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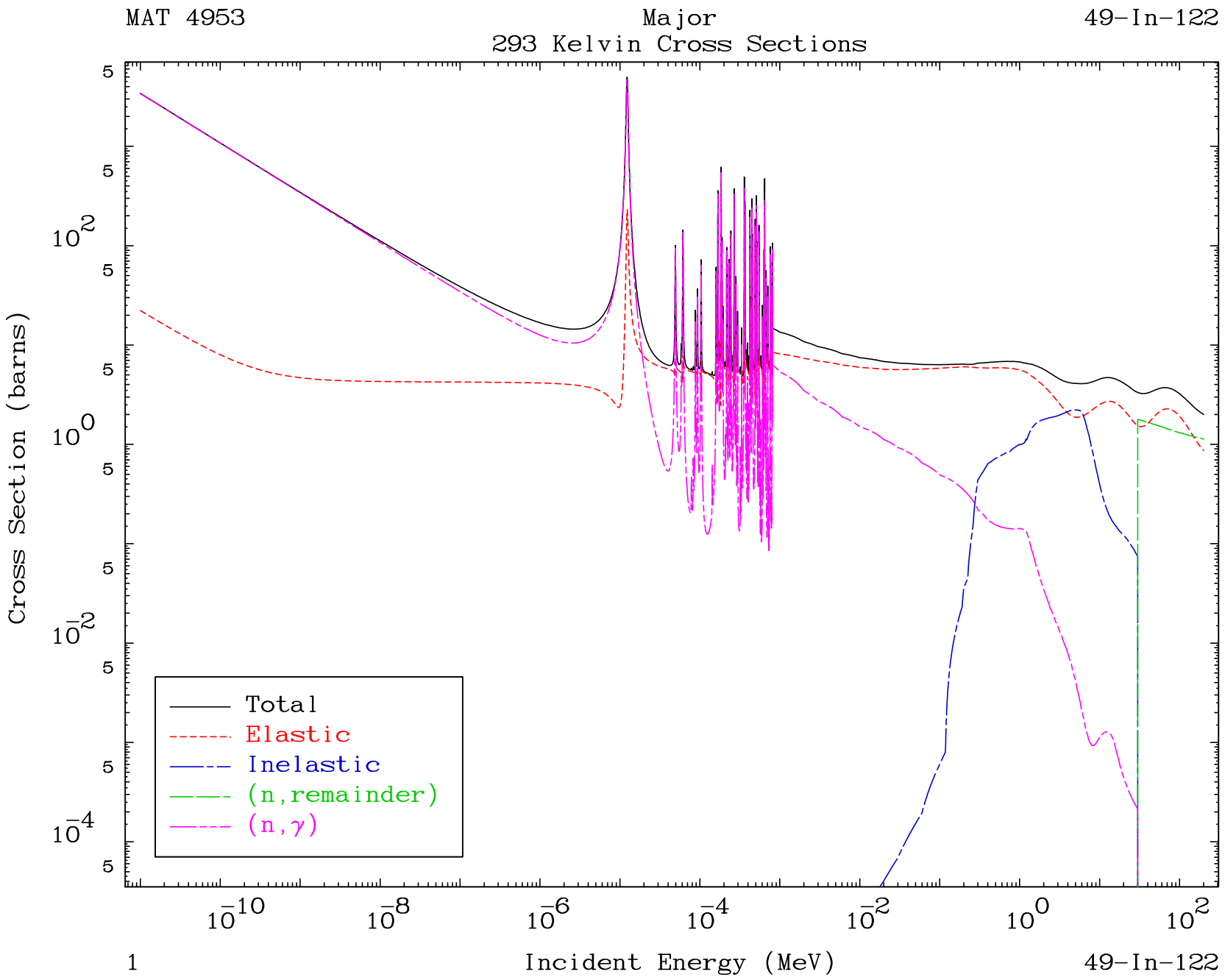
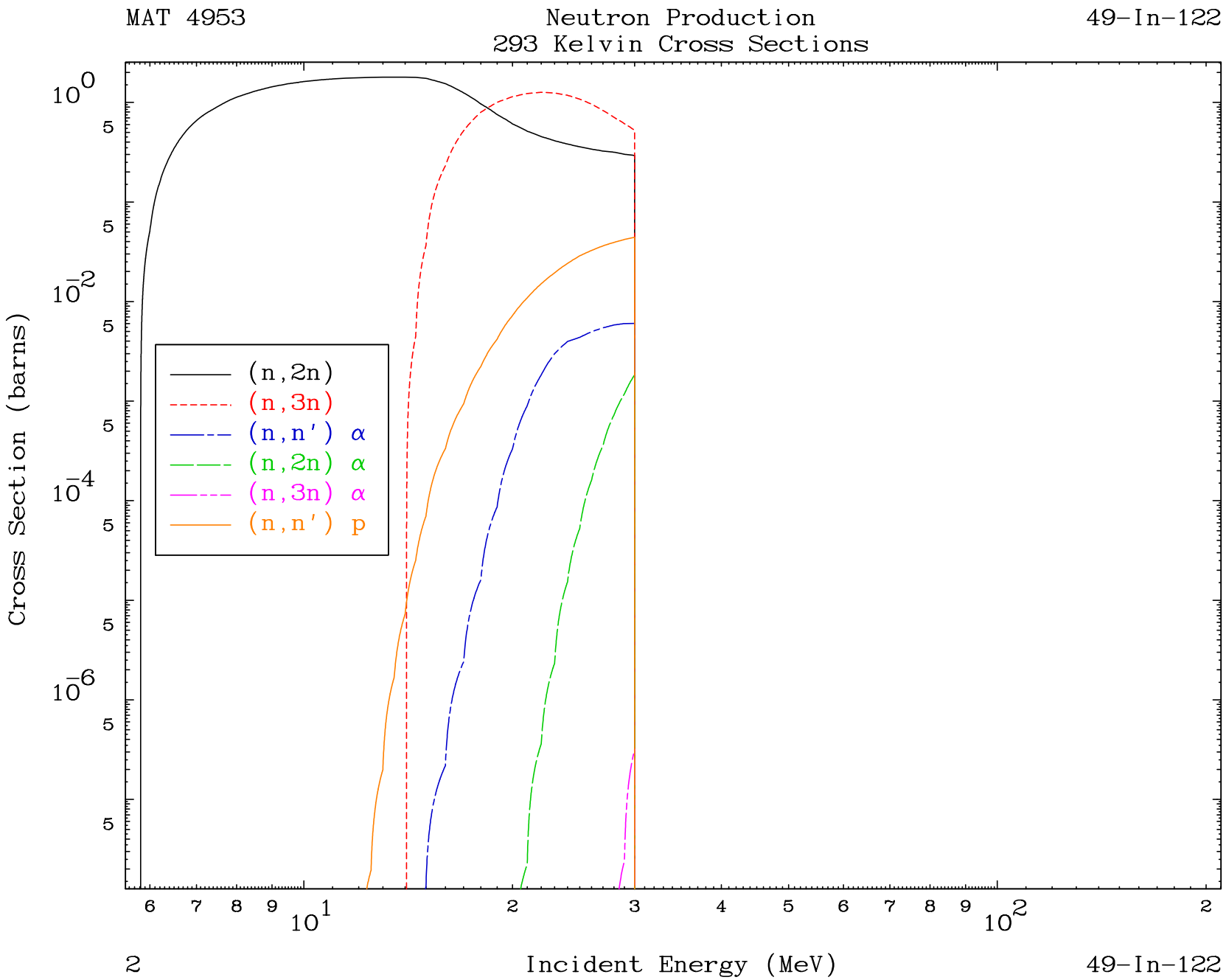
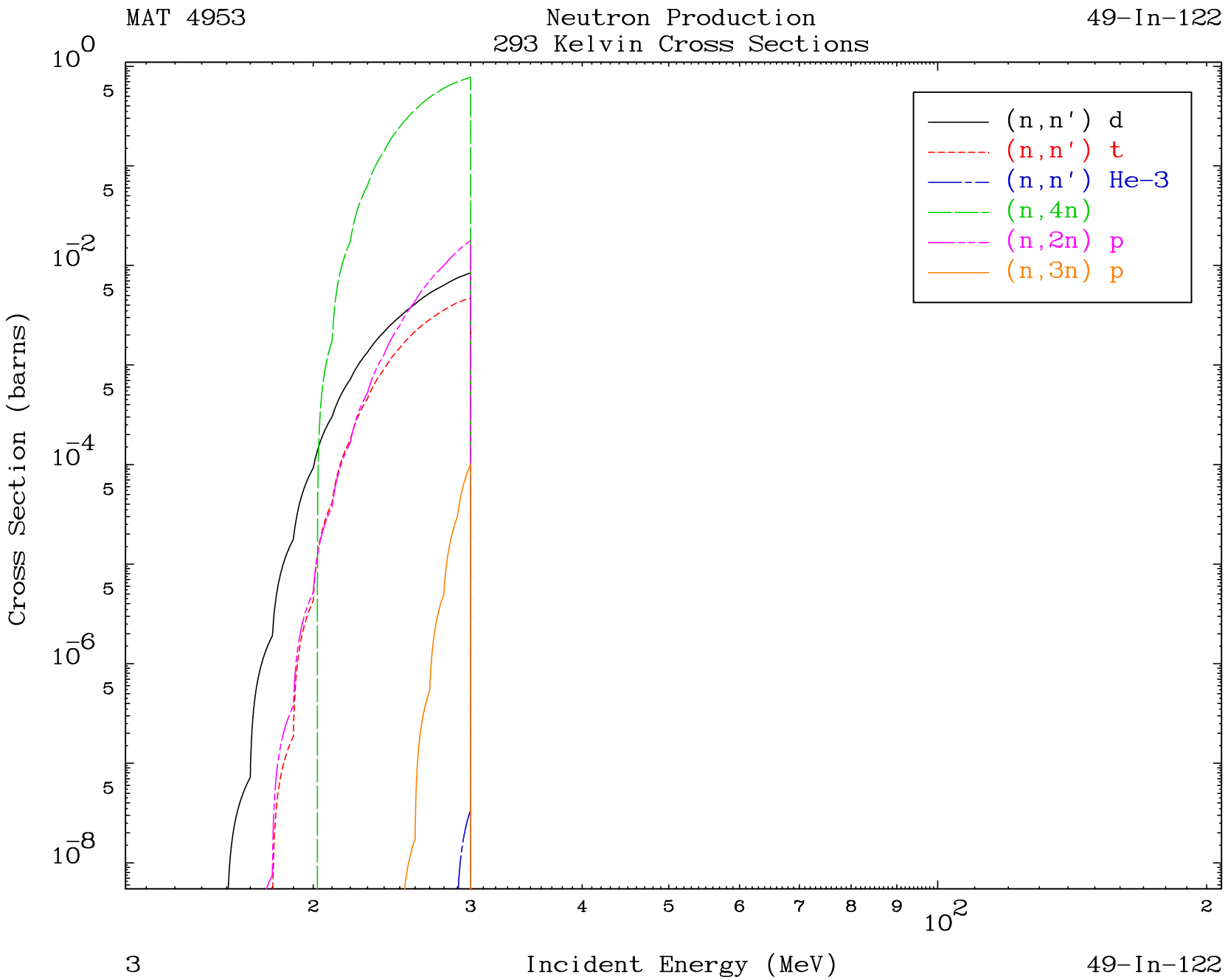
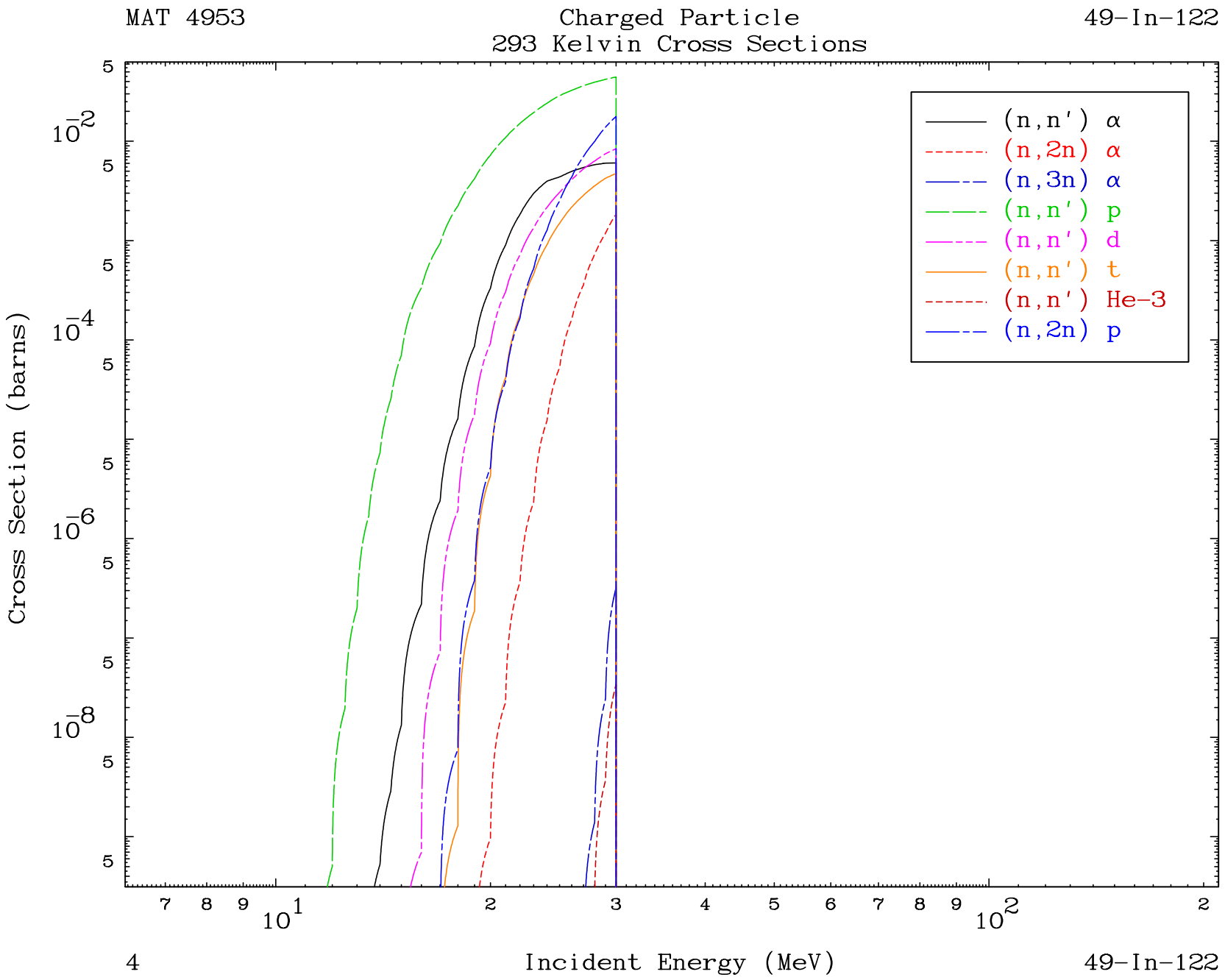
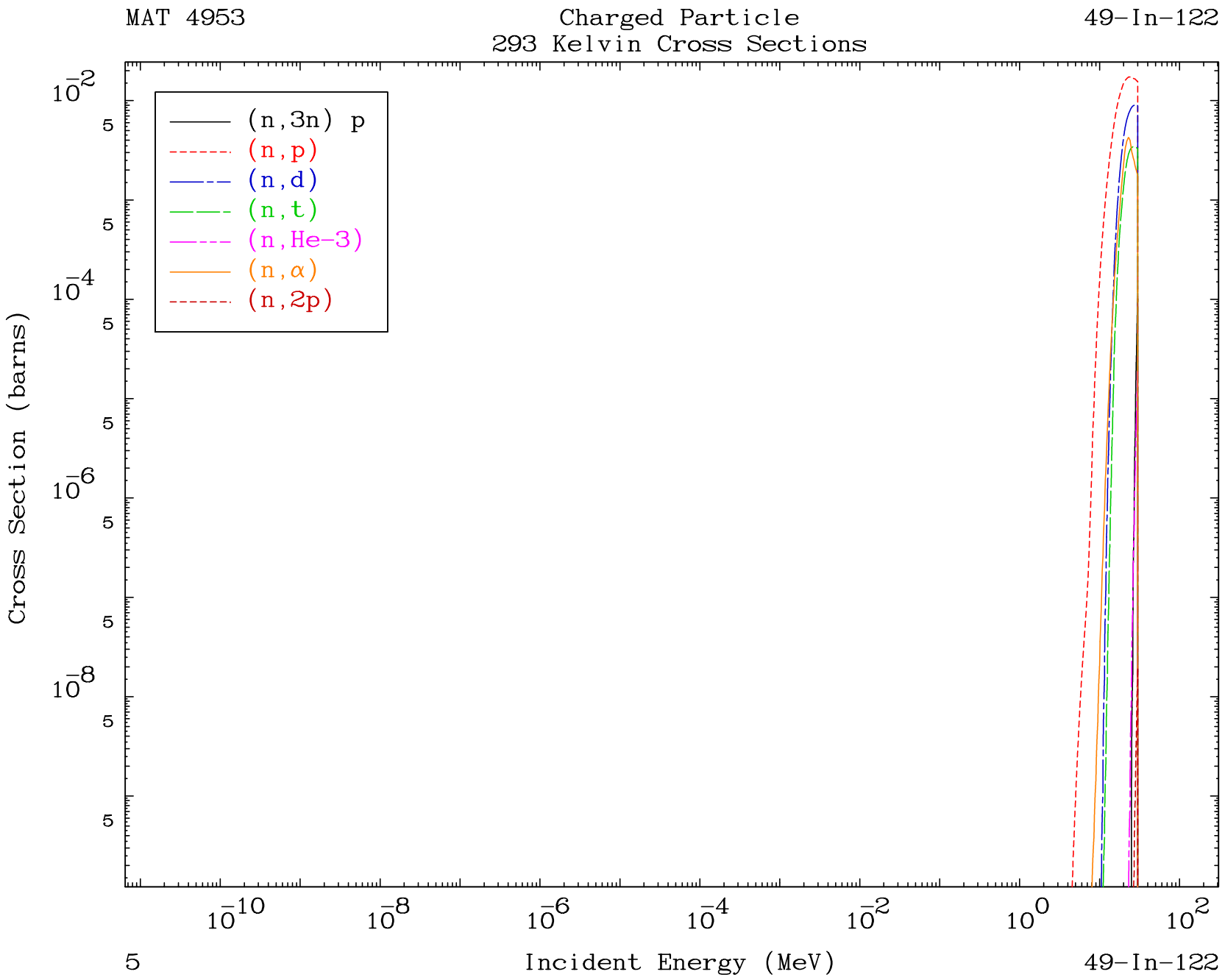
Press Mouse Button to Start

