Program EVALPLOT
(Version 2017-1)
by
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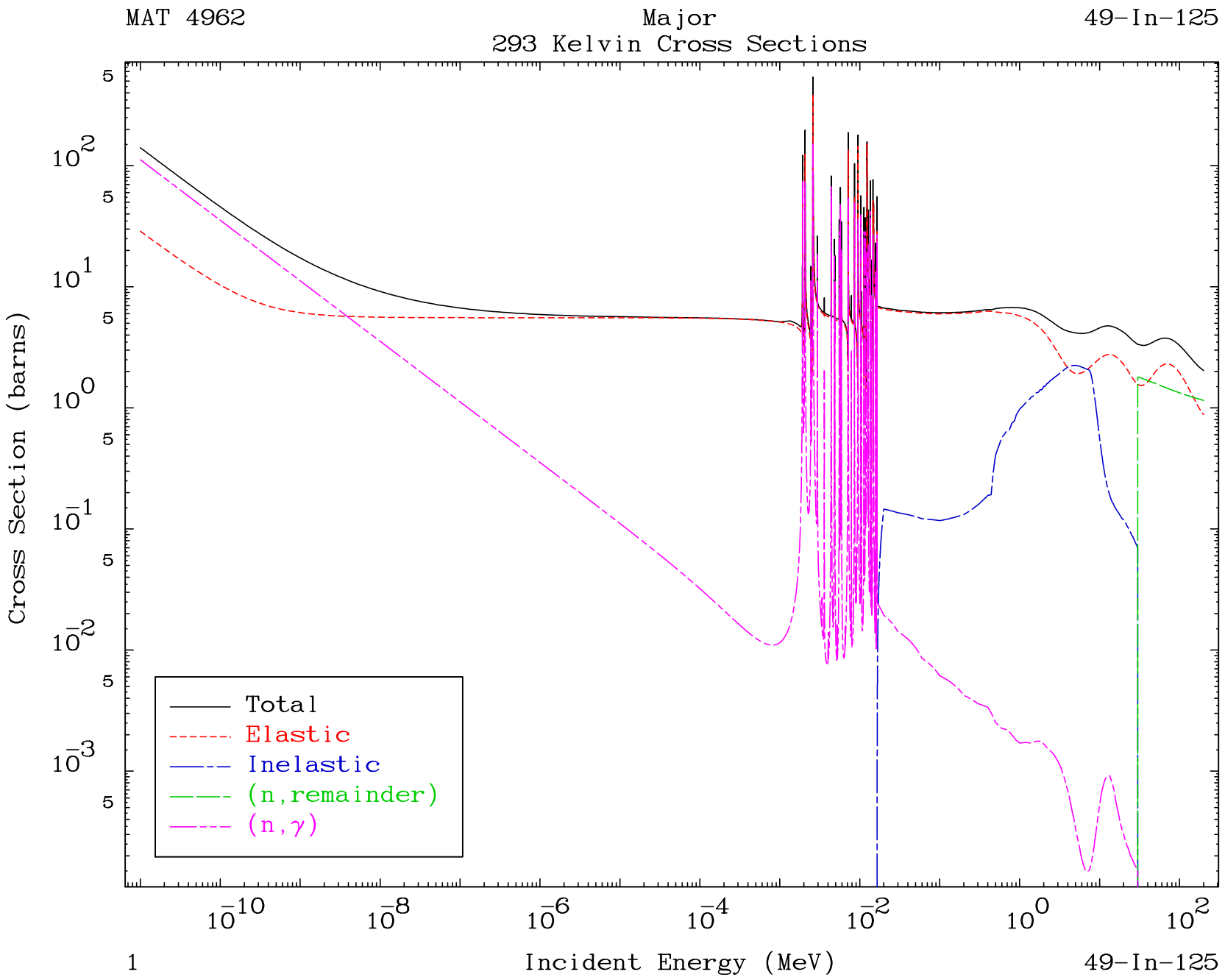
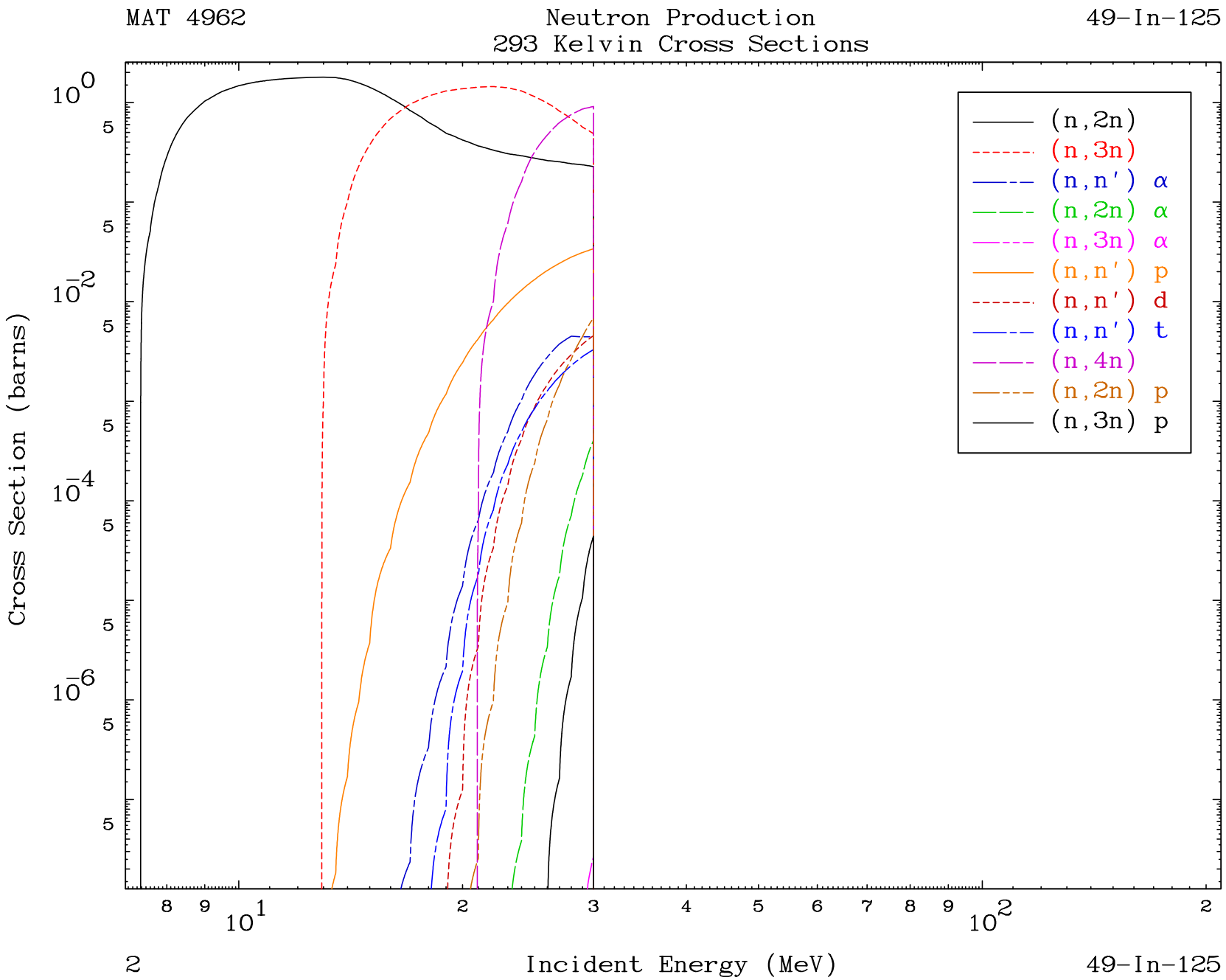
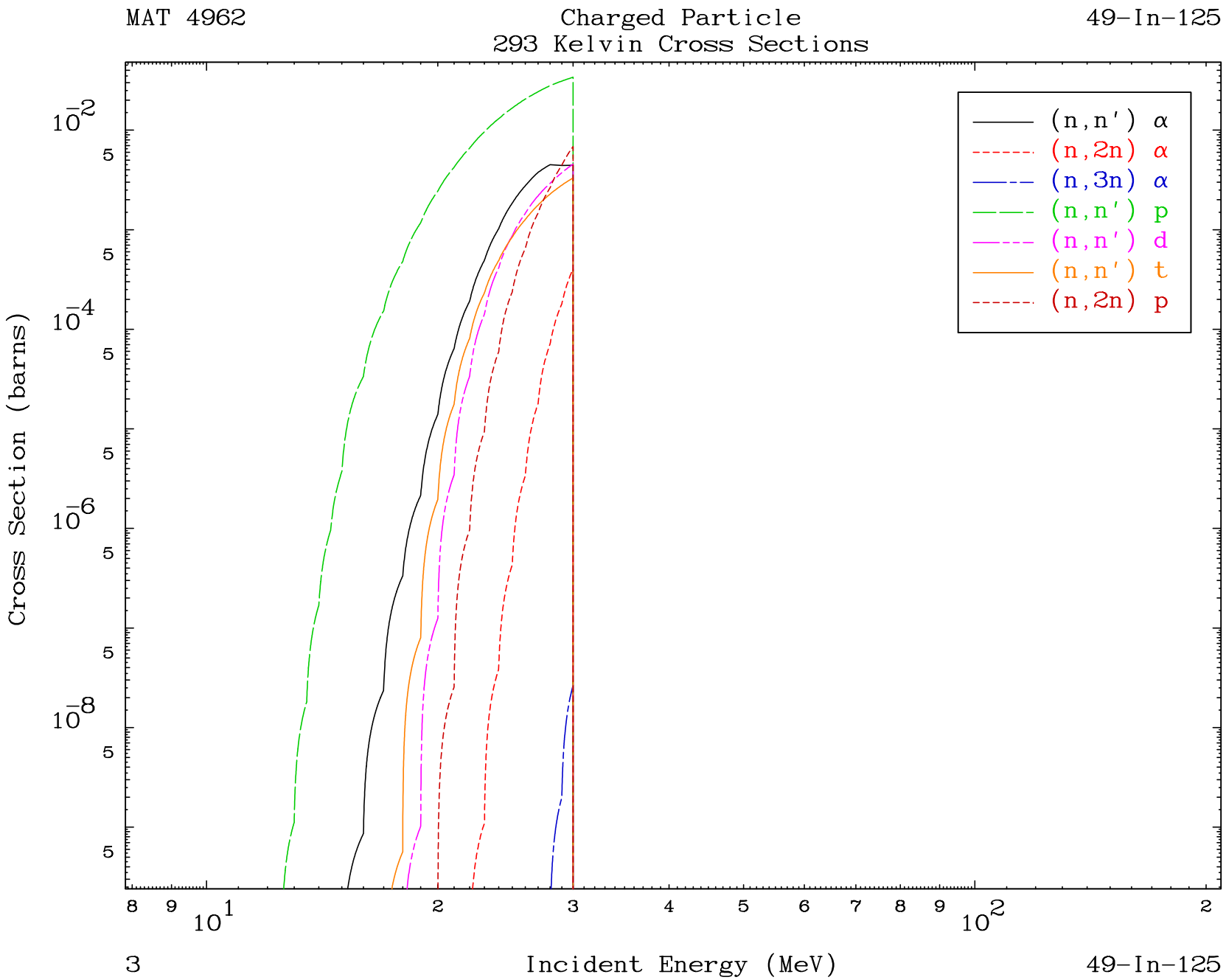
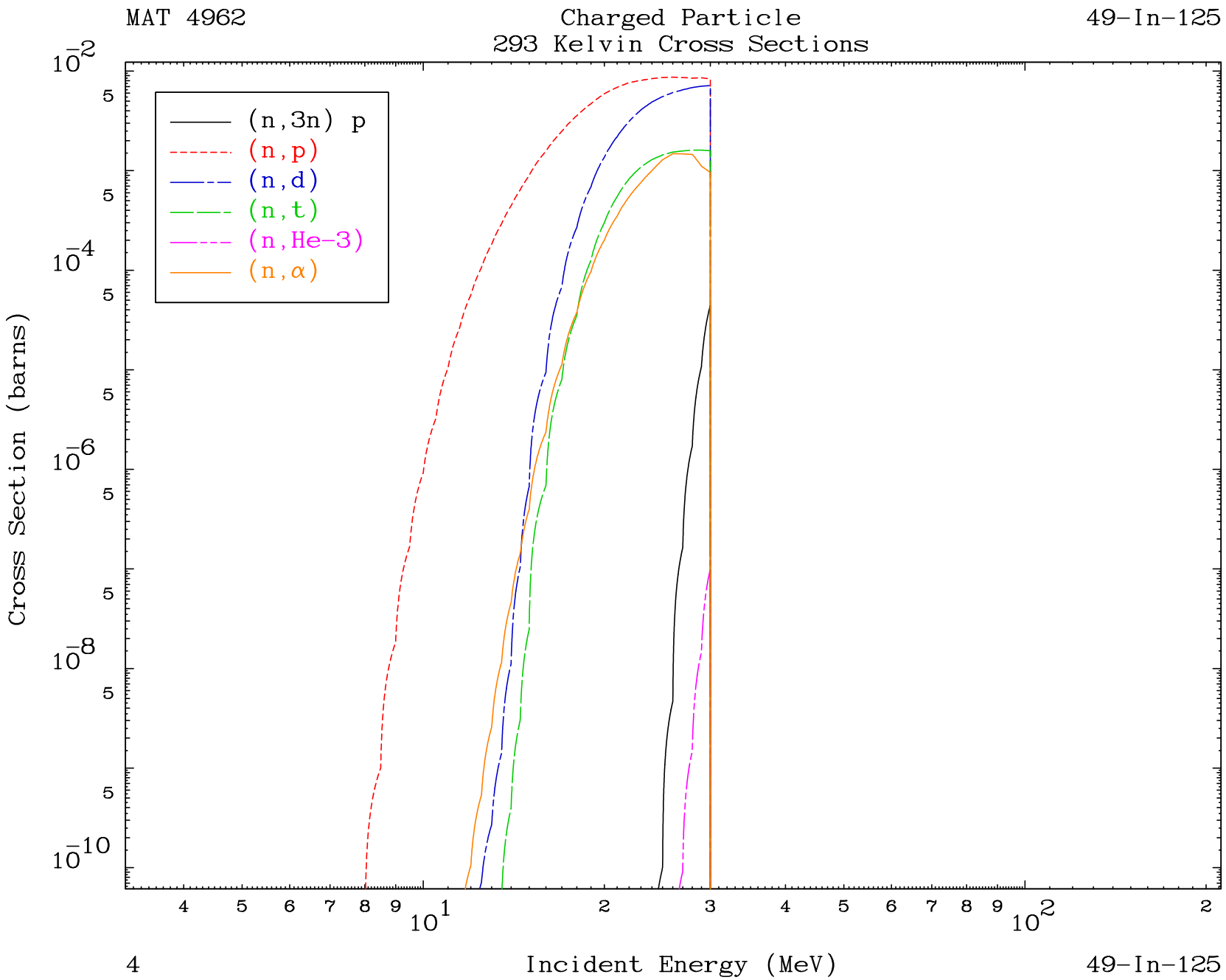
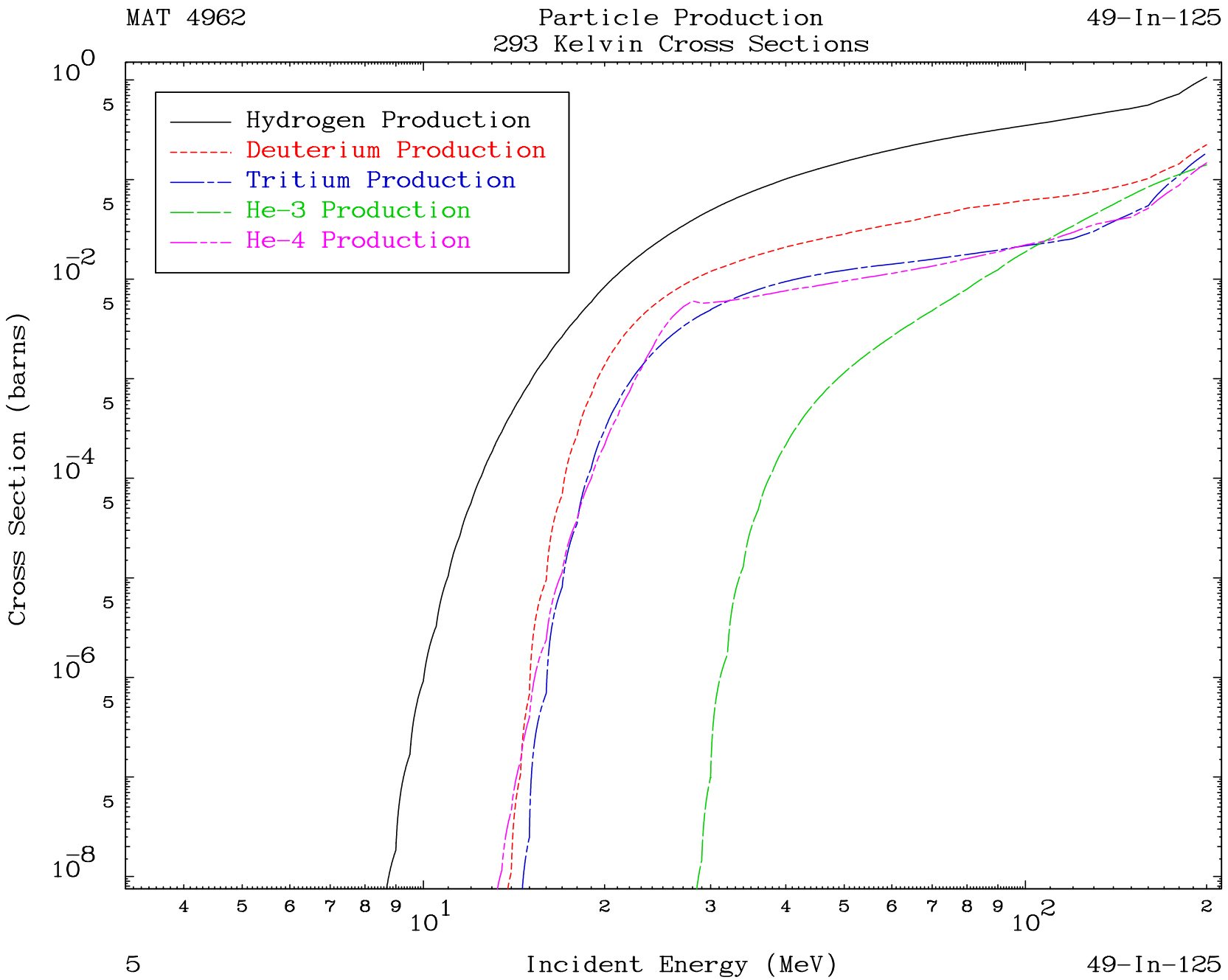
Press Mouse Button to Start

