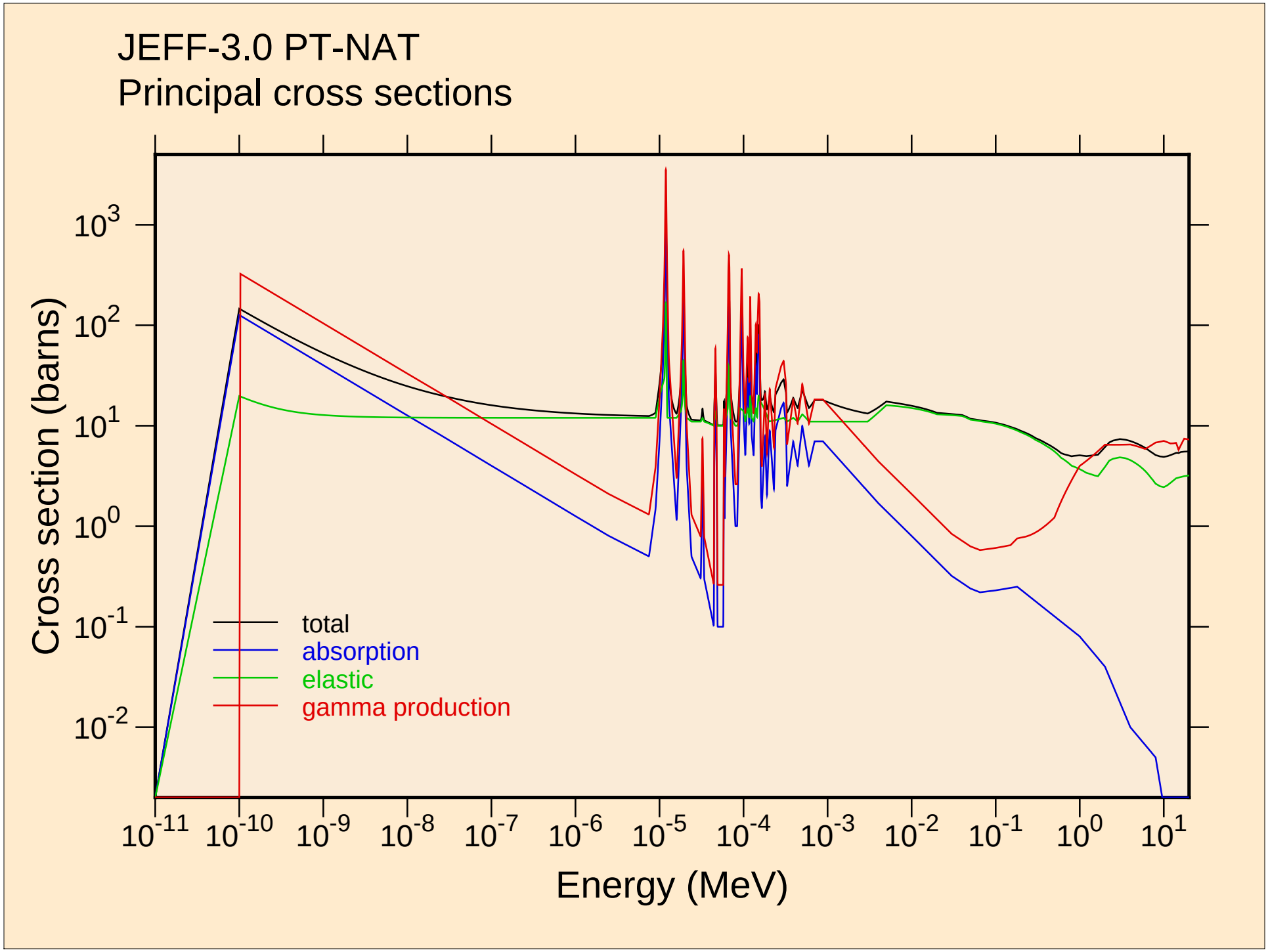
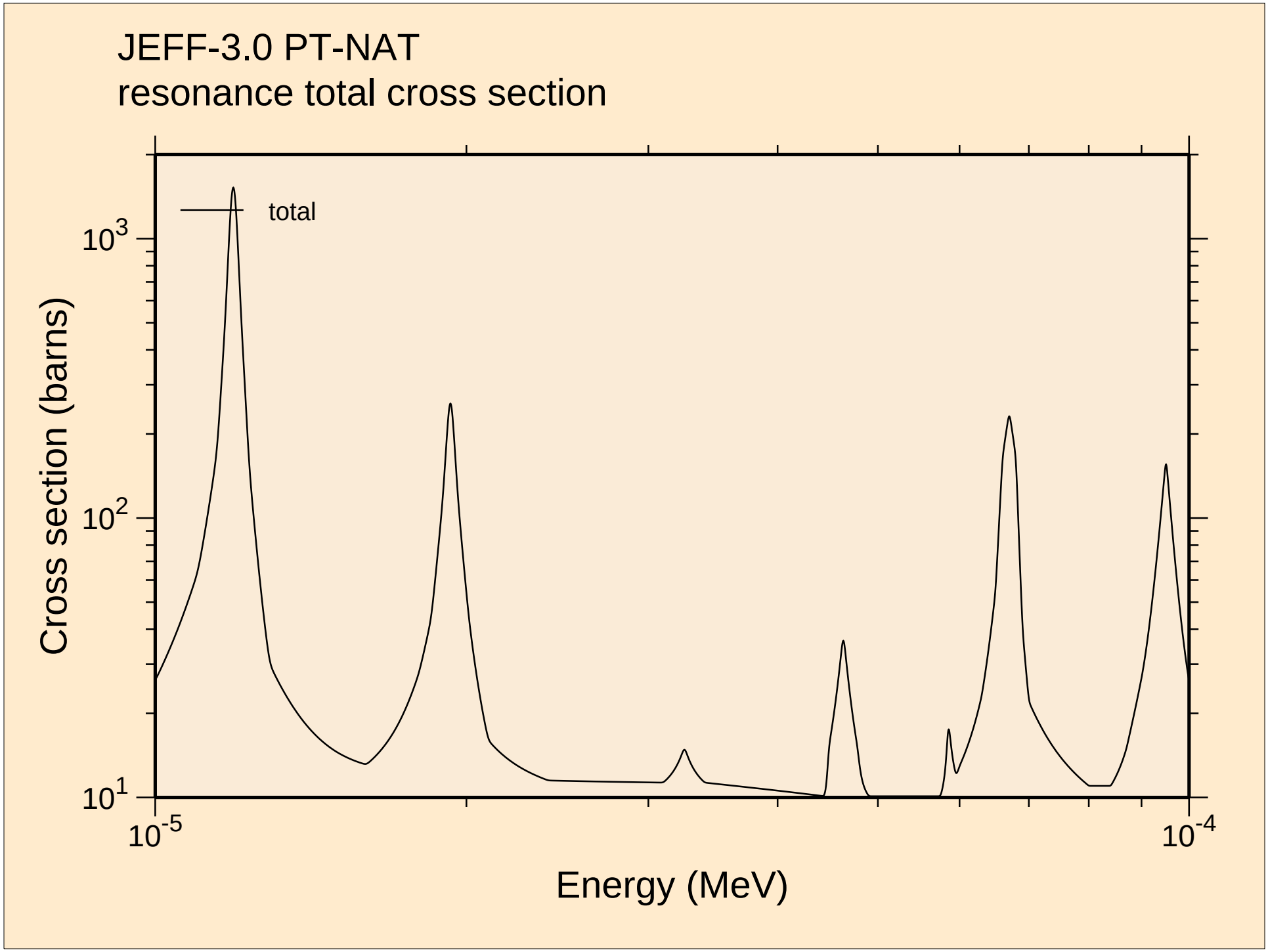
