Program EVALPLOT
(Version 2021-1)
by
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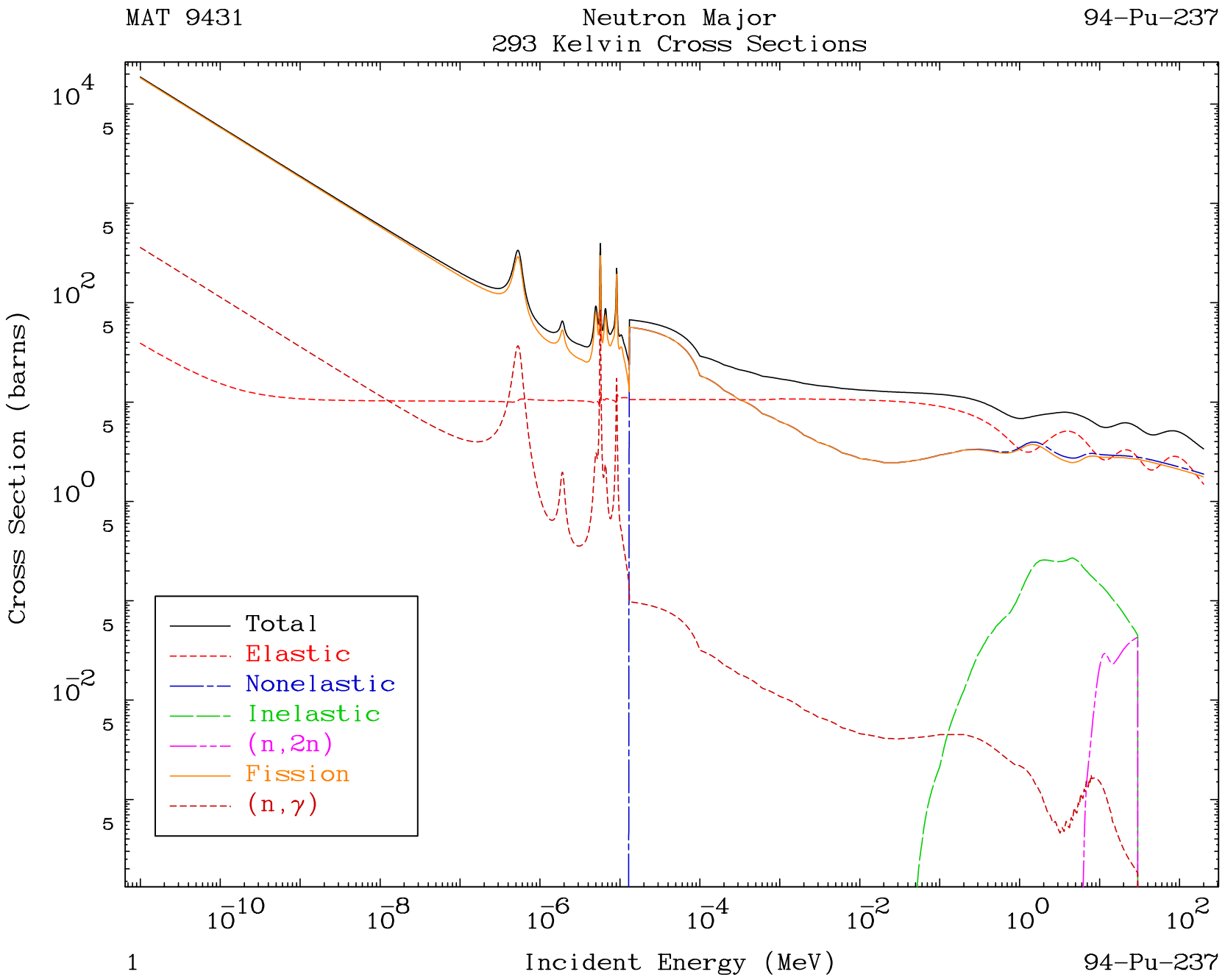
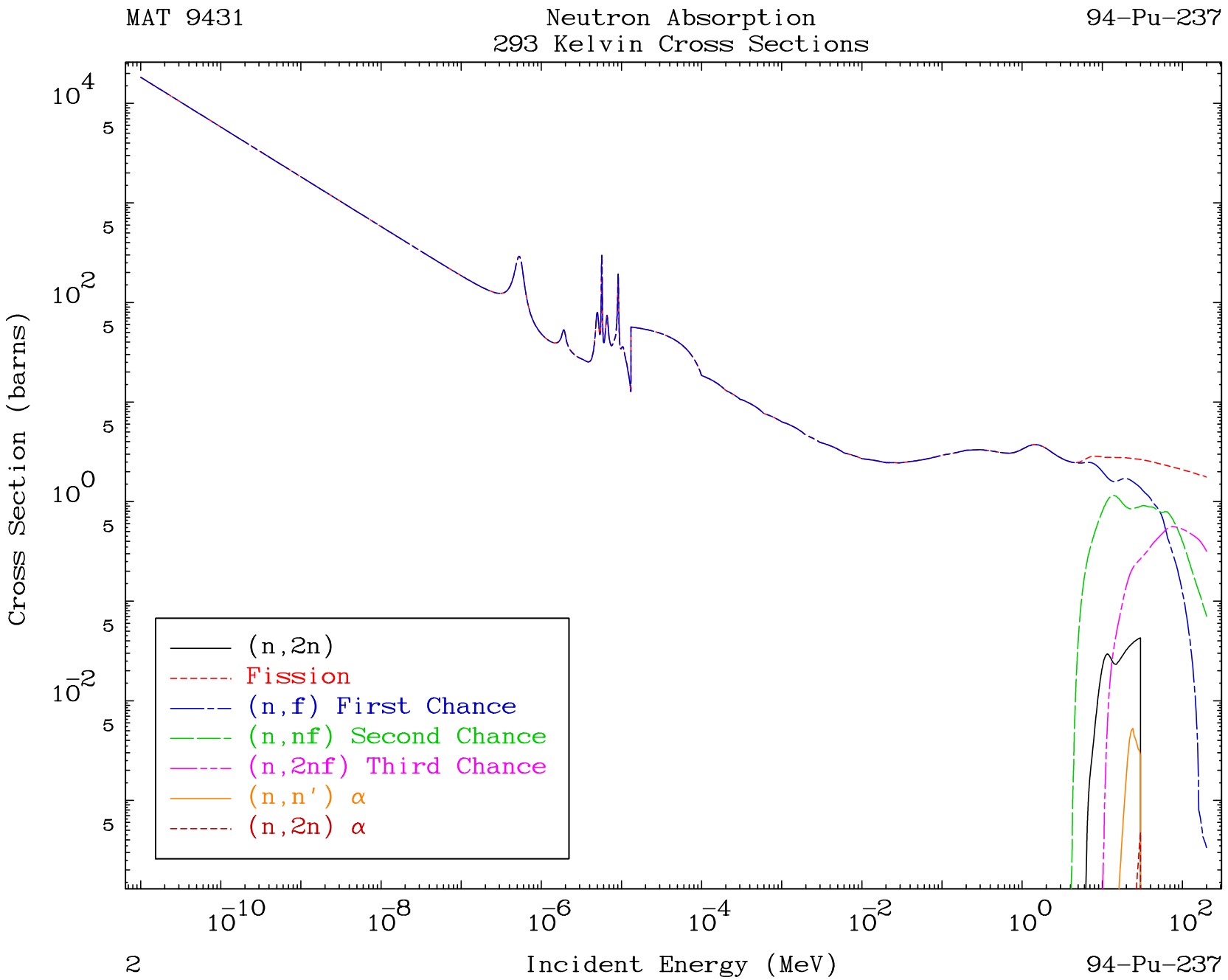
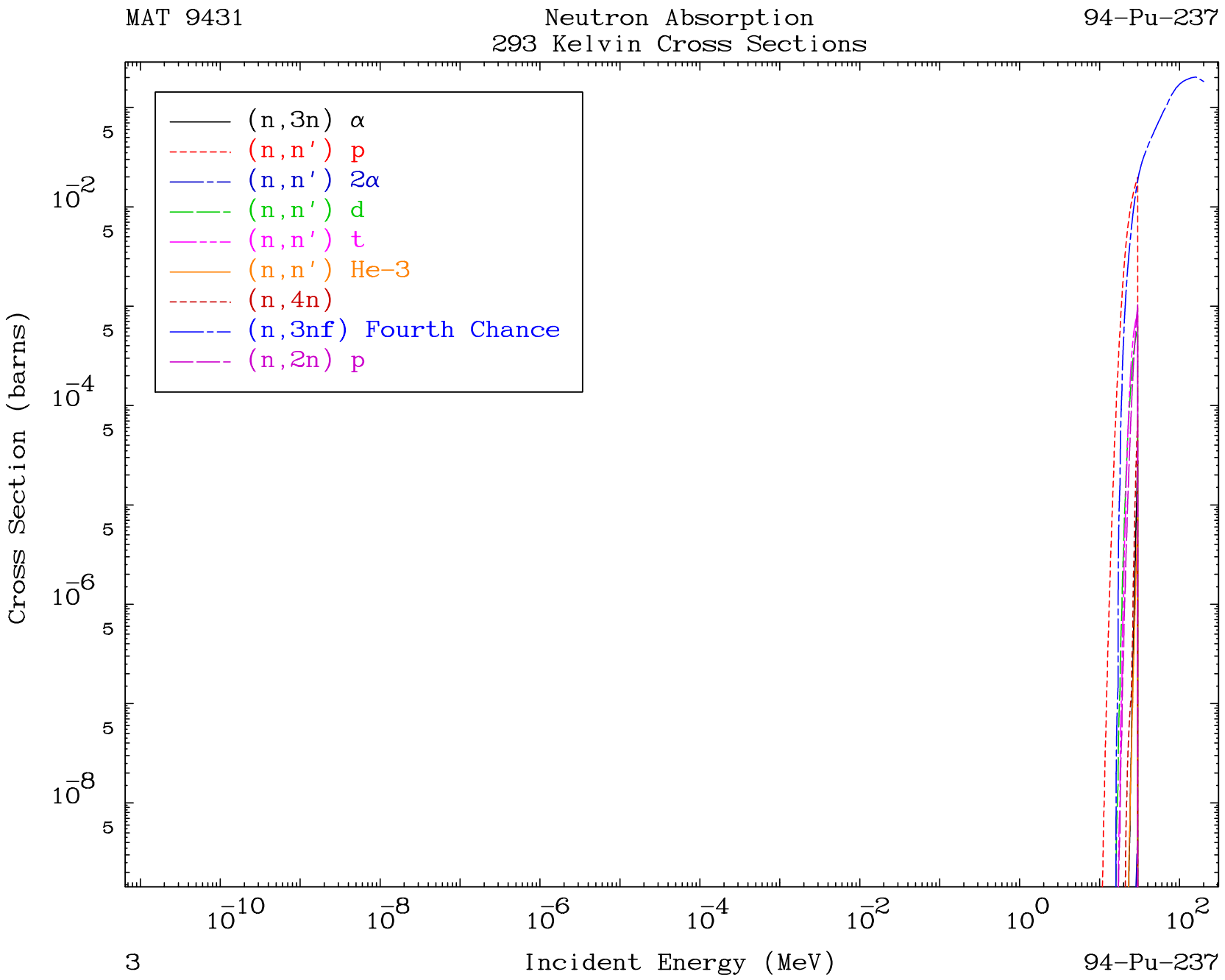
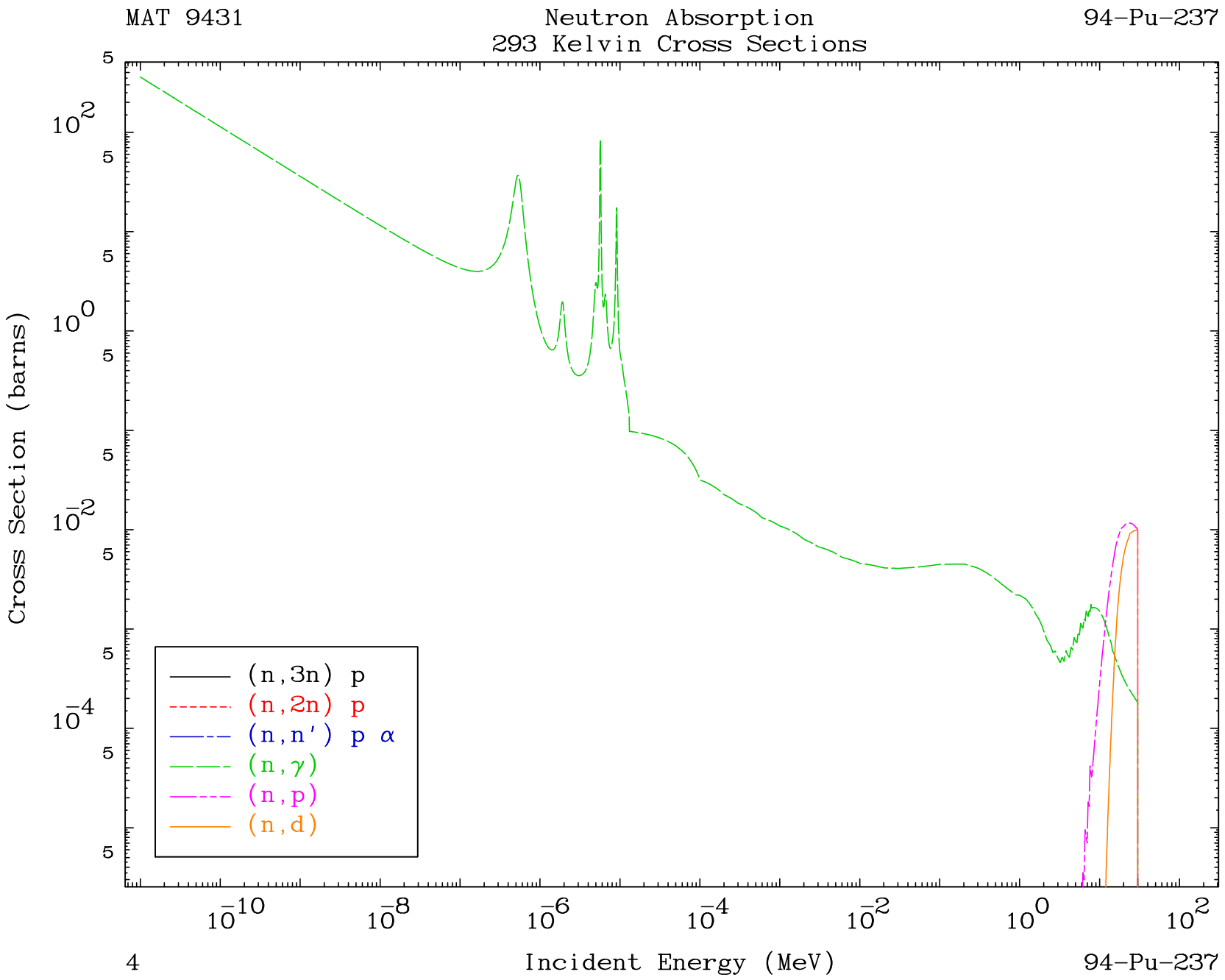
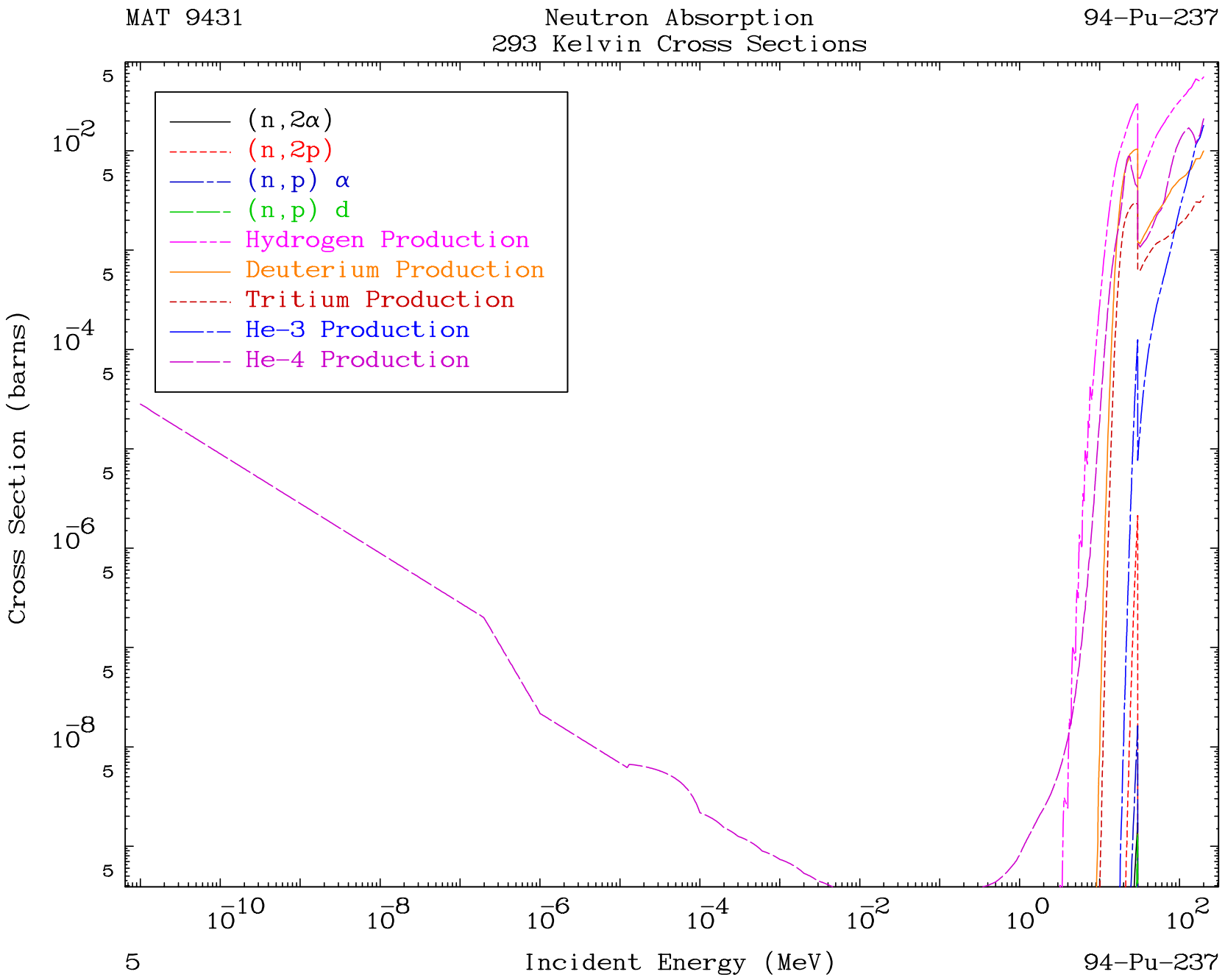
Press Mouse Button to Start

