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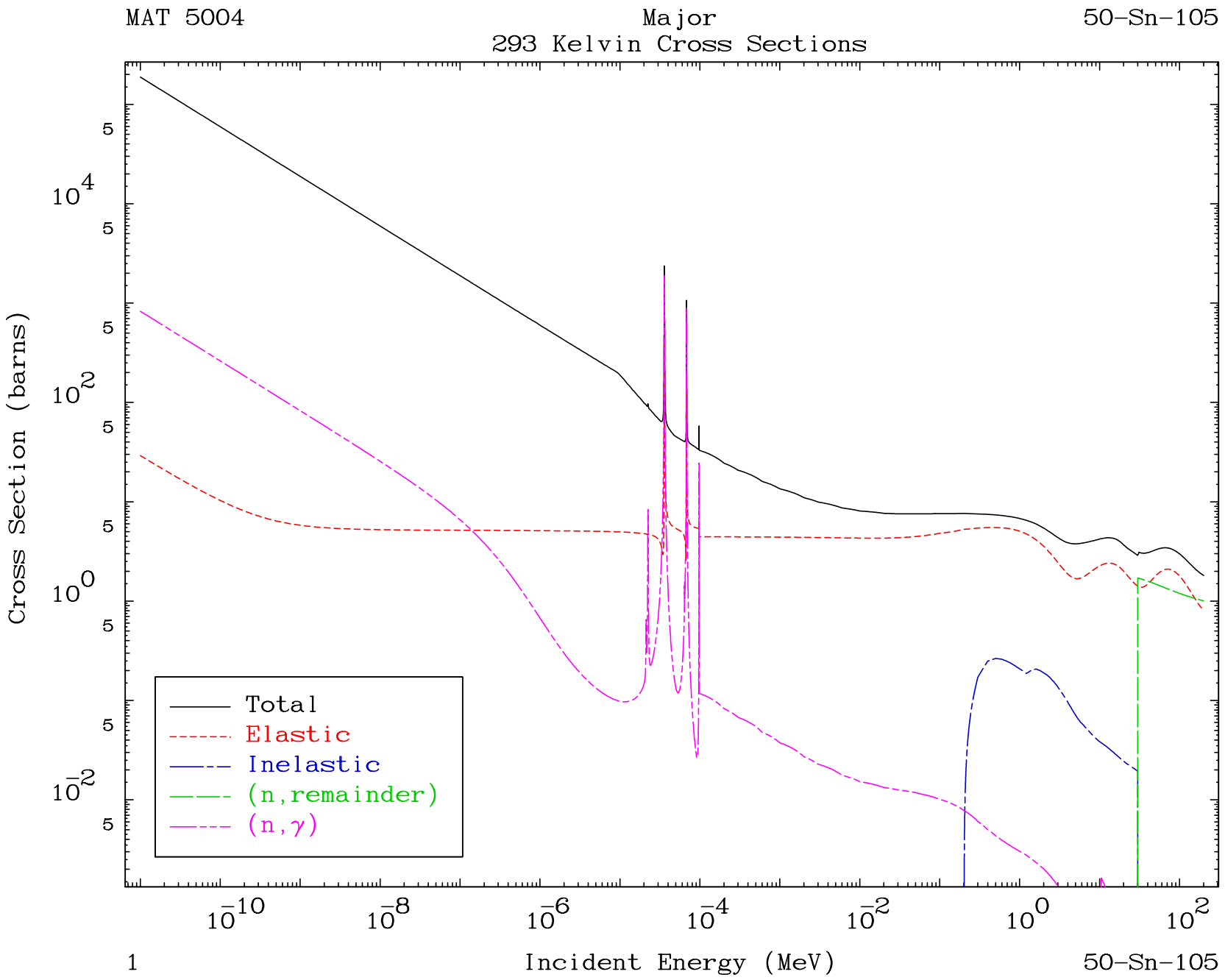
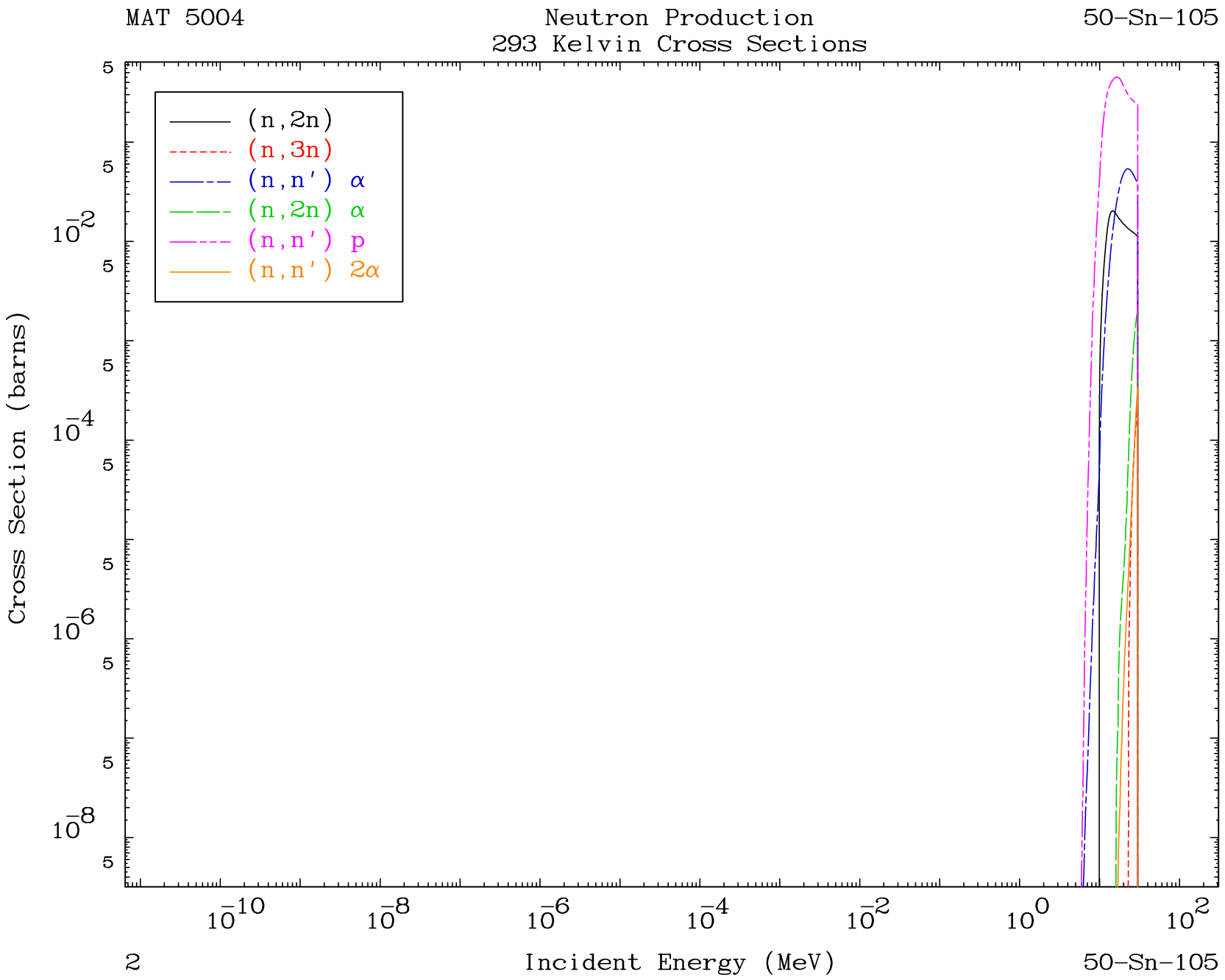
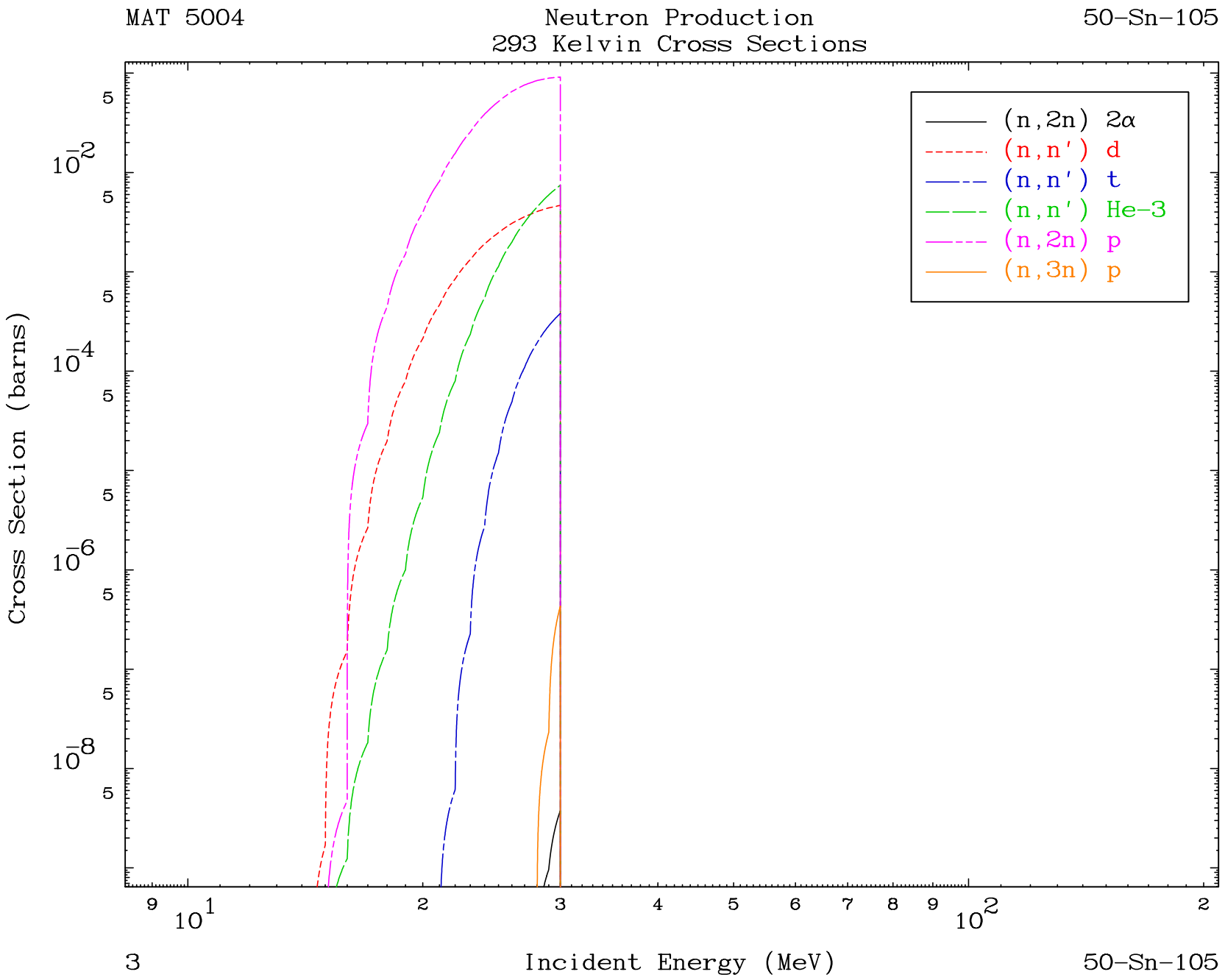
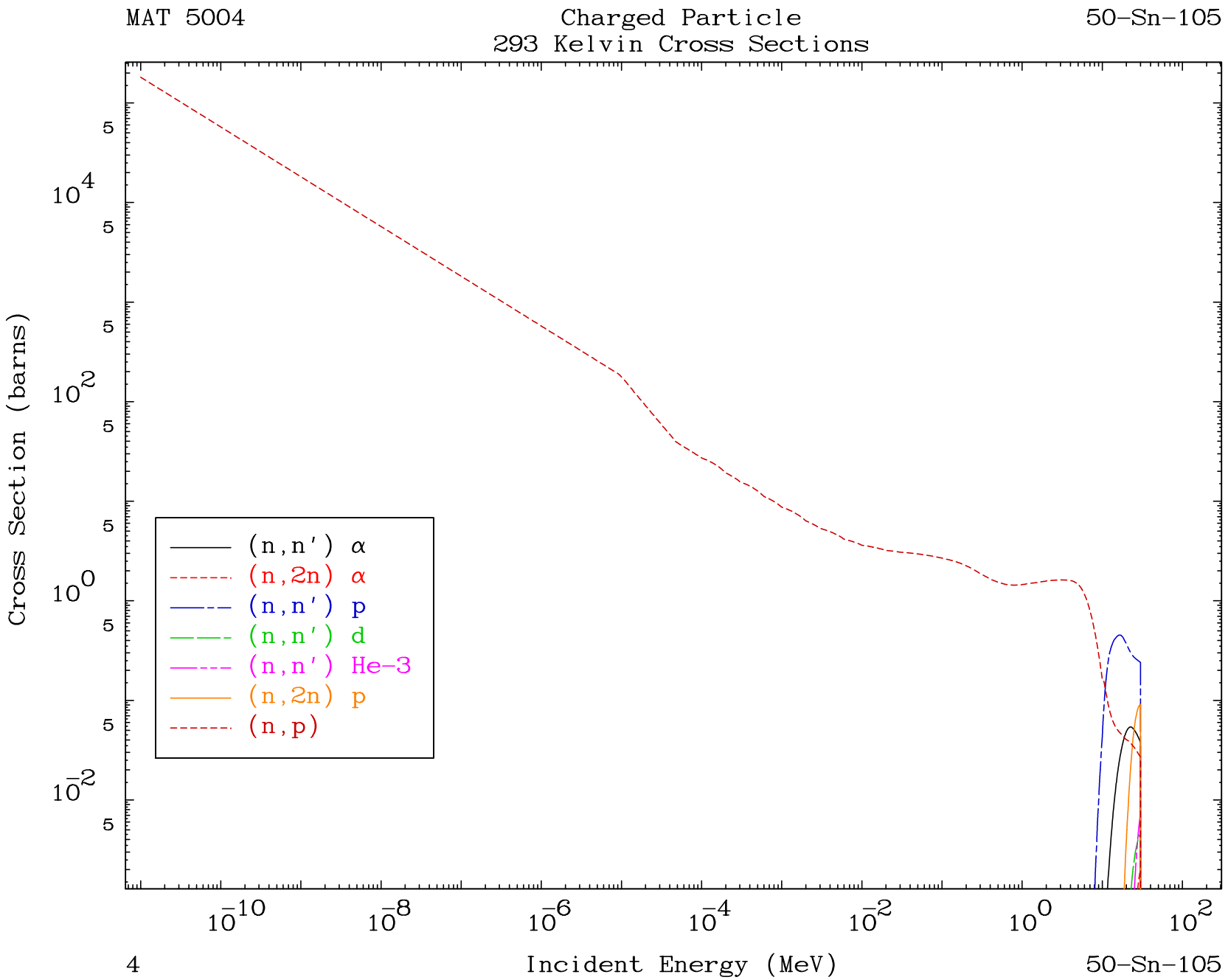
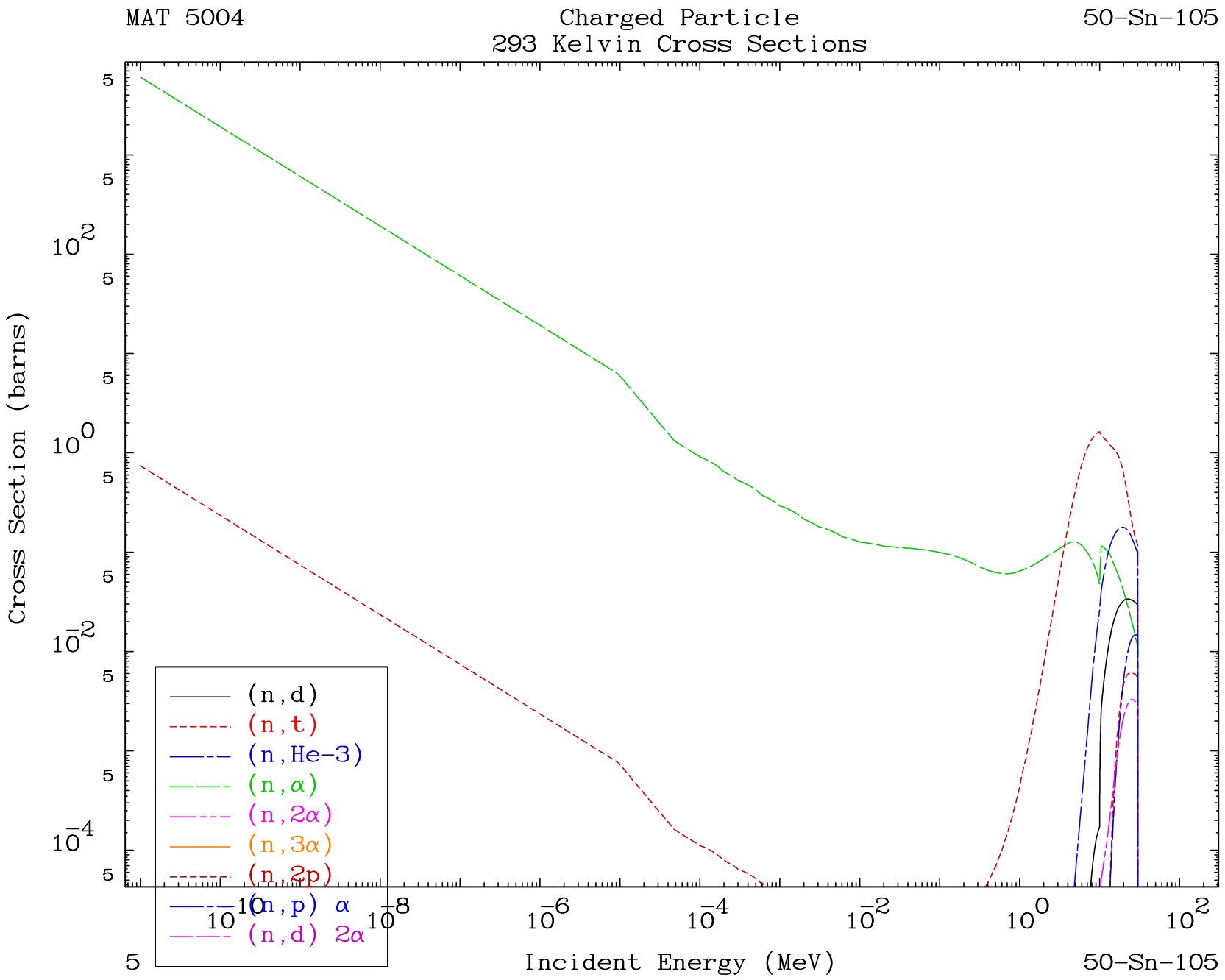
Press Mouse Button to Start

