Program EVALPLOT
(Version 2018-1)
by
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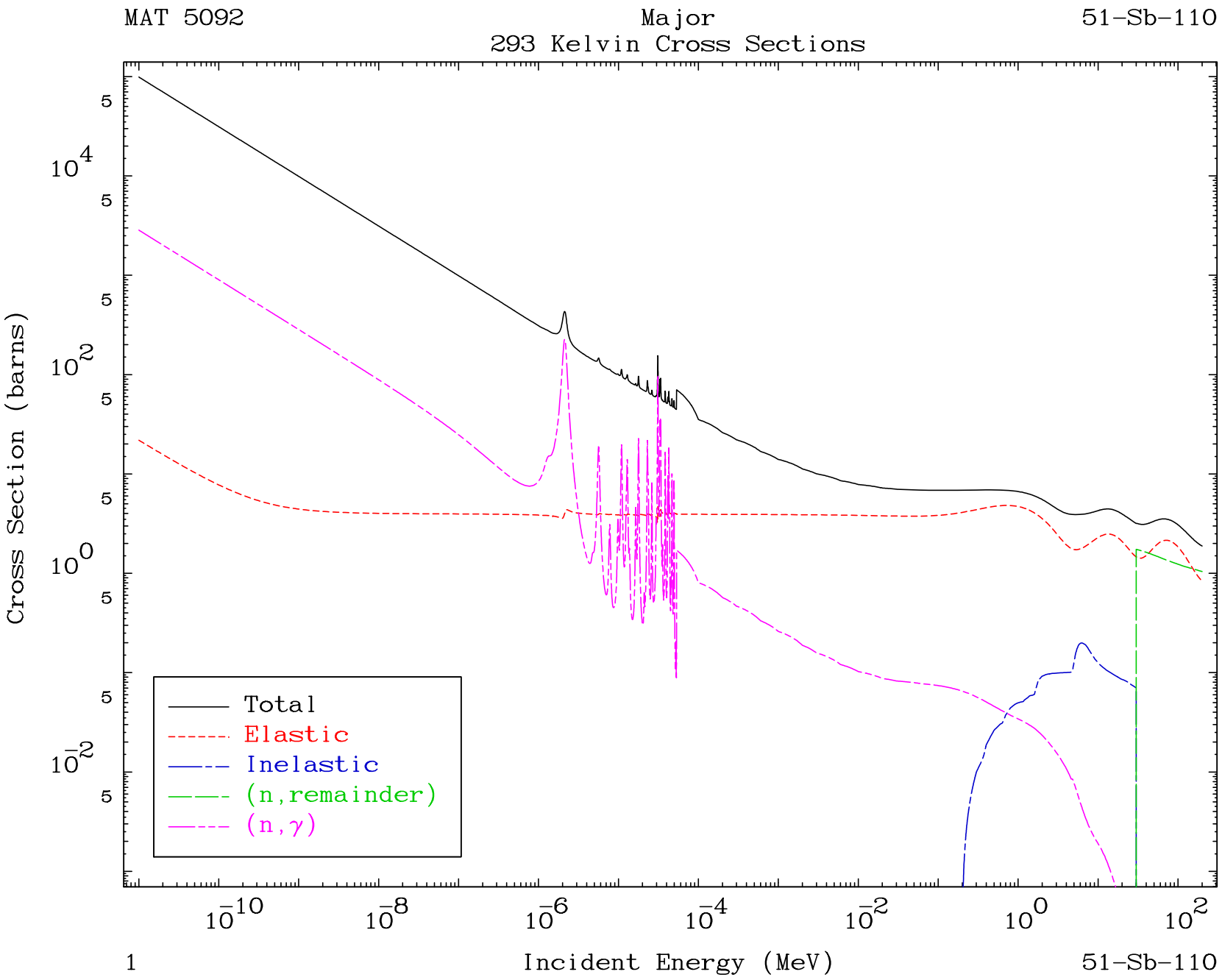
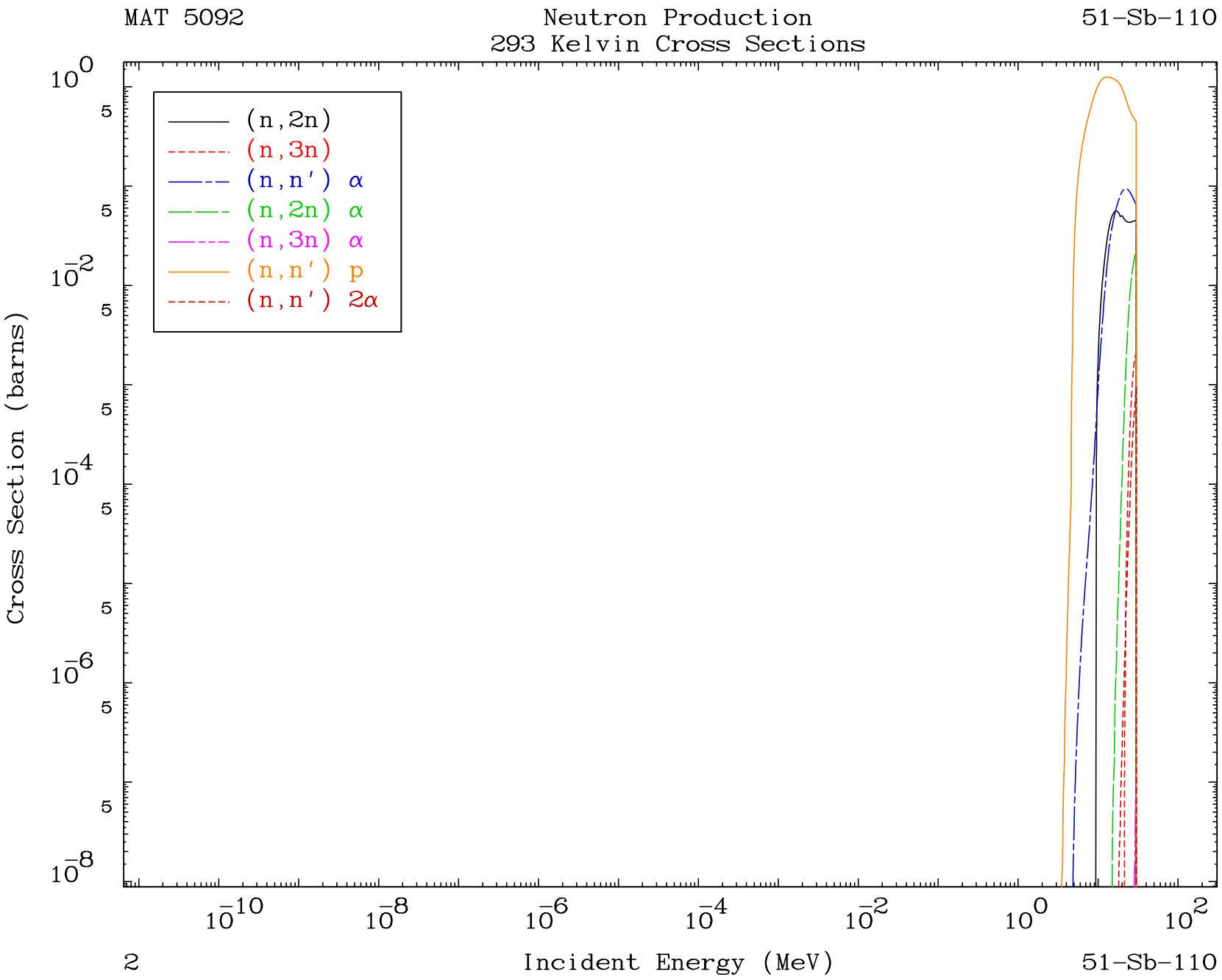
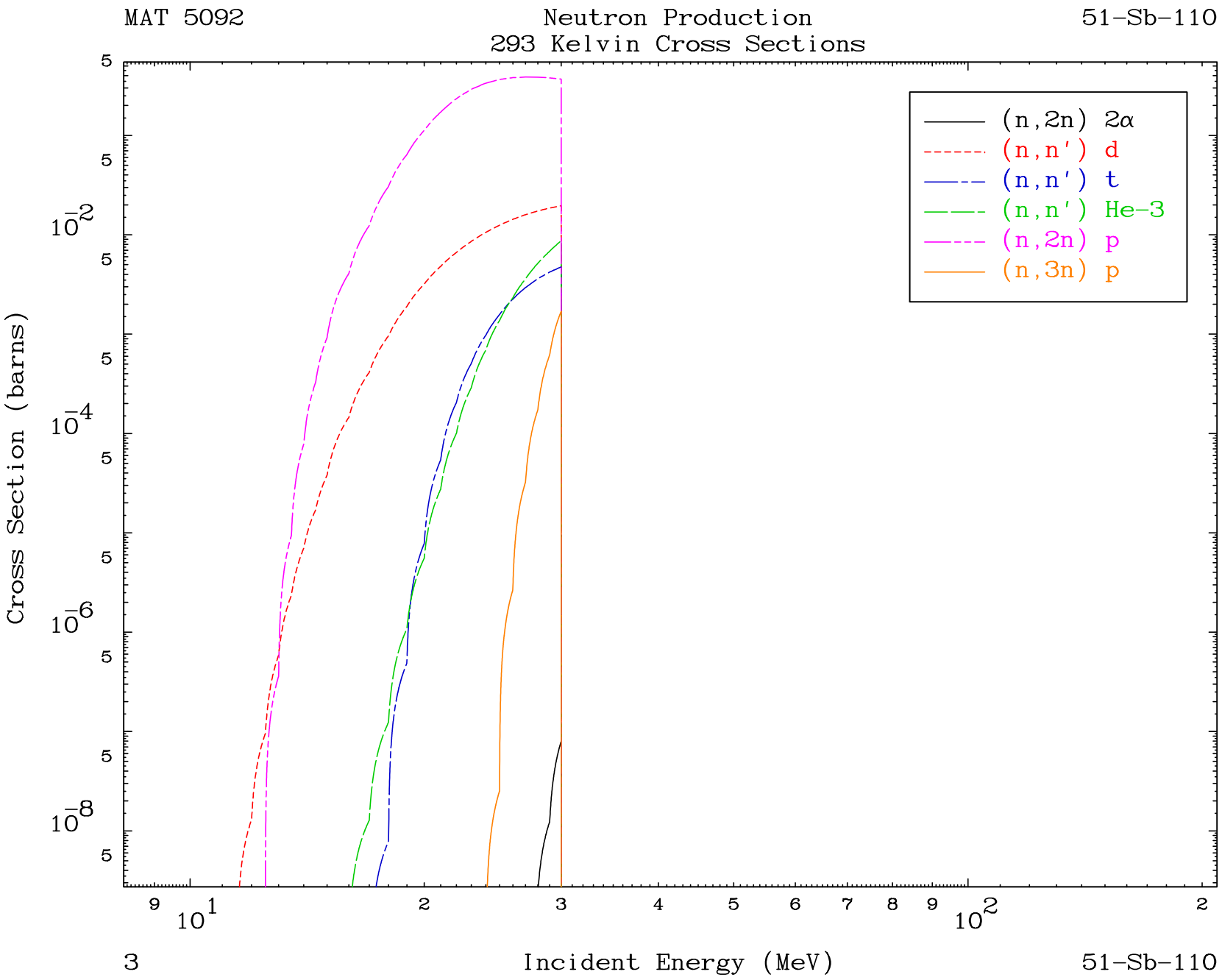
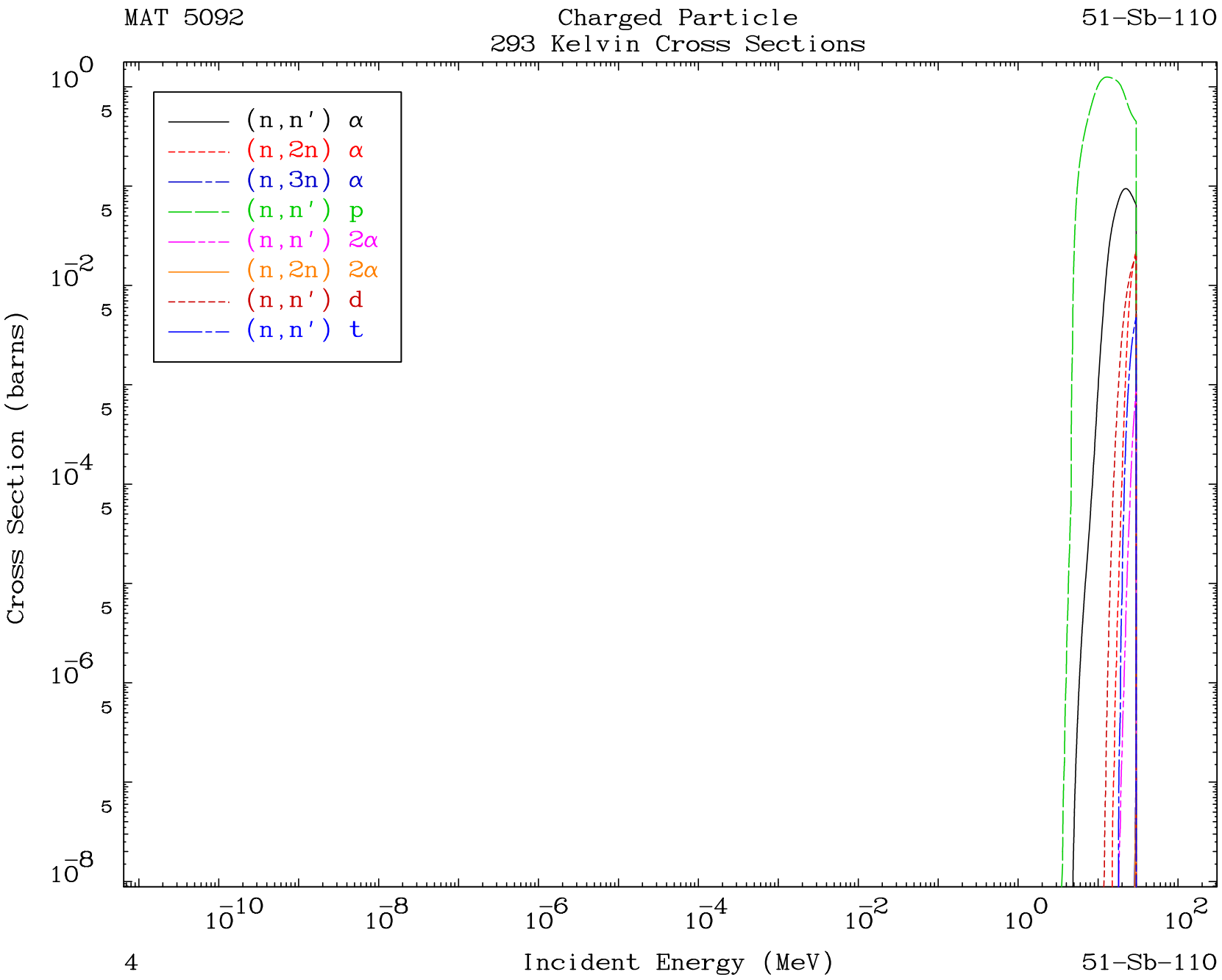
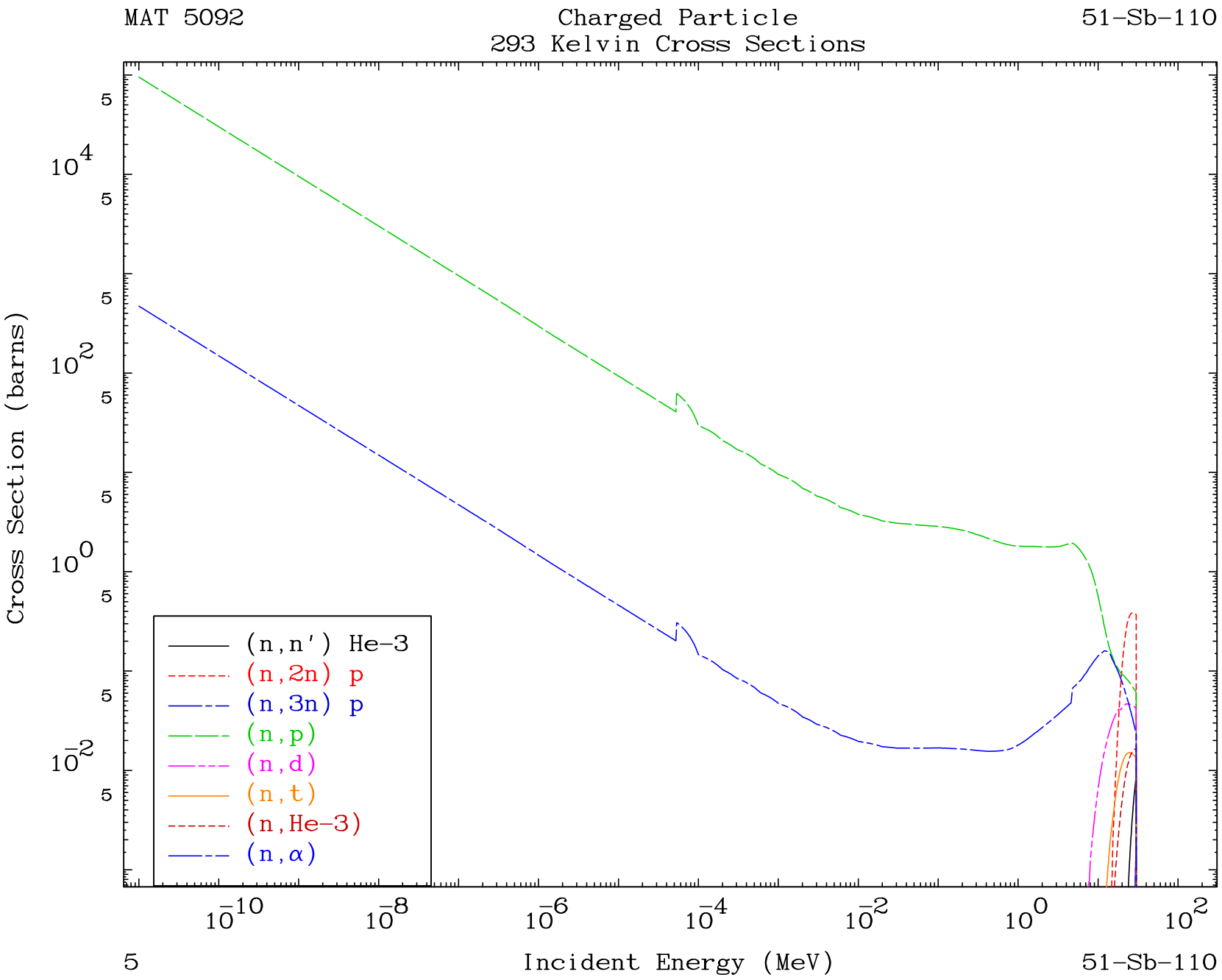
Press Mouse Button to Start

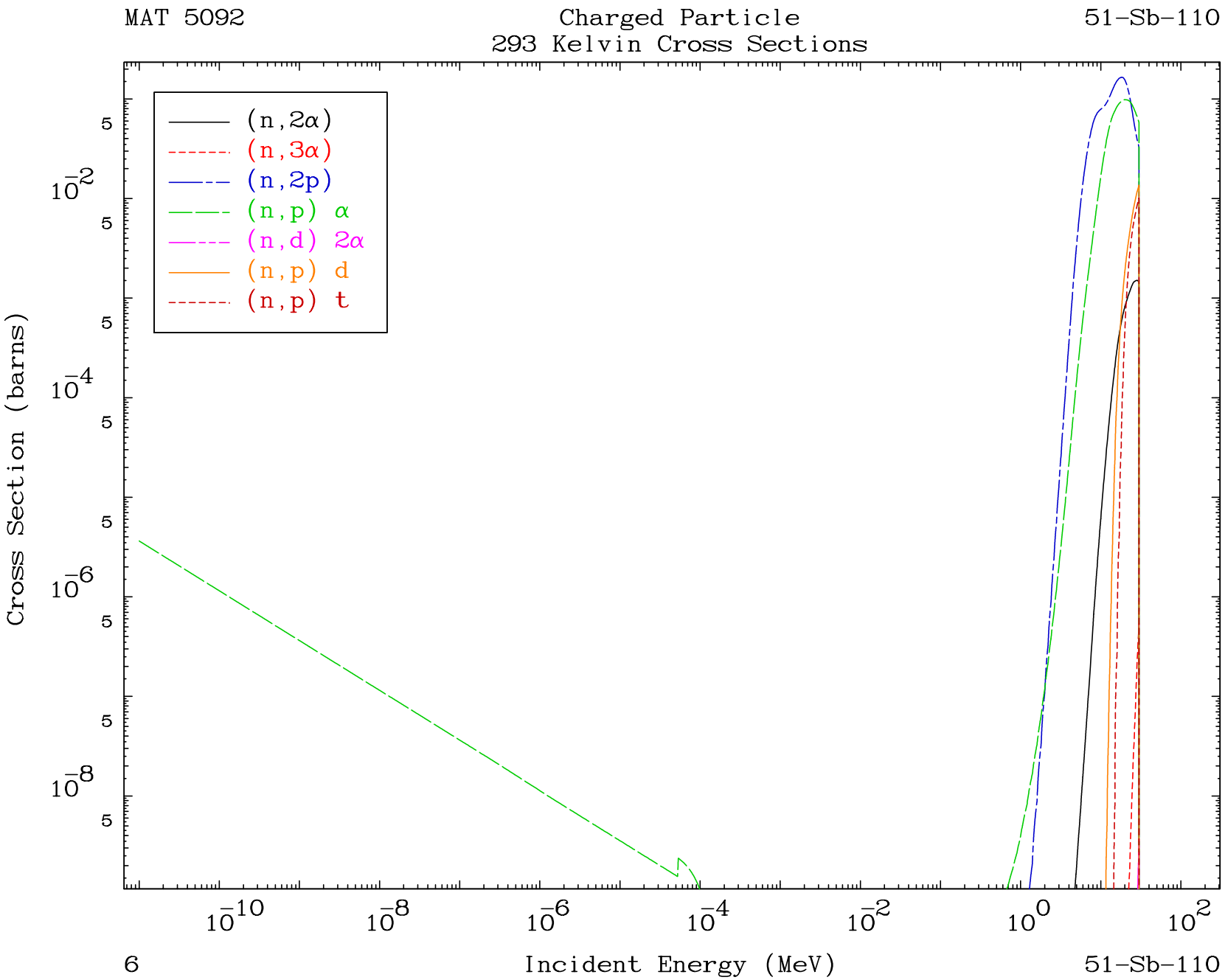

MAT 5092
Major
293 Kelvin Cross Sections
51-Sb-110
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
51-Sb-110

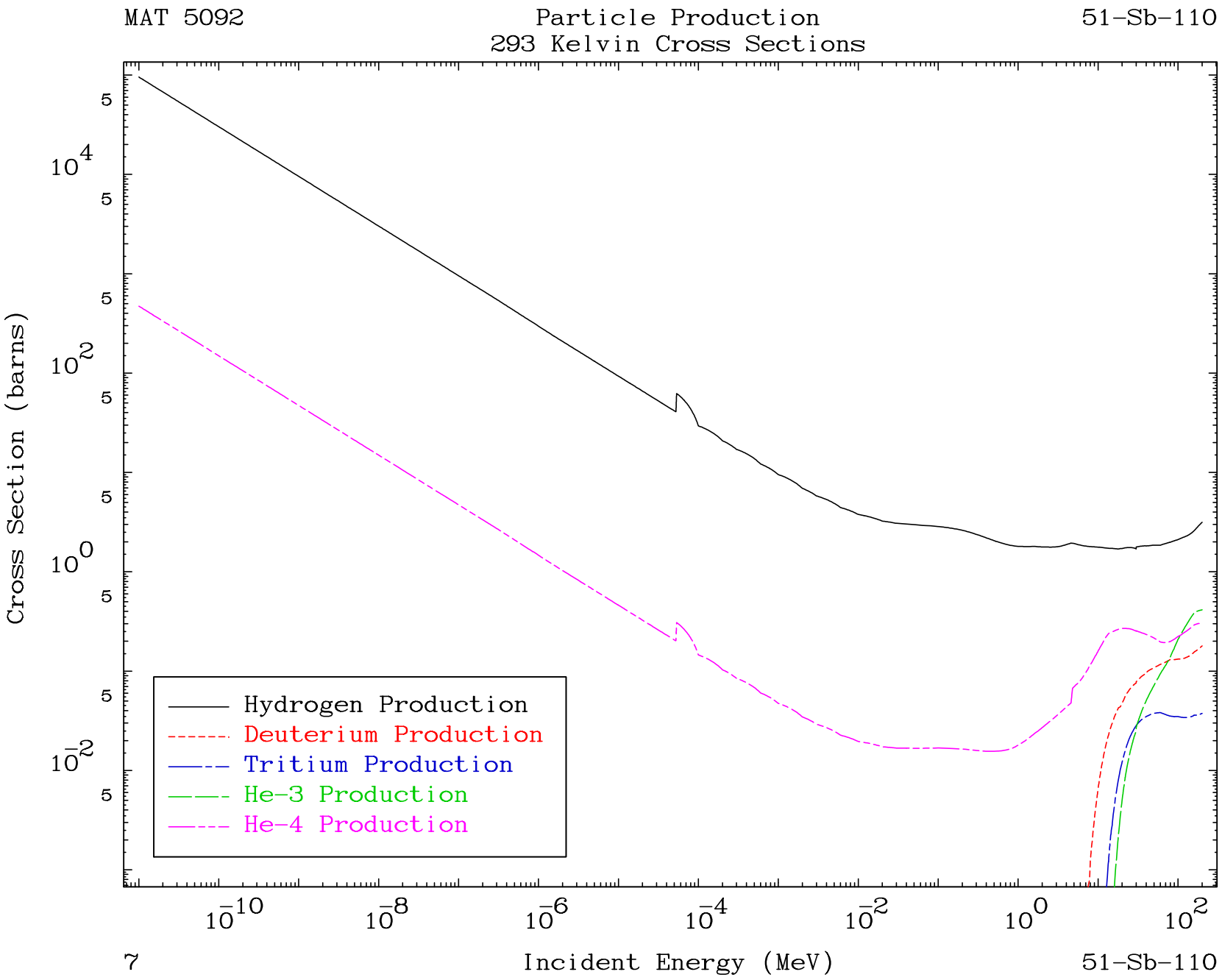

MAT 5092
Neutron Production
293 Kelvin Cross Sections
51-Sb-110
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
51-Sb-110

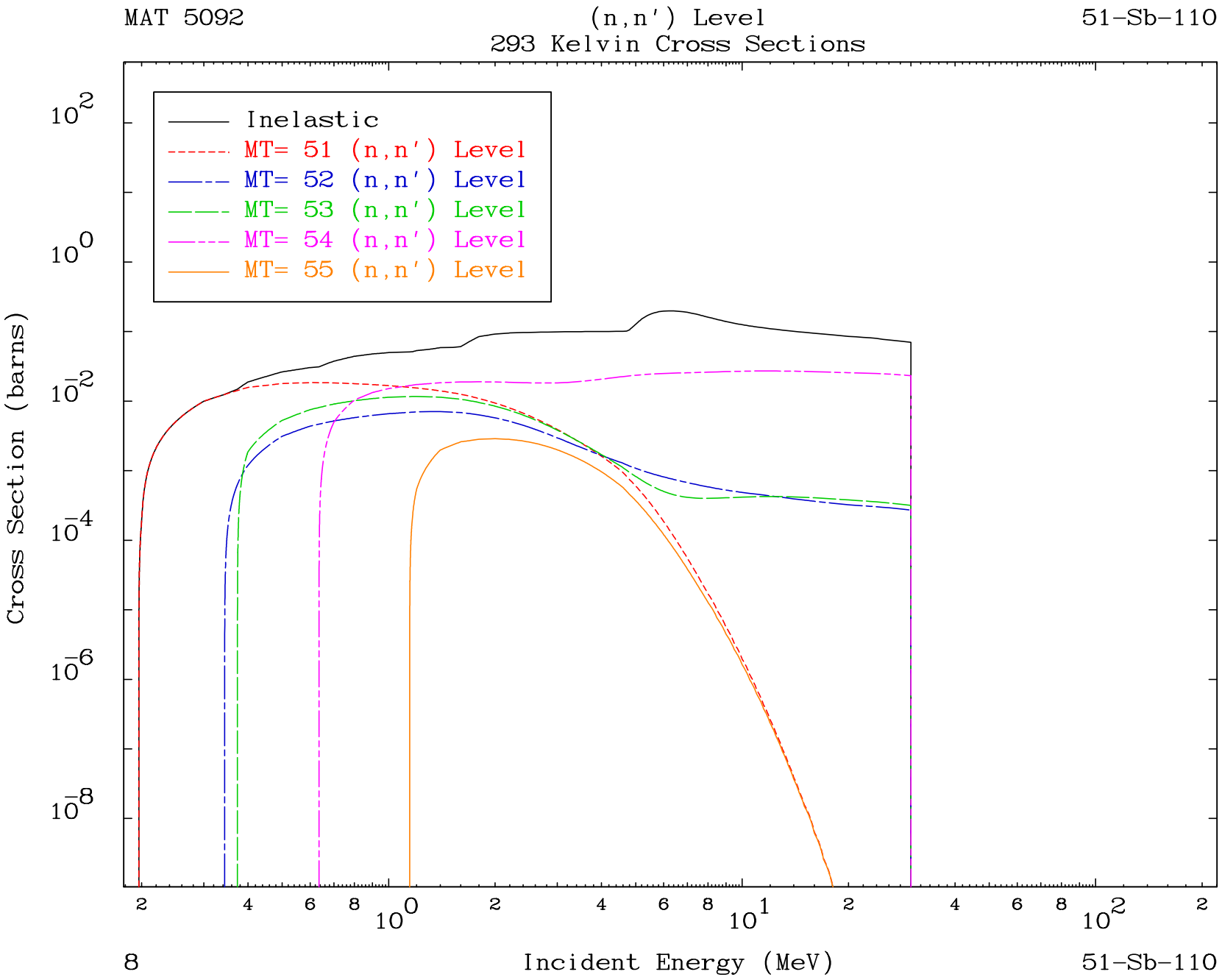

MAT 5092
Neutron Production
293 Kelvin Cross Sections
51-Sb-110
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
51-Sb-110

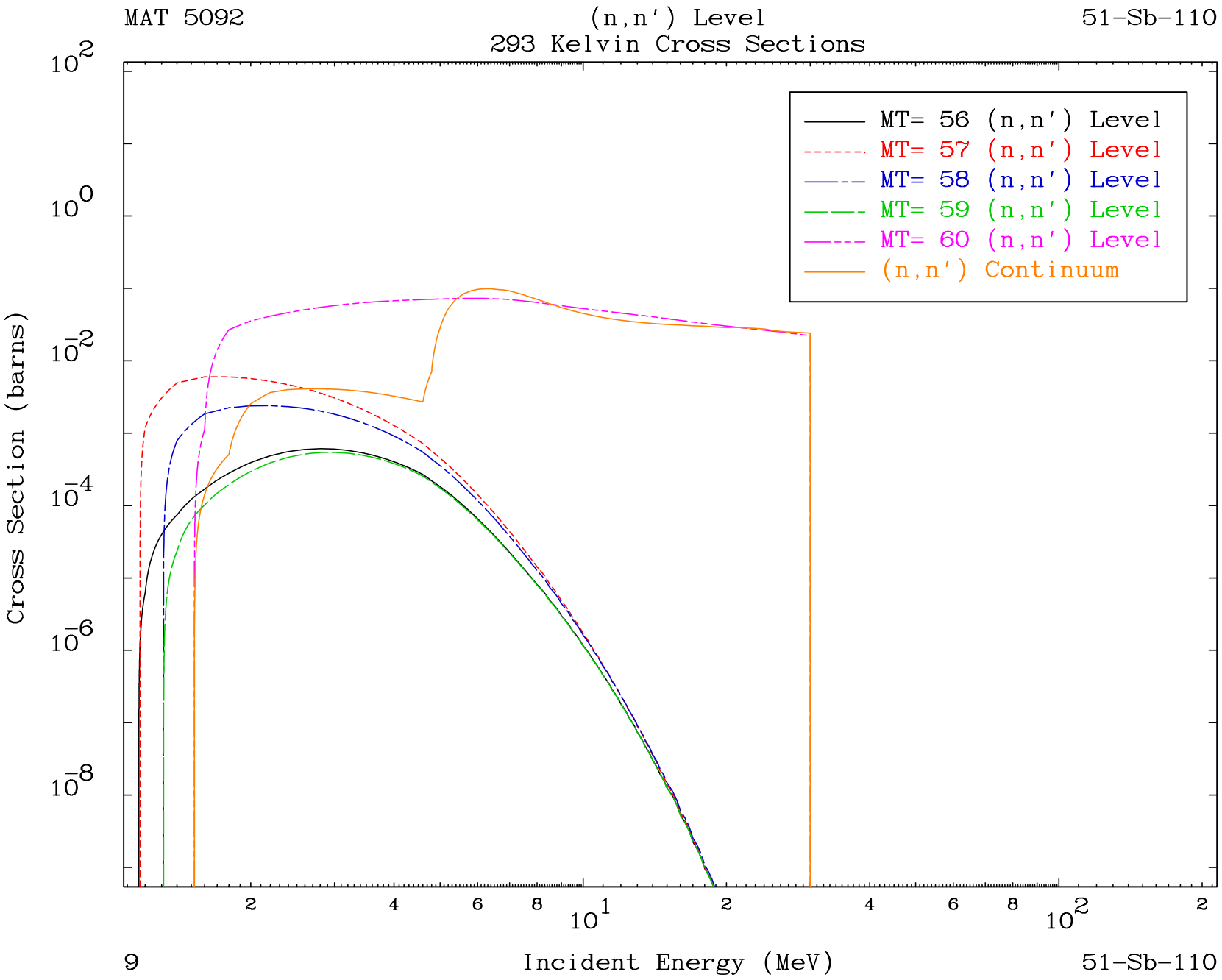

MAT 5092
Charged Particle
293 Kelvin Cross Sections
51-Sb-110
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
(n,n') d
(n,n') t
Cross Section (barns)
Incident Energy (MeV)
4
51-Sb-110

