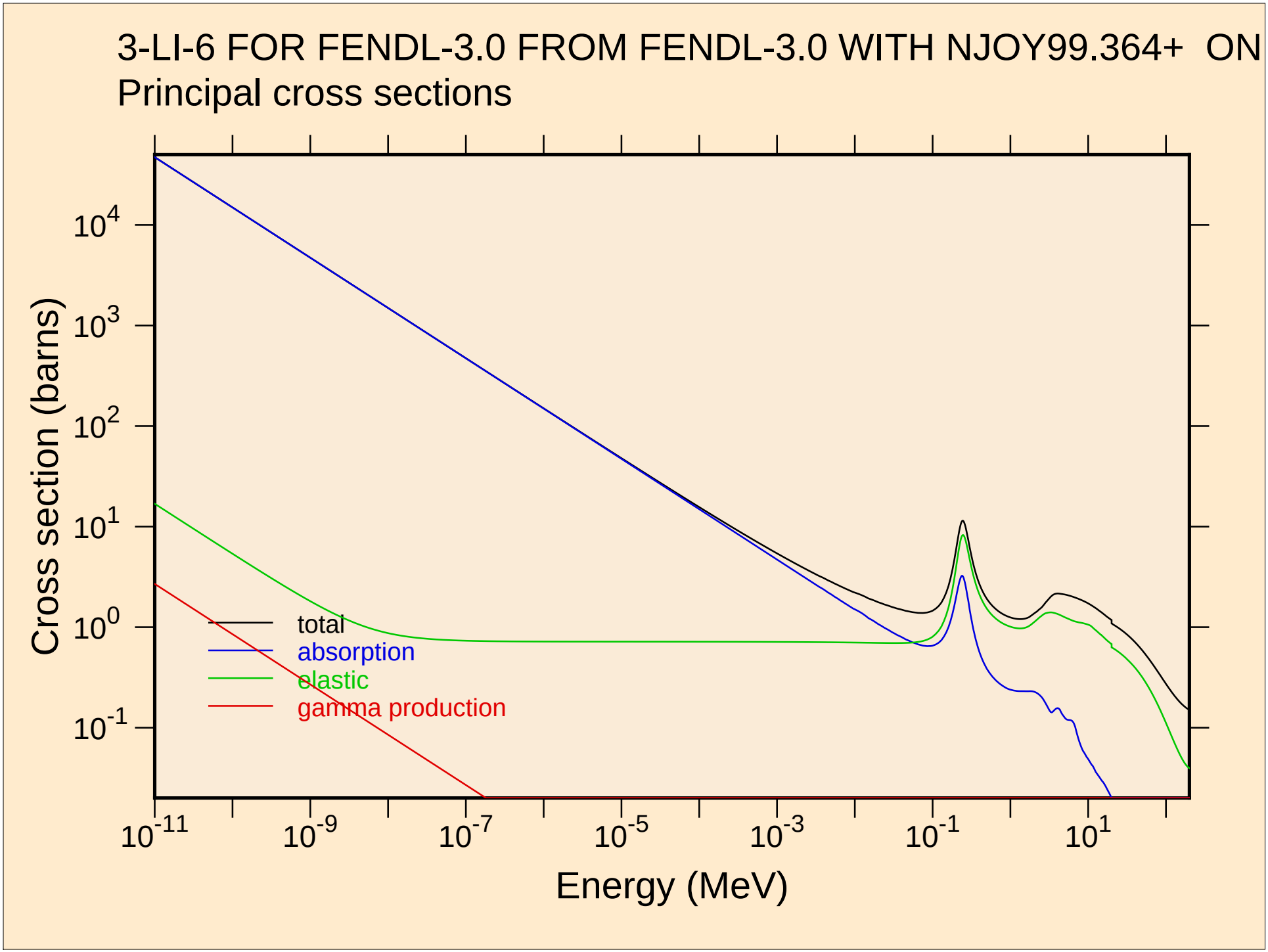
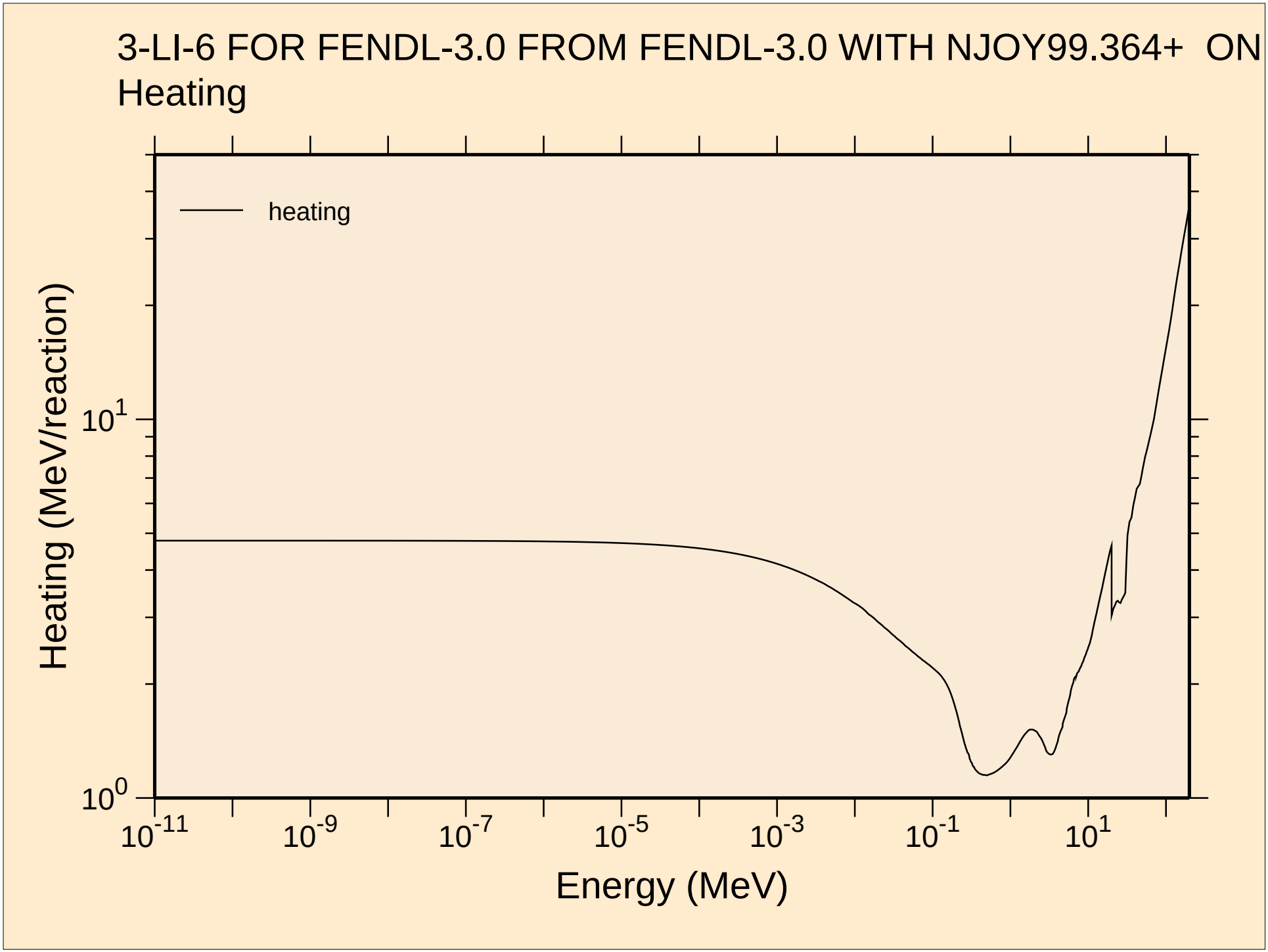
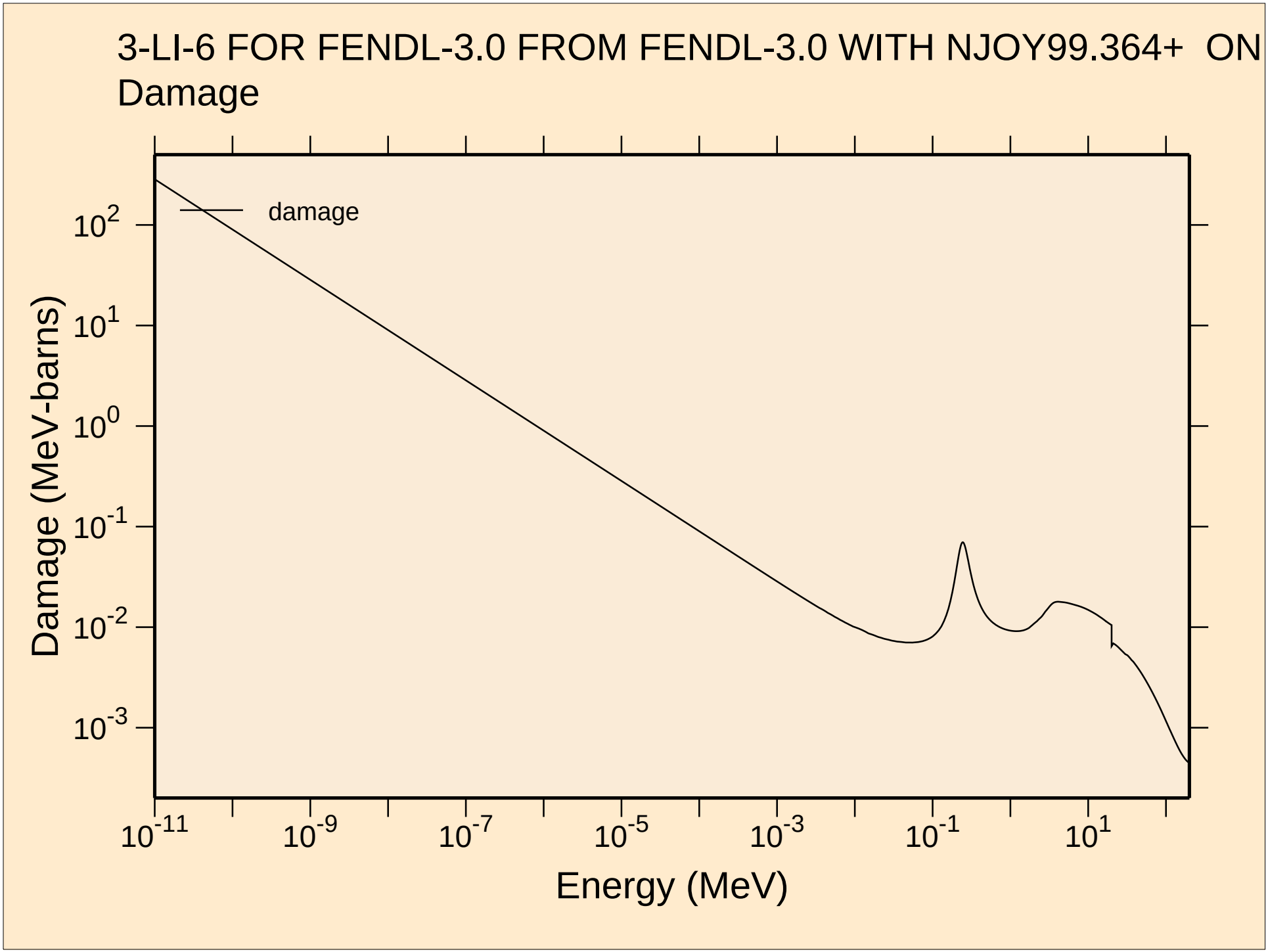
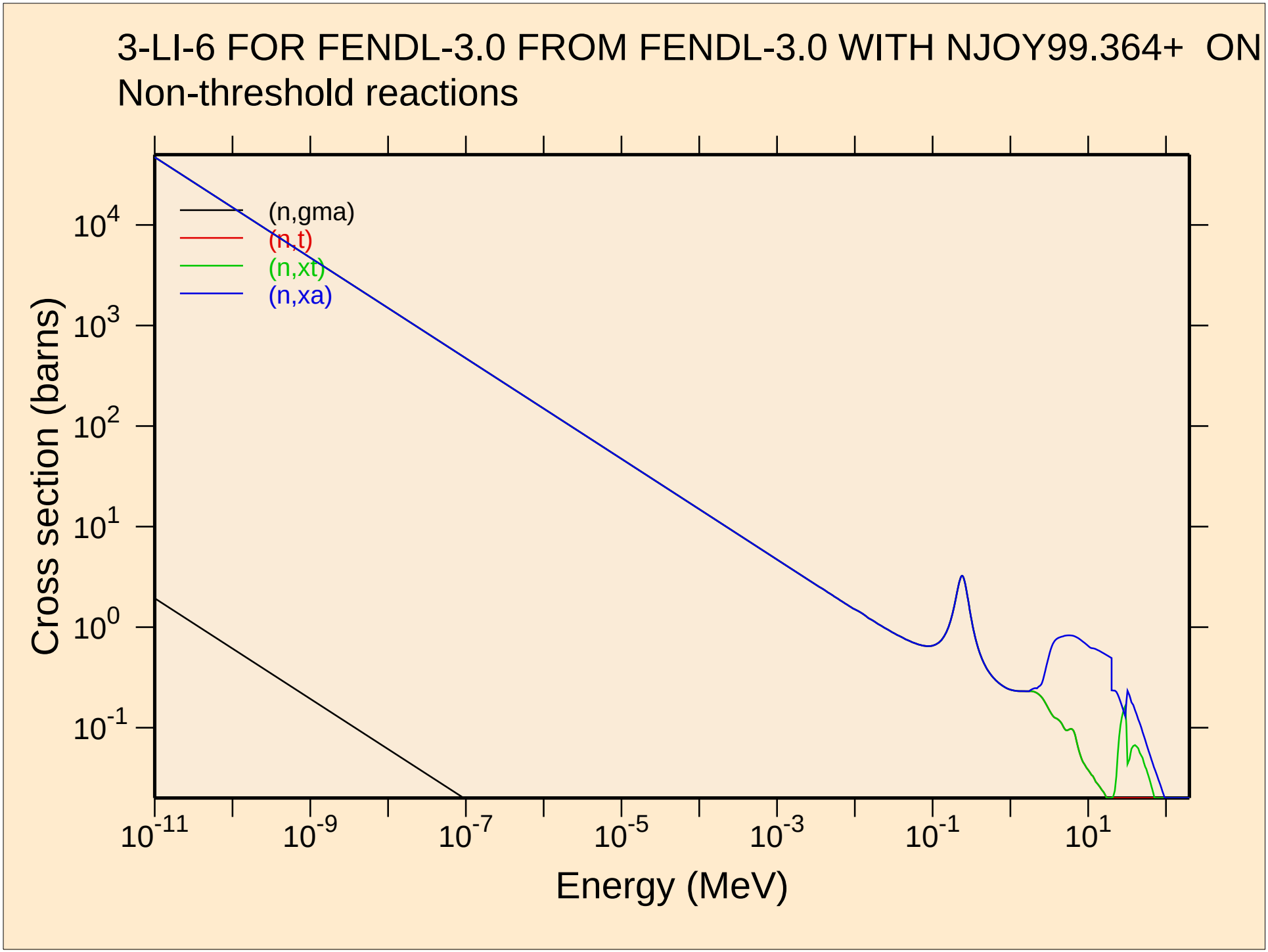
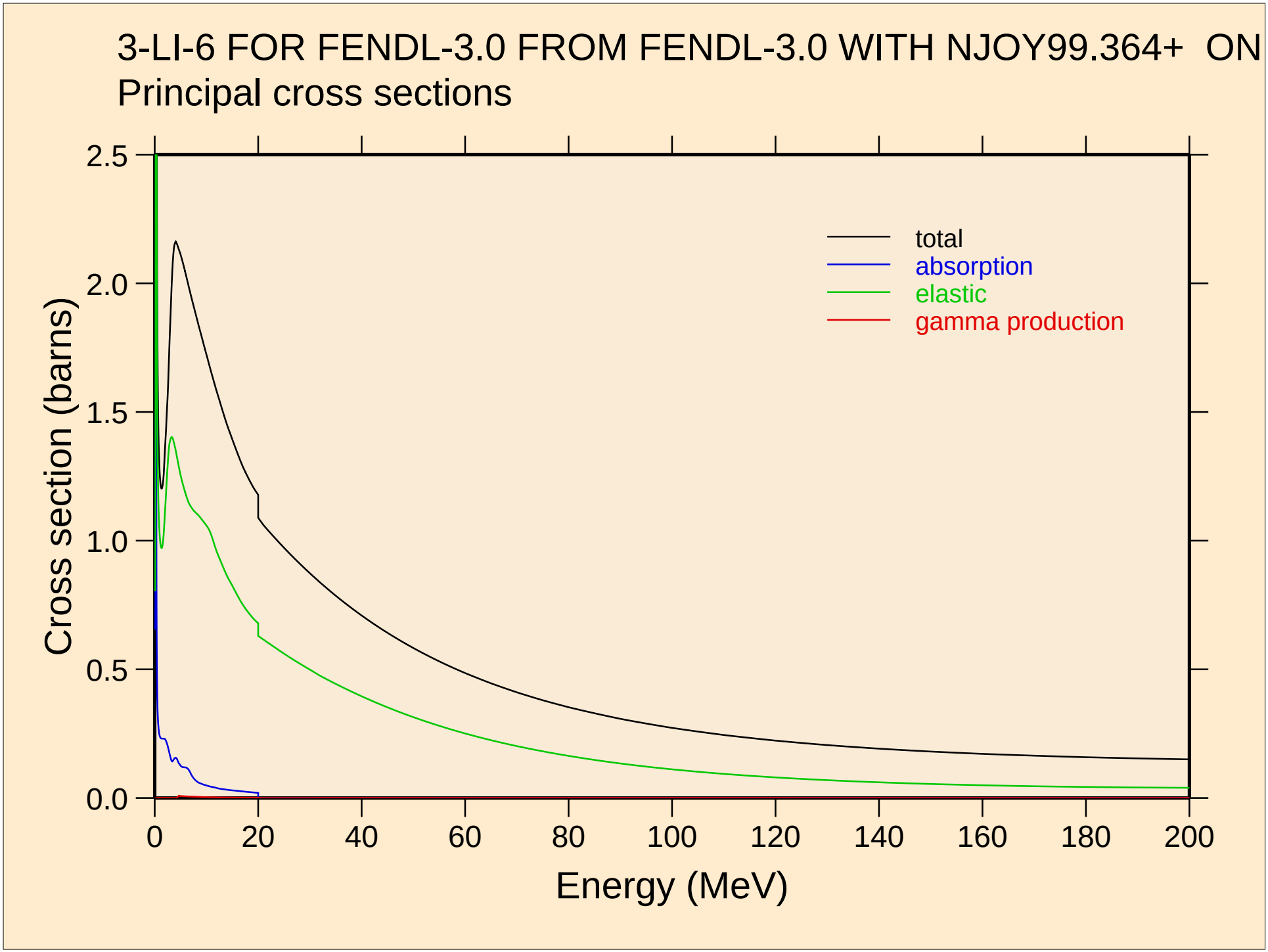
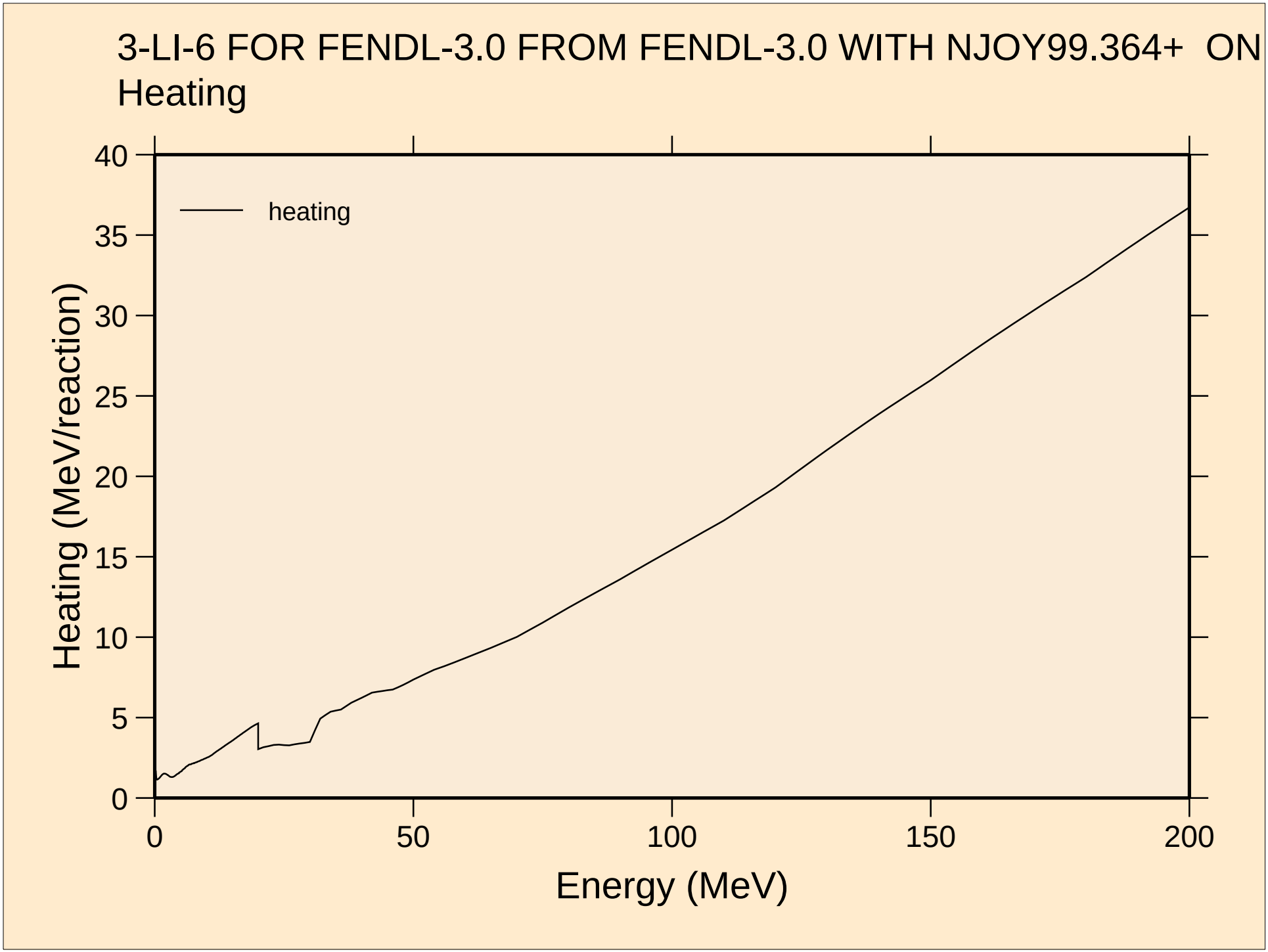

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Principal cross sections
Cross section (barns)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
total
absorption
elastic
gamma production
10^{-11}
10^{-9}
10^{-7}
10^{-5}
10^{-3}
10^{-1}
10^{1}
Energy (MeV)

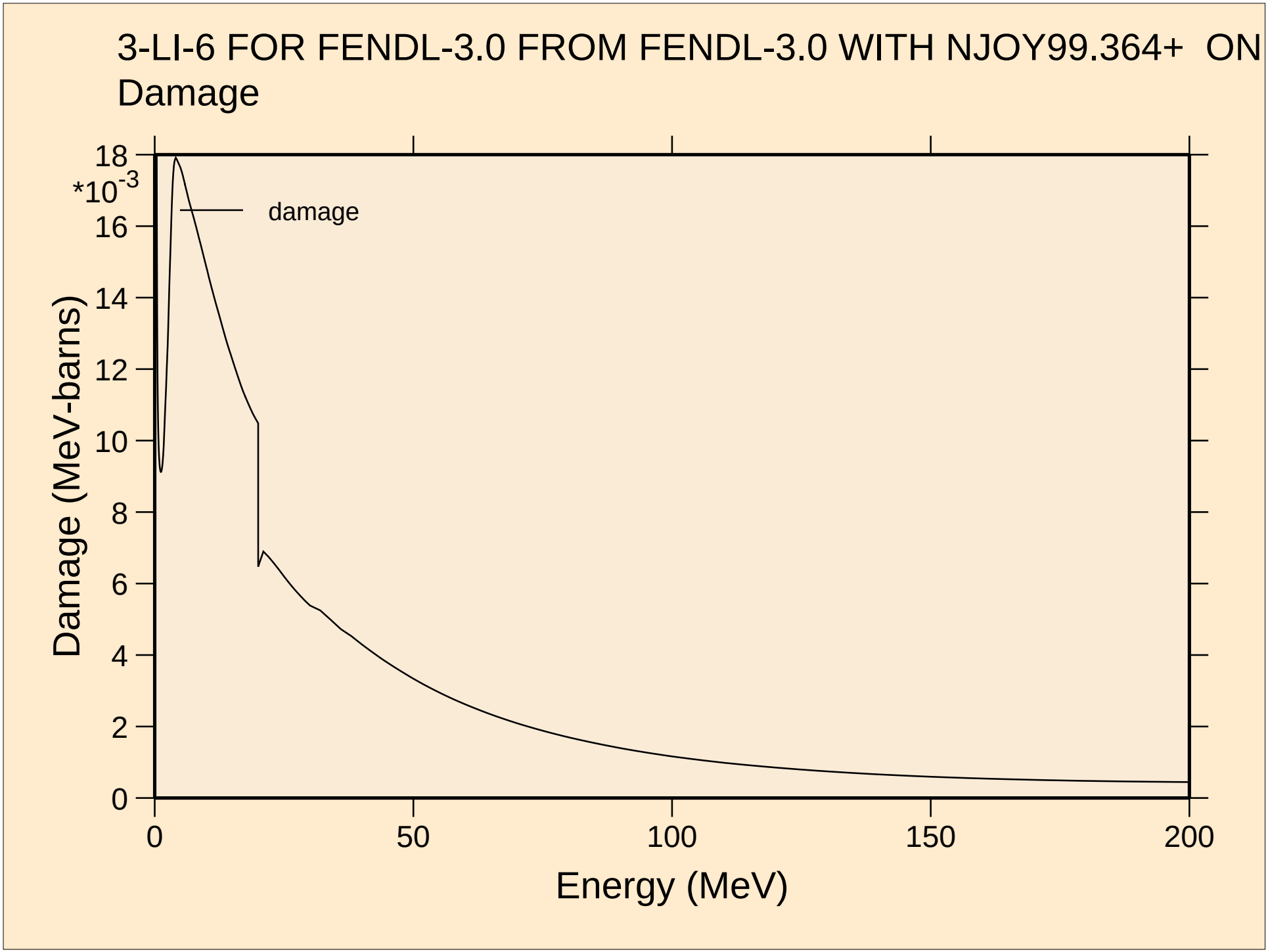

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Heating
heating
Heating (MeV/reaction)
10^1
10^0
10^-11
10^-9
10^-7
10^-5
10^-3
10^-1
10^1
Energy (MeV)

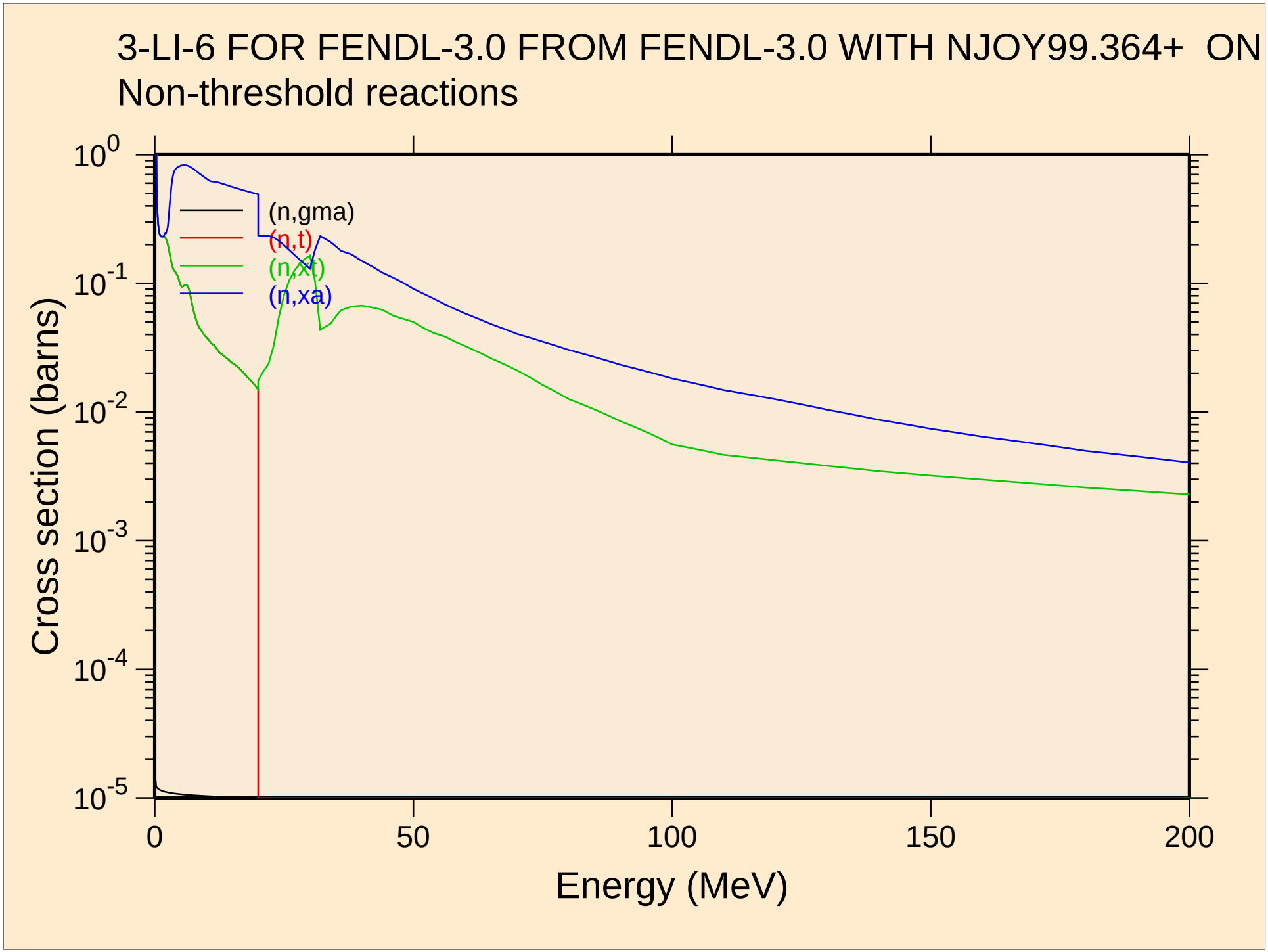

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Damage
damage
Damage (MeV-barns)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-11}
10^{-9}
10^{-7}
10^{-5}
10^{-3}
10^{-1}
10^{1}
Energy (MeV)

