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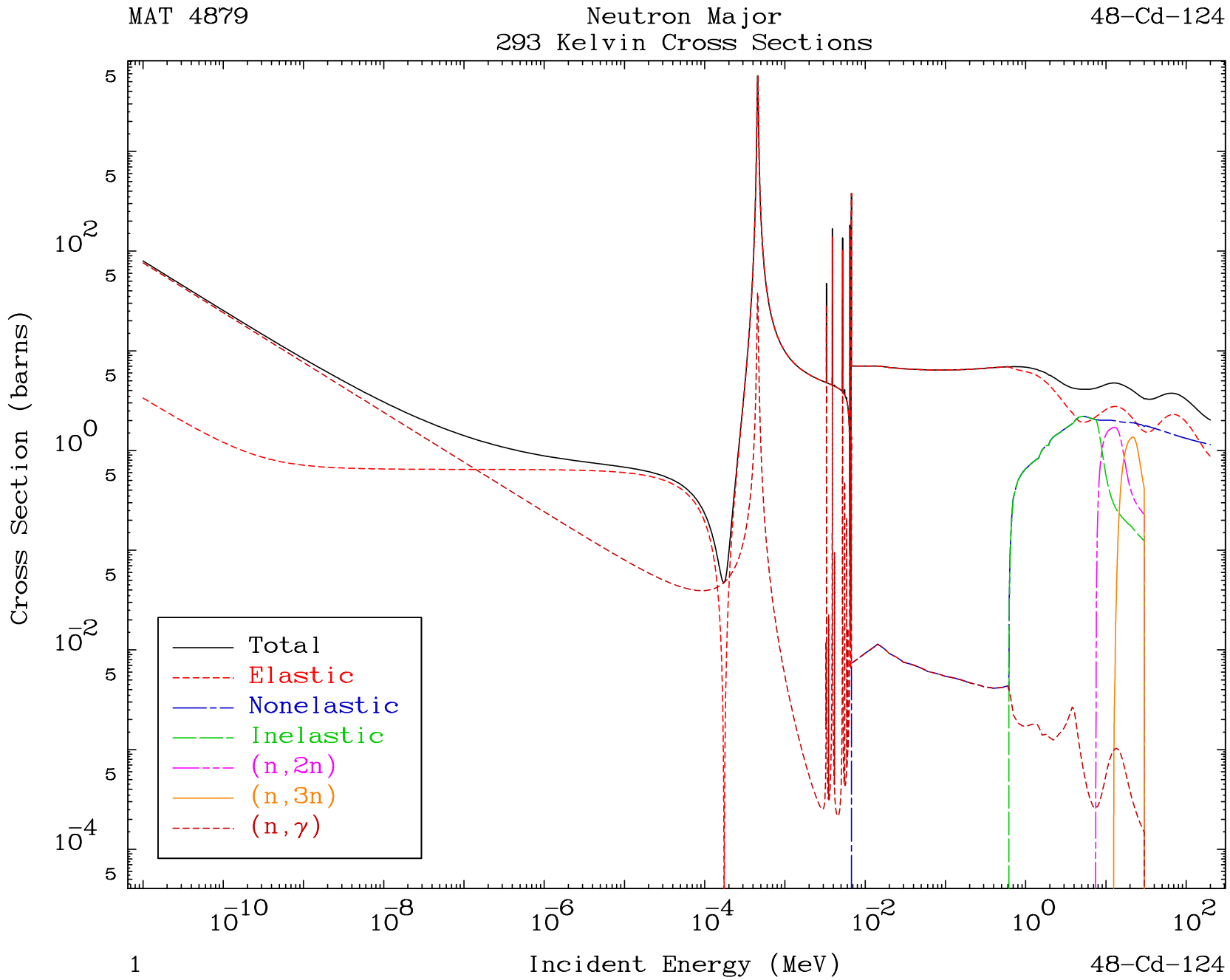
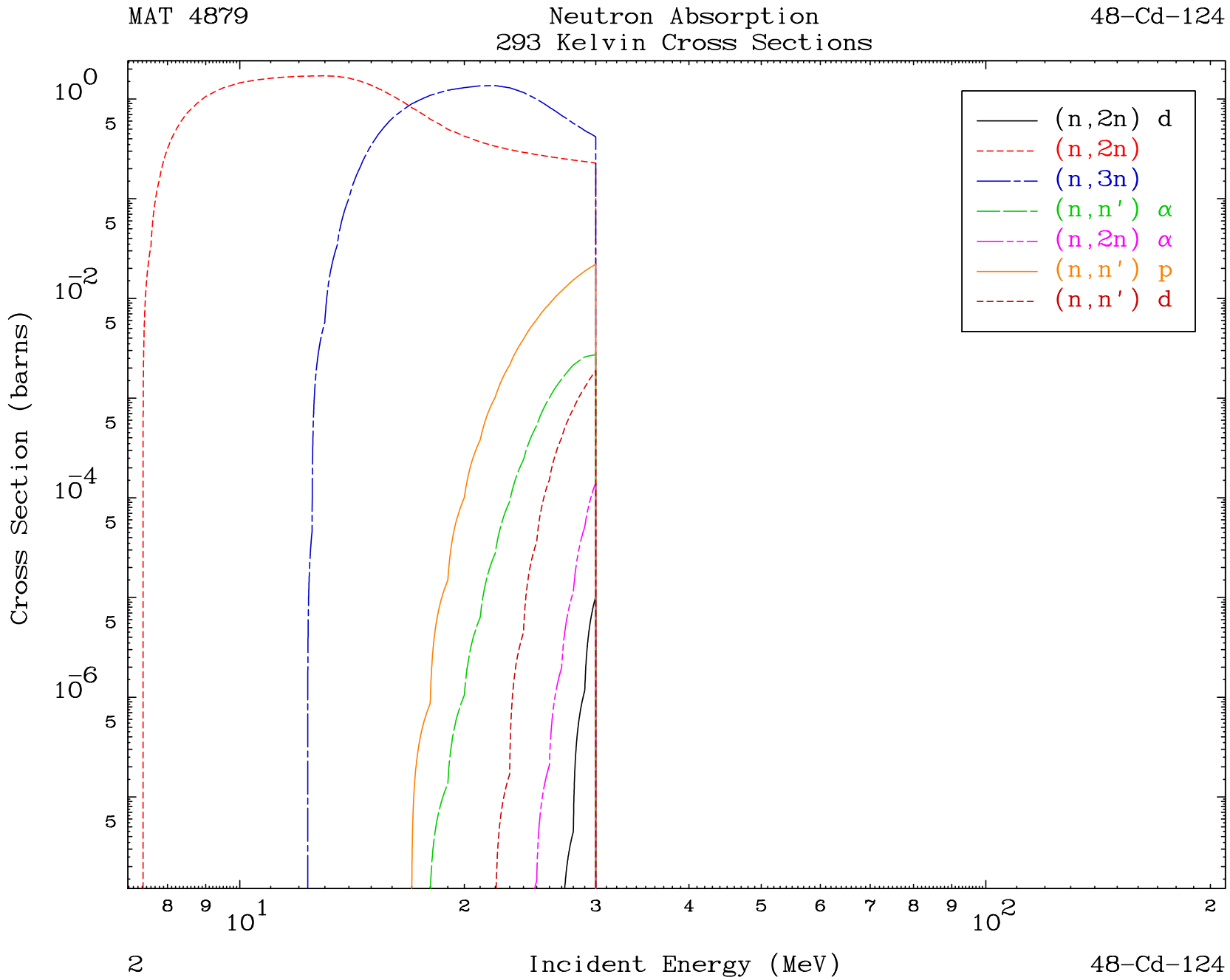
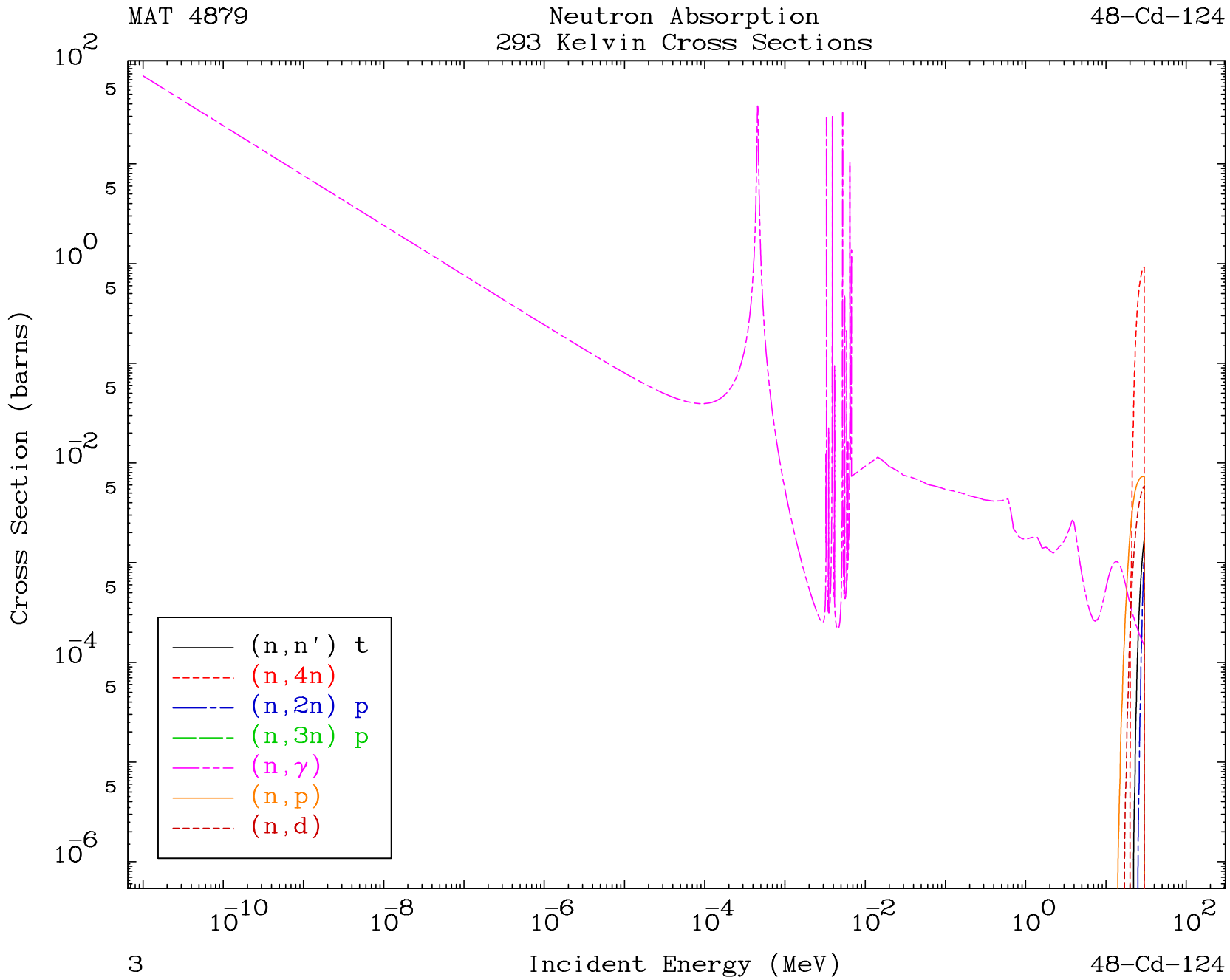
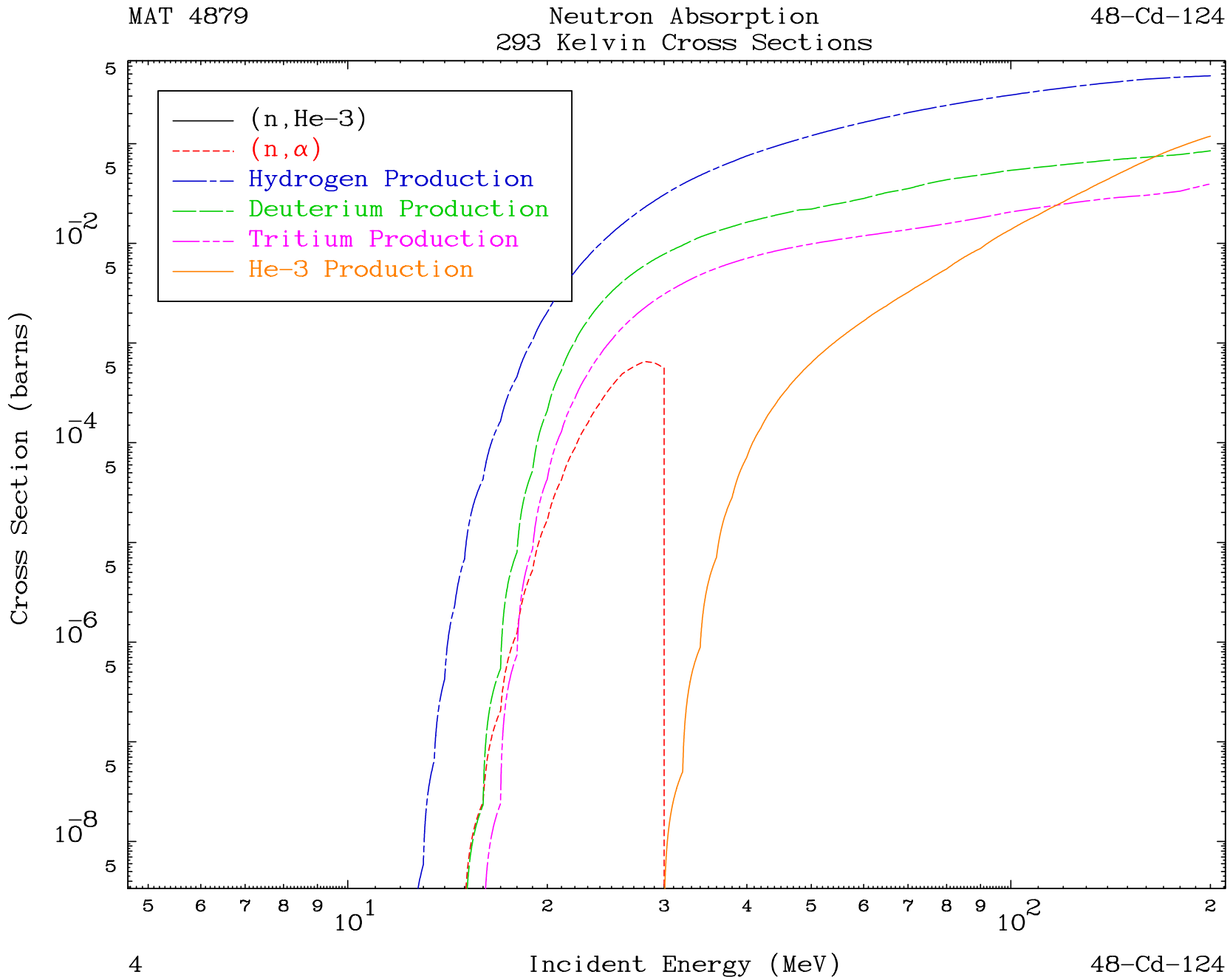
Press Mouse Button to Start

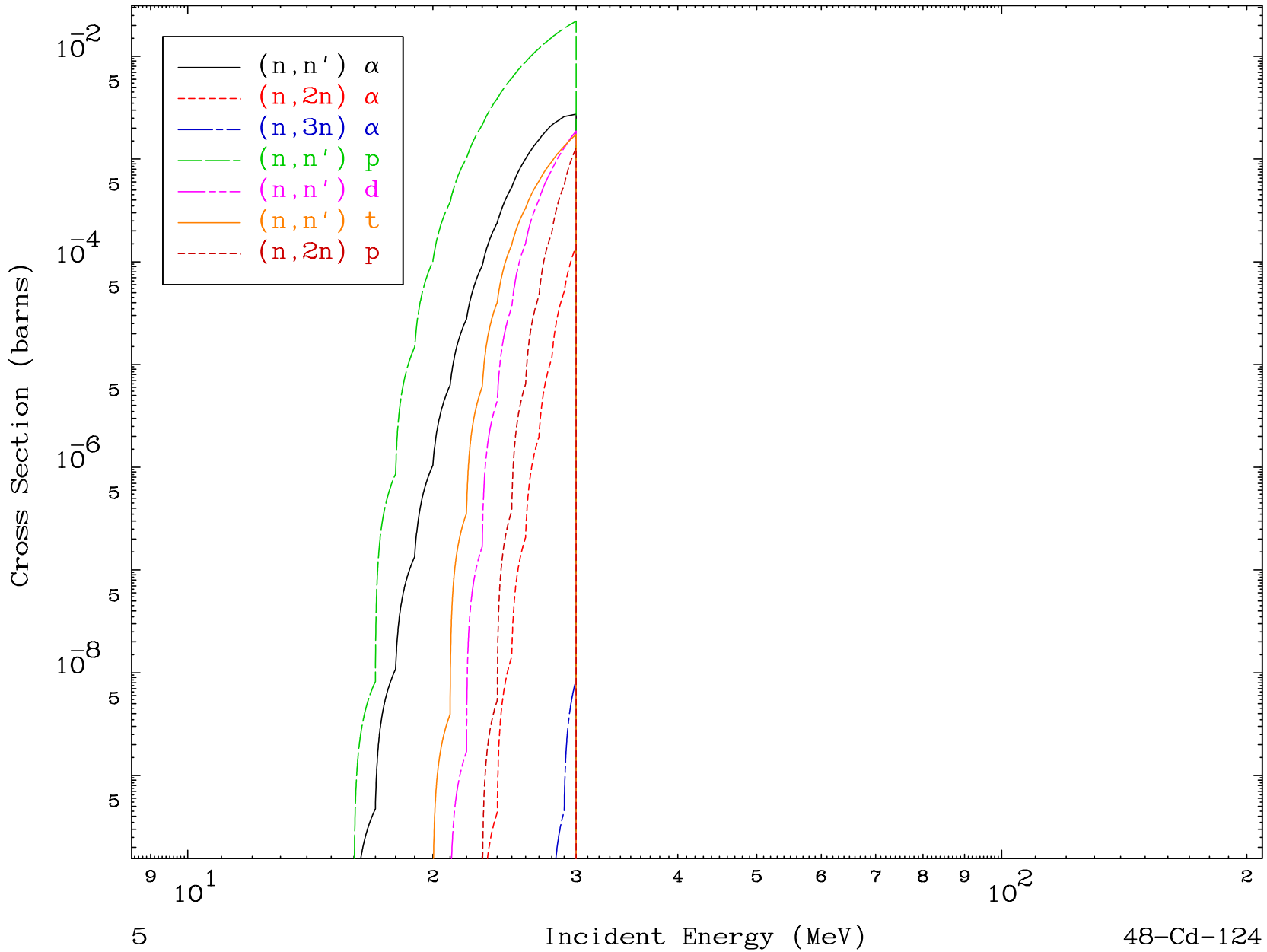

MAT 4879
Neutron Major
293 Kelvin Cross Sections
48-Cd-124
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
1
48-Cd-124

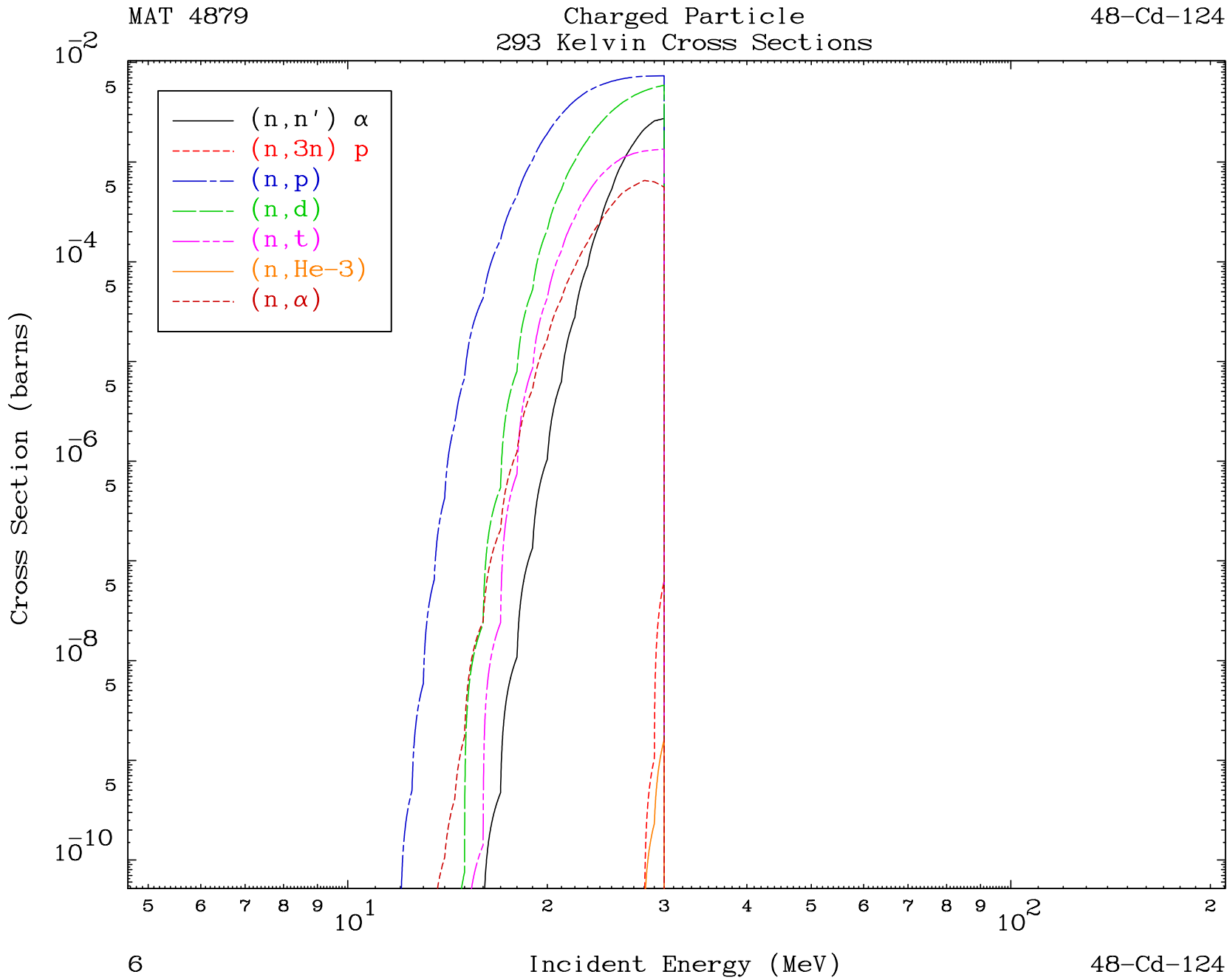

MAT 4879
Neutron Absorption
293 Kelvin Cross Sections
48-Cd-124
Cross Section (barns)
Incident Energy (MeV)
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') d

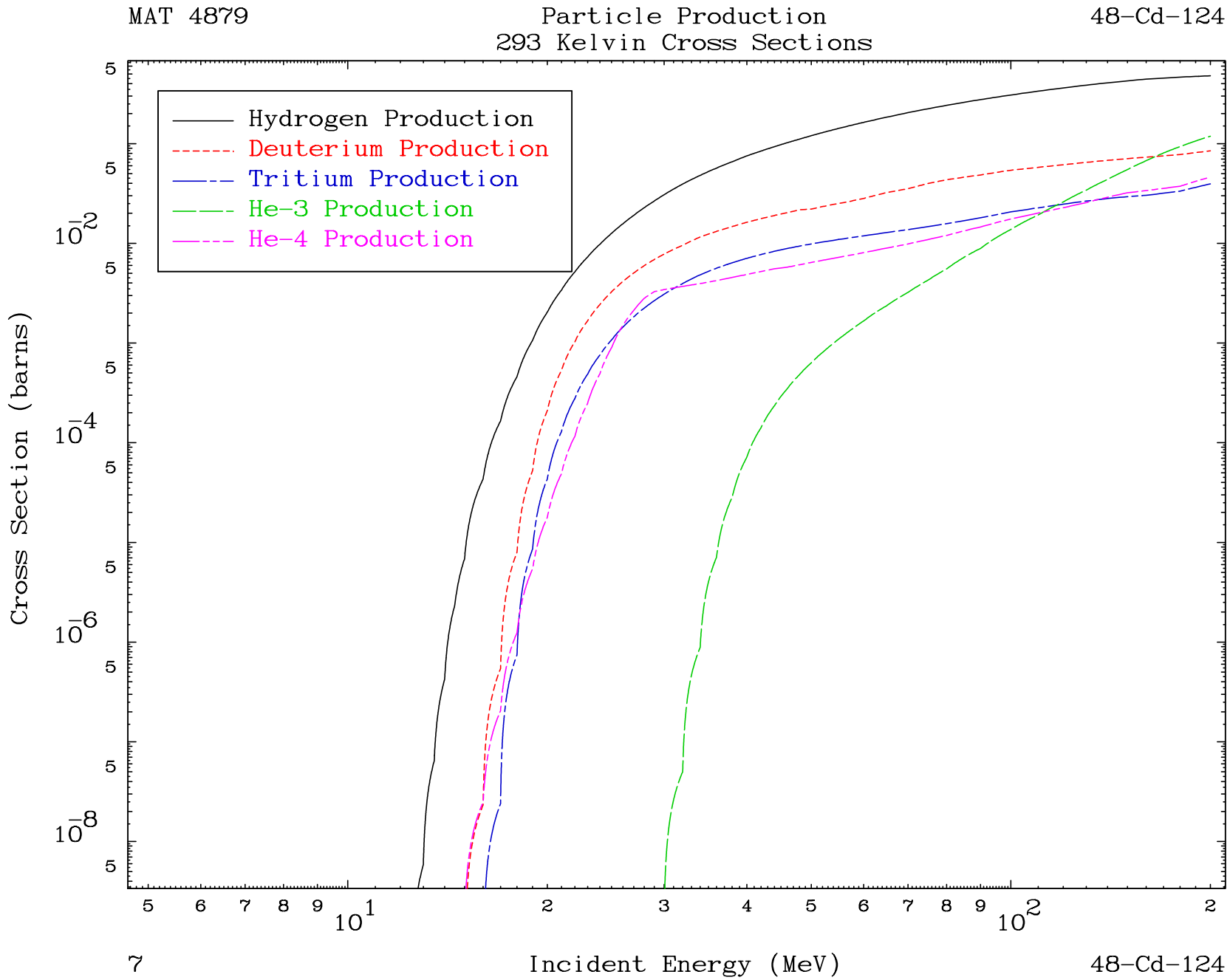

MAT 4879
Neutron Absorption
293 Kelvin Cross Sections
48-Cd-124
Cross Section (barns)
Incident Energy (MeV)
(n,n') t
(n,4n)
(n,2n) p
(n,3n) p
(n,γ)
(n,p)
(n,d)
3
48-Cd-124

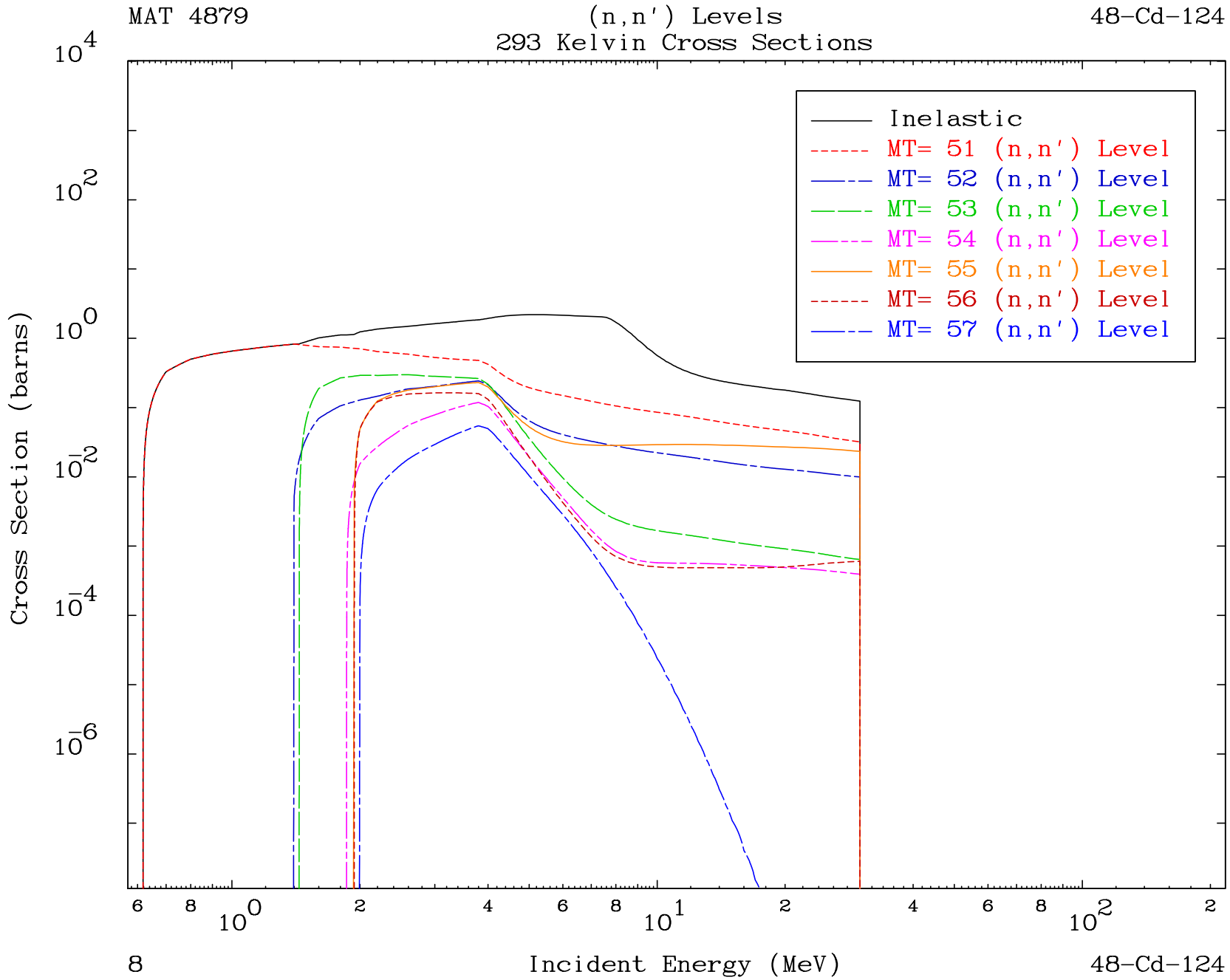

MAT 4879
Neutron Absorption
293 Kelvin Cross Sections
48-Cd-124
(n,He-3)
(n,α)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
Cross Section (barns)
Incident Energy (MeV)
4
48-Cd-124

