Program EVALPLOT
(Version 2015-2)
by
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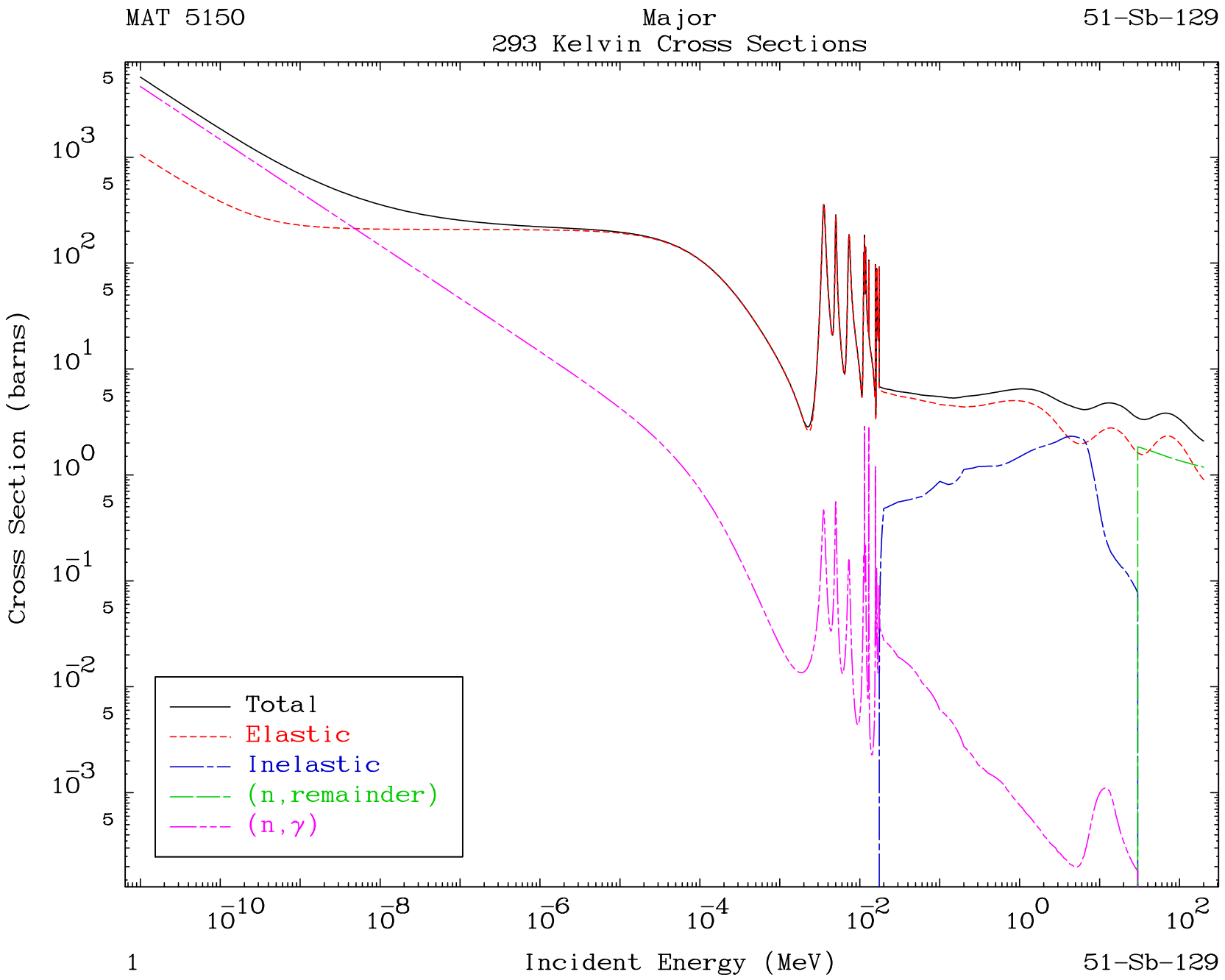
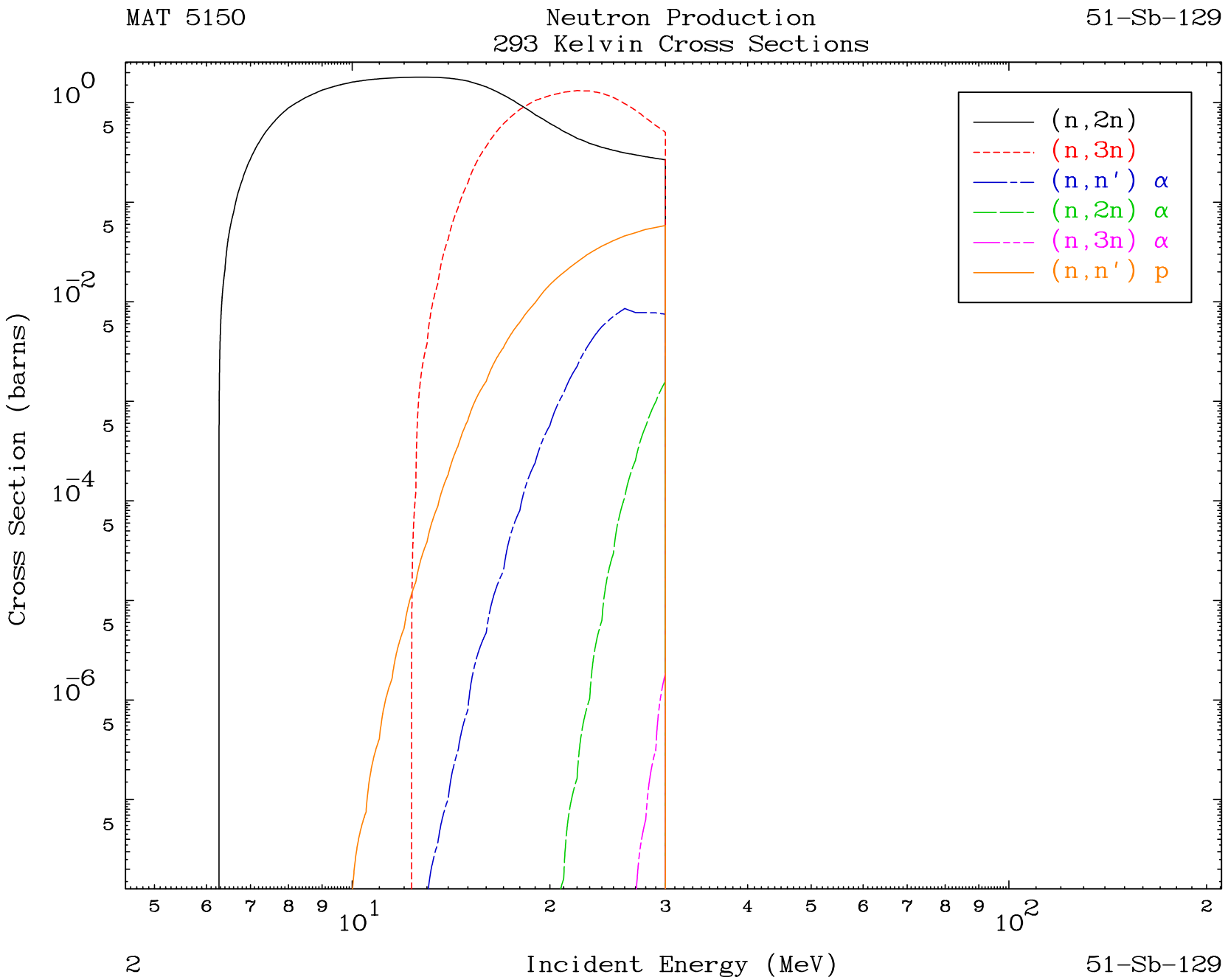
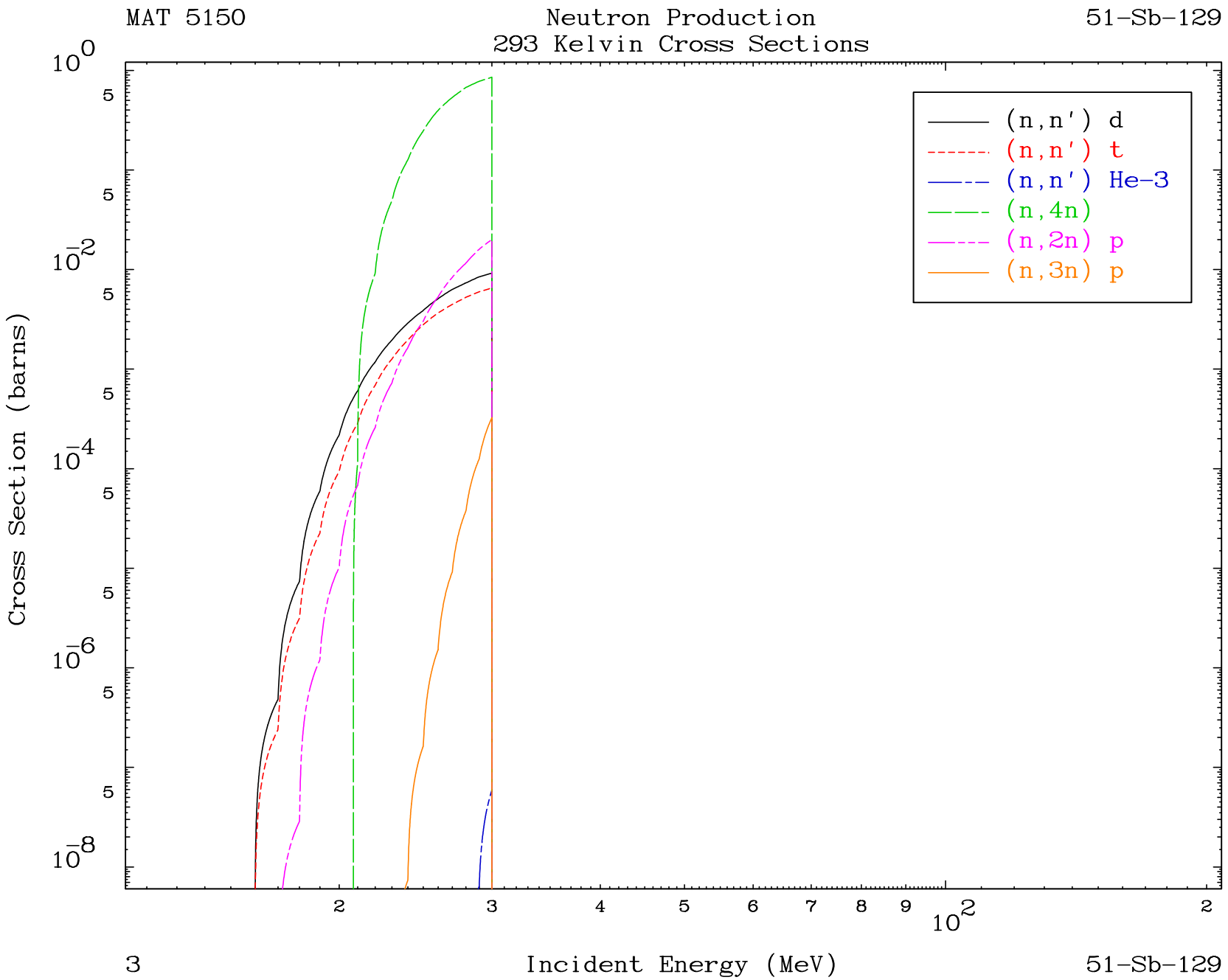
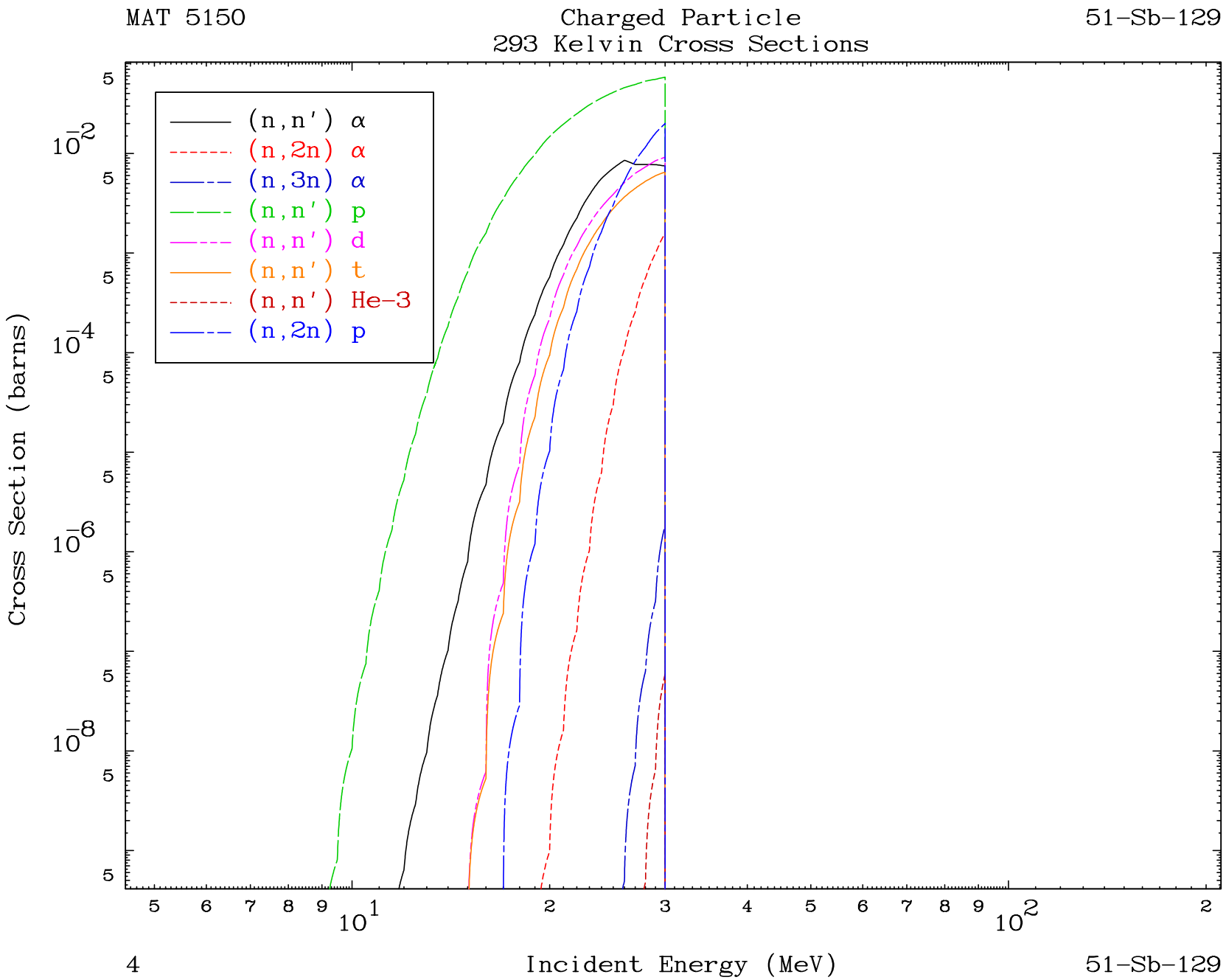
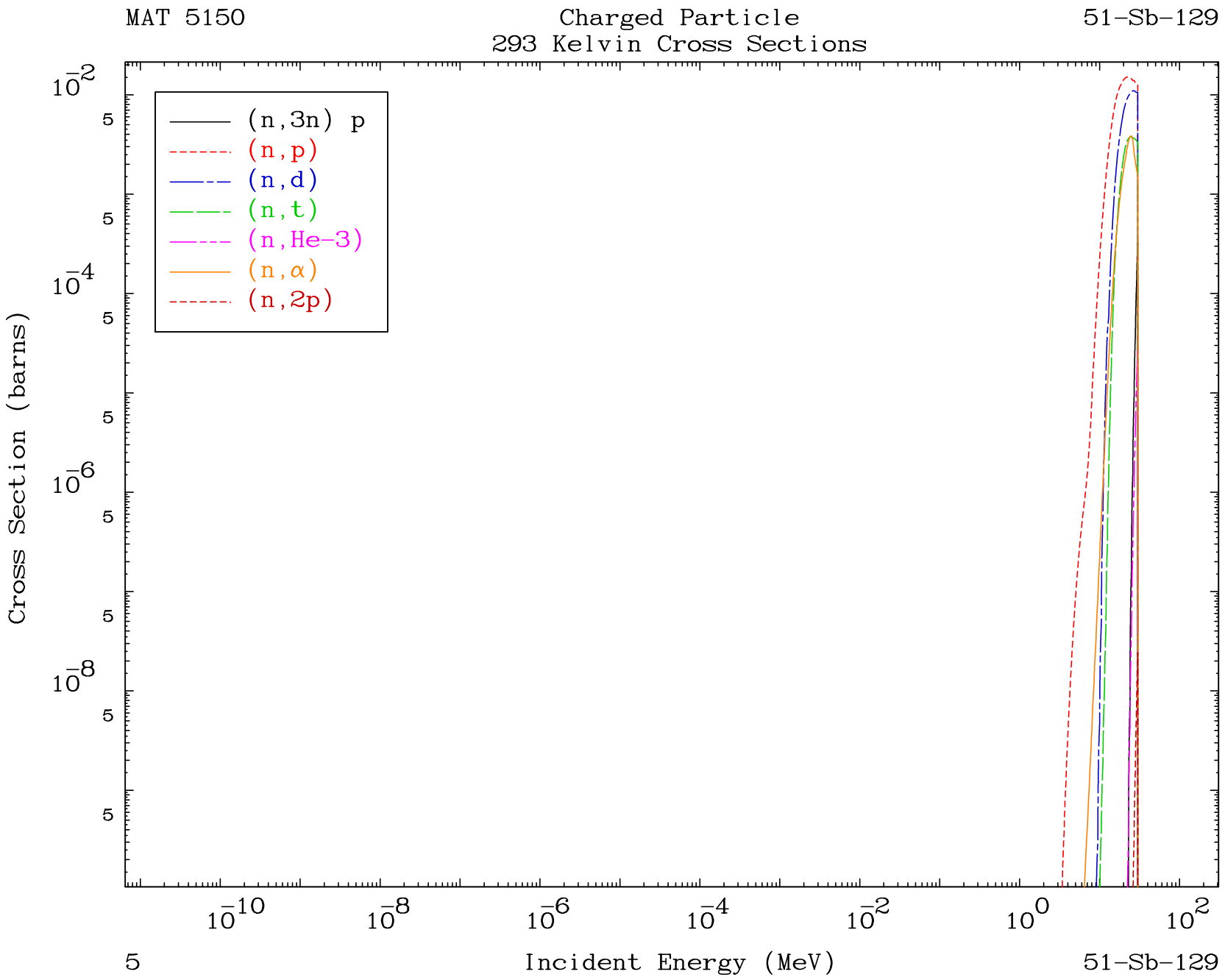
Press Mouse Button to Start

