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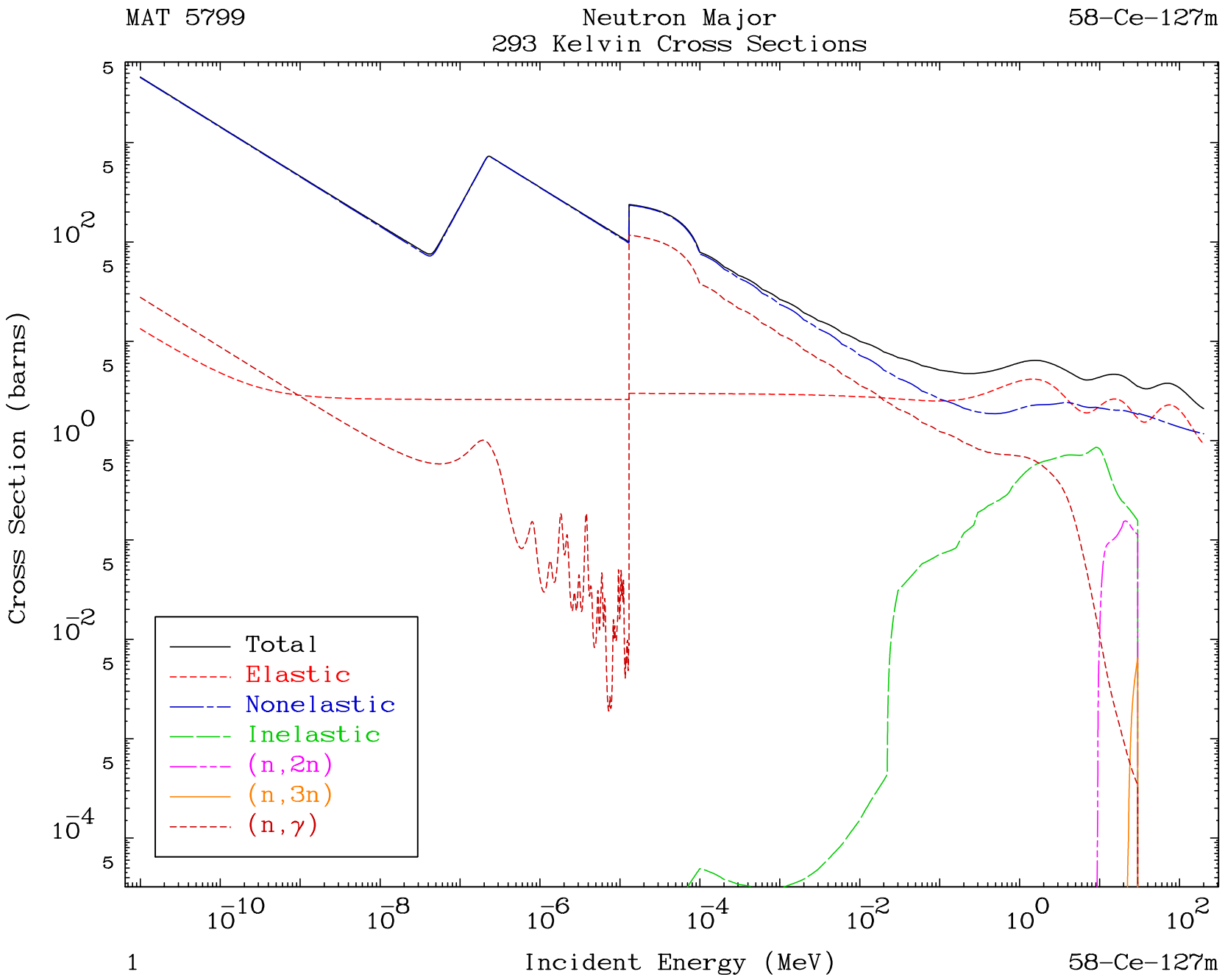
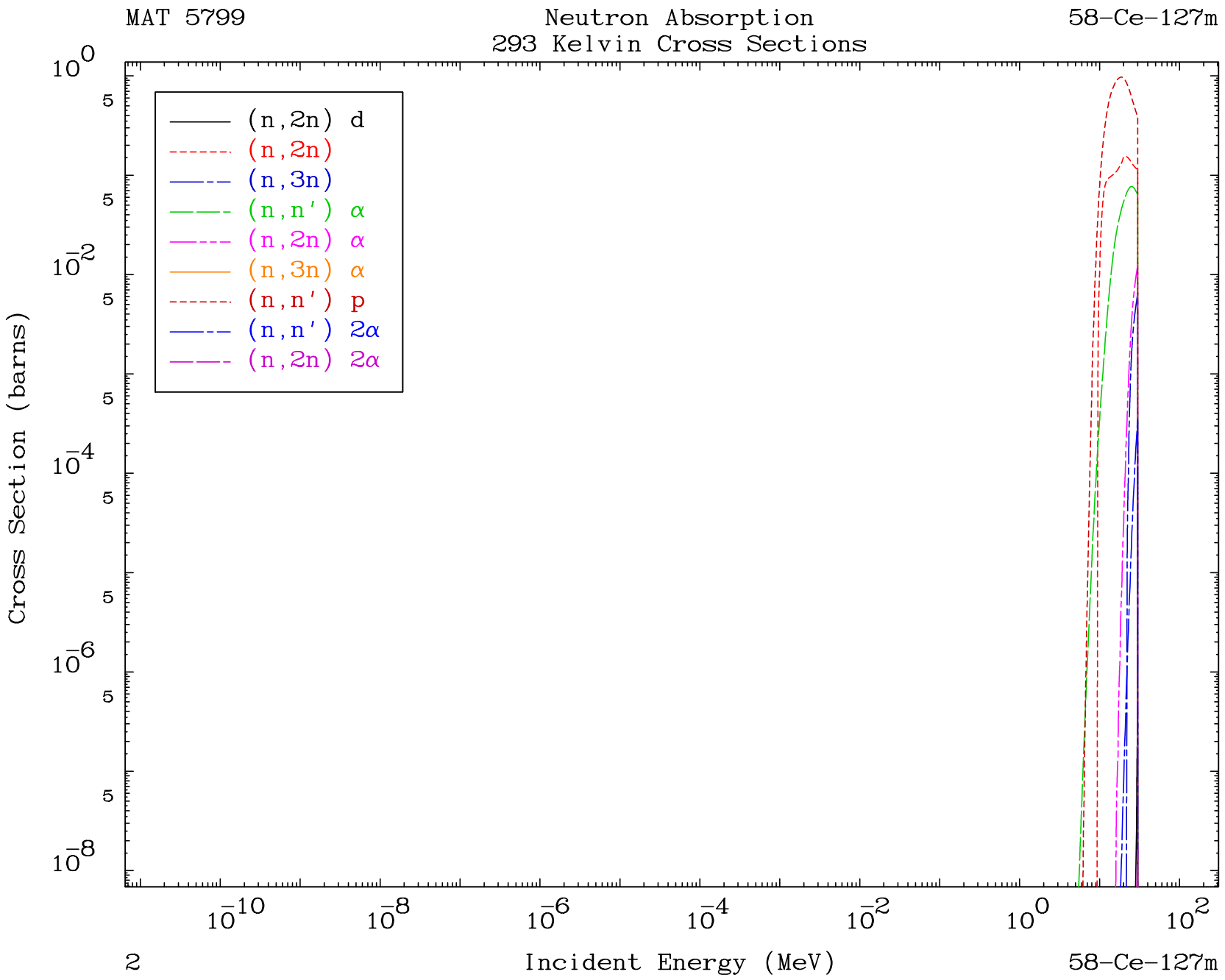
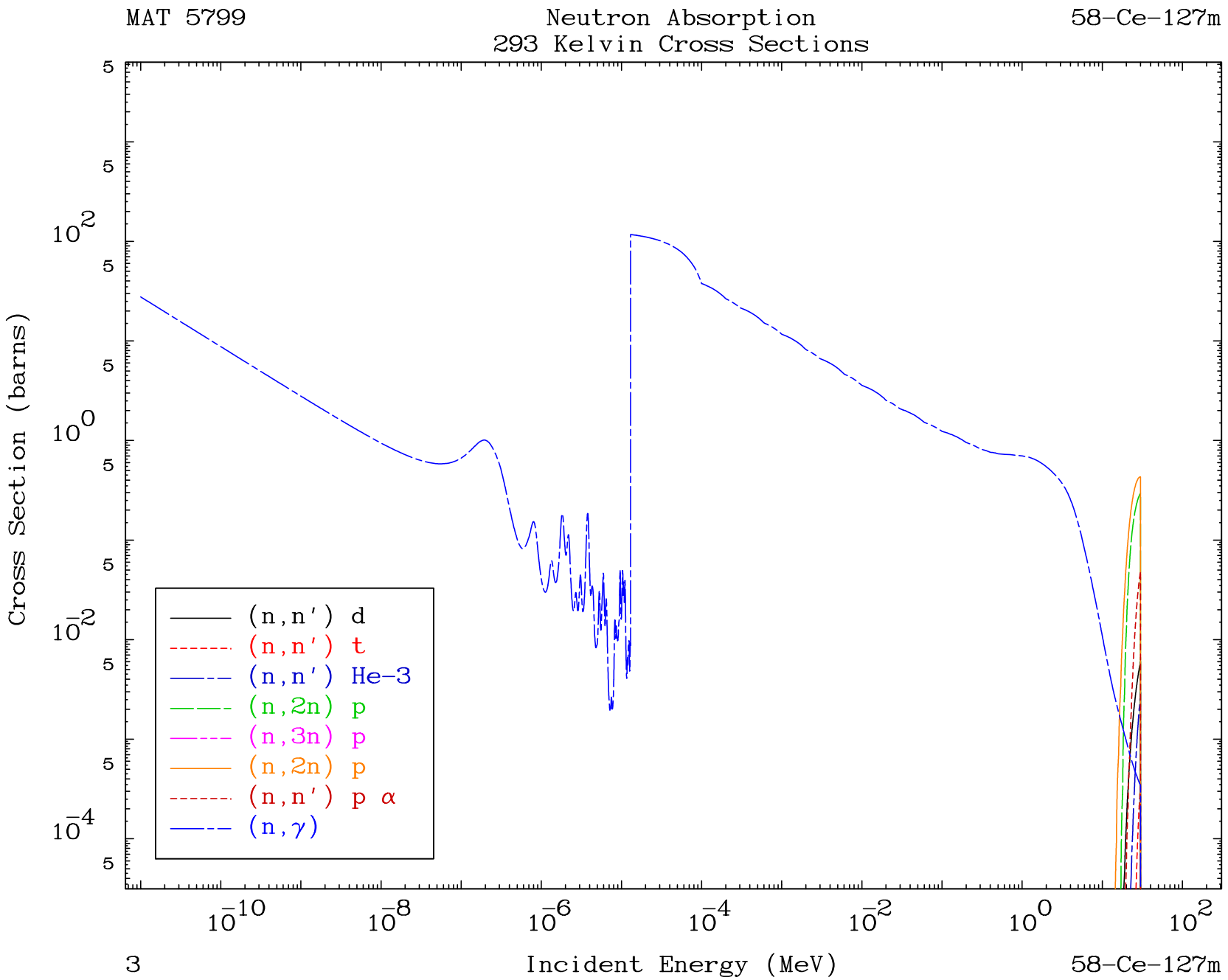
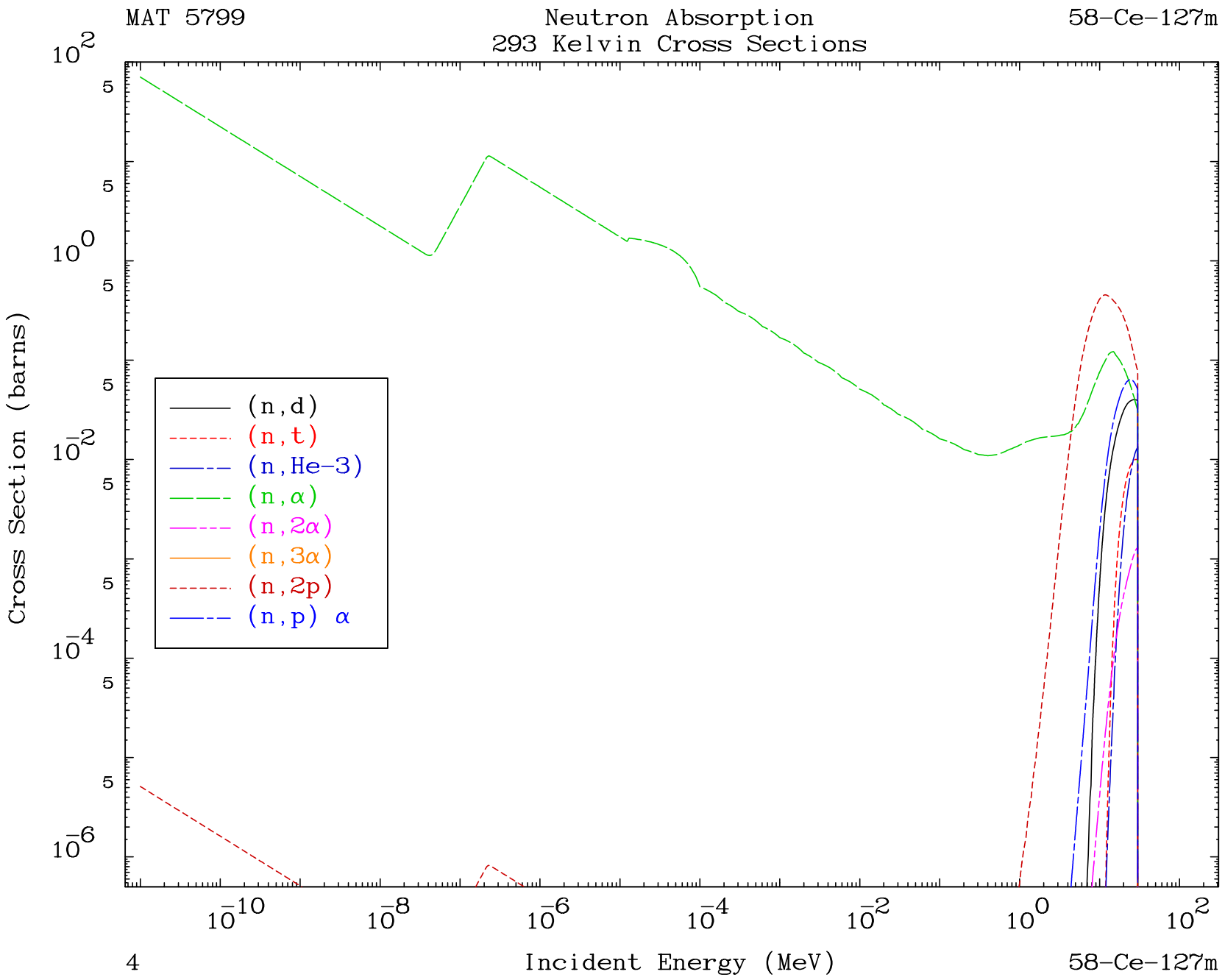
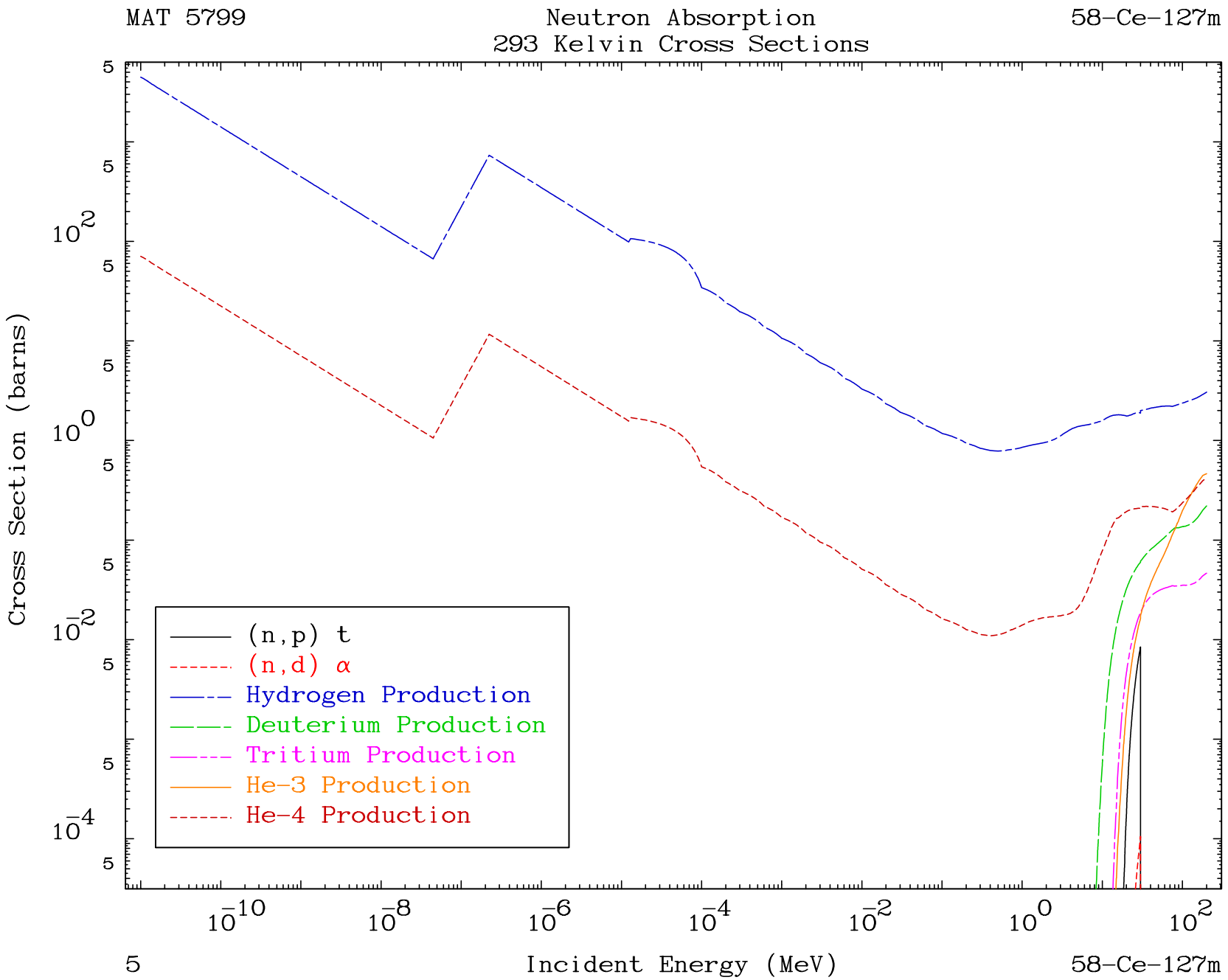
Press Mouse Button to Start