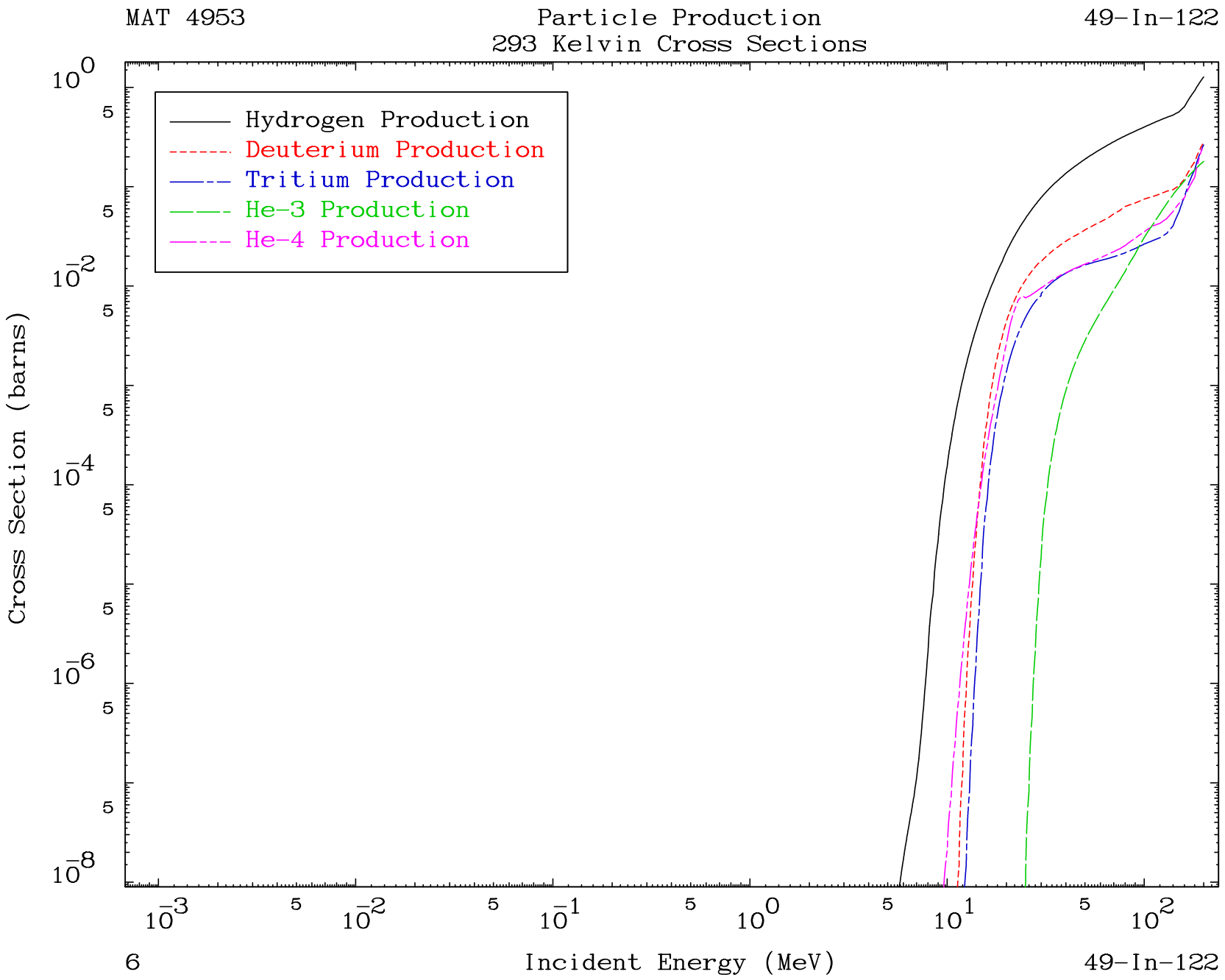

MAT 4953
Major
49-In-122
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
49-In-122

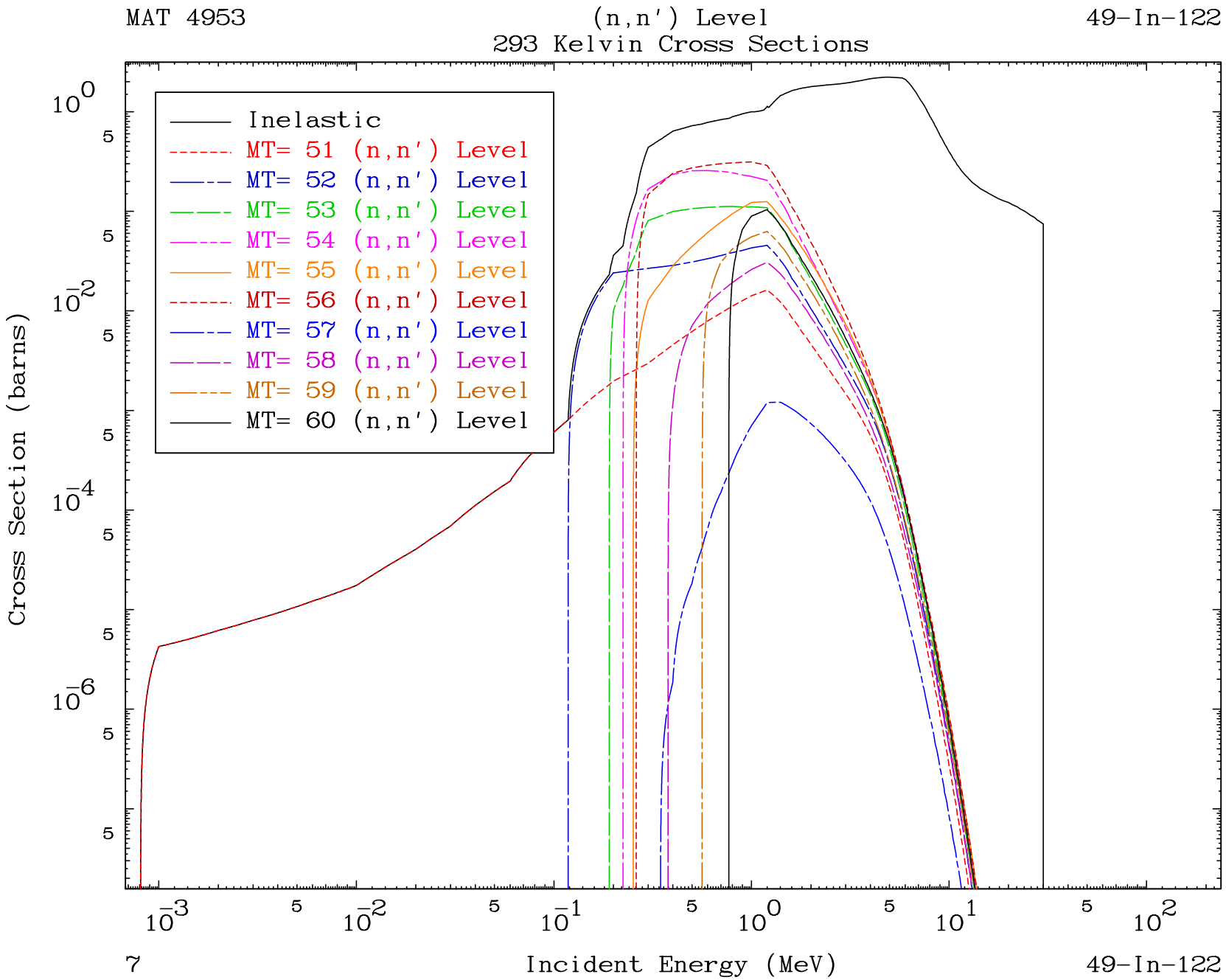

MAT 4953
Neutron Production
293 Kelvin Cross Sections
49-In-122
Cross Section (barns)
Incident Energy (MeV)
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p

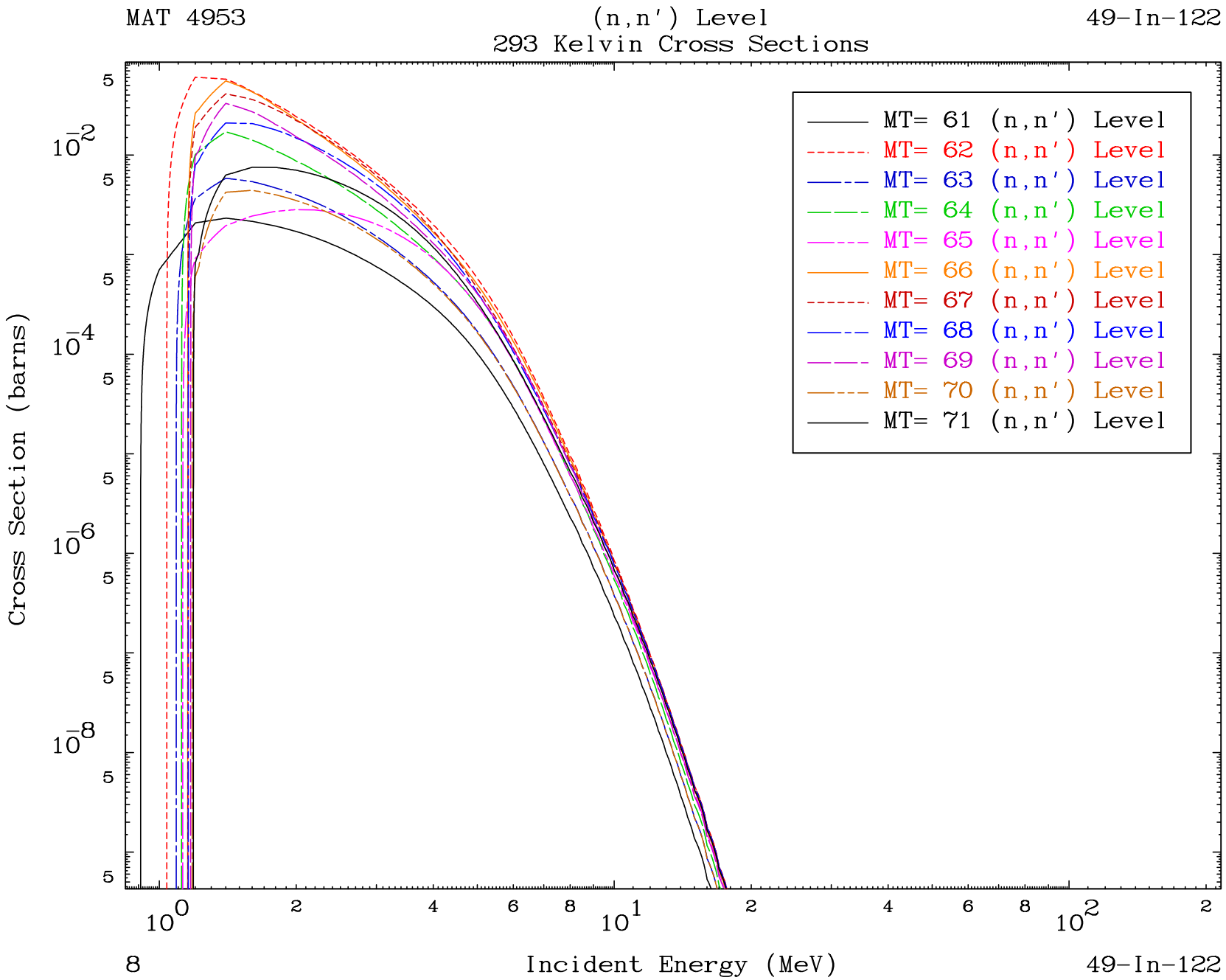

MAT 4953
Neutron Production
293 Kelvin Cross Sections
49-In-122
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
49-In-122

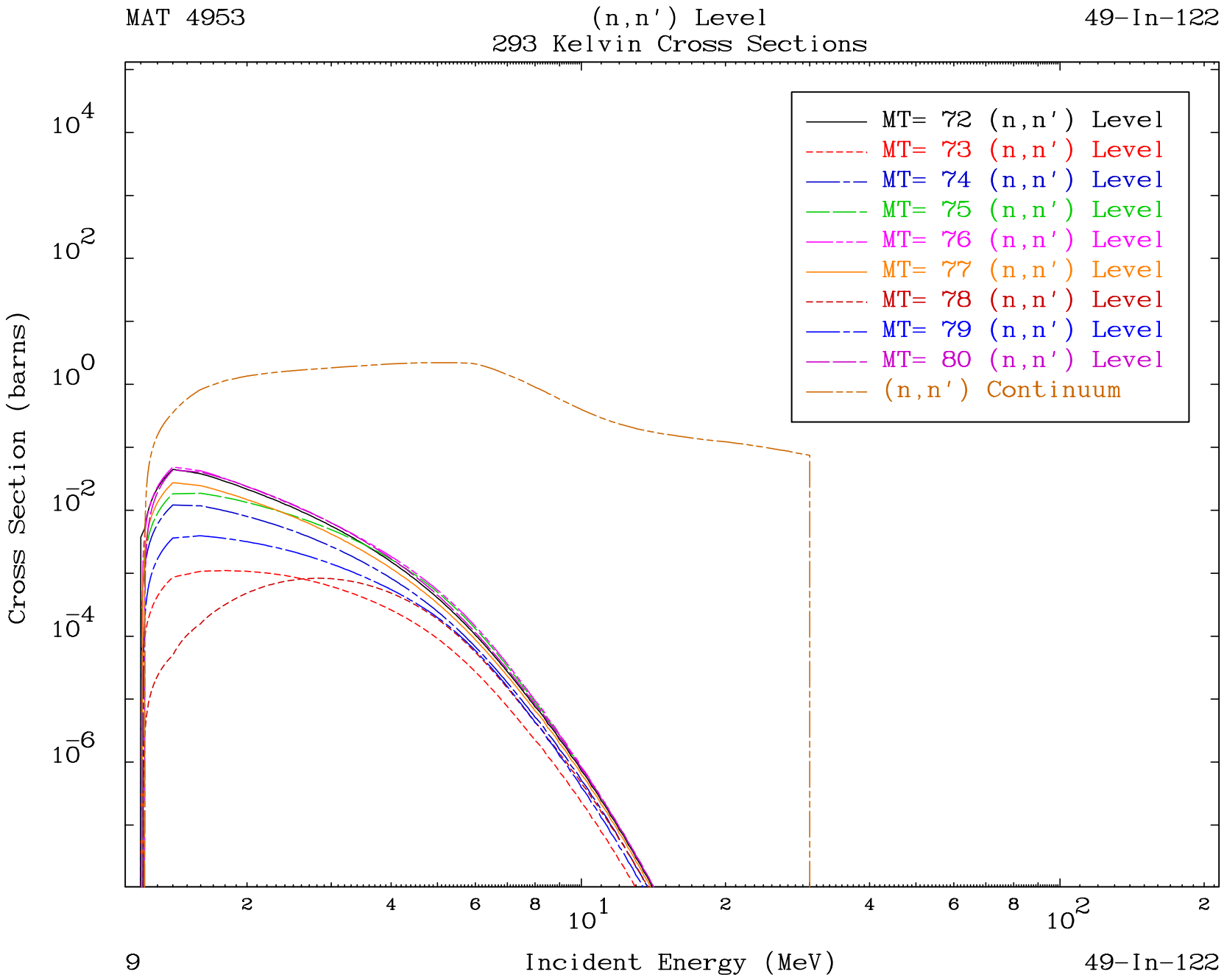

MAT 4953
Charged Particle
293 Kelvin Cross Sections
49-In-122
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
4
49-In-122