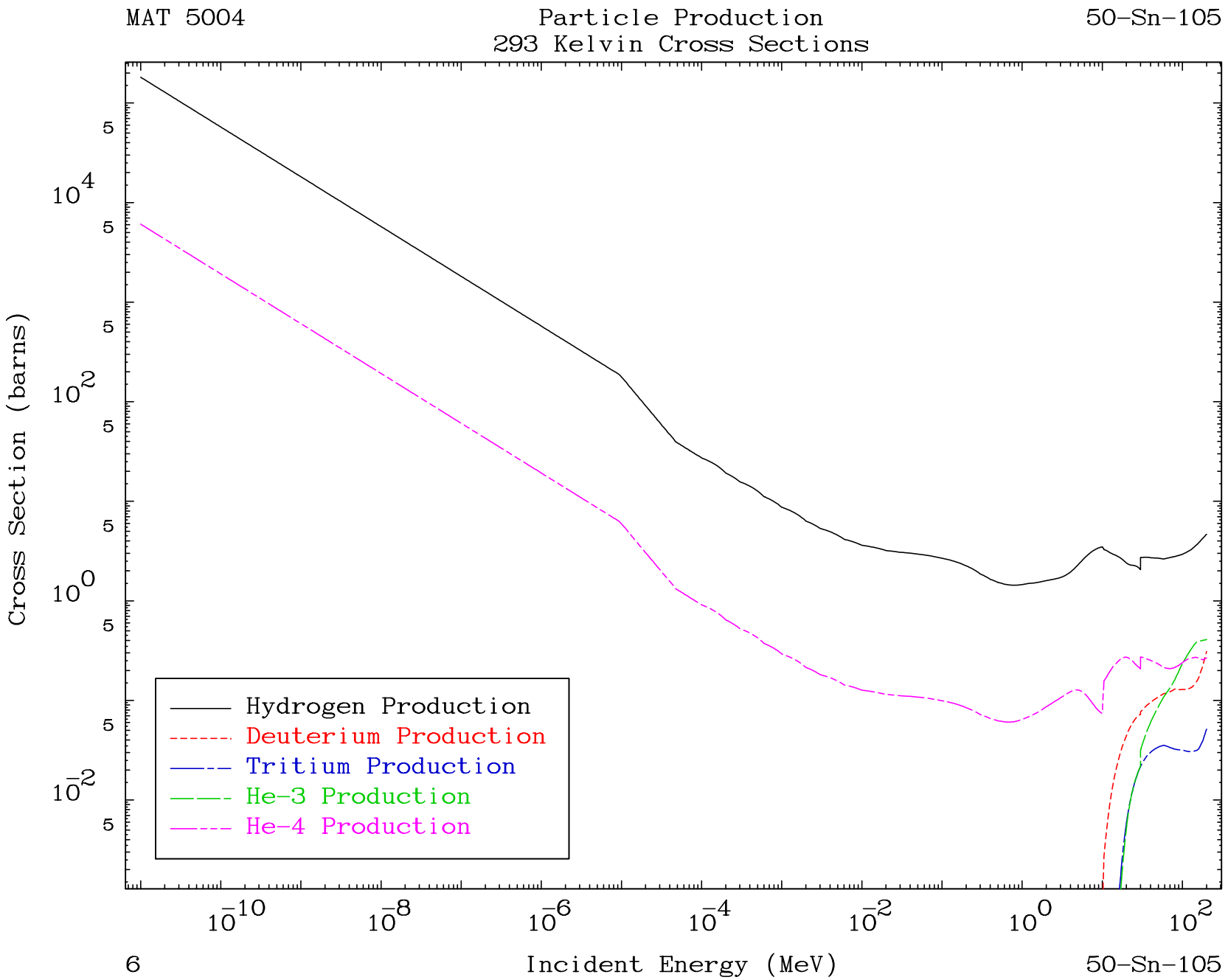

MAT 5004
Major
50-Sn-105
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
50-Sn-105

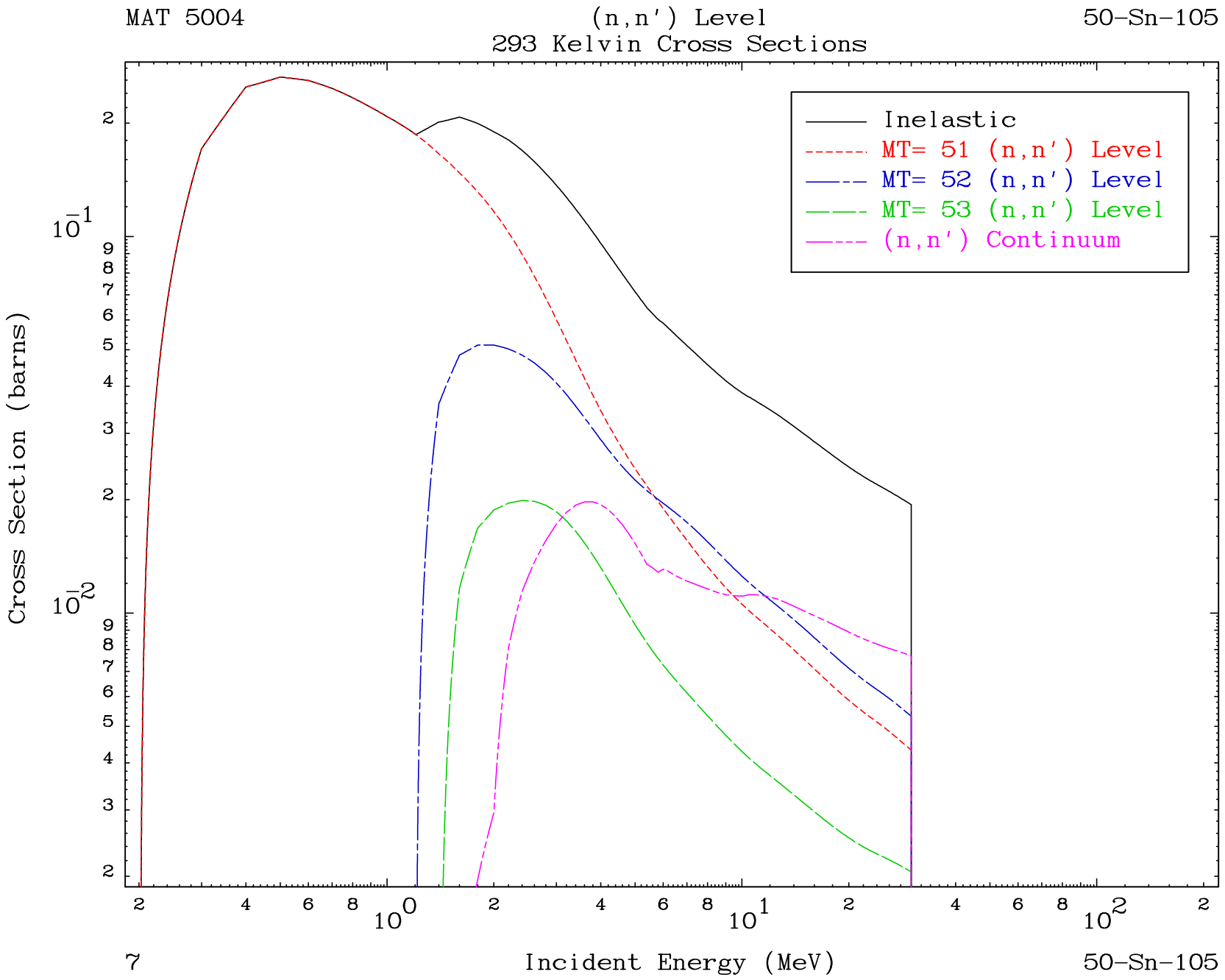

MAT 5004
Neutron Production
293 Kelvin Cross Sections
50-Sn-105
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
50-Sn-105
2

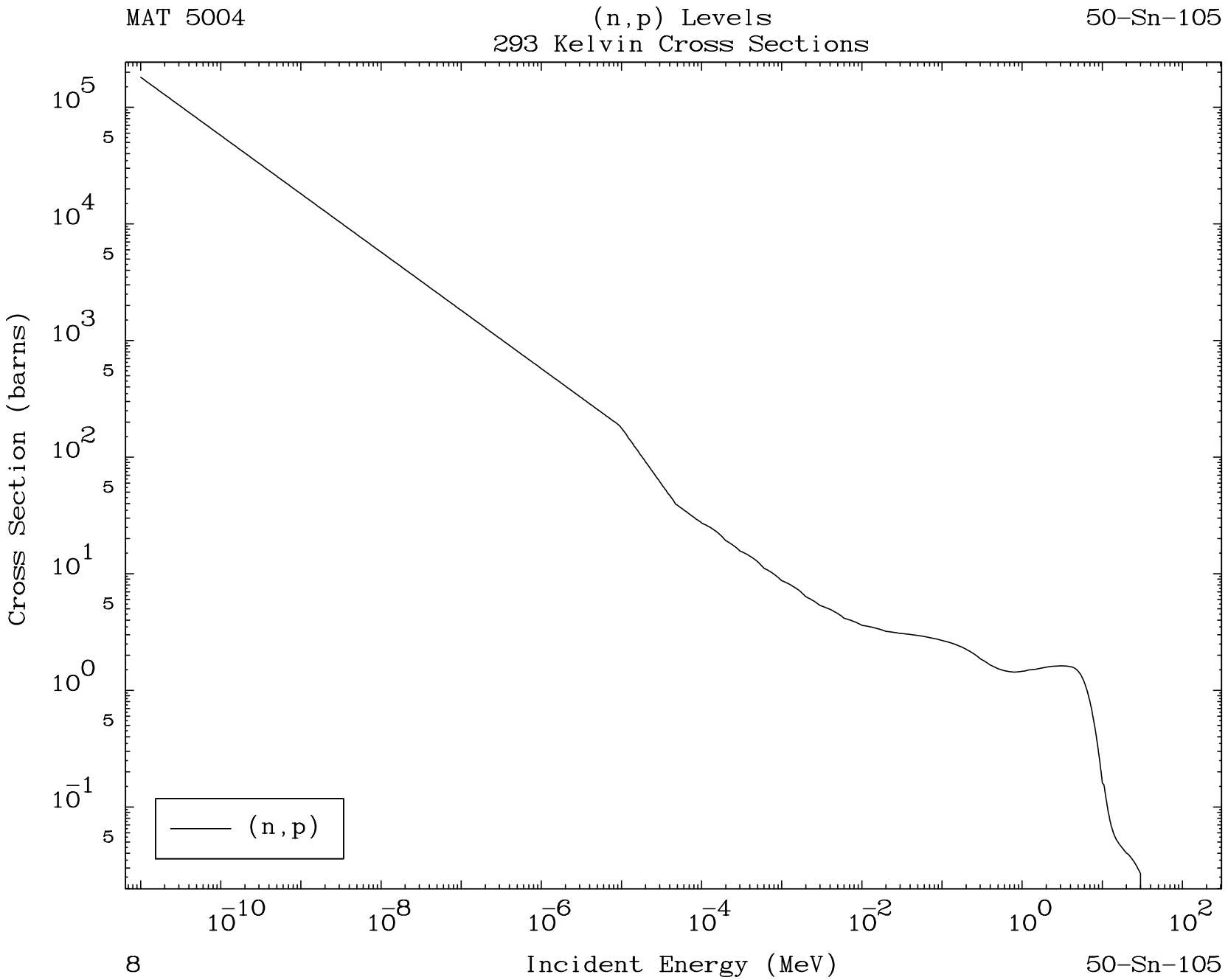

MAT 5004
Neutron Production
293 Kelvin Cross Sections
50-Sn-105
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
50-Sn-105
3

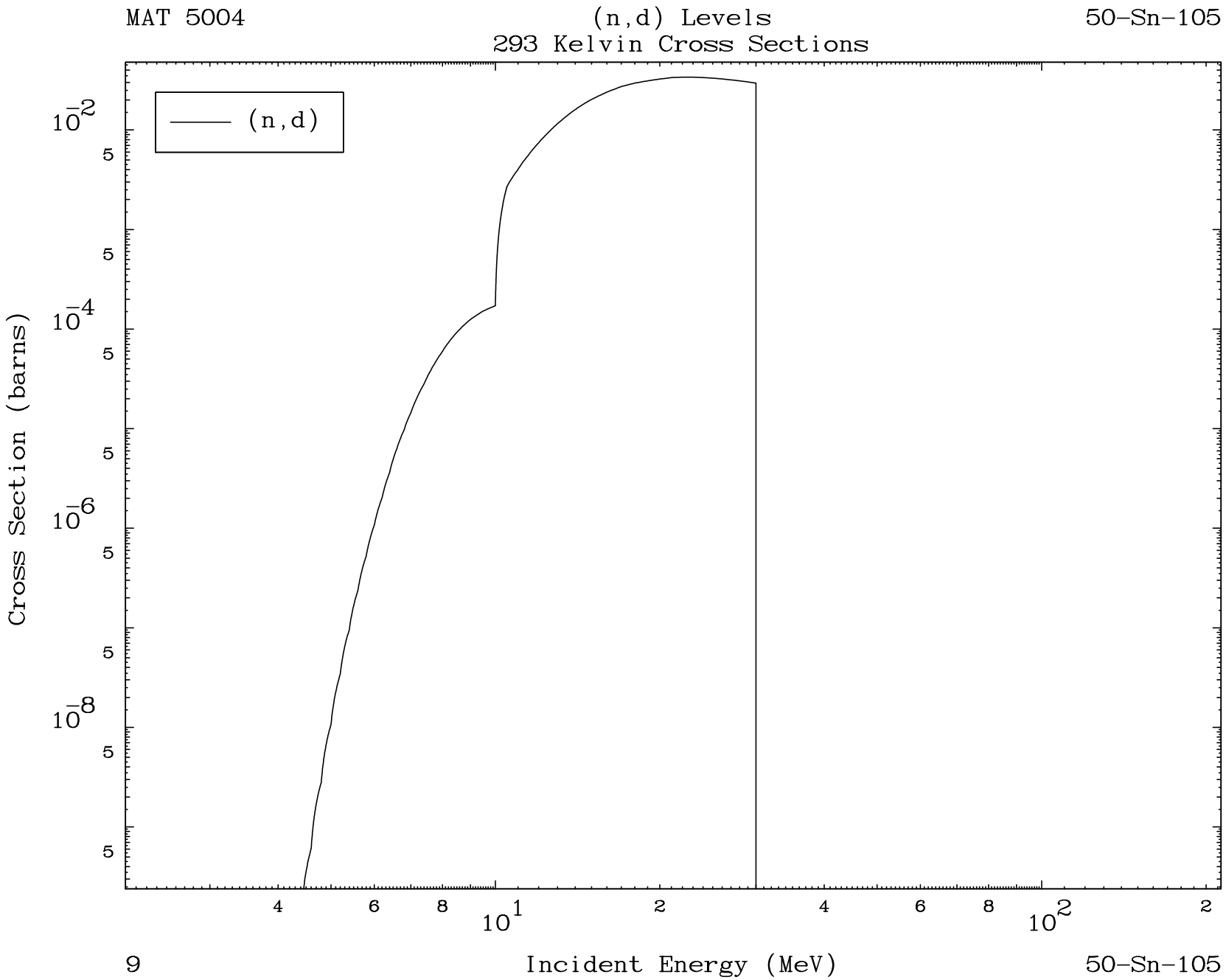

MAT 5004
Charged Particle
293 Kelvin Cross Sections
50-Sn-105
Cross Section (barns)
10^4
10^2
10^0
10^-2
(n,n') α
(n,2n) α
(n,n') p
(n,n') d
(n,n') He-3
(n,2n) p
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
4
50-Sn-105

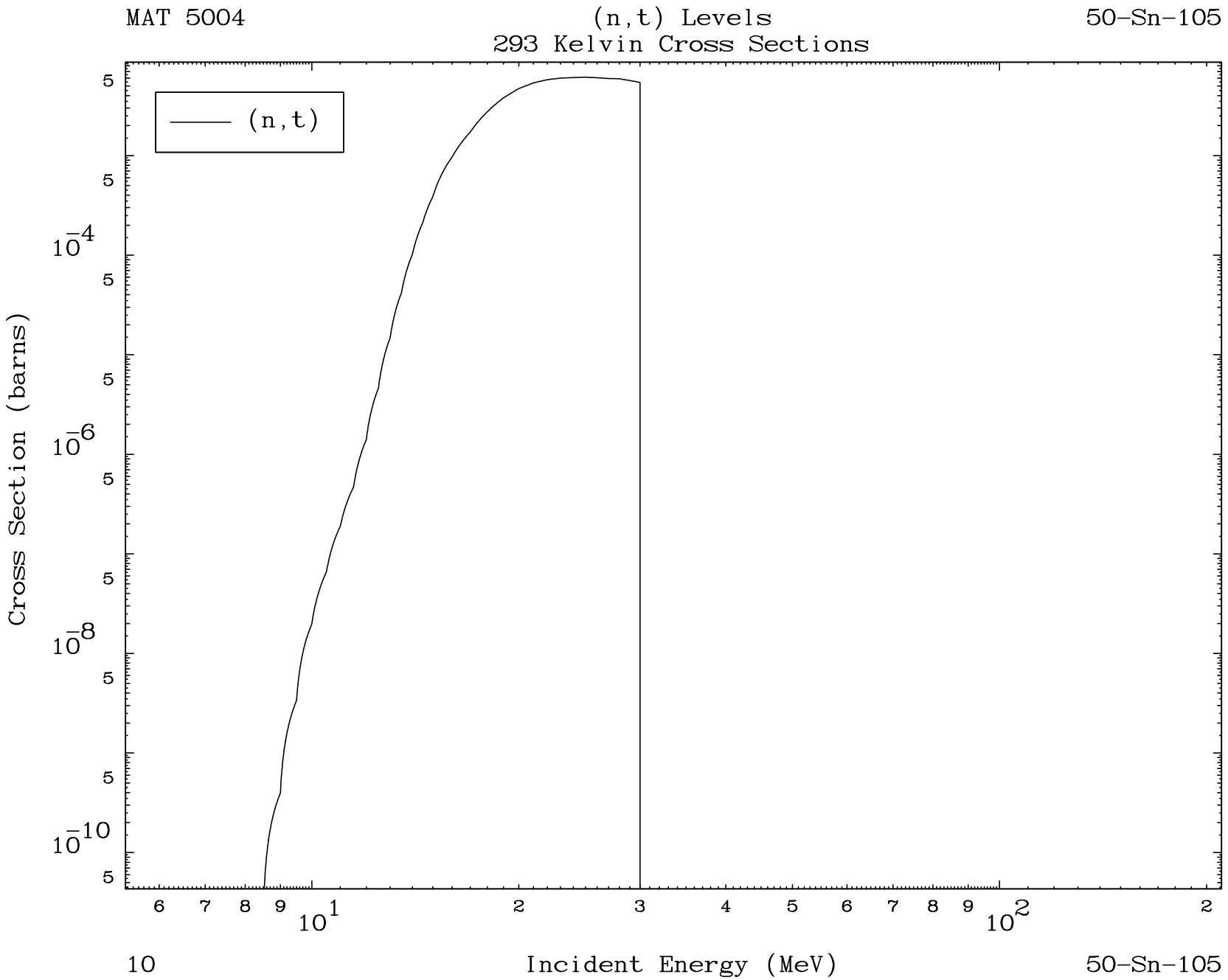

MAT 5004
Charged Particle
293 Kelvin Cross Sections
50-Sn-105
Cross Section (barns)
Incident Energy (MeV)
50-Sn-105
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,d) 2α