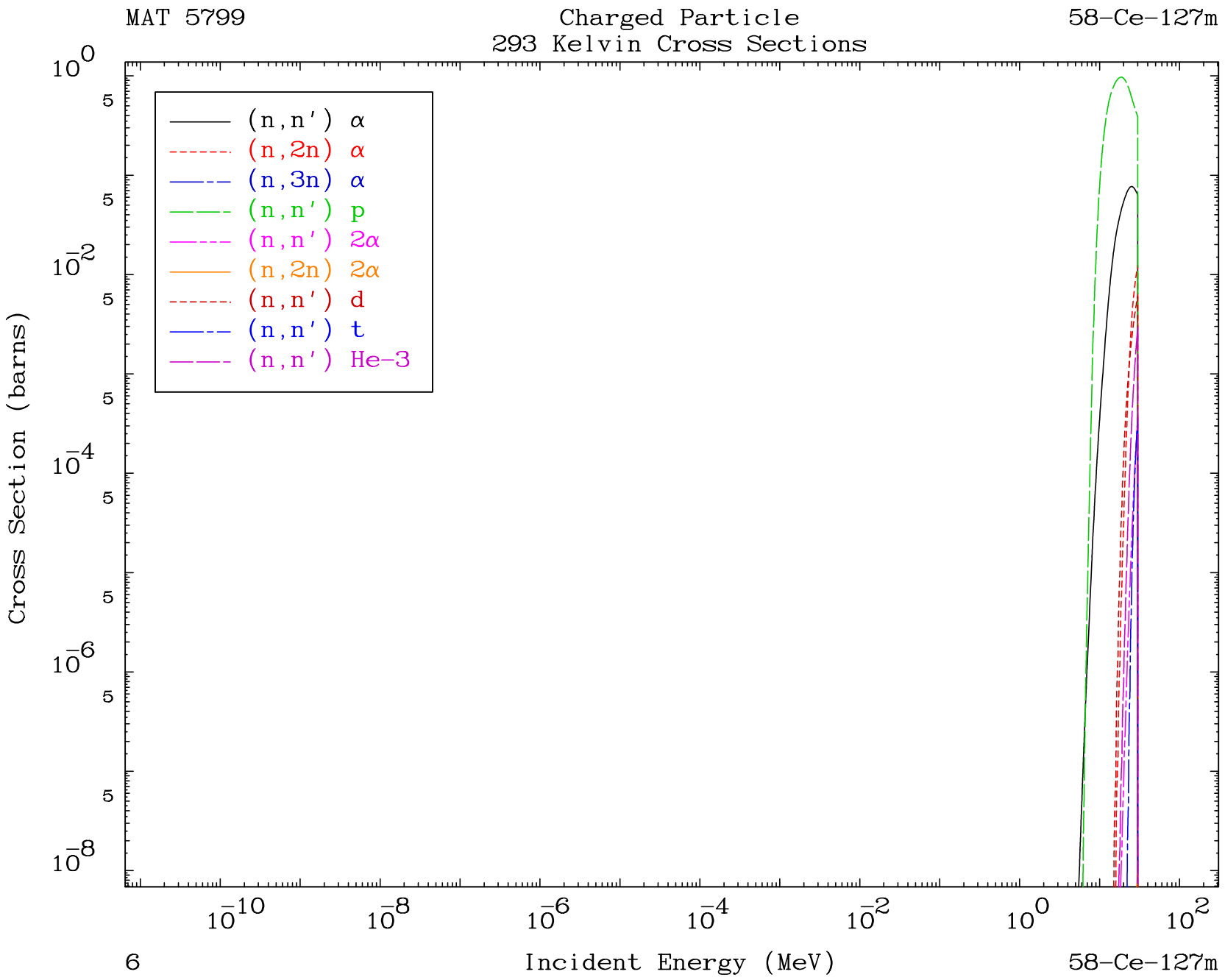

MAT 5799
Neutron Major
293 Kelvin Cross Sections
58-Ce-127m
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
1
58-Ce-127m

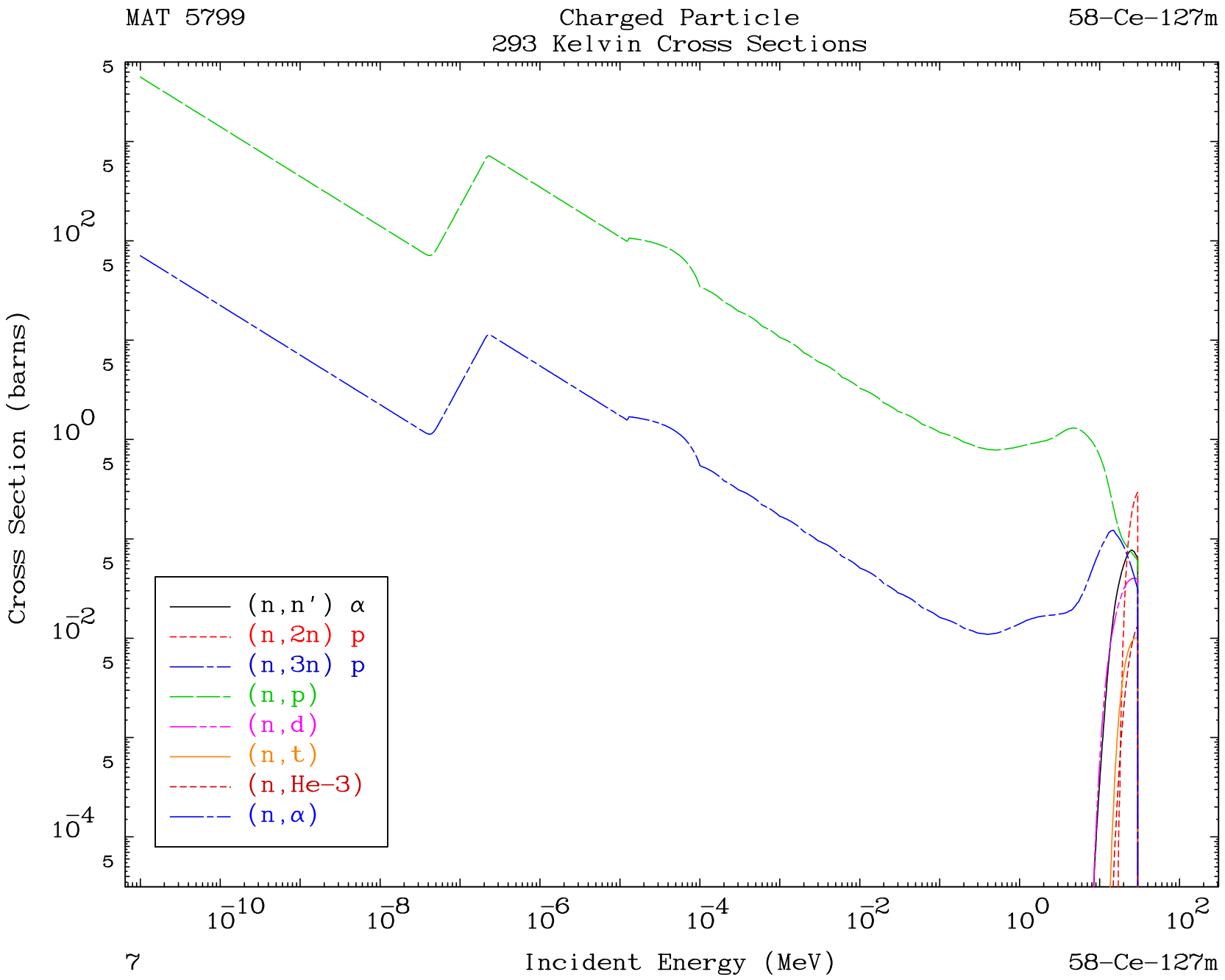

MAT 5799
Neutron Absorption
293 Kelvin Cross Sections
58-Ce-127m
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
Cross Section (barns)
Incident Energy (MeV)
58-Ce-127m
2

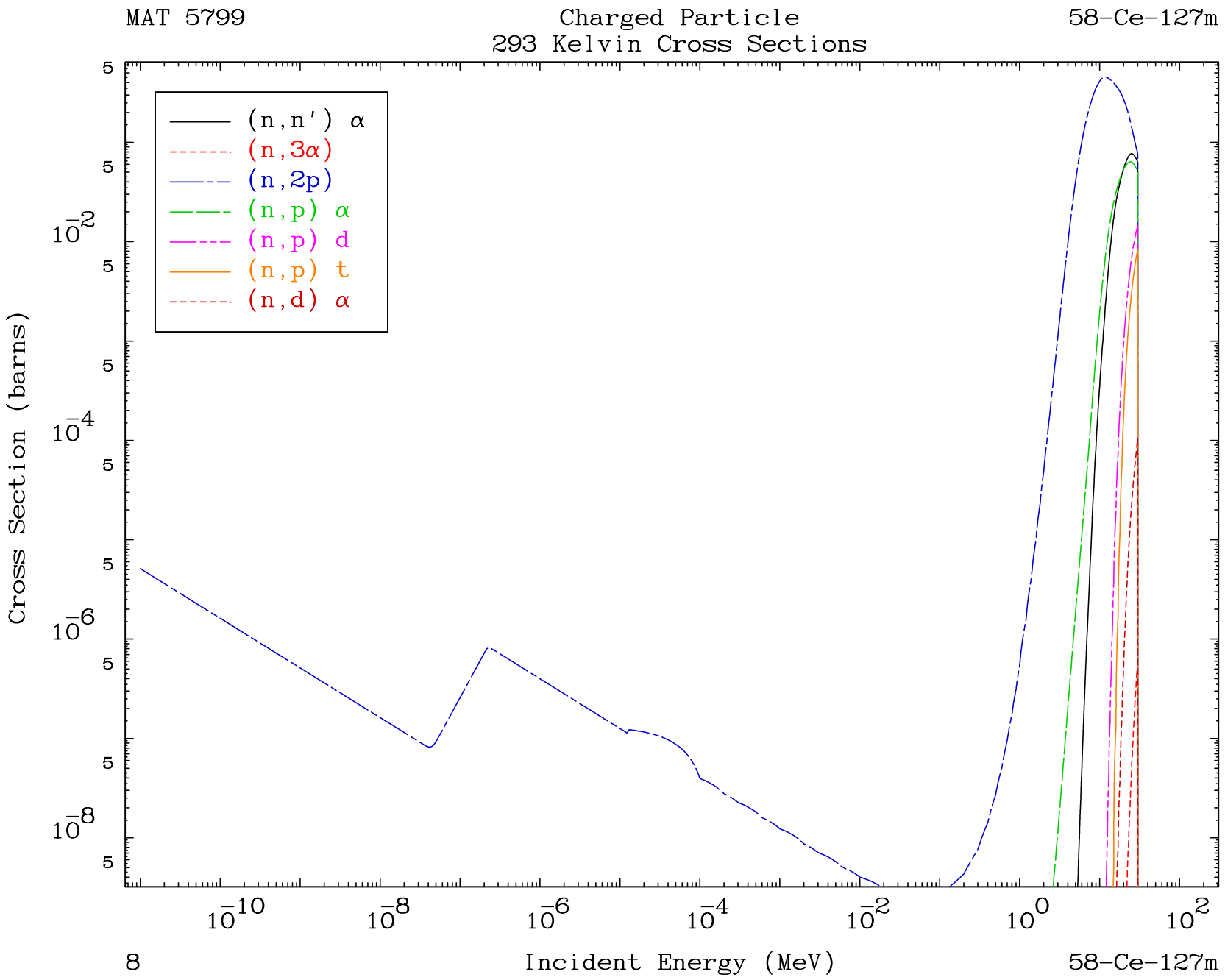

MAT 5799
Neutron Absorption
293 Kelvin Cross Sections
58-Ce-127m
Cross Section (barns)
Incident Energy (MeV)
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
(n,2n) p
(n,n') p α
(n,γ)
3
58-Ce-127m

