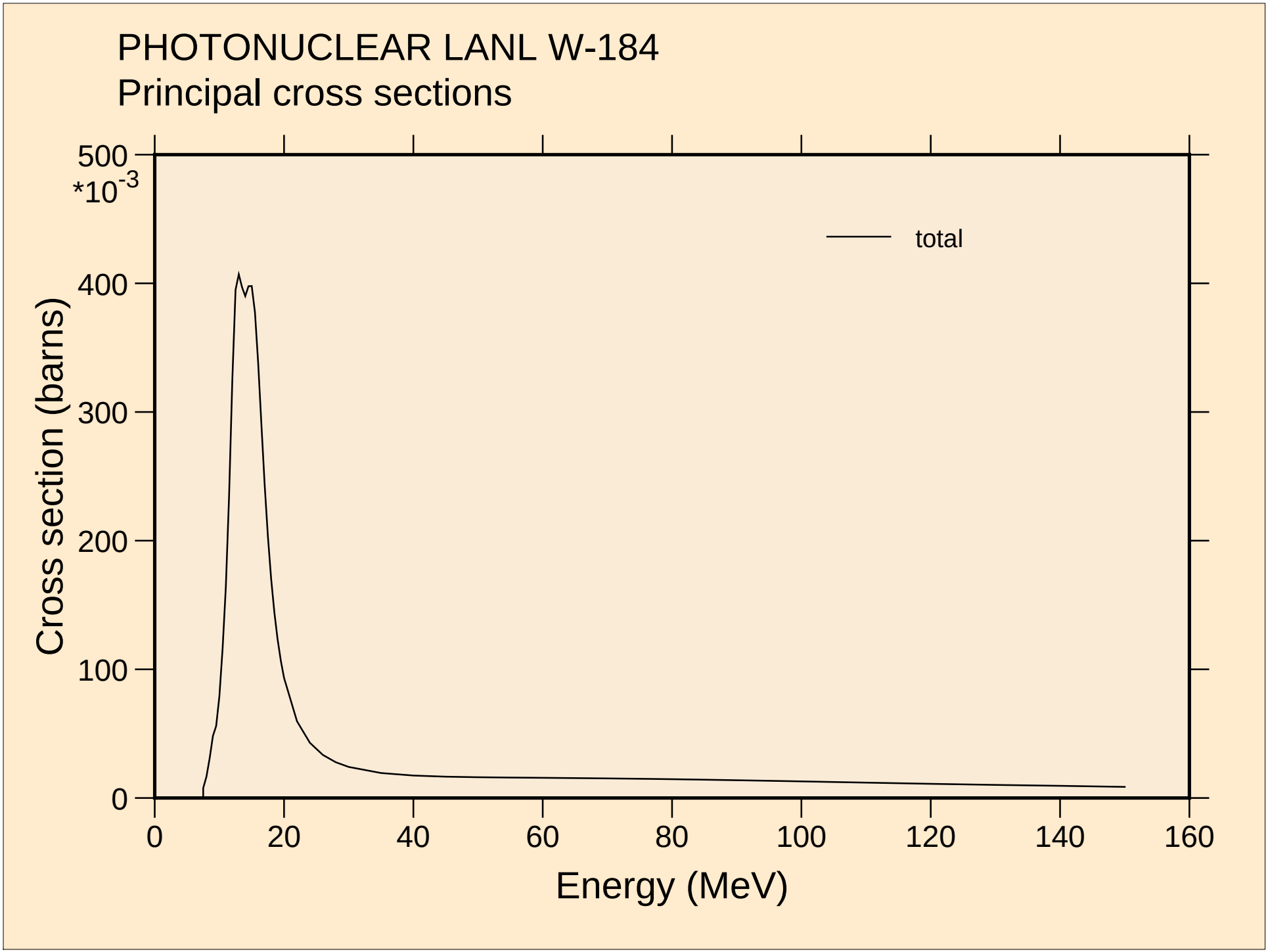
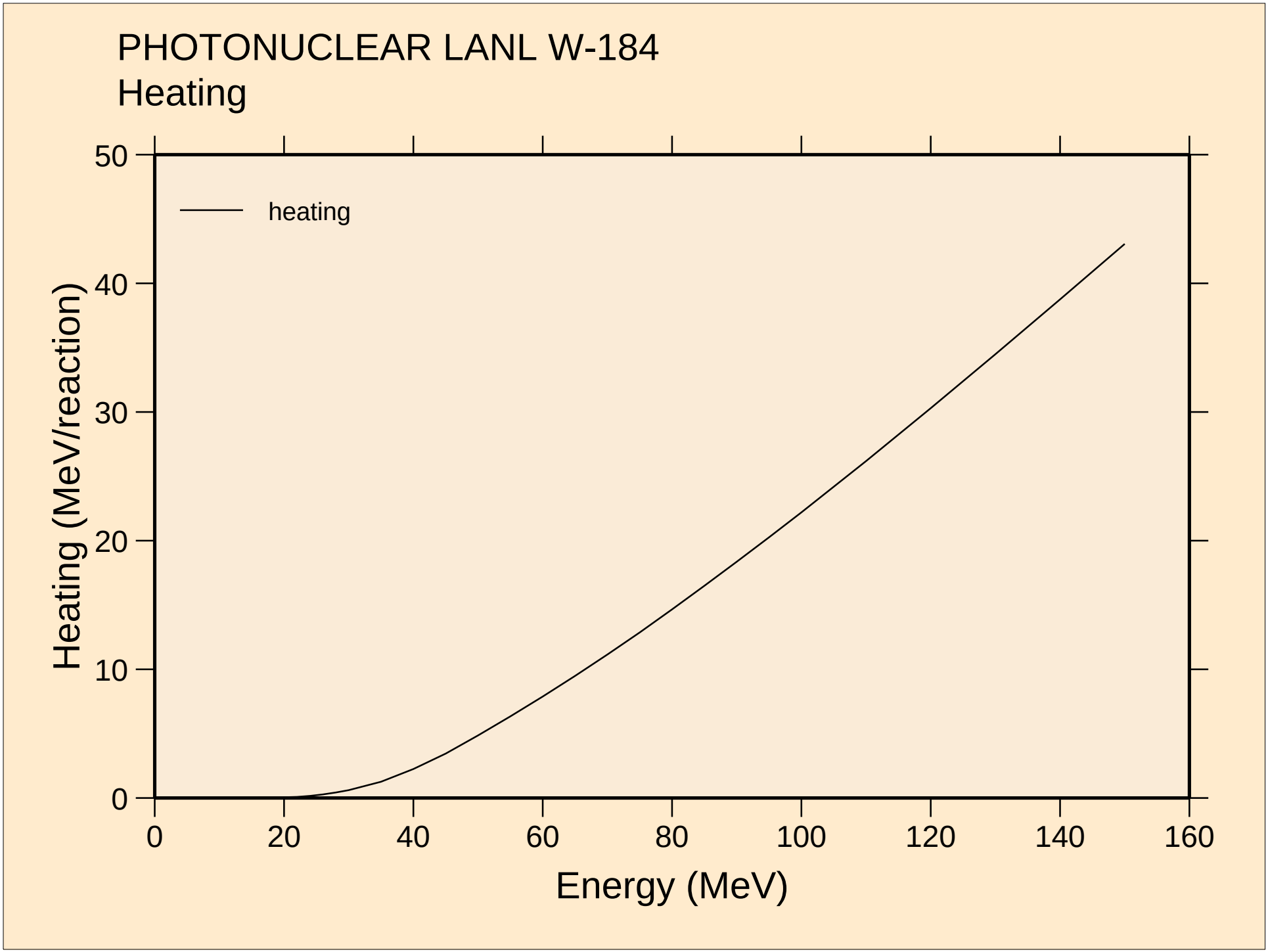
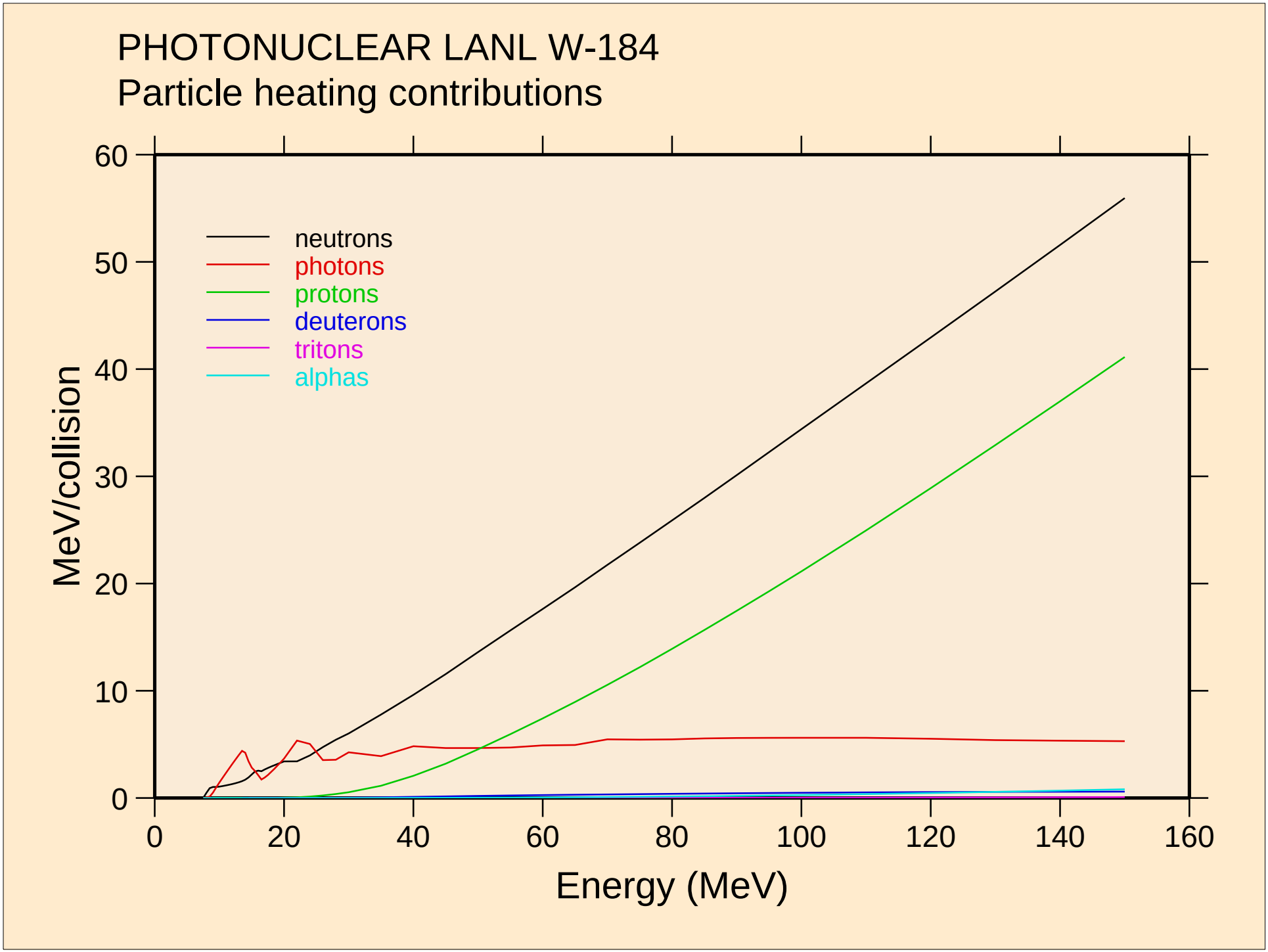
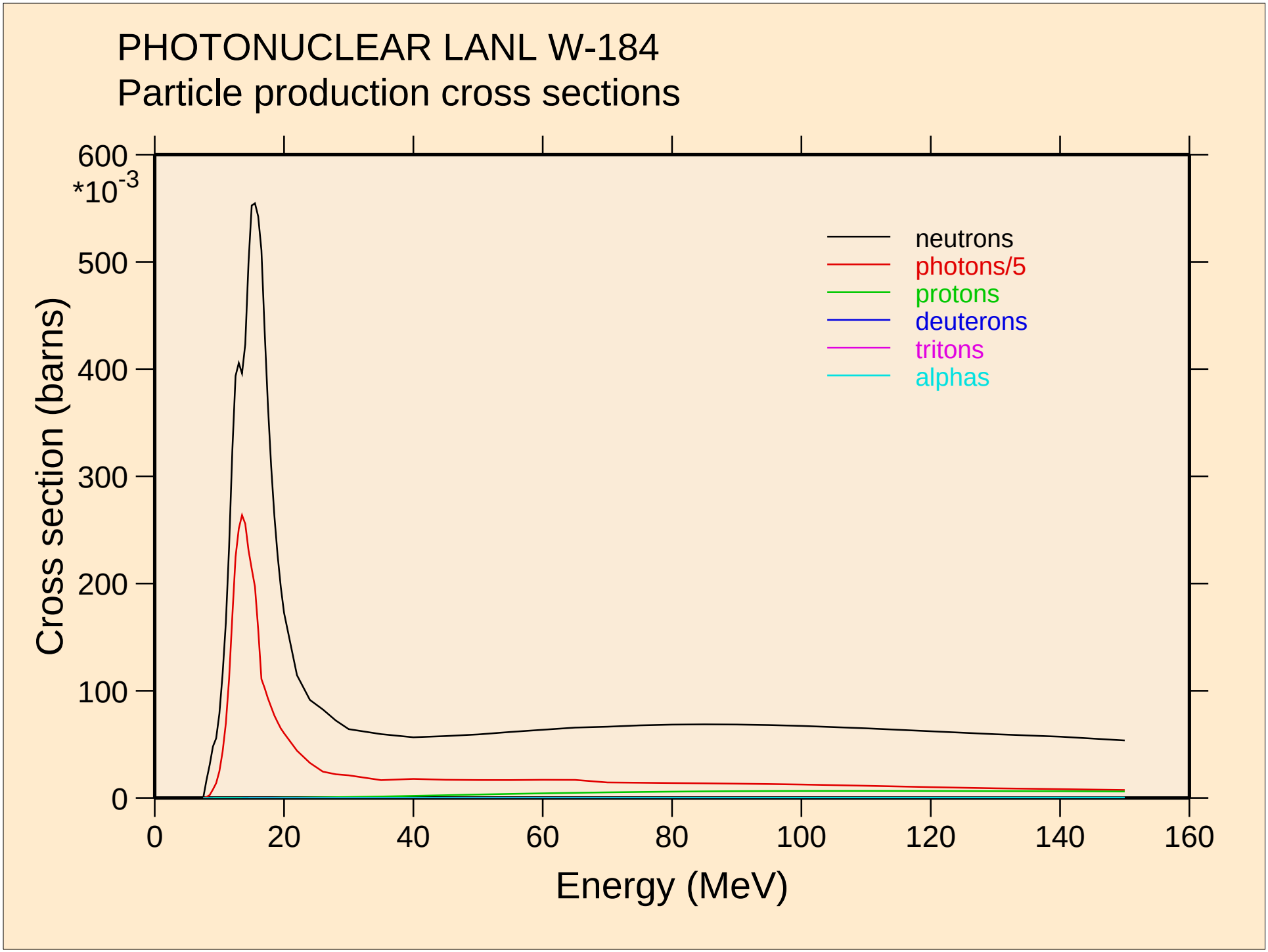
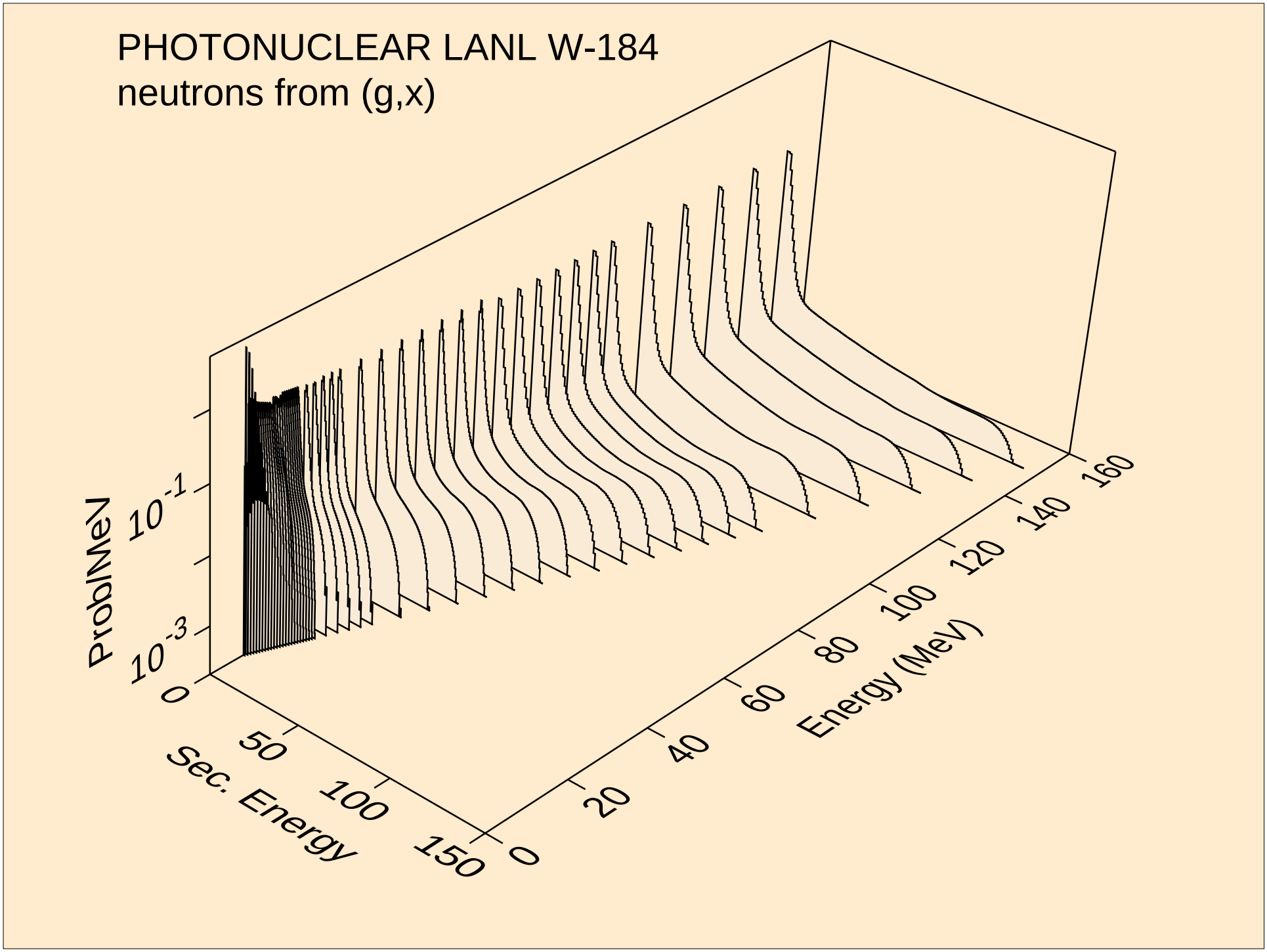
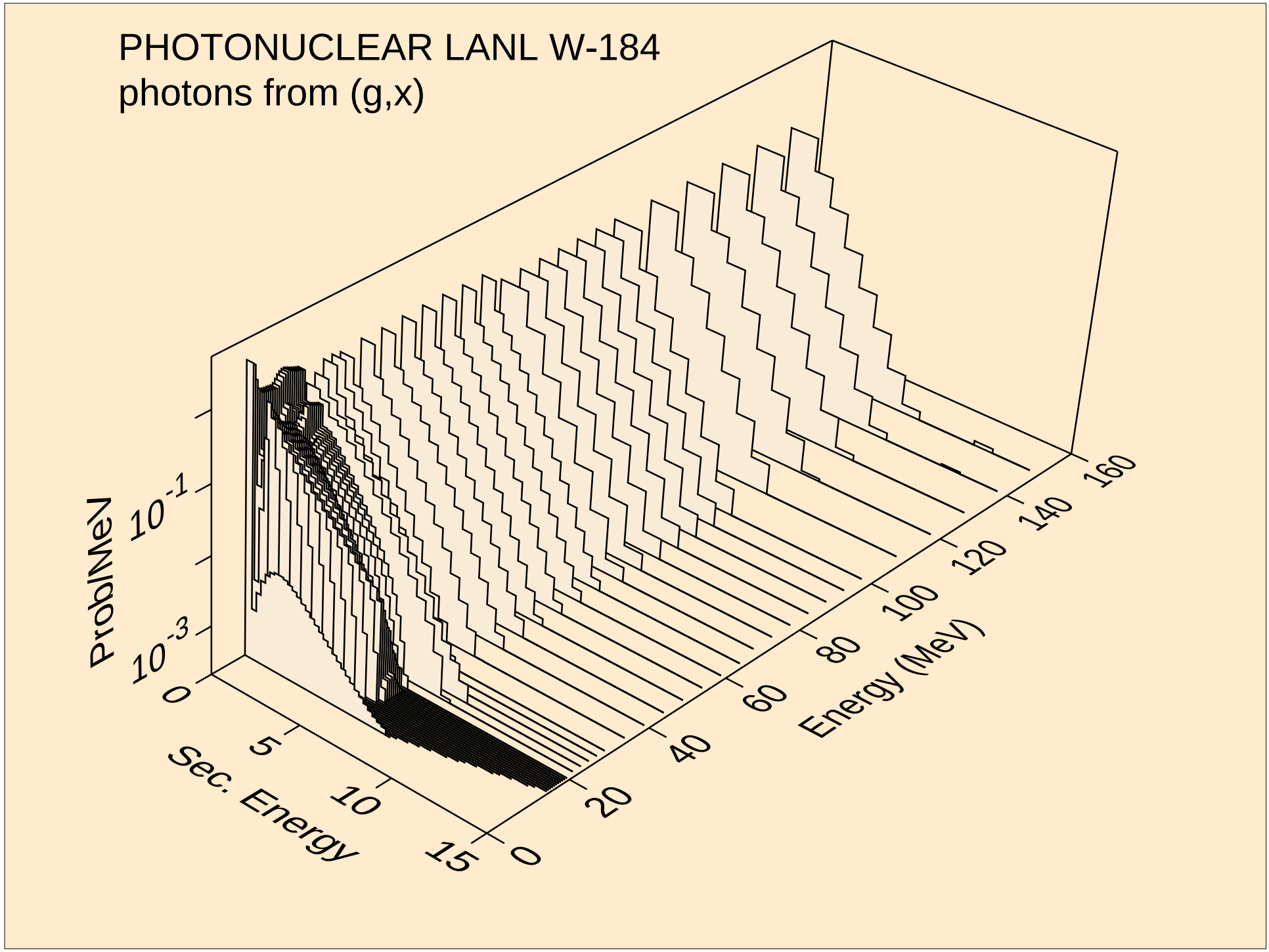