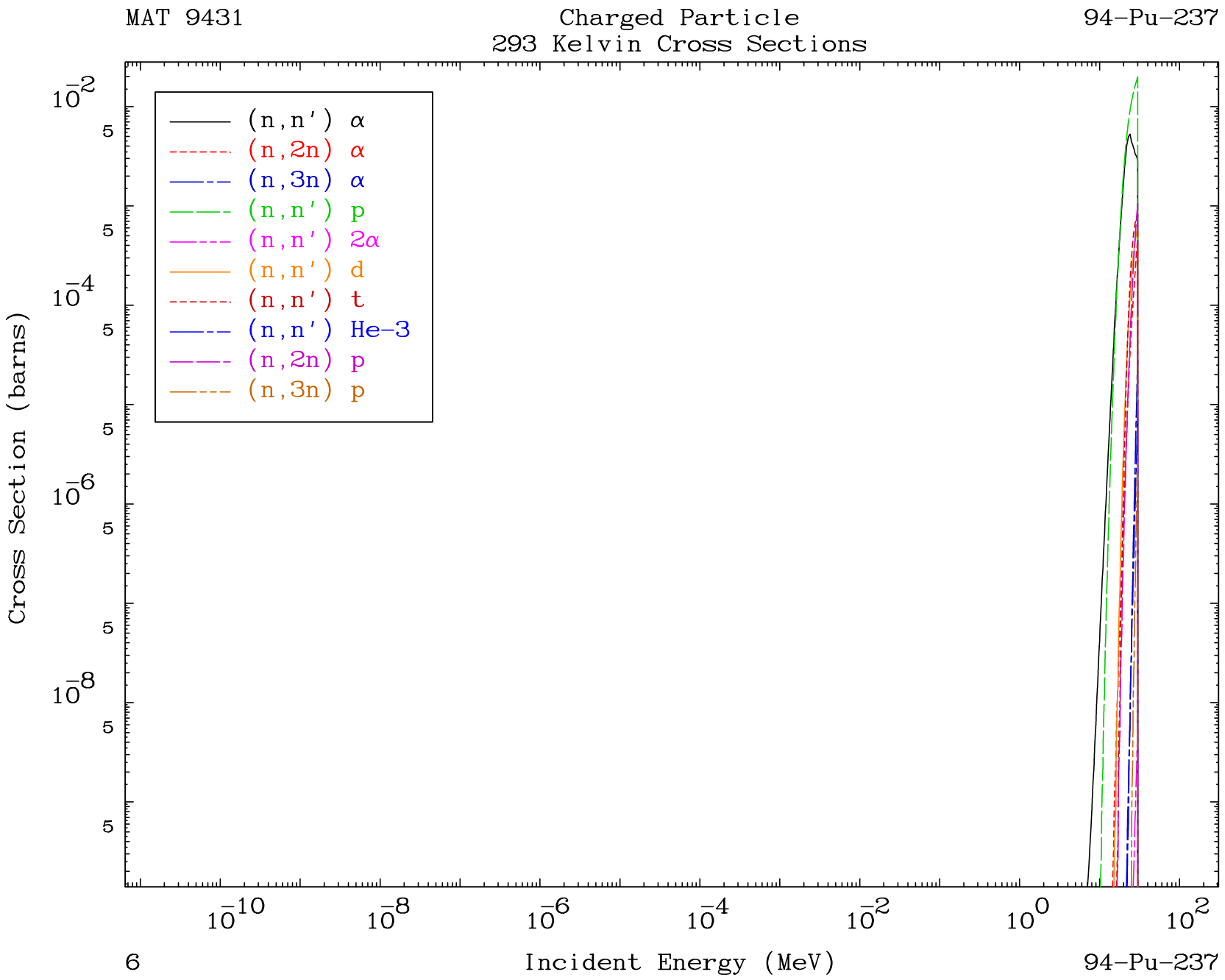

MAT 9431
Neutron Major
293 Kelvin Cross Sections
94-Pu-237
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
Fission
(n,γ)
1
94-Pu-237

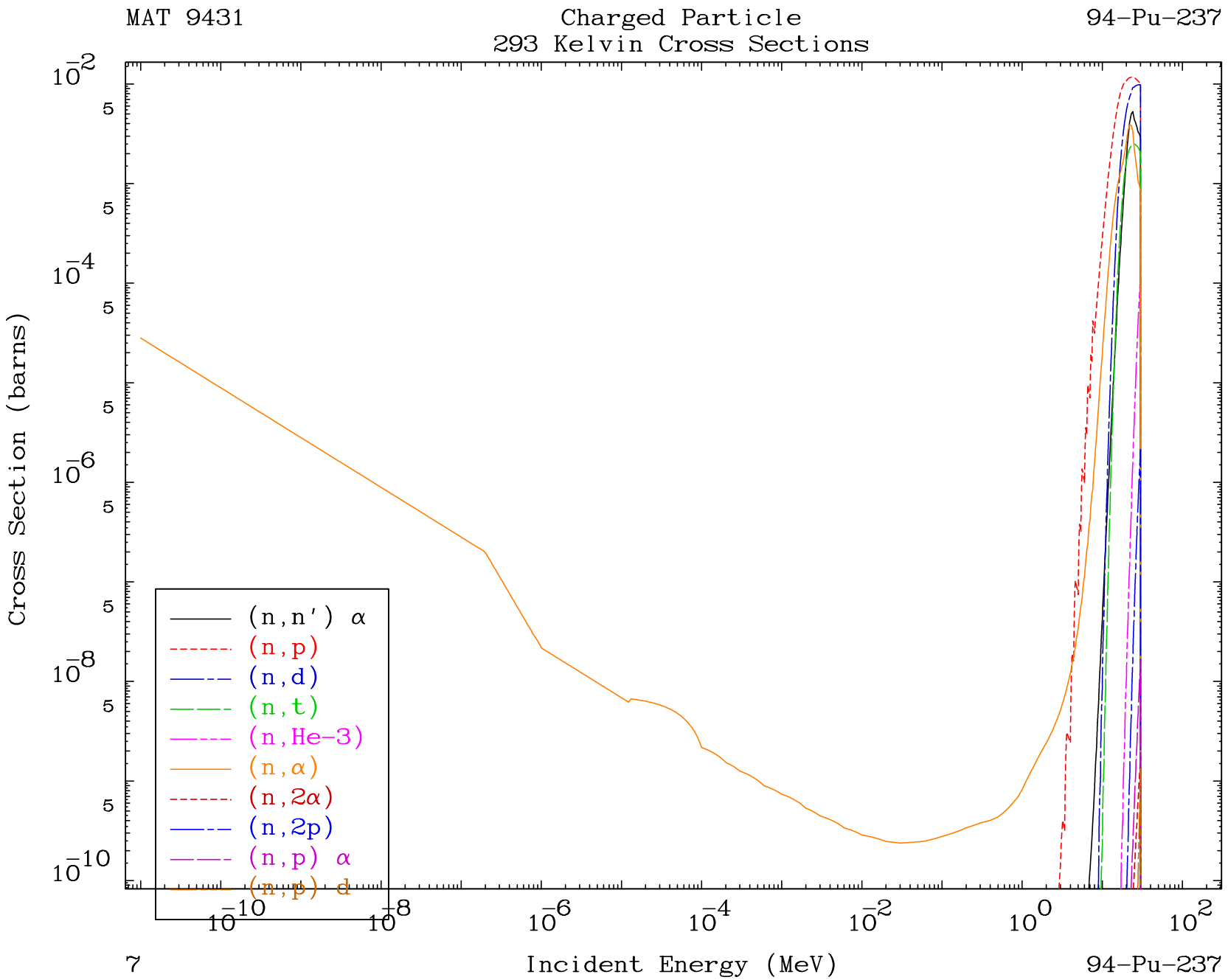

MAT 9431
Neutron Absorption
293 Kelvin Cross Sections
94-Pu-237
Cross Section (barns)
Incident Energy (MeV)
(n,2n)
Fission
(n,f) First Chance
(n,nf) Second Chance
(n,2nf) Third Chance
(n,n') α
(n,2n) α
2
94-Pu-237

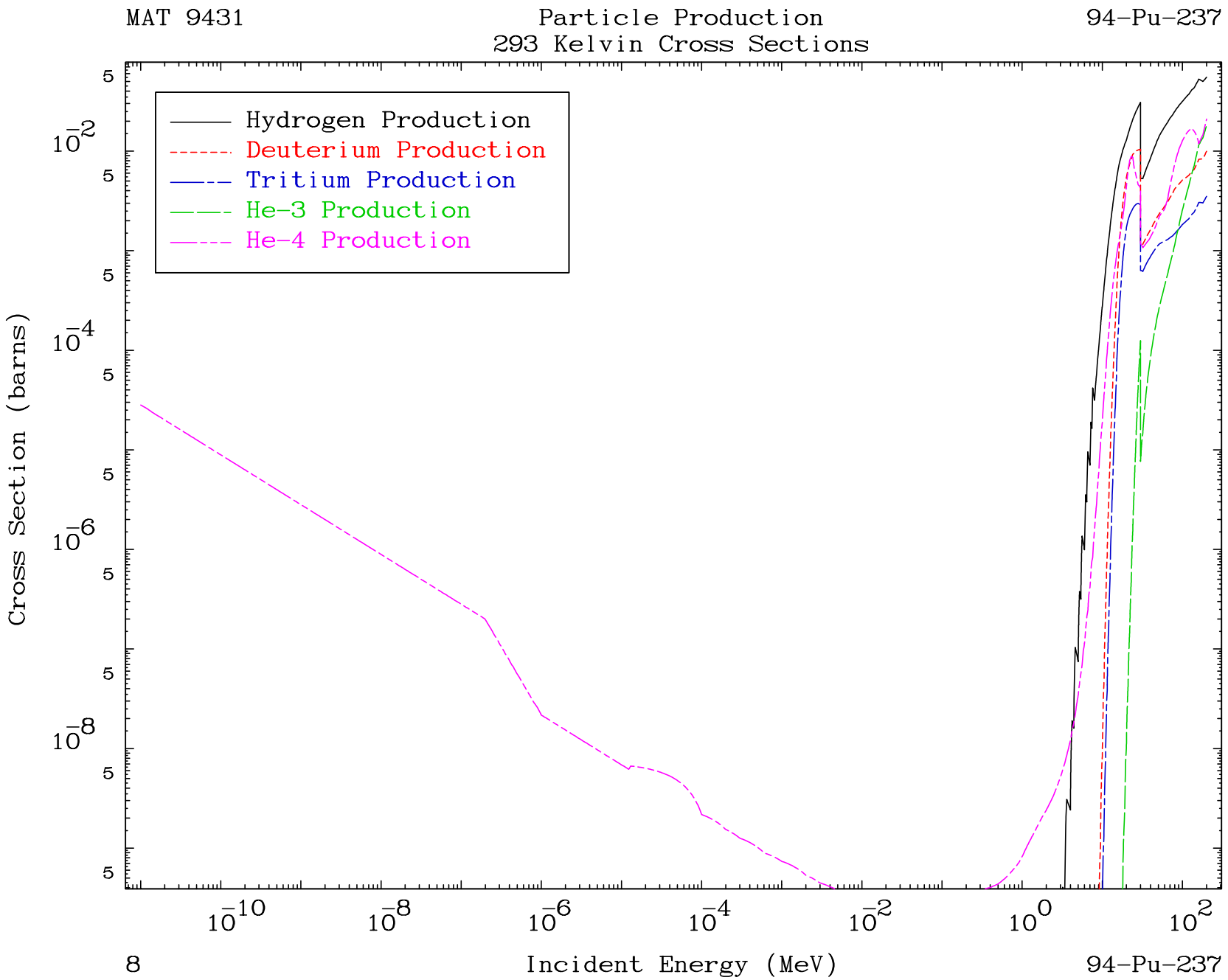

MAT 9431
Neutron Absorption
293 Kelvin Cross Sections
94-Pu-237
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,3nf) Fourth Chance
(n,2n) p
Cross Section (barns)
Incident Energy (MeV)
3
94-Pu-237

