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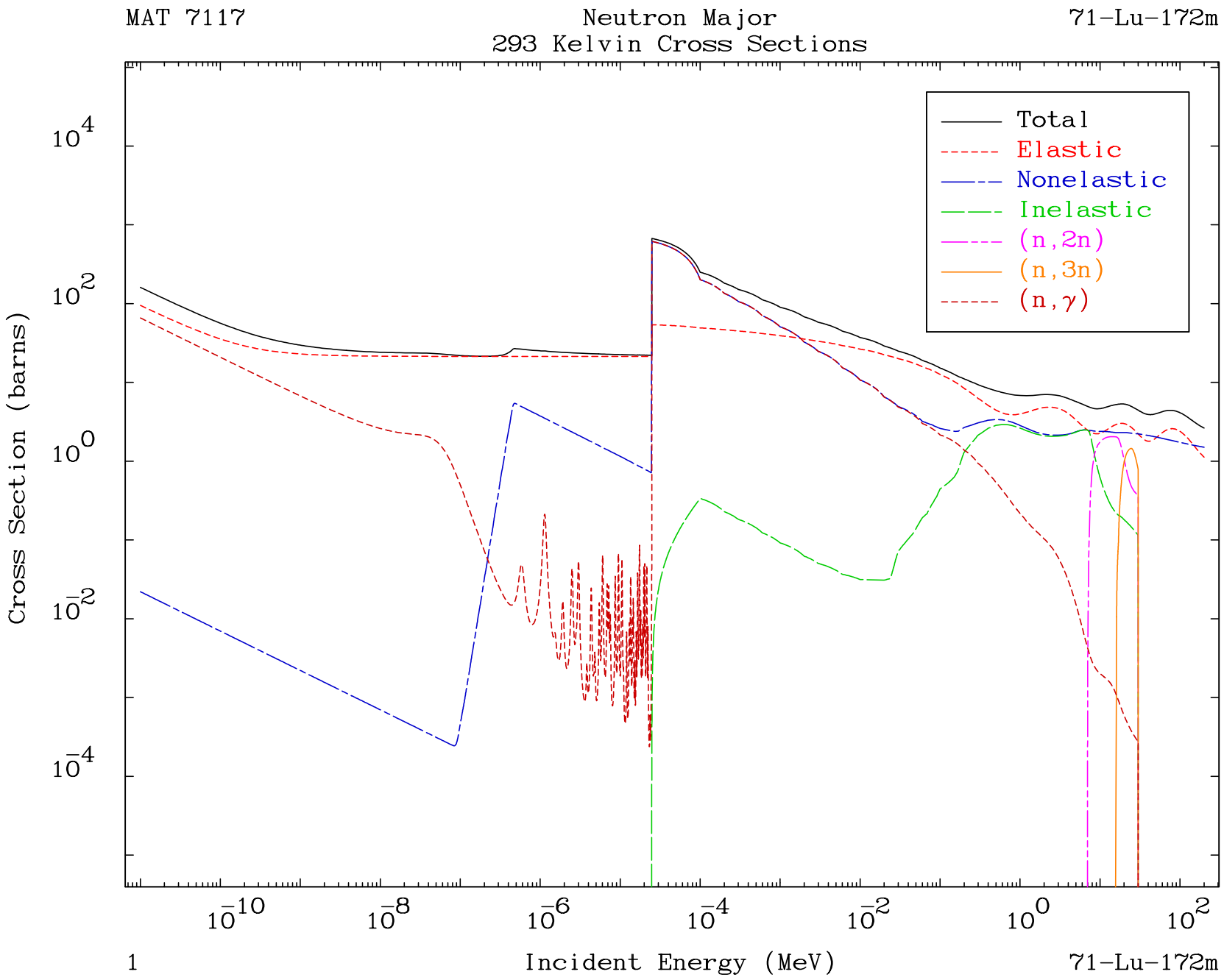
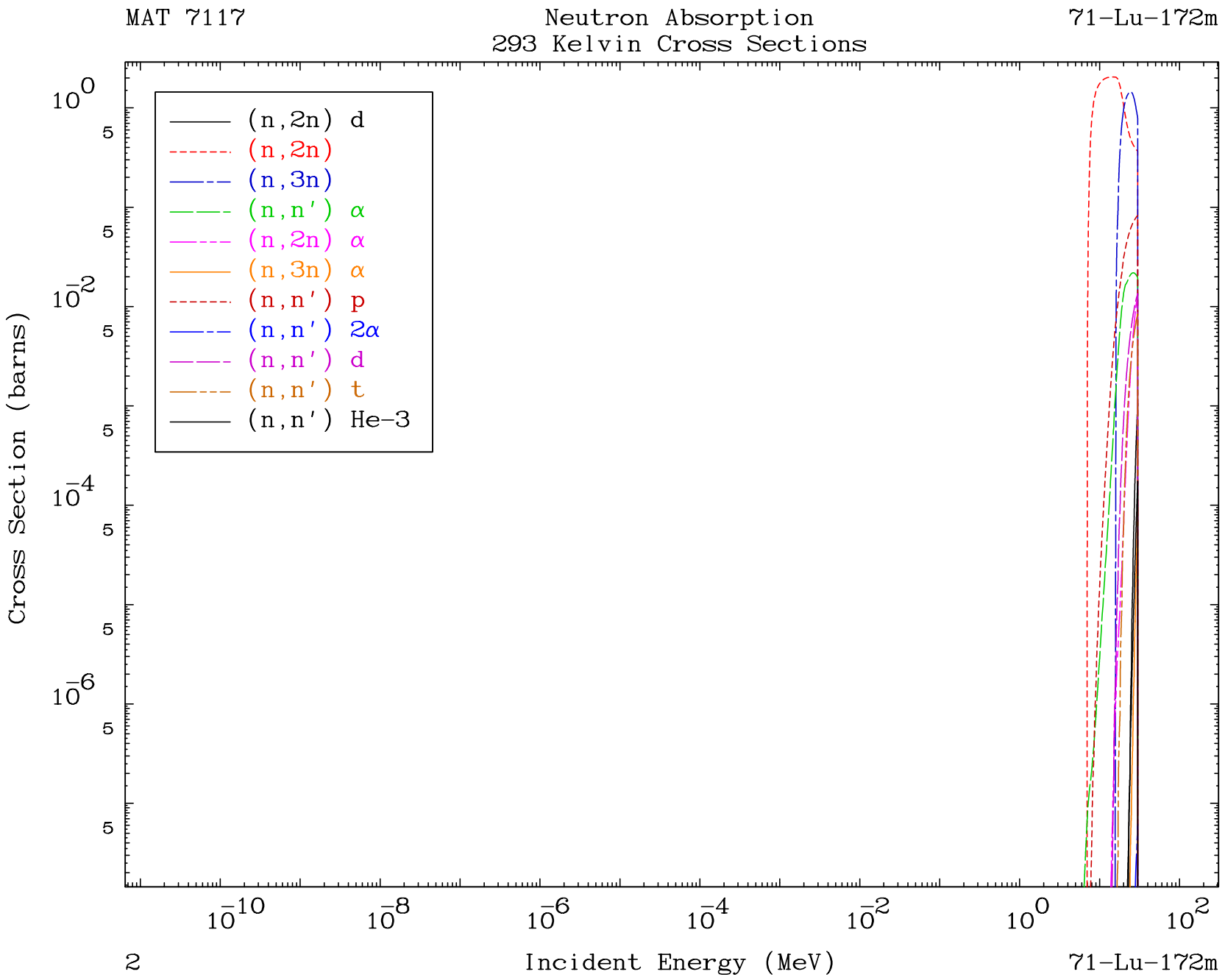
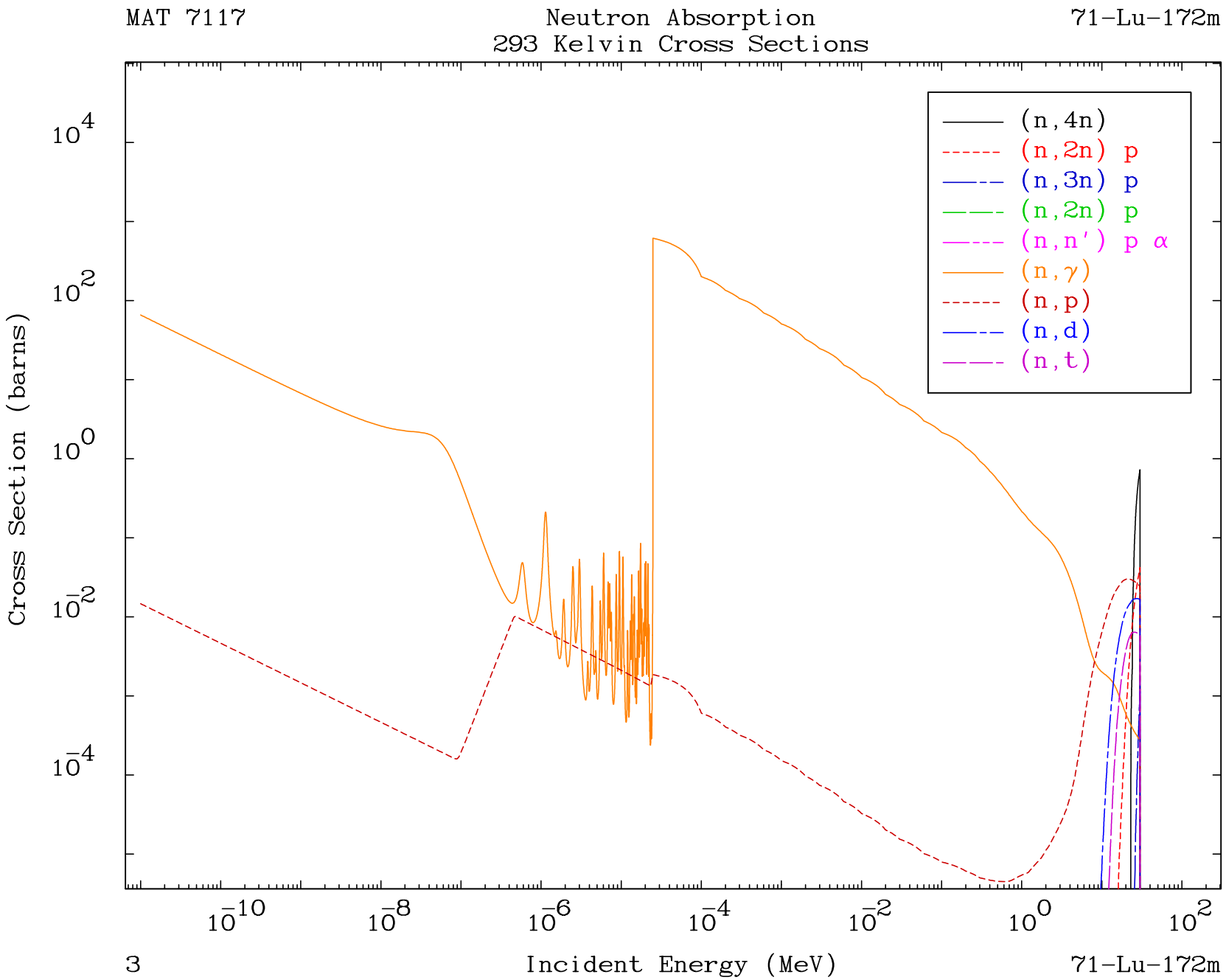
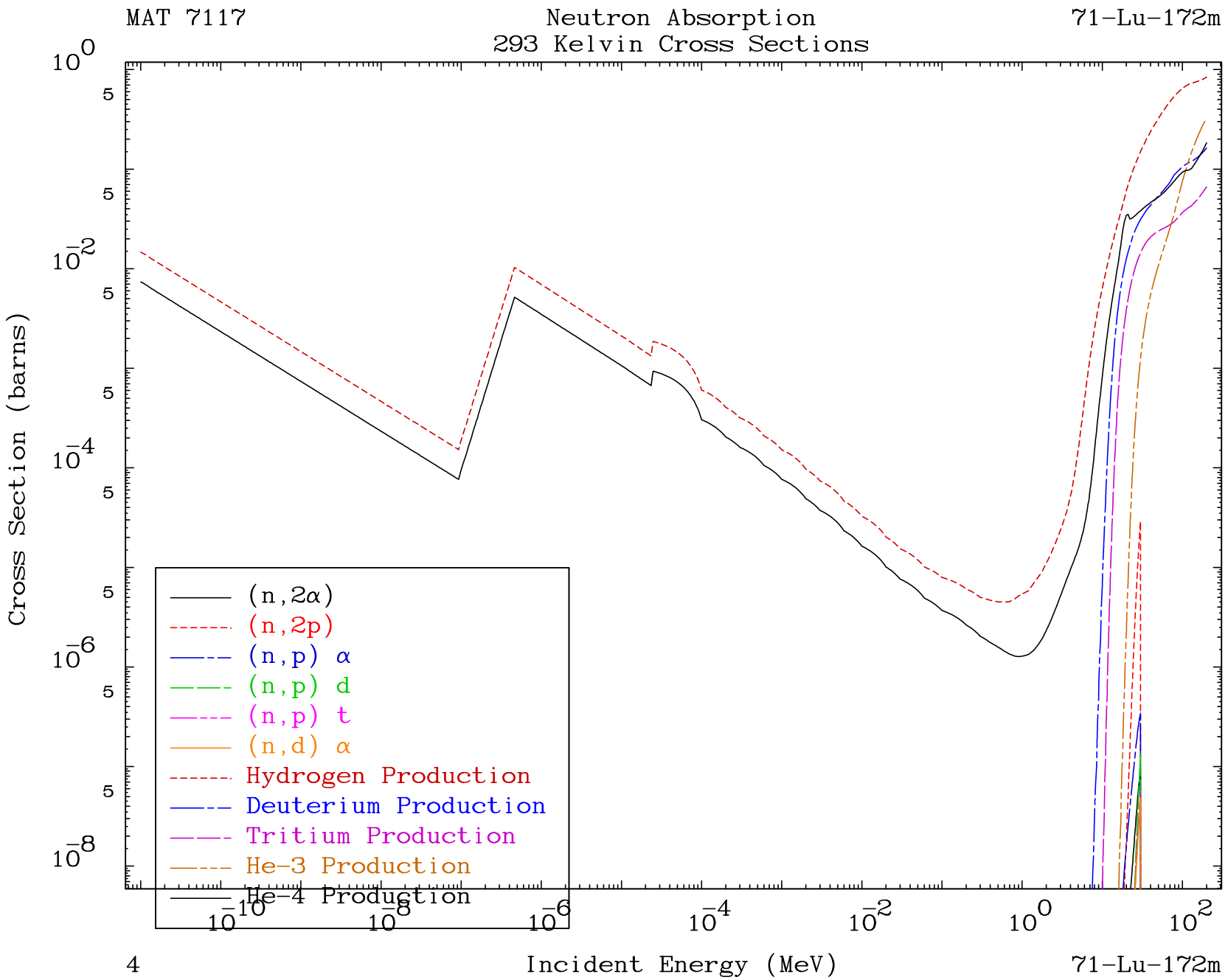
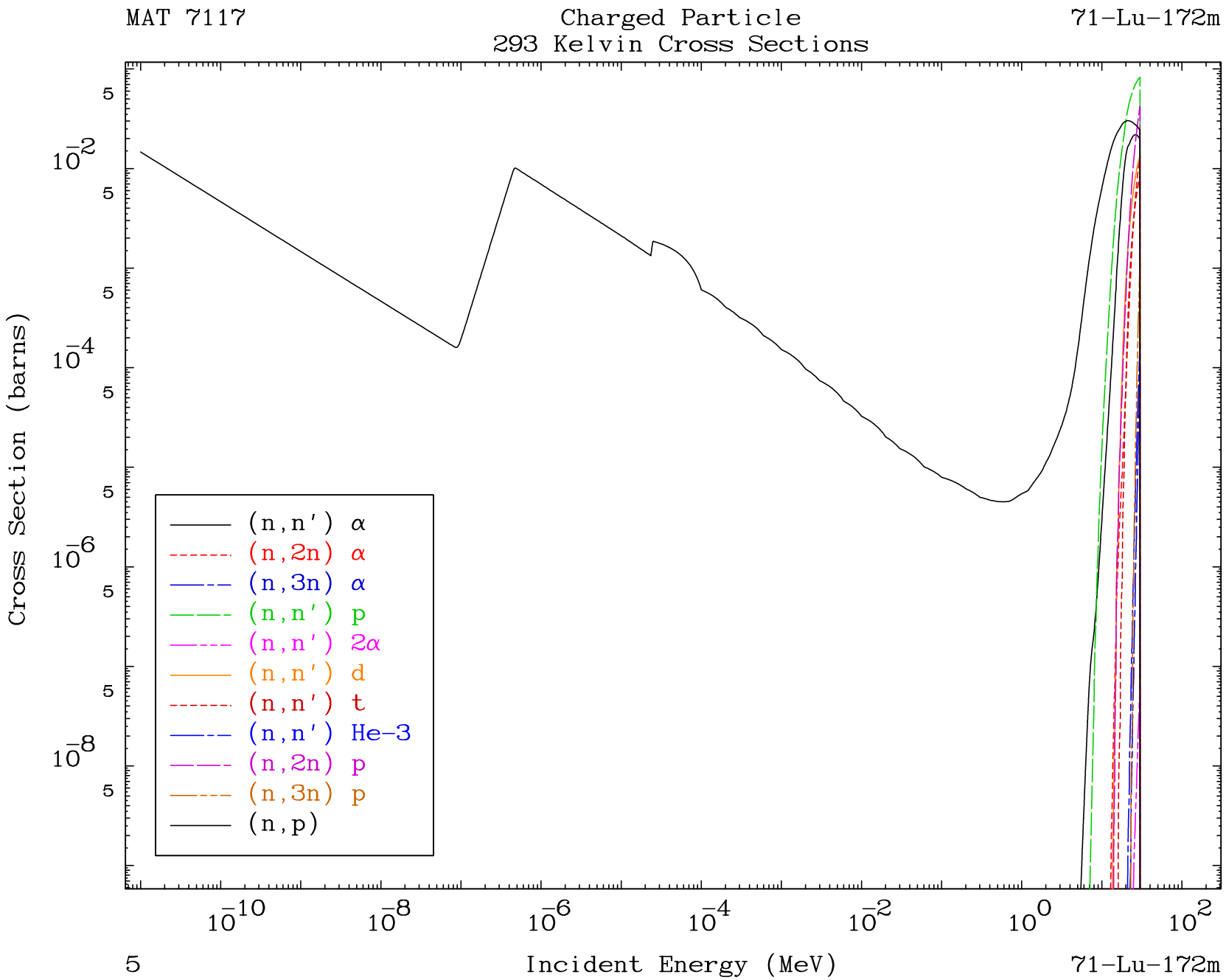
Press Mouse Button to Start