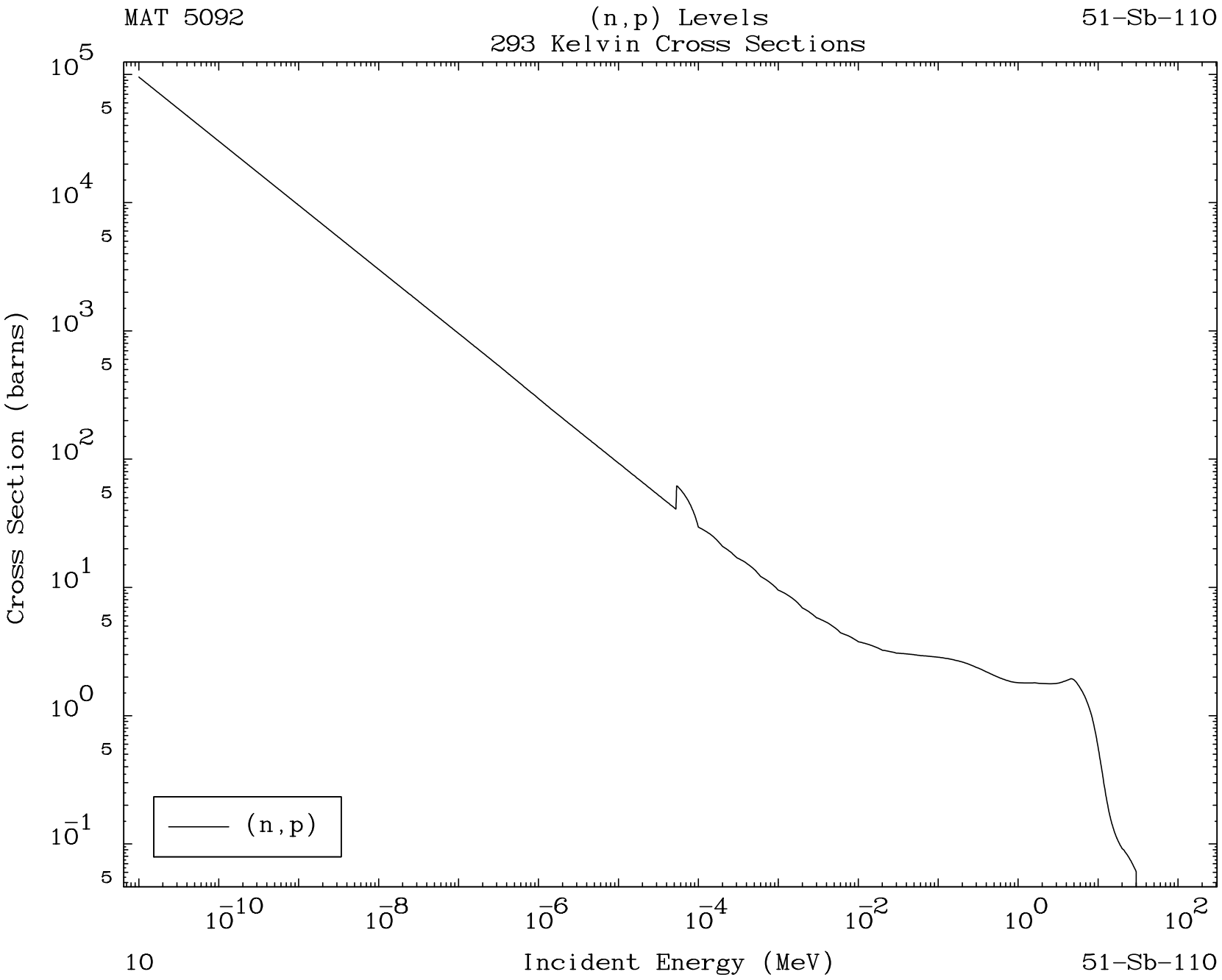

MAT 5092
Charged Particle
293 Kelvin Cross Sections
51-Sb-110
Cross Section (barns)
Incident Energy (MeV)
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
5
51-Sb-110


MAT 5092
Charged Particle
293 Kelvin Cross Sections
51-Sb-110
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,d) 2α
(n,p) d
(n,p) t
Cross Section (barns)
Incident Energy (MeV)
6
51-Sb-110

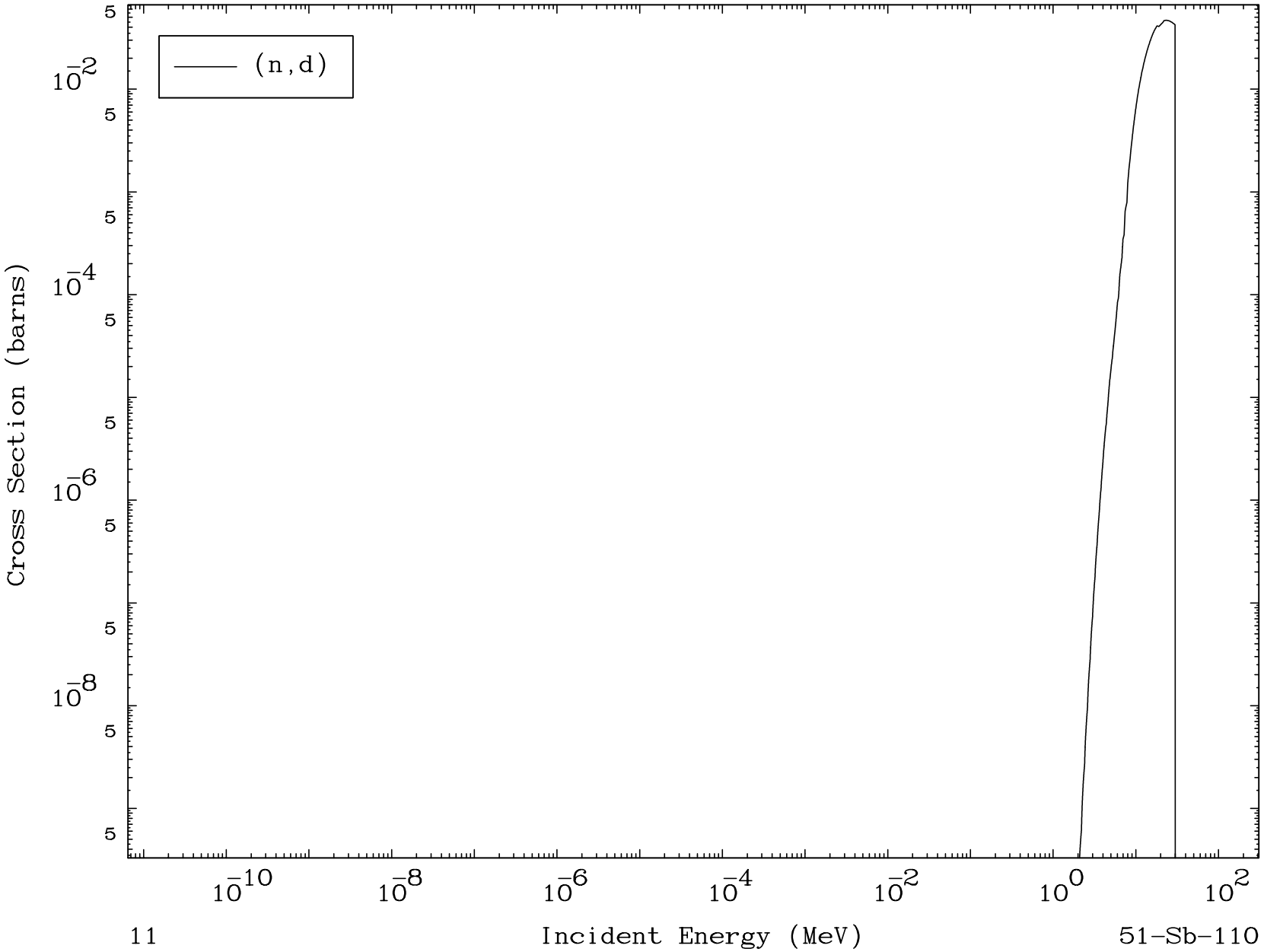

MAT 5092
Particle Production
293 Kelvin Cross Sections
51-Sb-110
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
7
51-Sb-110


MAT 5092
(n,n') Level
293 Kelvin Cross Sections
51-Sb-110
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
Cross Section (barns)
Incident Energy (MeV)
8
51-Sb-110

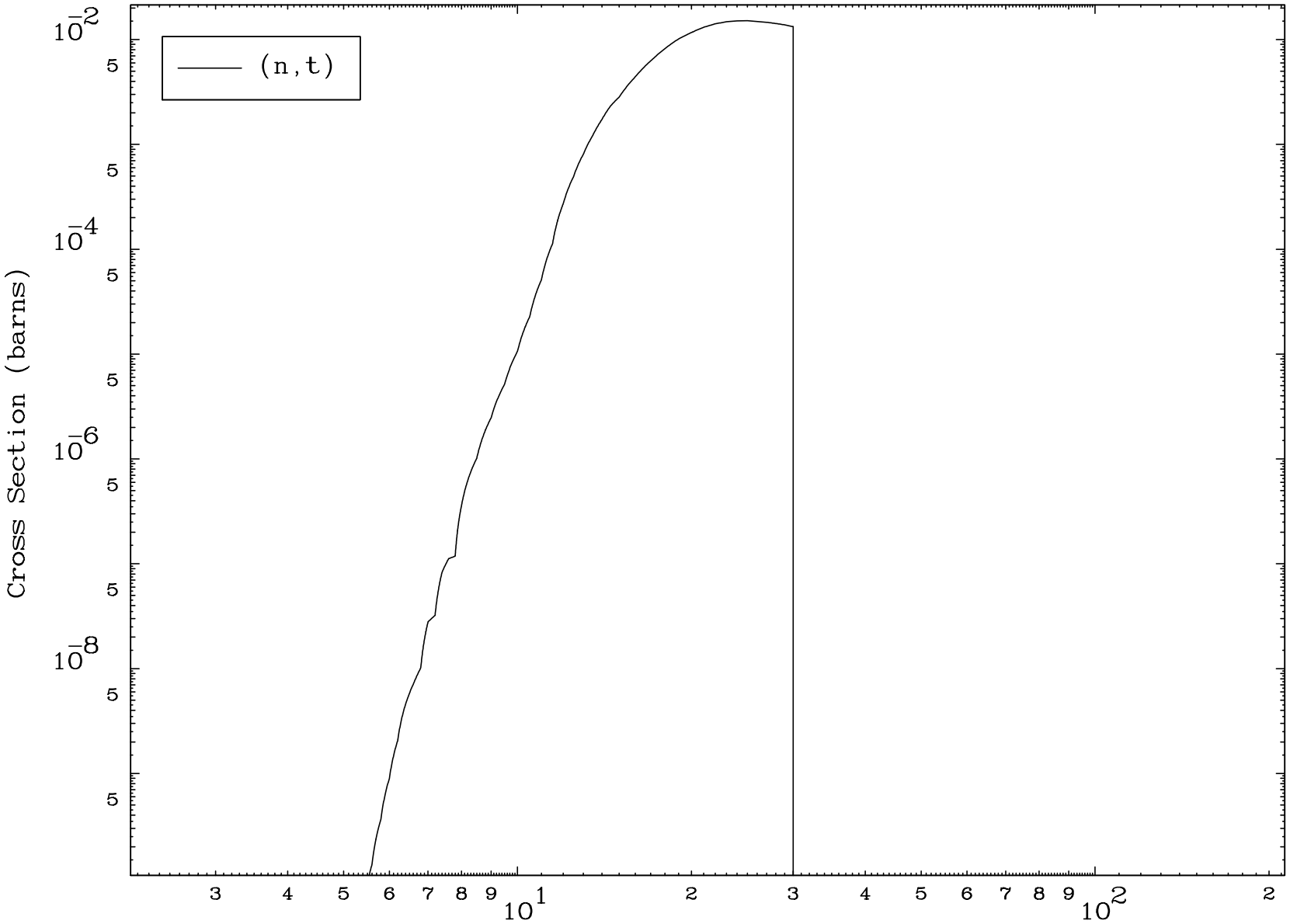

MAT 5092
(n,n') Level
293 Kelvin Cross Sections
51-Sb-110
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
MT= 60 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
9
51-Sb-110

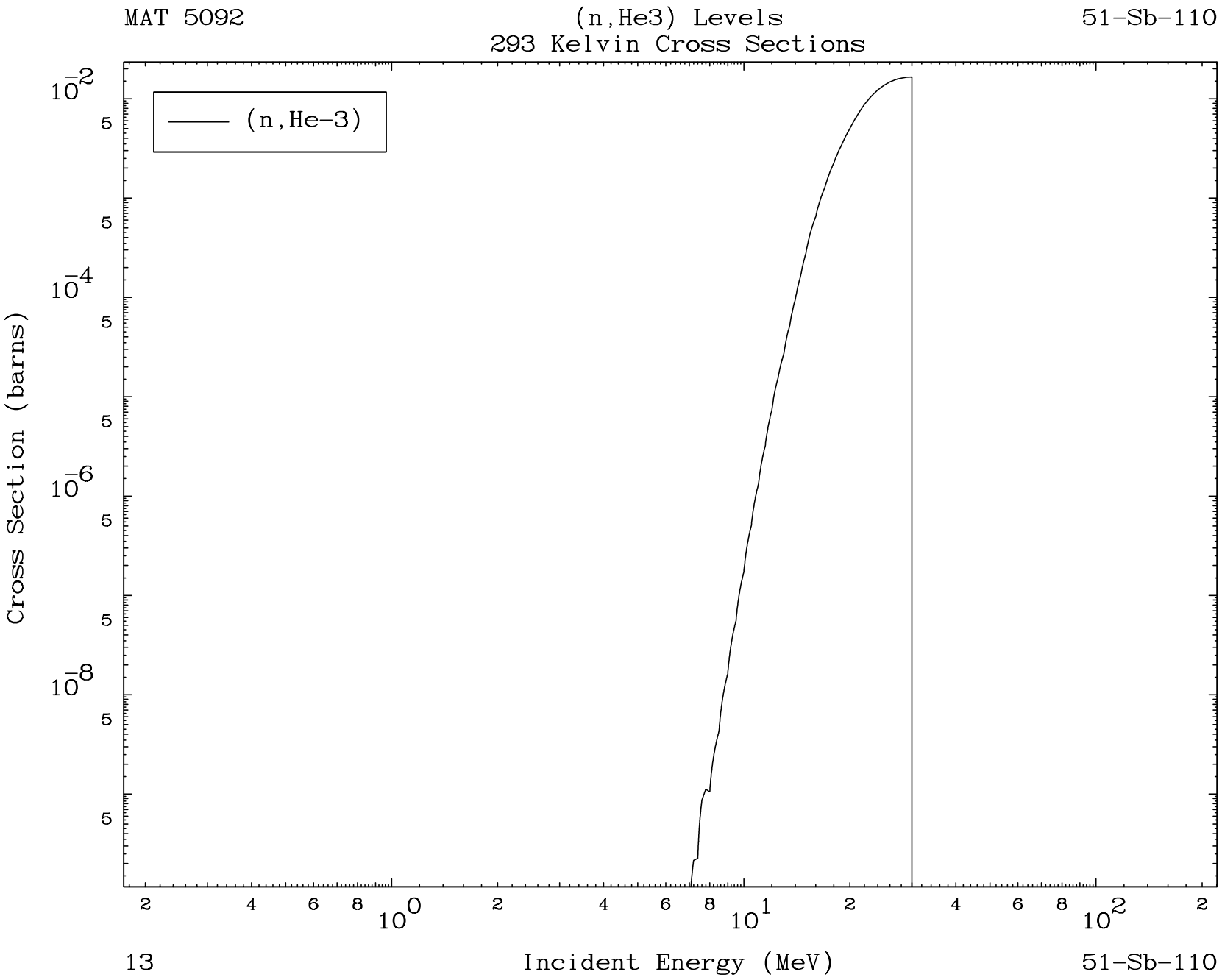

MAT 5092
(n,p) Levels
293 Kelvin Cross Sections
51-Sb-110
Cross Section (barns)
Incident Energy (MeV)
(n,p)
10
51-Sb-110

(n,d) Levels
293 Kelvin Cross Sections

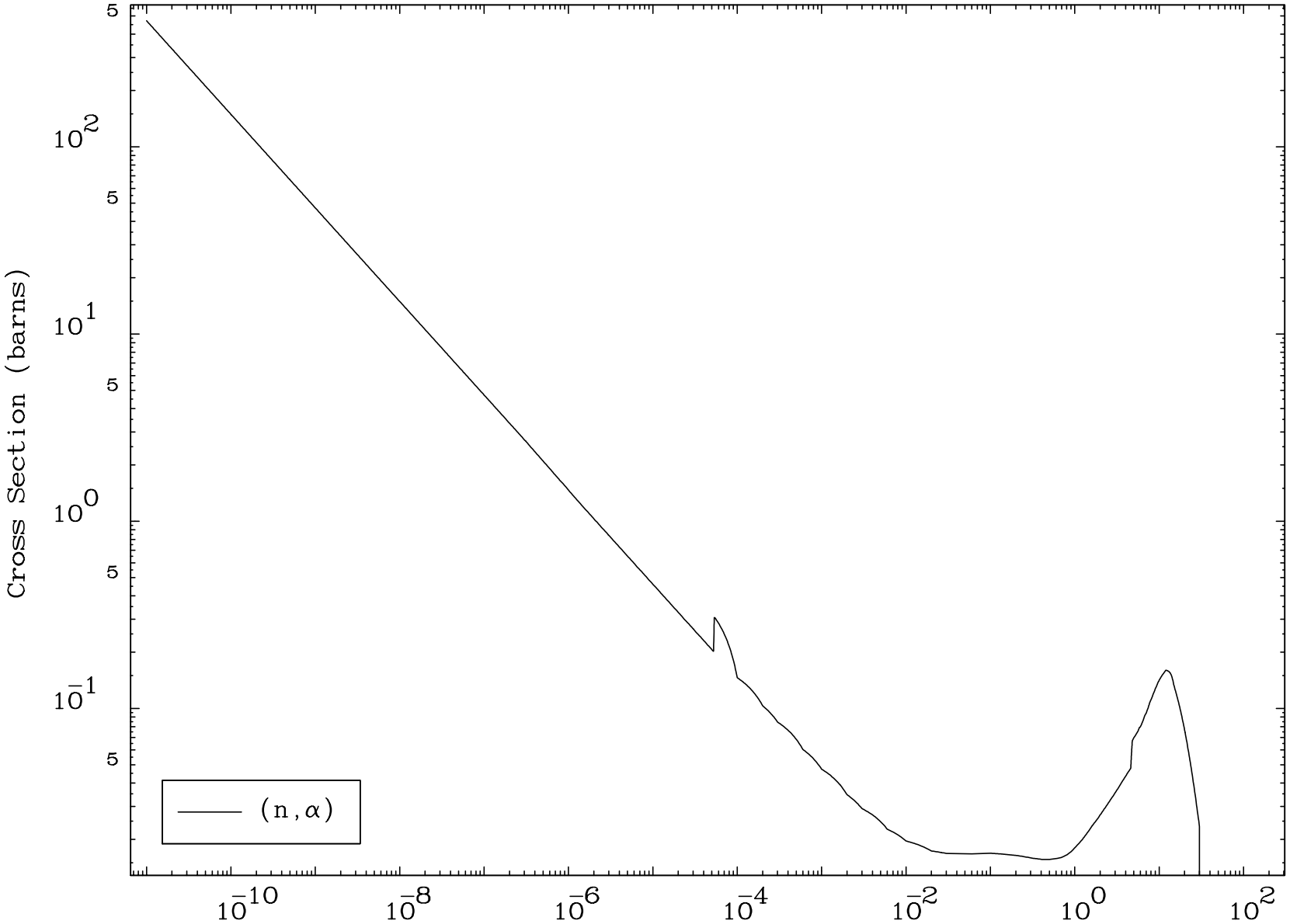


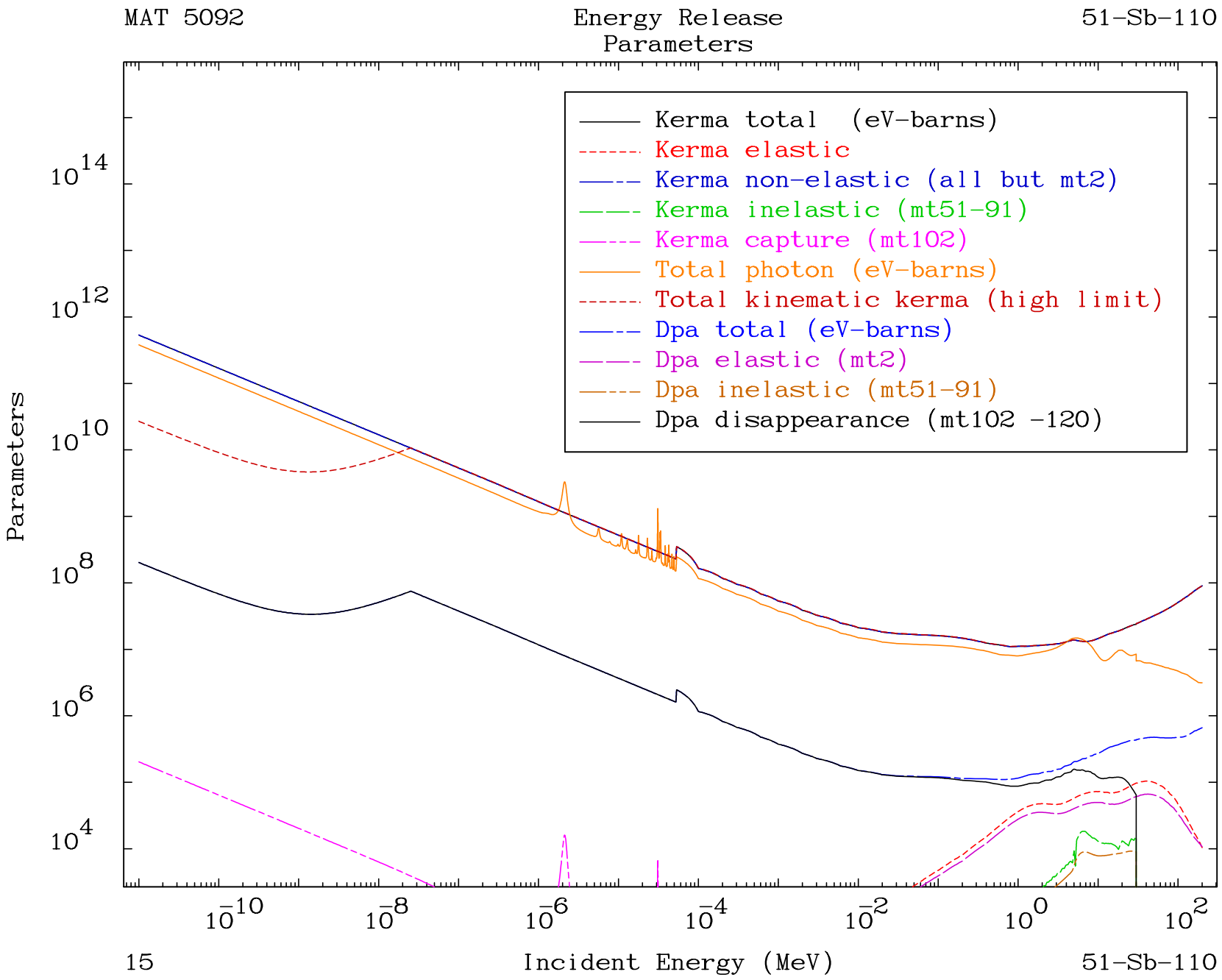
(n,t) Levels
293 Kelvin Cross Sections

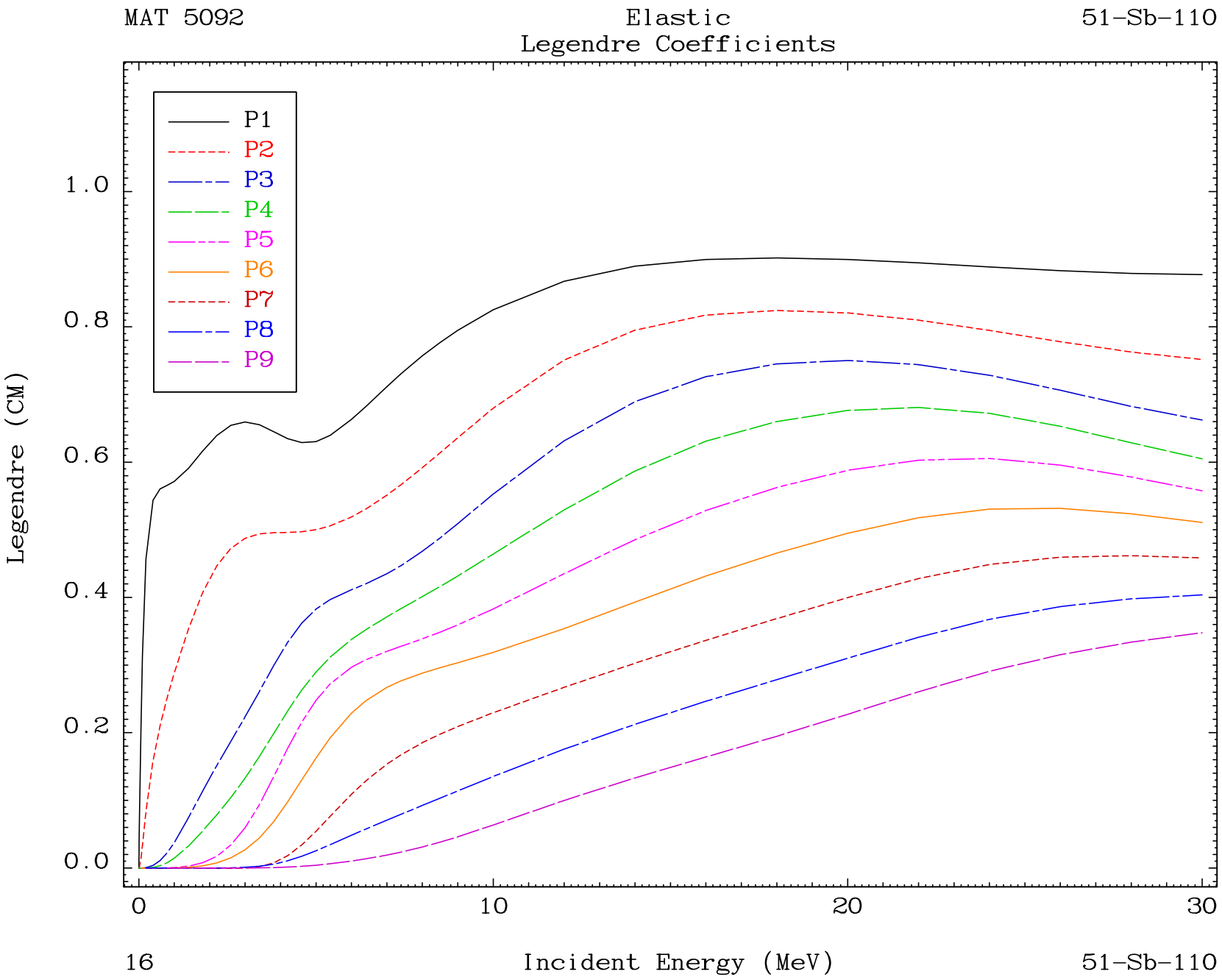


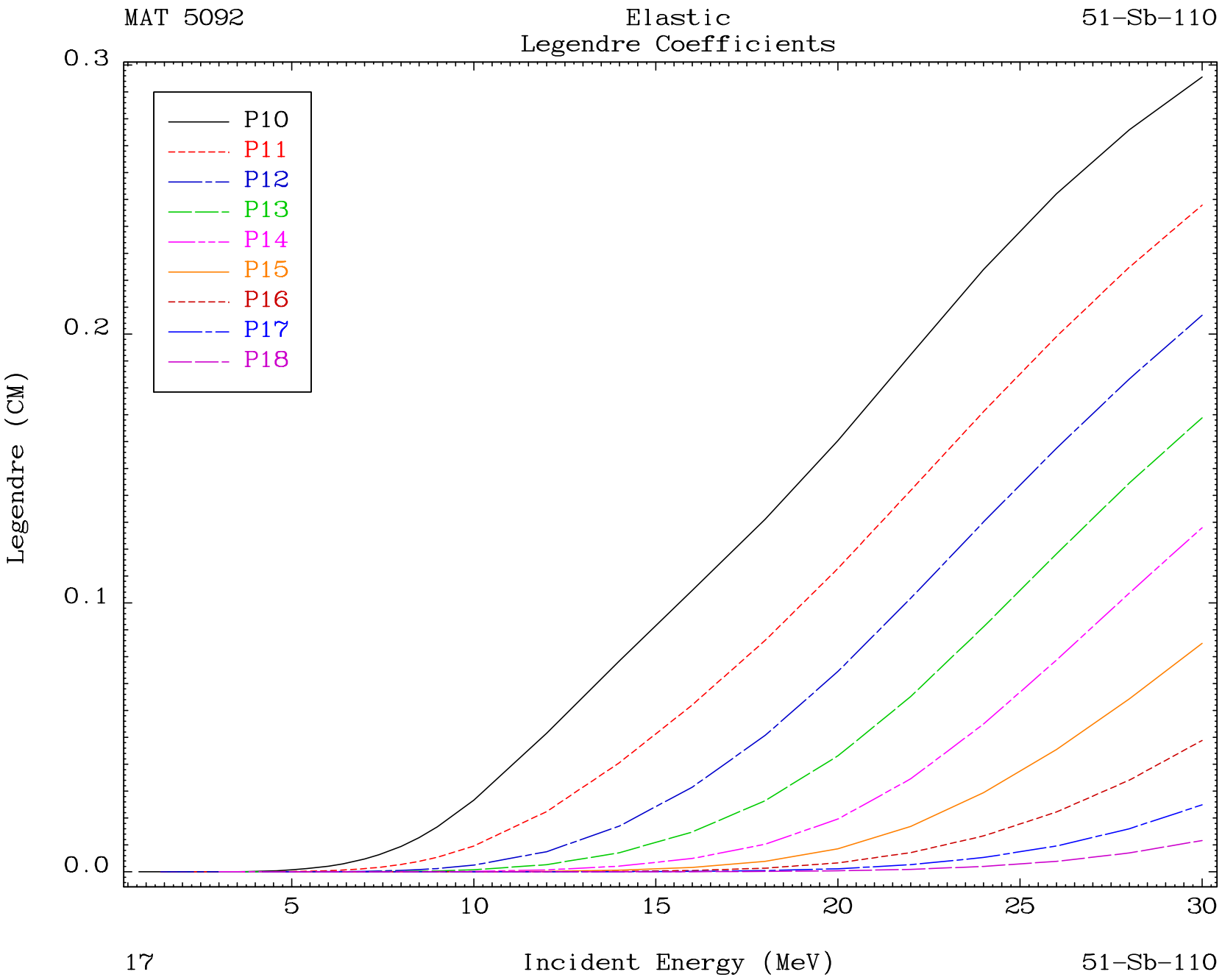

MAT 5092
(n,He3) Levels
293 Kelvin Cross Sections
51-Sb-110
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
13
51-Sb-110