Charged Particle
293 Kelvin Cross Sections

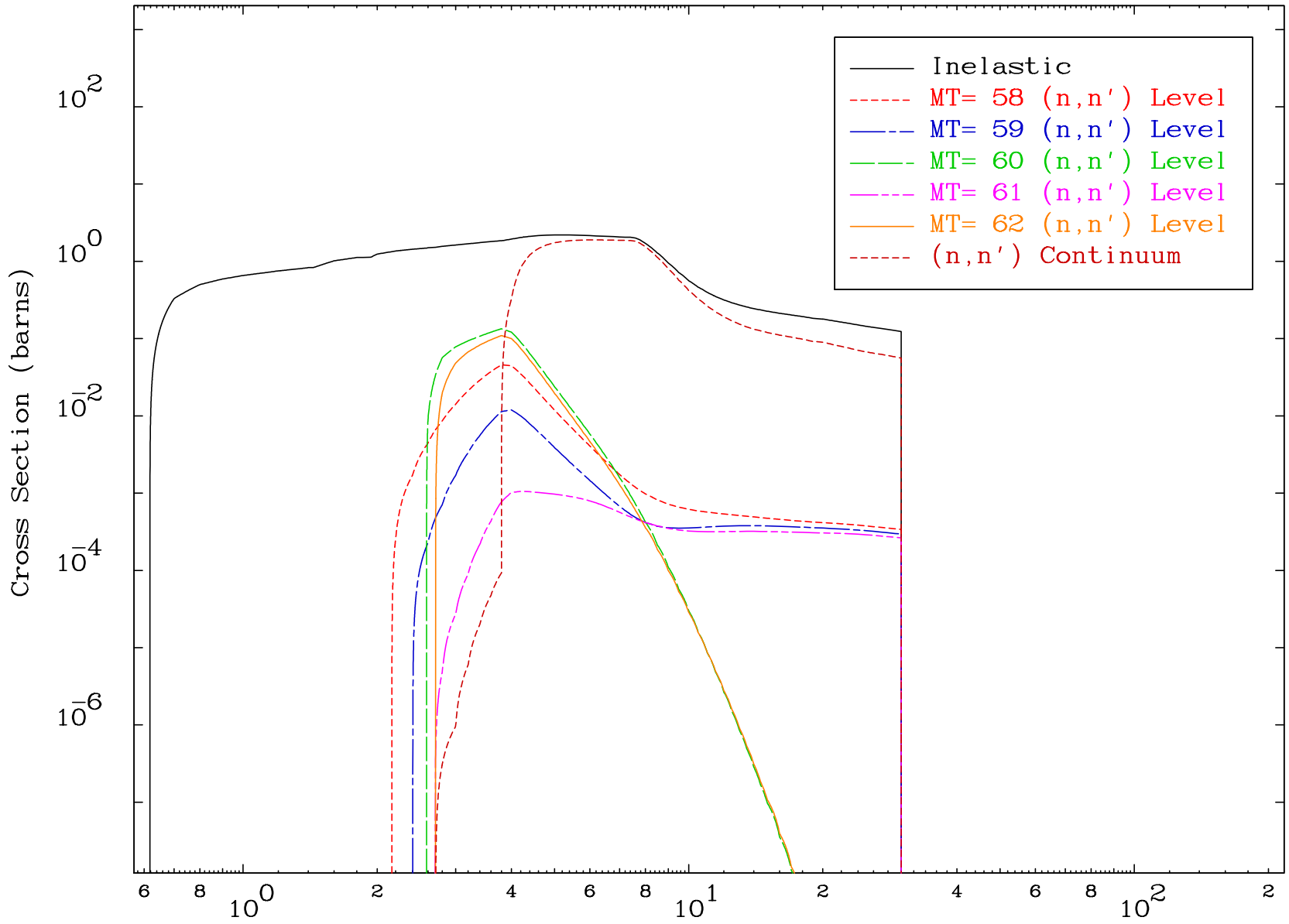


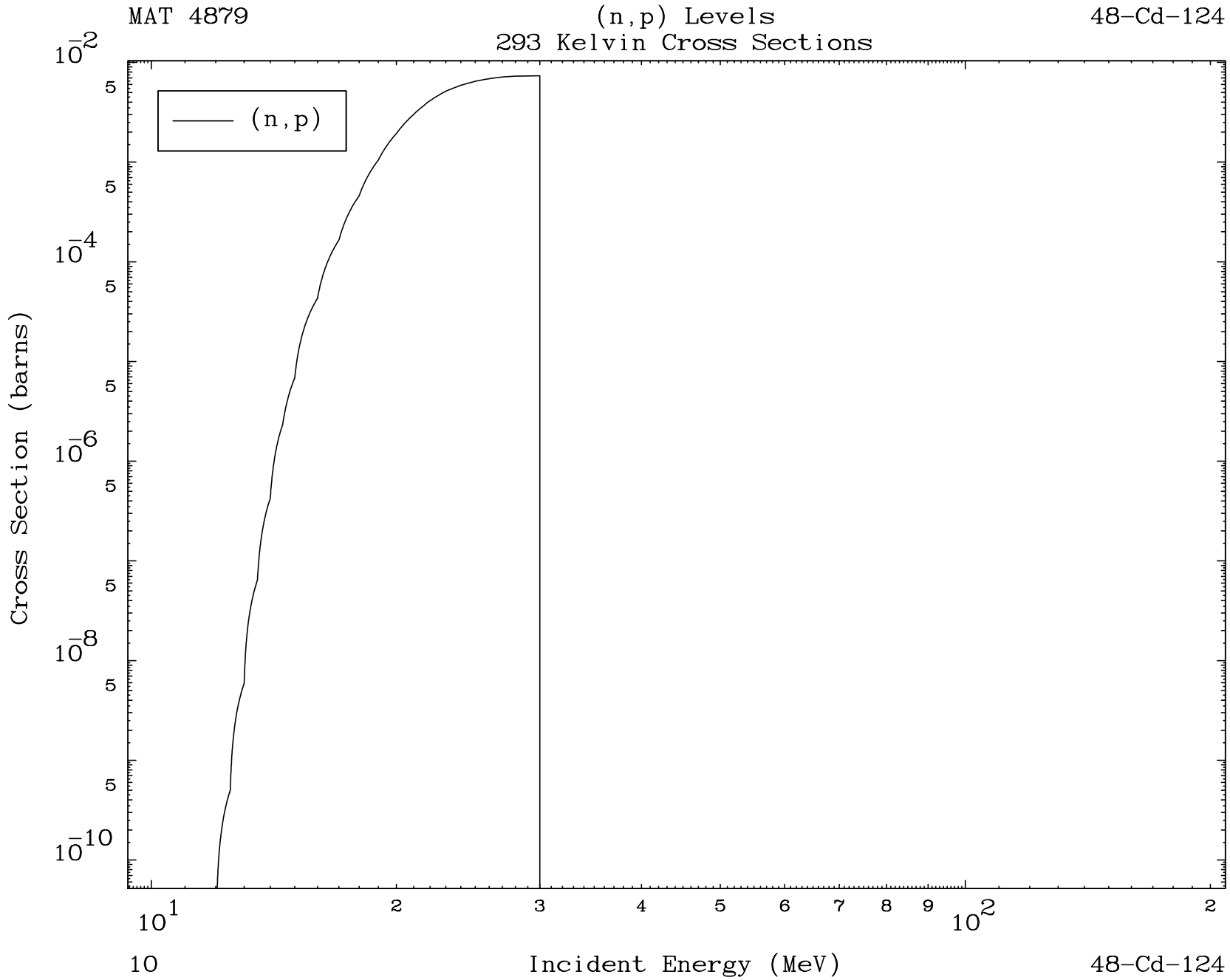

MAT 4879
Charged Particle
293 Kelvin Cross Sections
48-Cd-124
(n,n') α
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
Cross Section (barns)
Incident Energy (MeV)
6
48-Cd-124


MAT 4879
Particle Production
293 Kelvin Cross Sections
48-Cd-124
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
48-Cd-124

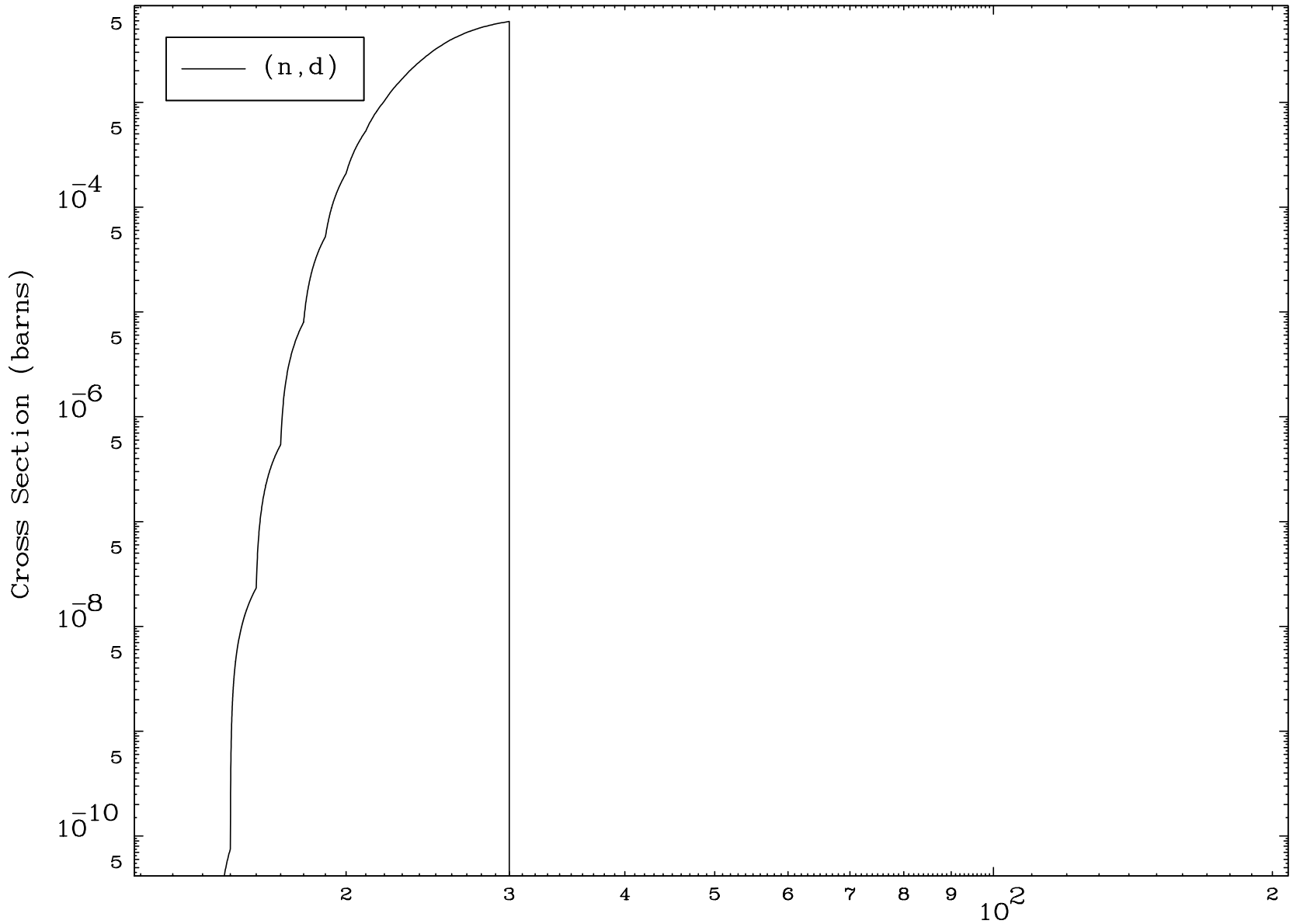

MAT 4879
(n,n') Levels
293 Kelvin Cross Sections
48-Cd-124
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
8
48-Cd-124

(n,n') Levels
293 Kelvin Cross Sections



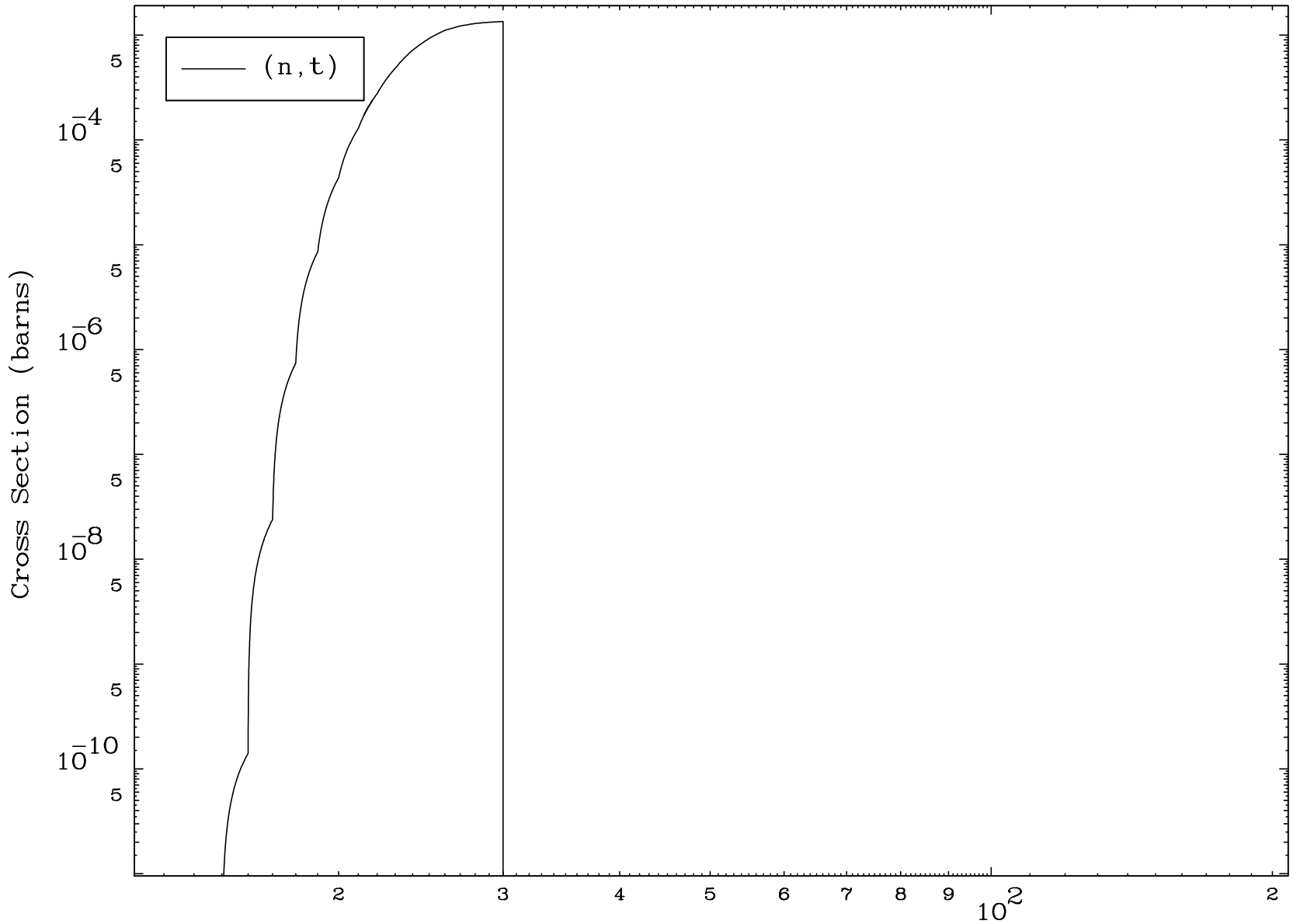

MAT 4879
(n,p) Levels
293 Kelvin Cross Sections
48-Cd-124
(n,p)
Cross Section (barns)
Incident Energy (MeV)
48-Cd-124

(n,d) Levels
293 Kelvin Cross Sections



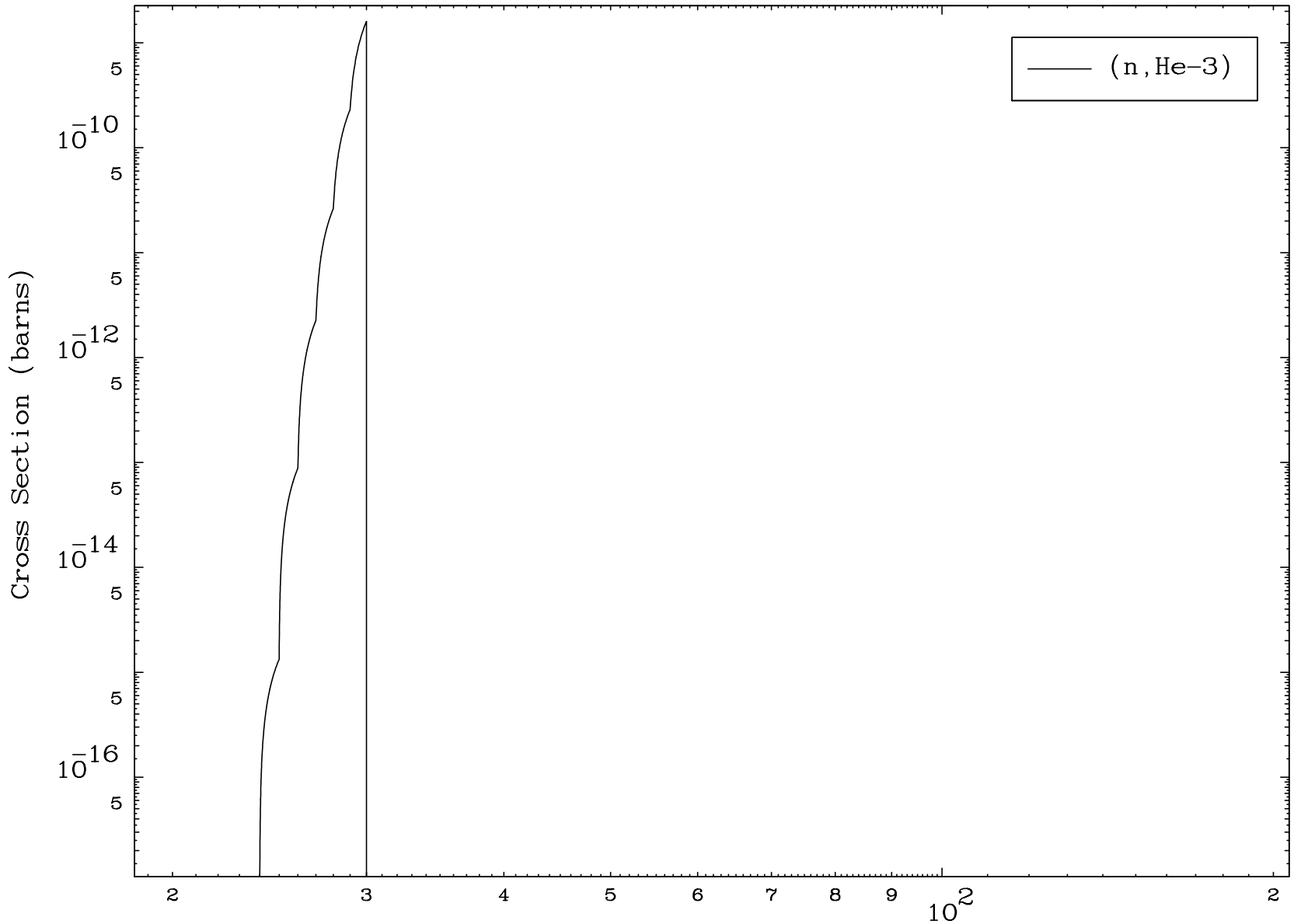
Incident Energy (MeV)

(n,t) Levels
293 Kelvin Cross Sections

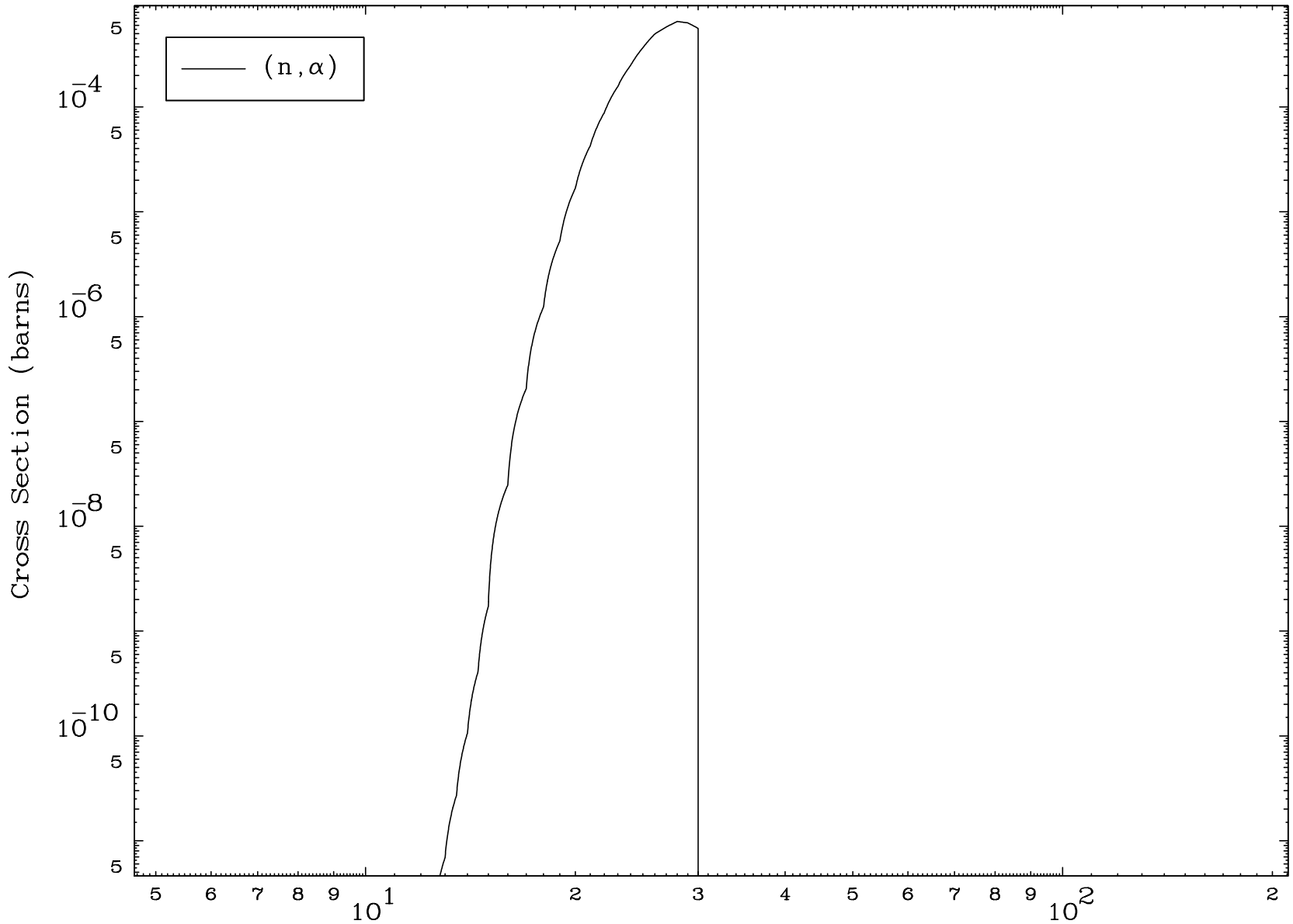


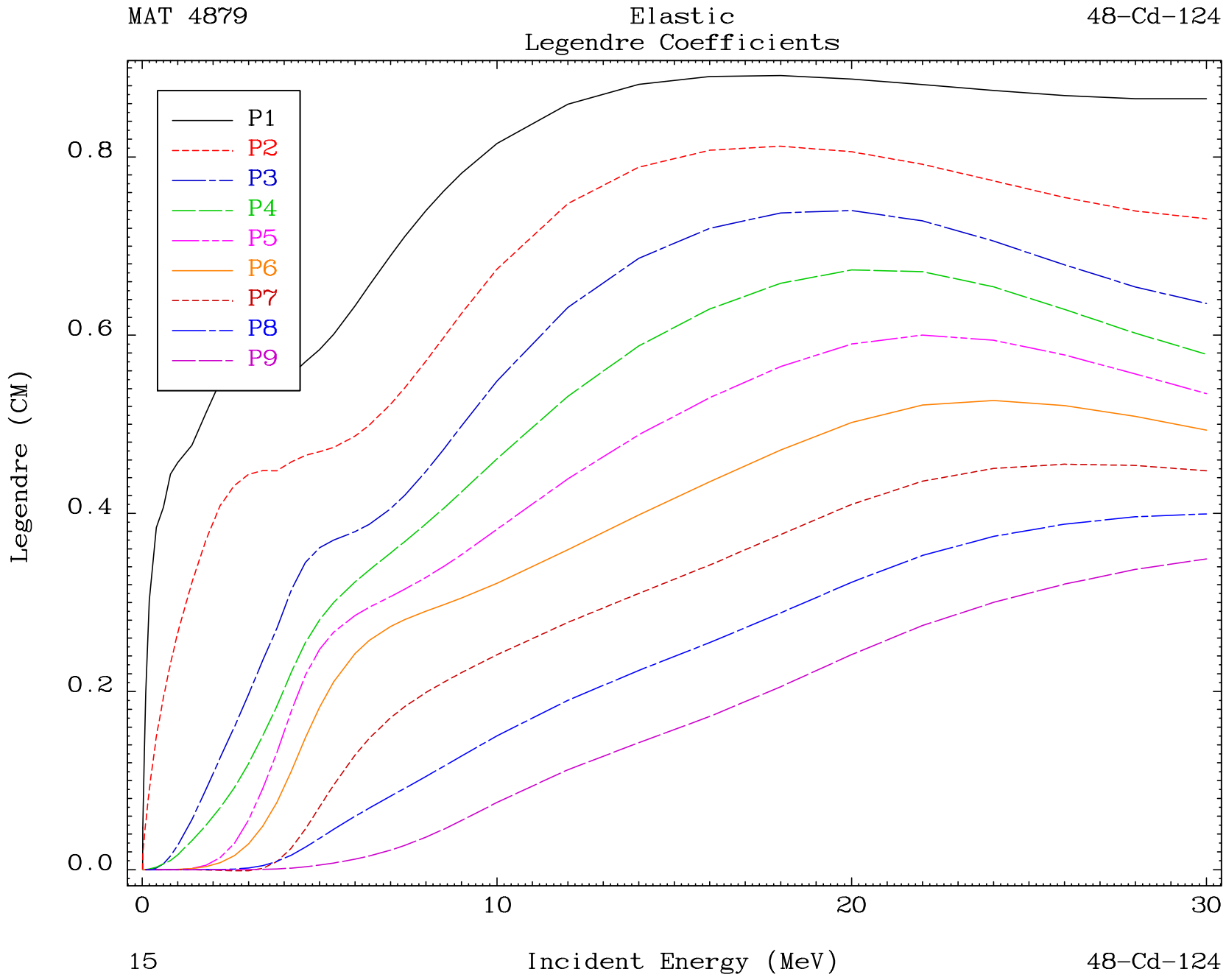
Incident Energy (MeV)