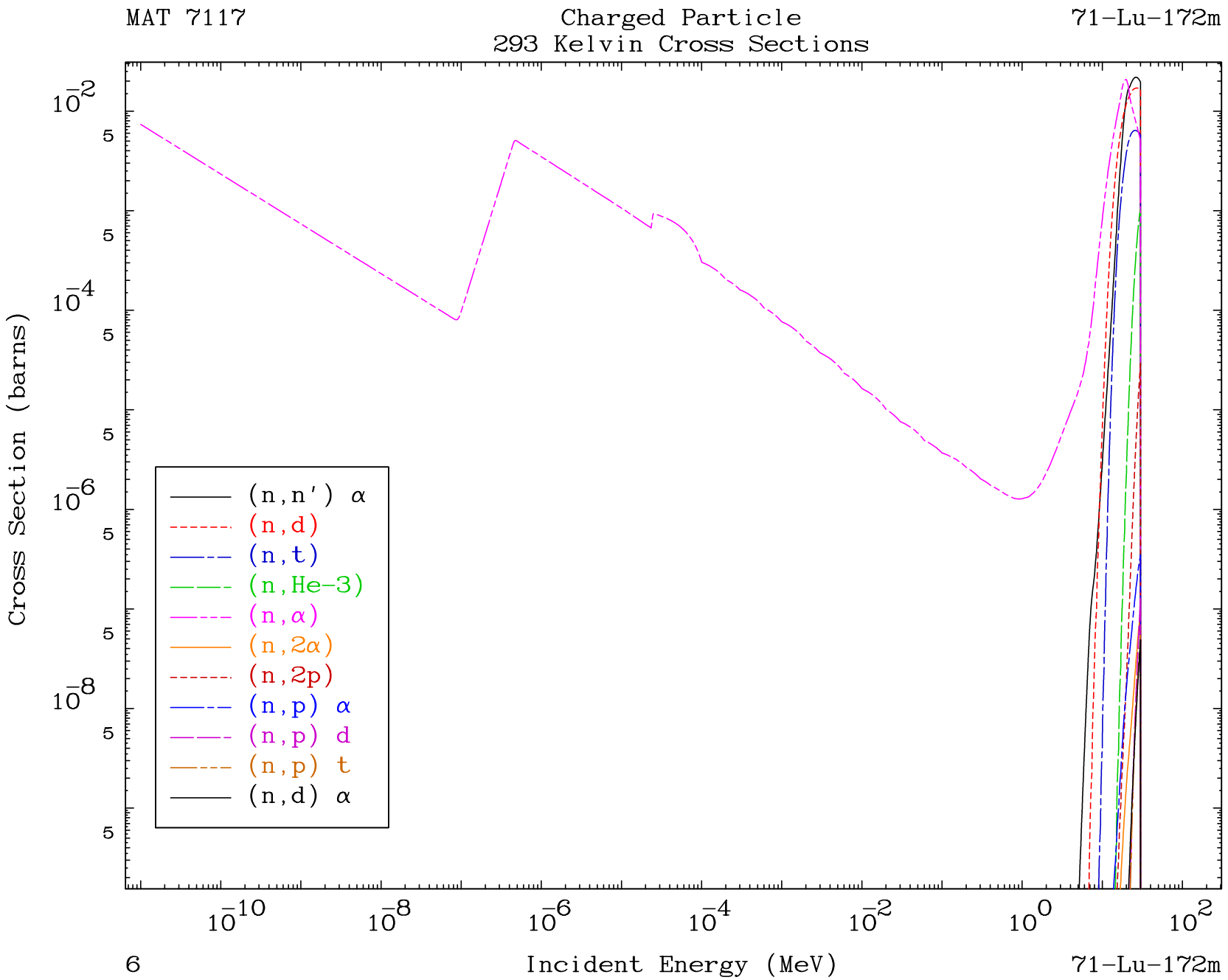

MAT 7117
Neutron Major
293 Kelvin Cross Sections
71-Lu-172m
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
1
71-Lu-172m

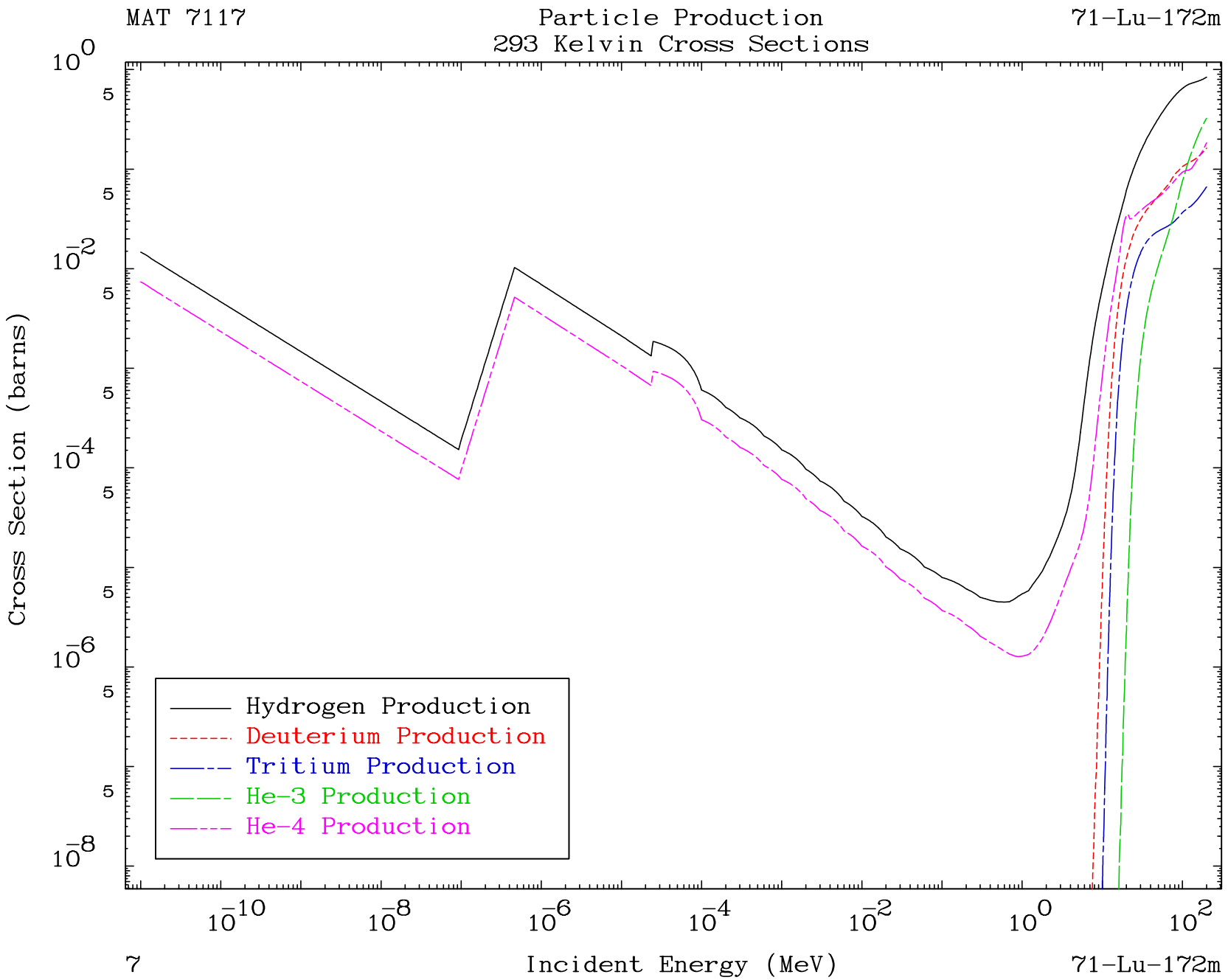

MAT 7117
Neutron Absorption
293 Kelvin Cross Sections
71-Lu-172m
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
Cross Section (barns)
Incident Energy (MeV)
71-Lu-172m
2

