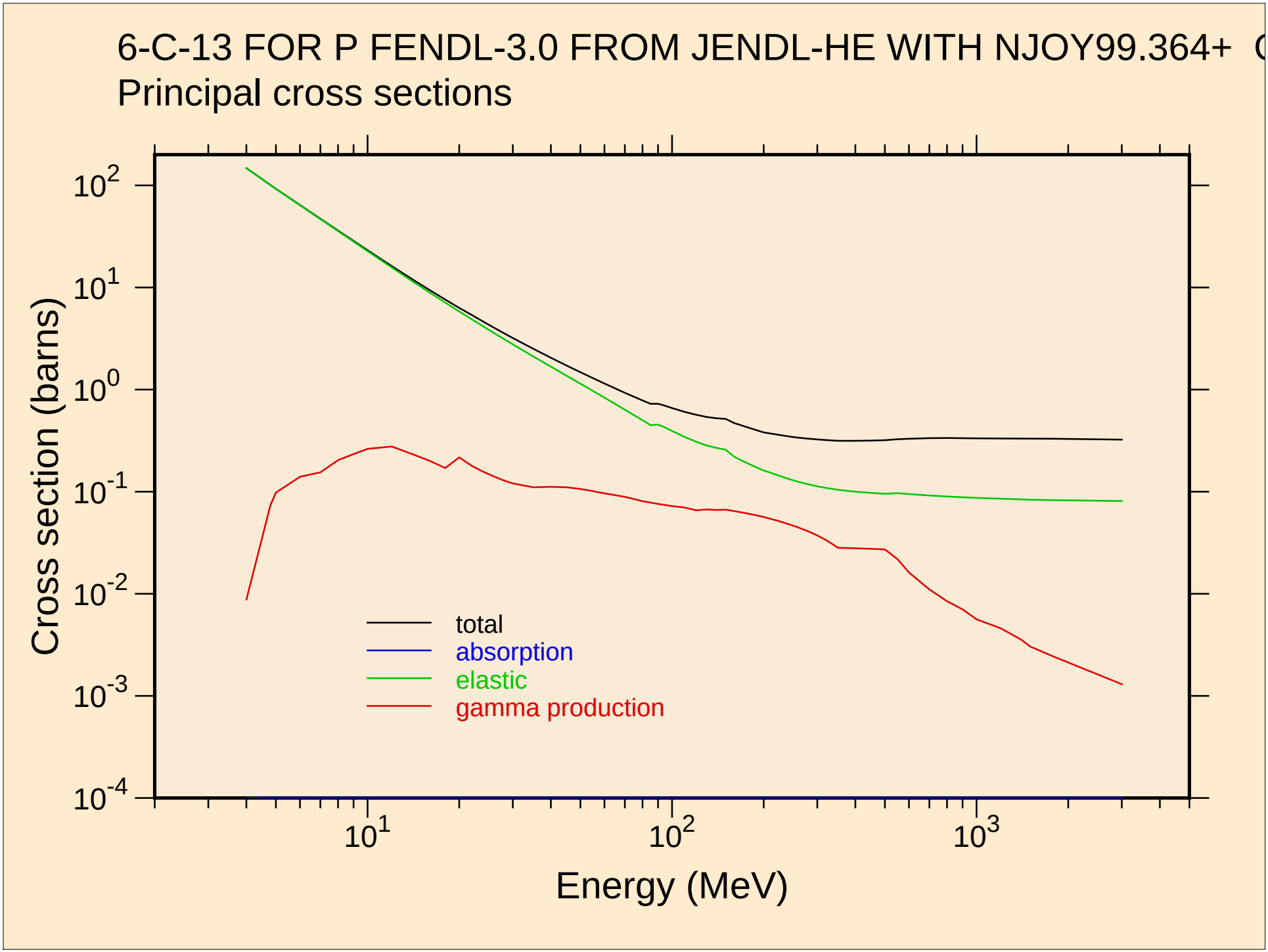
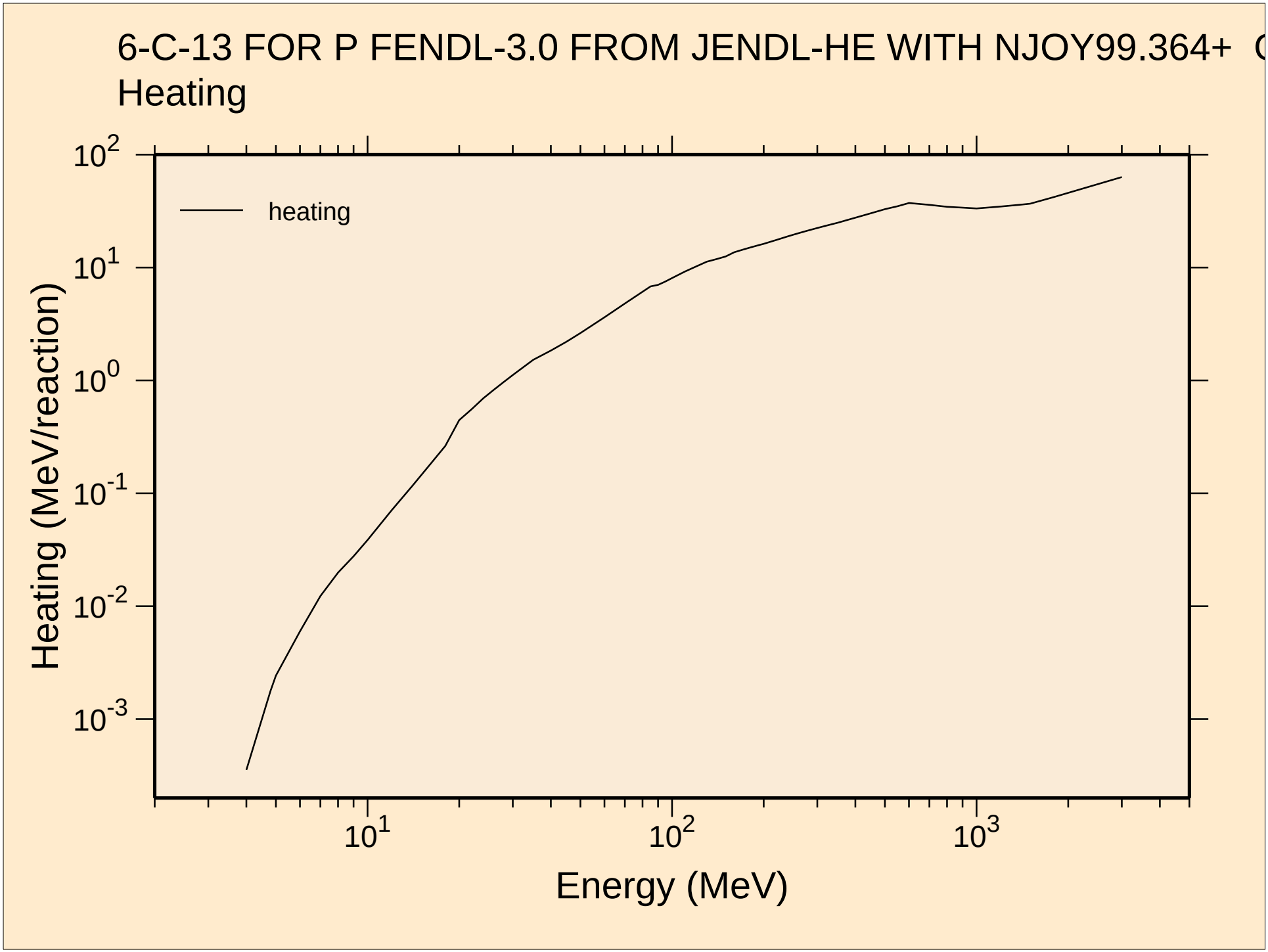