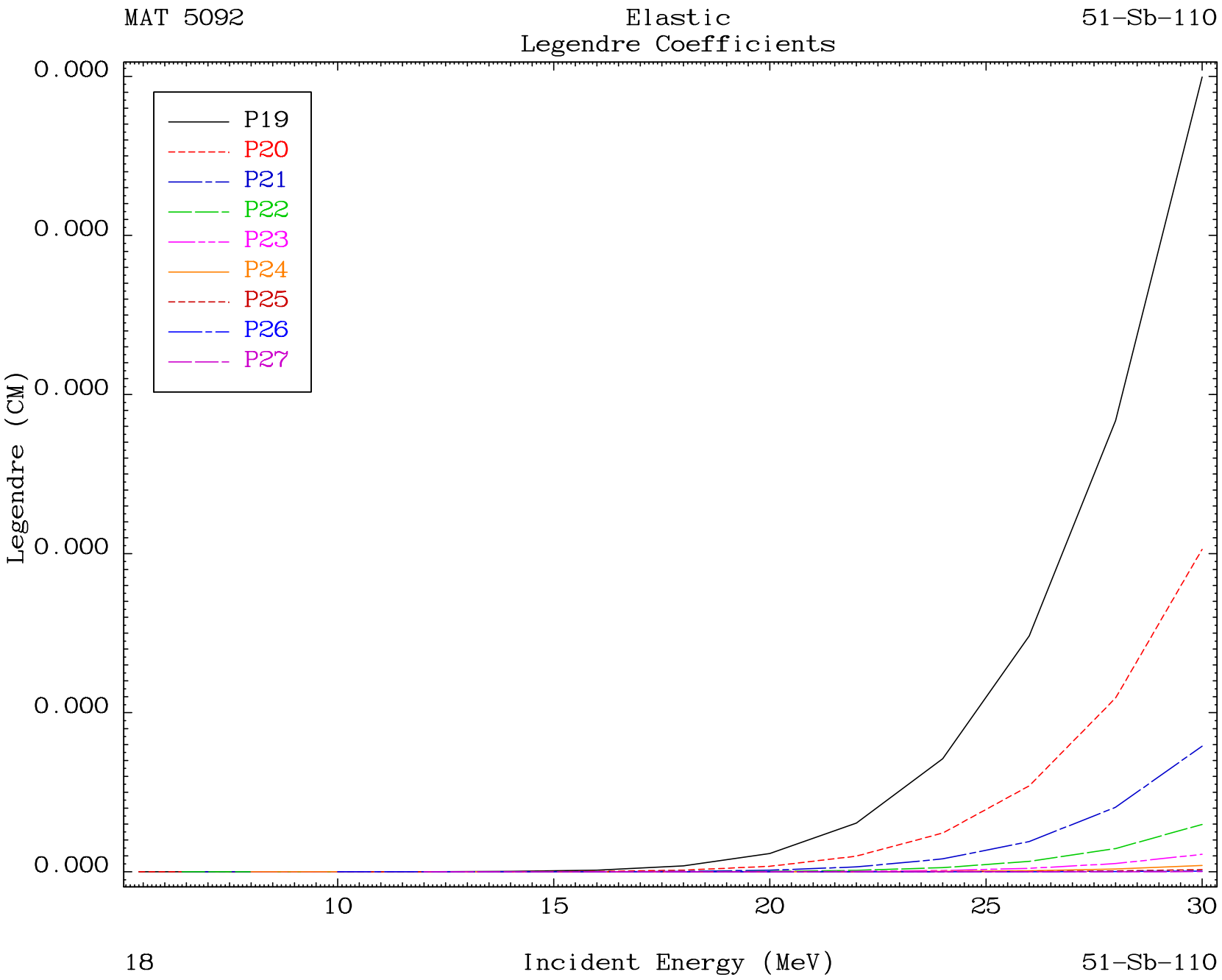
(n,α) Levels
293 Kelvin Cross Sections

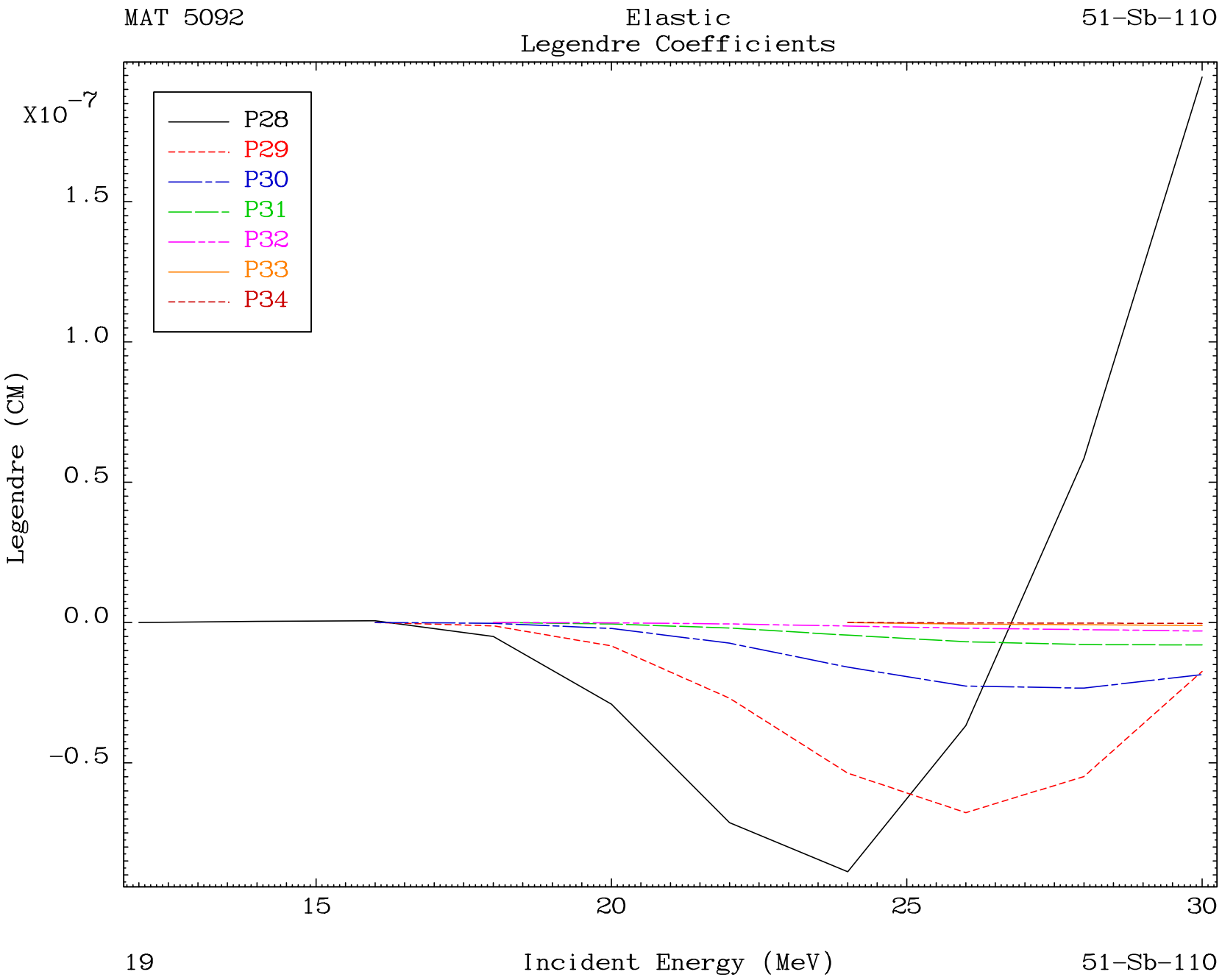


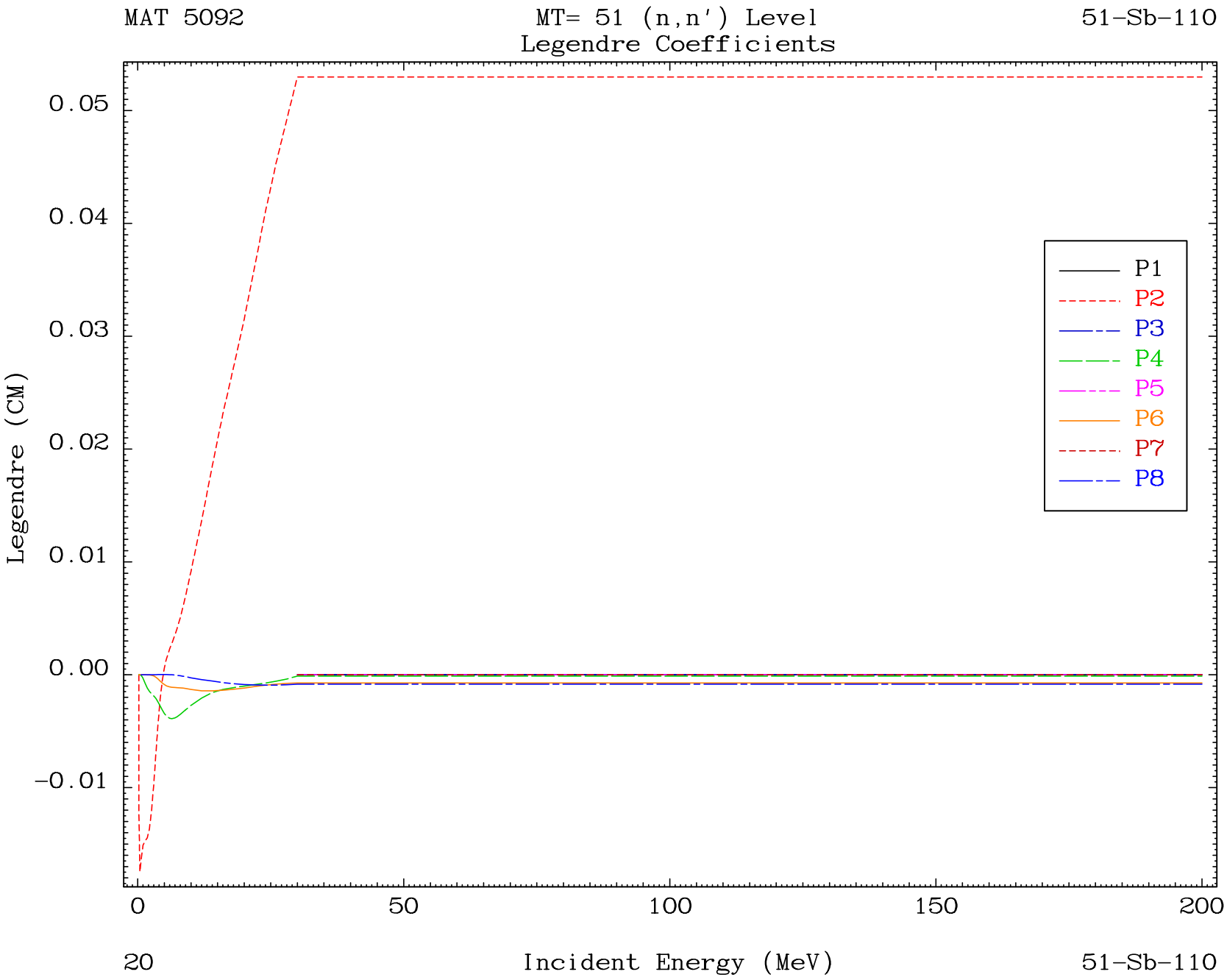

MAT 5092
Energy Release Parameters
51-Sb-110
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^{14}
10^{12}
10^{10}
10^{8}
10^{6}
10^{4}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
10^{-2}
10^{0}
10^{2}
Incident Energy (MeV)
15
51-Sb-110

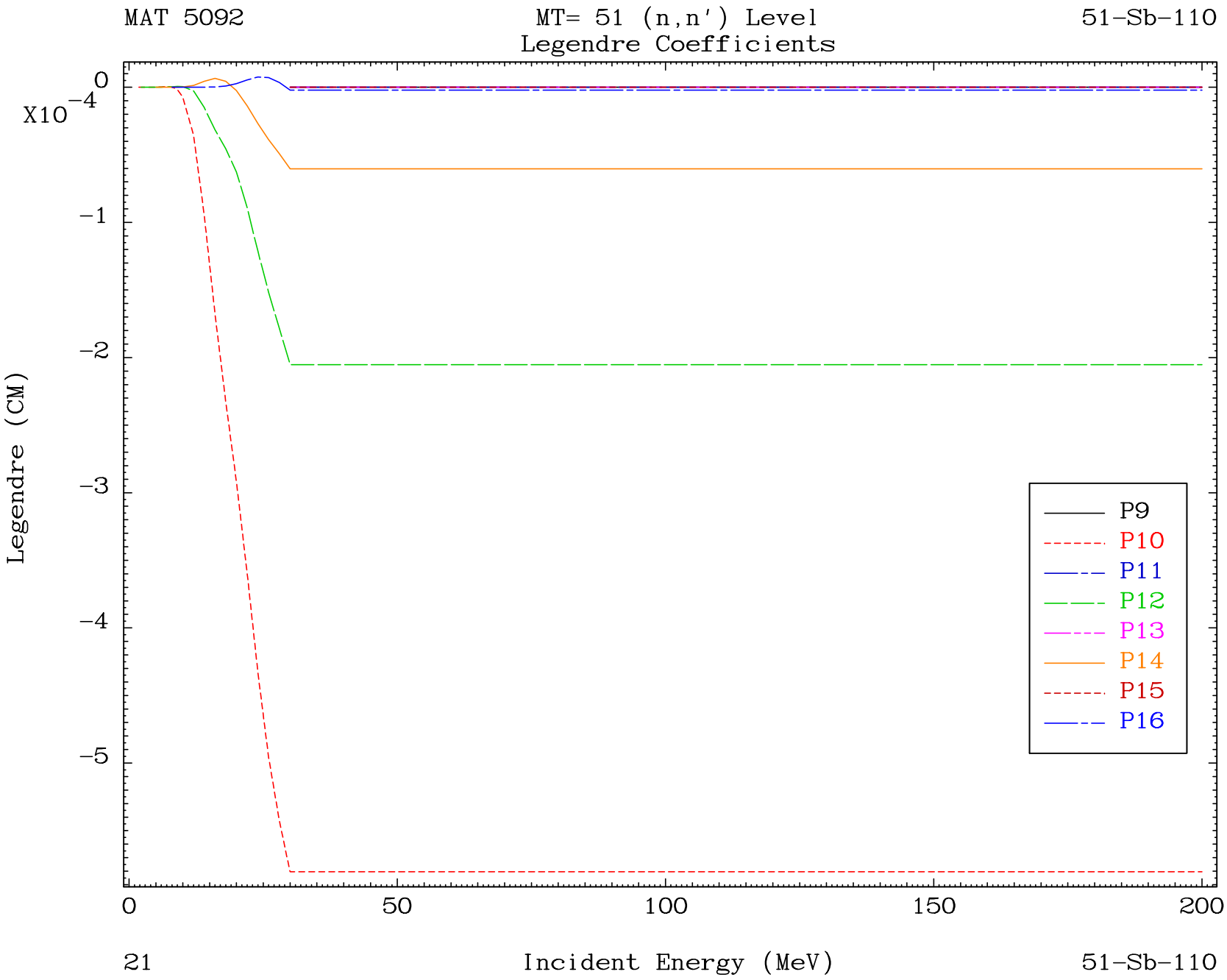

MAT 5092
Elastic
Legendre Coefficients
51-Sb-110
P1
P2
P3
P4
P5
P6
P7
P8
P9
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
10
20
30
16
Incident Energy (MeV)
51-Sb-110

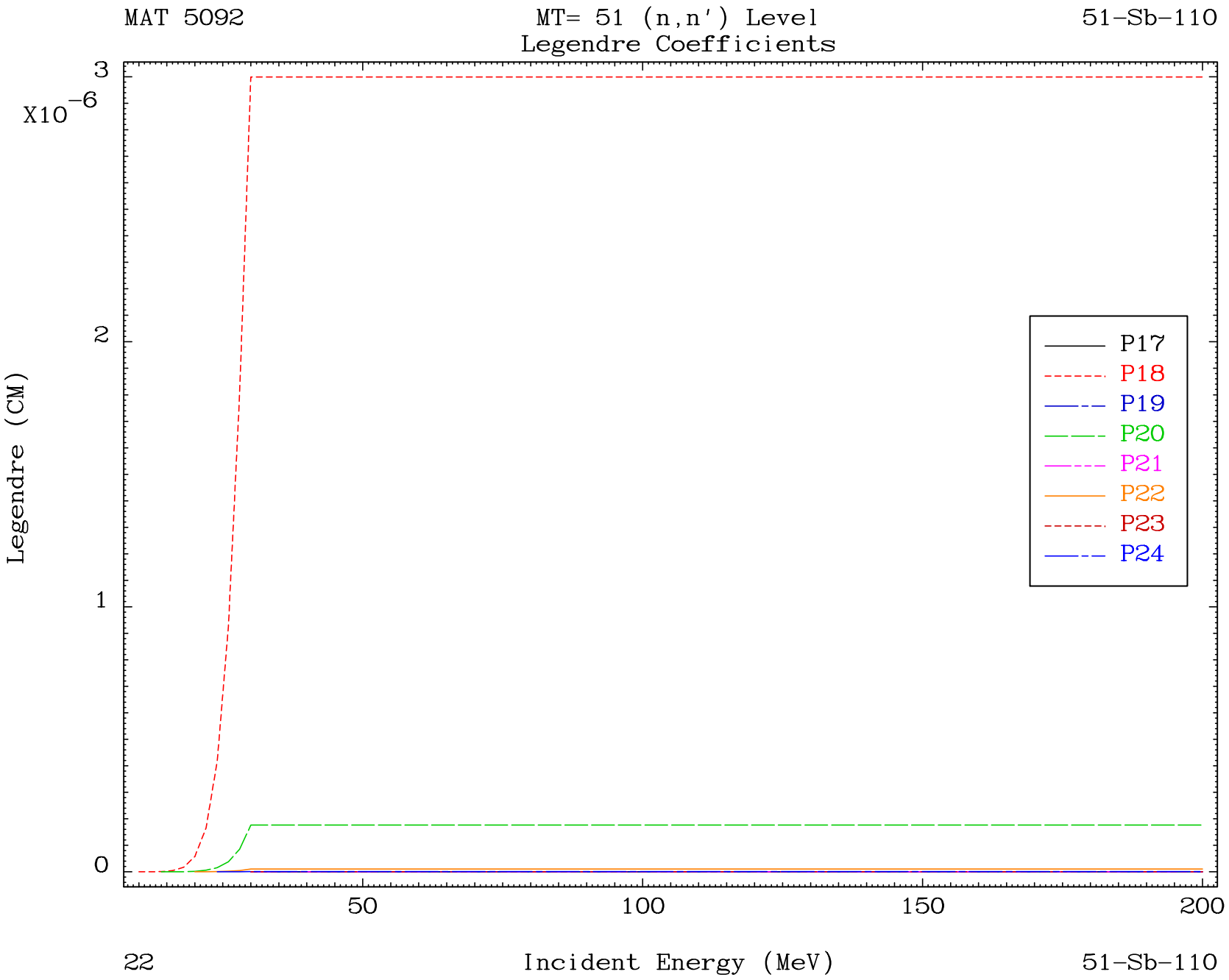

MAT 5092
Elastic
Legendre Coefficients
51-Sb-110
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.3
0.2
0.1
0.0
5
10
15
20
25
30
17
Incident Energy (MeV)
51-Sb-110

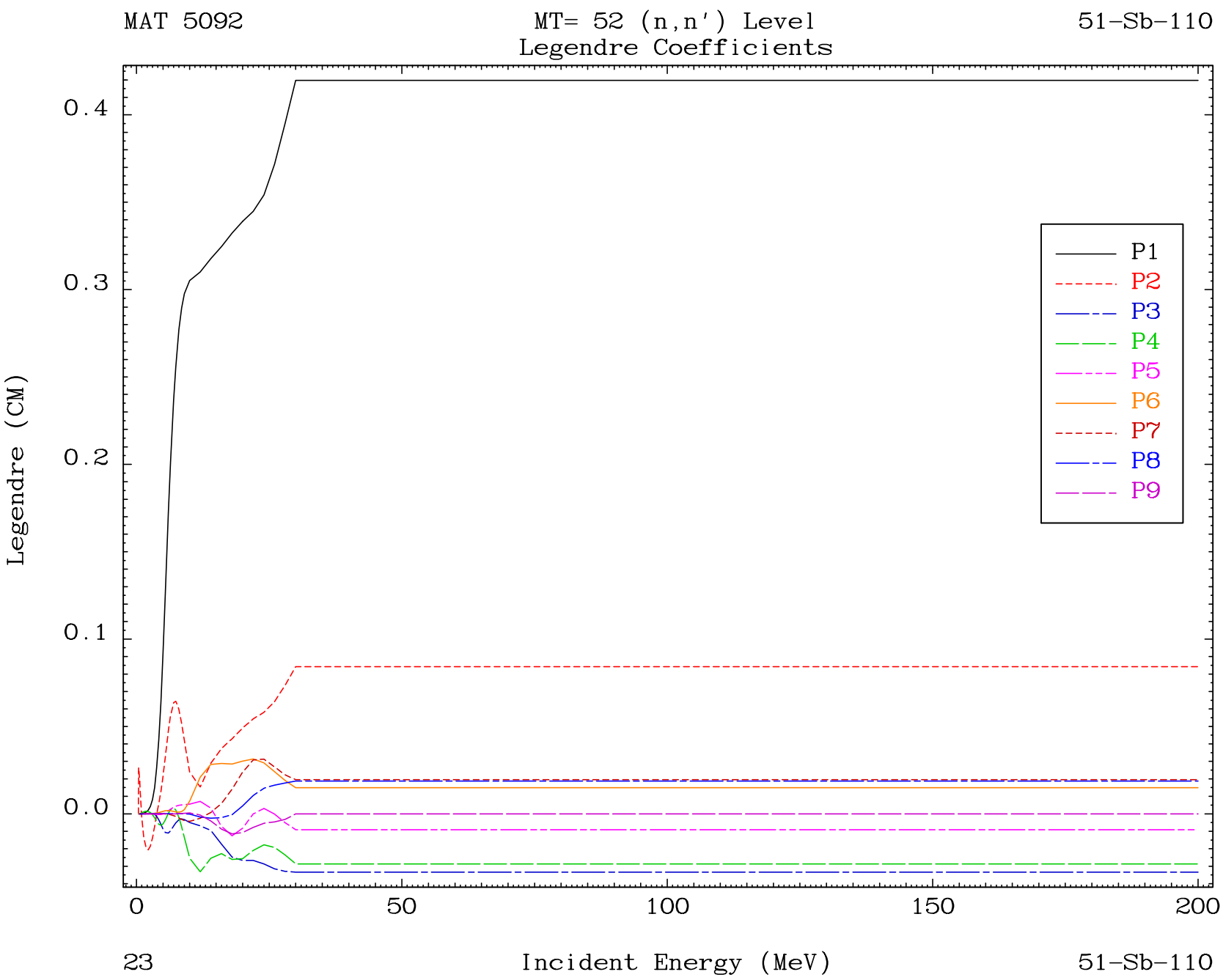

MAT 5092
Elastic
Legendre Coefficients
51-Sb-110
0.000
0.000
0.000
0.000
0.000
0.000
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
10
15
20
25
30
18
Incident Energy (MeV)
51-Sb-110

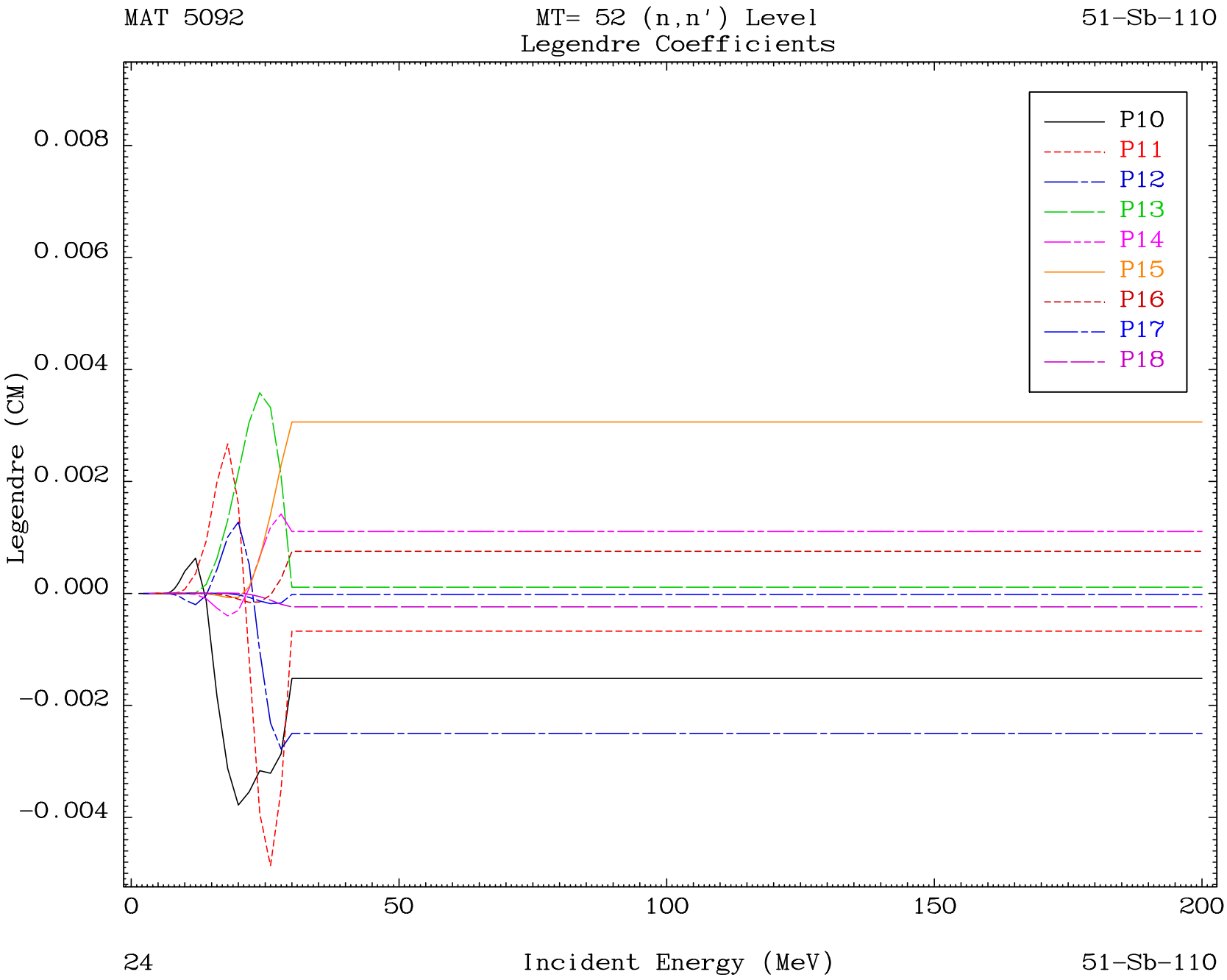

MAT 5092
Elastic
Legendre Coefficients
51-Sb-110
X10^-7
1.5
1.0
0.5
0.0
-0.5
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
15
20
25
30
19
Incident Energy (MeV)
51-Sb-110

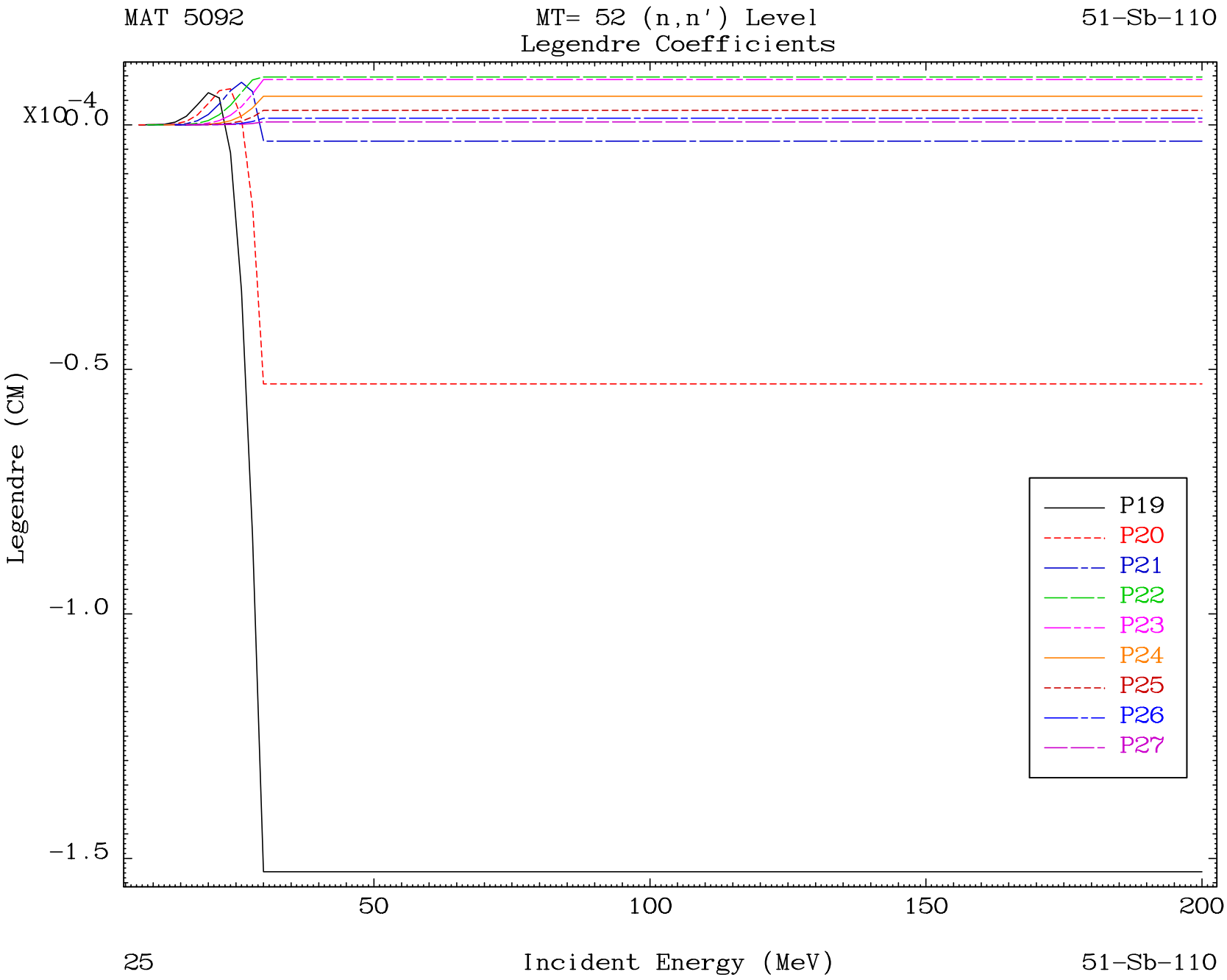

MAT 5092
MT= 51 (n,n') Level
Legendre Coefficients
51-Sb-110
0.05
0.04
0.03
0.02
0.01
0.00
-0.01
Legendre (CM)
0
50
100
150
200
20
Incident Energy (MeV)
51-Sb-110
P1
P2
P3
P4
P5
P6
P7
P8