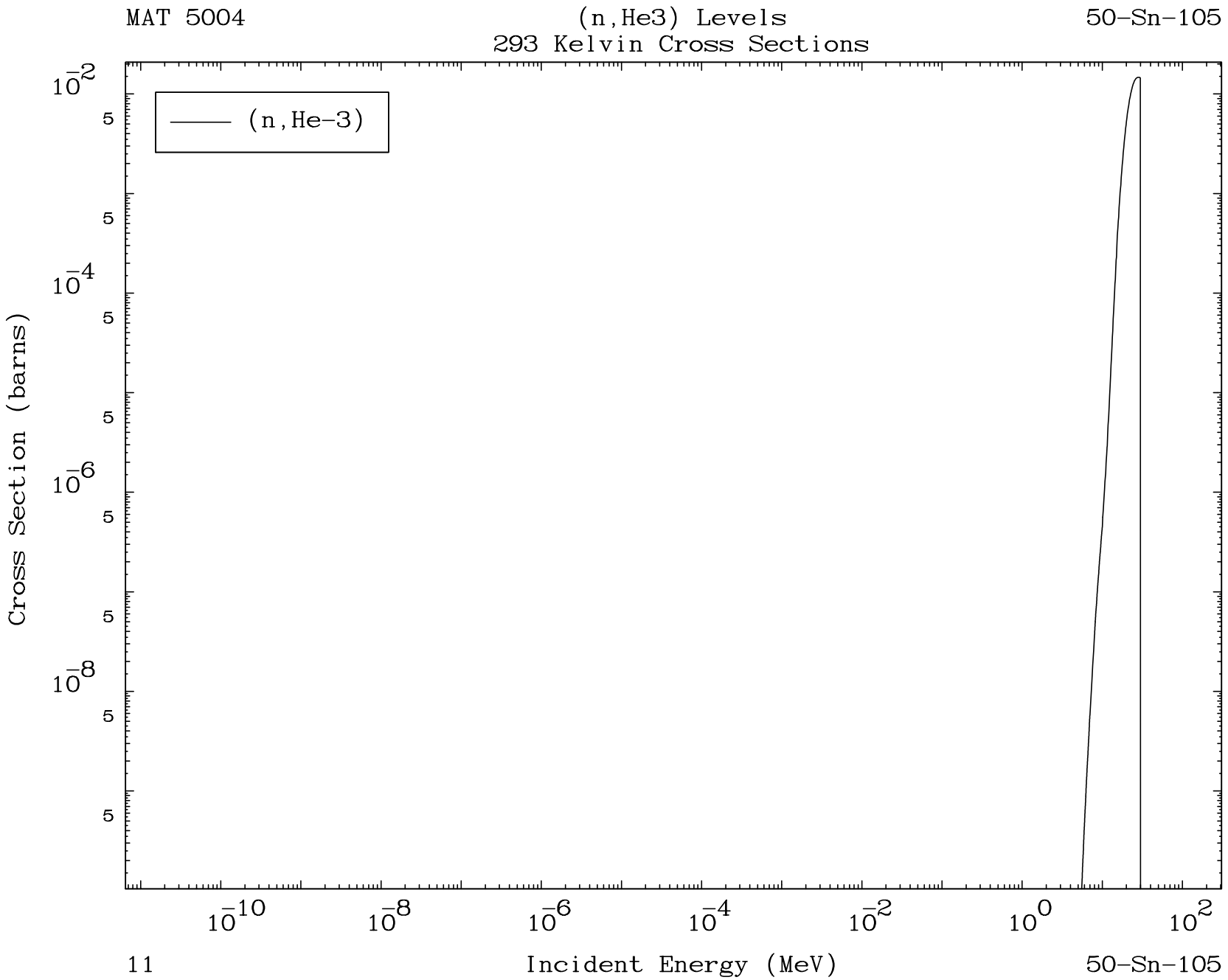

MAT 5004
Particle Production
293 Kelvin Cross Sections
50-Sn-105
Cross Section (barns)
10^4
10^2
10^0
10^-2
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
6
50-Sn-105

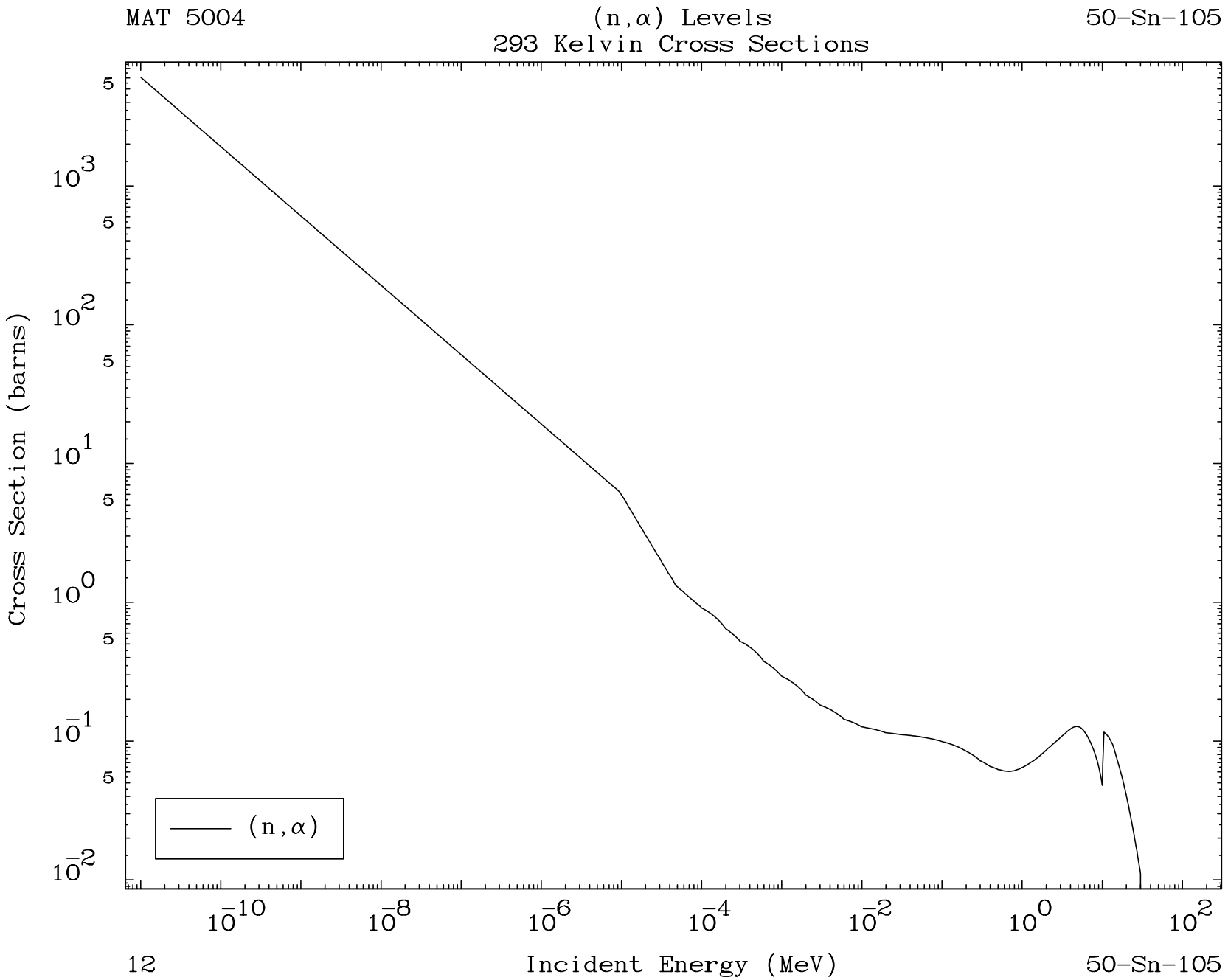

MAT 5004
(n,n') Level
293 Kelvin Cross Sections
50-Sn-105
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
7
50-Sn-105

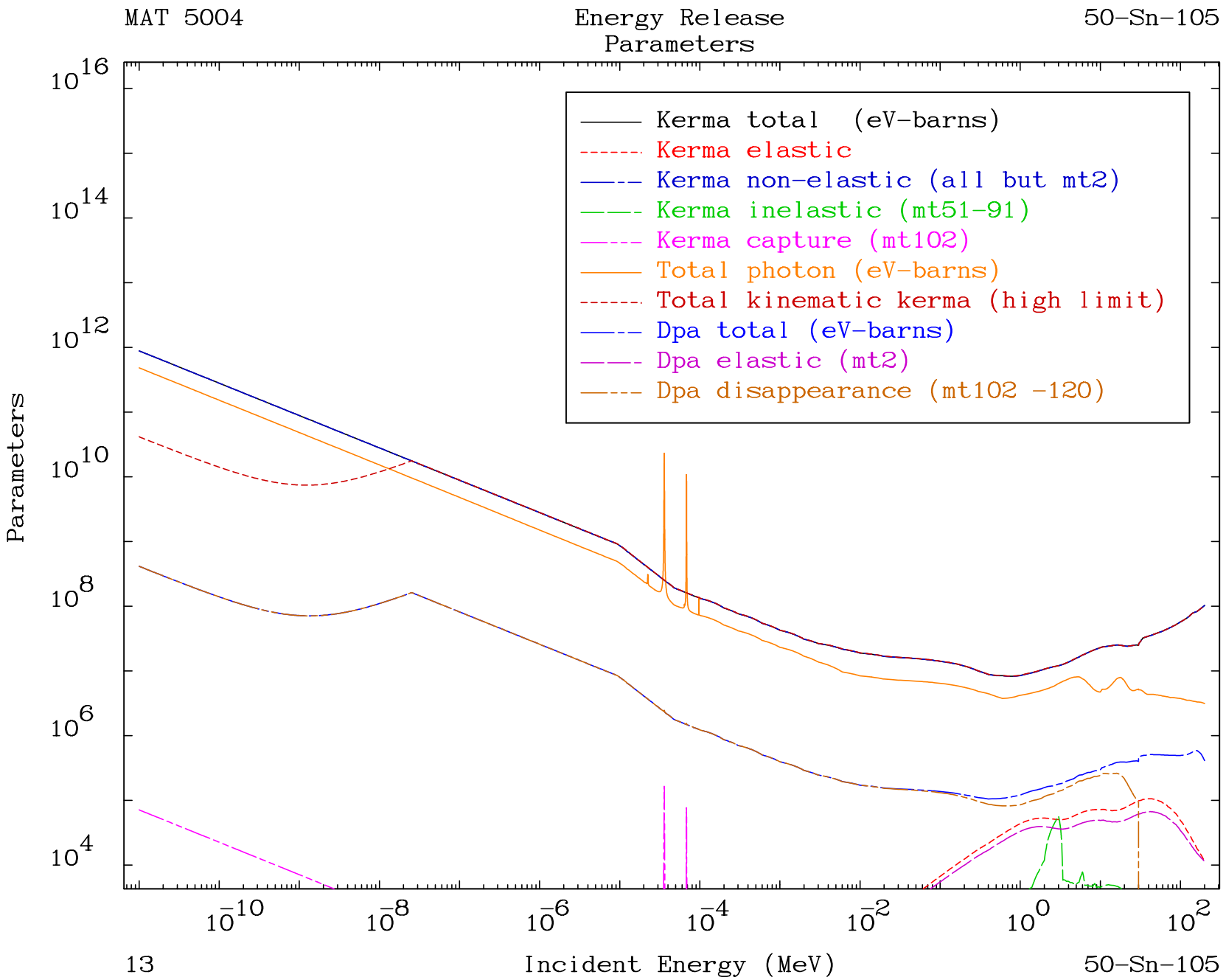

MAT 5004
(n,p) Levels
50-Sn-105
293 Kelvin Cross Sections
Cross Section (barns)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
8
50-Sn-105

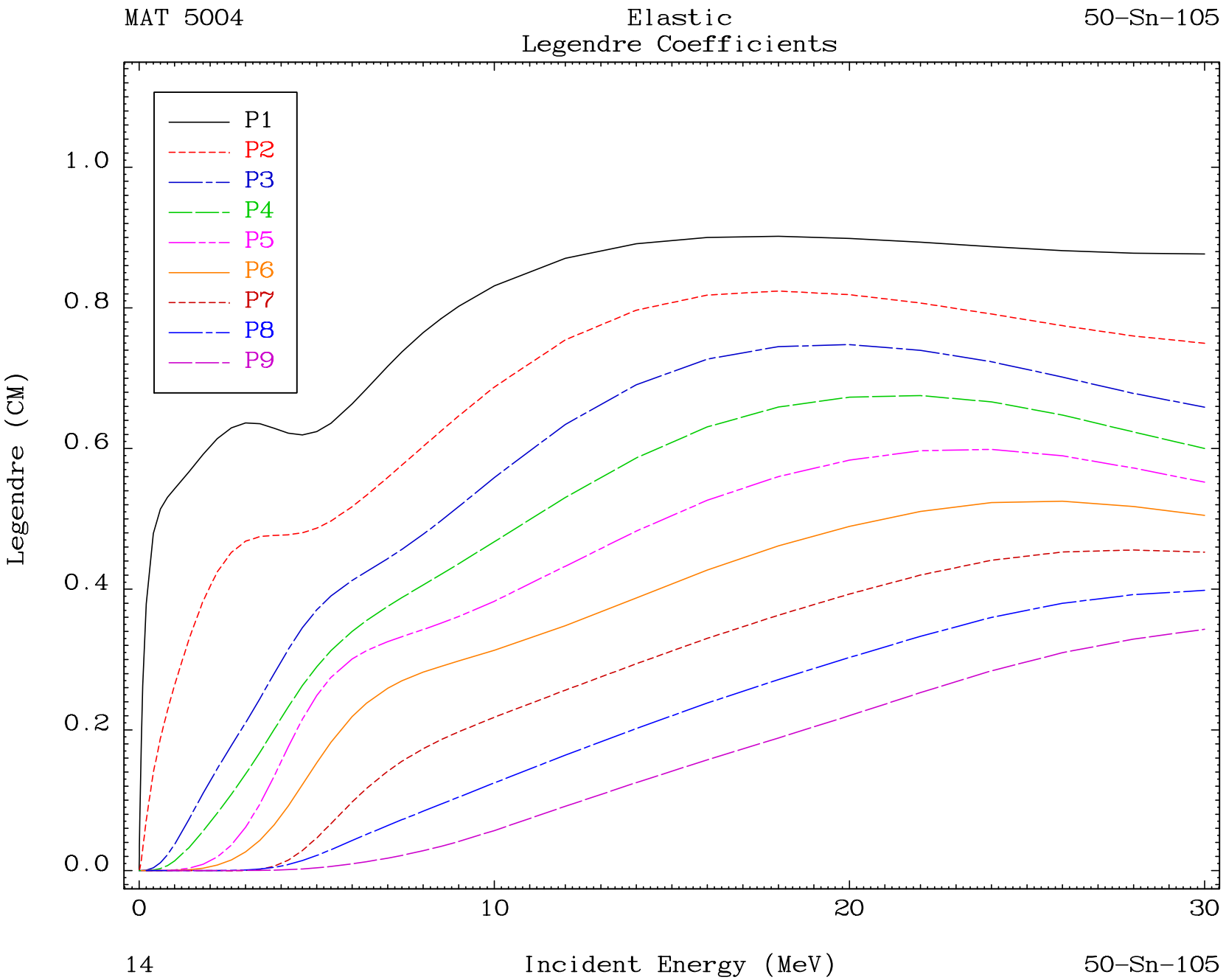

MAT 5004
(n,d) Levels
50-Sn-105
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
10-2
10-4
10-6
10-8
5
4
6
8
10 1
2
4
6
8
10 2
2
9
Incident Energy (MeV)
50-Sn-105

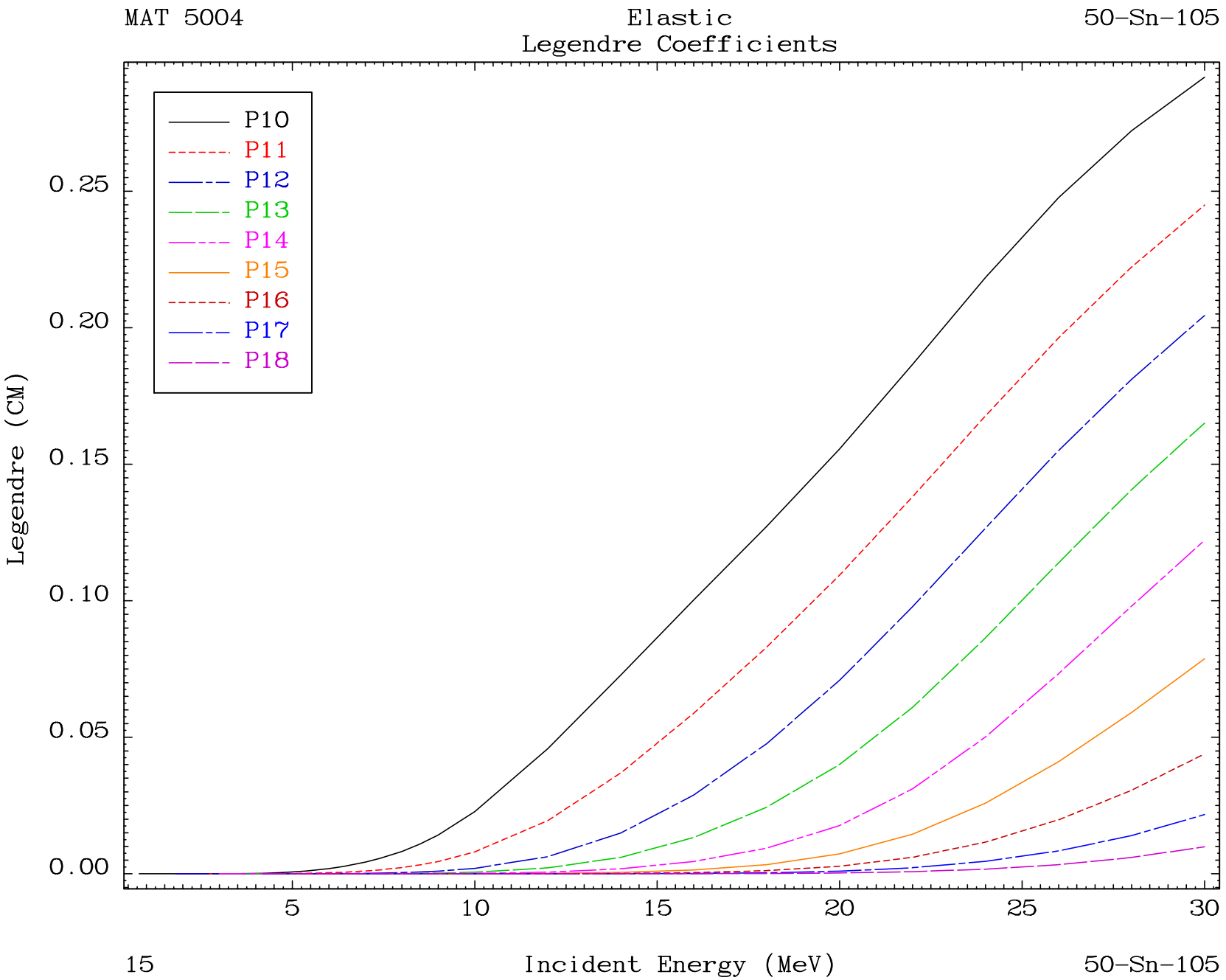

MAT 5004
(n,t) Levels
50-Sn-105
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
10
50-Sn-105

