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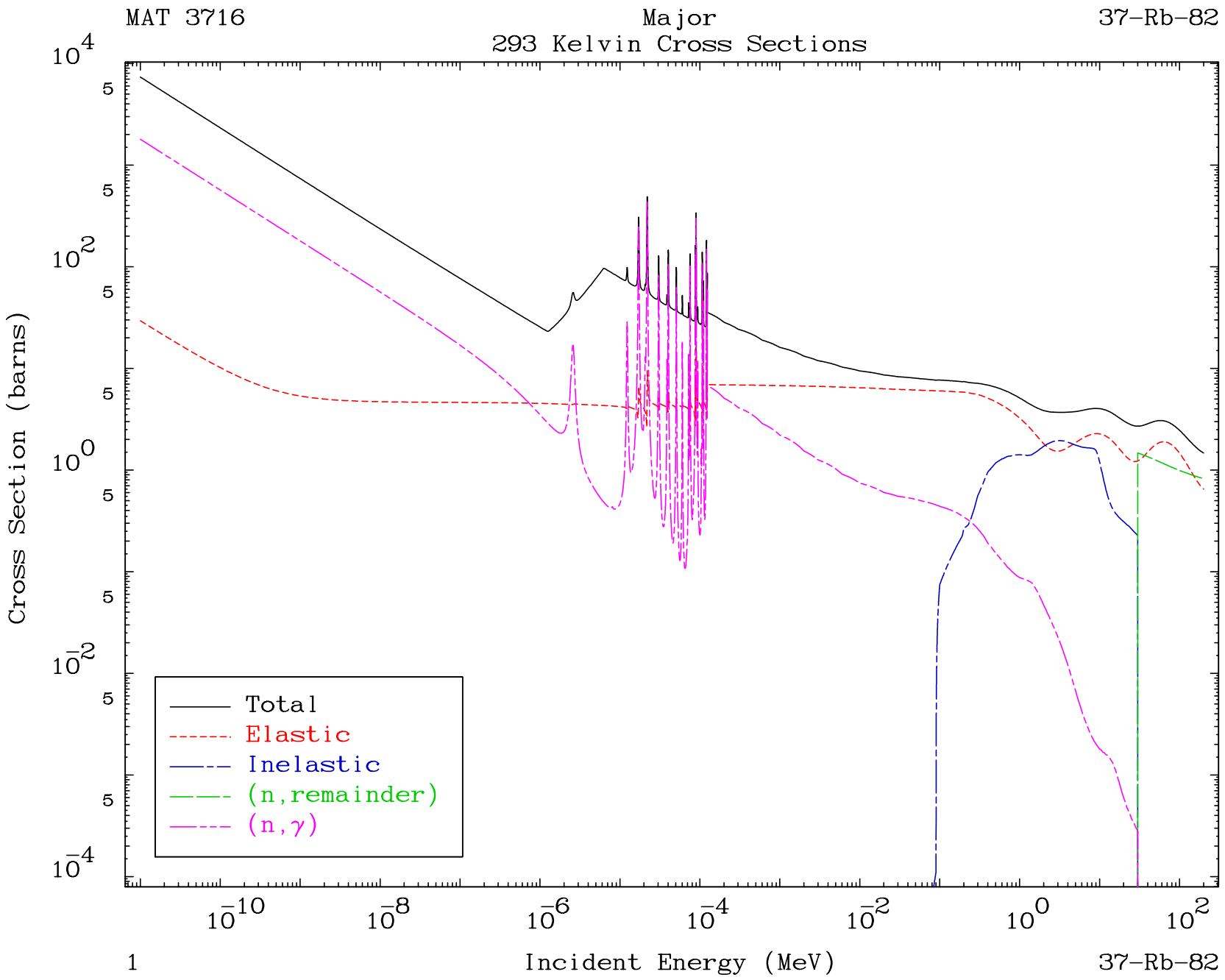
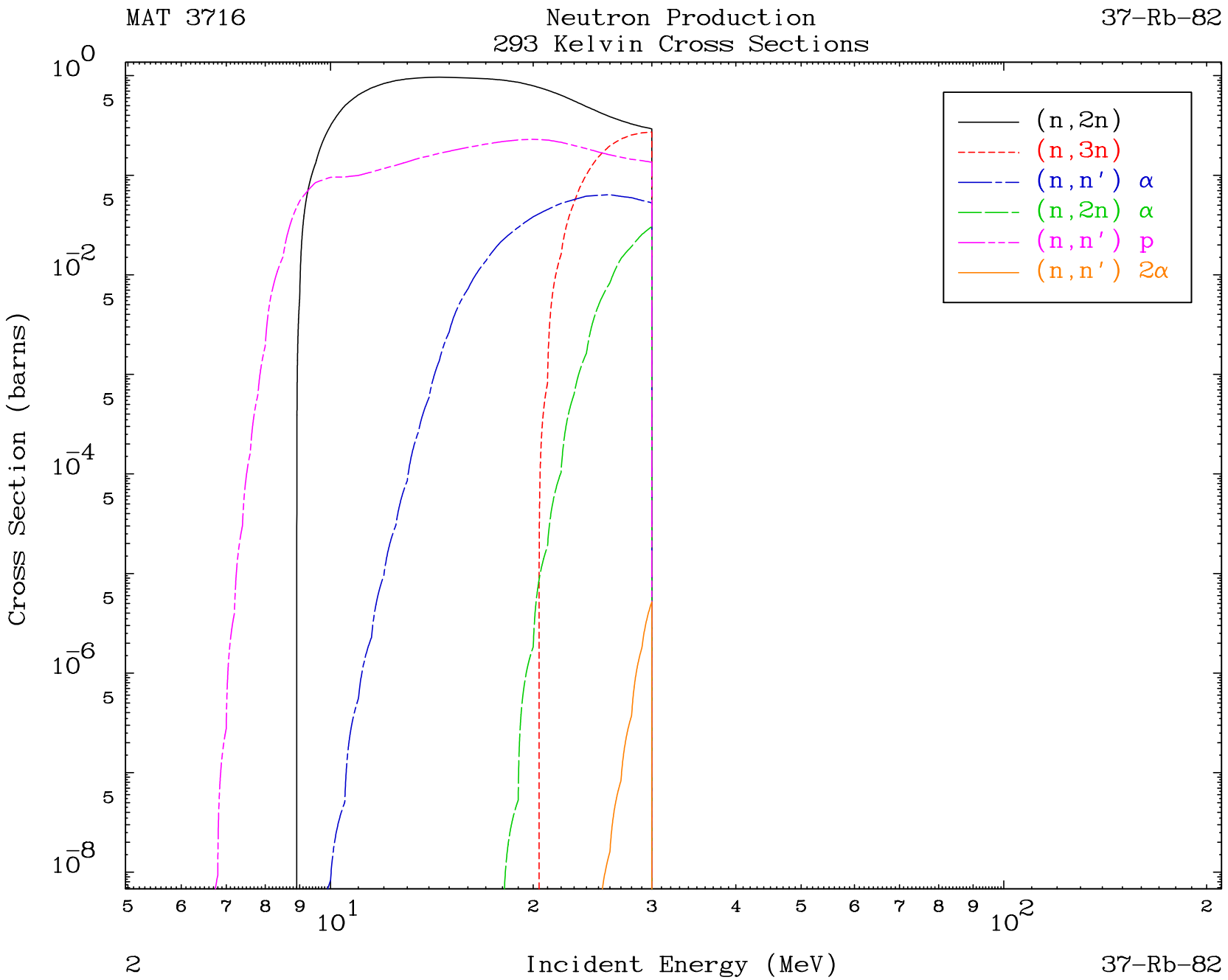
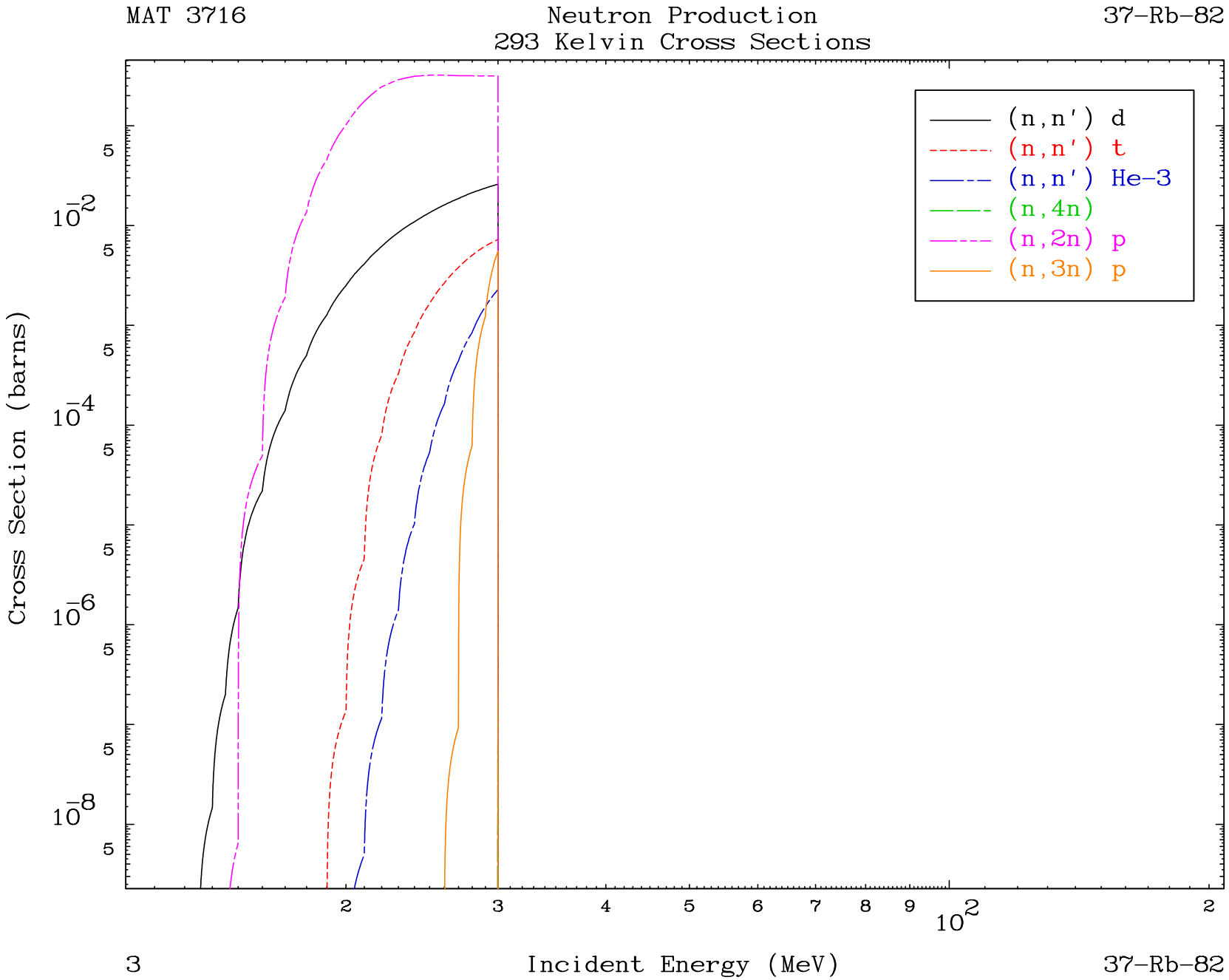
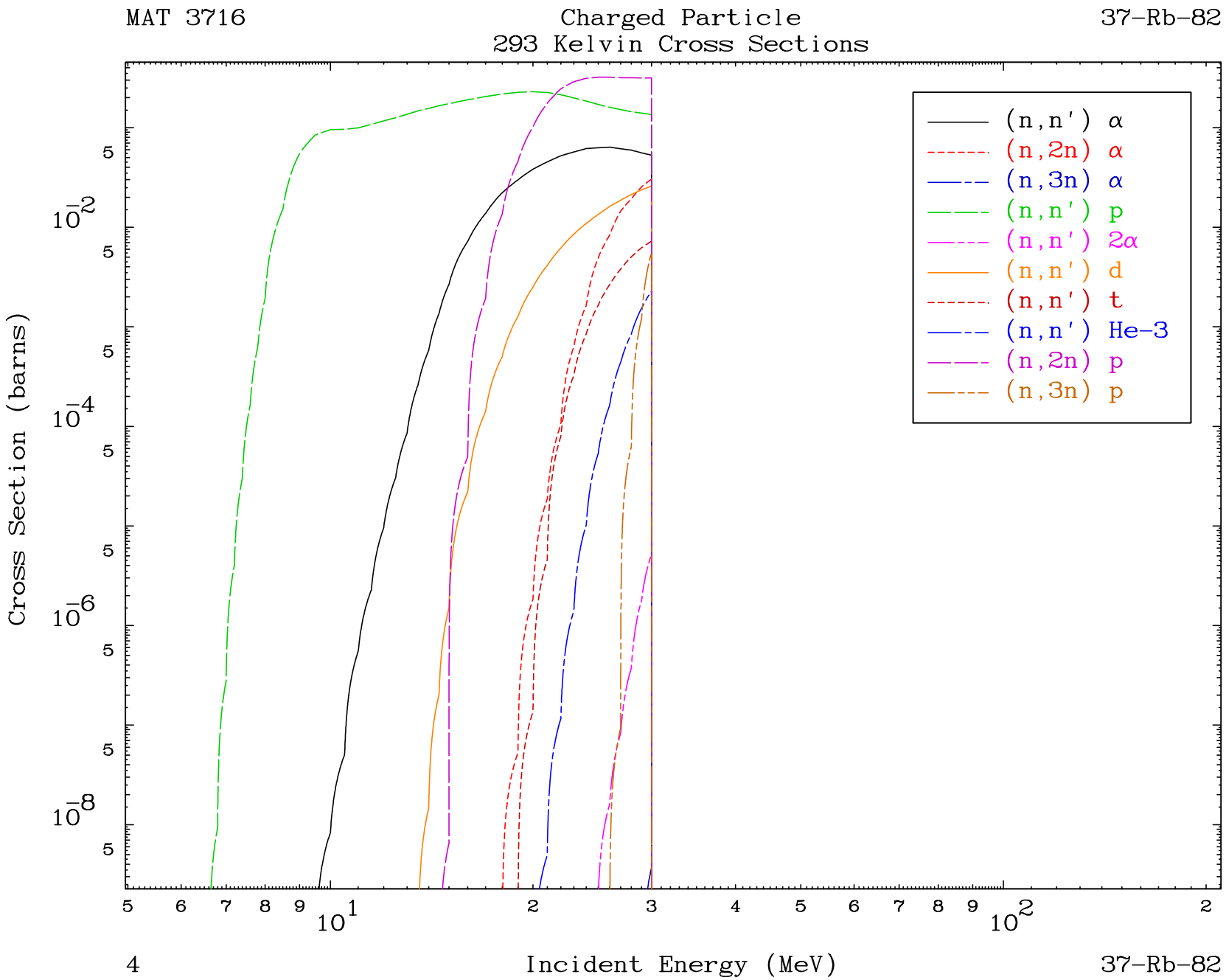
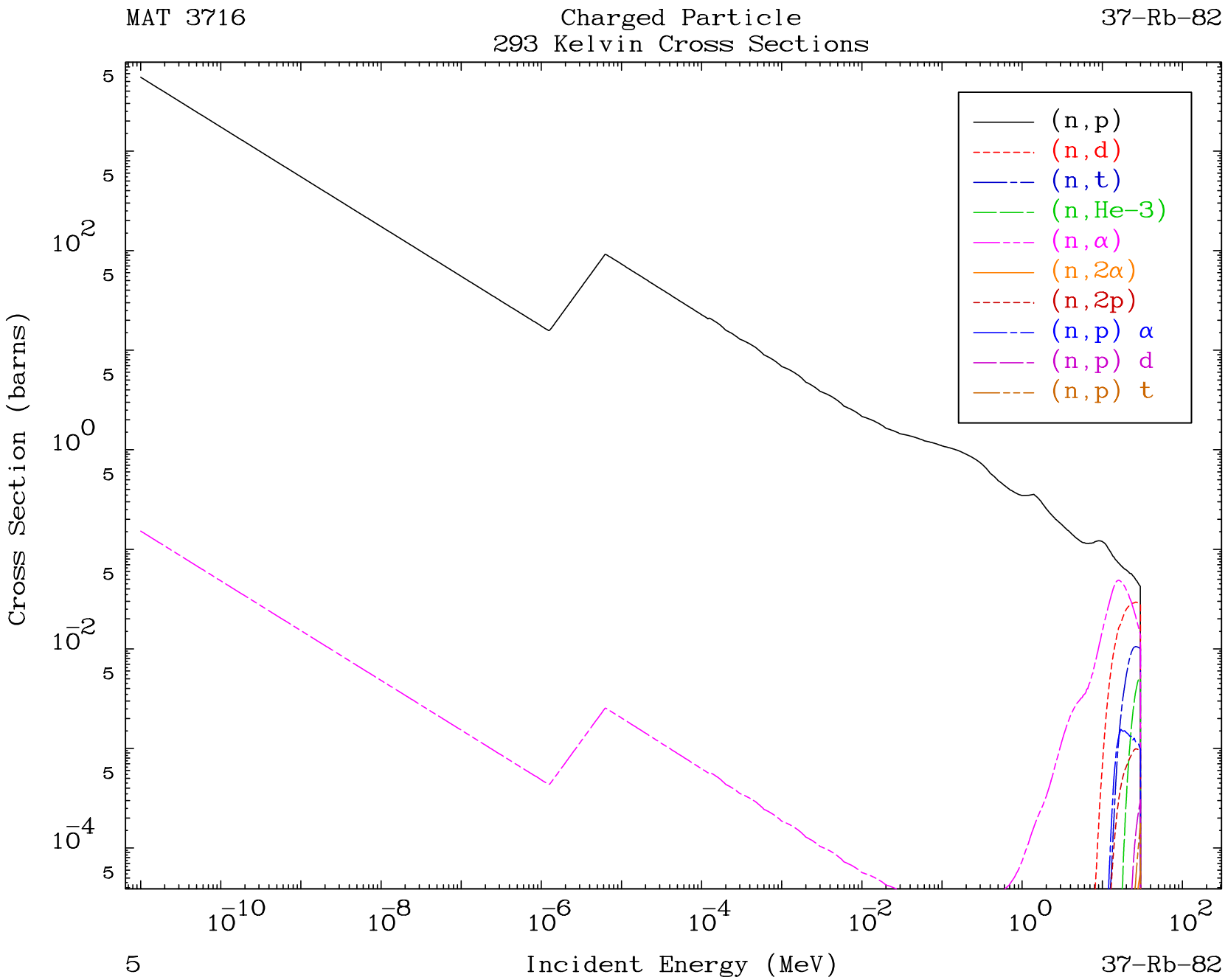
Press Mouse Button to Start

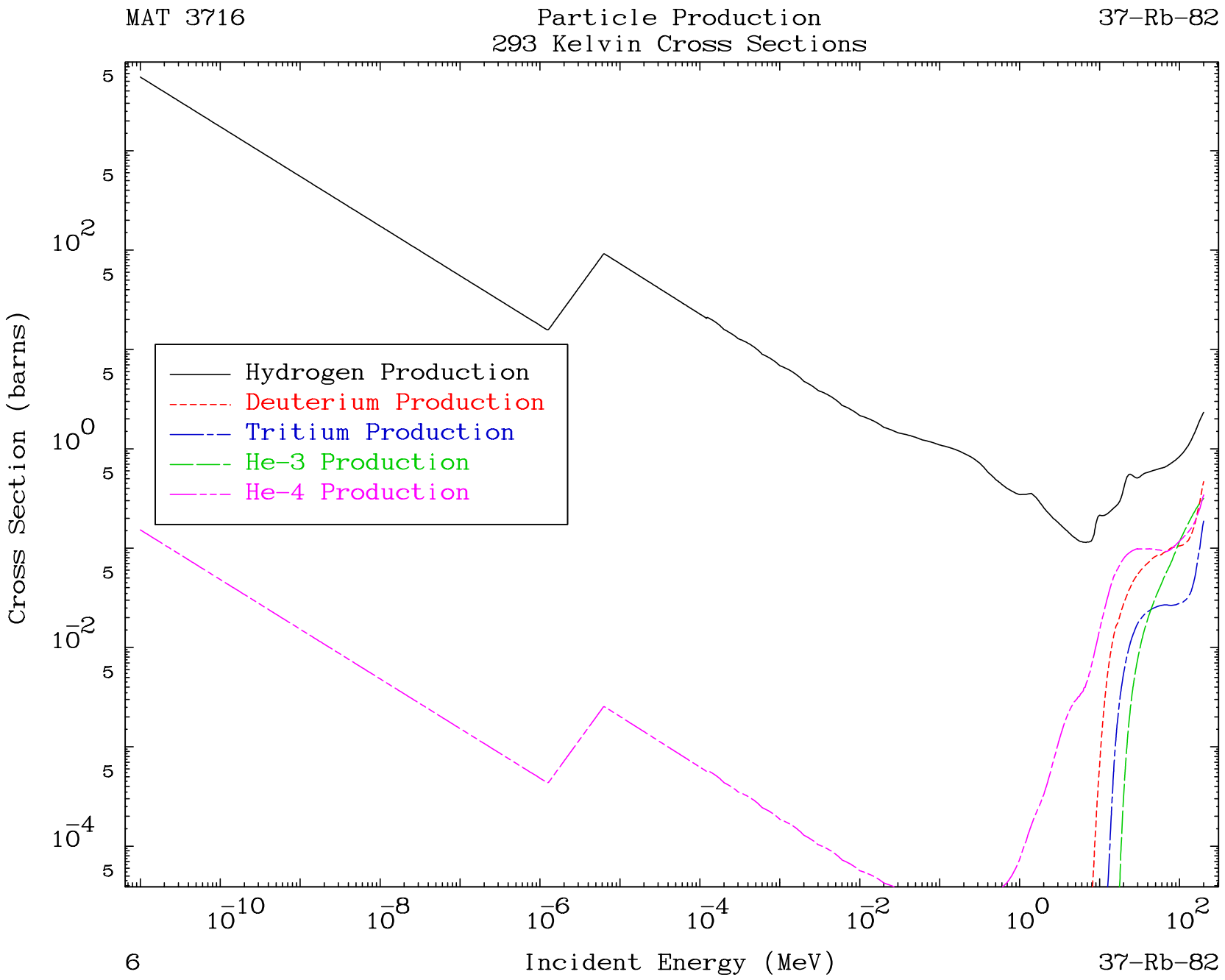

MAT 3716
Major
37-Rb-82
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
37-Rb-82