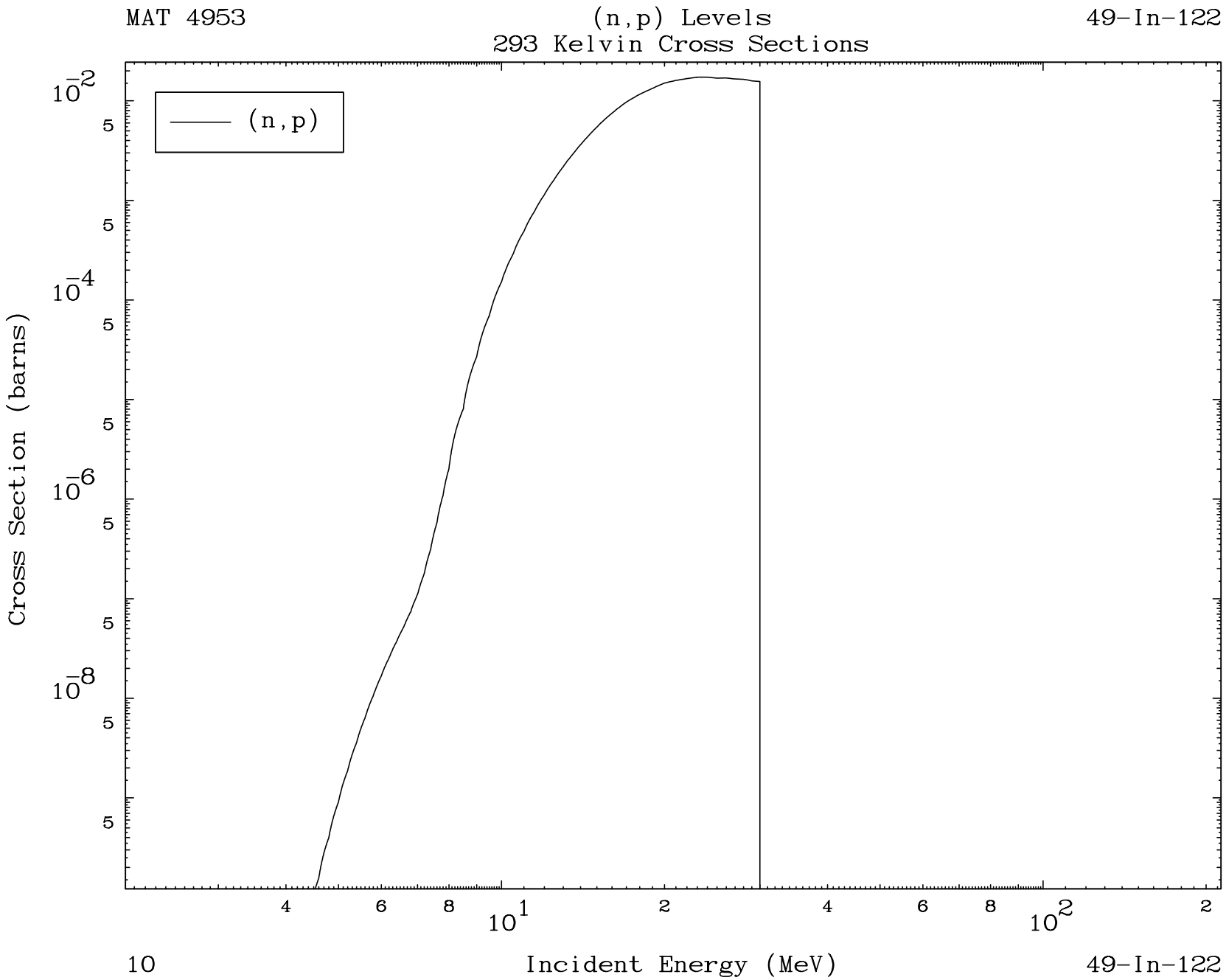

MAT 4953
Charged Particle
293 Kelvin Cross Sections
49-In-122
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2p)
Cross Section (barns)
Incident Energy (MeV)
49-In-122

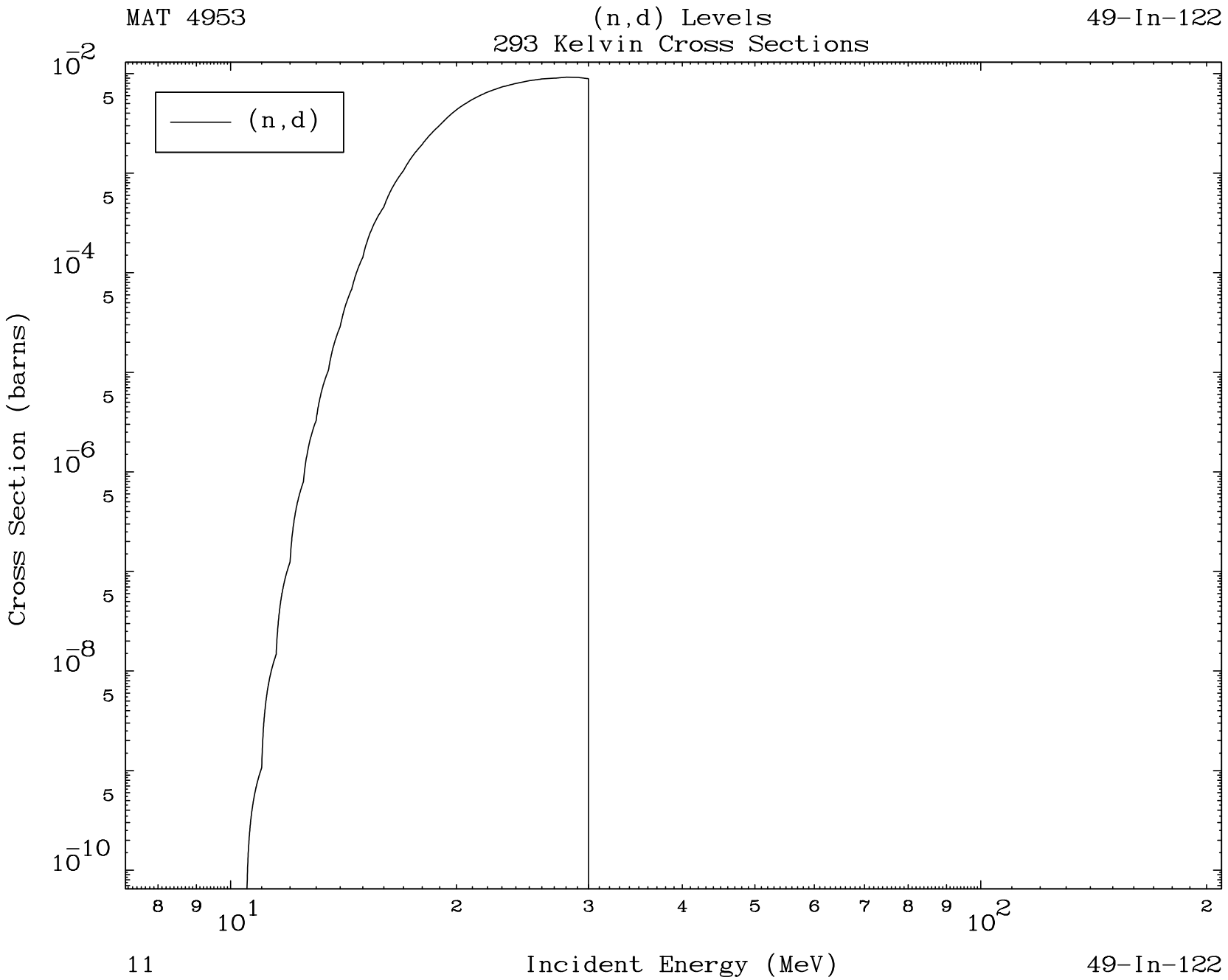

MAT 4953
Particle Production
293 Kelvin Cross Sections
49-In-122
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
49-In-122
6

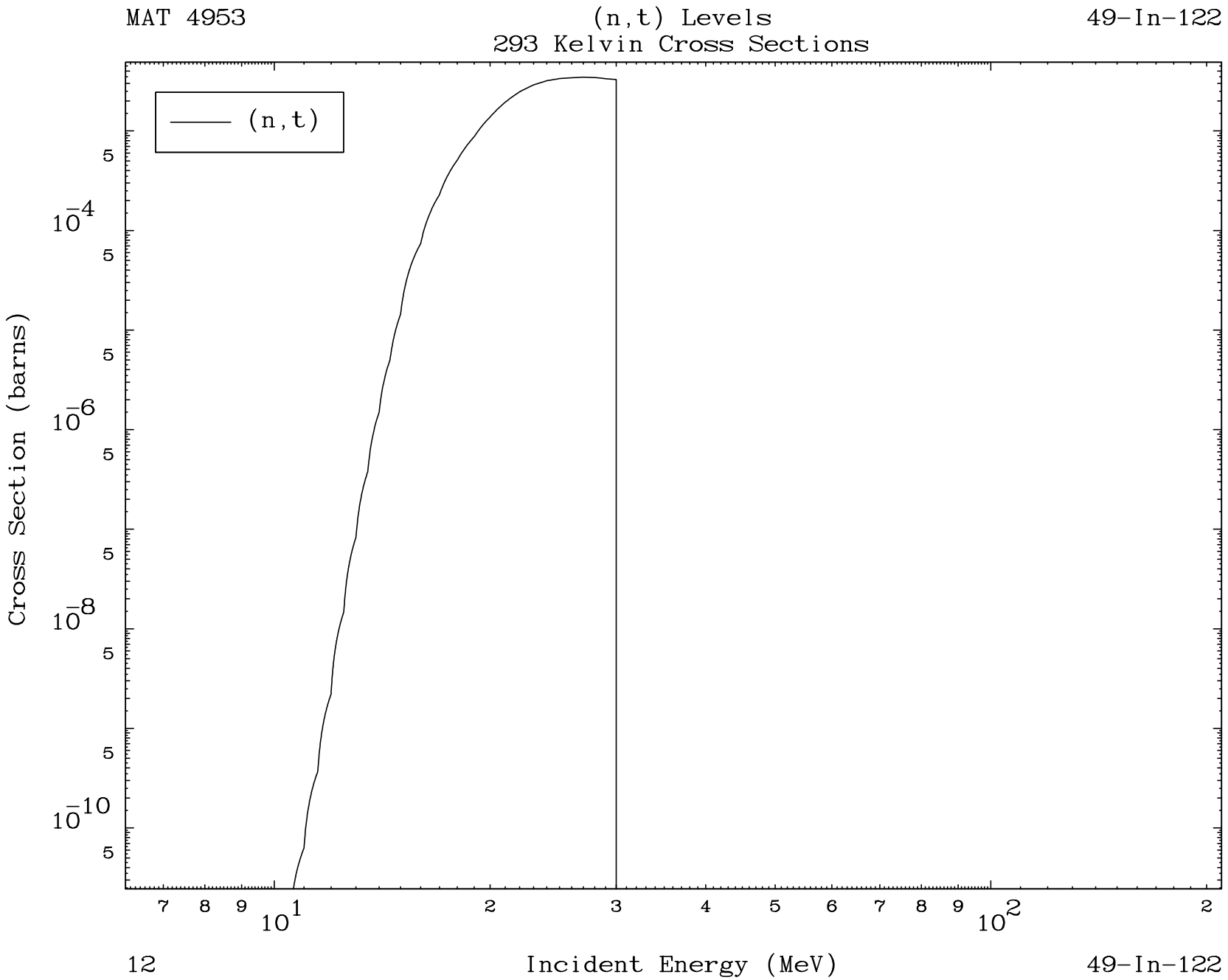

MAT 4953
(n,n') Level
49-In-122
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
MT= 60 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
7
49-In-122


MAT 4953
(n,n') Level
49-In-122
293 Kelvin Cross Sections
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)
49-In-122
8

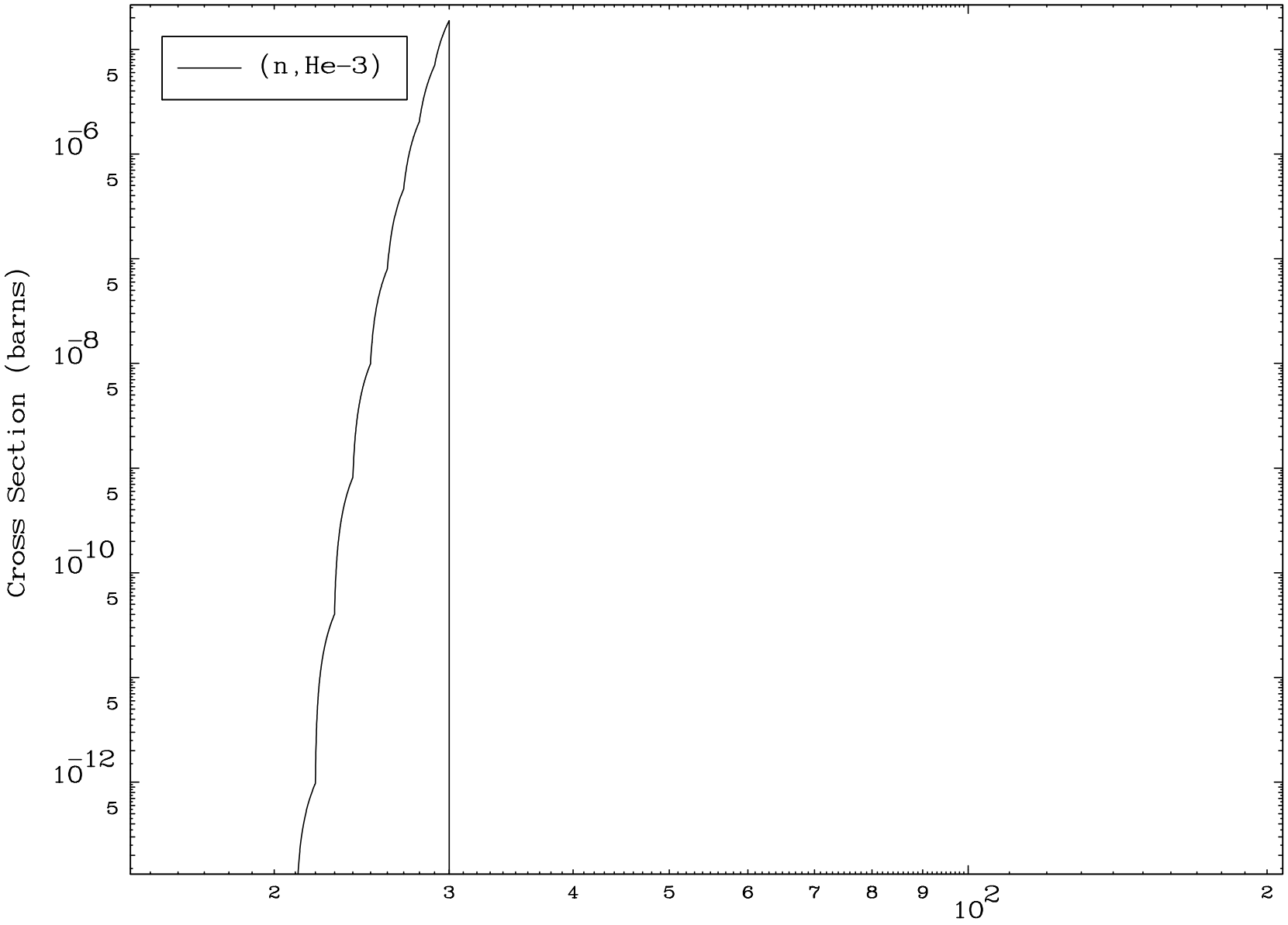

MAT 4953
(n,n') Level
293 Kelvin Cross Sections
49-In-122
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-6
2
4
6
8
10^1
2
4
6
8
10^2
2
9
Incident Energy (MeV)
49-In-122