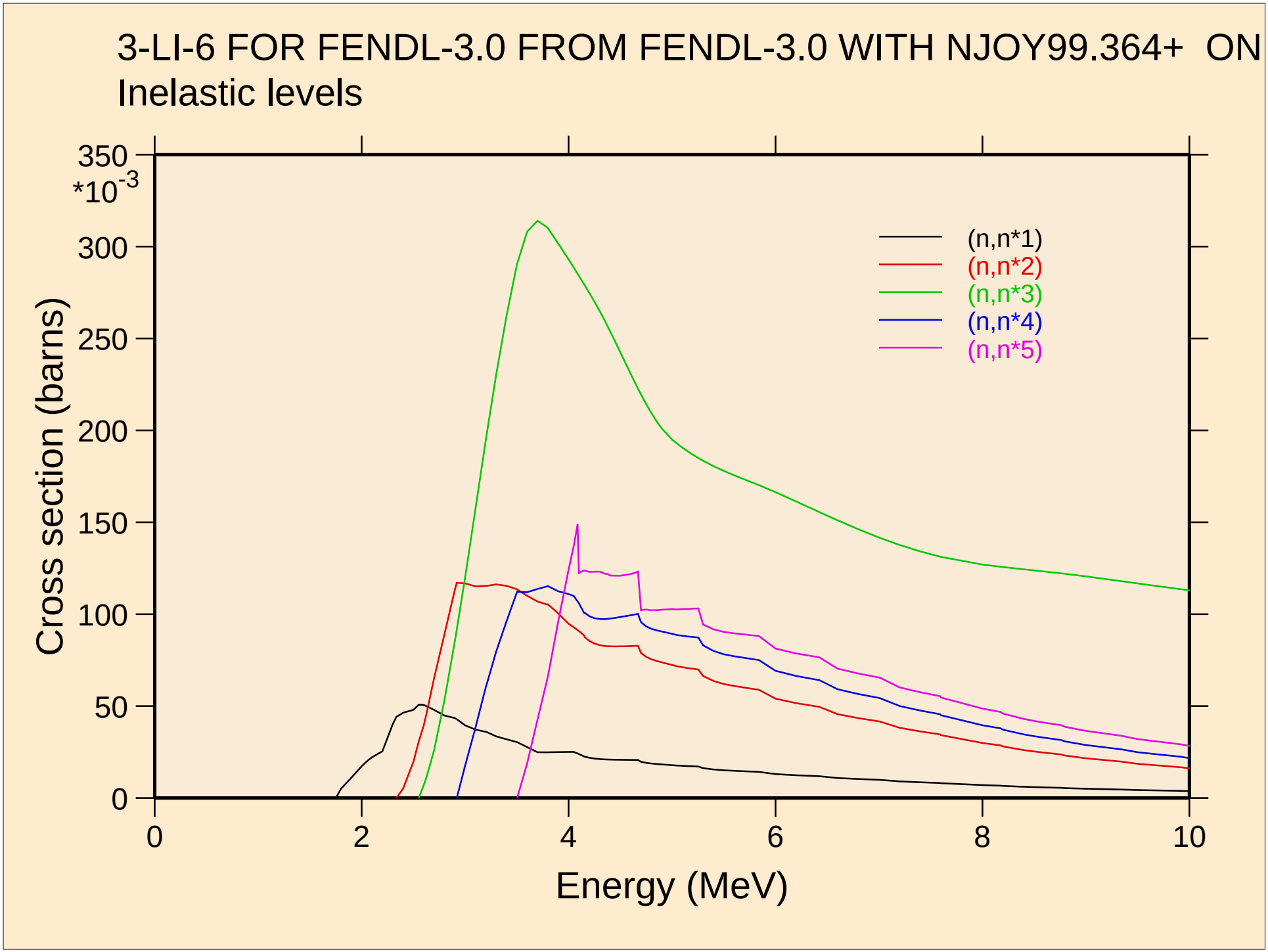

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Non-threshold reactions
(n,gma)
(n,t)
(n,xt)
(n,xa)
Cross section (barns)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-11
10^-9
10^-7
10^-5
10^-3
10^-1
10^1
Energy (MeV)

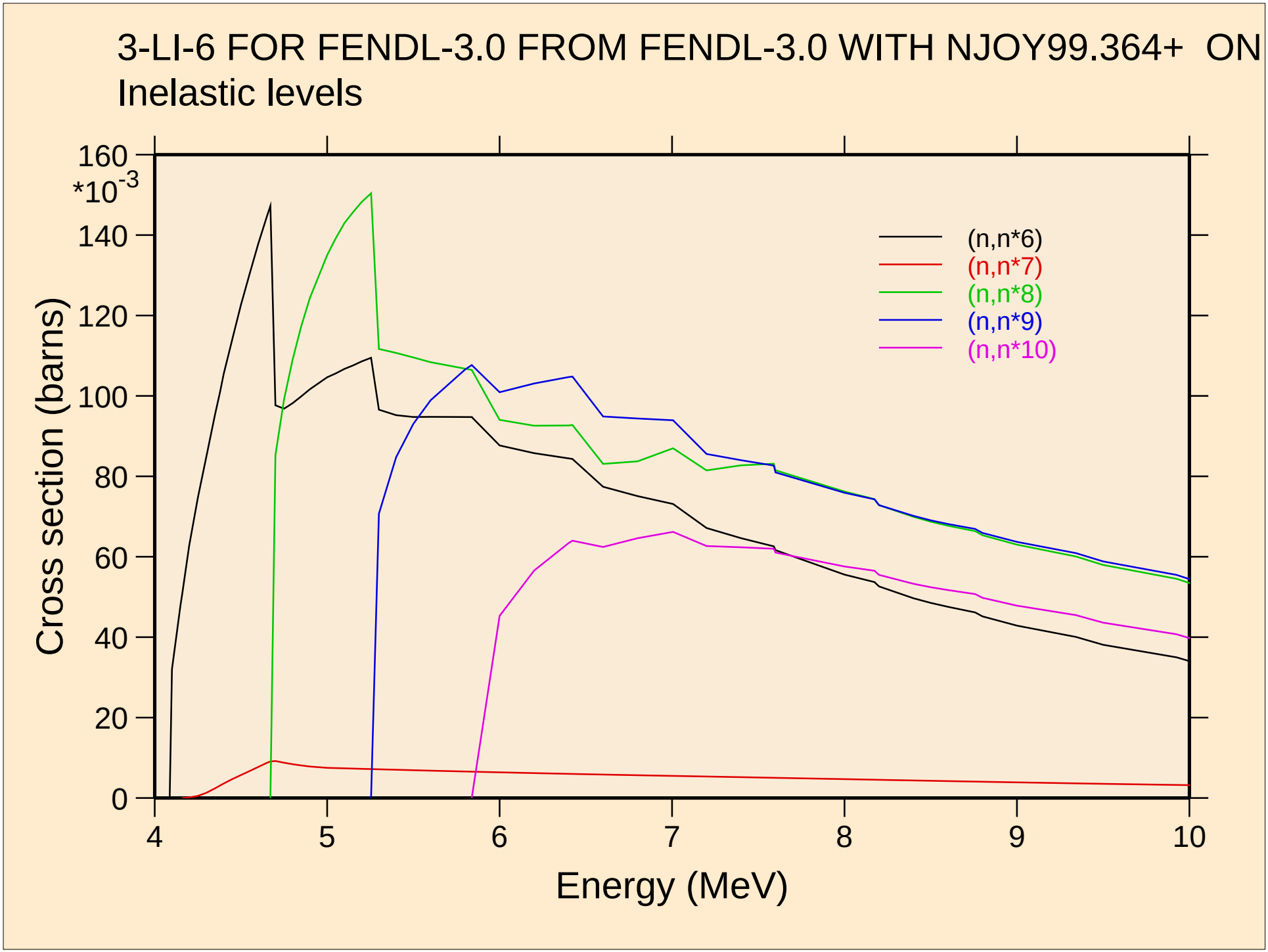

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Principal cross sections
Cross section (barns)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
0
20
40
60
80
100
120
140
160
180
200
total
absorption
elastic
gamma production

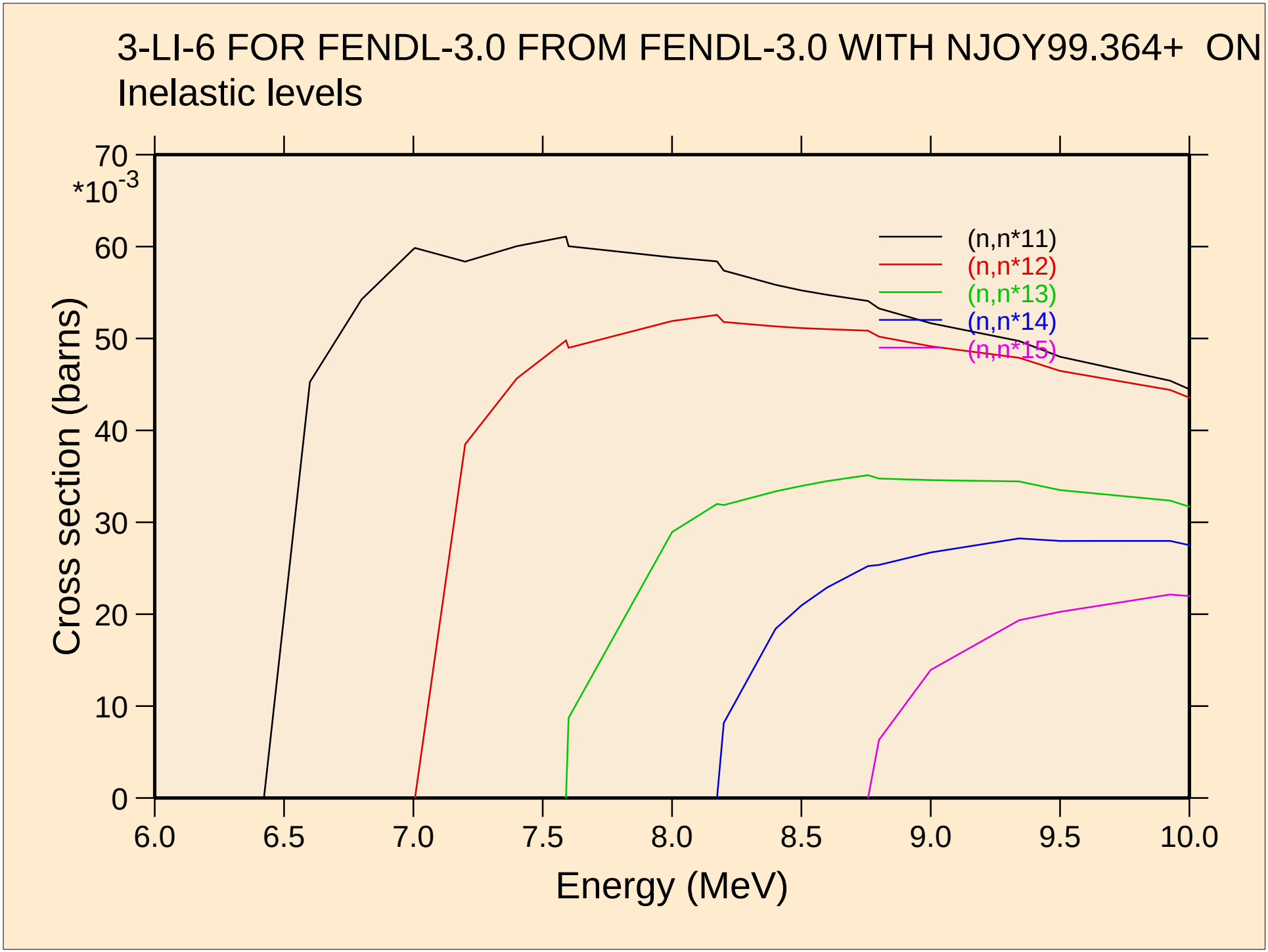

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
0
5
10
15
20
25
30
35
40
0
50
100
150
200

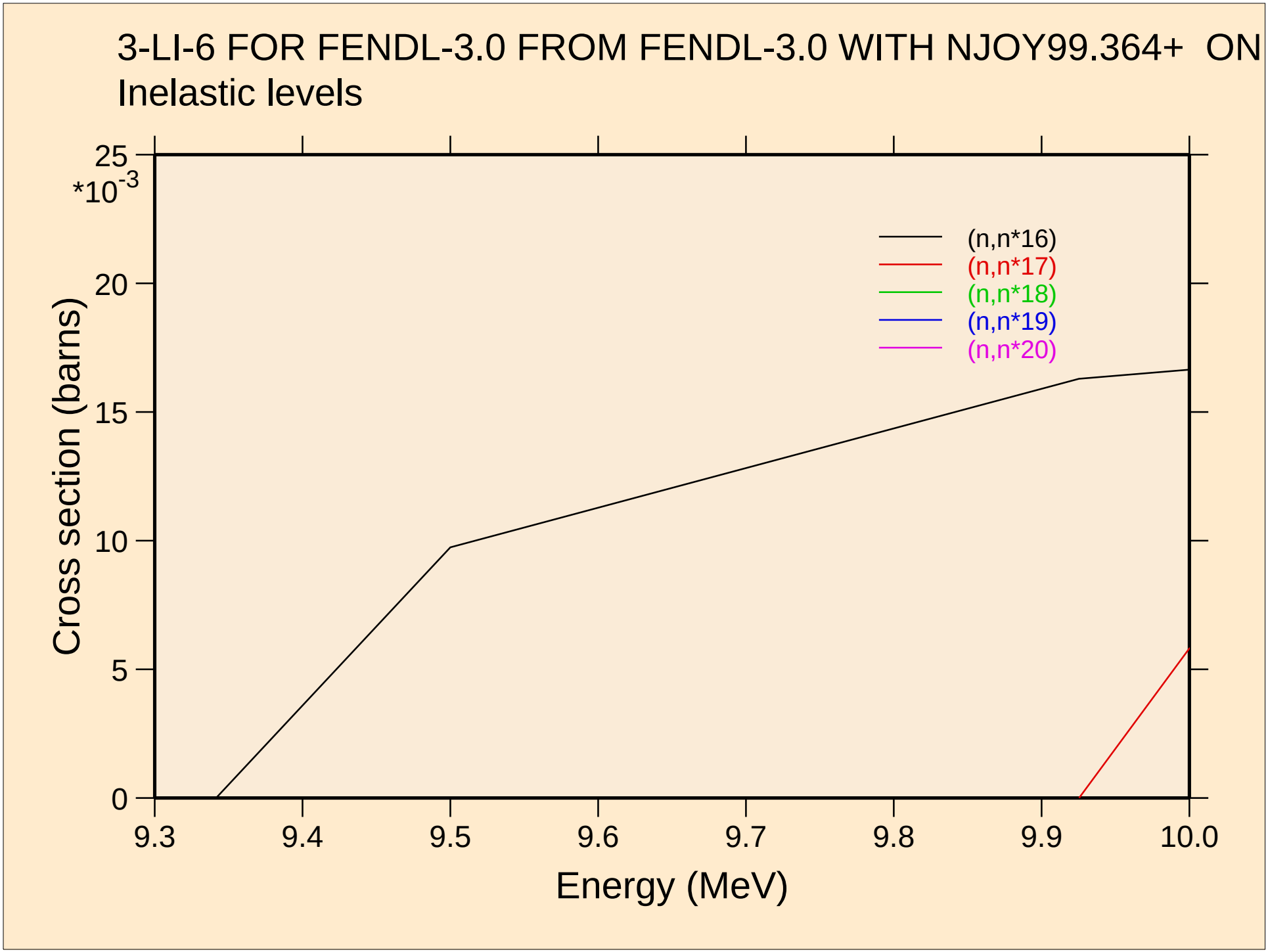

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Damage
*10-3
damage
Damage (MeV-barns)
18
16
14
12
10
8
6
4
2
0
0
50
100
150
200
Energy (MeV)

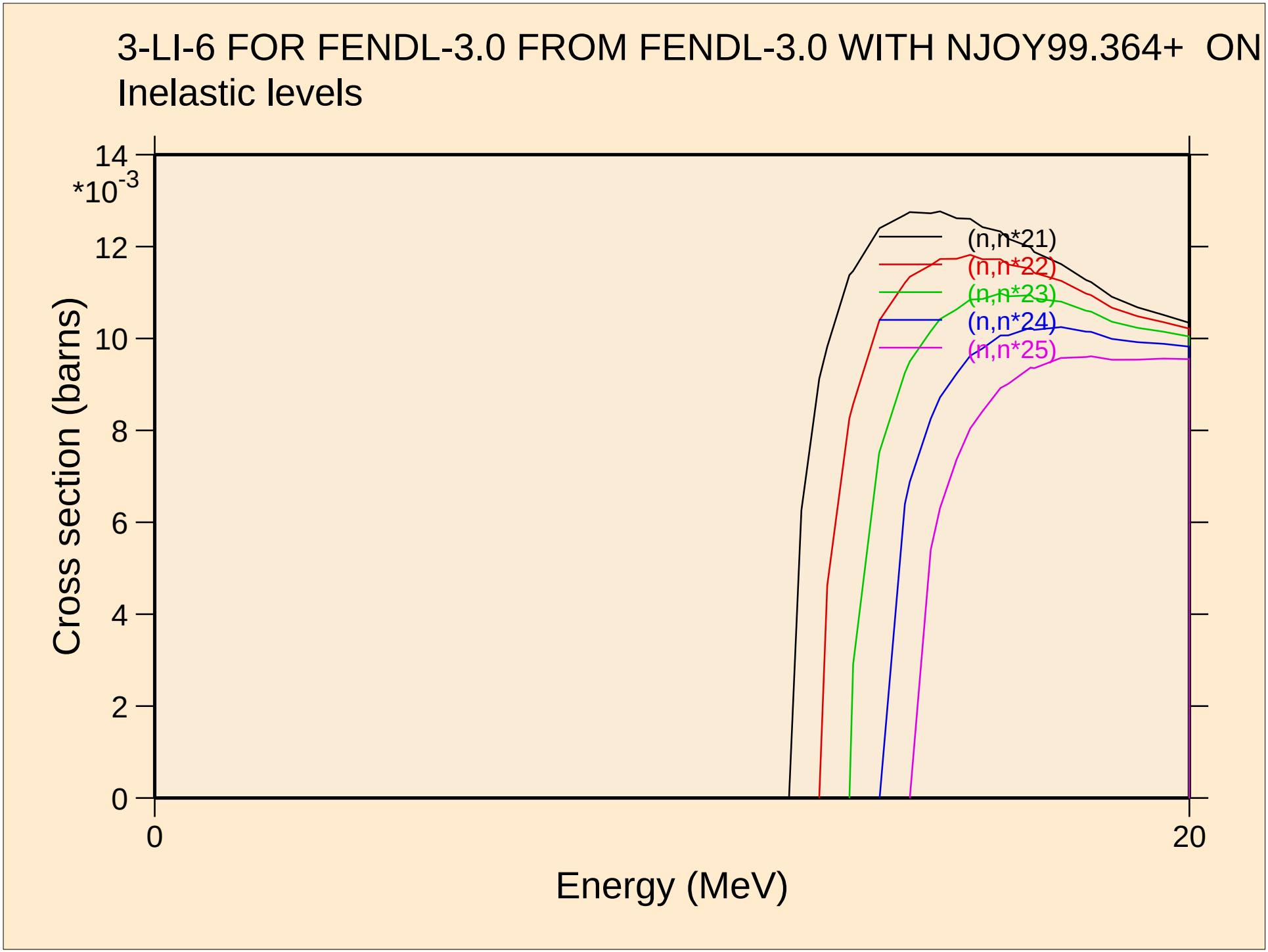

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Non-threshold reactions
(n,gma)
(n,t)
(n,x't)
(n,xa)
Cross section (barns)
Energy (MeV)
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
0
50
100
150
200

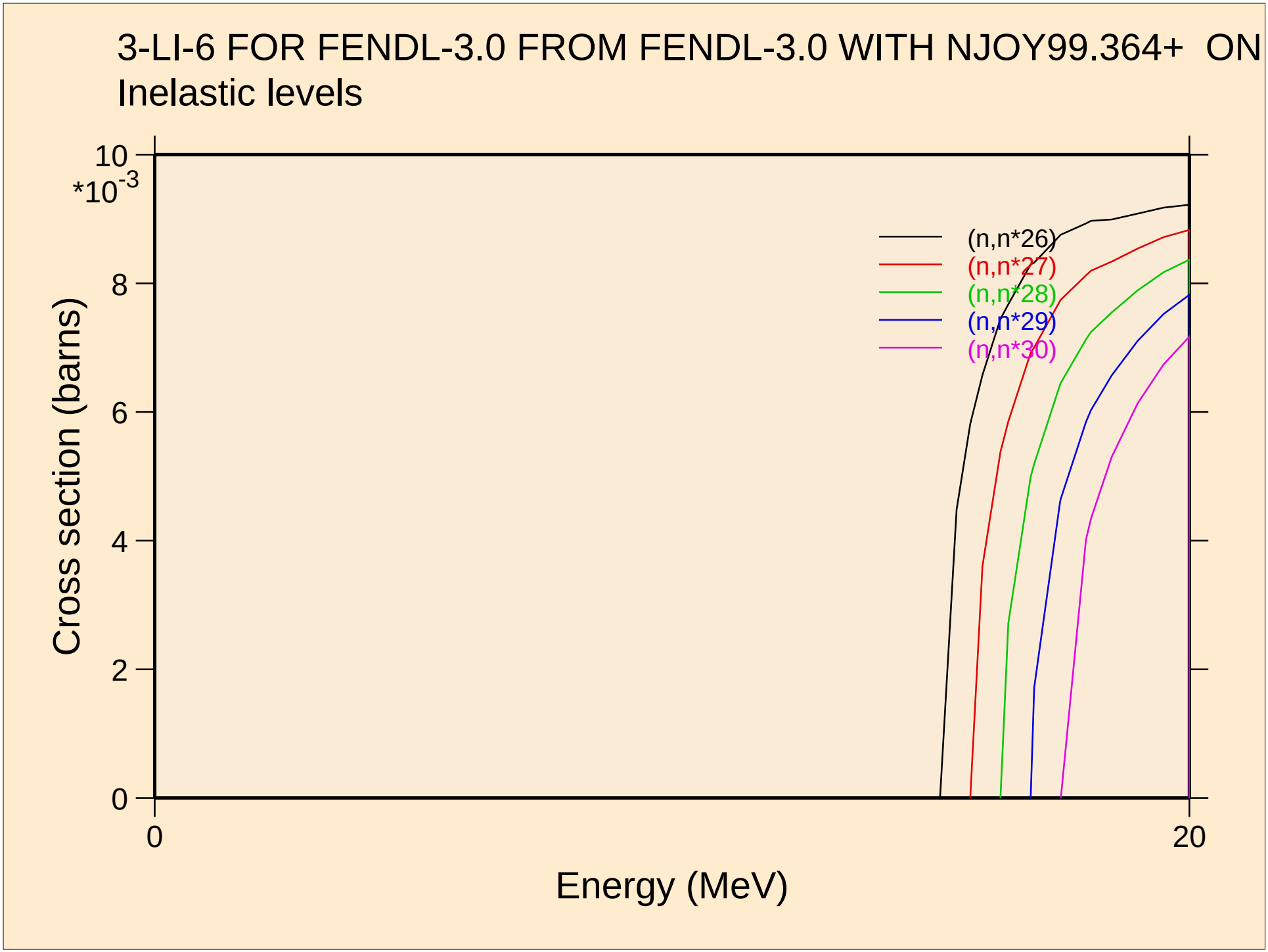

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Inelastic levels
Cross section (barns)
*10-3
350
300
250
200
150
100
50
0
0
2
4
6
8
10
Energy (MeV)
(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)

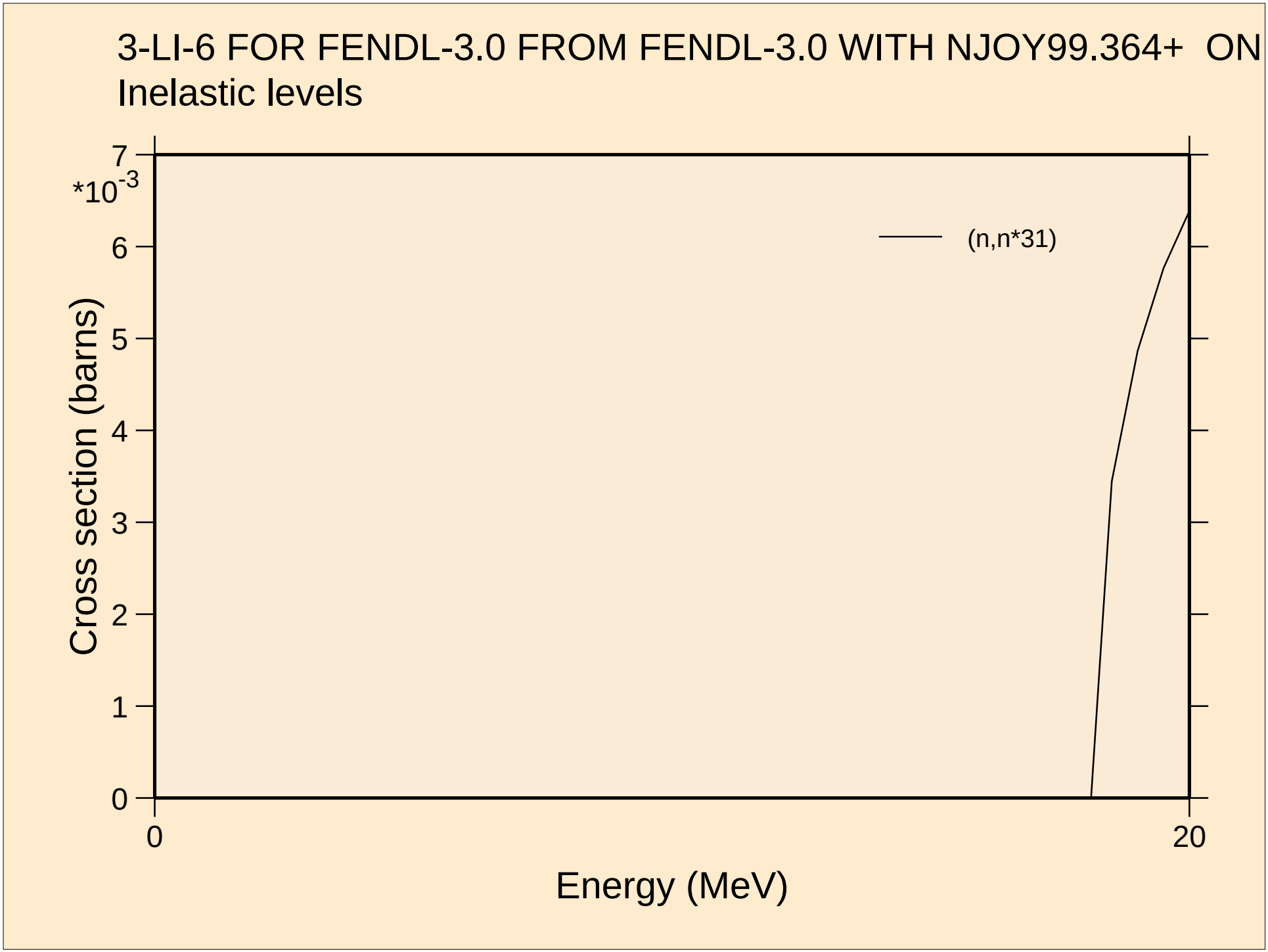

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Inelastic levels
Cross section (barns)
*10-3
160
140
120
100
80
60
40
20
0
4
5
6
7
8
9
10
Energy (MeV)
(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
(n,n*10)

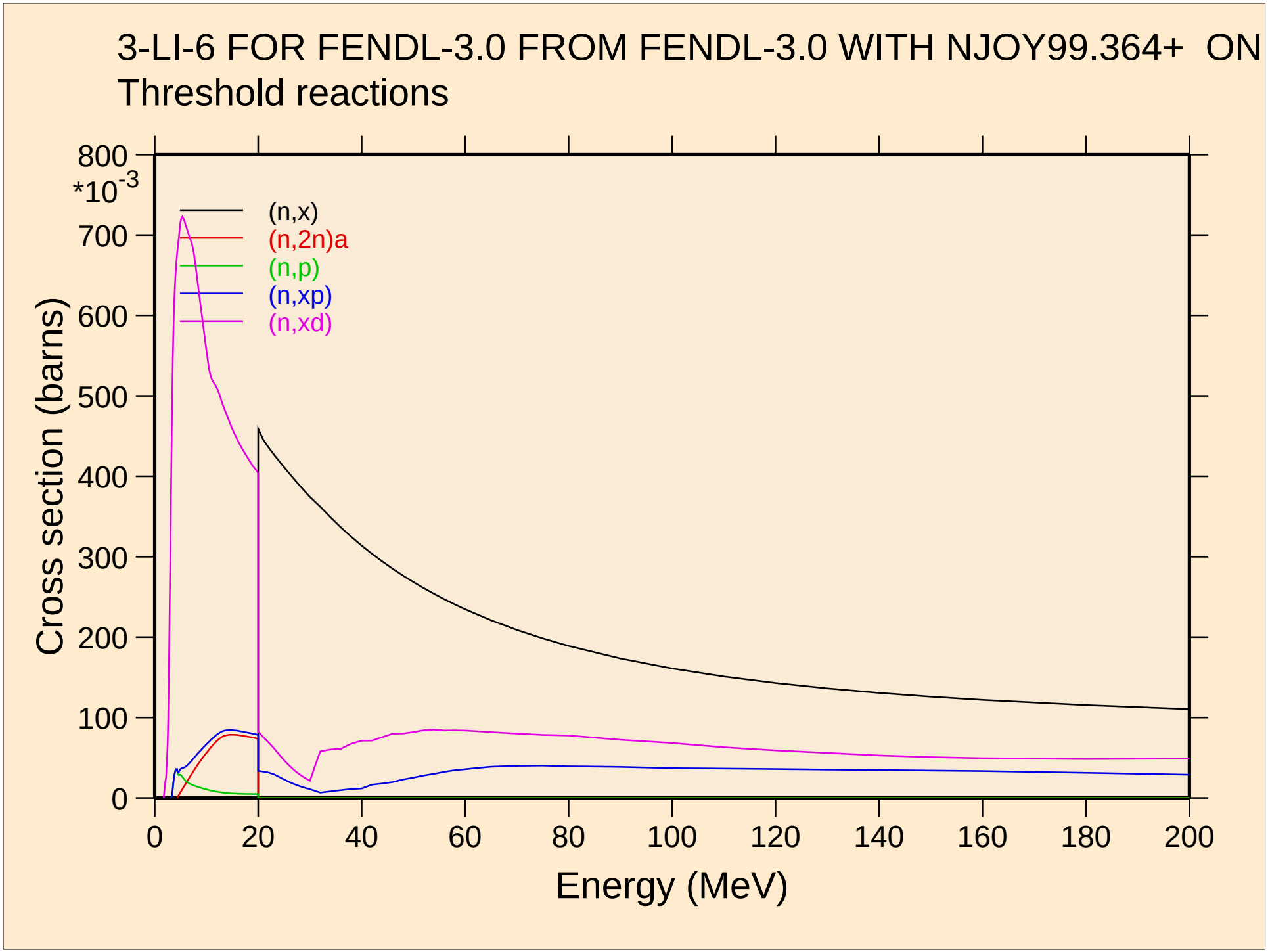

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Inelastic levels
*10-3
70
60
50
40
30
20
10
0
Cross section (barns)
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
Energy (MeV)
(n,n*11)
(n,n*12)
(n,n*13)
(n,n*14)
(n,n*15)

