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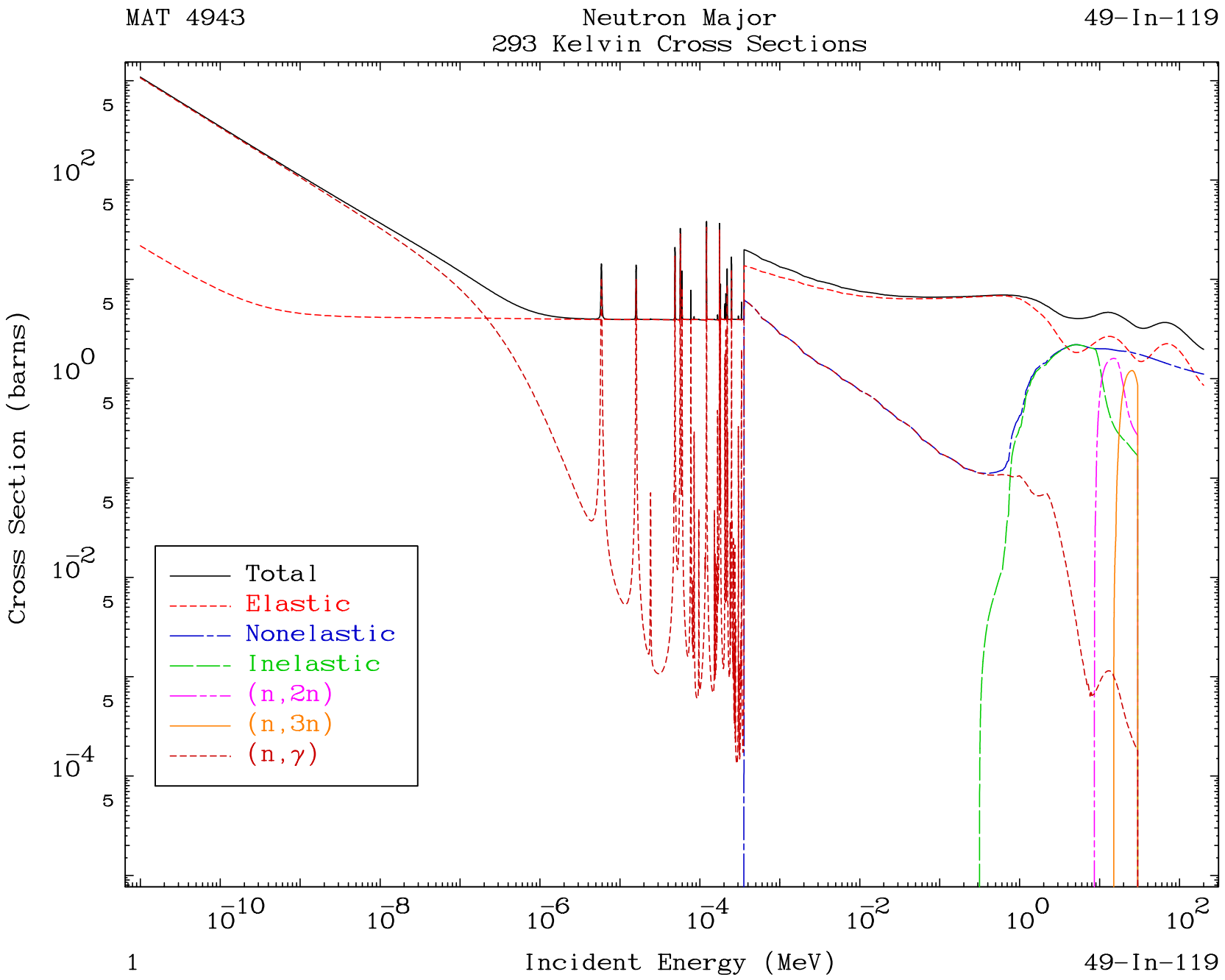
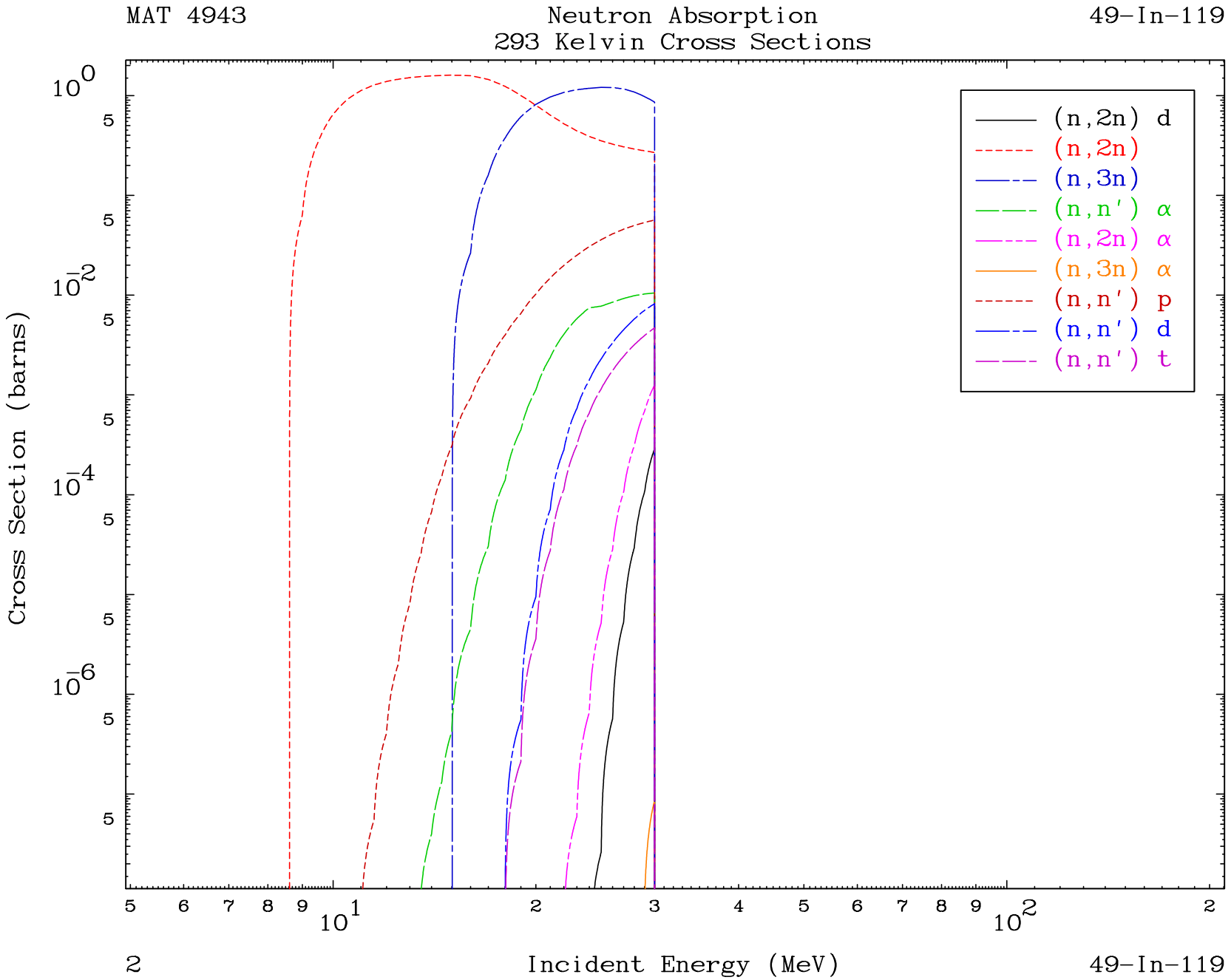
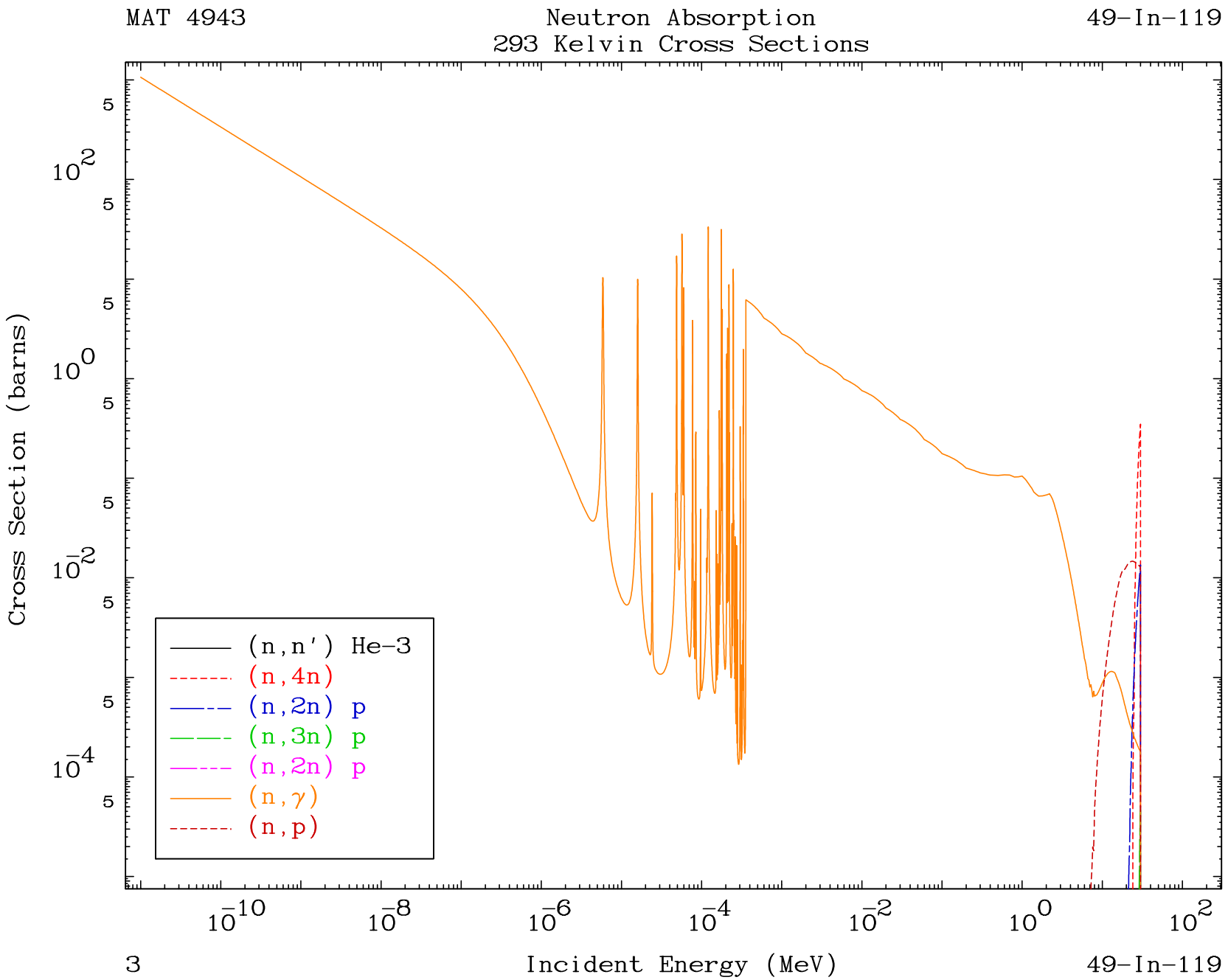
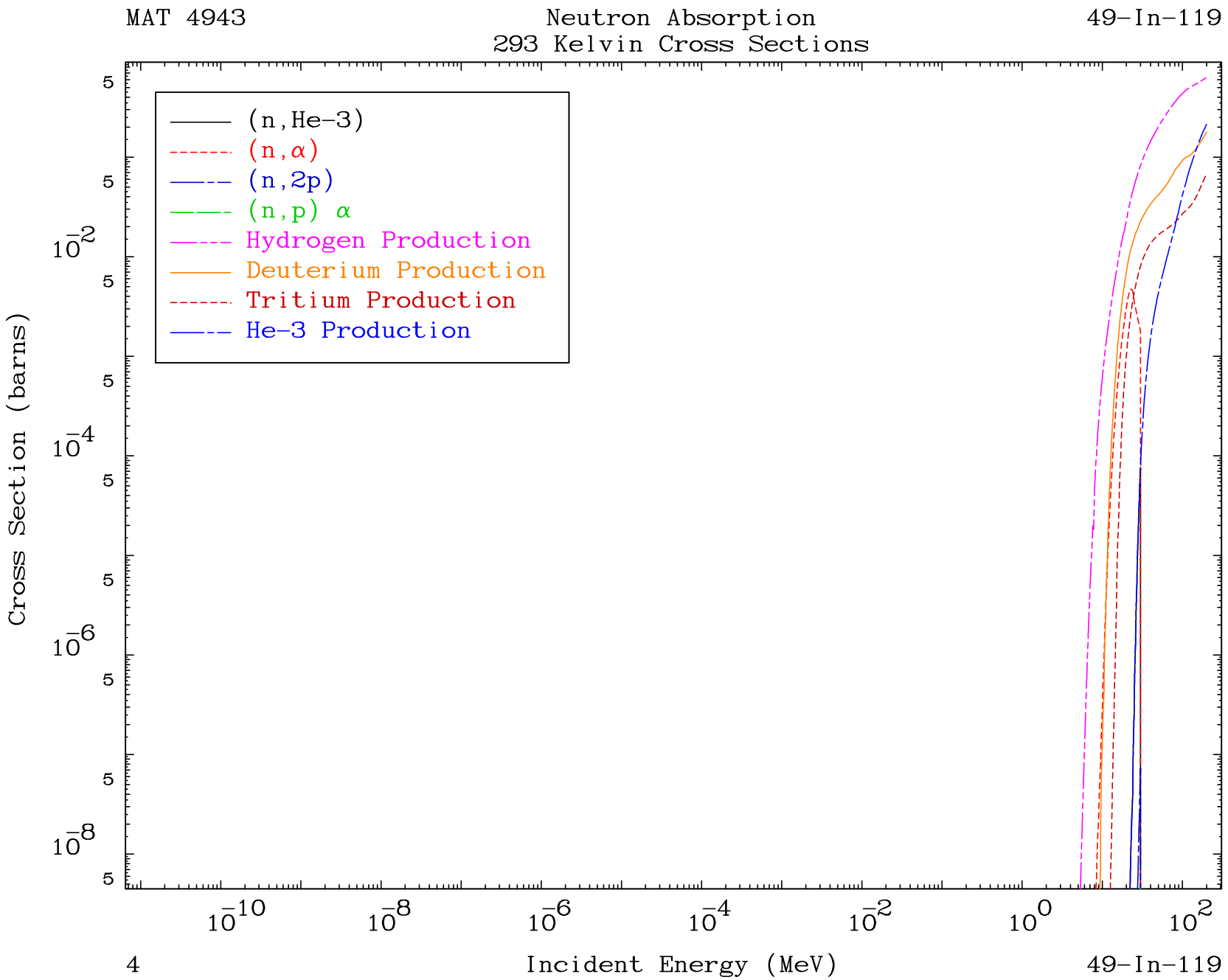
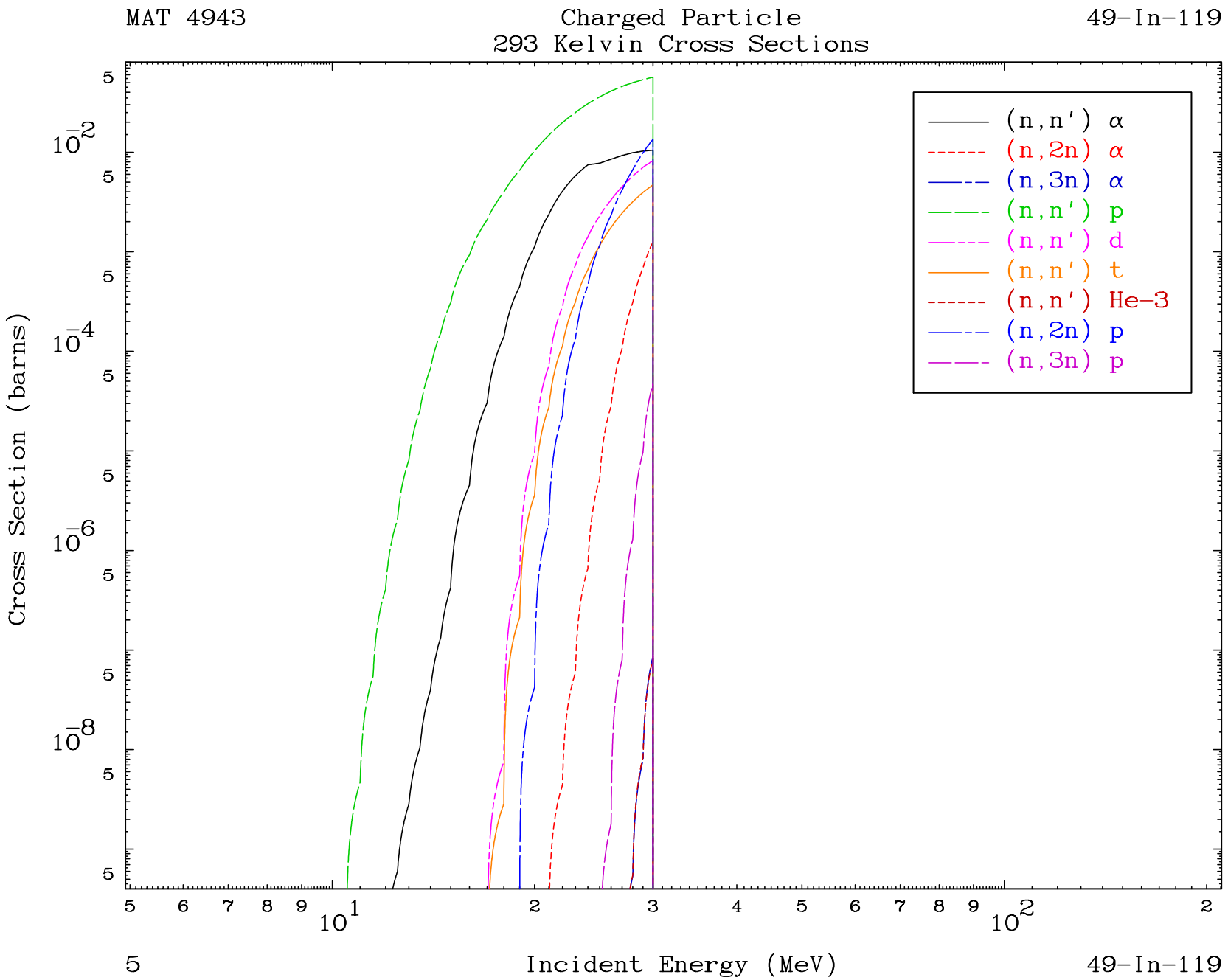
Press Mouse Button to Start

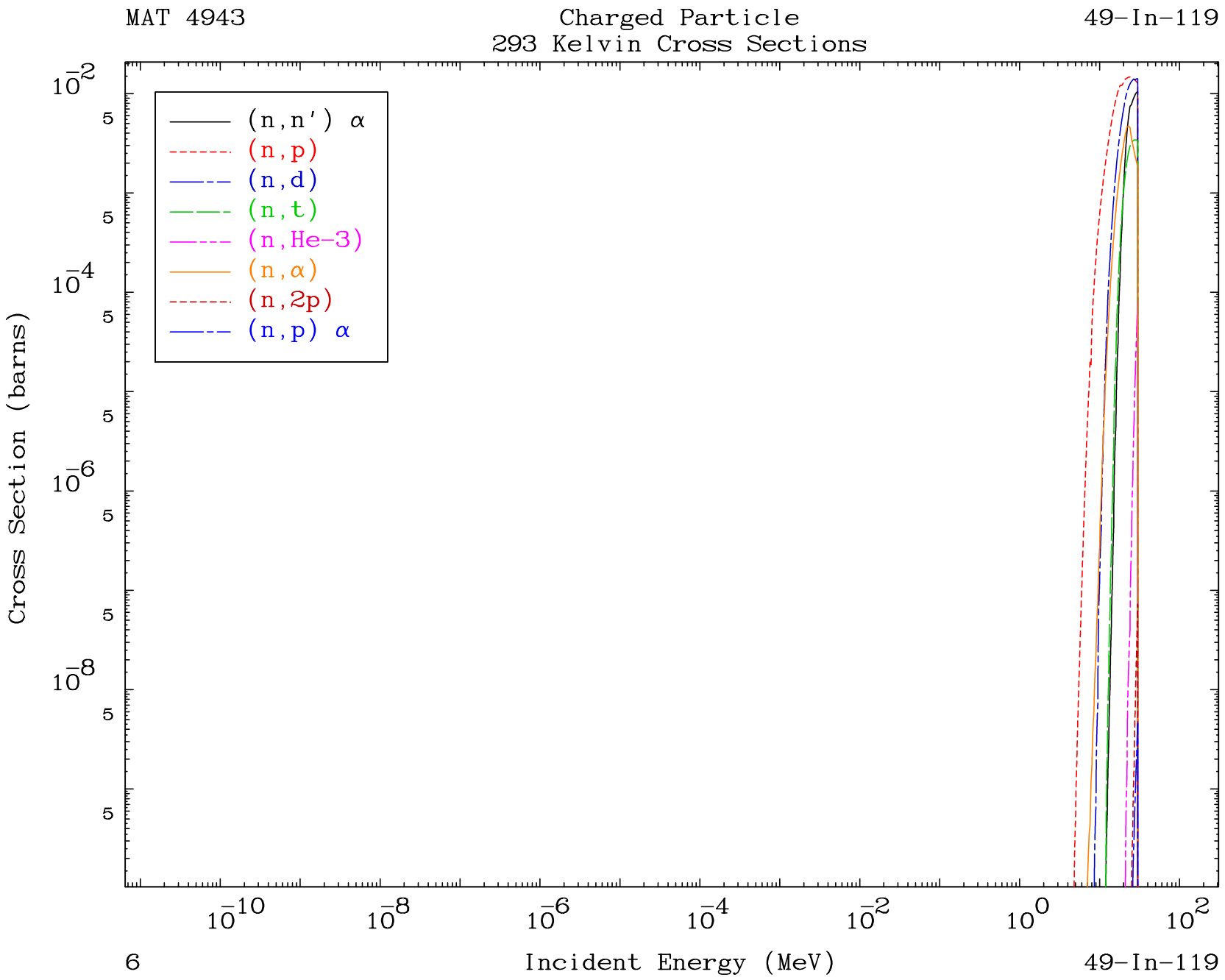

MAT 4943
Neutron Major
293 Kelvin Cross Sections
49-In-119
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
1
49-In-119

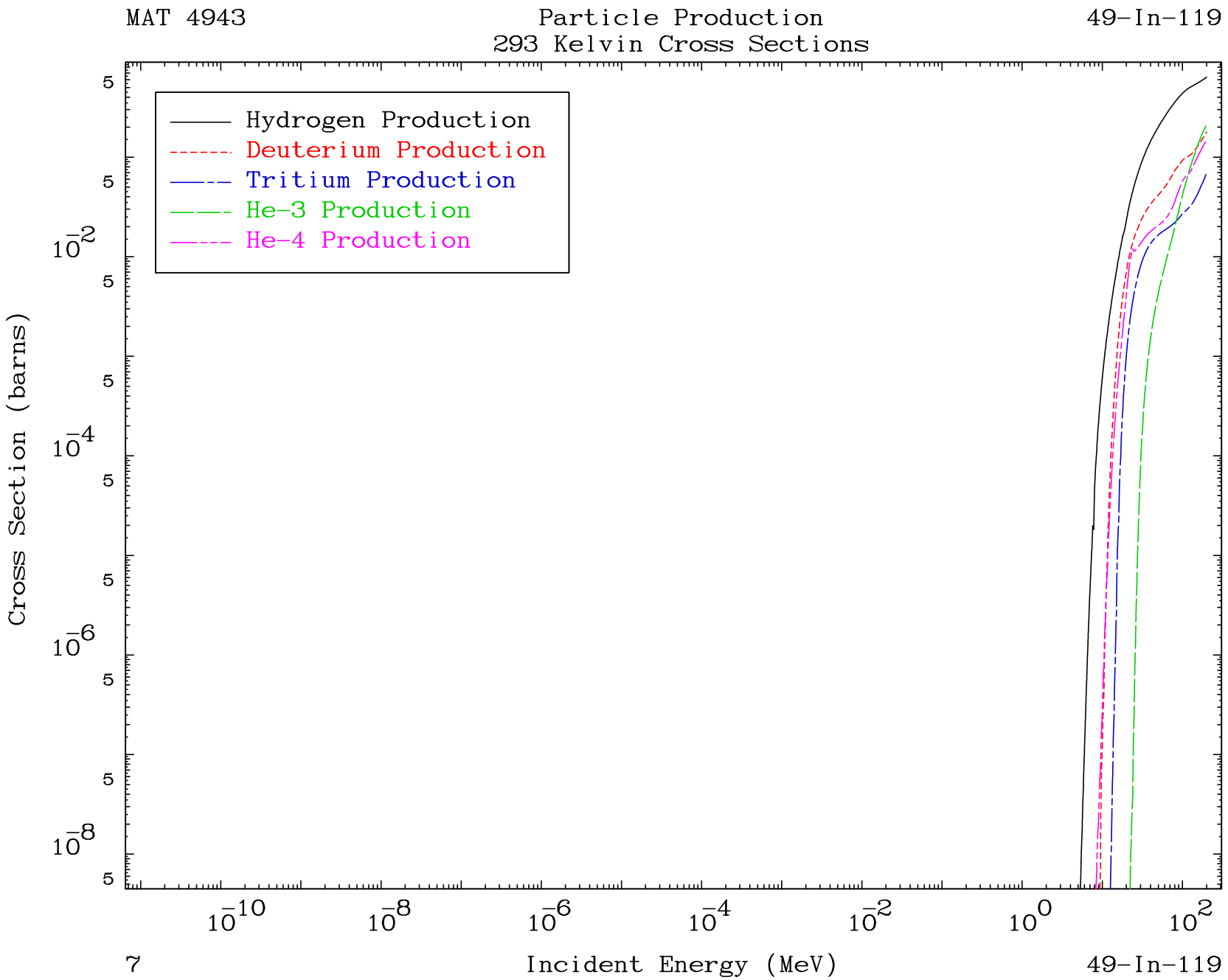

MAT 4943
Neutron Absorption
293 Kelvin Cross Sections
49-In-119
Cross Section (barns)
Incident Energy (MeV)
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
49-In-119

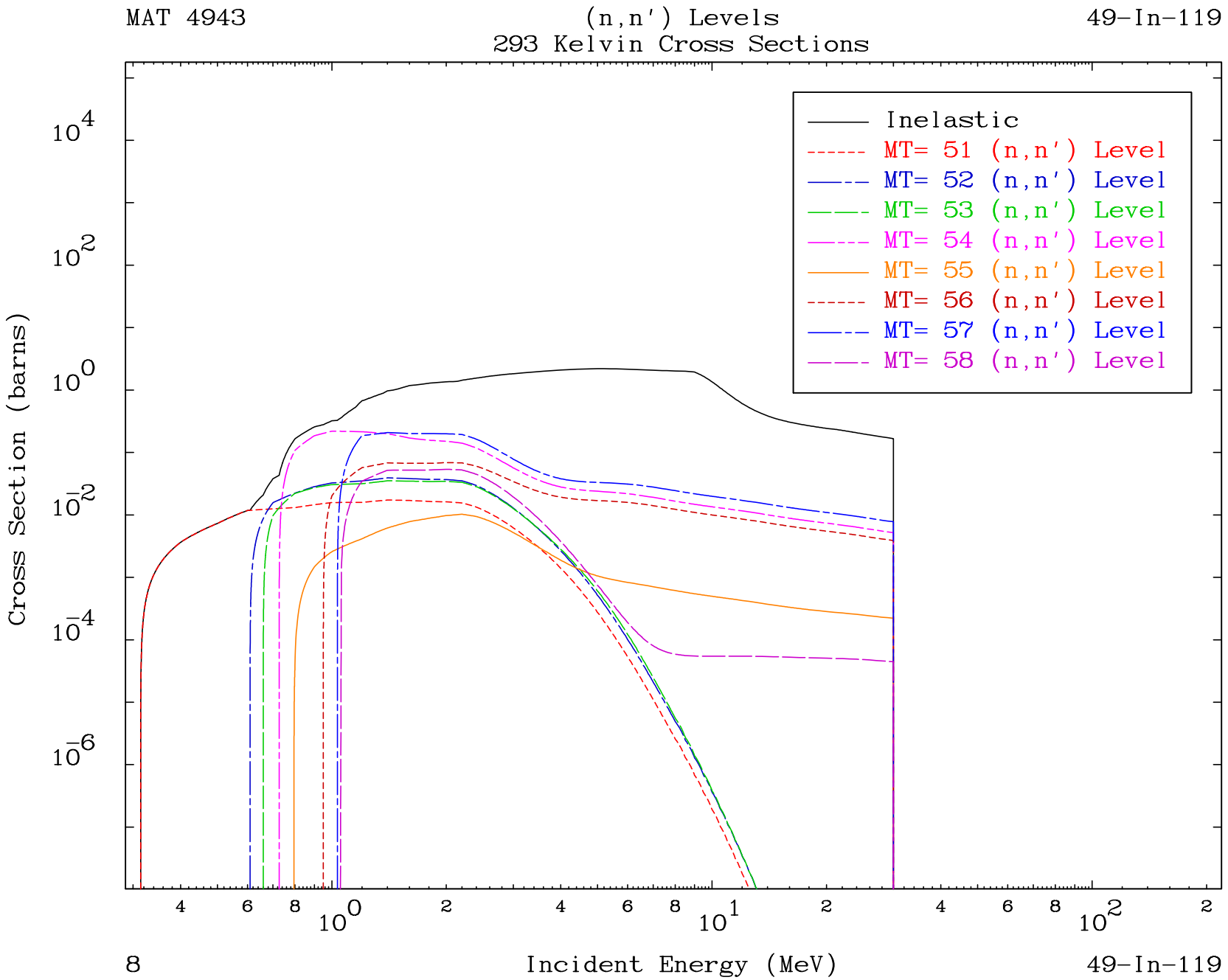

MAT 4943
Neutron Absorption
293 Kelvin Cross Sections
49-In-119
Cross Section (barns)
Incident Energy (MeV)
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
(n,2n) p
(n,γ)
(n,p)
3
49-In-119

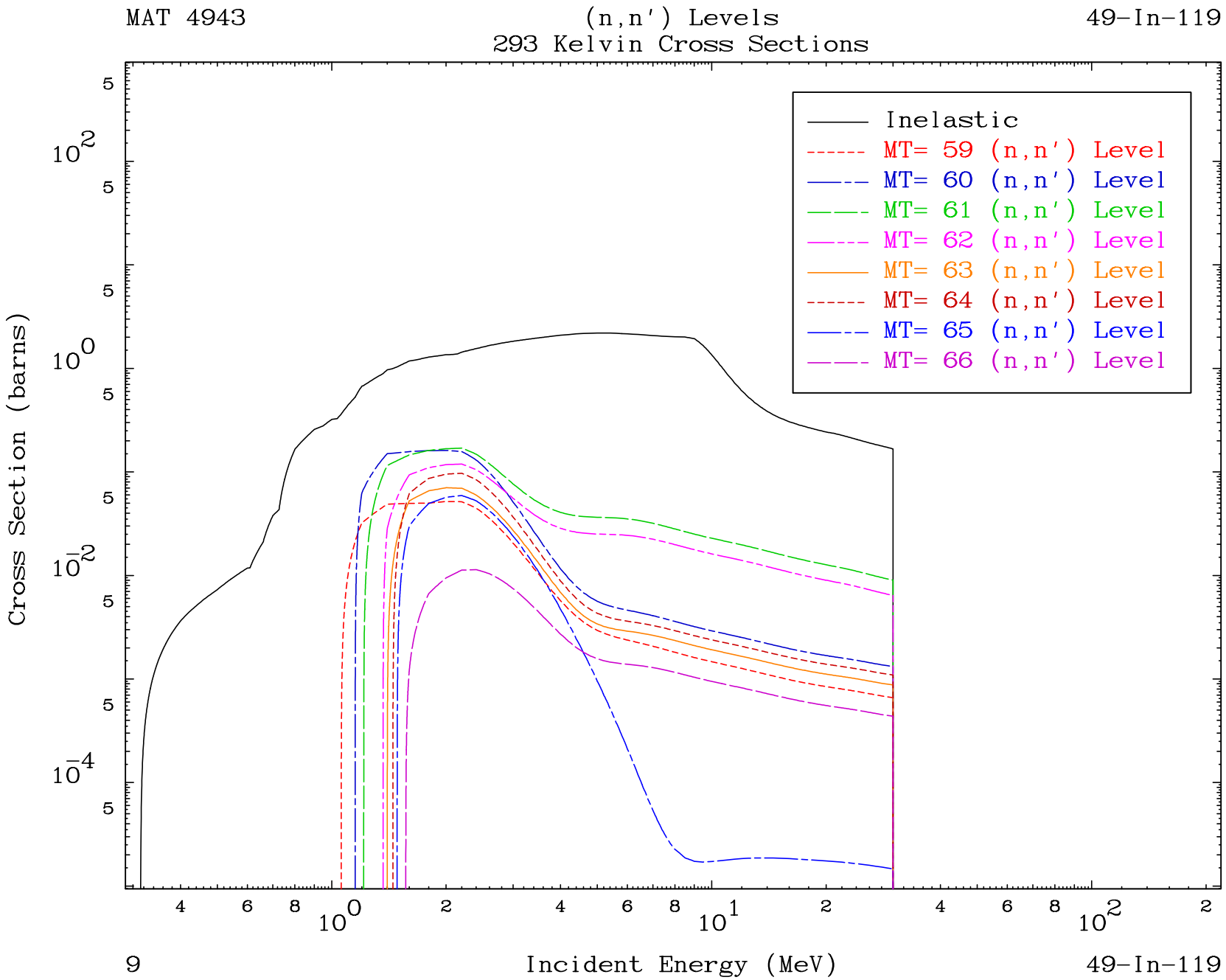

MAT 4943
Neutron Absorption
293 Kelvin Cross Sections
49-In-119
(n,He-3)
(n,α)
(n,2p)
(n,p) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
Cross Section (barns)
Incident Energy (MeV)
4
49-In-119

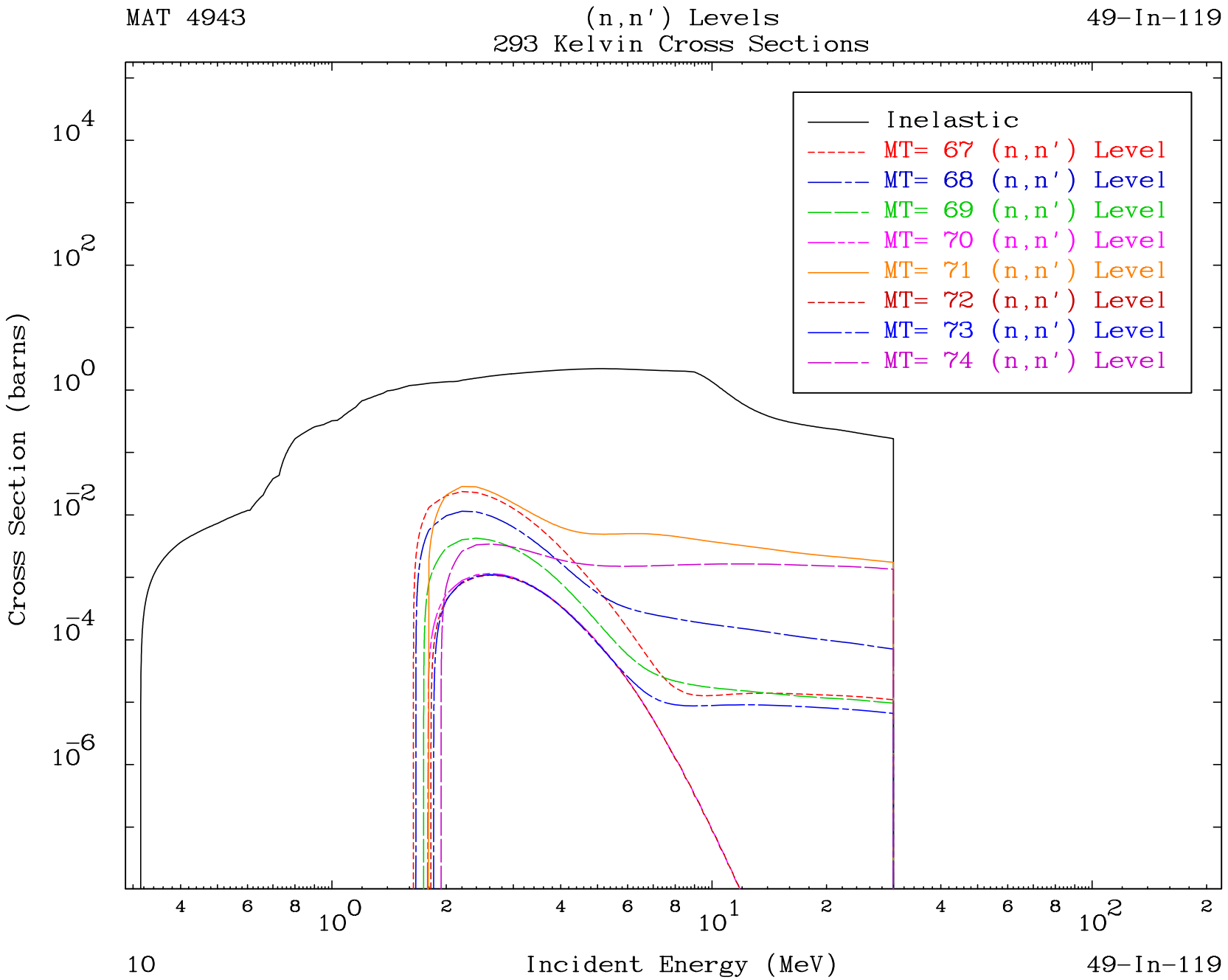

MAT 4943
Charged Particle
293 Kelvin Cross Sections
49-In-119
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p

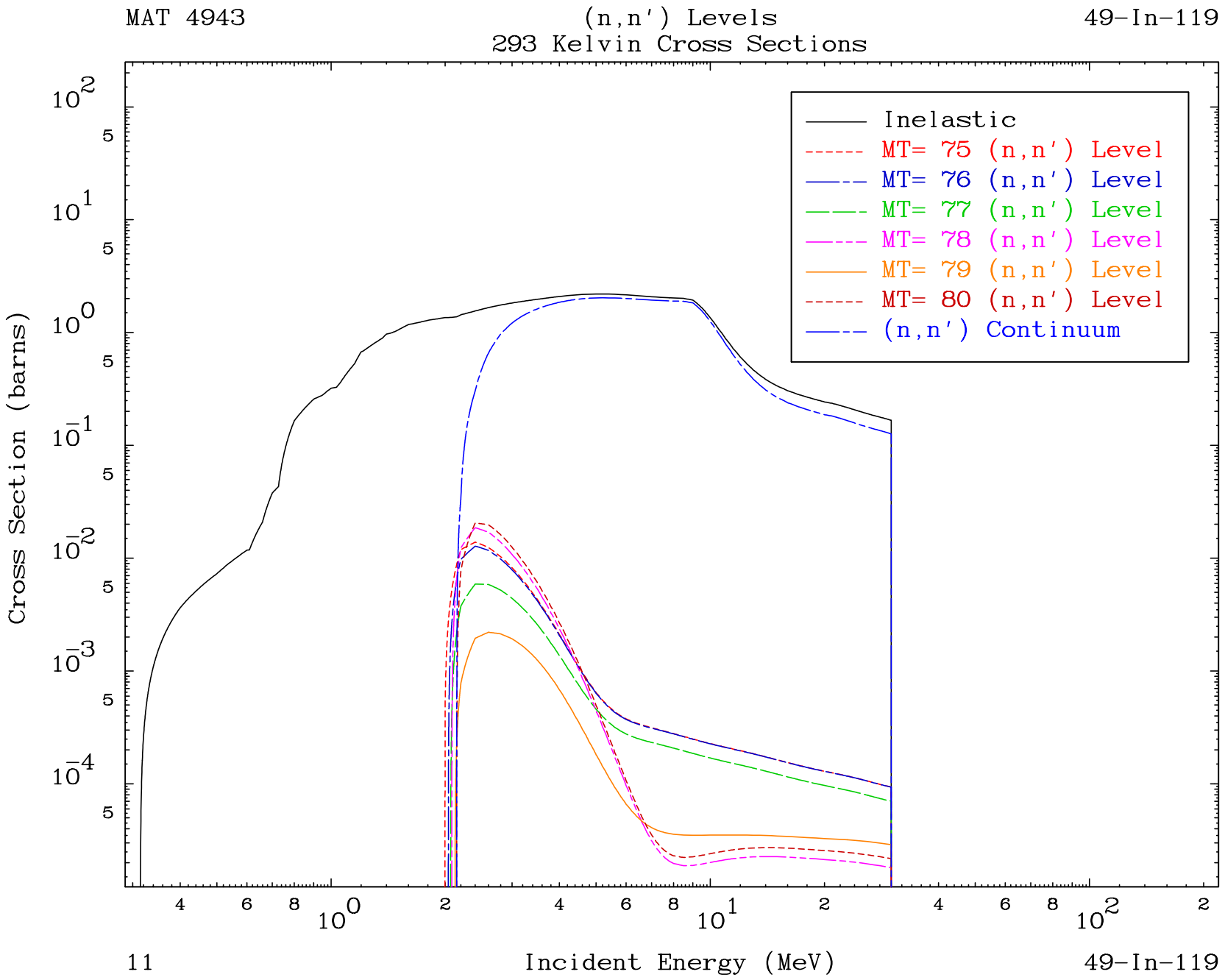

MAT 4943
Charged Particle
293 Kelvin Cross Sections
49-In-119
(n,n') α
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2p)
(n,p) α
Cross Section (barns)
Incident Energy (MeV)
6
49-In-119

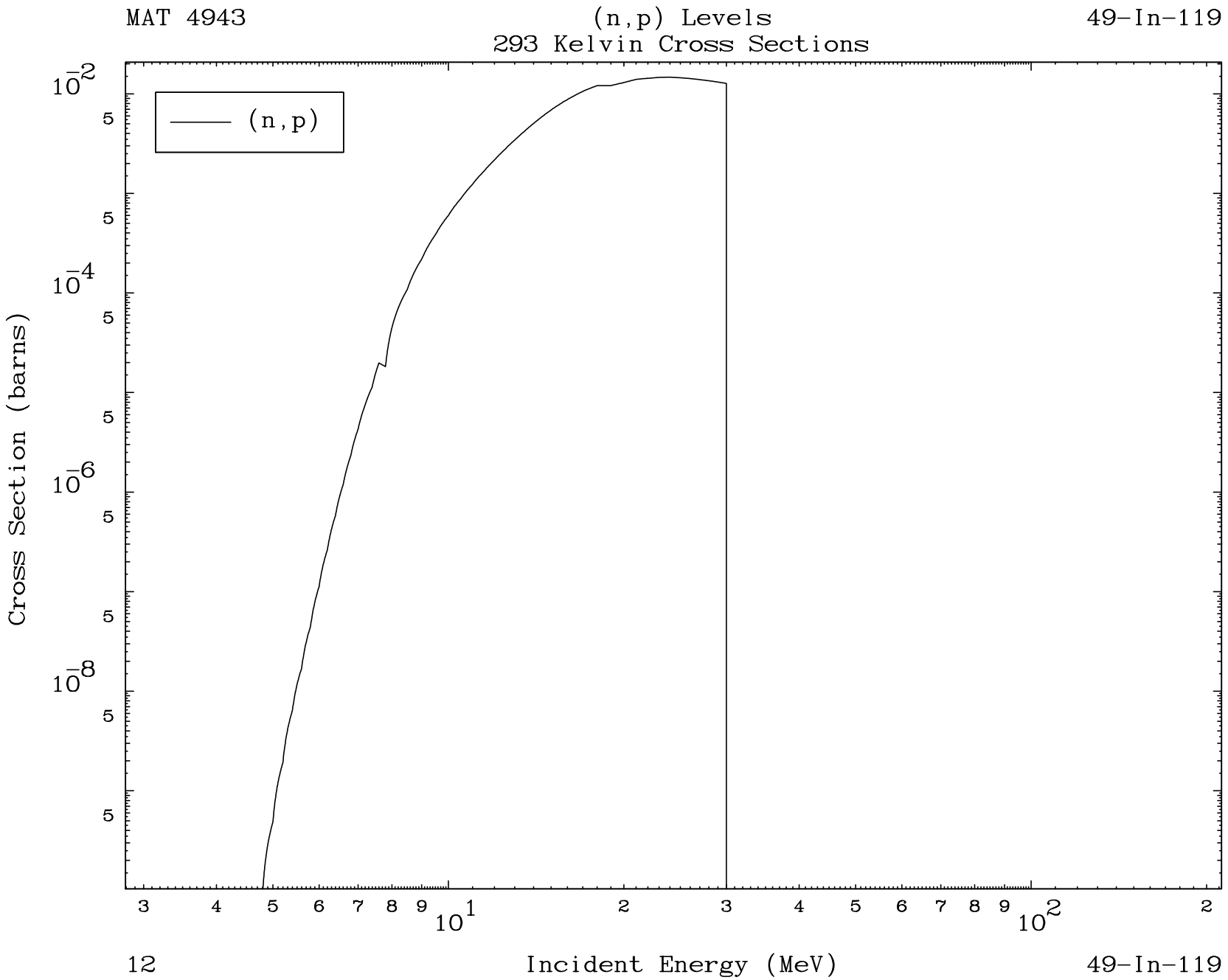

MAT 4943
Particle Production
293 Kelvin Cross Sections
49-In-119
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
49-In-119
7

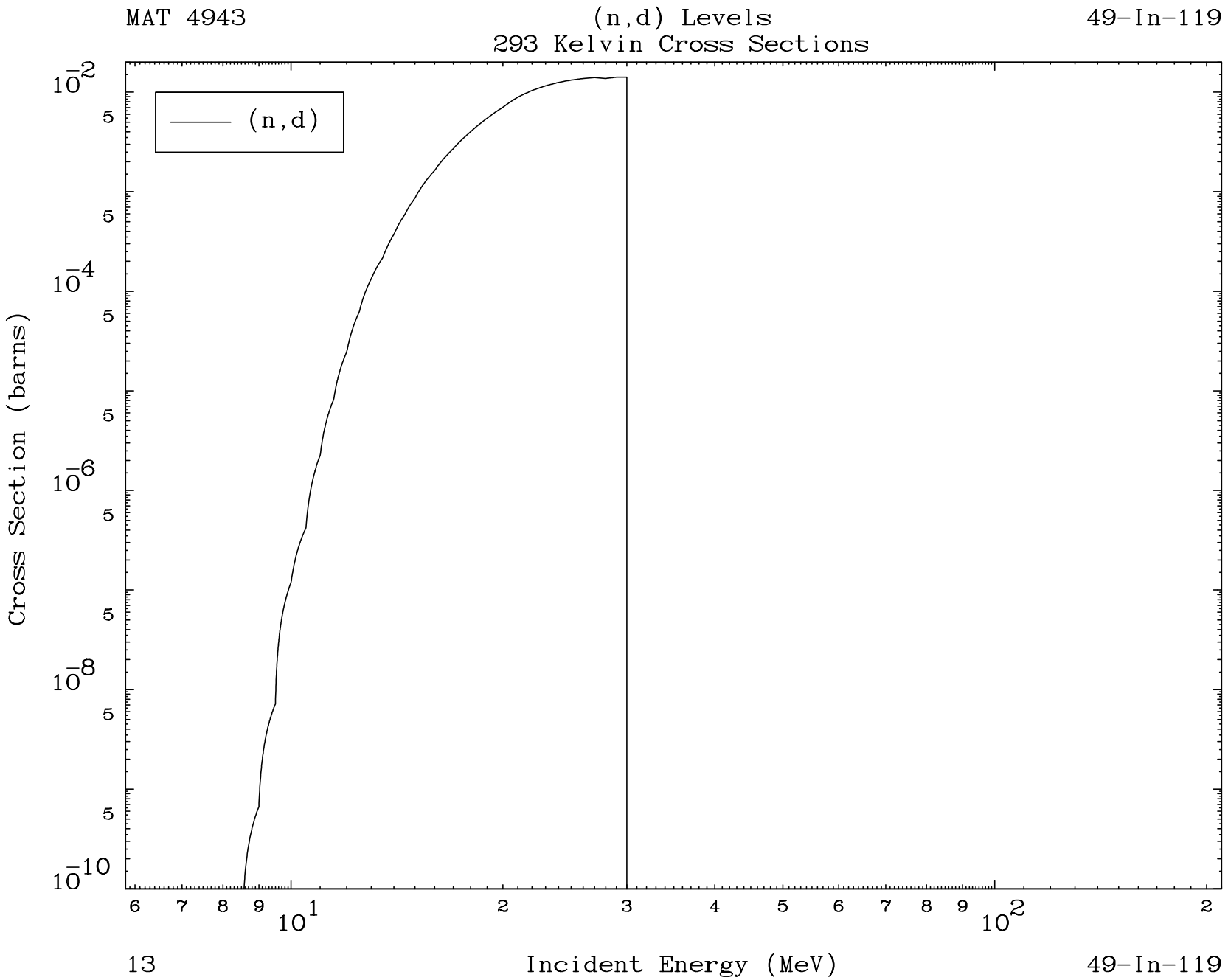

MAT 4943
(n,n') Levels
293 Kelvin Cross Sections
49-In-119
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
8
49-In-119

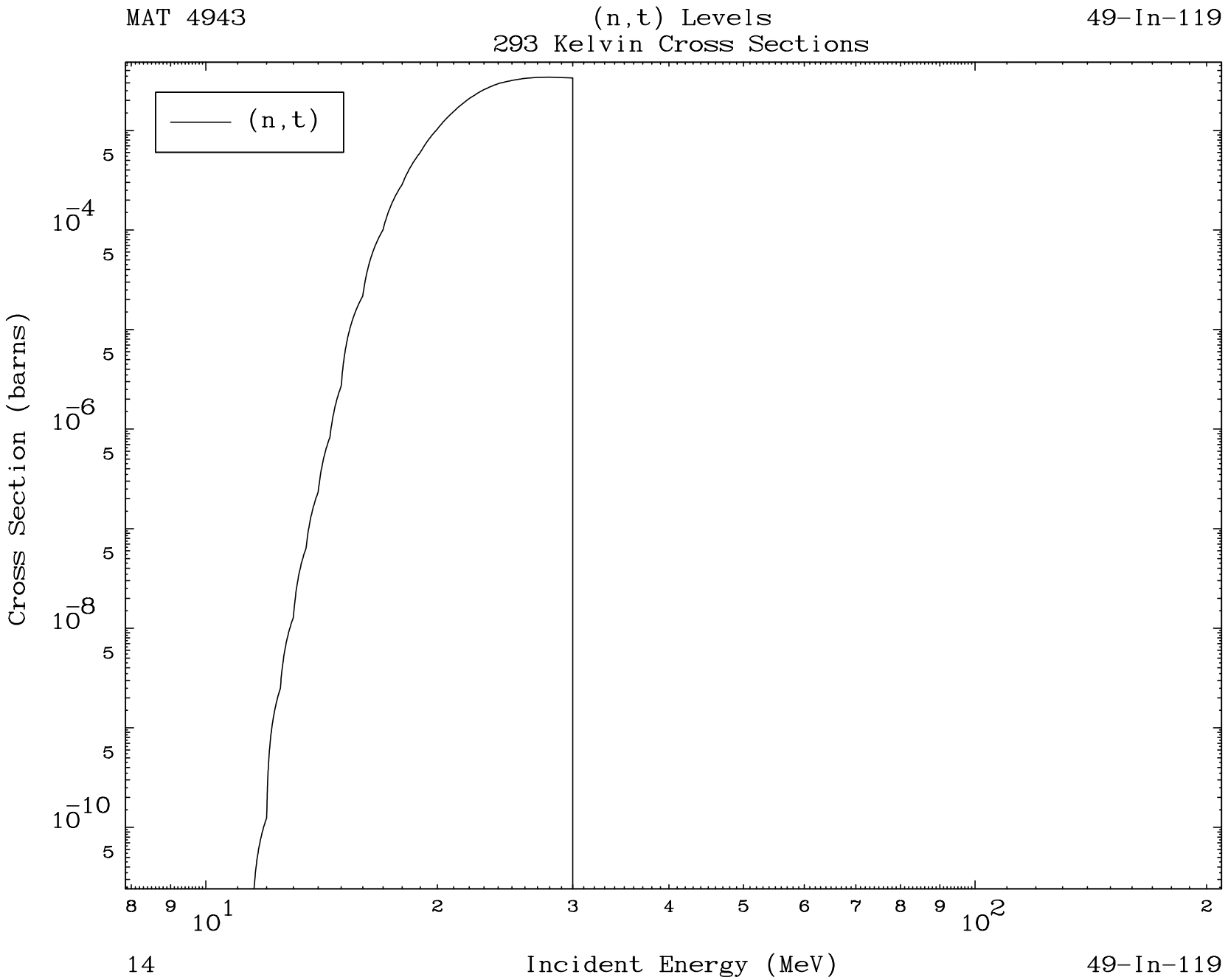

MAT 4943
(n,n') Levels
293 Kelvin Cross Sections
49-In-119
Inelastic
MT= 59 (n,n') Level
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
9
49-In-119

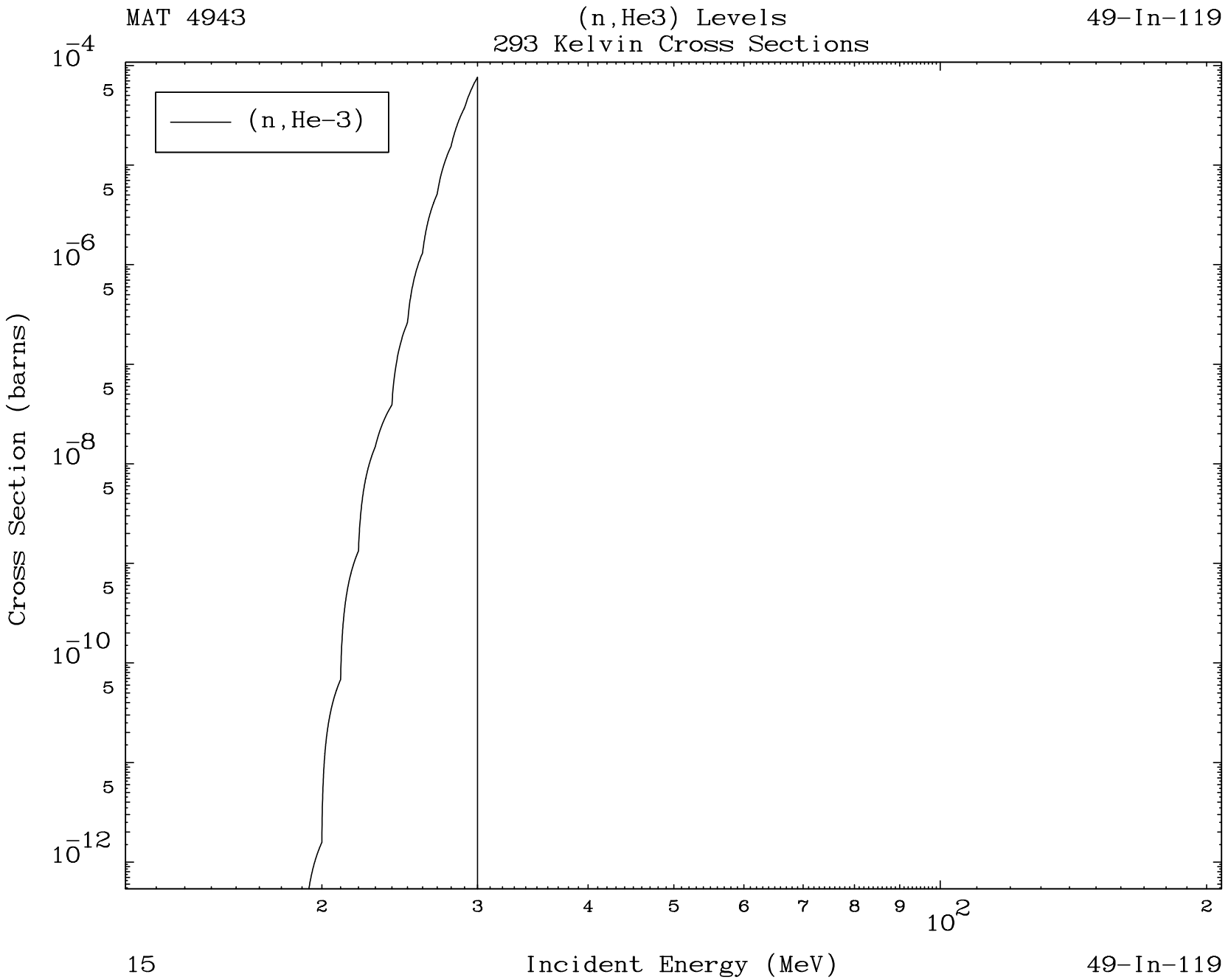

MAT 4943
(n,n') Levels
293 Kelvin Cross Sections
49-In-119
Inelastic
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
10
49-In-119

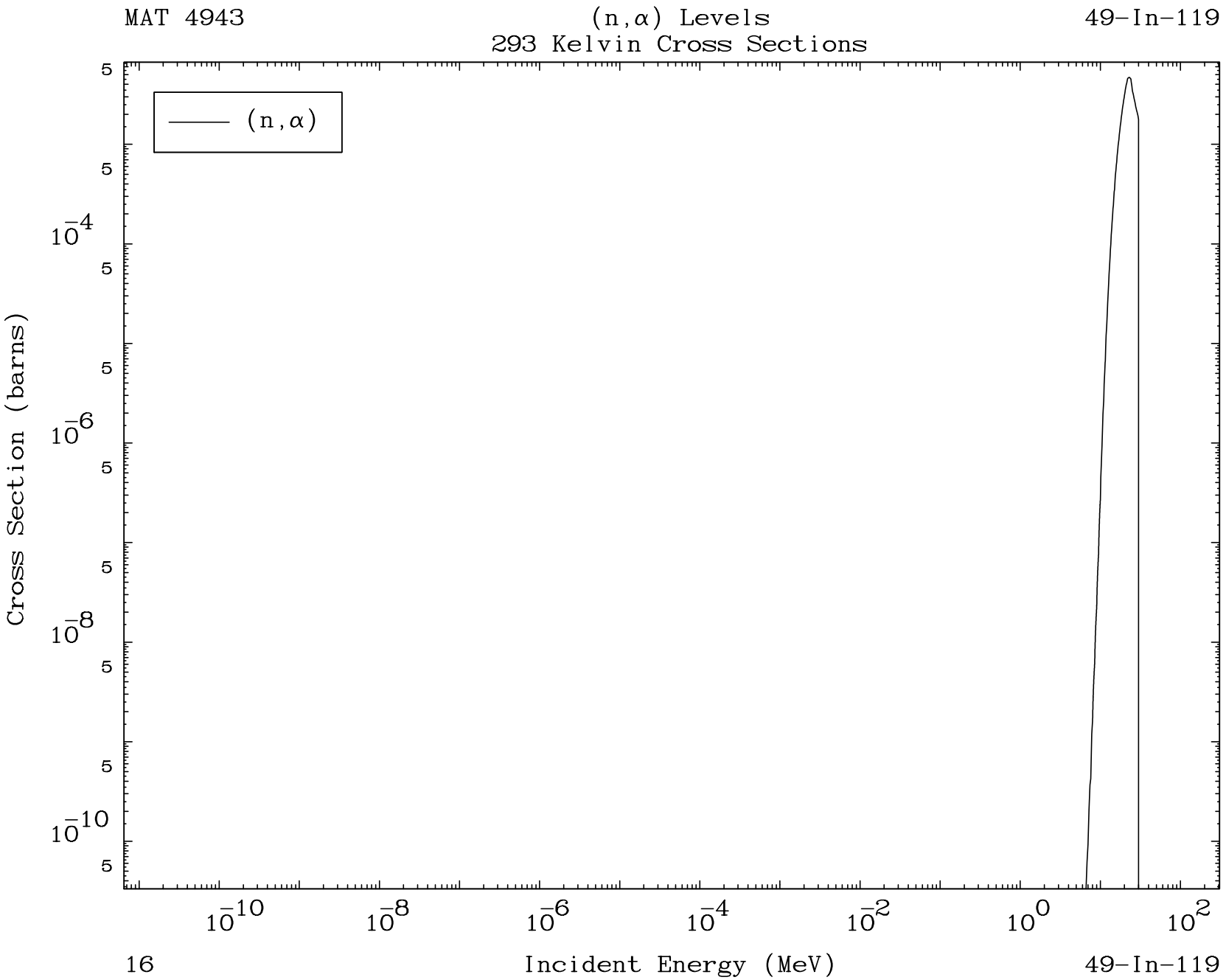

MAT 4943
(n,n') Levels
293 Kelvin Cross Sections
49-In-119
Inelastic
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
11
49-In-119

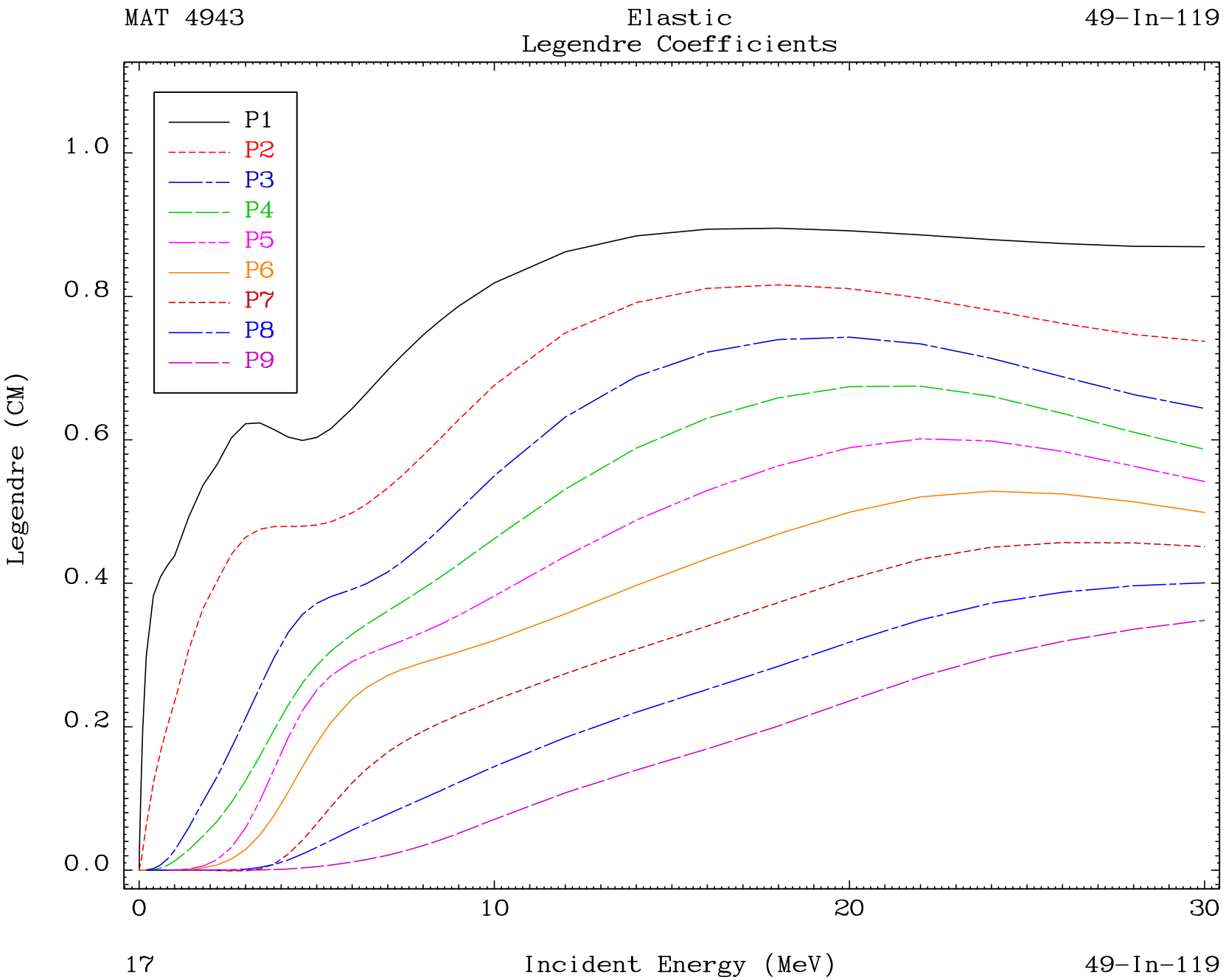

MAT 4943
(n,p) Levels
49-In-119
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
12
49-In-119

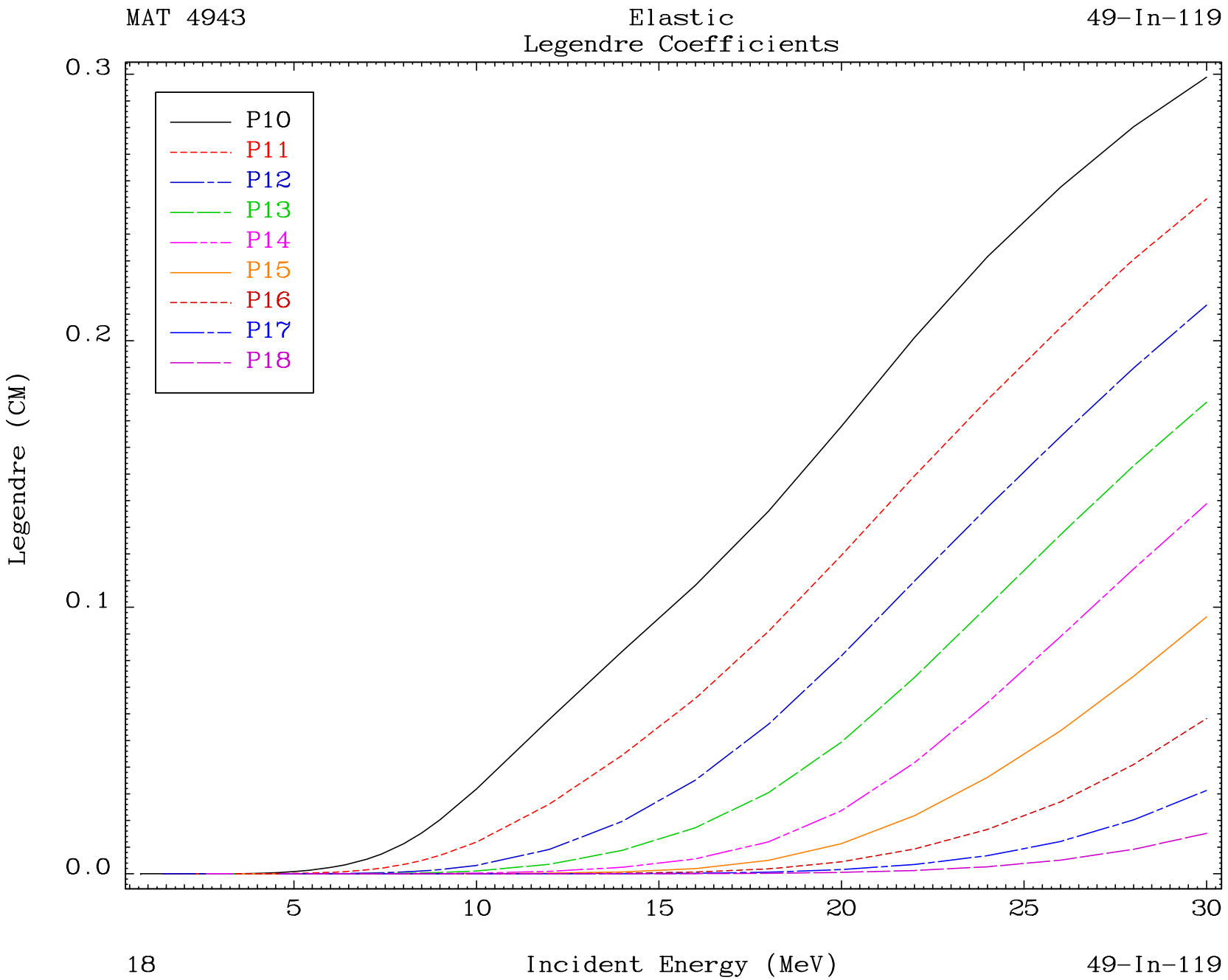

MAT 4943
(n,d) Levels
49-In-119
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
13
49-In-119

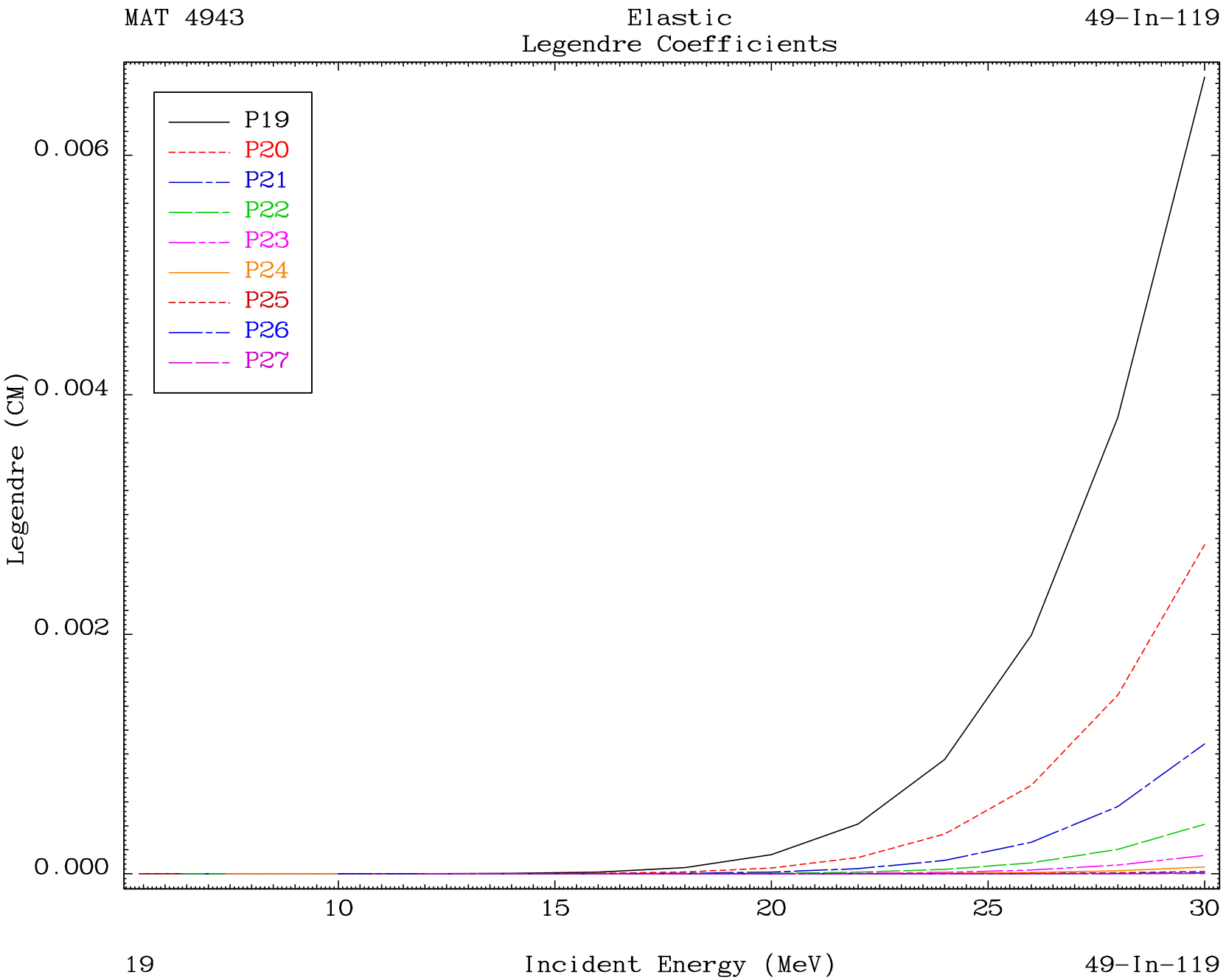

MAT 4943
(n,t) Levels
49-In-119
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
14
49-In-119