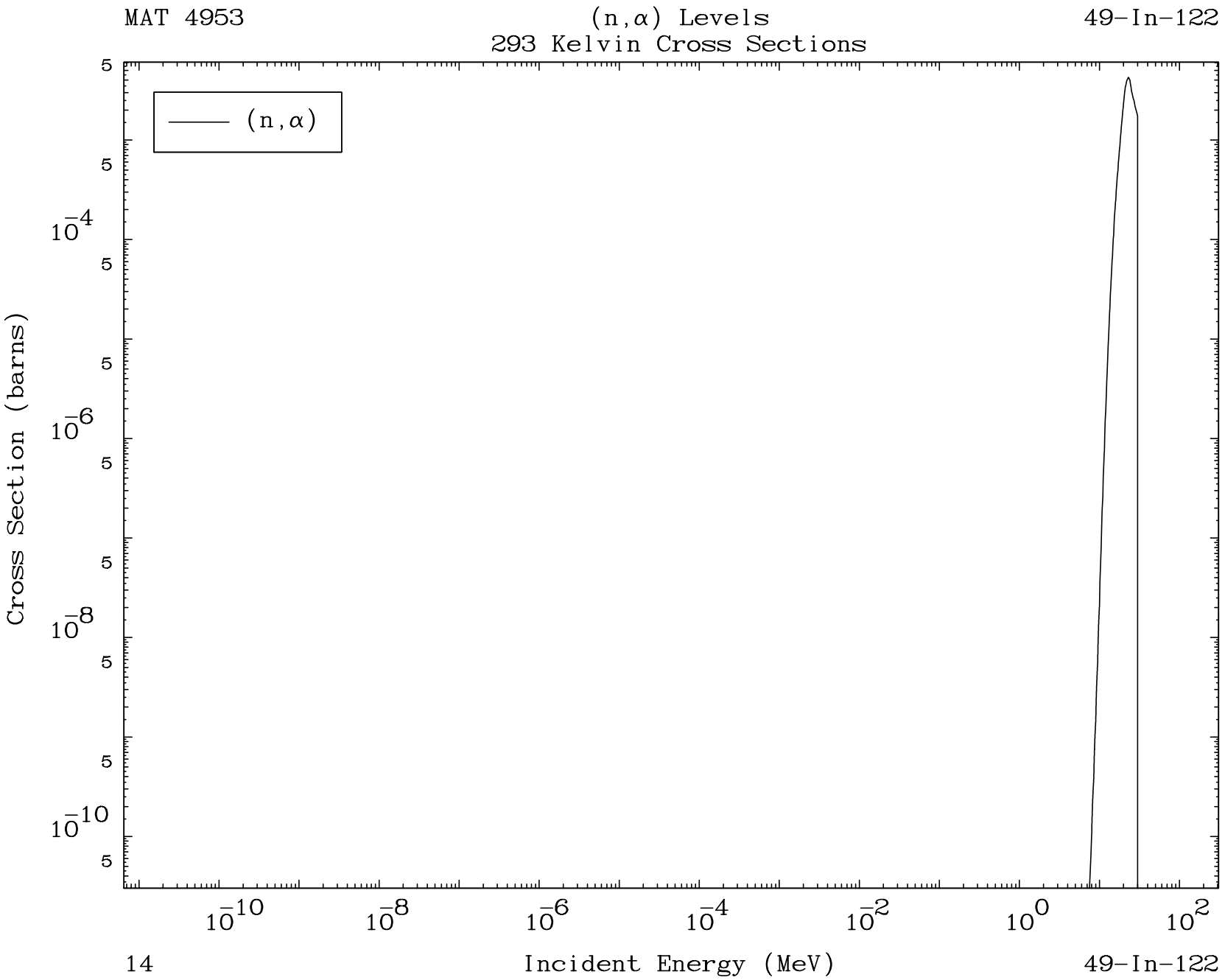

MAT 4953
(n,p) Levels
49-In-122
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
4
6
8
10^1
2
10^2
10
Incident Energy (MeV)
49-In-122

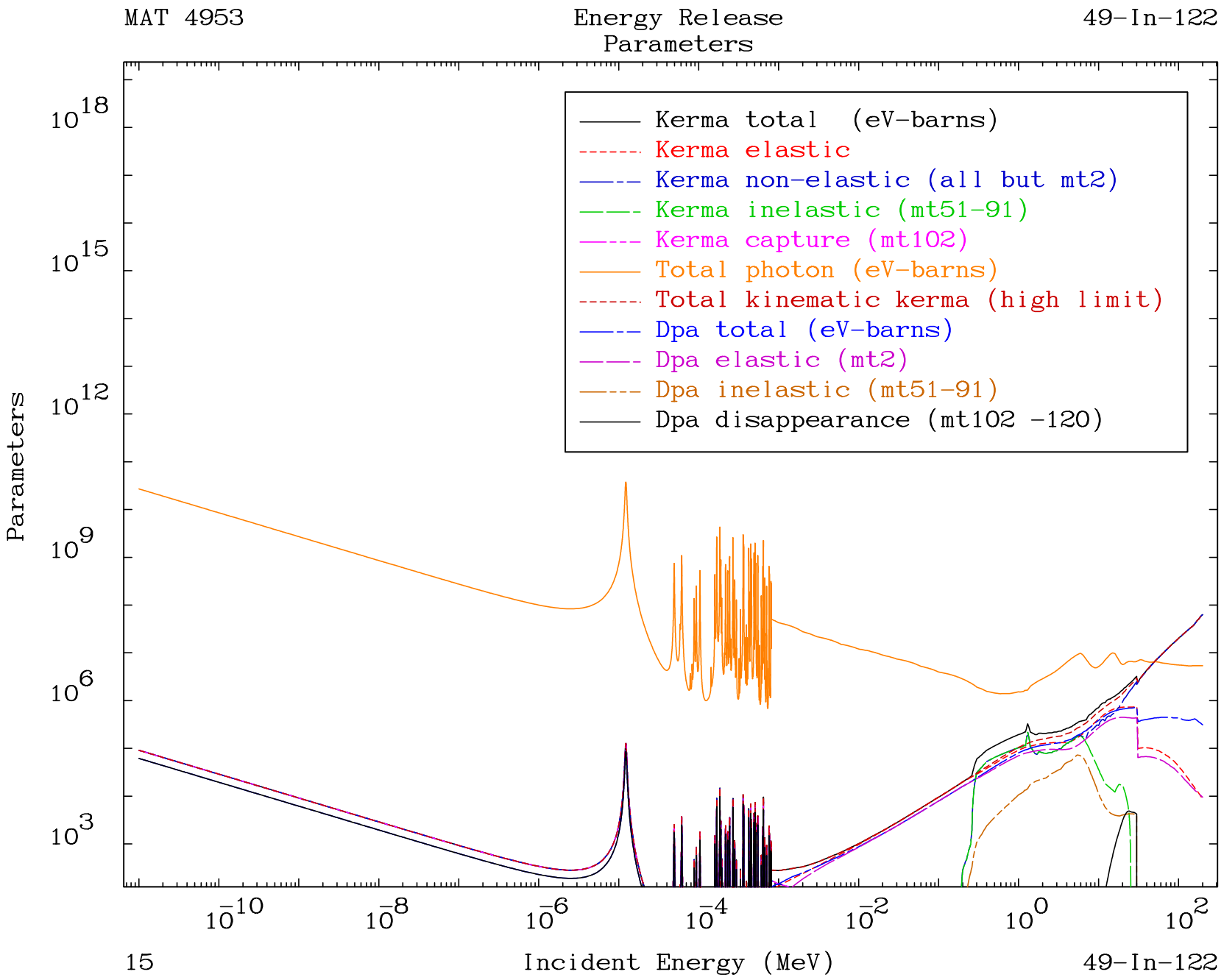

MAT 4953
(n,d) Levels
49-In-122
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
11
49-In-122

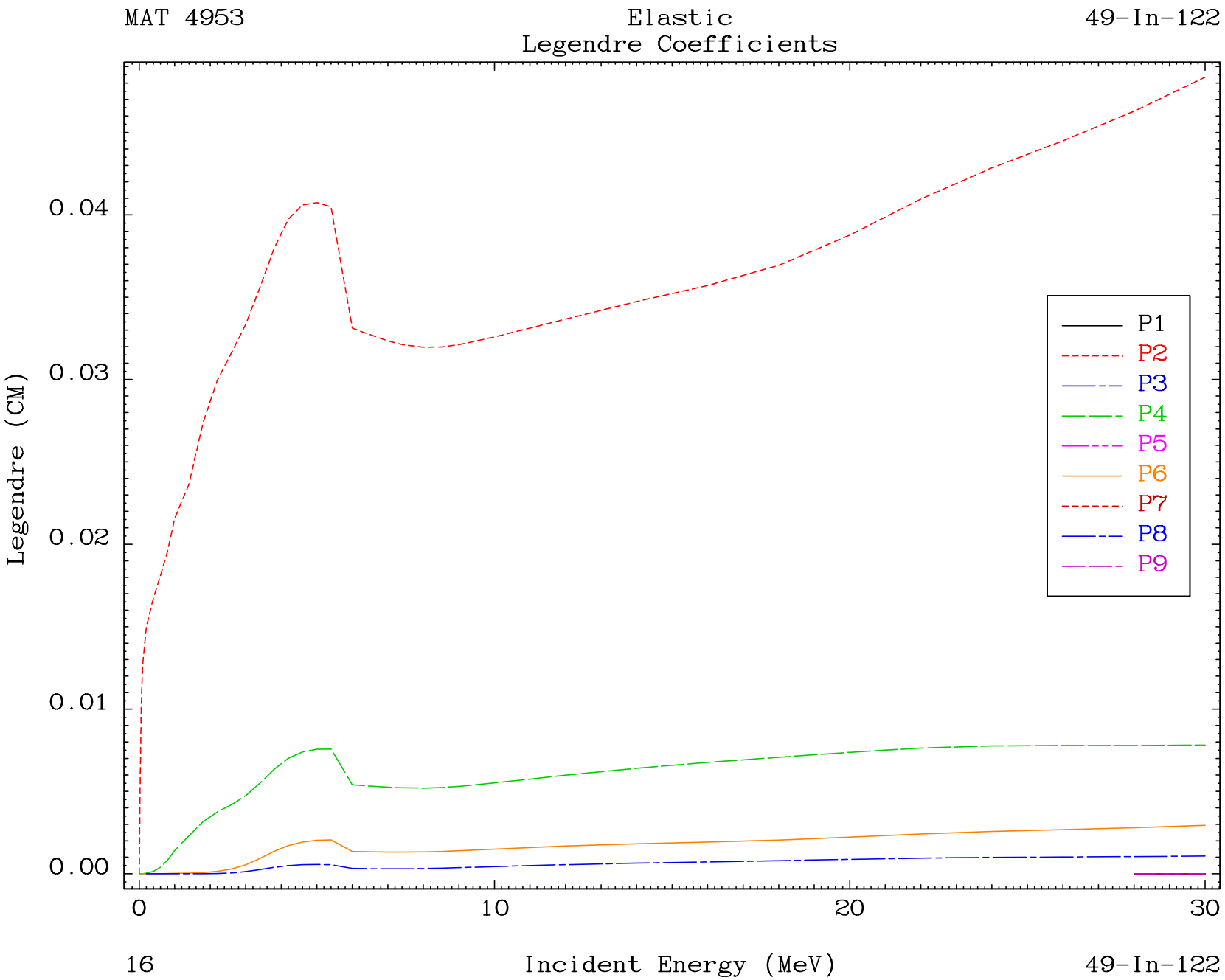

MAT 4953
(n,t) Levels
49-In-122
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
12
49-In-122