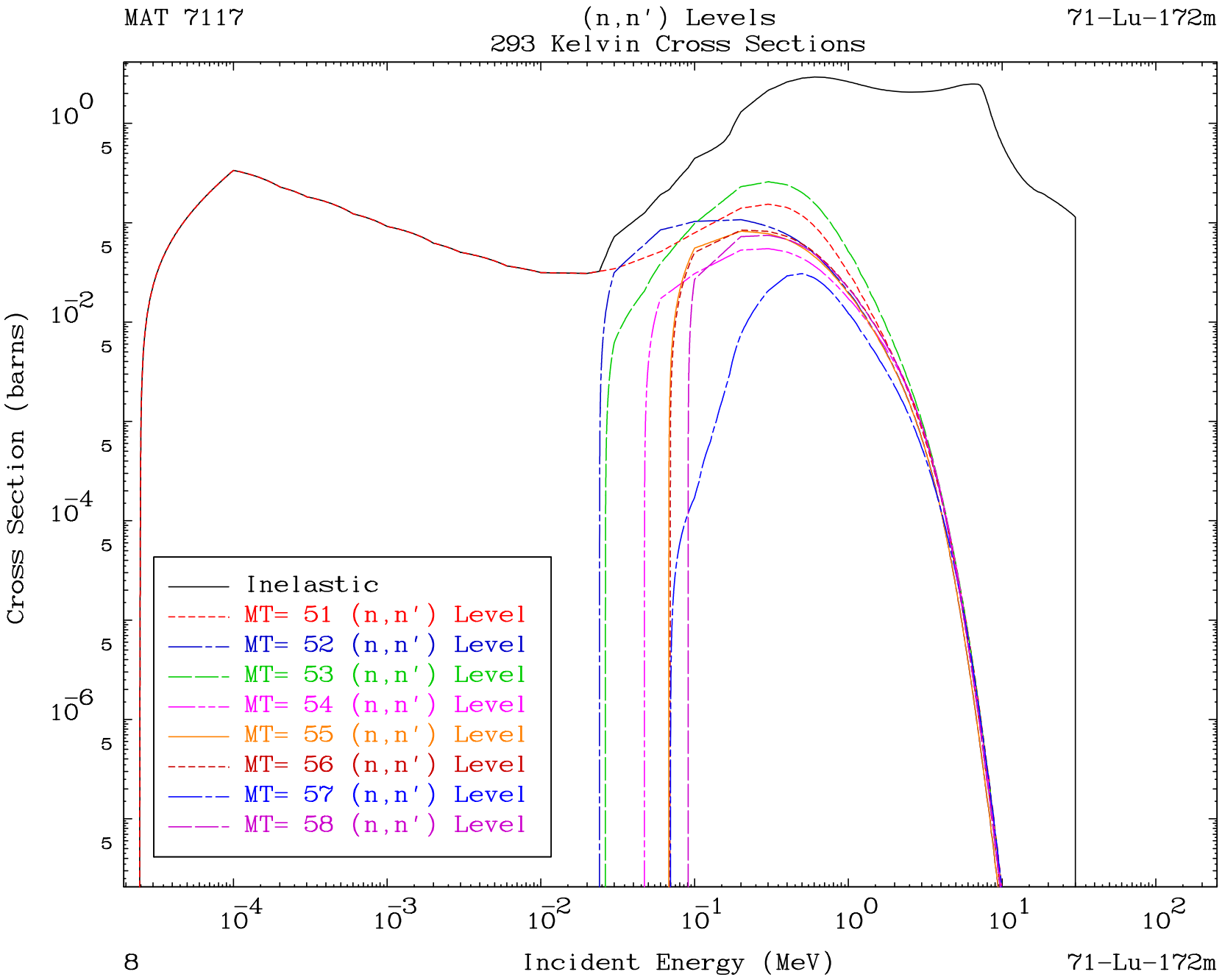

MAT 7117
Neutron Absorption
293 Kelvin Cross Sections
71-Lu-172m
(n,4n)
(n,2n) p
(n,3n) p
(n,2n) p
(n,n') p α
(n,γ)
(n,p)
(n,d)
(n,t)
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
3
71-Lu-172m

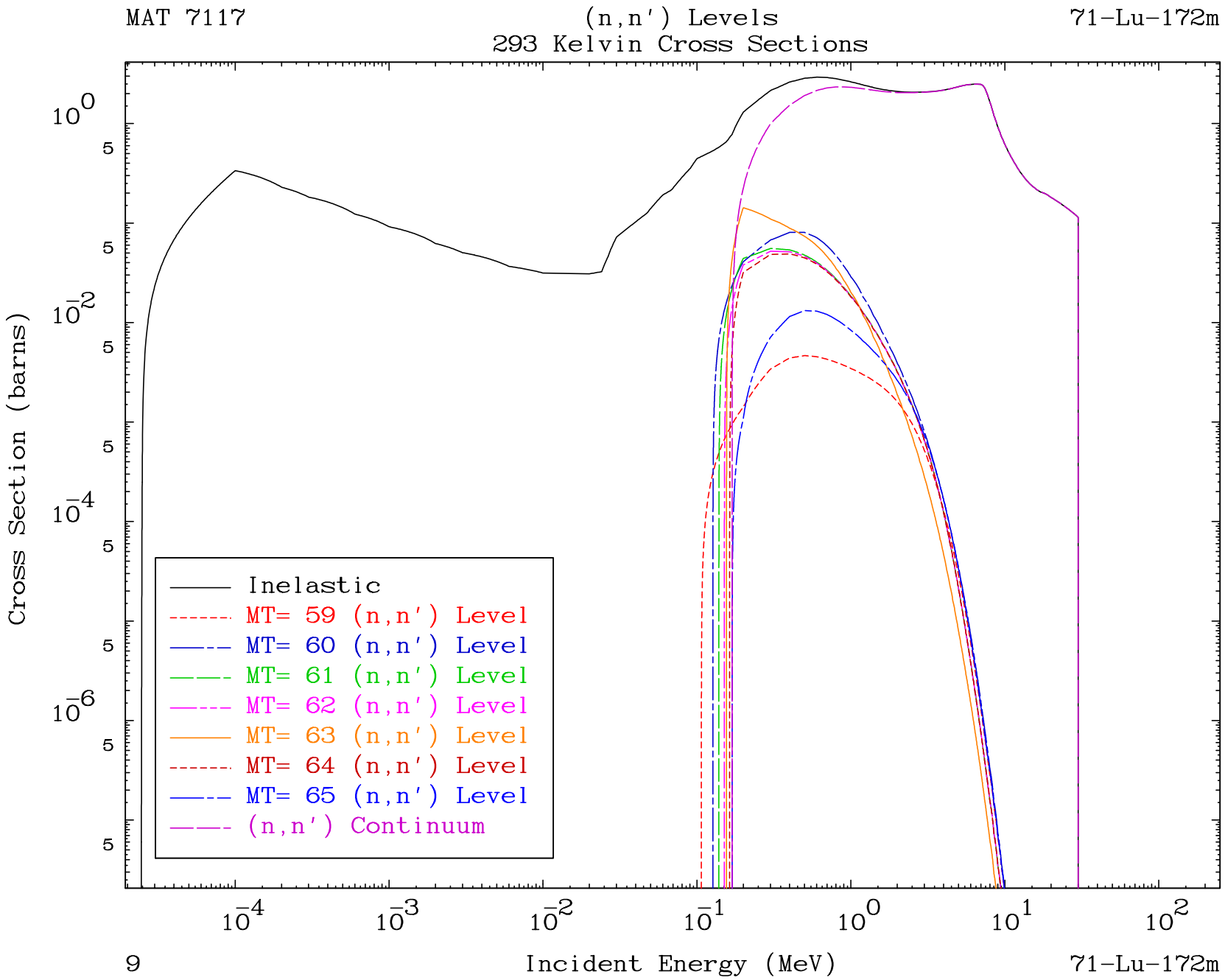

MAT 7117
Neutron Absorption
293 Kelvin Cross Sections
71-Lu-172m
Cross Section (barns)
Incident Energy (MeV)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production

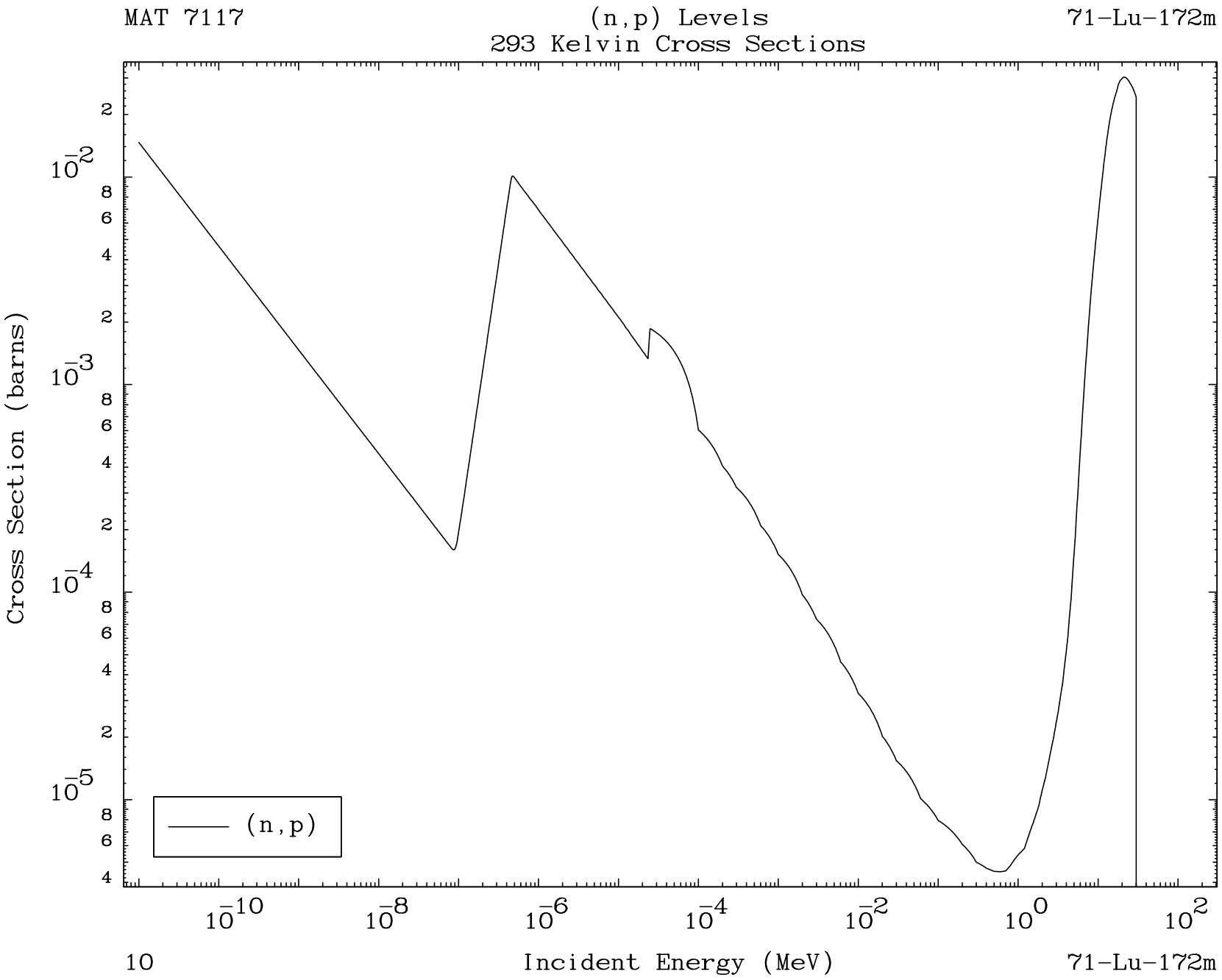

MAT 7117
Charged Particle
293 Kelvin Cross Sections
71-Lu-172m
Cross Section (barns)
Incident Energy (MeV)
71-Lu-172m
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)