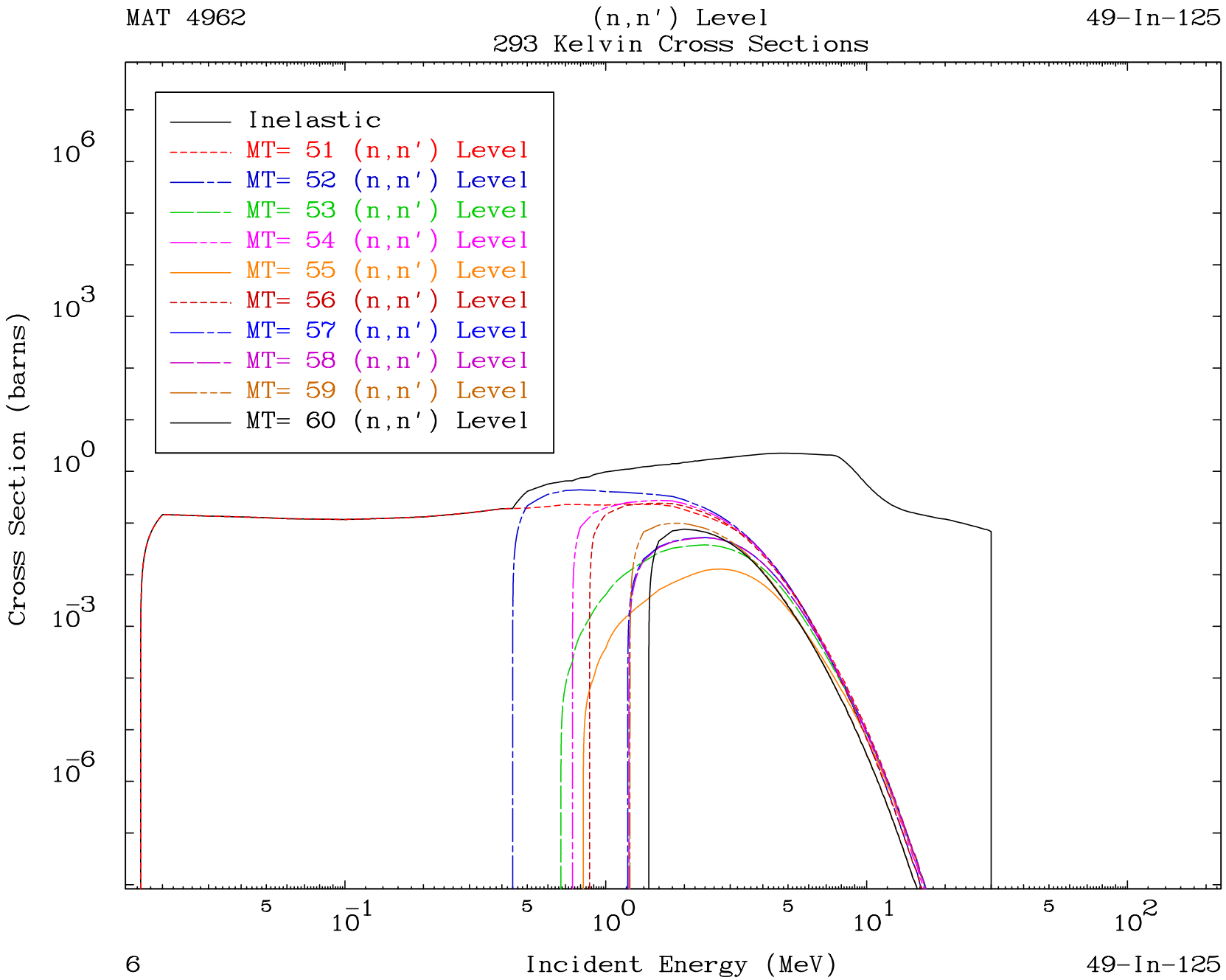

MAT 4962
Major
49-In-125
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
49-In-125

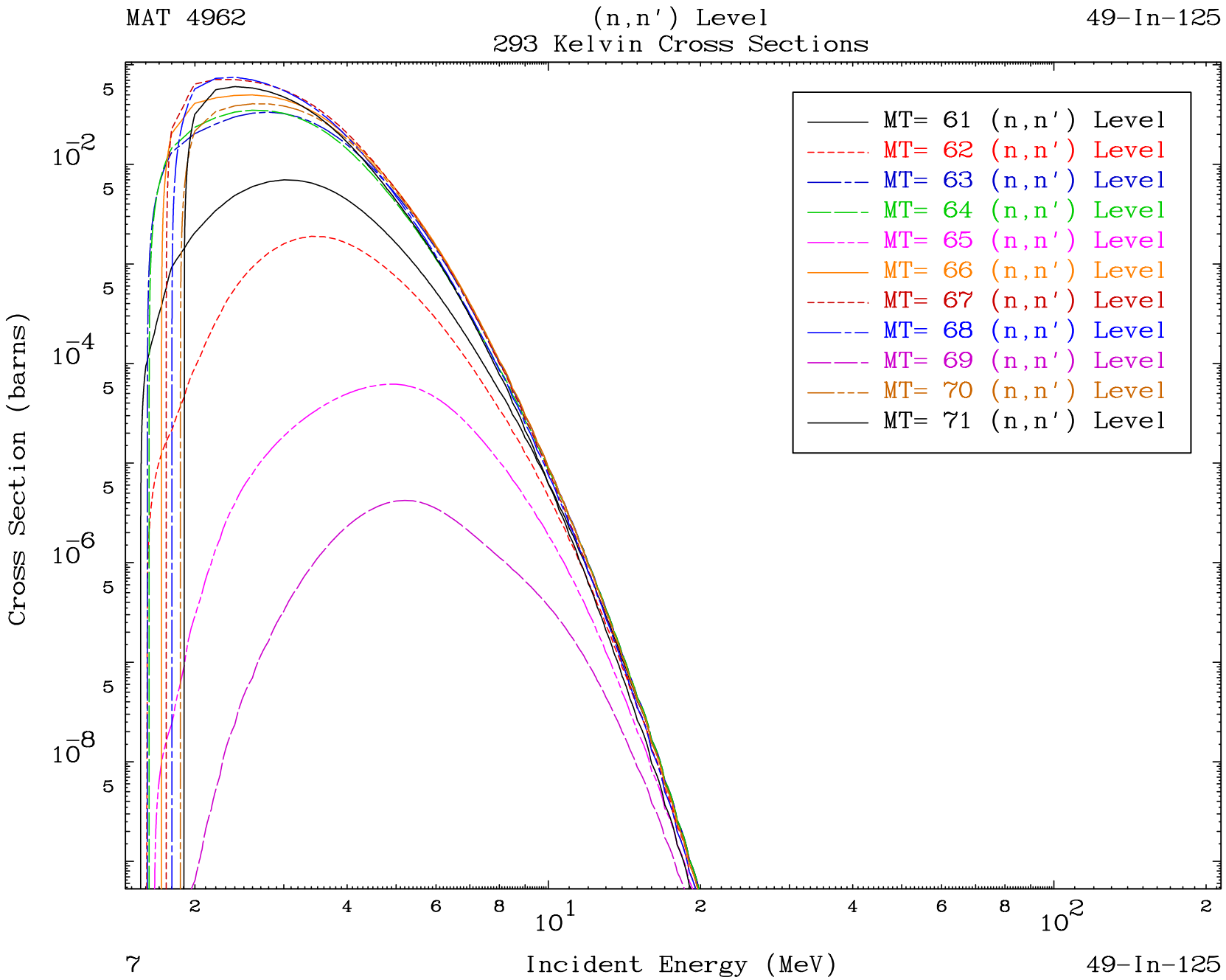

MAT 4962
Neutron Production
293 Kelvin Cross Sections
49-In-125
Cross Section (barns)
Incident Energy (MeV)
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,4n)
(n,2n) p
(n,3n) p

