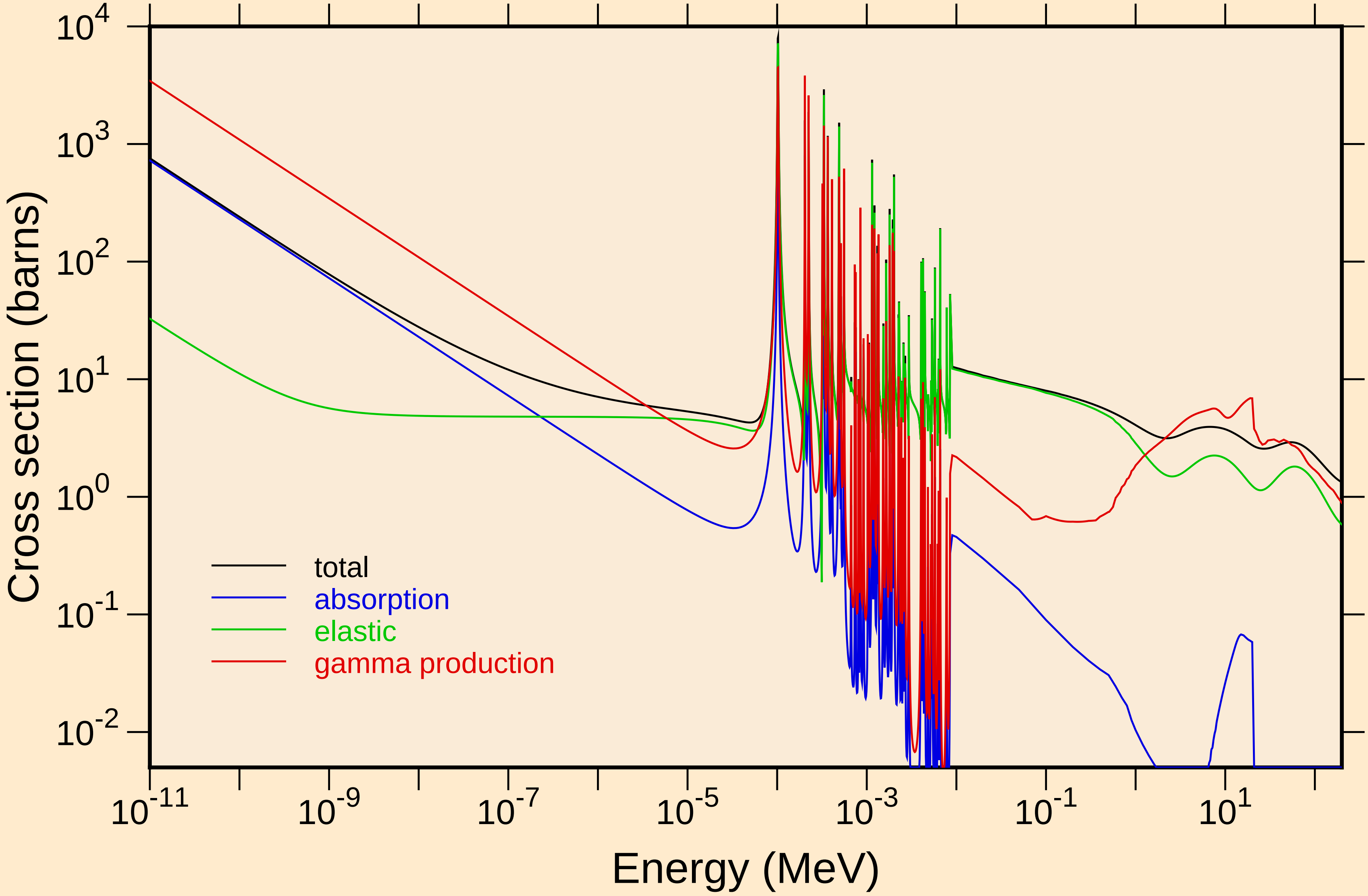
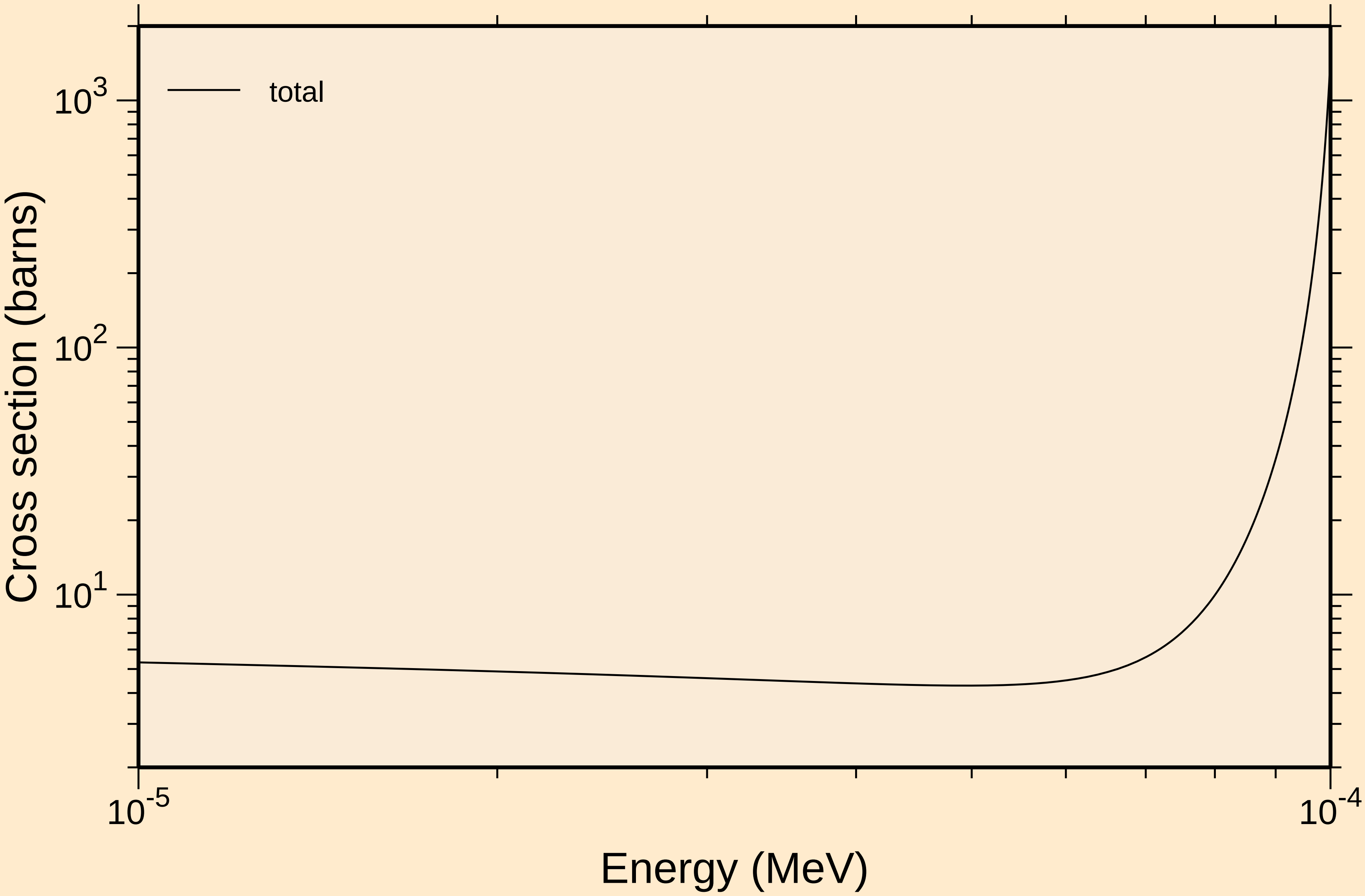
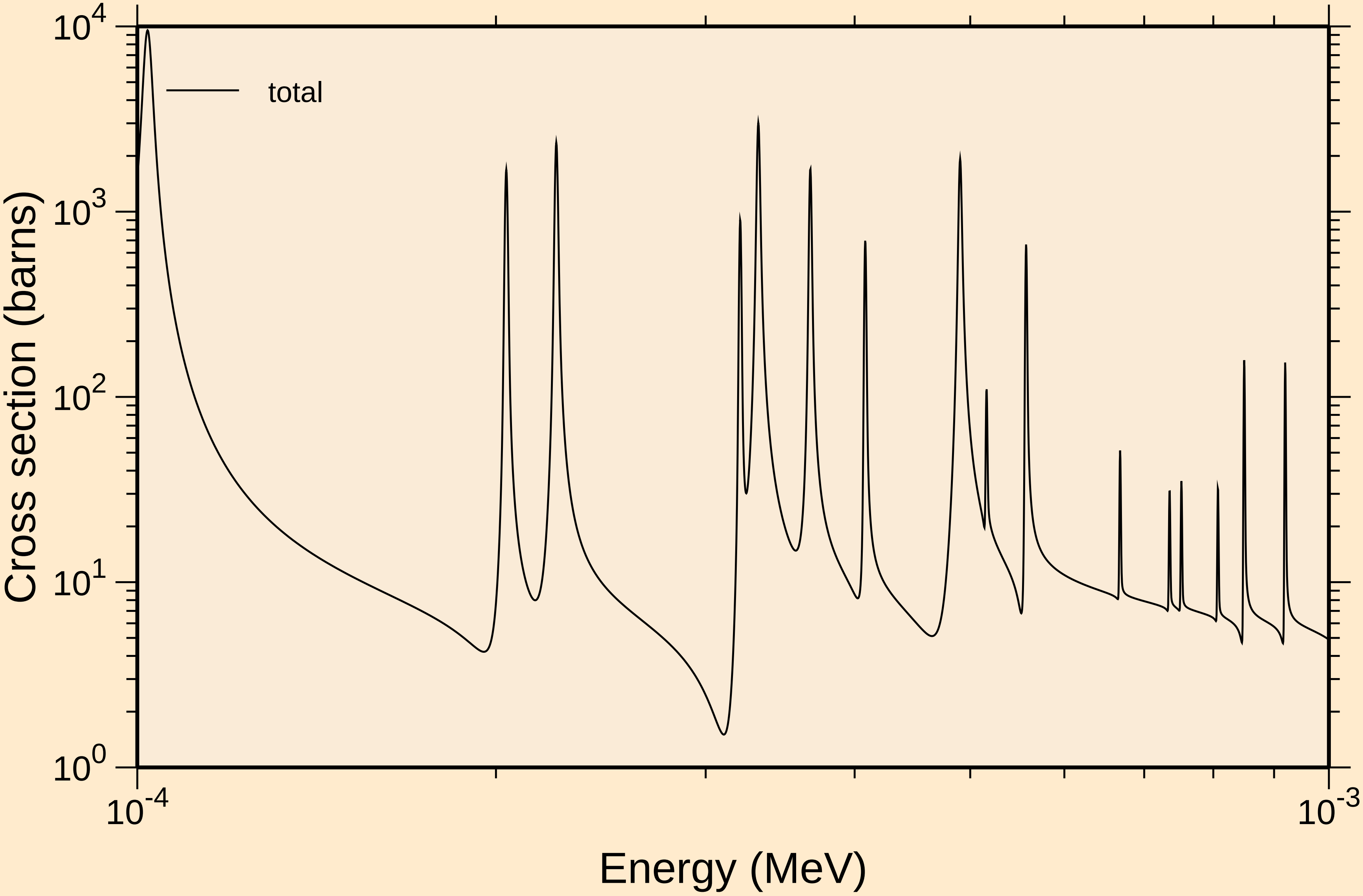
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Principal cross sections



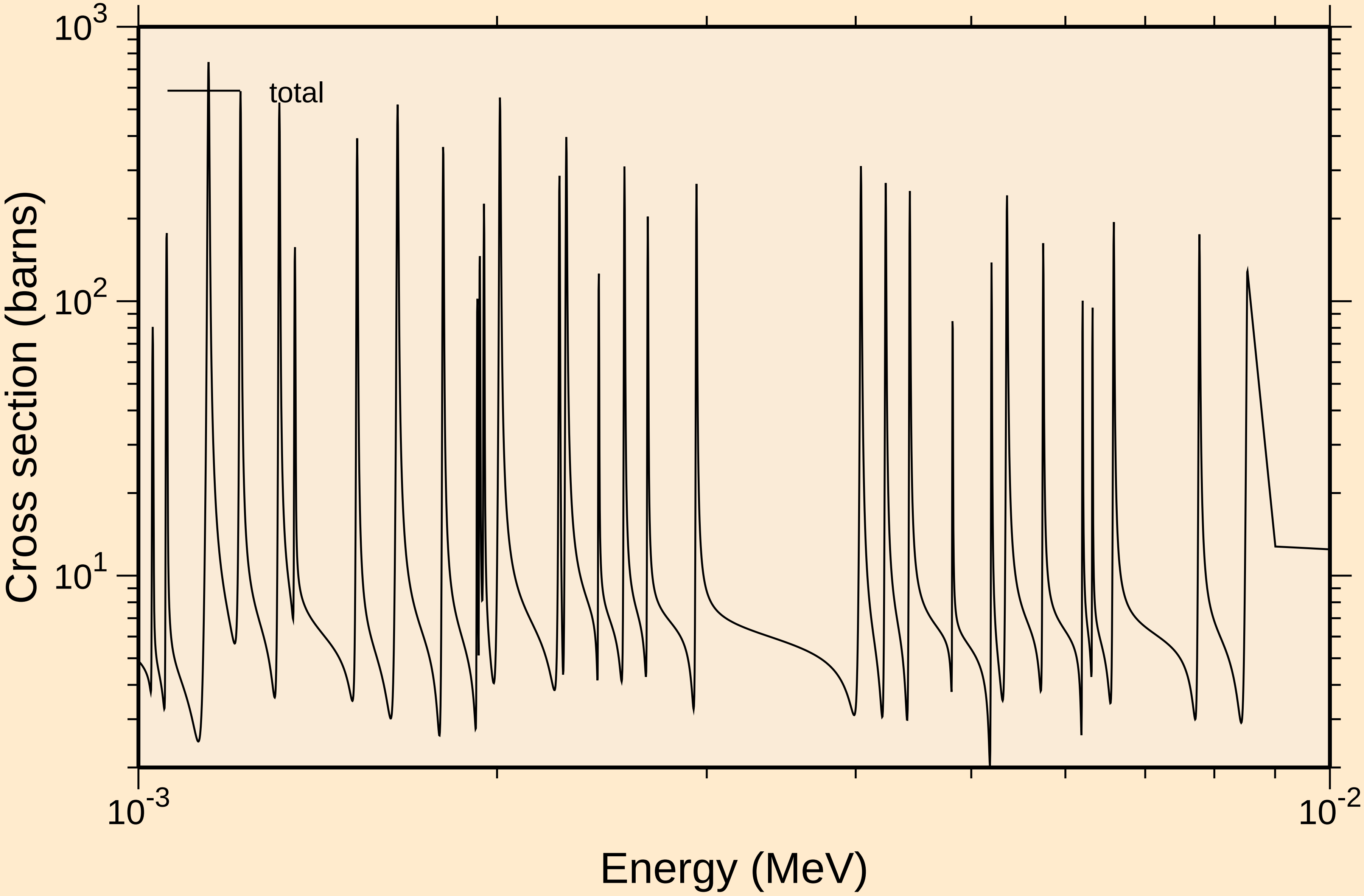
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
resonance total cross section



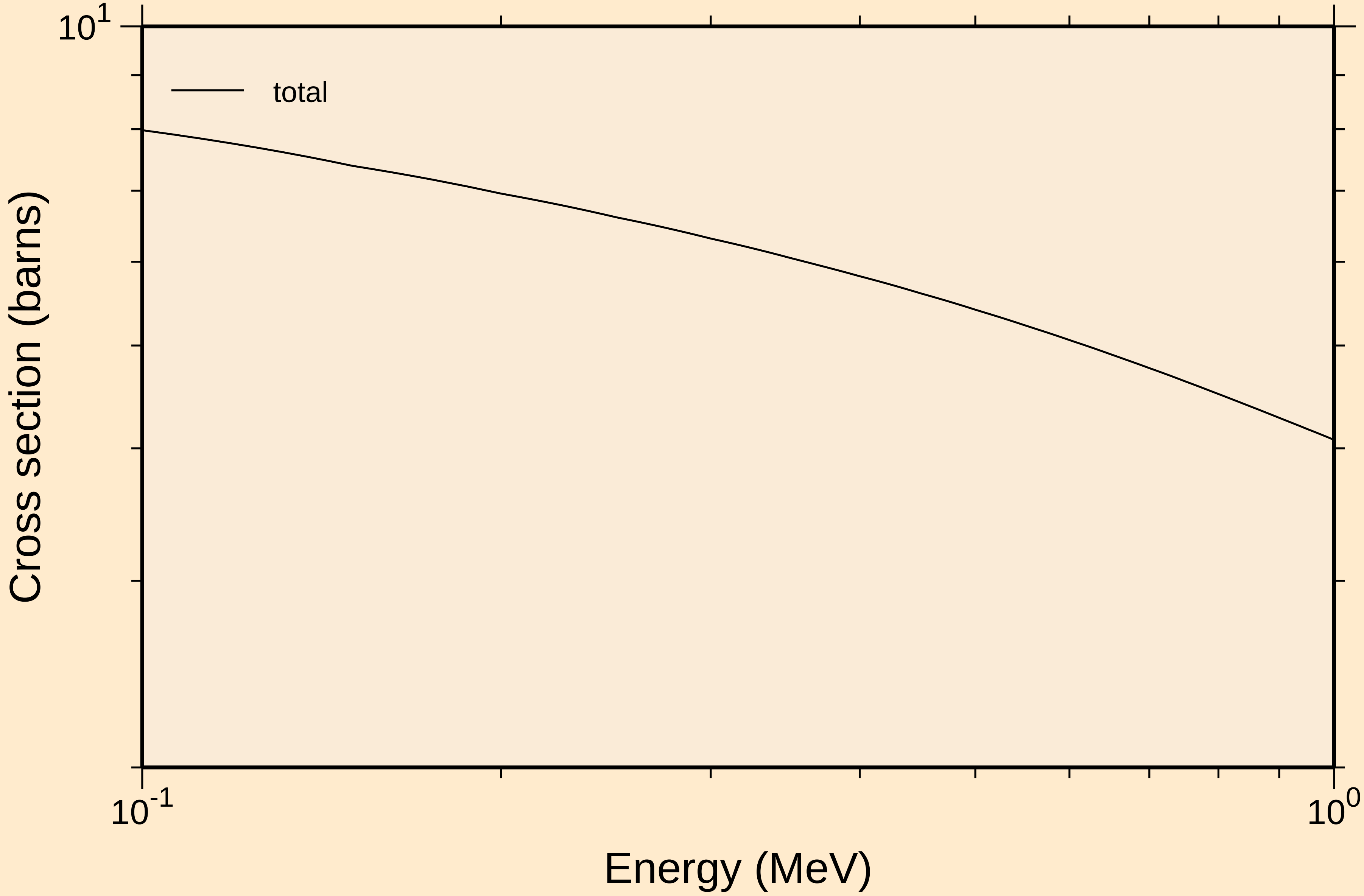
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
resonance total cross section

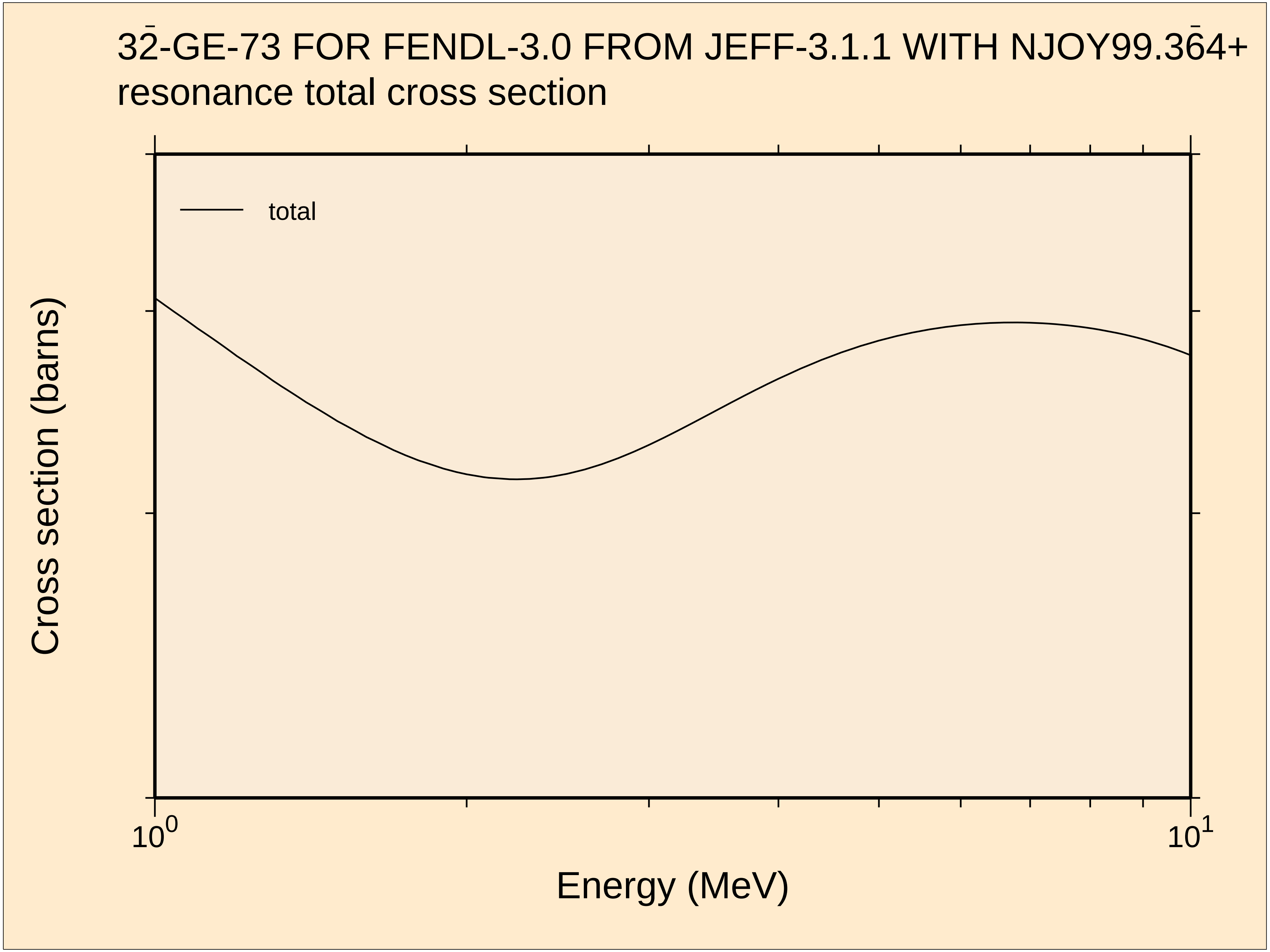


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
resonance total cross section



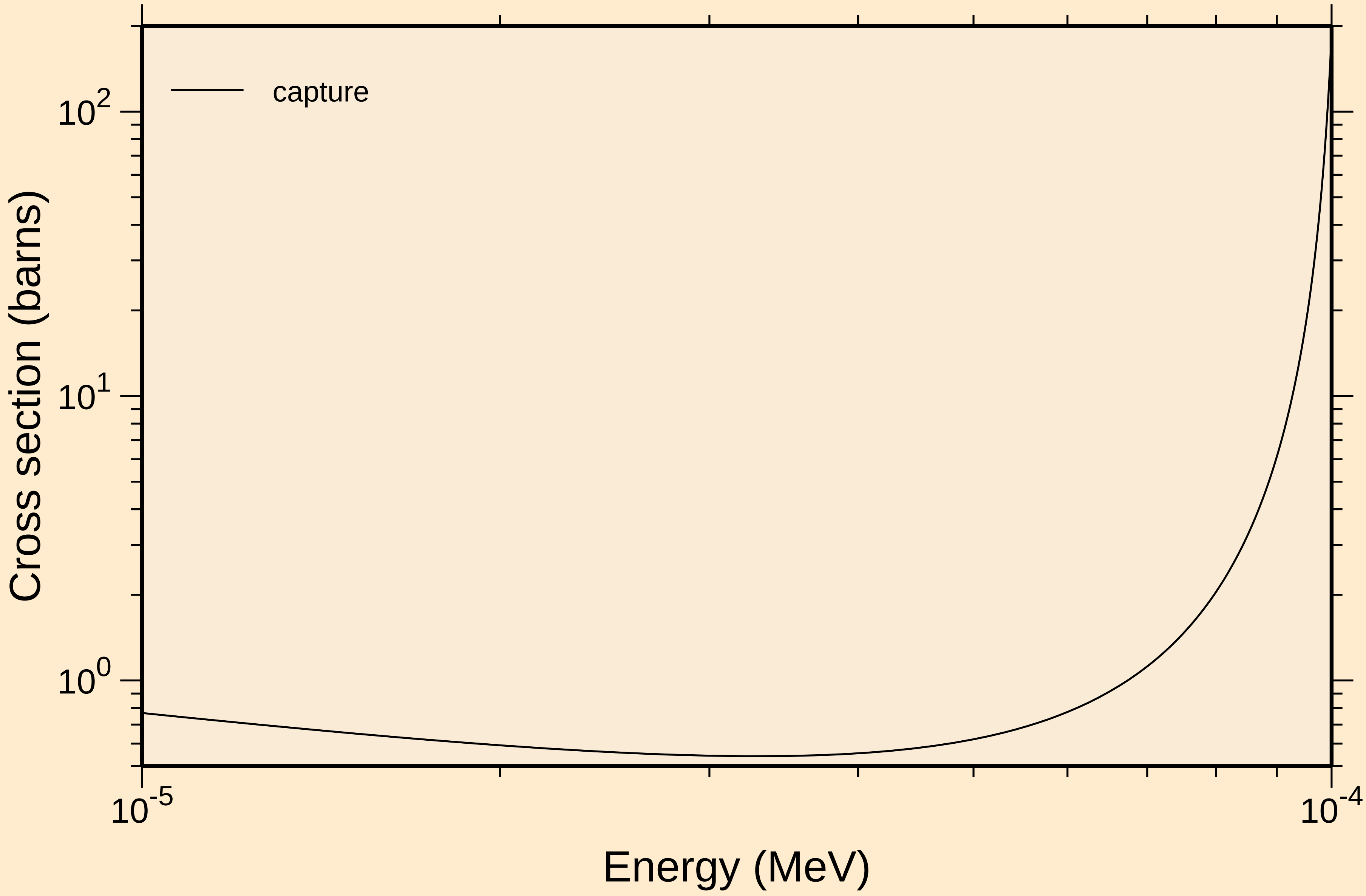
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
resonance total cross section



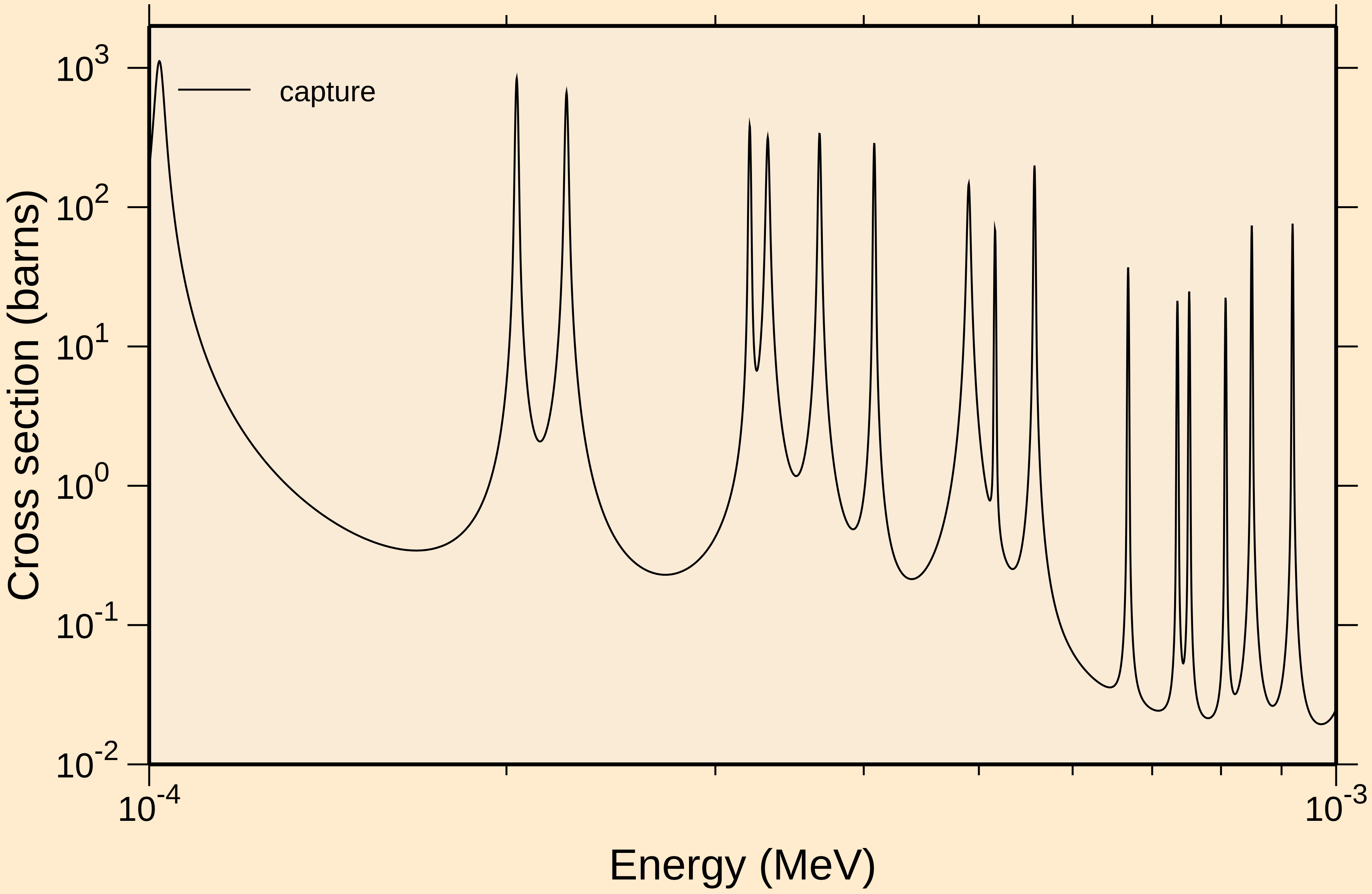


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
resonance total cross section

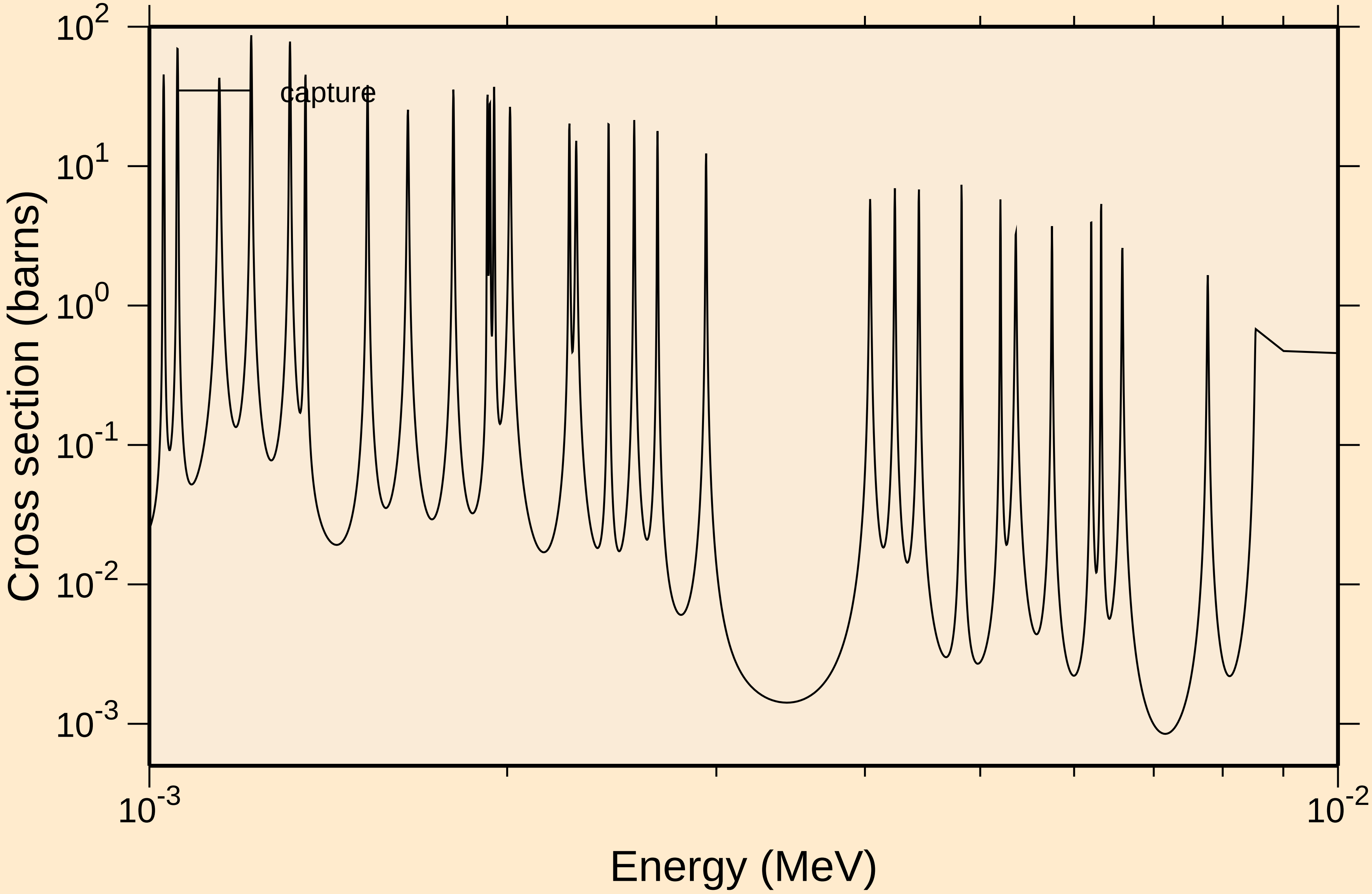
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
resonance absorption cross sections



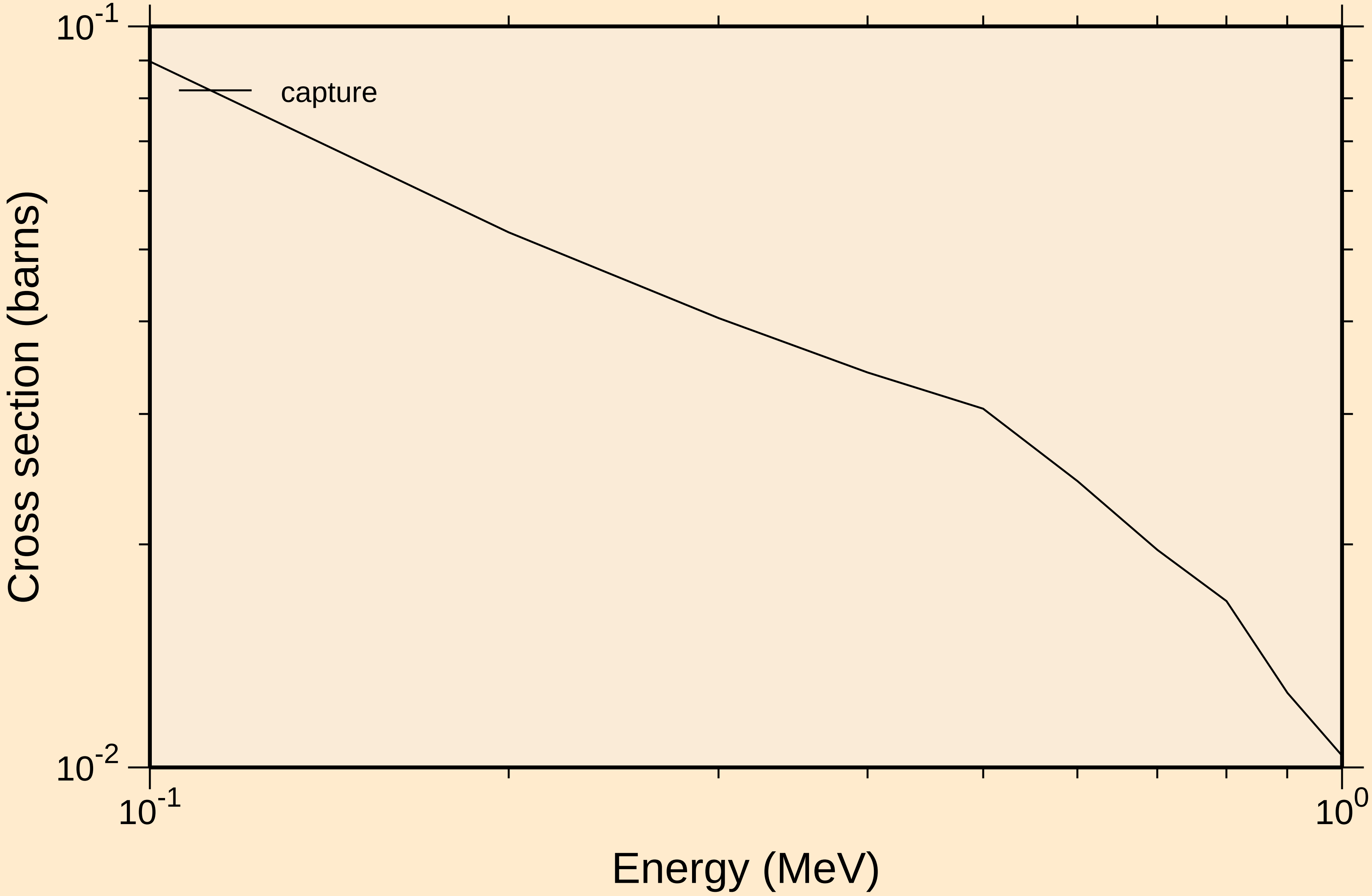
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
resonance absorption cross sections



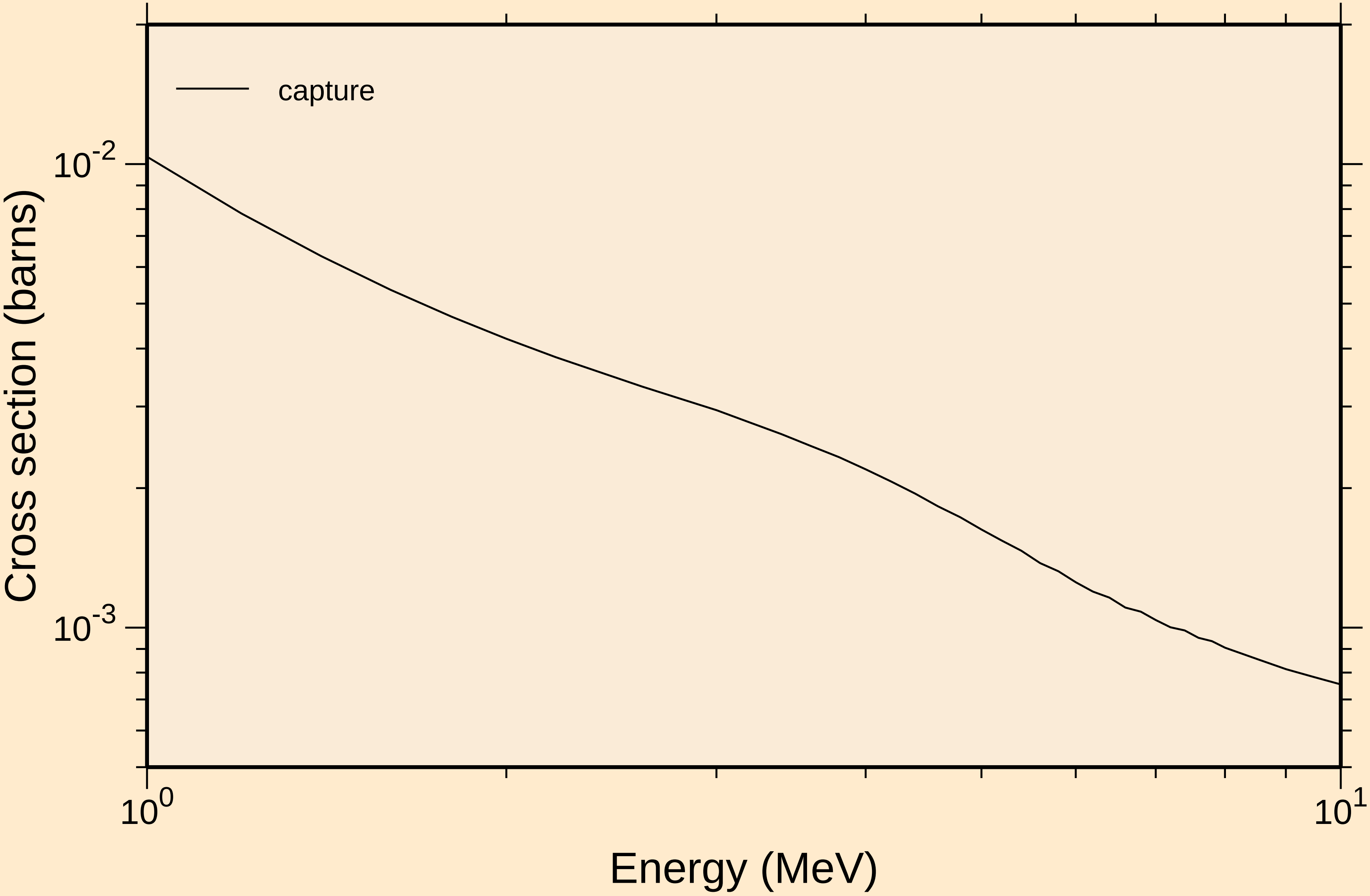
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
resonance absorption cross sections



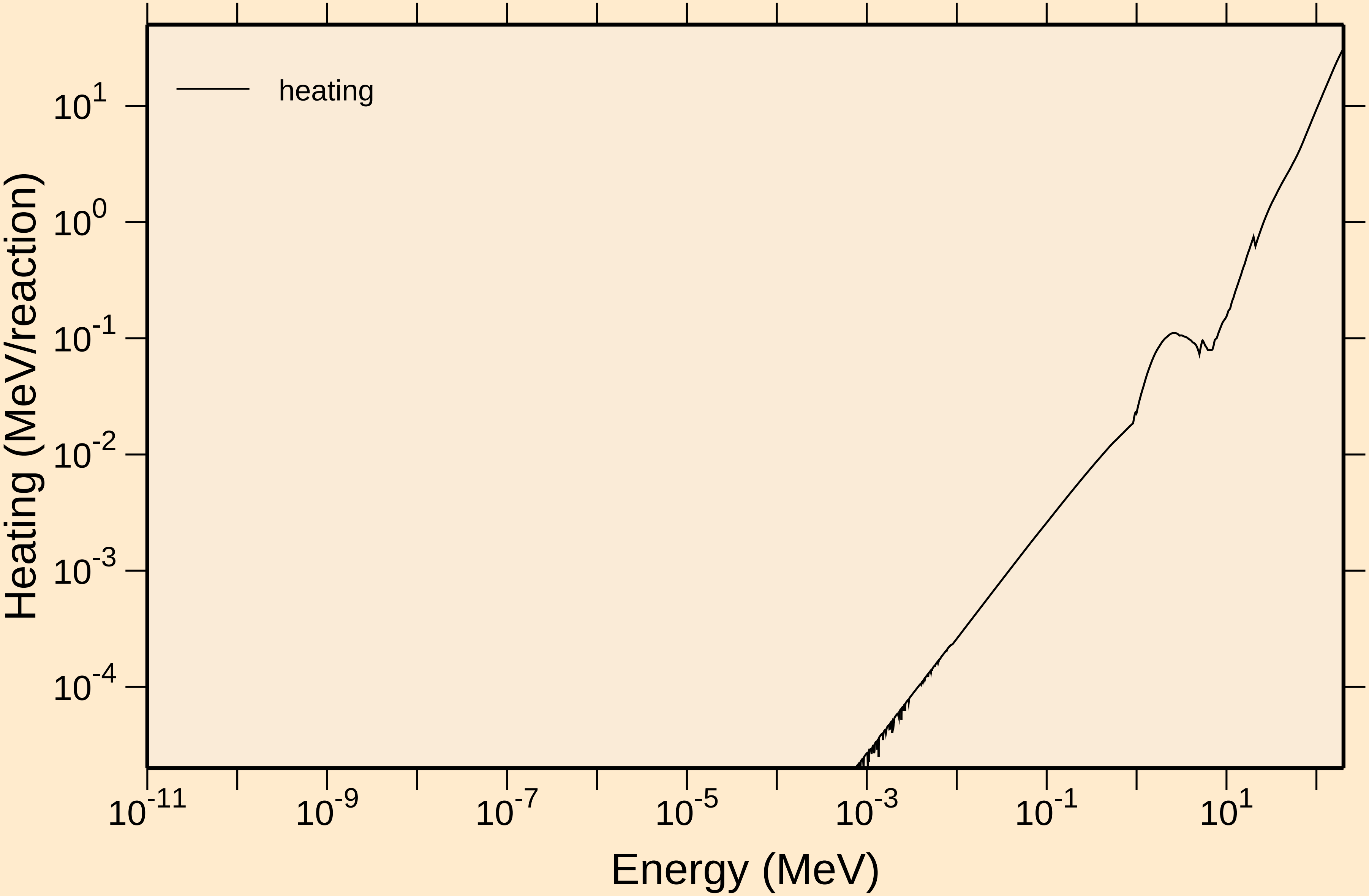
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
resonance absorption cross sections

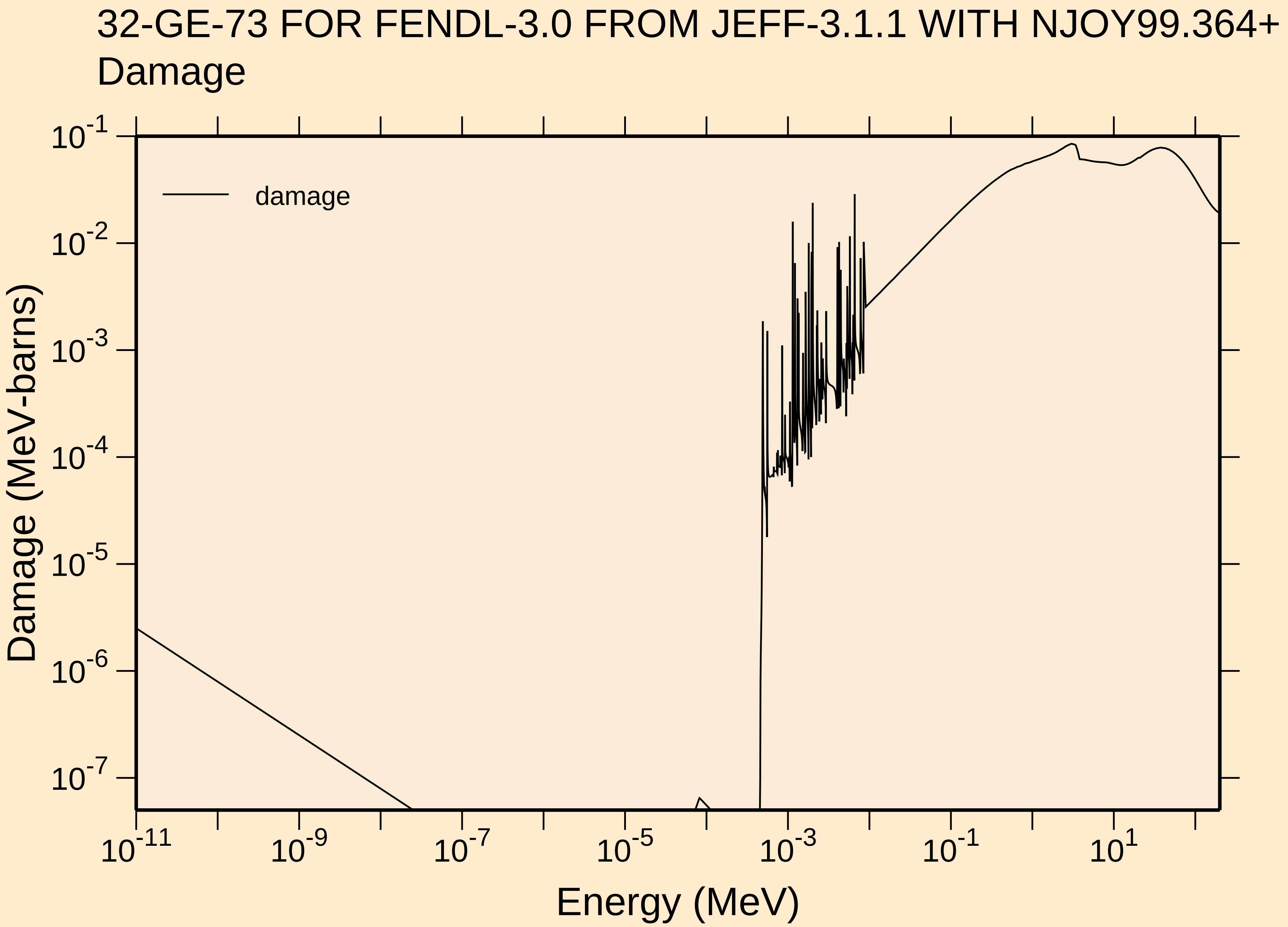


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
resonance absorption cross sections

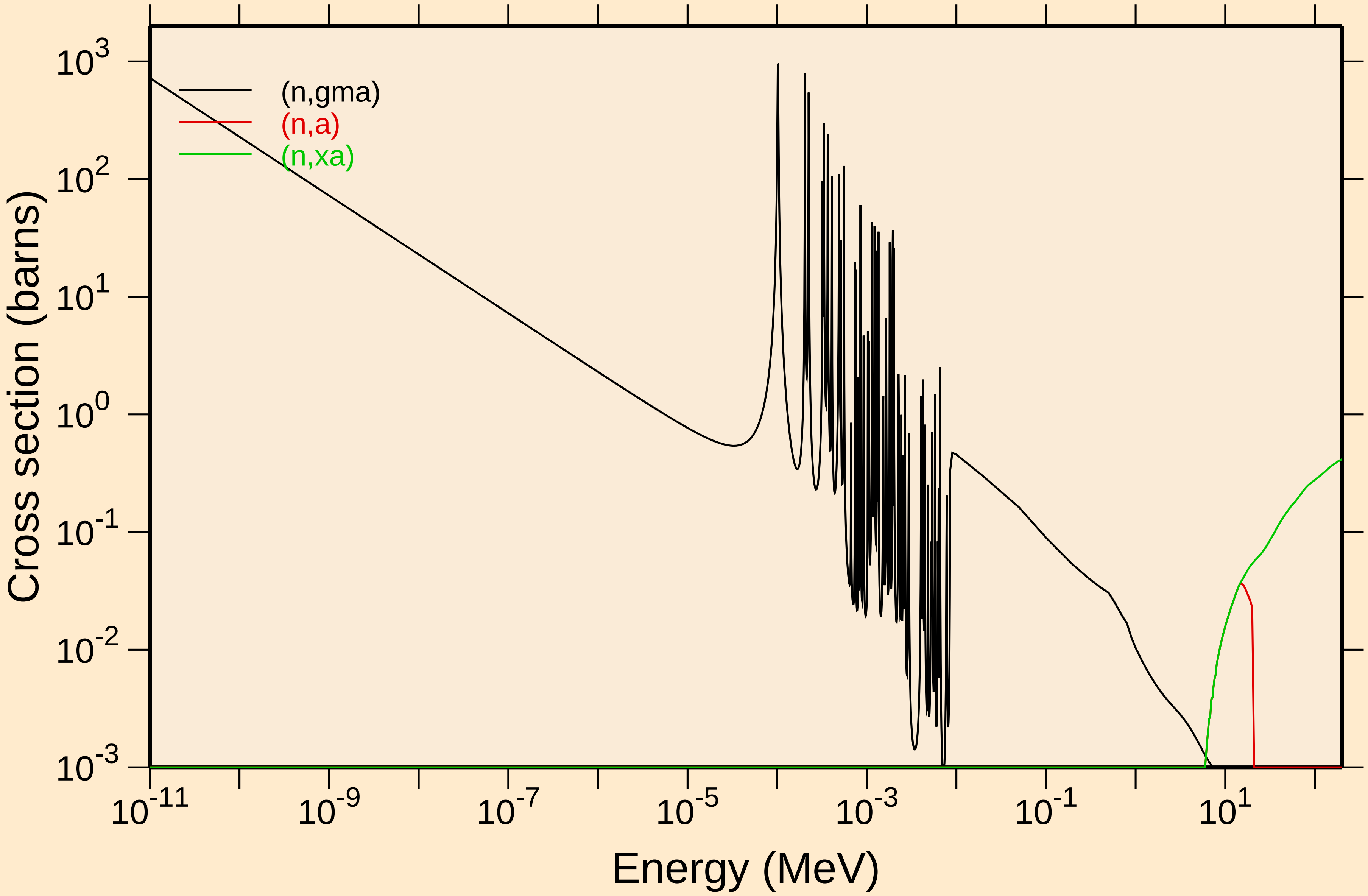


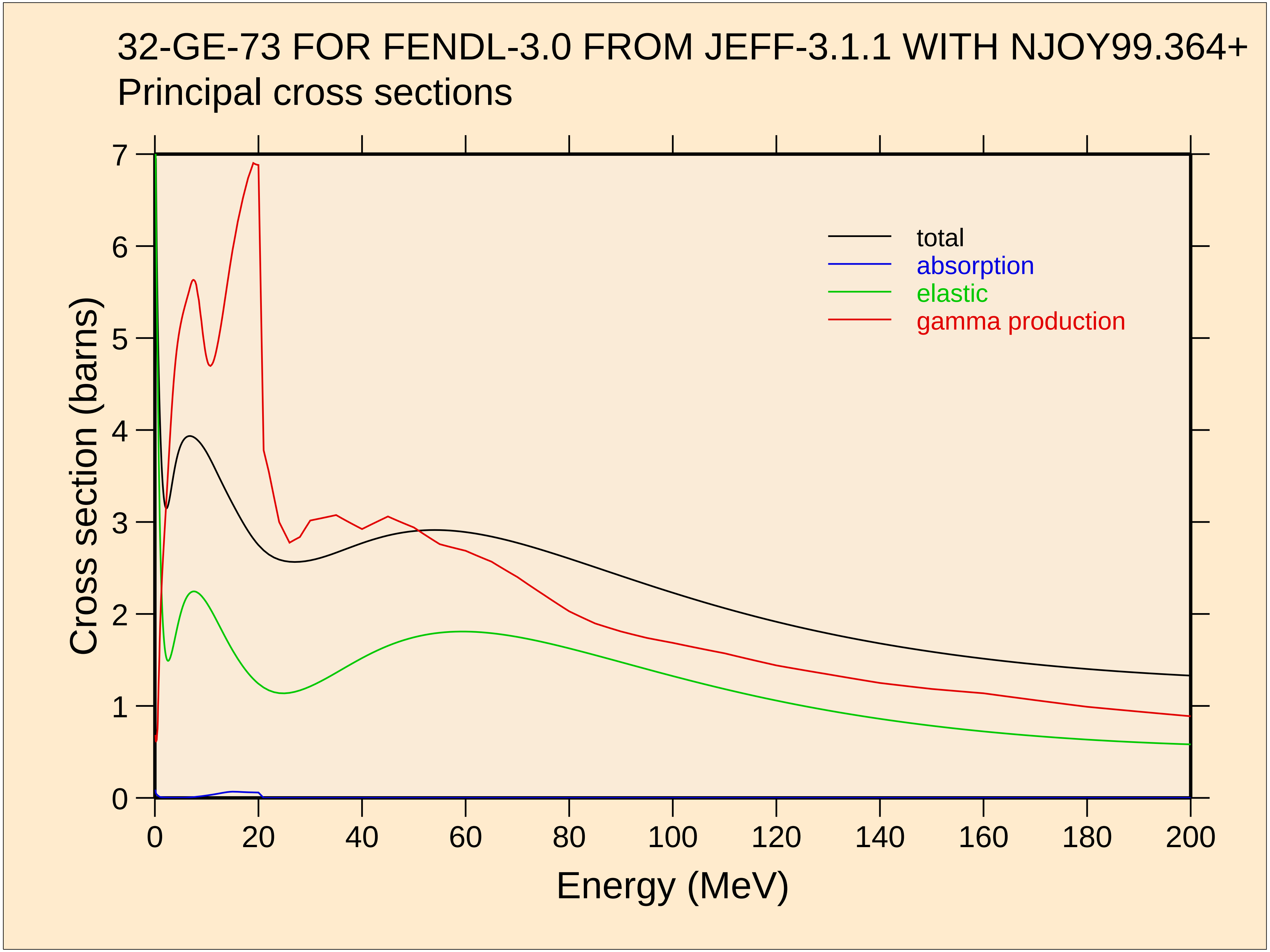
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Heating




32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Damage
damage
Damage (MeV-barns)
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
10^{-7}
10^{-11}
10^{-9}
10^{-7}
10^{-5}
10^{-3}
10^{-1}
10^{1}
Energy (MeV)

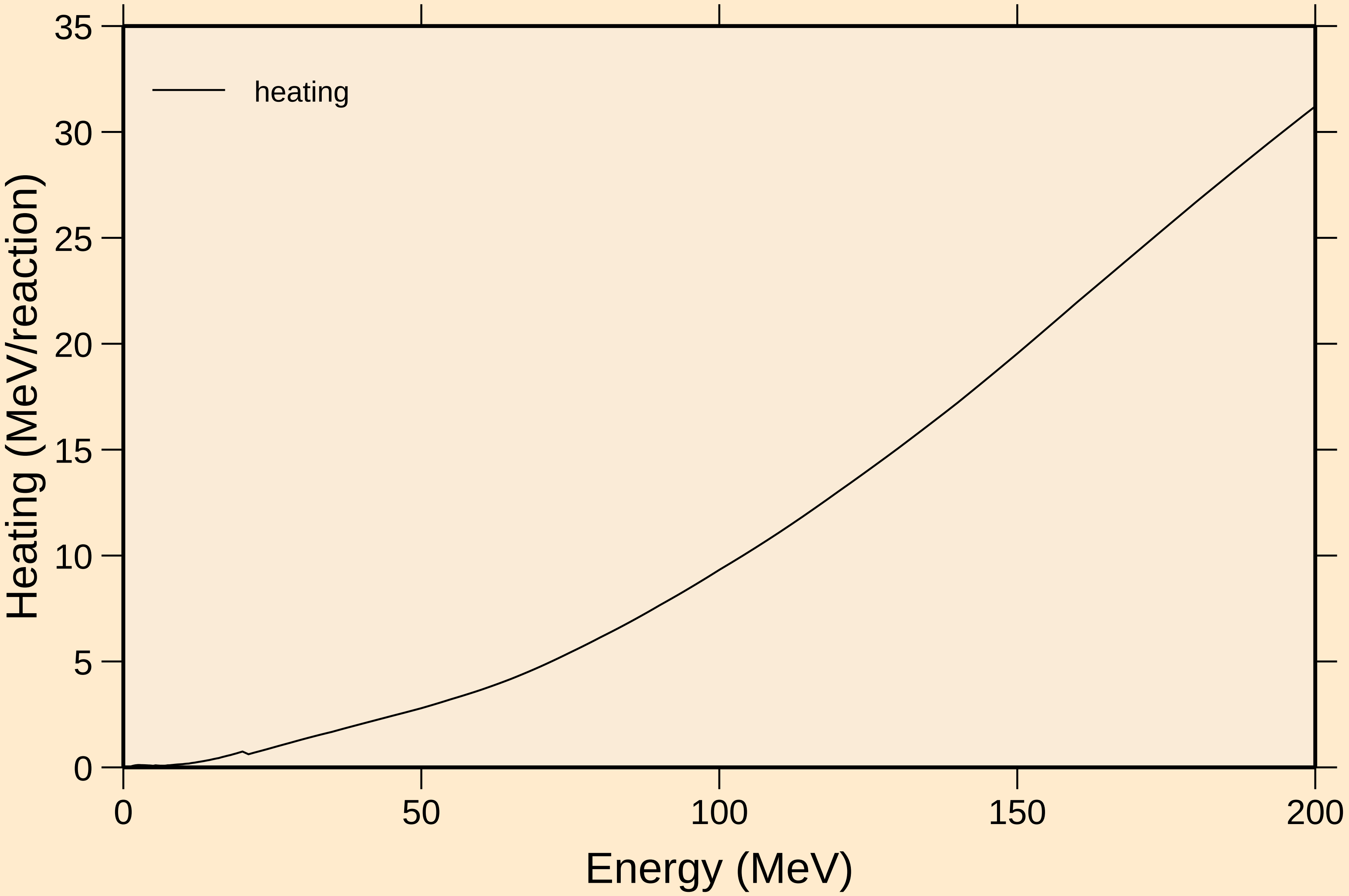
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Non-threshold reactions



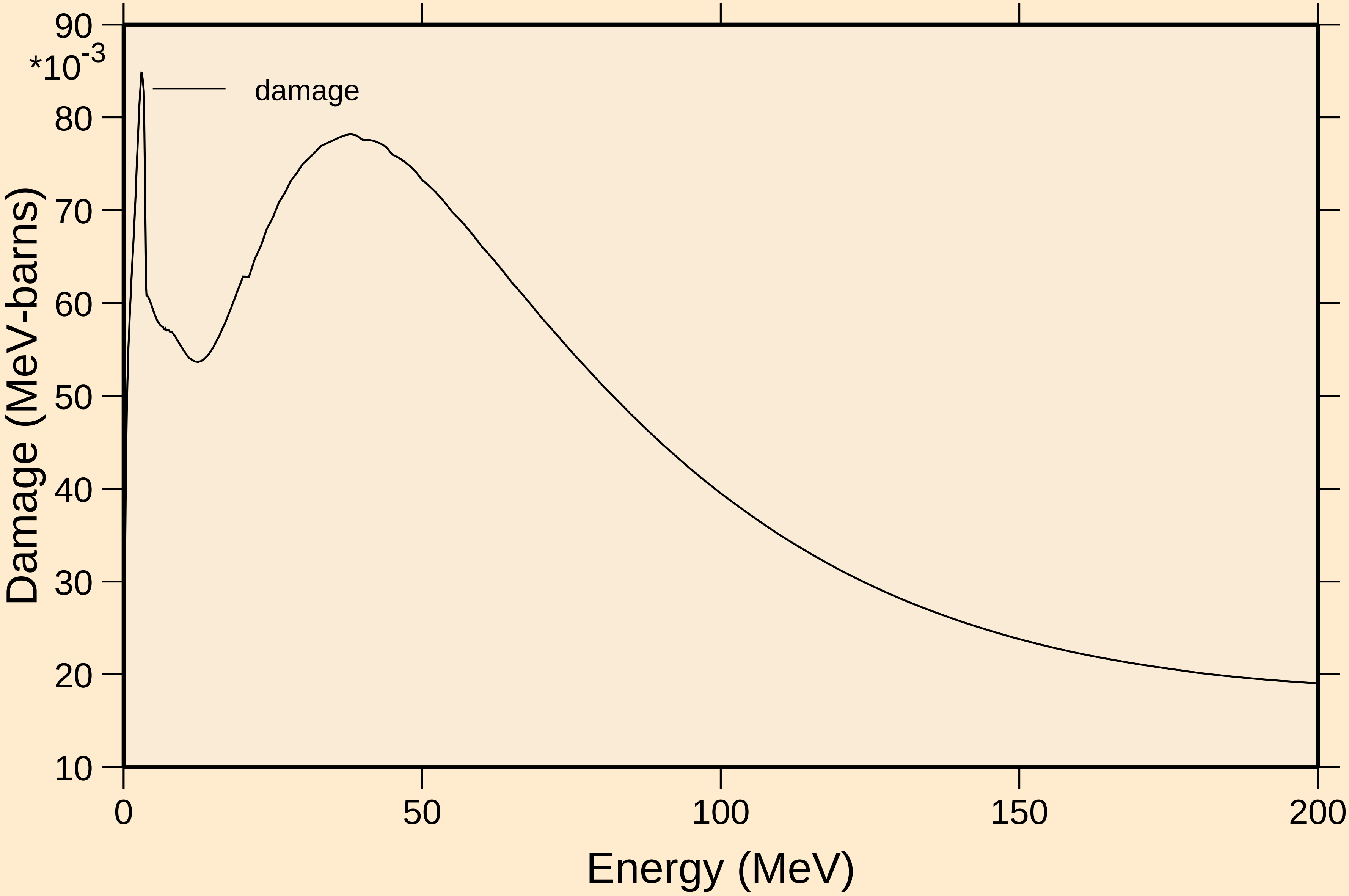


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Principal cross sections

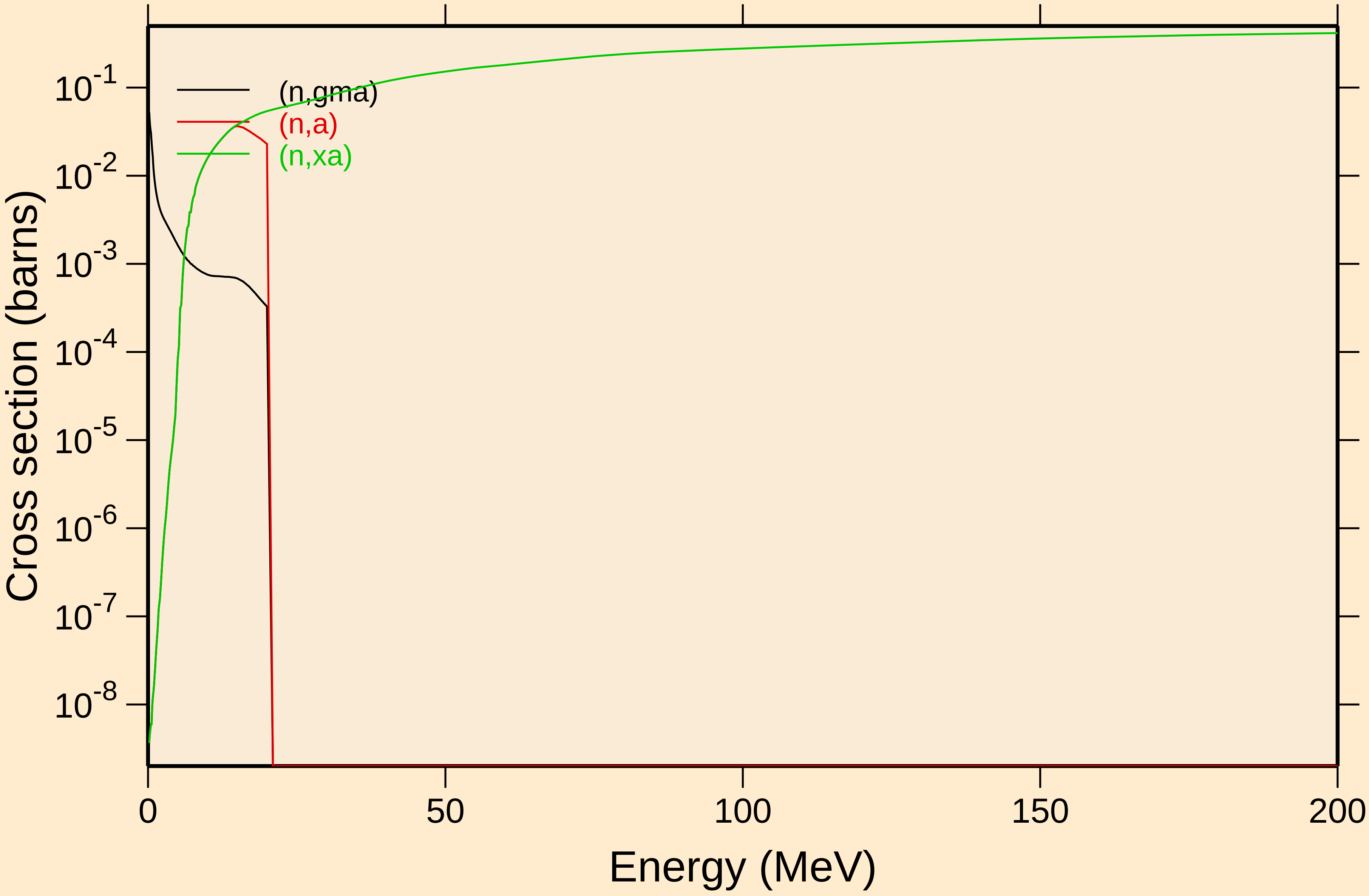
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Heating

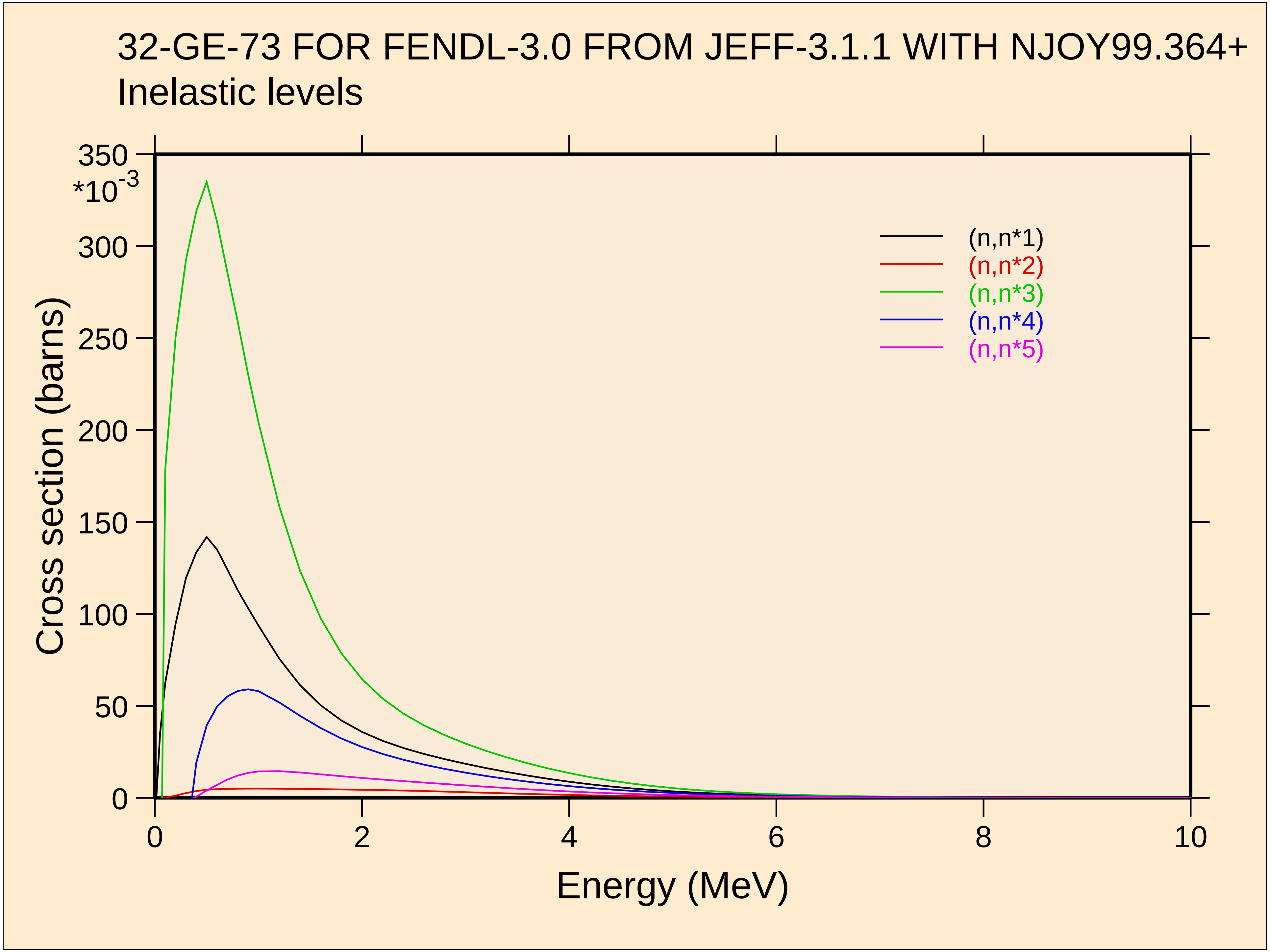


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Damage

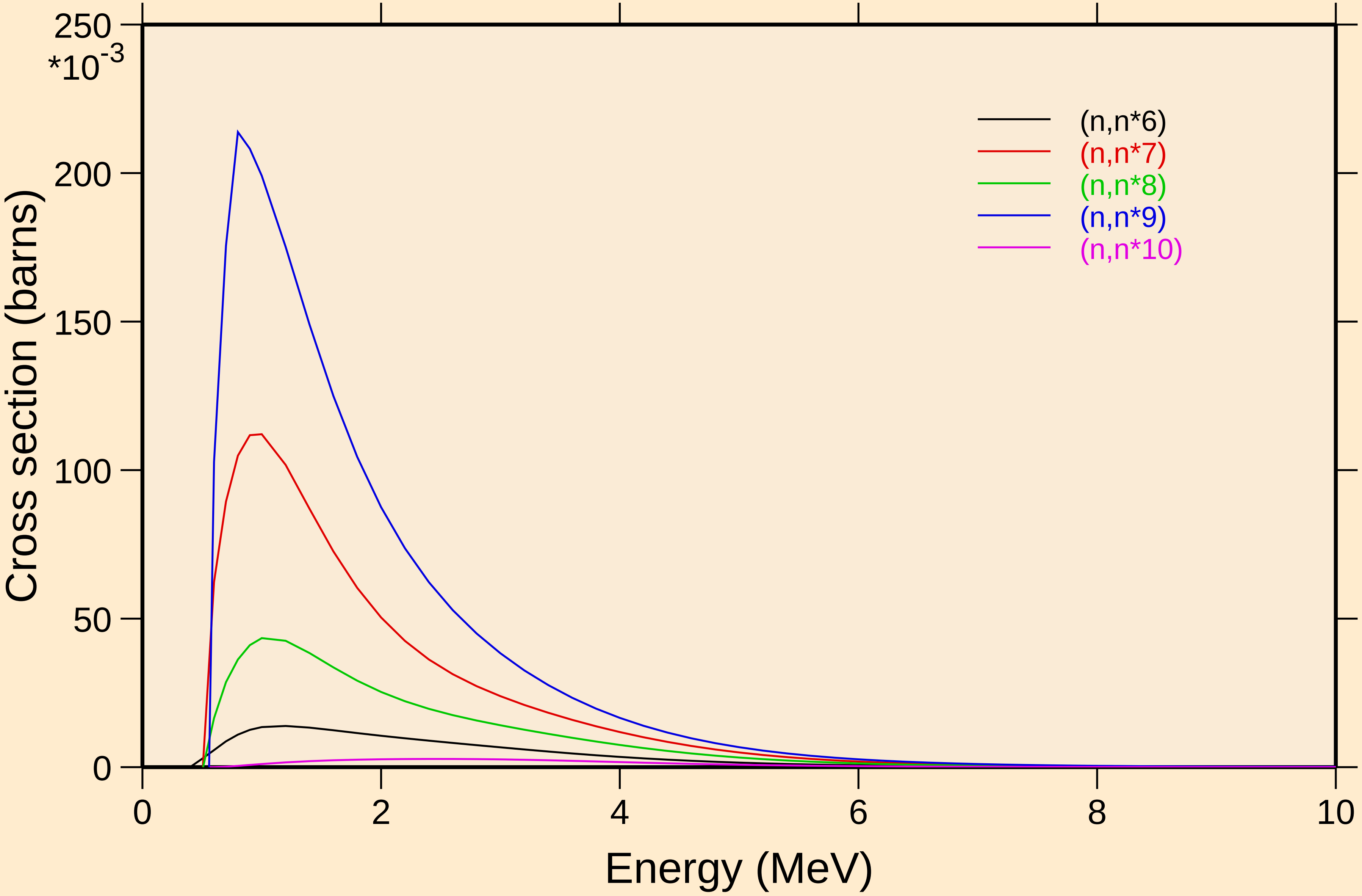


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Non-threshold reactions

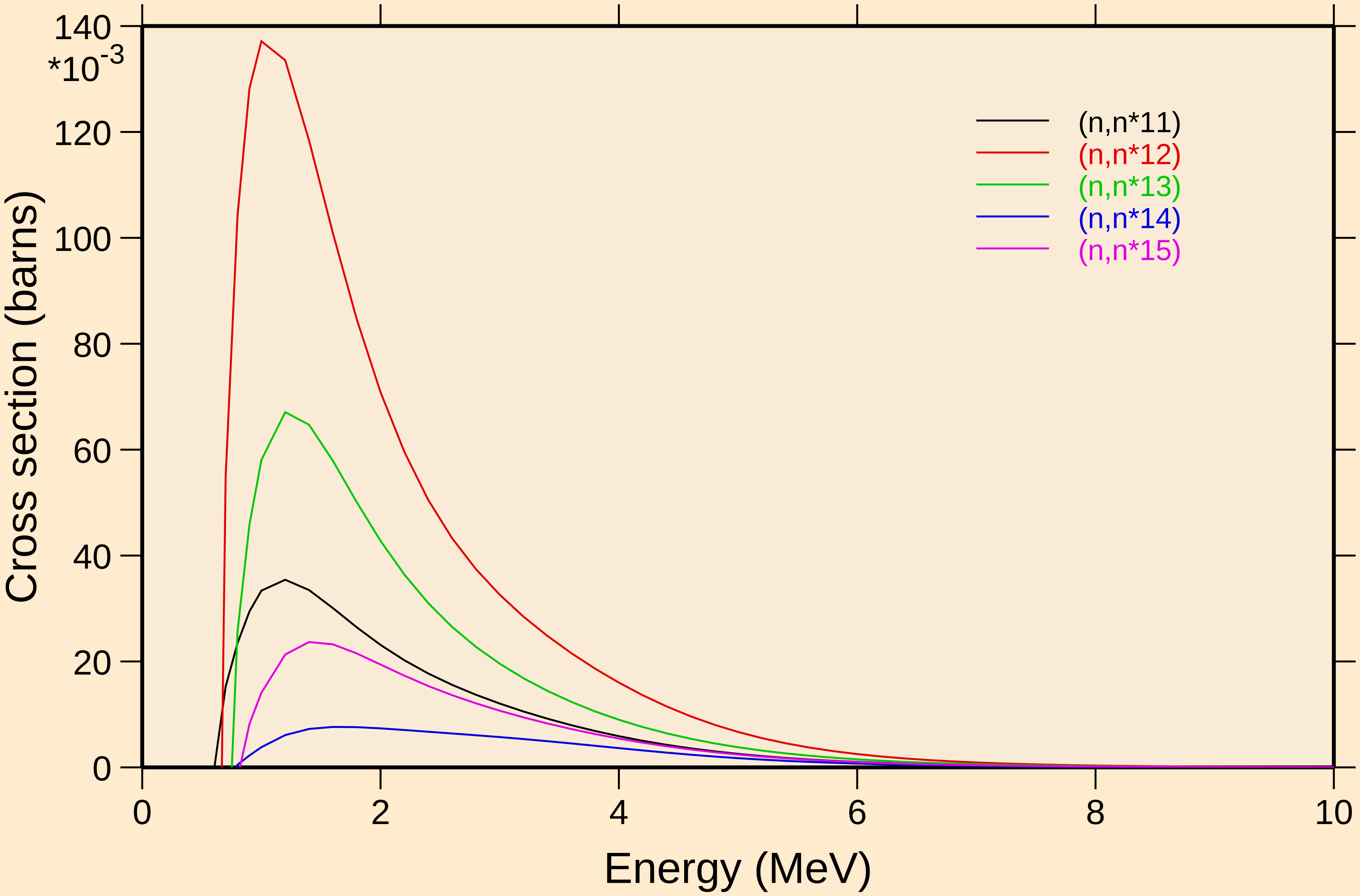


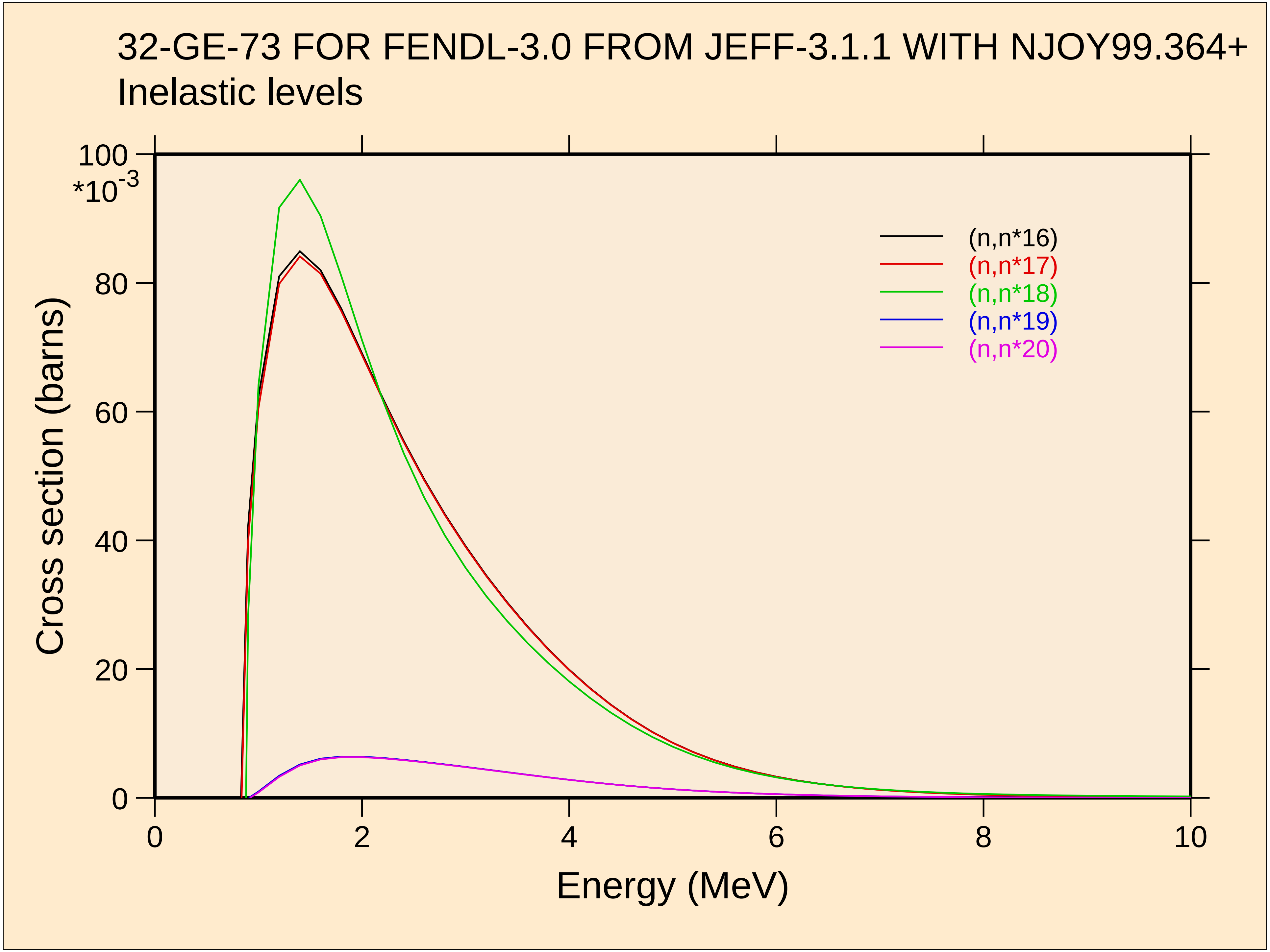

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Inelastic levels
Cross section (barns)
*10-3
350
300
250
200
150
100
50
0
Energy (MeV)
0
2
4
6
8
10
(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)

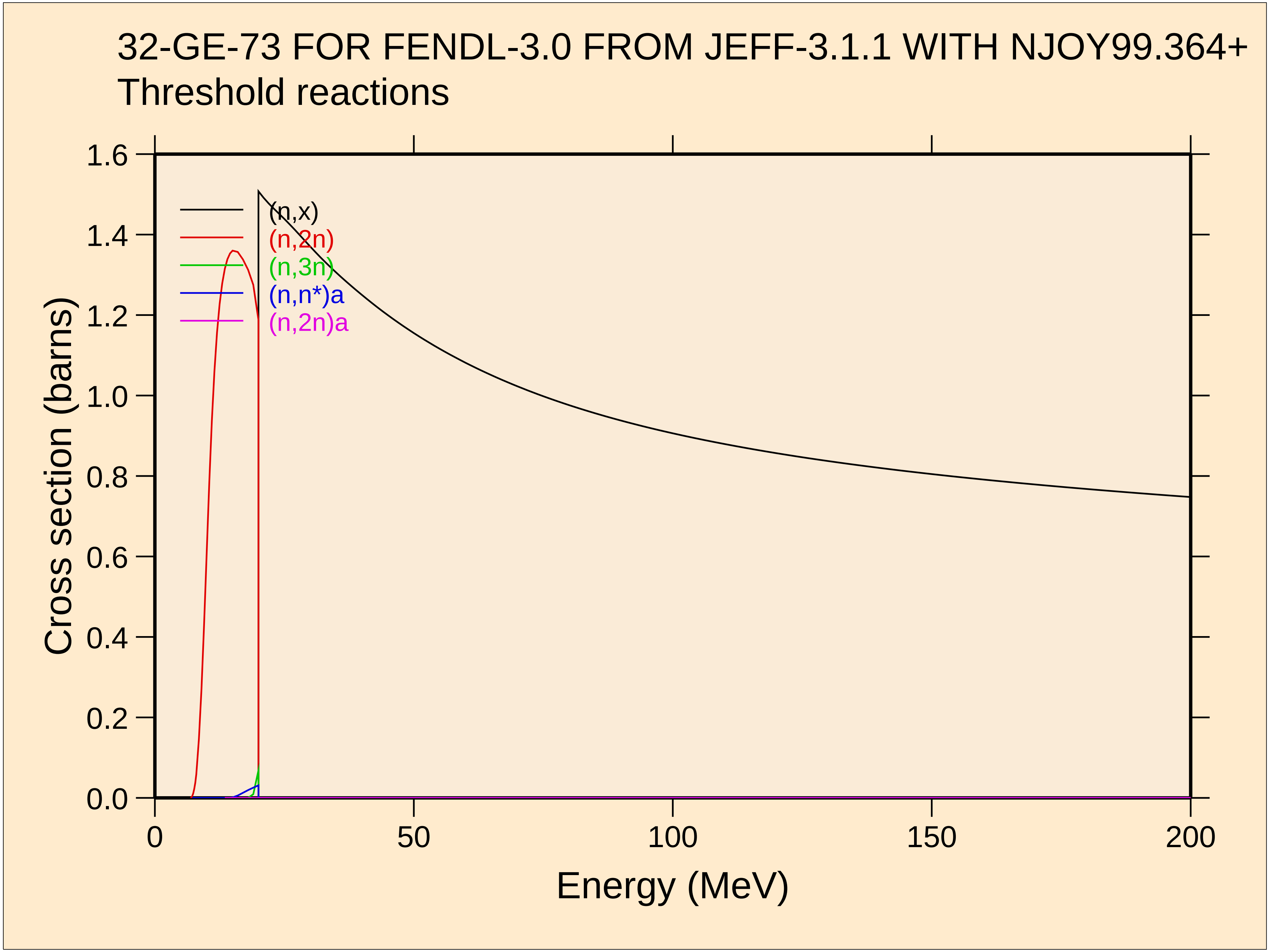
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Inelastic levels



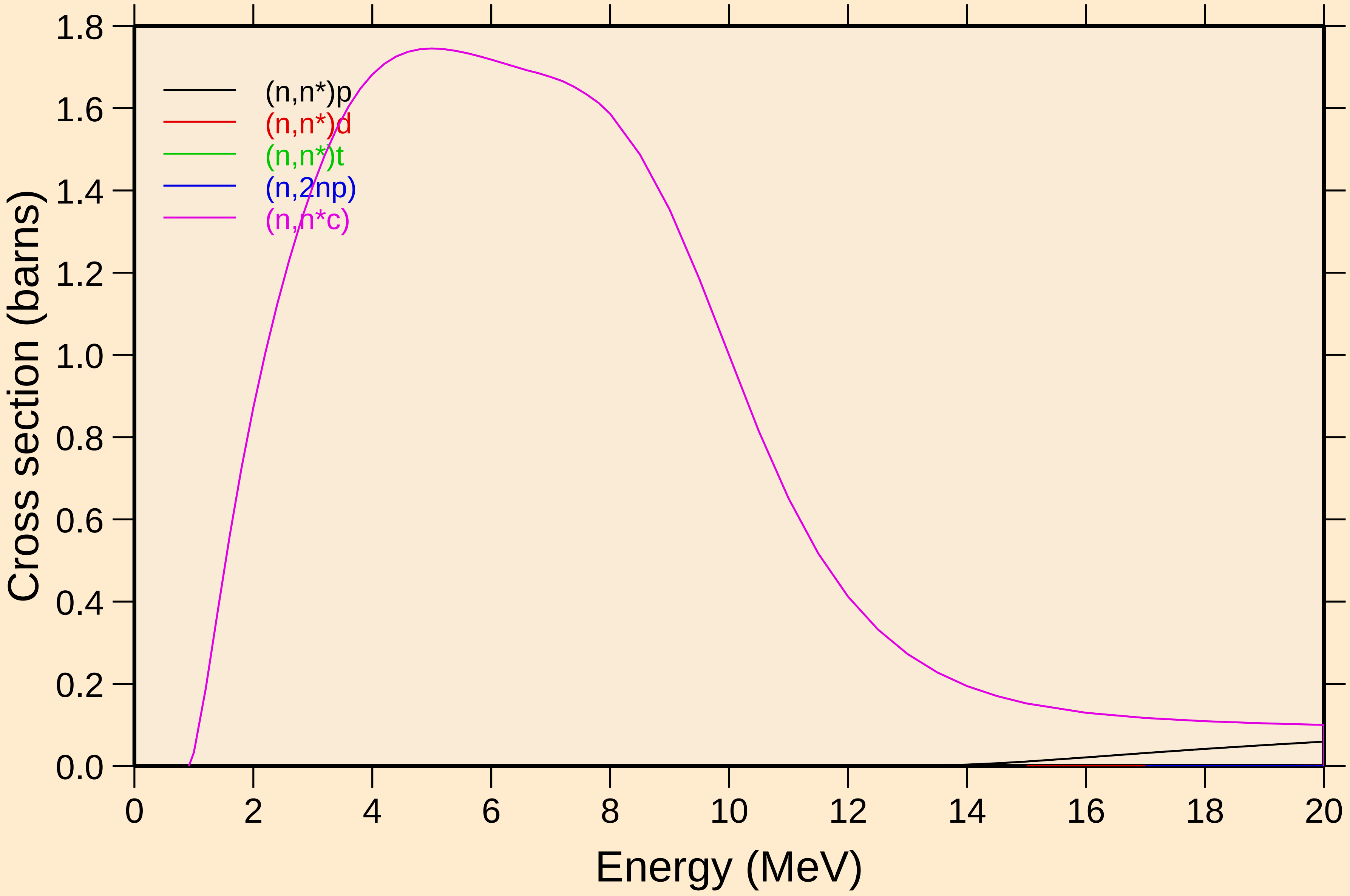
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Inelastic levels

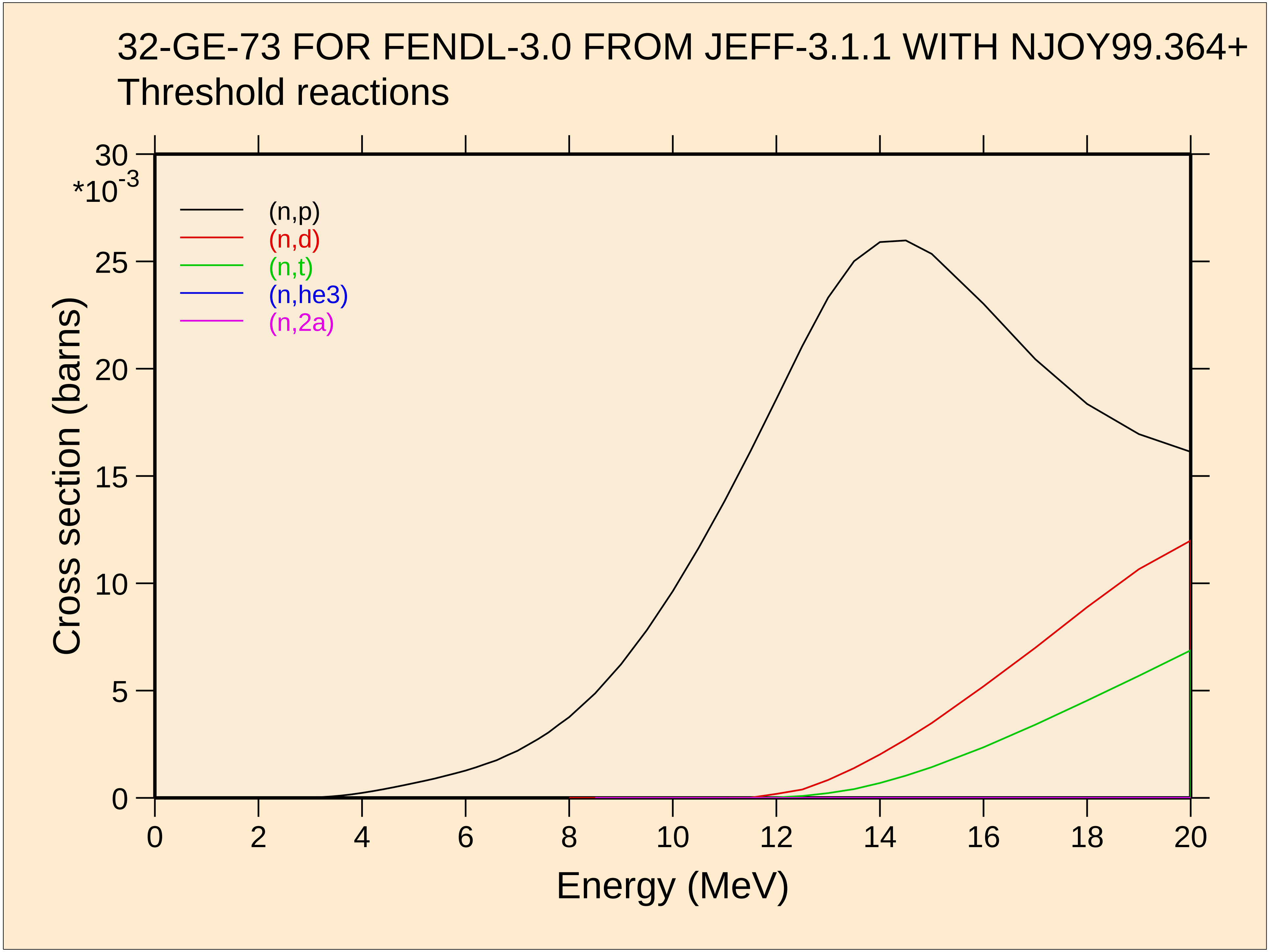



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Inelastic levels
Cross section (barns)
100
*10^-3
80
60
40
20
0
0
2
4
6
8
10
Energy (MeV)
(n,n*16)
(n,n*17)
(n,n*18)
(n,n*19)
(n,n*20)

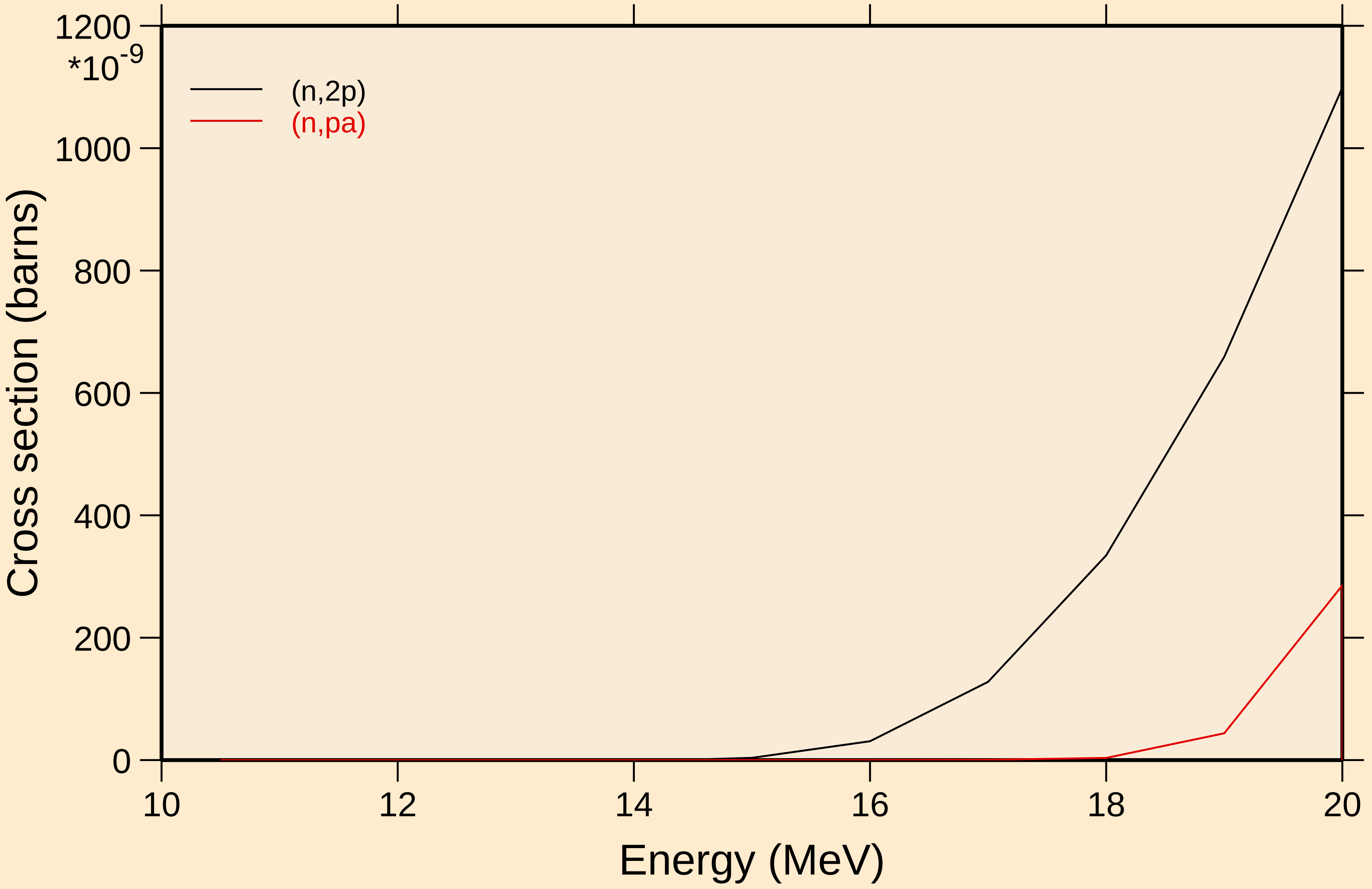

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions
Cross section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
Energy (MeV)
(n,x)
(n,2n)
(n,3n)
(n,n*)a
(n,2n)a

