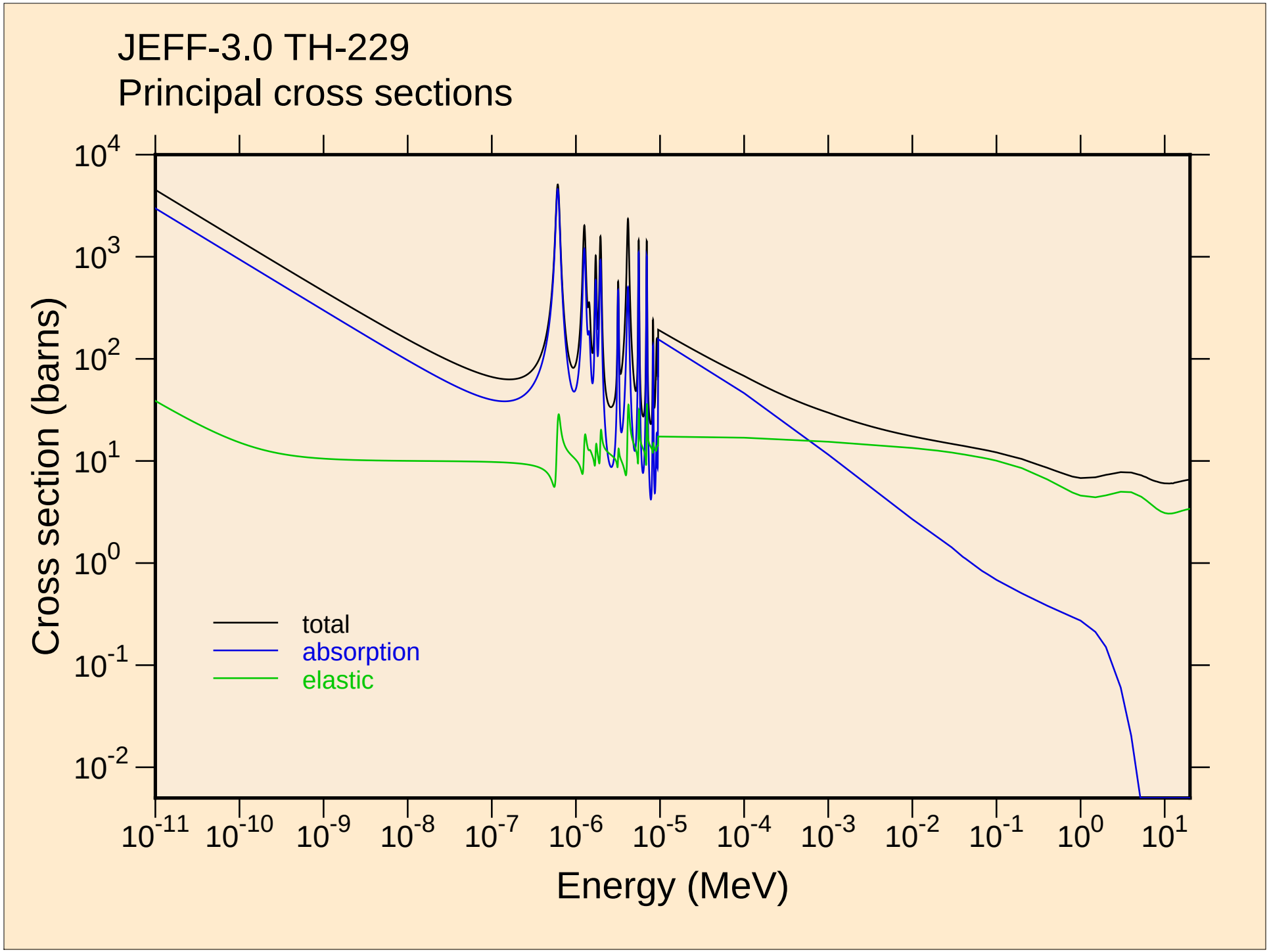
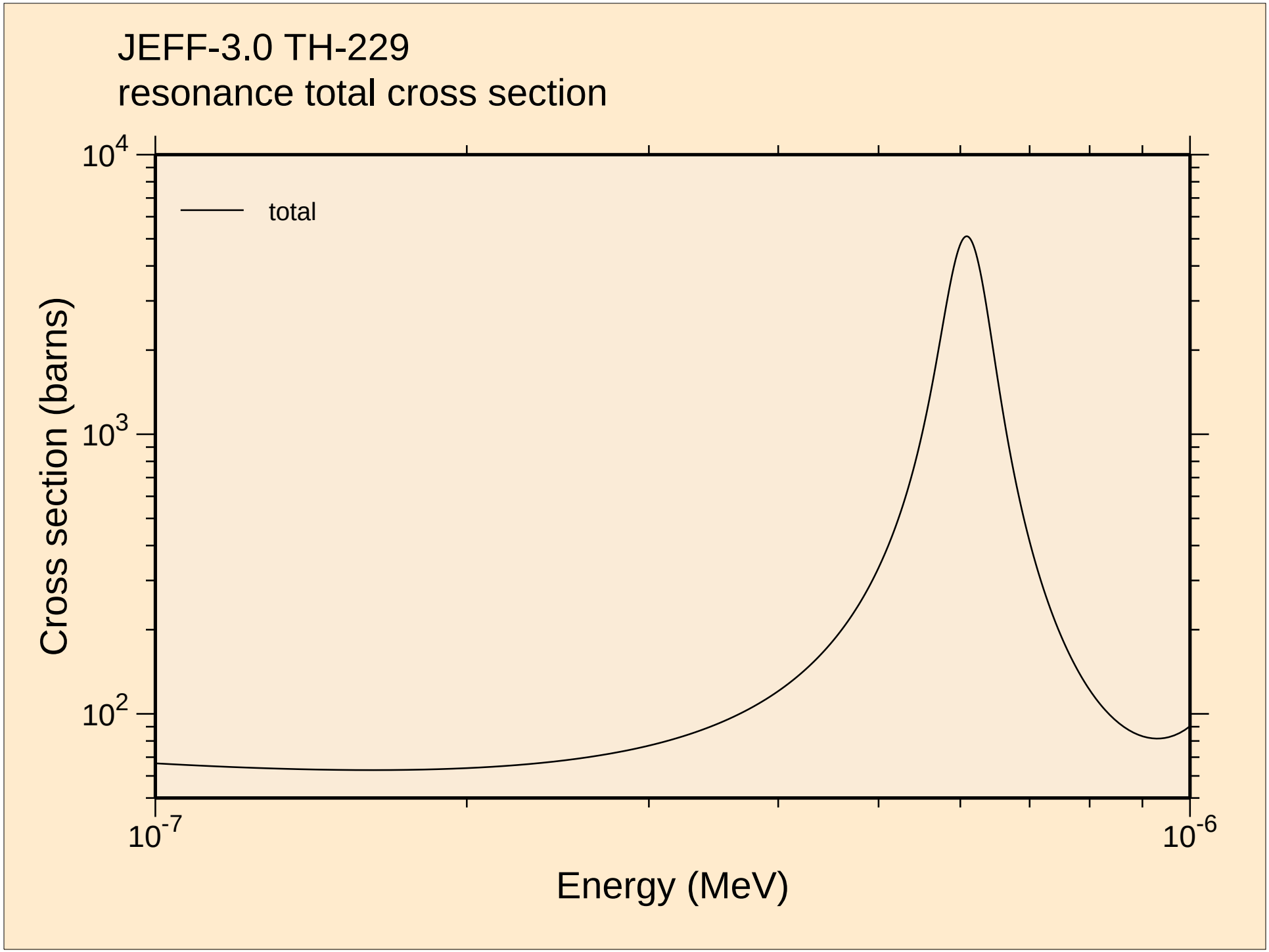
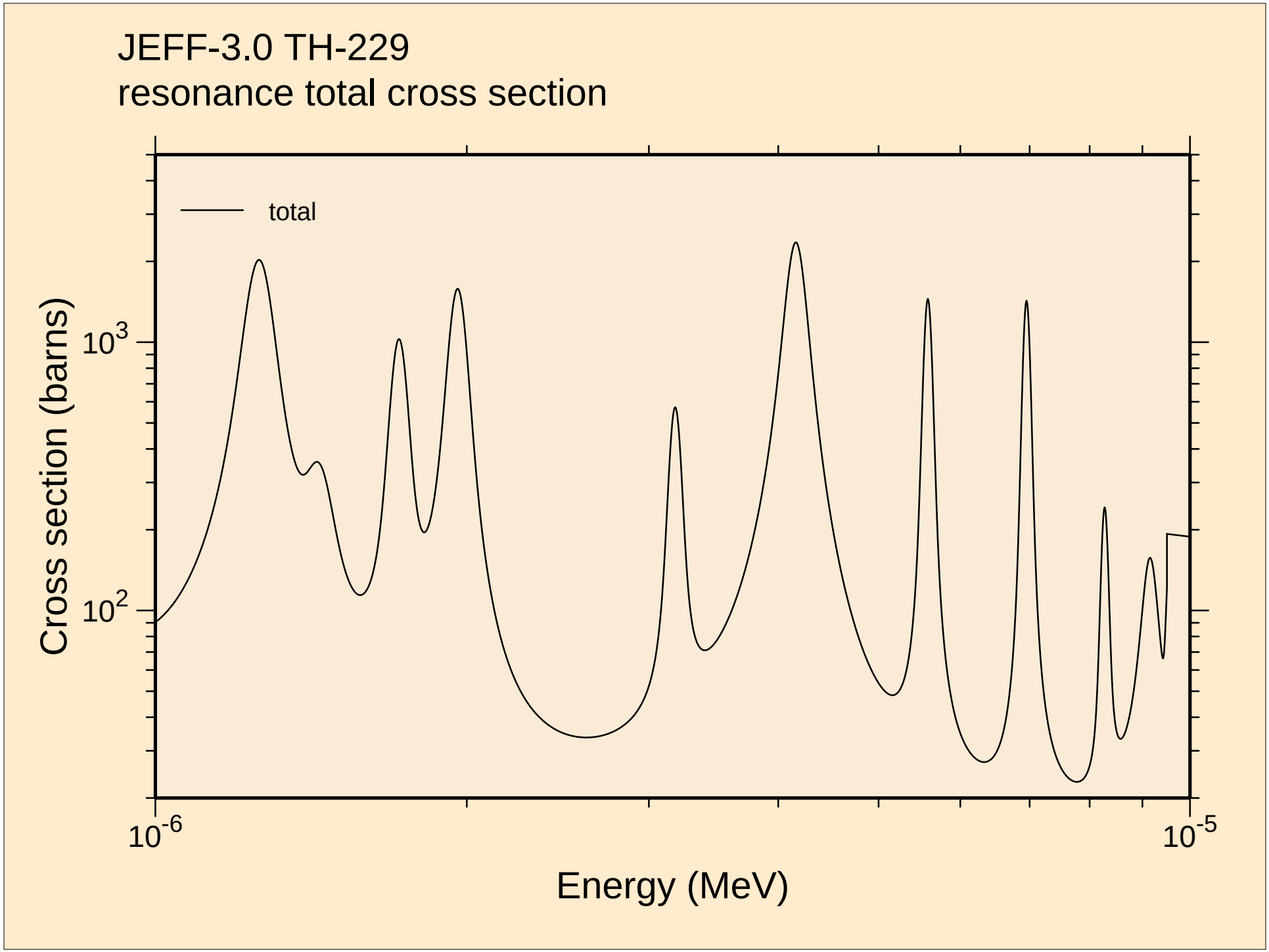