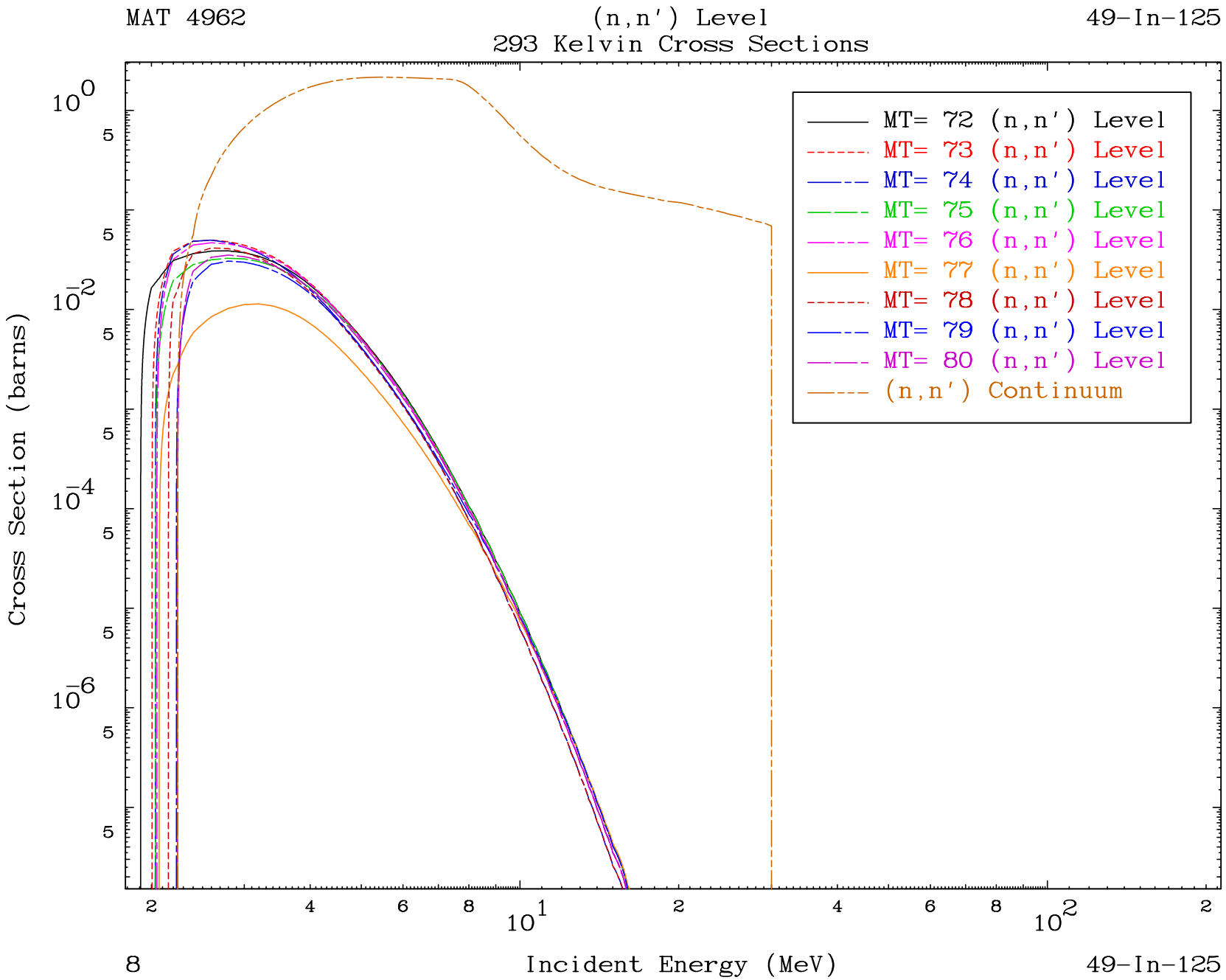

MAT 4962
Charged Particle
293 Kelvin Cross Sections
49-In-125
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,2n) p
Cross Section (barns)
Incident Energy (MeV)
3
49-In-125

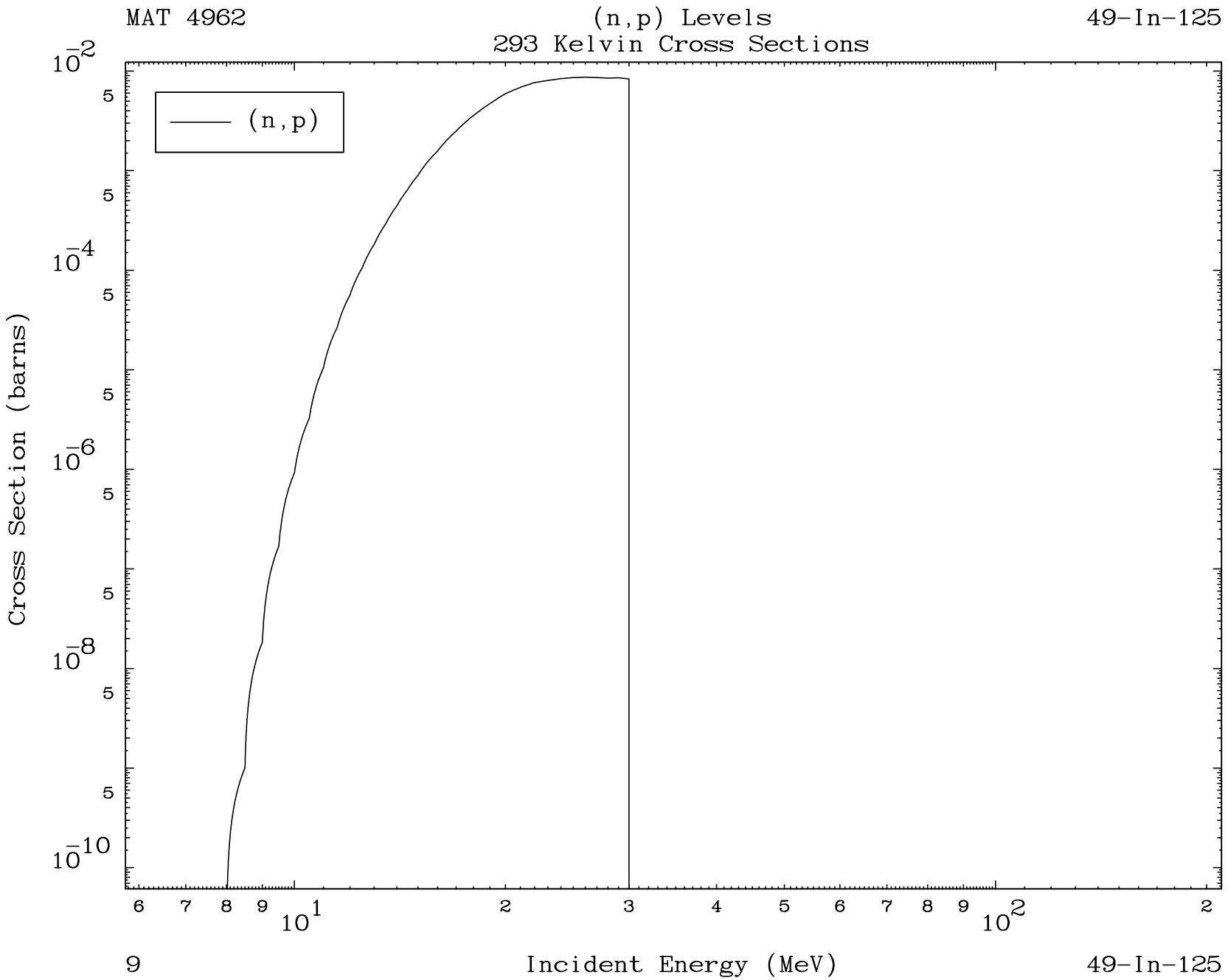

MAT 4962
Charged Particle
293 Kelvin Cross Sections
49-In-125
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
Cross Section (barns)
Incident Energy (MeV)
4
49-In-125

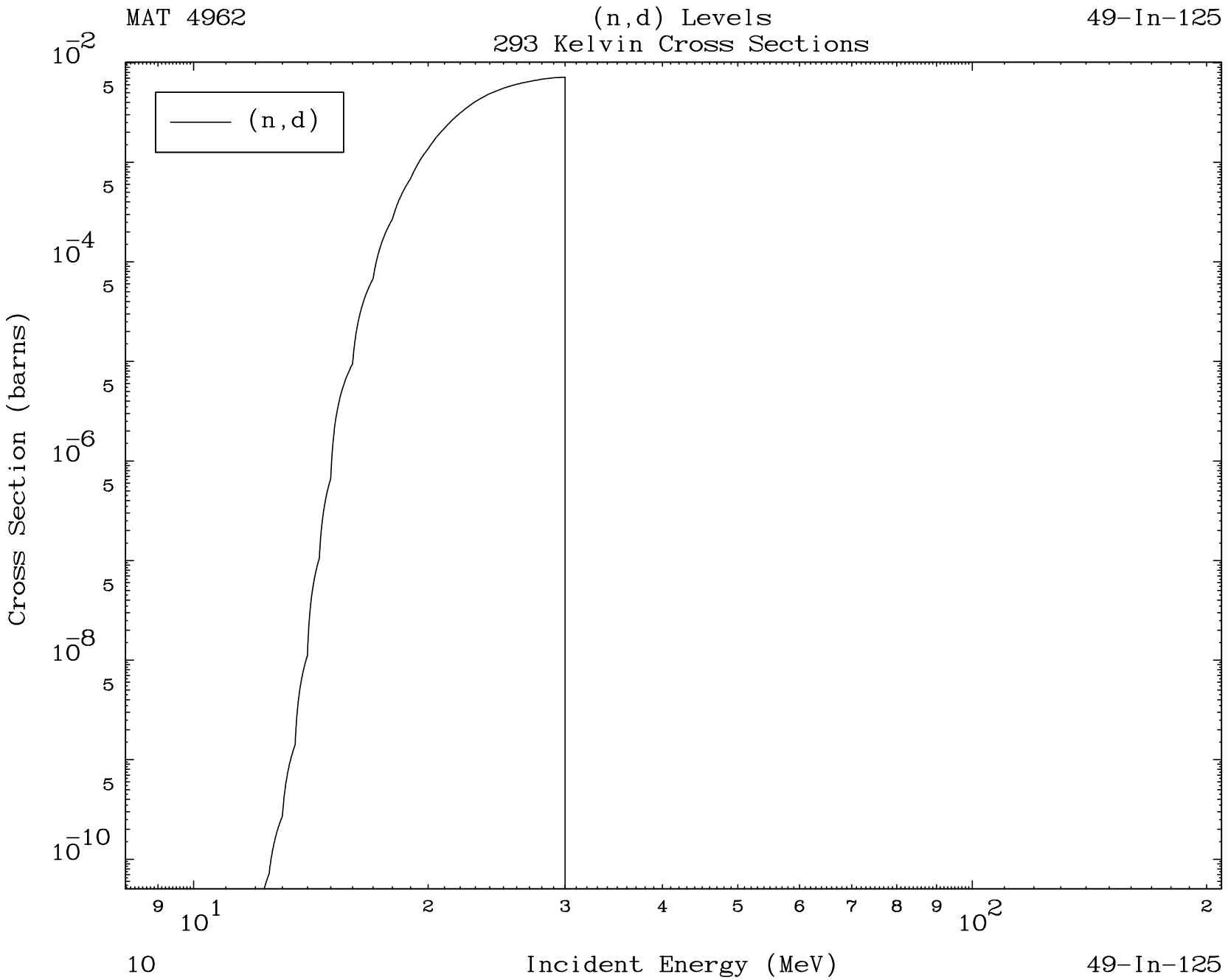

MAT 4962
Particle Production
293 Kelvin Cross Sections
49-In-125
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
49-In-125
5

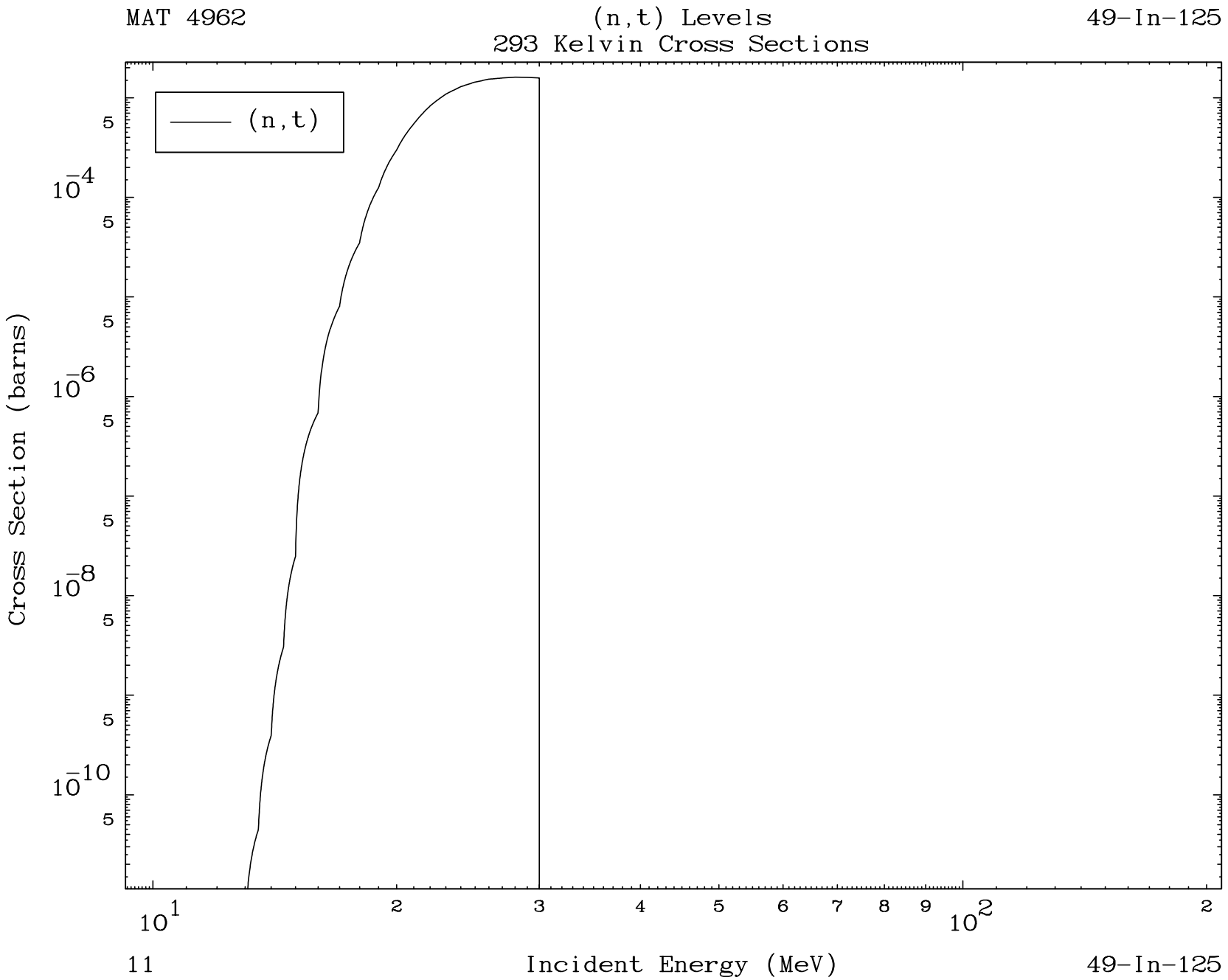

MAT 4962
(n,n') Level
49-In-125
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
MT= 60 (n,n') Level
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
5
10^-1
5
10^0
5
10^1
5
10^2
Incident Energy (MeV)
6
49-In-125