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions

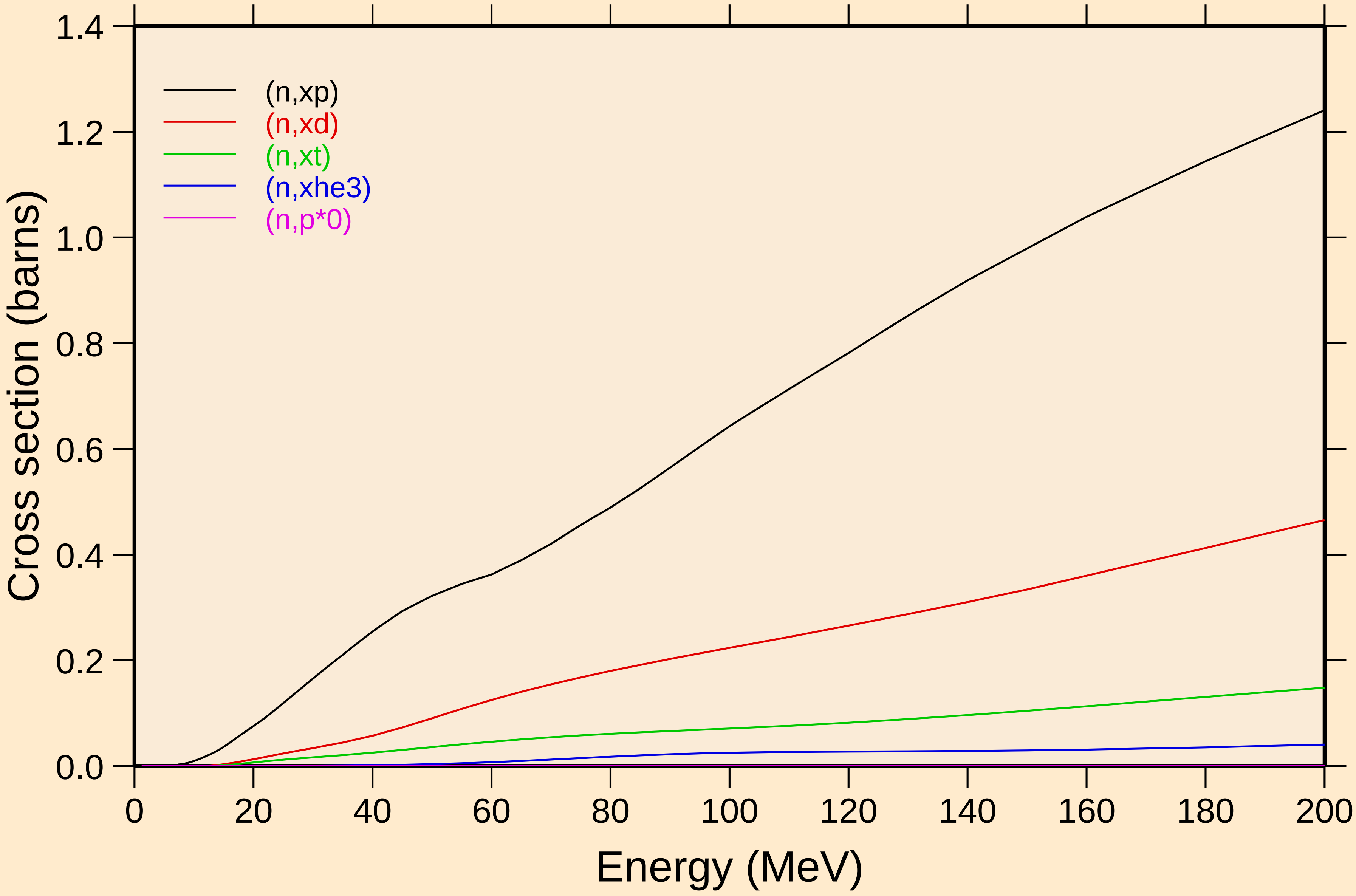


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions
Cross section (barns)
*10^{-3}
30
25
20
15
10
5
0
(n,p)
(n,d)
(n,t)
(n,he3)
(n,2a)
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

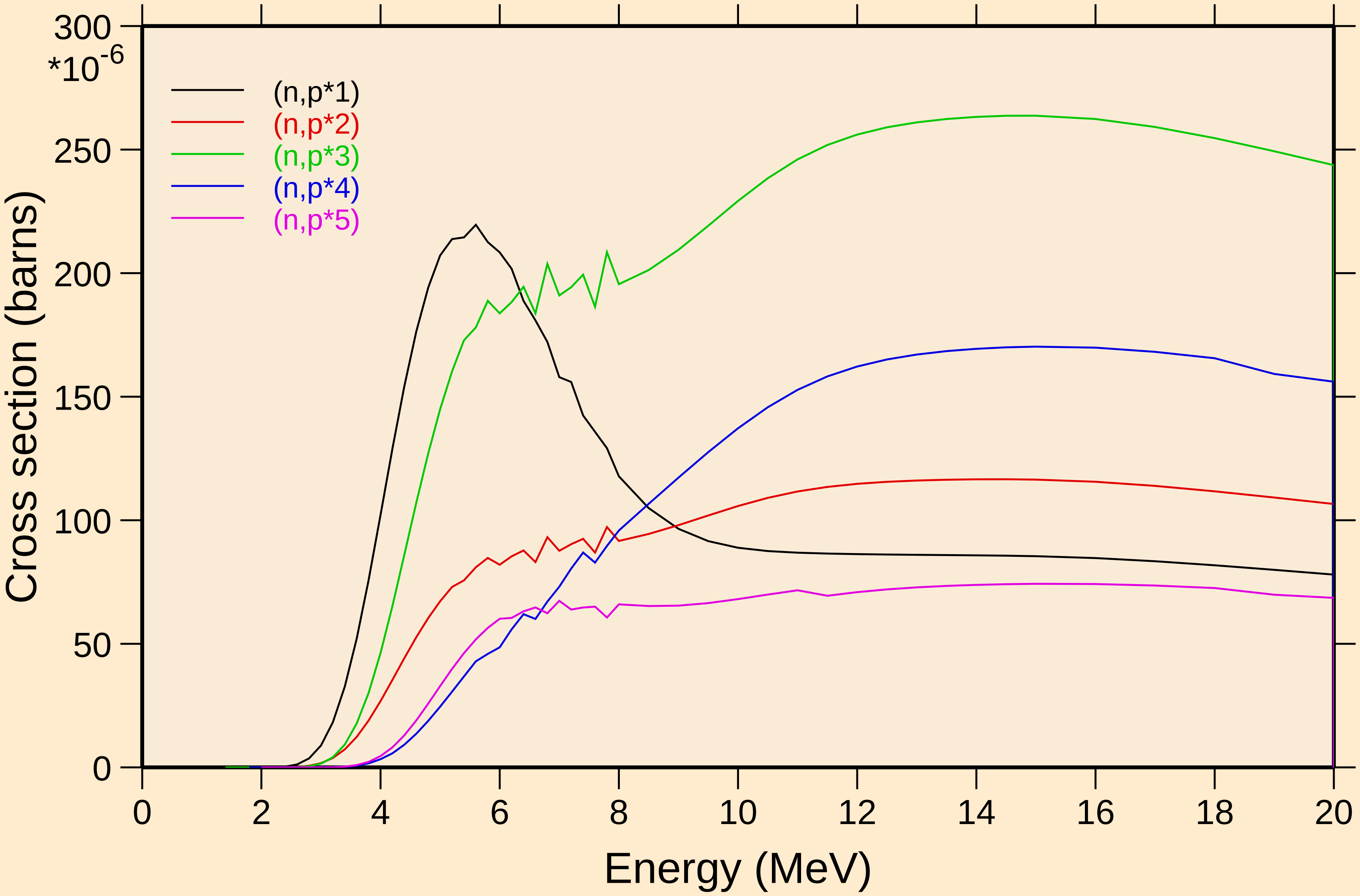
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions

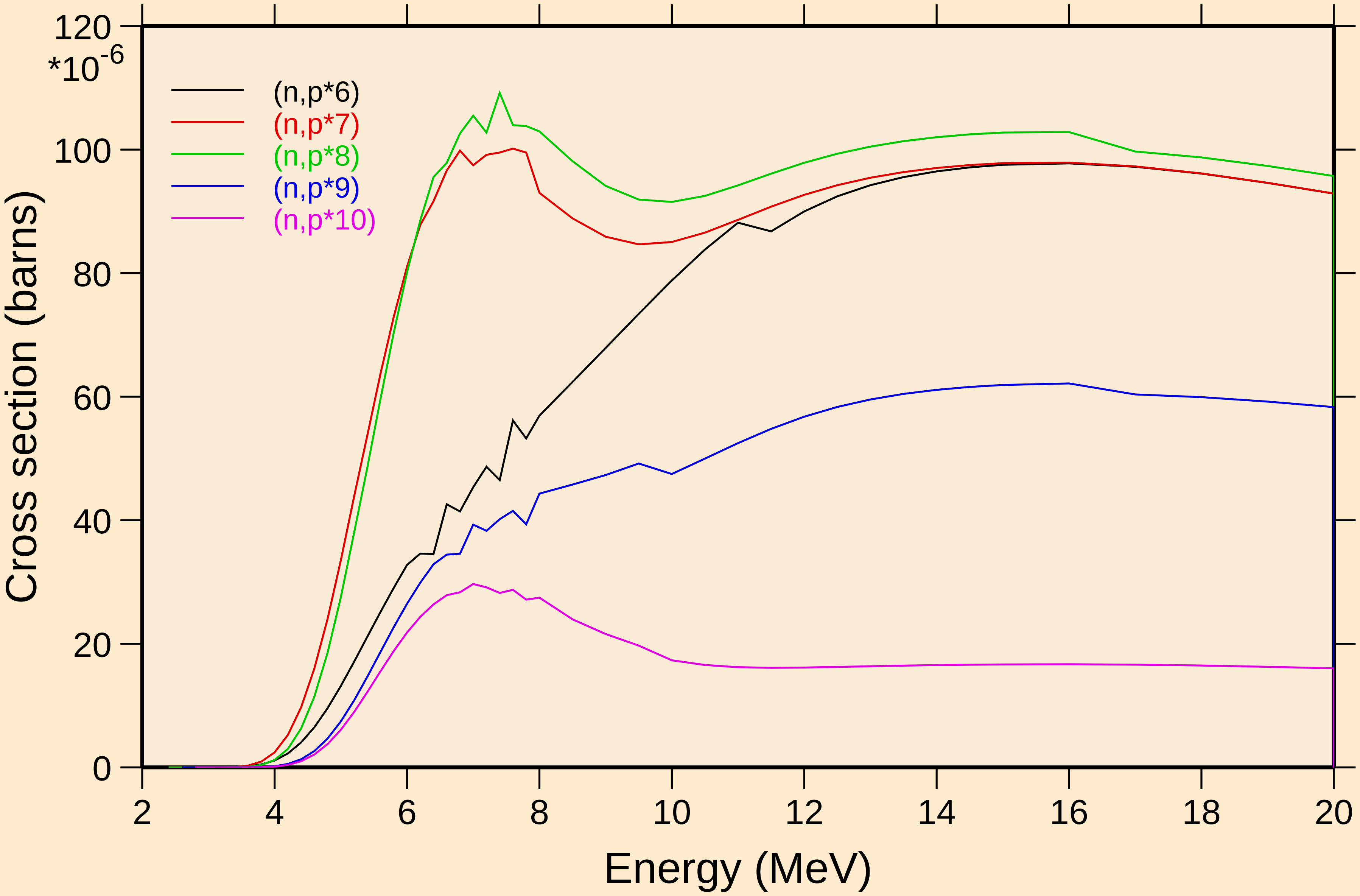


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions



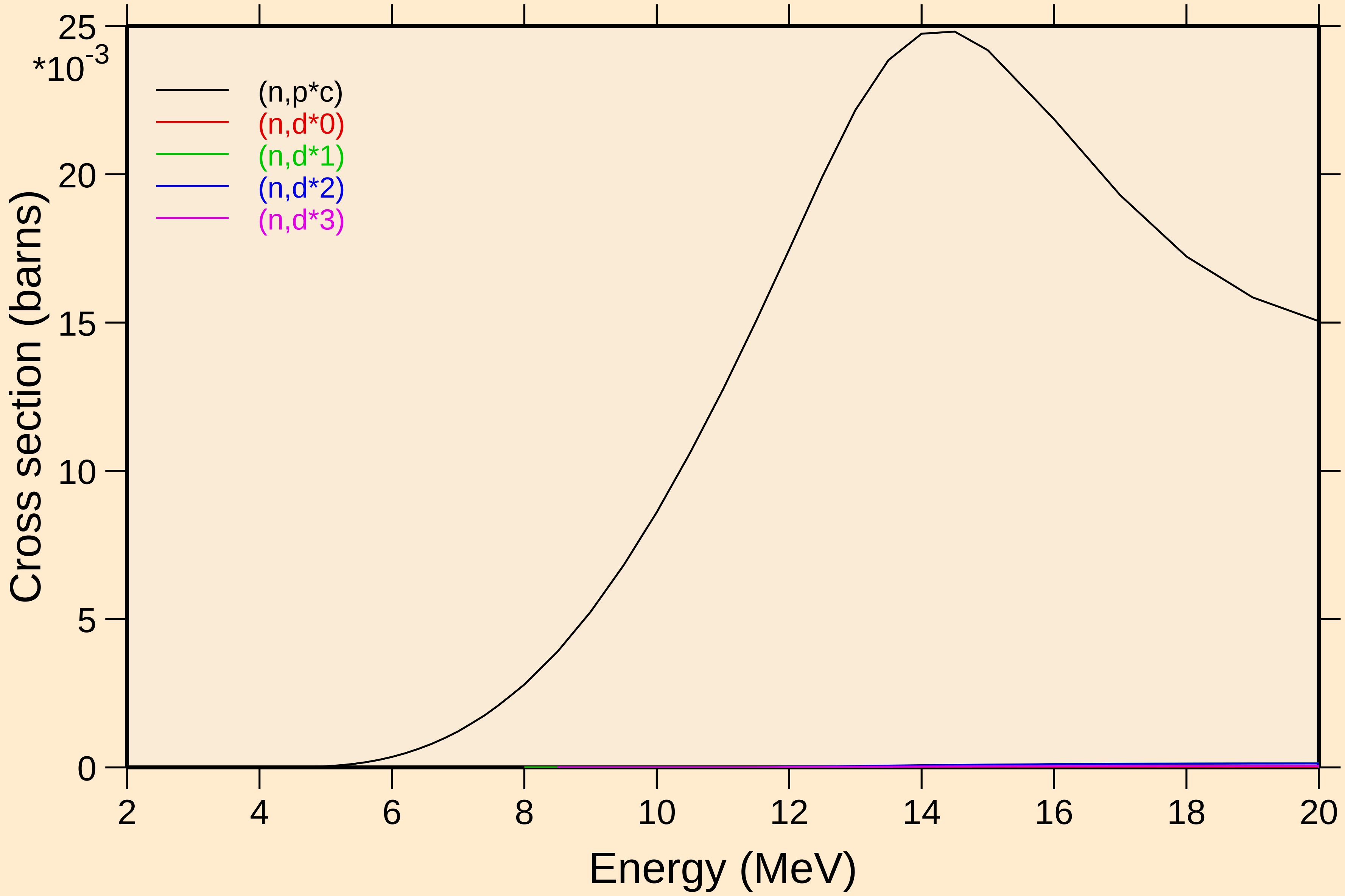
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions

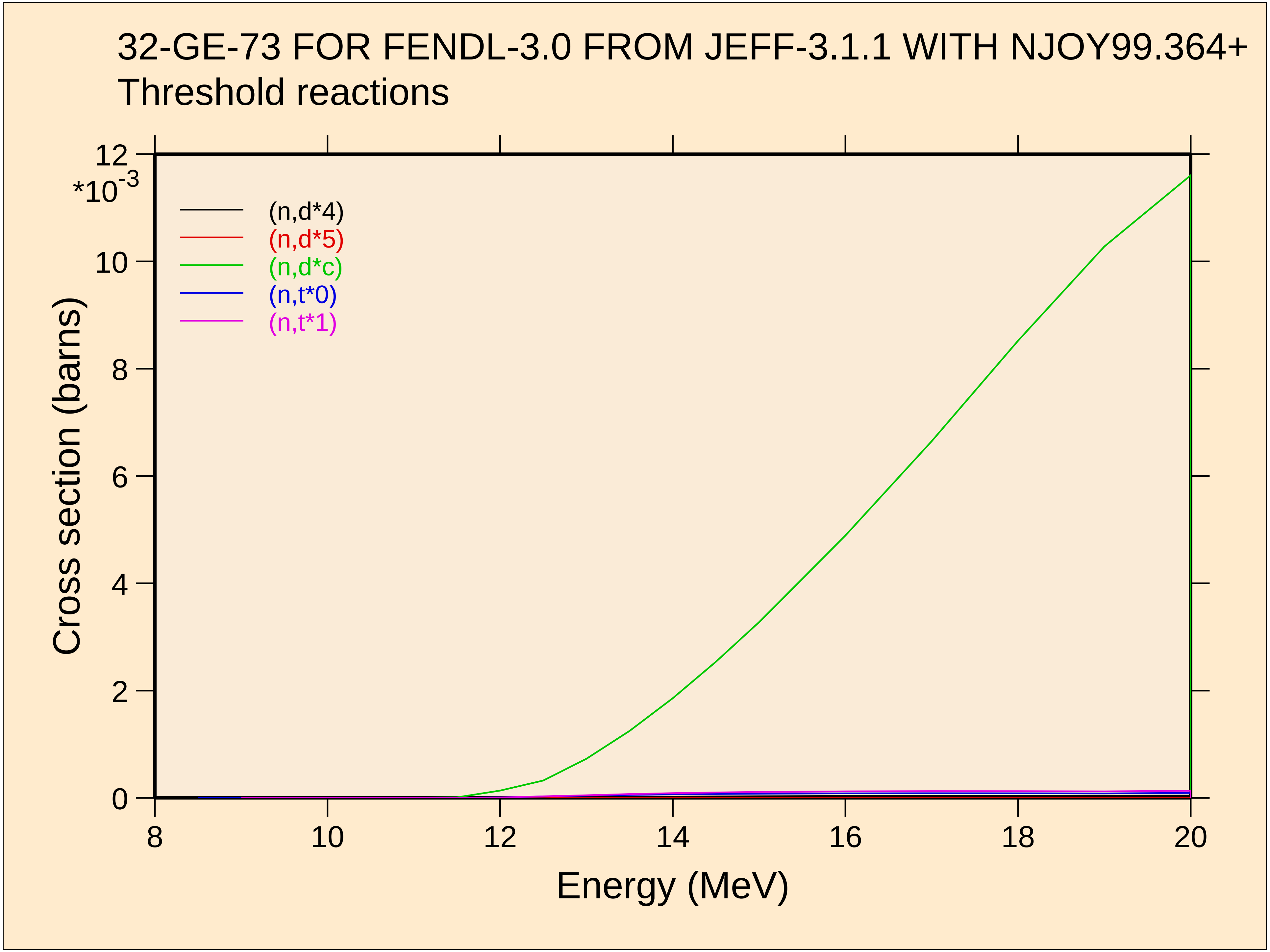


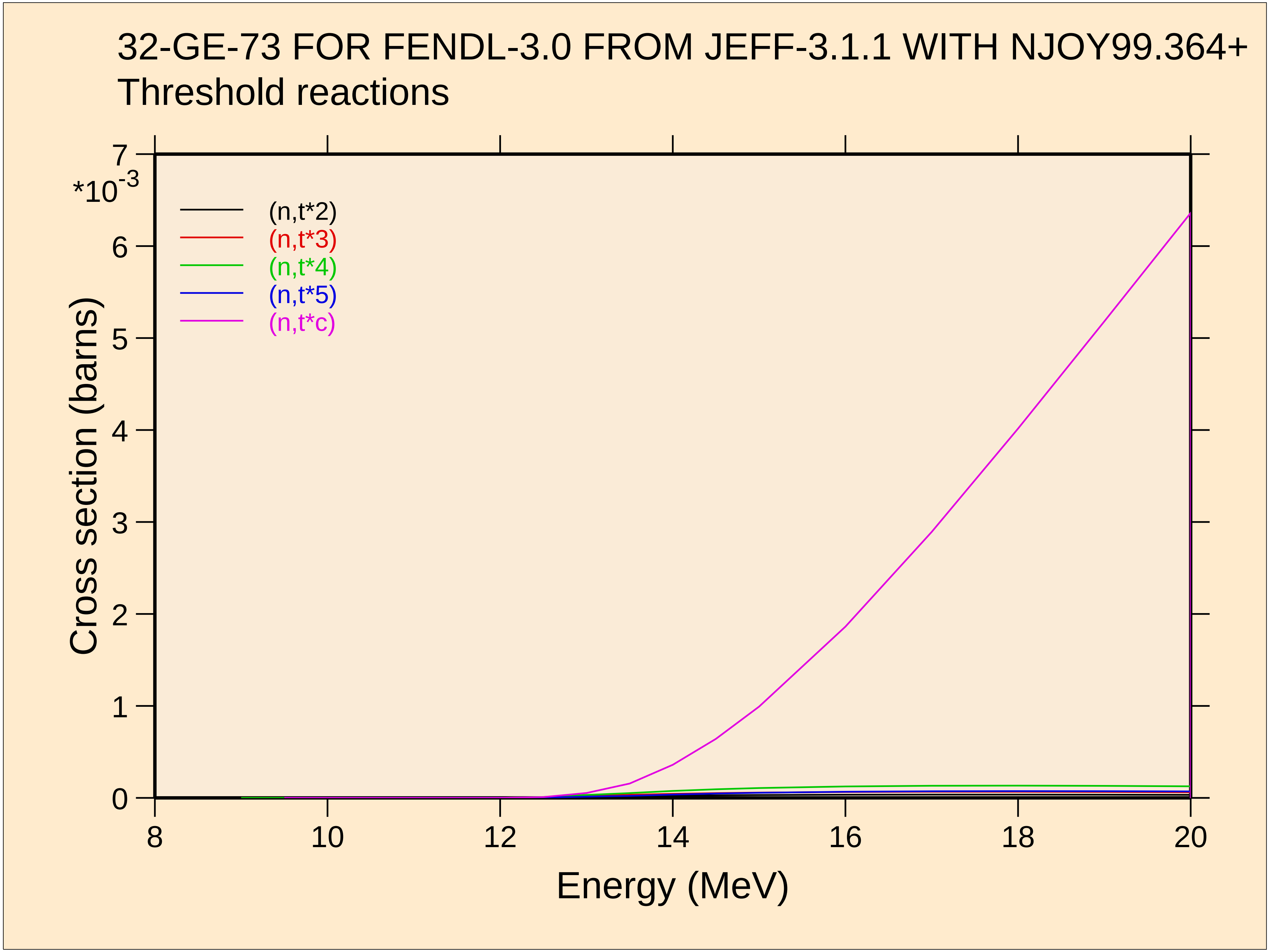


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions

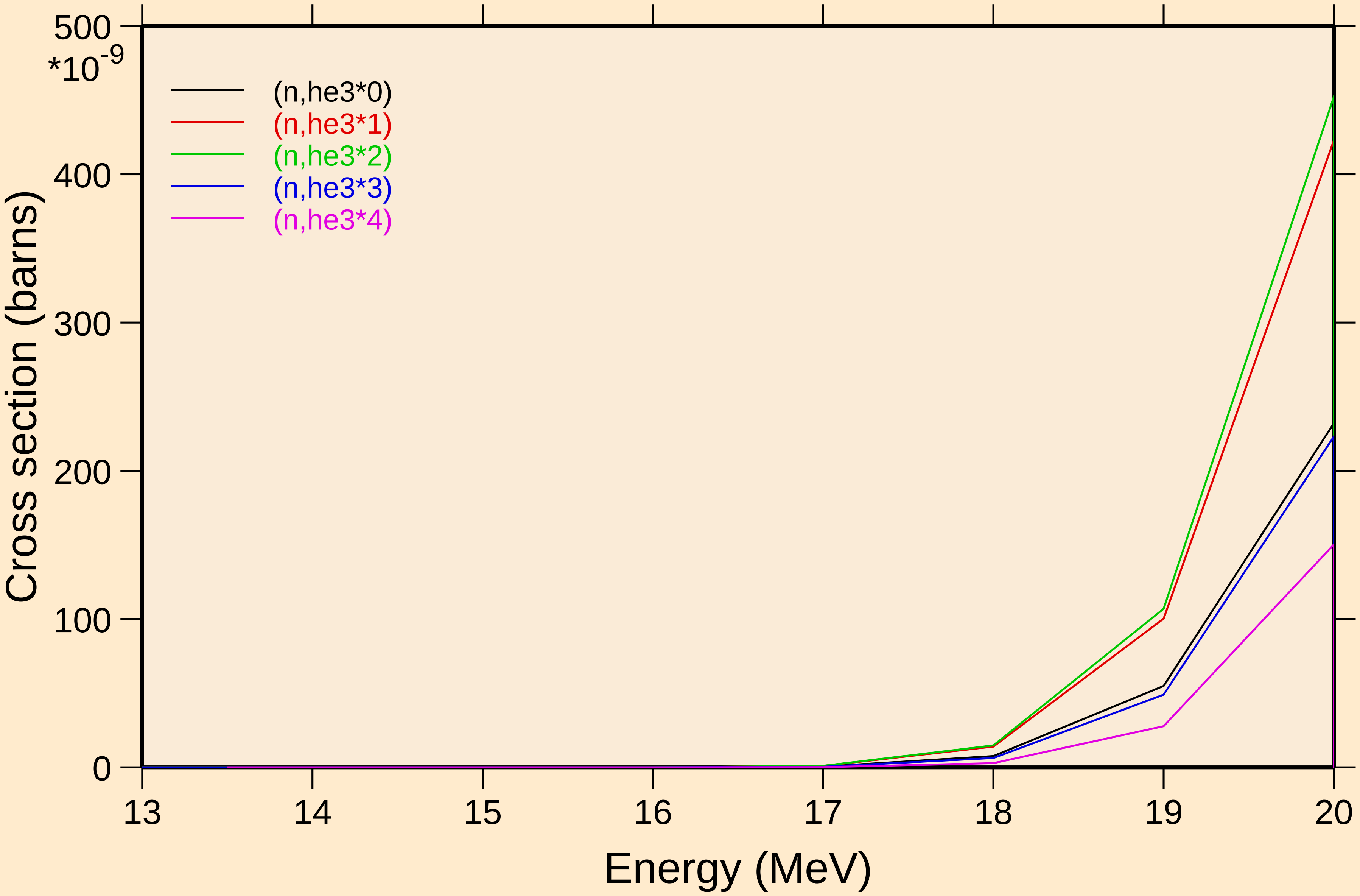
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions



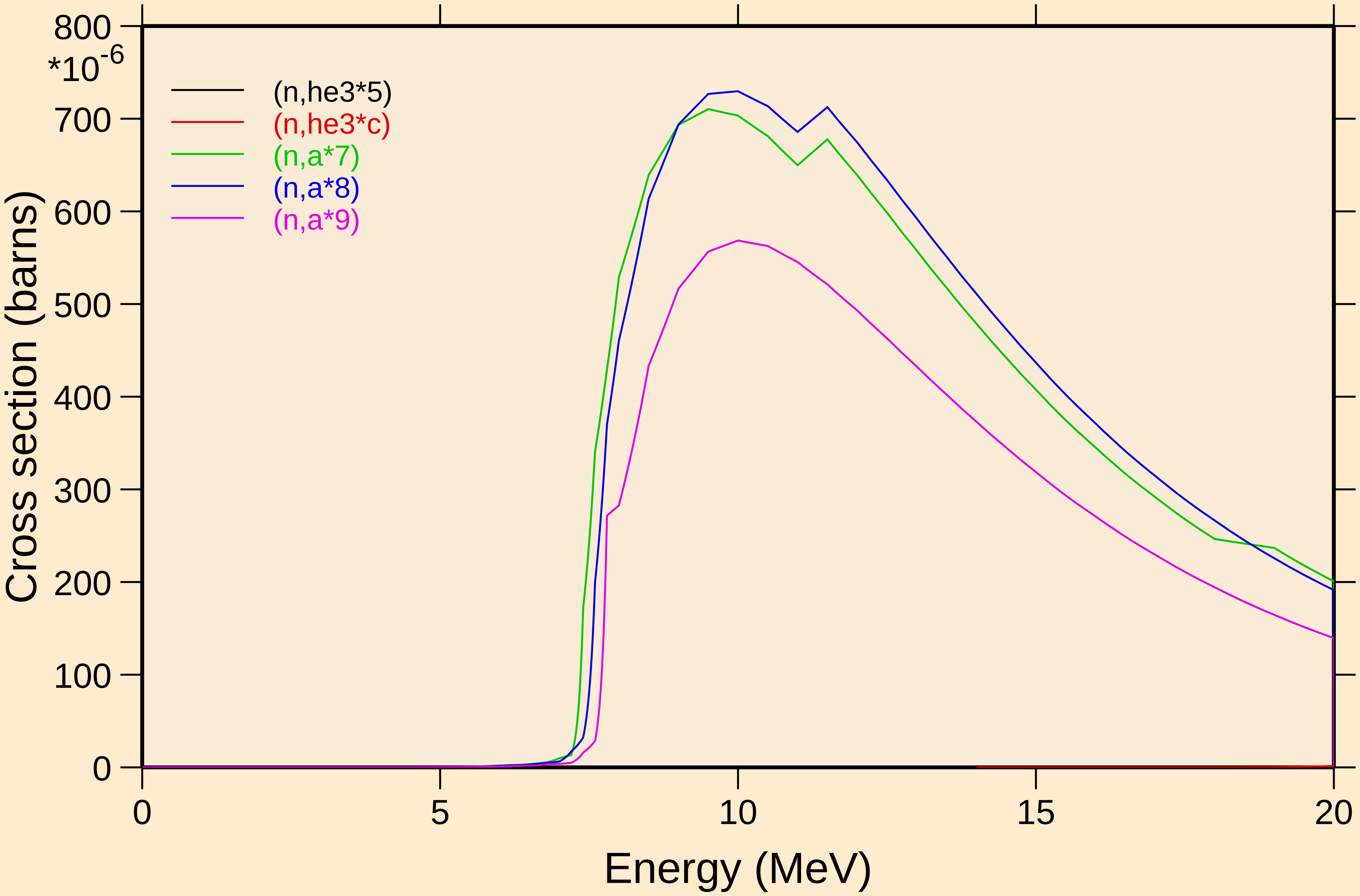

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions
Cross section (barns)
*10^{-3}
12
10
8
6
4
2
0
(n,d*4)
(n,d*5)
(n,d*c)
(n,t*0)
(n,t*1)
8
10
12
14
16
18
20
Energy (MeV)

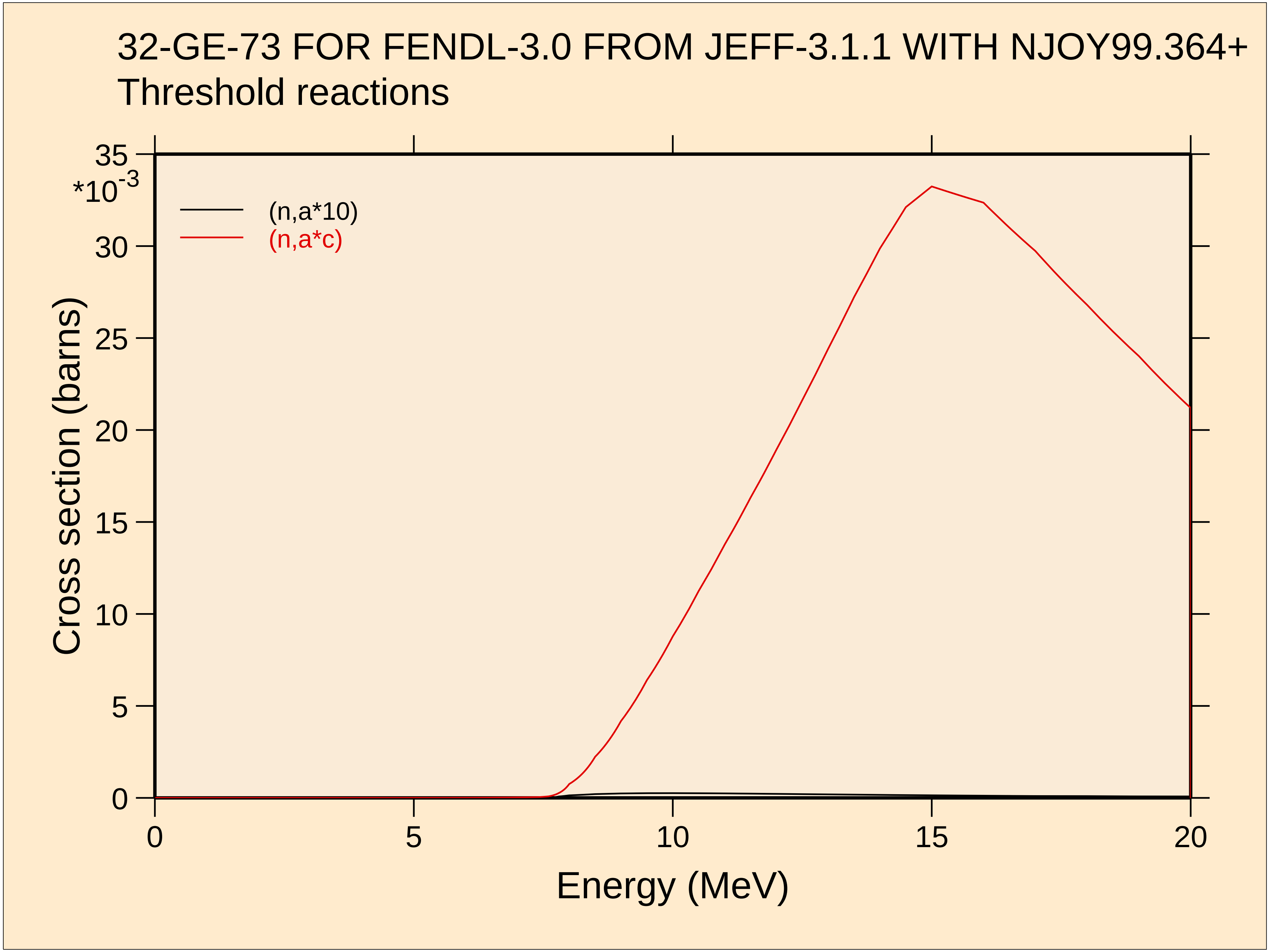

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions
Cross section (barns)
*10-3
0
1
2
3
4
5
6
7
Energy (MeV)
8
10
12
14
16
18
20
(n,t*2)
(n,t*3)
(n,t*4)
(n,t*5)
(n,t*c)

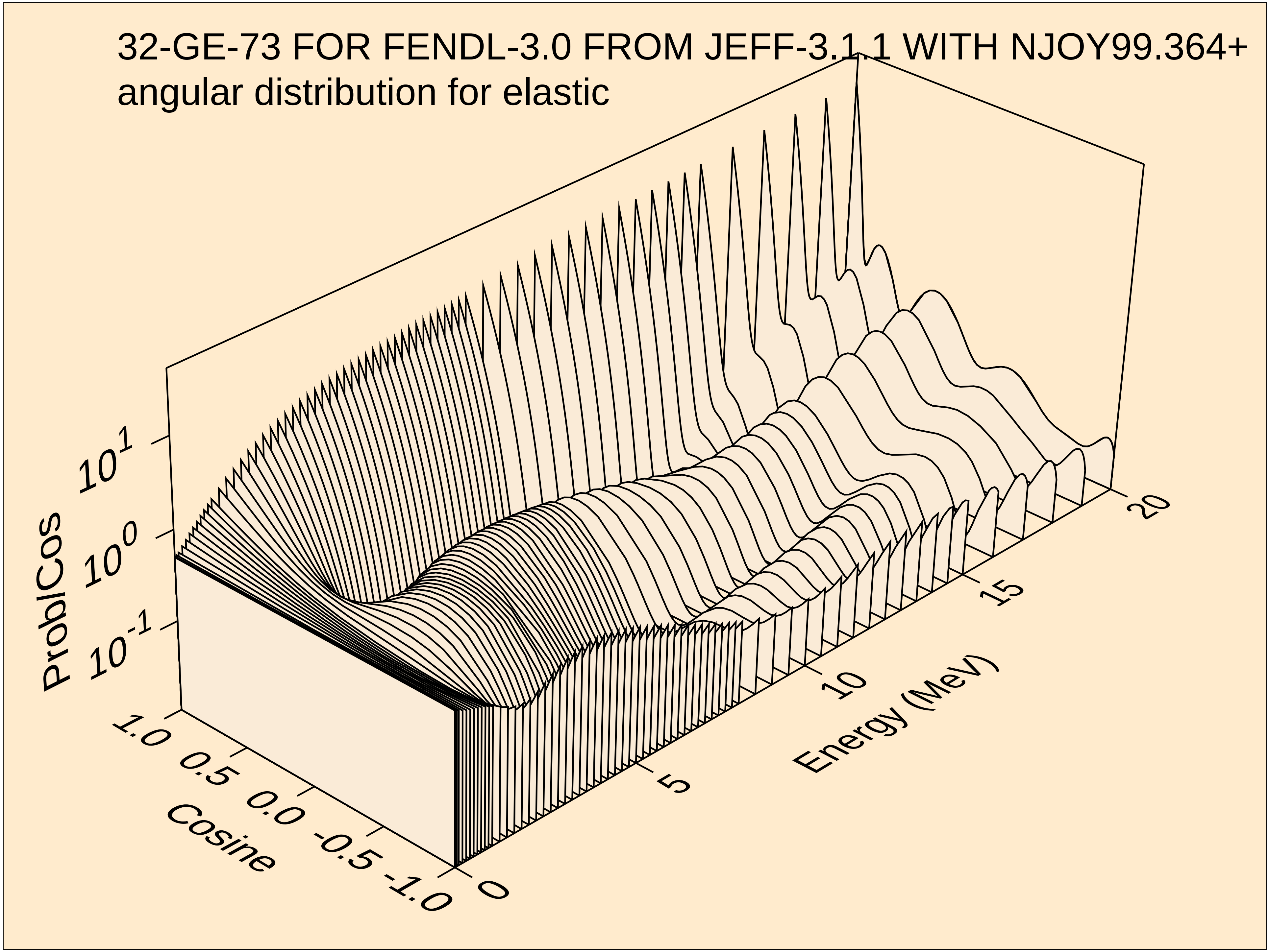
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions

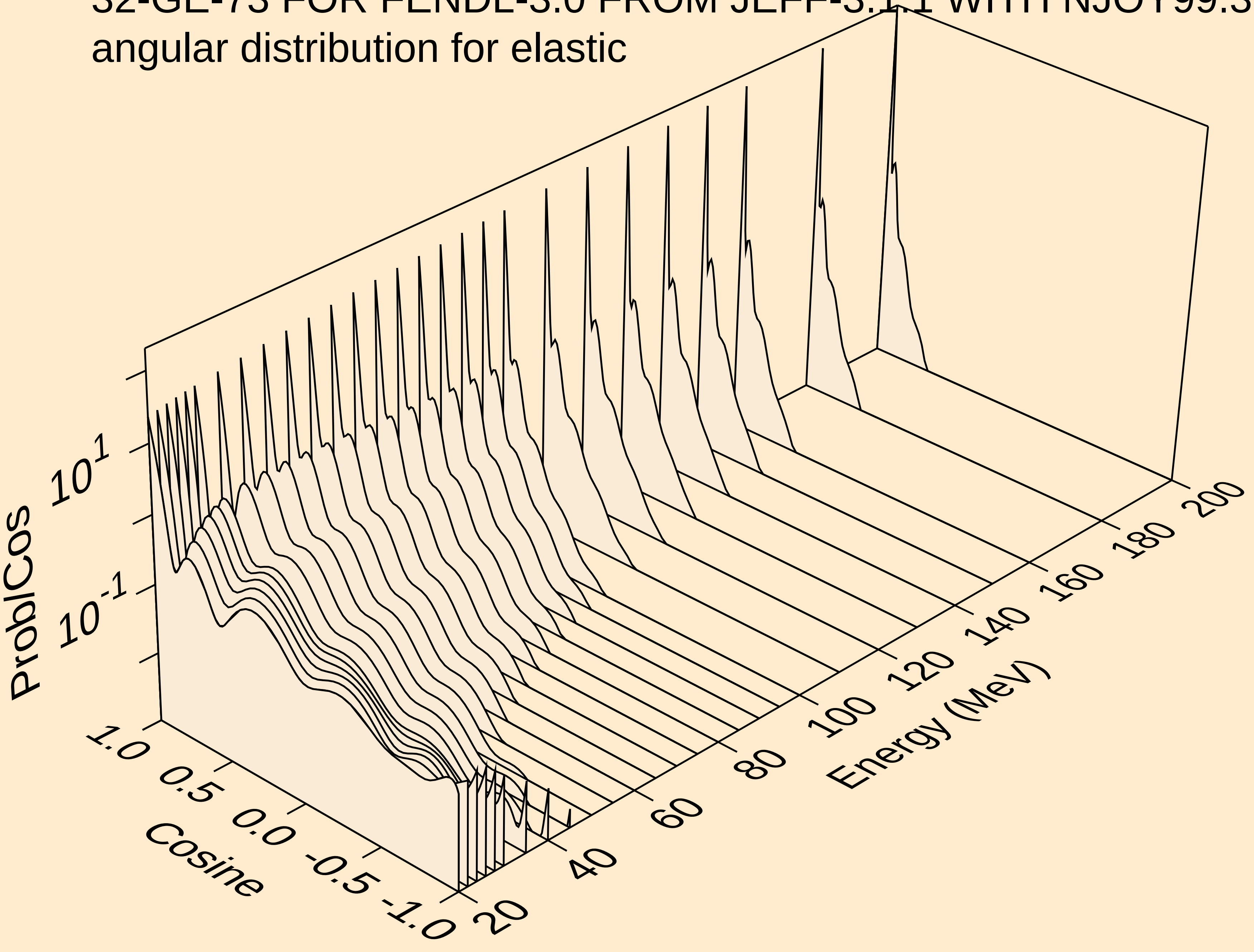


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions

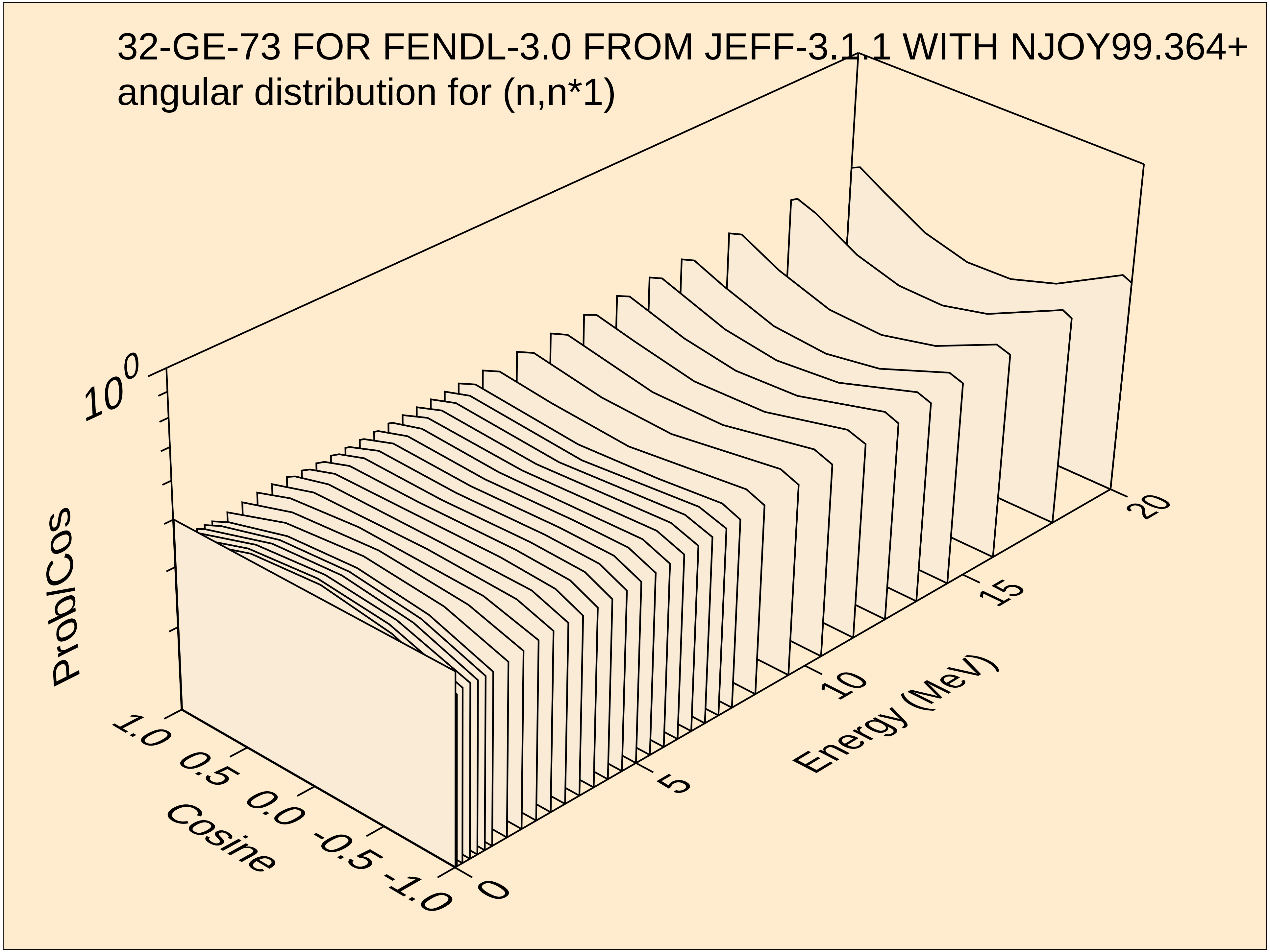



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Threshold reactions
(n,a*10)
(n,a*c)
Cross section (barns)
*10-3
35
30
25
20
15
10
5
0
Energy (MeV)
0
5
10
15
20

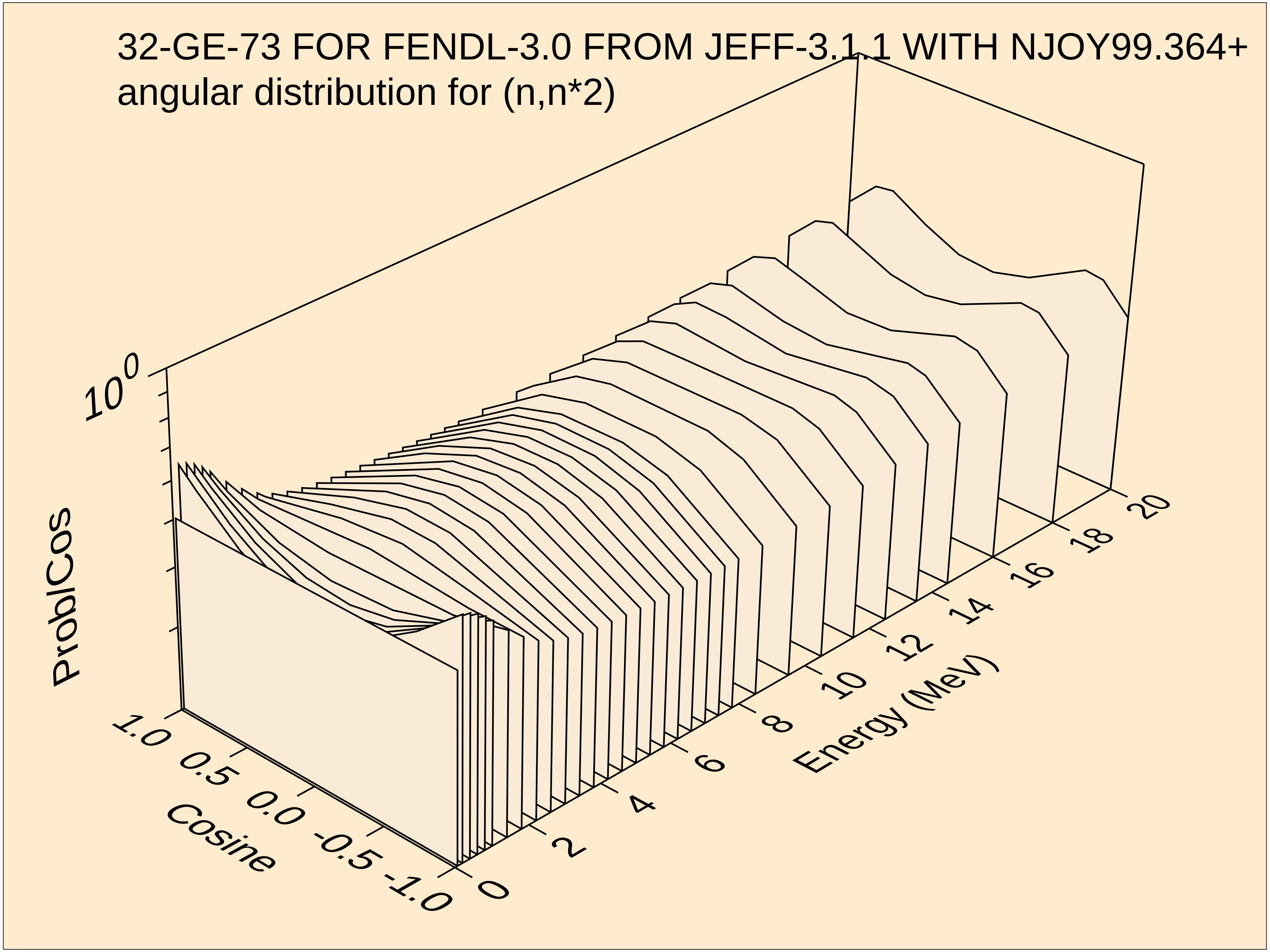

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for elastic
ProbICos
10^{1}
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

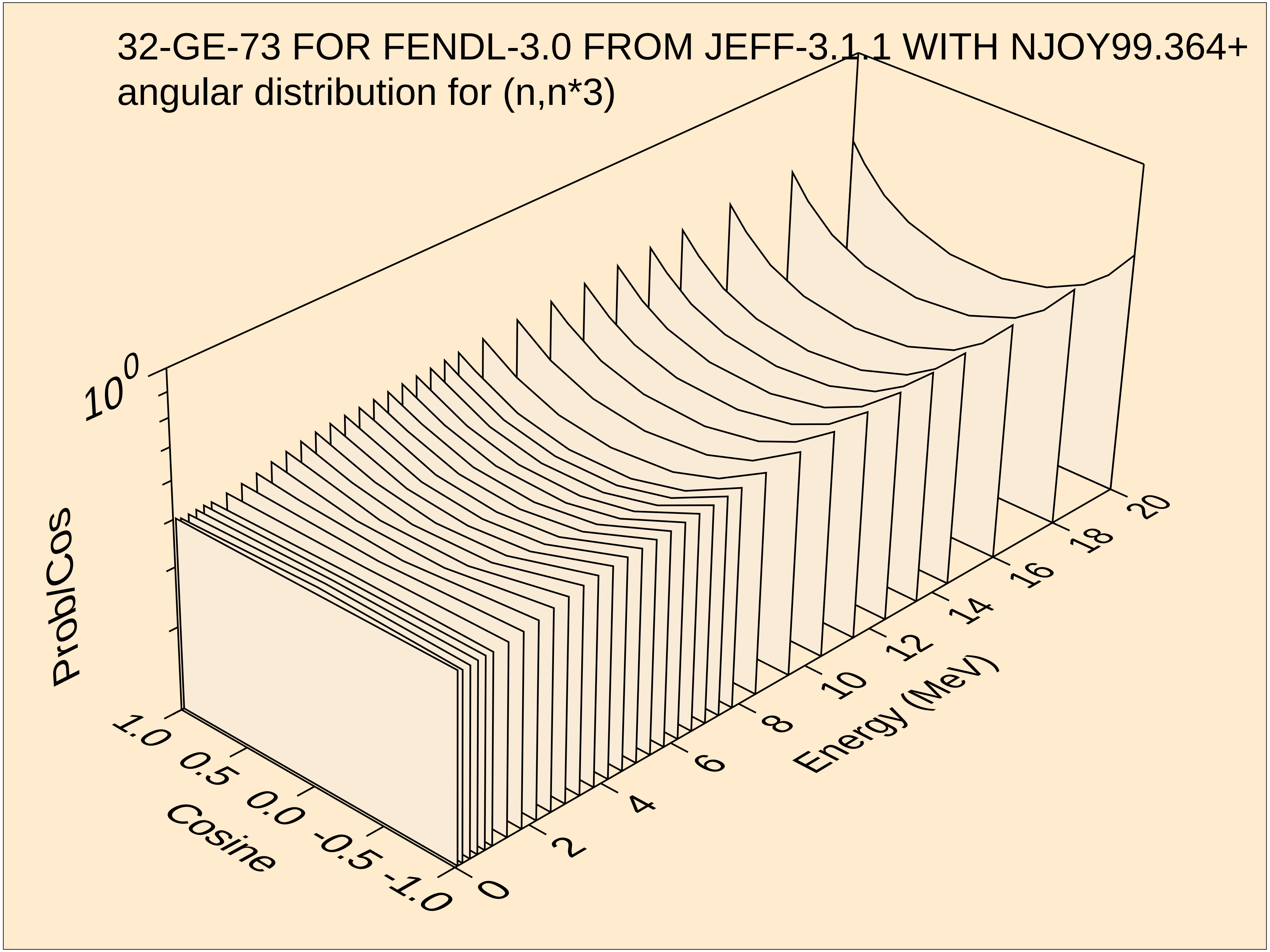


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for elastic
ProblCos
10^1
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

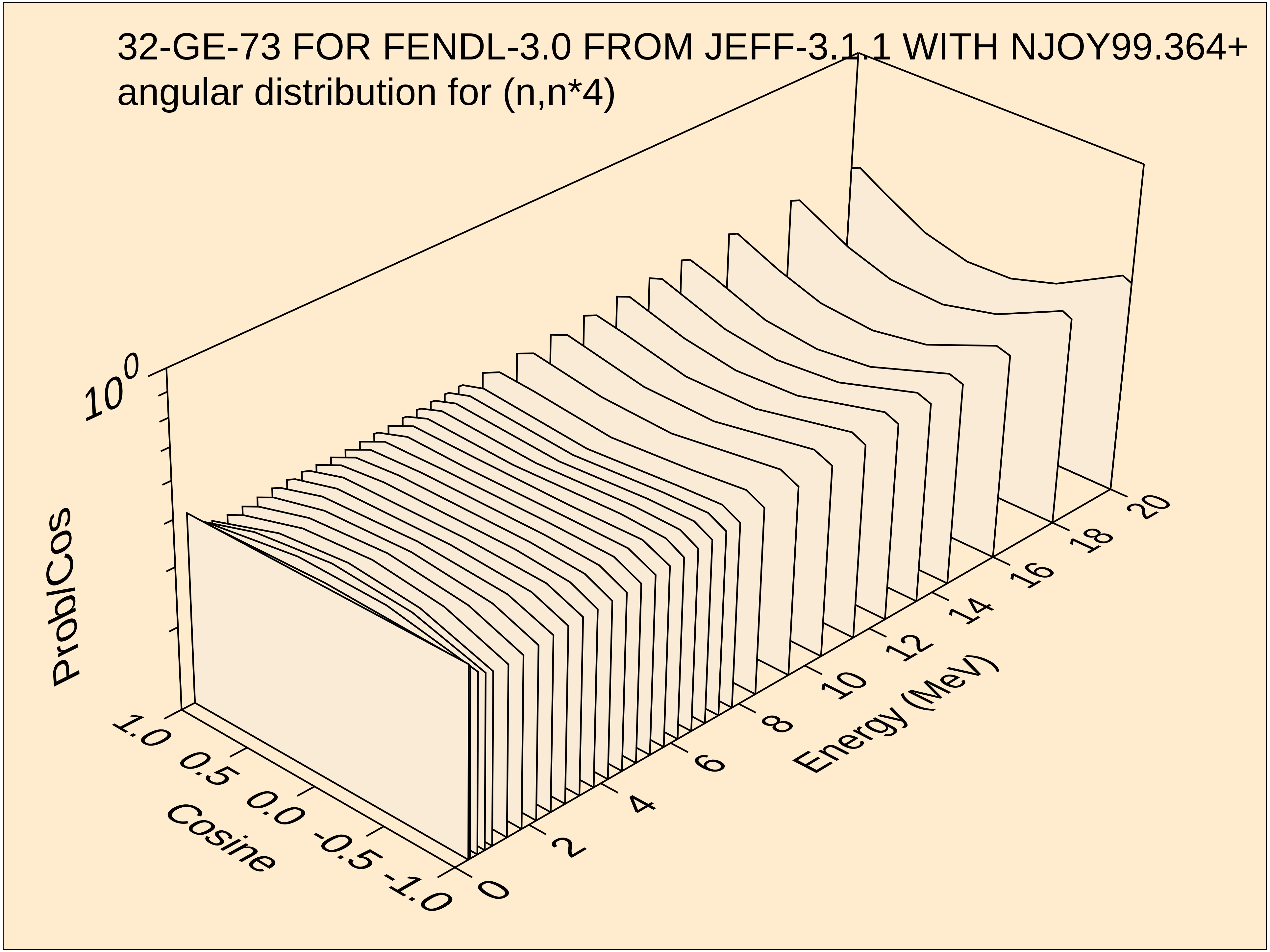


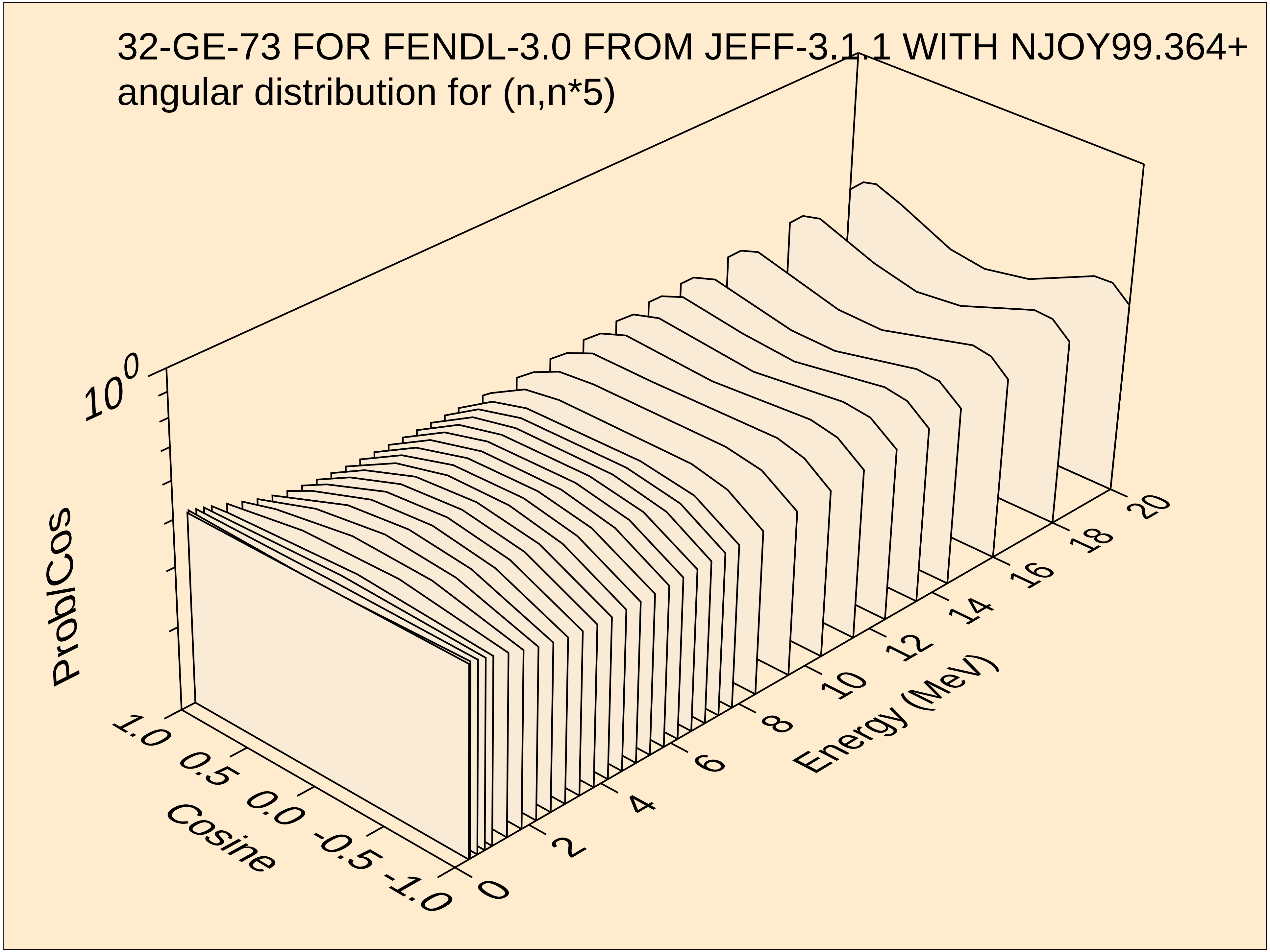
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*1)

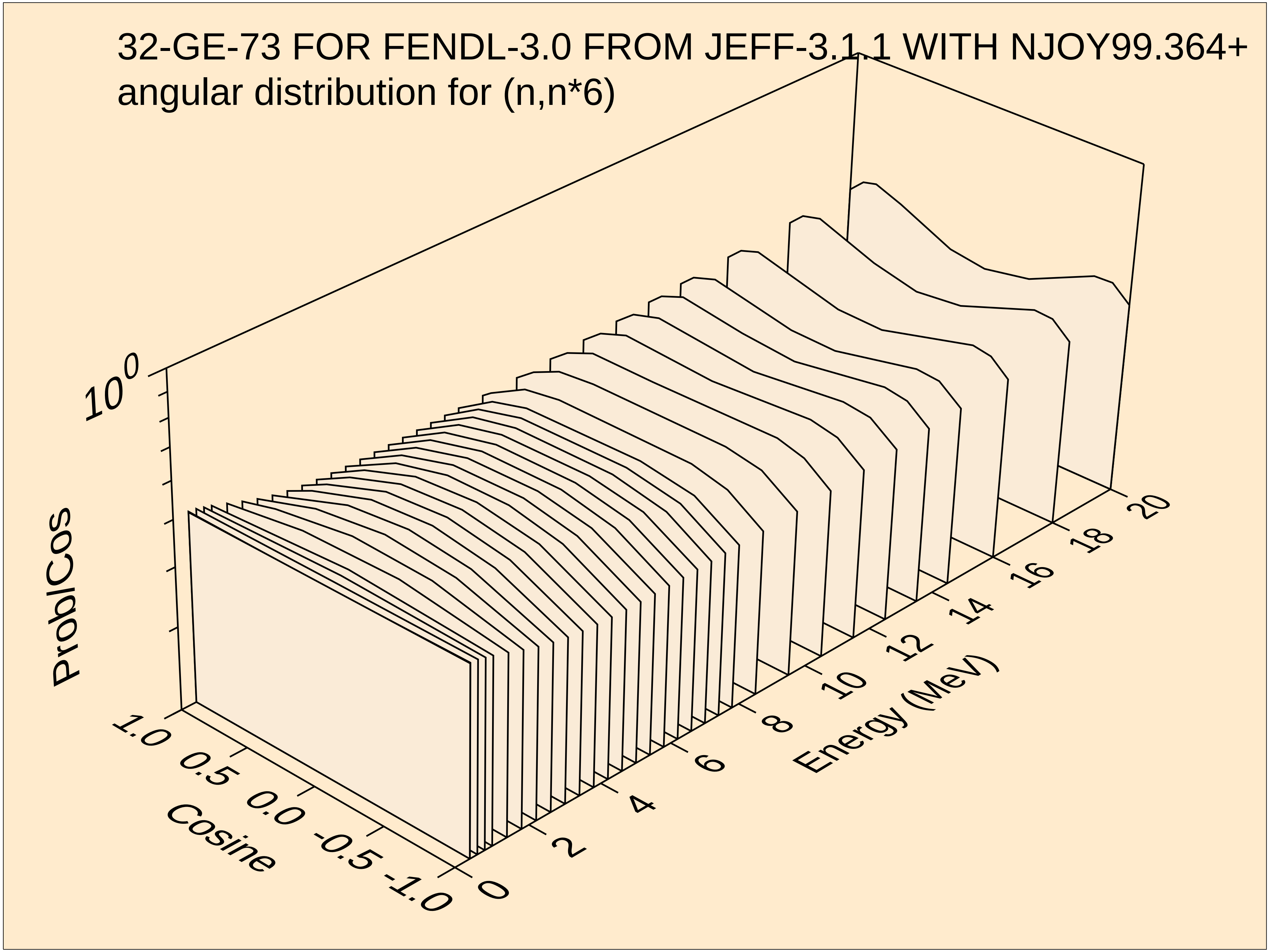

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*2)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*3)

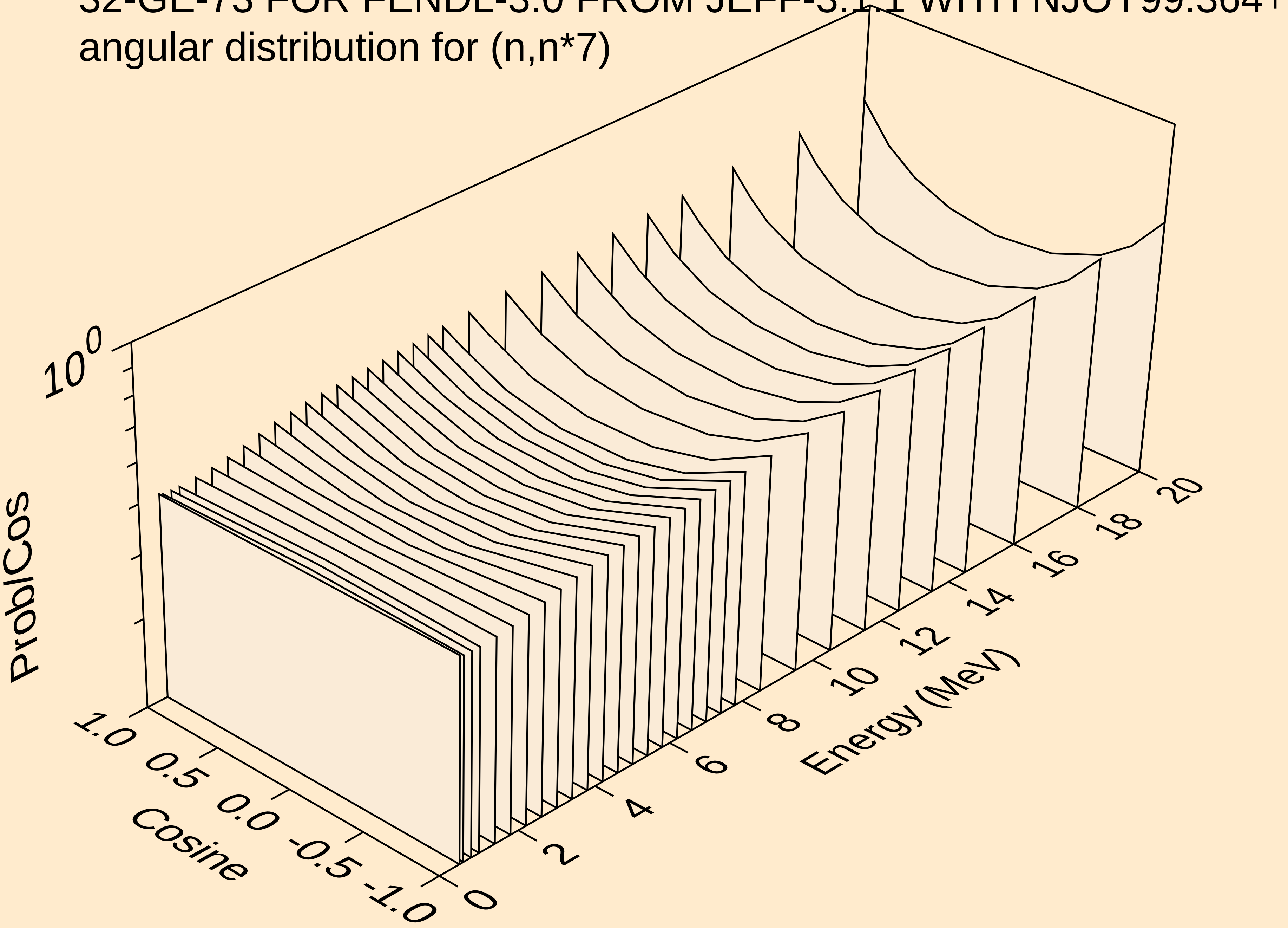

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*4)

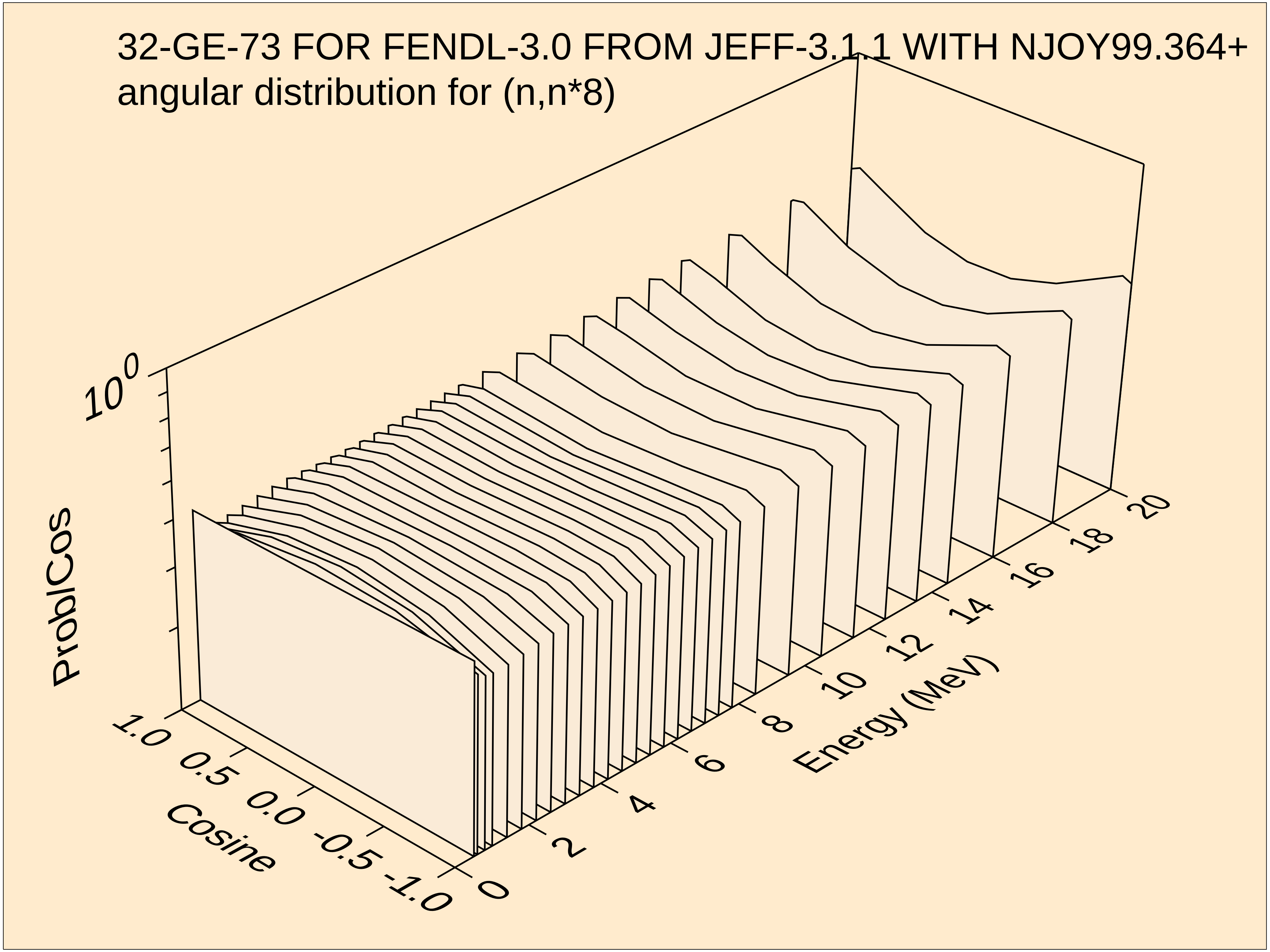

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*5)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

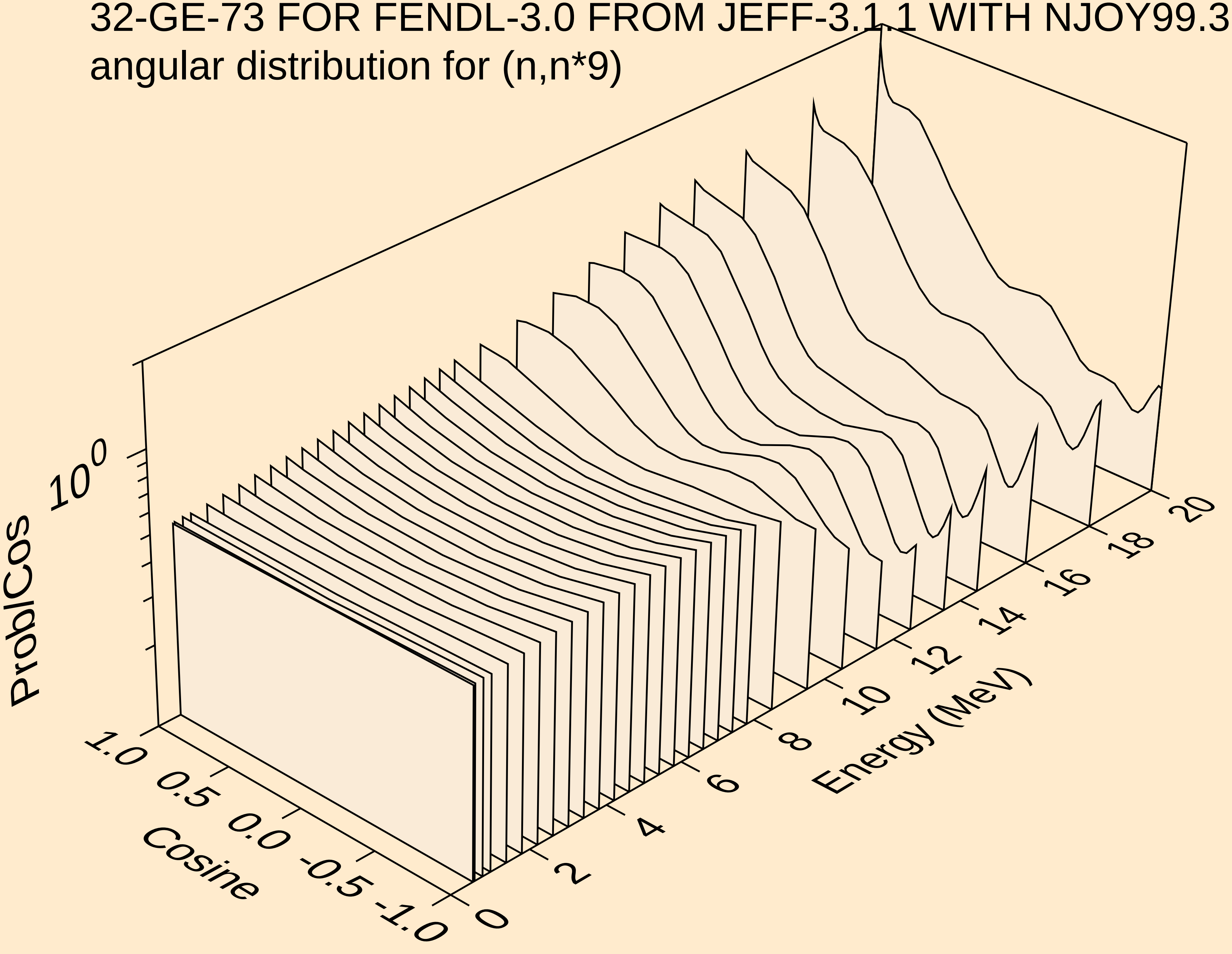


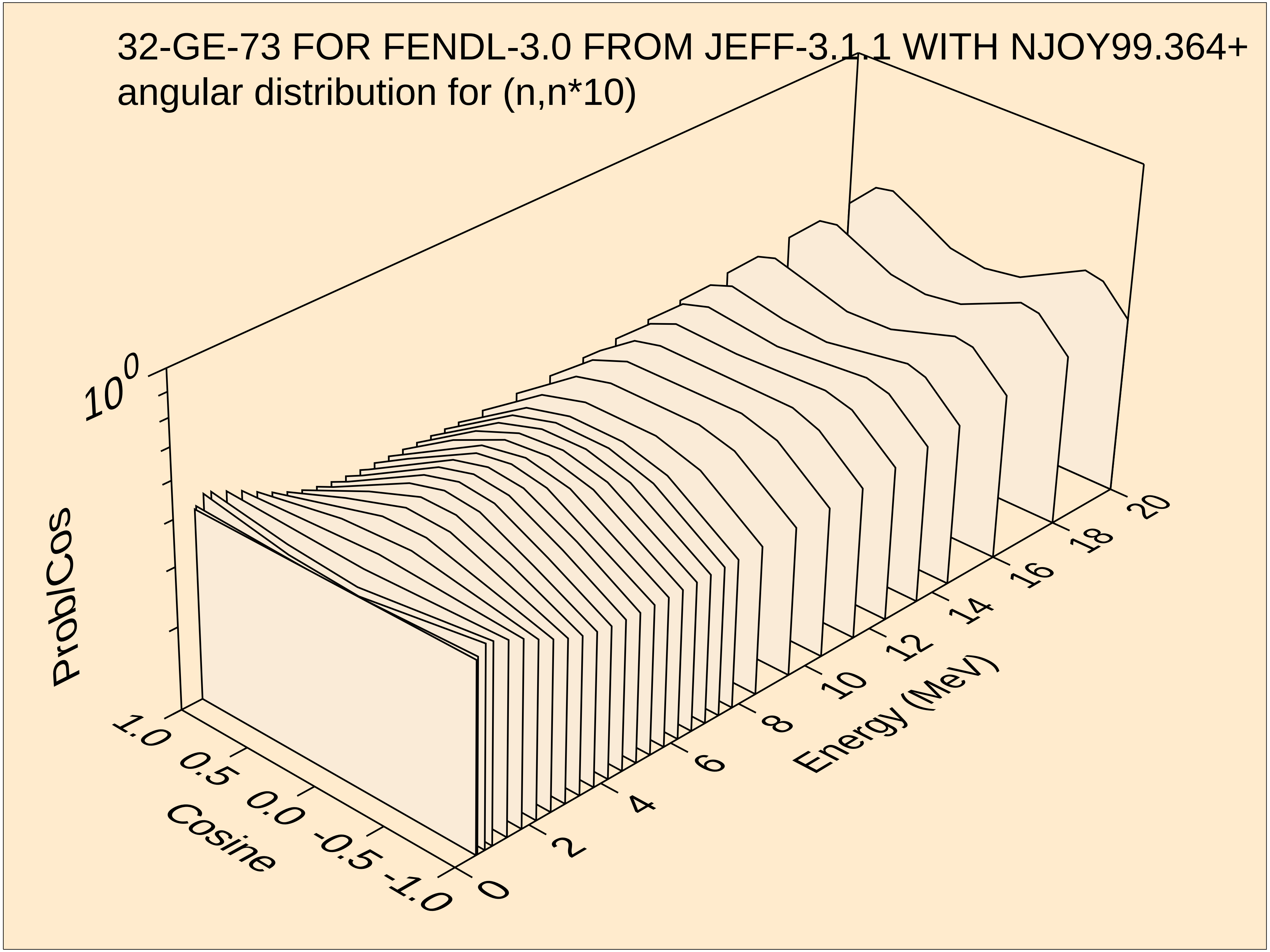
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*6)

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*7)



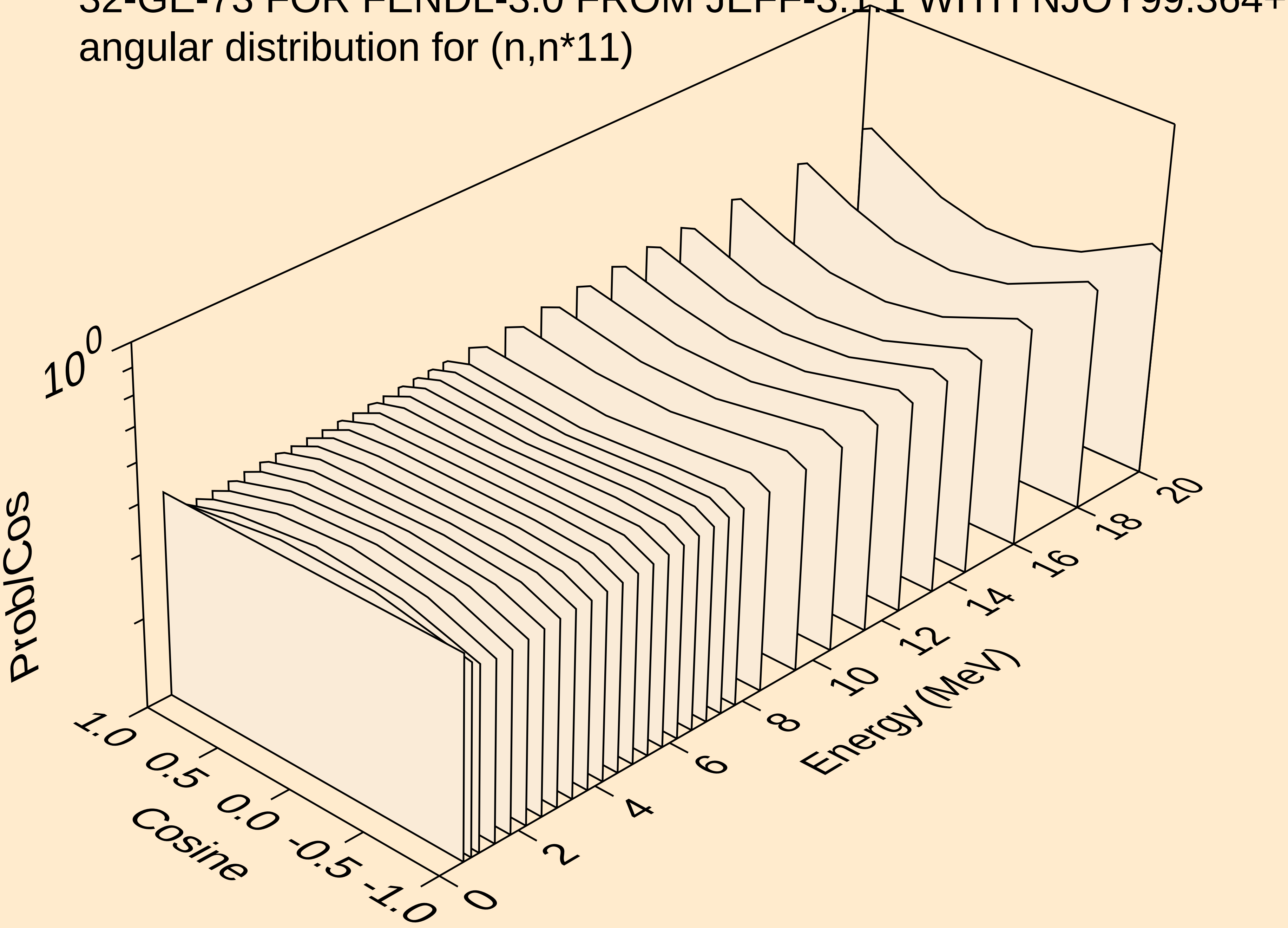

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*8)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

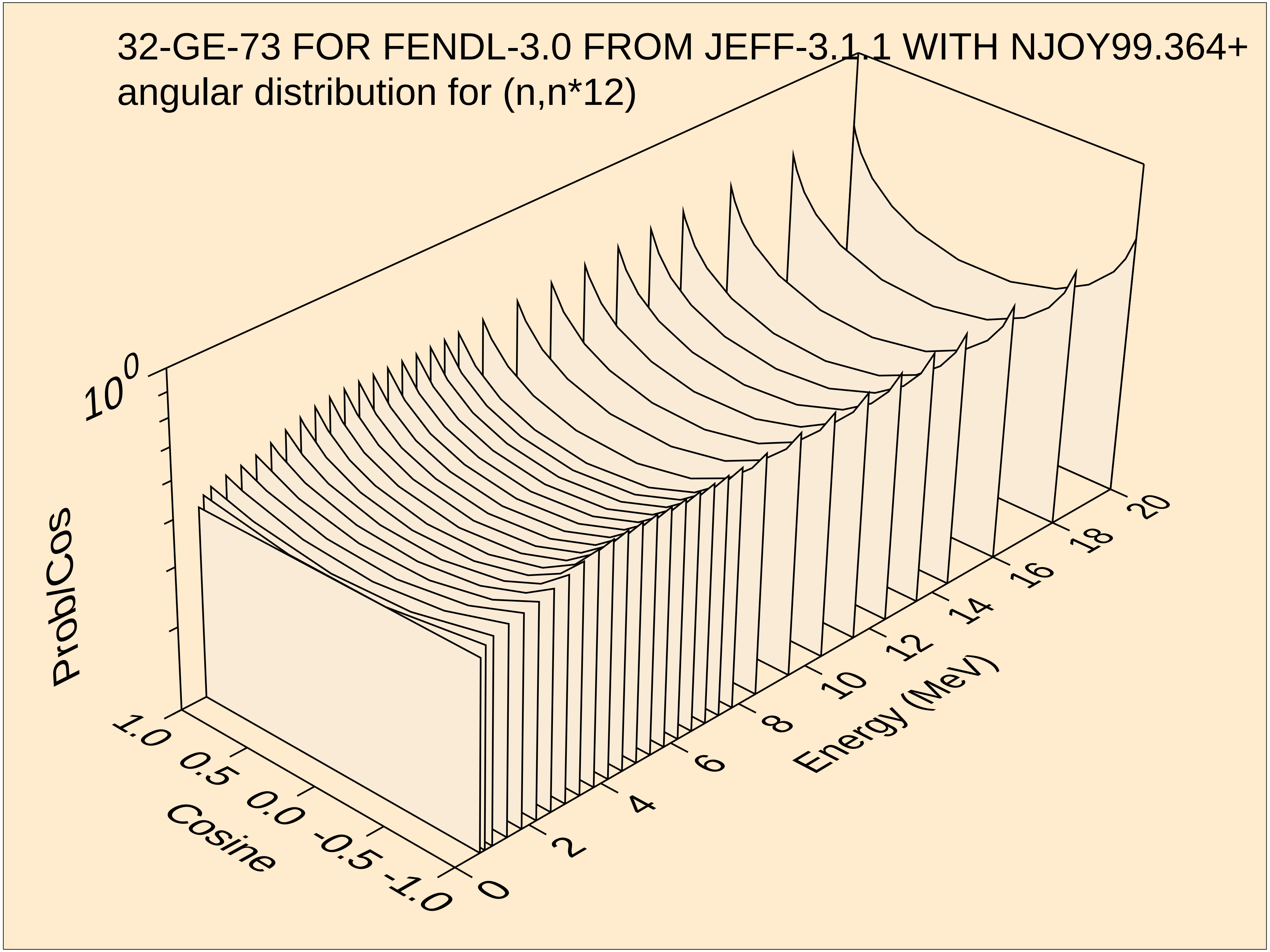

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*9)
ProbICos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

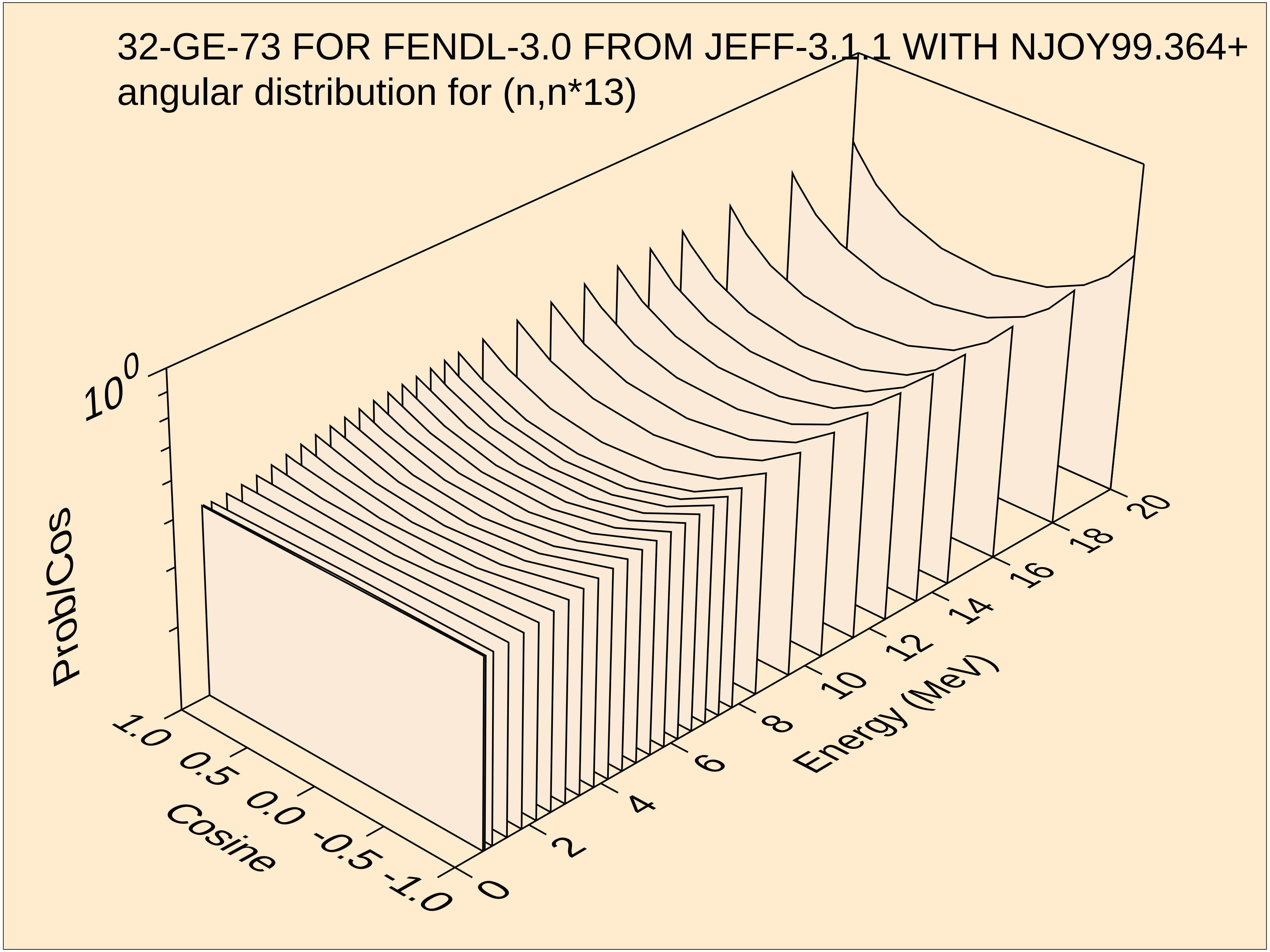

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*10)

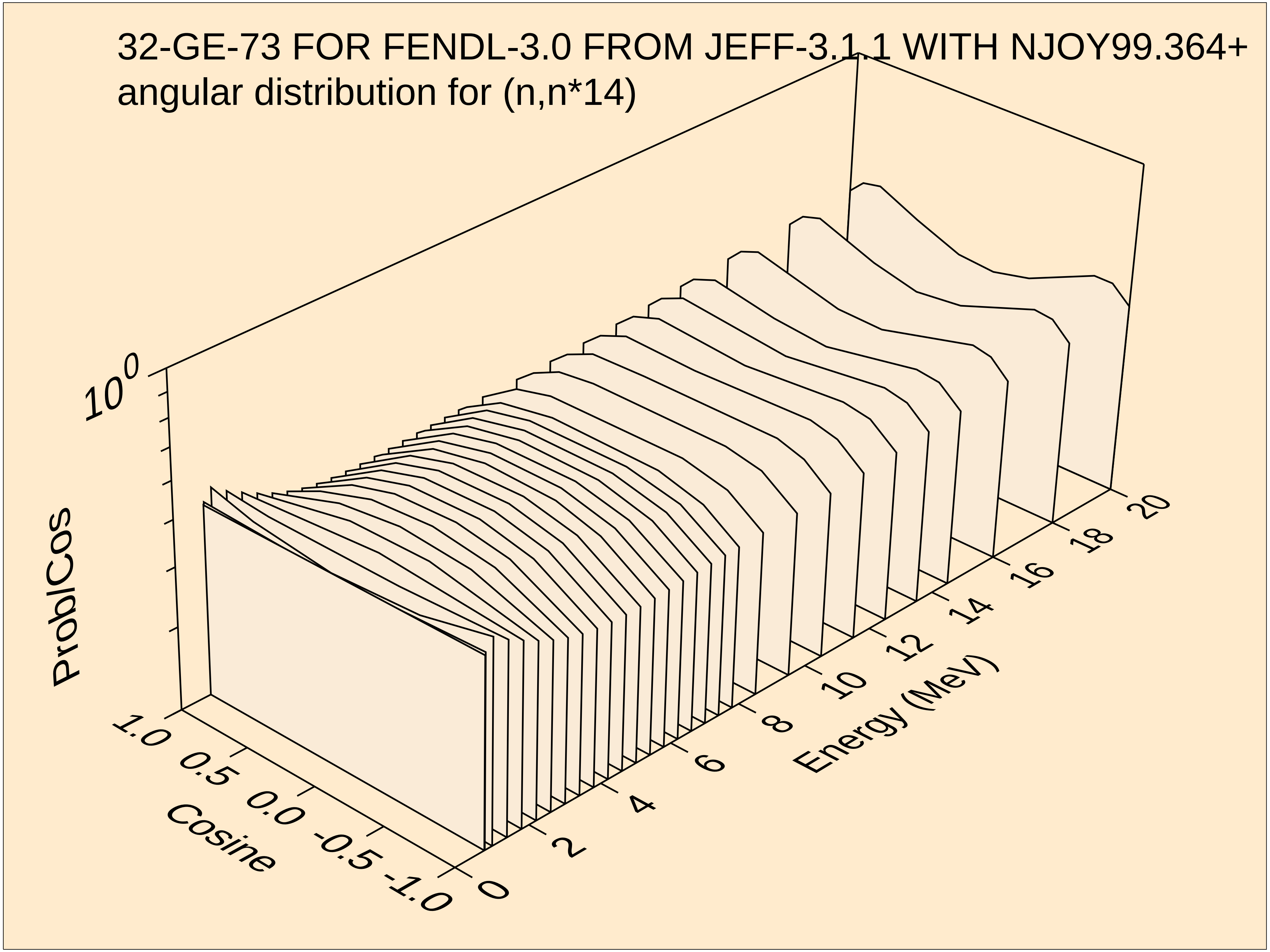
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+

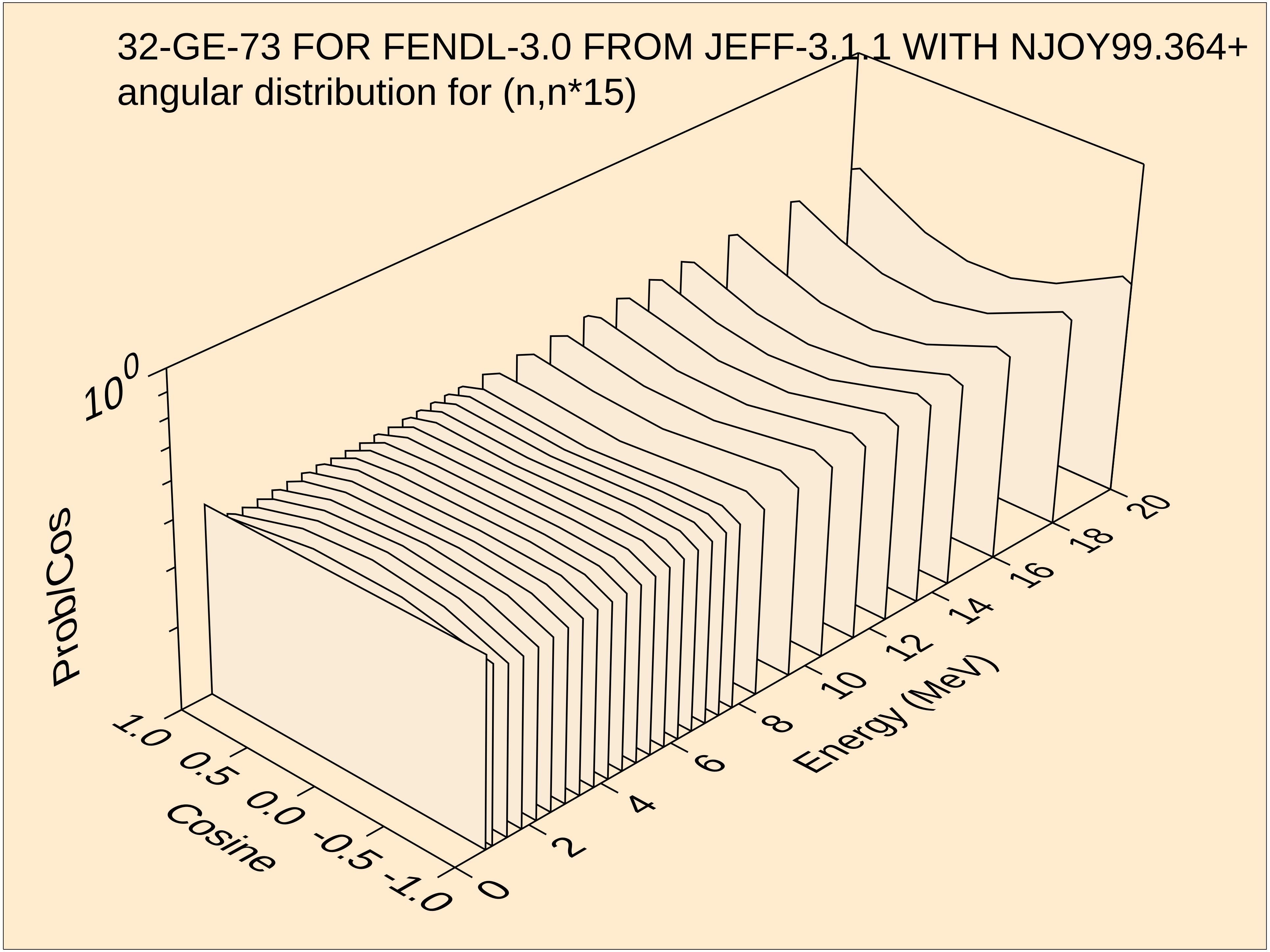
angular distribution for (n,n*11)