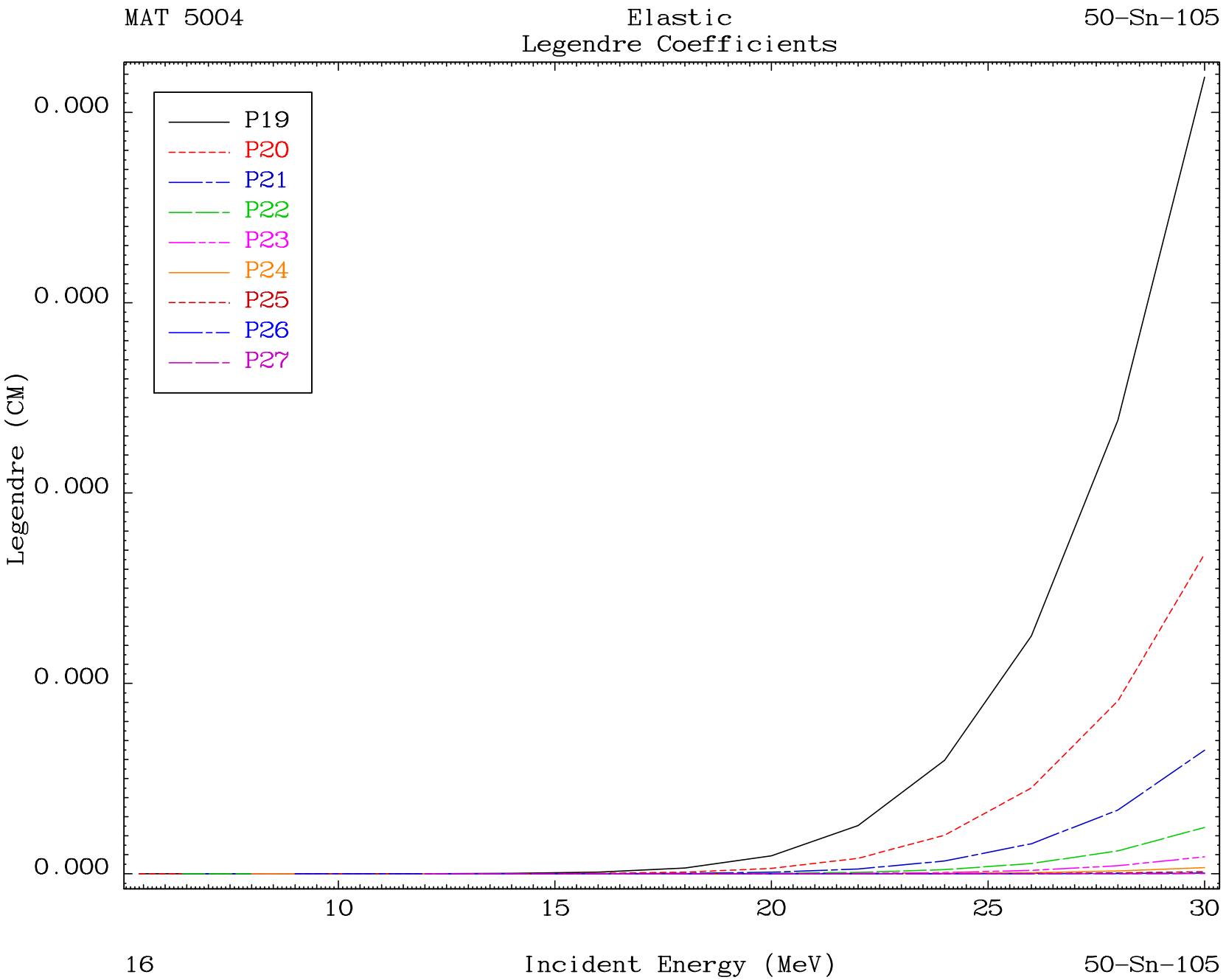

MAT 5004
(n,He3) Levels
50-Sn-105
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
11
50-Sn-105

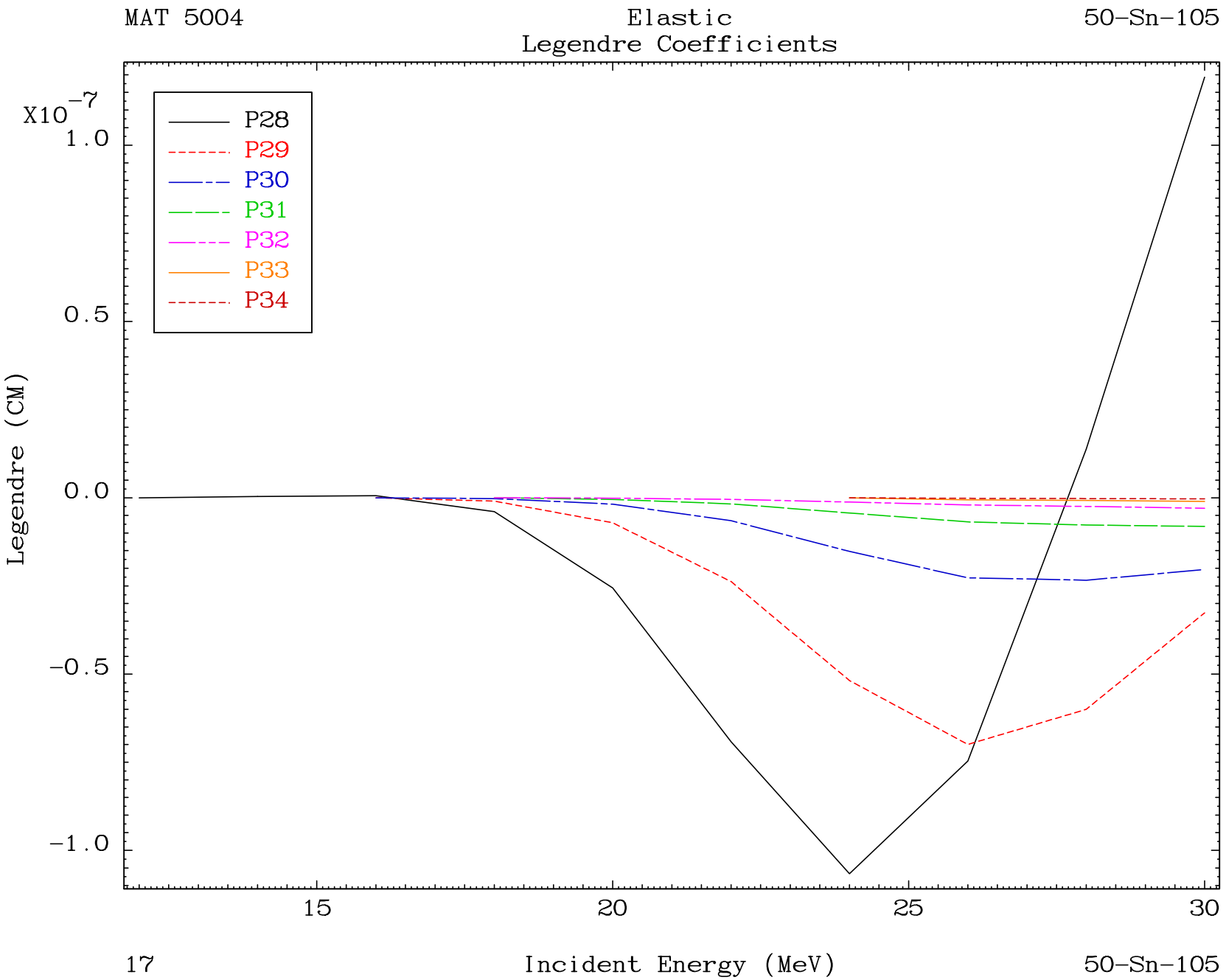

MAT 5004
(n,α) Levels
50-Sn-105
293 Kelvin Cross Sections
Cross Section (barns)
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
(n,α)
12
Incident Energy (MeV)
50-Sn-105

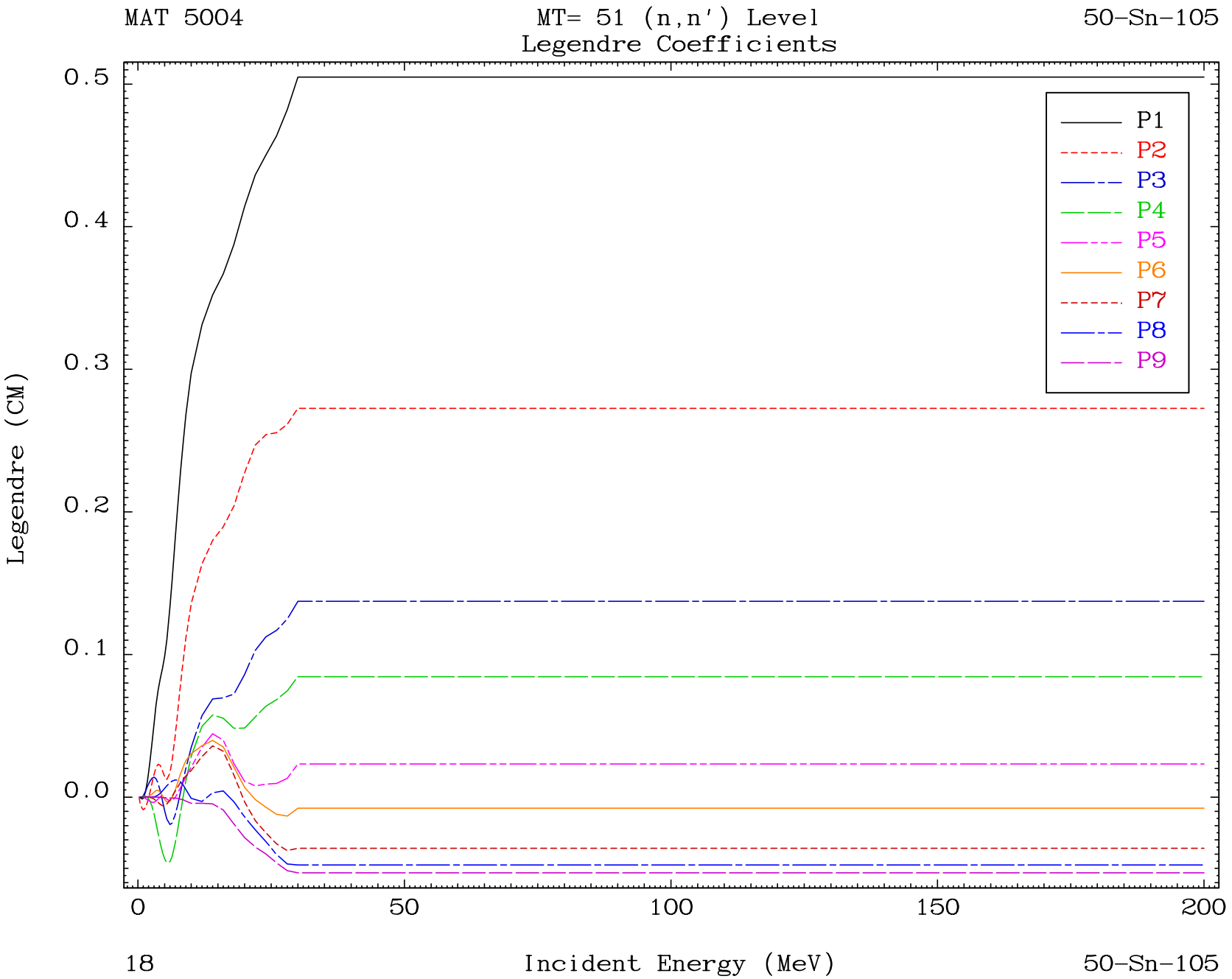

MAT 5004
Energy Release
Parameters
50-Sn-105
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa disappearance (mt102 -120)
Parameters
Incident Energy (MeV)
13
50-Sn-105

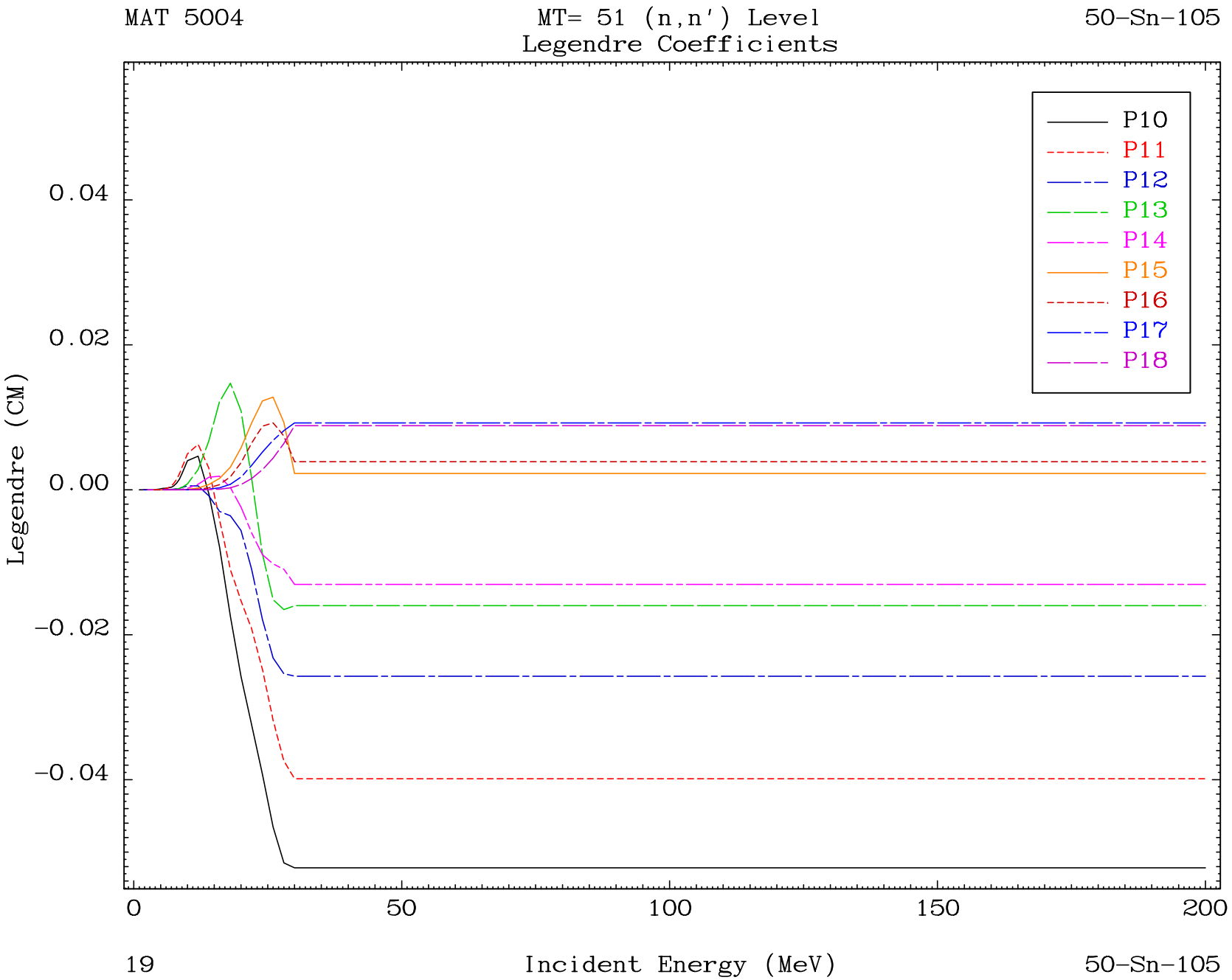

MAT 5004
Elastic
Legendre Coefficients
50-Sn-105
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
1.0
0.8
0.6
0.4
0.2
0.0
0
10
20
30
14
Incident Energy (MeV)
50-Sn-105

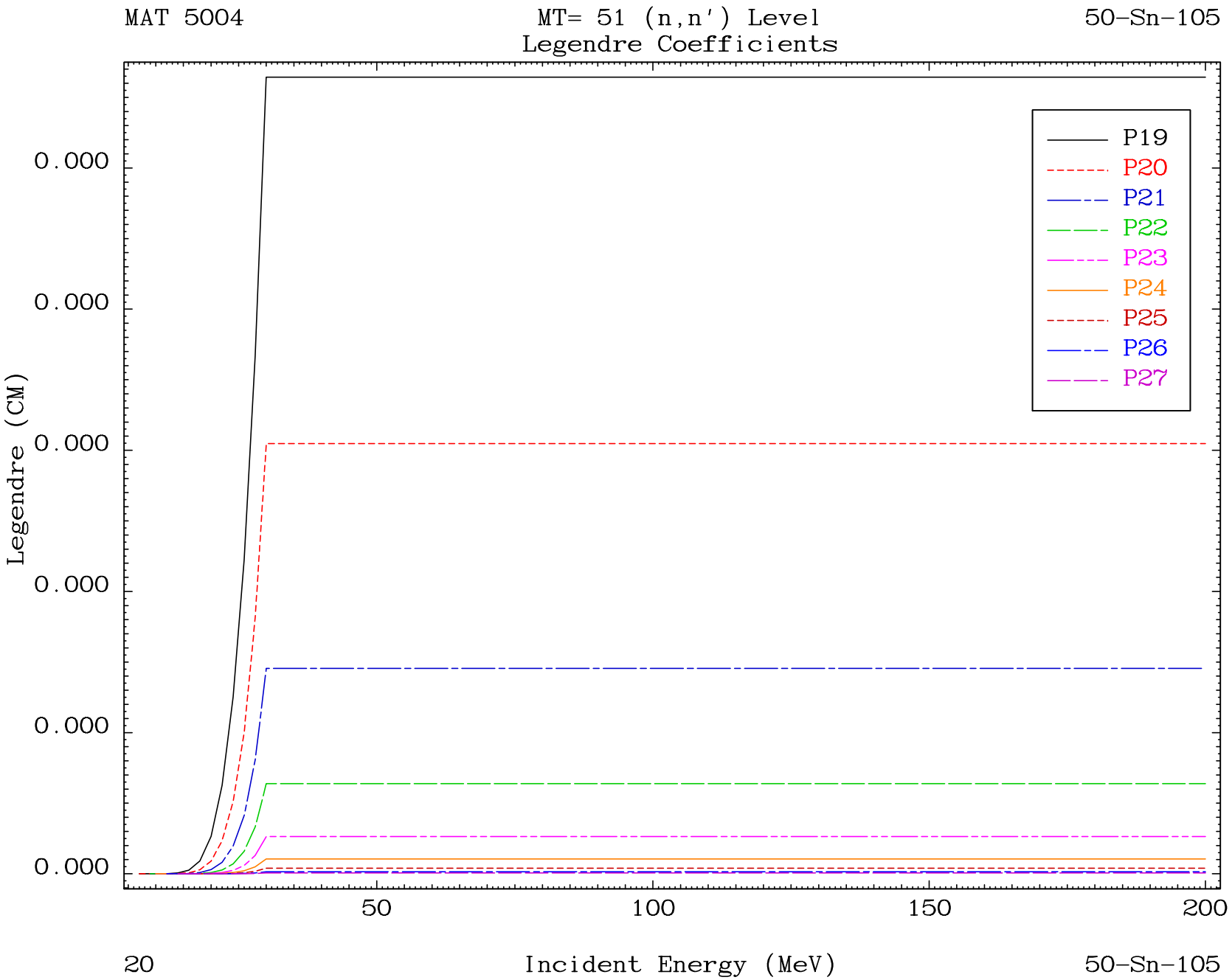

MAT 5004
Elastic
Legendre Coefficients
50-Sn-105
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.25
0.20
0.15
0.10
0.05
0.00
5
10
15
20
25
30
15
Incident Energy (MeV)
50-Sn-105