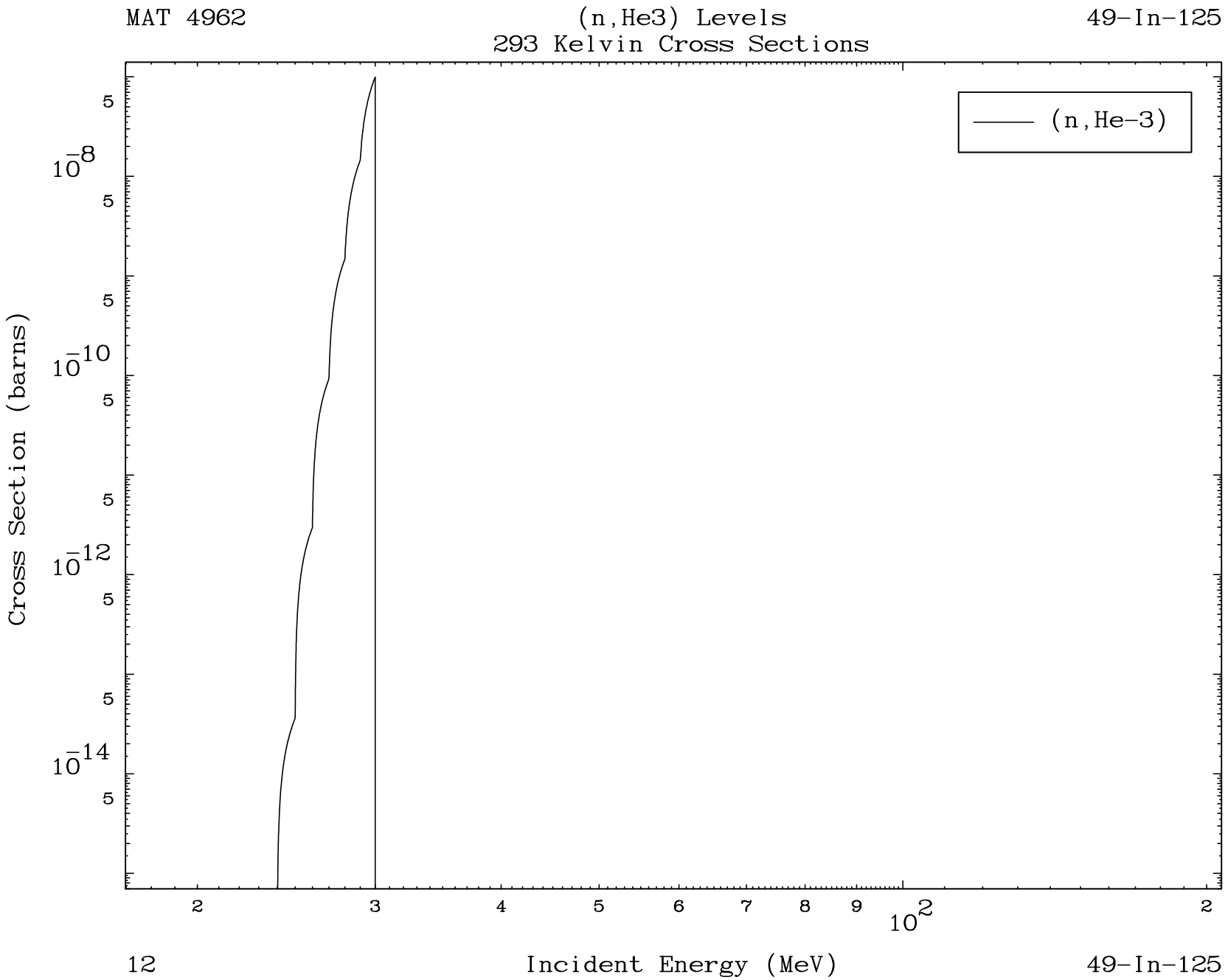

MAT 4962
(n,n') Level
293 Kelvin Cross Sections
49-In-125
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
7
49-In-125

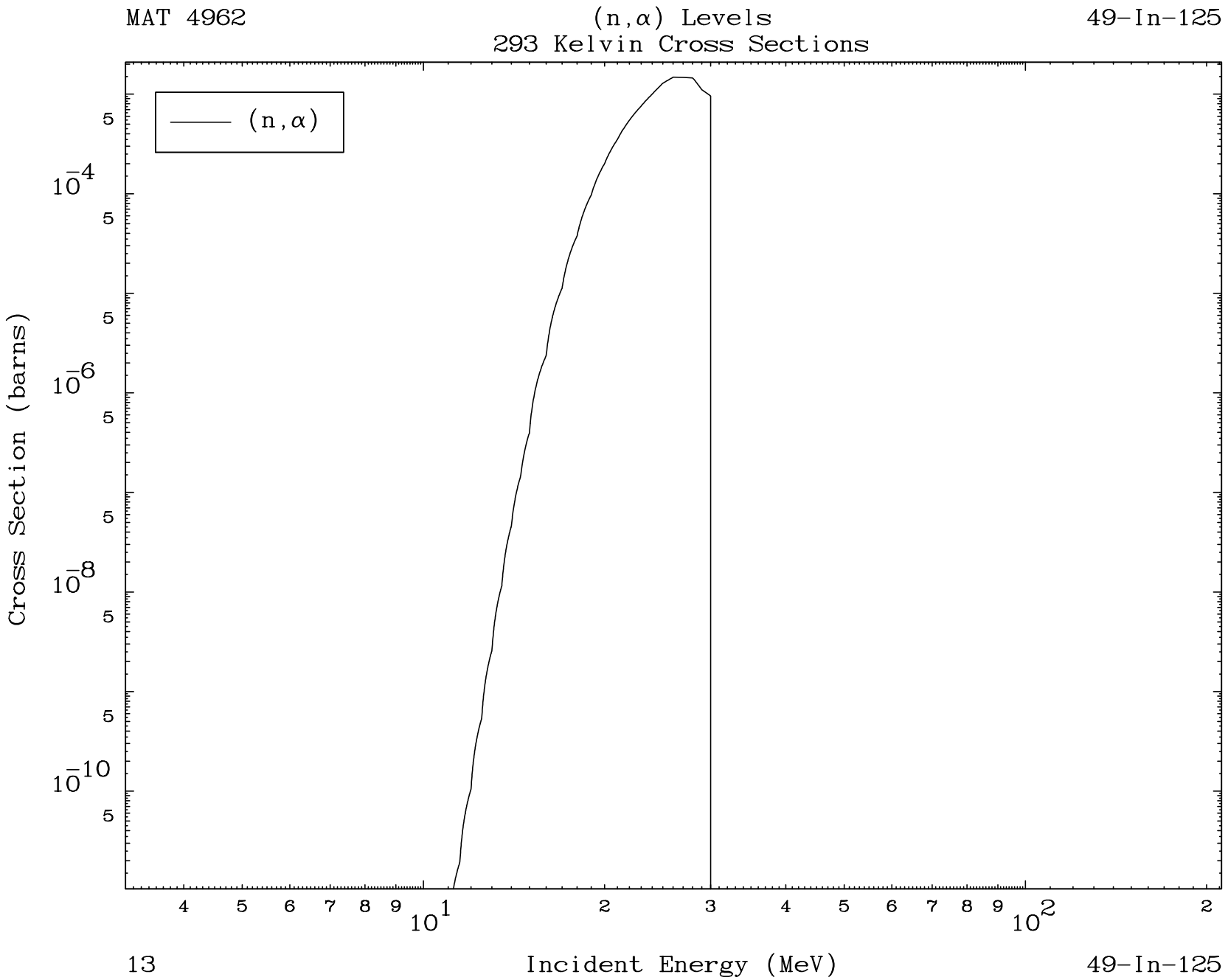

MAT 4962
(n,n') Level
293 Kelvin Cross Sections
49-In-125
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
8
49-In-125

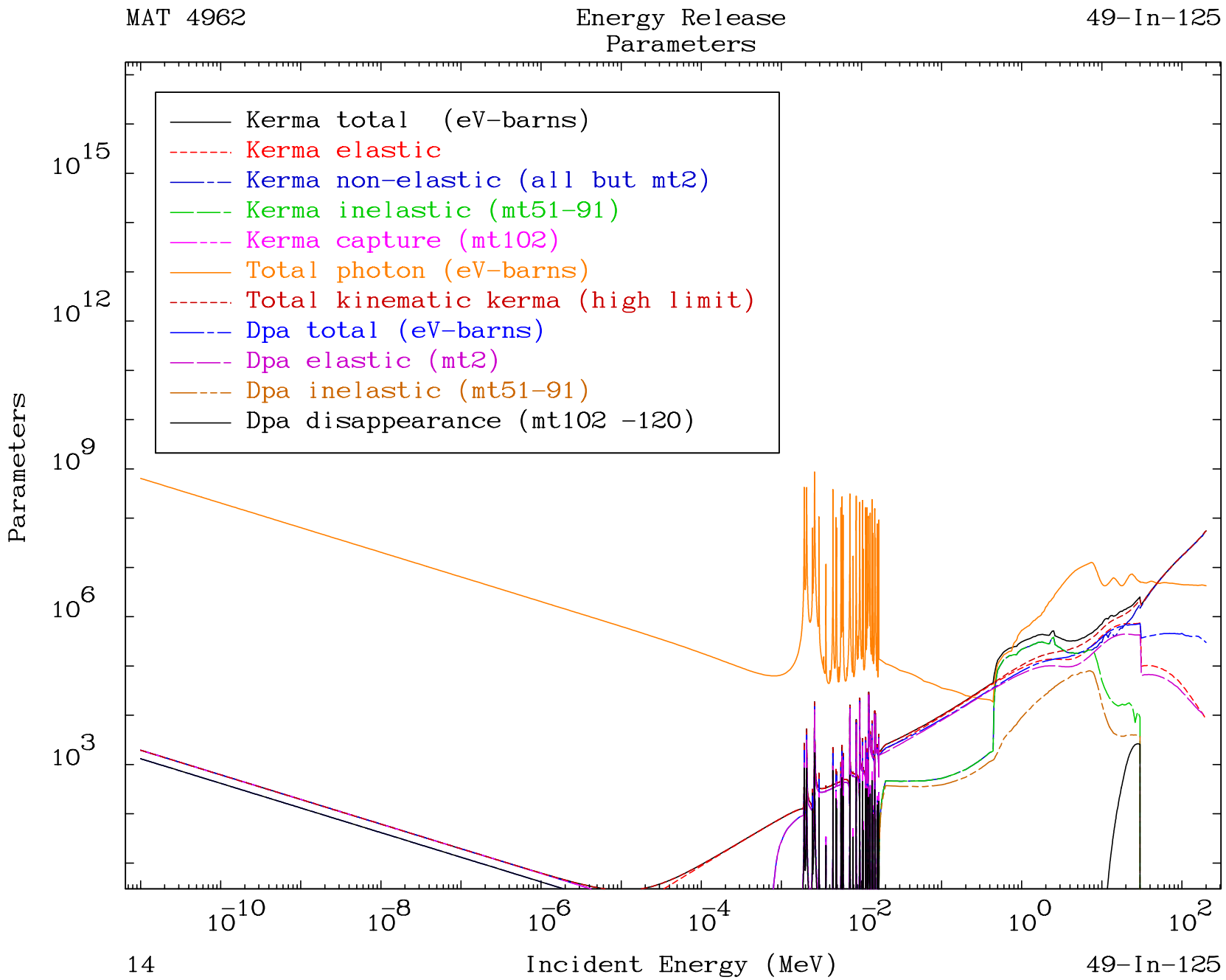

MAT 4962
(n,p) Levels
49-In-125
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
9
49-In-125

