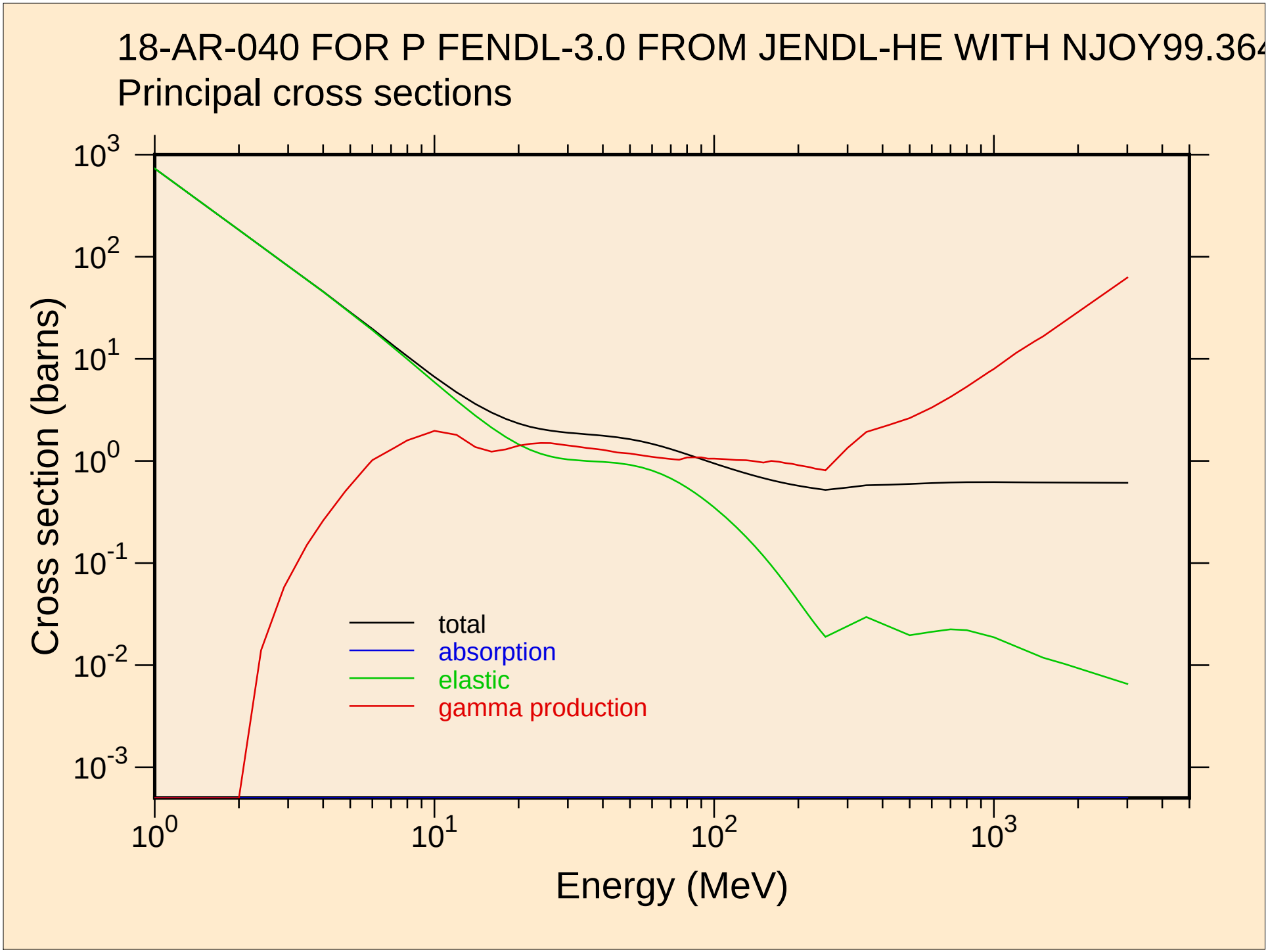
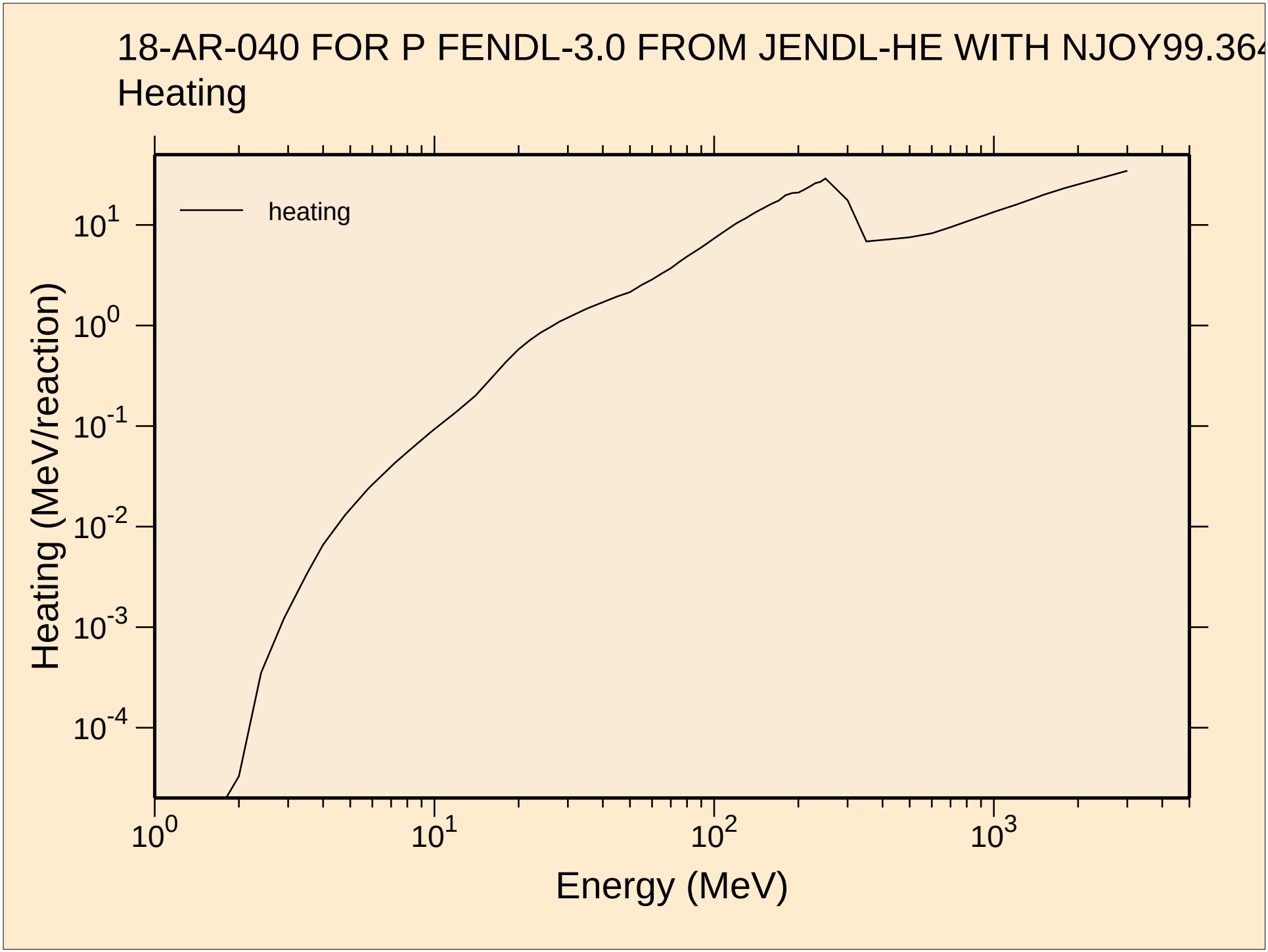