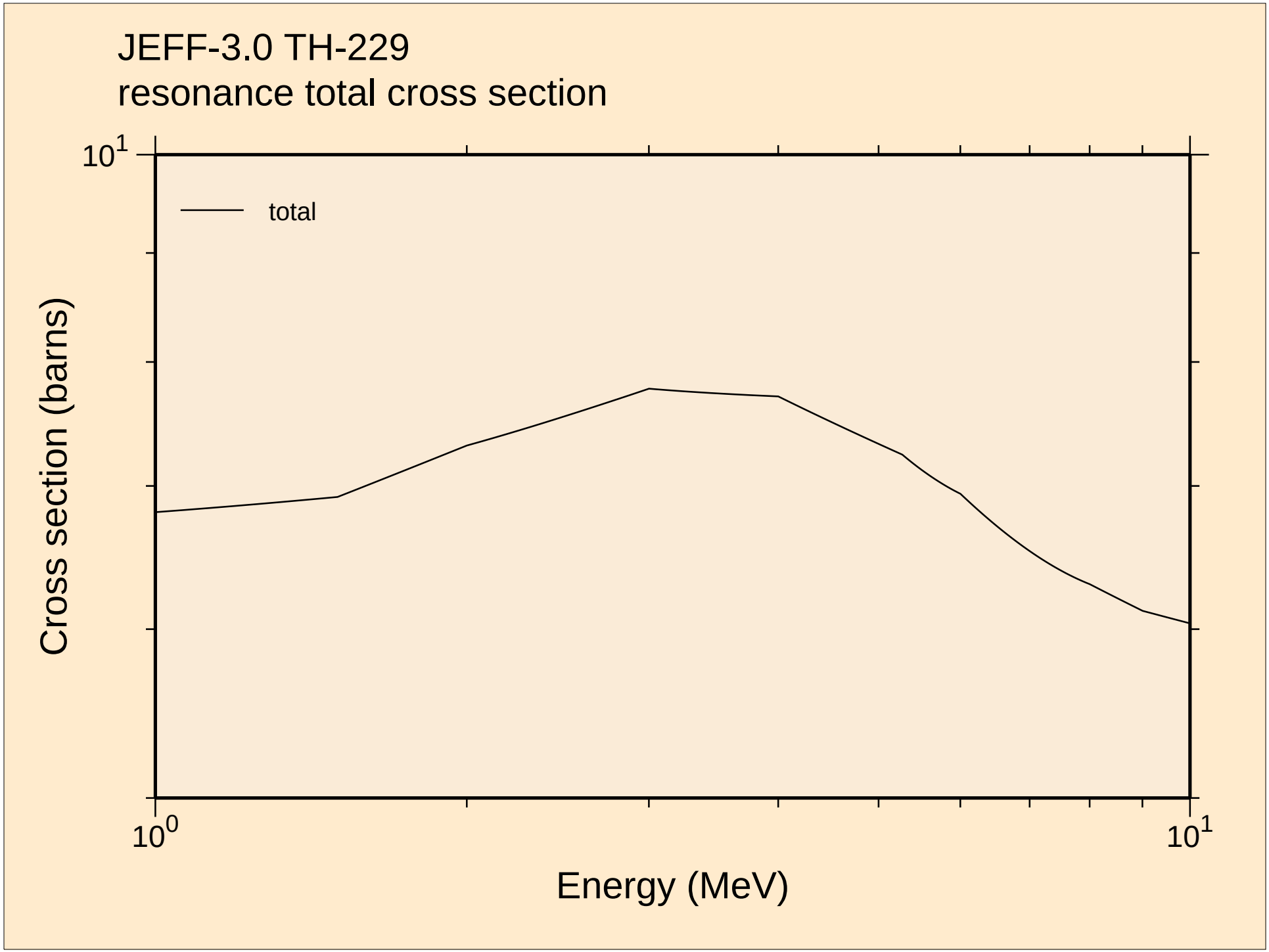
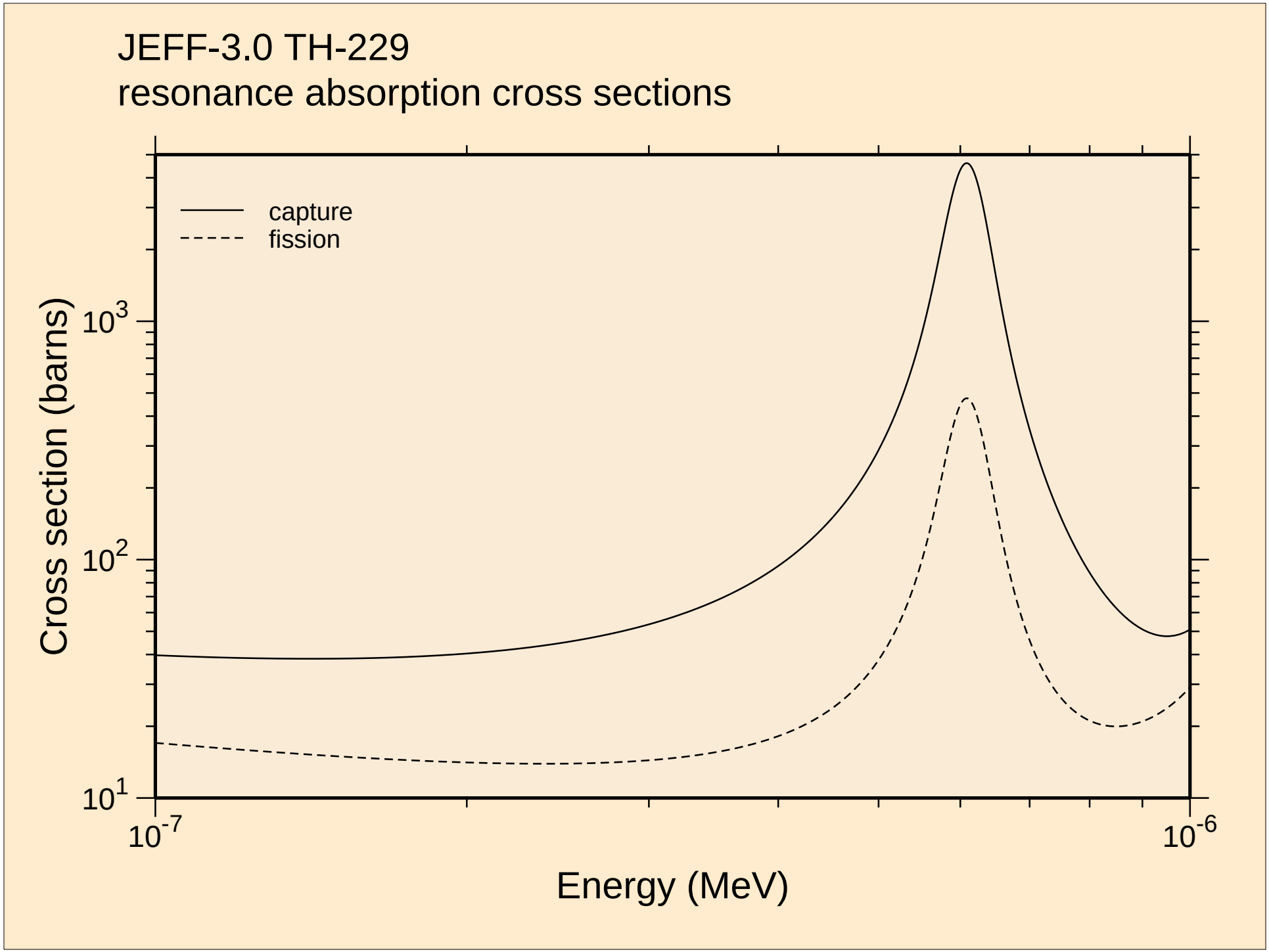
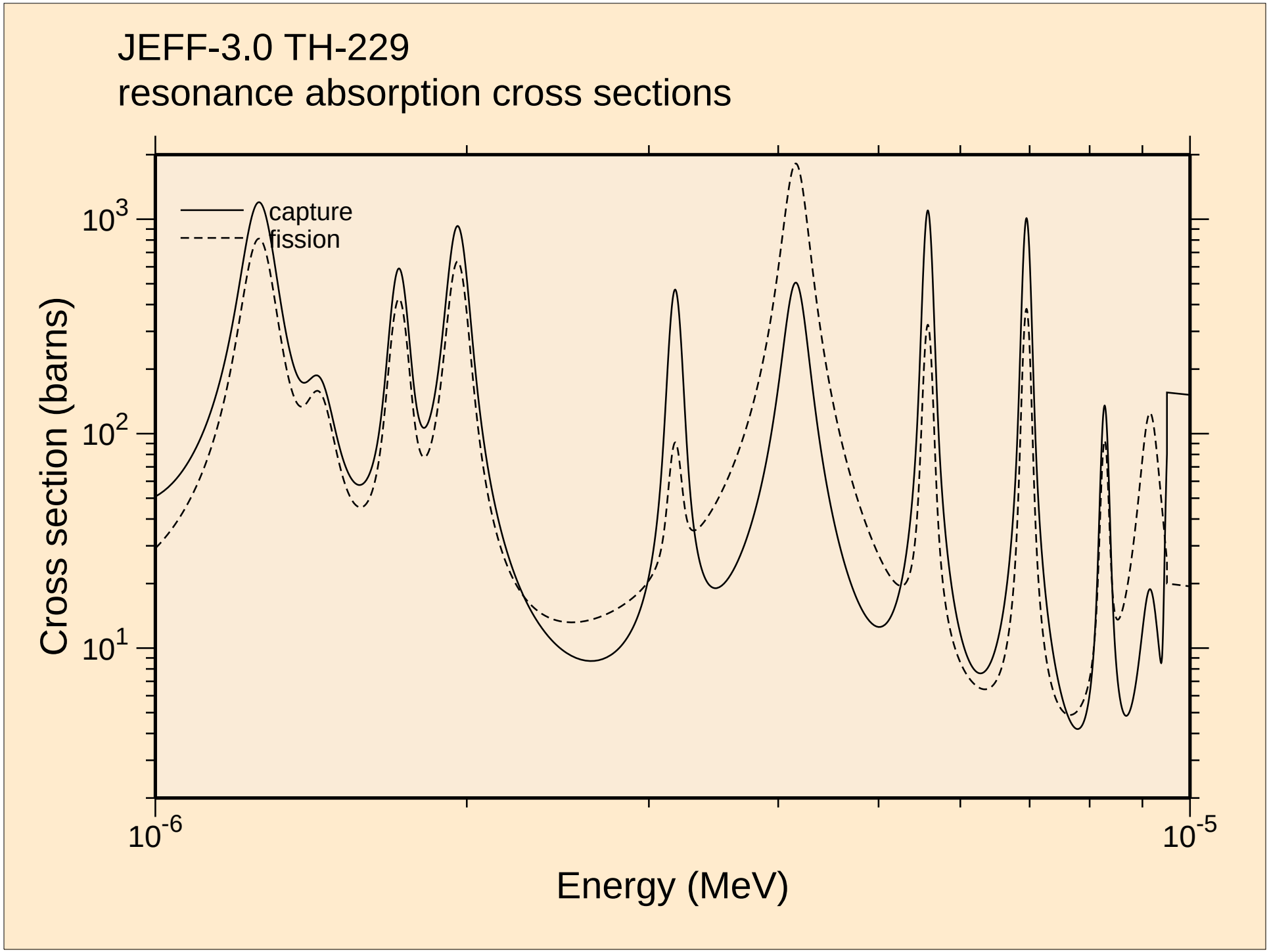