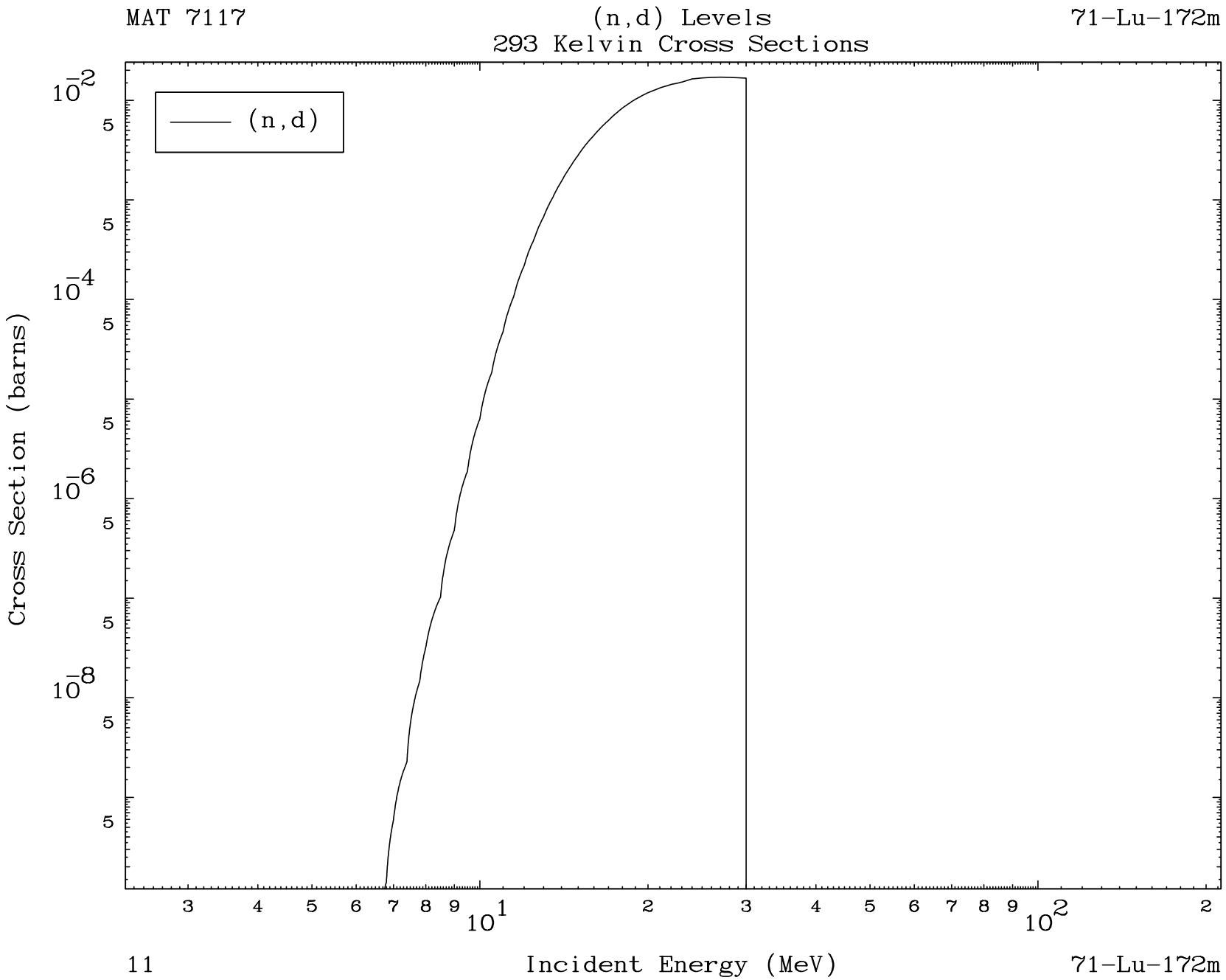

MAT 7117
Charged Particle
293 Kelvin Cross Sections
71-Lu-172m
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
6
71-Lu-172m

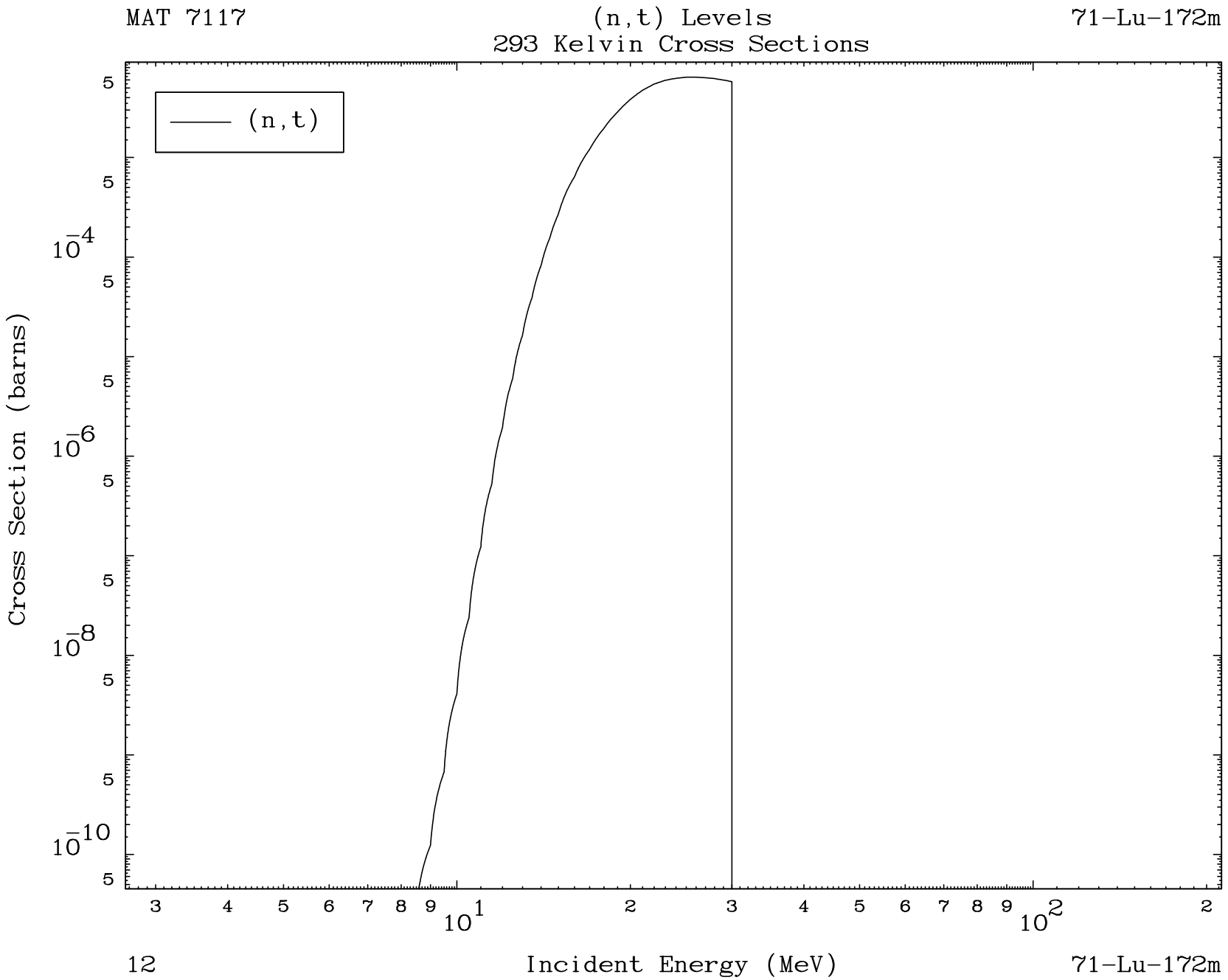

MAT 7117
Particle Production
293 Kelvin Cross Sections
71-Lu-172m
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
7
71-Lu-172m

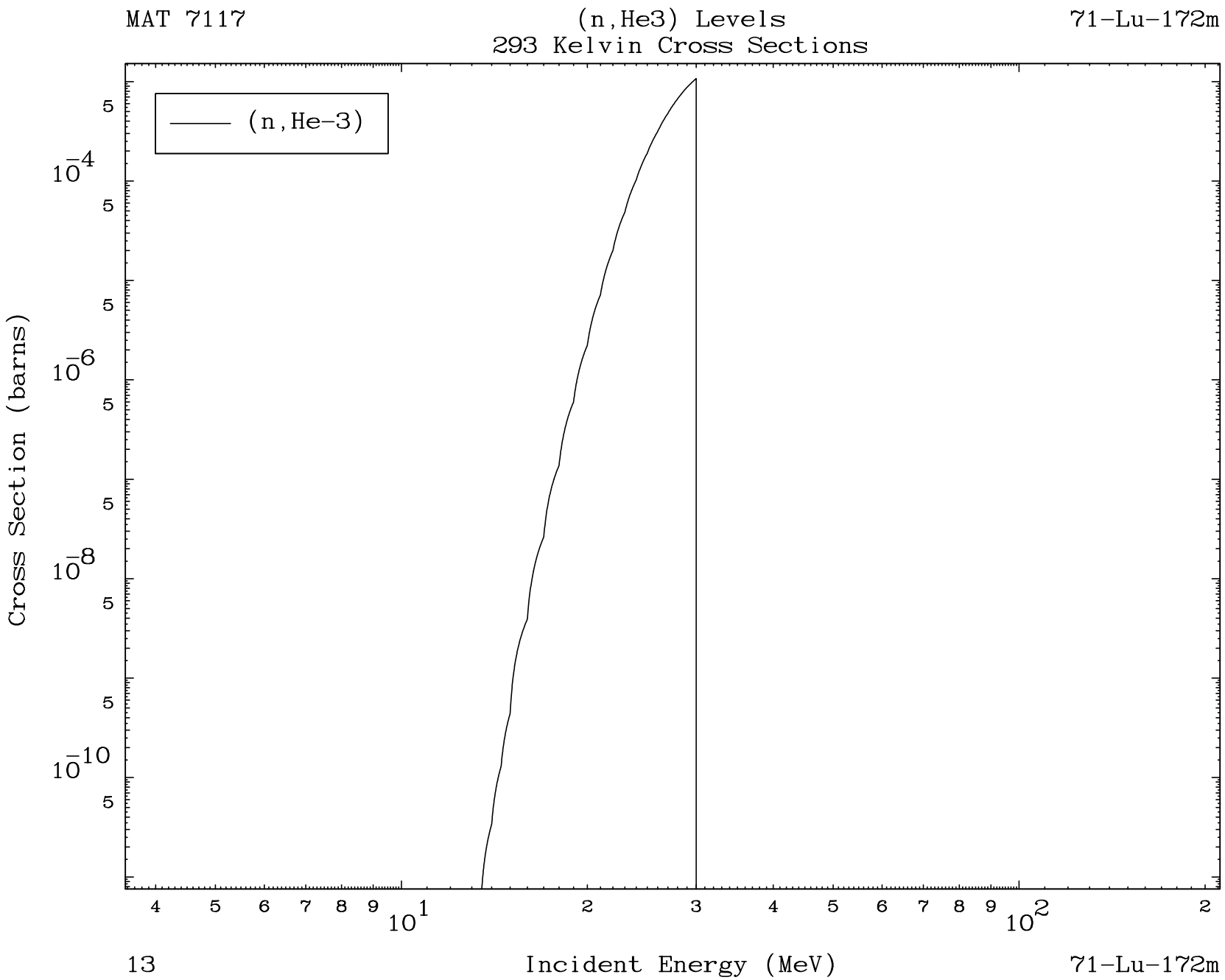

MAT 7117
(n,n') Levels
293 Kelvin Cross Sections
71-Lu-172m
Cross Section (barns)
Incident Energy (MeV)
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
8
71-Lu-172m

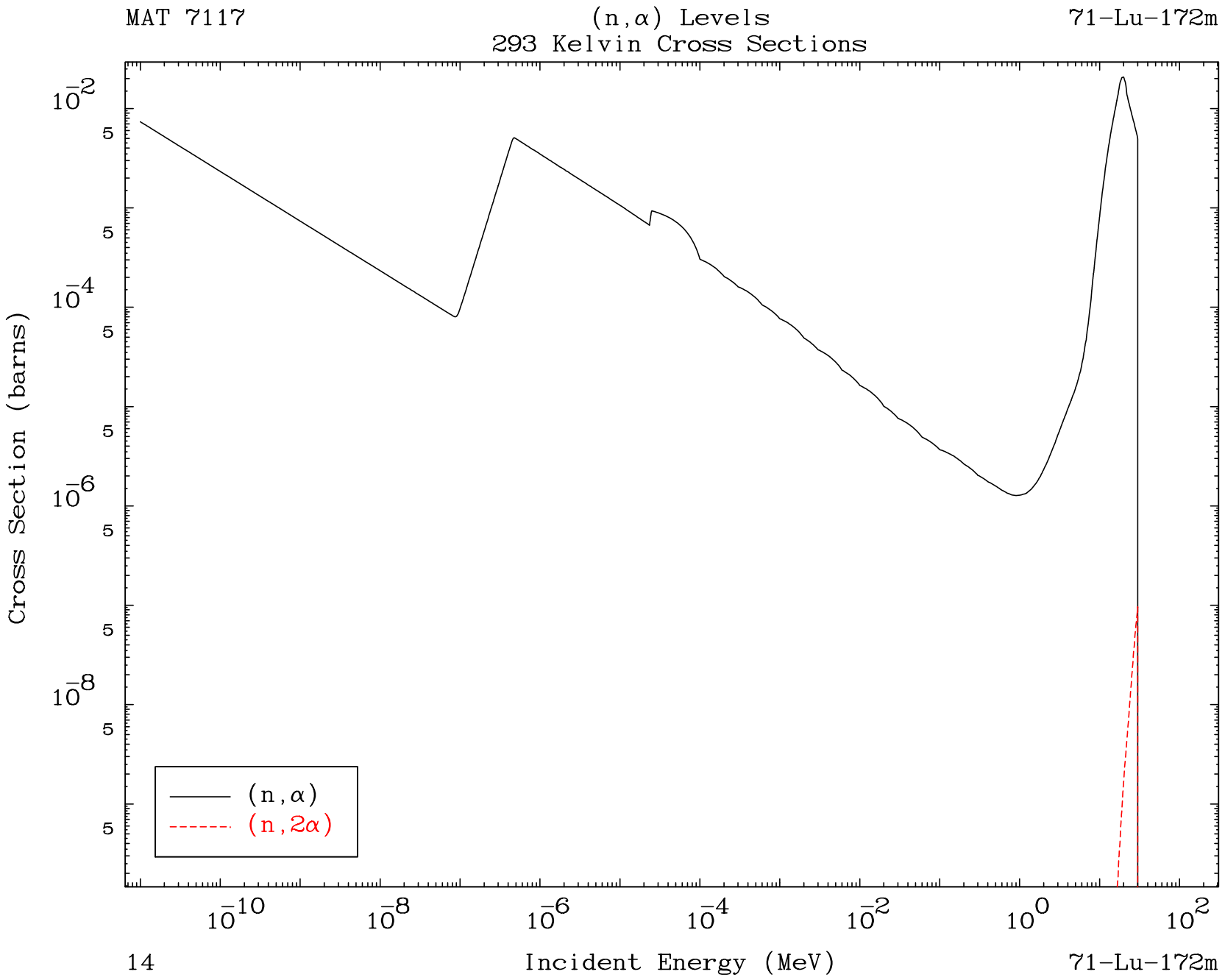

MAT 7117
(n,n') Levels
293 Kelvin Cross Sections
71-Lu-172m
Cross Section (barns)
Incident Energy (MeV)
Inelastic
MT= 59 (n,n') Level
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
(n,n') Continuum
9
71-Lu-172m