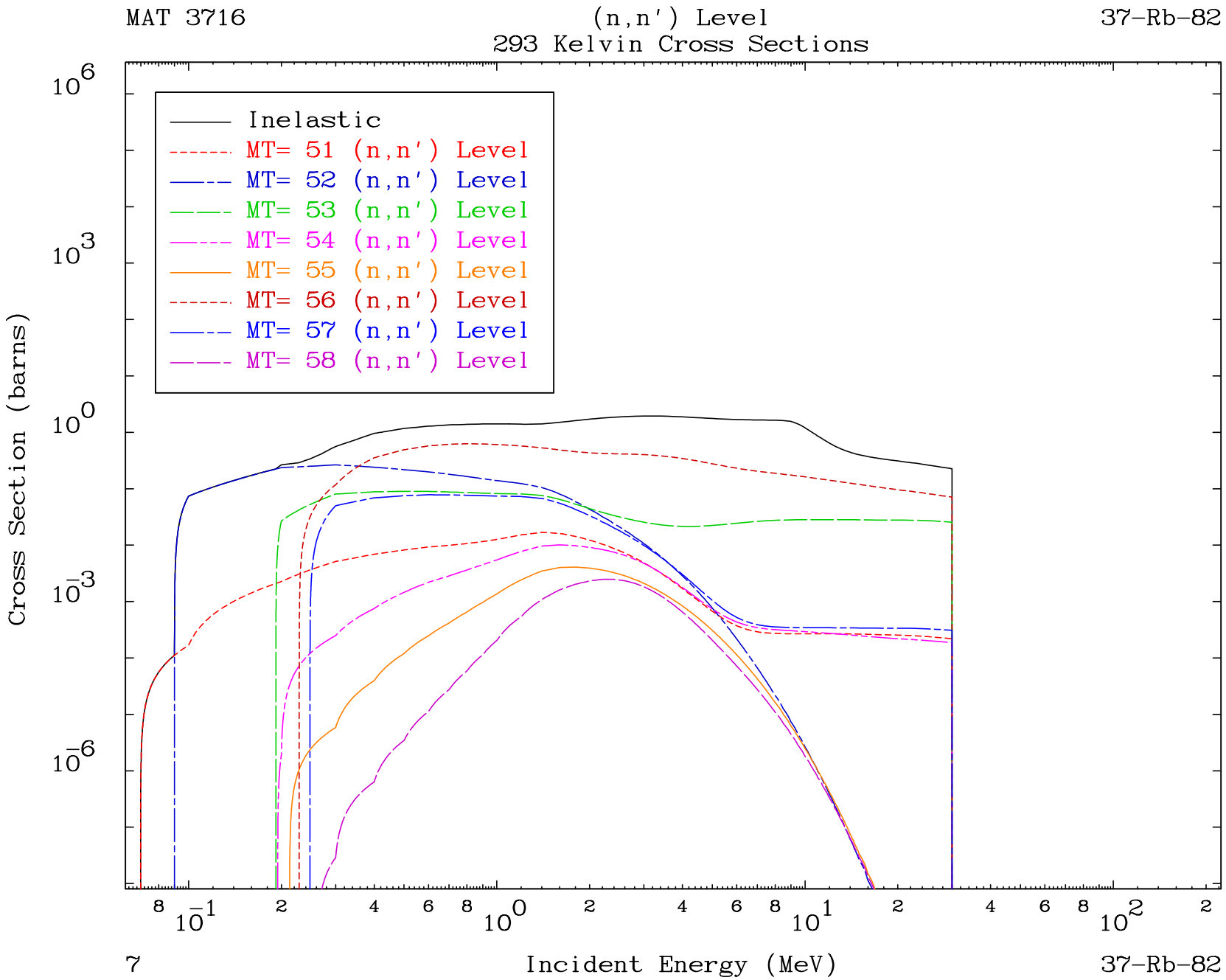

MAT 3716
Neutron Production
293 Kelvin Cross Sections
37-Rb-82
Cross Section (barns)
Incident Energy (MeV)
37-Rb-82
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α

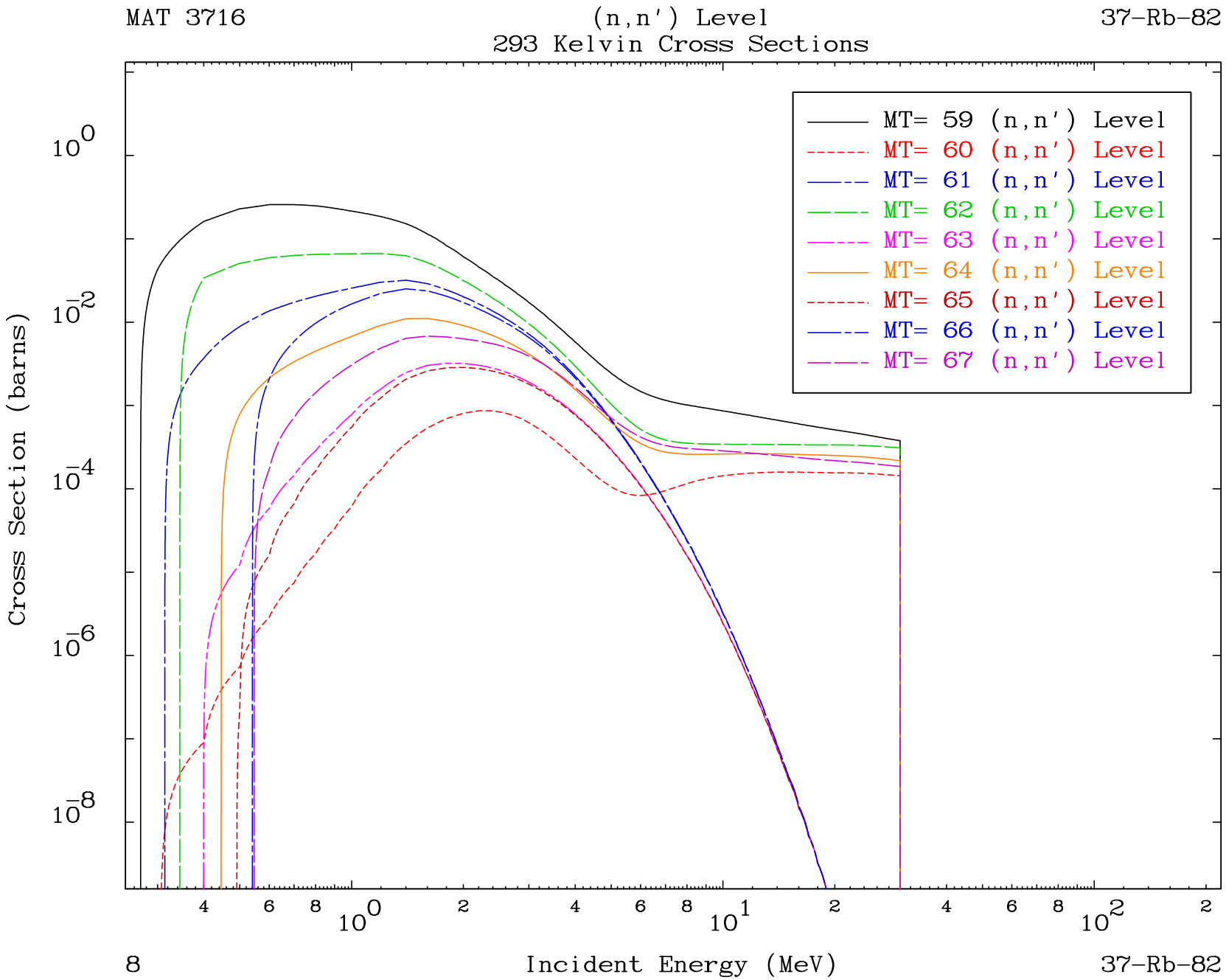

MAT 3716
Neutron Production
293 Kelvin Cross Sections
37-Rb-82
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
37-Rb-82

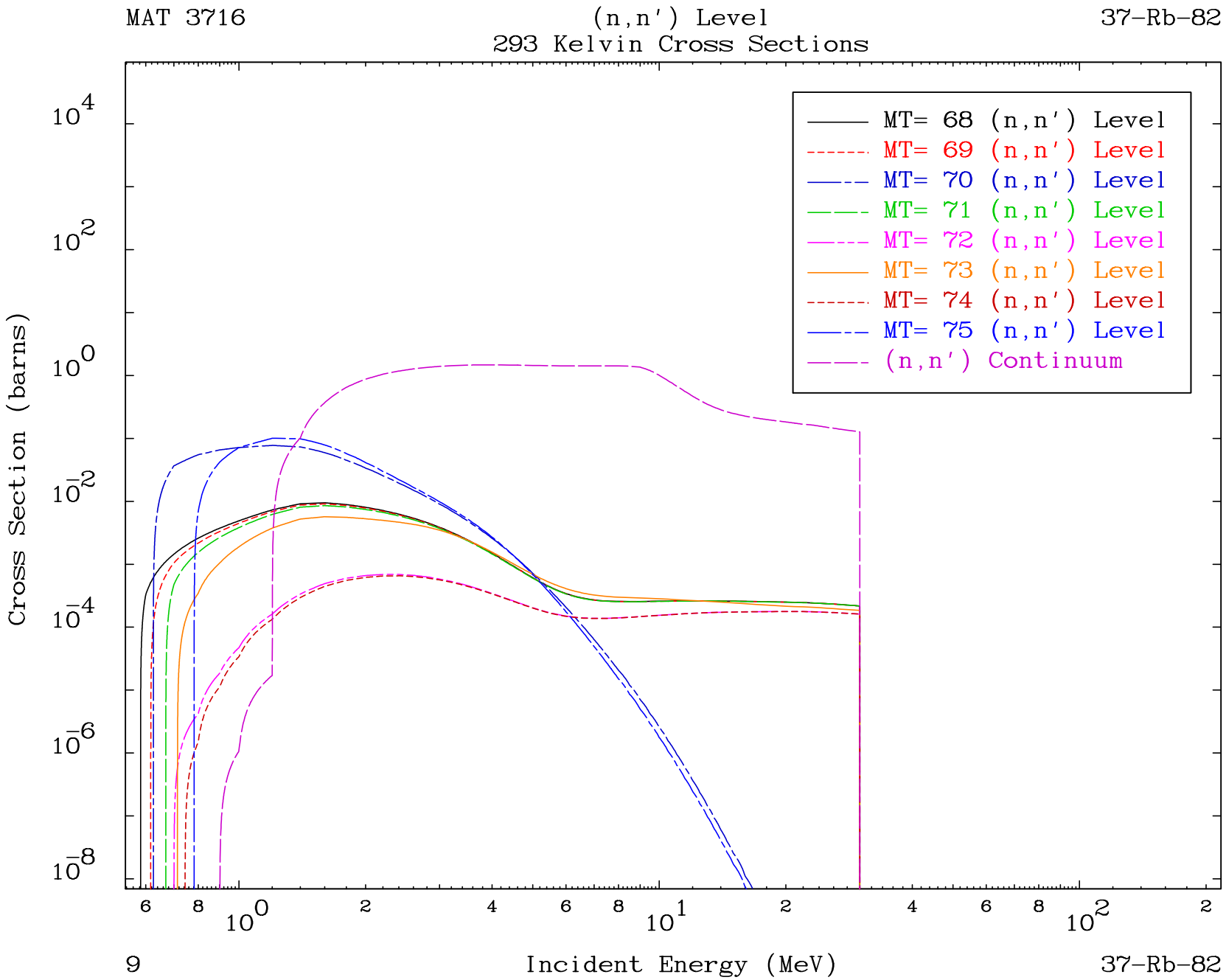

MAT 3716
Charged Particle
293 Kelvin Cross Sections
37-Rb-82
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
4
37-Rb-82

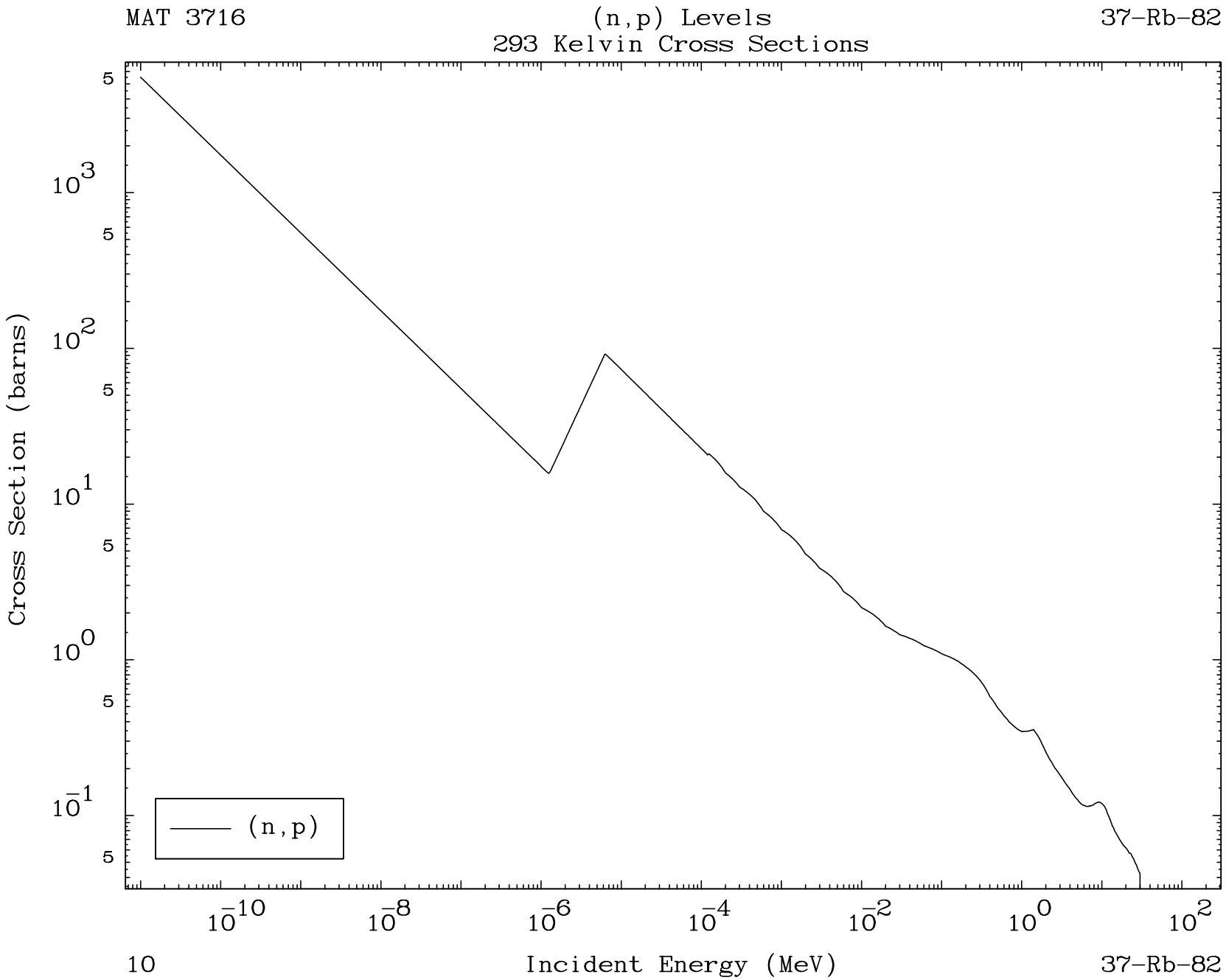

MAT 3716
Charged Particle
293 Kelvin Cross Sections
37-Rb-82
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
Cross Section (barns)
Incident Energy (MeV)
37-Rb-82

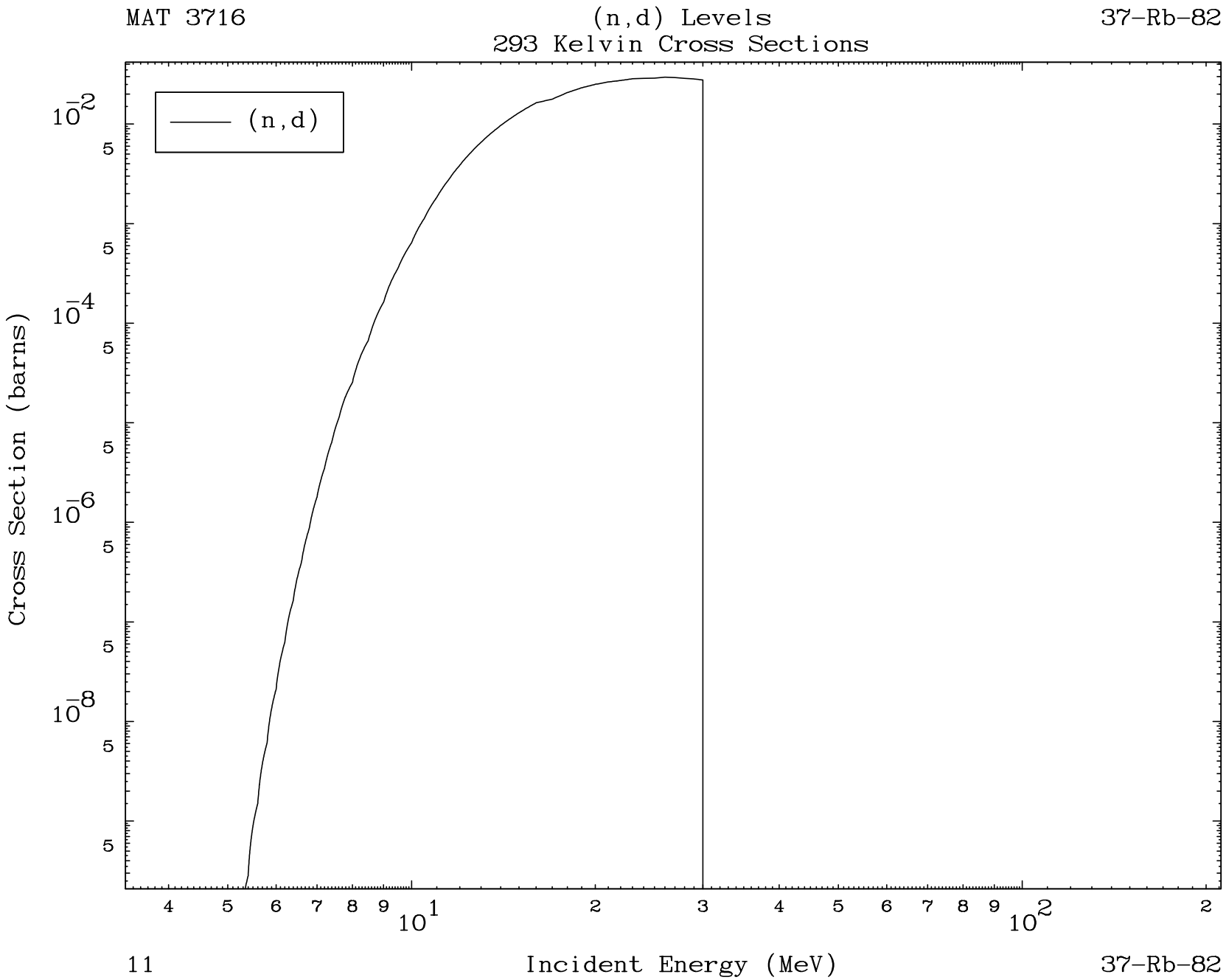

MAT 3716
Particle Production
293 Kelvin Cross Sections
37-Rb-82
Cross Section (barns)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Incident Energy (MeV)
6
37-Rb-82