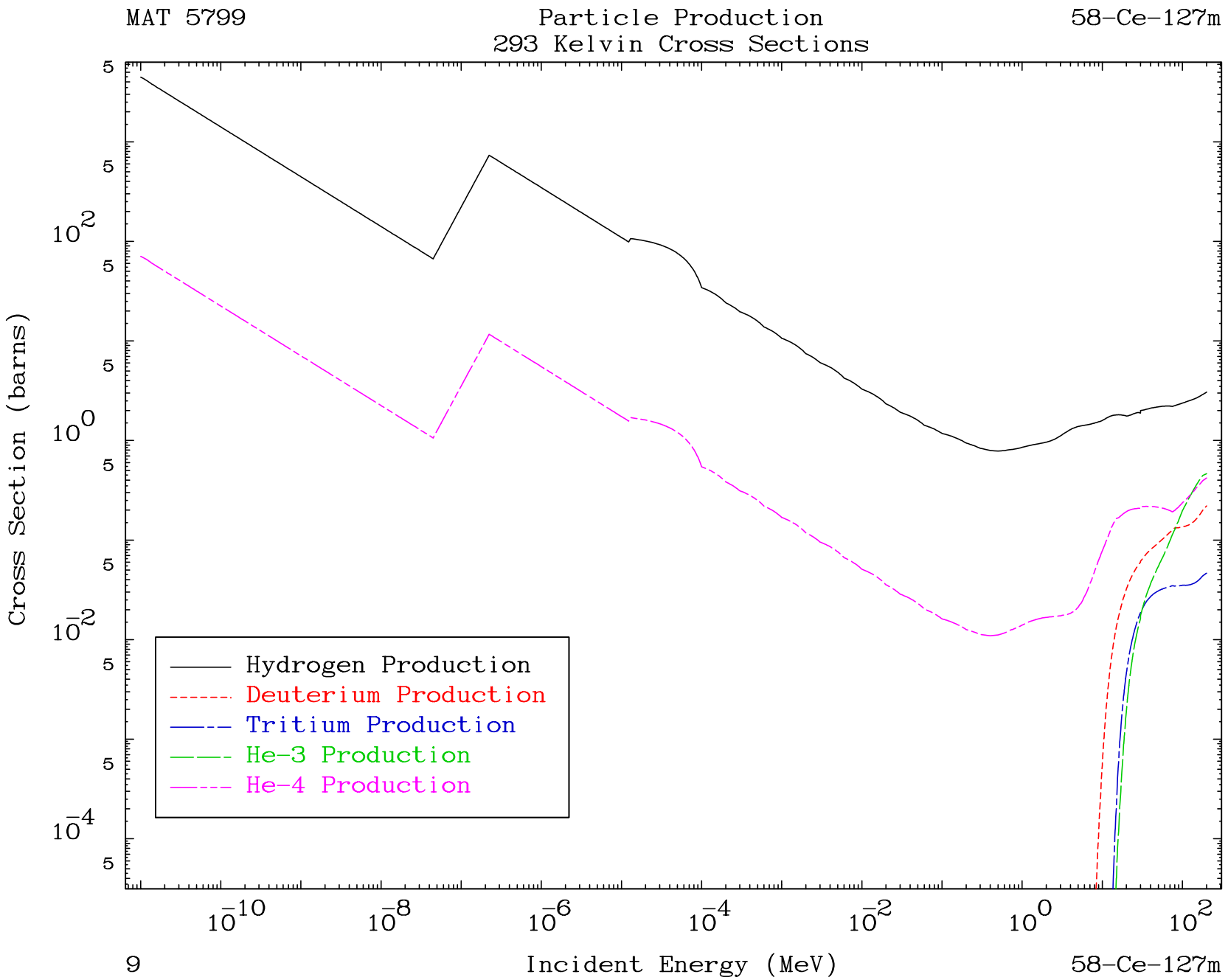

MAT 5799
Neutron Absorption
293 Kelvin Cross Sections
58-Ce-127m
Cross Section (barns)
Incident Energy (MeV)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,3α)
(n,2p)
(n,p) α
4
58-Ce-127m

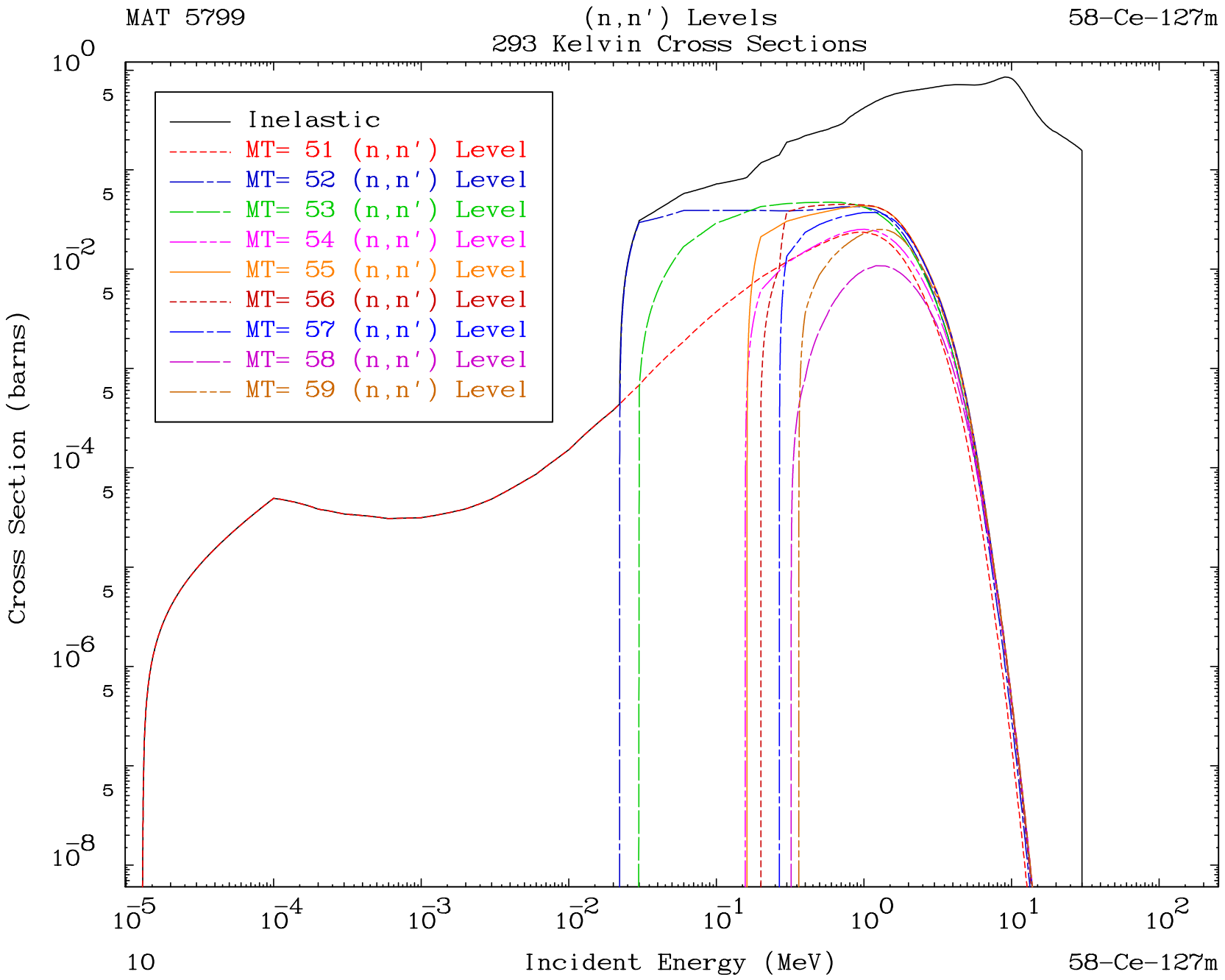

MAT 5799
Neutron Absorption
293 Kelvin Cross Sections
58-Ce-127m
Cross Section (barns)
Incident Energy (MeV)
58-Ce-127m
(n,p) t
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production

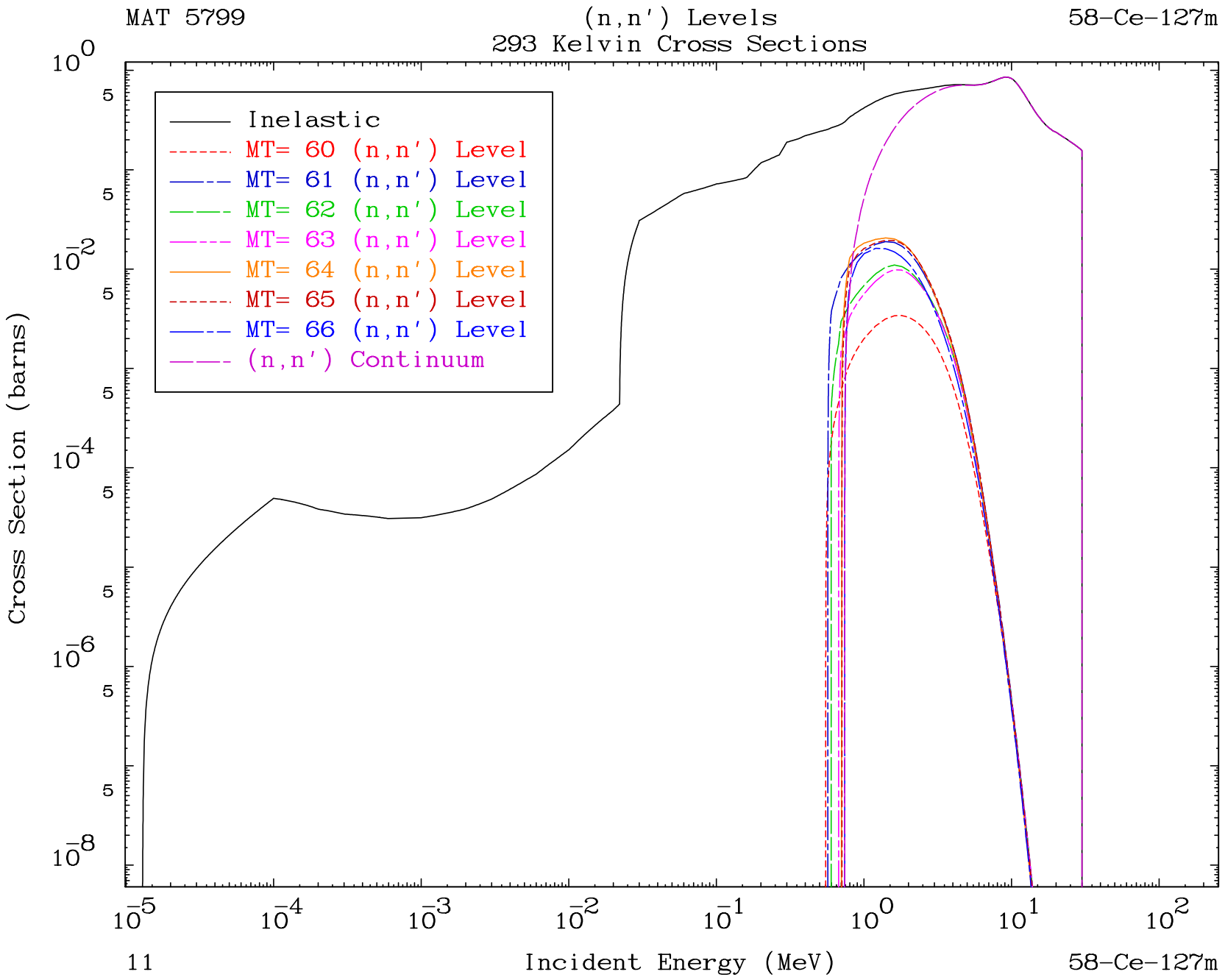

MAT 5799
Charged Particle
293 Kelvin Cross Sections
58-Ce-127m
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
Cross Section (barns)
Incident Energy (MeV)
58-Ce-127m
6

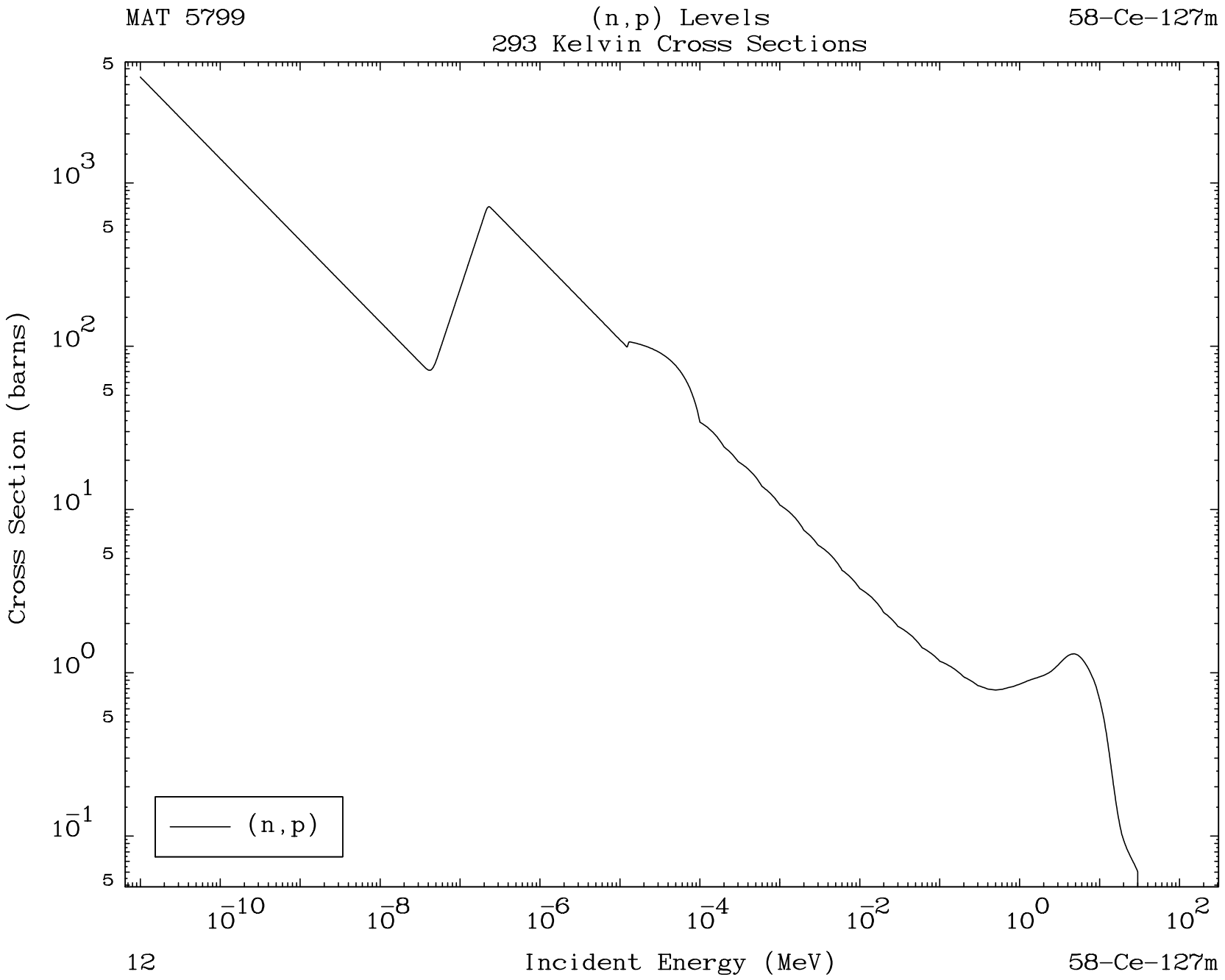

MAT 5799
Charged Particle
293 Kelvin Cross Sections
58-Ce-127m
Cross Section (barns)
Incident Energy (MeV)
7
58-Ce-127m
(n,n') α
(n,2n) p
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)