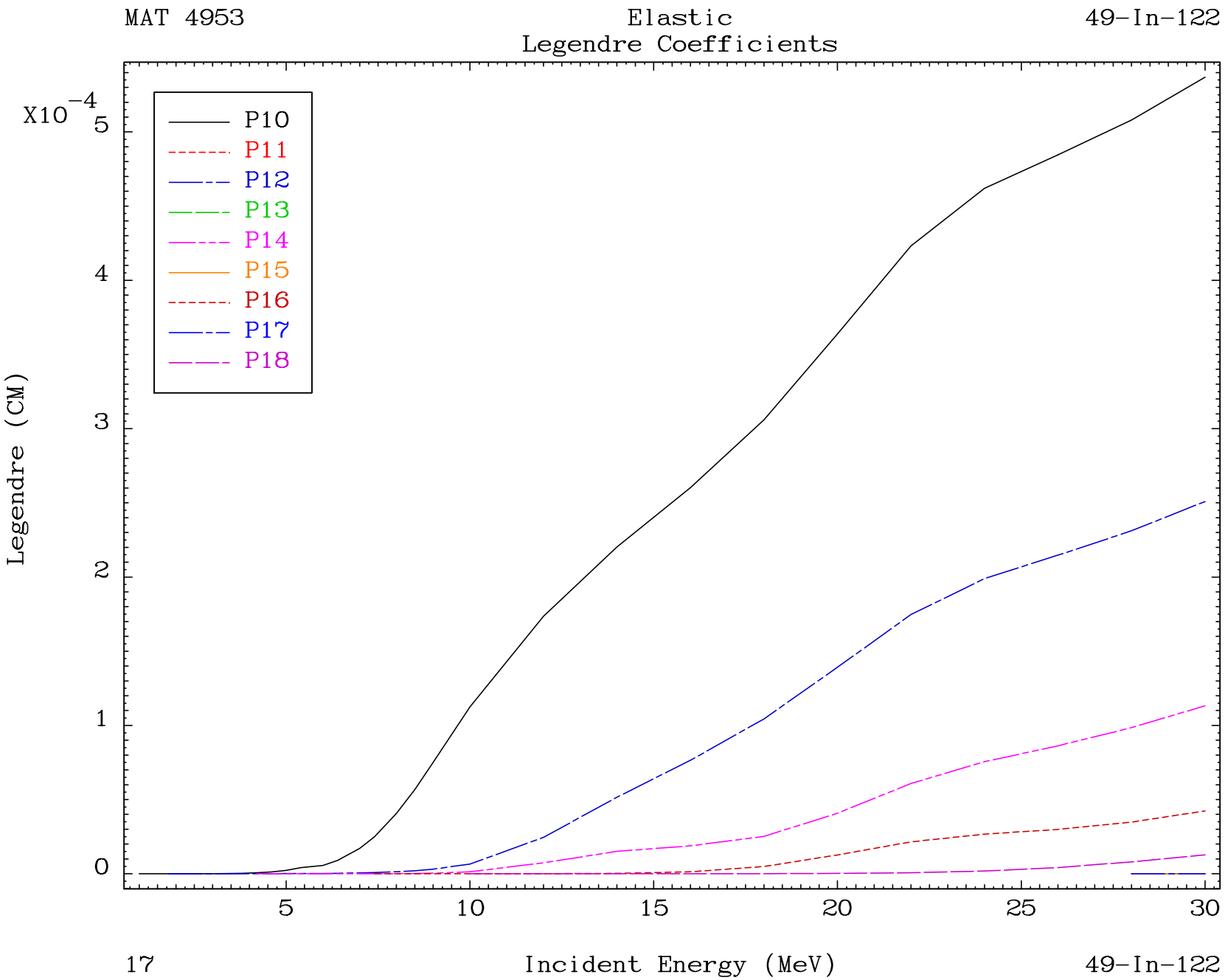
293 Kelvin Cross Sections

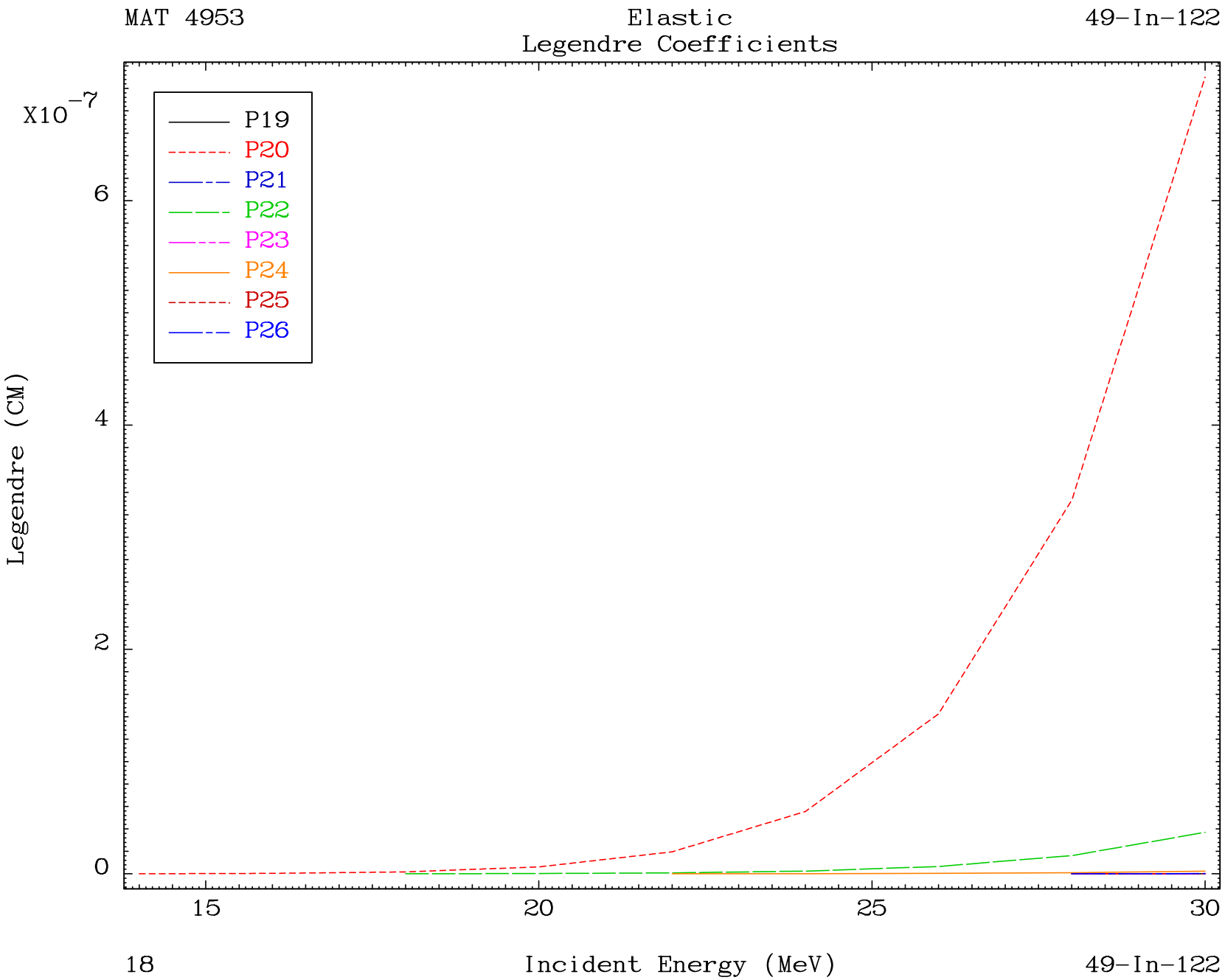


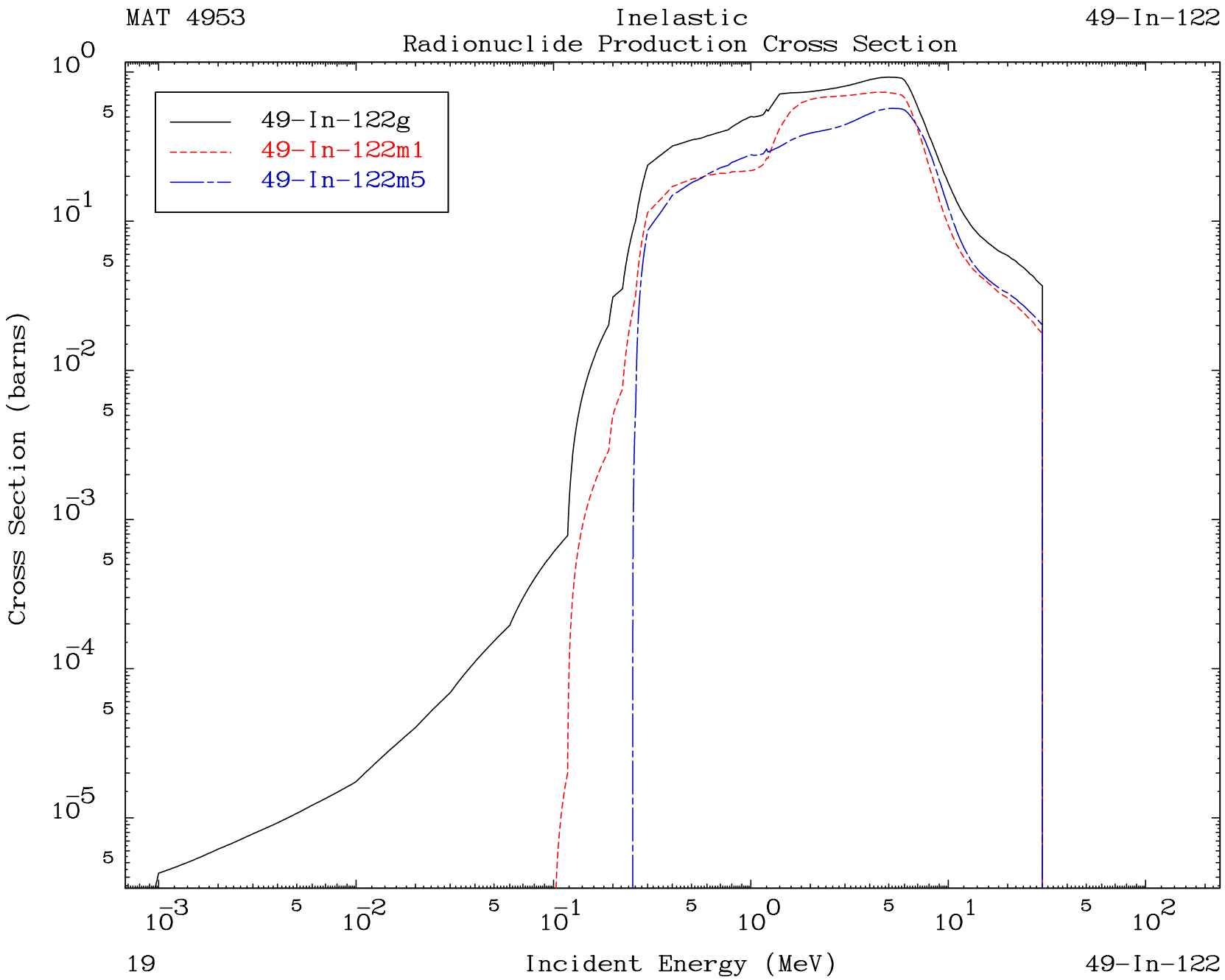

MAT 4953
(n,α) Levels
49-In-122
293 Kelvin Cross Sections
(n,α)
Cross Section (barns)
Incident Energy (MeV)
14
49-In-122

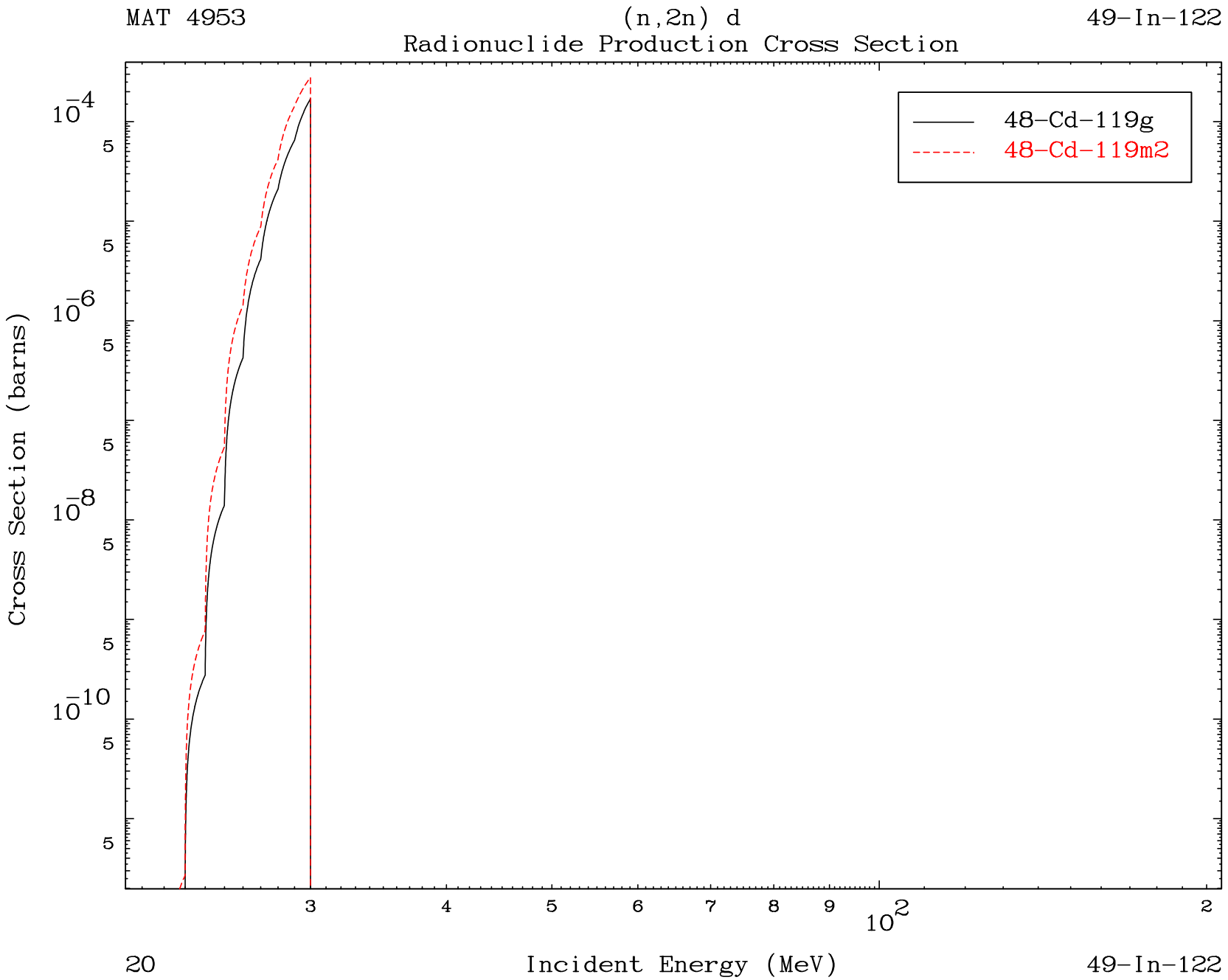

MAT 4953
Energy Release
Parameters
49-In-122
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^{18}
10^{15}
10^{12}
10^{9}
10^{6}
10^{3}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
10^{-2}
10^{0}
10^{2}
15
Incident Energy (MeV)
49-In-122

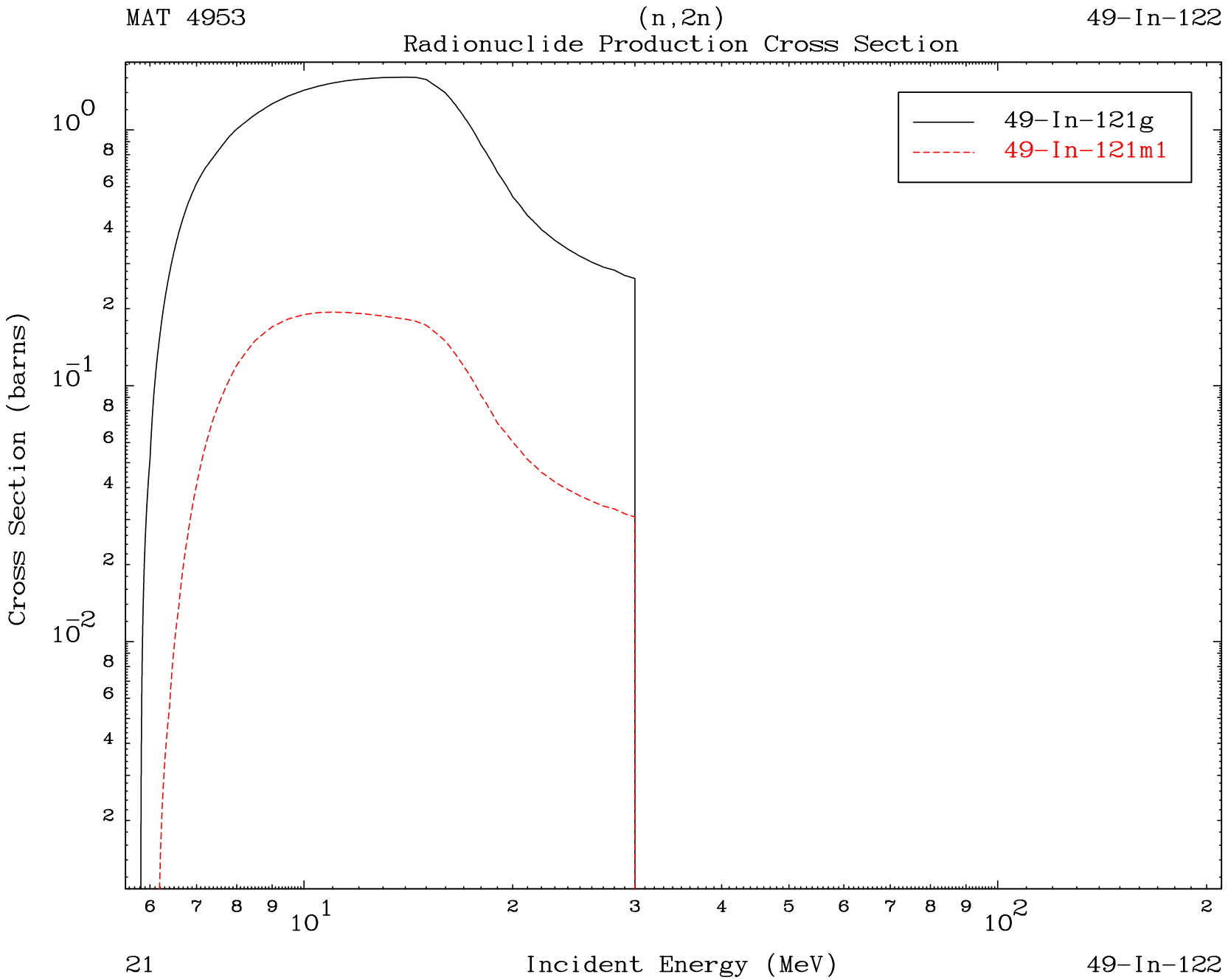

MAT 4953
Elastic
Legendre Coefficients
49-In-122
Legendre (CM)
0.04
0.03
0.02
0.01
0.00
0
10
20
30
16
Incident Energy (MeV)
49-In-122
P1
P2
P3
P4
P5
P6
P7
P8
P9

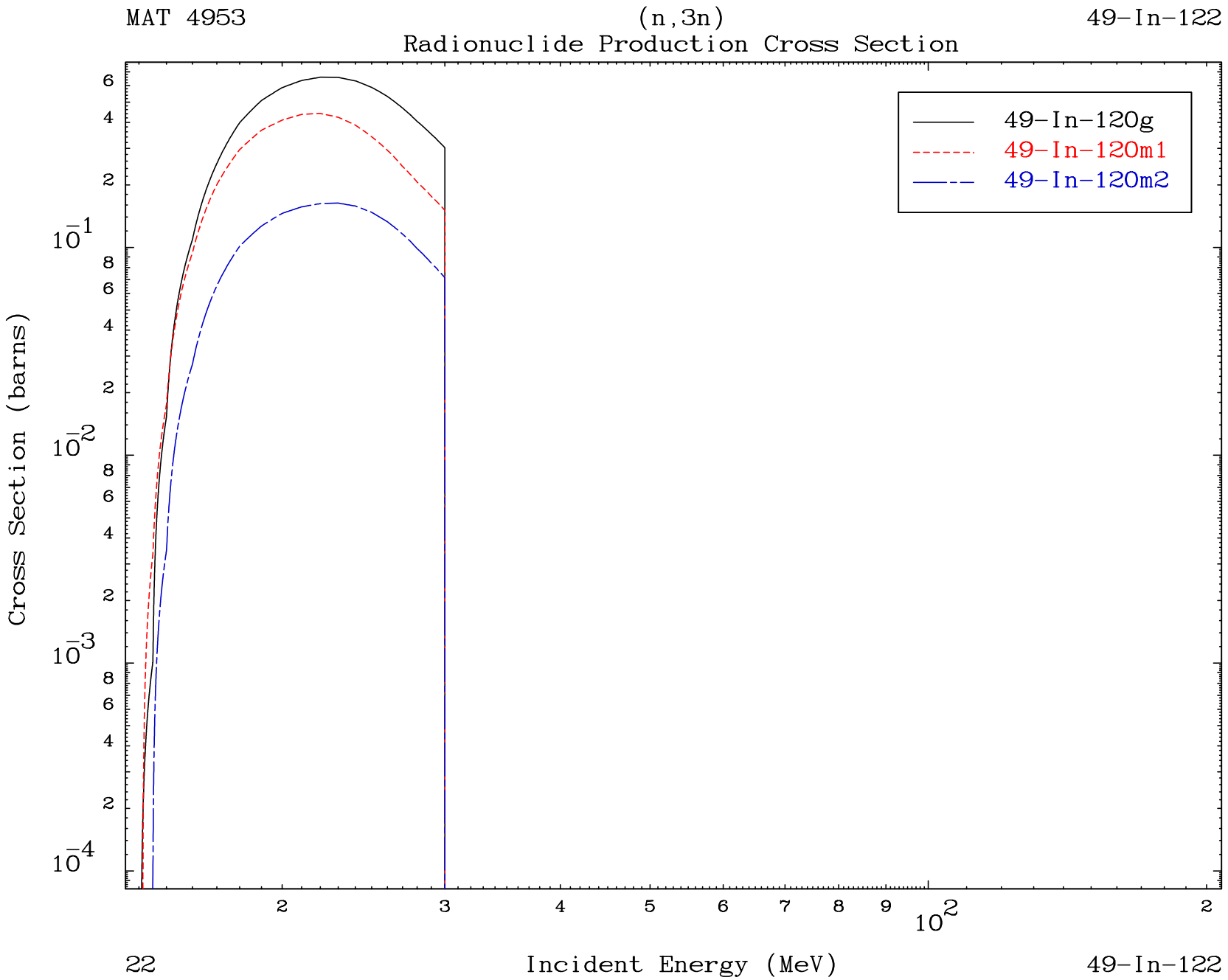

MAT 4953
Elastic
Legendre Coefficients
49-In-122
X10 -4
5
4
3
2
1
0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
5
10
15
20
25
30
17
Incident Energy (MeV)
49-In-122