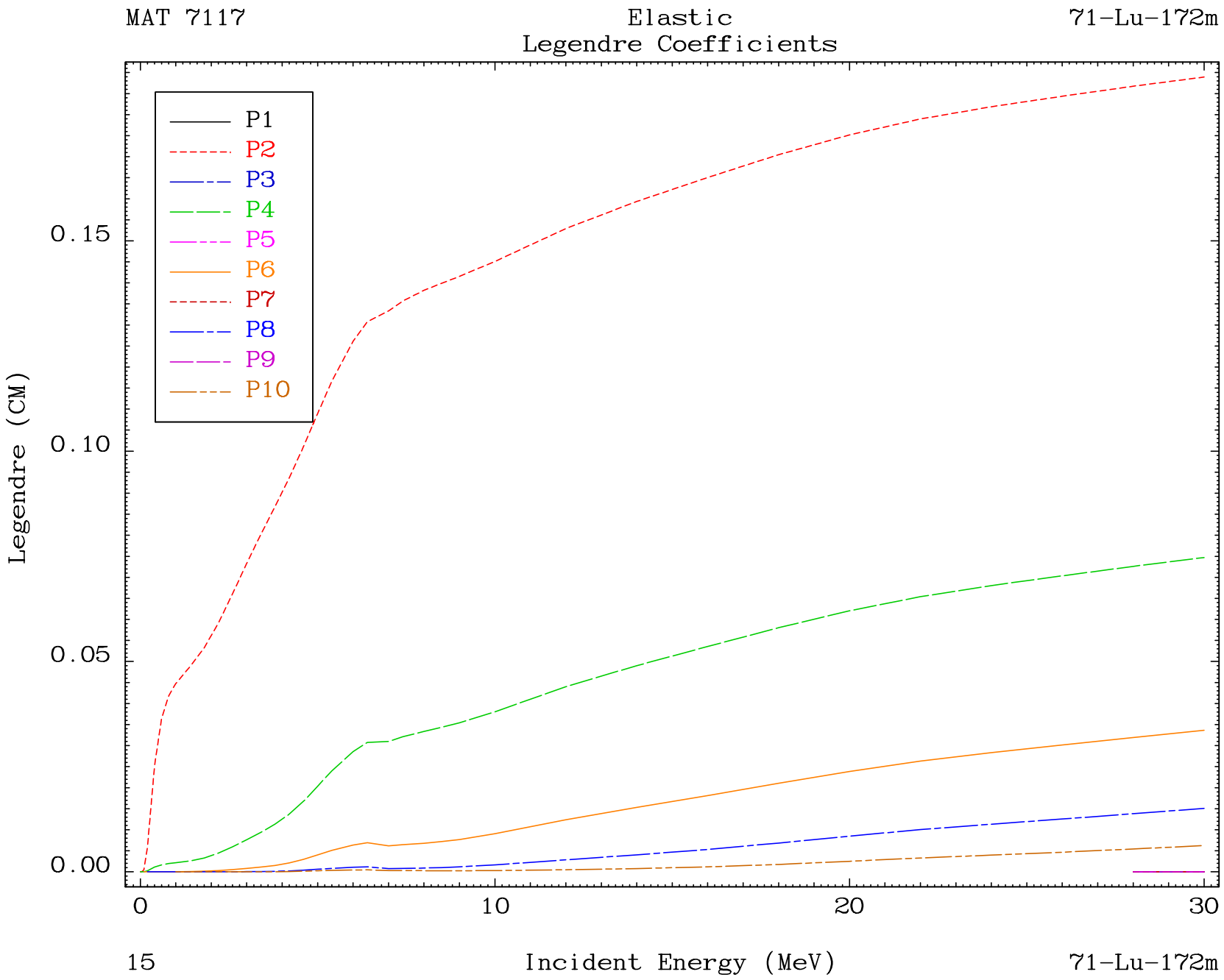

MAT 7117
(n,p) Levels
71-Lu-172m
293 Kelvin Cross Sections
Cross Section (barns)
(n,p)
Incident Energy (MeV)
71-Lu-172m

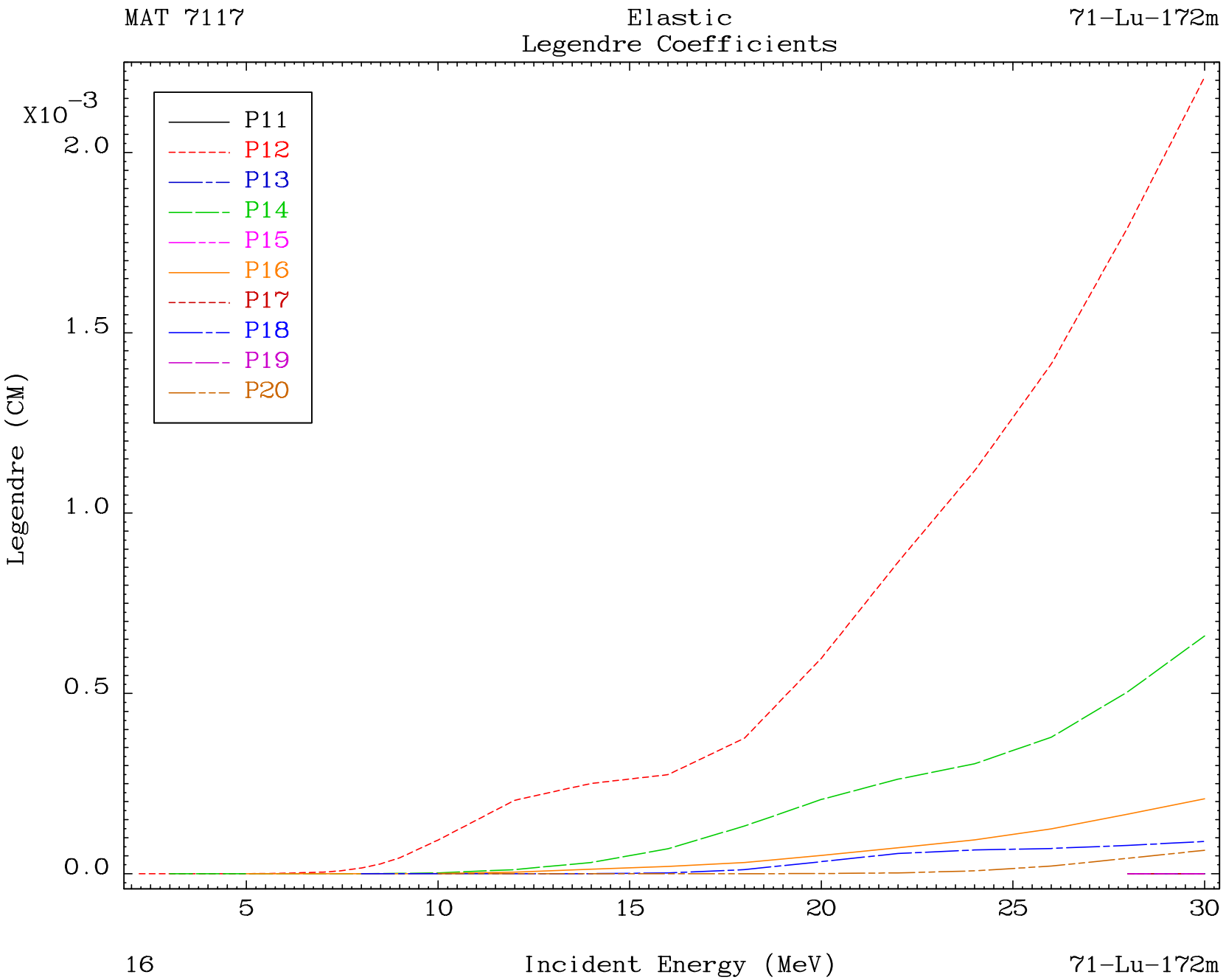

MAT 7117
(n,d) Levels
293 Kelvin Cross Sections
71-Lu-172m
(n,d)
Cross Section (barns)
Incident Energy (MeV)
11
71-Lu-172m

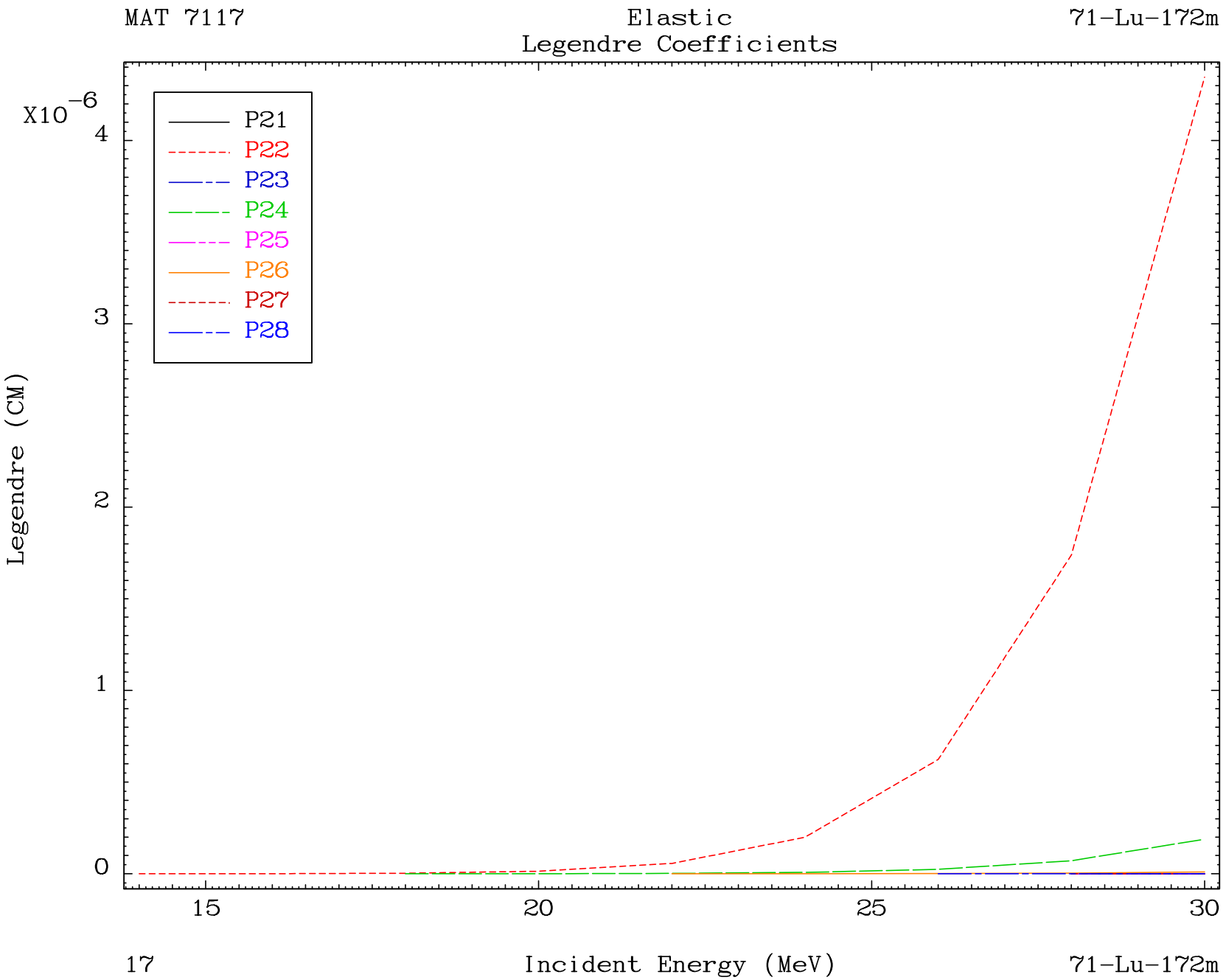

MAT 7117
(n,t) Levels
71-Lu-172m
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
12
71-Lu-172m