JEFF-3.0 TH-229
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-11
10^-10
10^-9
10^-8
10^-7
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1

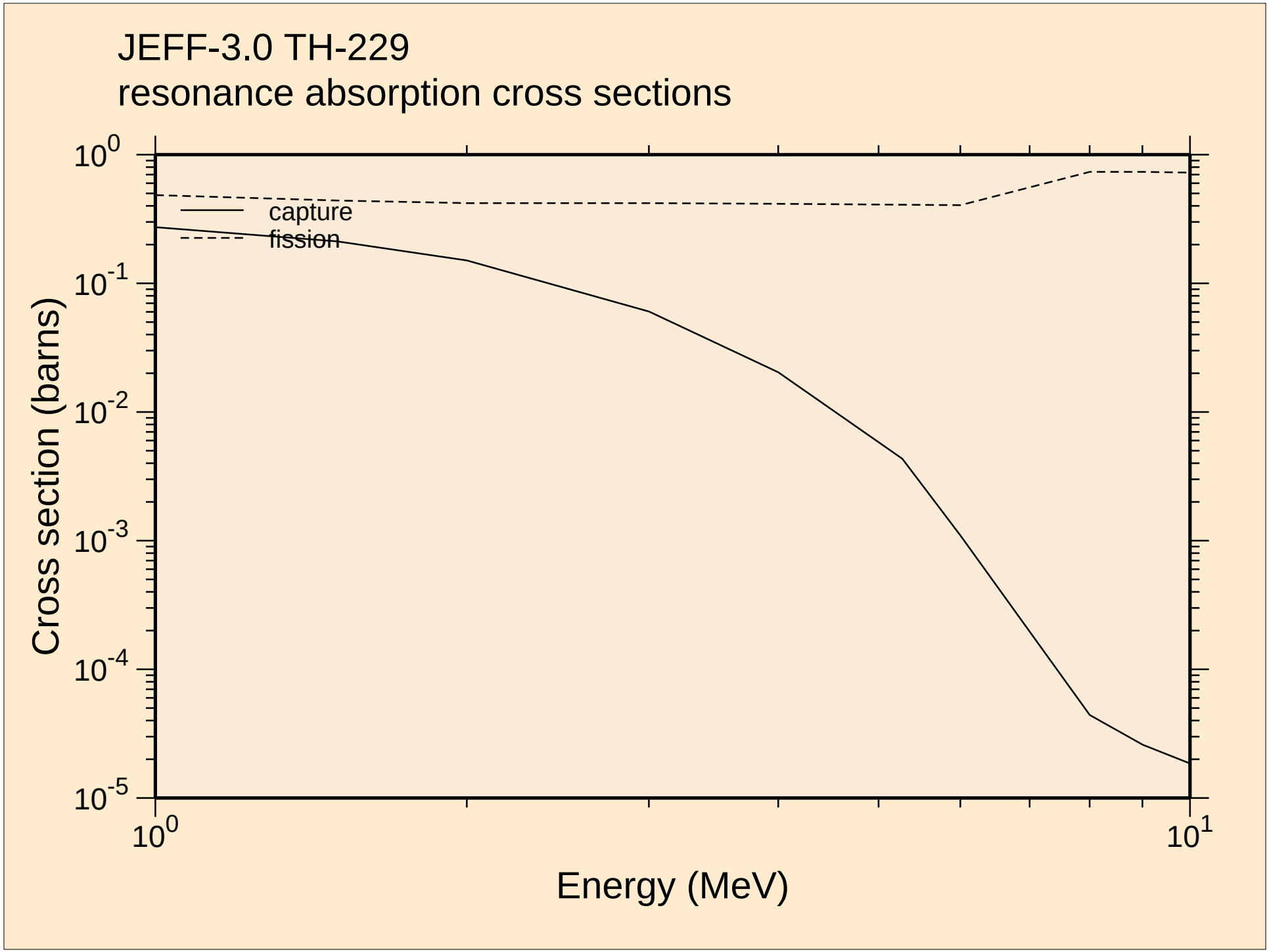

JEFF-3.0 TH-229
resonance total cross section
total
Cross section (barns)
10^4
10^3
10^2
10^{-7}
10^{-6}
Energy (MeV)

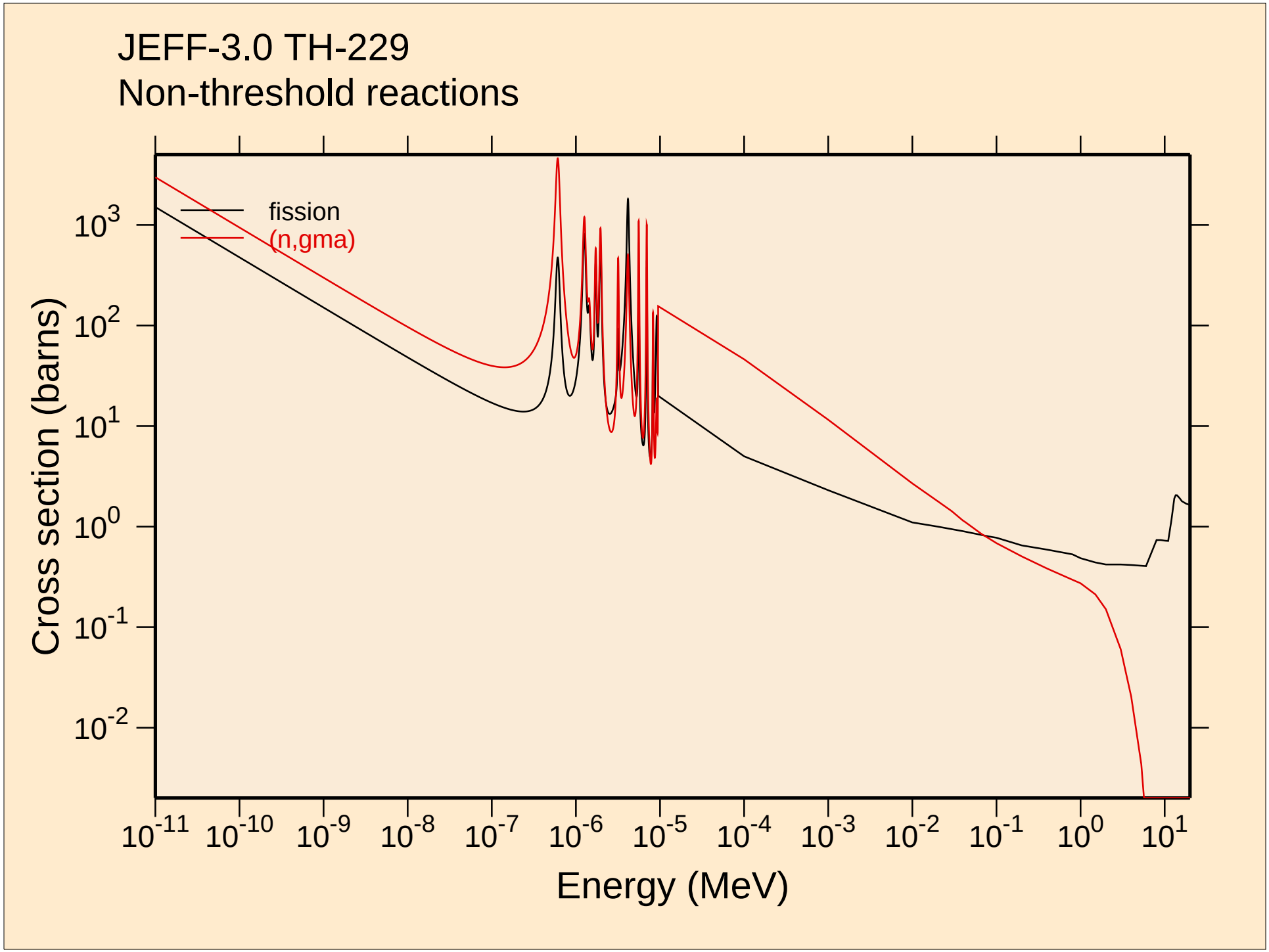

JEFF-3.0 TH-229
resonance total cross section
total
Cross section (barns)
10^3
10^2
10^-6
10^-5
Energy (MeV)

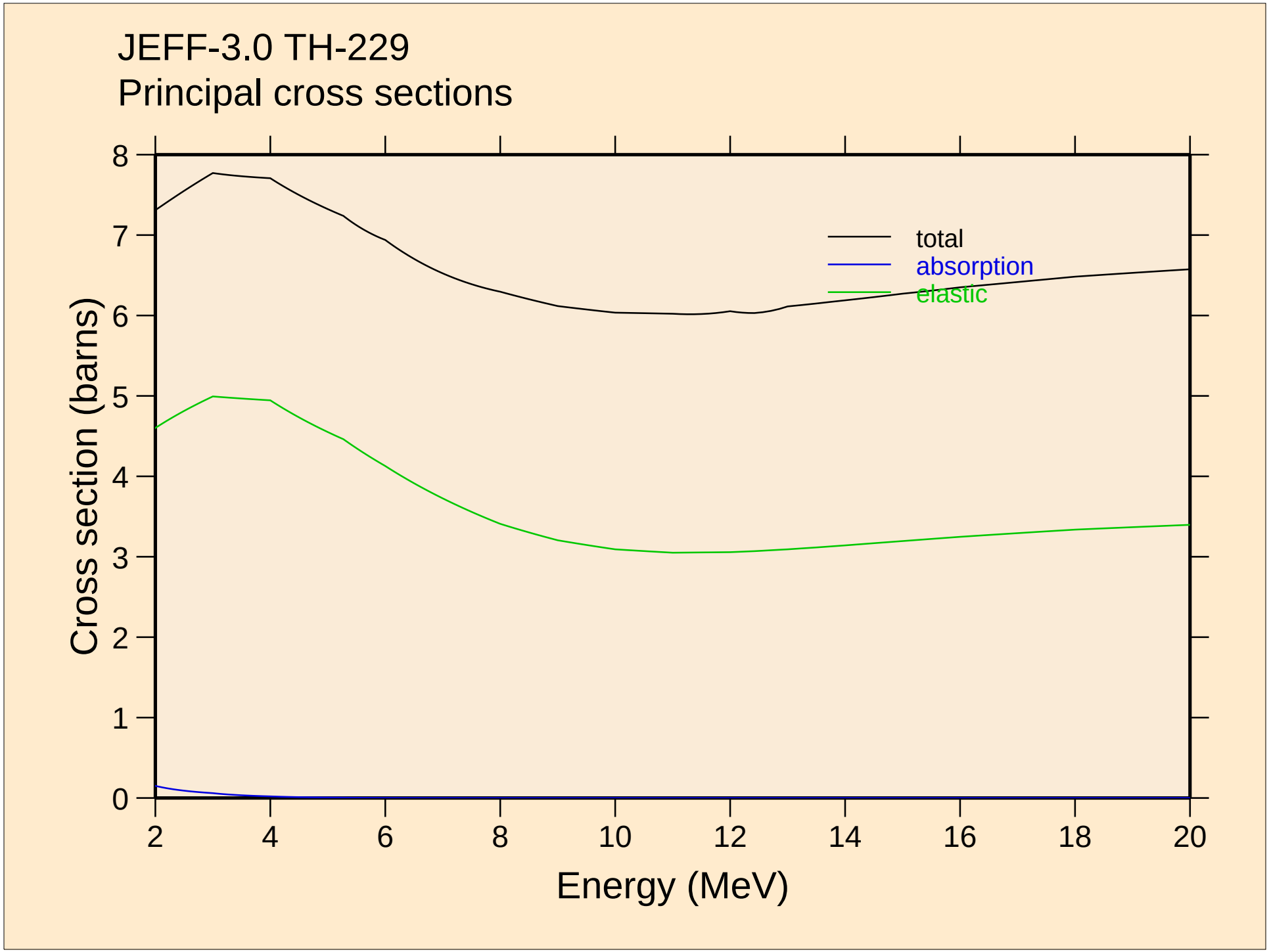

JEFF-3.0 TH-229
resonance total cross section
10^1
total
Cross section (barns)
10^0
10^1
Energy (MeV)