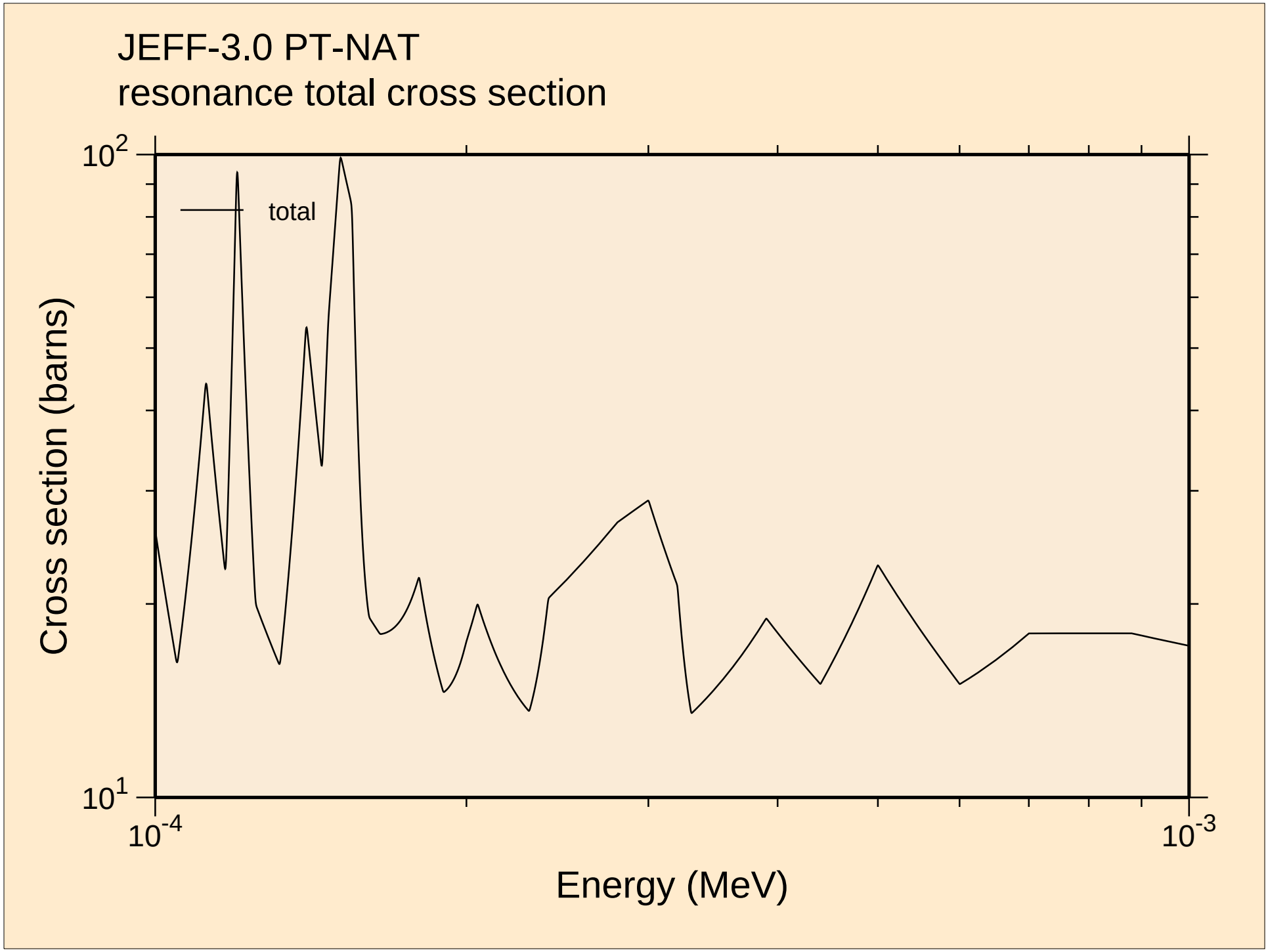
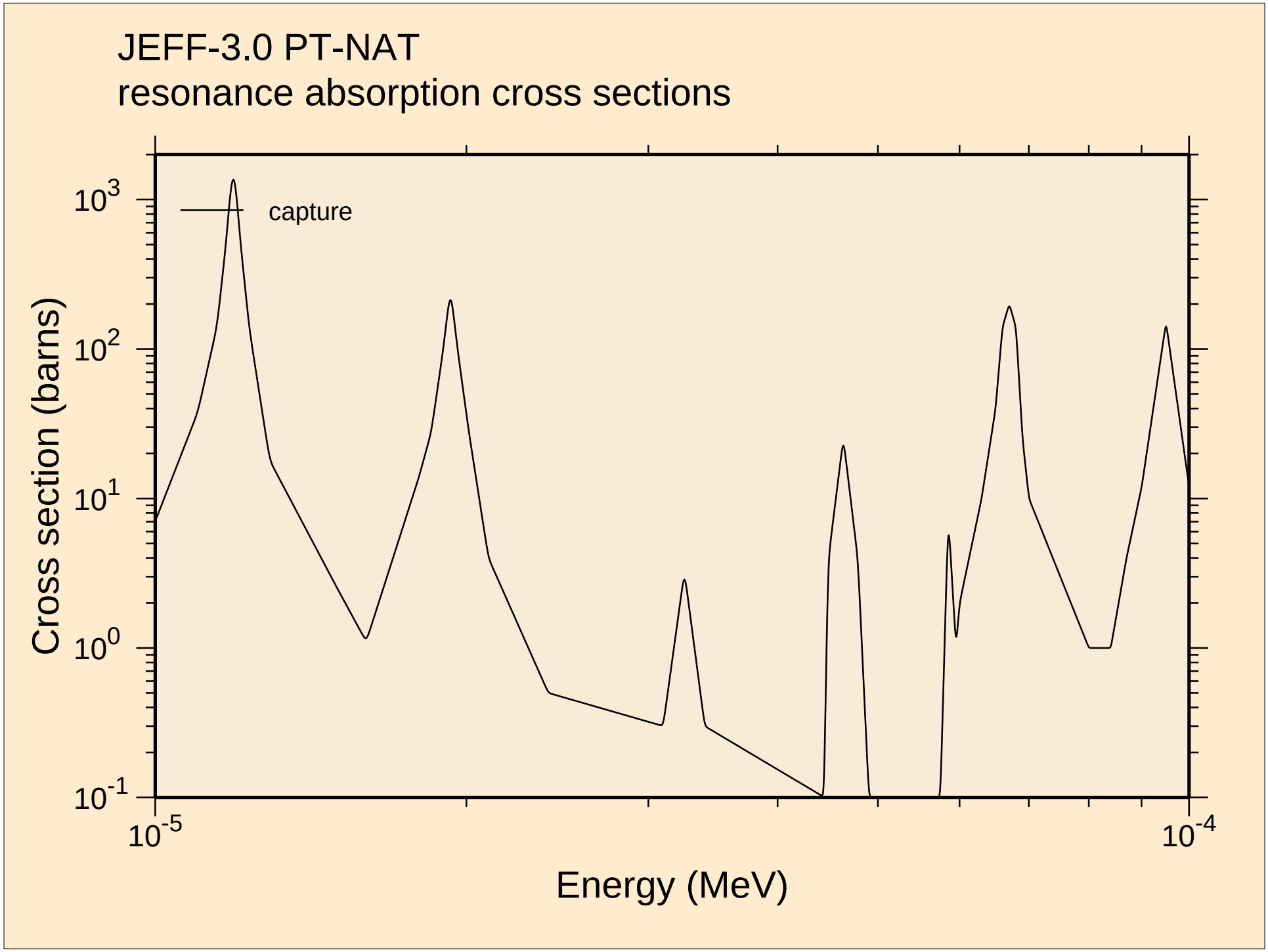