PHOTONUCLEAR LANL W-184
Principal cross sections
500
*10-3
400
300
200
100
0
Cross section (barns)
total
0
20
40
60
80
100
120
140
160
Energy (MeV)

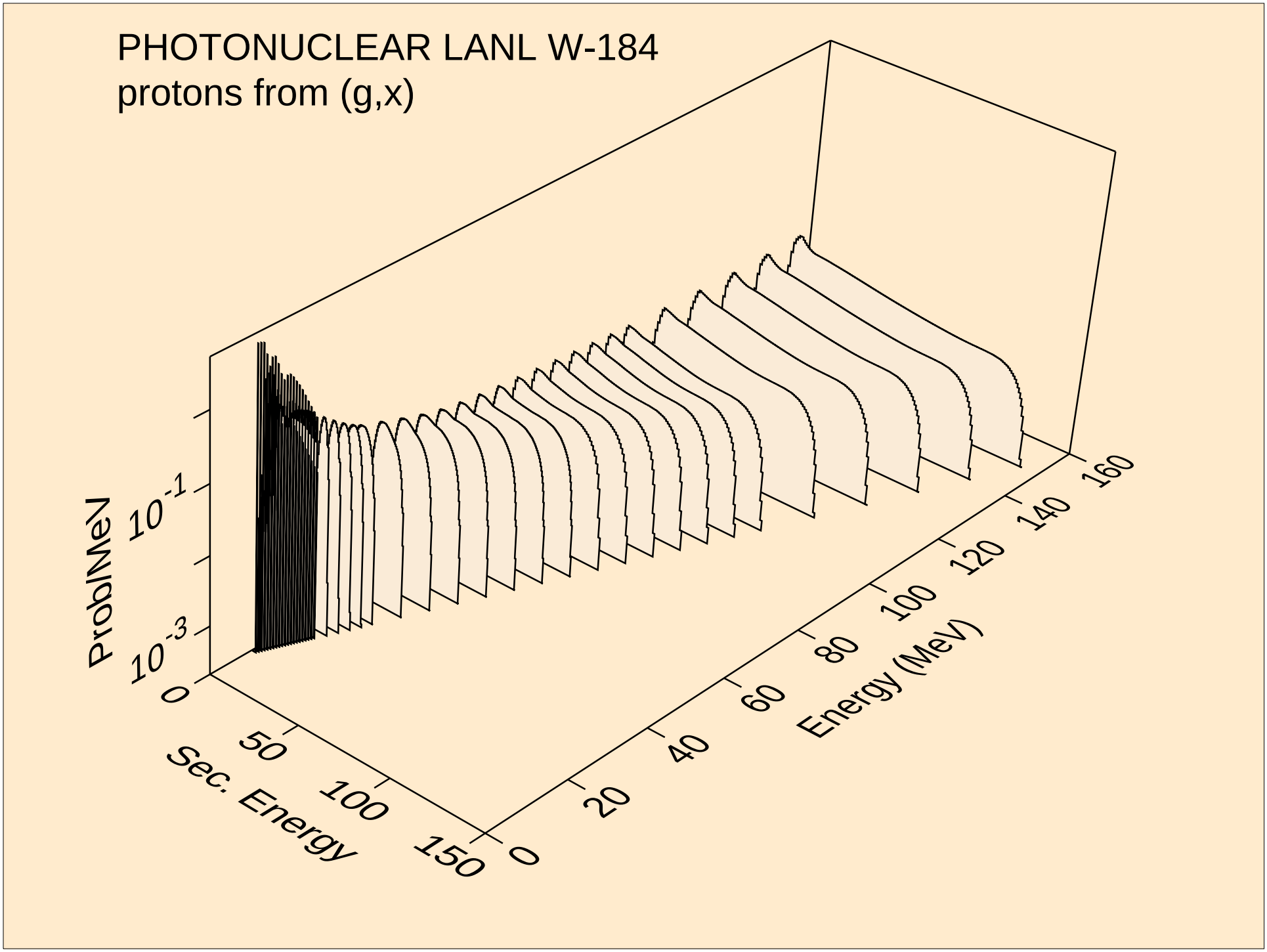

PHOTONUCLEAR LANL W-184