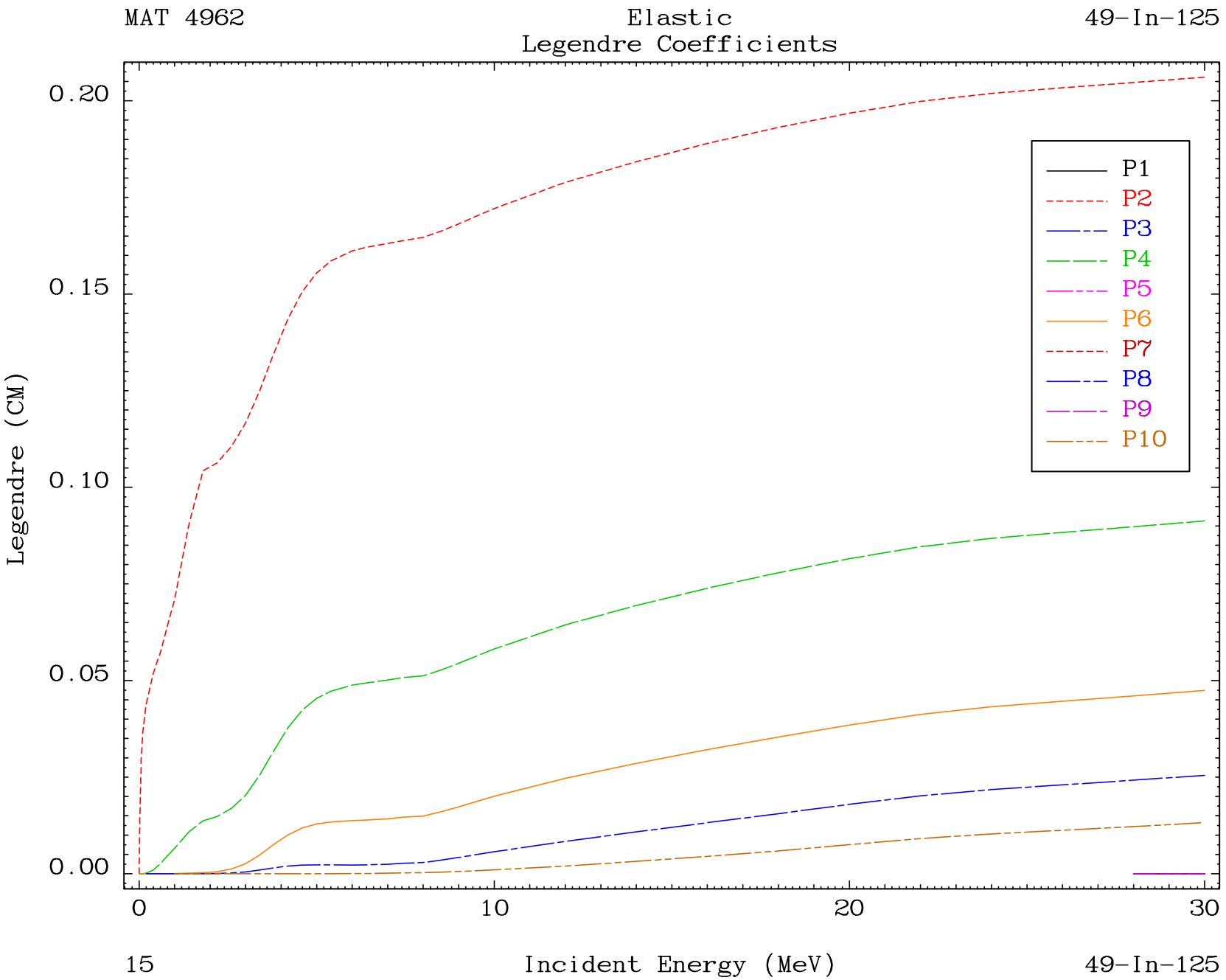

MAT 4962
(n,d) Levels
49-In-125
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
49-In-125

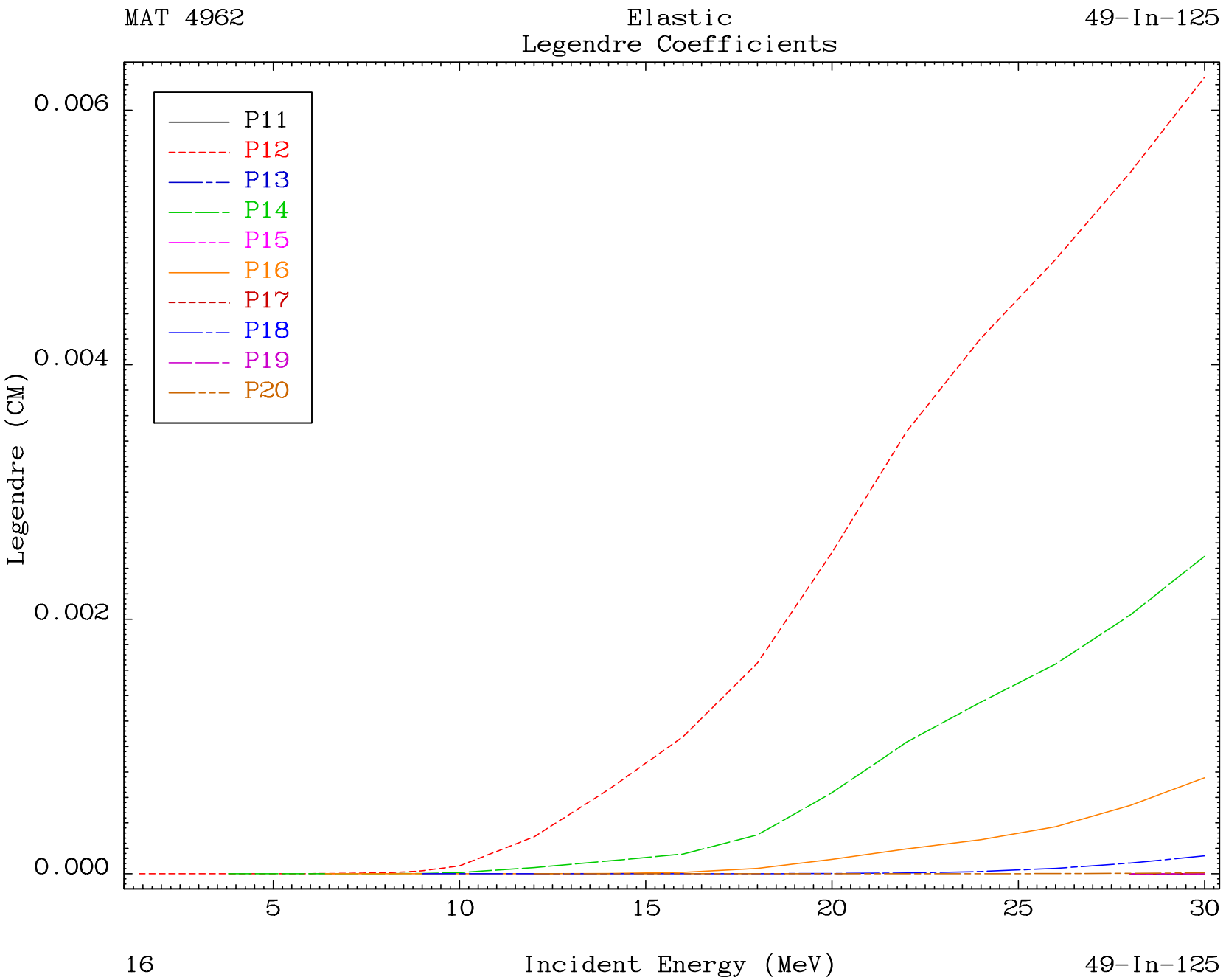

MAT 4962
(n,t) Levels
49-In-125
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
101
2
3
4
5
6
7
8
9
102
2
11
Incident Energy (MeV)
49-In-125

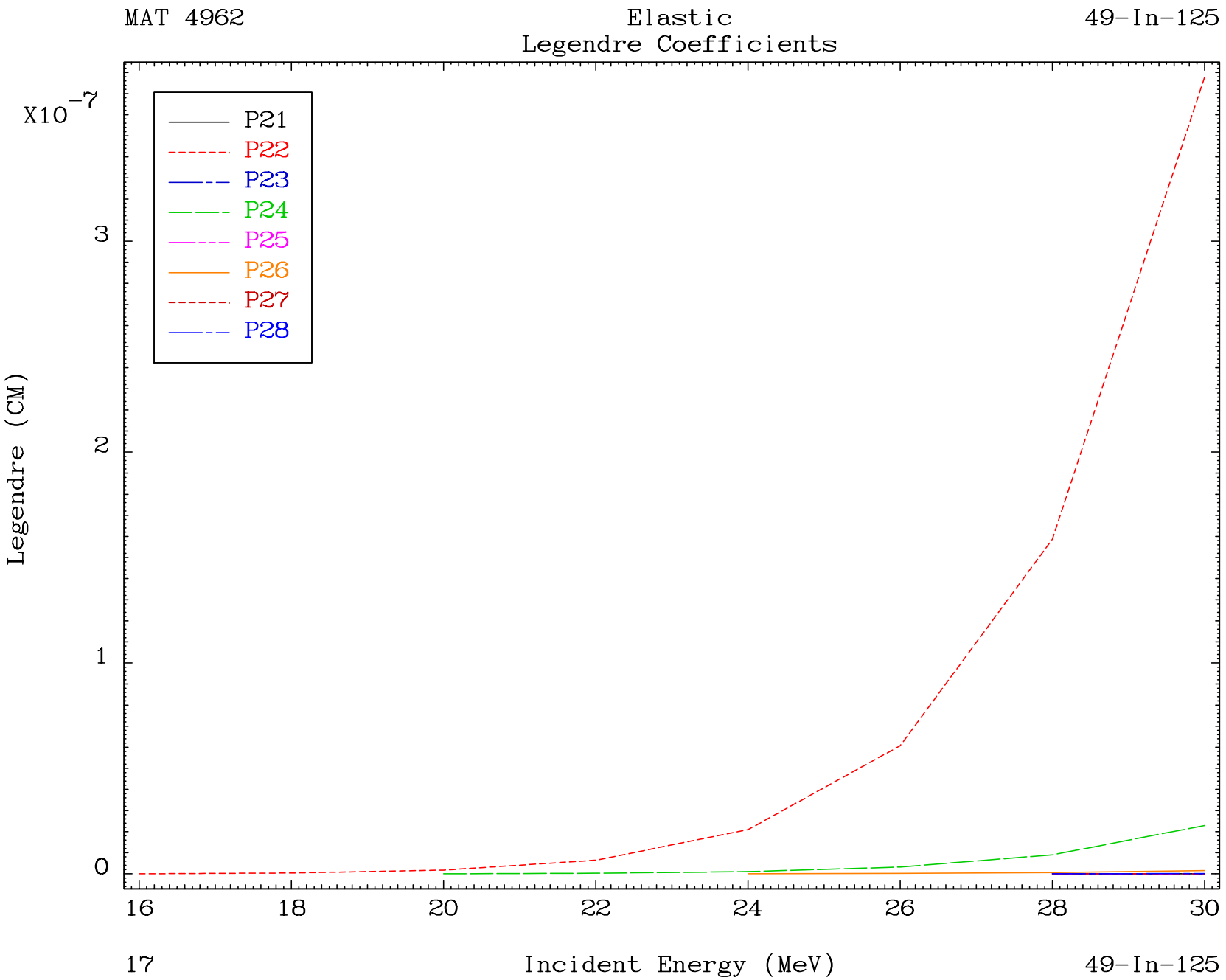

MAT 4962
(n,He3) Levels
293 Kelvin Cross Sections
49-In-125
(n,He-3)
Cross Section (barns)
10-8
10-10
10-12
10-14
5
2
3
4
5
6
7
8
9
10 2
2
12
Incident Energy (MeV)
49-In-125

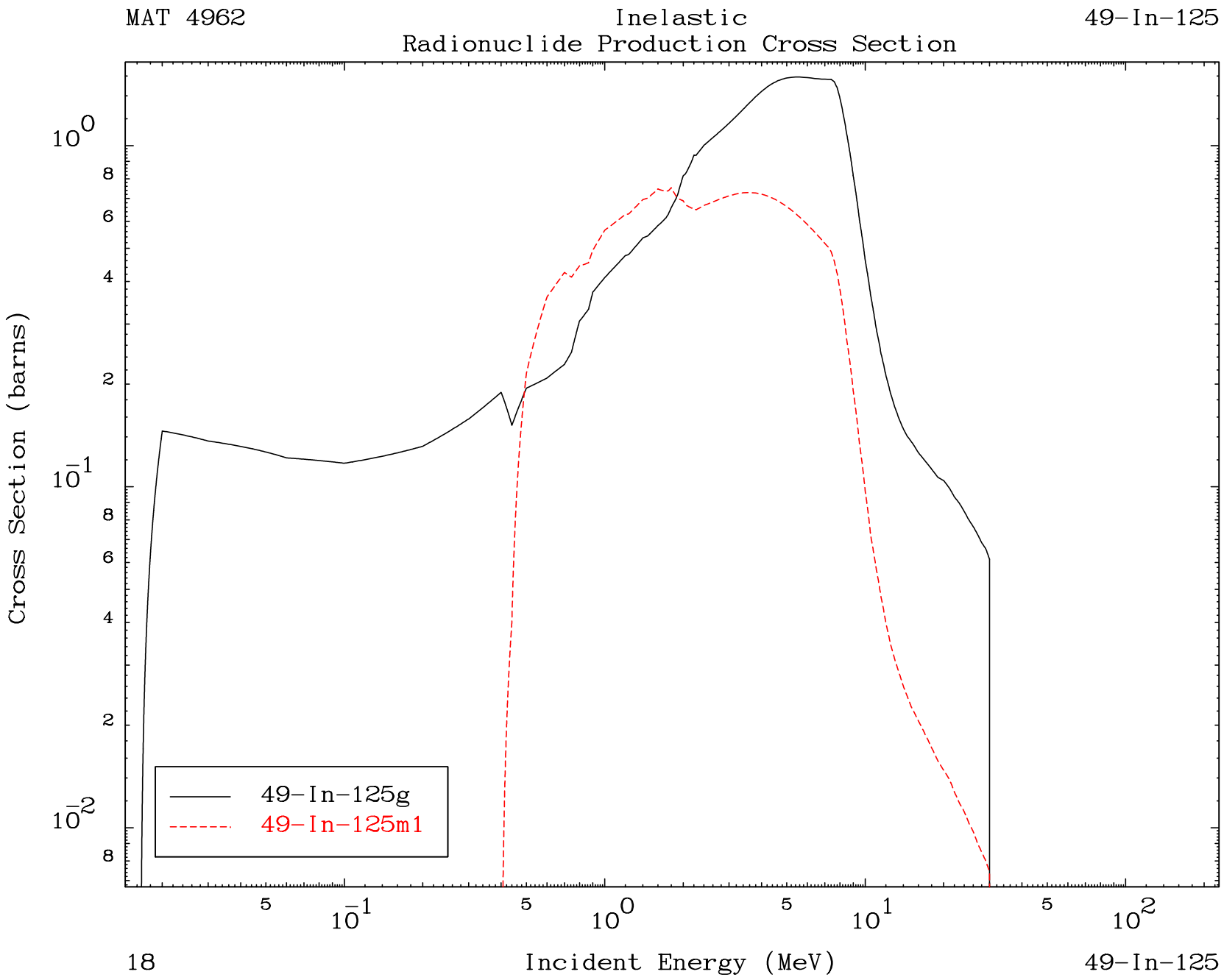

MAT 4962
(n,α) Levels
49-In-125
293 Kelvin Cross Sections
(n,α)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^1
10^2
Incident Energy (MeV)
13
49-In-125