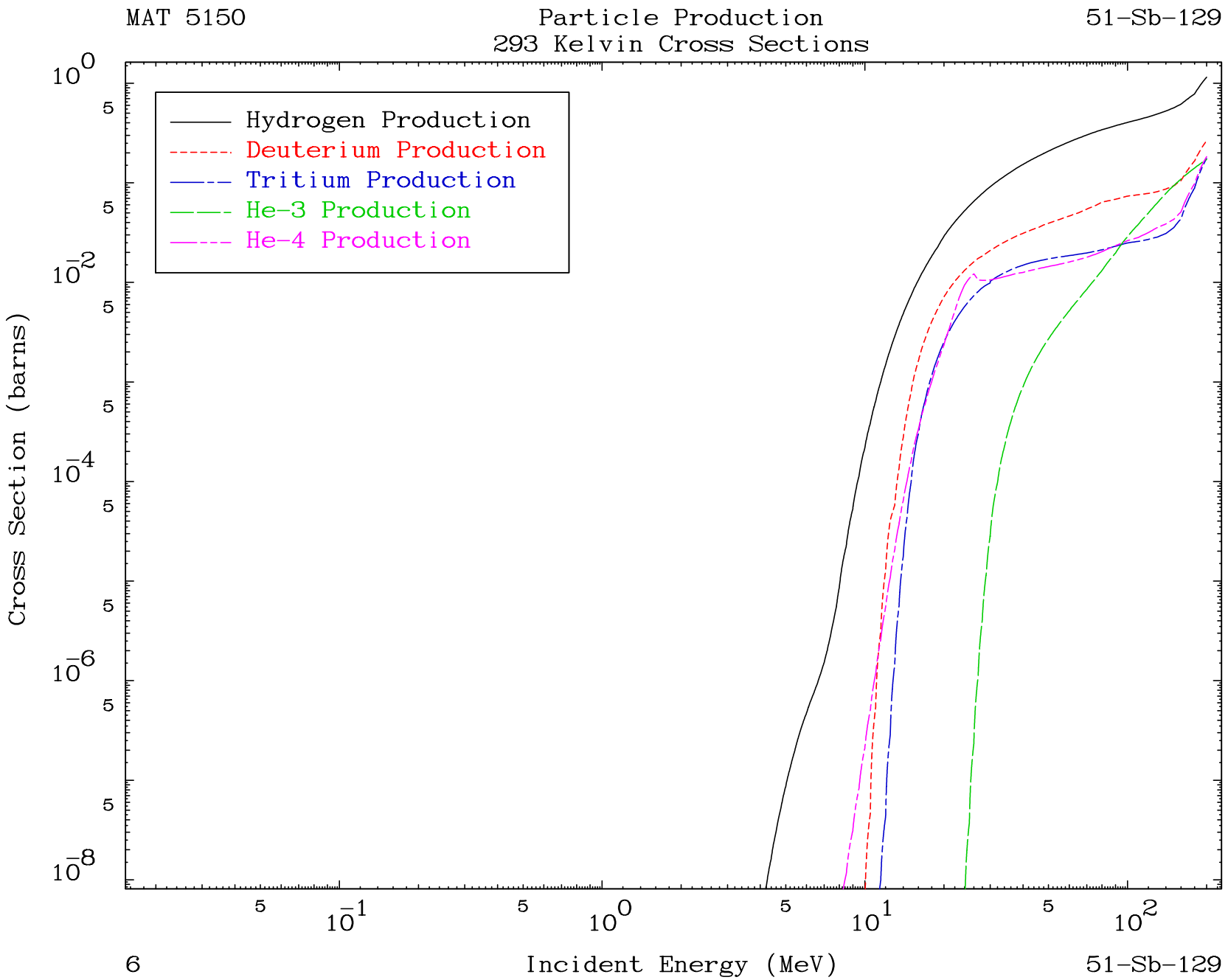

MAT 5150
Major
51-Sb-129
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
51-Sb-129

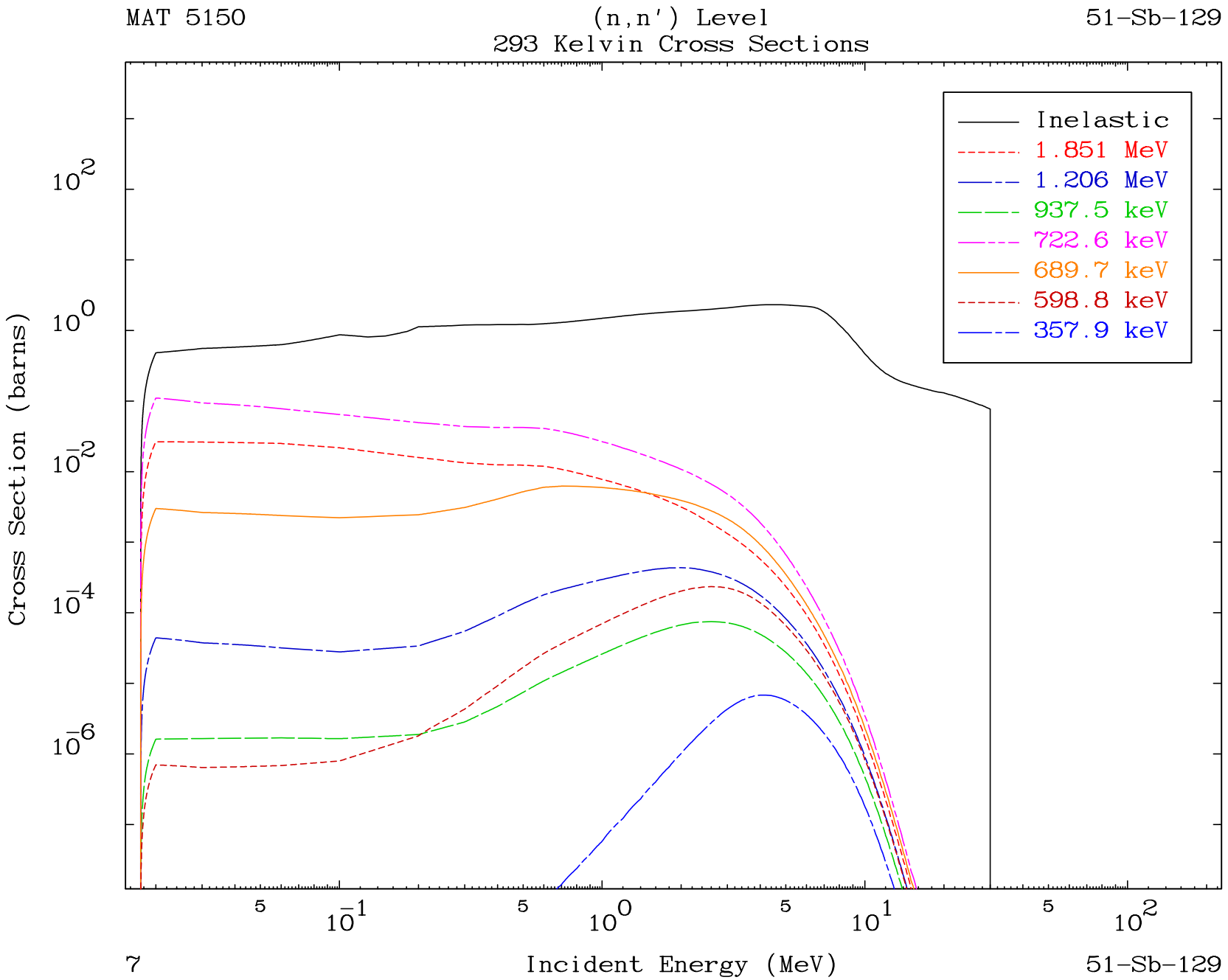

MAT 5150
Neutron Production
293 Kelvin Cross Sections
51-Sb-129
Cross Section (barns)
Incident Energy (MeV)
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
51-Sb-129
2

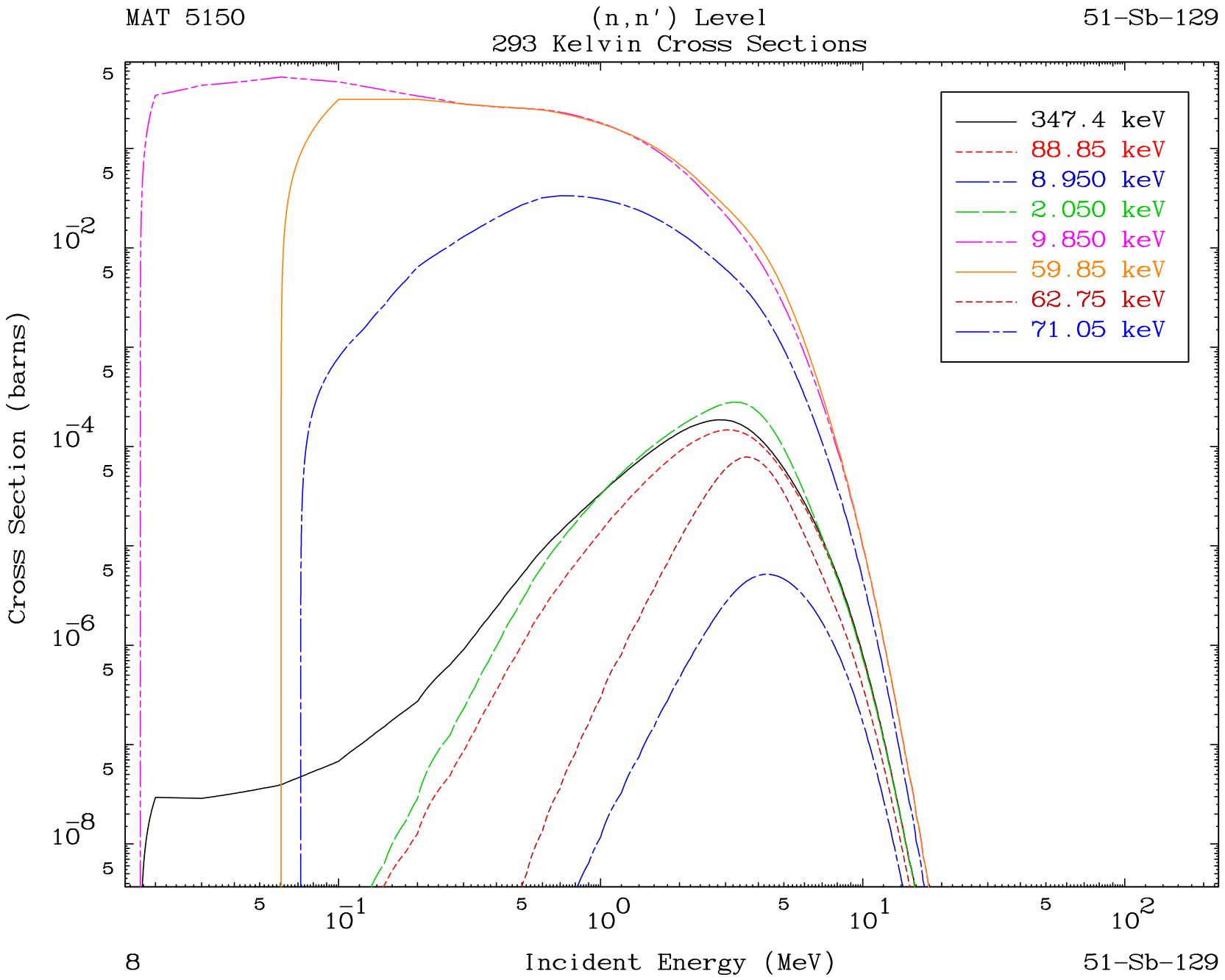

MAT 5150
Neutron Production
293 Kelvin Cross Sections
51-Sb-129
Cross Section (barns)
Incident Energy (MeV)
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
3
51-Sb-129

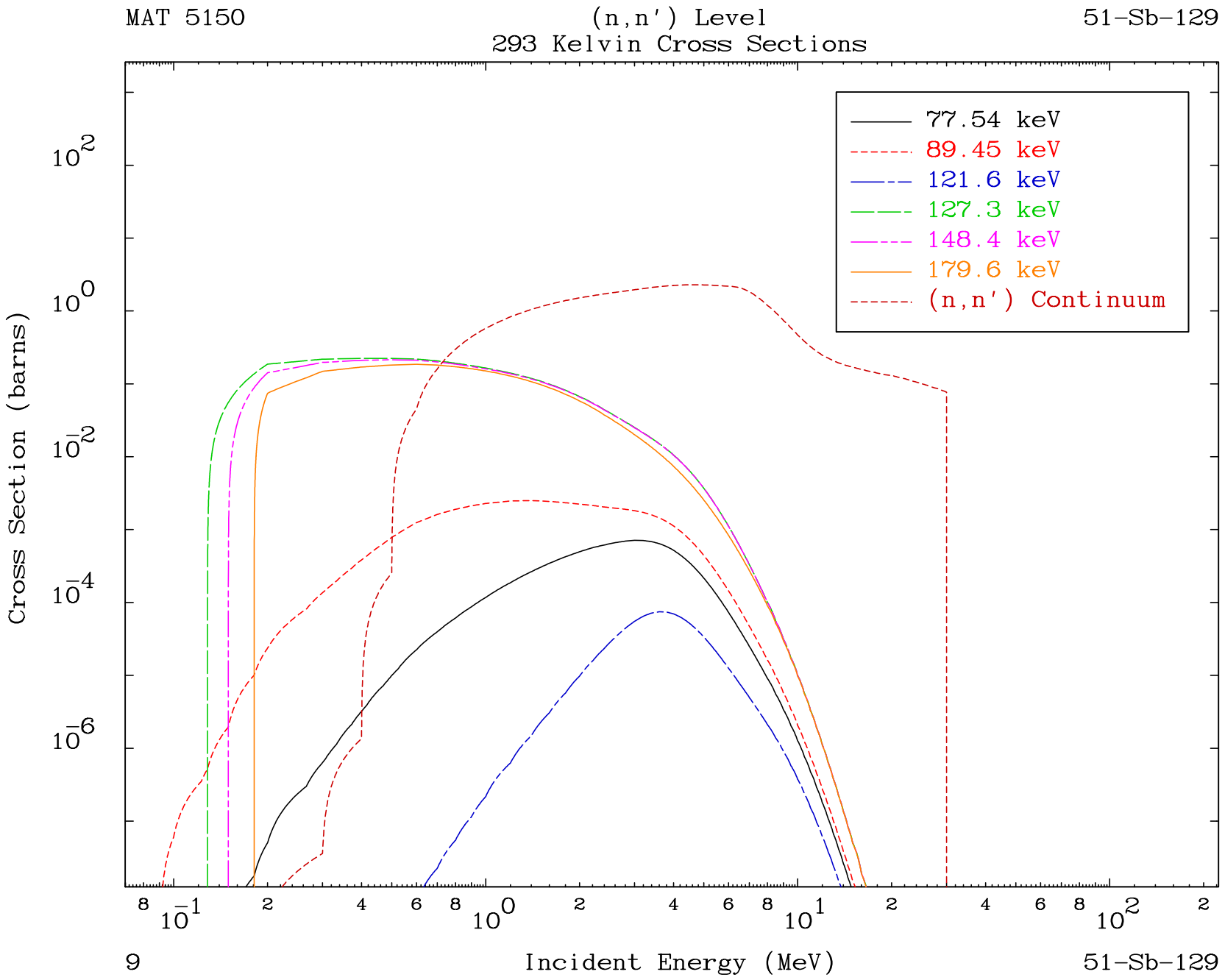

MAT 5150
Charged Particle
51-Sb-129
293 Kelvin Cross Sections
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
Cross Section (barns)
Incident Energy (MeV)
4
51-Sb-129