(n,He3) Levels
293 Kelvin Cross Sections



(n,α) Levels
293 Kelvin Cross Sections

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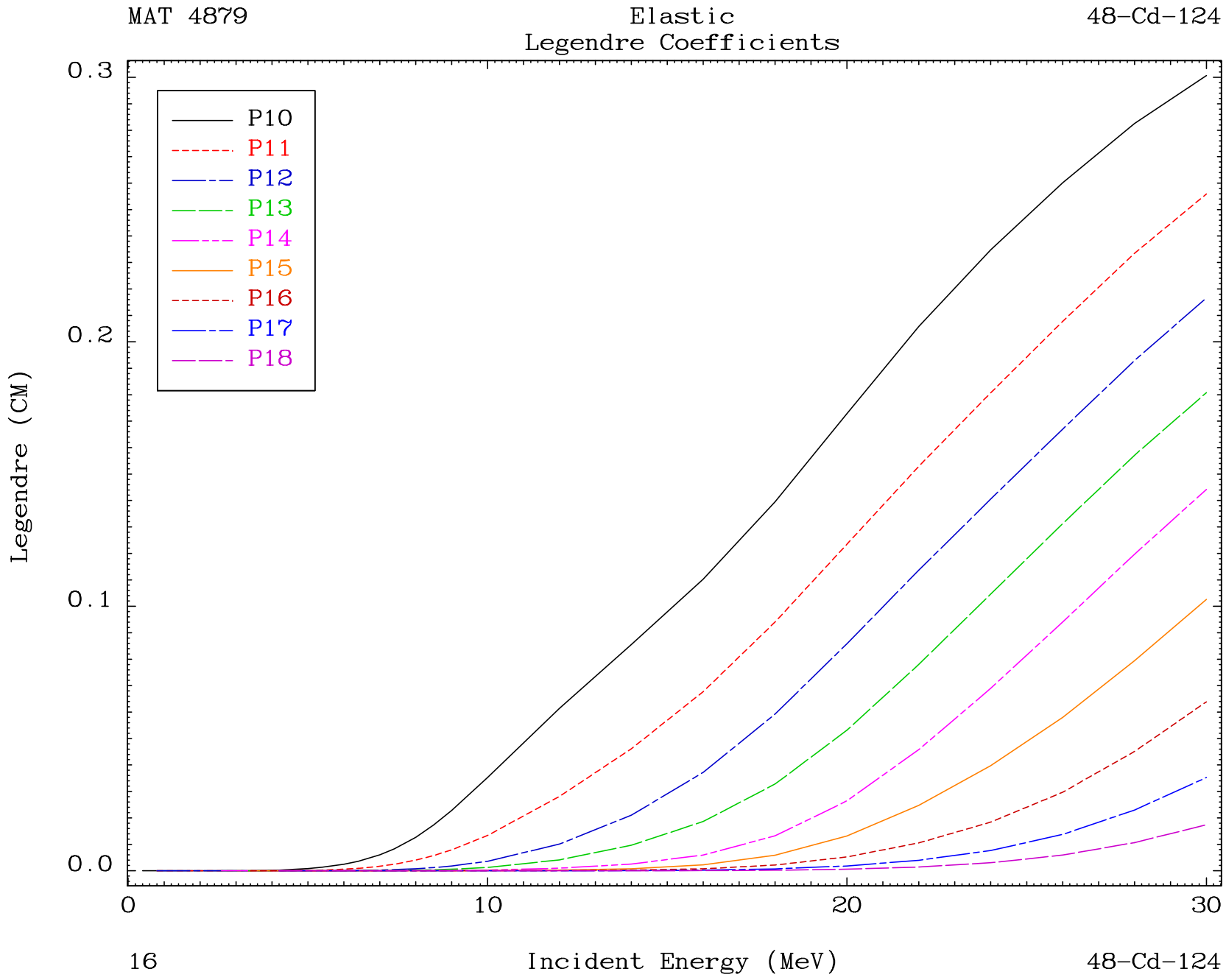
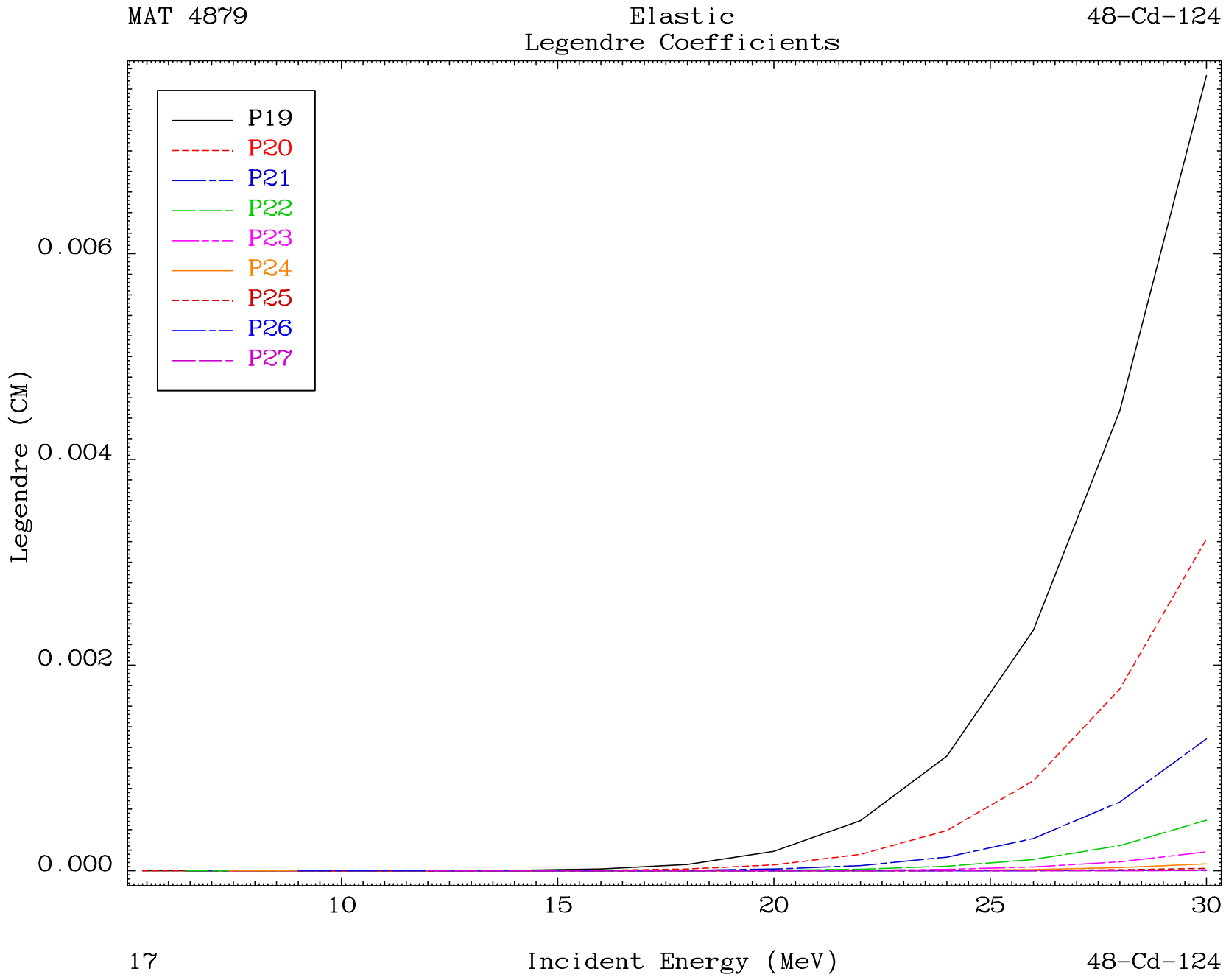
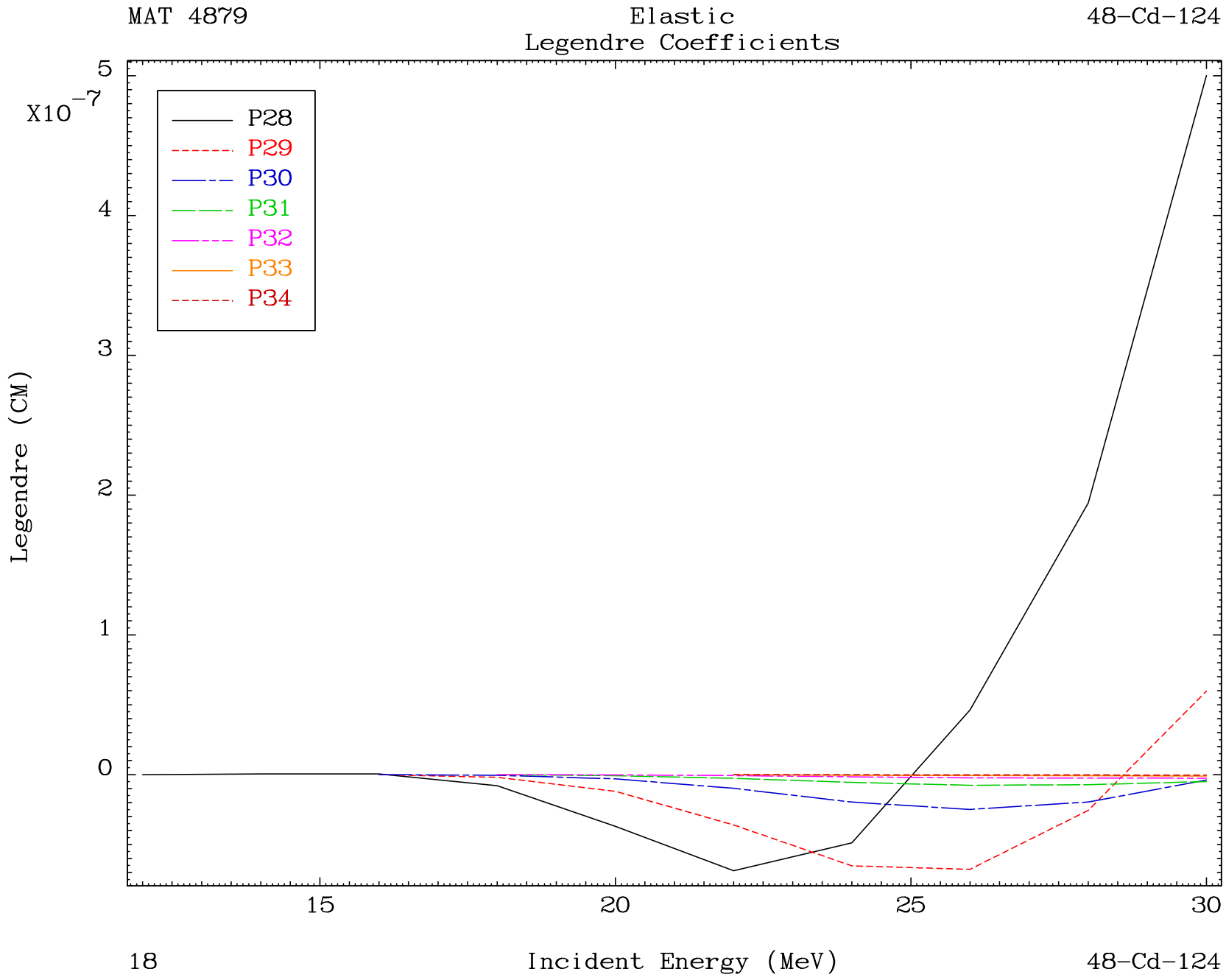
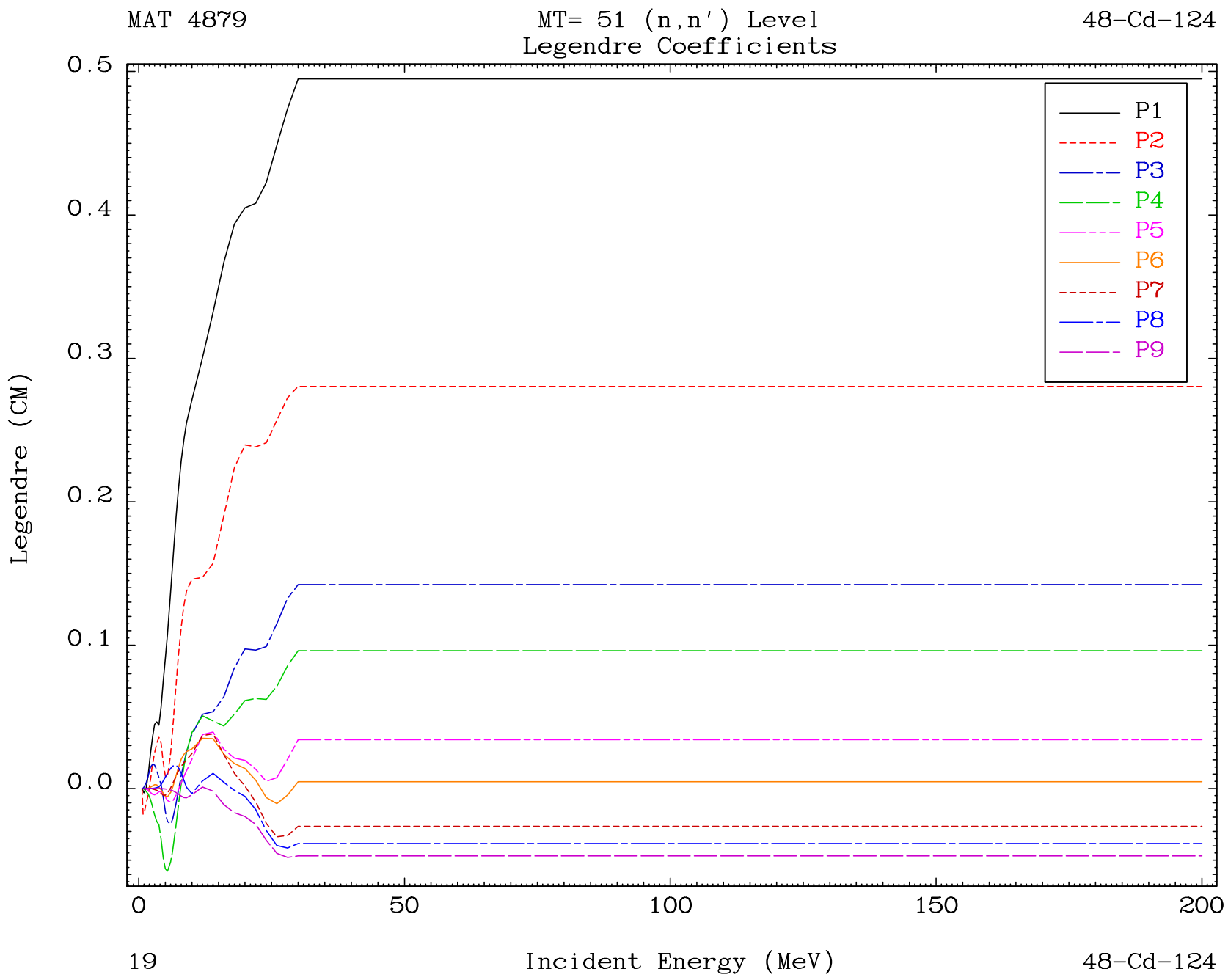
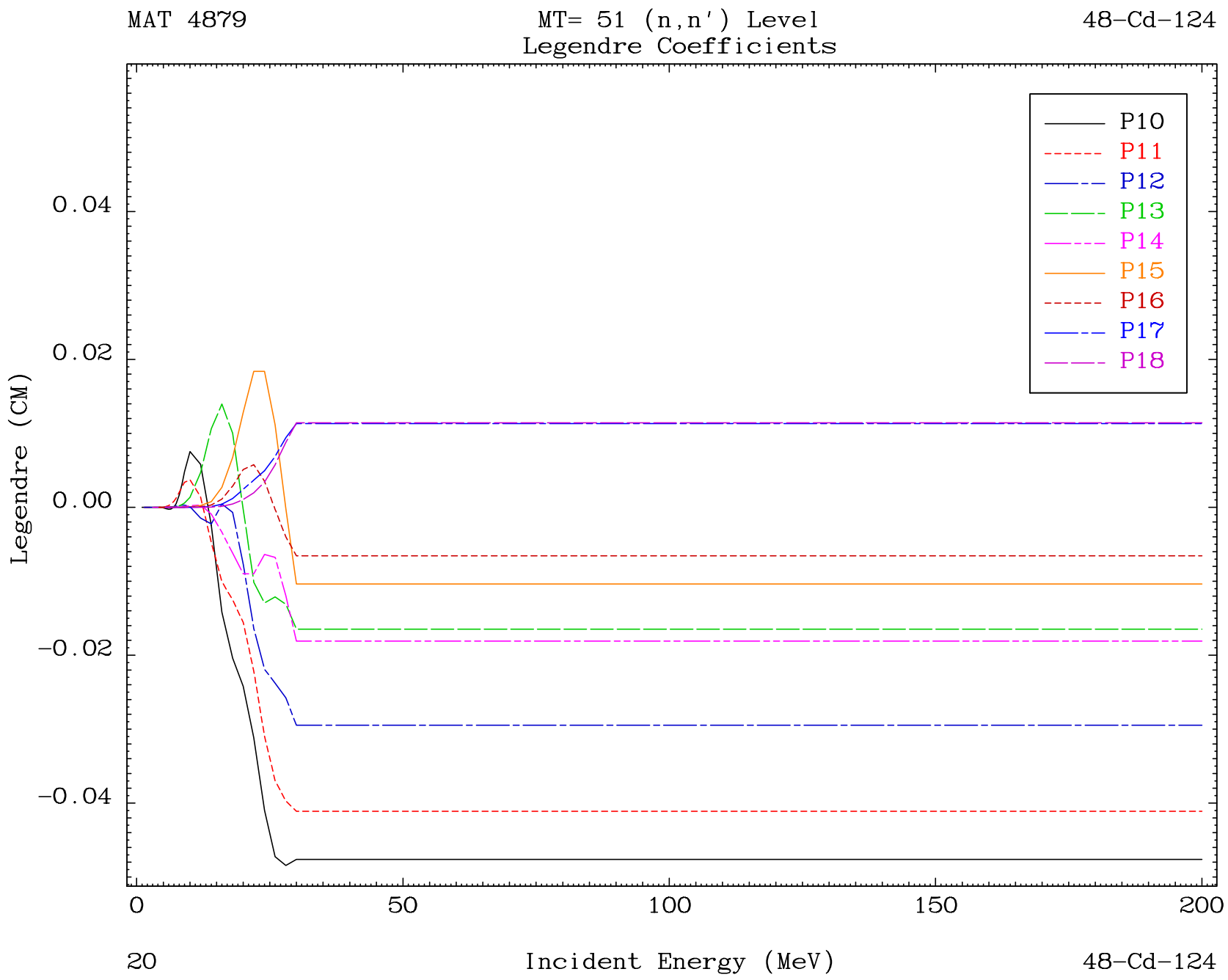
Elastic
Legendre Coefficients
48-Cd-124
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
15
Incident Energy (MeV)
48-Cd-124

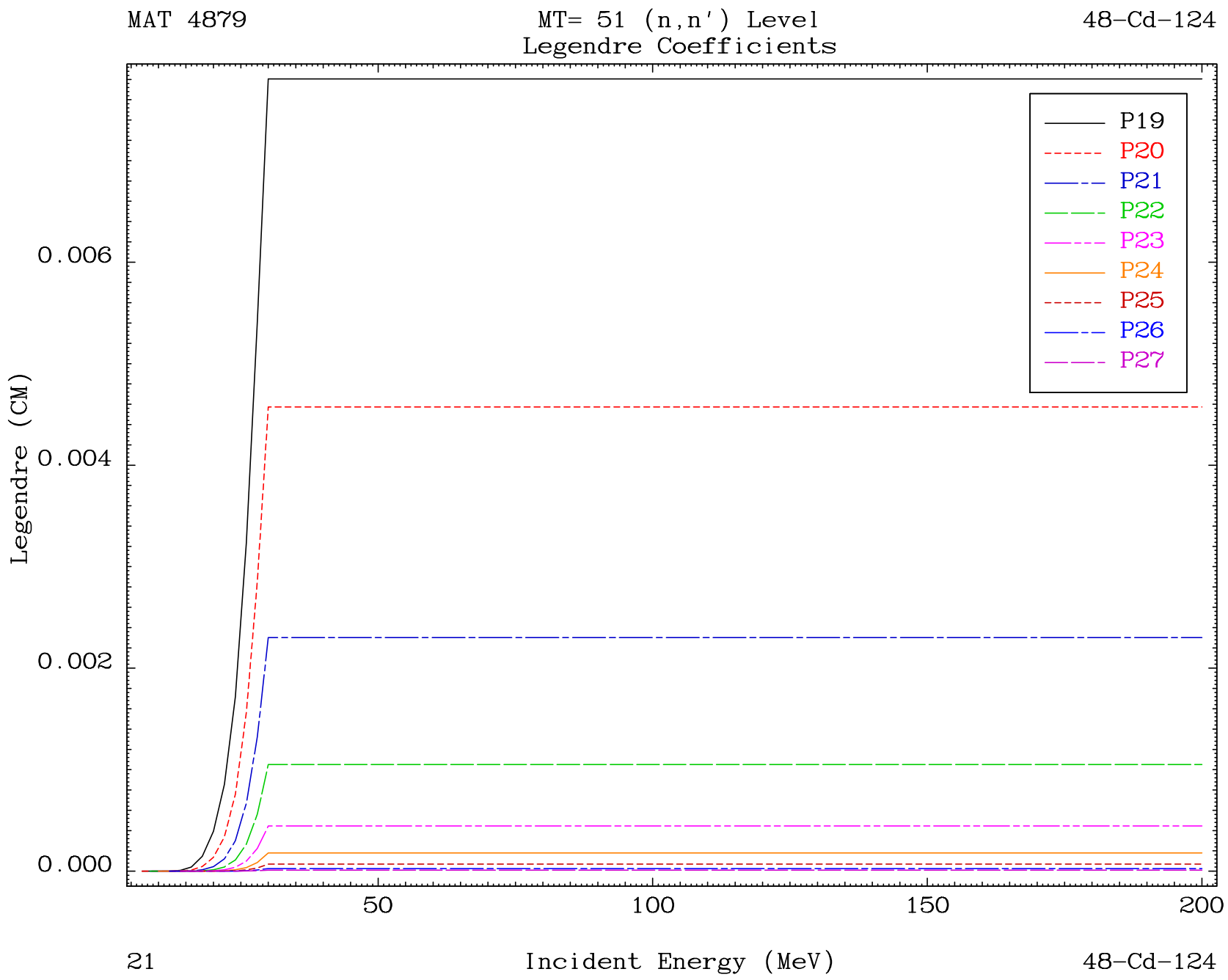

MAT 4879
Elastic
Legendre Coefficients
48-Cd-124
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.3
0.2
0.1
0.0
0
10
20
30
16
Incident Energy (MeV)
48-Cd-124

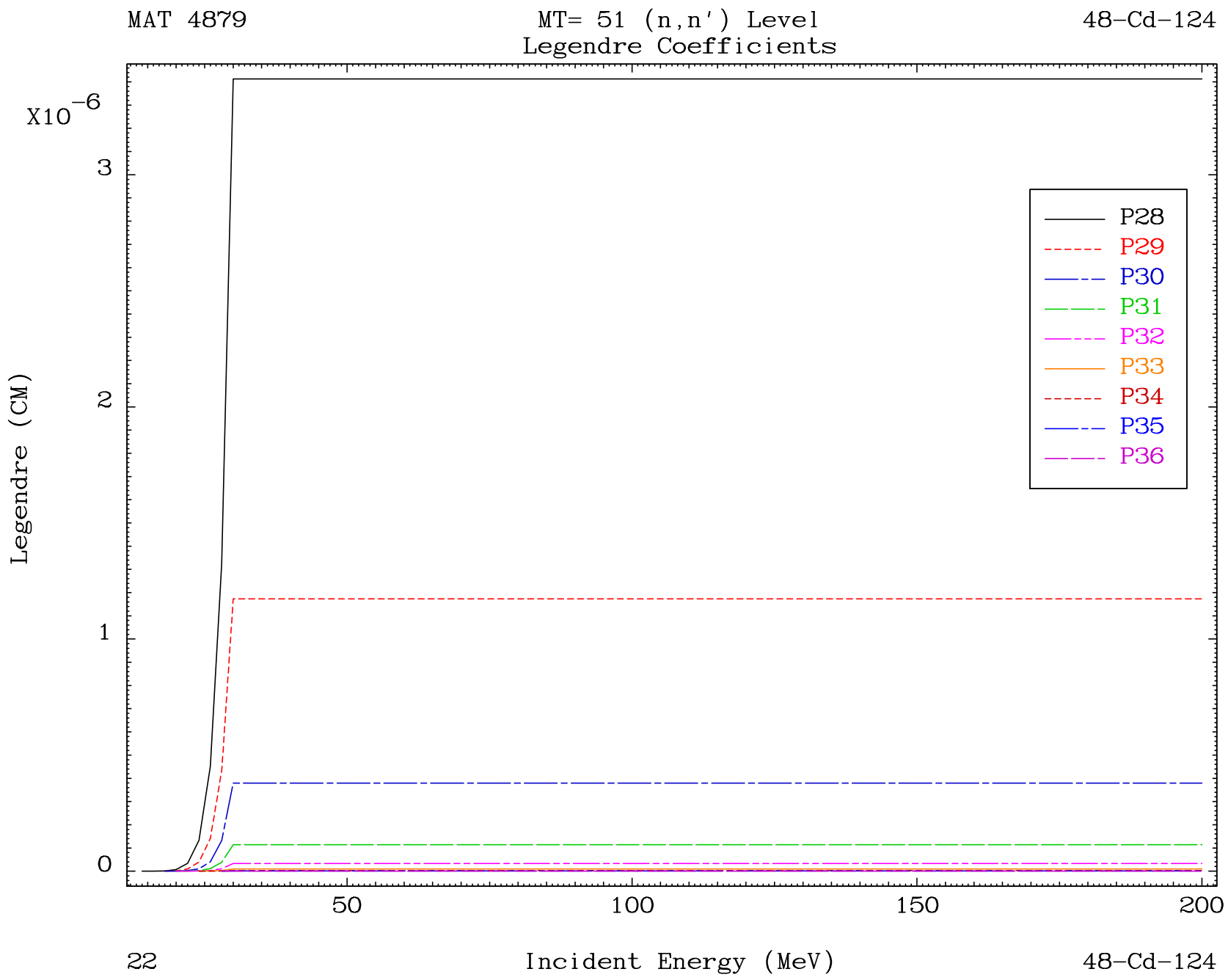

MAT 4879
Elastic
Legendre Coefficients
48-Cd-124
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.006
0.004
0.002
0.000
Legendre (CM)
10
15
20
25
30
17
Incident Energy (MeV)
48-Cd-124

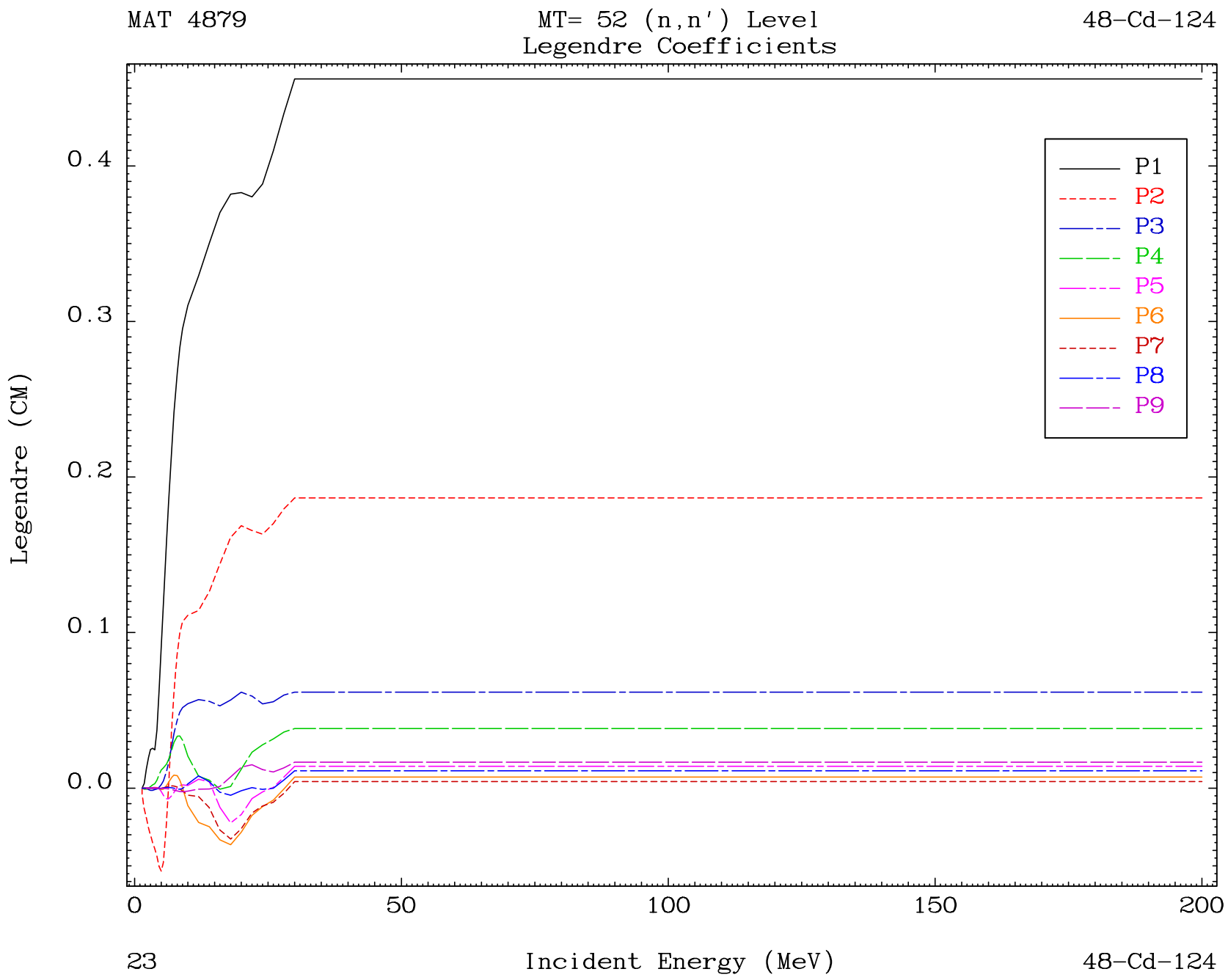

MAT 4879
Elastic
Legendre Coefficients
48-Cd-124
X10^-7
5
4
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
15
20
25
30
18
Incident Energy (MeV)
48-Cd-124

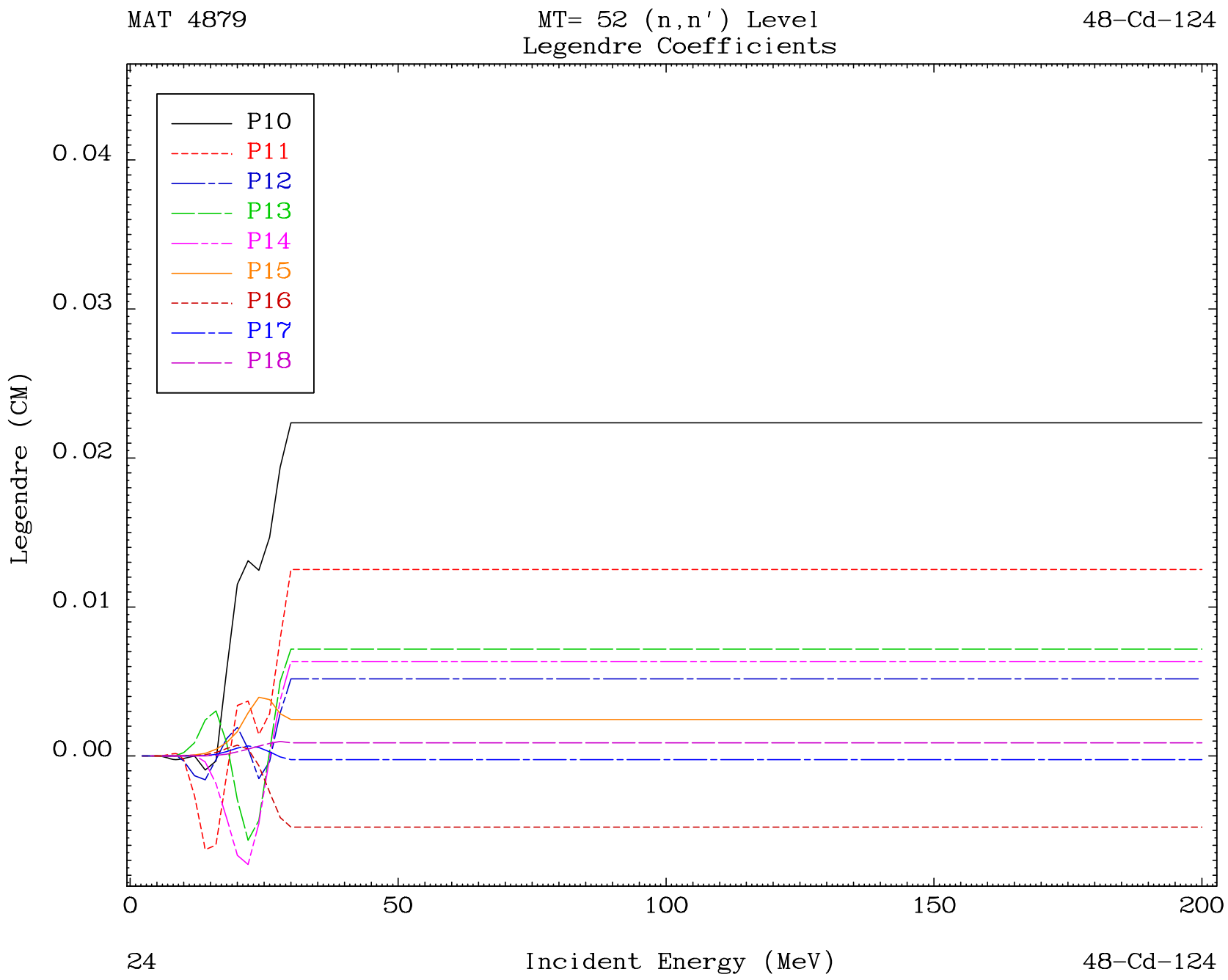

MAT 4879
MT= 51 (n,n') Level
Legendre Coefficients
48-Cd-124
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
19
Incident Energy (MeV)
48-Cd-124

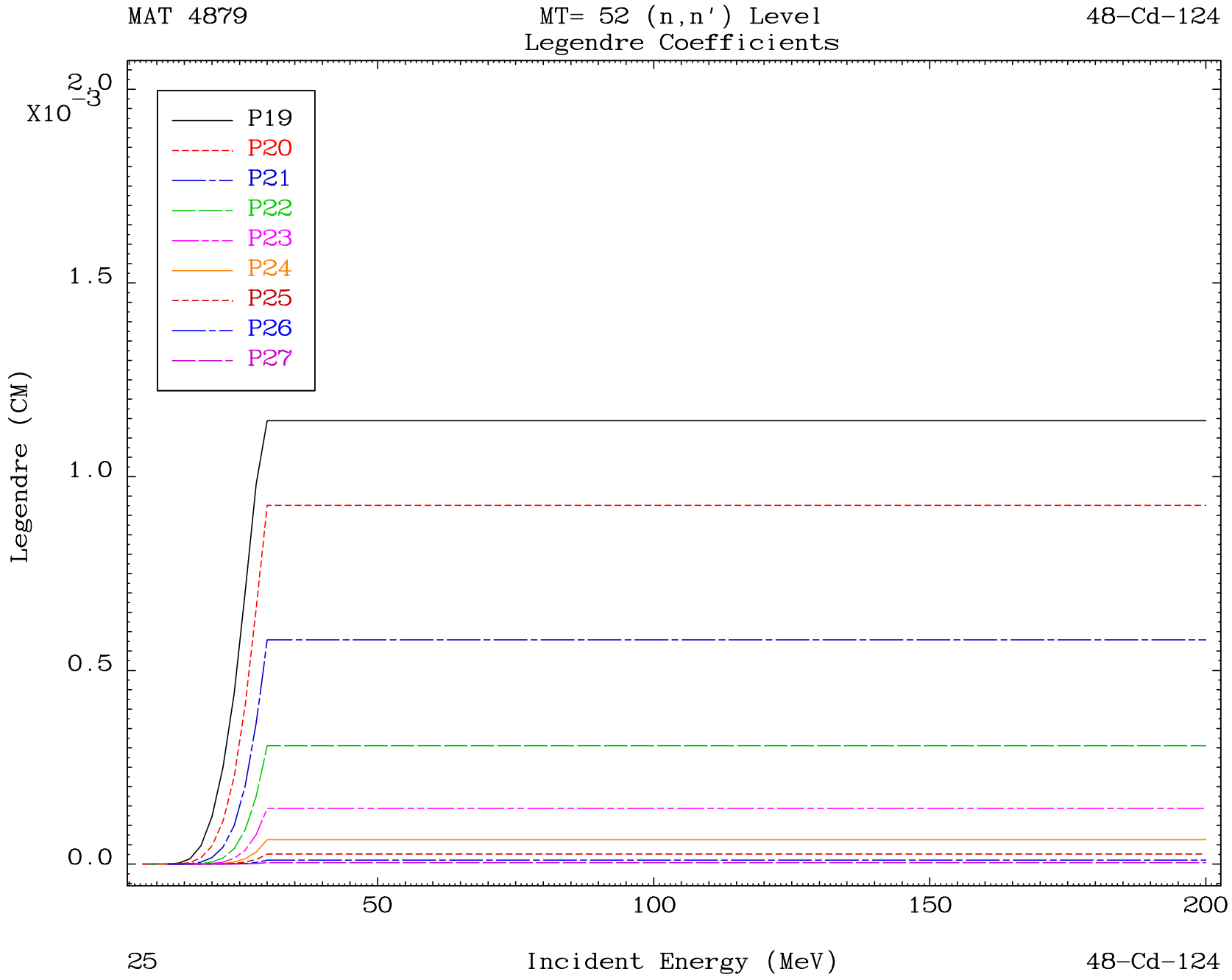

MAT 4879
MT= 51 (n,n') Level
Legendre Coefficients
48-Cd-124
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
20
Incident Energy (MeV)
48-Cd-124

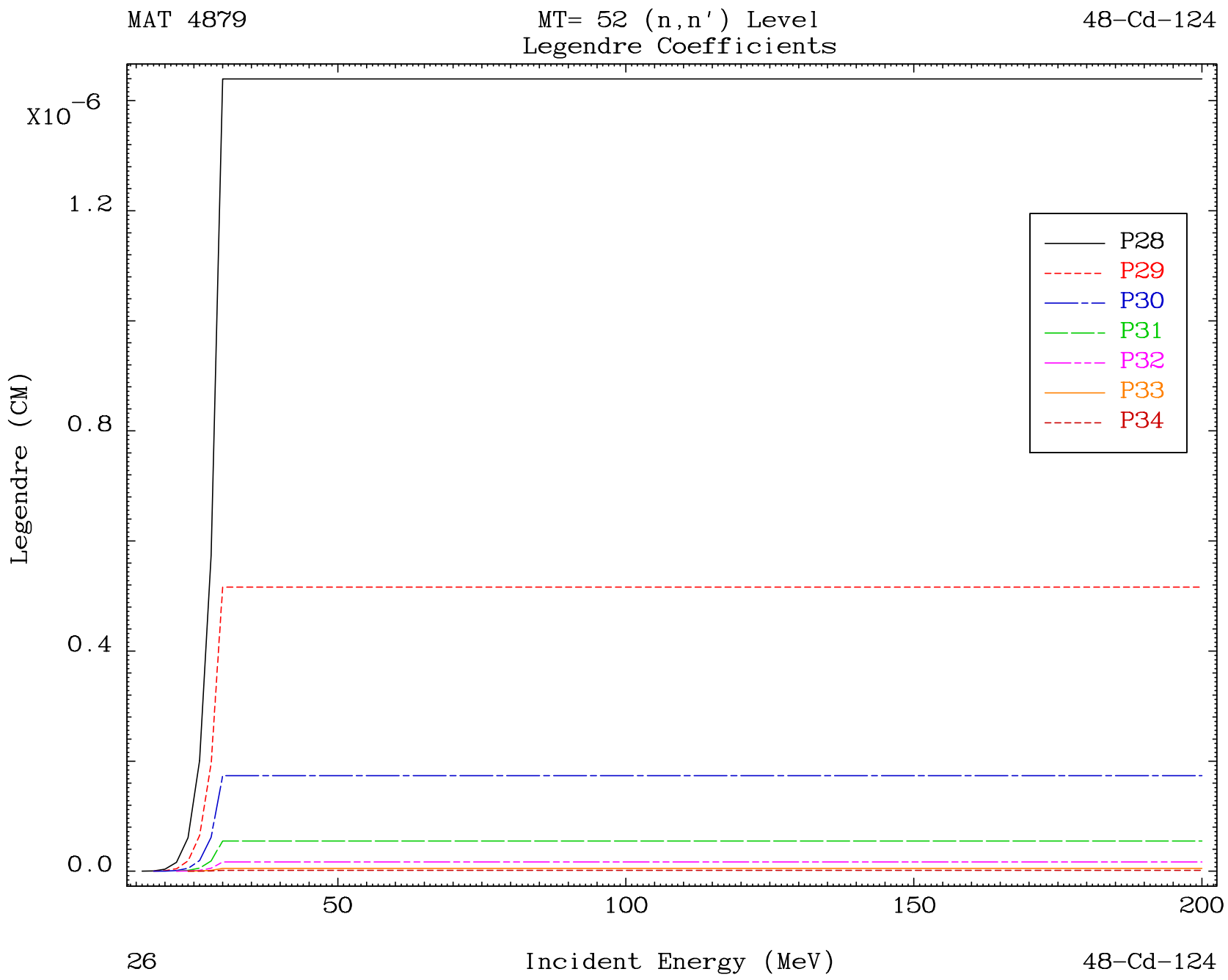

MAT 4879
MT= 51 (n,n') Level
Legendre Coefficients
48-Cd-124
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.006
0.004
0.002
0.000
Legendre (CM)
50
100
150
200
21
Incident Energy (MeV)
48-Cd-124

