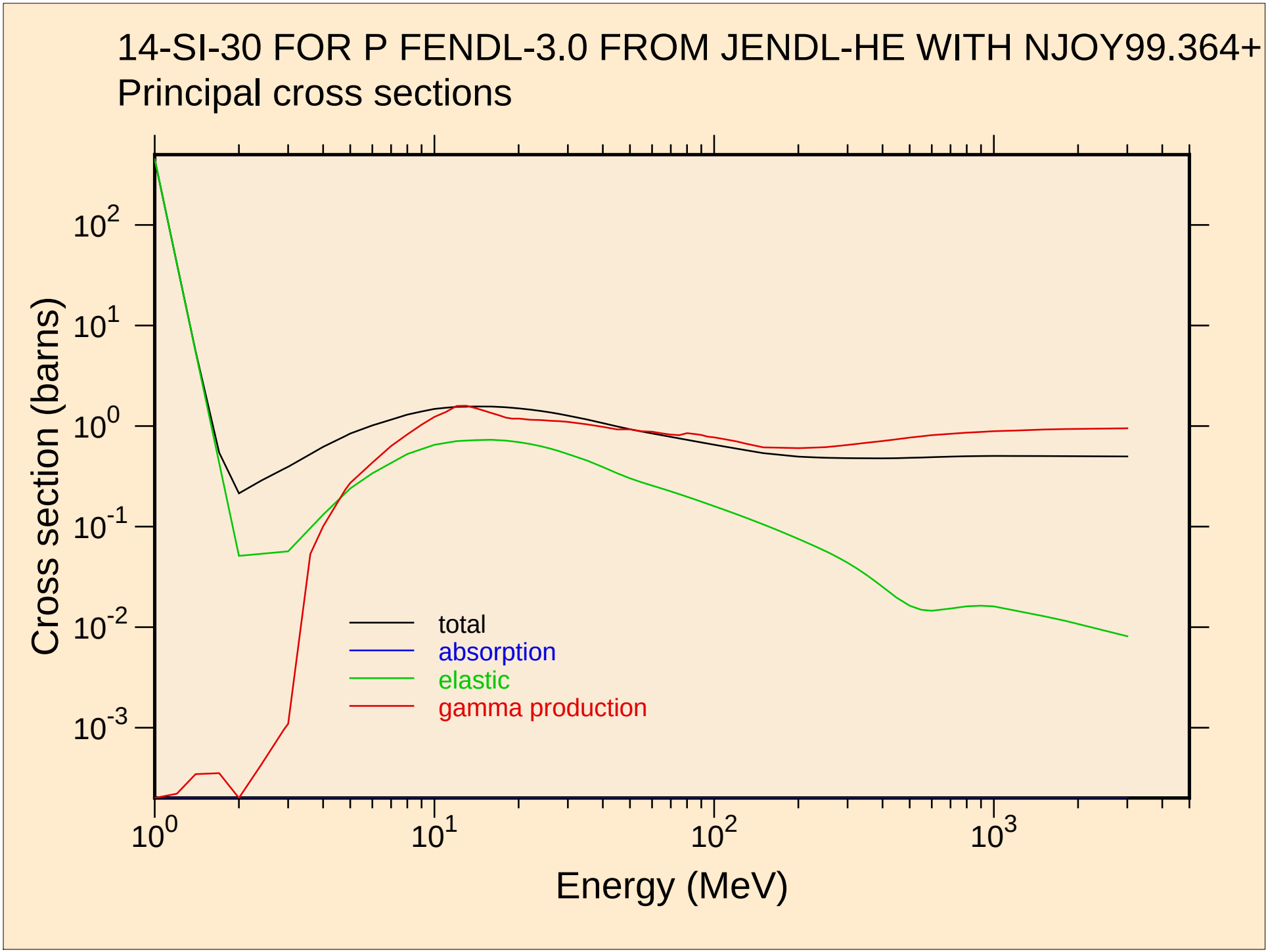
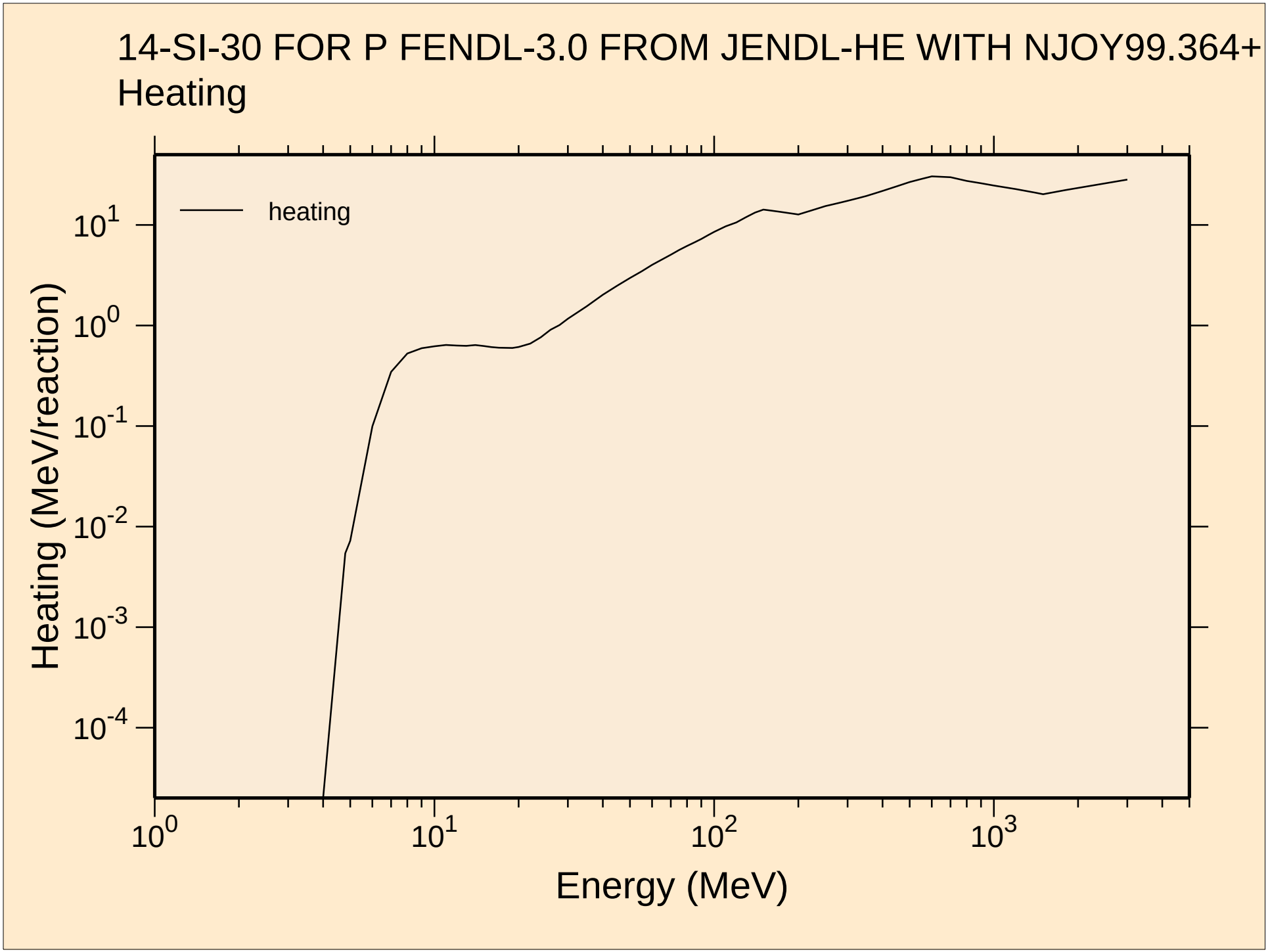