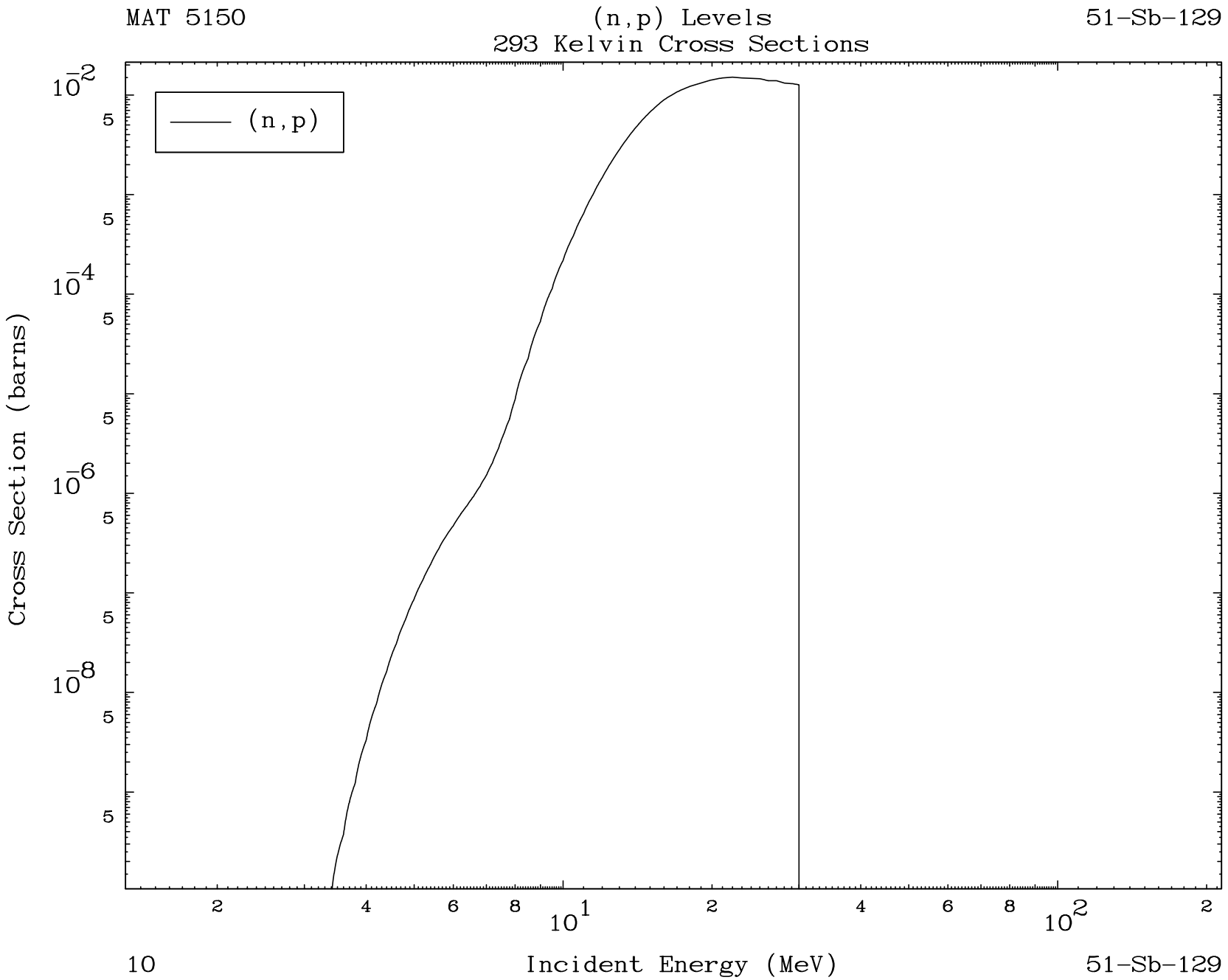

MAT 5150
Charged Particle
293 Kelvin Cross Sections
51-Sb-129
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2p)
Cross Section (barns)
Incident Energy (MeV)
51-Sb-129

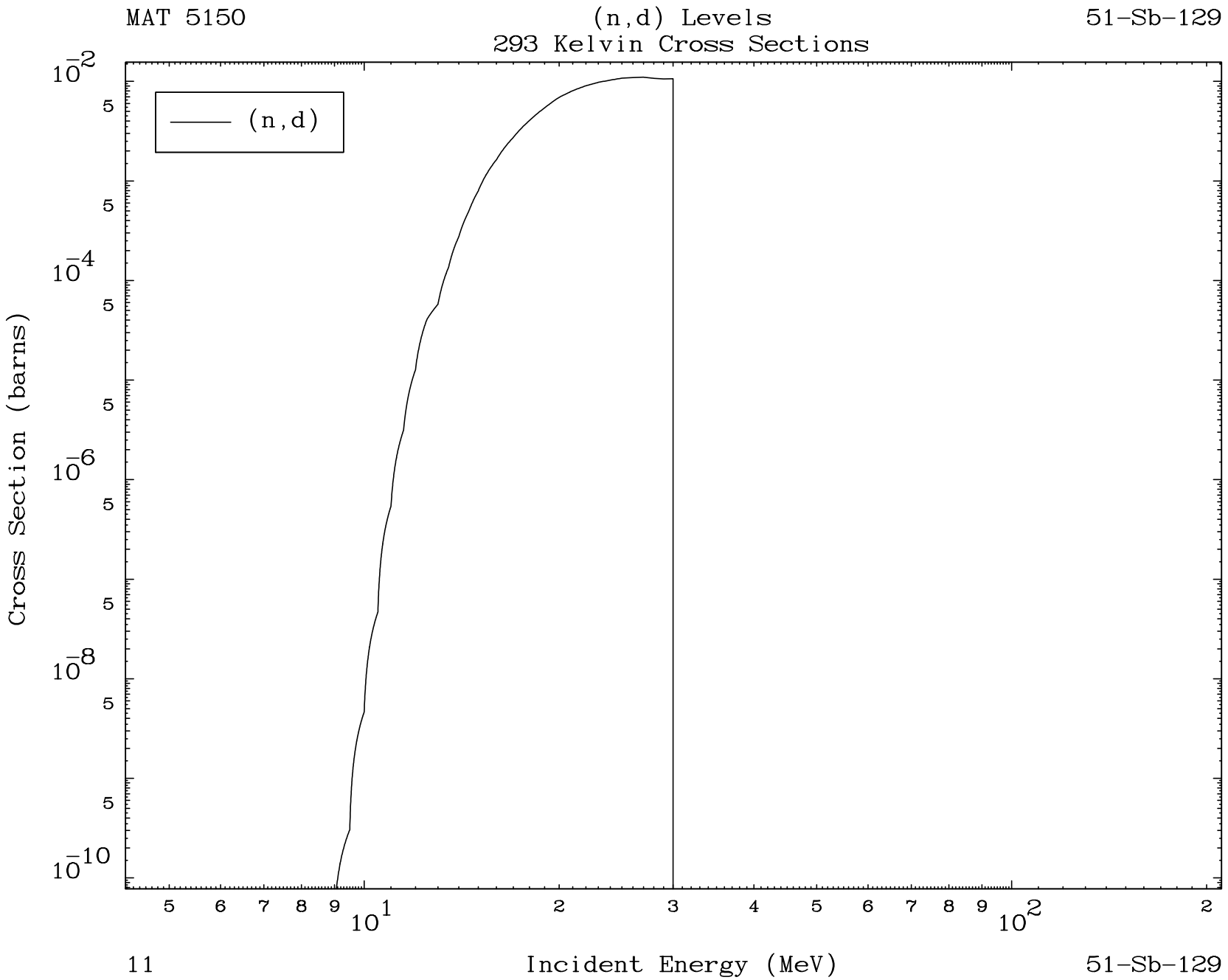

MAT 5150
Particle Production
293 Kelvin Cross Sections
51-Sb-129
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
6
51-Sb-129

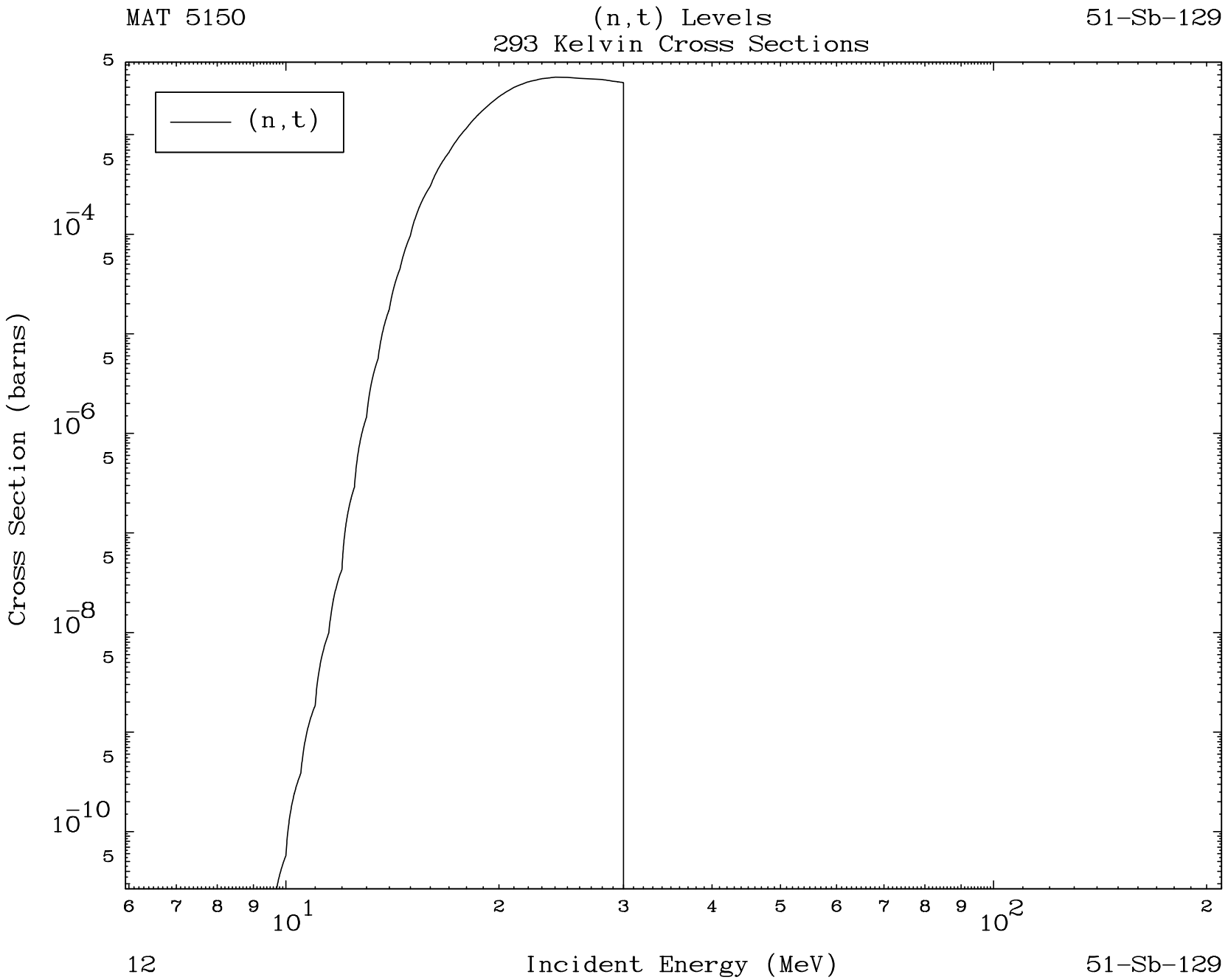

MAT 5150
(n,n') Level
293 Kelvin Cross Sections
51-Sb-129
Inelastic
1.851 MeV
1.206 MeV
937.5 keV
722.6 keV
689.7 keV
598.8 keV
357.9 keV
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
5
10^-1
5
10^0
5
10^1
5
10^2
Incident Energy (MeV)
7
51-Sb-129


MAT 5150
(n,n') Level
293 Kelvin Cross Sections
51-Sb-129
347.4 keV
88.85 keV
8.950 keV
2.050 keV
9.850 keV
59.85 keV
62.75 keV
71.05 keV
Cross Section (barns)
Incident Energy (MeV)
8
51-Sb-129

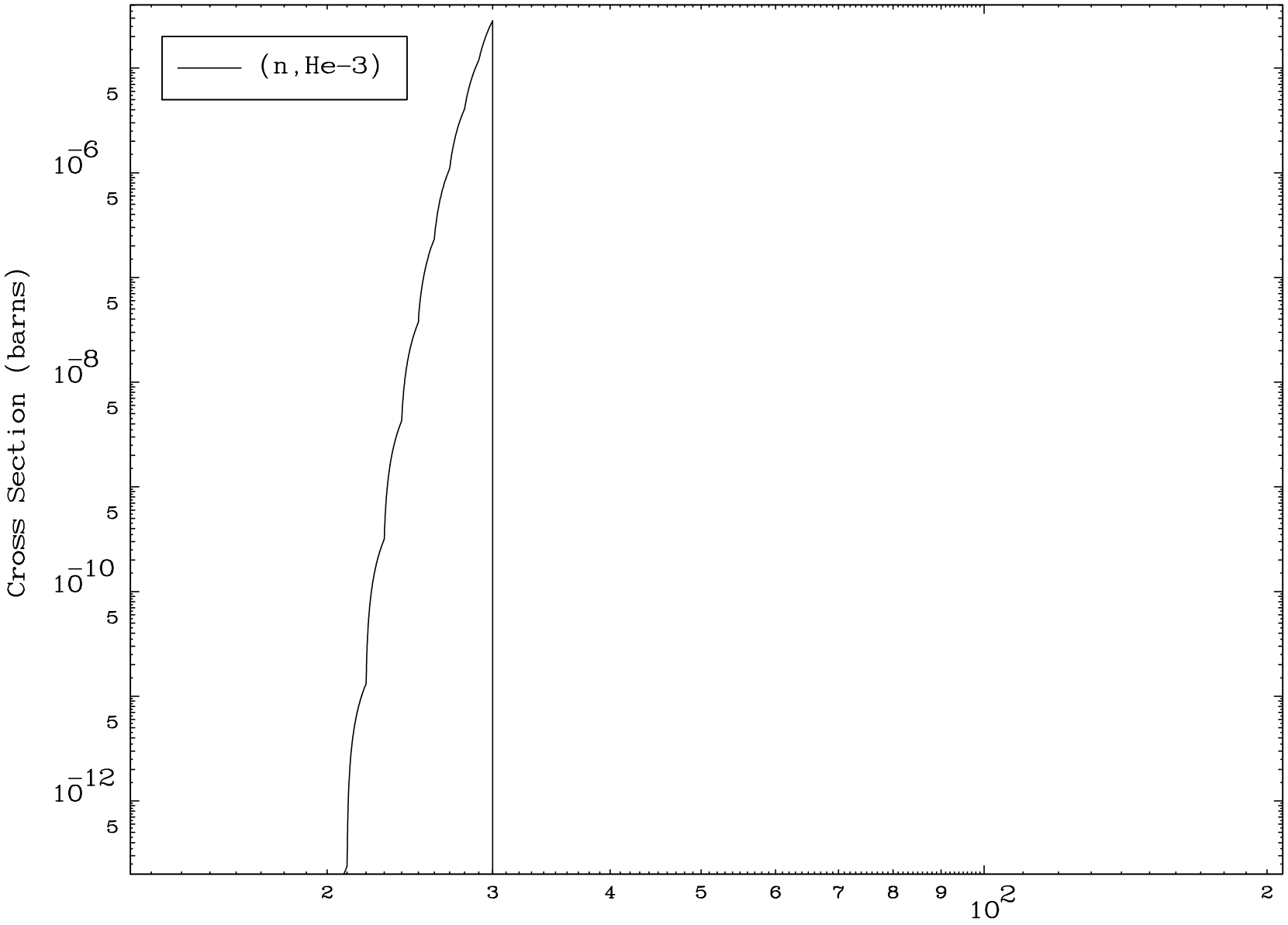

MAT 5150
(n,n') Level
293 Kelvin Cross Sections
51-Sb-129
77.54 keV
89.45 keV
121.6 keV
127.3 keV
148.4 keV
179.6 keV
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
9
51-Sb-129