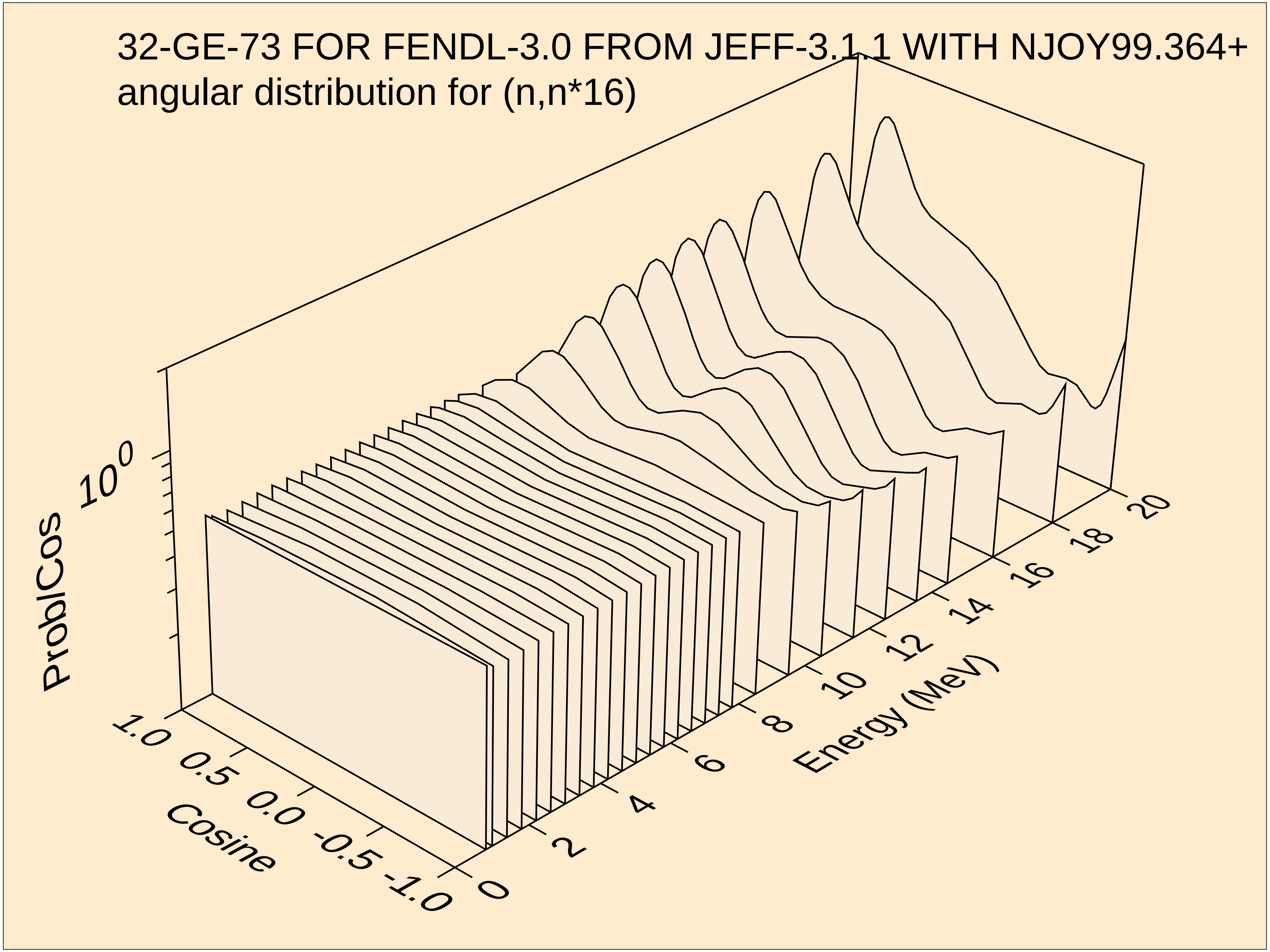


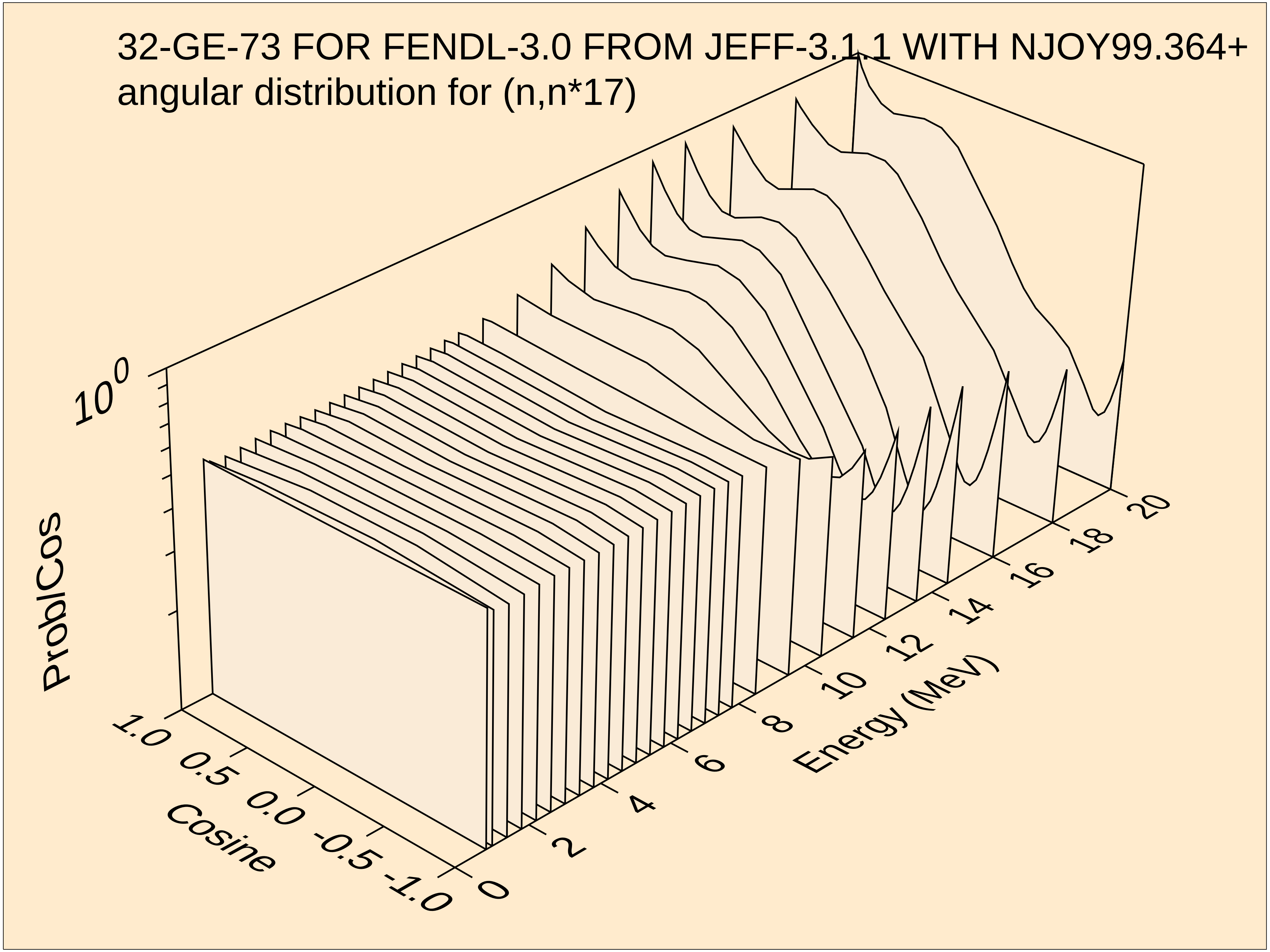

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*12)
10^0
ProbICos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

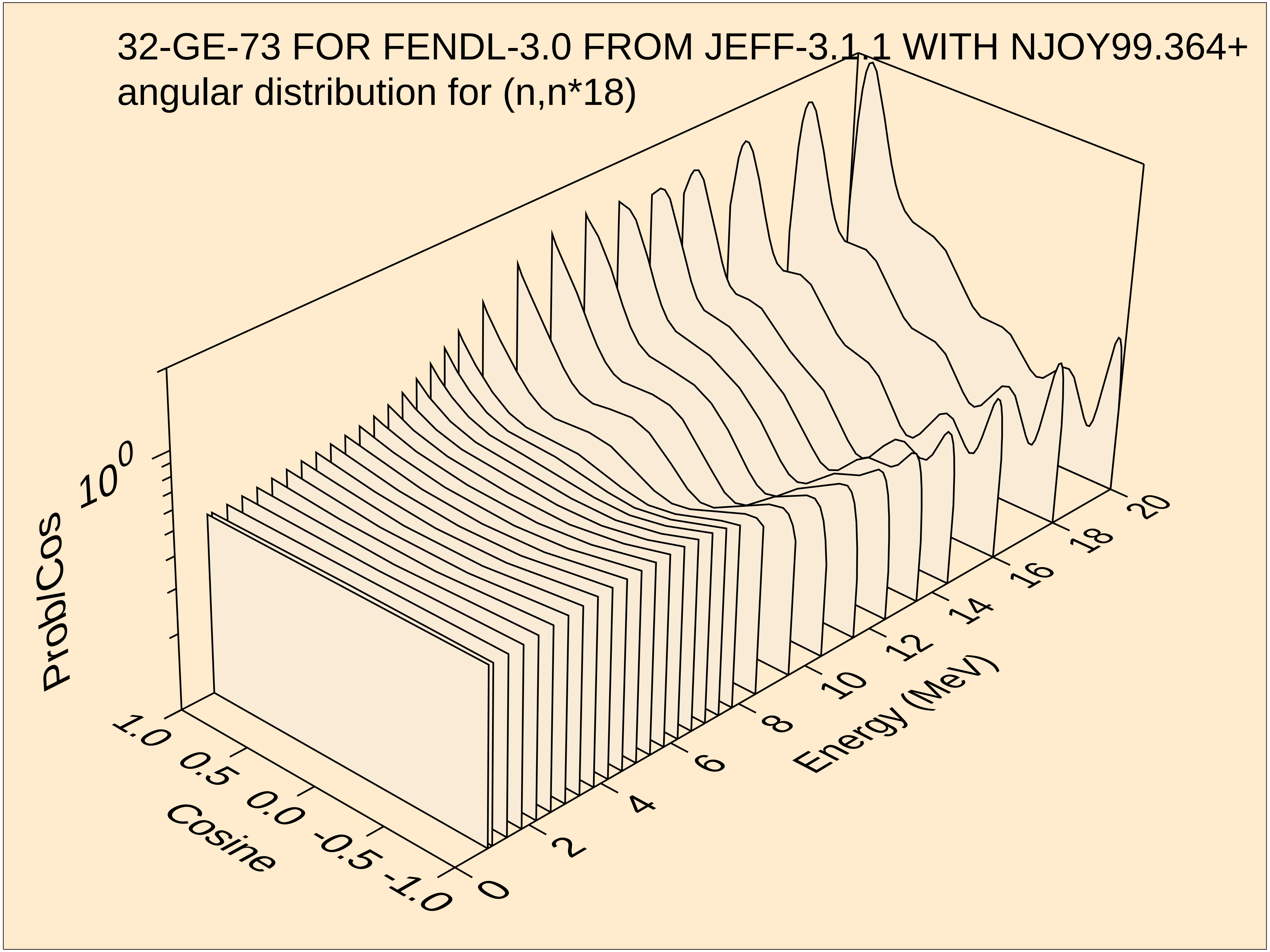

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*13)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

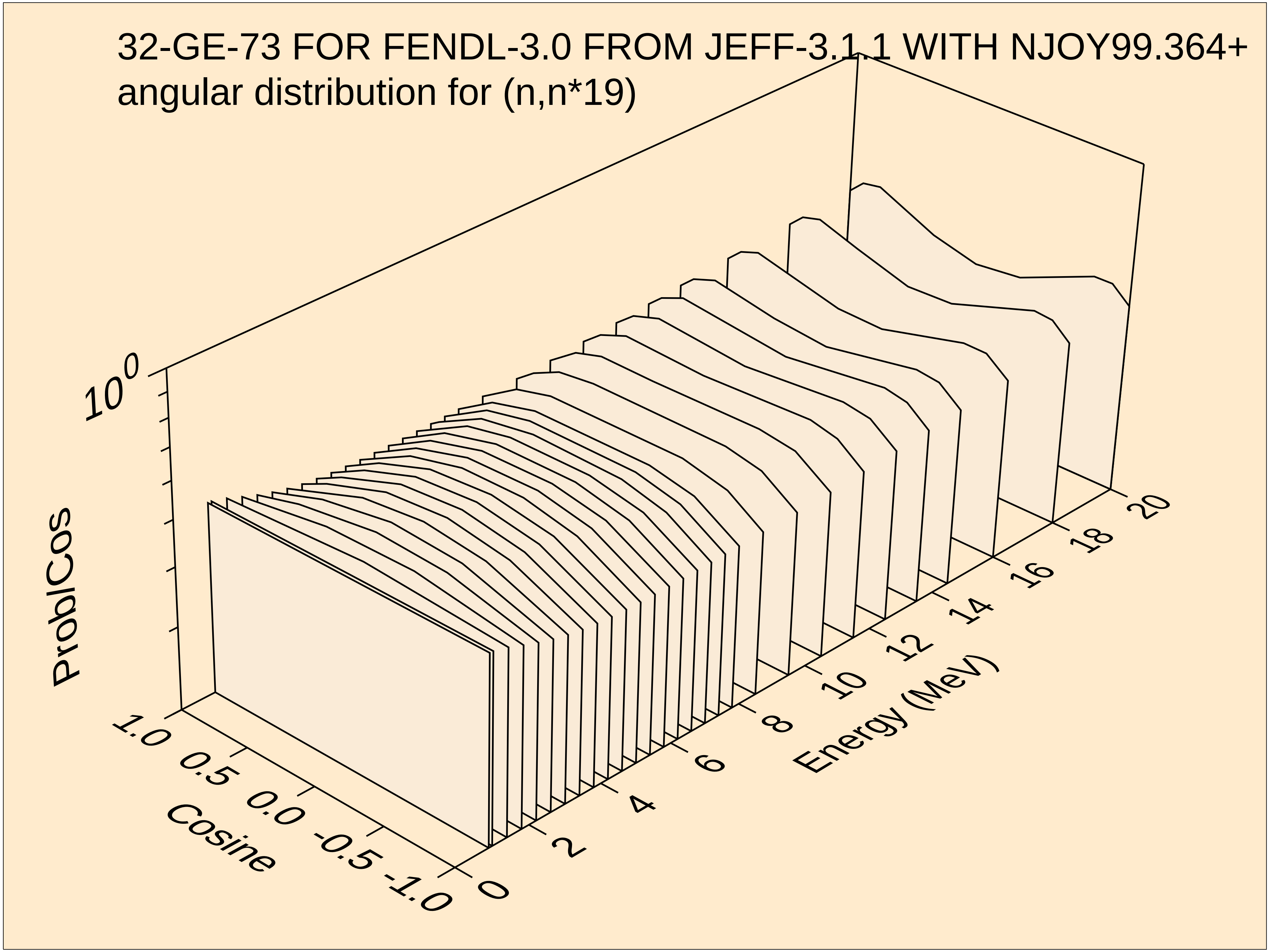

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*14)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

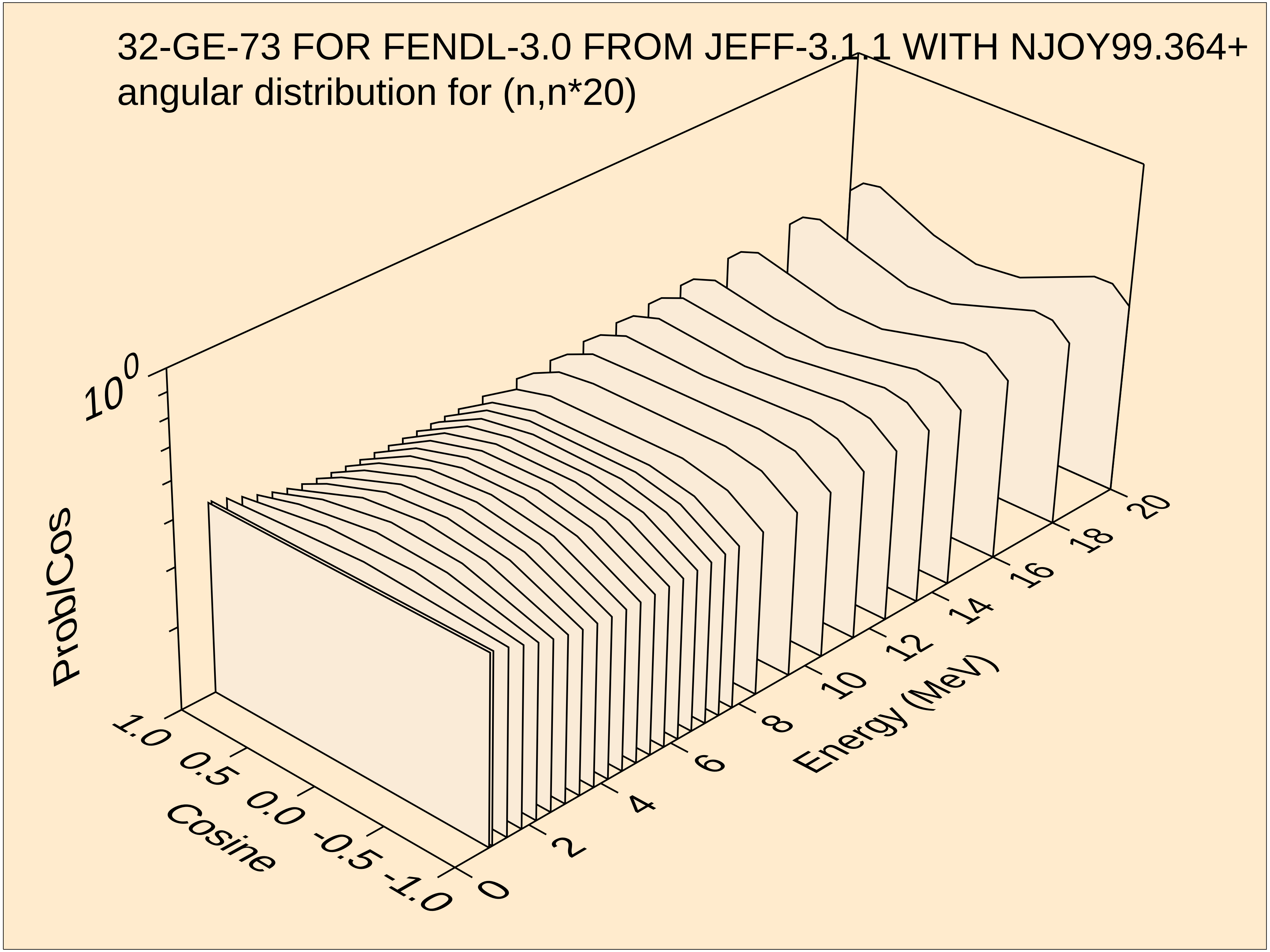

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*15)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*16)
ProblCos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

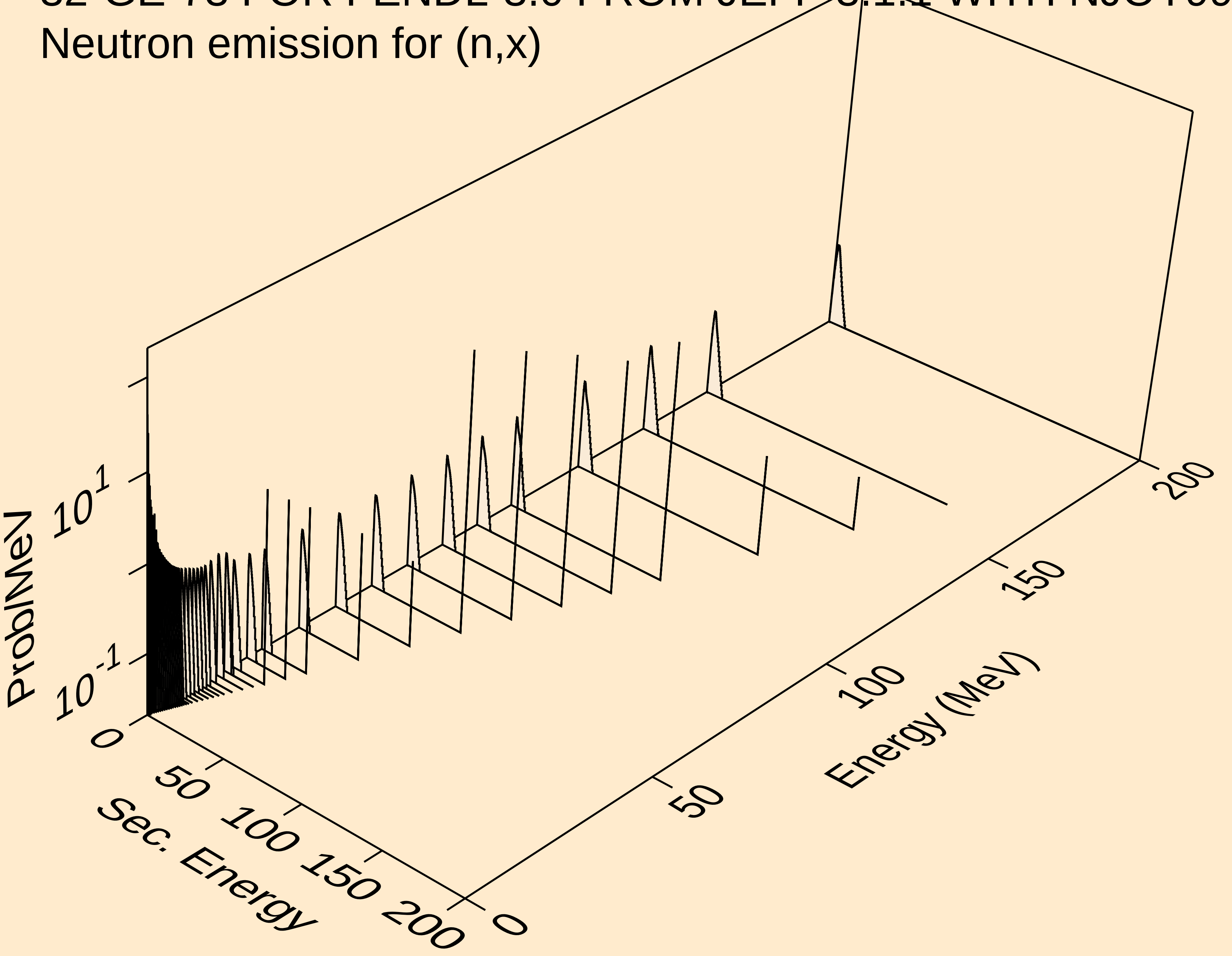

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*17)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

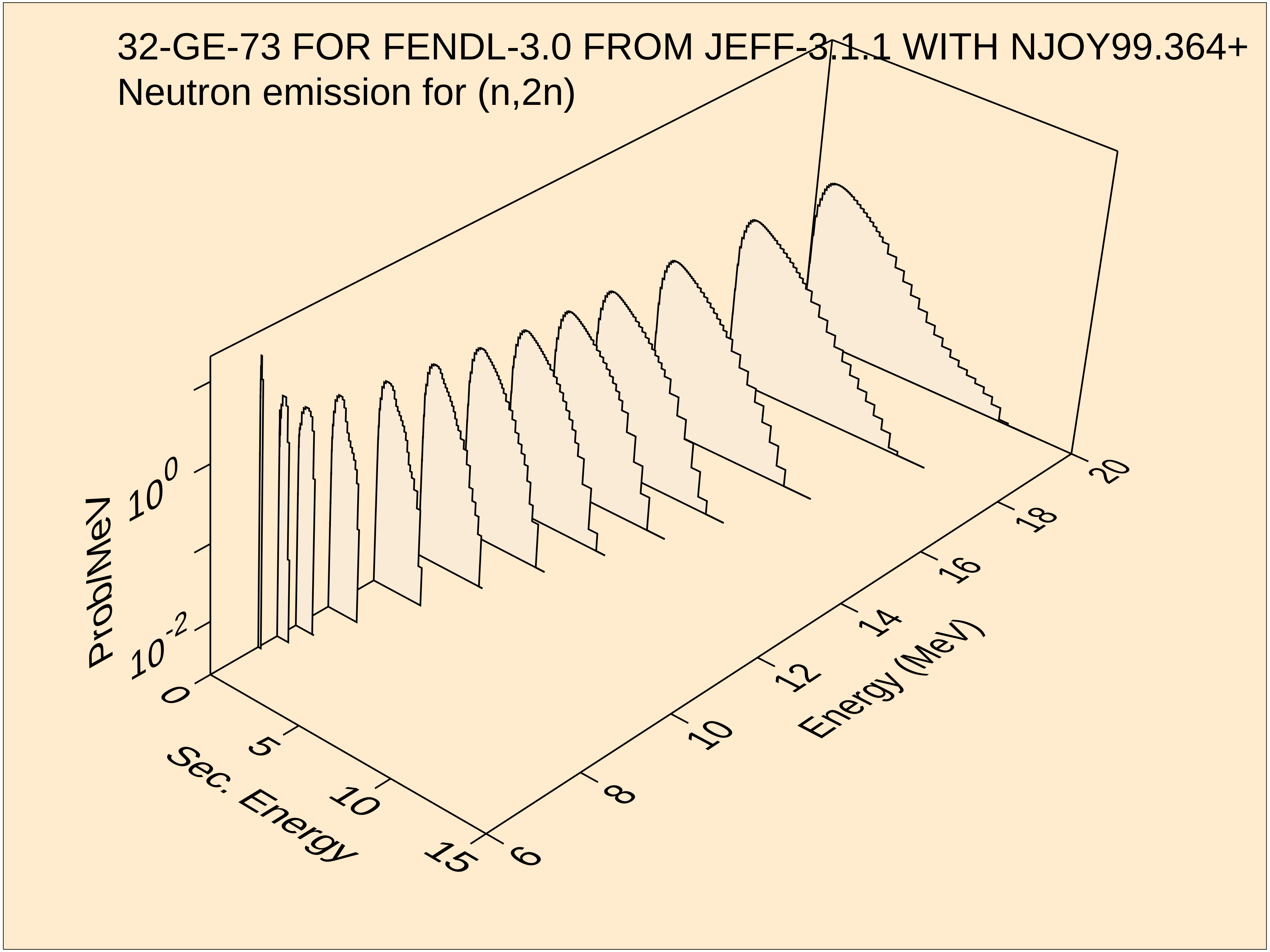

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*18)
ProblCos
10^{0}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

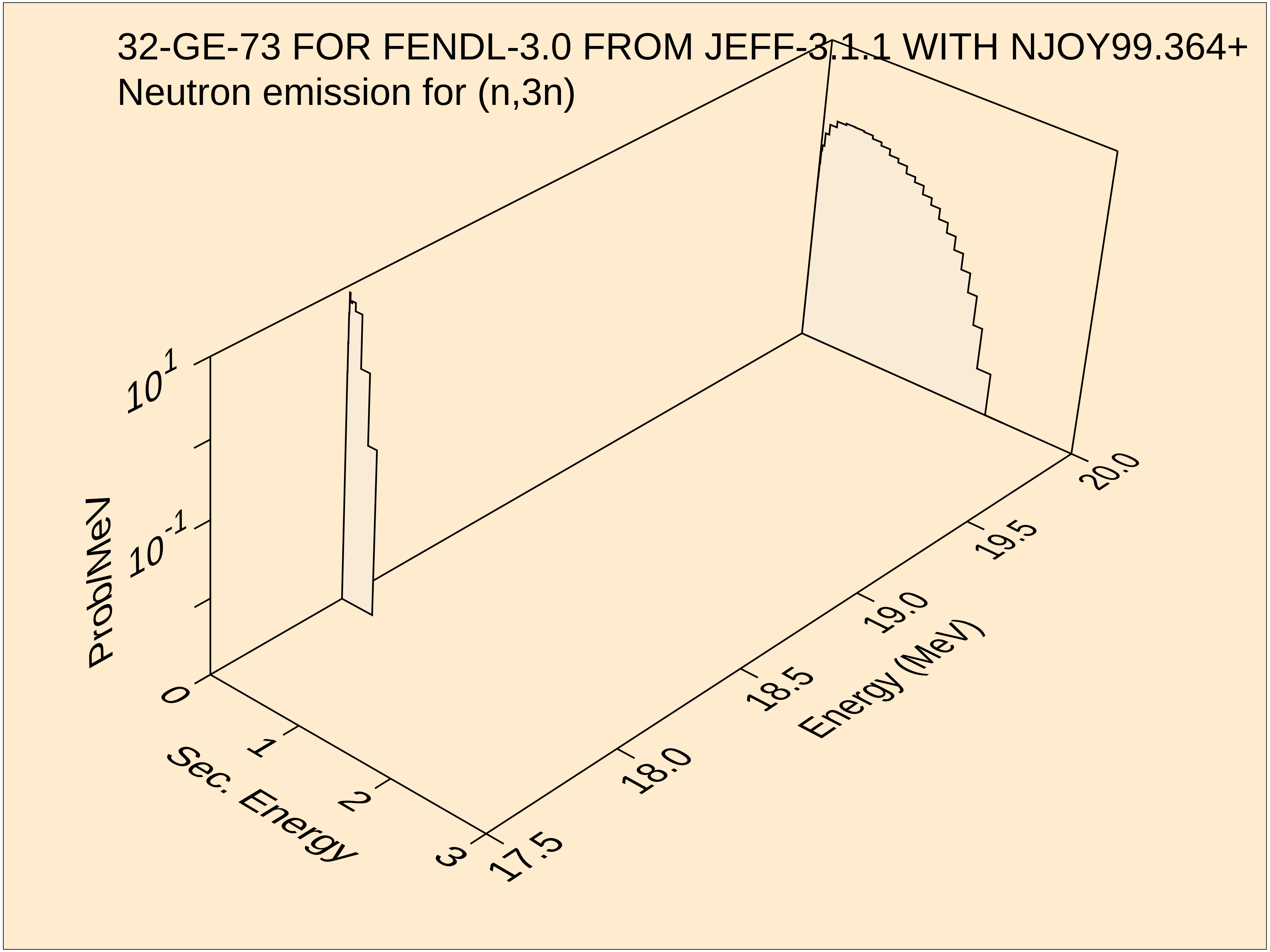

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*19)
10^0
ProbICos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

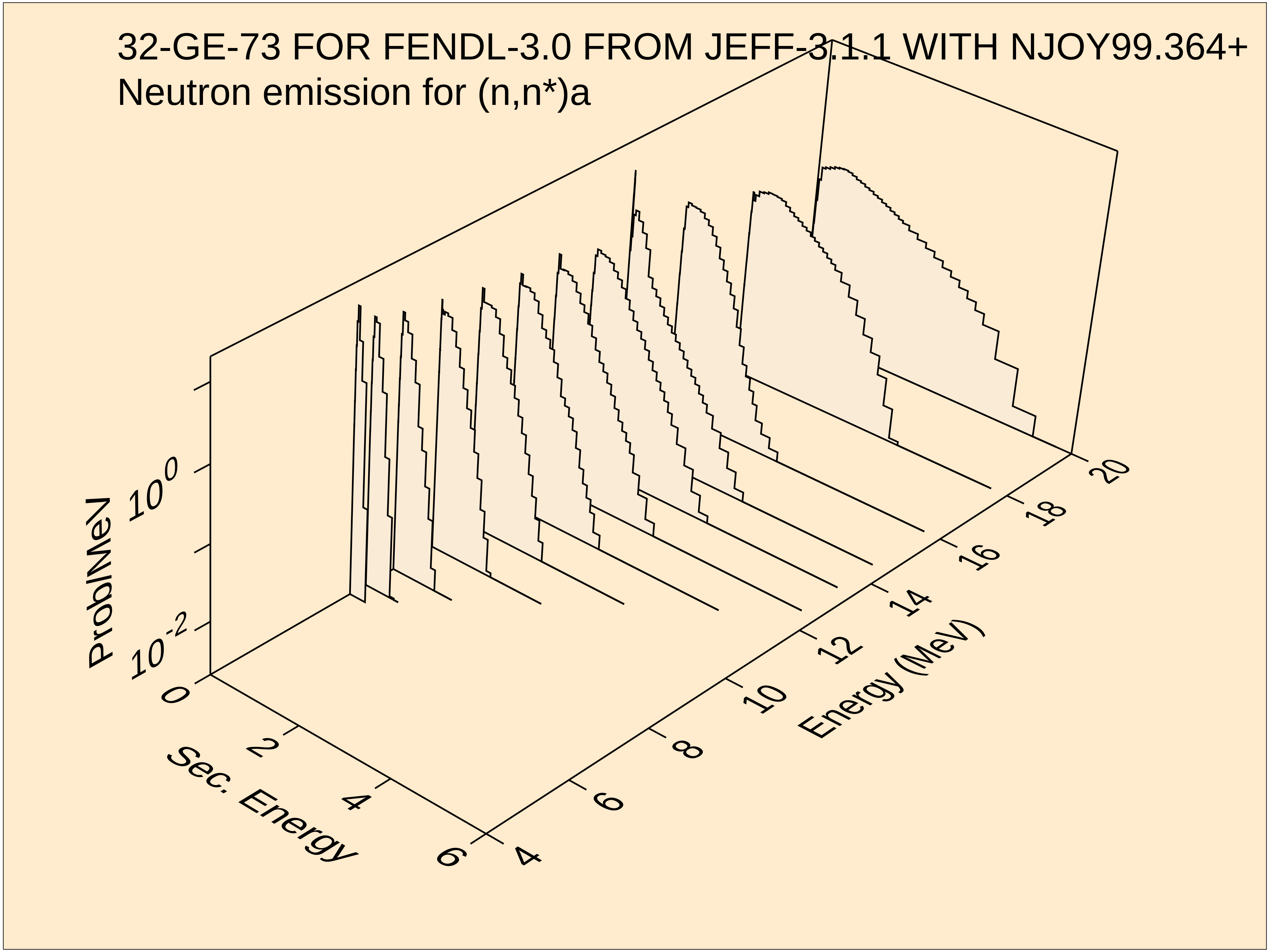

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,n*20)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

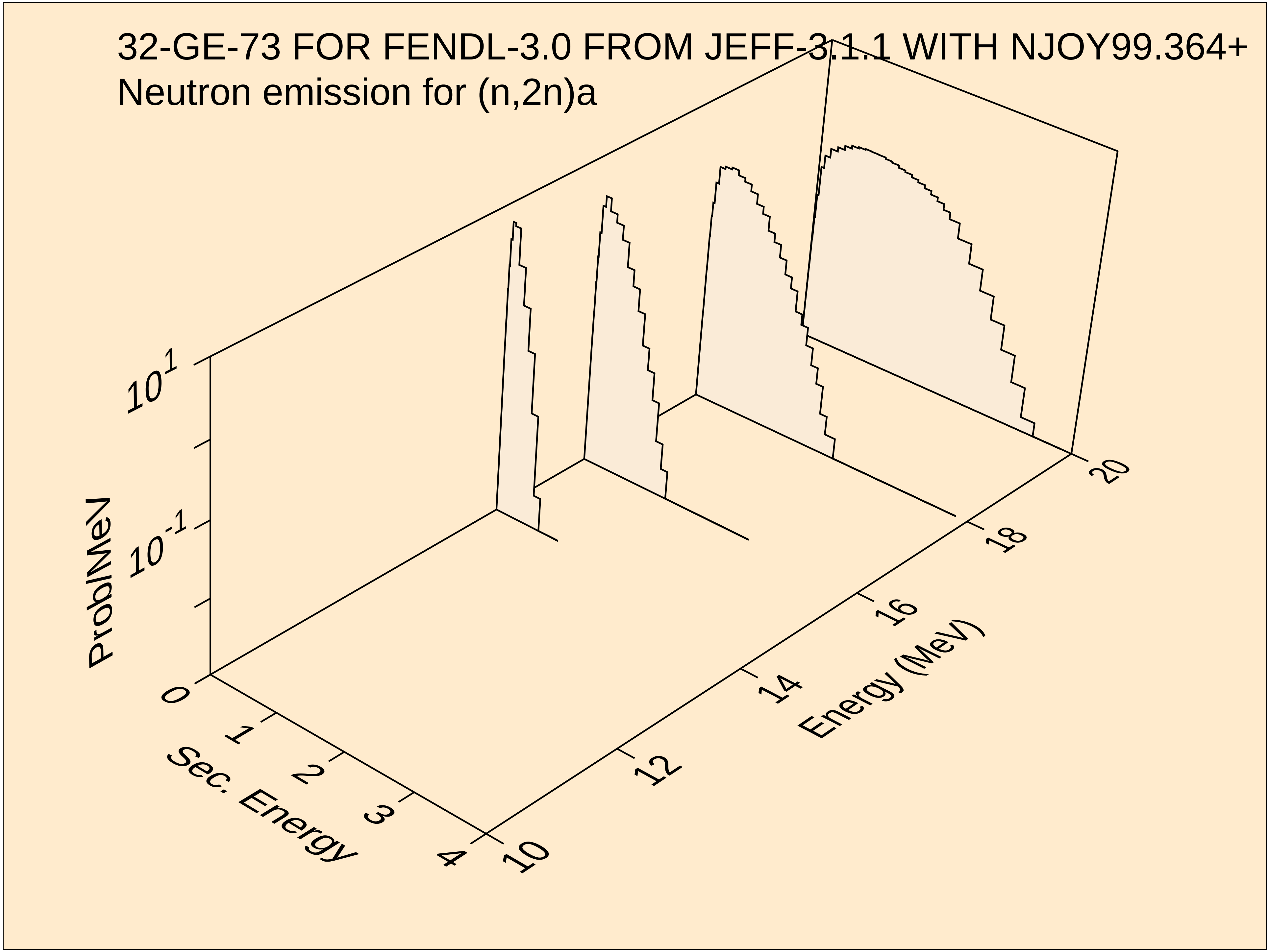
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Neutron emission for (n,x)

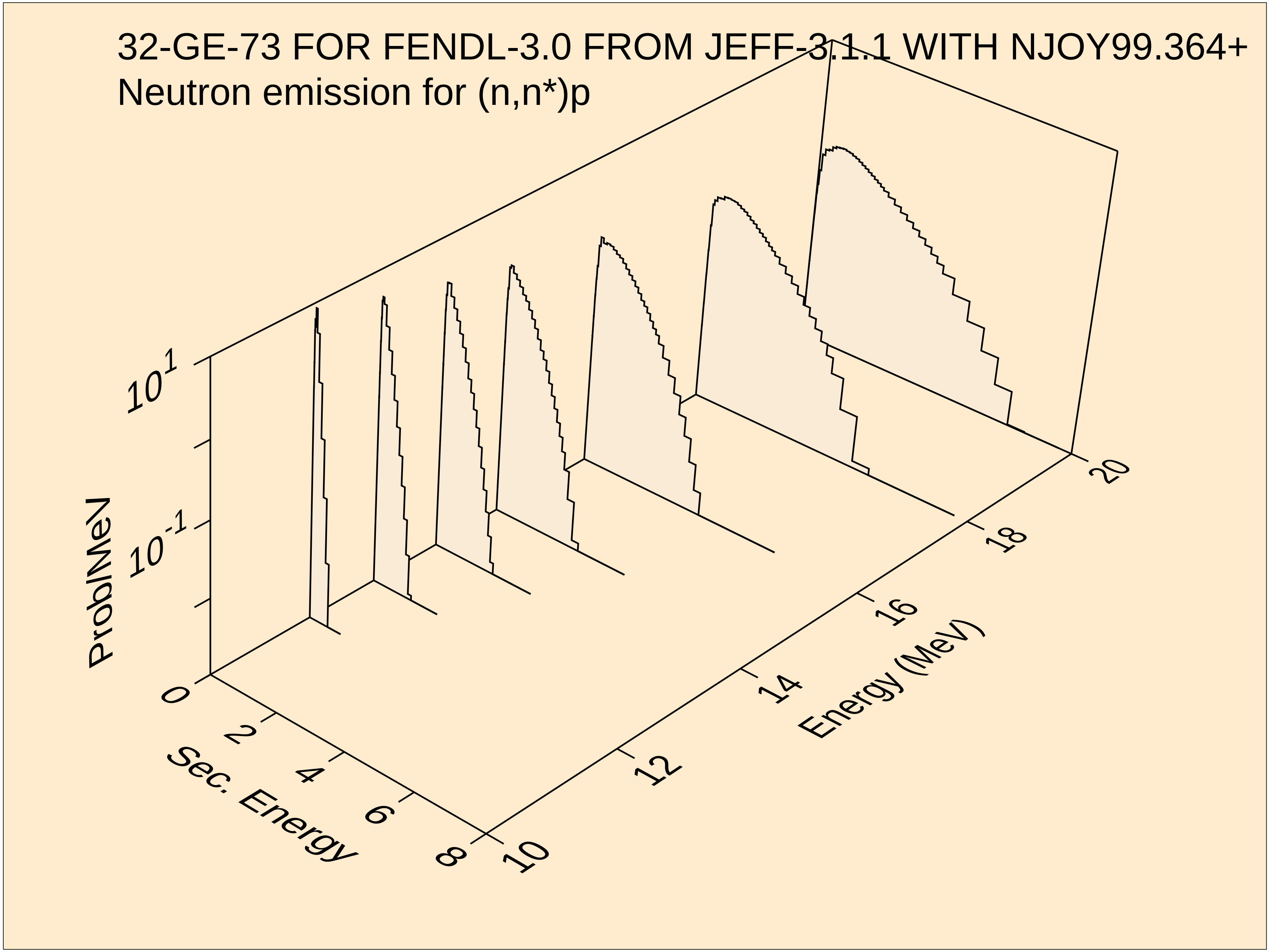



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Neutron emission for (n,2n)
Prob/MeV
10^{0}
10^{-2}
0
5
10
15
Sec. Energy
6
8
10
12
14
16
18
20
Energy (MeV)

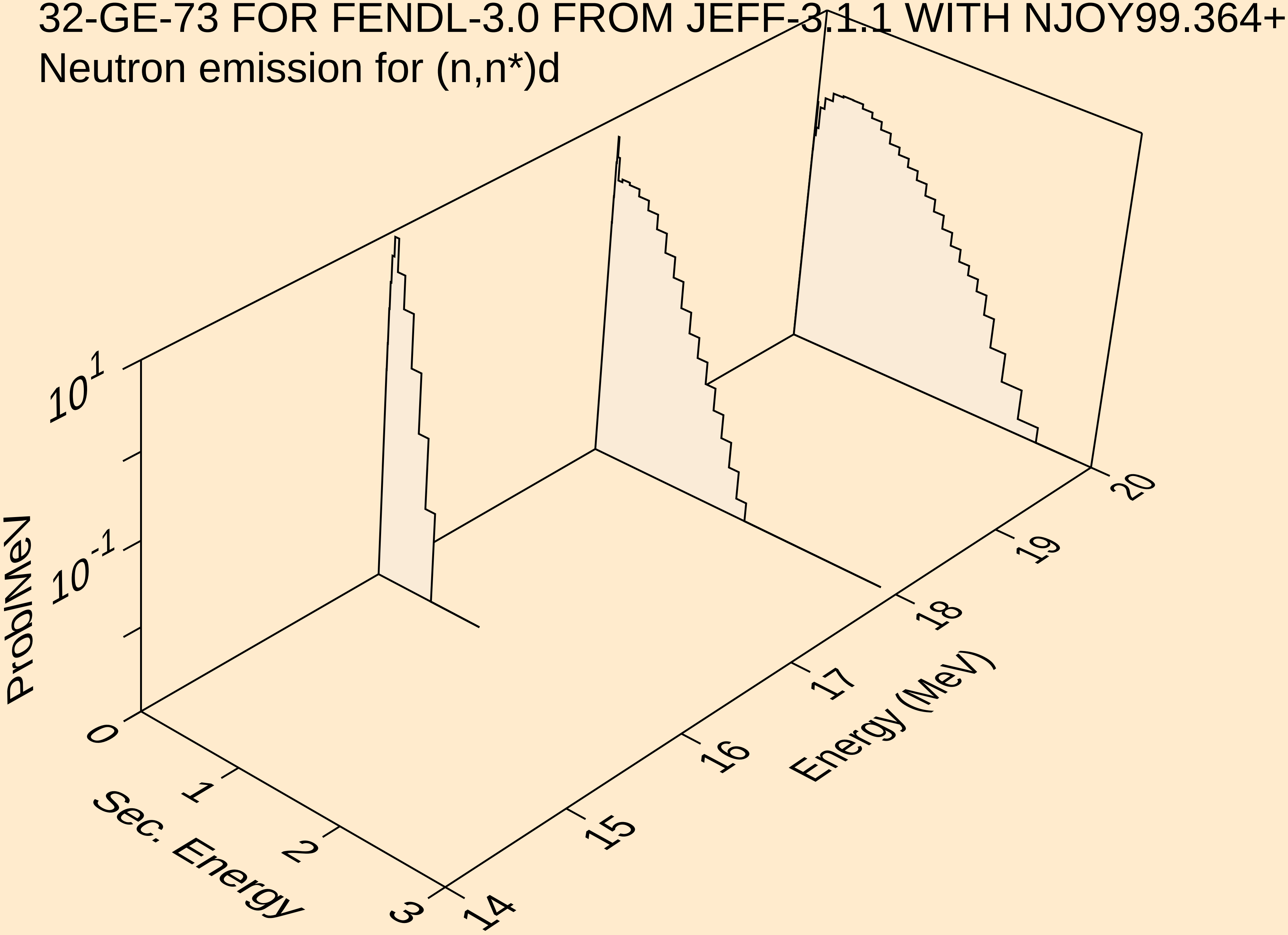

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Neutron emission for (n,3n)
Prob/MeV
10^{1}
10^{-1}
0
1
2
3
Sec. Energy
17.5
18.0
18.5
19.0
19.5
20.0
Energy (MeV)

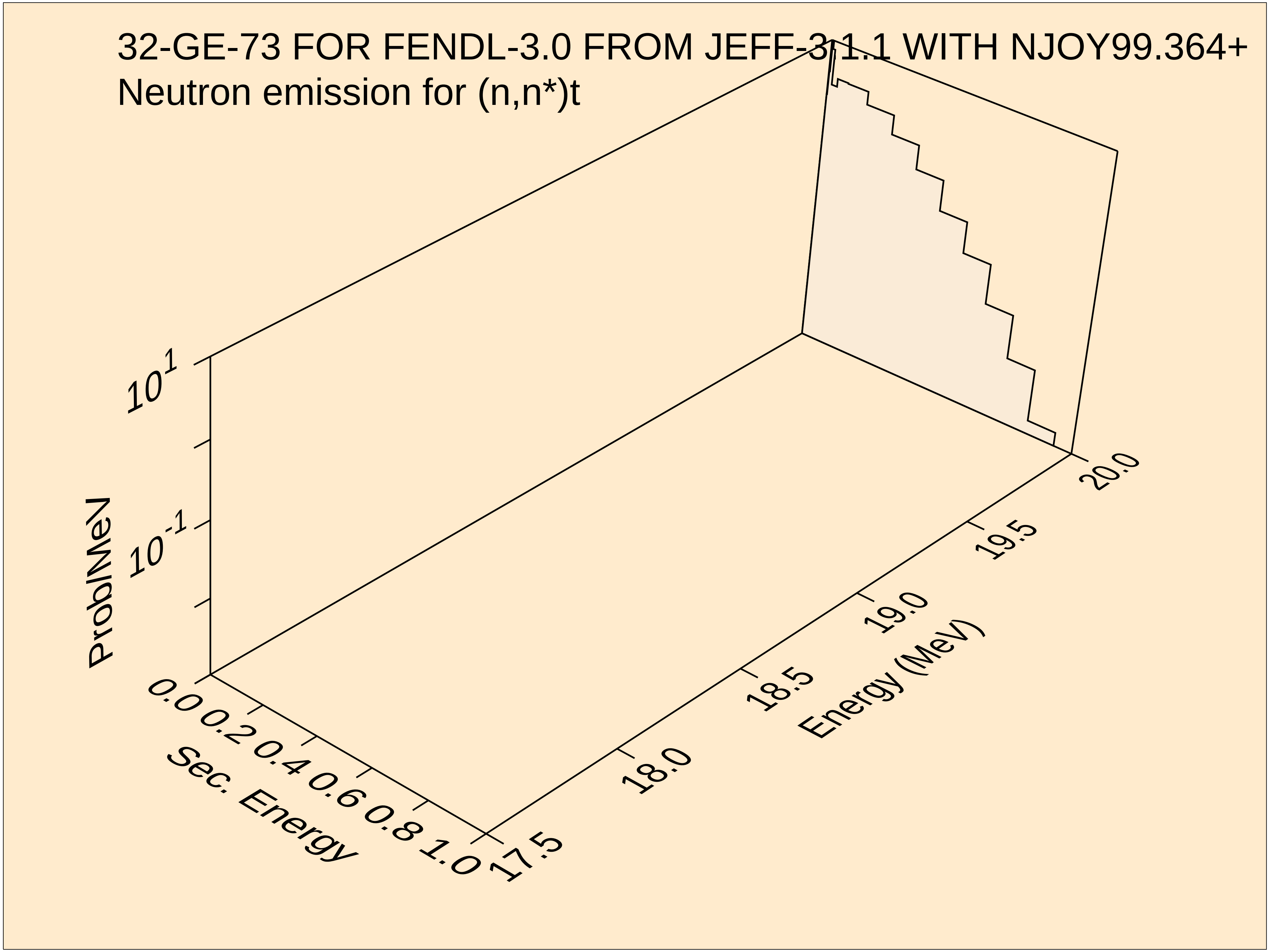

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Neutron emission for (n,n*)a
Prob/MeV
10^0
10^{-2}
0
2
4
6
Sec. Energy
4
6
8
10
12
14
16
18
20
Energy (MeV)

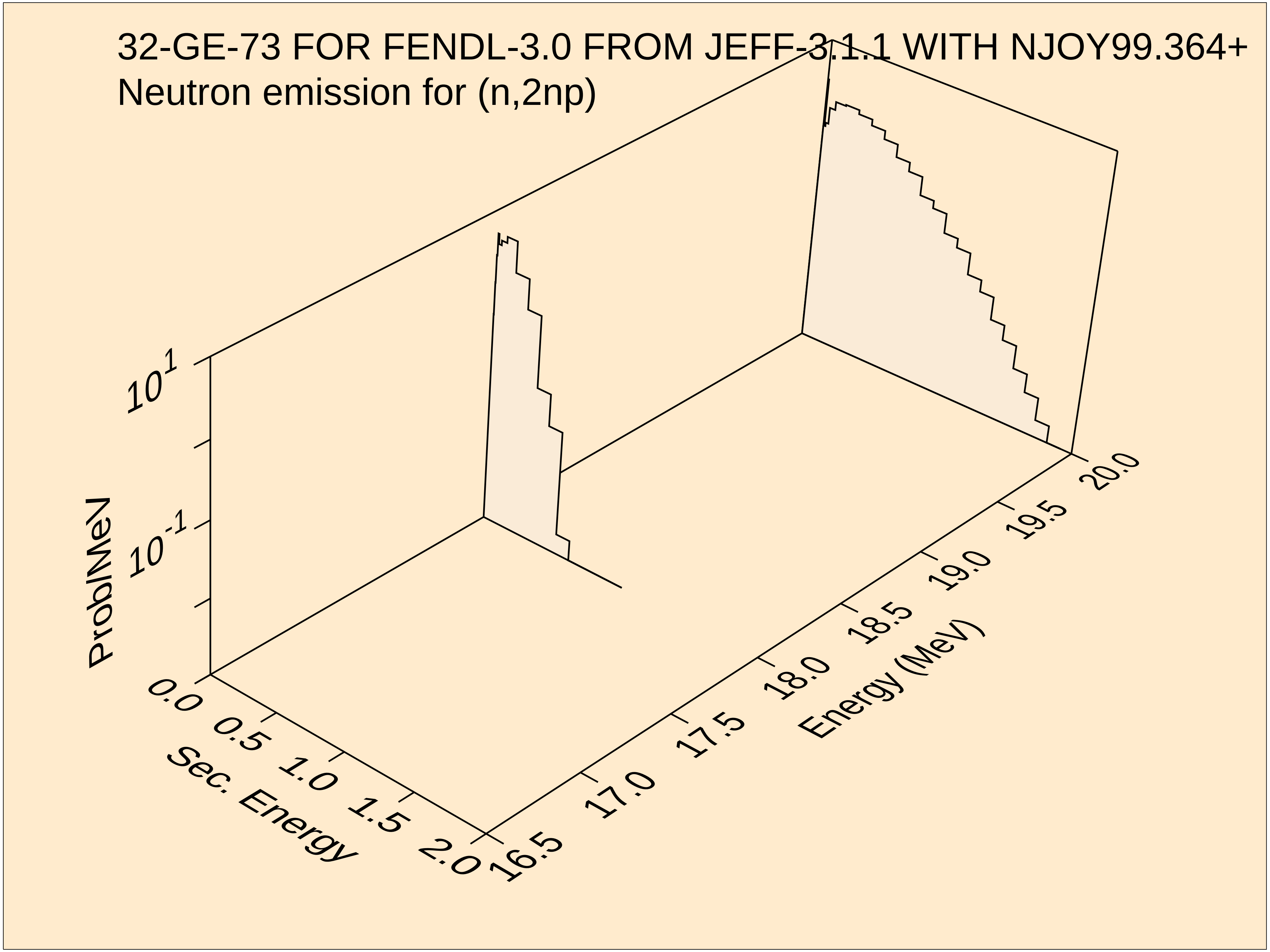

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Neutron emission for (n,2n)a
ProbIMeV
10^{1}
10^{-1}
0
1
2
3
4
Sec. Energy
10
12
14
16
18
20
Energy (MeV)

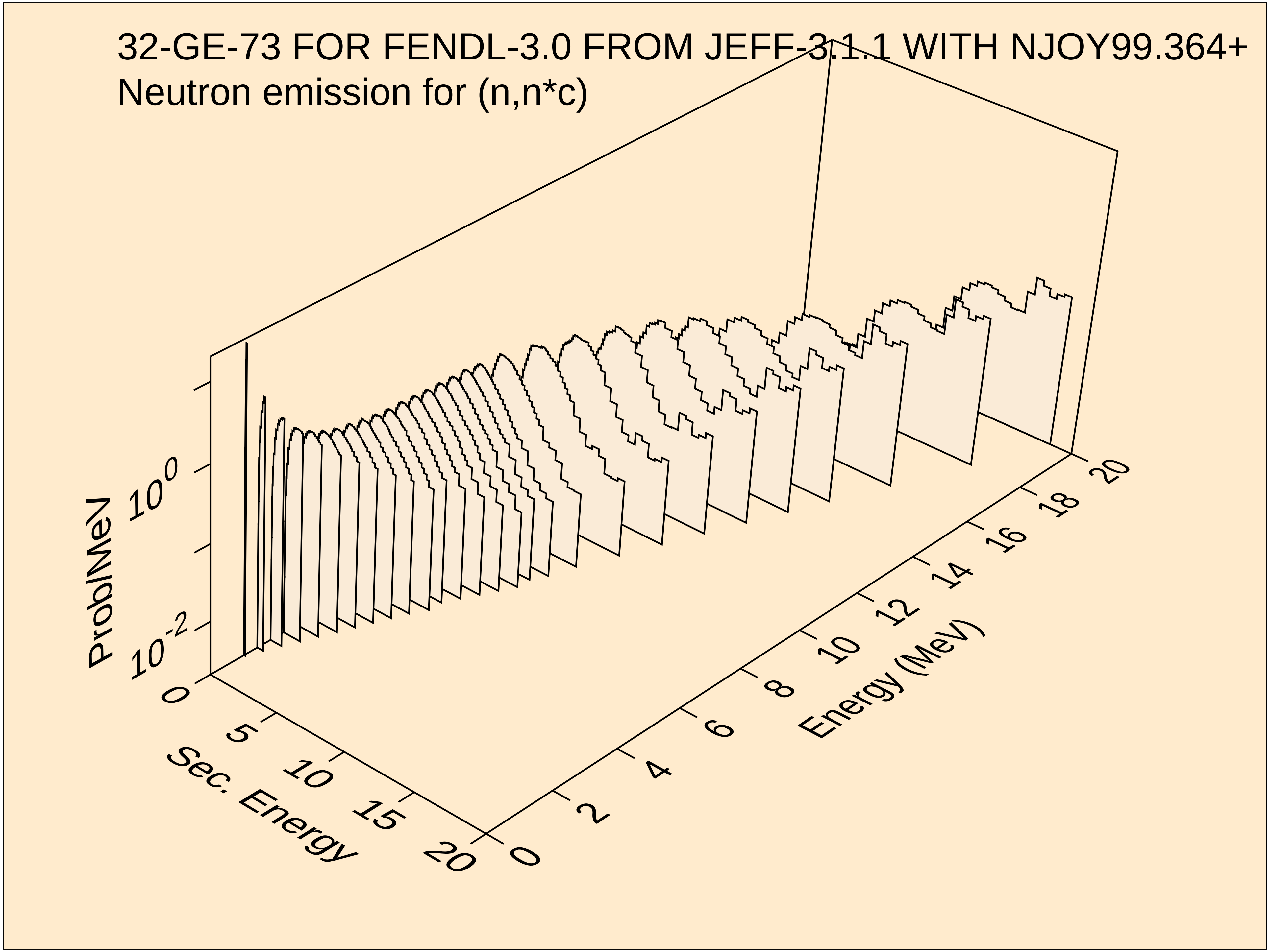

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Neutron emission for (n,n*)p
ProbMeV
10^{1}
10^{-1}
0
2
4
6
8
Sec. Energy
10
12
14
16
18
20
Energy (MeV)

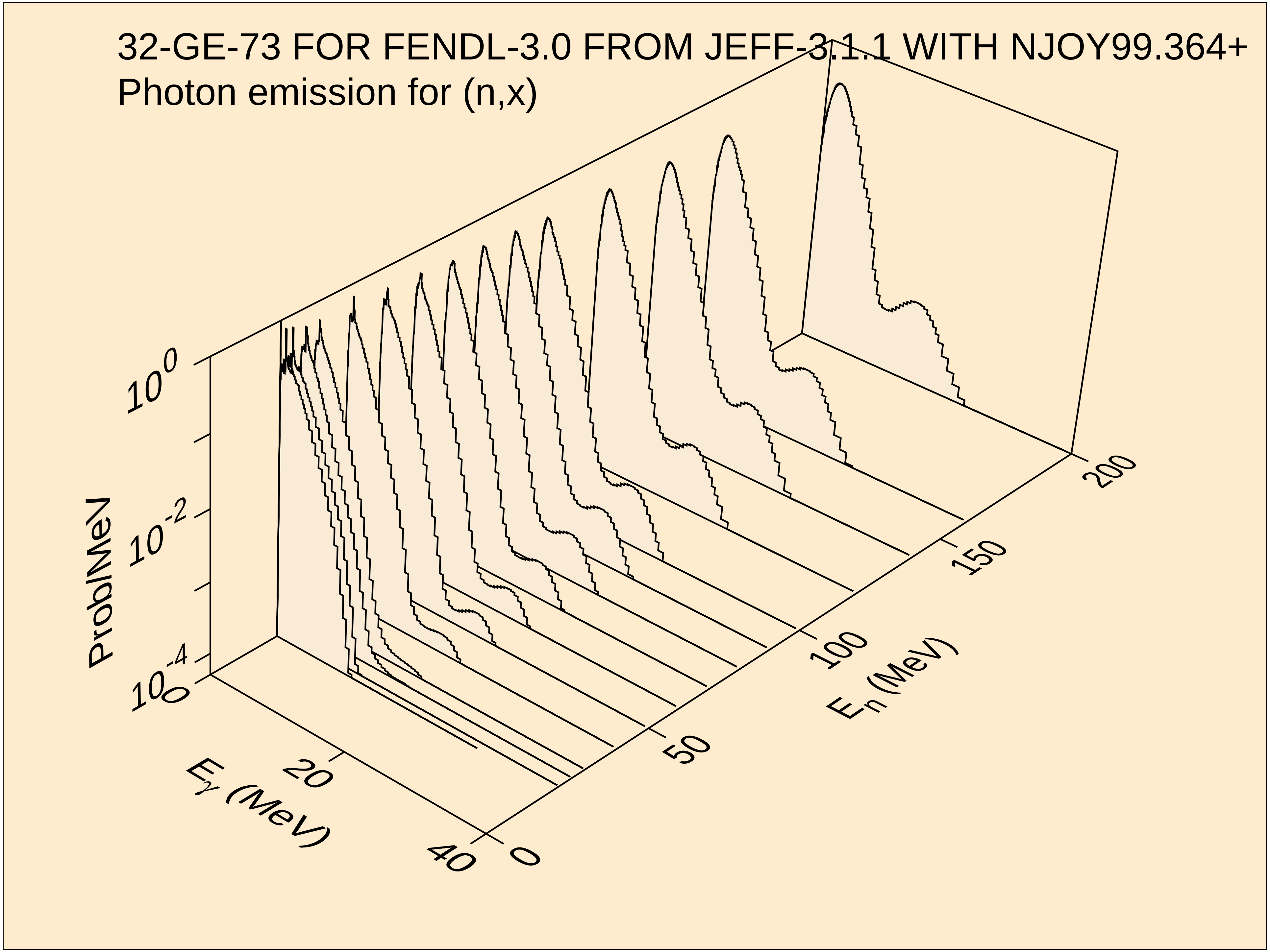
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Neutron emission for (n,n*)d

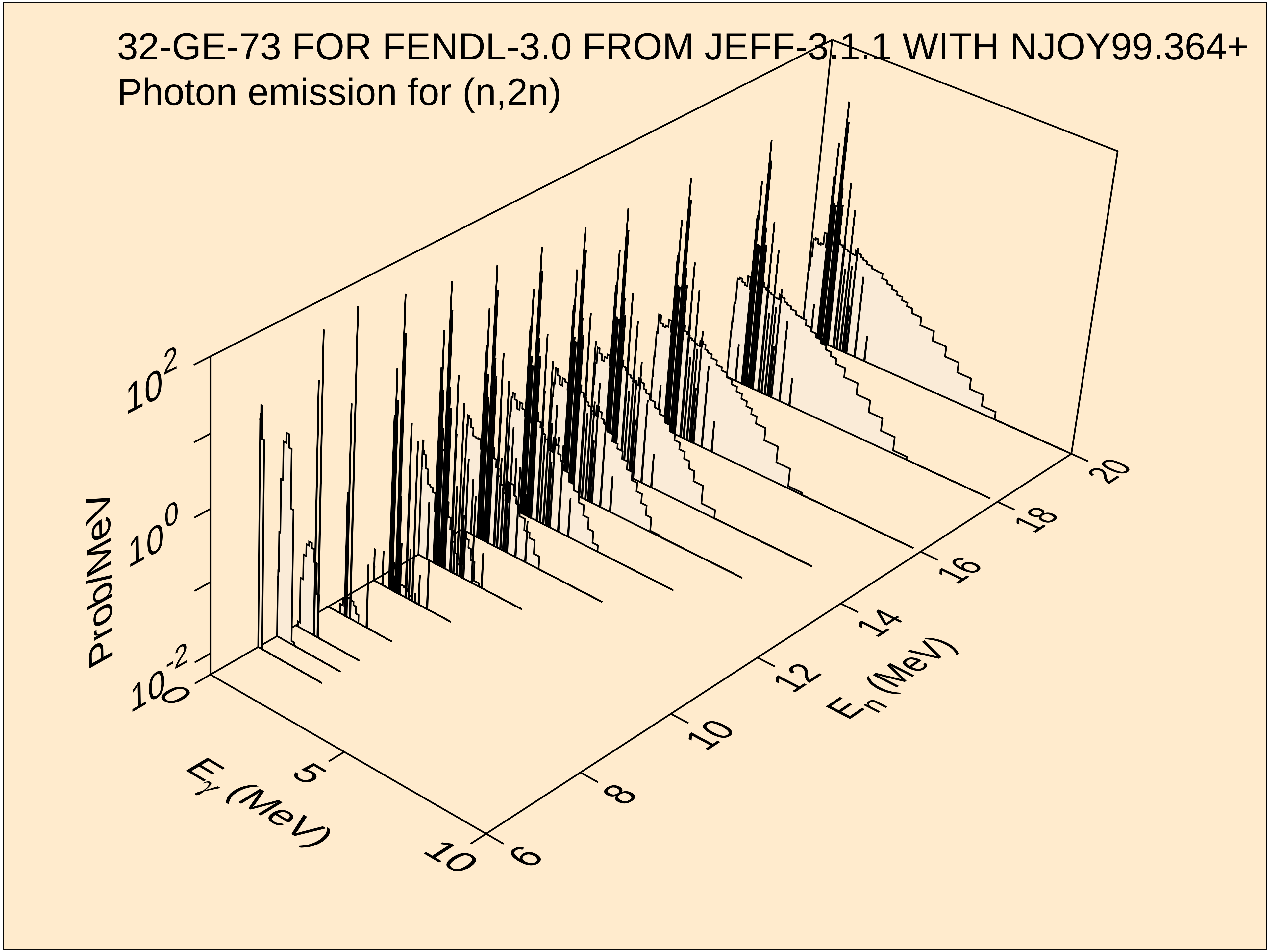


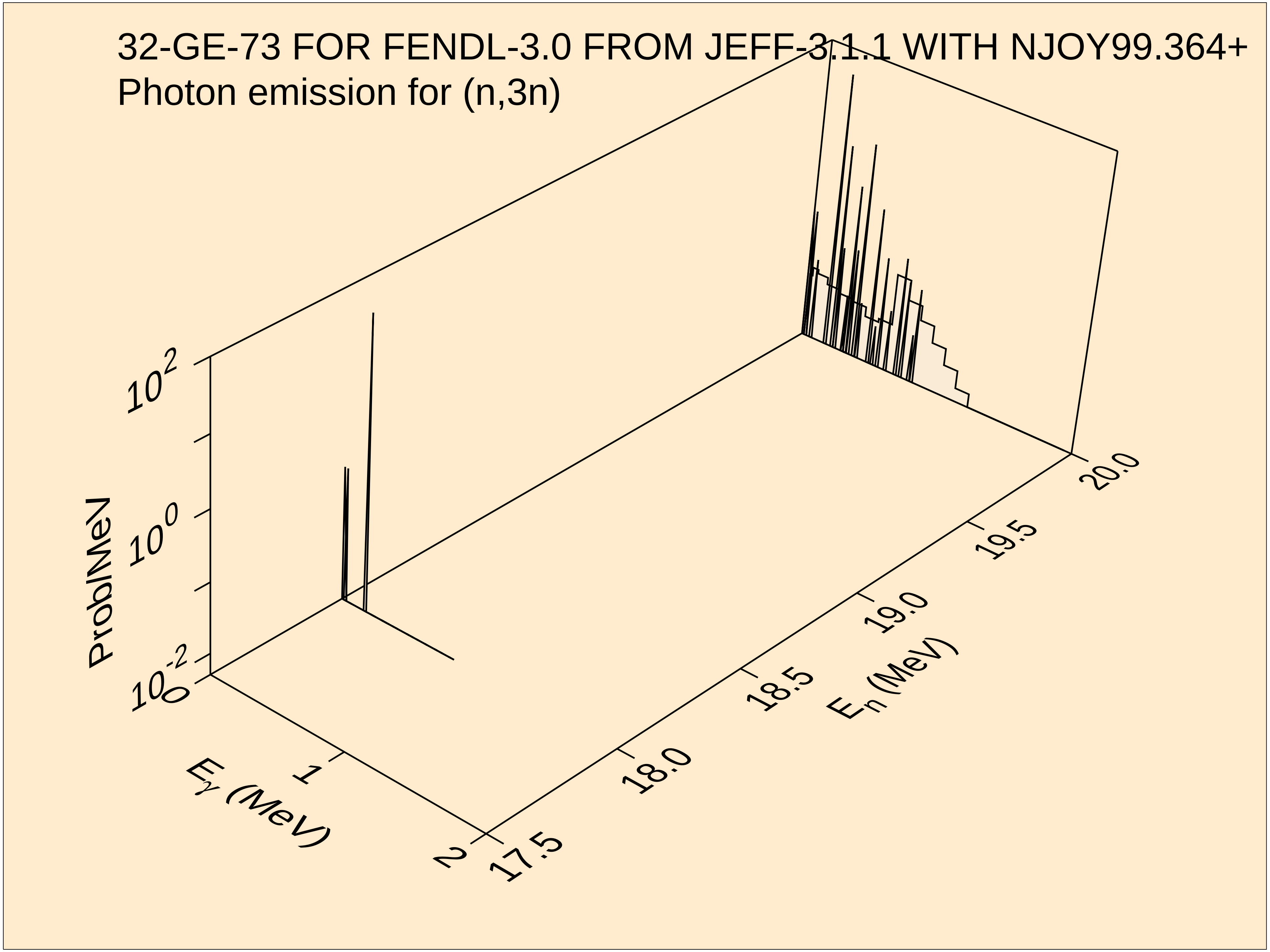

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Neutron emission for (n,n*)t
ProbMeV
10^{1}
10^{-1}
Sec. Energy
0.0
0.2
0.4
0.6
0.8
1.0
Energy (MeV)
17.5
18.0
18.5
19.0
19.5
20.0

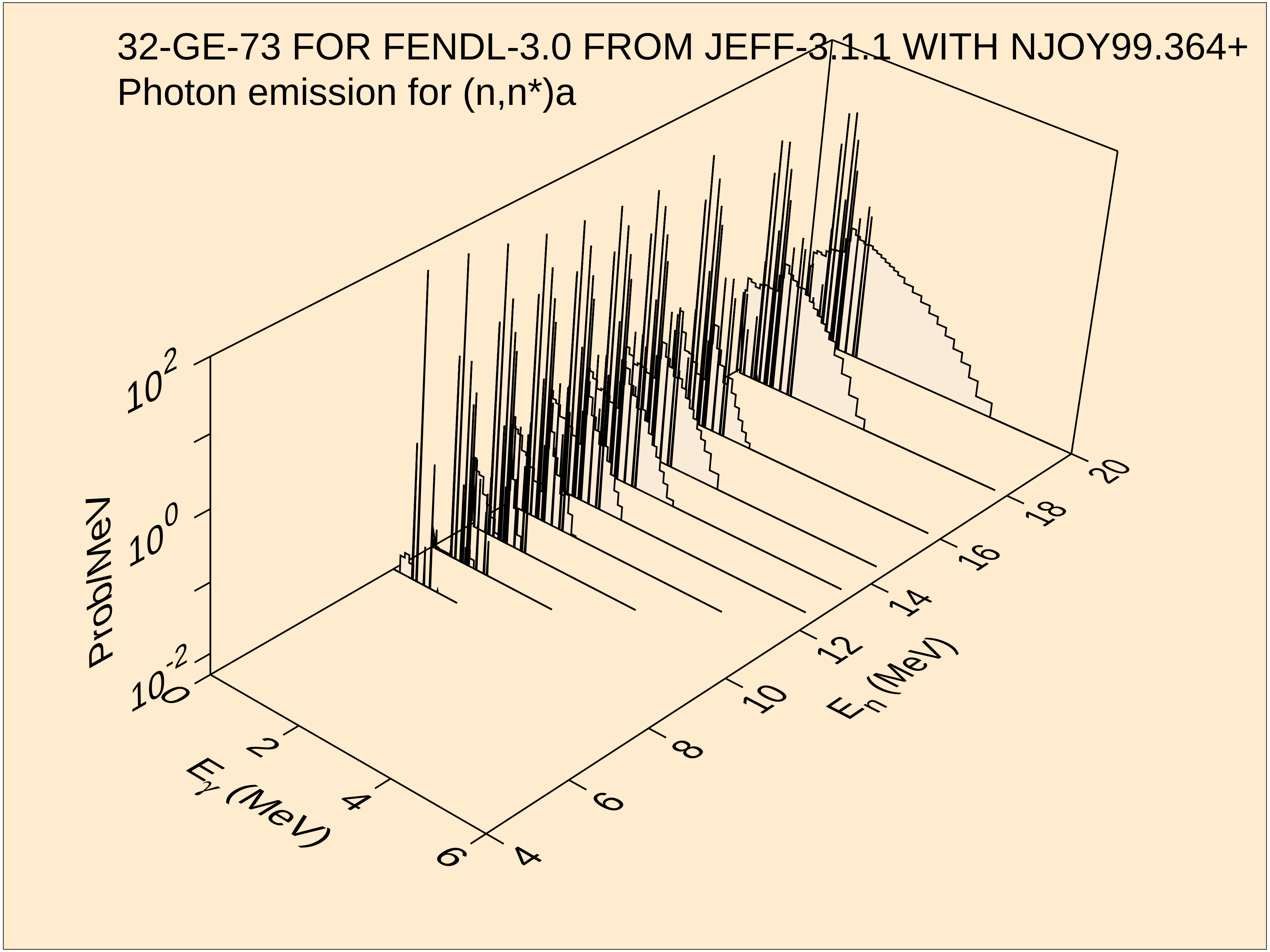

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Neutron emission for (n,2np)
Prob/MeV
10^{1}
10^{-1}
0.0
0.5
1.0
1.5
2.0
Sec. Energy
16.5
17.0
17.5
18.0
18.5
19.0
19.5
20.0
Energy (MeV)

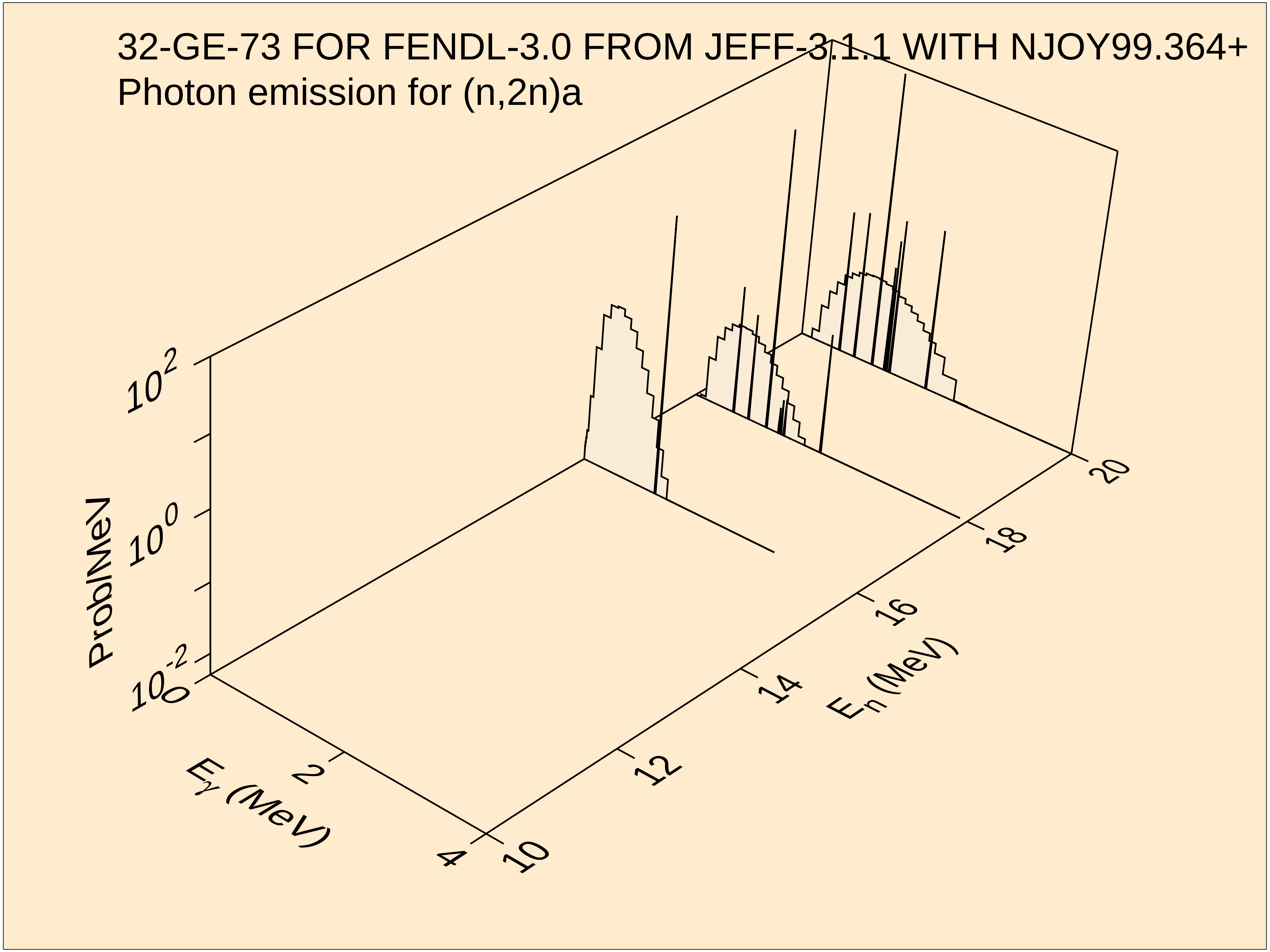

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Neutron emission for (n,n*c)
ProbMeV
10^{0}
10^{-2}
Sec. Energy
0
5
10
15
20
Energy (MeV)
0
2
4
6
8
10
12
14
16
18
20

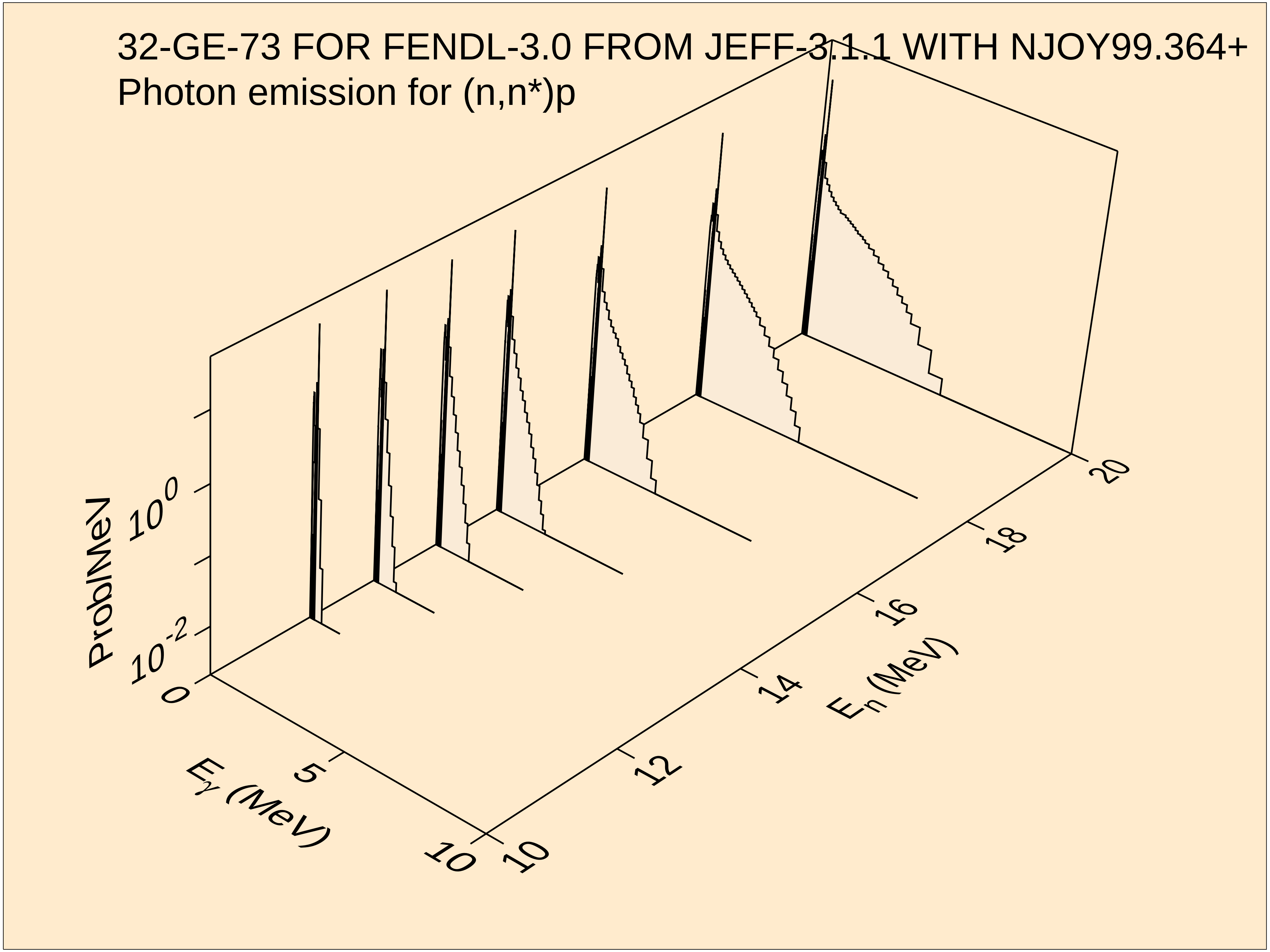

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,x)
ProbMeV
10^{0}
10^{-2}
10^{-4}
E_γ (MeV)
0
20
40
E_n (MeV)
0
50
100
150
200

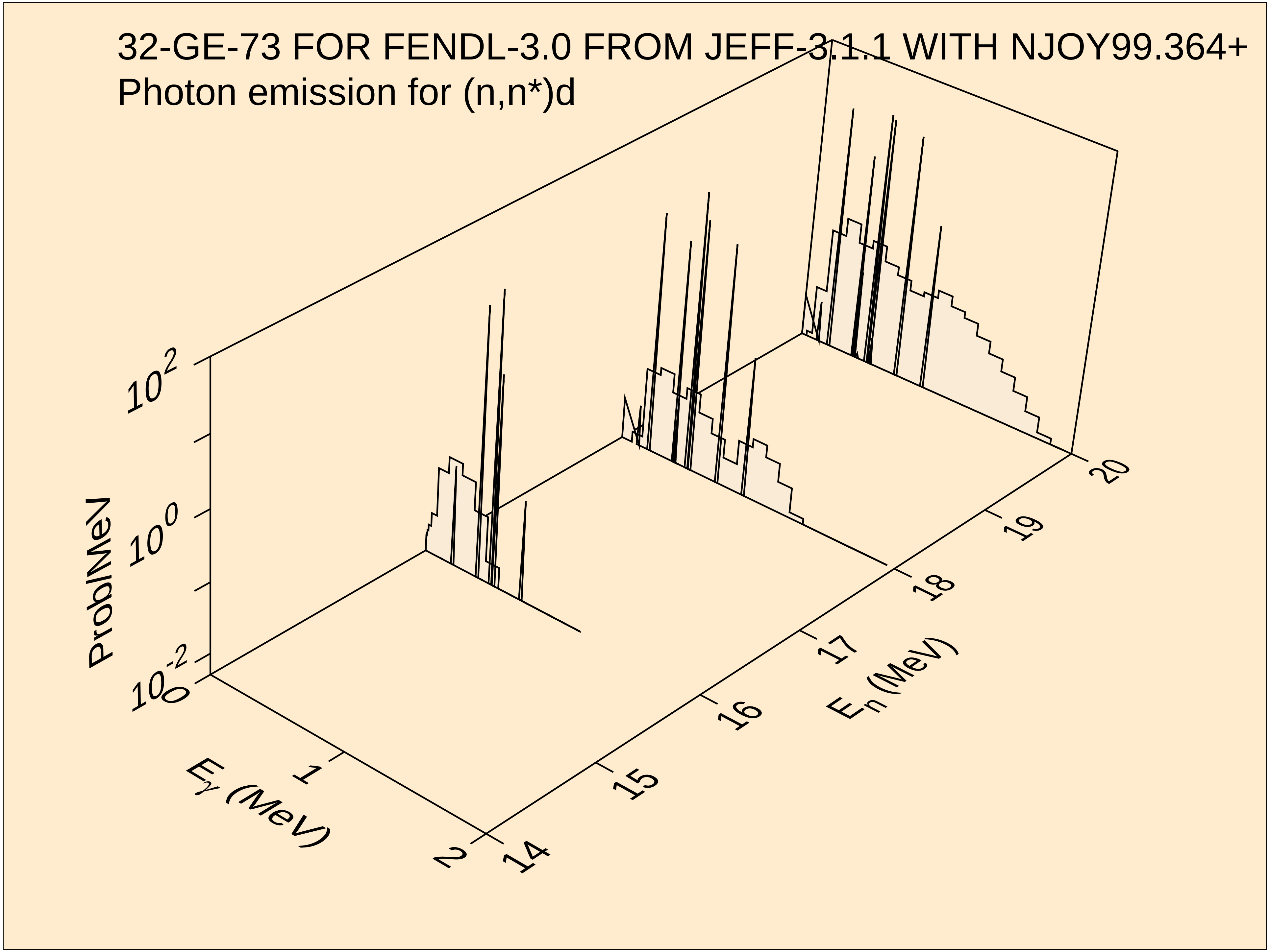

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,2n)
ProbMeV
10^{2}
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
6
8
10
12
14
16
18
20
E_n (MeV)

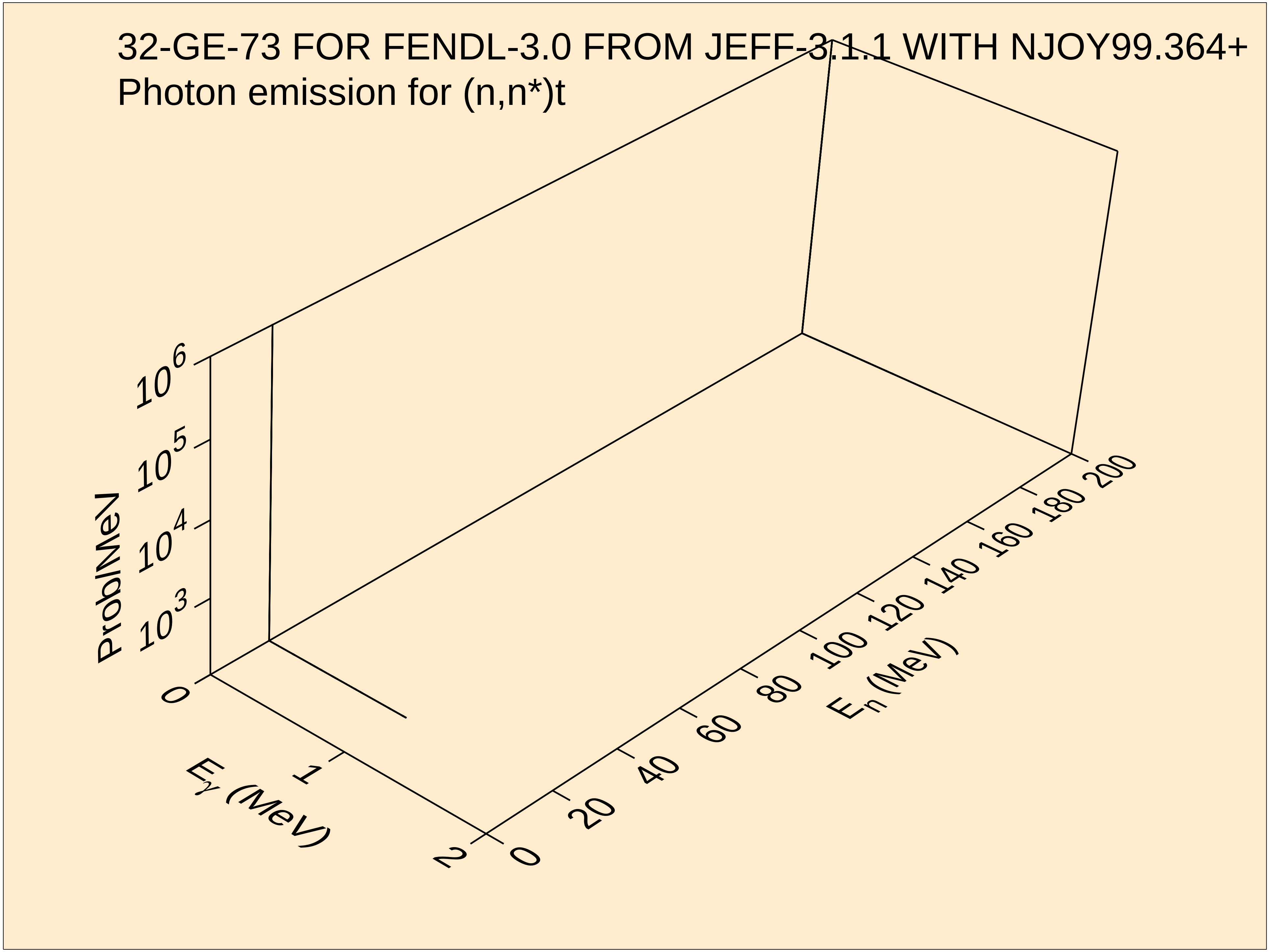

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,3n)
Prob/MeV
10^{2}
10^{0}
10^{-2}
0
1
2
E_{γ} (MeV)
17.5
18.0
18.5
19.0
19.5
20.0
E_{n} (MeV)

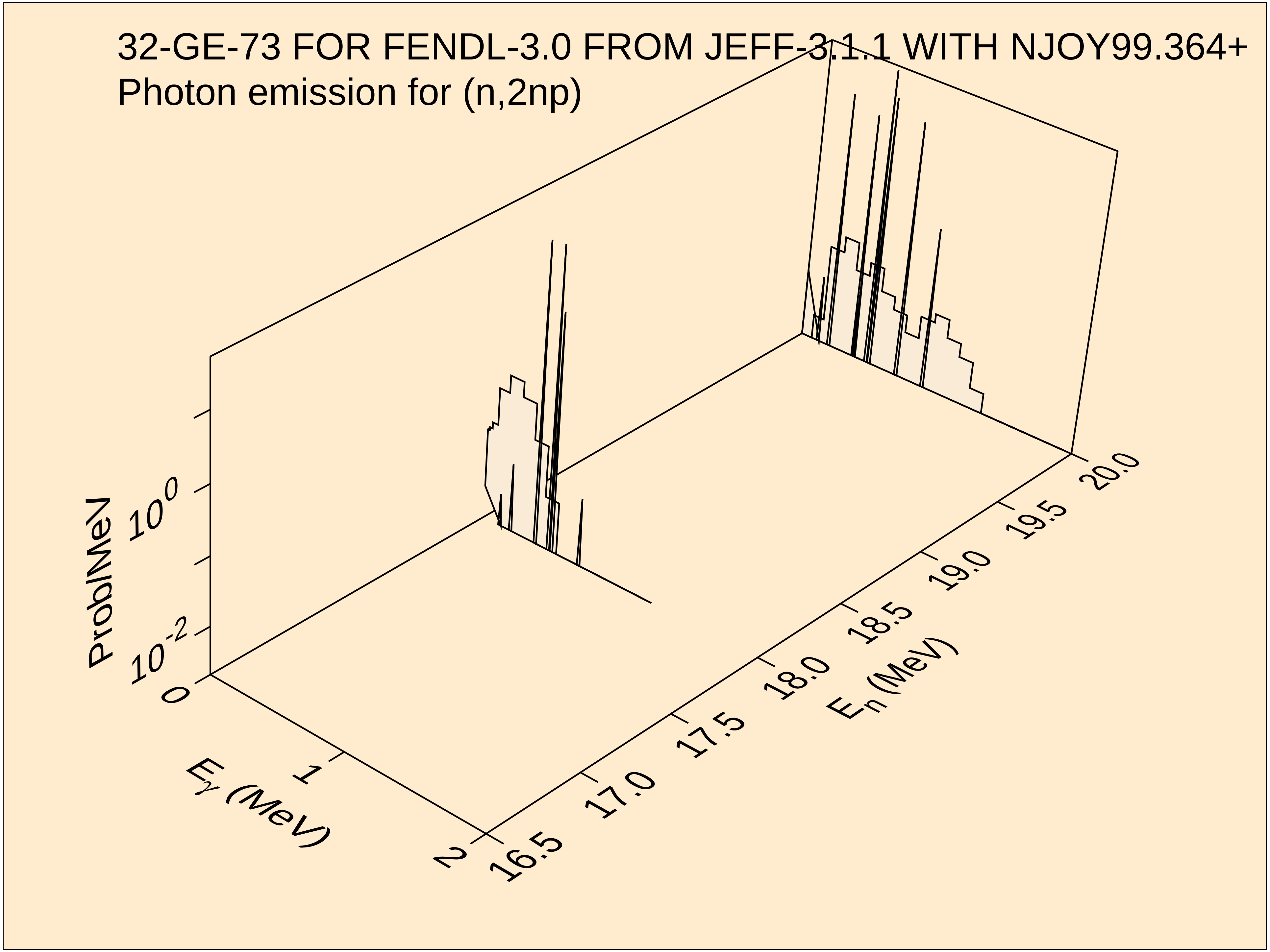

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*)a
ProbMeV
10^2
10^0
10^{-2}
E_γ (MeV)
0
2
4
6
E_n (MeV)
4
6
8
10
12
14
16
18
20

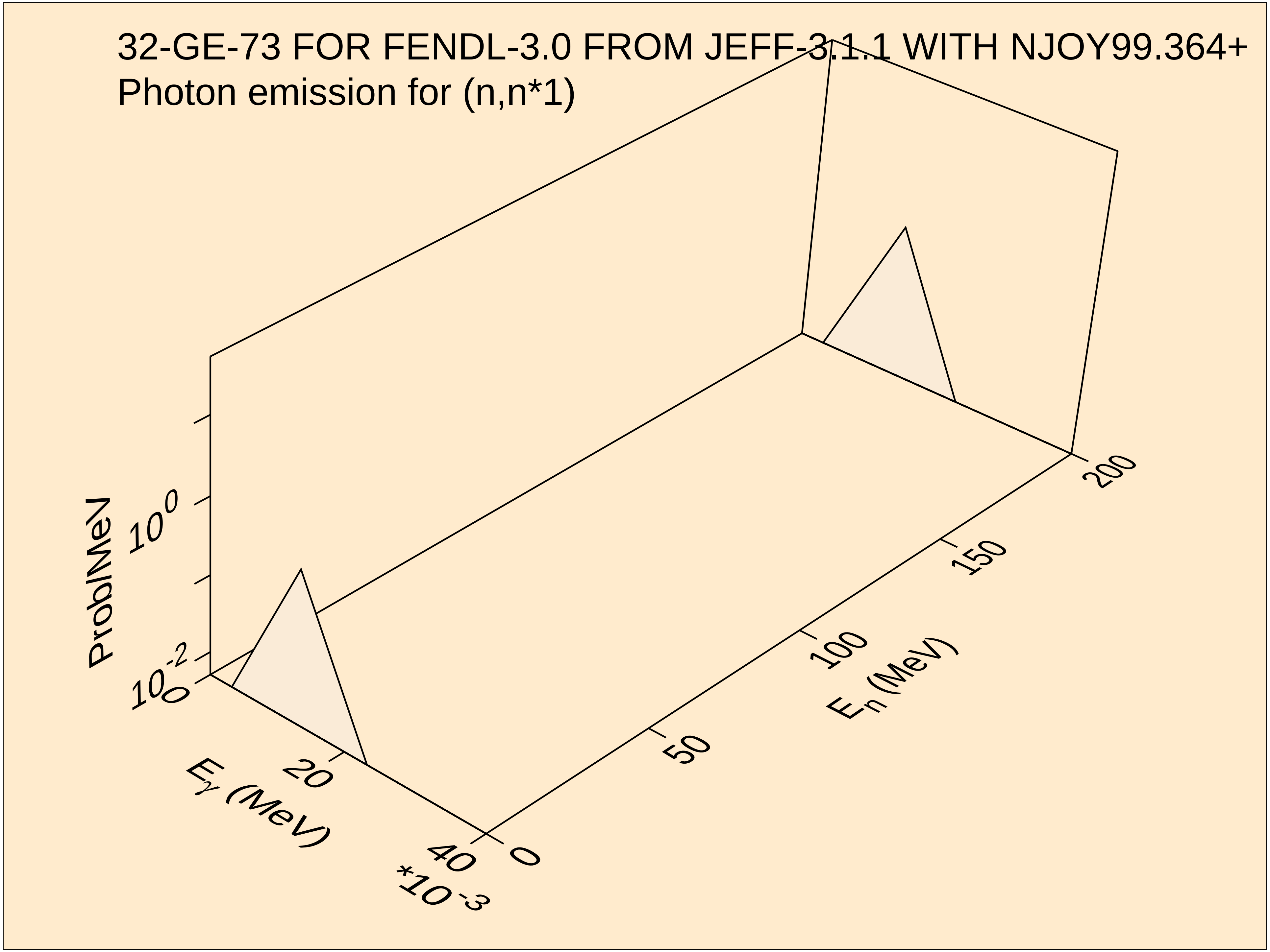

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,2n)a
ProbMeV
10^2
10^0
10^{-2}
0
2
4
E_γ (MeV)
10
12
14
16
18
20
E_n (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*)p
Prob/MeV
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
10
12
14
16
18
20
E_n (MeV)