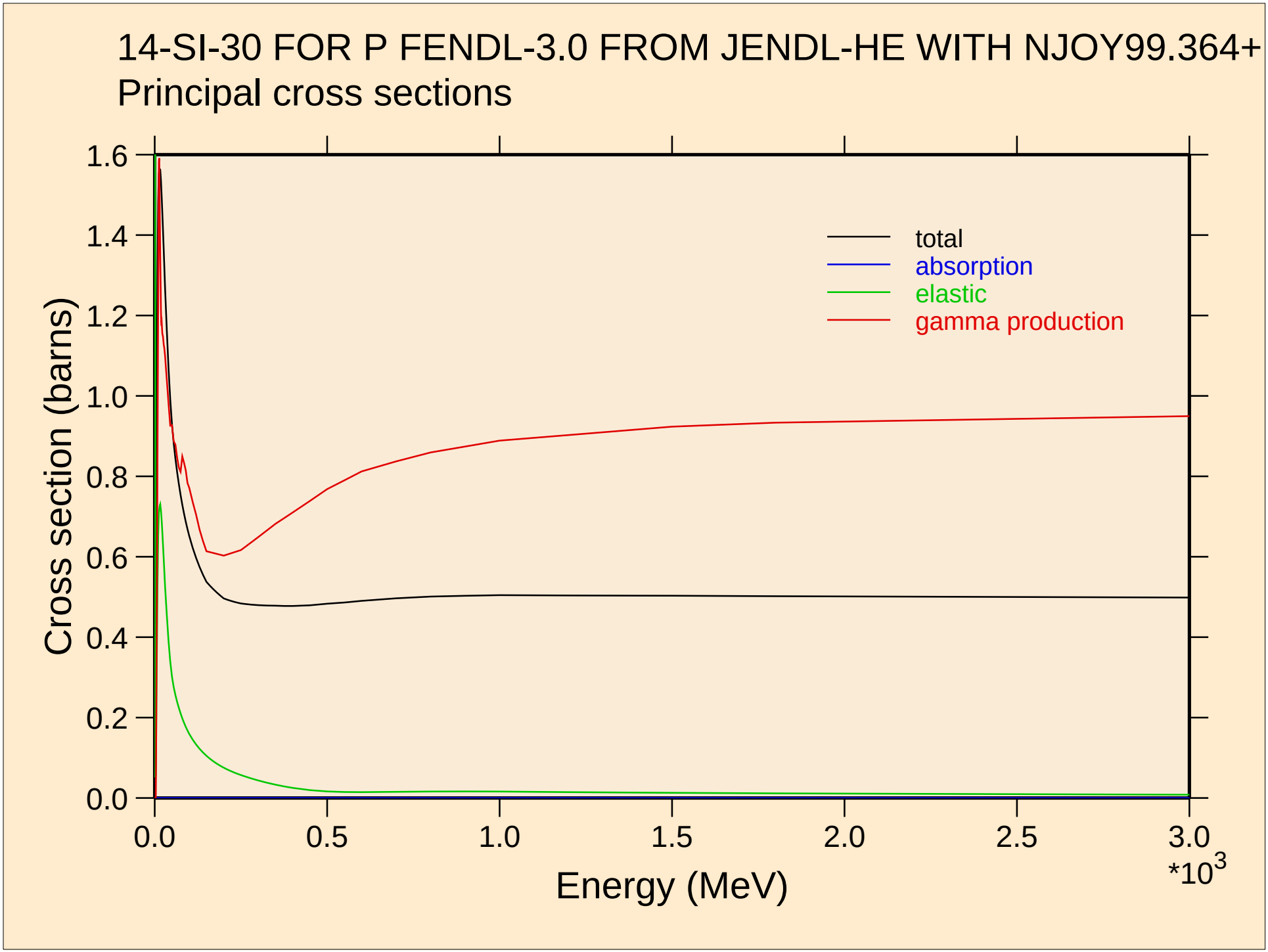
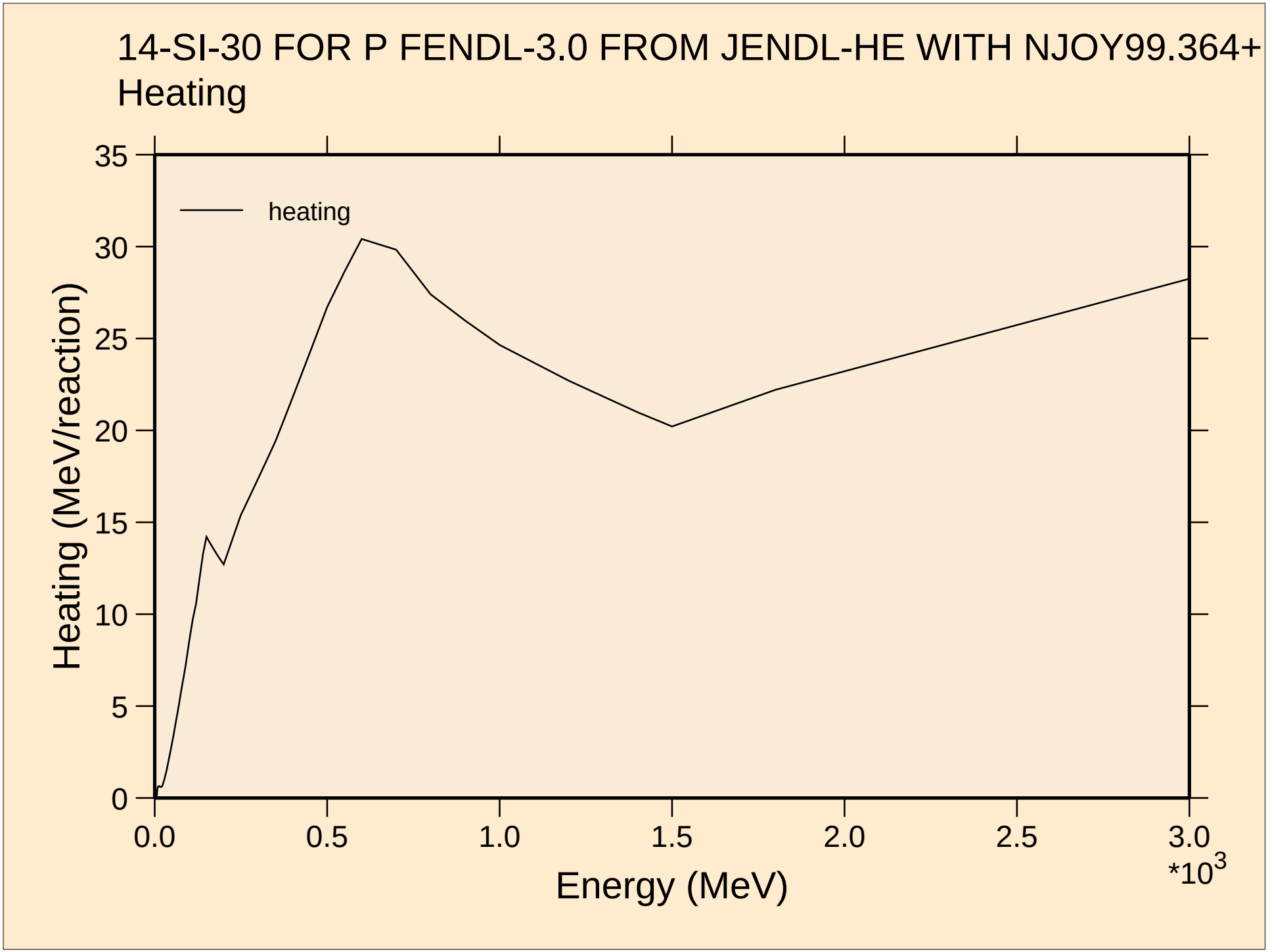