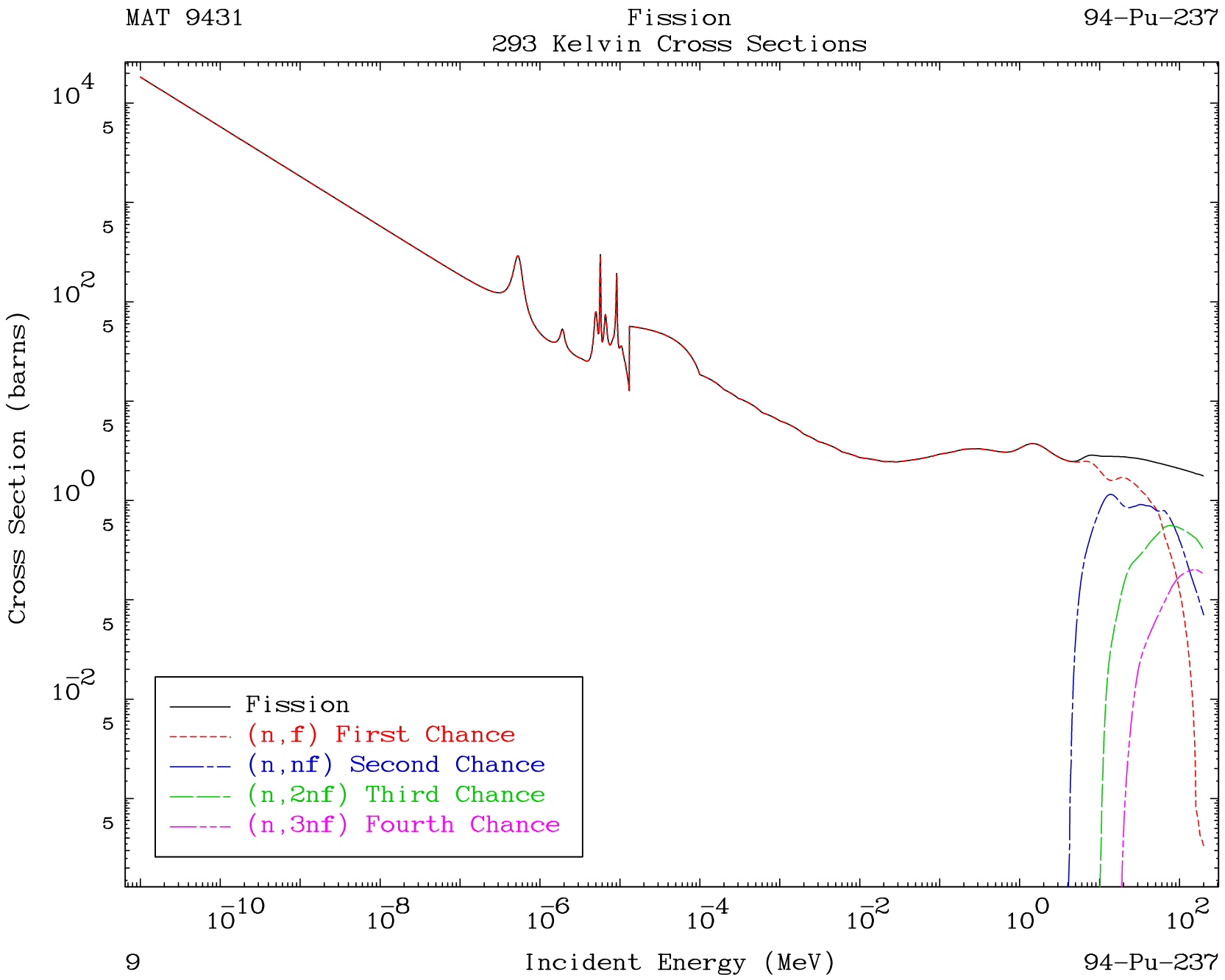

MAT 9431
Neutron Absorption
293 Kelvin Cross Sections
94-Pu-237
Cross Section (barns)
Incident Energy (MeV)
(n,3n) p
(n,2n) p
(n,n') p α
(n,γ)
(n,p)
(n,d)
4
94-Pu-237

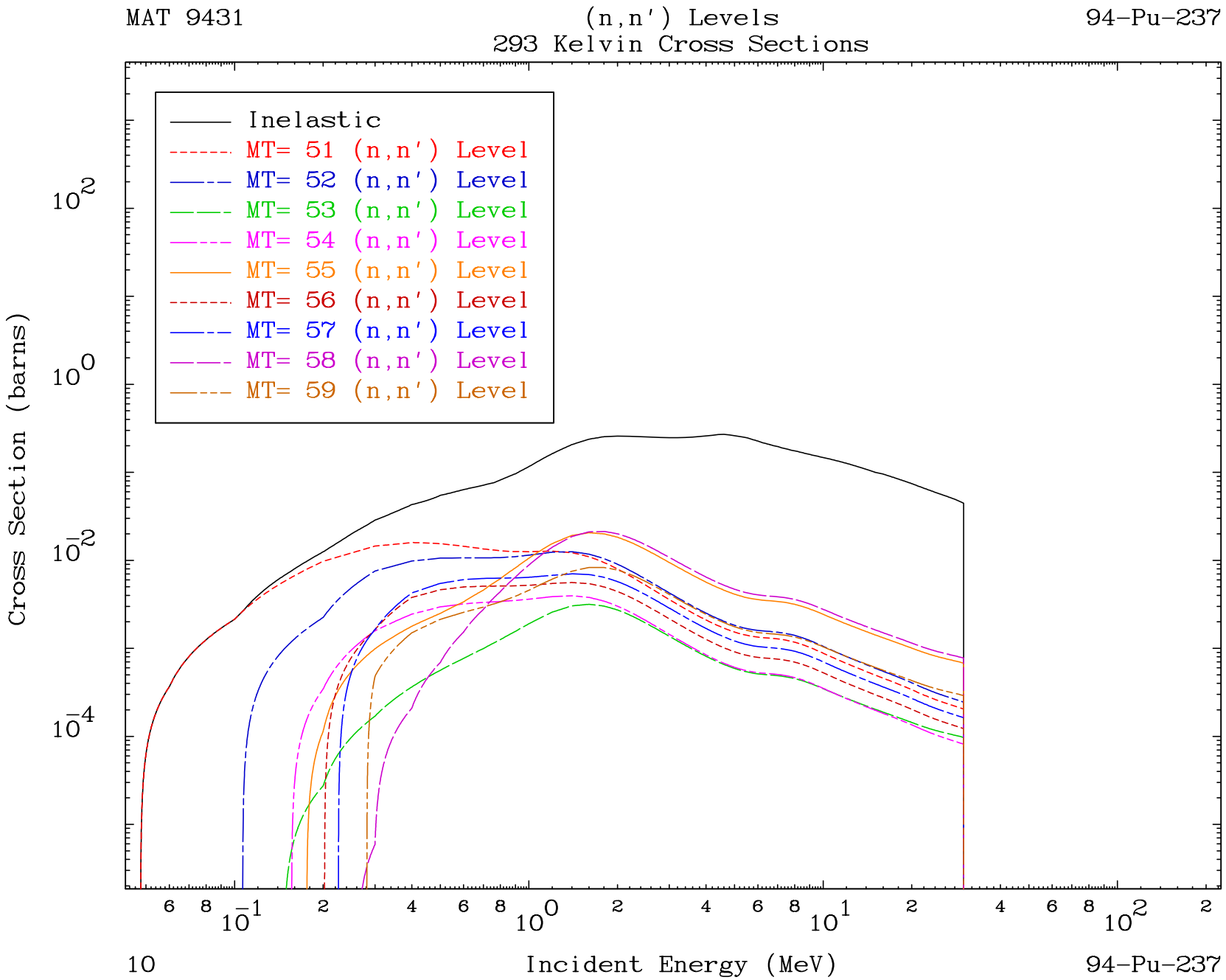

MAT 9431
Neutron Absorption
293 Kelvin Cross Sections
94-Pu-237
(n,2α)
(n,2p)
(n,p) α
(n,p) d
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
94-Pu-237

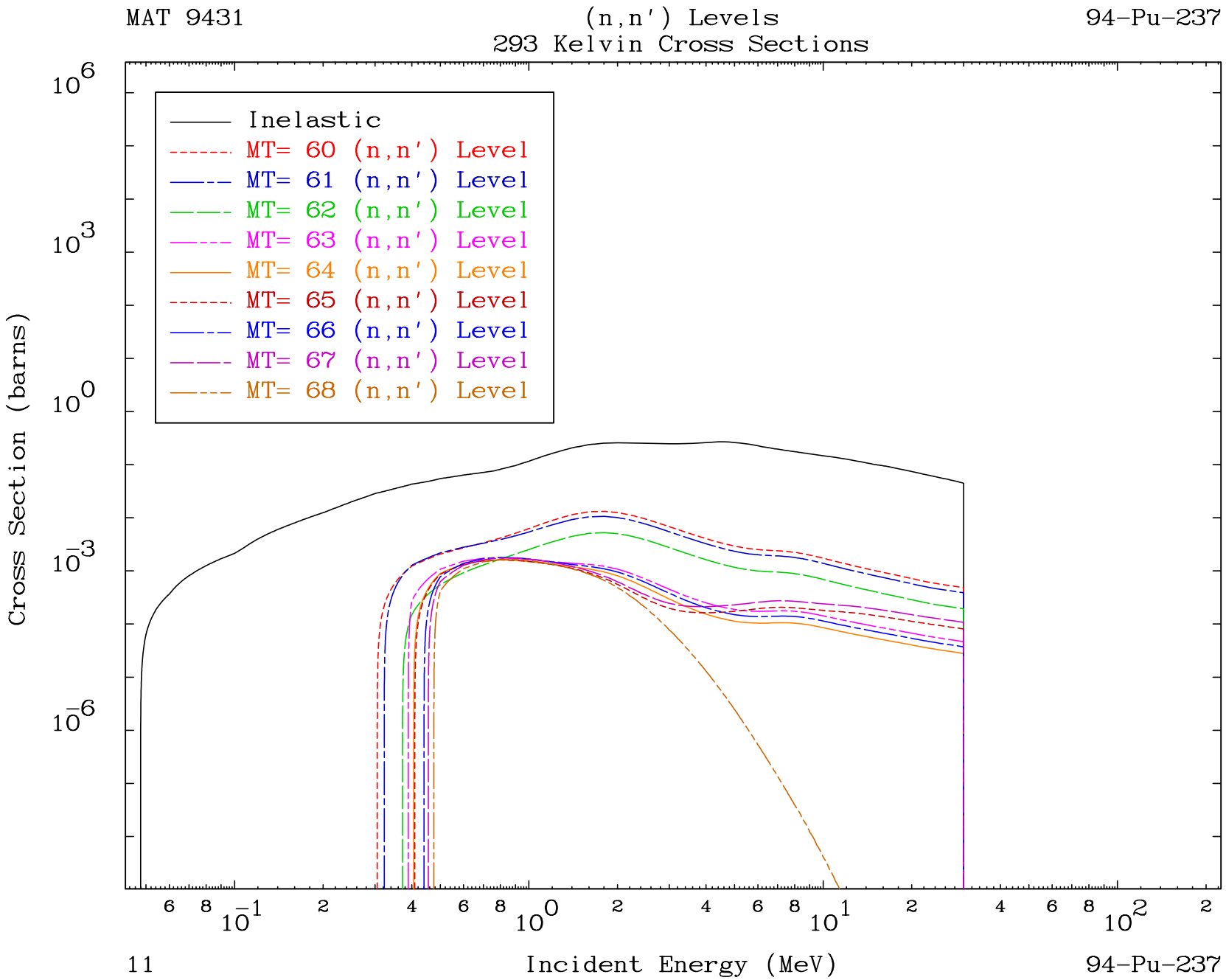

MAT 9431
Charged Particle
94-Pu-237
293 Kelvin Cross Sections
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
6
94-Pu-237

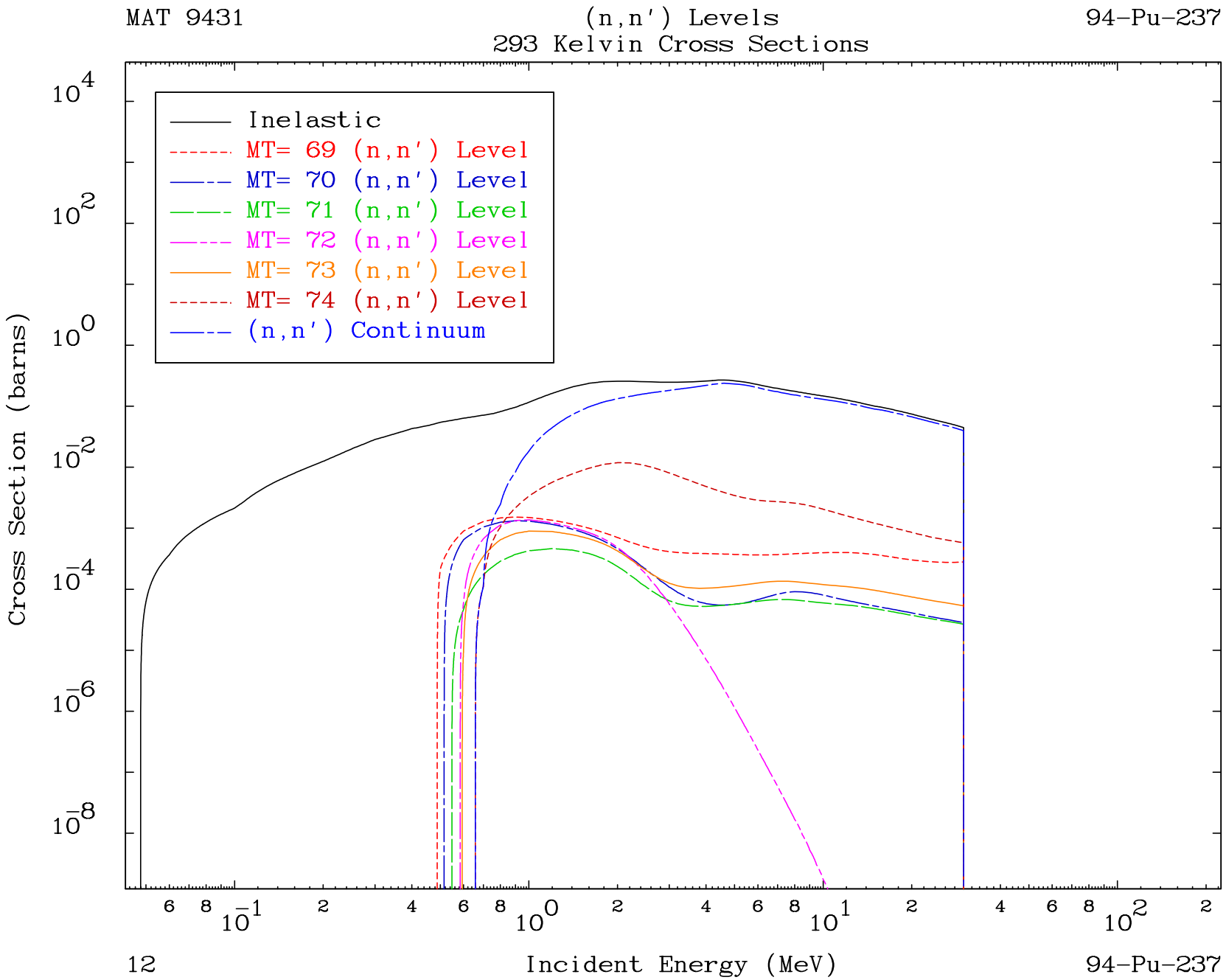

MAT 9431
Charged Particle
293 Kelvin Cross Sections
94-Pu-237
Cross Section (barns)
Incident Energy (MeV)
94-Pu-237
7
(n,n') α
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d

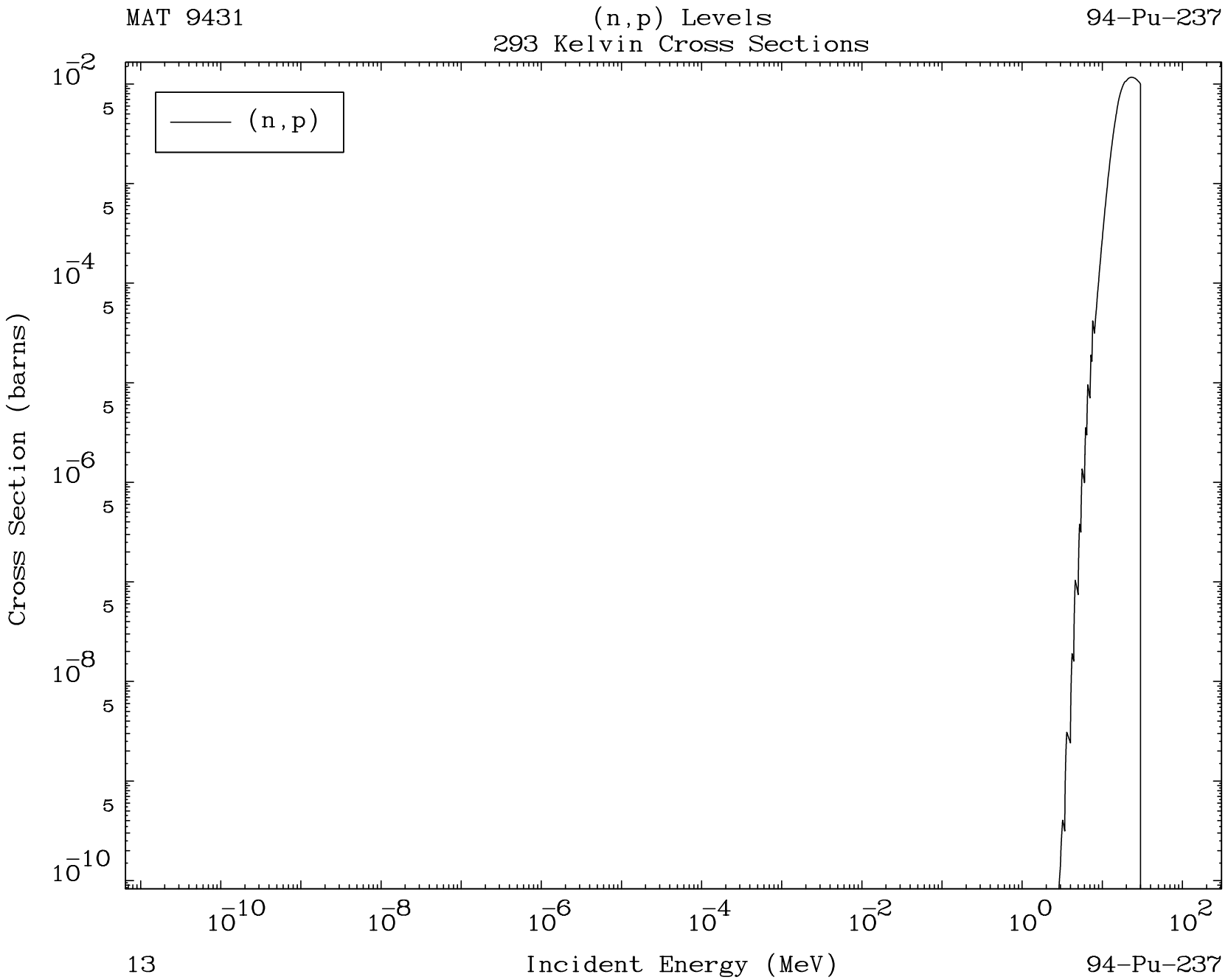

MAT 9431
Particle Production
94-Pu-237
293 Kelvin Cross Sections
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
94-Pu-237
8