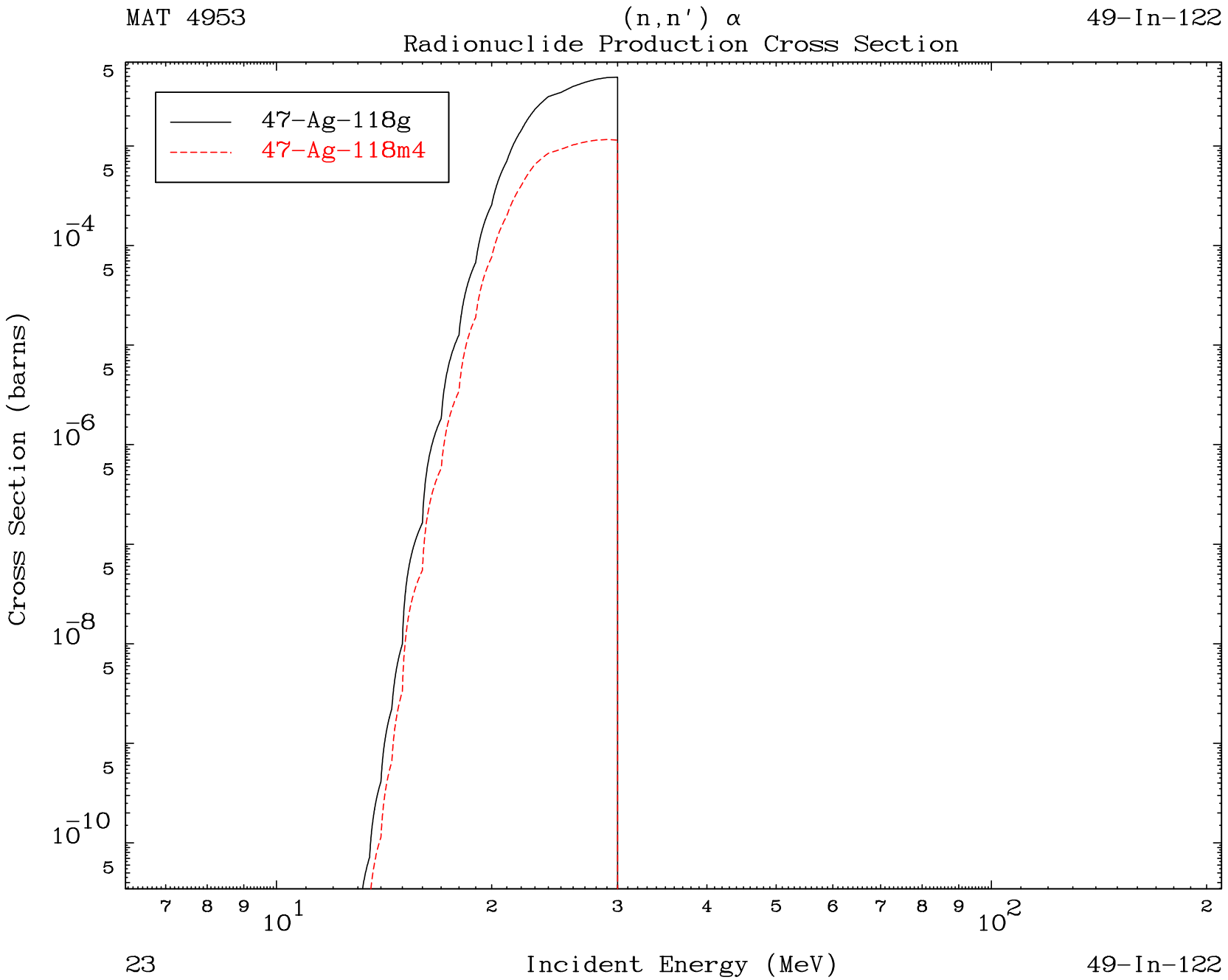

MAT 4953
Elastic
Legendre Coefficients
49-In-122
X10^-7
P19
P20
P21
P22
P23
P24
P25
P26
Legendre (CM)
6
4
2
0
15
20
25
30
18
Incident Energy (MeV)
49-In-122

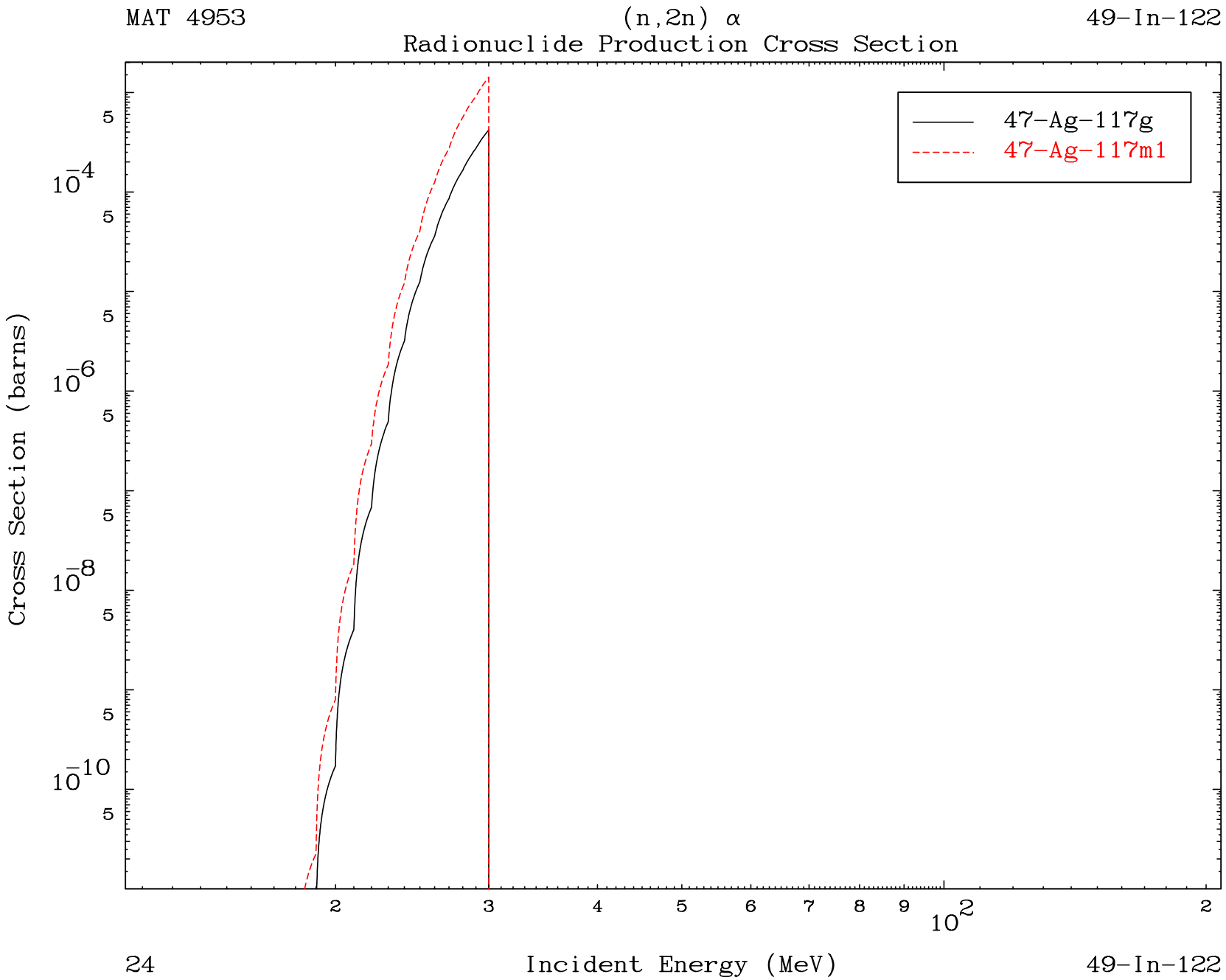

MAT 4953
Inelastic
49-In-122
Radionuclide Production Cross Section
49-In-122g
49-In-122m1
49-In-122m5
Cross Section (barns)
Incident Energy (MeV)
19
49-In-122

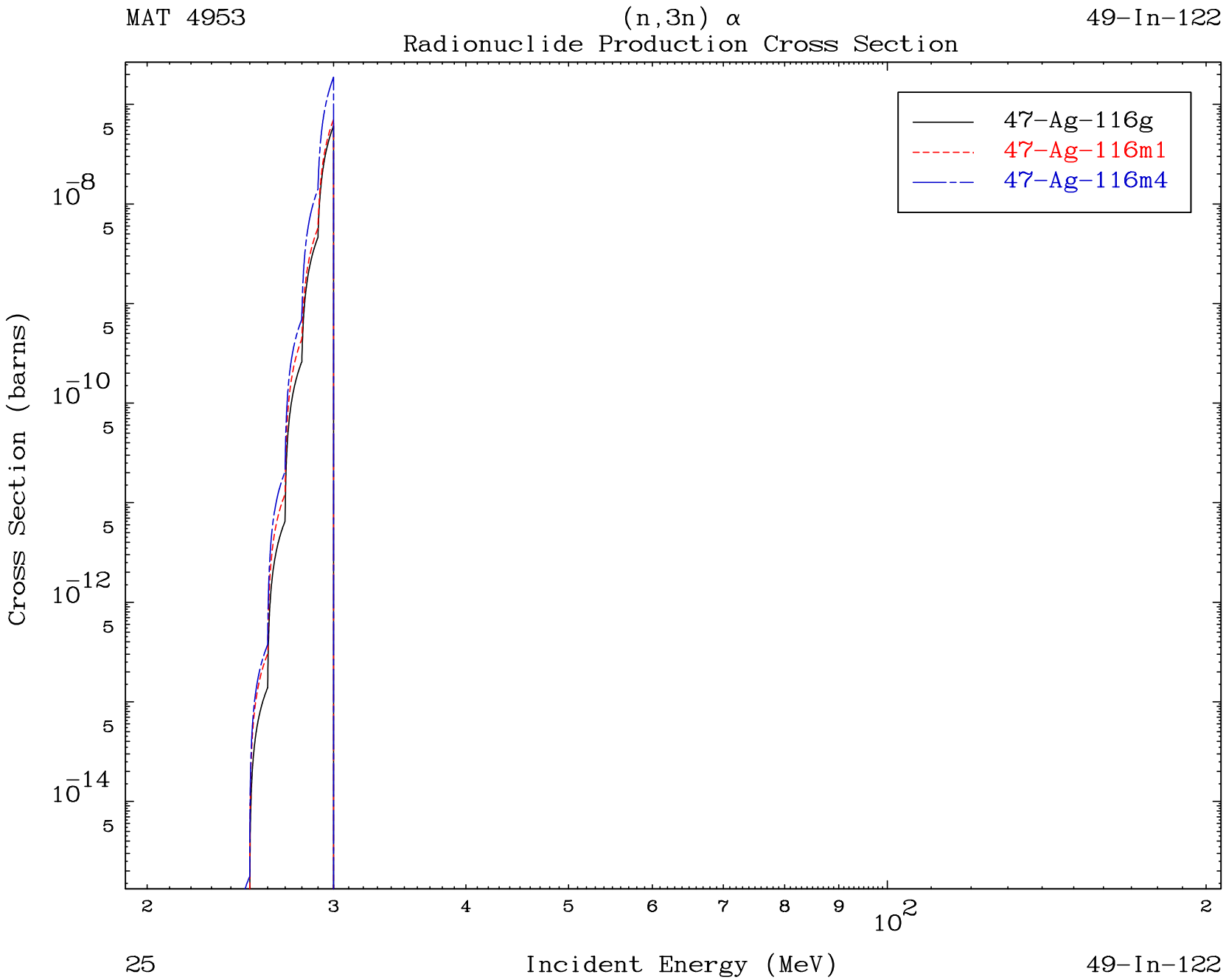

MAT 4953
(n,2n) d
49-In-122
Radionuclide Production Cross Section
48-Cd-119g
48-Cd-119m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
3
4
5
6
7
8
9
10^2
2
20
Incident Energy (MeV)
49-In-122

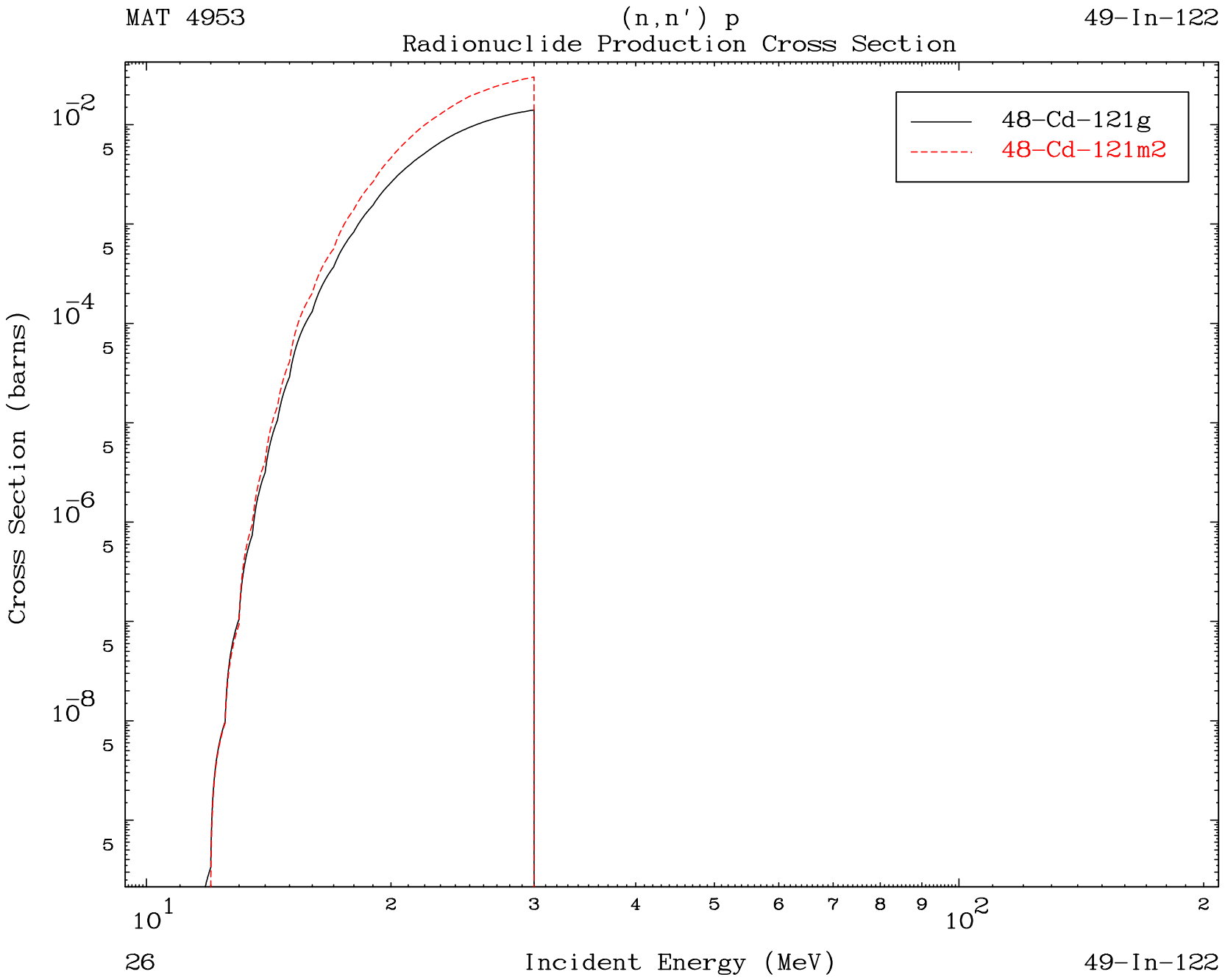

MAT 4953
(n,2n)
49-In-122
Radionuclide Production Cross Section
49-In-121g
49-In-121m1
Cross Section (barns)
Incident Energy (MeV)
21
49-In-122