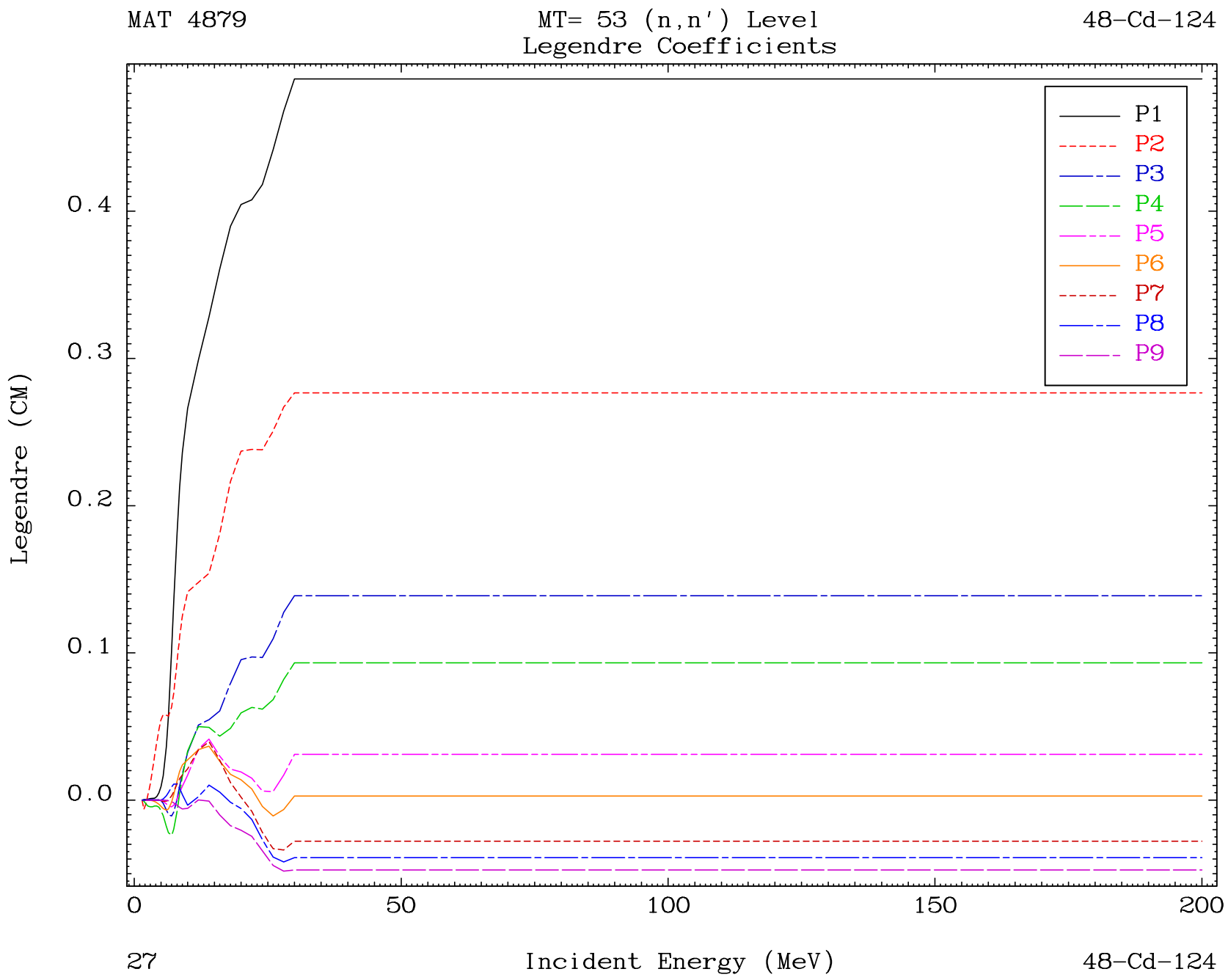

MAT 4879
MT= 51 (n,n') Level
Legendre Coefficients
48-Cd-124
X10^-6
3
2
1
0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
22
48-Cd-124
P28
P29
P30
P31
P32
P33
P34
P35
P36

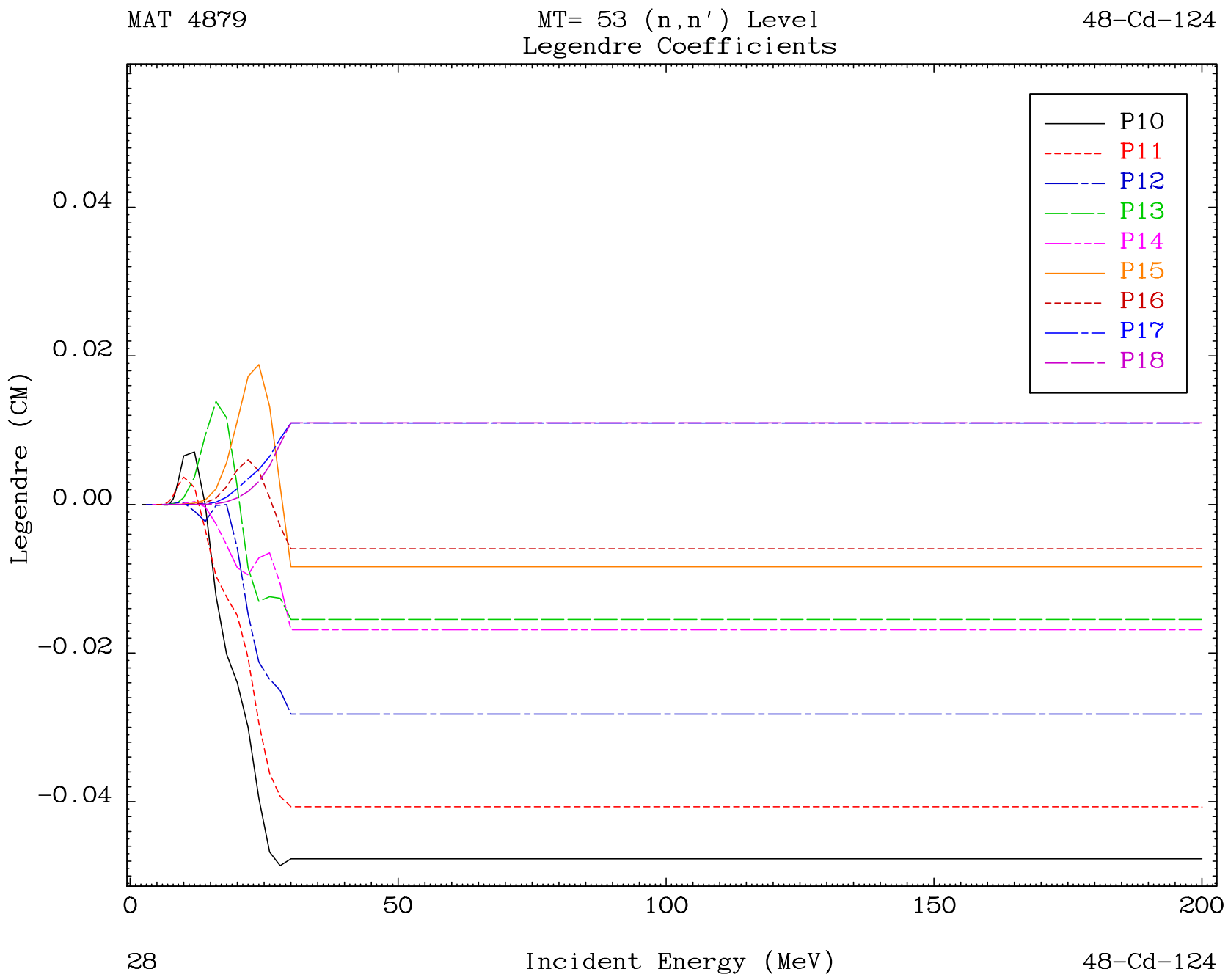

MAT 4879
MT= 52 (n,n') Level
Legendre Coefficients
48-Cd-124
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
23
Incident Energy (MeV)
48-Cd-124

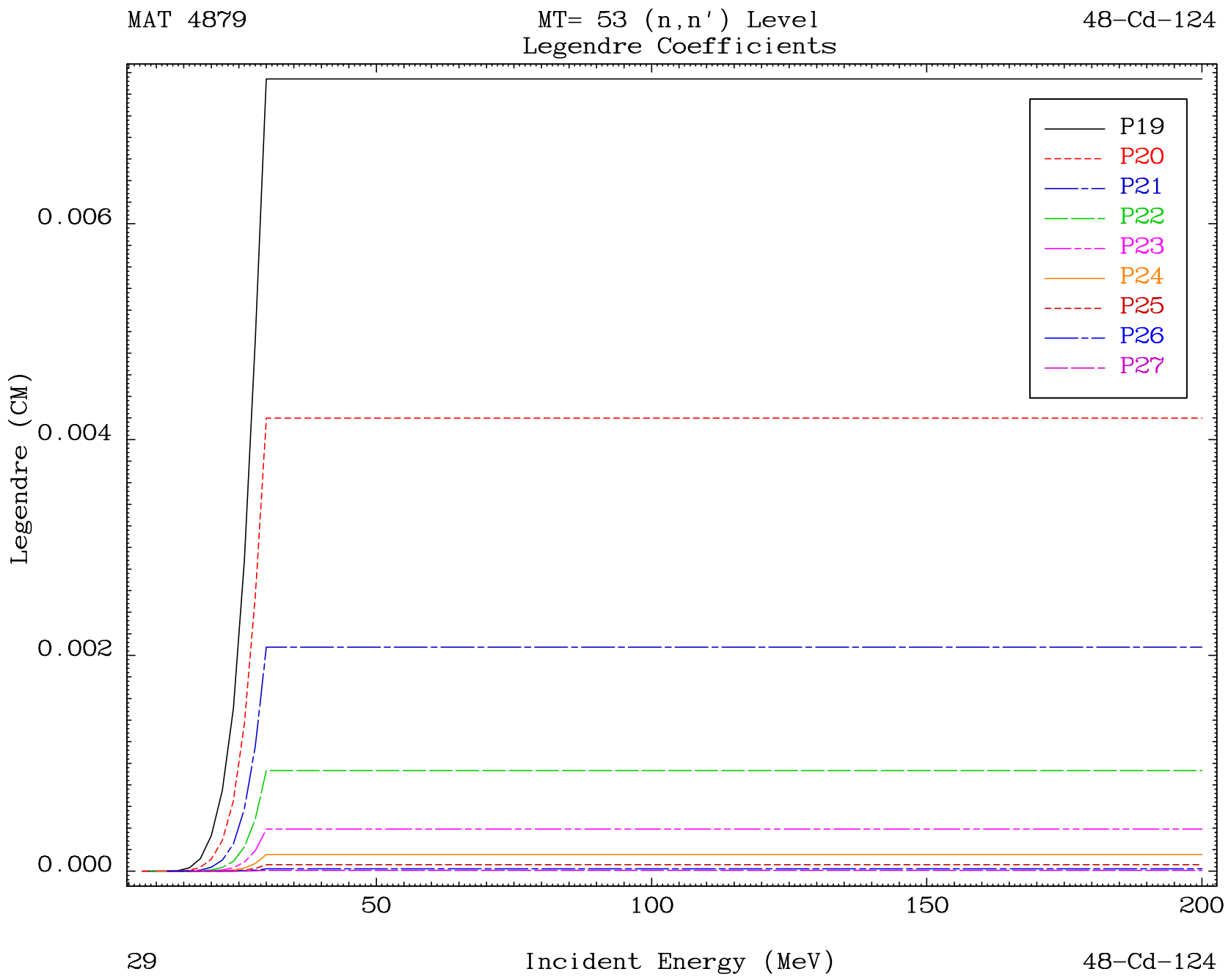

MAT 4879
MT= 52 (n,n') Level
Legendre Coefficients
48-Cd-124
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
24
Incident Energy (MeV)
48-Cd-124

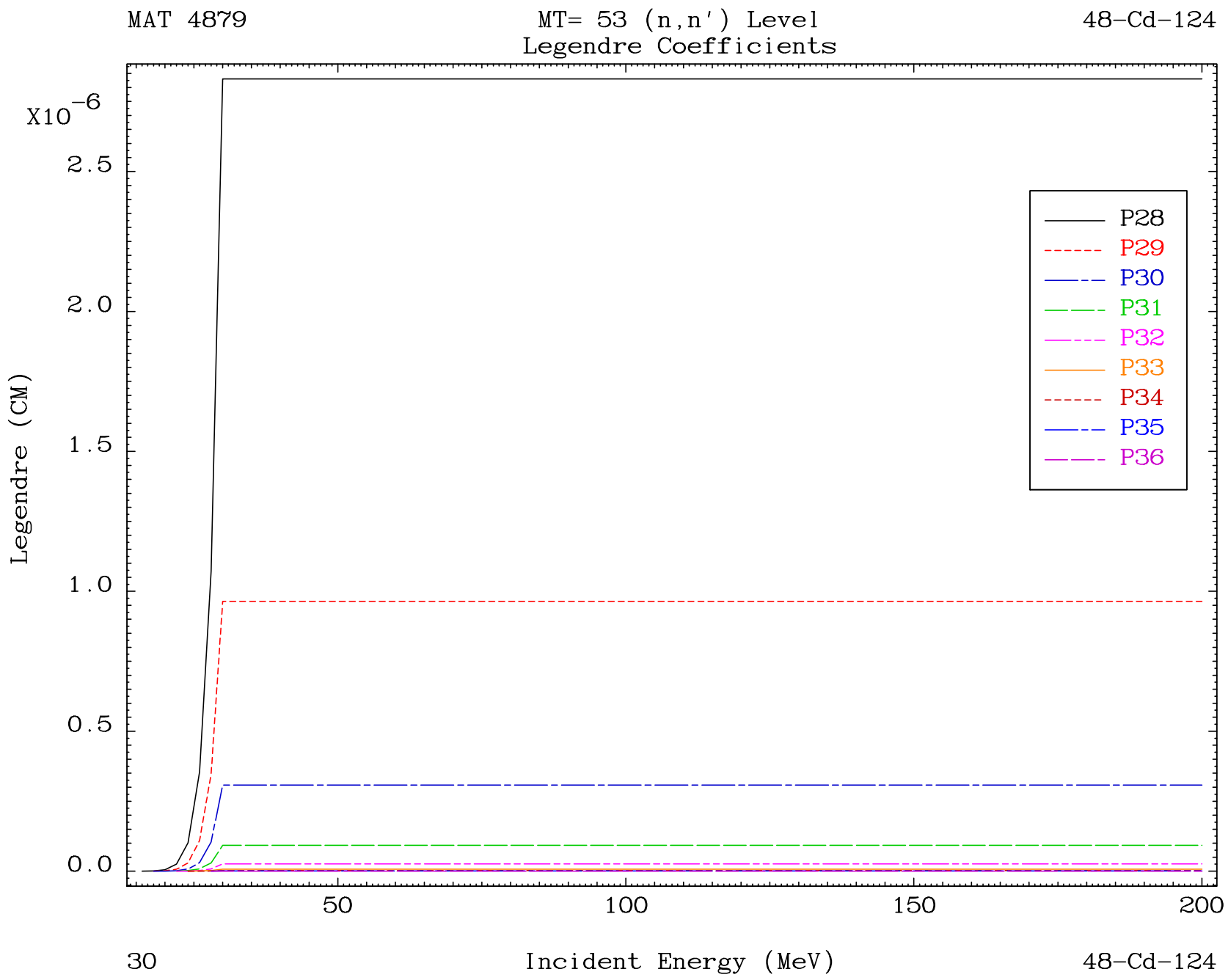

MAT 4879
MT= 52 (n,n') Level
Legendre Coefficients
48-Cd-124
X10^-3
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
25
Incident Energy (MeV)
48-Cd-124

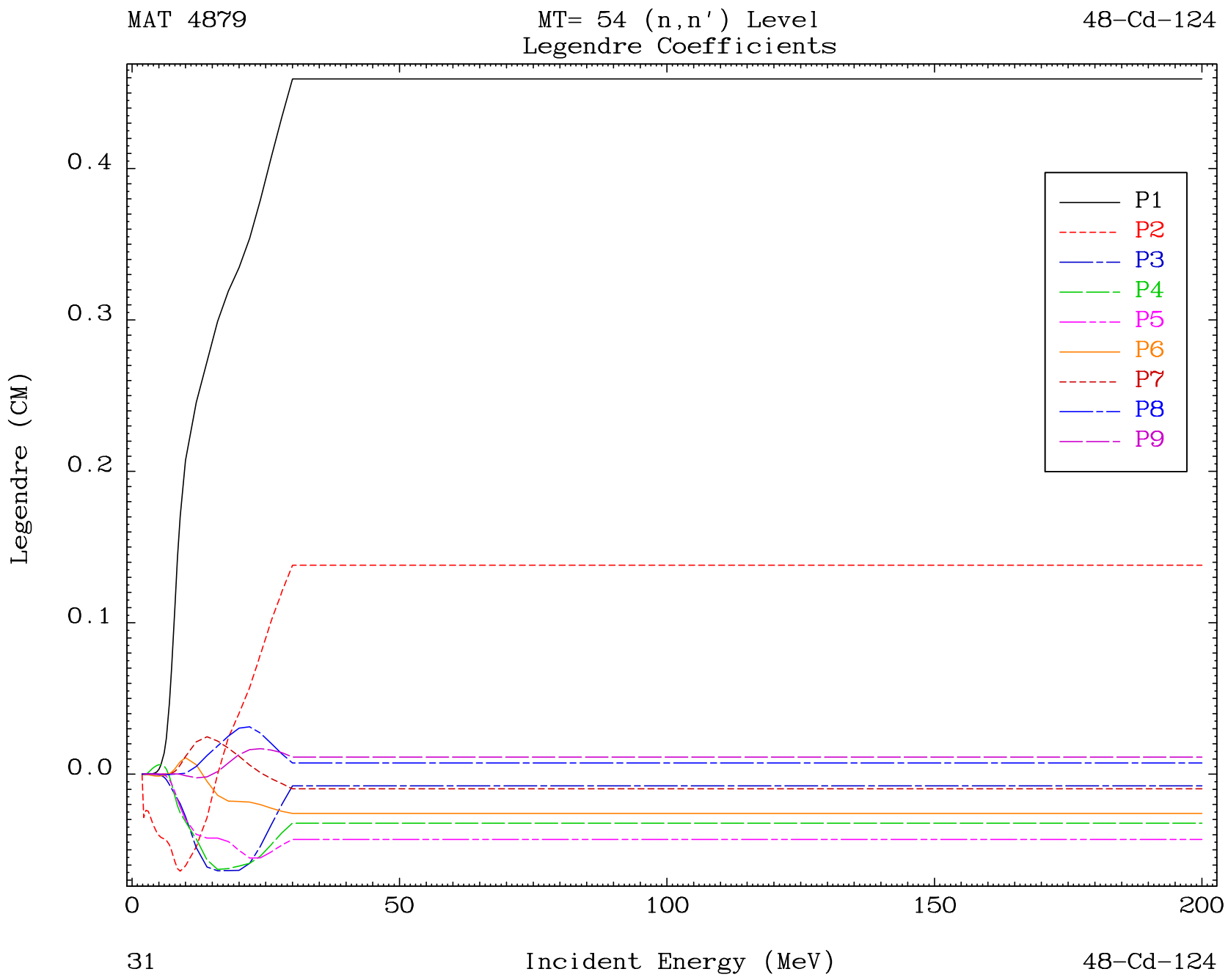

MAT 4879
MT= 52 (n,n') Level
Legendre Coefficients
48-Cd-124
X10^-6
1.2
0.8
0.4
0.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
26
48-Cd-124
P28
P29
P30
P31
P32
P33
P34

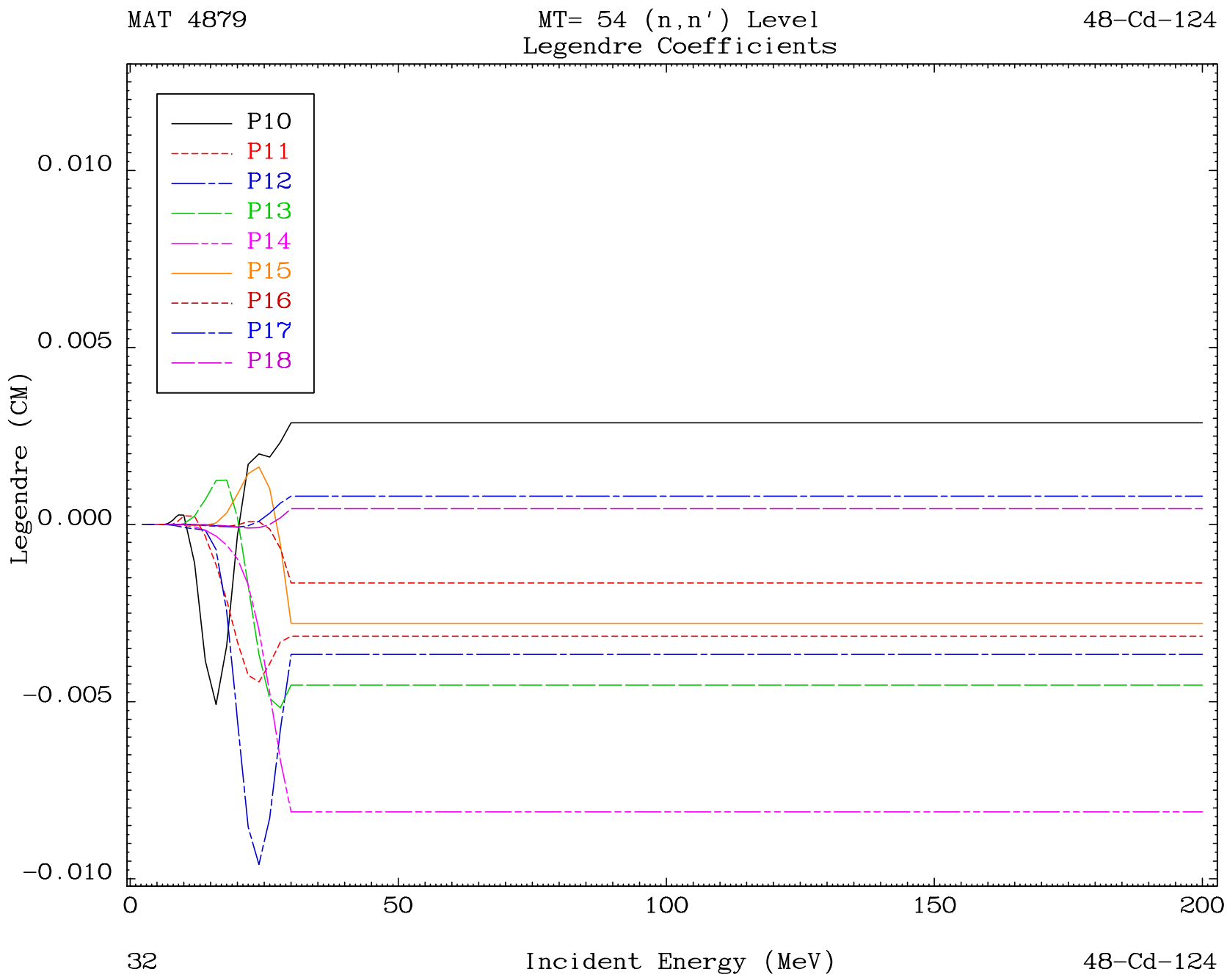

MAT 4879
MT= 53 (n,n') Level
Legendre Coefficients
48-Cd-124
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
27
Incident Energy (MeV)
48-Cd-124

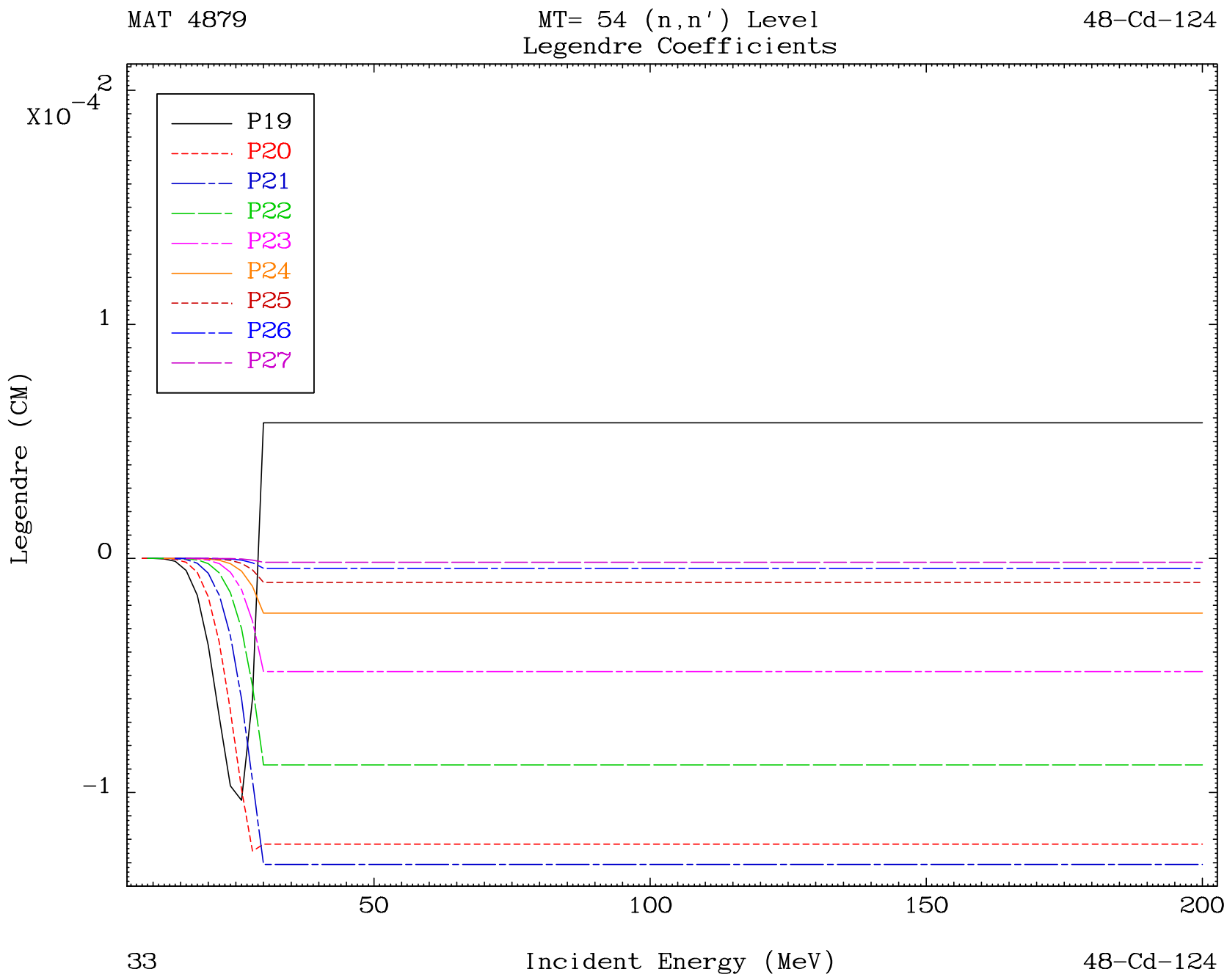

MAT 4879
MT= 53 (n,n') Level
Legendre Coefficients
48-Cd-124
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
28
Incident Energy (MeV)
48-Cd-124

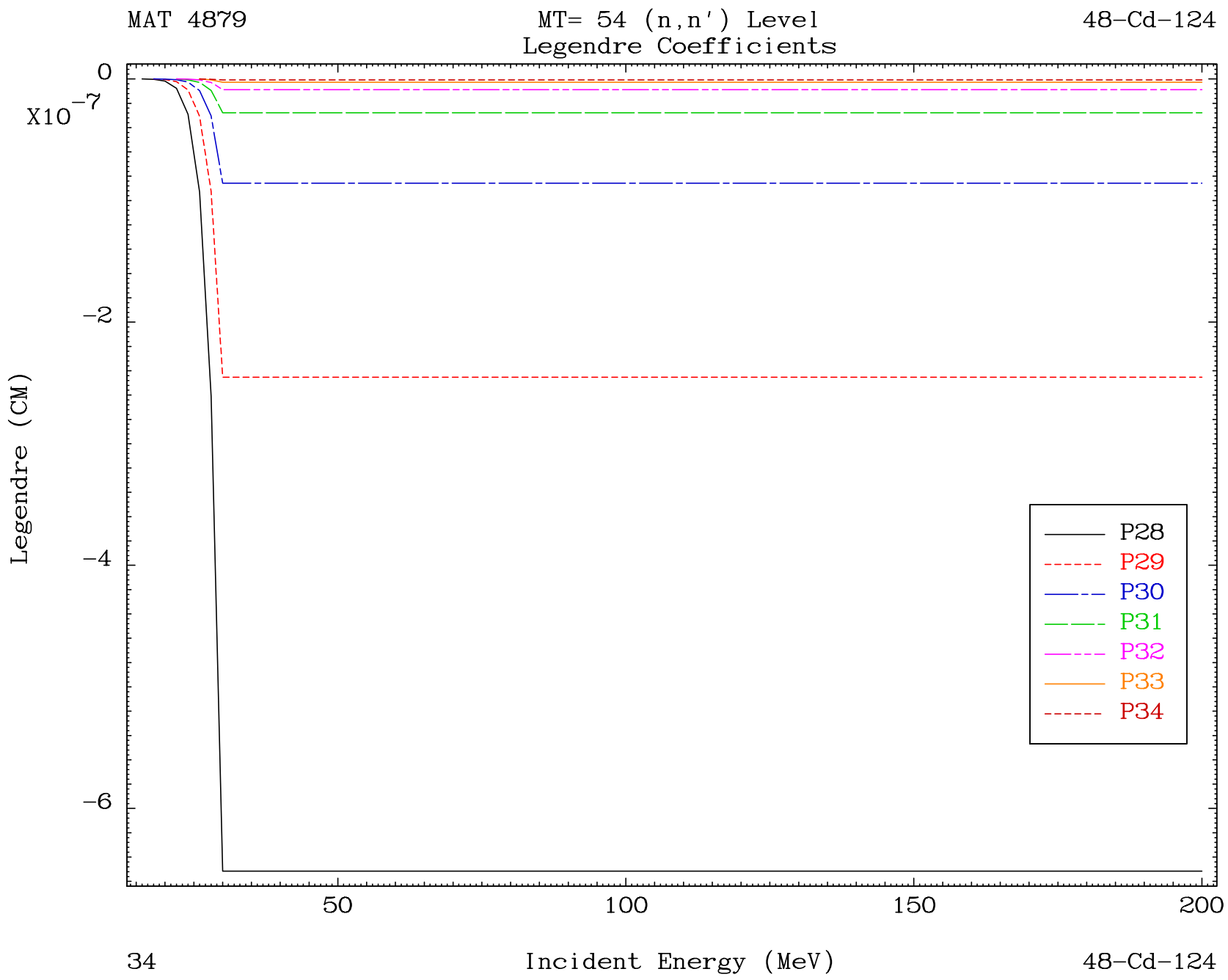

MAT 4879
MT= 53 (n,n') Level
Legendre Coefficients
48-Cd-124
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.006
0.004
0.002
0.000
Legendre (CM)
50
100
150
200
29
Incident Energy (MeV)
48-Cd-124