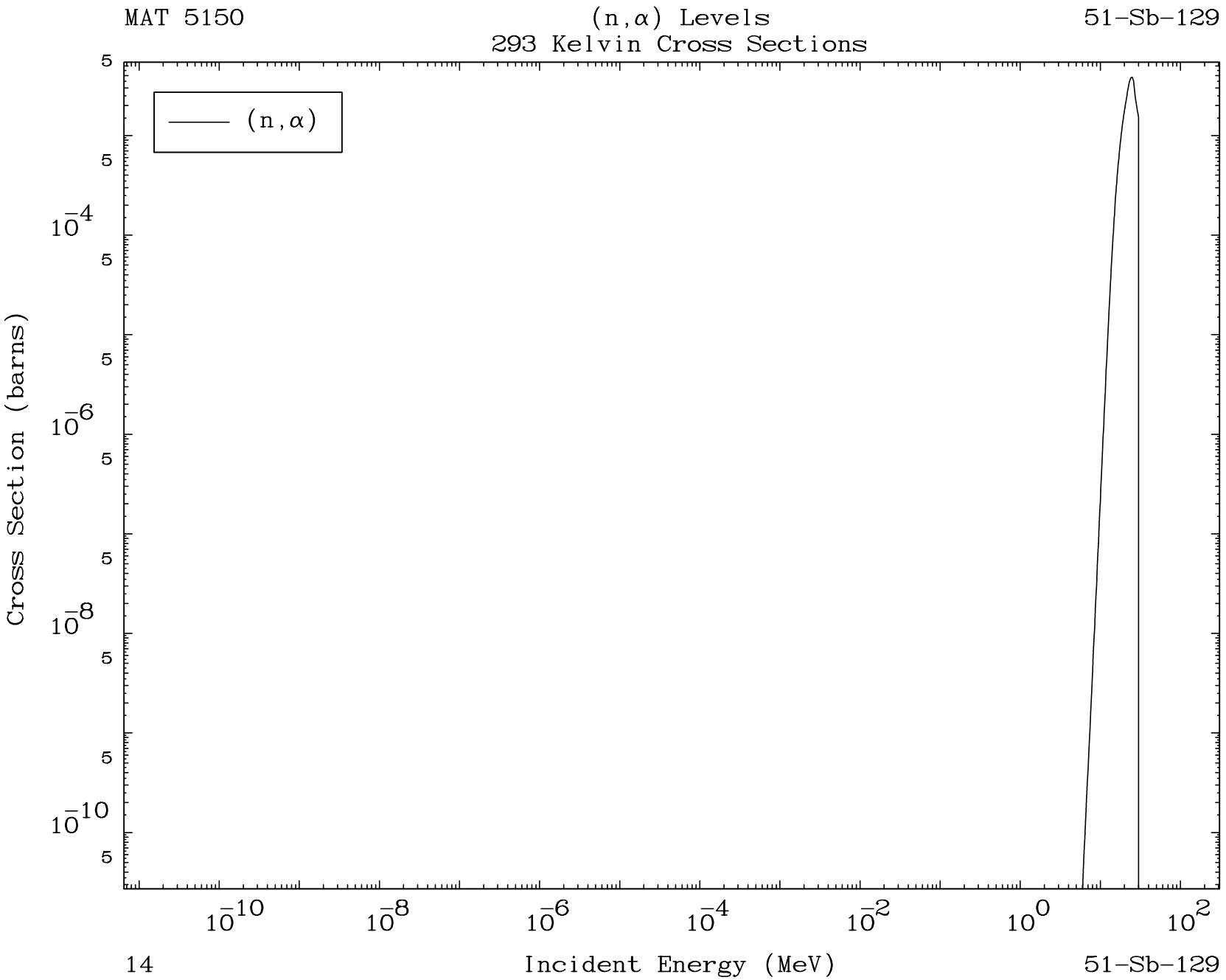

MAT 5150
(n,p) Levels
51-Sb-129
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
10
51-Sb-129

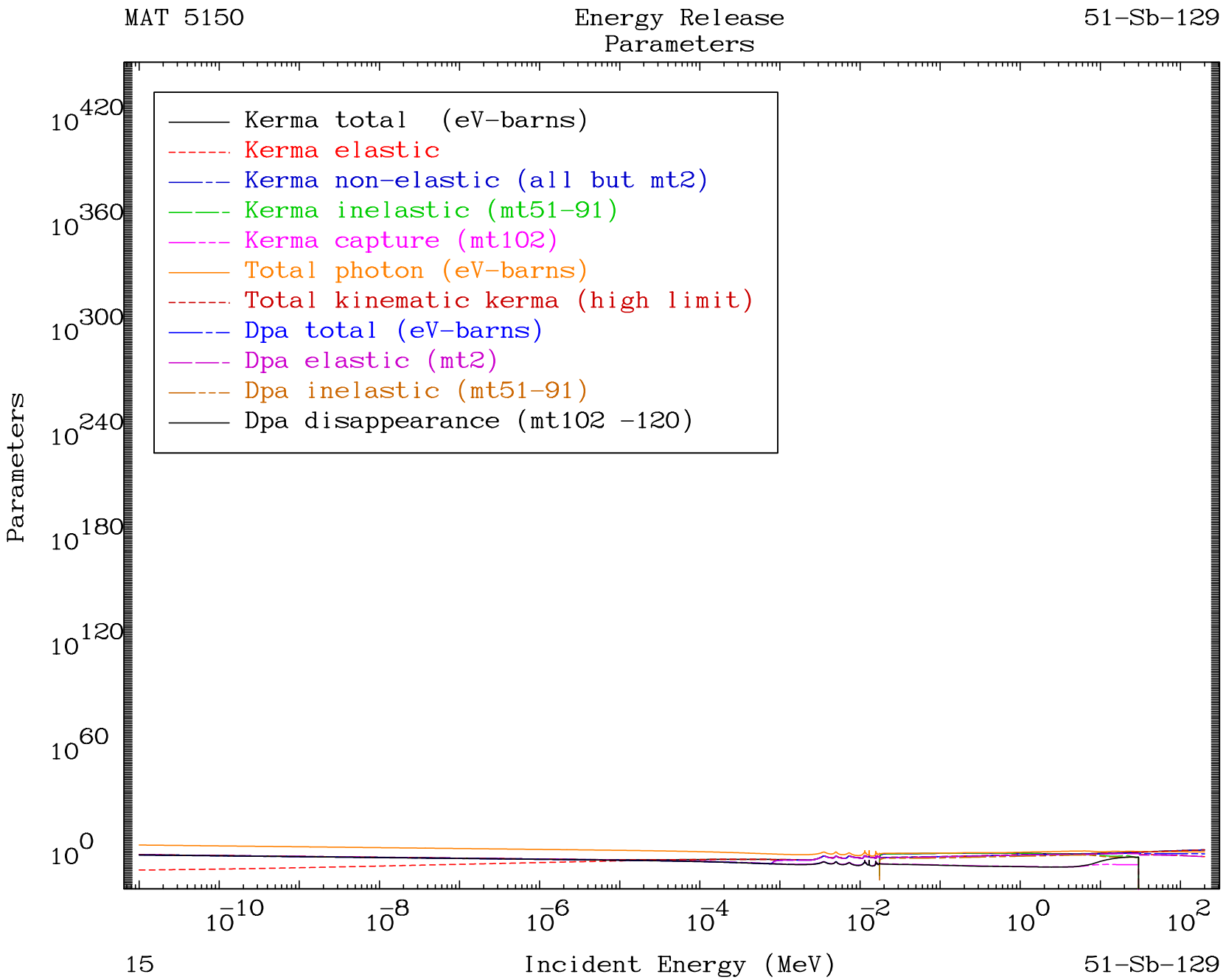

MAT 5150
(n,d) Levels
51-Sb-129
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
11
51-Sb-129

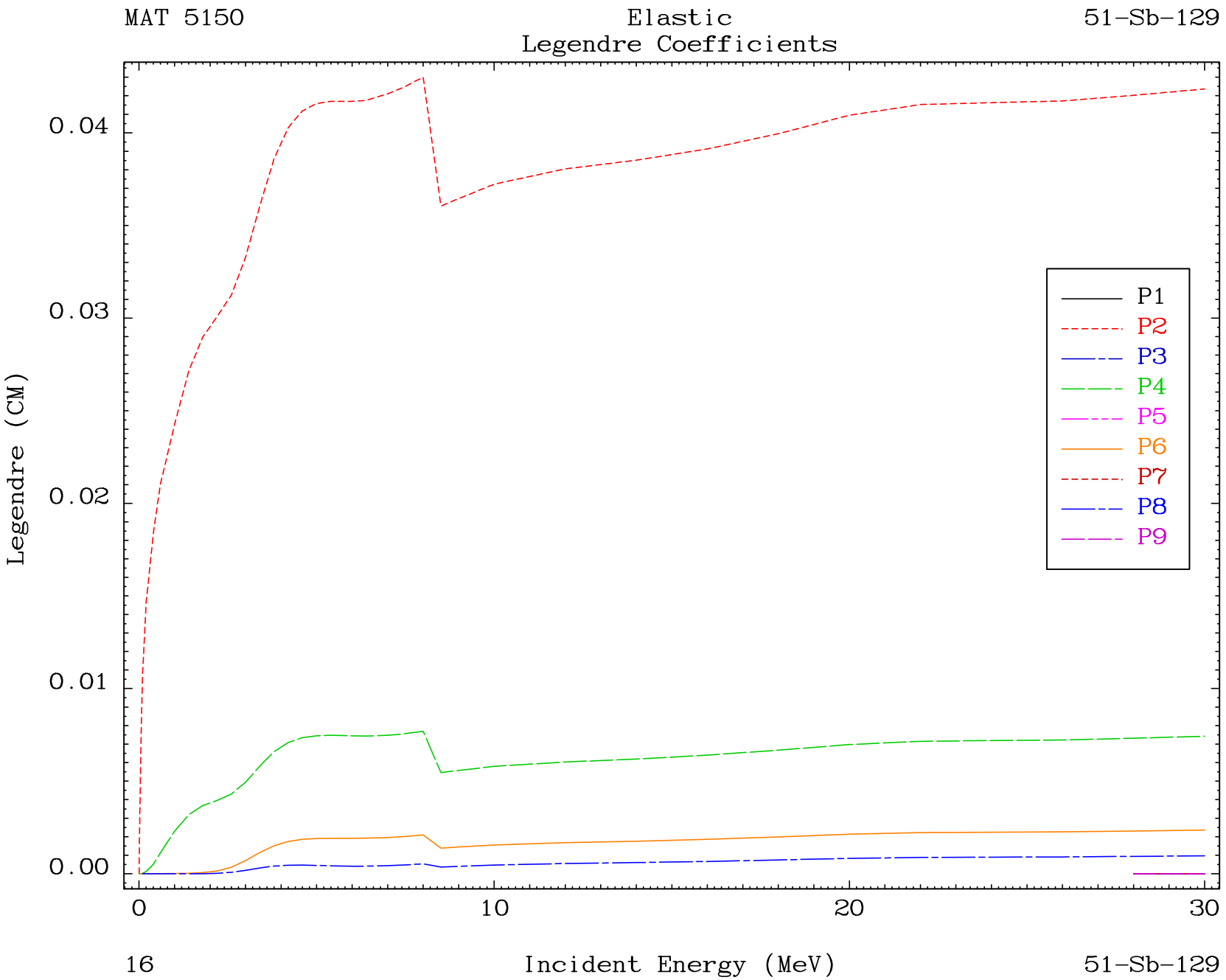

MAT 5150
(n,t) Levels
51-Sb-129
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
12
51-Sb-129