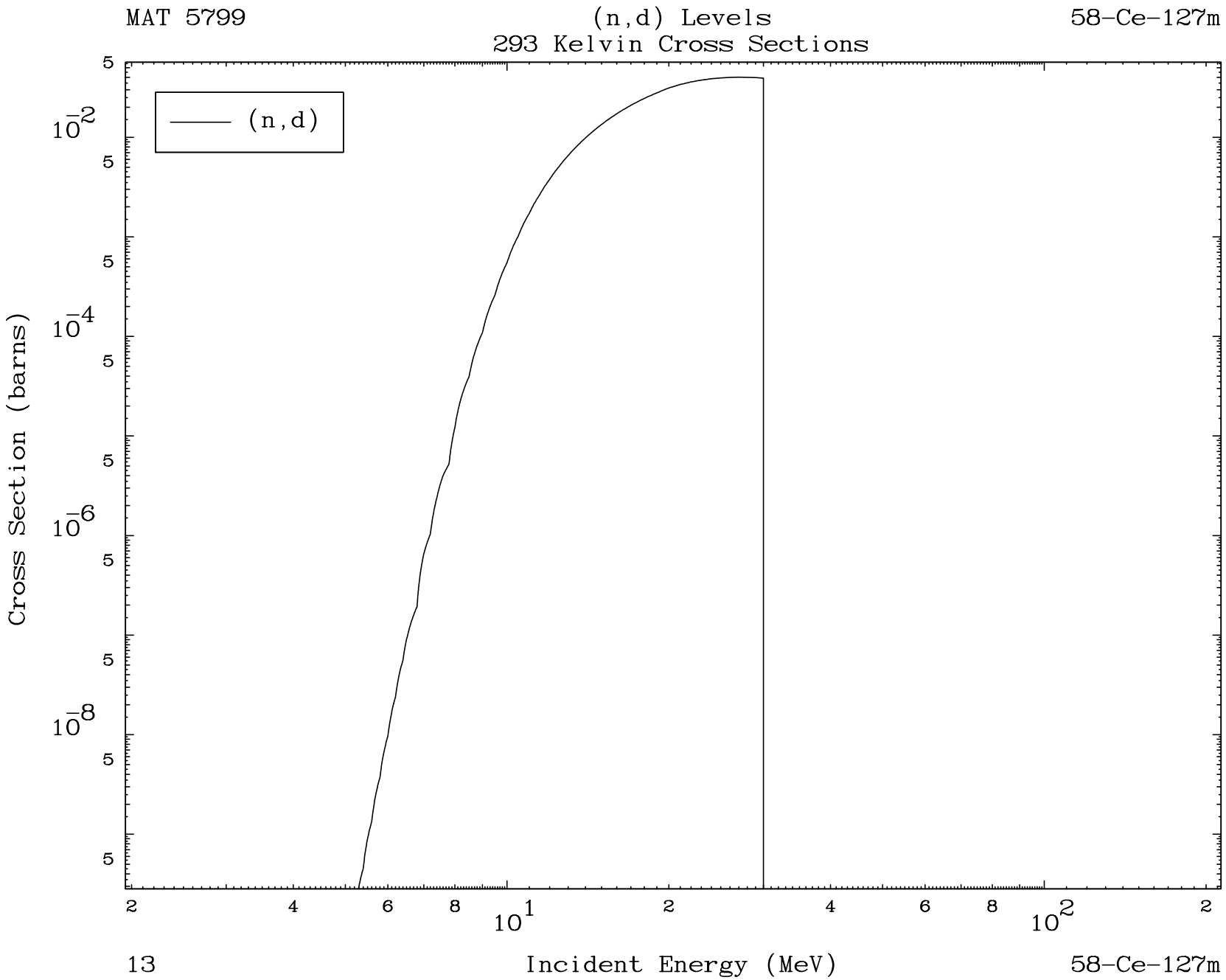

MAT 5799
Charged Particle
293 Kelvin Cross Sections
58-Ce-127m
(n,n') α
(n,3α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Cross Section (barns)
Incident Energy (MeV)
58-Ce-127m
8

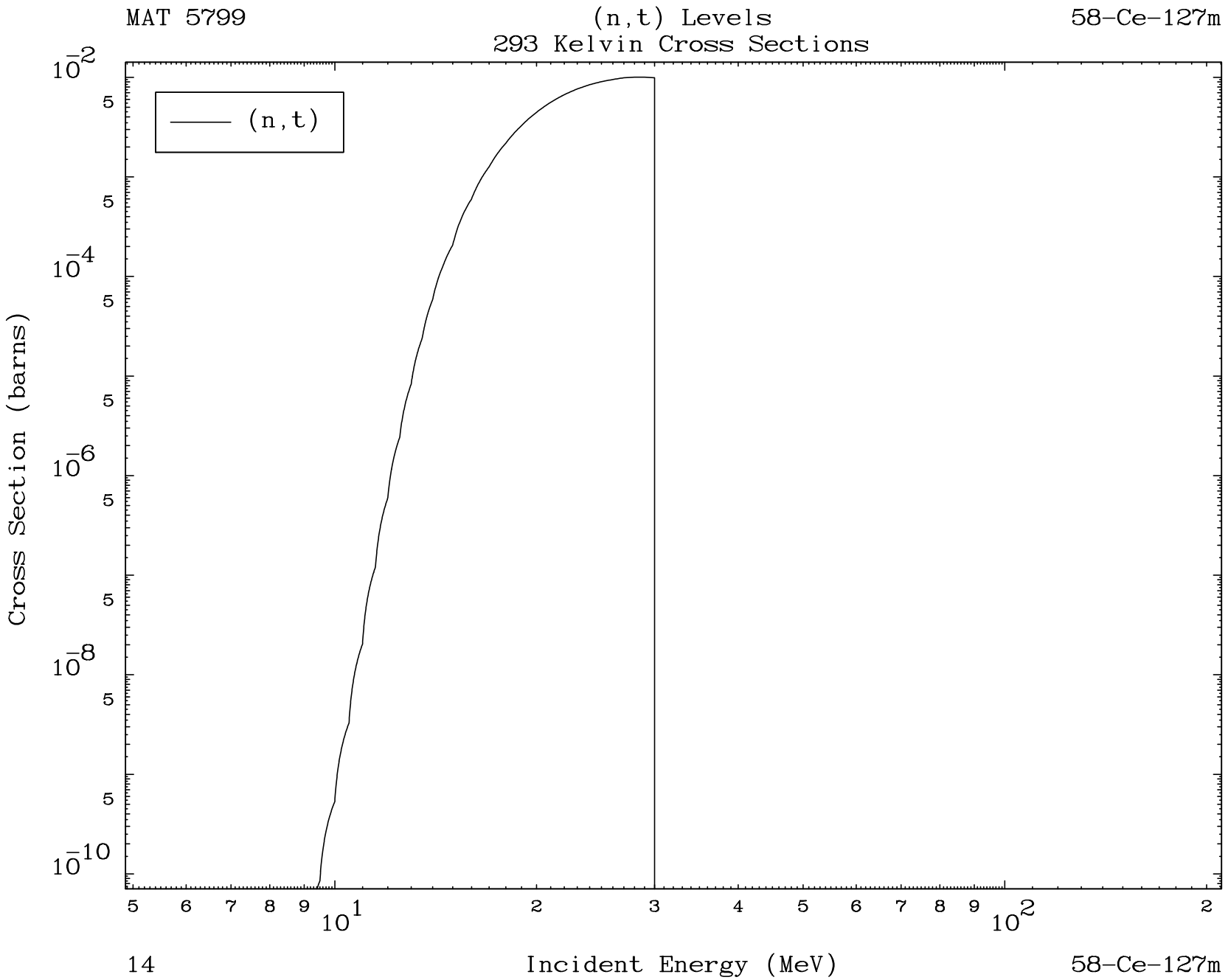

MAT 5799
Particle Production
293 Kelvin Cross Sections
58-Ce-127m
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
9
58-Ce-127m

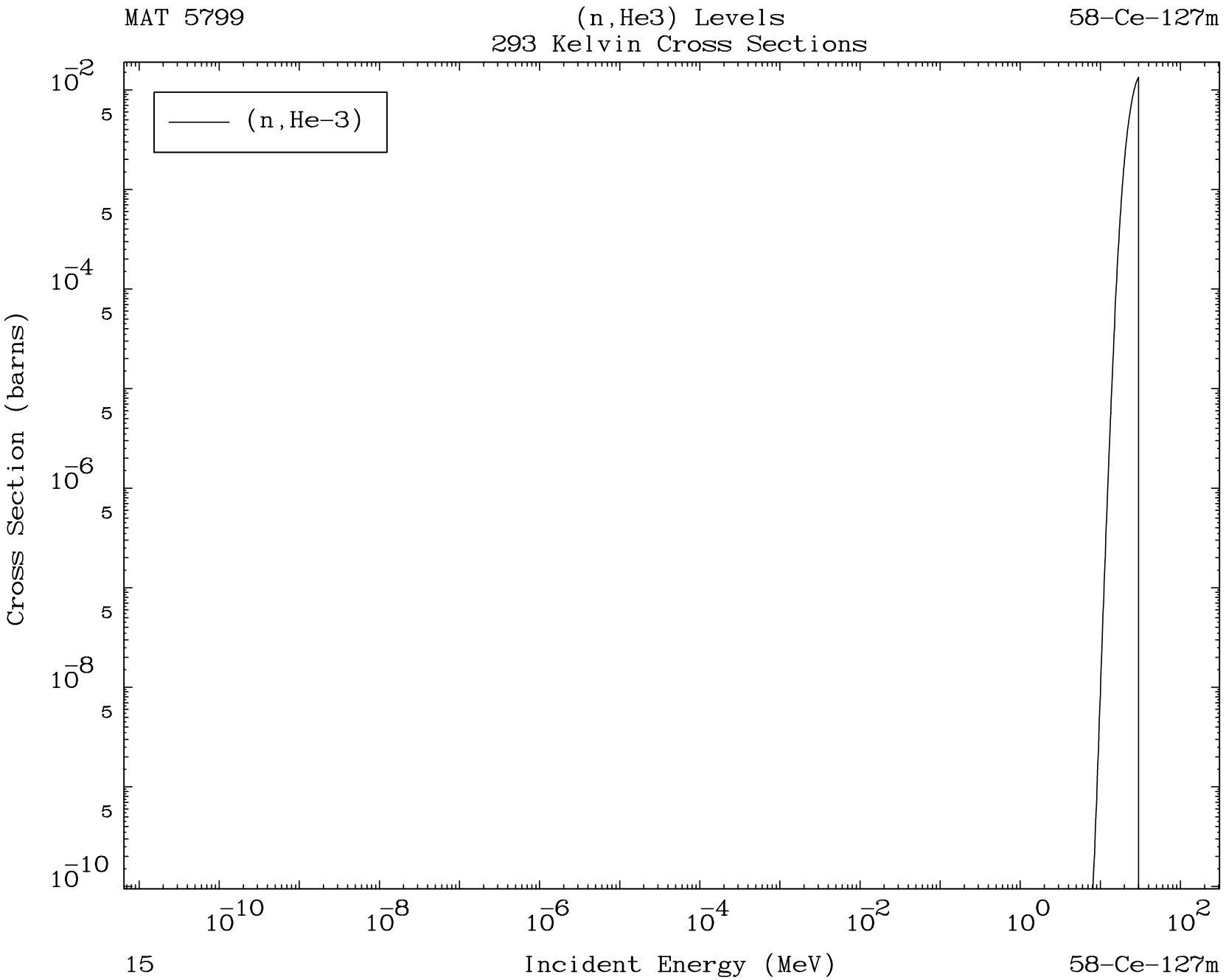

MAT 5799
(n,n') Levels
293 Kelvin Cross Sections
58-Ce-127m
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
58-Ce-127m