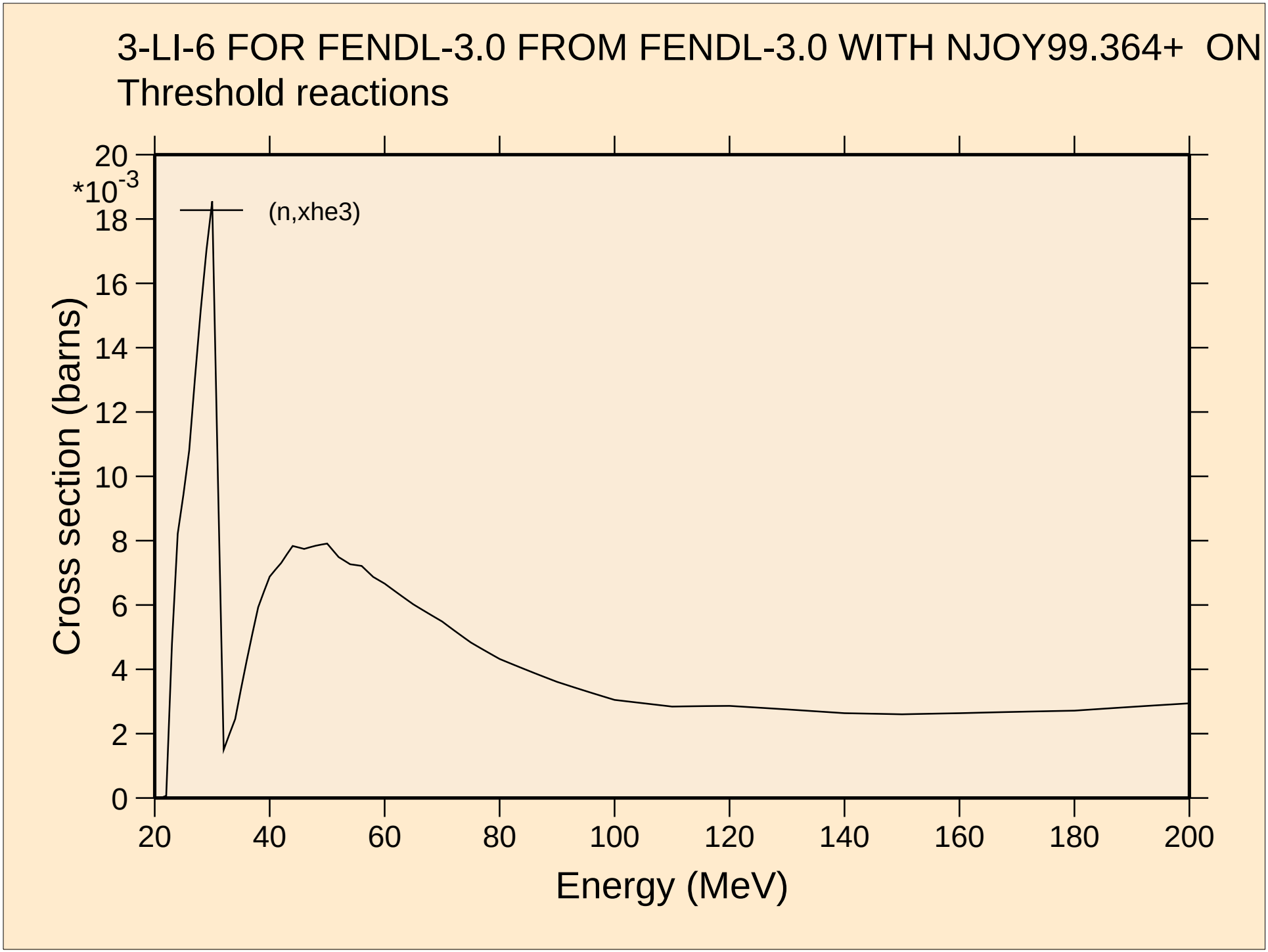

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Inelastic levels
25
*10-3
20
15
10
5
0
Cross section (barns)
9.3
9.4
9.5
9.6
9.7
9.8
9.9
10.0
Energy (MeV)
(n,n*16)
(n,n*17)
(n,n*18)
(n,n*19)
(n,n*20)

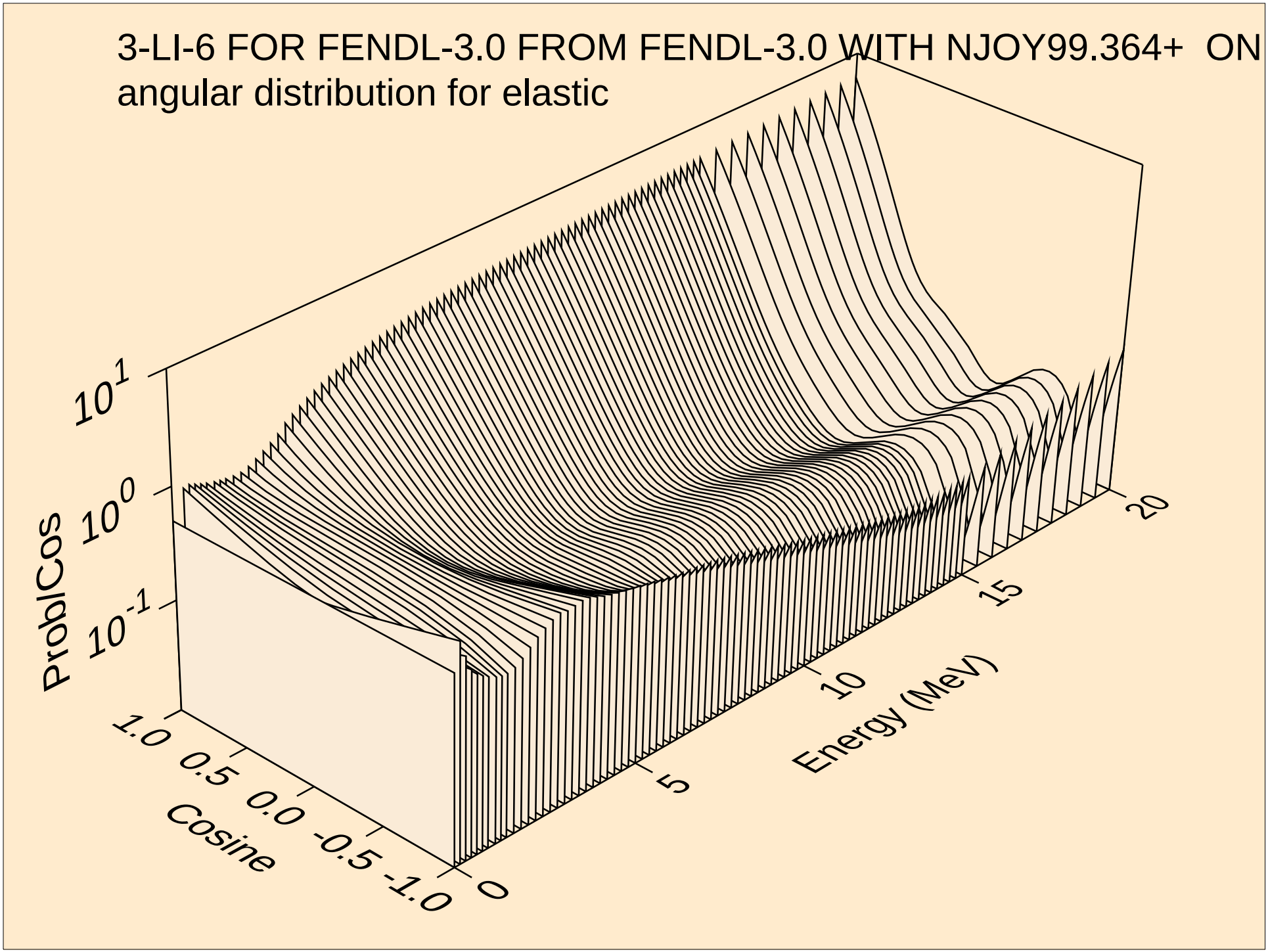

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Inelastic levels
14
*10-3
12
10
8
6
4
2
0
Cross section (barns)
0
20
Energy (MeV)
(n,n*21)
(n,n*22)
(n,n*23)
(n,n*24)
(n,n*25)

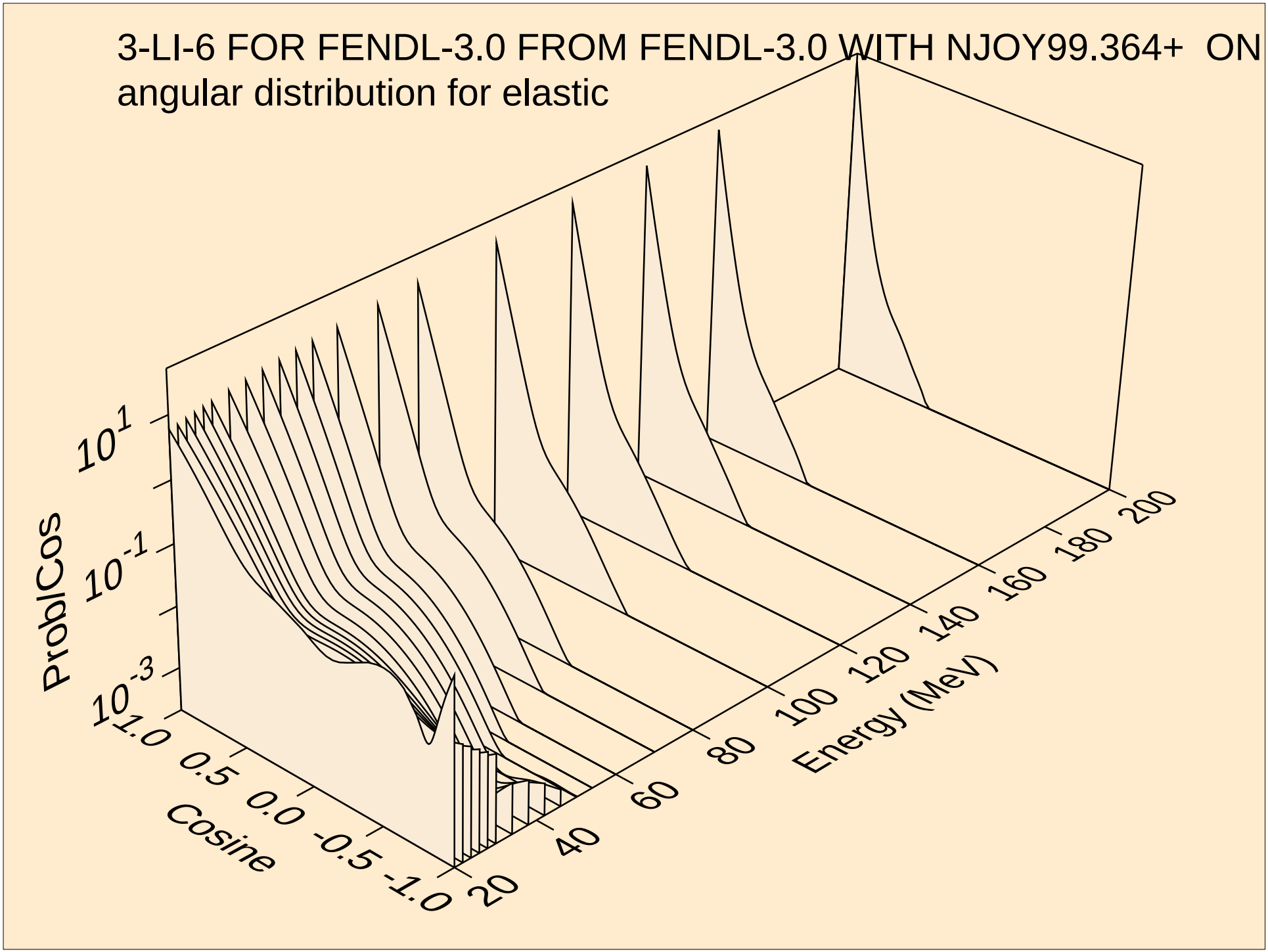

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Inelastic levels
10
*10-3
8
6
4
2
0
Cross section (barns)
0
20
Energy (MeV)
(n,n*26)
(n,n*27)
(n,n*28)
(n,n*29)
(n,n*30)

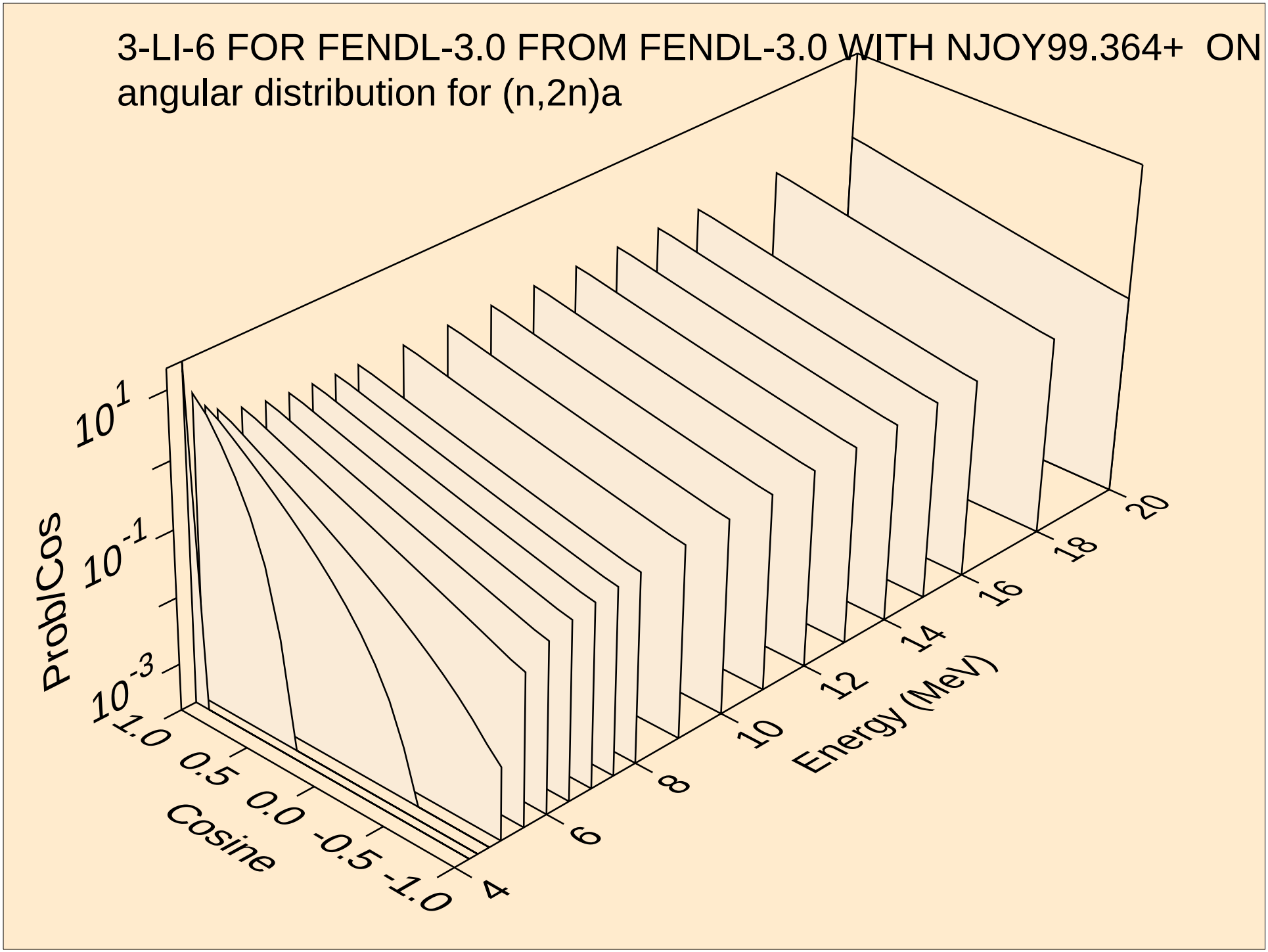

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Inelastic levels
*10-3
7
6
5
4
3
2
1
0
Cross section (barns)
(n,n*31)
0
20
Energy (MeV)

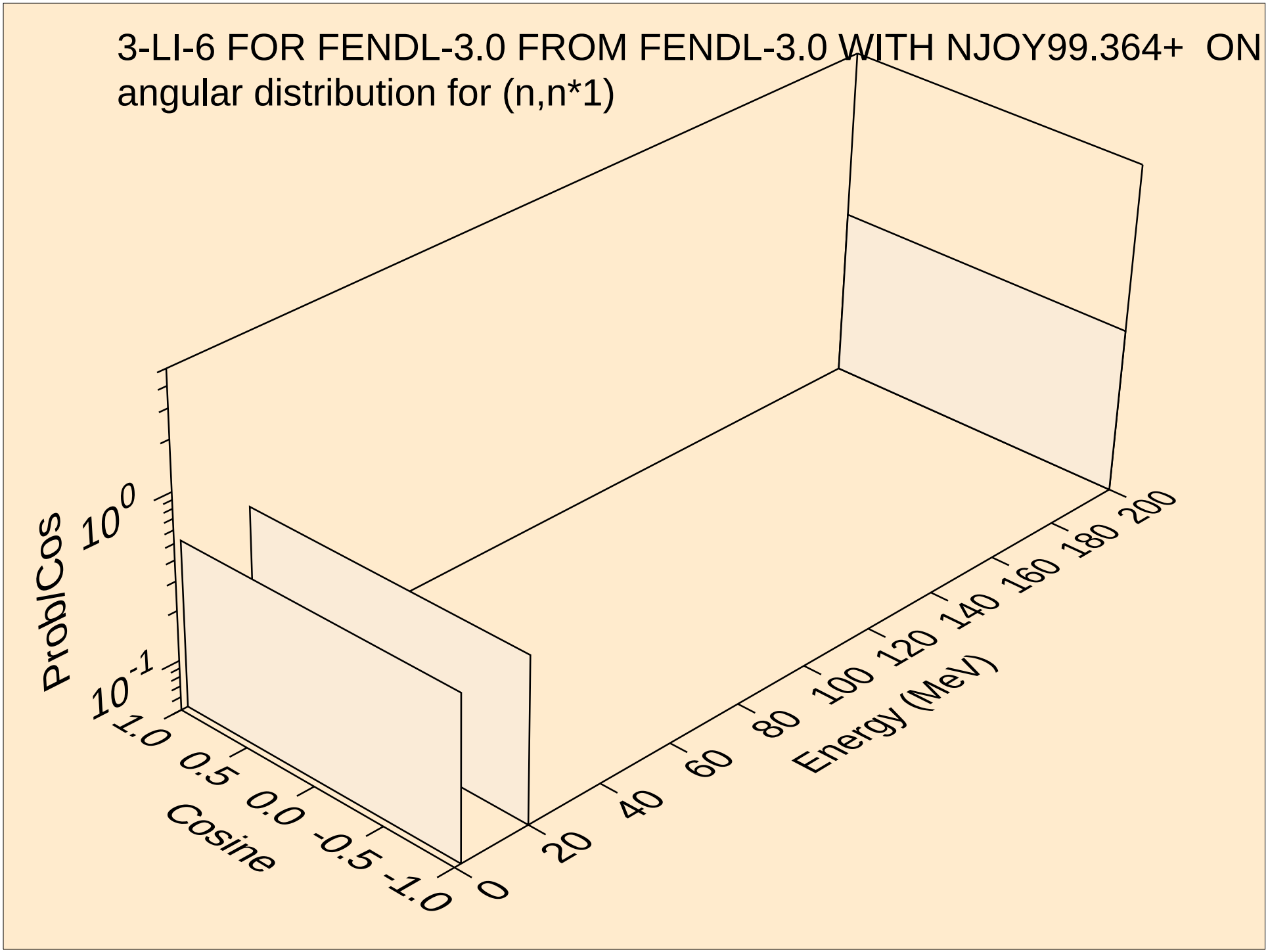

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Threshold reactions
800
*10-3
700
600
500
400
300
200
100
0
Cross section (barns)
(n,x)
(n,2n)a
(n,p)
(n,xp)
(n,xd)
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

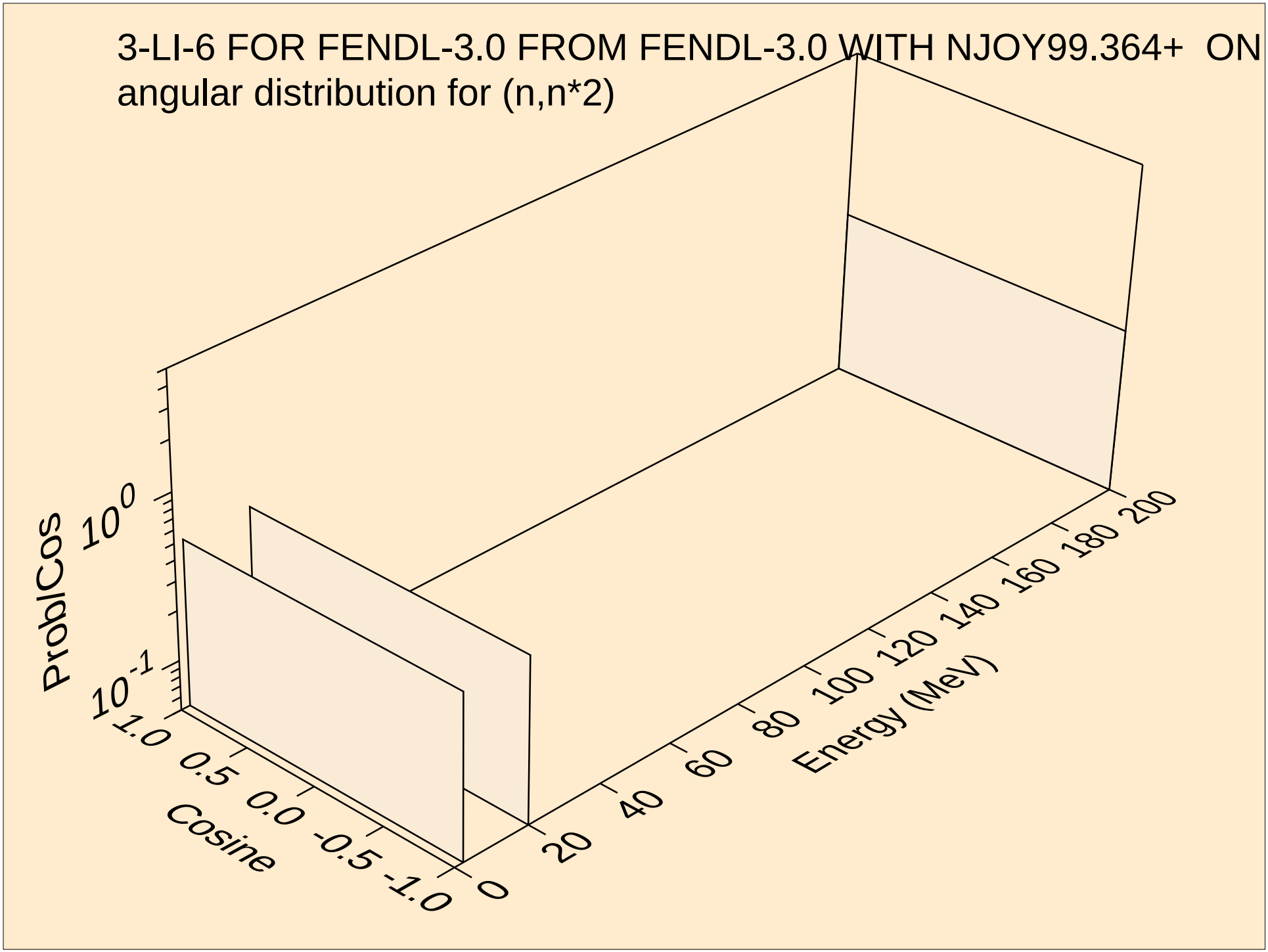

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Threshold reactions
*10-3
(n,xhe3)
Cross section (barns)
Energy (MeV)
0
2
4
6
8
10
12
14
16
18
20
20
40
60
80
100
120
140
160
180
200

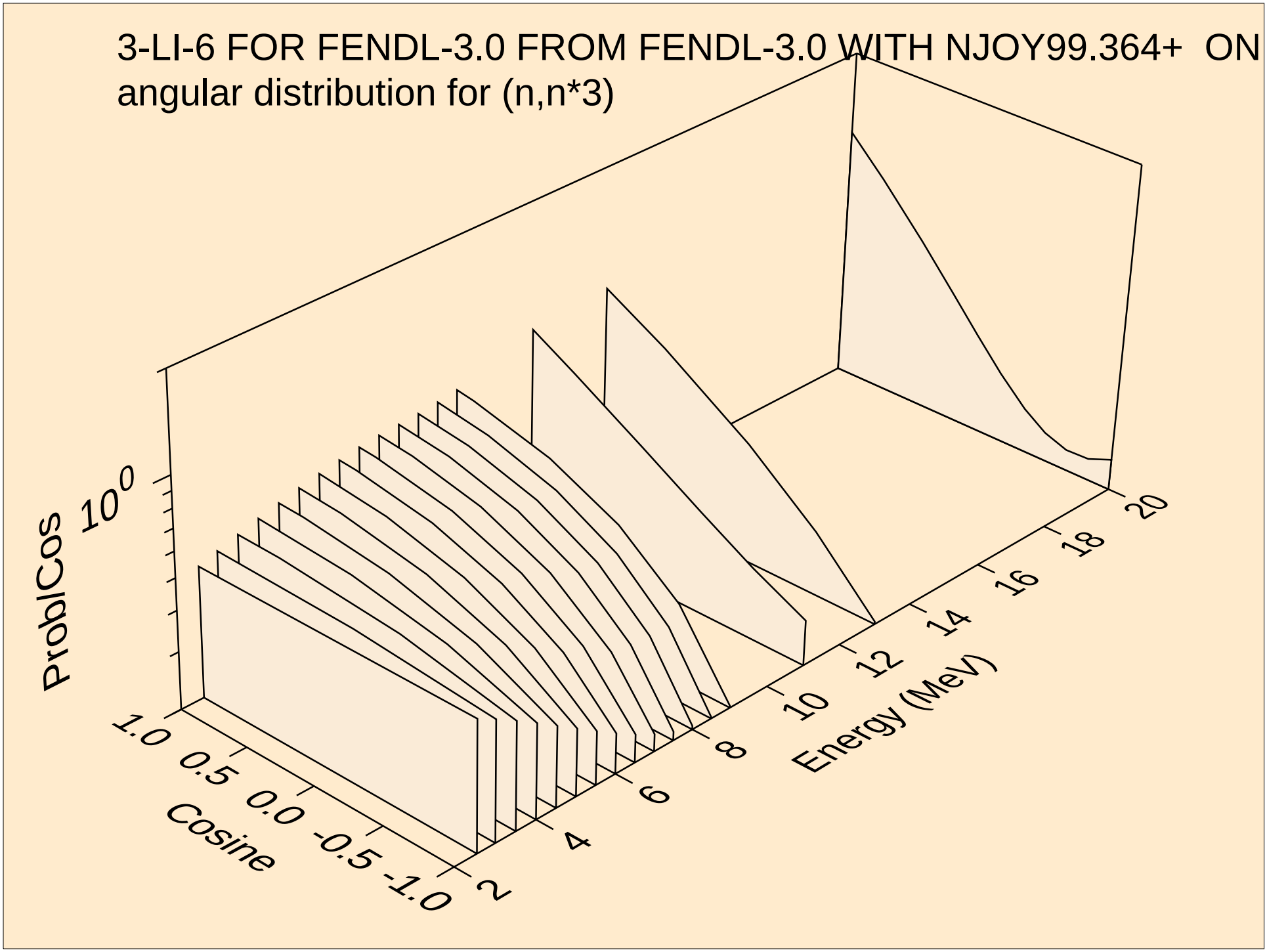

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for elastic
ProbICos
10^1
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

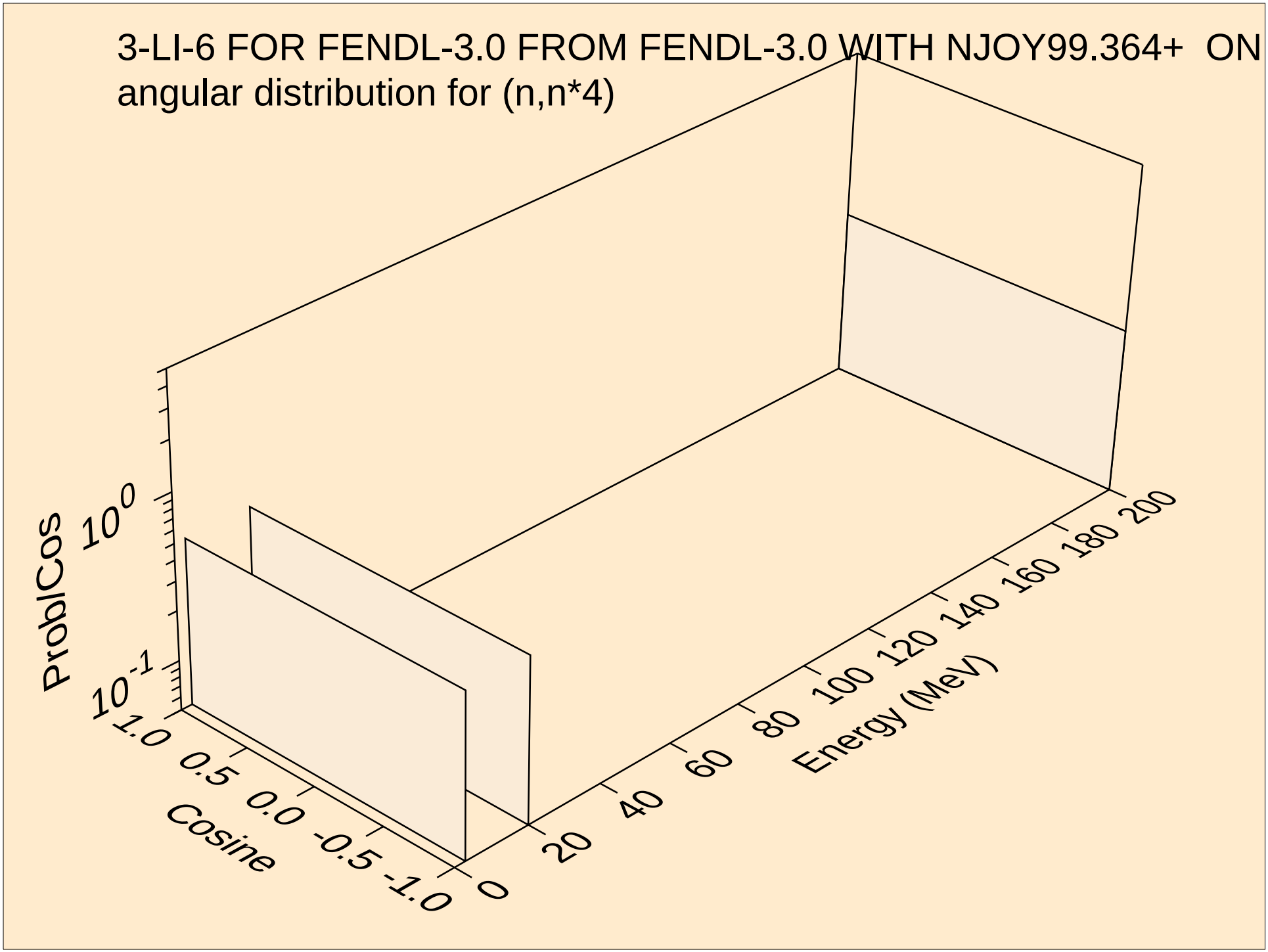

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for elastic
ProblCos
10^{1}
10^{-1}
10^{-3}
1.0
0.5
0.0
-0.5
-1.0
Cosine
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