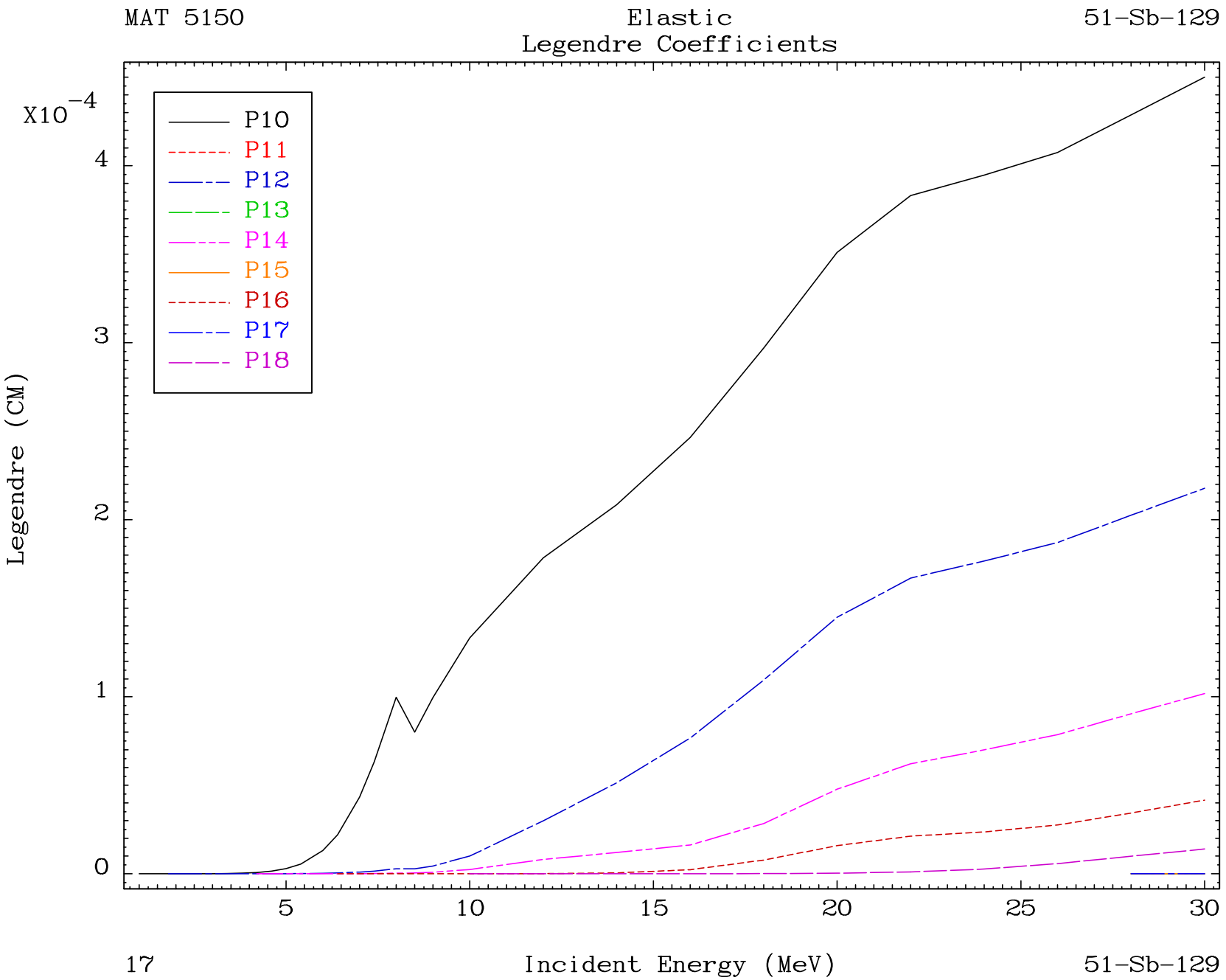
293 Kelvin Cross Sections

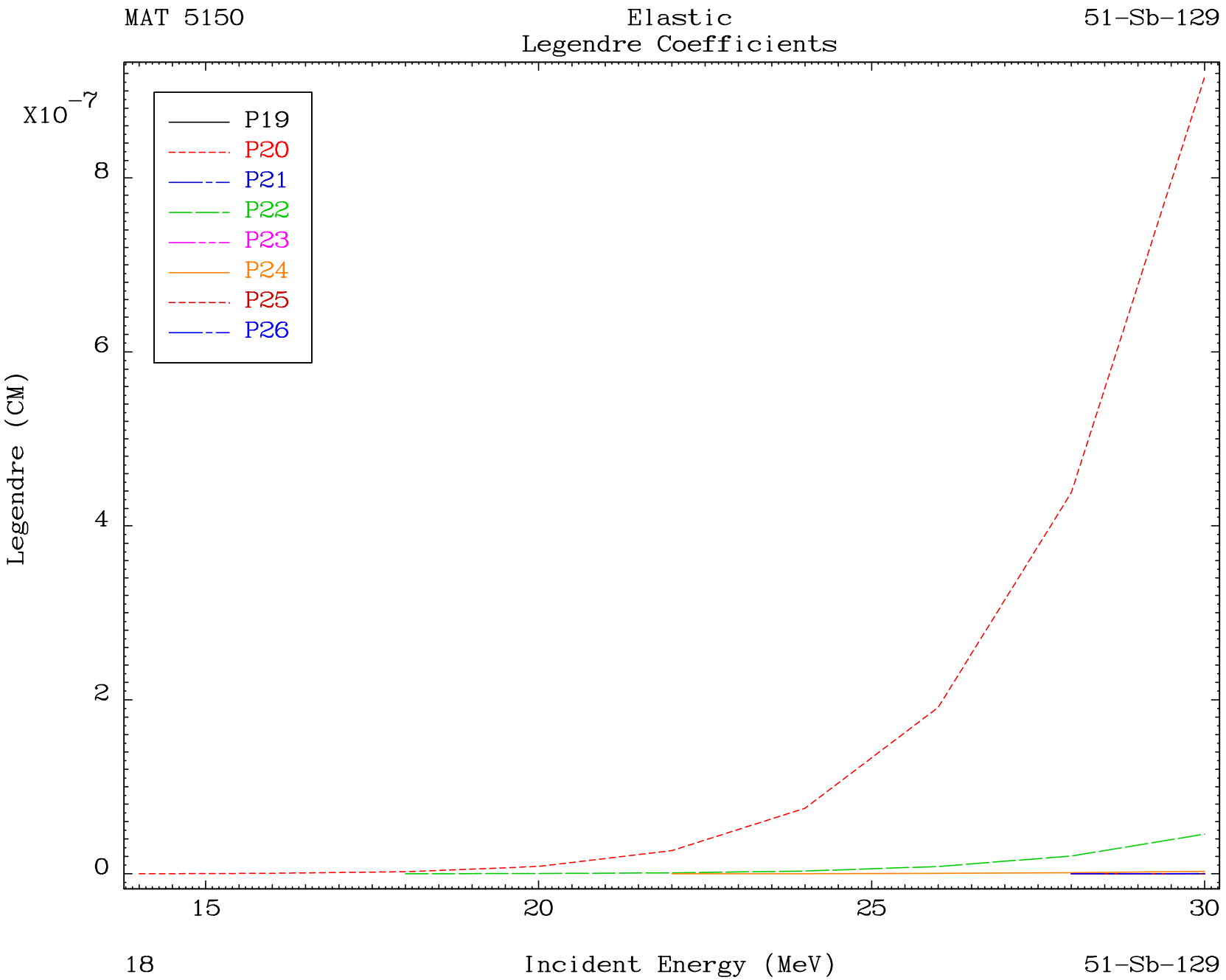


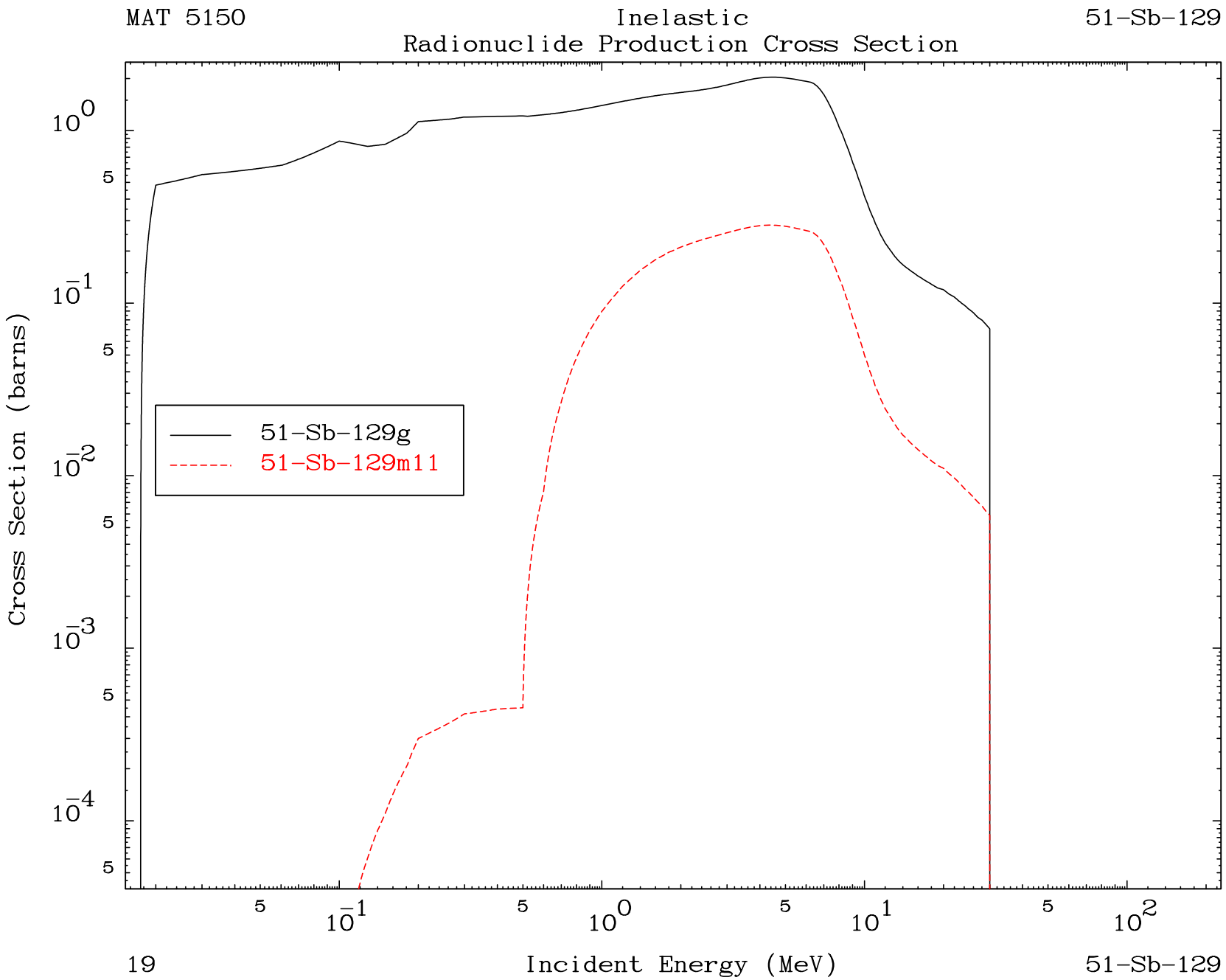

MAT 5150
(n,α) Levels
51-Sb-129
293 Kelvin Cross Sections
(n,α)
Cross Section (barns)
Incident Energy (MeV)
14
51-Sb-129

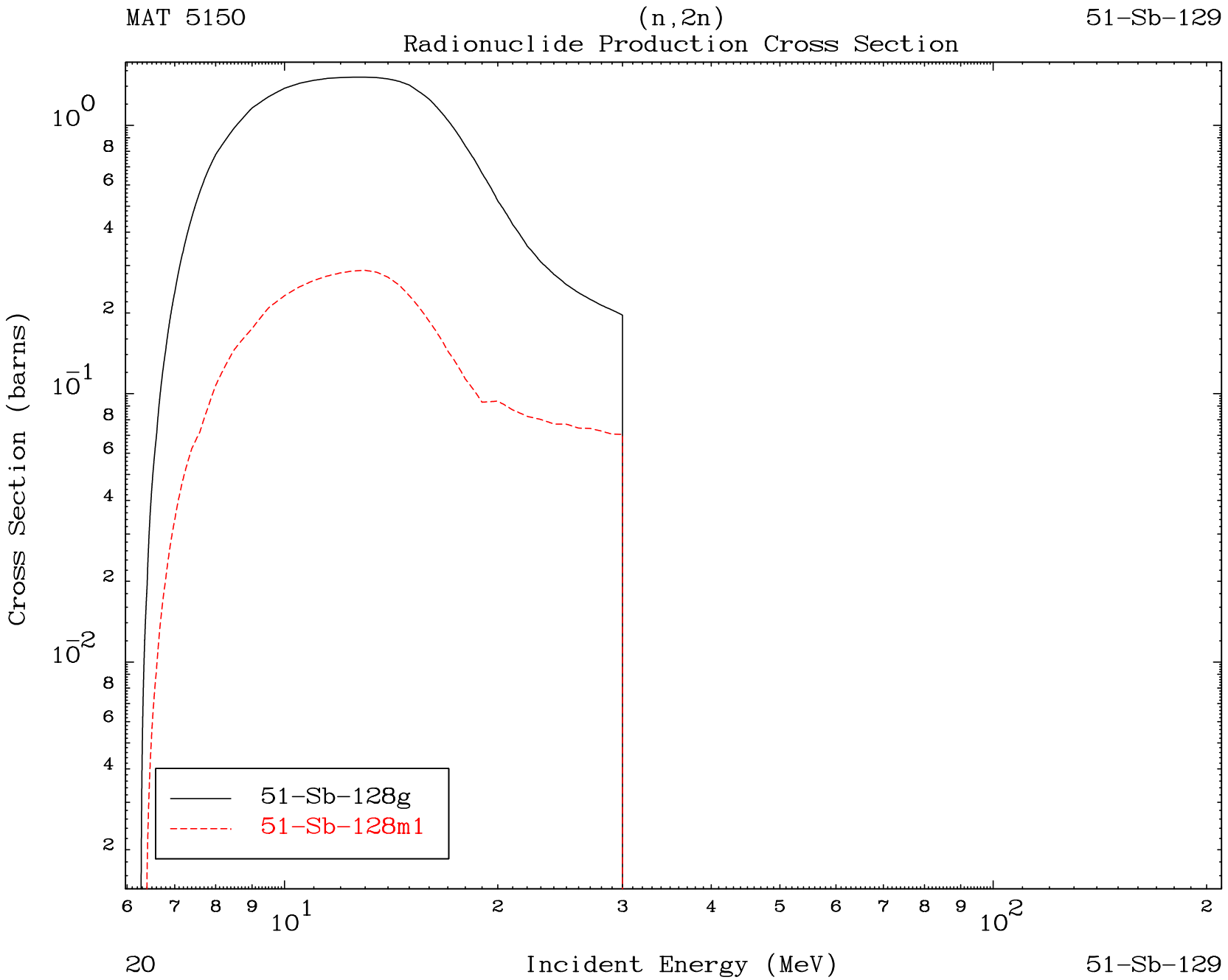

MAT 5150
Energy Release
Parameters
51-Sb-129
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^420
10^360
10^300
10^240
10^180
10^120
10^60
10^0
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
15
Incident Energy (MeV)
51-Sb-129

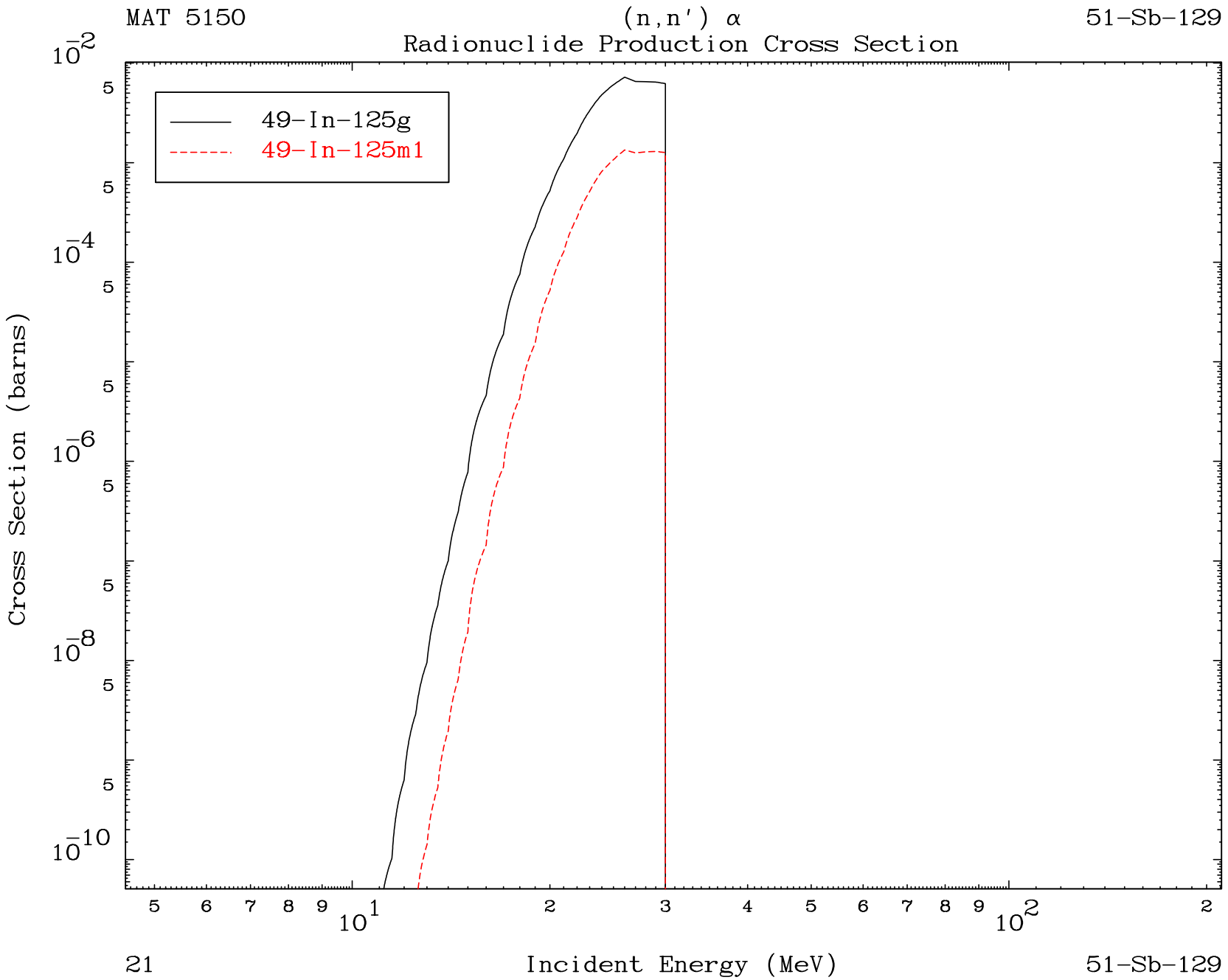

MAT 5150
Elastic
Legendre Coefficients
51-Sb-129
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
10
20
30
16
Incident Energy (MeV)
51-Sb-129

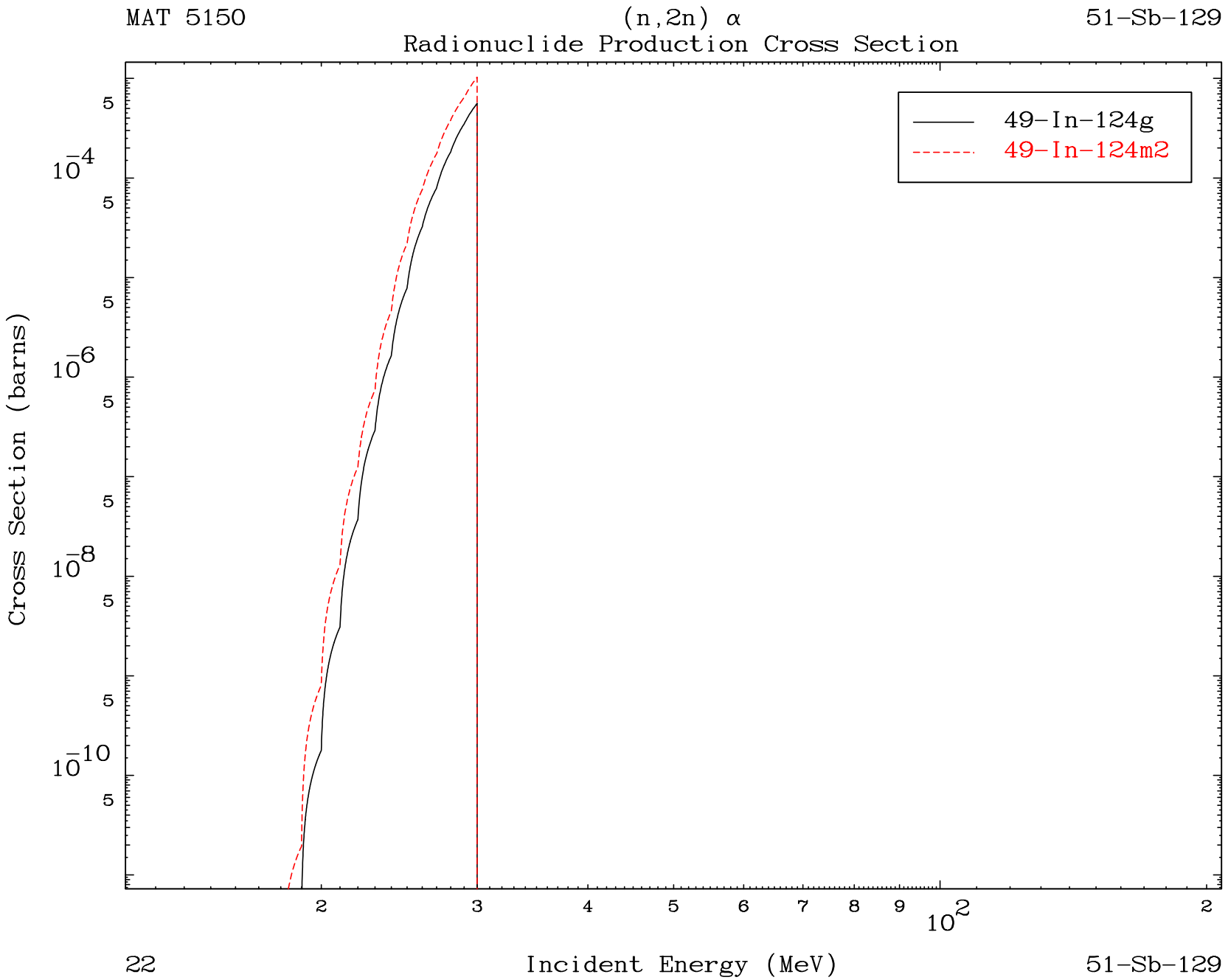

MAT 5150
Elastic
Legendre Coefficients
51-Sb-129
X10 −4
4
3
2
1
0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
5
10
15
20
25
30
17
Incident Energy (MeV)
51-Sb-129