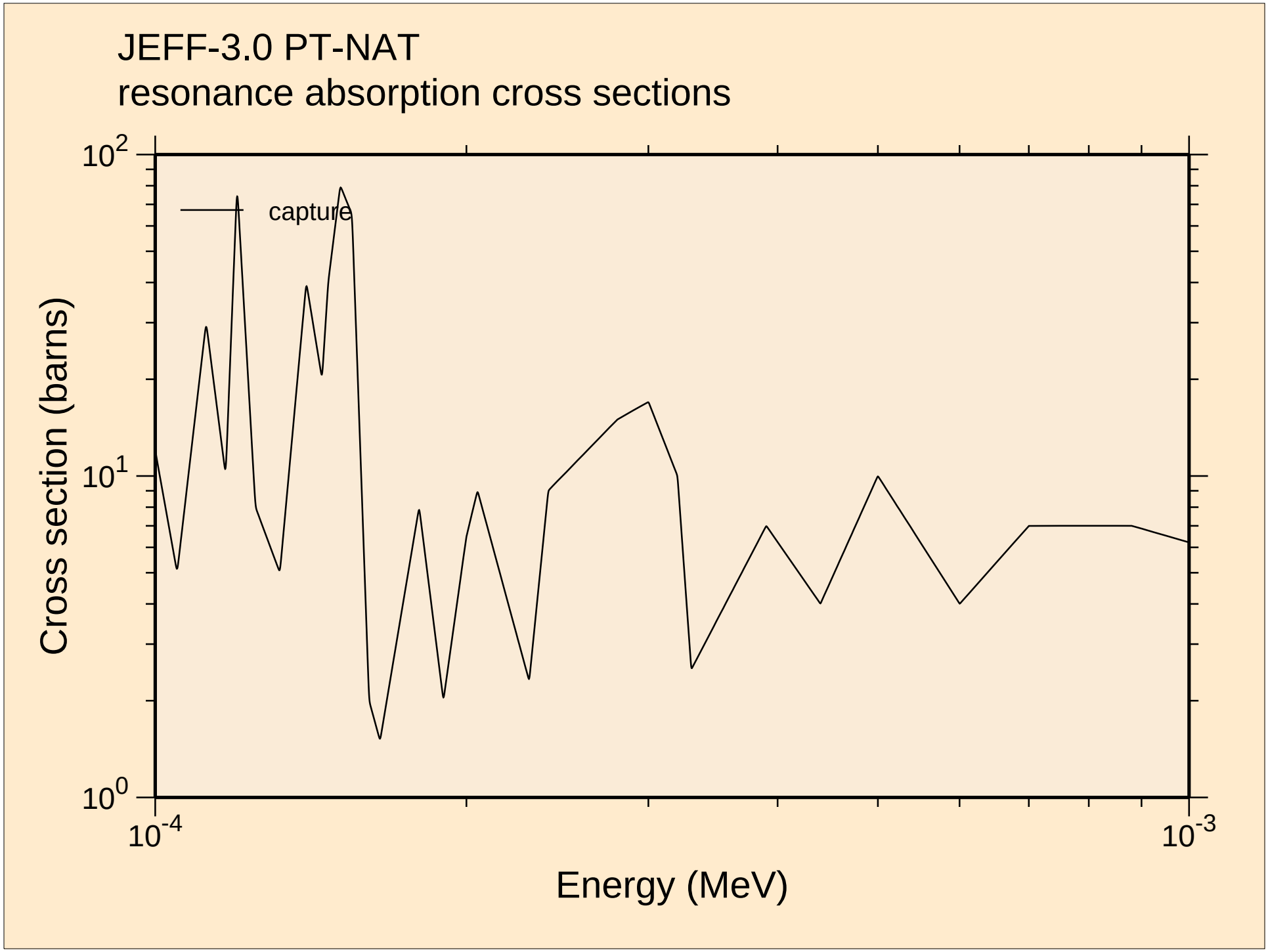
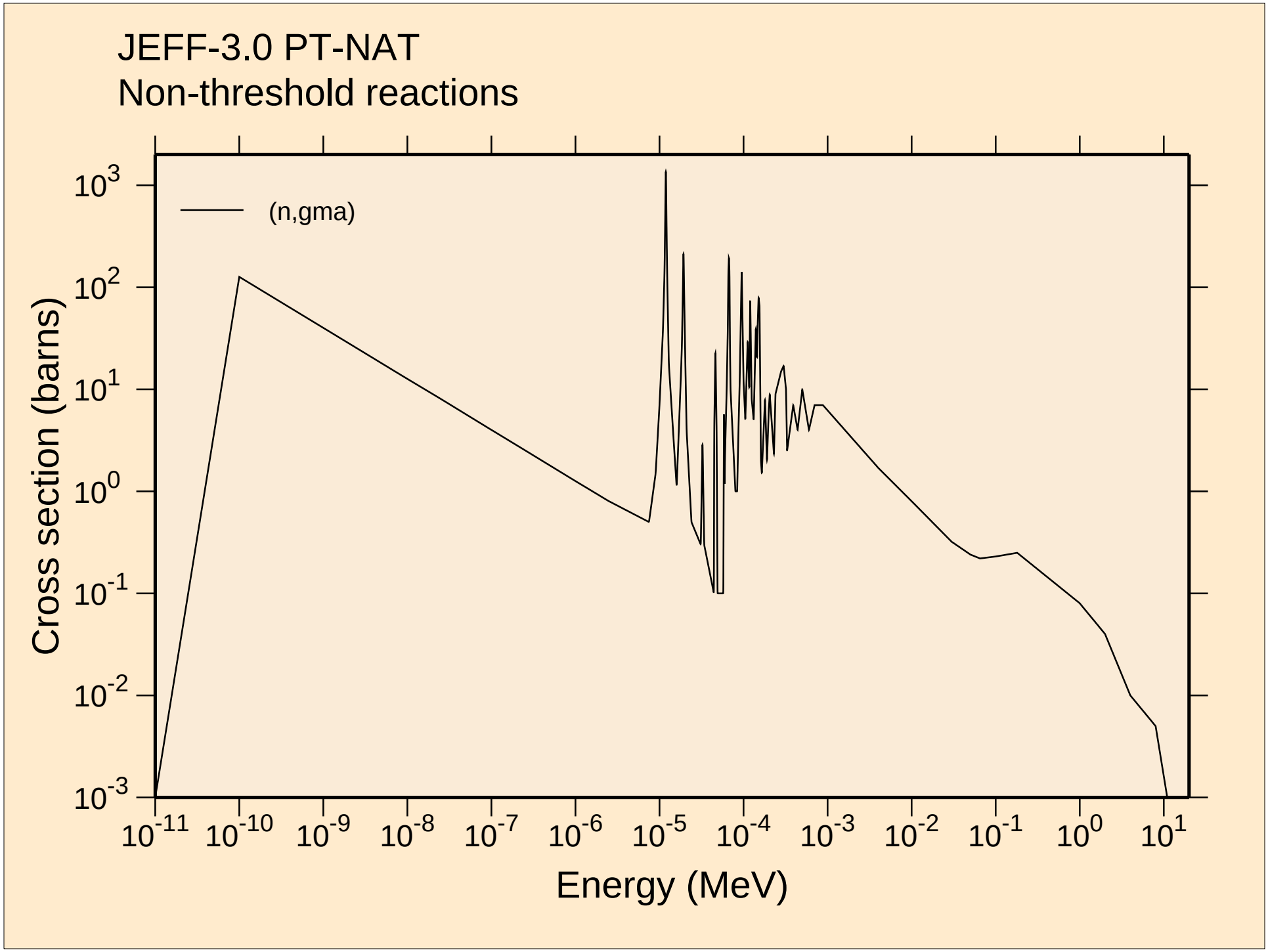