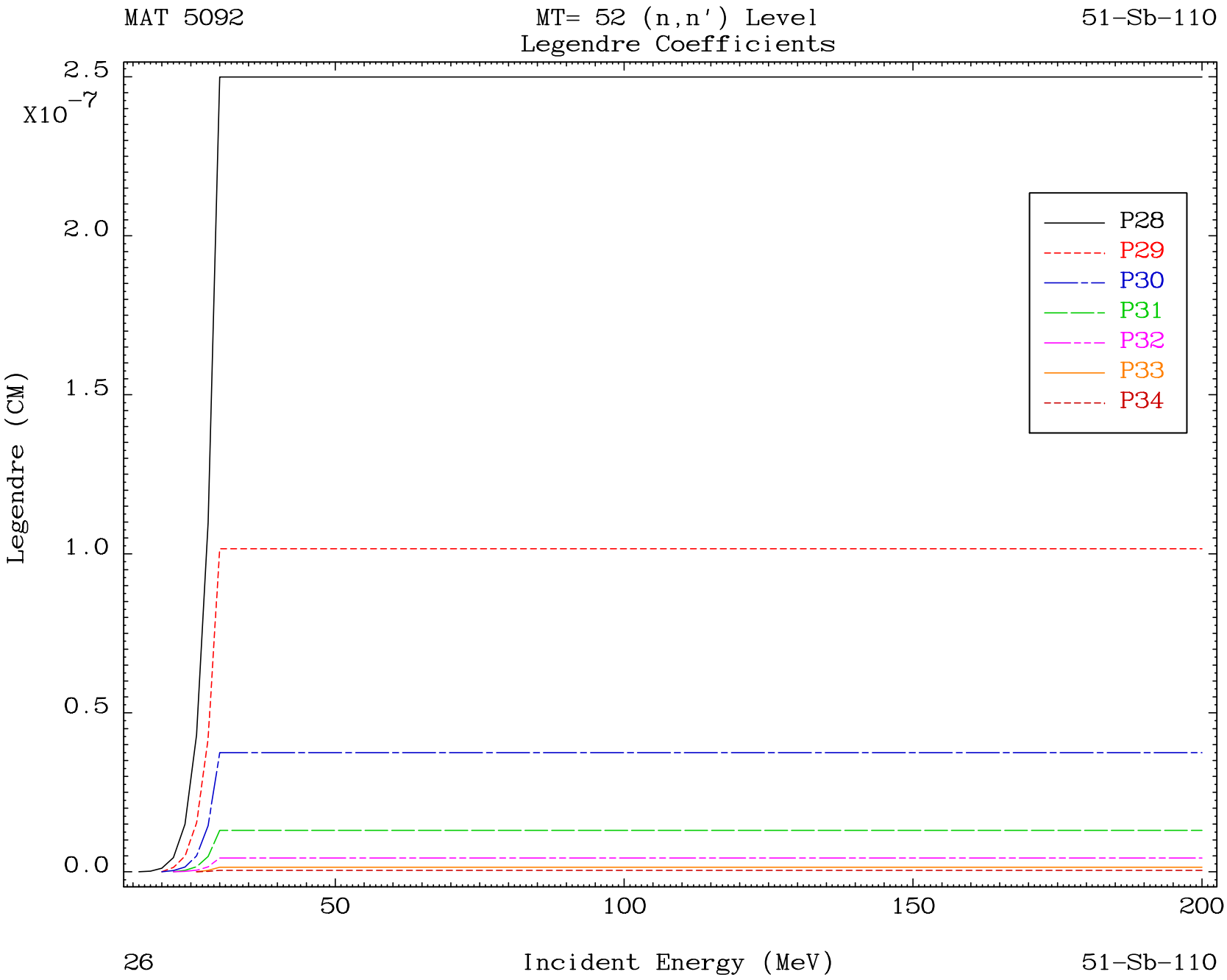

MAT 5092
MT= 51 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-4
0
-1
-2
-3
-4
-5
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P9
P10
P11
P12
P13
P14
P15
P16
21
51-Sb-110

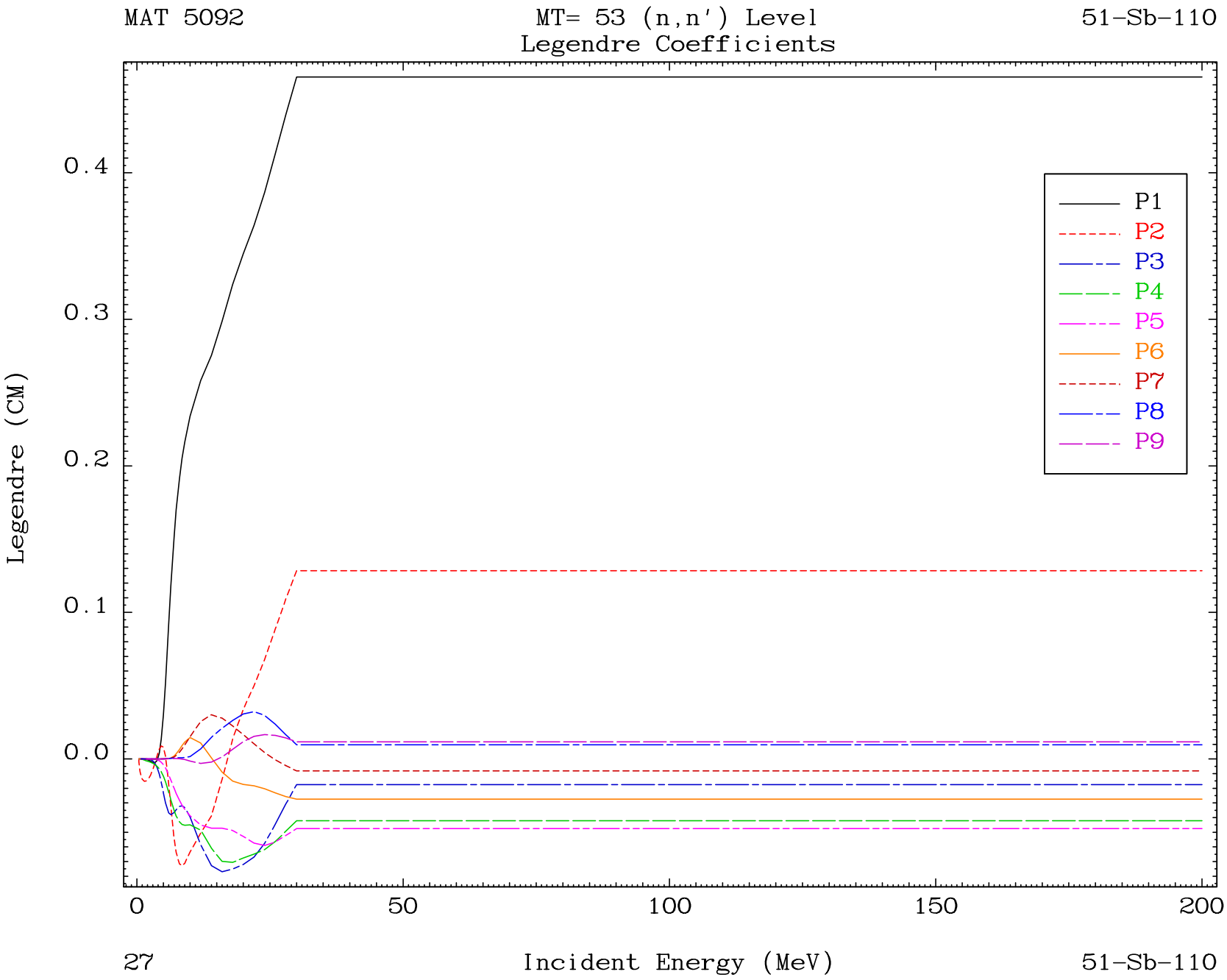

MAT 5092
MT= 51 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-6
3
2
1
0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
22
51-Sb-110
P17
P18
P19
P20
P21
P22
P23
P24

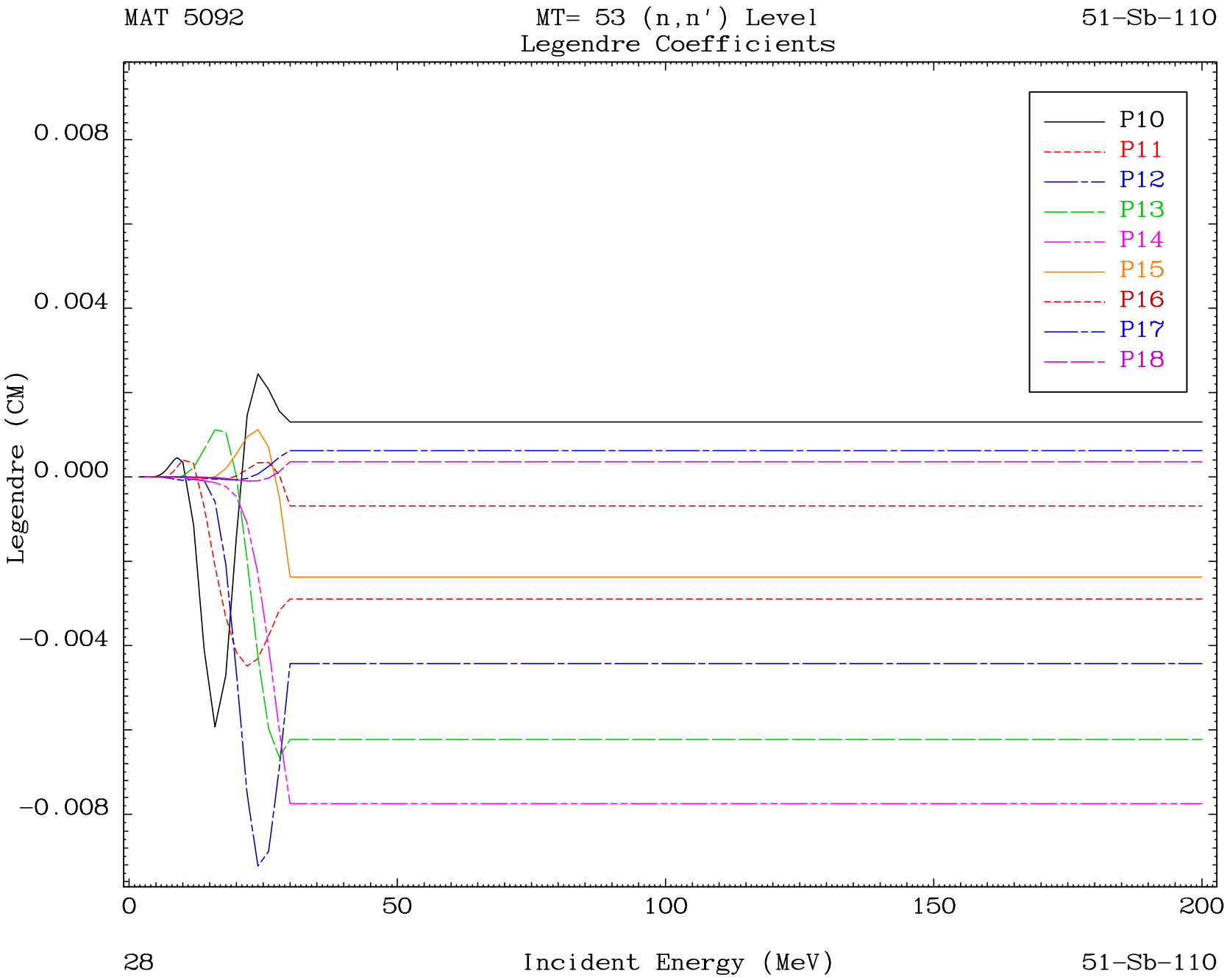

MAT 5092
MT= 52 (n,n') Level
Legendre Coefficients
51-Sb-110
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P1
P2
P3
P4
P5
P6
P7
P8
P9
23
51-Sb-110

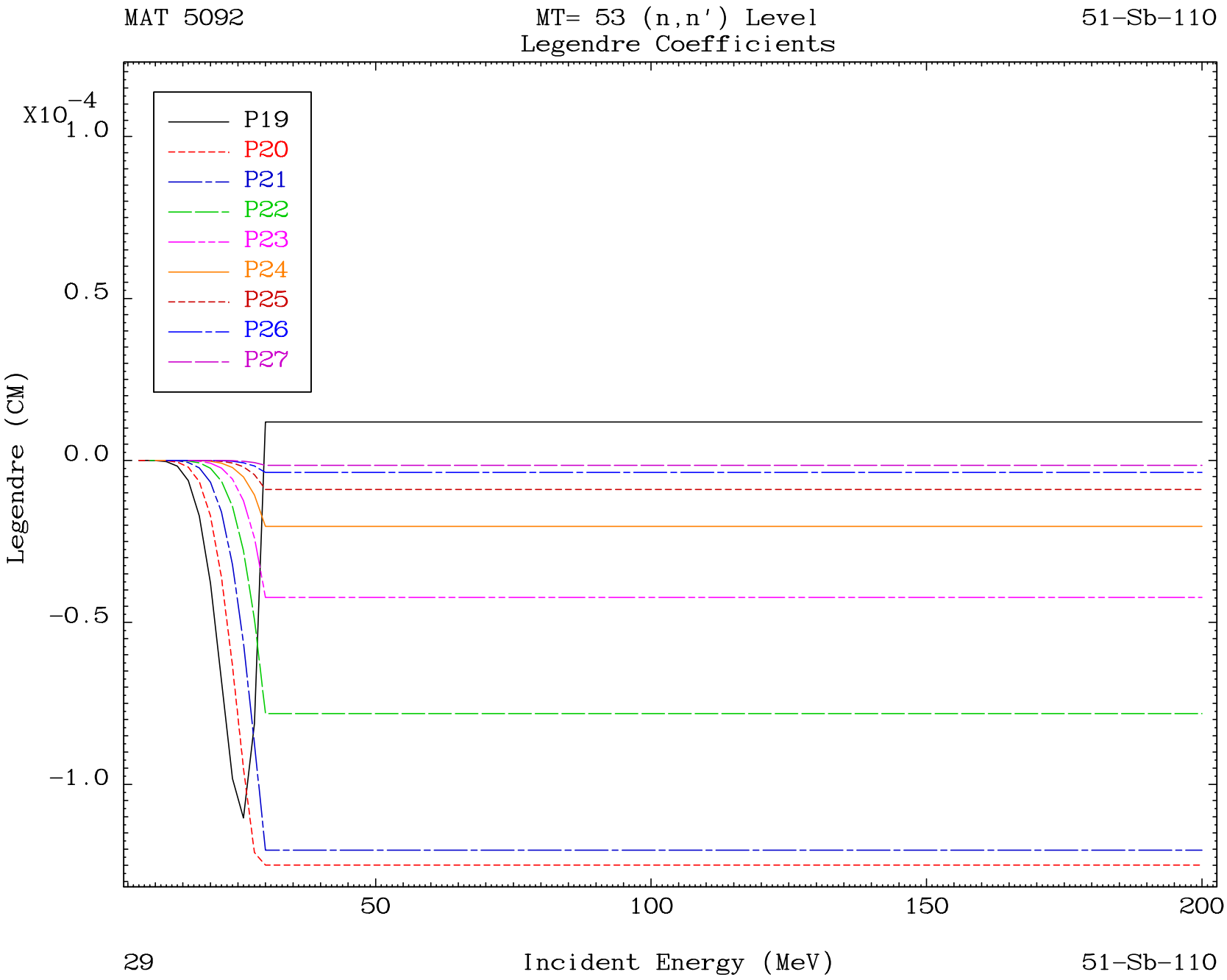

MAT 5092
MT= 52 (n,n') Level
Legendre Coefficients
51-Sb-110
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.008
0.006
0.004
0.002
0.000
-0.002
-0.004
Legendre (CM)
0
50
100
150
200
24
Incident Energy (MeV)
51-Sb-110

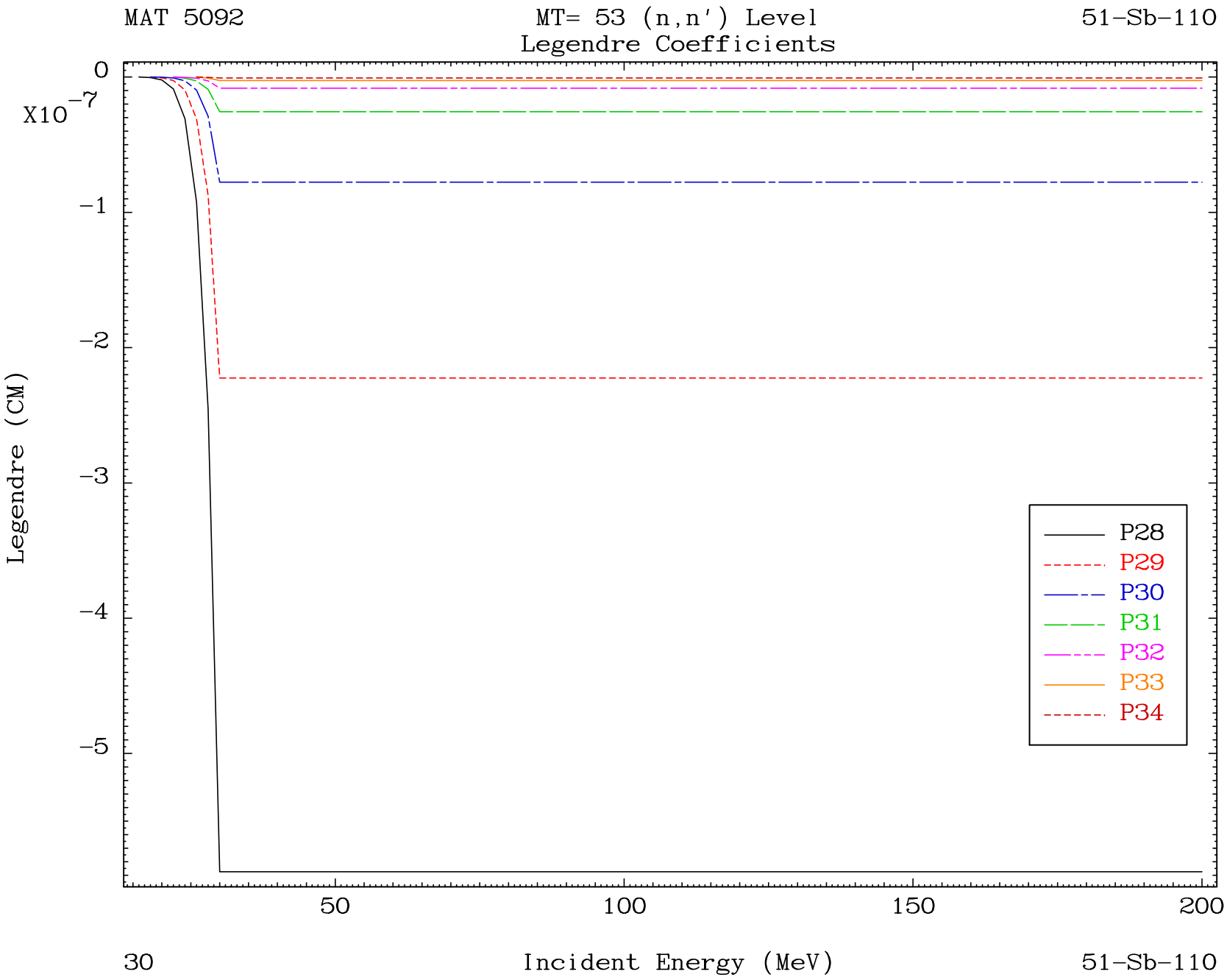

MAT 5092
MT= 52 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-4
0.0
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P19
P20
P21
P22
P23
P24
P25
P26
P27
25
51-Sb-110

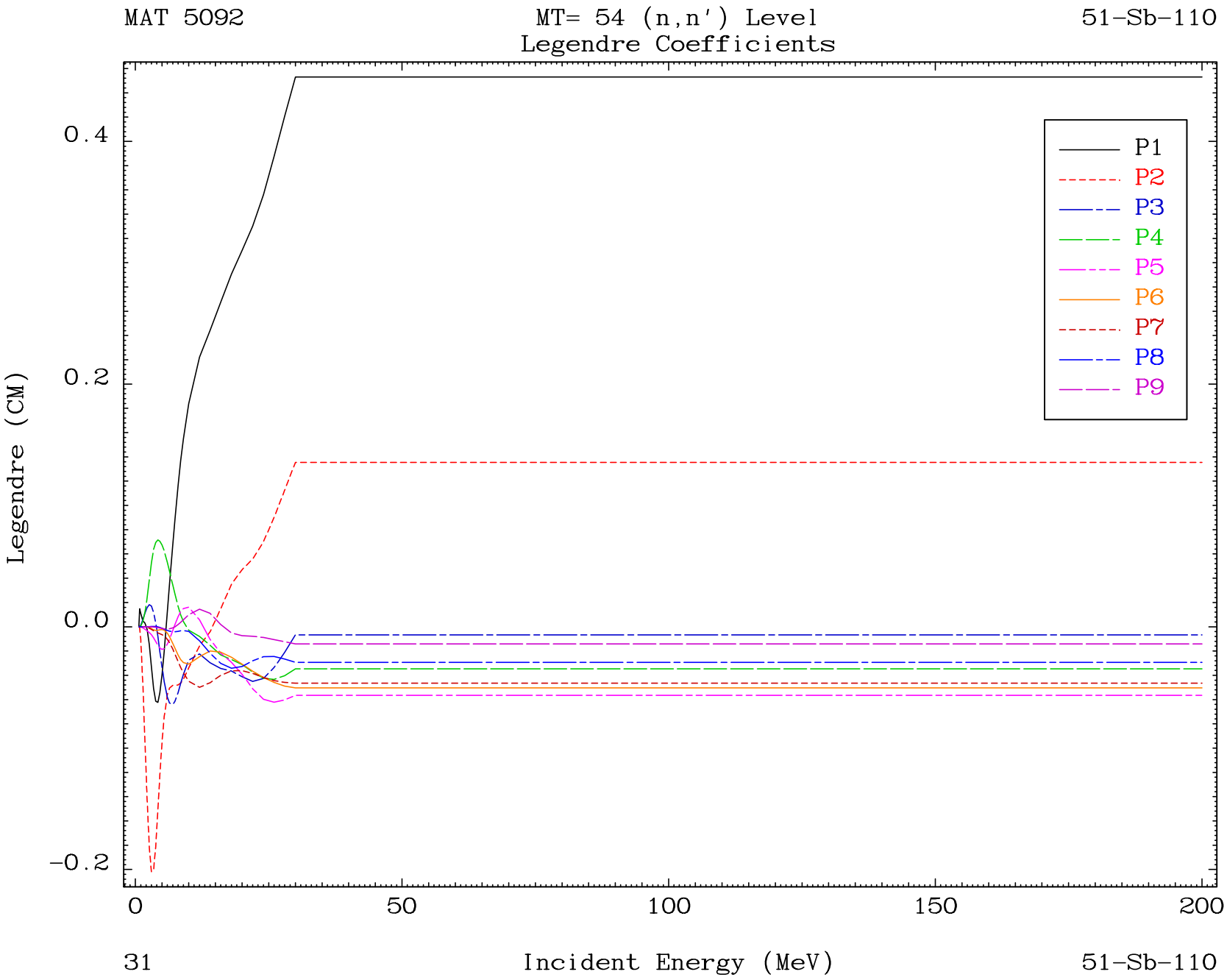

MAT 5092
MT= 52 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-7
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P28
P29
P30
P31
P32
P33
P34
26
51-Sb-110

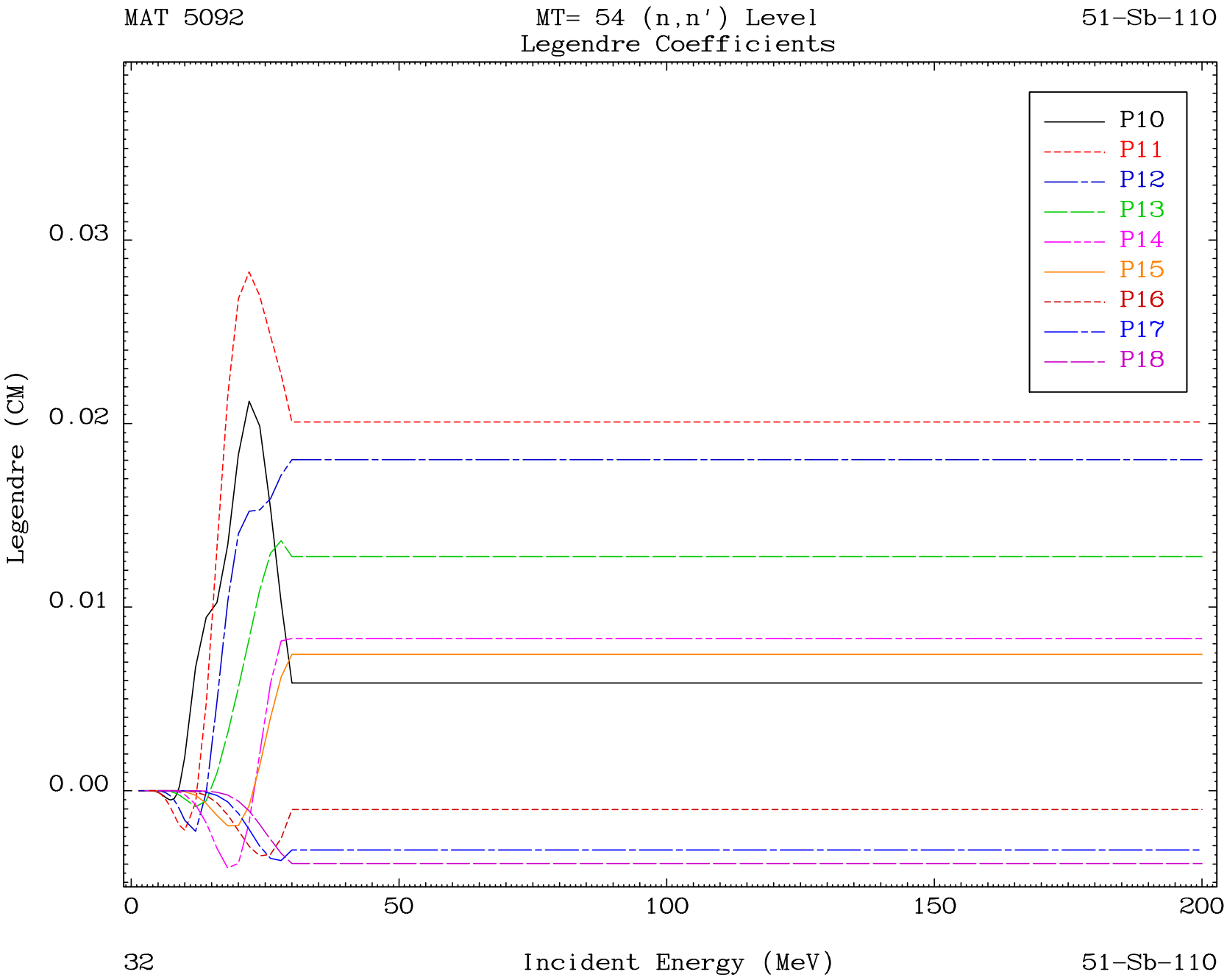

MAT 5092
MT= 53 (n,n') Level
Legendre Coefficients
51-Sb-110
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
27
Incident Energy (MeV)
51-Sb-110

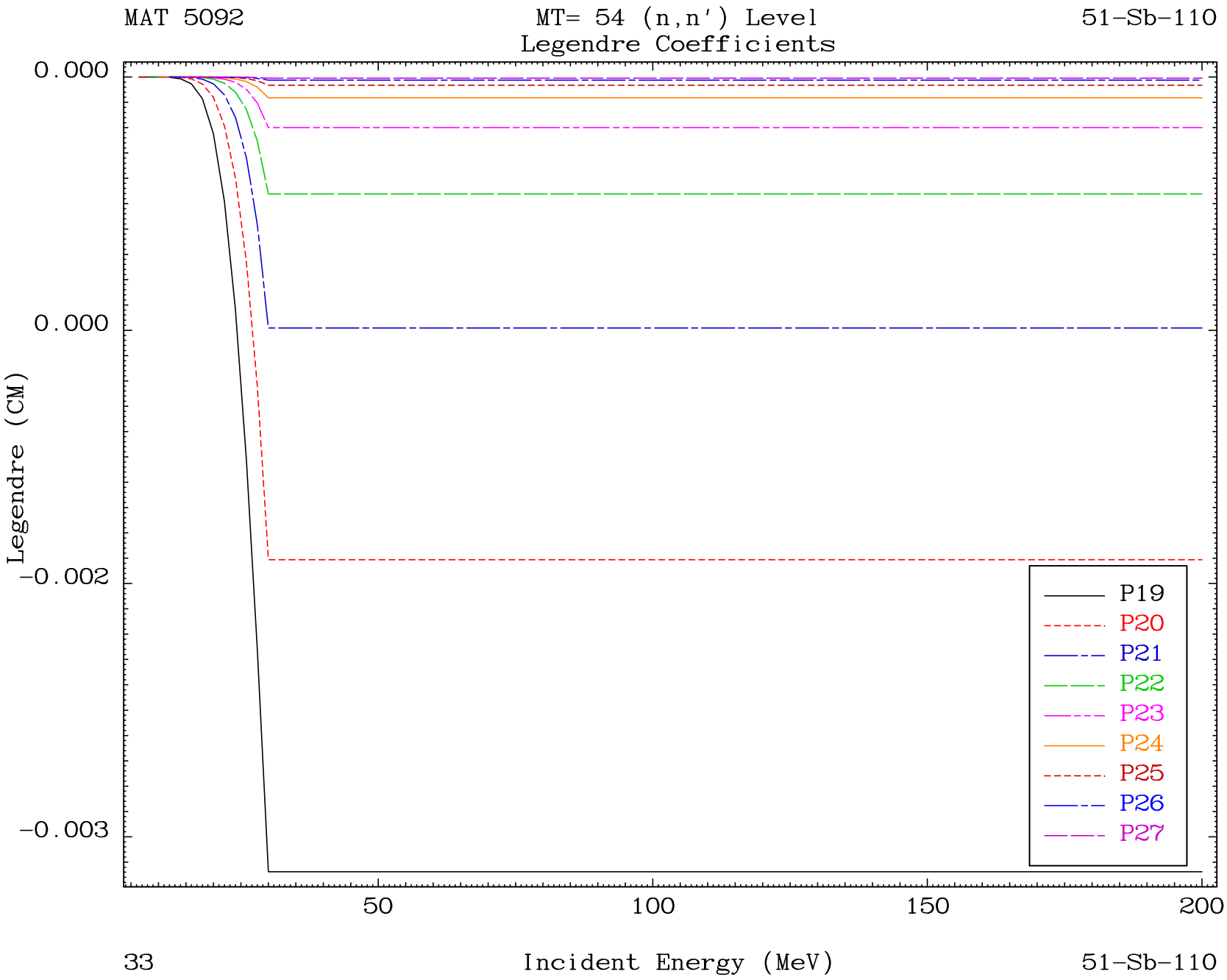

MAT 5092
MT= 53 (n,n') Level
Legendre Coefficients
51-Sb-110
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.008
0.004
0.000
-0.004
-0.008
Legendre (CM)
0
50
100
150
200
28
Incident Energy (MeV)
51-Sb-110

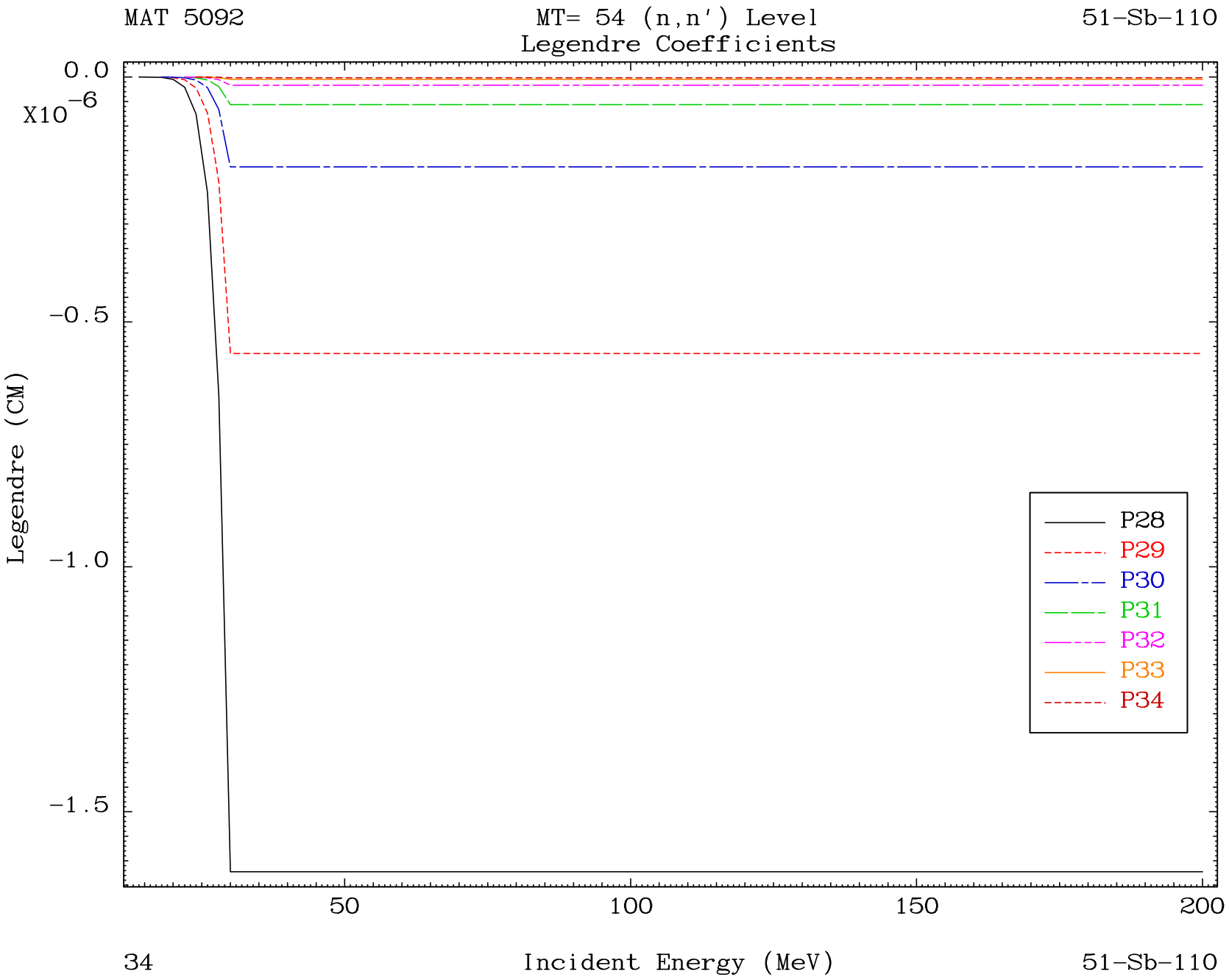

MAT 5092
MT= 53 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-4
1.0
0.5
0.0
-0.5
-1.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
29
Incident Energy (MeV)
51-Sb-110