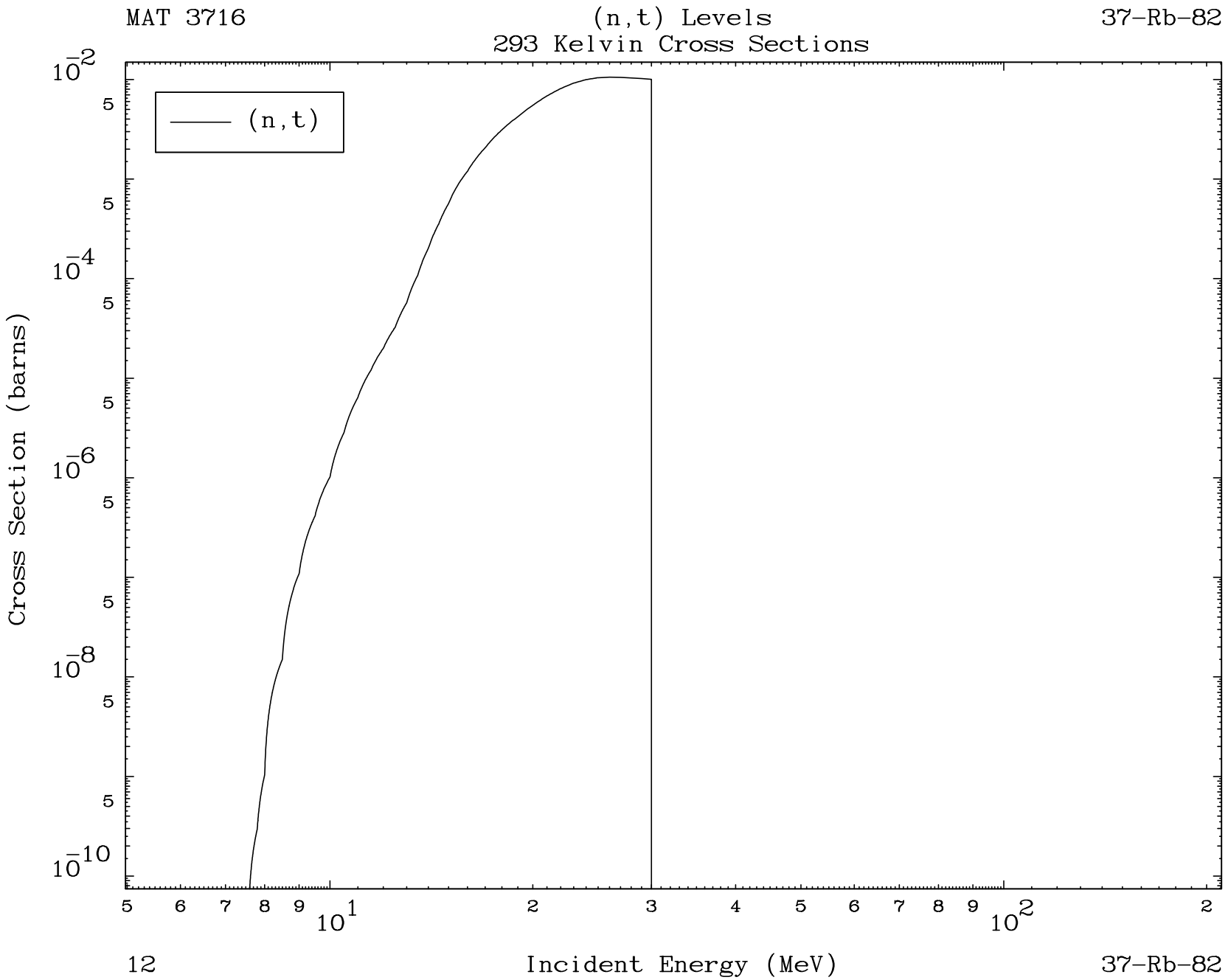

MAT 3716
(n,n') Level
37-Rb-82
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
7
37-Rb-82

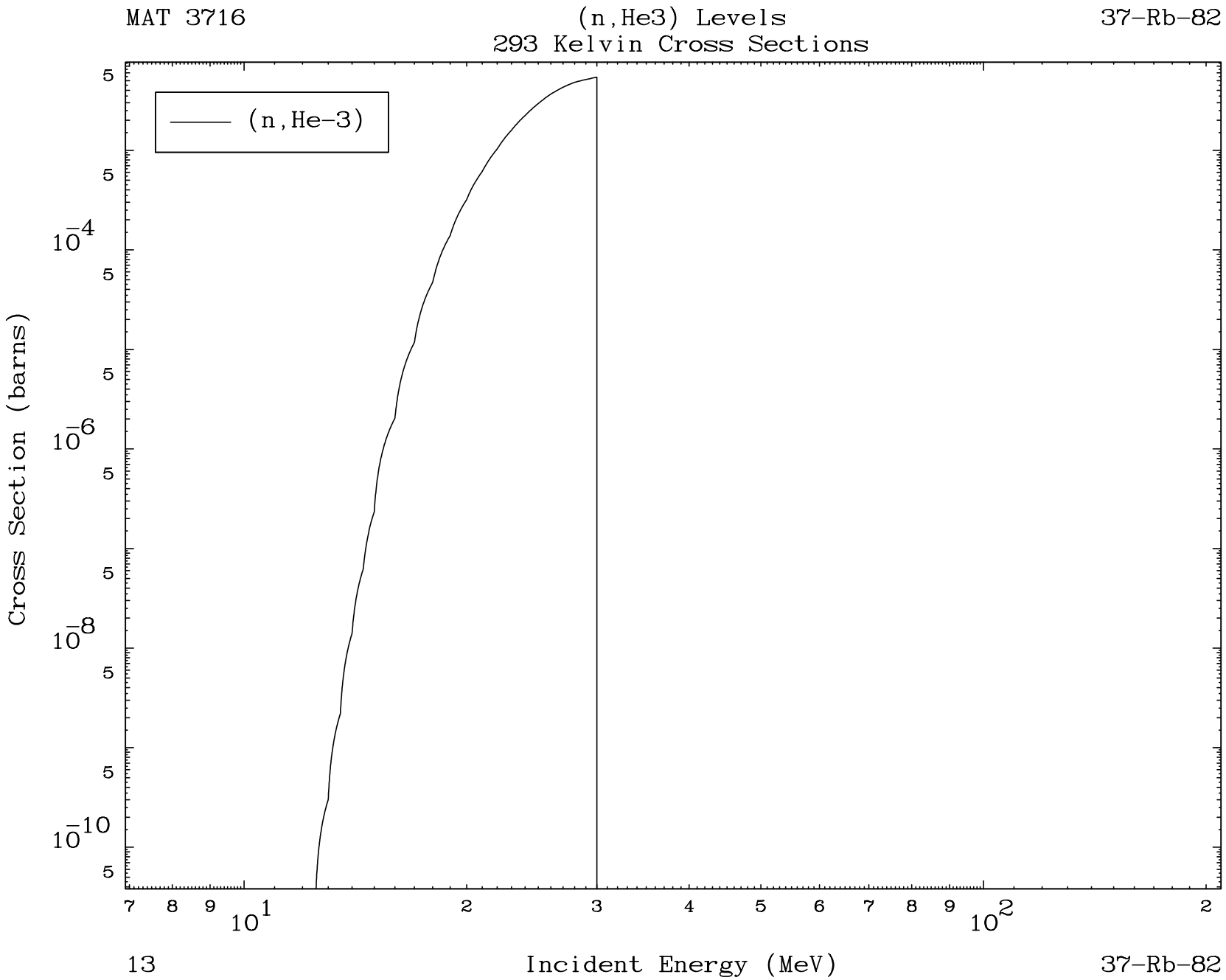

MAT 3716
(n,n') Level
37-Rb-82
293 Kelvin Cross Sections
MT= 59 (n,n') Level
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
8
37-Rb-82

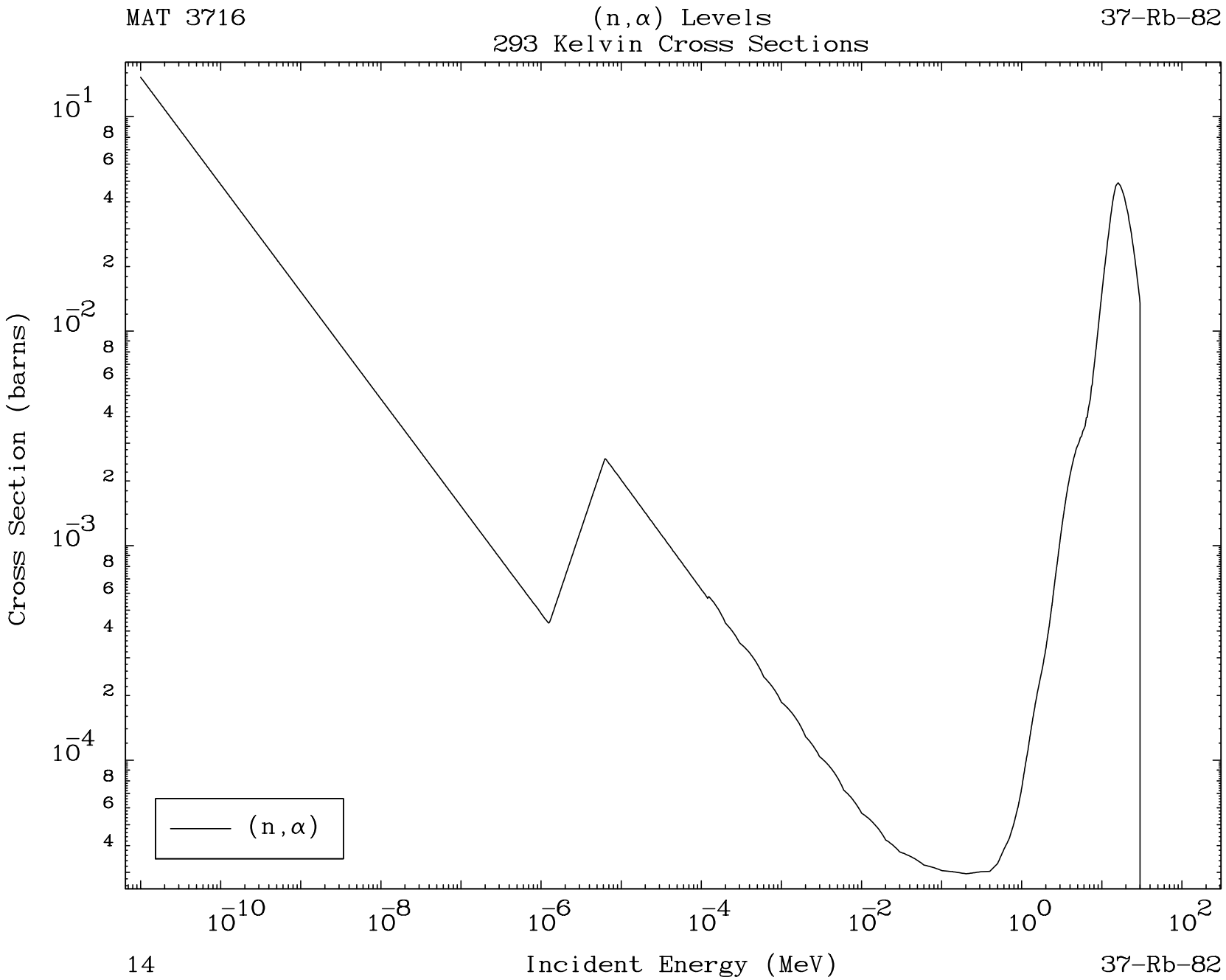

MAT 3716
(n,n') Level
37-Rb-82
293 Kelvin Cross Sections
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
MT= 75 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
9
37-Rb-82

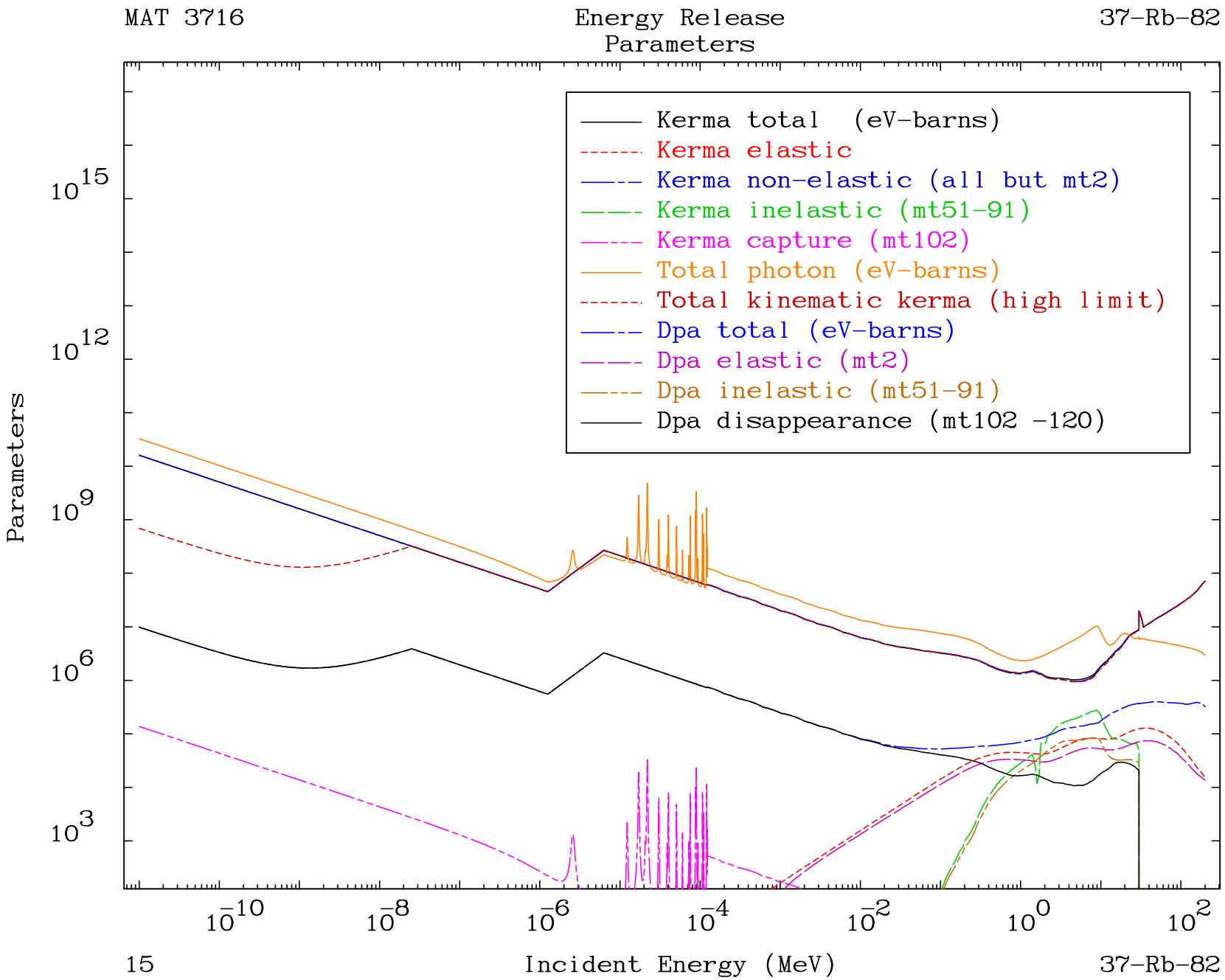

MAT 3716
(n,p) Levels
37-Rb-82
293 Kelvin Cross Sections
Cross Section (barns)
10^3
10^2
10^1
10^0
10^-1
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
(n,p)
10
Incident Energy (MeV)
37-Rb-82

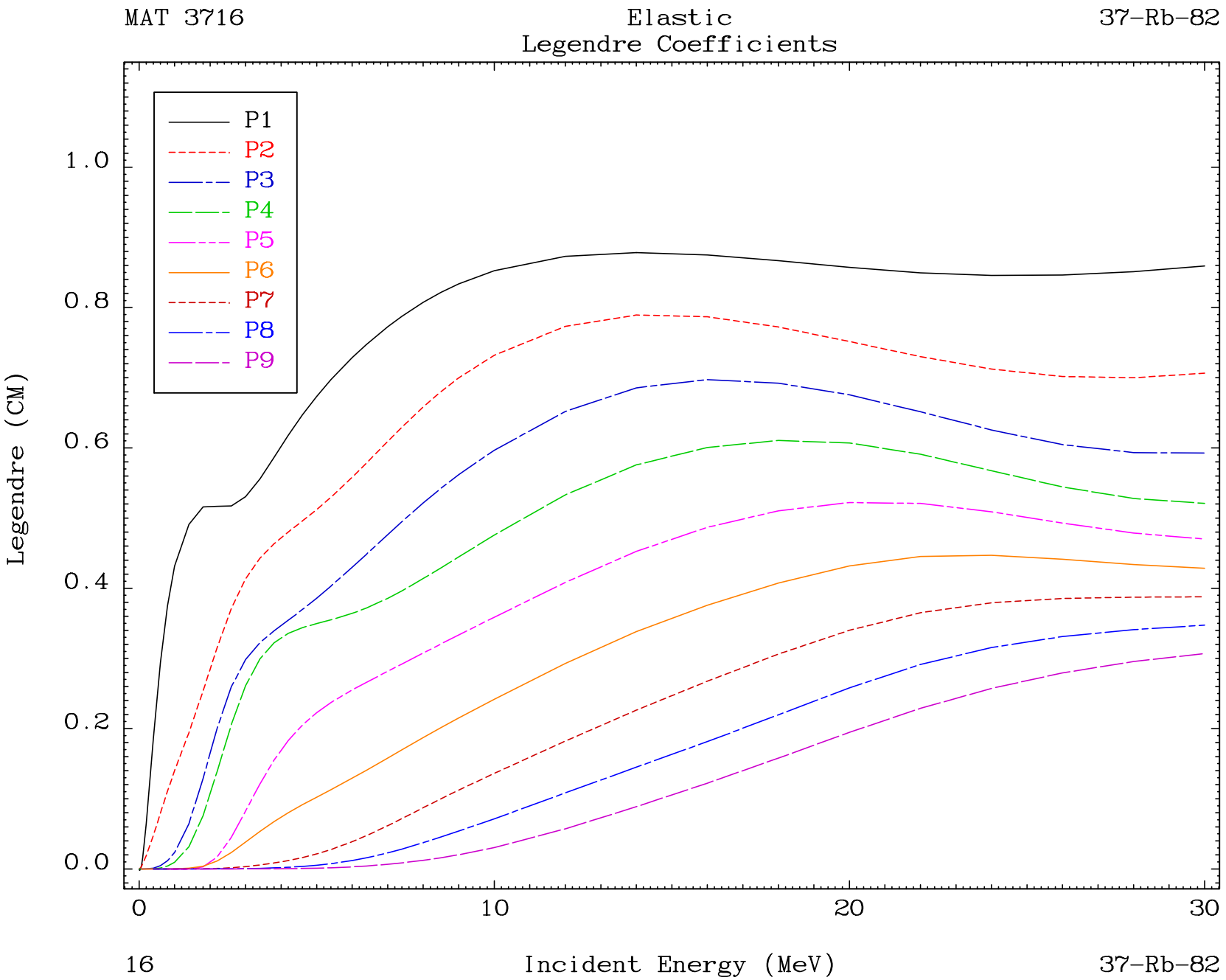

MAT 3716
(n,d) Levels
37-Rb-82
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
11
37-Rb-82