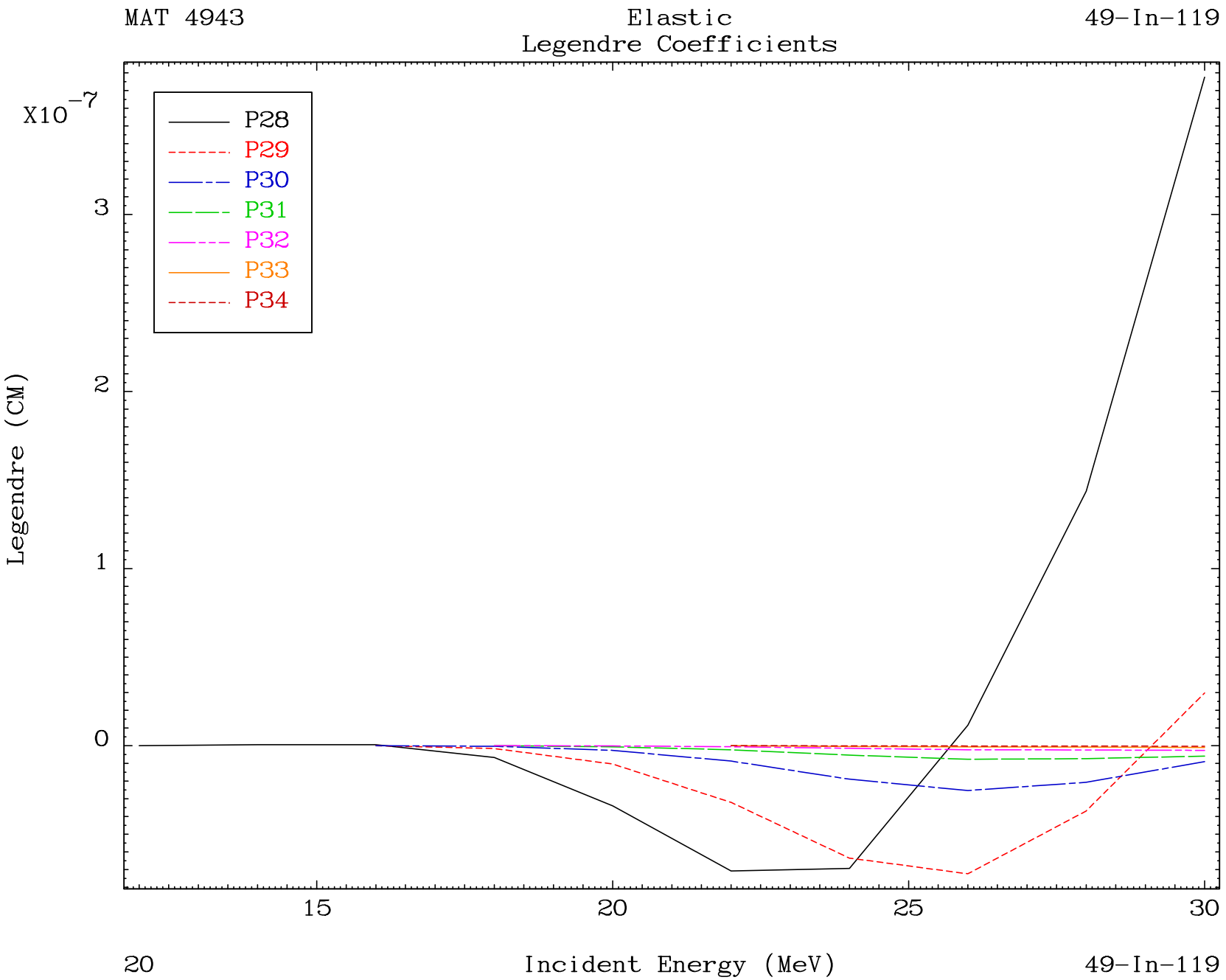

MAT 4943
(n,He3) Levels
49-In-119
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^-12
5
2
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
15
49-In-119

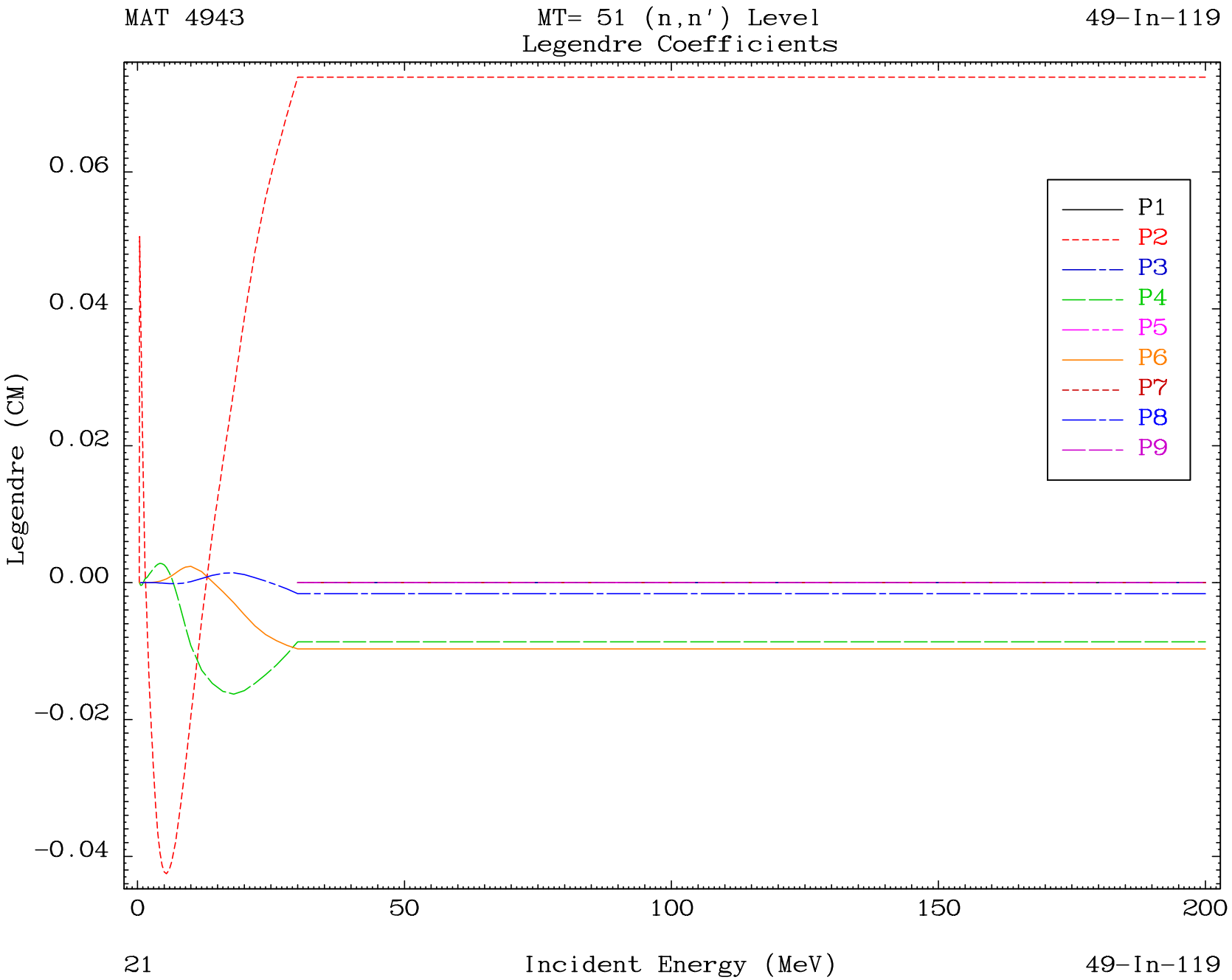

MAT 4943
(n,α) Levels
49-In-119
293 Kelvin Cross Sections
(n,α)
Cross Section (barns)
Incident Energy (MeV)
16
49-In-119

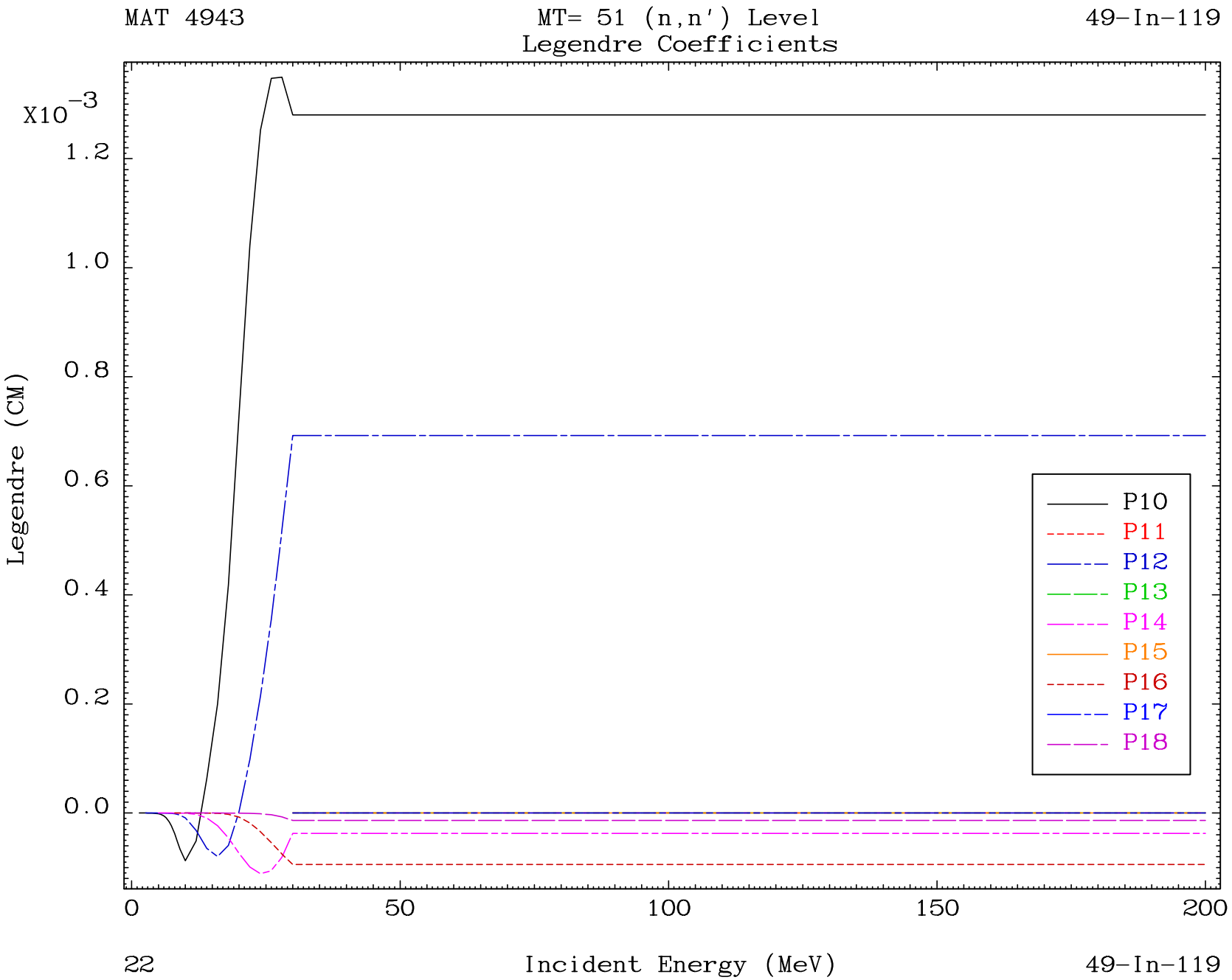

MAT 4943
Elastic
Legendre Coefficients
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
1.0
0.8
0.6
0.4
0.2
0.0
0
10
20
30
17
Incident Energy (MeV)
49-In-119

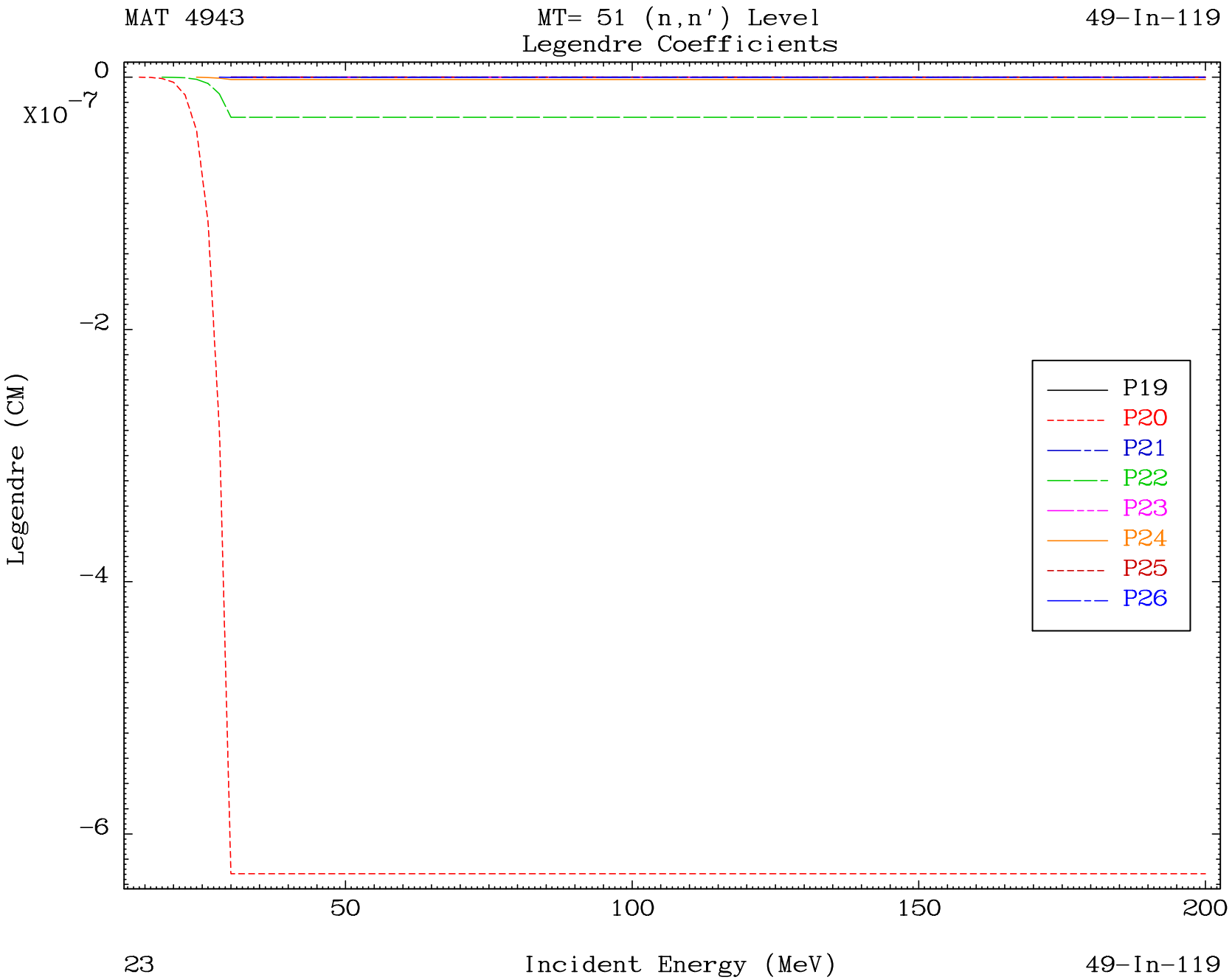

MAT 4943
Elastic
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.3
0.2
0.1
0.0
Legendre (CM)
5
10
15
20
25
30
18
Incident Energy (MeV)
49-In-119

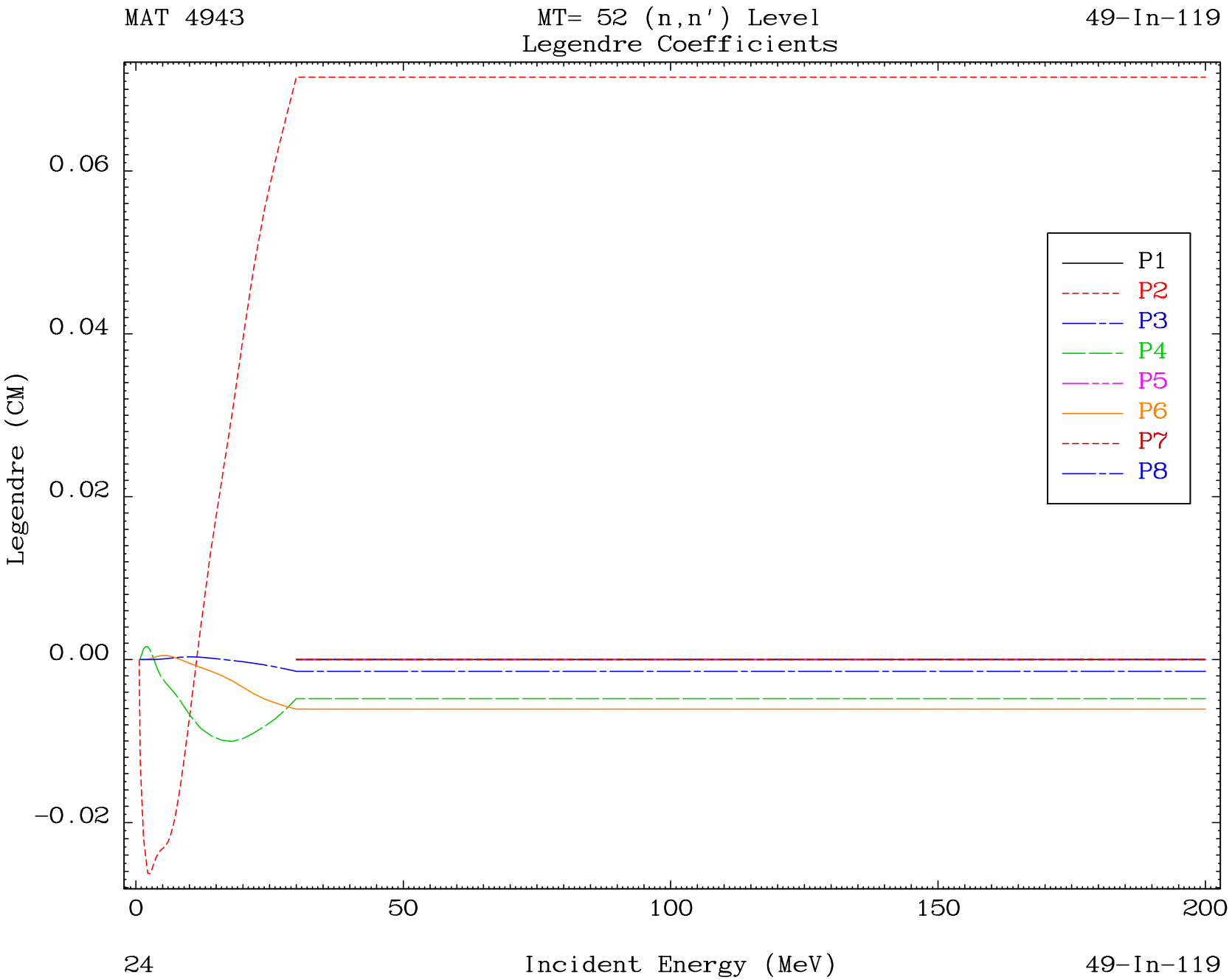

MAT 4943
Elastic
Legendre Coefficients
49-In-119
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.006
0.004
0.002
0.000
Legendre (CM)
10
15
20
25
30
19
Incident Energy (MeV)
49-In-119

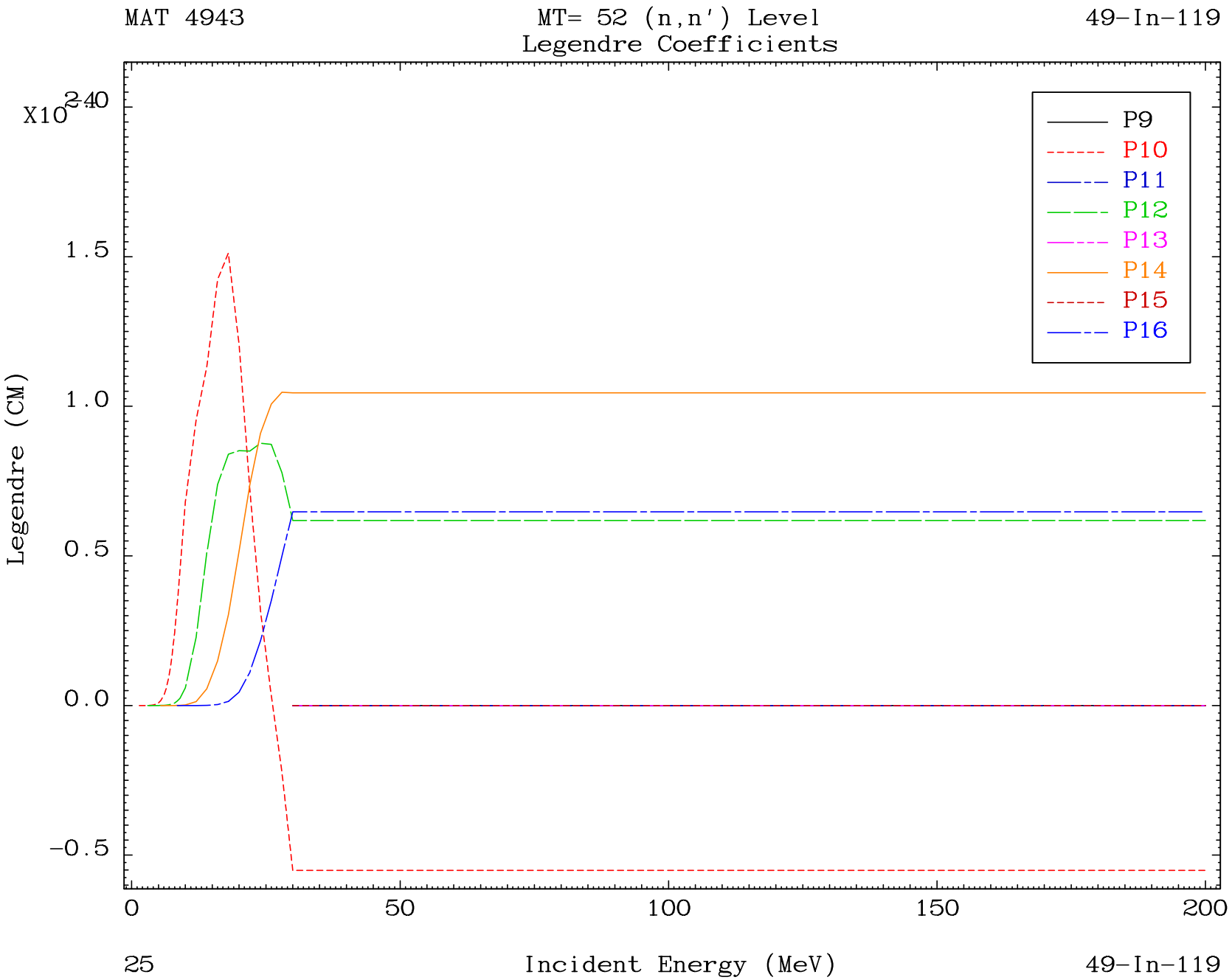

MAT 4943
Elastic
Legendre Coefficients
49-In-119
X10^-7
P28
P29
P30
P31
P32
P33
P34
Legendre (CM)
3
2
1
0
15
20
25
30
20
Incident Energy (MeV)
49-In-119

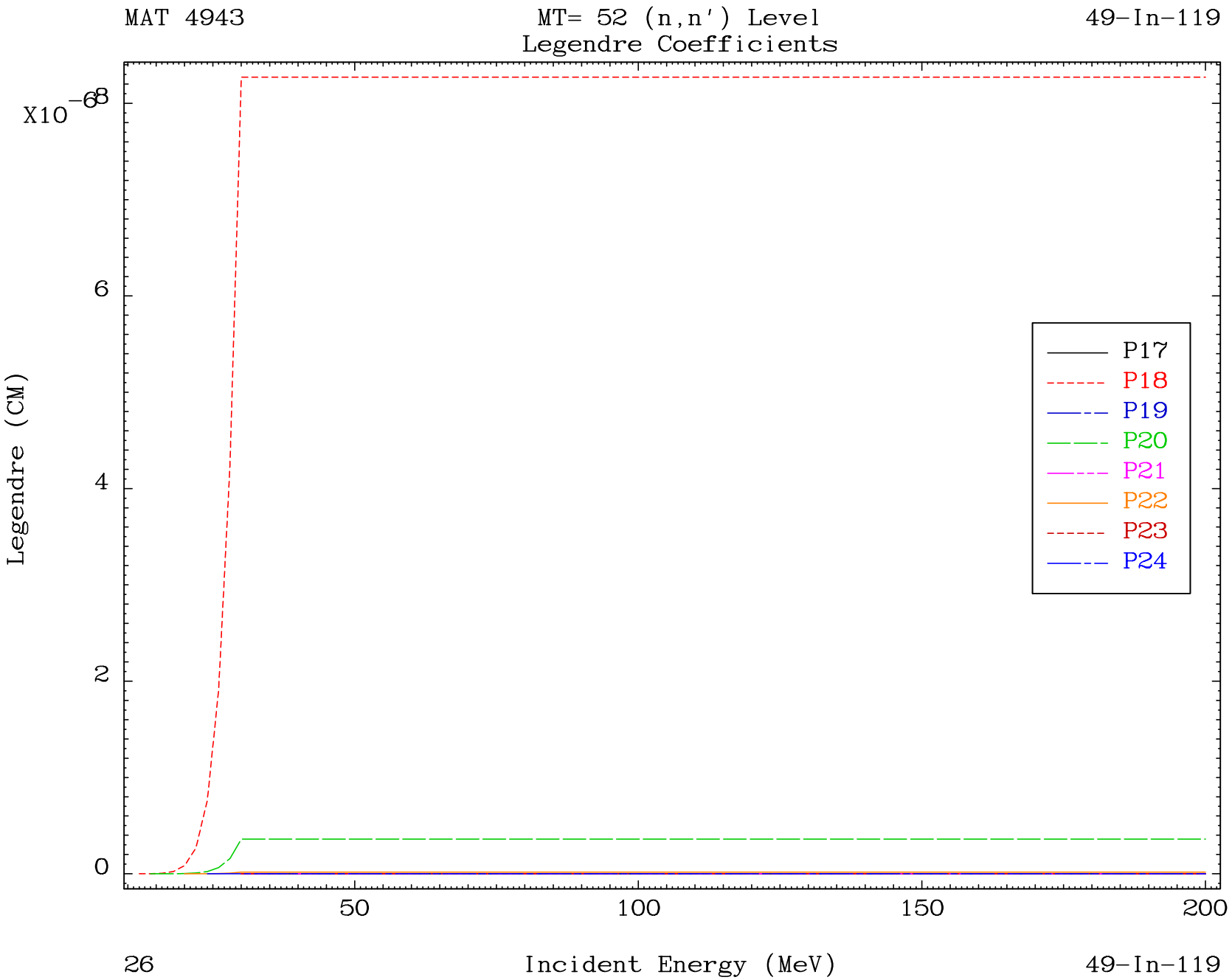

MAT 4943
MT= 51 (n,n') Level
Legendre Coefficients
49-In-119
0.06
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
21
Incident Energy (MeV)
49-In-119

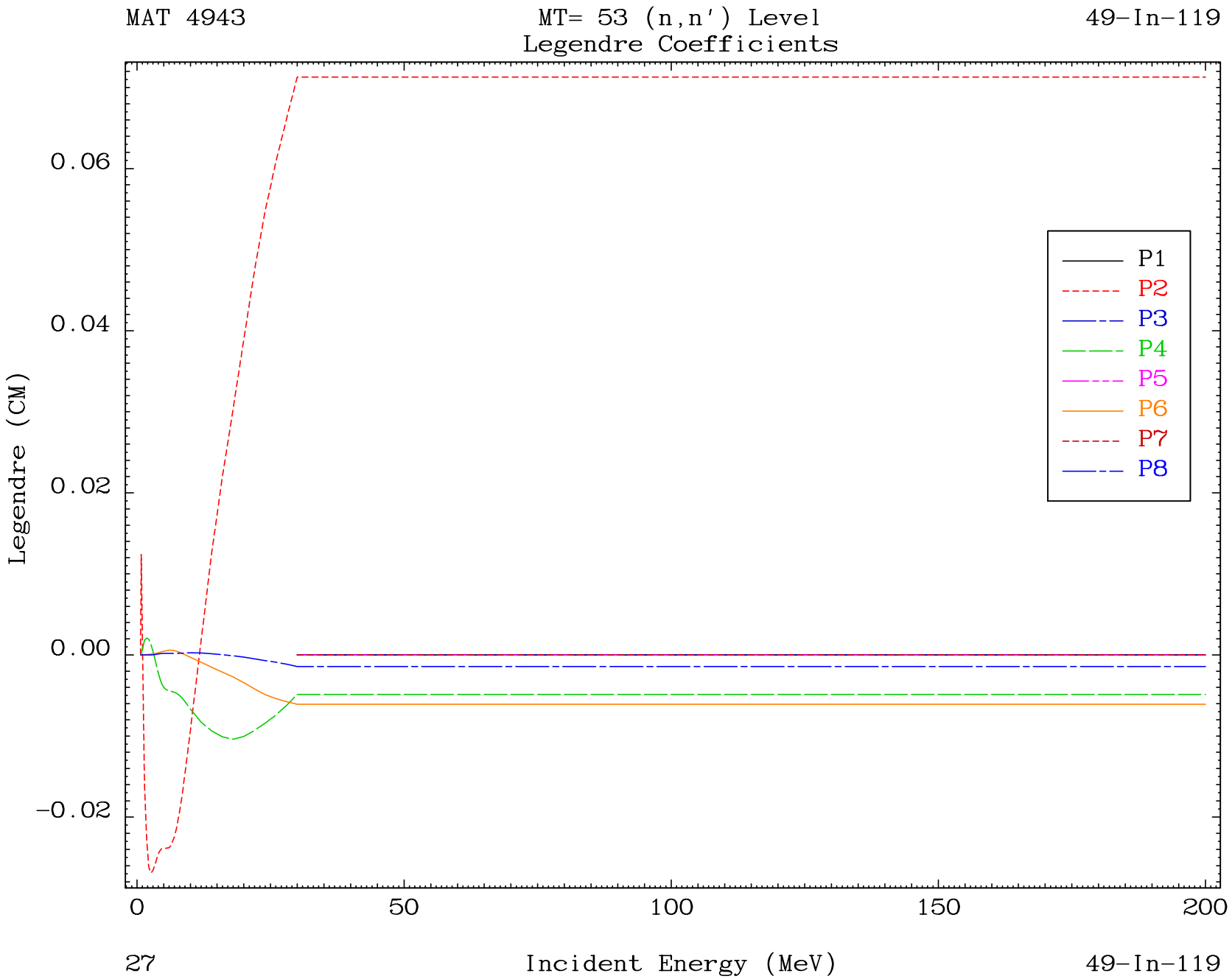

MAT 4943
MT= 51 (n,n') Level
Legendre Coefficients
49-In-119
X10^-3
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
50
100
150
200
22
Incident Energy (MeV)
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18

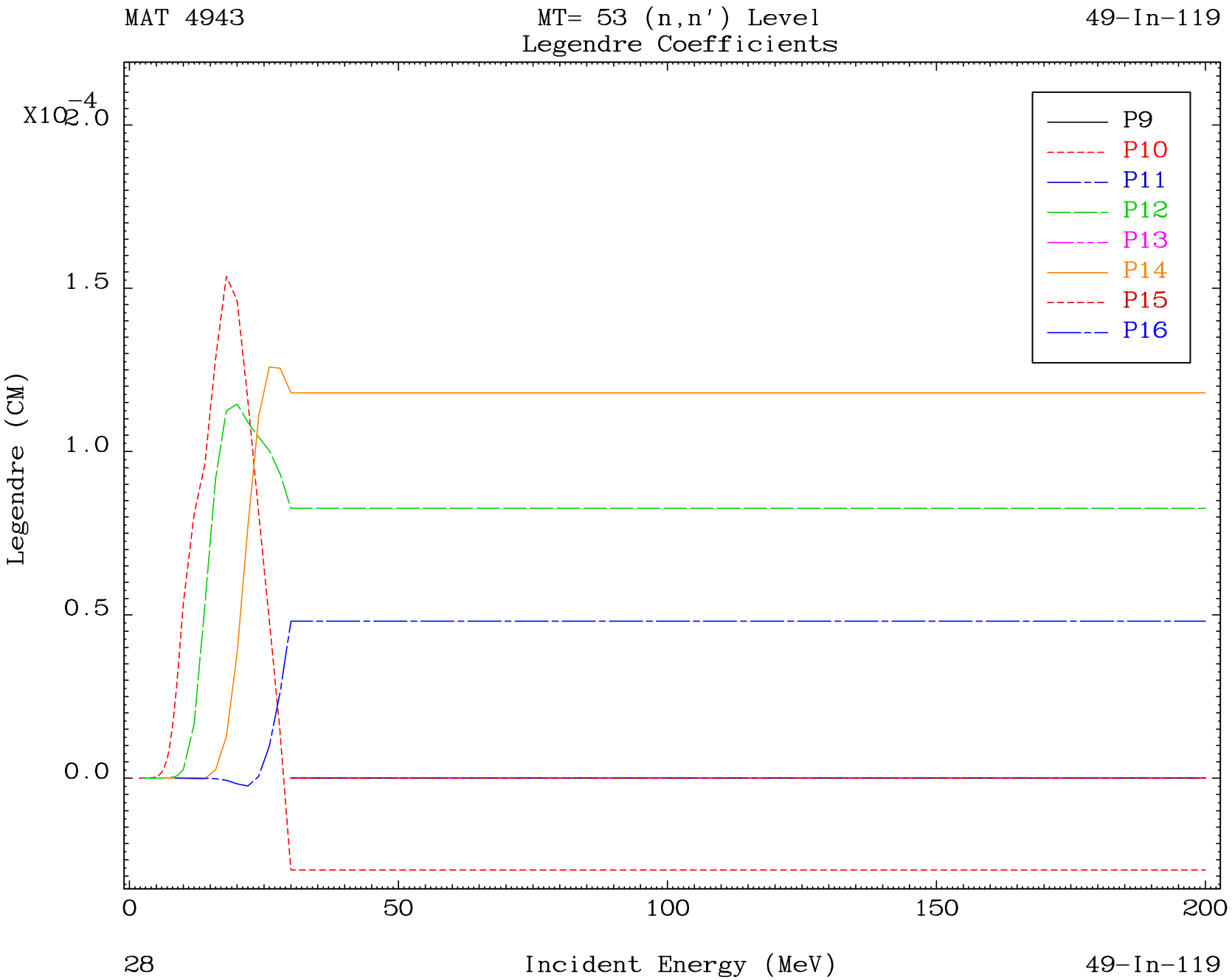

MAT 4943
MT= 51 (n,n') Level
Legendre Coefficients
49-In-119
0
X10^-7
-2
-4
-6
Legendre (CM)
50
100
150
200
P19
P20
P21
P22
P23
P24
P25
P26
23
Incident Energy (MeV)
49-In-119

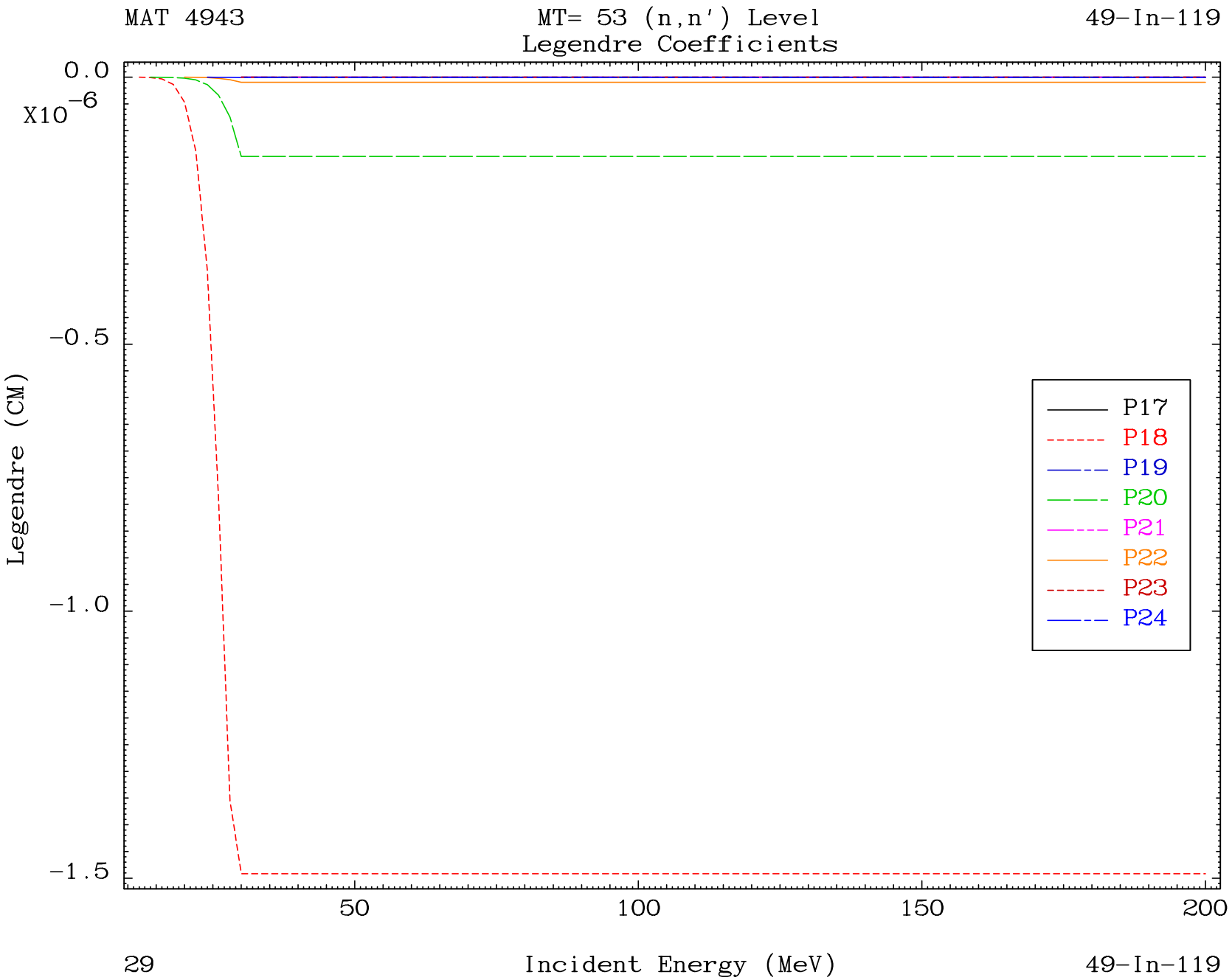

MAT 4943
MT= 52 (n,n') Level
Legendre Coefficients
49-In-119
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
24
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8

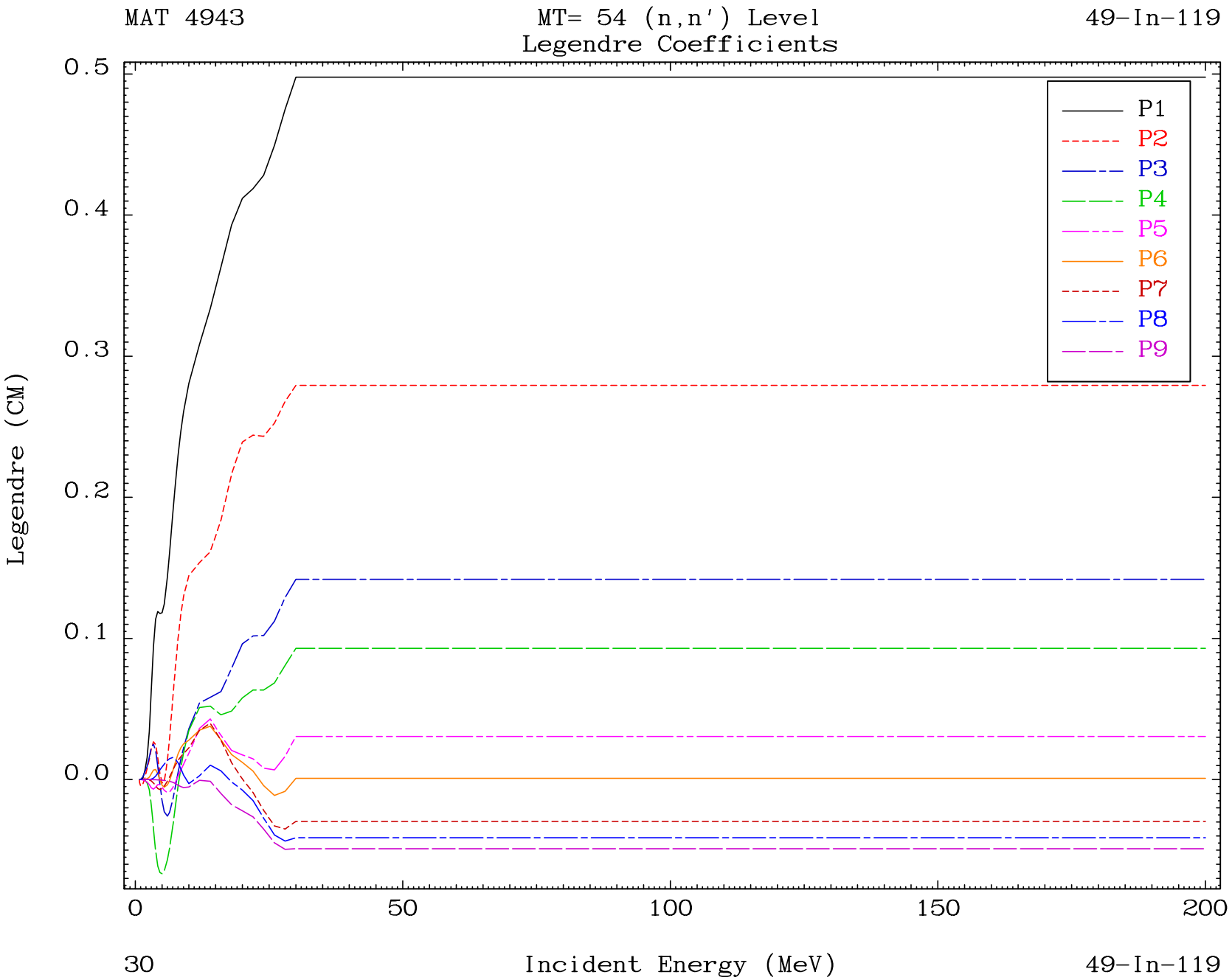

MAT 4943
MT= 52 (n,n') Level
Legendre Coefficients
49-In-119
X10-40
2
1.5
1.0
0.5
0.0
-0.5
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
25
Incident Energy (MeV)
49-In-119

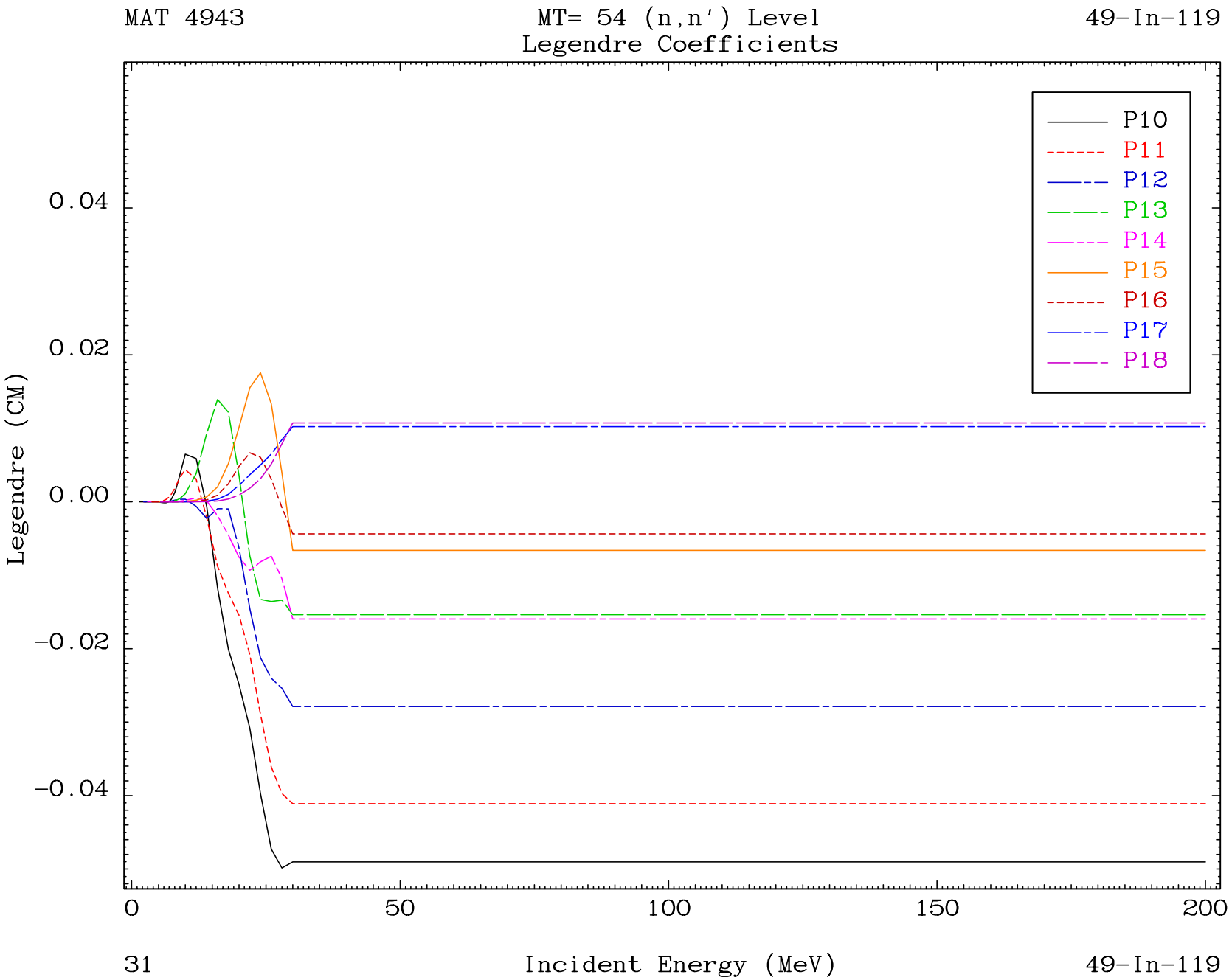

MAT 4943
MT= 52 (n,n') Level
Legendre Coefficients
49-In-119
X10 -6
8
6
4
2
0
Legendre (CM)
P17
P18
P19
P20
P21
P22
P23
P24
50
100
150
200
26
Incident Energy (MeV)
49-In-119

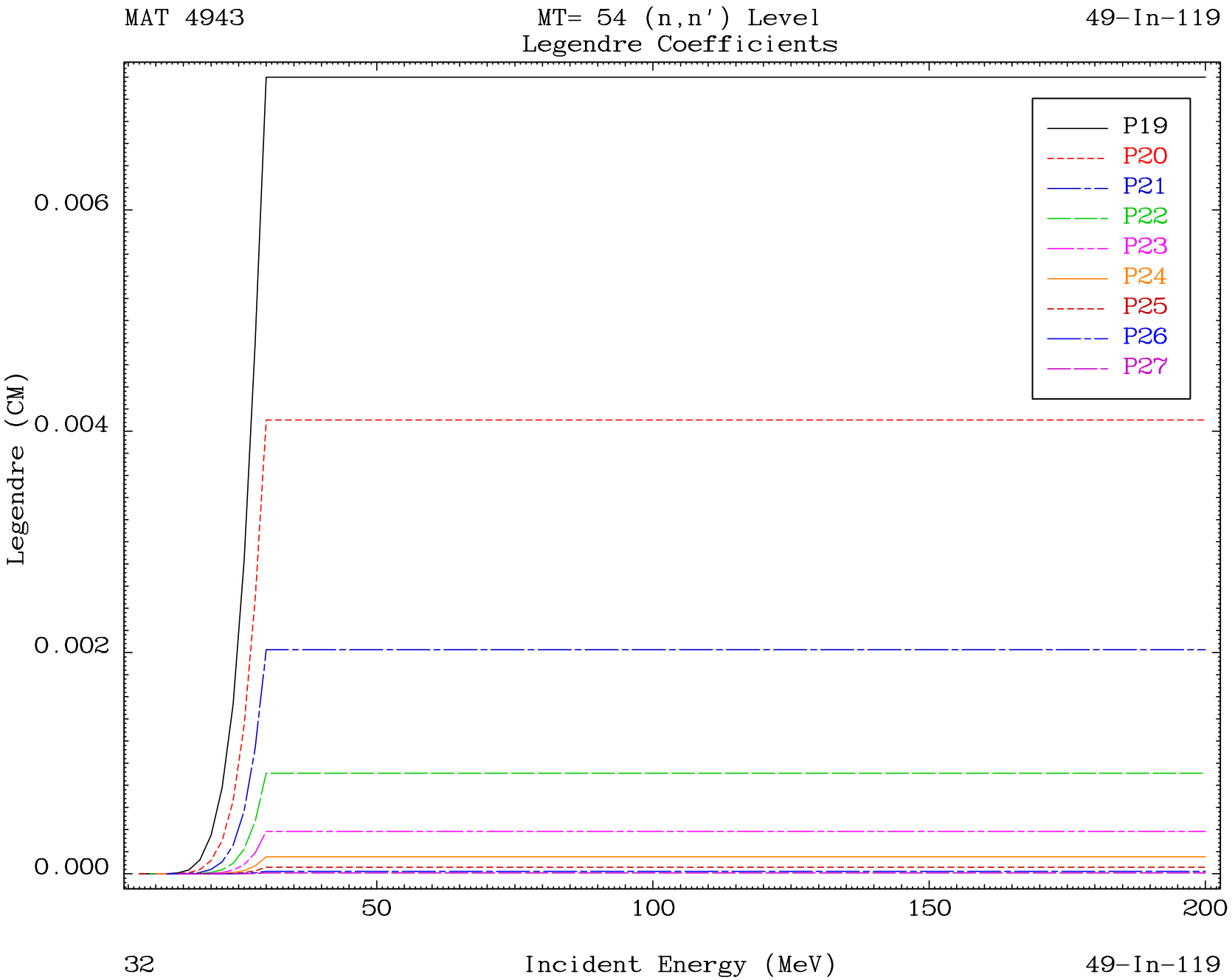

MAT 4943
MT= 53 (n,n') Level
Legendre Coefficients
49-In-119
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
27
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8

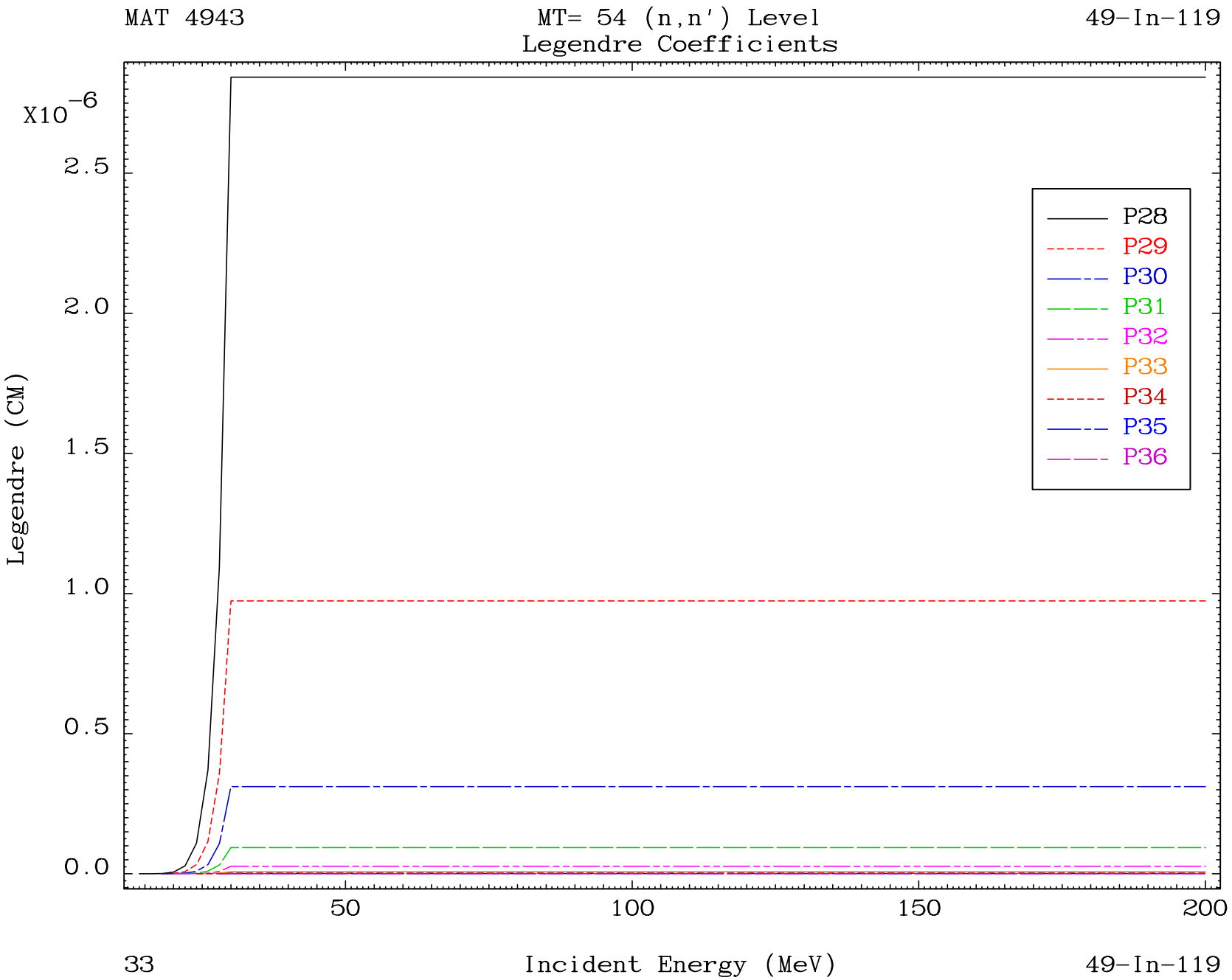

MAT 4943
MT= 53 (n,n') Level
Legendre Coefficients
49-In-119
X10-4
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
28
Incident Energy (MeV)
49-In-119

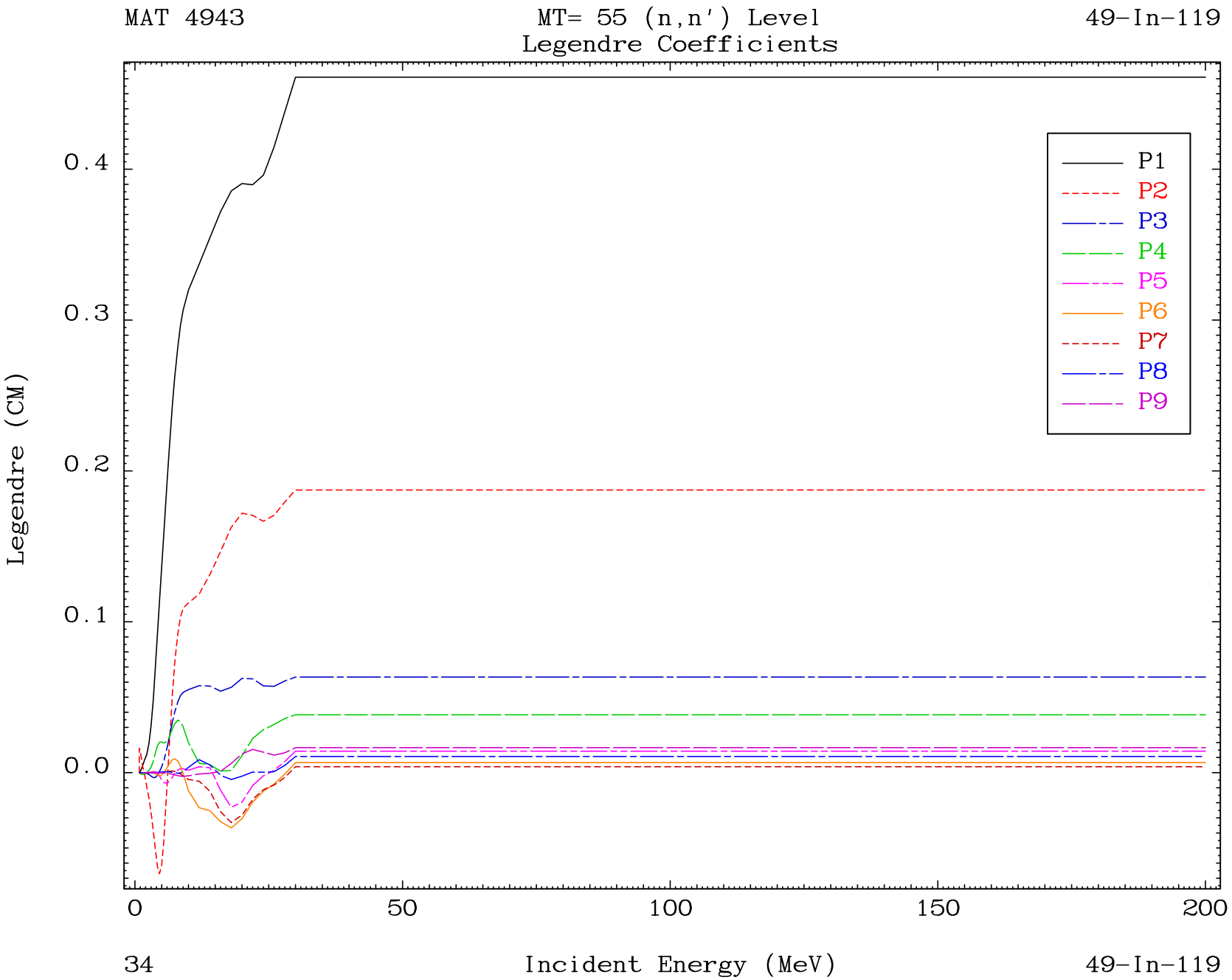

MAT 4943
MT= 53 (n,n') Level
Legendre Coefficients
49-In-119
0.0
X10^-6
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
29
Incident Energy (MeV)
49-In-119
P17
P18
P19
P20
P21
P22
P23
P24

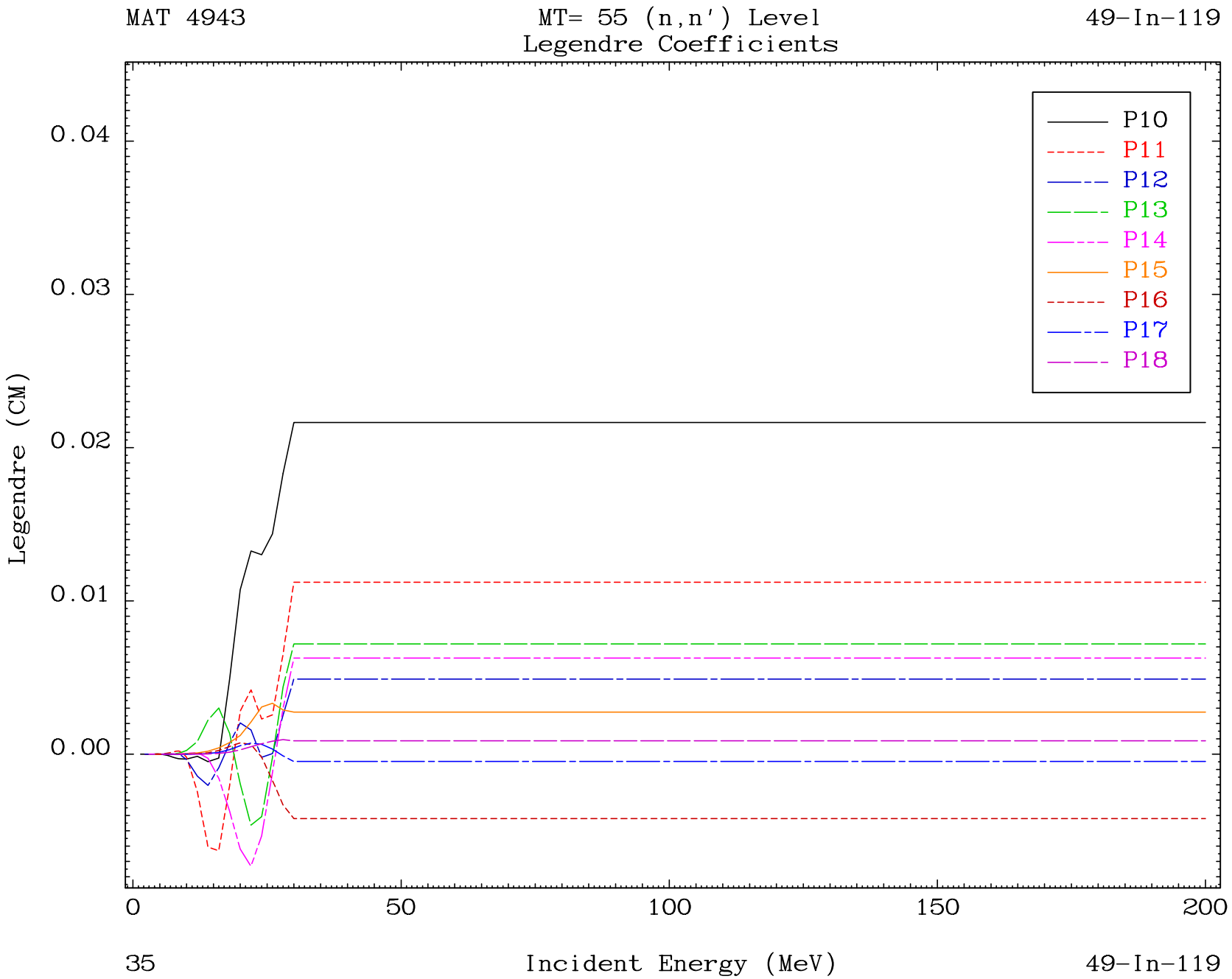

MAT 4943
MT= 54 (n,n') Level
Legendre Coefficients
49-In-119
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
30
Incident Energy (MeV)
49-In-119

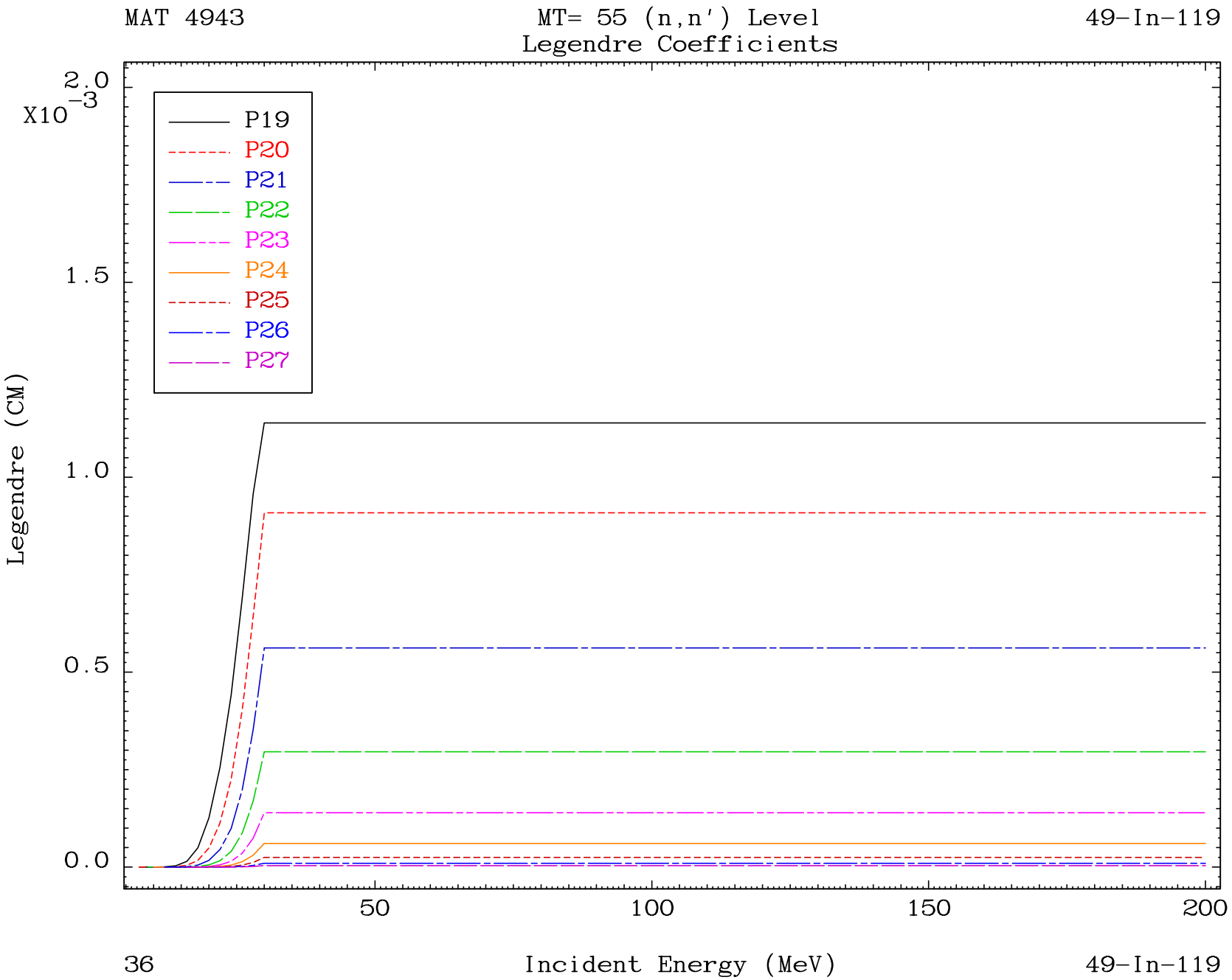

MAT 4943
MT= 54 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
31
Incident Energy (MeV)
49-In-119

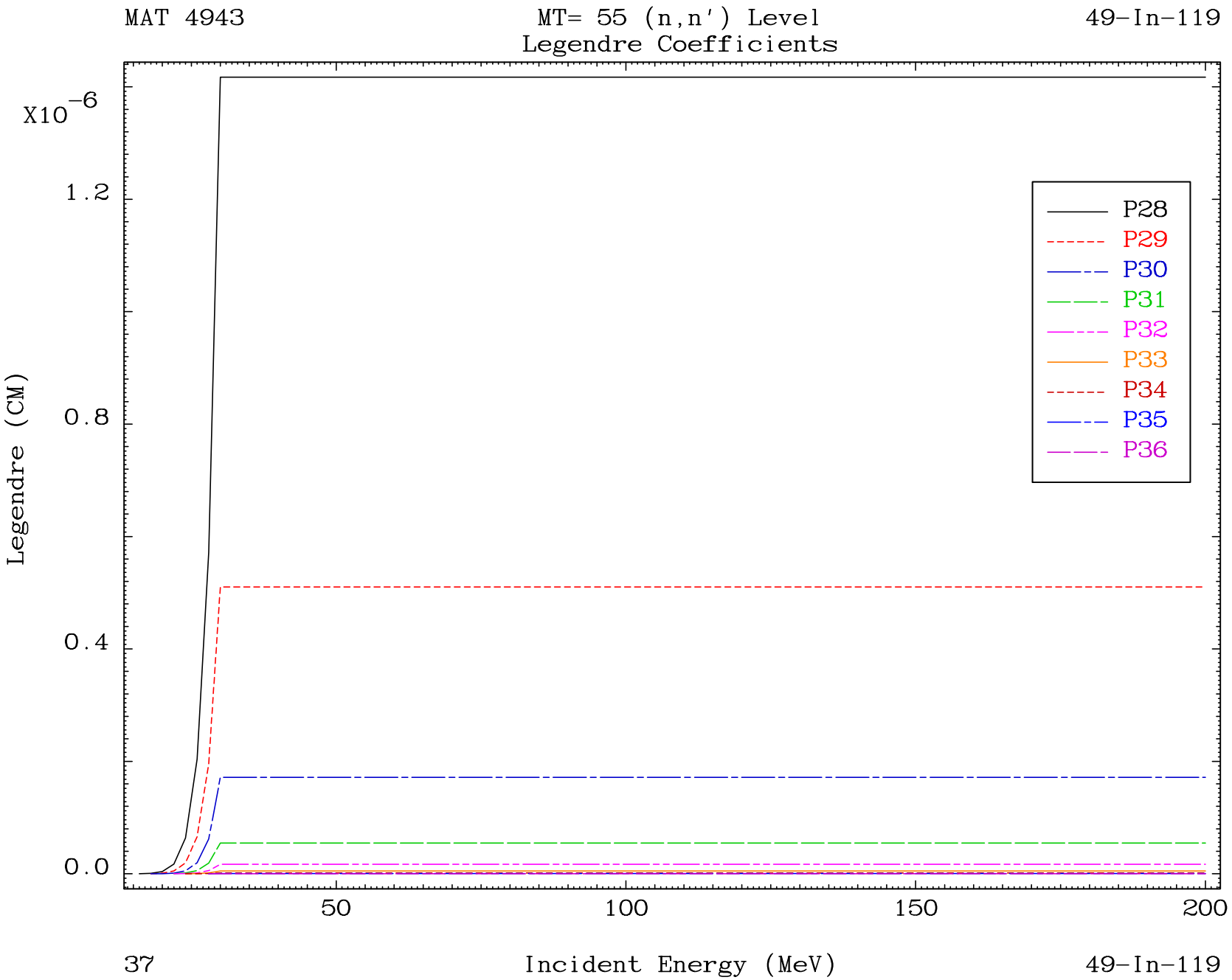

MAT 4943
MT= 54 (n,n') Level
Legendre Coefficients
49-In-119
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.006
0.004
0.002
0.000
Legendre (CM)
50
100
150
200
32
Incident Energy (MeV)
49-In-119

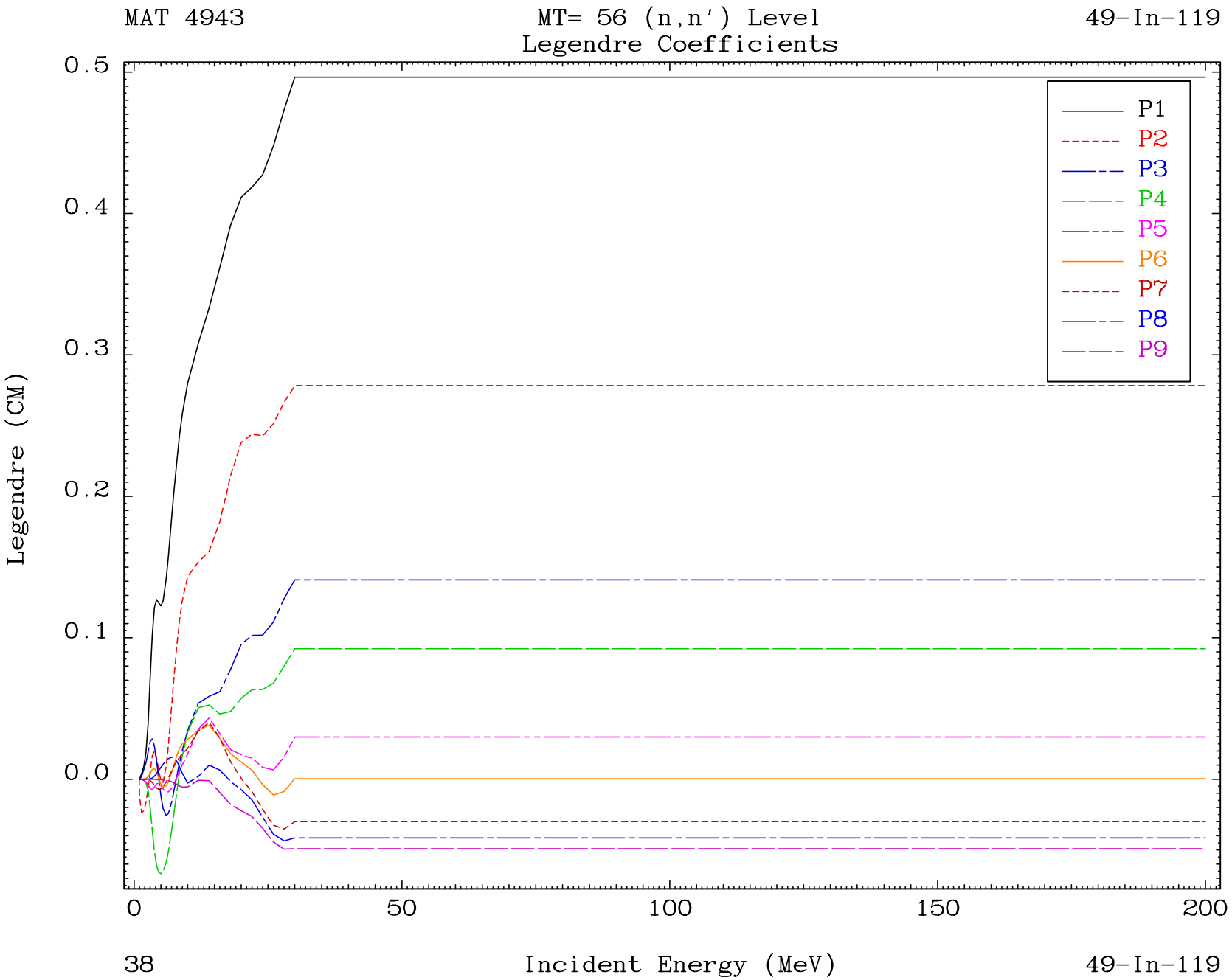

MAT 4943
MT= 54 (n,n') Level
Legendre Coefficients
49-In-119
X10^-6
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
33
Incident Energy (MeV)
49-In-119