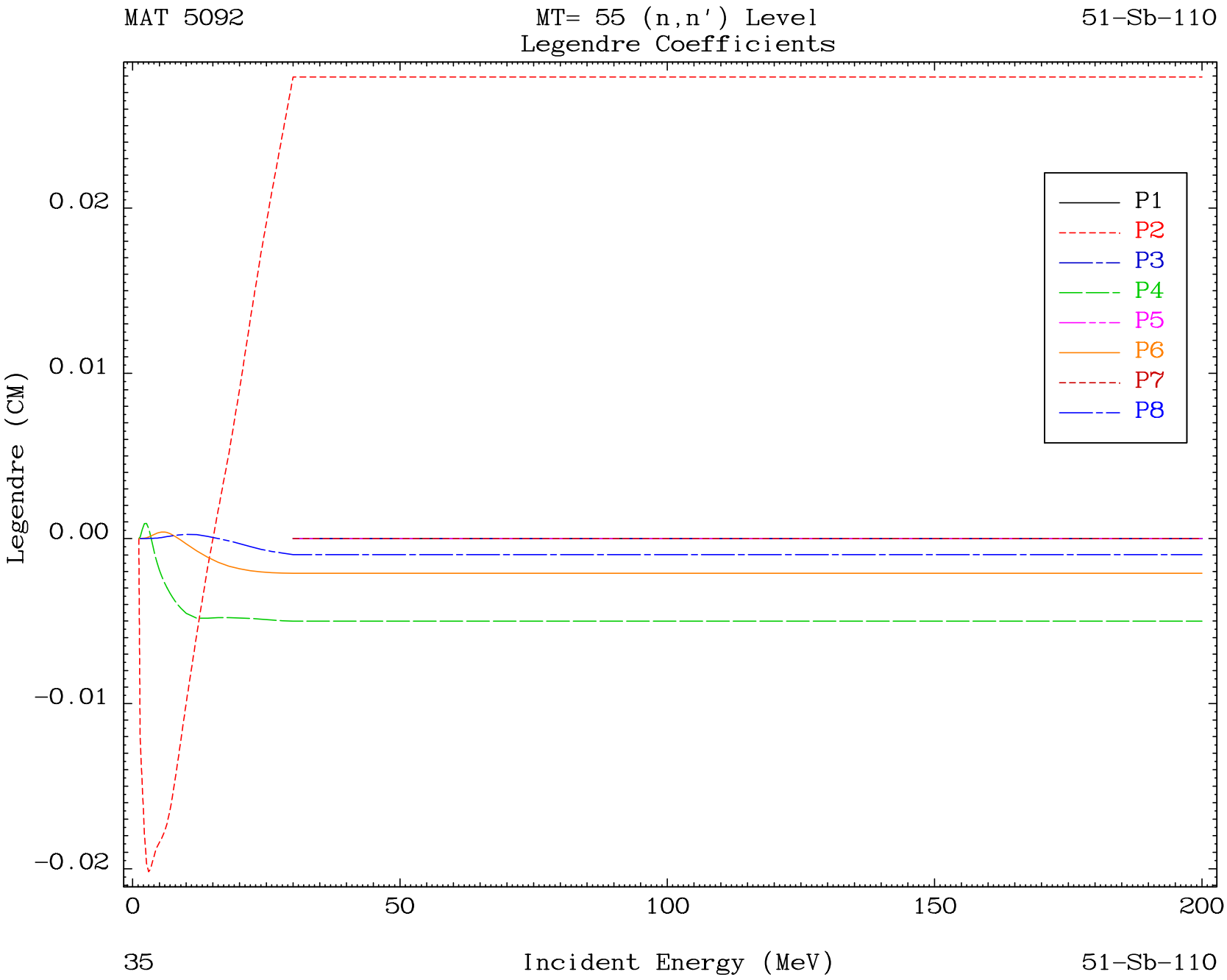

MAT 5092
MT= 53 (n,n') Level
Legendre Coefficients
51-Sb-110
0
X10^-7
-1
-2
-3
-4
-5
Legendre (CM)
50
100
150
200
30
Incident Energy (MeV)
51-Sb-110
P28
P29
P30
P31
P32
P33
P34

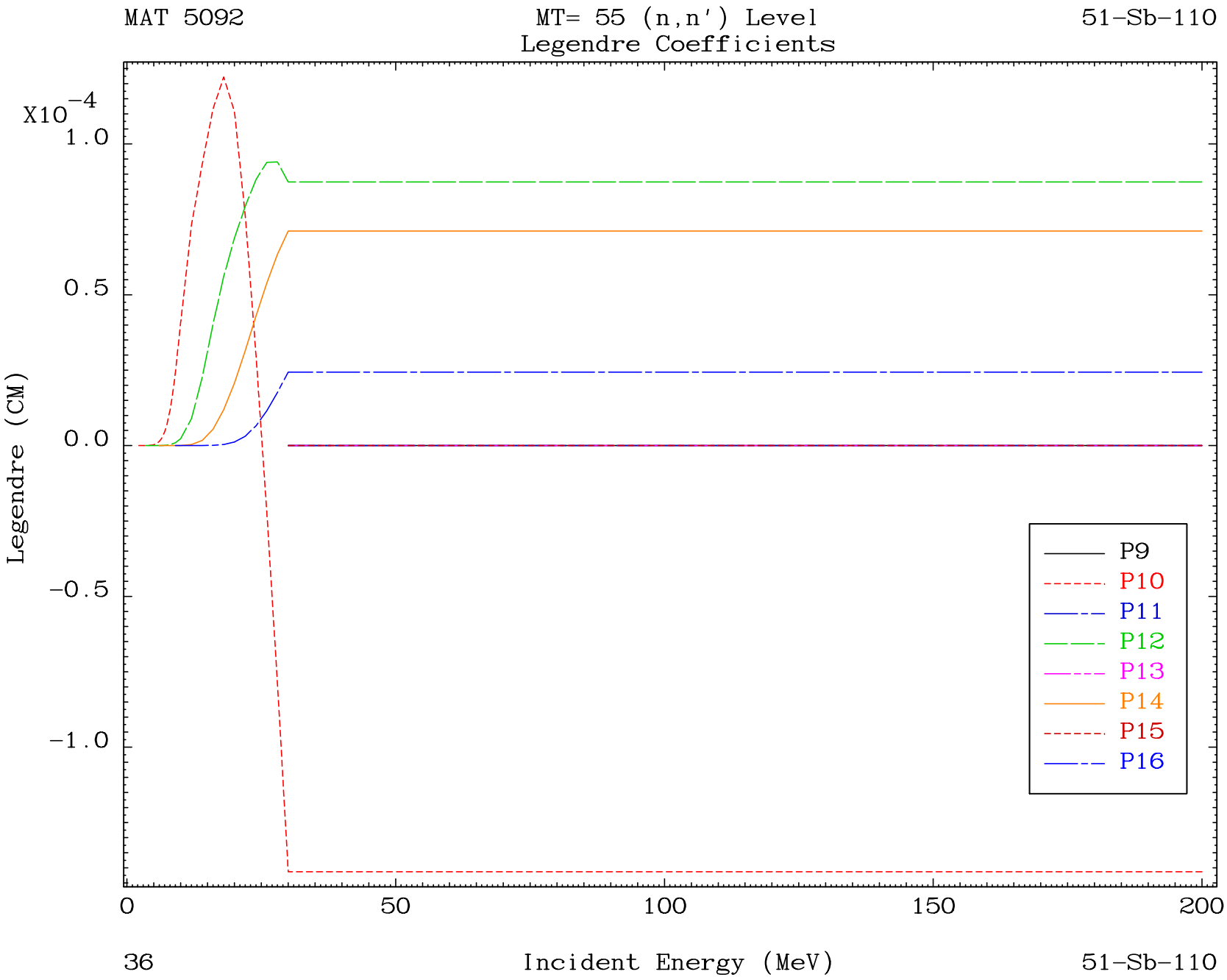

MAT 5092
MT= 54 (n,n') Level
Legendre Coefficients
51-Sb-110
0.4
0.2
0.0
-0.2
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P1
P2
P3
P4
P5
P6
P7
P8
P9
31
51-Sb-110

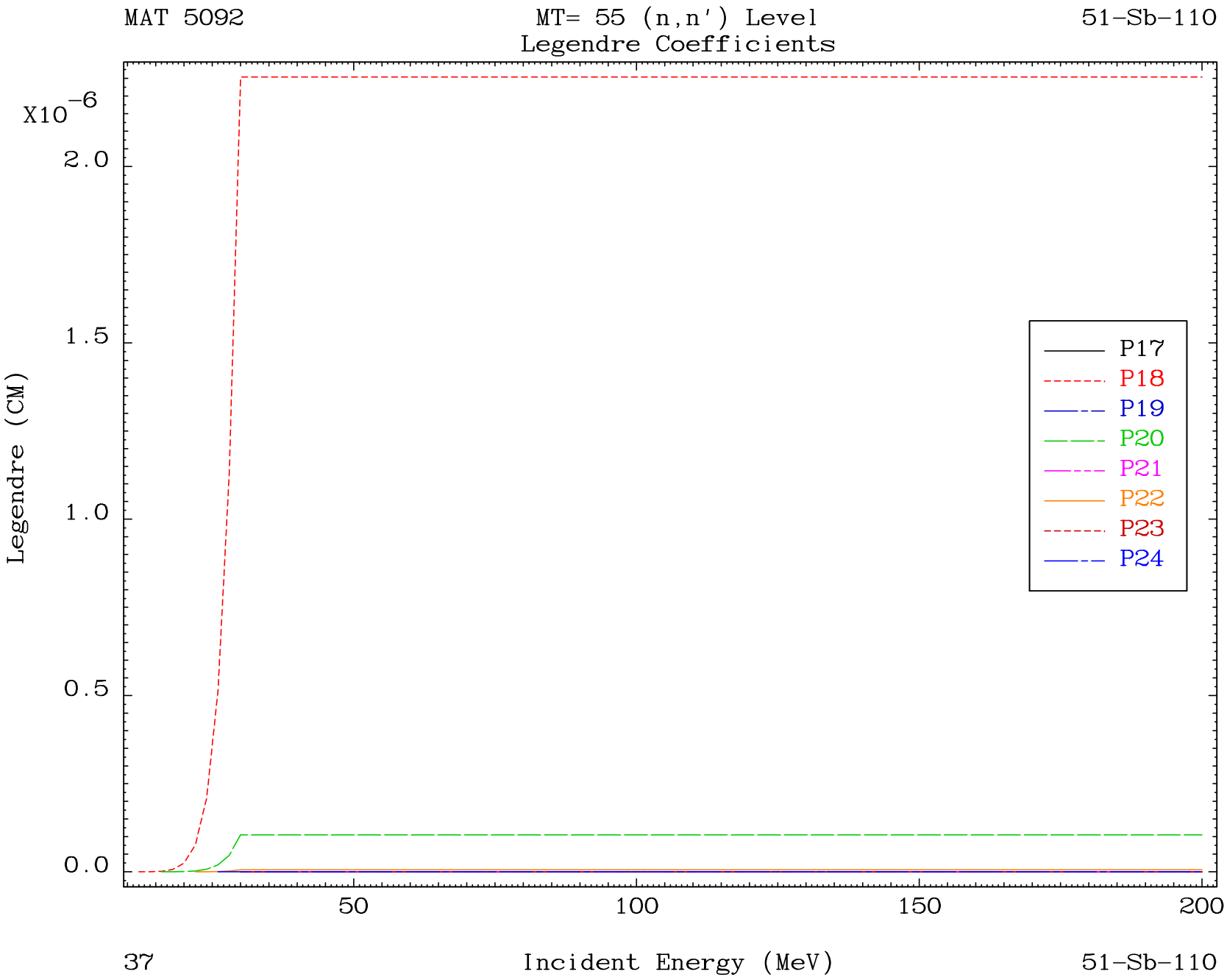

MAT 5092
MT= 54 (n,n') Level
Legendre Coefficients
51-Sb-110
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
32
Incident Energy (MeV)
51-Sb-110

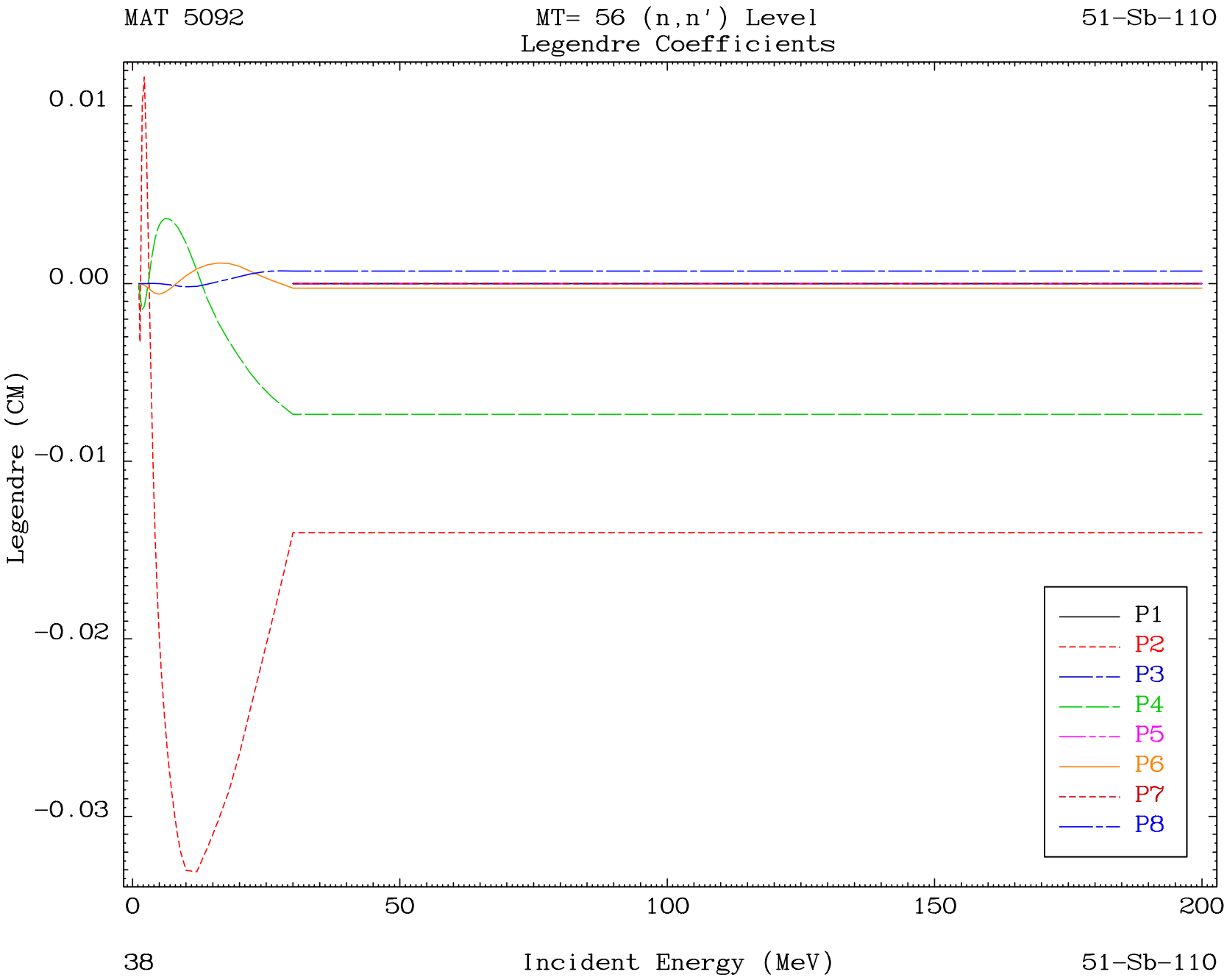

MAT 5092
MT= 54 (n,n') Level
Legendre Coefficients
51-Sb-110
0.000
0.000
-0.002
-0.003
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P19
P20
P21
P22
P23
P24
P25
P26
P27
33
51-Sb-110

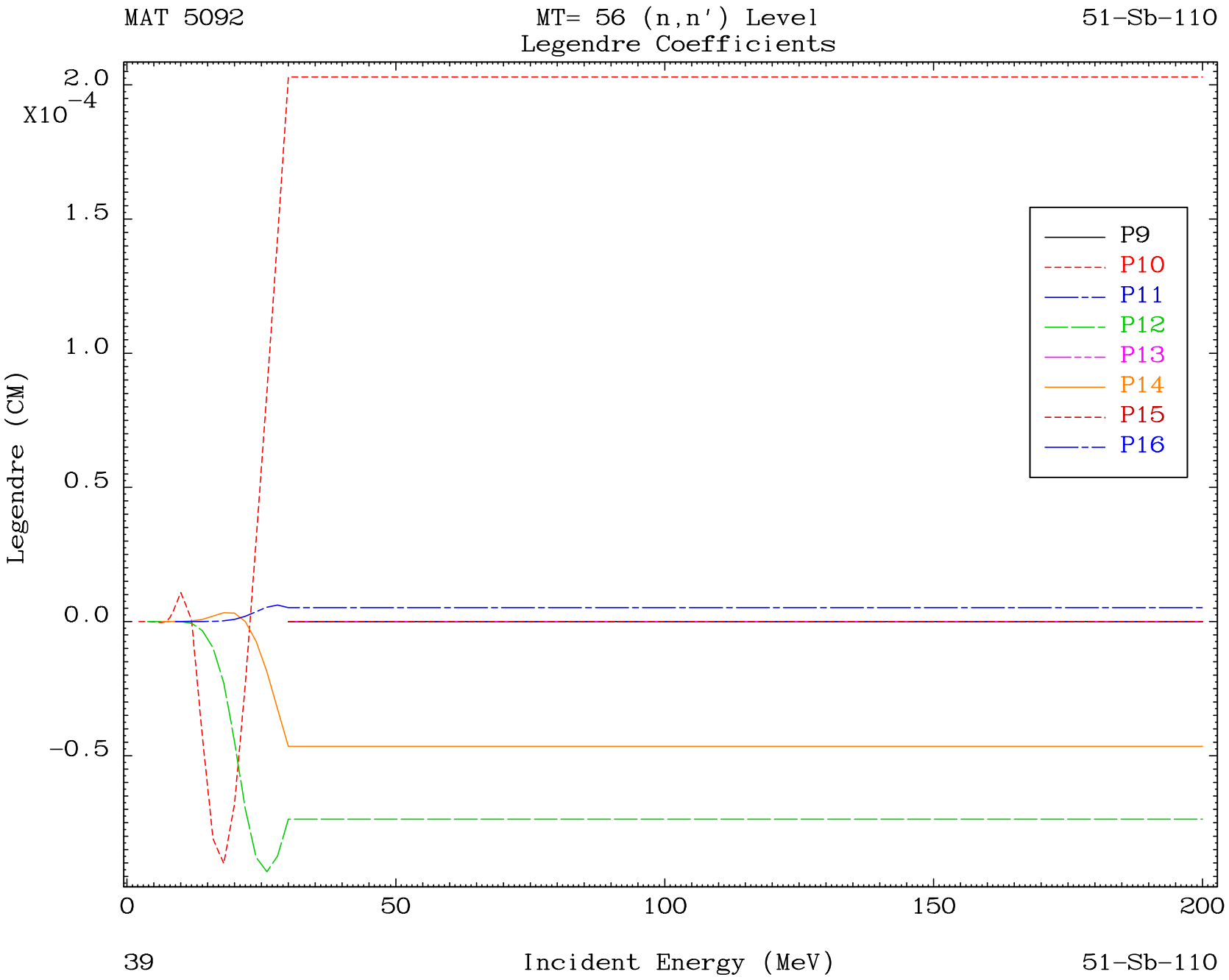

MAT 5092
MT= 54 (n,n') Level
Legendre Coefficients
51-Sb-110
0.0
X10^-6
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P28
P29
P30
P31
P32
P33
P34
34
51-Sb-110

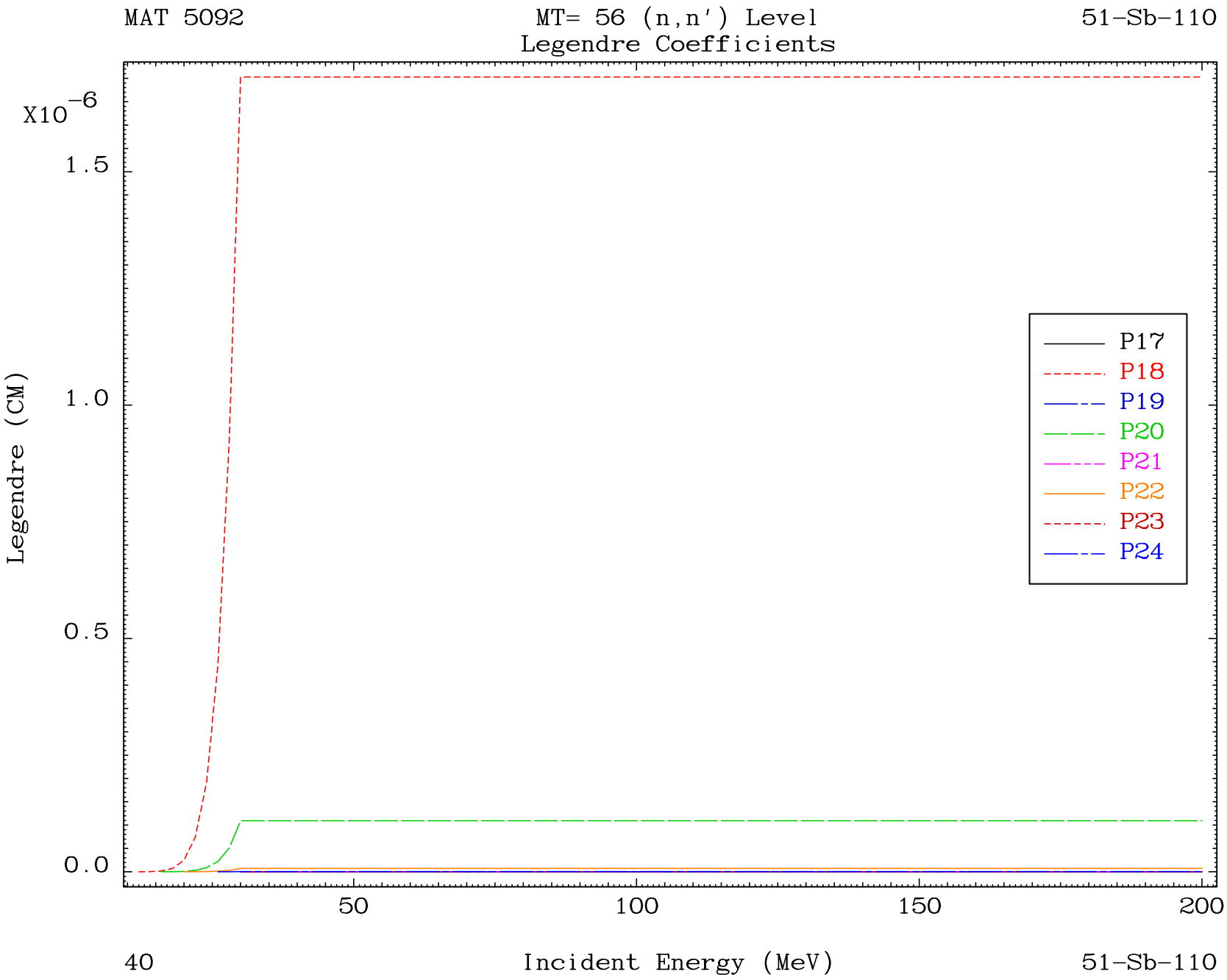

MAT 5092
MT= 55 (n,n') Level
Legendre Coefficients
51-Sb-110
0.02
0.01
0.00
-0.01
-0.02
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P1
P2
P3
P4
P5
P6
P7
P8
35
51-Sb-110

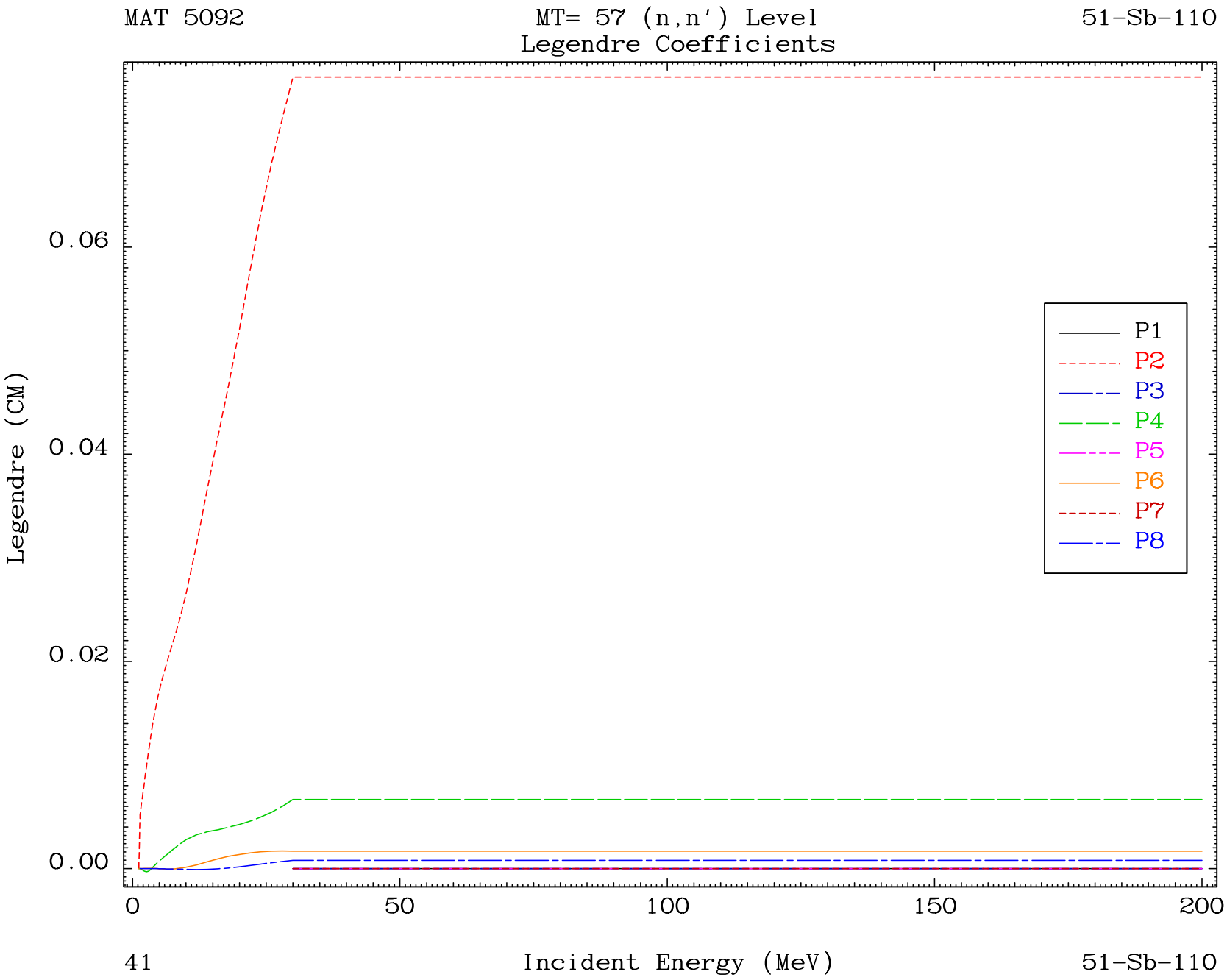

MAT 5092
MT= 55 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-4
1.0
0.5
0.0
-0.5
-1.0
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P9
P10
P11
P12
P13
P14
P15
P16
36
51-Sb-110

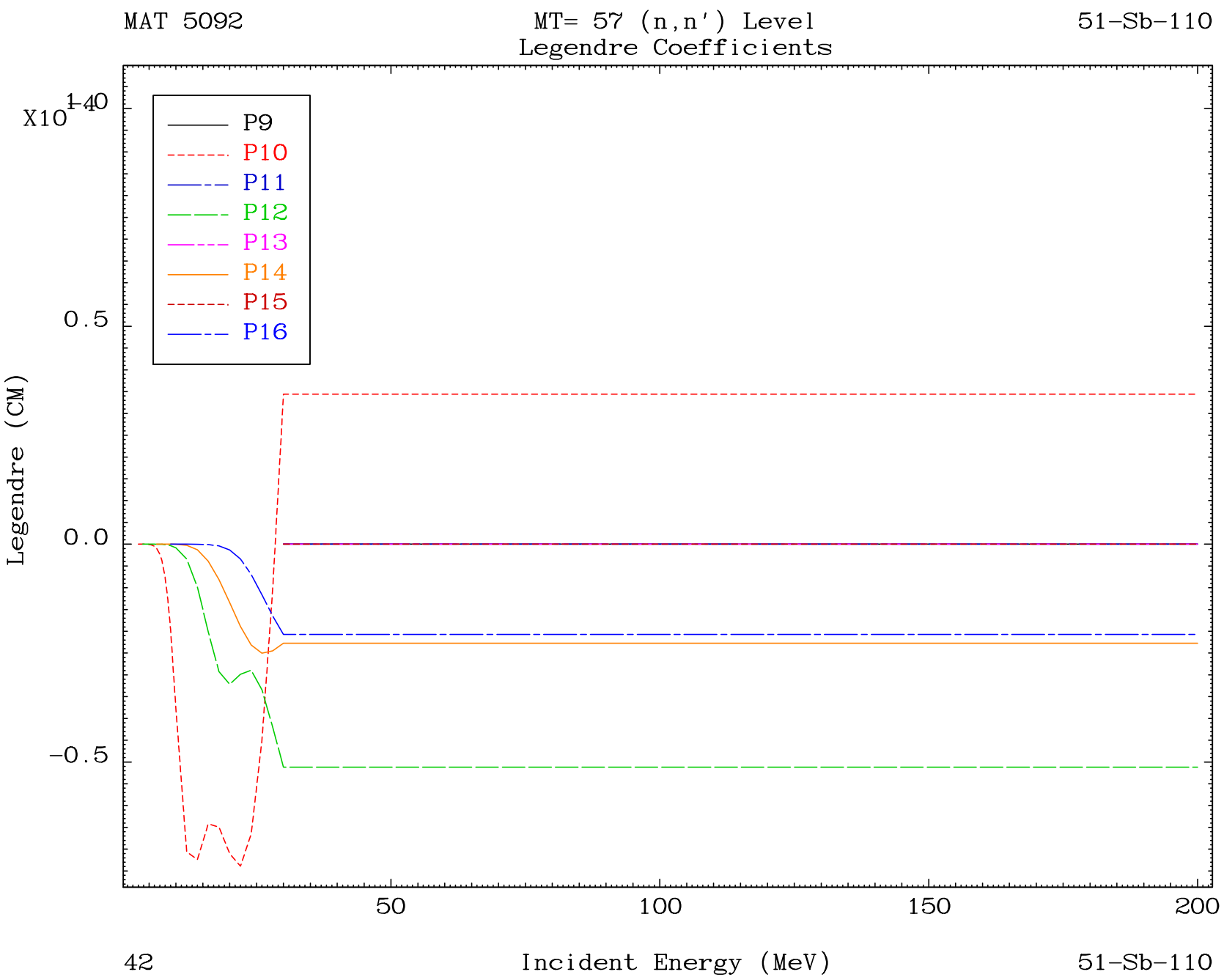

MAT 5092
MT= 55 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-6
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
P17
P18
P19
P20
P21
P22
P23
P24
37
Incident Energy (MeV)
51-Sb-110