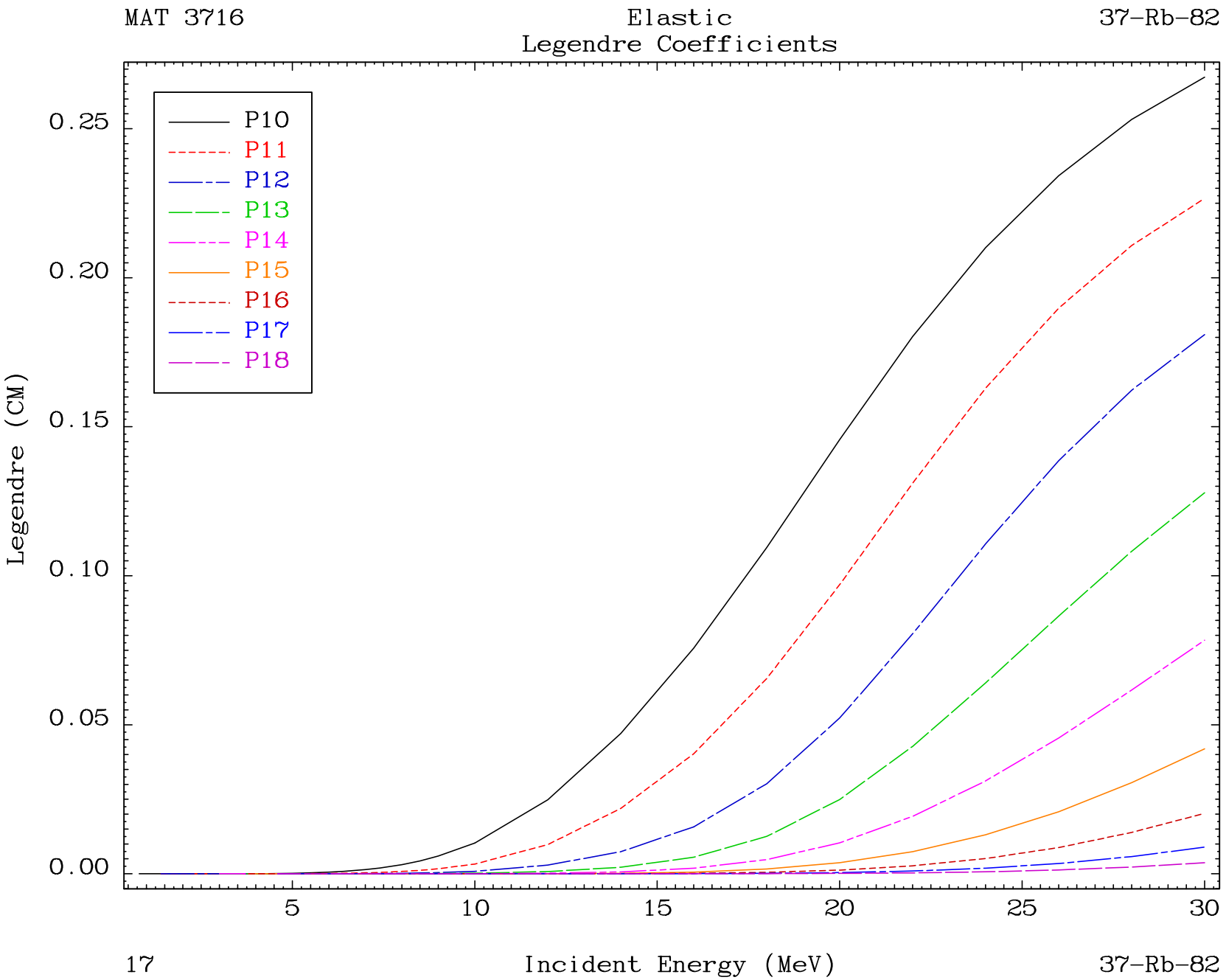

MAT 3716
(n,t) Levels
37-Rb-82
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
12
37-Rb-82

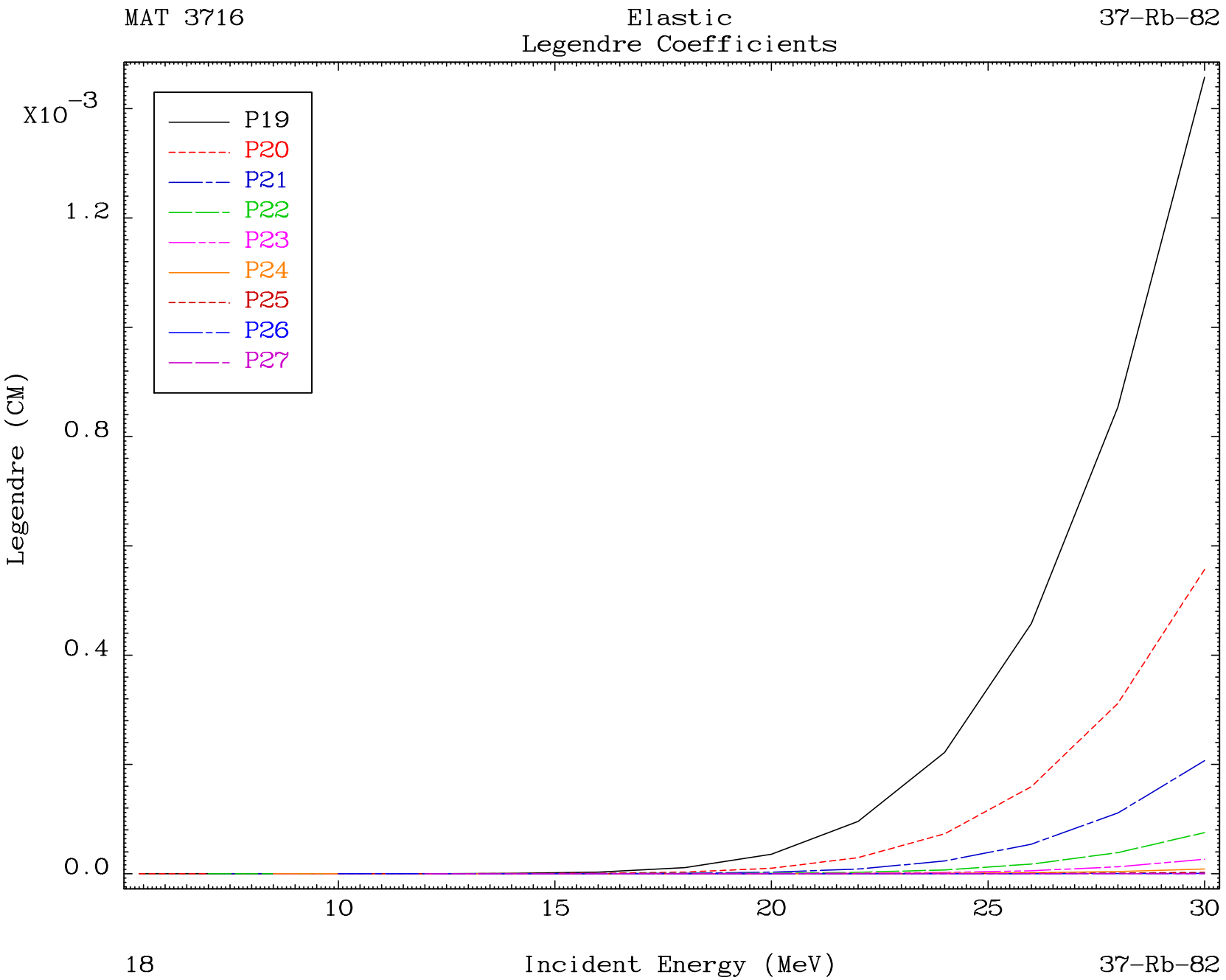

MAT 3716
(n,He3) Levels
37-Rb-82
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10-4
10-6
10-8
10-10
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
13
37-Rb-82

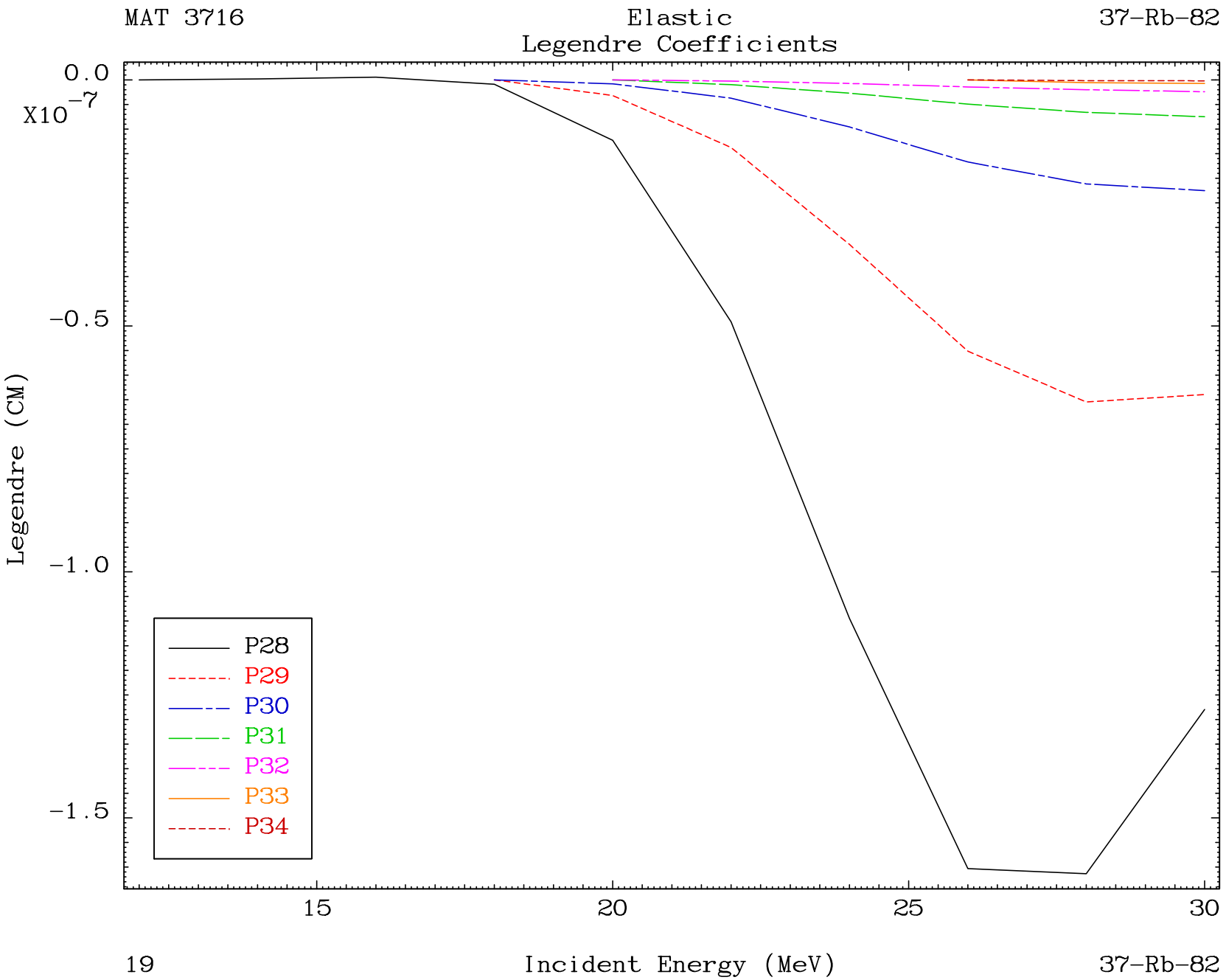

MAT 3716
(n,α) Levels
37-Rb-82
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
(n,α)
14
37-Rb-82

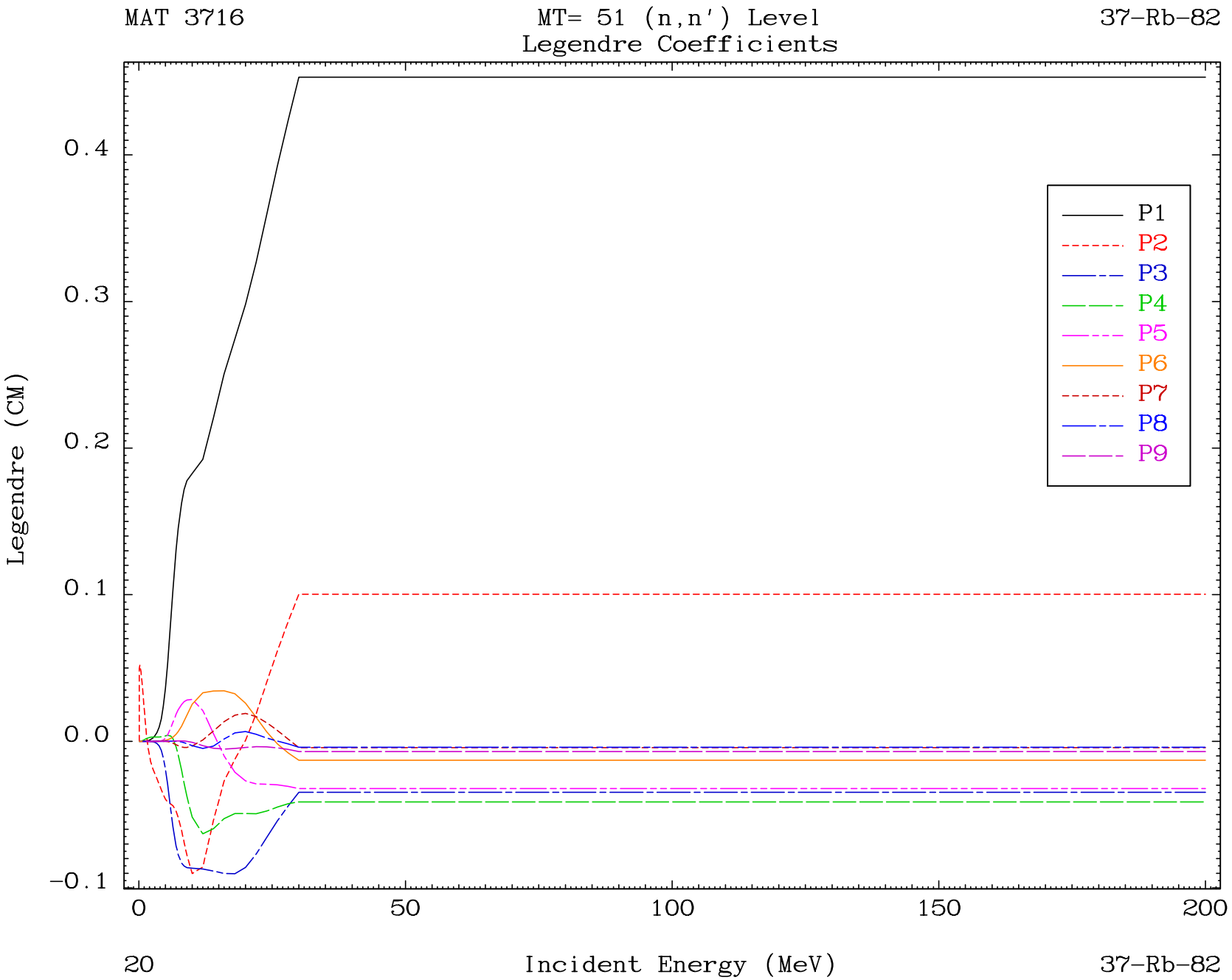

MAT 3716
Energy Release
Parameters
37-Rb-82
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^15
10^12
10^9
10^6
10^3
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
15
37-Rb-82

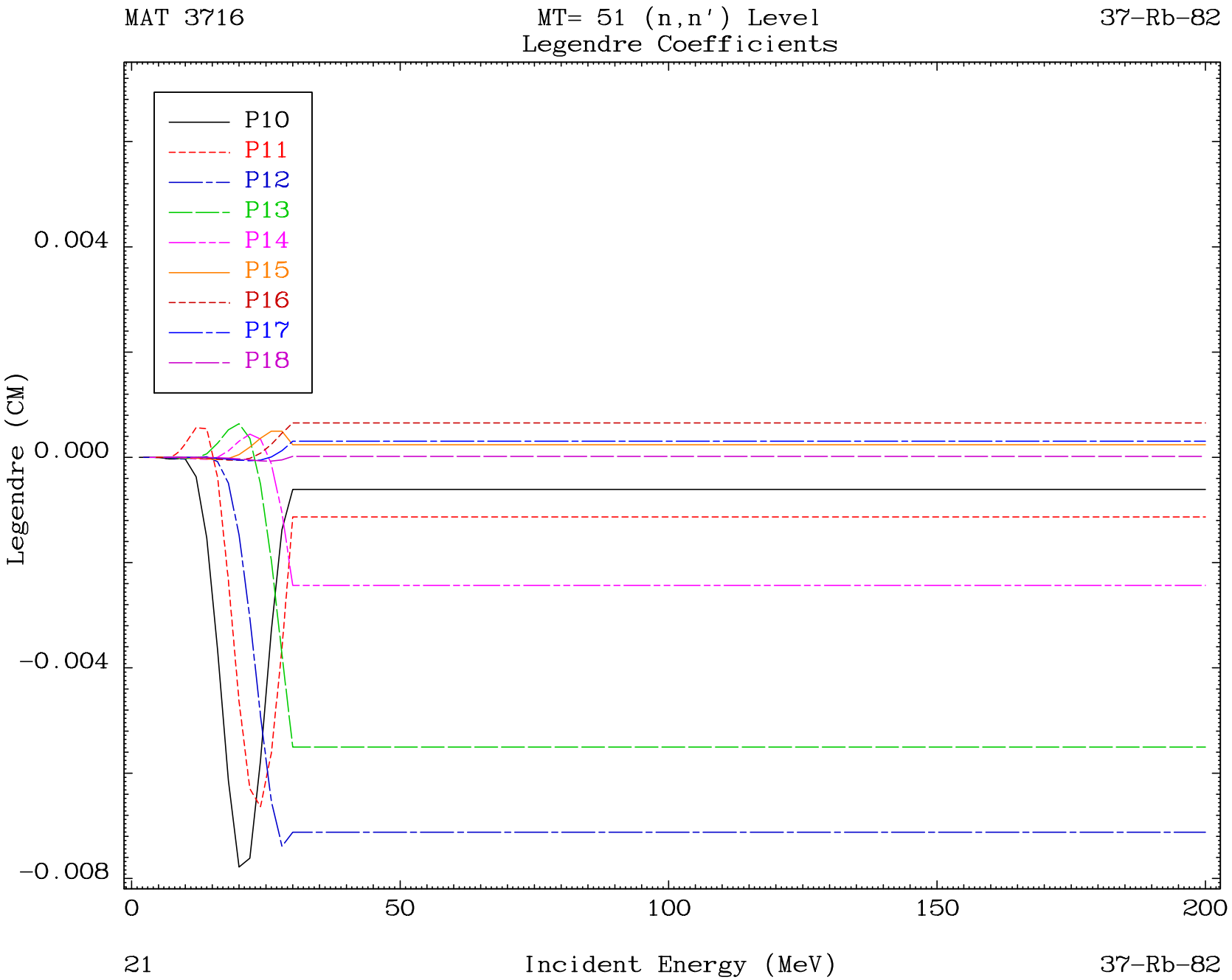

MAT 3716
Elastic
Legendre Coefficients
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
1.0
0.8
0.6
0.4
0.2
0.0
0
10
20
30
16
Incident Energy (MeV)
37-Rb-82

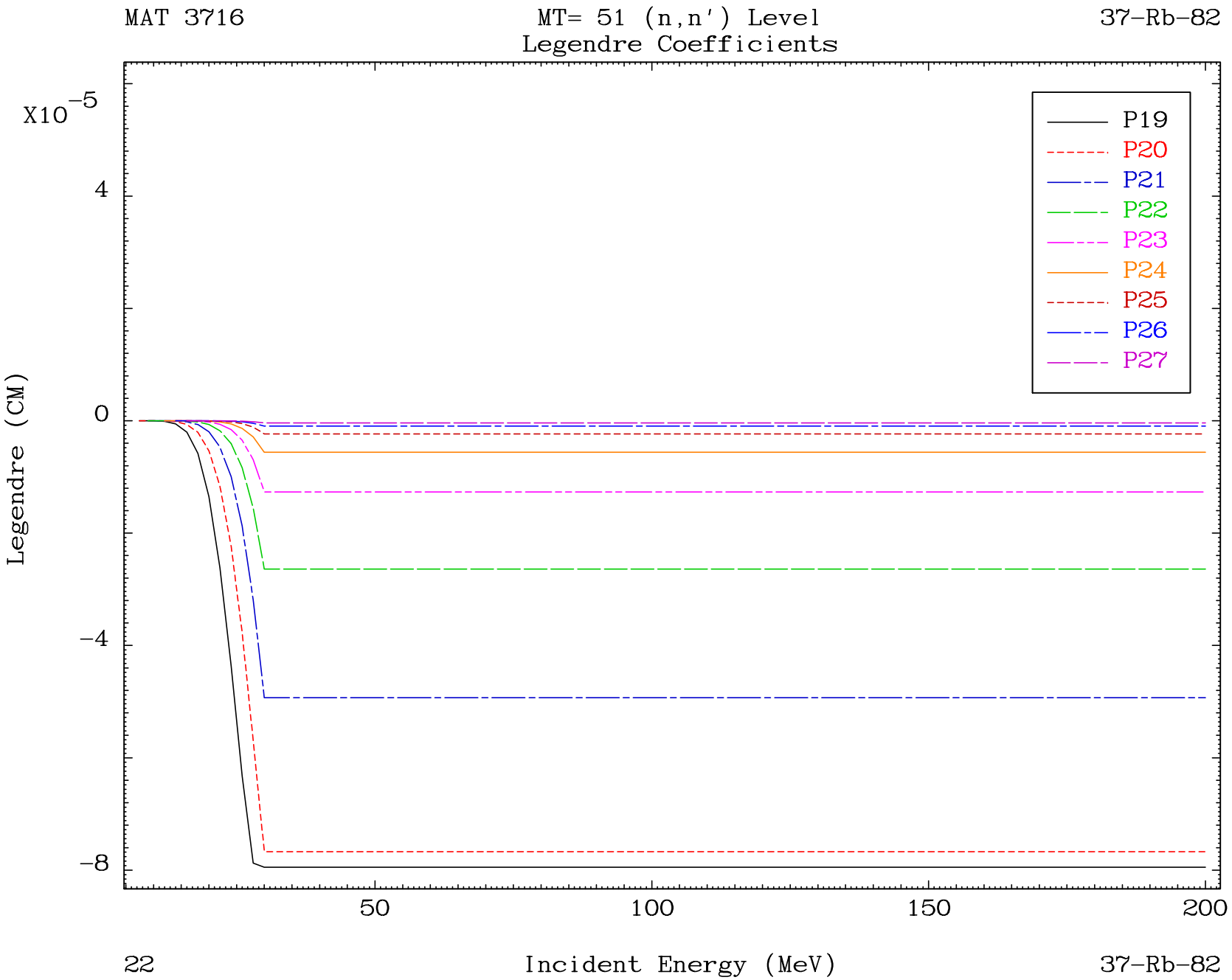

MAT 3716
Elastic
Legendre Coefficients
37-Rb-82
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.25
0.20
0.15
0.10
0.05
0.00
5
10
15
20
25
30
17
Incident Energy (MeV)
37-Rb-82