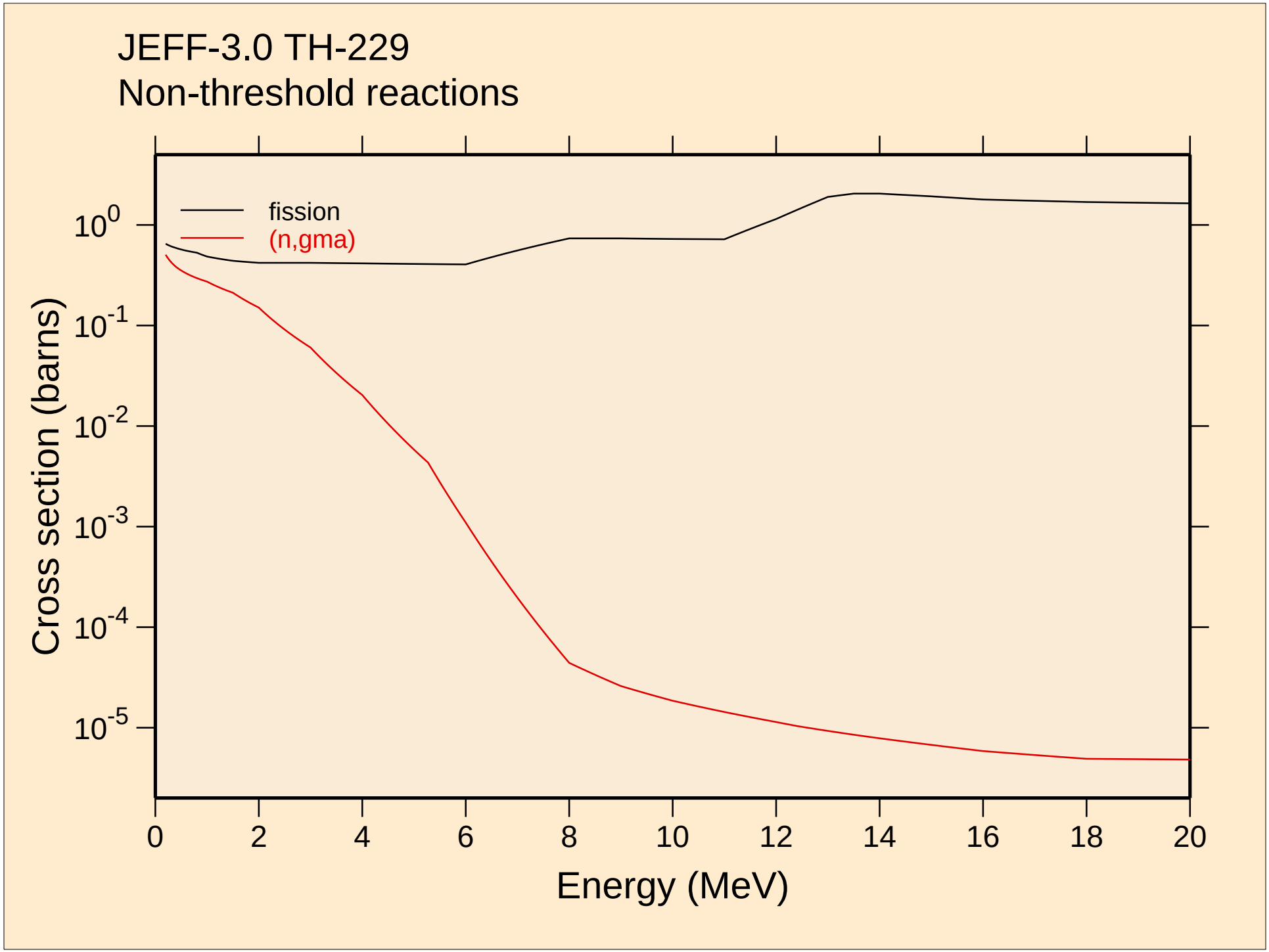

JEFF-3.0 TH-229
resonance absorption cross sections
capture
fission
Cross section (barns)
10^3
10^2
10^1
10^-7
10^-6
Energy (MeV)

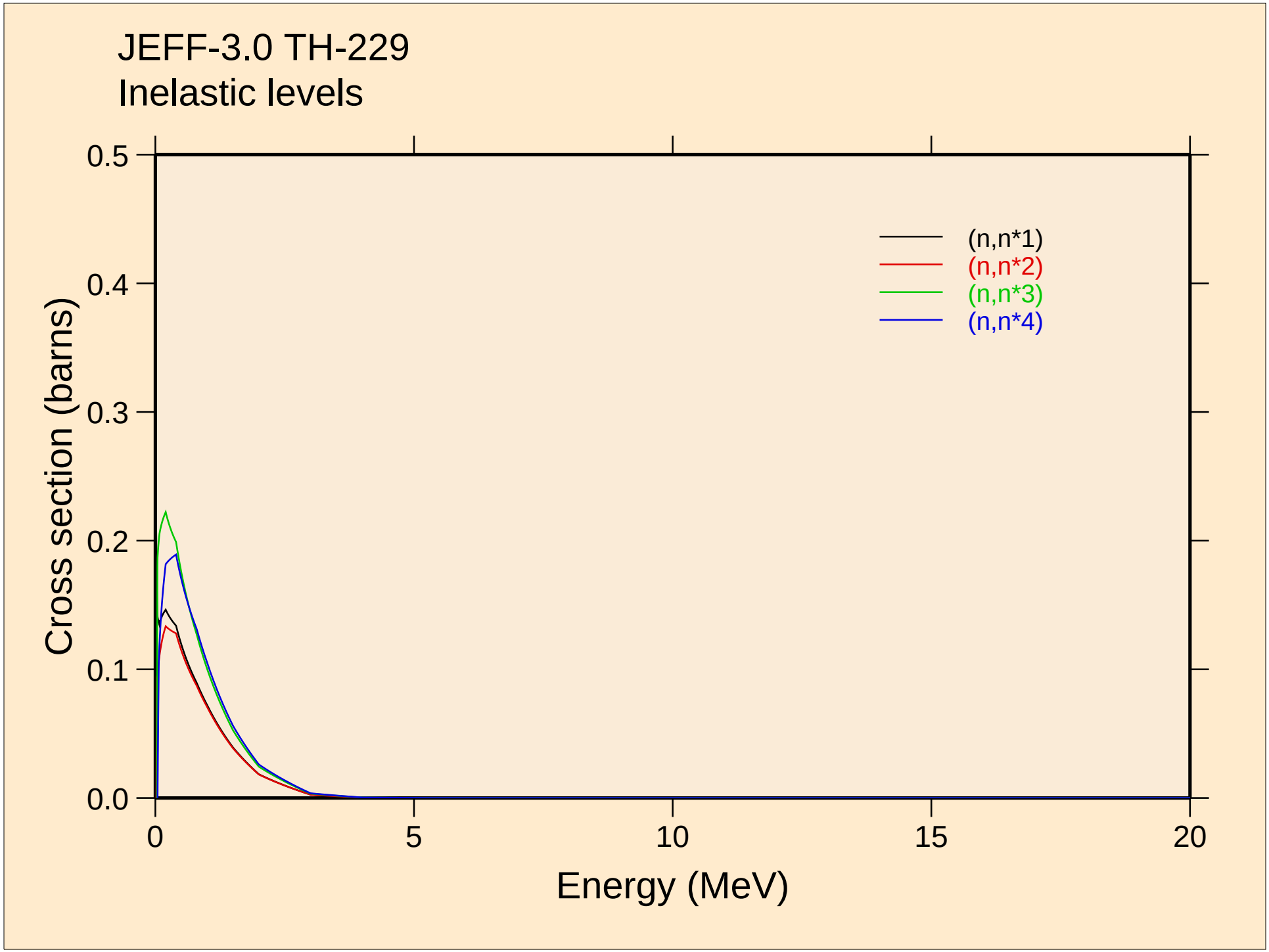

JEFF-3.0 TH-229
resonance absorption cross sections
capture
fission
Cross section (barns)
10^3
10^2
10^1
10^-6
10^-5
Energy (MeV)

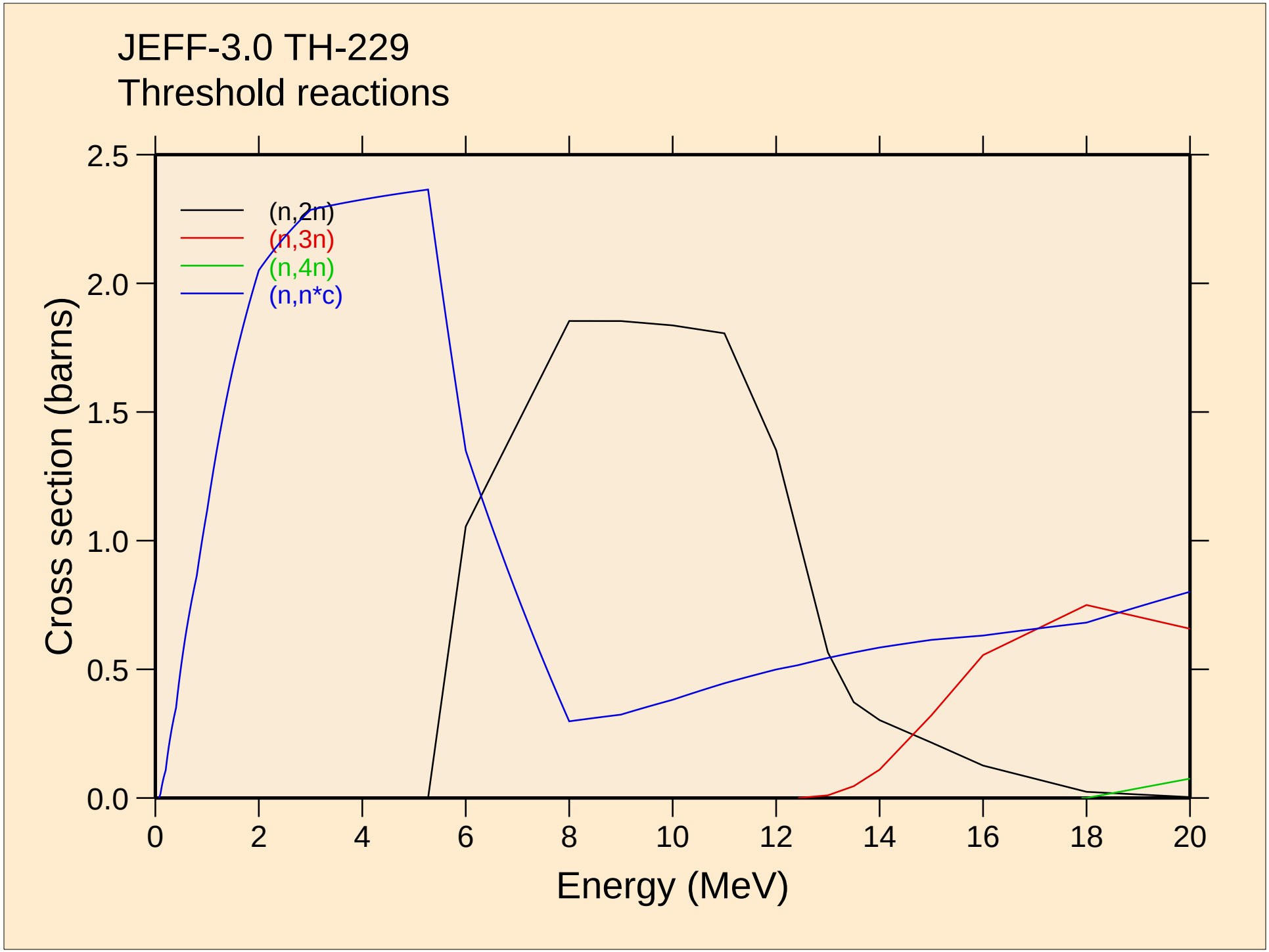

JEFF-3.0 TH-229
resonance absorption cross sections
Cross section (barns)
Energy (MeV)
capture
fission
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^0
10^1