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
0
10
20
30
40
50
0
20
40
60
80
100
120
140
160

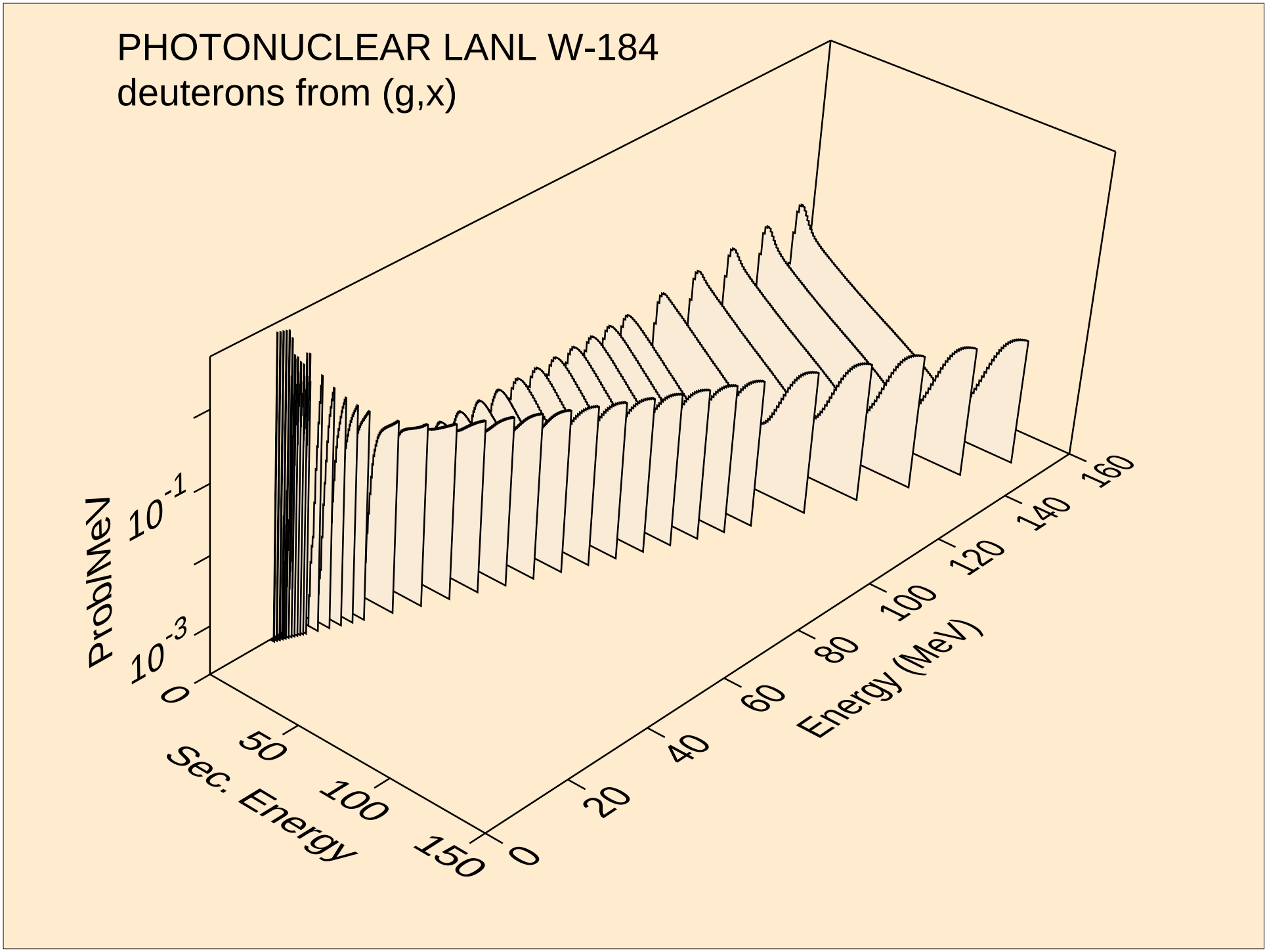

PHOTONUCLEAR LANL W-184
Particle heating contributions
neutrons
photons
protons
deuterons
tritons