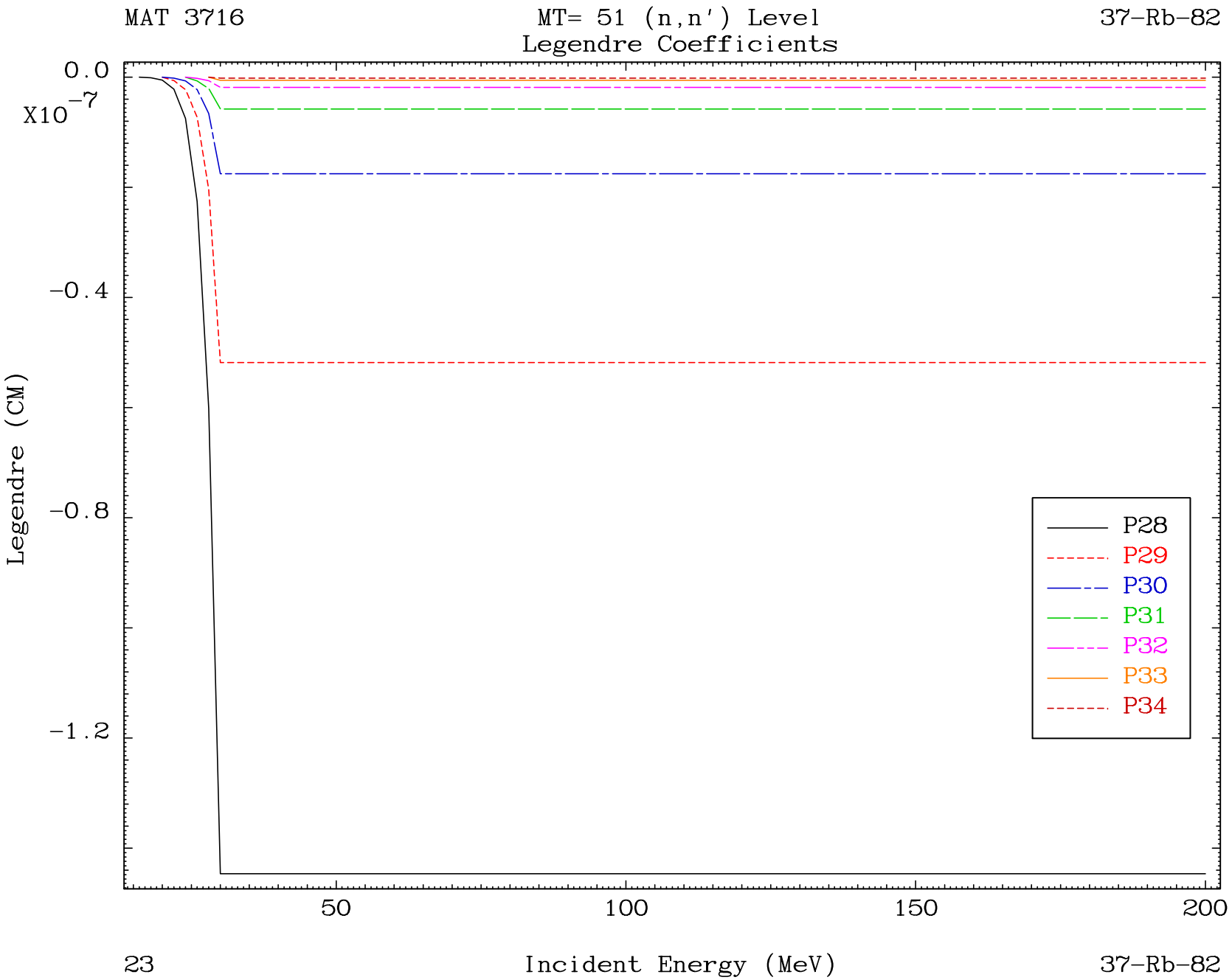

MAT 3716
Elastic
Legendre Coefficients
37-Rb-82
X10-3
1.2
0.8
0.4
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
10
15
20
25
30
18
Incident Energy (MeV)
37-Rb-82

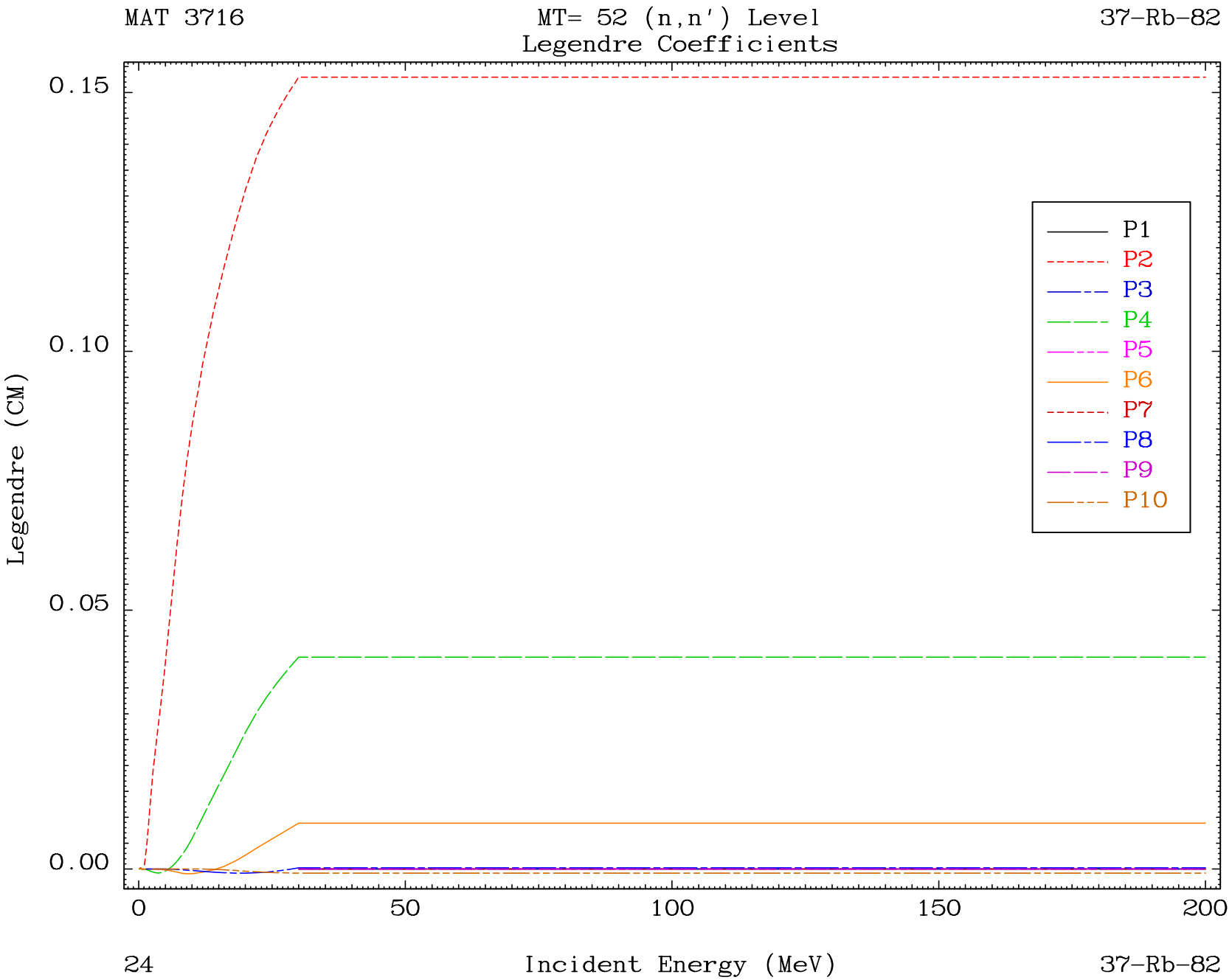

MAT 3716
Elastic
Legendre Coefficients
37-Rb-82
0.0
X10-7
-0.5
-1.0
-1.5
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
15
20
25
30
19
Incident Energy (MeV)
37-Rb-82

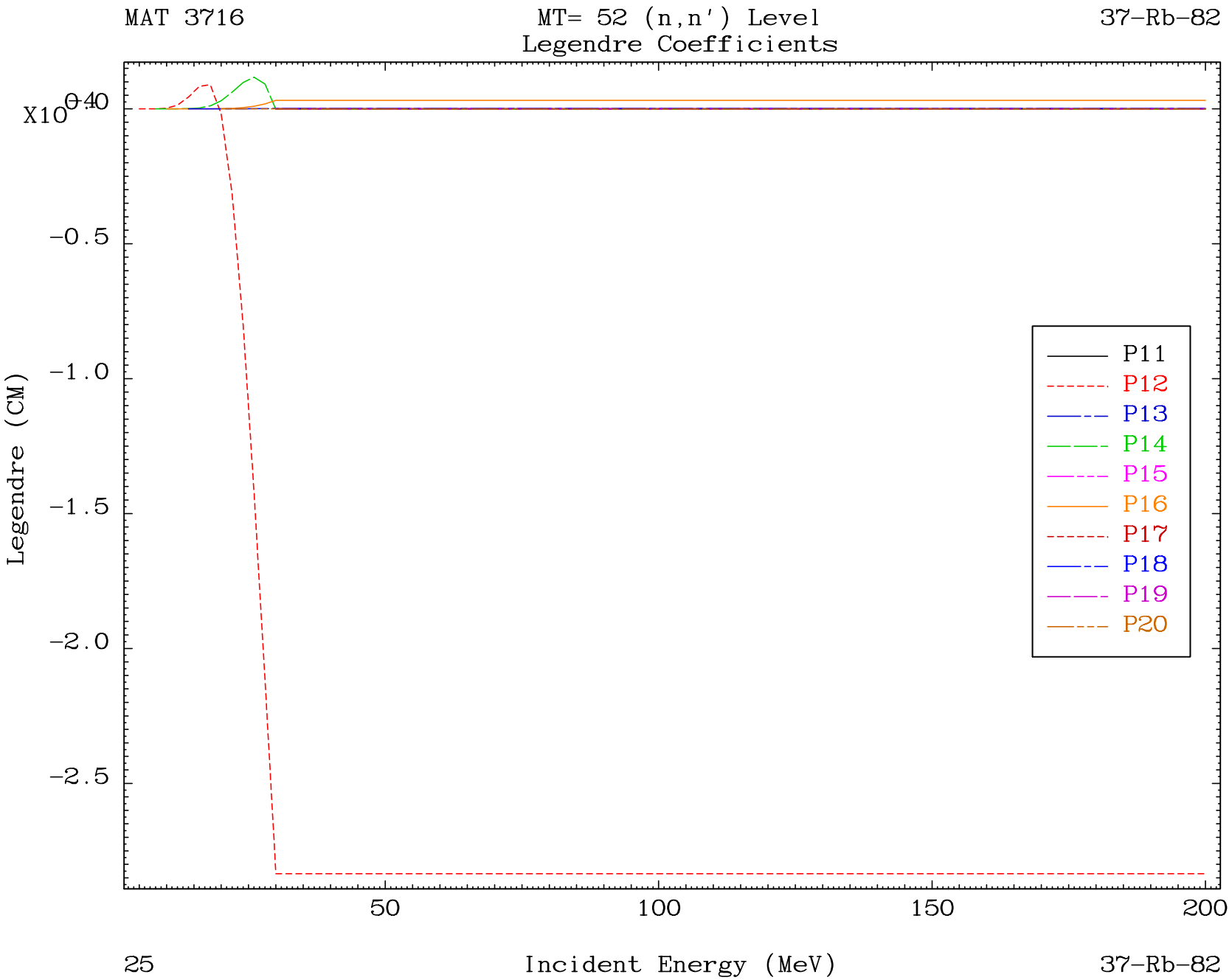

MAT 3716
MT= 51 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
20
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9

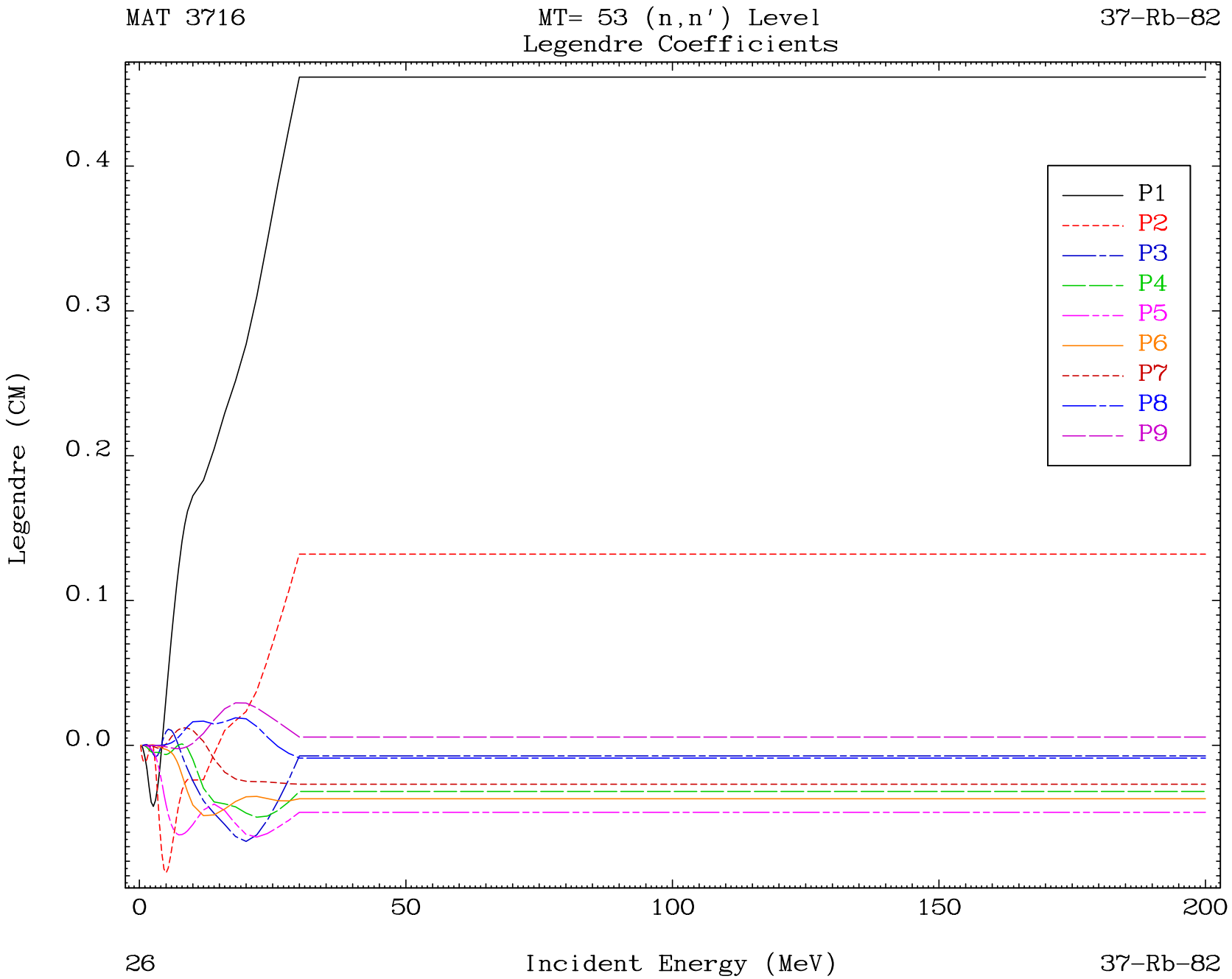

MAT 3716
MT= 51 (n,n') Level
Legendre Coefficients
37-Rb-82
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.004
0.000
-0.004
-0.008
Legendre (CM)
0
50
100
150
200
21
Incident Energy (MeV)
37-Rb-82

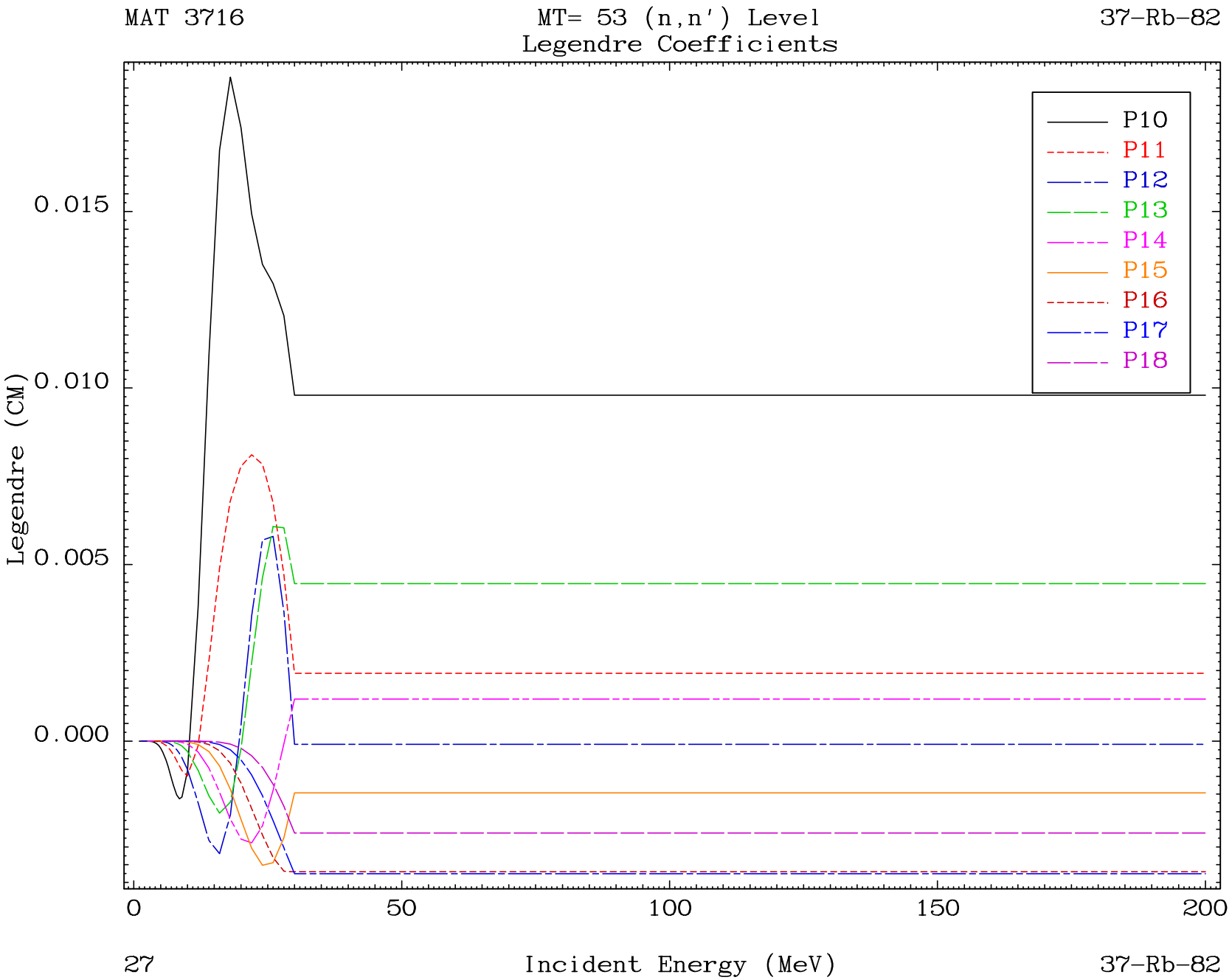

MAT 3716
MT= 51 (n,n') Level
Legendre Coefficients
37-Rb-82
X10 −5
4
0
−4
−8
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
22
Incident Energy (MeV)
37-Rb-82