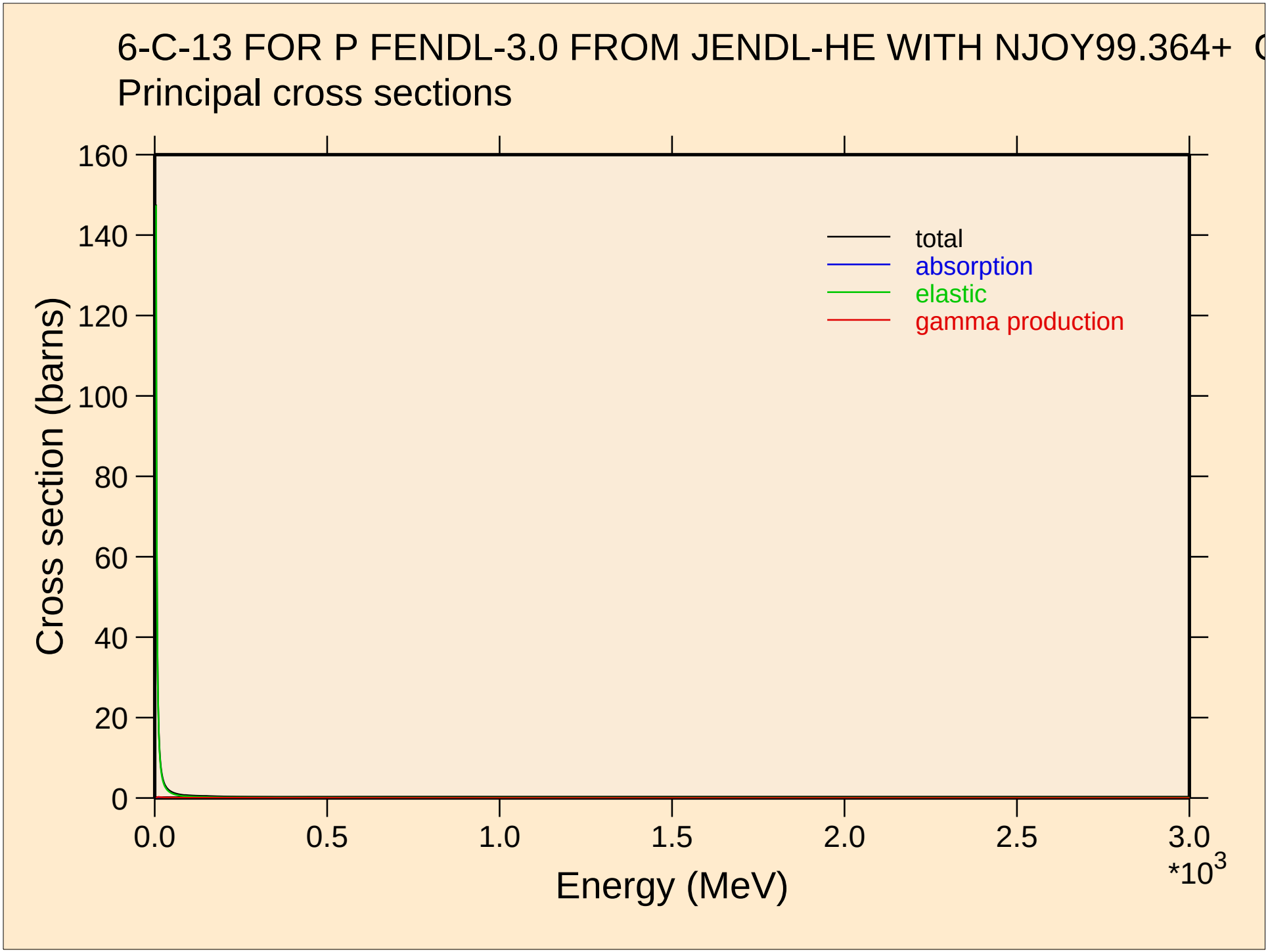
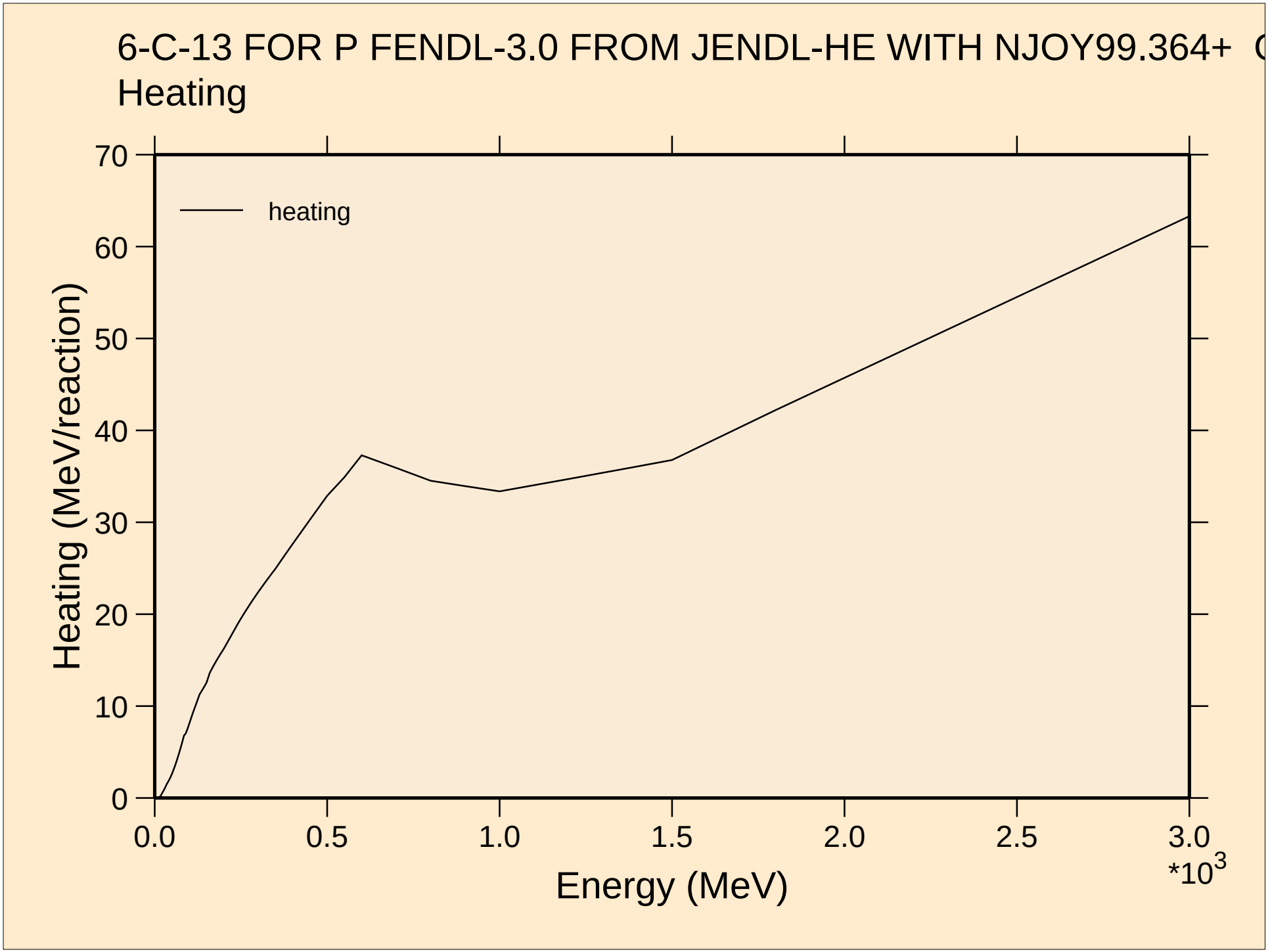