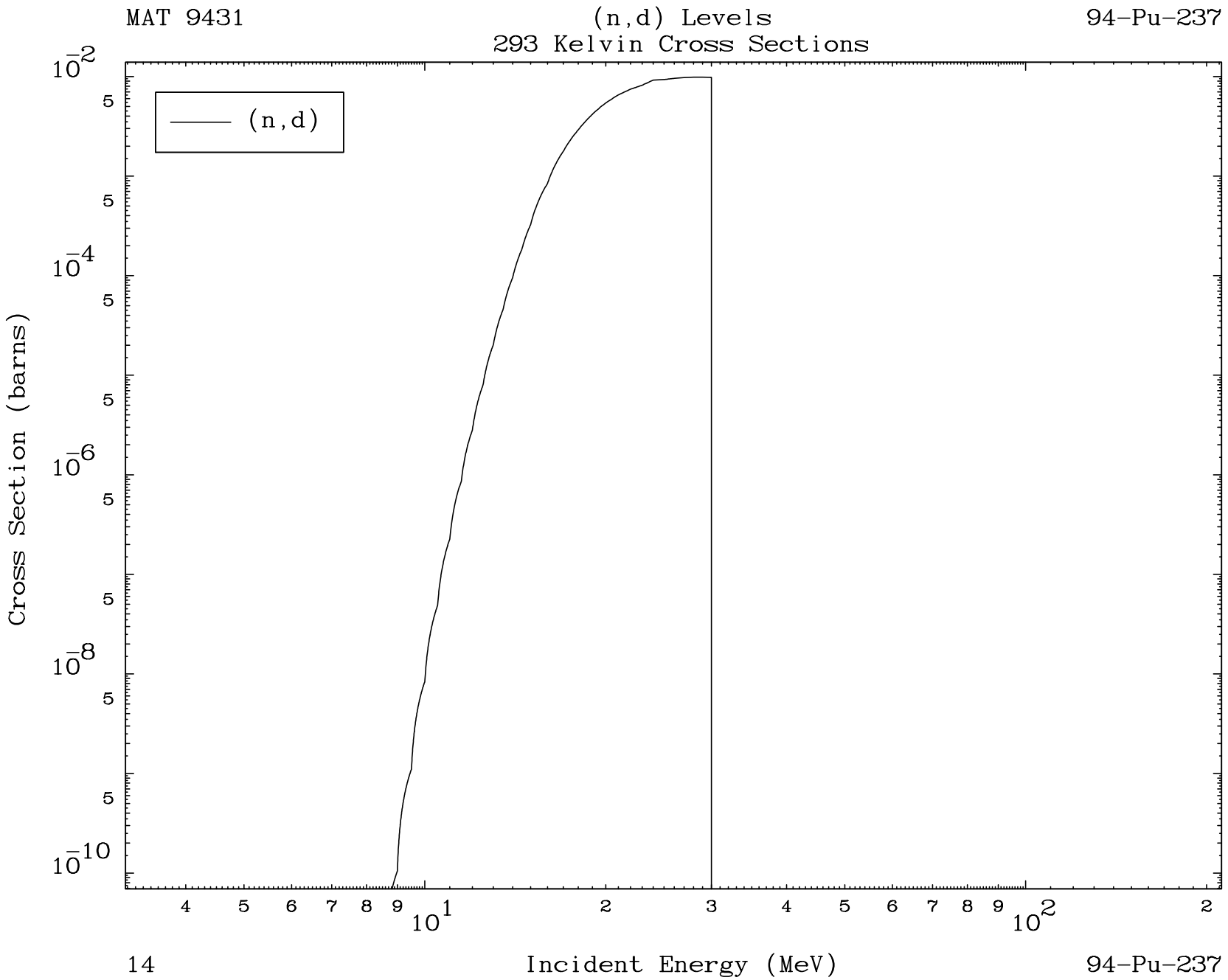

MAT 9431
Fission
94-Pu-237
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Fission
(n,f) First Chance
(n,nf) Second Chance
(n,2nf) Third Chance
(n,3nf) Fourth Chance
9
94-Pu-237

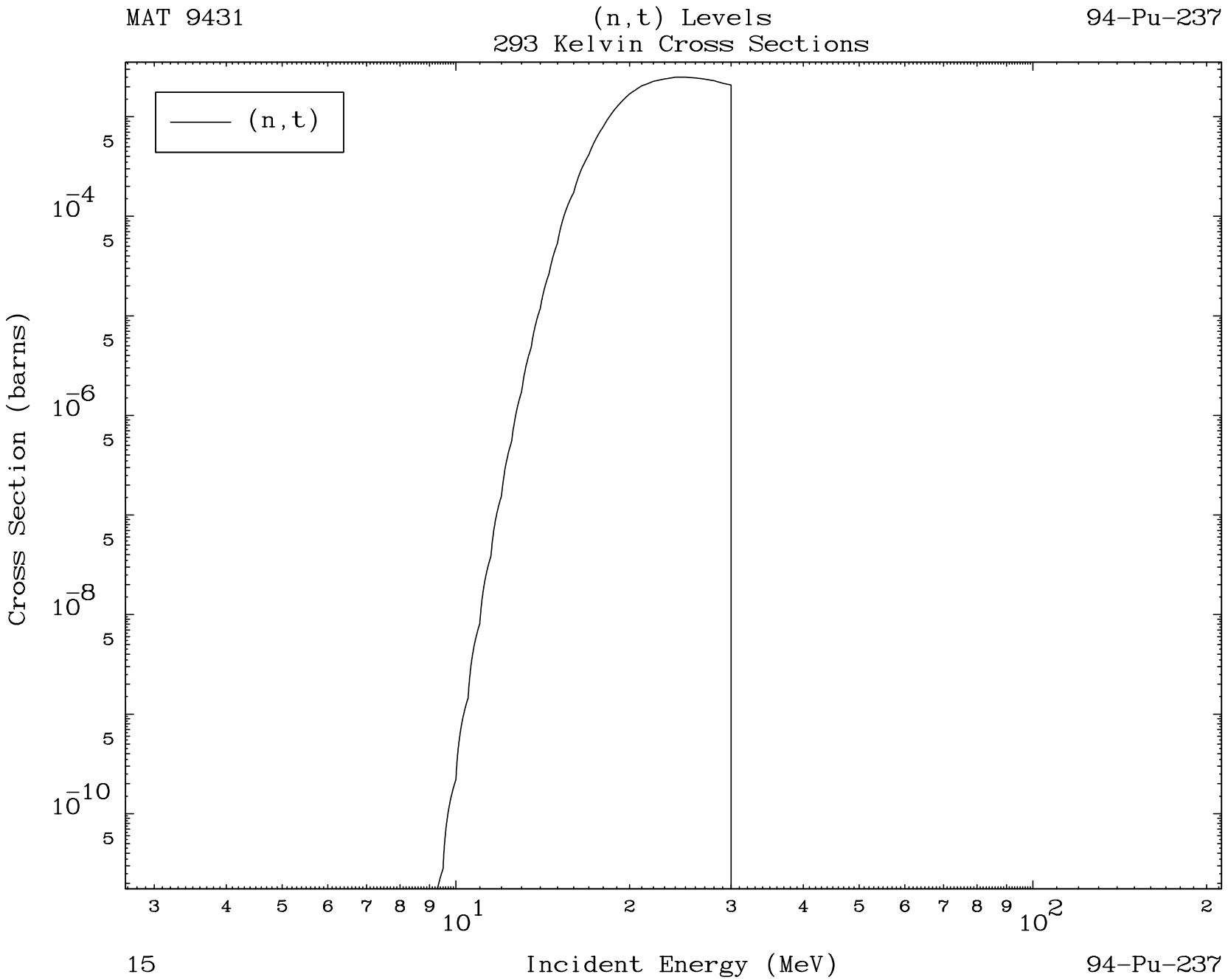

MAT 9431
(n,n') Levels
293 Kelvin Cross Sections
94-Pu-237
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
10
94-Pu-237

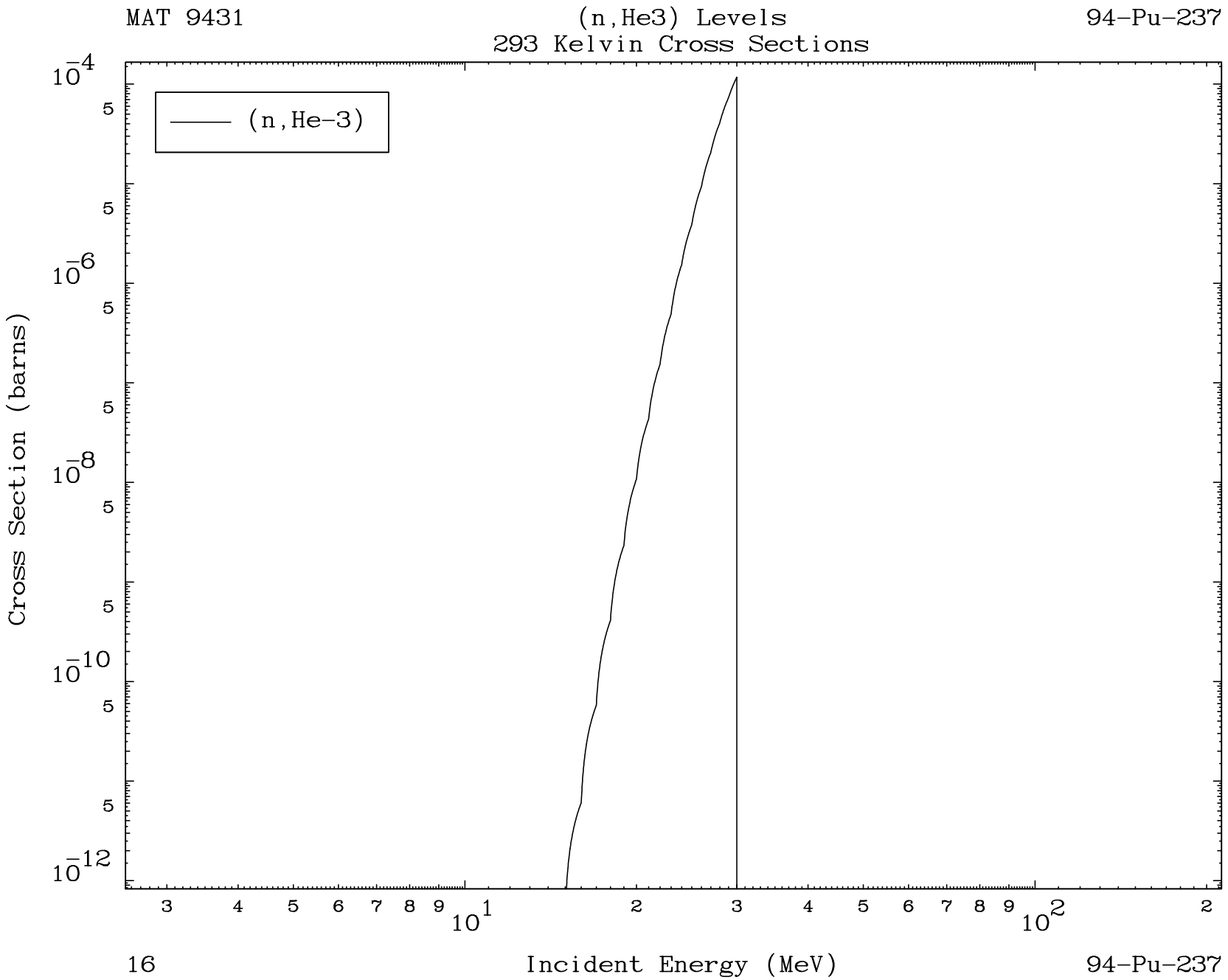

MAT 9431
(n,n') Levels
293 Kelvin Cross Sections
94-Pu-237
Inelastic
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
MT= 68 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
11
94-Pu-237

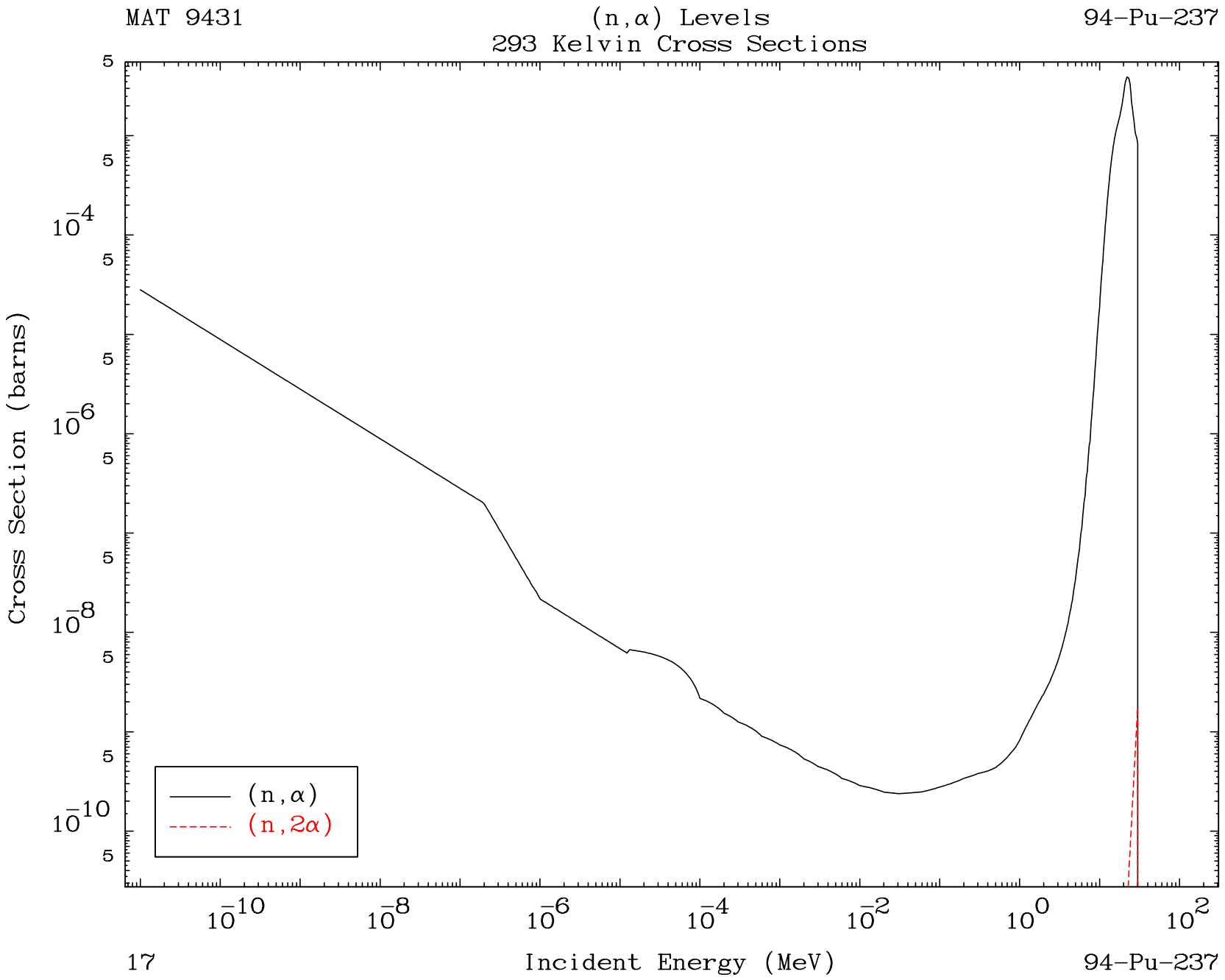

MAT 9431
(n,n') Levels
293 Kelvin Cross Sections
94-Pu-237
Inelastic
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
12
94-Pu-237