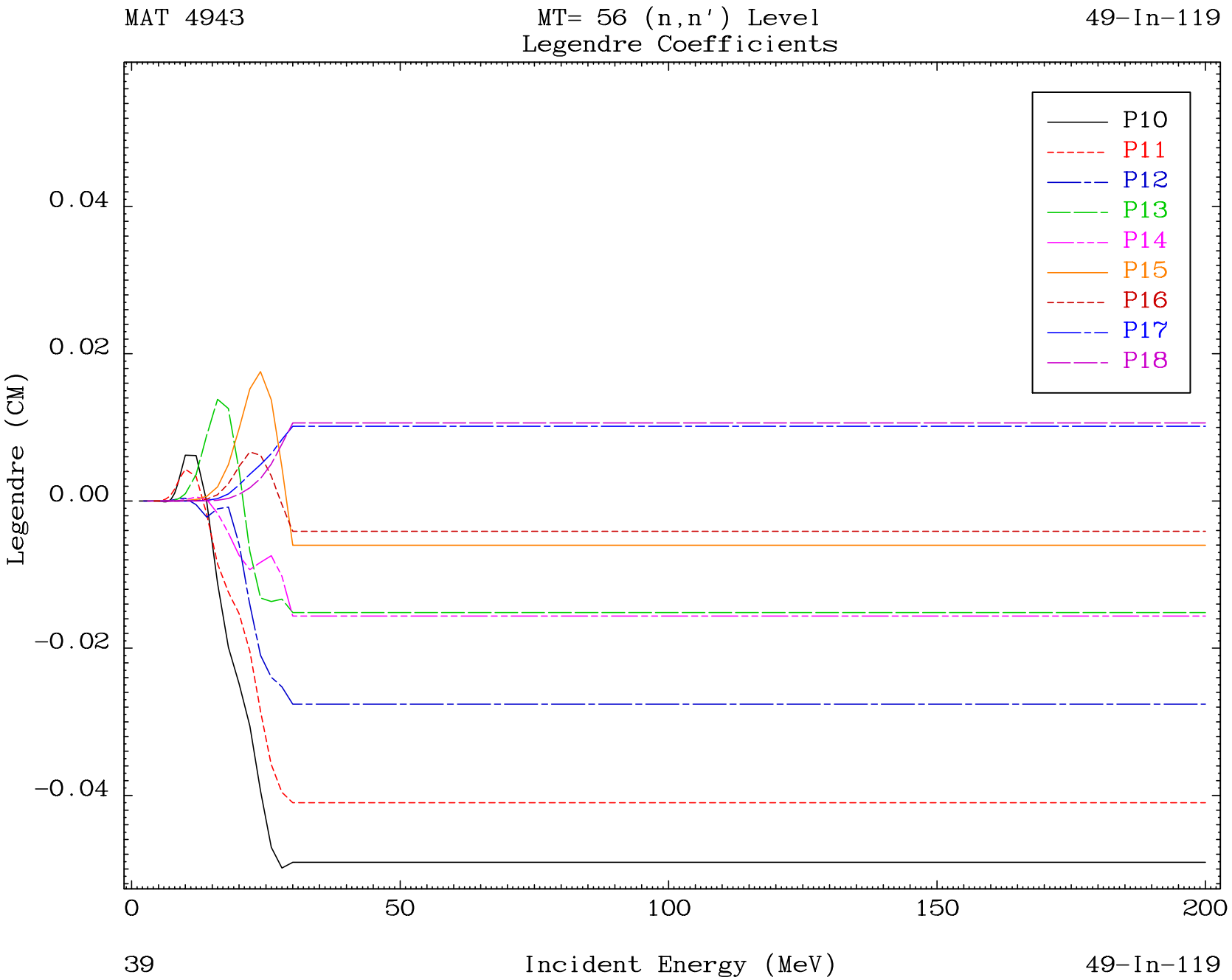

MAT 4943
MT= 55 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
34
Incident Energy (MeV)
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9

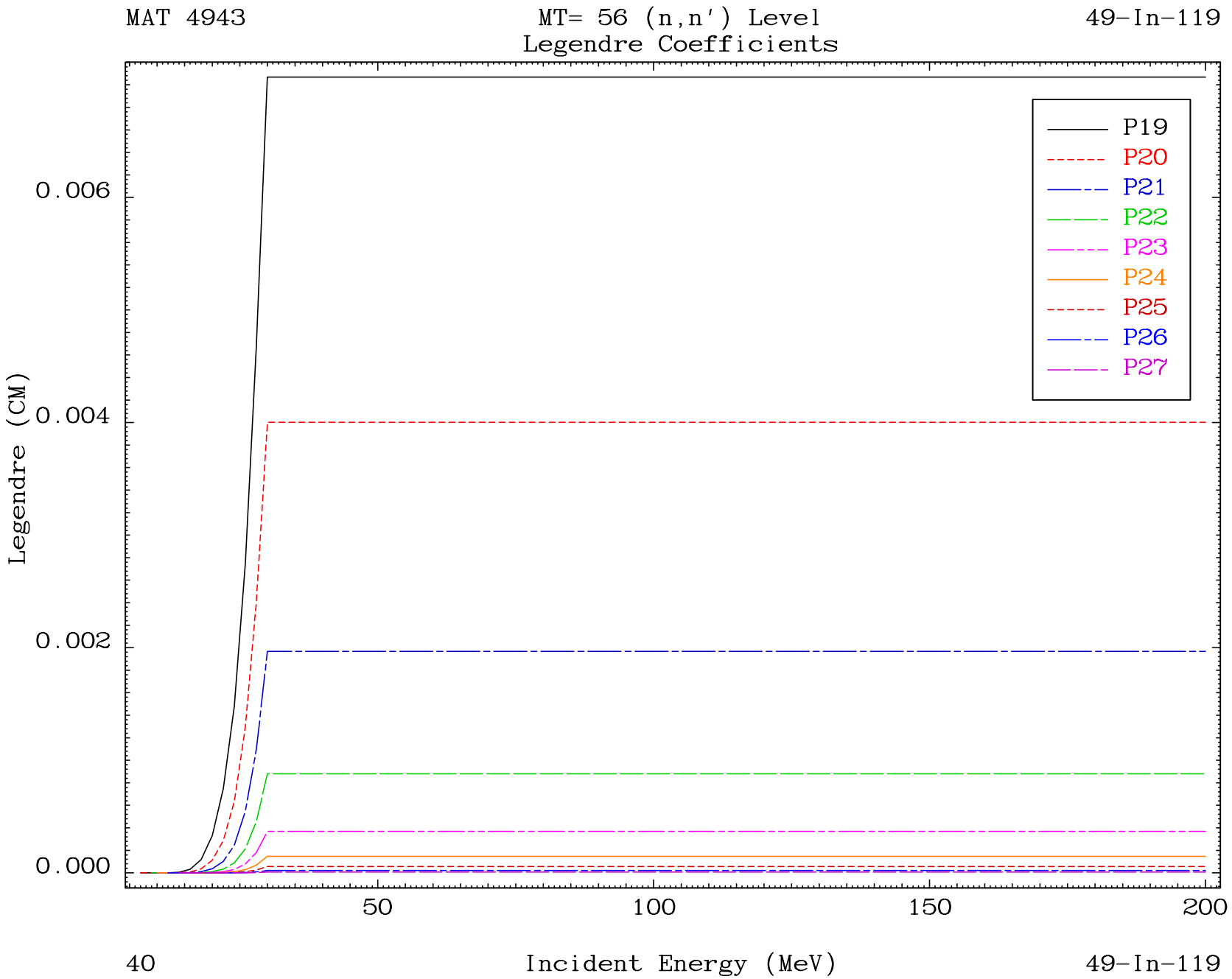

MAT 4943
MT= 55 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
35
Incident Energy (MeV)
49-In-119

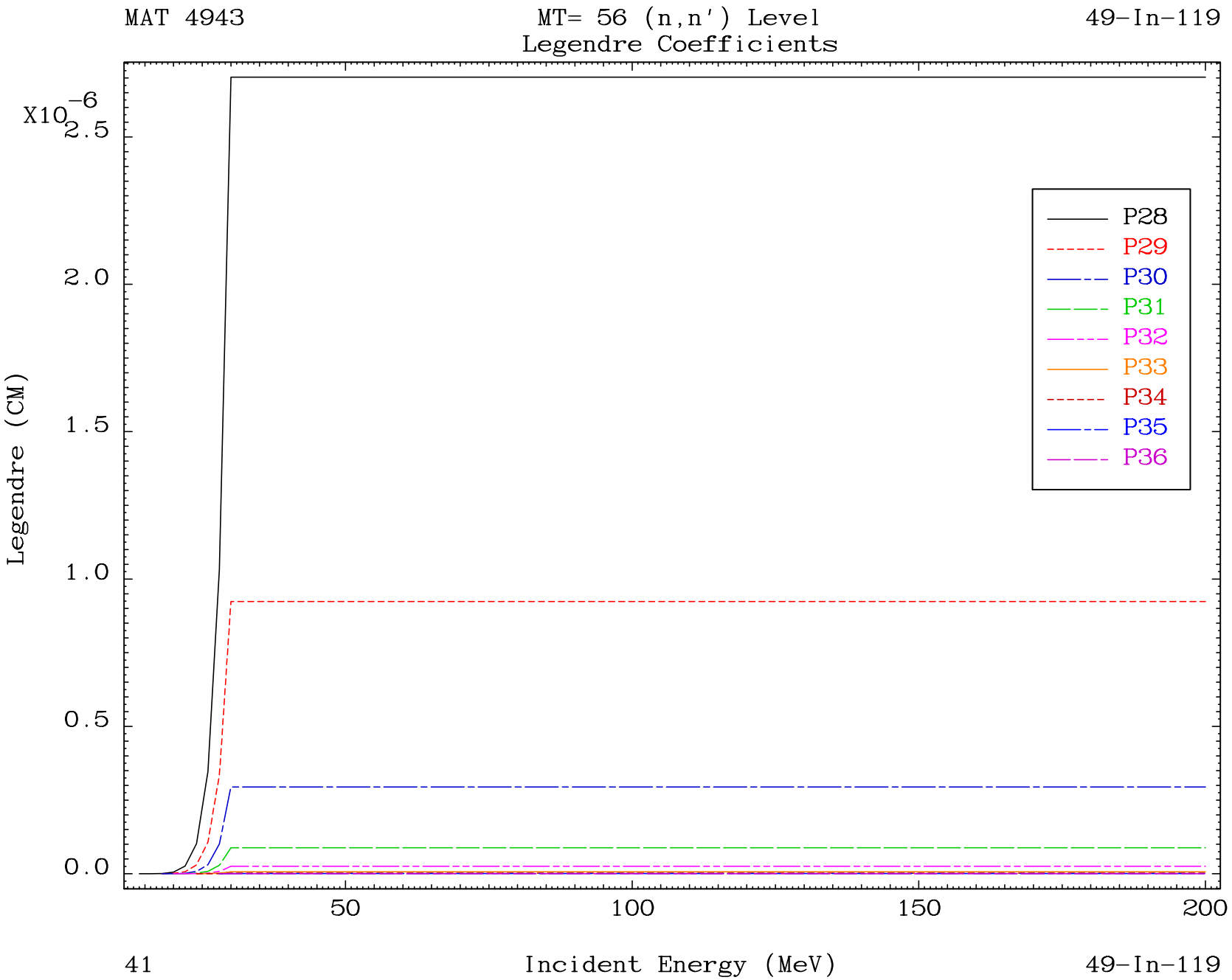

MAT 4943
MT= 55 (n,n') Level
Legendre Coefficients
49-In-119
X10 -3
2.0
1.5
1.0
0.5
0.0
P19
P20
P21
P22
P23
P24
P25
P26
P27
Legendre (CM)
50
100
150
200
36
Incident Energy (MeV)
49-In-119

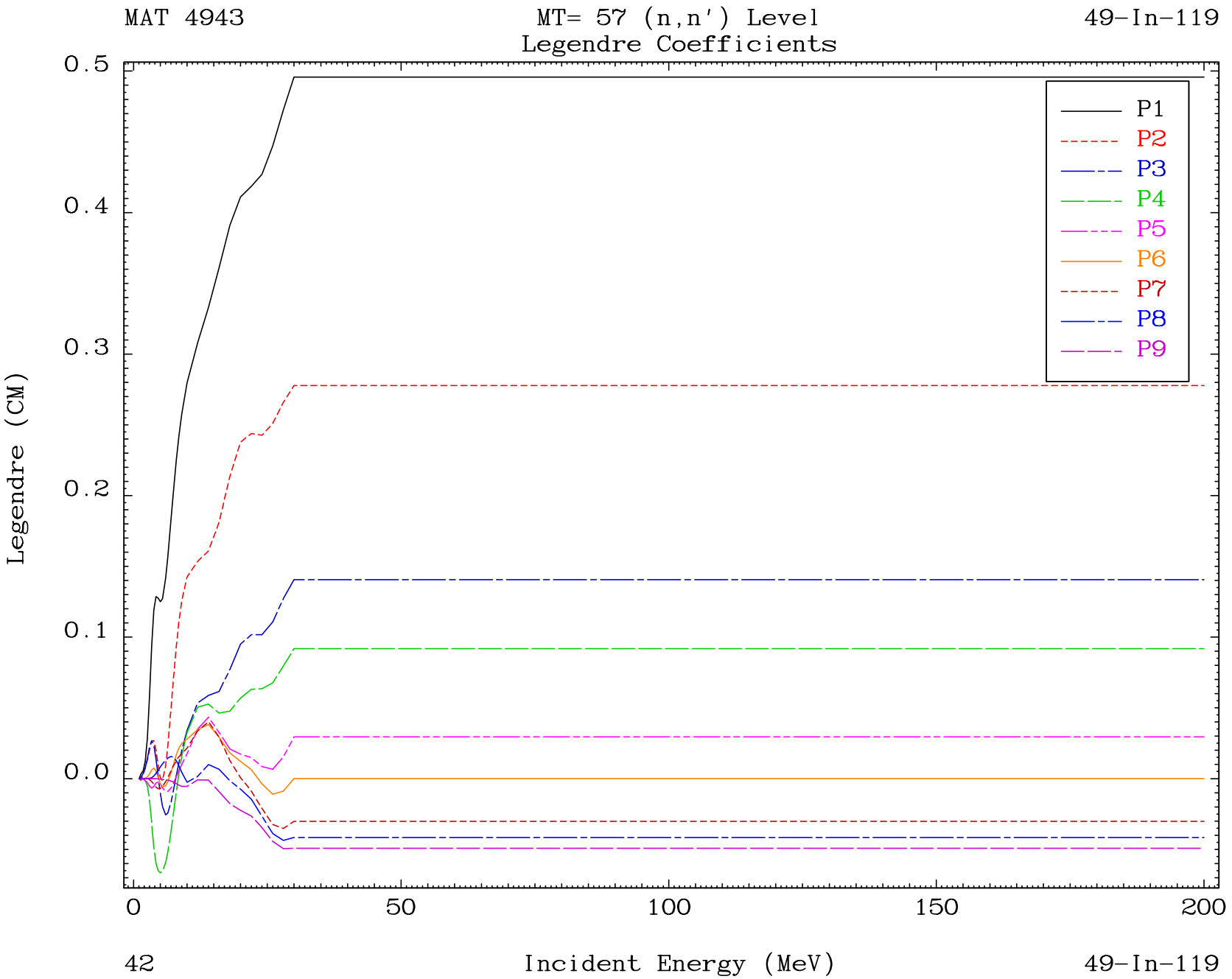

MAT 4943
MT= 55 (n,n') Level
Legendre Coefficients
49-In-119
X10^-6
1.2
0.8
0.4
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
37
Incident Energy (MeV)
49-In-119

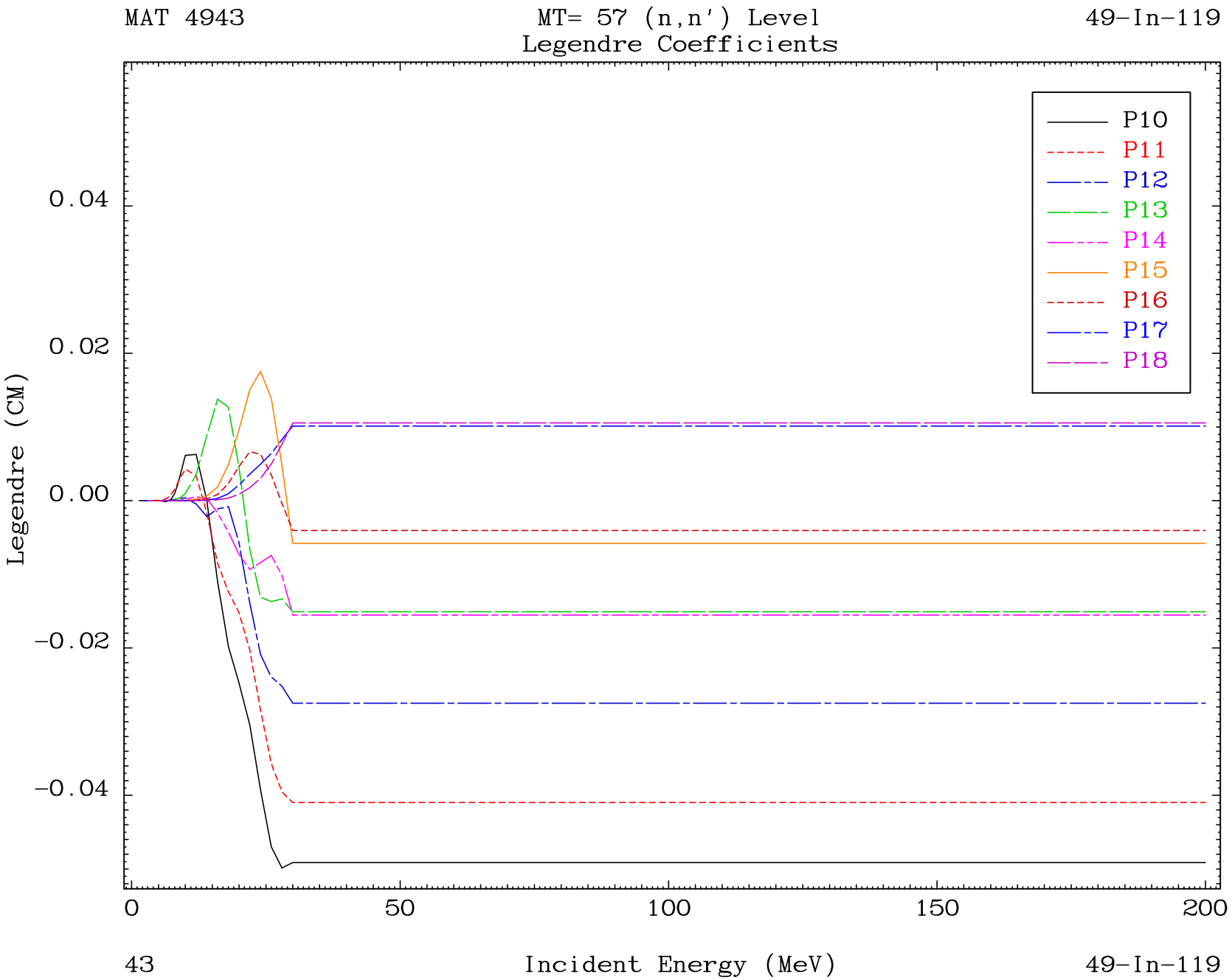

MAT 4943
MT= 56 (n,n') Level
Legendre Coefficients
49-In-119
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
38
Incident Energy (MeV)
49-In-119

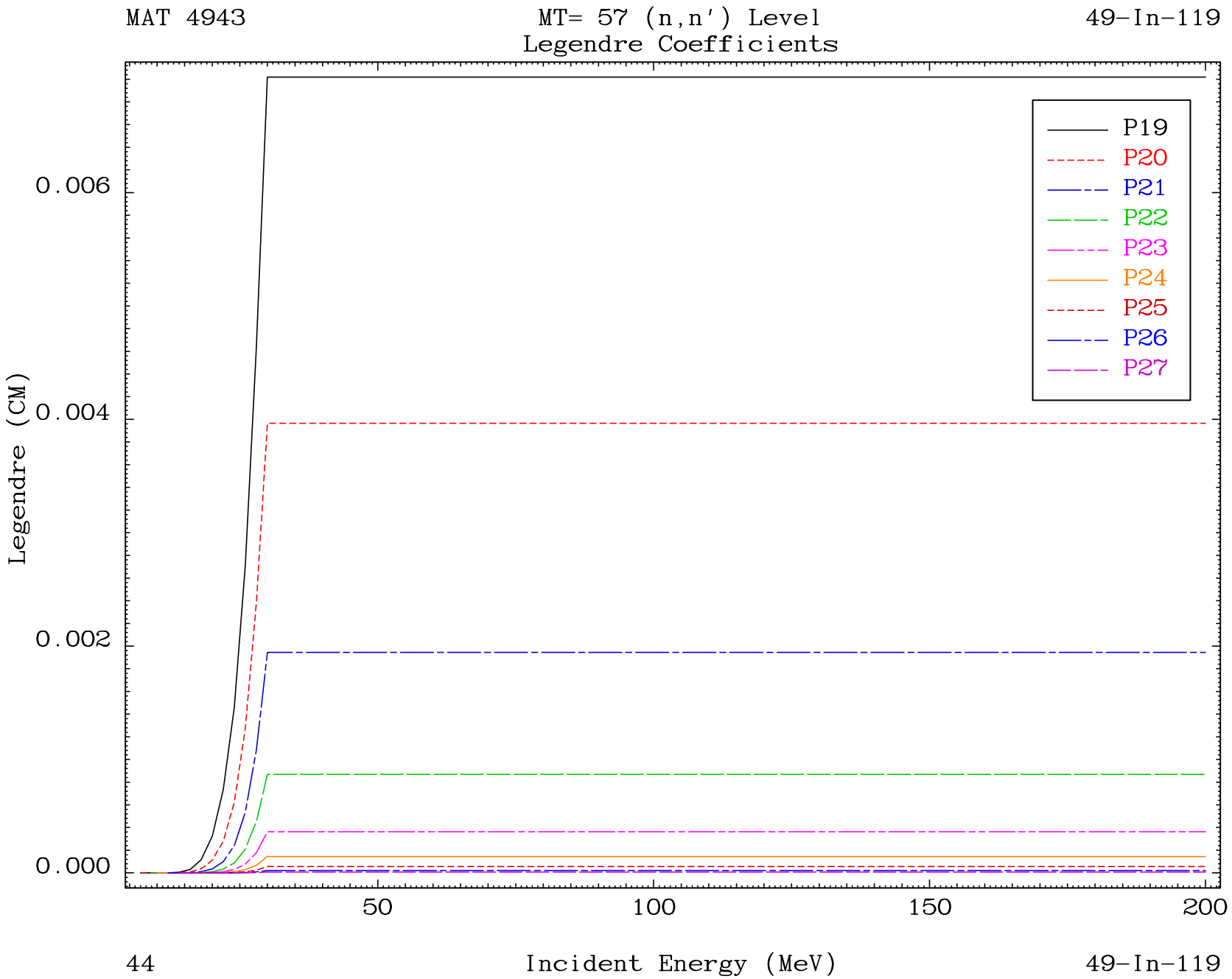

MAT 4943
MT= 56 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
39
Incident Energy (MeV)
49-In-119

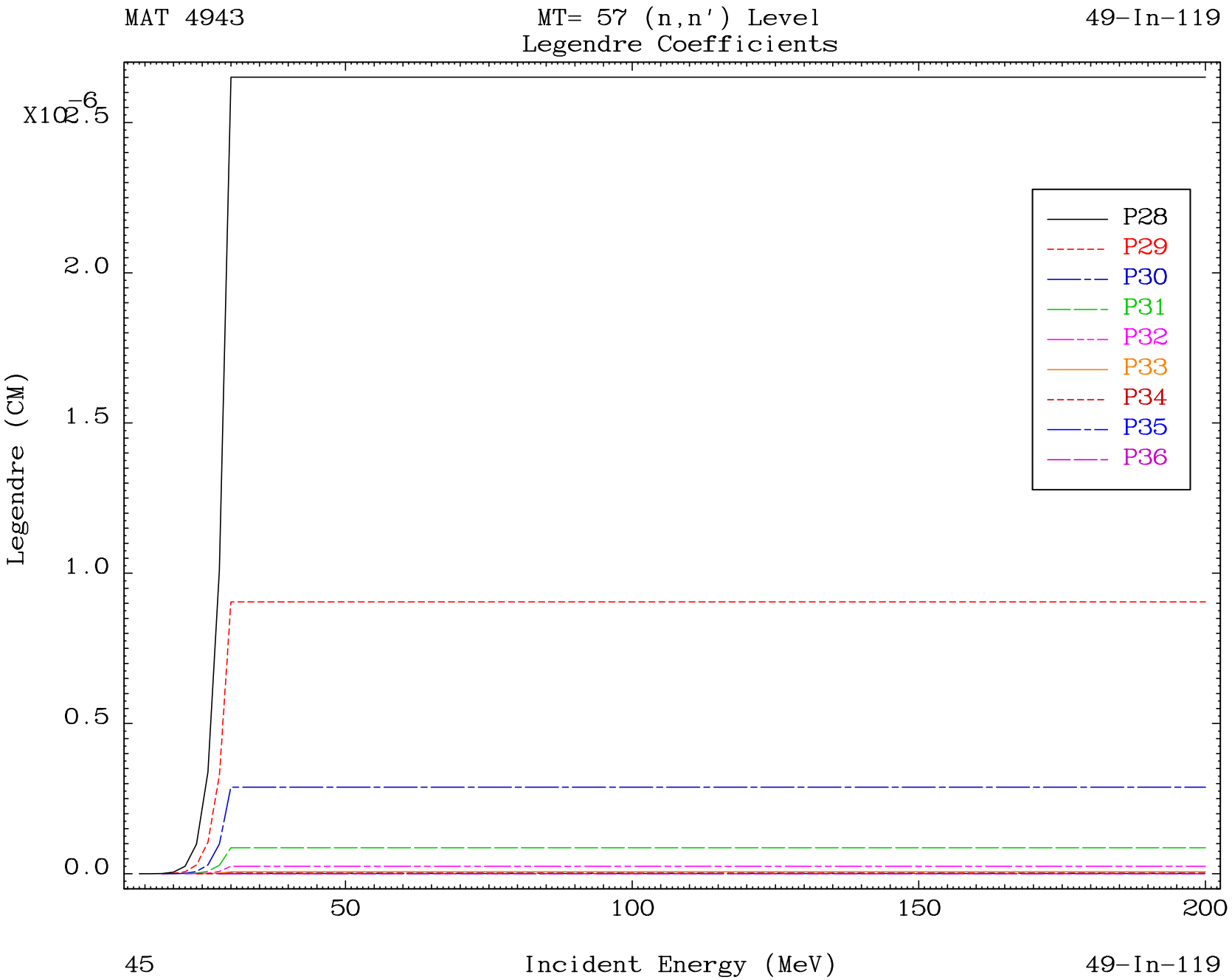

MAT 4943
MT= 56 (n,n') Level
Legendre Coefficients
49-In-119
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.006
0.004
0.002
0.000
Legendre (CM)
50
100
150
200
40
Incident Energy (MeV)
49-In-119

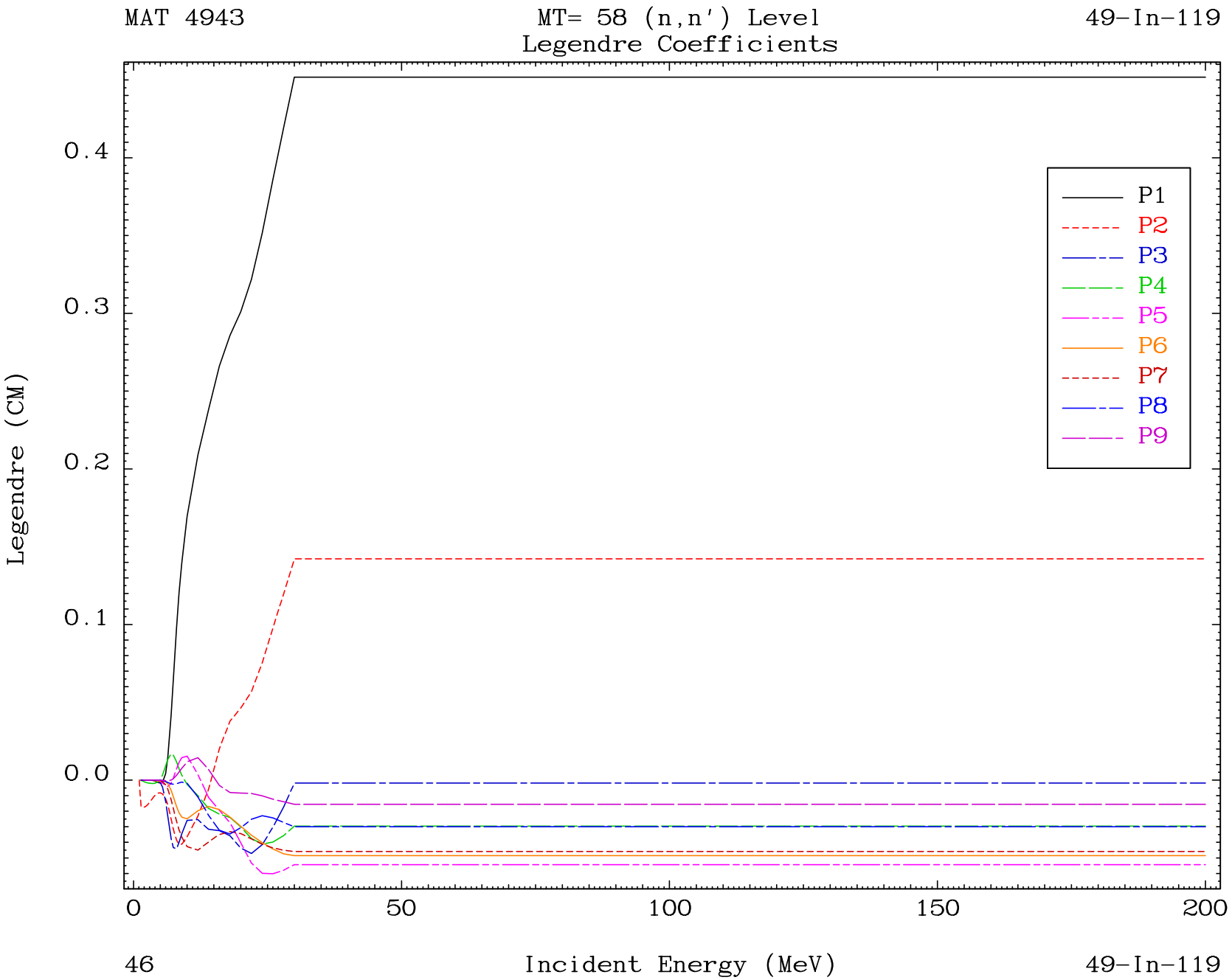

MAT 4943
MT= 56 (n,n') Level
Legendre Coefficients
49-In-119
X10^-6
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
41
Incident Energy (MeV)
49-In-119

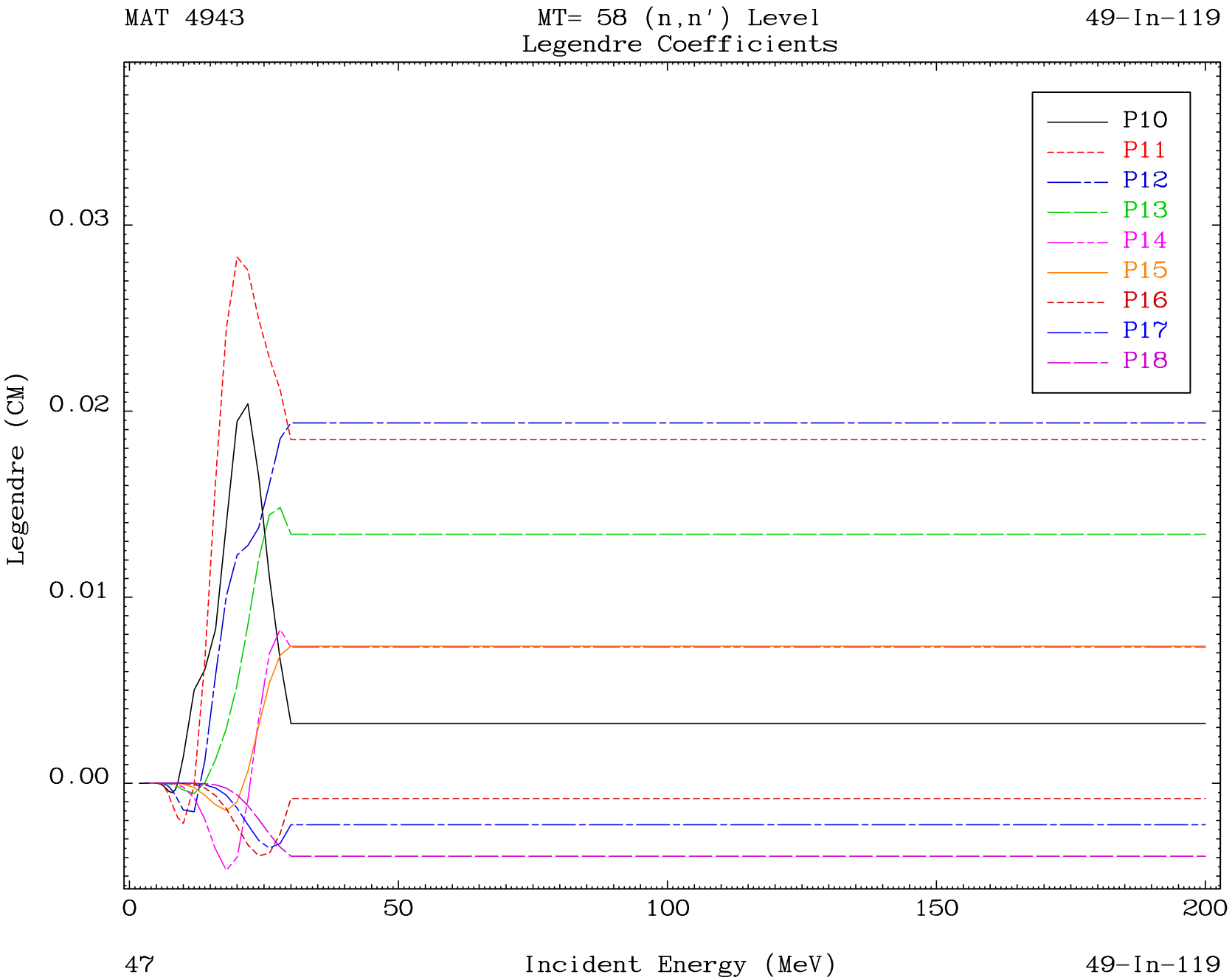

MAT 4943
MT= 57 (n,n') Level
Legendre Coefficients
49-In-119
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
42
Incident Energy (MeV)
49-In-119

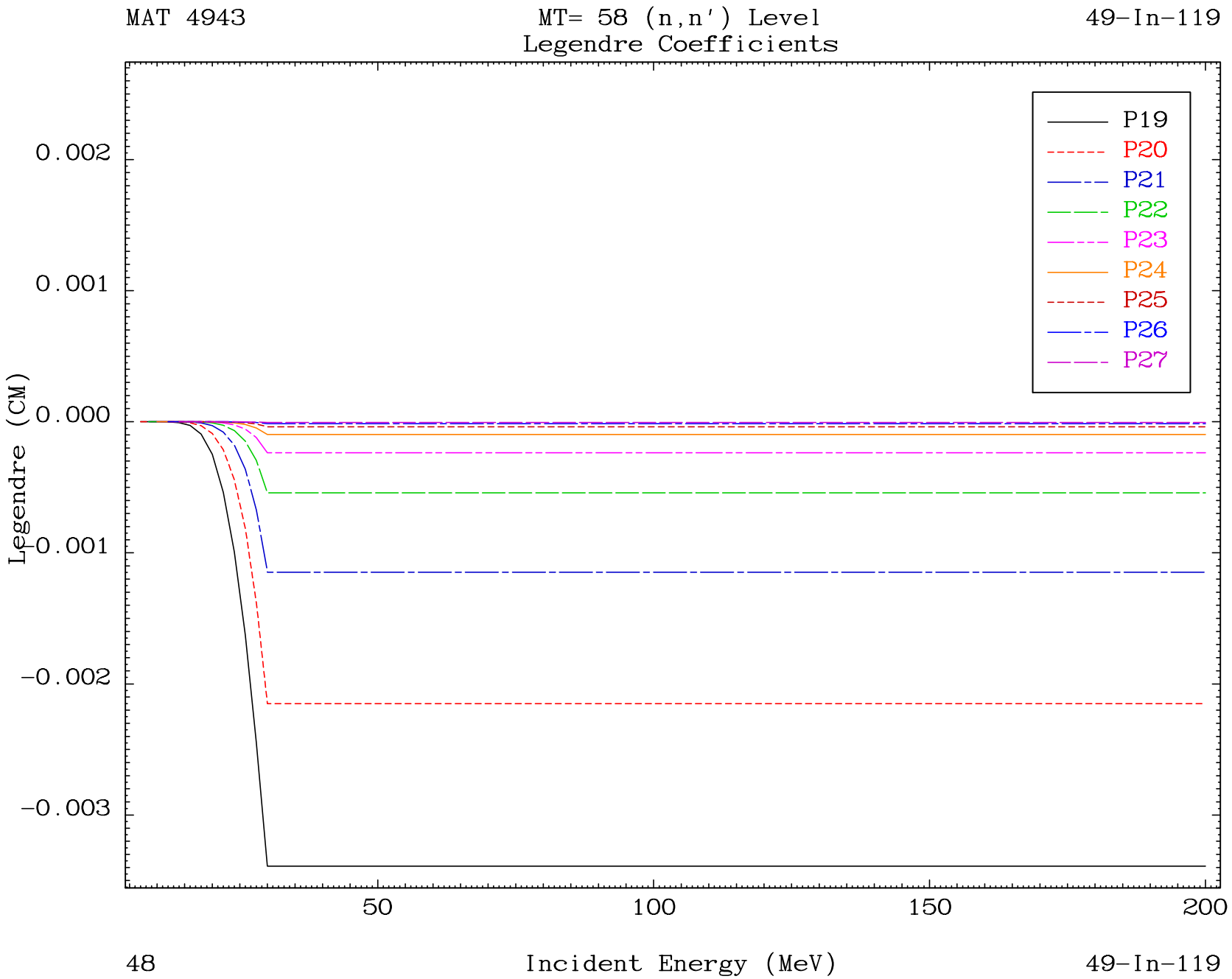

MAT 4943
MT= 57 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
43
Incident Energy (MeV)
49-In-119

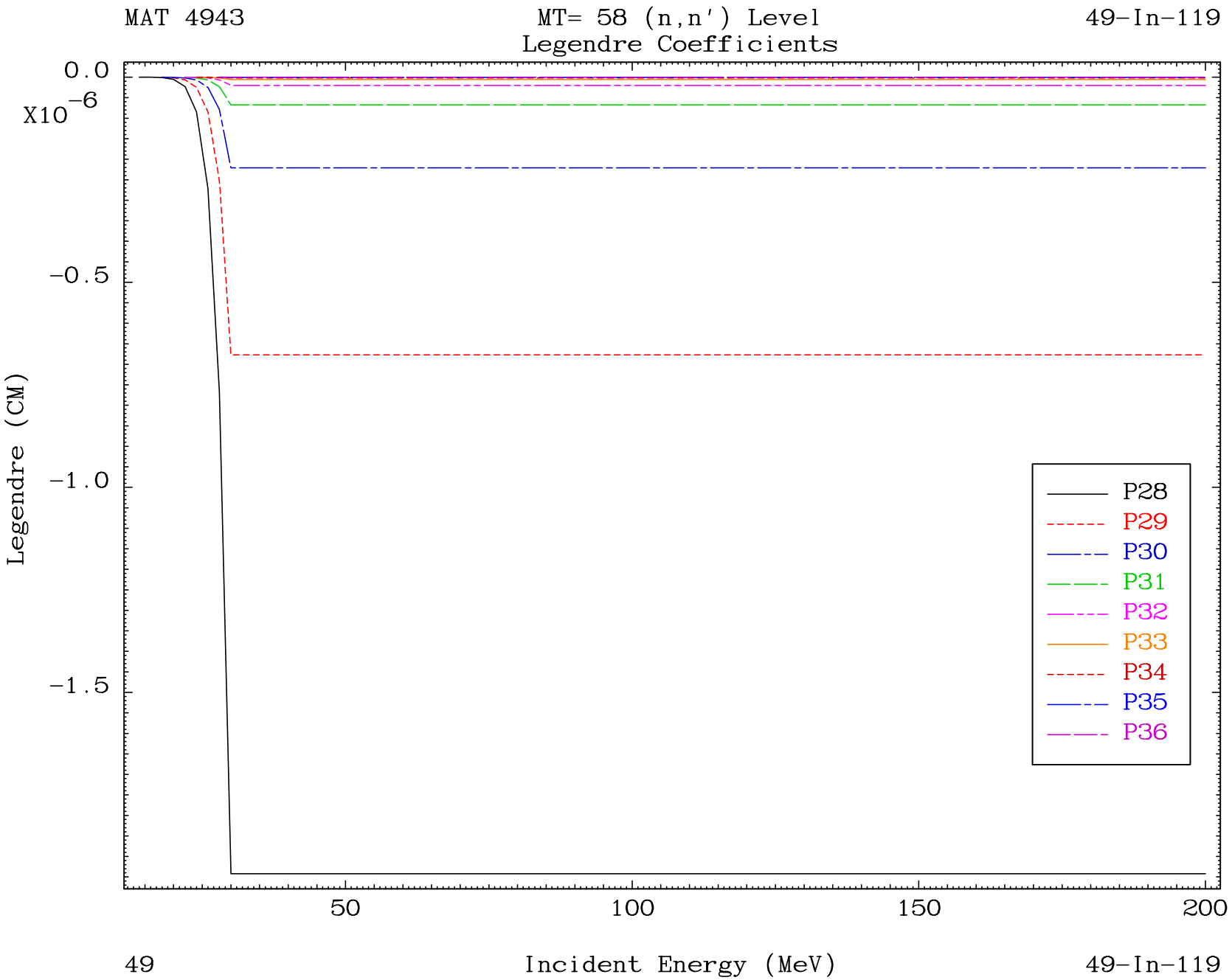

MAT 4943
MT= 57 (n,n') Level
Legendre Coefficients
49-In-119
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.006
0.004
0.002
0.000
Legendre (CM)
50
100
150
200
44
Incident Energy (MeV)
49-In-119

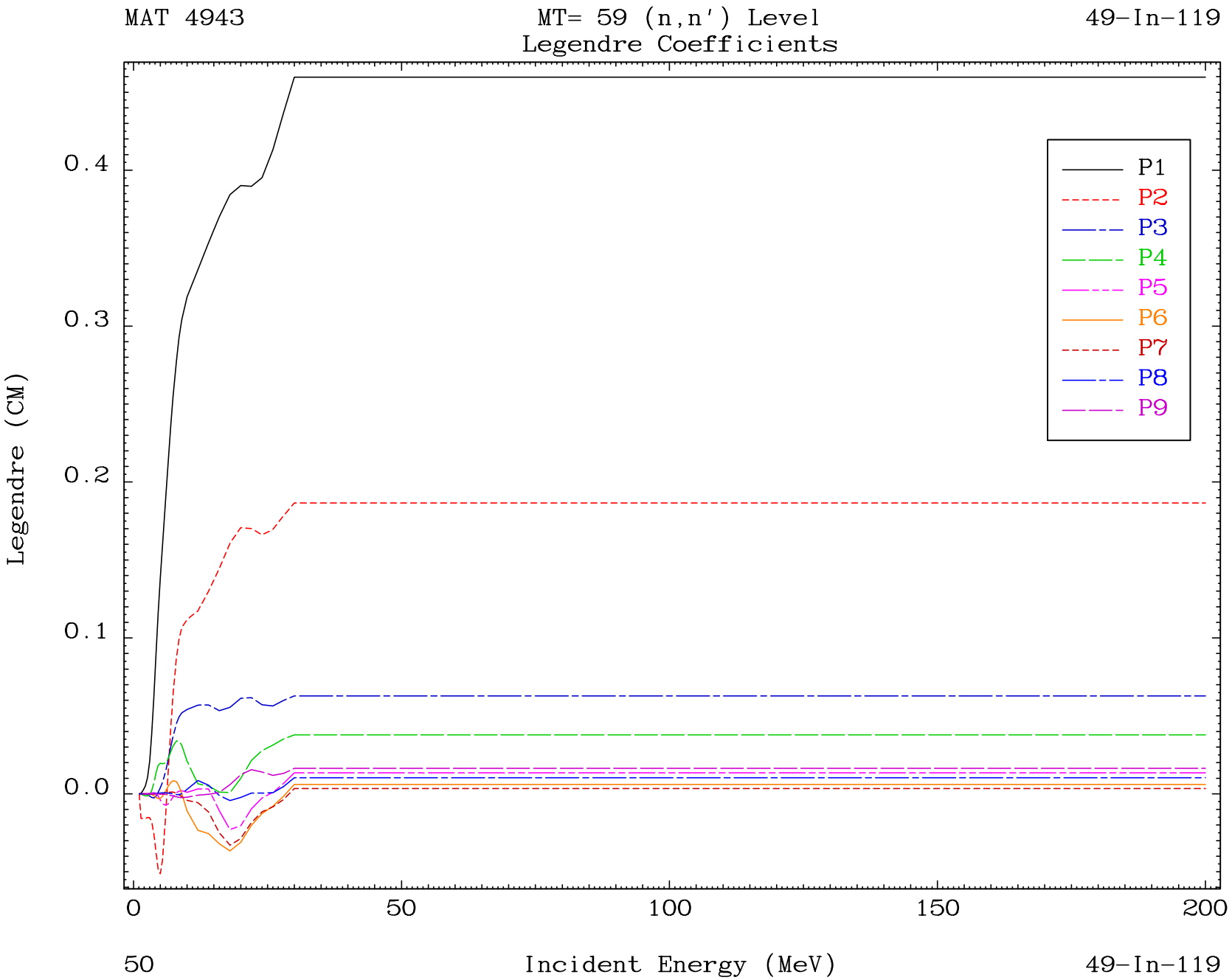

MAT 4943
MT= 57 (n,n') Level
Legendre Coefficients
49-In-119
X10
-6
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
45
50
100
150
200
Incident Energy (MeV)
49-In-119

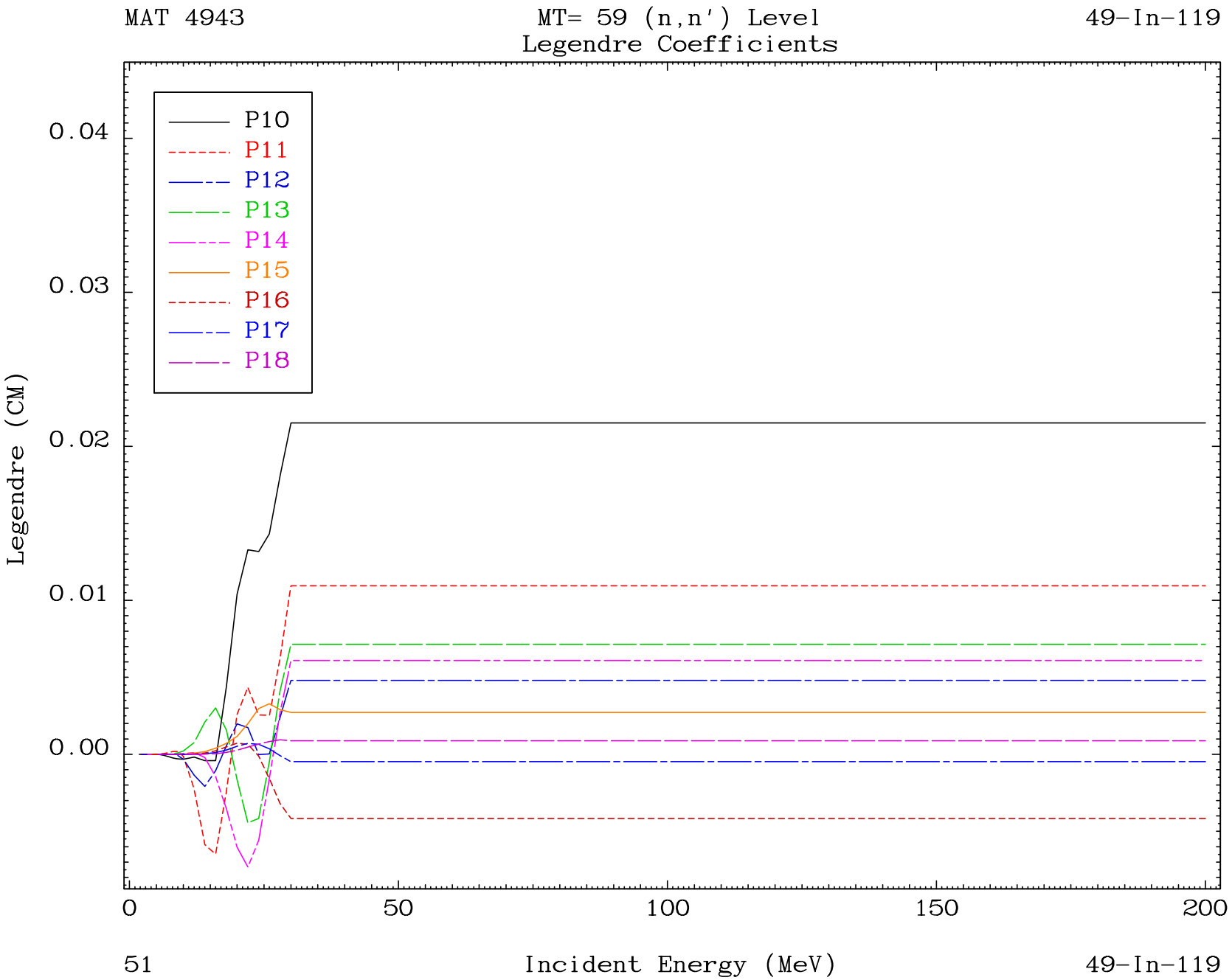

MAT 4943
MT= 58 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
46
Incident Energy (MeV)
49-In-119

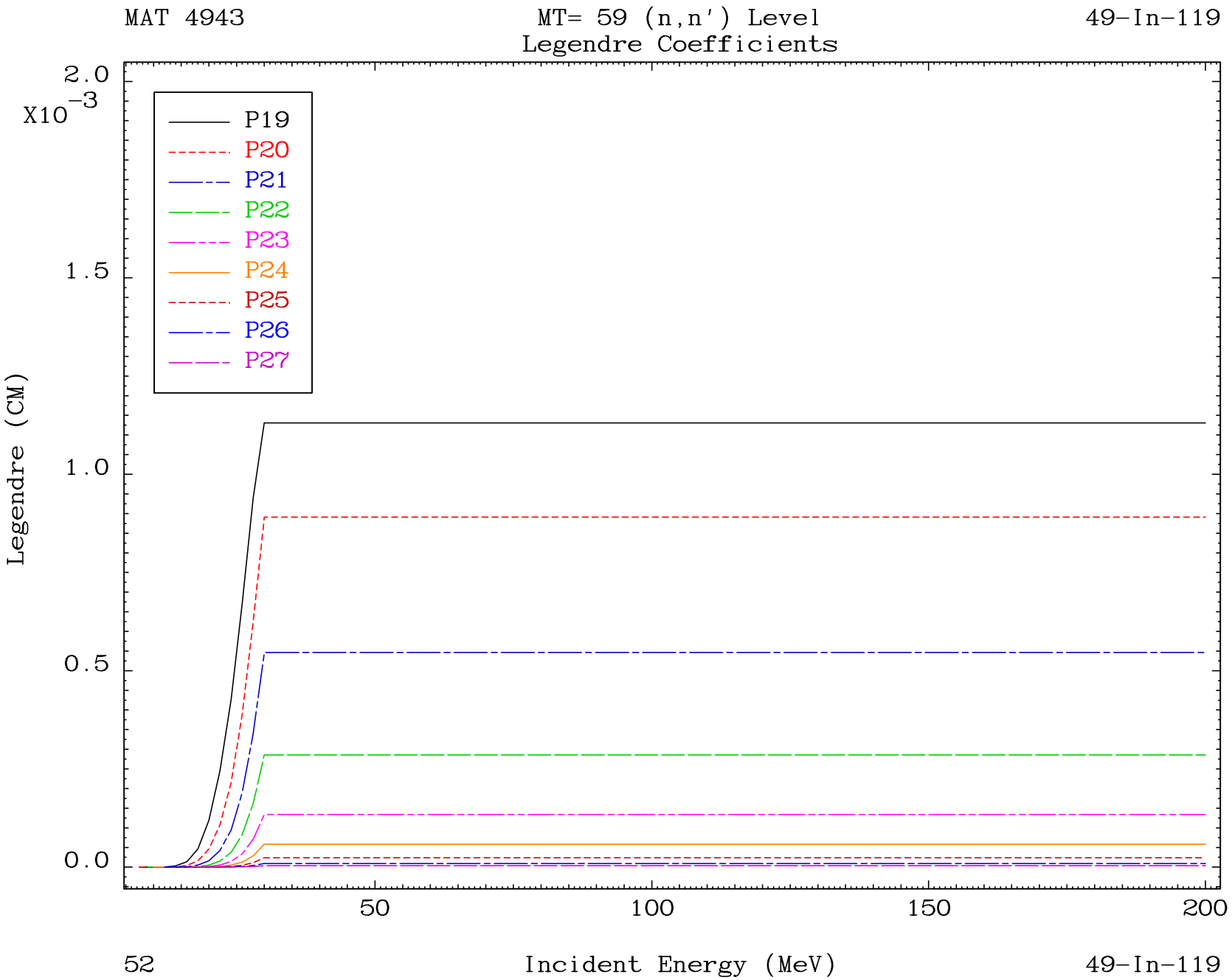

MAT 4943
MT= 58 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
47
Incident Energy (MeV)
49-In-119

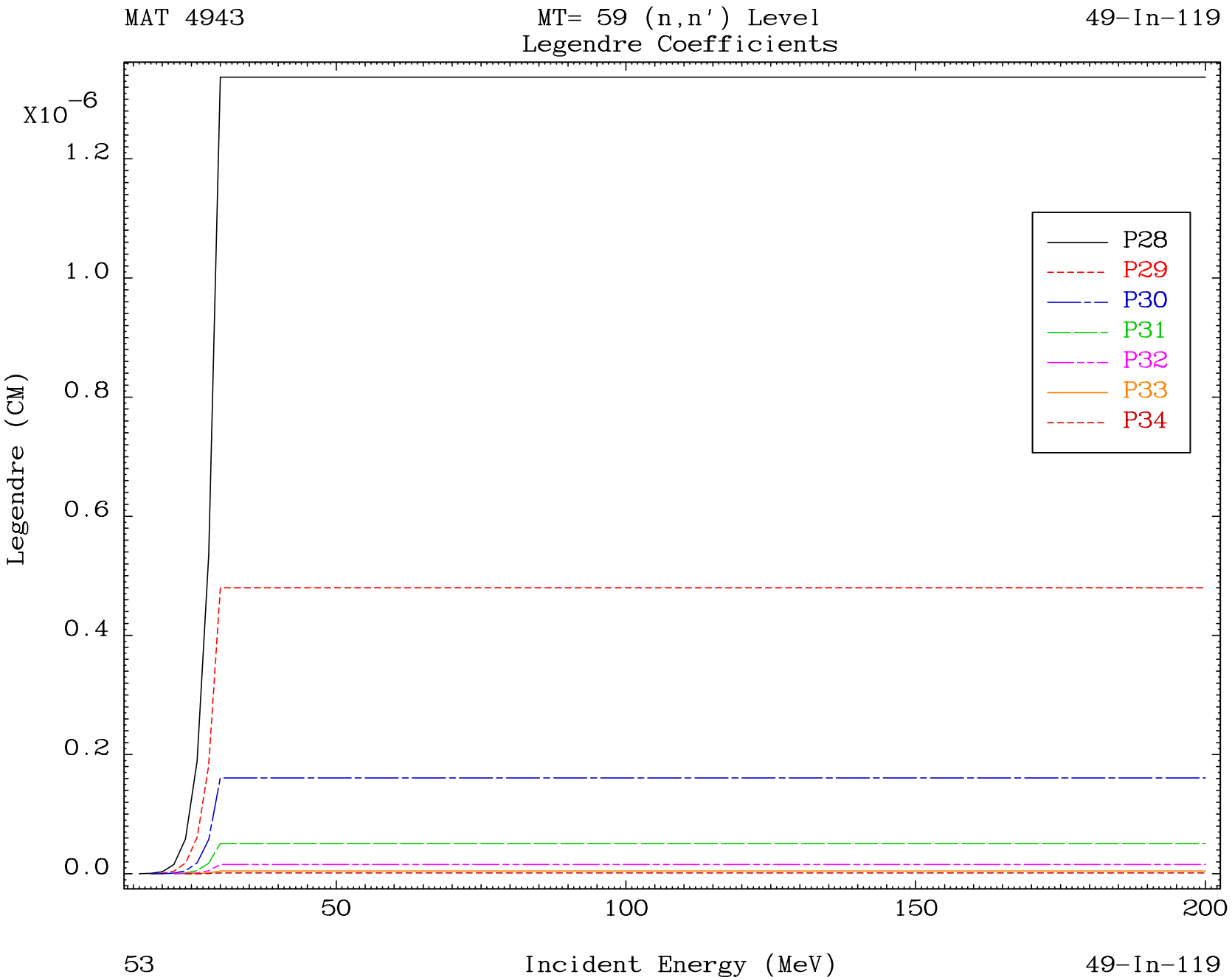

MAT 4943
MT= 58 (n,n') Level
Legendre Coefficients
49-In-119
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.002
0.001
0.000
-0.001
-0.002
-0.003
Legendre (CM)
50
100
150
200
48
Incident Energy (MeV)
49-In-119

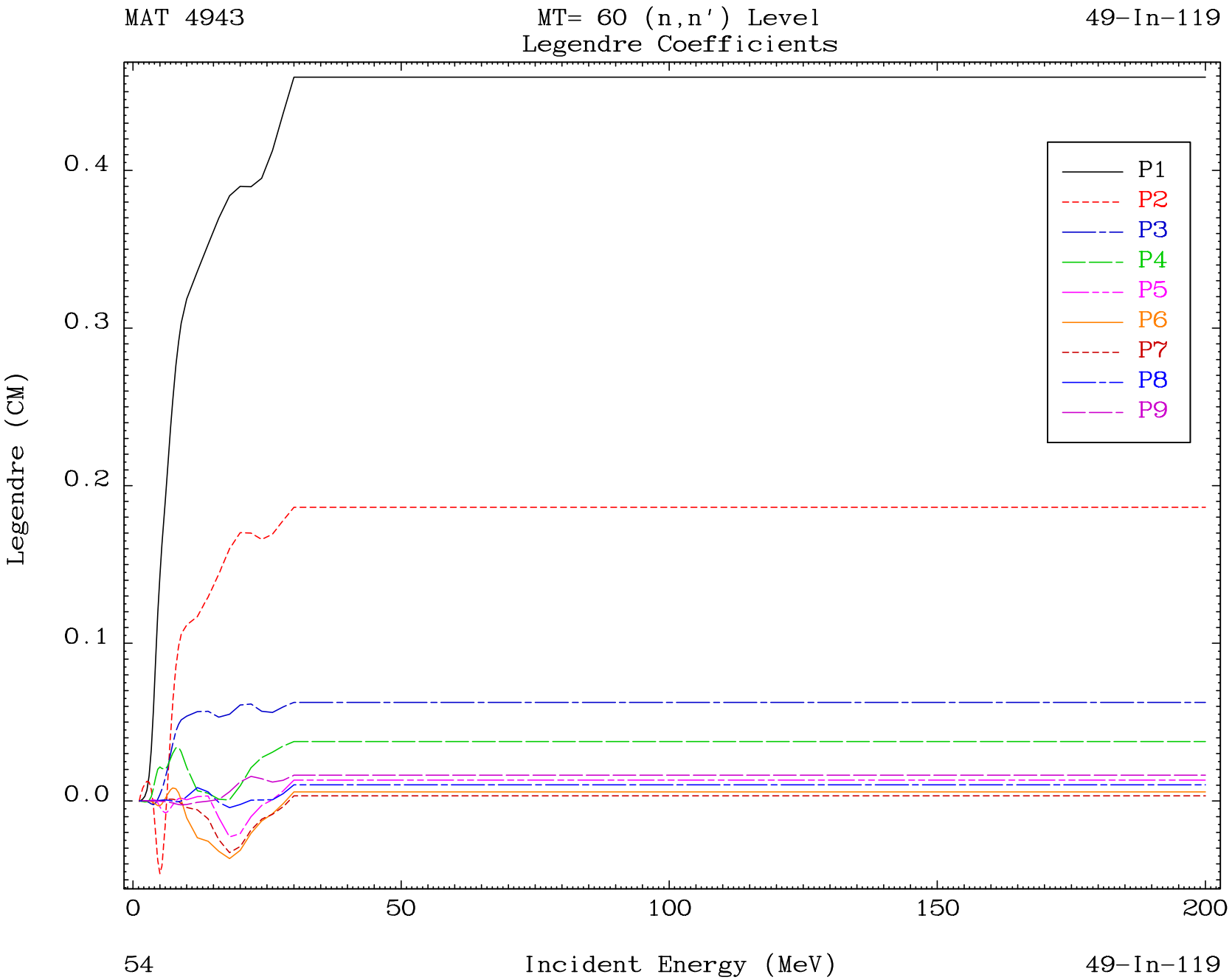

MAT 4943
MT= 58 (n,n') Level
Legendre Coefficients
49-In-119
0.0
X10^-6
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
49
Incident Energy (MeV)
49-In-119
P28
P29
P30
P31
P32
P33
P34
P35
P36

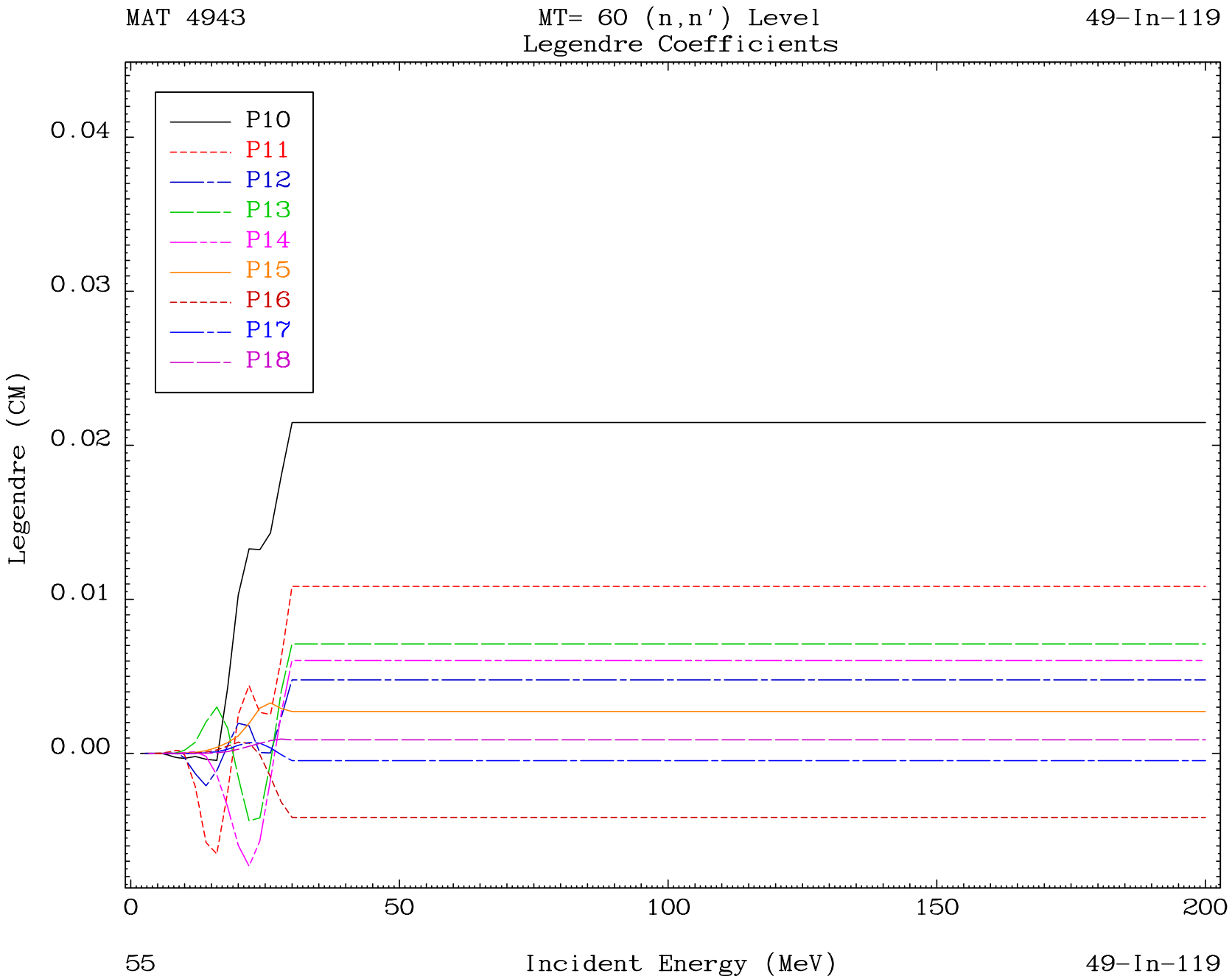

MAT 4943
MT= 59 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
50
Incident Energy (MeV)
49-In-119

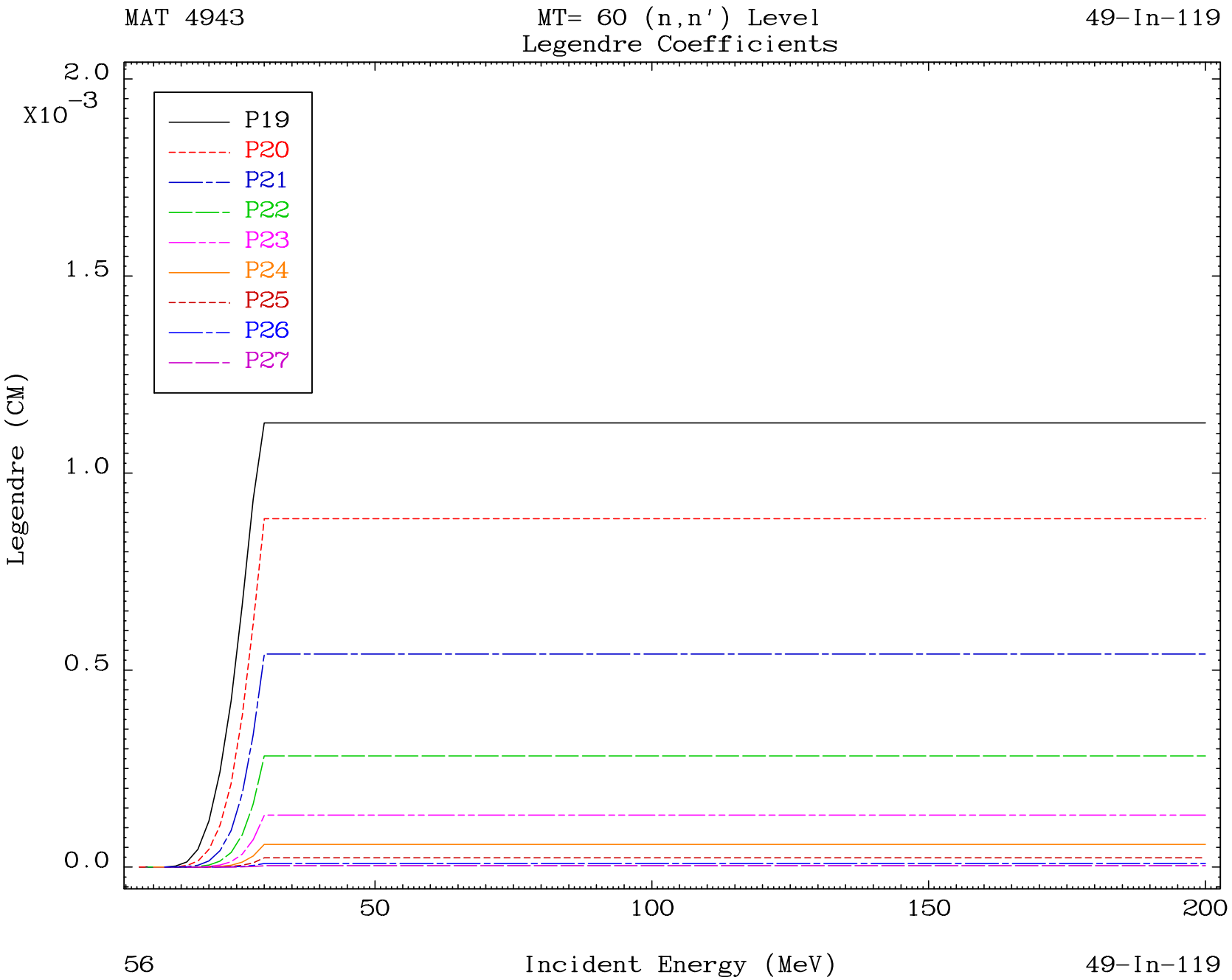

MAT 4943
MT= 59 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
51
Incident Energy (MeV)
49-In-119

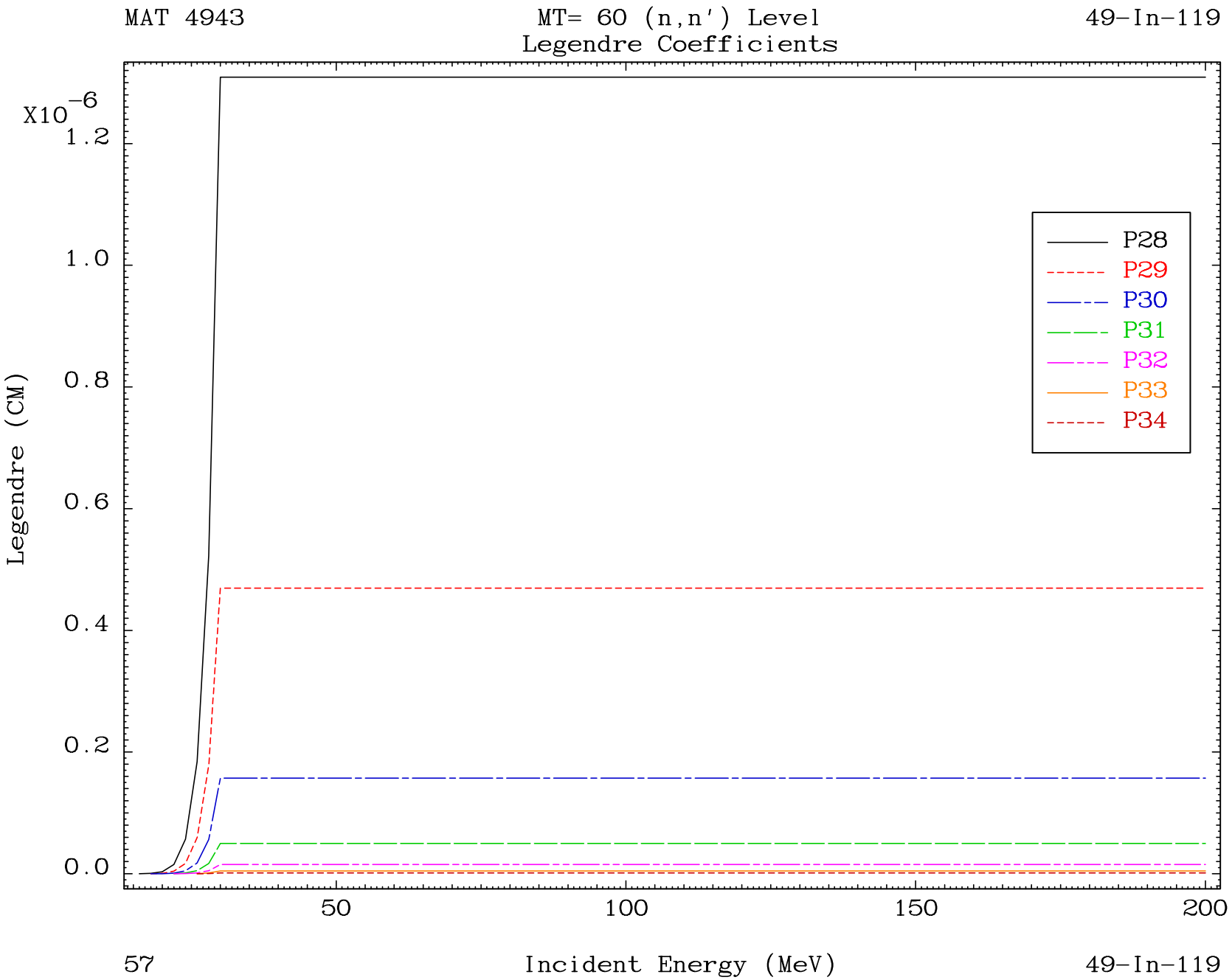

MAT 4943
MT= 59 (n,n') Level
Legendre Coefficients
49-In-119
X10^-3
2.0
1.5
1.0
0.5
0.0
P19
P20
P21
P22
P23
P24
P25
P26
P27
Legendre (CM)
50
100
150
200
52
Incident Energy (MeV)
49-In-119