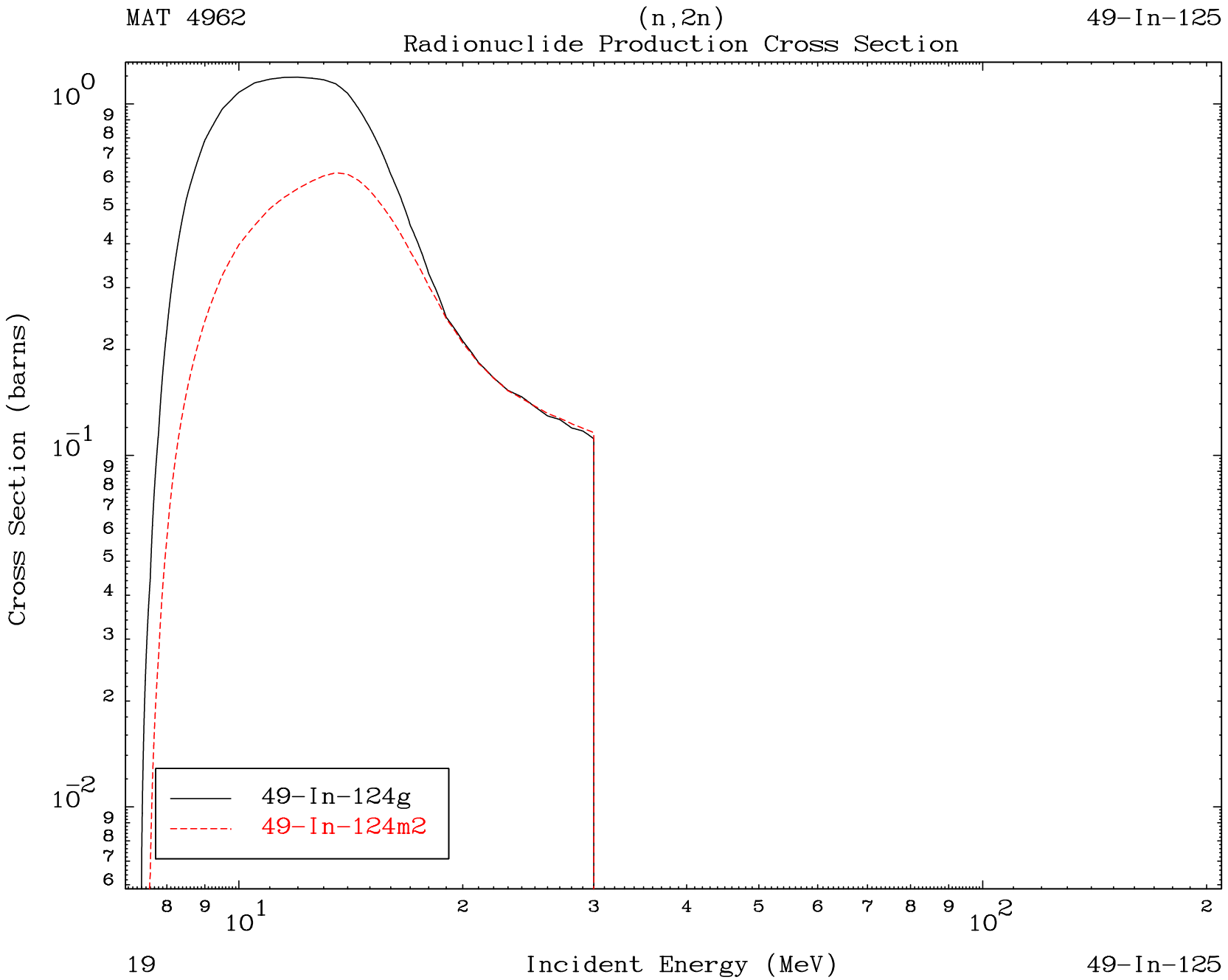

MAT 4962
Energy Release
Parameters
49-In-125
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^15
10^12
10^9
10^6
10^3
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
14
Incident Energy (MeV)
49-In-125

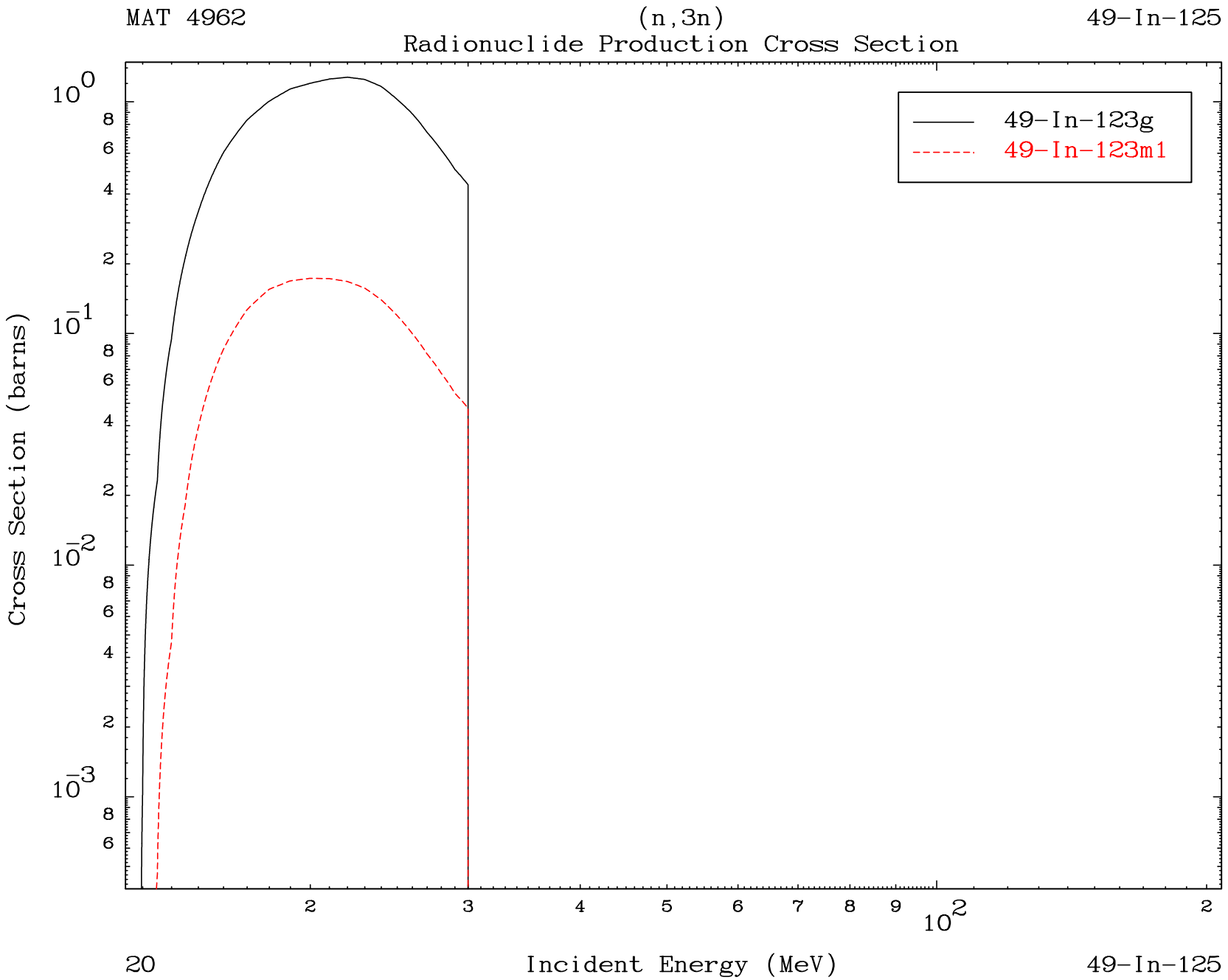

MAT 4962
Elastic
Legendre Coefficients
49-In-125
0.20
0.15
0.10
0.05
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
10
20
30
15
Incident Energy (MeV)
49-In-125

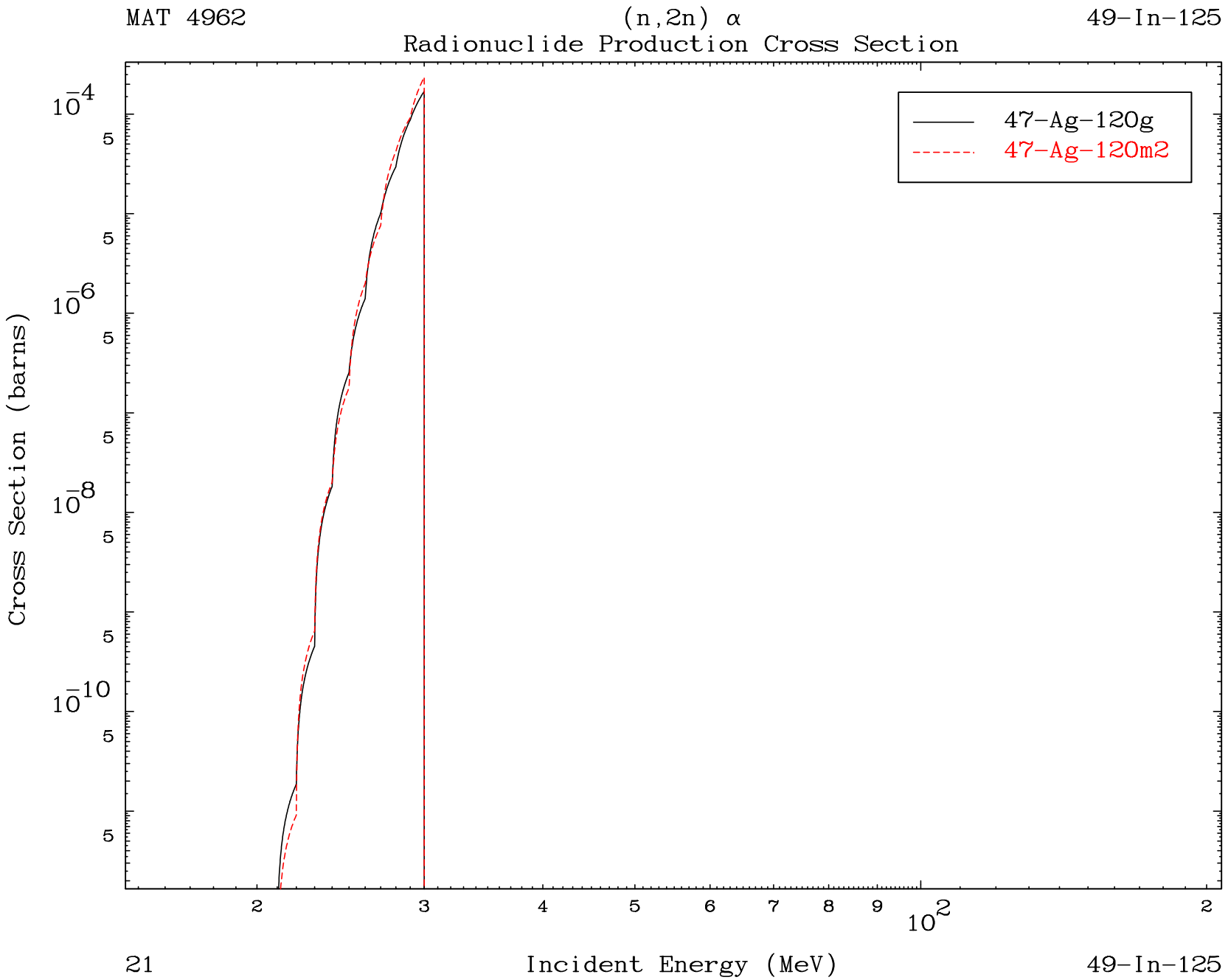

MAT 4962
Elastic
Legendre Coefficients
49-In-125
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.006
0.004
0.002
0.000
Legendre (CM)
5
10
15
20
25
30
16
Incident Energy (MeV)
49-In-125