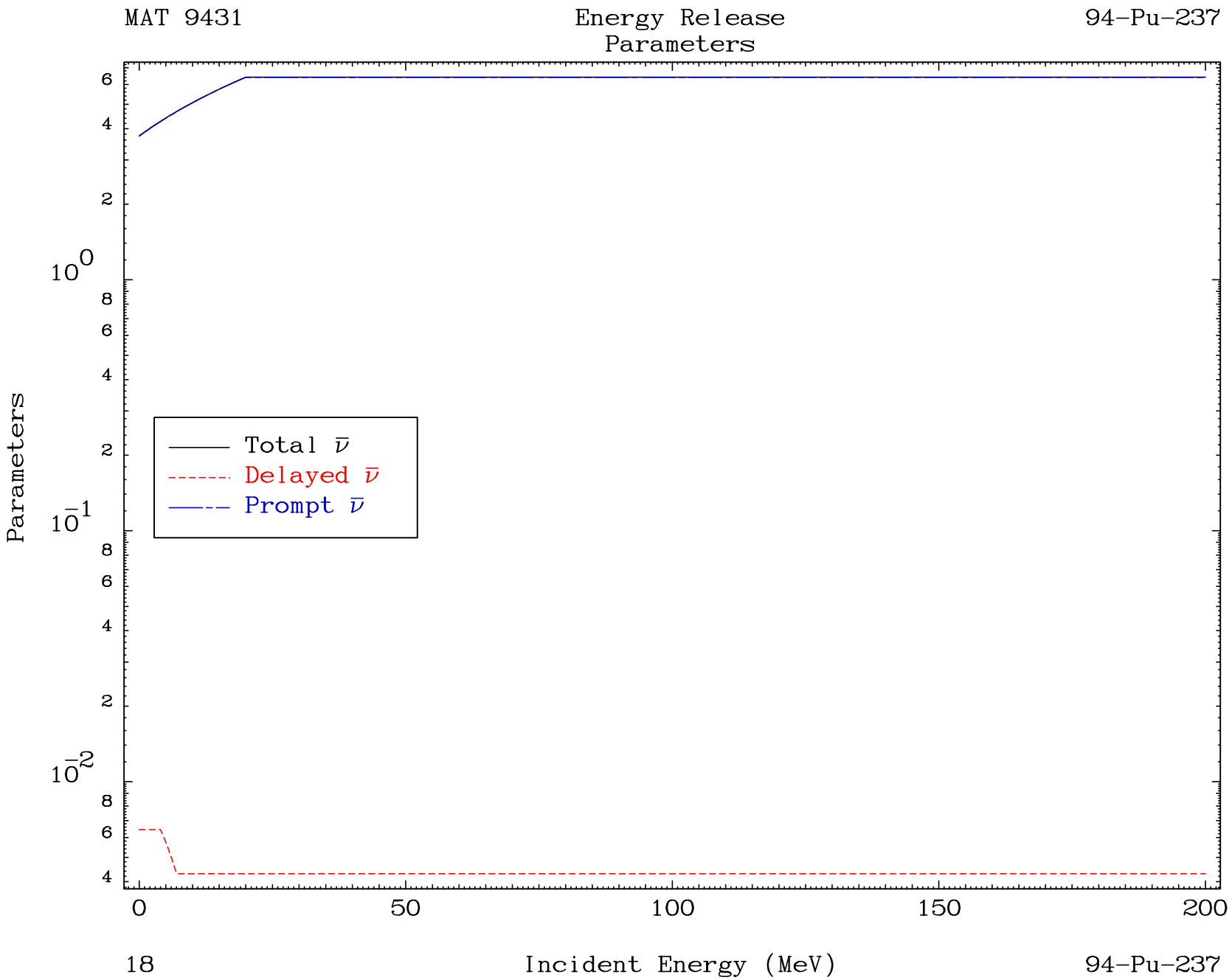

MAT 9431
(n,p) Levels
94-Pu-237
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
13
94-Pu-237

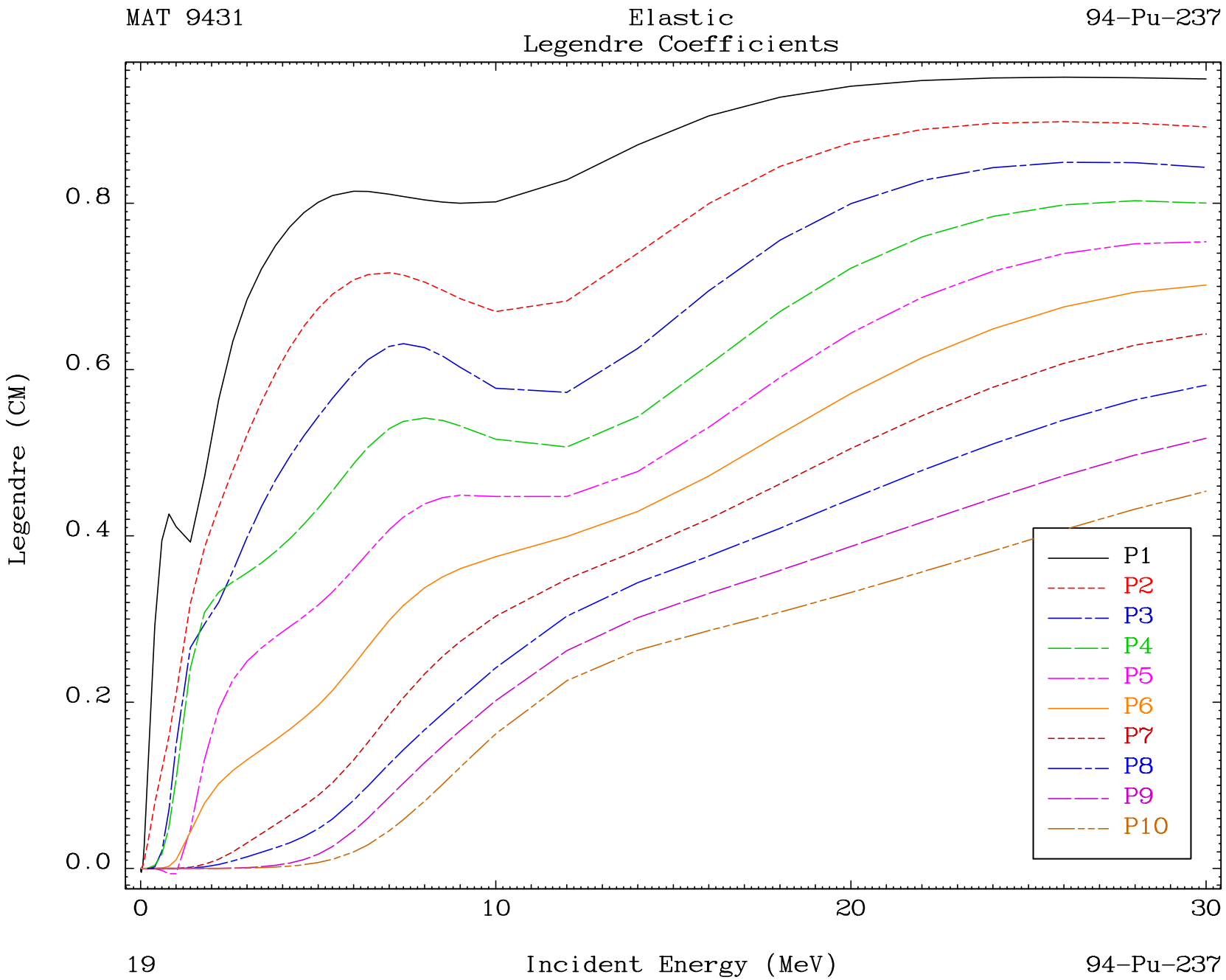

MAT 9431
(n,d) Levels
94-Pu-237
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
14
94-Pu-237

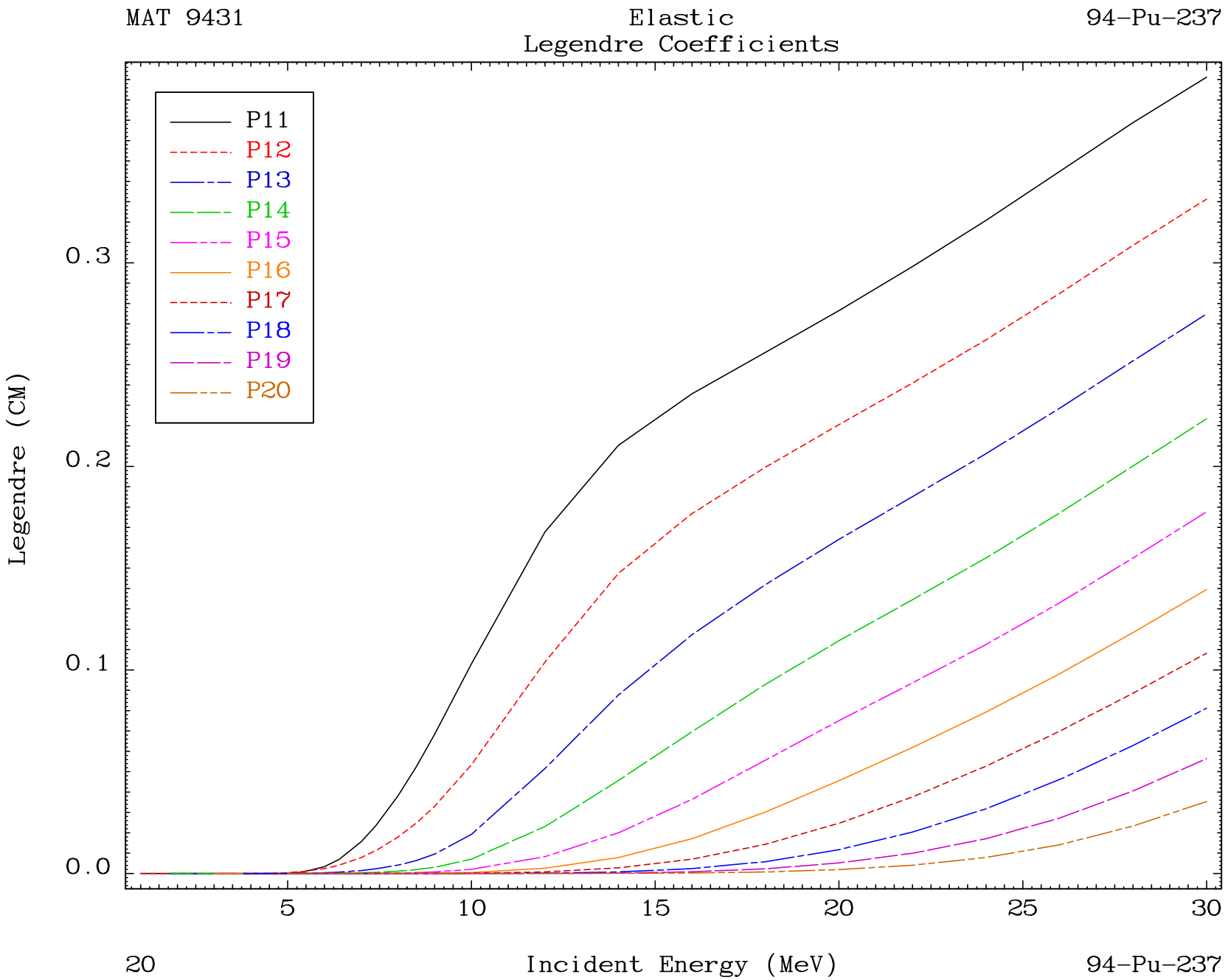

MAT 9431
(n,t) Levels
94-Pu-237
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
3 4 5 6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
15
94-Pu-237

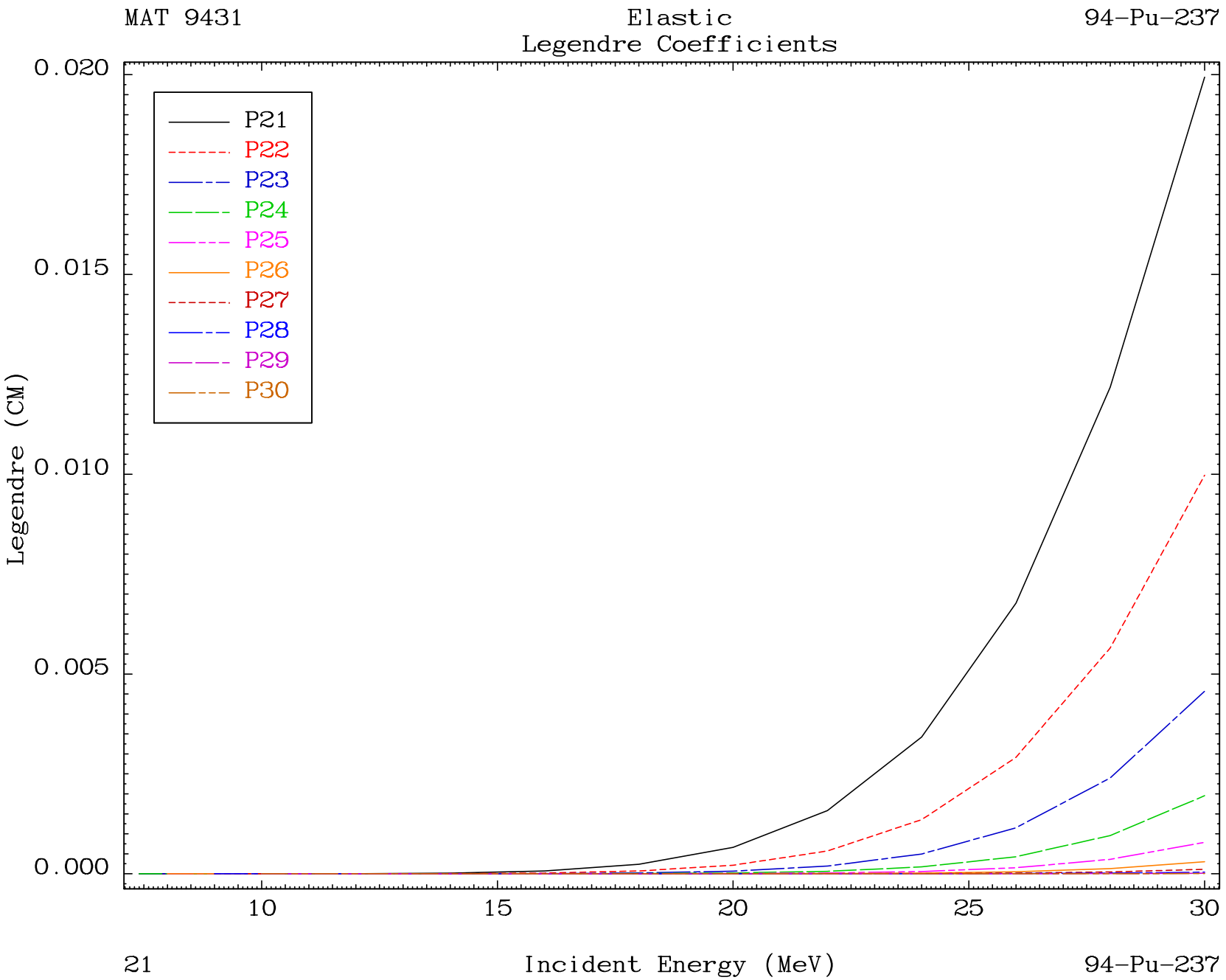

MAT 9431
(n,He3) Levels
94-Pu-237
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10-4
10-6
10-8
10-10
10-12
5
3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 10 2 2
16
Incident Energy (MeV)
94-Pu-237