JEFF-3.0 PT-NAT
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
gamma production

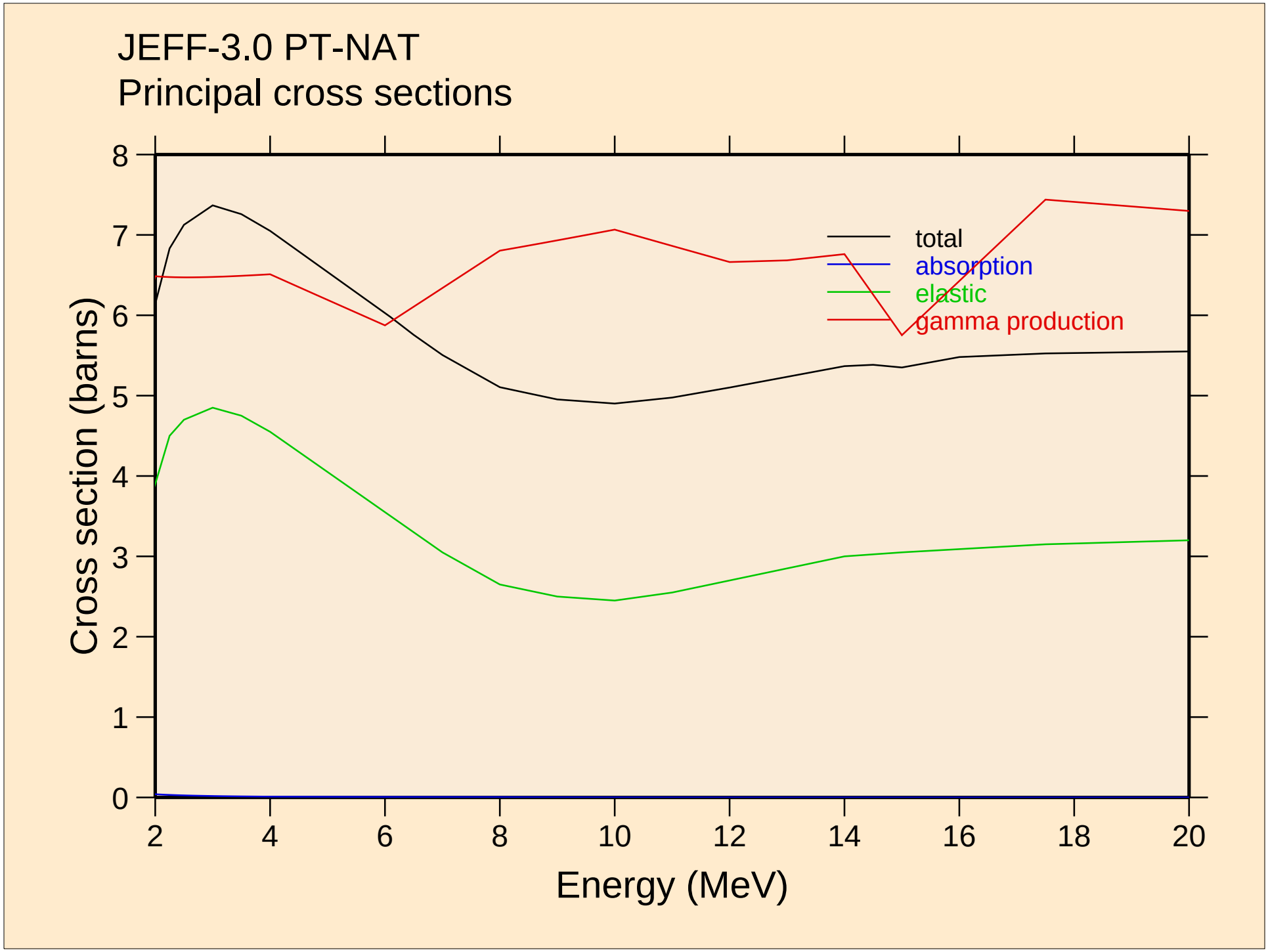

JEFF-3.0 PT-NAT
resonance total cross section
total
Cross section (barns)
10^3
10^2
10^1
10^{-5}
10^{-4}
Energy (MeV)

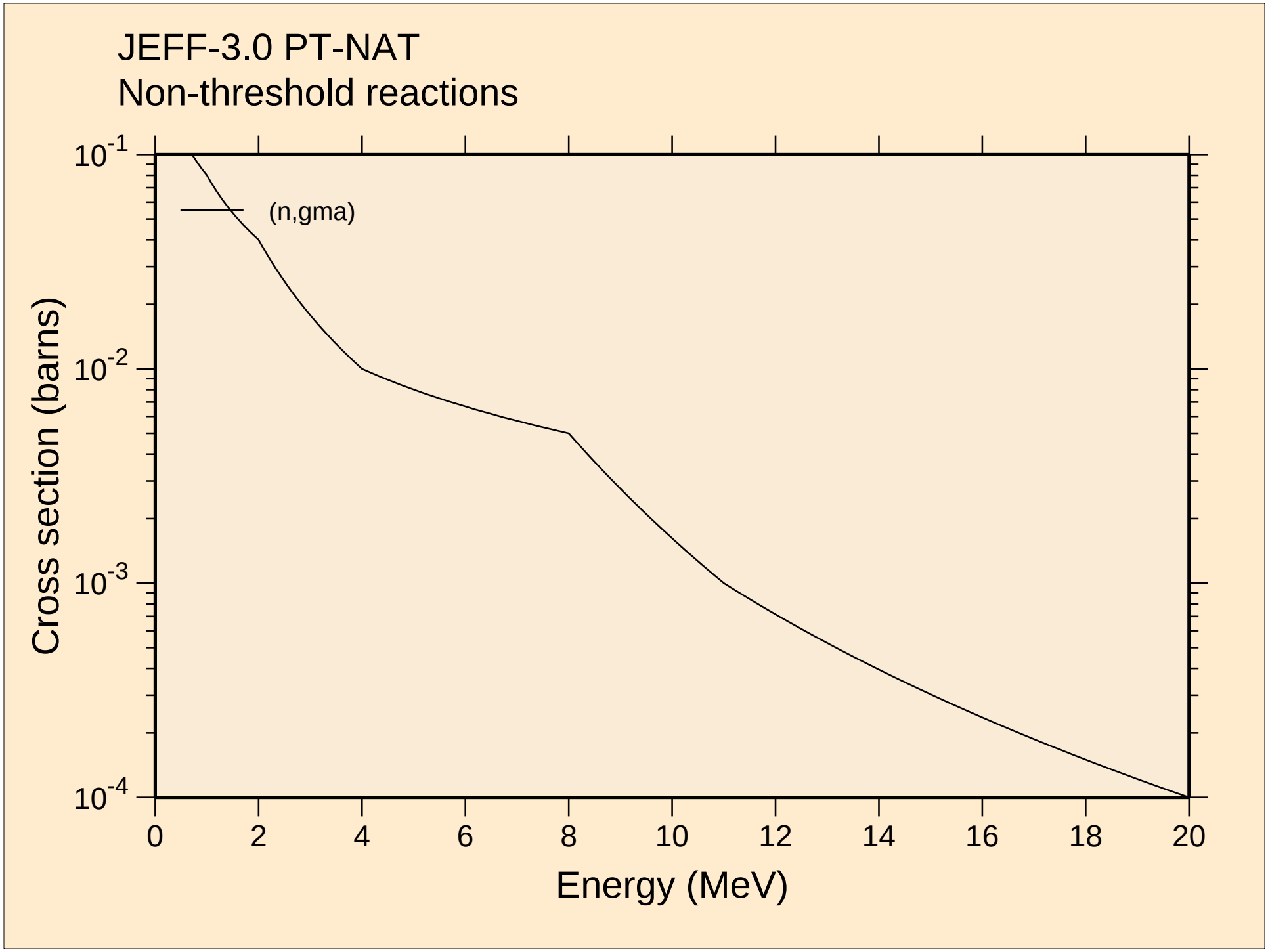

JEFF-3.0 PT-NAT
resonance total cross section
total
Cross section (barns)
10^2
10^1
10^{-4}
10^{-3}
Energy (MeV)

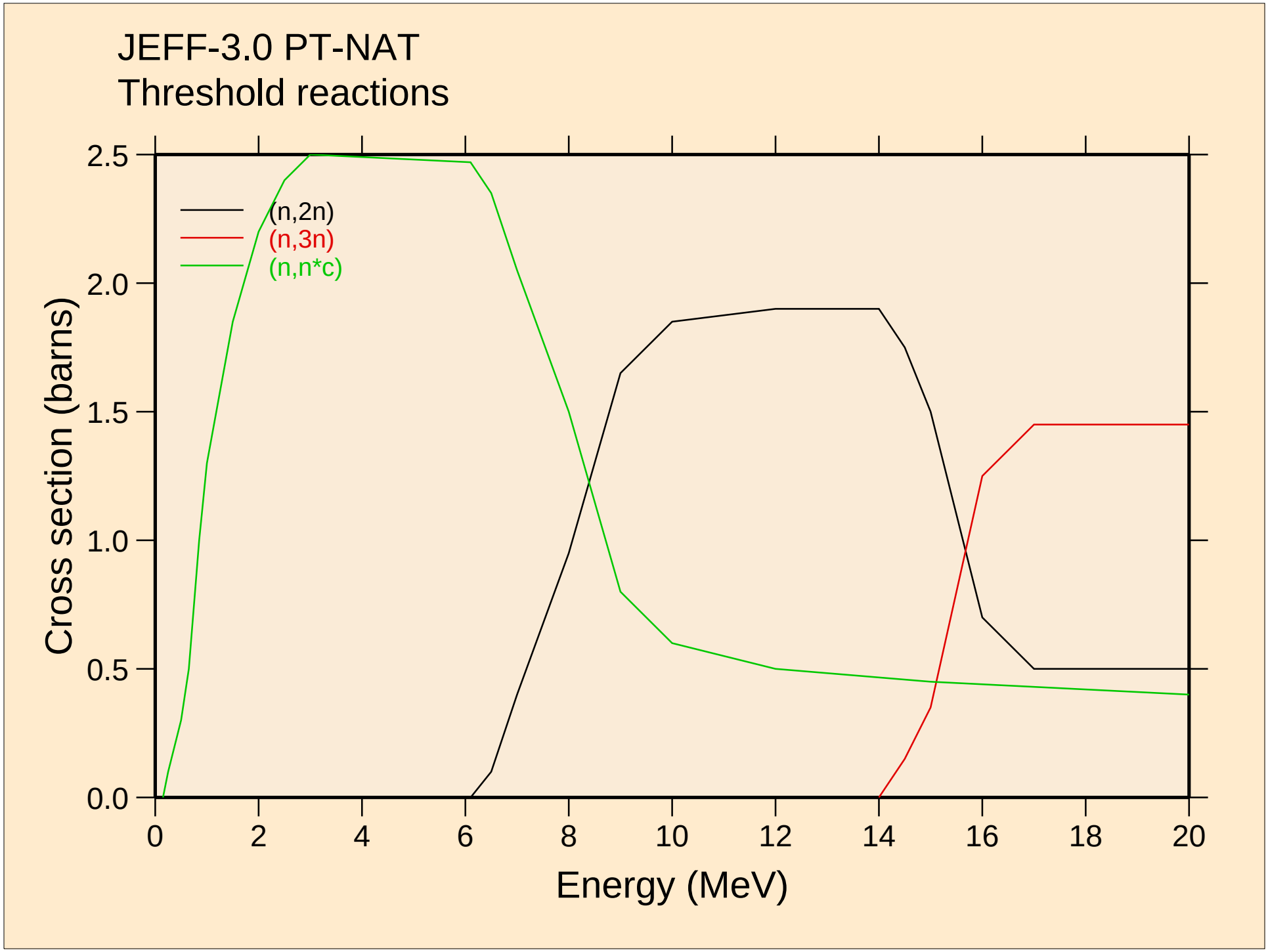

JEFF-3.0 PT-NAT
resonance absorption cross sections
capture
Cross section (barns)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-5}
10^{-4}
Energy (MeV)