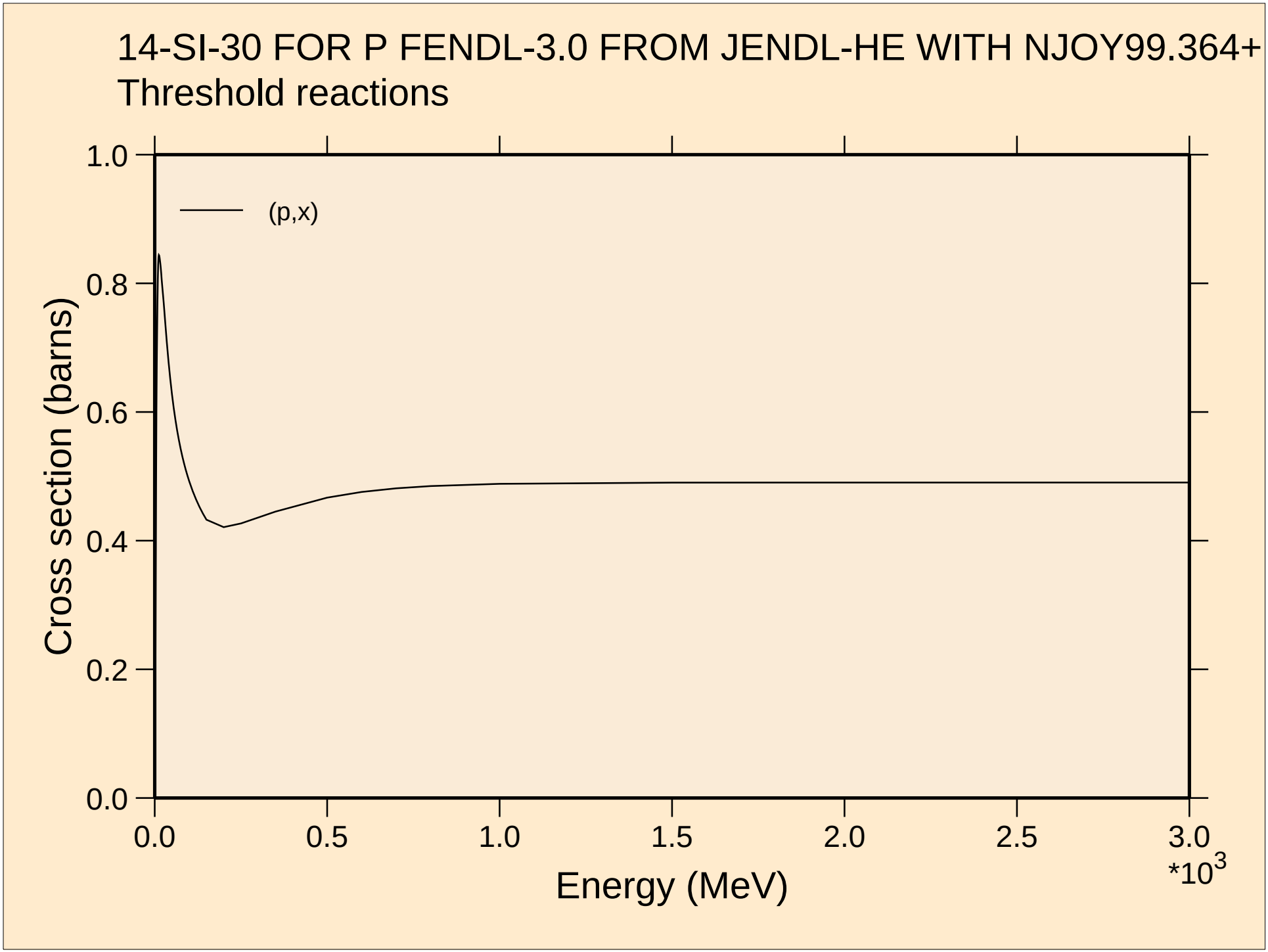
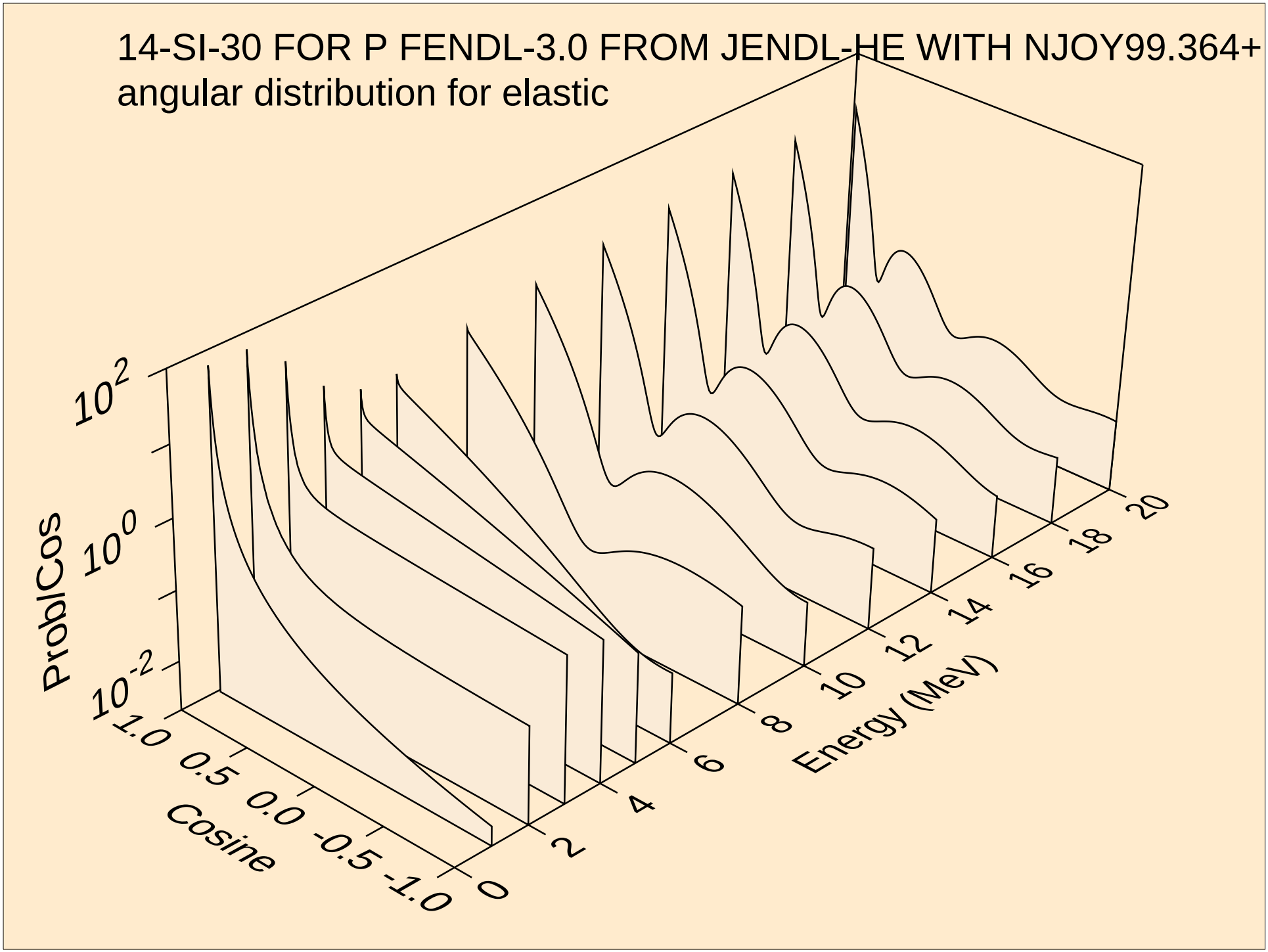