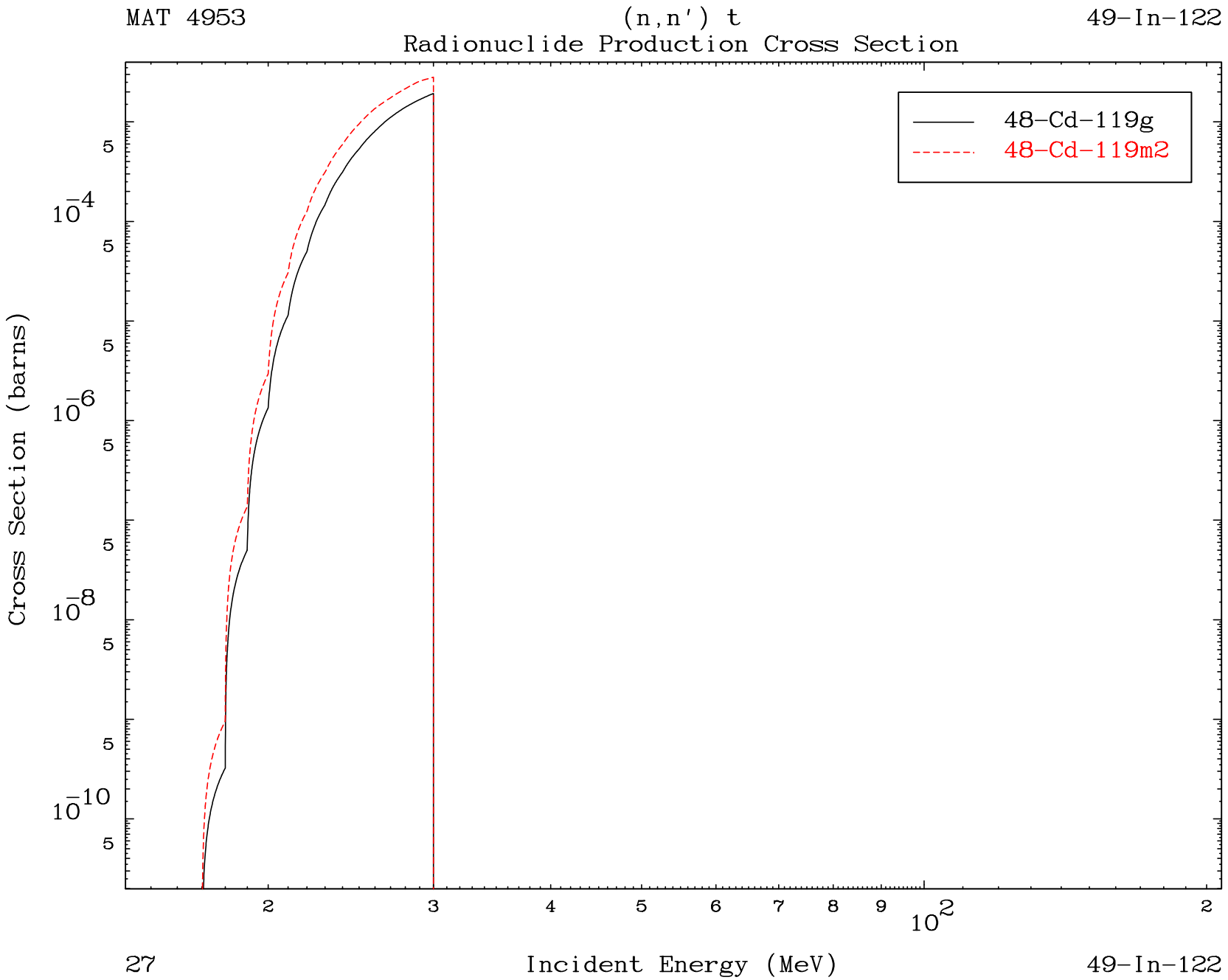

MAT 4953
(n,3n)
49-In-122
Radionuclide Production Cross Section
49-In-120g
49-In-120m1
49-In-120m2
Cross Section (barns)
Incident Energy (MeV)
22
49-In-122

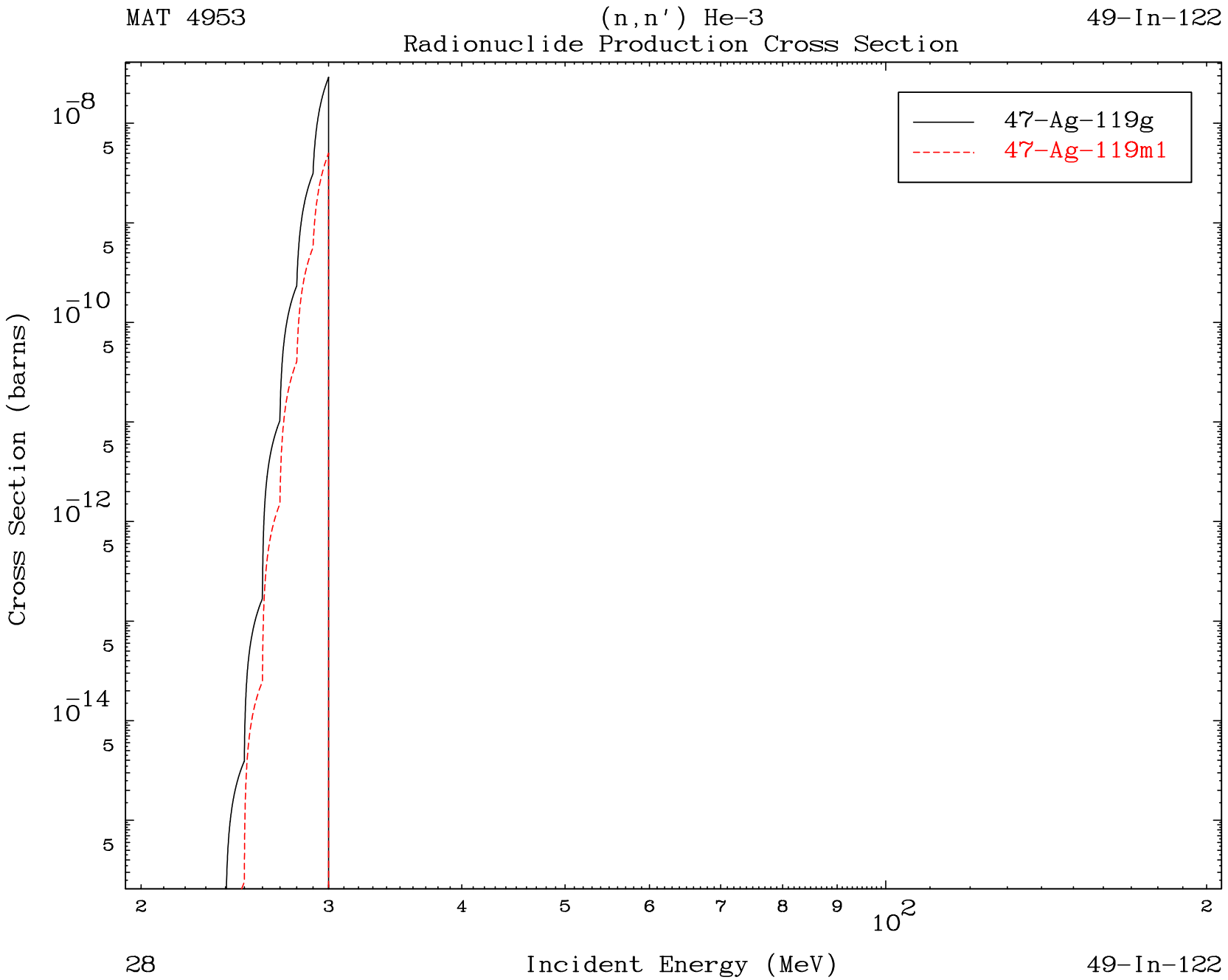

MAT 4953
(n,n') α
49-In-122
Radionuclide Production Cross Section
47-Ag-118g
47-Ag-118m4
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^1
10^2
Incident Energy (MeV)
23
49-In-122

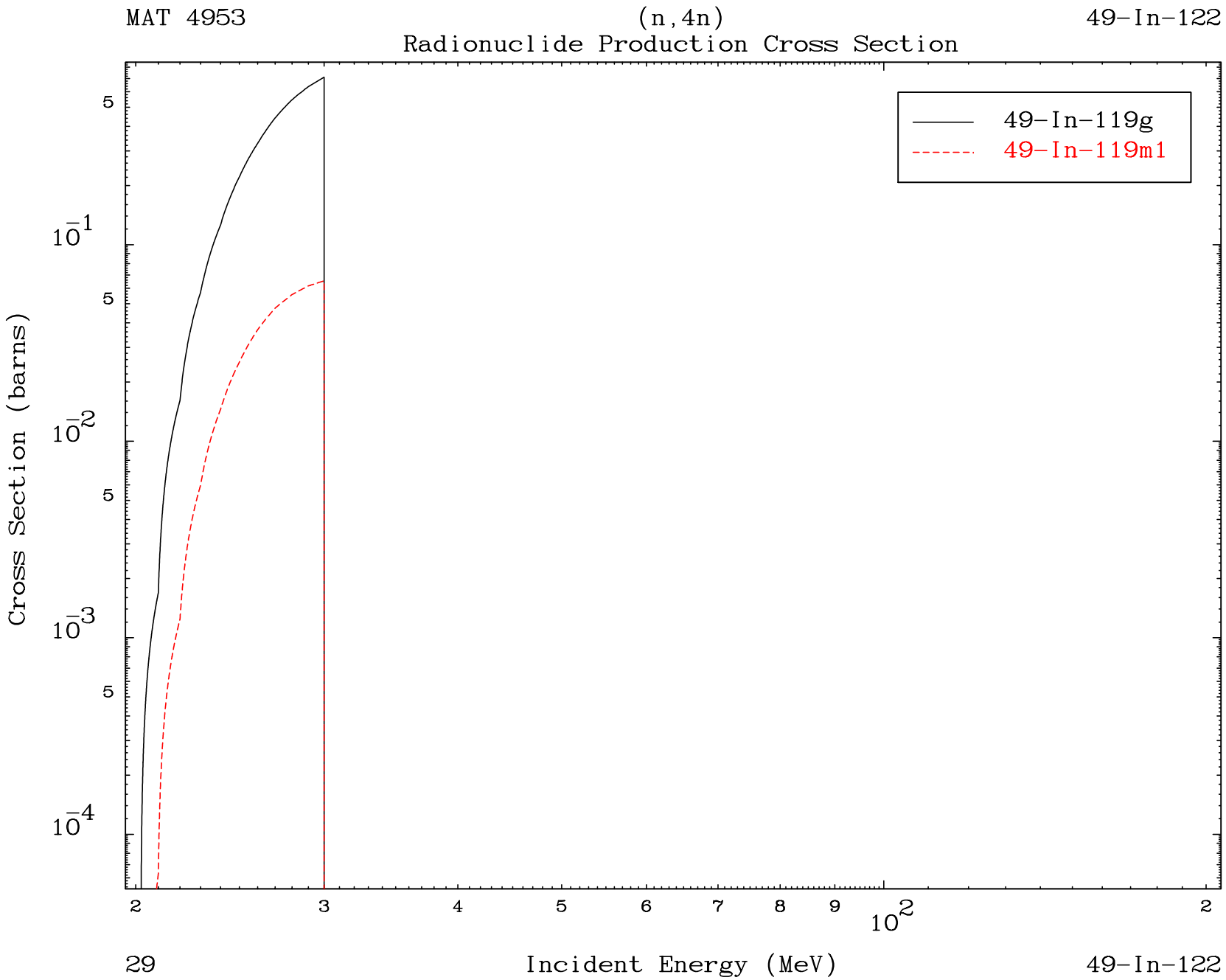

MAT 4953
(n,2n) α
49-In-122
Radionuclide Production Cross Section
47-Ag-117g
47-Ag-117m1
Cross Section (barns)
10-4
10-6
10-8
10-10
2
3
4
5
6
7
8
9
10 2
Incident Energy (MeV)
24
49-In-122

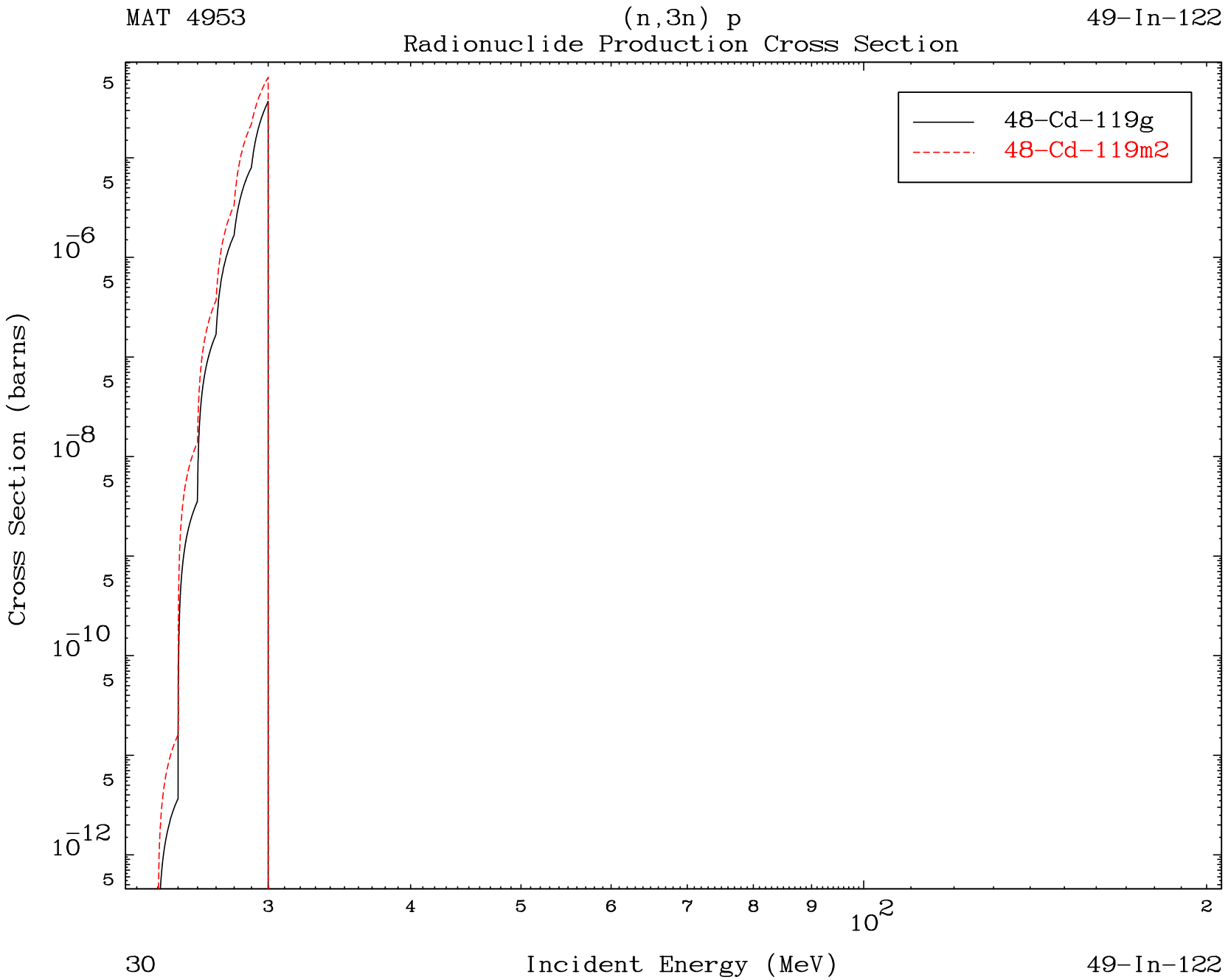

MAT 4953
(n,3n) α
49-In-122
Radionuclide Production Cross Section
47-Ag-116g
47-Ag-116m1
47-Ag-116m4
Cross Section (barns)
10-8
10-10
10-12
10-14
5
2
3
4
5
6
7
8
9
10 2
2
25
Incident Energy (MeV)
49-In-122