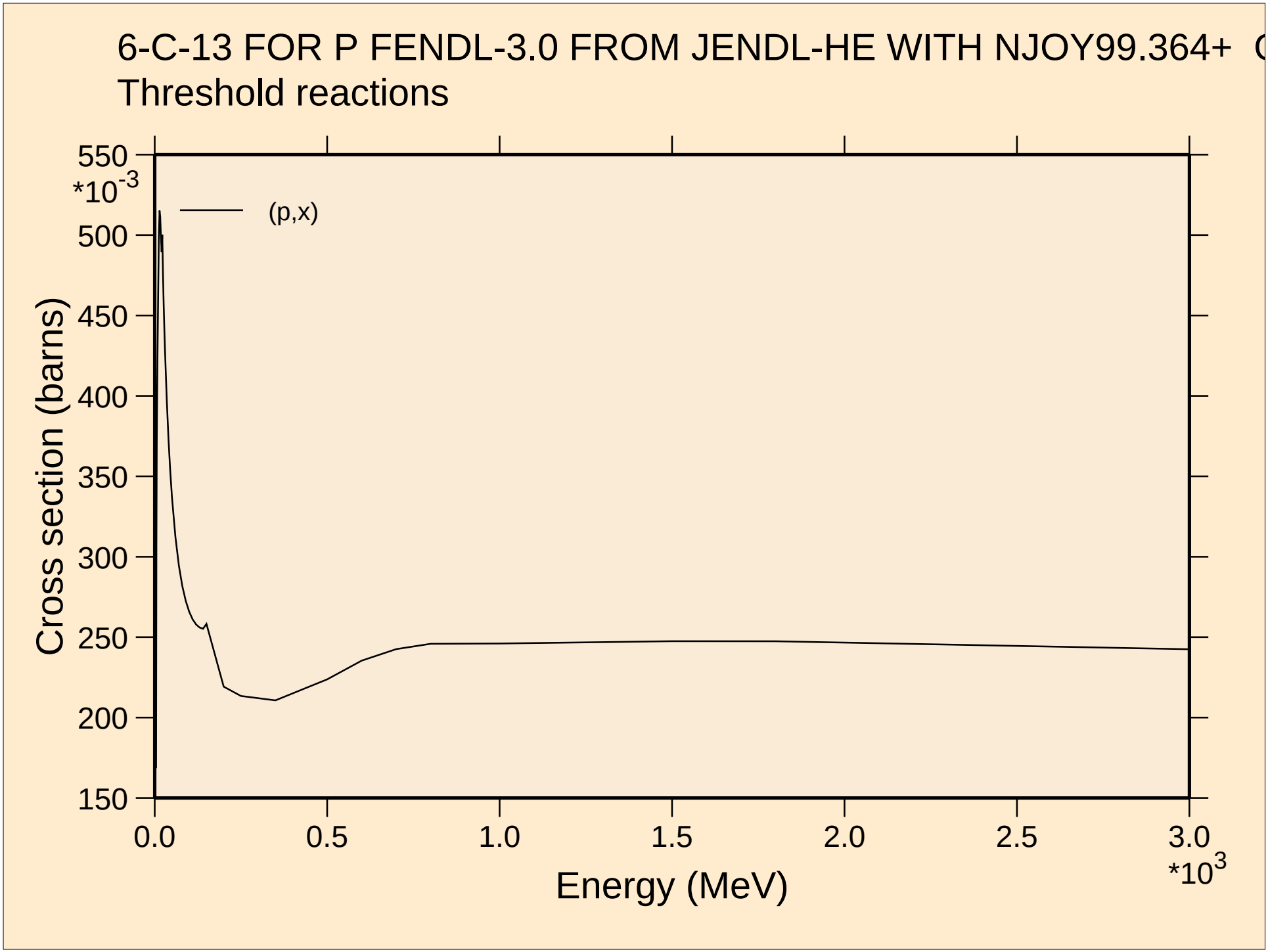
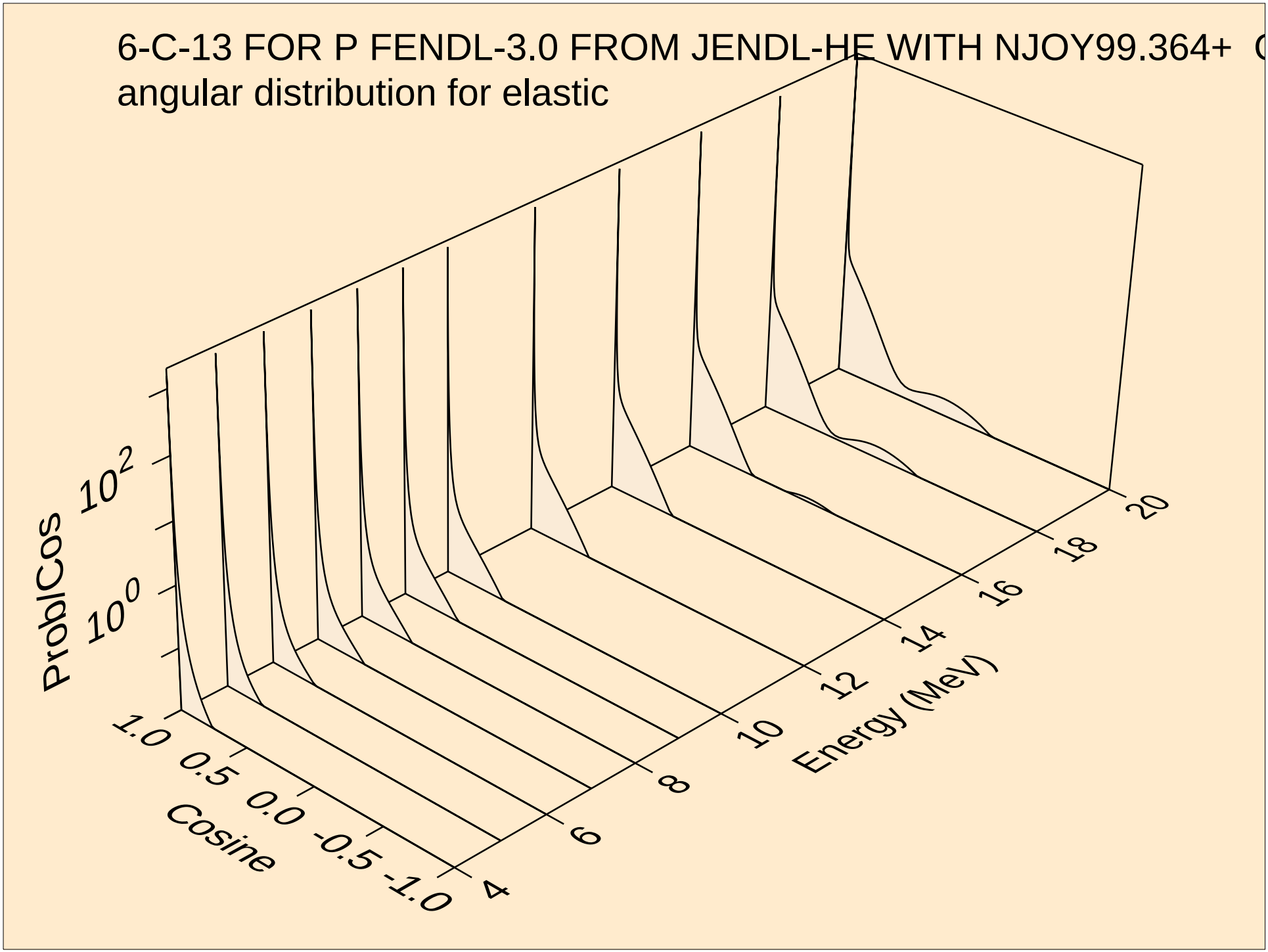