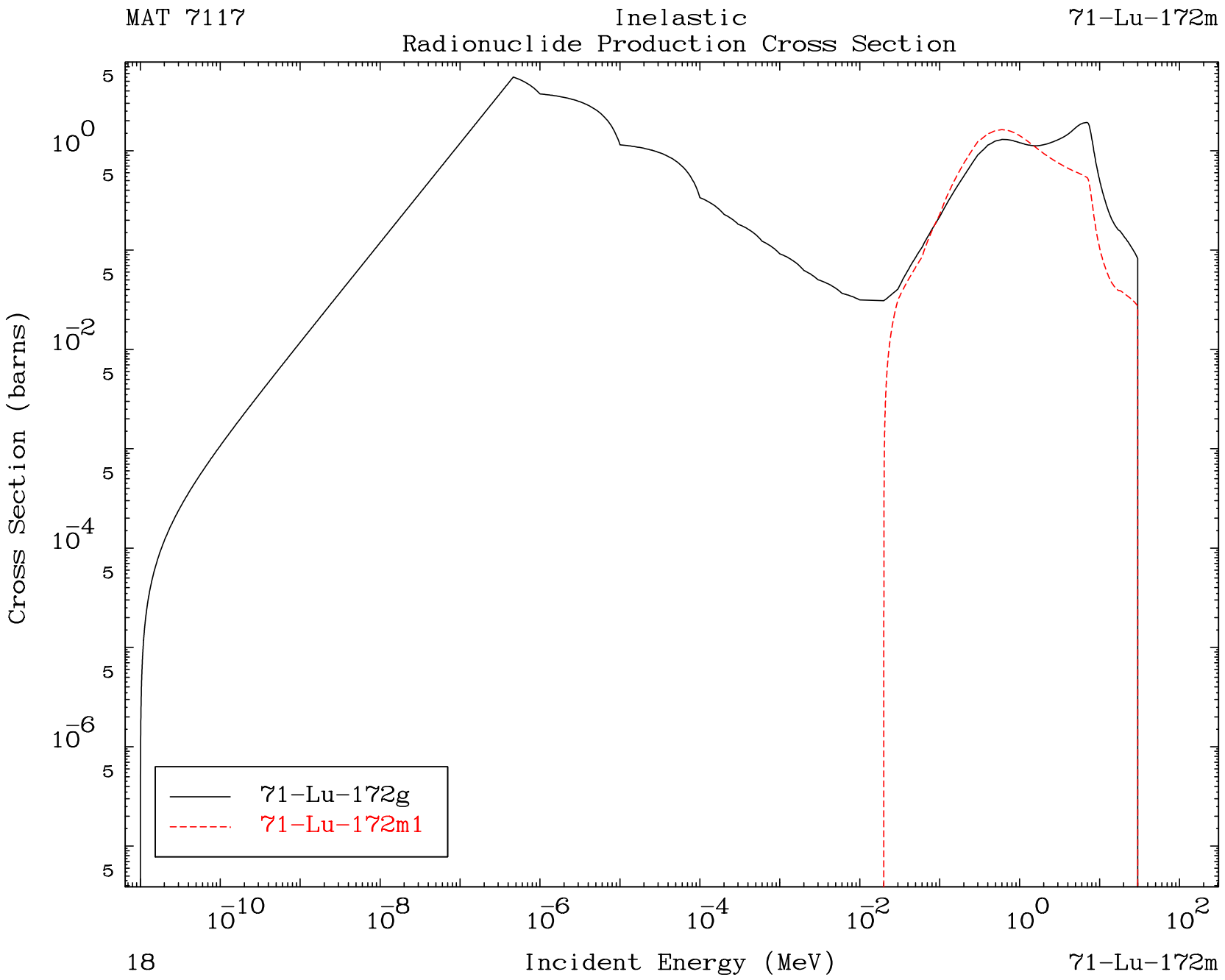

MAT 7117
(n,He3) Levels
71-Lu-172m
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10-4
10-6
10-8
10-10
4 5 6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
13
Incident Energy (MeV)
71-Lu-172m

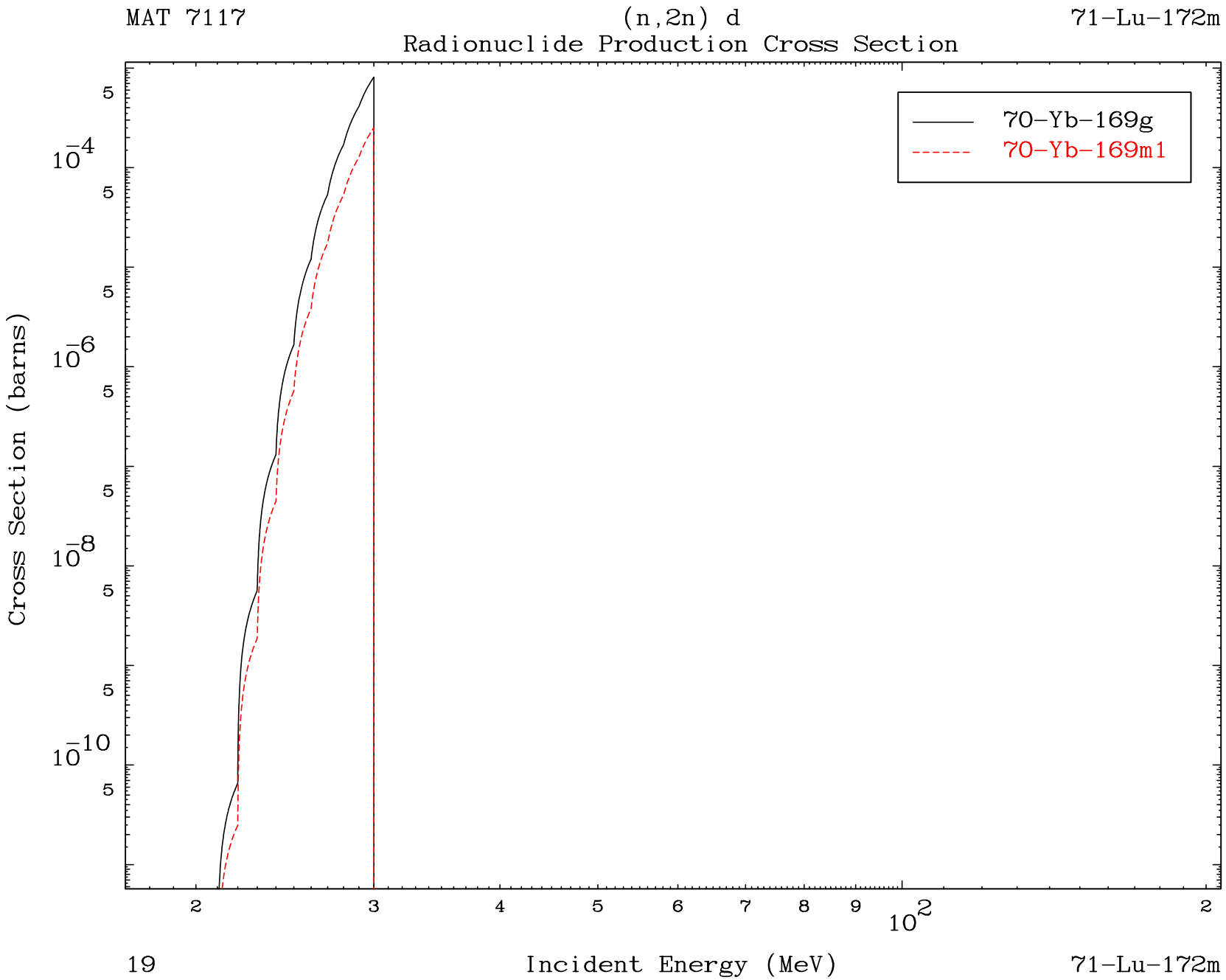

MAT 7117
(n,α) Levels
71-Lu-172m
293 Kelvin Cross Sections
Cross Section (barns)
10-2
5
10-4
5
10-6
5
10-8
5
(n,α)
(n,2α)
10-10
10-8
10-6
10-4
10-2
100
102
14
Incident Energy (MeV)
71-Lu-172m

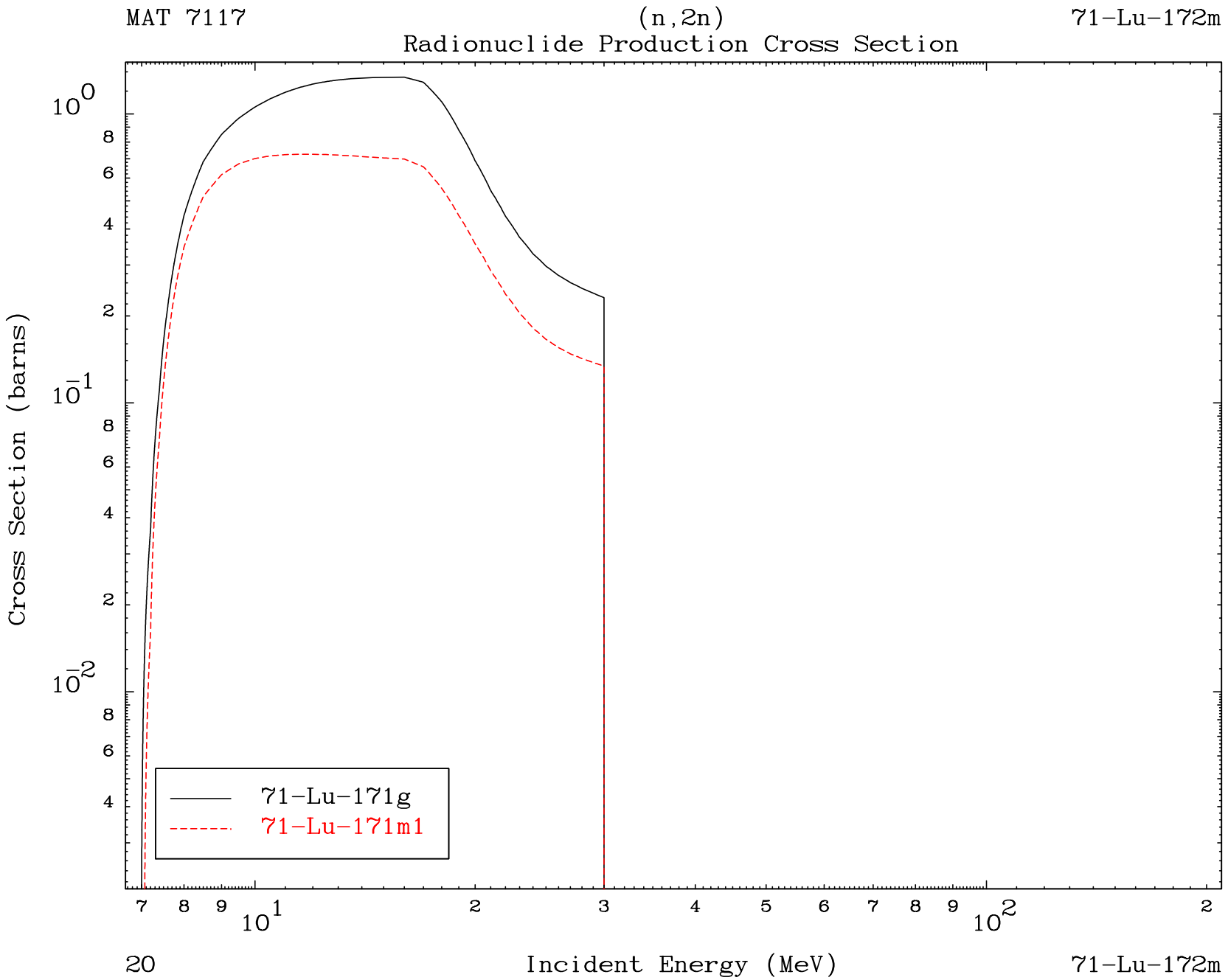

MAT 7117
Elastic
Legendre Coefficients
71-Lu-172m
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
Legendre (CM)
0.15
0.10
0.05
0.00
0
10
20
30
15
Incident Energy (MeV)
71-Lu-172m

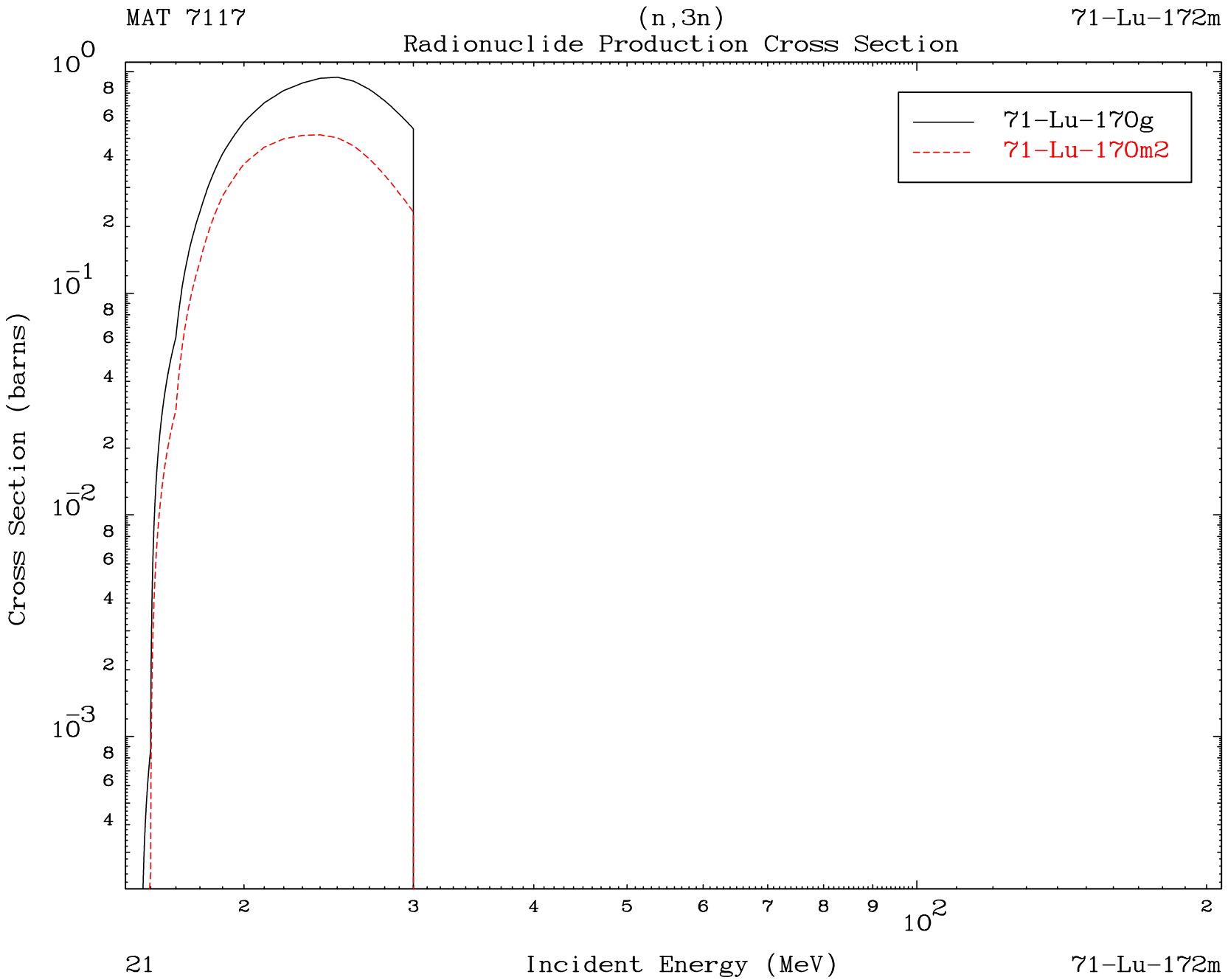

MAT 7117
Elastic
Legendre Coefficients
71-Lu-172m
X10 -3
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
5
10
15
20
25
30
16
Incident Energy (MeV)
71-Lu-172m