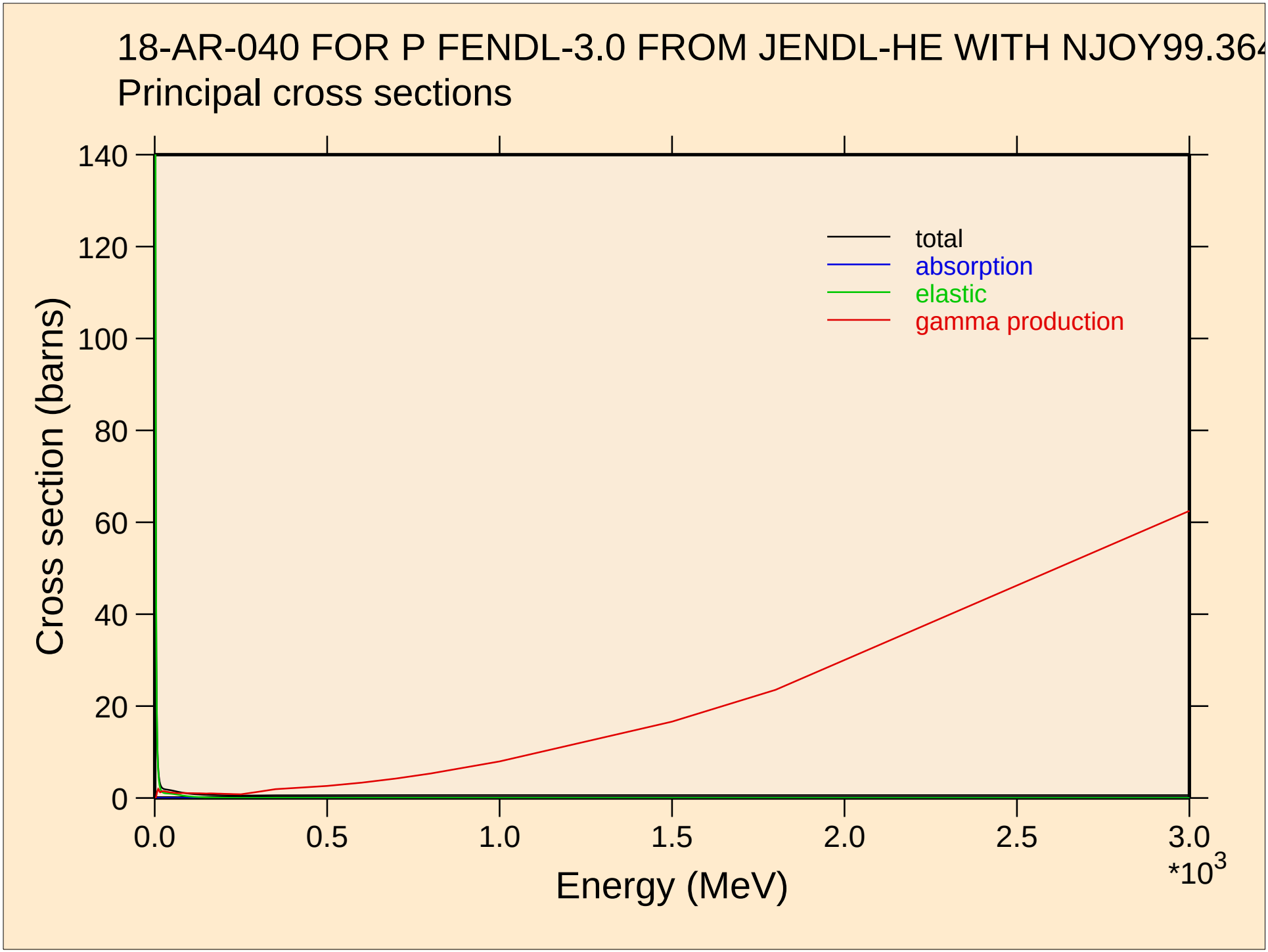
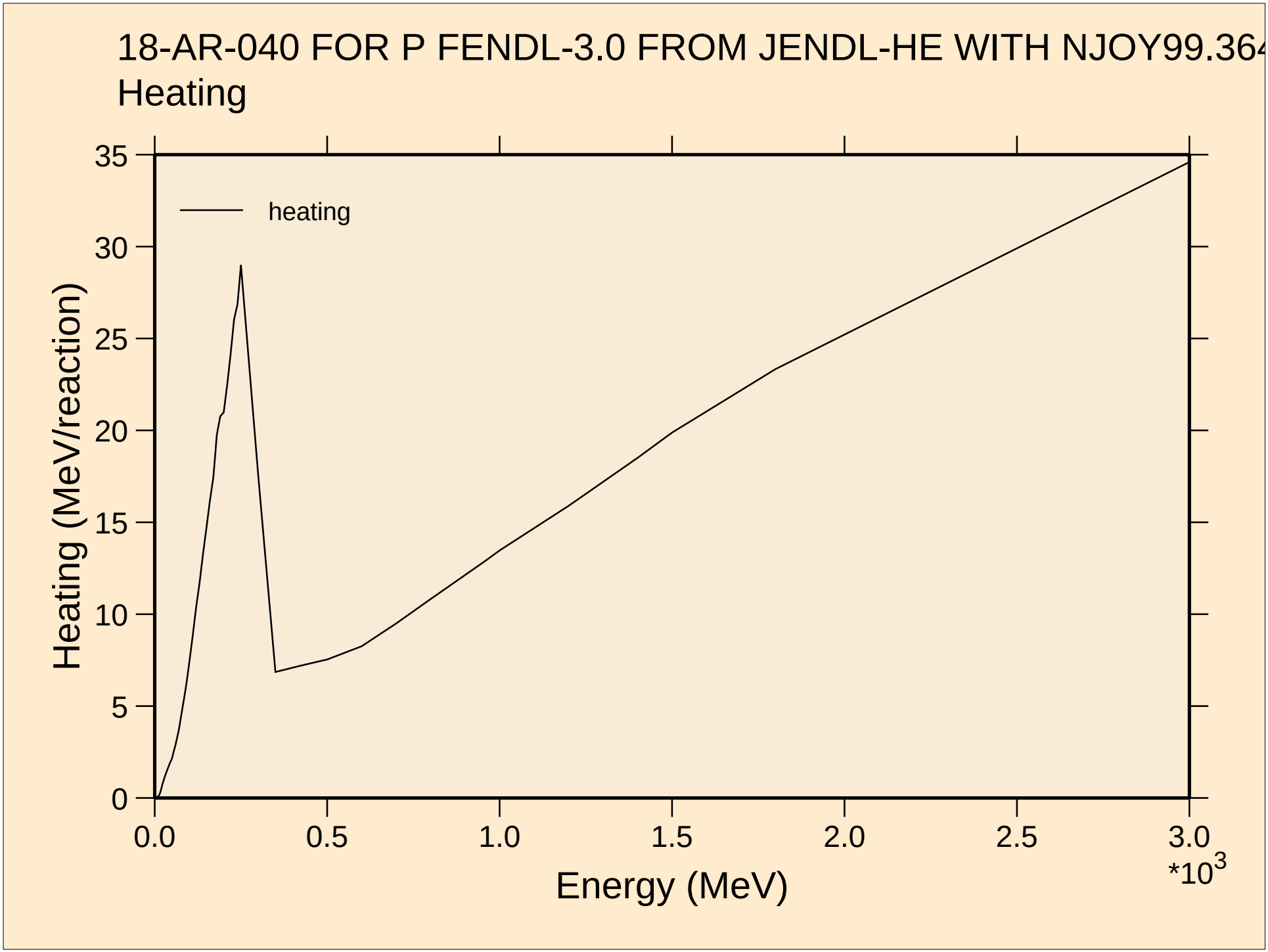