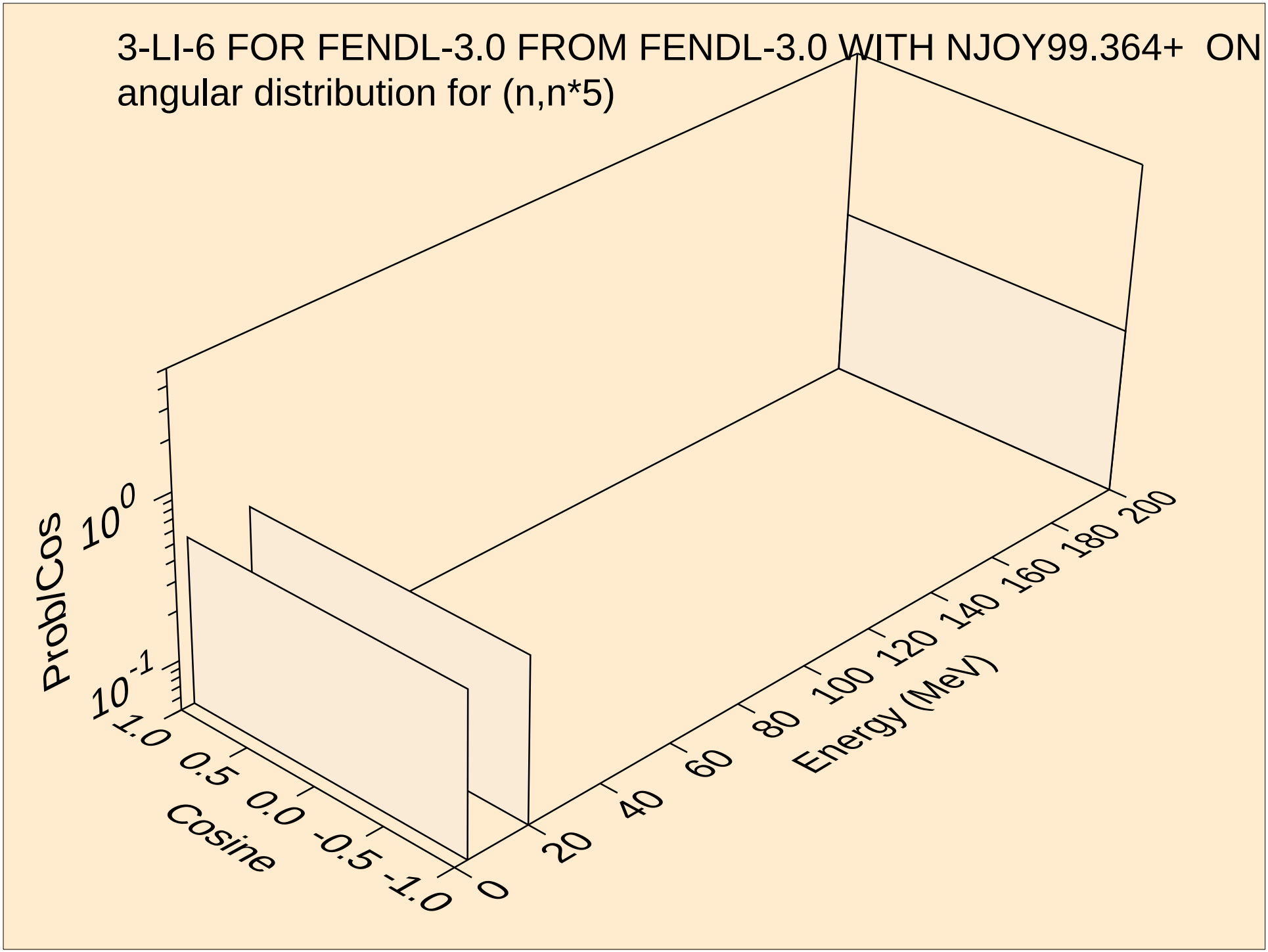

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,2n)a
ProbICos
10^1
10^-1
10^-3
1.0
0.5
0.0
-0.5
-1.0
Cosine
4
6
8
10
12
14
16
18
20
Energy (MeV)

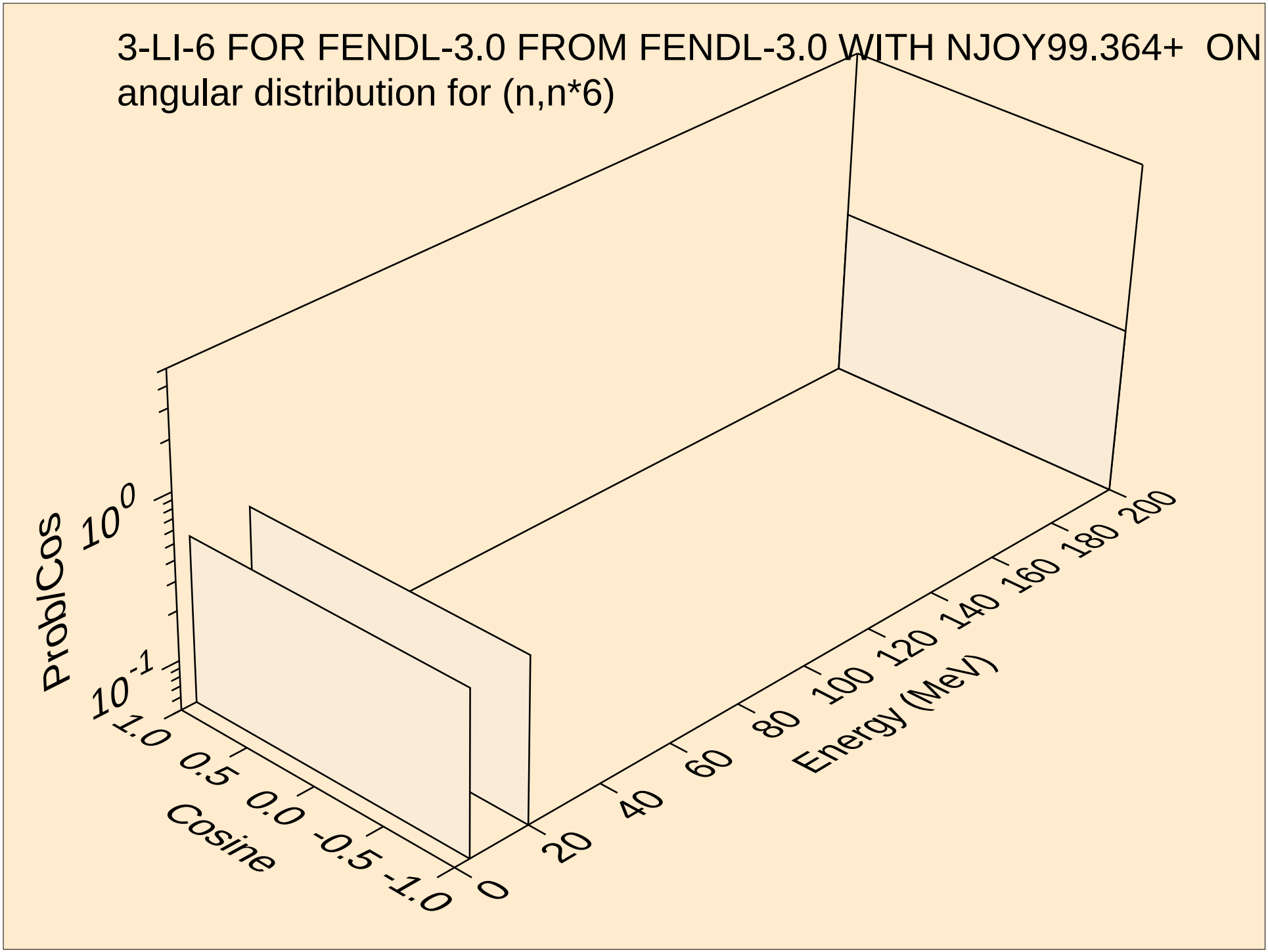

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*1)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

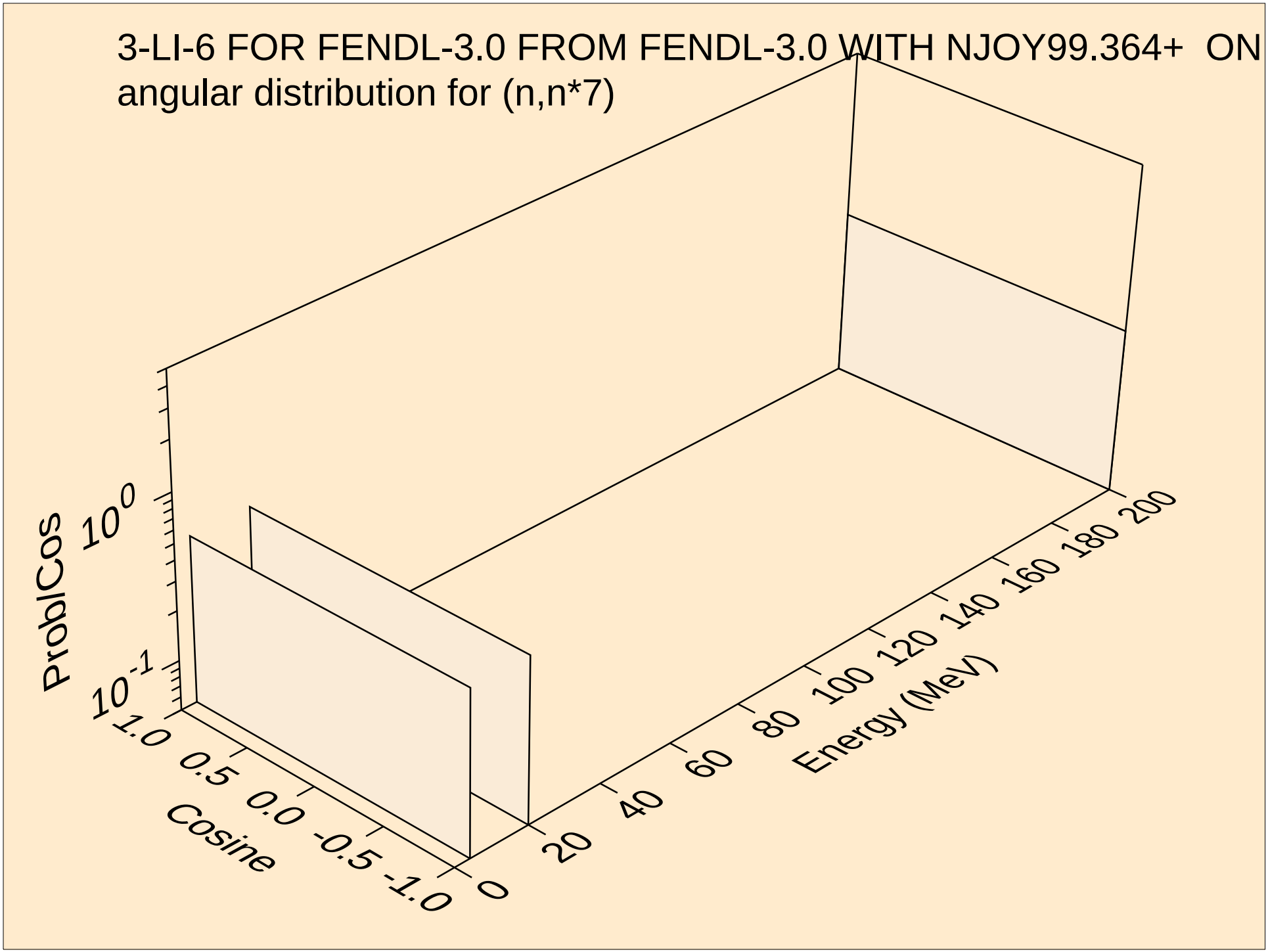

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*2)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

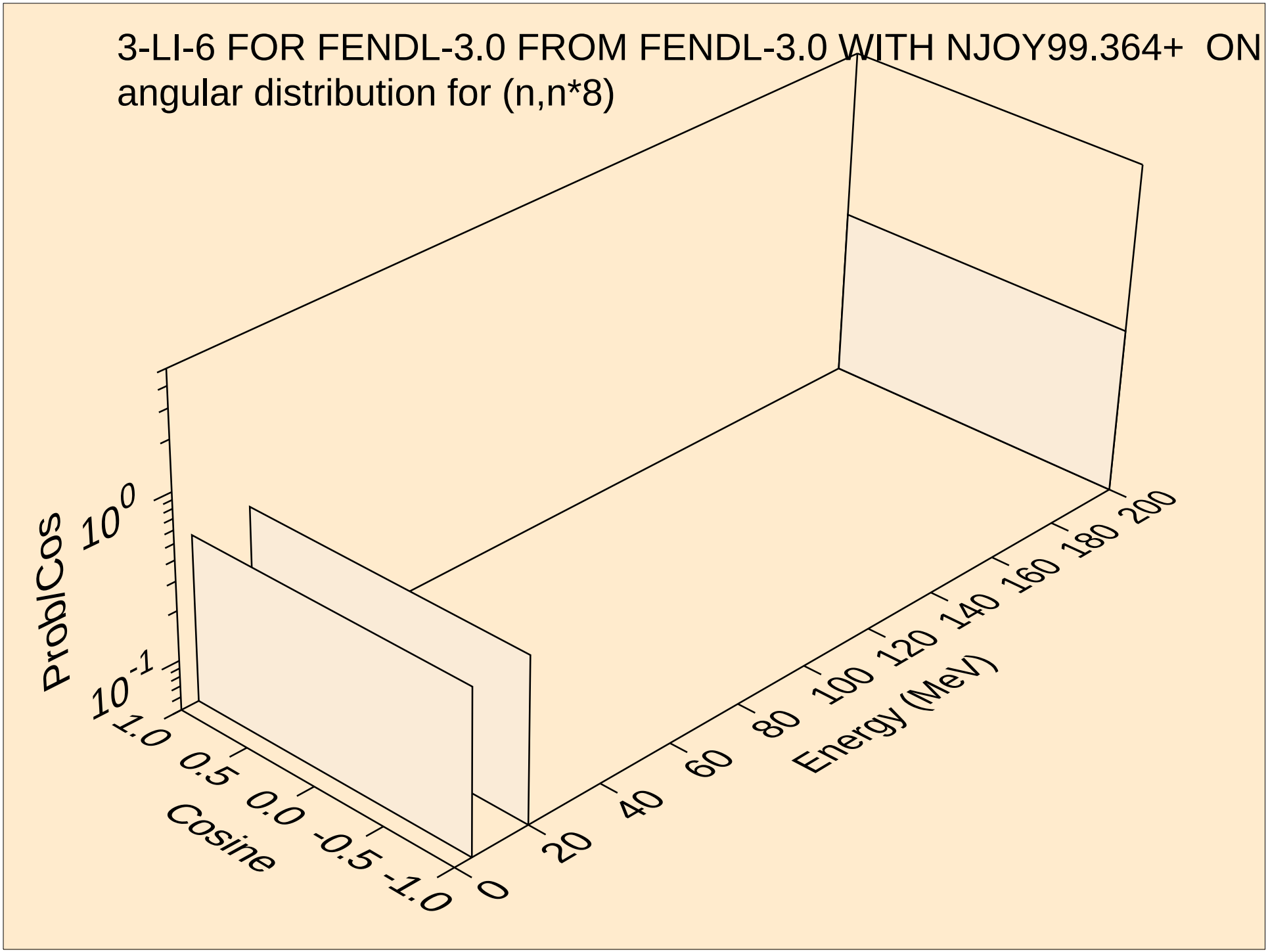

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*3)
ProblCos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

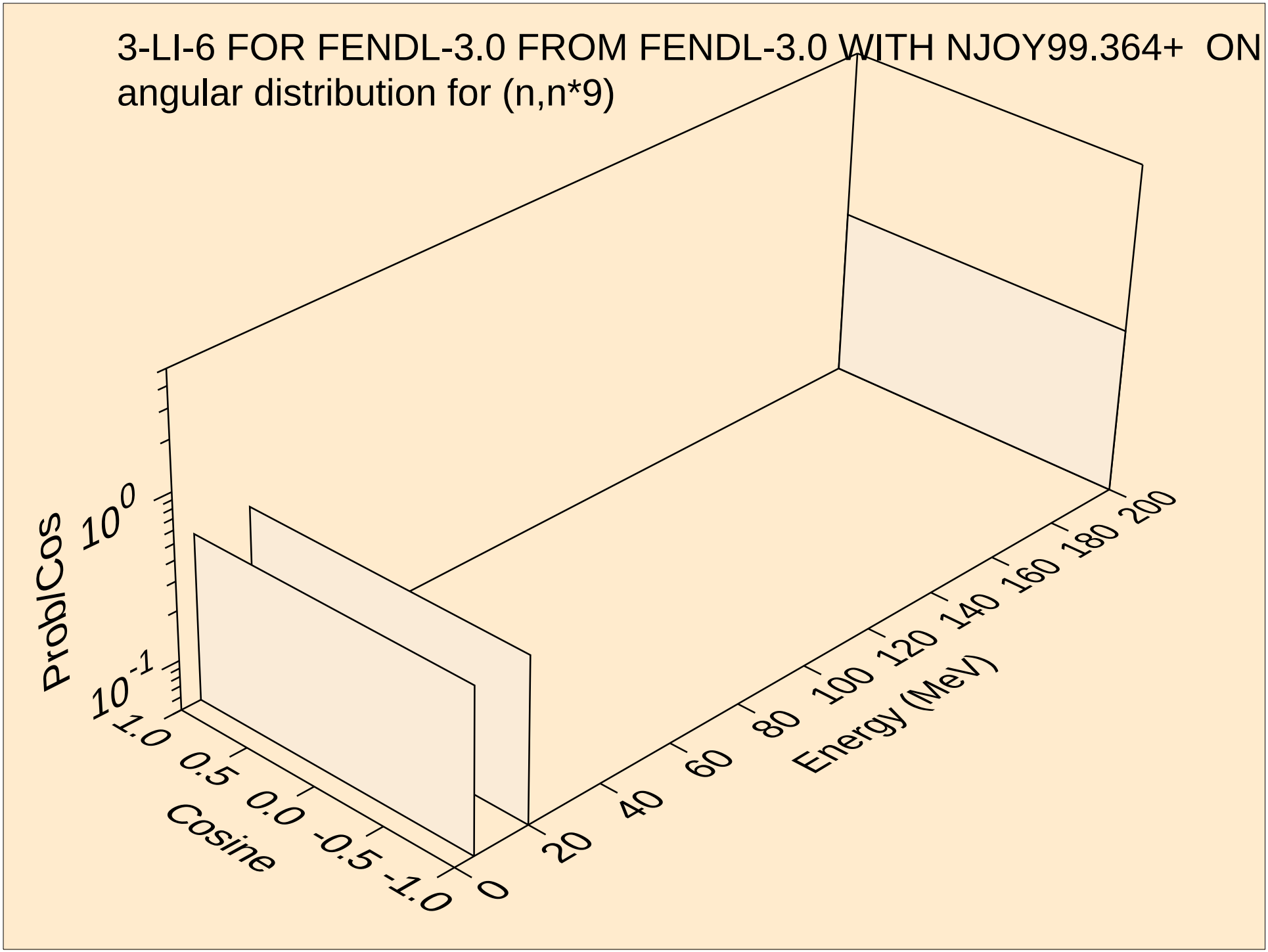

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*4)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

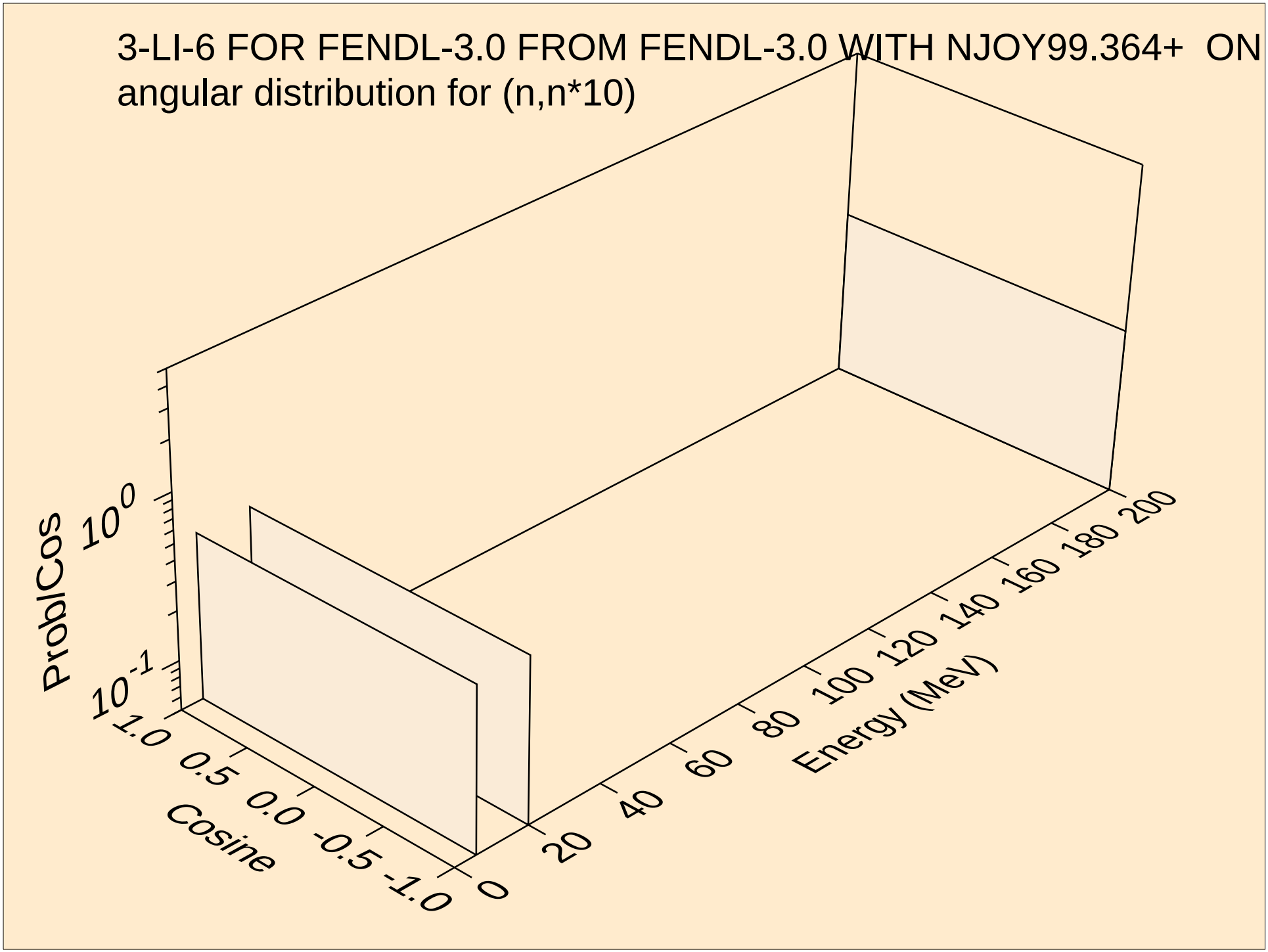

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*5)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

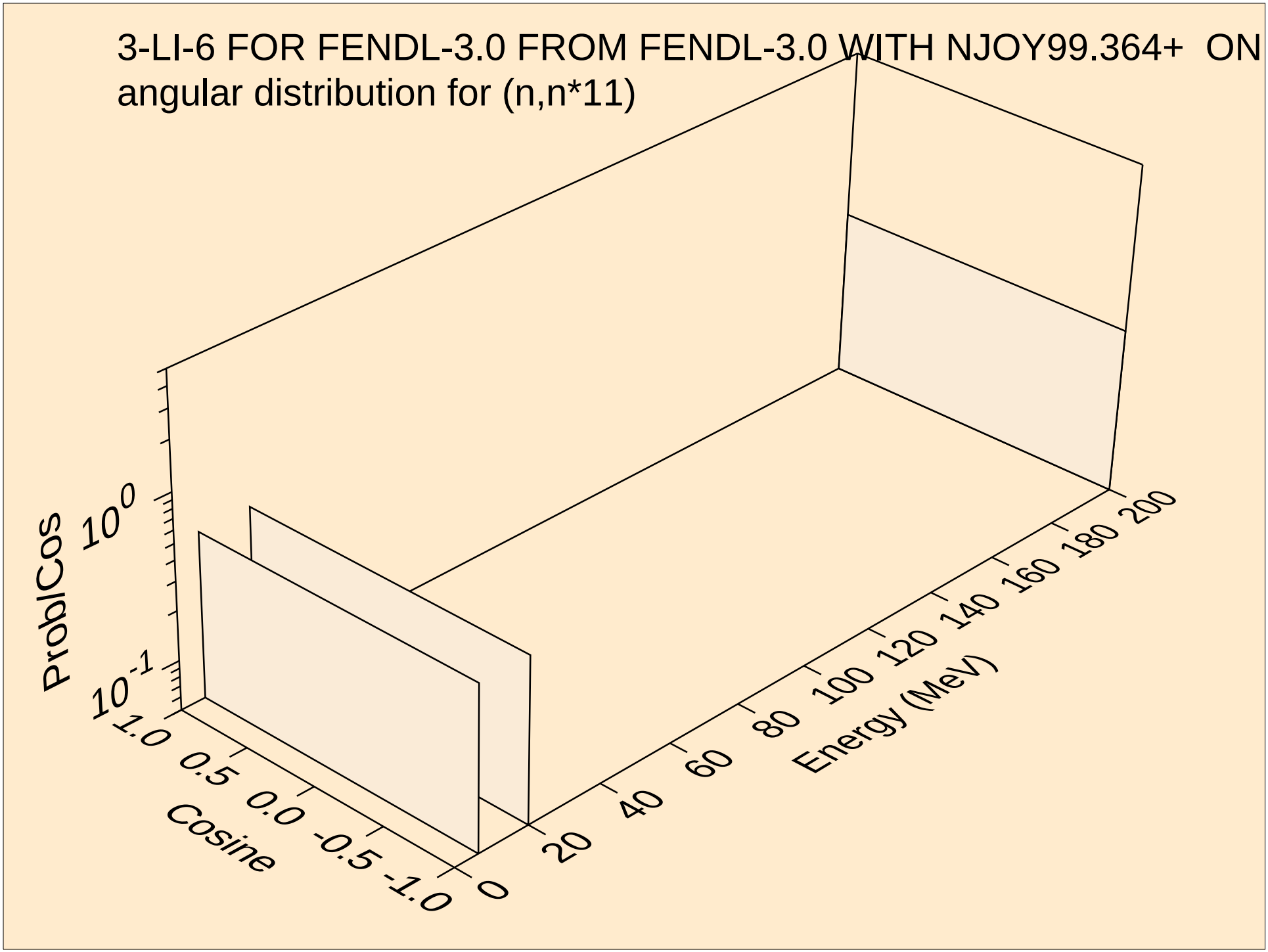

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*6)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

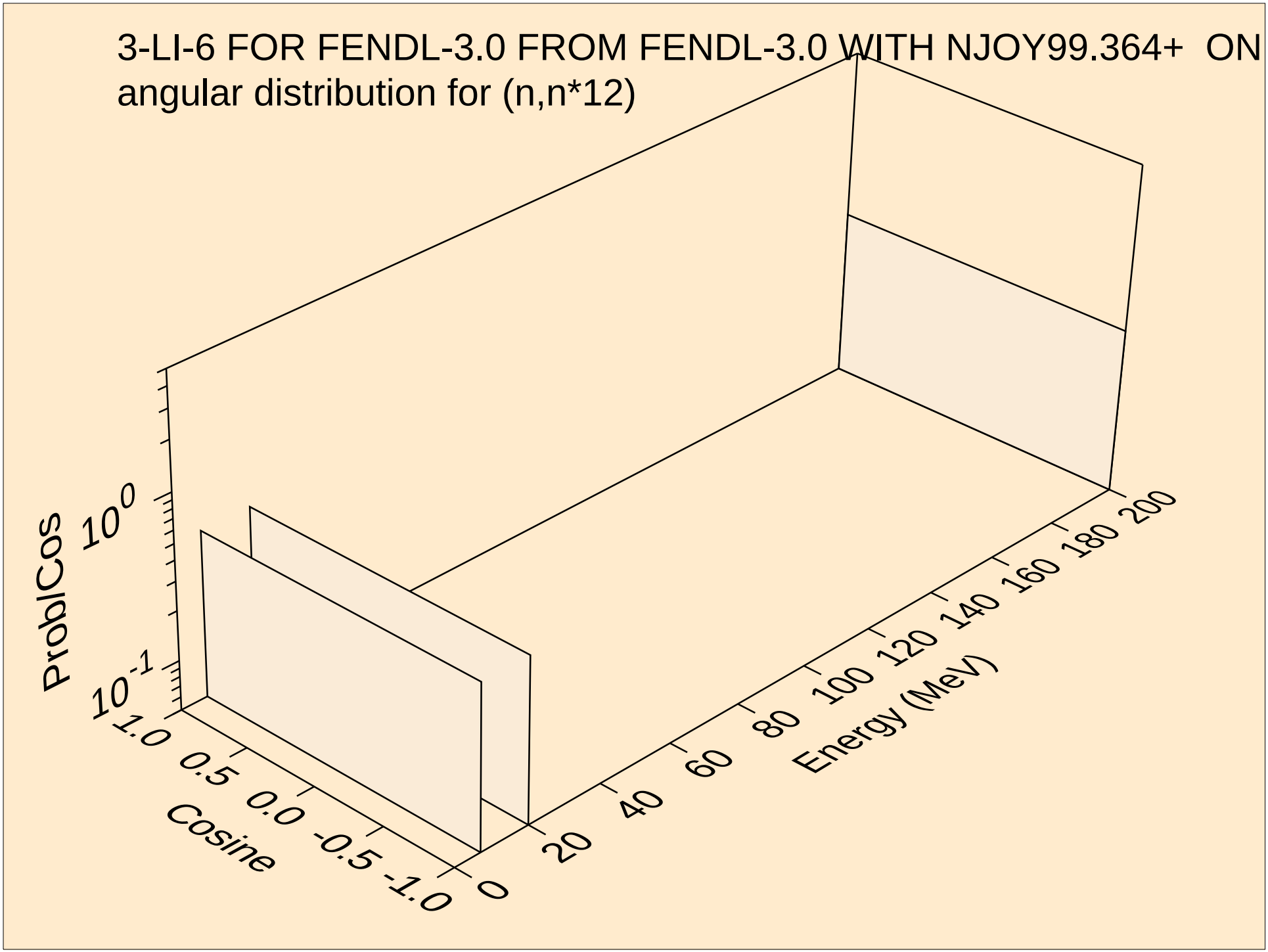

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*7)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

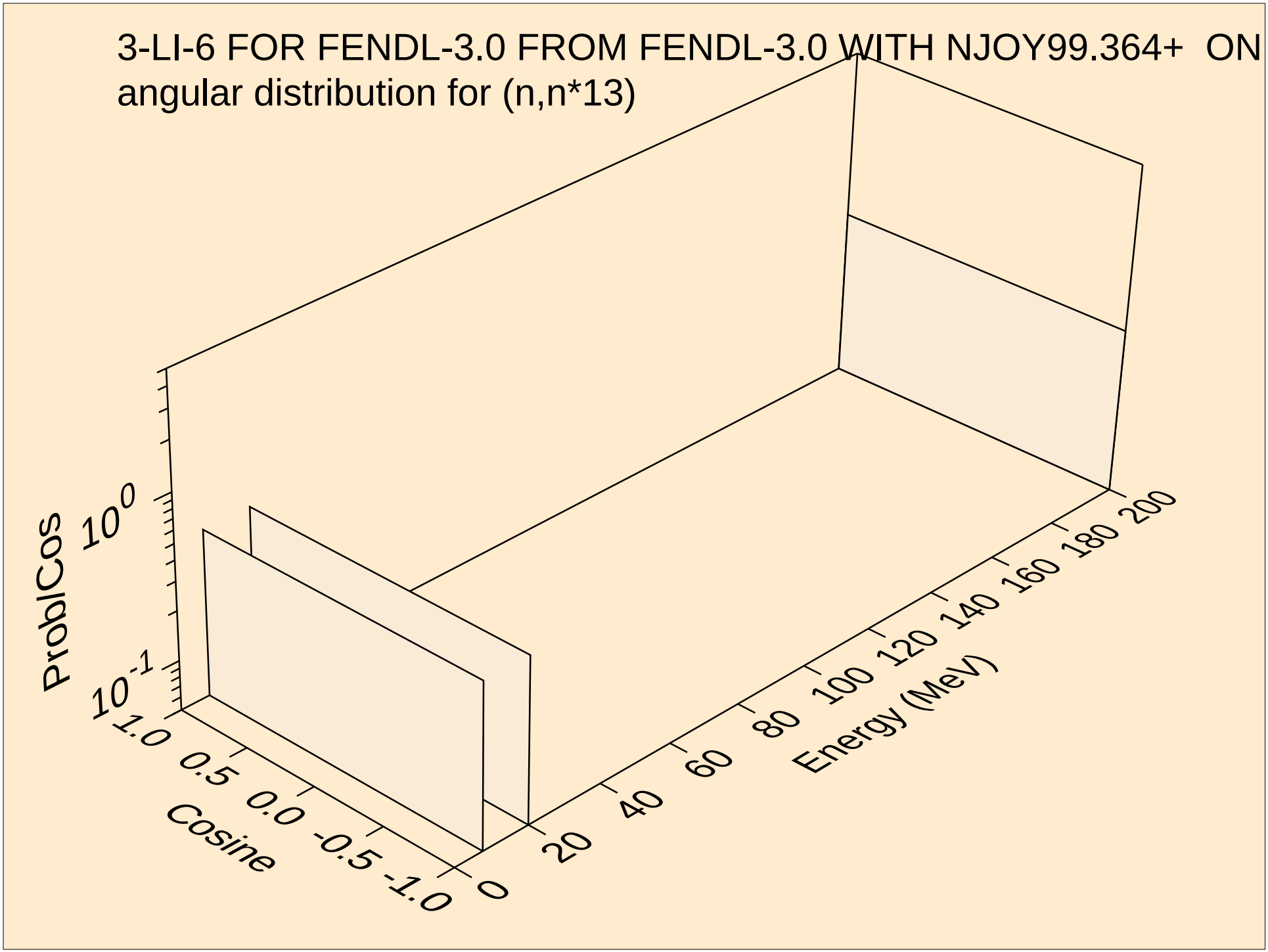

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*8)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