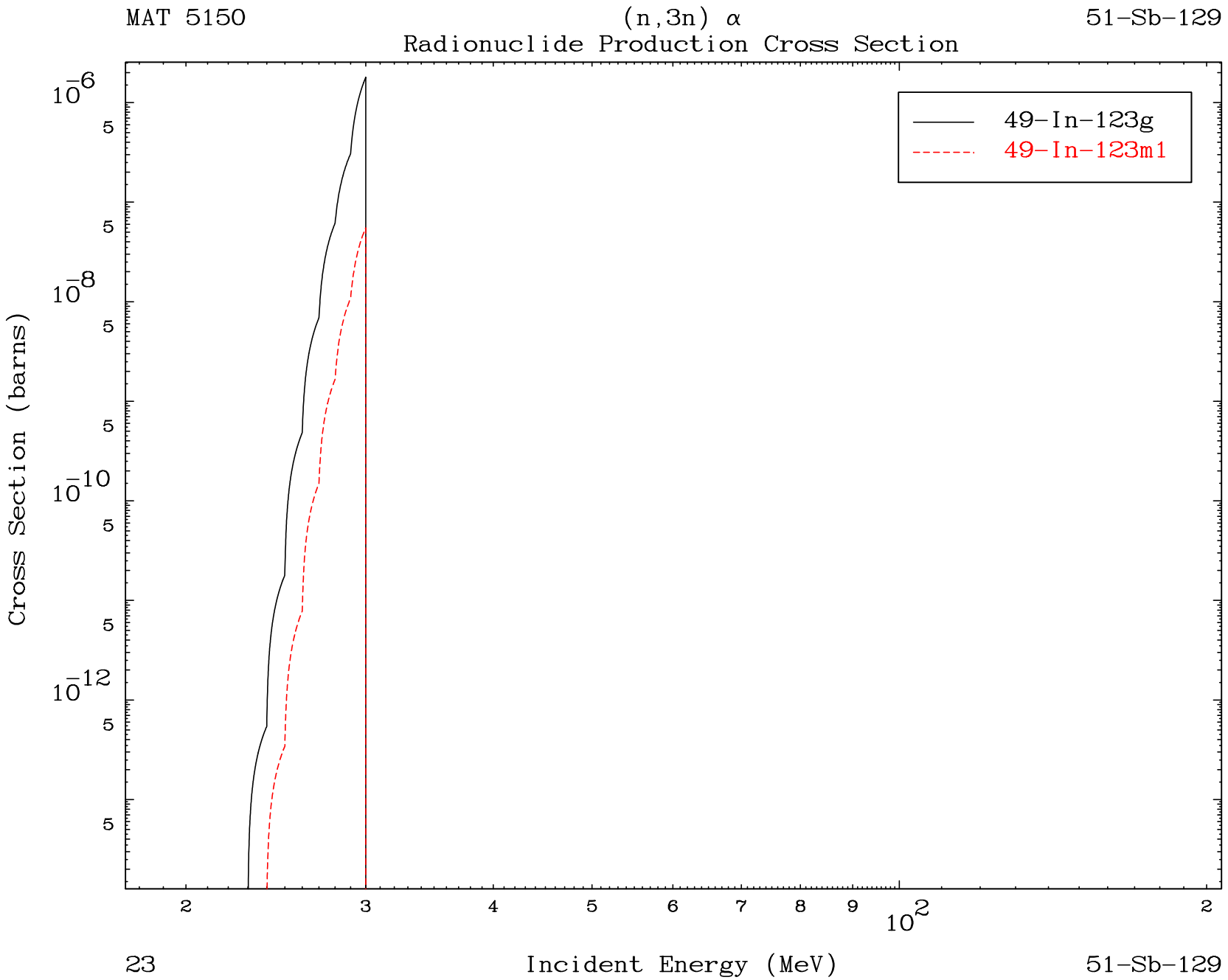

MAT 5150
Elastic
Legendre Coefficients
51-Sb-129
X10^-7
P19
P20
P21
P22
P23
P24
P25
P26
Legendre (CM)
8
6
4
2
0
15
20
25
30
18
Incident Energy (MeV)
51-Sb-129

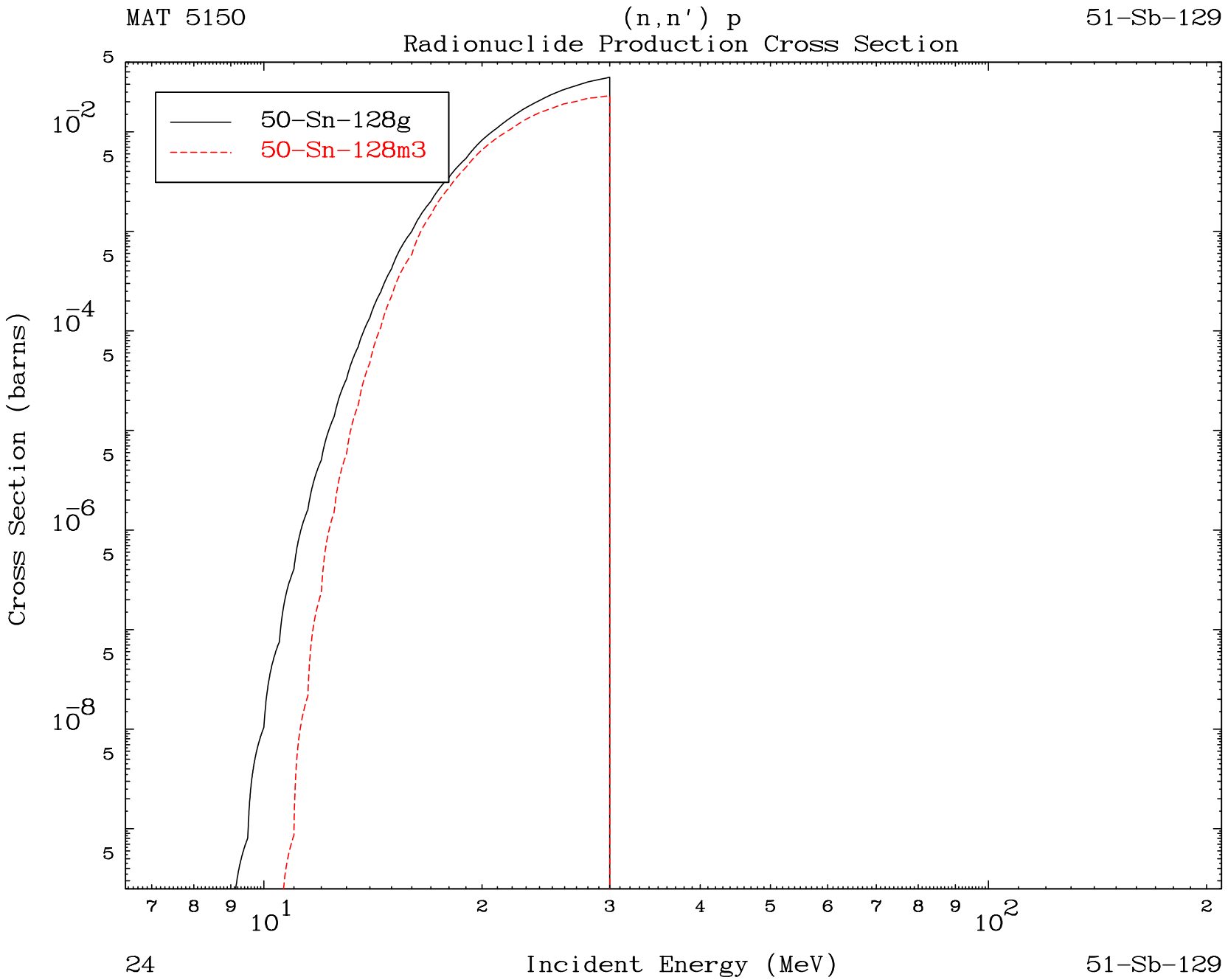

MAT 5150
Inelastic
51-Sb-129
Radionuclide Production Cross Section
Cross Section (barns)
10^0
5
10^-1
5
10^-2
5
10^-3
5
10^-4
5
51-Sb-129g
51-Sb-129m11
5
10^-1
5
10^0
5
10^1
5
10^2
19
Incident Energy (MeV)
51-Sb-129

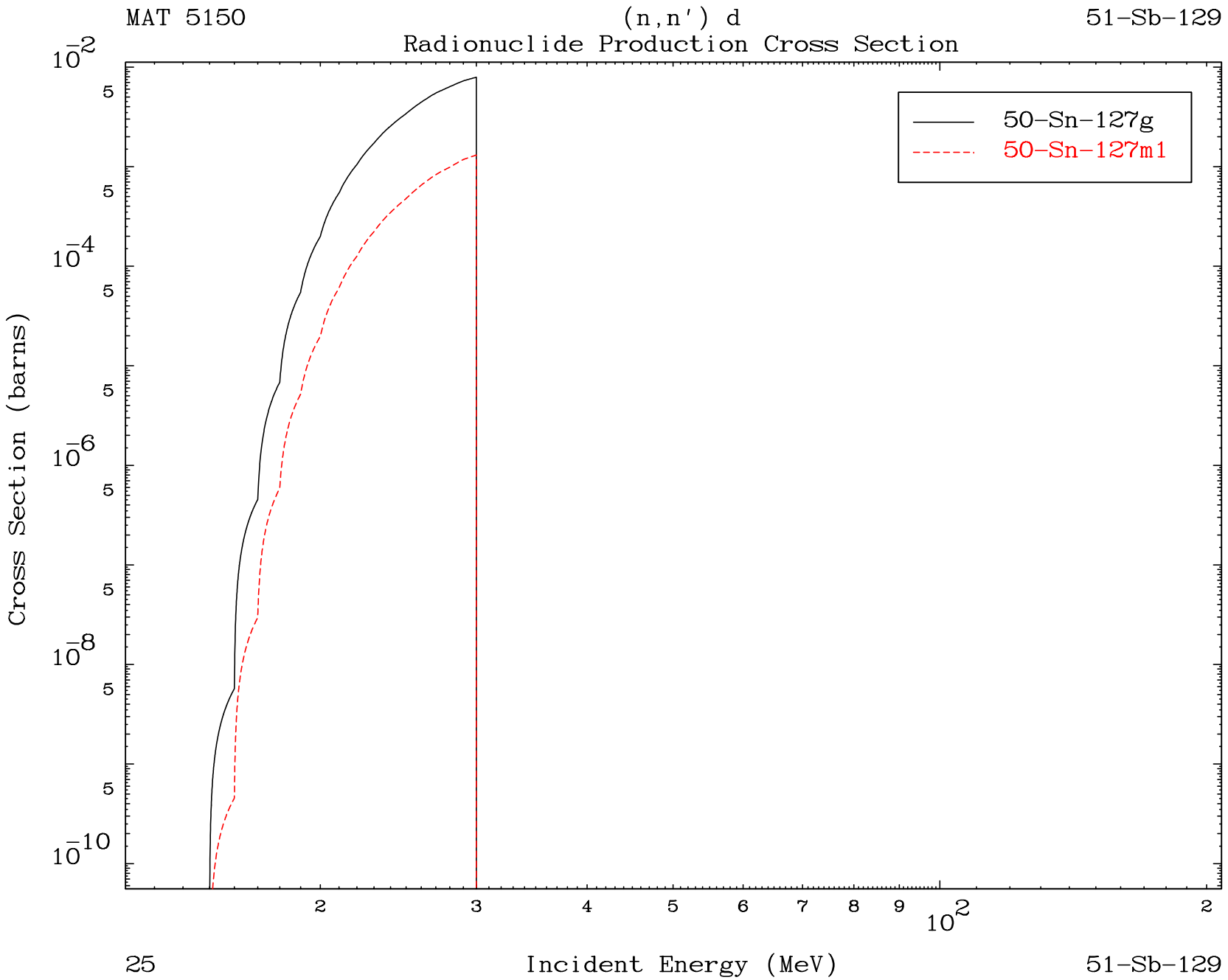

MAT 5150
(n,2n)
51-Sb-129
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
51-Sb-128g
51-Sb-128m1
20
51-Sb-129

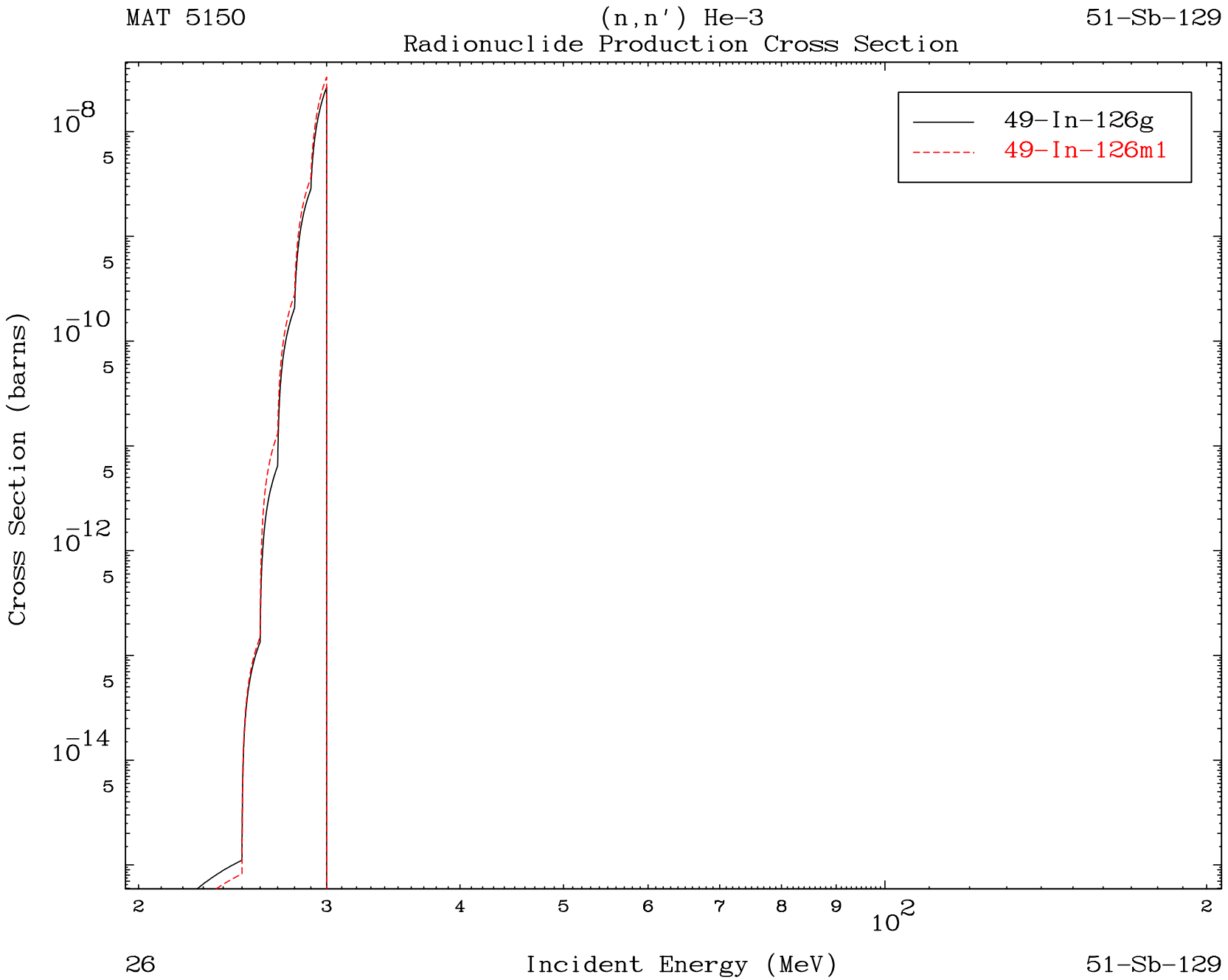

MAT 5150
(n,n') α
51-Sb-129
Radionuclide Production Cross Section
49-In-125g
49-In-125m1
Cross Section (barns)
Incident Energy (MeV)
21
51-Sb-129

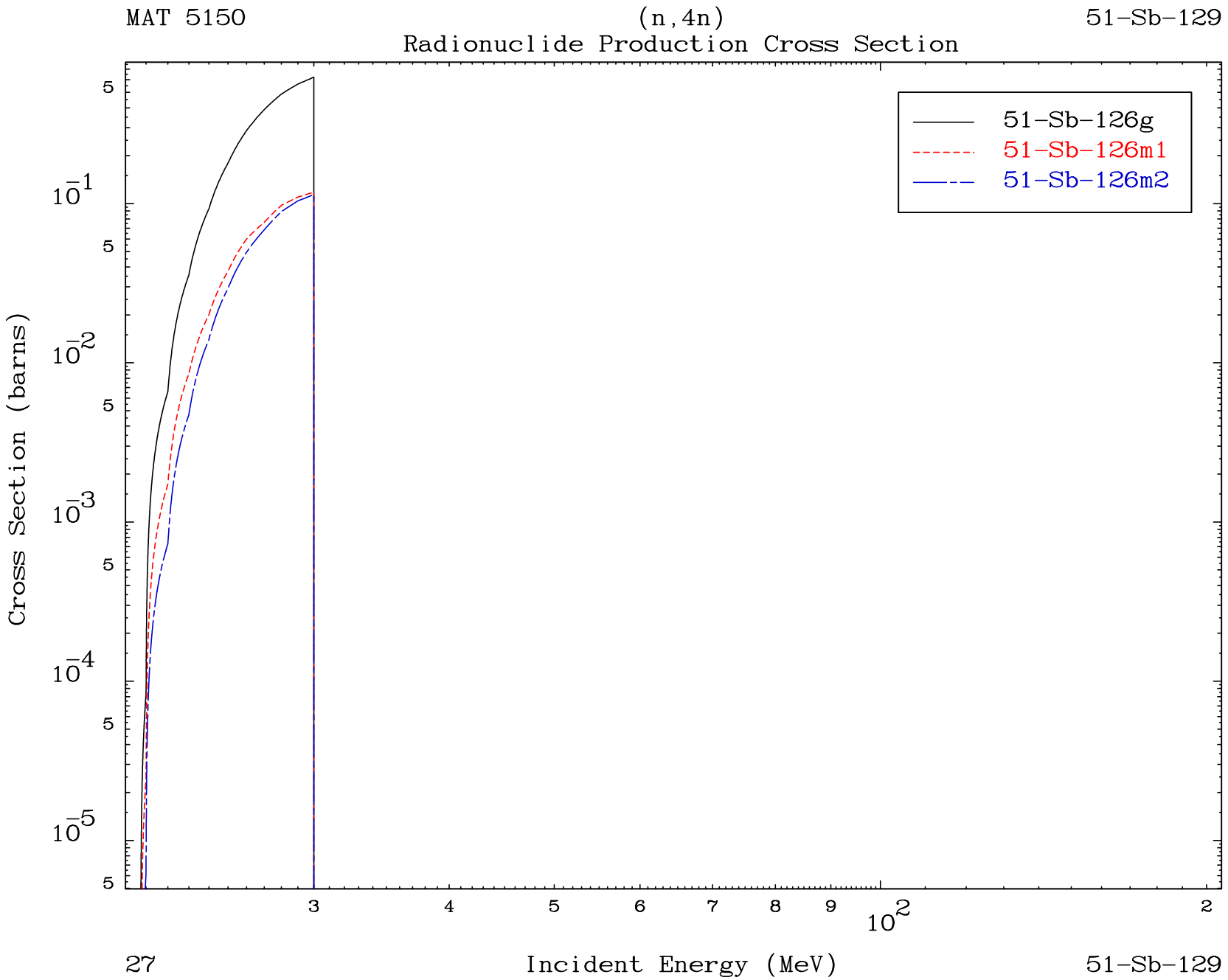

MAT 5150
(n,2n) α
51-Sb-129
Radionuclide Production Cross Section
49-In-124g
49-In-124m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
2
3
4
5
6
7
8
9
10^2
2
22
Incident Energy (MeV)
51-Sb-129