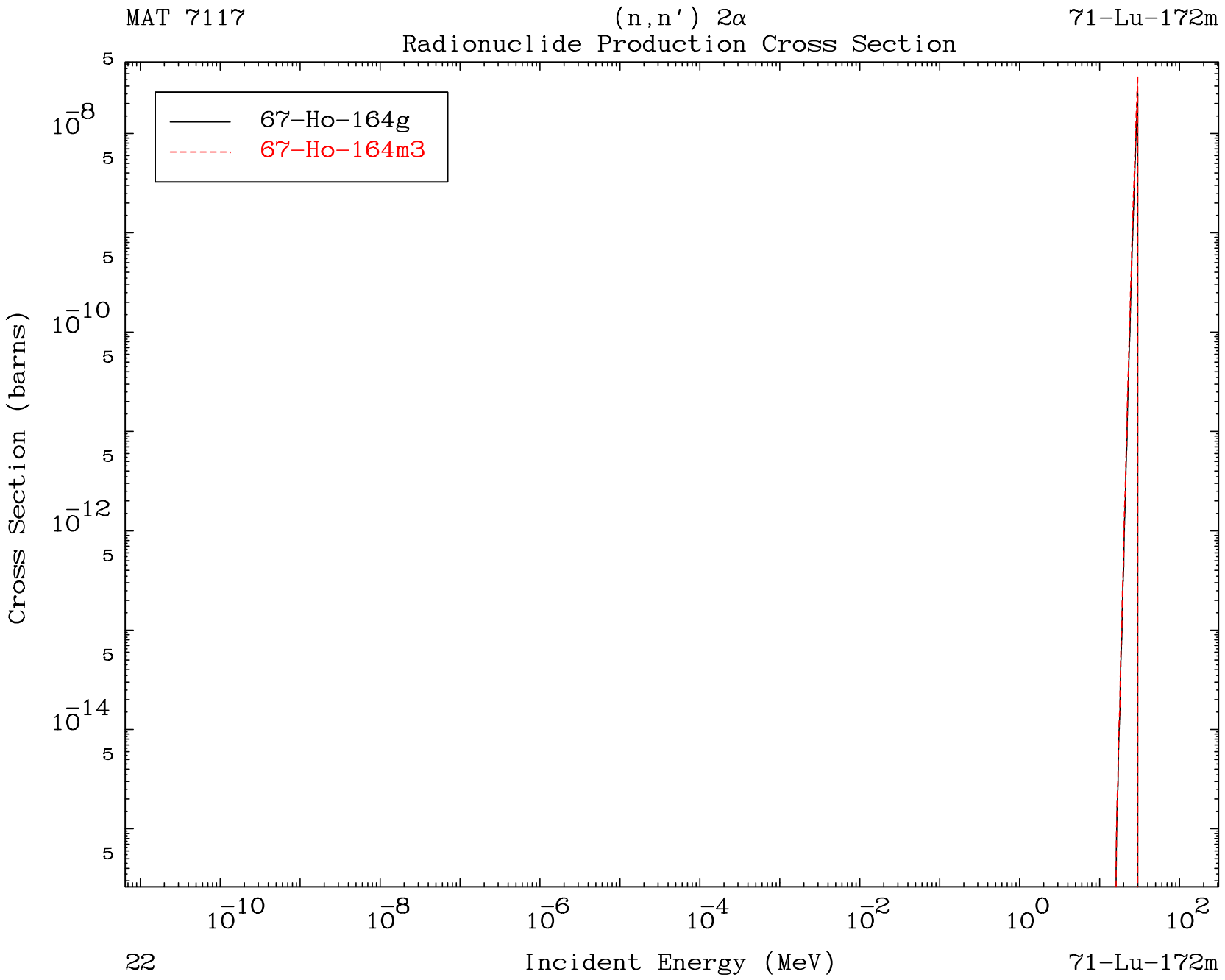

MAT 7117
Elastic
Legendre Coefficients
71-Lu-172m
X10 −6
4
3
2
1
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
15
20
25
30
17
Incident Energy (MeV)
71-Lu-172m

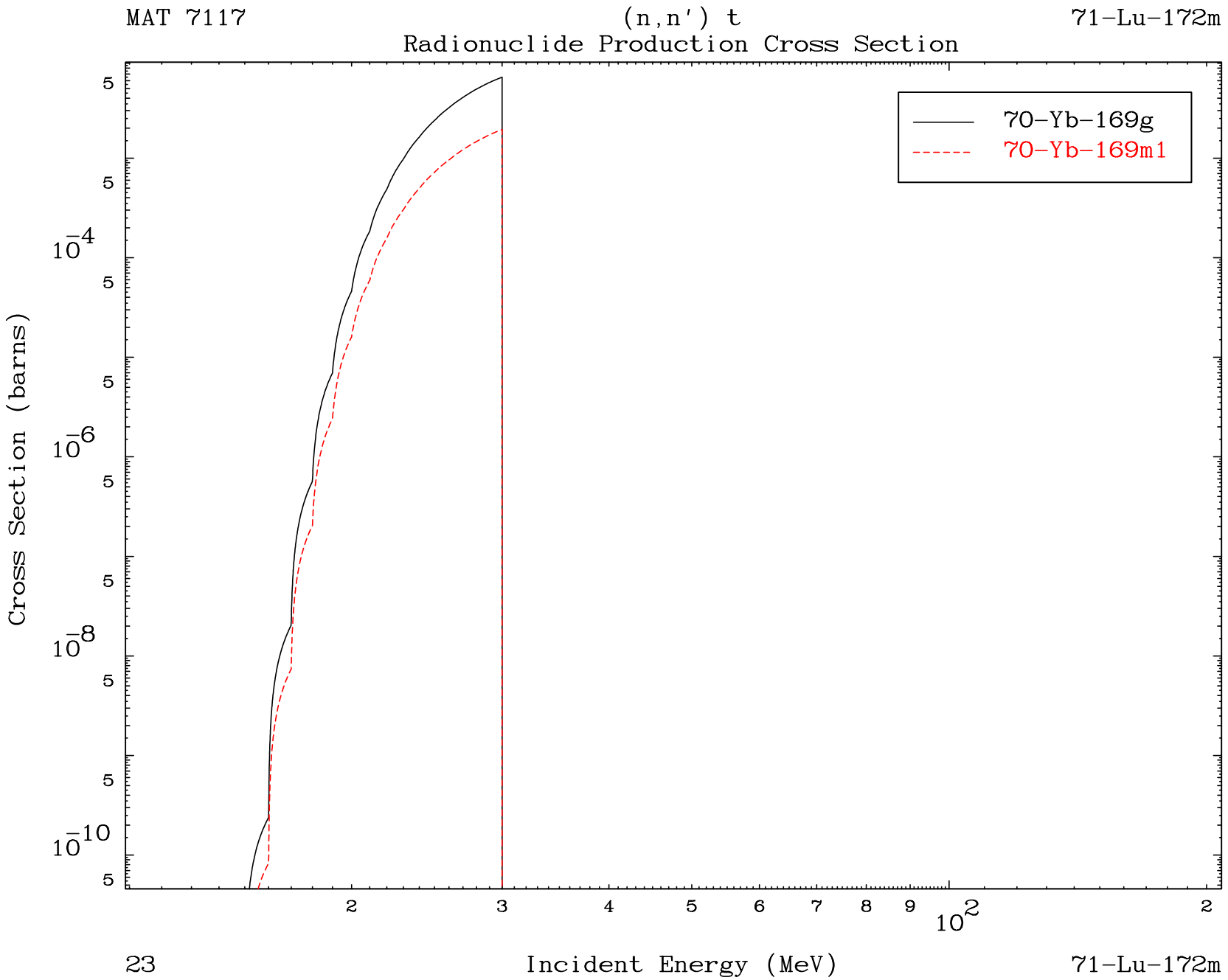

MAT 7117
Inelastic
71-Lu-172m
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
71-Lu-172g
71-Lu-172m1
18
71-Lu-172m

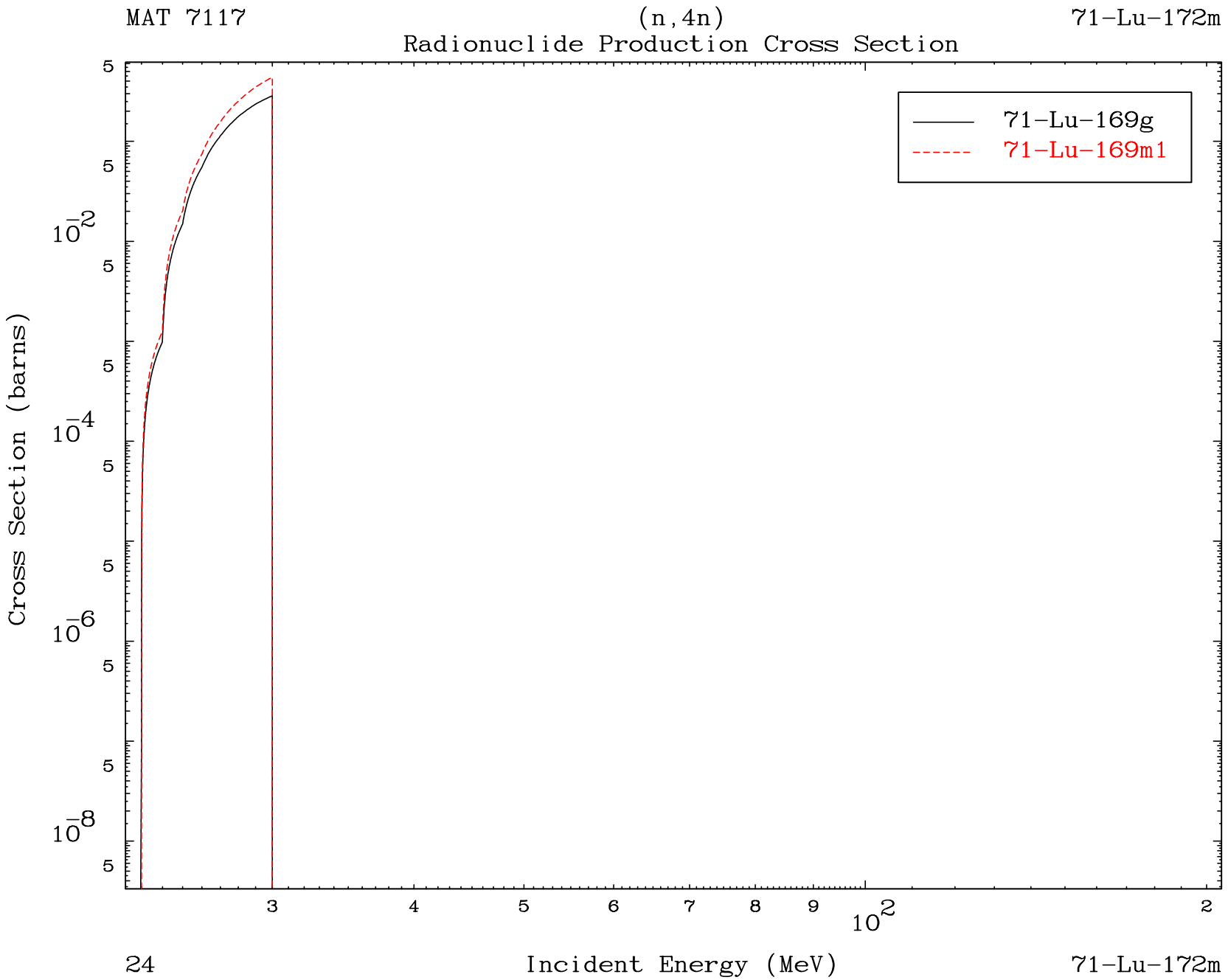

MAT 7117
(n,2n) d
71-Lu-172m
Radionuclide Production Cross Section
70-Yb-169g
70-Yb-169m1
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
19
Incident Energy (MeV)
71-Lu-172m