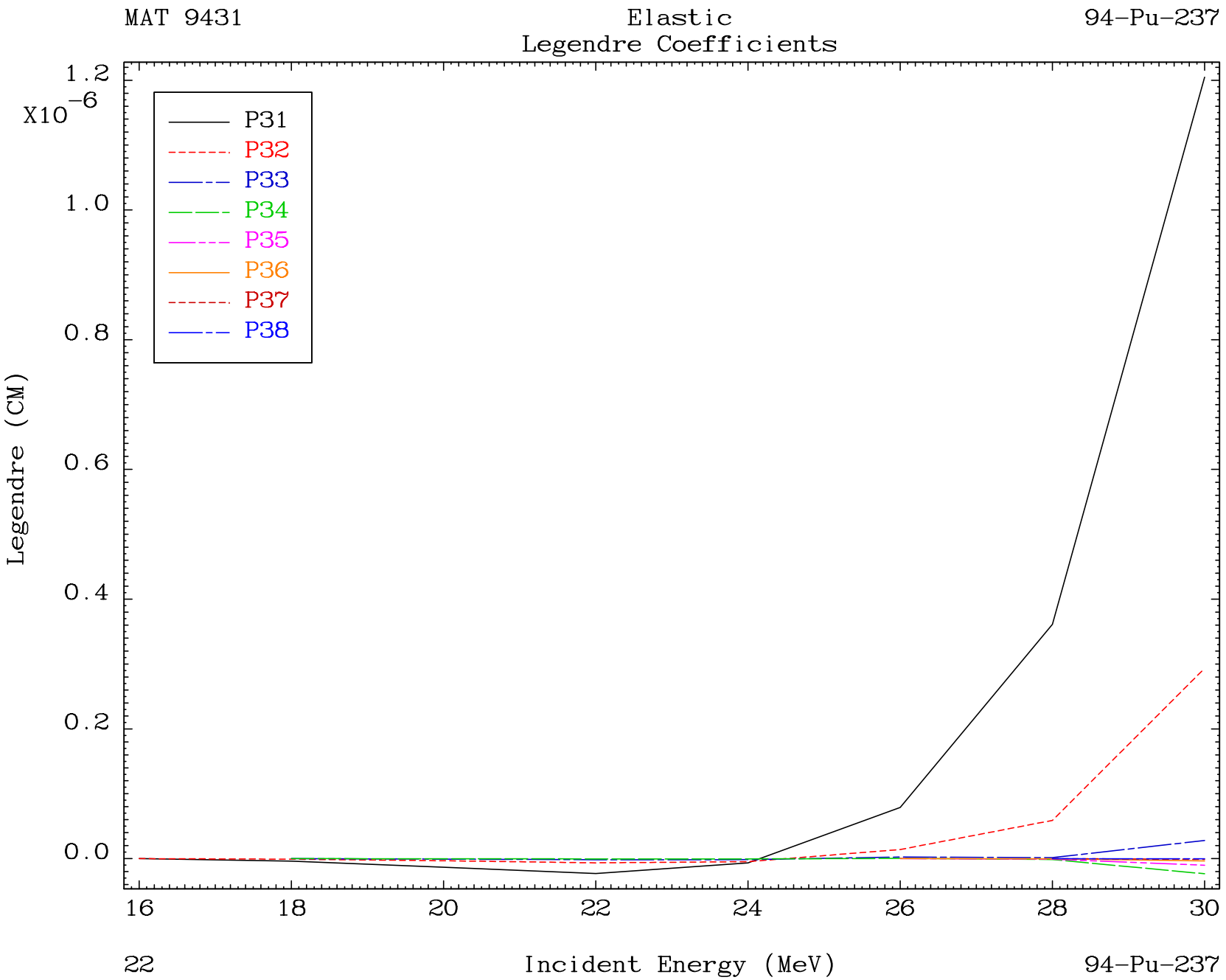

MAT 9431
(n,α) Levels
94-Pu-237
293 Kelvin Cross Sections
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
(n,α)
(n,2α)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
17
Incident Energy (MeV)
94-Pu-237

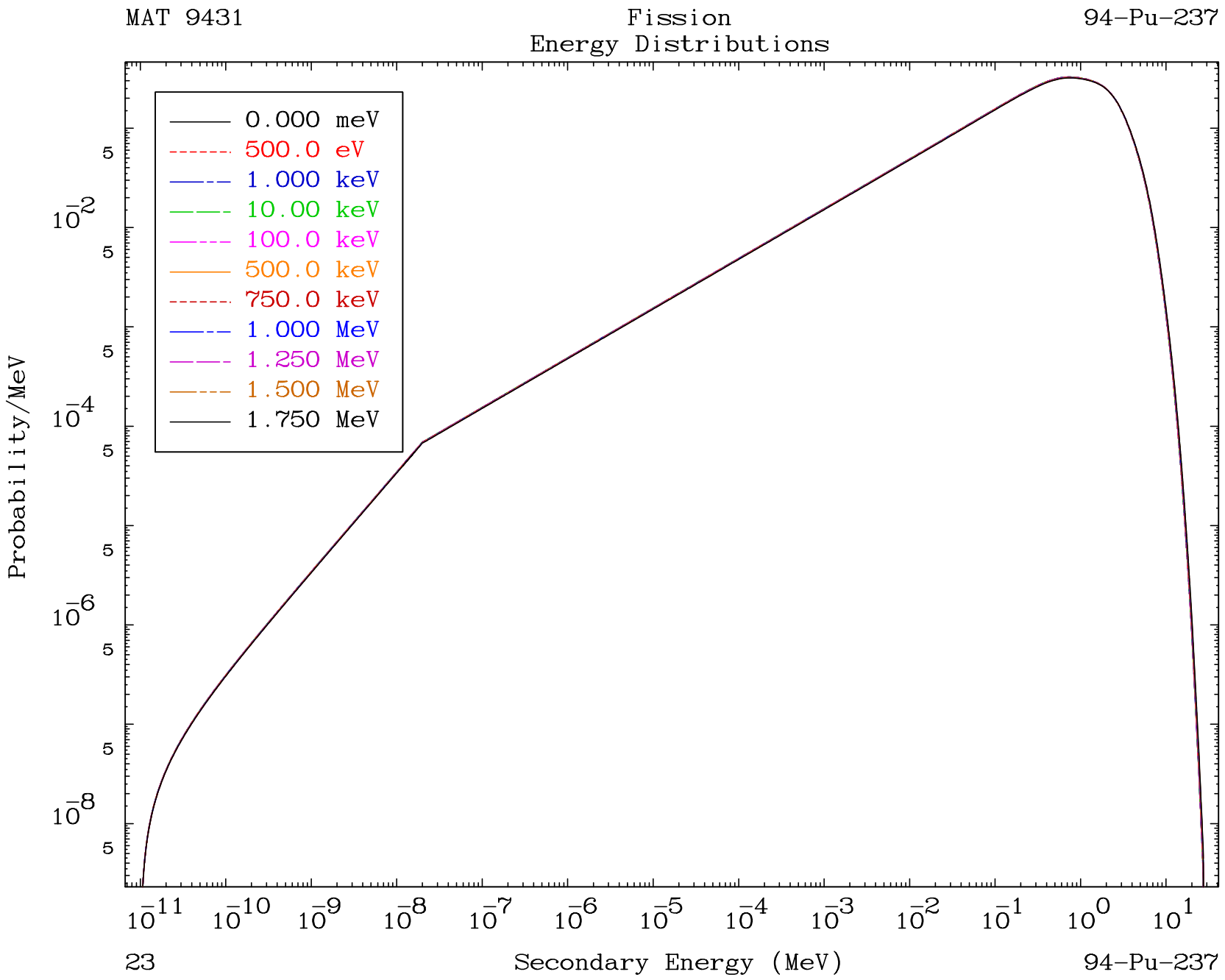

MAT 9431
Energy Release
Parameters
94-Pu-237
Parameters
Total $\bar{\nu}$
Delayed $\bar{\nu}$
Prompt $\bar{\nu}$
Incident Energy (MeV)
18
94-Pu-237

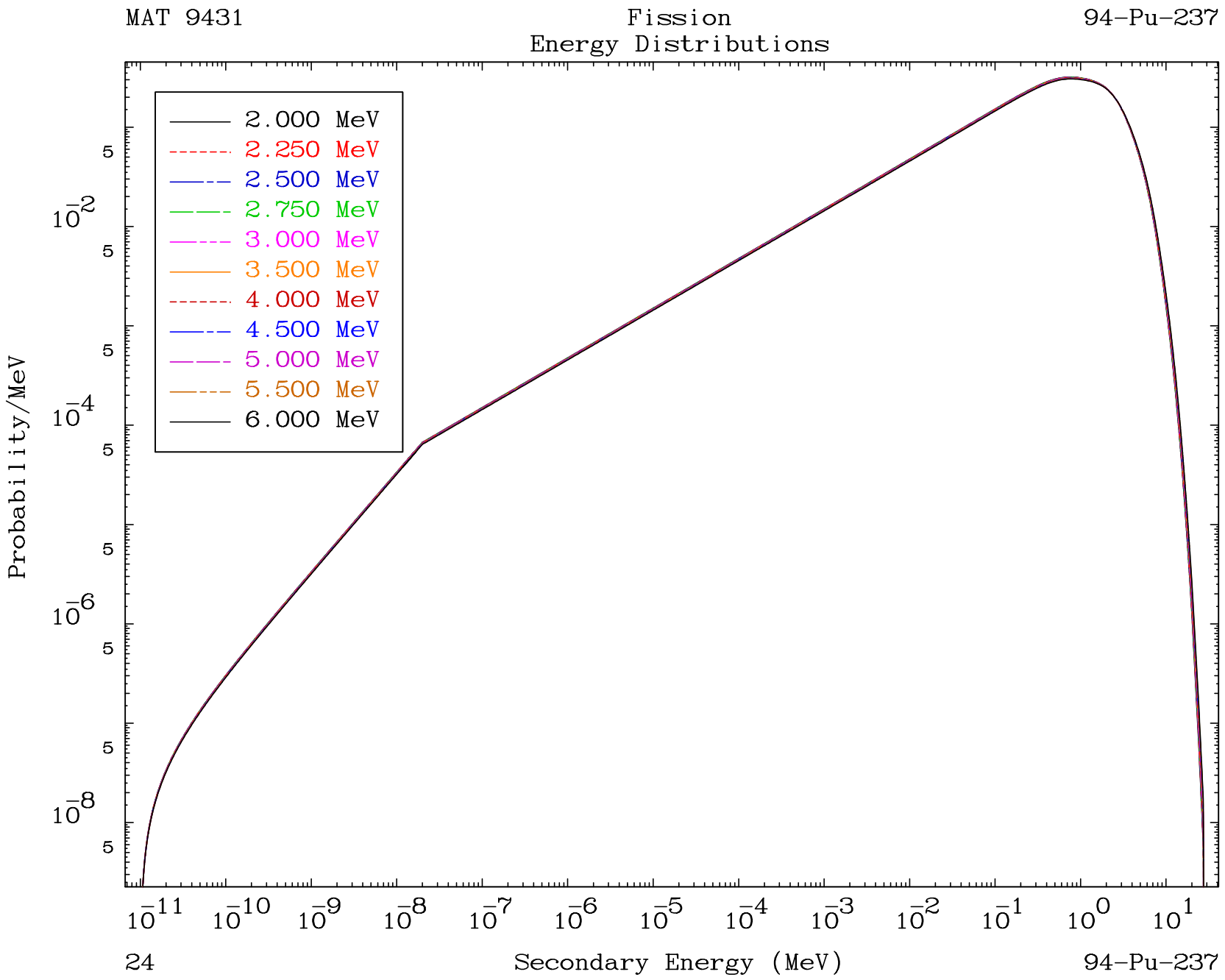

MAT 9431
Elastic
Legendre Coefficients
94-Pu-237
Legendre (CM)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
19
Incident Energy (MeV)
94-Pu-237
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

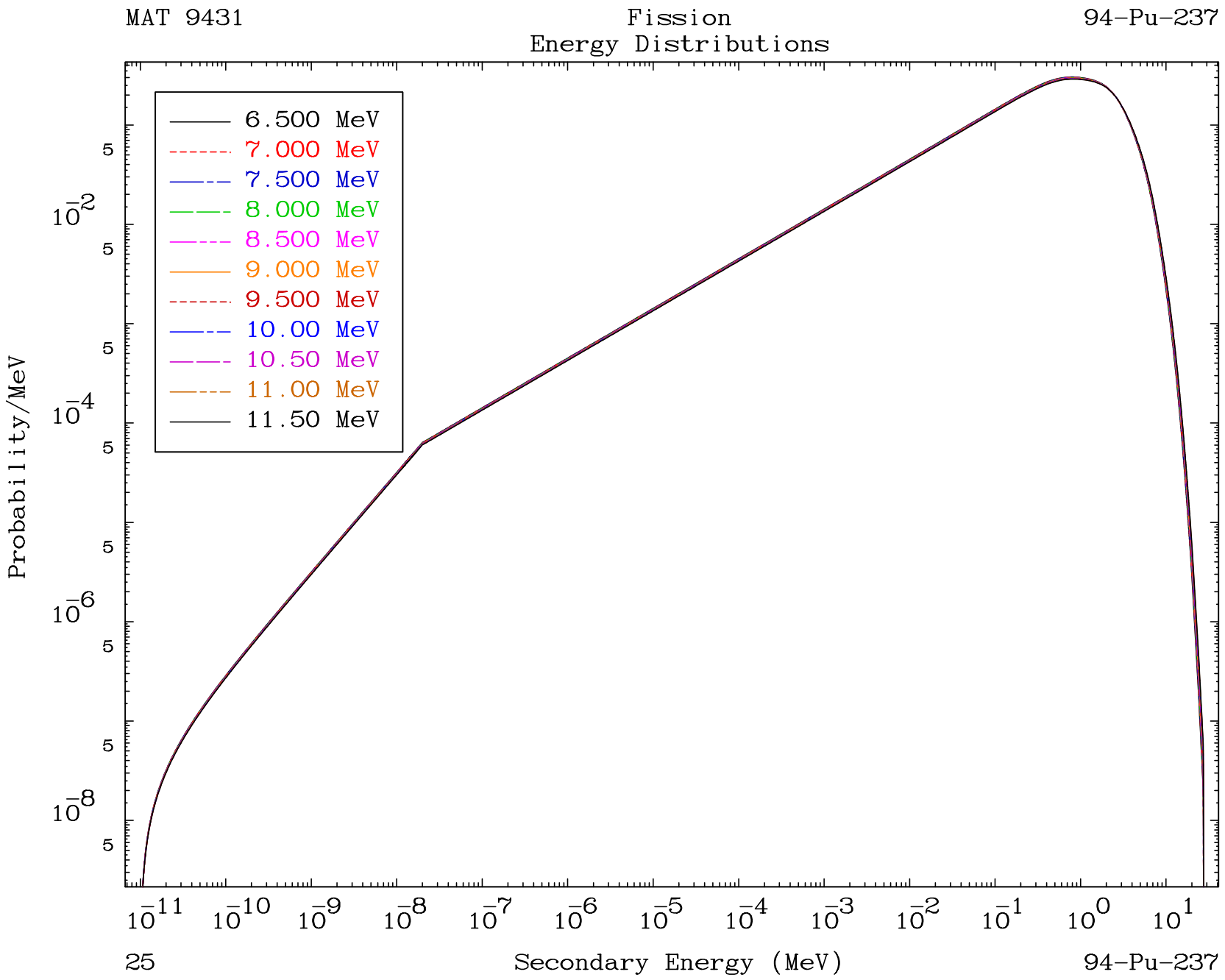

MAT 9431
Elastic
Legendre Coefficients
94-Pu-237
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
Legendre (CM)
0.0
0.1
0.2
0.3
5
10
15
20
25
30
20
Incident Energy (MeV)
94-Pu-237