alphas
MeV/collision
Energy (MeV)
0
10
20
30
40
50
60
0
20
40
60
80
100
120
140
160

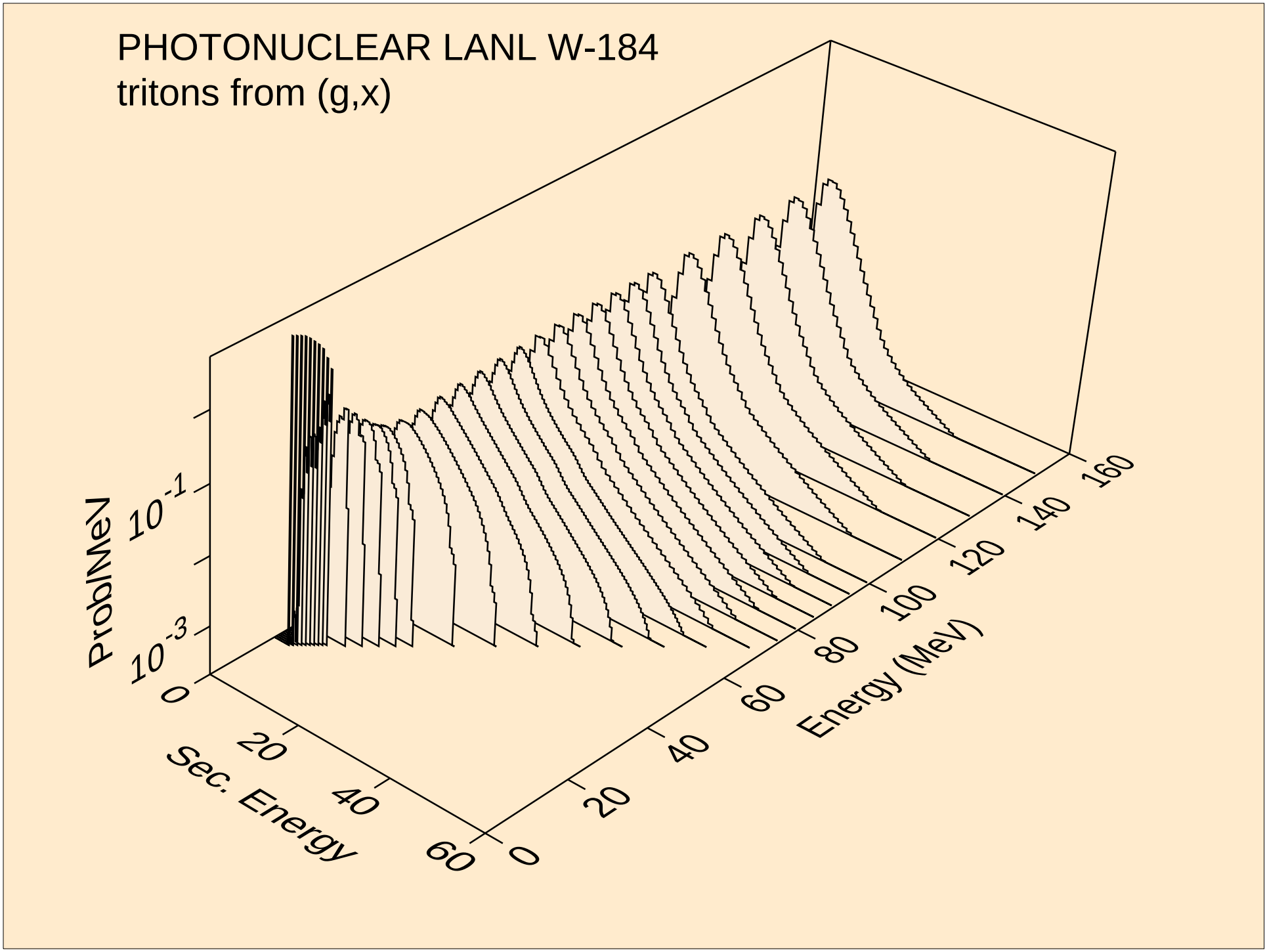

PHOTONUCLEAR LANL W-184
Particle production cross sections
Cross section (barns)
*10-3