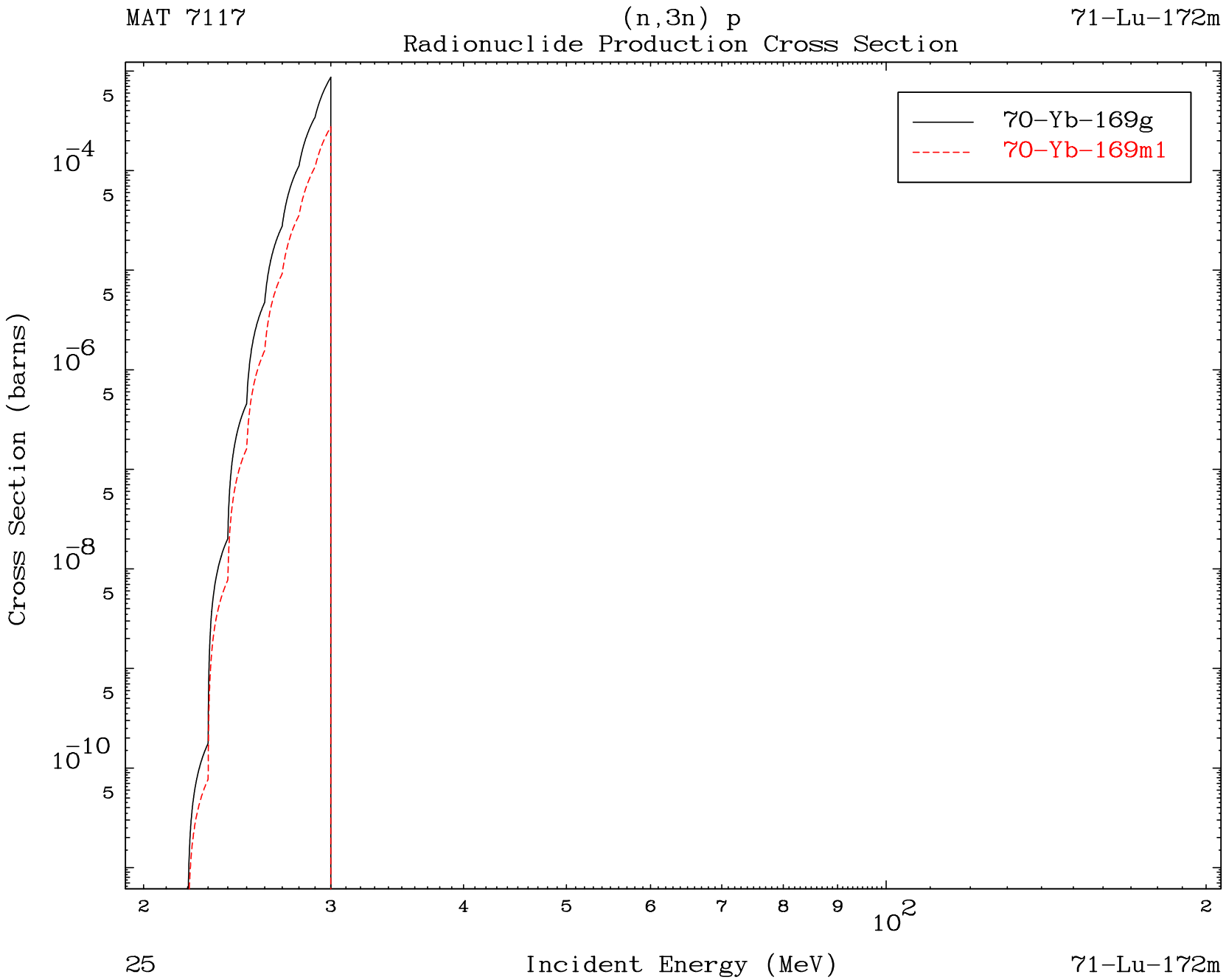

MAT 7117
(n,2n)
71-Lu-172m
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-1
10^-2
8
6
4
2
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
71-Lu-171g
71-Lu-171m1
20
Incident Energy (MeV)
71-Lu-172m

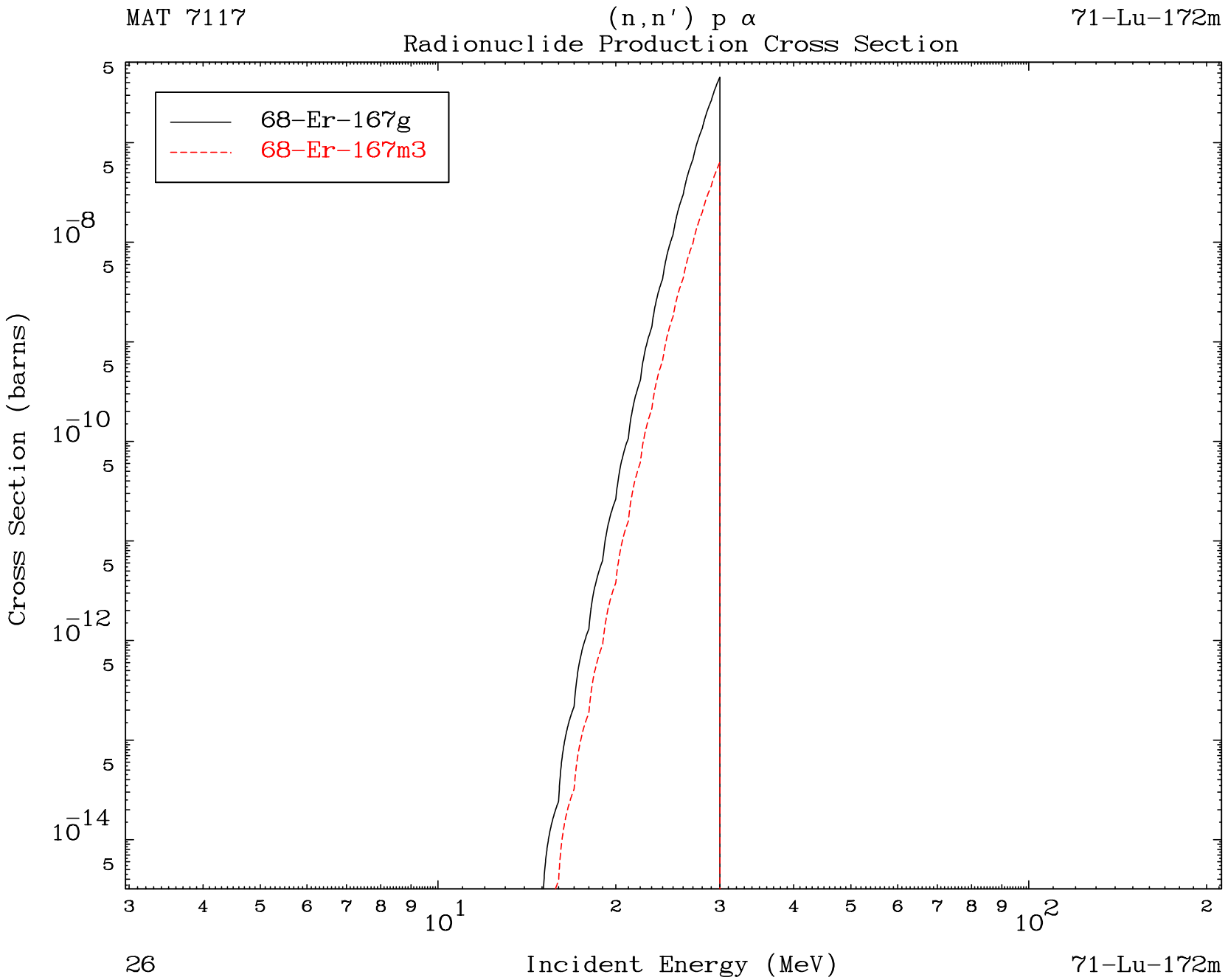

MAT 7117
(n,3n)
71-Lu-172m
Radionuclide Production Cross Section
71-Lu-170g
71-Lu-170m2
Cross Section (barns)
Incident Energy (MeV)
21
71-Lu-172m

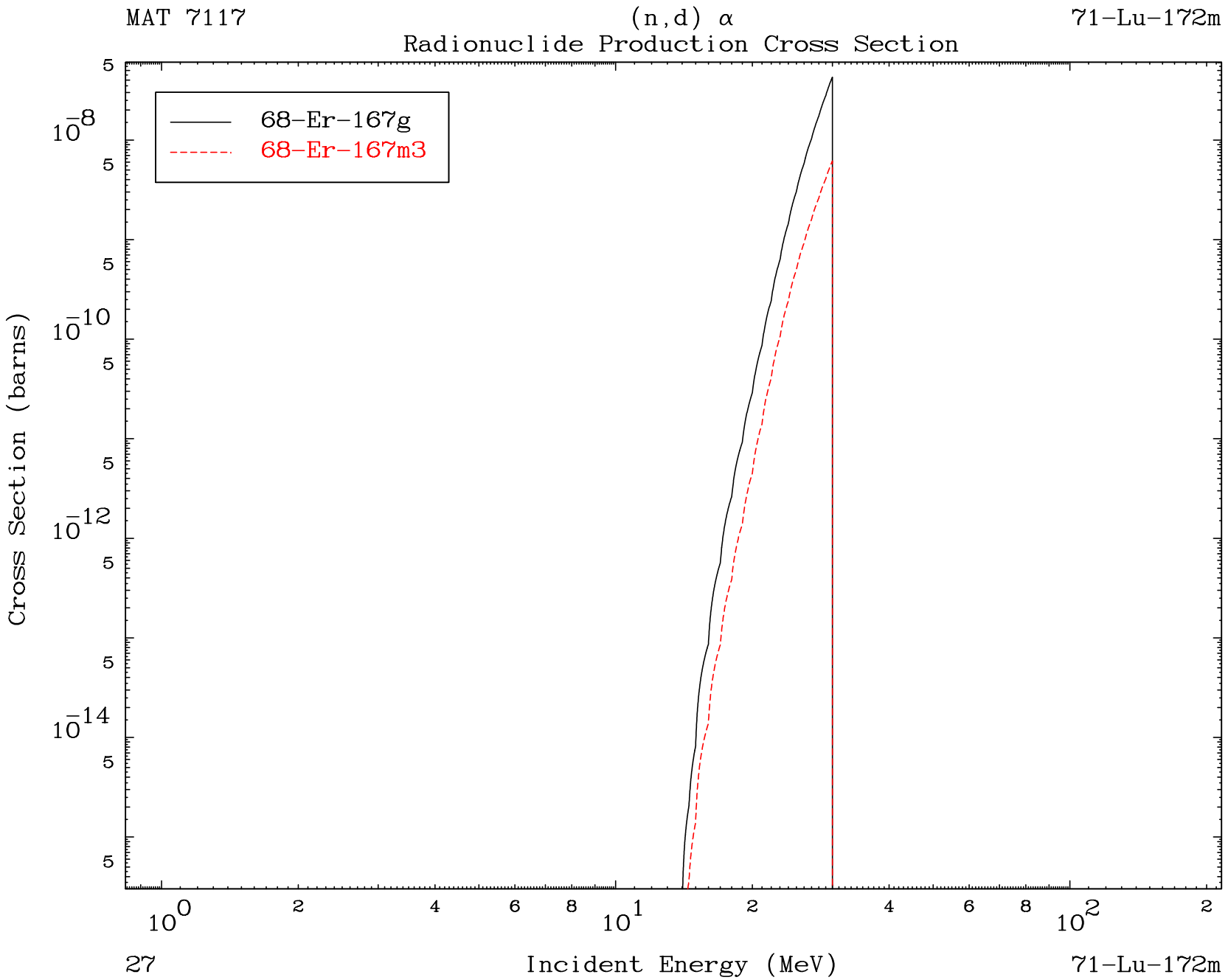

MAT 7117
(n,n') 2α
71-Lu-172m
Radionuclide Production Cross Section
67-Ho-164g
67-Ho-164m3
Cross Section (barns)
Incident Energy (MeV)
22
71-Lu-172m


MAT 7117
(n,n') t
71-Lu-172m
Radionuclide Production Cross Section
70-Yb-169g
70-Yb-169m1
Cross Section (barns)
Incident Energy (MeV)
23
71-Lu-172m


MAT 7117
(n,4n)
71-Lu-172m
Radionuclide Production Cross Section
71-Lu-169g
71-Lu-169m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
24
Incident Energy (MeV)
71-Lu-172m


MAT 7117
(n,3n) p
71-Lu-172m
Radionuclide Production Cross Section
70-Yb-169g
70-Yb-169m1
Cross Section (barns)
10-4
10-6
10-8
10-10
2
3
4
5
6
7
8
9
10 2
2
25
Incident Energy (MeV)
71-Lu-172m


MAT 7117
(n,n') p α
71-Lu-172m
Radionuclide Production Cross Section
68-Er-167g
68-Er-167m3
Cross Section (barns)
Incident Energy (MeV)
26
71-Lu-172m


MAT 7117
(n,d) α
71-Lu-172m
Radionuclide Production Cross Section
68-Er-167g
68-Er-167m3
Cross Section (barns)
Incident Energy (MeV)
27
71-Lu-172m