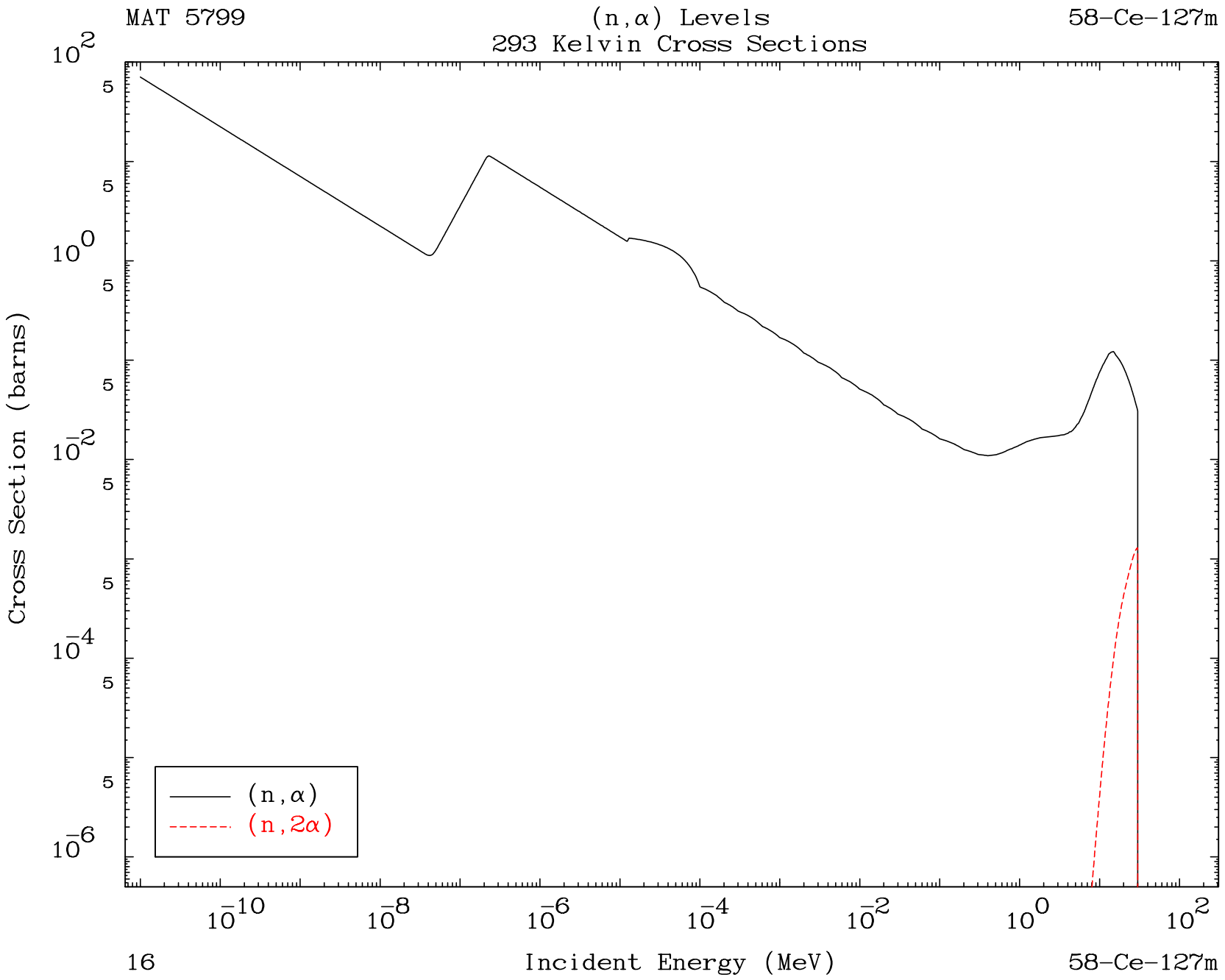

MAT 5799
(n,n') Levels
293 Kelvin Cross Sections
58-Ce-127m
Inelastic
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
11
58-Ce-127m

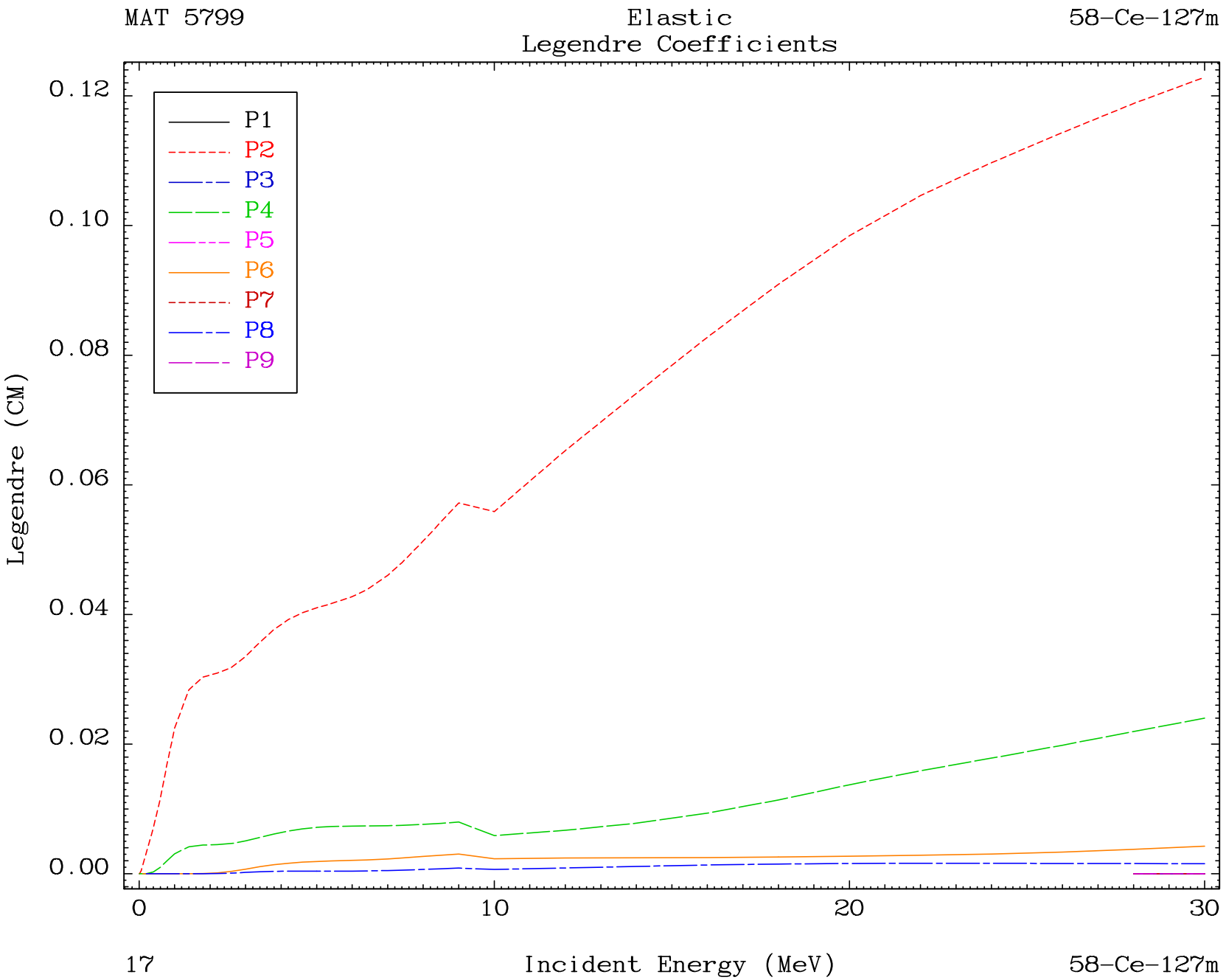

MAT 5799
(n,p) Levels
58-Ce-127m
293 Kelvin Cross Sections
Cross Section (barns)
10^3
10^2
10^1
10^0
10^-1
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
(n,p)
12
Incident Energy (MeV)
58-Ce-127m

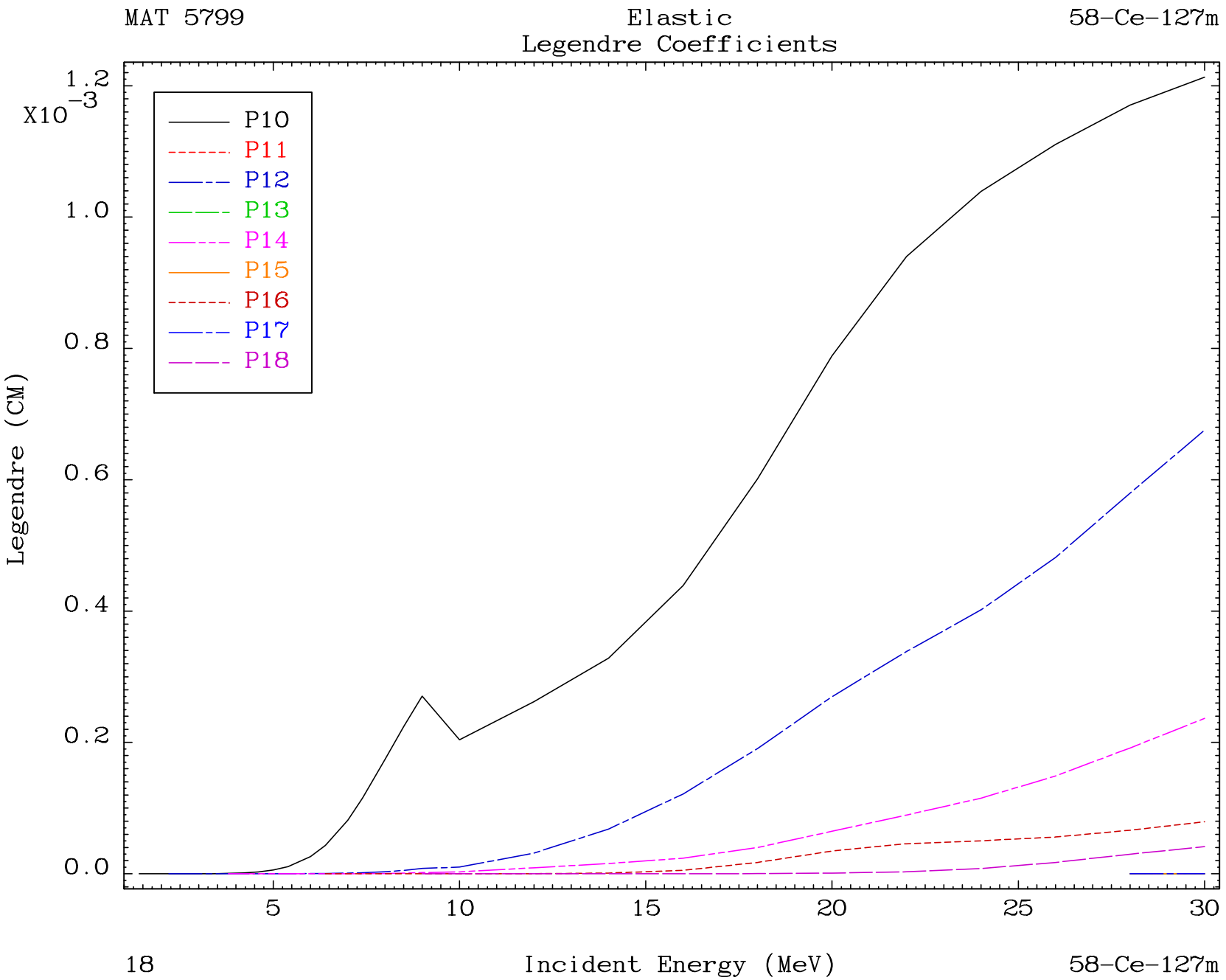

MAT 5799
(n,d) Levels
58-Ce-127m
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
13
58-Ce-127m

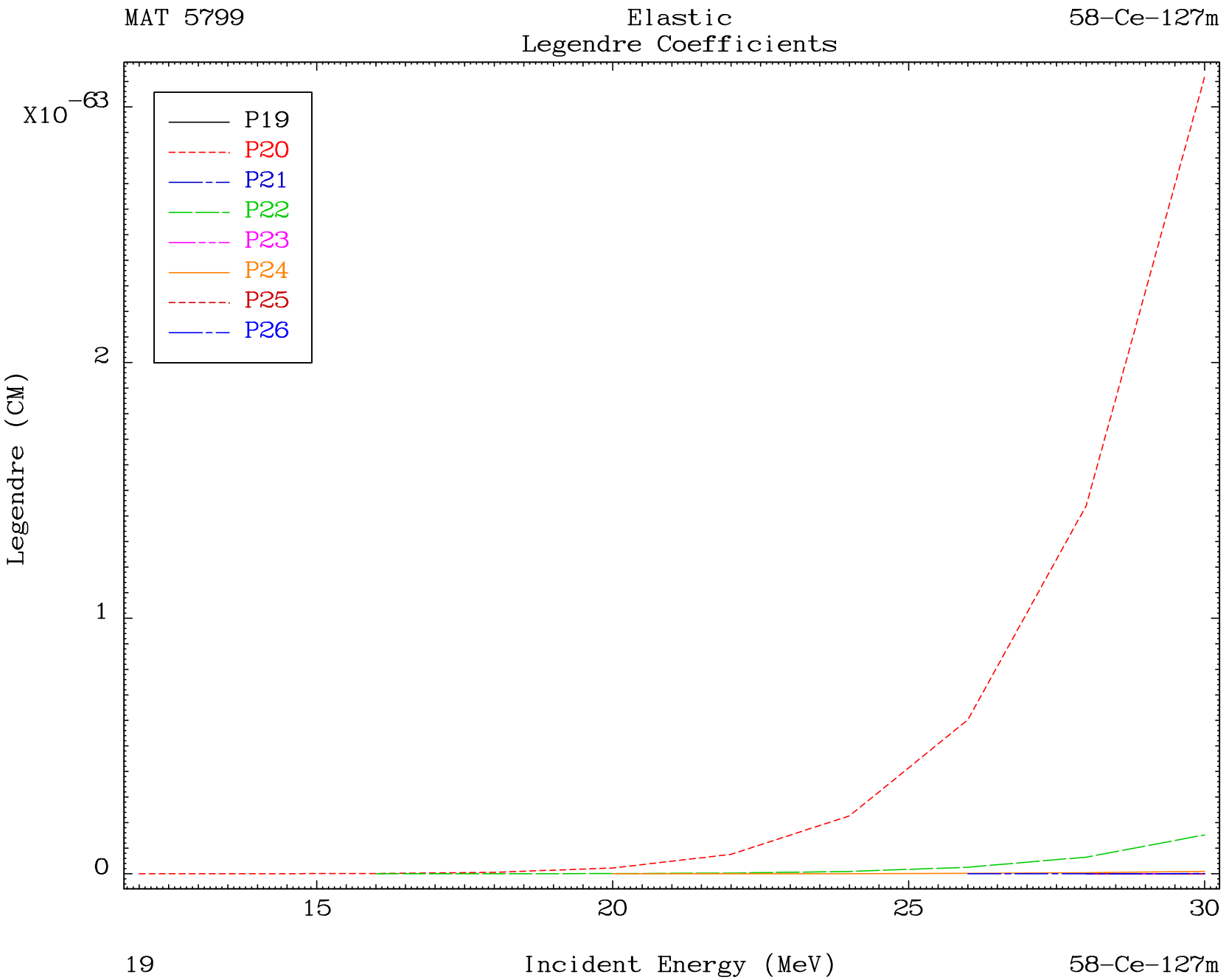

MAT 5799
(n,t) Levels
58-Ce-127m
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
14
58-Ce-127m