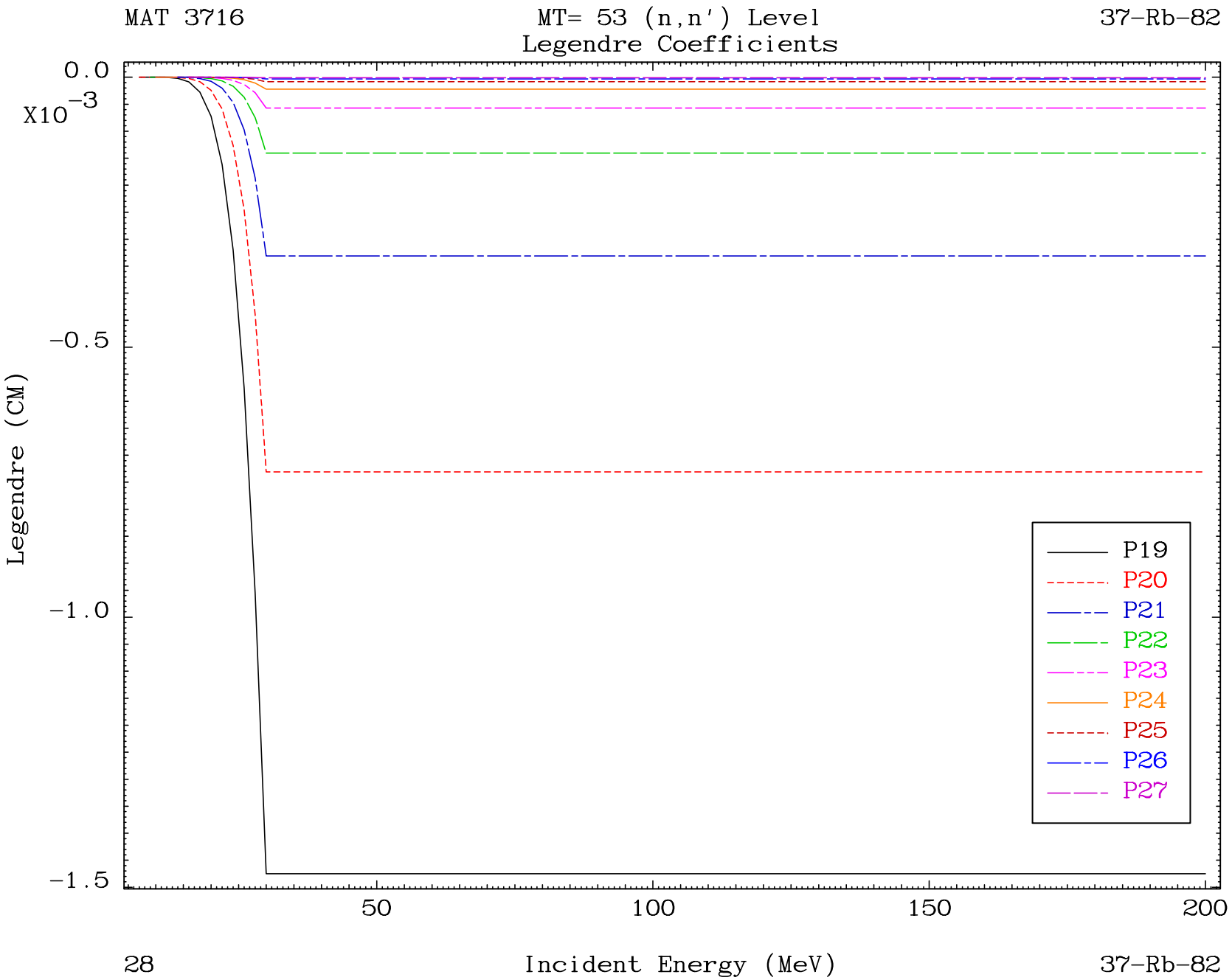

MAT 3716
MT= 51 (n,n') Level
Legendre Coefficients
37-Rb-82
0.0
X10^-7
-0.4
-0.8
-1.2
Legendre (CM)
50
100
150
200
23
Incident Energy (MeV)
37-Rb-82
P28
P29
P30
P31
P32
P33
P34

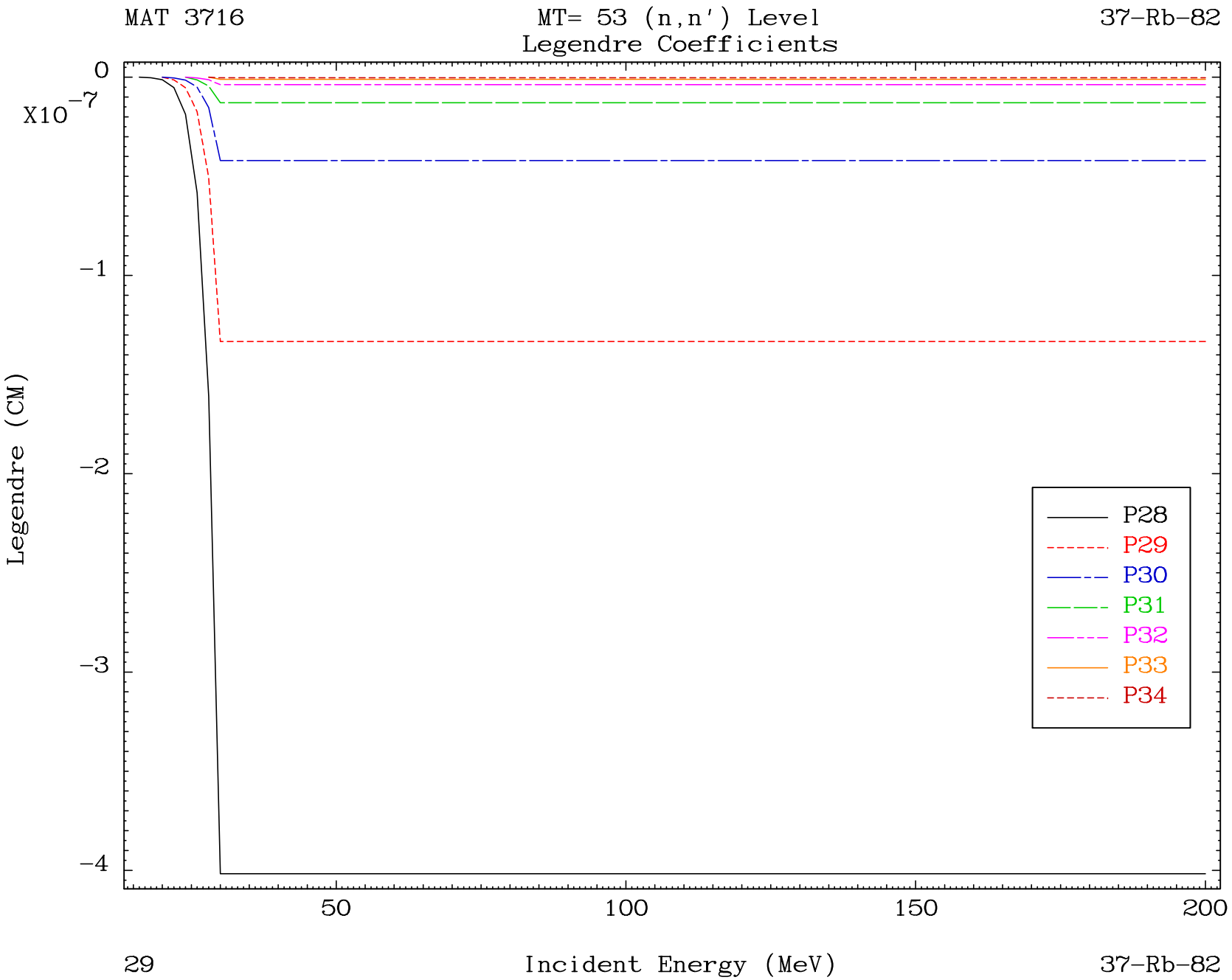

MAT 3716
MT= 52 (n,n') Level
Legendre Coefficients
37-Rb-82
0.15
0.10
0.05
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
24
Incident Energy (MeV)
37-Rb-82

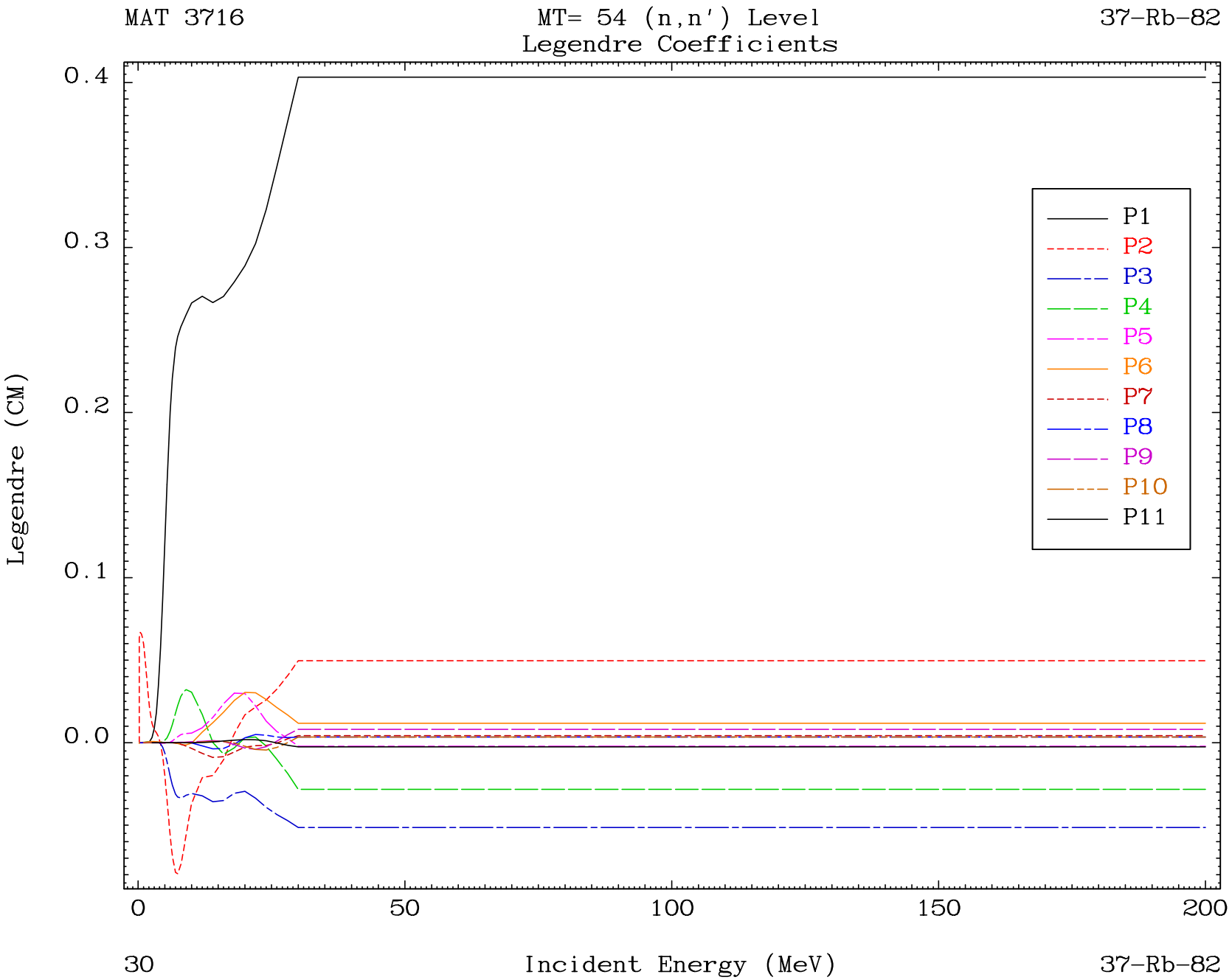

MAT 3716
MT= 52 (n,n') Level
Legendre Coefficients
37-Rb-82
X10^-0.40
-0.5
-1.0
-1.5
-2.0
-2.5
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
50
100
150
200
25
Incident Energy (MeV)
37-Rb-82

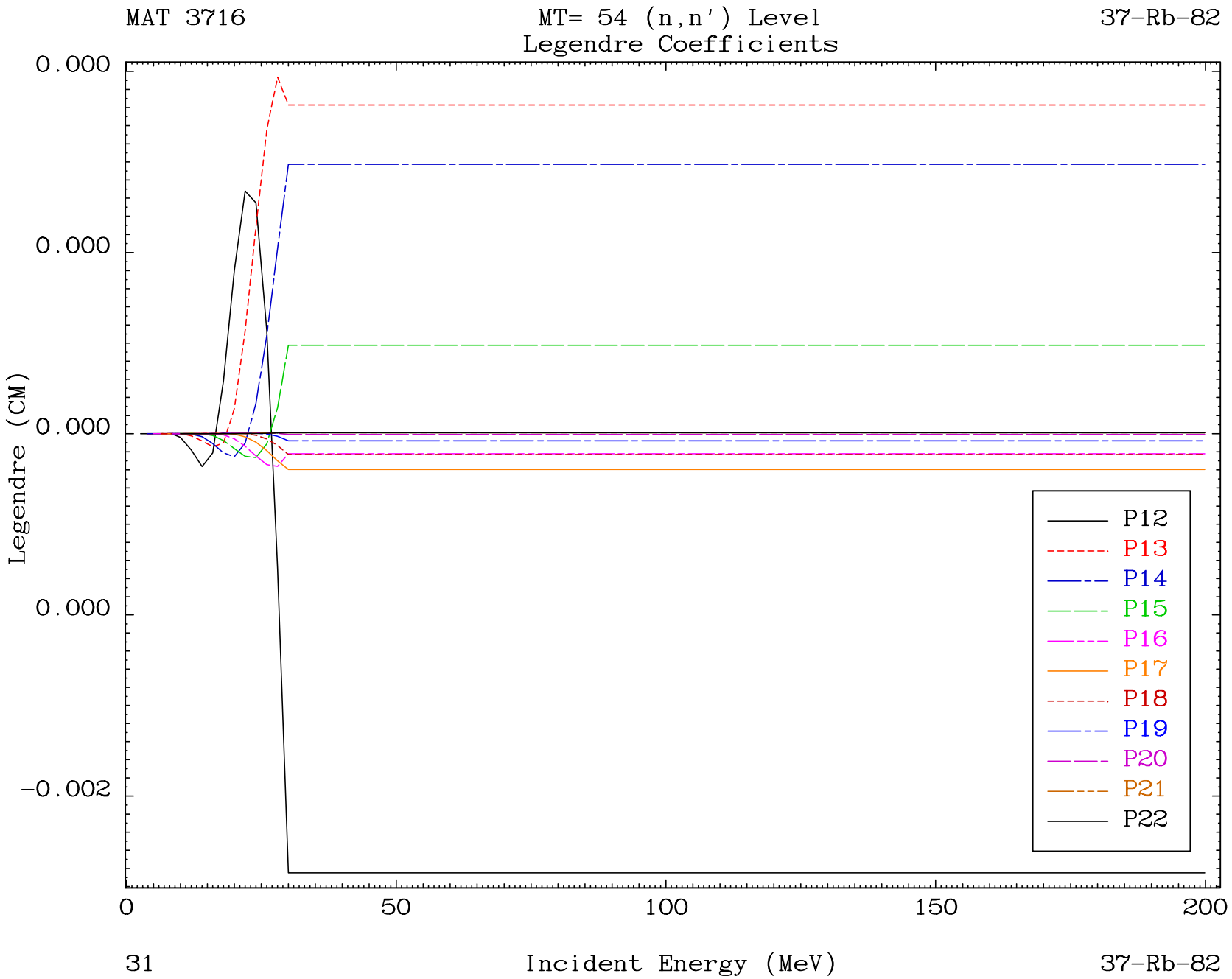

MAT 3716
MT= 53 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
26
Incident Energy (MeV)
37-Rb-82

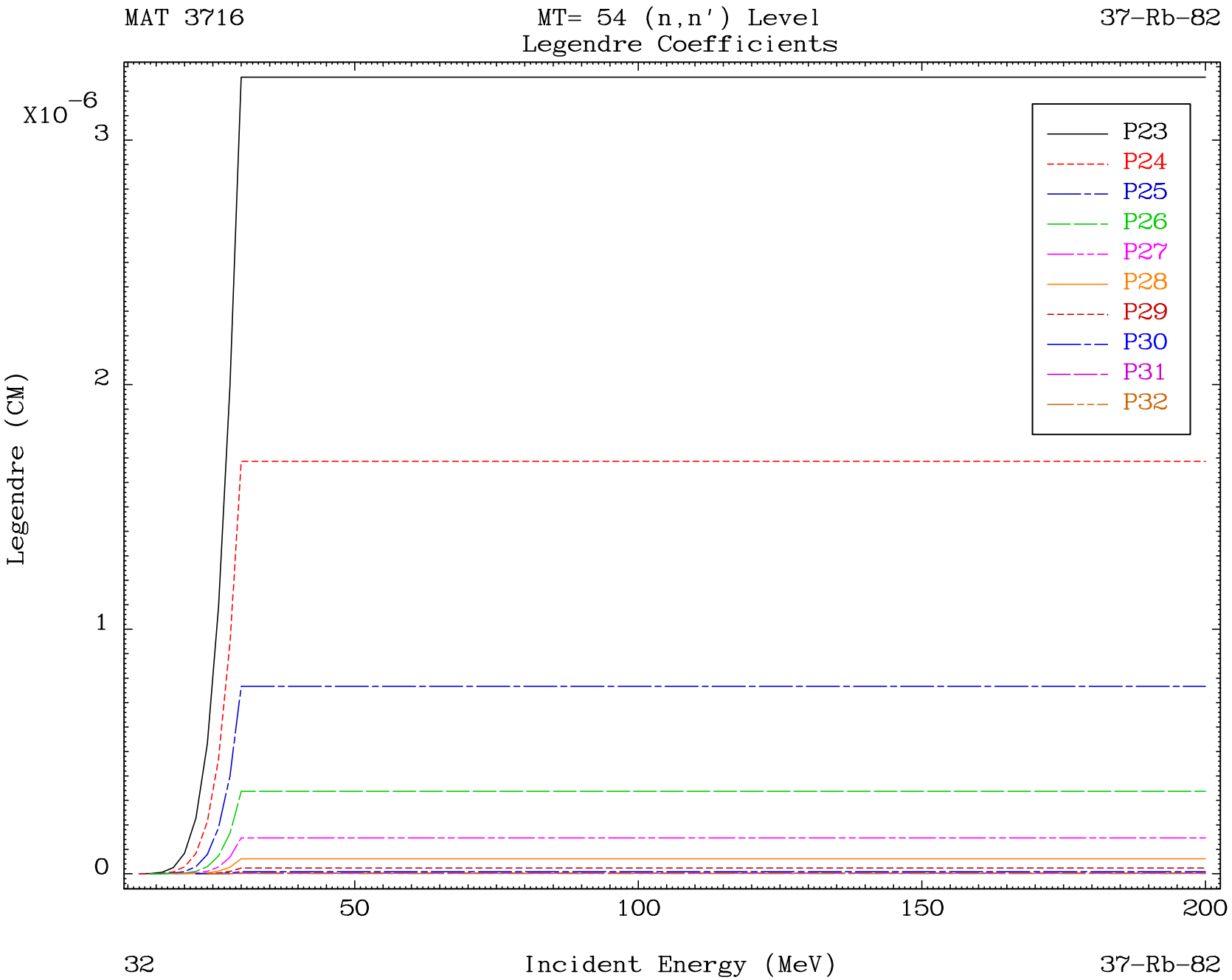

MAT 3716
MT= 53 (n,n') Level
Legendre Coefficients
37-Rb-82
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.015
0.010
0.005
0.000
Legendre (CM)
0
50
100
150
200
27
Incident Energy (MeV)
37-Rb-82