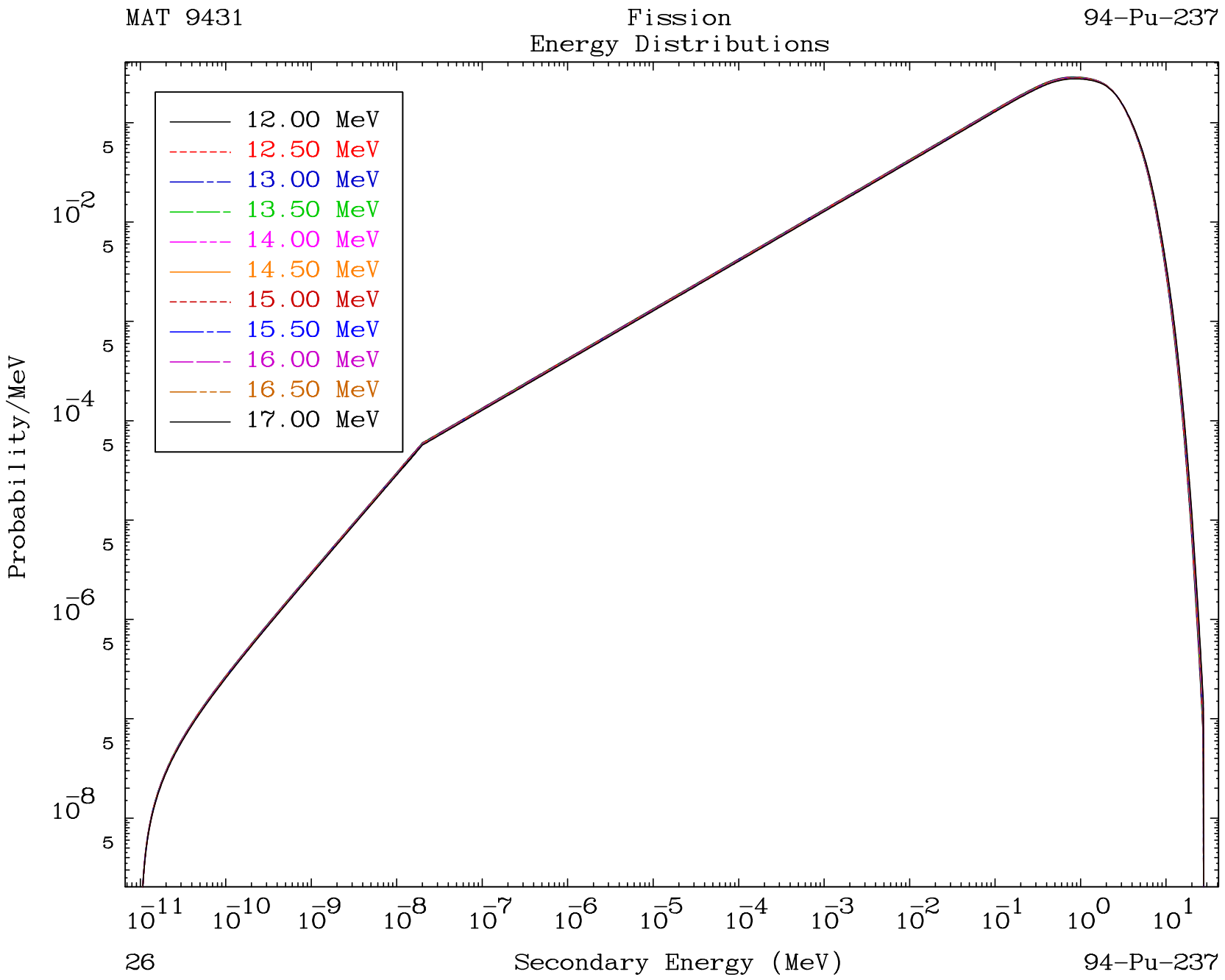

MAT 9431
Elastic
Legendre Coefficients
94-Pu-237
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
10
15
20
25
30
21
Incident Energy (MeV)
94-Pu-237

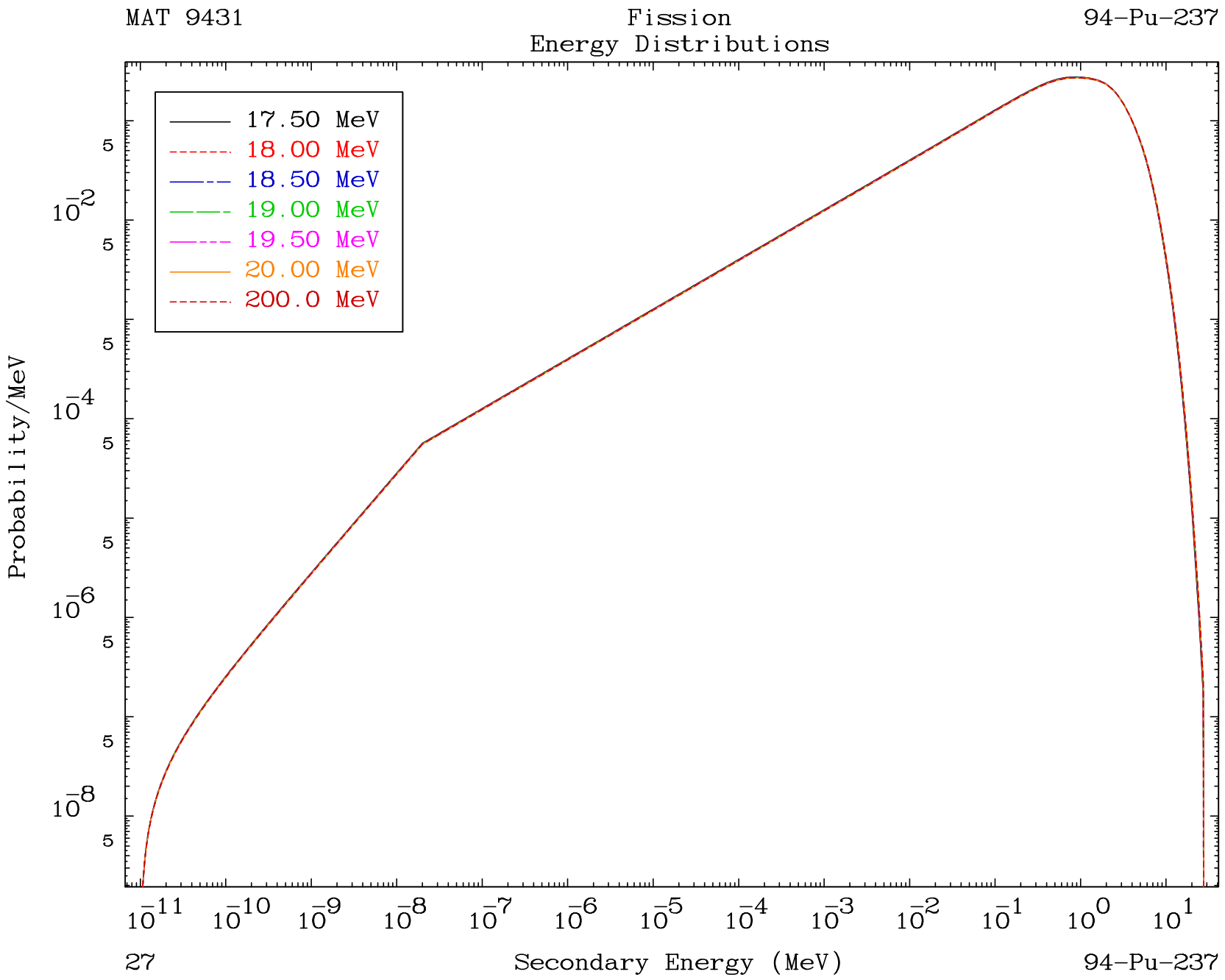

MAT 9431
Elastic
Legendre Coefficients
94-Pu-237
X10 −6
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
16
18
20
22
24
26
28
30
22
Incident Energy (MeV)
94-Pu-237

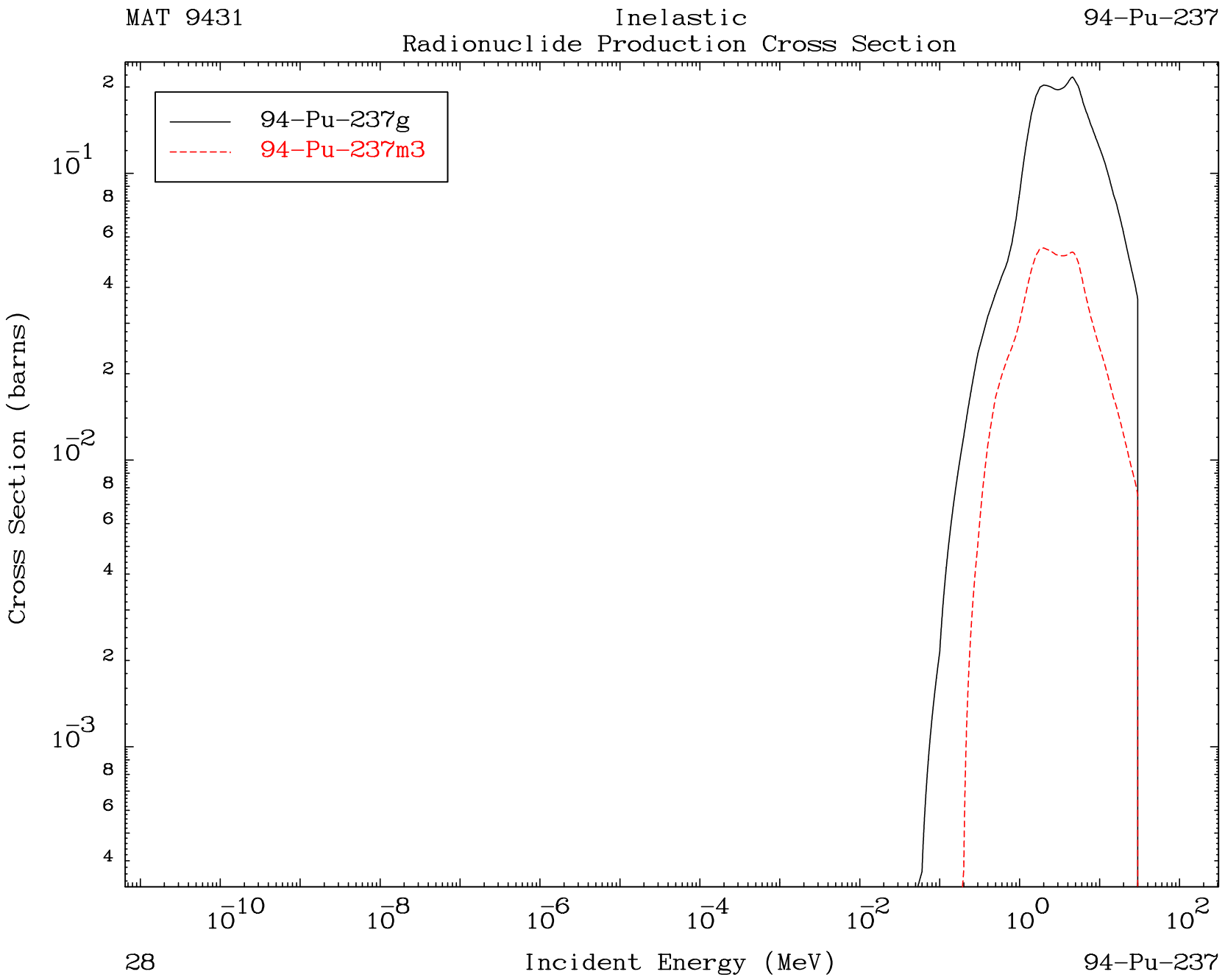

MAT 9431
Fission
Energy Distributions
94-Pu-237
0.000 meV
500.0 eV
1.000 keV
10.00 keV
100.0 keV
500.0 keV
750.0 keV
1.000 MeV
1.250 MeV
1.500 MeV
1.750 MeV
Probability/MeV
Secondary Energy (MeV)
23
94-Pu-237

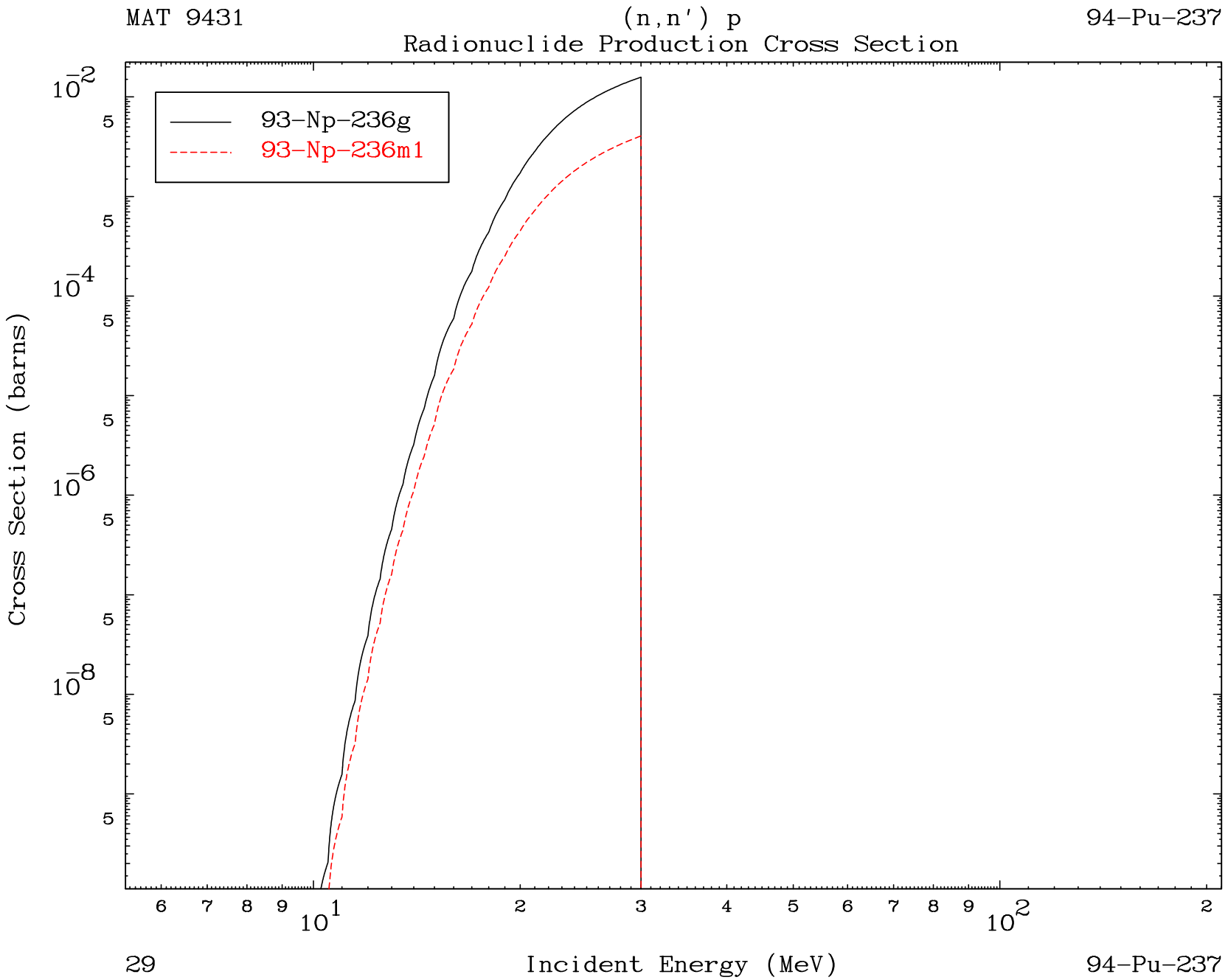

MAT 9431
Fission
Energy Distributions
94-Pu-237
2.000 MeV
2.250 MeV
2.500 MeV
2.750 MeV
3.000 MeV
3.500 MeV
4.000 MeV
4.500 MeV
5.000 MeV
5.500 MeV
6.000 MeV
Probability/MeV
Secondary Energy (MeV)
24
94-Pu-237