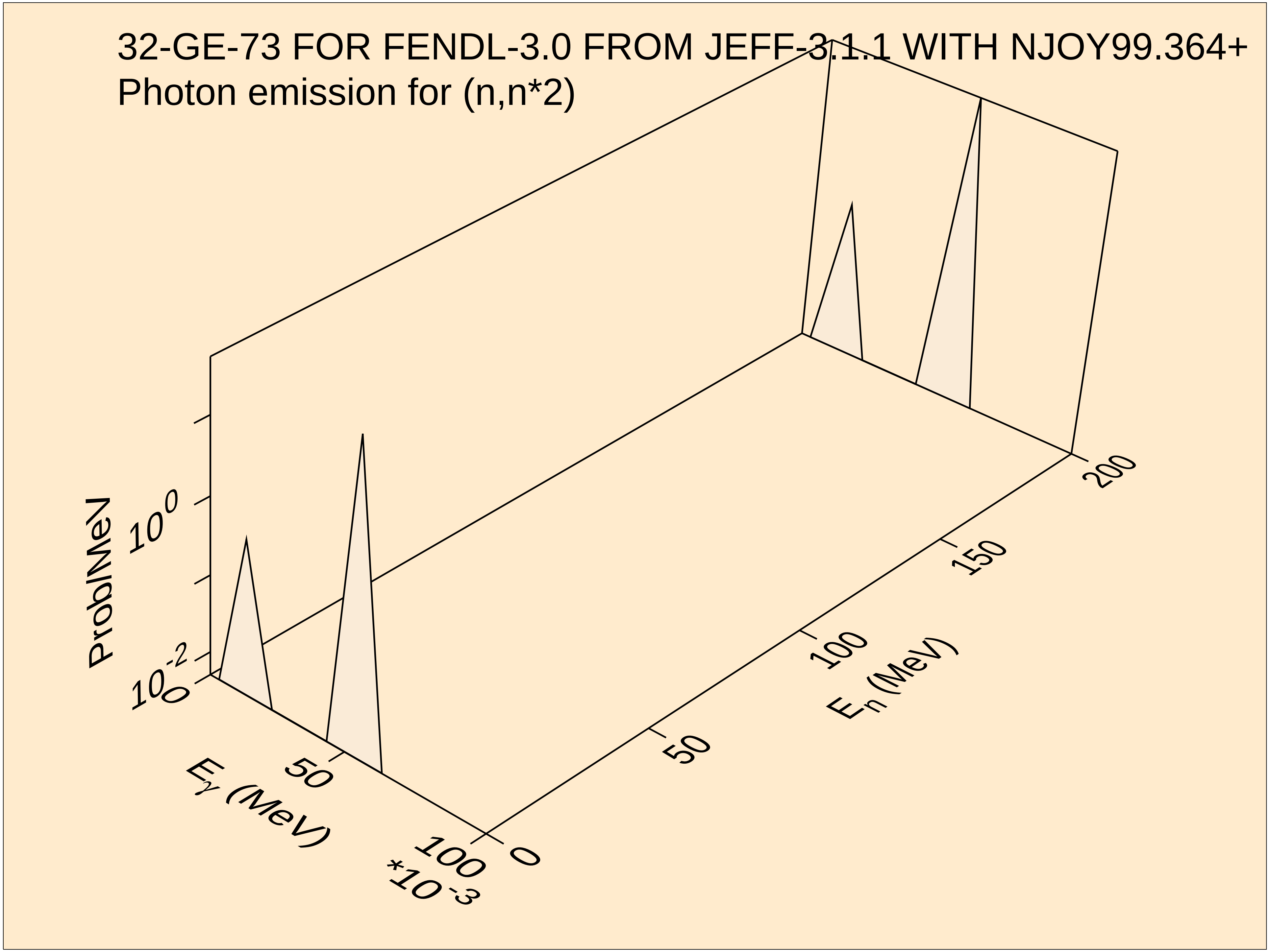

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*)d

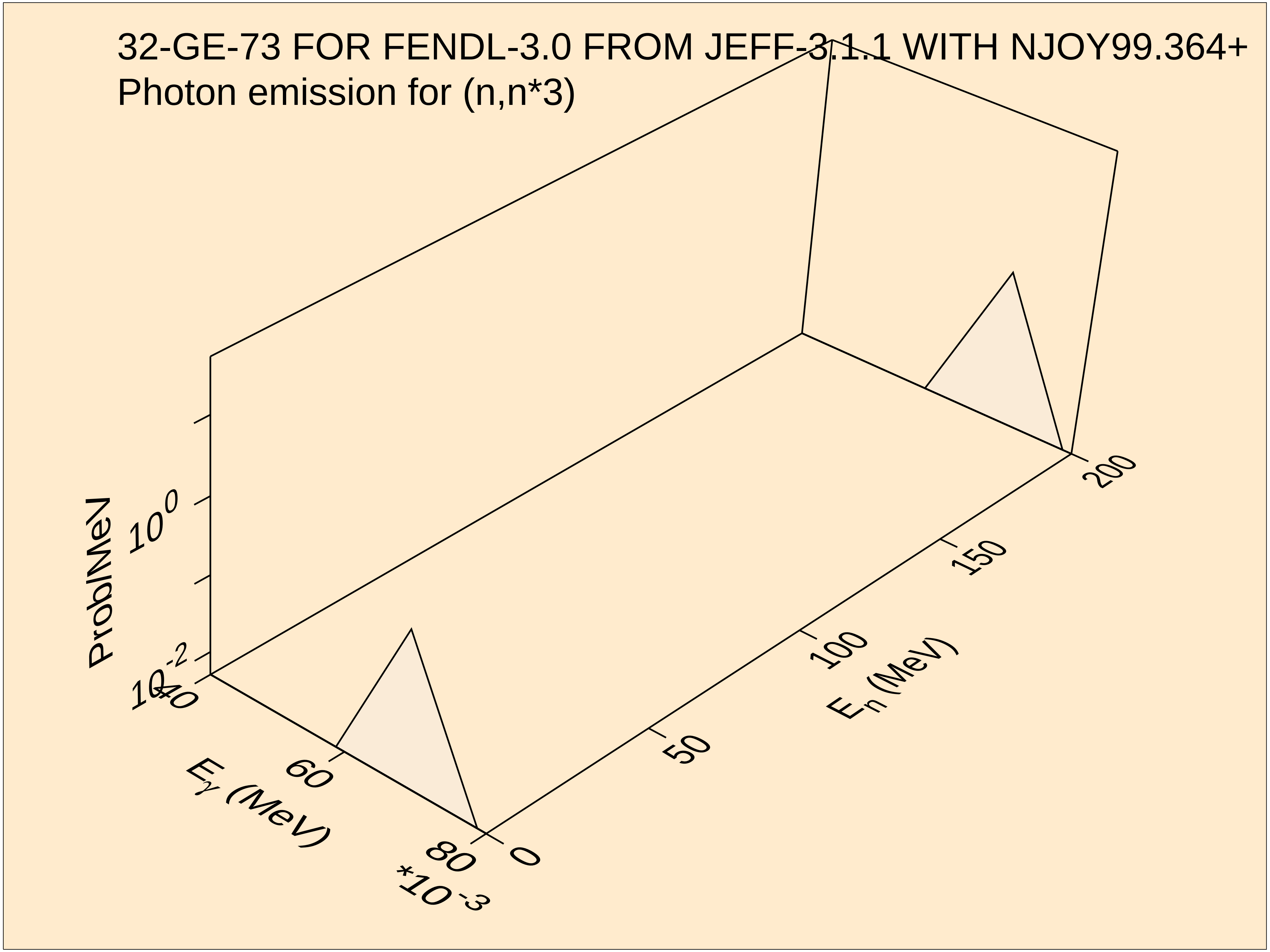

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*)t
Prob/MeV
10^6
10^5
10^4
10^3
0
1
2
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

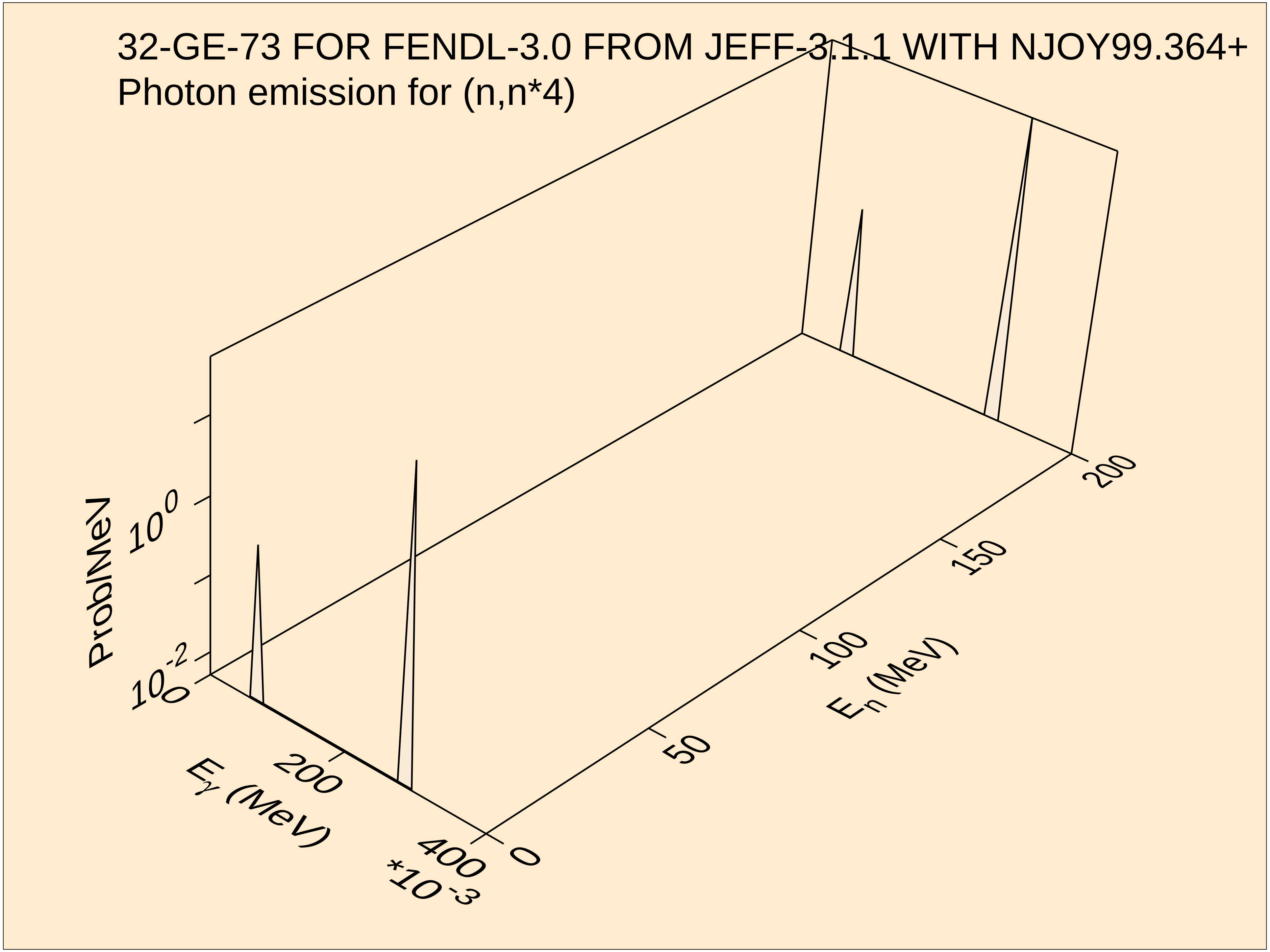

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,2np)
Prob/MeV
10^{0}
10^{-2}
0
1
2
E_{γ} (MeV)
16.5
17.0
17.5
18.0
18.5
19.0
19.5
20.0
E_{n} (MeV)

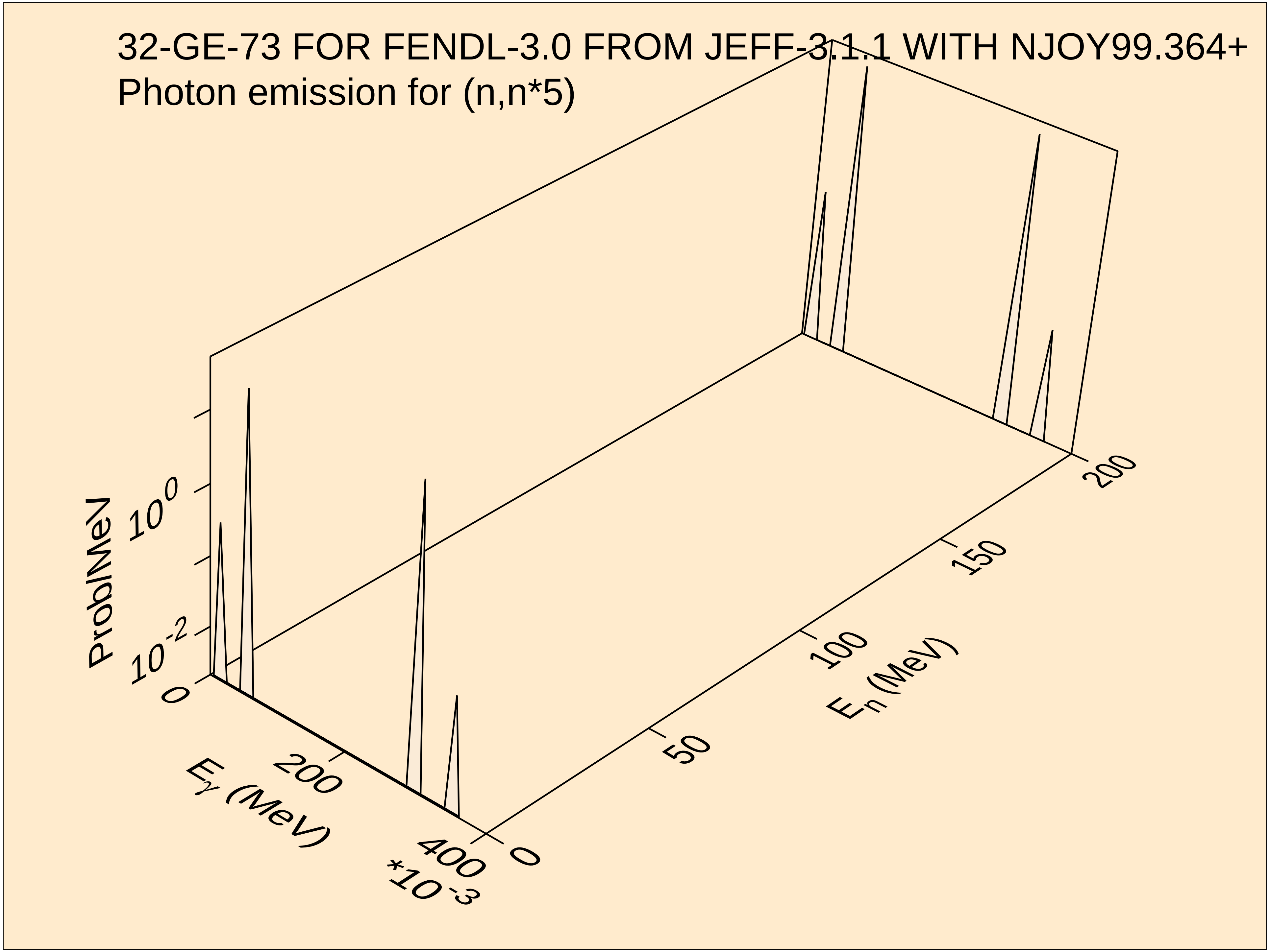


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*1)
ProbMeV
10^{0}
10^{-2}
0
20
40
*10 -3
E_{γ} (MeV)
0
50
100
150
200
E_{n} (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*2)
Prob/MeV
10^{0}
10^{-2}
0
50
100
$*10^{-3}$
E_γ (MeV)
0
50
100
150
200
E_n (MeV)

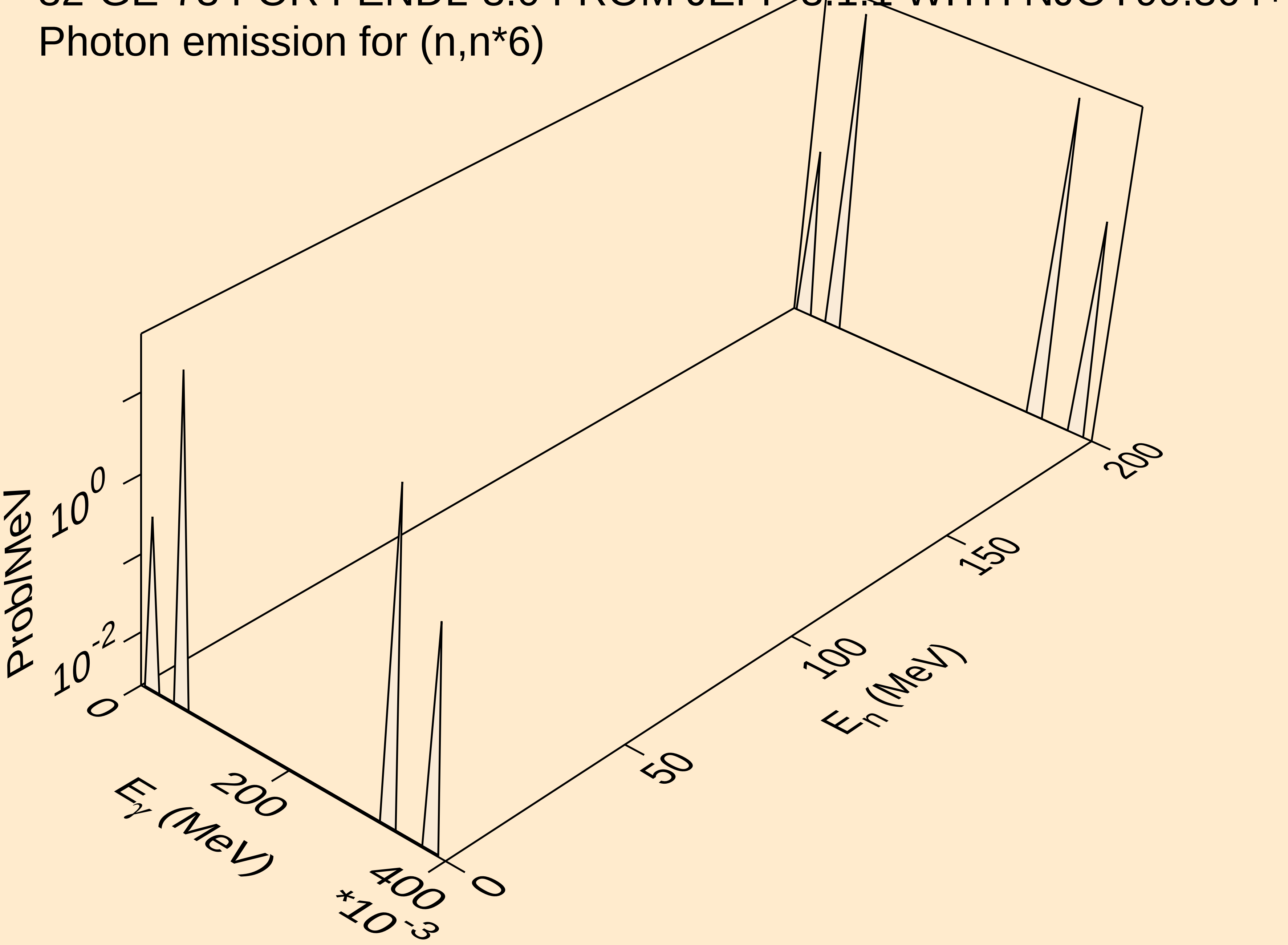

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*3)
Prob/MeV
10^{0}
10^{-2}
40
60
80
$*10^{-3}$
E_{γ} (MeV)
0
50
100
150
200
E_{n} (MeV)

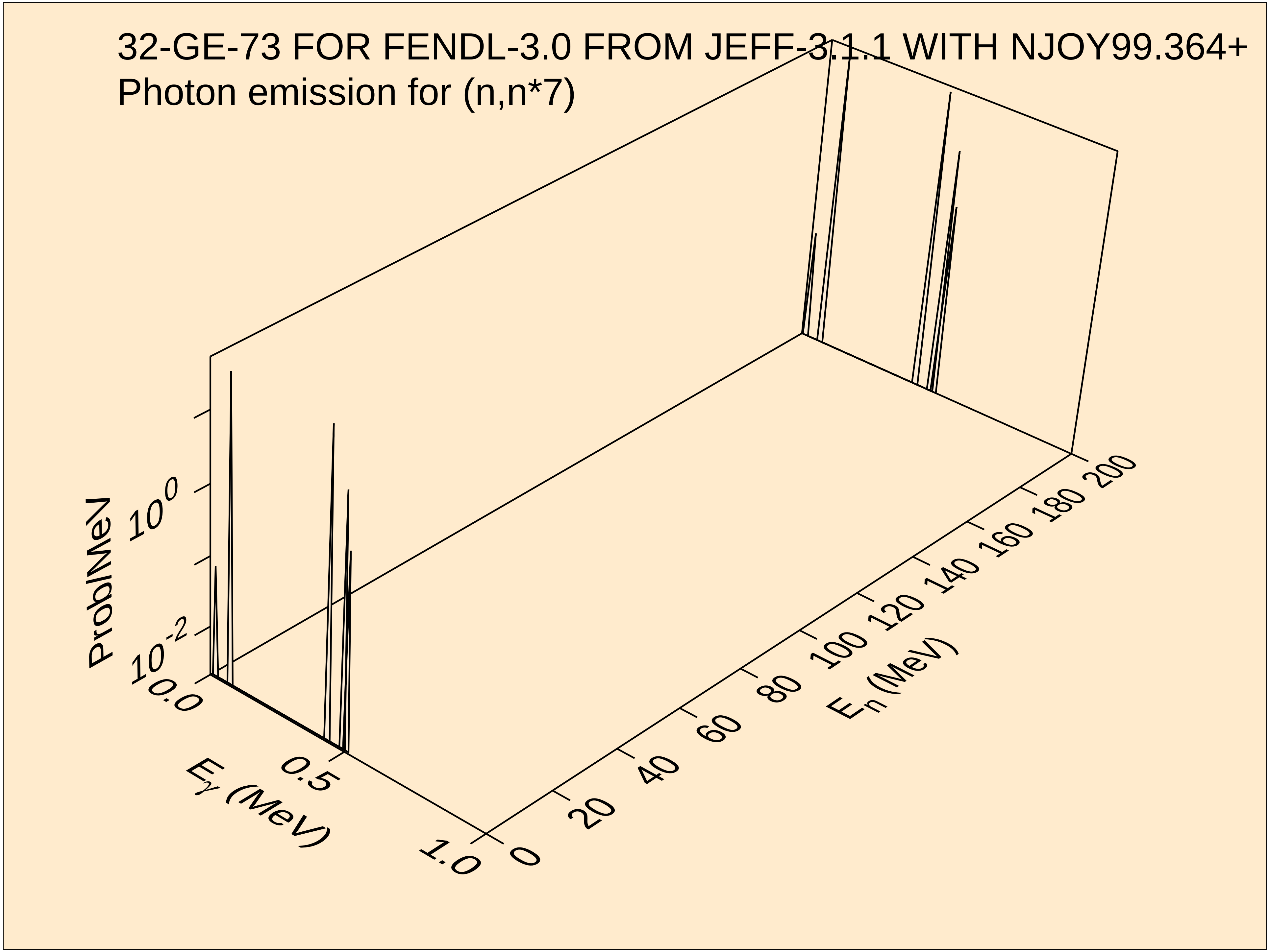

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*4)
Prob/MeV
10^{0}
10^{-2}
E_{γ} (MeV)
0
200
400
$*10^{-3}$
E_{n} (MeV)
0
50
100
150
200

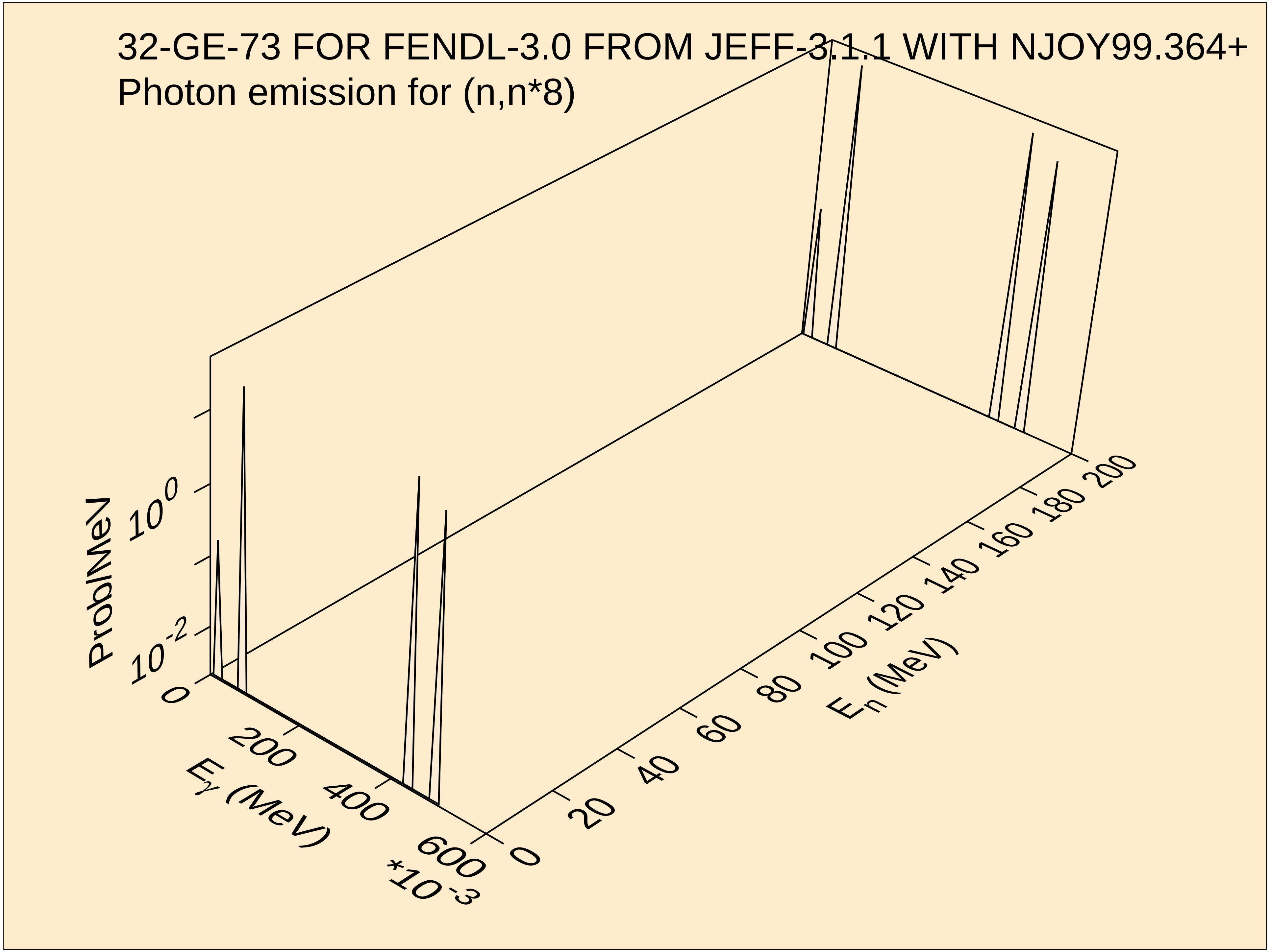


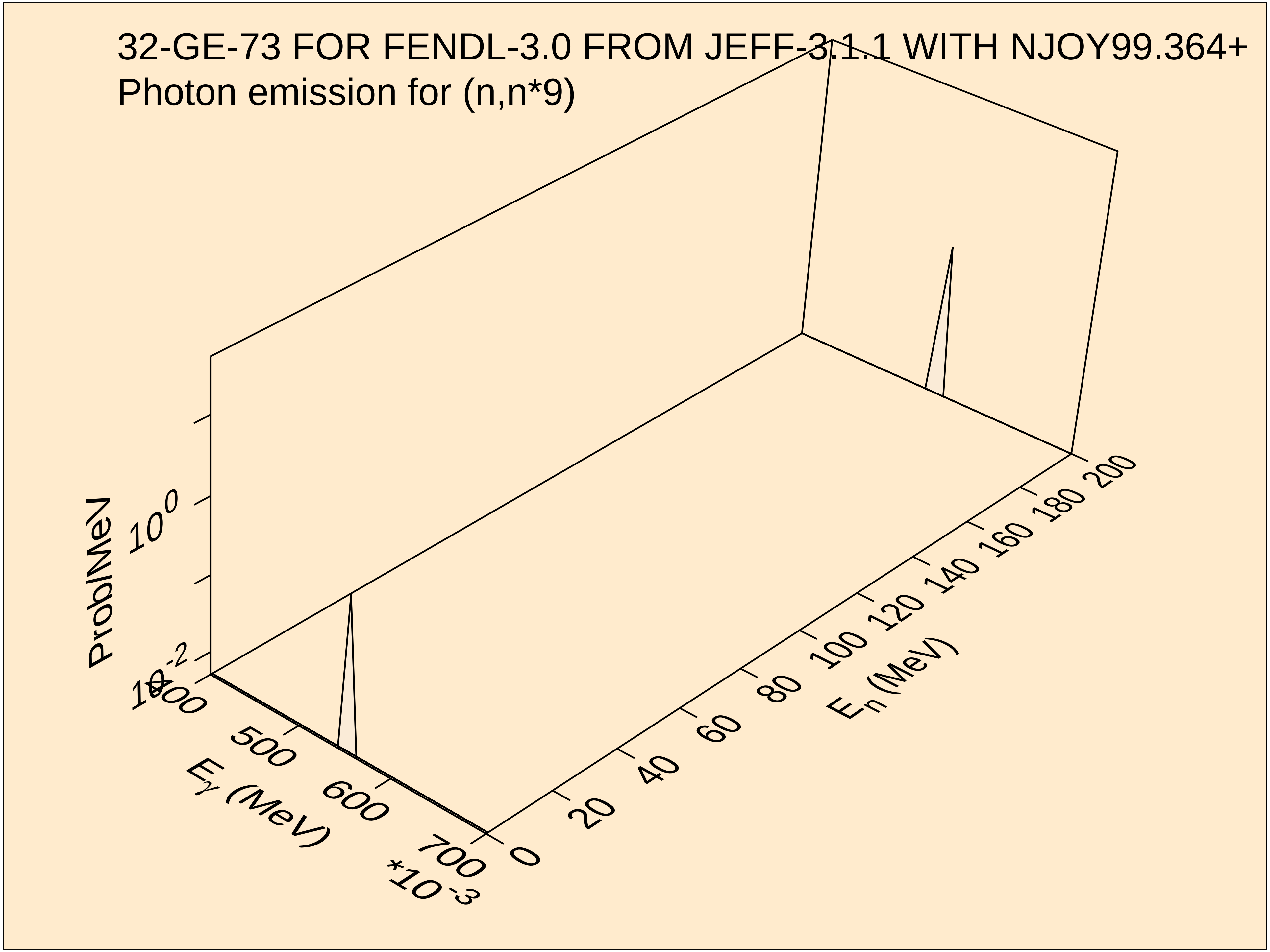
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*5)

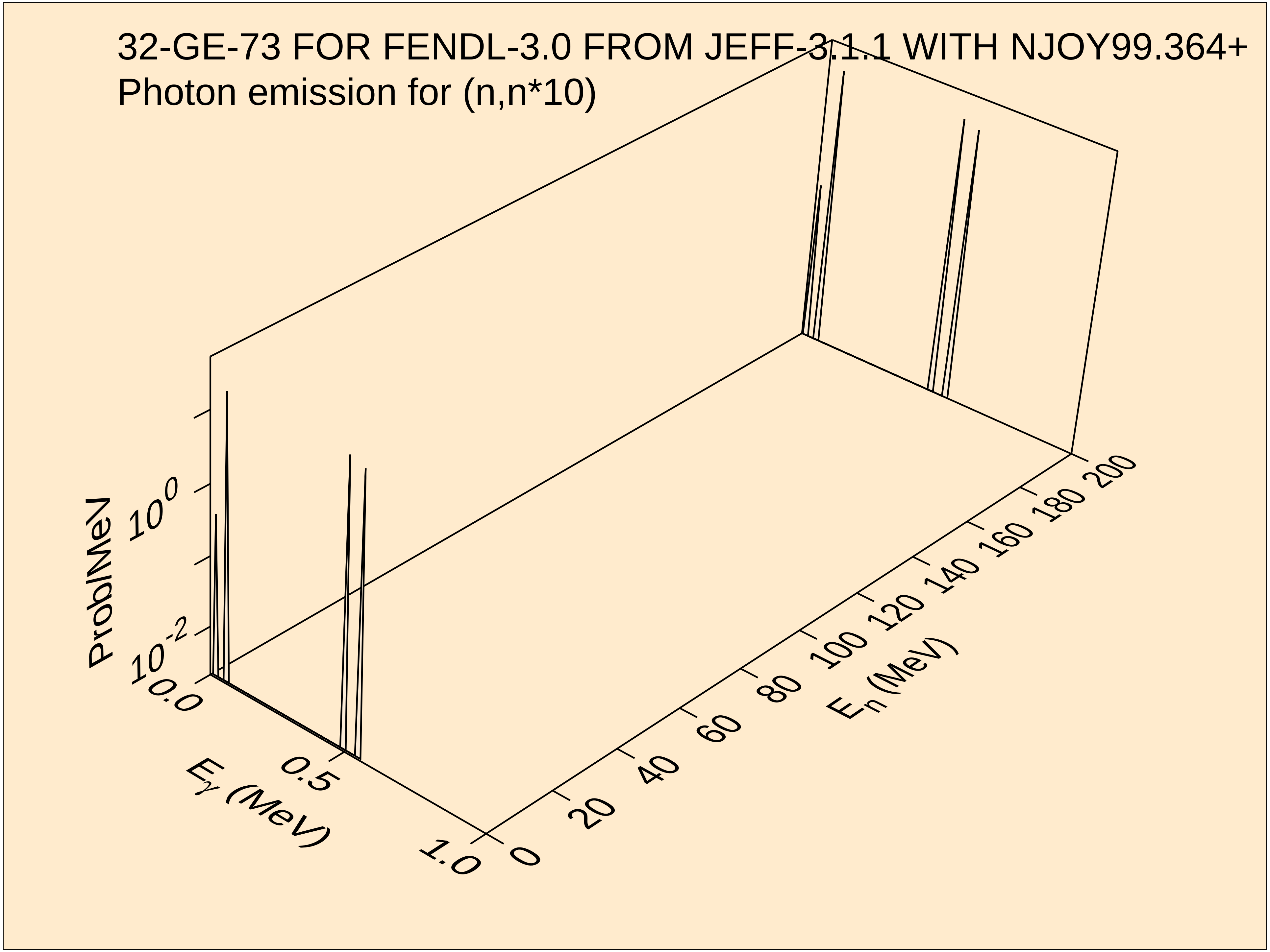
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*6)




32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*7)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

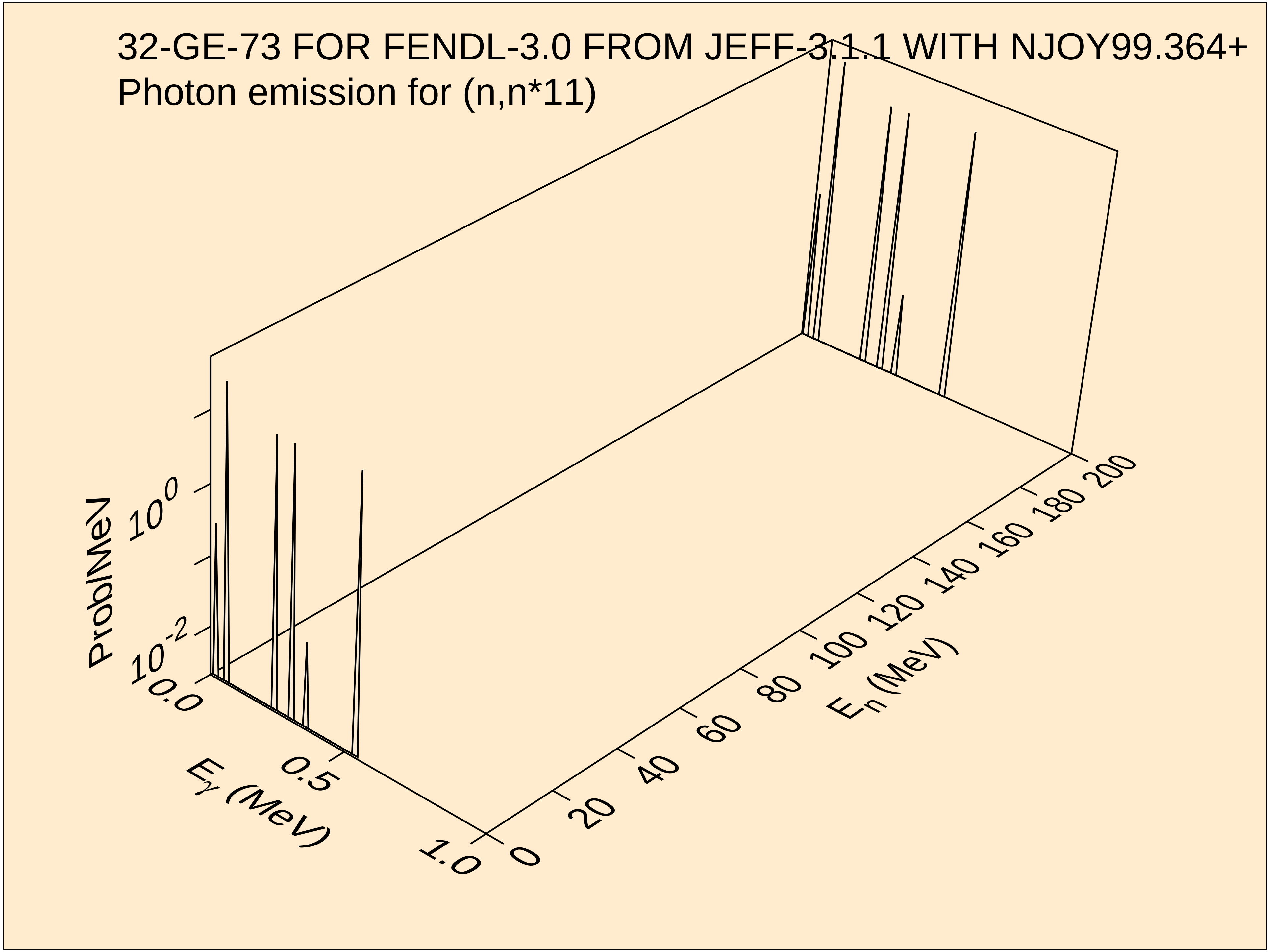

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*8)
ProbMeV
10^{0}
10^{-2}
0
200
400
600
$*10^{-3}$
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

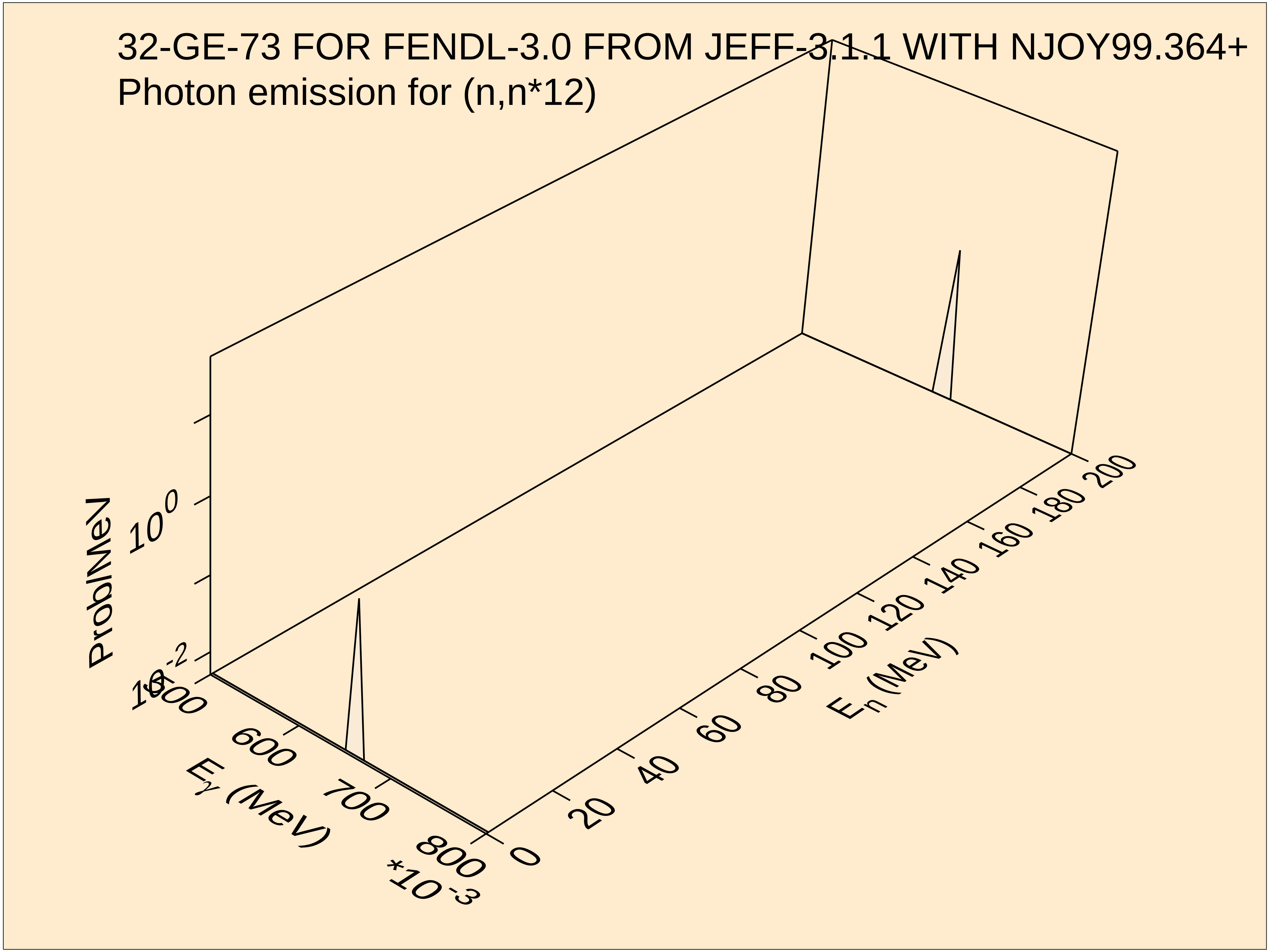

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*9)
Prob/MeV
10^{0}
10^{-2}
E_{γ} (MeV)
400
500
600
700
$*10^{-3}$
E_{n} (MeV)
0
20
40
60
80
100
120
140
160
180
200

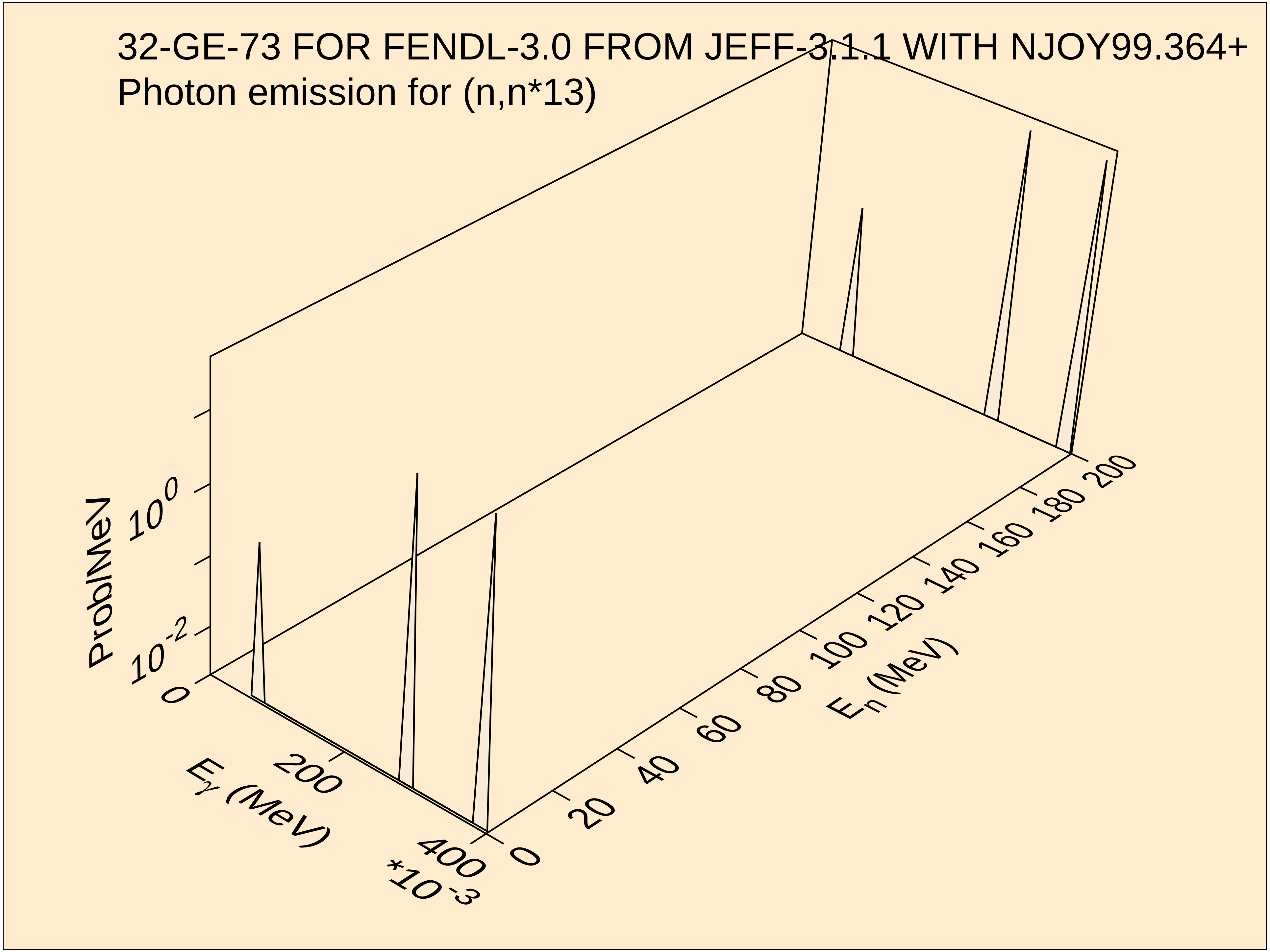


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+

Photon emission for (n,n*10)

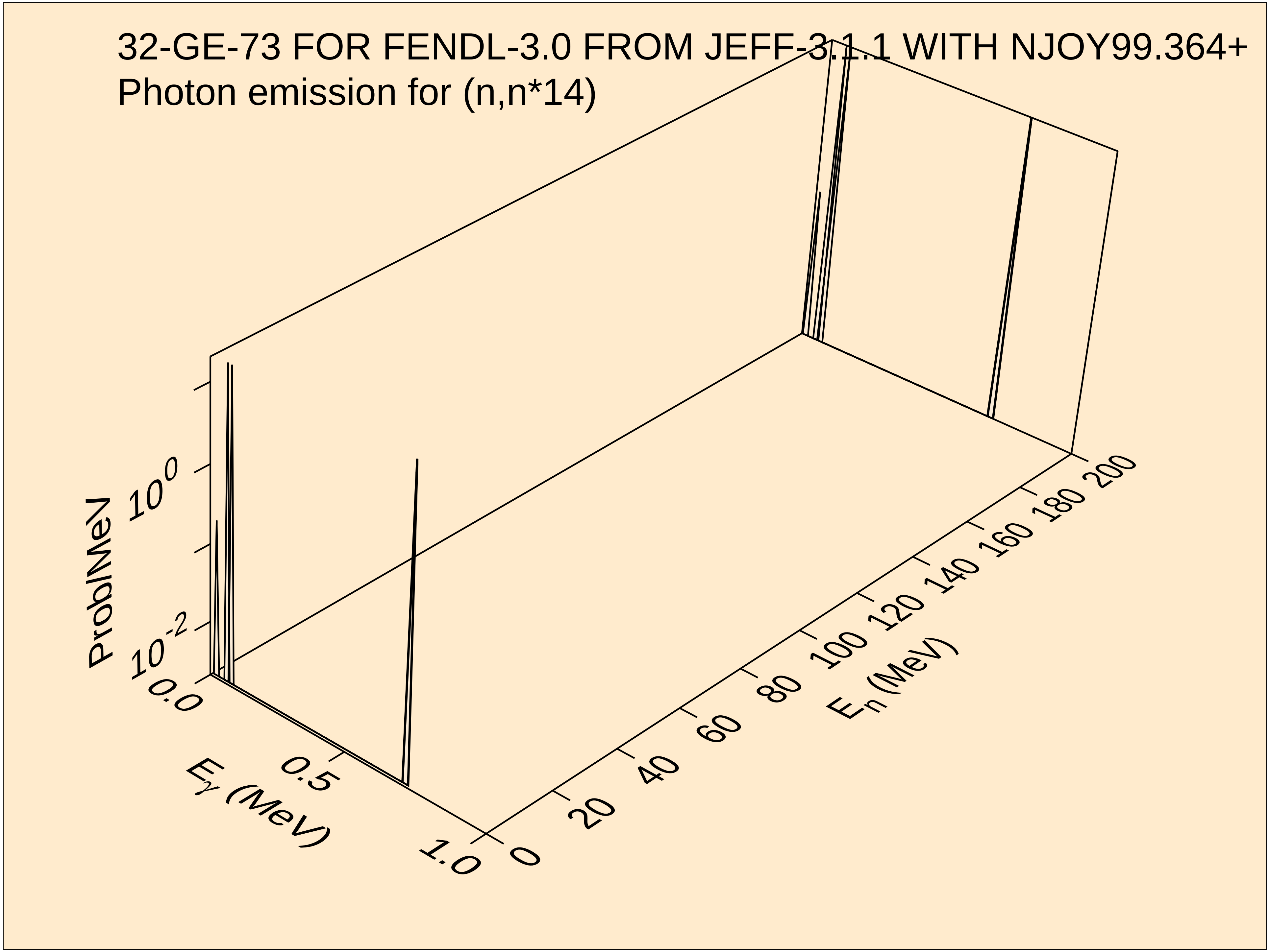

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*11)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

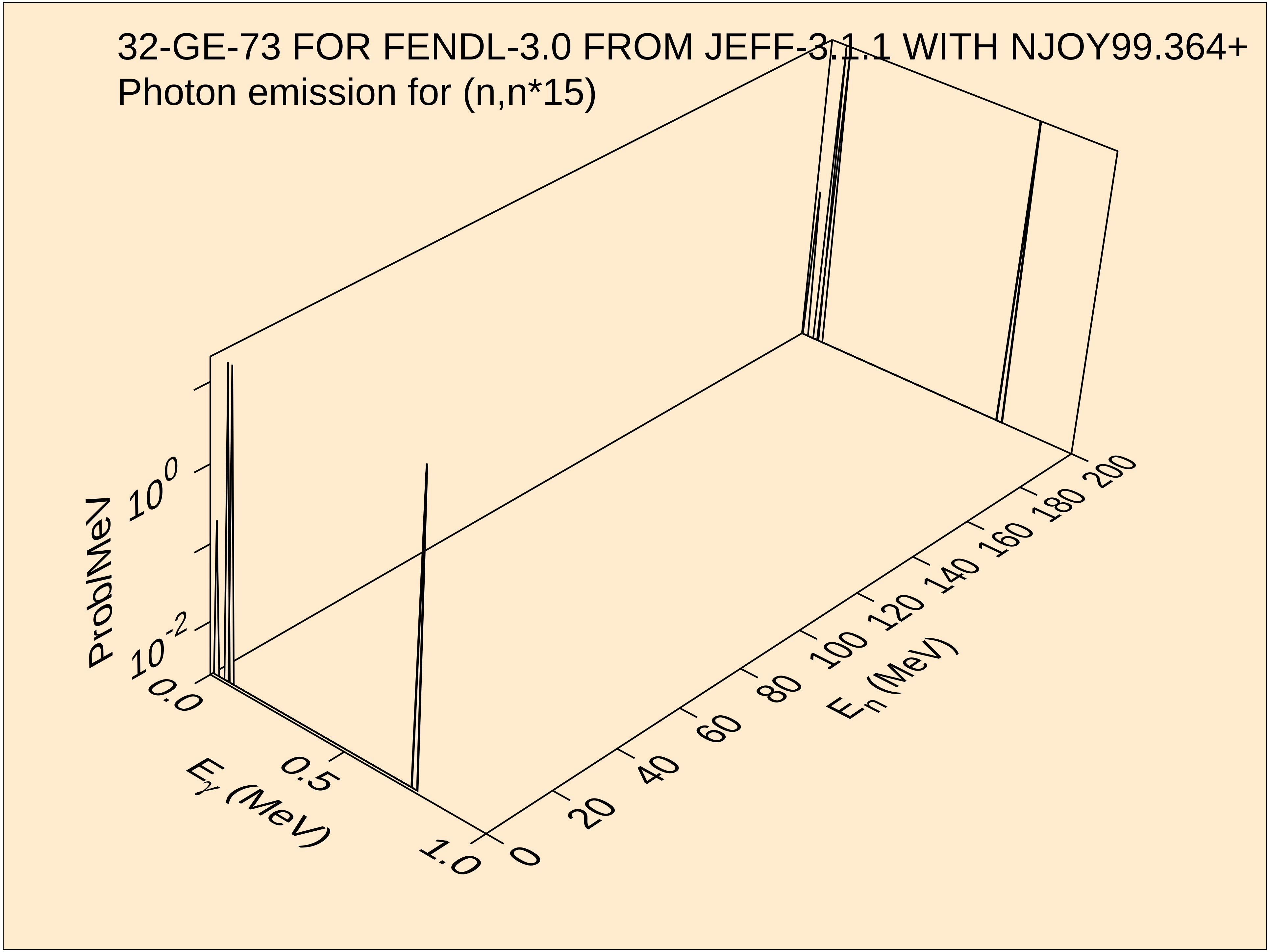

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*12)
Prob/MeV
10^{0}
10^{-2}
500
600
700
800
$*10^{-3}$
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)



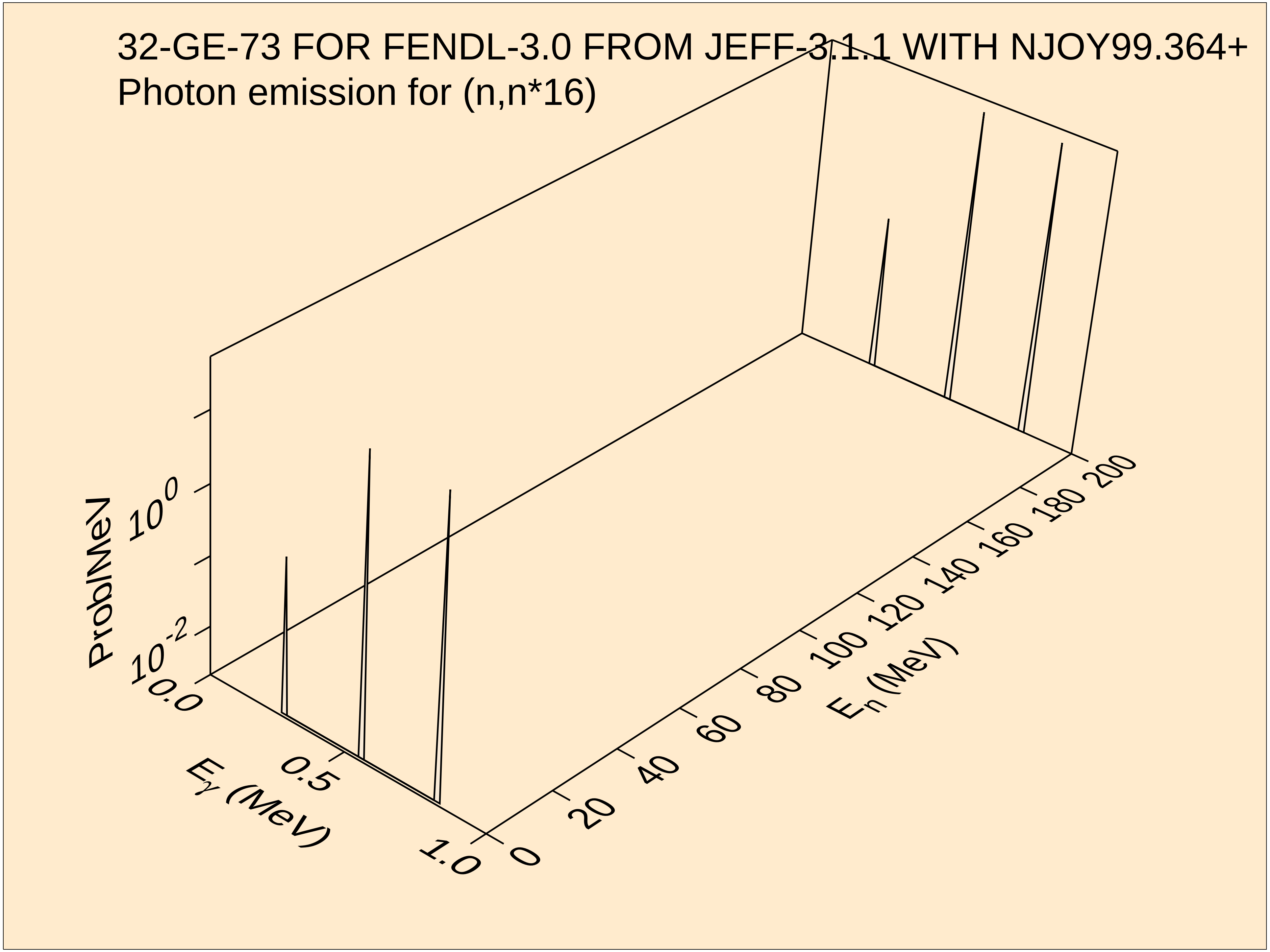
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+

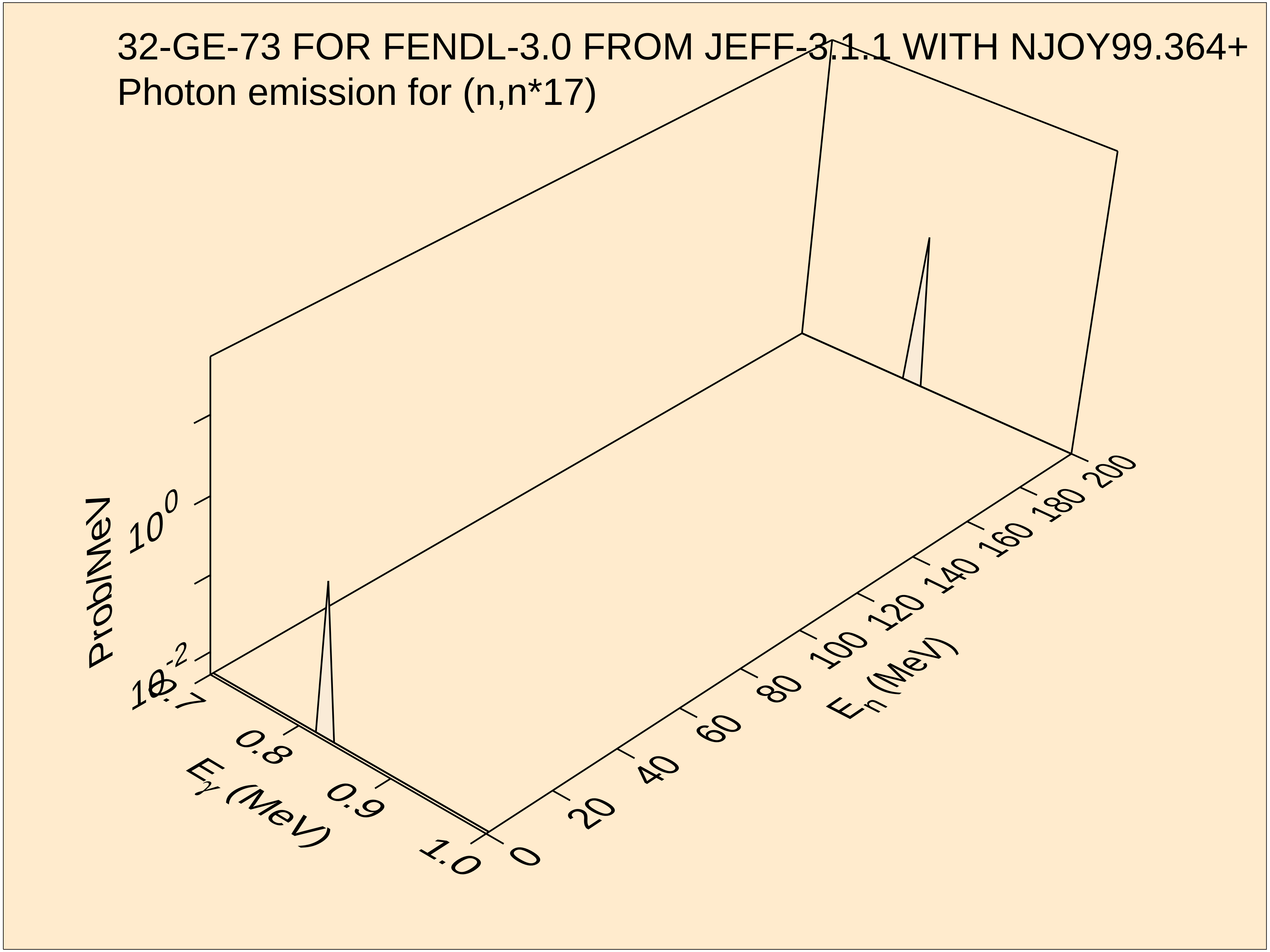
Photon emission for (n,n*13)

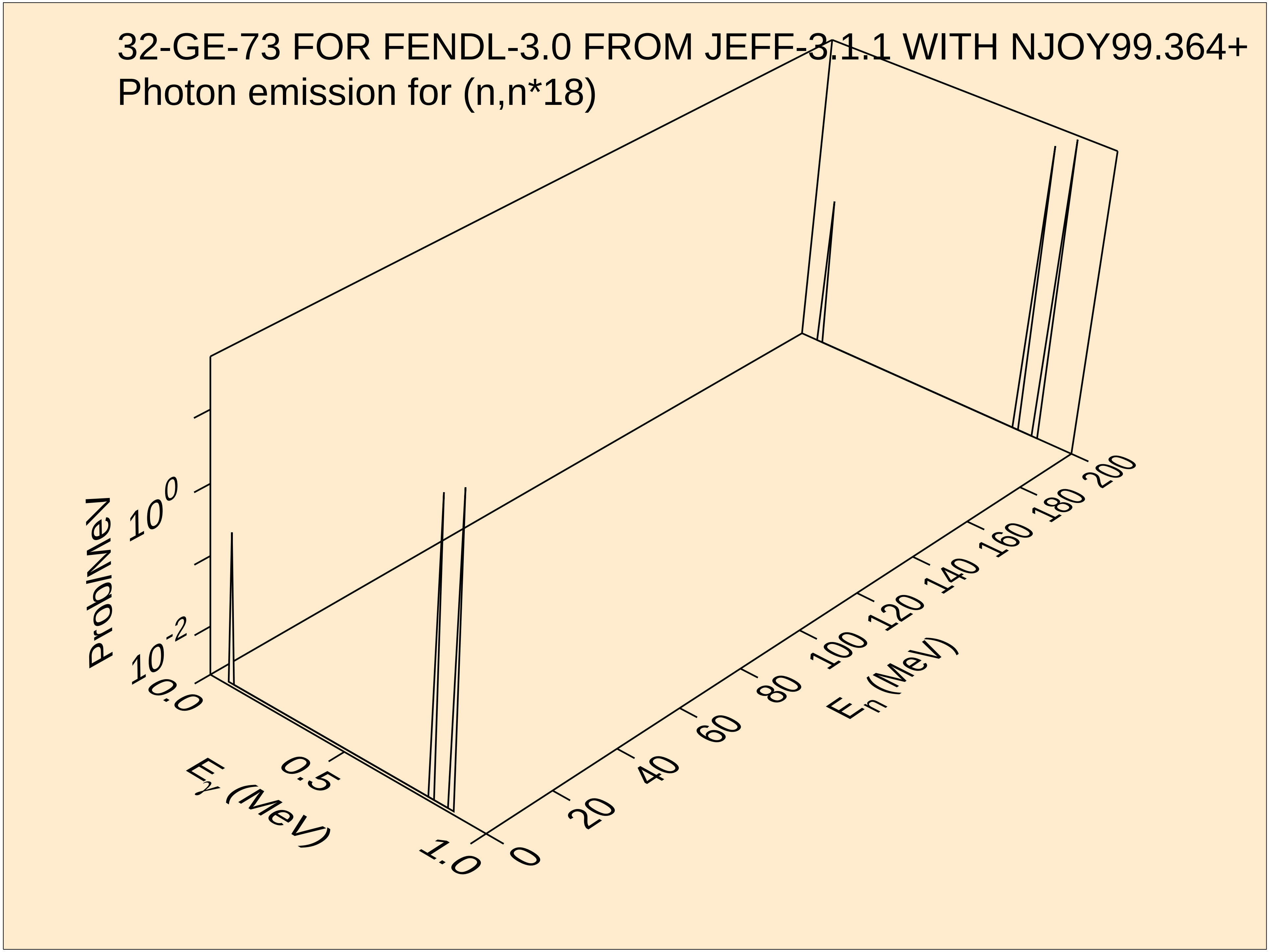

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*14)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
E_{γ} (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_{n} (MeV)

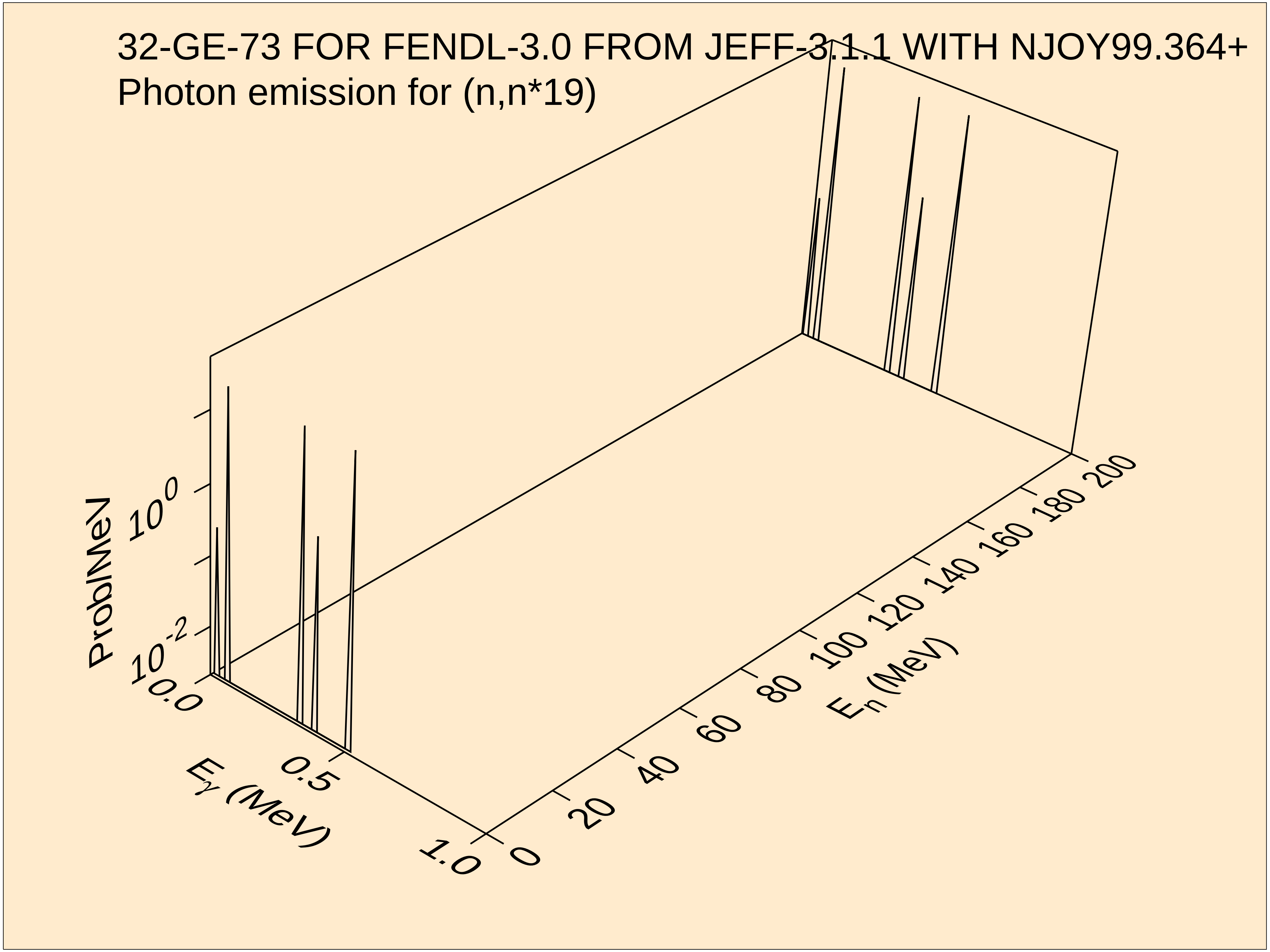


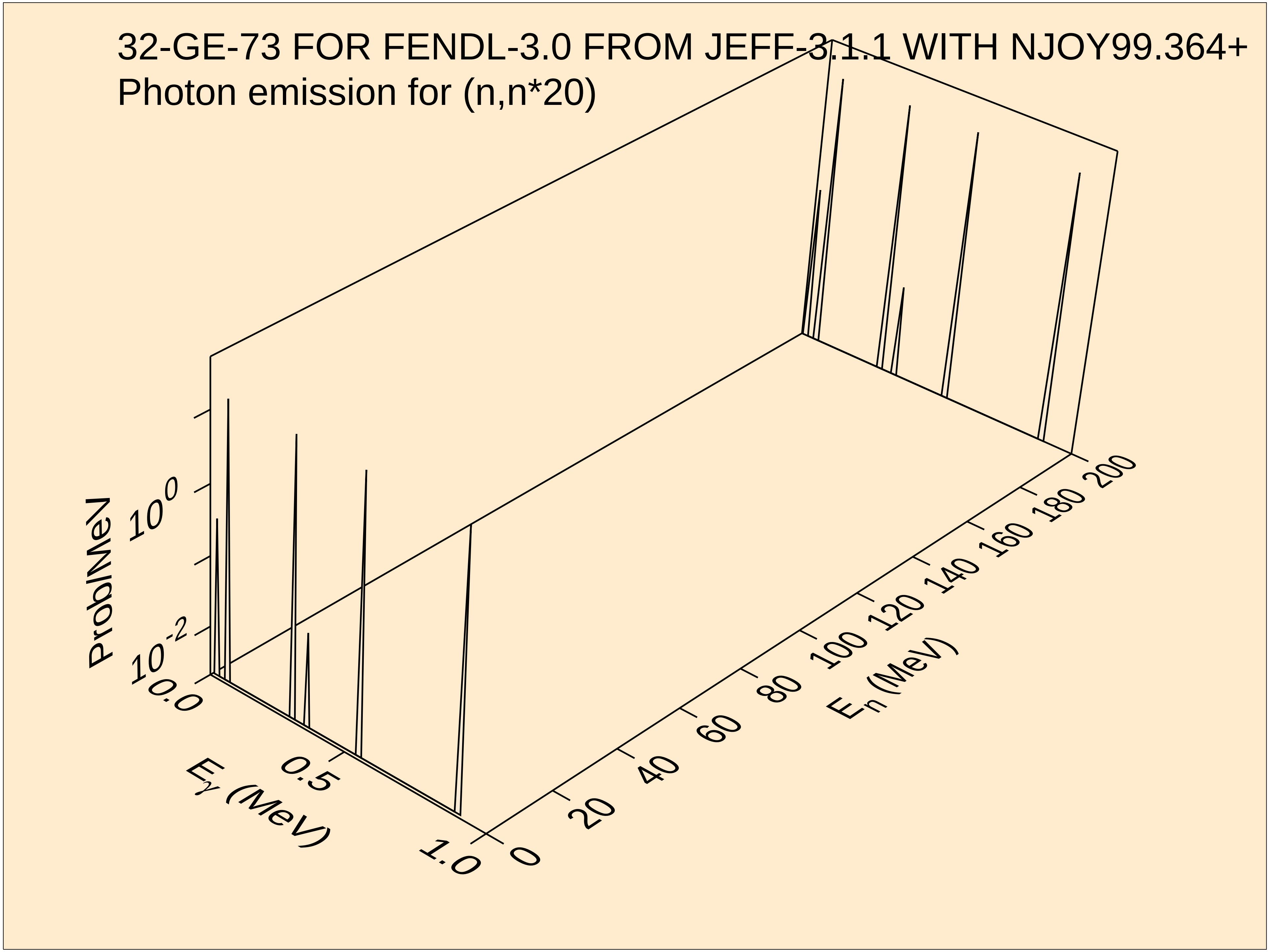
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*15)

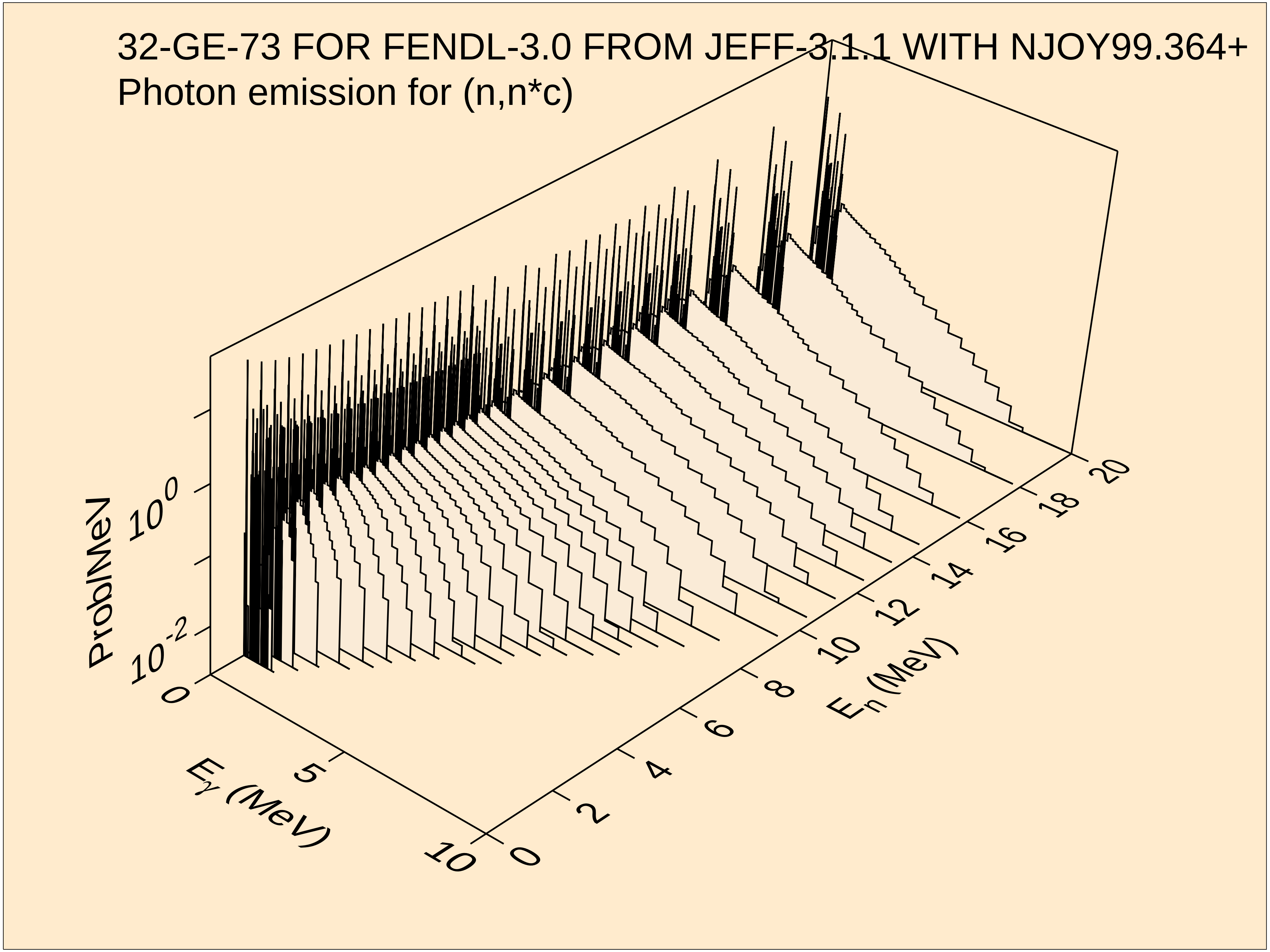

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*16)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
E_{γ} (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_{n} (MeV)

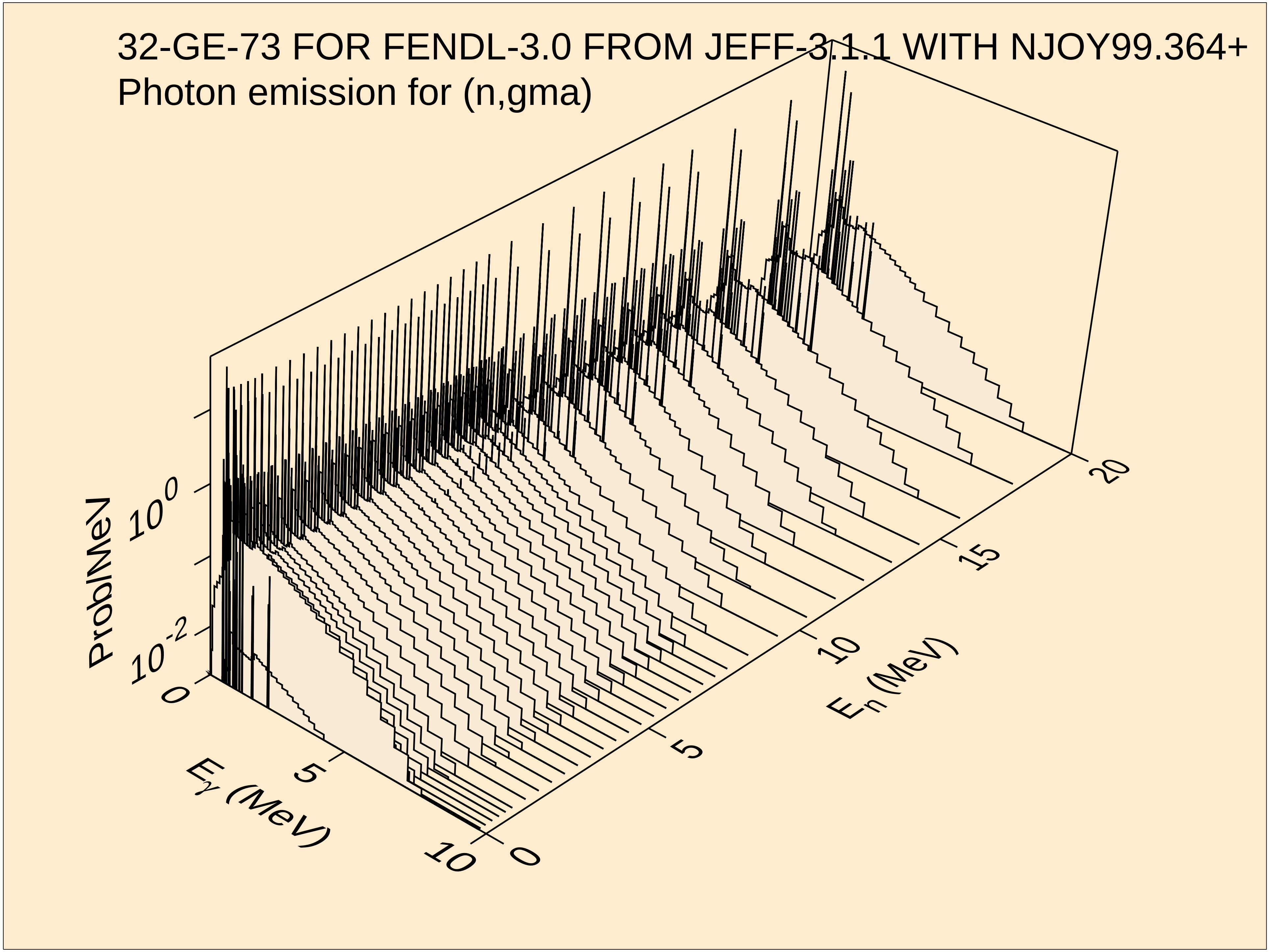

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*17)
Prob/MeV
10^{0}
10^{-2}
0.7
0.8
0.9
1.0
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

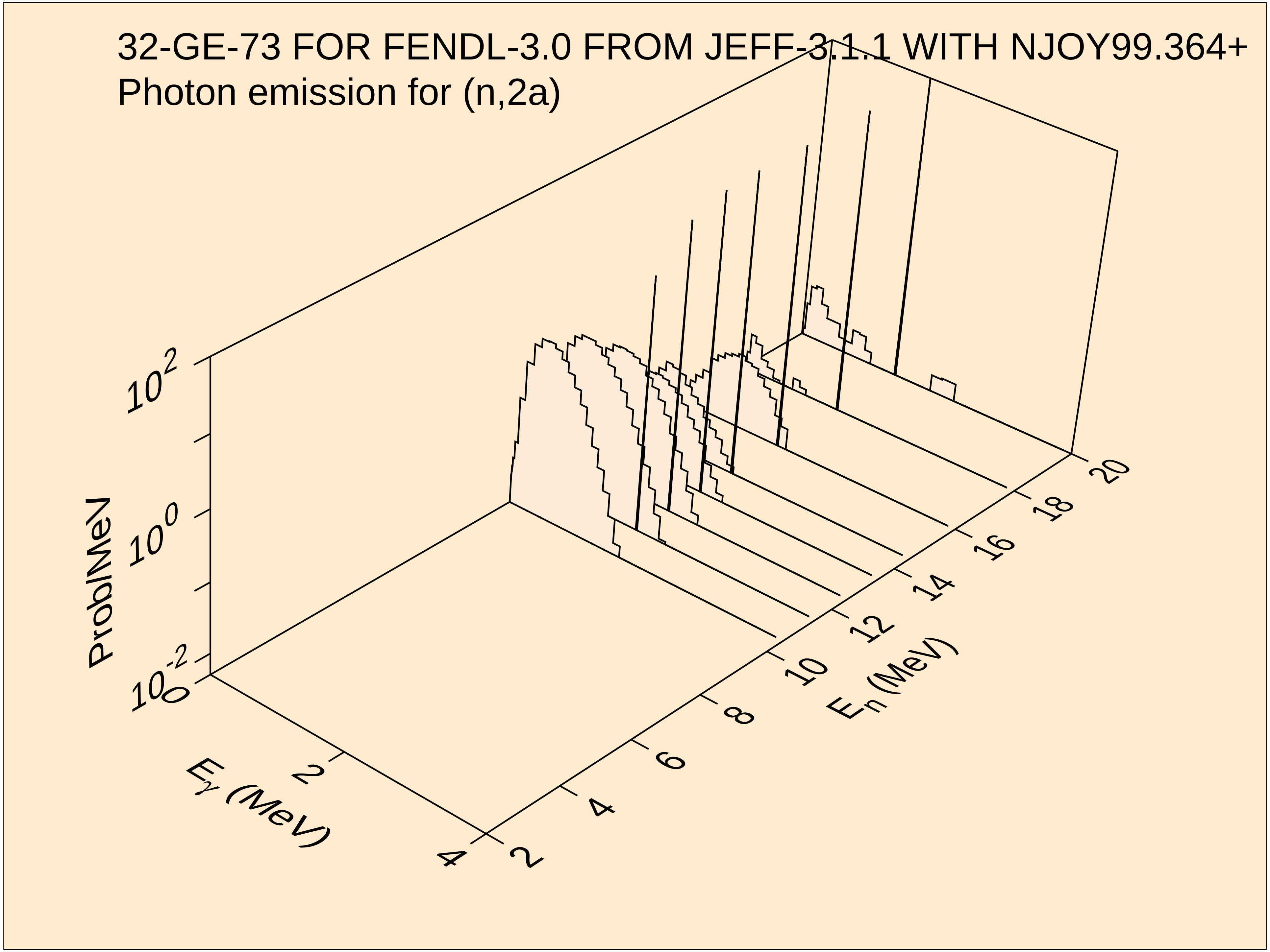

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*18)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*19)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*20)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

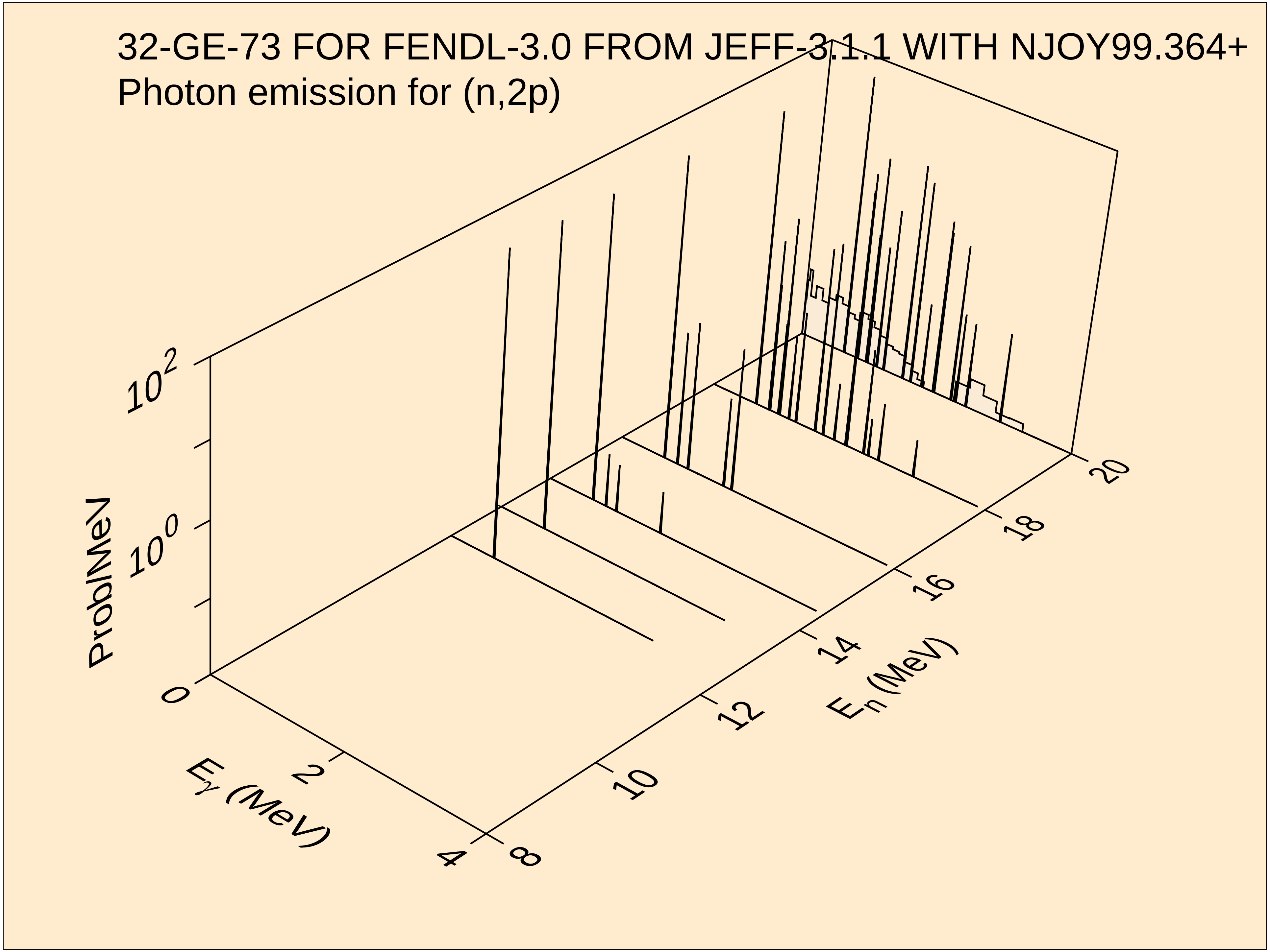

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,n*c)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,gma)
Prob/MeV
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
0
5
10
15
20
E_n (MeV)

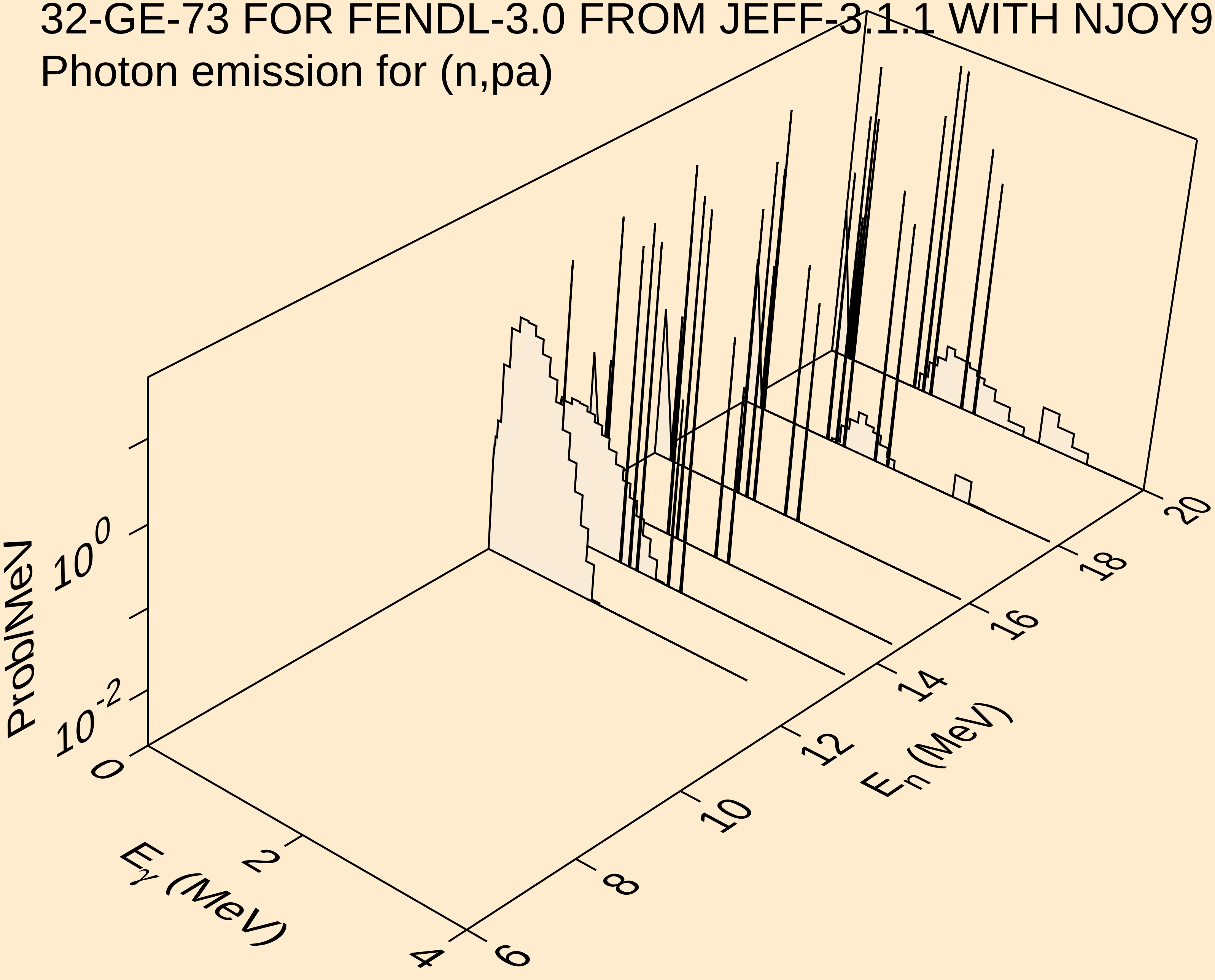

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,2a)
ProbMeV
10^{2}
10^{0}
10^{-2}
E_{γ} (MeV)
0
2
4
E_{n} (MeV)
2
4
6
8
10
12
14
16
18
20

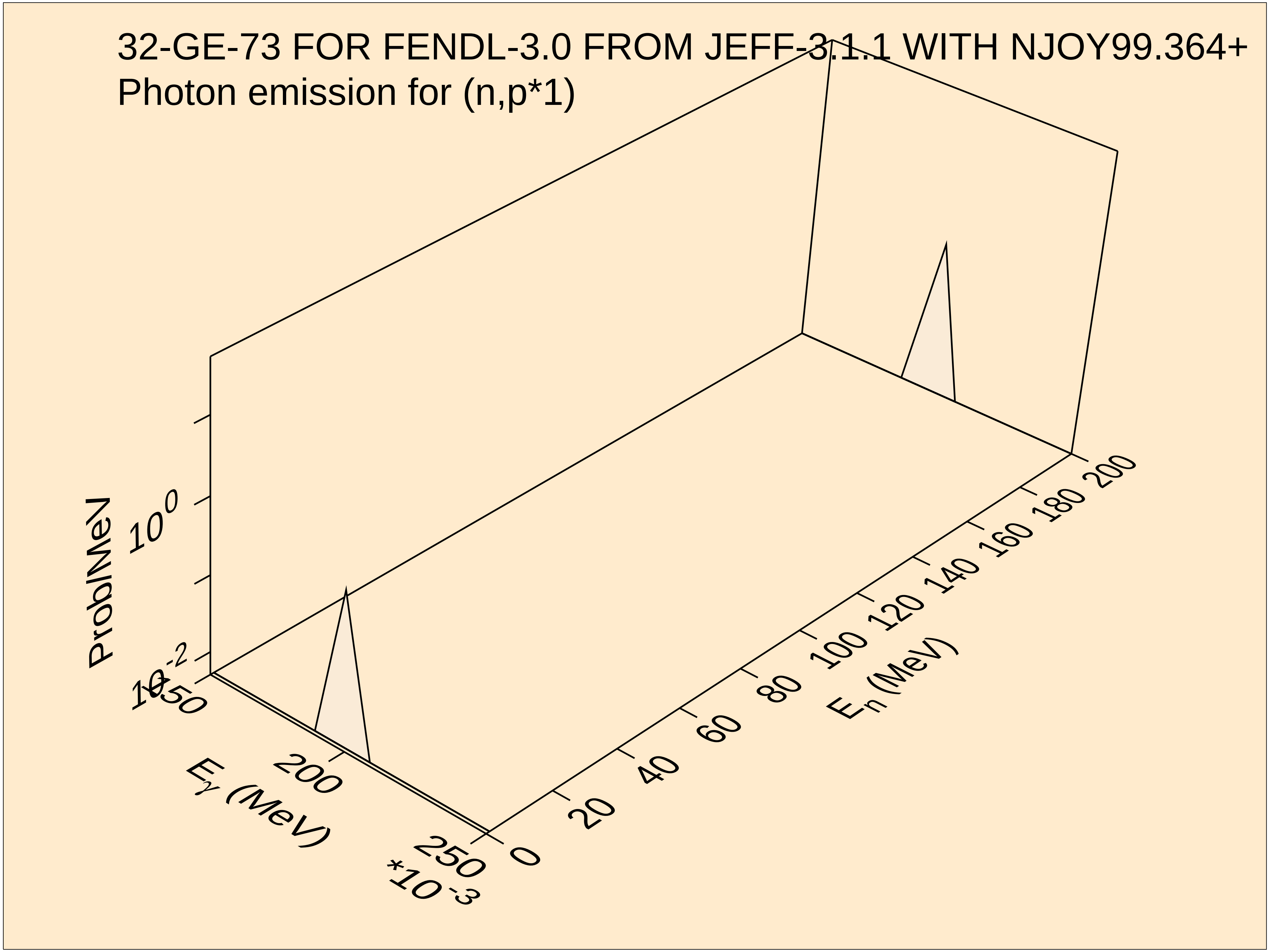
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+

Photon emission for (n,2p)