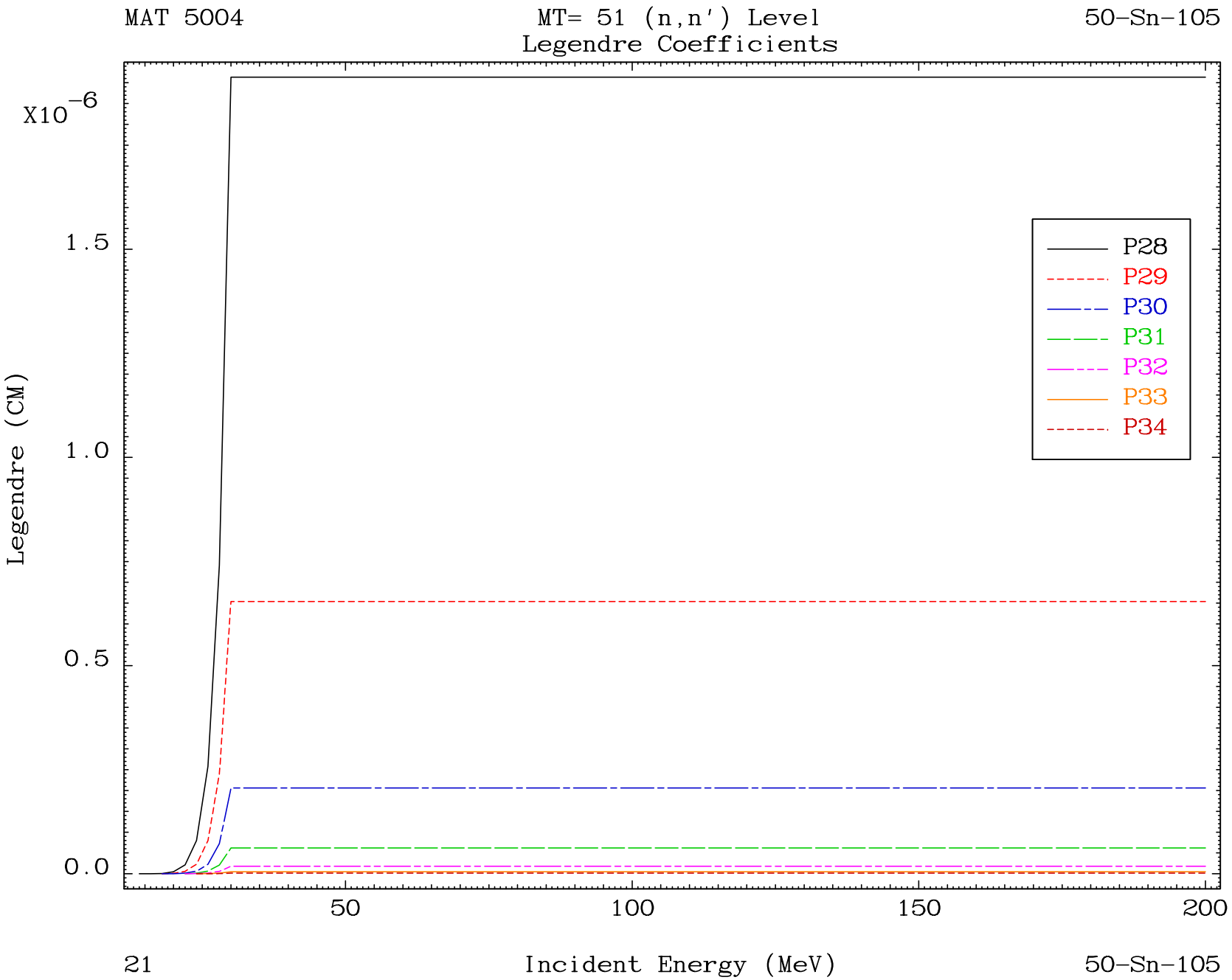

MAT 5004
Elastic
Legendre Coefficients
50-Sn-105
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.000
0.000
0.000
0.000
Legendre (CM)
10
15
20
25
30
16
Incident Energy (MeV)
50-Sn-105

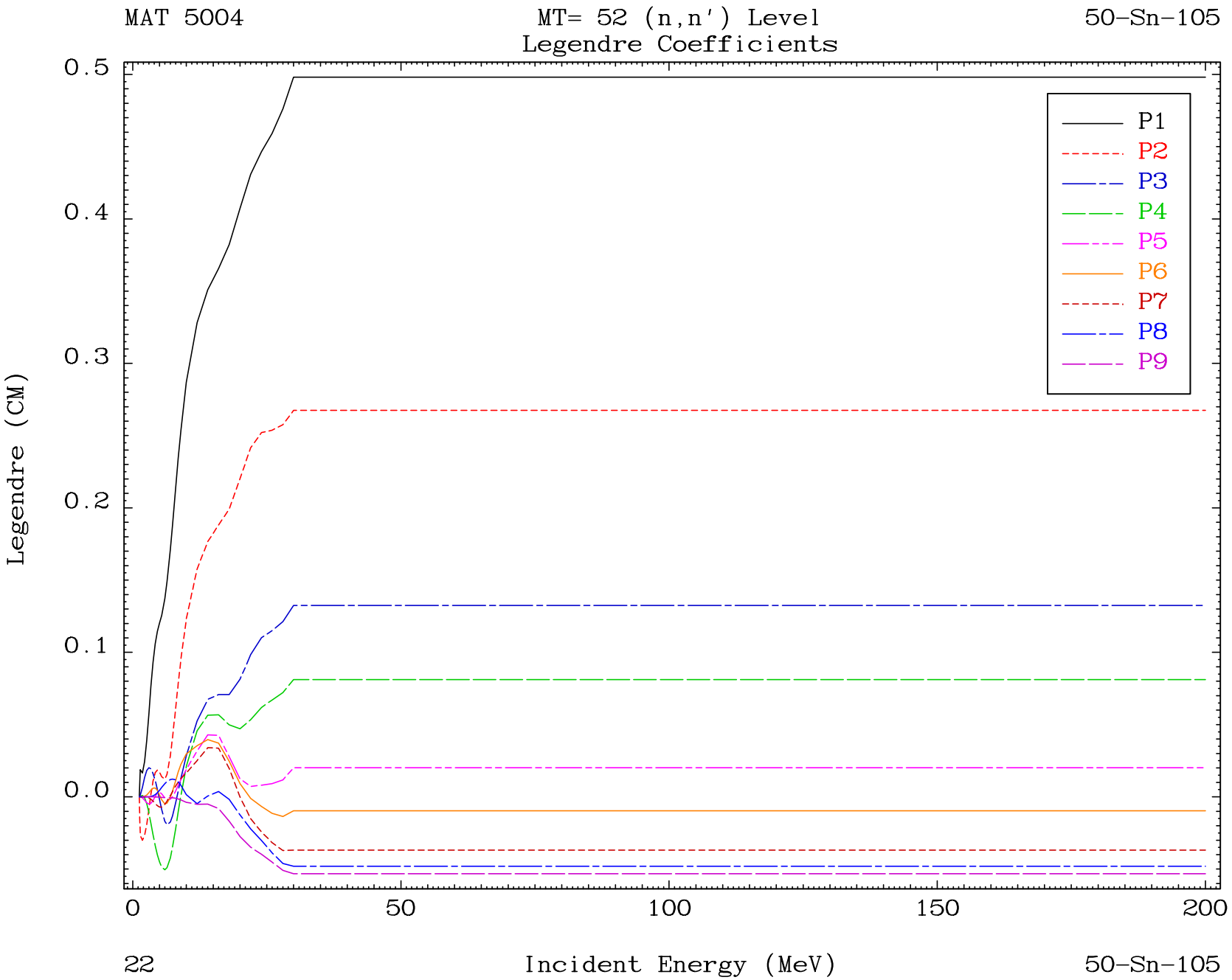

MAT 5004
Elastic
Legendre Coefficients
50-Sn-105
X10^-7
1.0
0.5
0.0
-0.5
-1.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
15
20
25
30
17
Incident Energy (MeV)
50-Sn-105

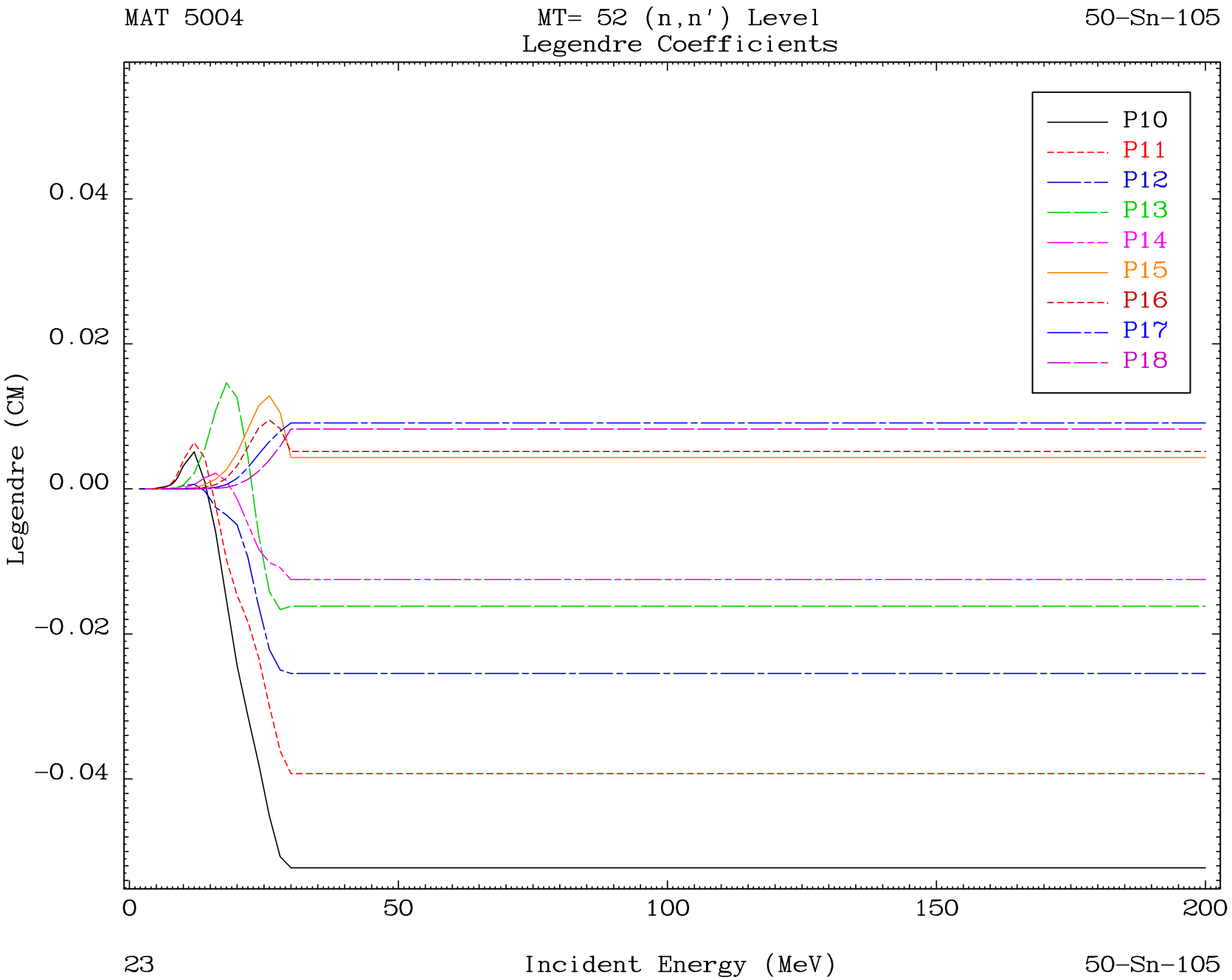

MAT 5004
MT= 51 (n,n') Level
Legendre Coefficients
50-Sn-105
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
18
Incident Energy (MeV)
50-Sn-105

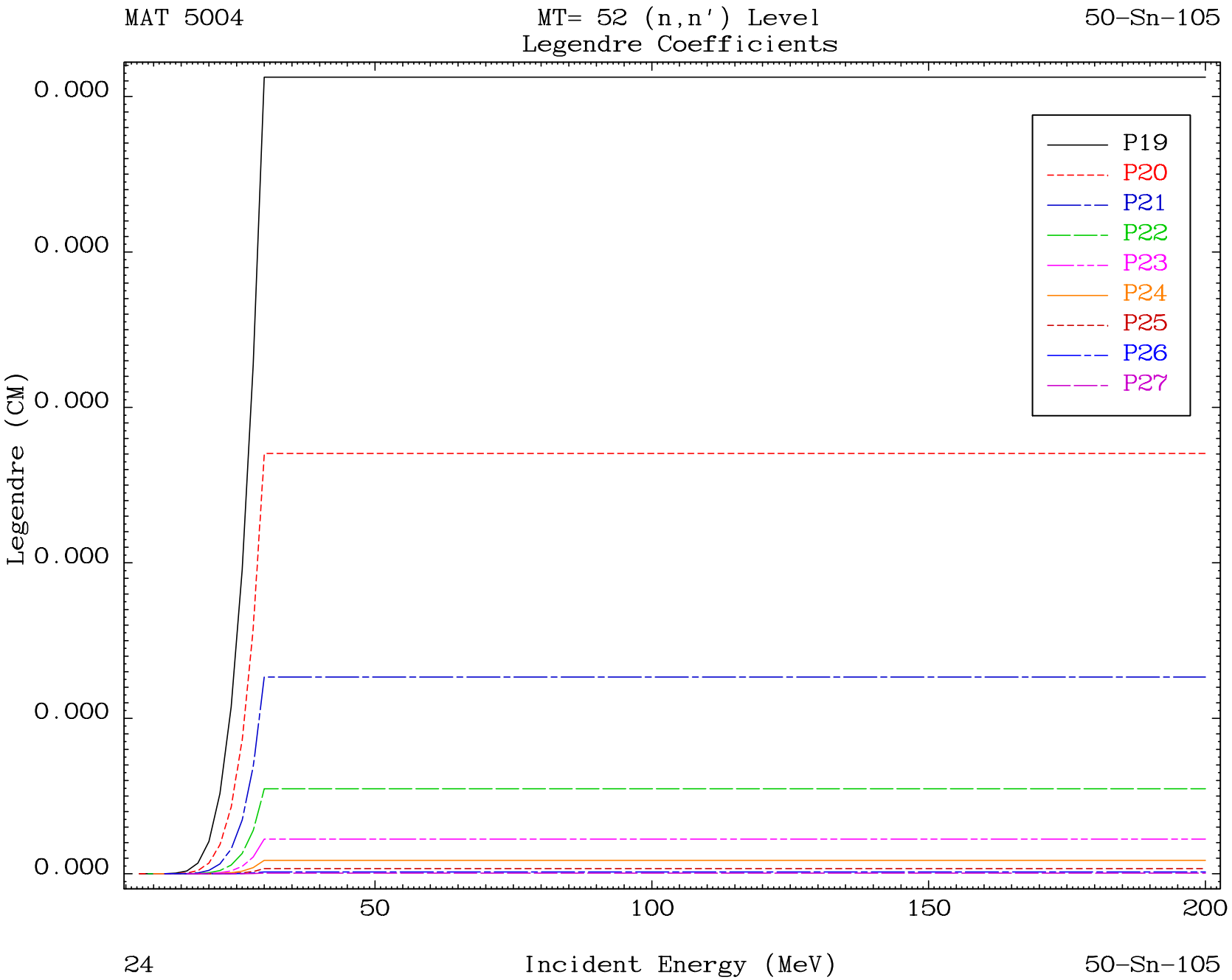

MAT 5004
MT= 51 (n,n') Level
Legendre Coefficients
50-Sn-105
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
19
Incident Energy (MeV)
50-Sn-105

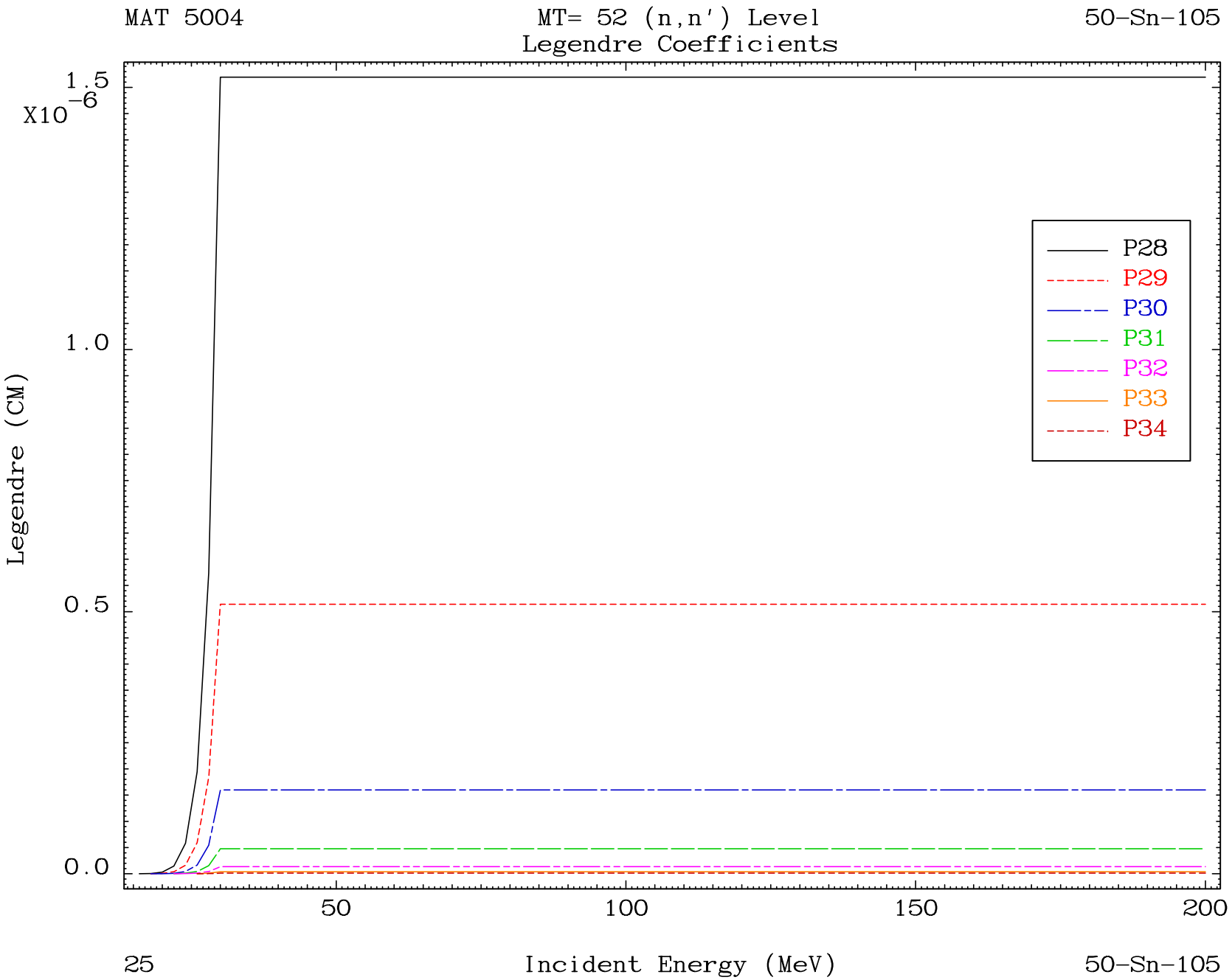

MAT 5004
MT= 51 (n,n') Level
Legendre Coefficients
50-Sn-105
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.000
0.000
0.000
0.000
0.000
Legendre (CM)
20
50
100
150
200
Incident Energy (MeV)
50-Sn-105