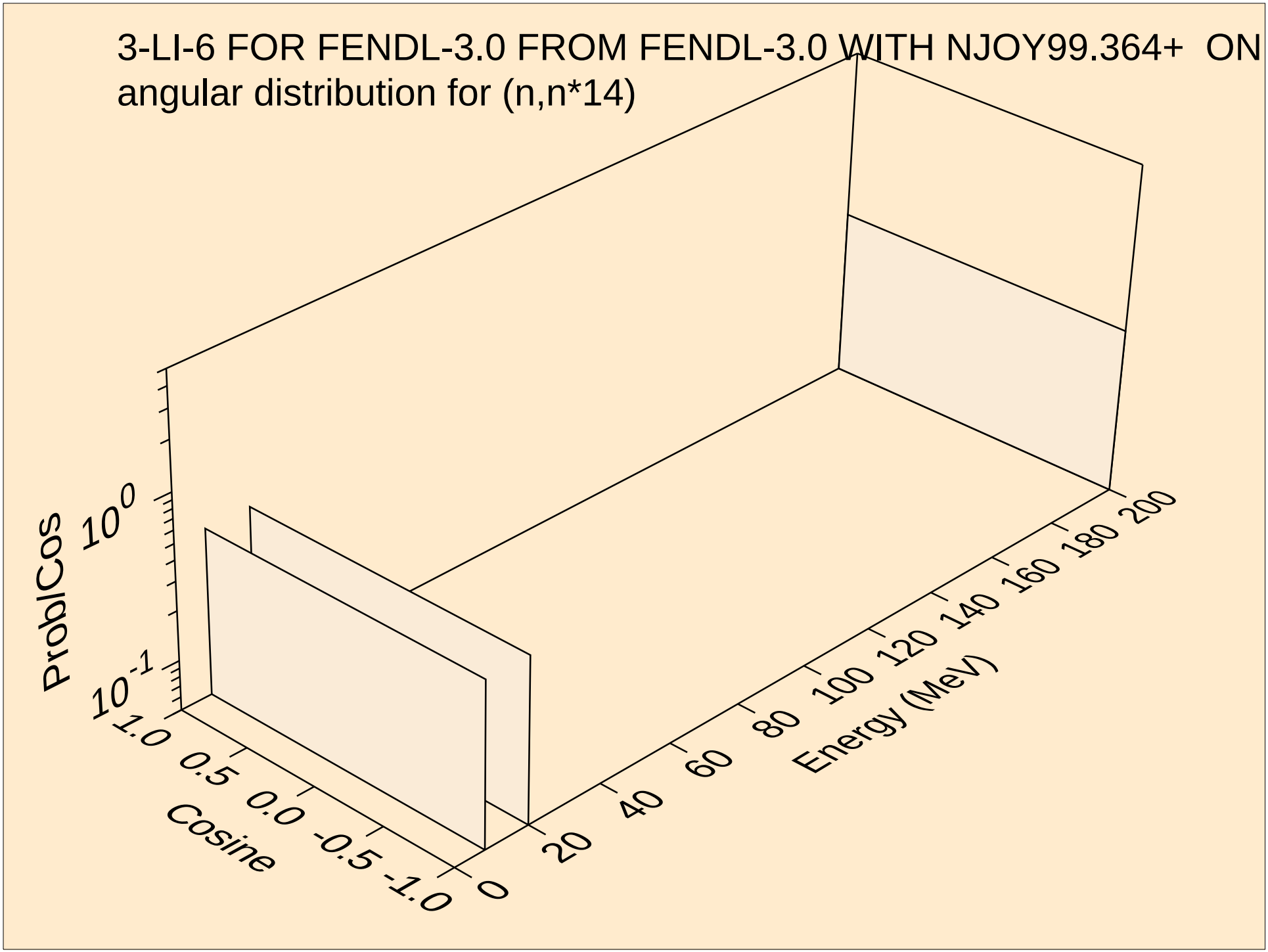

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*9)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

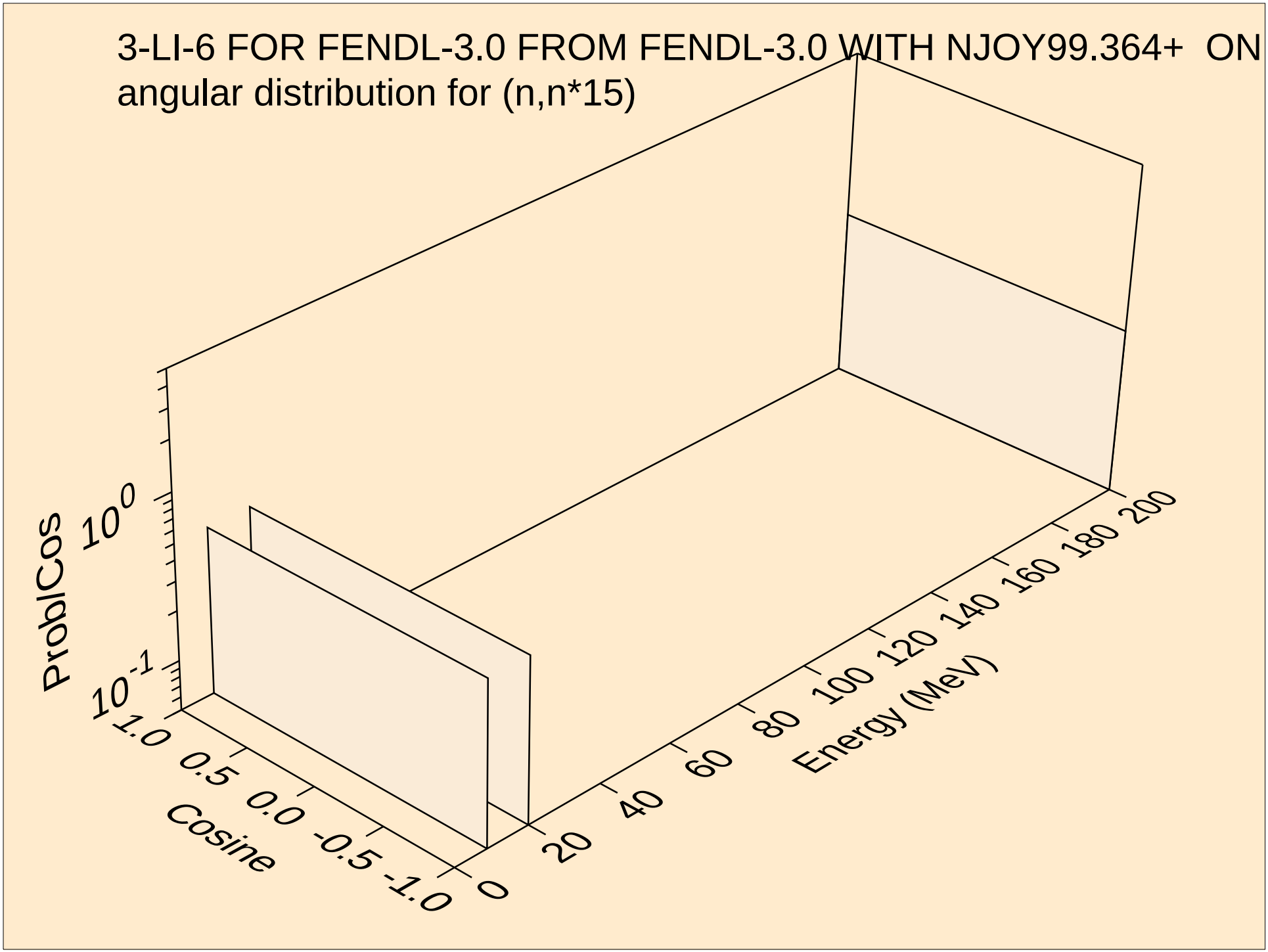

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*10)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

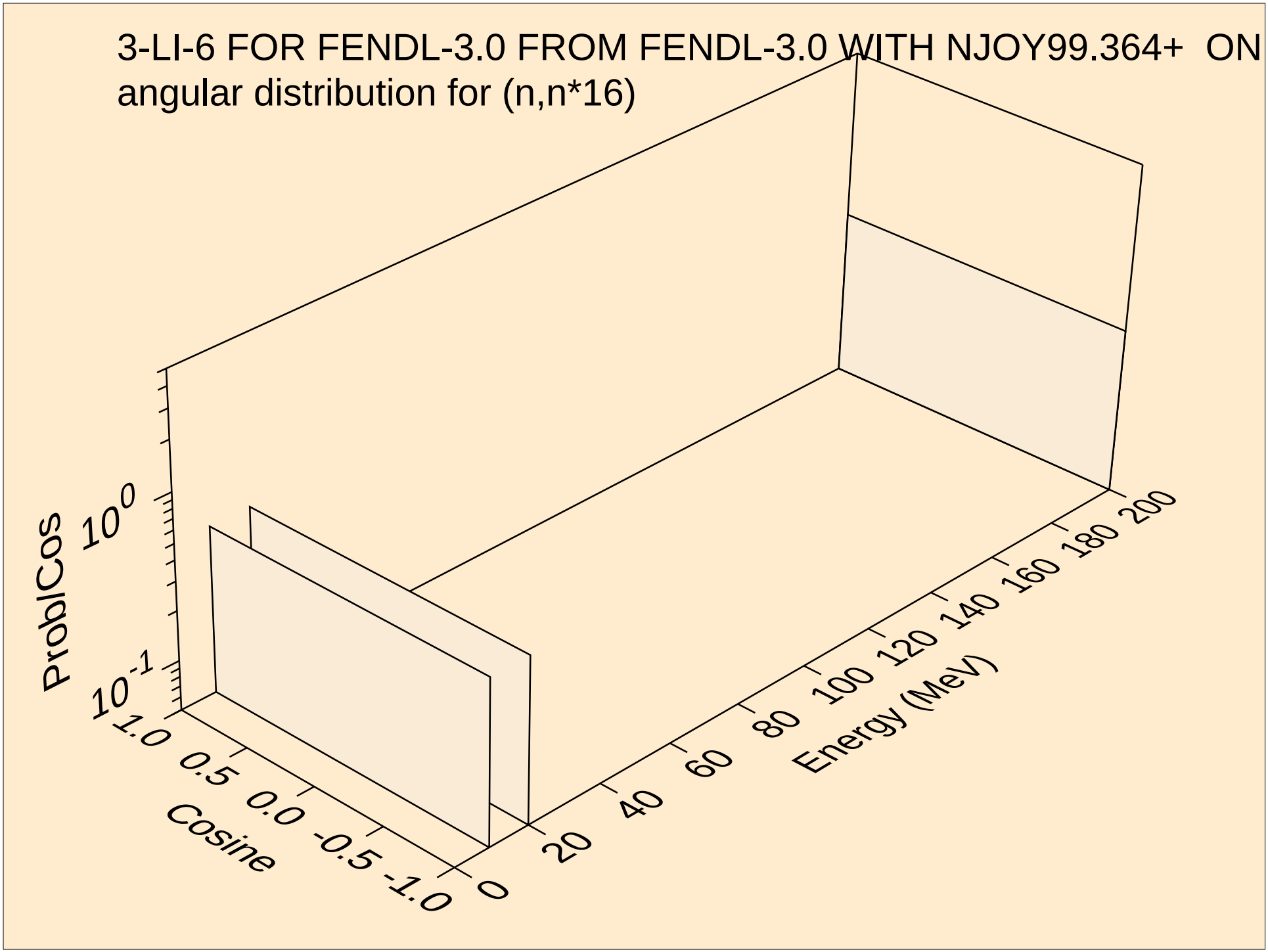

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*11)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

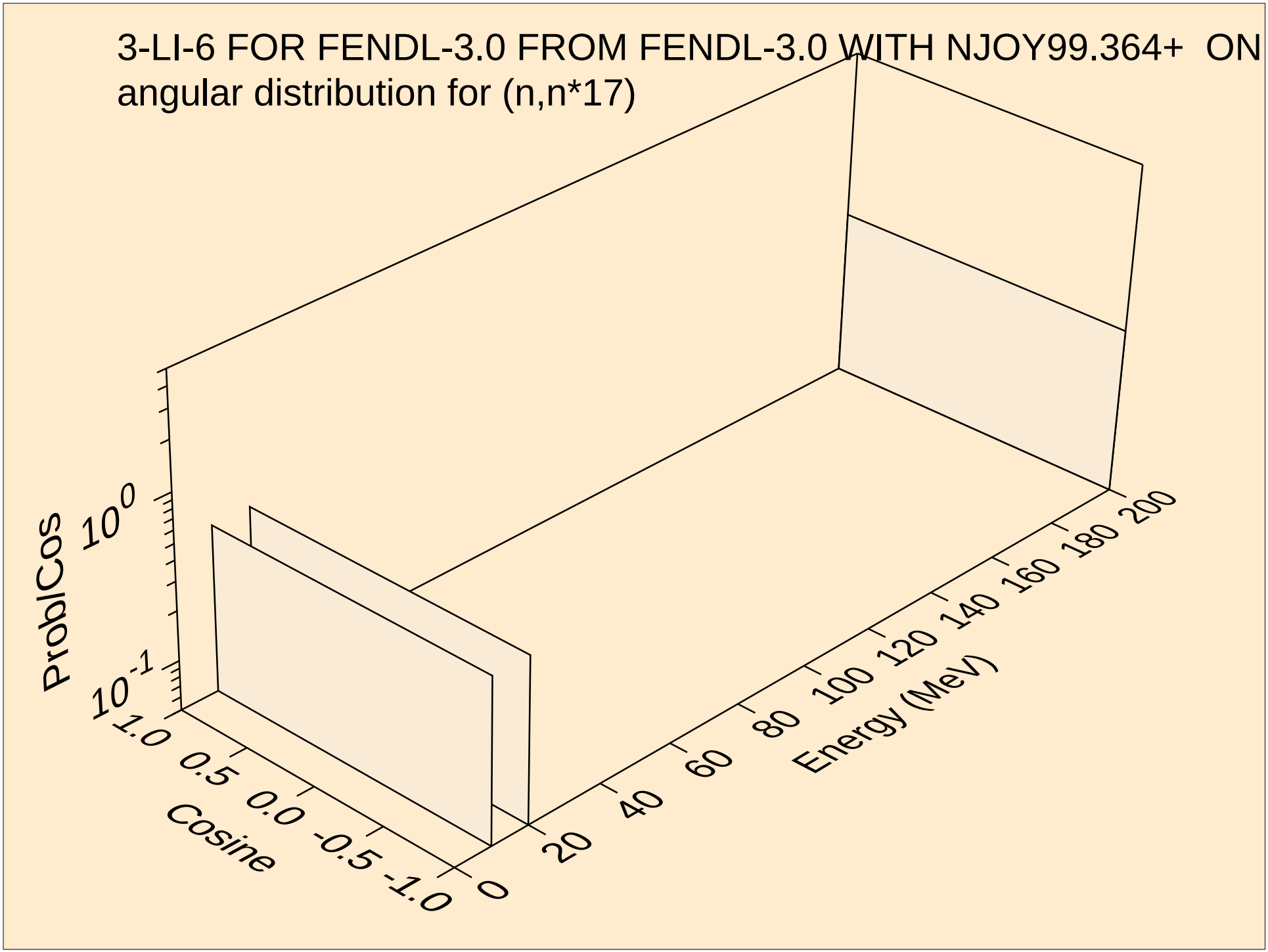

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*12)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

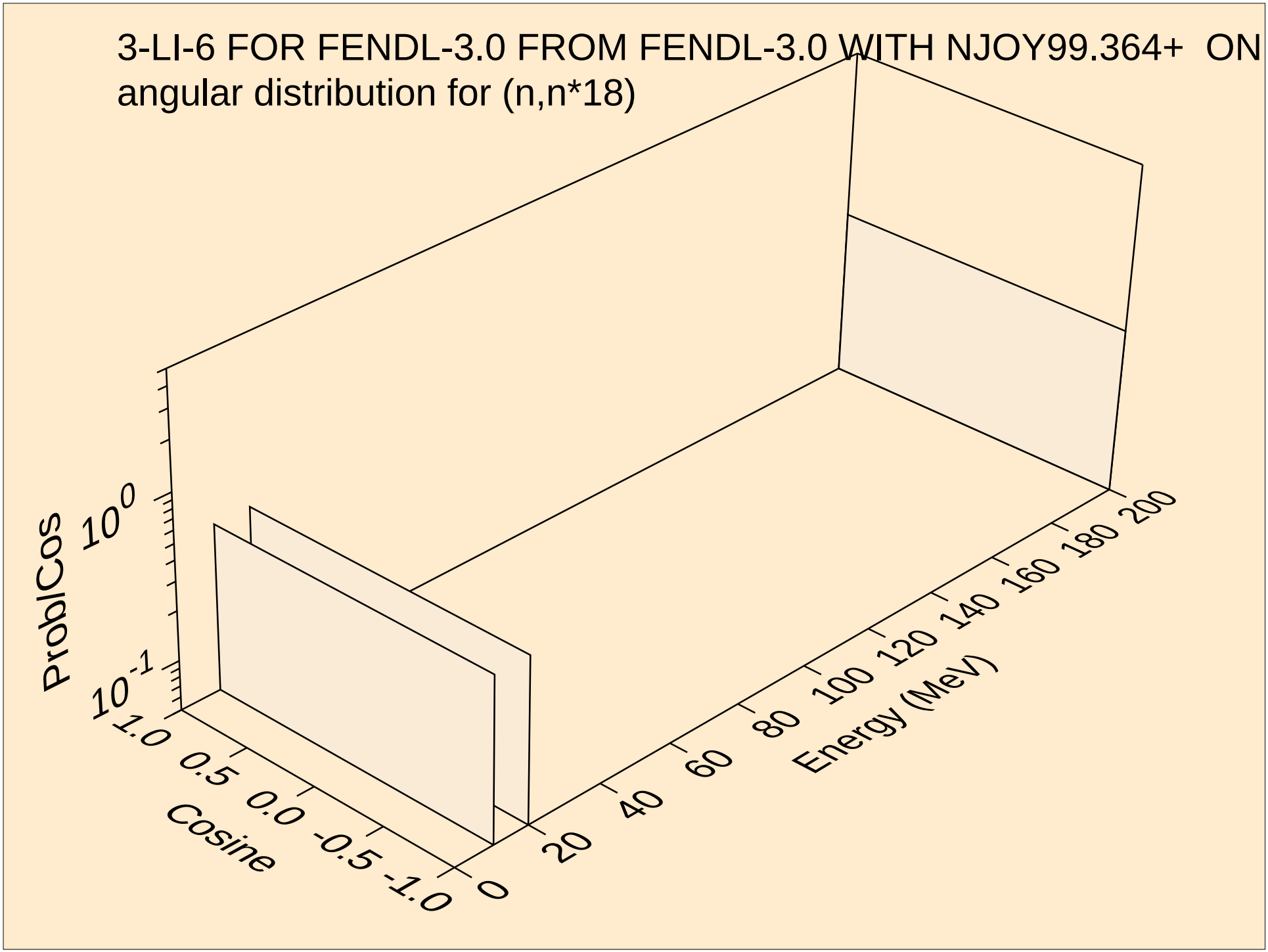

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*13)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

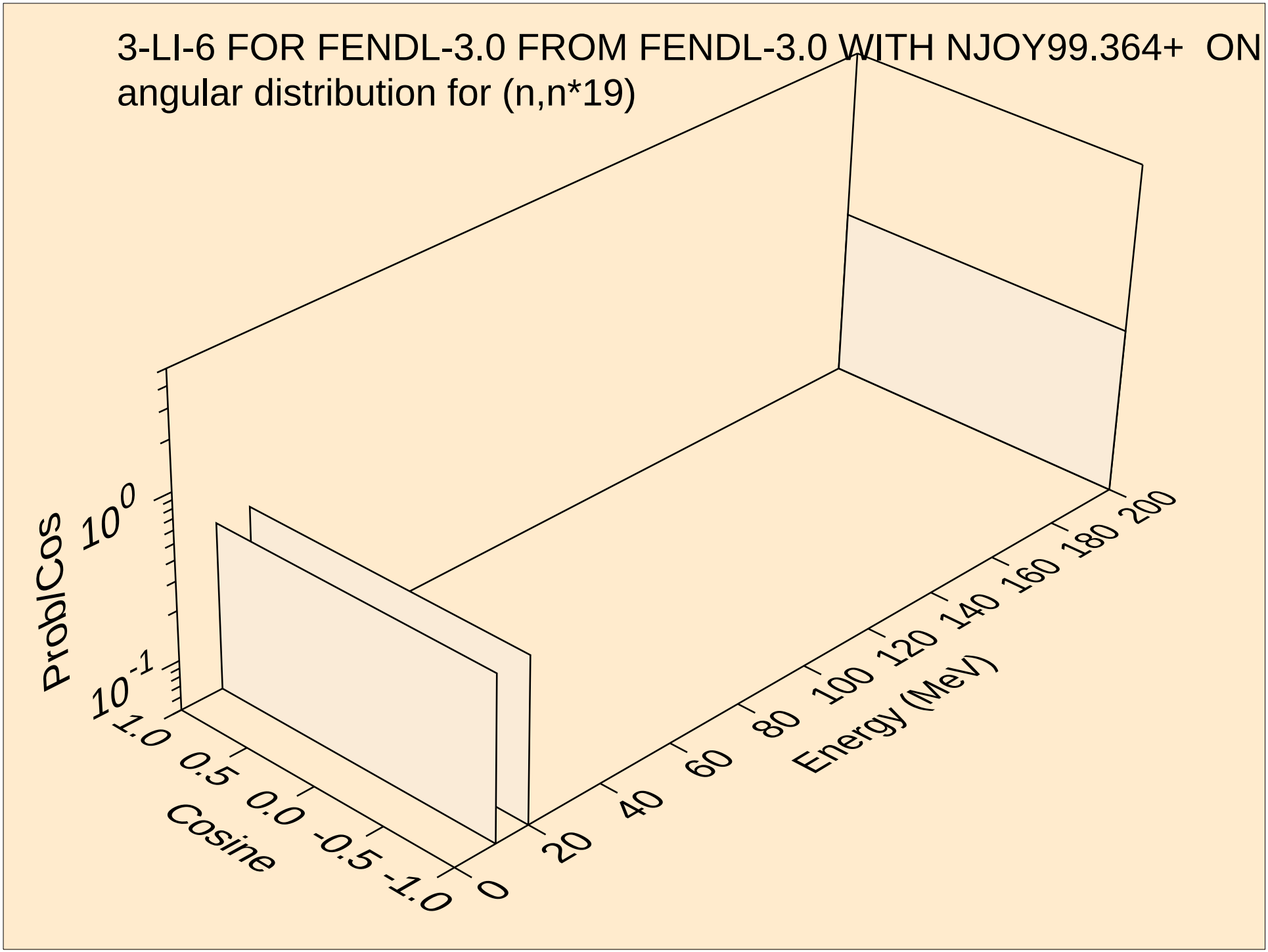

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*14)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

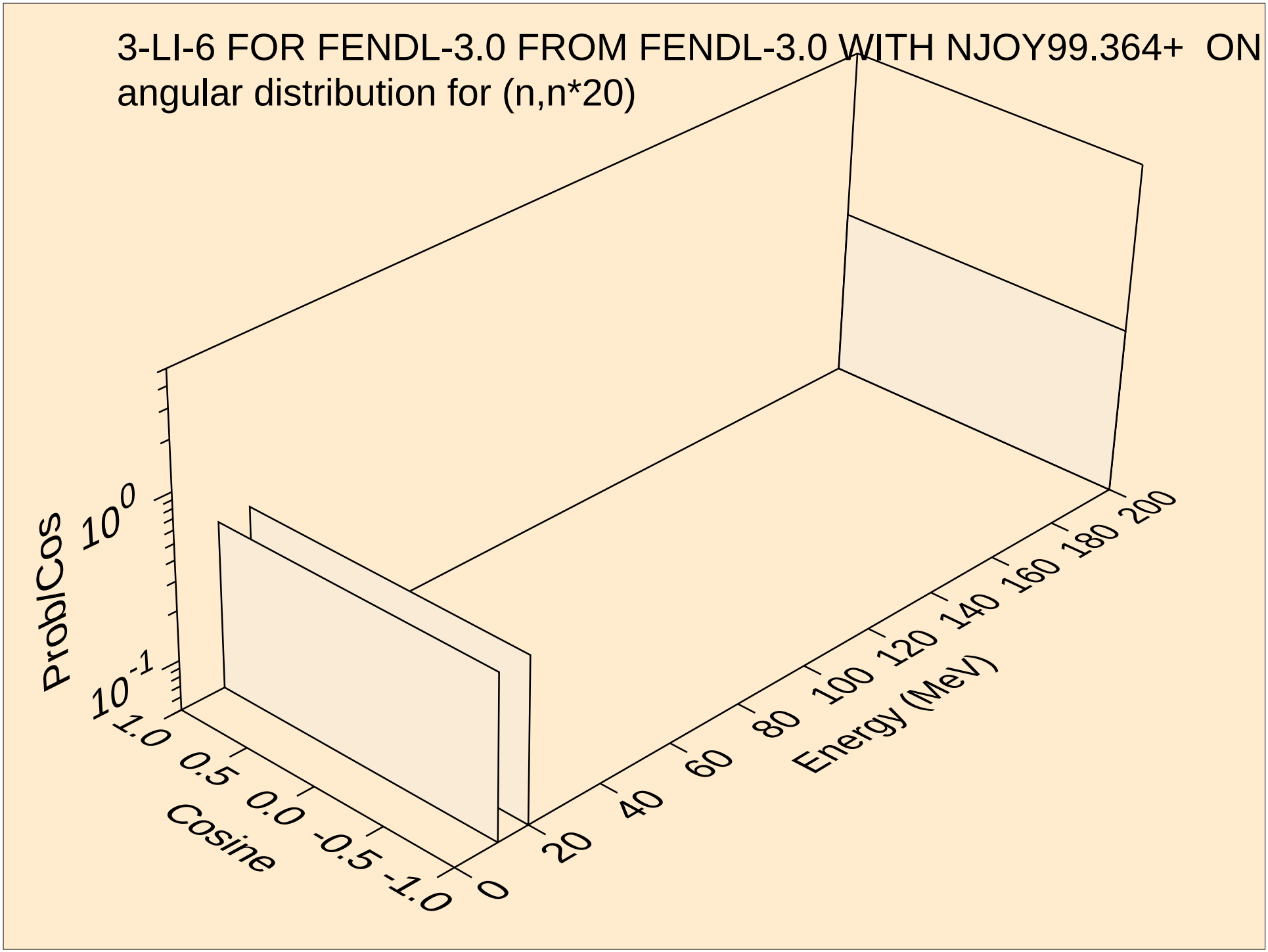

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*15)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

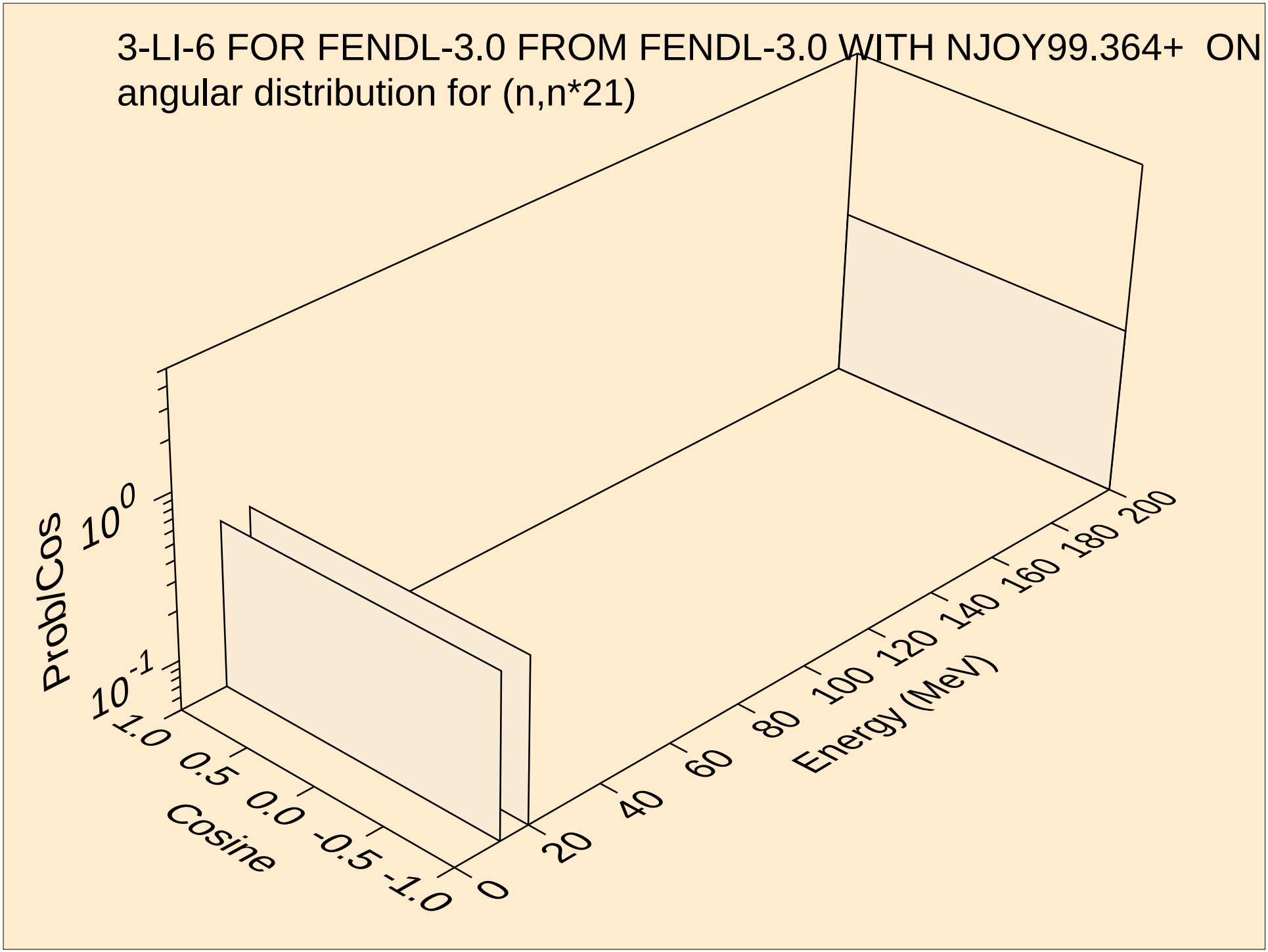

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*16)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