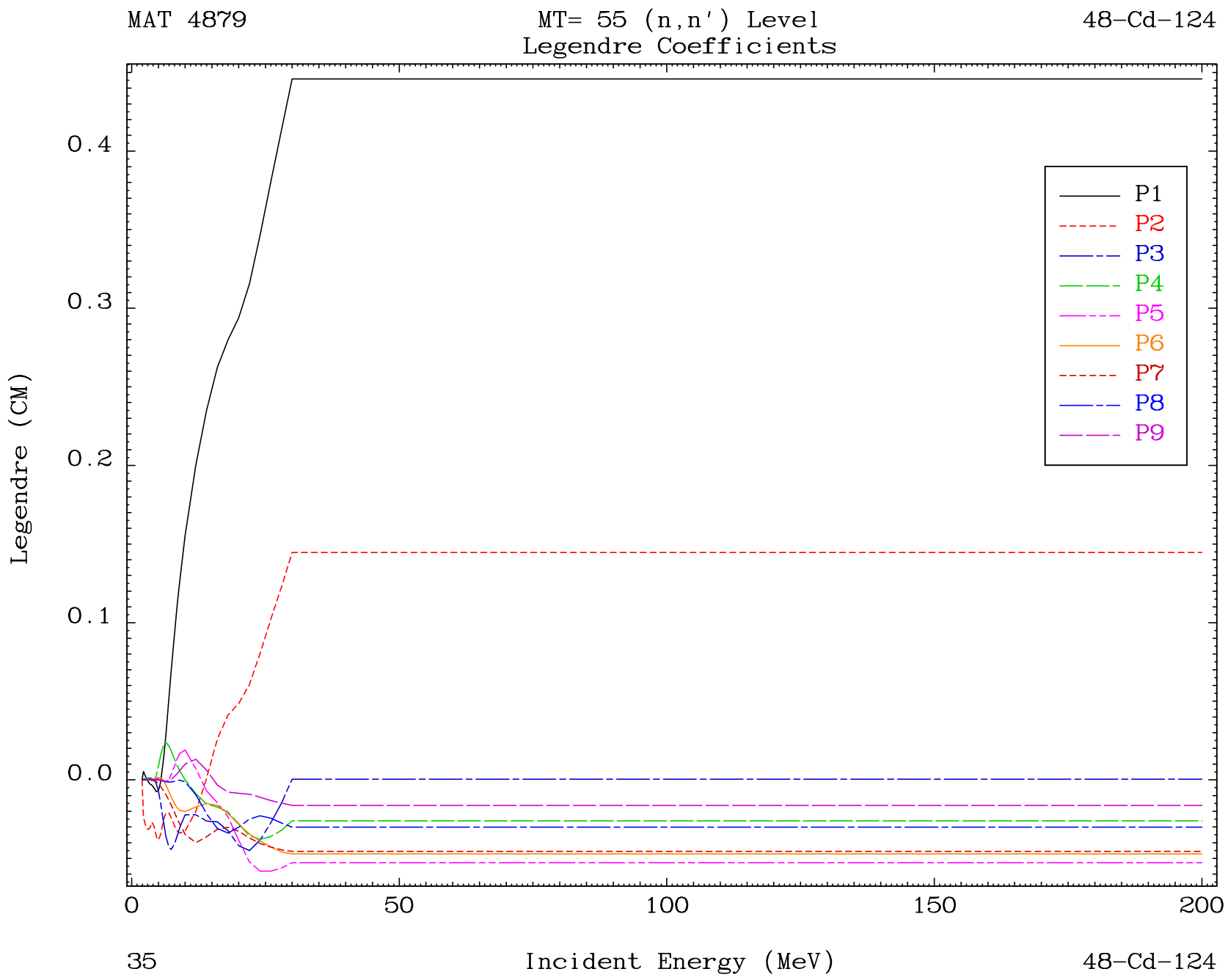

MAT 4879
MT= 53 (n,n') Level
Legendre Coefficients
48-Cd-124
X10^-6
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
30
Incident Energy (MeV)
48-Cd-124

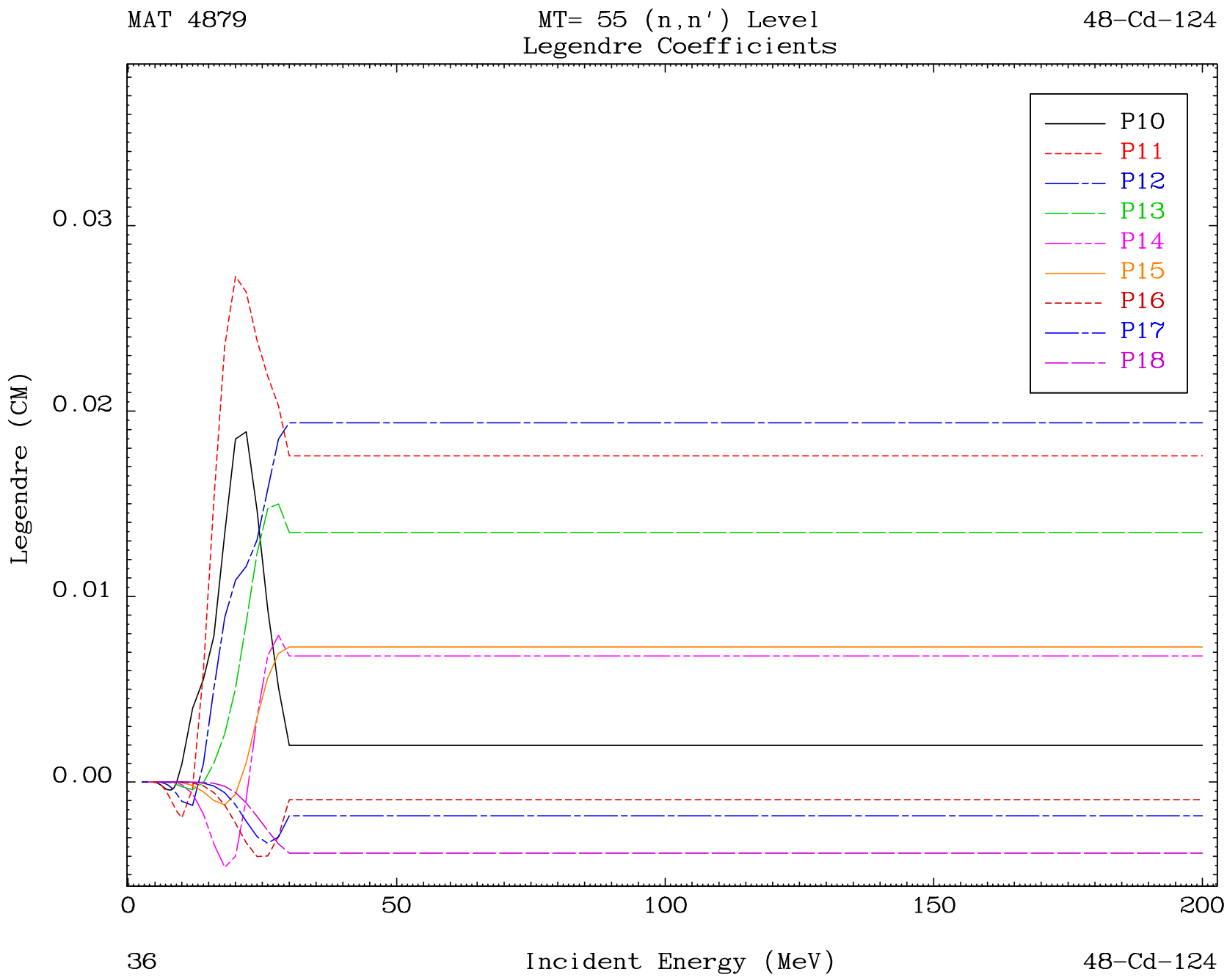

MAT 4879
MT= 54 (n,n') Level
Legendre Coefficients
48-Cd-124
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
31
Incident Energy (MeV)
48-Cd-124

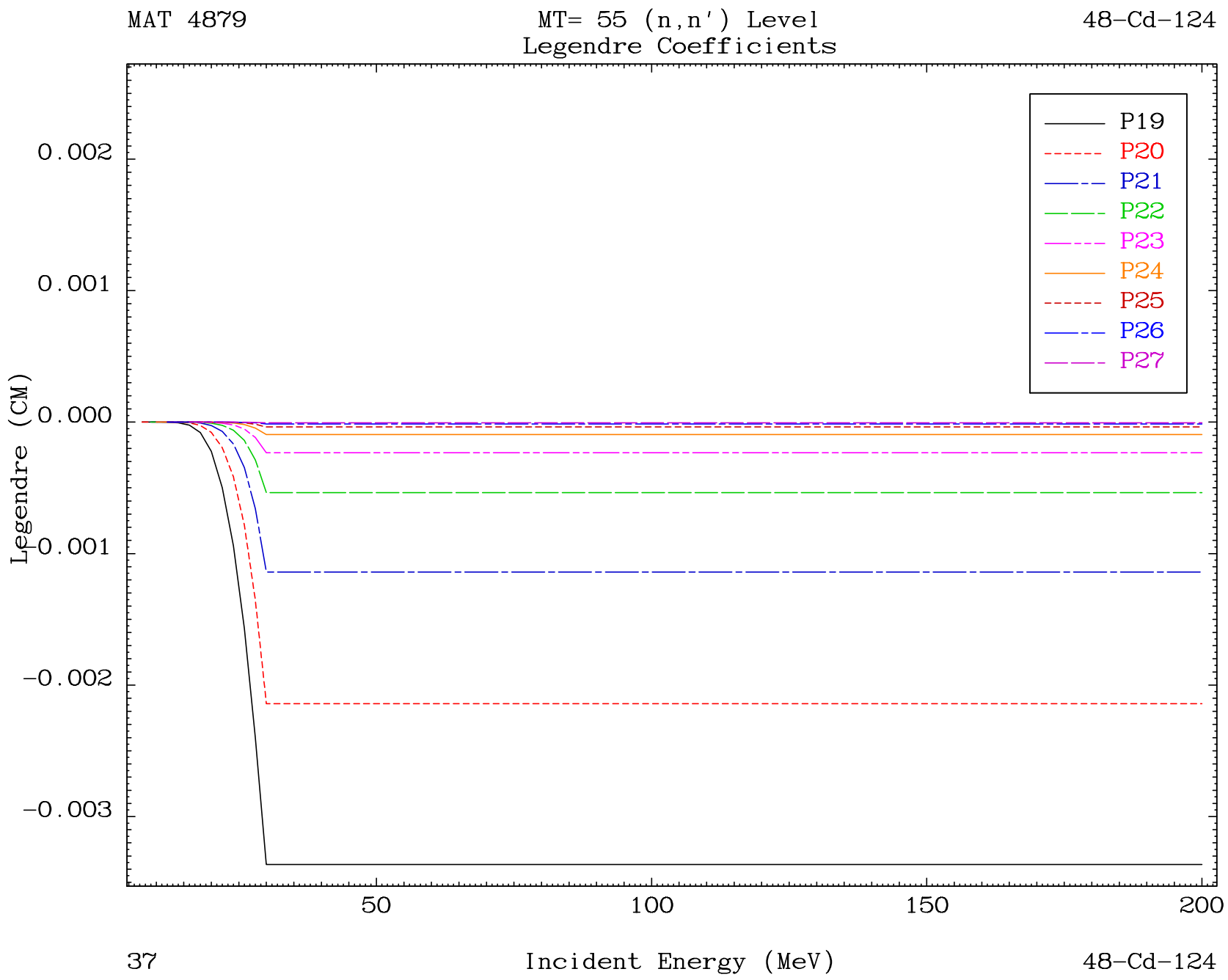

MAT 4879
MT= 54 (n,n') Level
Legendre Coefficients
48-Cd-124
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.010
0.005
0.000
-0.005
-0.010
Legendre (CM)
0
50
100
150
200
32
Incident Energy (MeV)
48-Cd-124

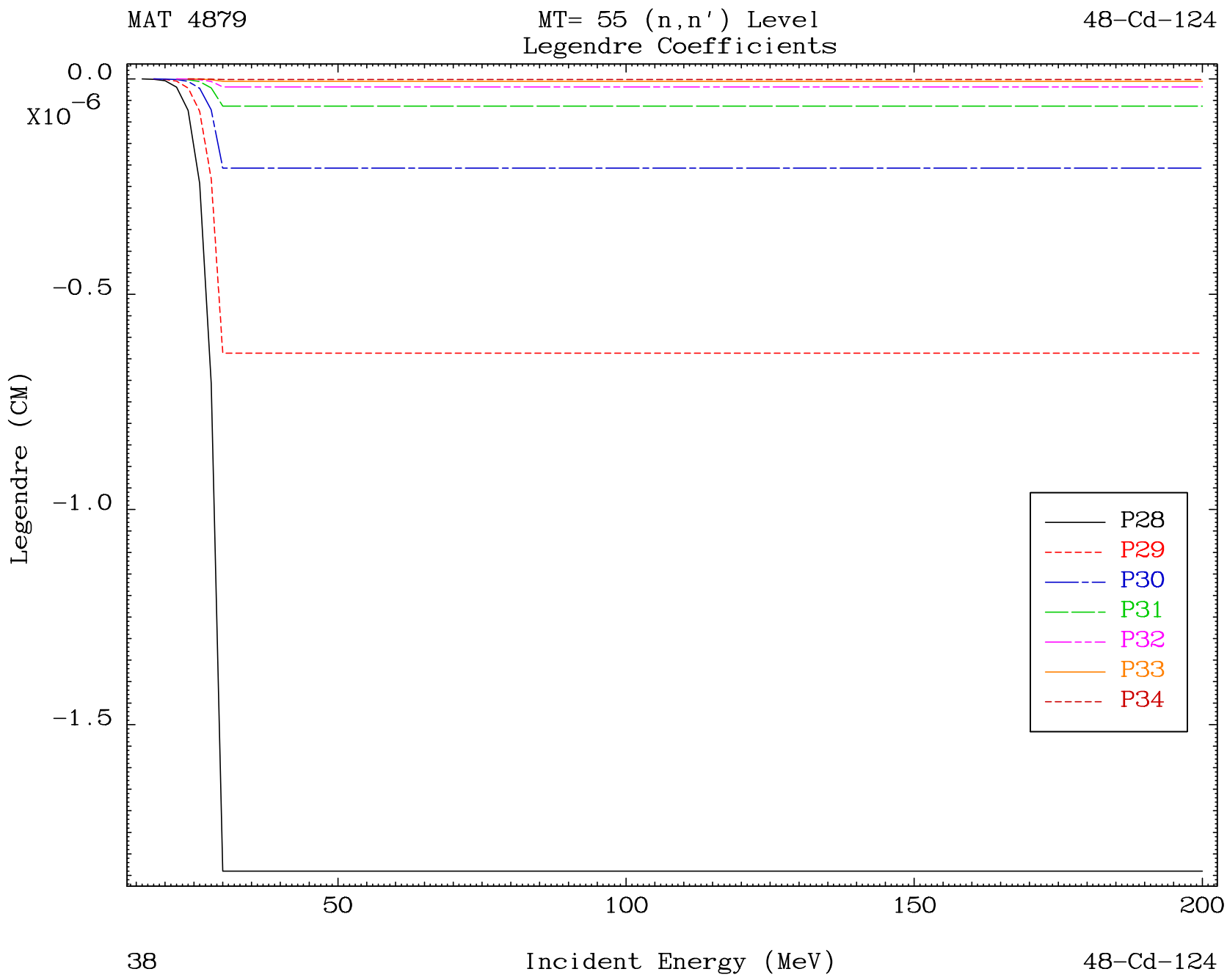

MAT 4879
MT= 54 (n,n') Level
Legendre Coefficients
48-Cd-124
X10^-4
2
1
0
-1
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
33
Incident Energy (MeV)
48-Cd-124

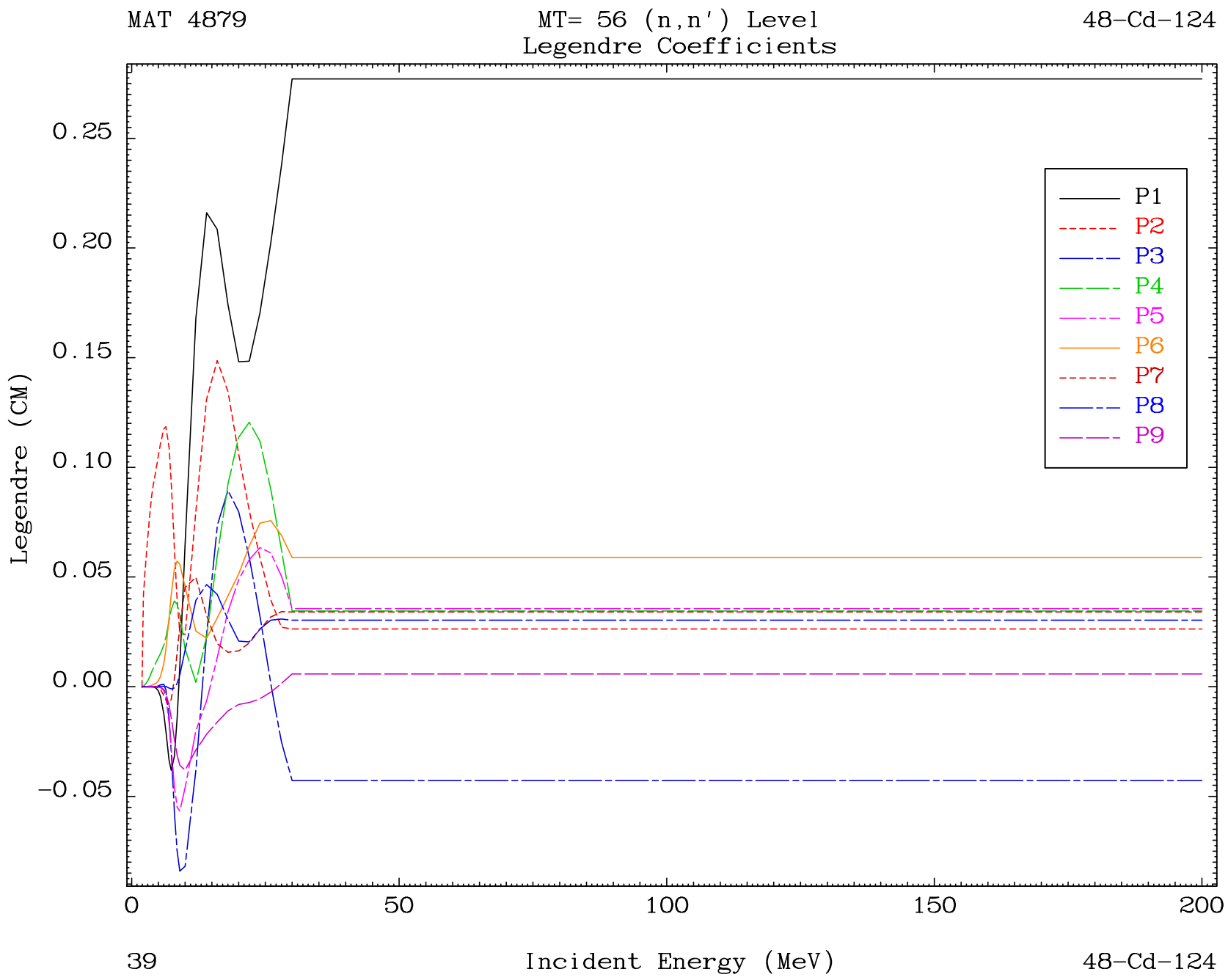

MAT 4879
MT= 54 (n,n') Level
Legendre Coefficients
48-Cd-124
0
X10^-7
-2
-4
-6
Legendre (CM)
50
100
150
200
34
Incident Energy (MeV)
48-Cd-124
P28
P29
P30
P31
P32
P33
P34

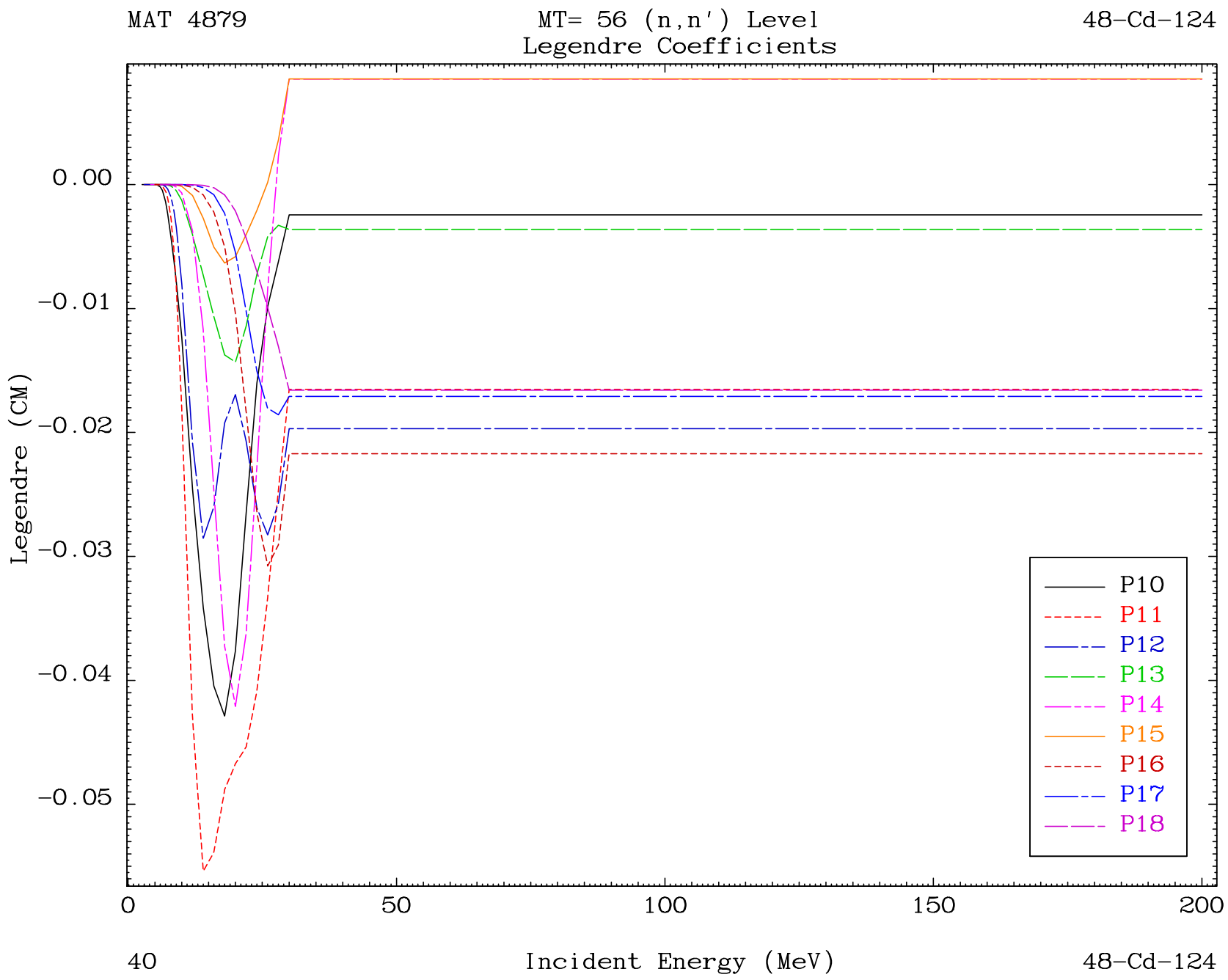

MAT 4879
MT= 55 (n,n') Level
Legendre Coefficients
48-Cd-124
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
35
Incident Energy (MeV)
48-Cd-124

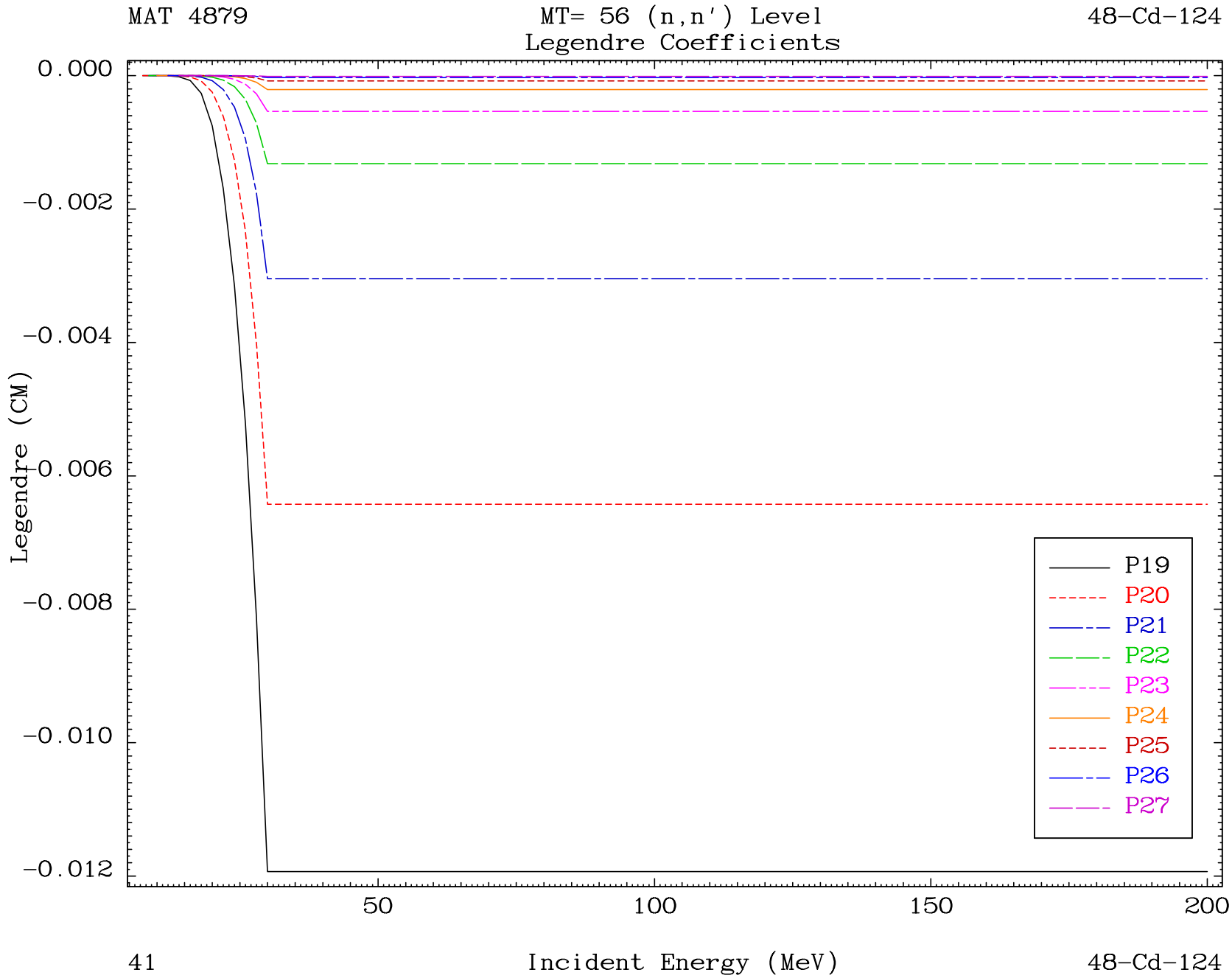

MAT 4879
MT= 55 (n,n') Level
Legendre Coefficients
48-Cd-124
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
36
Incident Energy (MeV)
48-Cd-124

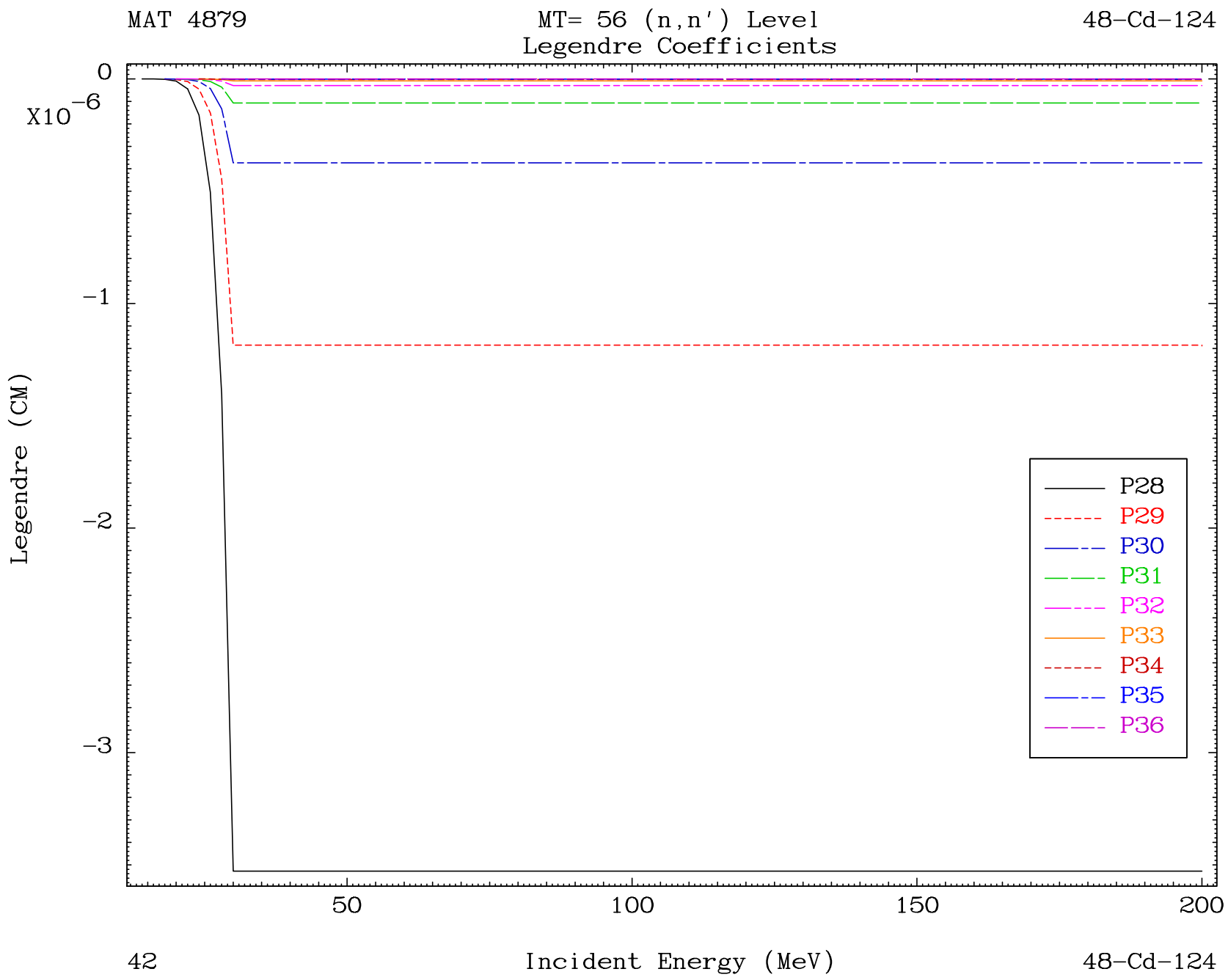

MAT 4879
MT= 55 (n,n') Level
Legendre Coefficients
48-Cd-124
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.002
0.001
0.000
-0.001
-0.002
-0.003
Legendre (CM)
50
100
150
200
37
Incident Energy (MeV)
48-Cd-124