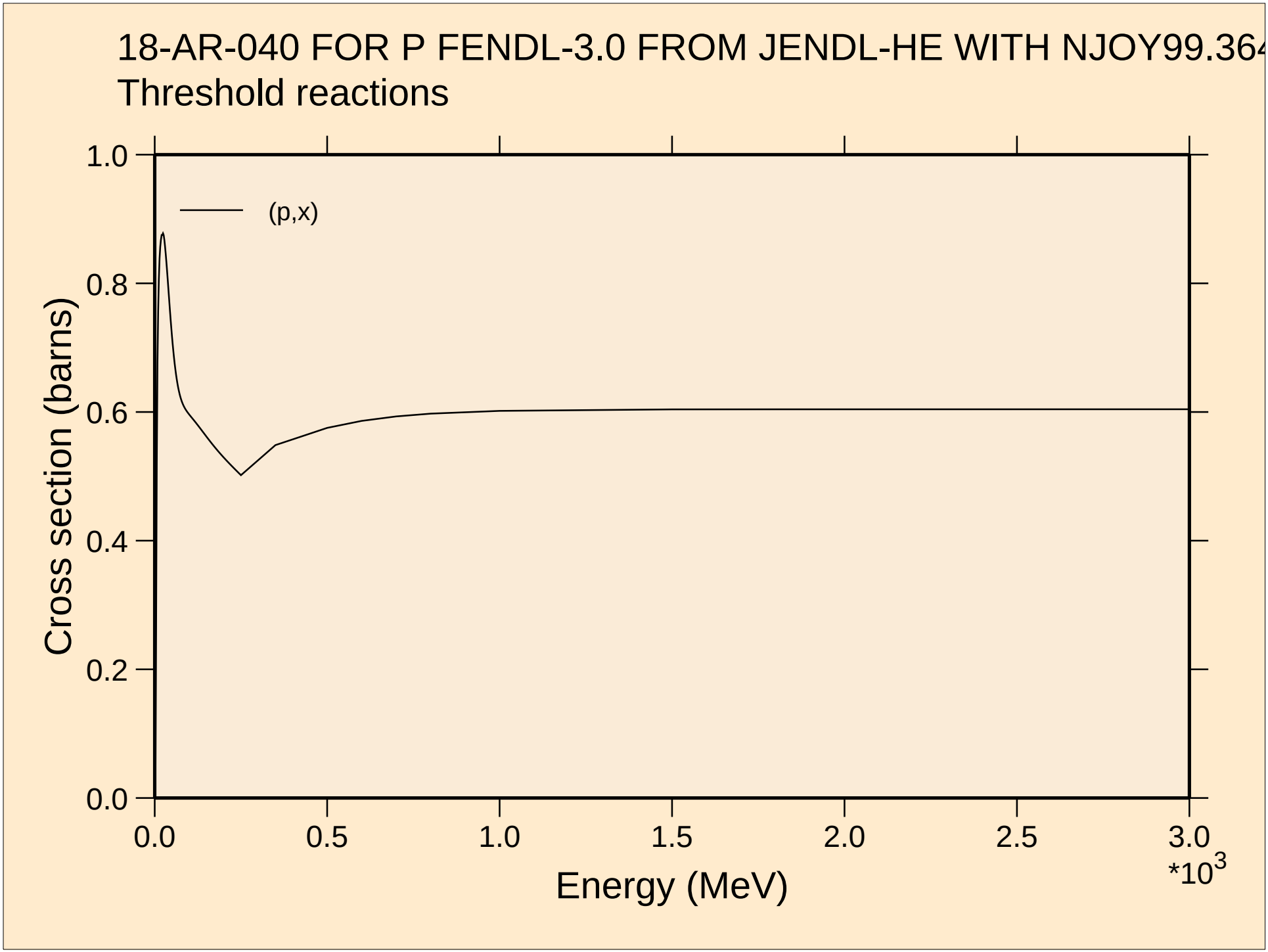
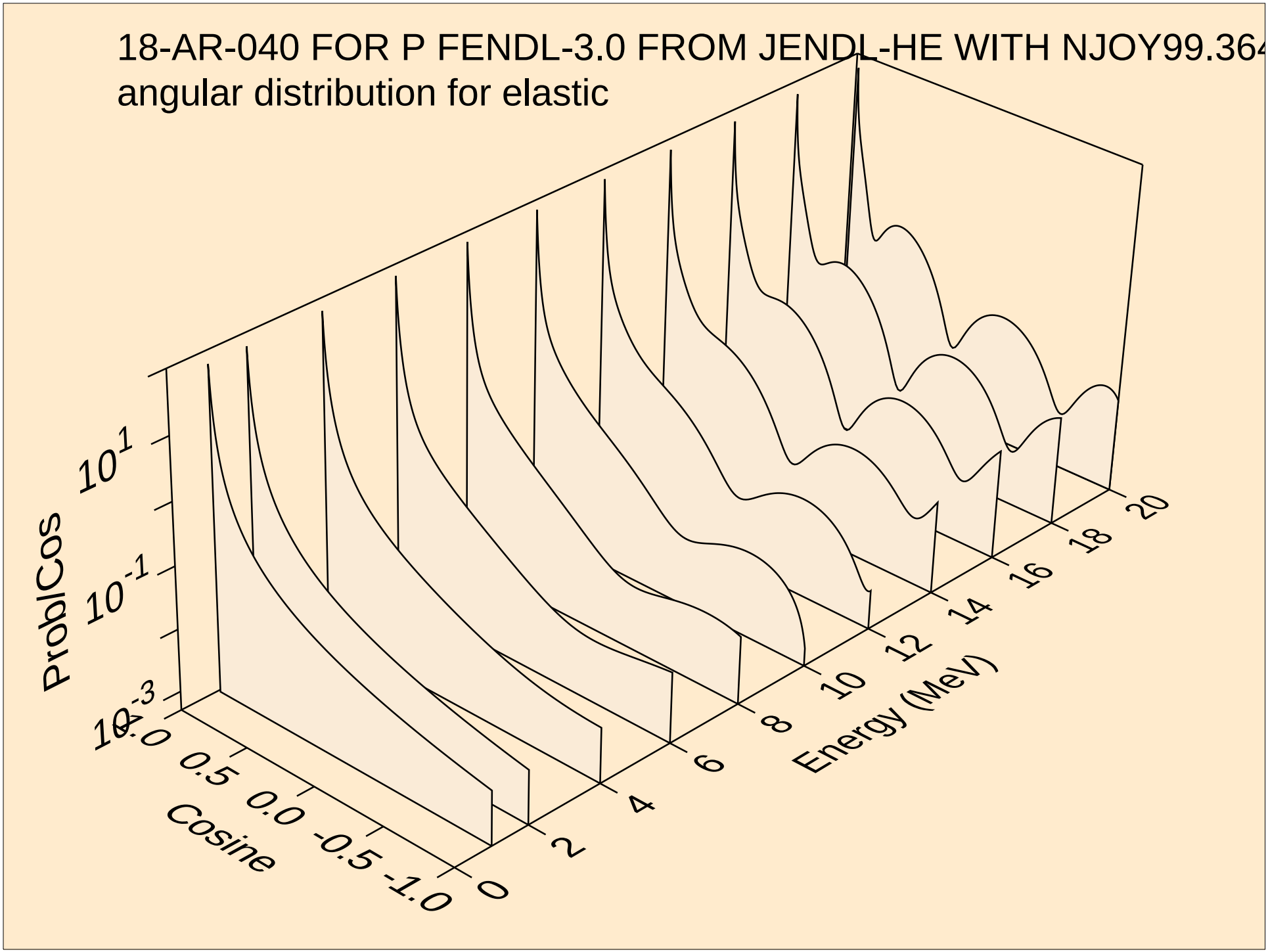