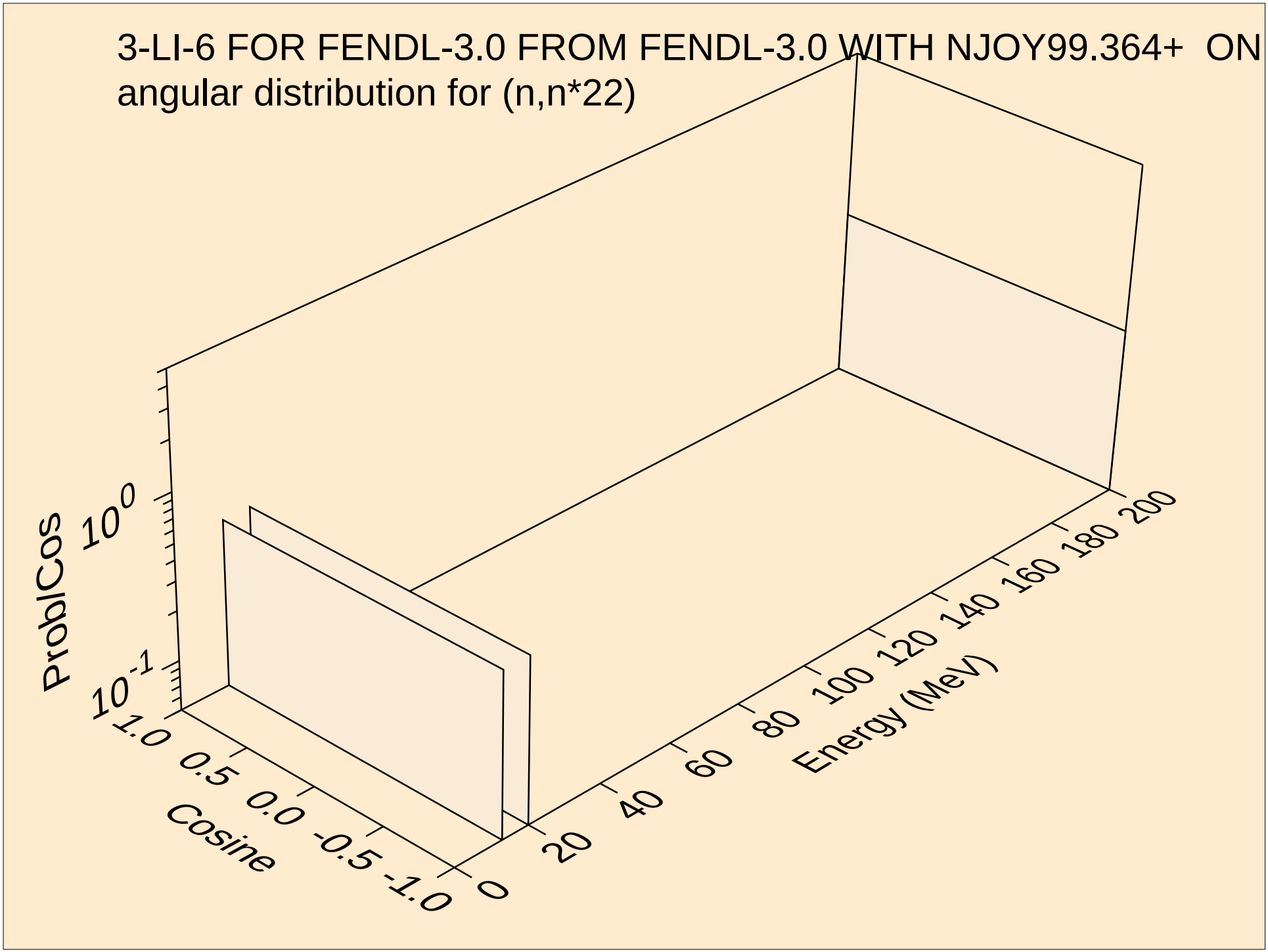

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*17)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

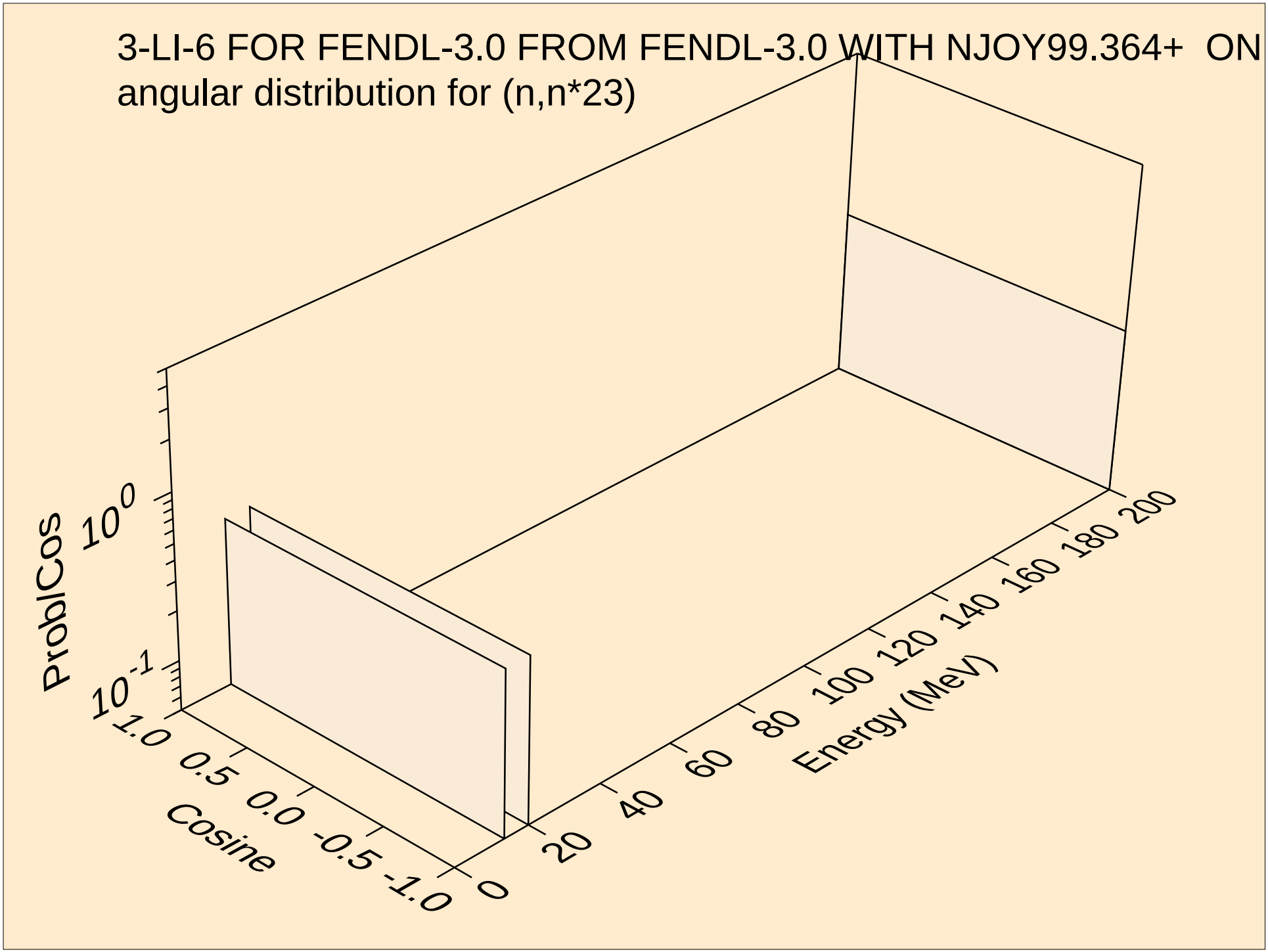

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*18)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

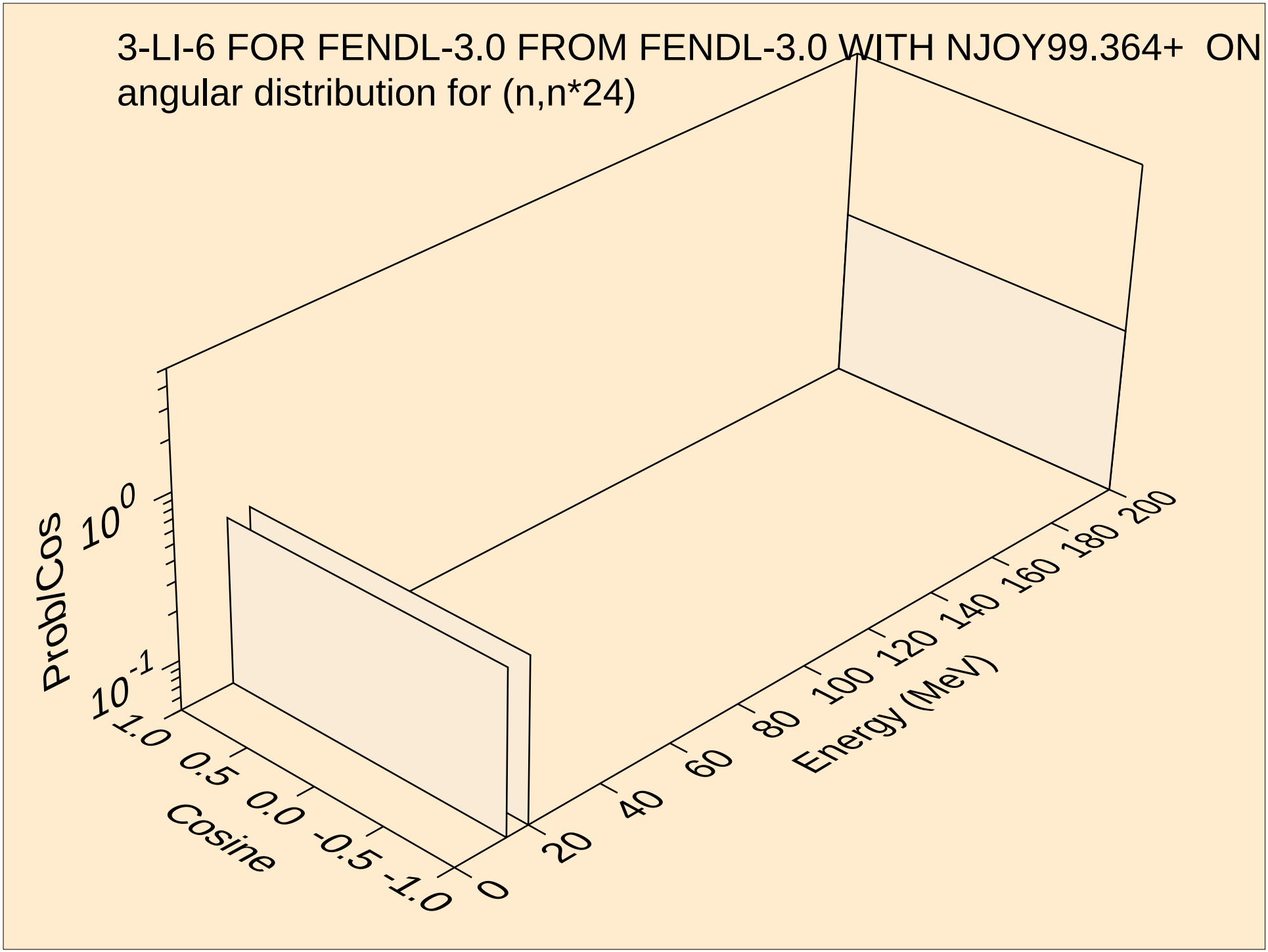

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*19)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

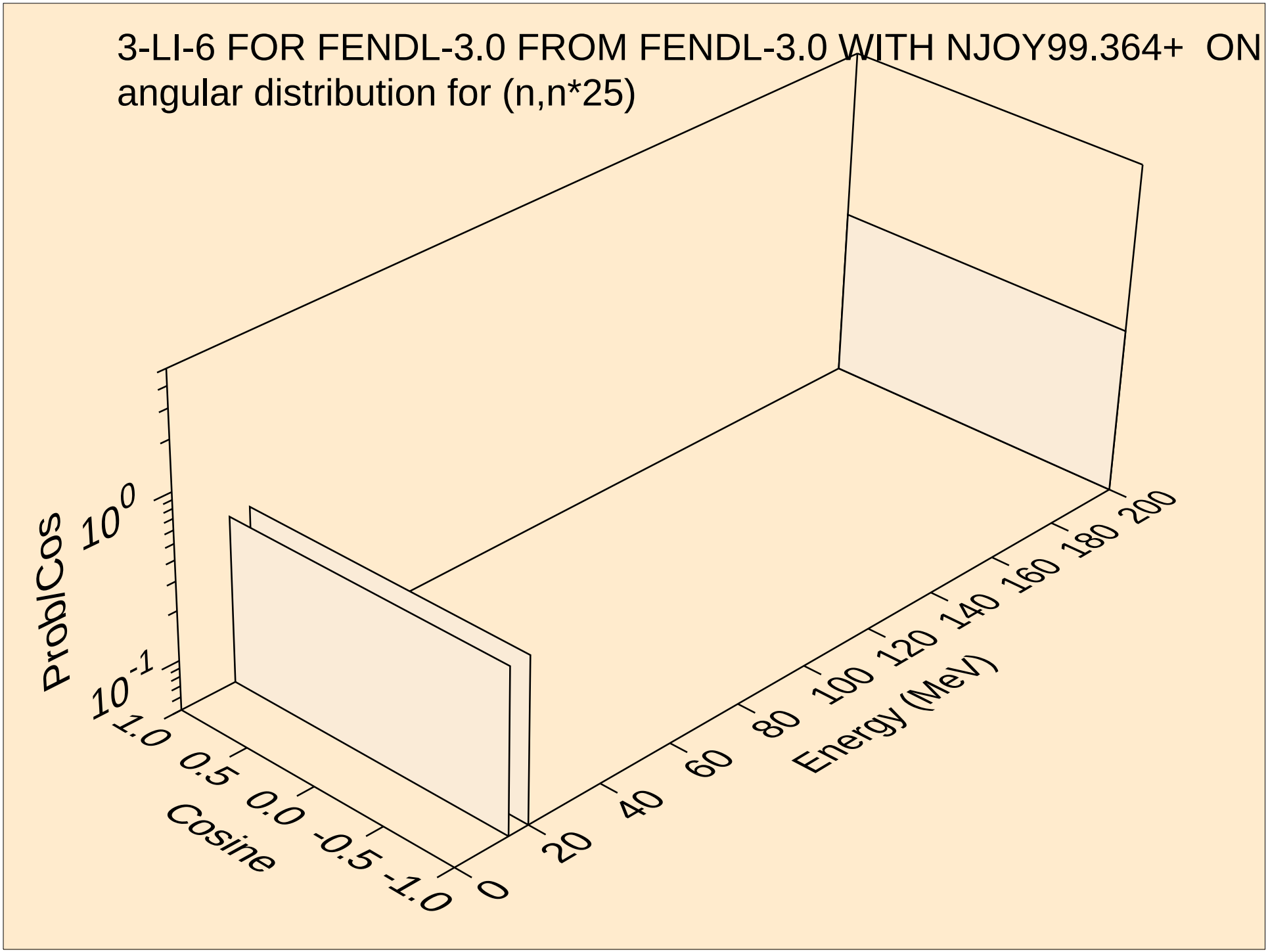

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*20)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

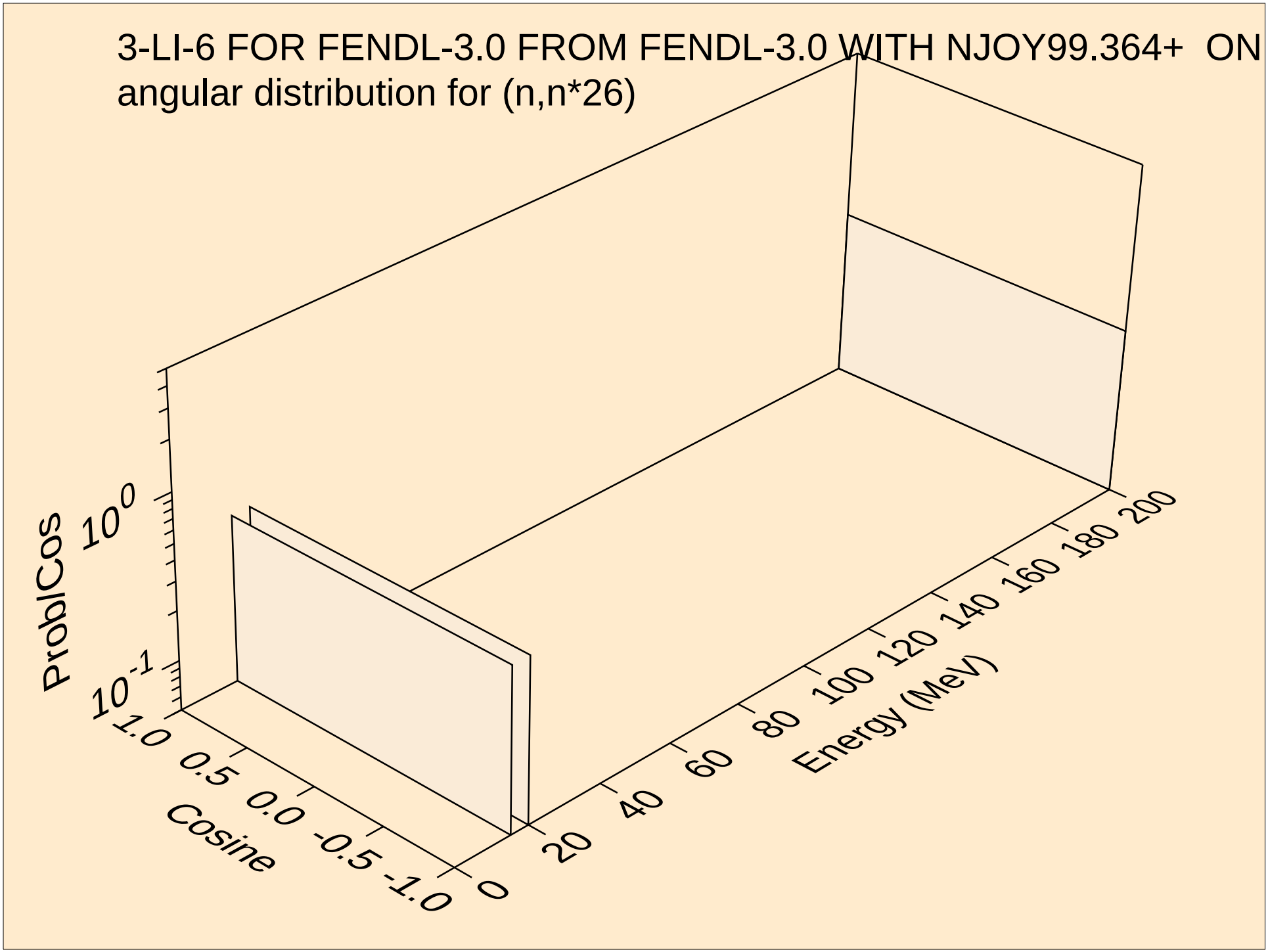

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*21)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

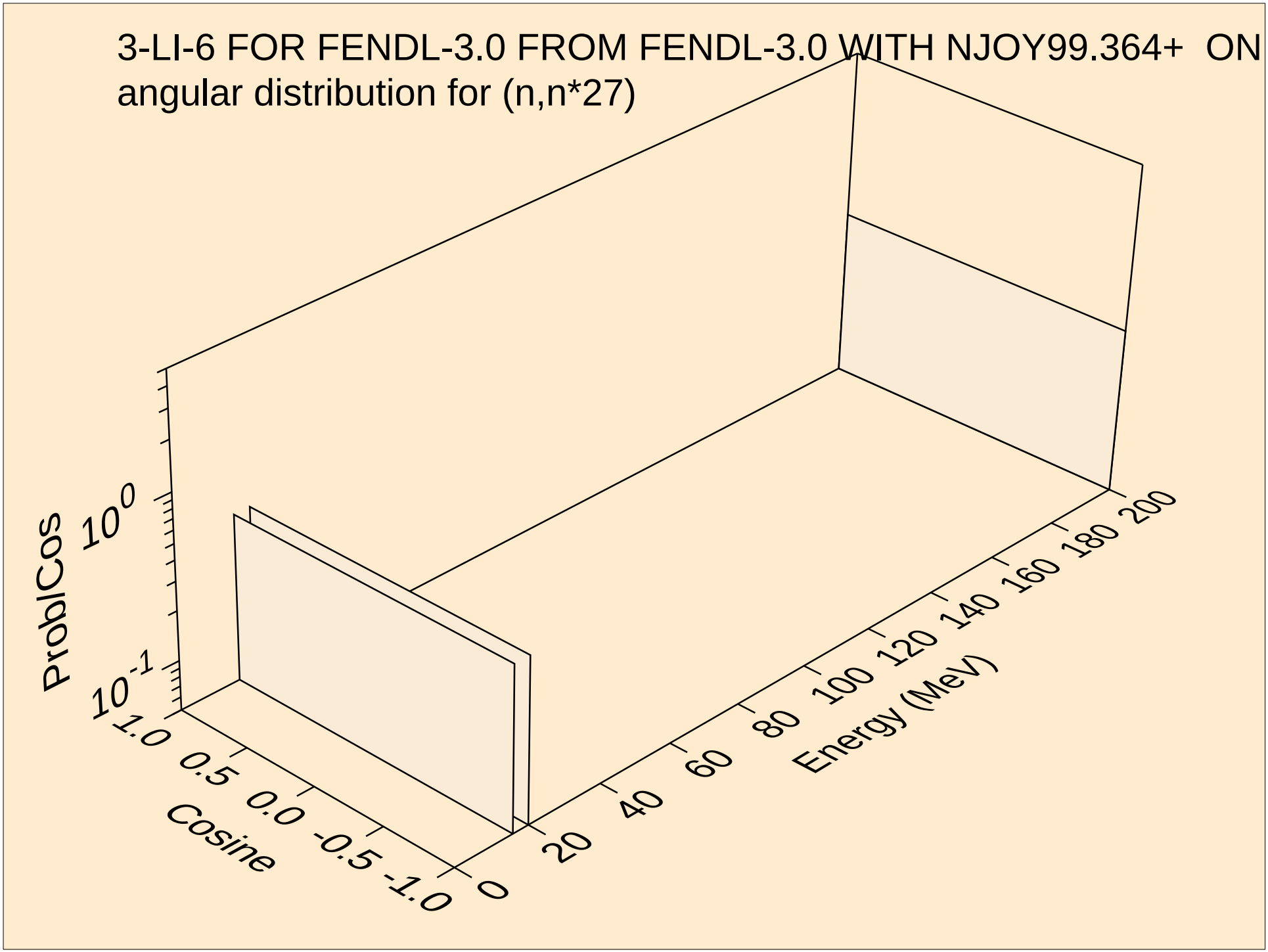

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*22)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

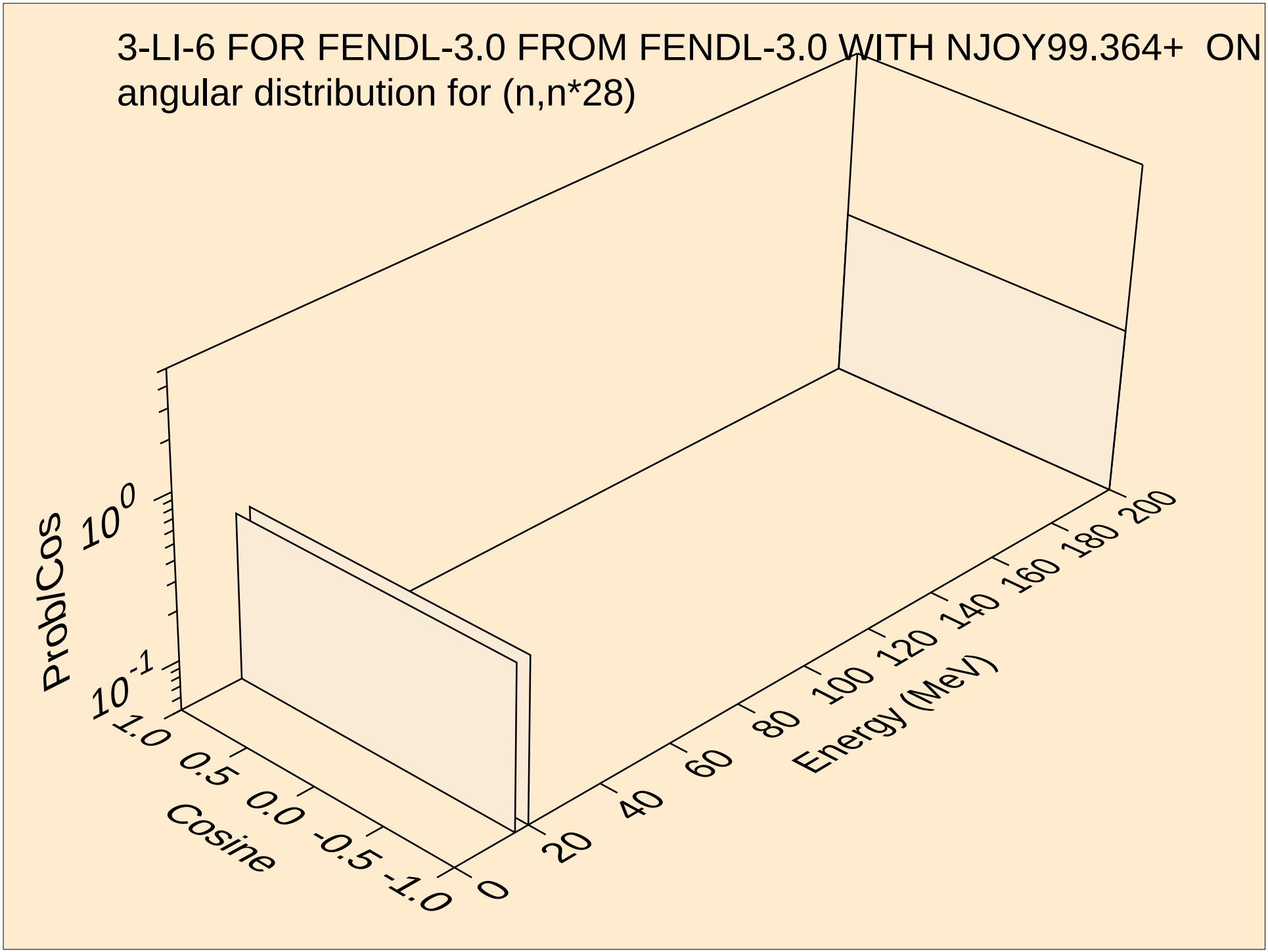

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*23)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

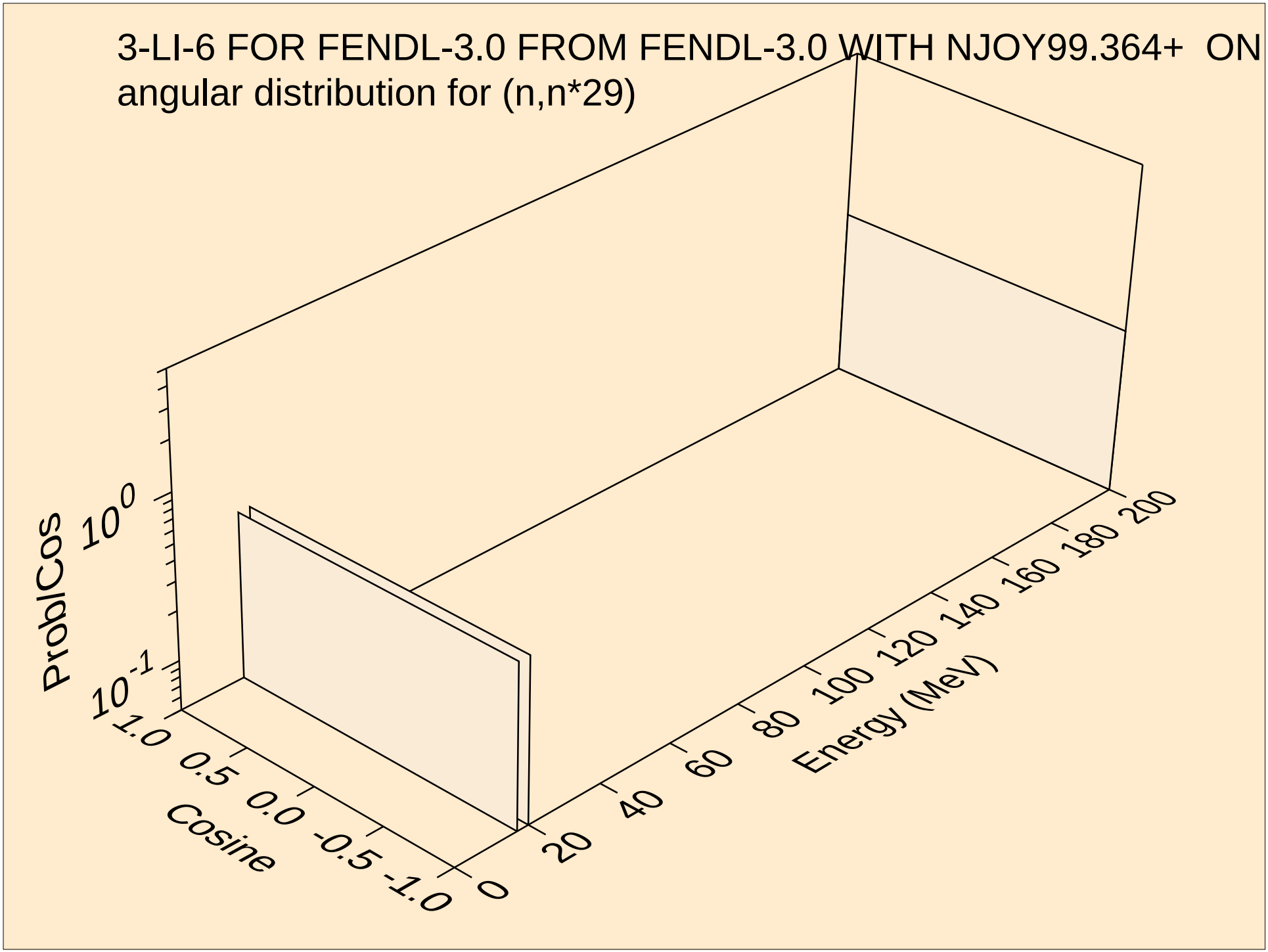

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*24)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

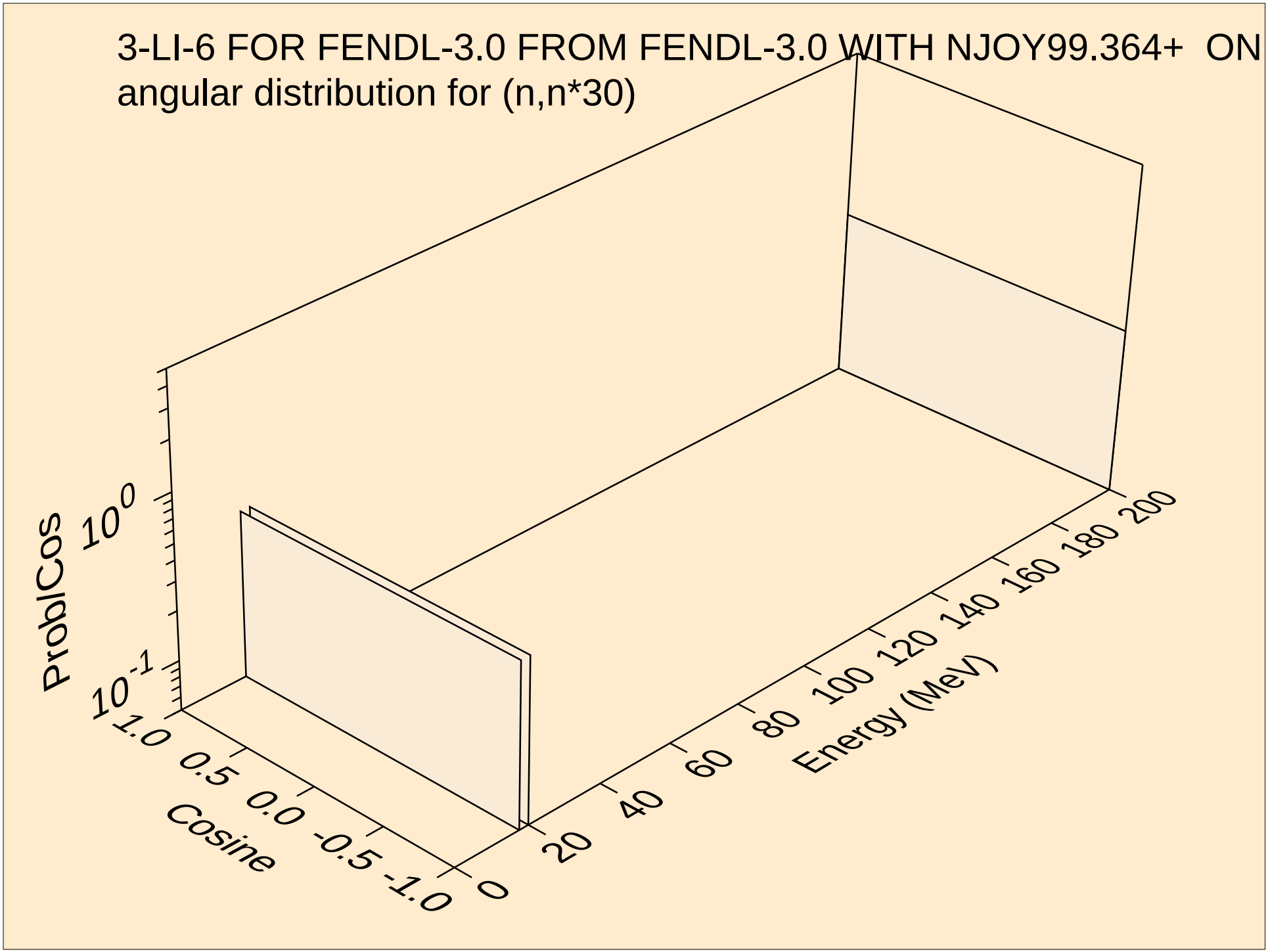

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*25)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