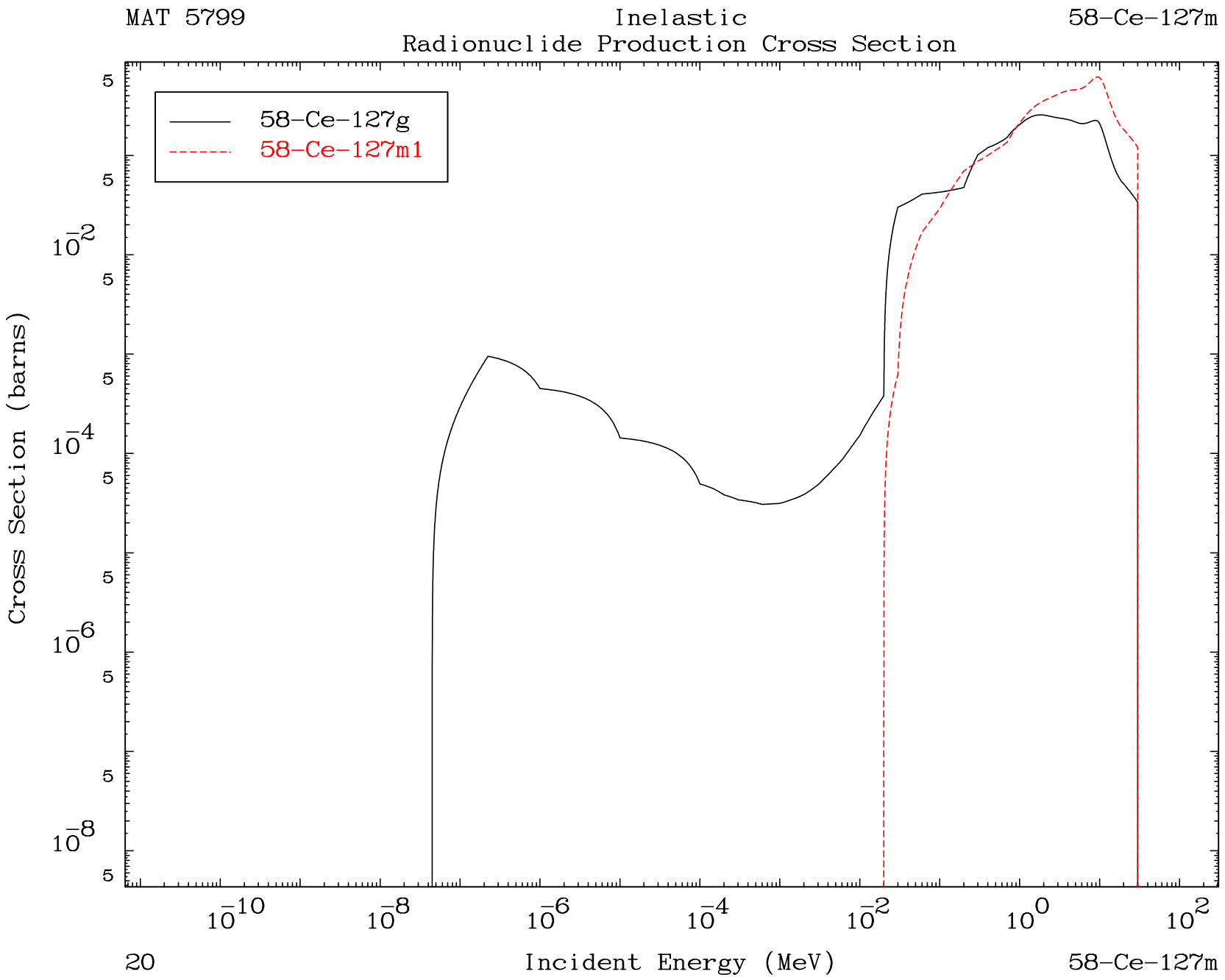

MAT 5799
(n,He3) Levels
58-Ce-127m
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
15
58-Ce-127m

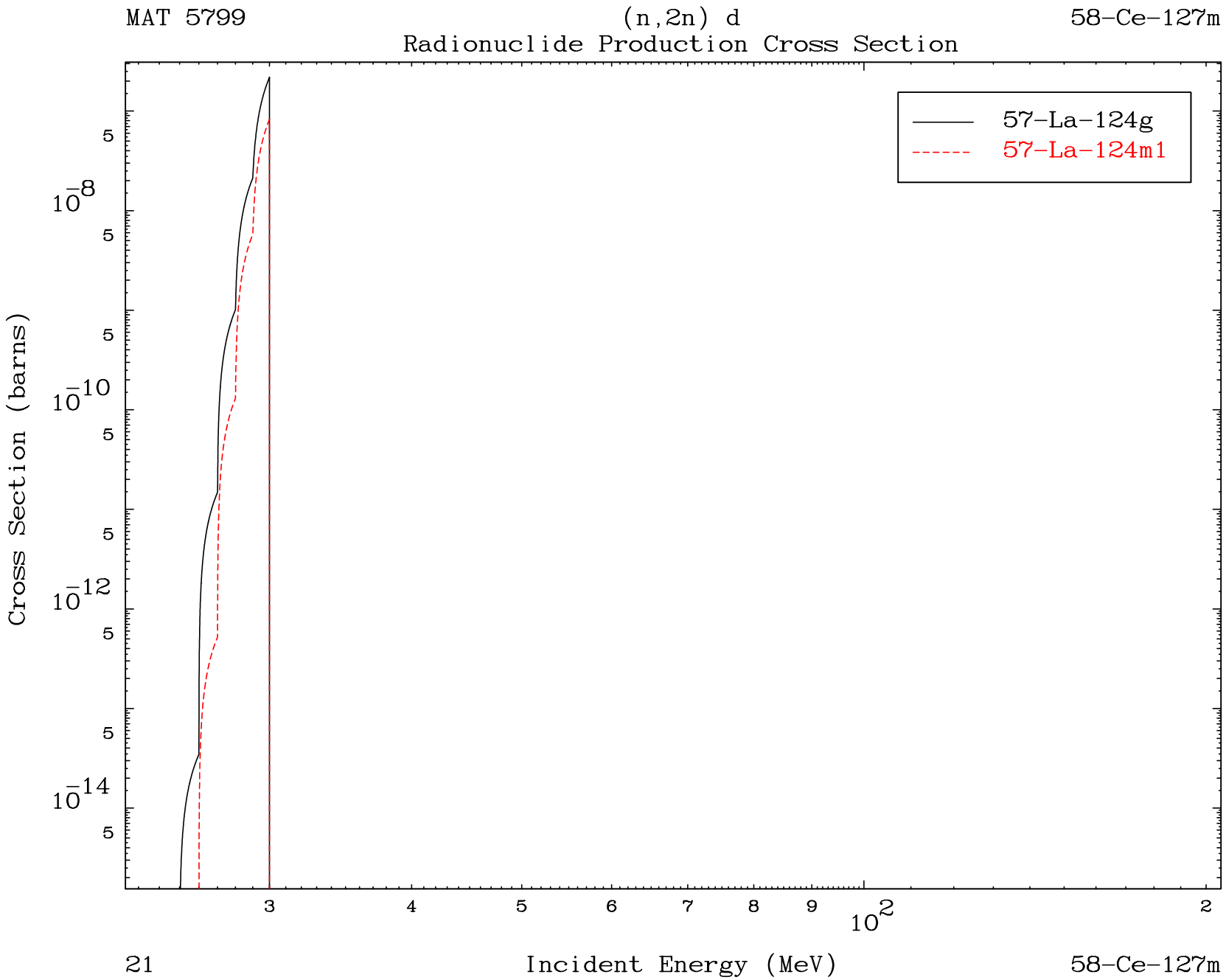

MAT 5799
(n,α) Levels
293 Kelvin Cross Sections
58-Ce-127m
Cross Section (barns)
Incident Energy (MeV)
(n,α)
(n,2α)
16
58-Ce-127m

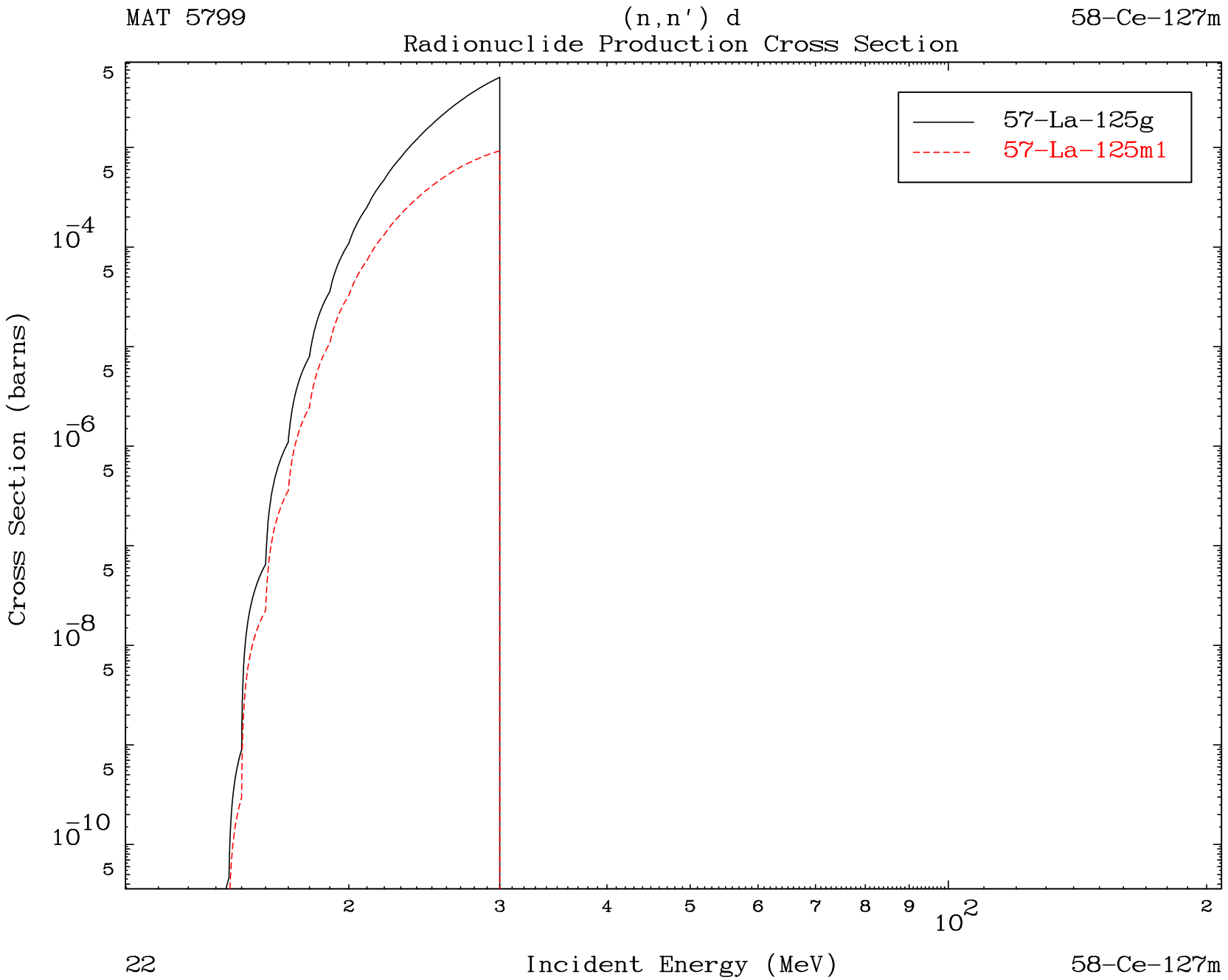

MAT 5799
Elastic
Legendre Coefficients
58-Ce-127m
P1
P2
P3
P4
P5
P6
P7
P8
P9
0.12
0.10
0.08
0.06
0.04
0.02
0.00
Legendre (CM)
0
10
20
30
17
Incident Energy (MeV)
58-Ce-127m

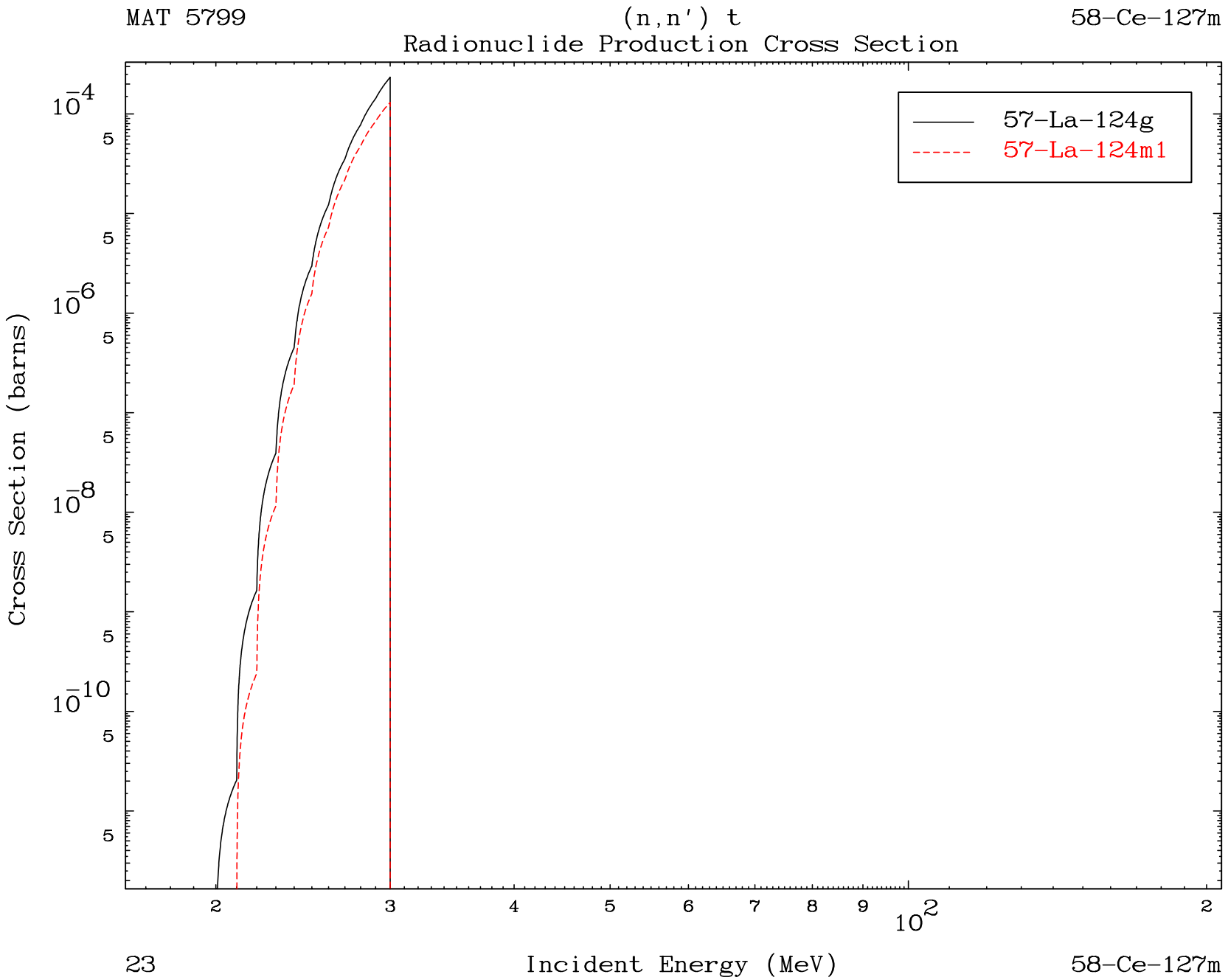

MAT 5799
Elastic
Legendre Coefficients
58-Ce-127m
X10 -3
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
5
10
15
20
25
30
18
Incident Energy (MeV)
58-Ce-127m