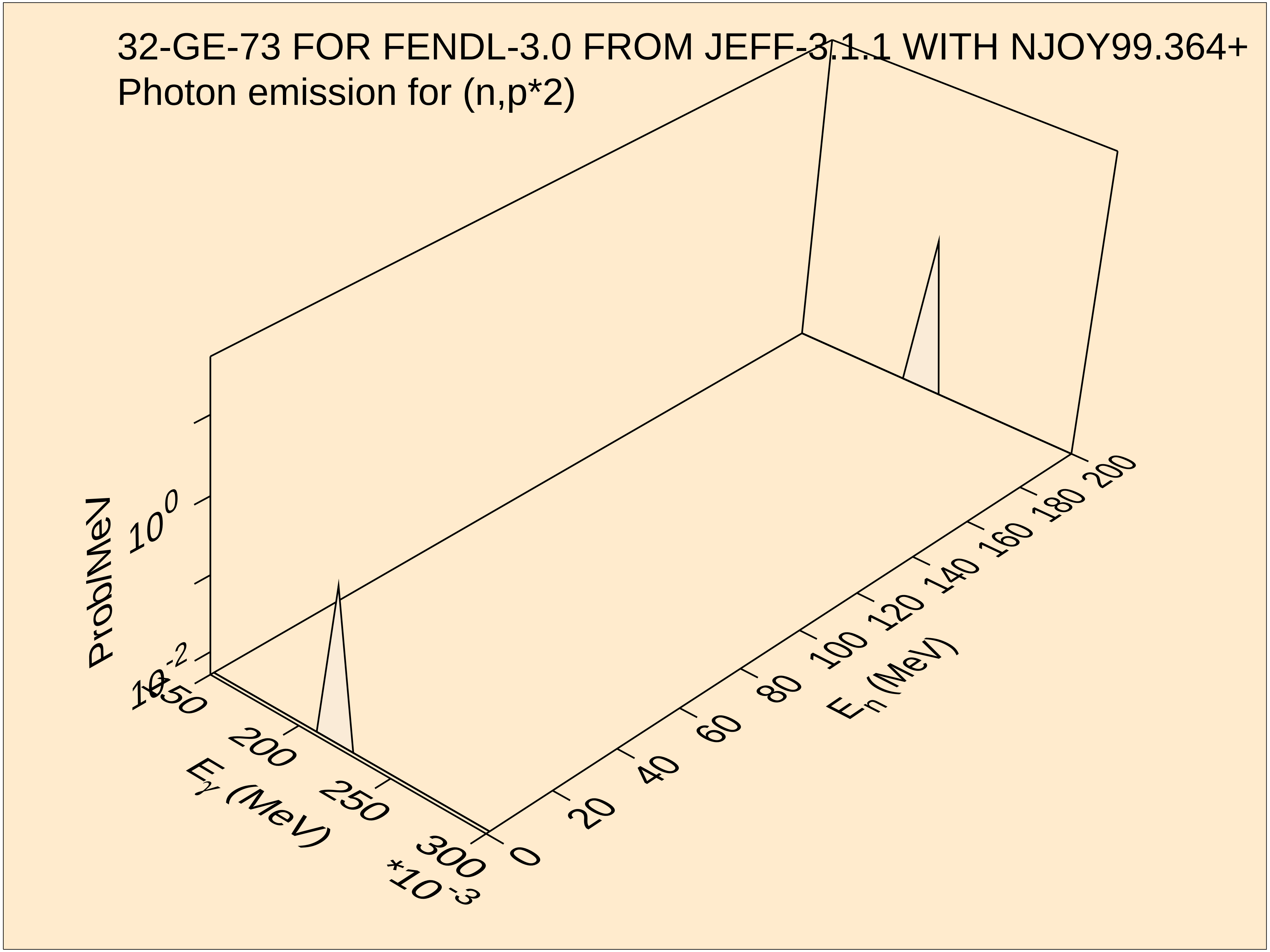


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,pa)

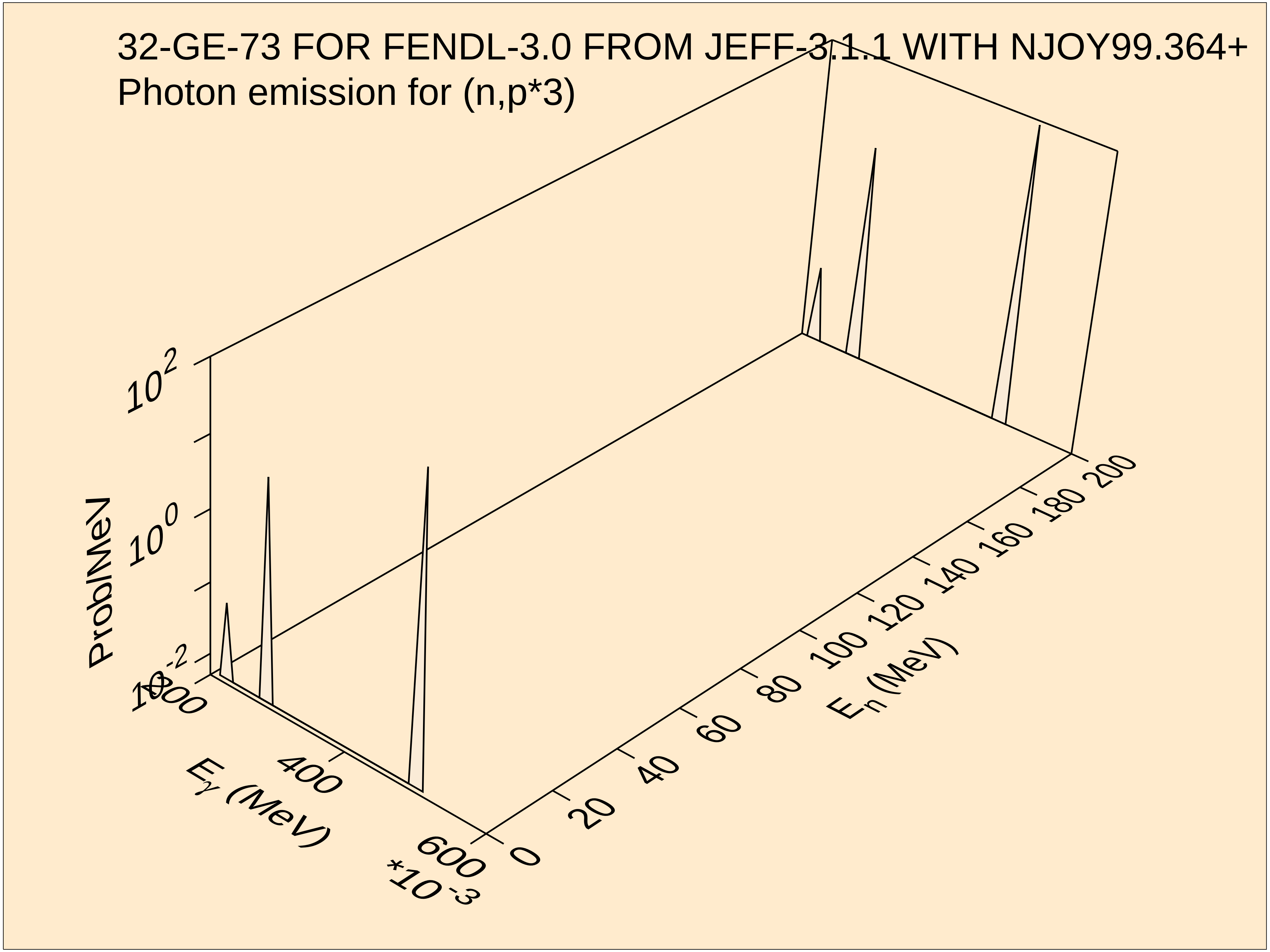




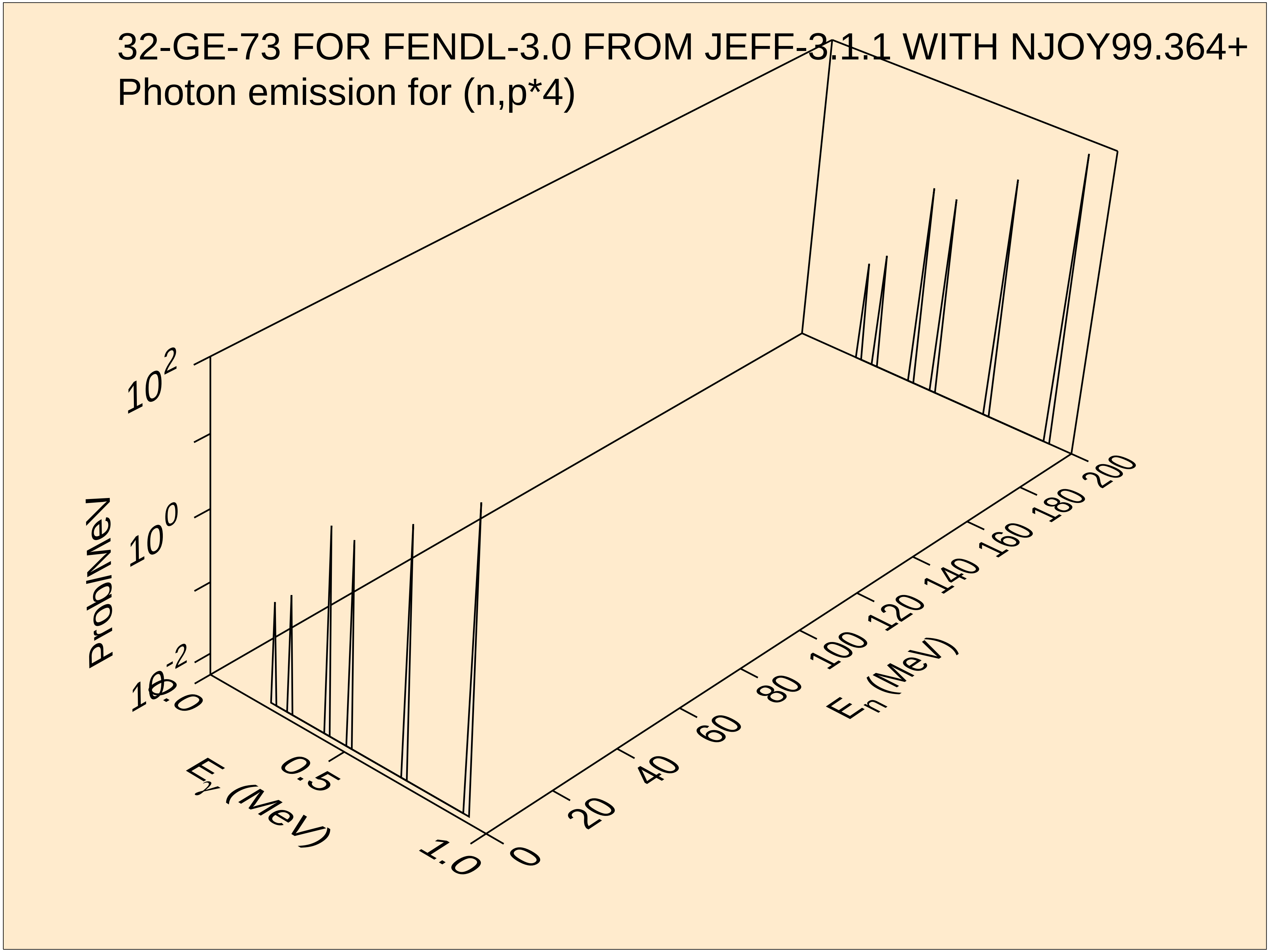
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*1)
Prob/MeV
10^{0}
10^{-2}
150
200
250
$*10^{-3}$
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

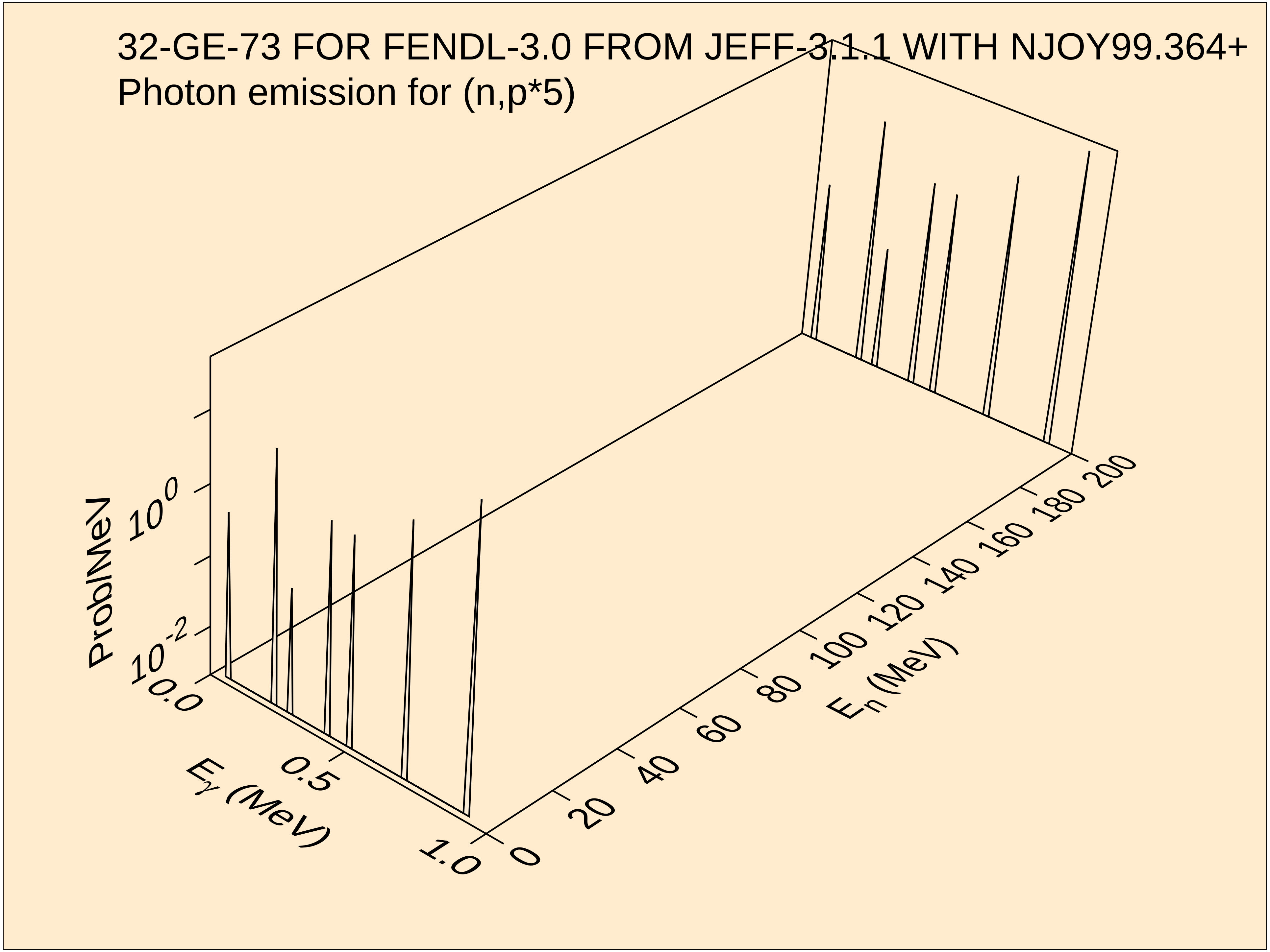


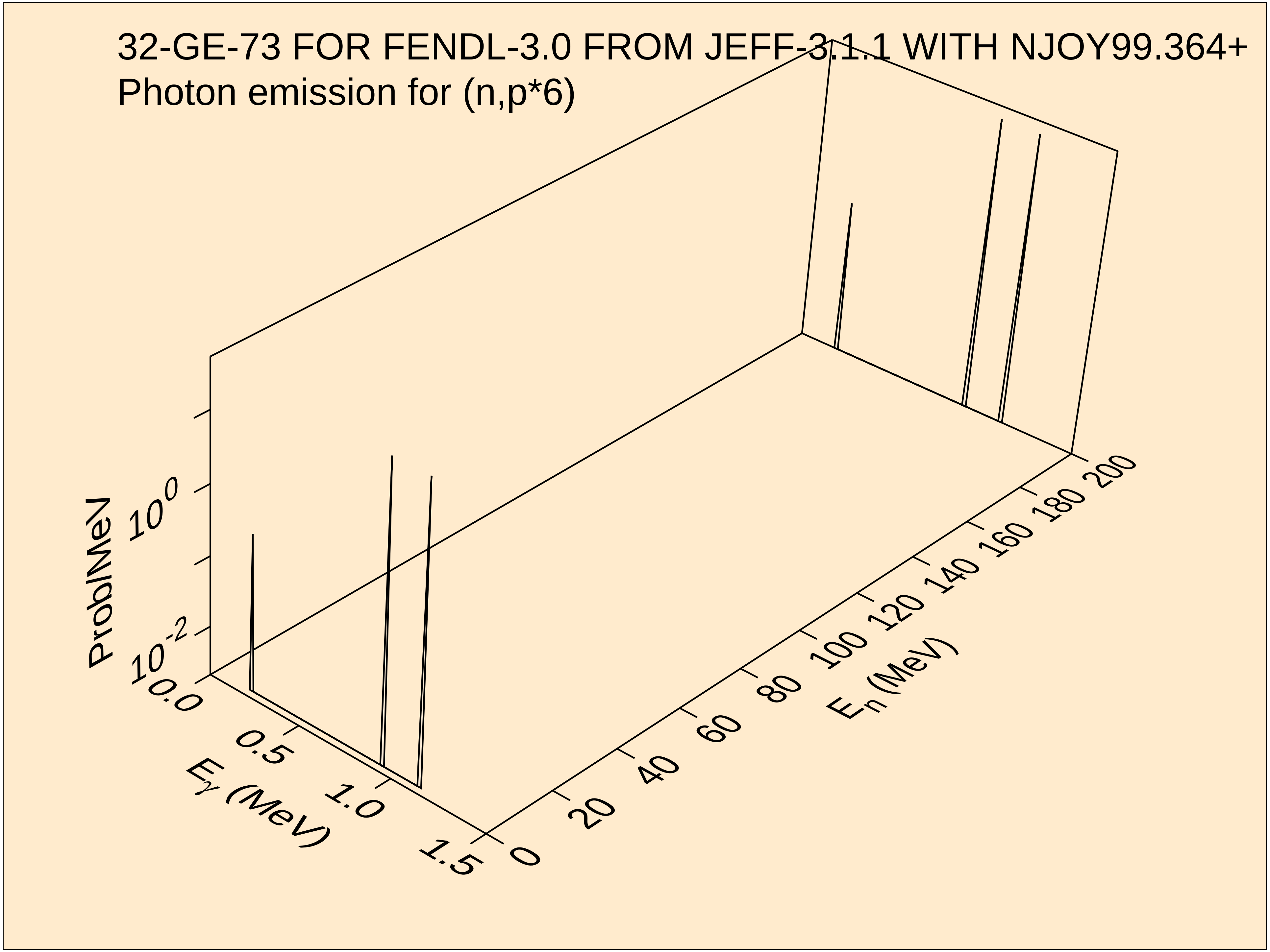
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*2)

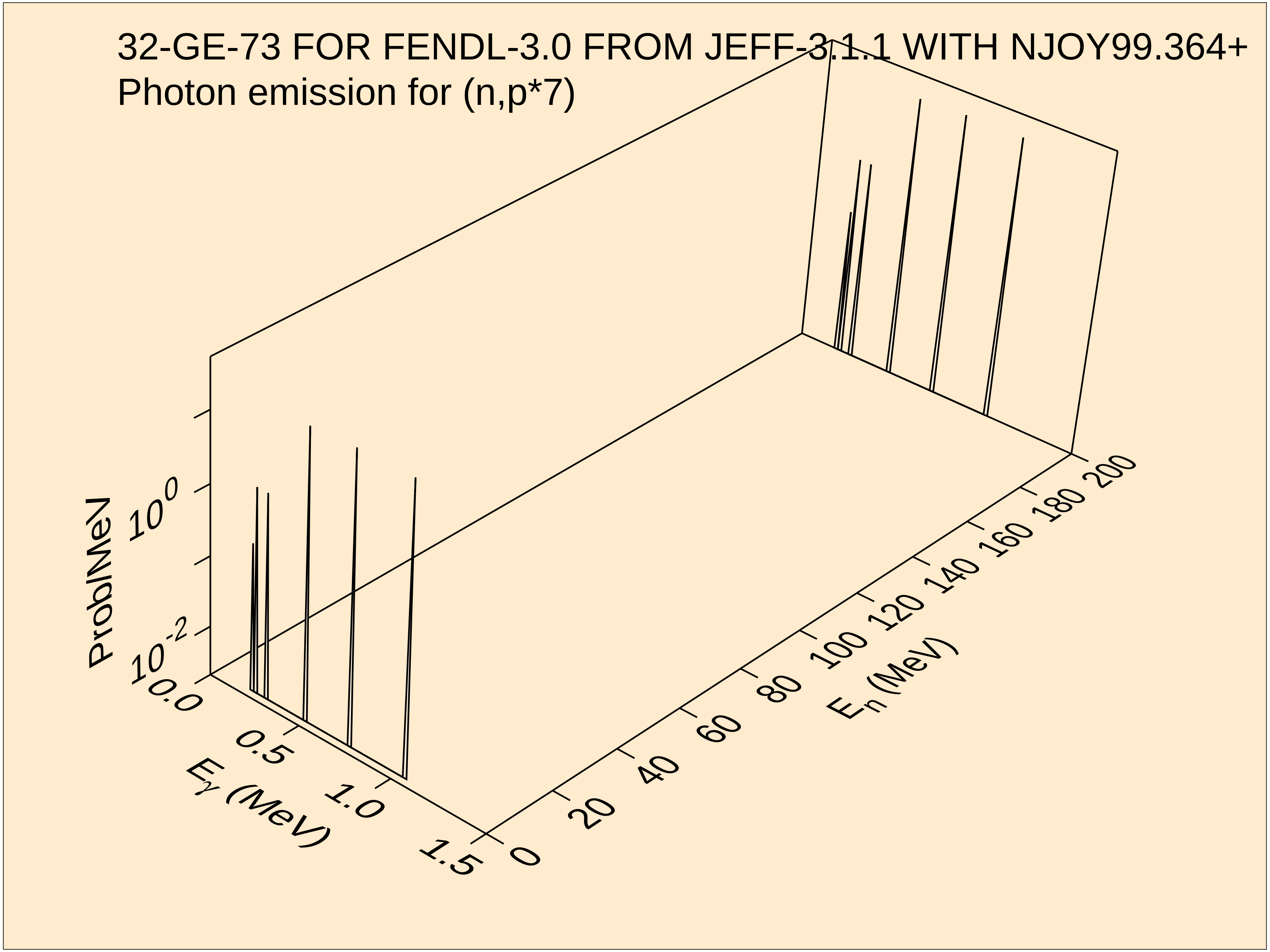


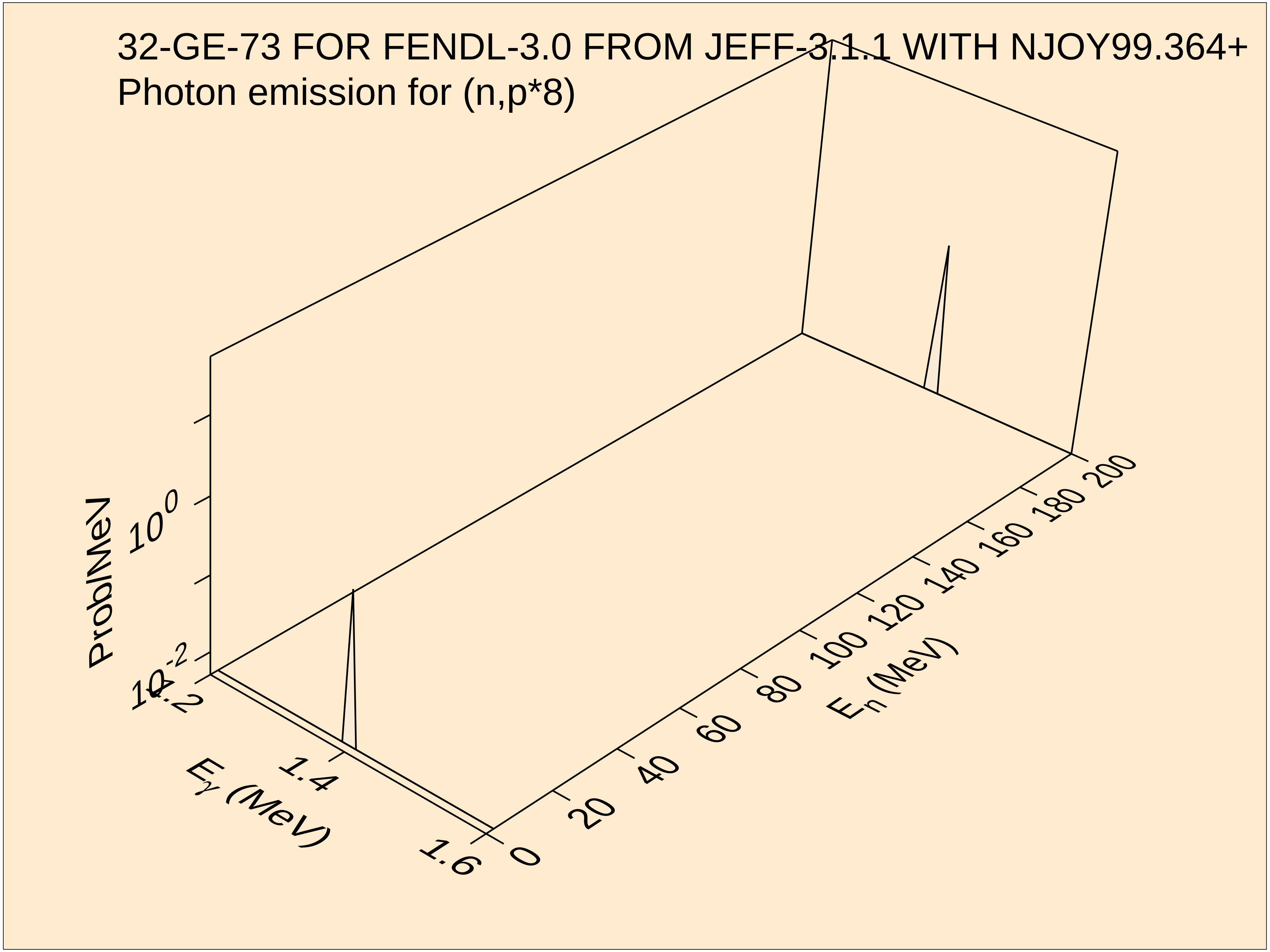
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*3)

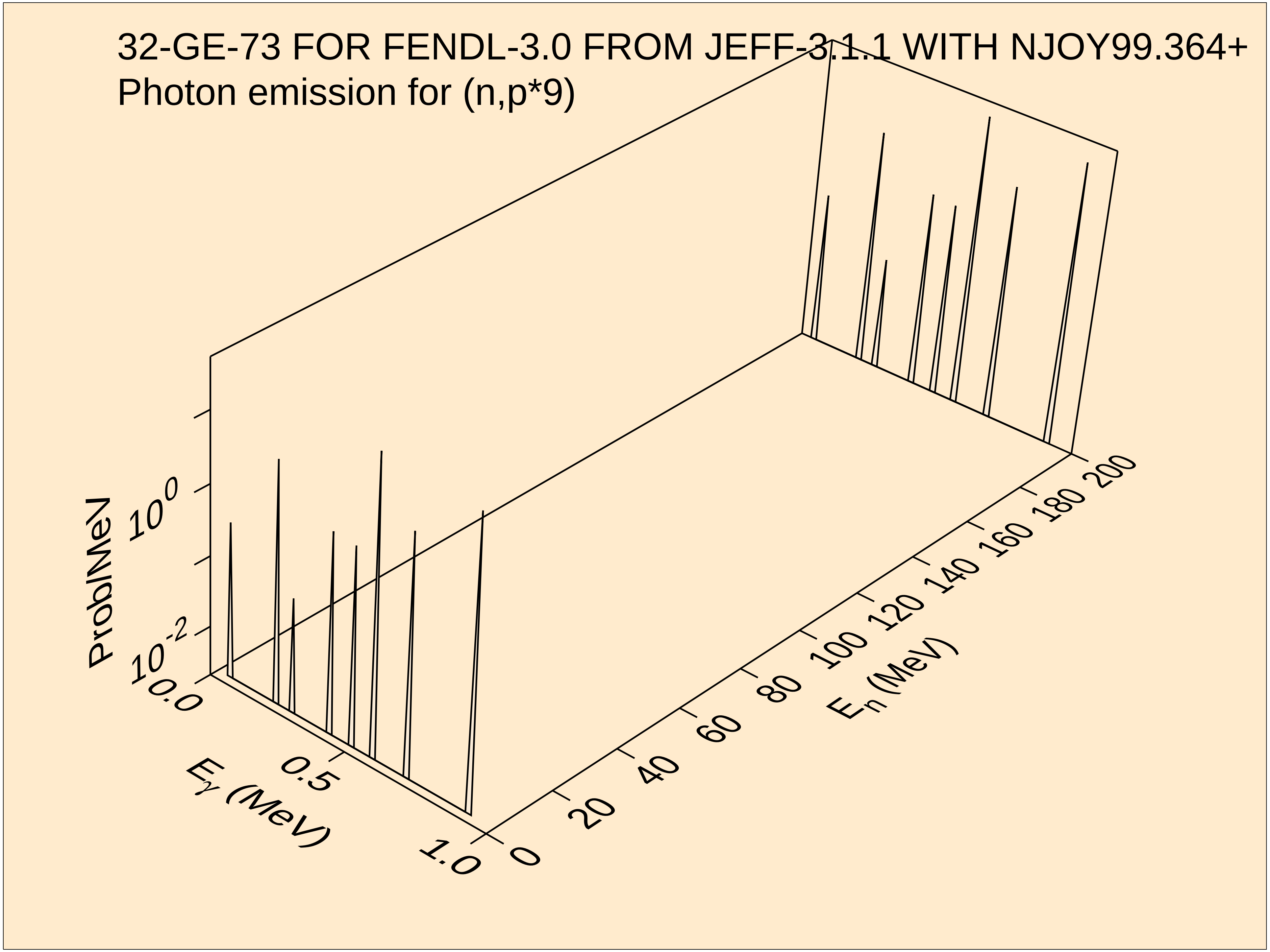

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*4)
Prob/MeV
10^{2}
10^{0}
10^{-2}
0.0
0.5
1.0
E_{γ} (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_{n} (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*5)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

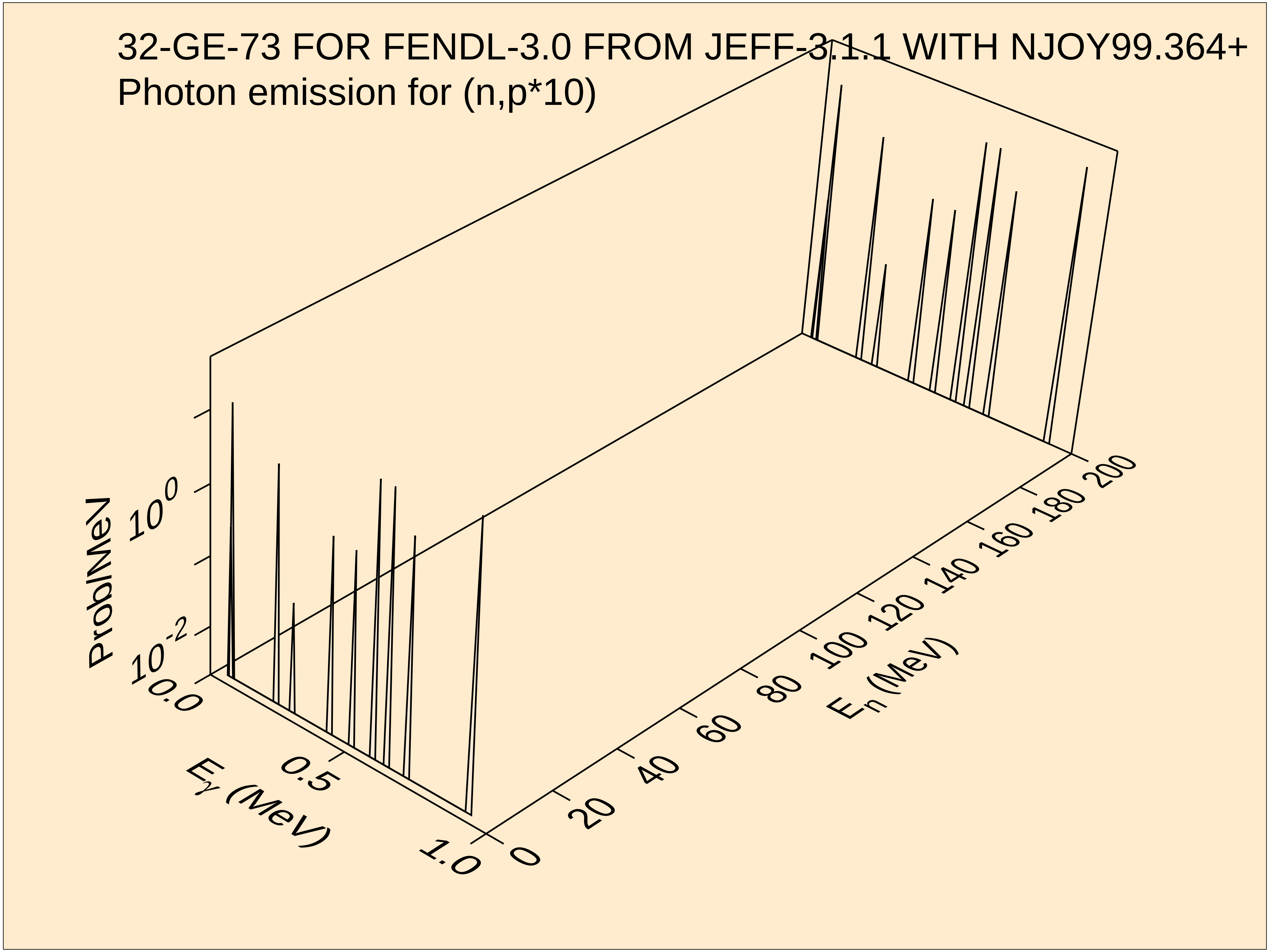

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*6)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
1.5
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

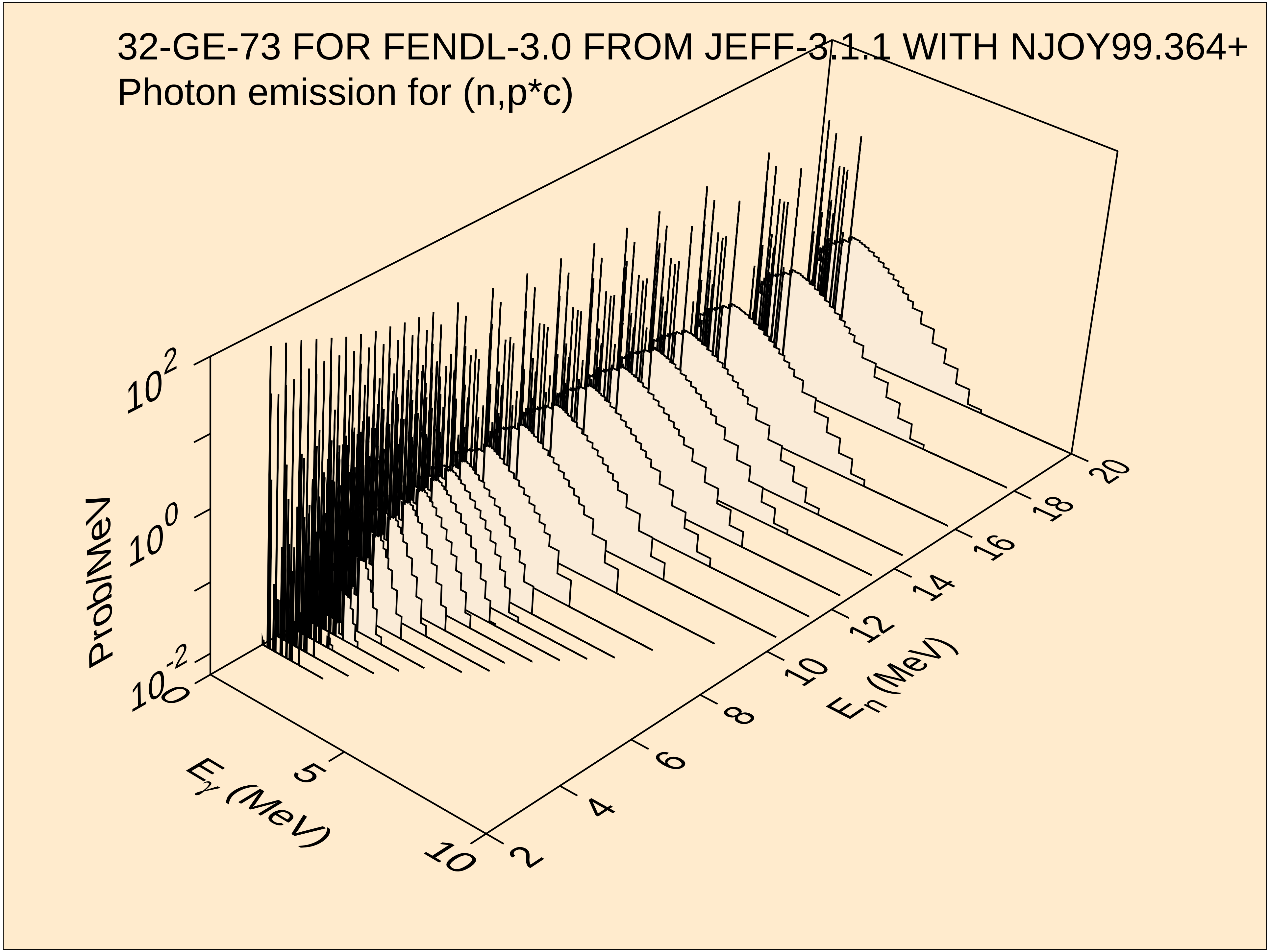

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*7)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
1.5
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

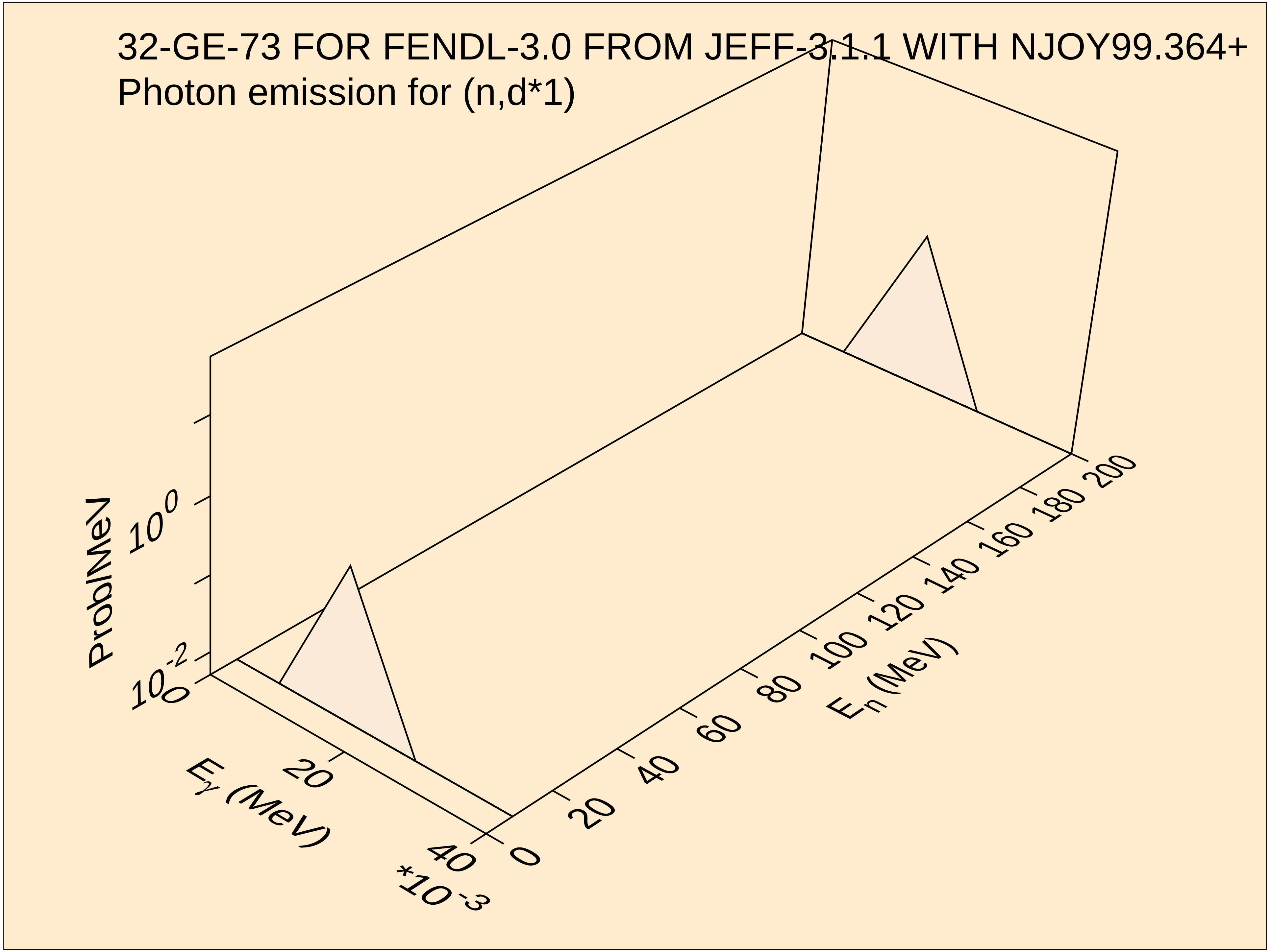

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*8)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*9)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
E_{γ} (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_{n} (MeV)

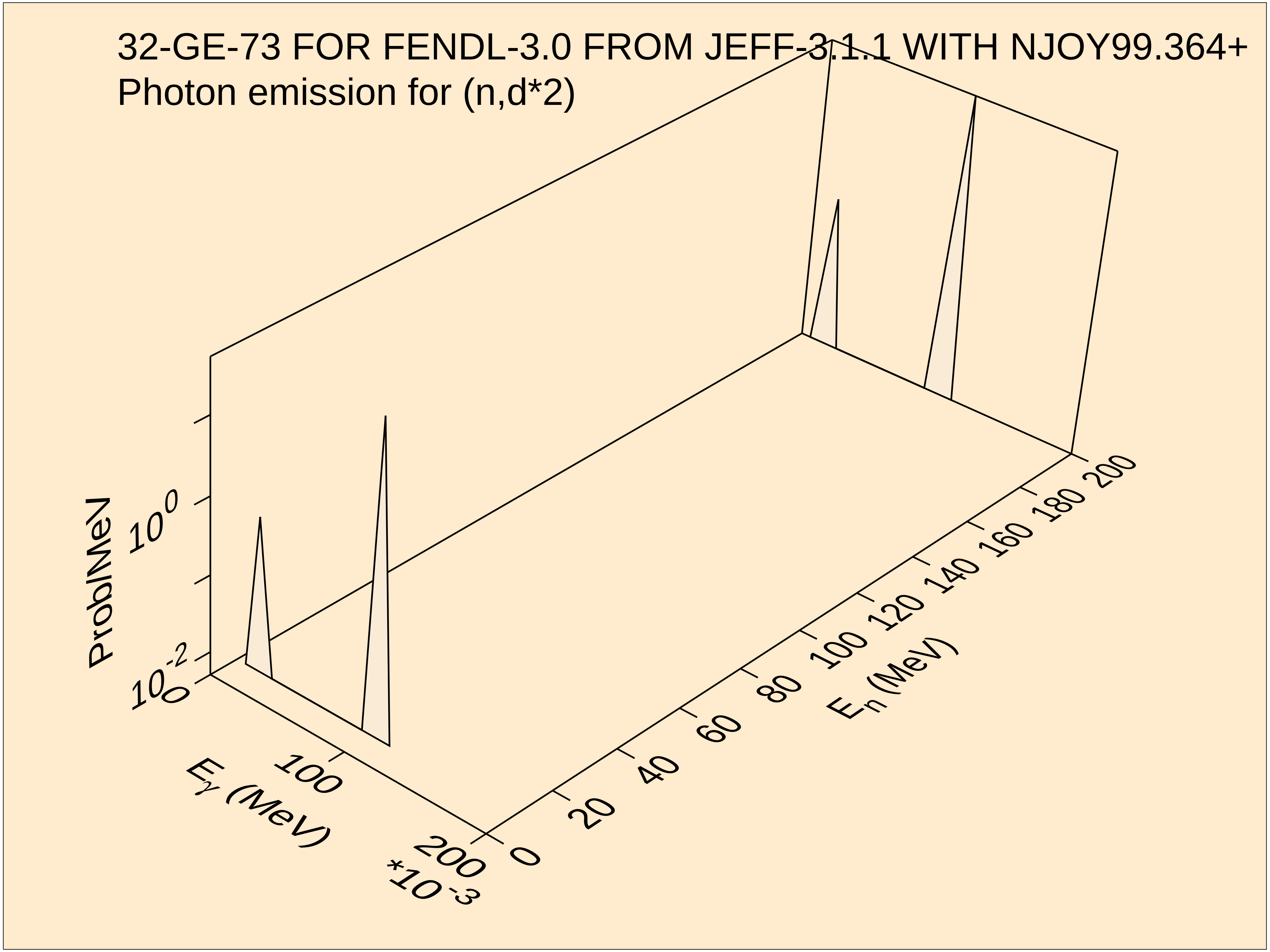
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*10)

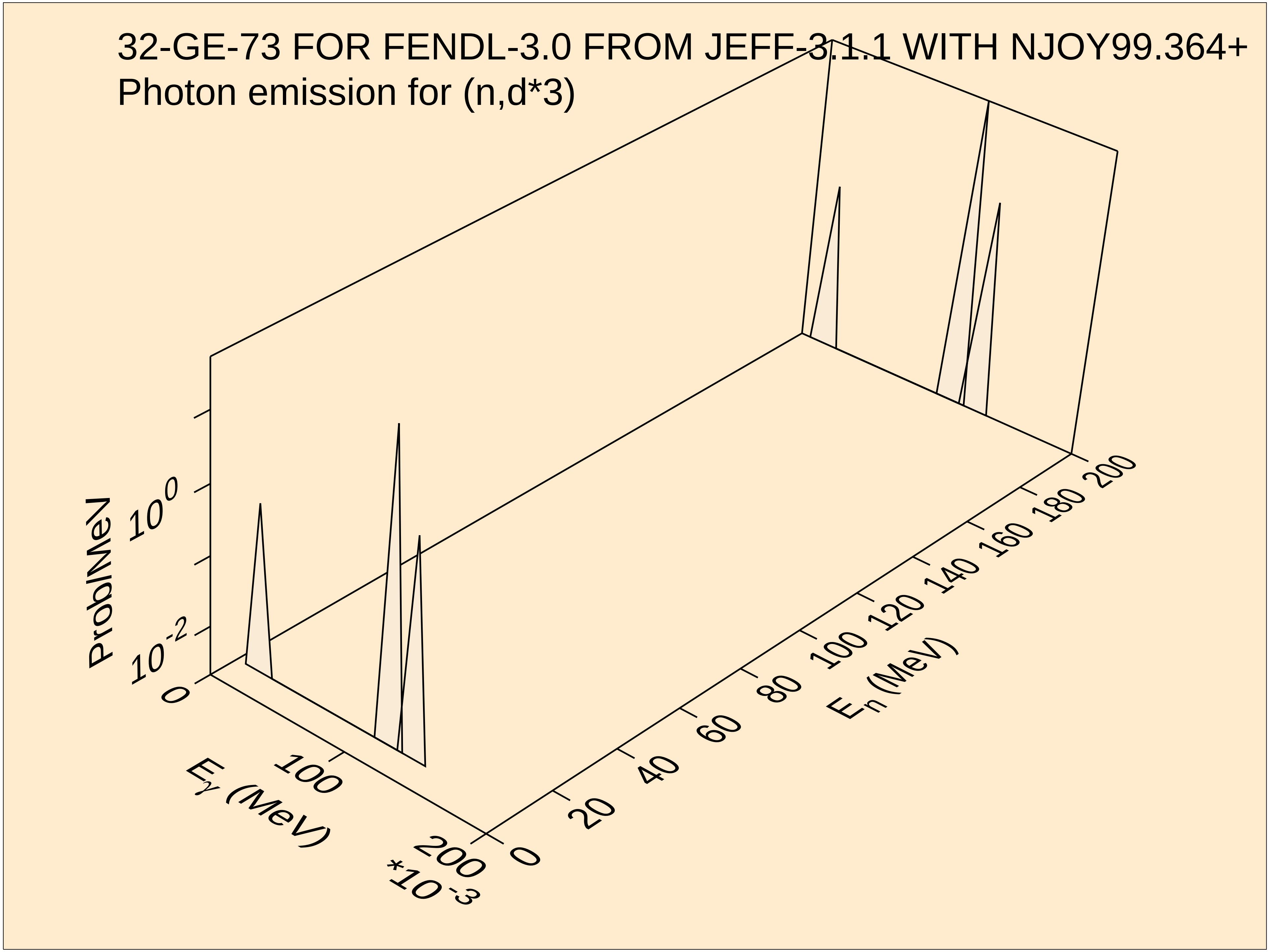



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,p*c)
ProbMeV
10^{2}
10^{0}
10^{-2}
E_γ (MeV)
0
5
10
E_n (MeV)
2
4
6
8
10
12
14
16
18
20



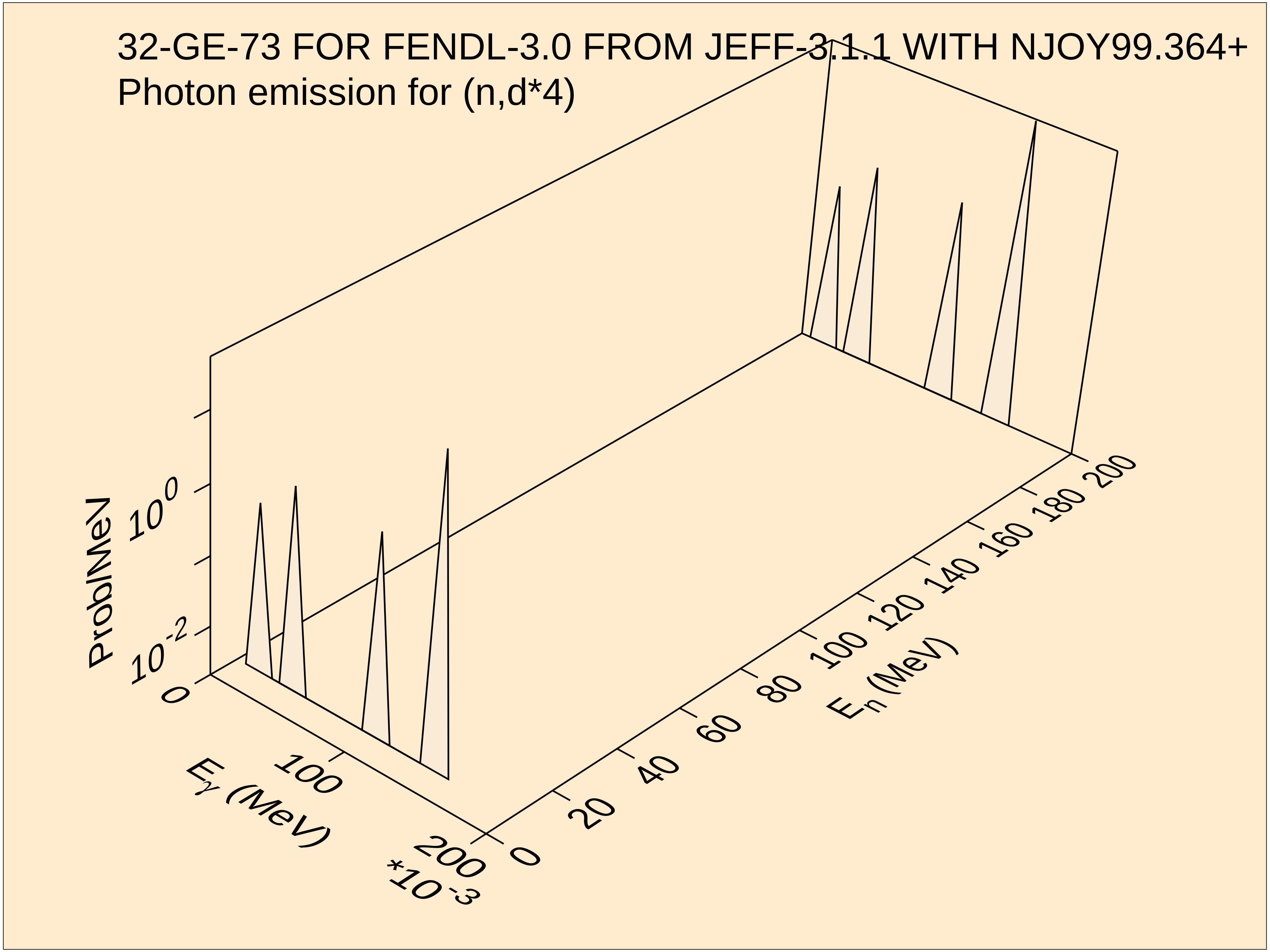
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,d*1)

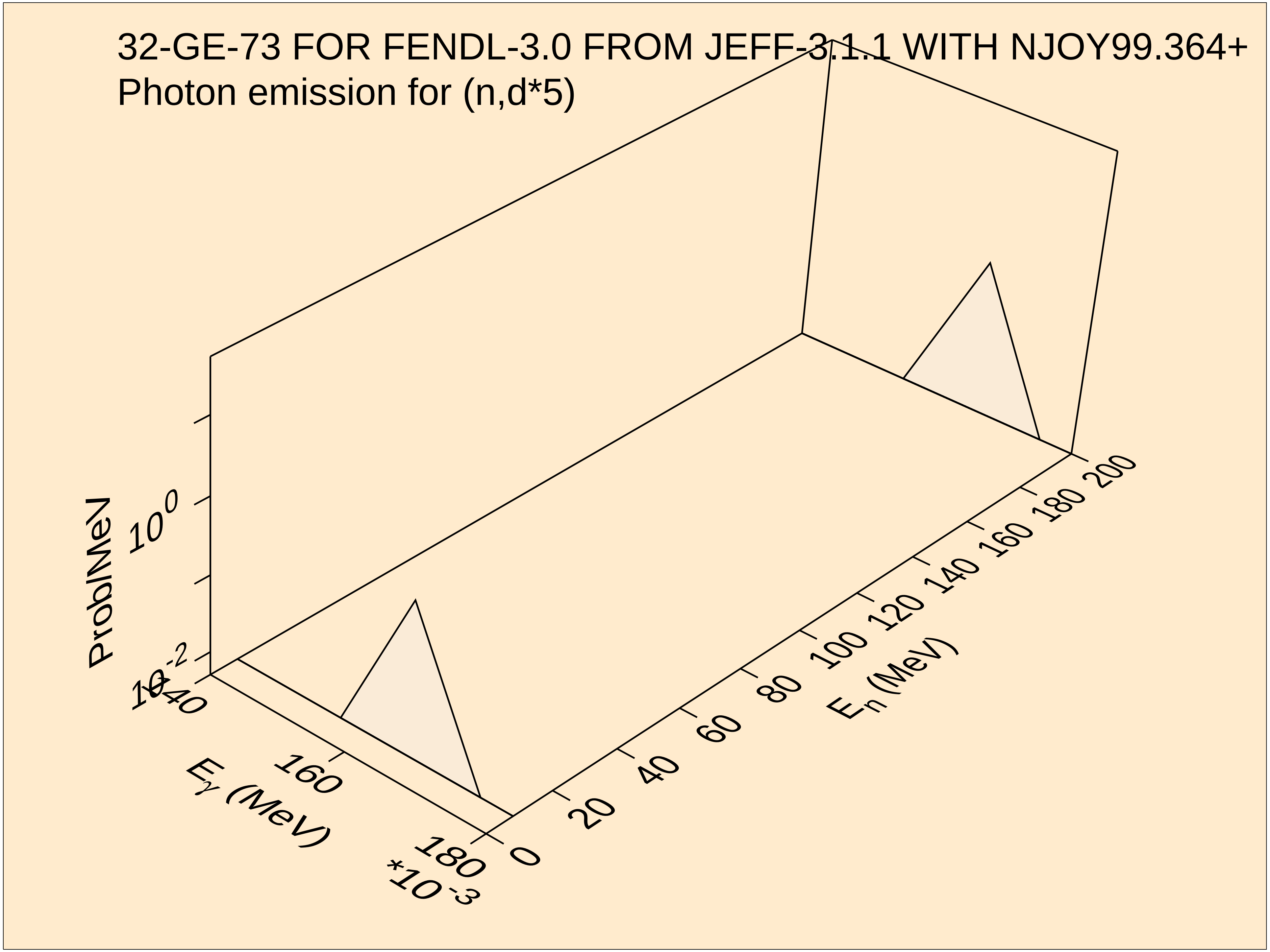

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,d*2)
Prob/MeV
10^{0}
10^{-2}
E_{γ} (MeV)
0
100
200
$*10^{-3}$
E_n (MeV)
0
20
40
60
80
100
120
140
160
180
200



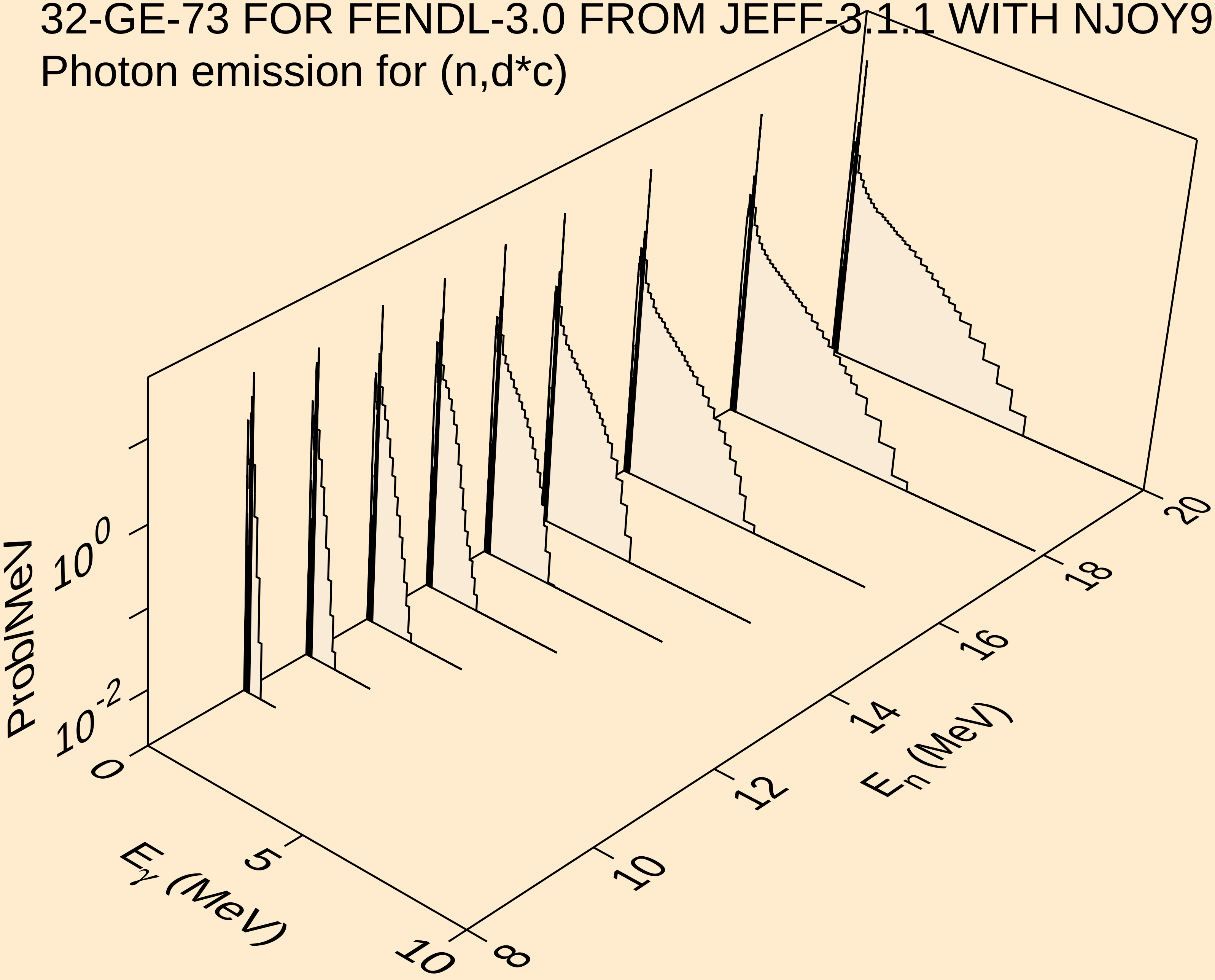
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,d*3)

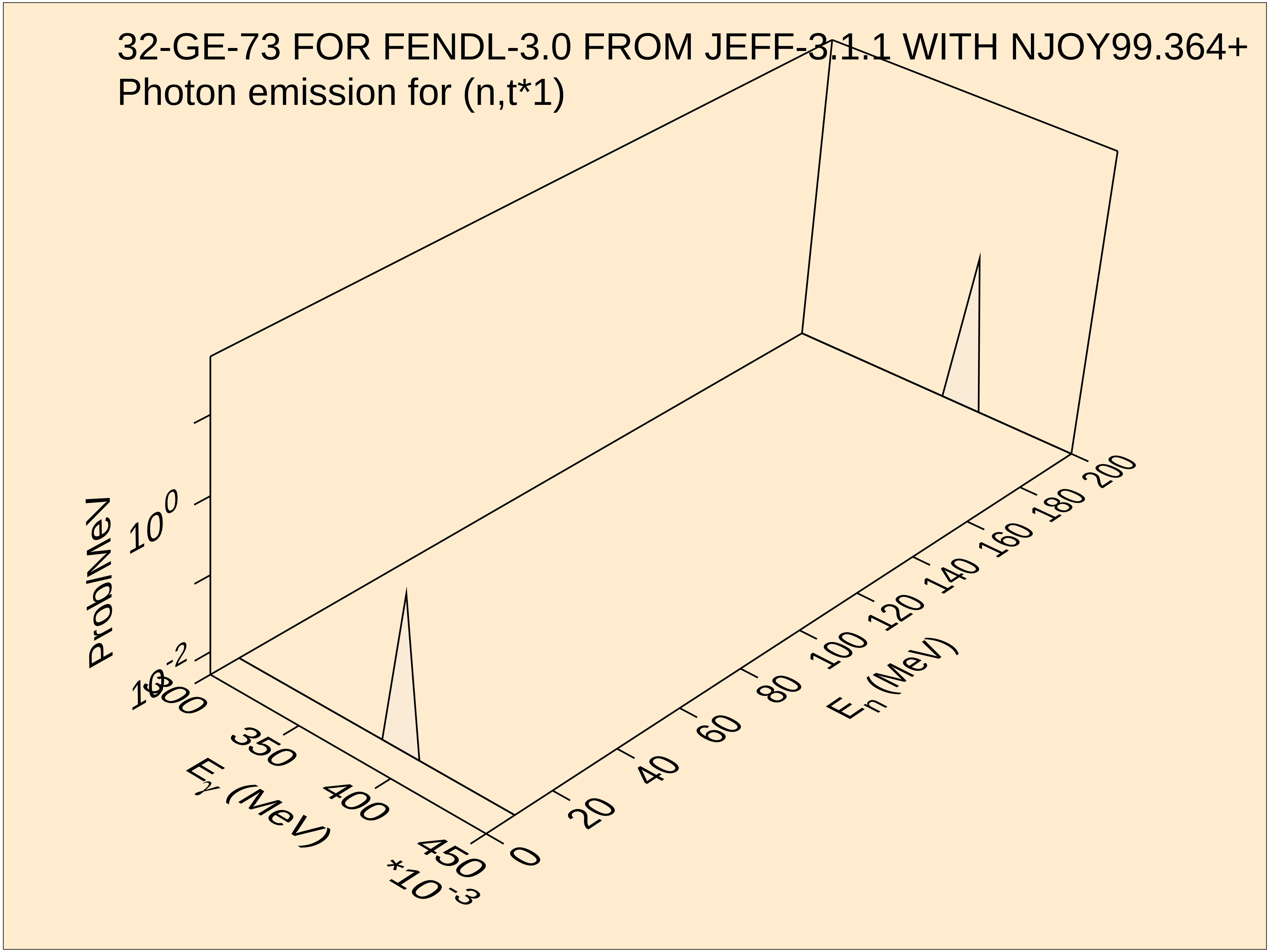
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,d*4)

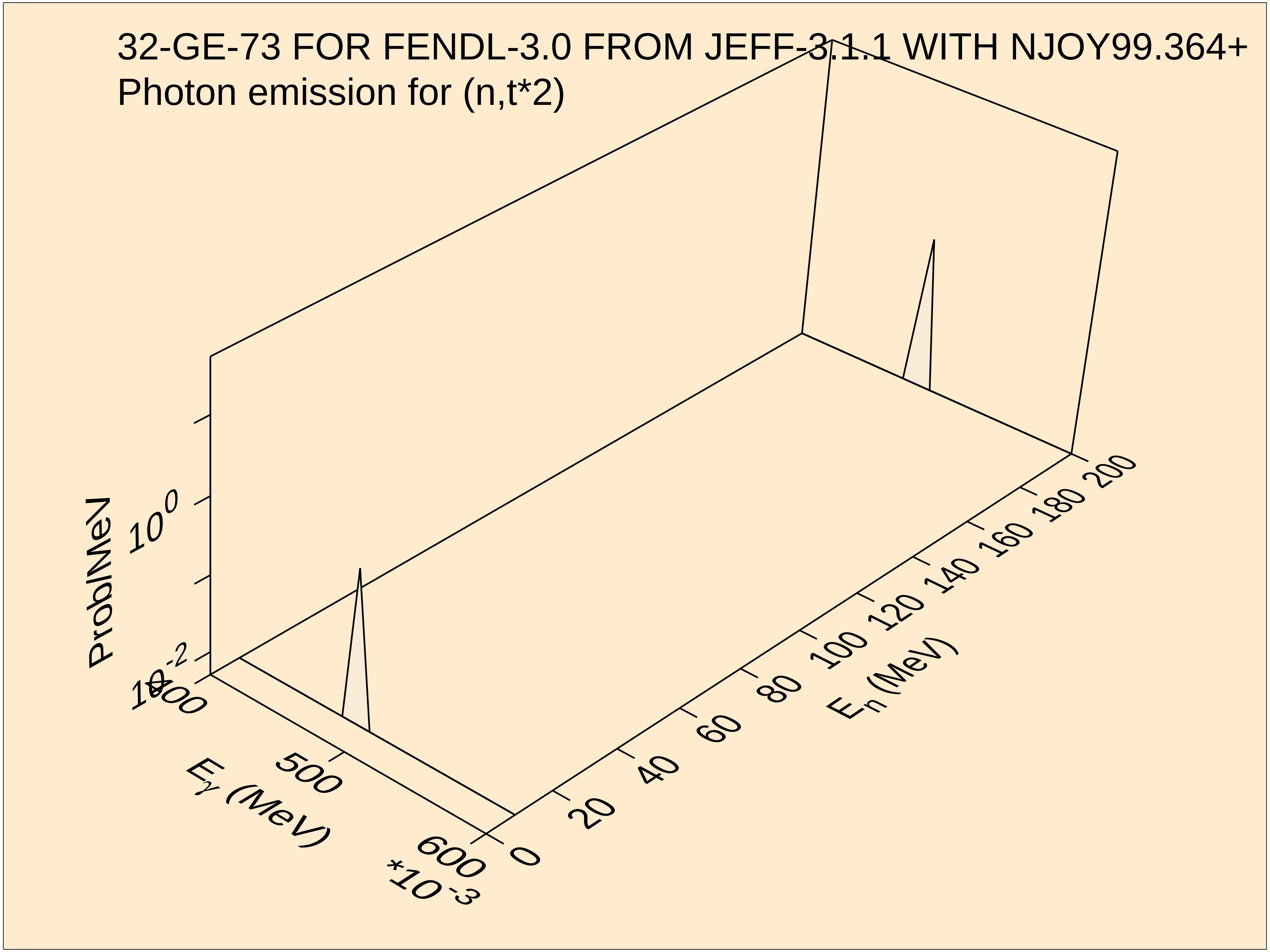


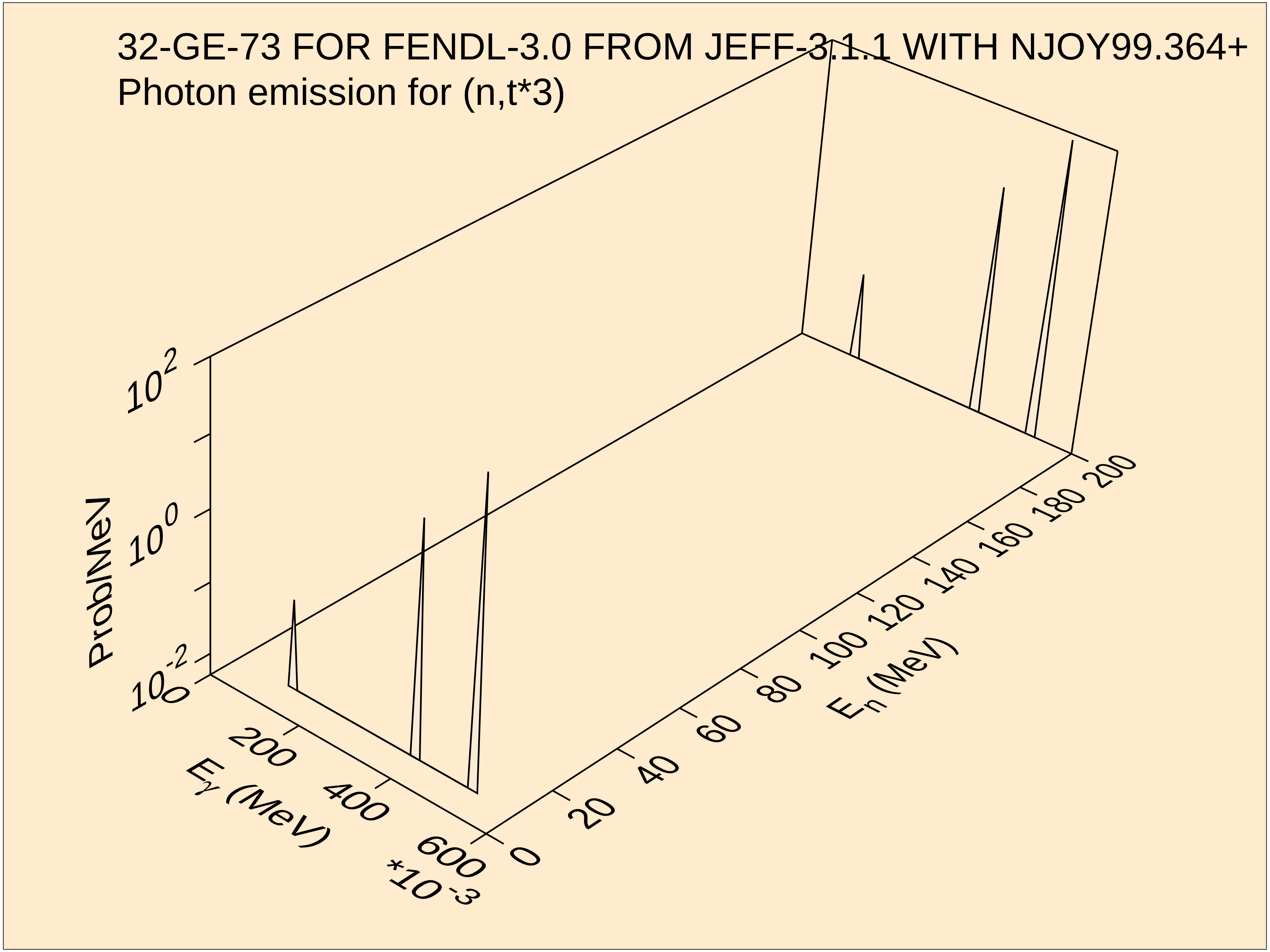

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,d*5)
ProbMeV
10^0
10^-2
E_n (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_γ (MeV)
140
160
180
*10^-3

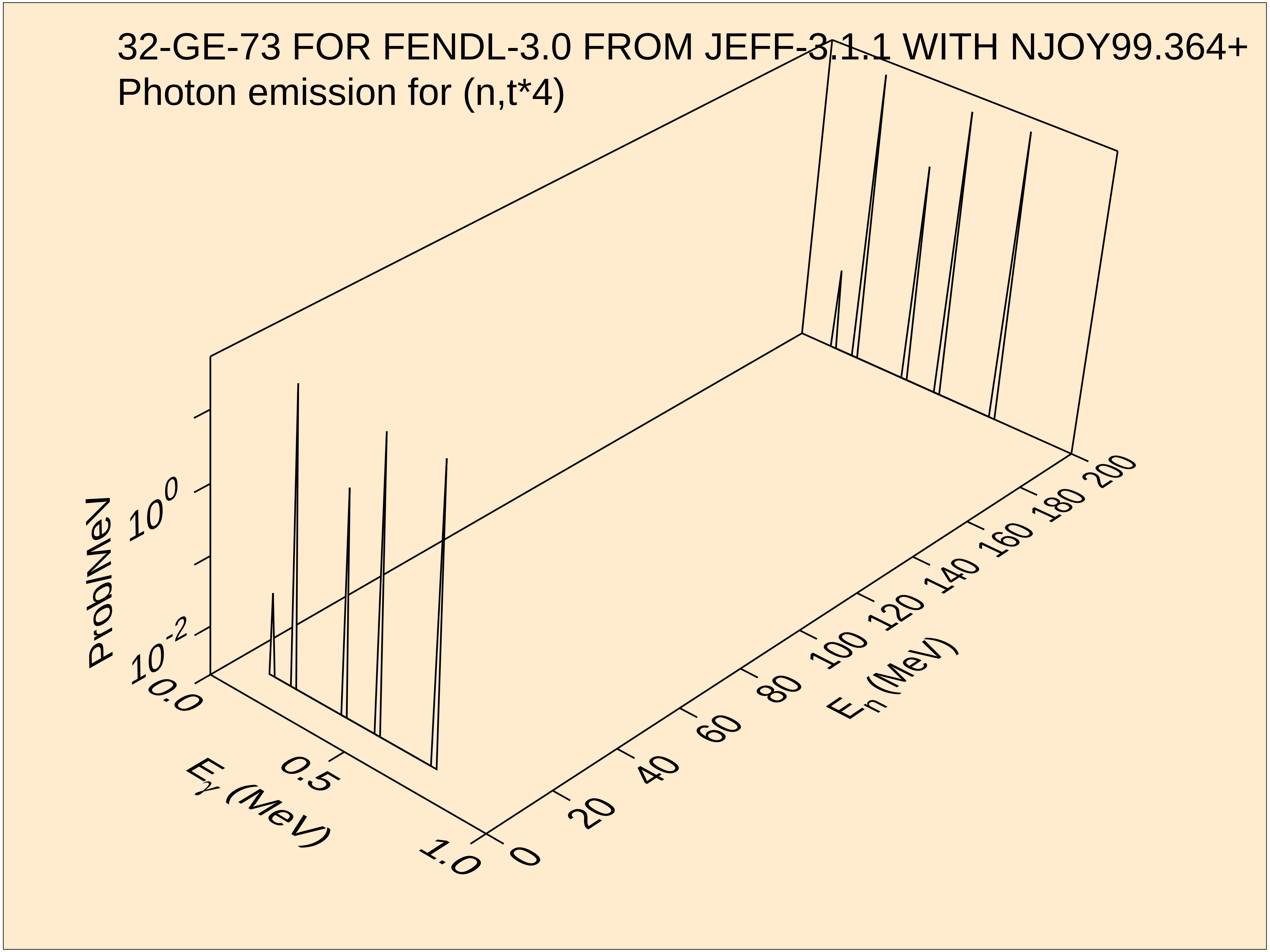
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,d*c)




32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,t*1)
ProbMeV
10^{0}
10^{-2}
300
350
400
450
$*10^{-3}$
E_{γ} (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_{n} (MeV)

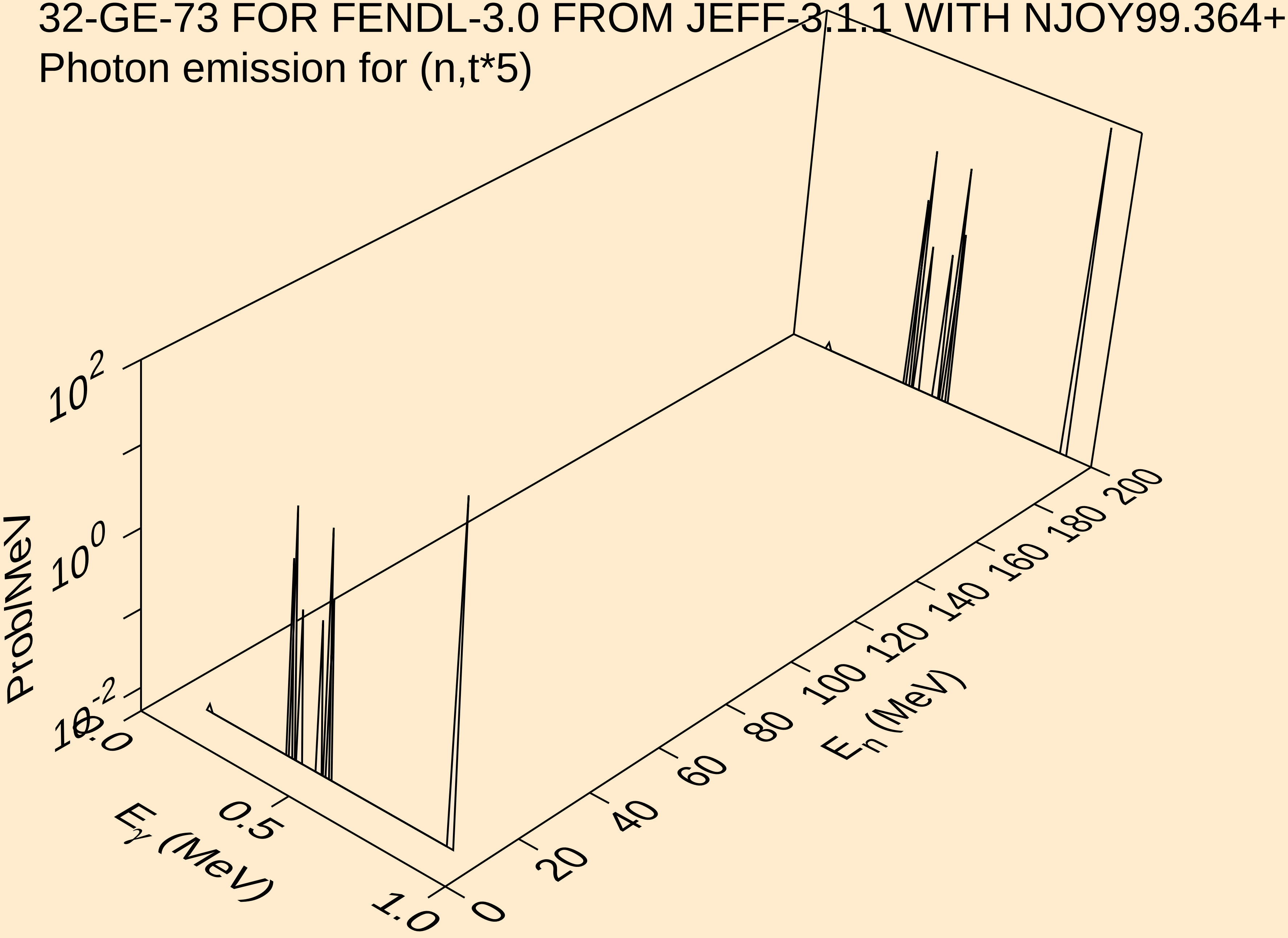

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,t*2)
ProbMeV
10^{0}
10^{-2}
400
500
600
$*10^{-3}$
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

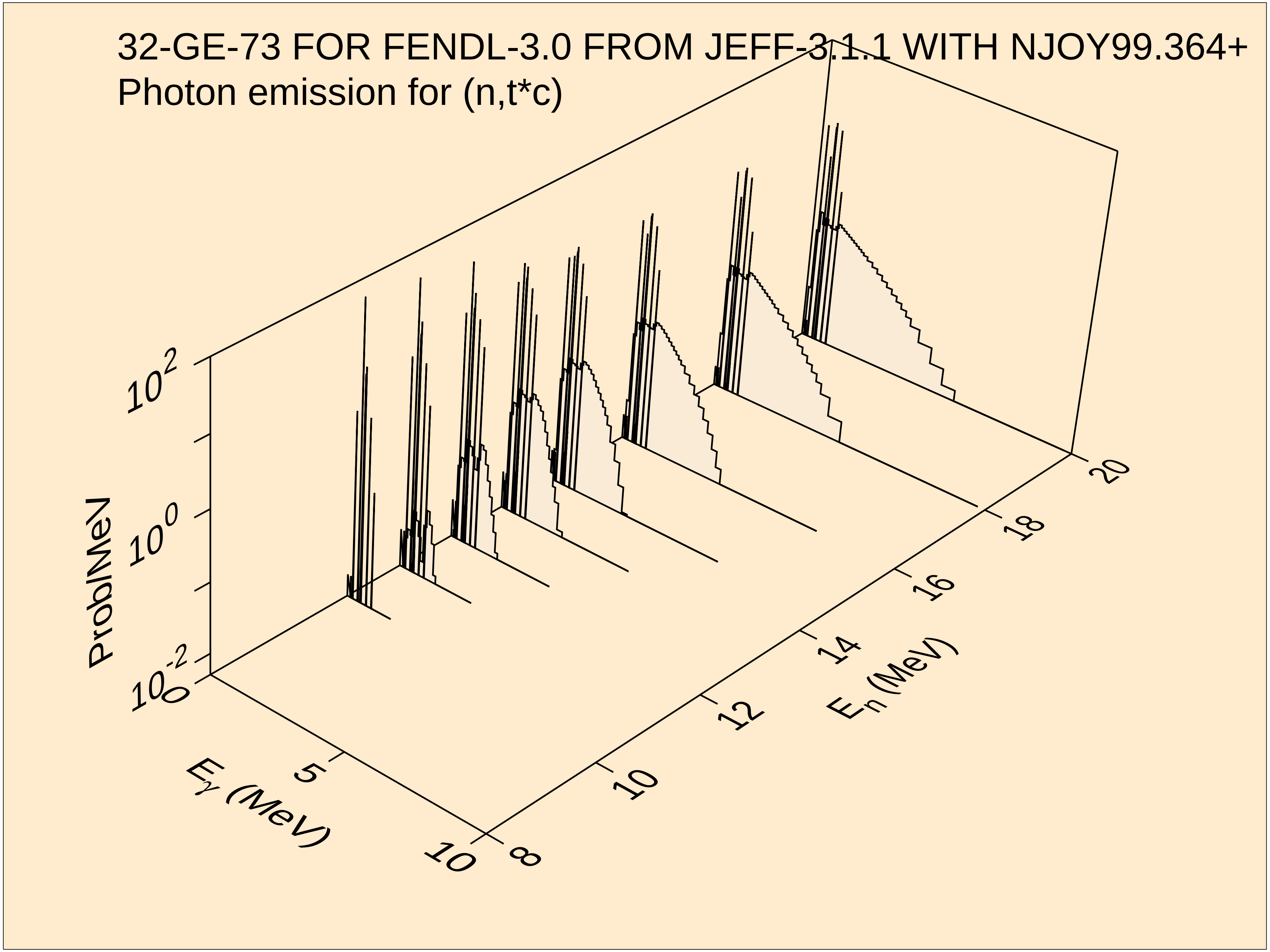

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,t*3)
ProbMeV
10^{2}
10^{0}
10^{-2}
0
200
400
600
$*10^{-3}$
E_{γ} (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_{n} (MeV)

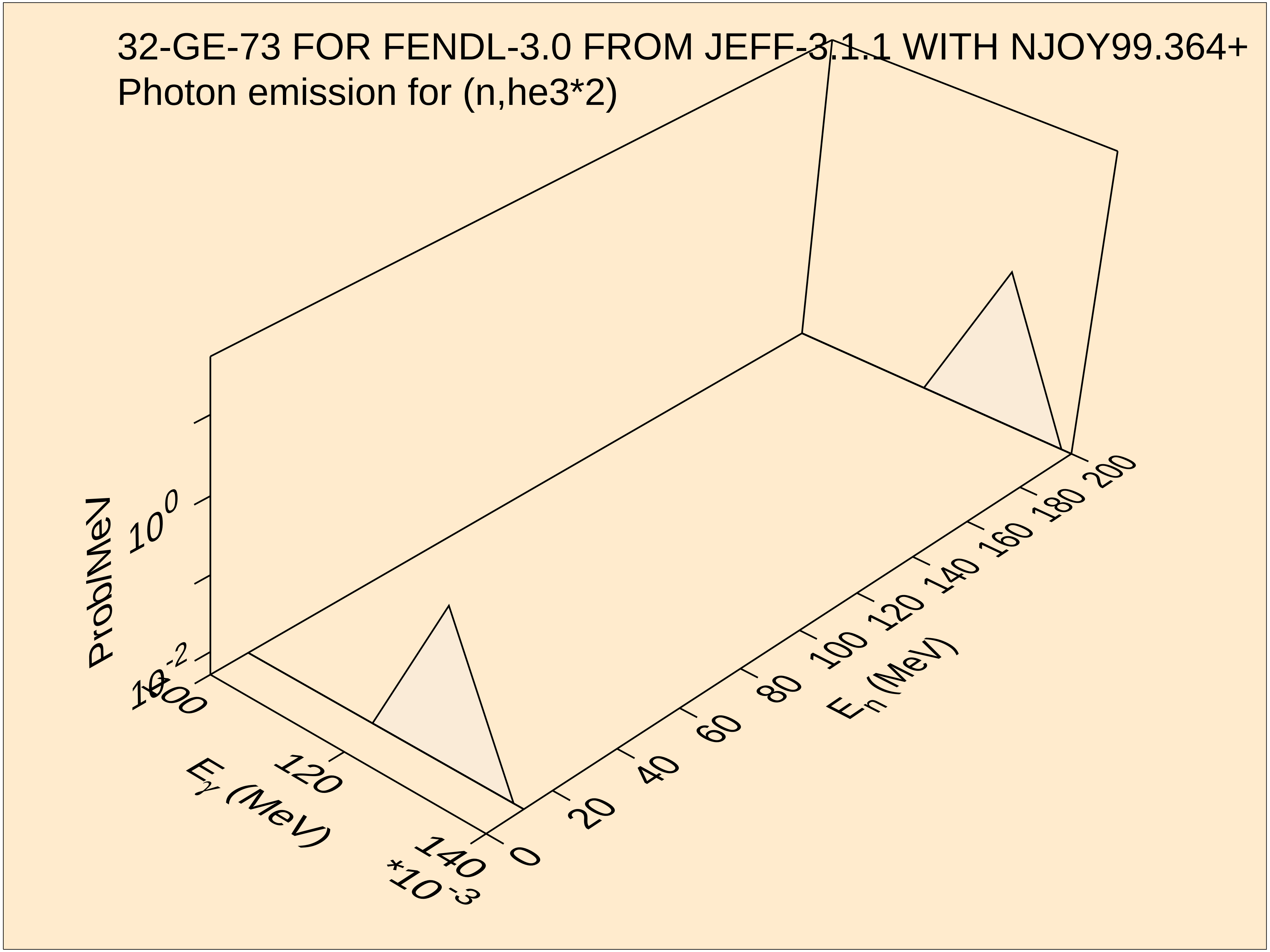

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,t*4)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
E_{γ} (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_{n} (MeV)

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+

Photon emission for (n,t*5)

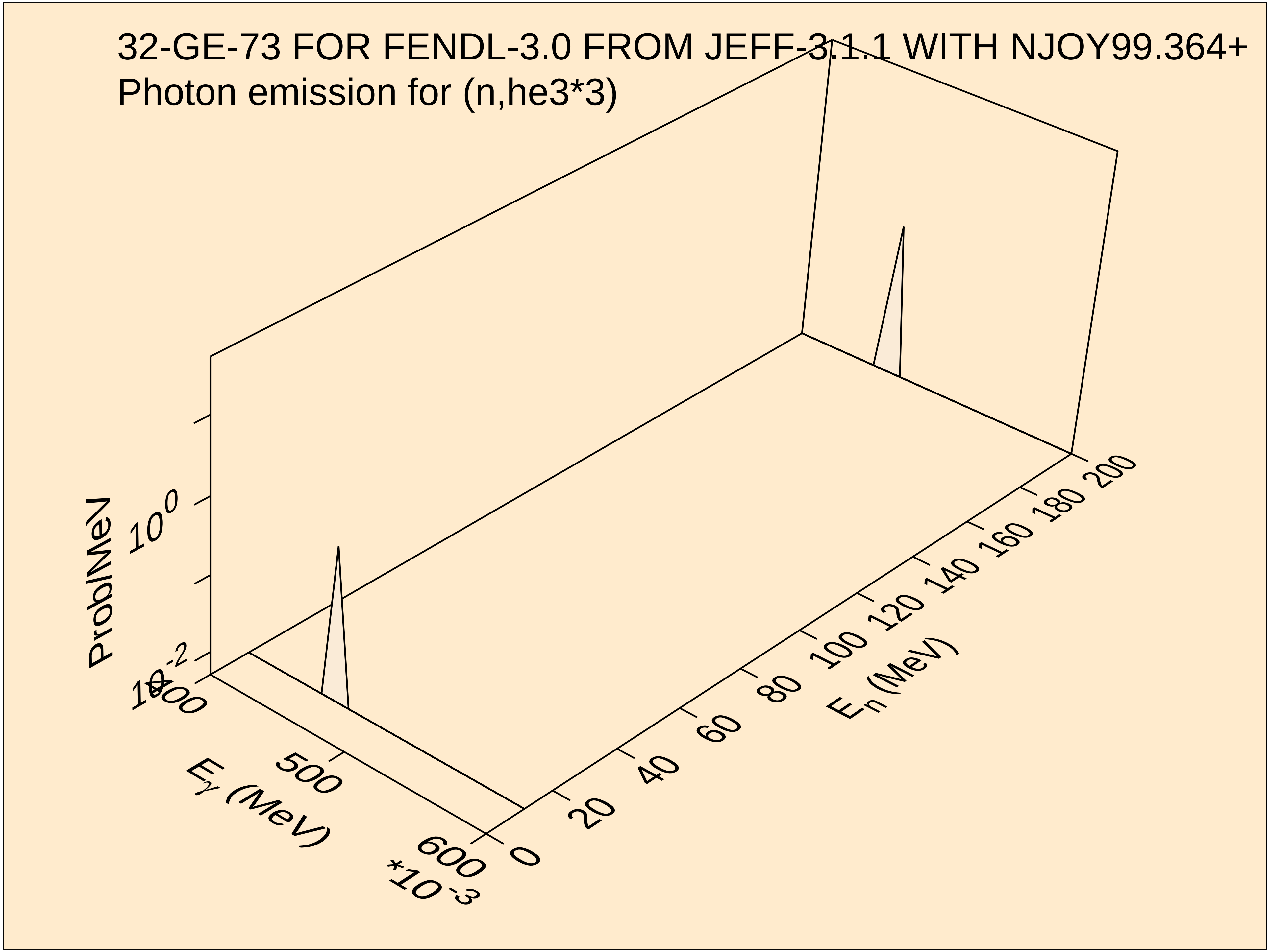



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,t*c)
ProblMeV
10^{2}
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
8
10
12
14
16
18
20
E_n (MeV)

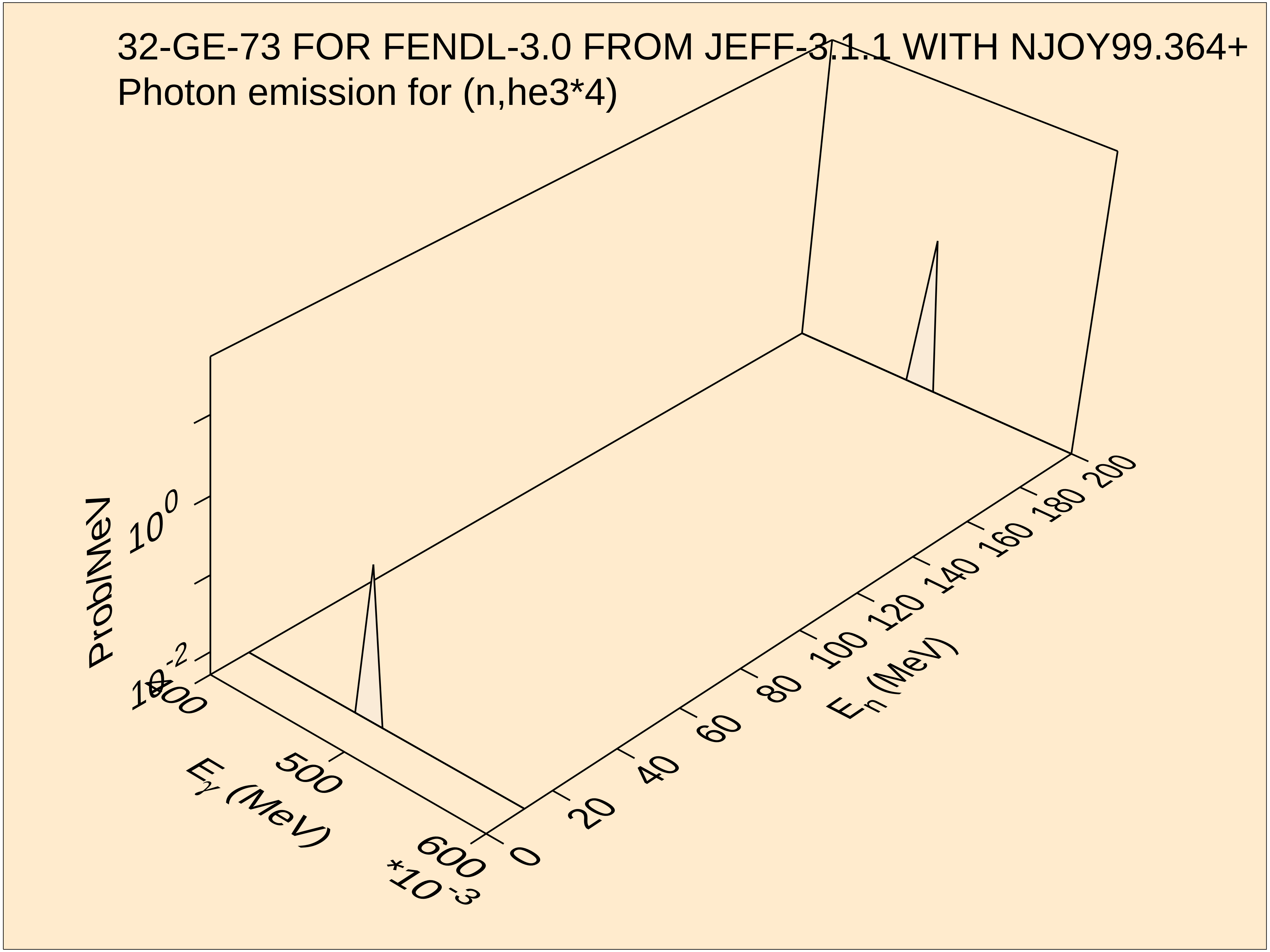


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+

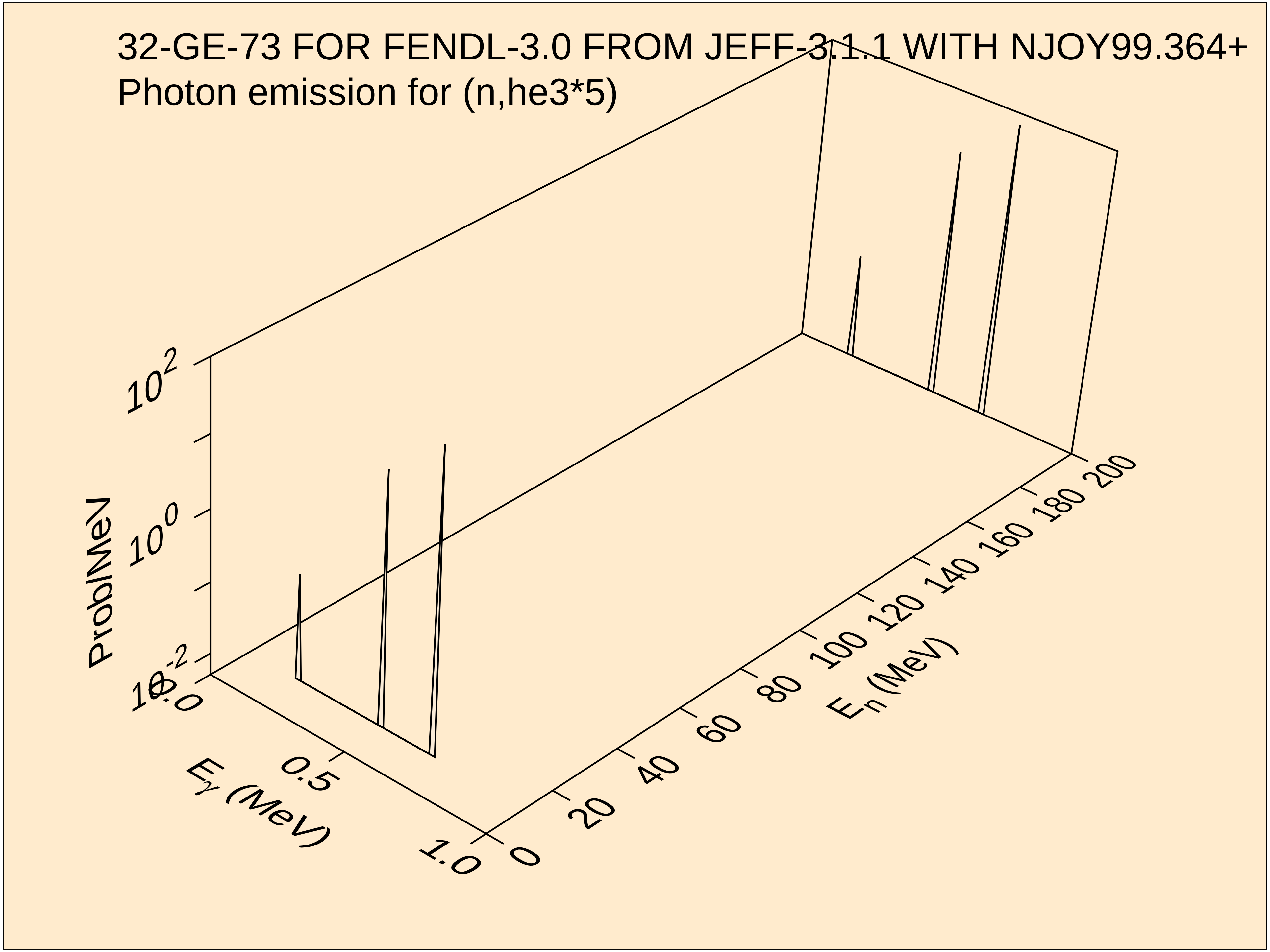
Photon emission for (n,he3*2)