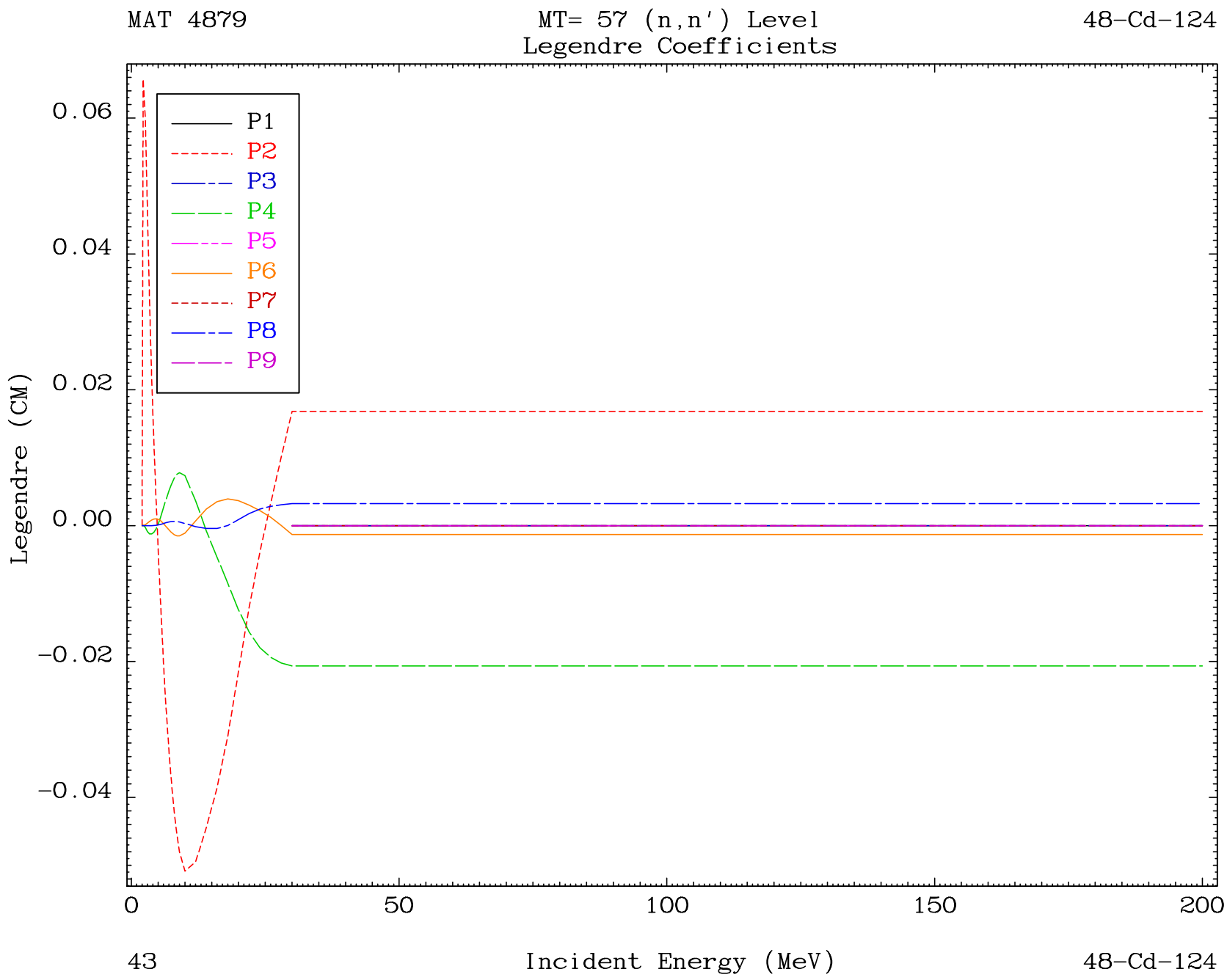

MAT 4879
MT= 55 (n,n') Level
Legendre Coefficients
48-Cd-124
0.0
X10^-6
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
38
Incident Energy (MeV)
48-Cd-124
P28
P29
P30
P31
P32
P33
P34

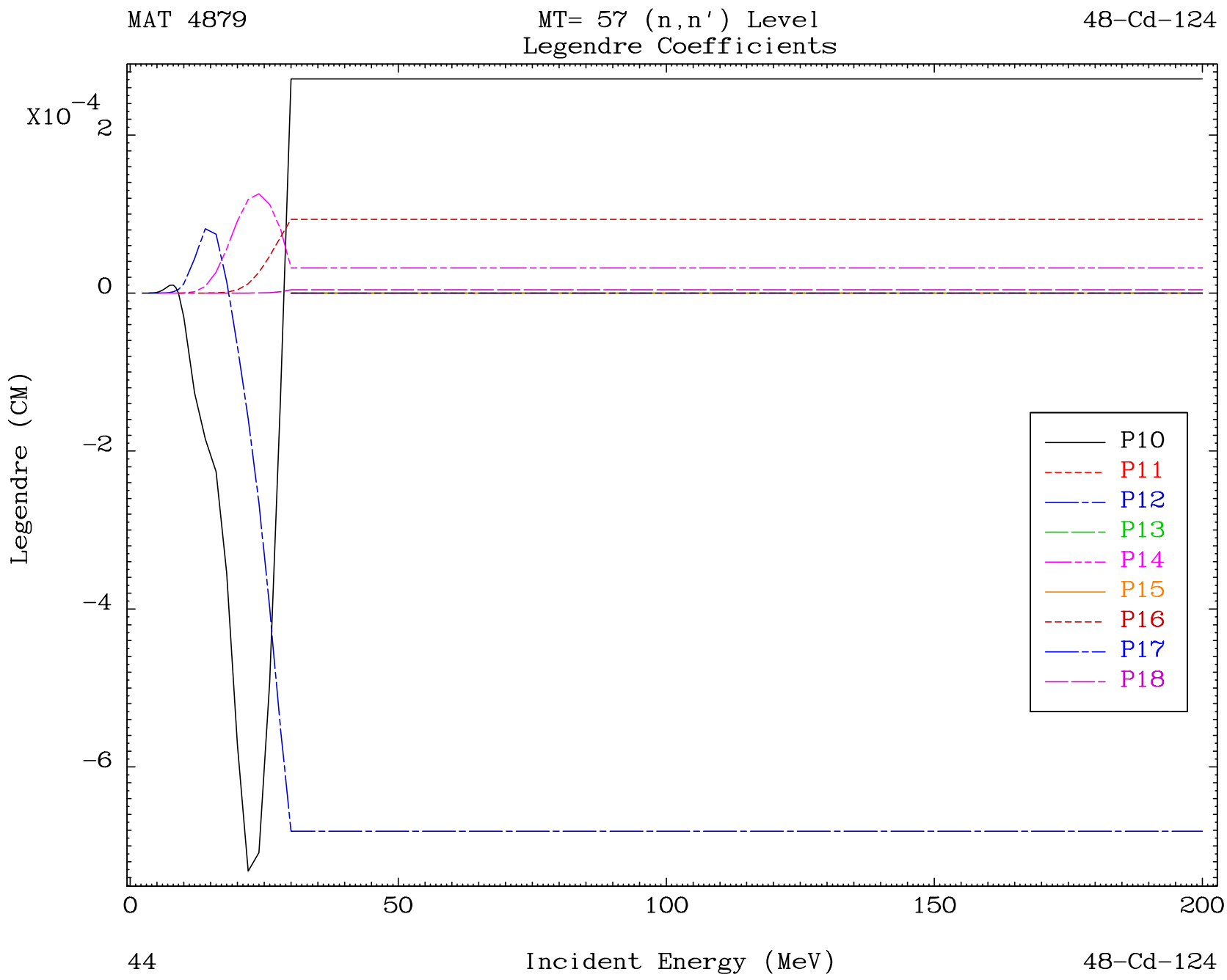

MAT 4879
MT= 56 (n,n') Level
Legendre Coefficients
48-Cd-124
0.25
0.20
0.15
0.10
0.05
0.00
-0.05
Legendre (CM)
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
39
Incident Energy (MeV)
48-Cd-124

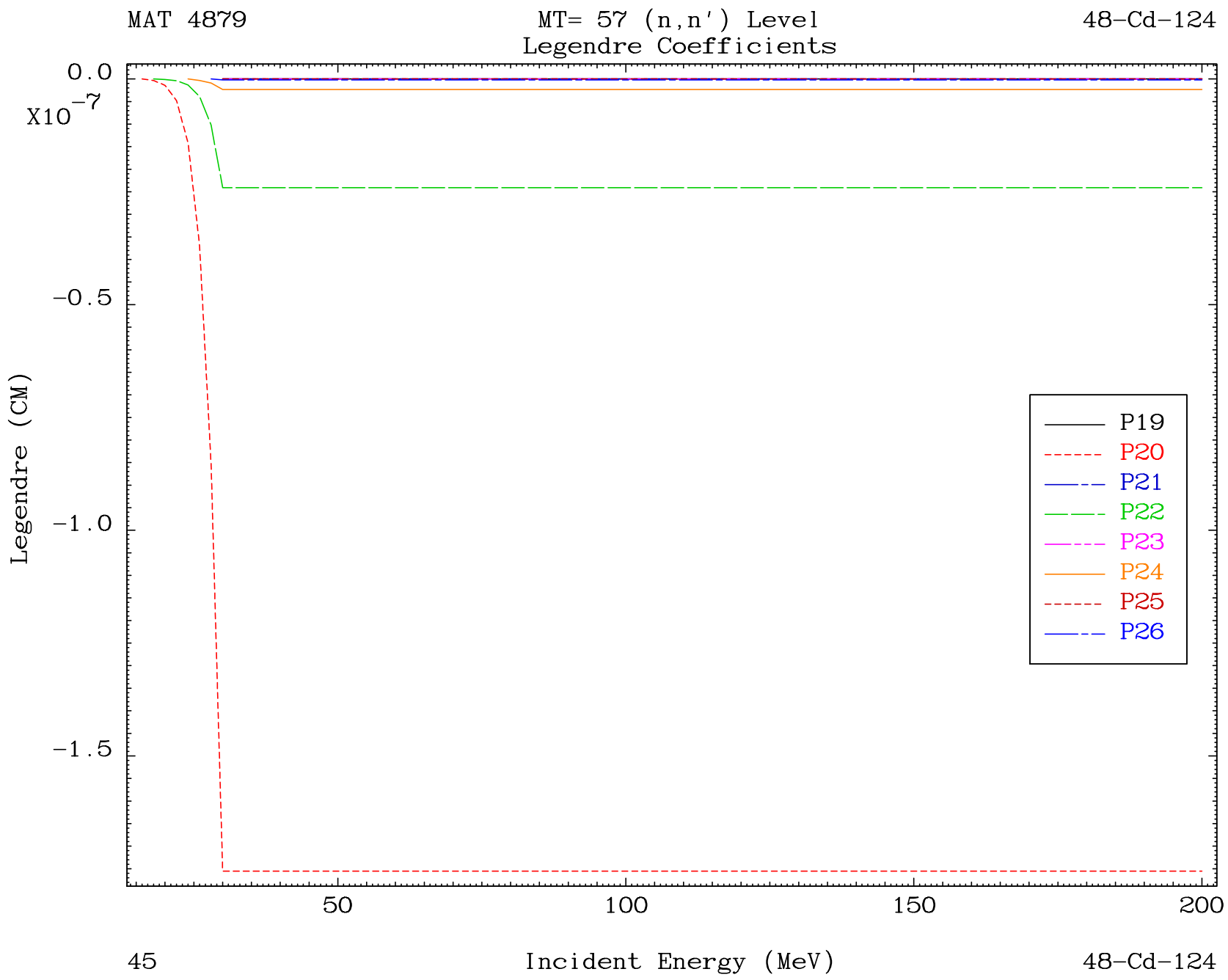

MAT 4879
MT= 56 (n,n') Level
Legendre Coefficients
48-Cd-124
0.00
-0.01
-0.02
-0.03
-0.04
-0.05
Legendre (CM)
0
50
100
150
200
40
Incident Energy (MeV)
48-Cd-124
P10
P11
P12
P13
P14
P15
P16
P17
P18

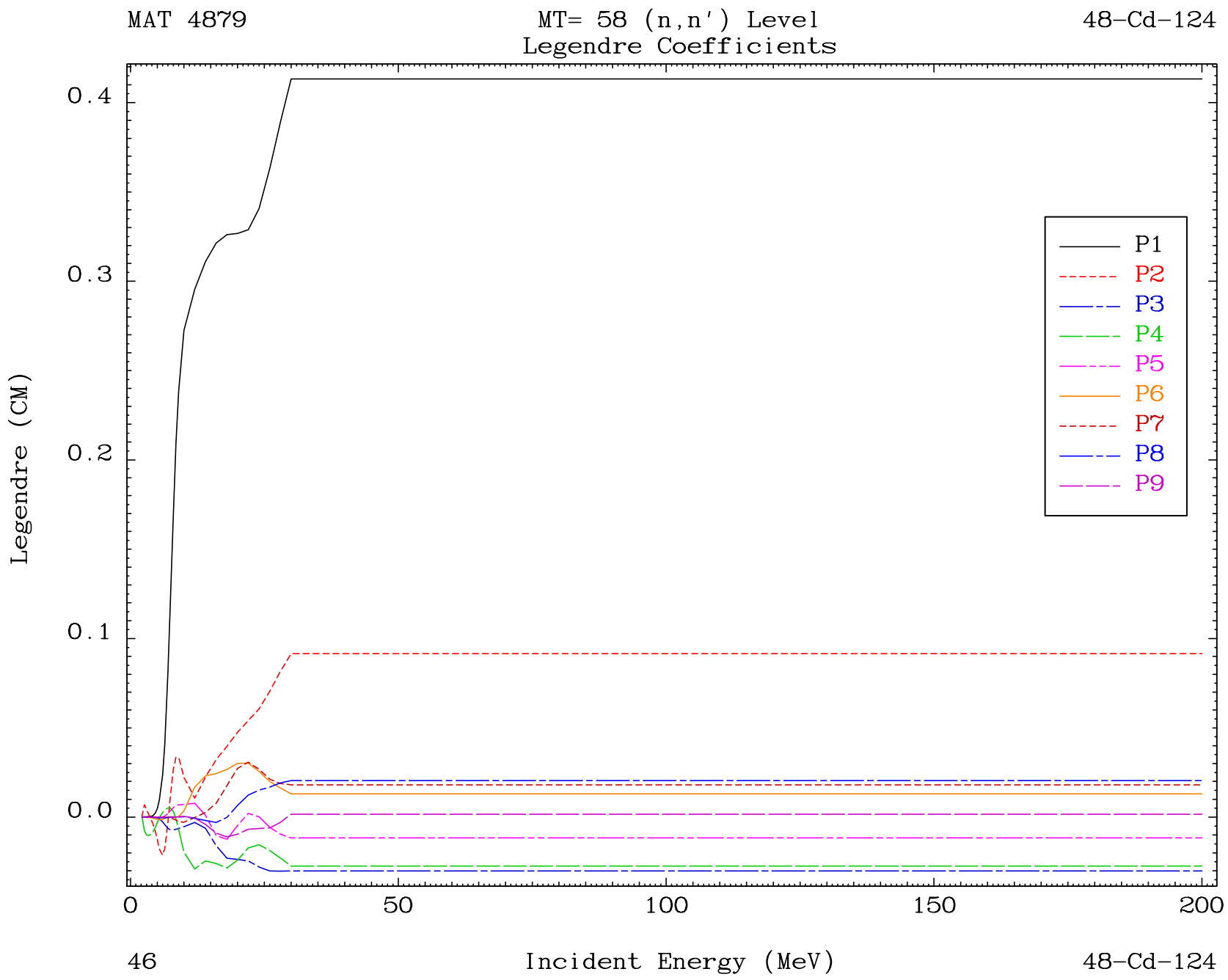

MAT 4879
MT= 56 (n,n') Level
Legendre Coefficients
48-Cd-124
0.000
-0.002
-0.004
-0.006
-0.008
-0.010
-0.012
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P19
P20
P21
P22
P23
P24
P25
P26
P27
41
48-Cd-124

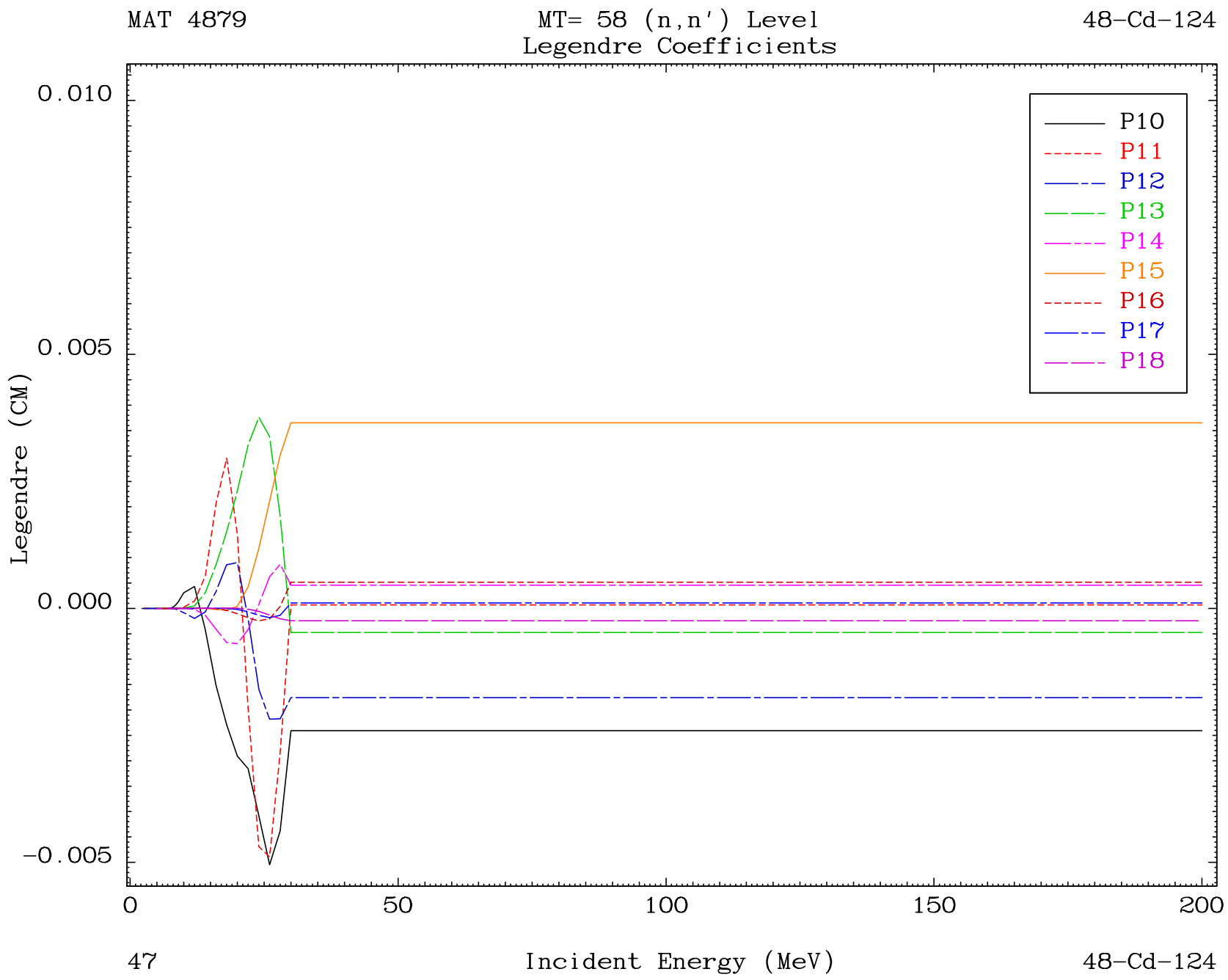

MAT 4879
MT= 56 (n,n') Level
Legendre Coefficients
48-Cd-124
0
X10^-6
-1
-2
-3
Legendre (CM)
50
100
150
200
42
Incident Energy (MeV)
48-Cd-124
P28
P29
P30
P31
P32
P33
P34
P35
P36

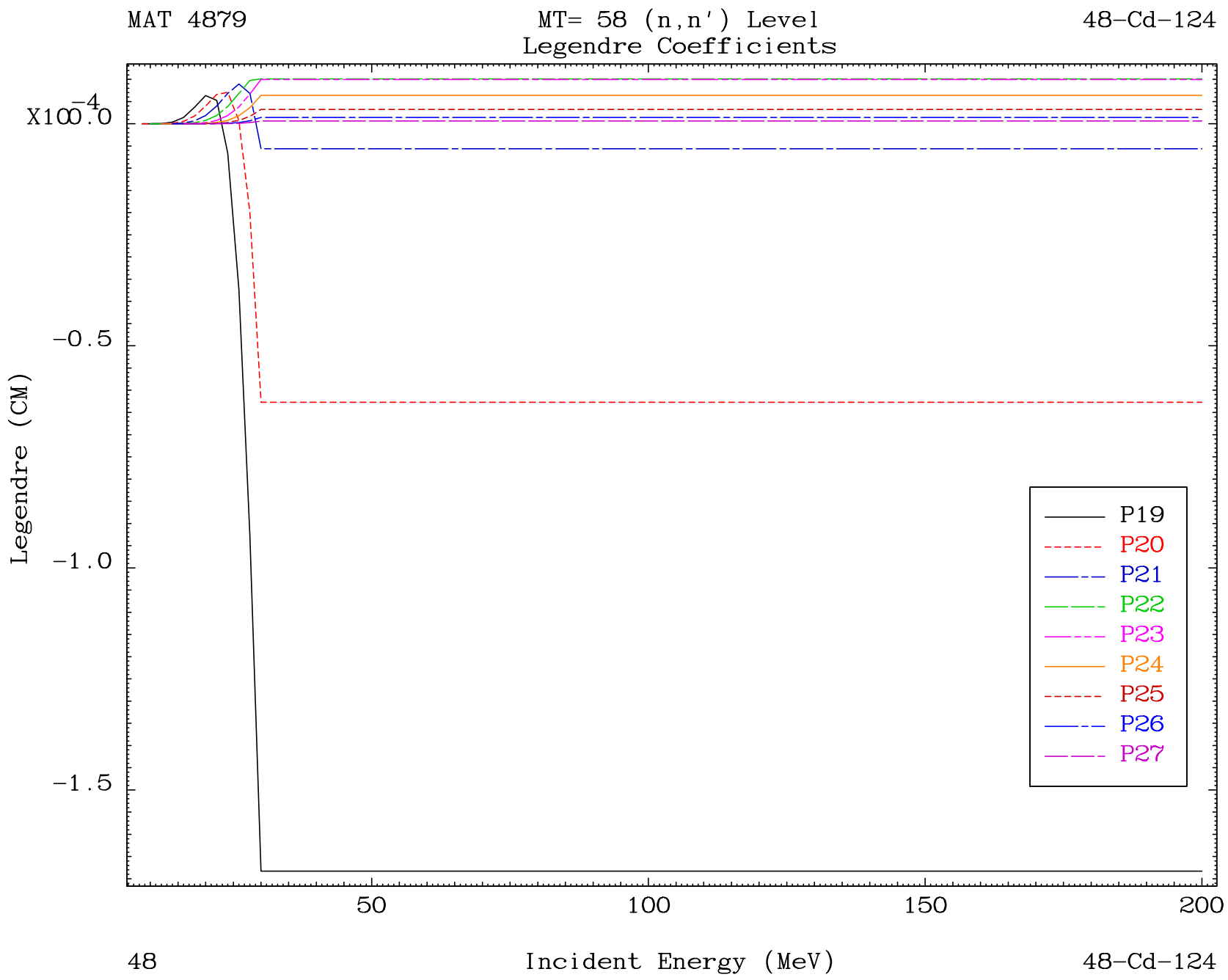

MAT 4879
MT= 57 (n,n') Level
Legendre Coefficients
48-Cd-124
P1
P2
P3
P4
P5
P6
P7
P8
P9
0.06
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
43
Incident Energy (MeV)
48-Cd-124

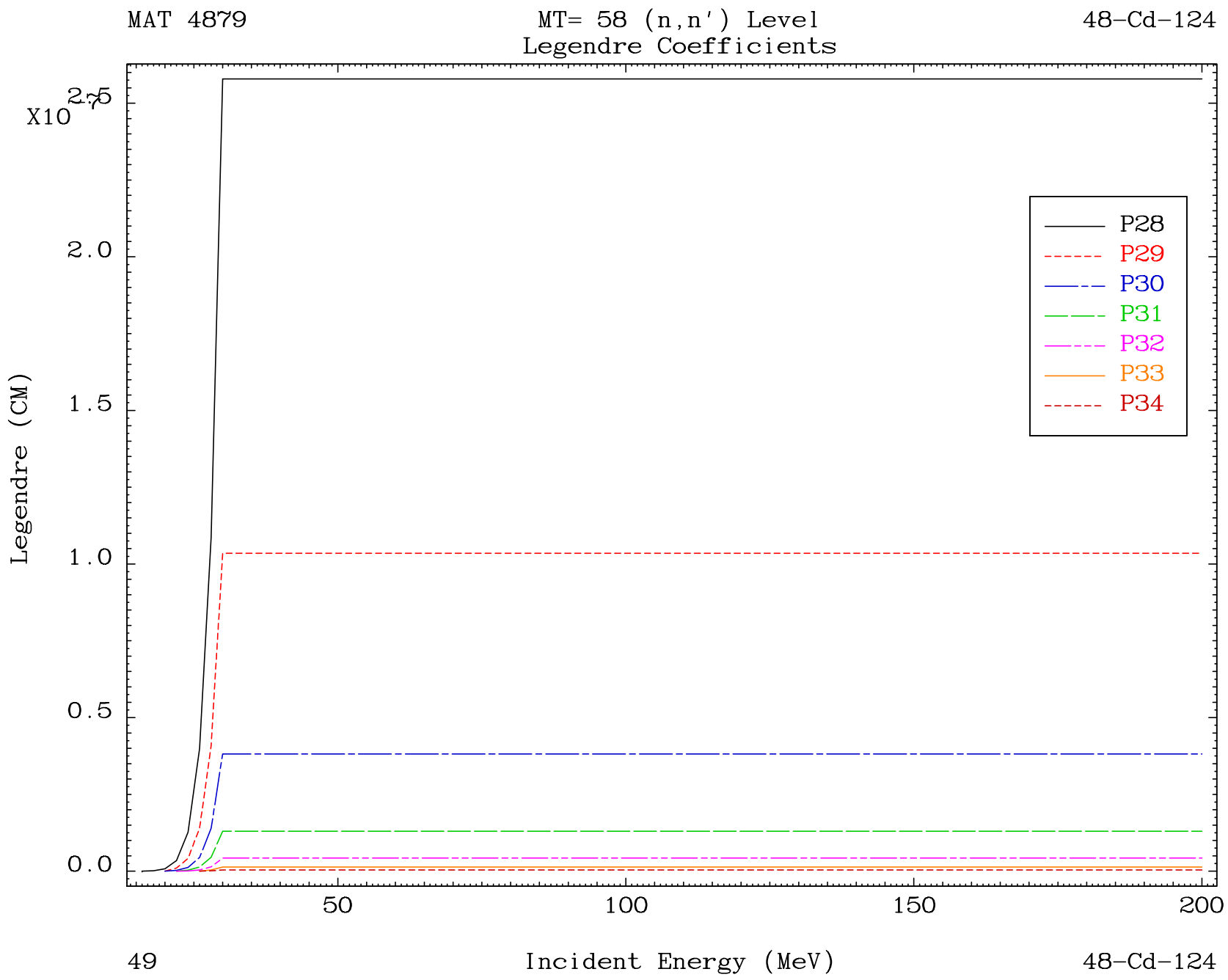

MAT 4879
MT= 57 (n,n') Level
Legendre Coefficients
48-Cd-124
X10^-4
2
0
-2
-4
-6
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
44
48-Cd-124
P10
P11
P12
P13
P14
P15
P16
P17
P18

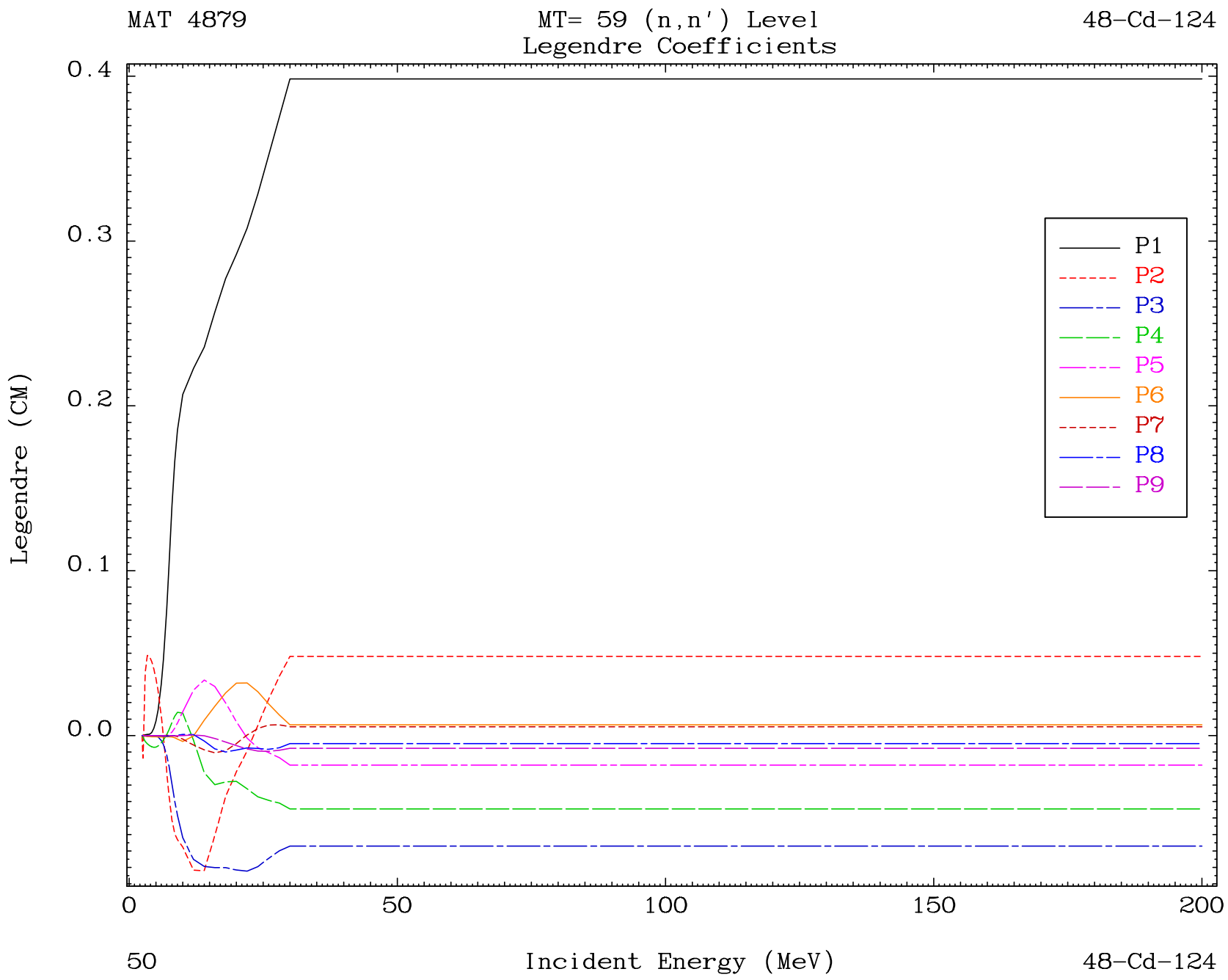

MAT 4879
MT= 57 (n,n') Level
Legendre Coefficients
48-Cd-124
0.0
X10^-7
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
45
Incident Energy (MeV)
48-Cd-124
P19
P20
P21
P22
P23
P24
P25
P26

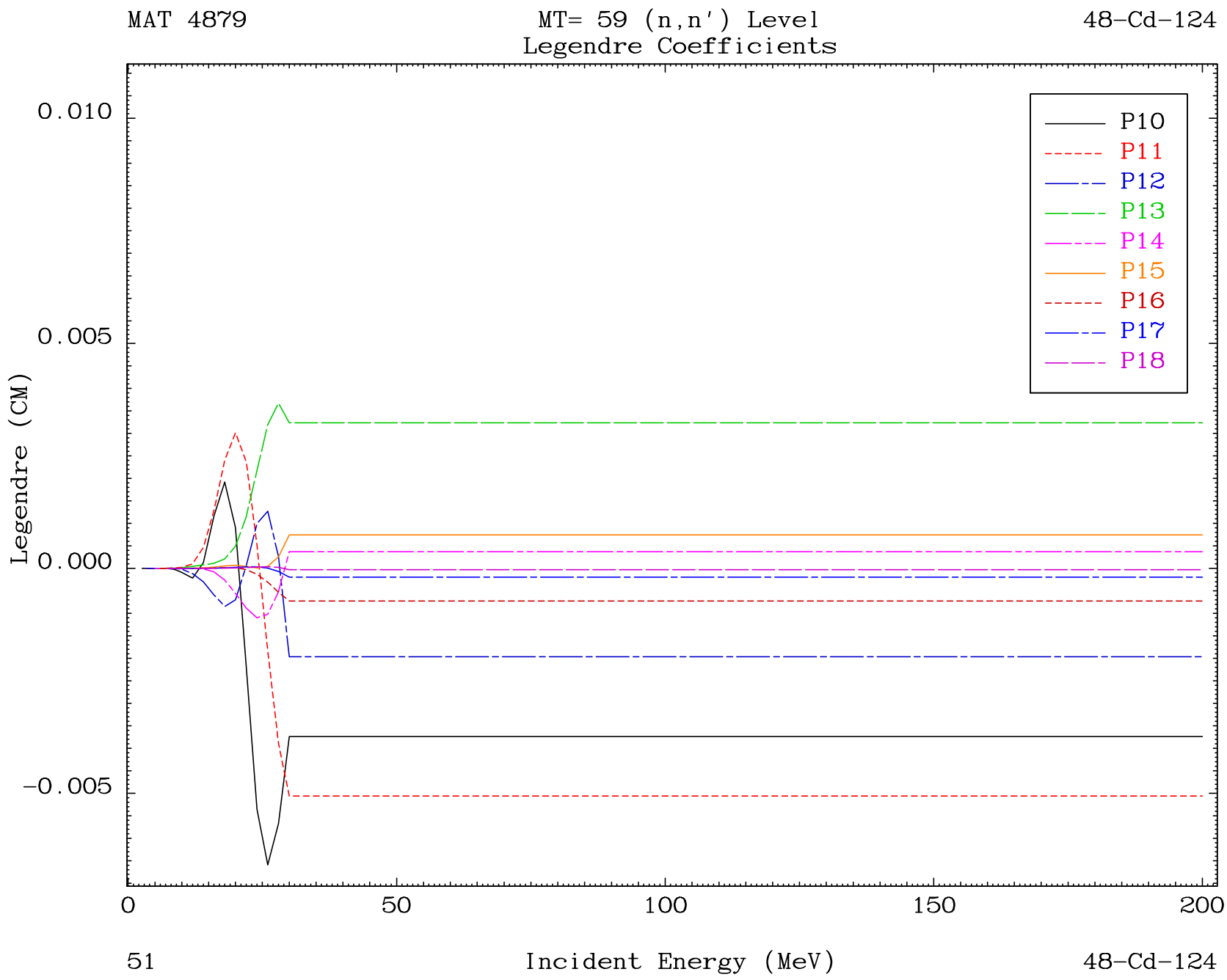

MAT 4879
MT= 58 (n,n') Level
Legendre Coefficients
48-Cd-124
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P1
P2
P3
P4
P5
P6
P7
P8
P9
46
48-Cd-124