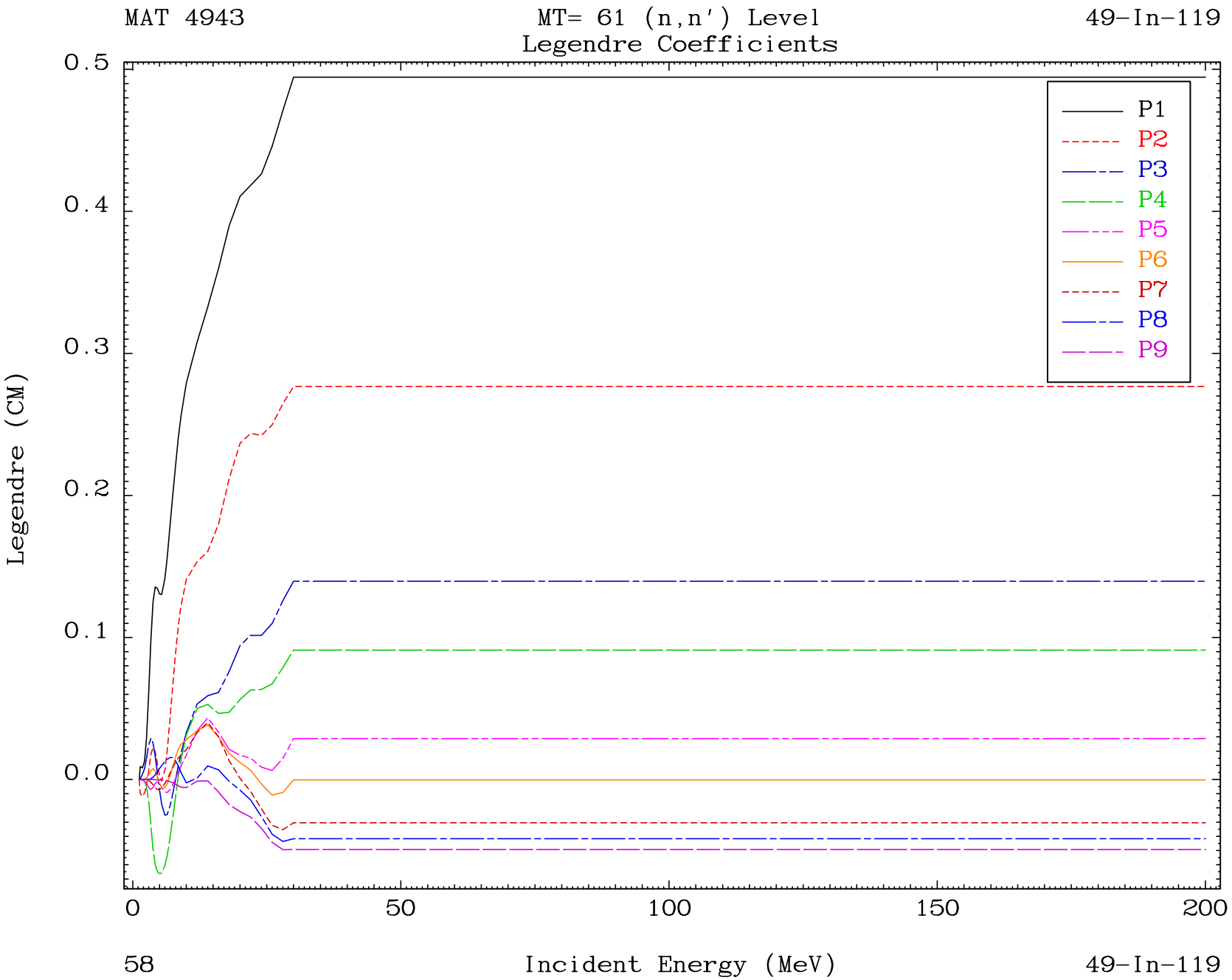

MAT 4943
MT= 59 (n,n') Level
Legendre Coefficients
49-In-119
X10^-6
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
53
Incident Energy (MeV)
49-In-119

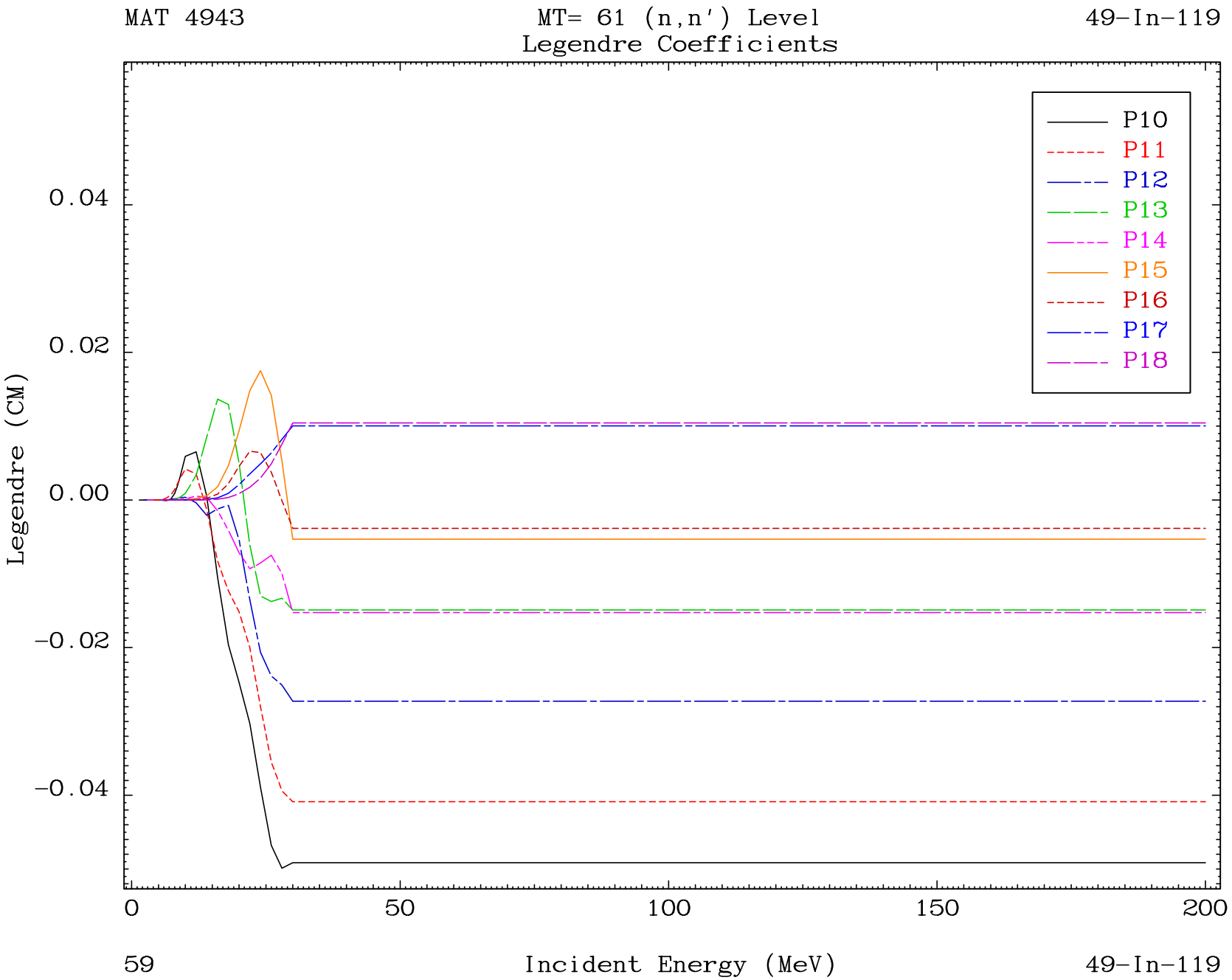

MAT 4943
MT= 60 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
54
Incident Energy (MeV)
49-In-119

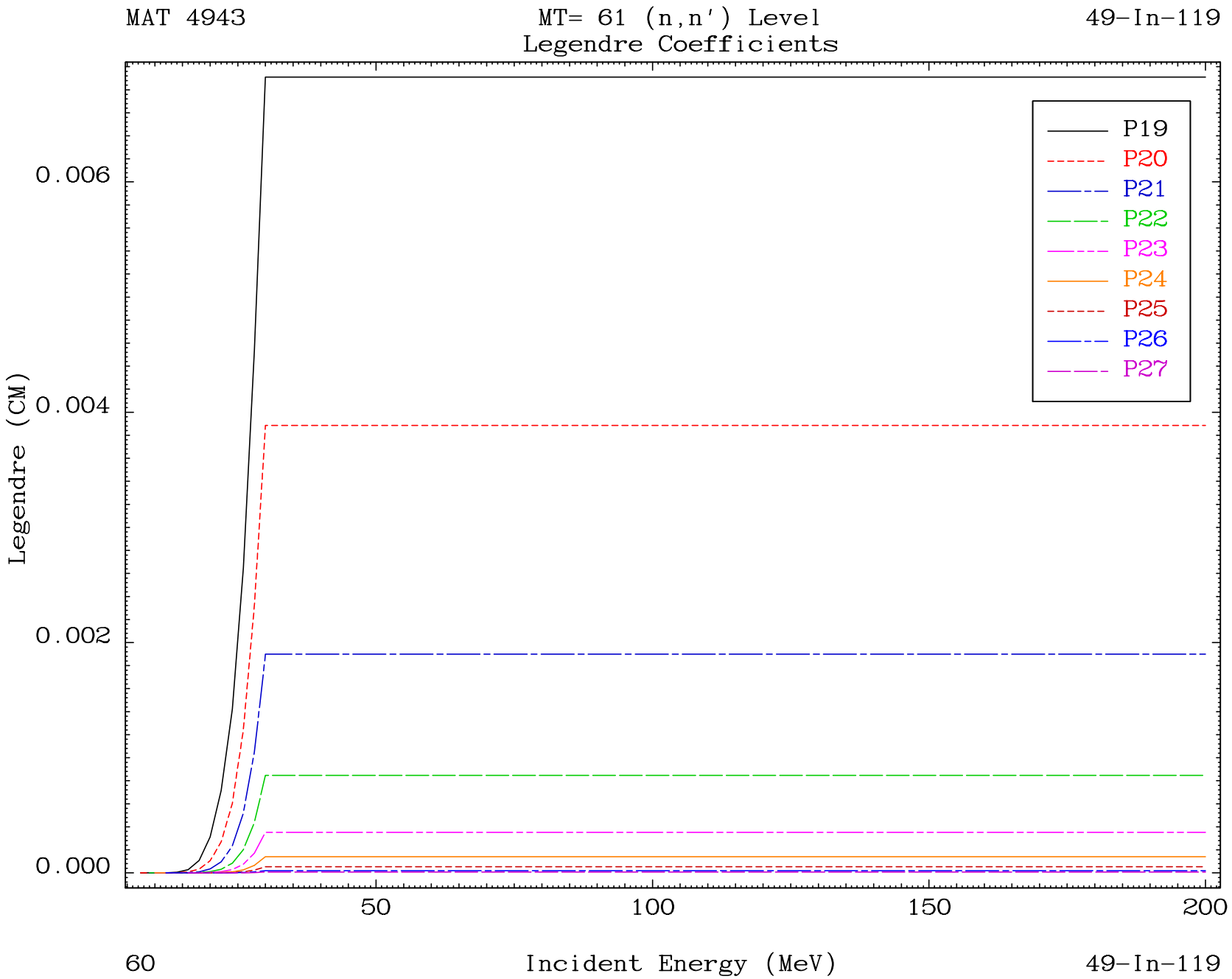

MAT 4943
MT= 60 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
55
Incident Energy (MeV)
49-In-119

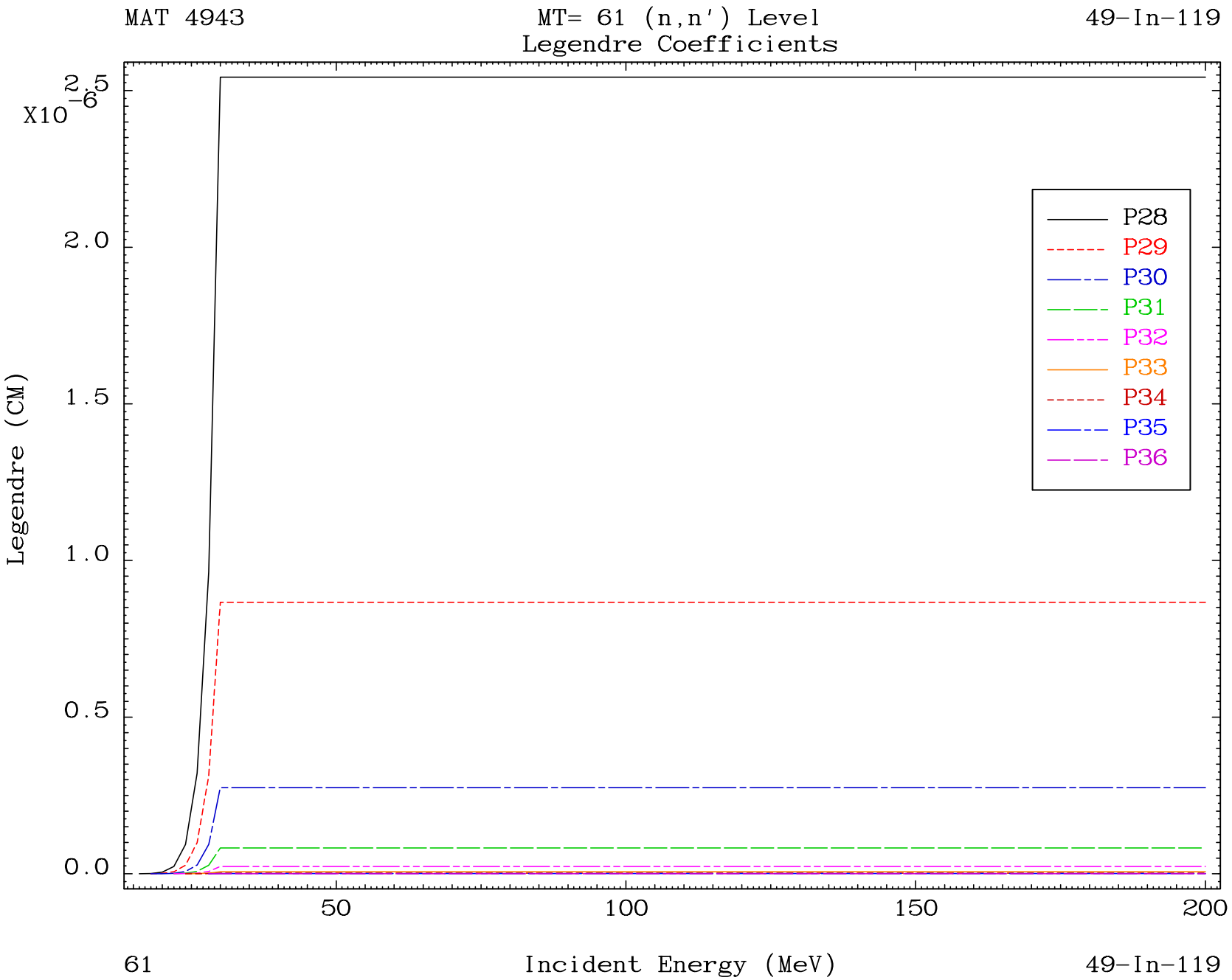

MAT 4943
MT= 60 (n,n') Level
Legendre Coefficients
49-In-119
2.0
X10 -3
1.5
1.0
0.5
0.0
P19
P20
P21
P22
P23
P24
P25
P26
P27
Legendre (CM)
50
100
150
200
56
Incident Energy (MeV)
49-In-119

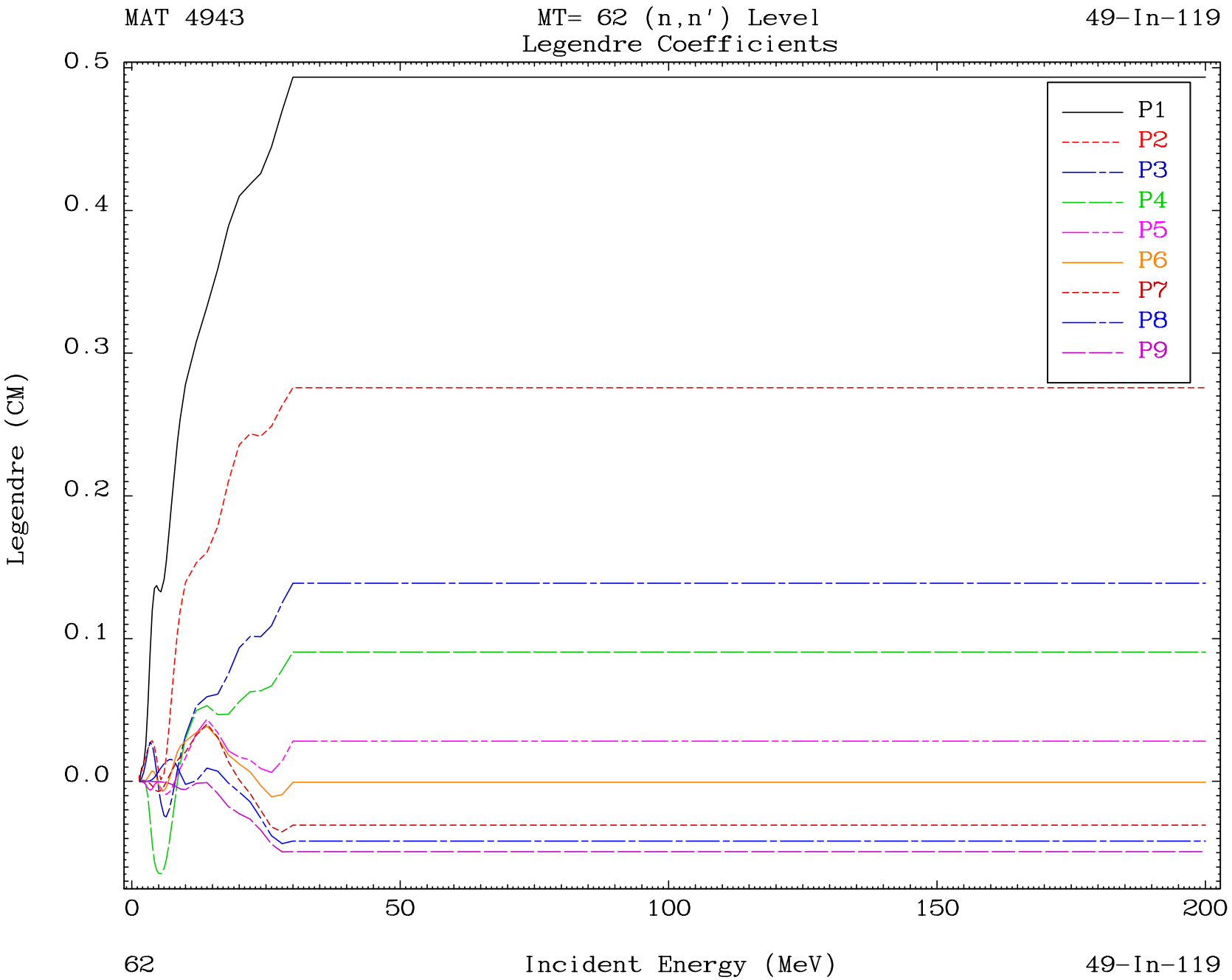

MAT 4943
MT= 60 (n,n') Level
Legendre Coefficients
49-In-119
X10^-6
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
57
Incident Energy (MeV)
49-In-119

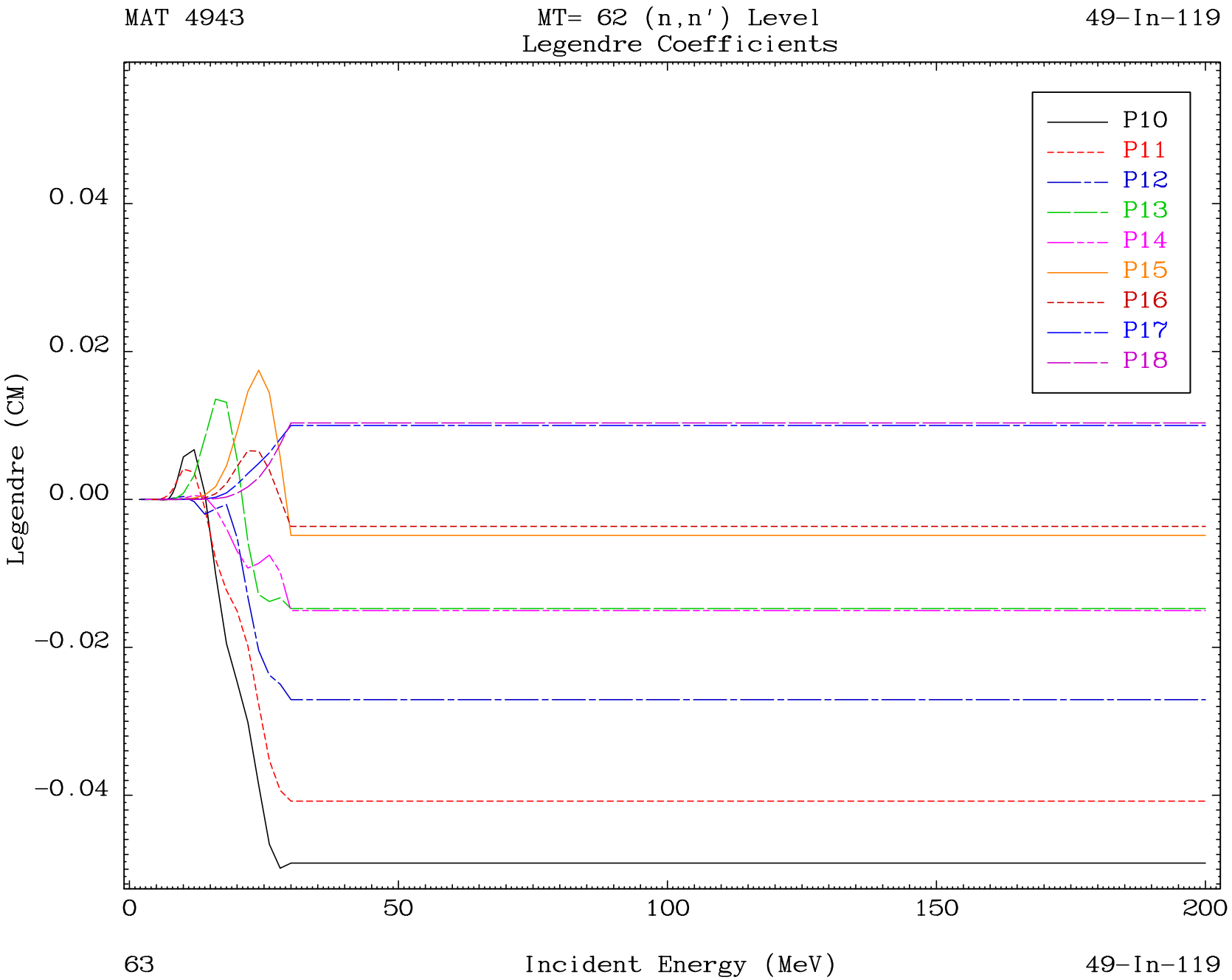

MAT 4943
MT= 61 (n,n') Level
Legendre Coefficients
49-In-119
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
58
Incident Energy (MeV)
49-In-119

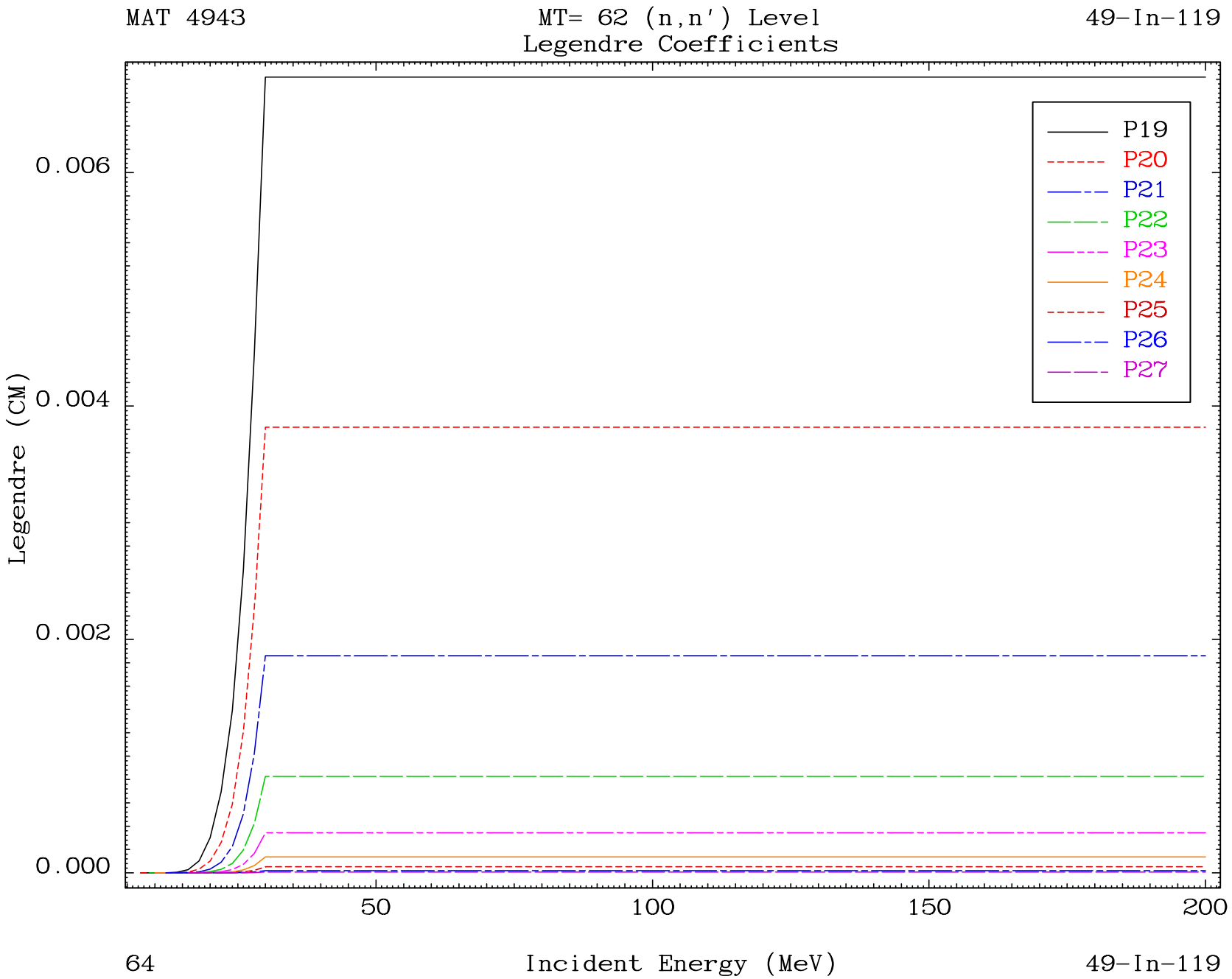

MAT 4943
MT= 61 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
59
Incident Energy (MeV)
49-In-119

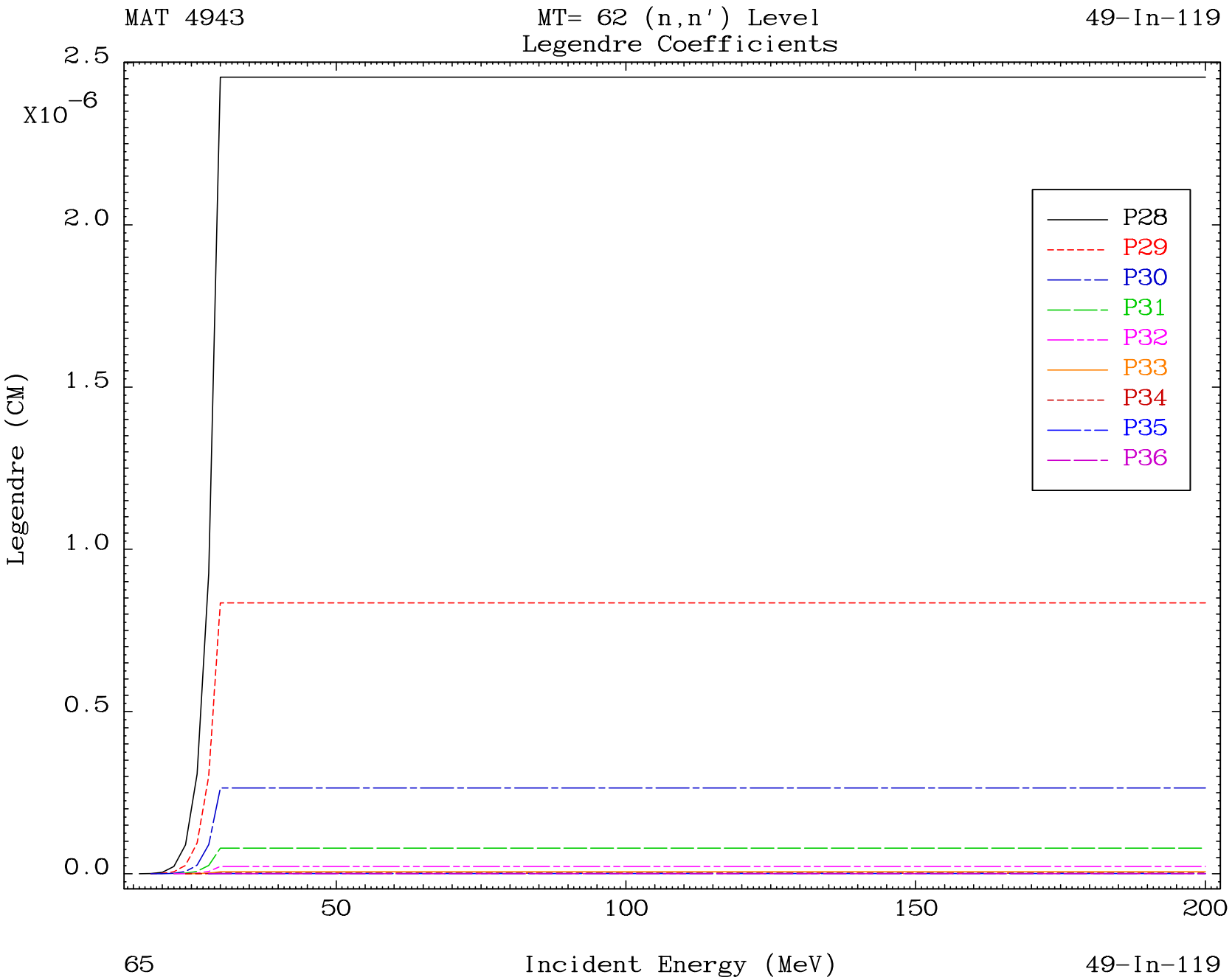

MAT 4943
MT= 61 (n,n') Level
Legendre Coefficients
49-In-119
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.006
0.004
0.002
0.000
Legendre (CM)
50
100
150
200
60
Incident Energy (MeV)
49-In-119

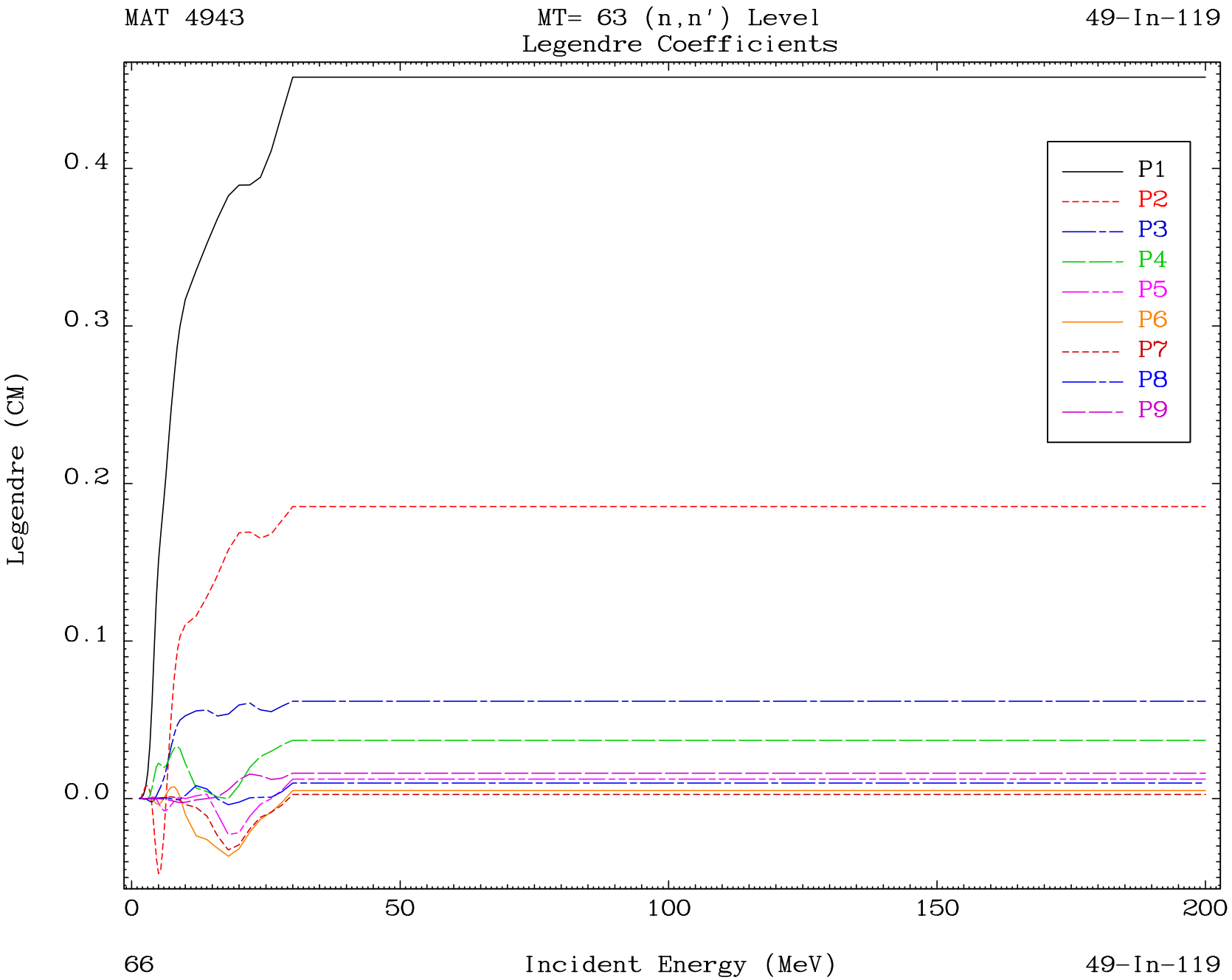

MAT 4943
MT= 61 (n,n') Level
Legendre Coefficients
49-In-119
X10-6
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
61
Incident Energy (MeV)
49-In-119

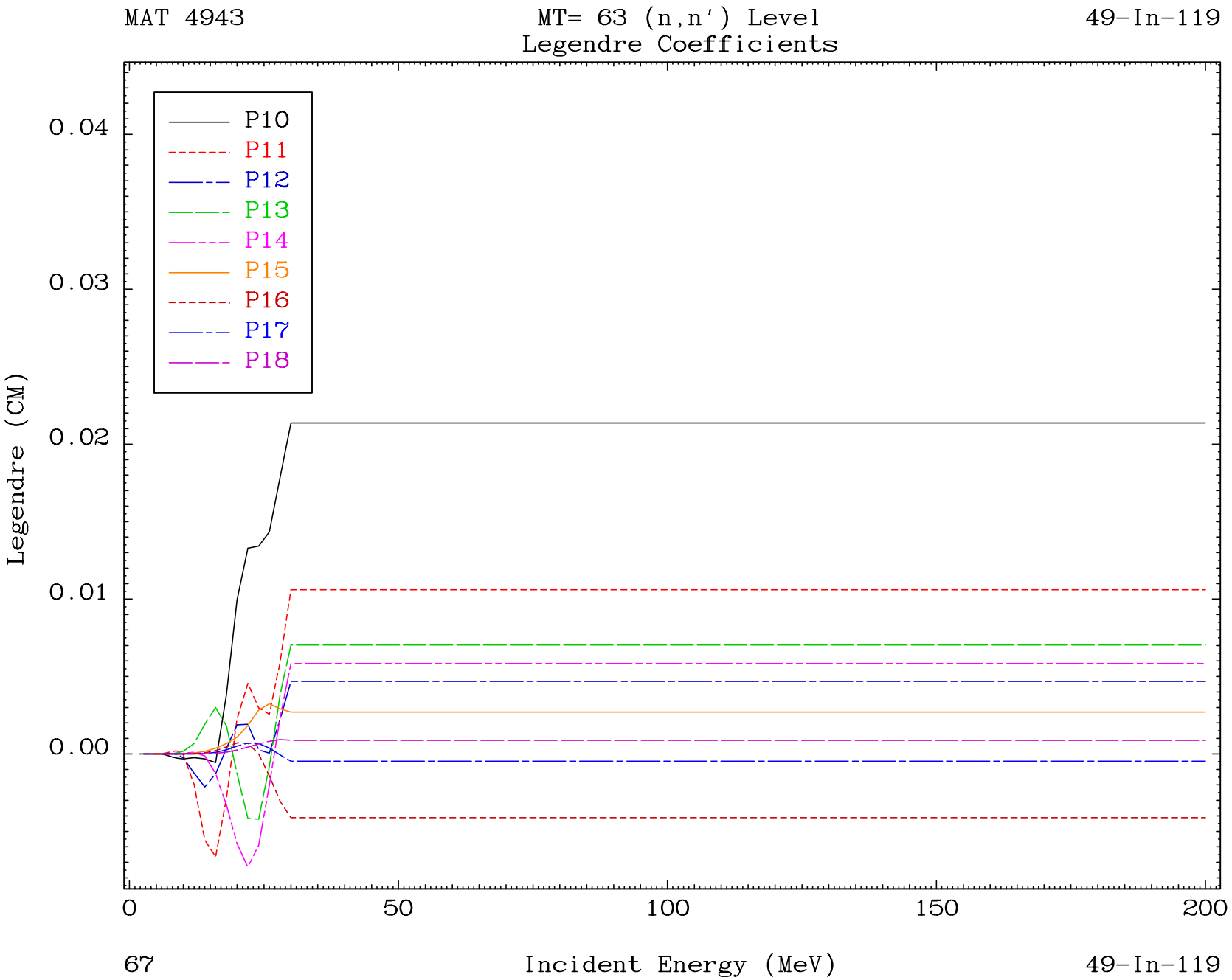

MAT 4943
MT= 62 (n,n') Level
Legendre Coefficients
49-In-119
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
62
Incident Energy (MeV)
49-In-119

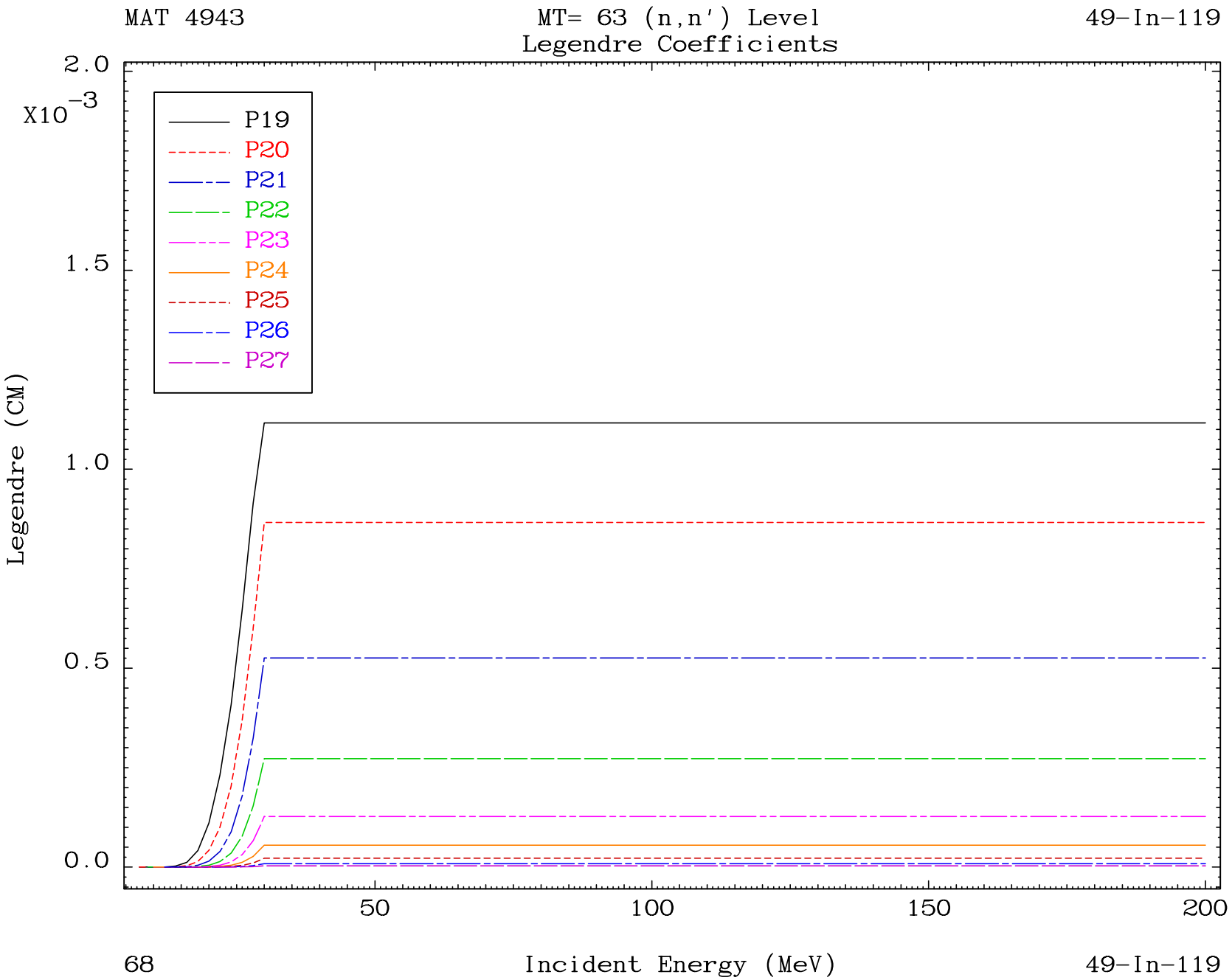

MAT 4943
MT= 62 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
63
Incident Energy (MeV)
49-In-119

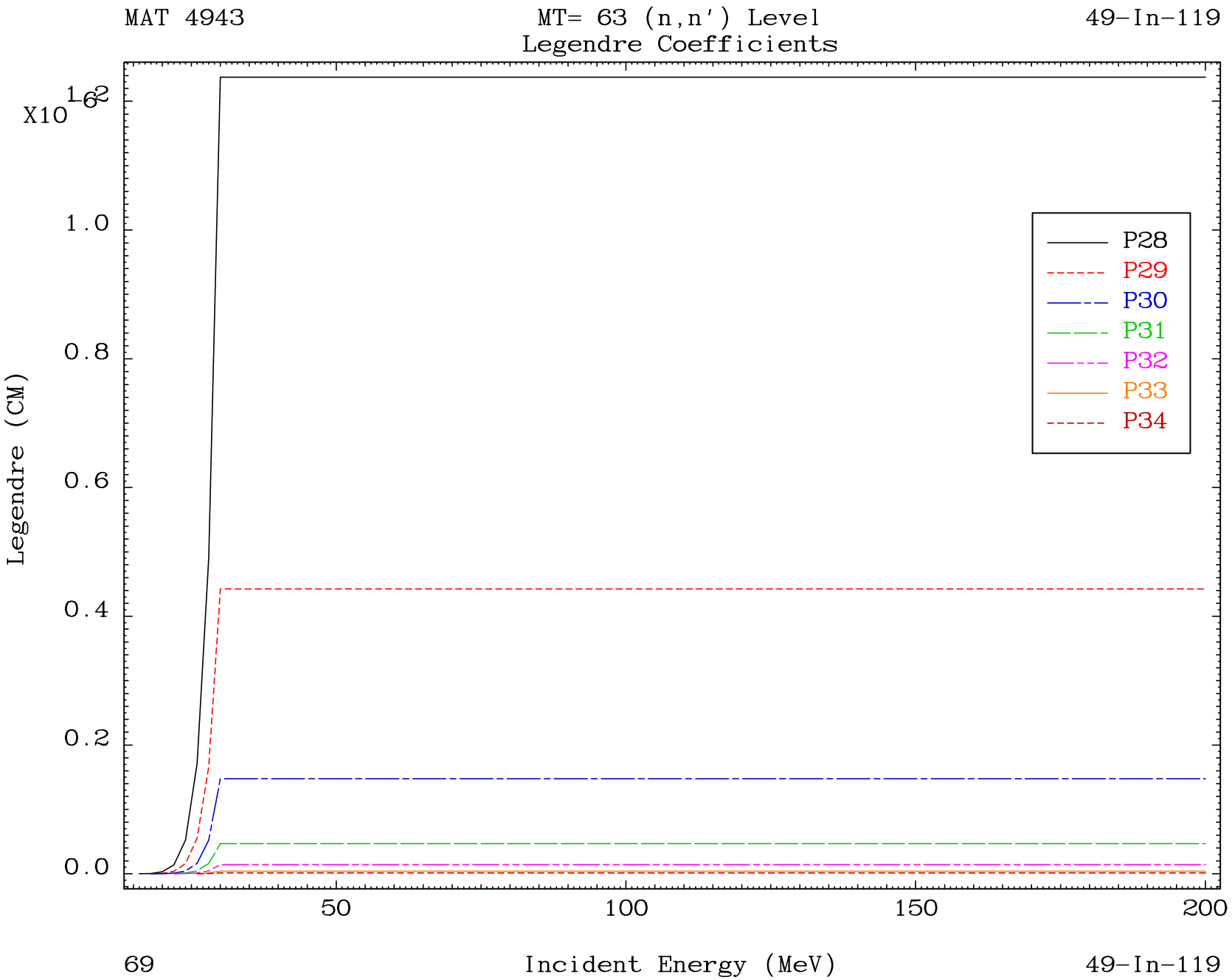

MAT 4943
MT= 62 (n,n') Level
Legendre Coefficients
49-In-119
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.006
0.004
0.002
0.000
Legendre (CM)
50
100
150
200
64
Incident Energy (MeV)
49-In-119

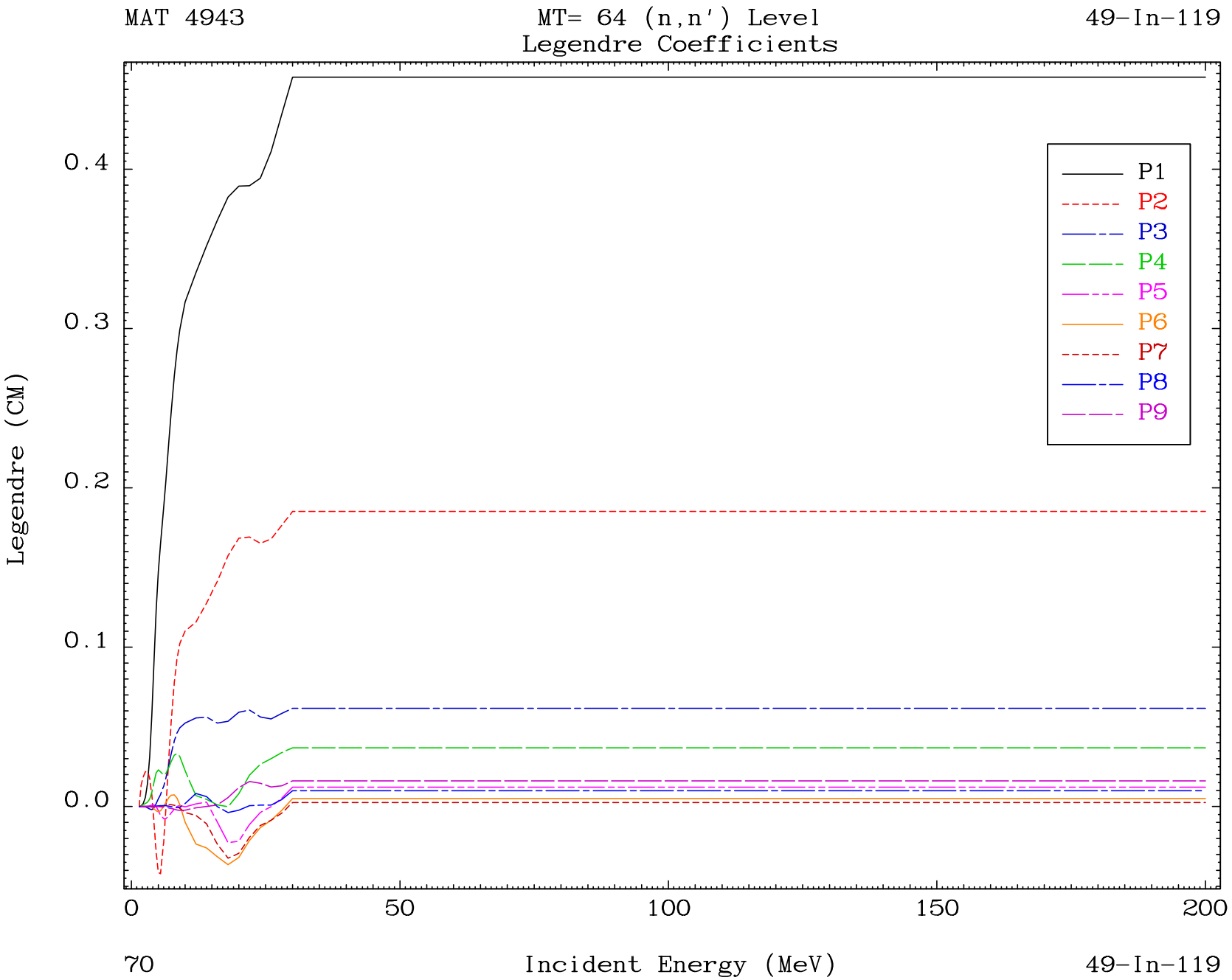

MAT 4943
MT= 62 (n,n') Level
Legendre Coefficients
49-In-119
X10^-6
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
65
Incident Energy (MeV)
49-In-119

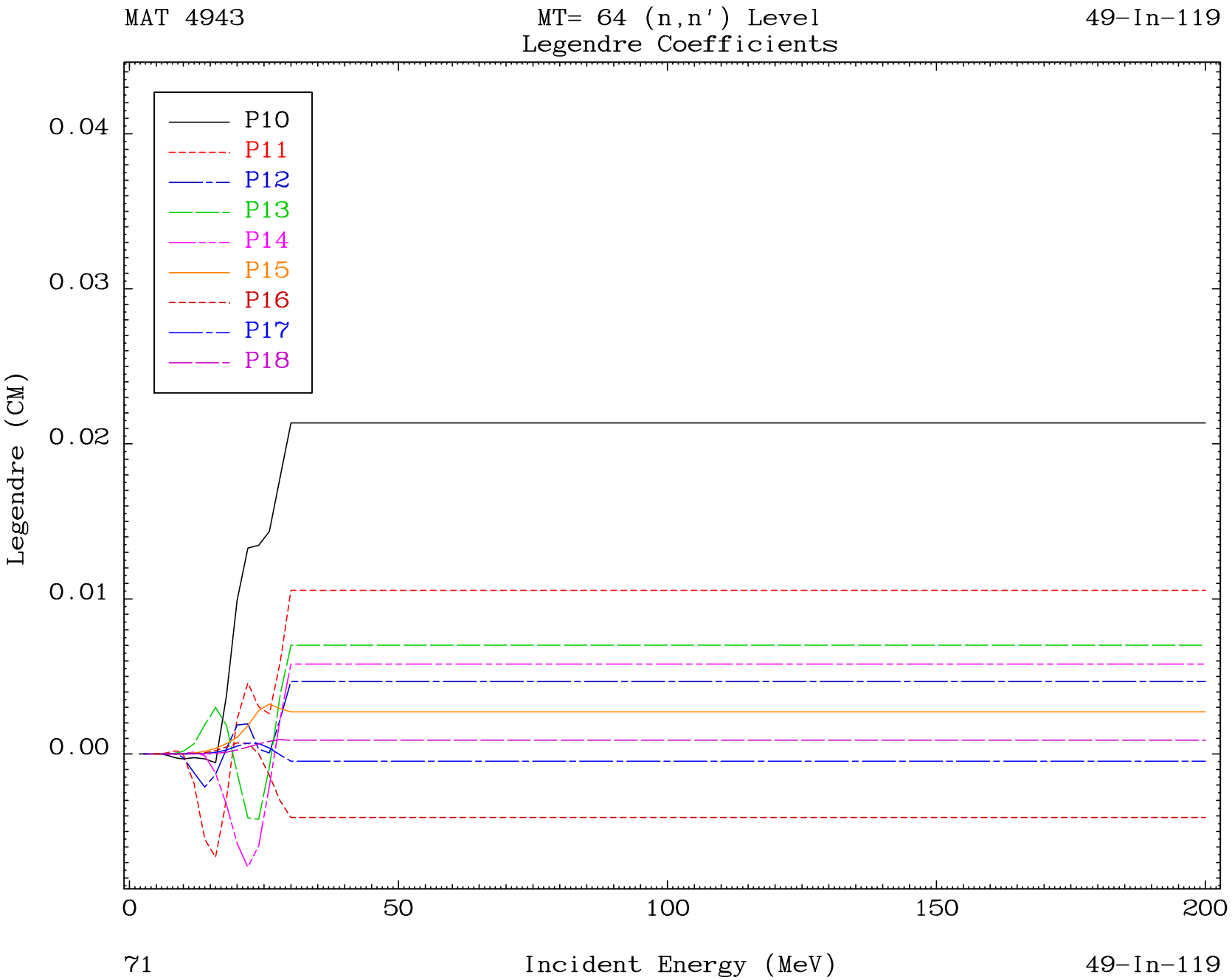

MAT 4943
MT= 63 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
66
Incident Energy (MeV)
49-In-119

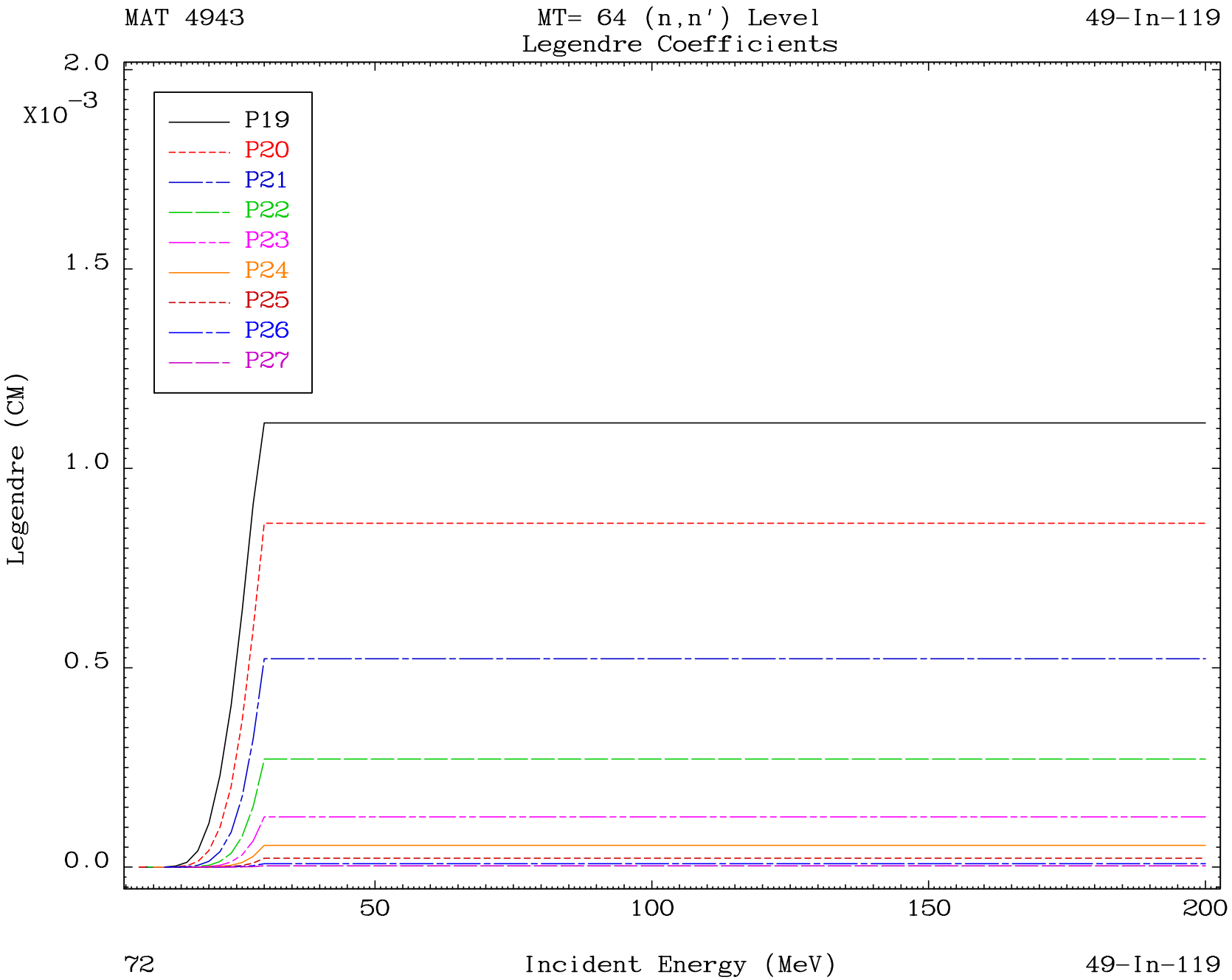

MAT 4943
MT= 63 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
67
Incident Energy (MeV)
49-In-119

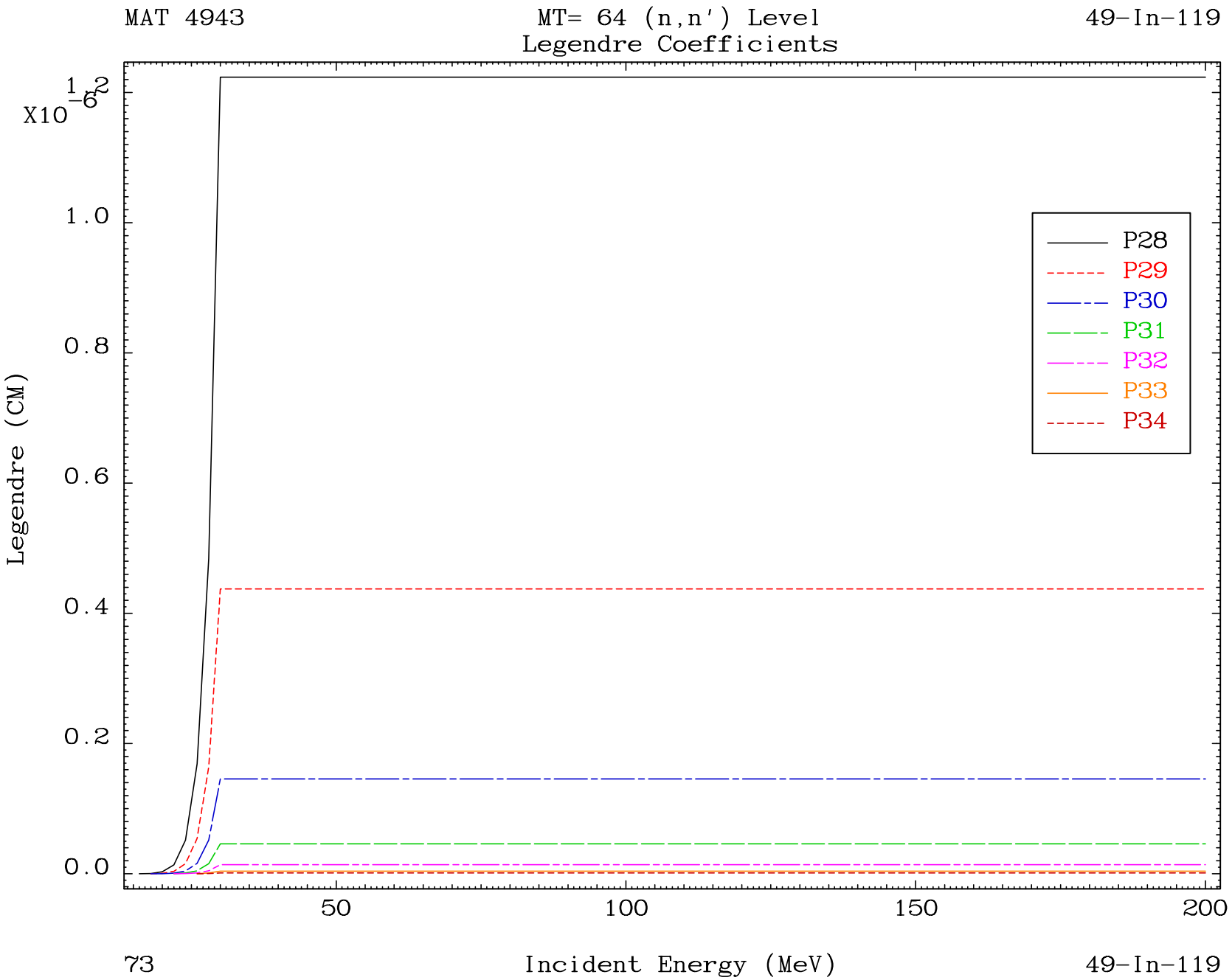

MAT 4943
MT= 63 (n,n') Level
Legendre Coefficients
49-In-119
2.0
X10^-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
68
Incident Energy (MeV)
49-In-119

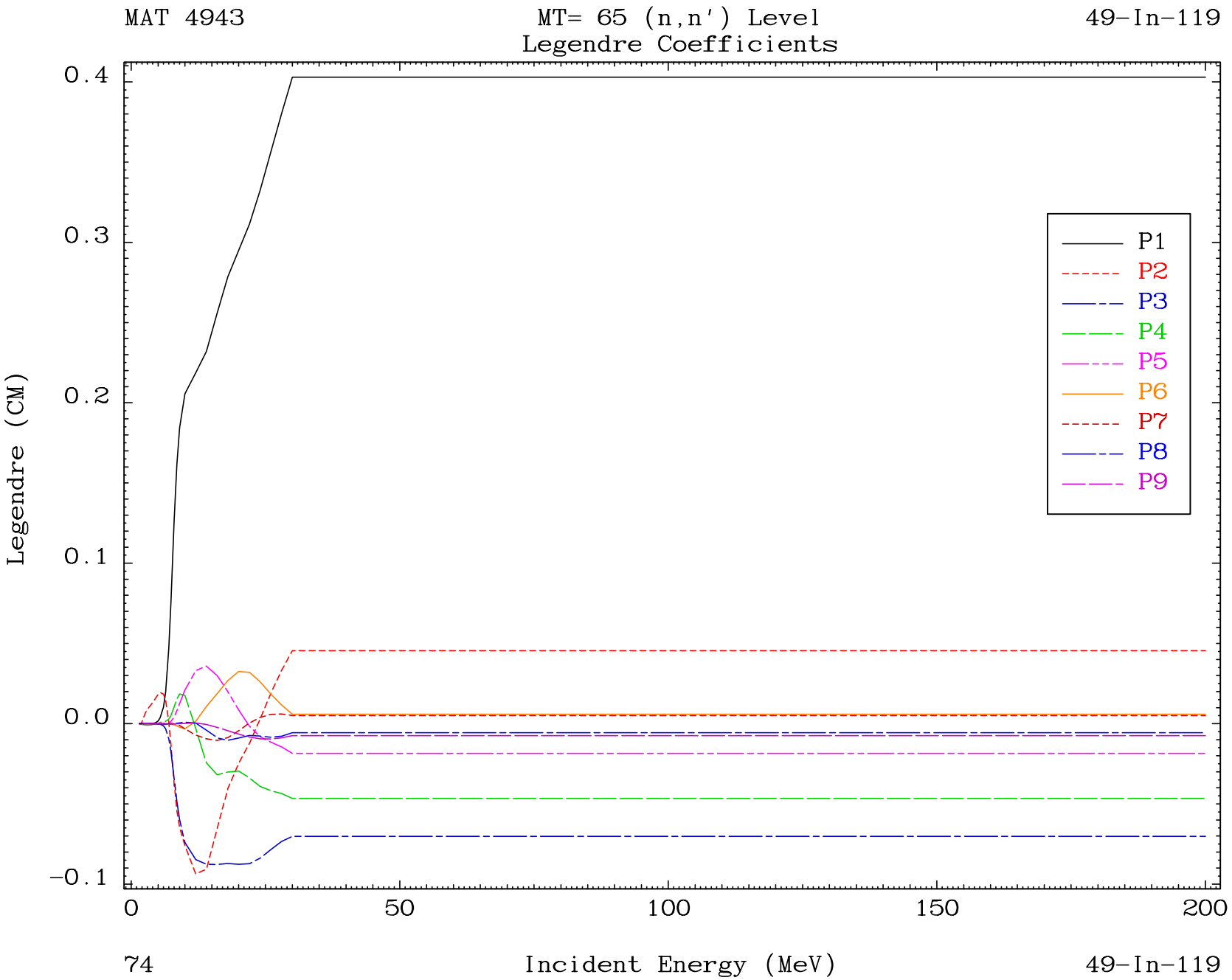

MAT 4943
MT= 63 (n,n') Level
Legendre Coefficients
49-In-119
X10 L2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
69
Incident Energy (MeV)
49-In-119

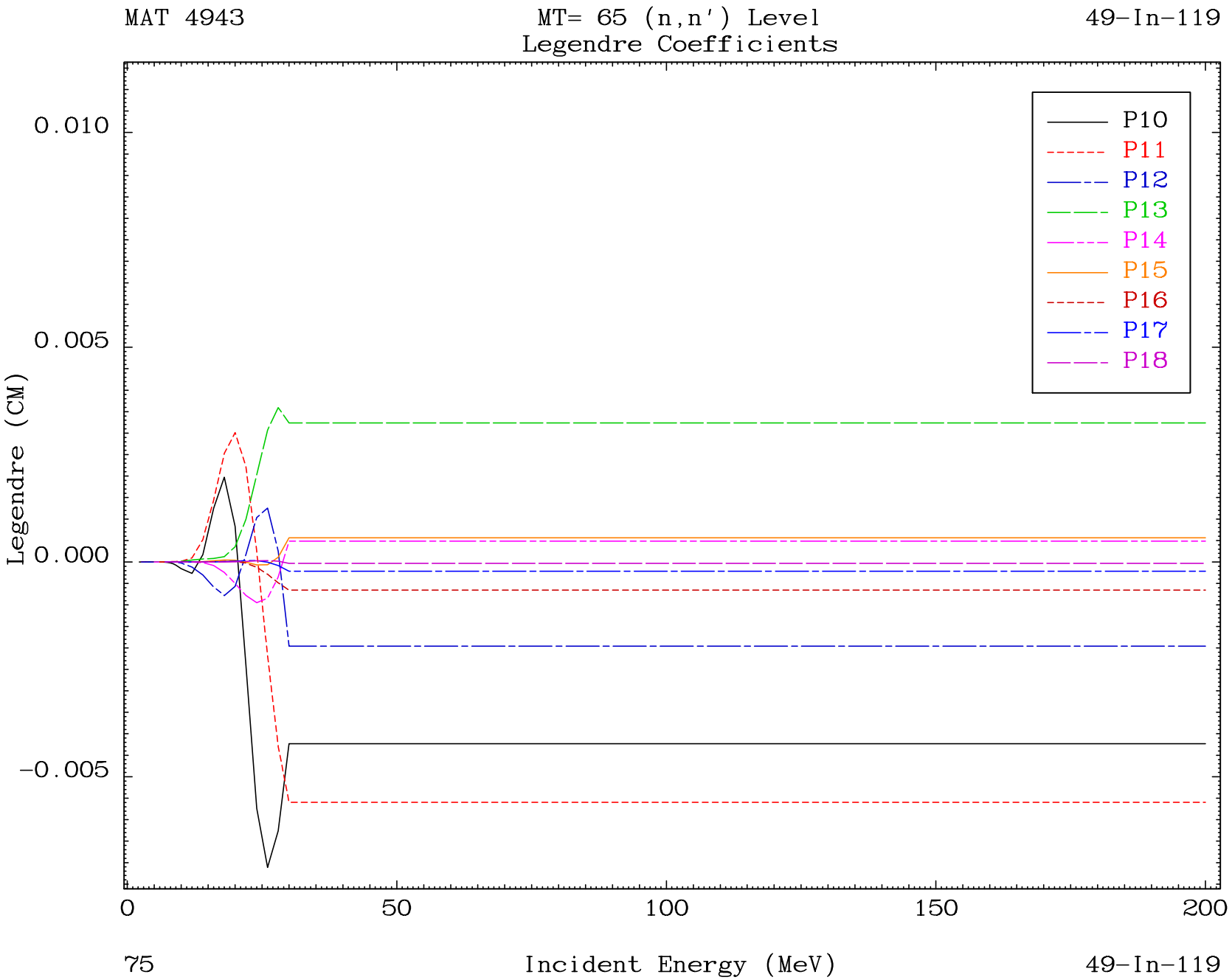

MAT 4943
MT= 64 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
70
Incident Energy (MeV)
49-In-119