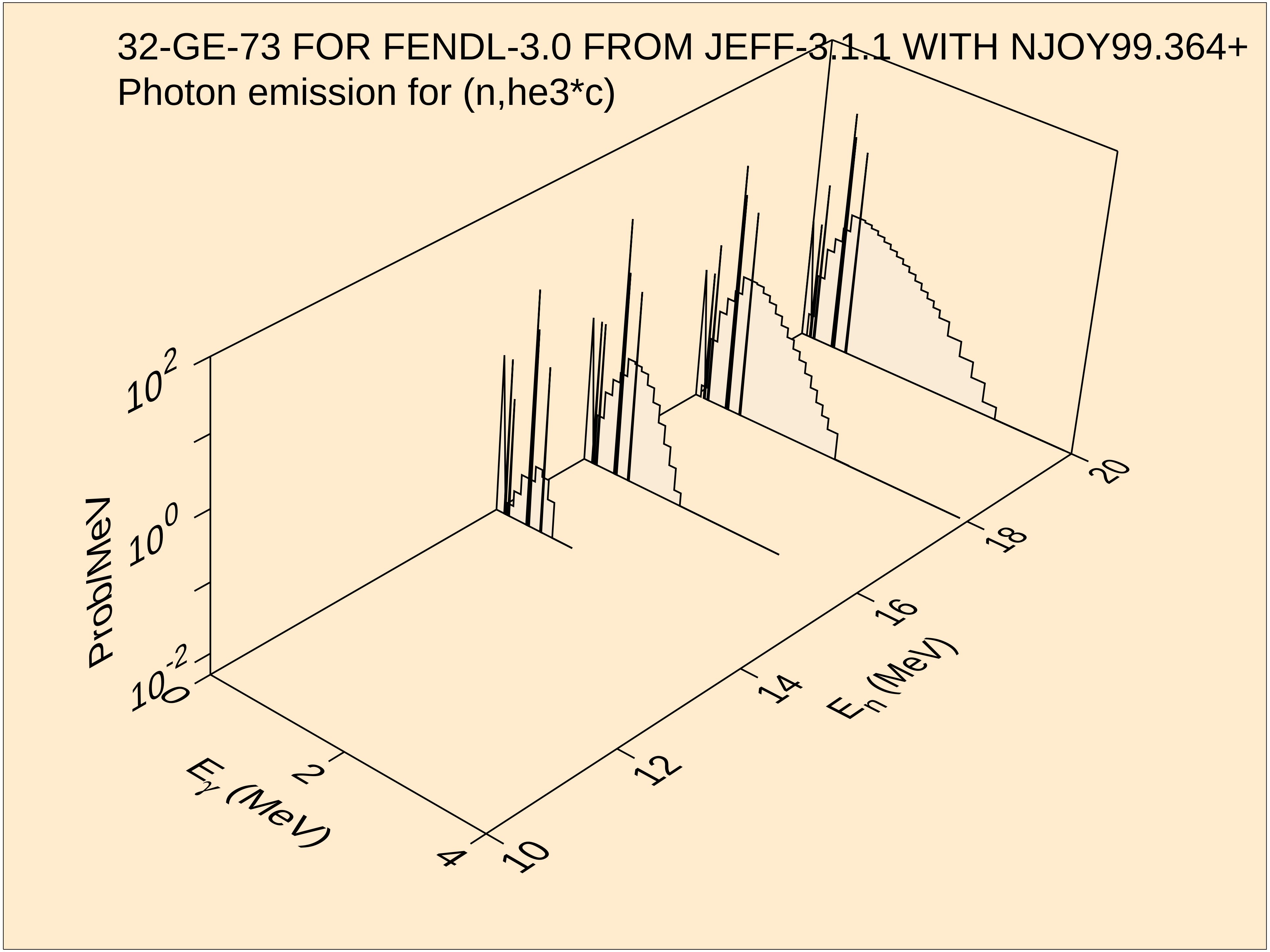


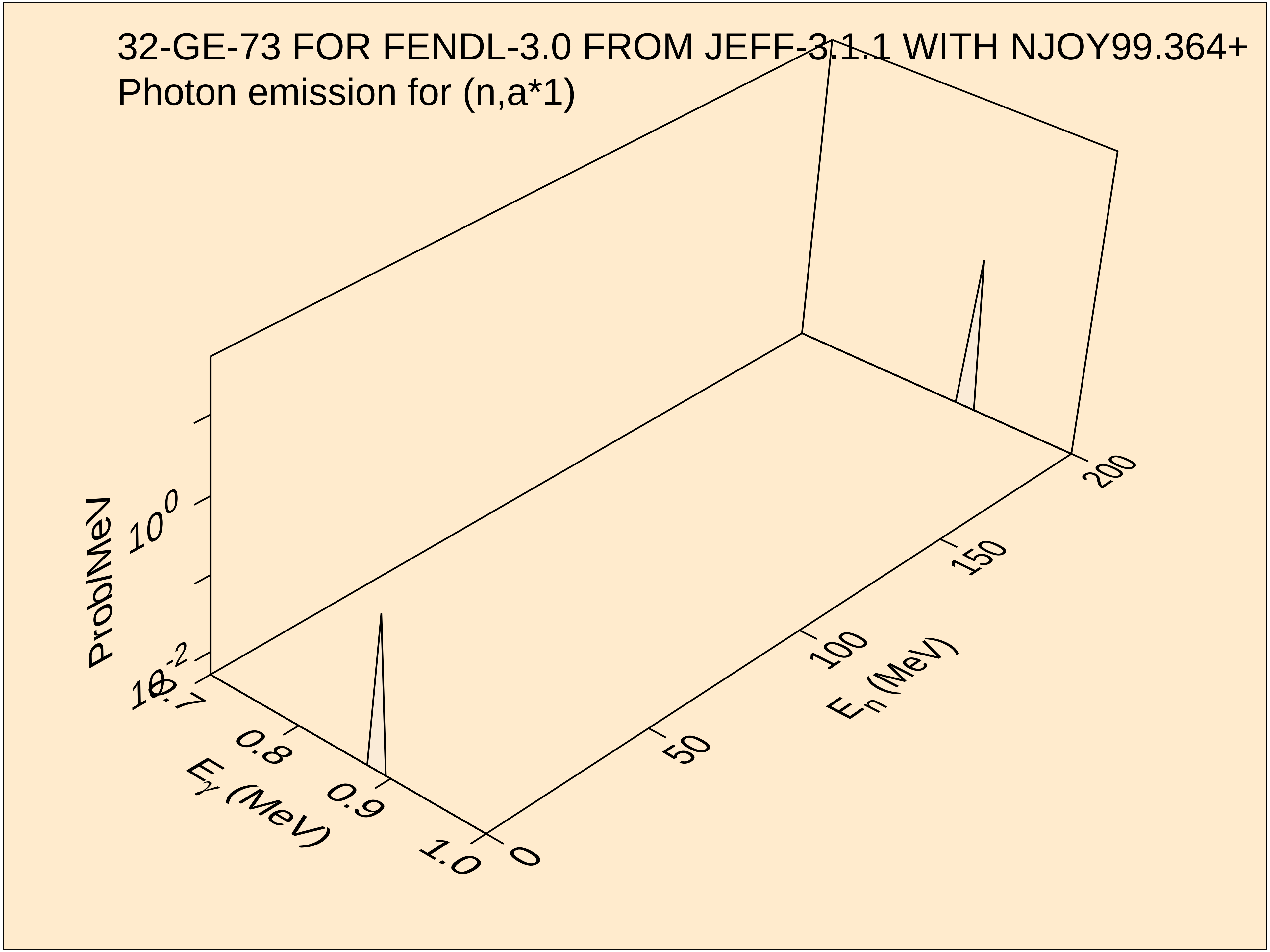
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,he3*3)

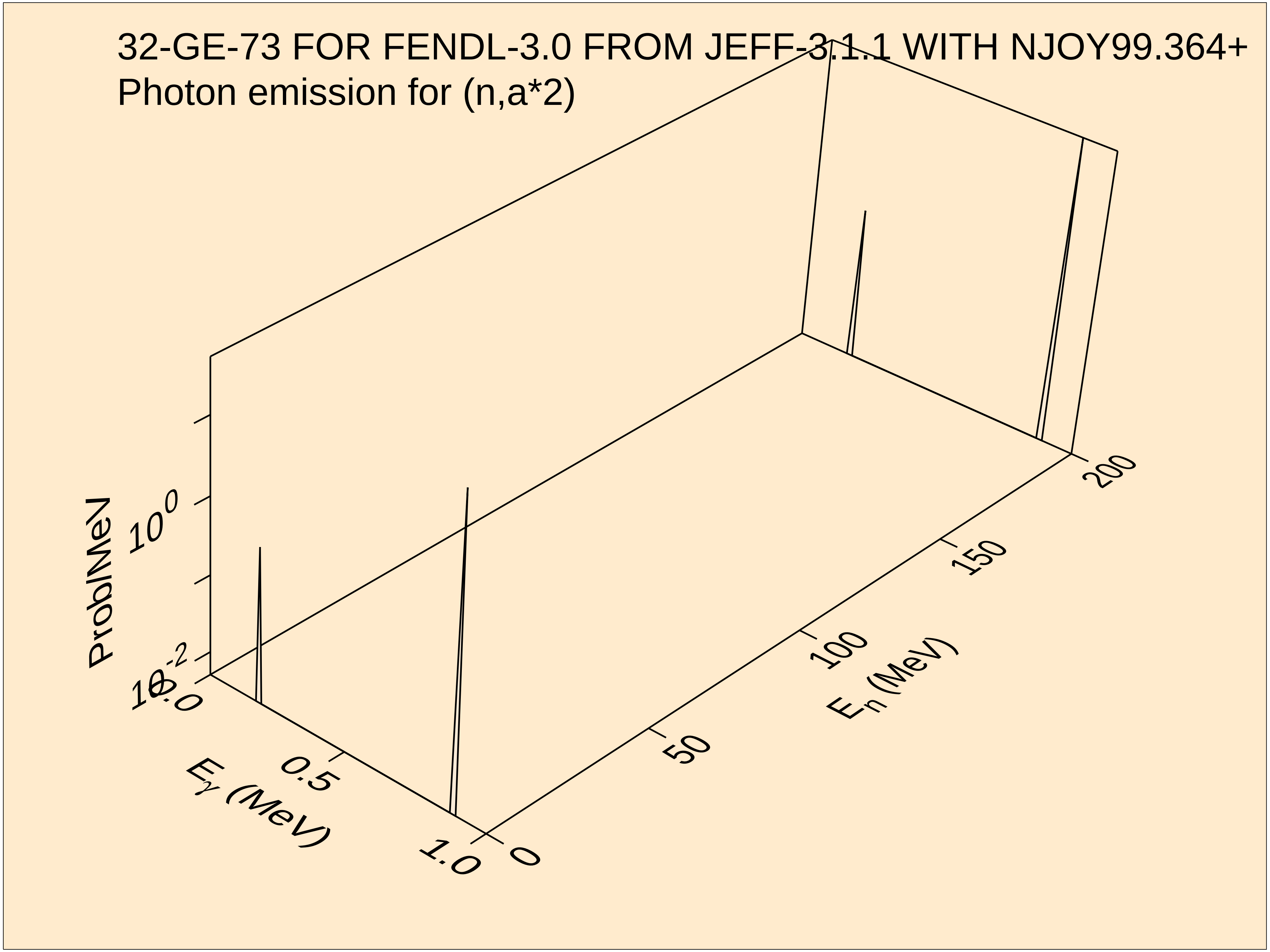

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,he3*4)
Prob/MeV
10^{0}
10^{-2}
400
500
600
$*10^{-3}$
E_γ (MeV)
0
20
40
60
80
100
120
140
160
180
200
E_n (MeV)

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,he3*5)



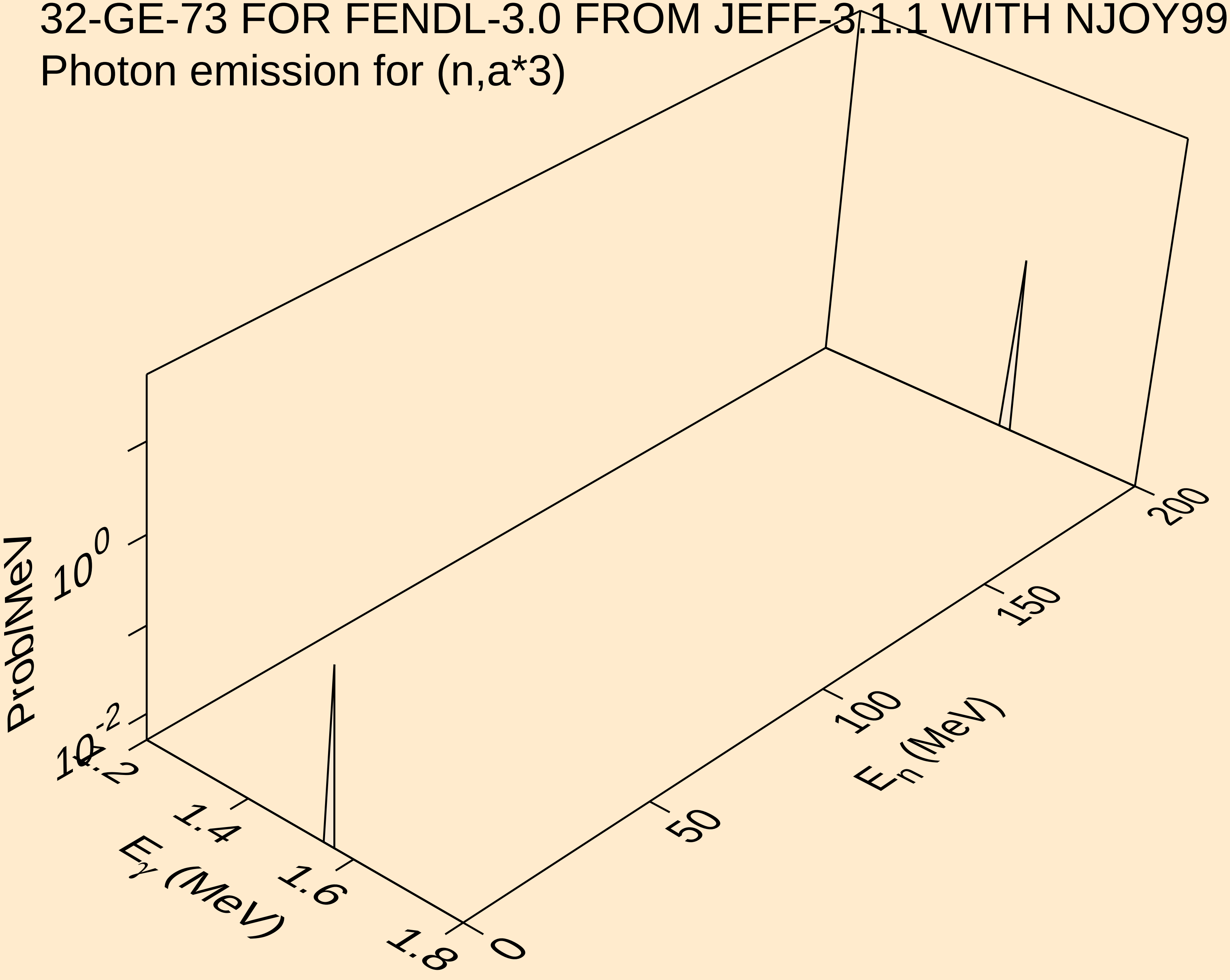

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,he3*c)
ProbMeV
10^{2}
10^{0}
10^{-2}
0
2
4
E_{γ} (MeV)
10
12
14
16
18
20
E_{n} (MeV)

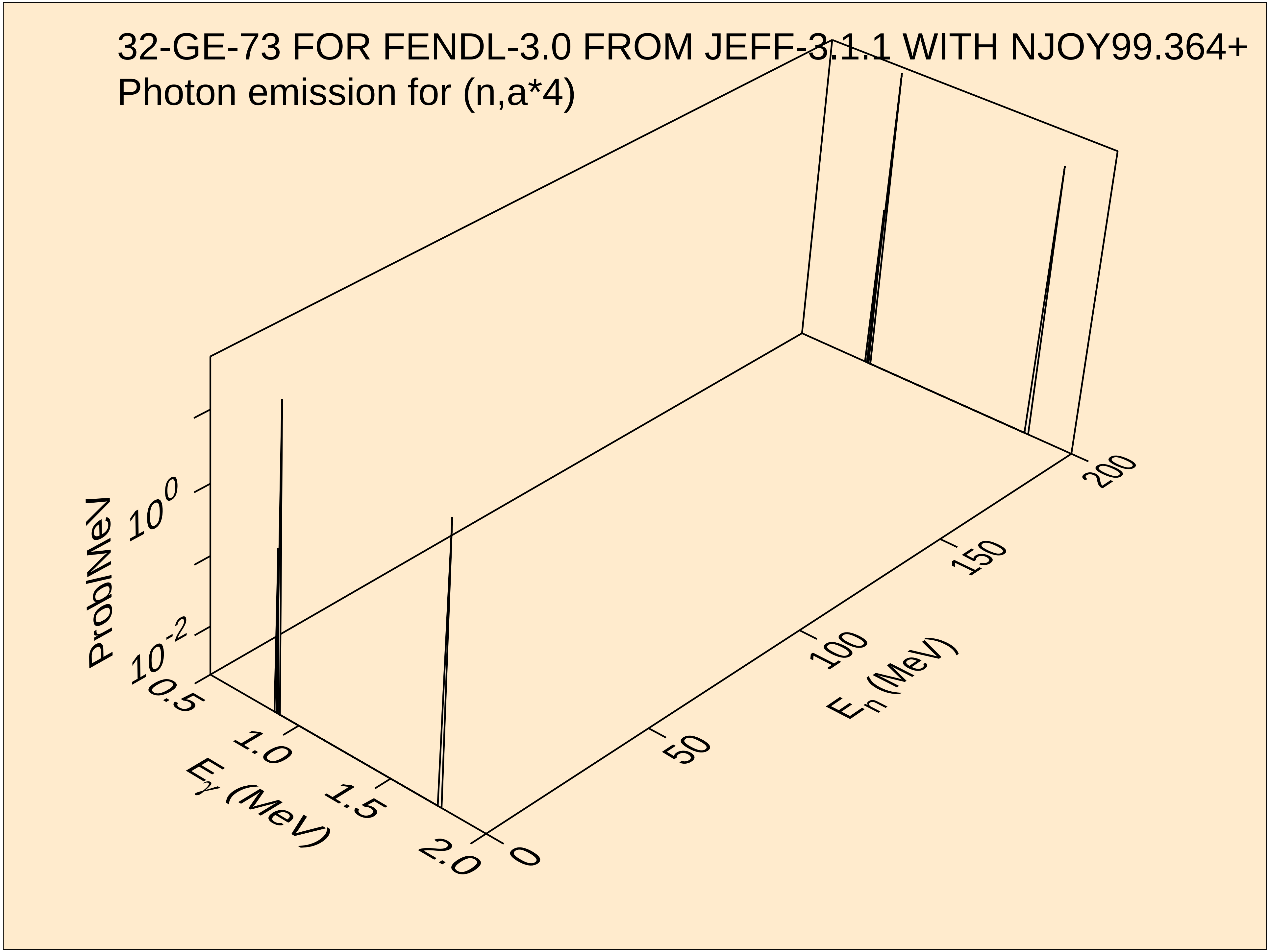

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*1)
ProbMeV
10^{0}
10^{-2}
0.7
0.8
0.9
1.0
E_{γ} (MeV)
0
50
100
150
200
E_n (MeV)

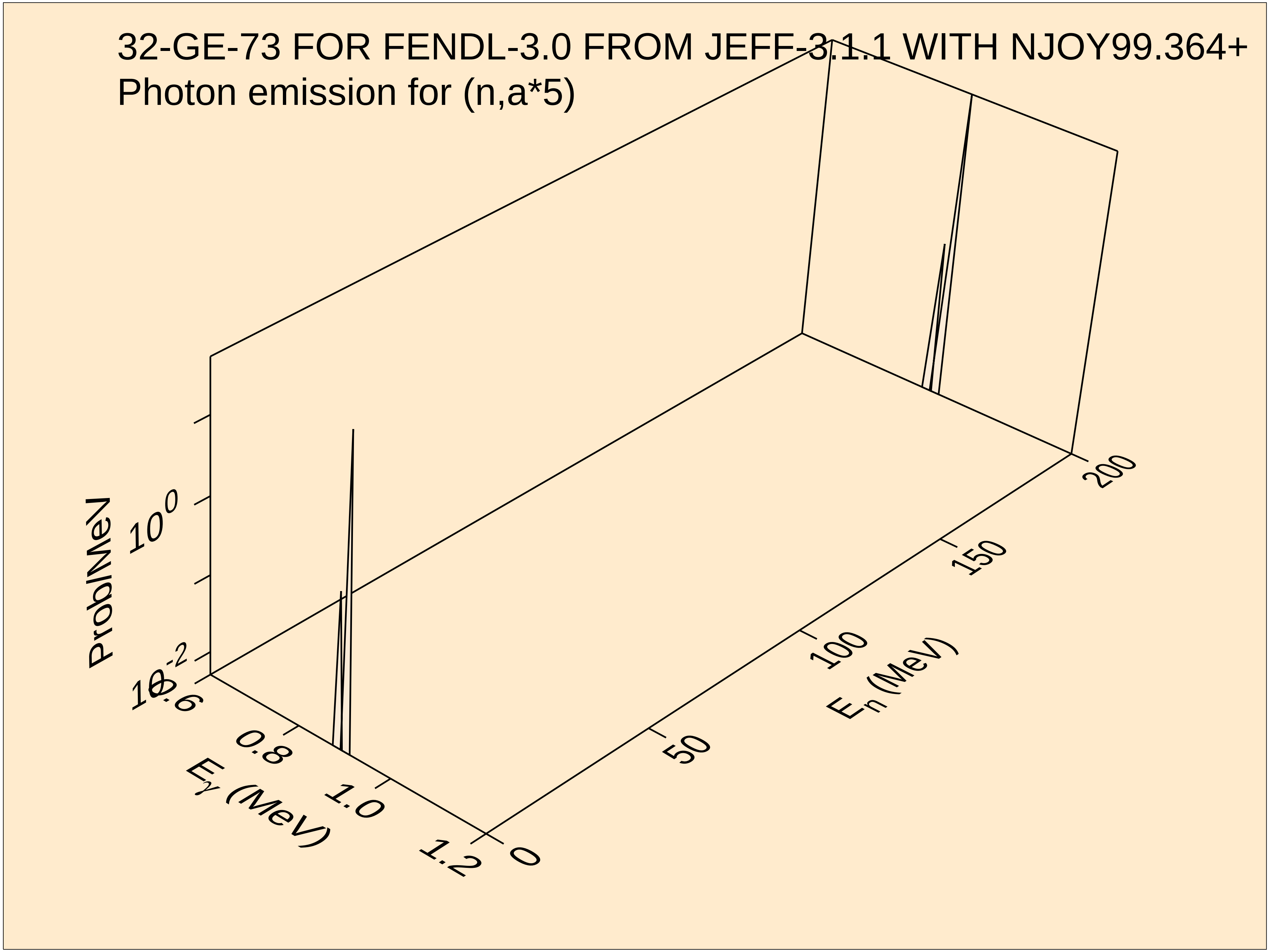


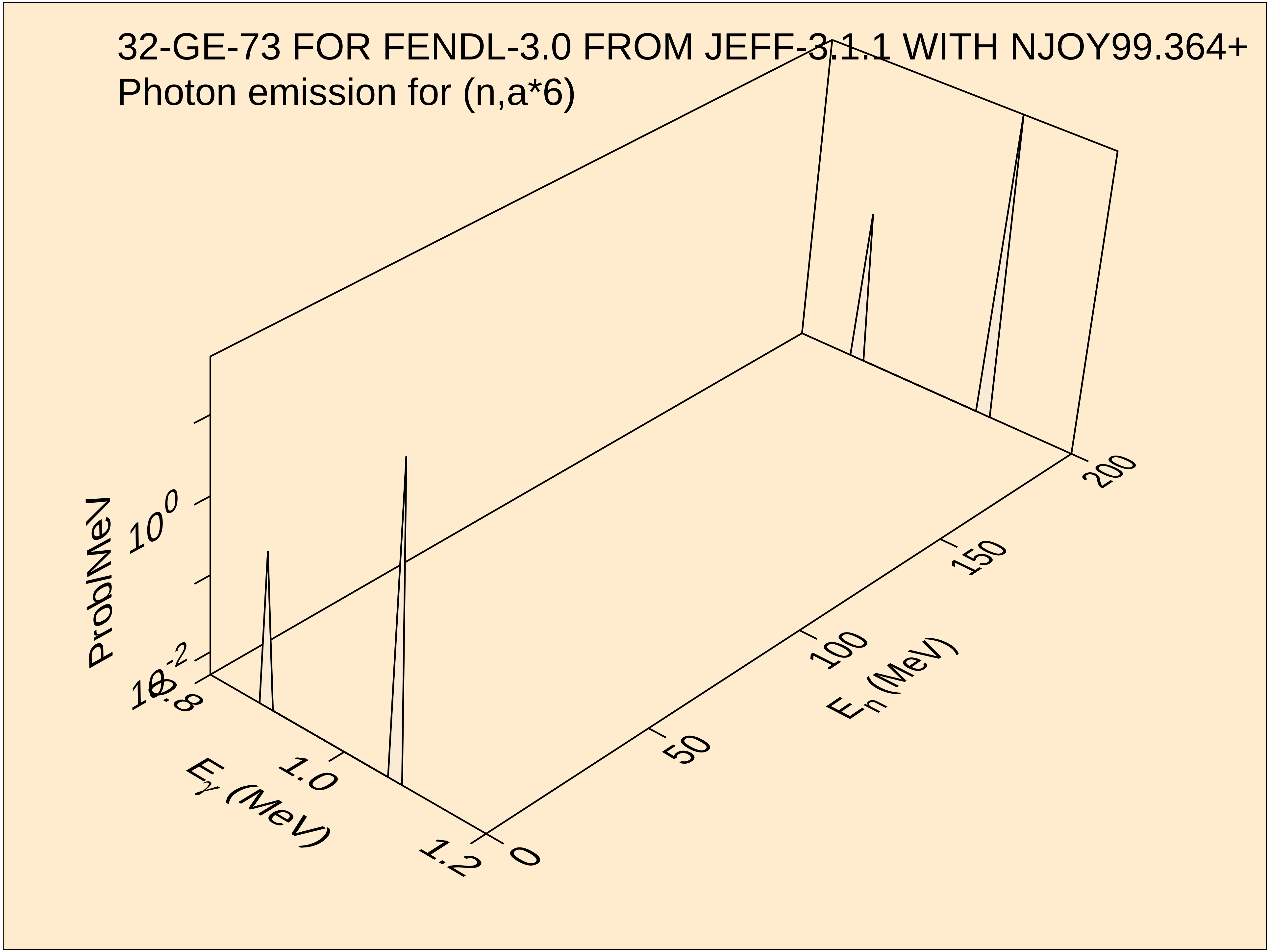
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*2)

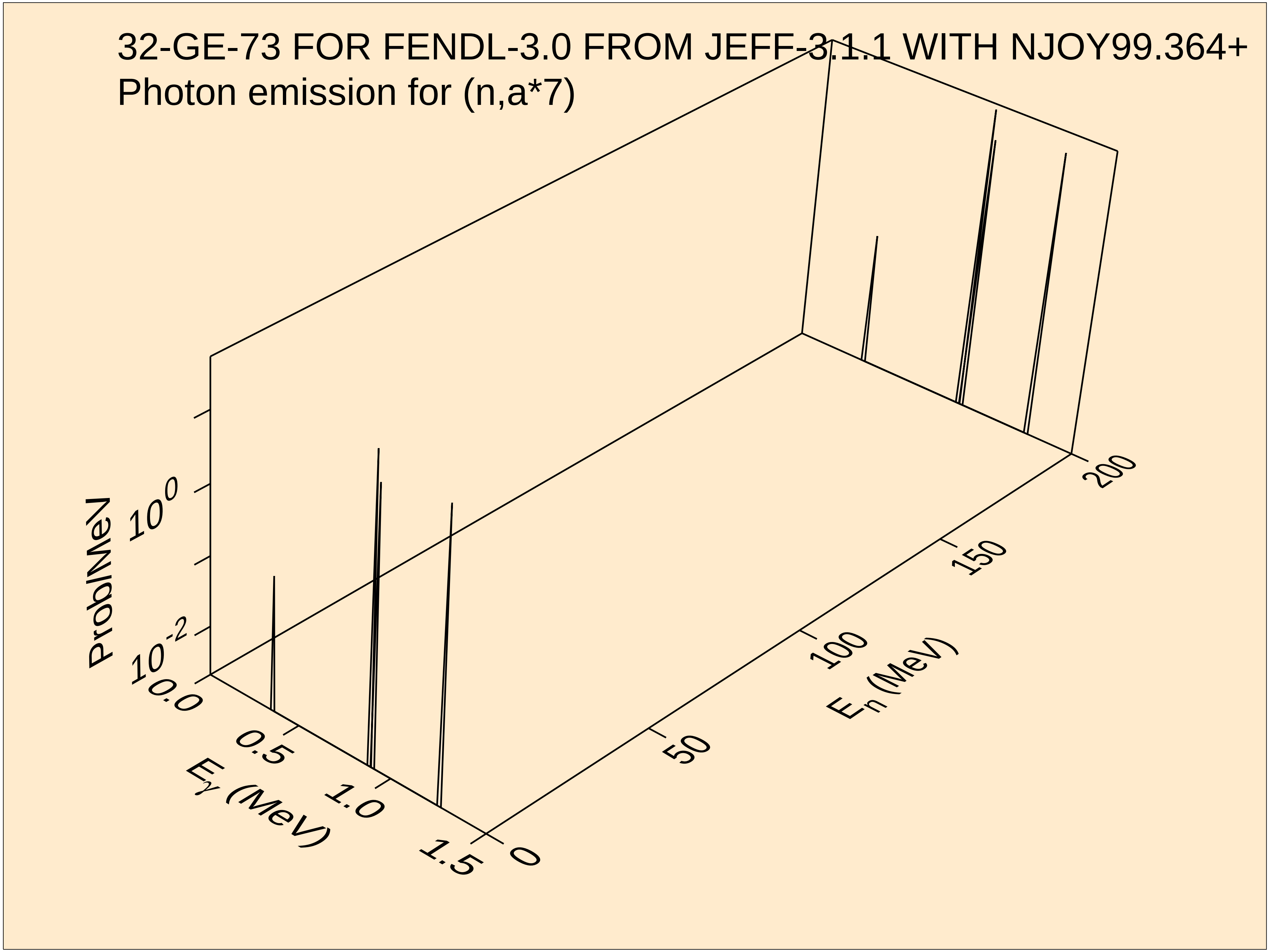
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*3)

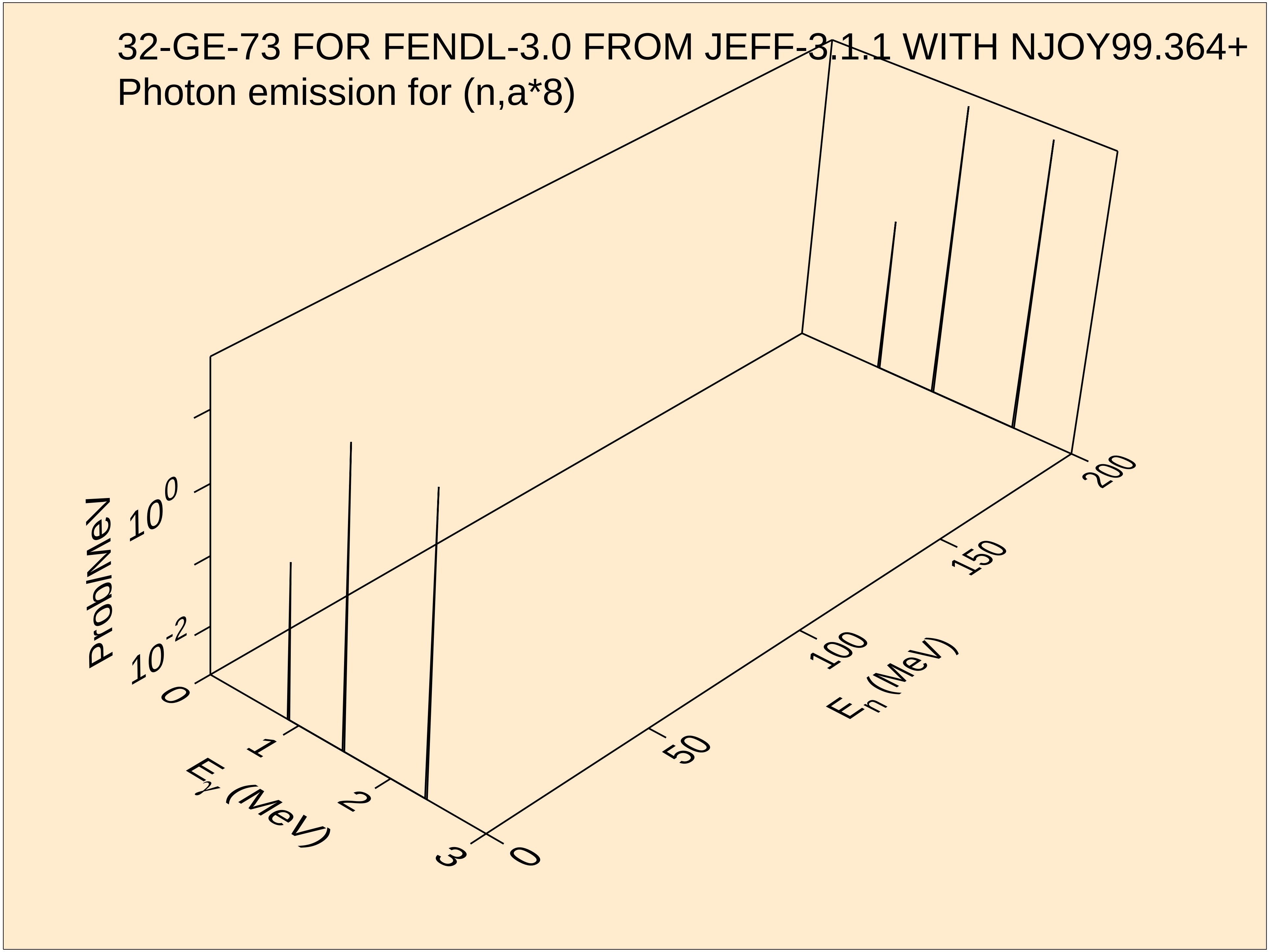



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*4)

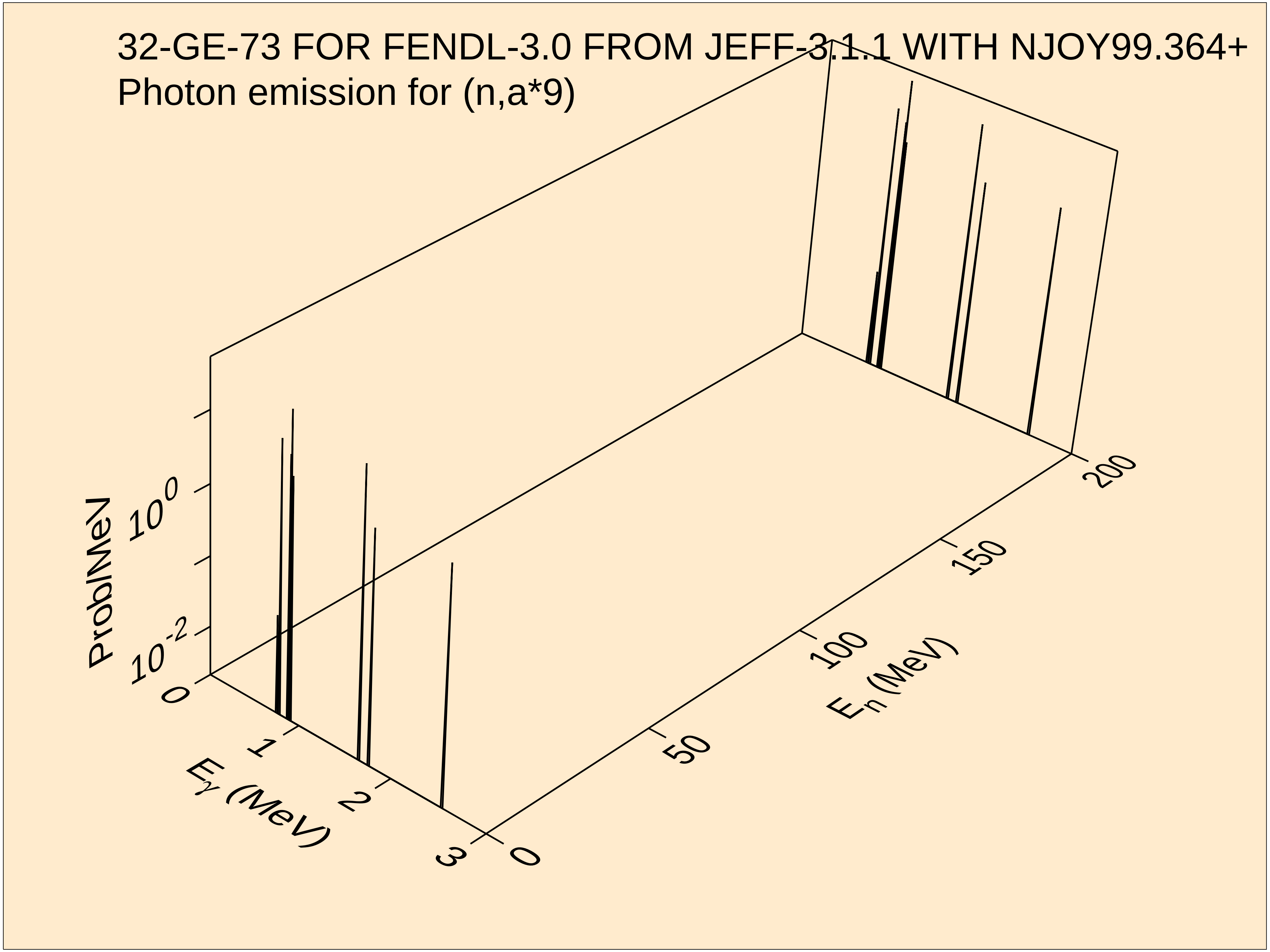

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*5)
ProbMeV
10^{0}
10^{-2}
0.6
0.8
1.0
1.2
E_{γ} (MeV)
0
50
100
150
200
E_{n} (MeV)

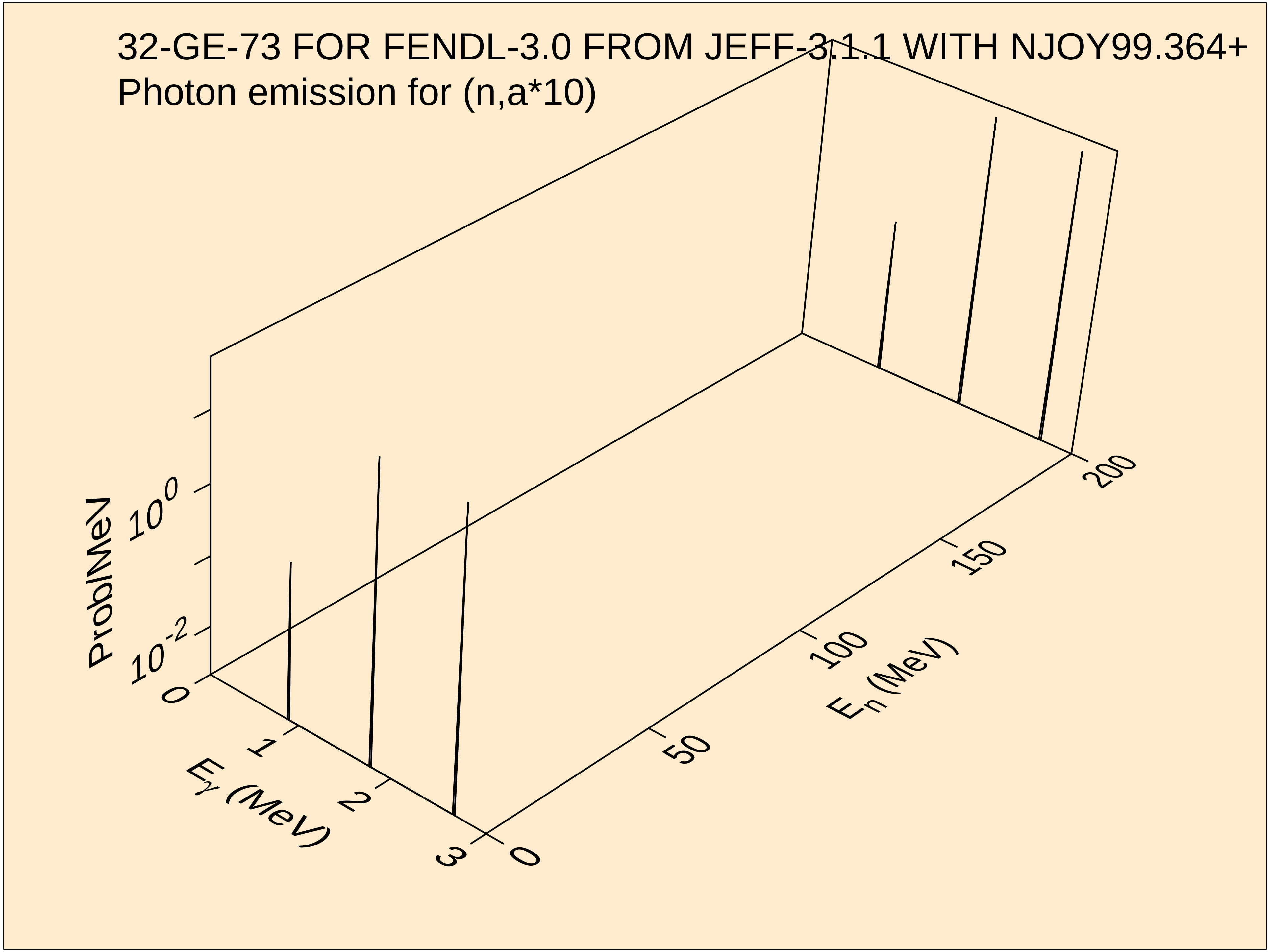

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*6)
Prob/MeV
10^{0}
10^{-2}
0.8
1.0
1.2
E_{γ} (MeV)
0
50
100
150
200
E_n (MeV)

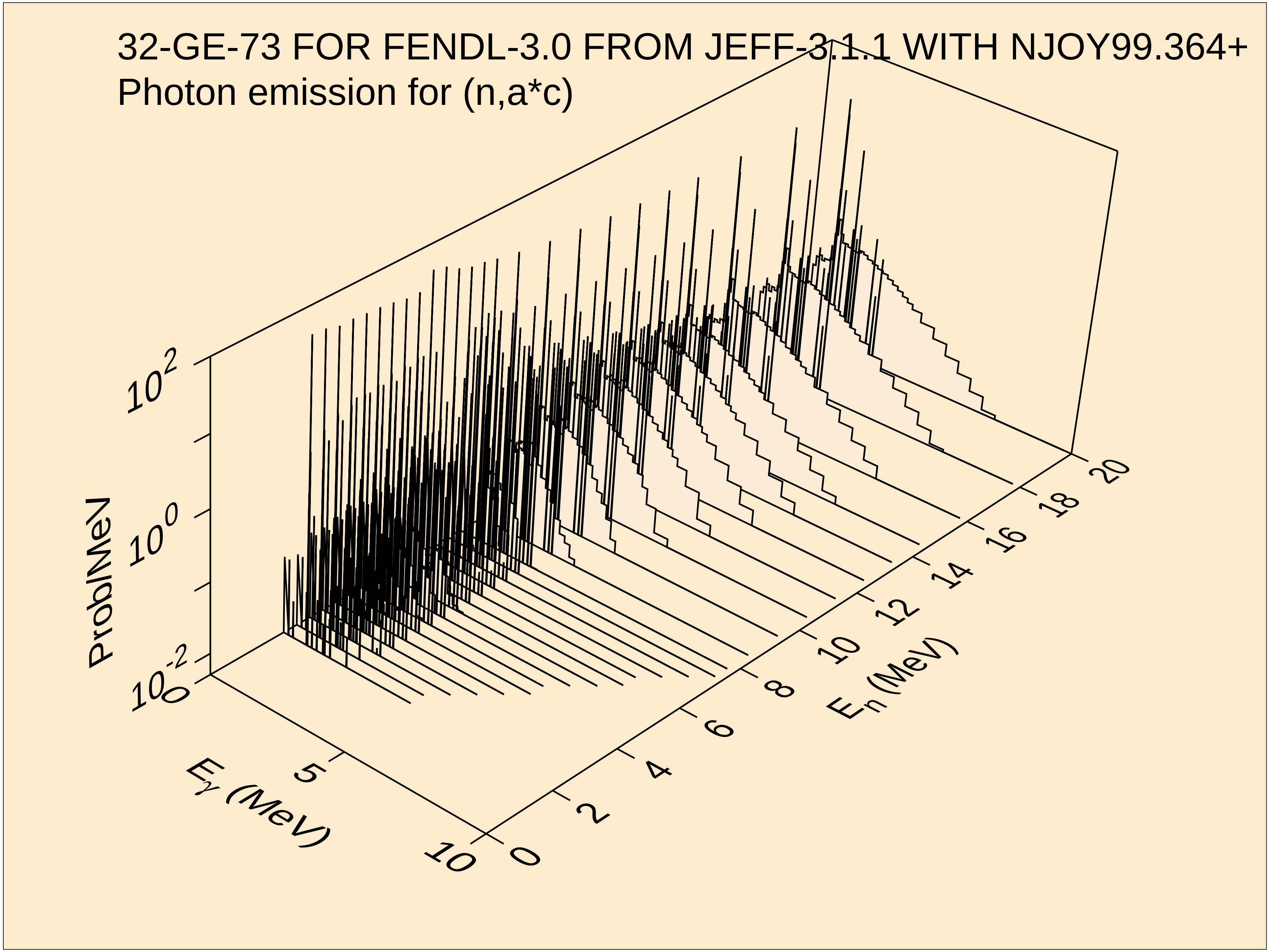

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*7)
Prob/MeV
10^{0}
10^{-2}
0.0
0.5
1.0
1.5
E_γ (MeV)
0
50
100
150
200
E_n (MeV)



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*8)

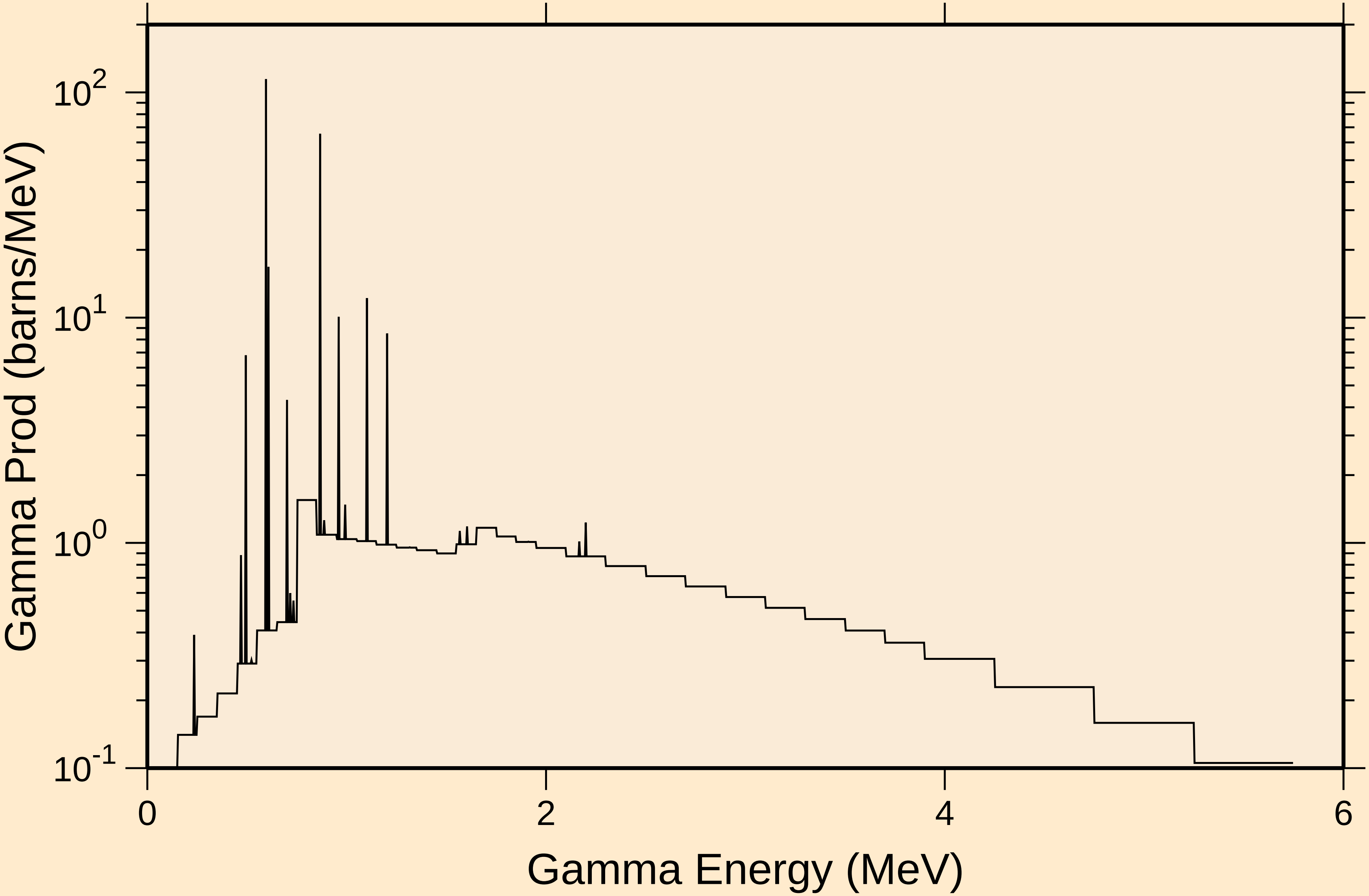
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*9)
ProbMeV
10^{0}
10^{-2}
0
1
2
3
E_γ (MeV)
0
50
100
150
200
E_n (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*10)

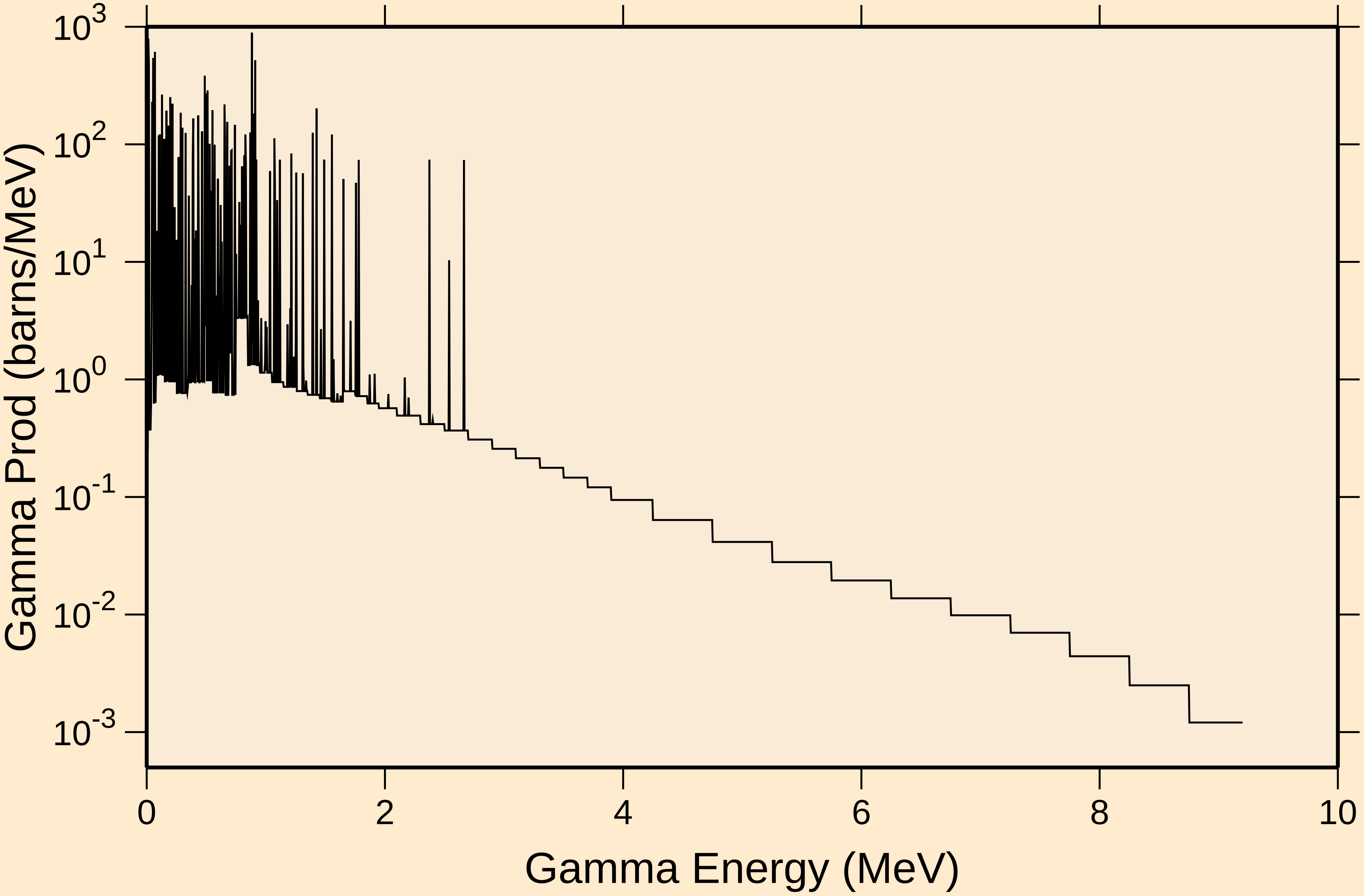


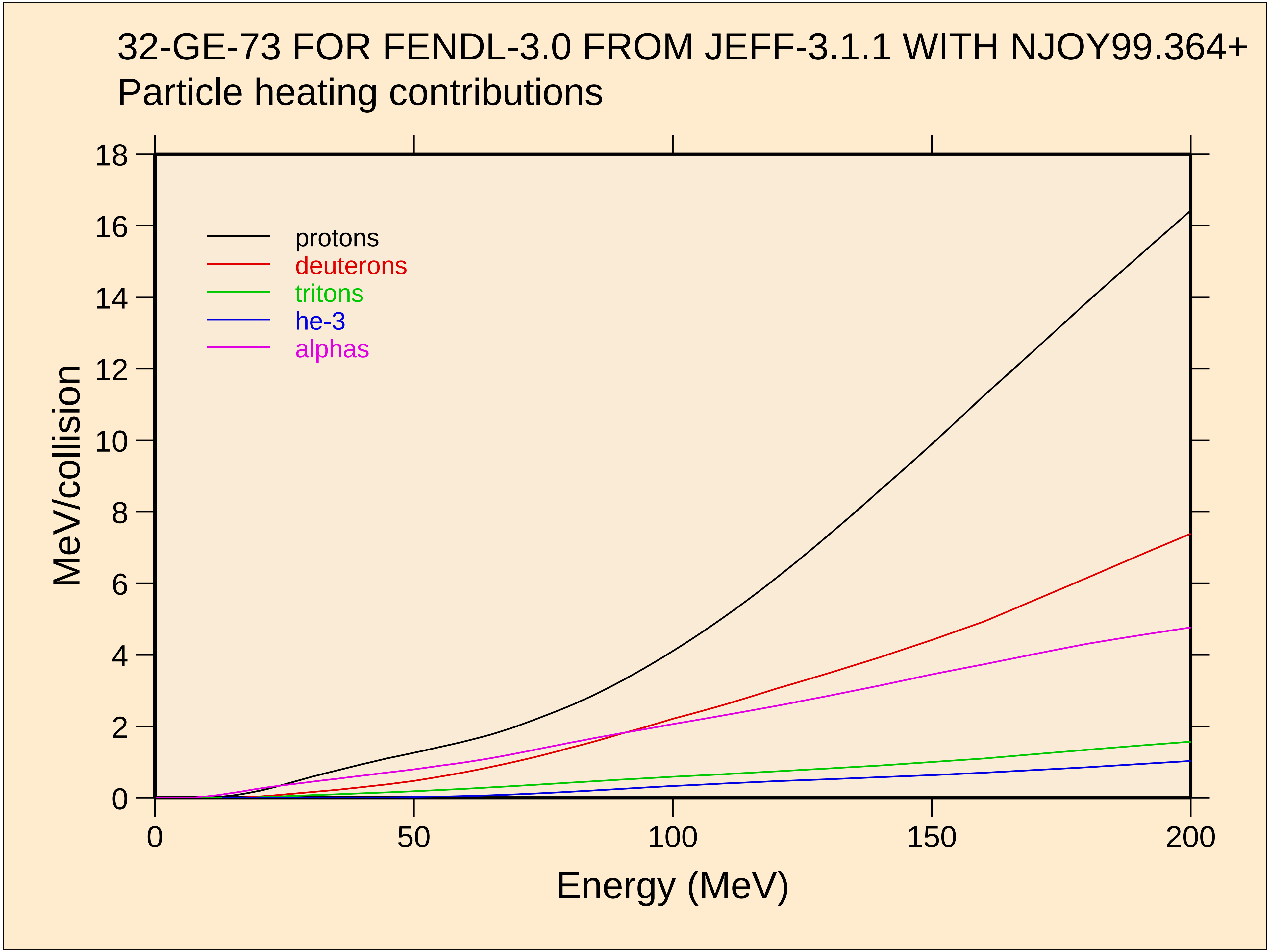
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Photon emission for (n,a*c)
ProbMeV
10^{2}
10^{0}
10^{-2}
0
5
10
E_{γ} (MeV)
0
2
4
6
8
10
12
14
16
18
20
E_{n} (MeV)

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
thermal capture photon spectrum



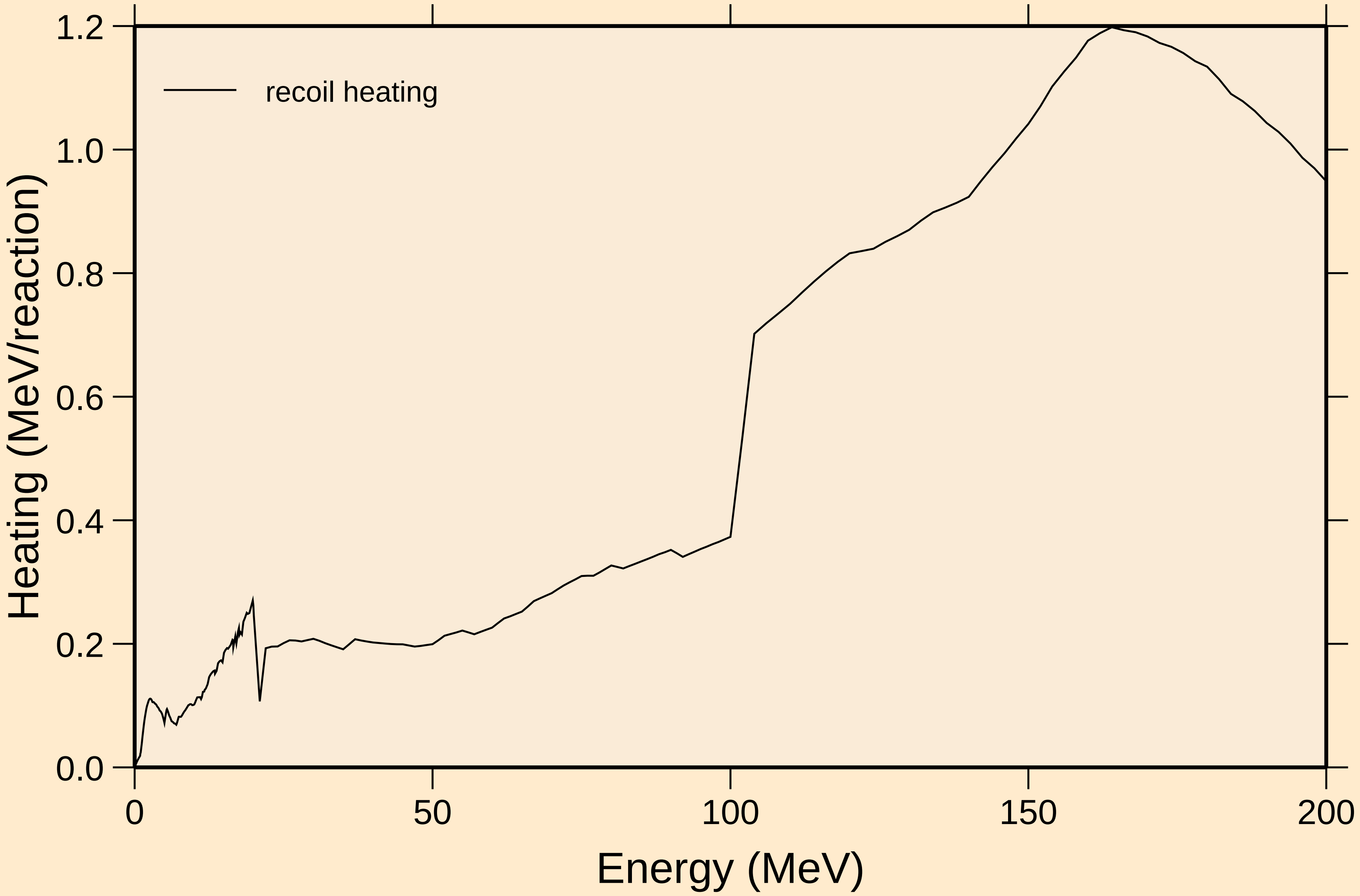
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
14 MeV photon spectrum

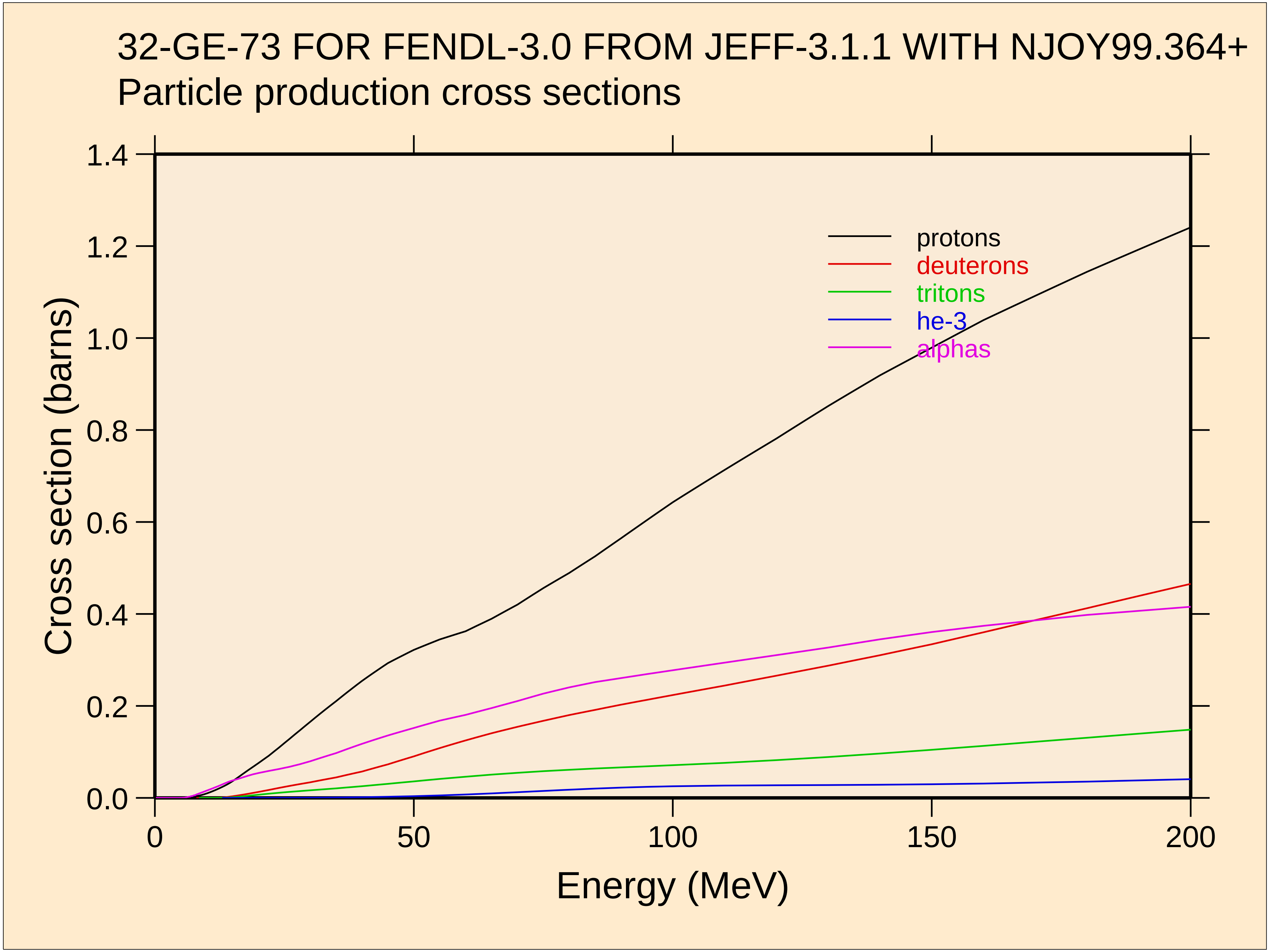


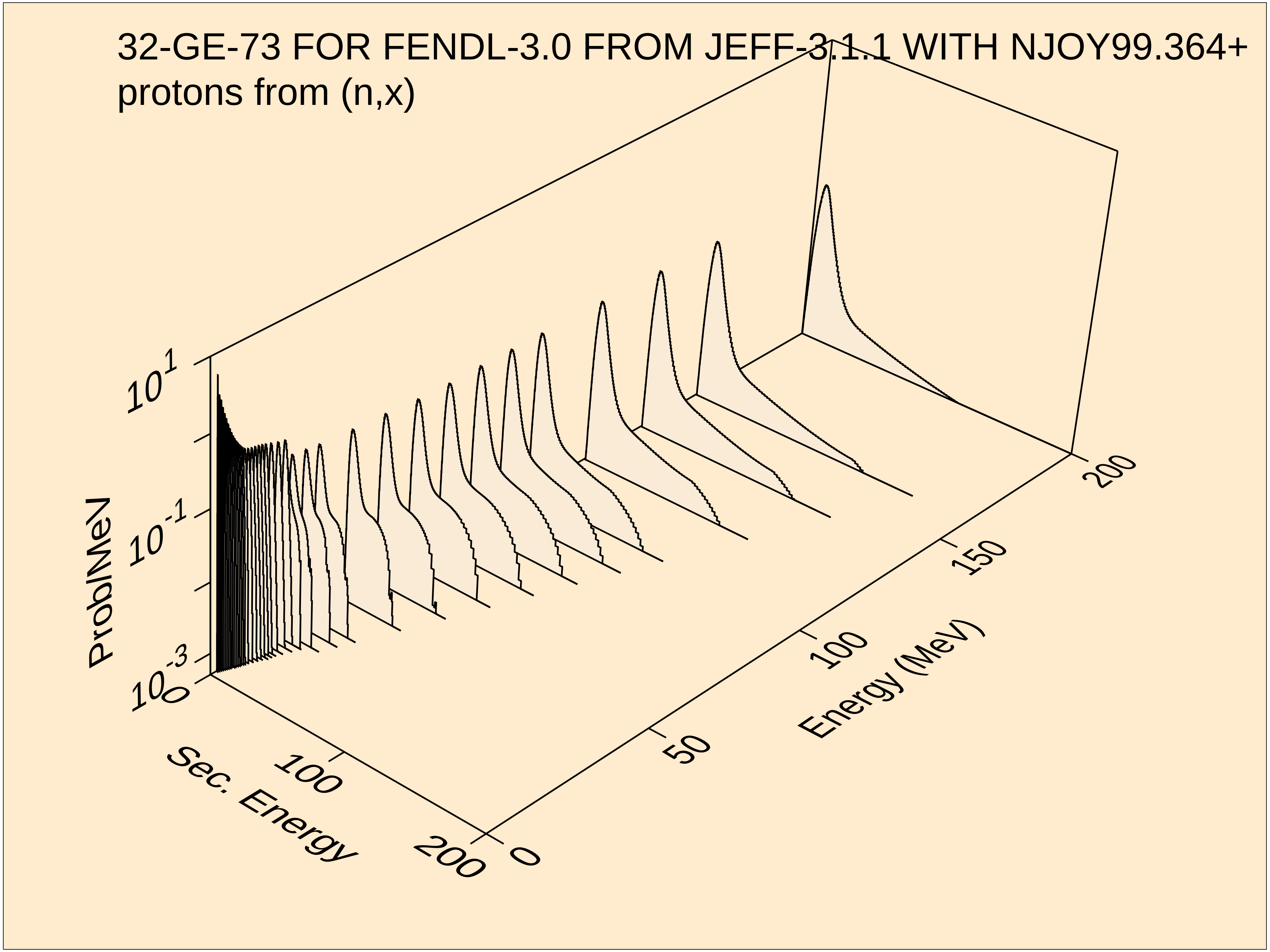


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Particle heating contributions

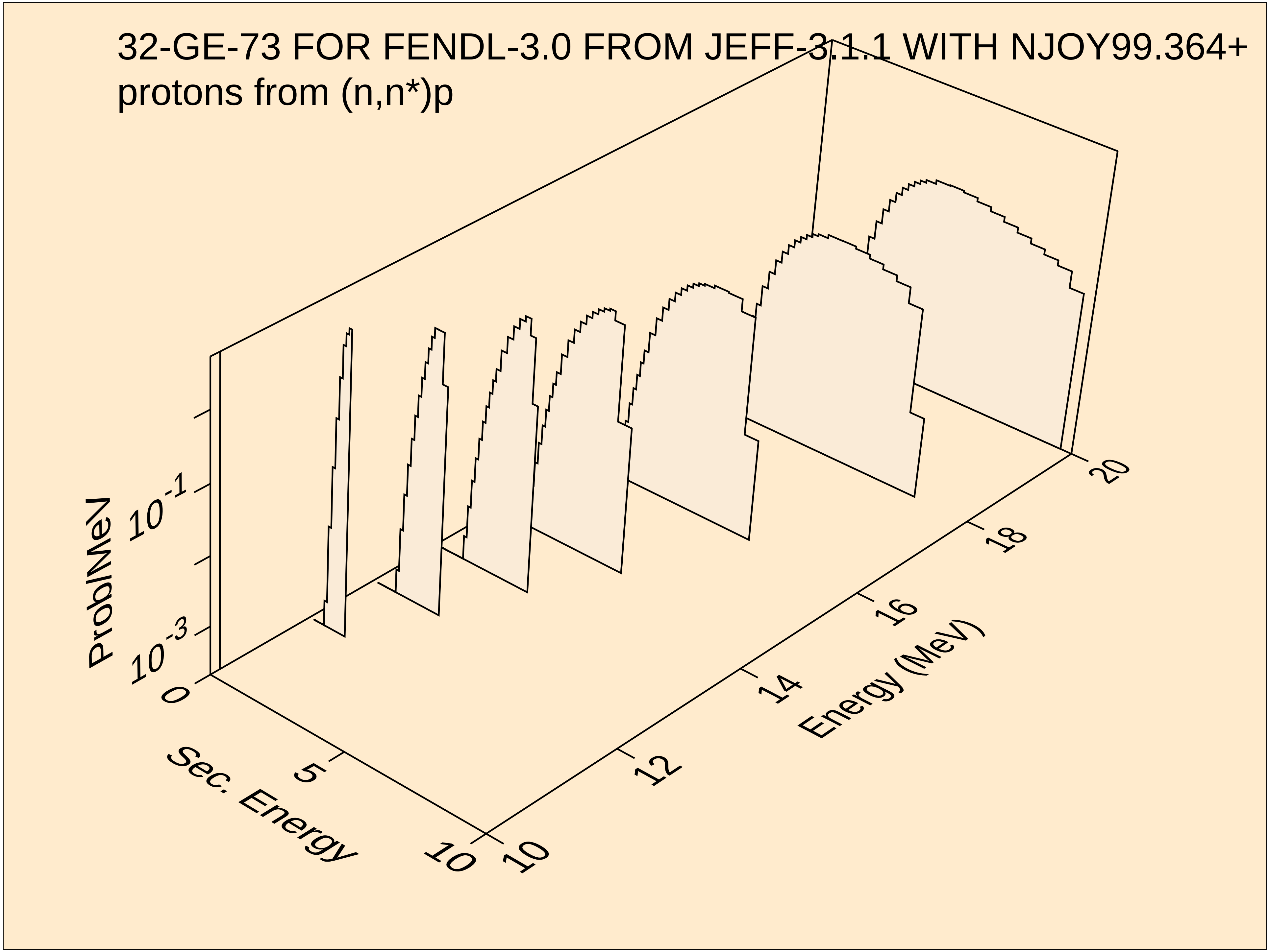
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Recoil Heating



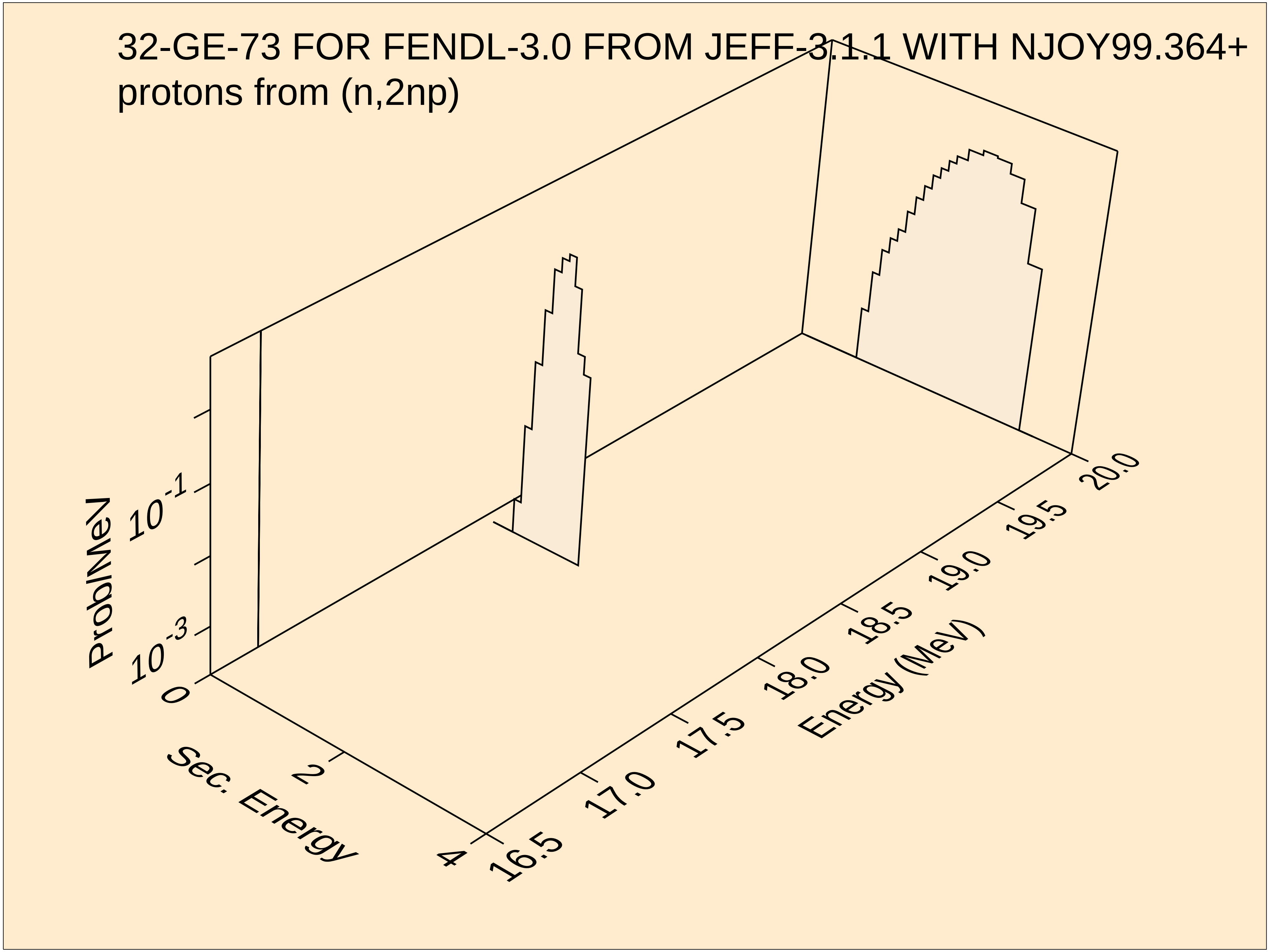

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
Particle production cross sections
protons
deuterons
tritons
he-3
alphas
Cross section (barns)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
50
100
150
200
Energy (MeV)



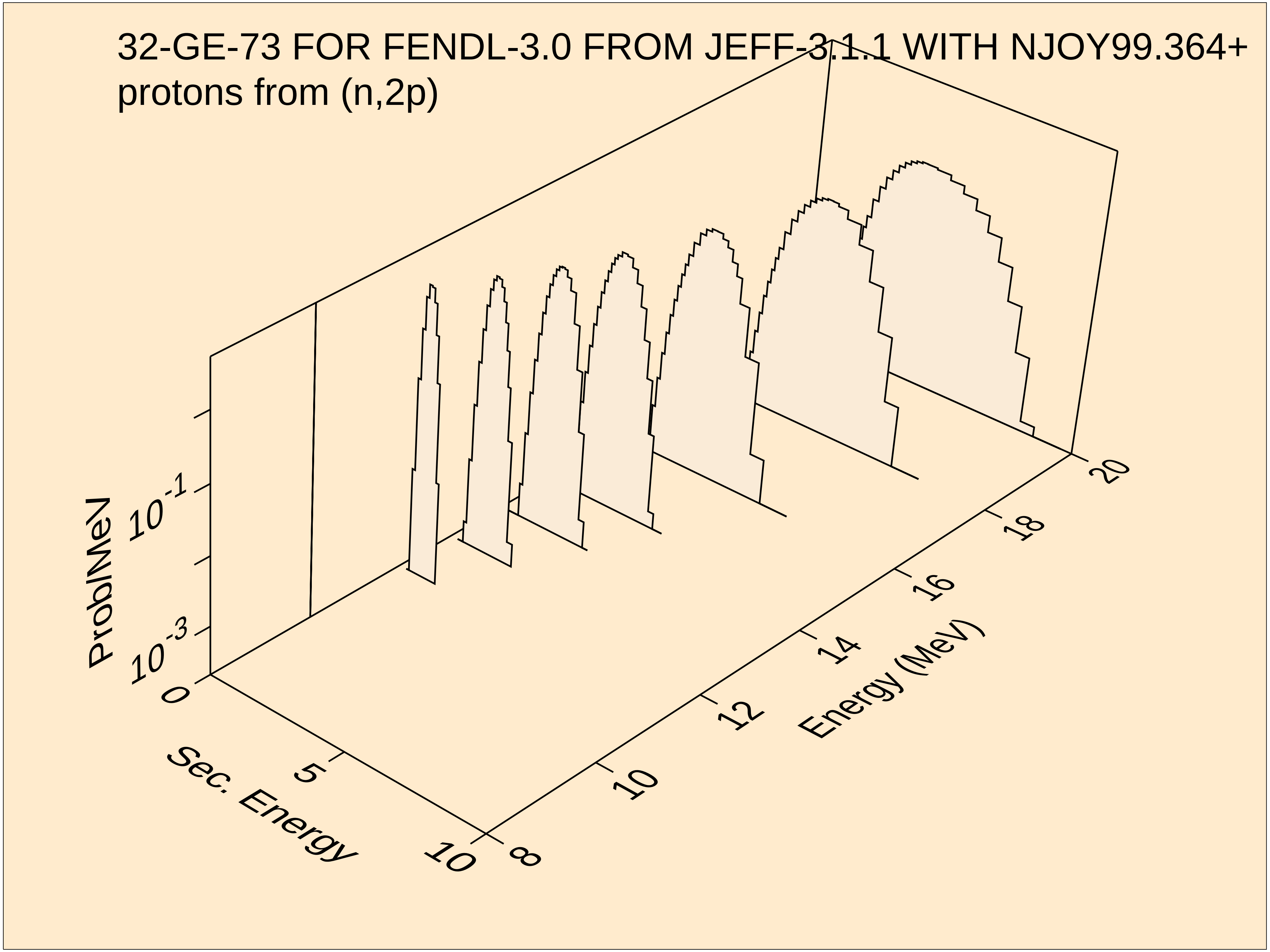
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
protons from (n,x)



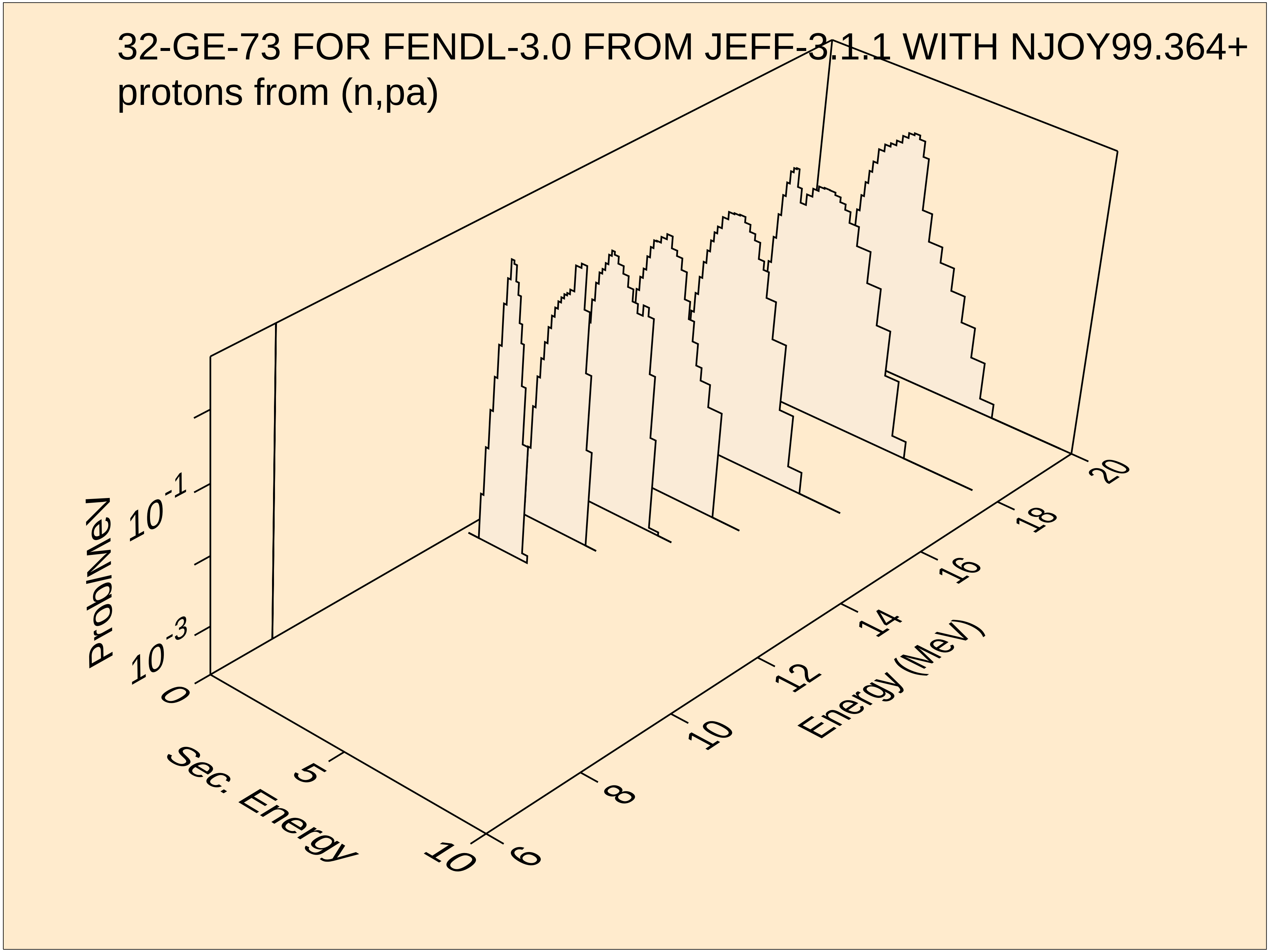
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
protons from (n,n*)p



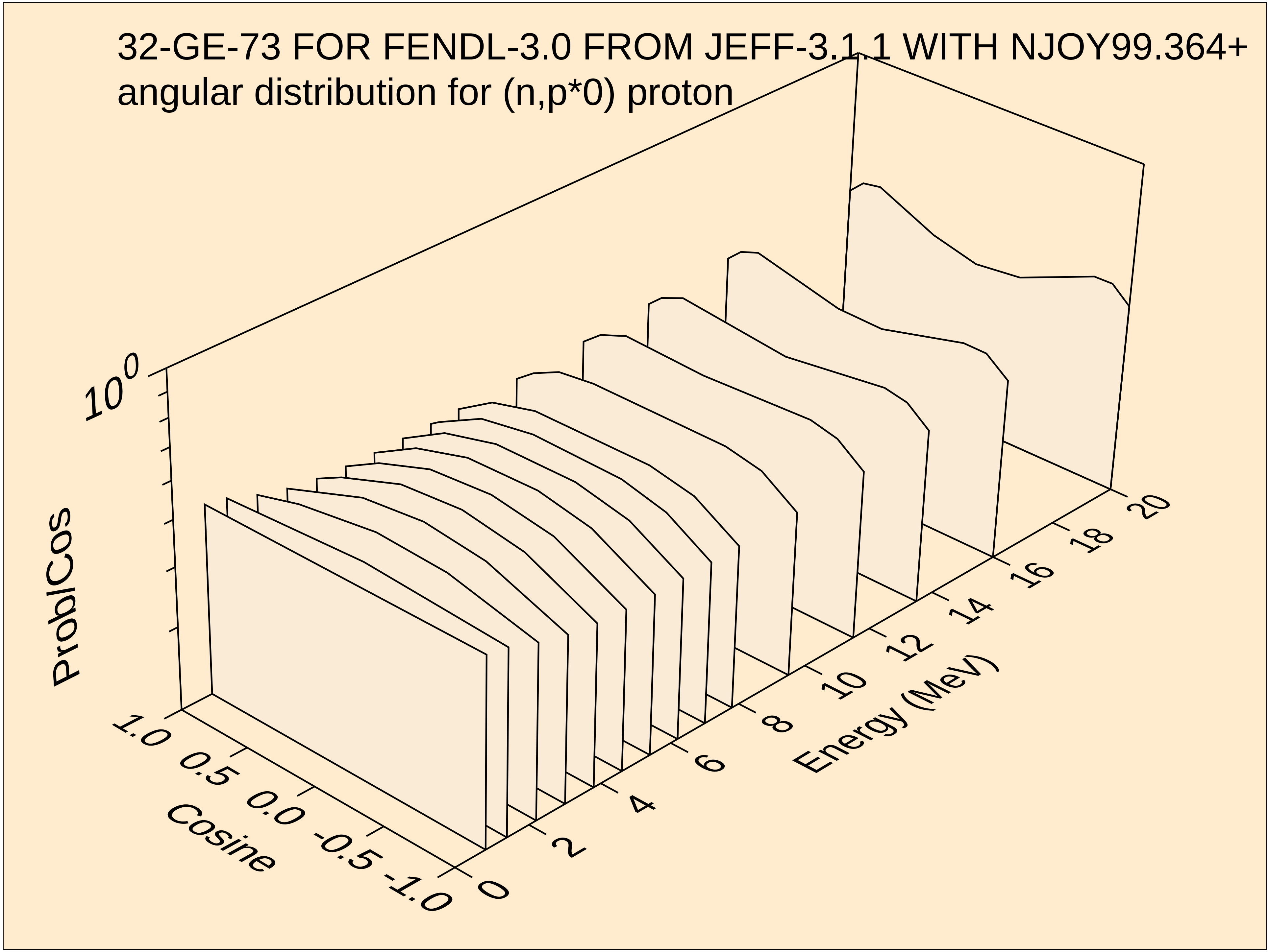
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
protons from (n,2np)

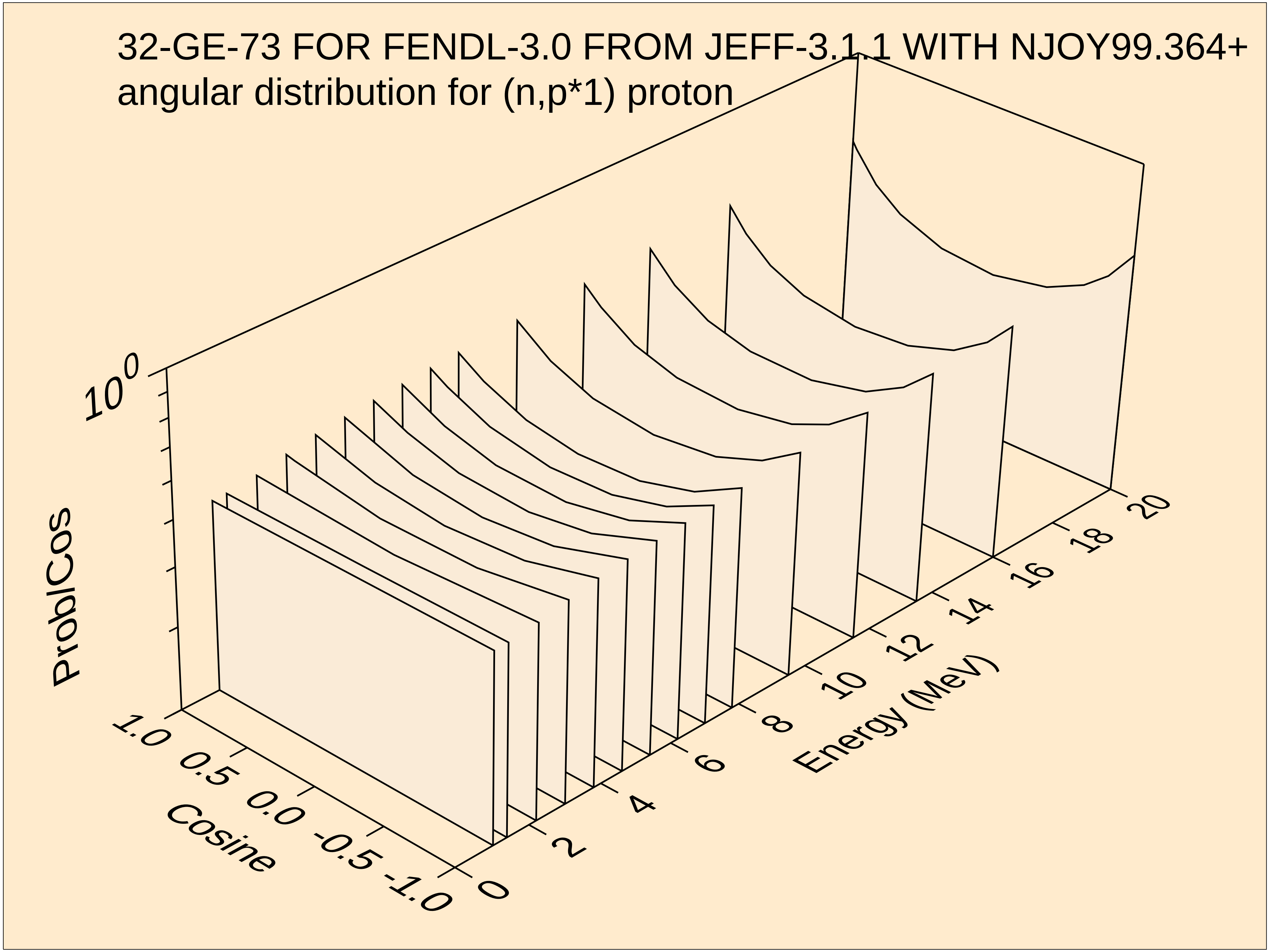


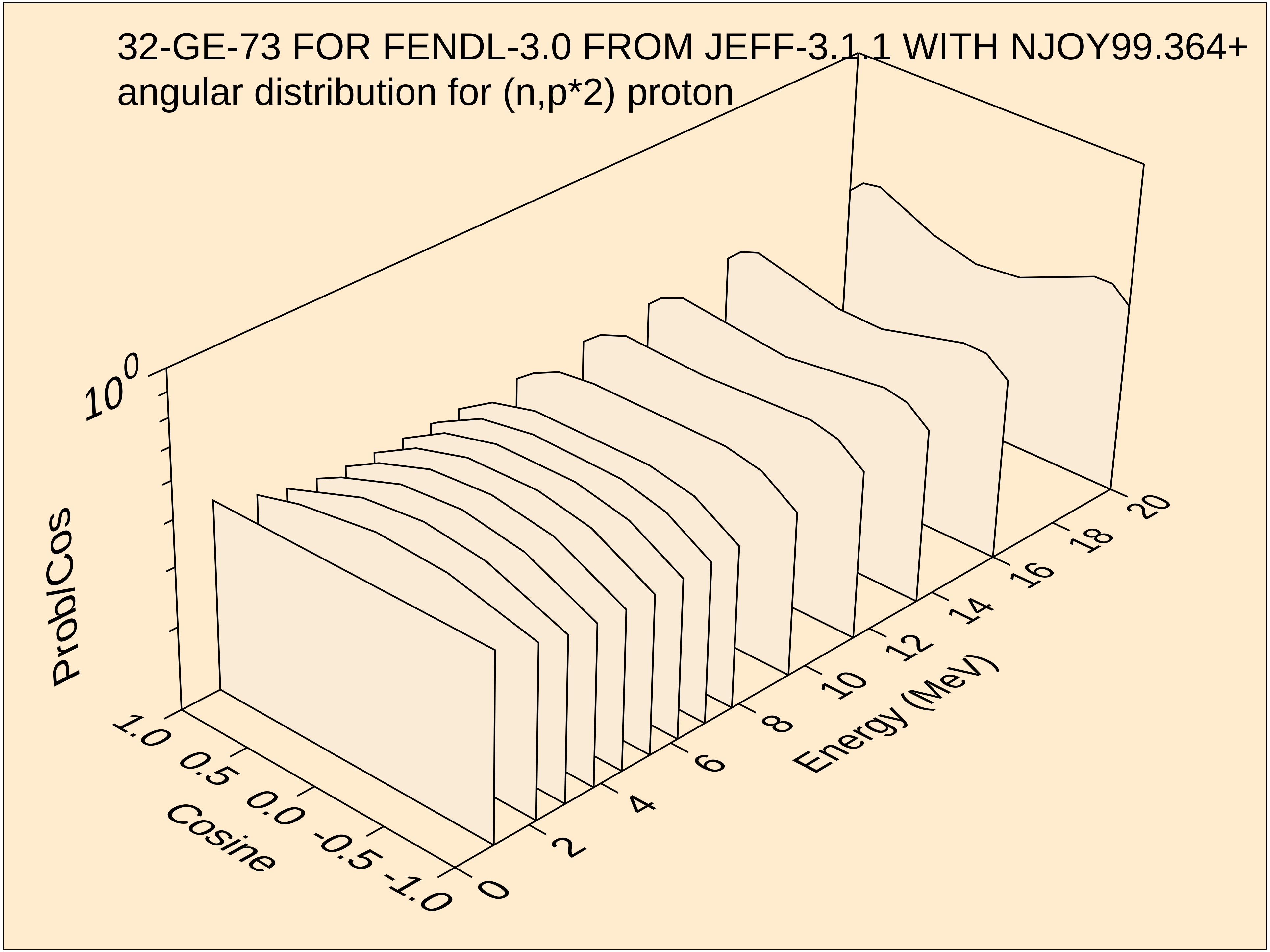
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
protons from (n,2p)