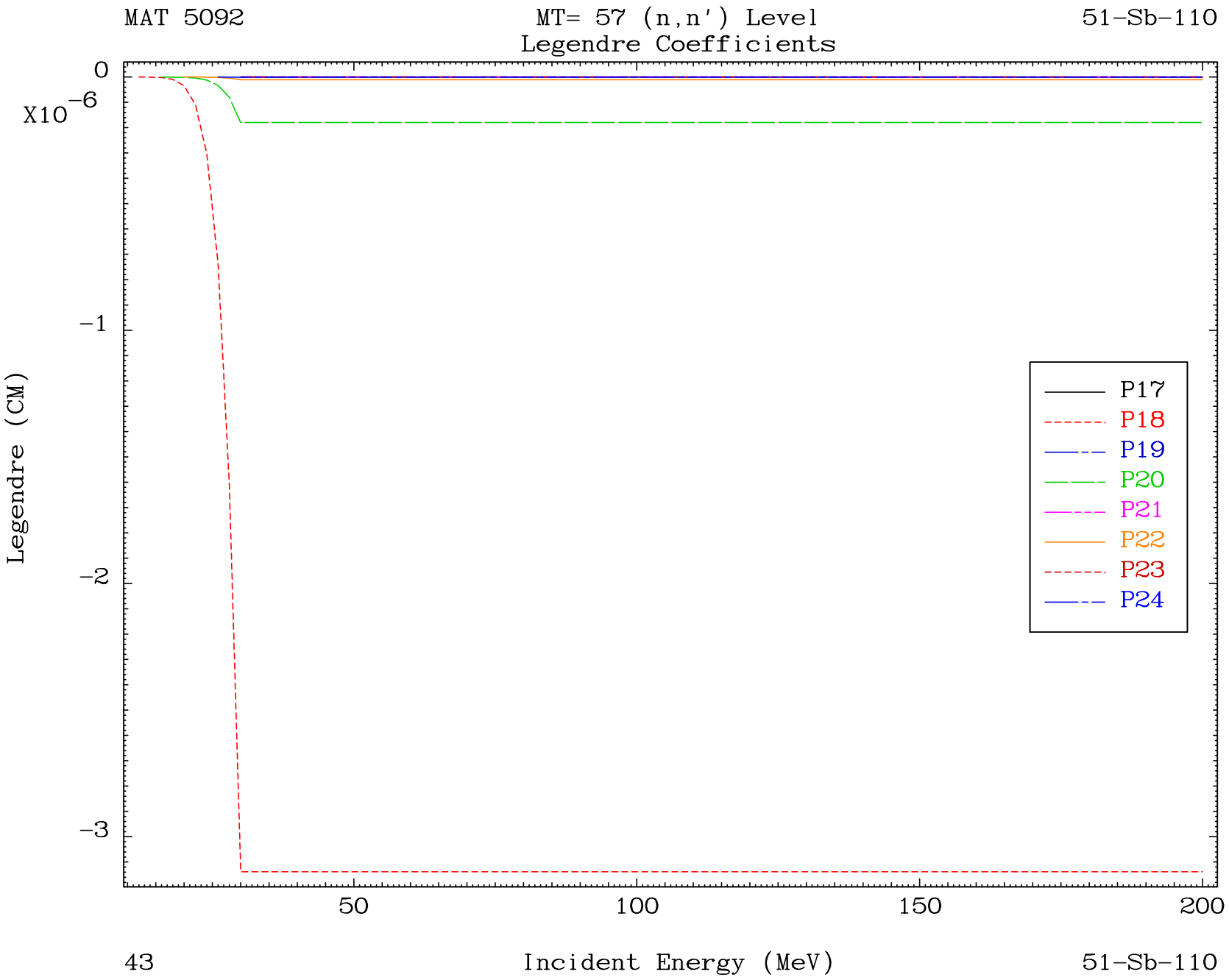

MAT 5092
MT= 56 (n,n') Level
Legendre Coefficients
51-Sb-110
0.01
0.00
-0.01
-0.02
-0.03
Legendre (CM)
0
50
100
150
200
38
Incident Energy (MeV)
51-Sb-110
P1
P2
P3
P4
P5
P6
P7
P8

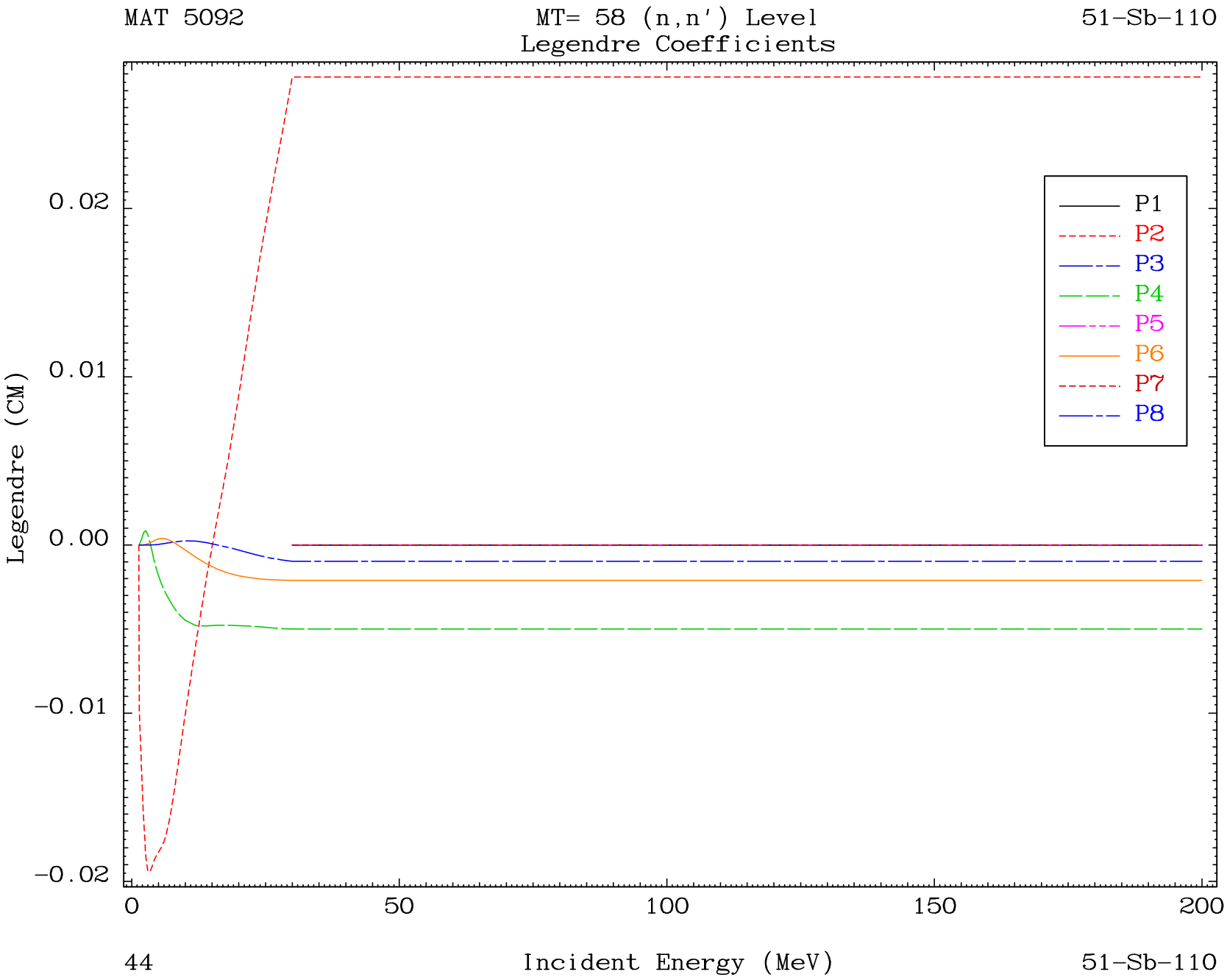

MAT 5092
MT= 56 (n,n') Level
Legendre Coefficients
51-Sb-110
2.0
X10^-4
1.5
1.0
0.5
0.0
-0.5
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
39
Incident Energy (MeV)
51-Sb-110

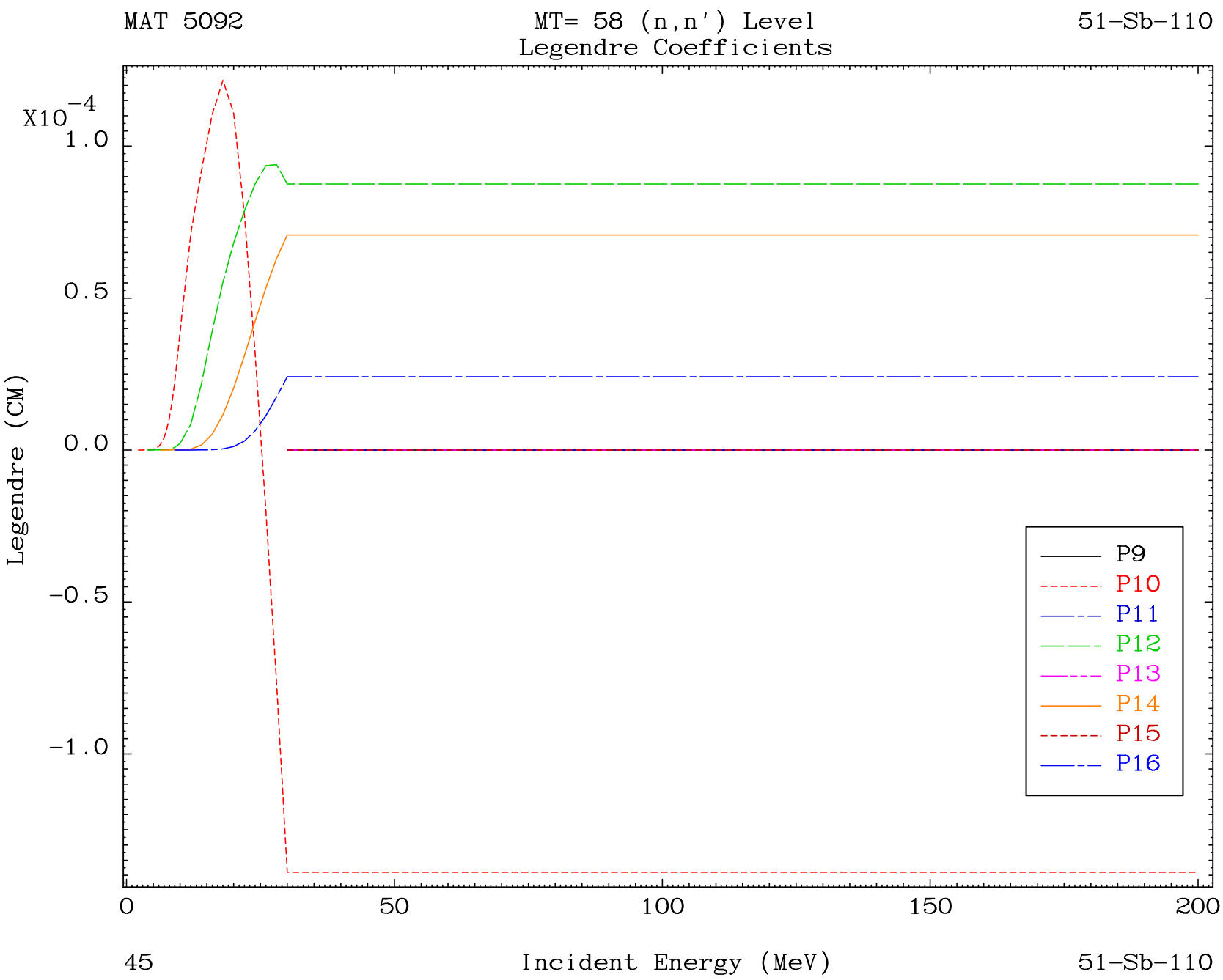

MAT 5092
MT= 56 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-6
1.5
1.0
0.5
0.0
Legendre (CM)
P17
P18
P19
P20
P21
P22
P23
P24
50
100
150
200
40
Incident Energy (MeV)
51-Sb-110

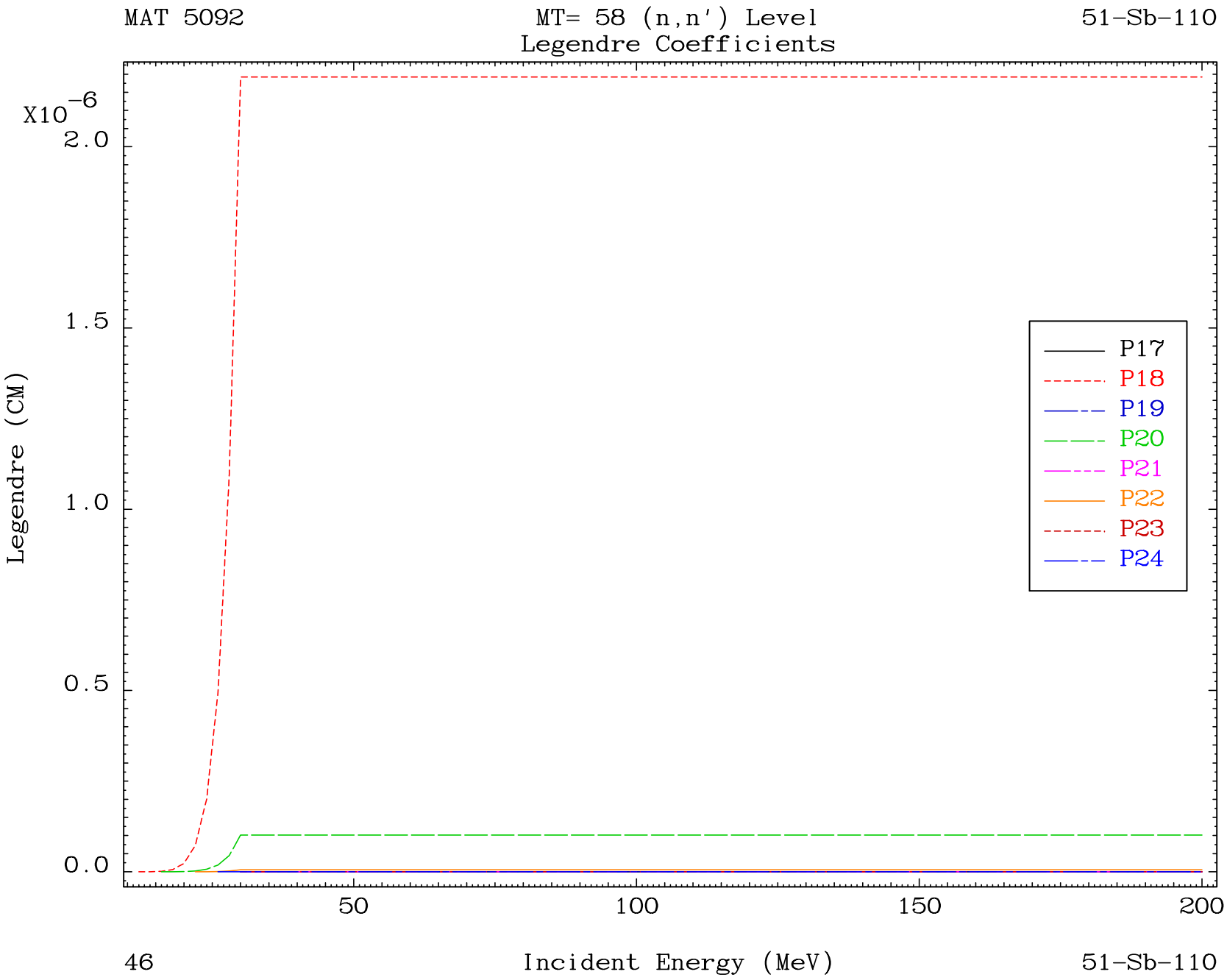

MAT 5092
MT= 57 (n,n') Level
Legendre Coefficients
51-Sb-110
0.06
0.04
0.02
0.00
Legendre (CM)
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
41
Incident Energy (MeV)
51-Sb-110

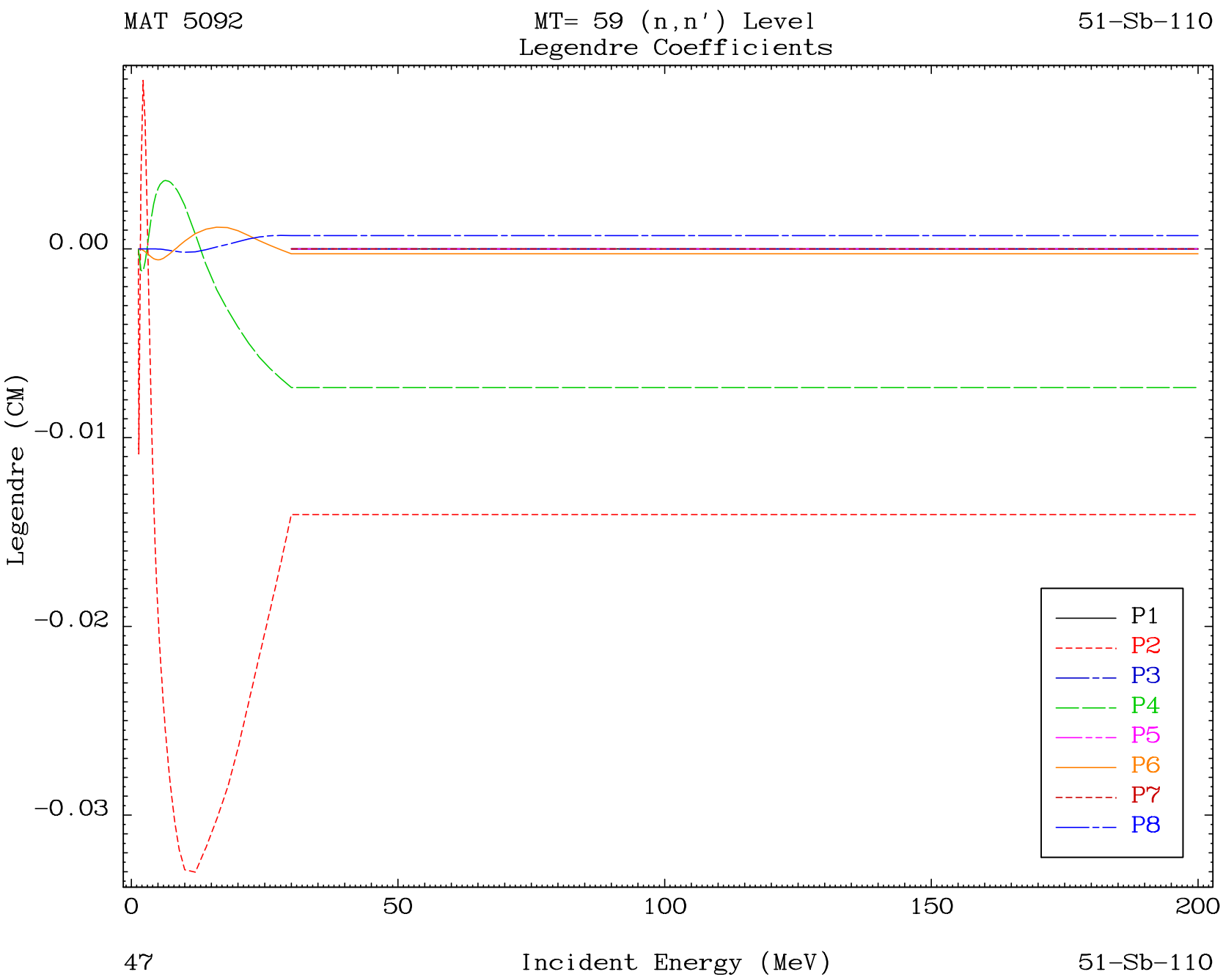

MAT 5092
MT= 57 (n,n') Level
Legendre Coefficients
51-Sb-110
X10-40
P9
P10
P11
P12
P13
P14
P15
P16
0.5
0.0
-0.5
Legendre (CM)
50
100
150
200
42
Incident Energy (MeV)
51-Sb-110

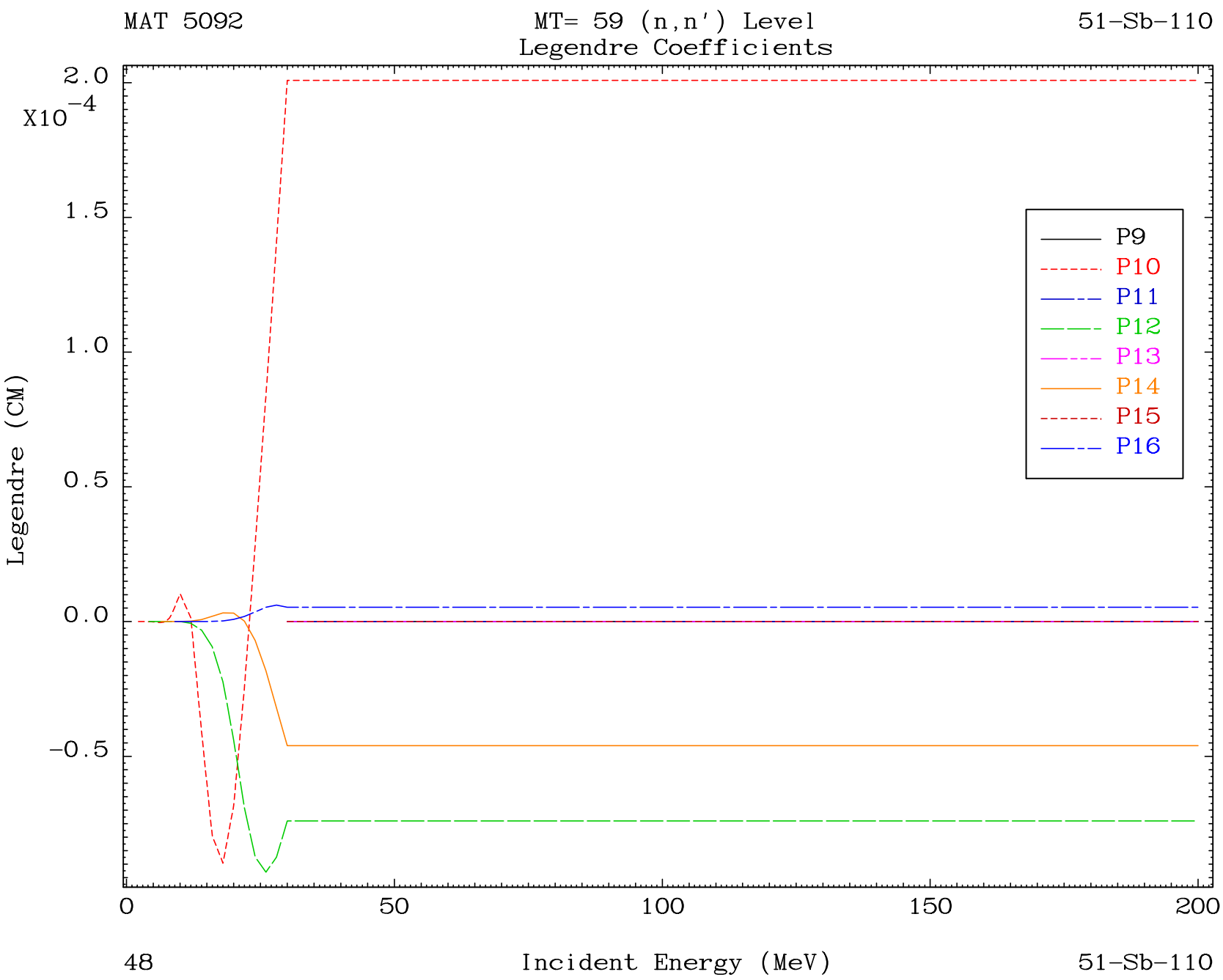

MAT 5092
MT= 57 (n,n') Level
Legendre Coefficients
51-Sb-110
0
X10^-6
-1
-2
-3
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P17
P18
P19
P20
P21
P22
P23
P24
43
51-Sb-110

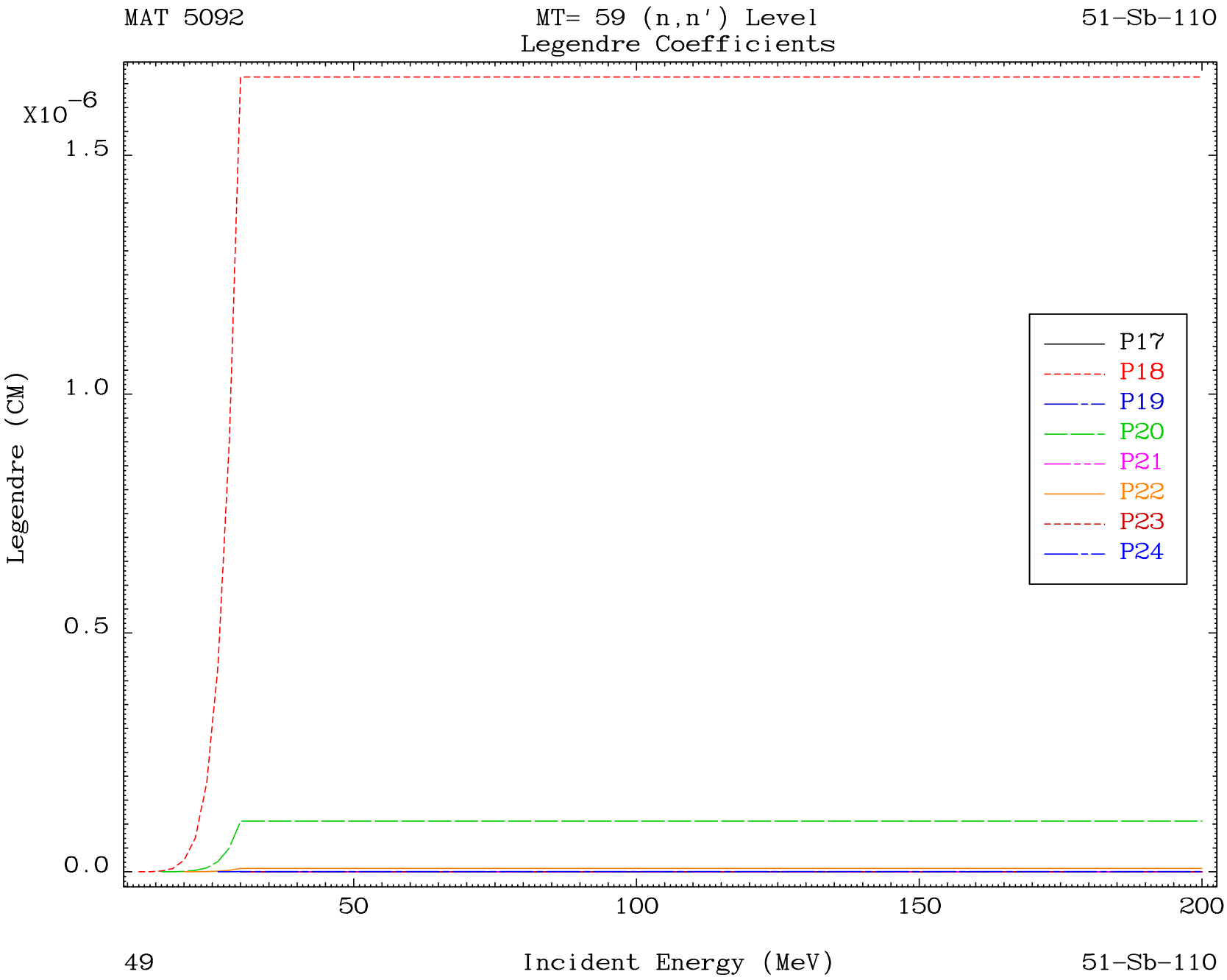

MAT 5092
MT= 58 (n,n') Level
Legendre Coefficients
51-Sb-110
0.02
0.01
0.00
-0.01
-0.02
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P1
P2
P3
P4
P5
P6
P7
P8
44
51-Sb-110

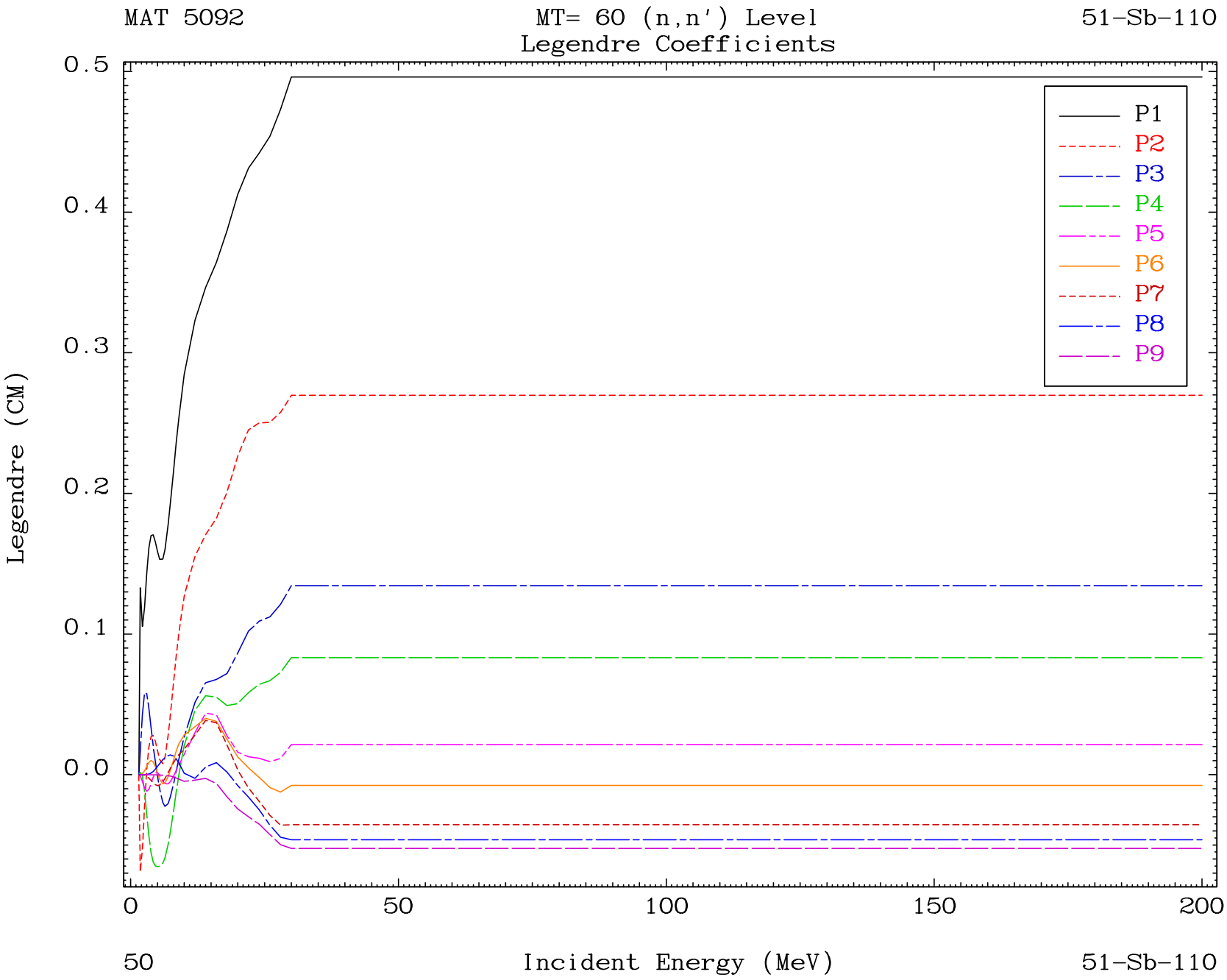

MAT 5092
MT= 58 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-4
1.0
0.5
0.0
-0.5
-1.0
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P9
P10
P11
P12
P13
P14
P15
P16
45
51-Sb-110

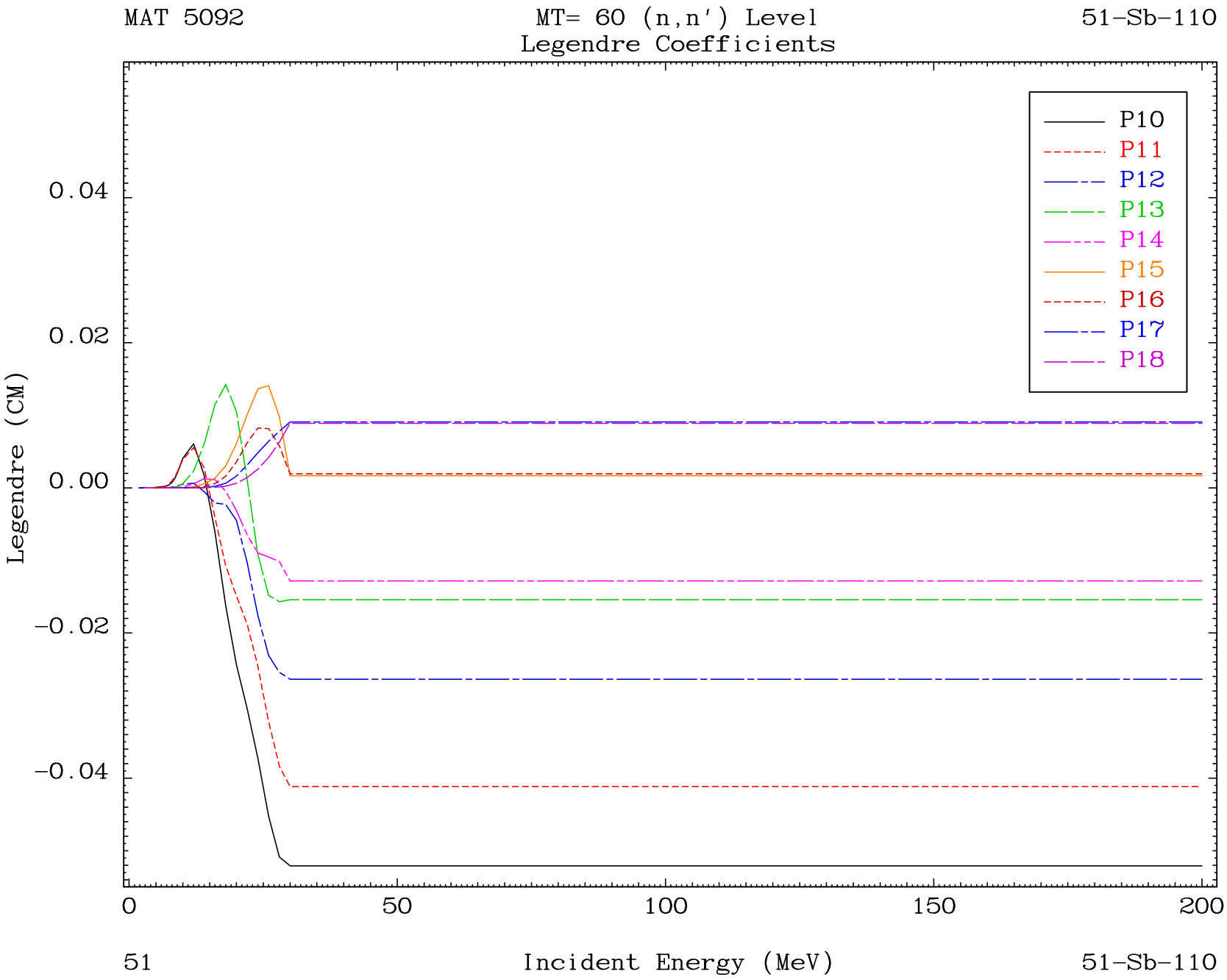

MAT 5092
MT= 58 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-6
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P17
P18
P19
P20
P21
P22
P23
P24
46
51-Sb-110