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
gamma production

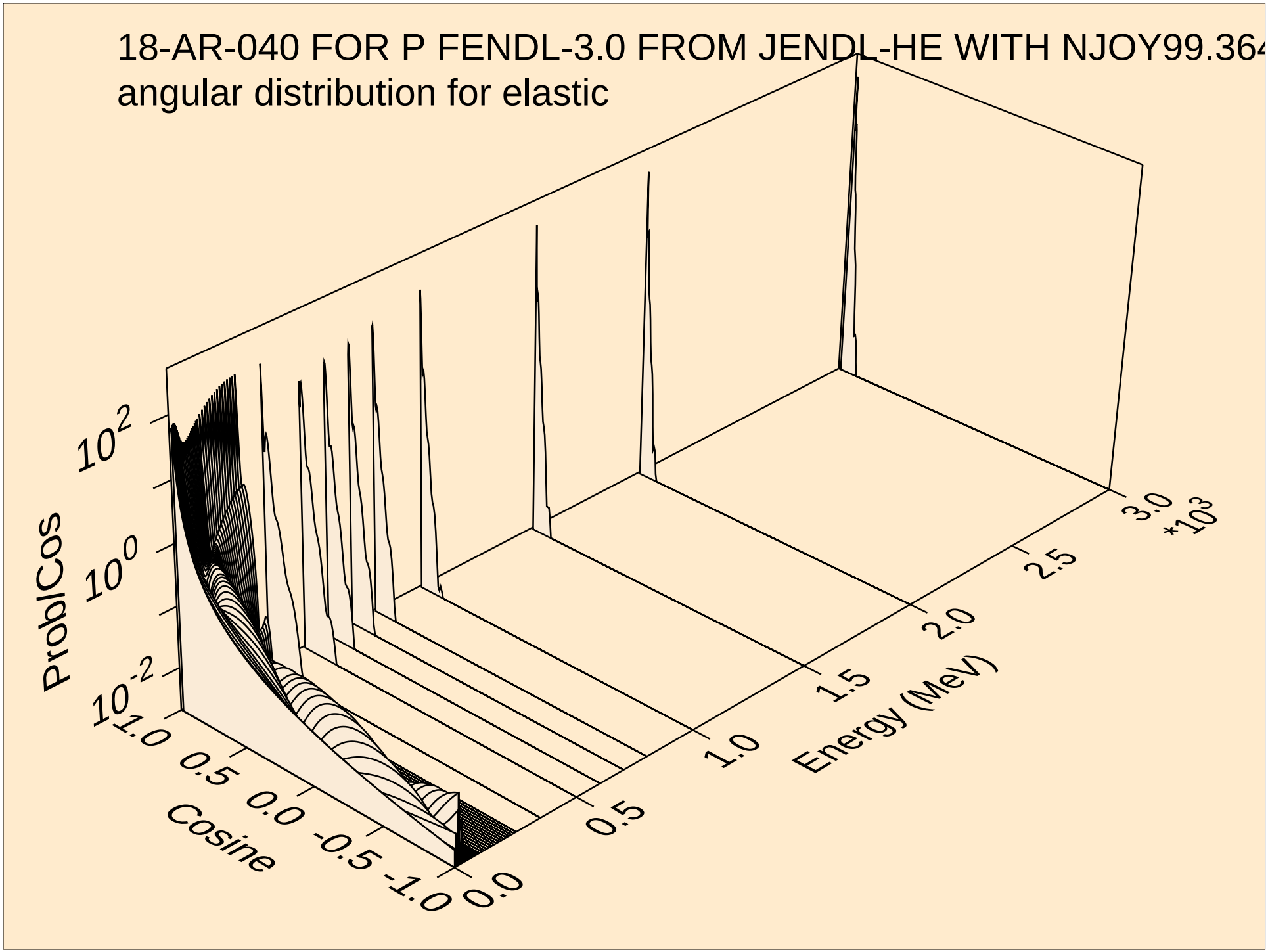

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
Heating
heating
Heating (MeV/reaction)
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{0}
10^{1}
10^{2}
10^{3}
Energy (MeV)

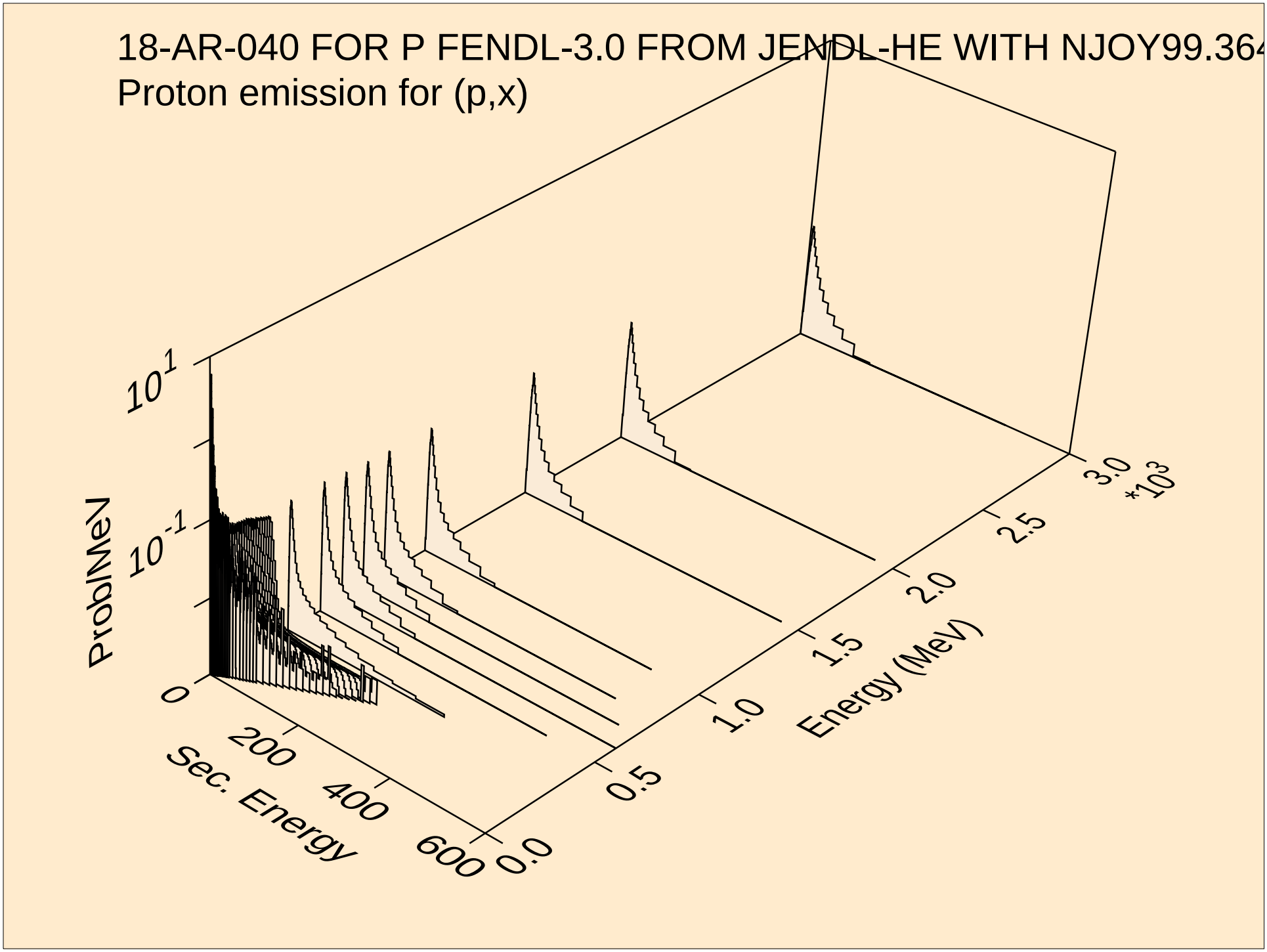

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
Principal cross sections
Cross section (barns)
140
120
100
80
60
40
20
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)
total
absorption
elastic
gamma production