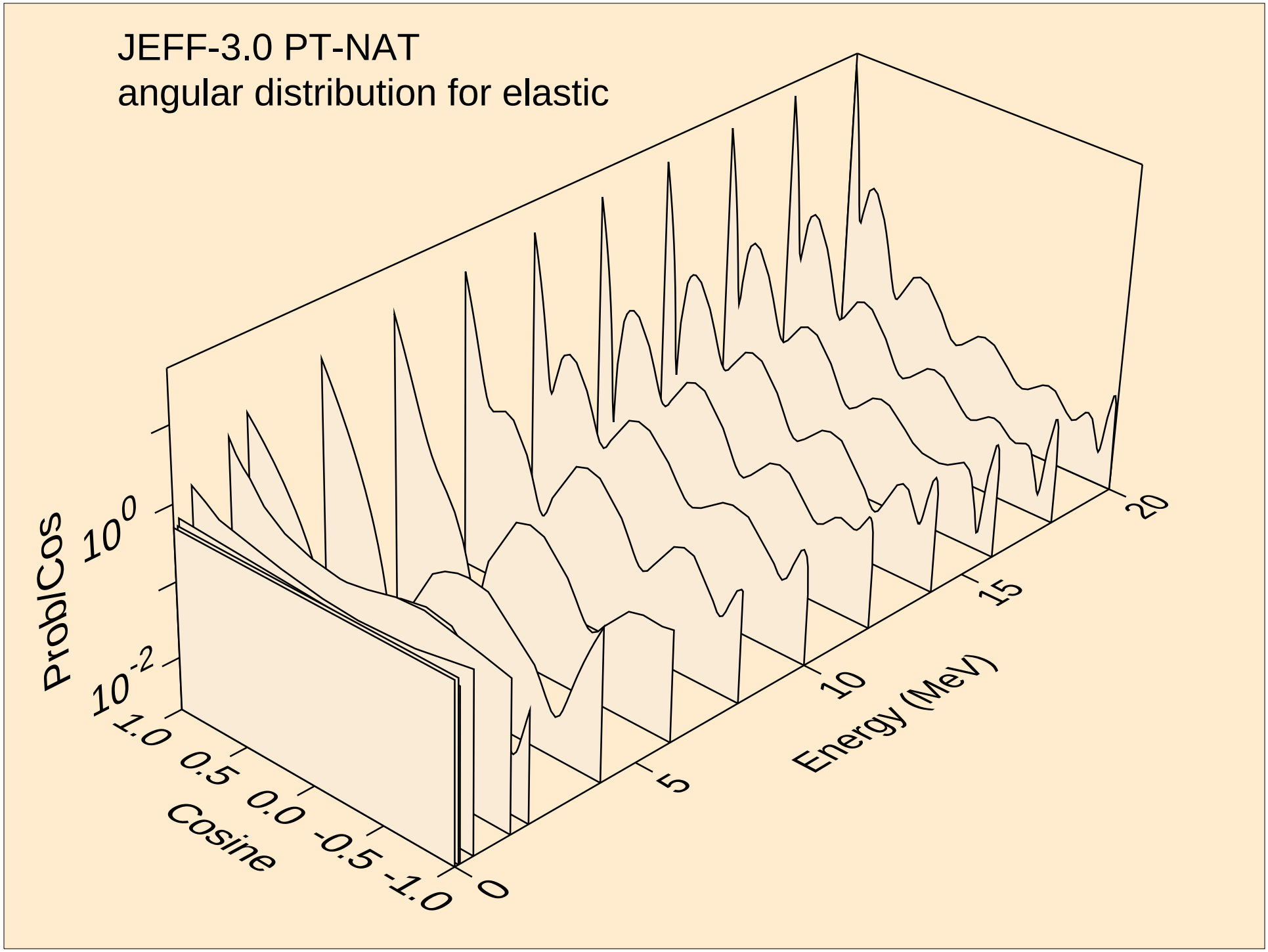

JEFF-3.0 PT-NAT
resonance absorption cross sections
capture
Cross section (barns)
10^2
10^1
10^0
10^{-4}
10^{-3}
Energy (MeV)

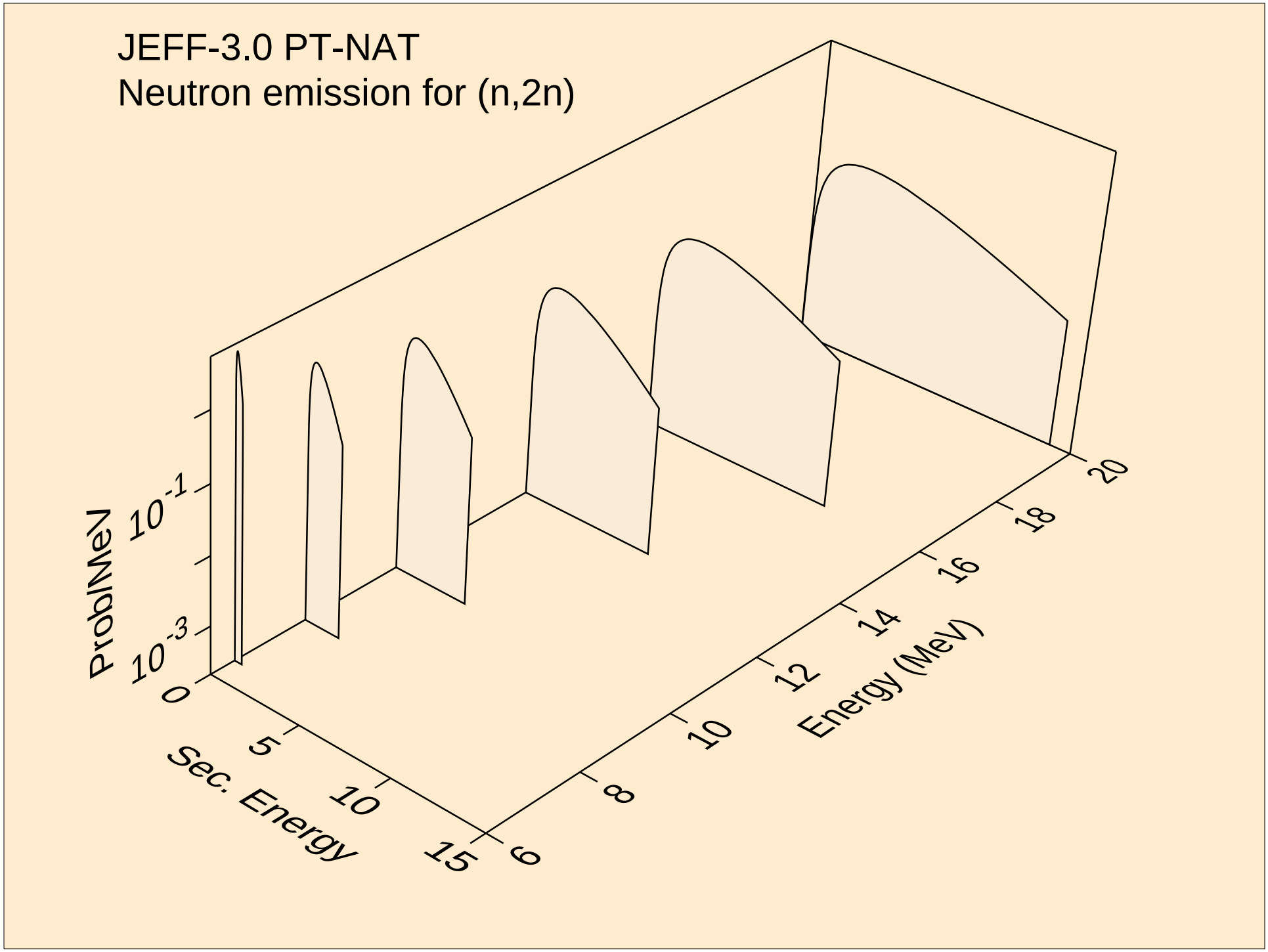

JEFF-3.0 PT-NAT
Non-threshold reactions
(n,gma)
Cross section (barns)
Energy (MeV)
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-11
10^-10
10^-9
10^-8
10^-7
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1