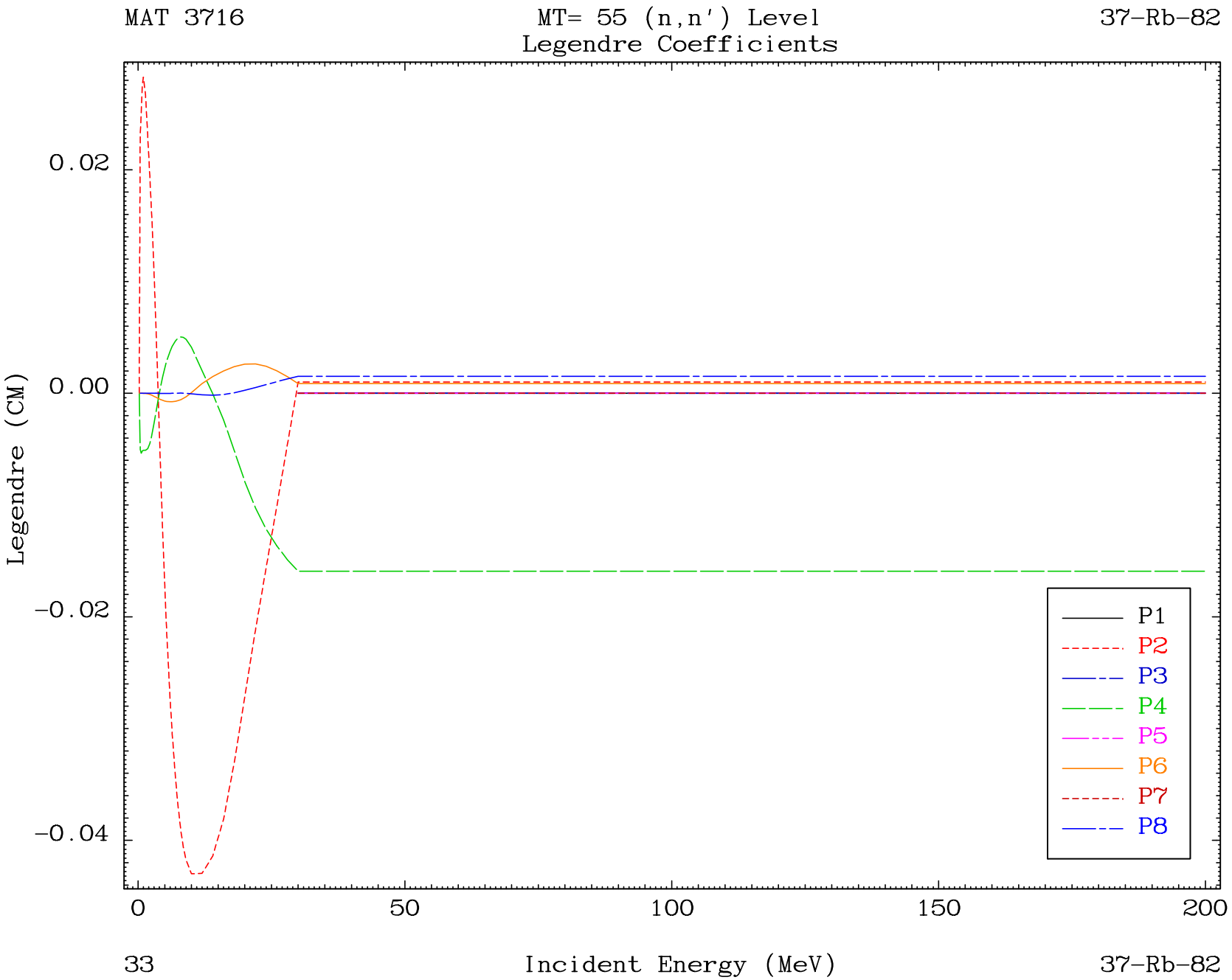

MAT 3716
MT= 53 (n,n') Level
Legendre Coefficients
37-Rb-82
0.0
X10^-3
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
28
Incident Energy (MeV)
37-Rb-82
P19
P20
P21
P22
P23
P24
P25
P26
P27

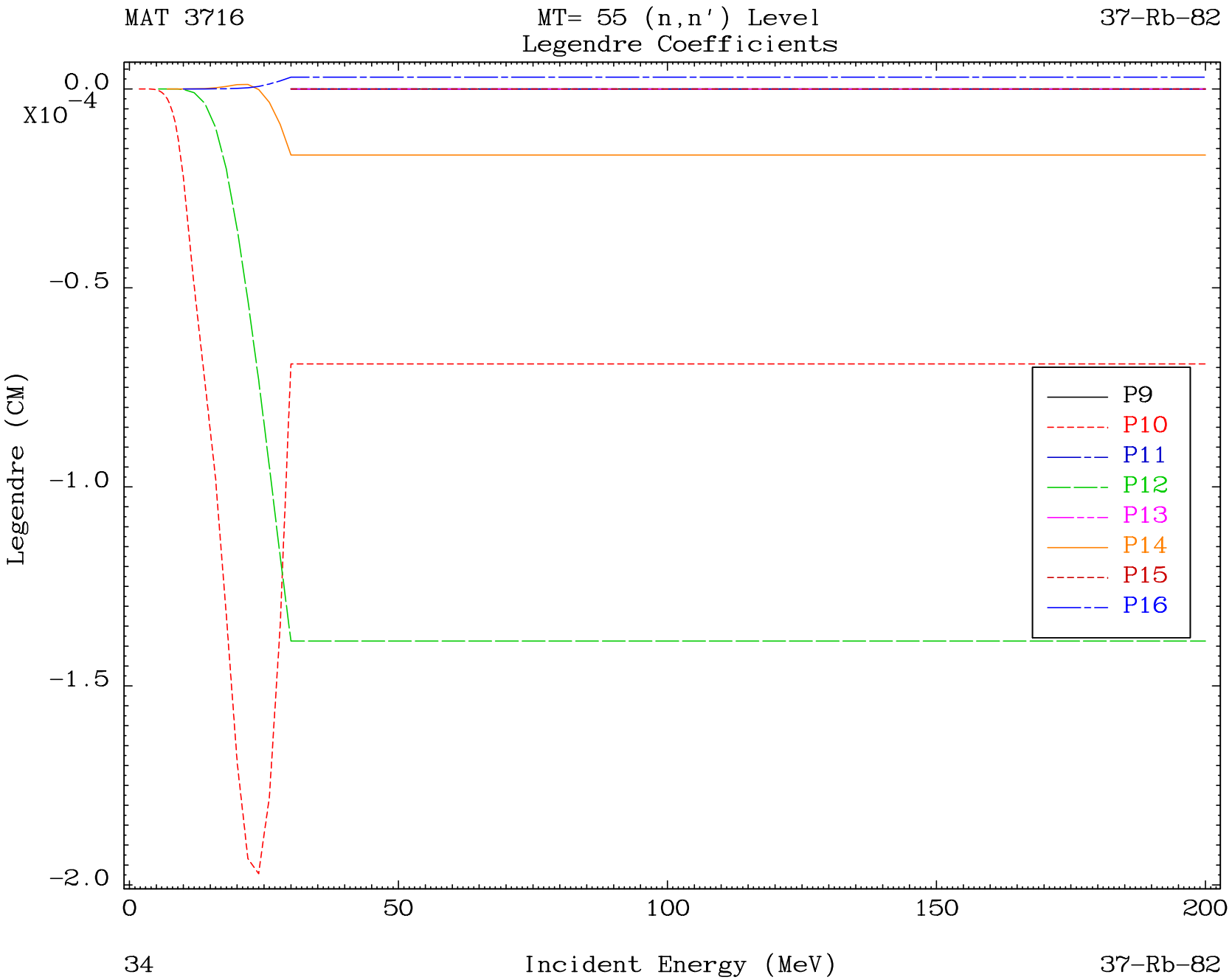

MAT 3716
MT= 53 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-7
0
-1
-2
-3
-4
Legendre (CM)
50
100
150
200
P28
P29
P30
P31
P32
P33
P34
29
Incident Energy (MeV)
37-Rb-82

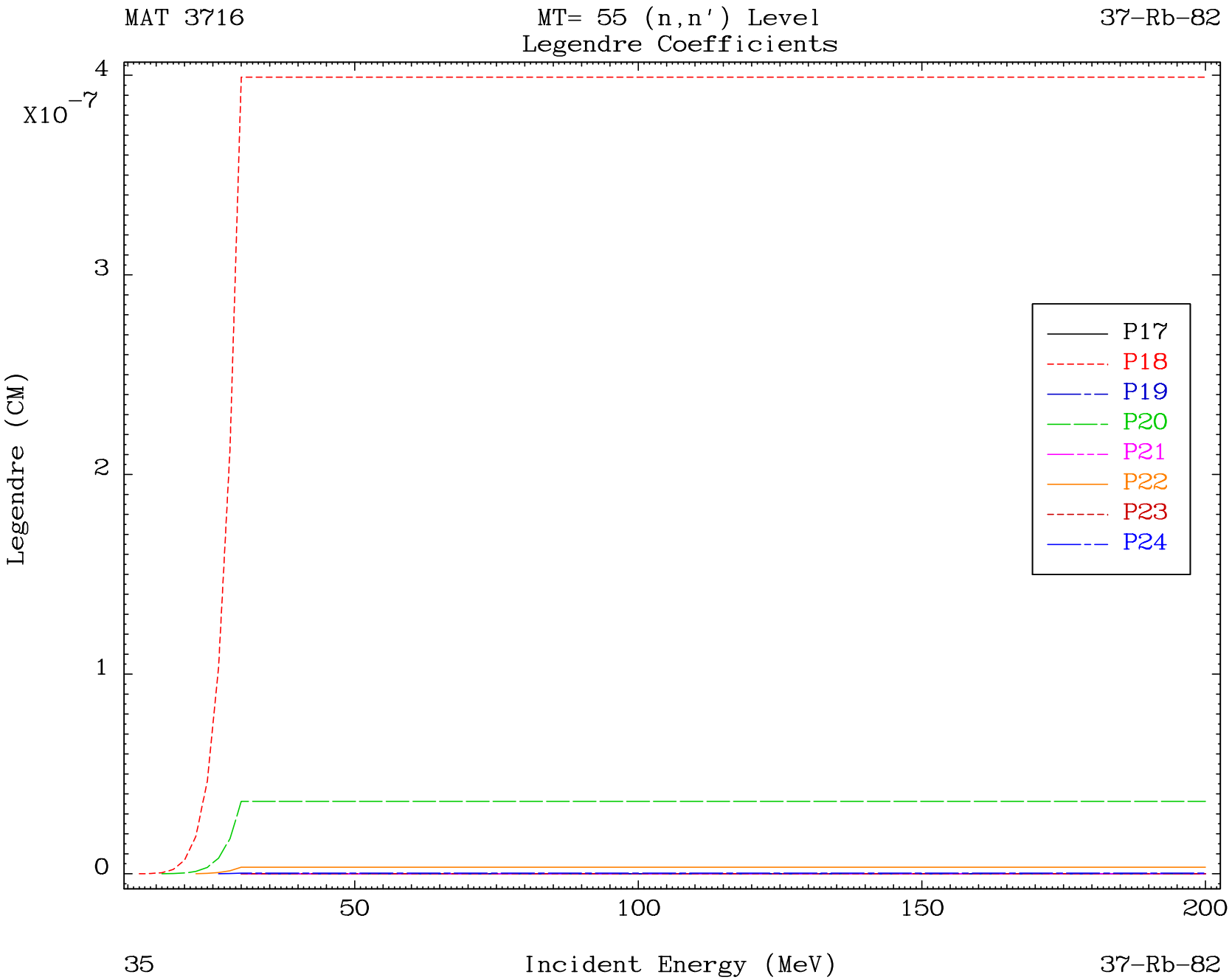

MAT 3716
MT= 54 (n,n') Level
Legendre Coefficients
37-Rb-82
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
0
50
100
150
200
30
Incident Energy (MeV)
37-Rb-82

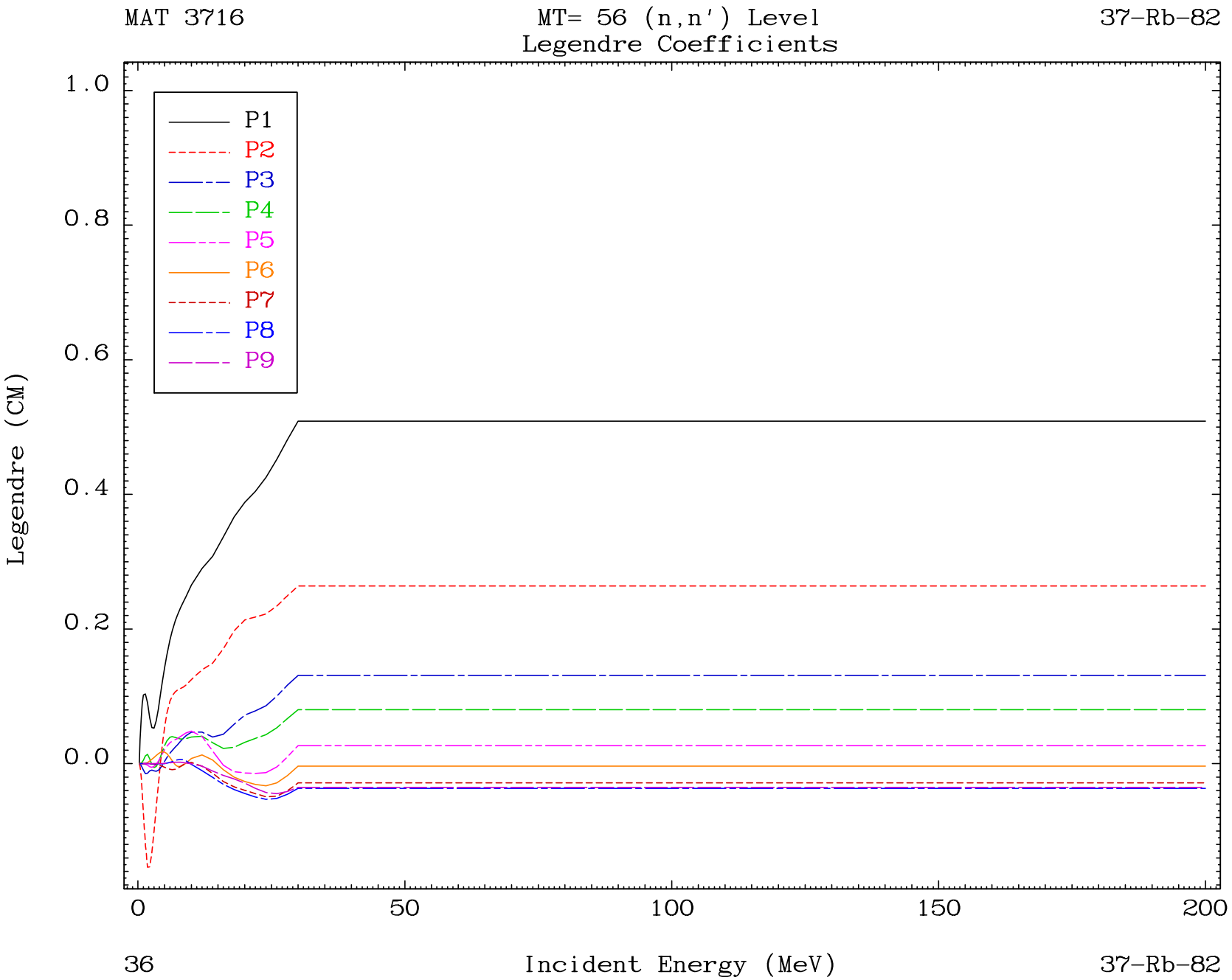

MAT 3716
MT= 54 (n,n') Level
Legendre Coefficients
37-Rb-82
0.000
0.000
0.000
0.000
-0.002
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
31
37-Rb-82
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

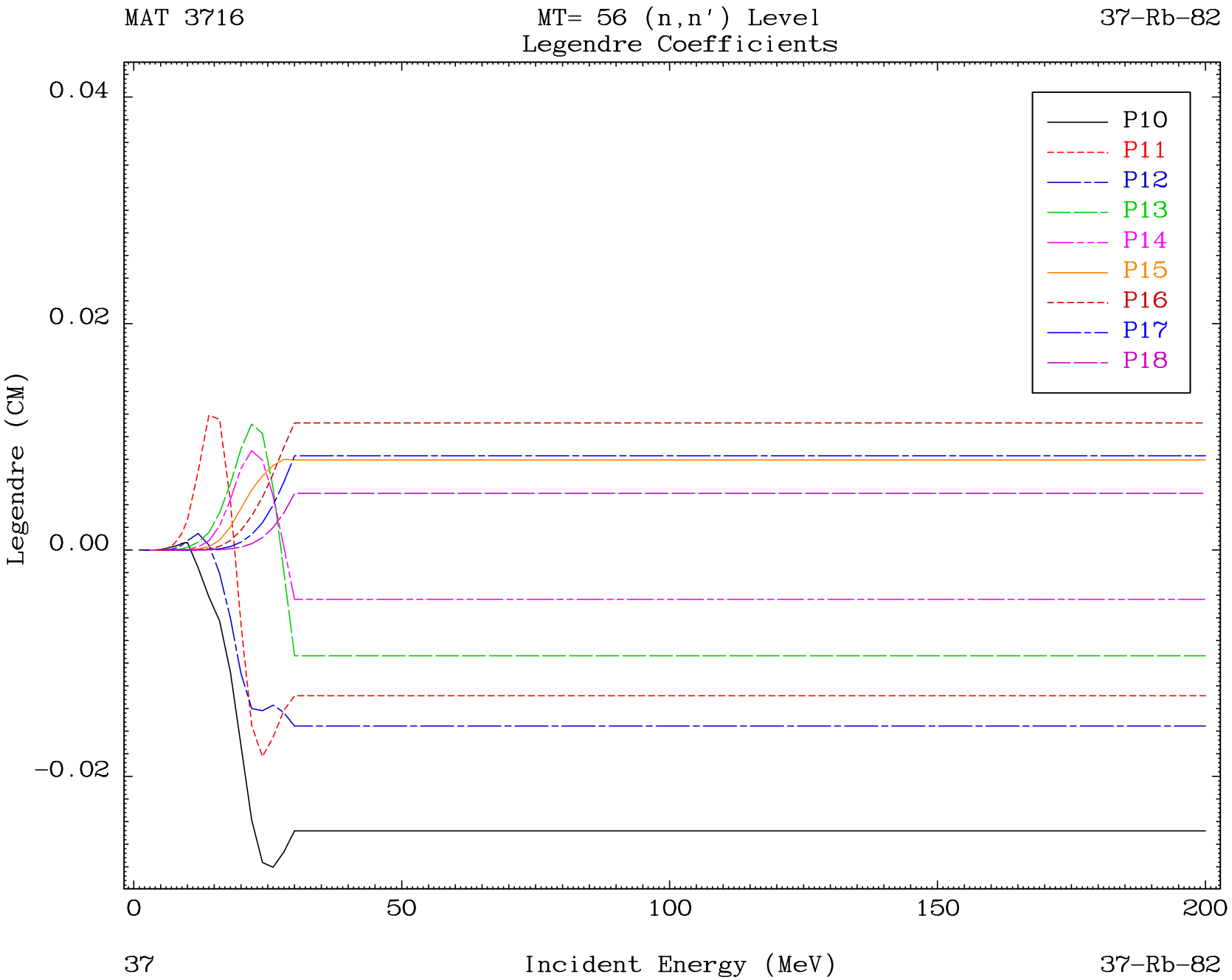

MAT 3716
MT= 54 (n,n') Level
Legendre Coefficients
37-Rb-82
X10 -6
3
2
1
0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
32
Incident Energy (MeV)
37-Rb-82

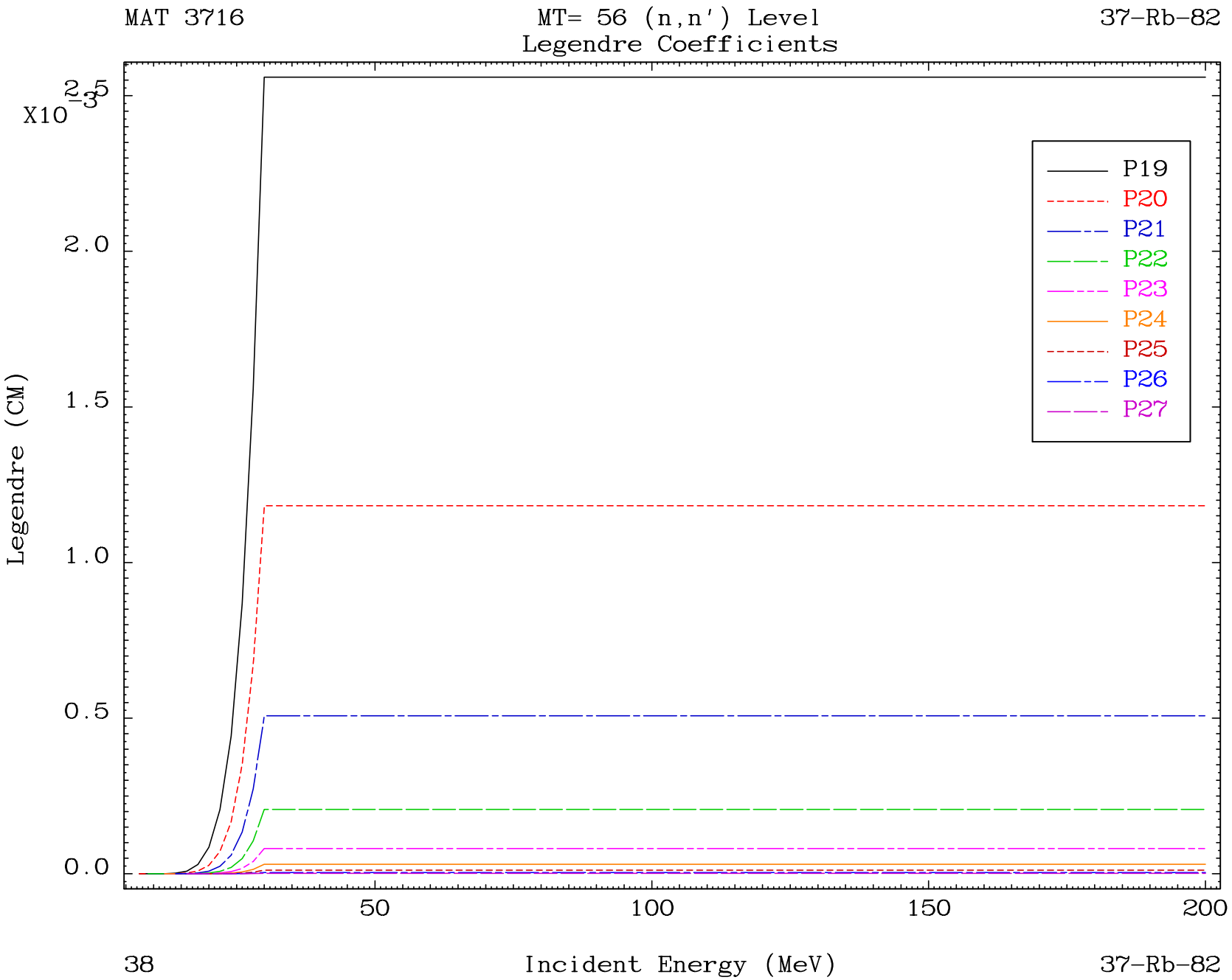

MAT 3716
MT= 55 (n,n') Level
Legendre Coefficients
37-Rb-82
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
33
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8