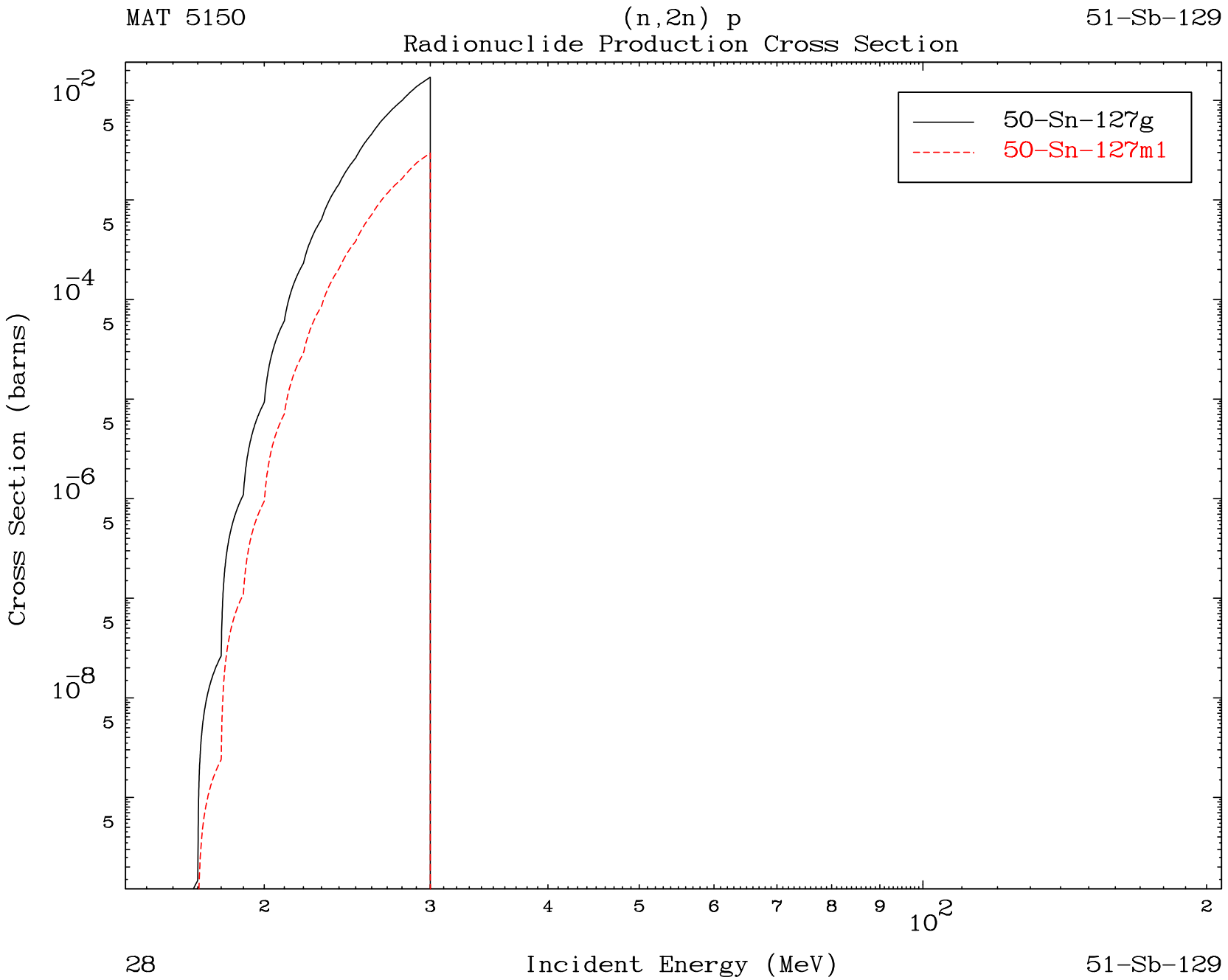

MAT 5150
(n,3n) α
51-Sb-129
Radionuclide Production Cross Section
49-In-123g
49-In-123m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
5
6
7
8
9
10 2
2
23
Incident Energy (MeV)
51-Sb-129

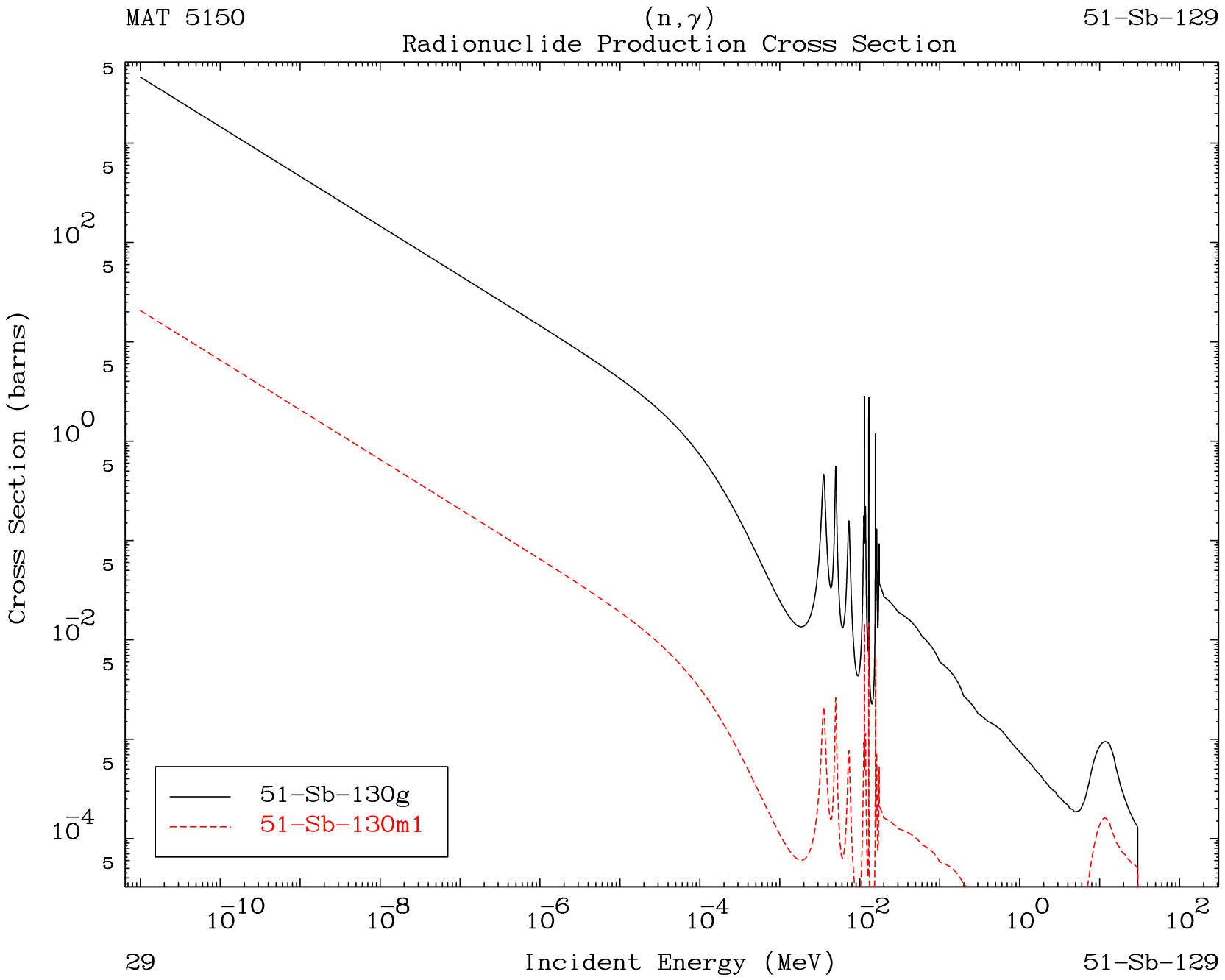

MAT 5150
(n,n') p
51-Sb-129
Radionuclide Production Cross Section
50-Sn-128g
50-Sn-128m3
Cross Section (barns)
Incident Energy (MeV)
24
51-Sb-129

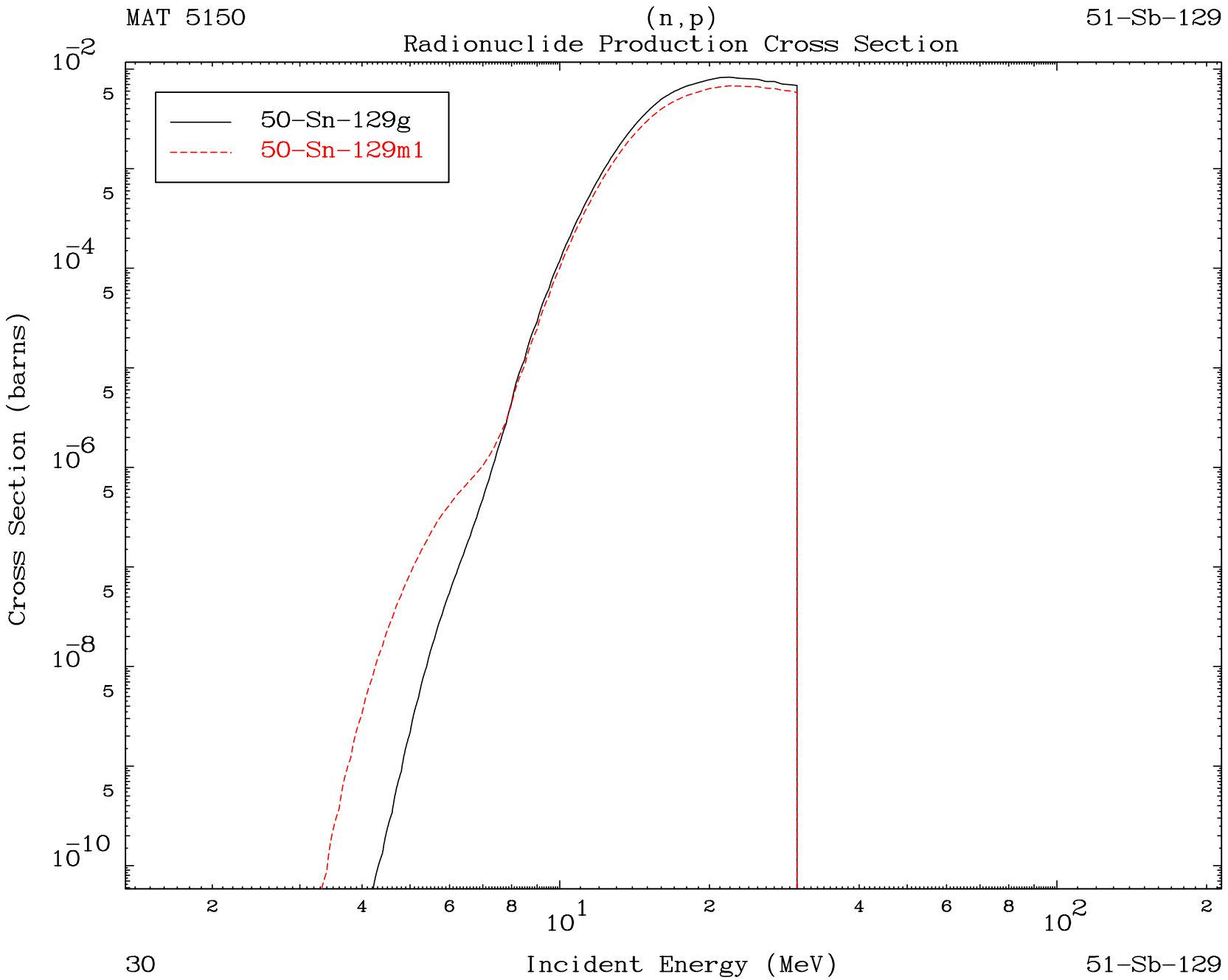

MAT 5150
(n,n') d
51-Sb-129
Radionuclide Production Cross Section
50-Sn-127g
50-Sn-127m1
Cross Section (barns)
Incident Energy (MeV)
25
51-Sb-129

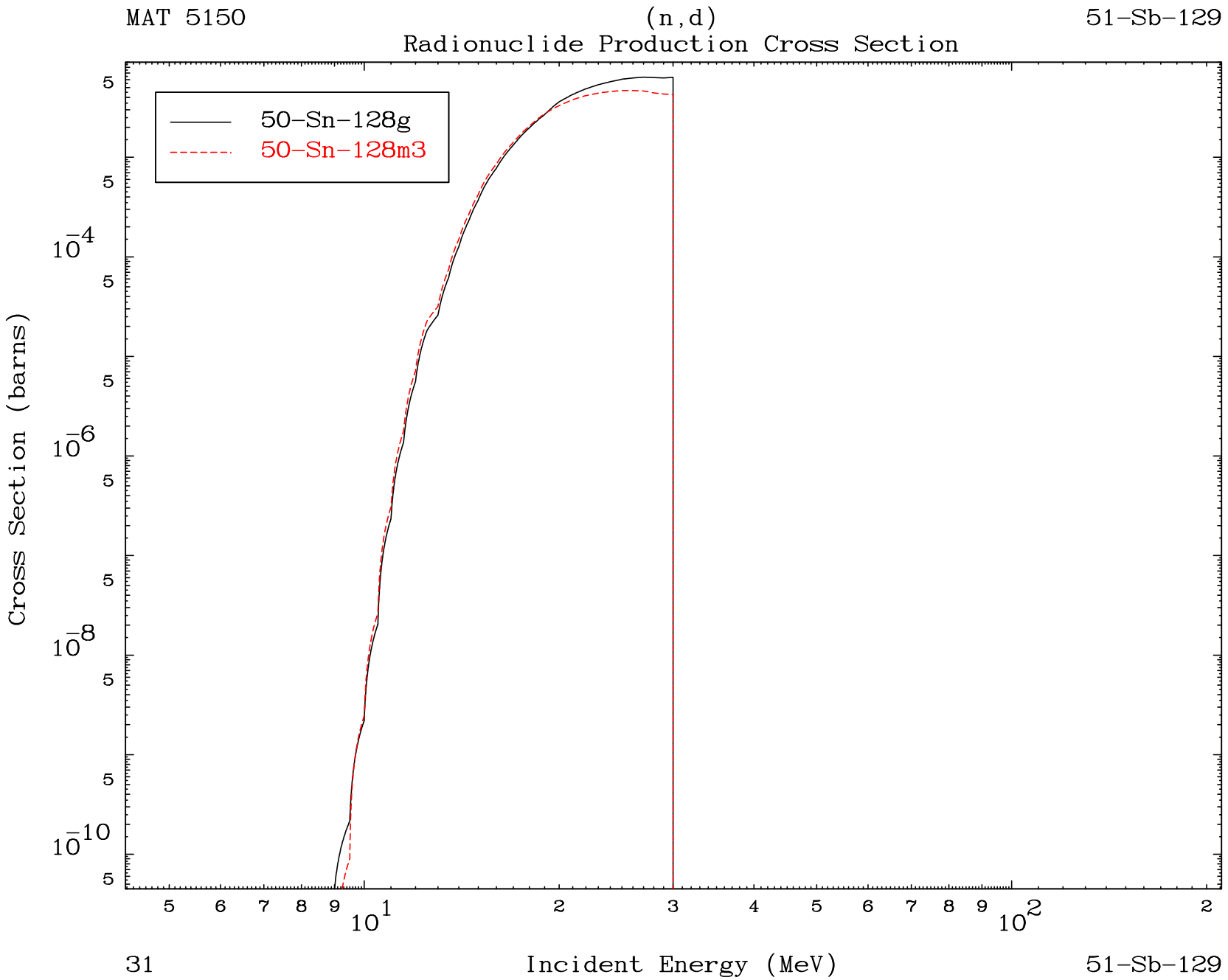

MAT 5150
(n,n') He-3
51-Sb-129
Radionuclide Production Cross Section
49-In-126g
49-In-126m1
Cross Section (barns)
10-8
10-10
10-12
10-14
5
2
3
4
5
6
7
8
9
10 2
2
26
Incident Energy (MeV)
51-Sb-129