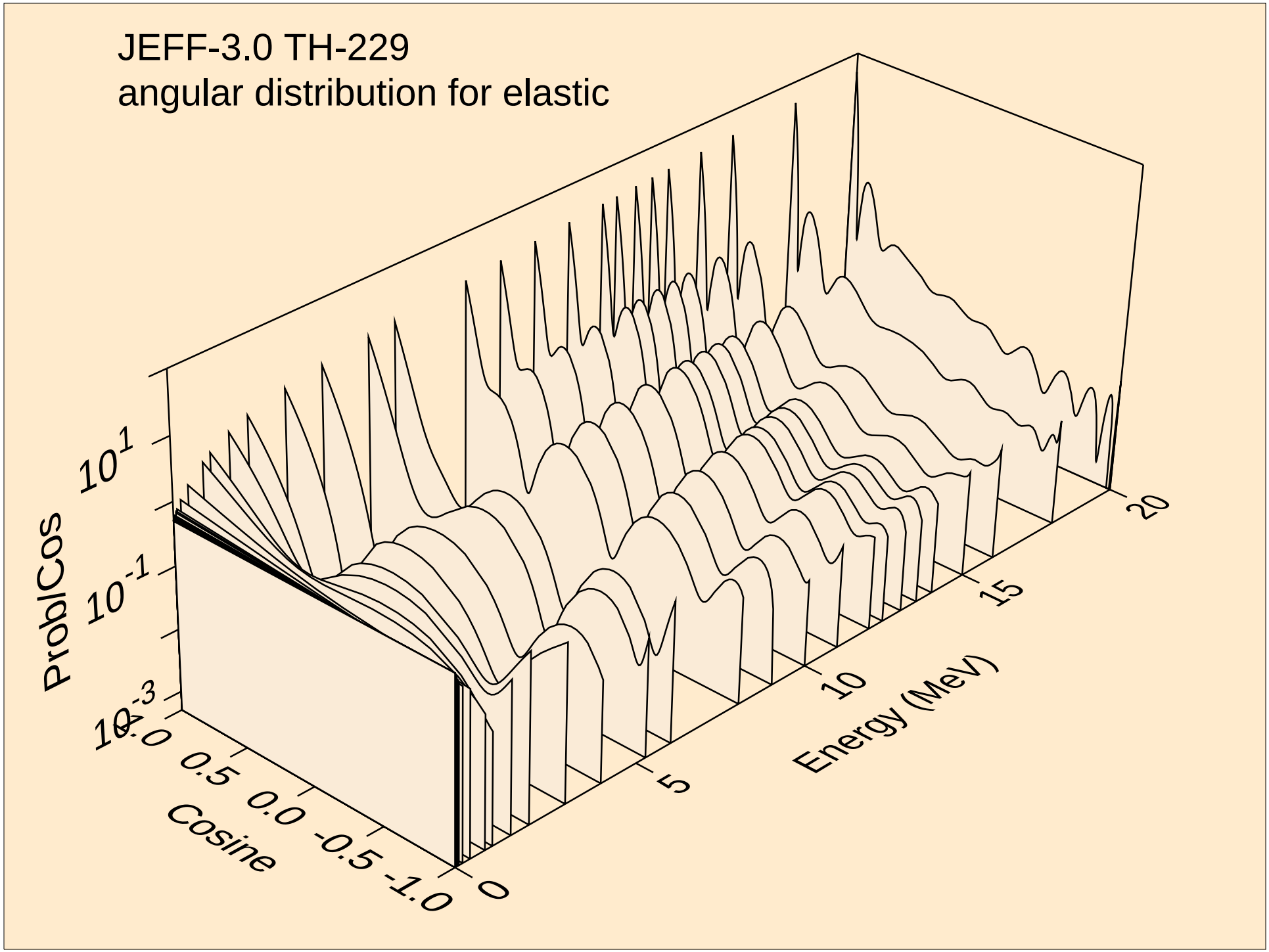

JEFF-3.0 TH-229
Non-threshold reactions
fission
(n,gma)
Cross section (barns)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-11} 10^{-10} 10^{-9} 10^{-8} 10^{-7} 10^{-6} 10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1}
Energy (MeV)

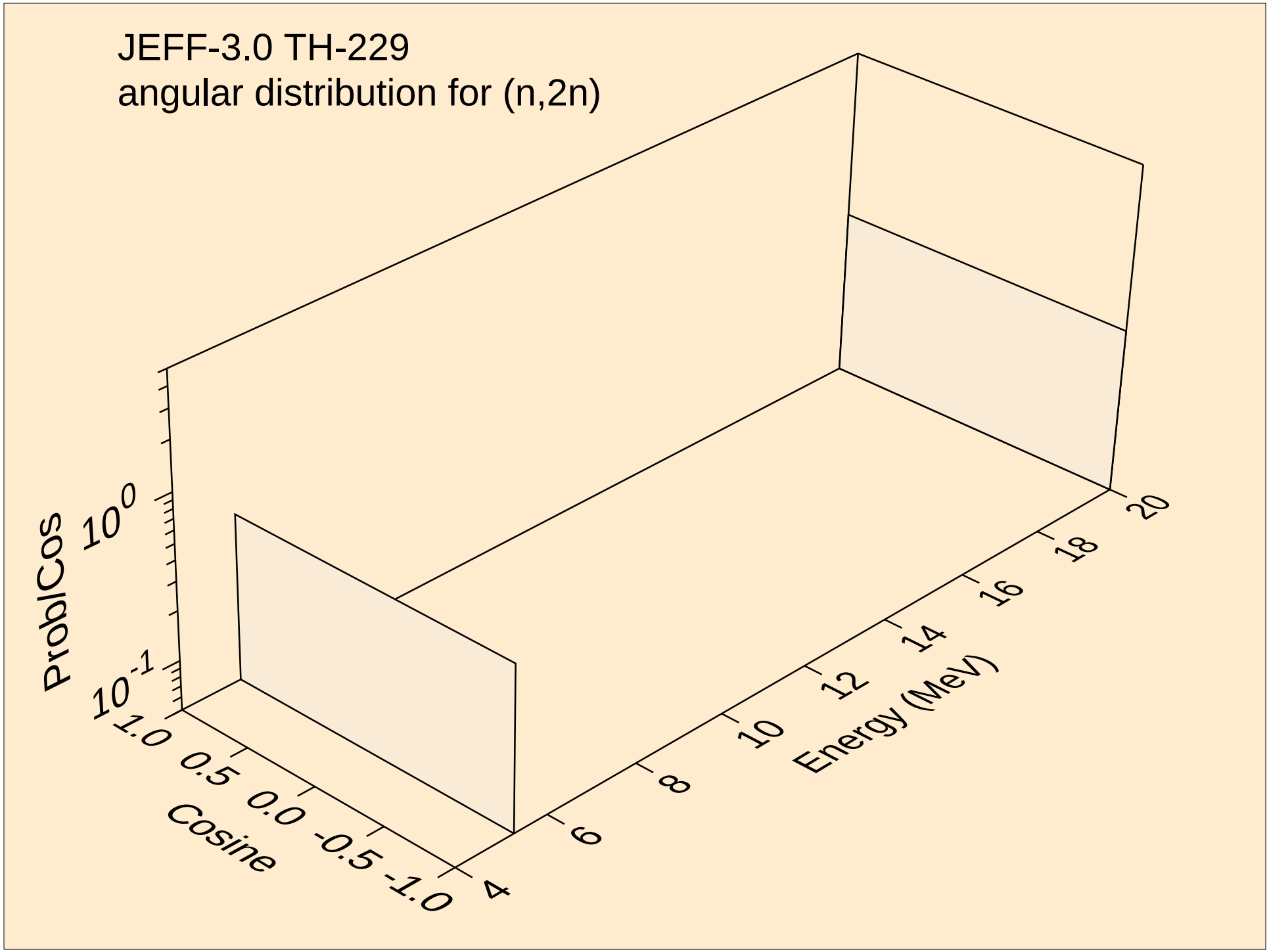

JEFF-3.0 TH-229
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
0
1
2
3
4
5
6
7
8
2
4
6
8
10
12
14
16
18
20