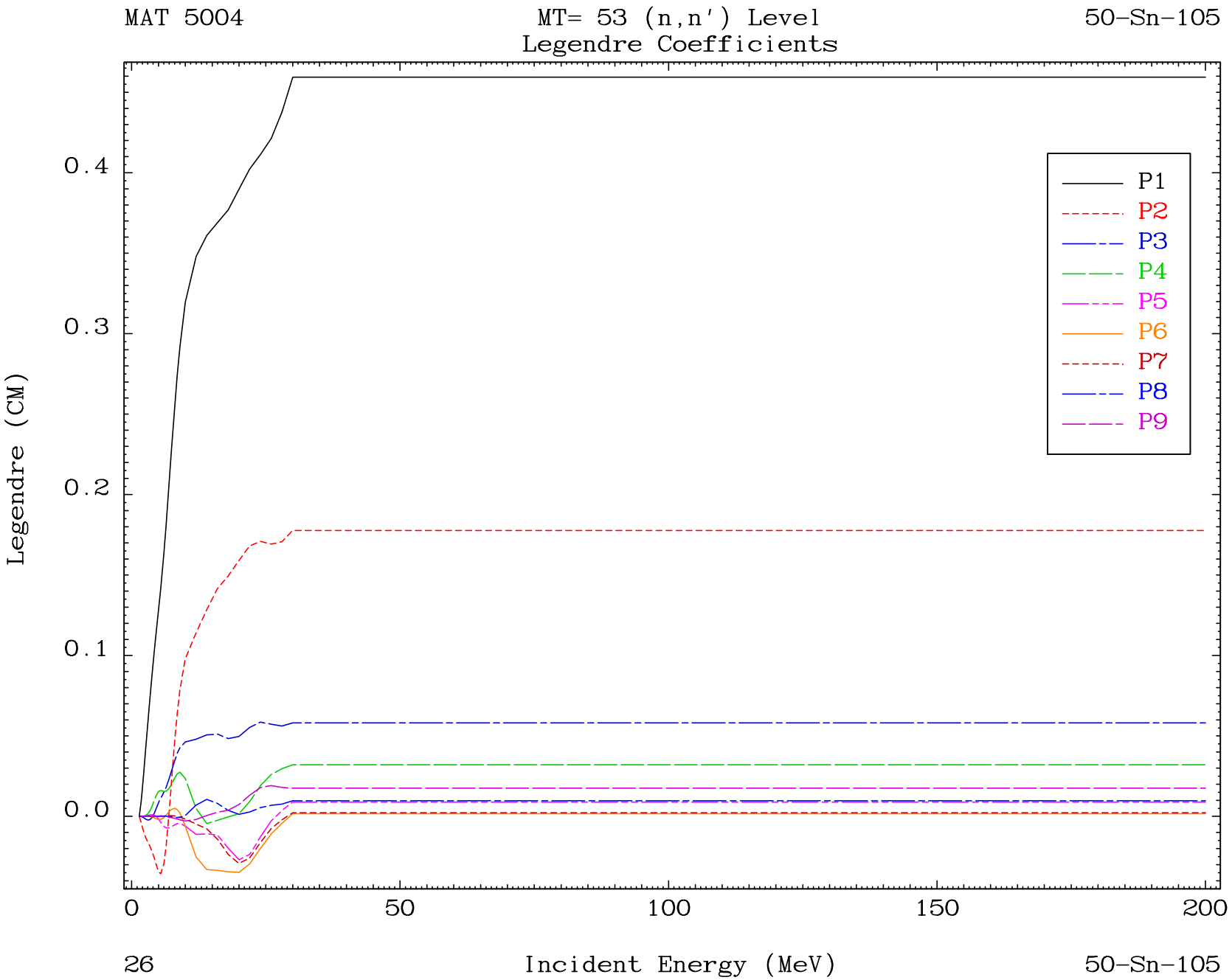

MAT 5004
MT= 51 (n,n') Level
Legendre Coefficients
50-Sn-105
X10^-6
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
21
Incident Energy (MeV)
50-Sn-105

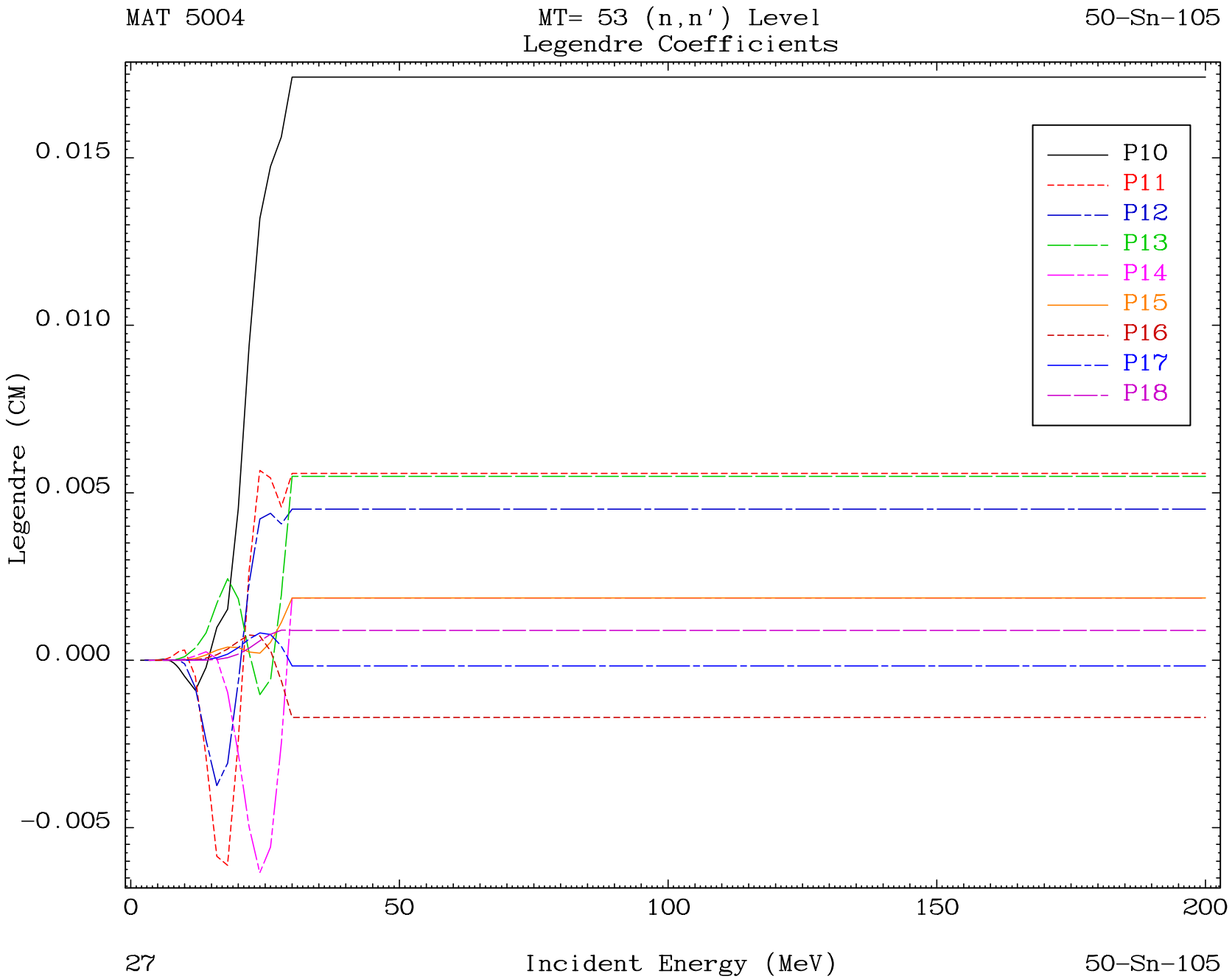

MAT 5004
MT= 52 (n,n') Level
Legendre Coefficients
50-Sn-105
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
22
Incident Energy (MeV)
50-Sn-105

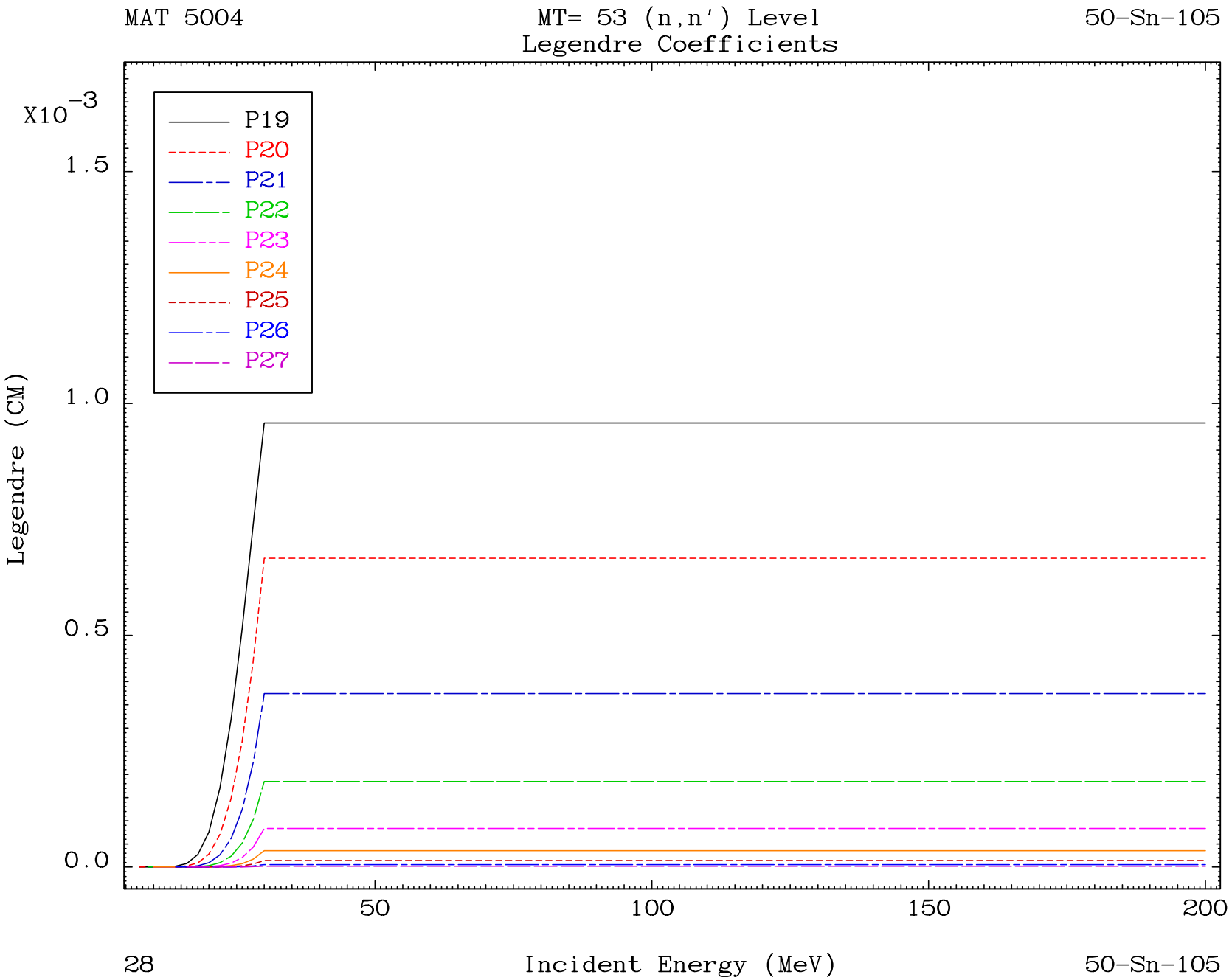

MAT 5004
MT= 52 (n,n') Level
Legendre Coefficients
50-Sn-105
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
23
Incident Energy (MeV)
50-Sn-105

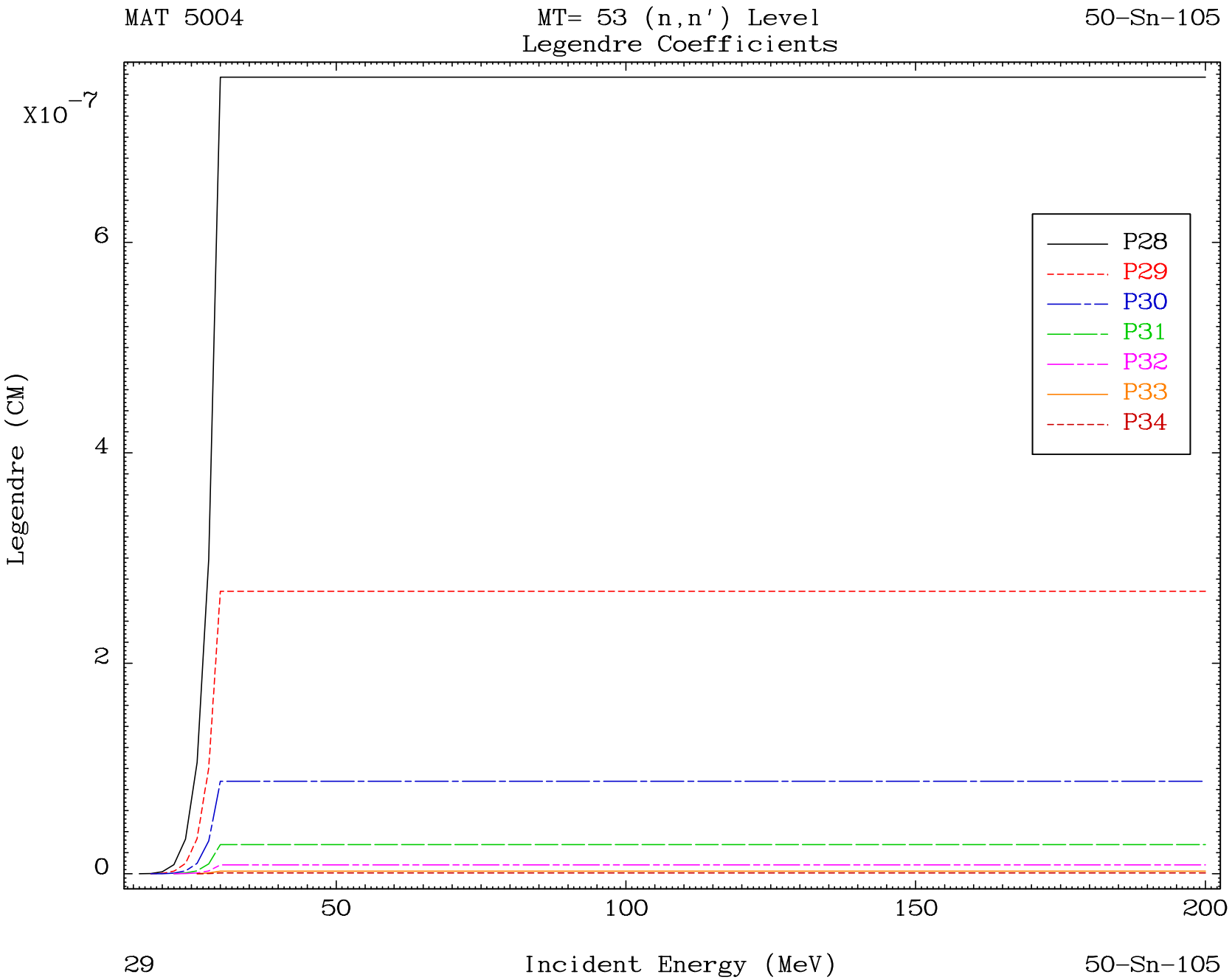

MAT 5004
MT= 52 (n,n') Level
Legendre Coefficients
50-Sn-105
0.000
0.000
0.000
0.000
0.000
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
24
Incident Energy (MeV)
50-Sn-105

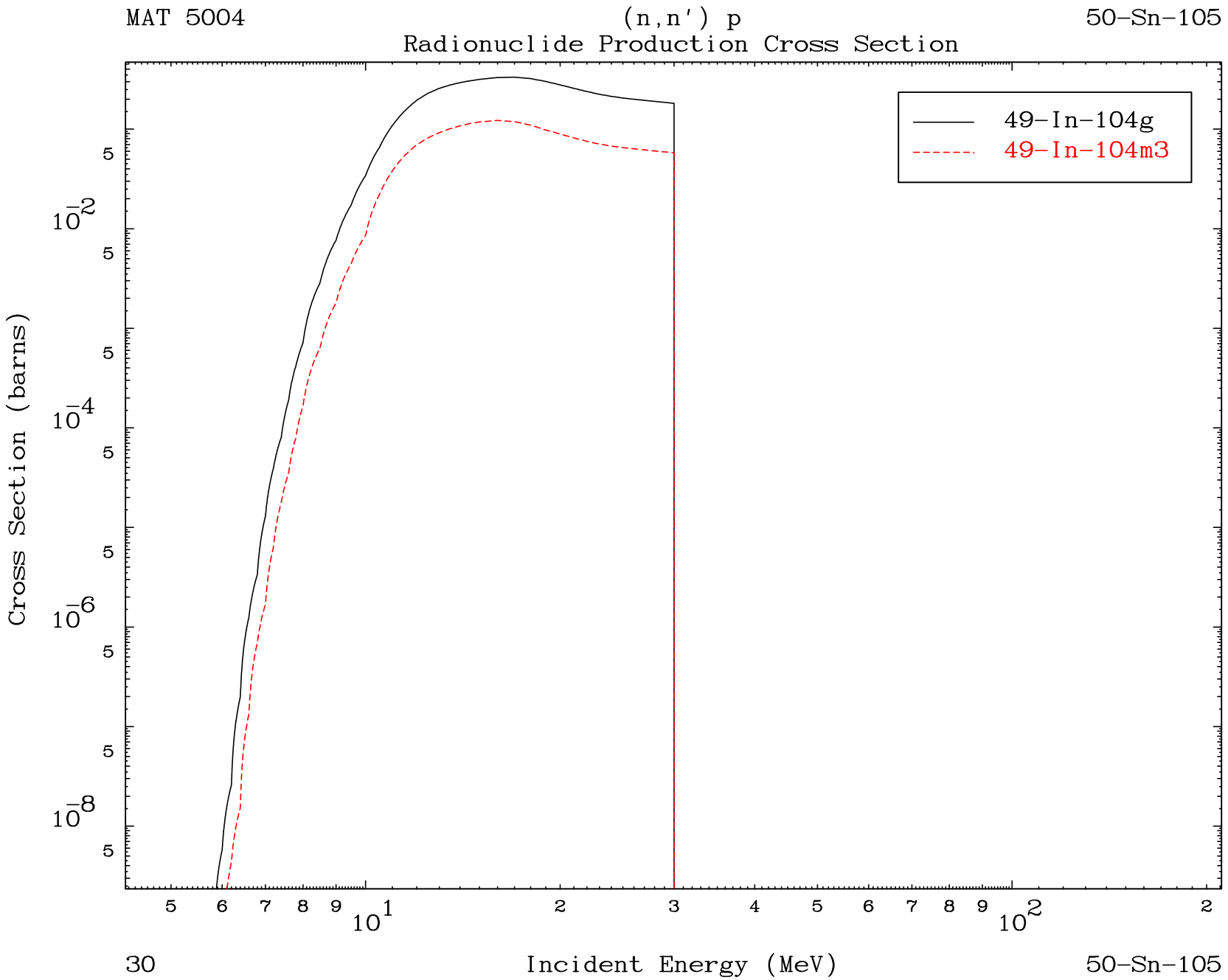

MAT 5004
MT= 52 (n,n') Level
Legendre Coefficients
50-Sn-105
X10 -6
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
25
50
100
150
200
Incident Energy (MeV)
50-Sn-105