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Principal cross sections
Cross section (barns)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
total
absorption
elastic
gamma production
10^{0}
10^{1}
10^{2}
10^{3}
Energy (MeV)

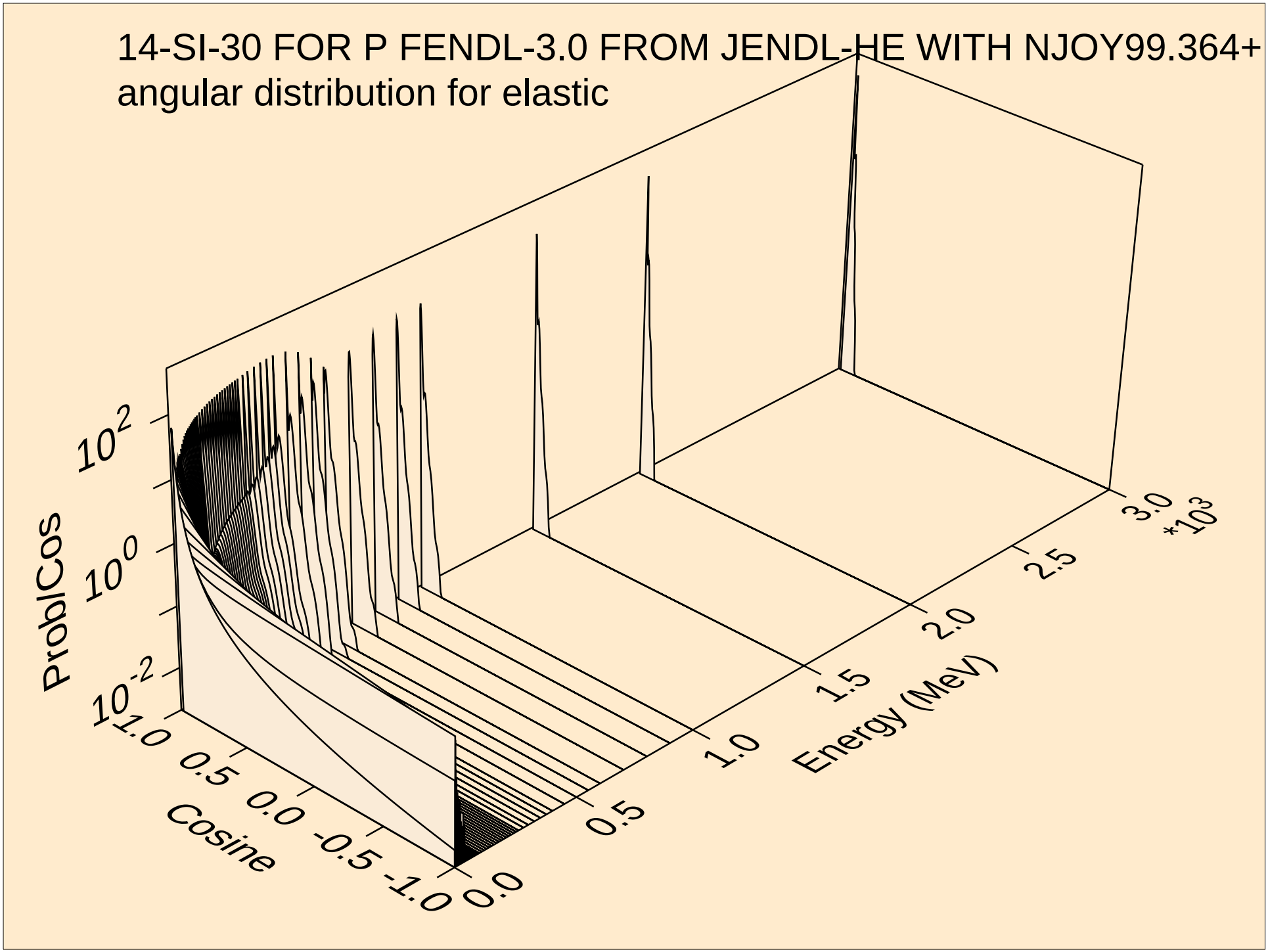

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Heating
heating
Heating (MeV/reaction)
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{0}
10^{1}
10^{2}
10^{3}
Energy (MeV)

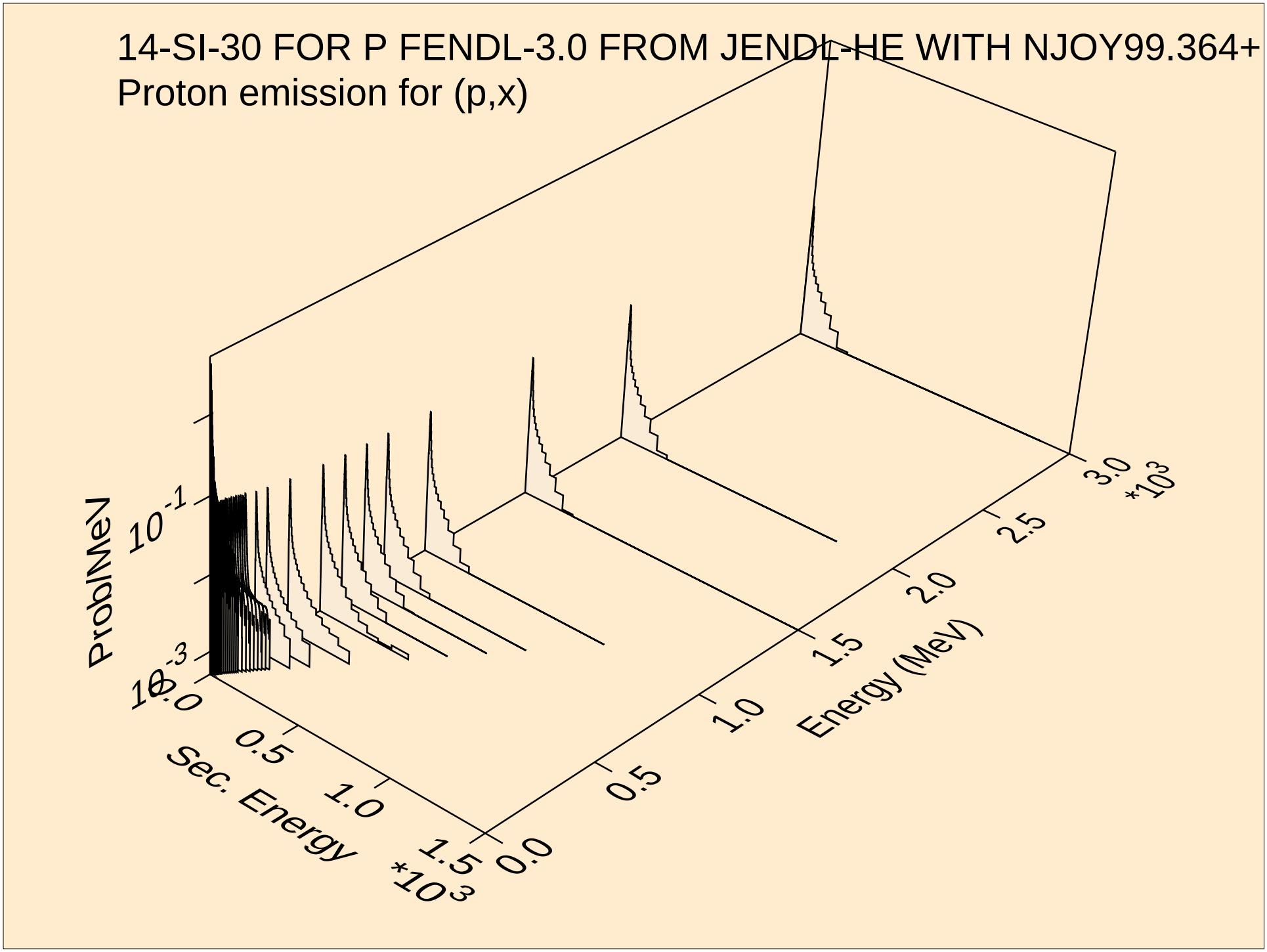

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Principal cross sections
Cross section (barns)
Energy (MeV)
*10^3
total
absorption
elastic
gamma production
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
0.0
0.5
1.0
1.5
2.0
2.5
3.0

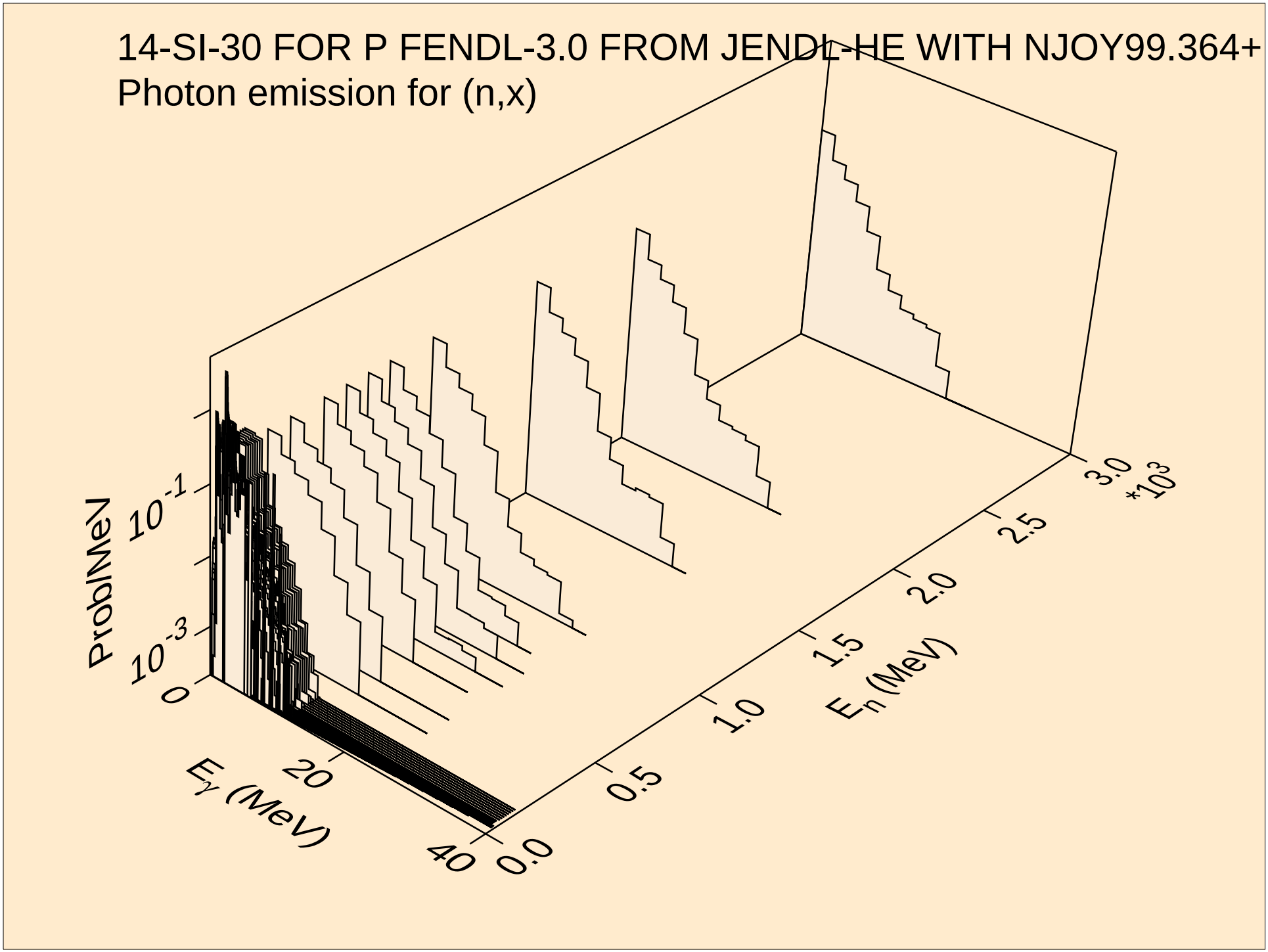

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Heating
heating
Heating (MeV/reaction)
0
5
10
15
20
25
30
35
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