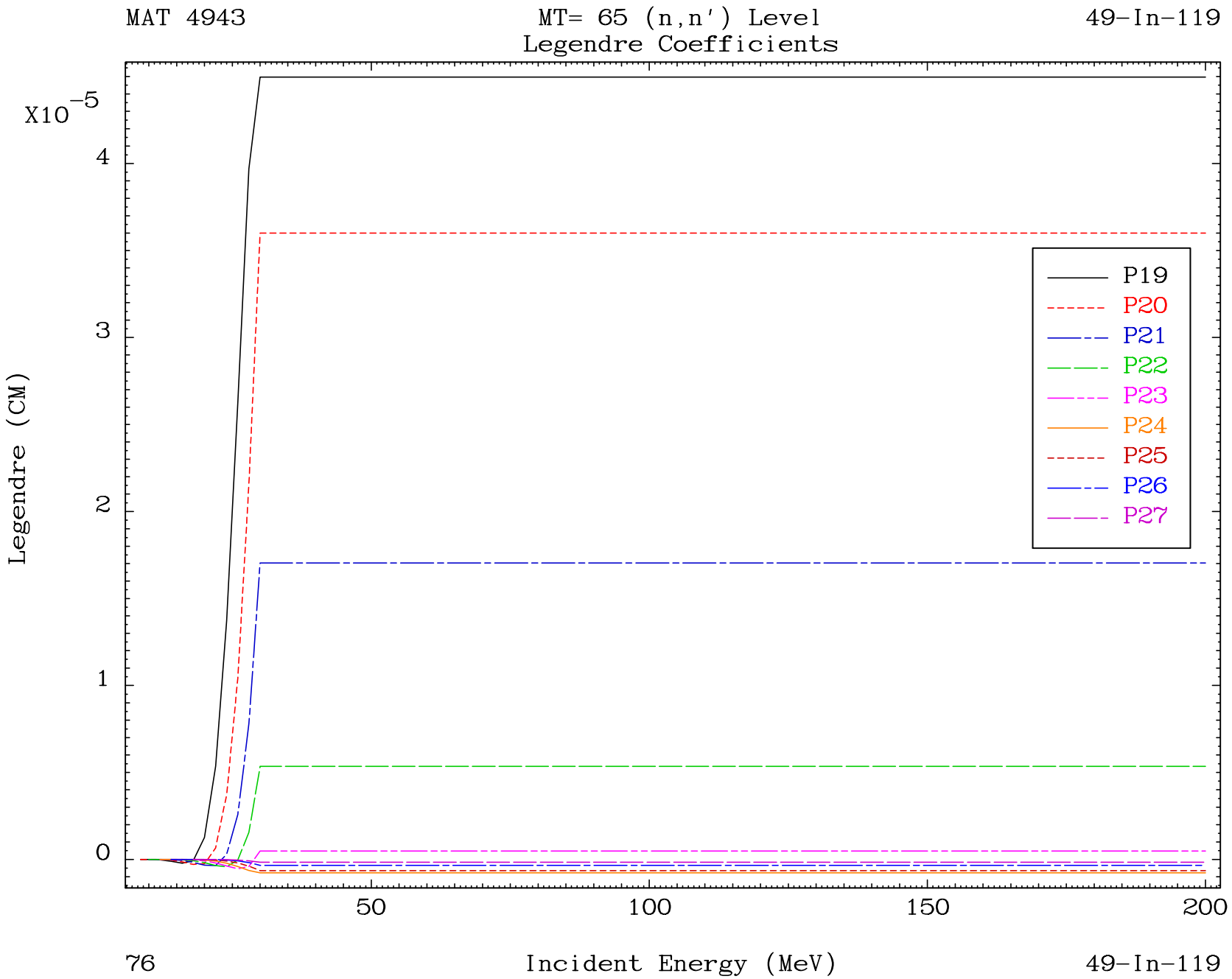

MAT 4943
MT= 64 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
71
Incident Energy (MeV)
49-In-119

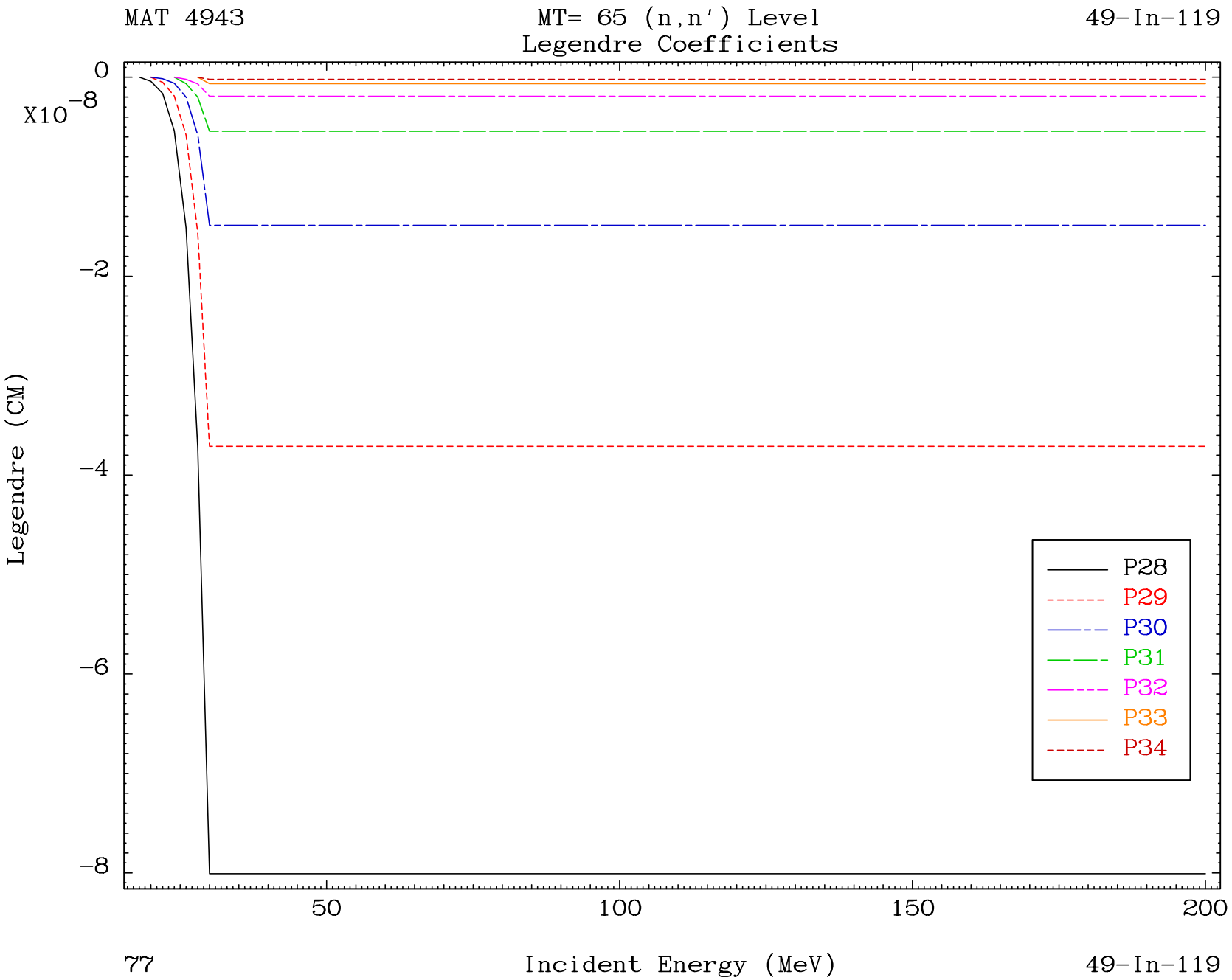

MAT 4943
MT= 64 (n,n') Level
Legendre Coefficients
49-In-119
2.0
X10^-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
72
Incident Energy (MeV)
49-In-119

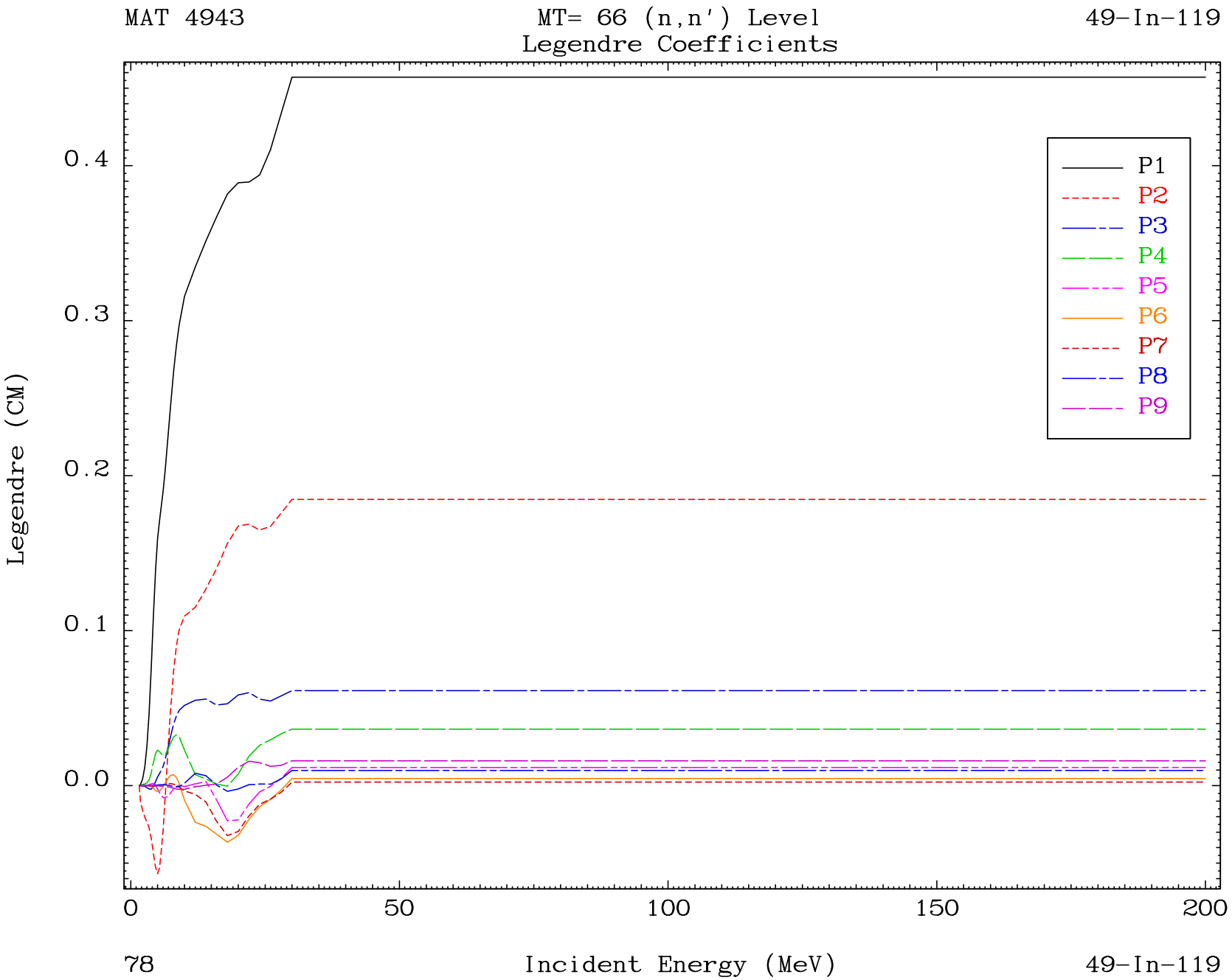

MAT 4943
MT= 64 (n,n') Level
Legendre Coefficients
49-In-119
X10-6
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
73
Incident Energy (MeV)
49-In-119

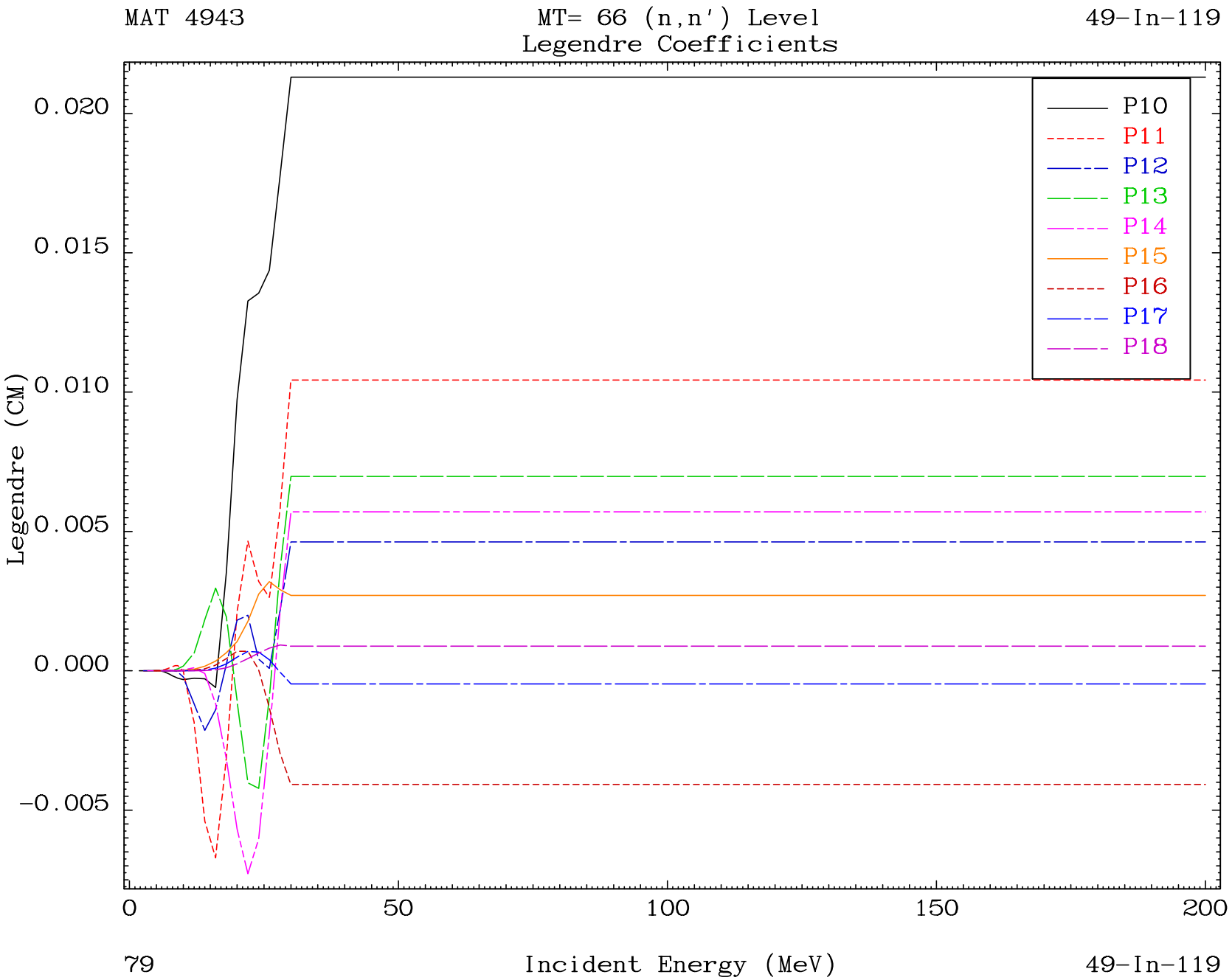

MAT 4943
MT= 65 (n,n') Level
Legendre Coefficients
49-In-119
0.4
0.3
0.2
0.1
0.0
-0.1
Legendre (CM)
0
50
100
150
200
74
Incident Energy (MeV)
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9

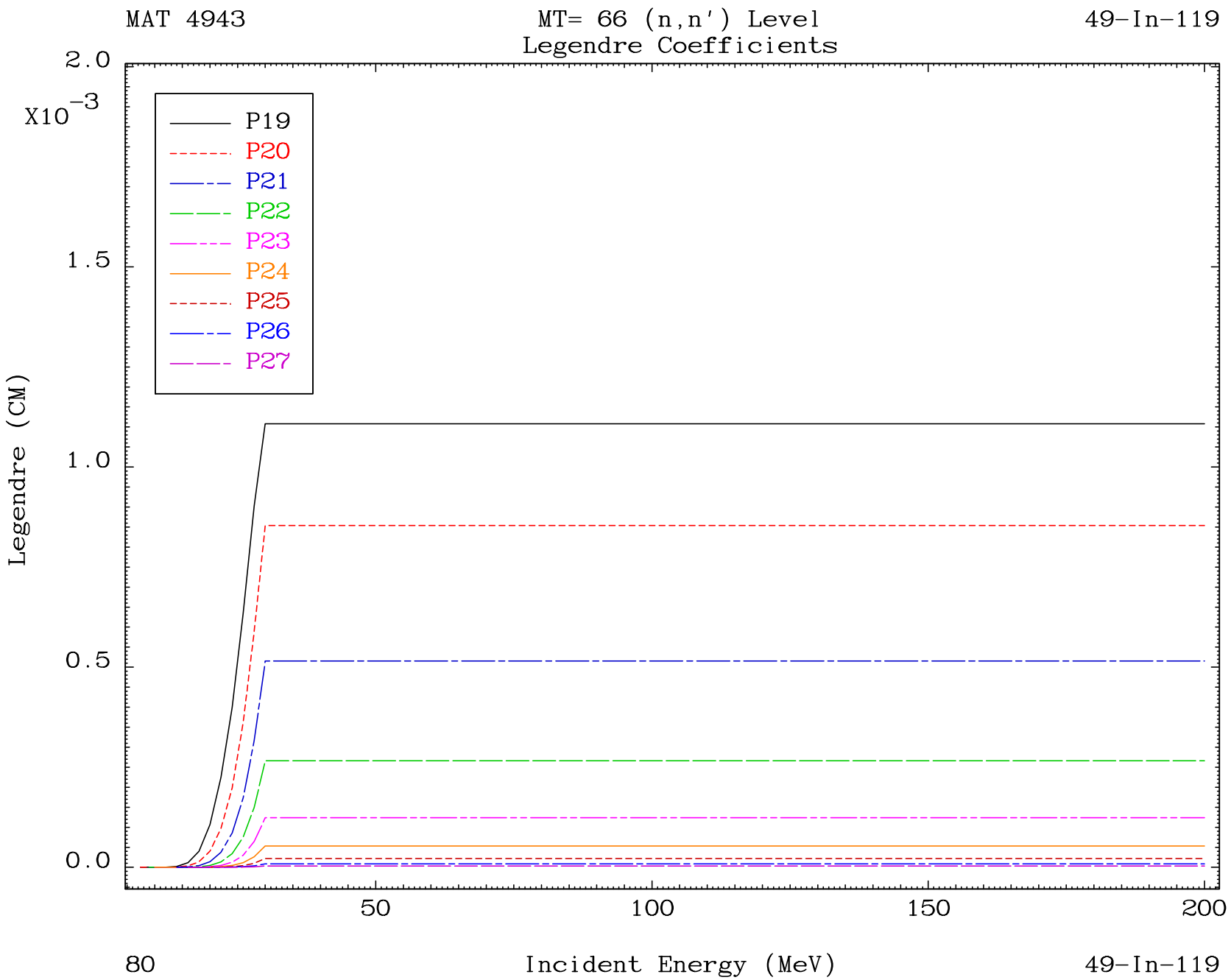

MAT 4943
MT= 65 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.010
0.005
0.000
-0.005
Legendre (CM)
0
50
100
150
200
75
Incident Energy (MeV)
49-In-119

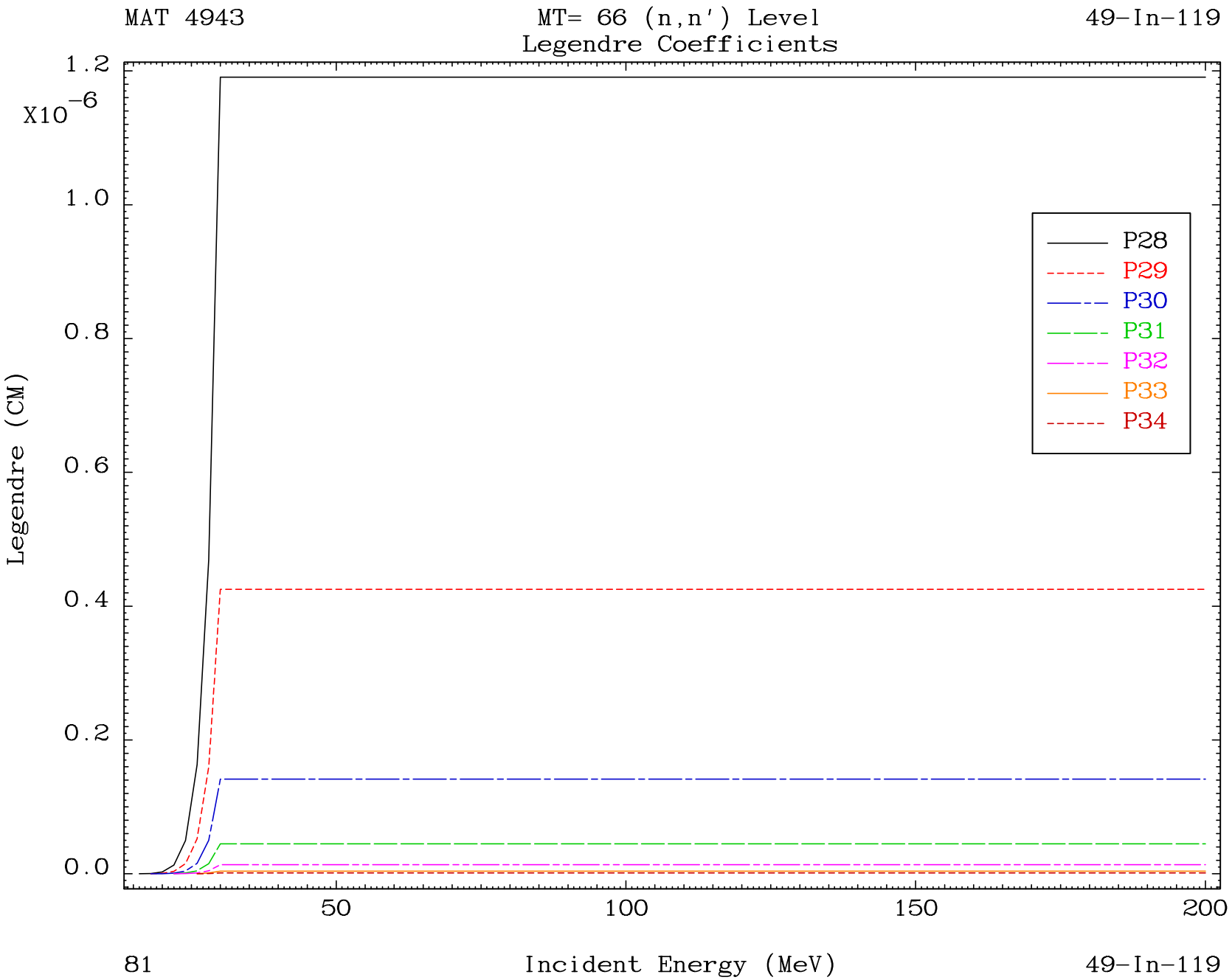

MAT 4943
MT= 65 (n,n') Level
Legendre Coefficients
49-In-119
X10^-5
4
3
2
1
0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
76
Incident Energy (MeV)
49-In-119

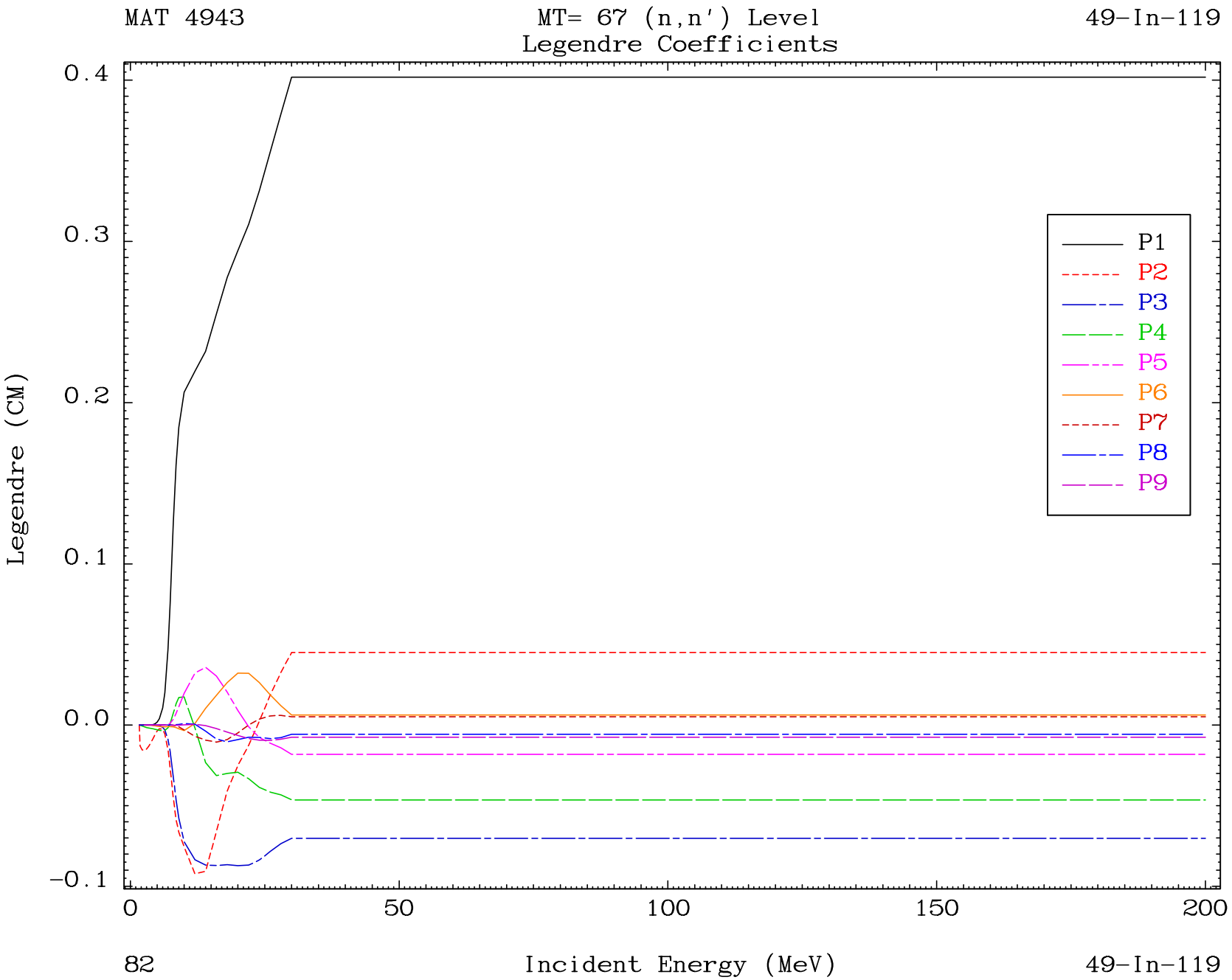

MAT 4943
MT= 65 (n,n') Level
Legendre Coefficients
49-In-119
0
X10 -8
-2
-4
-6
-8
Legendre (CM)
50
100
150
200
77
Incident Energy (MeV)
49-In-119
P28
P29
P30
P31
P32
P33
P34

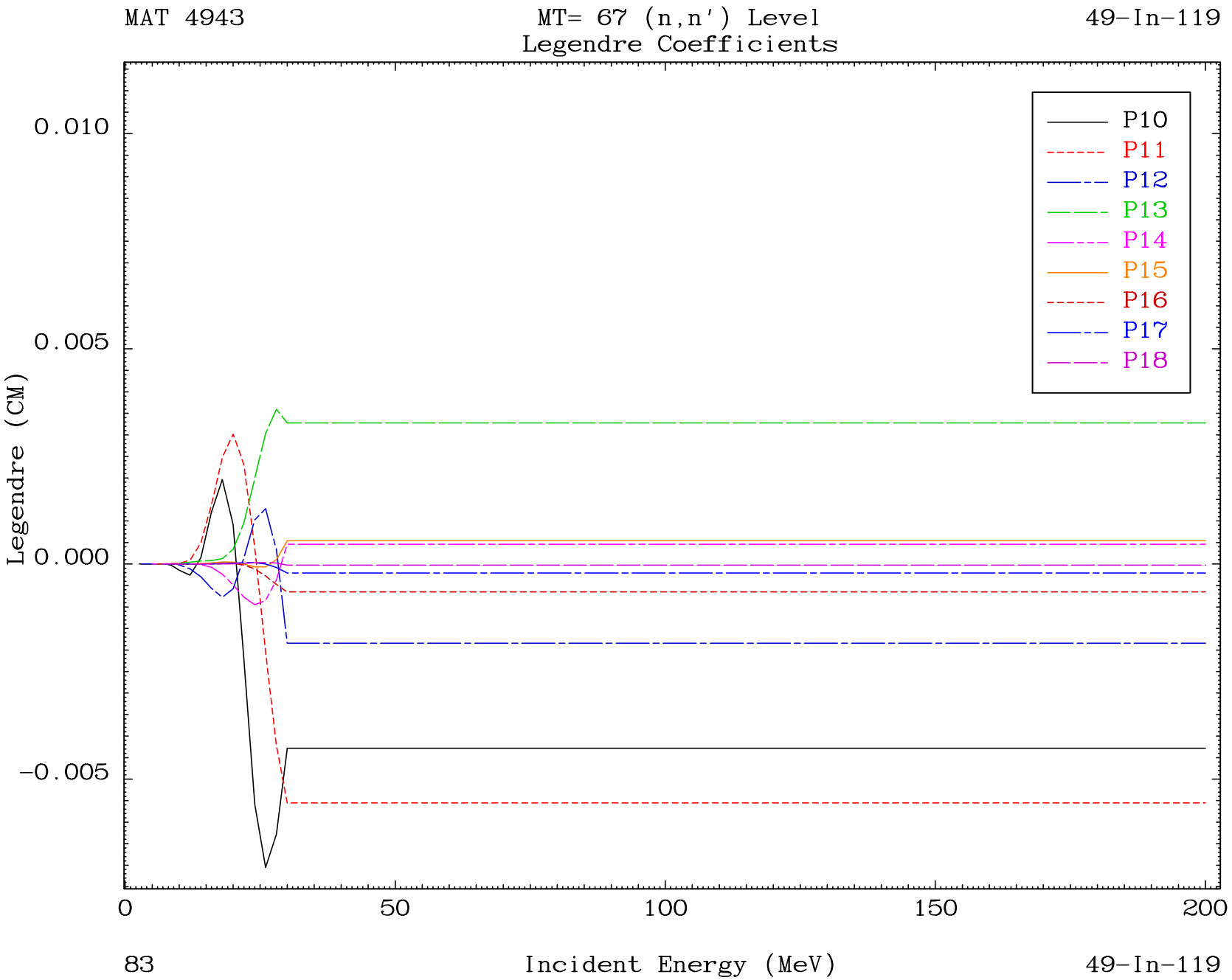

MAT 4943
MT= 66 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
78
Incident Energy (MeV)
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9

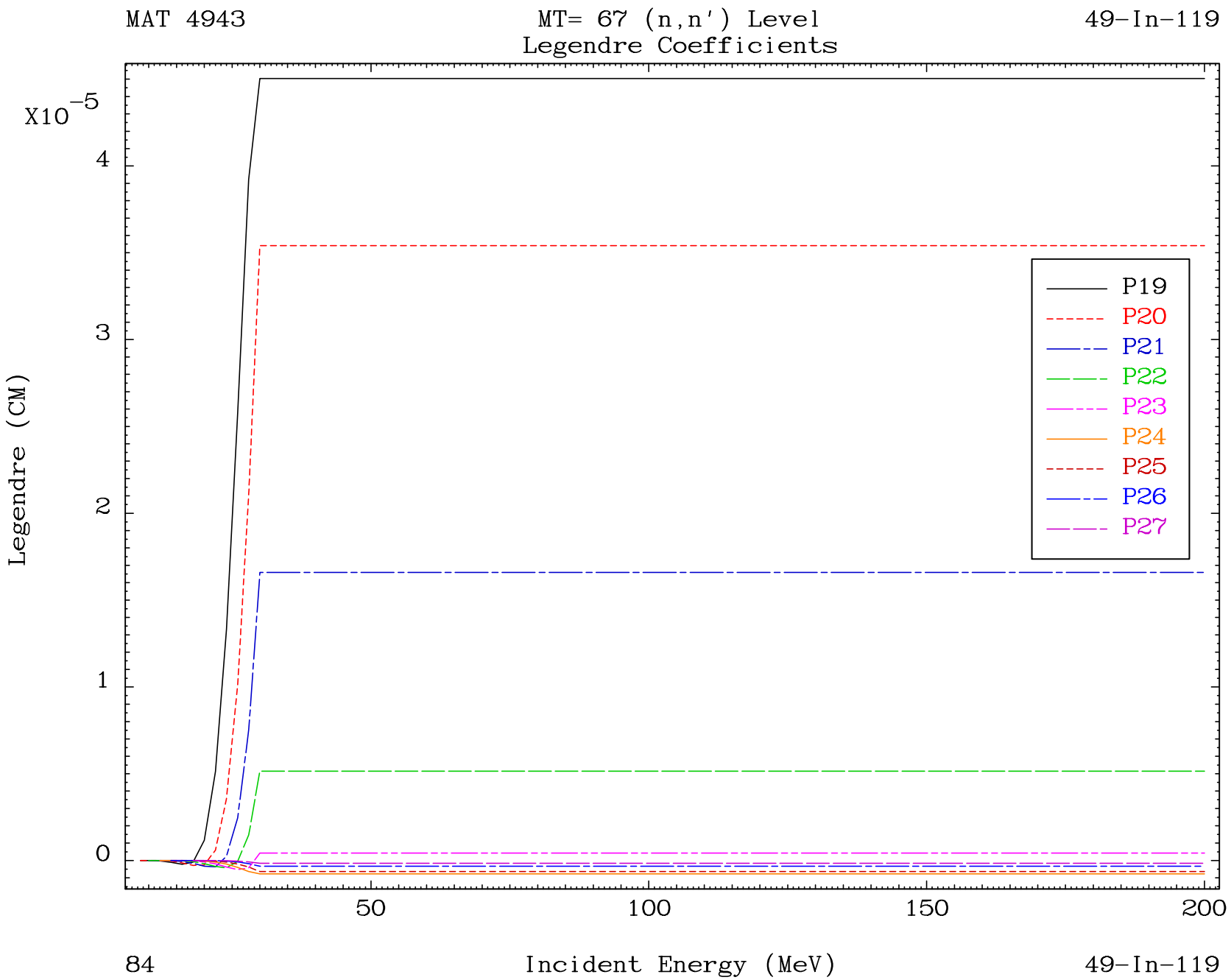

MAT 4943
MT= 66 (n,n') Level
Legendre Coefficients
49-In-119
0.020
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
79
Incident Energy (MeV)
49-In-119

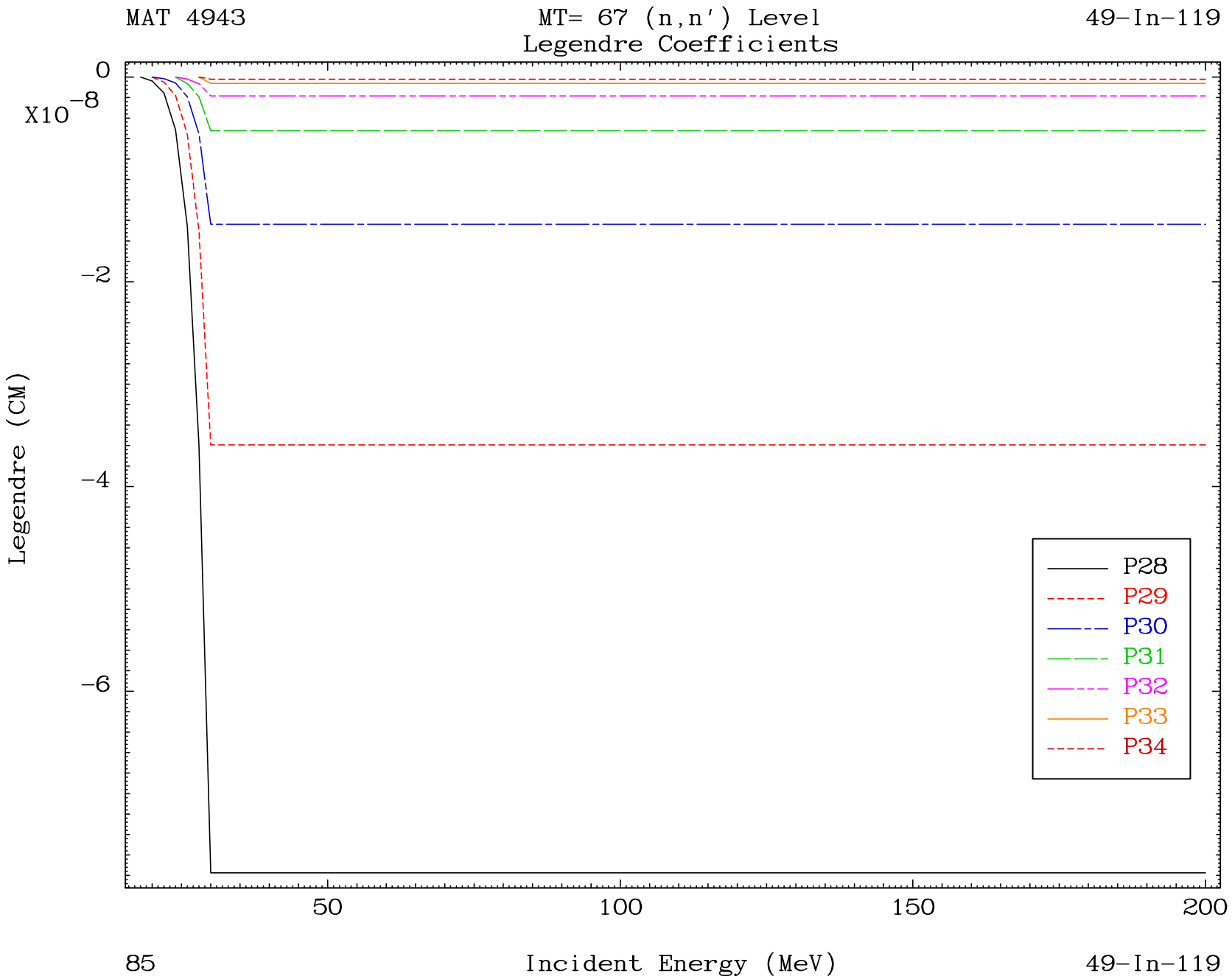

MAT 4943
MT= 66 (n,n') Level
Legendre Coefficients
49-In-119
2.0
X10^-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
80
Incident Energy (MeV)
49-In-119

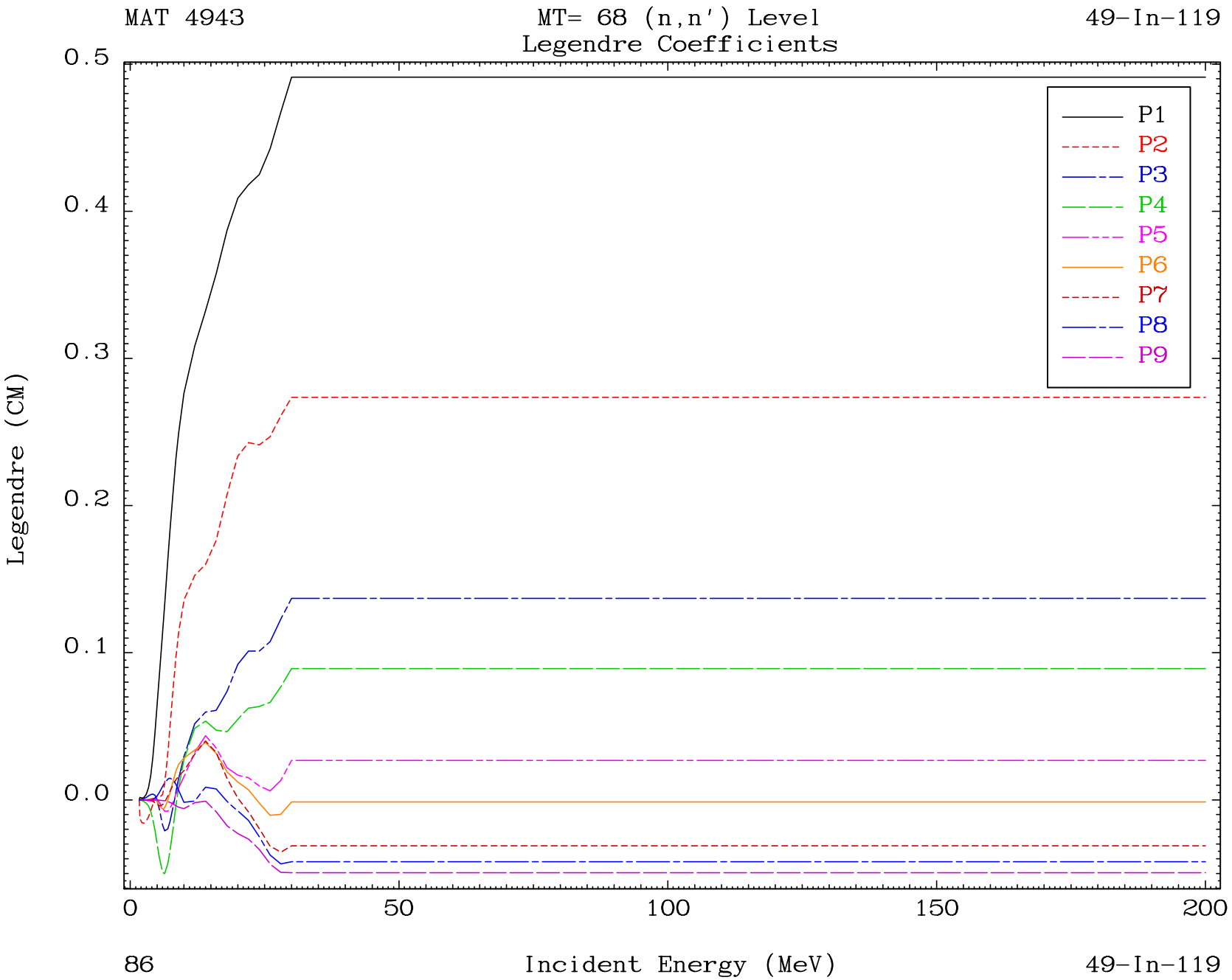

MAT 4943
MT= 66 (n,n') Level
Legendre Coefficients
49-In-119
X10^-6
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
81
Incident Energy (MeV)
49-In-119

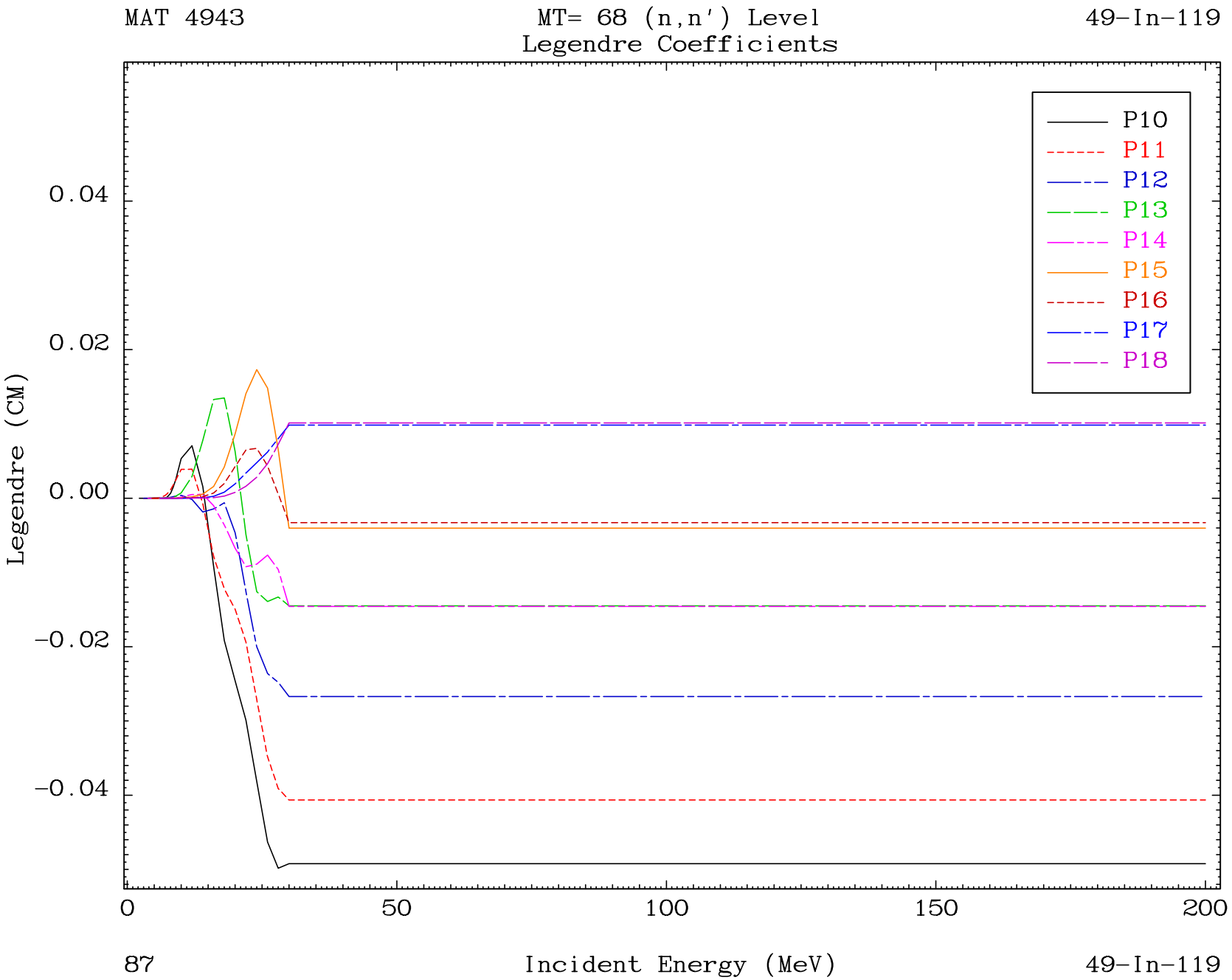

MAT 4943
MT= 67 (n,n') Level
Legendre Coefficients
49-In-119
0.4
0.3
0.2
0.1
0.0
-0.1
Legendre (CM)
0
50
100
150
200
82
Incident Energy (MeV)
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9

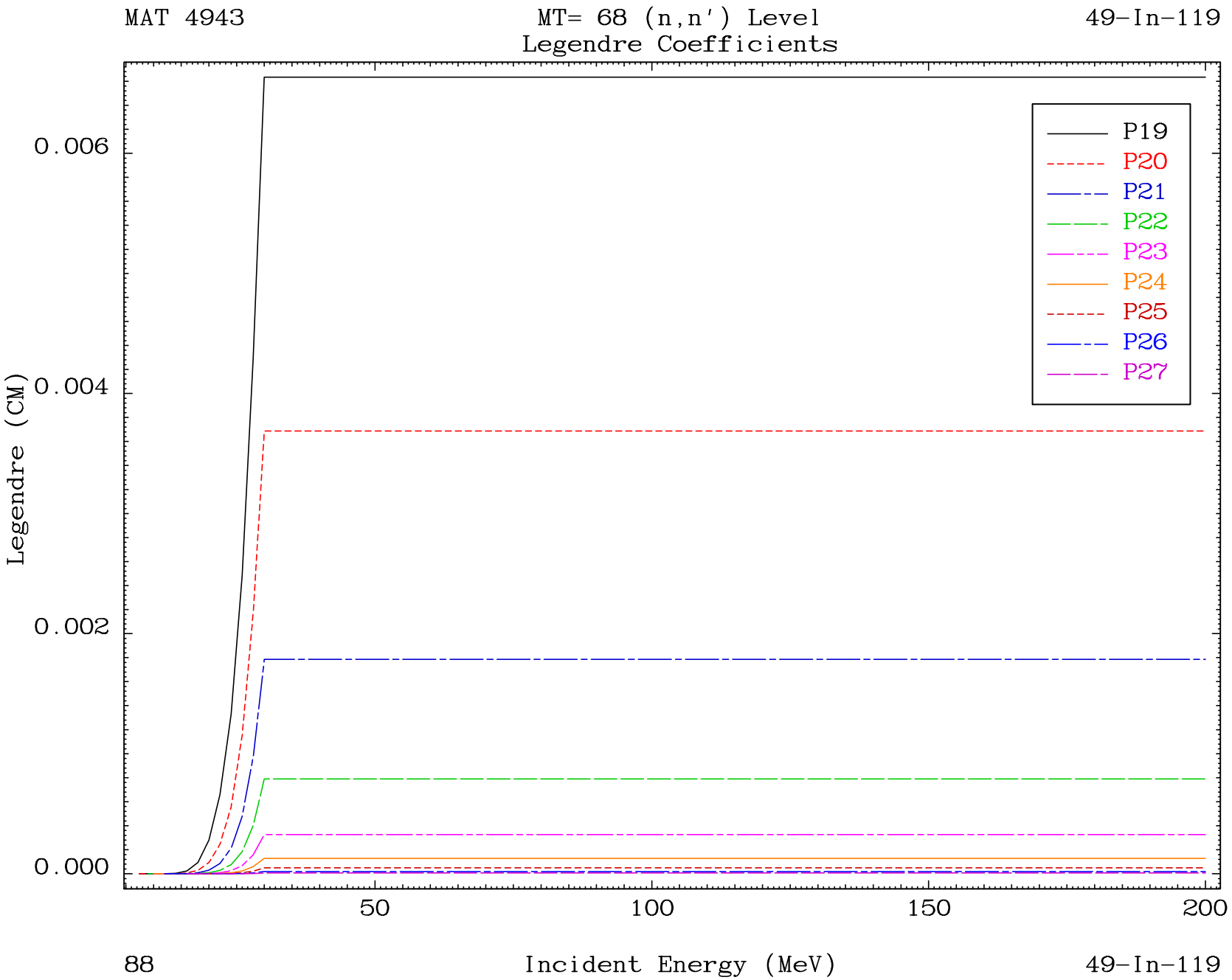

MAT 4943
MT= 67 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.010
0.005
0.000
-0.005
Legendre (CM)
0
50
100
150
200
83
Incident Energy (MeV)
49-In-119

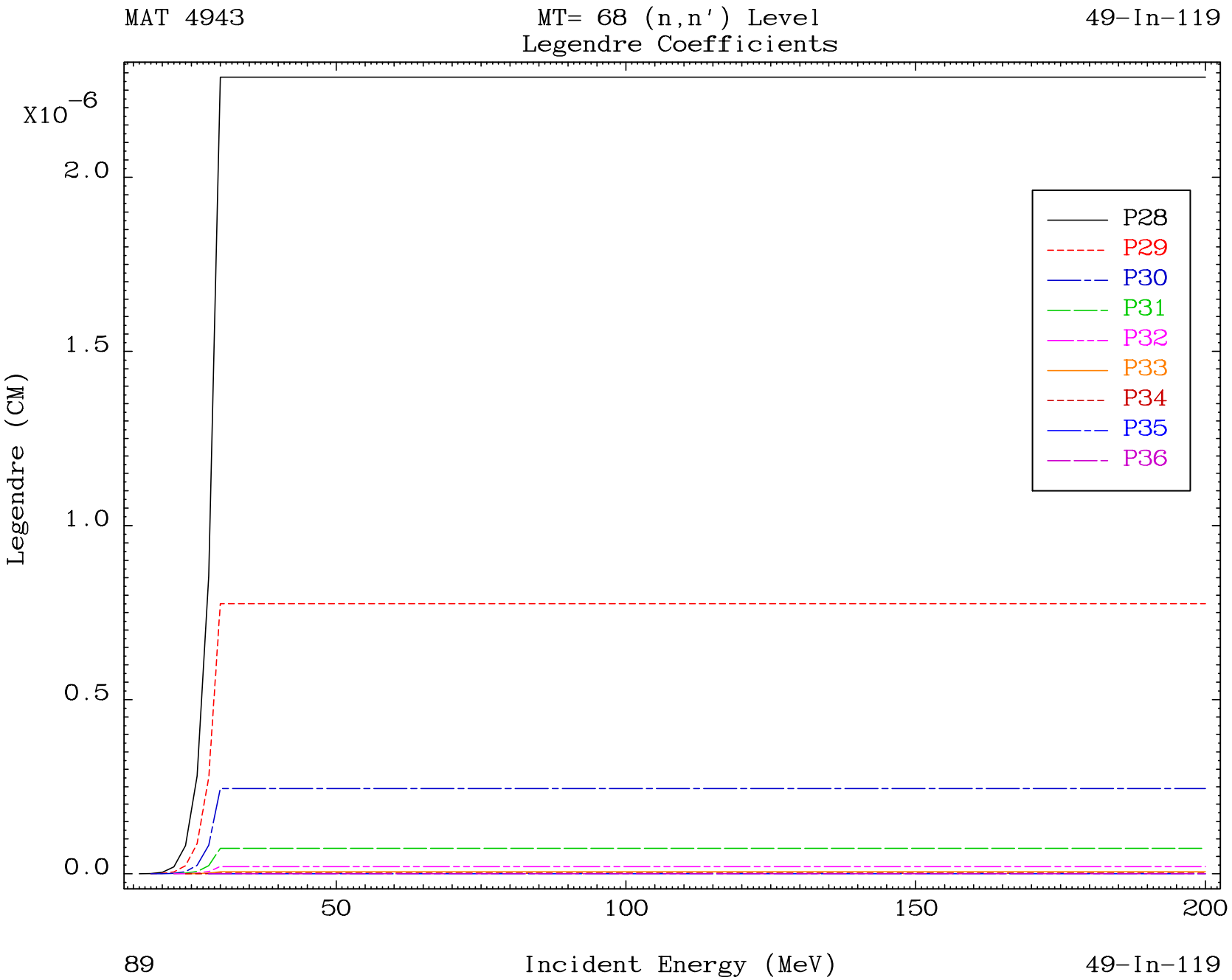

MAT 4943
MT= 67 (n,n') Level
Legendre Coefficients
49-In-119
X10^-5
4
3
2
1
0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
84
Incident Energy (MeV)
49-In-119

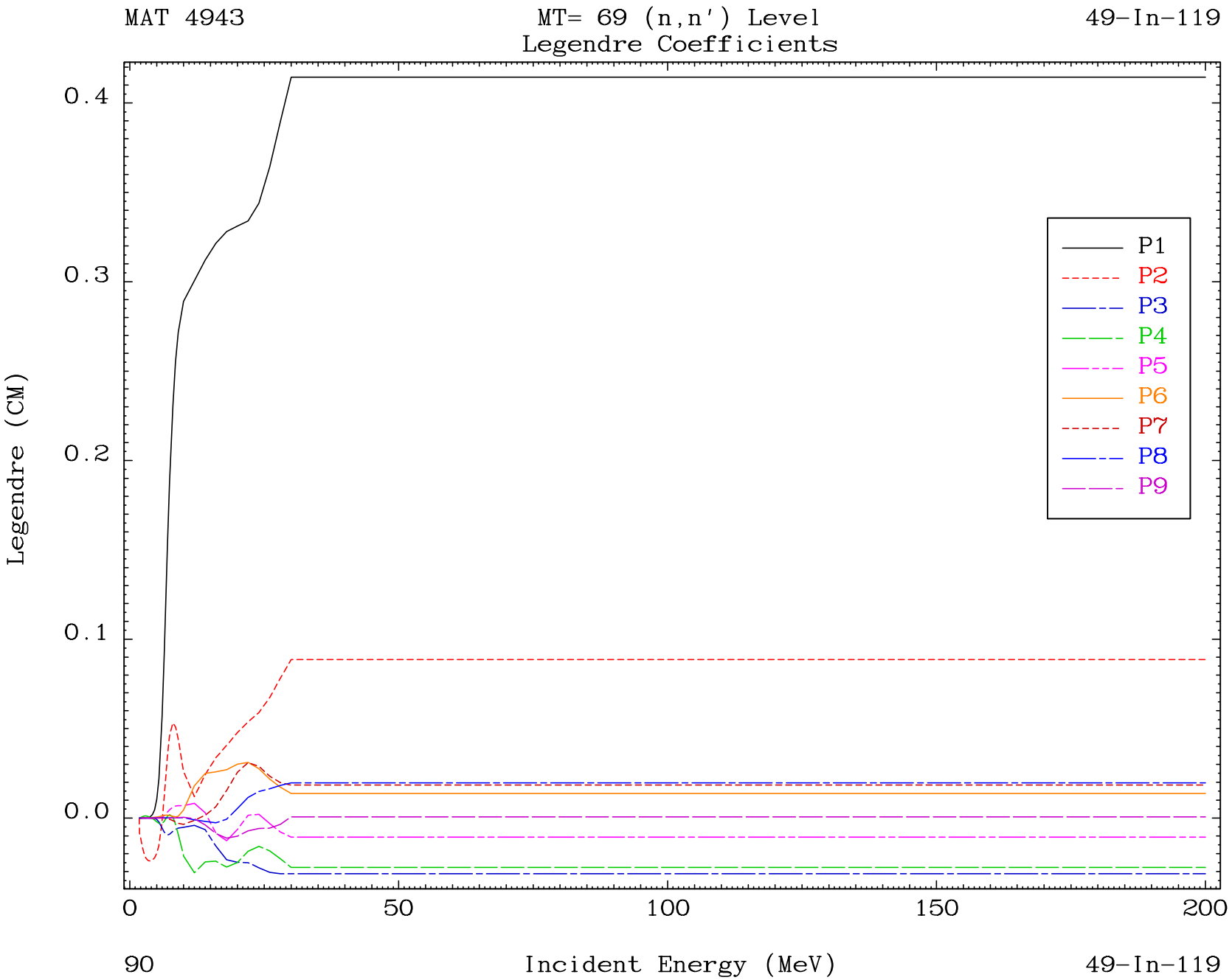

MAT 4943
MT= 67 (n,n') Level
Legendre Coefficients
49-In-119
0
X10 −8
−2
−4
−6
Legendre (CM)
50
100
150
200
85
Incident Energy (MeV)
49-In-119
P28
P29
P30
P31
P32
P33
P34

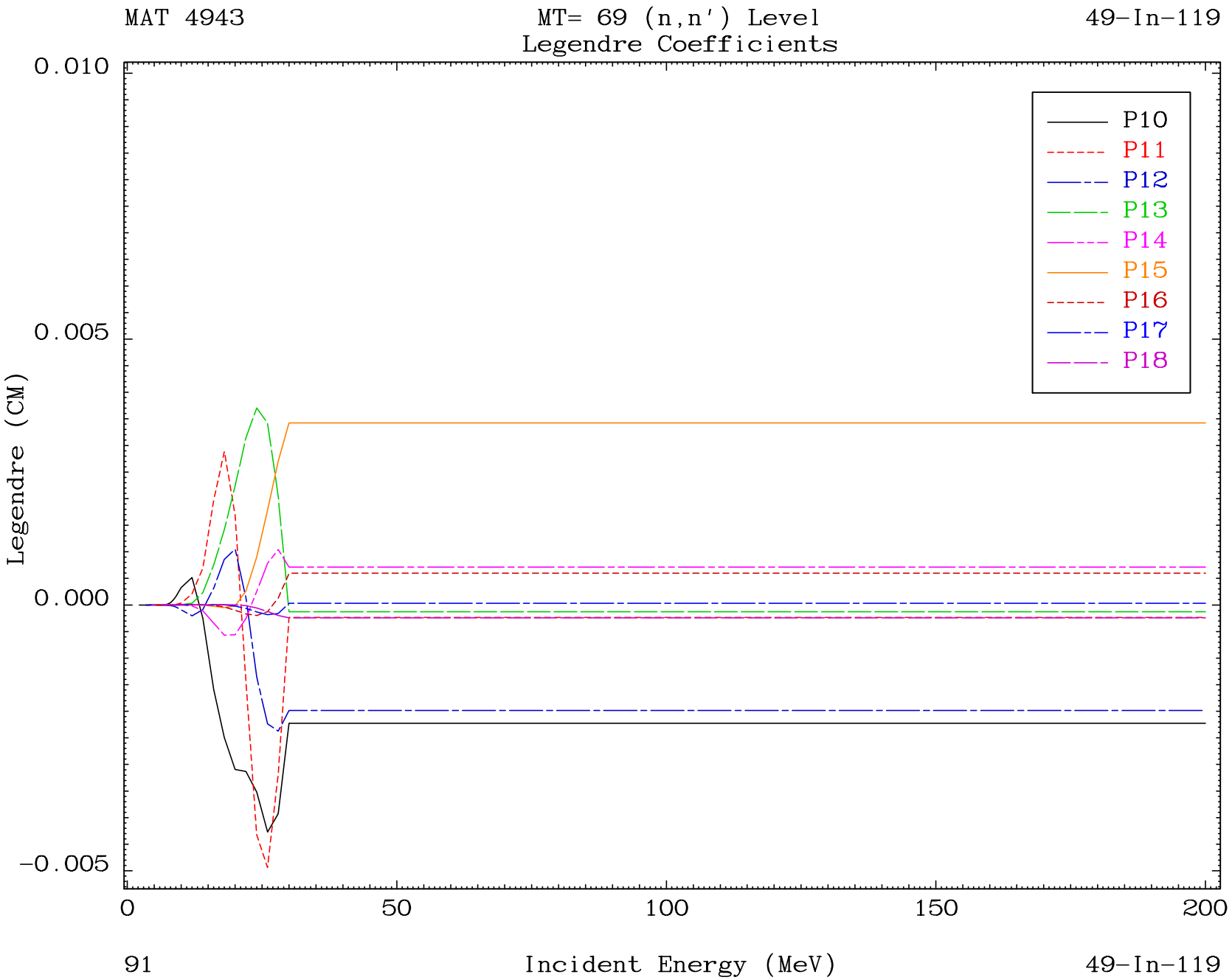

MAT 4943
MT= 68 (n,n') Level
Legendre Coefficients
49-In-119
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
86
Incident Energy (MeV)
49-In-119

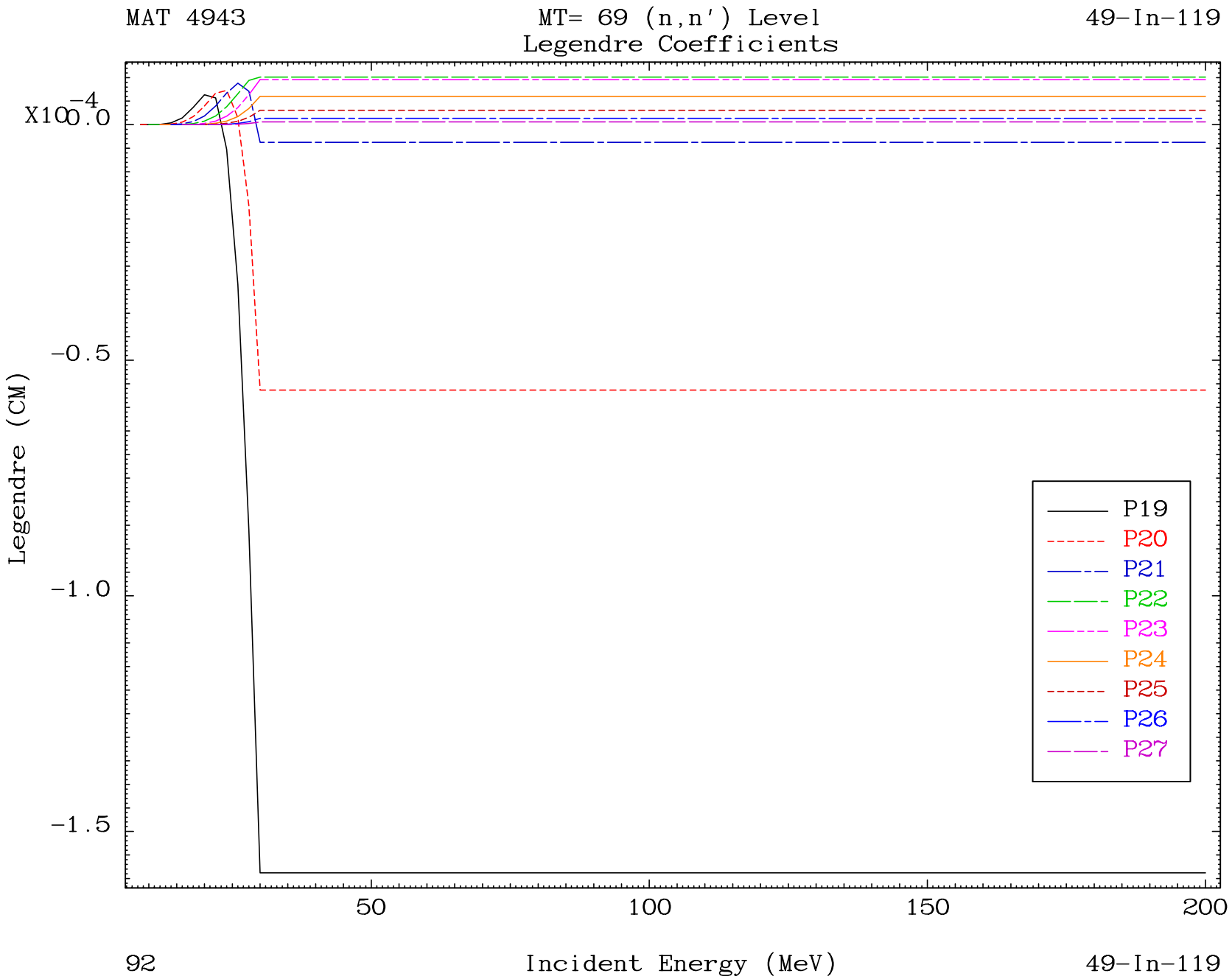

MAT 4943
MT= 68 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
87
Incident Energy (MeV)
49-In-119

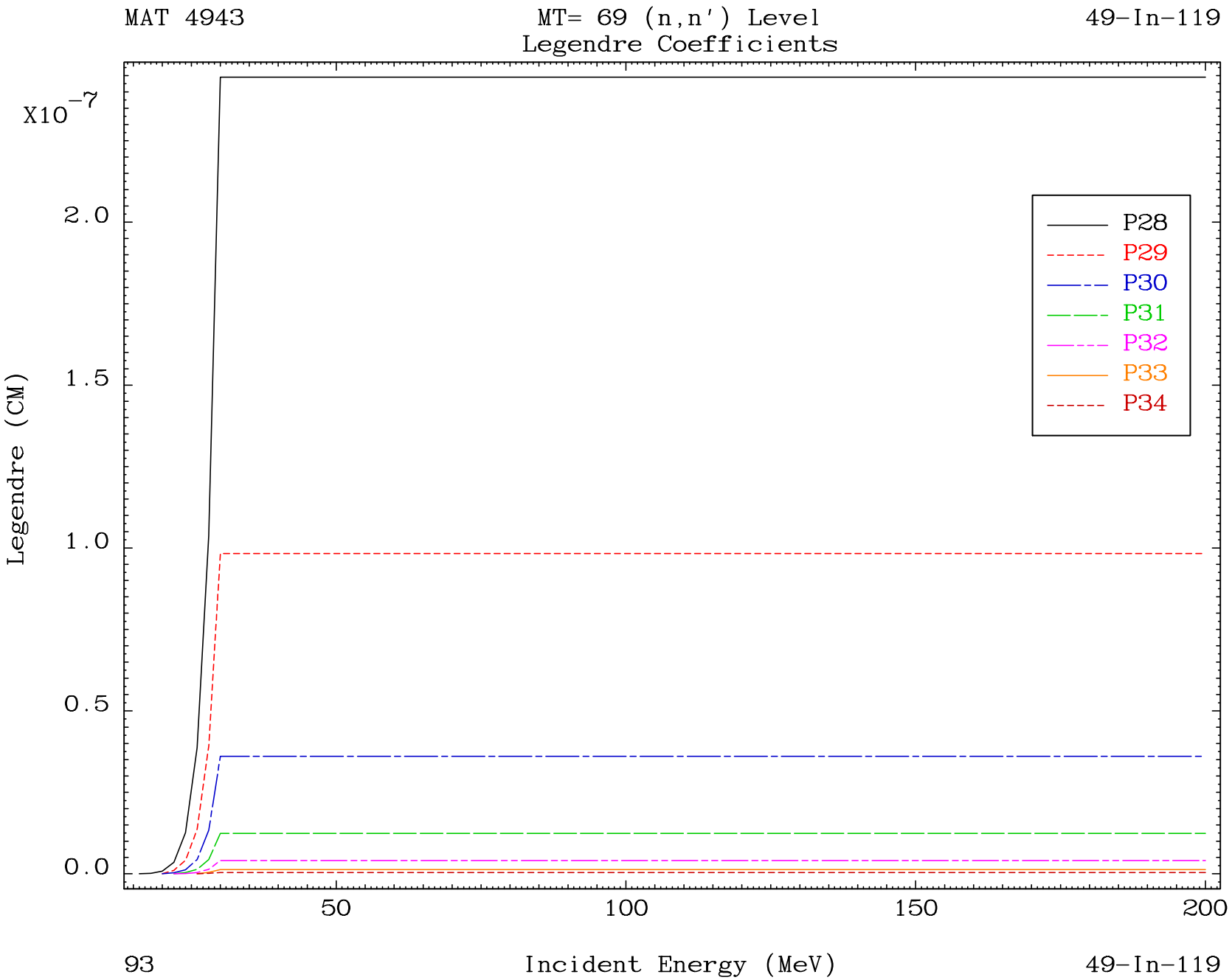

MAT 4943
MT= 68 (n,n') Level
Legendre Coefficients
49-In-119
0.006
0.004
0.002
0.000
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
88
Incident Energy (MeV)
49-In-119

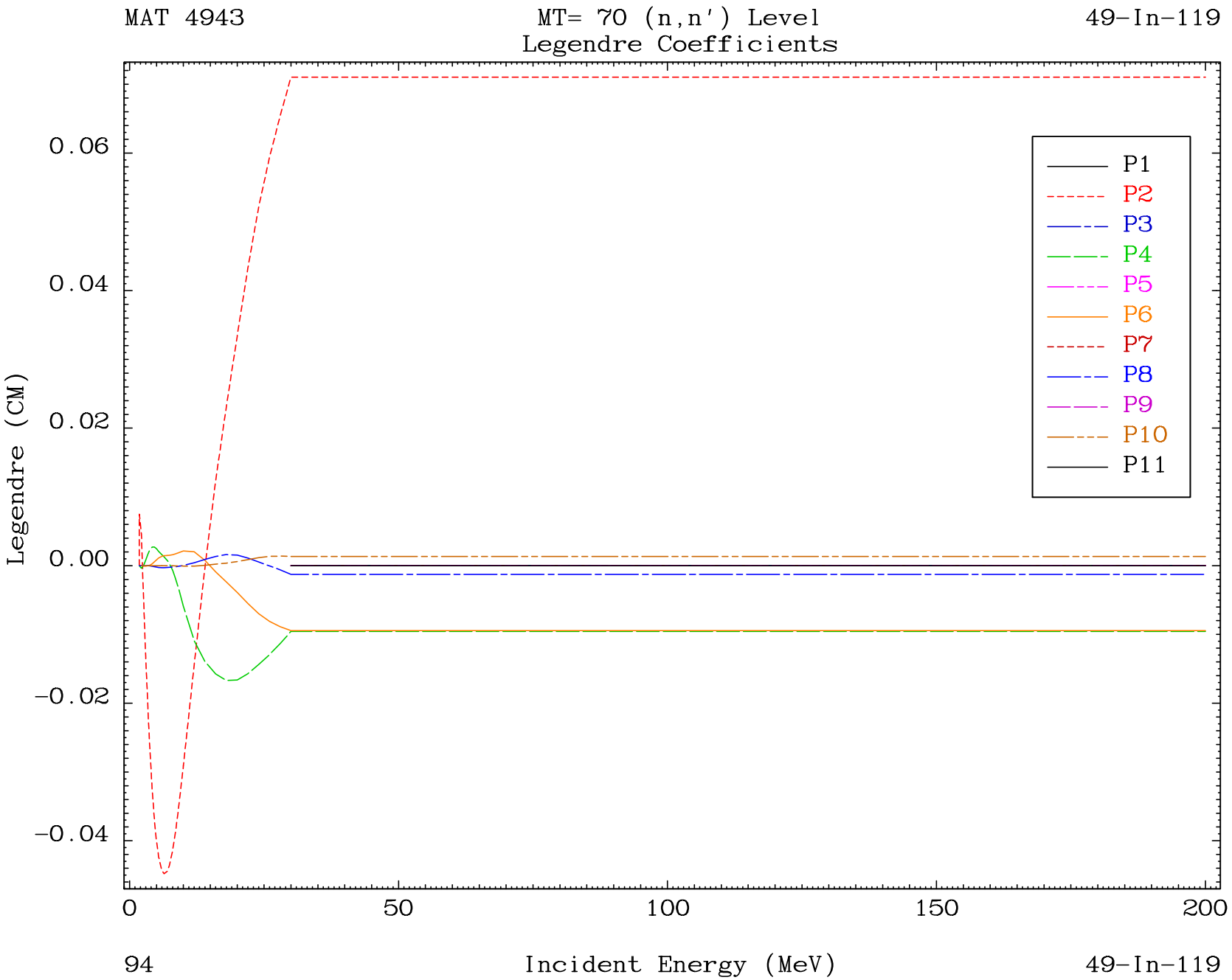

MAT 4943
MT= 68 (n,n') Level
Legendre Coefficients
49-In-119
X10^-6
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
89
Incident Energy (MeV)
49-In-119