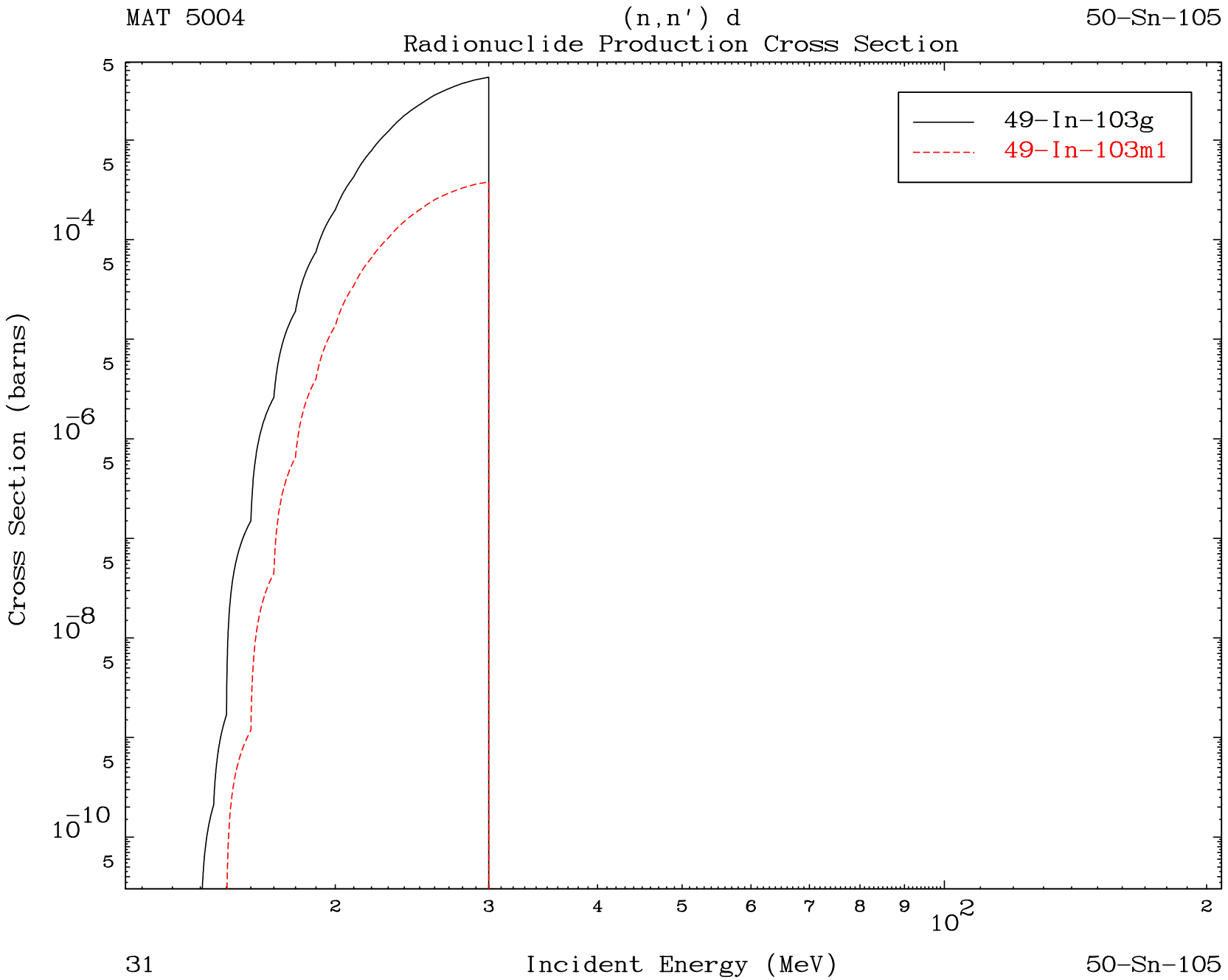

MAT 5004
MT= 53 (n,n') Level
Legendre Coefficients
50-Sn-105
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
Incident Energy (MeV)
26
50-Sn-105
P1
P2
P3
P4
P5
P6
P7
P8
P9

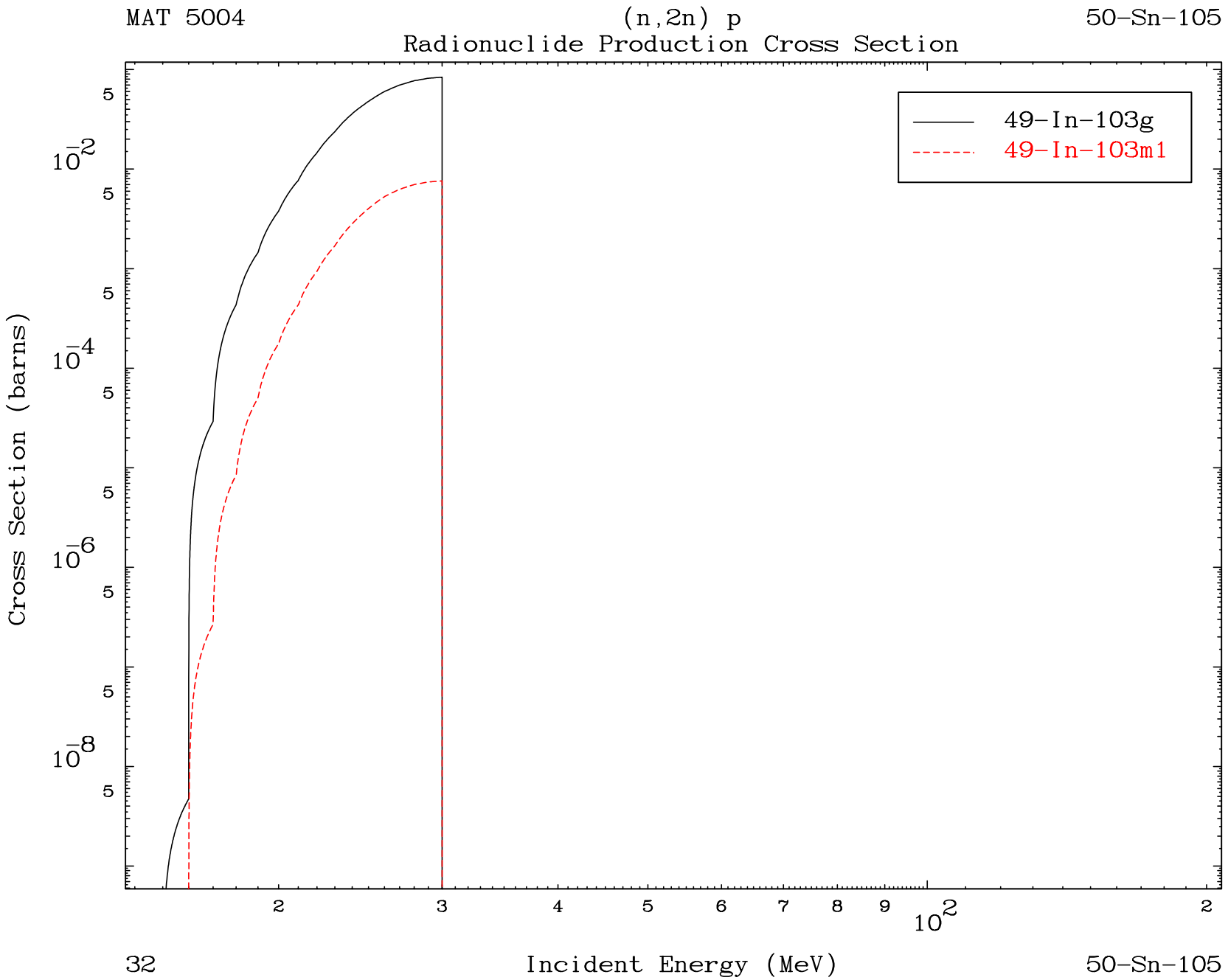

MAT 5004
MT= 53 (n,n') Level
Legendre Coefficients
50-Sn-105
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
27
Incident Energy (MeV)
50-Sn-105

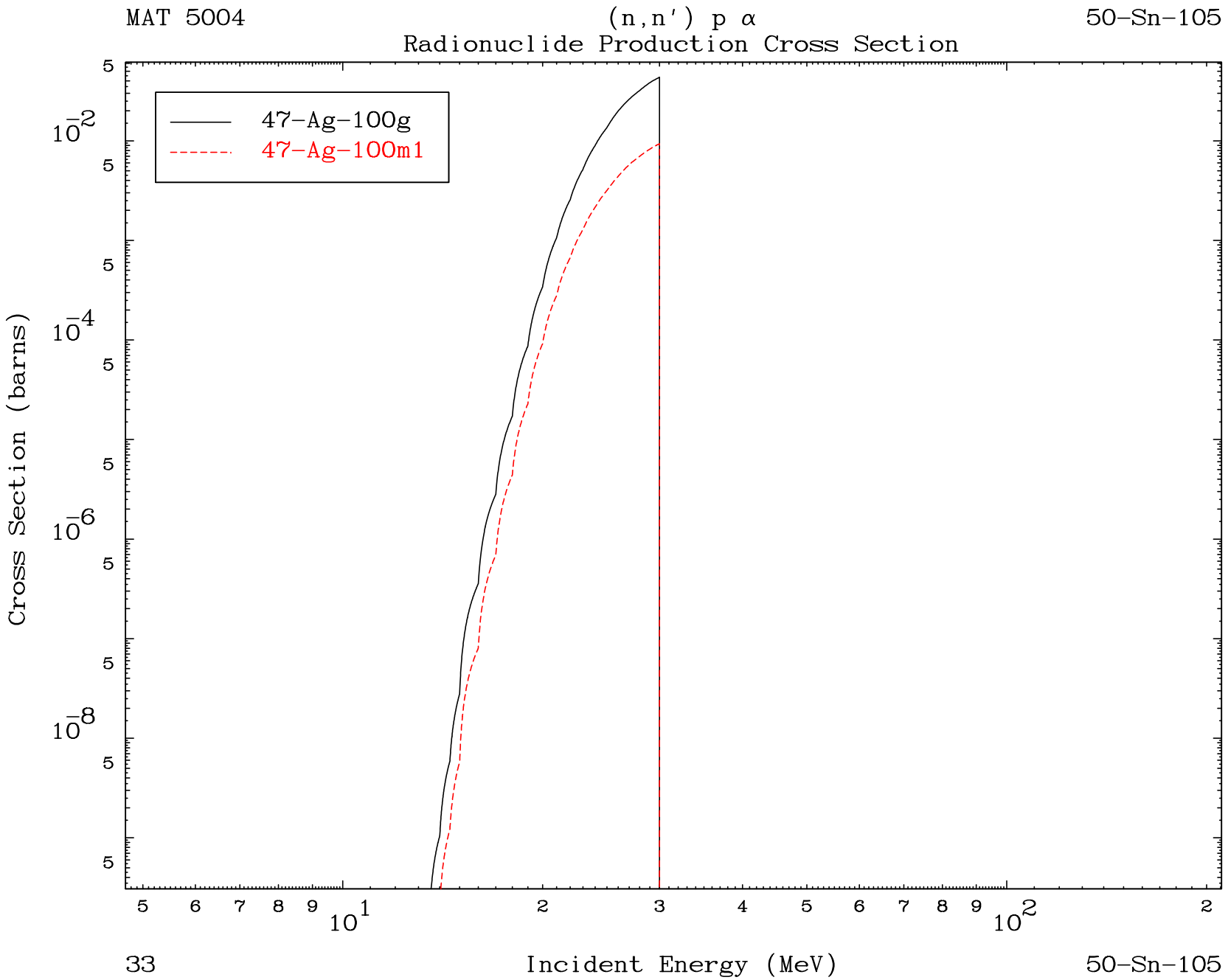

MAT 5004
MT= 53 (n,n') Level
Legendre Coefficients
50-Sn-105
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
28
Incident Energy (MeV)
50-Sn-105

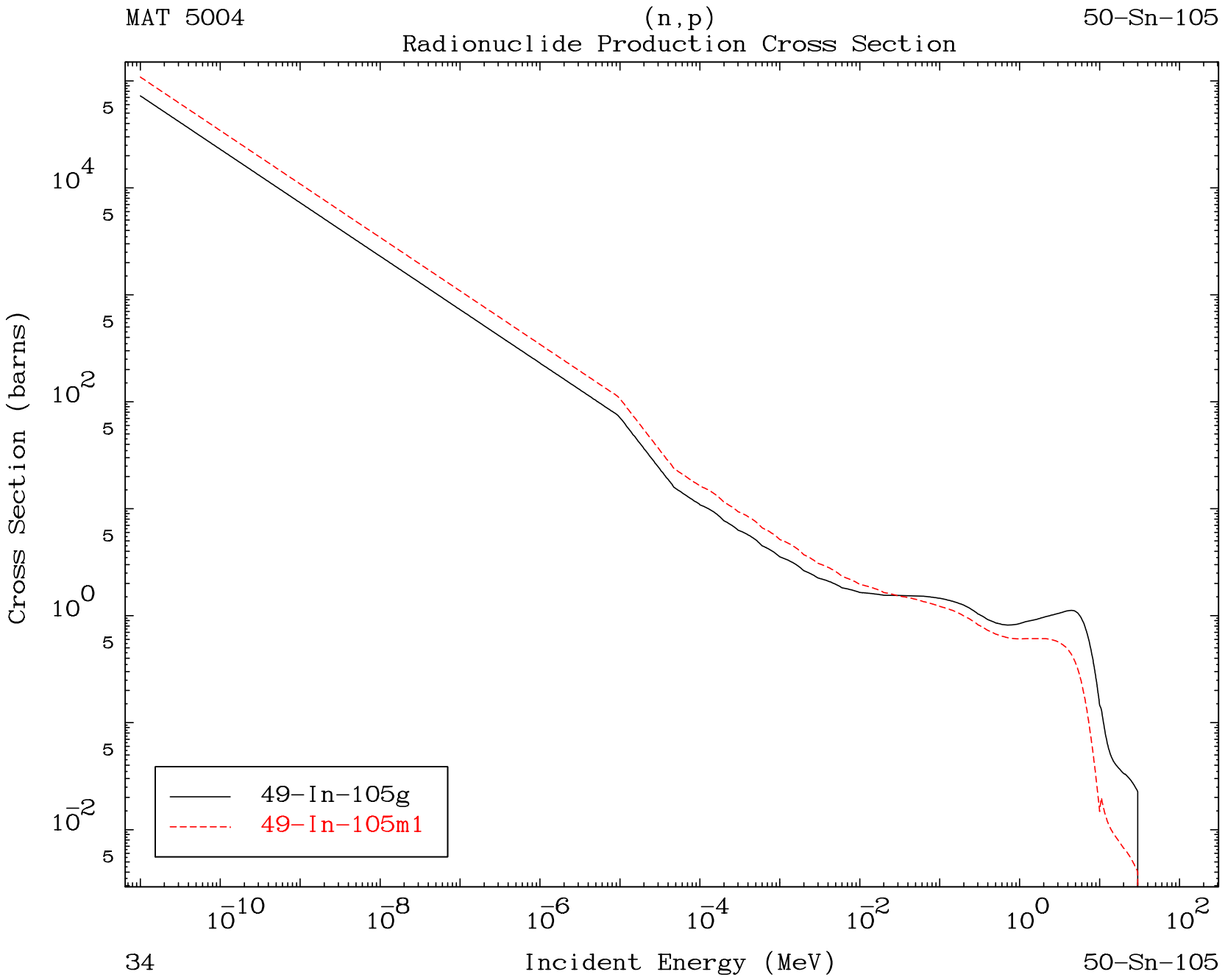

MAT 5004
MT= 53 (n,n') Level
Legendre Coefficients
50-Sn-105
X10^-7
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
29
Incident Energy (MeV)
50-Sn-105