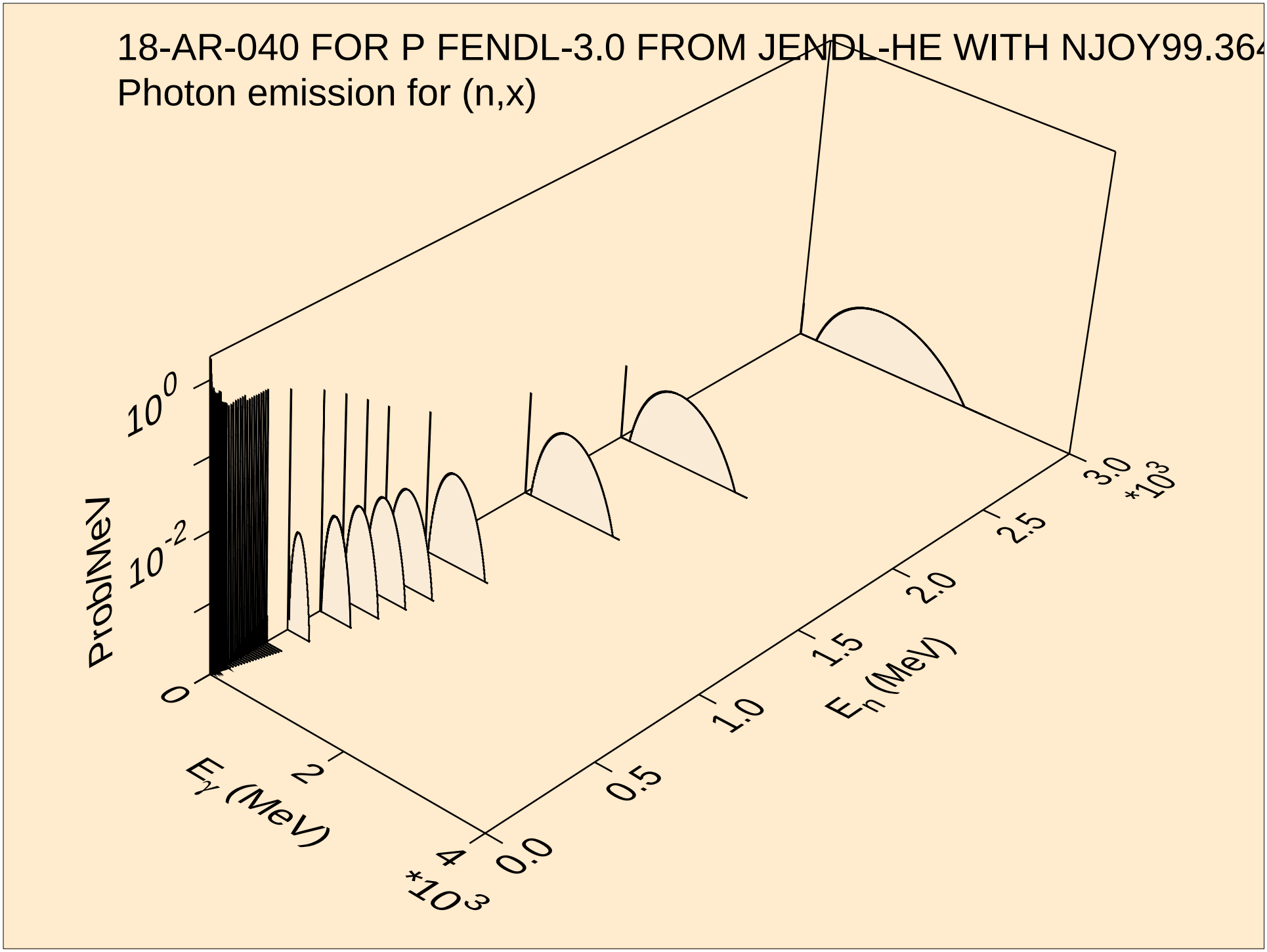

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
Heating
heating
Heating (MeV/reaction)
0
5
10
15
20
25
30
35
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

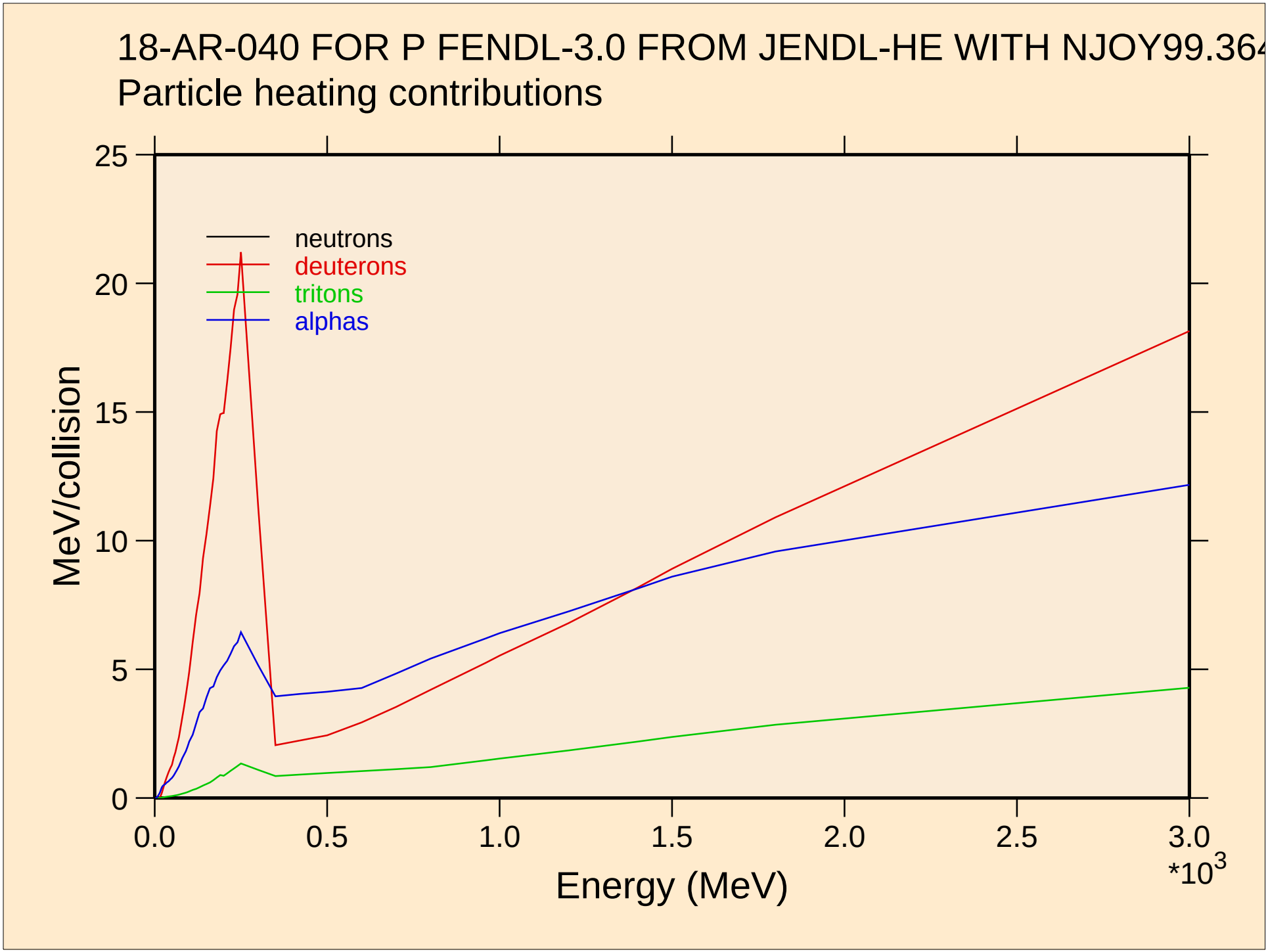

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
Threshold reactions
(p,x)
Cross section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