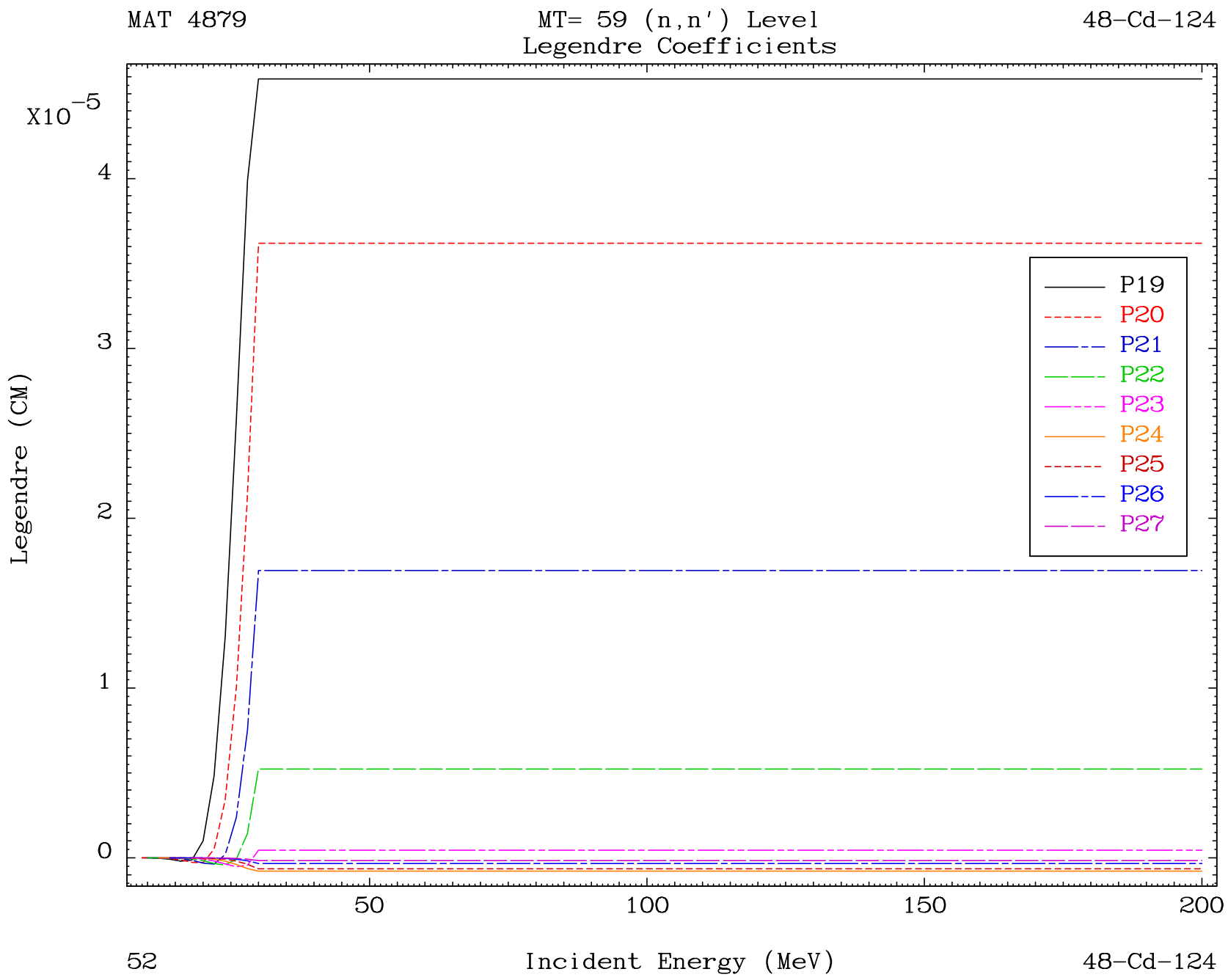

MAT 4879
MT= 58 (n,n') Level
Legendre Coefficients
48-Cd-124
0.010
0.005
0.000
-0.005
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P10
P11
P12
P13
P14
P15
P16
P17
P18
47
48-Cd-124

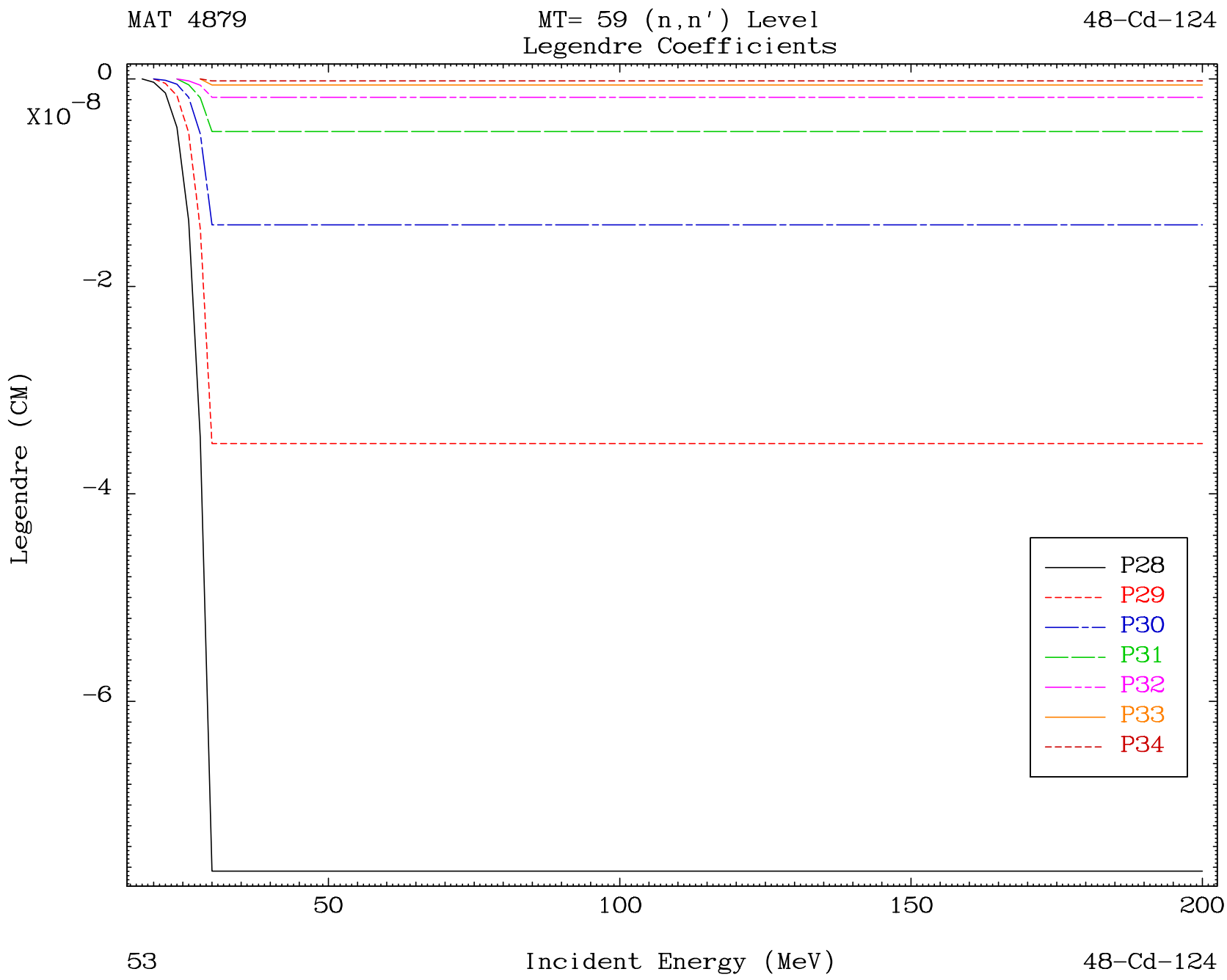

MAT 4879
MT= 58 (n,n') Level
Legendre Coefficients
48-Cd-124
X10^-4
0.0
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
48
Incident Energy (MeV)
48-Cd-124
P19
P20
P21
P22
P23
P24
P25
P26
P27


MAT 4879
MT= 58 (n,n') Level
Legendre Coefficients
48-Cd-124
X10^-5
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
49
48-Cd-124

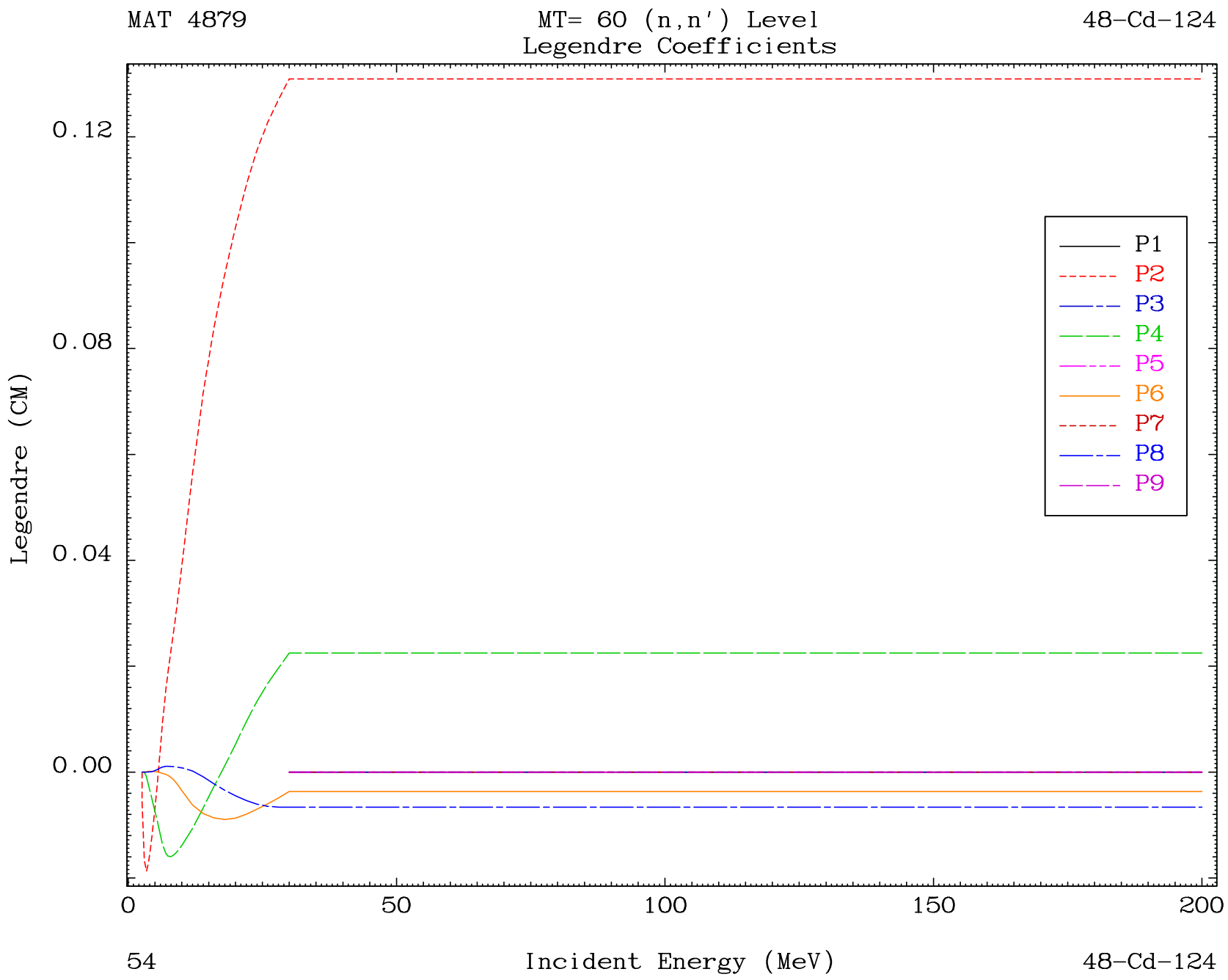

MAT 4879
MT= 59 (n,n') Level
Legendre Coefficients
48-Cd-124
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
50
Incident Energy (MeV)
48-Cd-124

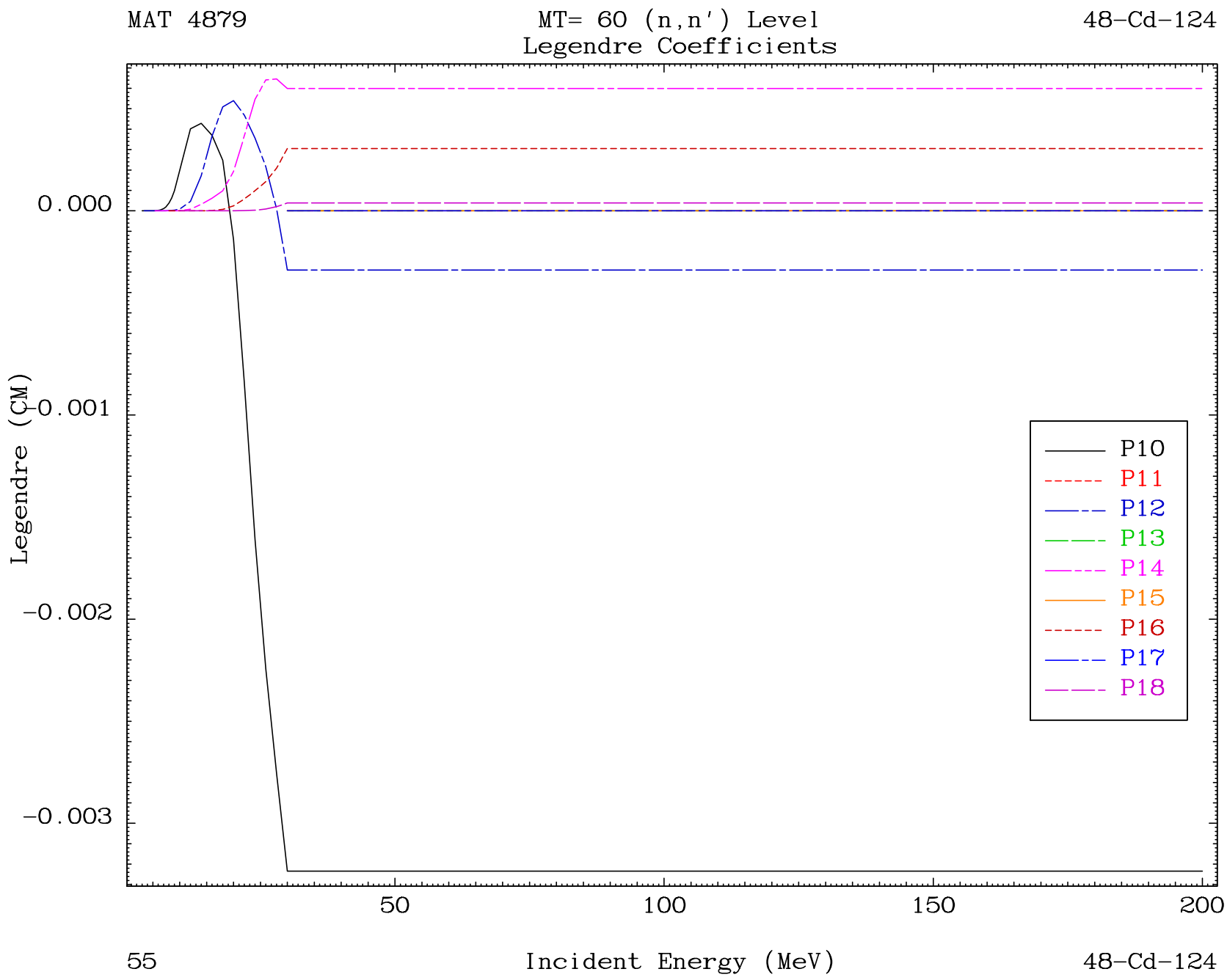

MAT 4879
MT= 59 (n,n') Level
Legendre Coefficients
48-Cd-124
0.010
0.005
0.000
-0.005
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P10
P11
P12
P13
P14
P15
P16
P17
P18
51
48-Cd-124

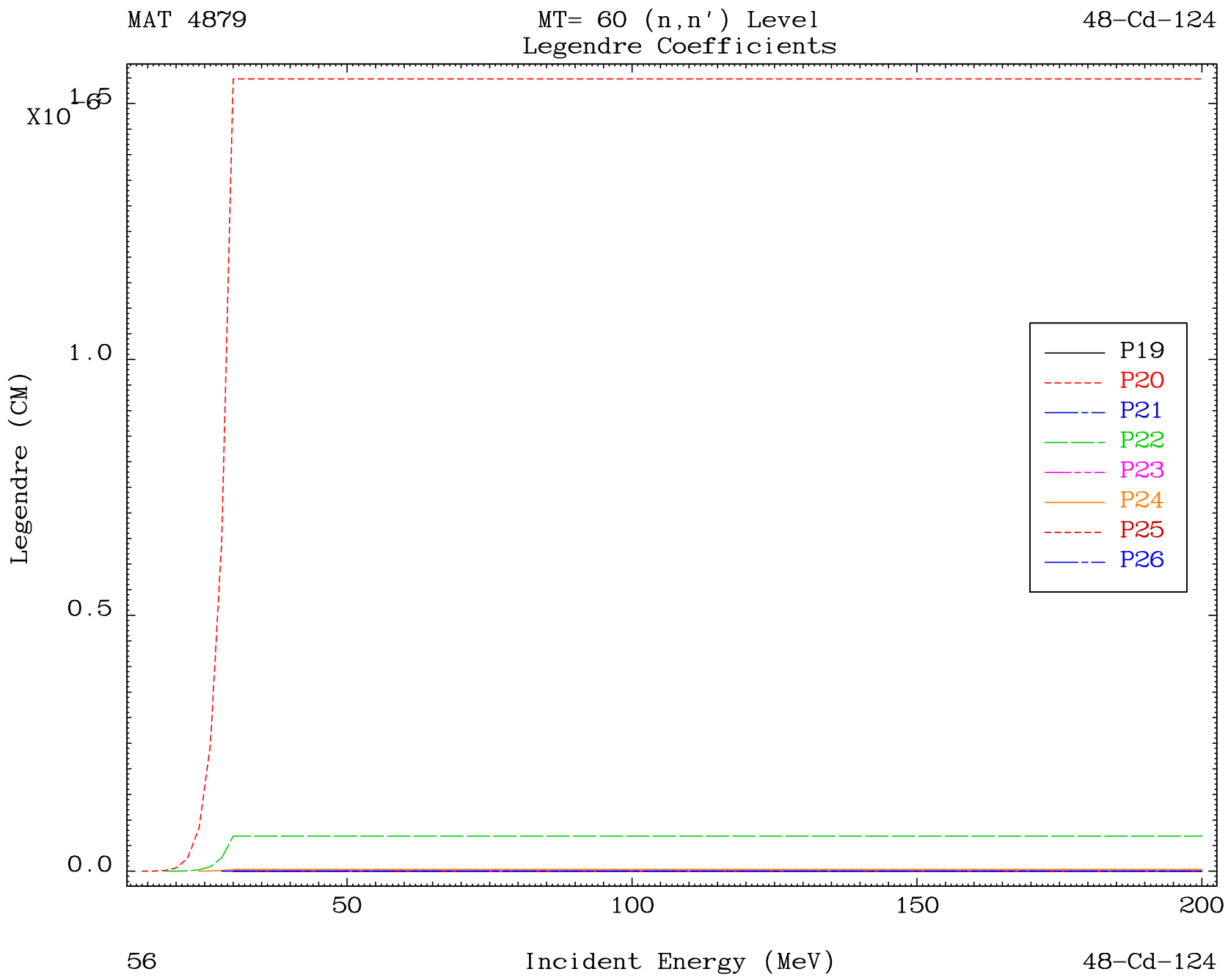

MAT 4879
MT= 59 (n,n') Level
Legendre Coefficients
48-Cd-124
X10^-5
4
3
2
1
0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
52
48-Cd-124
P19
P20
P21
P22
P23
P24
P25
P26
P27

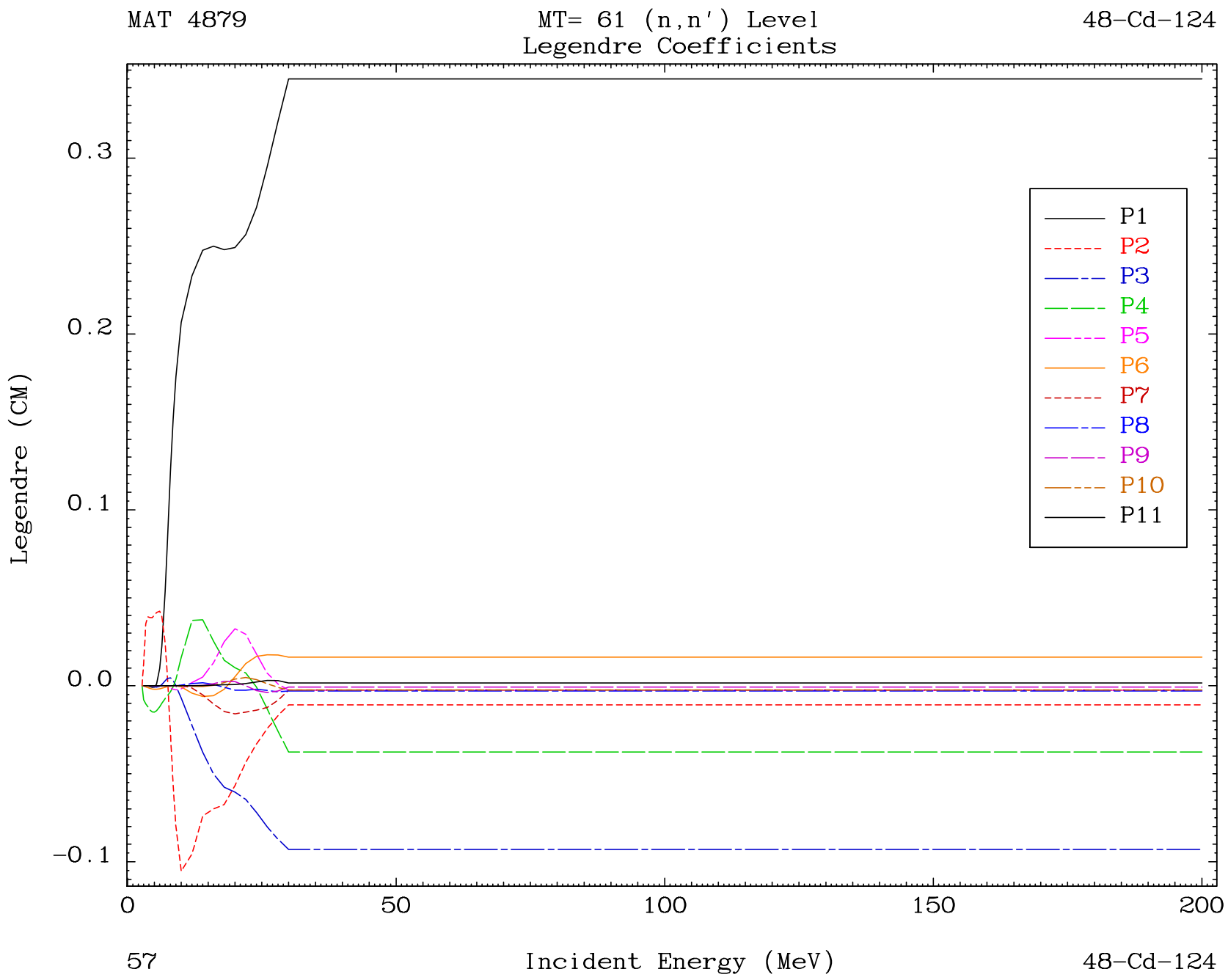

MAT 4879
MT= 59 (n,n') Level
Legendre Coefficients
48-Cd-124
0
X10^-8
-2
-4
-6
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P28
P29
P30
P31
P32
P33
P34

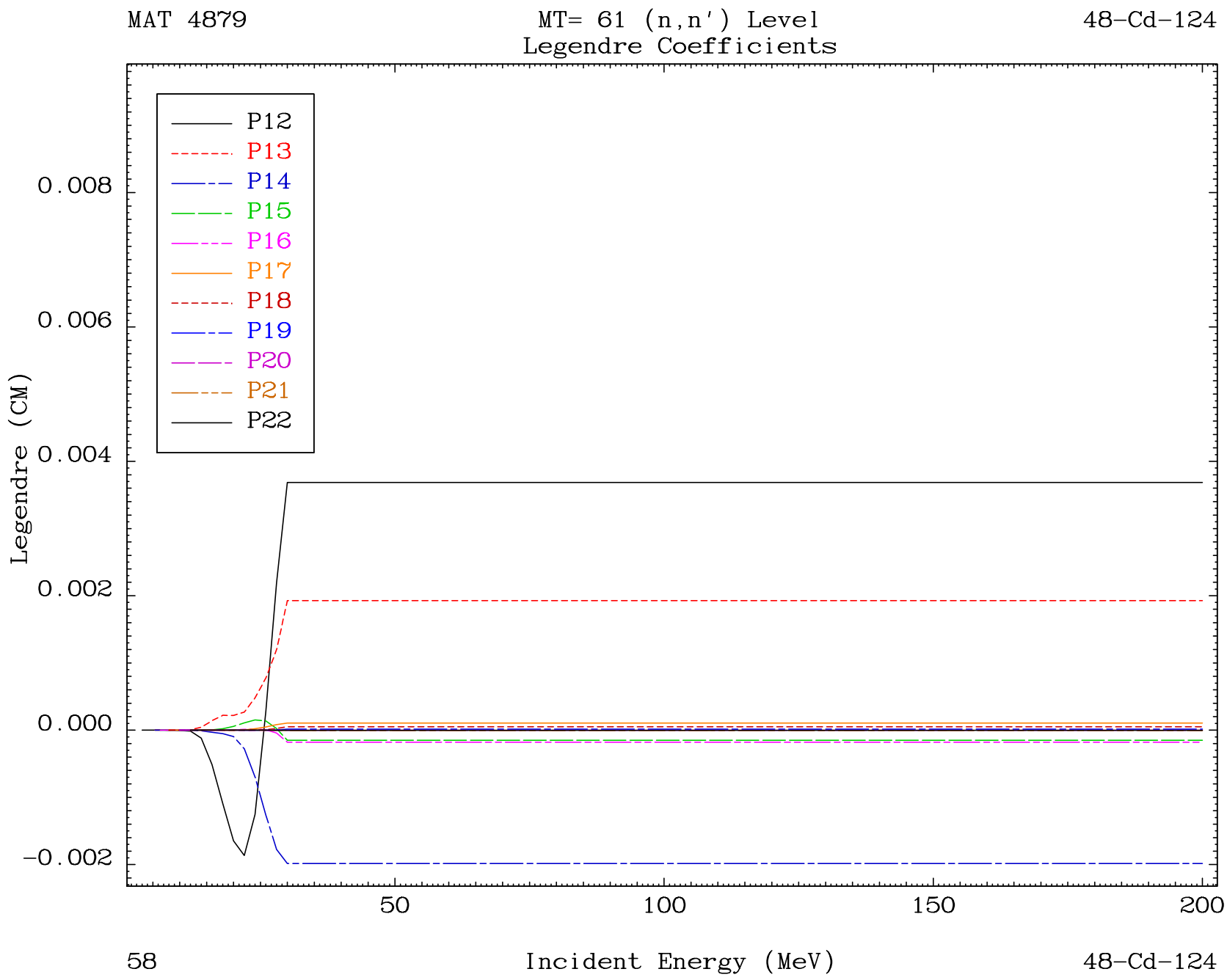
48-Cd-124

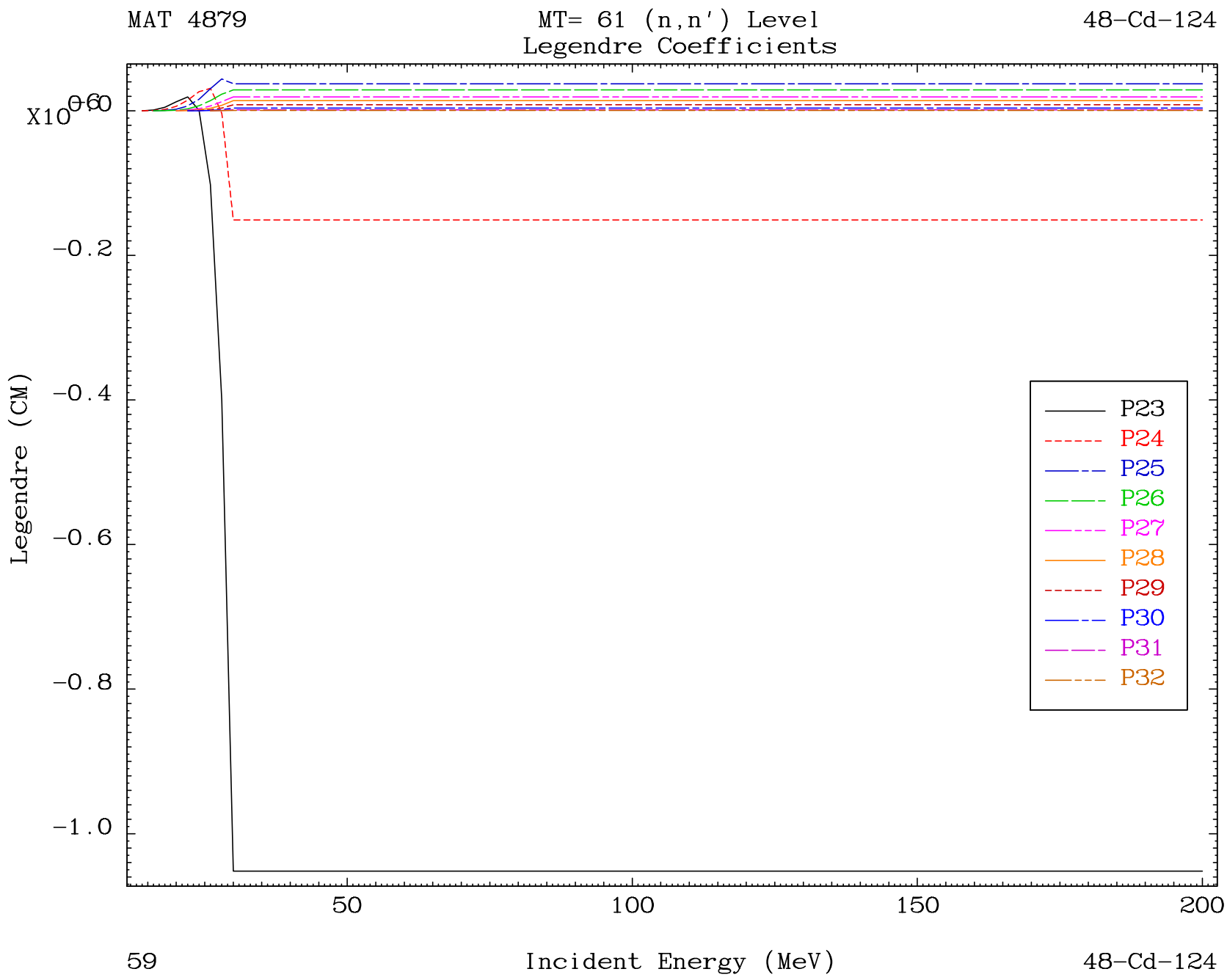

MAT 4879
MT= 60 (n,n') Level
Legendre Coefficients
48-Cd-124
0.12
0.08
0.04
0.00
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
P1
P2
P3
P4
P5
P6
P7
P8
P9
54
48-Cd-124