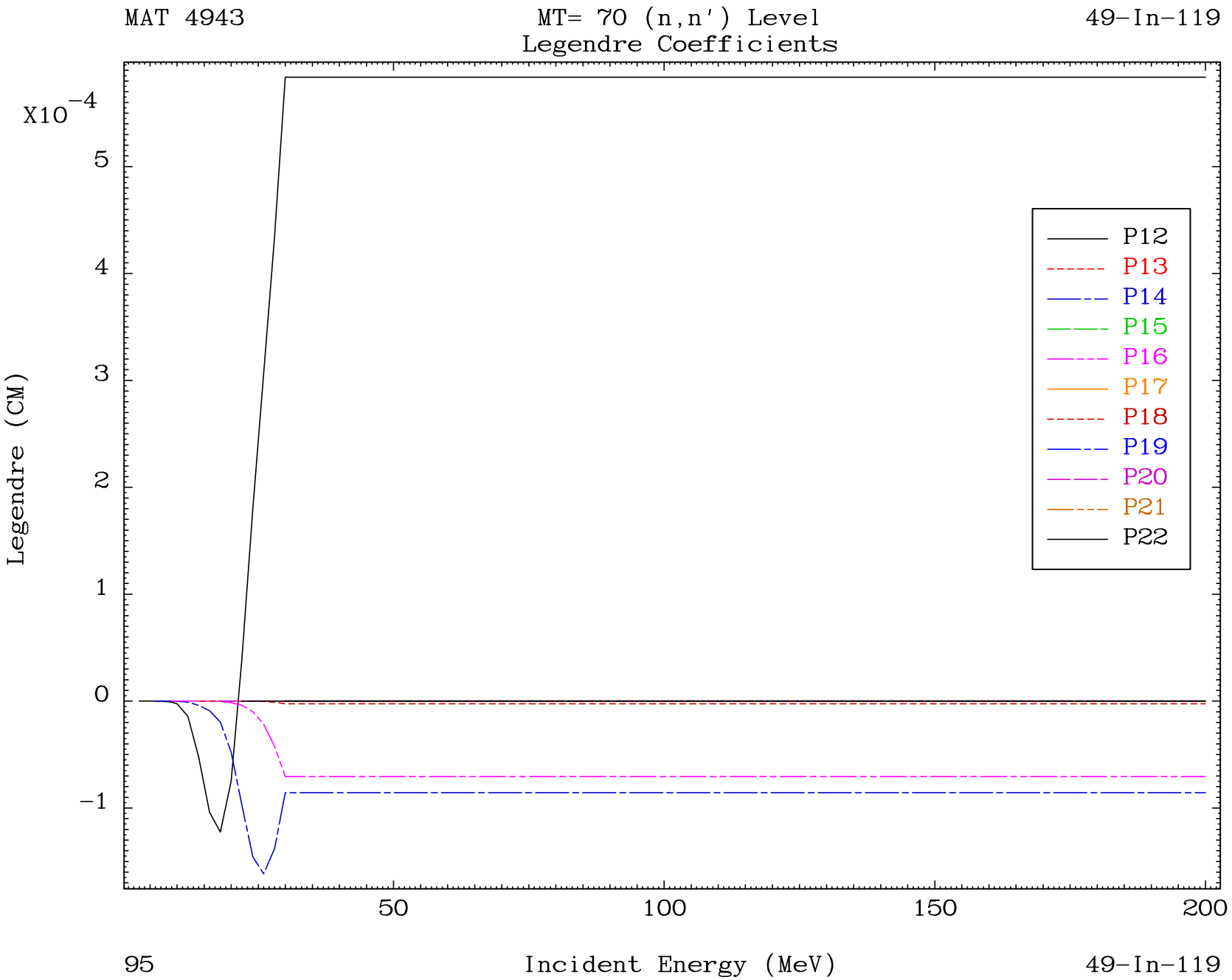

MAT 4943
MT= 69 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
90
Incident Energy (MeV)
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9

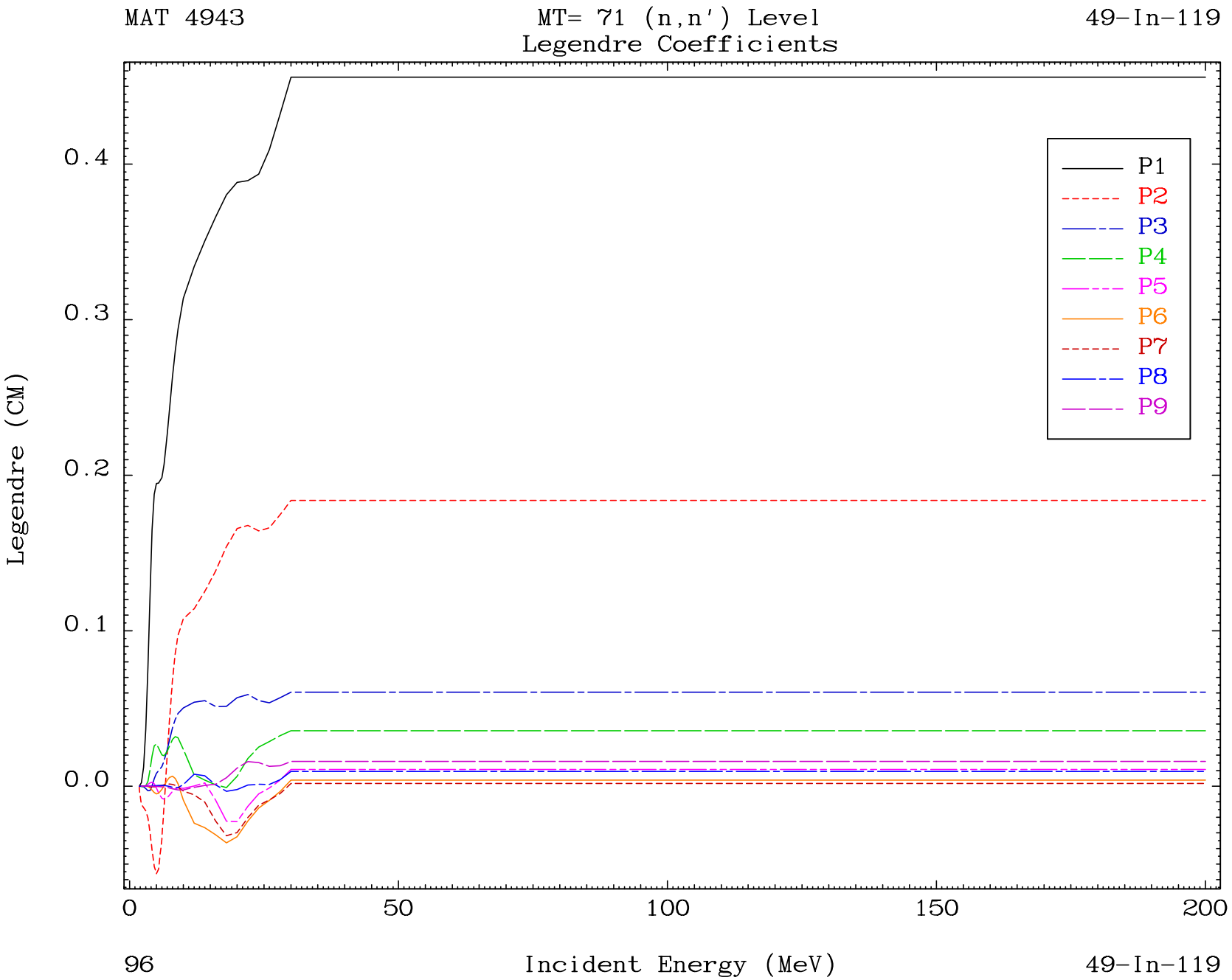

MAT 4943
MT= 69 (n,n') Level
Legendre Coefficients
49-In-119
0.010
0.005
0.000
-0.005
Legendre (CM)
0
50
100
150
200
91
Incident Energy (MeV)
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18

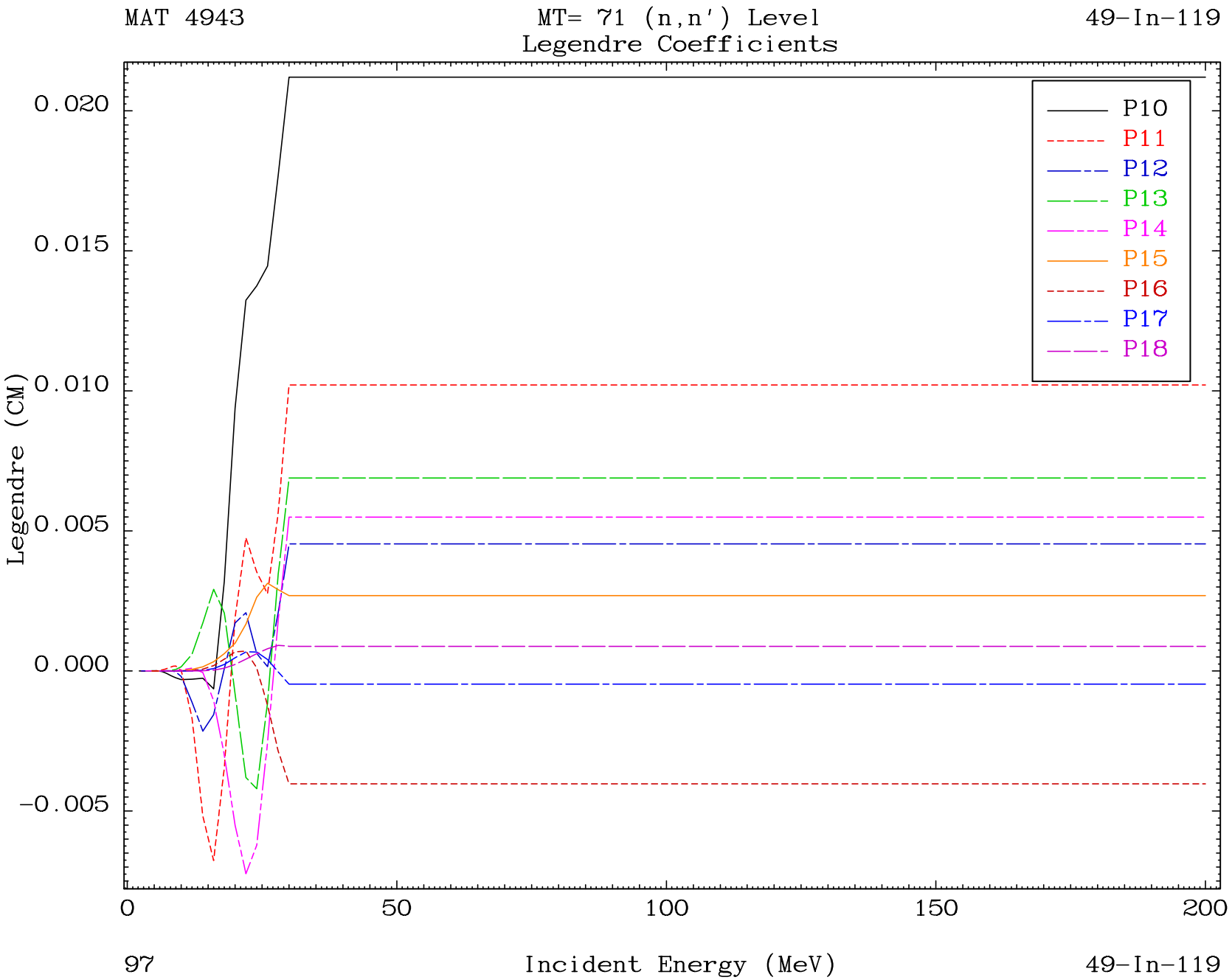

MAT 4943
MT= 69 (n,n') Level
Legendre Coefficients
49-In-119
X10^-4
0.0
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
92
Incident Energy (MeV)
49-In-119
P19
P20
P21
P22
P23
P24
P25
P26
P27

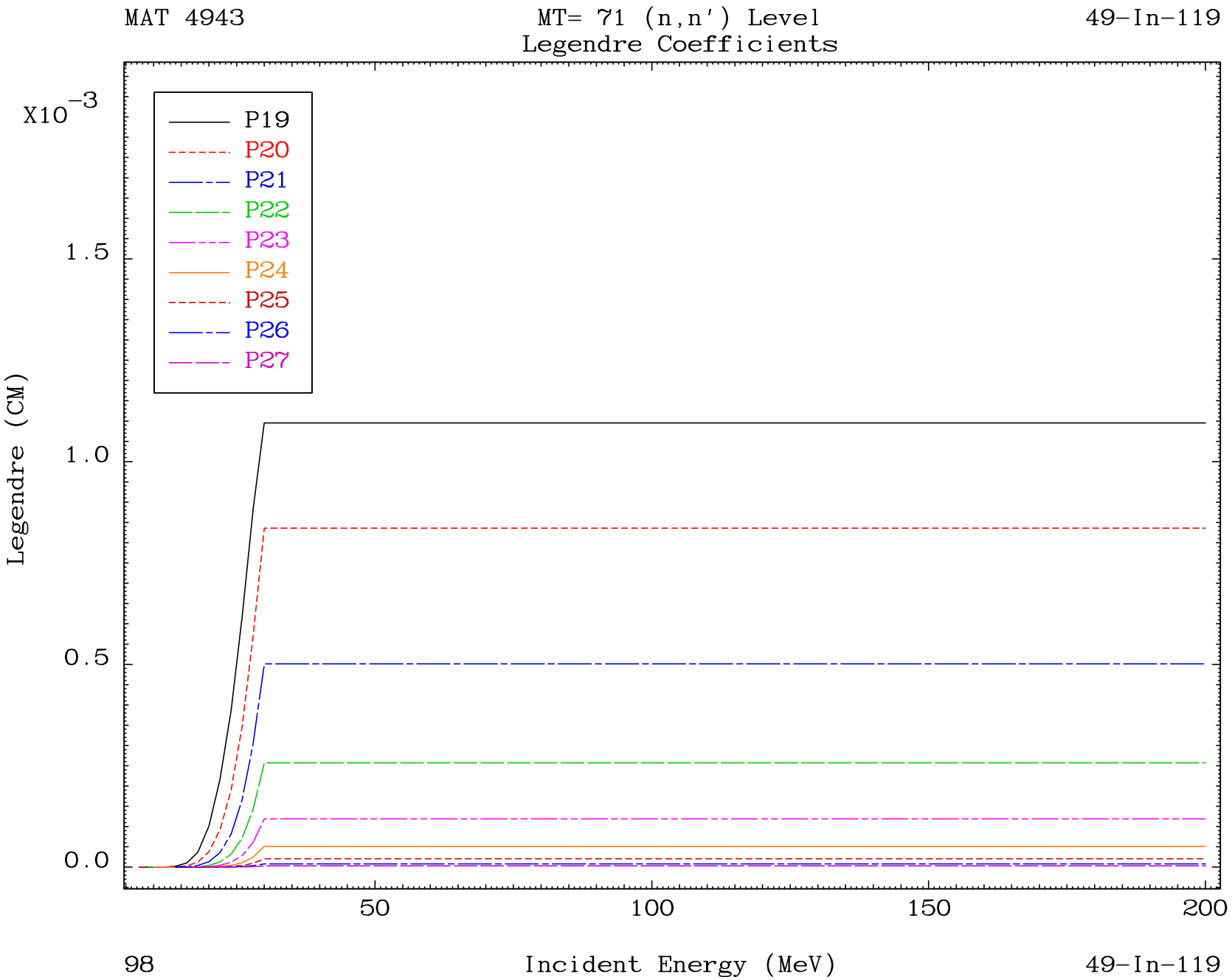

MAT 4943
MT= 69 (n,n') Level
Legendre Coefficients
49-In-119
X10-7
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
93
Incident Energy (MeV)
49-In-119

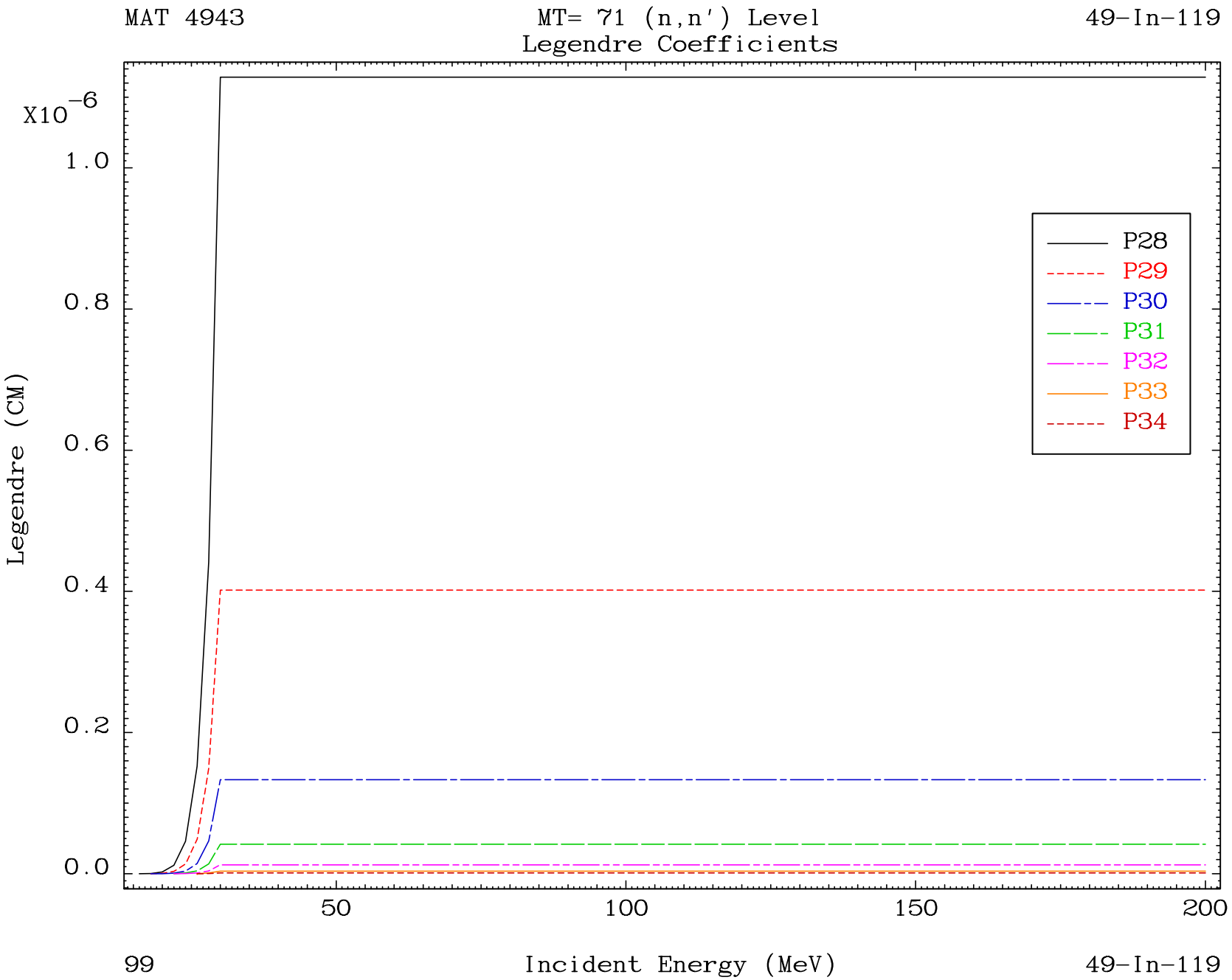

MAT 4943
MT= 70 (n,n') Level
Legendre Coefficients
49-In-119
0.06
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
0
50
100
150
200
94
Incident Energy (MeV)
49-In-119

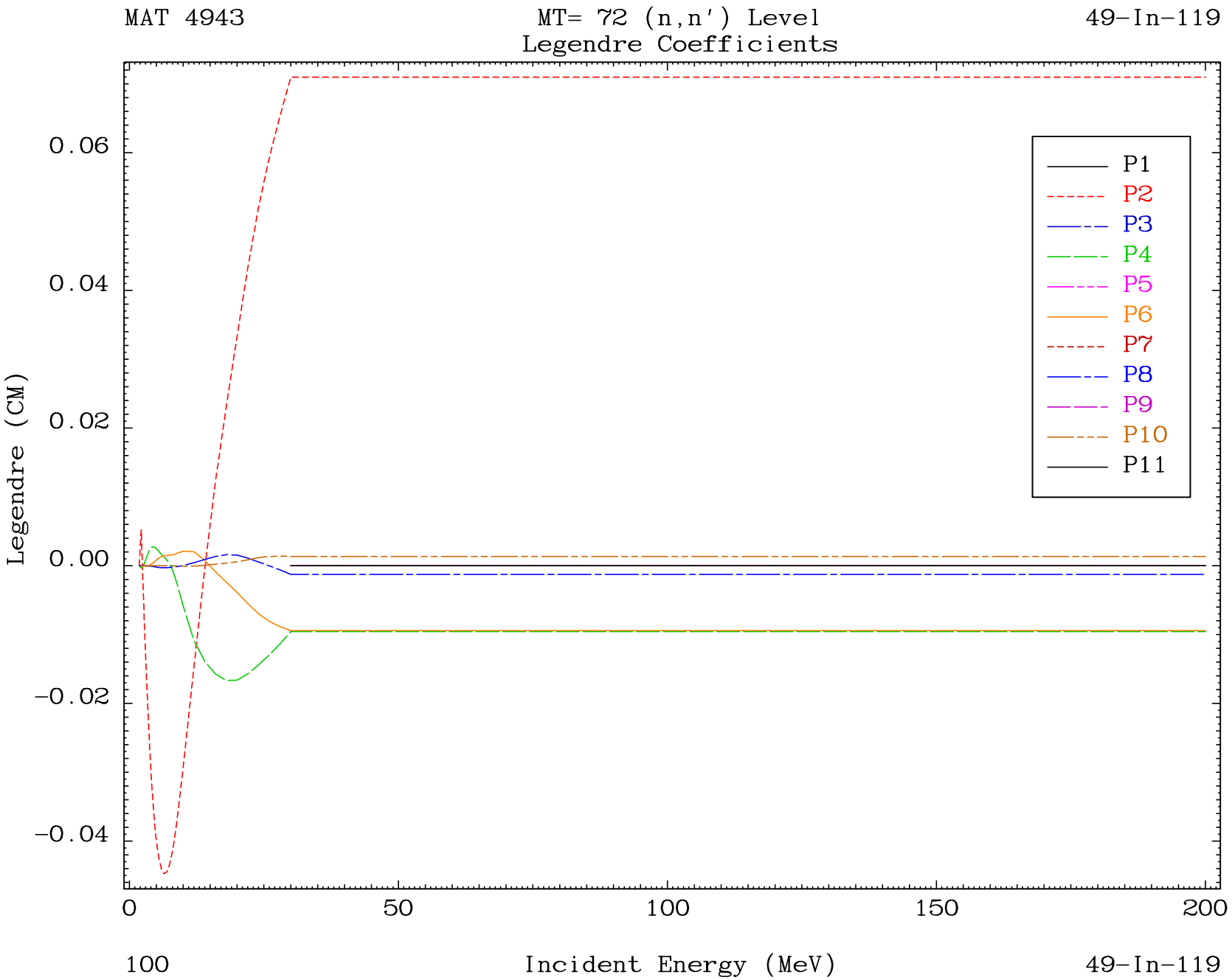

MAT 4943
MT= 70 (n,n') Level
Legendre Coefficients
49-In-119
X10^-4
5
4
3
2
1
0
-1
Legendre (CM)
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
50
100
150
200
95
Incident Energy (MeV)
49-In-119

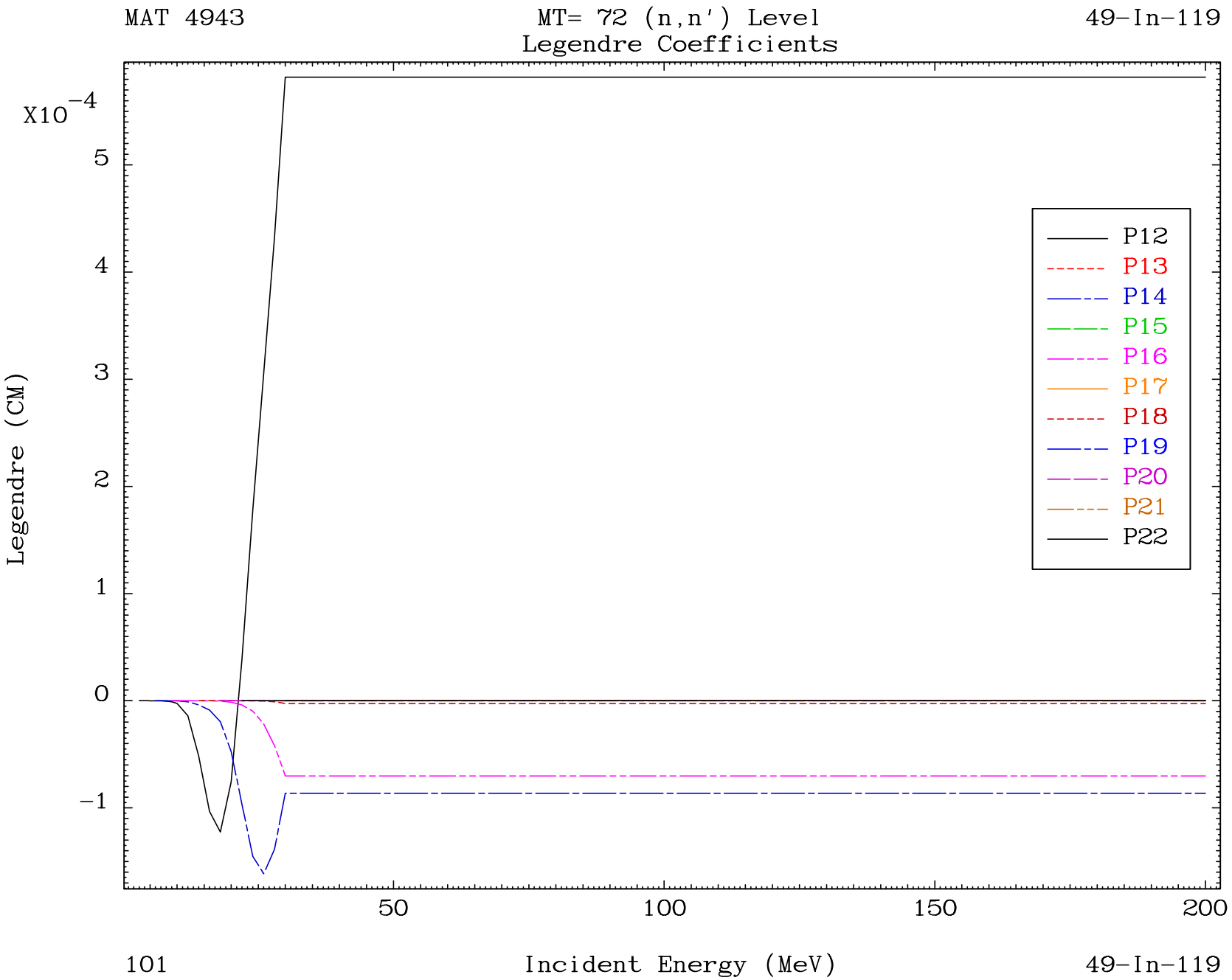

MAT 4943
MT= 71 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
96
Incident Energy (MeV)
49-In-119

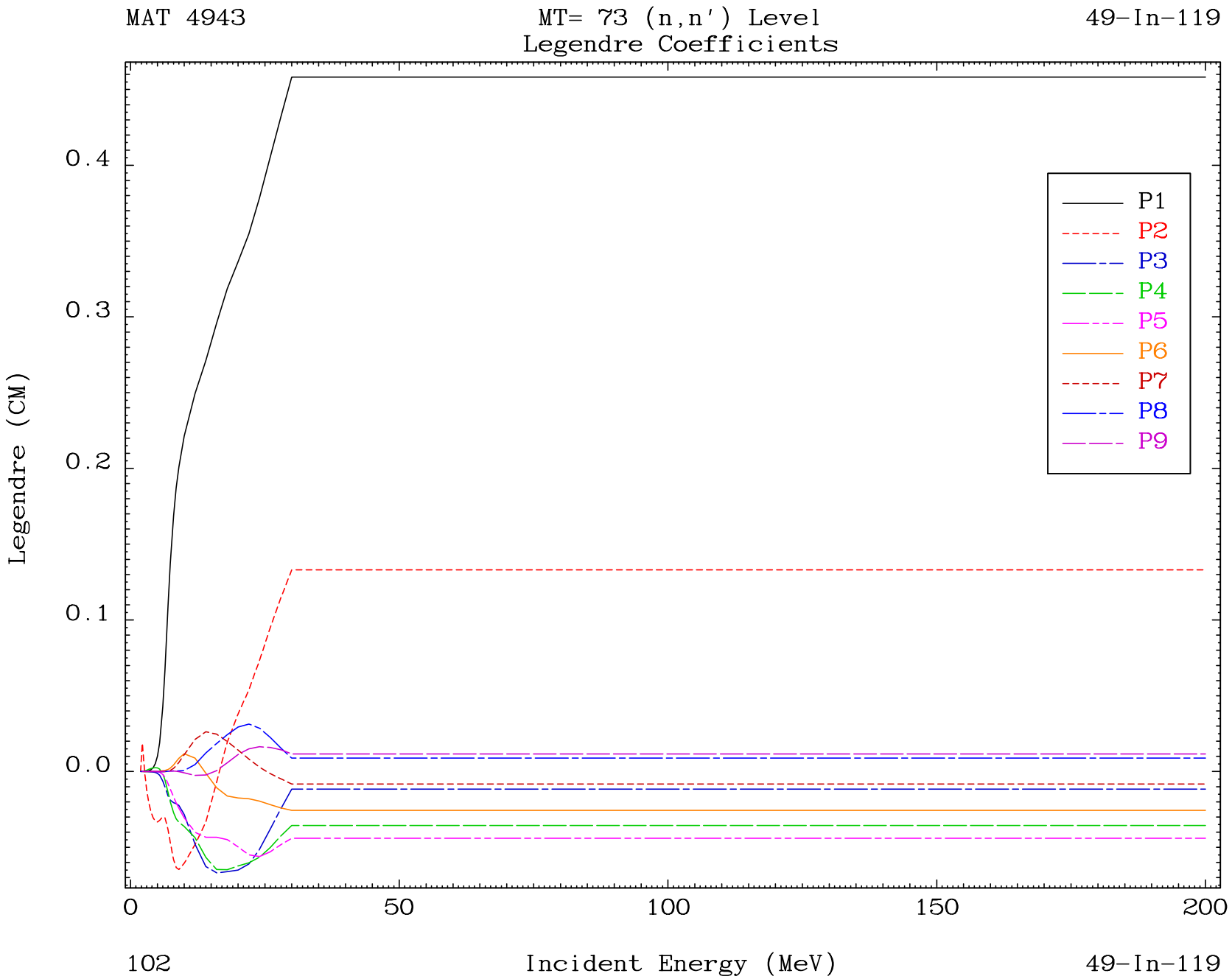

MAT 4943
MT= 71 (n,n') Level
Legendre Coefficients
49-In-119
0.020
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
97
Incident Energy (MeV)
49-In-119

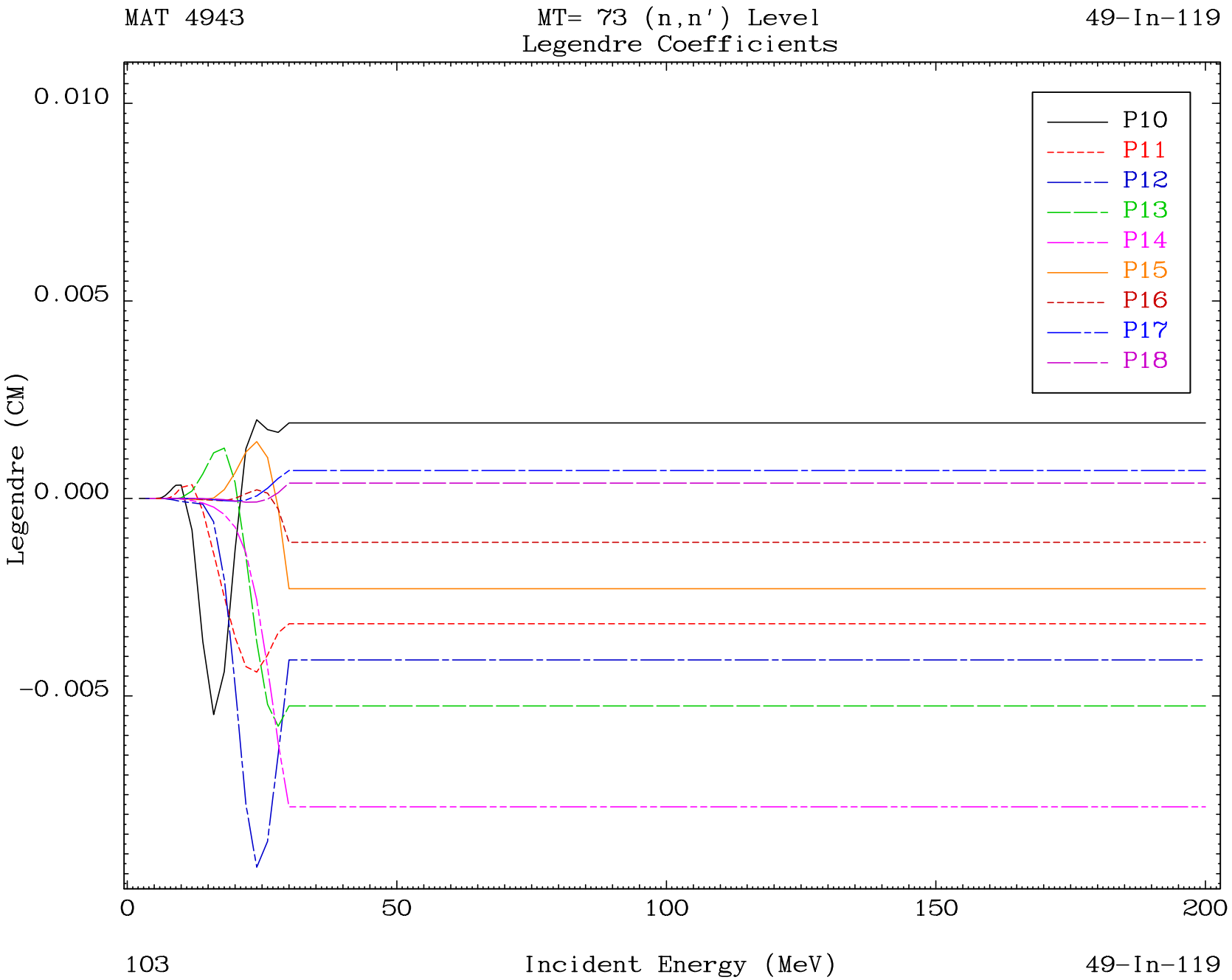

MAT 4943
MT= 71 (n,n') Level
Legendre Coefficients
49-In-119
X10^-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
98
Incident Energy (MeV)
49-In-119

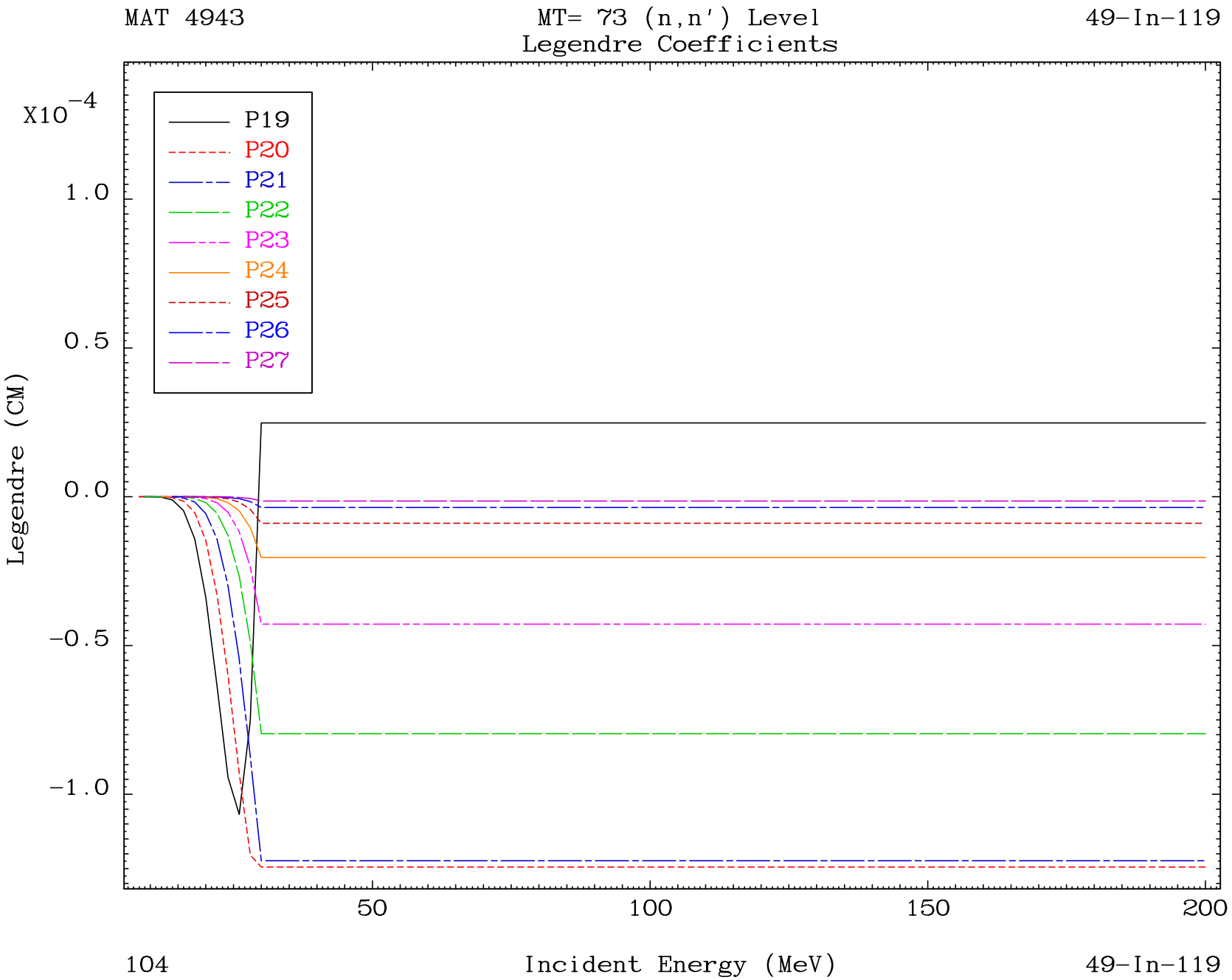

MAT 4943
MT= 71 (n,n') Level
Legendre Coefficients
49-In-119
X10^-6
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
99
Incident Energy (MeV)
49-In-119

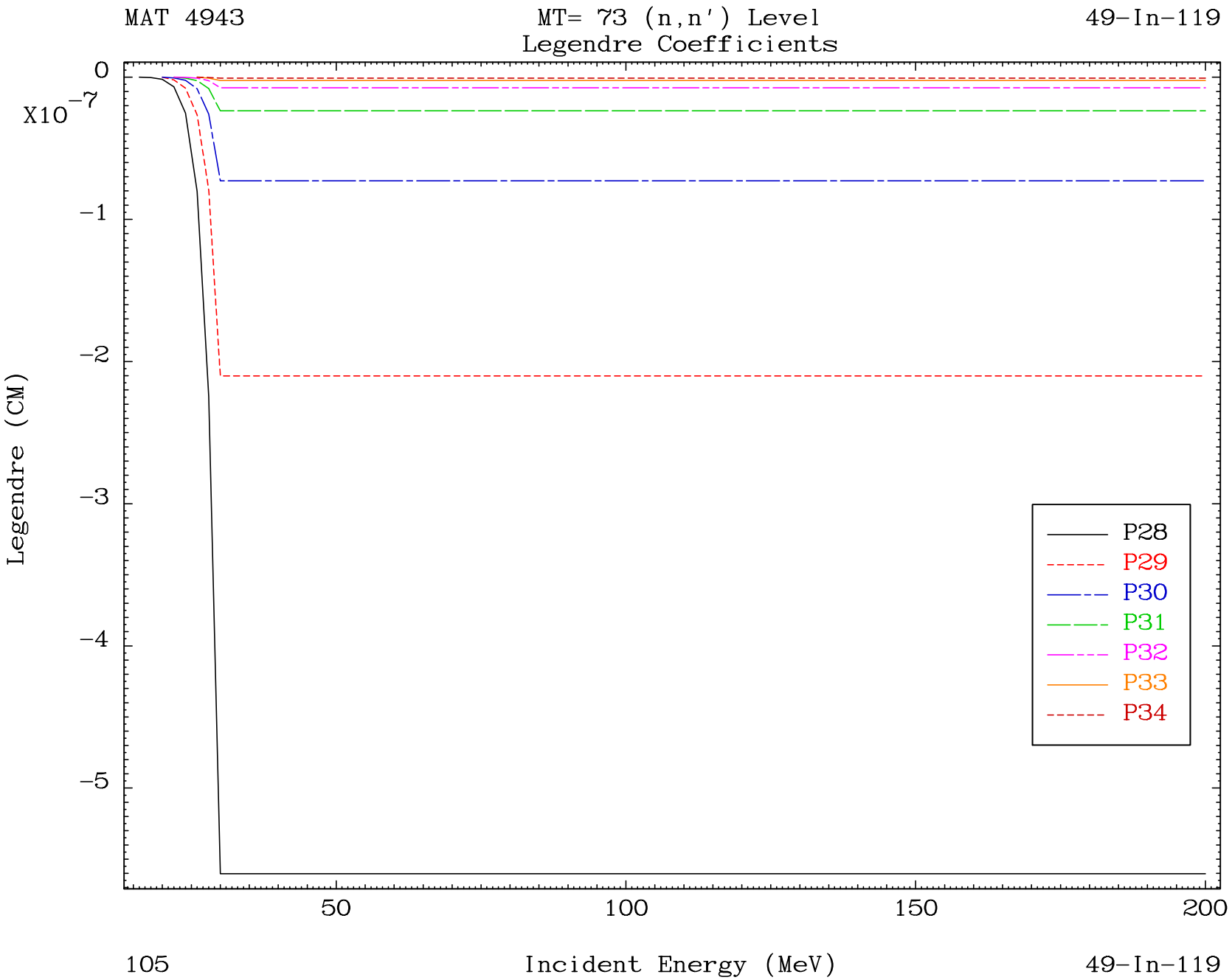

MAT 4943
MT= 72 (n,n') Level
Legendre Coefficients
49-In-119
0.06
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
0
50
100
150
200
100
Incident Energy (MeV)
49-In-119

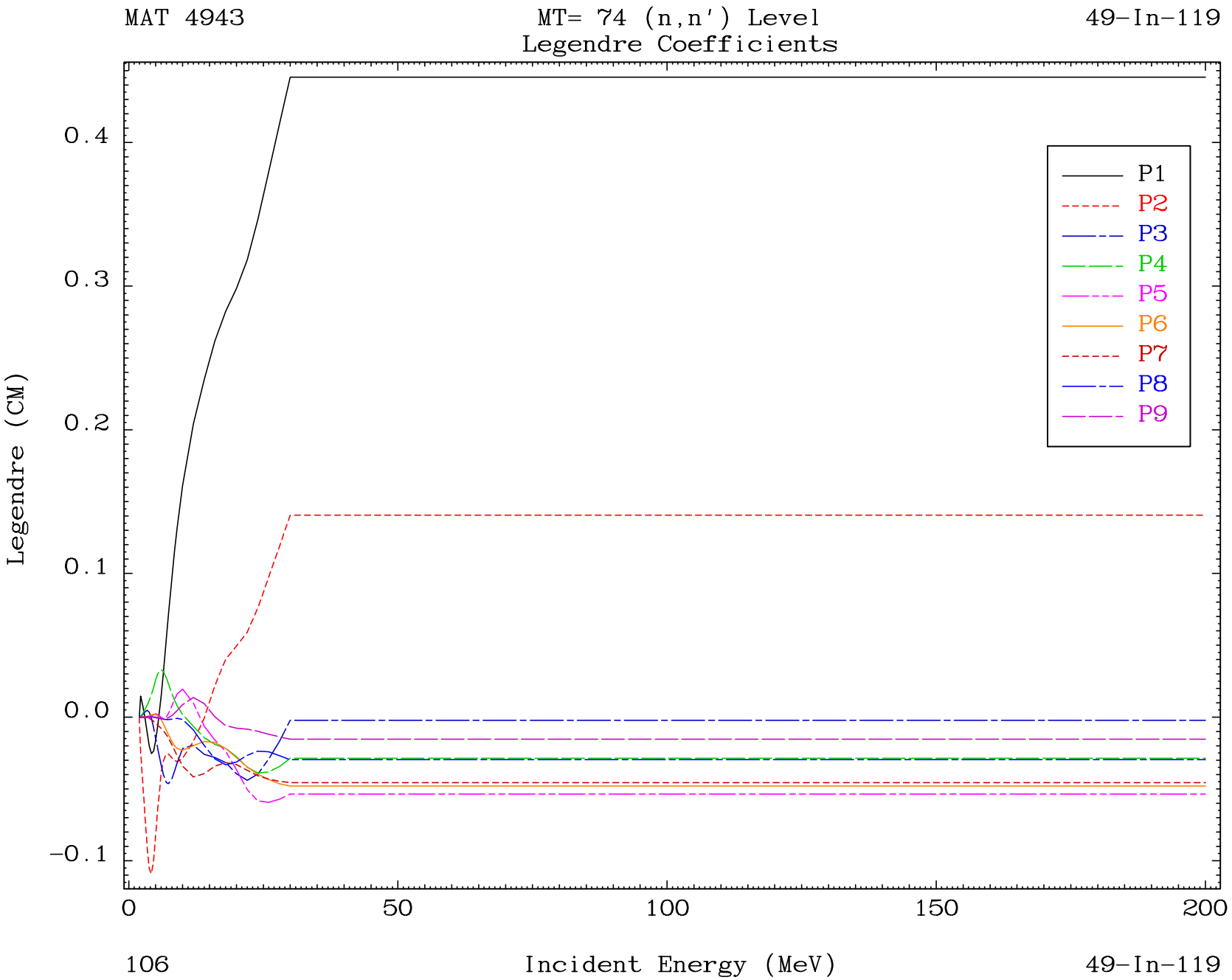

MAT 4943
MT= 72 (n,n') Level
Legendre Coefficients
49-In-119
X10^-4
5
4
3
2
1
0
-1
Legendre (CM)
50
100
150
200
101
Incident Energy (MeV)
49-In-119
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

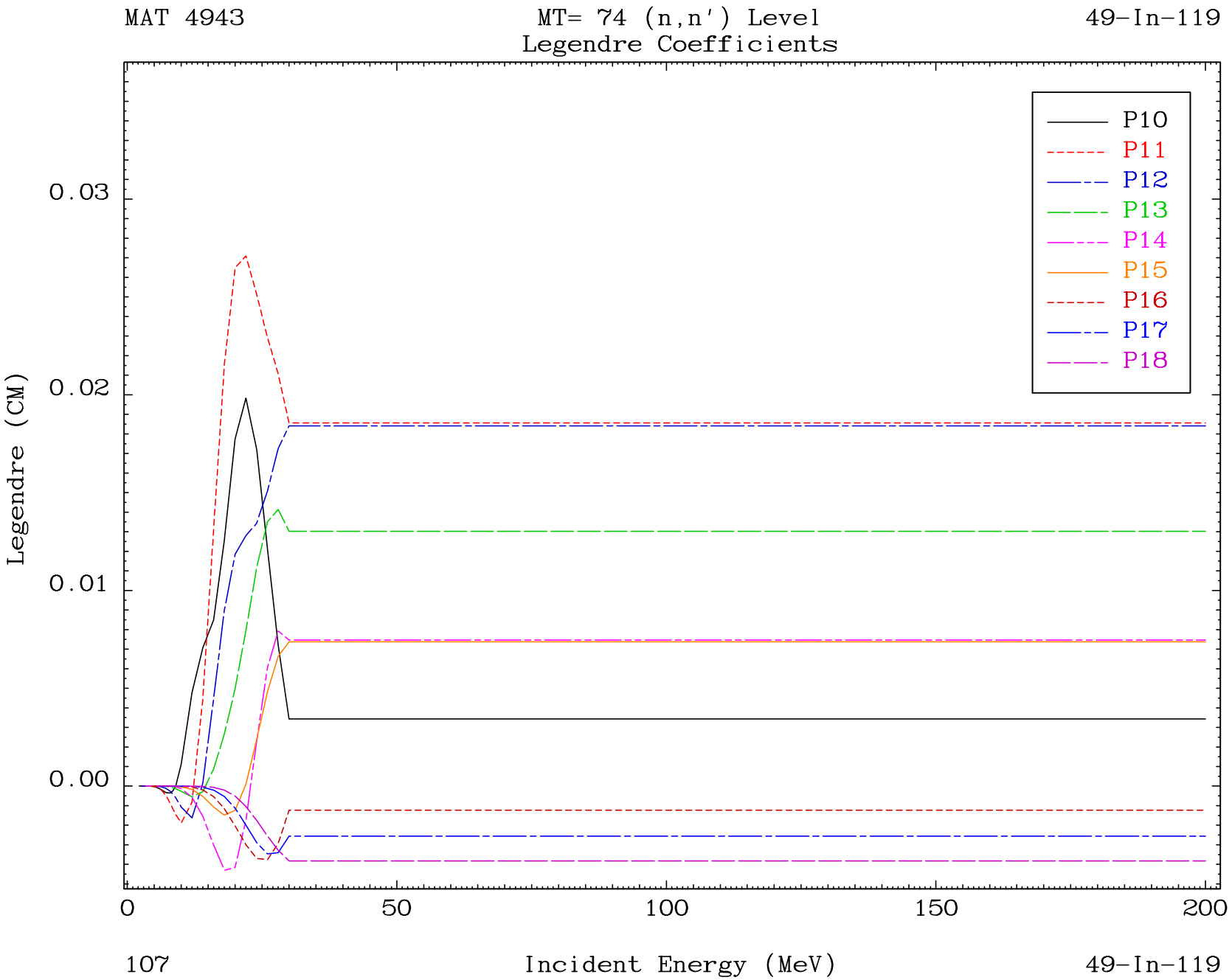

MAT 4943
MT= 73 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
102
Incident Energy (MeV)
49-In-119

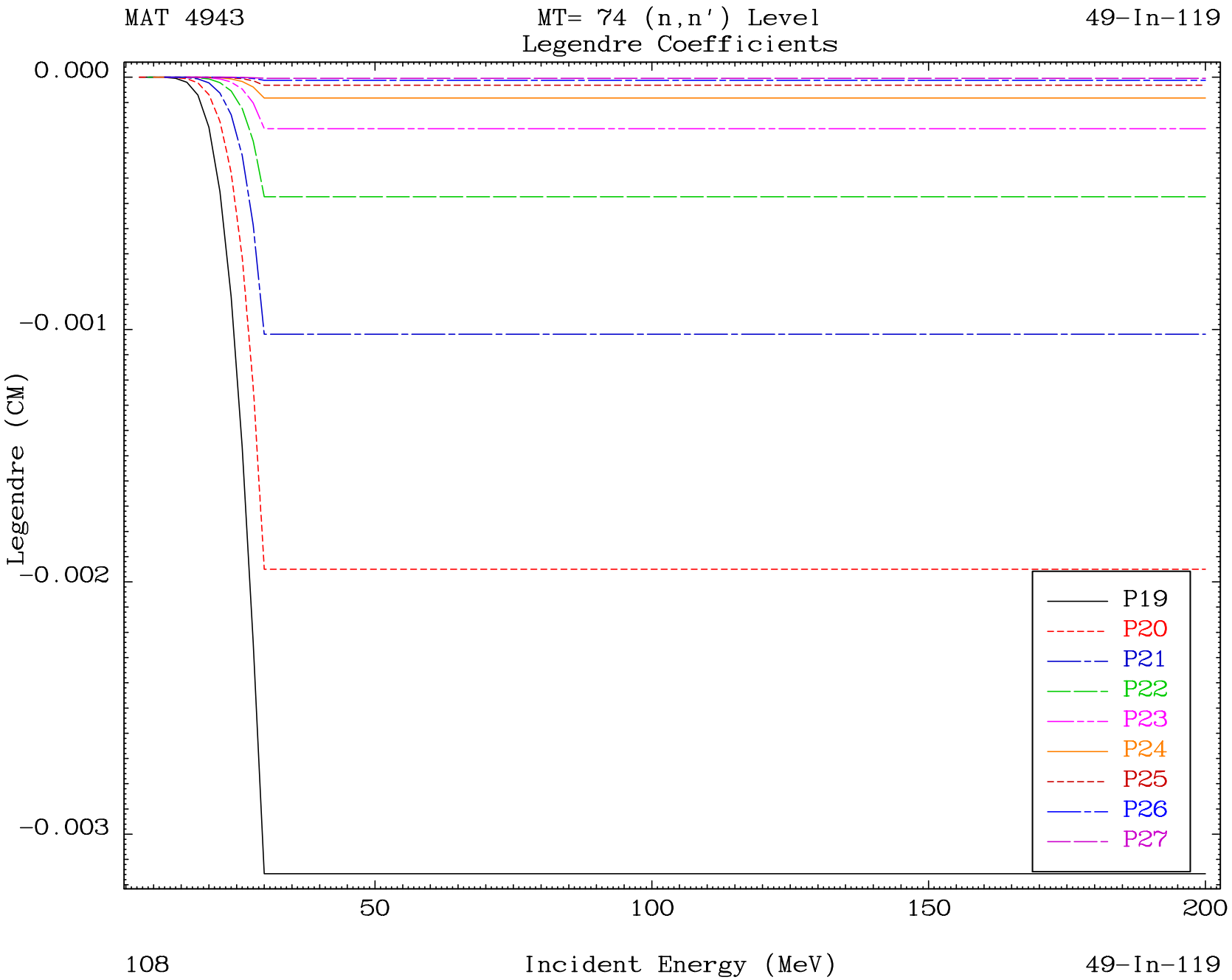

MAT 4943
MT= 73 (n,n') Level
Legendre Coefficients
49-In-119
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
103
Incident Energy (MeV)
49-In-119

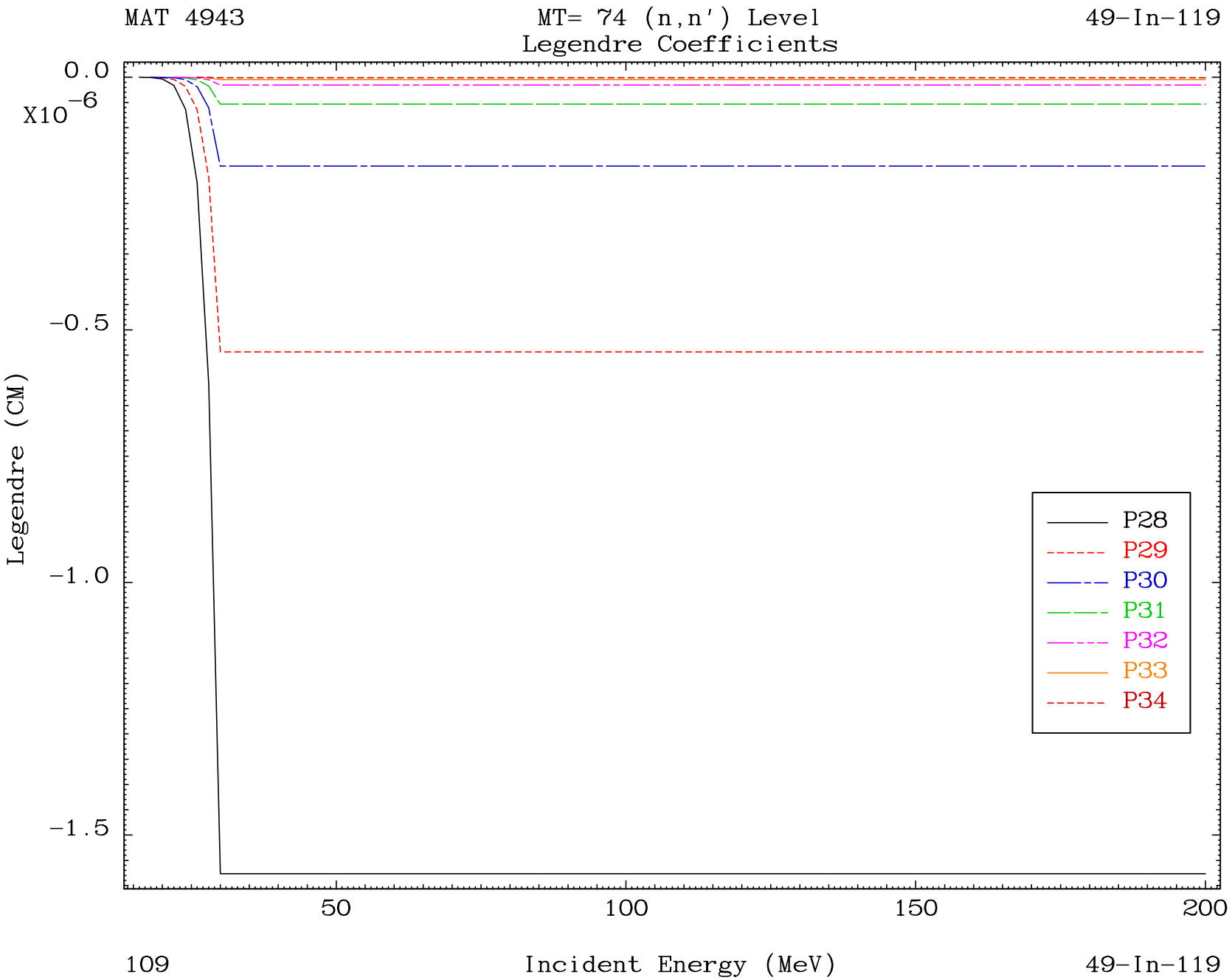

MAT 4943
MT= 73 (n,n') Level
Legendre Coefficients
49-In-119
X10^-4
1.0
0.5
0.0
-0.5
-1.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
104
Incident Energy (MeV)
49-In-119

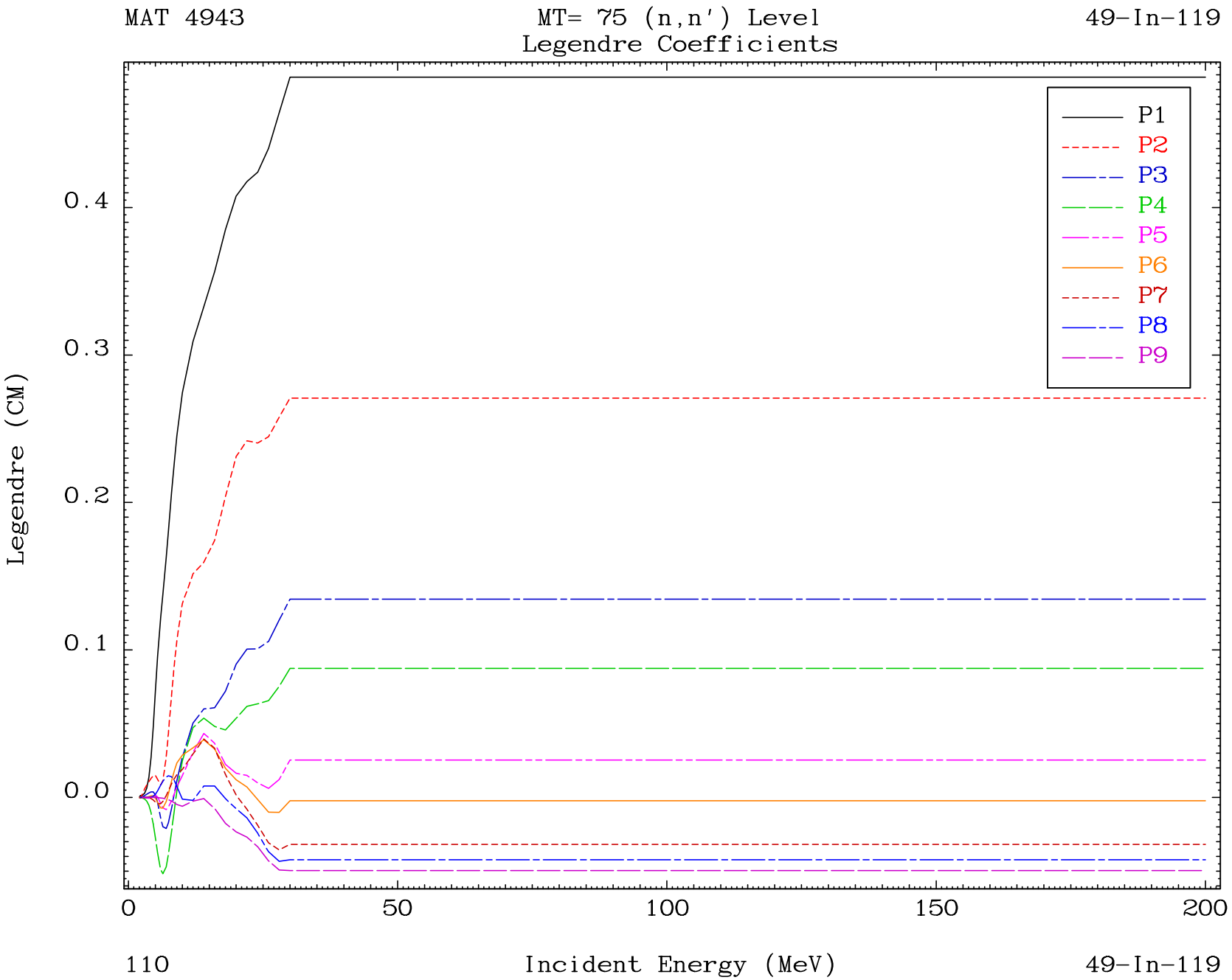

MAT 4943
MT= 73 (n,n') Level
Legendre Coefficients
49-In-119
X10-7
0
-1
-2
-3
-4
-5
Legendre (CM)
50
100
150
200
105
Incident Energy (MeV)
49-In-119
P28
P29
P30
P31
P32
P33
P34

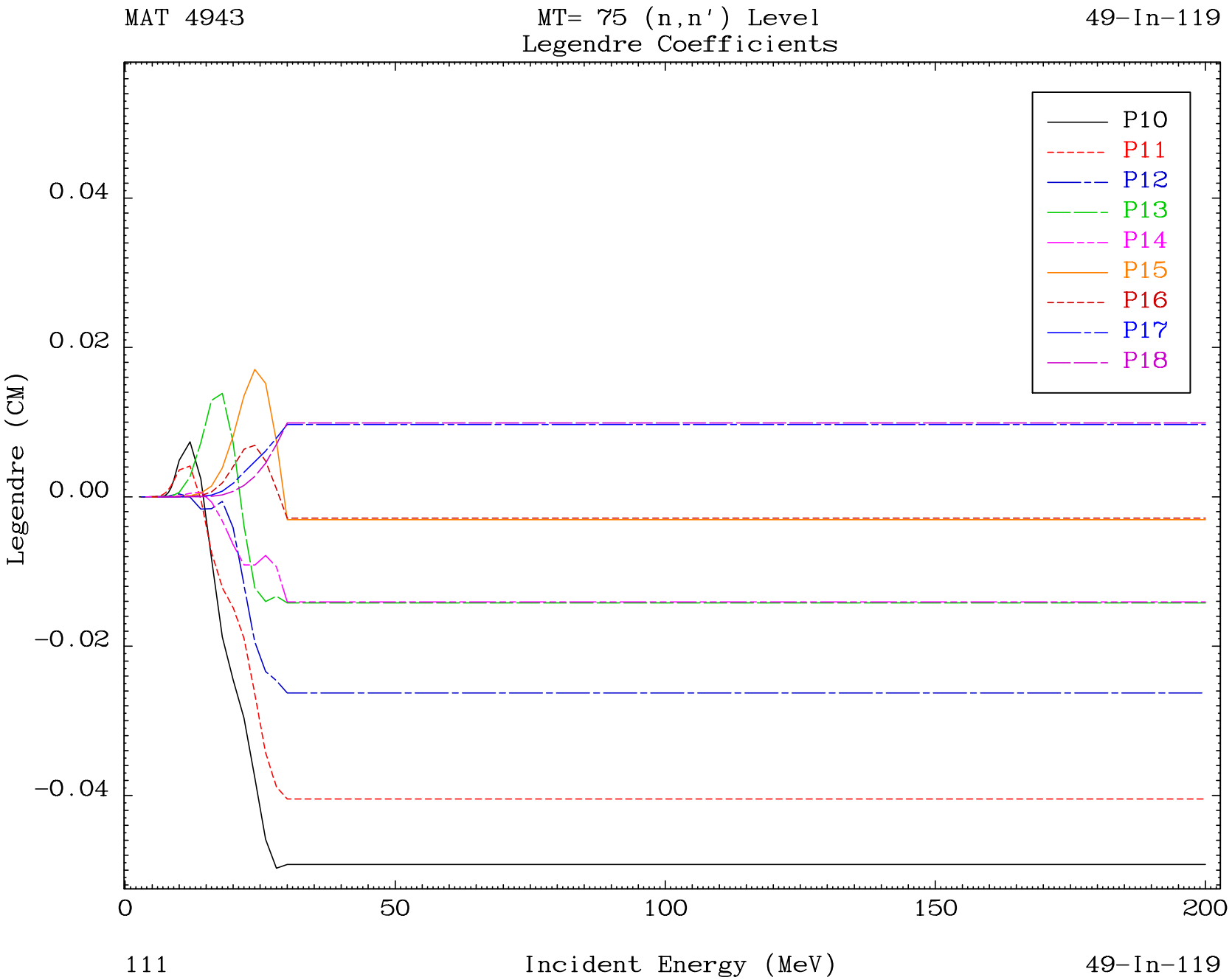

MAT 4943
MT= 74 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
106
Incident Energy (MeV)
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9

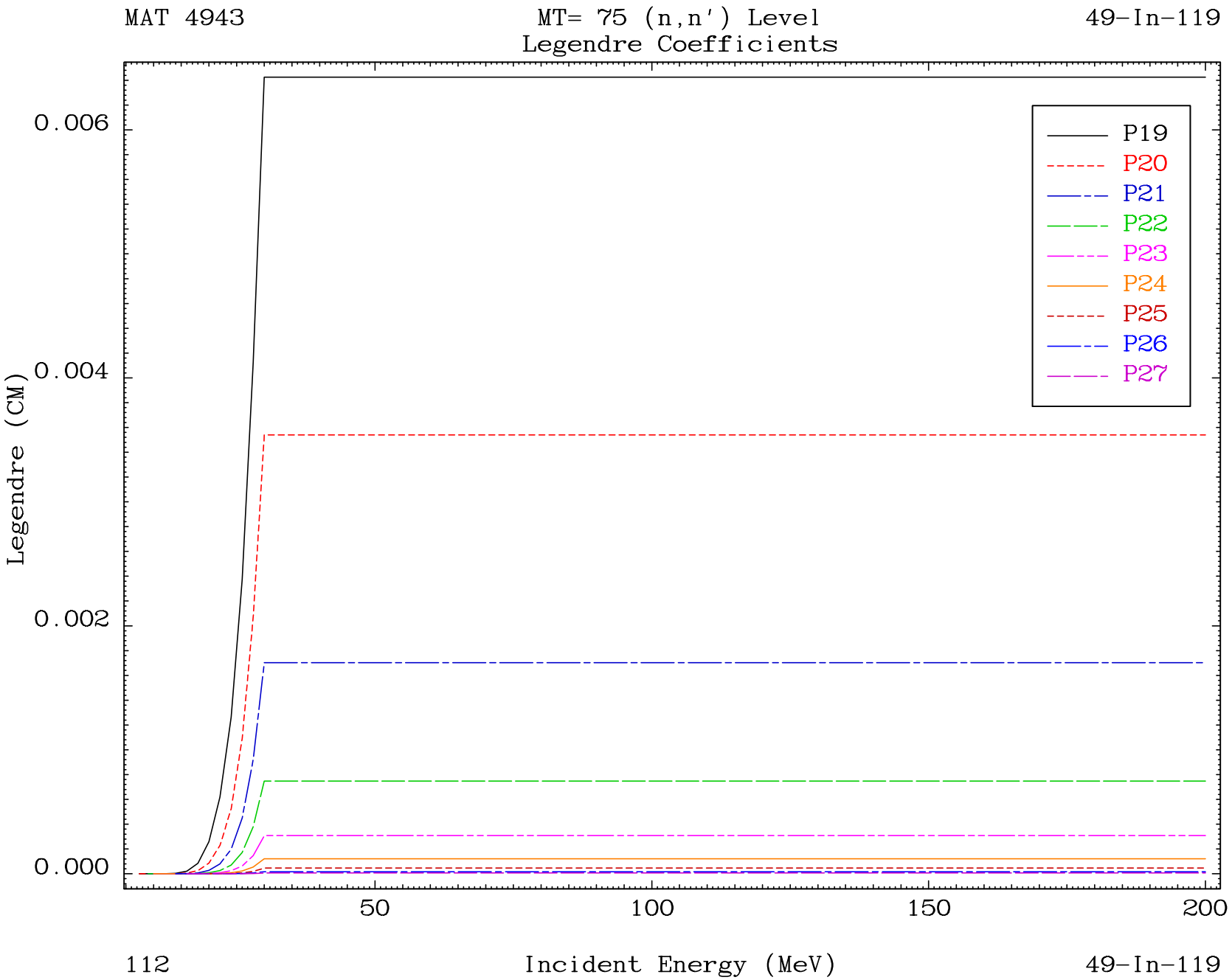

MAT 4943
MT= 74 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
107
Incident Energy (MeV)
49-In-119

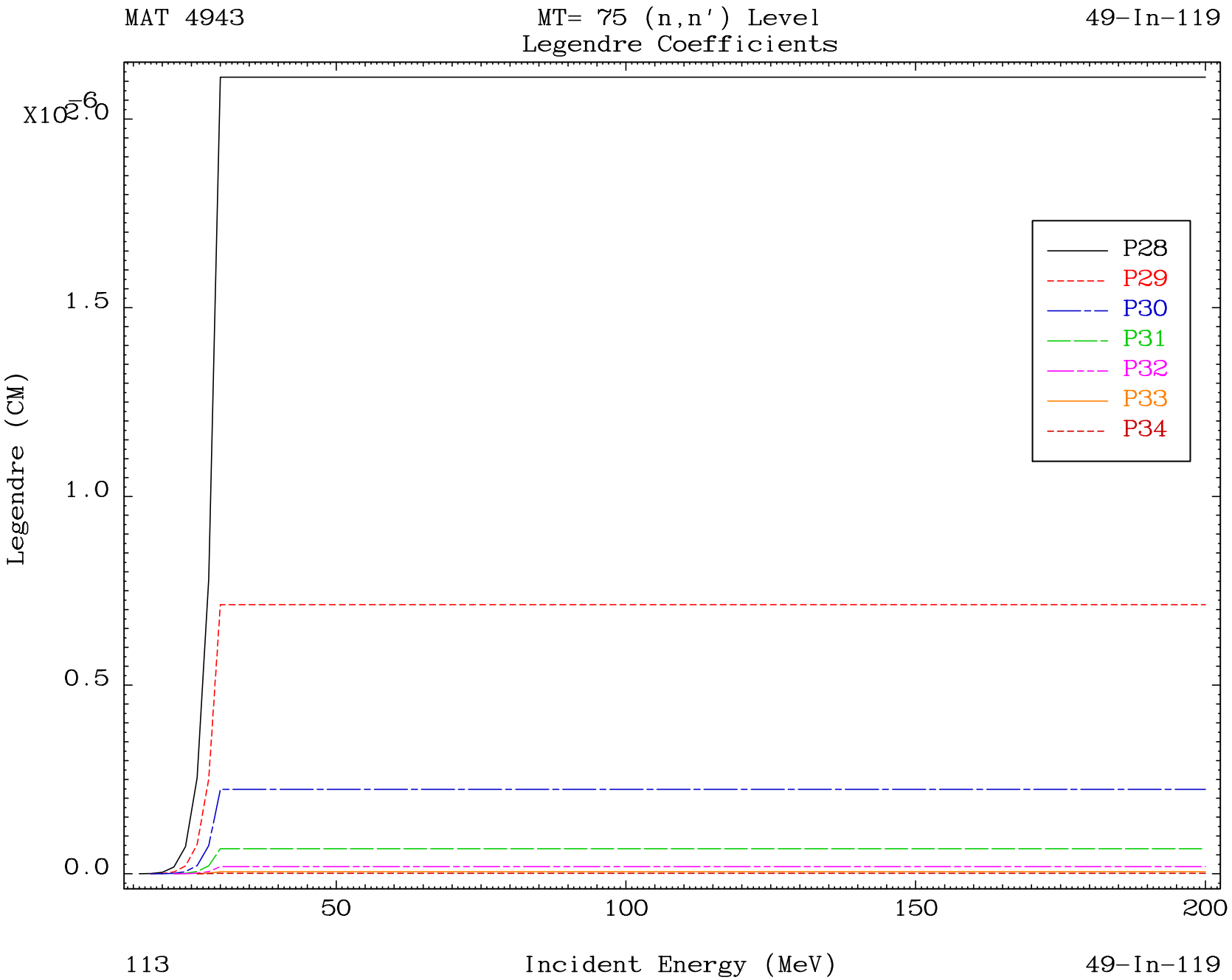

MAT 4943
MT= 74 (n,n') Level
Legendre Coefficients
49-In-119
0.000
-0.001
-0.002
-0.003
Legendre (CM)
50
100
150
200
108
Incident Energy (MeV)
49-In-119
P19
P20
P21
P22
P23
P24
P25
P26
P27