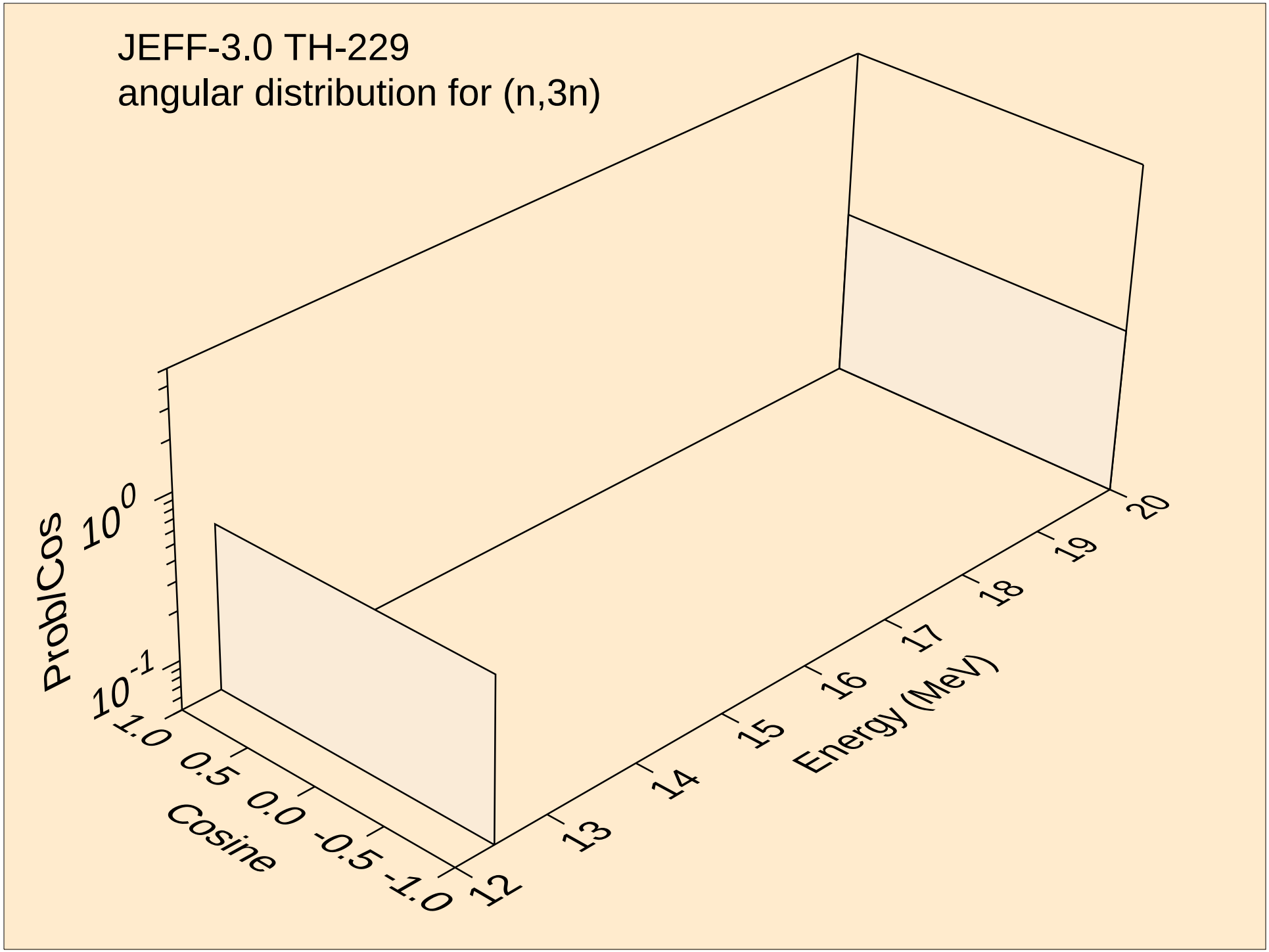

JEFF-3.0 TH-229
Non-threshold reactions
fission
(n,gma)
Cross section (barns)
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

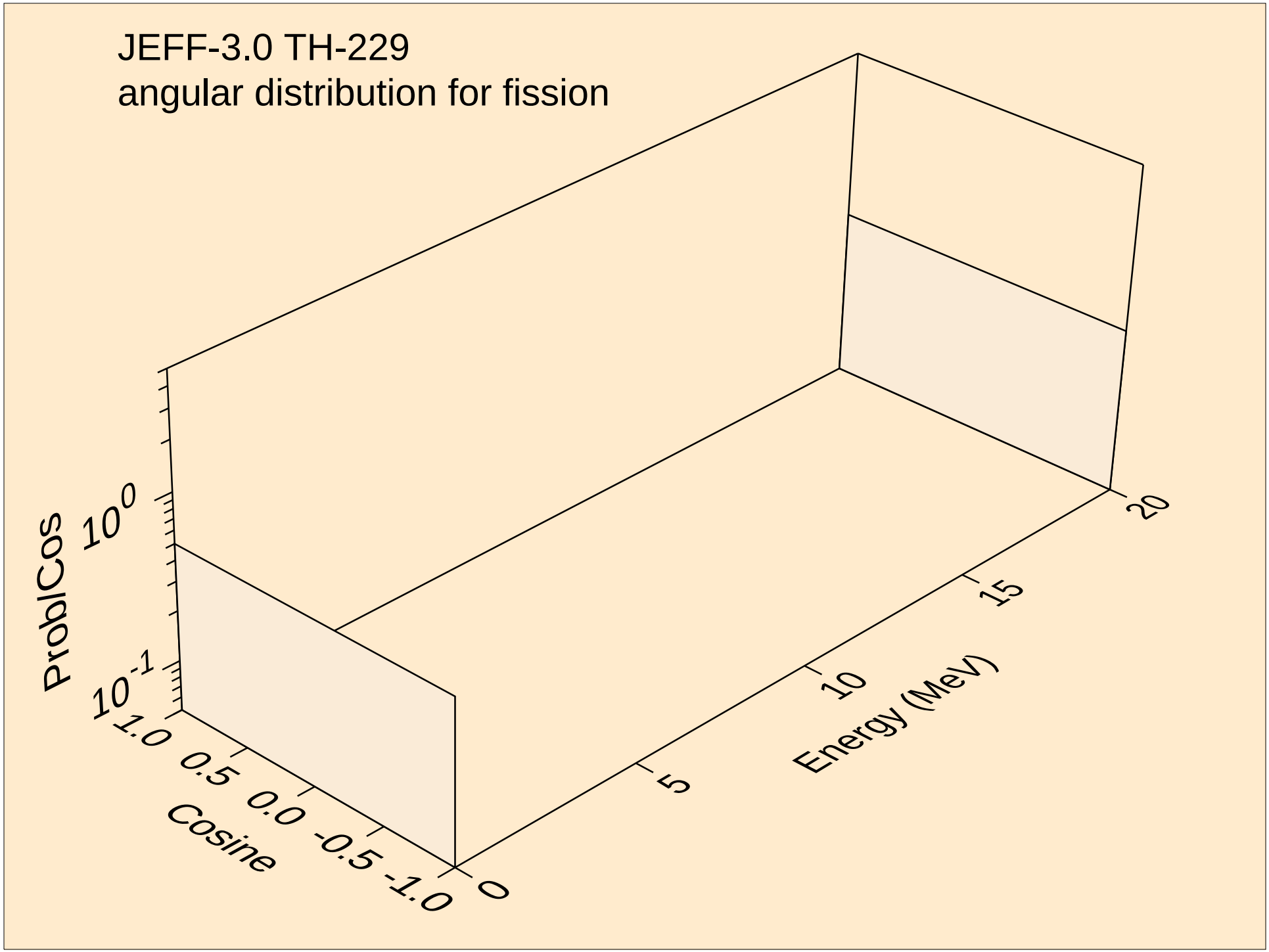

JEFF-3.0 TH-229
Inelastic levels
Cross section (barns)
0.0
0.1
0.2
0.3
0.4
0.5
0
5
10
15
20
Energy (MeV)
(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)

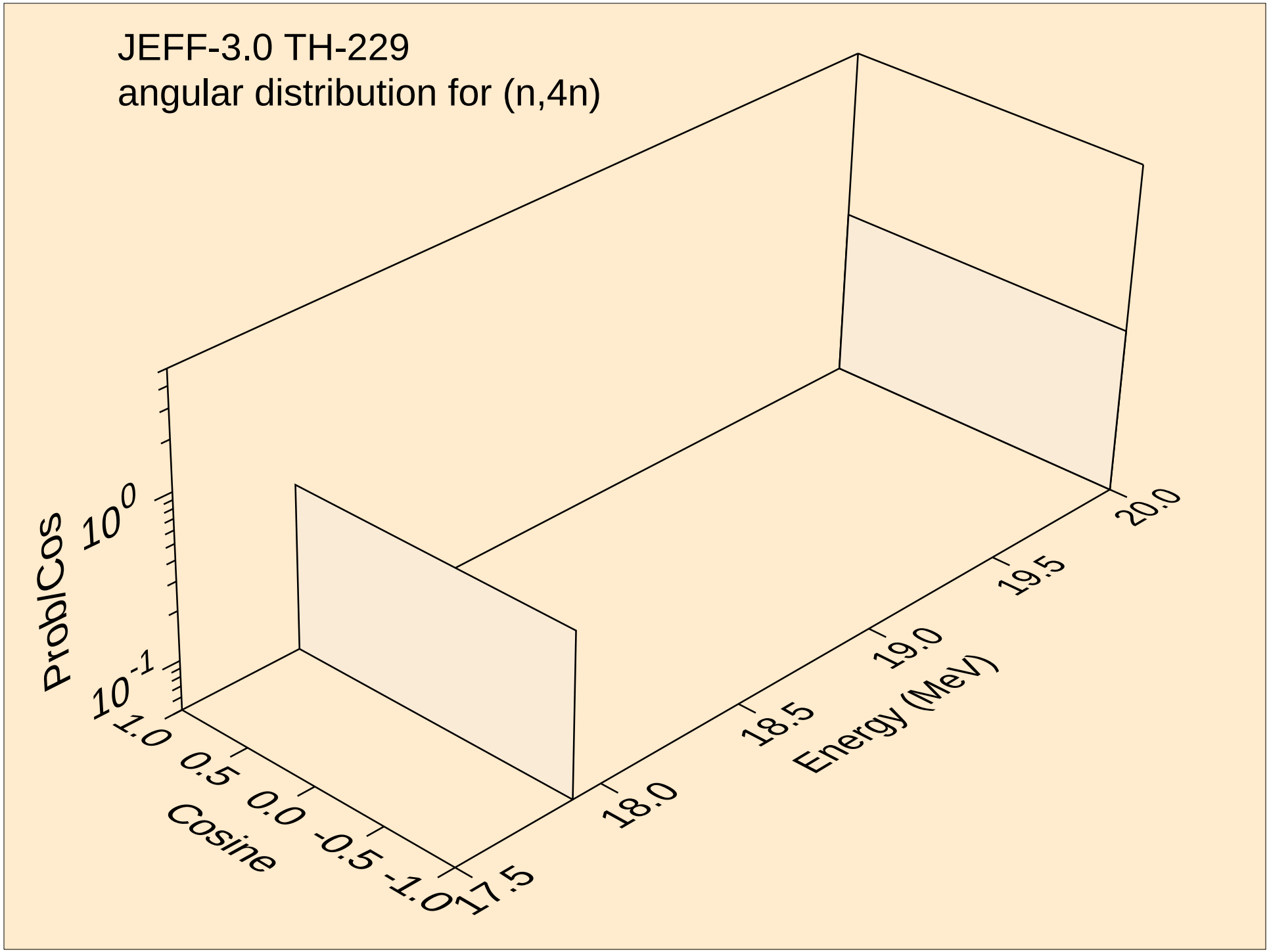

JEFF-3.0 TH-229
Threshold reactions
(n,2n)
(n,3n)
(n,4n)
(n,n*c)
Cross section (barns)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
0
2
4
6
8
10
12
14
16
18
20