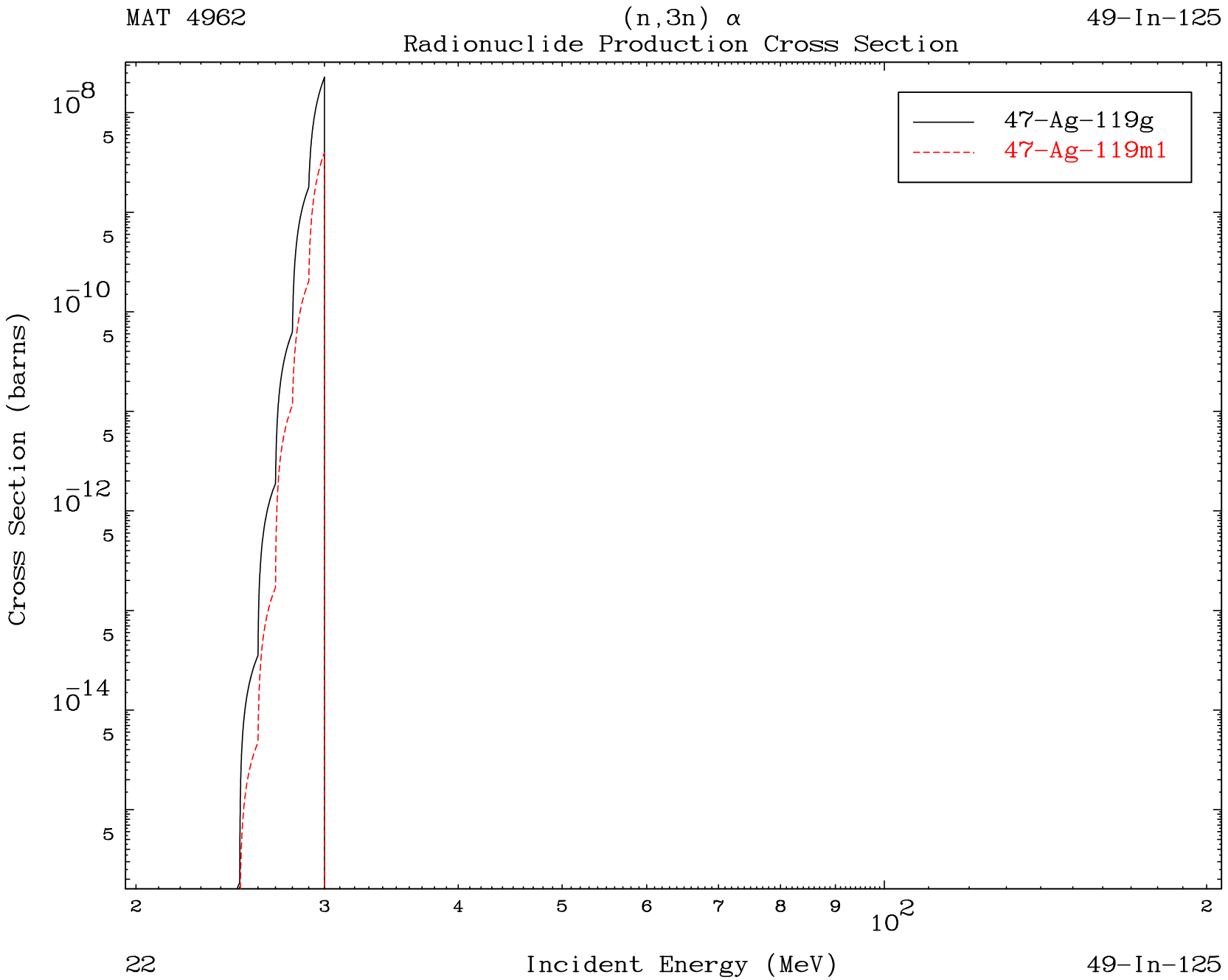

MAT 4962
Elastic
Legendre Coefficients
49-In-125
X10^-7
P21
P22
P23
P24
P25
P26
P27
P28
Legendre (CM)
3
2
1
0
16
18
20
22
24
26
28
30
17
Incident Energy (MeV)
49-In-125

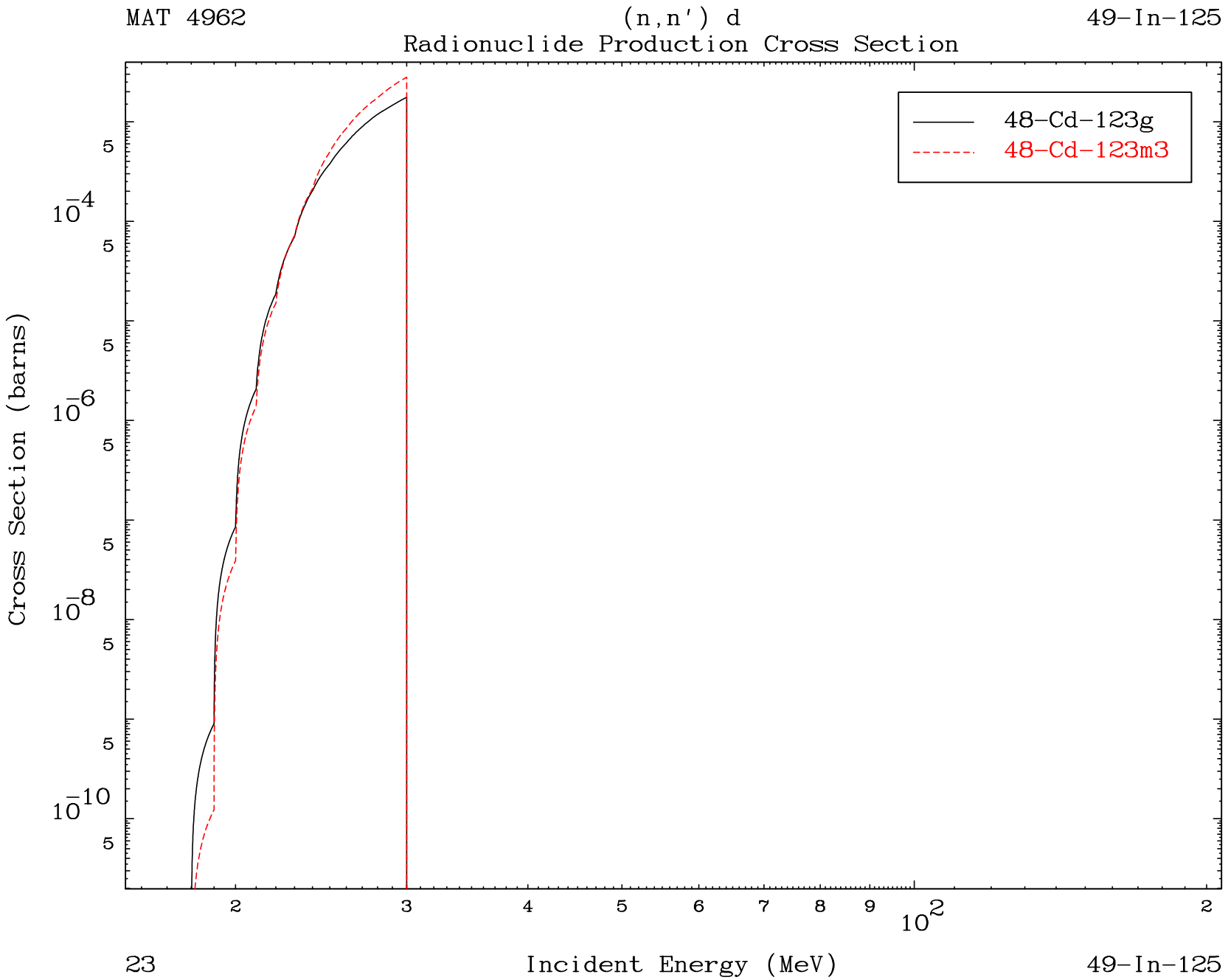

MAT 4962
Inelastic
49-In-125
Radionuclide Production Cross Section
Cross Section (barns)
10^0
8
6
4
2
10^-1
8
6
4
2
10^-2
8
5
10^-1
5
10^0
5
10^1
5
10^2
49-In-125g
49-In-125m1
18
Incident Energy (MeV)
49-In-125

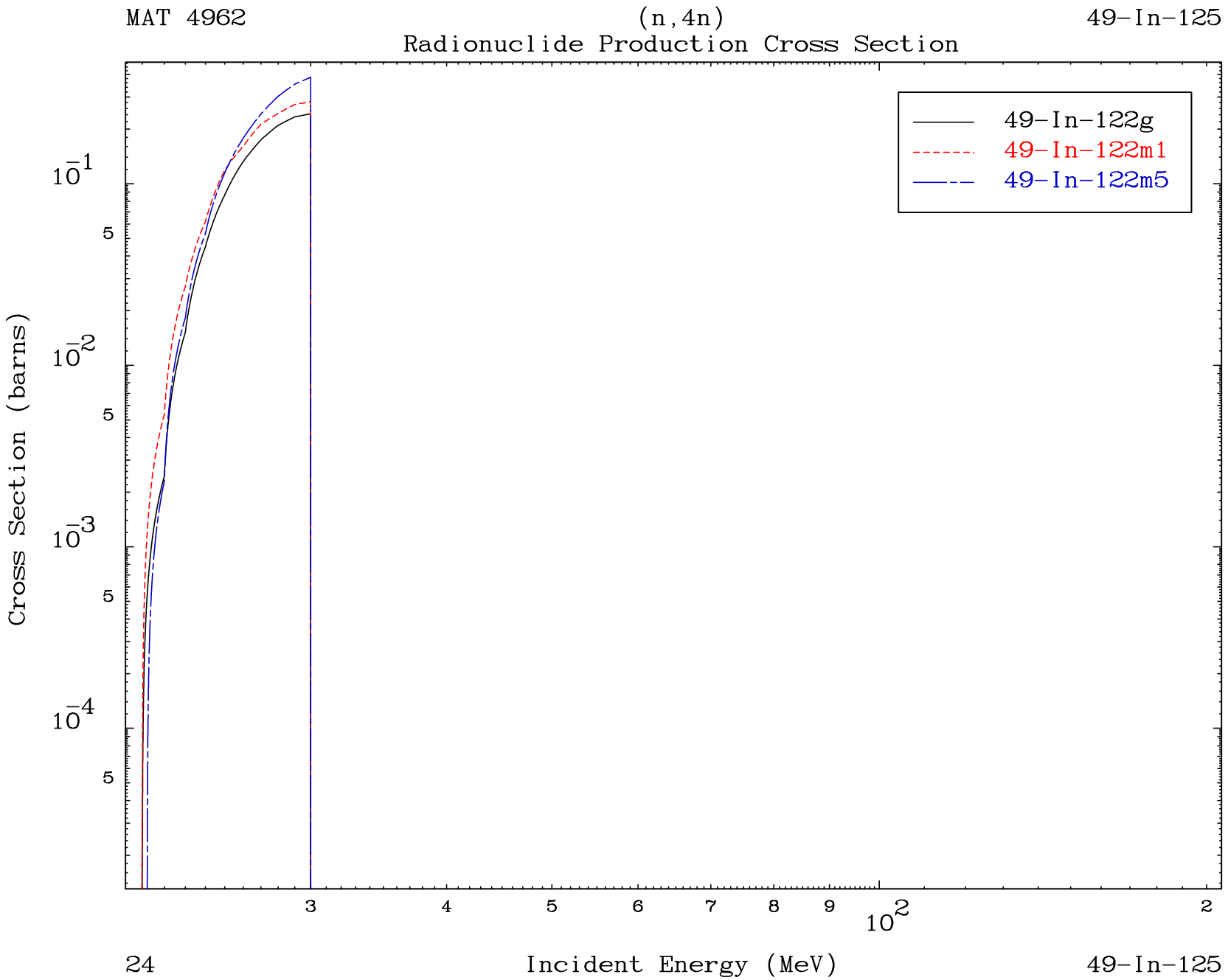

MAT 4962
(n,2n)
49-In-125
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^{-1}
10^{-2}
10^1
10^2
49-In-124g
49-In-124m2
19
Incident Energy (MeV)
49-In-125

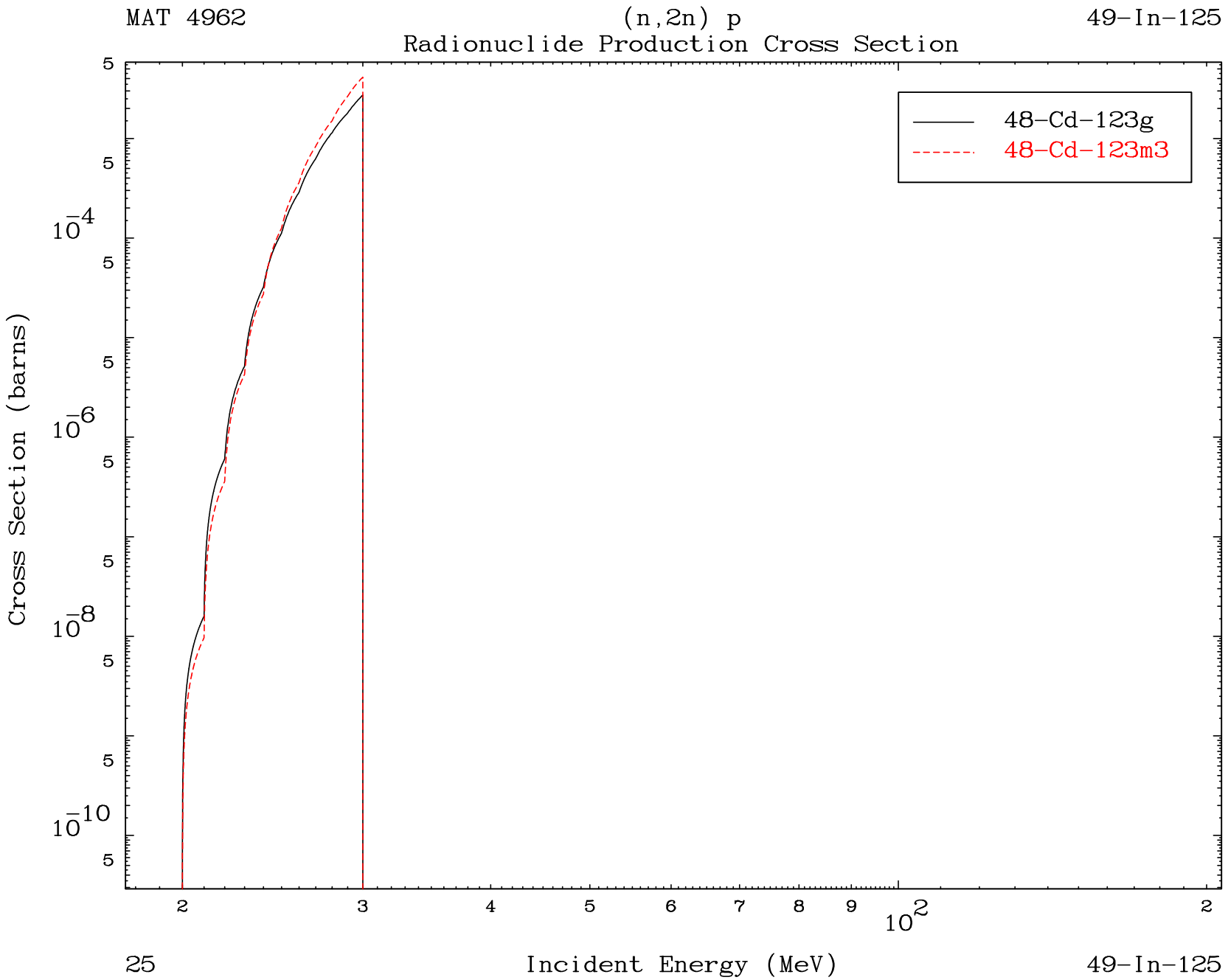

MAT 4962
(n,3n)
49-In-125
Radionuclide Production Cross Section
49-In-123g
49-In-123m1
Cross Section (barns)
Incident Energy (MeV)
20
49-In-125