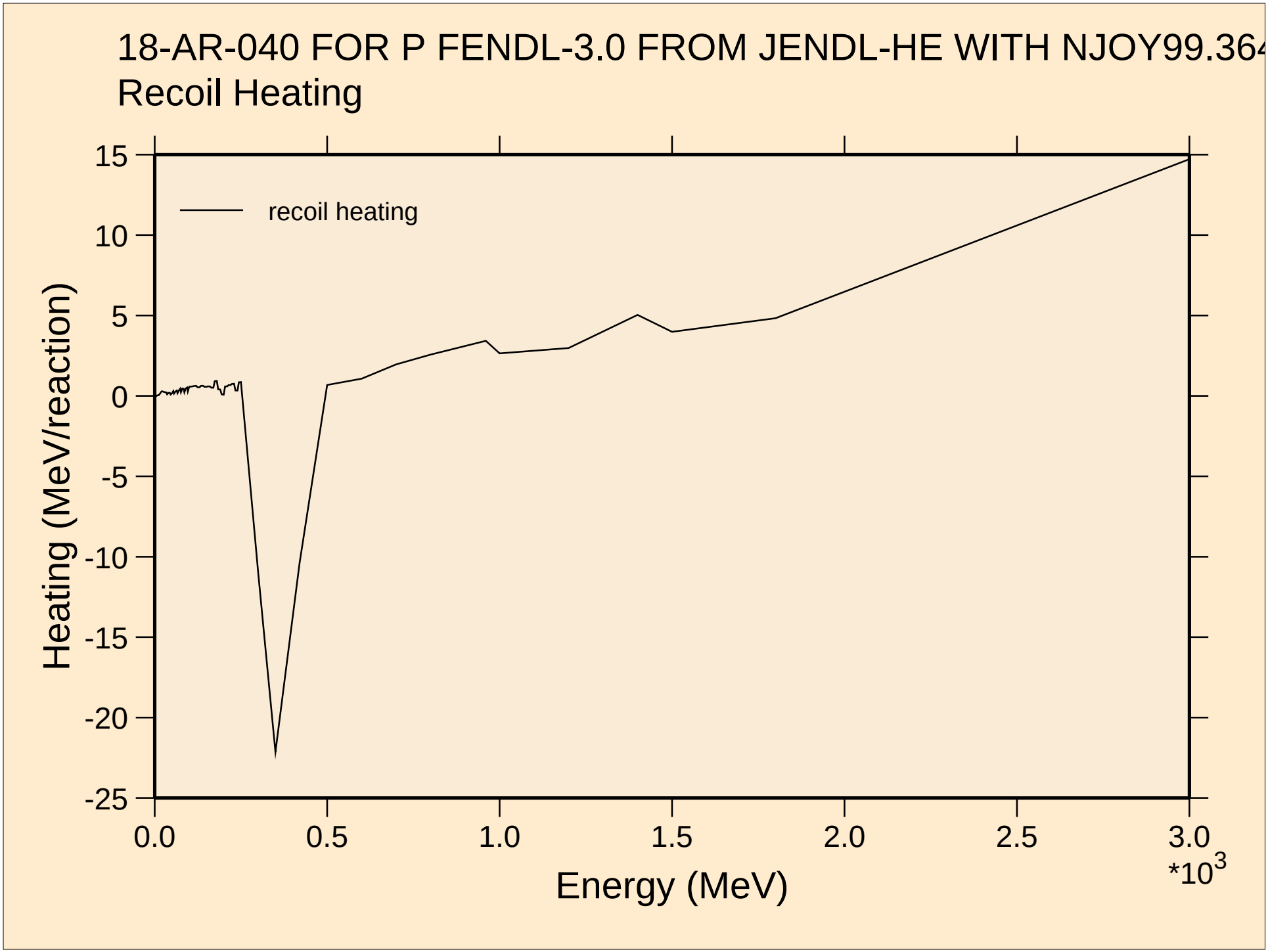

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
angular distribution for elastic
Prob\Cos
10^1
10^-1
10^-3
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

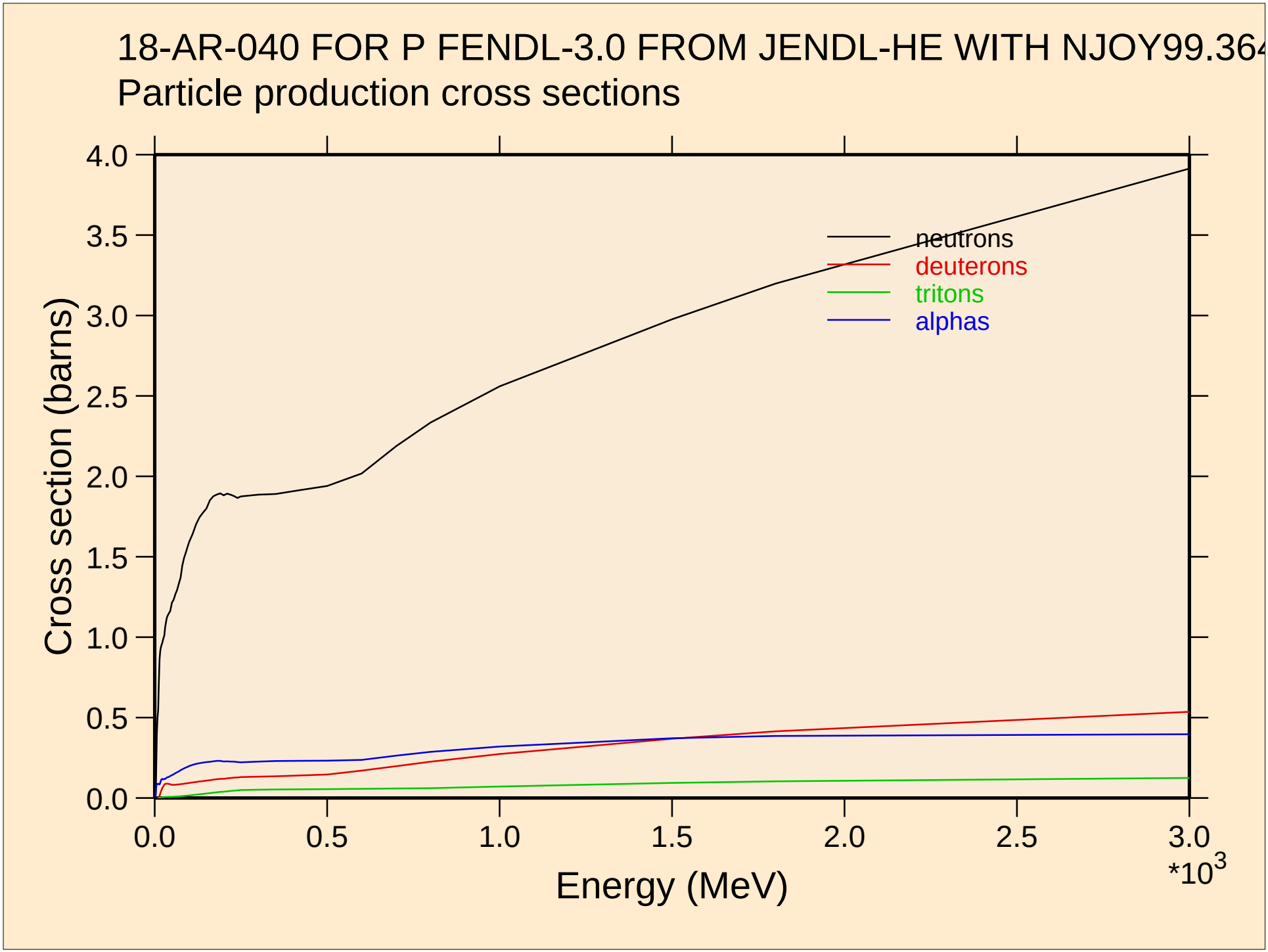

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
angular distribution for elastic
ProblCos
10^{2}
10^{0}
10^{-2}
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^{3}