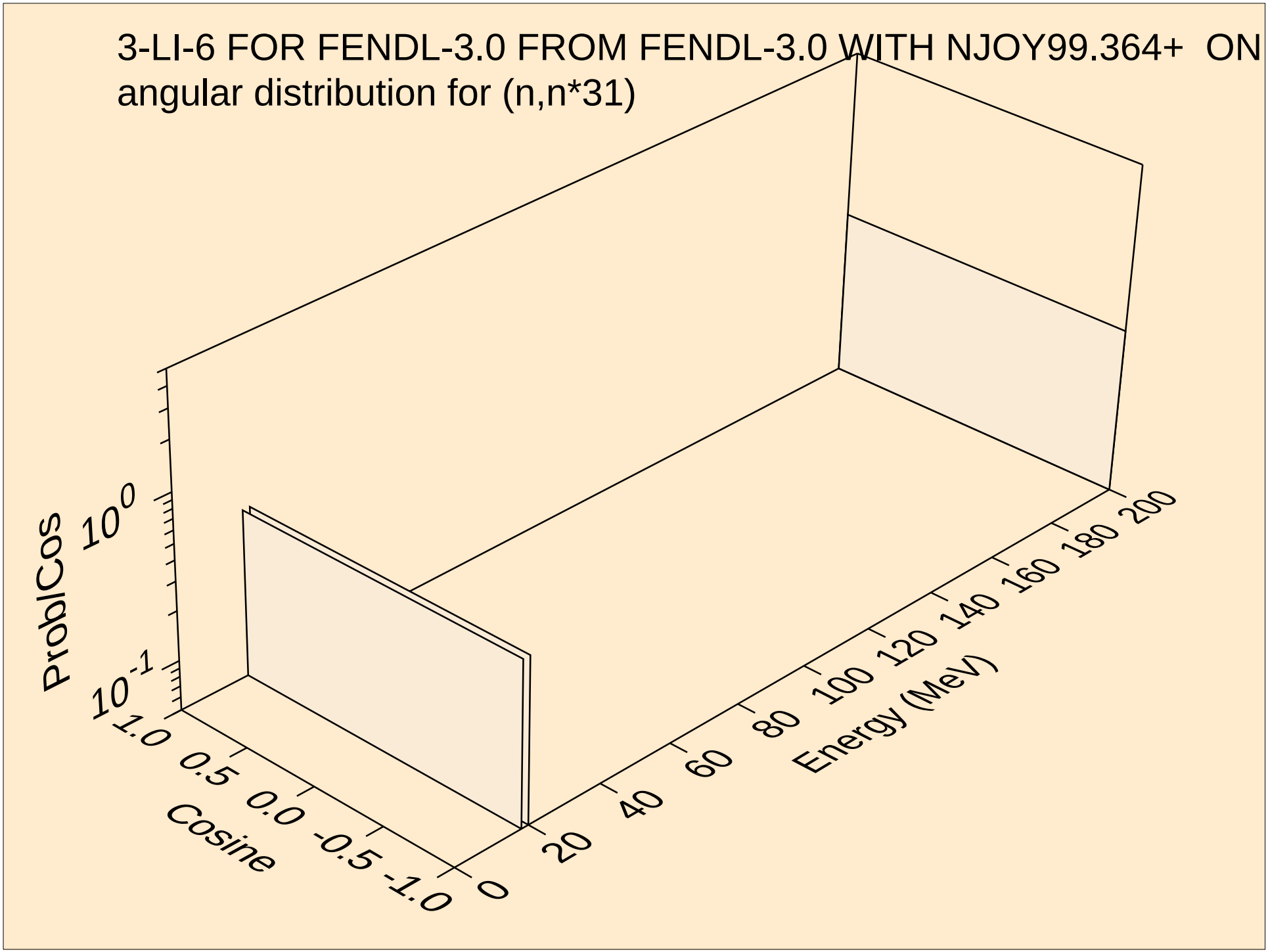

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*26)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

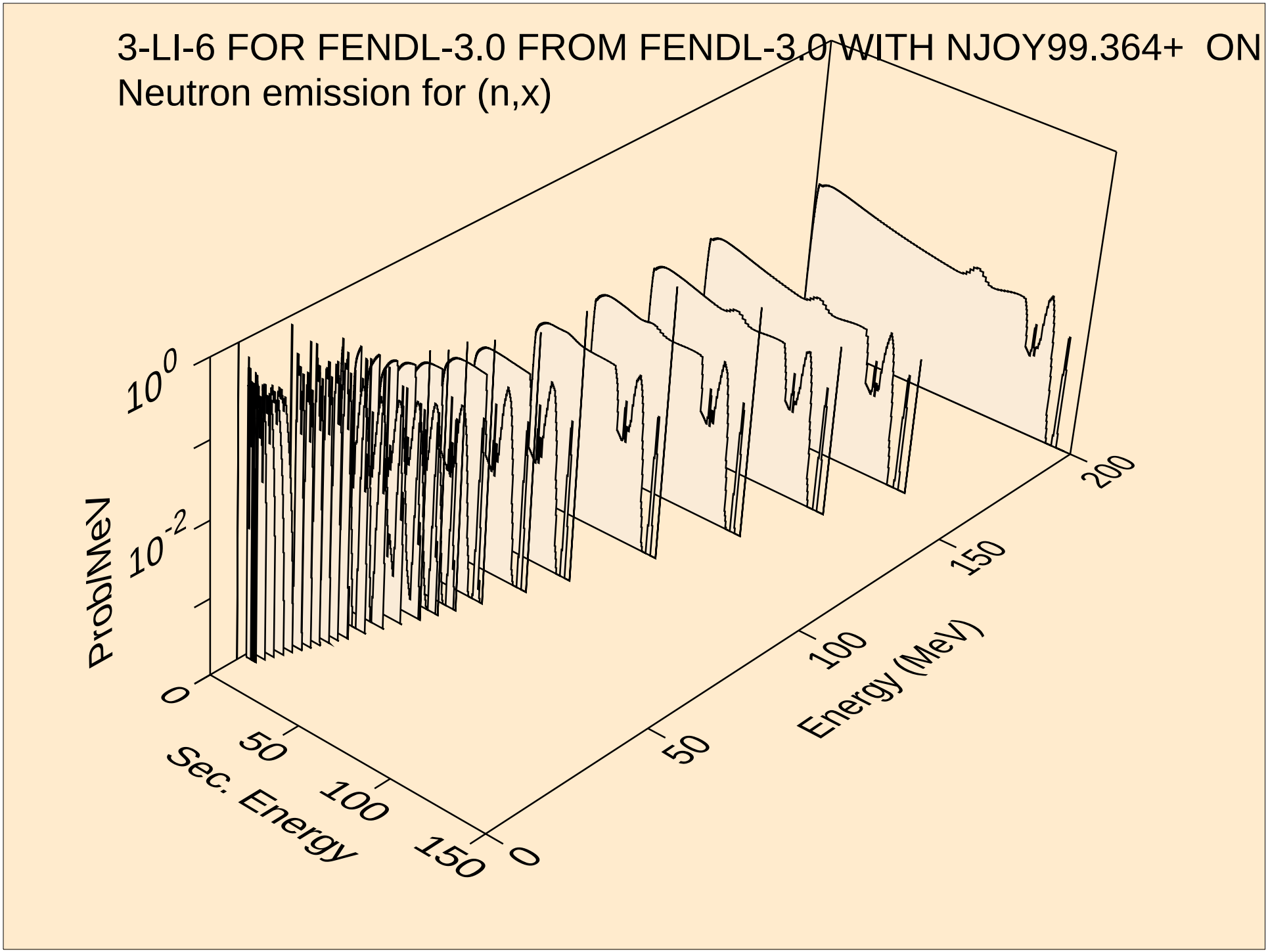

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*27)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

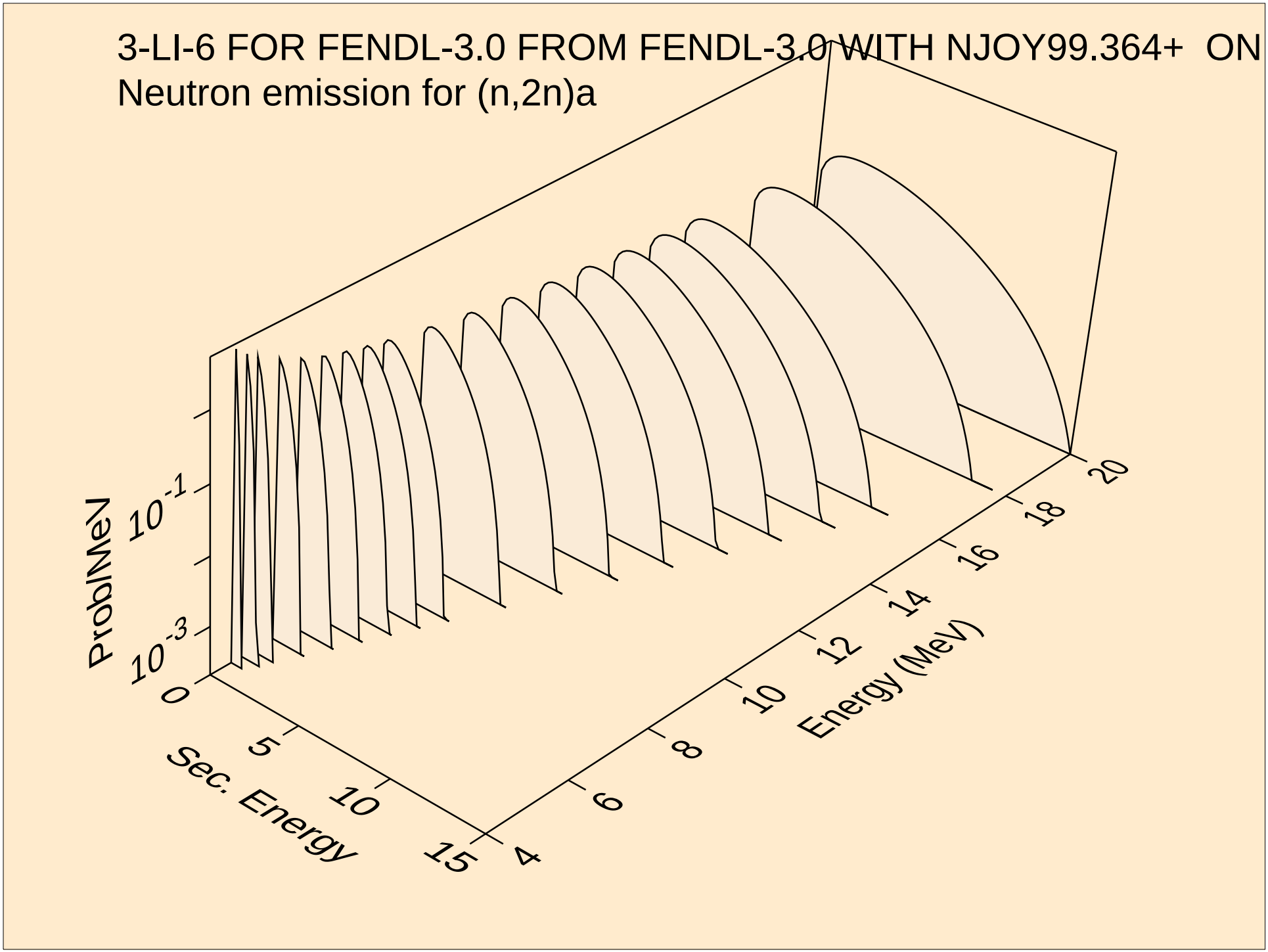

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*28)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

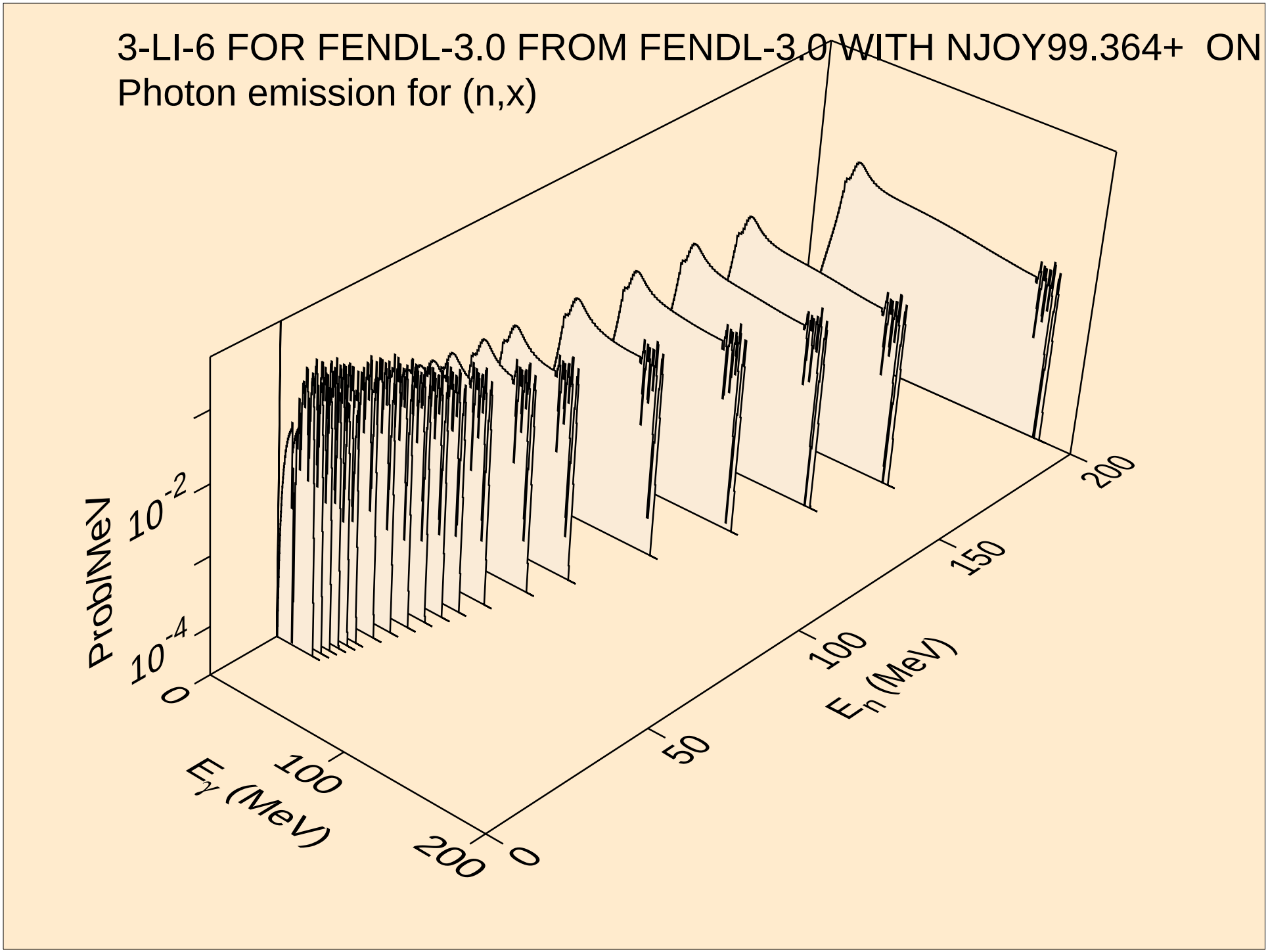

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*29)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

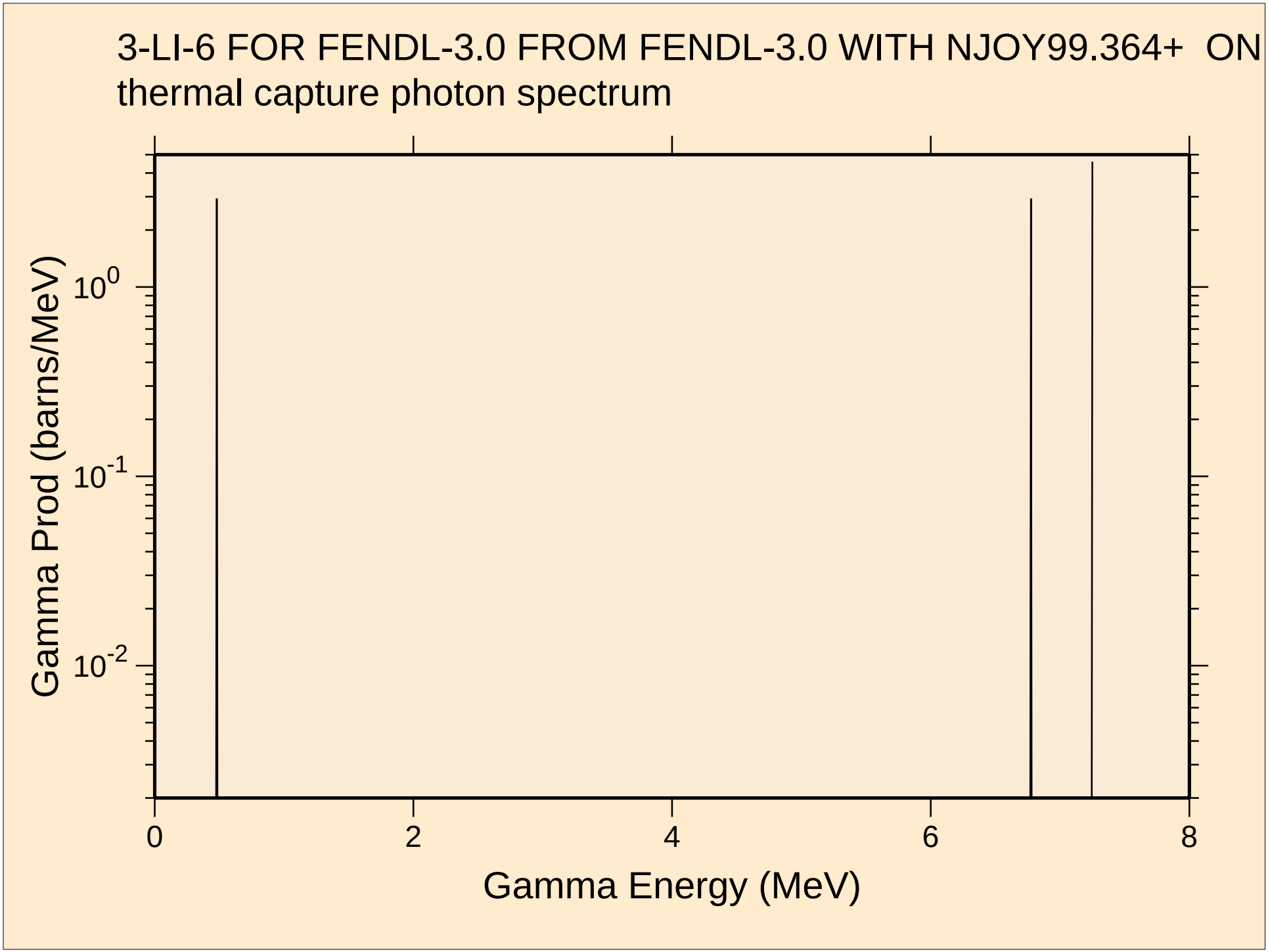

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*30)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

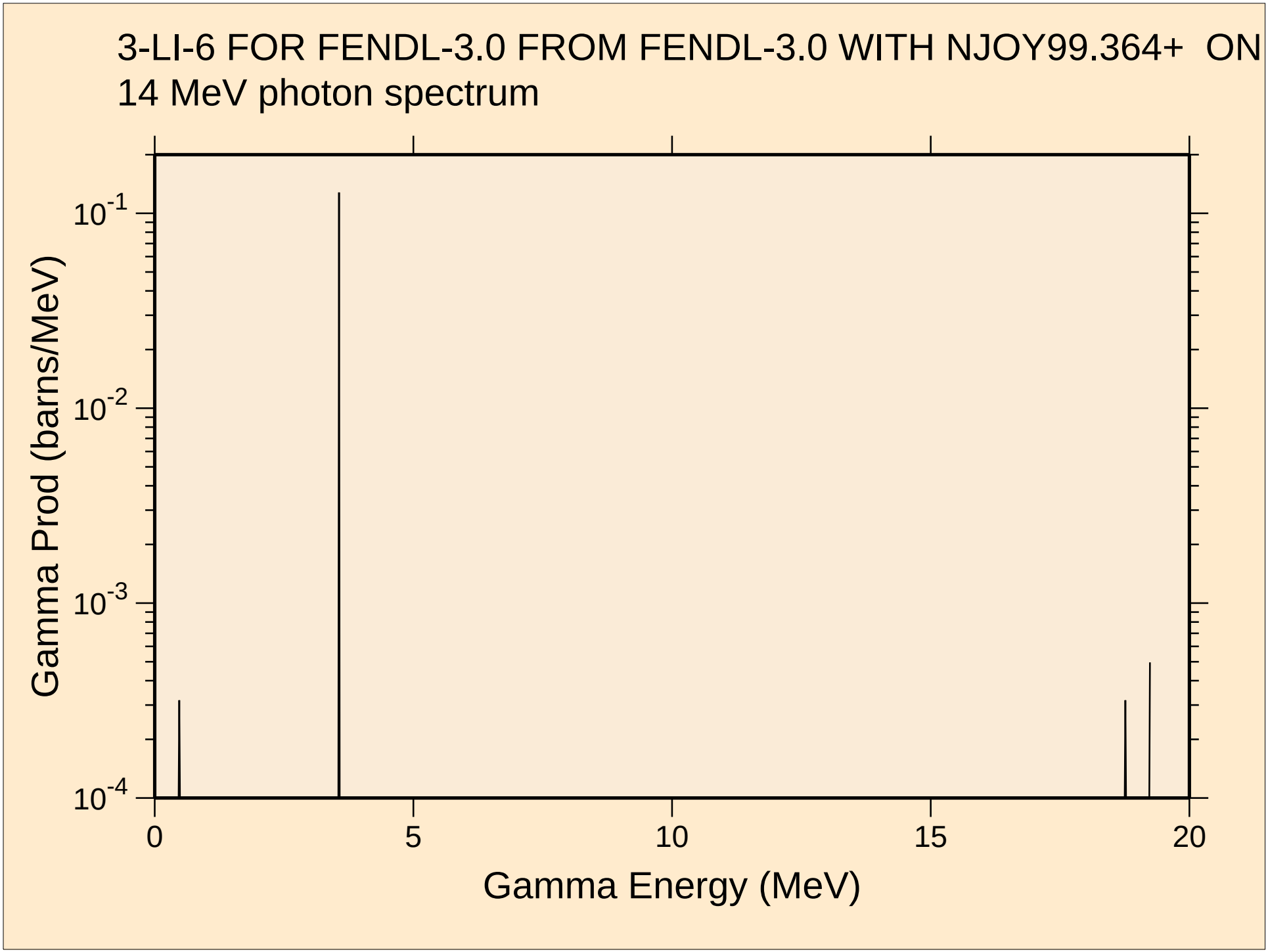

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,n*31)
ProbICos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

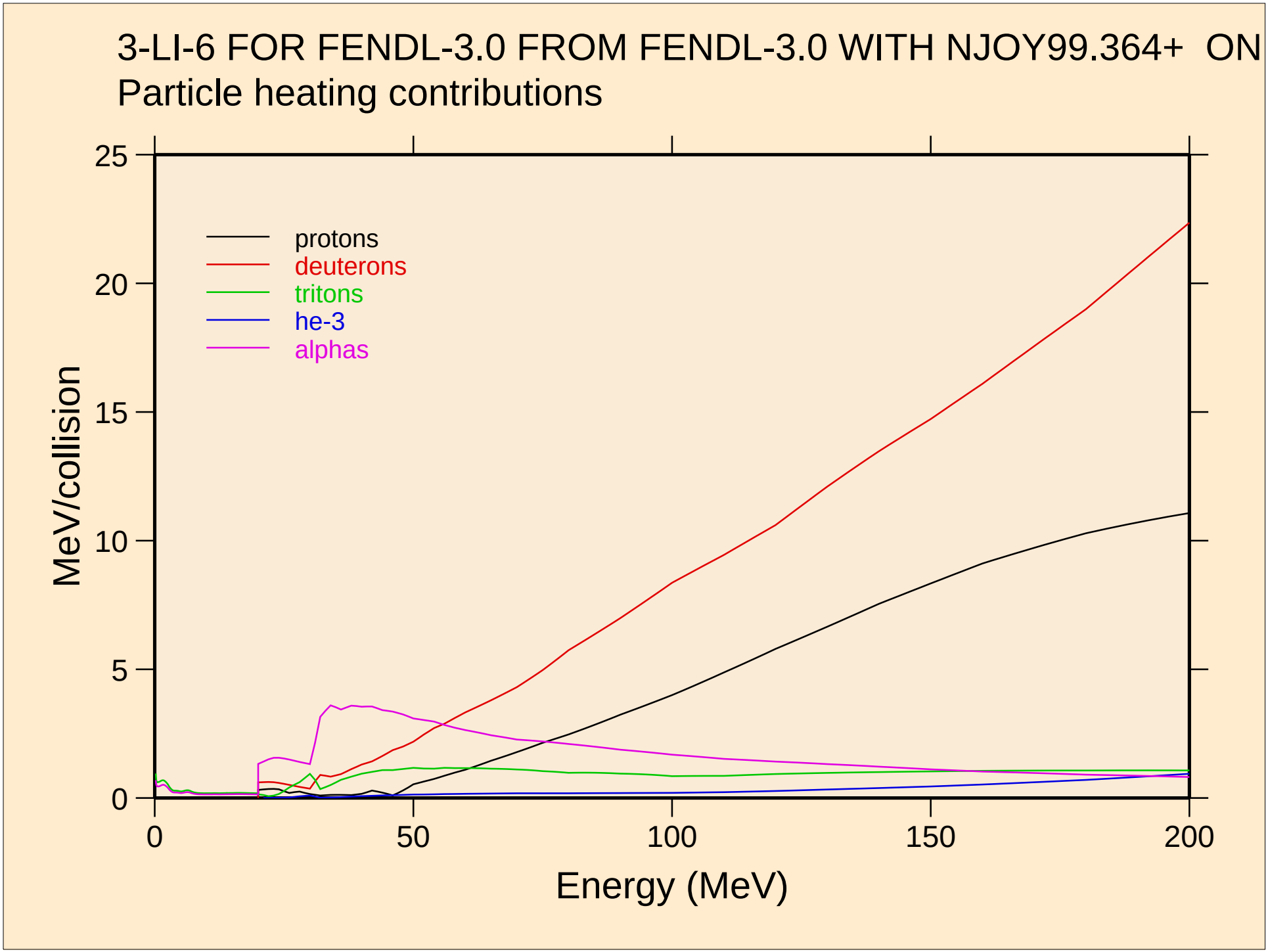

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Neutron emission for (n,x)
Prob/MeV
10^0
10^-2
0
50
100
150
Sec. Energy
0
50
100
150
200
Energy (MeV)

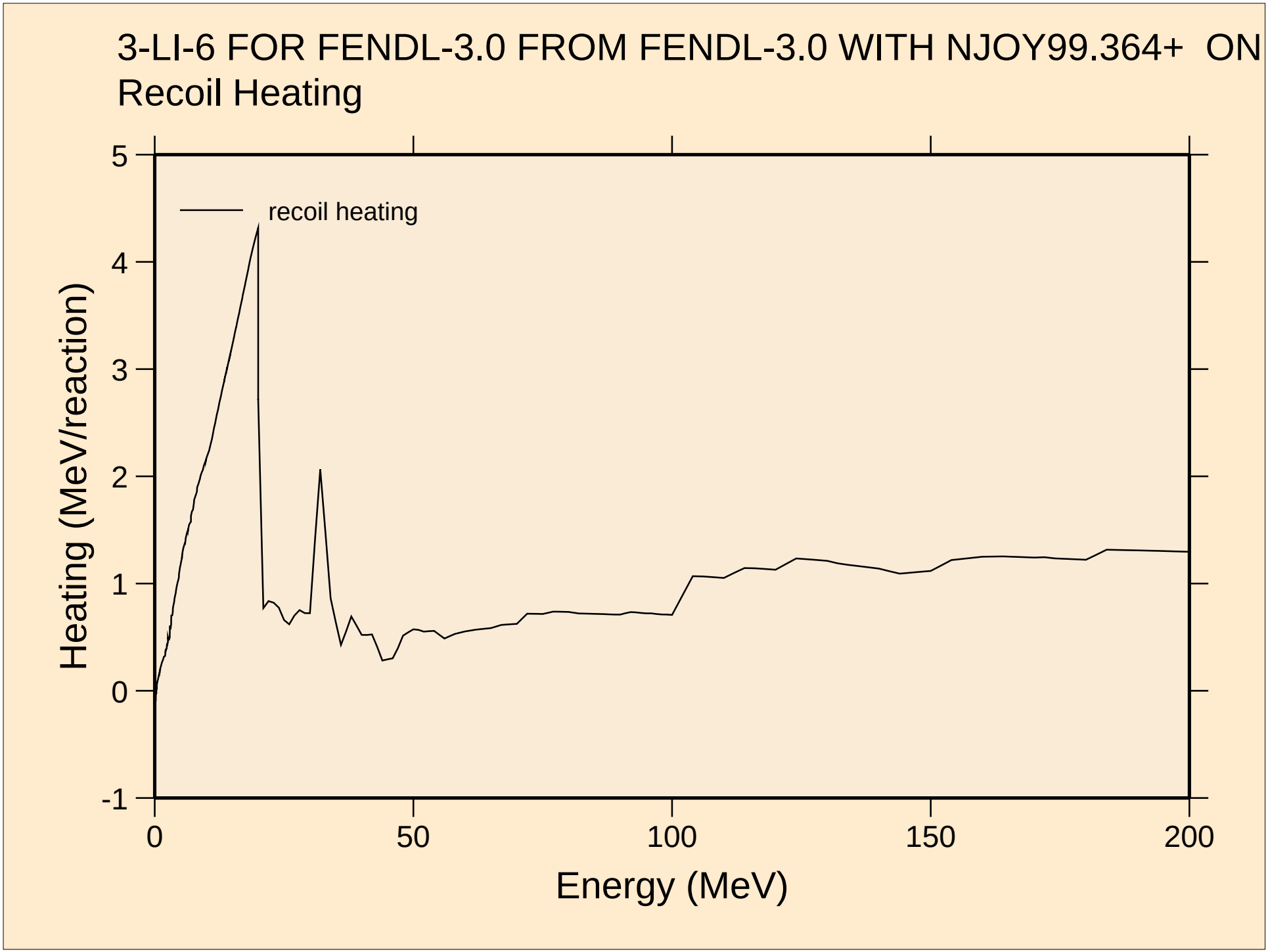

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Neutron emission for (n,2n)a
Prob/MeV
10-1
10-3
0
5
10
15
Sec. Energy
4
6
8
10
12
14
16
18
20
Energy (MeV)