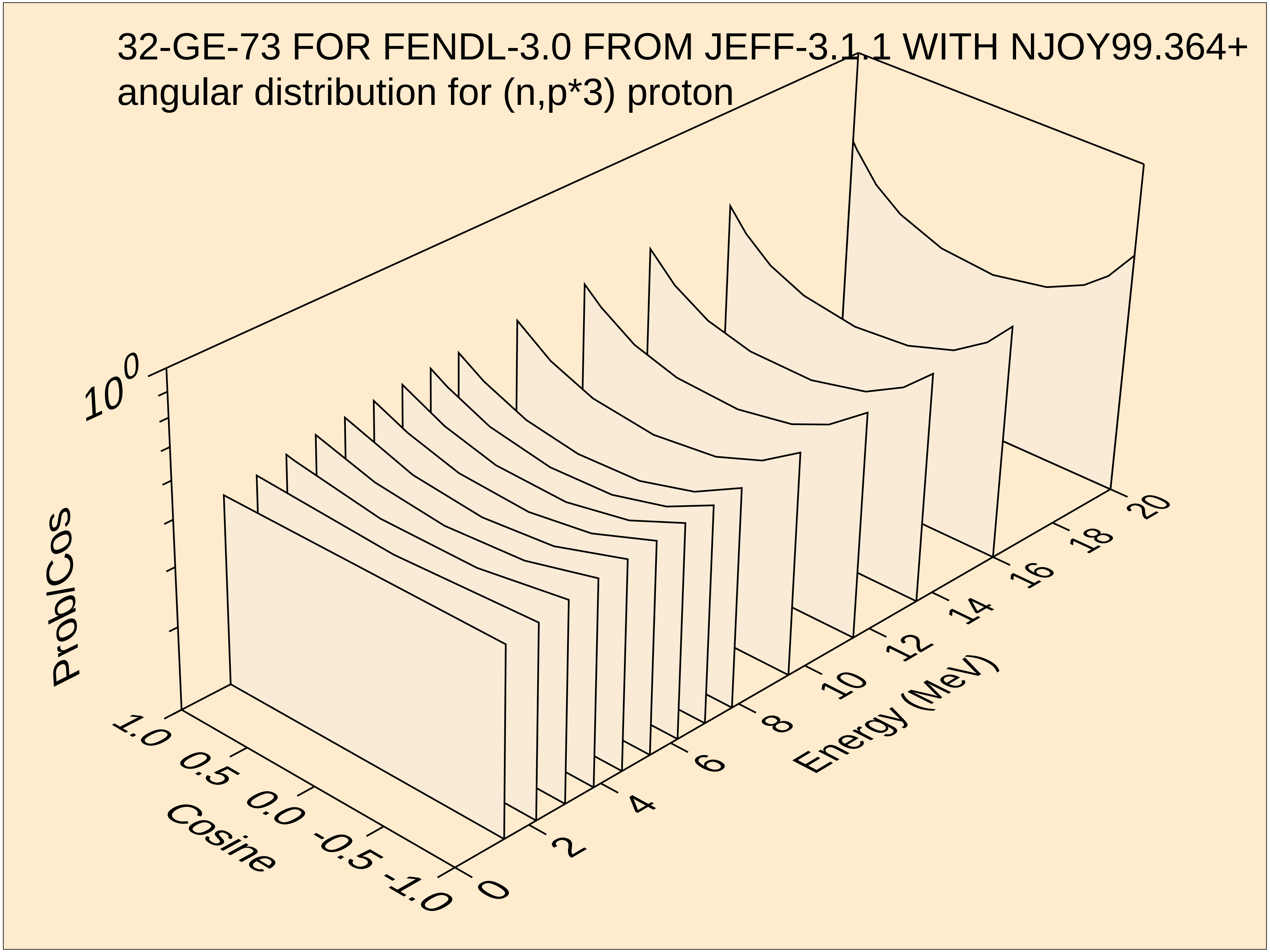


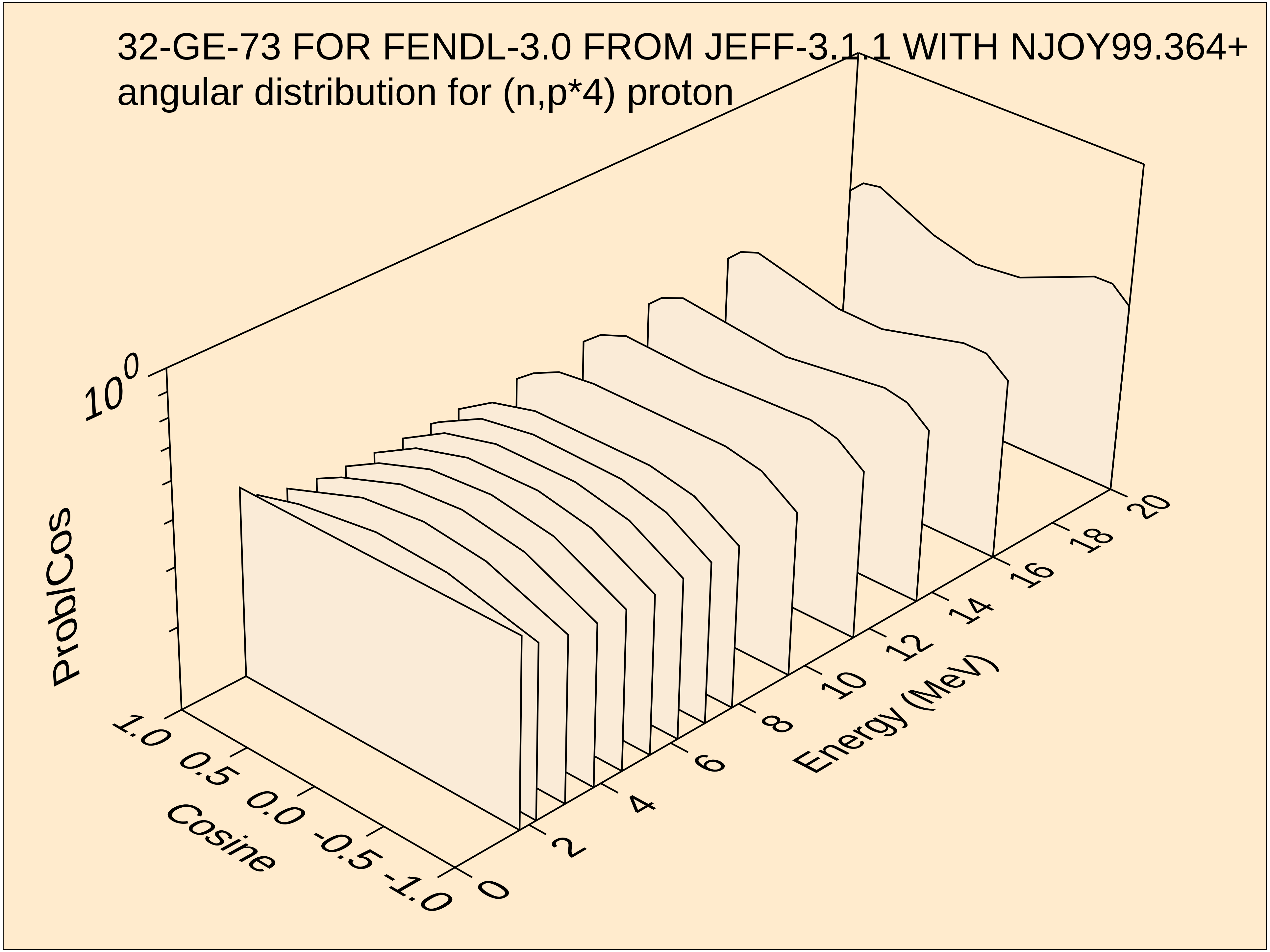
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
protons from (n,pa)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*0) proton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

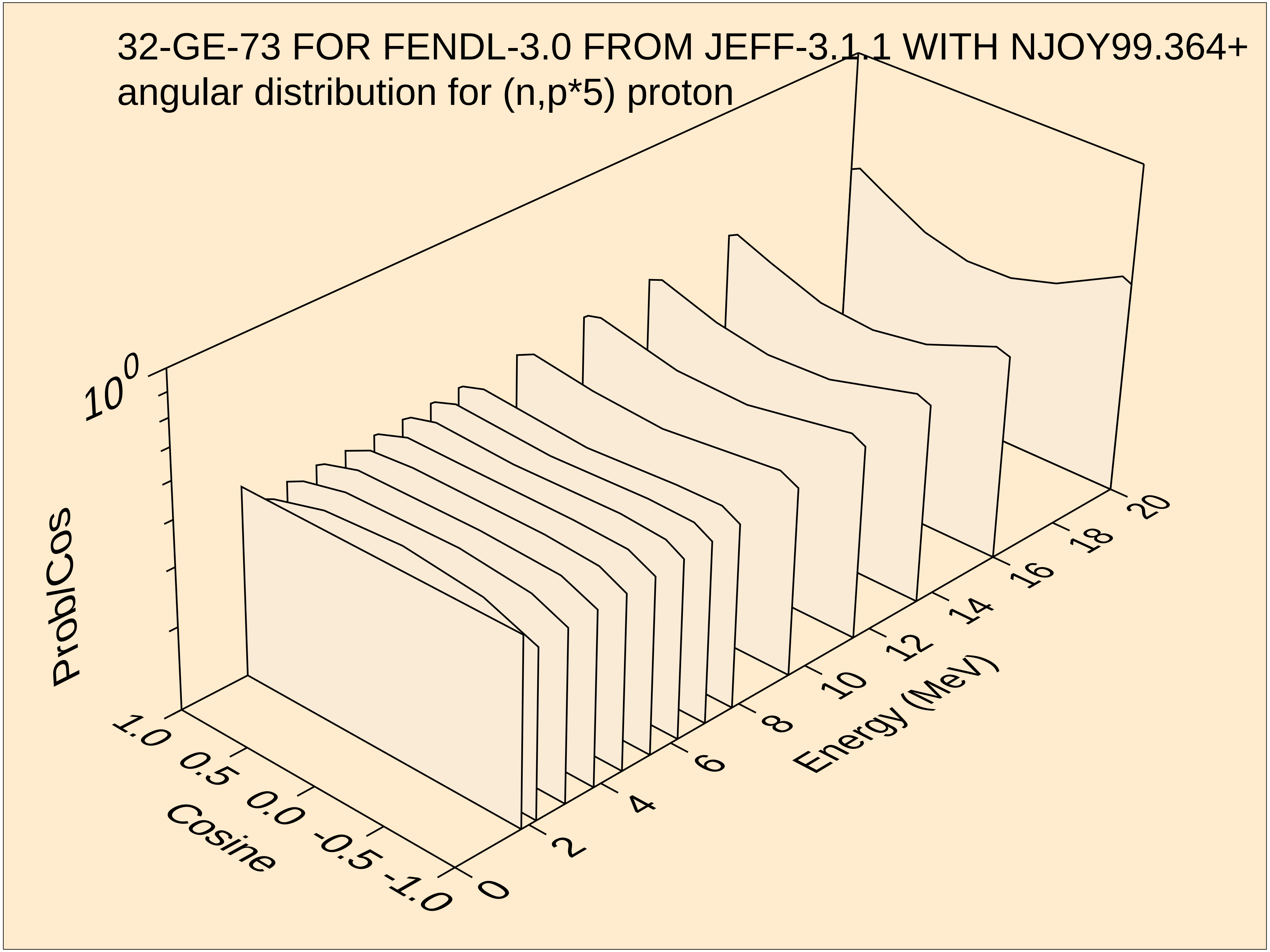

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*1) proton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

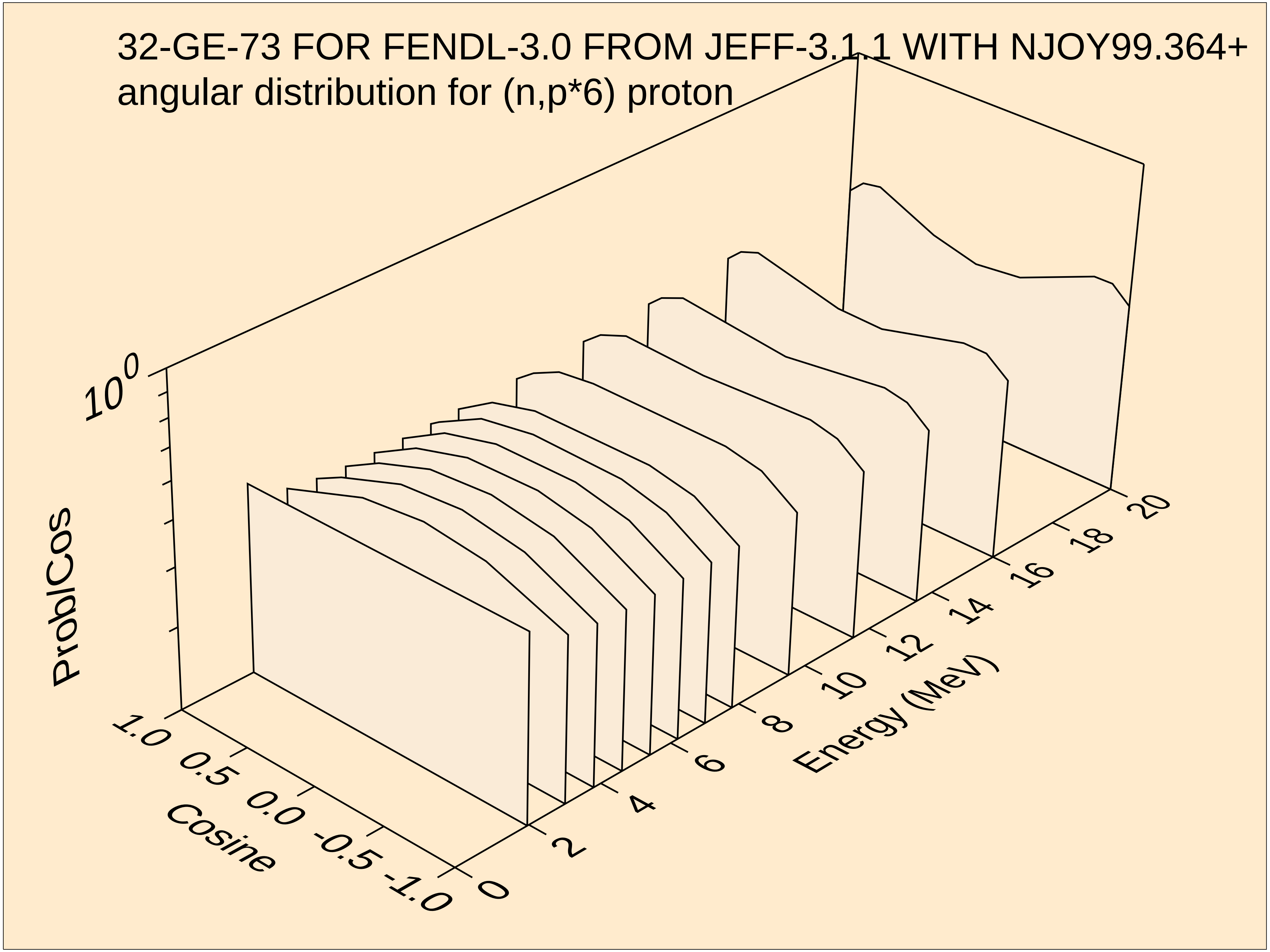

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*2) proton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

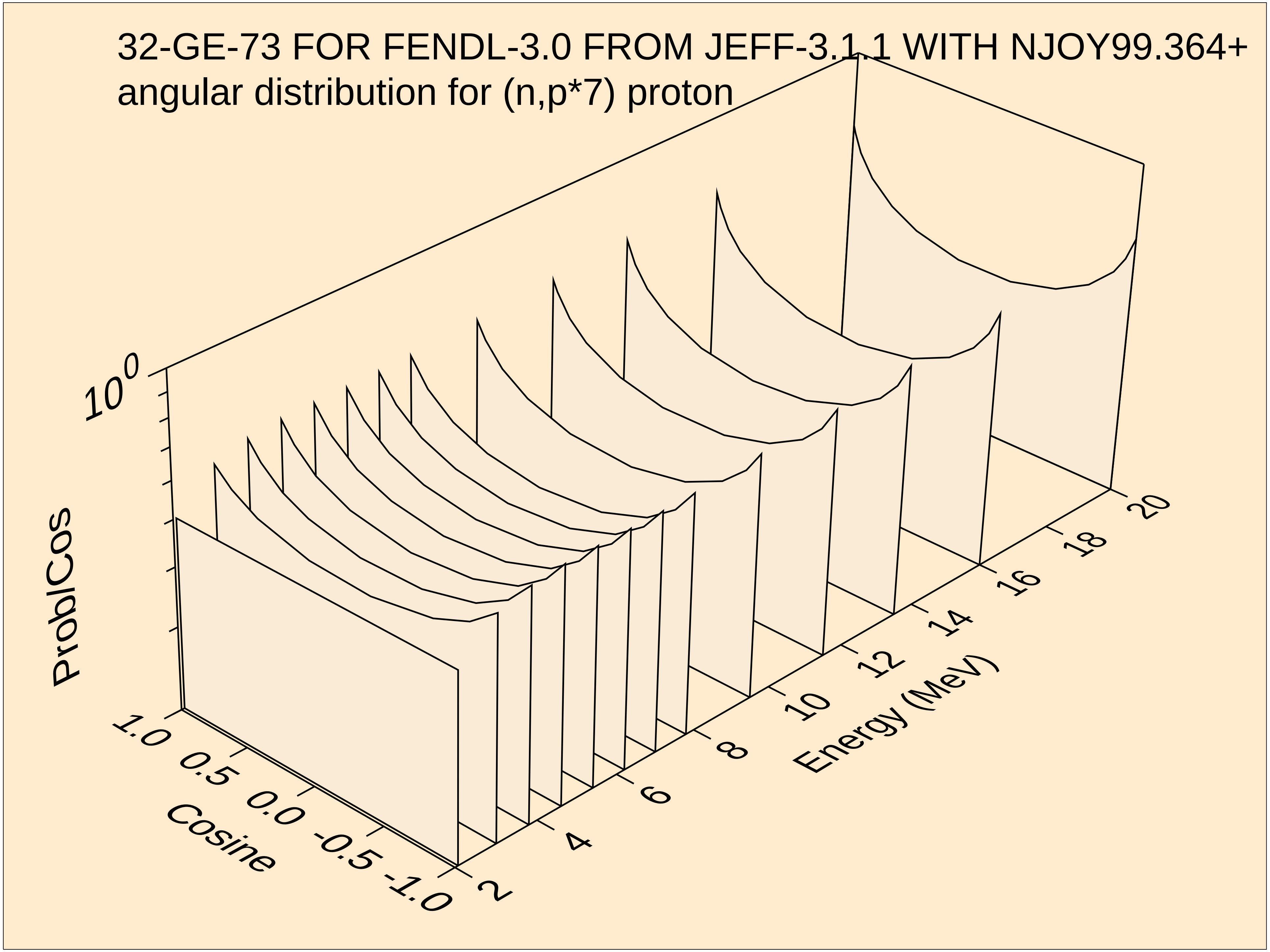

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*3) proton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

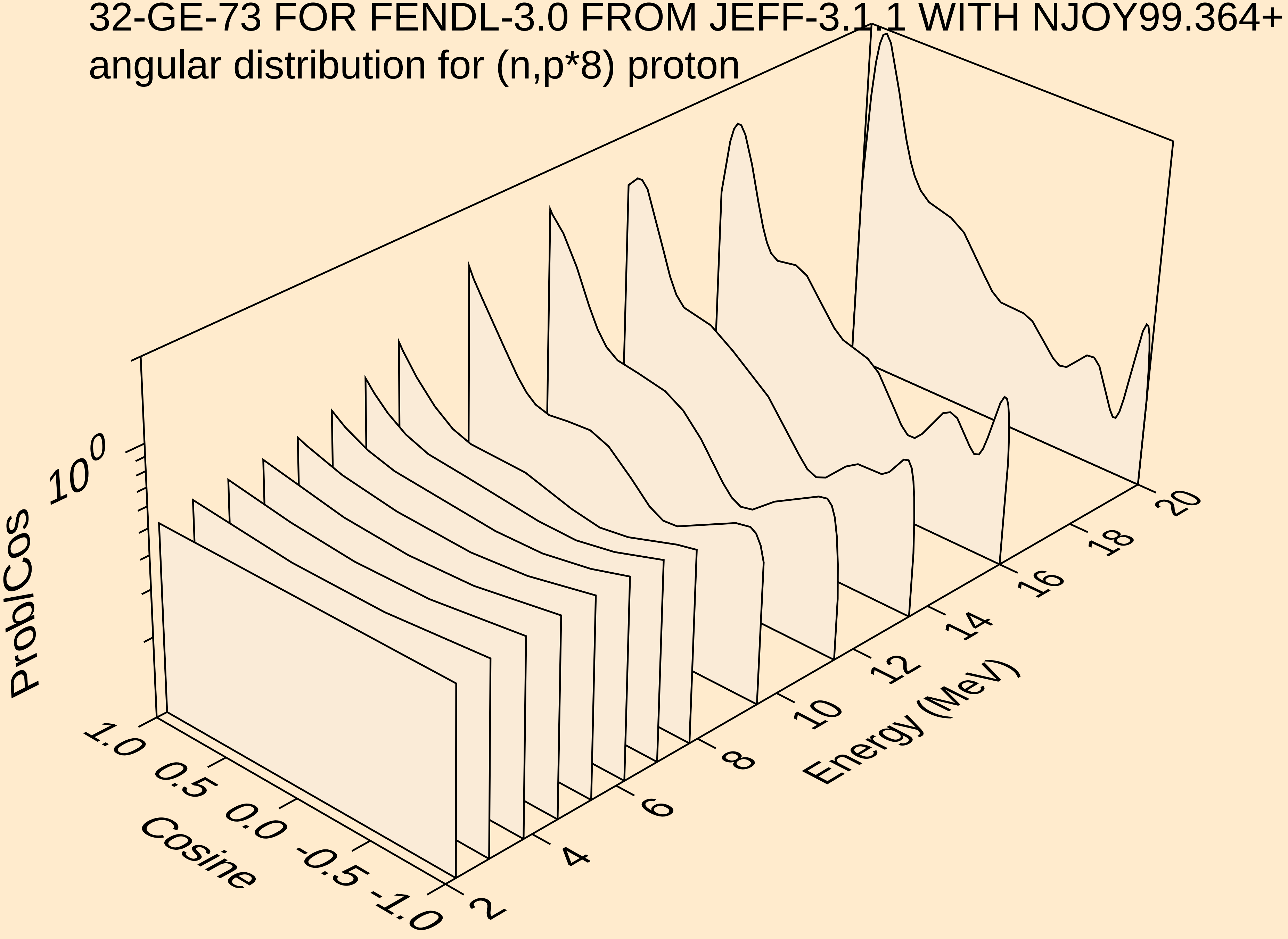


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*4) proton

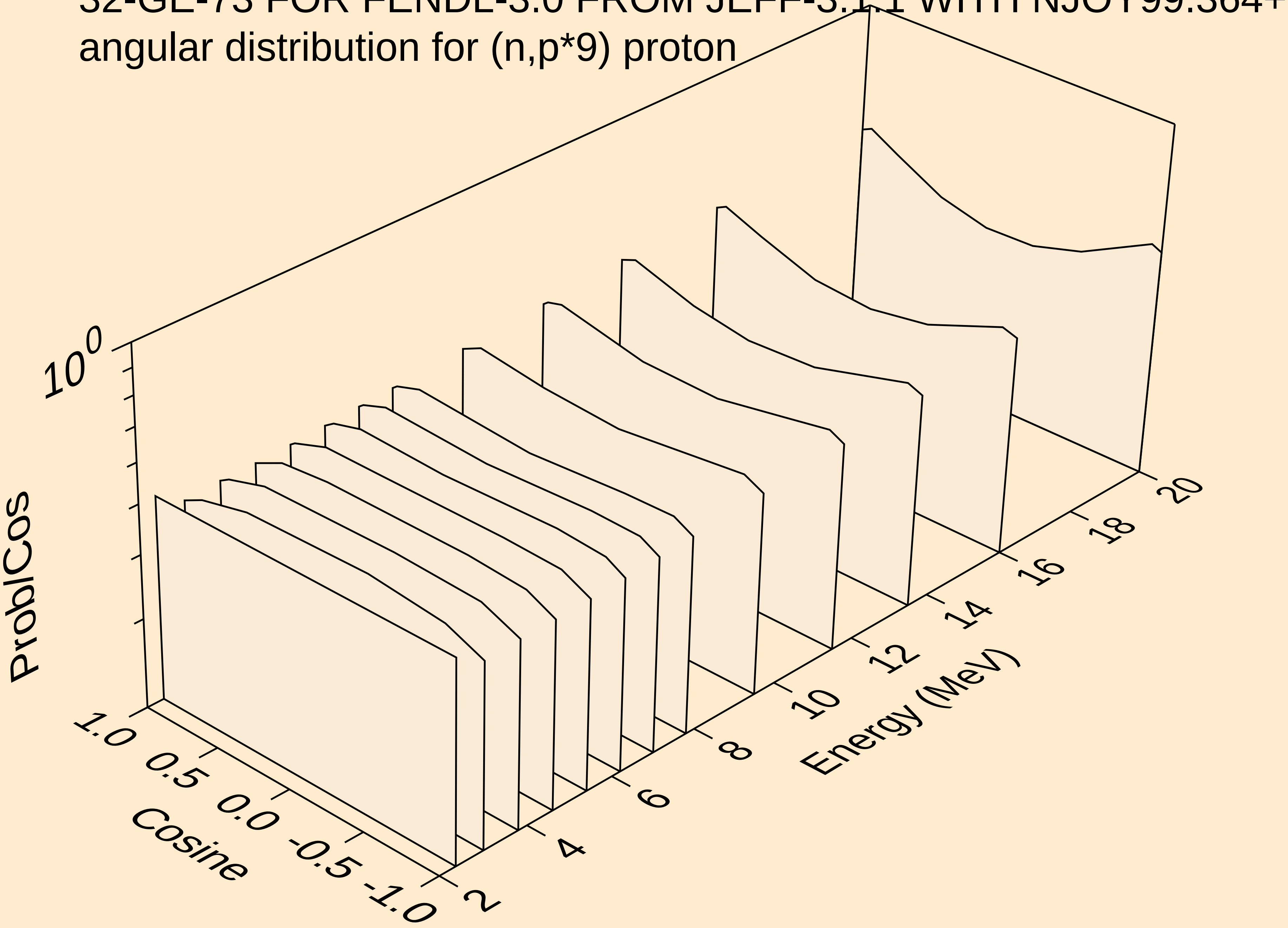

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*5) proton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*6) proton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

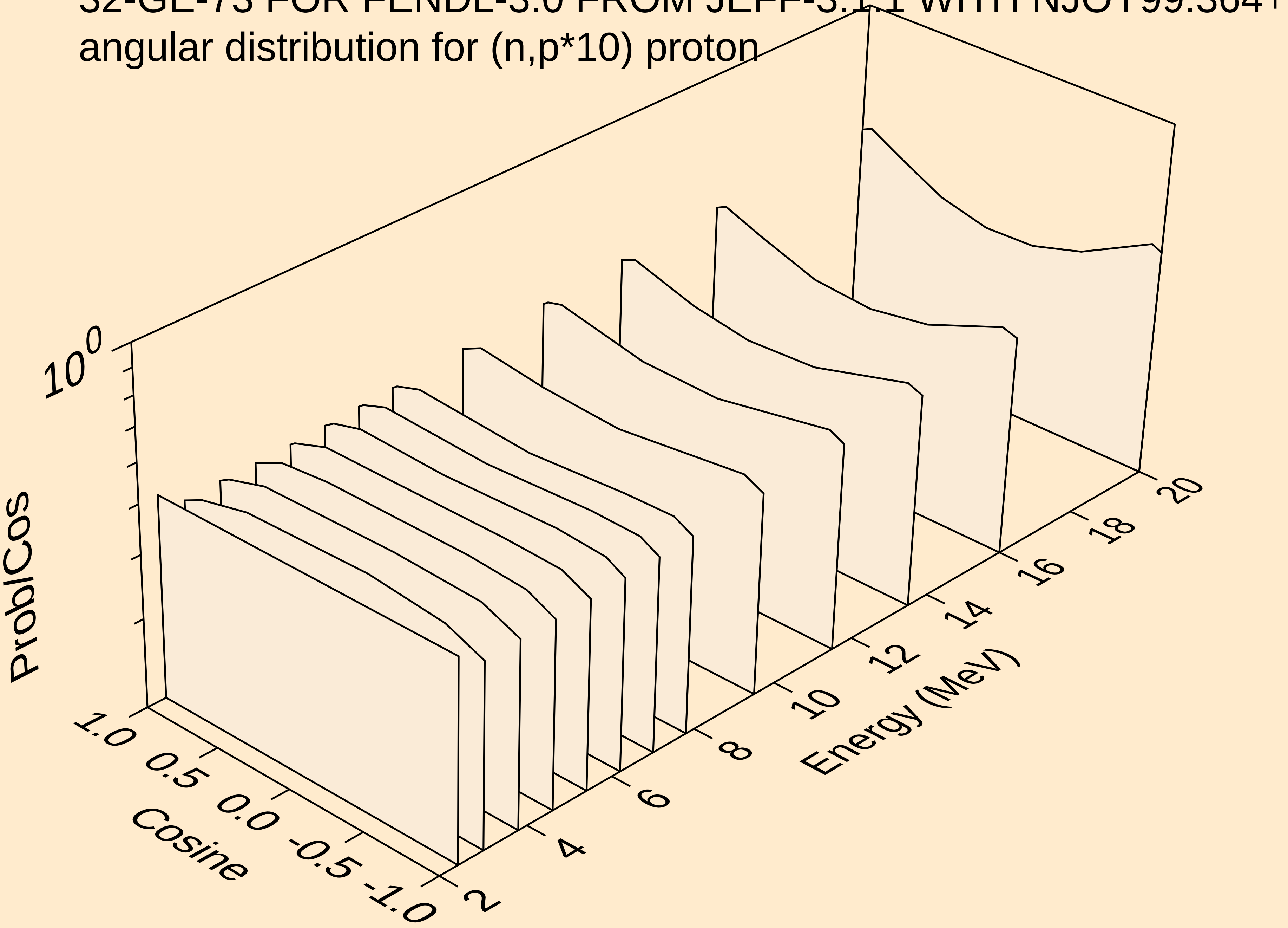

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*7) proton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

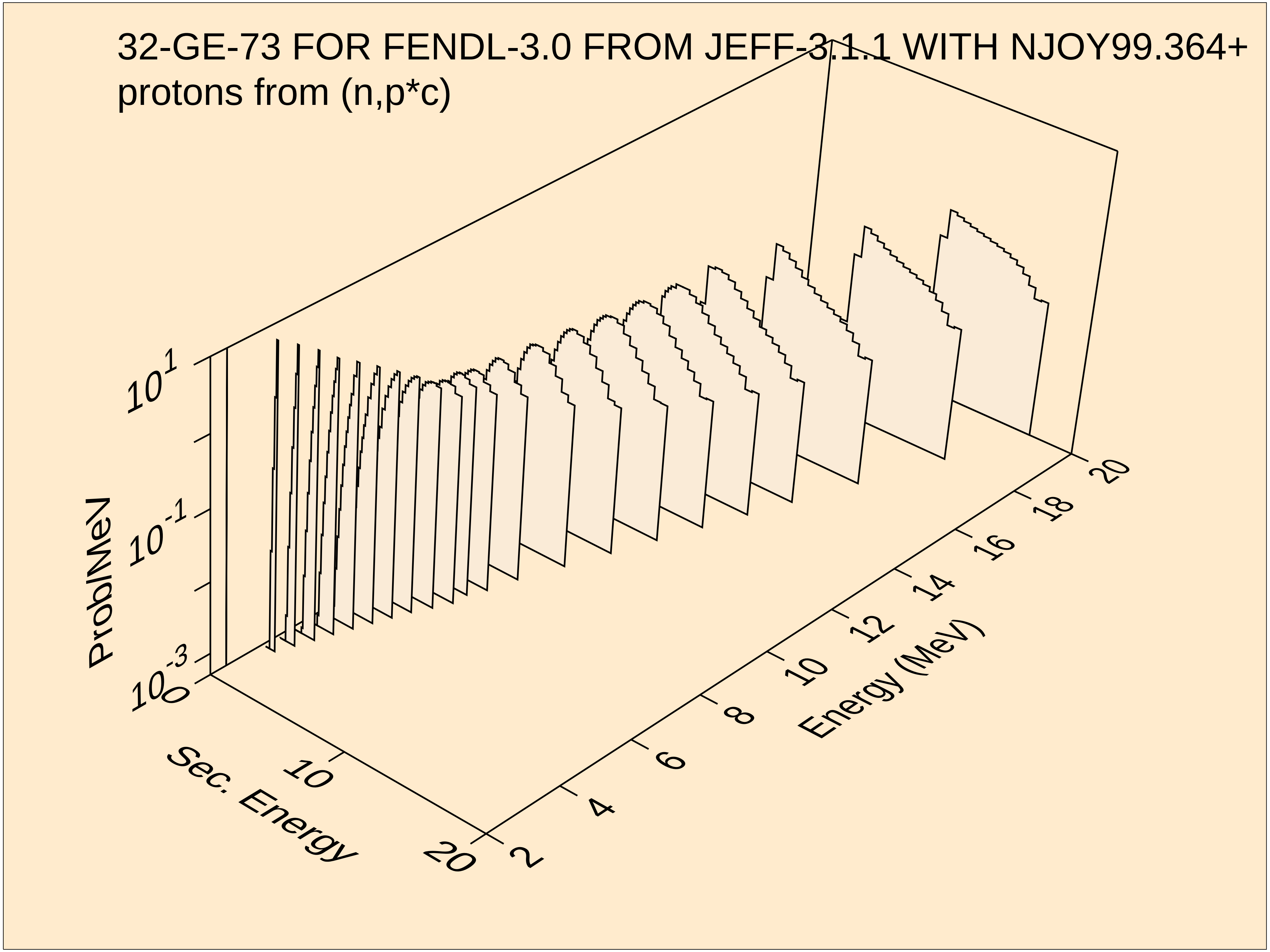

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*8) proton
ProblCos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

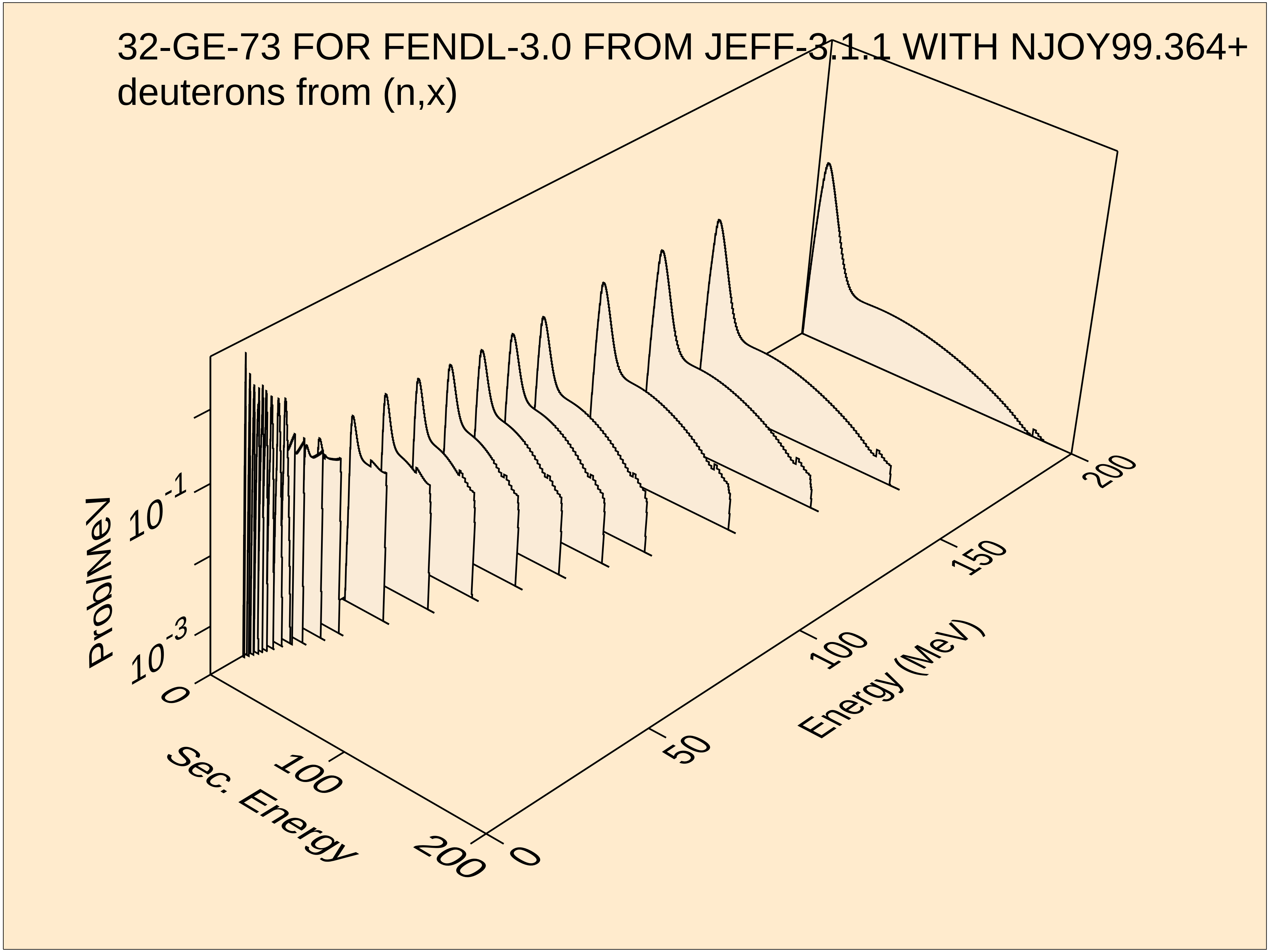
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*9) proton

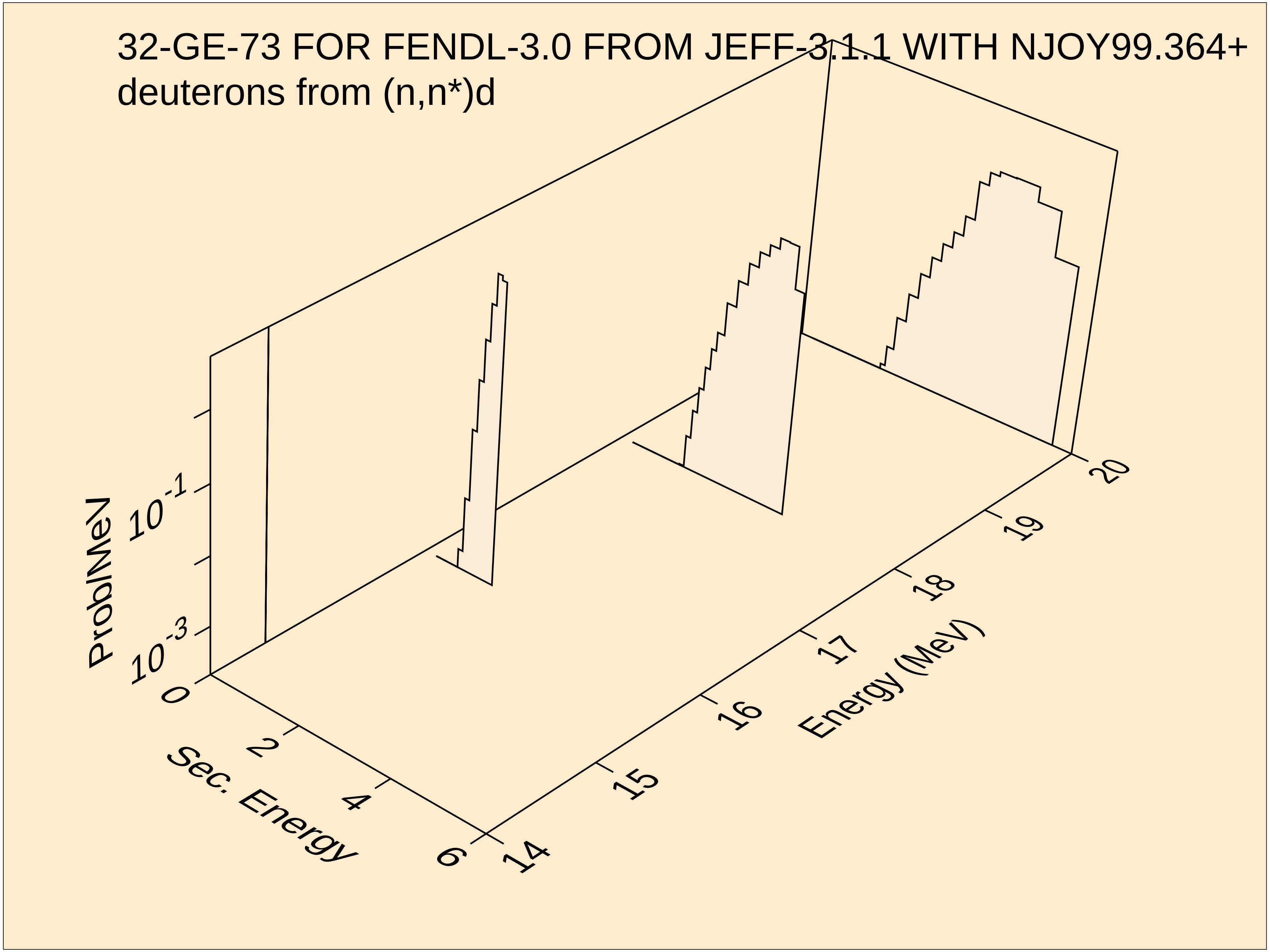


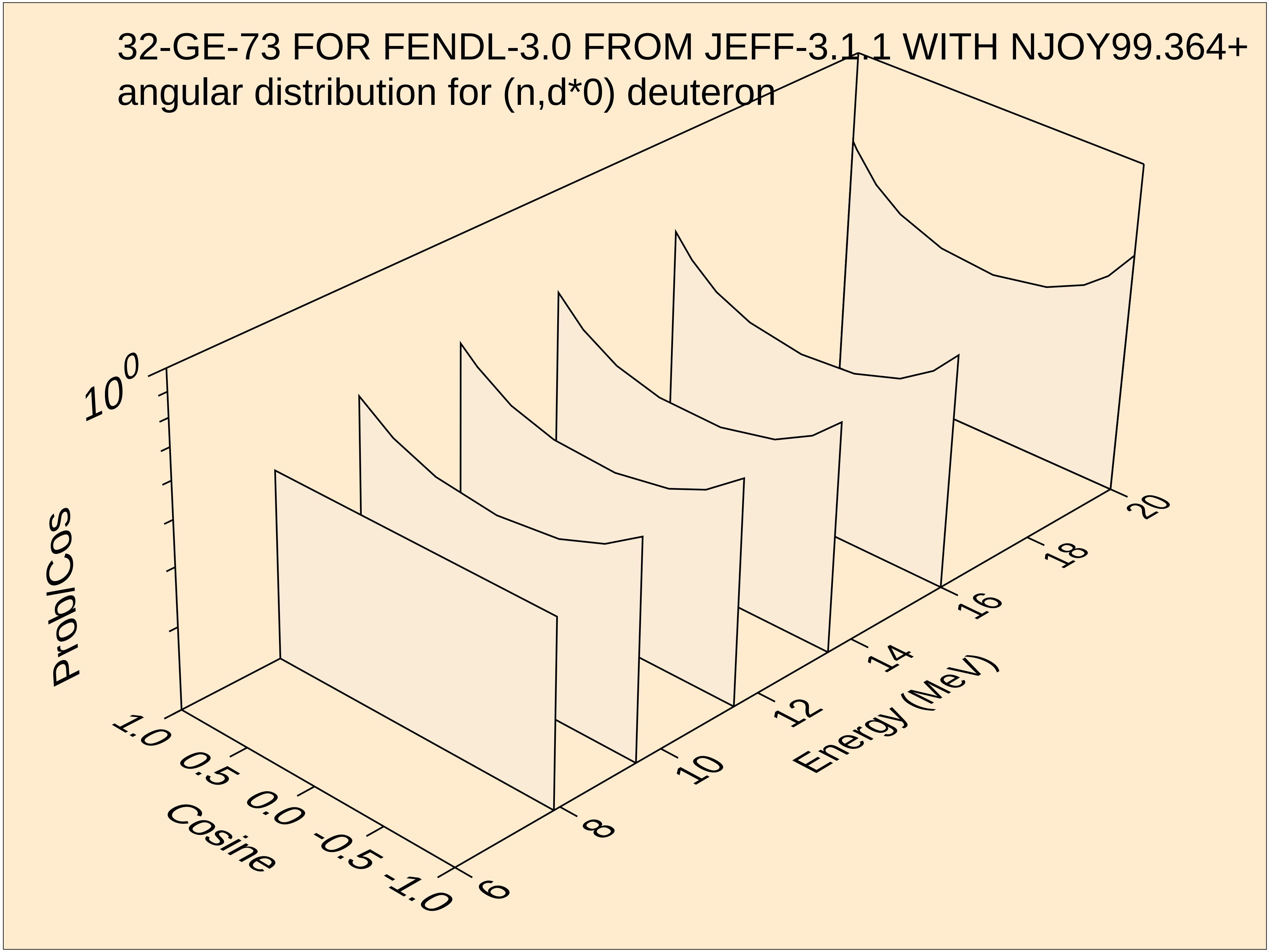
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,p*10) proton

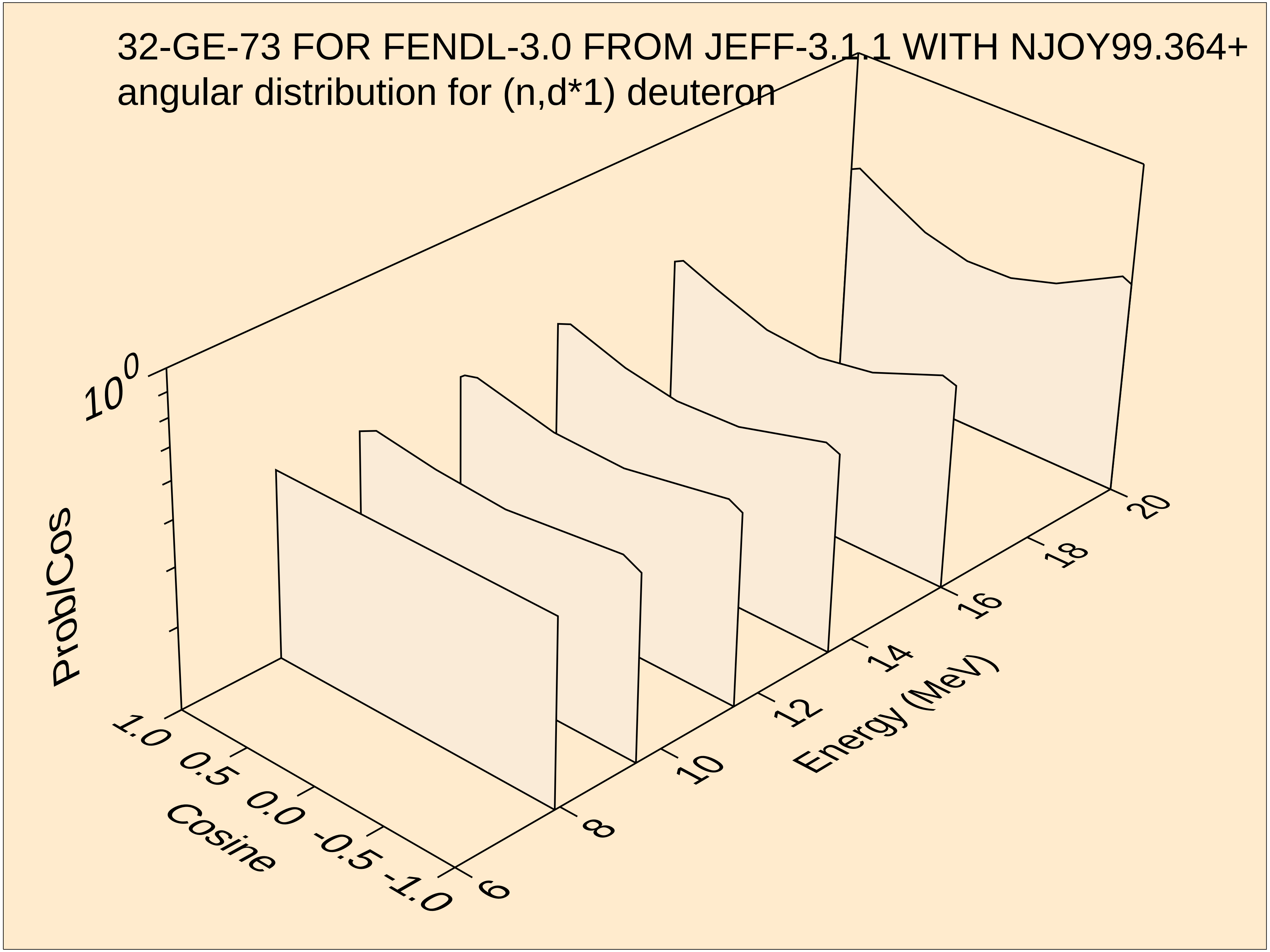


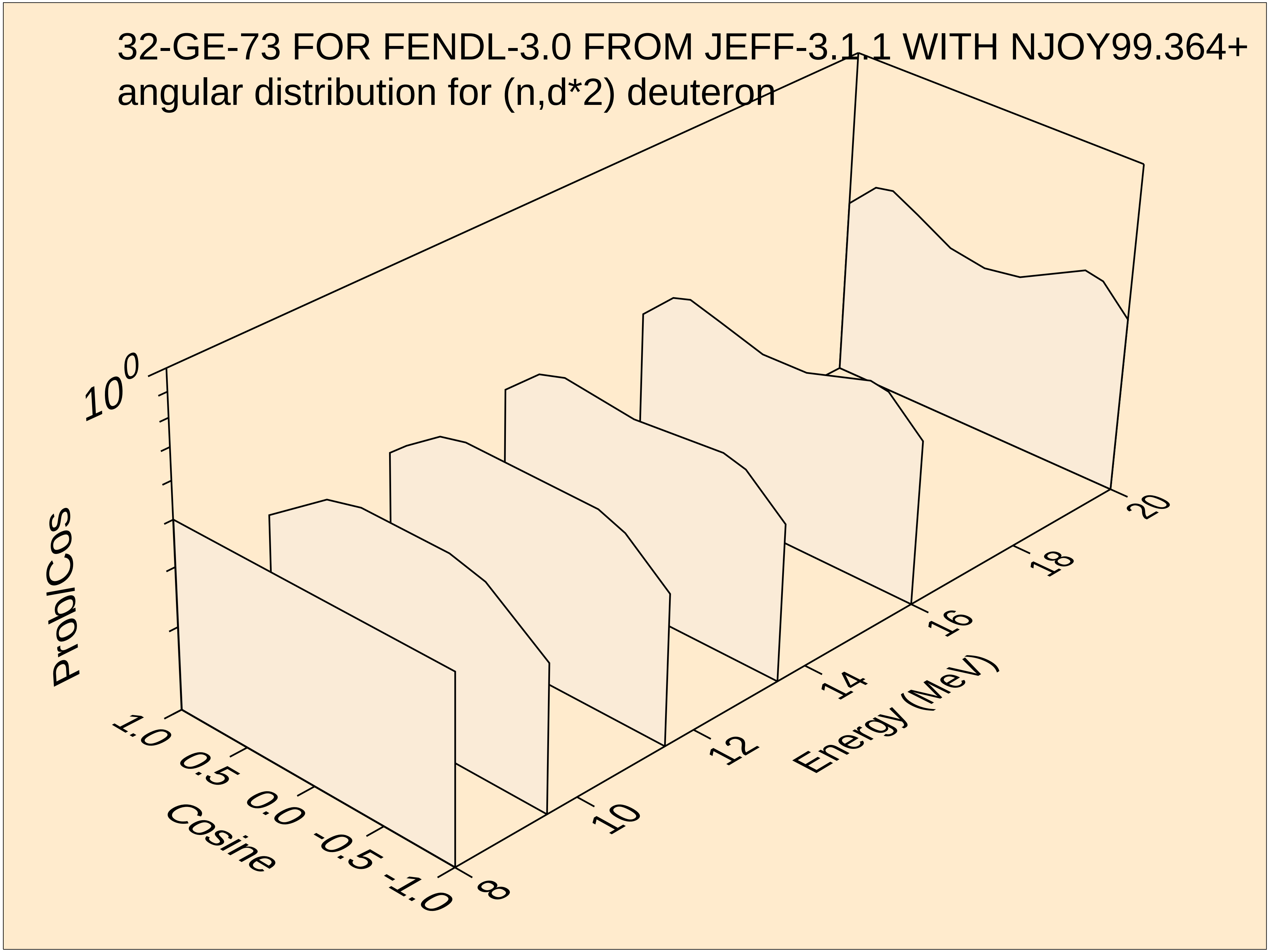

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
protons from (n,p*c)
ProblMeV
10^{1}
10^{-1}
10^{-3}
0
10
20
Sec. Energy
2
4
6
8
10
12
14
16
18
20
Energy (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
deuterons from (n,x)
Prob/MeV
10^{-1}
10^{-3}
0
100
200
Sec. Energy
0
50
100
150
200
Energy (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
deuterons from (n,n*)d
ProbMeV
10^{-1}
10^{-3}
0
2
4
6
Sec. Energy
14
15
16
17
18
19
20
Energy (MeV)

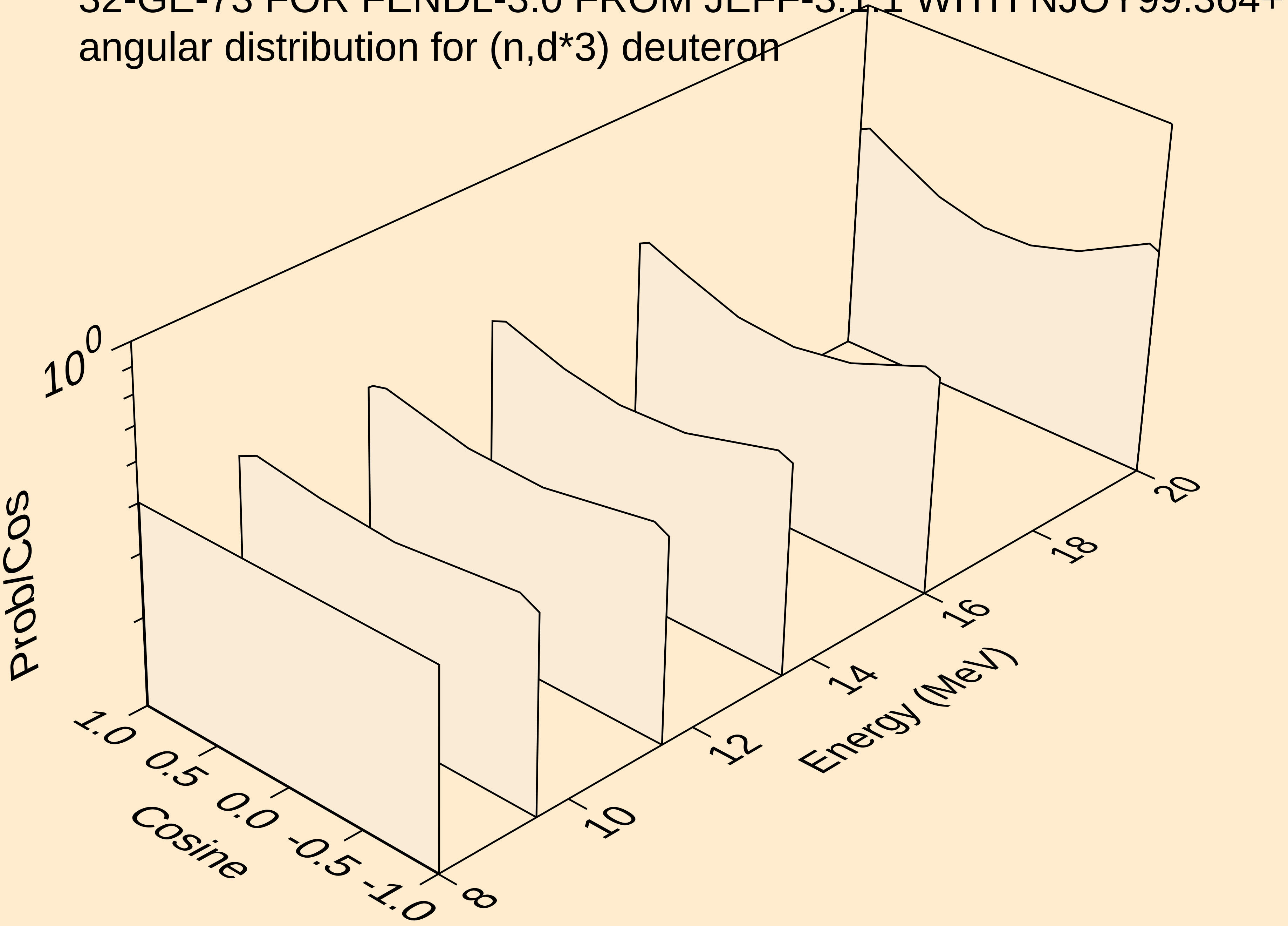

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,d*0) deuteron
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
6
8
10
12
14
16
18
20
Energy (MeV)

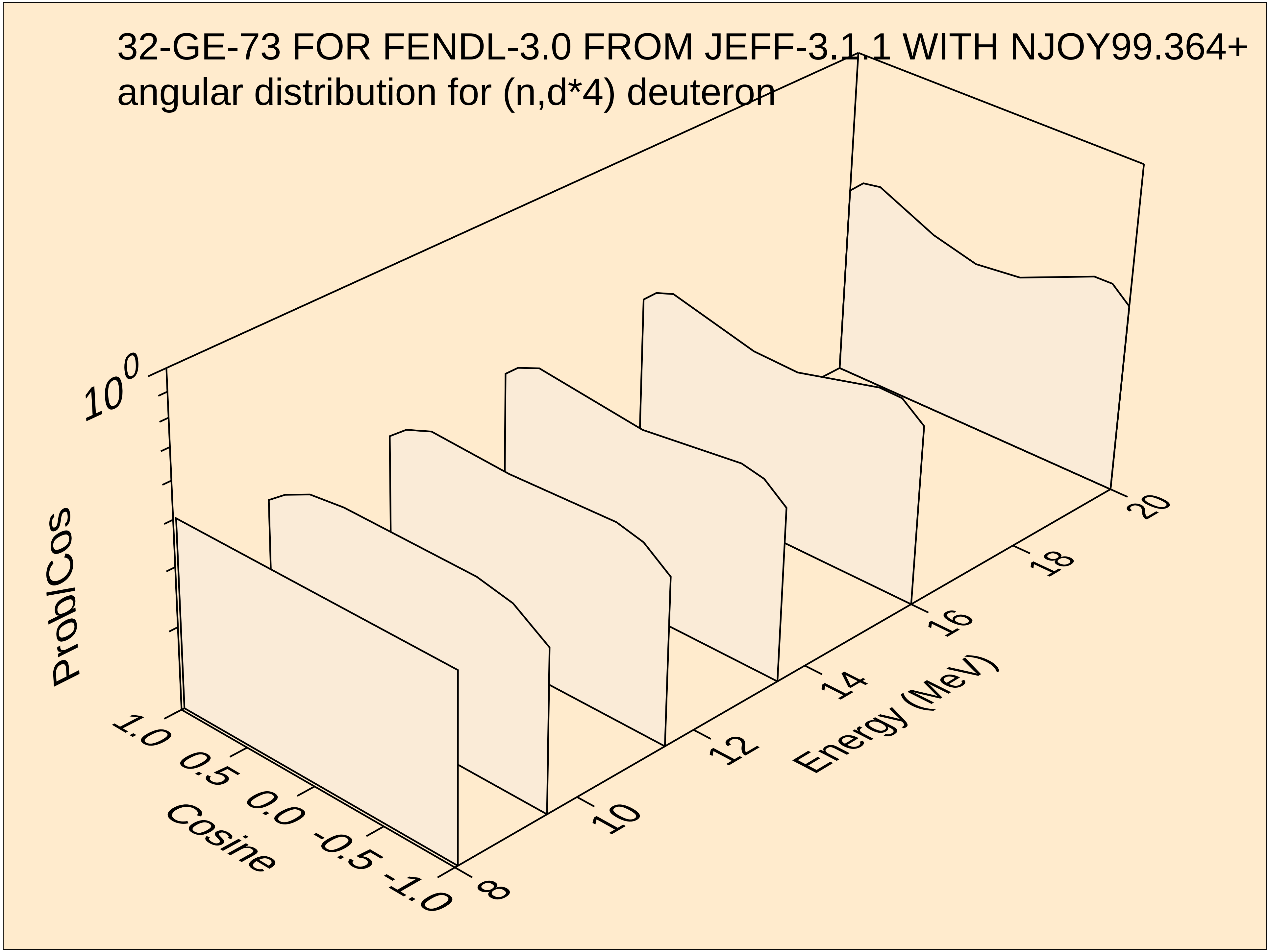

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,d*1) deuteron
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
6
8
10
12
14
16
18
20
Energy (MeV)

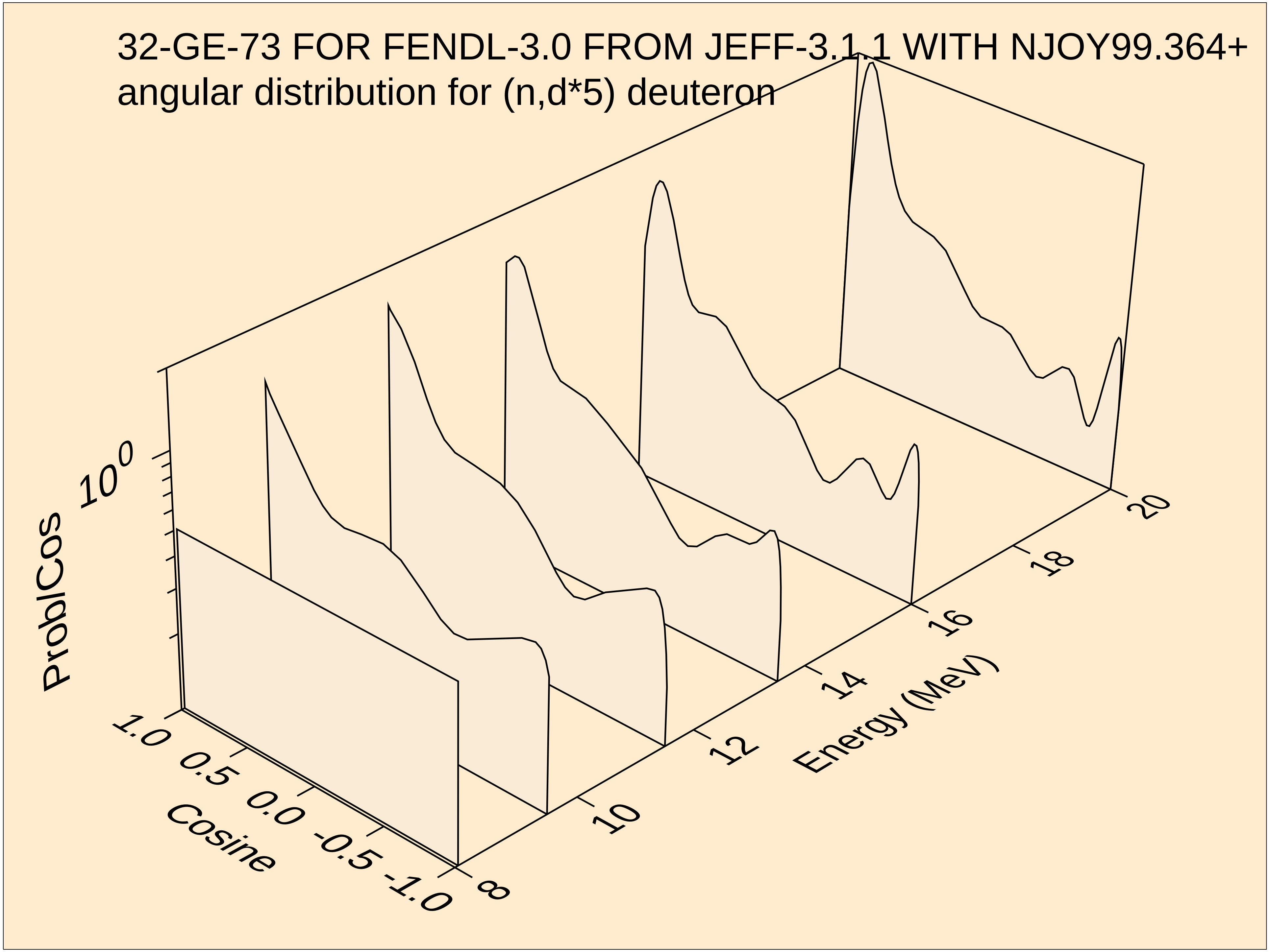


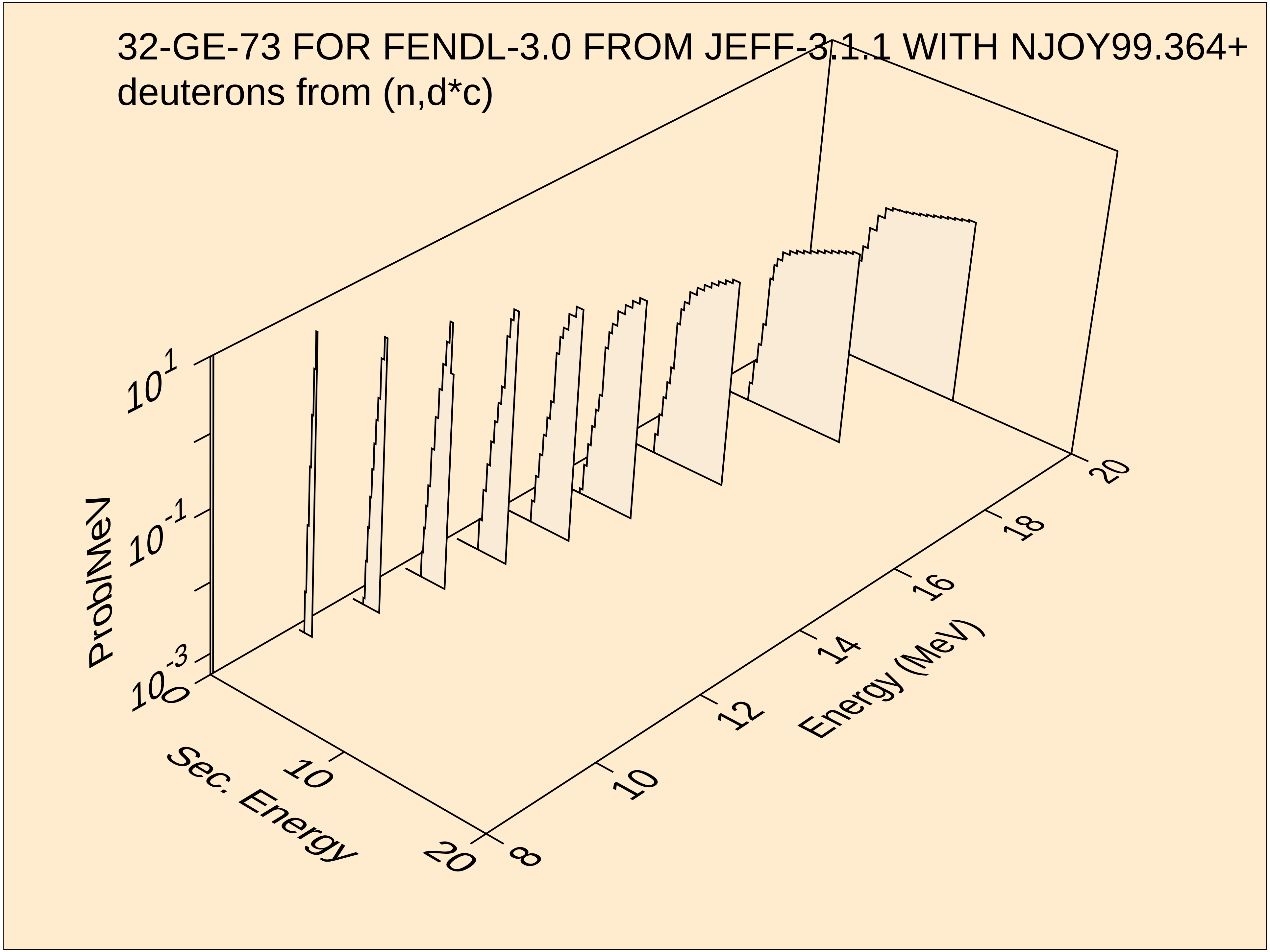
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,d*2) deuteron

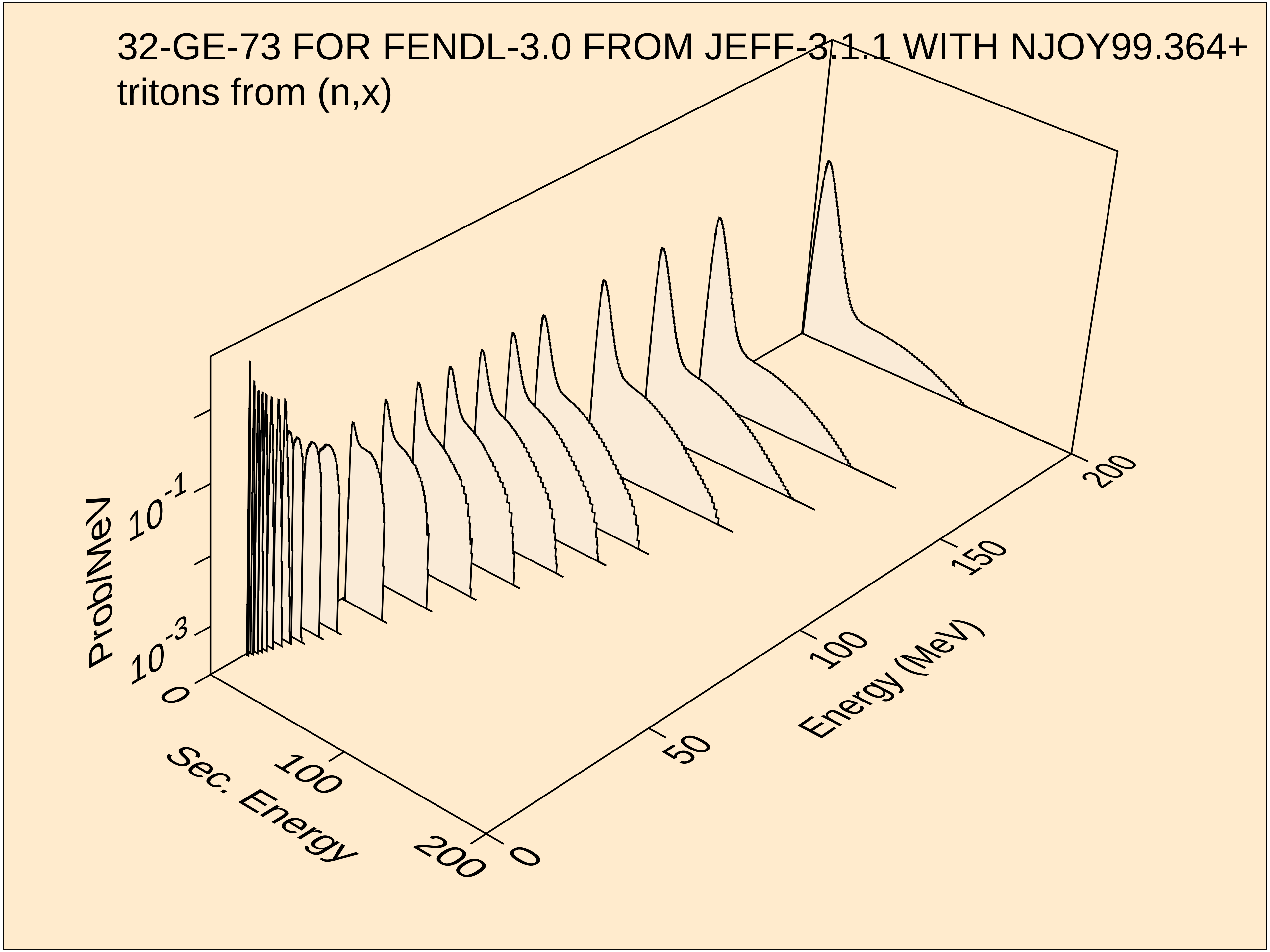
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,d*3) deuteron

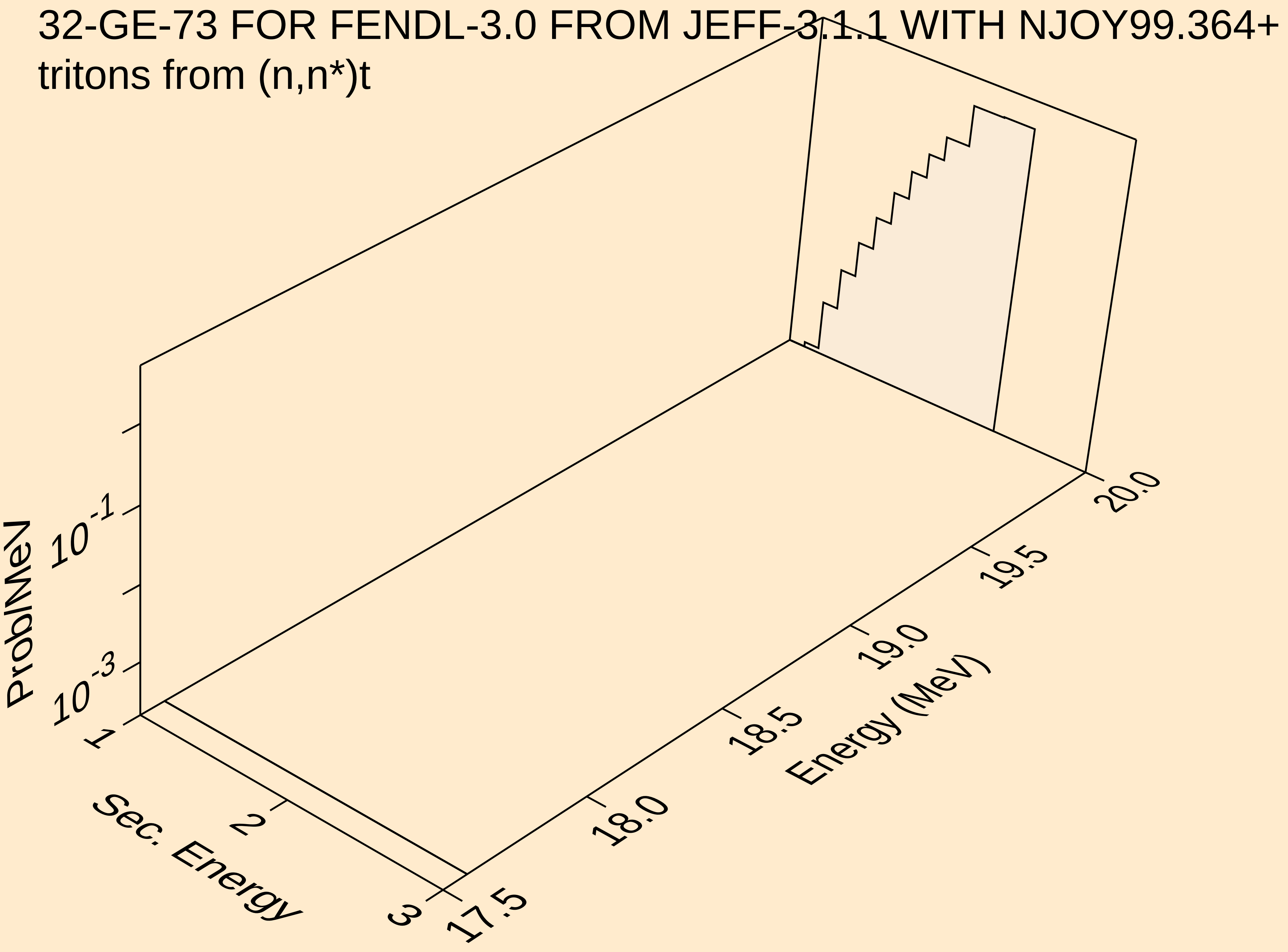


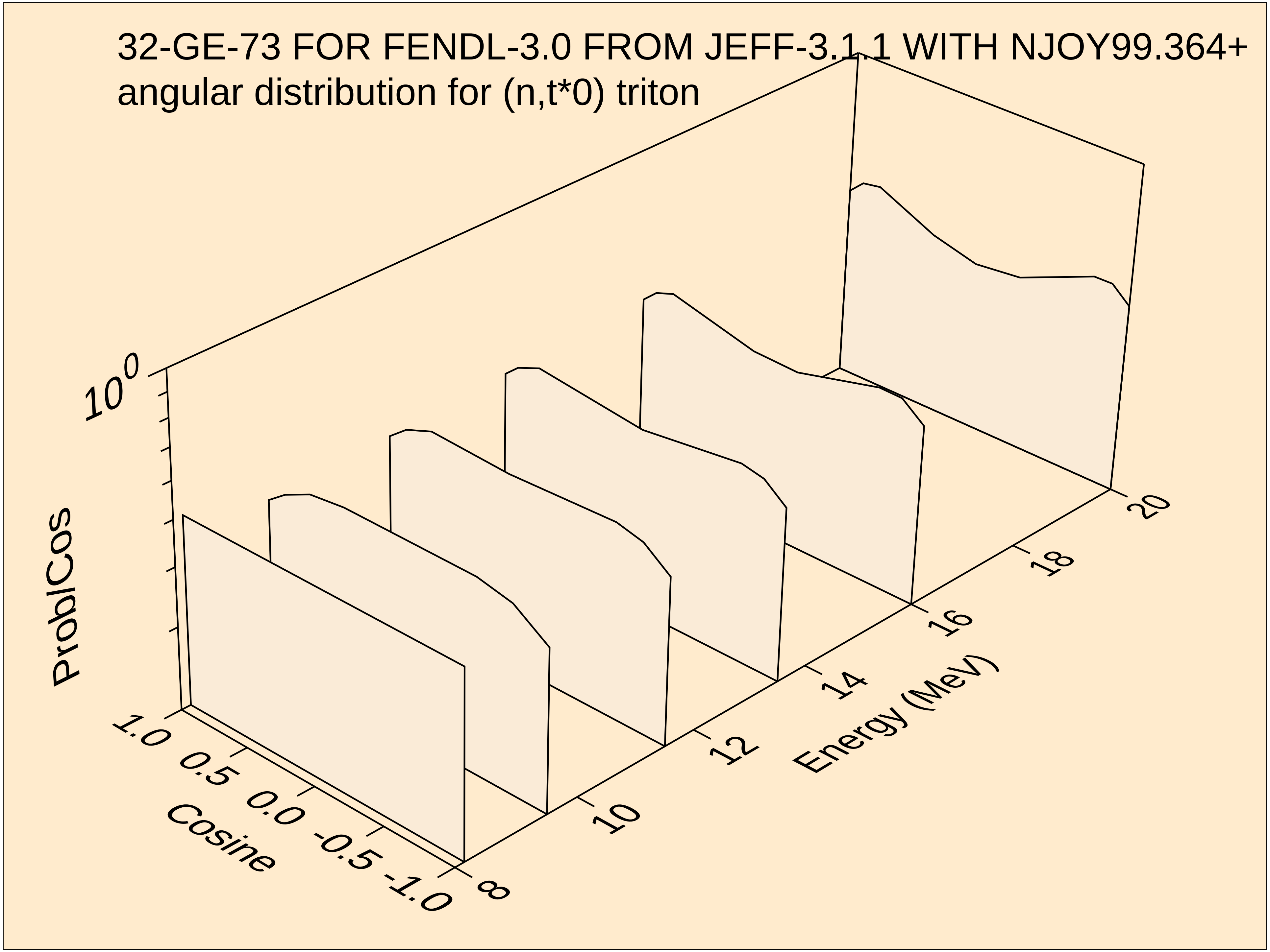

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,d*4) deuteron
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
8
10
12
14
16
18
20
Energy (MeV)

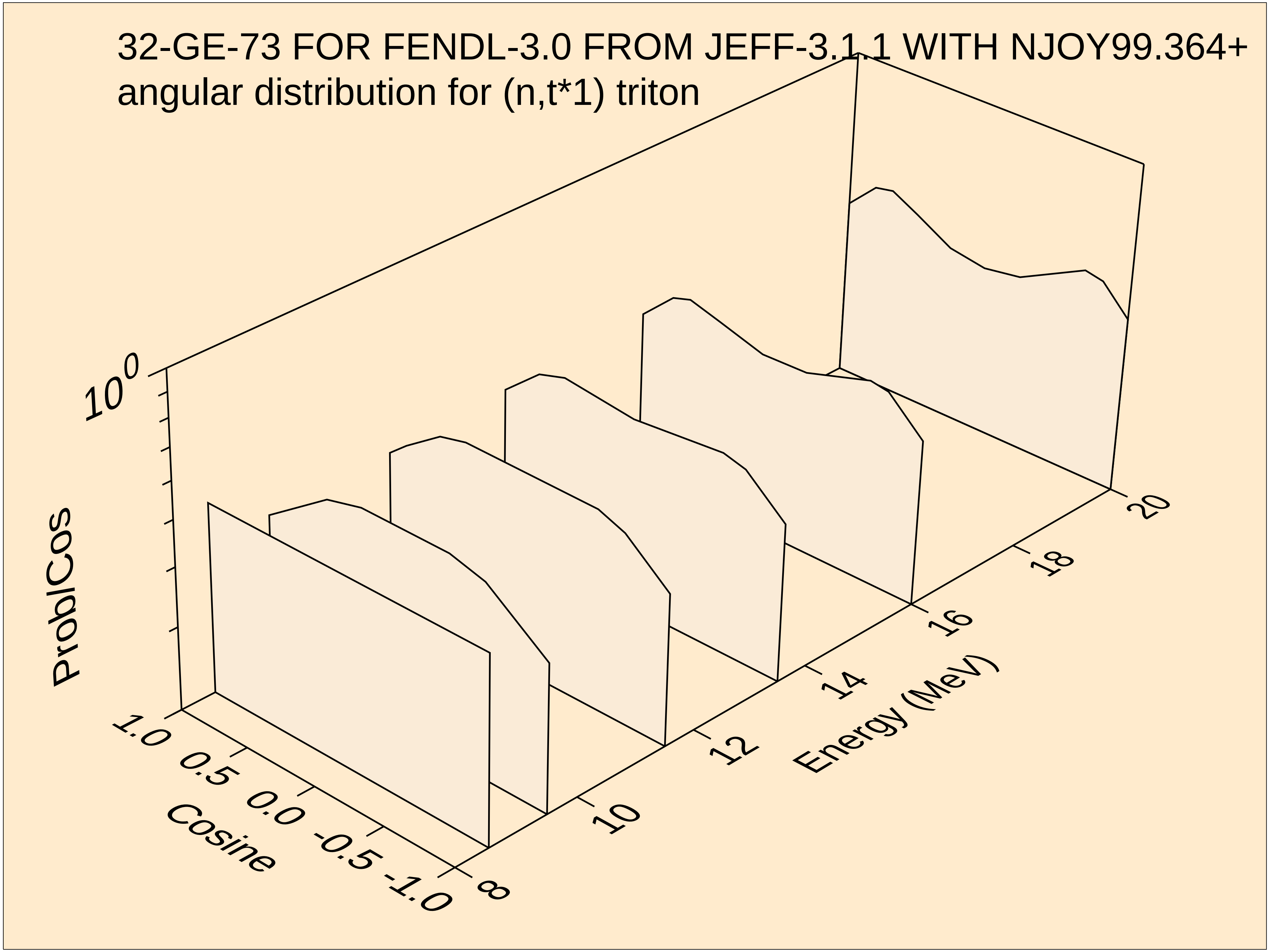

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,d*5) deuteron
ProblCos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
8
10
12
14
16
18
20
Energy (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
deuterons from (n,d*c)
ProbIMeV
10^{1}
10^{-1}
10^{-3}
0
10
20
Sec. Energy
8
10
12
14
16
18
20
Energy (MeV)

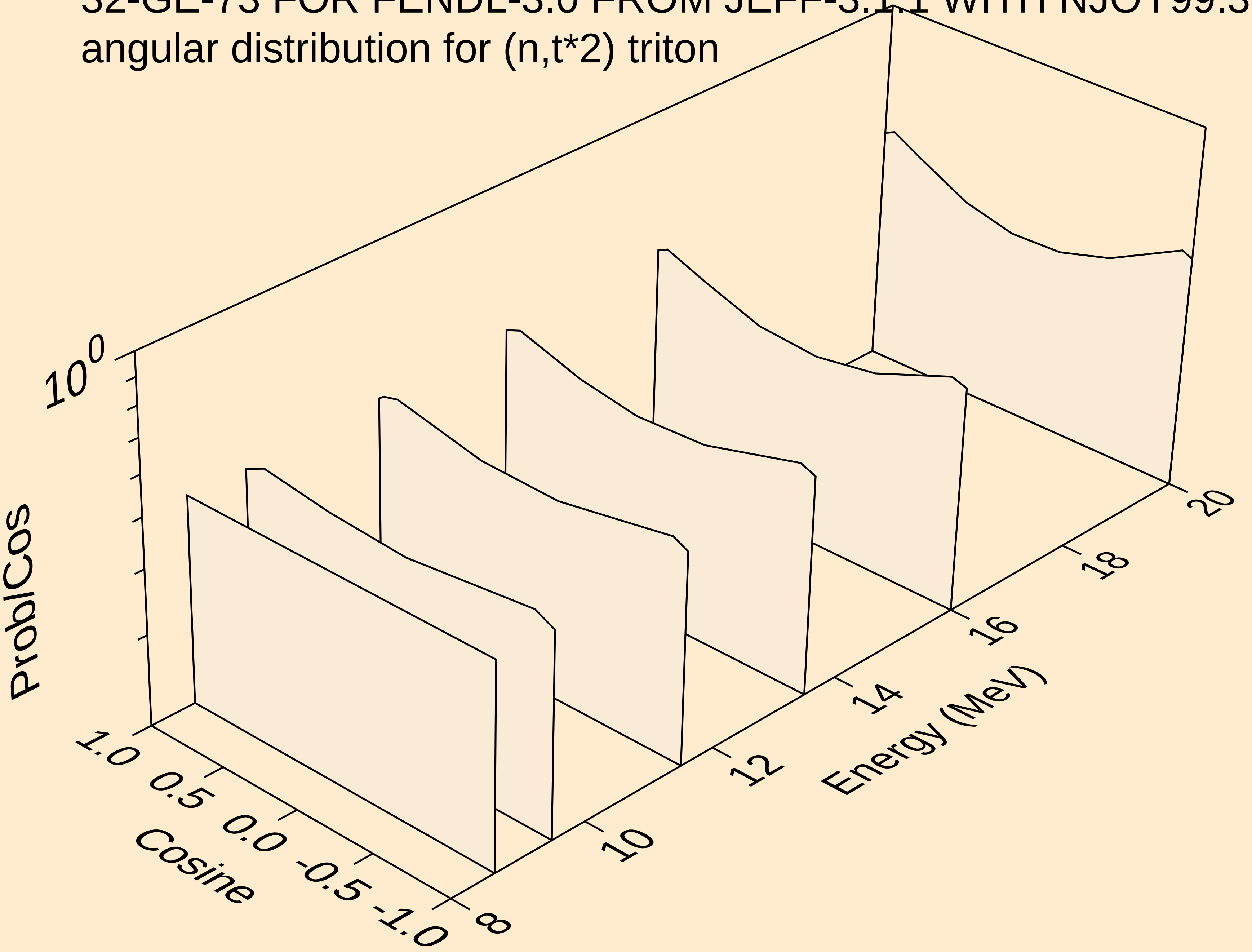

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
tritons from (n,x)
Prob/MeV
10^{-1}
10^{-3}
0
100
200
Sec. Energy
0
50
100
150
200
Energy (MeV)

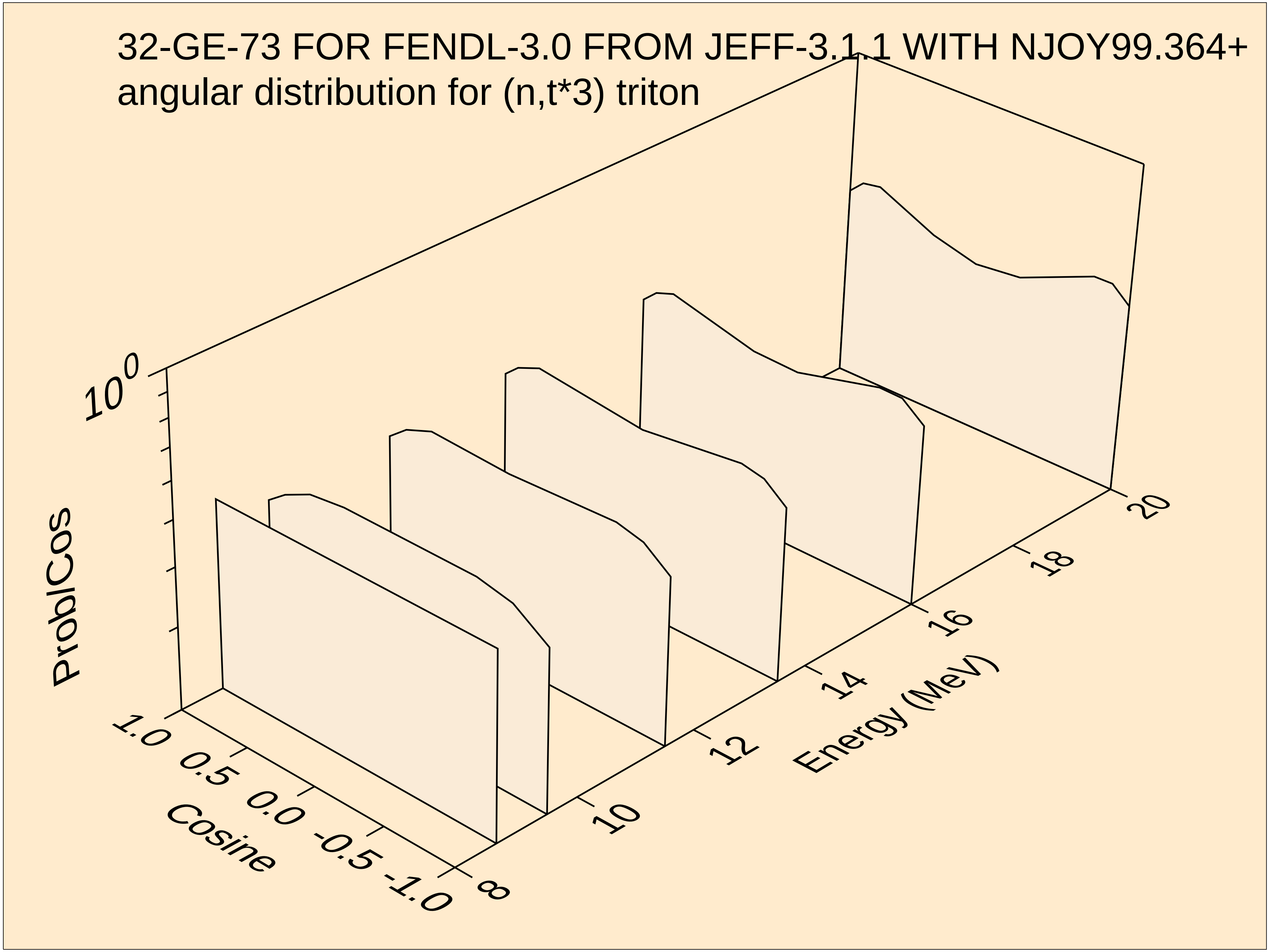
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
tritons from (n,n*)t
ProbMeV
10^{-1}
10^{-3}
1
2
3
Sec. Energy
17.5
18.0
18.5
19.0
19.5
20.0
Energy (MeV)

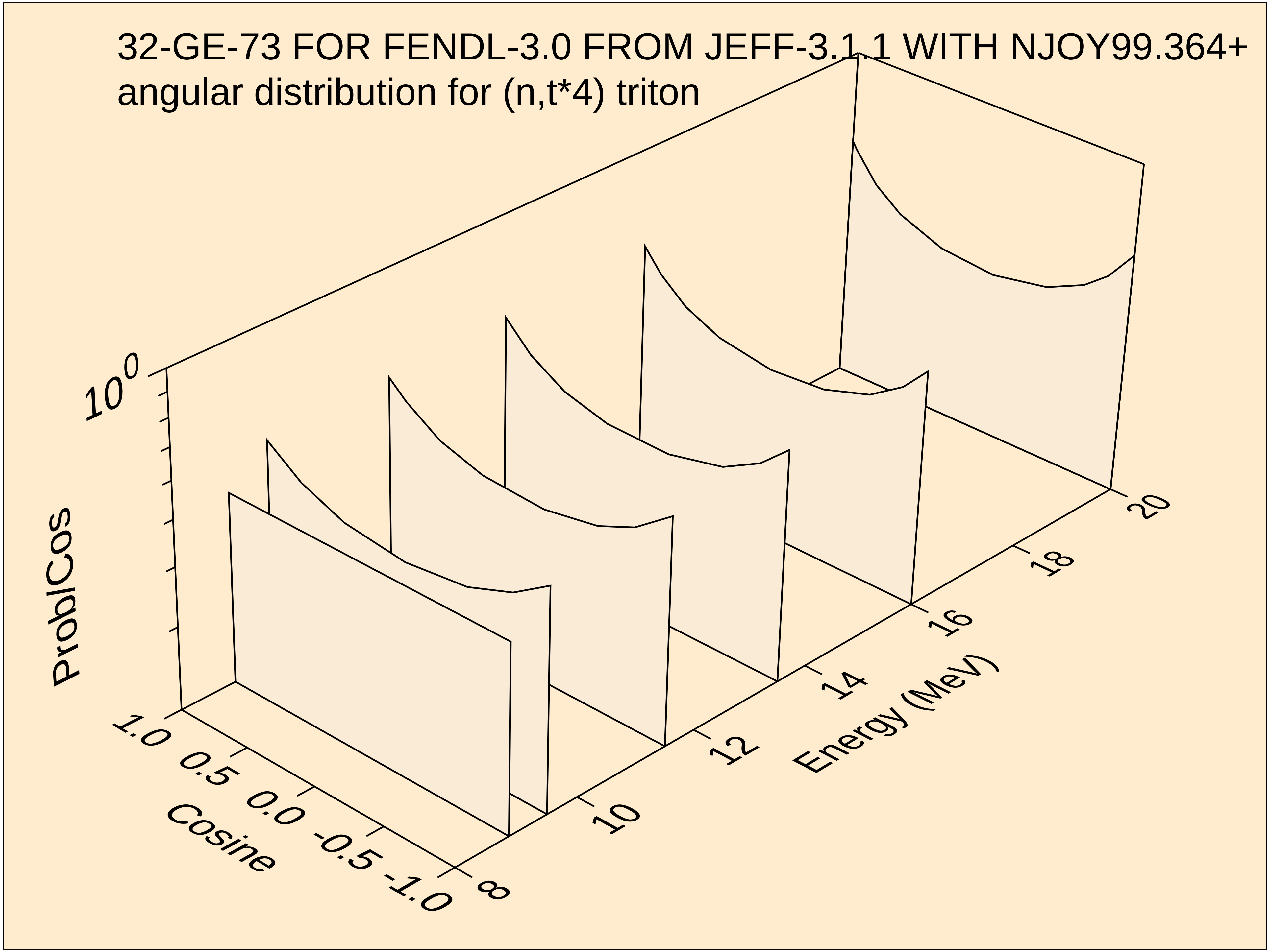

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,t*0) triton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
8
10
12
14
16
18
20
Energy (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,t*1) triton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
8
10
12
14
16
18
20
Energy (MeV)

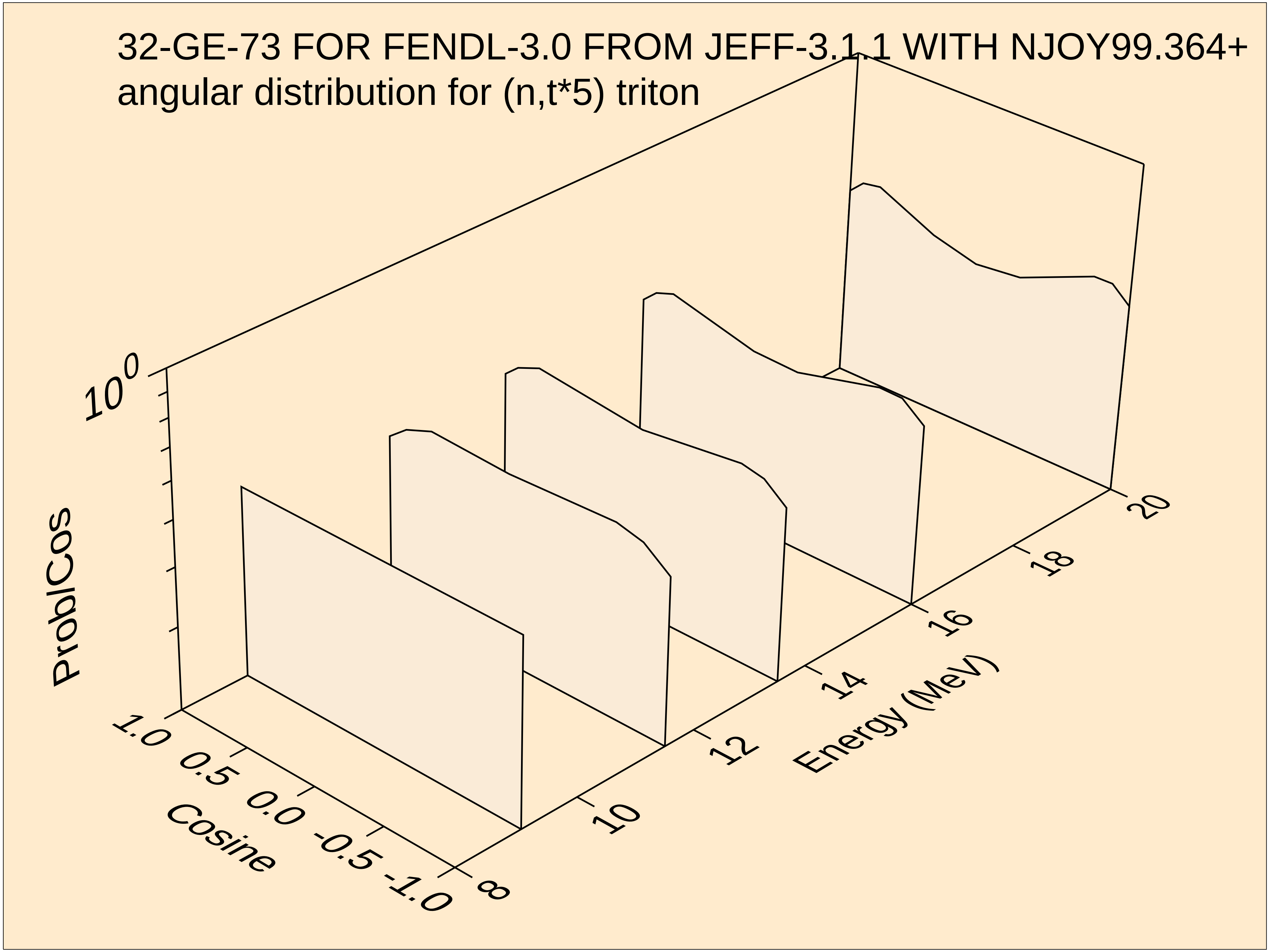
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,t*2) triton