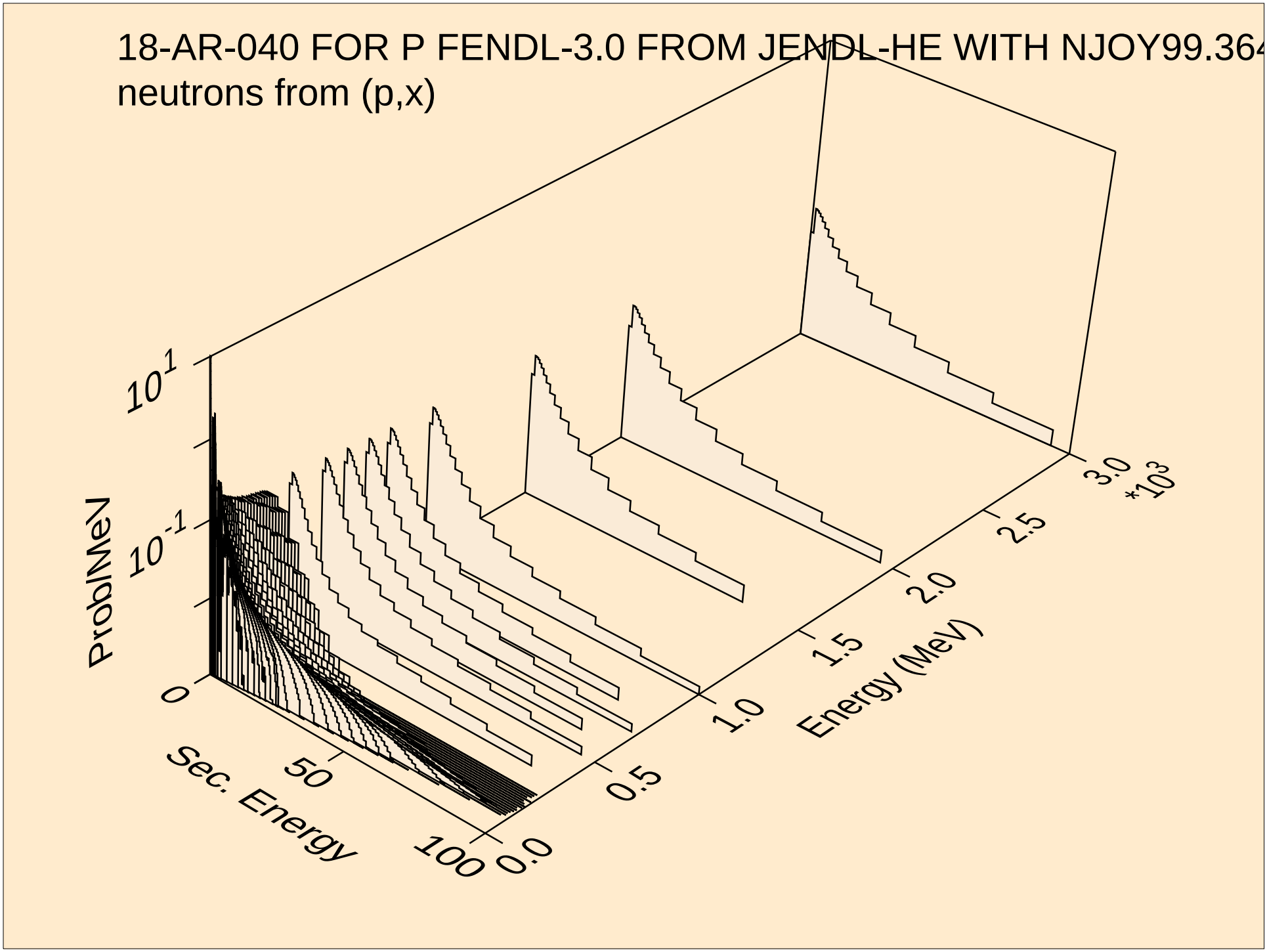

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
Proton emission for (p,x)
Prob/MeV
10^1
10^-1
0
200
400
600
Sec. Energy
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

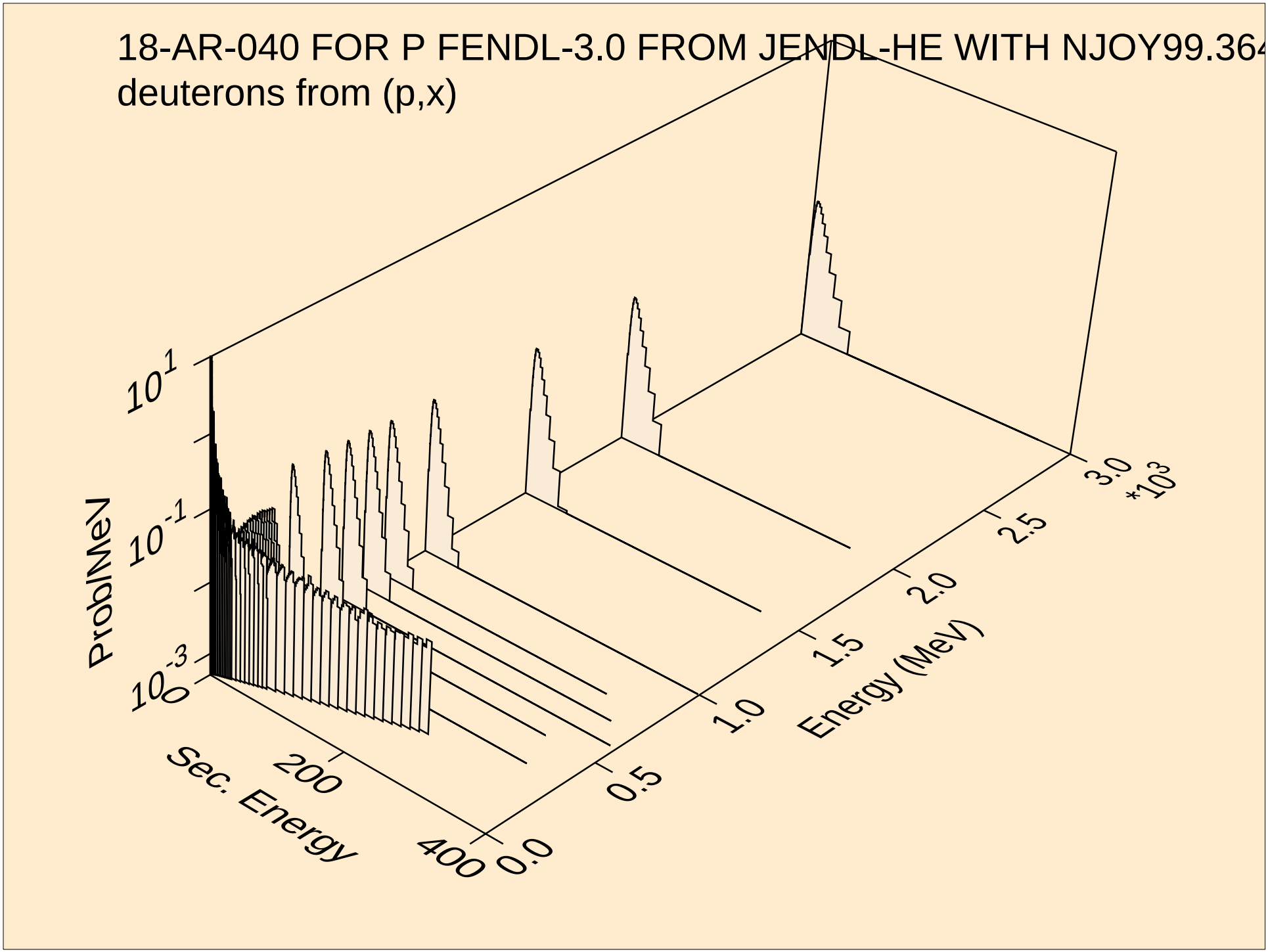

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
Photon emission for (n,x)
Prob/MeV
10^0
10^-2
0
E_γ (MeV)
2
4
*10^3
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
E_n (MeV)