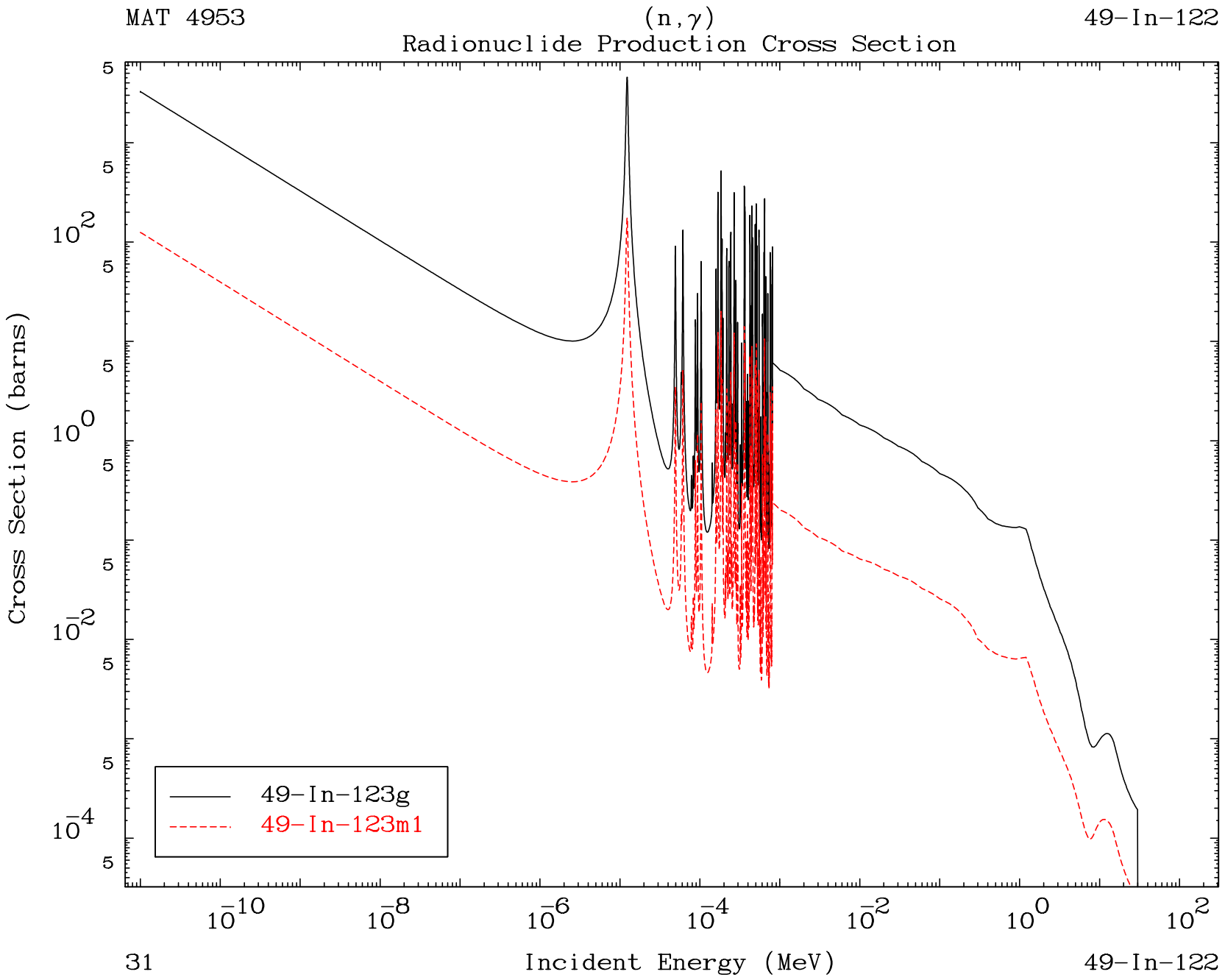

MAT 4953
(n,n') p
49-In-122
Radionuclide Production Cross Section
48-Cd-121g
48-Cd-121m2
Cross Section (barns)
Incident Energy (MeV)
26
49-In-122

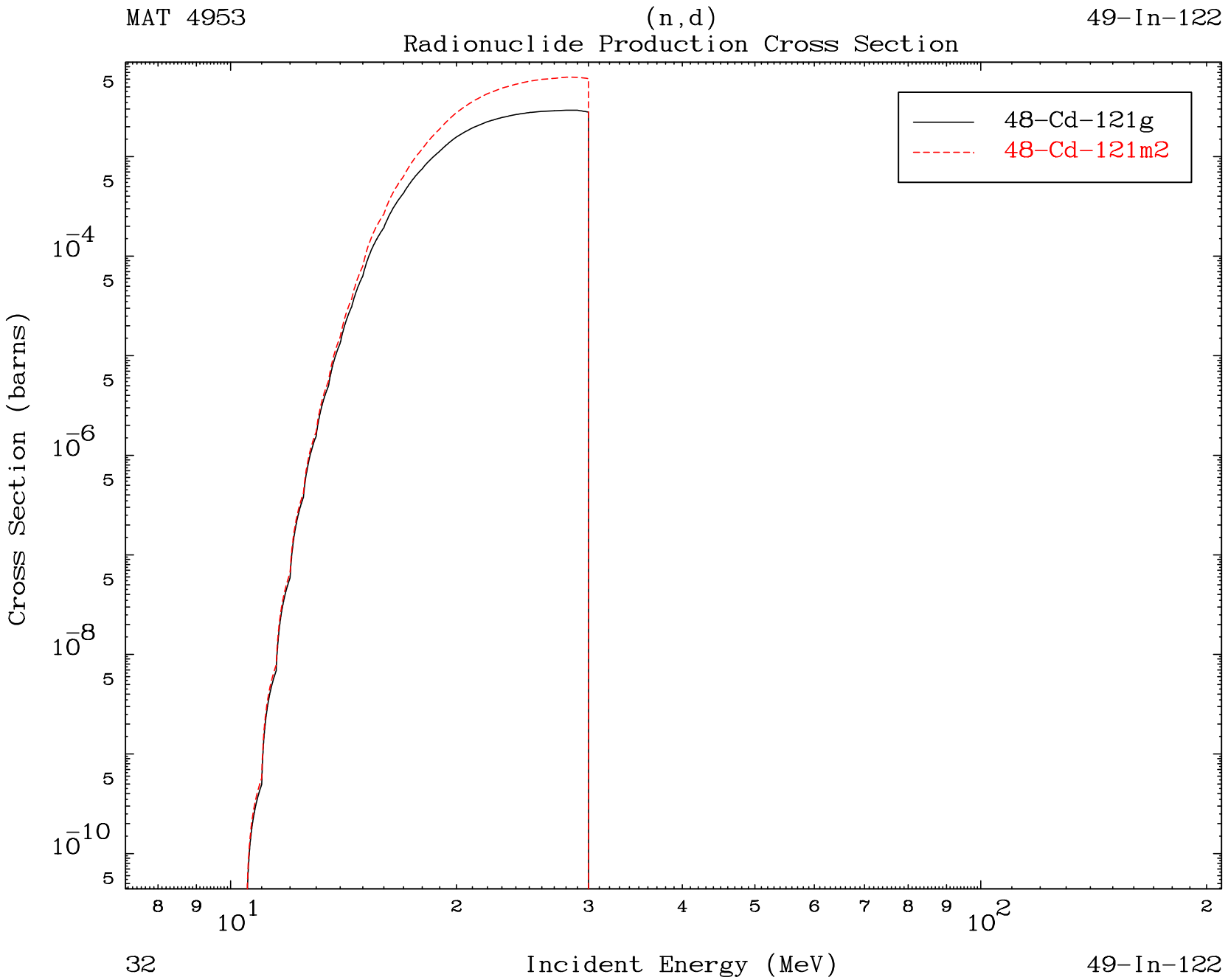

MAT 4953
(n,n') t
49-In-122
Radionuclide Production Cross Section
48-Cd-119g
48-Cd-119m2
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
27
Incident Energy (MeV)
49-In-122

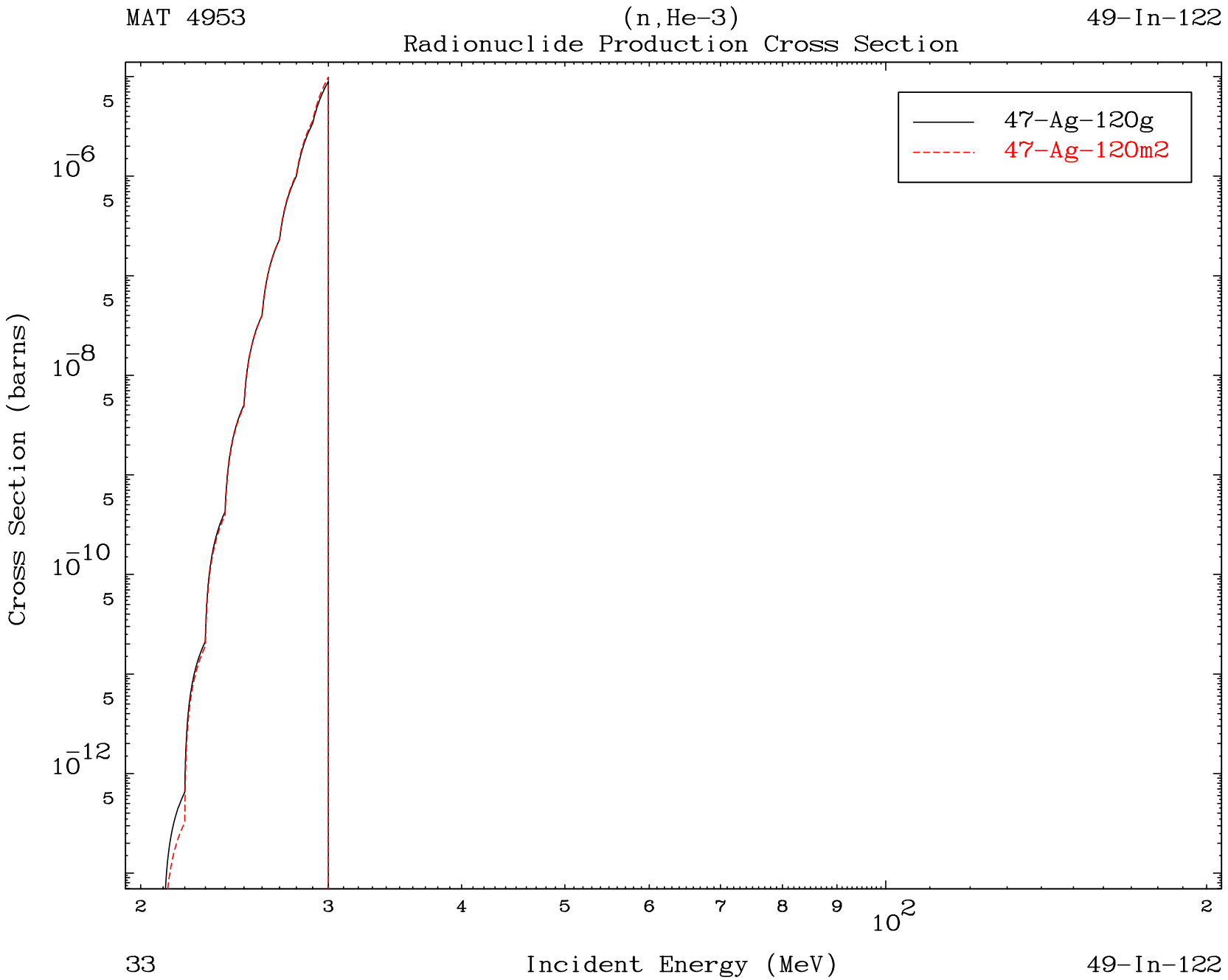

MAT 4953
(n,n') He-3
49-In-122
Radionuclide Production Cross Section
47-Ag-119g
47-Ag-119m1
Cross Section (barns)
10-8
10-10
10-12
10-14
5
2
3
4
5
6
7
8
9
10 2
2
28
Incident Energy (MeV)
49-In-122

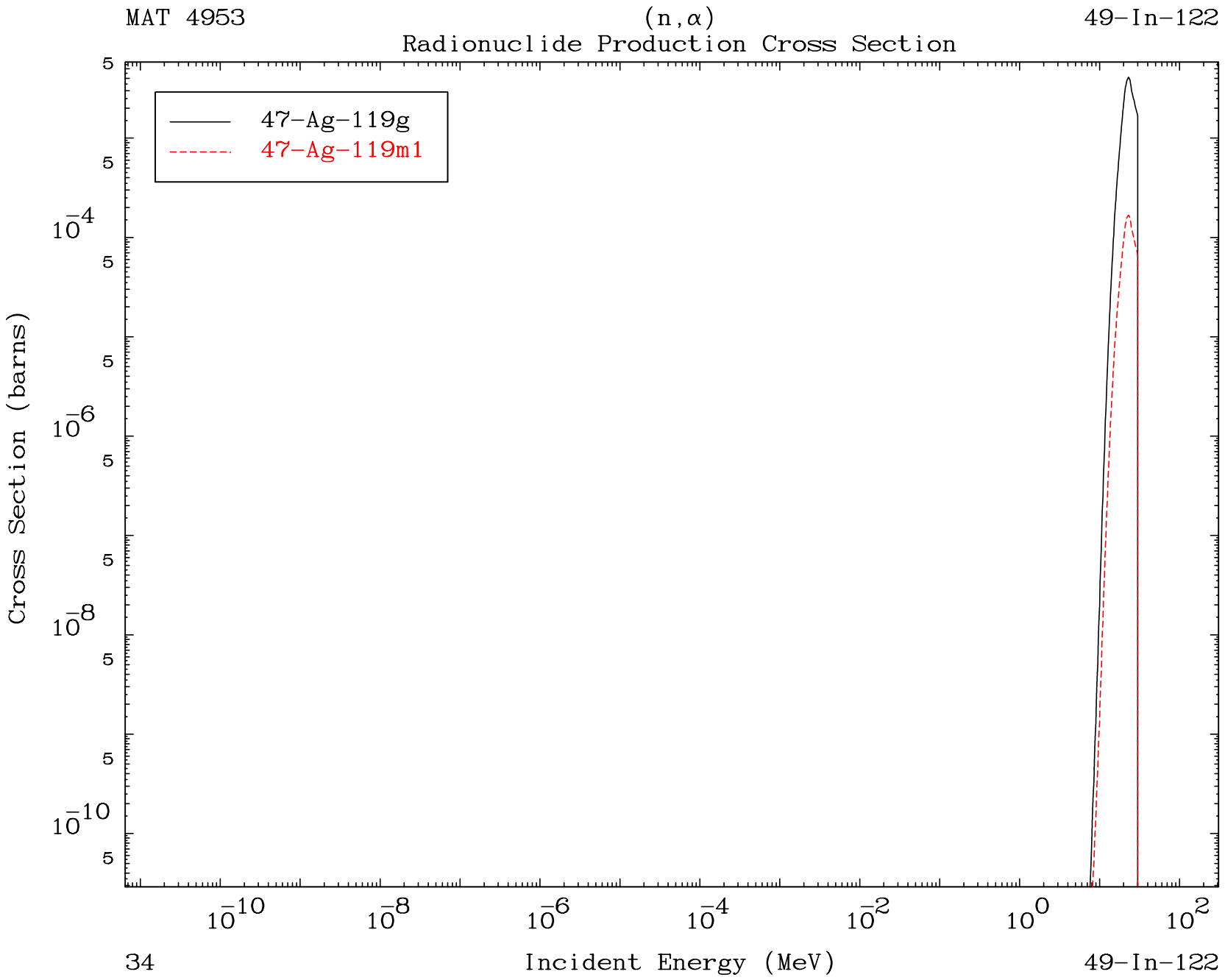

MAT 4953
(n,4n)
49-In-122
Radionuclide Production Cross Section
49-In-119g
49-In-119m1
Cross Section (barns)
10-1
10-2
10-3
10-4
5
2
3
4
5
6
7
8
9
10 2
2
29
Incident Energy (MeV)
49-In-122


MAT 4953
(n,3n) p
49-In-122
Radionuclide Production Cross Section
48-Cd-119g
48-Cd-119m2
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
3
4
6
7
8
9
10^2
2
30
Incident Energy (MeV)
49-In-122


MAT 4953
(n,γ)
49-In-122
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)
49-In-123g
49-In-123m1
31
49-In-122


MAT 4953
(n,d)
49-In-122
Radionuclide Production Cross Section
48-Cd-121g
48-Cd-121m2
Cross Section (barns)
Incident Energy (MeV)
32
49-In-122


MAT 4953
(n,He-3)
49-In-122
Radionuclide Production Cross Section
47-Ag-120g
47-Ag-120m2
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
2
3
4
5
6
7
8
9
10^2
2
33
Incident Energy (MeV)
49-In-122


MAT 4953
(n,α)
49-In-122
Radionuclide Production Cross Section
47-Ag-119g
47-Ag-119m1
Cross Section (barns)
Incident Energy (MeV)
34
49-In-122