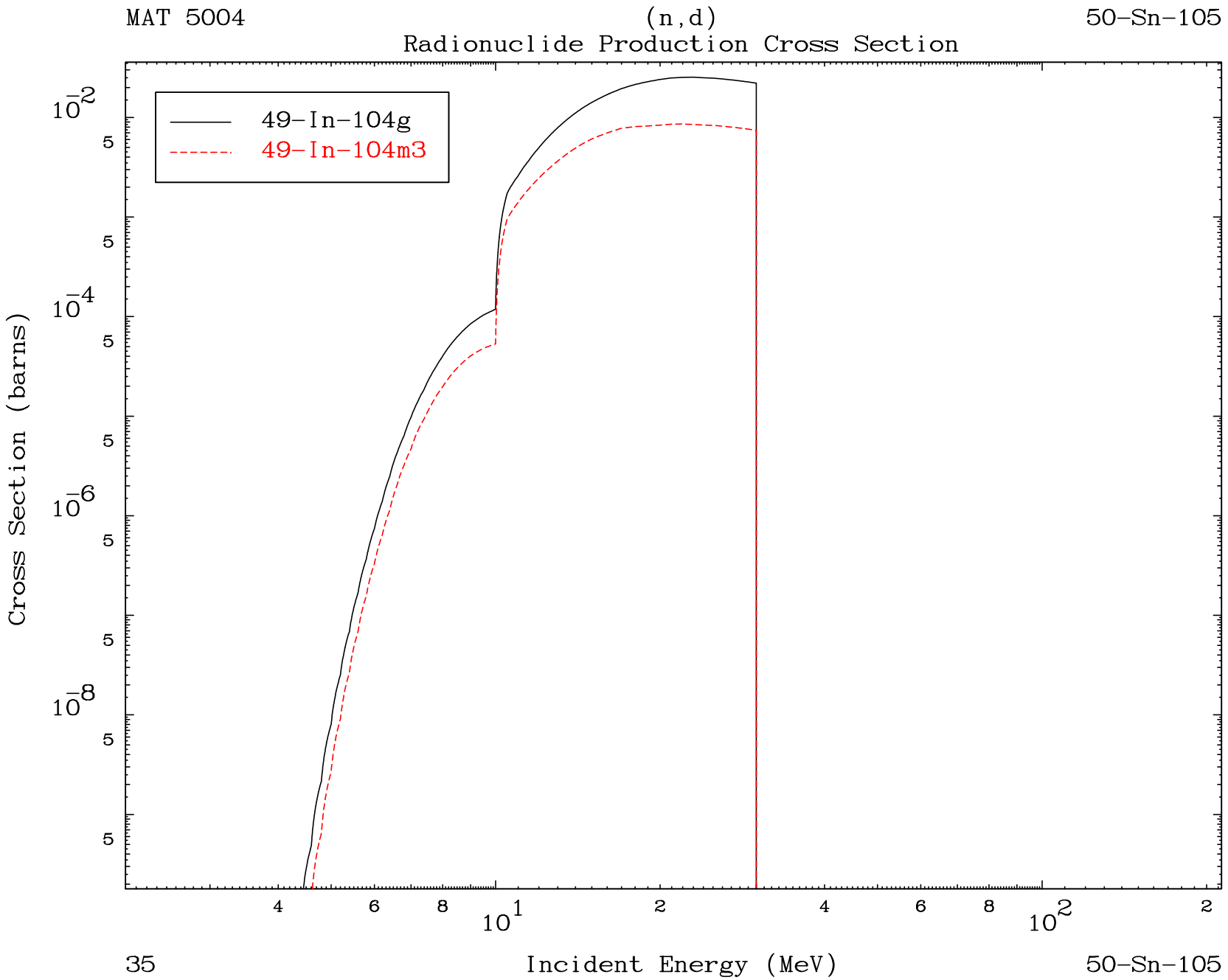

MAT 5004
(n,n') p
50-Sn-105
Radionuclide Production Cross Section
49-In-104g
49-In-104m3
Cross Section (barns)
10-2
10-4
10-6
10-8
5
6
7
8
9
10 1
2
3
4
5
6
7
8
9
10 2
2
30
Incident Energy (MeV)
50-Sn-105

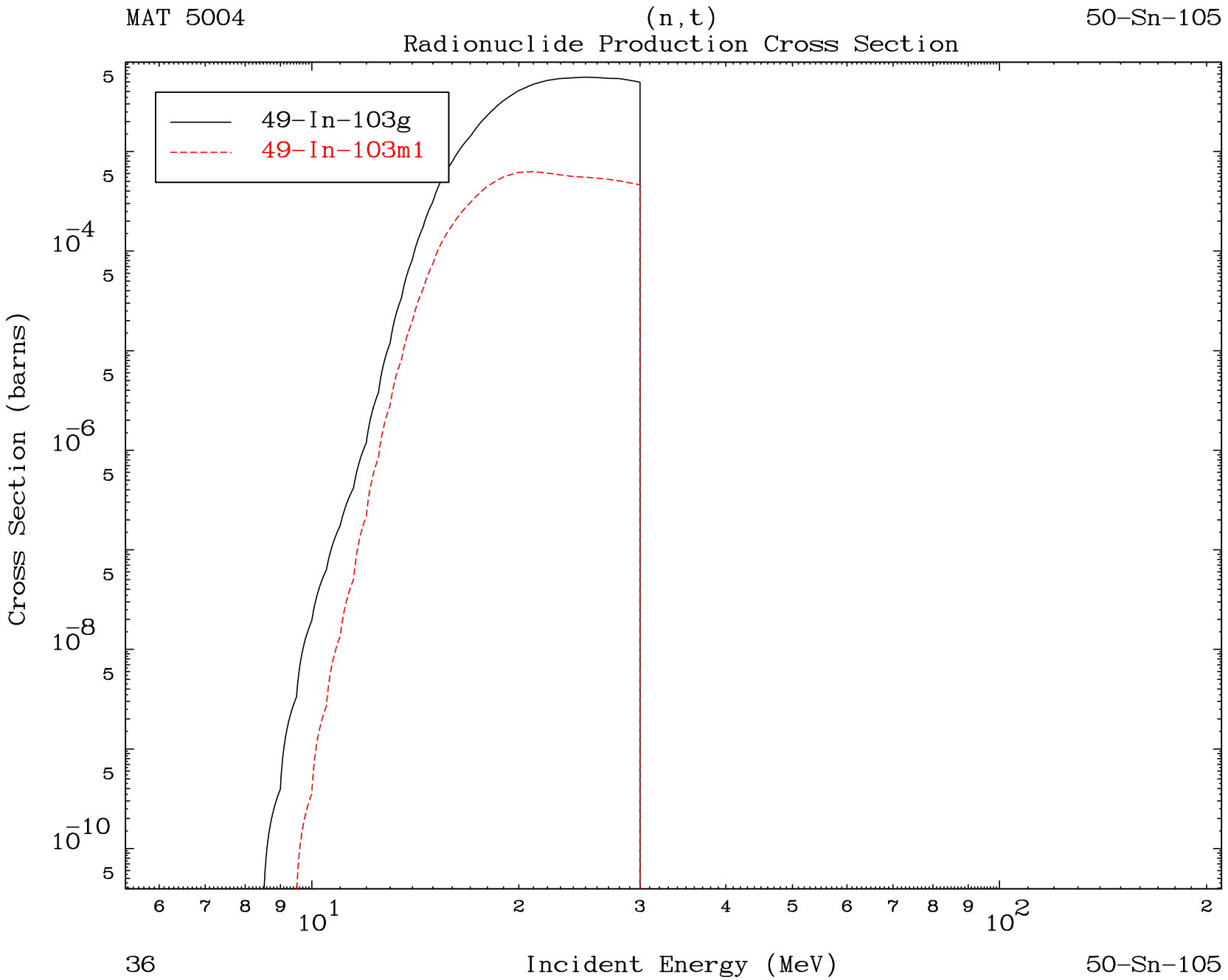

MAT 5004
(n,n') d
50-Sn-105
Radionuclide Production Cross Section
49-In-103g
49-In-103m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
2
3
4
5
6
7
8
9
10^2
2
31
Incident Energy (MeV)
50-Sn-105

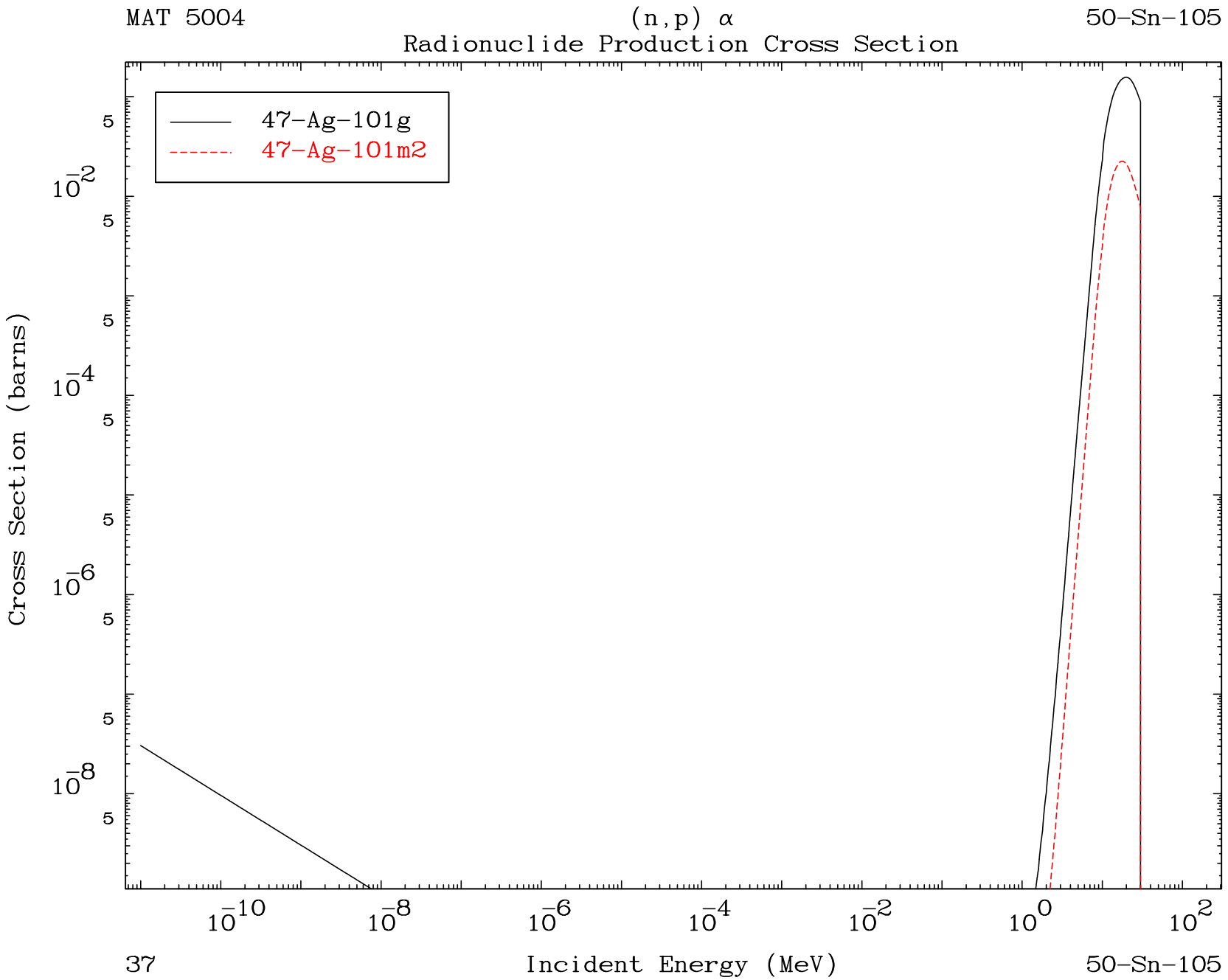

MAT 5004
(n,2n) p
50-Sn-105
Radionuclide Production Cross Section
49-In-103g
49-In-103m1
Cross Section (barns)
Incident Energy (MeV)
32
50-Sn-105

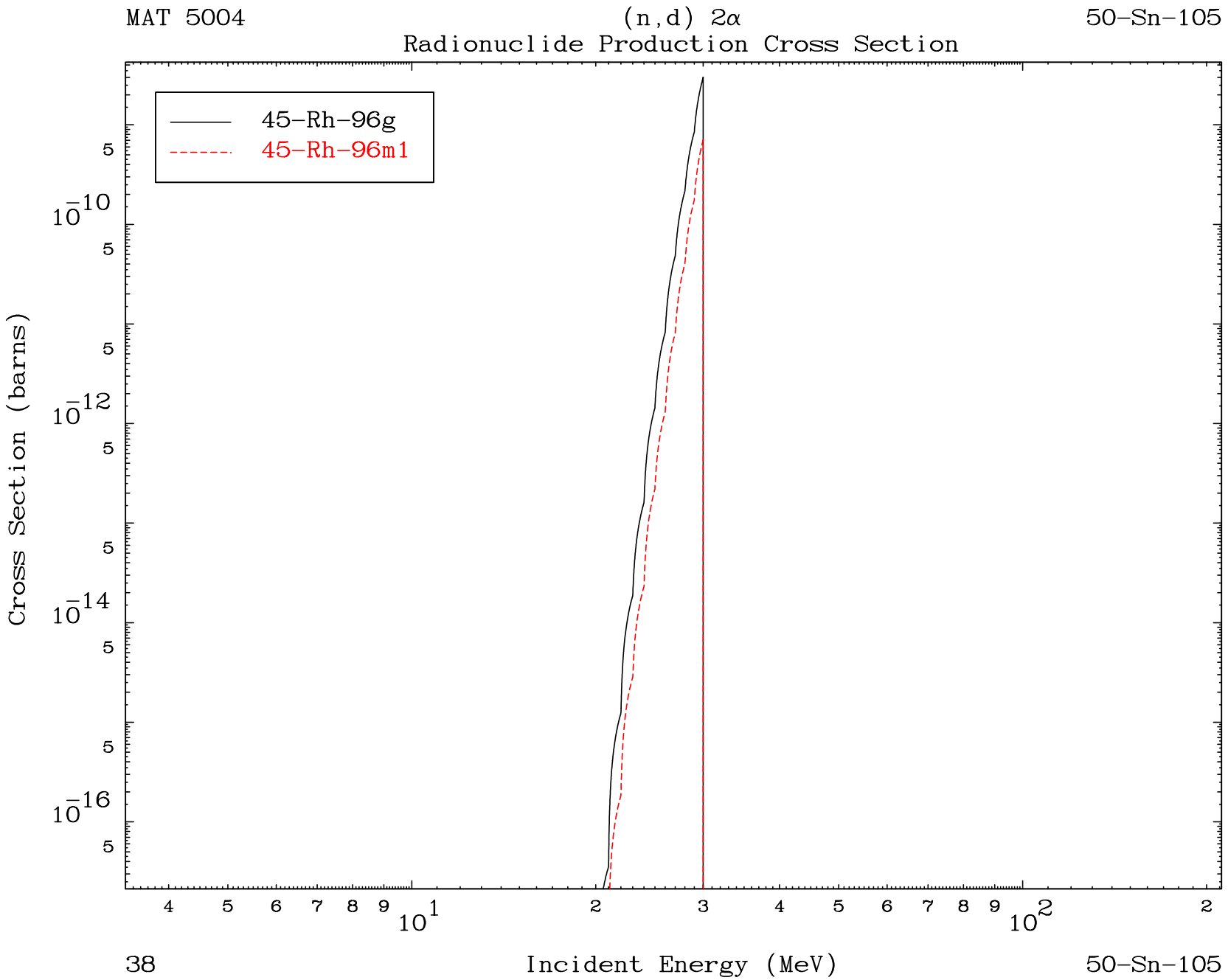

MAT 5004
(n,n') p α
50-Sn-105
Radionuclide Production Cross Section
47-Ag-100g
47-Ag-100m1
Cross Section (barns)
Incident Energy (MeV)
33
50-Sn-105

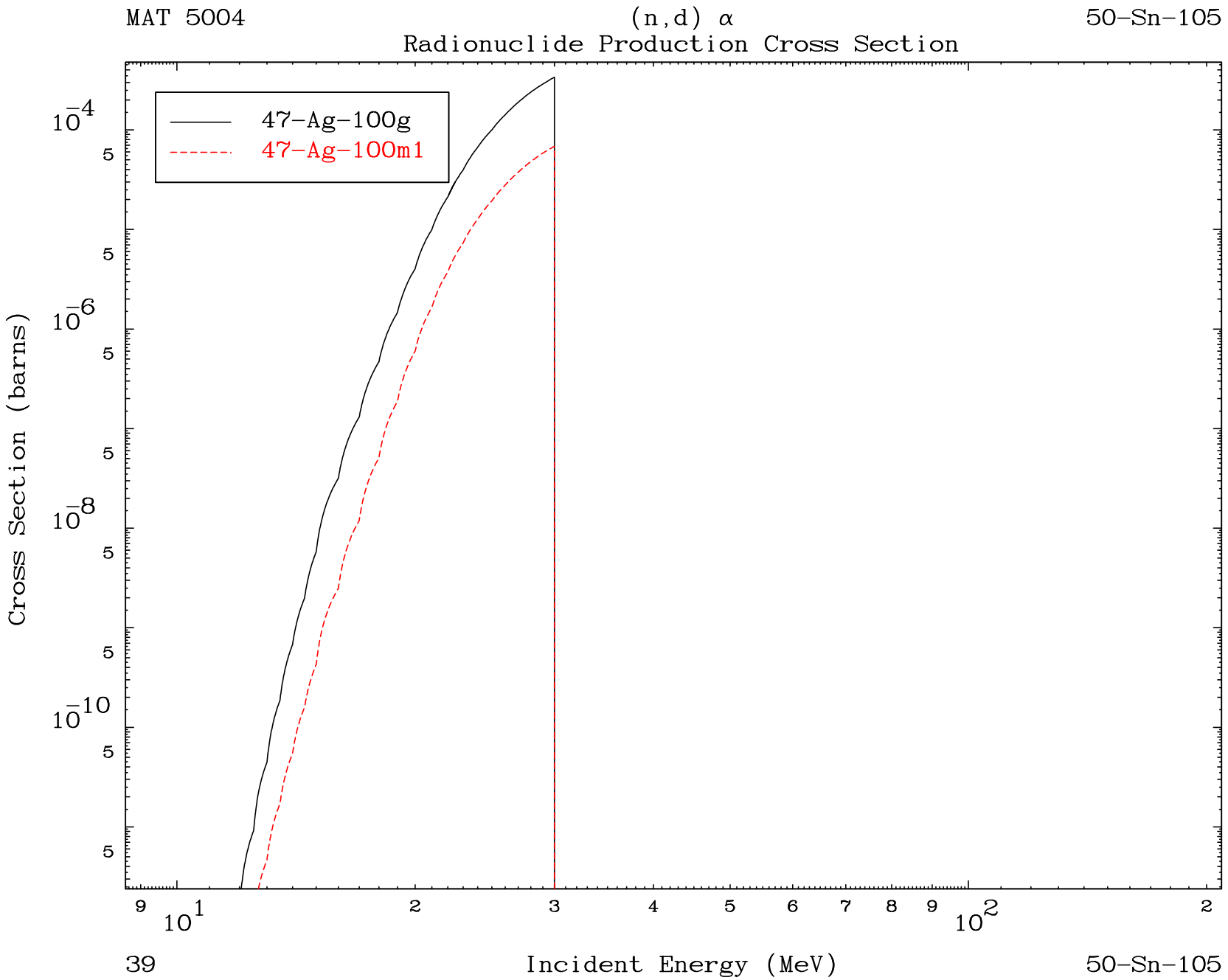

MAT 5004
(n,p)
50-Sn-105
Radionuclide Production Cross Section
Cross Section (barns)
10^4
10^2
10^0
10^-2
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
49-In-105g
49-In-105m1
34
50-Sn-105


MAT 5004
(n,d)
50-Sn-105
Radionuclide Production Cross Section
49-In-104g
49-In-104m3
Cross Section (barns)
10-2
10-4
10-6
10-8
5
4
6
8
10 1
2
4
6
8
10 2
2
35
Incident Energy (MeV)
50-Sn-105


MAT 5004
(n,t)
50-Sn-105
Radionuclide Production Cross Section
49-In-103g
49-In-103m1
Cross Section (barns)
Incident Energy (MeV)
36
50-Sn-105


MAT 5004
(n,p) α
50-Sn-105
Radionuclide Production Cross Section
47-Ag-101g
47-Ag-101m2
Cross Section (barns)
Incident Energy (MeV)
37
50-Sn-105


MAT 5004
(n,d) 2α
50-Sn-105
Radionuclide Production Cross Section
45-Rh-96g
45-Rh-96m1
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
5
4 5 6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
38
Incident Energy (MeV)
50-Sn-105


MAT 5004
(n,d) α
50-Sn-105
Radionuclide Production Cross Section
47-Ag-100g
47-Ag-100m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
9
10^1
2
3
4
5
6
7
8
9
10^2
2
39
Incident Energy (MeV)
50-Sn-105