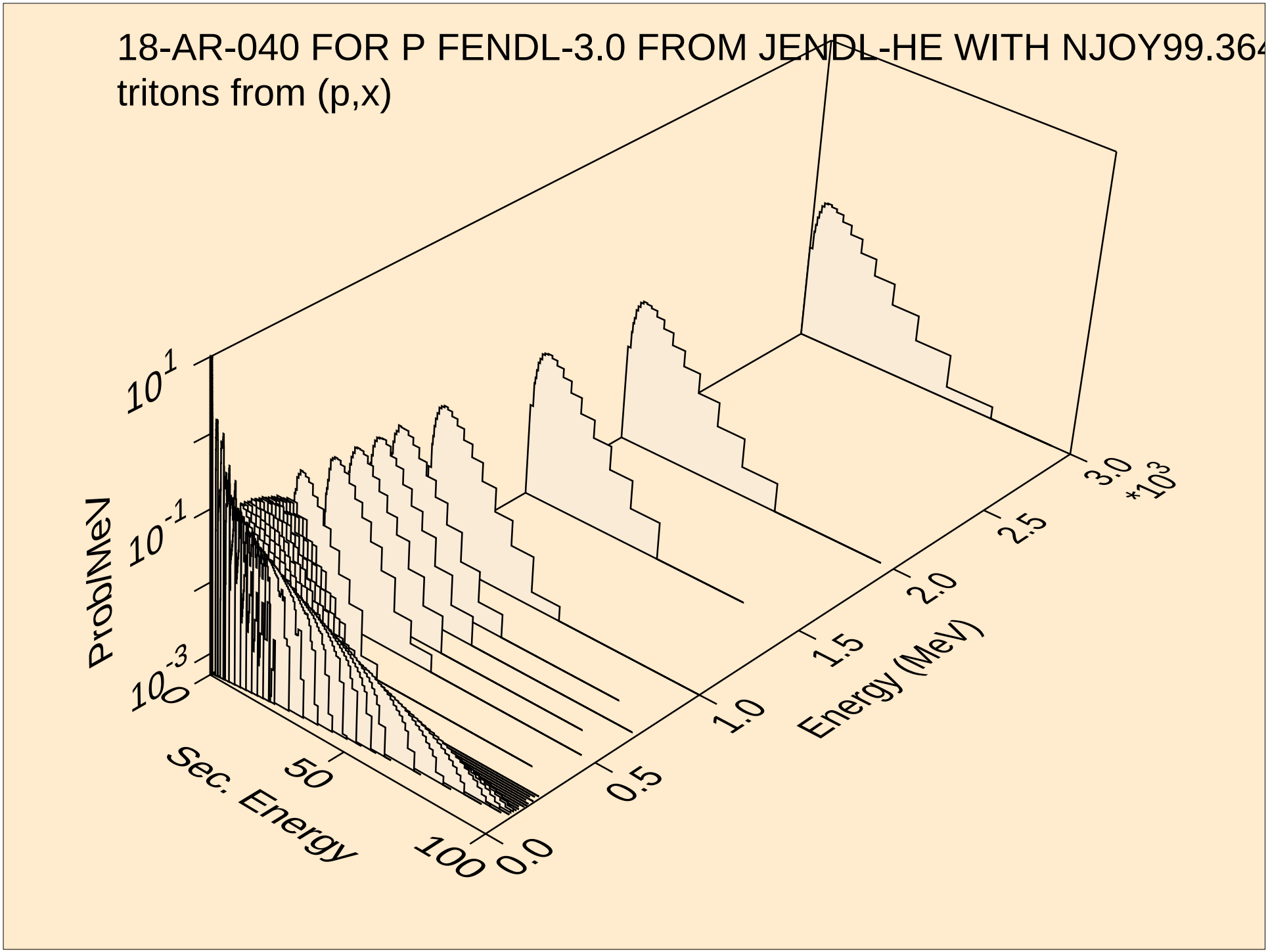

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
Particle heating contributions
neutrons
deuterons
tritons
alphas
MeV/collision
0
5
10
15
20
25
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)

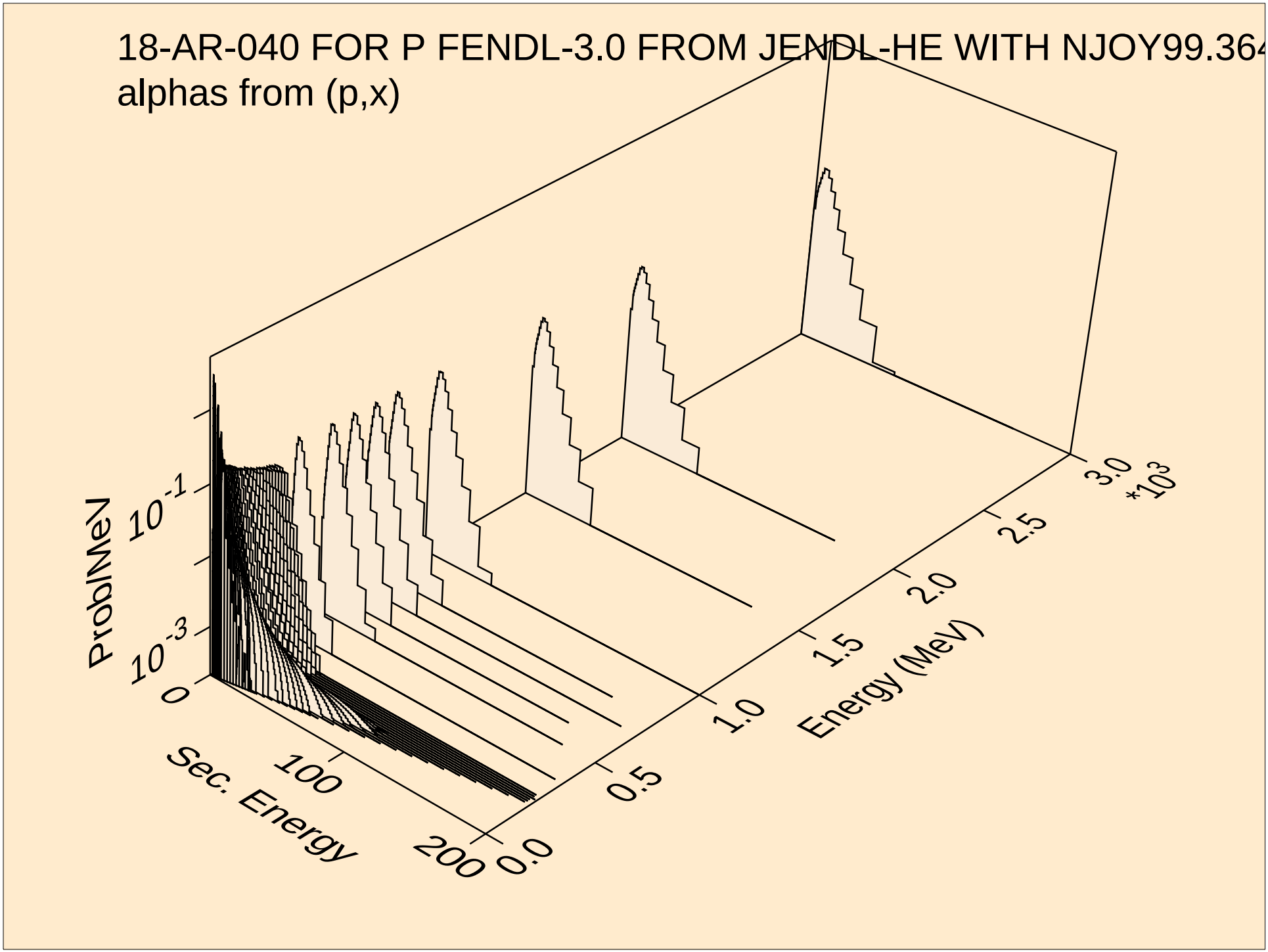

18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
Recoil Heating
recoil heating
Heating (MeV/reaction)
15
10
5
0
-5
-10
-15
-20
-25
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)


18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
Particle production cross sections
Cross section (barns)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
neutrons
deuterons
tritons
alphas
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)


18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
neutrons from (p,x)
Prob/MeV
10^1
10^-1
0
Sec. Energy
50
100
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)


18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
deuterons from (p,x)
Prob/MeV
10^1
10^-1
10^-3
0
200
400
Sec. Energy
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)


18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
tritons from (p,x)
Prob/MeV
10^1
10^-1
10^-3
0
50
100
Sec. Energy
0.0
0.5
1.0
1.5
2.0
2.5
3.0
*10^3
Energy (MeV)


18-AR-040 FOR P FENDL-3.0 FROM JENDL-HE WITH NJOY99.364
alphas 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)