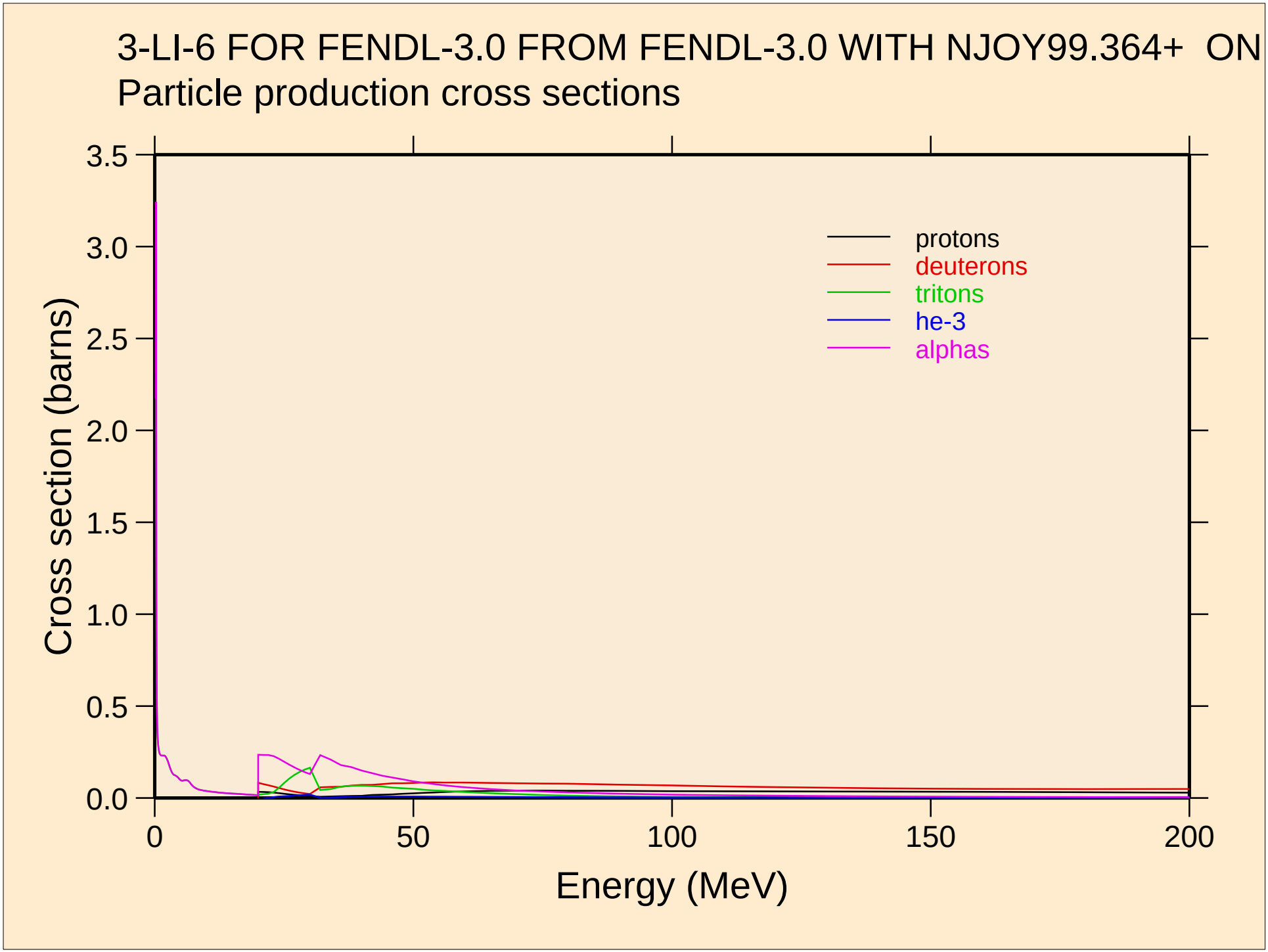

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Photon emission for (n,x)
Prob/MeV
10-2
10-4
0
100
200
Eγ (MeV)
0
50
100
150
200
En (MeV)

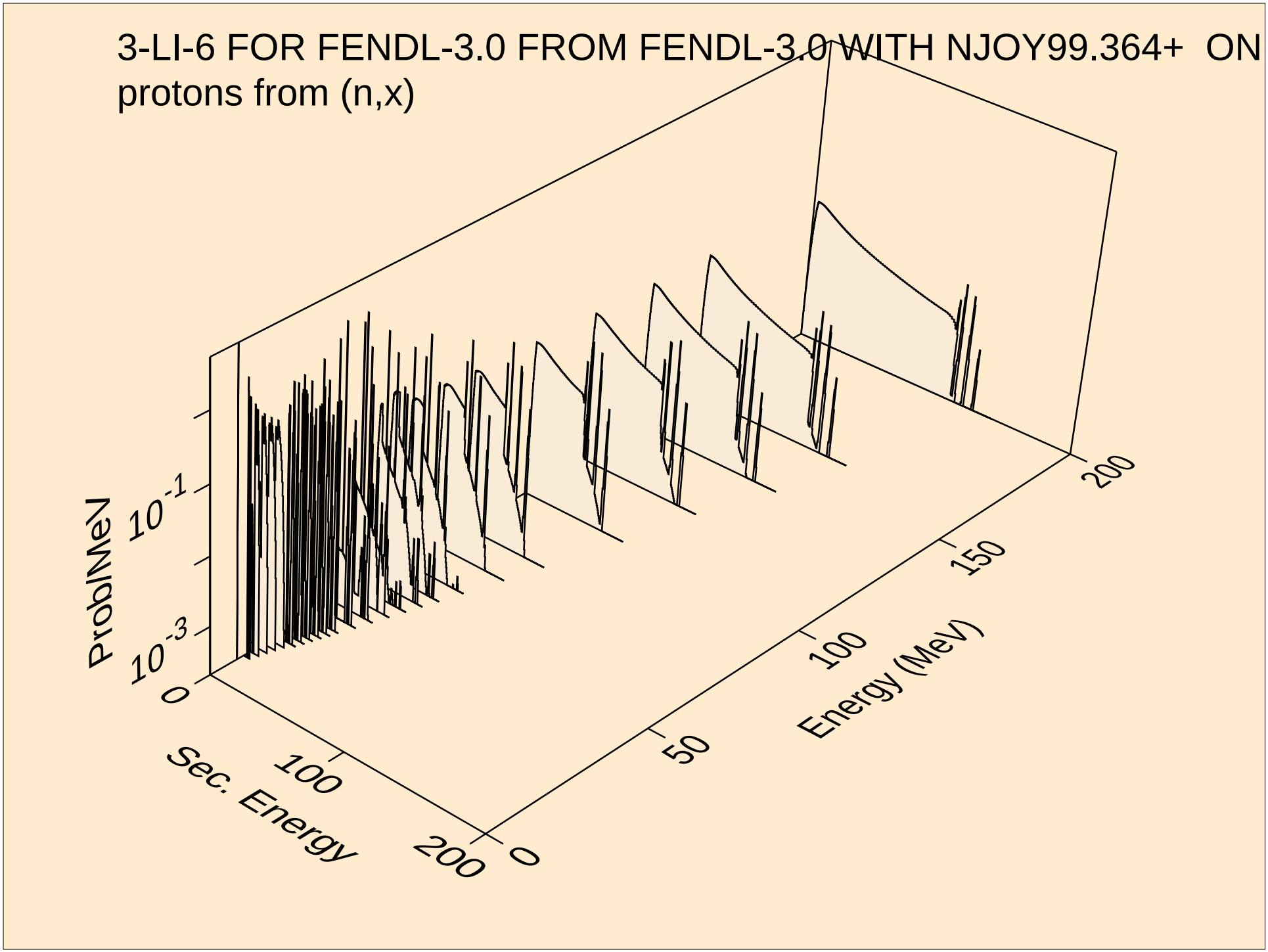

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
thermal capture photon spectrum
Gamma Prod (barns/MeV)
10^0
10^-1
10^-2
0
2
4
6
8
Gamma Energy (MeV)

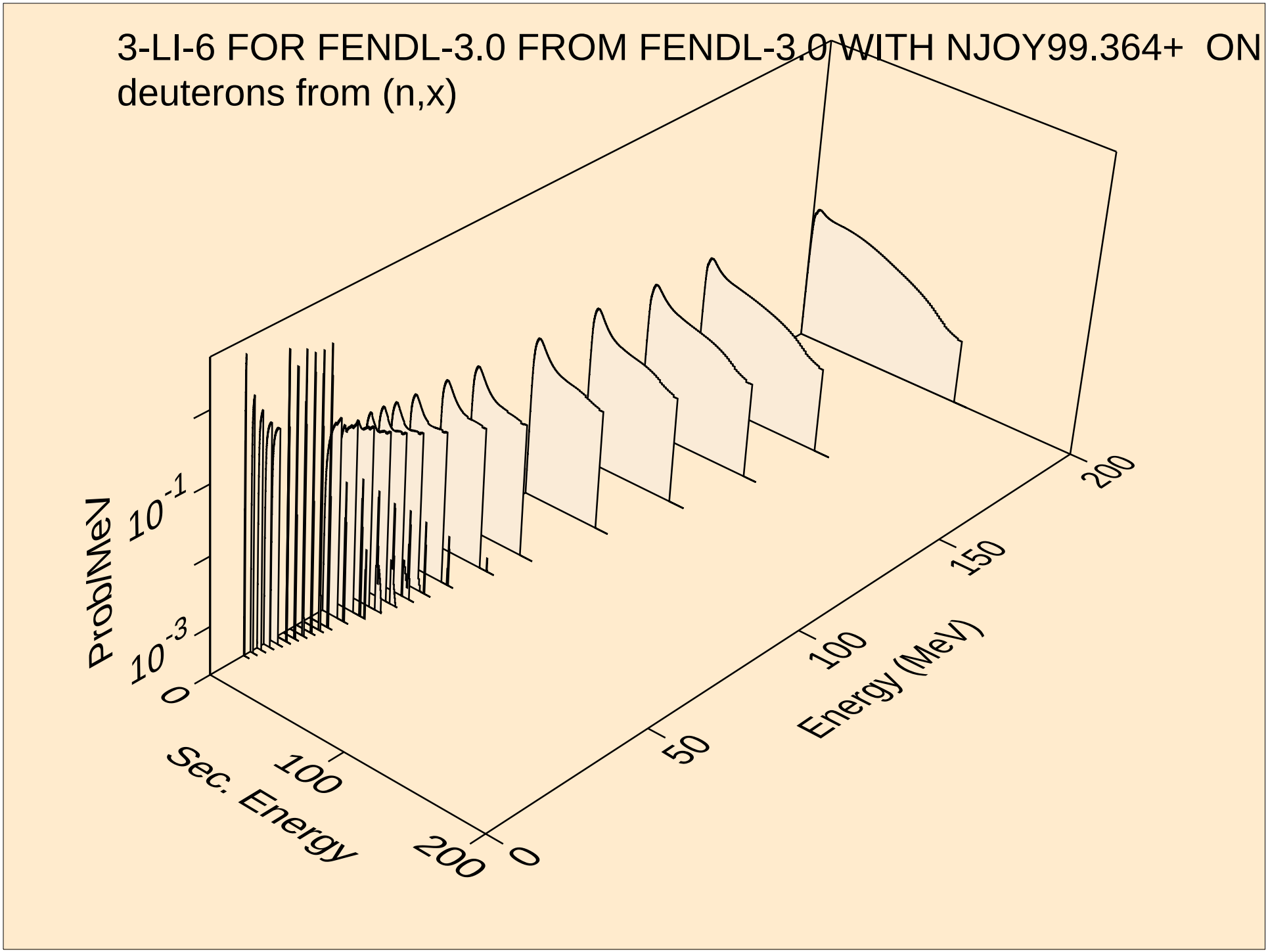

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
14 MeV photon spectrum
Gamma Prod (barns/MeV)
10-1
10-2
10-3
10-4
0
5
10
15
20
Gamma Energy (MeV)

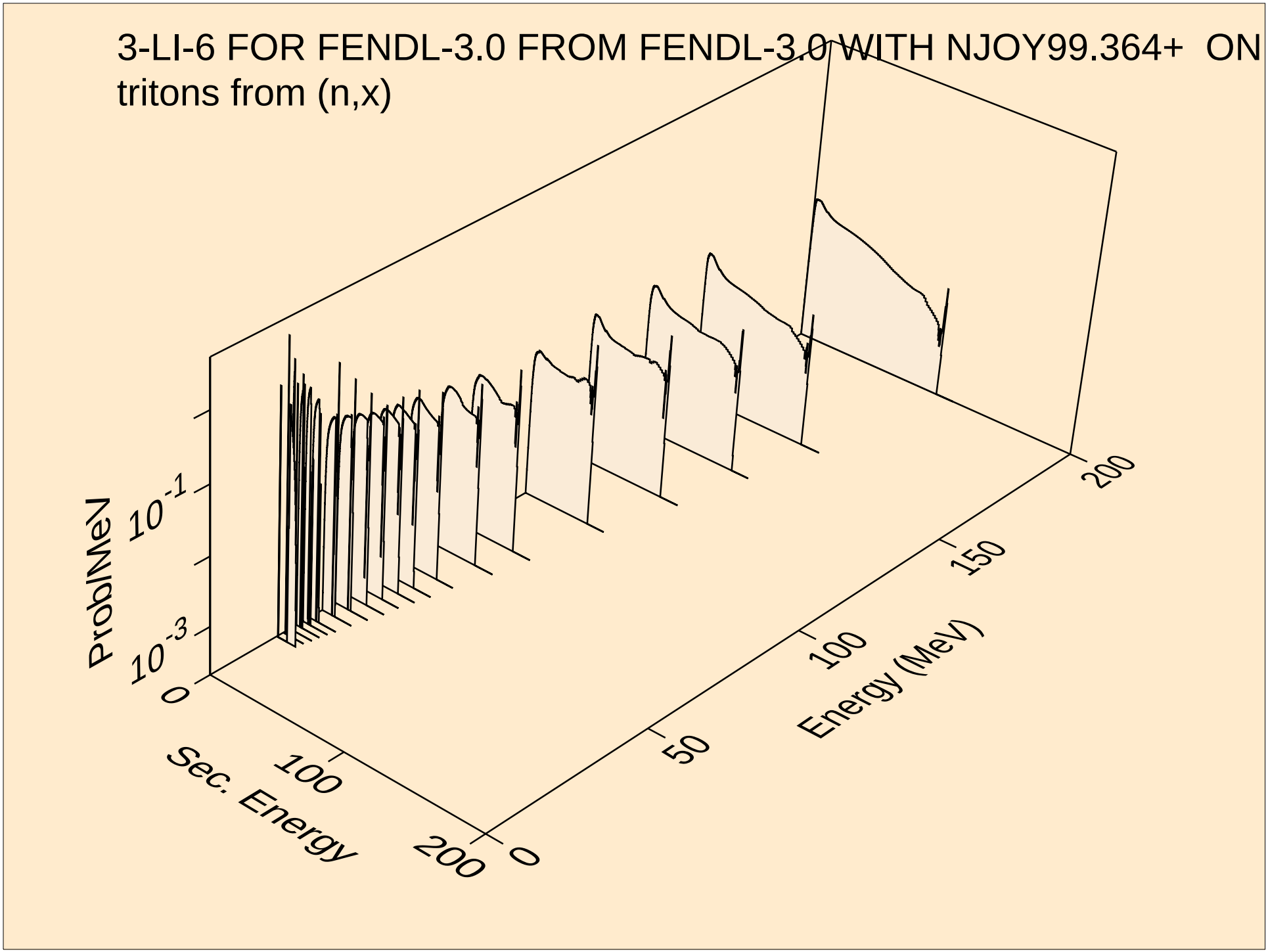

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Particle heating contributions
protons
deuterons
tritons
he-3
alphas
MeV/collision
Energy (MeV)
0
5
10
15
20
25
0
50
100
150
200

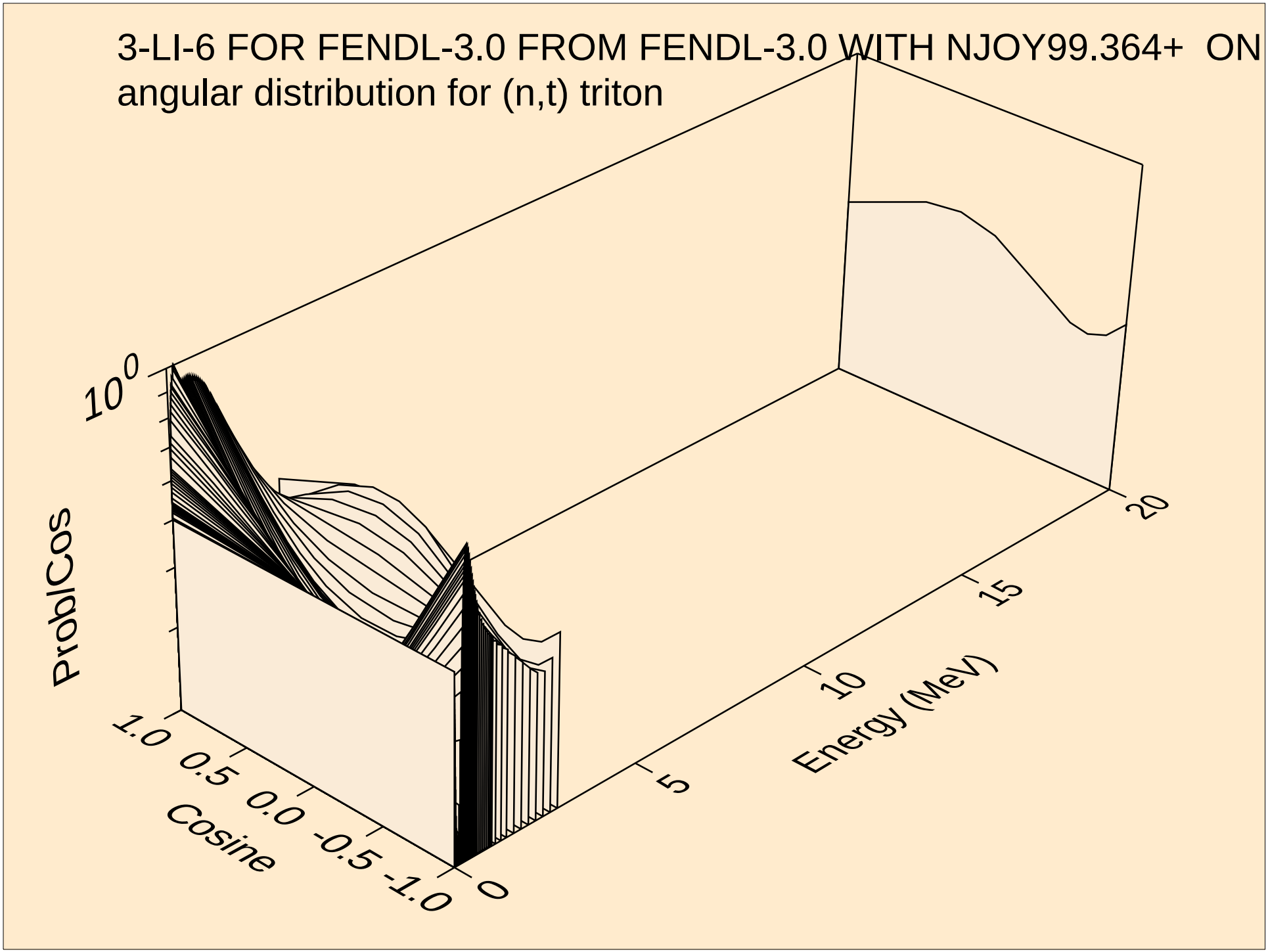

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Recoil Heating
recoil heating
Heating (MeV/reaction)
Energy (MeV)
5
4
3
2
1
0
-1
0
50
100
150
200

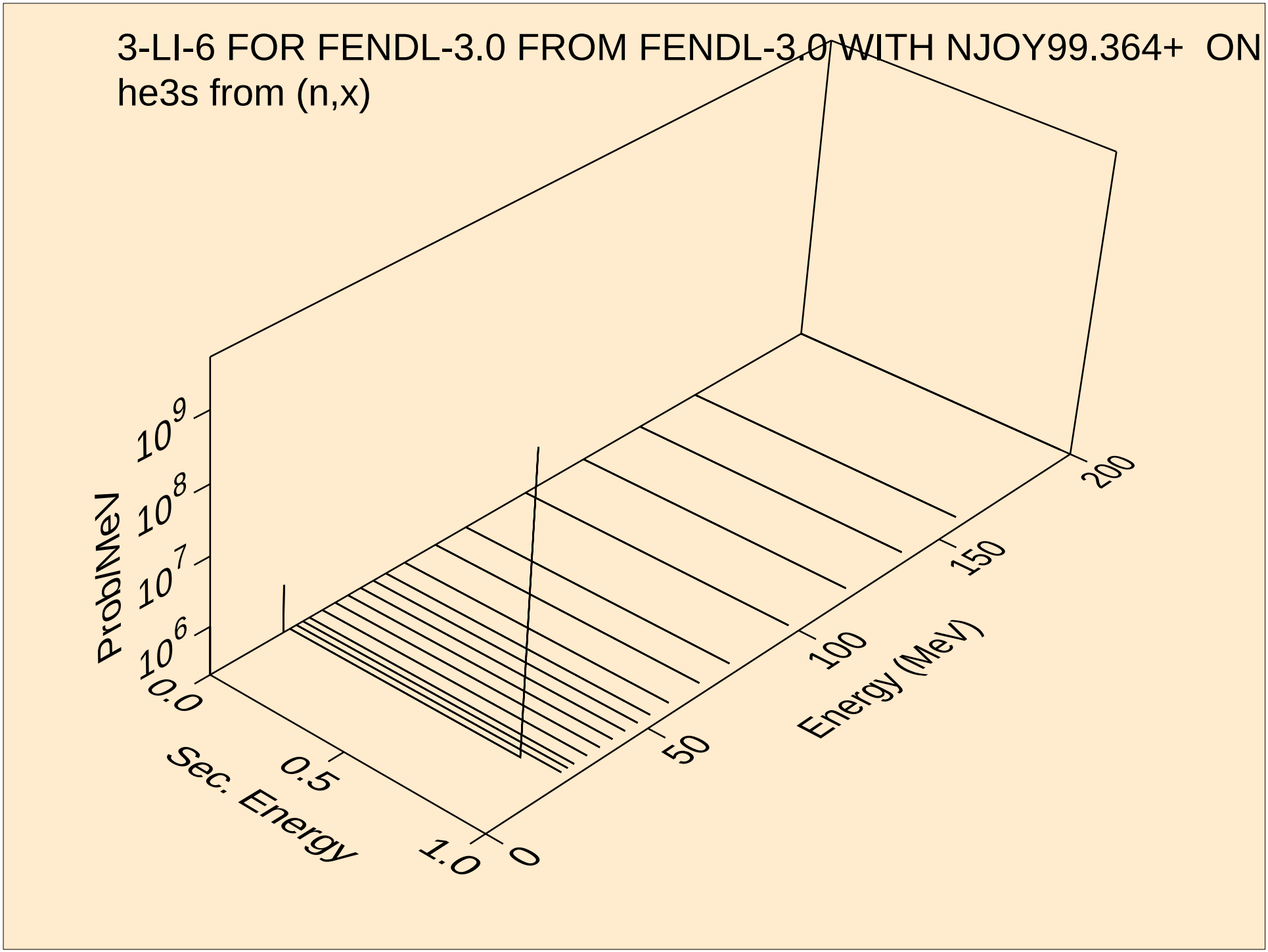

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
Particle production cross sections
Cross section (barns)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
0
50
100
150
200
protons
deuterons
tritons
he-3
alphas

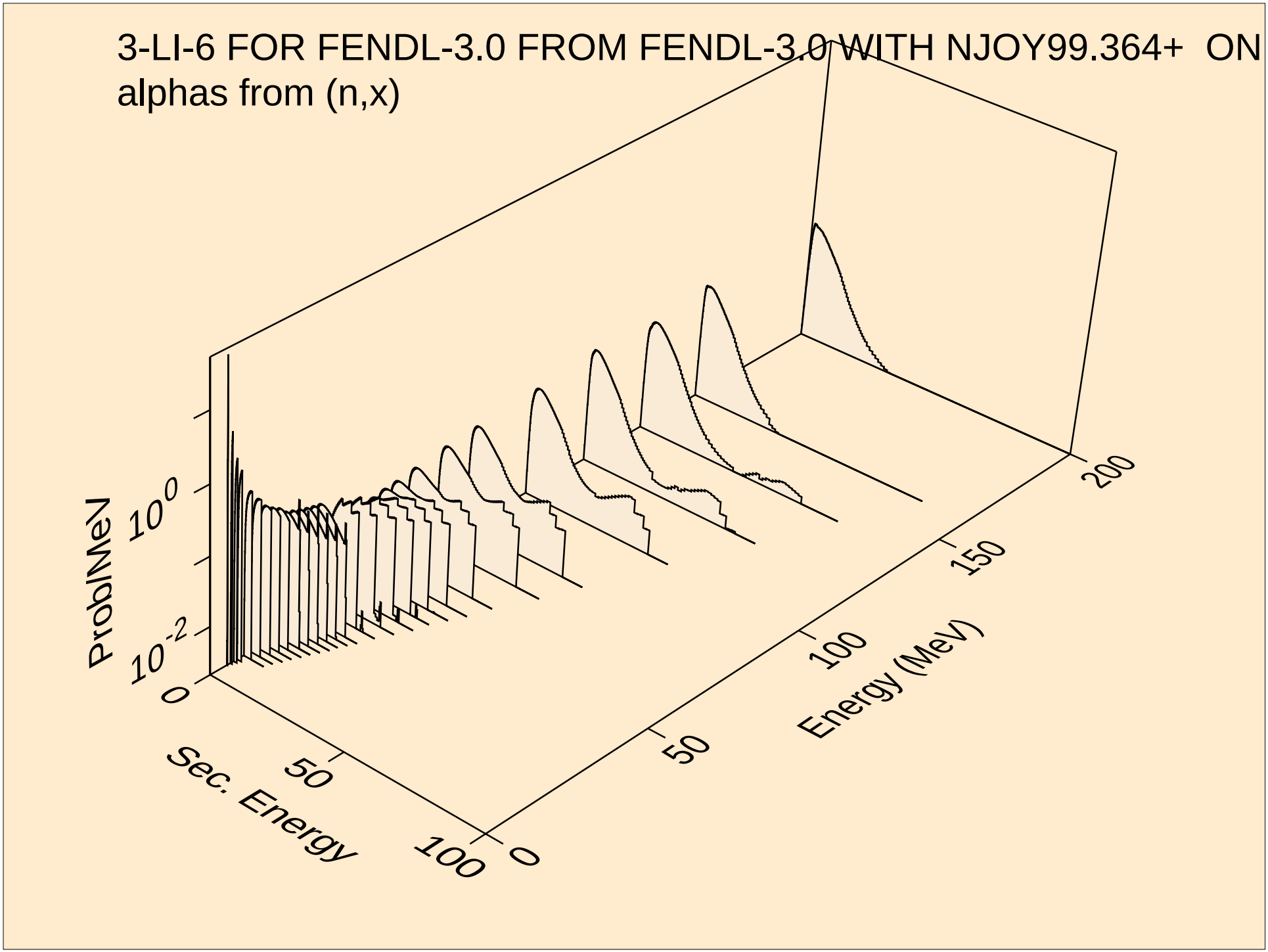

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
protons from (n,x)
Prob/MeV
10-1
10-3
0
Sec. Energy
100
200
0
50
100
150
200
Energy (MeV)

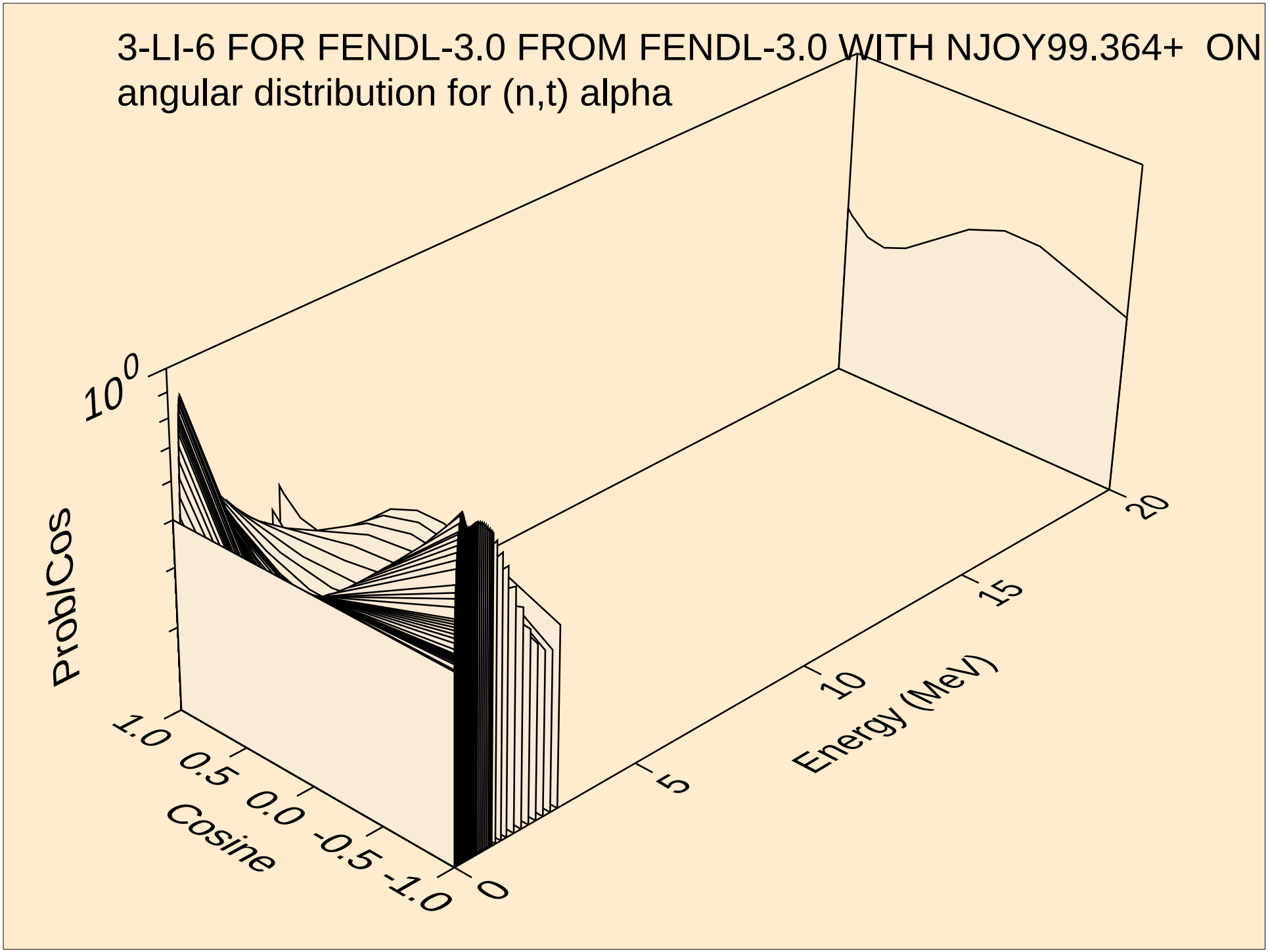

3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
deuterons from (n,x)
Prob/MeV
10-1
10-3
0
Sec. Energy
100
200
0
50
100
150
200
Energy (MeV)


3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
tritons from (n,x)
Prob/MeV
10-1
10-3
0
100
200
Sec. Energy
0
50
100
150
200
Energy (MeV)


3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,t) triton
ProbICos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)


3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
he3s from (n,x)
Prob/MeV
10^9
10^8
10^7
10^6
0.0
0.5
1.0
Sec. Energy
0
50
100
150
200
Energy (MeV)


3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
alphas from (n,x)
Prob/MeV
10^0
10^-2
0
Sec. Energy
50
100
0
50
100
150
200
Energy (MeV)


3-LI-6 FOR FENDL-3.0 FROM FENDL-3.0 WITH NJOY99.364+ ON
angular distribution for (n,t) alpha
10^0
ProbICos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)