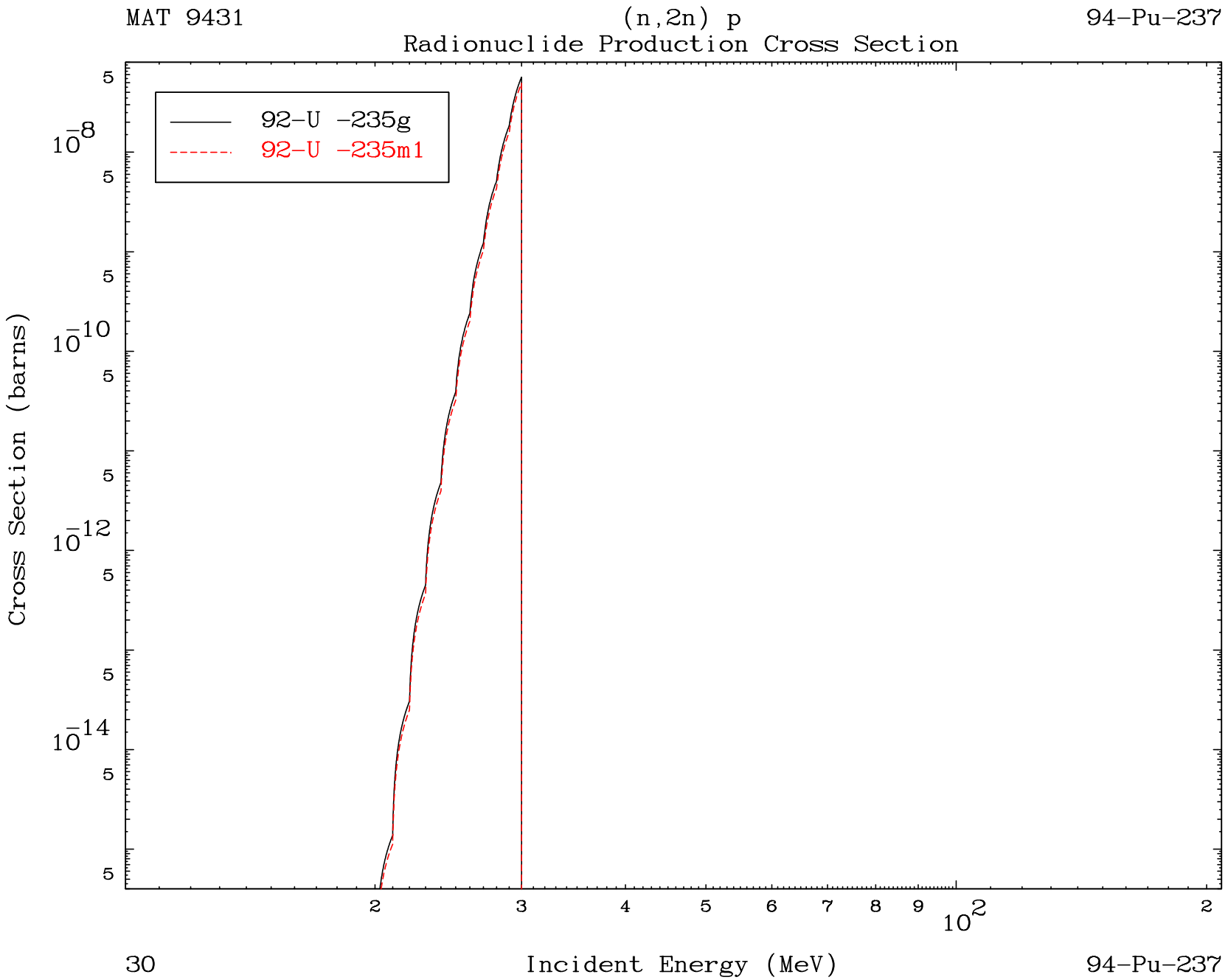

MAT 9431
Fission
Energy Distributions
94-Pu-237
6.500 MeV
7.000 MeV
7.500 MeV
8.000 MeV
8.500 MeV
9.000 MeV
9.500 MeV
10.00 MeV
10.50 MeV
11.00 MeV
11.50 MeV
Probability/MeV
Secondary Energy (MeV)
25
94-Pu-237

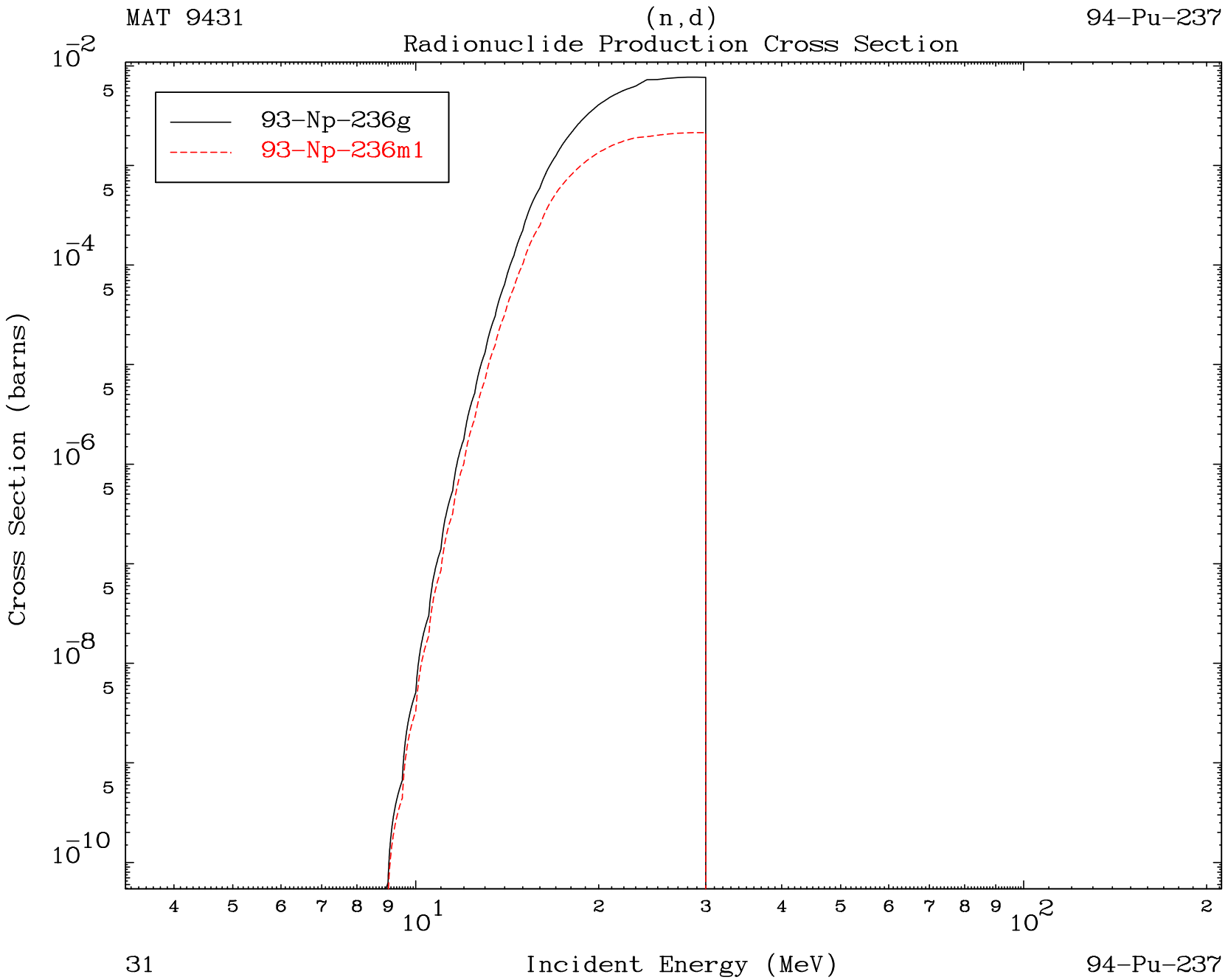

MAT 9431
Fission
Energy Distributions
94-Pu-237
12.00 MeV
12.50 MeV
13.00 MeV
13.50 MeV
14.00 MeV
14.50 MeV
15.00 MeV
15.50 MeV
16.00 MeV
16.50 MeV
17.00 MeV
Probability/MeV
Secondary Energy (MeV)
26
94-Pu-237

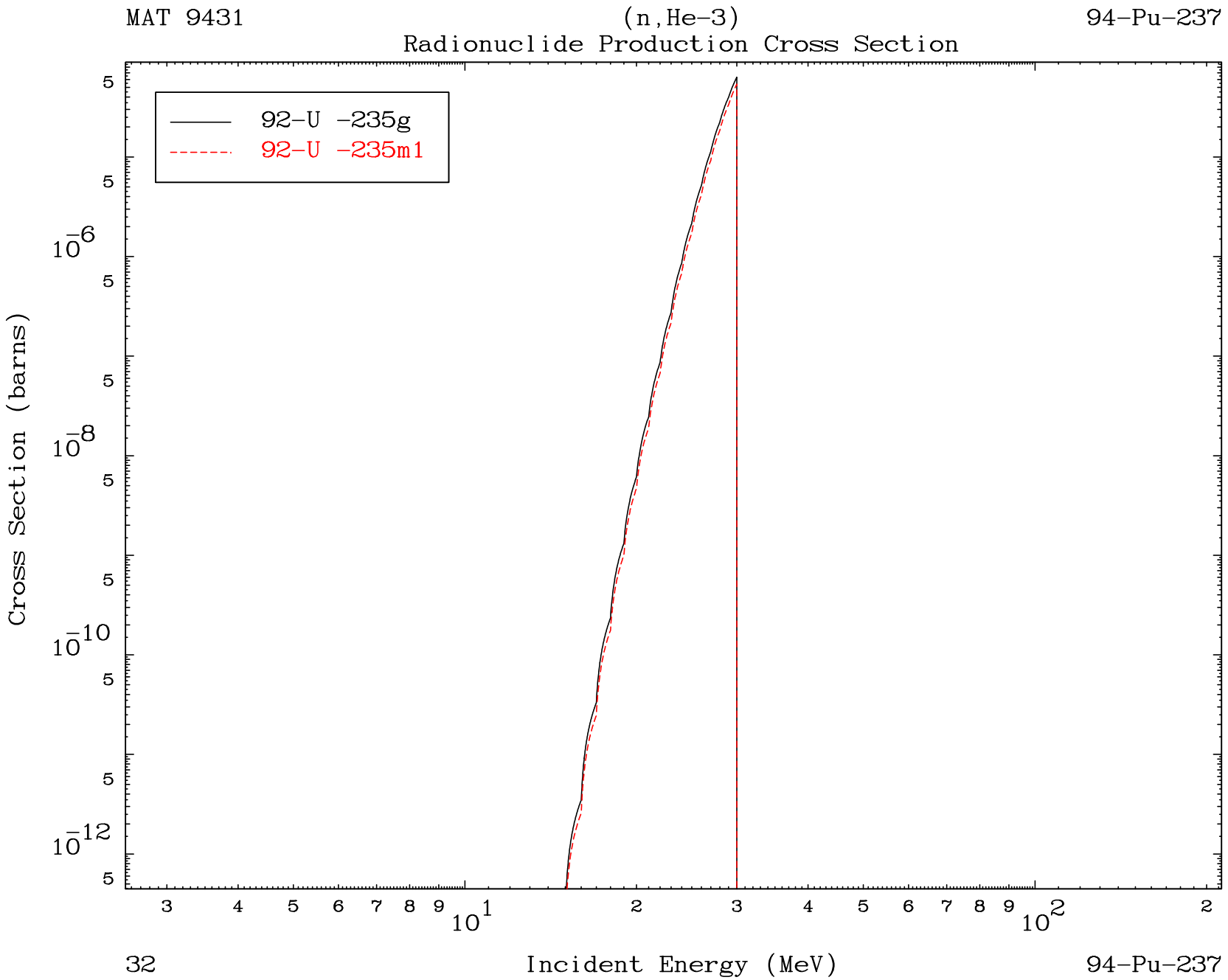

MAT 9431
Fission
Energy Distributions
94-Pu-237
17.50 MeV
18.00 MeV
18.50 MeV
19.00 MeV
19.50 MeV
20.00 MeV
200.0 MeV
Probability/MeV
Secondary Energy (MeV)
27
94-Pu-237

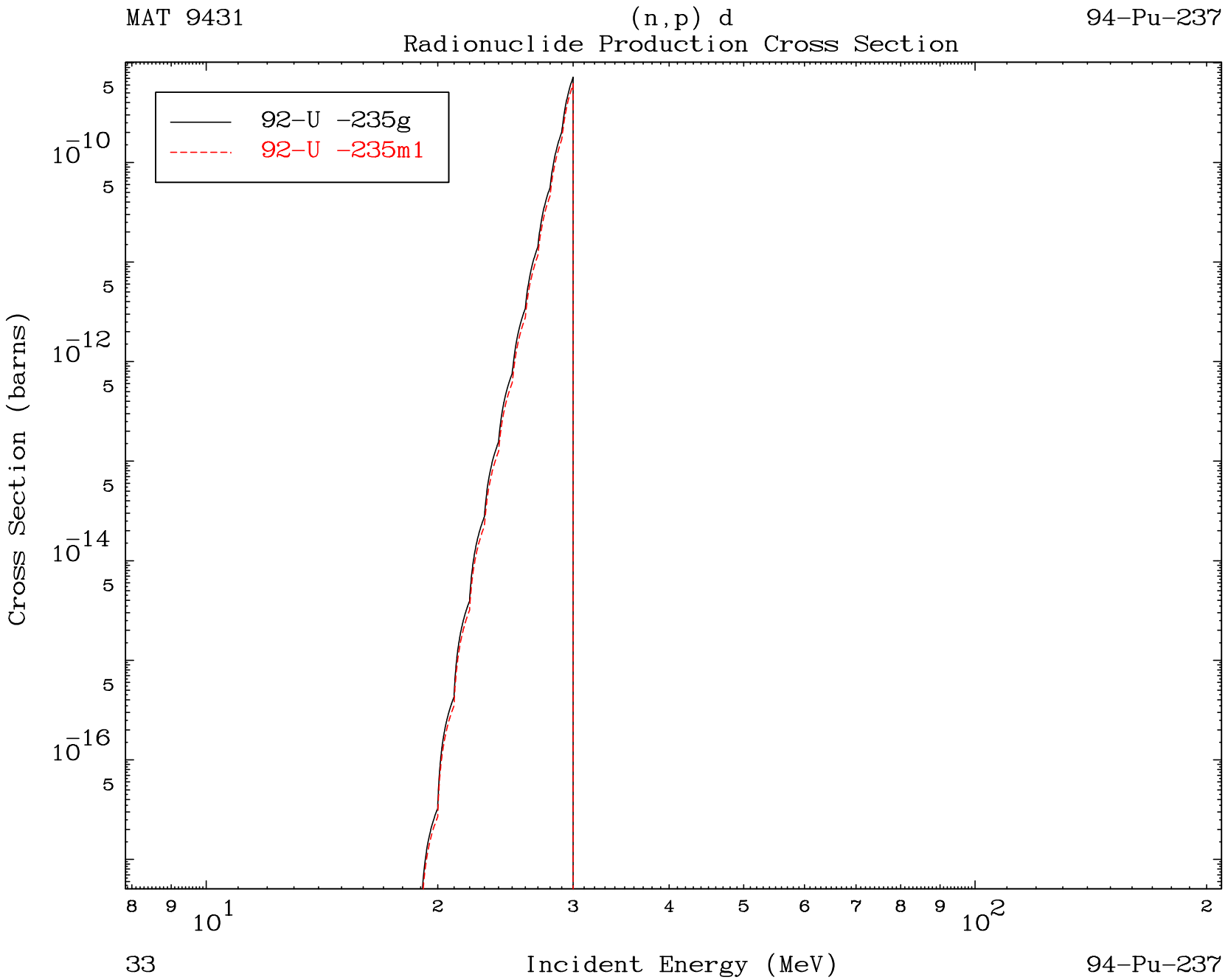

MAT 9431
Inelastic
94-Pu-237
Radionuclide Production Cross Section
94-Pu-237g
94-Pu-237m3
Cross Section (barns)
Incident Energy (MeV)
28
94-Pu-237


MAT 9431
(n,n') p
94-Pu-237
Radionuclide Production Cross Section
93-Np-236g
93-Np-236m1
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
29
Incident Energy (MeV)
94-Pu-237


MAT 9431
(n,2n) p
94-Pu-237
Radionuclide Production Cross Section
92-U -235g
92-U -235m1
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
2
3
4
5
6
7
8
9
10^2
2
30
Incident Energy (MeV)
94-Pu-237


MAT 9431
(n,d)
94-Pu-237
Radionuclide Production Cross Section
93-Np-236g
93-Np-236m1
Cross Section (barns)
Incident Energy (MeV)
31
94-Pu-237


MAT 9431
(n,He-3)
94-Pu-237
Radionuclide Production Cross Section
92-U -235g
92-U -235m1
Cross Section (barns)
Incident Energy (MeV)
32
94-Pu-237


MAT 9431
(n,p) d
94-Pu-237
Radionuclide Production Cross Section
92-U -235g
92-U -235m1
Cross Section (barns)
Incident Energy (MeV)
33
94-Pu-237