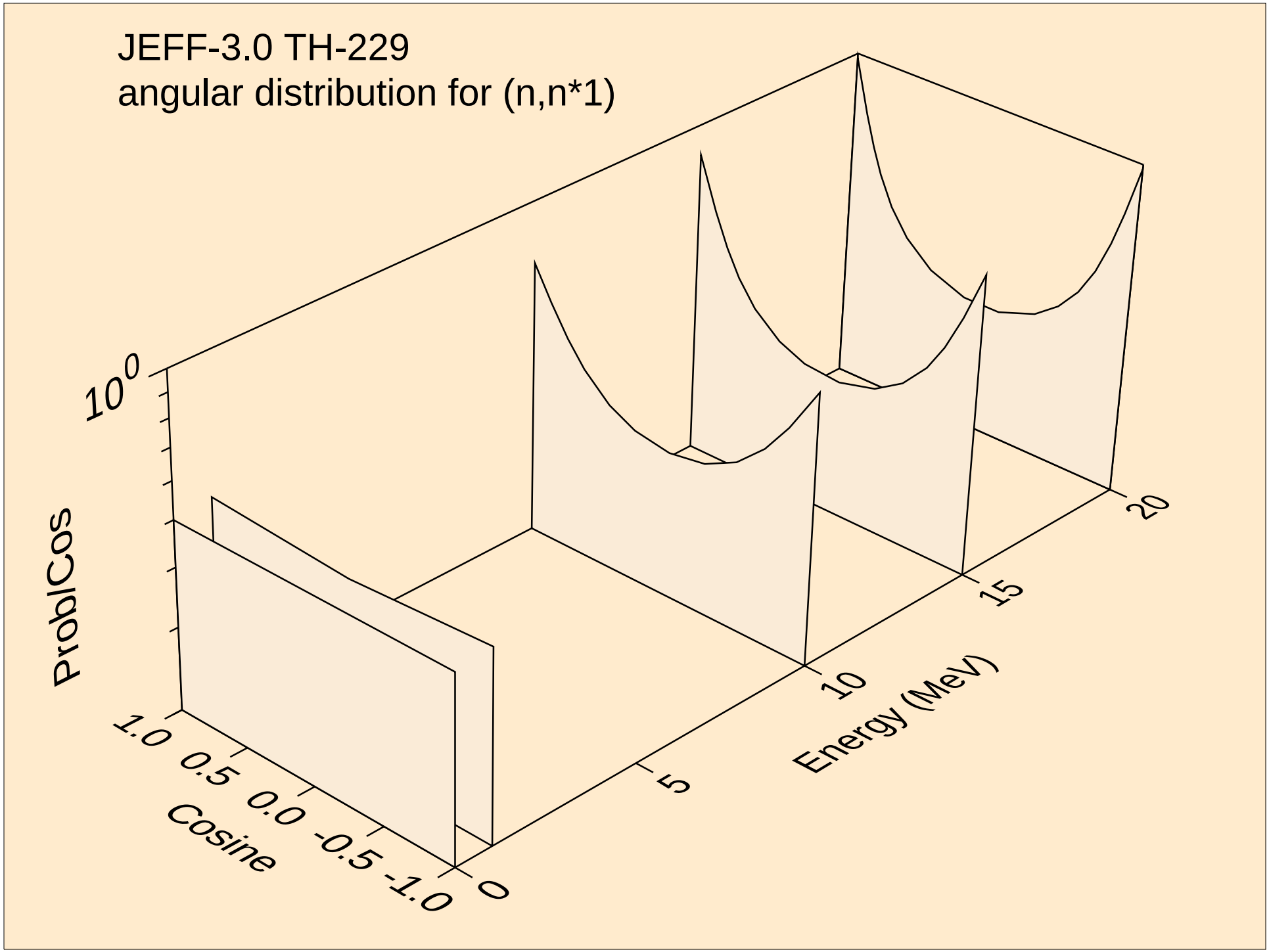

JEFF-3.0 TH-229
angular distribution for elastic
Prob\Cos
10^{1}
10^{-1}
10^{-3}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

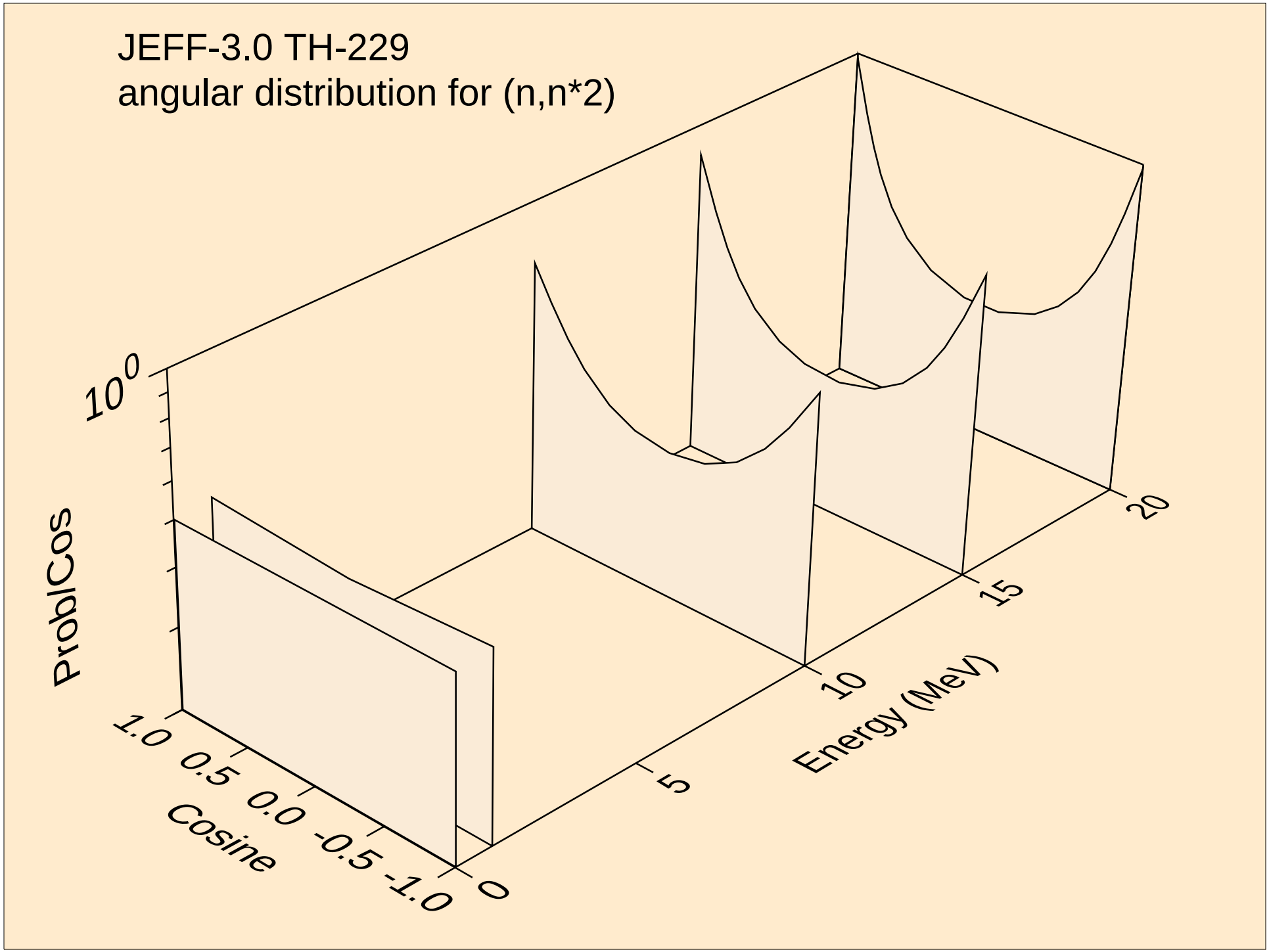

JEFF-3.0 TH-229
angular distribution for (n,2n)
ProbICos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
4
6
8
10
12
14
16
18
20
Energy (MeV)

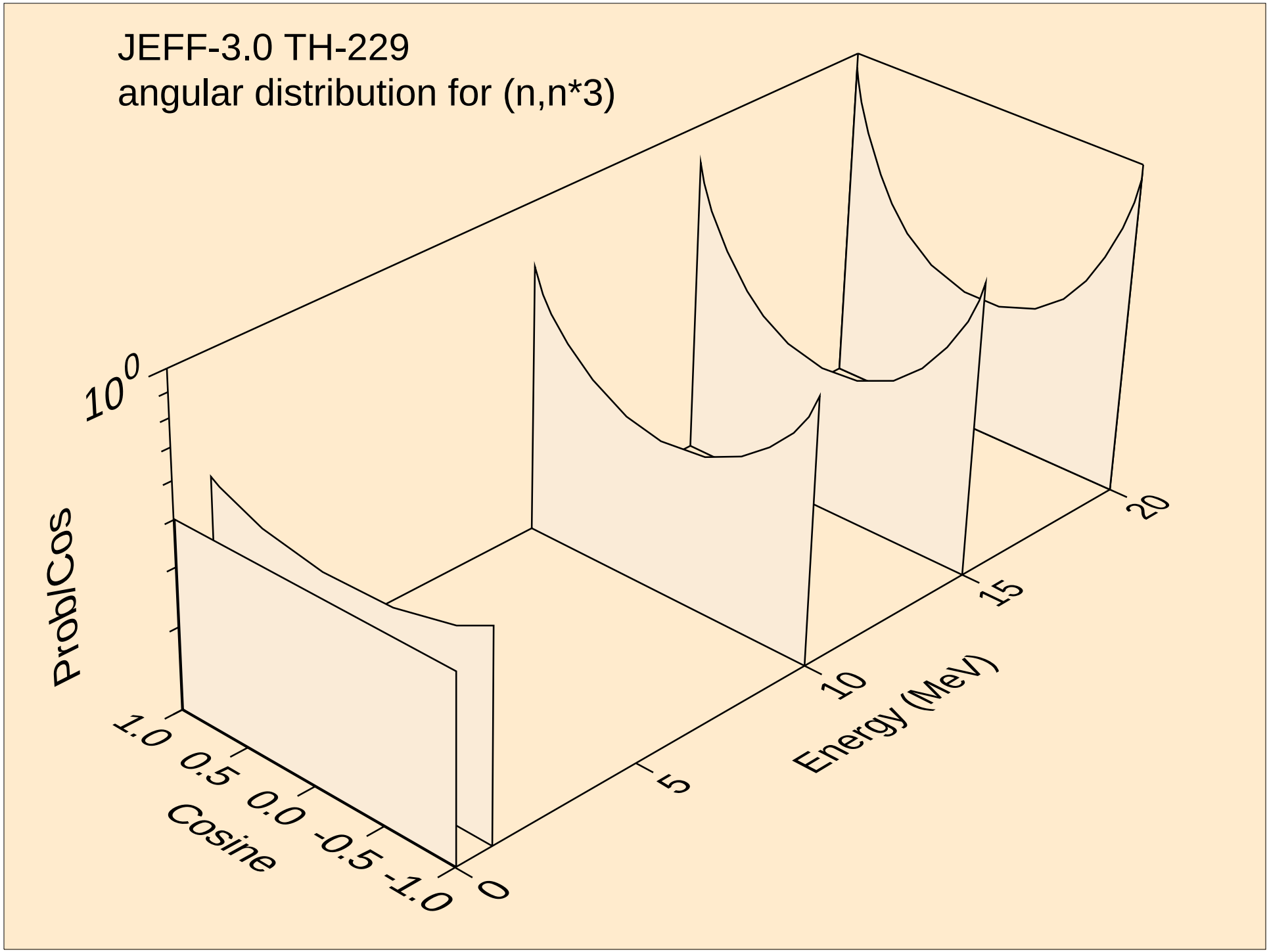

JEFF-3.0 TH-229
angular distribution for (n,3n)
ProbICos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
12
13
14
15
16
17
18
19
20
Energy (MeV)