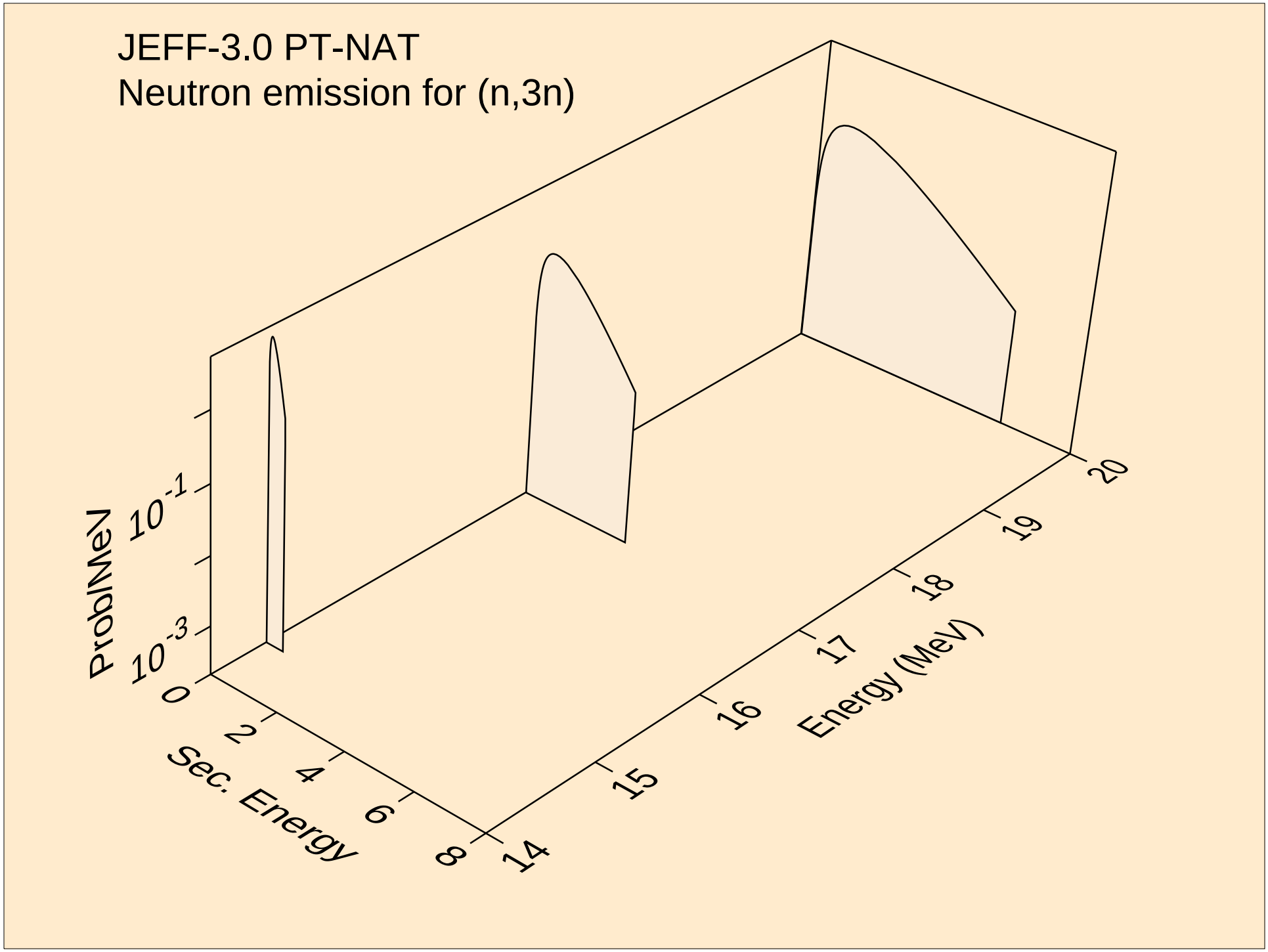

JEFF-3.0 PT-NAT
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
gamma production
0
1
2
3
4
5
6
7
8
2
4
6
8
10
12
14
16
18
20

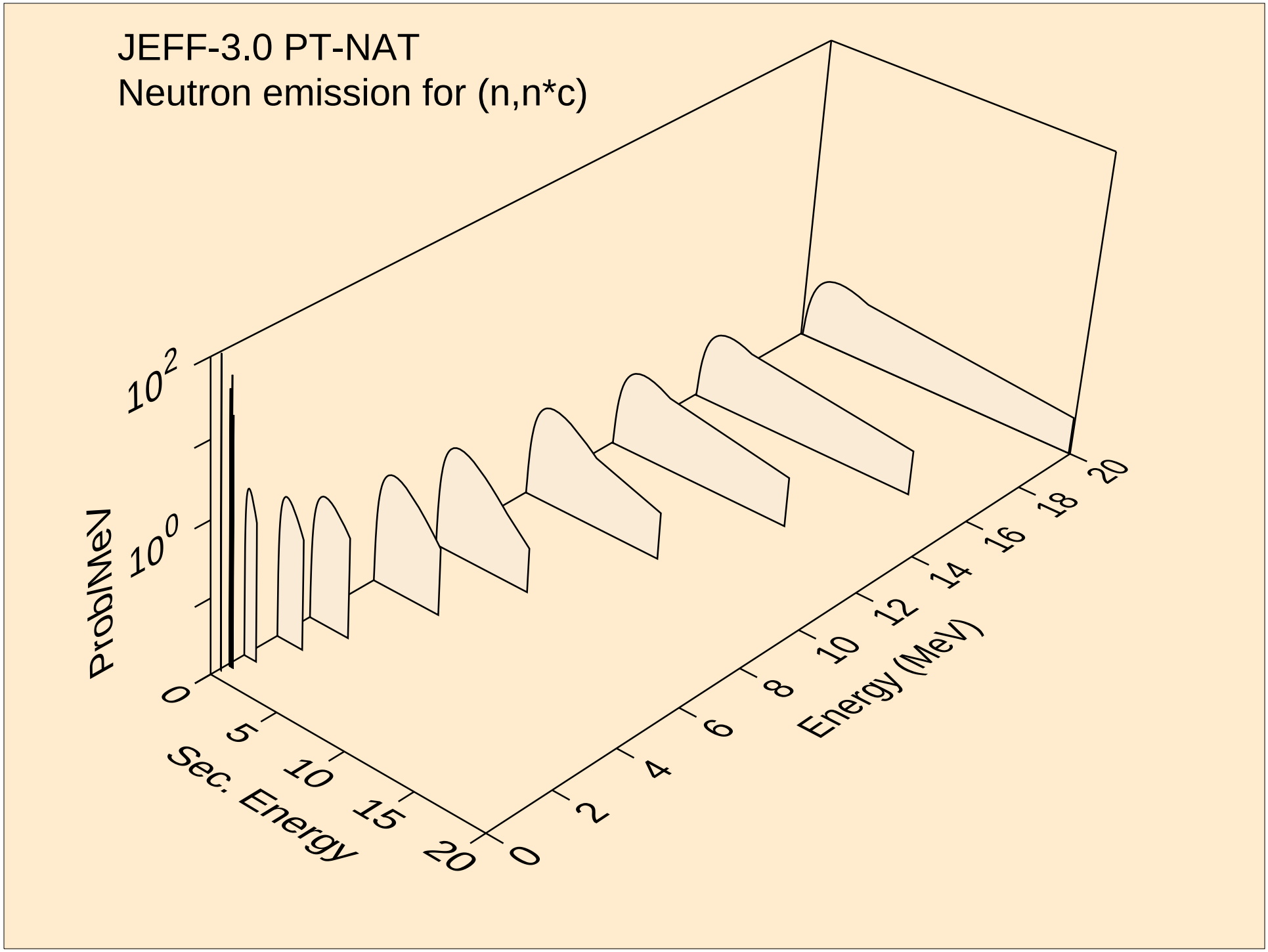

JEFF-3.0 PT-NAT
Non-threshold reactions
(n,gma)
Cross section (barns)
10-1
10-2
10-3
10-4
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)