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Principal cross sections
Cross section (barns)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{1}
10^{2}
10^{3}
Energy (MeV)
total
absorption
elastic
gamma production

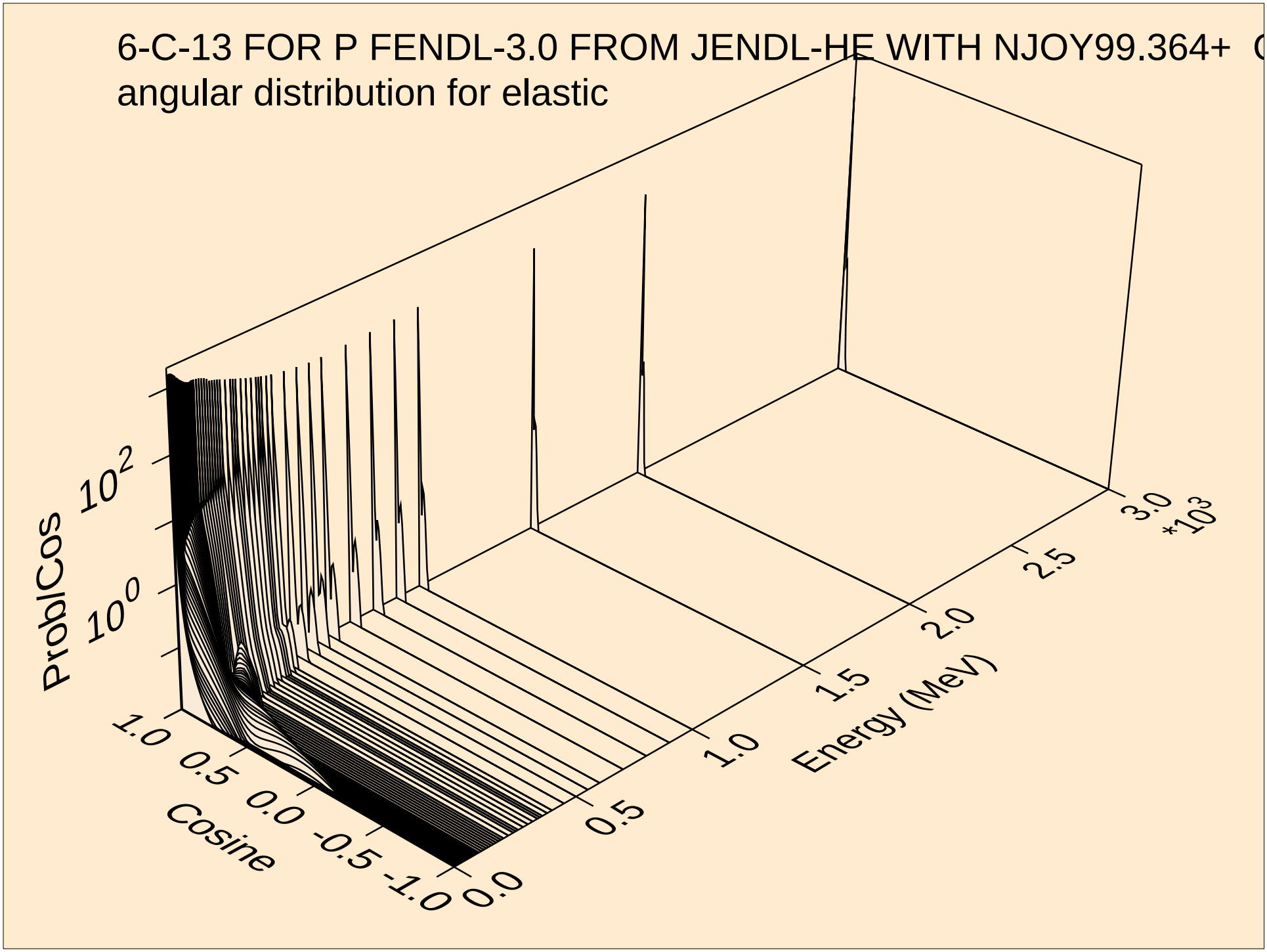

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^1
10^2
10^3

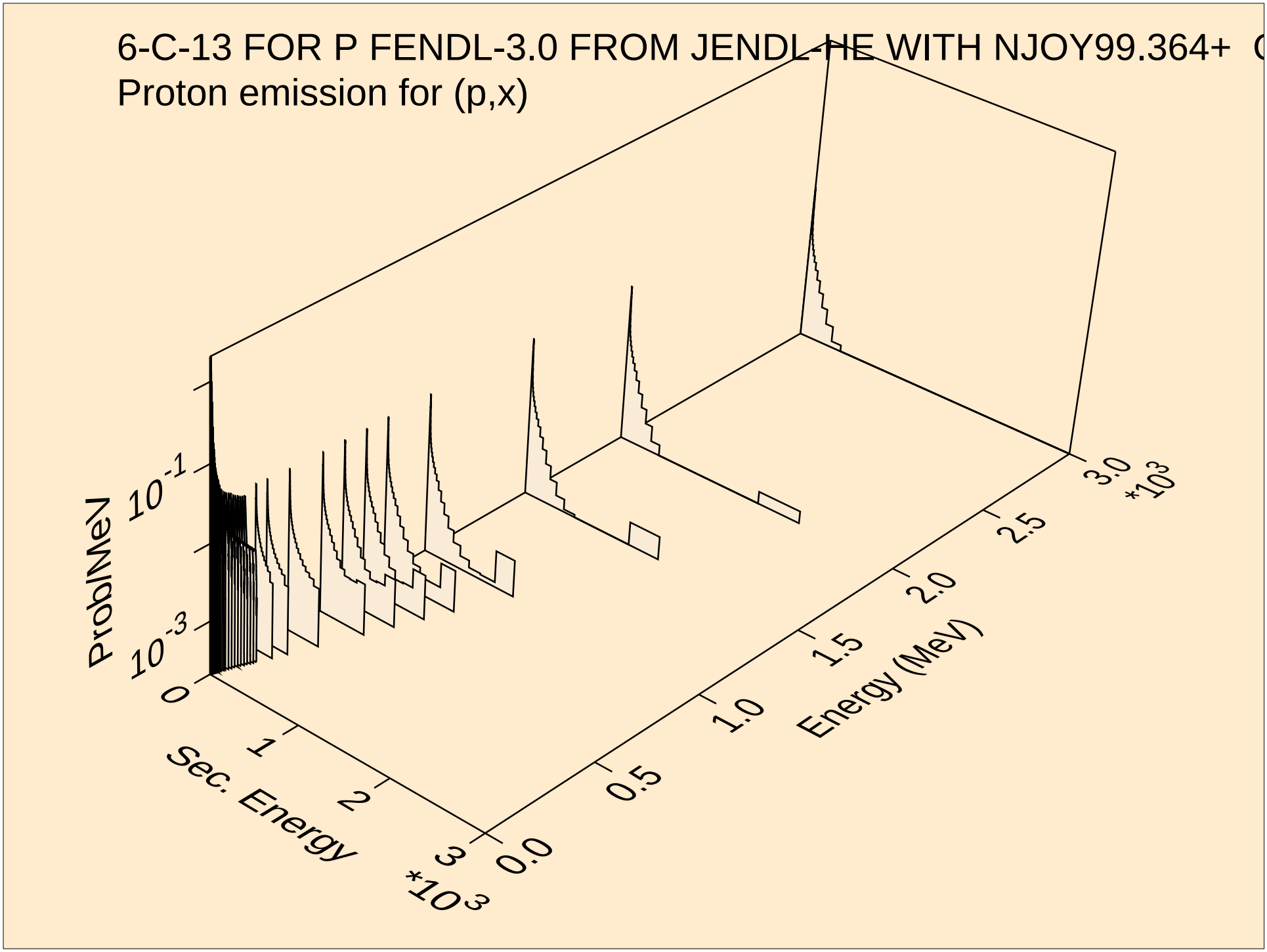

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
Principal cross sections
Cross section (barns)
160
140
120
100
80
60
40
20
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)
total
absorption
elastic
gamma production

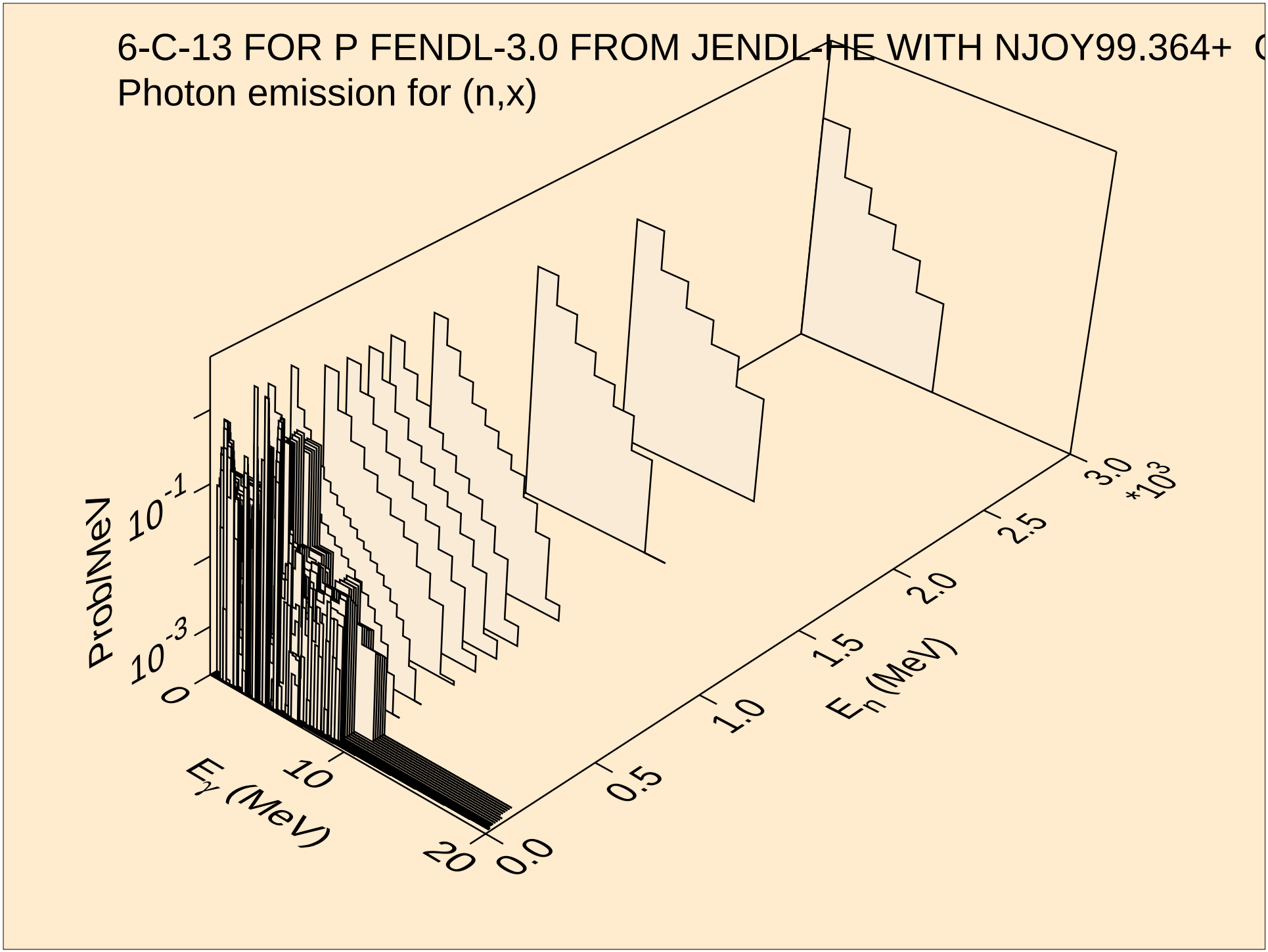

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
*10^3
0
10
20
30
40
50
60
70
0.0
0.5
1.0
1.5
2.0
2.5
3.0