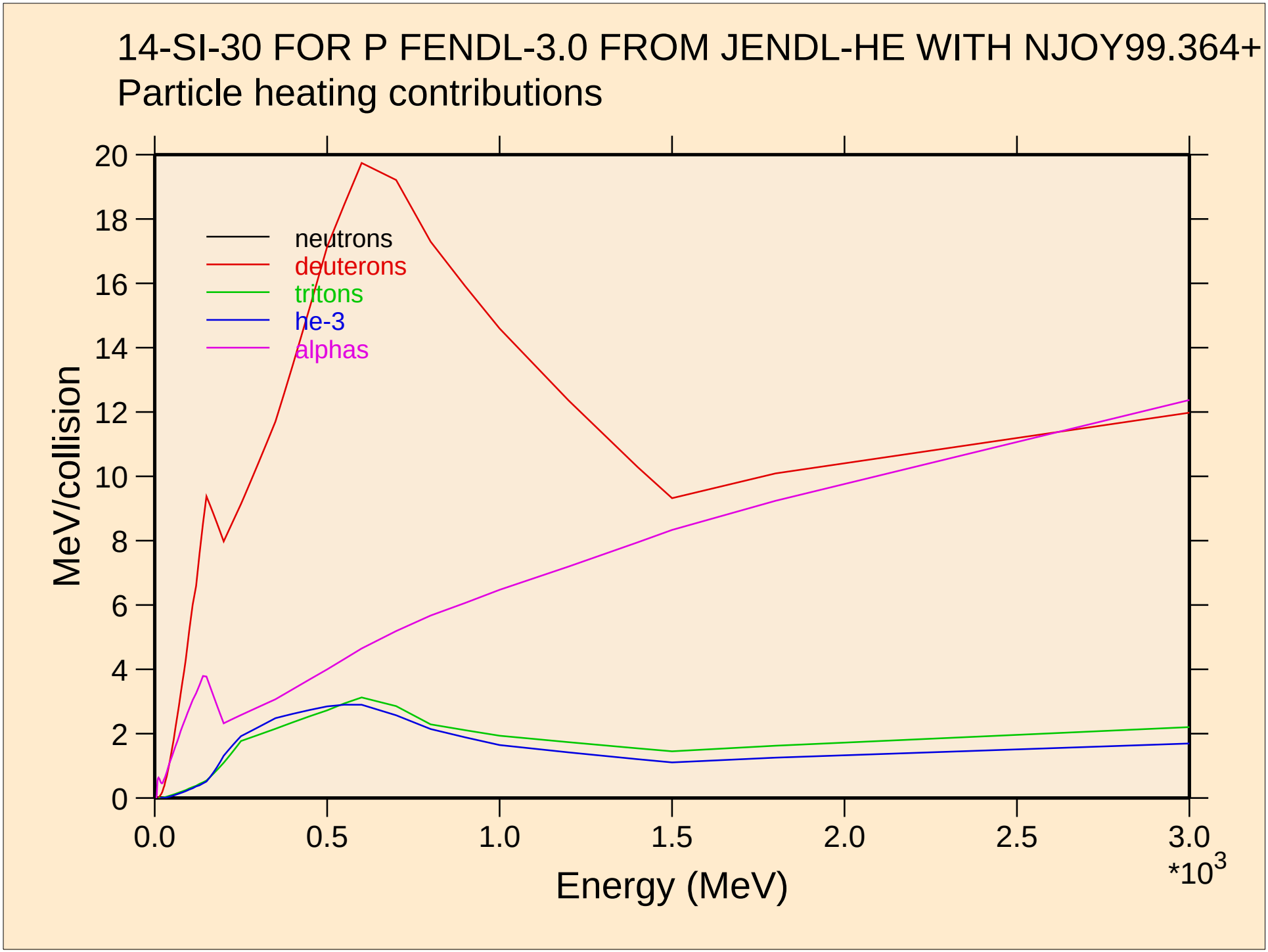

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Threshold reactions
(p,x)
Cross section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

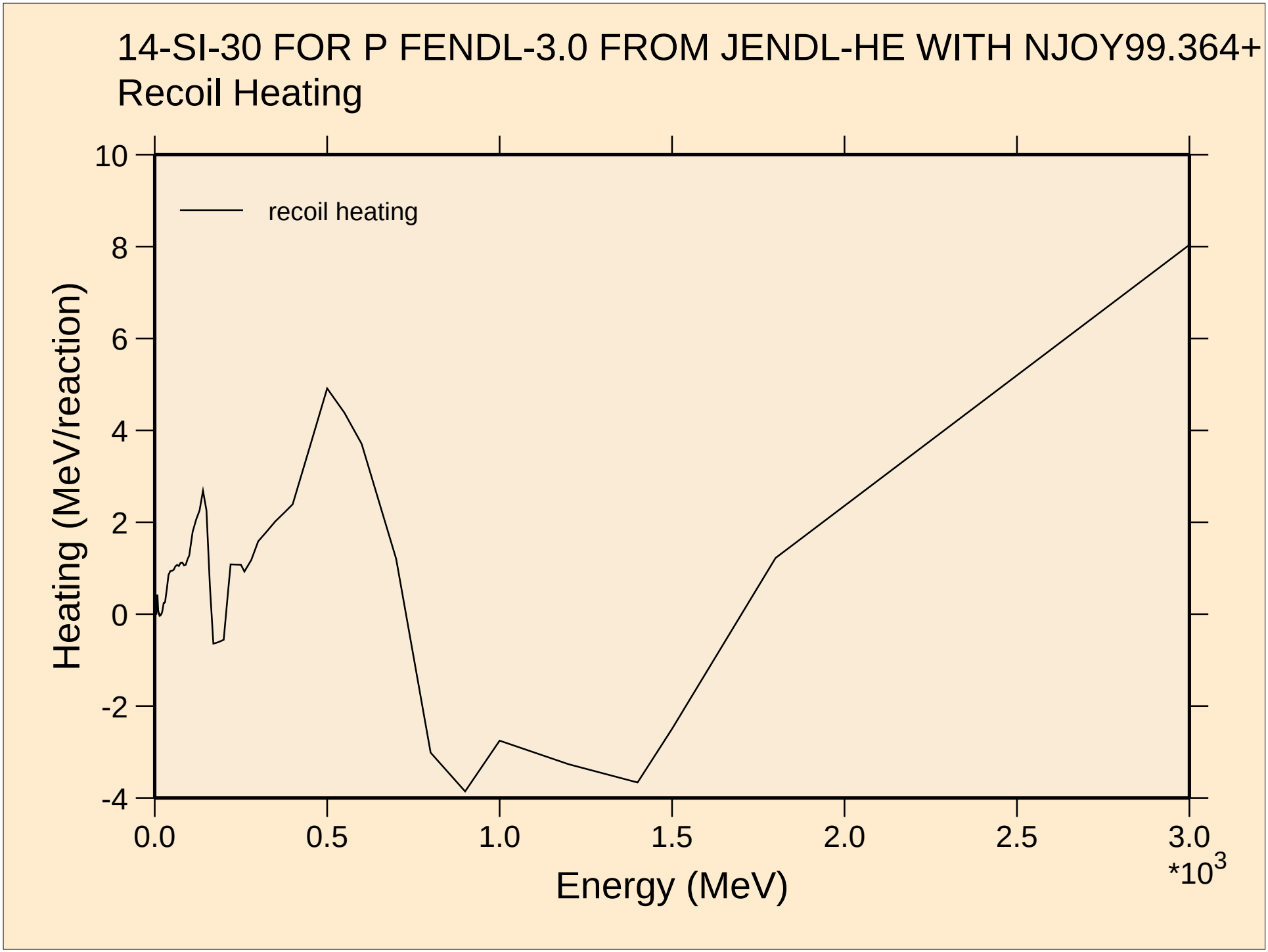

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
angular distribution for elastic
ProblCos
10^{2}
10^{0}
10^{-2}
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
2
4
6
8
10
12
14
16
18
20