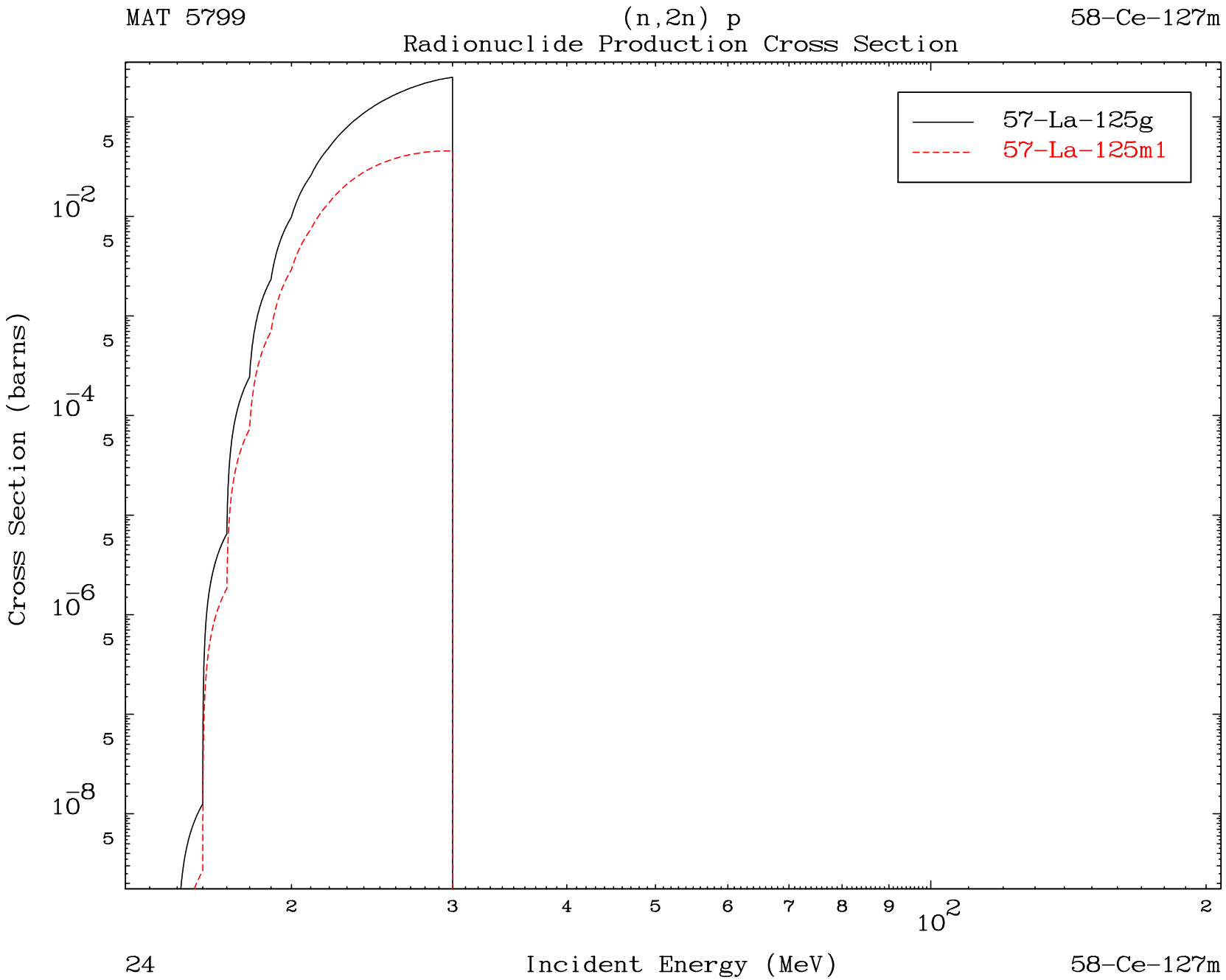

MAT 5799
Elastic
Legendre Coefficients
58-Ce-127m
X10 -63
P19
P20
P21
P22
P23
P24
P25
P26
Legendre (CM)
2
1
0
15
20
25
30
19
Incident Energy (MeV)
58-Ce-127m

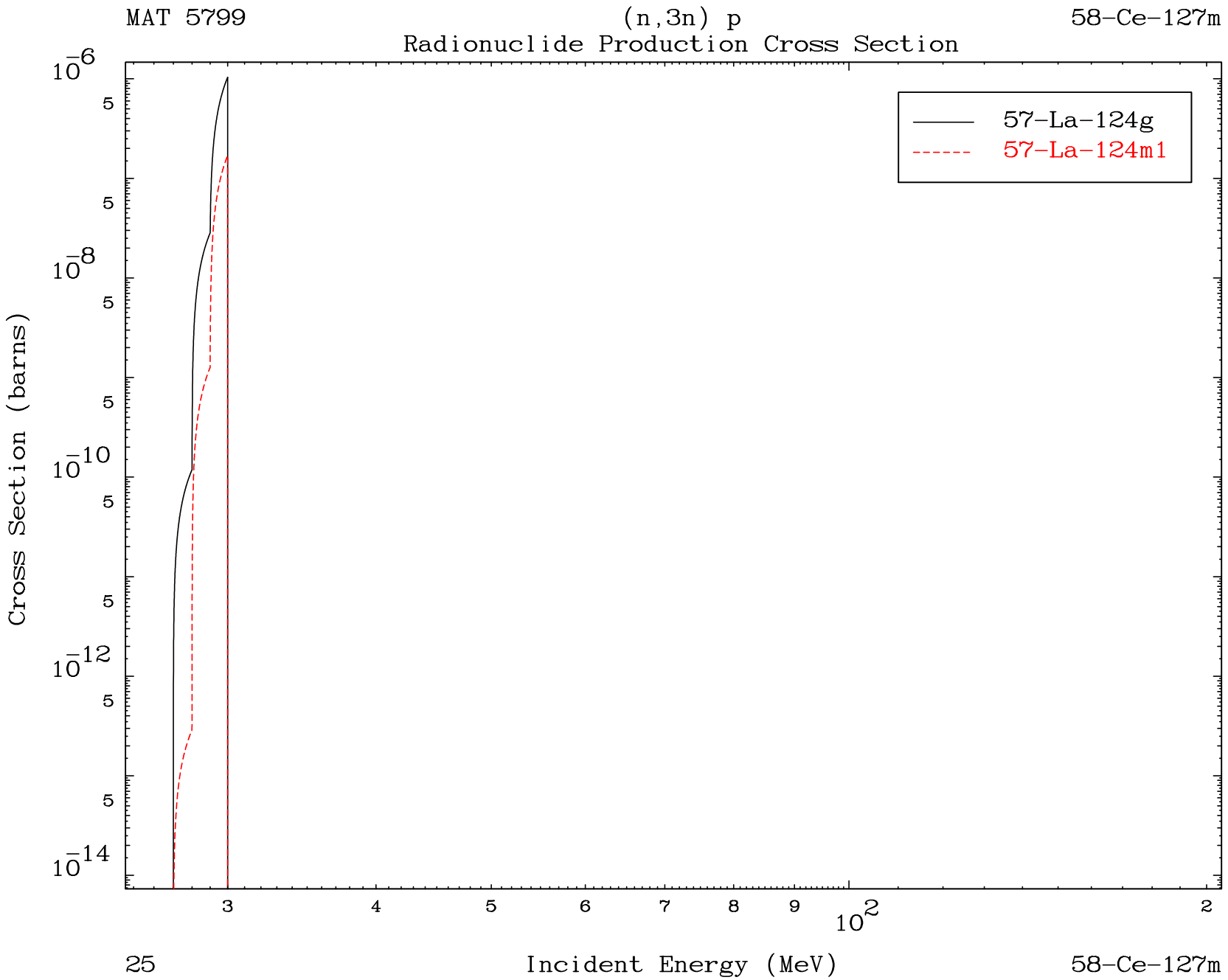

MAT 5799
Inelastic
58-Ce-127m
Radionuclide Production Cross Section
58-Ce-127g
58-Ce-127m1
Cross Section (barns)
Incident Energy (MeV)
20
58-Ce-127m

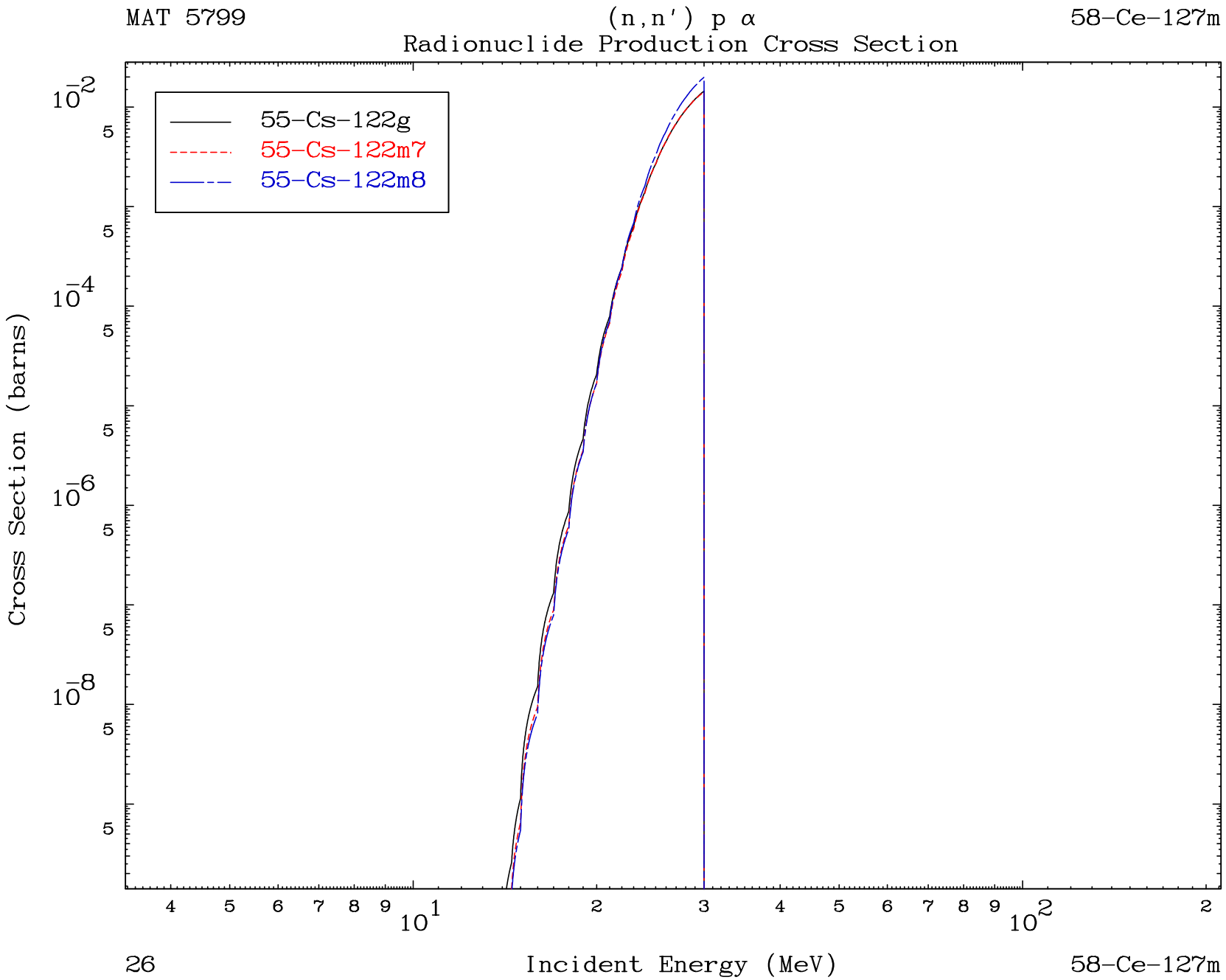

MAT 5799
(n,2n) d
58-Ce-127m
Radionuclide Production Cross Section
57-La-124g
57-La-124m1
Cross Section (barns)
10-8
10-10
10-12
10-14
5
3
4
5
6
7
8
9
10 2
2
21
Incident Energy (MeV)
58-Ce-127m

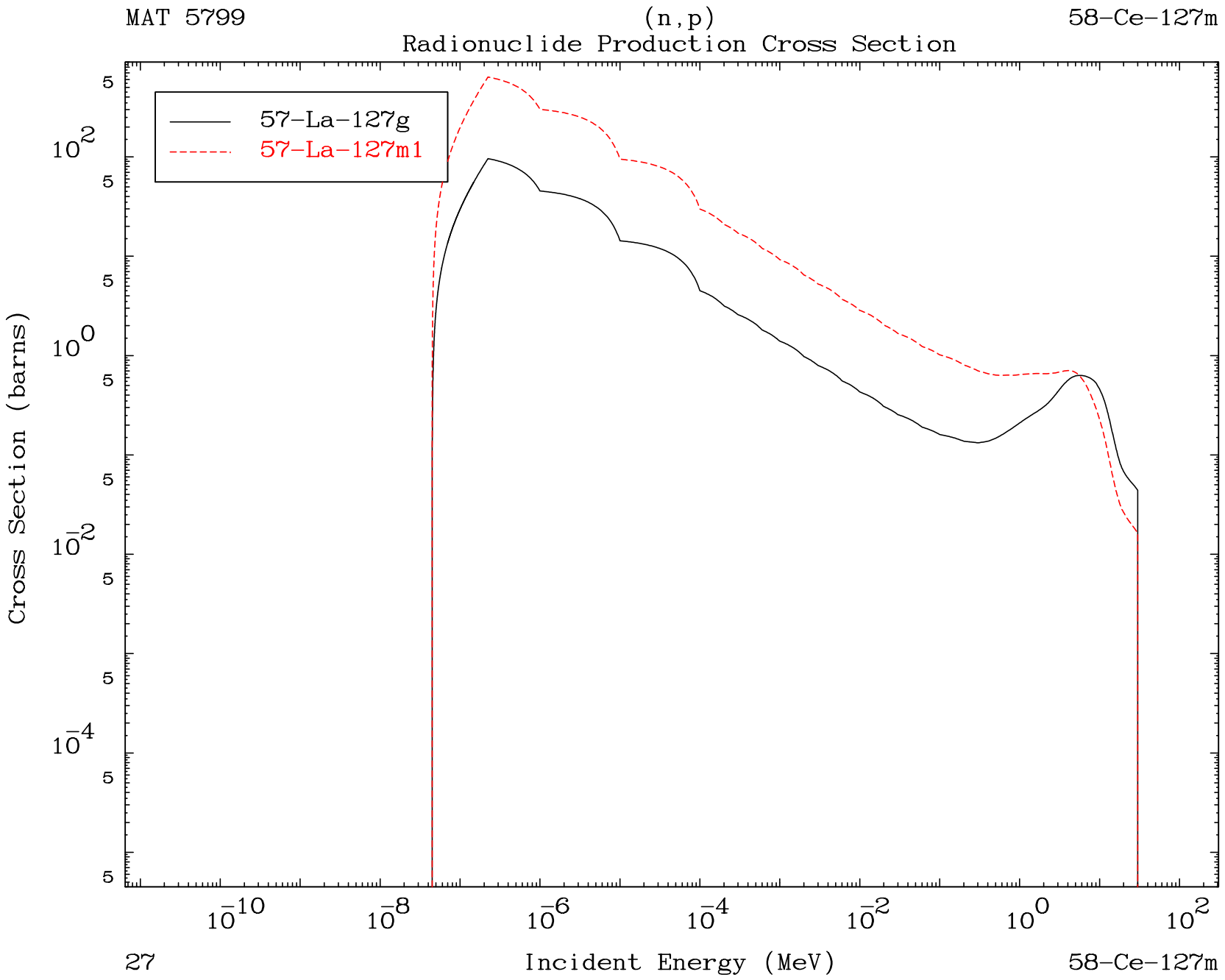

MAT 5799
(n,n') d
58-Ce-127m
Radionuclide Production Cross Section
57-La-125g
57-La-125m1
Cross Section (barns)
10-4
10-6
10-8
10-10
2
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
22
58-Ce-127m