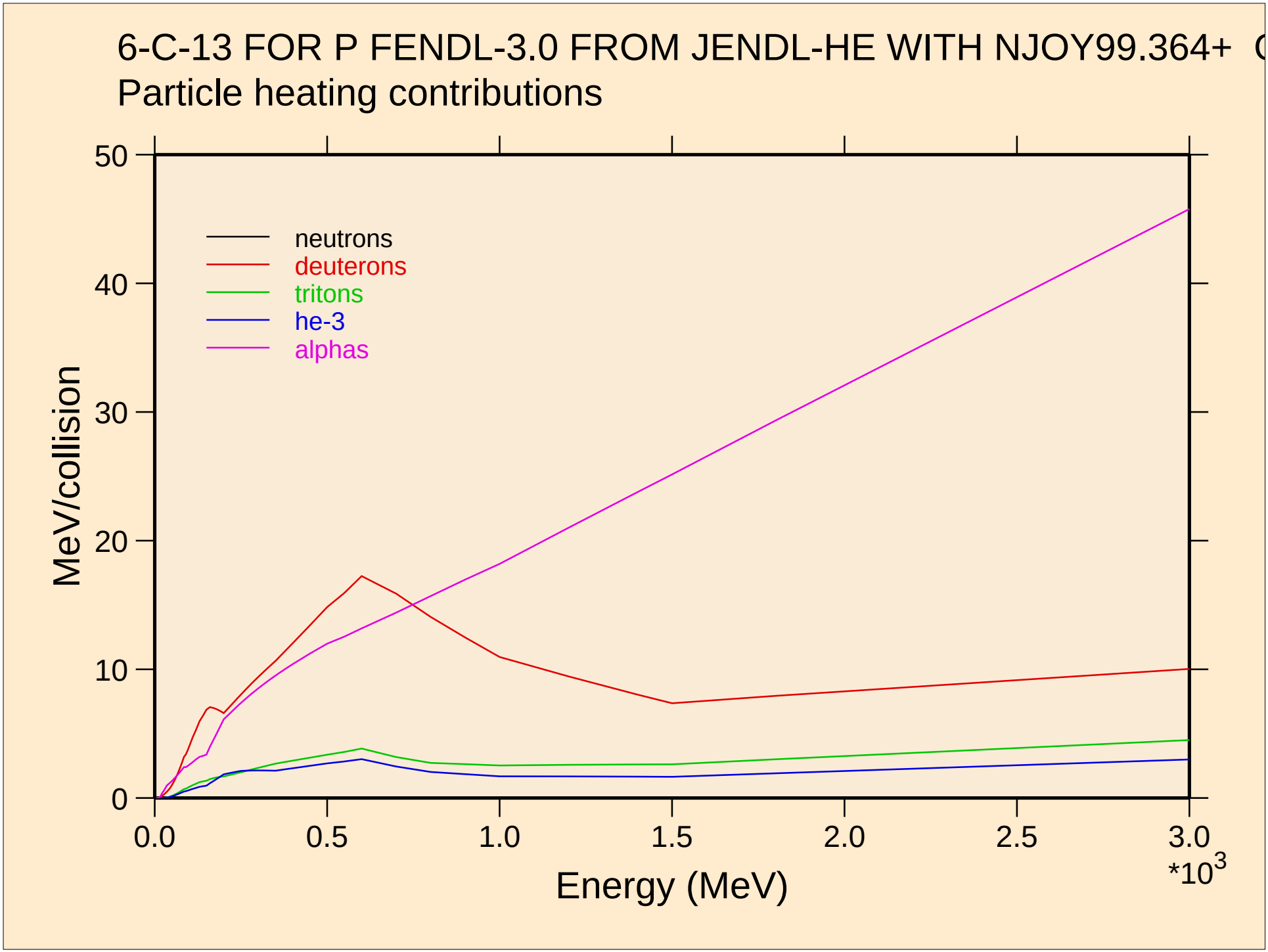

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
Threshold reactions
(p,x)
Cross section (barns)
*10-3
550
500
450
400
350
300
250
200
150
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

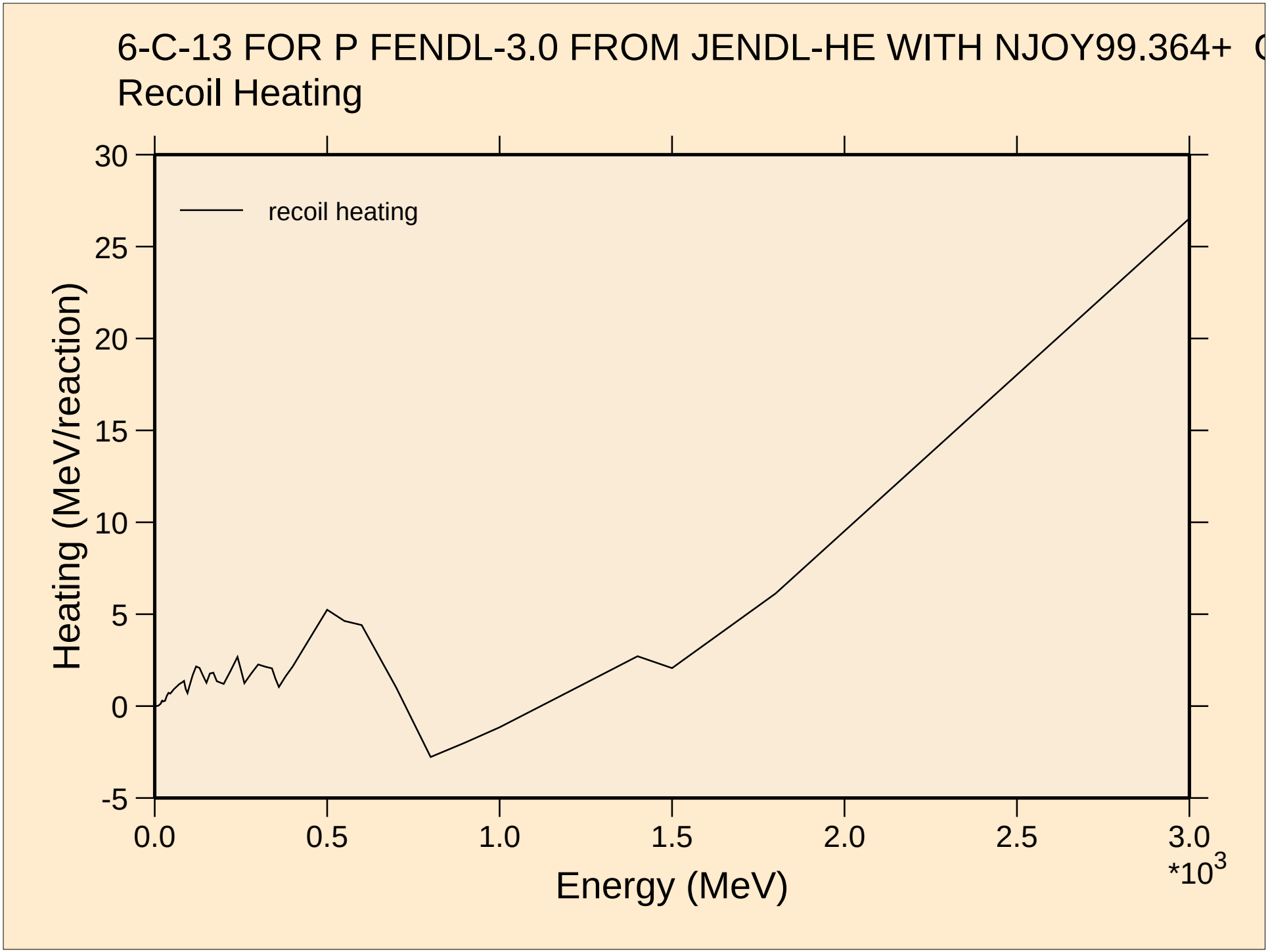

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
angular distribution for elastic
Prob\Cos
10^2
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
4
6
8
10
12
14
16
18
20
Energy (MeV)