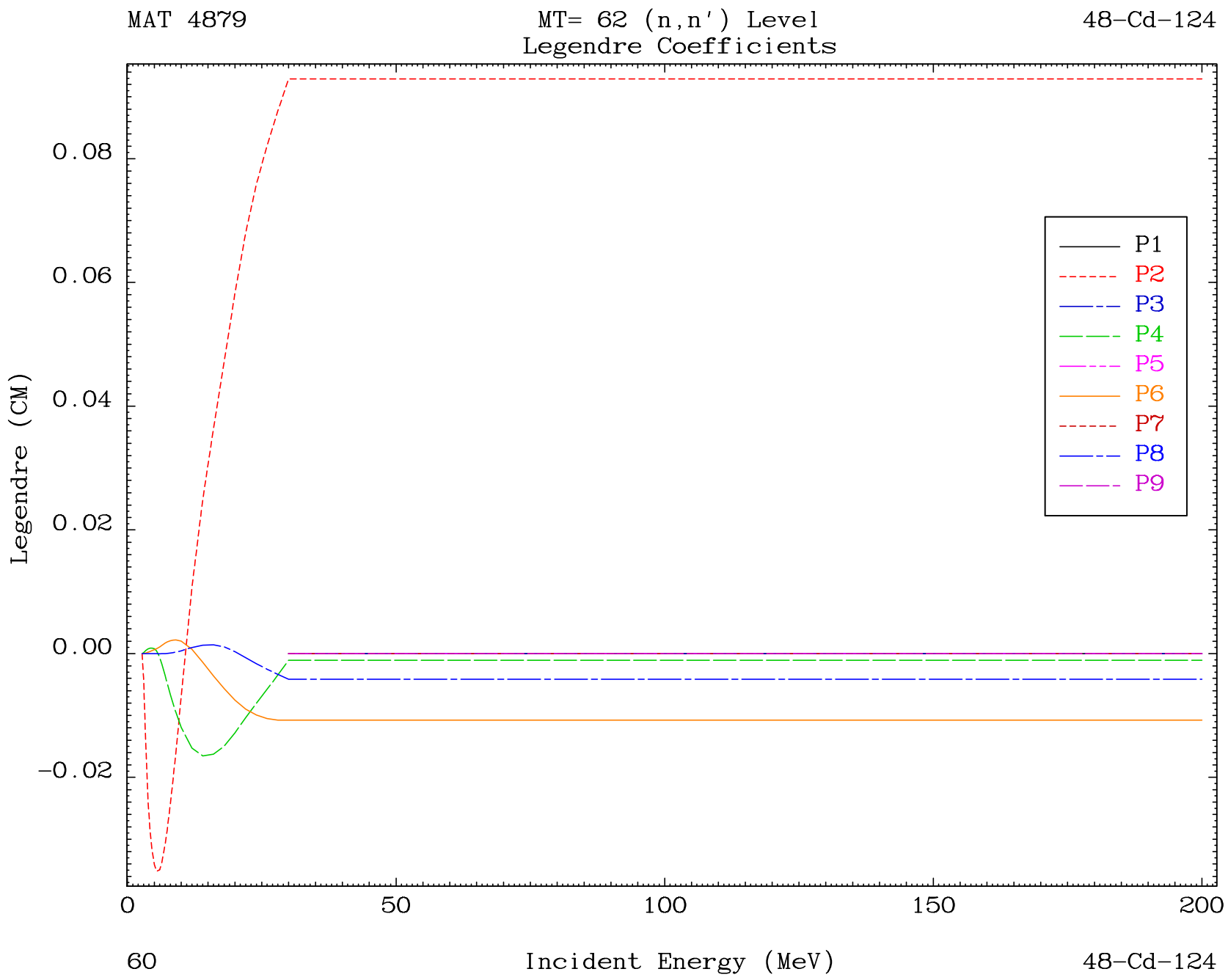

MAT 4879
MT= 60 (n,n') Level
Legendre Coefficients
48-Cd-124
0.000
-0.001
-0.002
-0.003
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P10
P11
P12
P13
P14
P15
P16
P17
P18
55
48-Cd-124

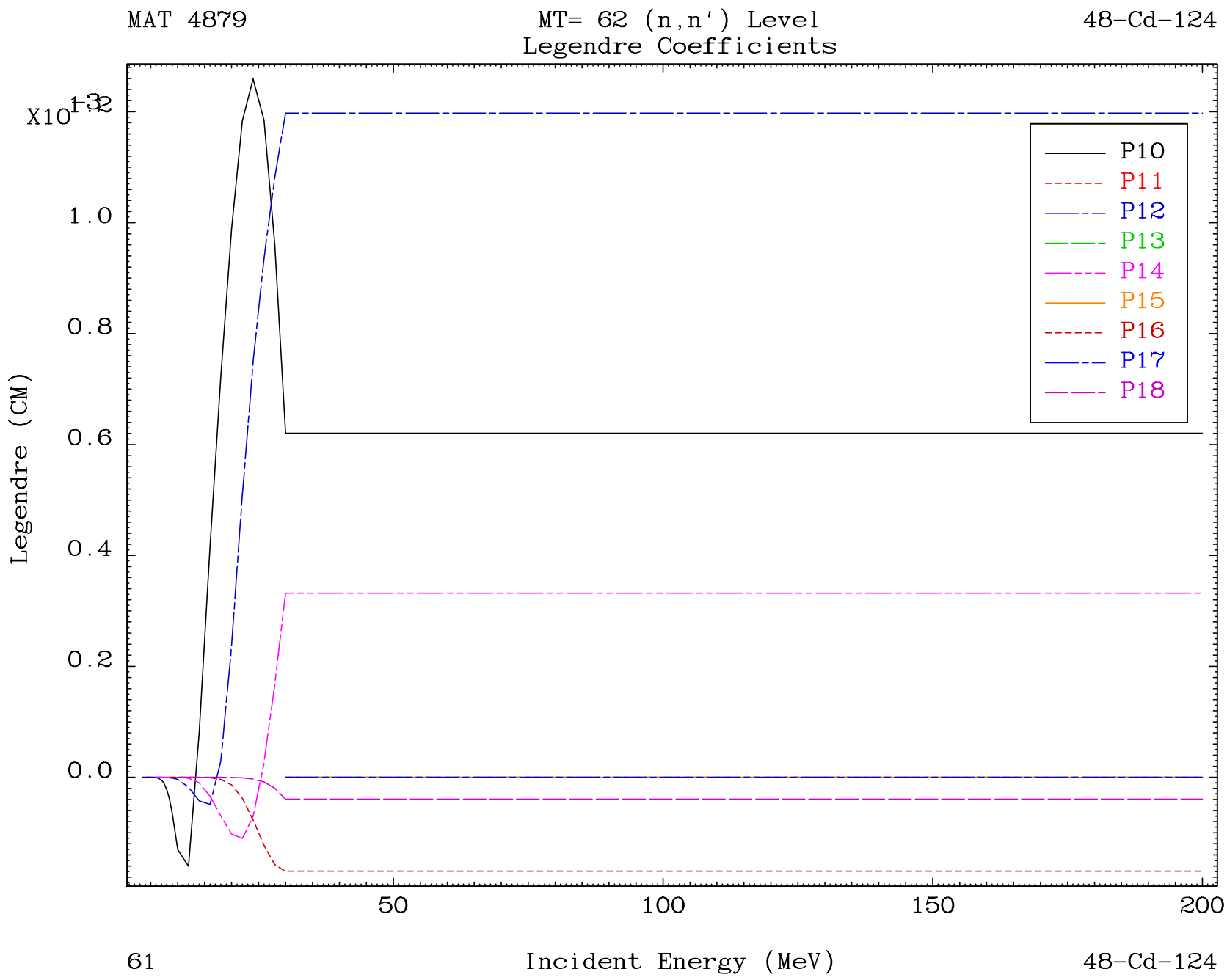

MAT 4879
MT= 60 (n,n') Level
Legendre Coefficients
48-Cd-124
X10-6
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
56
48-Cd-124
P19
P20
P21
P22
P23
P24
P25
P26

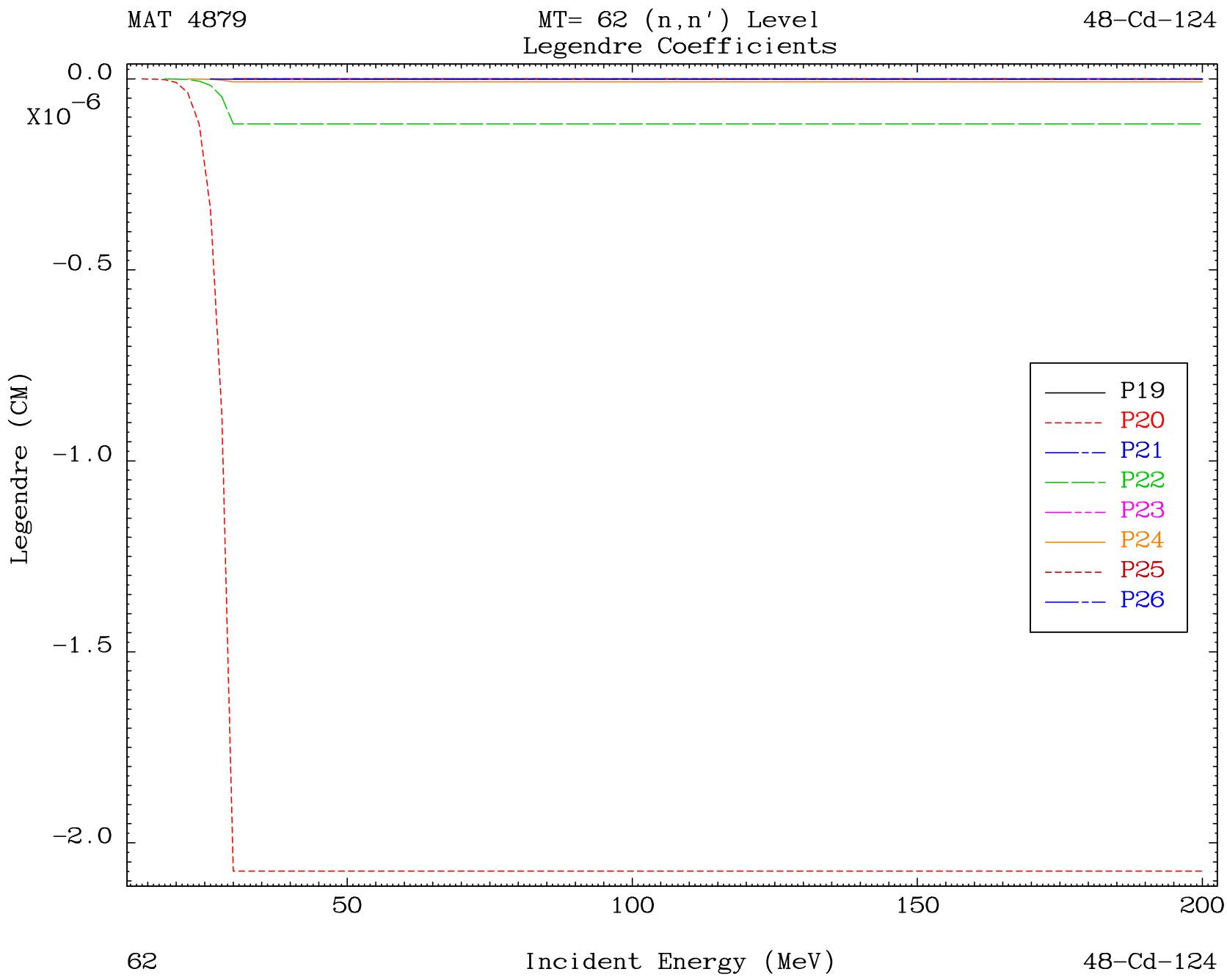

MAT 4879
MT= 61 (n,n') Level
Legendre Coefficients
48-Cd-124
Legendre (CM)
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
57
Incident Energy (MeV)
48-Cd-124

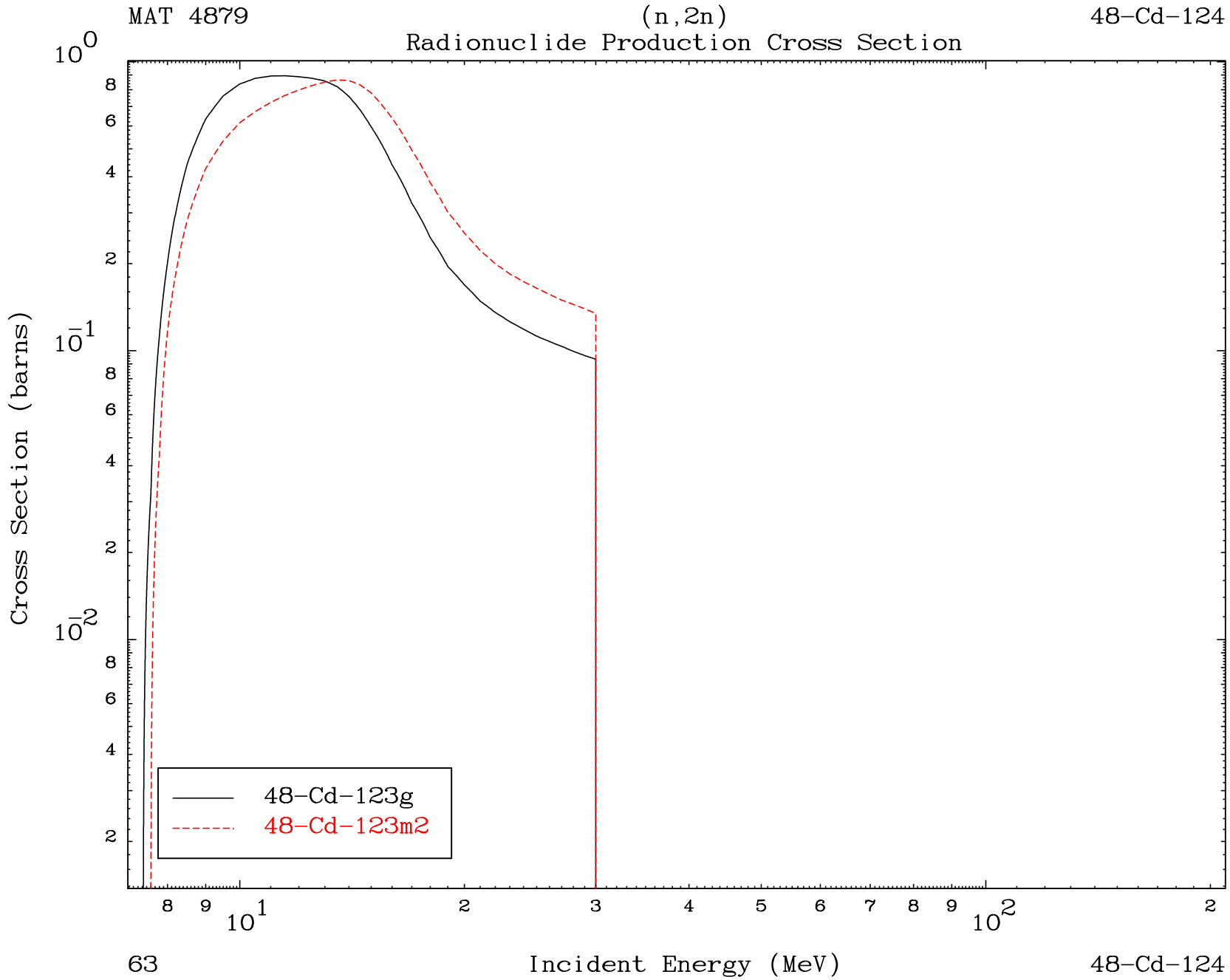

MAT 4879
MT= 61 (n,n') Level
Legendre Coefficients
48-Cd-124
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0.008
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
50
100
150
200
58
Incident Energy (MeV)
48-Cd-124

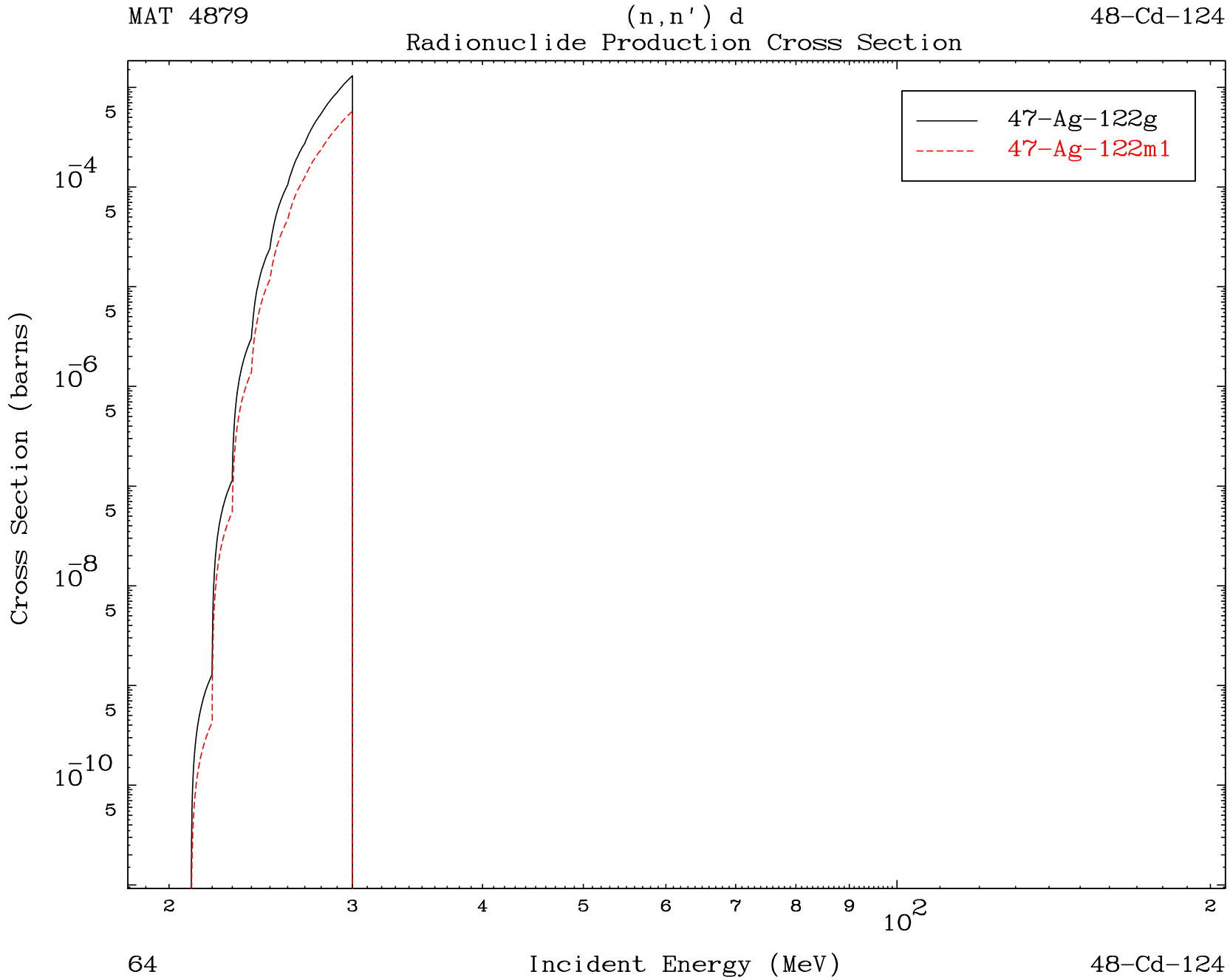

MAT 4879
MT= 61 (n,n') Level
Legendre Coefficients
48-Cd-124
X10^-0
0.0
-0.2
-0.4
-0.6
-0.8
-1.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
59
48-Cd-124
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32

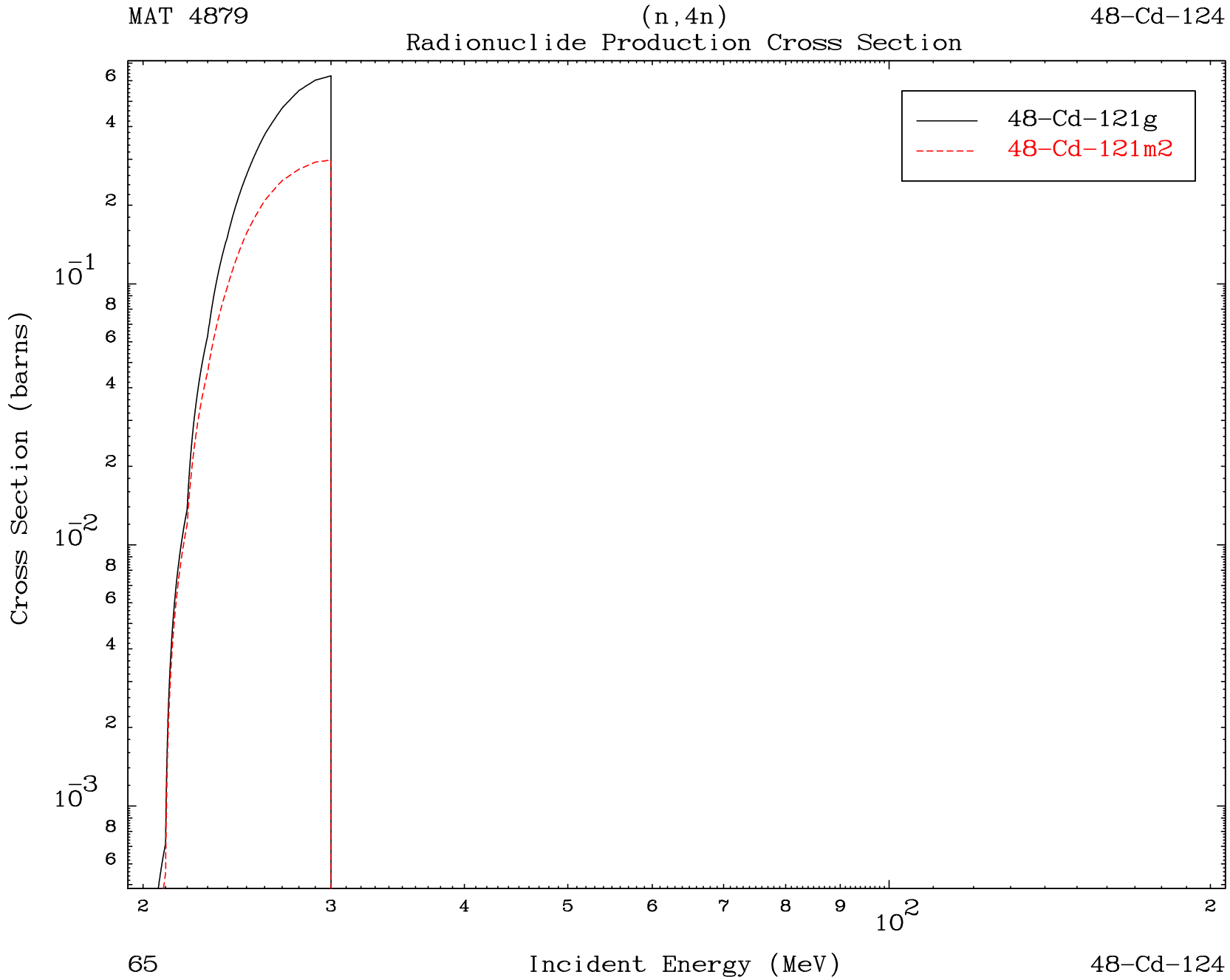

MAT 4879
MT= 62 (n,n') Level
Legendre Coefficients
48-Cd-124
0.08
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
60
Incident Energy (MeV)
48-Cd-124
P1
P2
P3
P4
P5
P6
P7
P8
P9

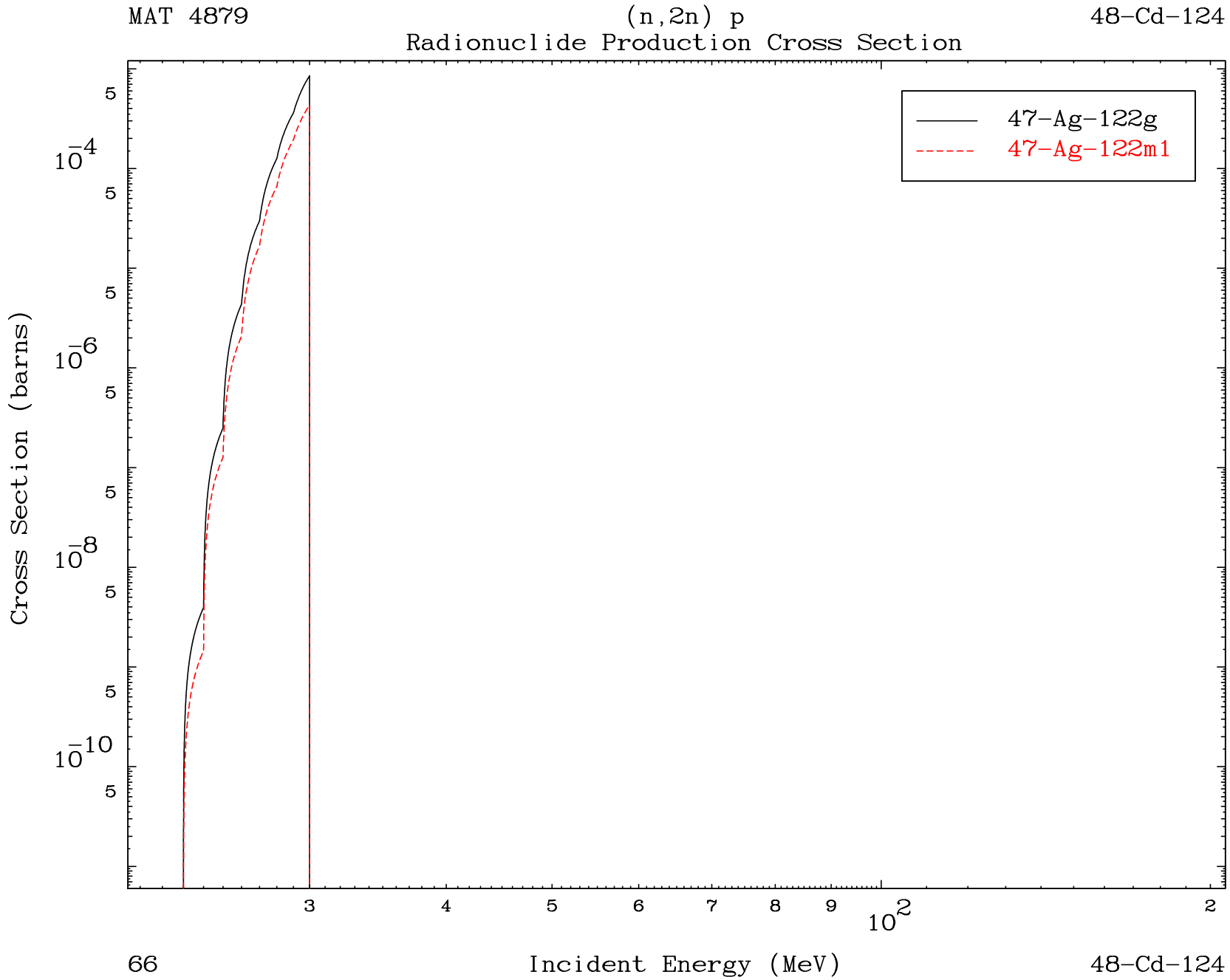

MAT 4879
MT= 62 (n,n') Level
Legendre Coefficients
48-Cd-124
X10+32
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
61
48-Cd-124
P10
P11
P12
P13
P14
P15
P16
P17
P18

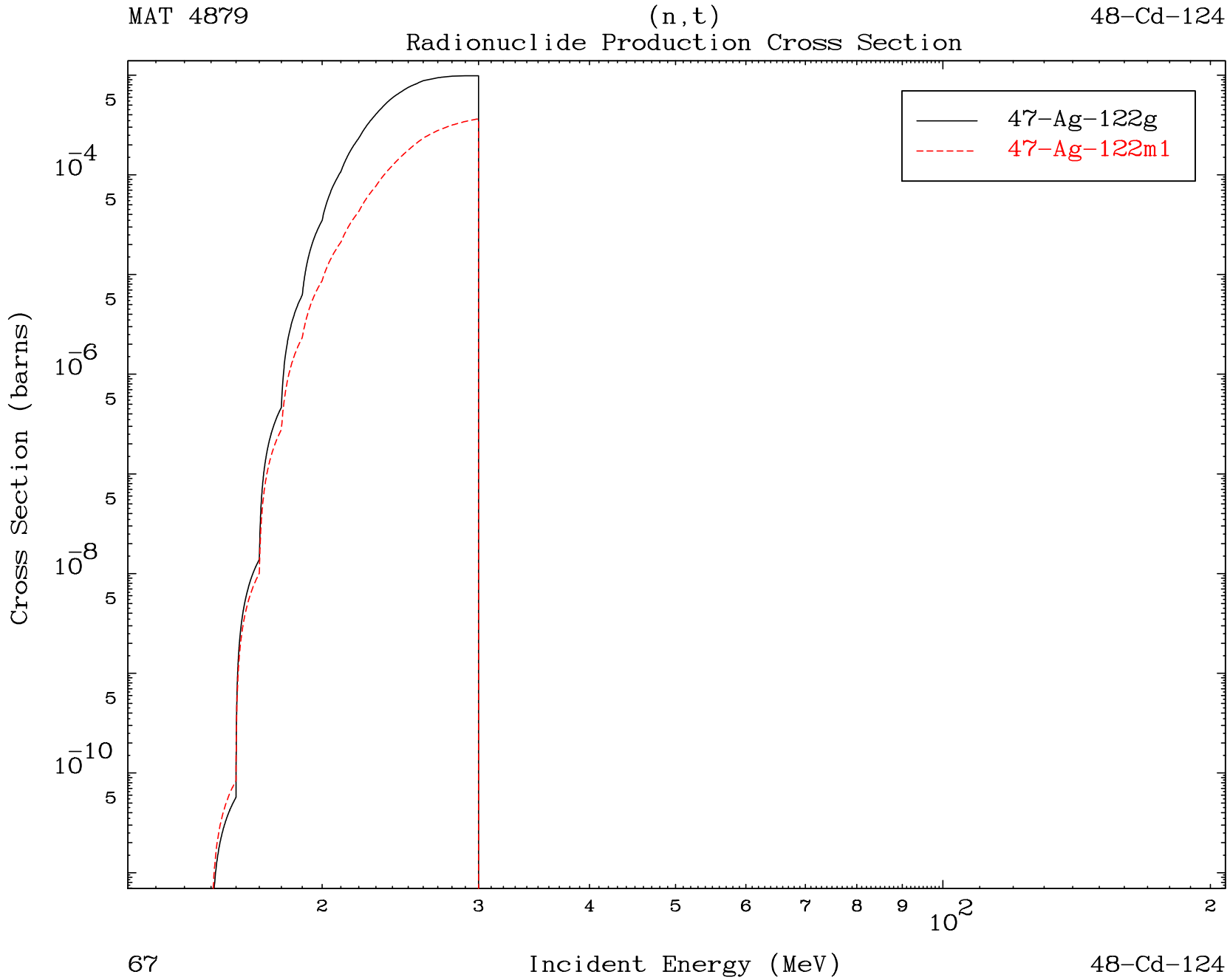

MAT 4879
MT= 62 (n,n') Level
Legendre Coefficients
48-Cd-124
0.0
X10^-6
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
50
100
150
200
62
Incident Energy (MeV)
48-Cd-124
P19
P20
P21
P22
P23
P24
P25
P26


MAT 4879
(n,2n)
48-Cd-124
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
48-Cd-123g
48-Cd-123m2
63
48-Cd-124


MAT 4879
(n,n') d
48-Cd-124
Radionuclide Production Cross Section
47-Ag-122g
47-Ag-122m1
Cross Section (barns)
Incident Energy (MeV)
64
48-Cd-124


MAT 4879
(n,4n)
48-Cd-124
Radionuclide Production Cross Section
48-Cd-121g
48-Cd-121m2
Cross Section (barns)
Incident Energy (MeV)
65
48-Cd-124


MAT 4879
(n,2n) p
48-Cd-124
Radionuclide Production Cross Section
47-Ag-122g
47-Ag-122m1
Cross Section (barns)
Incident Energy (MeV)
66
48-Cd-124


MAT 4879
(n,t)
48-Cd-124
Radionuclide Production Cross Section
47-Ag-122g
47-Ag-122m1
Cross Section (barns)
Incident Energy (MeV)
67
48-Cd-124