JEFF-3.0 PT-NAT
Threshold reactions
(n,2n)
(n,3n)
(n,n*c)
Cross section (barns)
Energy (MeV)
0.0
0.5
1.0
1.5
2.0
2.5
0
2
4
6
8
10
12
14
16
18
20

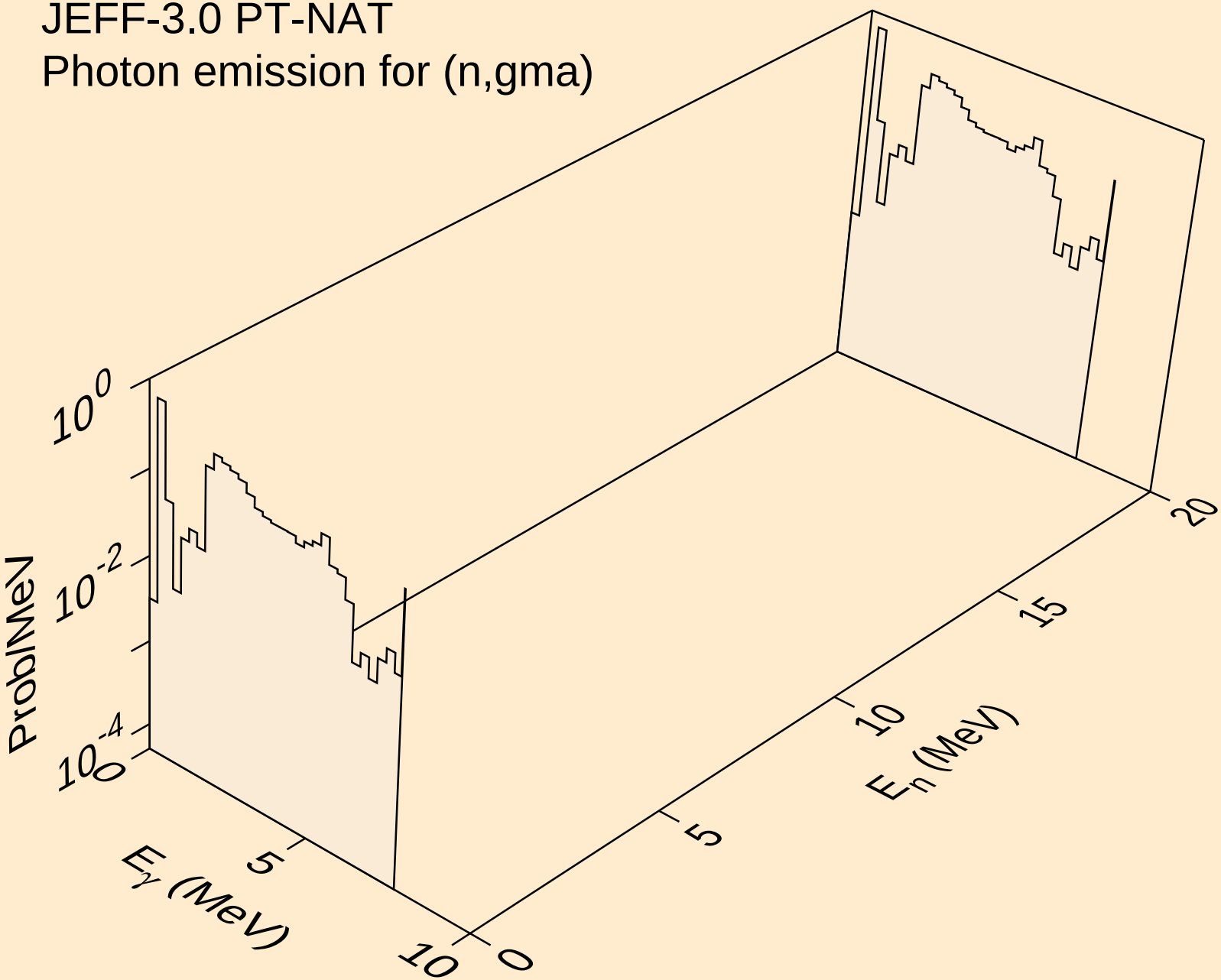

JEFF-3.0 PT-NAT
angular distribution for elastic
ProblCos
10^0
10^{-2}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

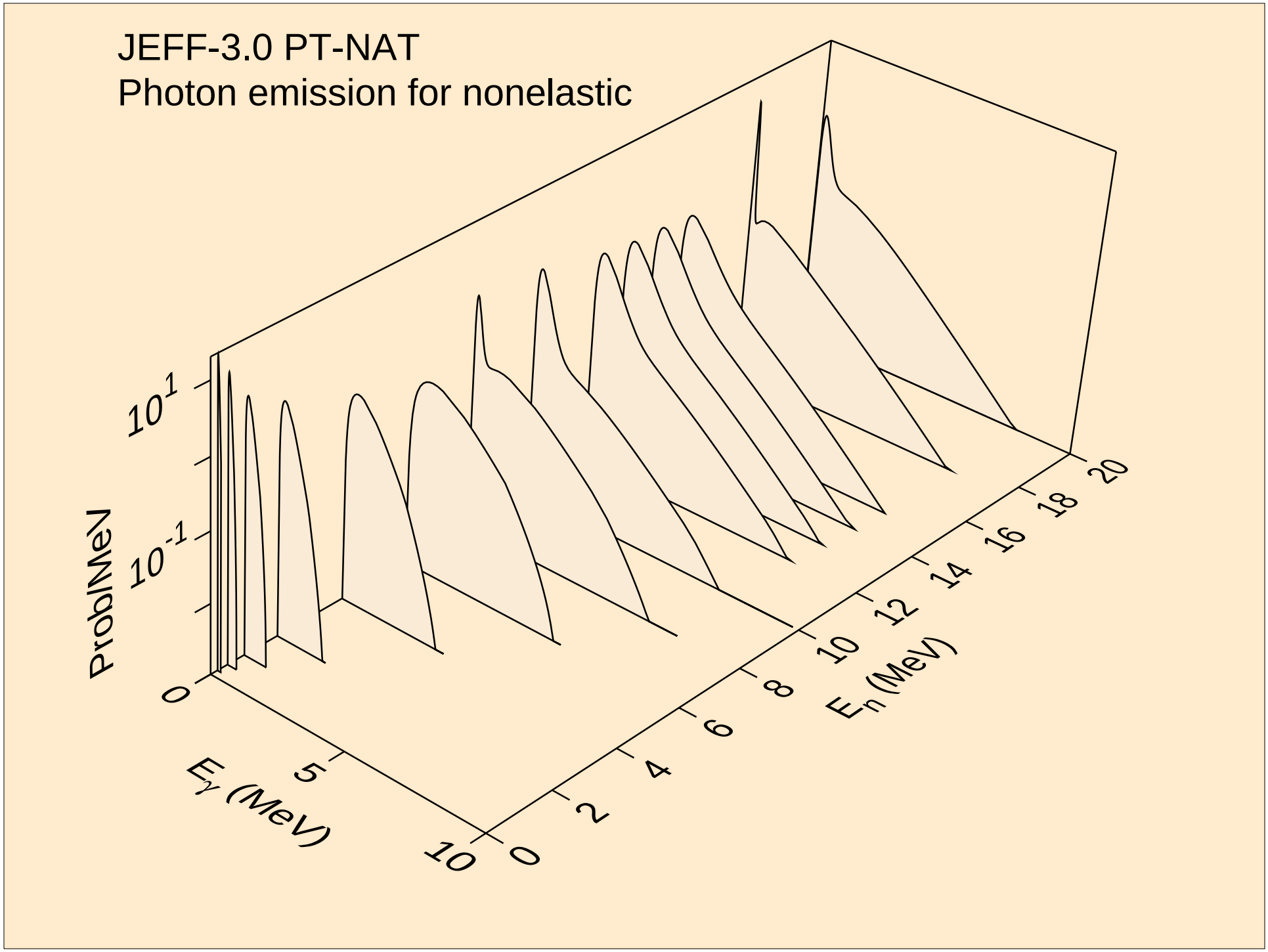

JEFF-3.0 PT-NAT
Neutron emission for (n,2n)
Prob/MeV
10-1
10-3
0
5
10
15
Sec. Energy
6
8
10
12
14
16
18
20
Energy (MeV)