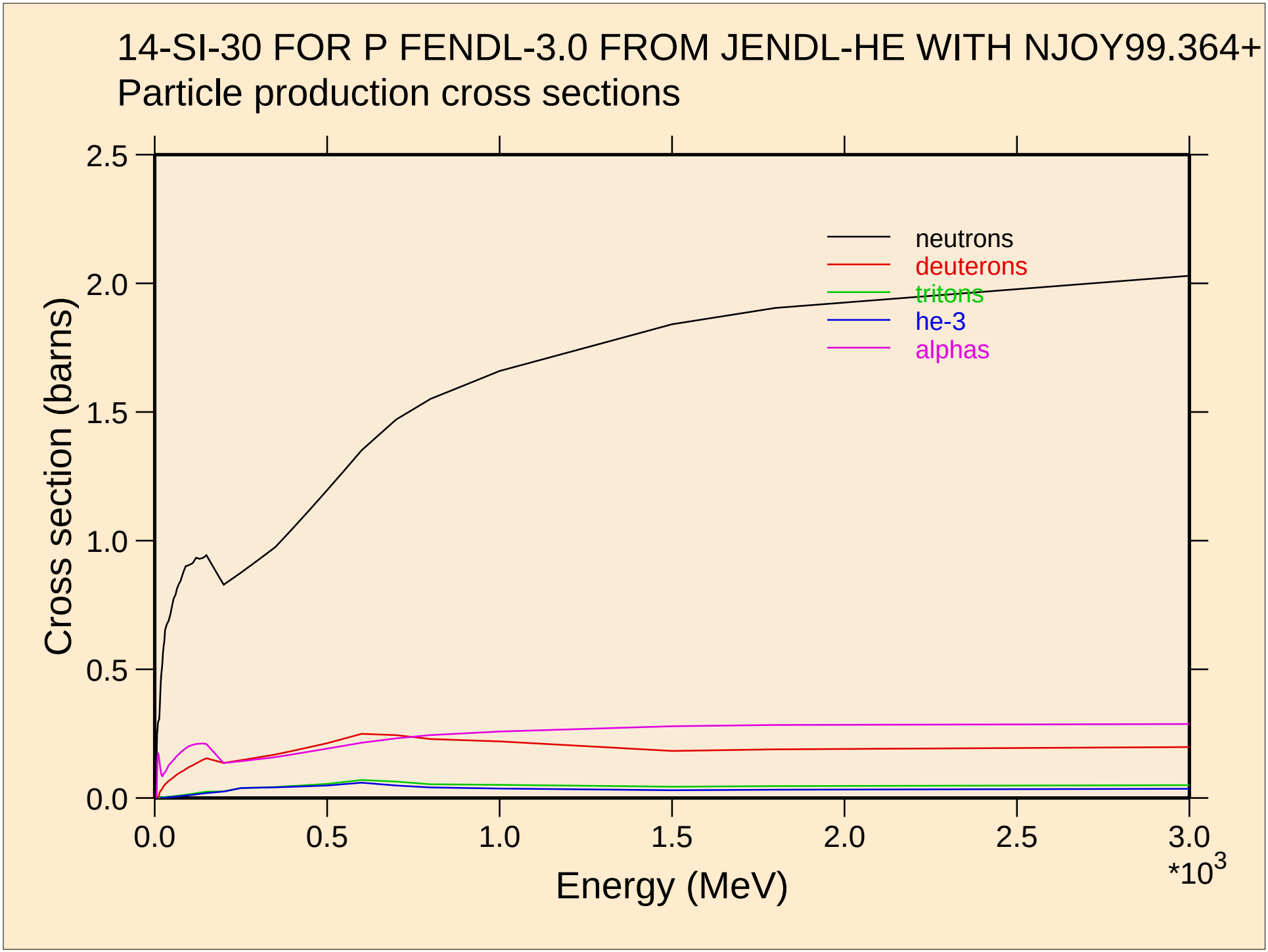

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
angular distribution for elastic
ProbICos
10^{2}
10^{0}
10^{-2}
Cosine
1.0
0.5
0.0
-0.5
-1.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Energy (MeV)
*10^{3}

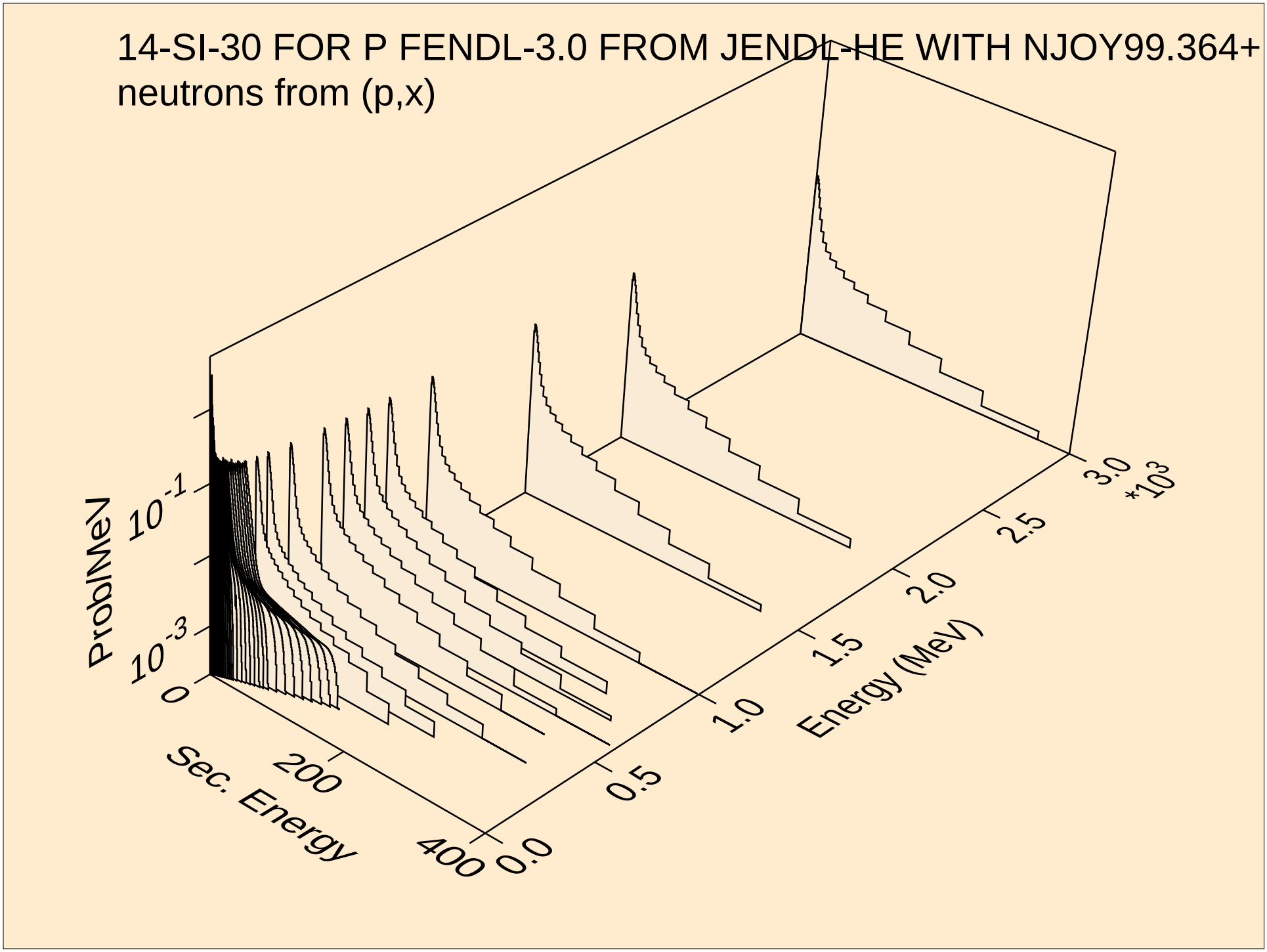

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Proton emission for (p,x)
Prob/MeV
10-1
10-3
0.0
0.5
1.0
1.5
Sec. Energy
*10³
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Energy (MeV)
*10³