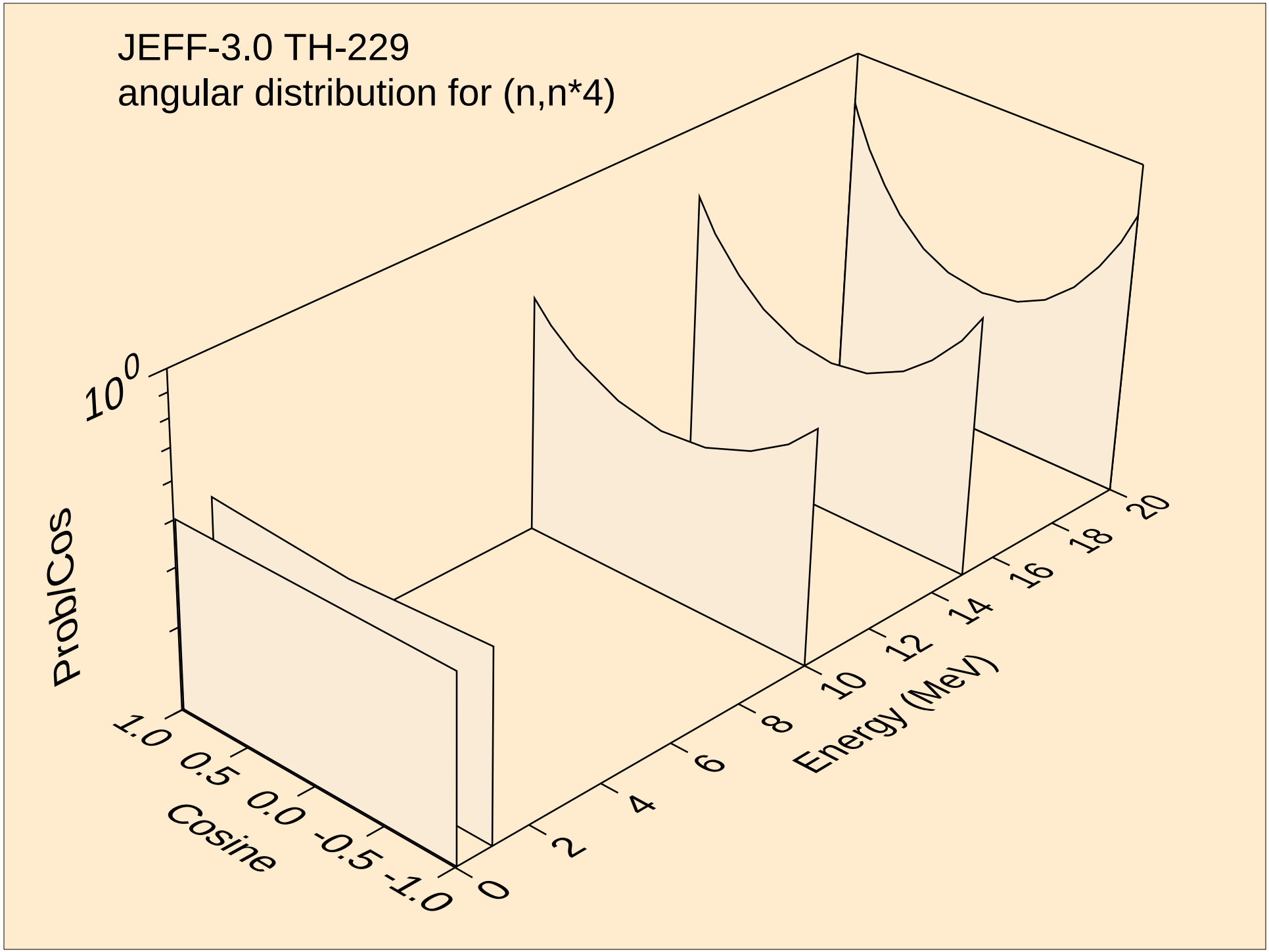

JEFF-3.0 TH-229
angular distribution for fission
ProbCos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

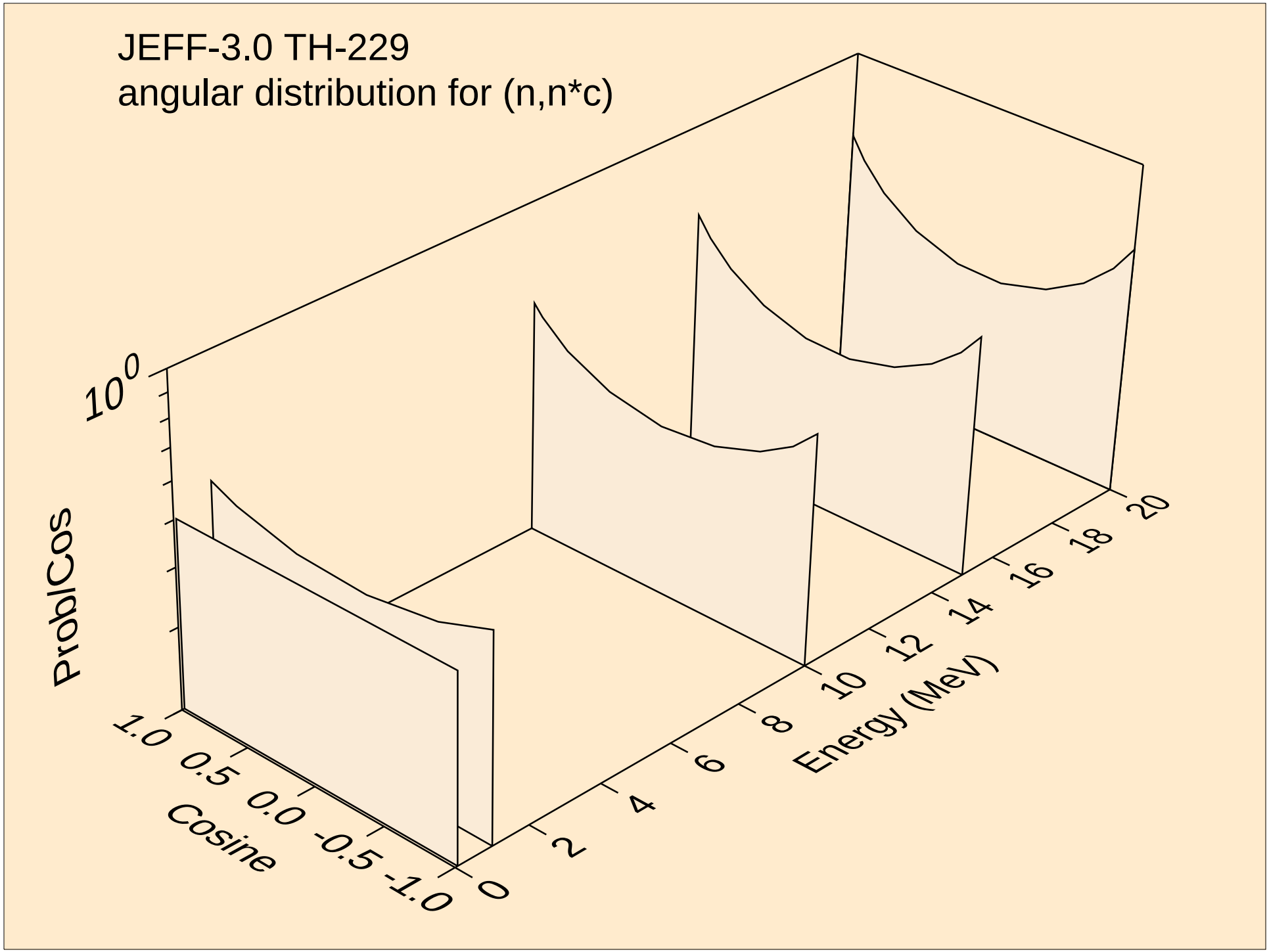

JEFF-3.0 TH-229
angular distribution for (n,4n)
ProbICos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
17.5
18.0
18.5
19.0
19.5
20.0
Energy (MeV)

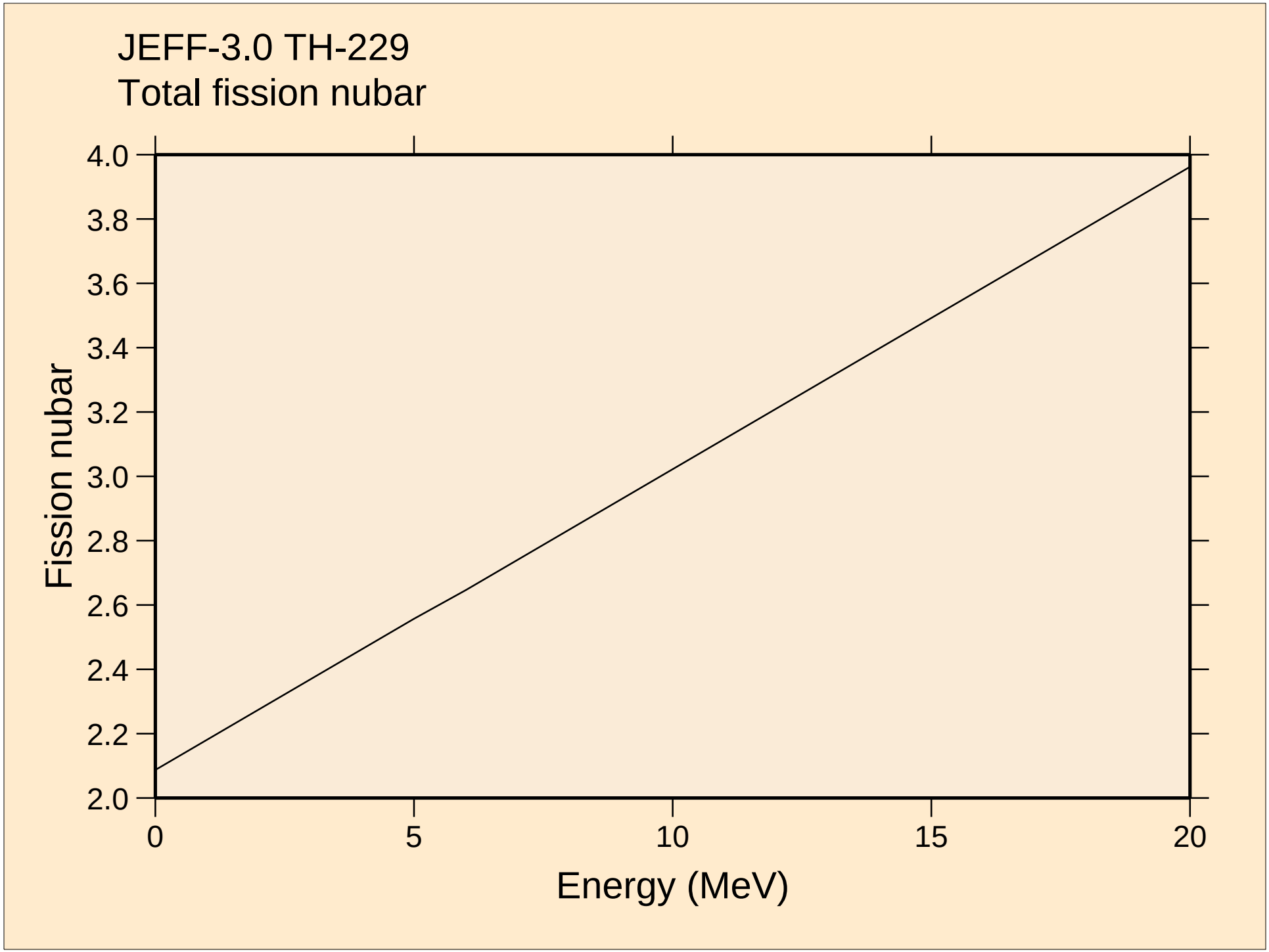

JEFF-3.0 TH-229
angular distribution for (n,n*1)
10^0
ProbICos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)


JEFF-3.0 TH-229
angular distribution for (n,n*2)
10^0
ProbICos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)


JEFF-3.0 TH-229
angular distribution for (n,n*3)
10^0
ProbICos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)


JEFF-3.0 TH-229
angular distribution for (n,n*4)
10^0
Prob\Cos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)


JEFF-3.0 TH-229
angular distribution for (n,n*c)
10^0
ProbICos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)


JEFF-3.0 TH-229
Total fission nubar
Fission nubar
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
0
5
10
15
20
Energy (MeV)