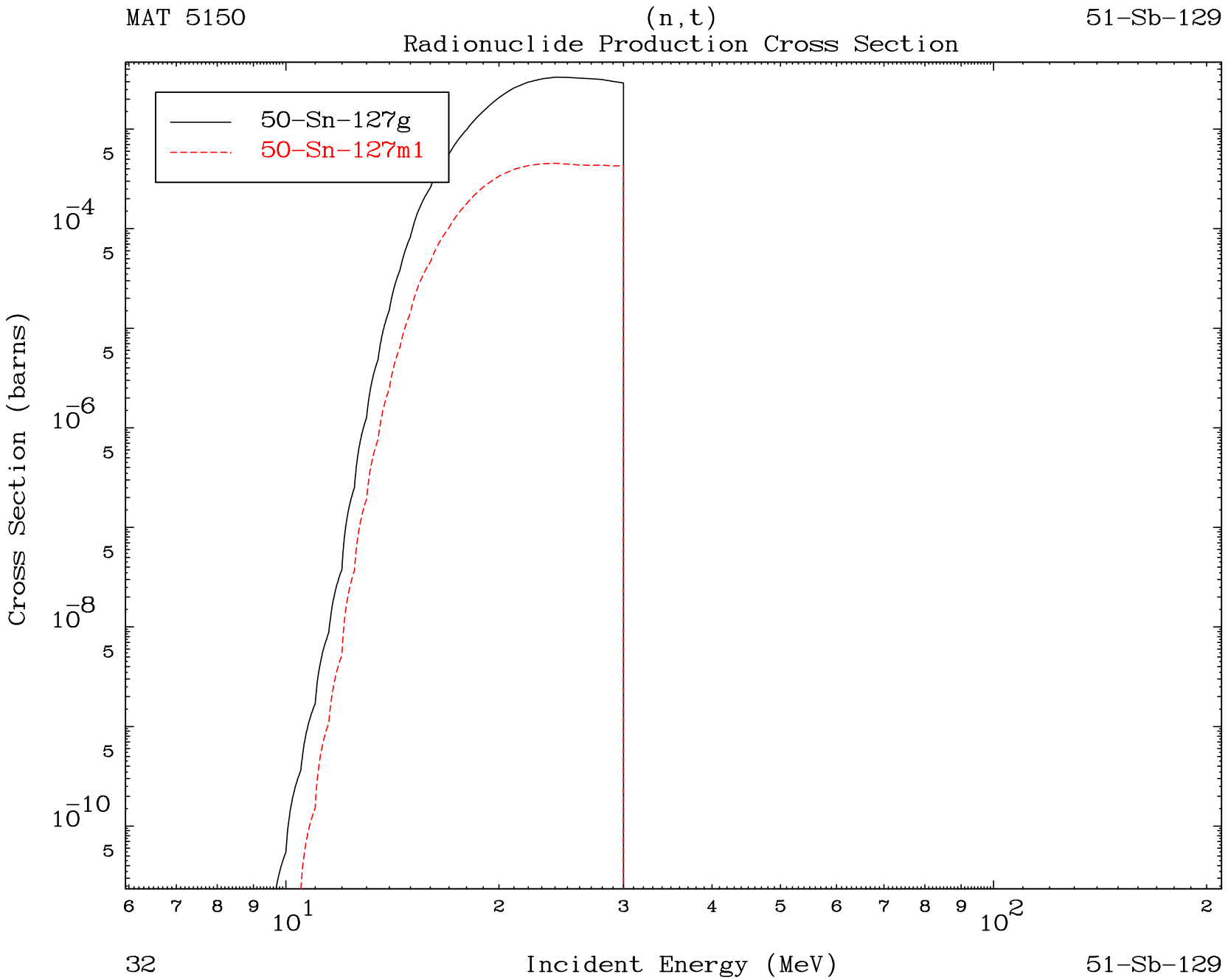

MAT 5150
(n,4n)
51-Sb-129
Radionuclide Production Cross Section
51-Sb-126g
51-Sb-126m1
51-Sb-126m2
Cross Section (barns)
Incident Energy (MeV)
27
51-Sb-129

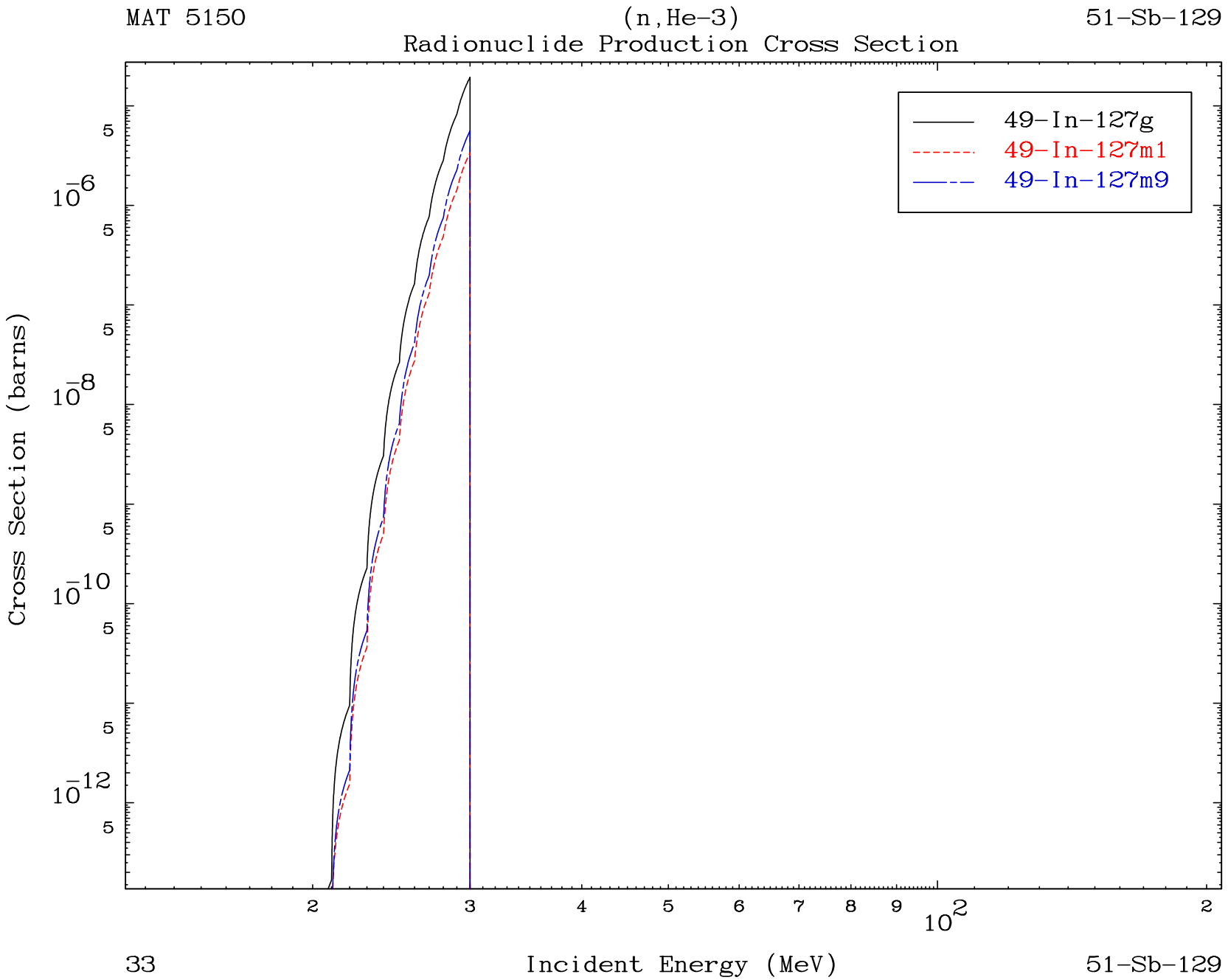

MAT 5150
(n,2n) p
51-Sb-129
Radionuclide Production Cross Section
50-Sn-127g
50-Sn-127m1
Cross Section (barns)
Incident Energy (MeV)
28
51-Sb-129

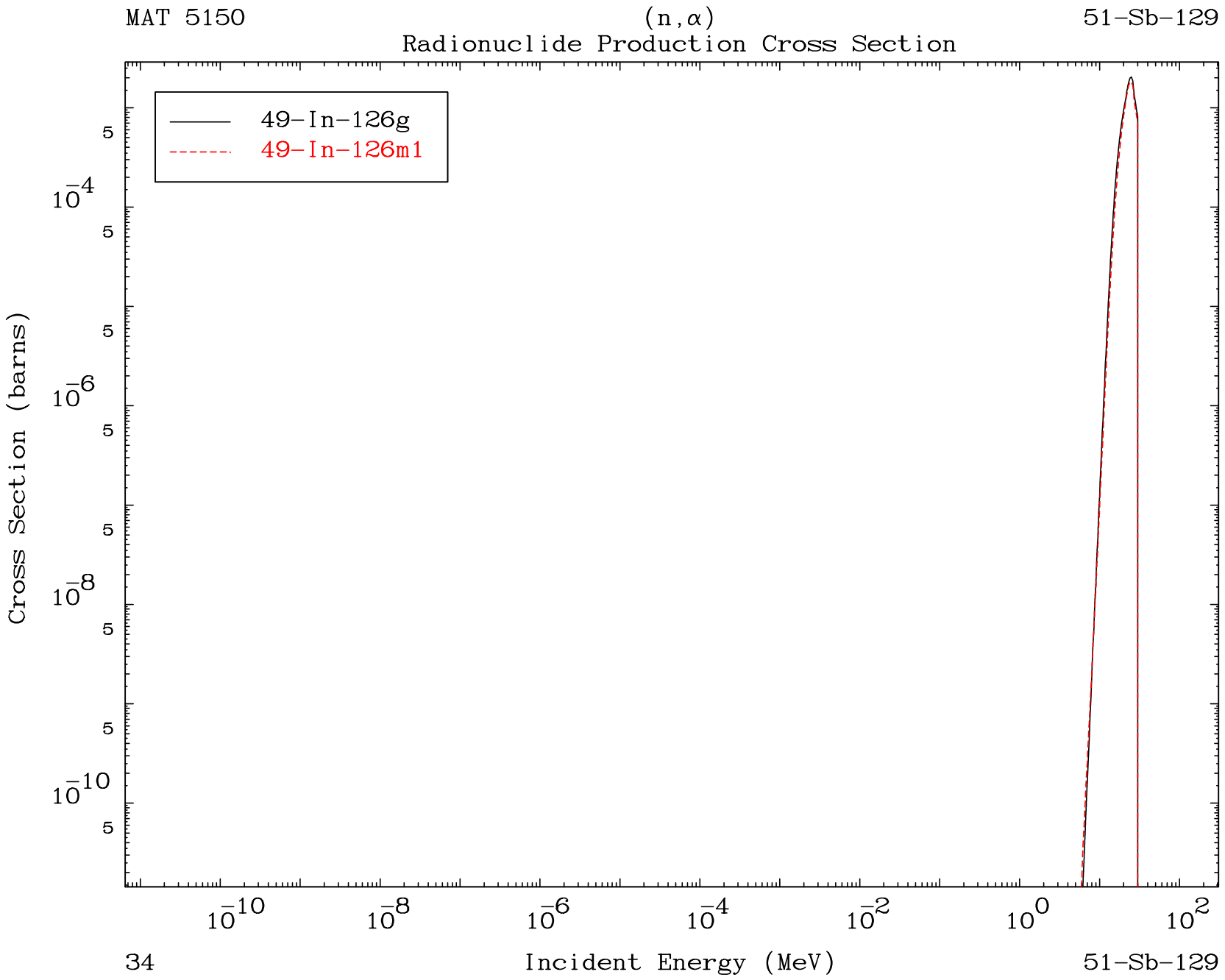

MAT 5150
(n,γ)
51-Sb-129
Radionuclide Production Cross Section
Cross Section (barns)
10^2
10^0
10^-2
10^-4
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
51-Sb-130g
51-Sb-130m1
29
51-Sb-129

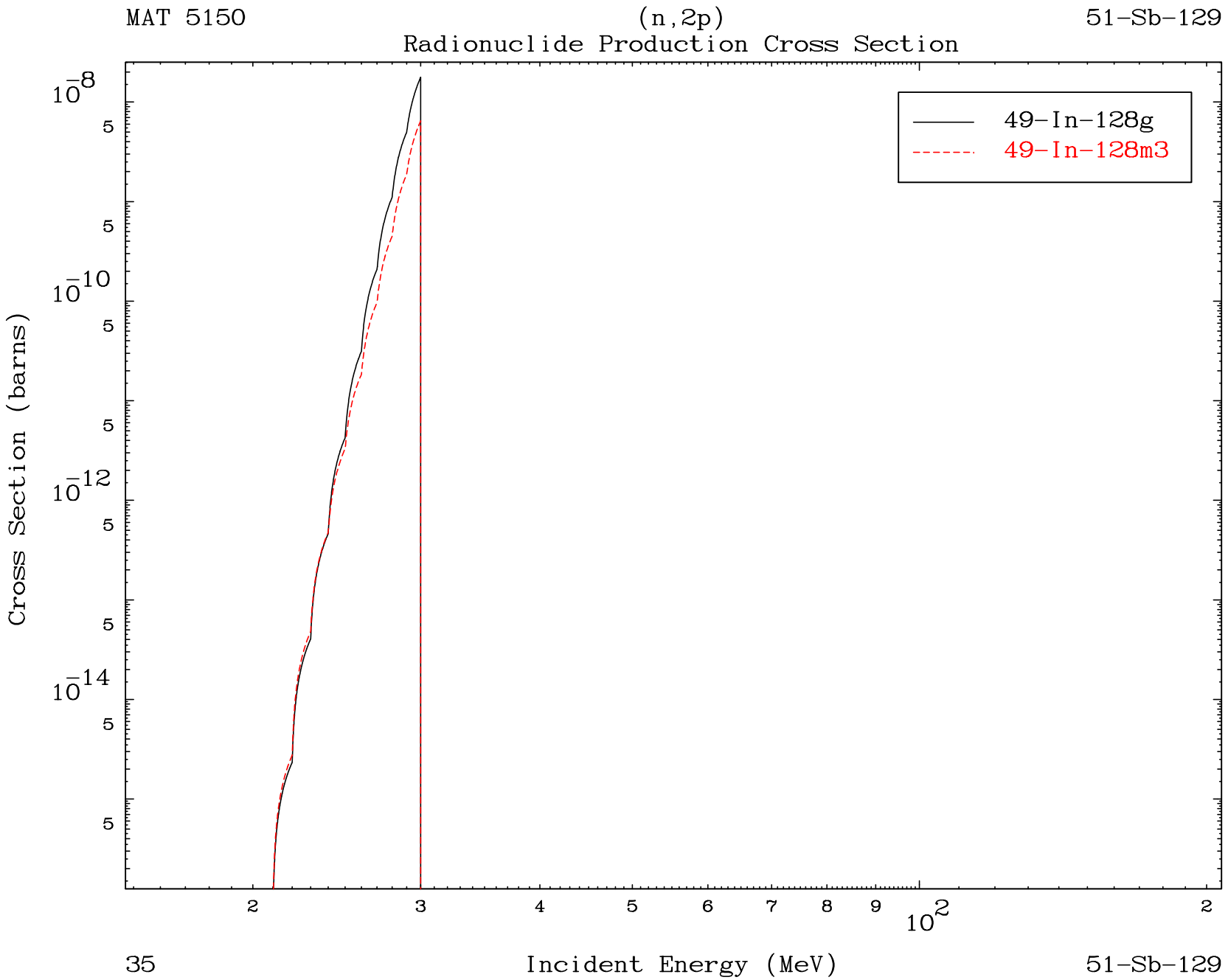

MAT 5150
(n,p)
51-Sb-129
Radionuclide Production Cross Section
50-Sn-129g
50-Sn-129m1
Cross Section (barns)
Incident Energy (MeV)
30
51-Sb-129


MAT 5150
(n,d)
51-Sb-129
Radionuclide Production Cross Section
50-Sn-128g
50-Sn-128m3
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10^1
2
3
4
10^2
Incident Energy (MeV)
31
51-Sb-129


MAT 5150
(n,t)
51-Sb-129
Radionuclide Production Cross Section
50-Sn-127g
50-Sn-127m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
32
Incident Energy (MeV)
51-Sb-129


MAT 5150
(n,He-3)
51-Sb-129
Radionuclide Production Cross Section
49-In-127g
49-In-127m1
49-In-127m9
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
6
7
8
9
10 2
Incident Energy (MeV)
33
51-Sb-129


MAT 5150
(n,α)
51-Sb-129
Radionuclide Production Cross Section
49-In-126g
49-In-126m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
34
Incident Energy (MeV)
51-Sb-129


MAT 5150
(n,2p)
51-Sb-129
Radionuclide Production Cross Section
49-In-128g
49-In-128m3
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
2
3
4
6
7
8
9
10^2
35
Incident Energy (MeV)
51-Sb-129