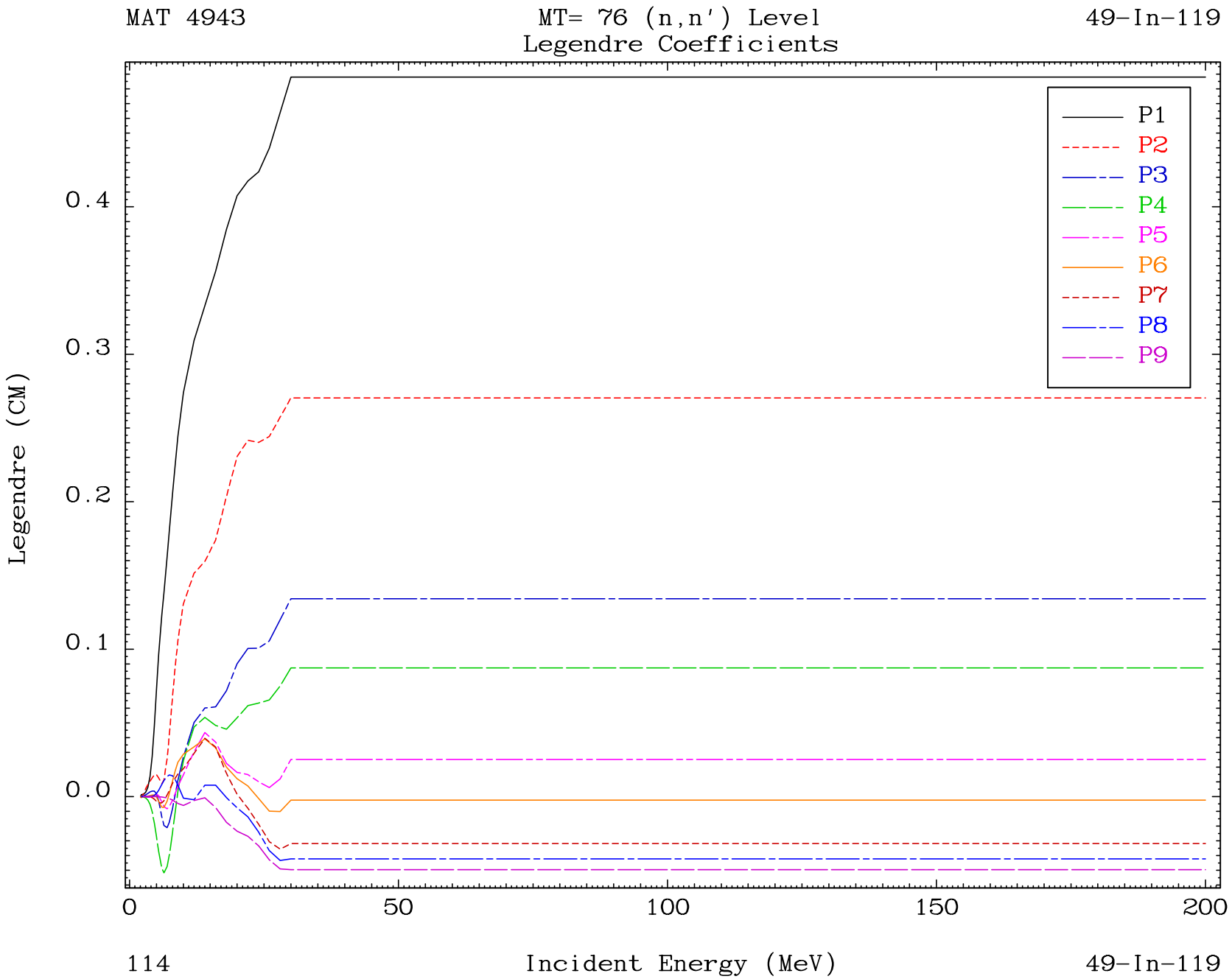

MAT 4943
MT= 74 (n,n') Level
Legendre Coefficients
49-In-119
0.0
X10^-6
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
109
Incident Energy (MeV)
49-In-119
P28
P29
P30
P31
P32
P33
P34

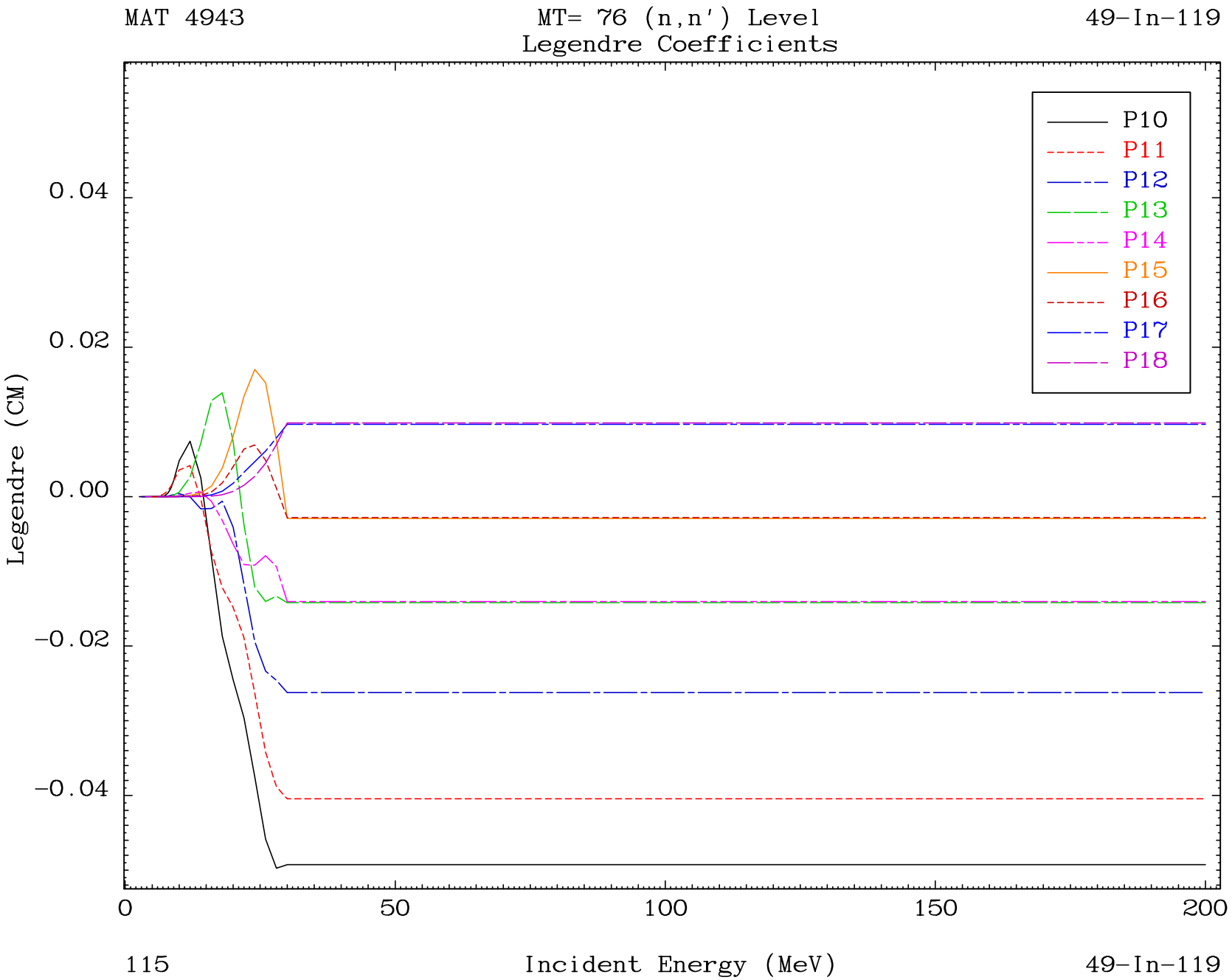

MAT 4943
MT= 75 (n,n') Level
Legendre Coefficients
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
110
Incident Energy (MeV)
49-In-119

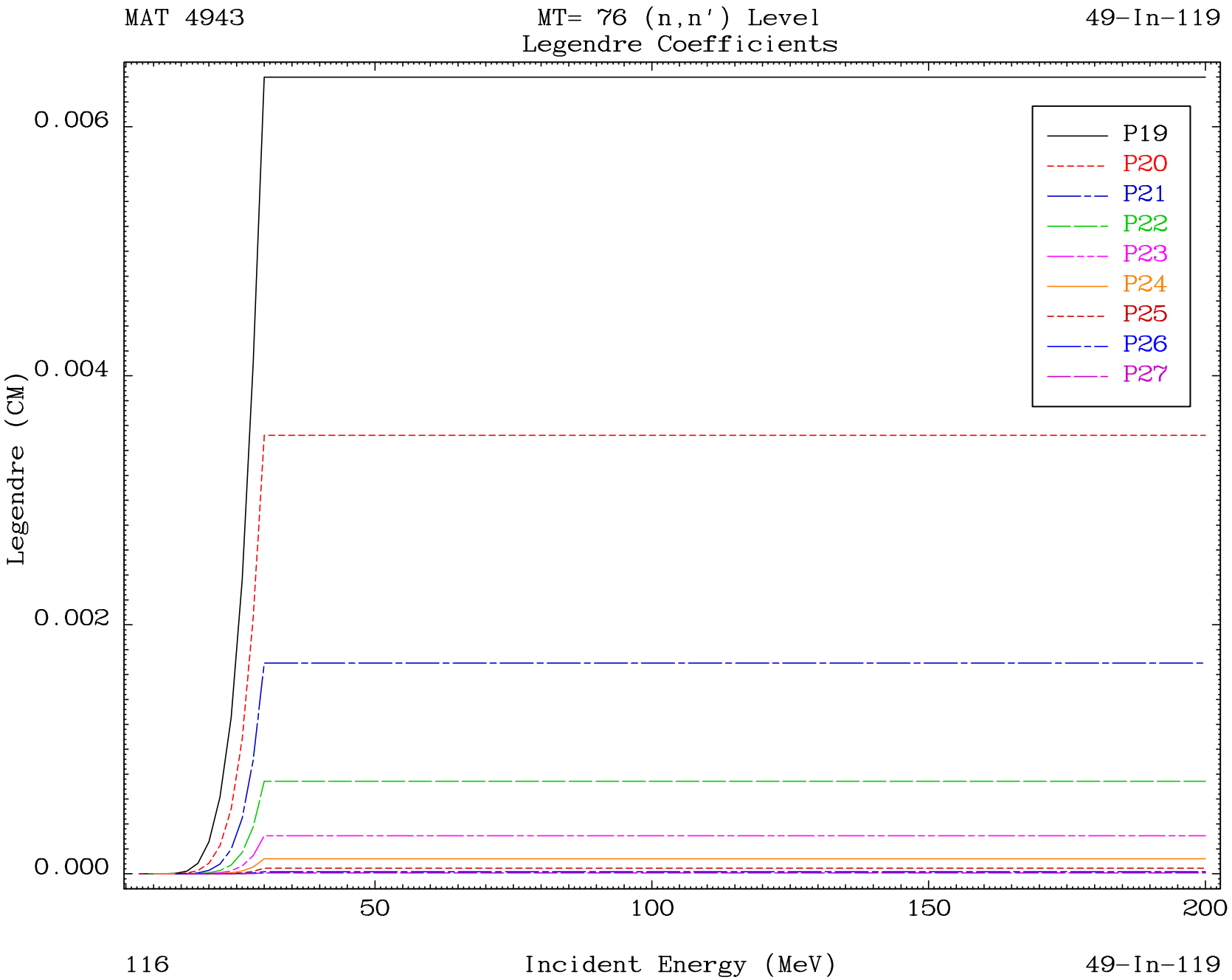

MAT 4943
MT= 75 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
111
Incident Energy (MeV)
49-In-119

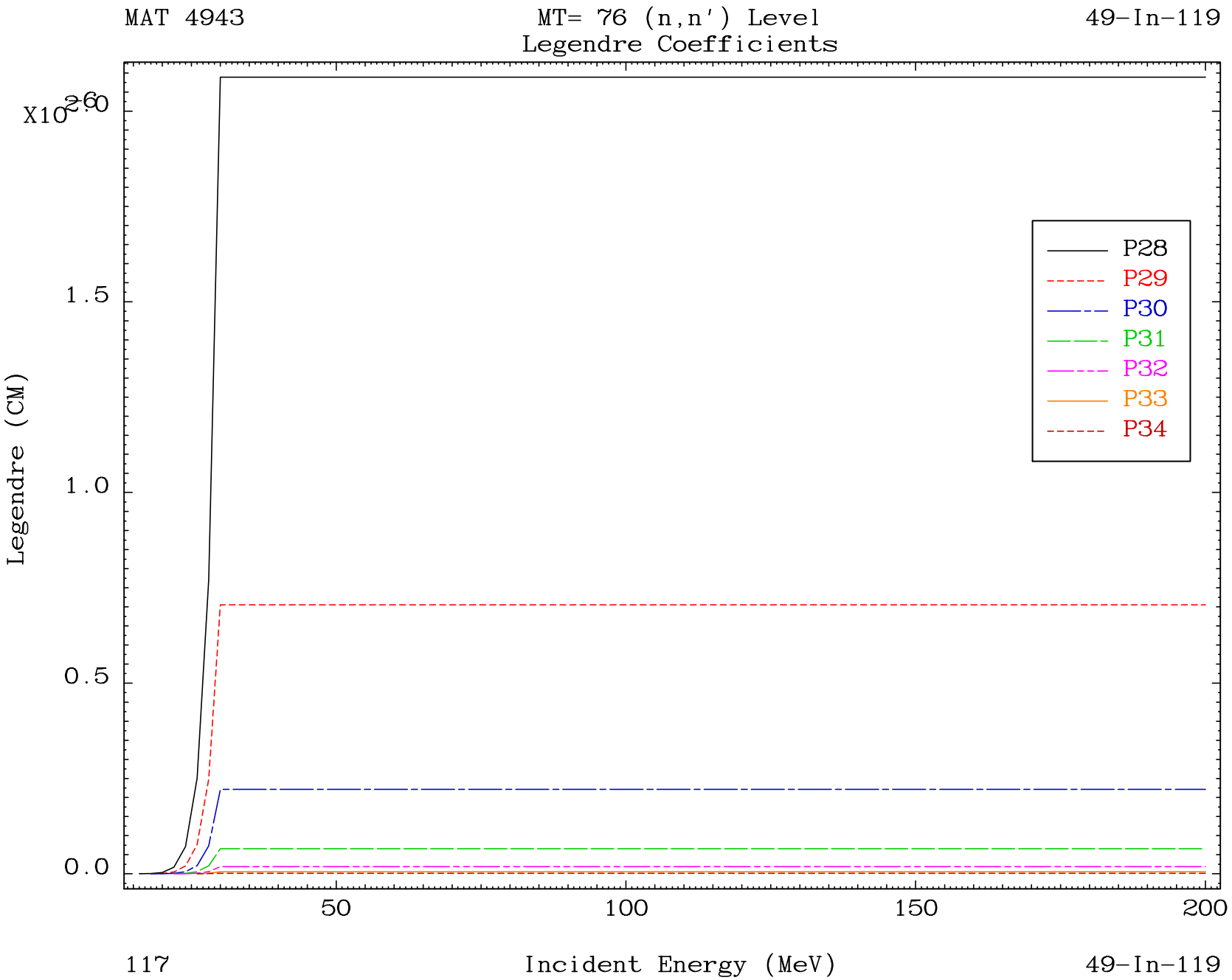

MAT 4943
MT= 75 (n,n') Level
Legendre Coefficients
49-In-119
0.006
0.004
0.002
0.000
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
112
Incident Energy (MeV)
49-In-119

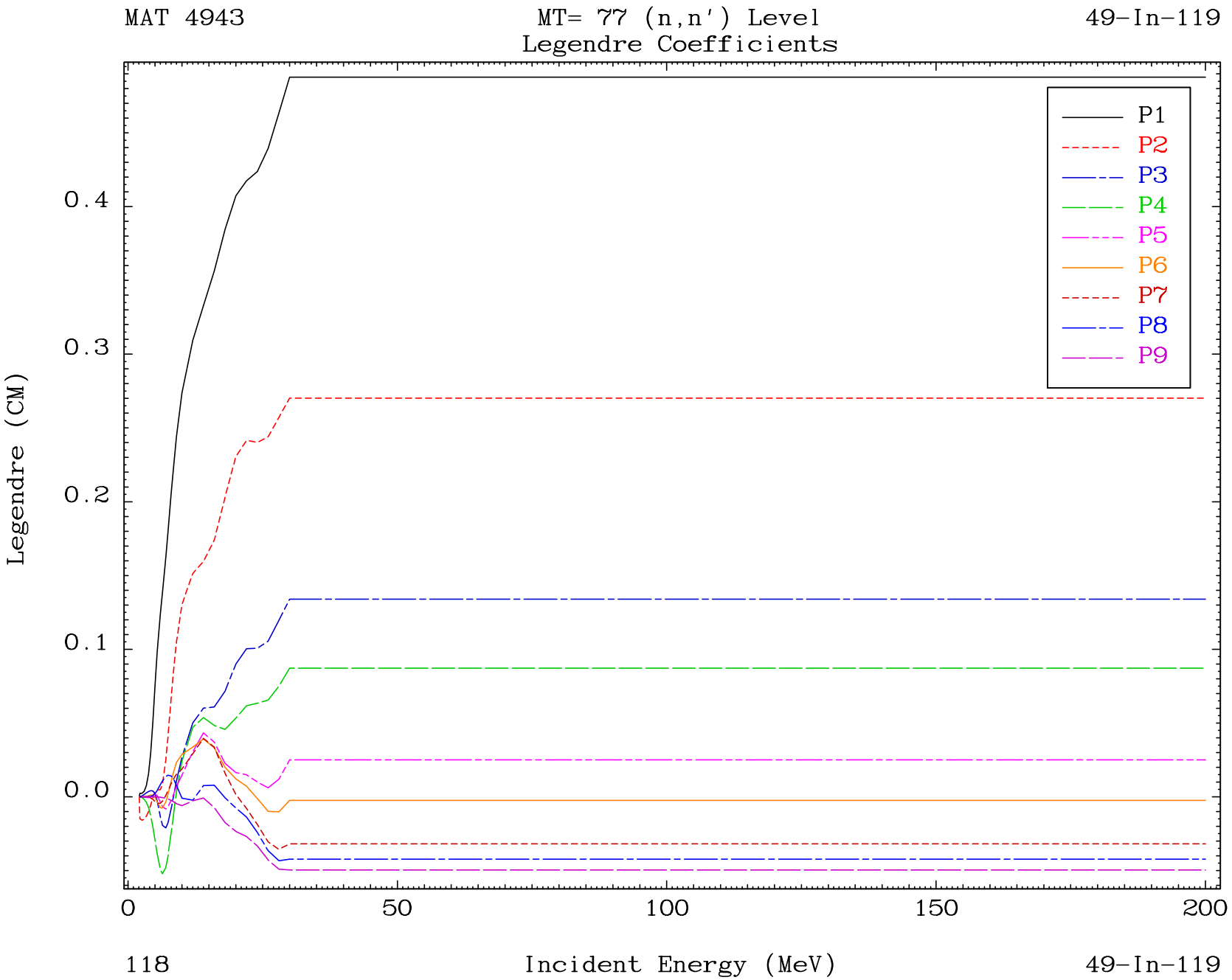

MAT 4943
MT= 75 (n,n') Level
Legendre Coefficients
49-In-119
X10-6
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
113
Incident Energy (MeV)
49-In-119

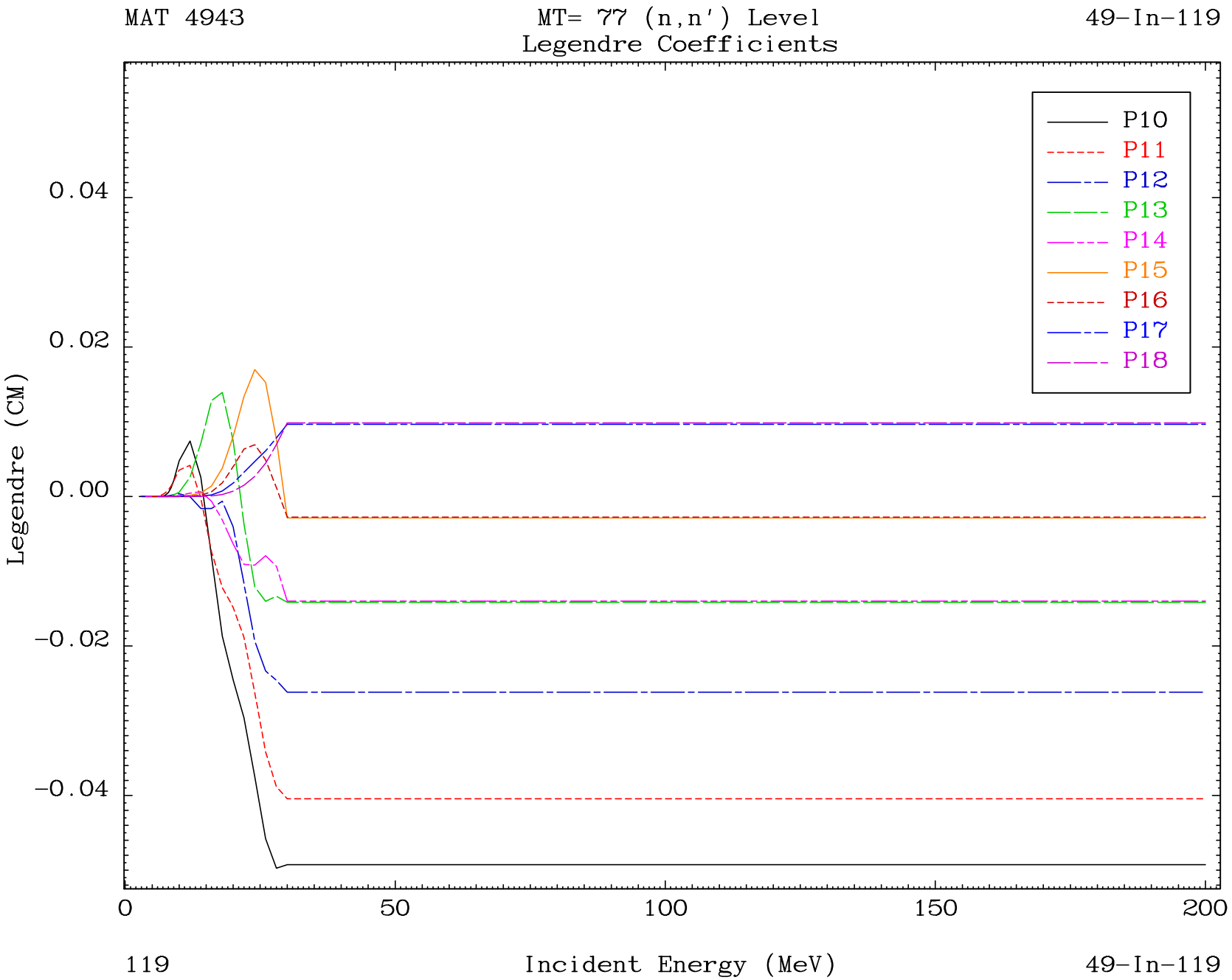

MAT 4943
MT= 76 (n,n') Level
Legendre Coefficients
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
114
Incident Energy (MeV)
49-In-119

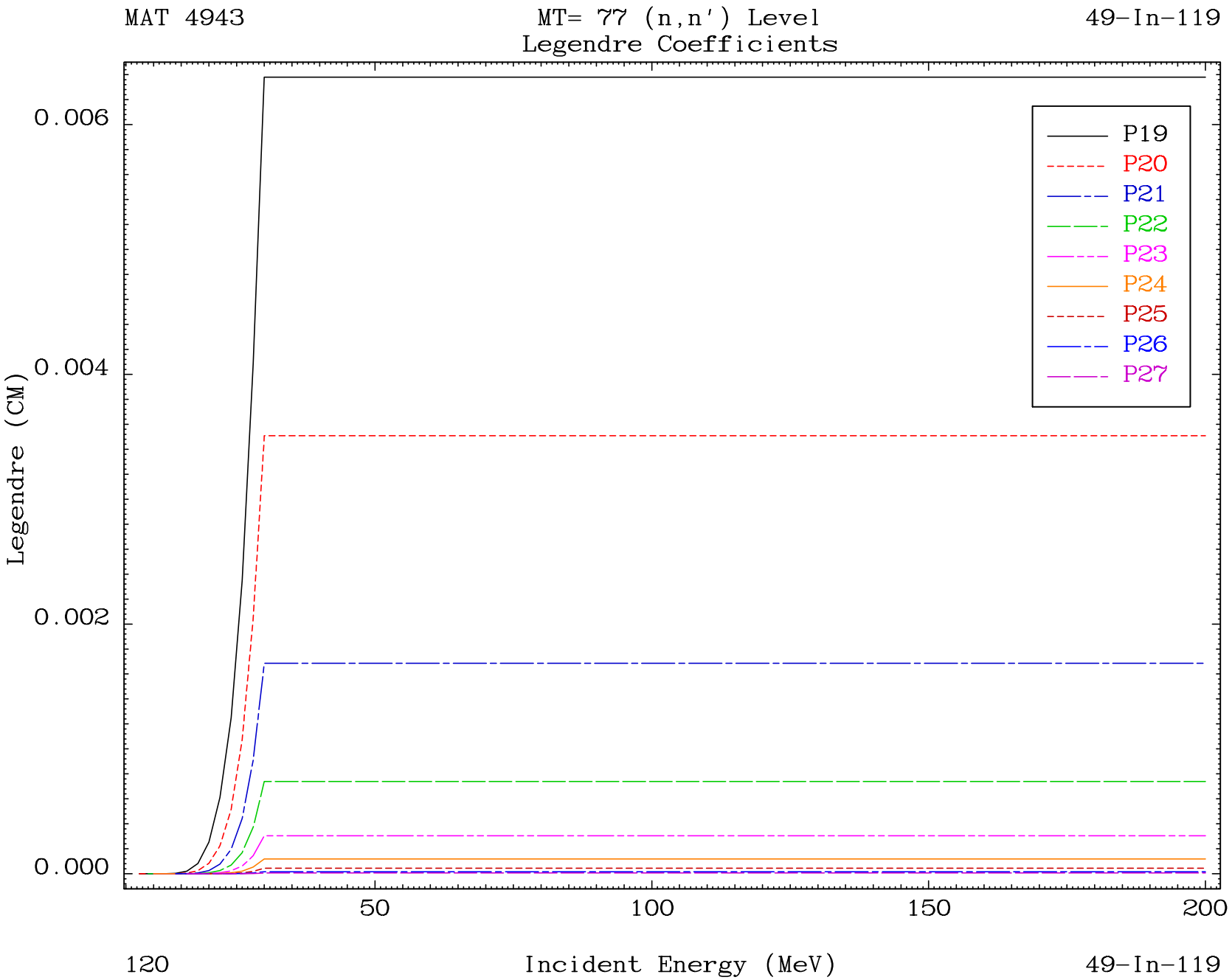

MAT 4943
MT= 76 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
115
Incident Energy (MeV)
49-In-119

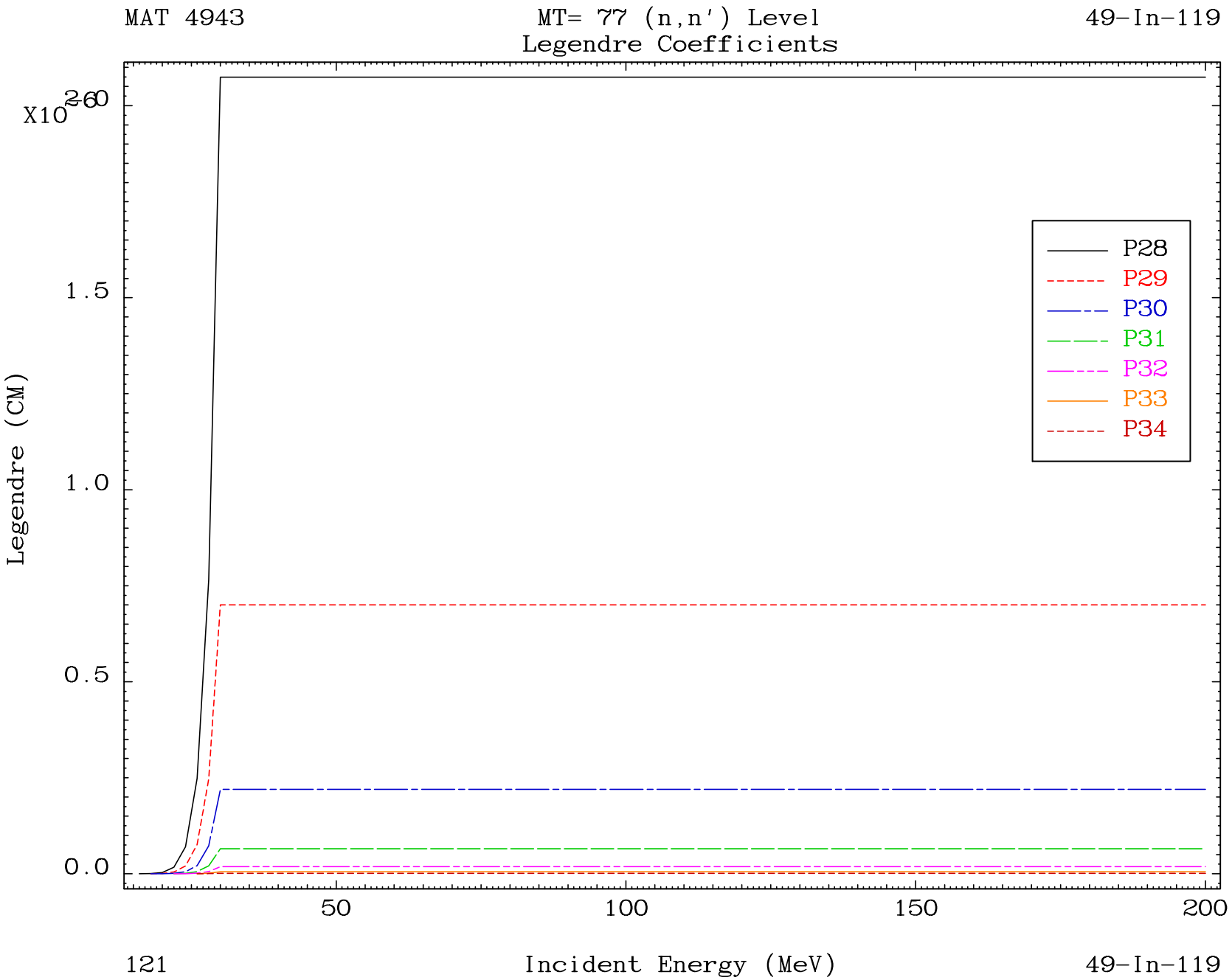

MAT 4943
MT= 76 (n,n') Level
Legendre Coefficients
49-In-119
0.006
0.004
0.002
0.000
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
116
Incident Energy (MeV)
49-In-119

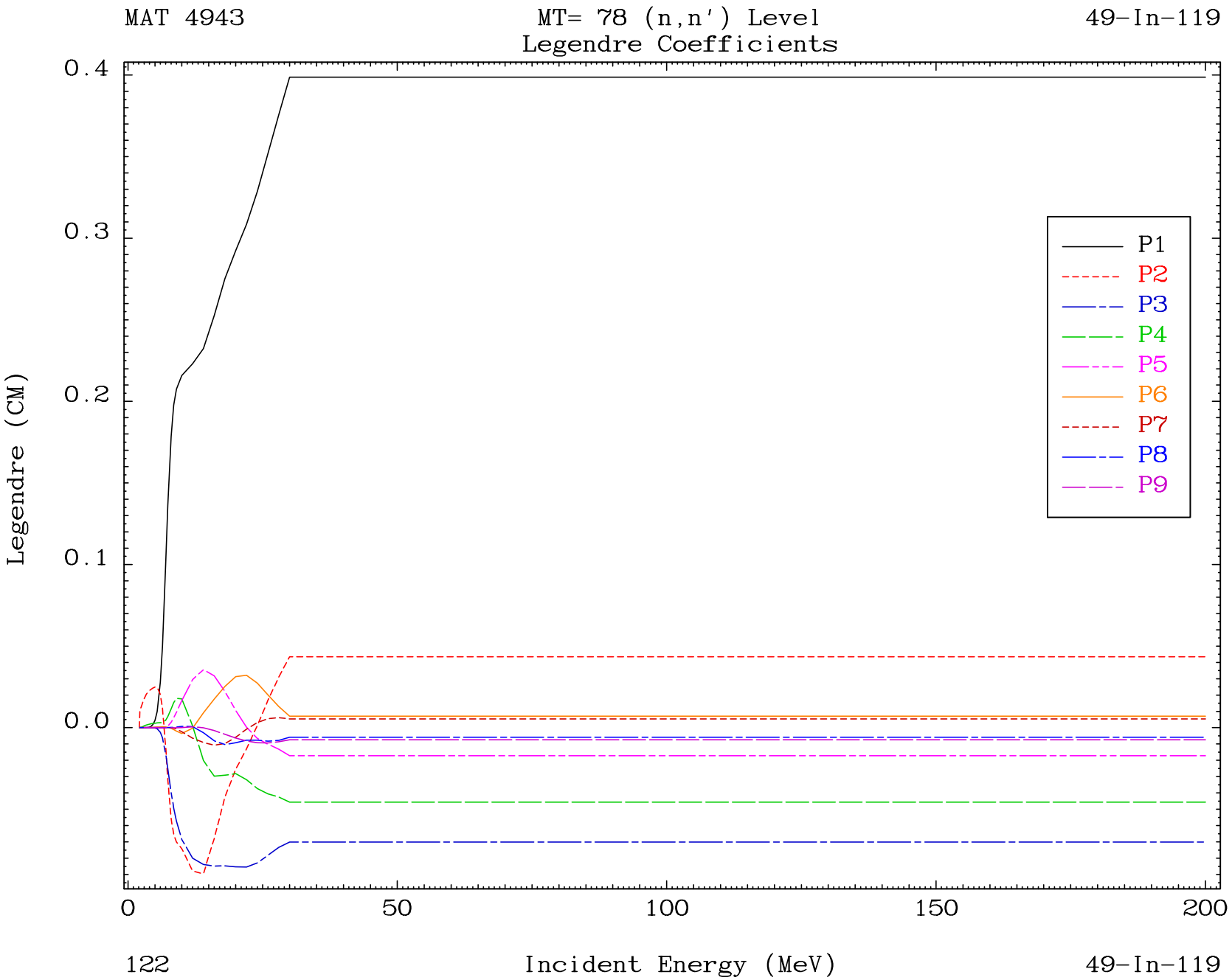

MAT 4943
MT= 76 (n,n') Level
Legendre Coefficients
49-In-119
X10-2
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
117
Incident Energy (MeV)
49-In-119

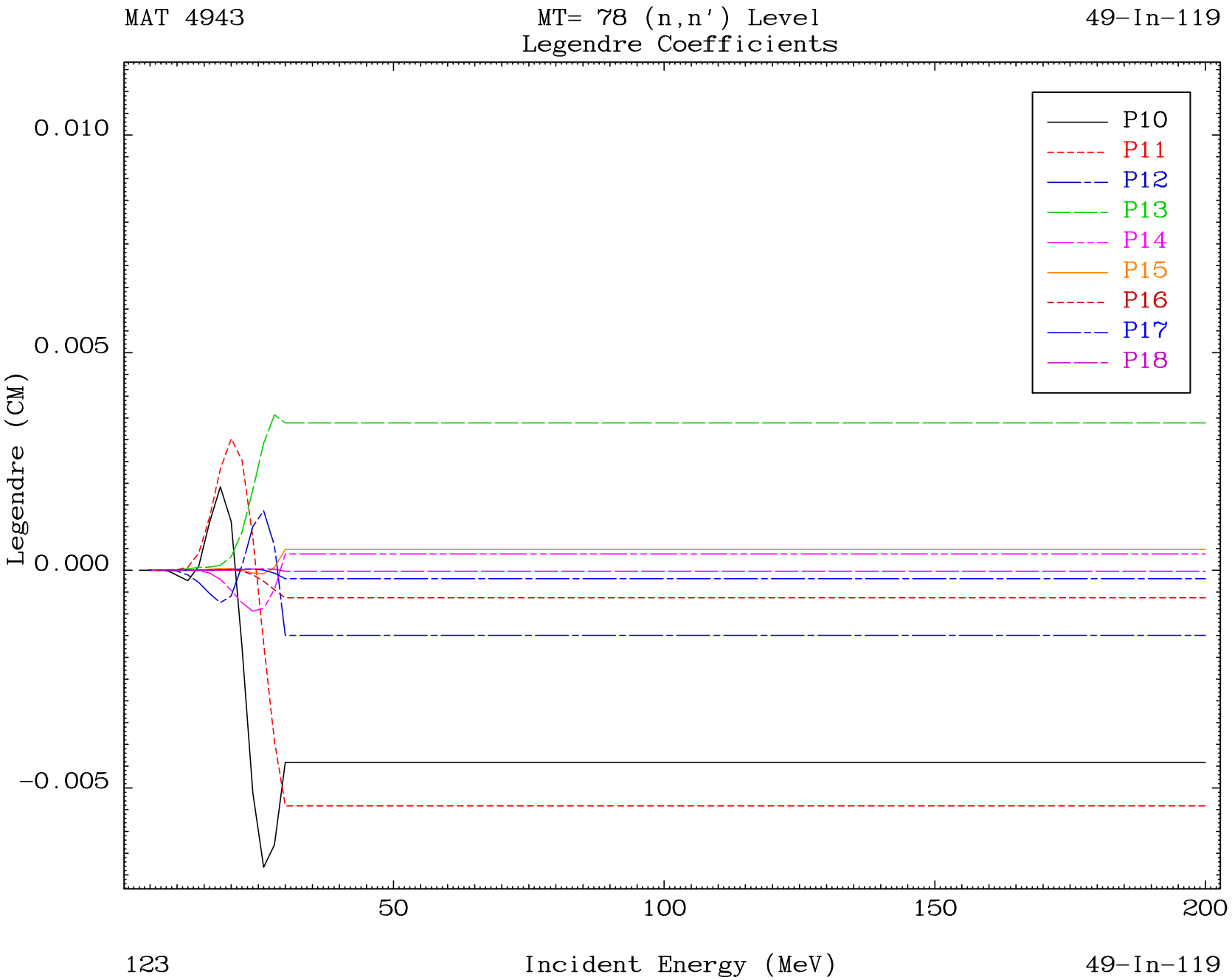

MAT 4943
MT= 77 (n,n') Level
Legendre Coefficients
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
118
Incident Energy (MeV)
49-In-119

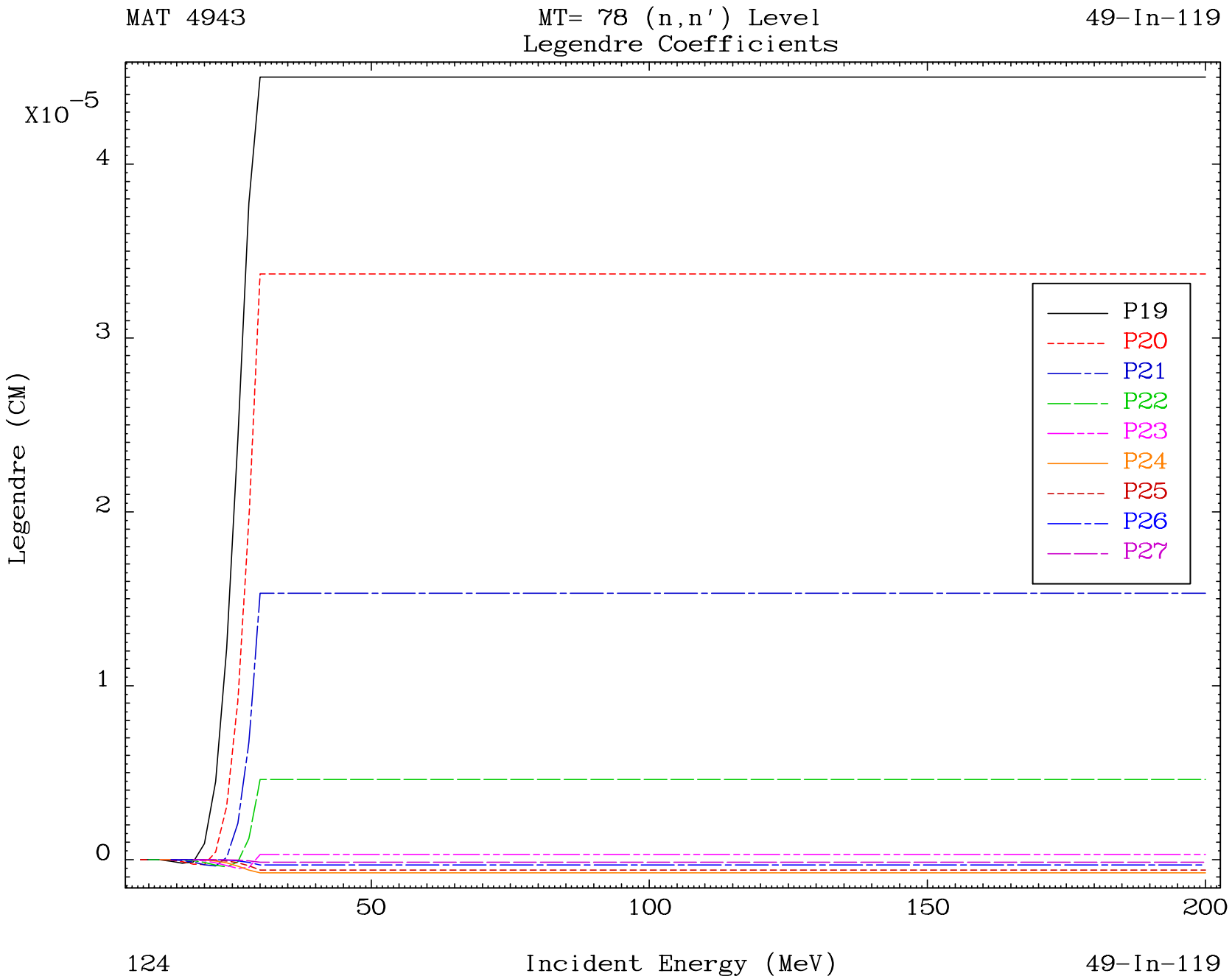

MAT 4943
MT= 77 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
119
Incident Energy (MeV)
49-In-119

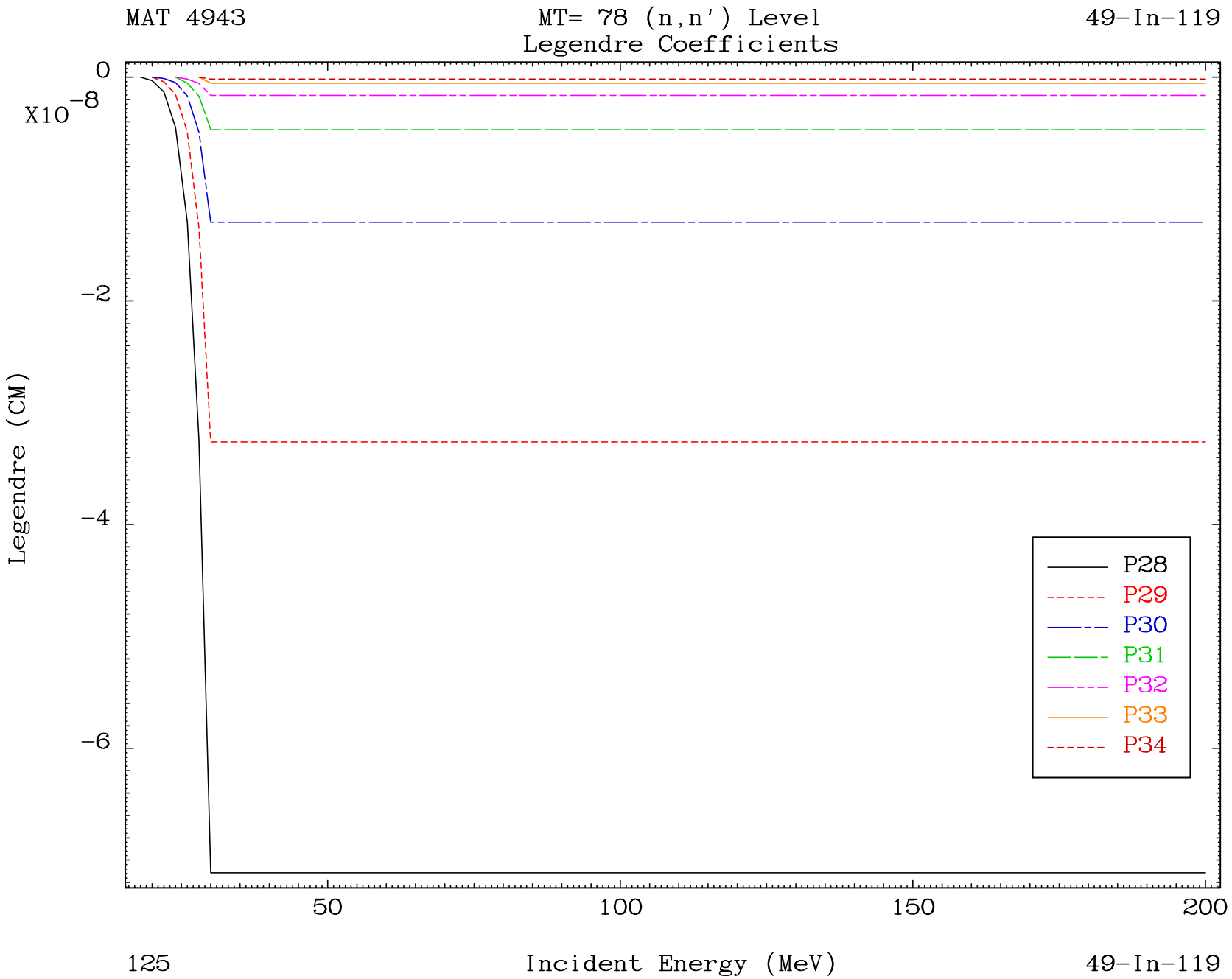

MAT 4943
MT= 77 (n,n') Level
Legendre Coefficients
49-In-119
0.006
0.004
0.002
0.000
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
120
Incident Energy (MeV)
49-In-119

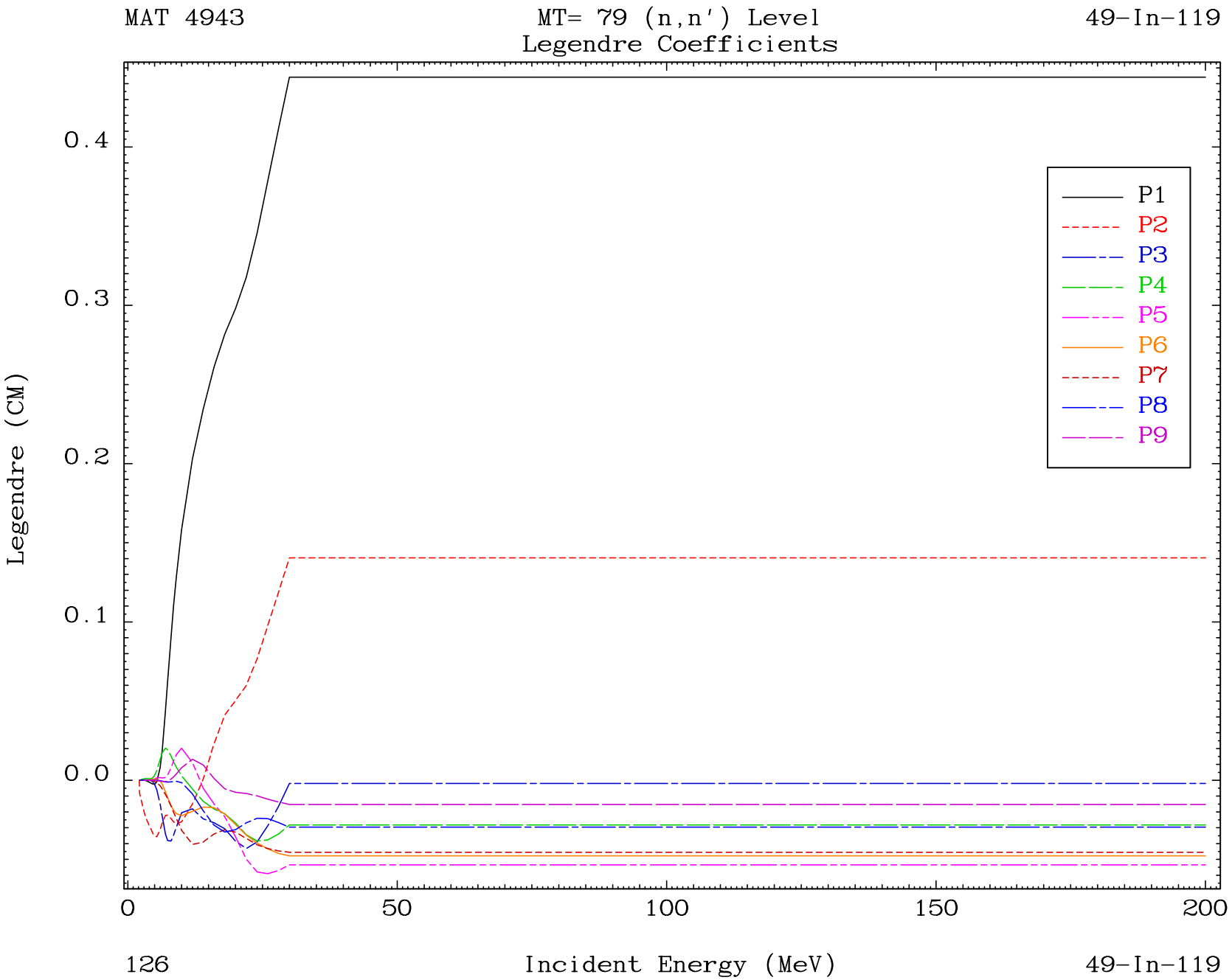

MAT 4943
MT= 77 (n,n') Level
Legendre Coefficients
49-In-119
X10-2
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
121
Incident Energy (MeV)
49-In-119

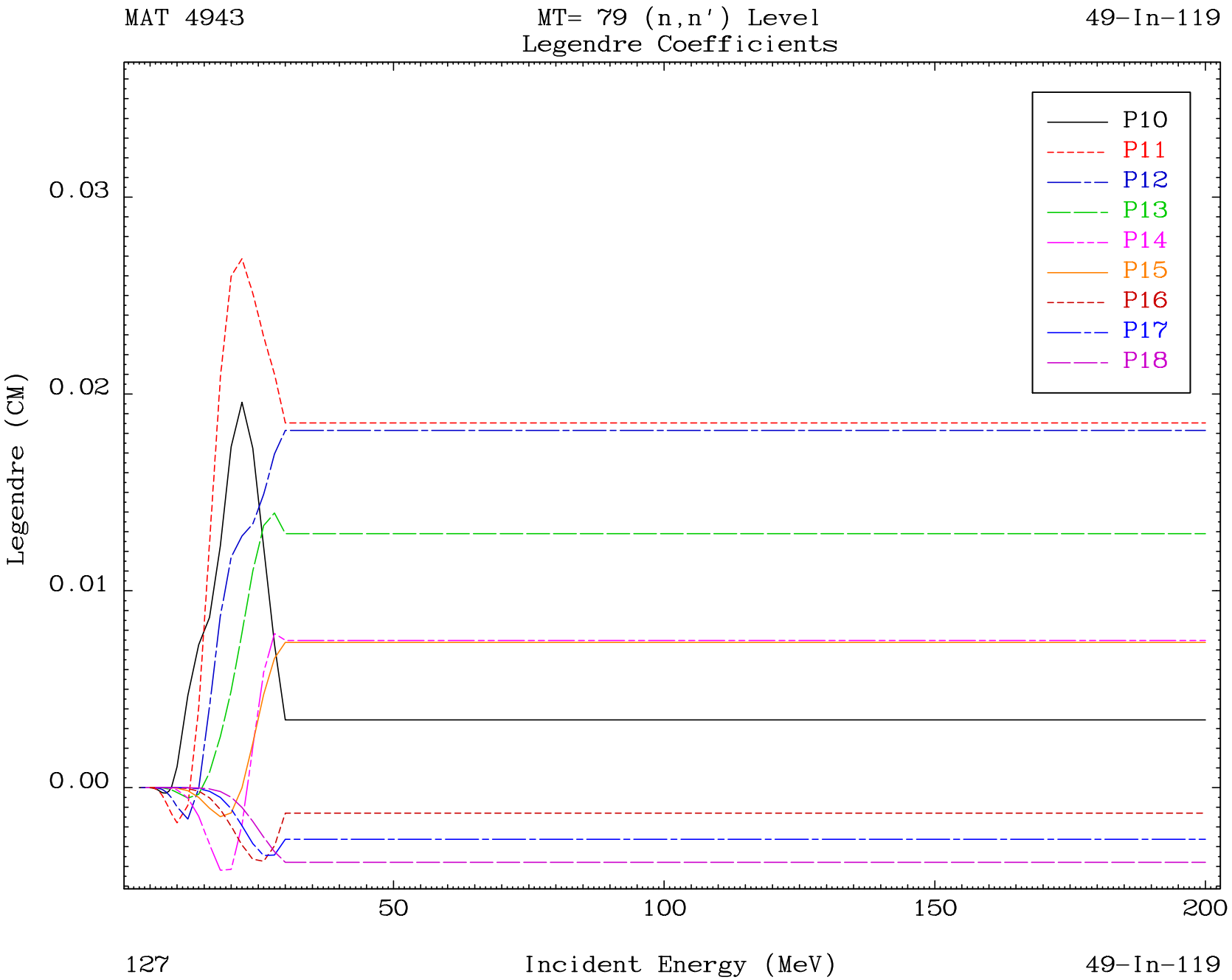

MAT 4943
MT= 78 (n,n') Level
Legendre Coefficients
49-In-119
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
122
Incident Energy (MeV)
49-In-119

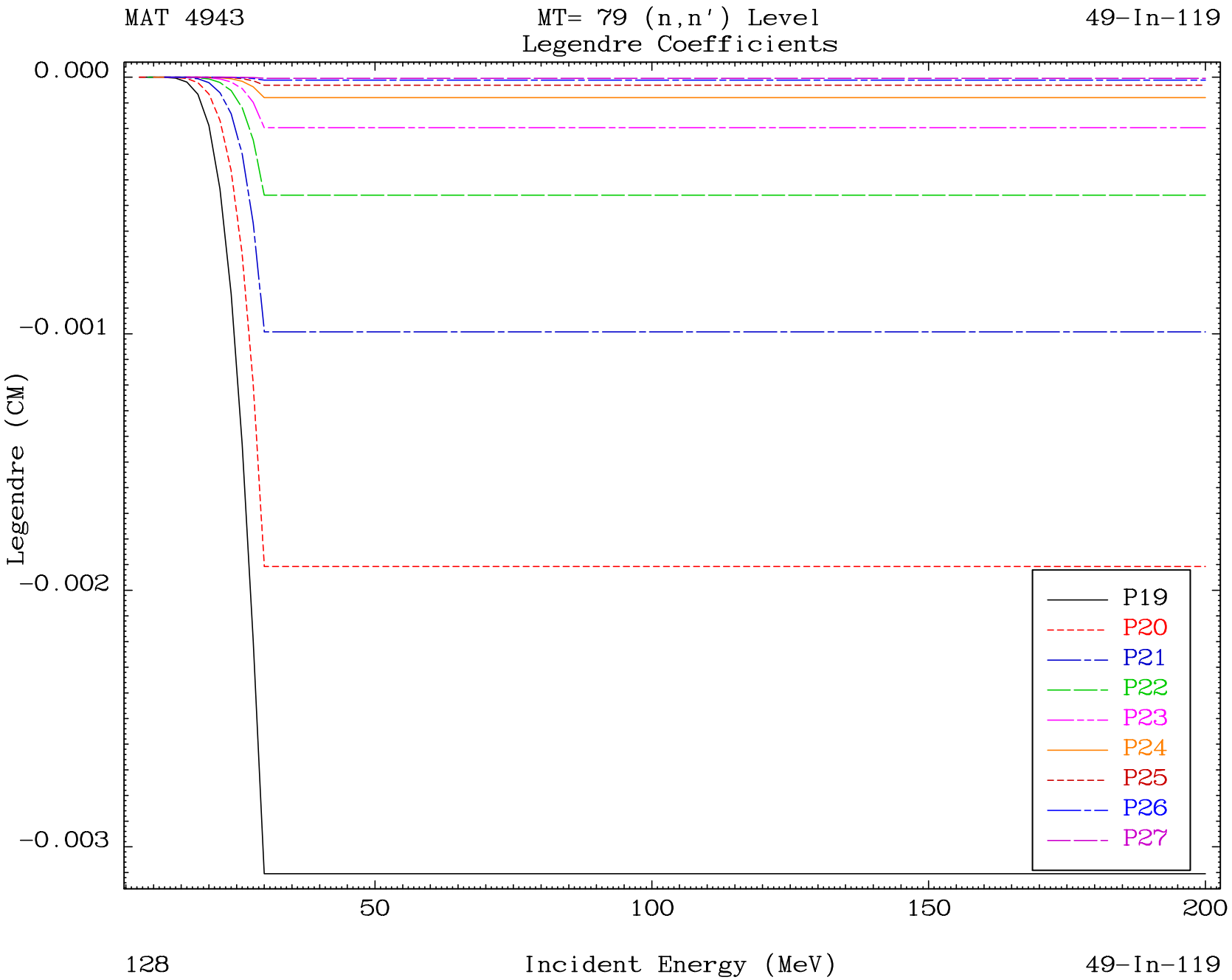

MAT 4943
MT= 78 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.010
0.005
0.000
-0.005
Legendre (CM)
50
100
150
200
123
Incident Energy (MeV)
49-In-119

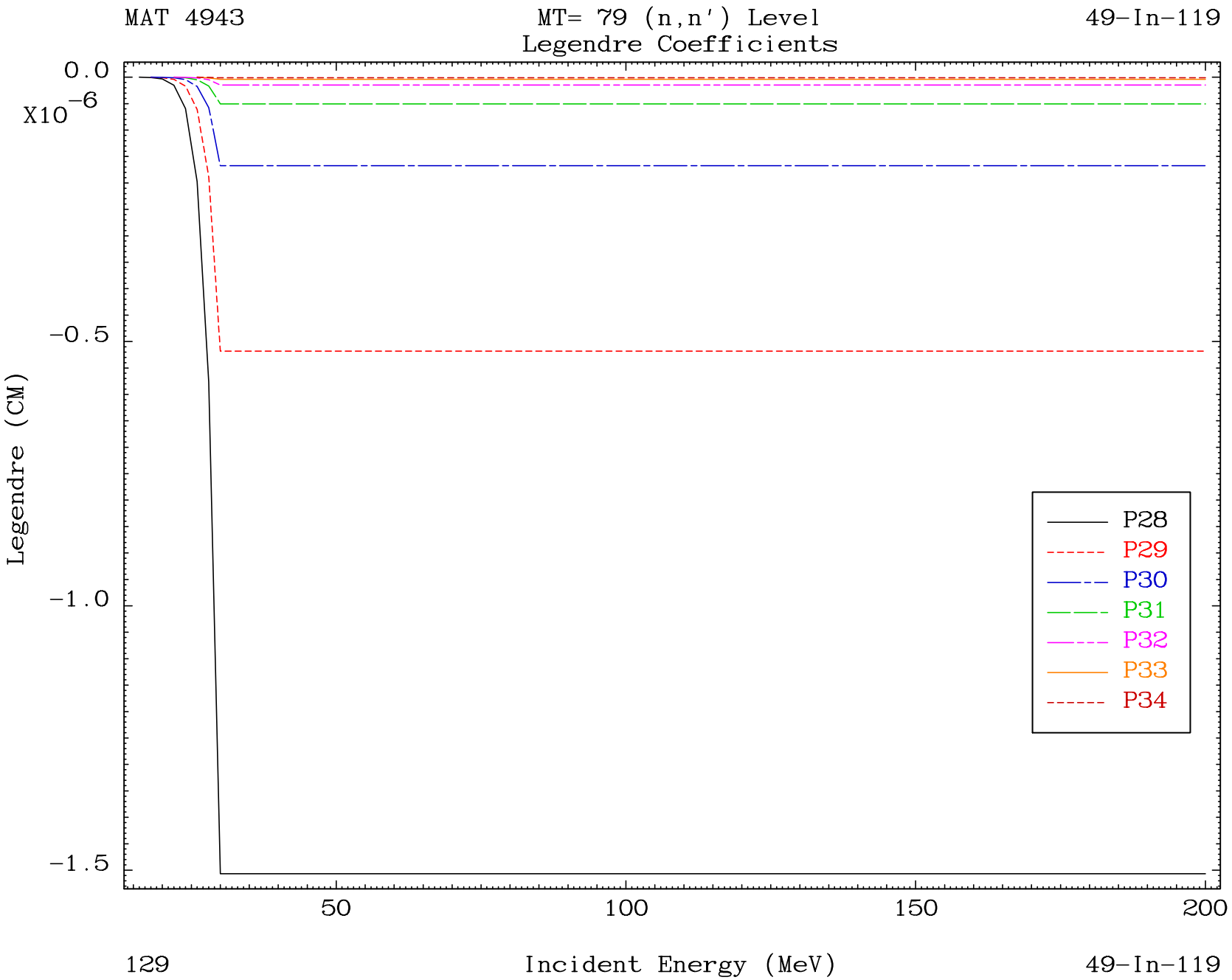

MAT 4943
MT= 78 (n,n') Level
Legendre Coefficients
49-In-119
X10^-5
4
3
2
1
0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
124
Incident Energy (MeV)
49-In-119

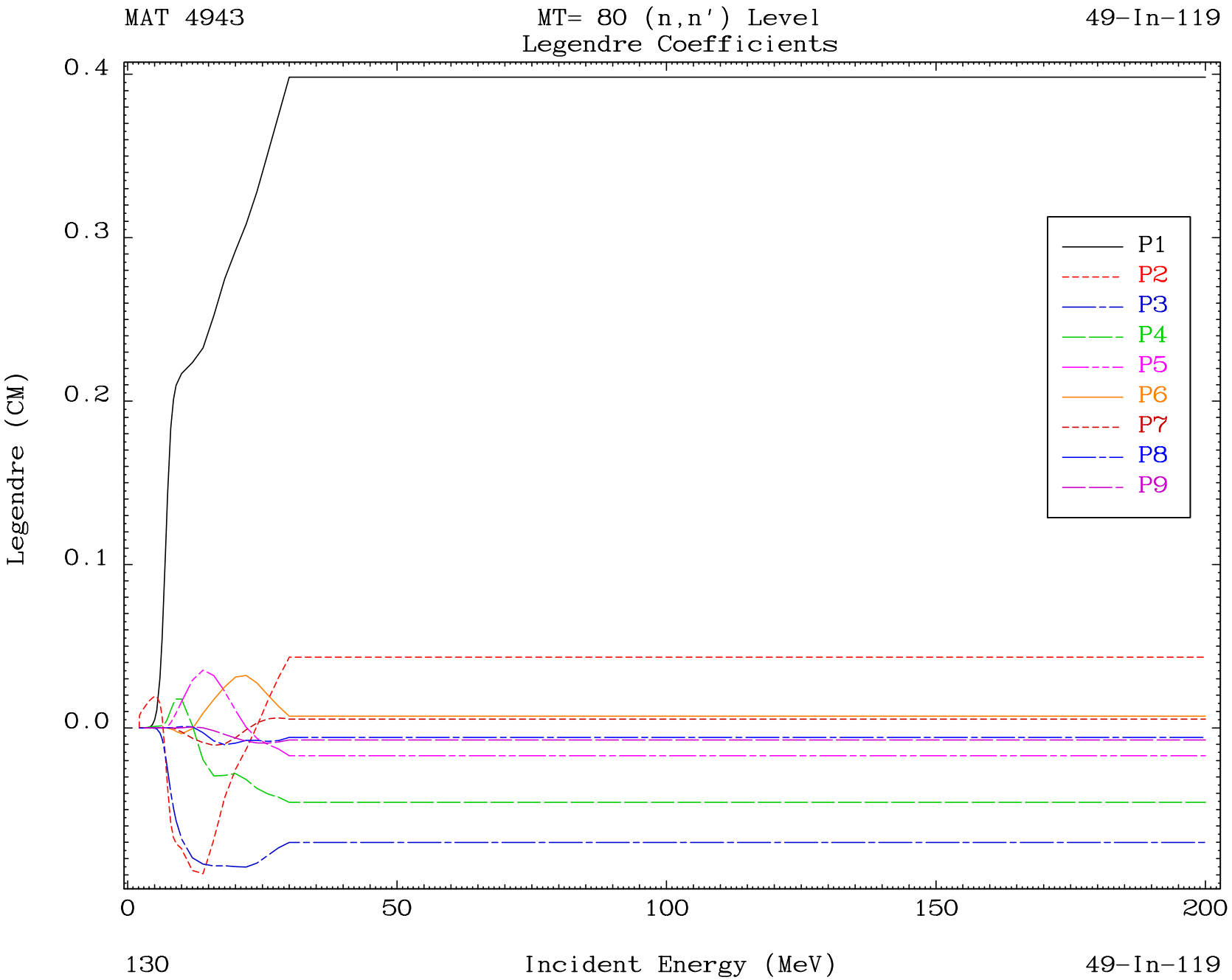

MAT 4943
MT= 78 (n,n') Level
Legendre Coefficients
49-In-119
0
X10 −8
−2
−4
−6
Legendre (CM)
50
100
150
200
125
Incident Energy (MeV)
49-In-119
P28
P29
P30
P31
P32
P33
P34

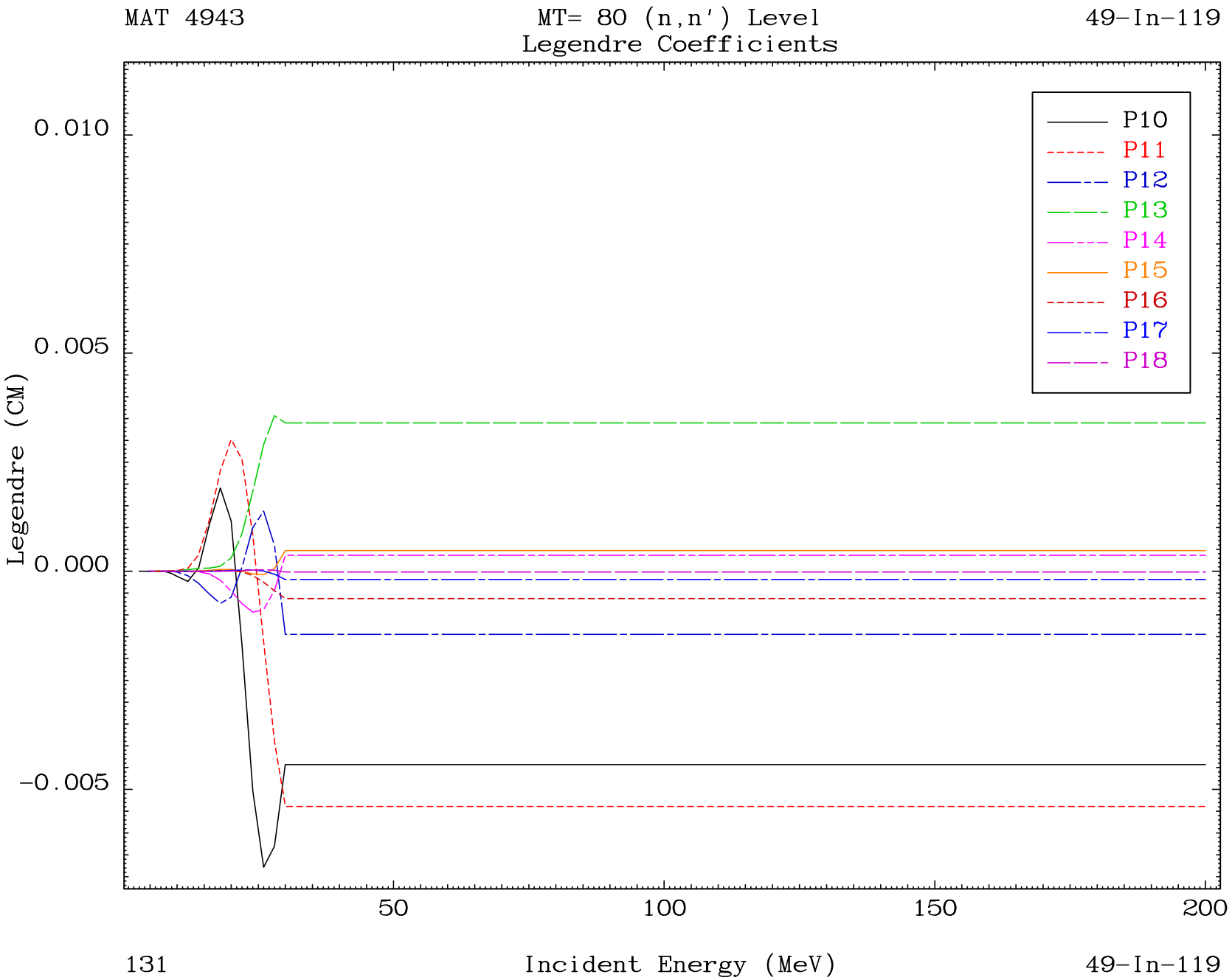

MAT 4943
MT= 79 (n,n') Level
Legendre Coefficients
49-In-119
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
126
Incident Energy (MeV)
49-In-119
P1
P2
P3
P4
P5
P6
P7
P8
P9

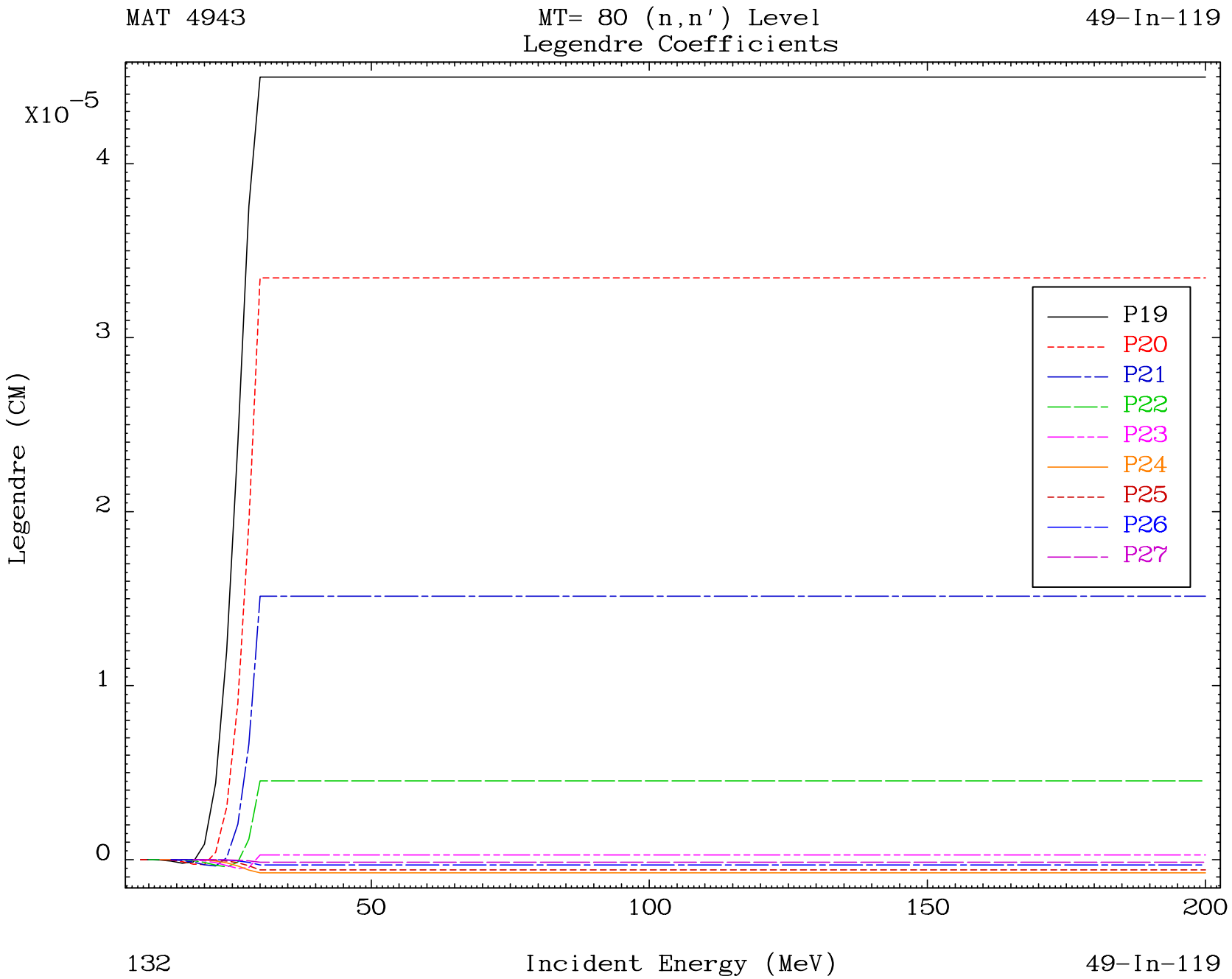

MAT 4943
MT= 79 (n,n') Level
Legendre Coefficients
49-In-119
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
Legendre (CM)
50
100
150
200
127
Incident Energy (MeV)
49-In-119