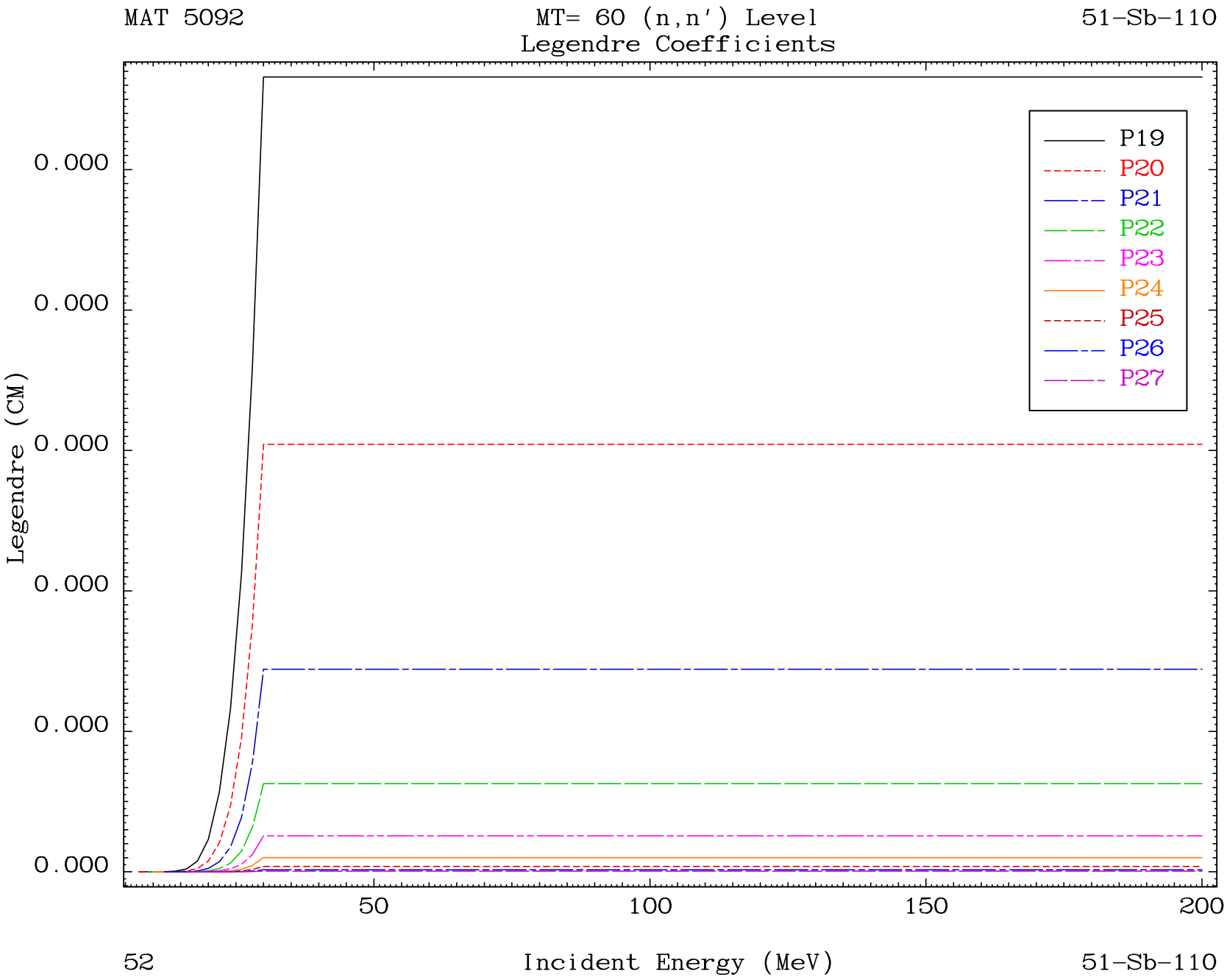

MAT 5092
MT= 59 (n,n') Level
Legendre Coefficients
51-Sb-110
0.00
-0.01
-0.02
-0.03
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P1
P2
P3
P4
P5
P6
P7
P8
47
51-Sb-110

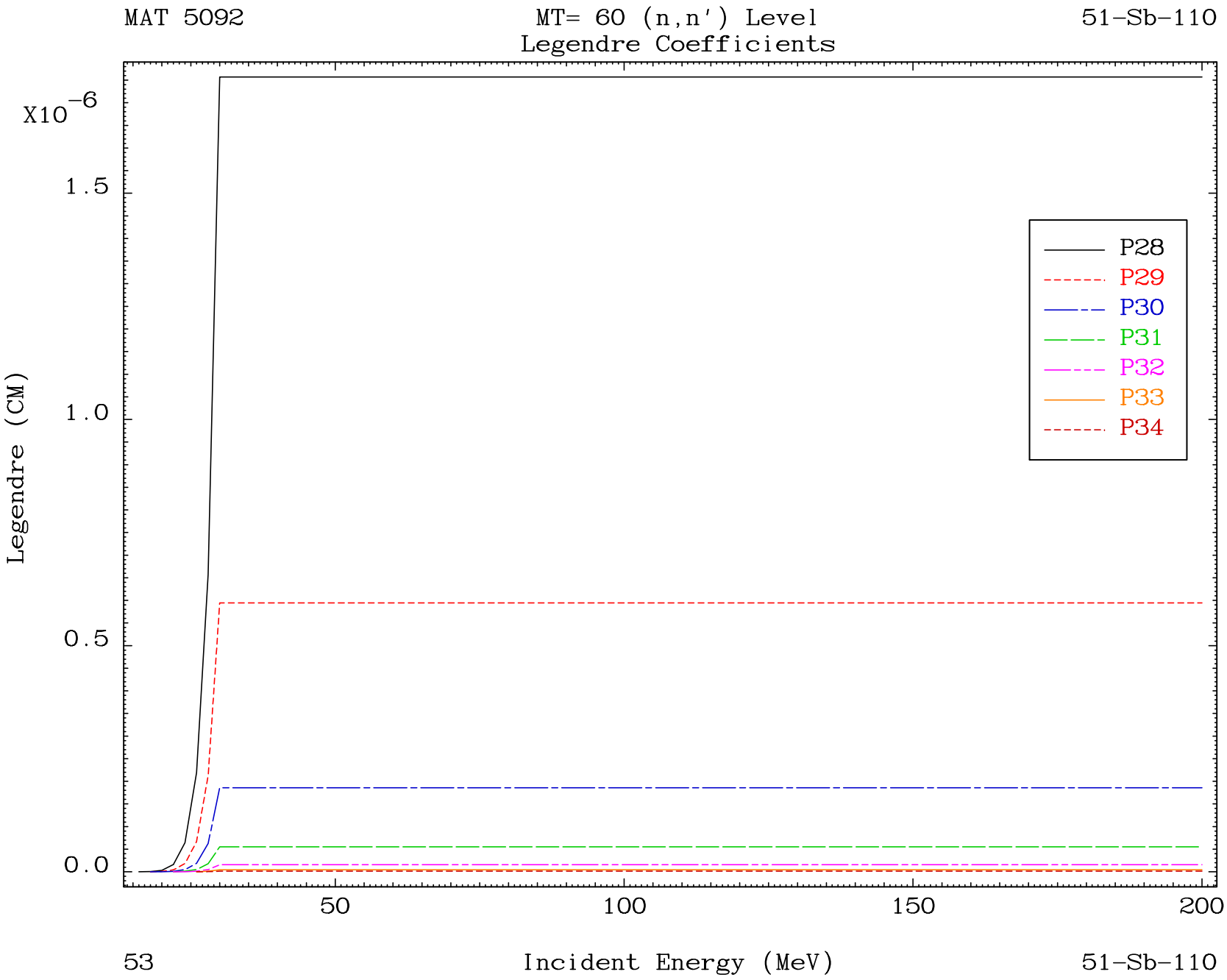

MAT 5092
MT= 59 (n,n') Level
Legendre Coefficients
51-Sb-110
2.0
X10^-4
1.5
1.0
0.5
0.0
-0.5
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P9
P10
P11
P12
P13
P14
P15
P16
48
51-Sb-110

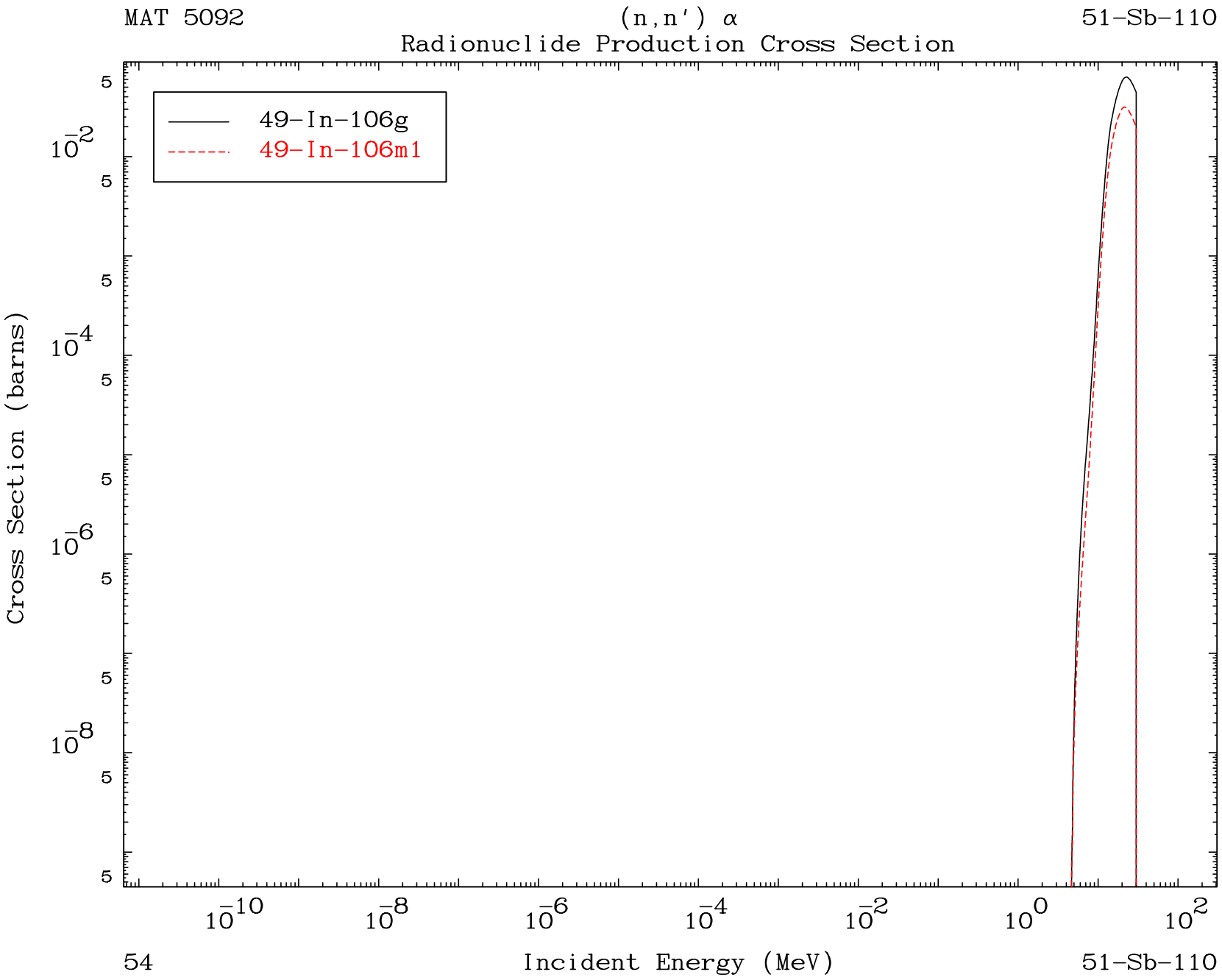

MAT 5092
MT= 59 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-6
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P17
P18
P19
P20
P21
P22
P23
P24
49
51-Sb-110

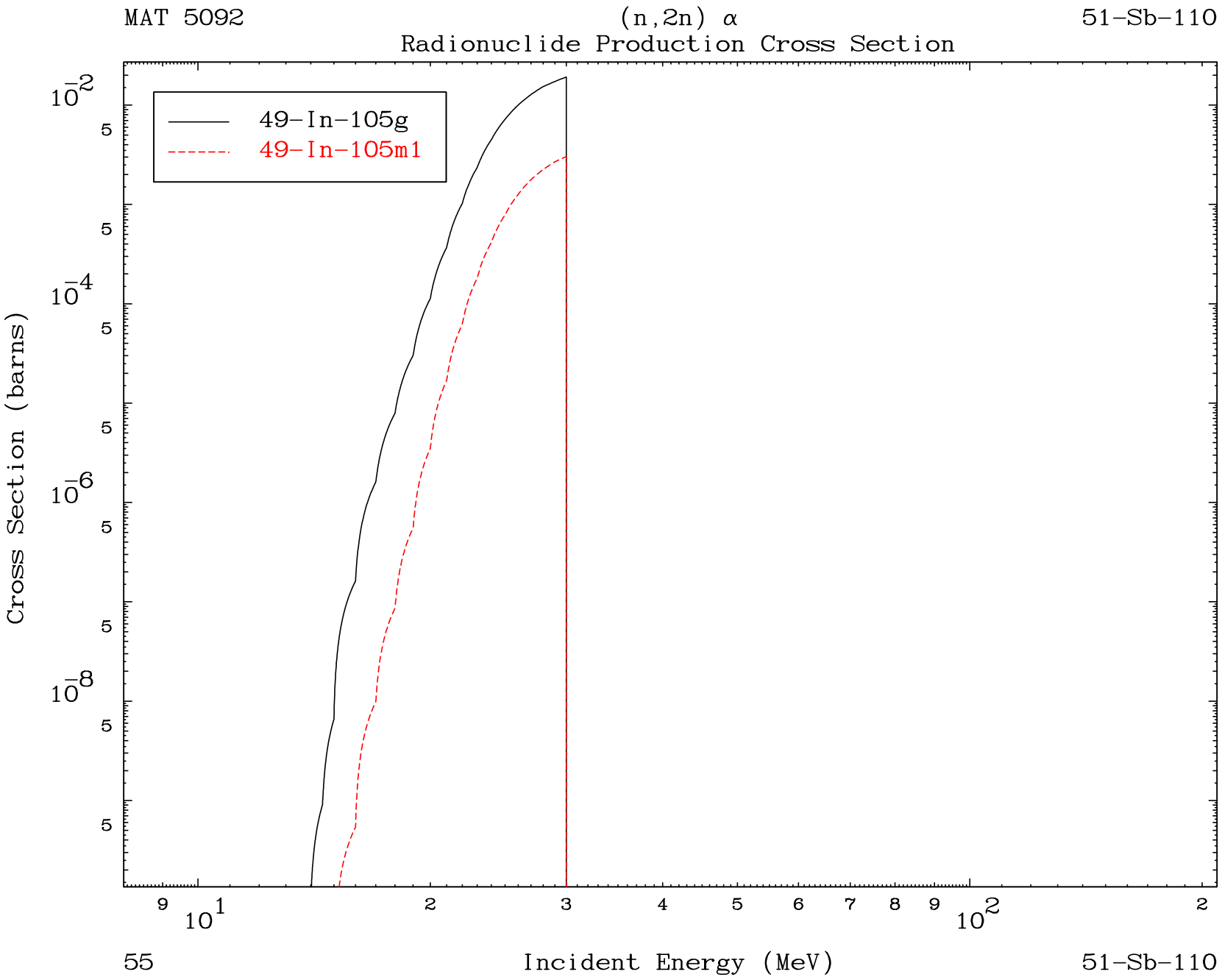

MAT 5092
MT= 60 (n,n') Level
Legendre Coefficients
51-Sb-110
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
50
Incident Energy (MeV)
51-Sb-110

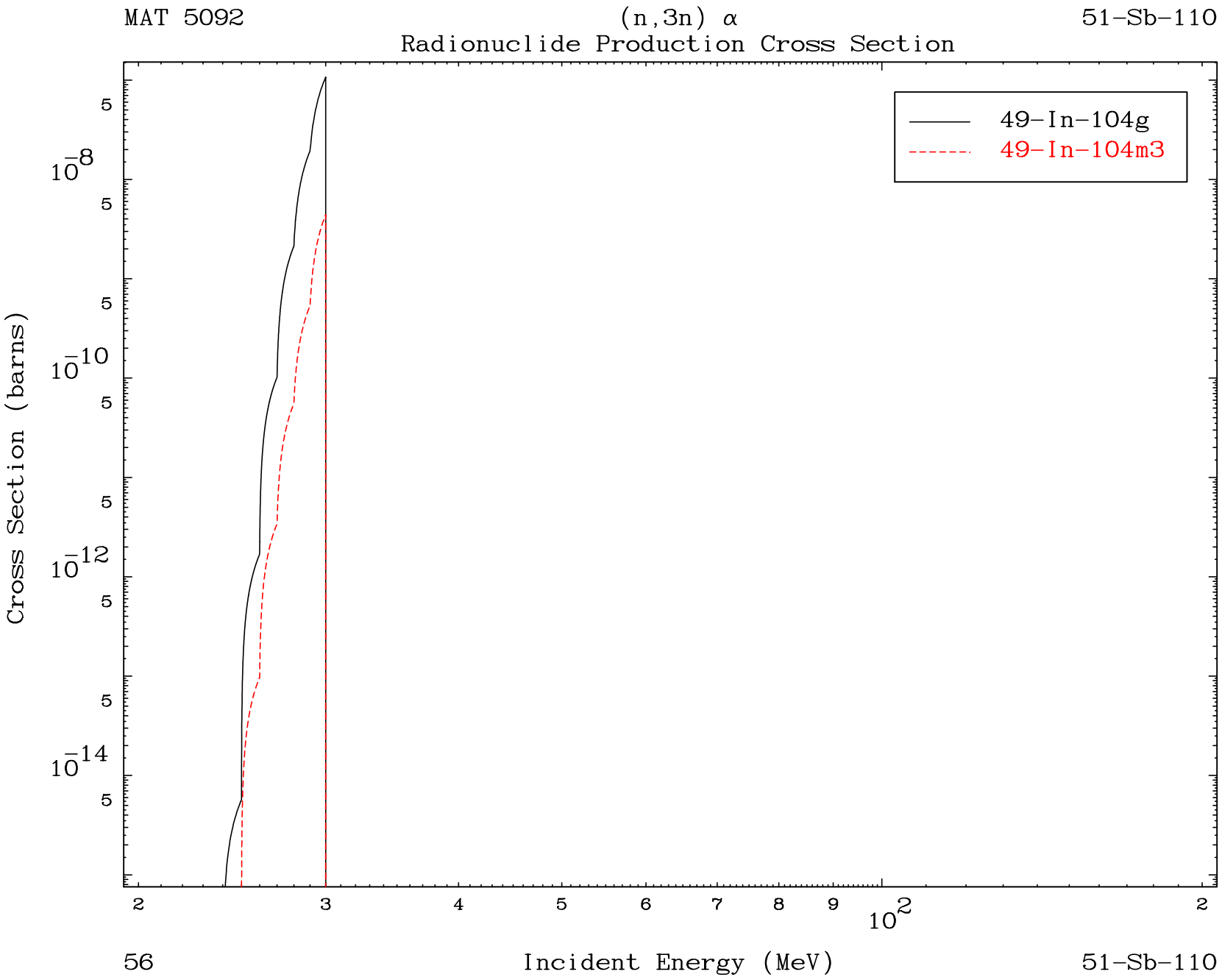

MAT 5092
MT= 60 (n,n') Level
Legendre Coefficients
51-Sb-110
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
51
Incident Energy (MeV)
51-Sb-110

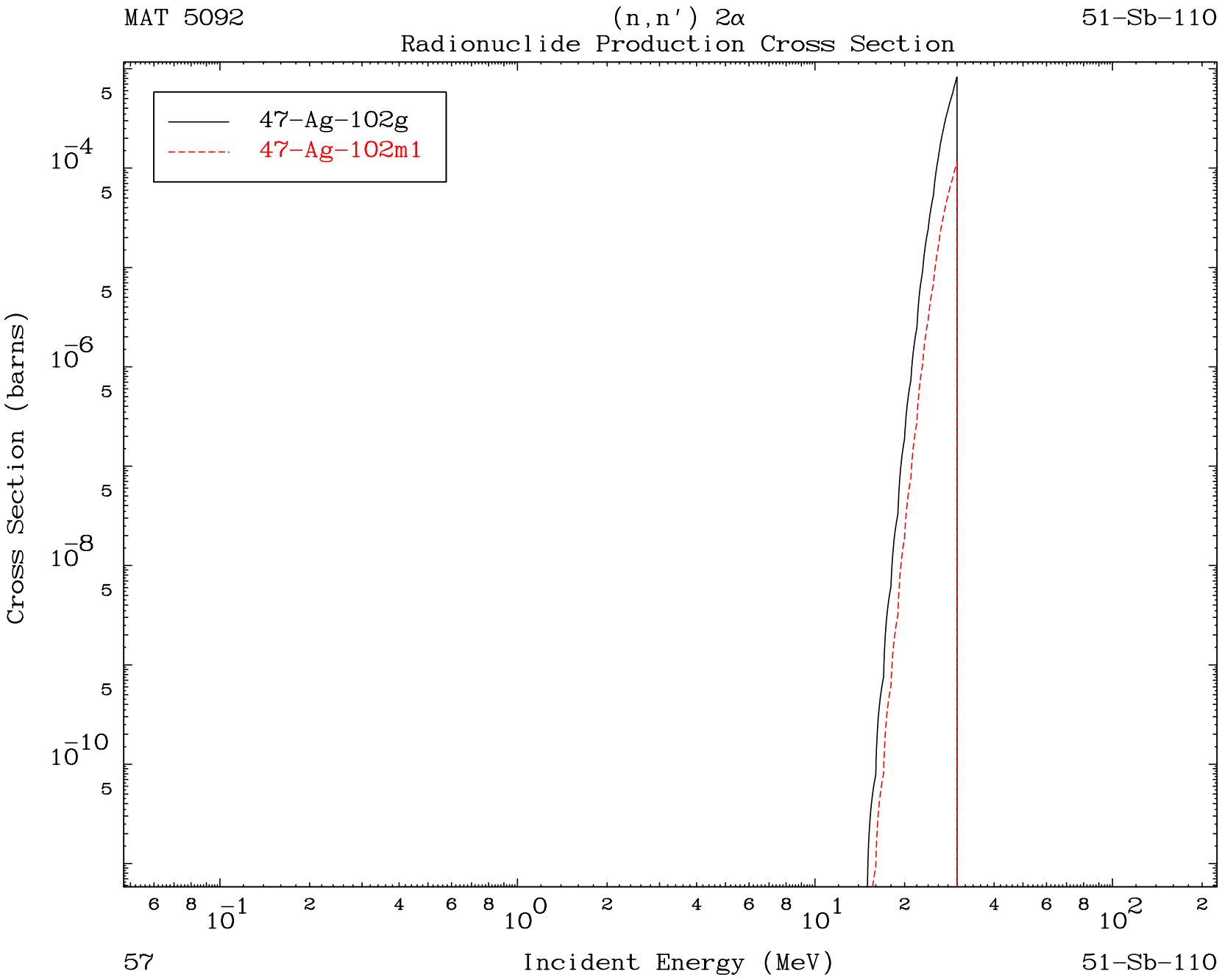

MAT 5092
MT= 60 (n,n') Level
Legendre Coefficients
51-Sb-110
0.000
0.000
0.000
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
52
Incident Energy (MeV)
51-Sb-110
P19
P20
P21
P22
P23
P24
P25
P26
P27

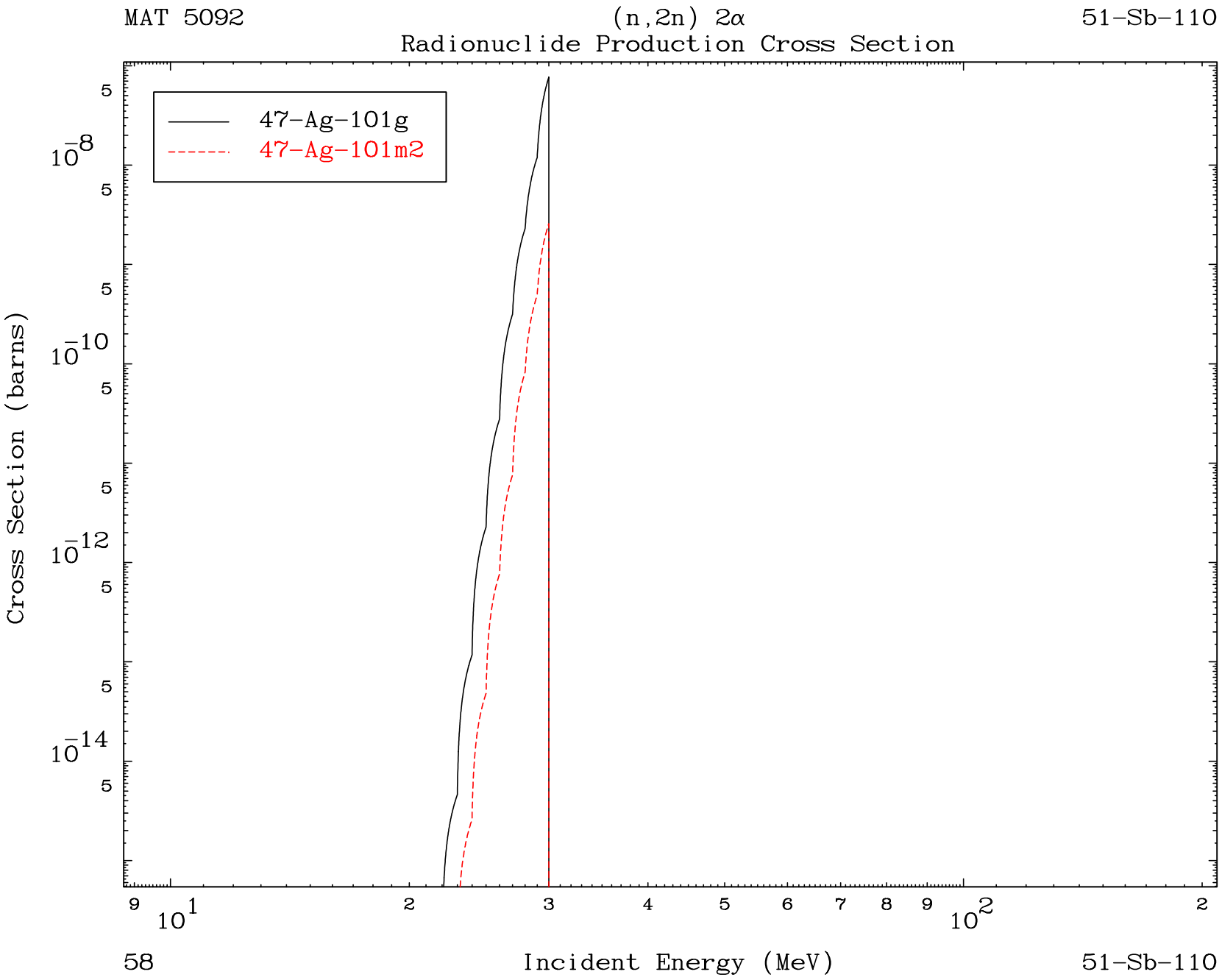

MAT 5092
MT= 60 (n,n') Level
Legendre Coefficients
51-Sb-110
X10^-6
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
53
Incident Energy (MeV)
51-Sb-110

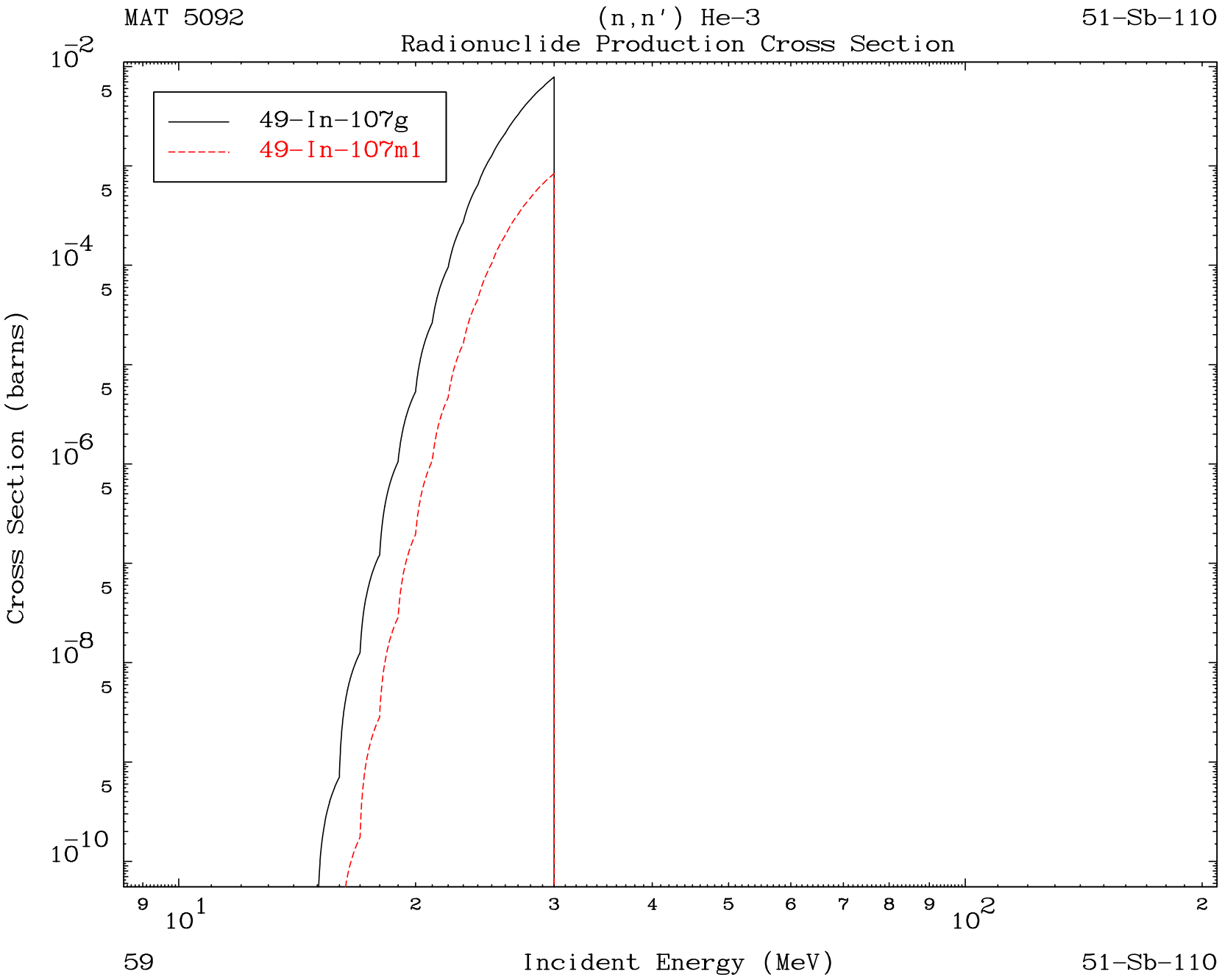

MAT 5092
(n,n') α
51-Sb-110
Radionuclide Production Cross Section
49-In-106g
49-In-106m1
Cross Section (barns)
Incident Energy (MeV)
54
51-Sb-110