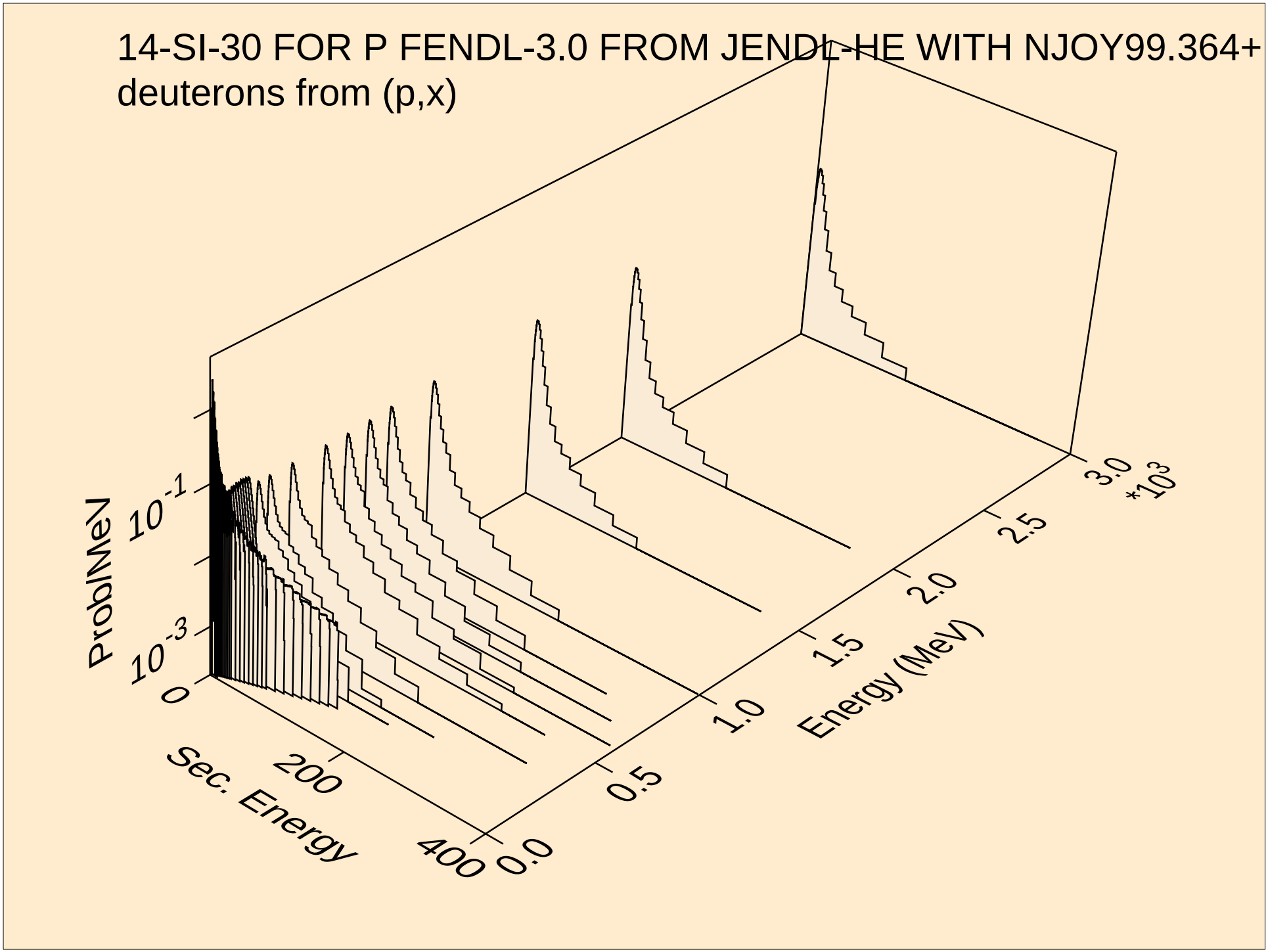

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Photon emission for (n,x)
Prob/MeV
10-1
10-3
0
Eγ (MeV)
20
40
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10³
En (MeV)

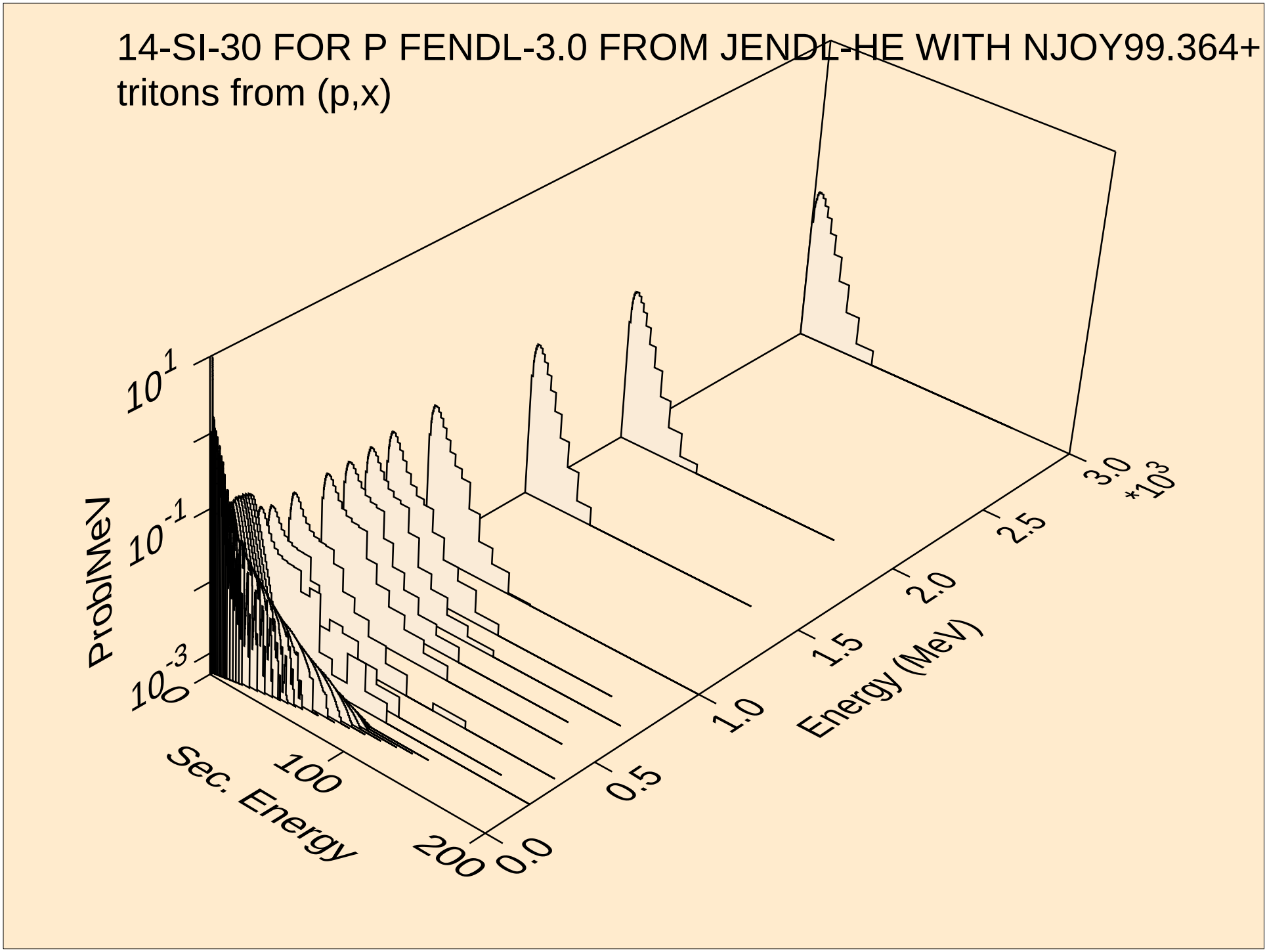

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Particle heating contributions
neutrons
deuterons
tritons
he-3
alphas
MeV/collision
Energy (MeV)
*10^3
0
2
4
6
8
10
12
14
16
18
20
0.0
0.5
1.0
1.5
2.0
2.5
3.0