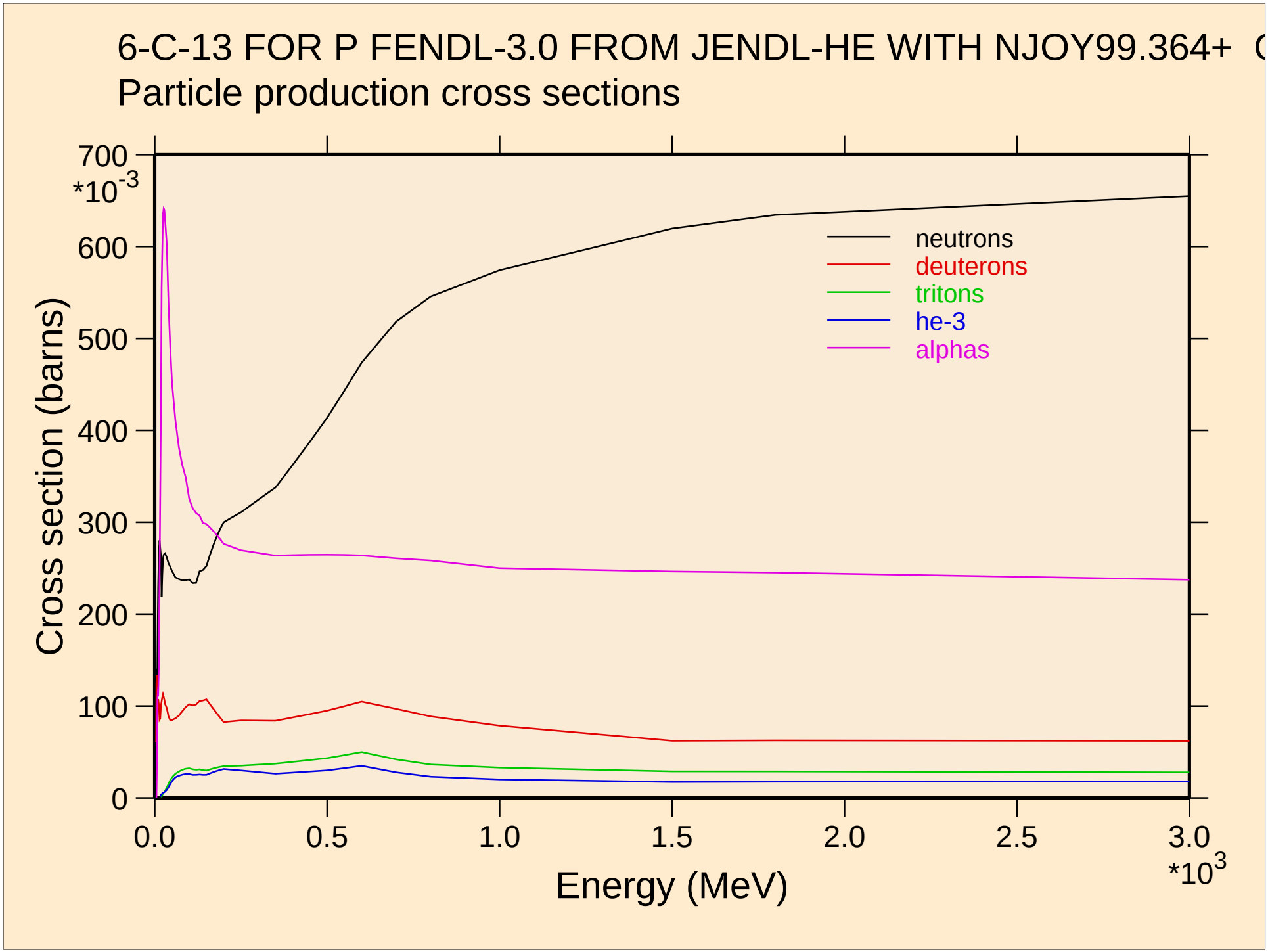

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
angular distribution for elastic
ProbICos
10^2
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

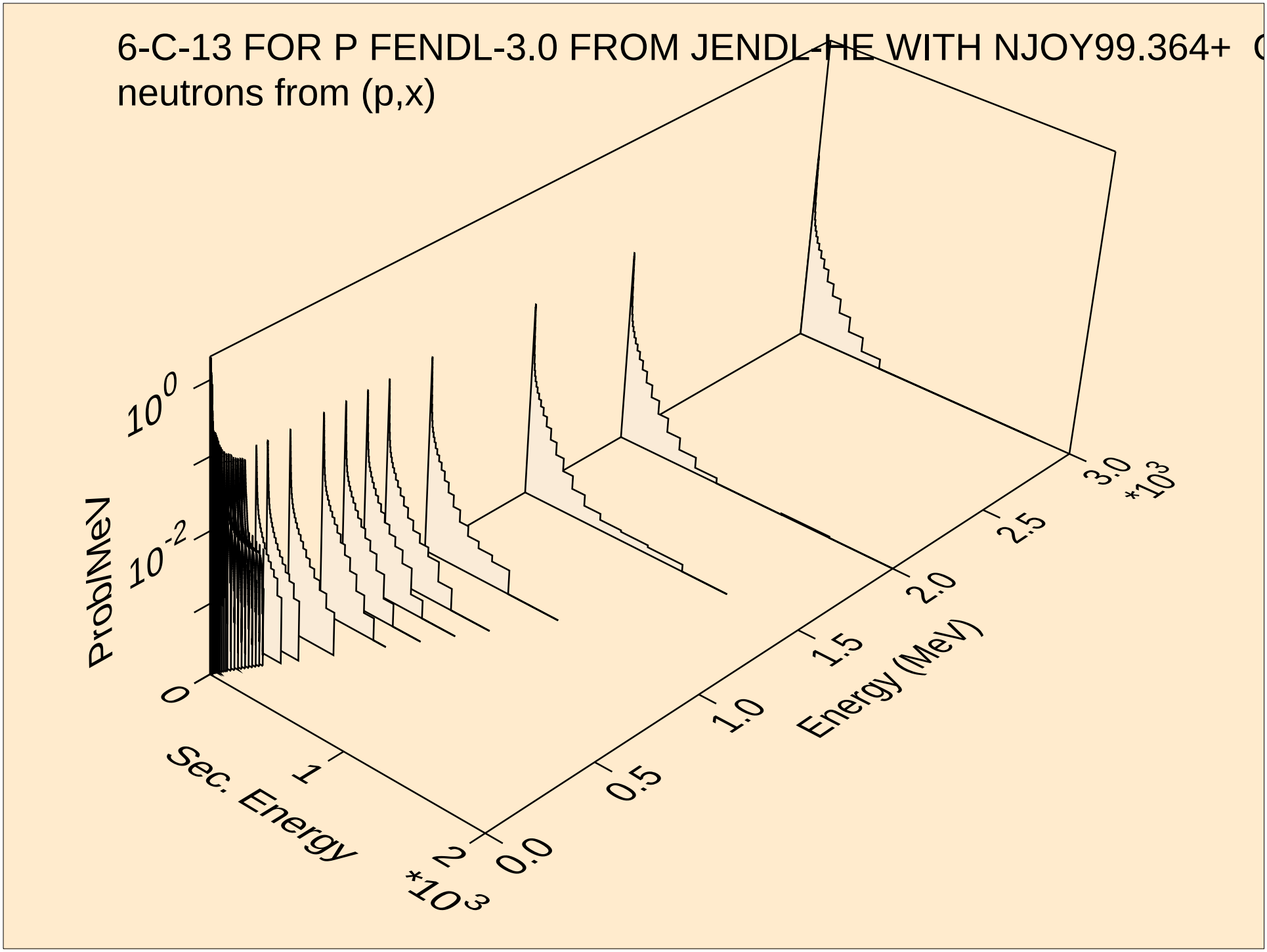

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
Proton emission for (p,x)
Prob/MeV
10-1
10-3
0
1
2
3
*10³
Sec. Energy
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10³
Energy (MeV)