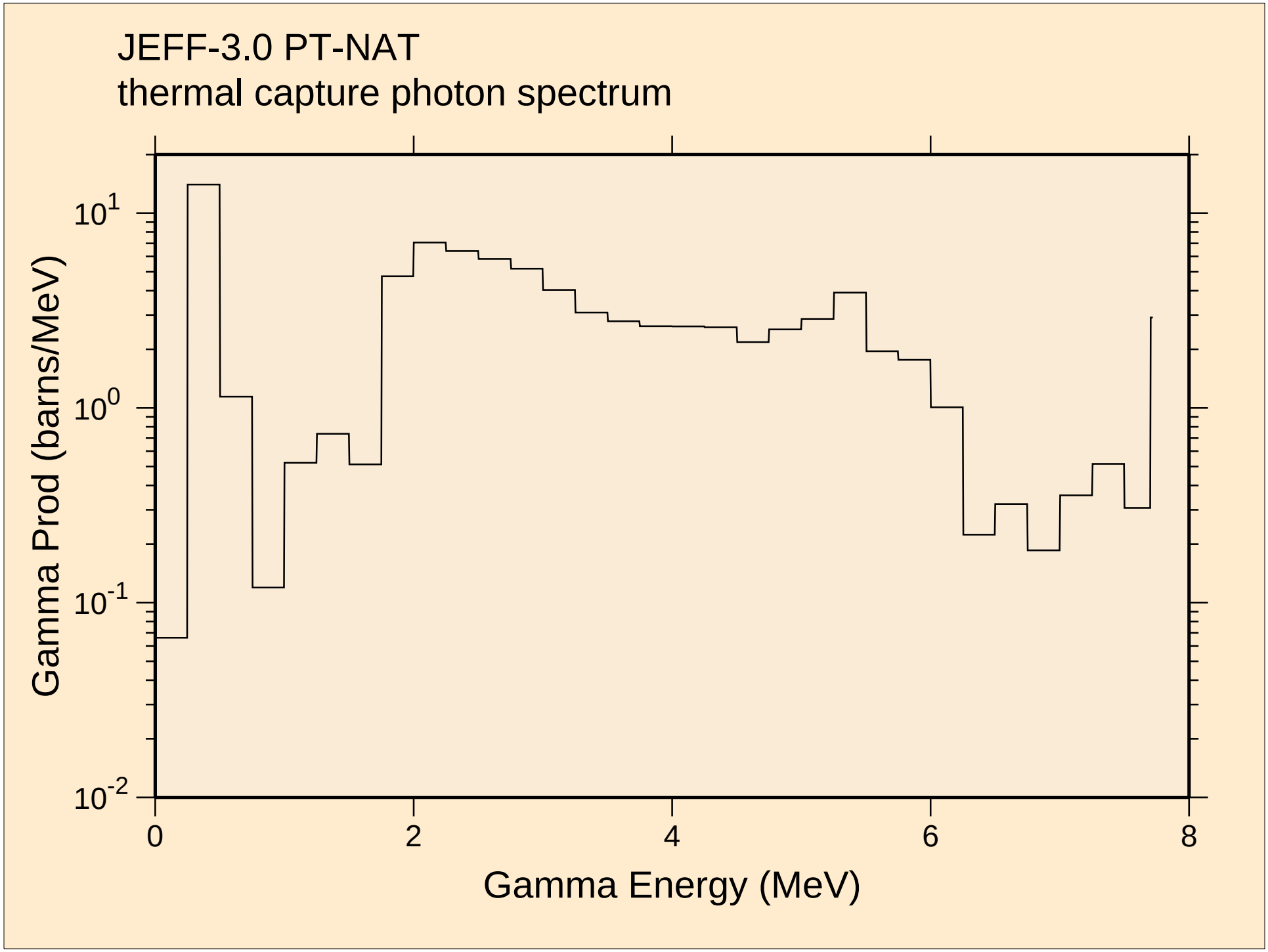

JEFF-3.0 PT-NAT
Neutron emission for (n,3n)
Prob/MeV
10^-1
10^-3
0
2
4
6
8
Sec. Energy
14
15
16
17
18
19
20
Energy (MeV)

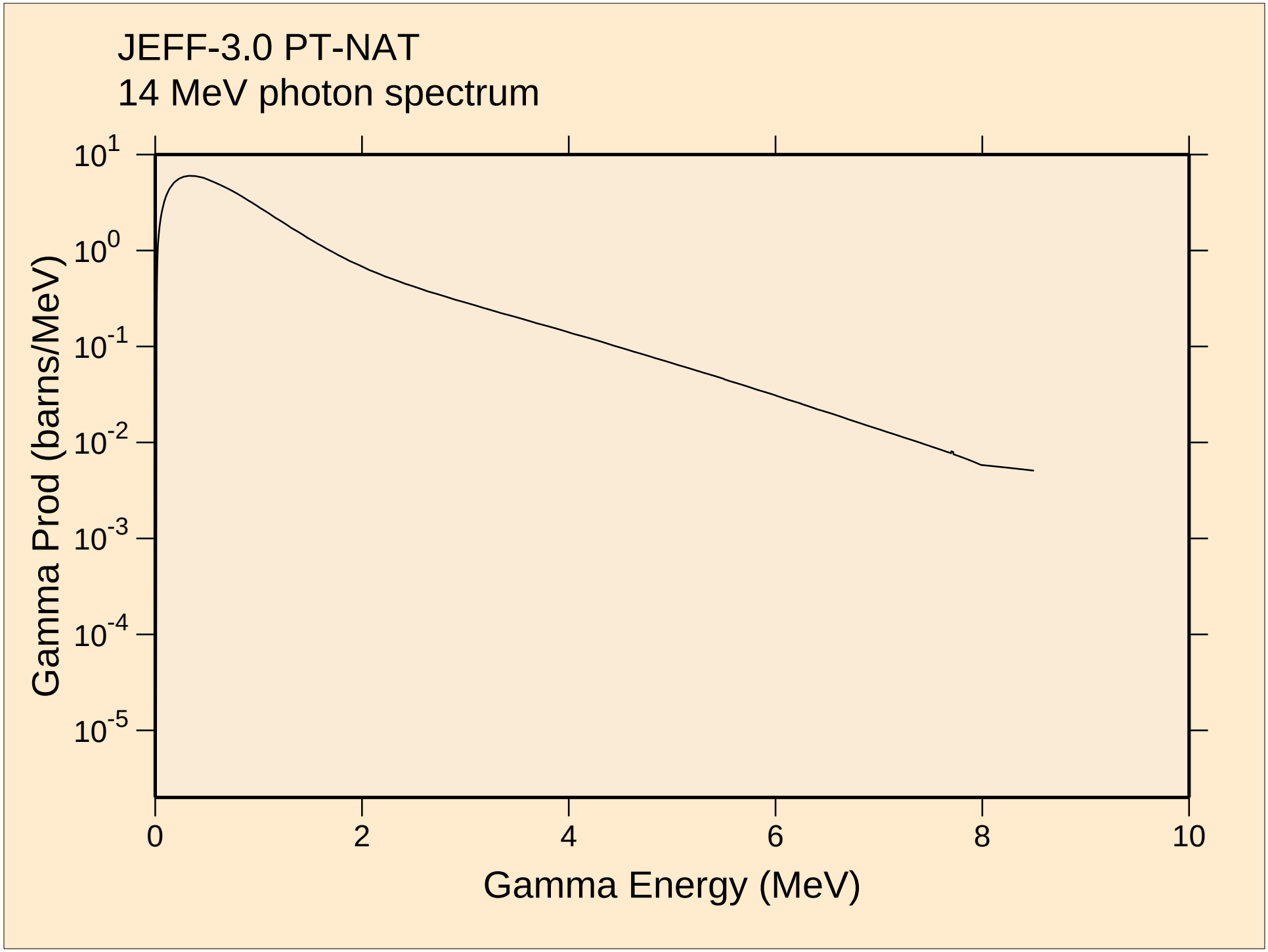

JEFF-3.0 PT-NAT
Neutron emission for (n,n*c)
Prob/MeV
10^2
10^0
0
5
10
15
20
Sec. Energy
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

JEFF-3.0 PT-NAT
Photon emission for (n,gma)




JEFF-3.0 PT-NAT
Photon emission for nonelastic
Prob/MeV
10^{1}
10^{-1}
0
5
10
E_γ (MeV)
0
2
4
6
8
10
12
14
16
18
20
E_n (MeV)


JEFF-3.0 PT-NAT
thermal capture photon spectrum
Gamma Prod (barns/MeV)
10^1
10^0
10^-1
10^-2
0
2
4
6
8
Gamma Energy (MeV)


JEFF-3.0 PT-NAT
14 MeV photon spectrum
Gamma Prod (barns/MeV)
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
0
2
4
6
8
10
Gamma Energy (MeV)