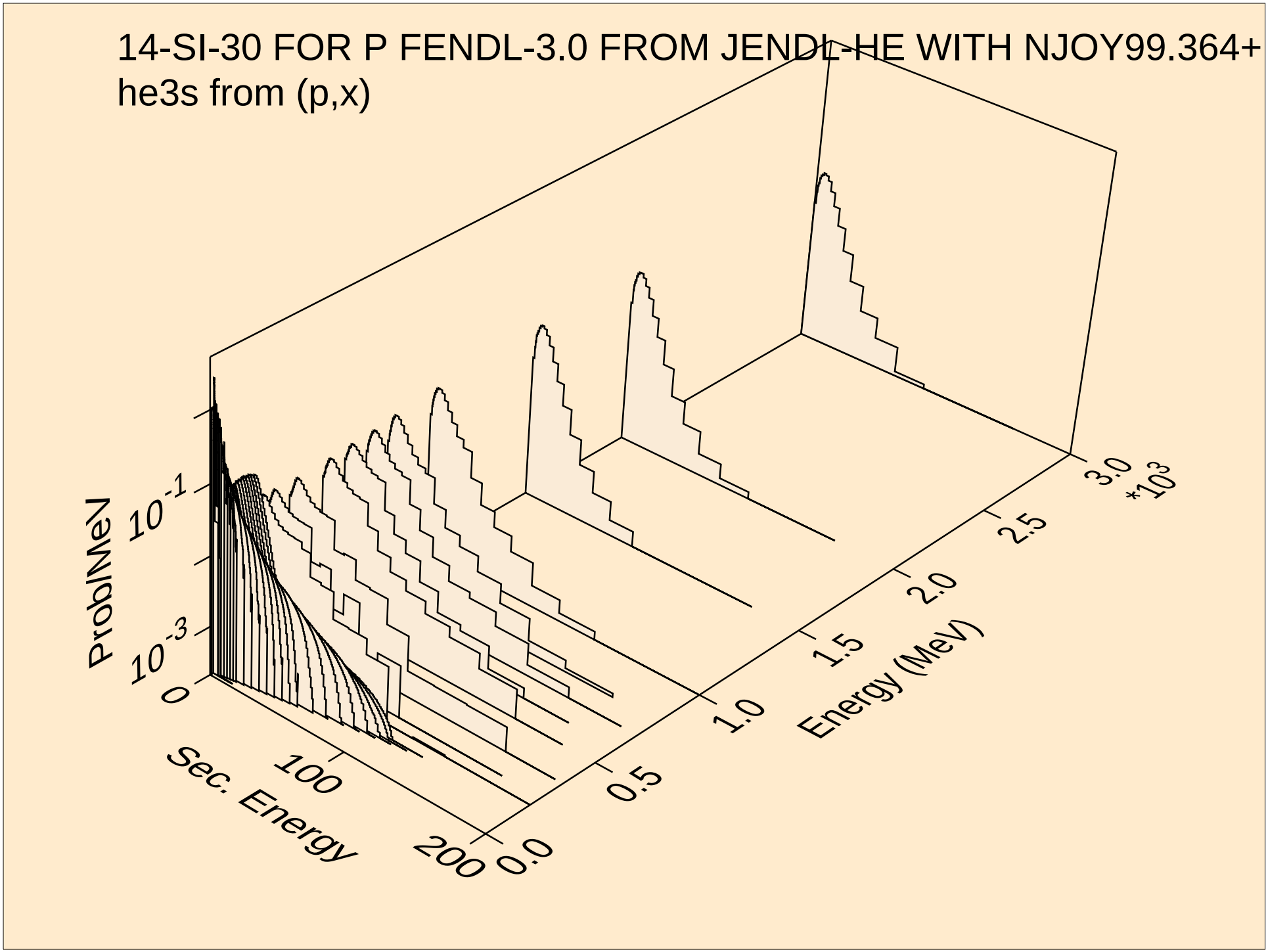

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Recoil Heating
recoil heating
Heating (MeV/reaction)
10
8
6
4
2
0
-2
-4
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

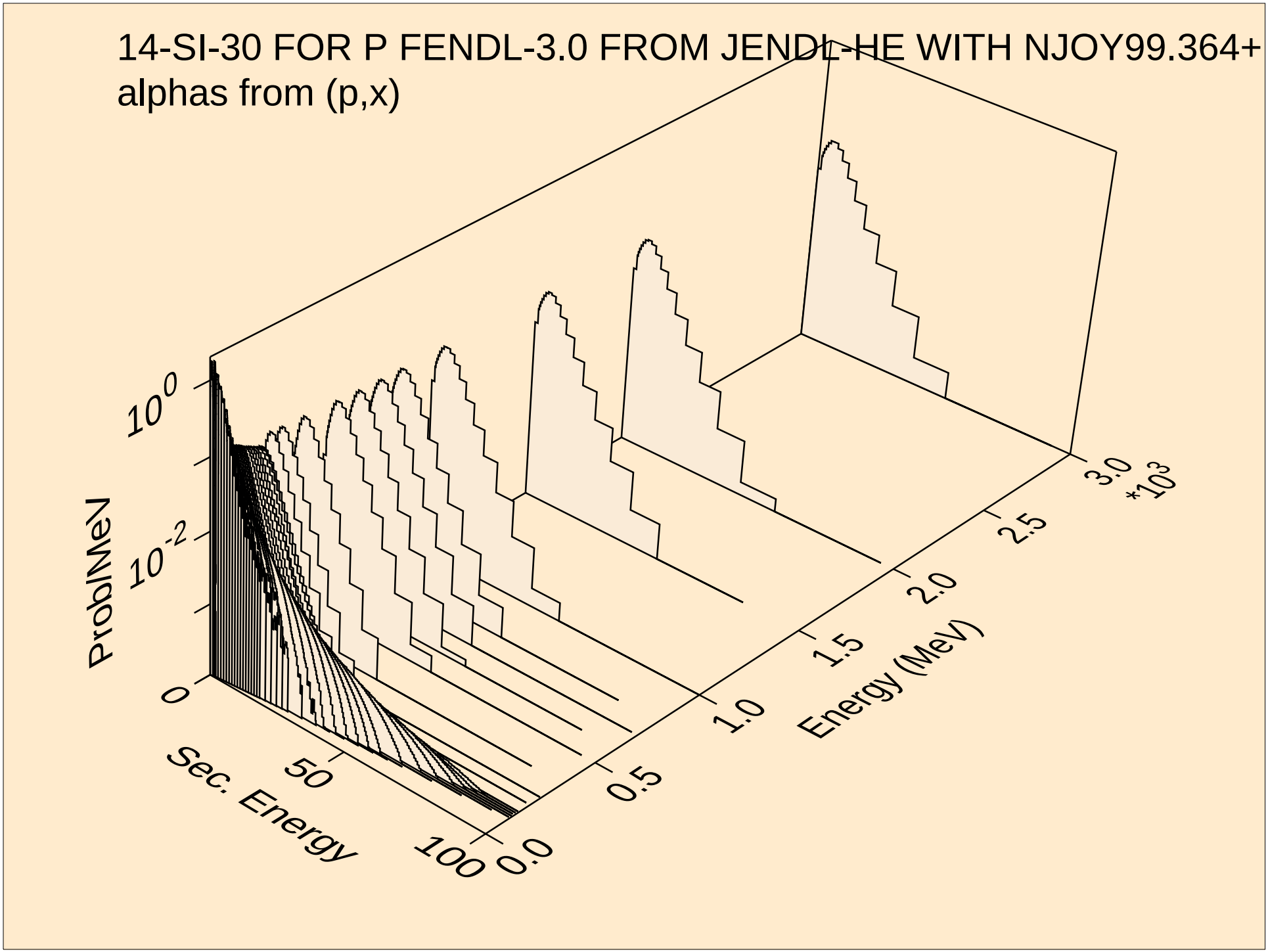

14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
Particle production cross sections
Cross section (barns)
Energy (MeV)
*10^3
neutrons
deuterons
tritons
he-3
alphas
0.0
0.5
1.0
1.5
2.0
2.5
3.0


14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
neutrons from (p,x)
Prob/MeV
10-1
10-3
0
Sec. Energy
200
400
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10³
Energy (MeV)


14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
deuterons from (p,x)
Prob/MeV
10-1
10-3
0
Sec. Energy
200
400
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10³
Energy (MeV)


14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
tritons from (p,x)
Prob/MeV
10^{1}
10^{-1}
10^{-3}
0
100
200
Sec. Energy
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^{3}
Energy (MeV)


14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
he3s from (p,x)
Prob/MeV
10-1
10-3
0
Sec. Energy
100
200
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10³
Energy (MeV)


14-SI-30 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364+
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)