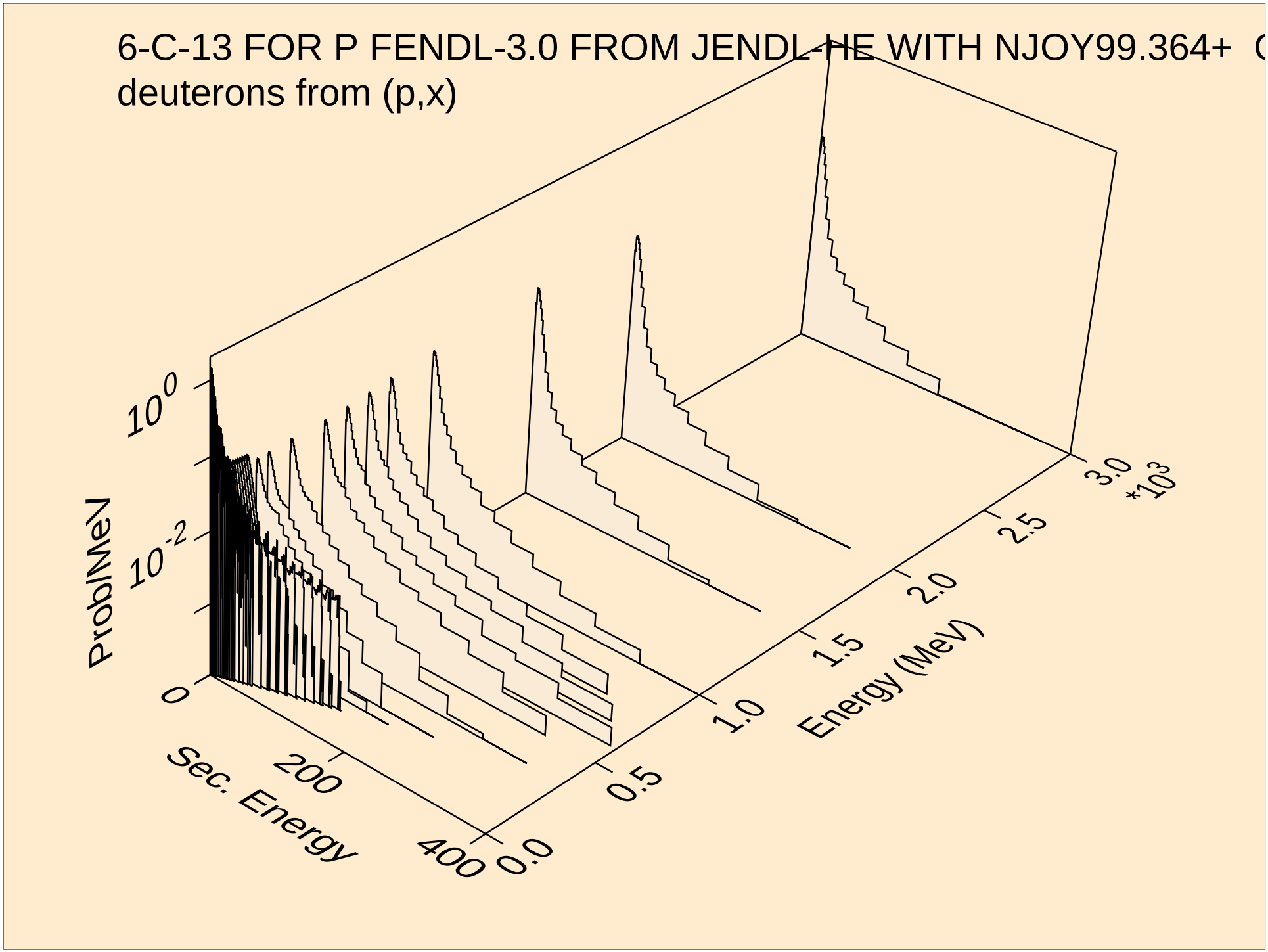

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
Photon emission for (n,x)
Prob/MeV
10-1
10-3
0
10
20
Eγ (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10³
En (MeV)

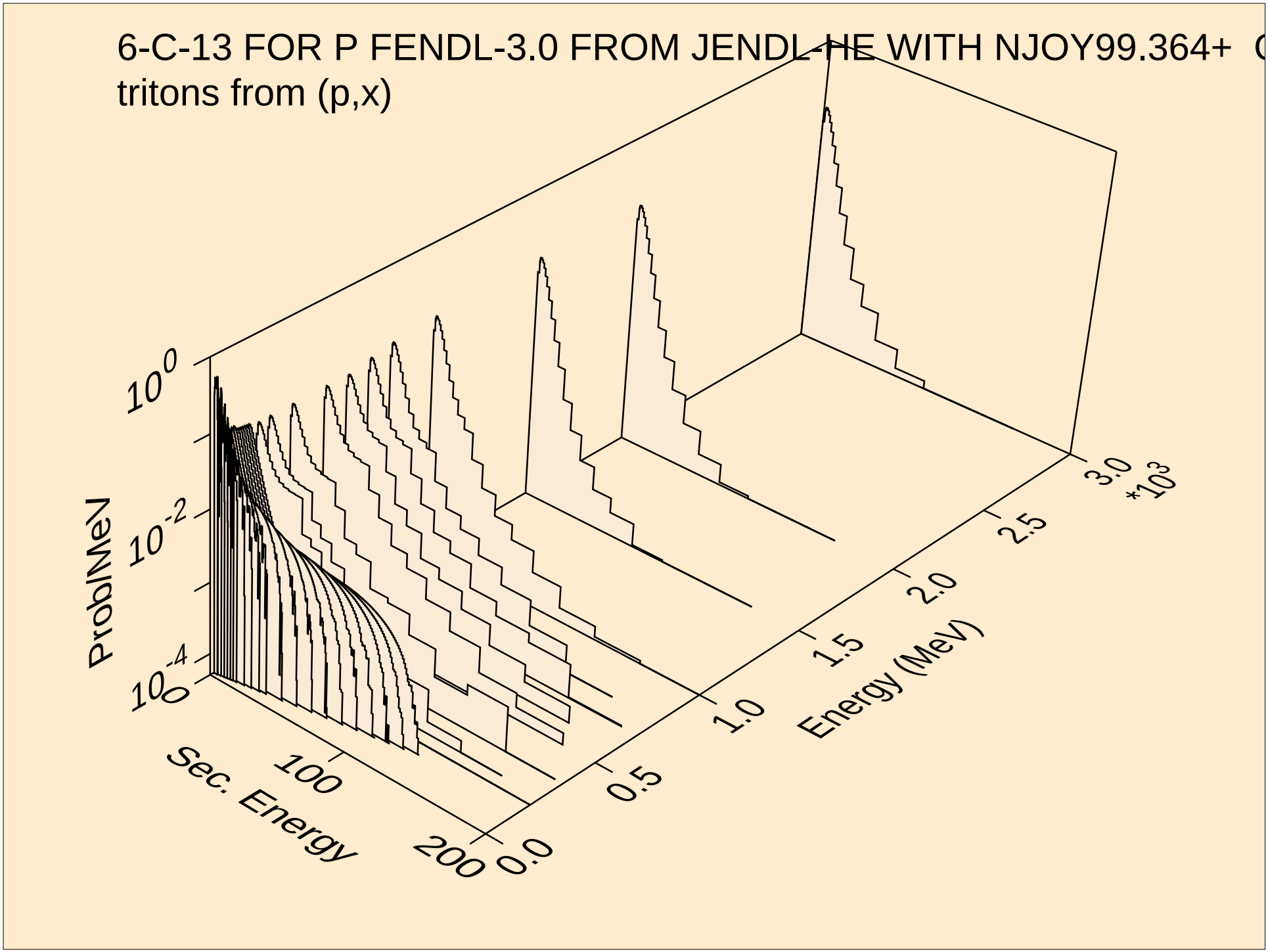

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
Particle heating contributions
neutrons
deuterons
tritons
he-3
alphas
MeV/collision
0
10
20
30
40
50
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