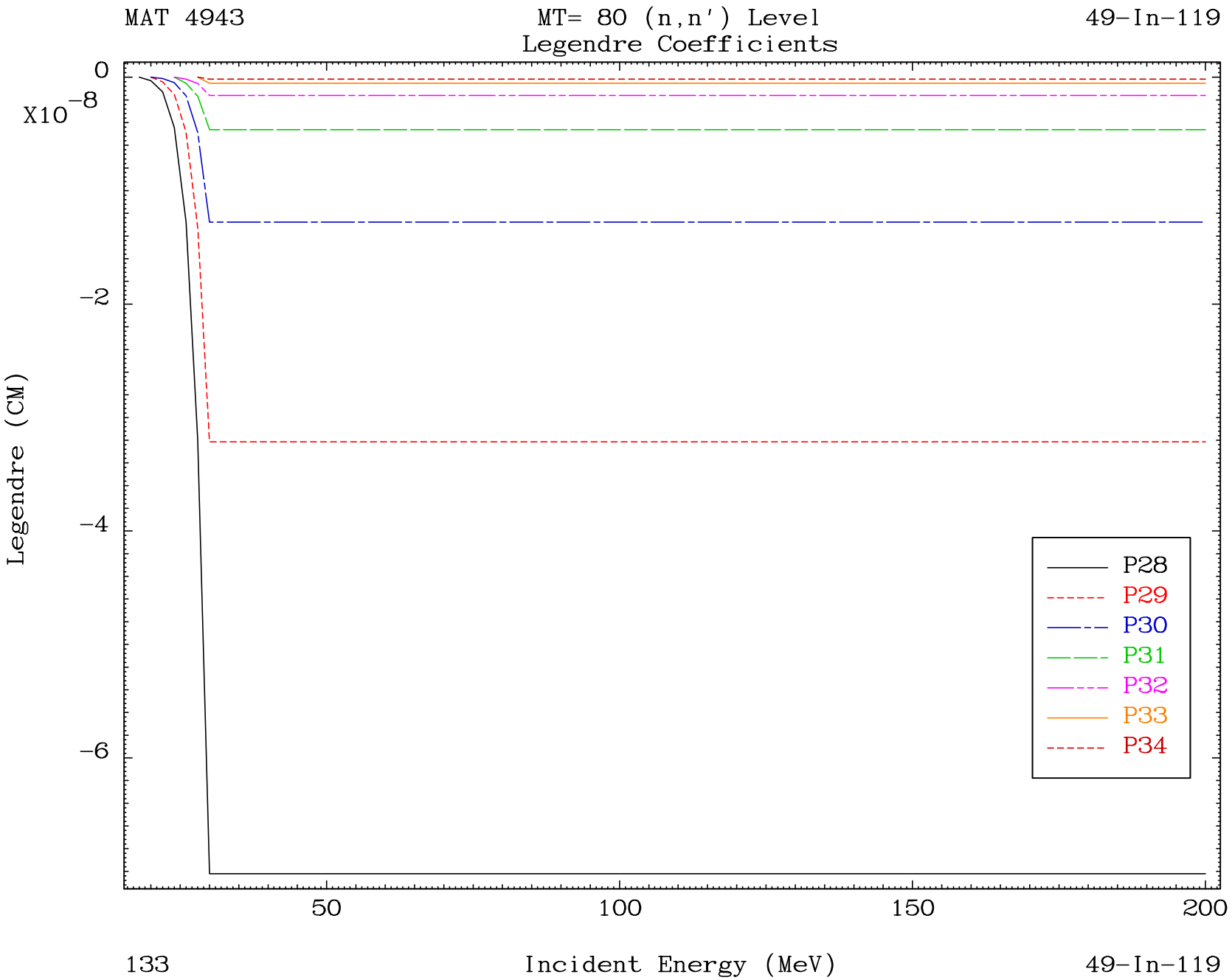

MAT 4943
MT= 79 (n,n') Level
Legendre Coefficients
49-In-119
0.000
-0.001
-0.002
-0.003
Legendre (CM)
50
100
150
200
128
Incident Energy (MeV)
49-In-119
P19
P20
P21
P22
P23
P24
P25
P26
P27

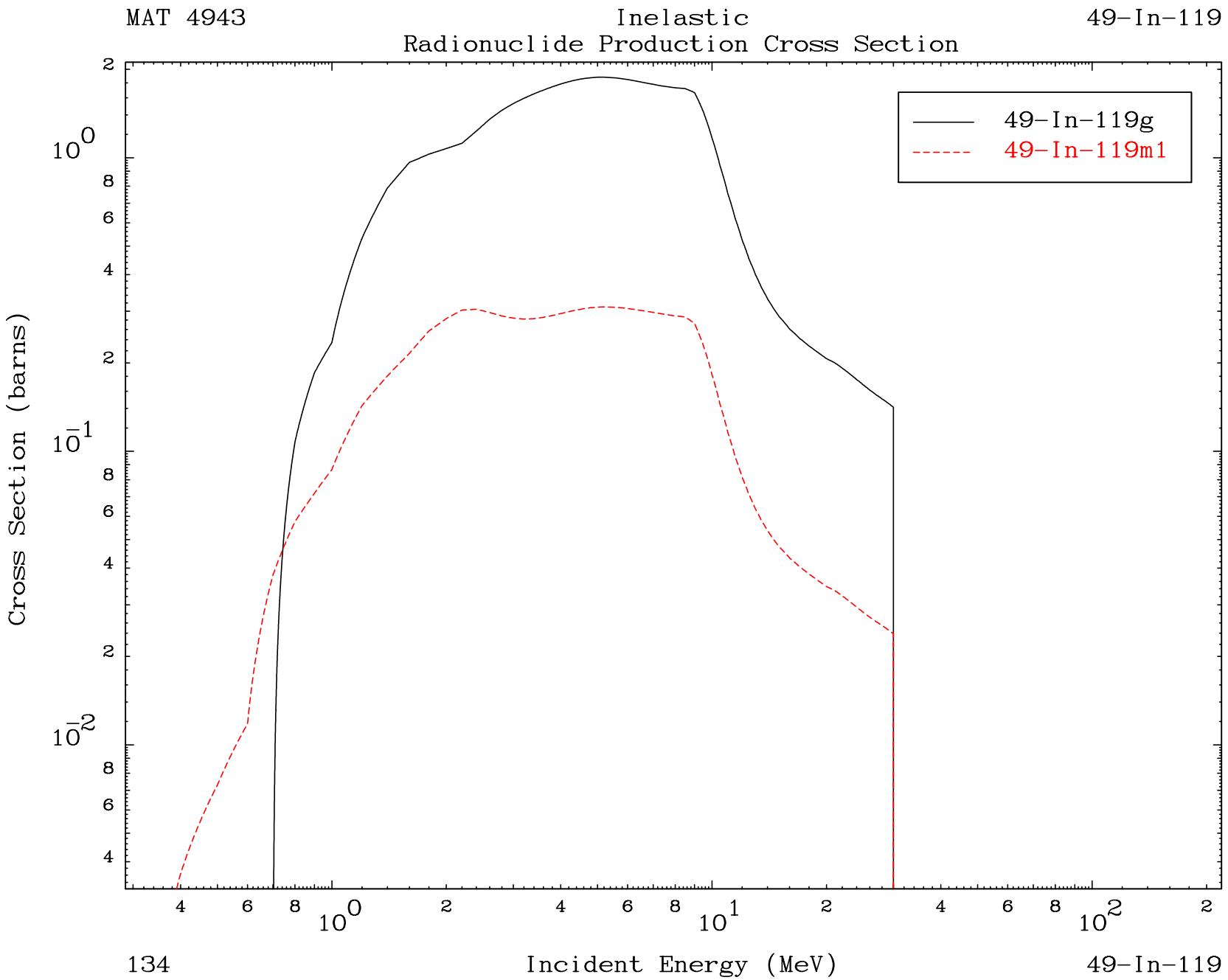

MAT 4943
MT= 79 (n,n') Level
Legendre Coefficients
49-In-119
0.0
X10−6
−0.5
−1.0
−1.5
Legendre (CM)
50
100
150
200
129
Incident Energy (MeV)
49-In-119
P28
P29
P30
P31
P32
P33
P34

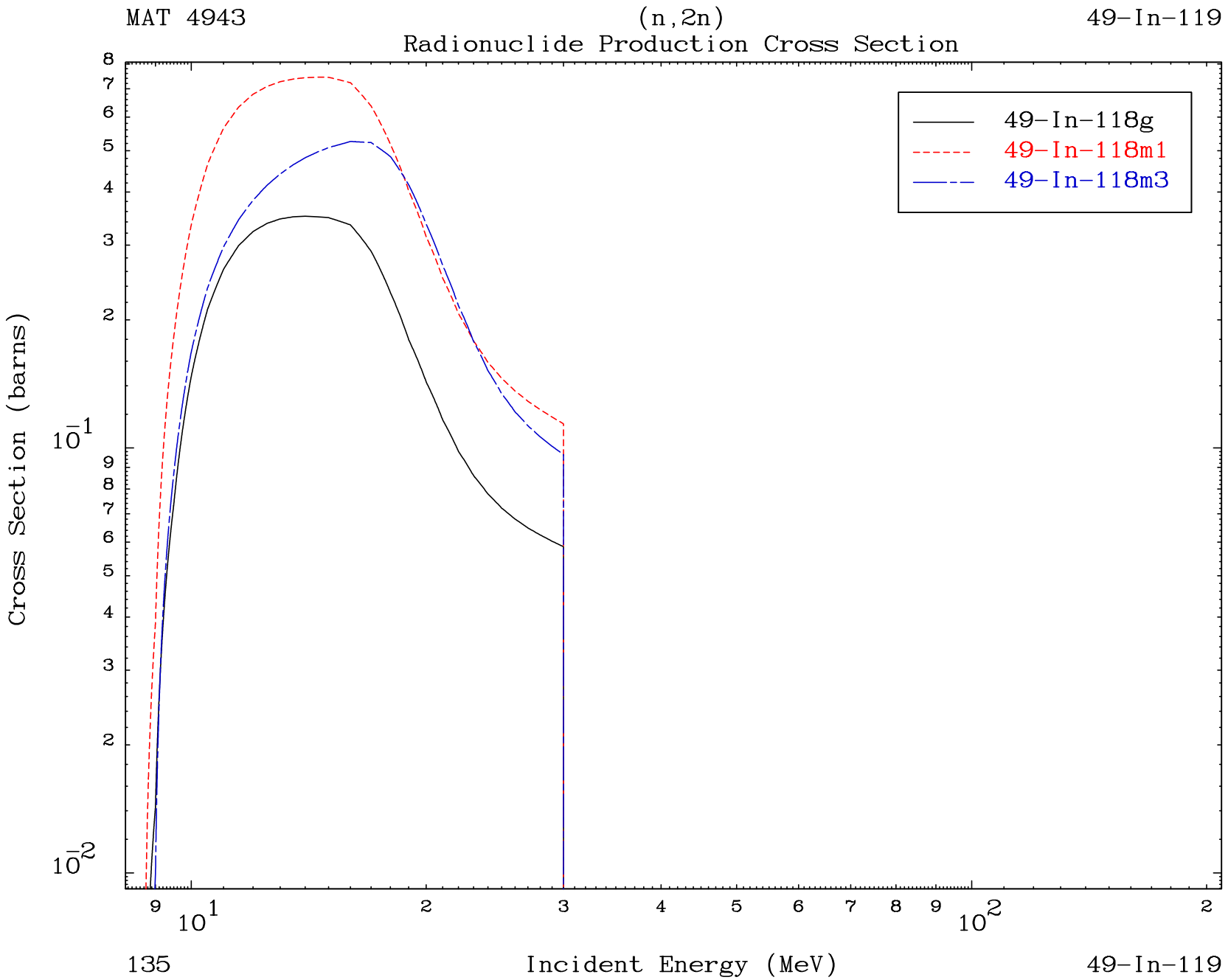

MAT 4943
MT= 80 (n,n') Level
Legendre Coefficients
49-In-119
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
130
Incident Energy (MeV)
49-In-119

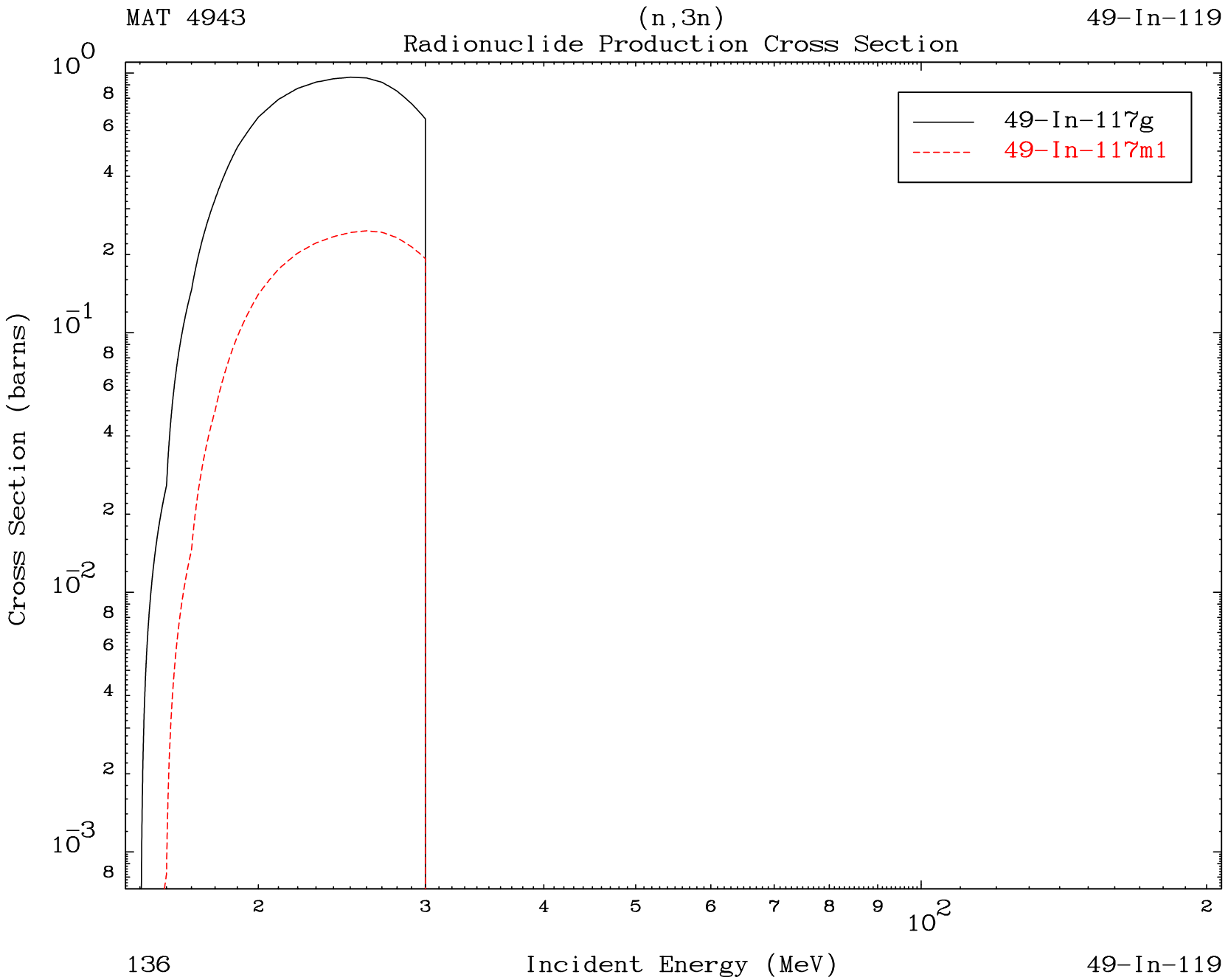

MAT 4943
MT= 80 (n,n') Level
Legendre Coefficients
49-In-119
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
50
100
150
200
131
Incident Energy (MeV)
49-In-119

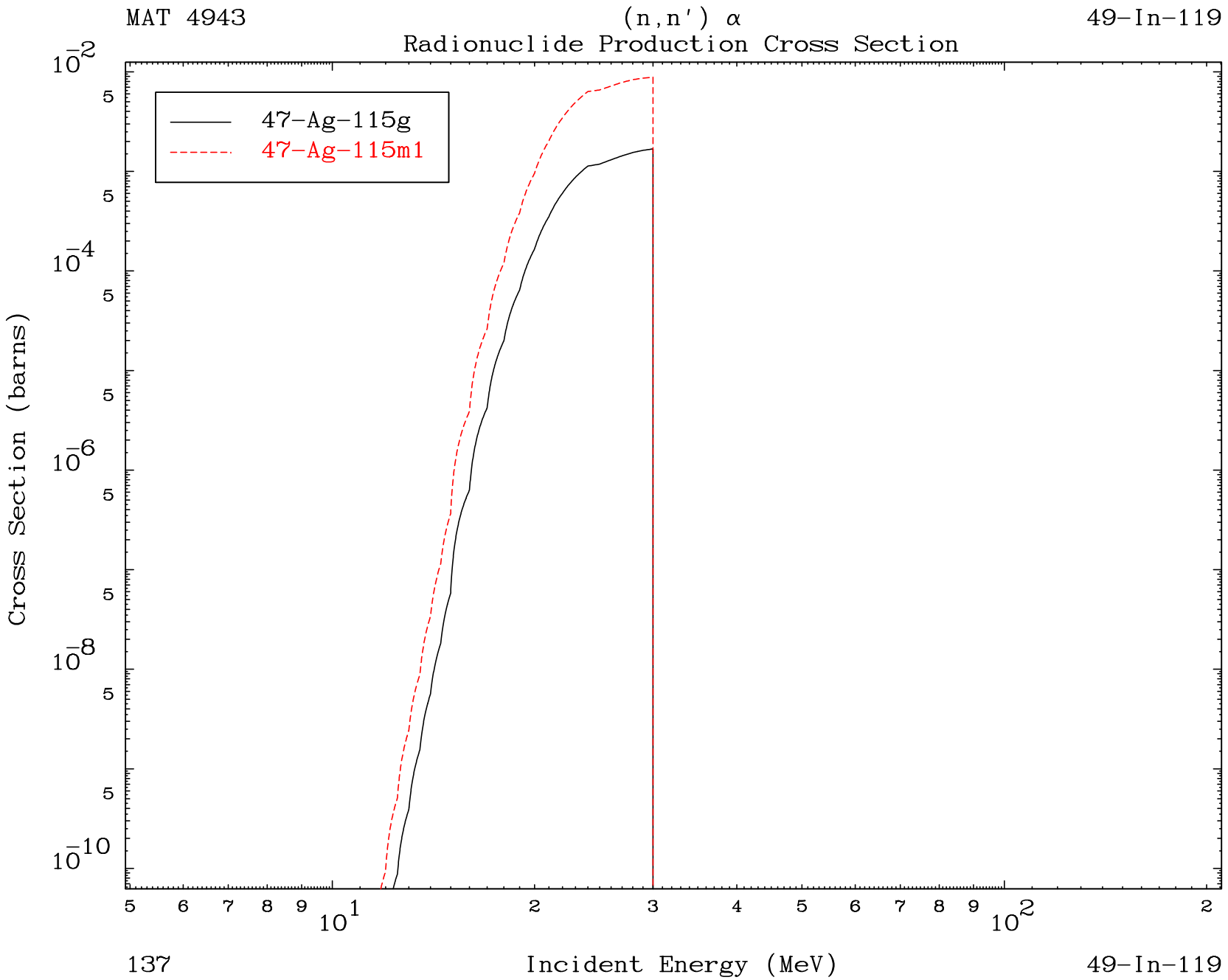

MAT 4943
MT= 80 (n,n') Level
Legendre Coefficients
49-In-119
X10 -5
4
3
2
1
0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
132
Incident Energy (MeV)
49-In-119

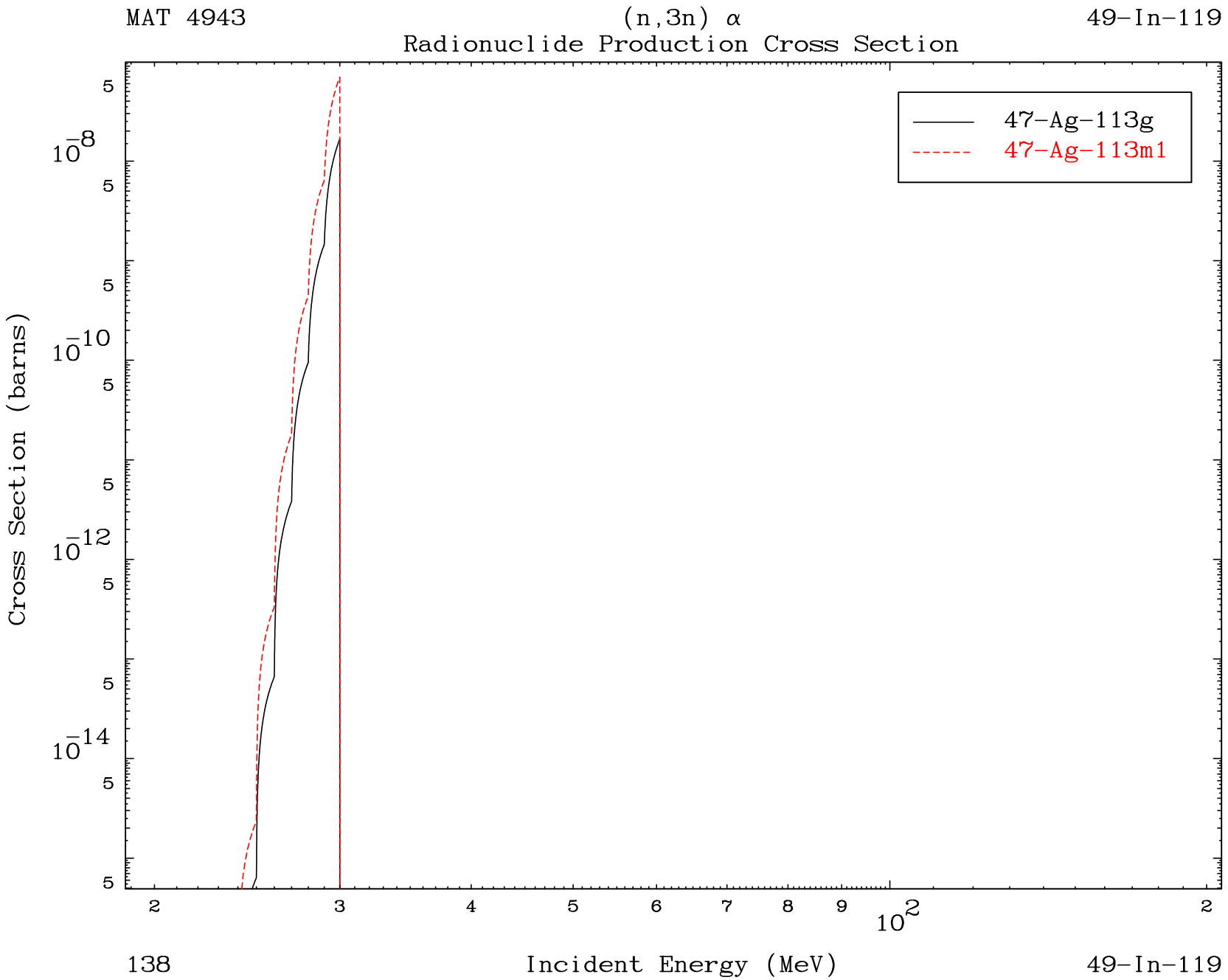

MAT 4943
MT= 80 (n,n') Level
Legendre Coefficients
49-In-119
0
X10 −8
−2
−4
−6
Legendre (CM)
50
100
150
200
133
Incident Energy (MeV)
49-In-119
P28
P29
P30
P31
P32
P33
P34

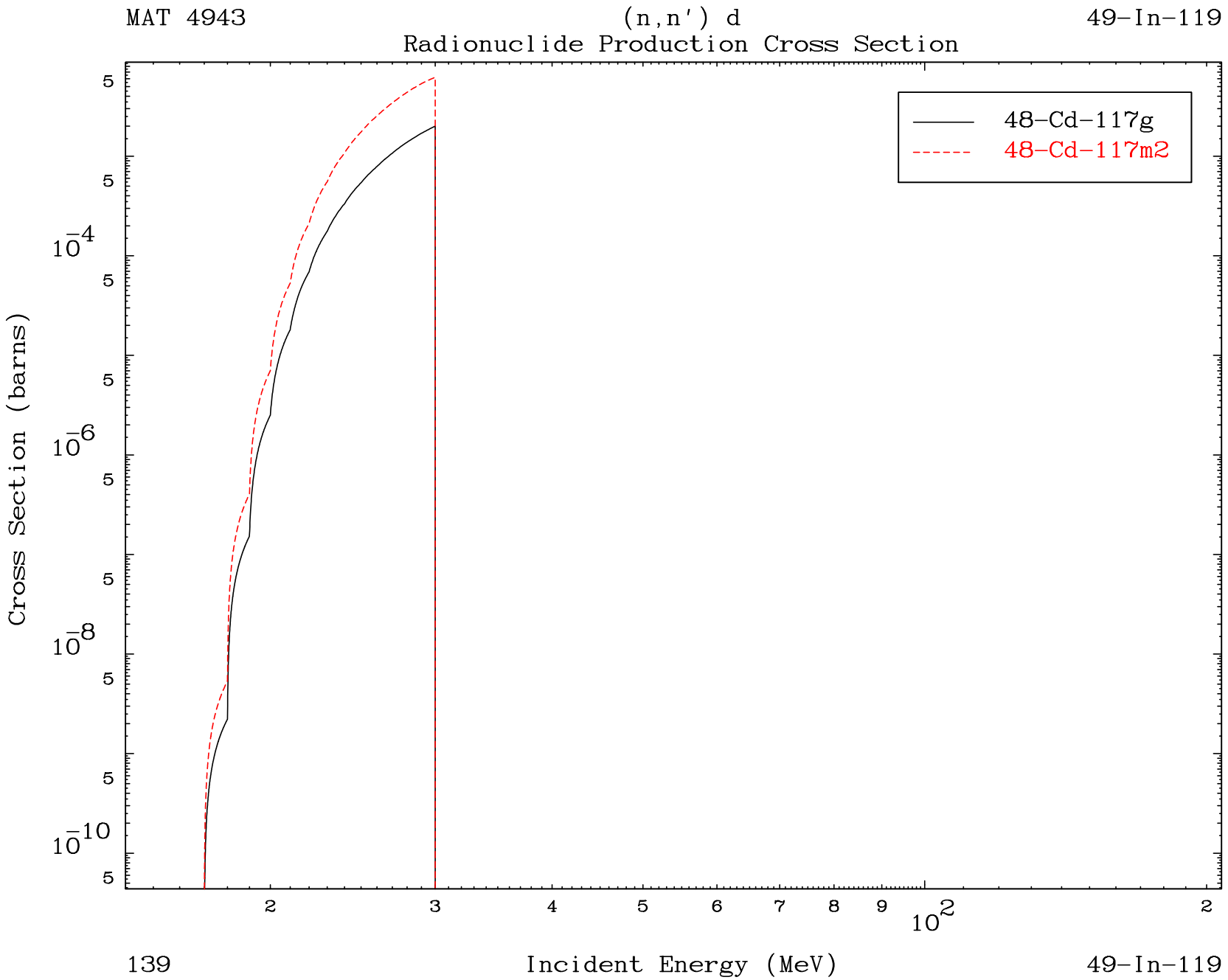

MAT 4943
Inelastic
49-In-119
Radionuclide Production Cross Section
49-In-119g
49-In-119m1
Cross Section (barns)
Incident Energy (MeV)
134
49-In-119

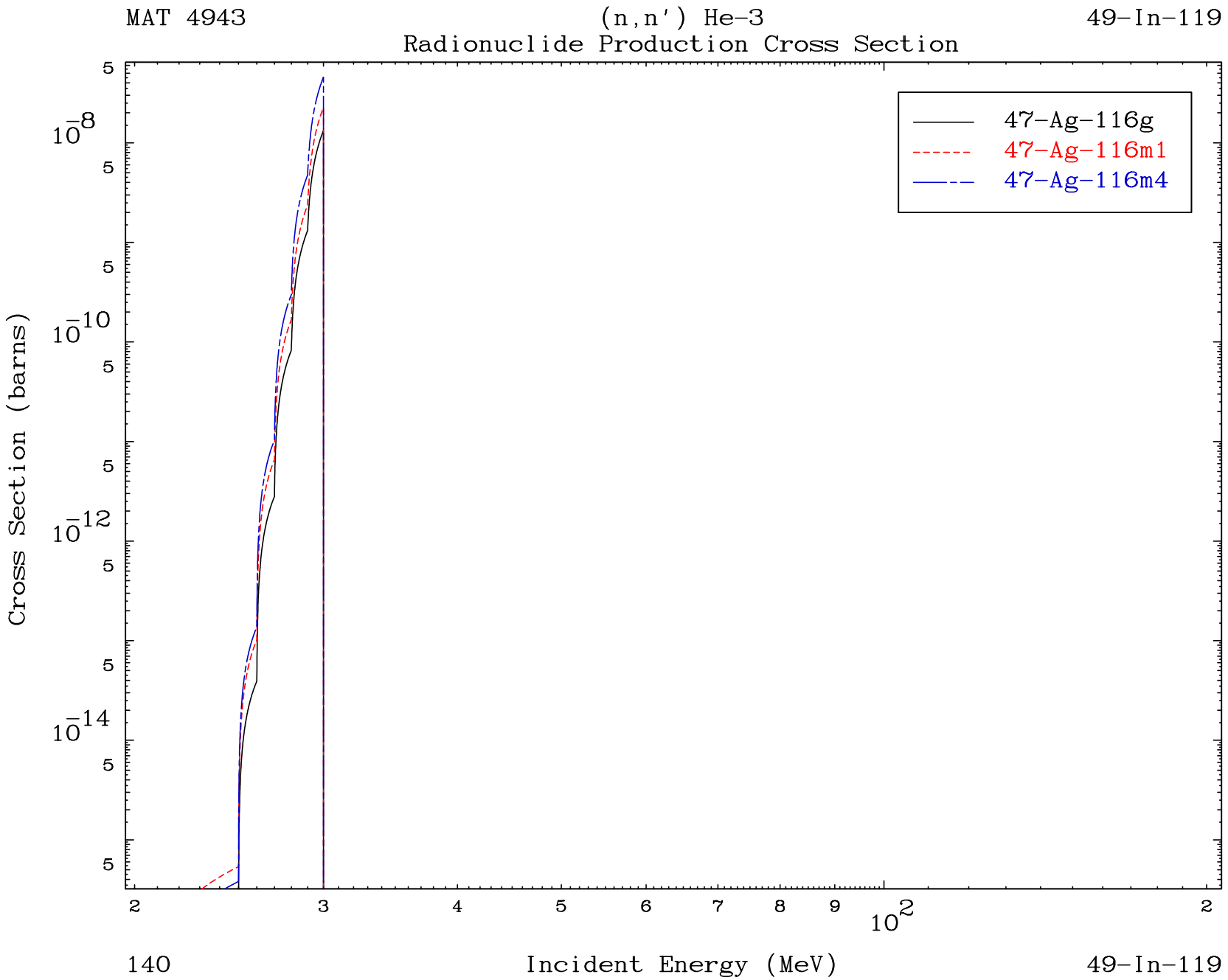

MAT 4943
(n,2n)
49-In-119
Radionuclide Production Cross Section
49-In-118g
49-In-118m1
49-In-118m3
Cross Section (barns)
Incident Energy (MeV)
135
49-In-119

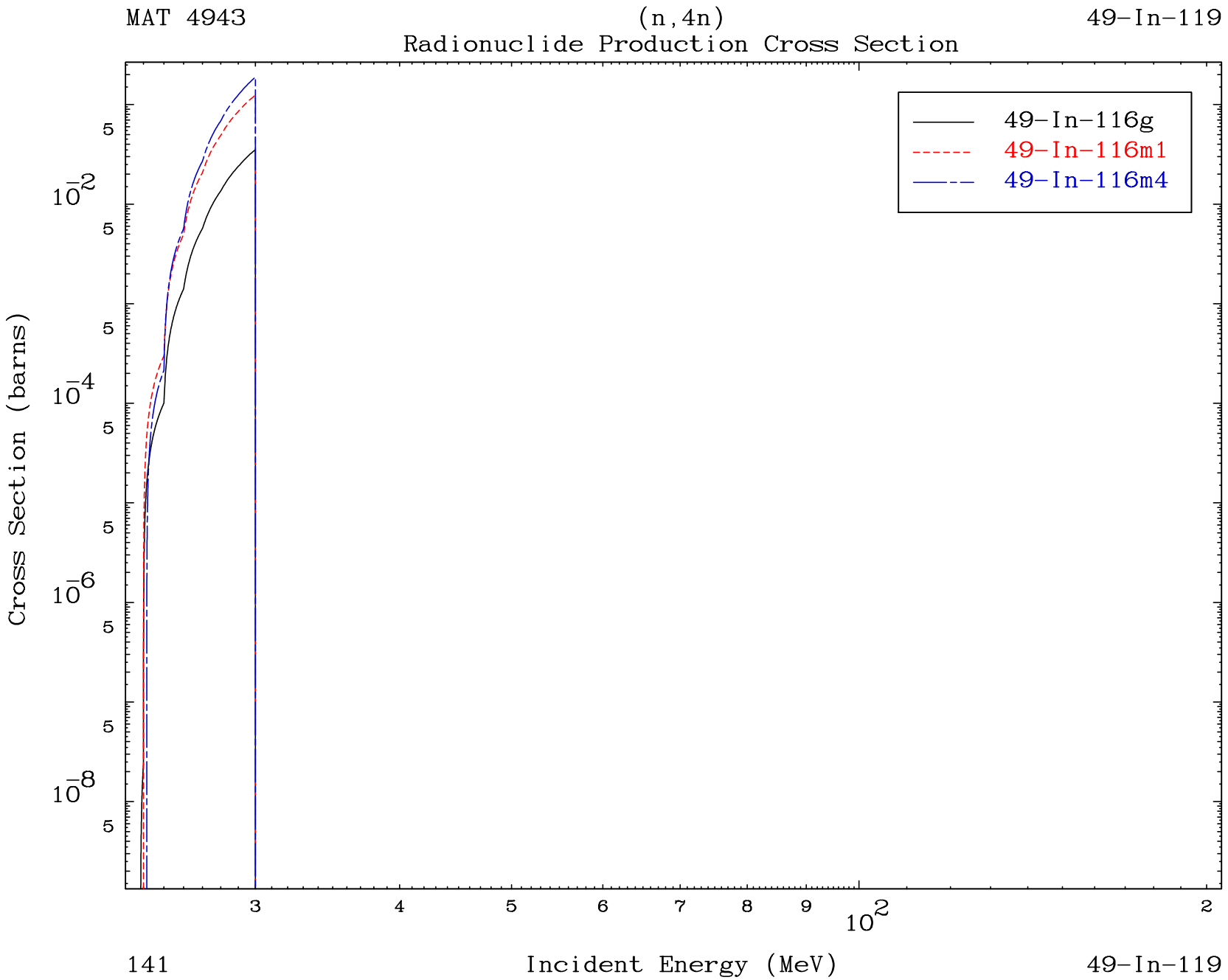

MAT 4943
(n,3n)
49-In-119
Radionuclide Production Cross Section
49-In-117g
49-In-117m1
Cross Section (barns)
Incident Energy (MeV)
136
49-In-119

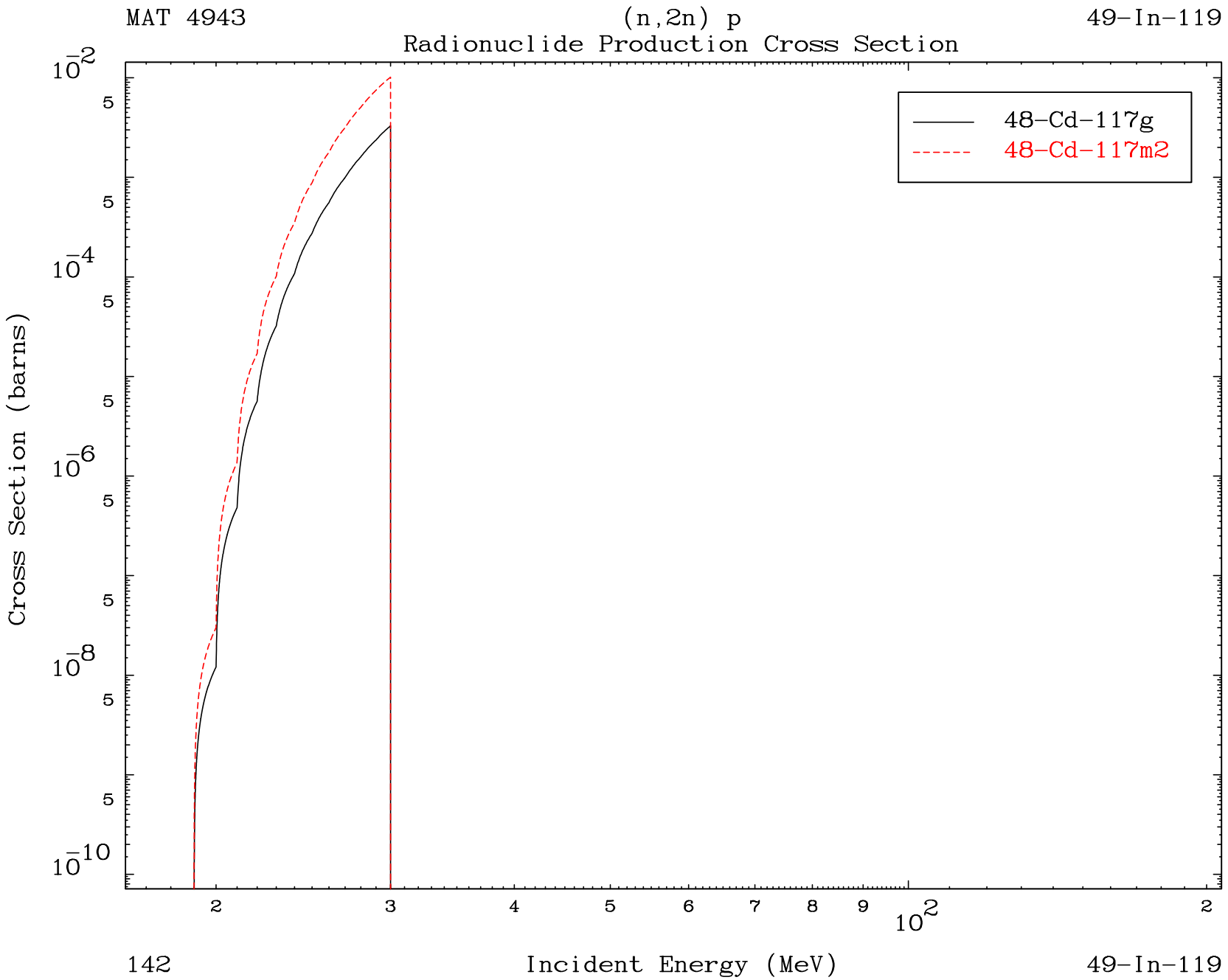

MAT 4943
(n,n') α
49-In-119
Radionuclide Production Cross Section
47-Ag-115g
47-Ag-115m1
Cross Section (barns)
Incident Energy (MeV)
137
49-In-119

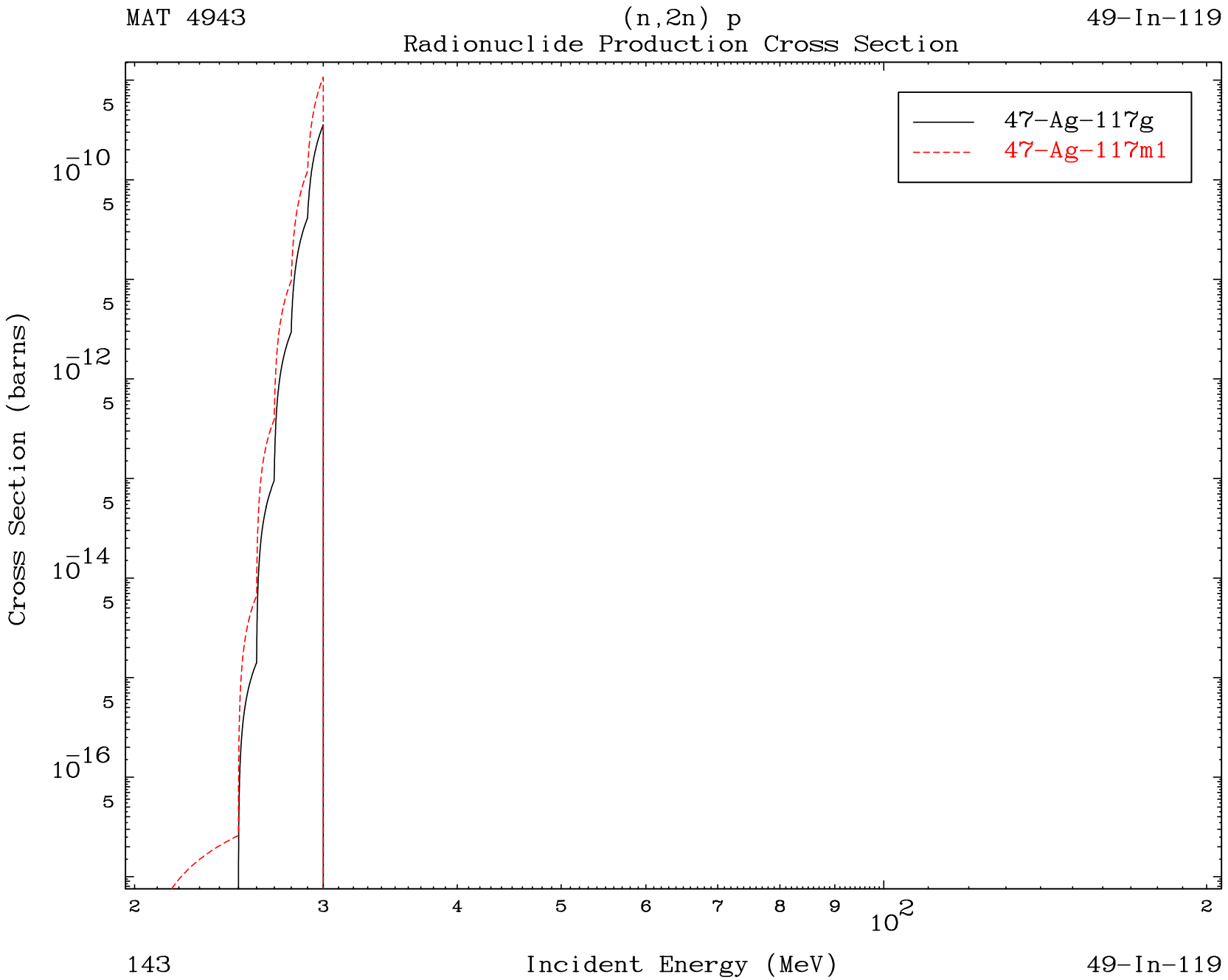

MAT 4943
(n,3n) α
49-In-119
Radionuclide Production Cross Section
47-Ag-113g
47-Ag-113m1
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
2
3
4
5
6
7
8
9
10^2
2
138
Incident Energy (MeV)
49-In-119

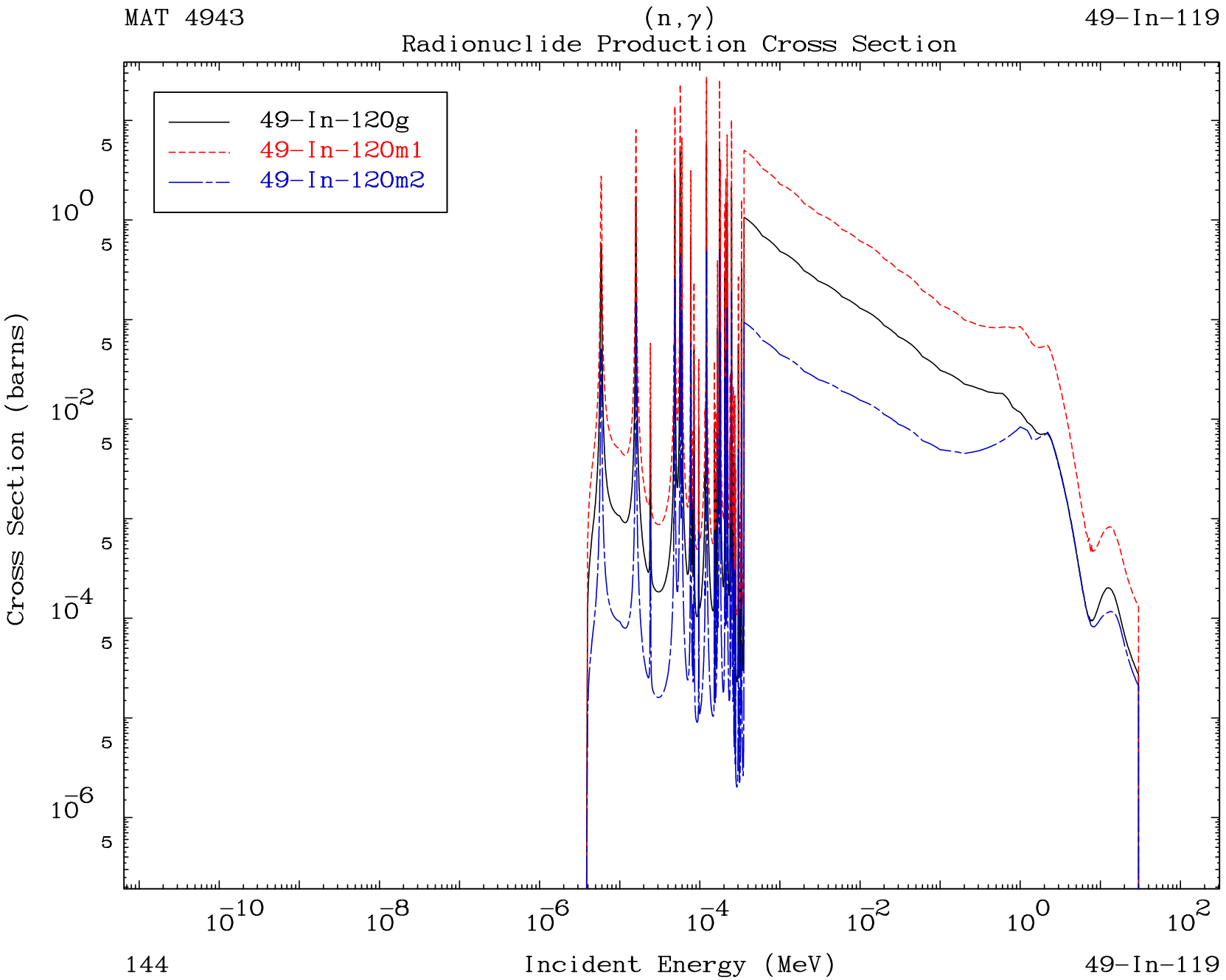

MAT 4943
(n,n') d
49-In-119
Radionuclide Production Cross Section
48-Cd-117g
48-Cd-117m2
Cross Section (barns)
Incident Energy (MeV)
139
49-In-119

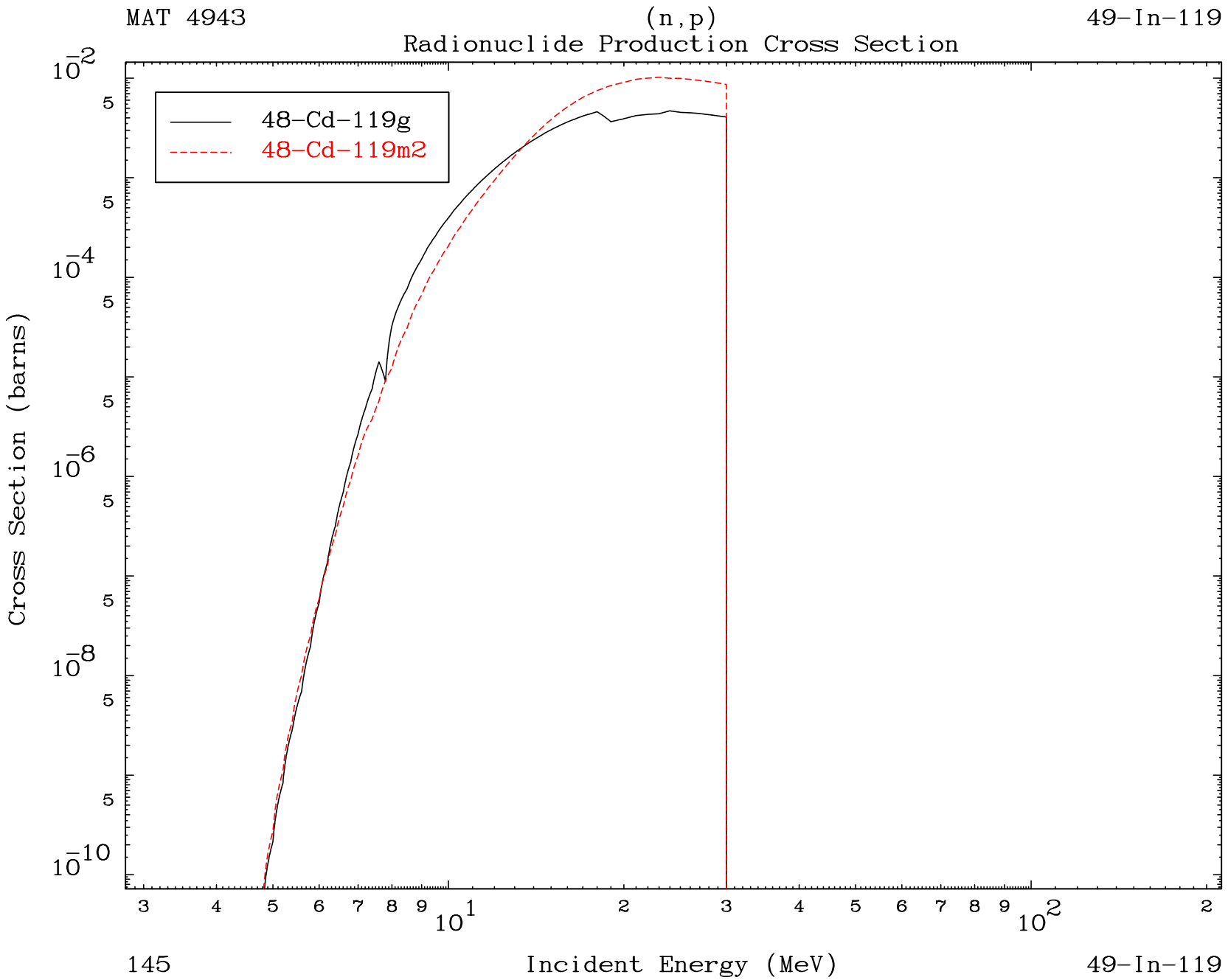

MAT 4943
(n,n') He-3
49-In-119
Radionuclide Production Cross Section
47-Ag-116g
47-Ag-116m1
47-Ag-116m4
Cross Section (barns)
Incident Energy (MeV)
140
49-In-119

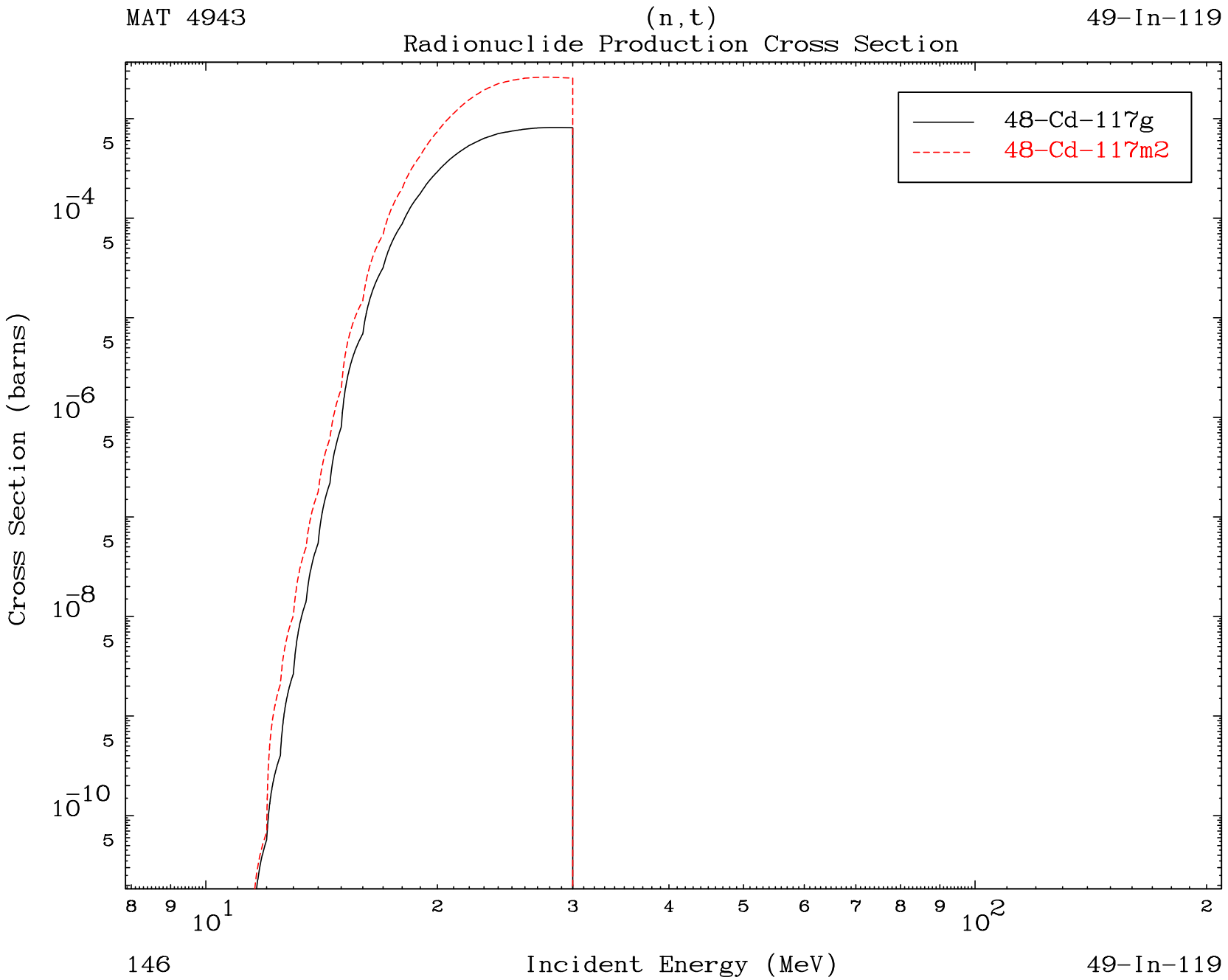

MAT 4943
(n,4n)
49-In-119
Radionuclide Production Cross Section
49-In-116g
49-In-116m1
49-In-116m4
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
141
Incident Energy (MeV)
49-In-119

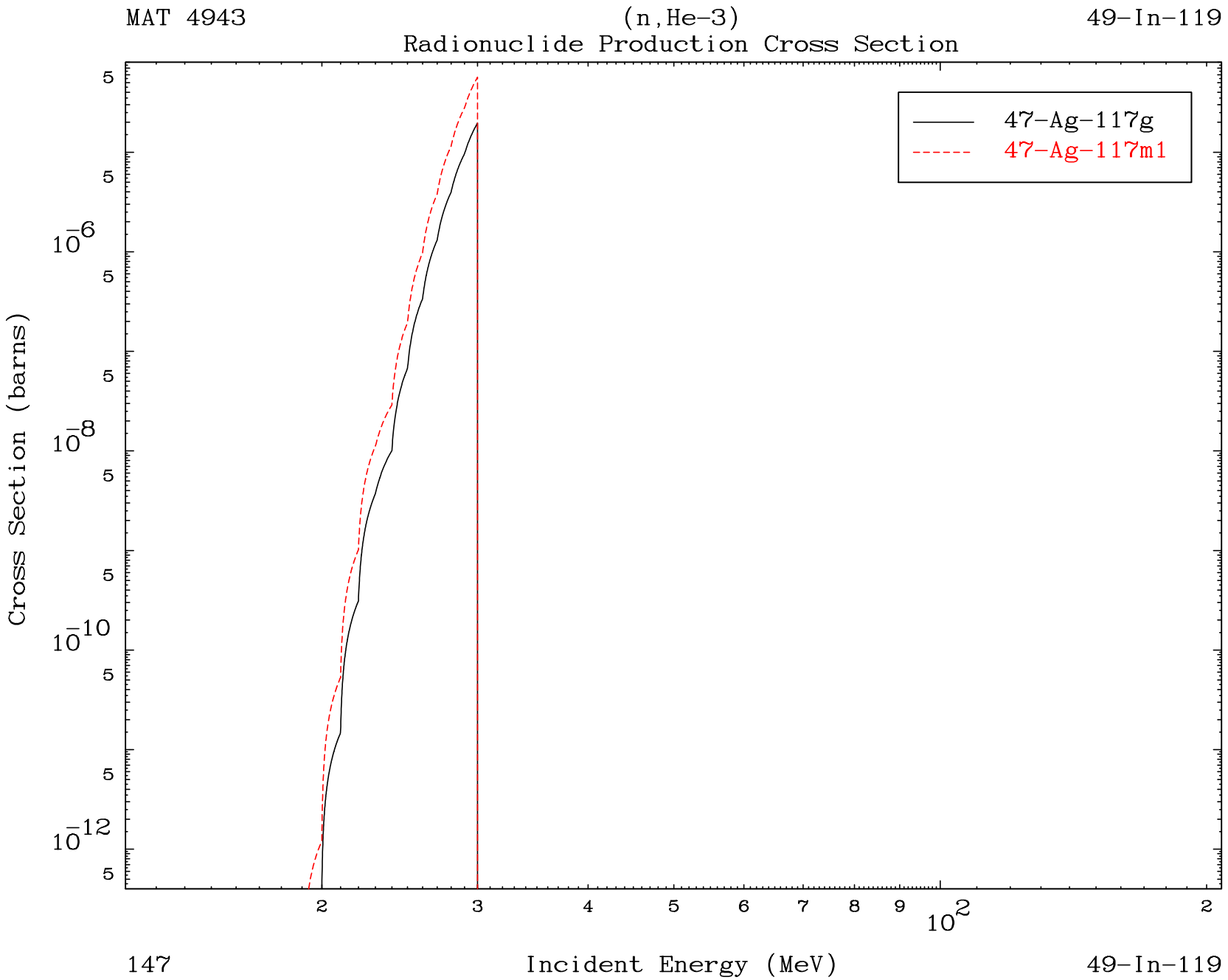

MAT 4943
(n,2n) p
49-In-119
Radionuclide Production Cross Section
48-Cd-117g
48-Cd-117m2
Cross Section (barns)
Incident Energy (MeV)
142
49-In-119

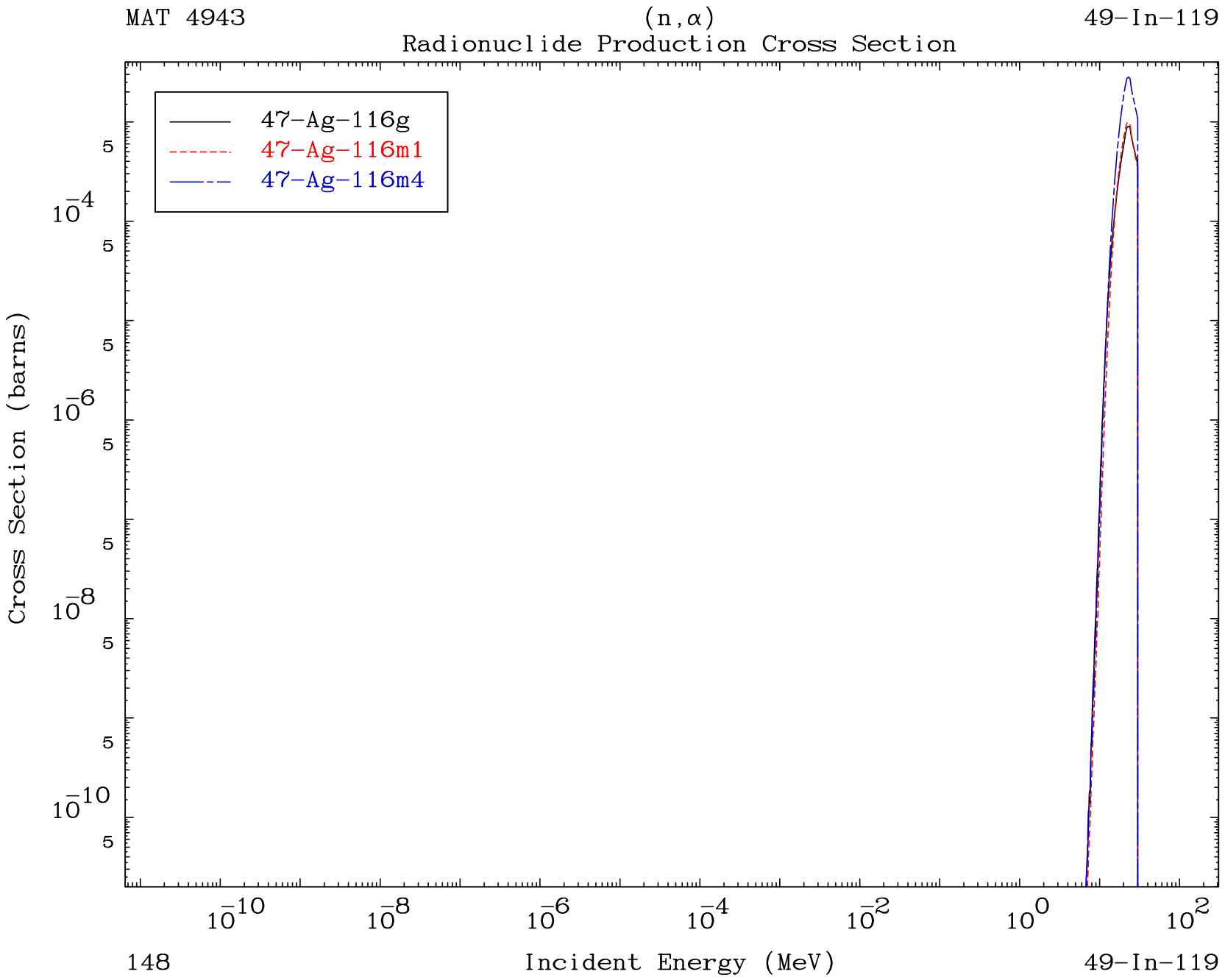

MAT 4943
(n,2n) p
49-In-119
Radionuclide Production Cross Section
47-Ag-117g
47-Ag-117m1
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
2
3
4
5
6
7
8
9
10^2
2
143
Incident Energy (MeV)
49-In-119

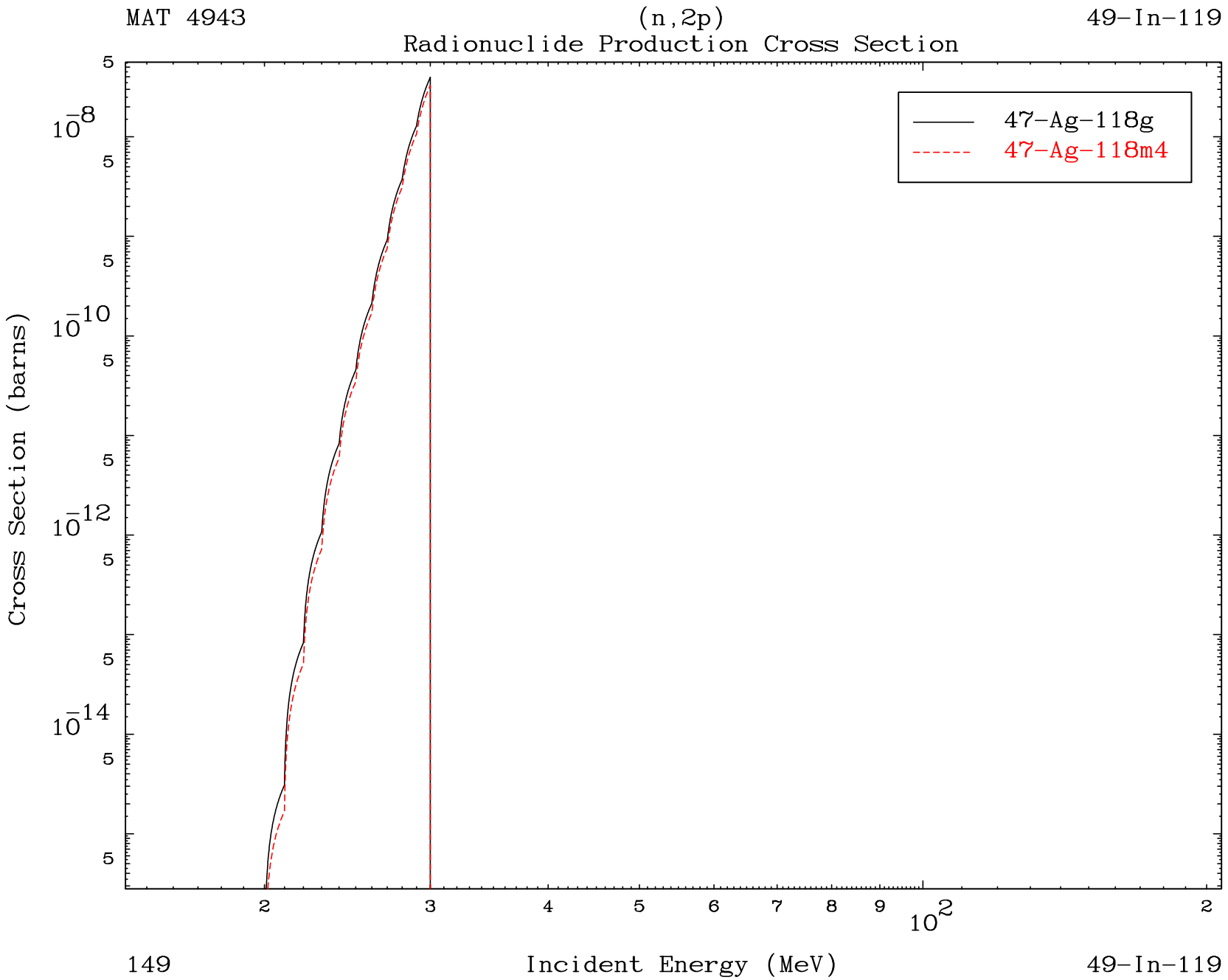

MAT 4943
(n,γ)
49-In-119
Radionuclide Production Cross Section
49-In-120g
49-In-120m1
49-In-120m2
Cross Section (barns)
Incident Energy (MeV)
144
49-In-119

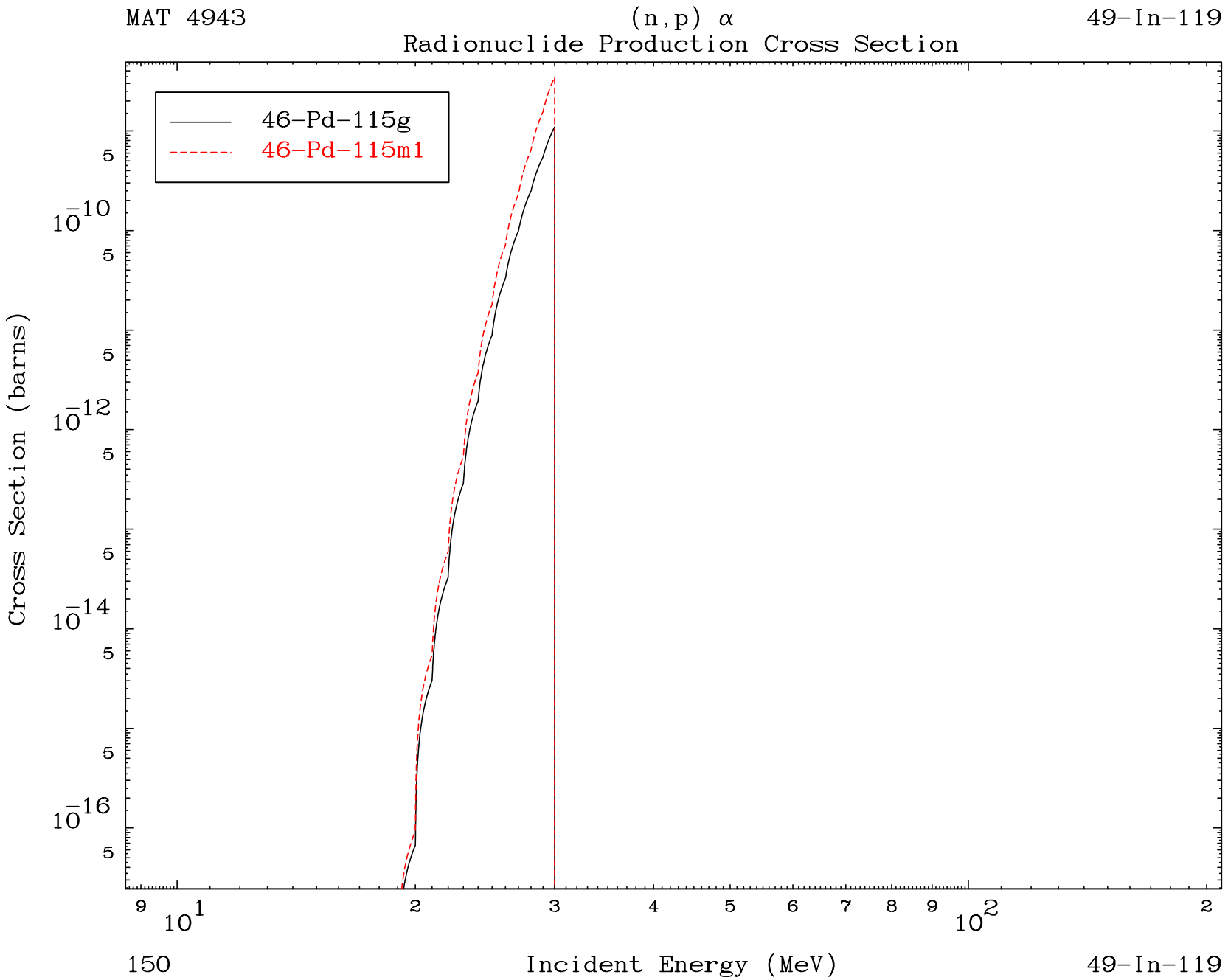

MAT 4943
(n,p)
49-In-119
Radionuclide Production Cross Section
48-Cd-119g
48-Cd-119m2
Cross Section (barns)
Incident Energy (MeV)
145
49-In-119


MAT 4943
(n,t)
49-In-119
Radionuclide Production Cross Section
48-Cd-117g
48-Cd-117m2
Cross Section (barns)
10-4
10-6
10-8
10-10
Incident Energy (MeV)
101
102
146
49-In-119


MAT 4943
(n,He-3)
49-In-119
Radionuclide Production Cross Section
47-Ag-117g
47-Ag-117m1
Cross Section (barns)
Incident Energy (MeV)
147
49-In-119


MAT 4943
(n,α)
49-In-119
Radionuclide Production Cross Section
47-Ag-116g
47-Ag-116m1
47-Ag-116m4
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
148
Incident Energy (MeV)
49-In-119


MAT 4943
(n,2p)
49-In-119
Radionuclide Production Cross Section
47-Ag-118g
47-Ag-118m4
Cross Section (barns)
Incident Energy (MeV)
149
49-In-119


MAT 4943
(n,p) α
49-In-119
Radionuclide Production Cross Section
46-Pd-115g
46-Pd-115m1
Cross Section (barns)
10-10
10-12
10-14
10-16
5
9
10 1
2
3
4
5
6
7
8
9
10 2
2
150
Incident Energy (MeV)
49-In-119