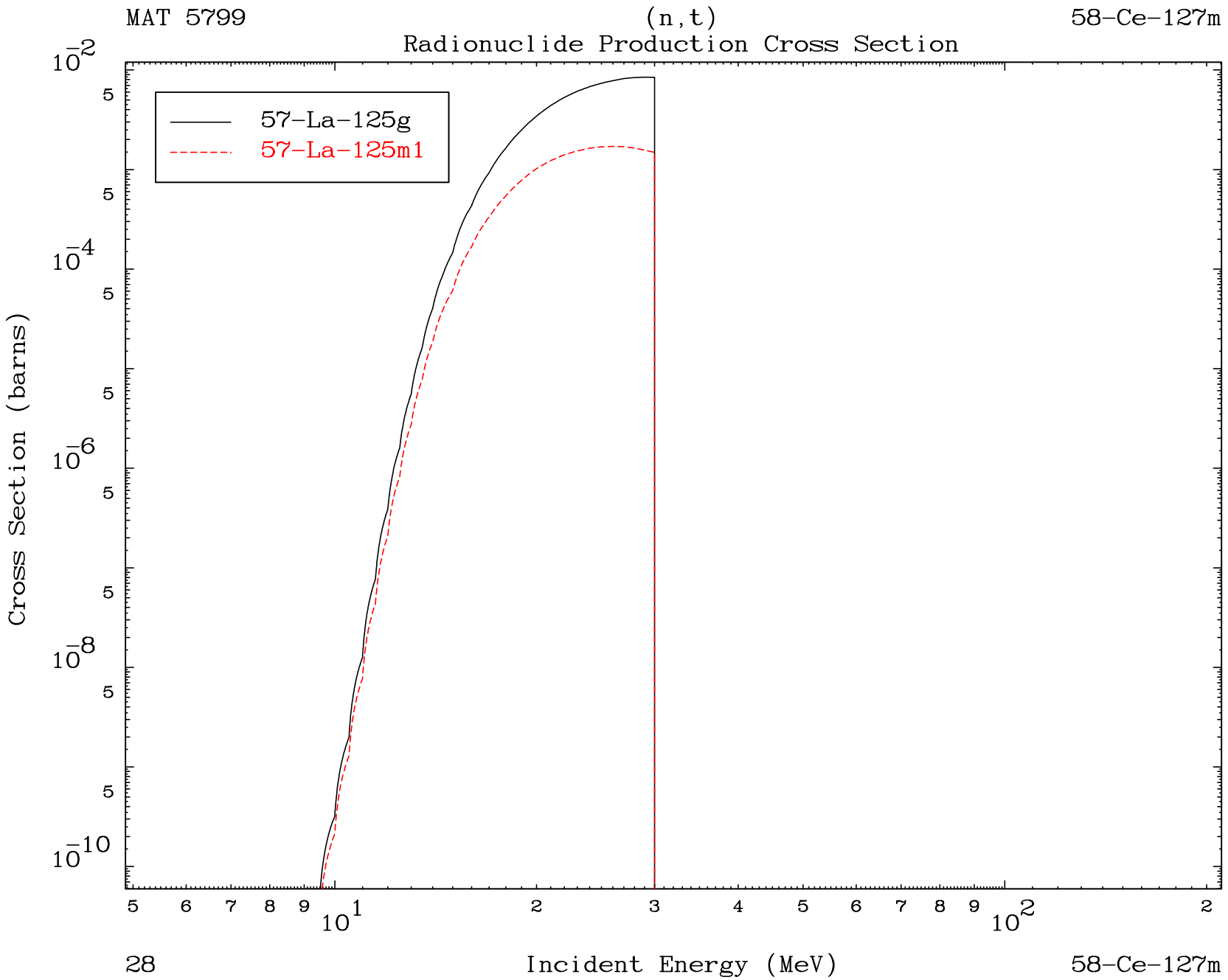

MAT 5799
(n,n') t
58-Ce-127m
Radionuclide Production Cross Section
57-La-124g
57-La-124m1
Cross Section (barns)
10-4
10-6
10-8
10-10
Incident Energy (MeV)
23
58-Ce-127m

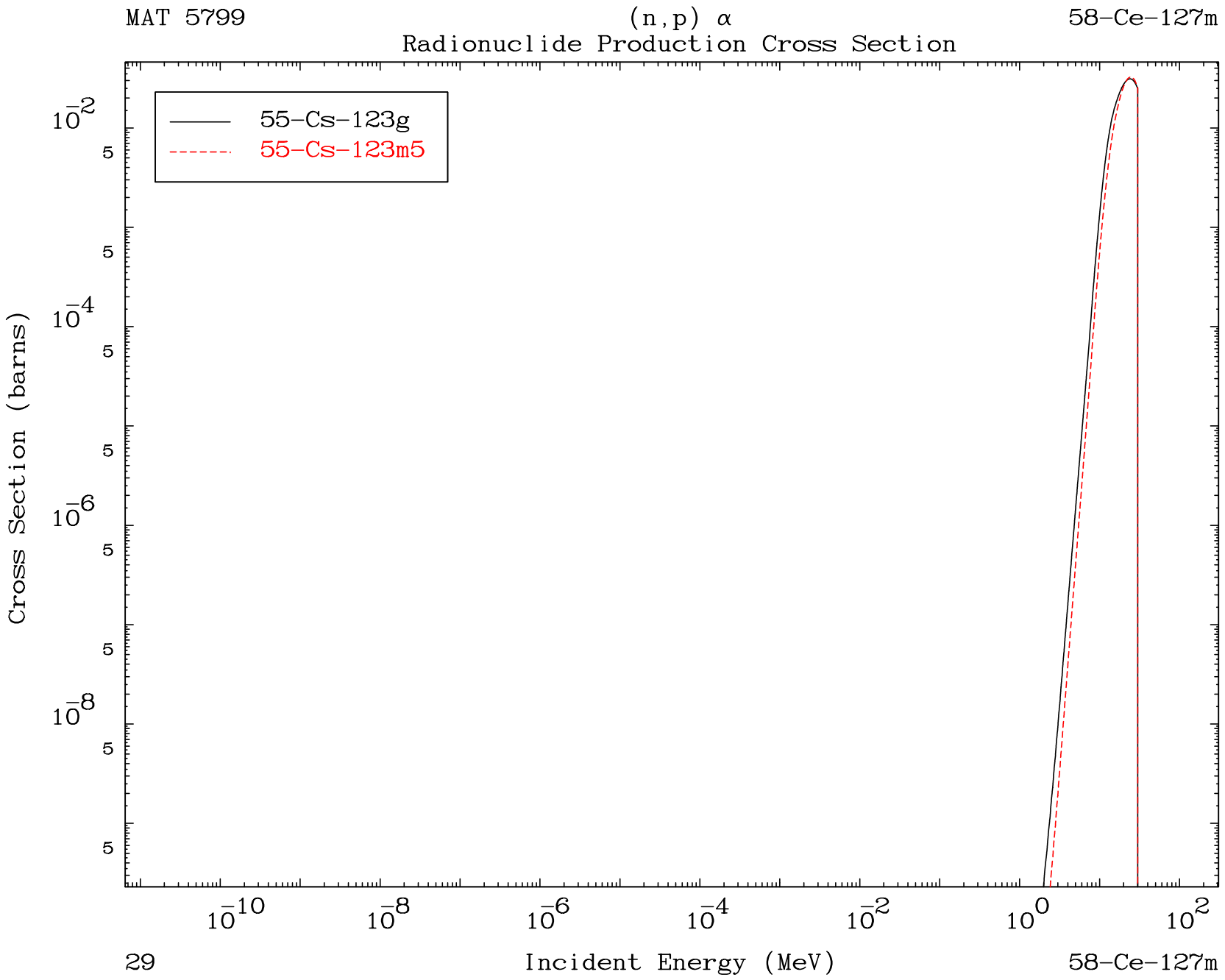

MAT 5799
(n,2n) p
58-Ce-127m
Radionuclide Production Cross Section
57-La-125g
57-La-125m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
2
3
4
5
6
7
8
9
102
2
24
Incident Energy (MeV)
58-Ce-127m

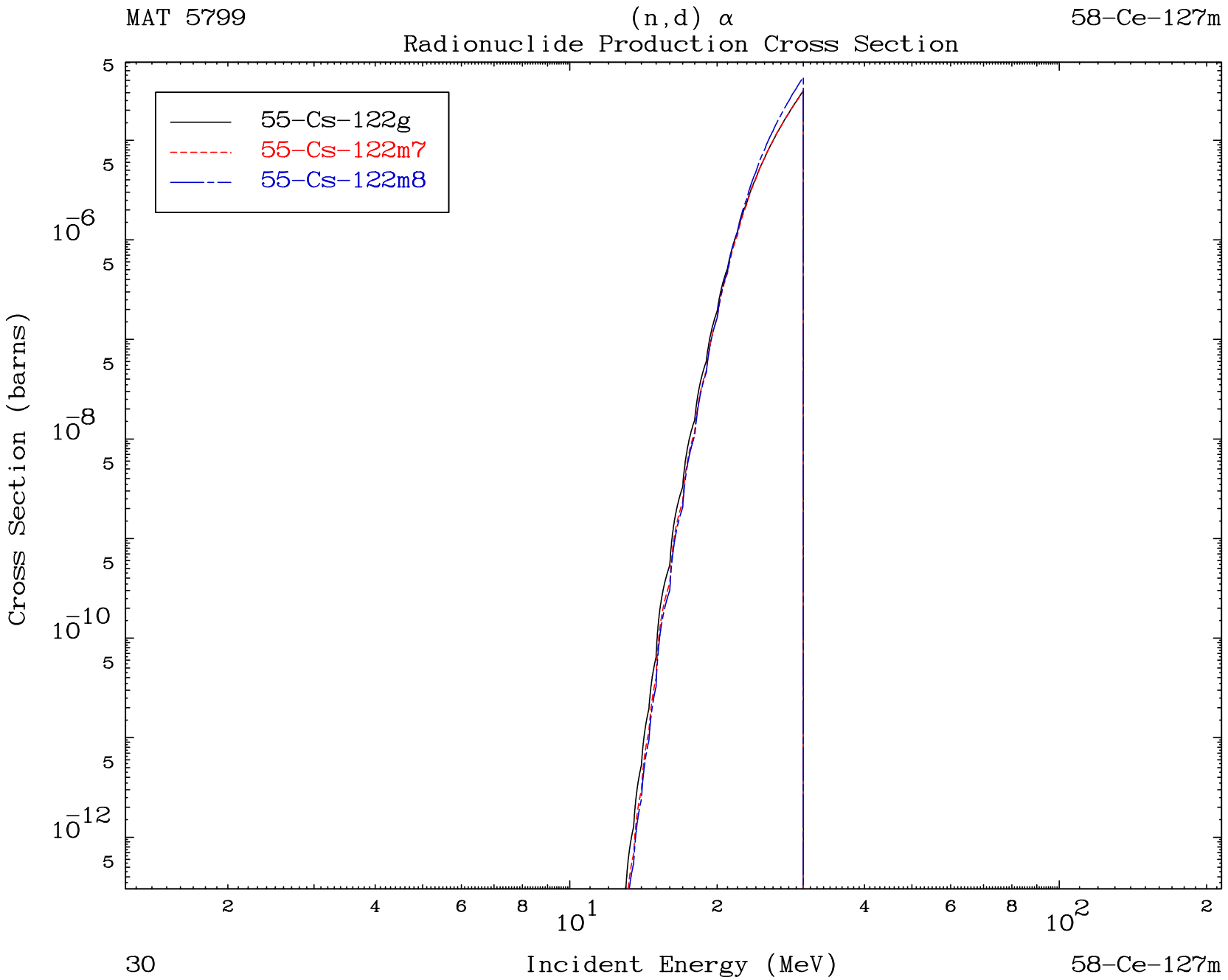

MAT 5799
(n,3n) p
58-Ce-127m
Radionuclide Production Cross Section
57-La-124g
57-La-124m1
Cross Section (barns)
Incident Energy (MeV)
25
58-Ce-127m


MAT 5799
(n,n') p α
58-Ce-127m
Radionuclide Production Cross Section
55-Cs-122g
55-Cs-122m7
55-Cs-122m8
Cross Section (barns)
Incident Energy (MeV)
26
58-Ce-127m


MAT 5799
(n,p)
58-Ce-127m
Radionuclide Production Cross Section
57-La-127g
57-La-127m1
Cross Section (barns)
Incident Energy (MeV)
27
58-Ce-127m


MAT 5799
(n,t)
58-Ce-127m
Radionuclide Production Cross Section
57-La-125g
57-La-125m1
Cross Section (barns)
Incident Energy (MeV)
28
58-Ce-127m


MAT 5799
(n,p) α
58-Ce-127m
Radionuclide Production Cross Section
55-Cs-123g
55-Cs-123m5
Cross Section (barns)
Incident Energy (MeV)
29
58-Ce-127m


MAT 5799
(n,d) α
58-Ce-127m
Radionuclide Production Cross Section
55-Cs-122g
55-Cs-122m7
55-Cs-122m8
Cross Section (barns)
Incident Energy (MeV)
30
58-Ce-127m