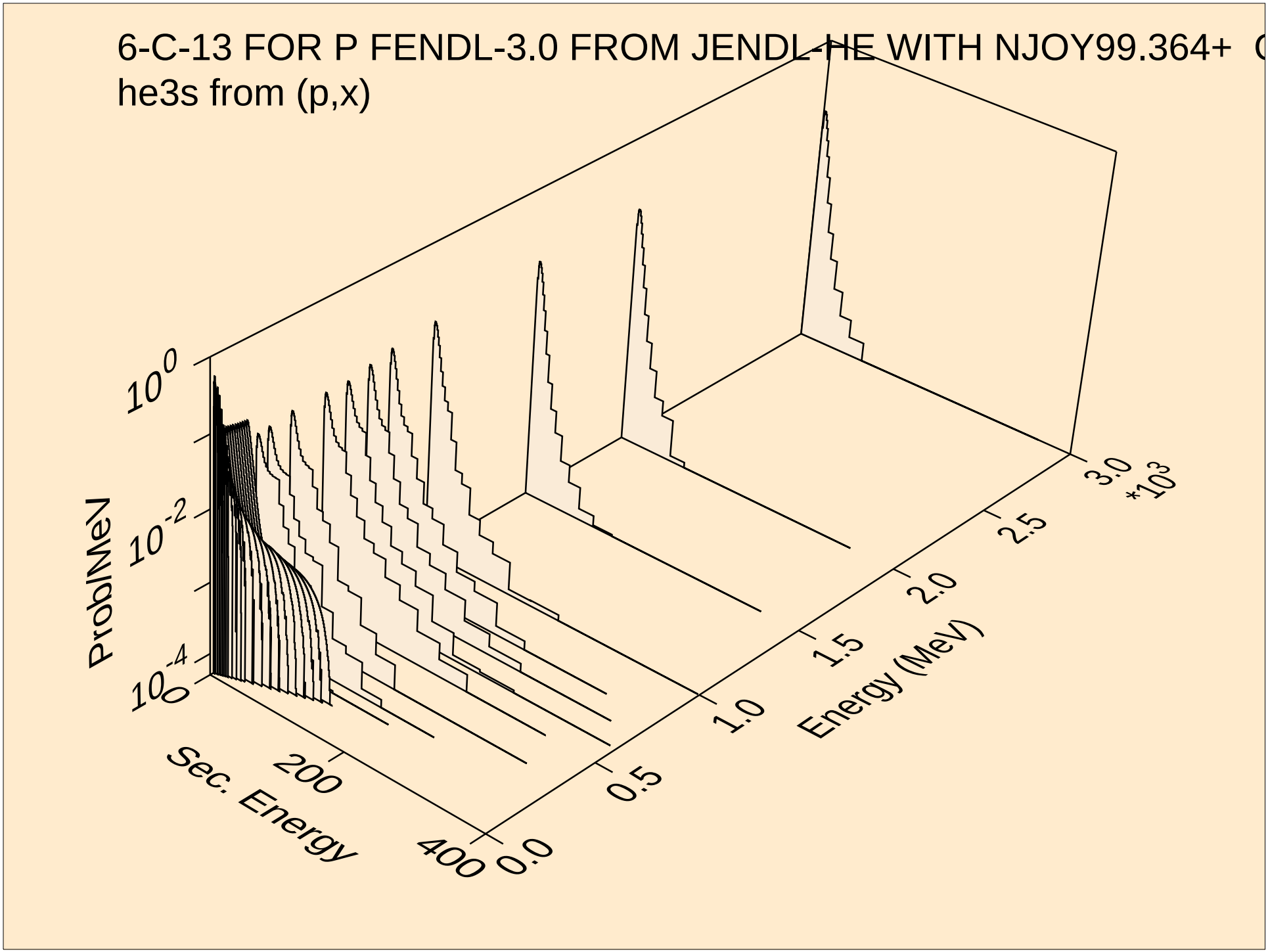

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
Recoil Heating
recoil heating
Heating (MeV/reaction)
30
25
20
15
10
5
0
-5
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

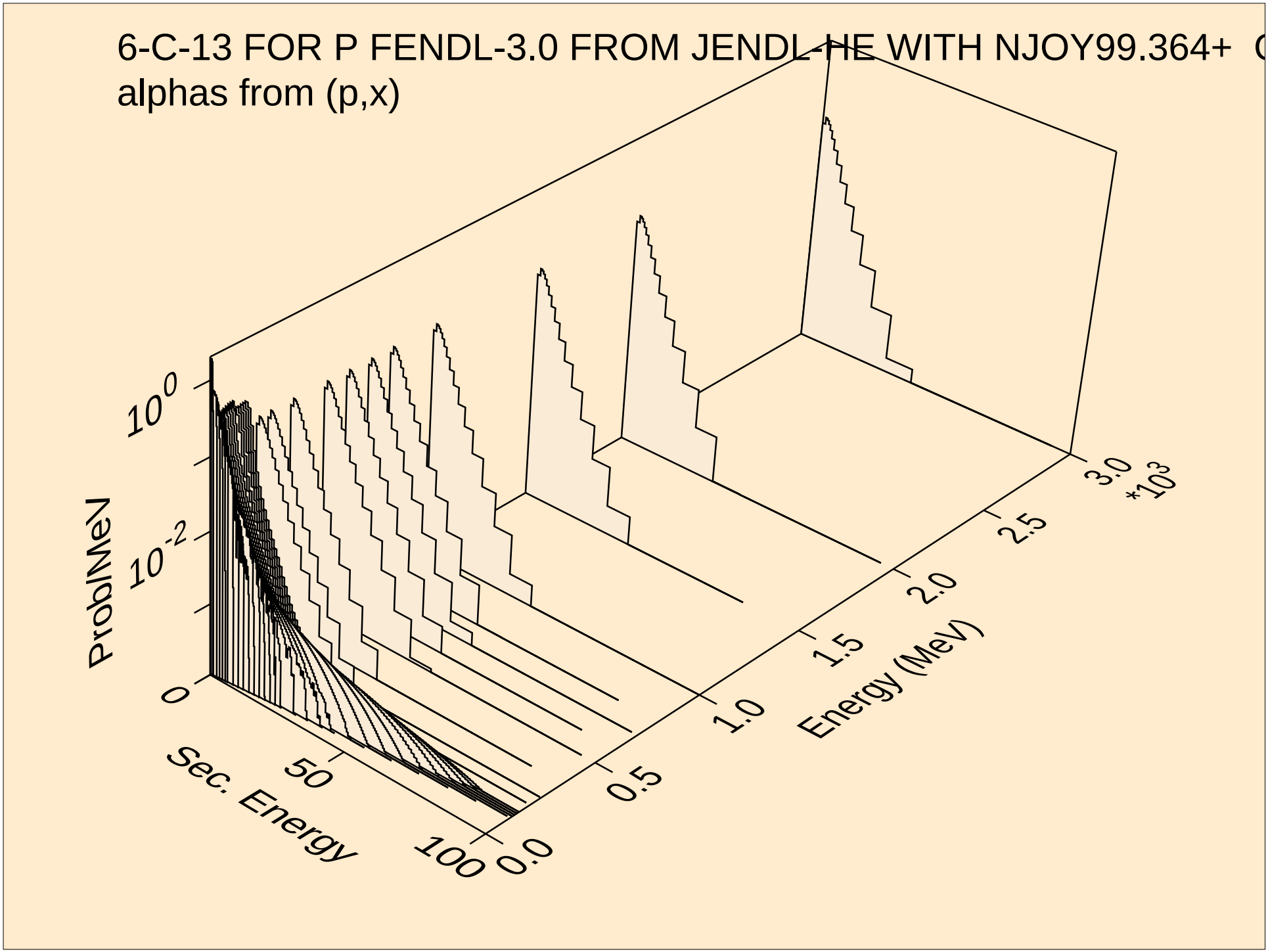

6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Particle production cross sections
Cross section (barns)
*10-3
700
600
500
400
300
200
100
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)
neutrons
deuterons
tritons
he-3
alphas


6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
neutrons from (p,x)
Prob/MeV
10^0
10^-2
0
Sec. Energy
1
2
*10^3
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)


6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
deuterons from (p,x)
Prob/MeV
10^{0}
10^{-2}
0
200
400
Sec. Energy
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10³
Energy (MeV)


6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
tritons from (p,x)
Prob/MeV
10^{0}
10^{-2}
10^{-4}
Sec. Energy
0
100
200
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^{3}


6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
he3s from (p,x)
Prob/MeV
10^{0}
10^{-2}
10^{-4}
Sec. Energy
0
200
400
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^{3}


6-C-13 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+ C
alphas from (p,x)
Prob/MeV
10^{0}
10^{-2}
0
Sec. Energy
50
100
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^{3}
Energy (MeV)