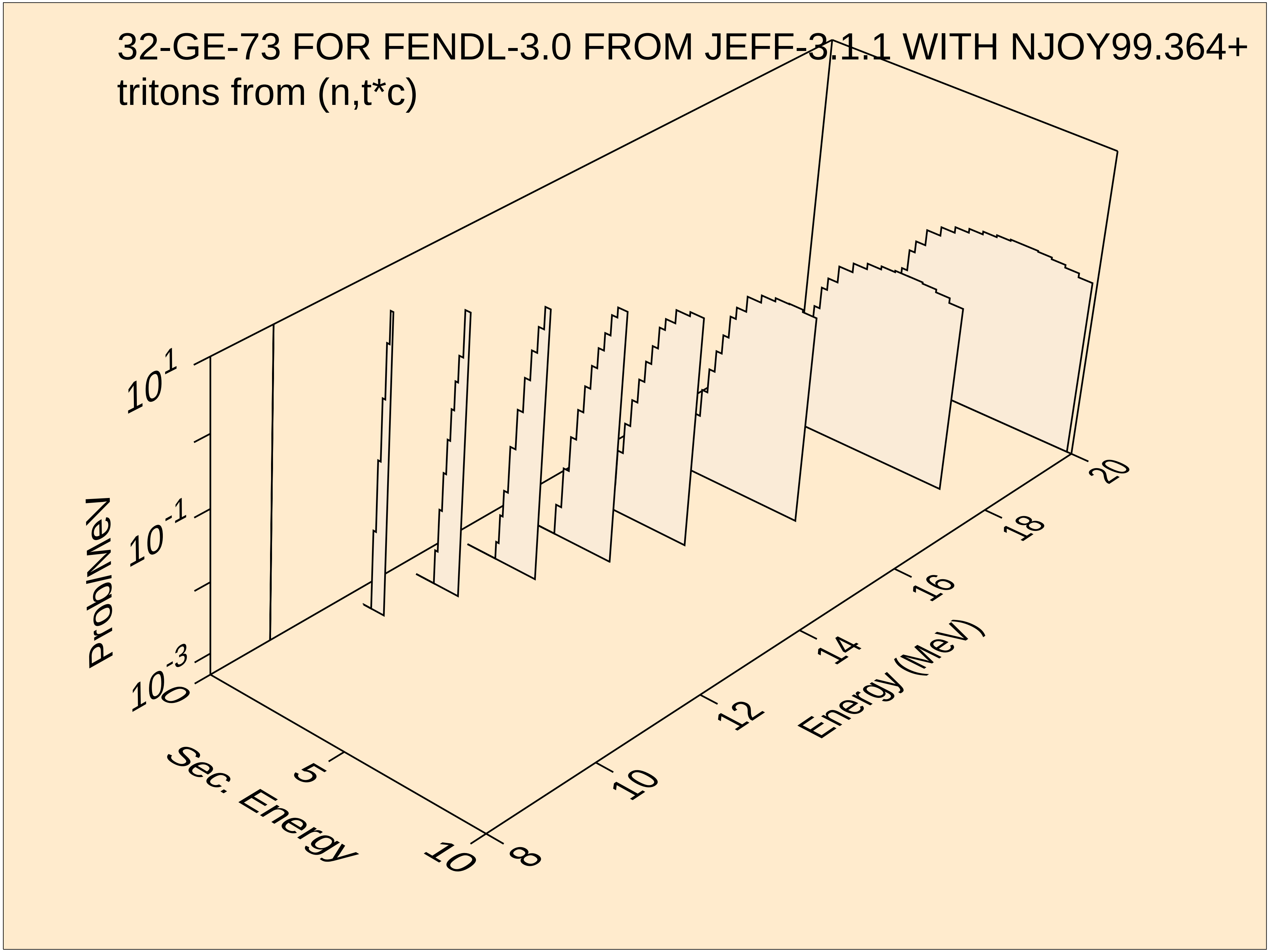

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,t*3) triton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
8
10
12
14
16
18
20
Energy (MeV)



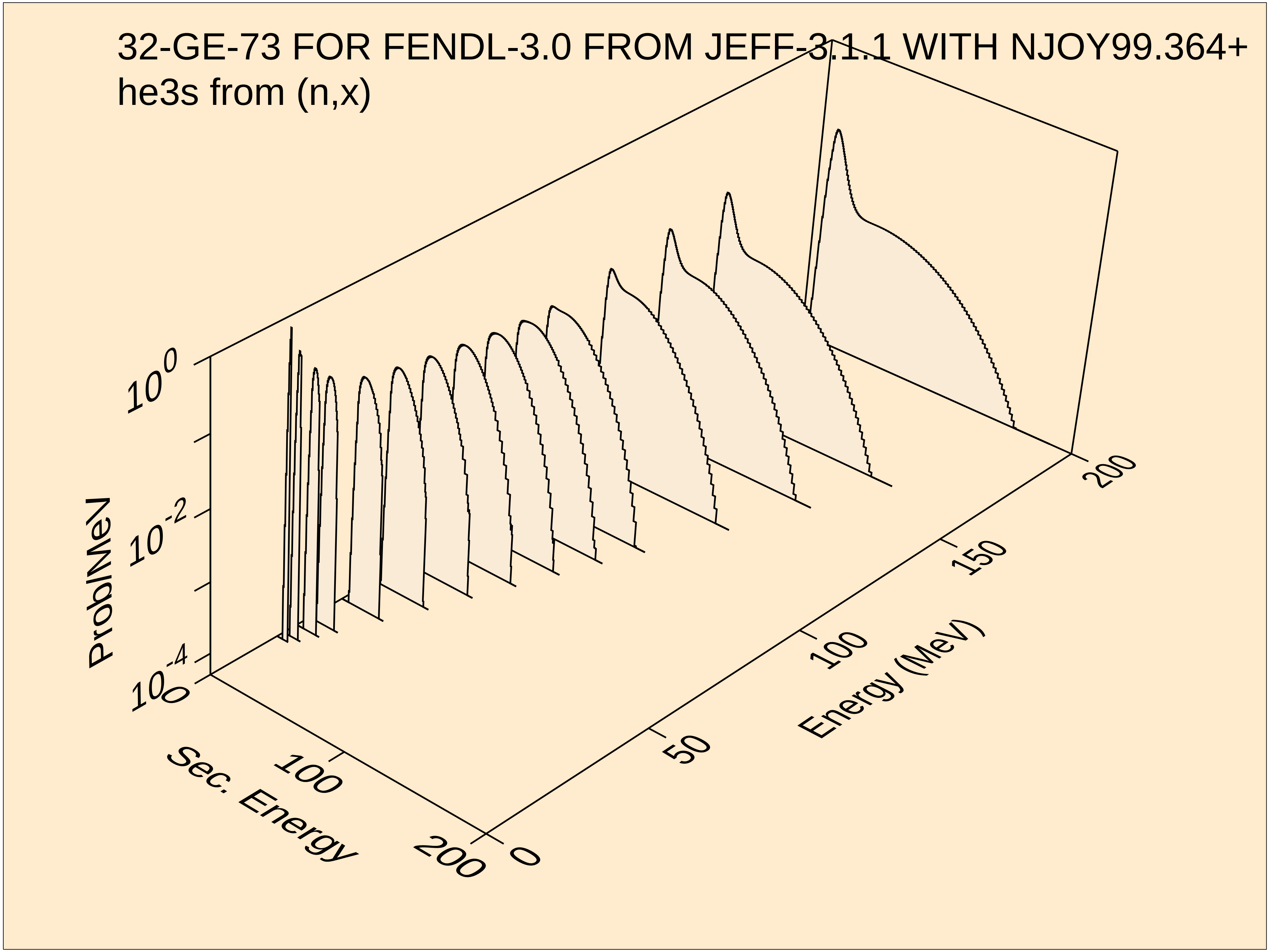
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,t*4) triton
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
8
10
12
14
16
18
20
Energy (MeV)



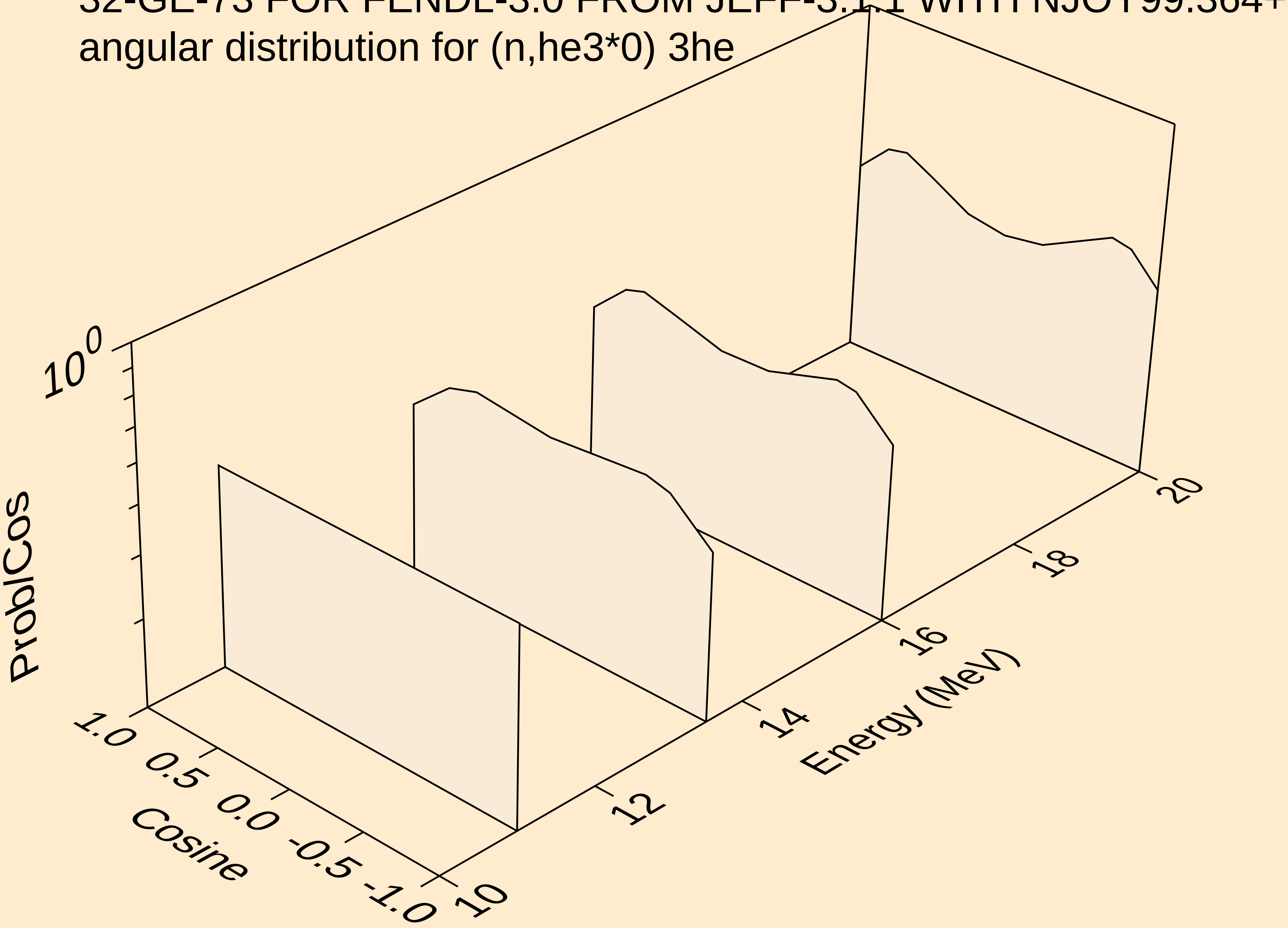
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,t*5) triton

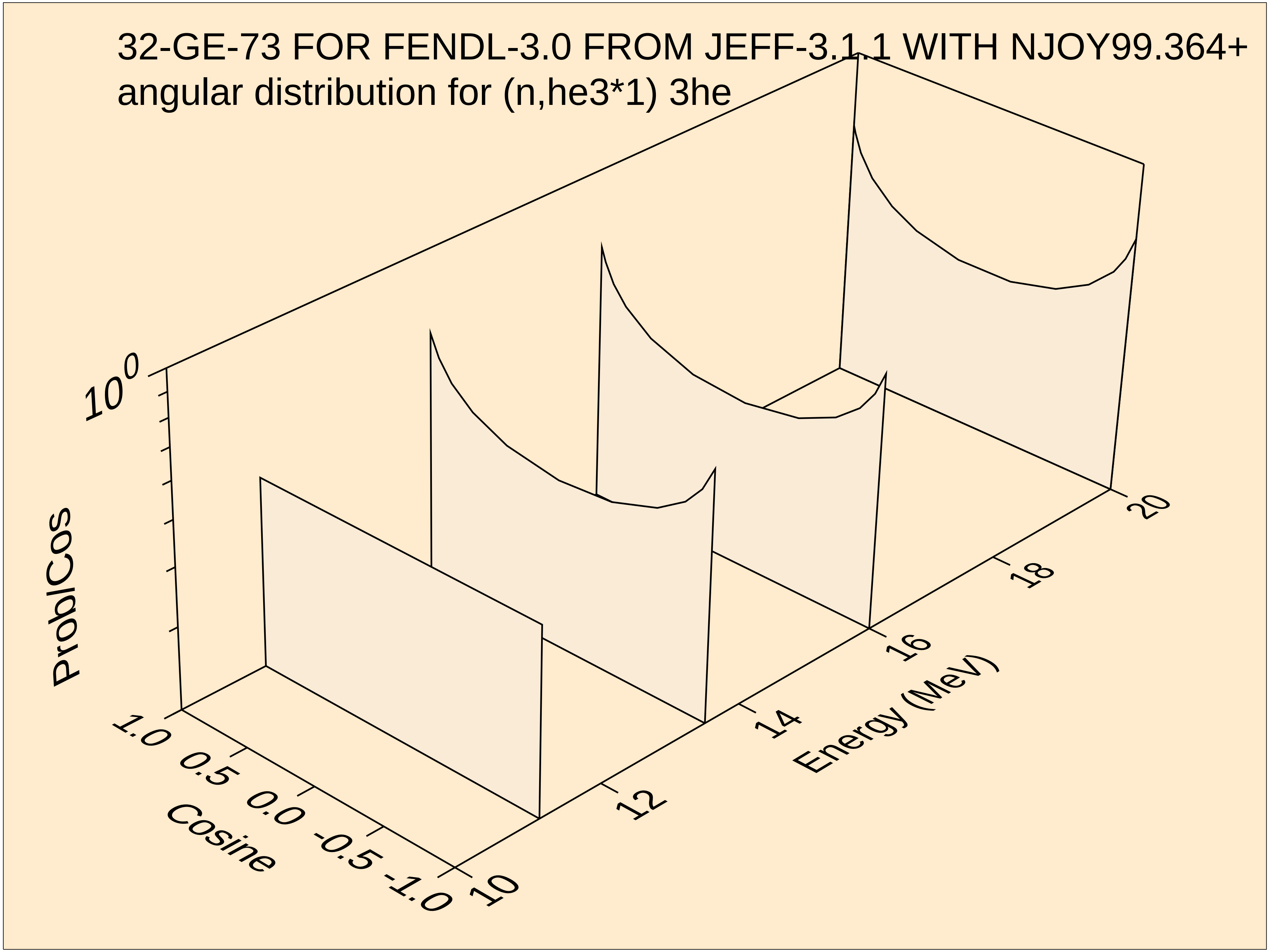


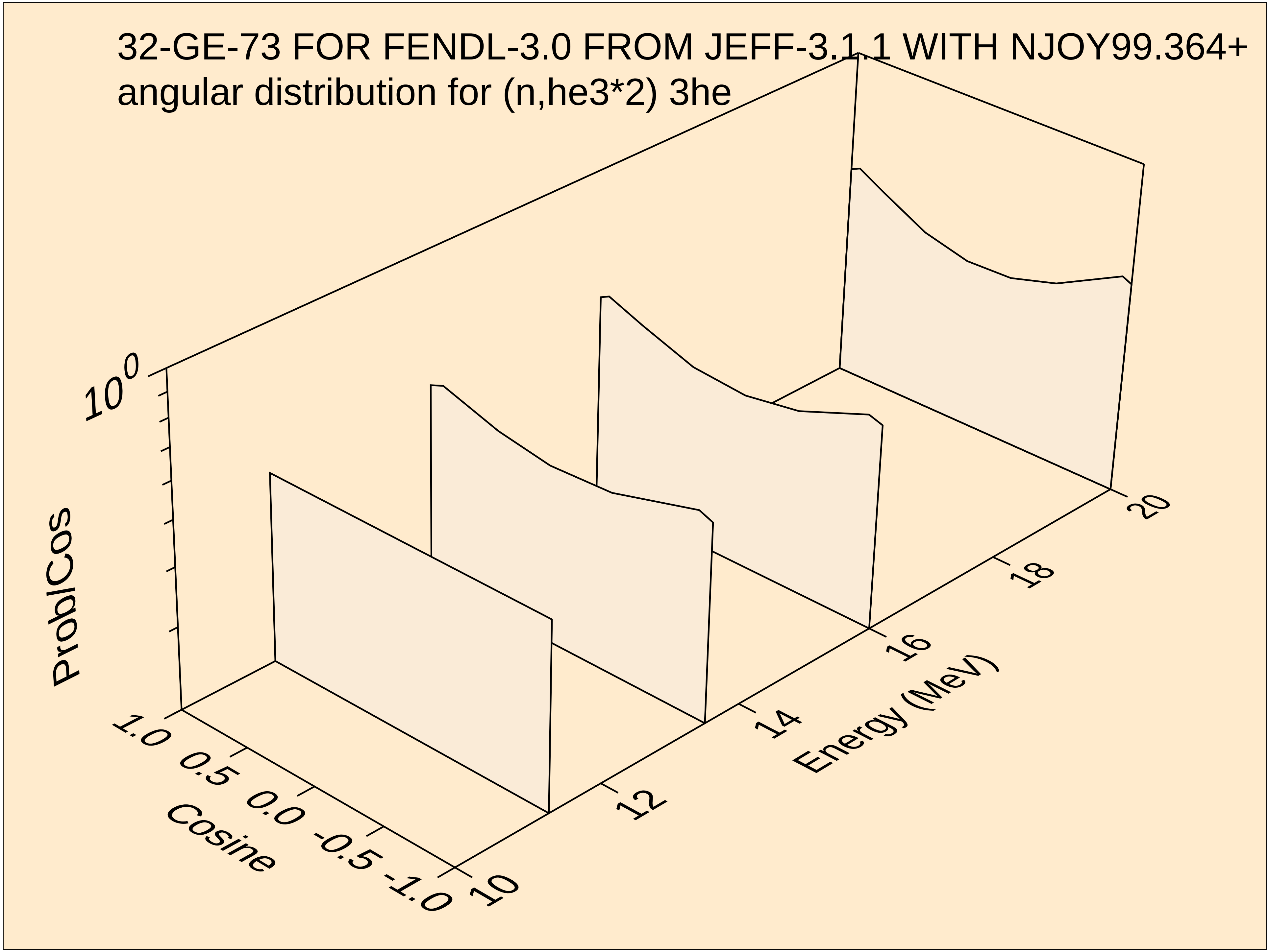
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
tritons from (n,t*c)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
he3s from (n,x)
10^0
10^{-2}
10^{-4}
Prob/MeV
0
100
200
Sec. Energy
0
50
100
150
200
Energy (MeV)

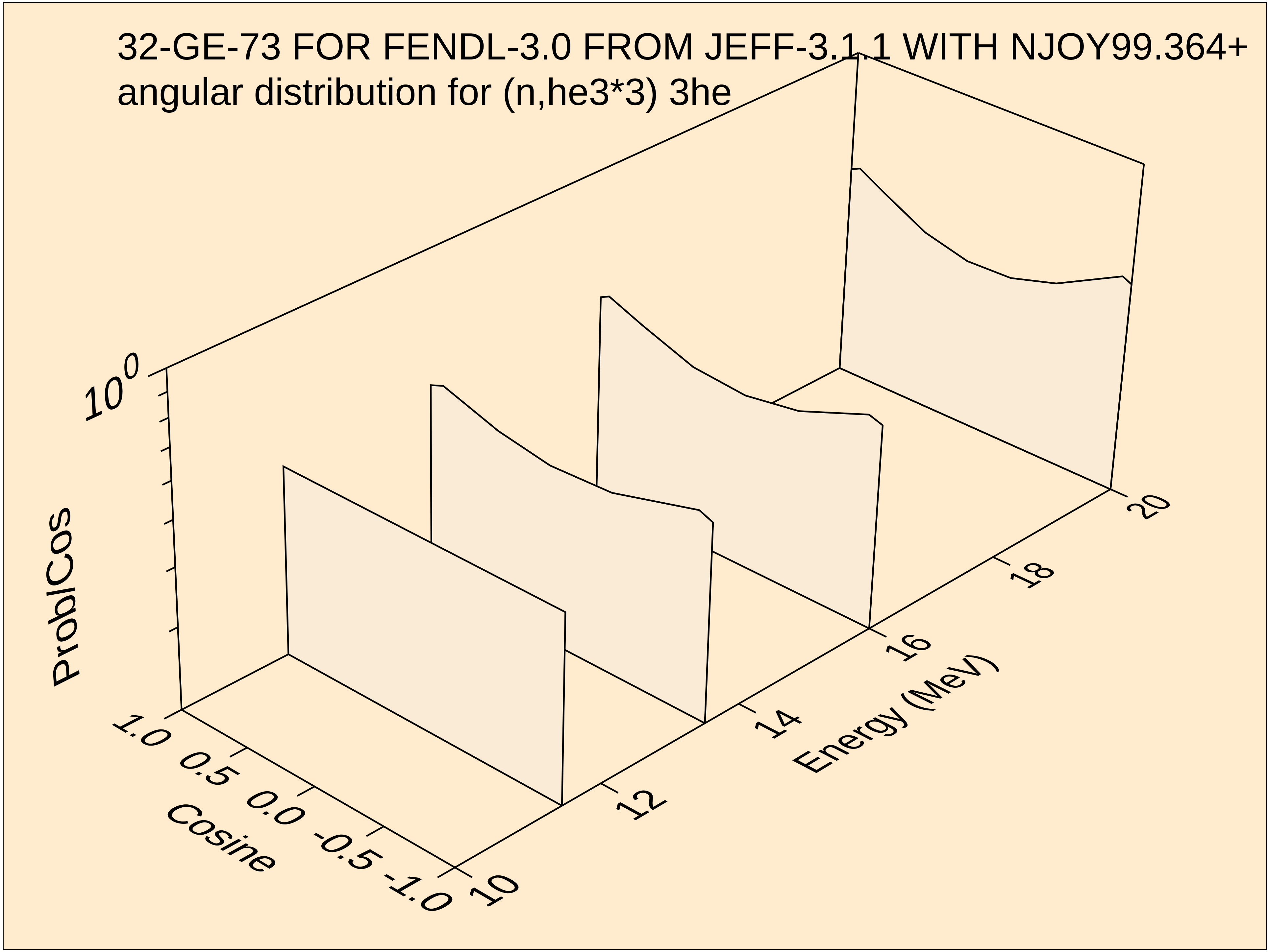
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,he3*0) 3he

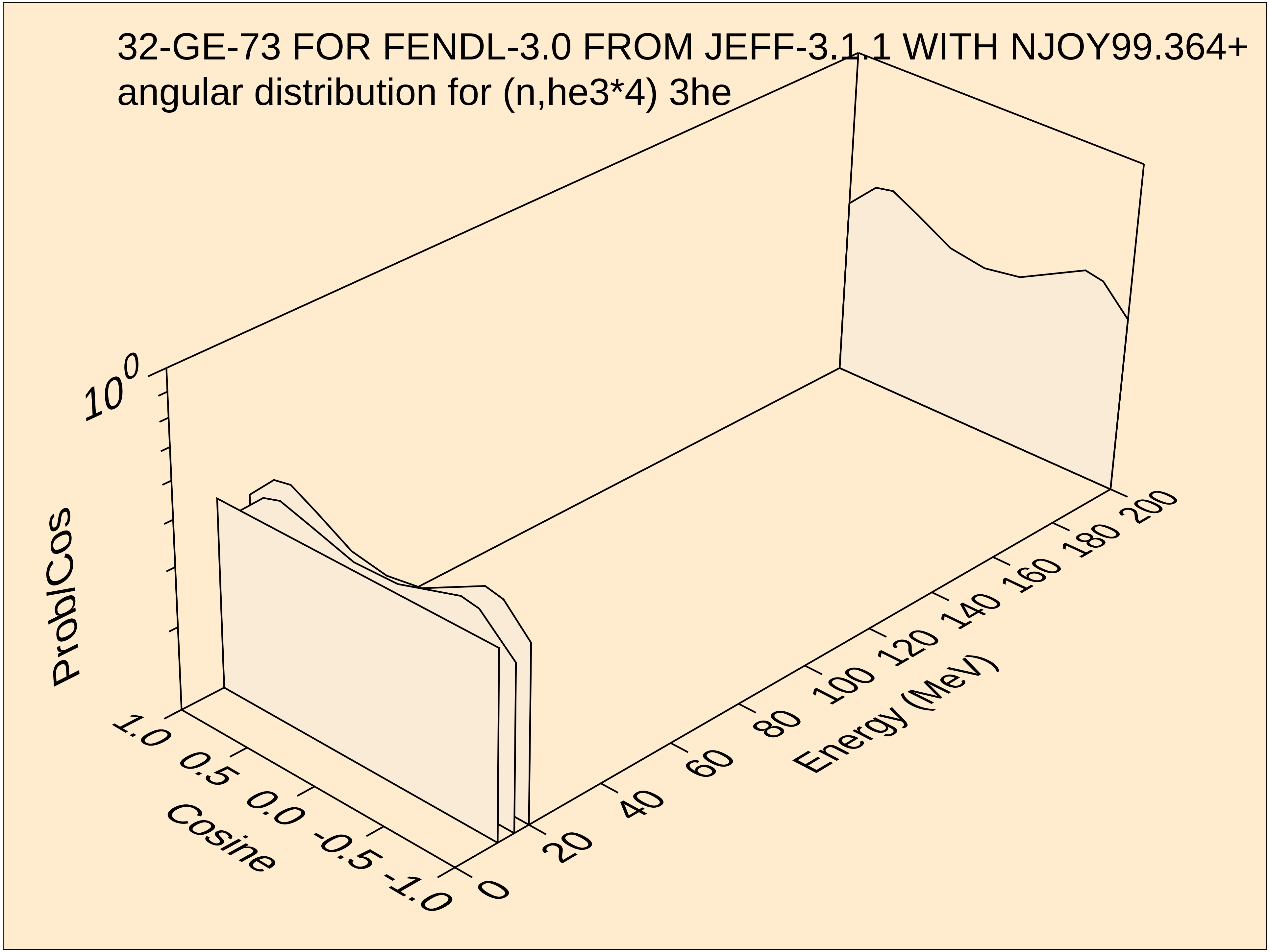



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,he3*1) 3he
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
10
12
14
16
18
20
Energy (MeV)

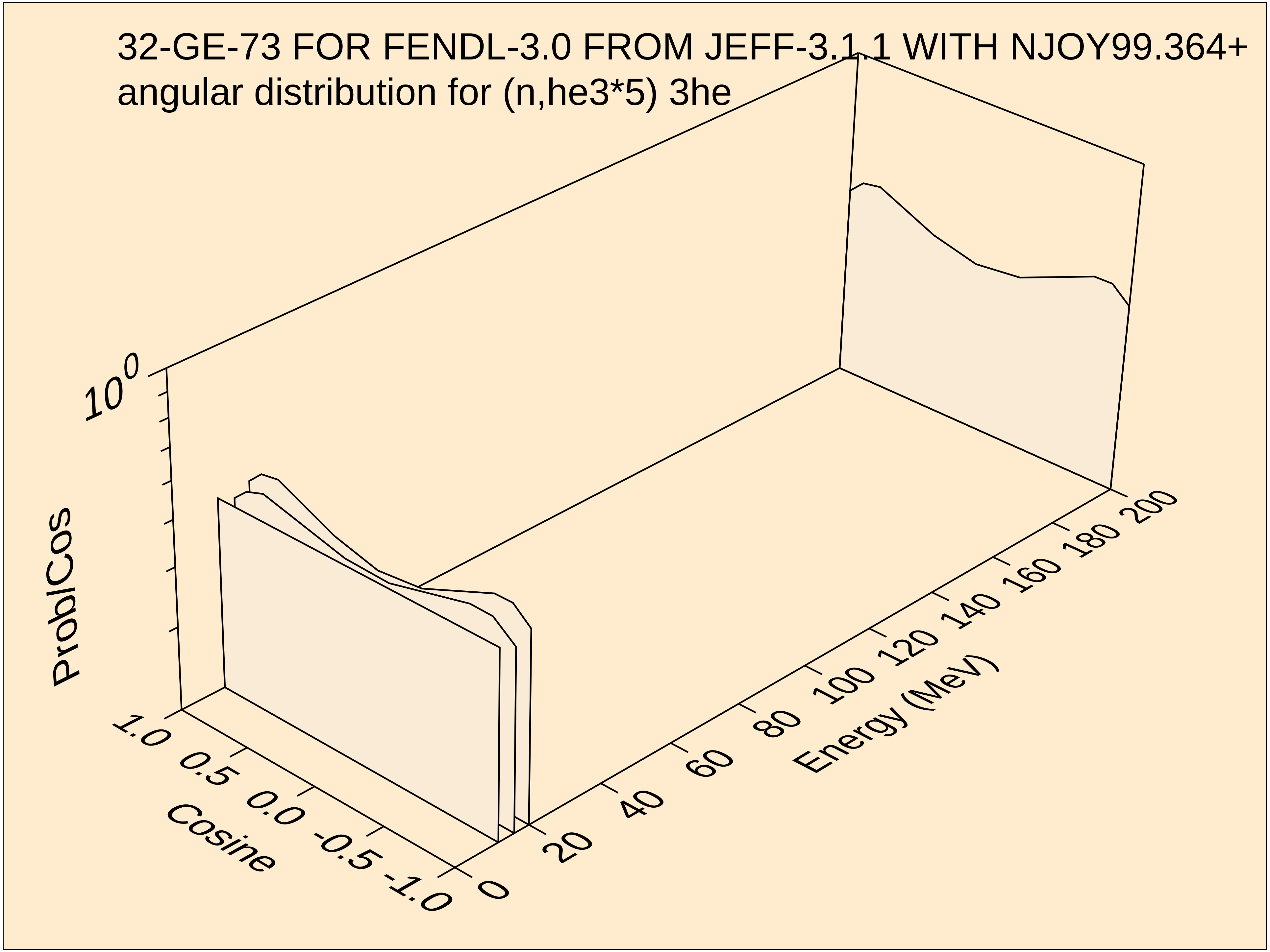

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,he3*2) 3he
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
10
12
14
16
18
20
Energy (MeV)

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,he3*3) 3he

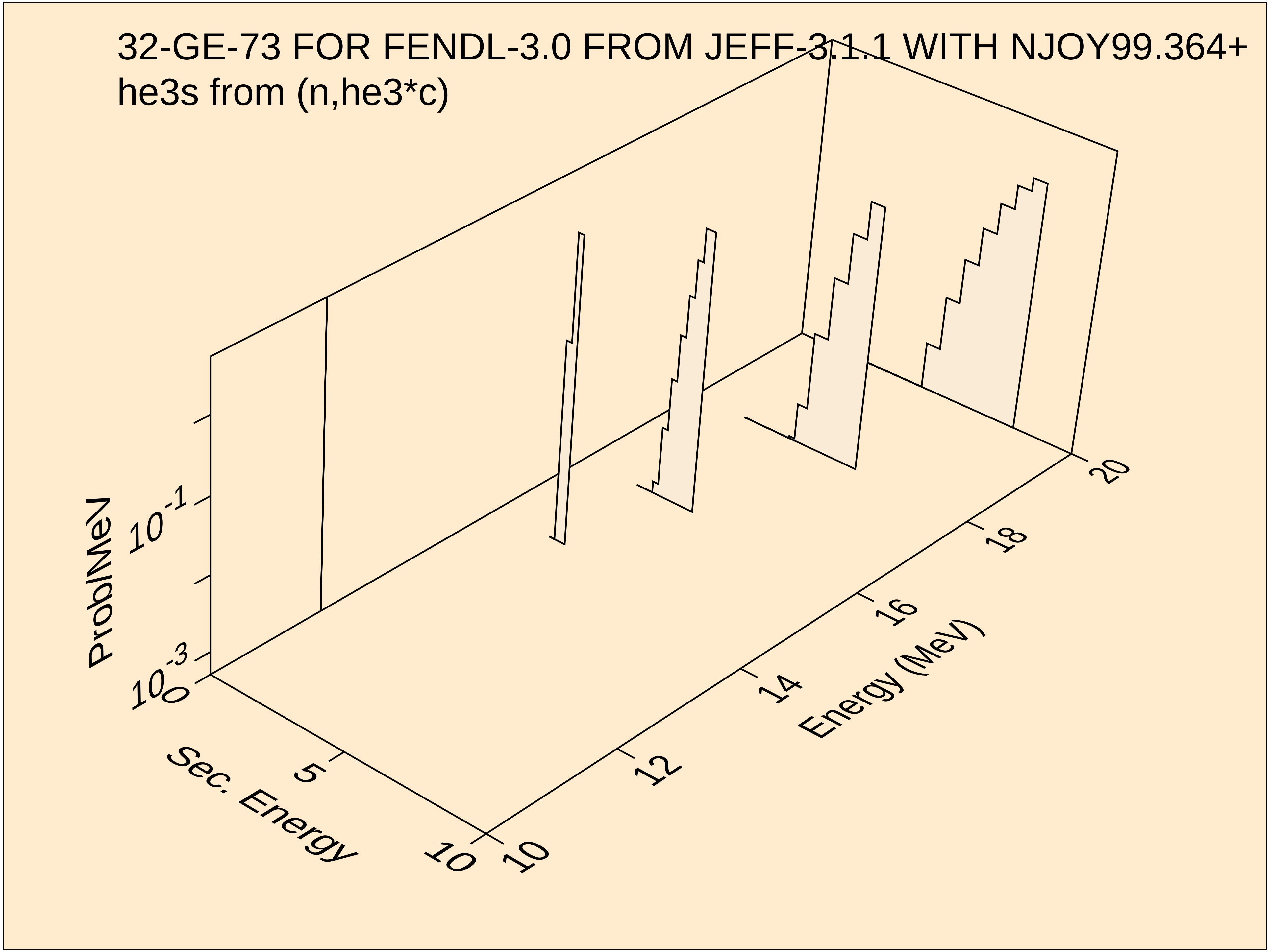




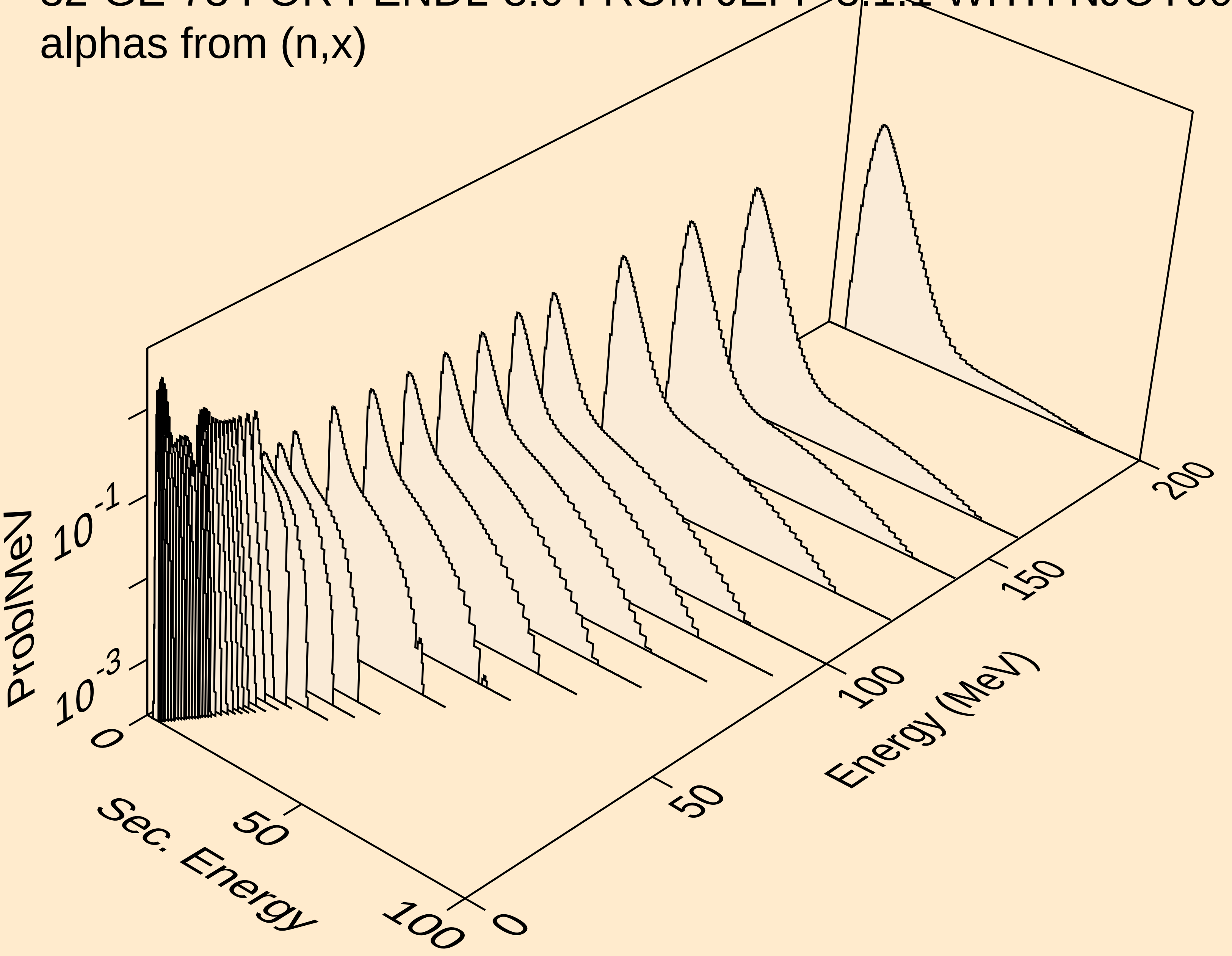
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,he3*4) 3he

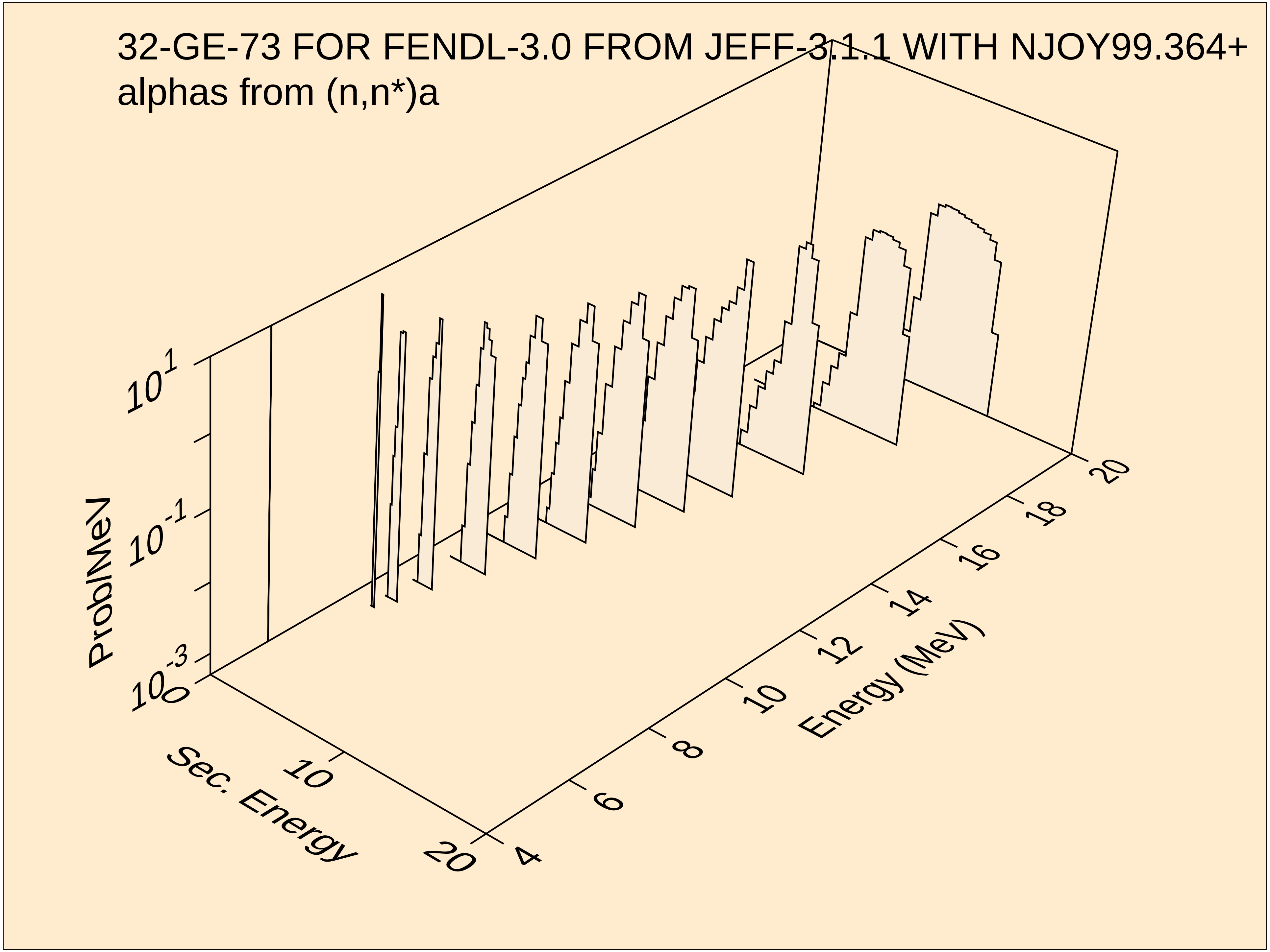


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,he3*5) 3he

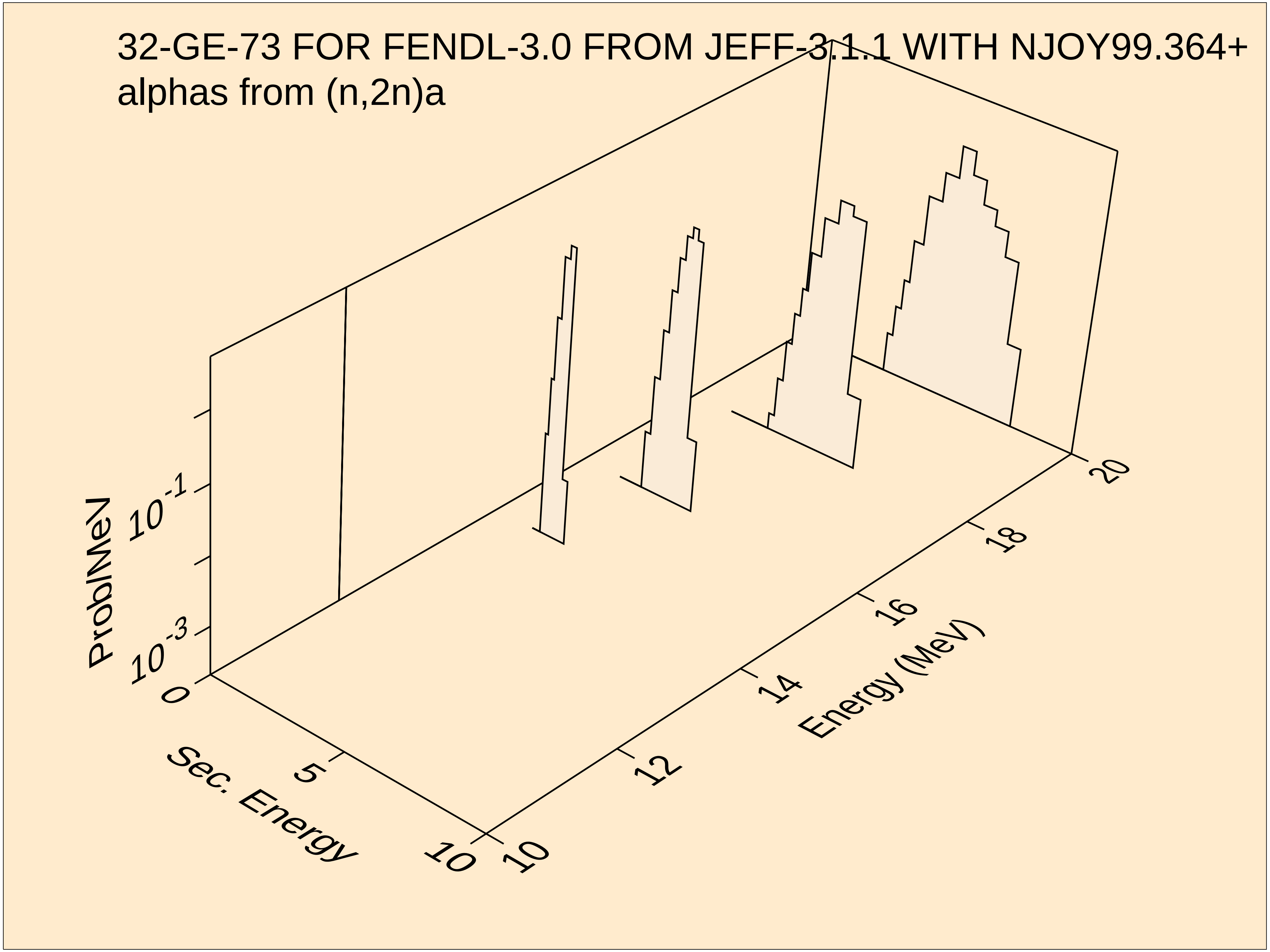

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
he3s from (n,he3*c)
Prob/MeV
10-1
10-3
0
5
10
Sec. Energy
10
12
14
16
18
20
Energy (MeV)

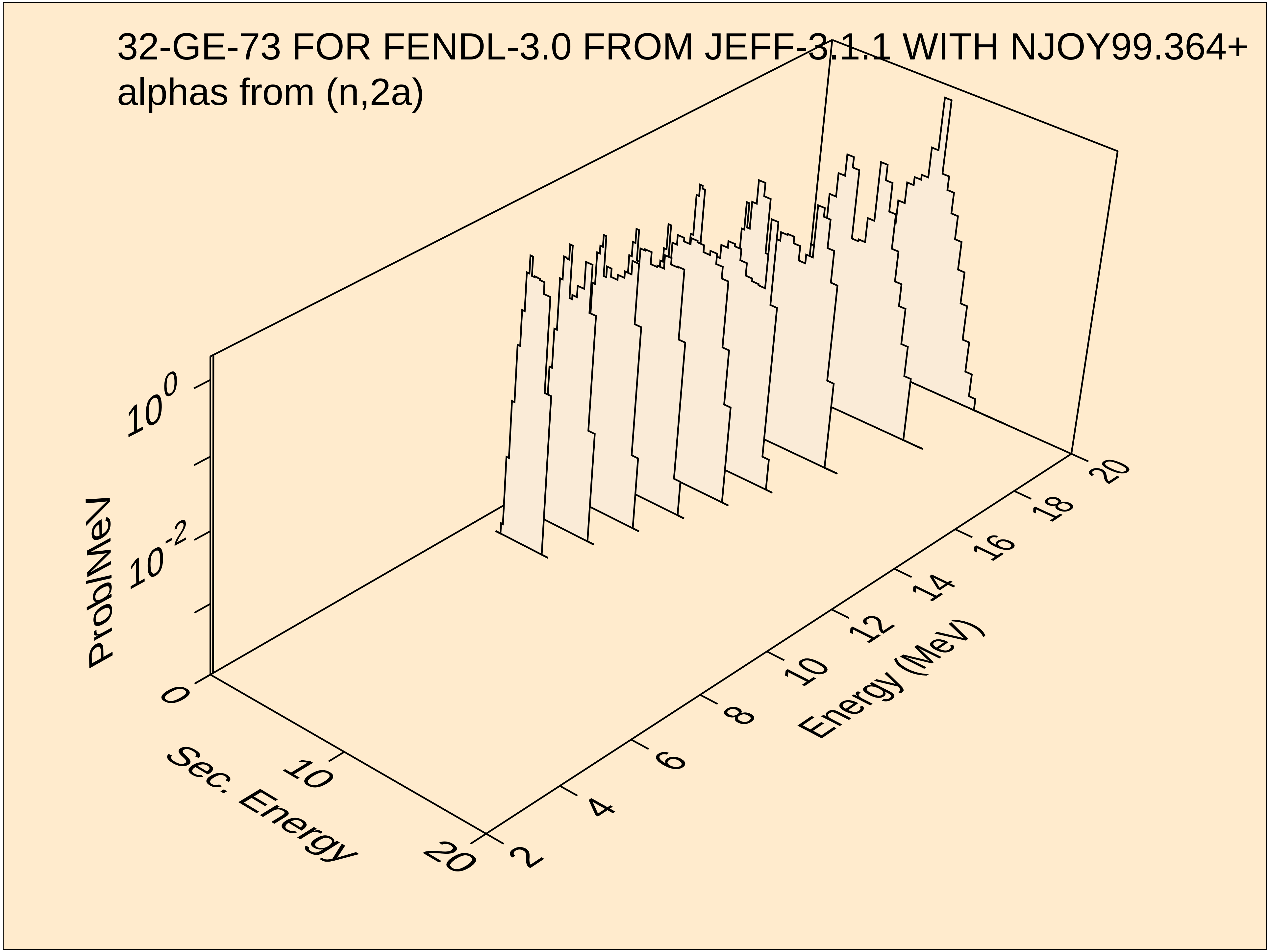
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
alphas from (n,x)



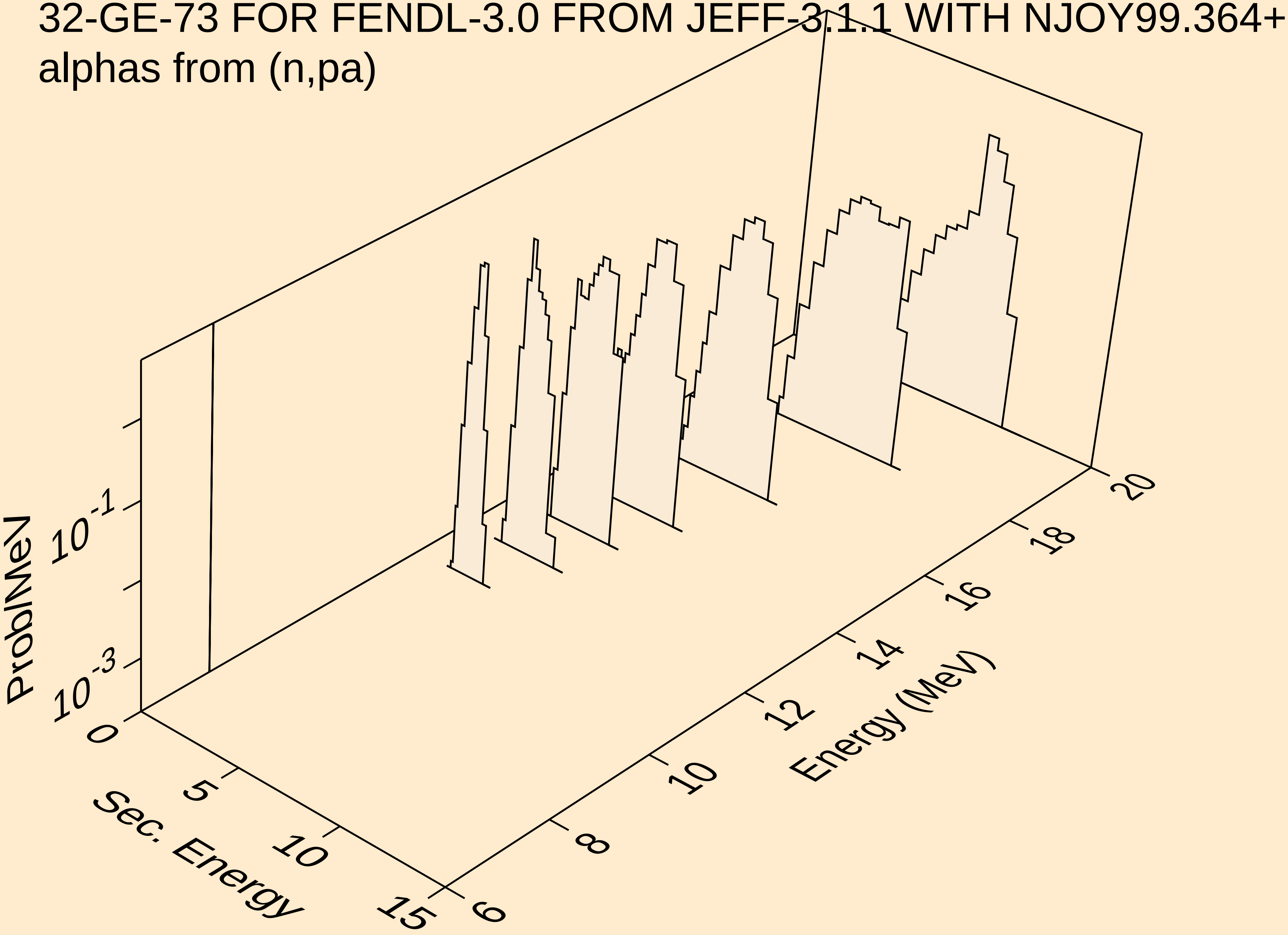


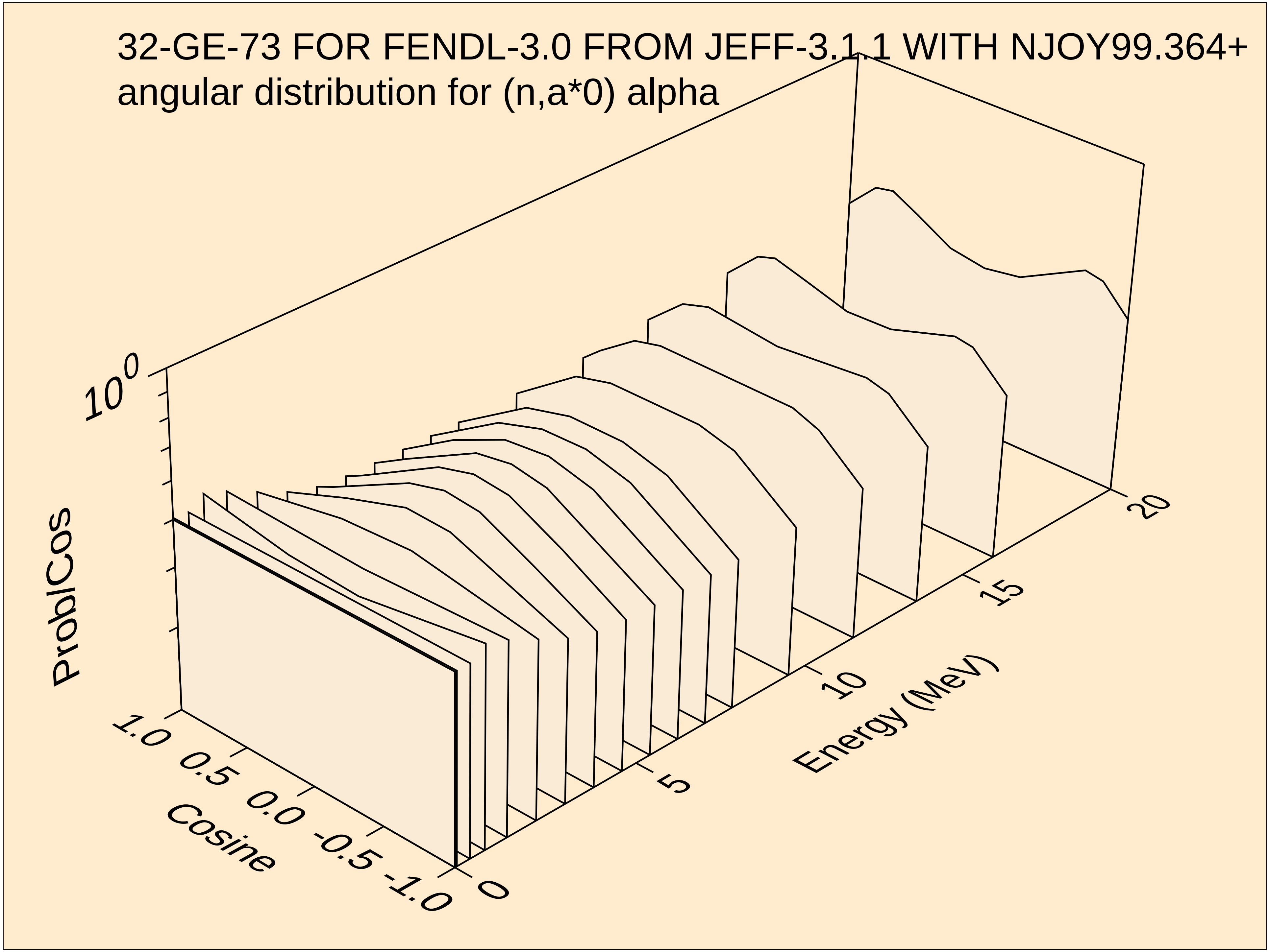
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
alphas from (n,n*)a

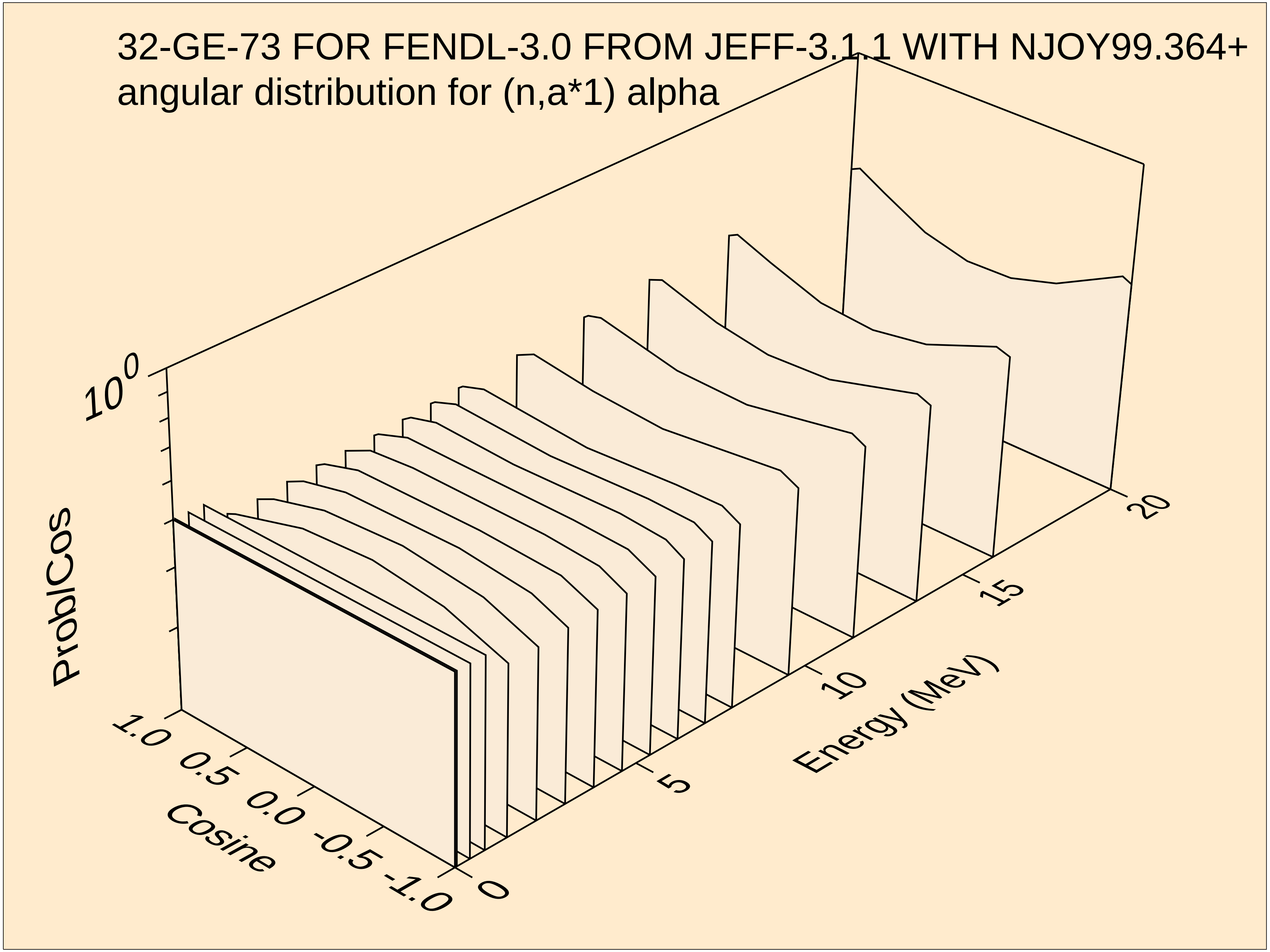

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
alphas from (n,2n)a
Prob/MeV
10^{-1}
10^{-3}
0
5
10
Sec. Energy
10
12
14
16
18
20
Energy (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
alphas from (n,2a)
Prob/MeV
10^0
10^-2
0
Sec. Energy
10
20
Energy (MeV)
2
4
6
8
10
12
14
16
18
20

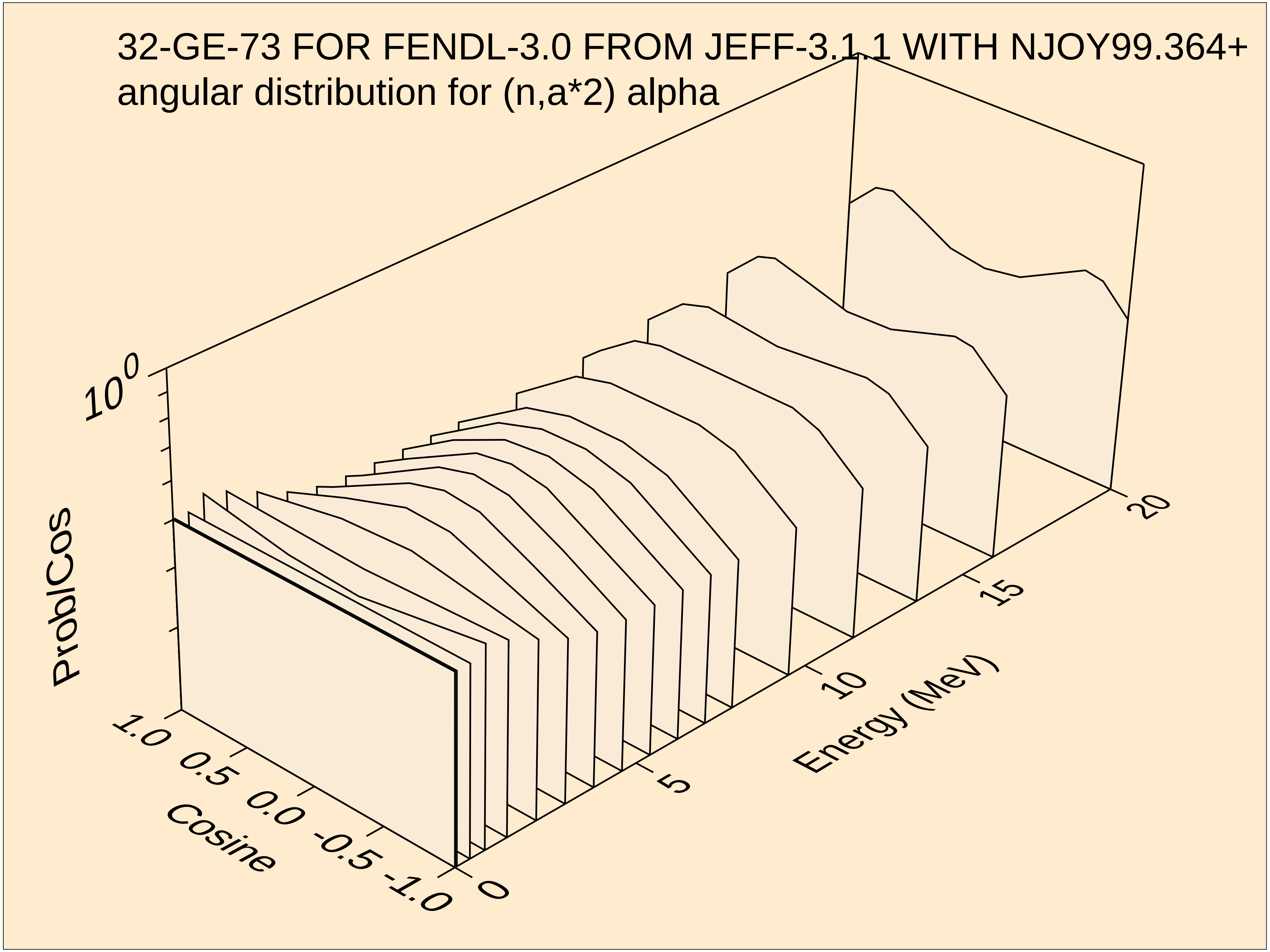
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
alphas from (n,pa)

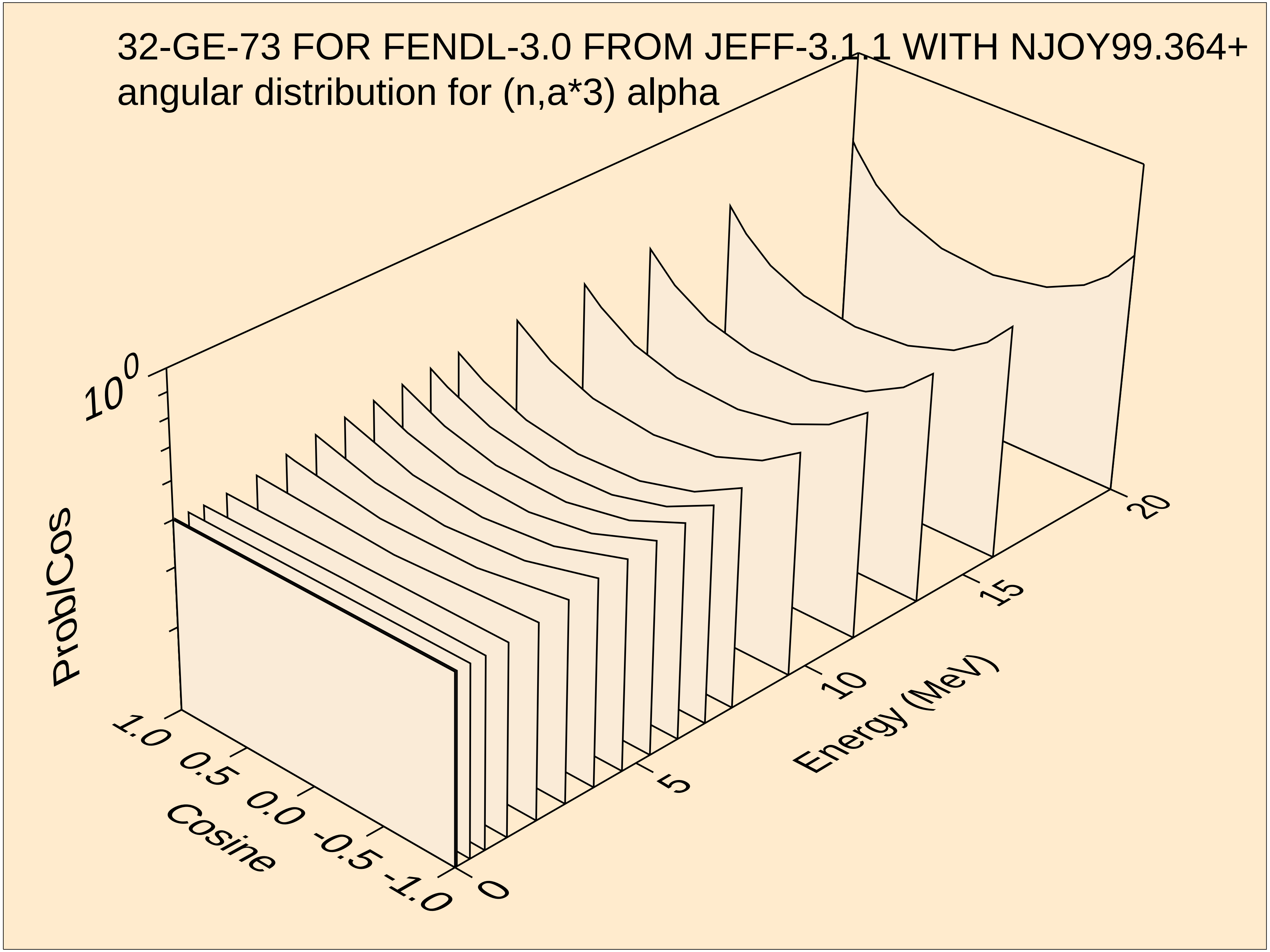


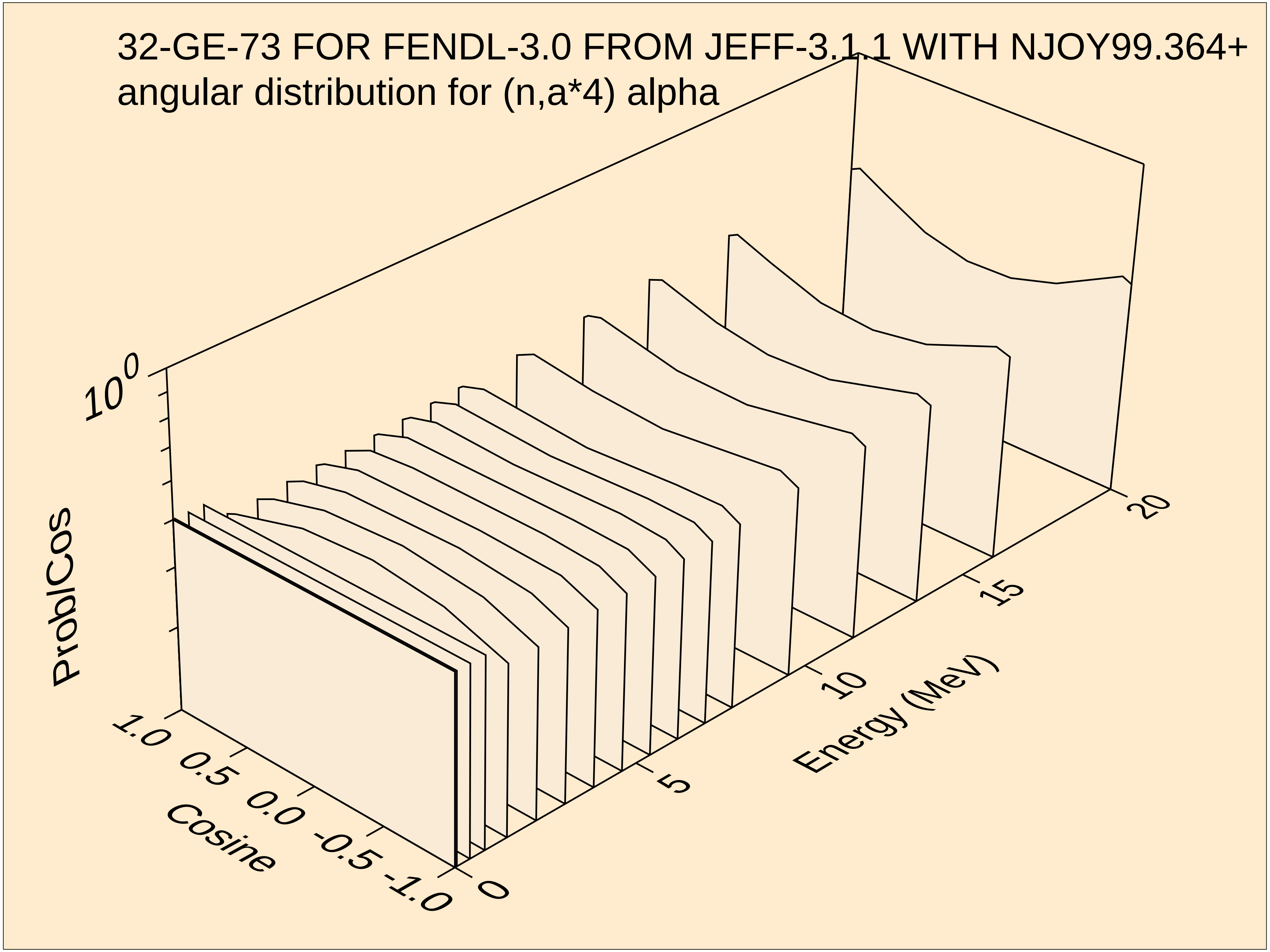

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,a*0) alpha
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,a*1) alpha

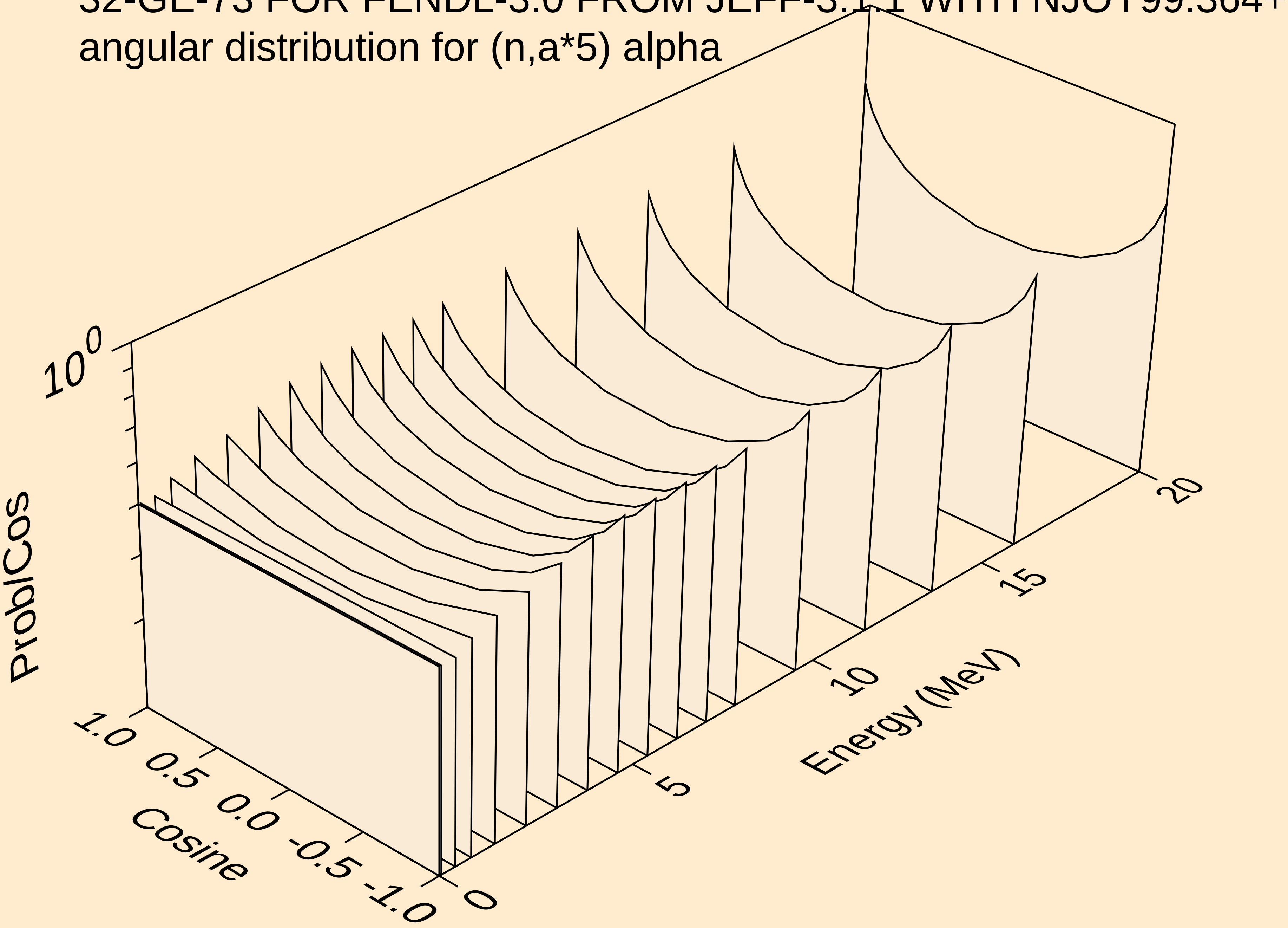

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,a*2) alpha
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,a*3) alpha
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

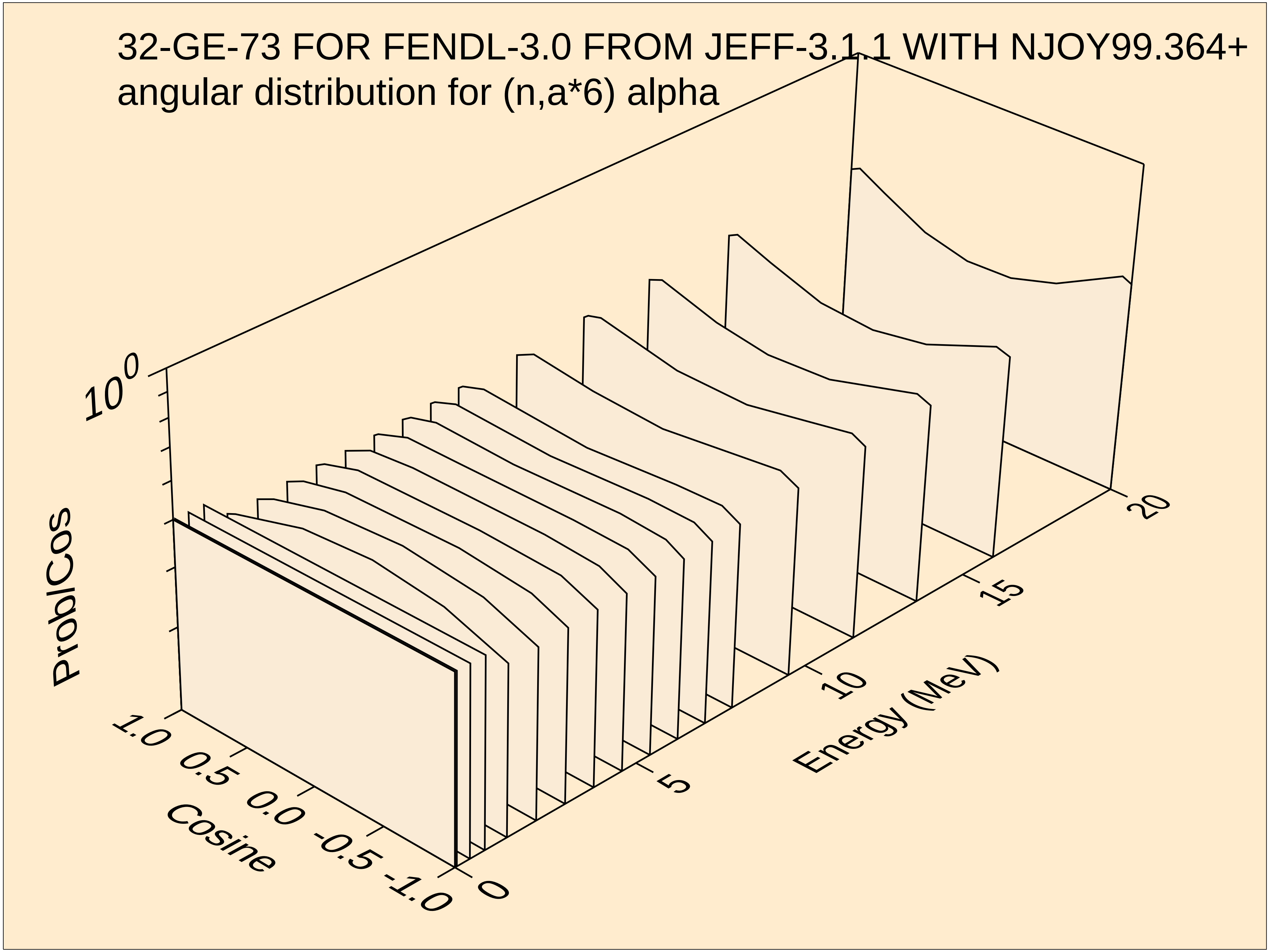

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,a*4) alpha
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+

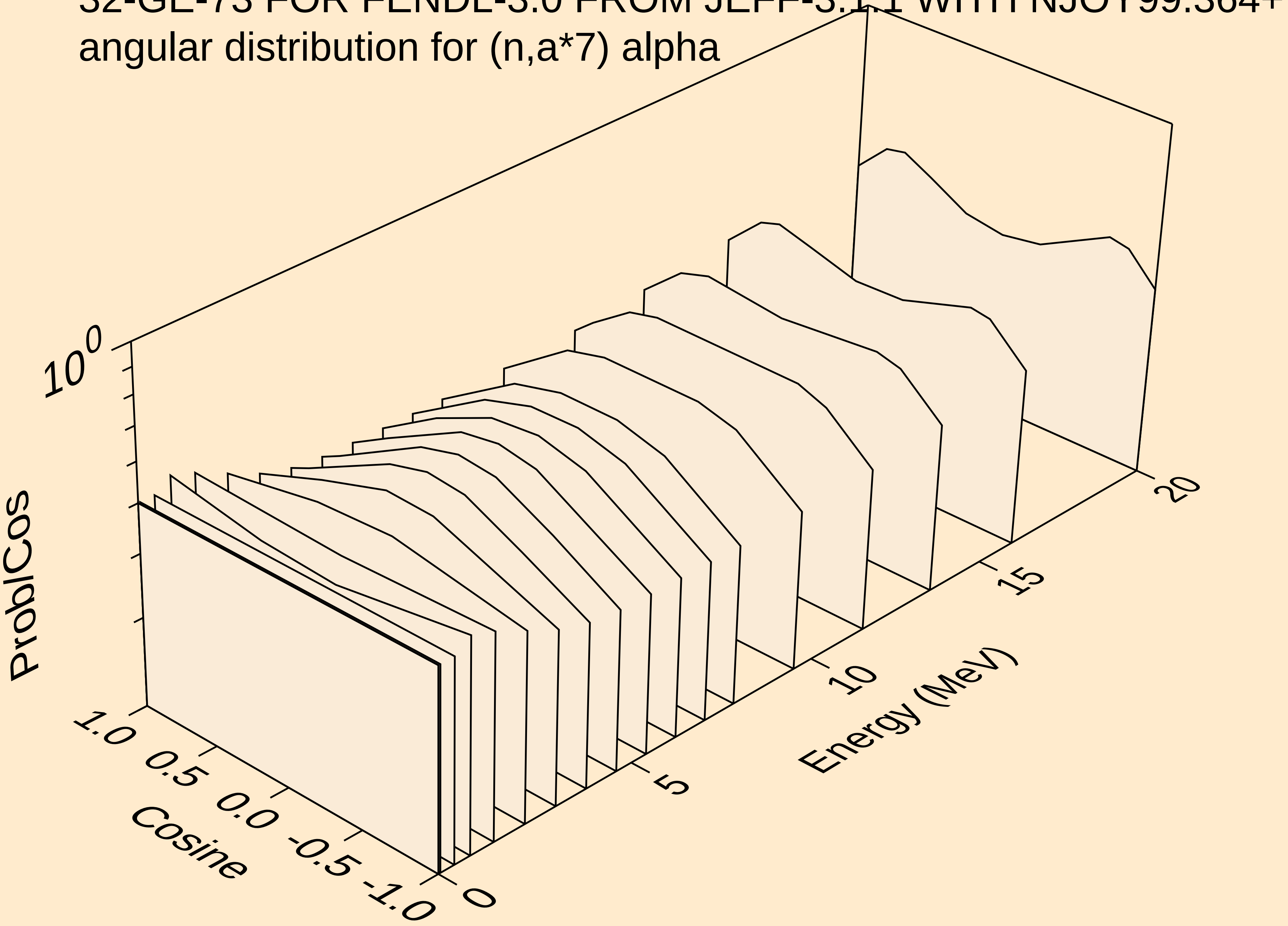
angular distribution for (n,a*5) alpha

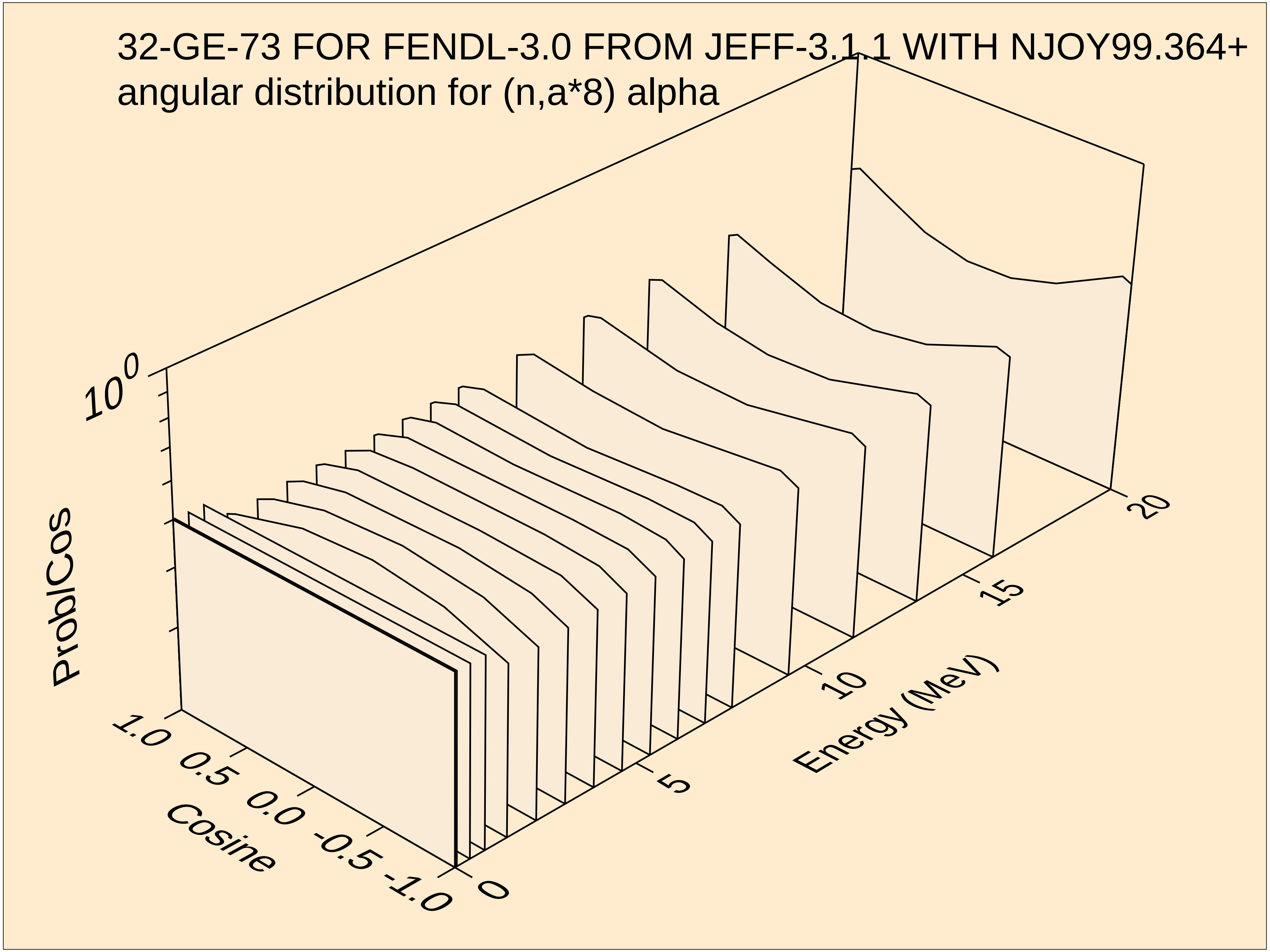


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,a*6) alpha

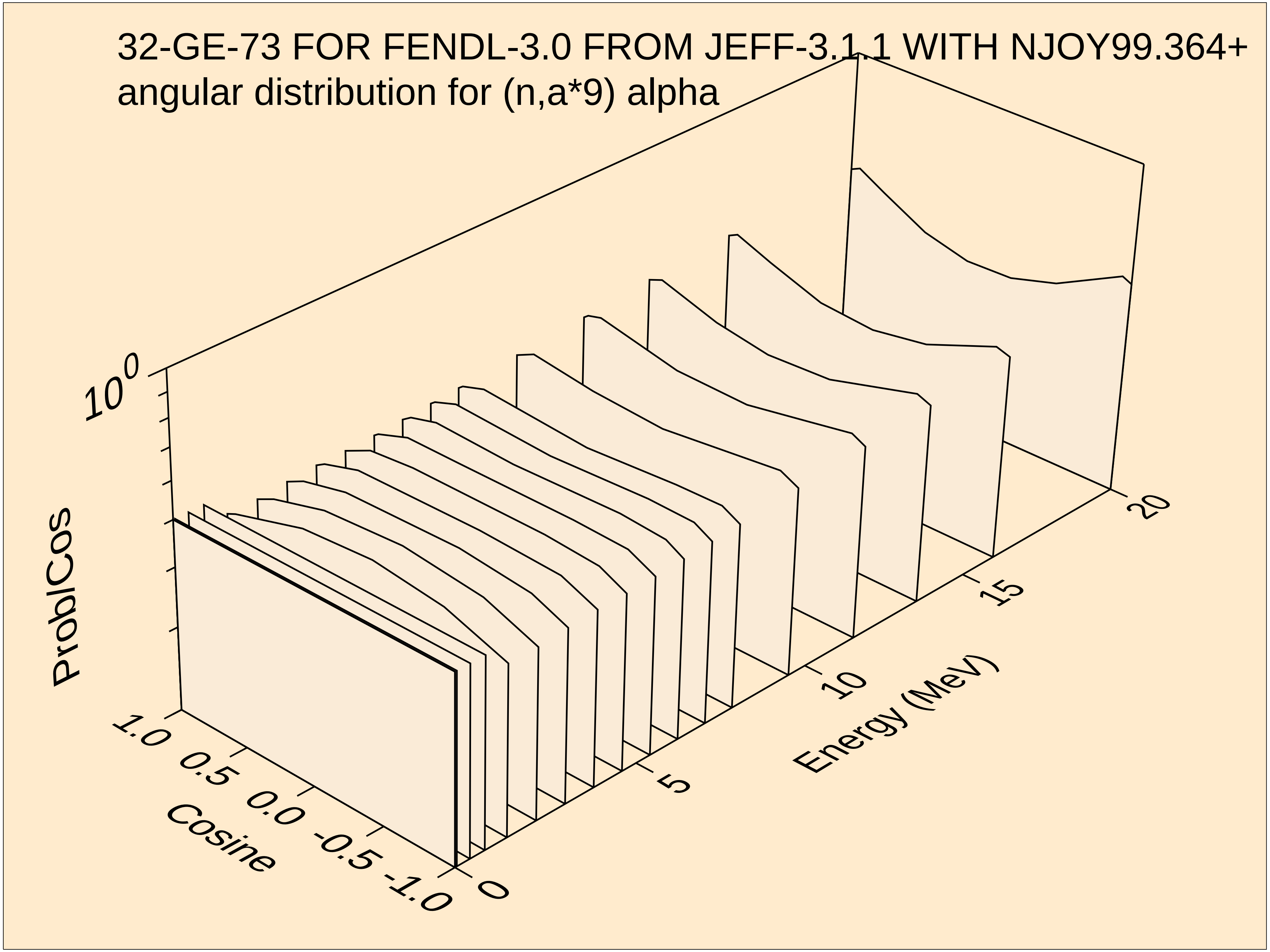


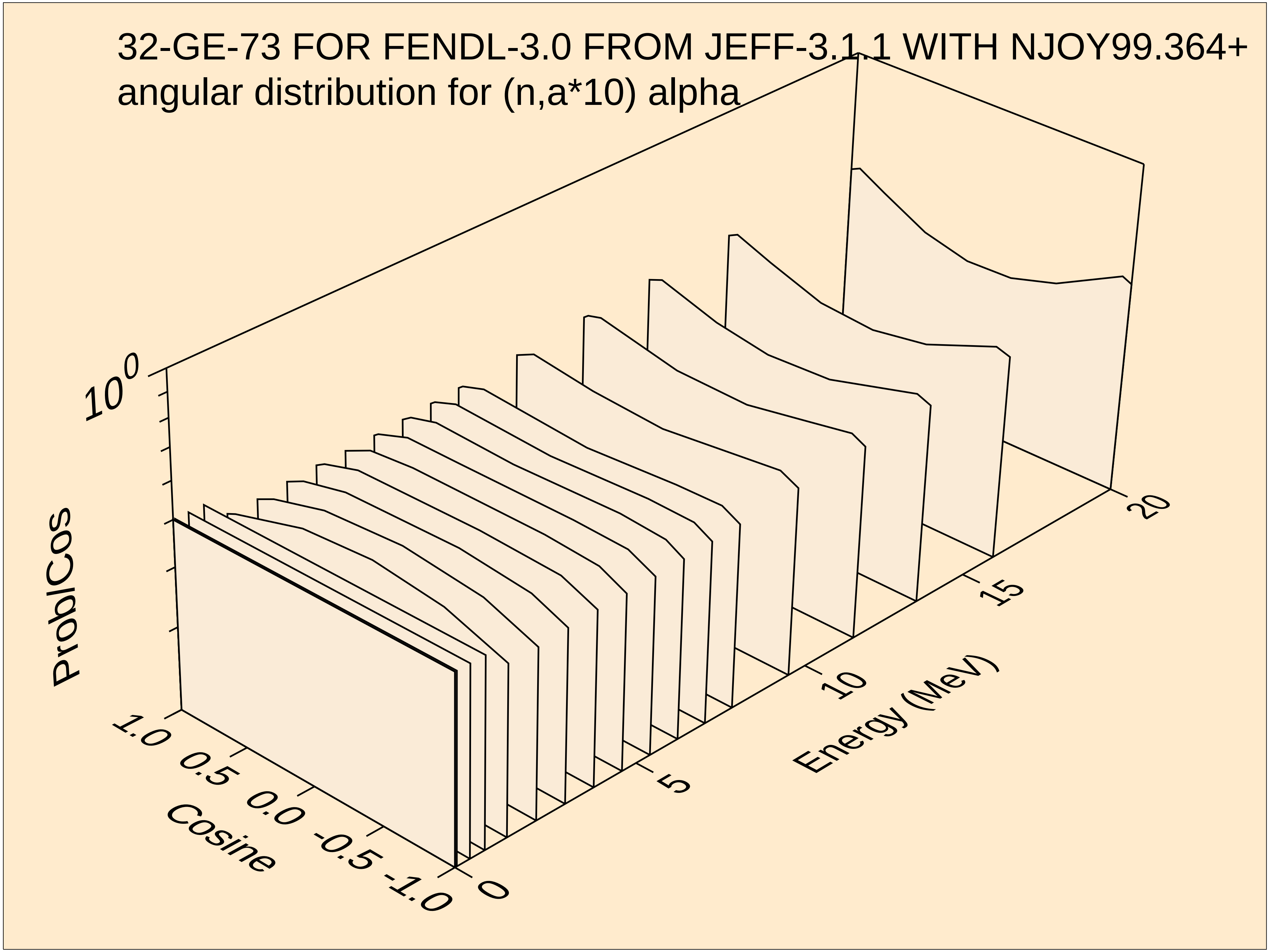
32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,a*7) alpha

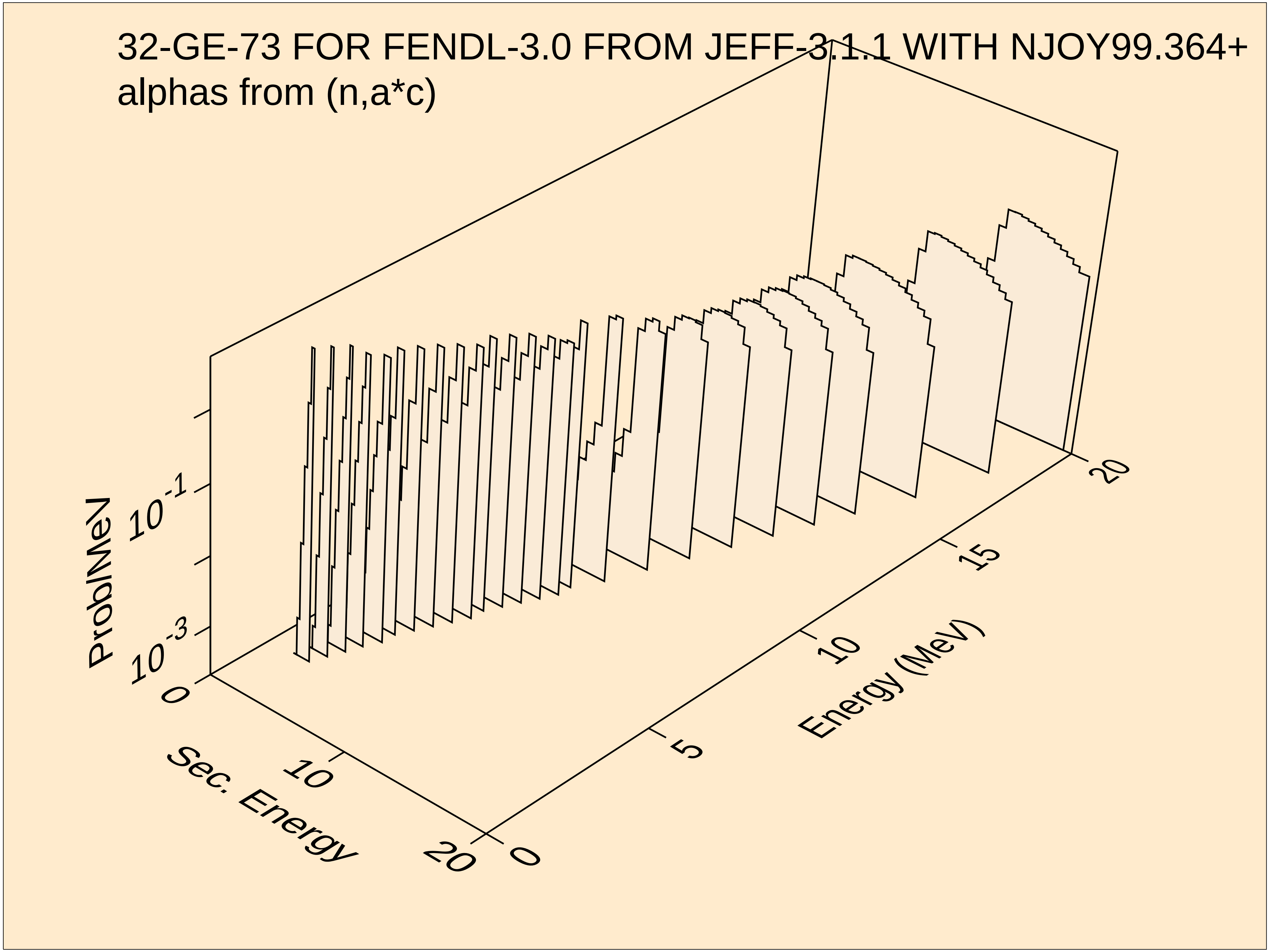




32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,a*8) alpha


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,a*9) alpha
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)


32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
angular distribution for (n,a*10) alpha
10^0
Probl/Cos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)



32-GE-73 FOR FENDL-3.0 FROM JEFF-3.1.1 WITH NJOY99.364+
alphas from (n,a*c)