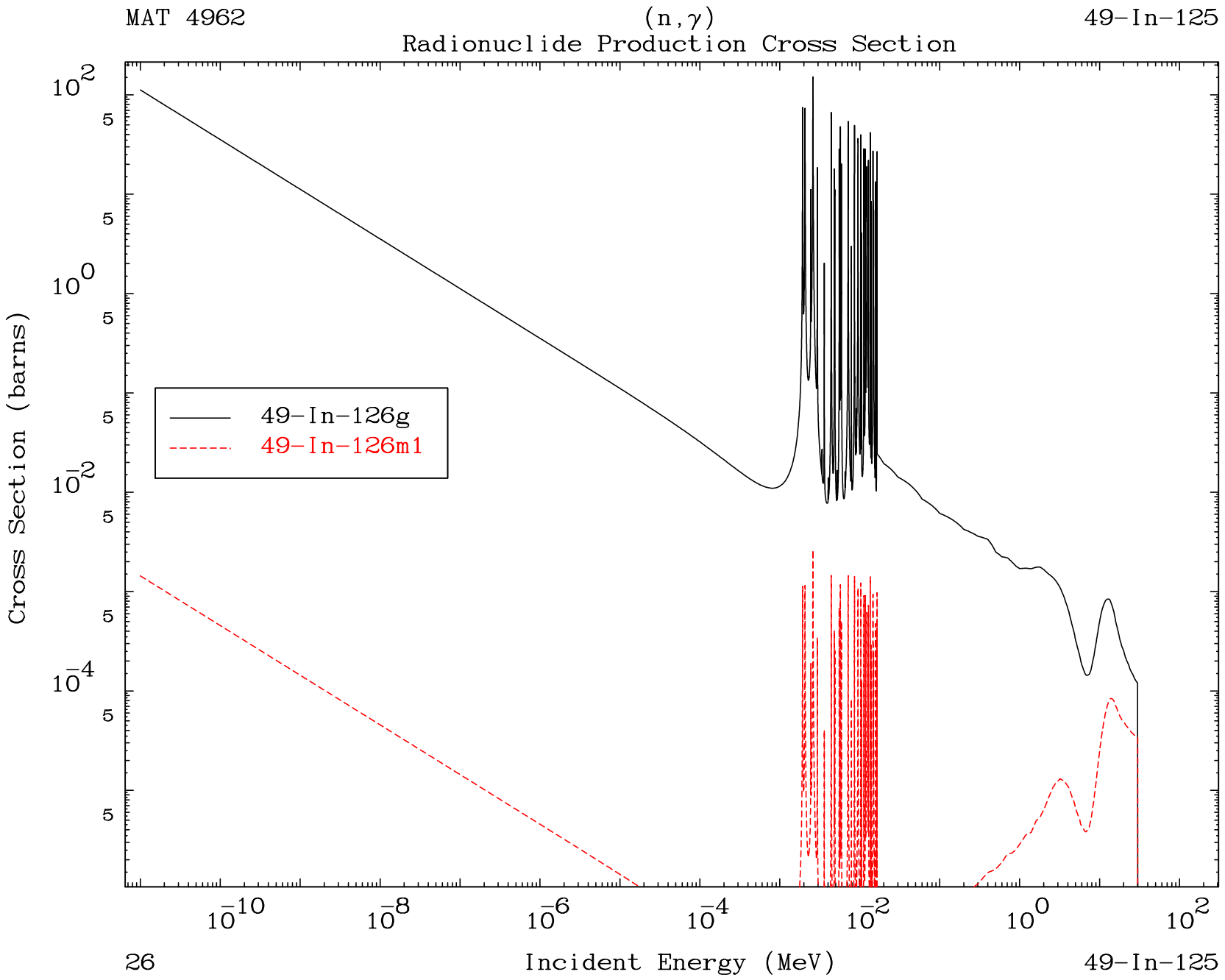

MAT 4962
(n,2n) α
49-In-125
Radionuclide Production Cross Section
47-Ag-120g
47-Ag-120m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
Incident Energy (MeV)
10^2
21
49-In-125

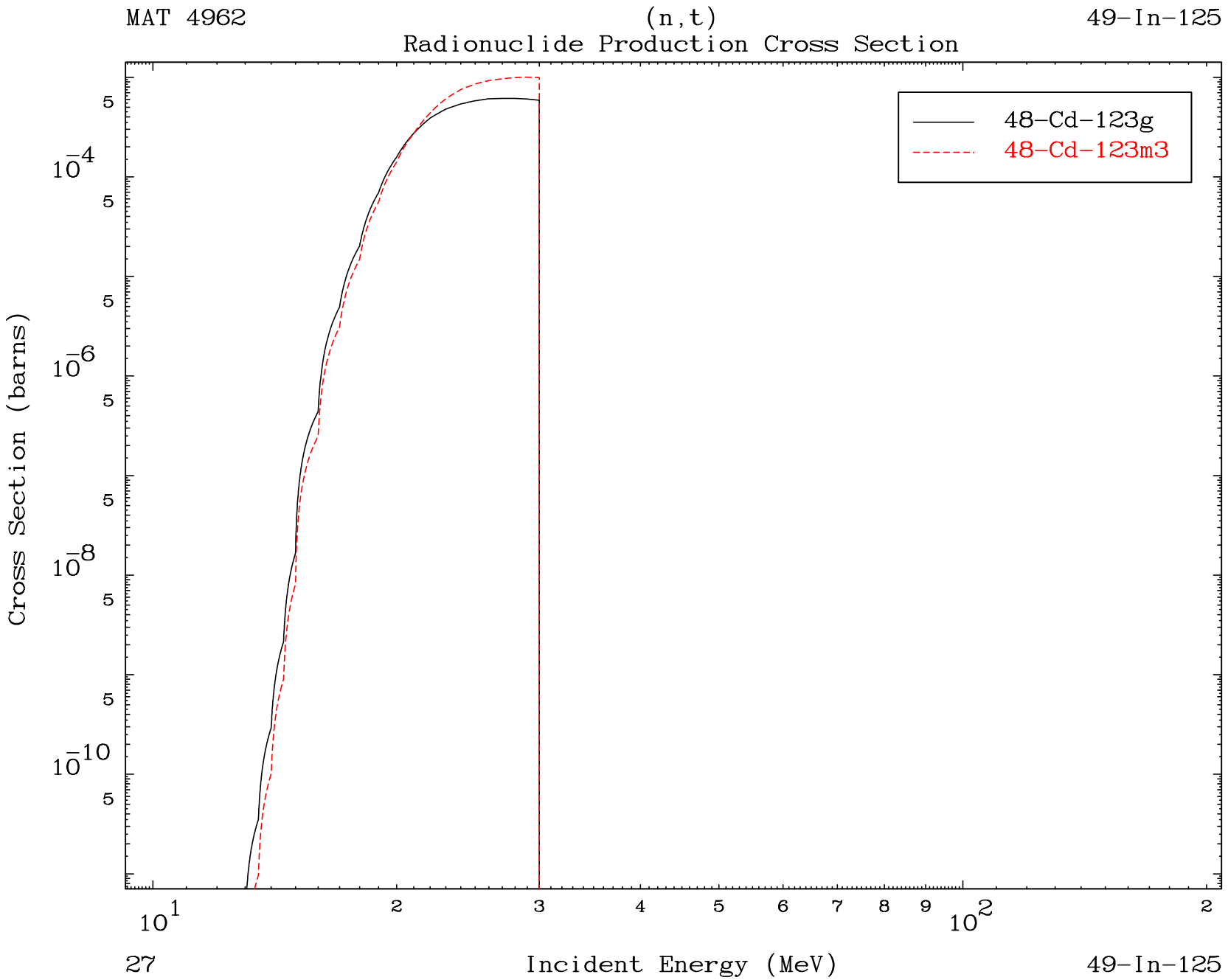

MAT 4962
(n,3n) α
49-In-125
Radionuclide Production Cross Section
47-Ag-119g
47-Ag-119m1
Cross Section (barns)
10-8
10-10
10-12
10-14
5
2
3
4
5
6
7
8
9
10 2
2
22
Incident Energy (MeV)
49-In-125

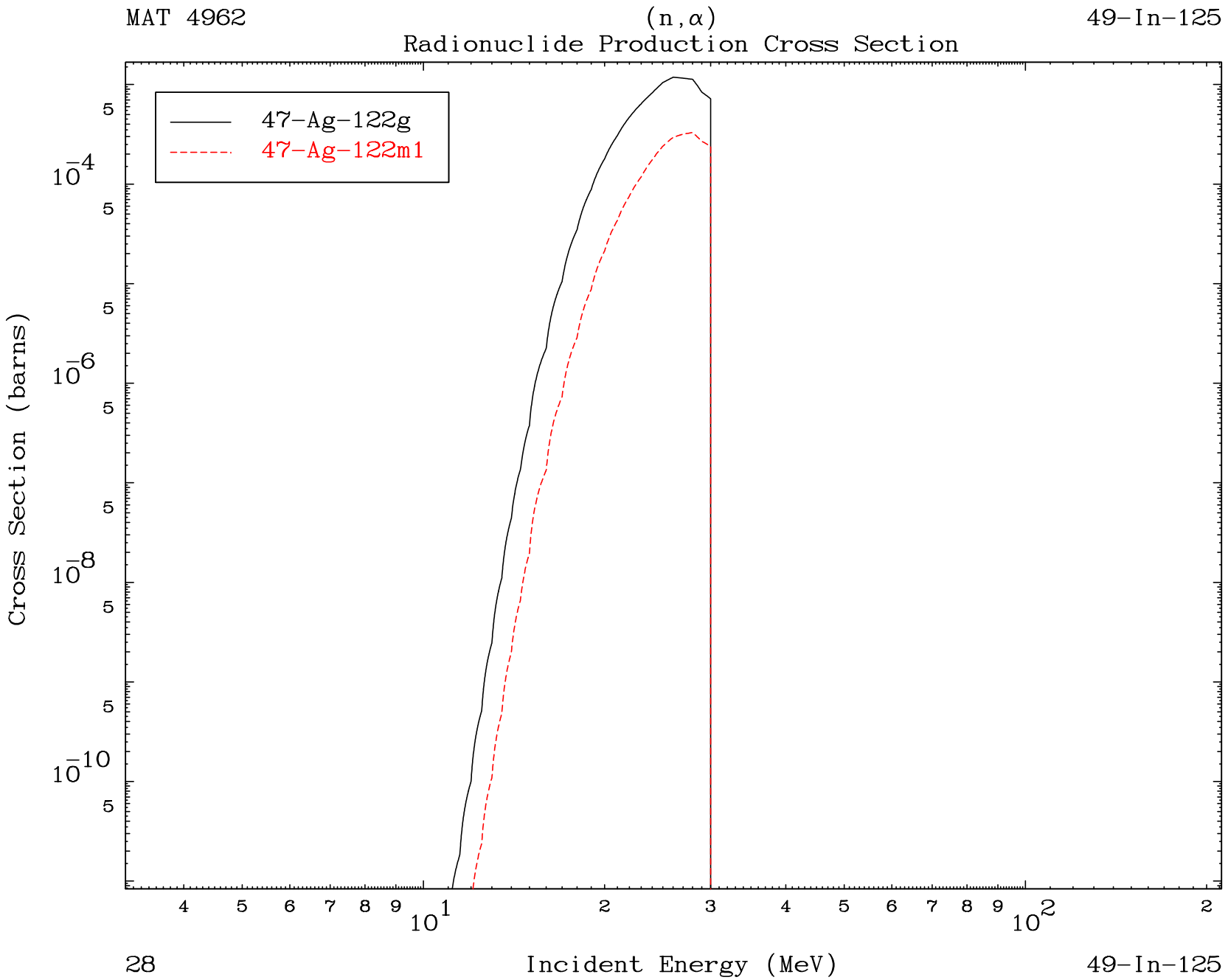

MAT 4962
(n,n') d
49-In-125
Radionuclide Production Cross Section
48-Cd-123g
48-Cd-123m3
Cross Section (barns)
10-4
10-6
10-8
10-10
2
3
4
5
6
7
8
9
102
2
23
Incident Energy (MeV)
49-In-125


MAT 4962
(n,4n)
49-In-125
Radionuclide Production Cross Section
49-In-122g
49-In-122m1
49-In-122m5
Cross Section (barns)
10-1
5
10-2
5
10-3
5
10-4
5
3
4
5
6
7
8
9
10 2
2
24
Incident Energy (MeV)
49-In-125


MAT 4962
(n,2n) p
49-In-125
Radionuclide Production Cross Section
48-Cd-123g
48-Cd-123m3
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)
49-In-125


MAT 4962
(n,γ)
49-In-125
Radionuclide Production Cross Section
Cross Section (barns)
10^2
10^0
10^-2
10^-4
5
49-In-126g
49-In-126m1
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
26
Incident Energy (MeV)
49-In-125


MAT 4962
(n,t)
49-In-125
Radionuclide Production Cross Section
48-Cd-123g
48-Cd-123m3
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^1
10^2
Incident Energy (MeV)
27
49-In-125


MAT 4962
(n,α)
49-In-125
Radionuclide Production Cross Section
47-Ag-122g
47-Ag-122m1
Cross Section (barns)
10-4
10-6
10-8
10-10
Incident Energy (MeV)
28
49-In-125