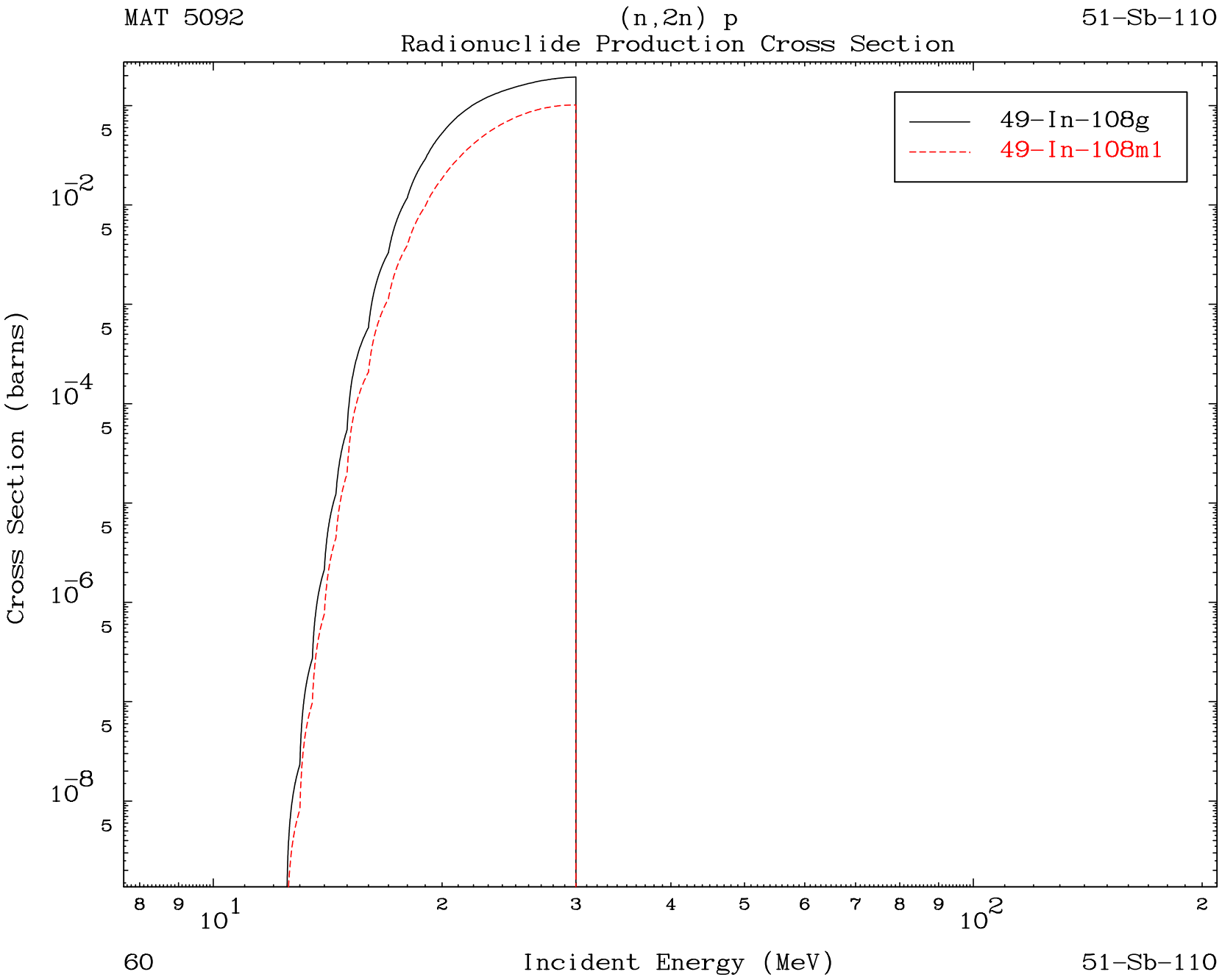

MAT 5092
(n,2n) α
51-Sb-110
Radionuclide Production Cross Section
49-In-105g
49-In-105m1
Cross Section (barns)
Incident Energy (MeV)
55
51-Sb-110

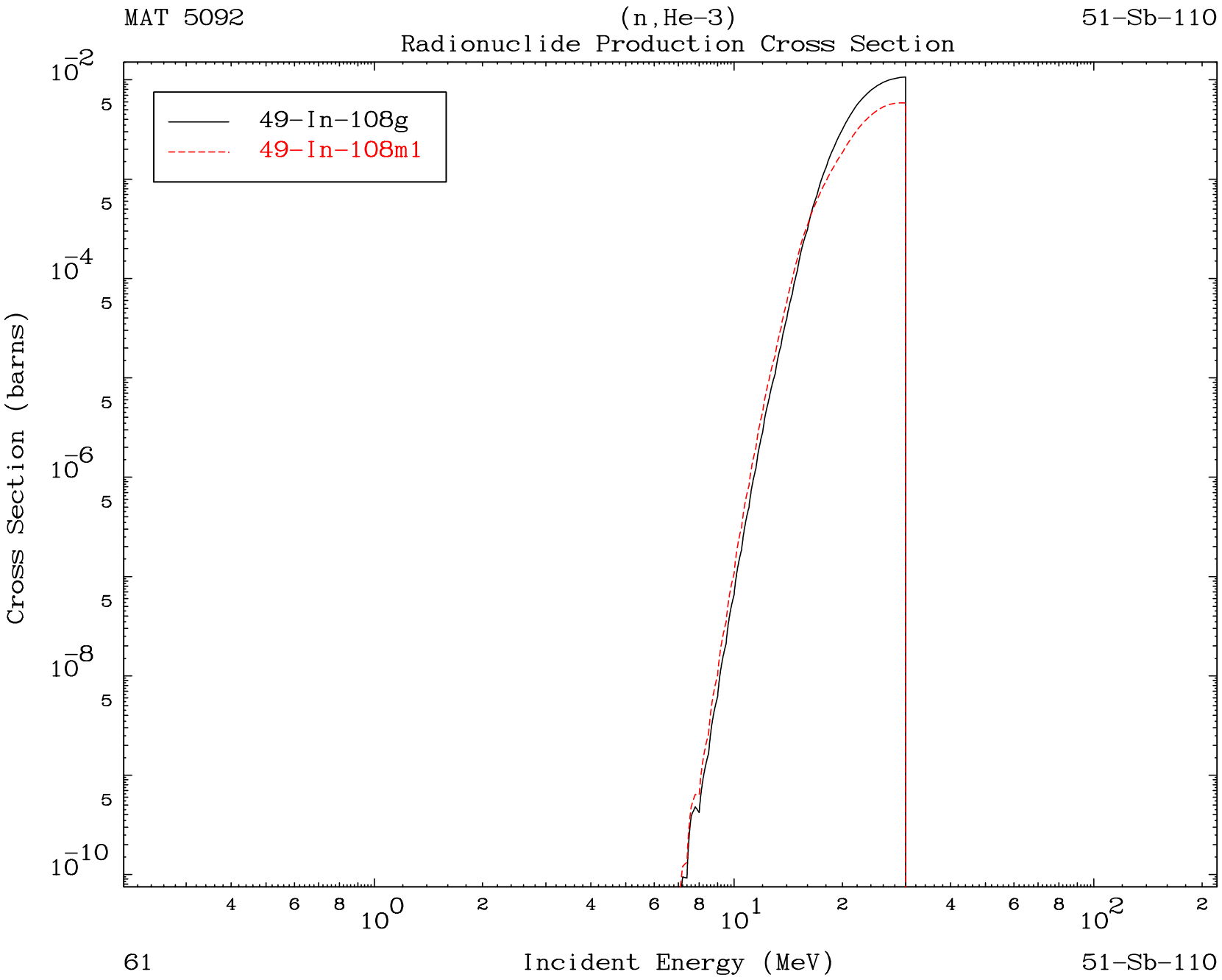

MAT 5092
(n,3n) α
51-Sb-110
Radionuclide Production Cross Section
49-In-104g
49-In-104m3
Cross Section (barns)
Incident Energy (MeV)
56
51-Sb-110

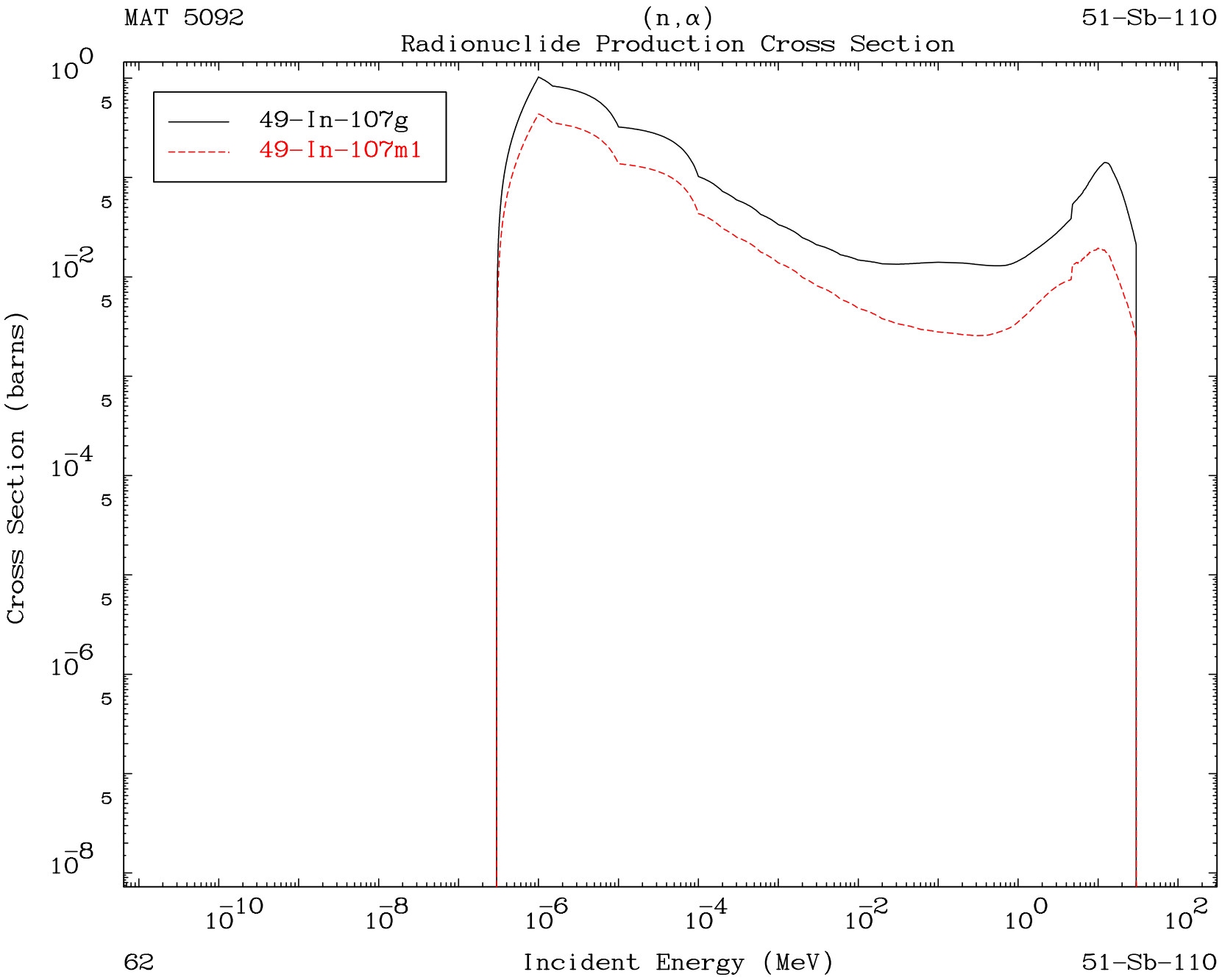

MAT 5092
(n,n') 2α
51-Sb-110
Radionuclide Production Cross Section
47-Ag-102g
47-Ag-102m1
Cross Section (barns)
Incident Energy (MeV)
57
51-Sb-110

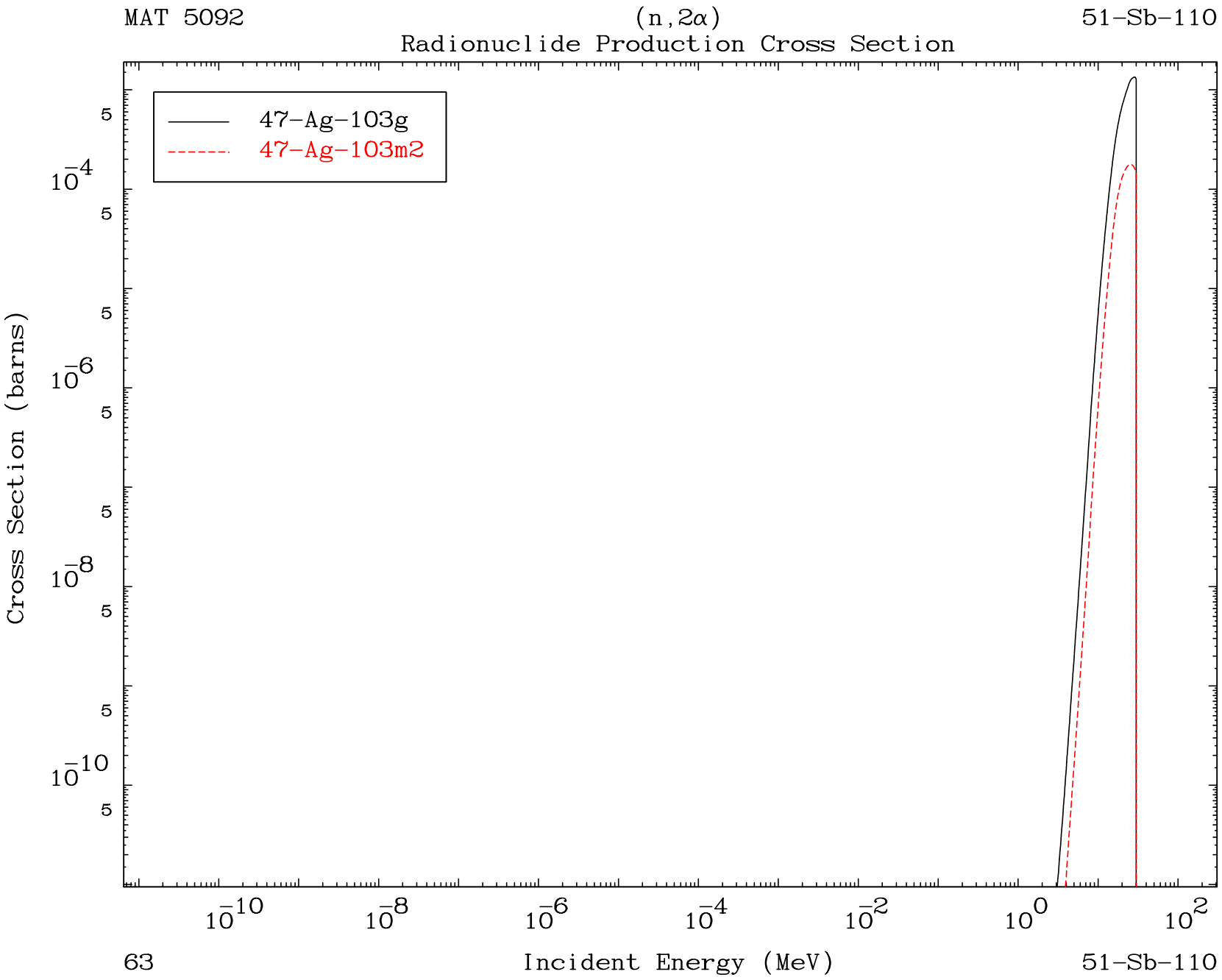

MAT 5092
(n,2n) 2α
51-Sb-110
Radionuclide Production Cross Section
47-Ag-101g
47-Ag-101m2
Cross Section (barns)
Incident Energy (MeV)
58
51-Sb-110

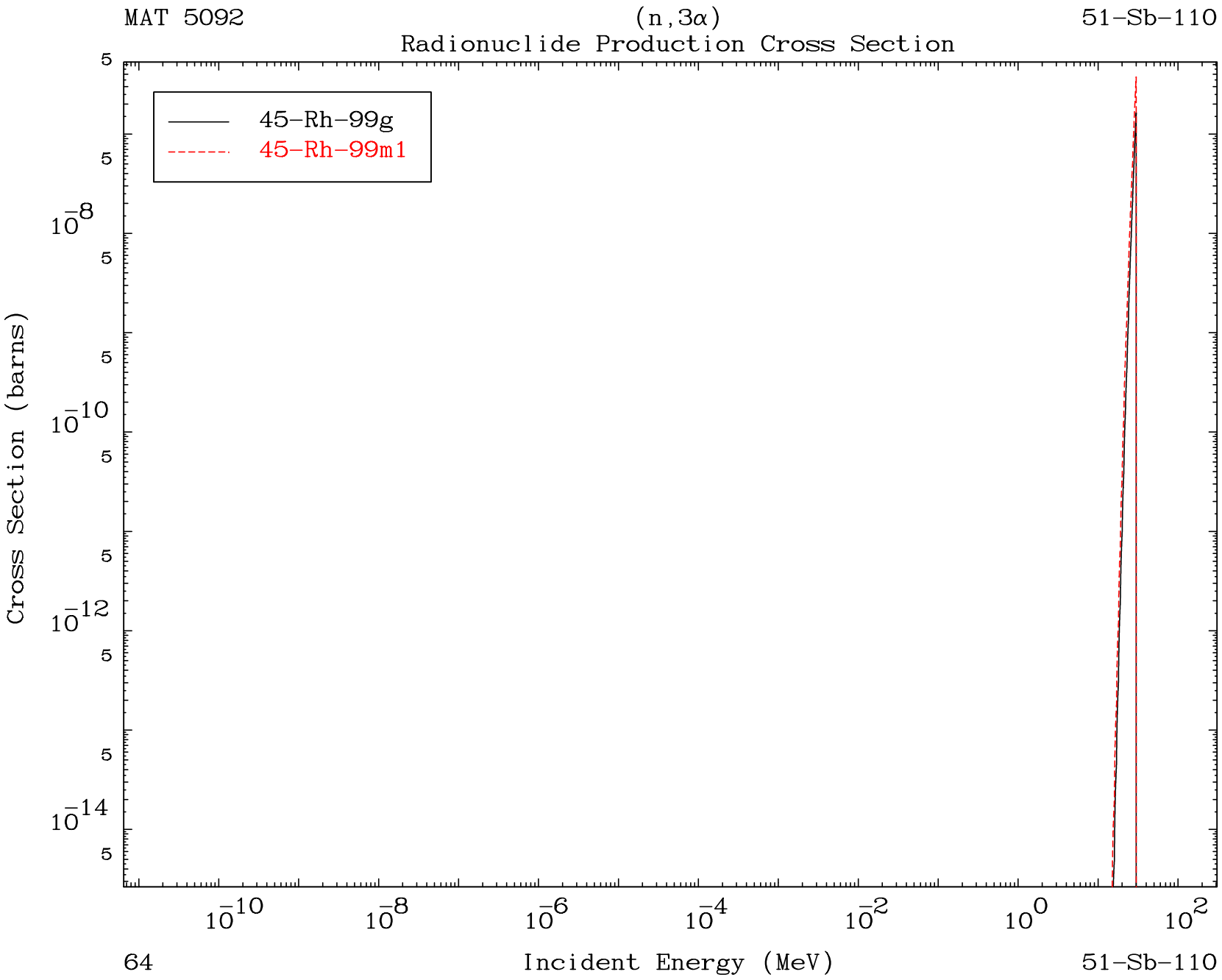

MAT 5092
(n,n') He-3
51-Sb-110
Radionuclide Production Cross Section
49-In-107g
49-In-107m1
Cross Section (barns)
Incident Energy (MeV)
59
51-Sb-110

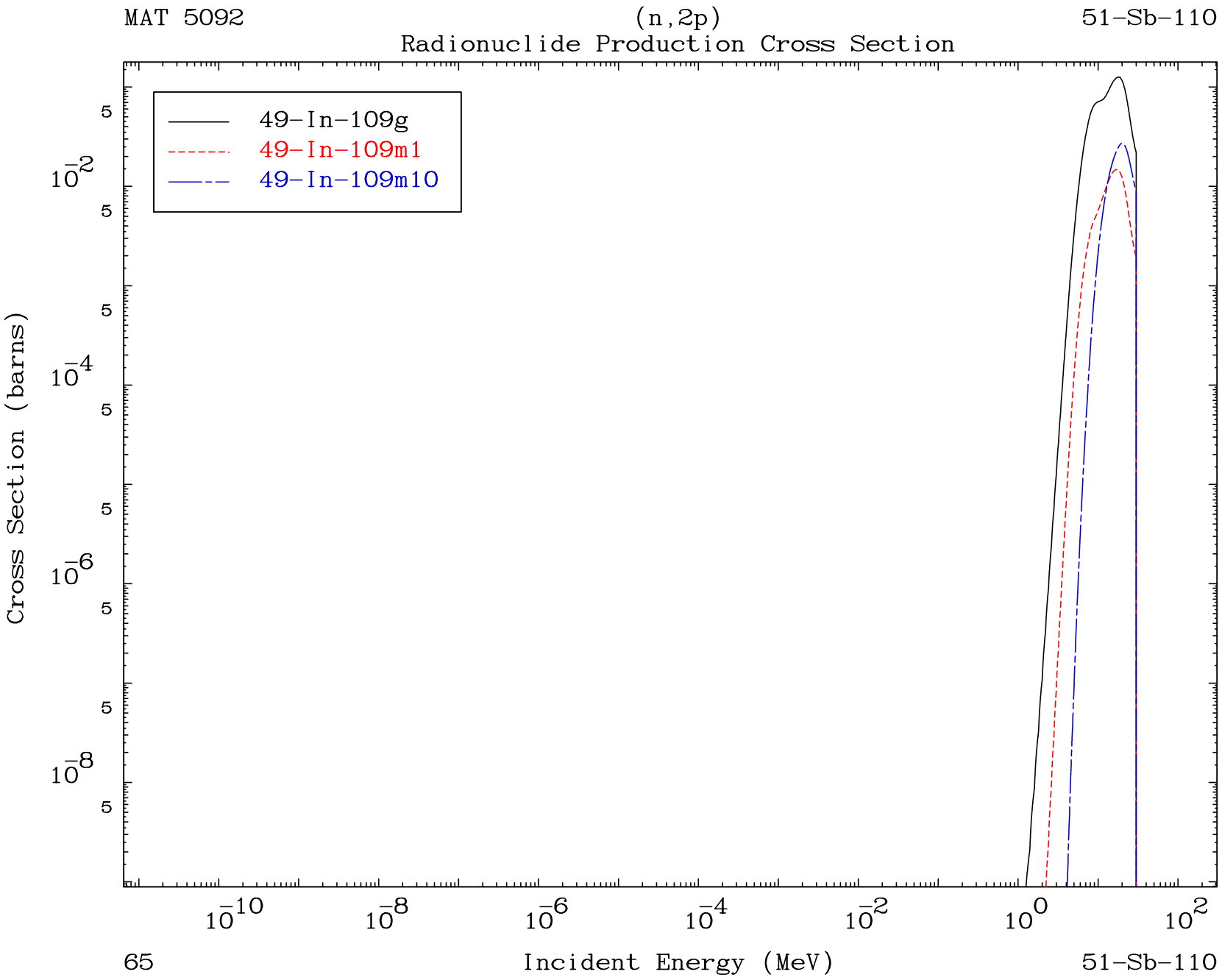

MAT 5092
(n,2n) p
51-Sb-110
Radionuclide Production Cross Section
49-In-108g
49-In-108m1
Cross Section (barns)
Incident Energy (MeV)
60
51-Sb-110

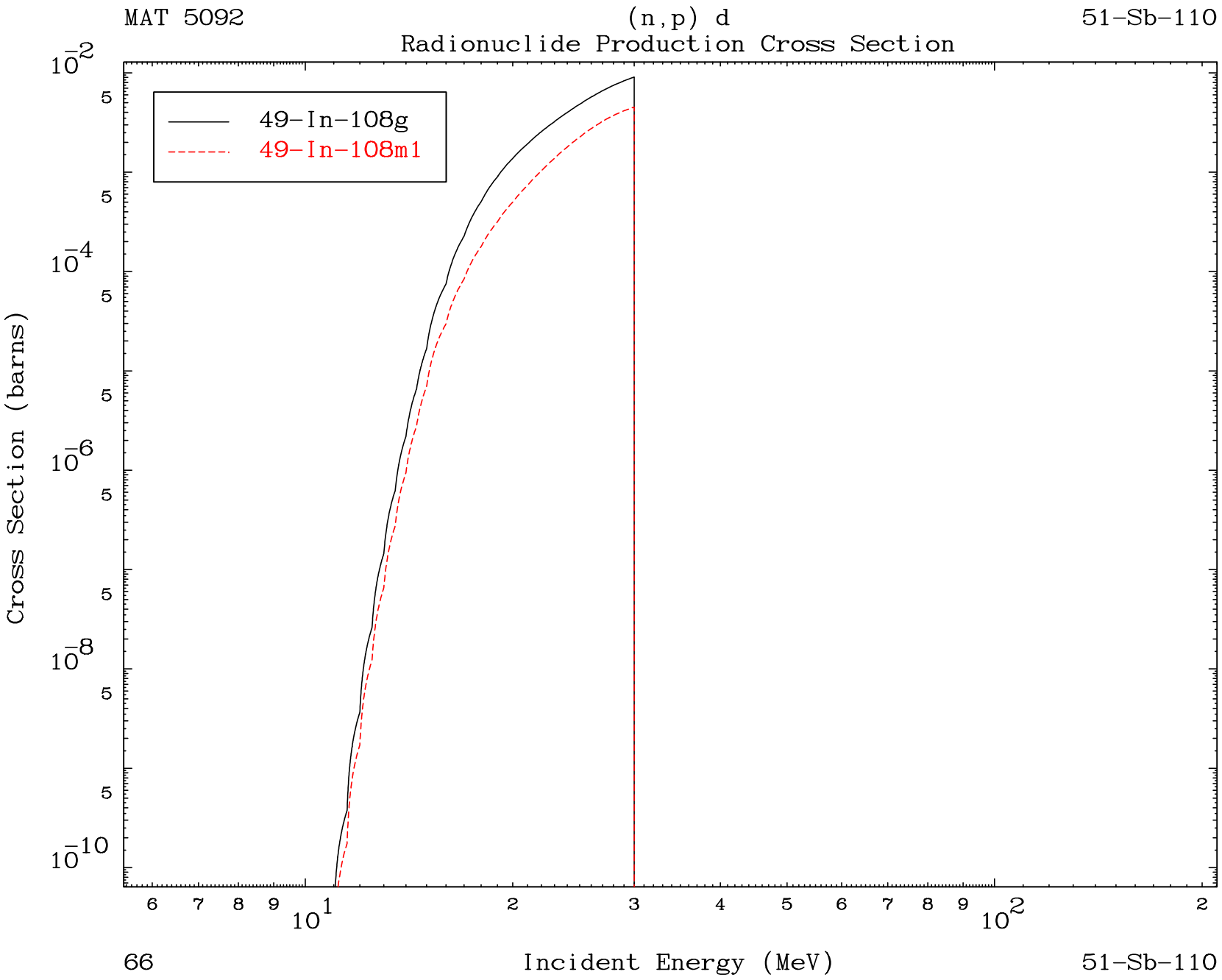

MAT 5092
(n,He-3)
51-Sb-110
Radionuclide Production Cross Section
49-In-108g
49-In-108m1
Cross Section (barns)
Incident Energy (MeV)
61
51-Sb-110

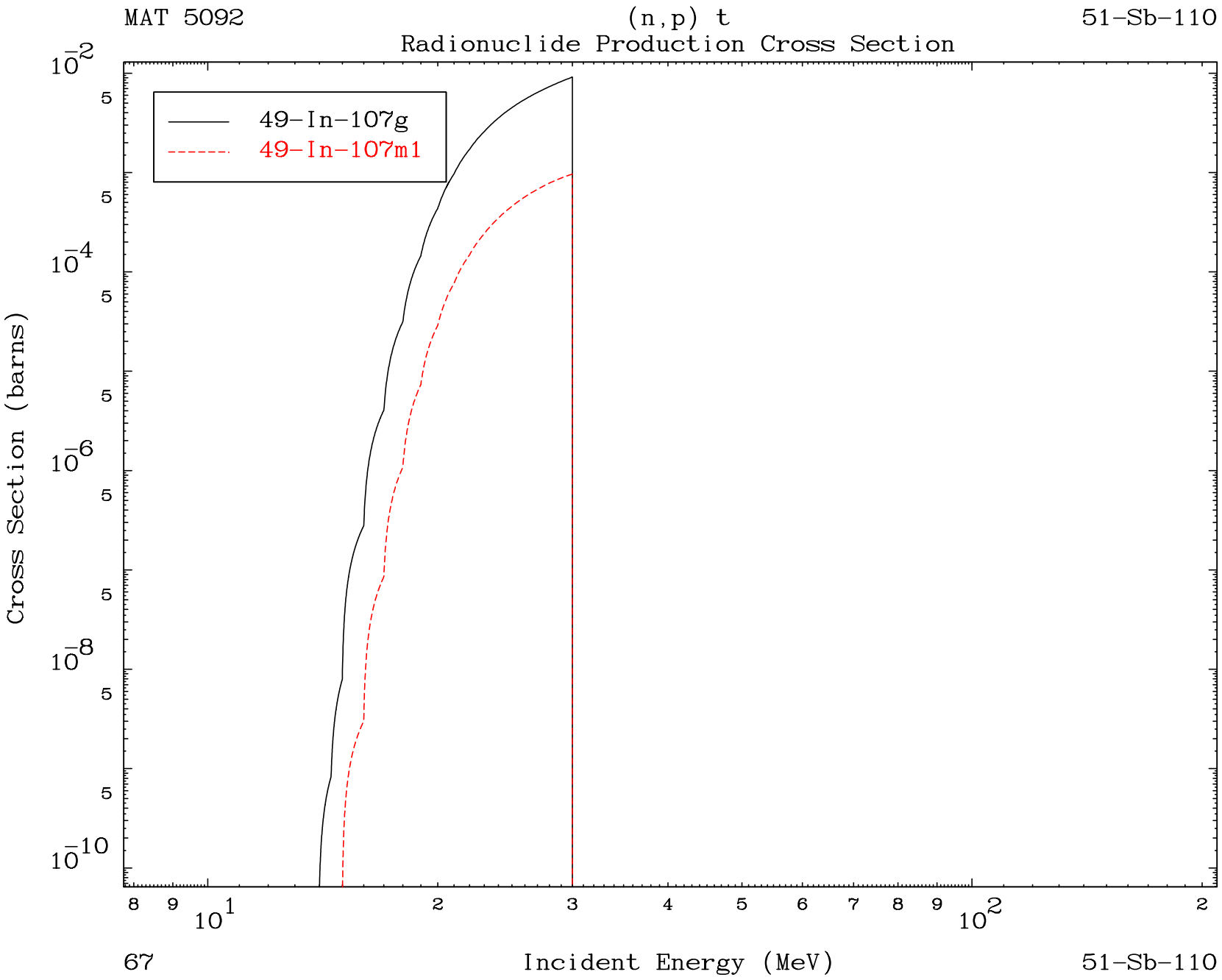

MAT 5092
(n,α)
51-Sb-110
Radionuclide Production Cross Section
49-In-107g
49-In-107m1
Cross Section (barns)
Incident Energy (MeV)
62
51-Sb-110


MAT 5092
(n,2α)
51-Sb-110
Radionuclide Production Cross Section
47-Ag-103g
47-Ag-103m2
Cross Section (barns)
Incident Energy (MeV)
63
51-Sb-110


MAT 5092
(n,3α)
51-Sb-110
Radionuclide Production Cross Section
45-Rh-99g
45-Rh-99m1
Cross Section (barns)
Incident Energy (MeV)
64
51-Sb-110


MAT 5092
(n,2p)
51-Sb-110
Radionuclide Production Cross Section
49-In-109g
49-In-109m1
49-In-109m10
Cross Section (barns)
Incident Energy (MeV)
65
51-Sb-110


MAT 5092
(n,p) d
51-Sb-110
Radionuclide Production Cross Section
49-In-108g
49-In-108m1
Cross Section (barns)
Incident Energy (MeV)
66
51-Sb-110


MAT 5092
(n,p) t
51-Sb-110
Radionuclide Production Cross Section
49-In-107g
49-In-107m1
Cross Section (barns)
Incident Energy (MeV)
67
51-Sb-110