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
160
Energy (MeV)
neutrons
photons/5
protons
deuterons
tritons
alphas

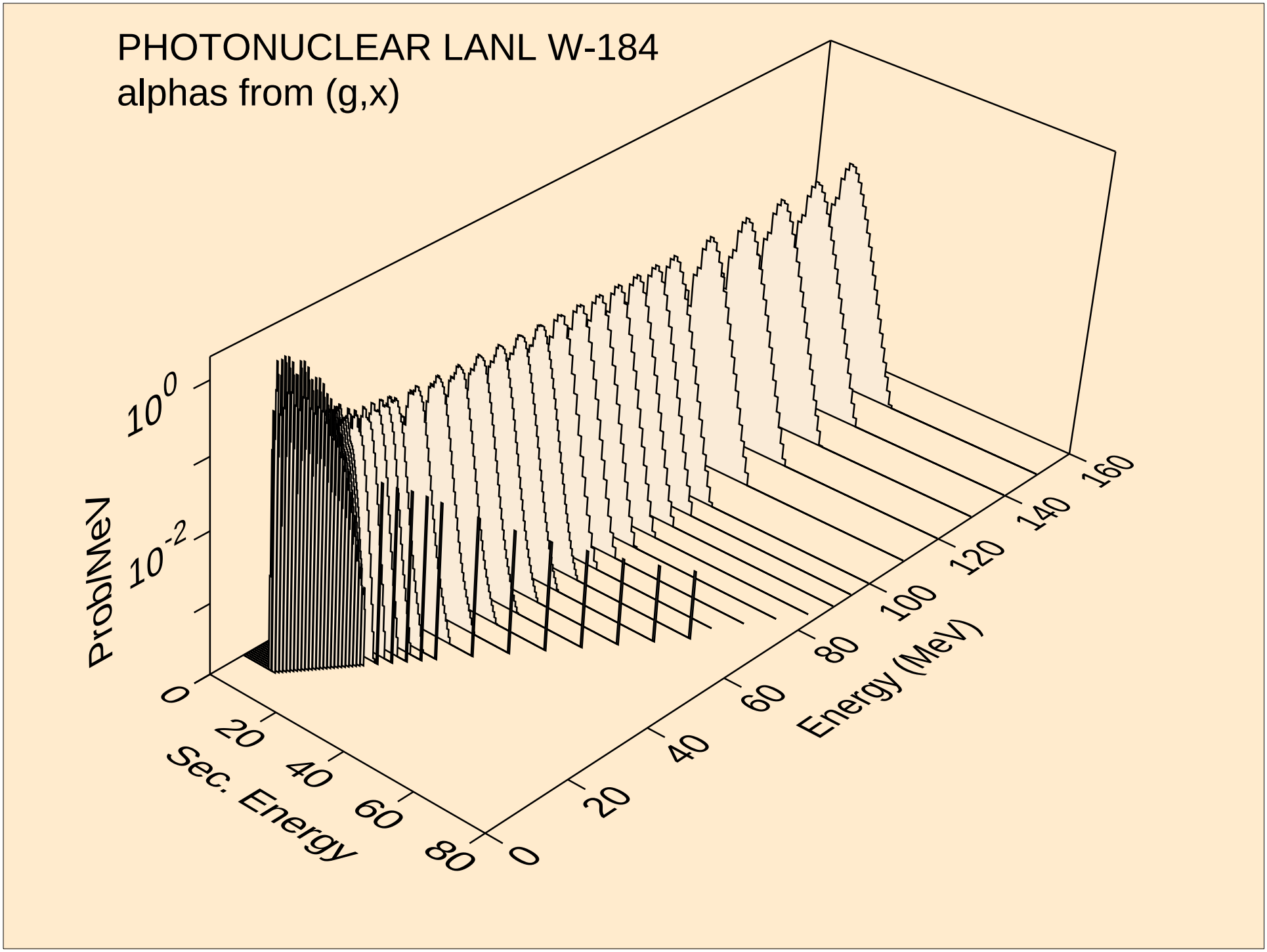

PHOTONUCLEAR LANL W-184
neutrons from (g,x)
Prob/MeV
10-1
10-3
0
50
100
150
Sec. Energy
0
20
40
60
80
100
120
140
160
Energy (MeV)


PHOTONUCLEAR LANL W-184
photons from (g,x)
Prob/MeV
10-1
10-3
0
5
10
15
Sec. Energy
0
20
40
60
80
100
120
140
160
Energy (MeV)


PHOTONUCLEAR LANL W-184
protons from (g,x)
Prob/MeV
10-1
10-3
0
50
100
150
Sec. Energy
0
20
40
60
80
100
120
140
160
Energy (MeV)


PHOTONUCLEAR LANL W-184
deuterons from (g,x)
Prob/MeV
10-1
10-3
0
50
100
150
Sec. Energy
0
20
40
60
80
100
120
140
160
Energy (MeV)


PHOTONUCLEAR LANL W-184
tritons from (g,x)
Prob/MeV
10-1
10-3
0
20
40
60
Sec. Energy
0
20
40
60
80
100
120
140
160
Energy (MeV)


PHOTONUCLEAR LANL W-184
alphas from (g,x)
Prob/MeV
10^0
10^-2
0
20
40
60
80
Sec. Energy
0
20
40
60
80
100
120
140
160
Energy (MeV)