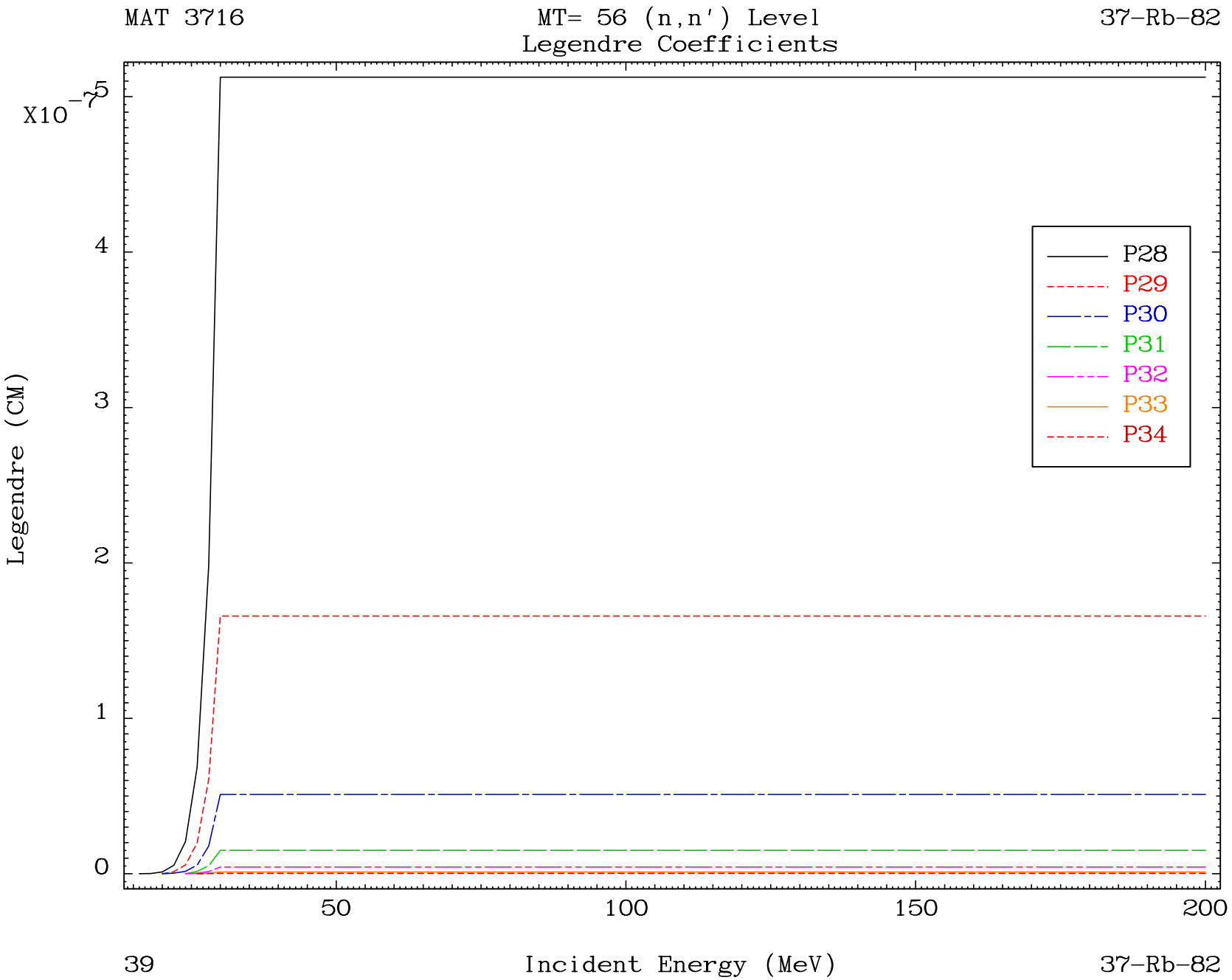

MAT 3716
MT= 55 (n,n') Level
Legendre Coefficients
37-Rb-82
0.0
X10 -4
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
34
Incident Energy (MeV)
37-Rb-82

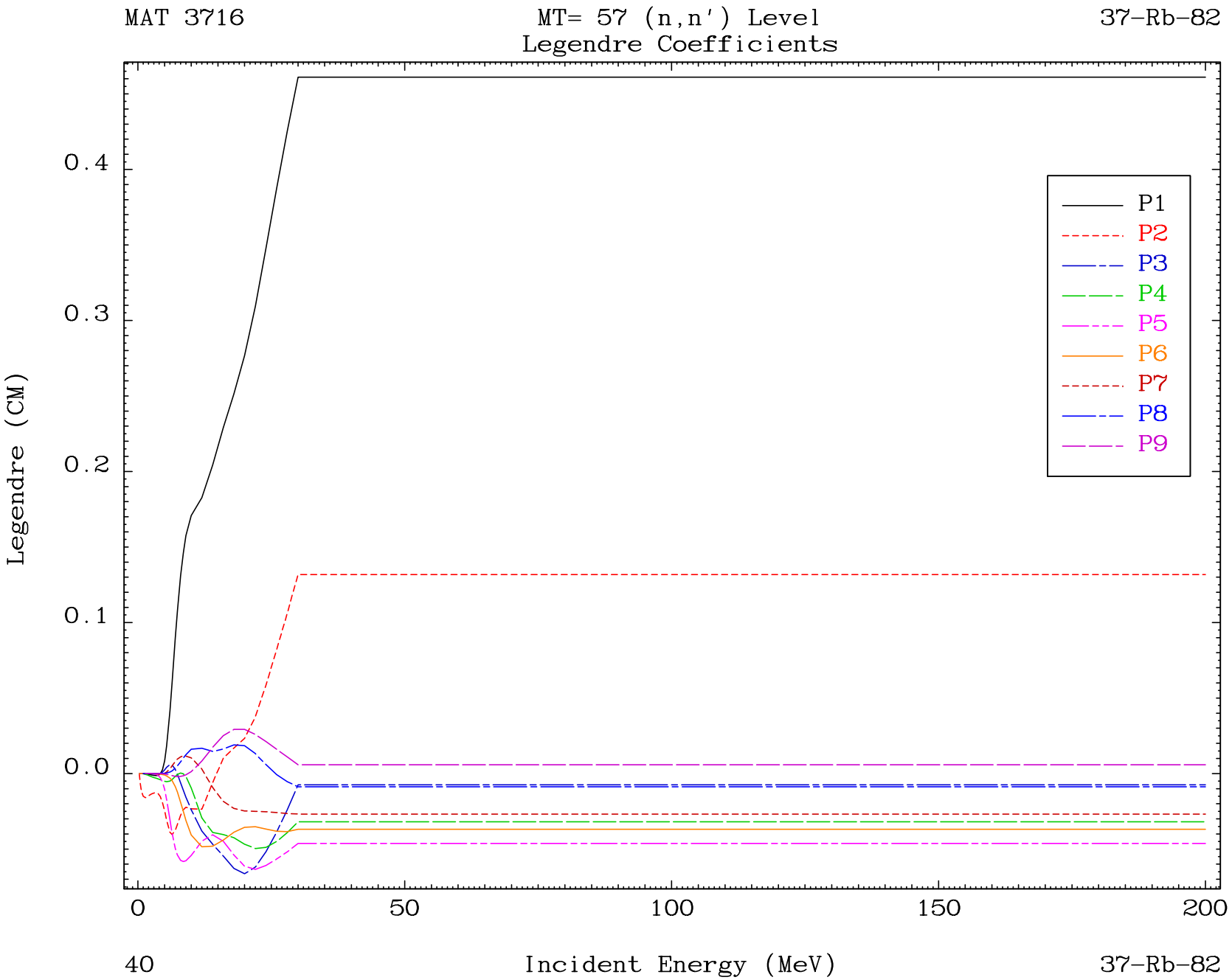

MAT 3716
MT= 55 (n,n') Level
Legendre Coefficients
37-Rb-82
X10^-7
4
3
2
1
0
Legendre (CM)
P17
P18
P19
P20
P21
P22
P23
P24
50
100
150
200
35
Incident Energy (MeV)
37-Rb-82

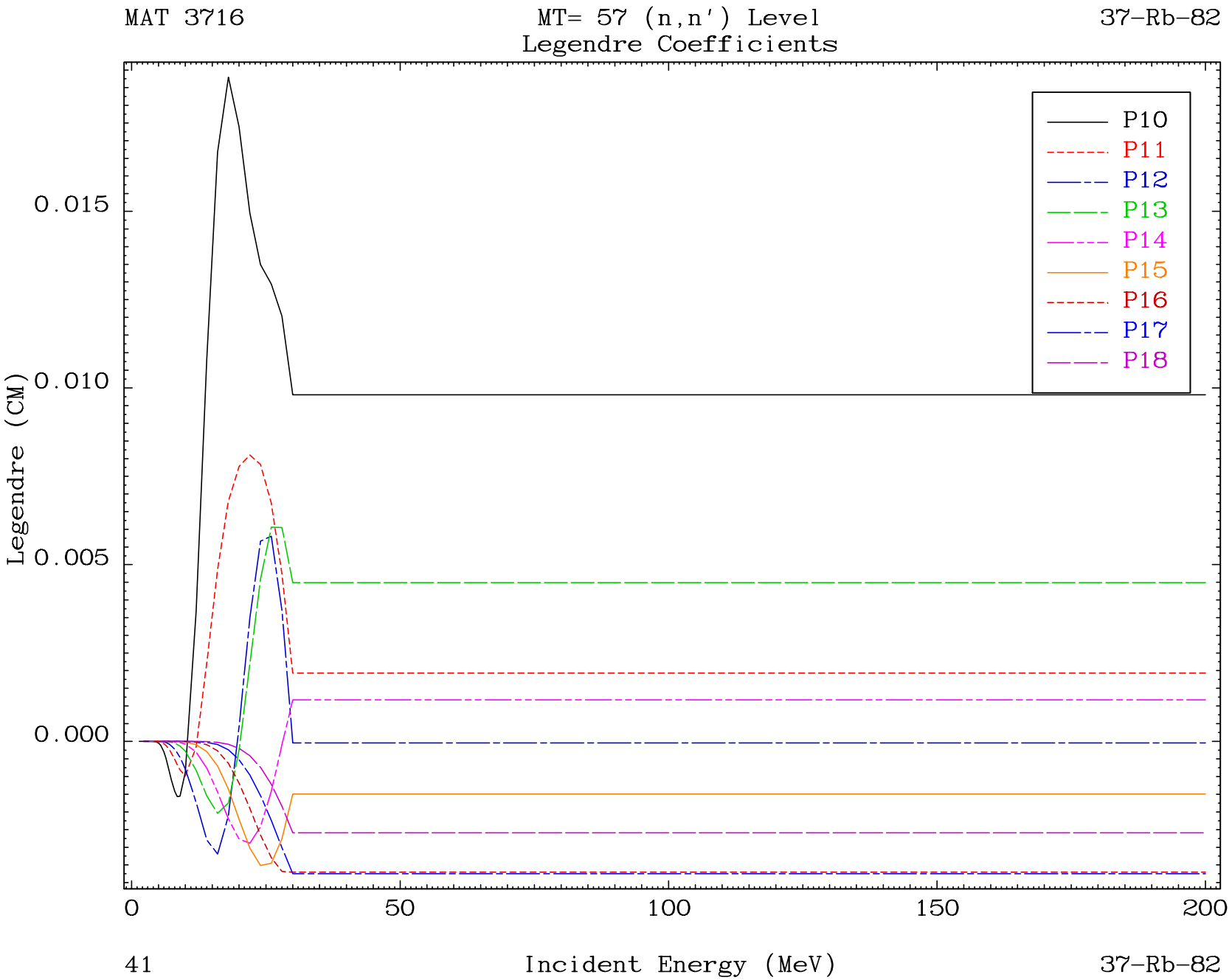

MAT 3716
MT= 56 (n,n') Level
Legendre Coefficients
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
50
100
150
200
36
Incident Energy (MeV)
37-Rb-82

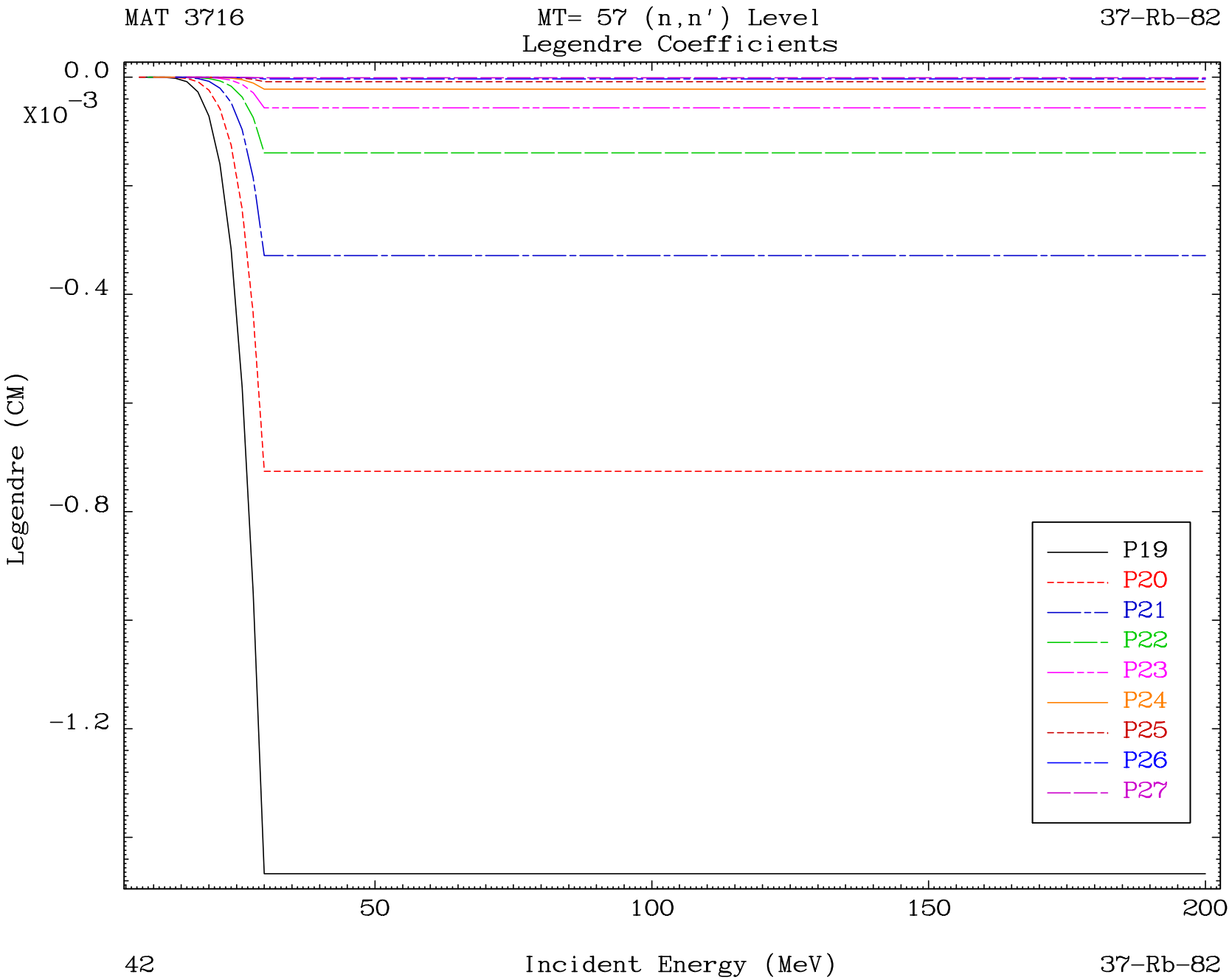

MAT 3716
MT= 56 (n,n') Level
Legendre Coefficients
37-Rb-82
0.04
0.02
0.00
-0.02
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
37
Incident Energy (MeV)
37-Rb-82

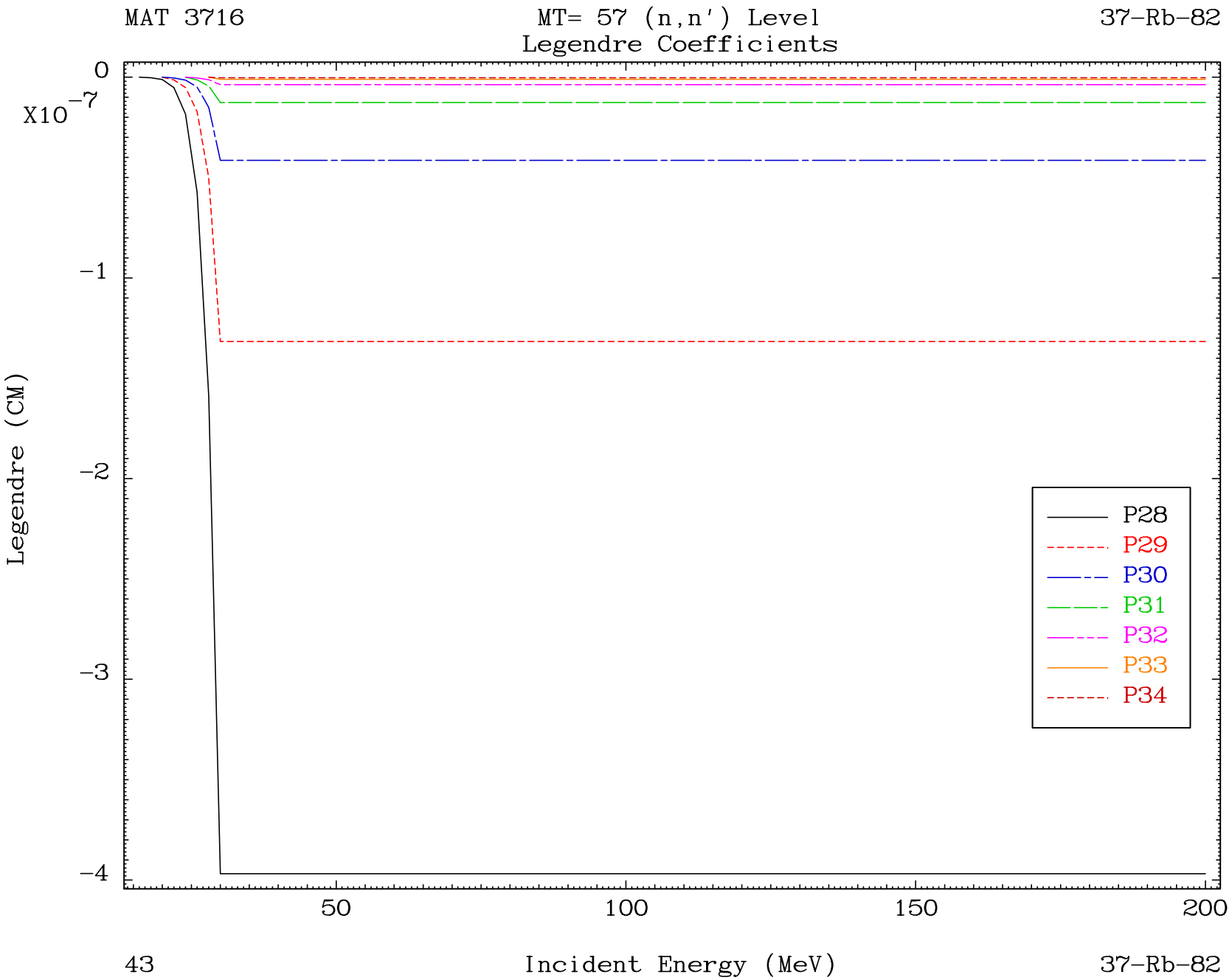

MAT 3716
MT= 56 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
38
Incident Energy (MeV)
37-Rb-82

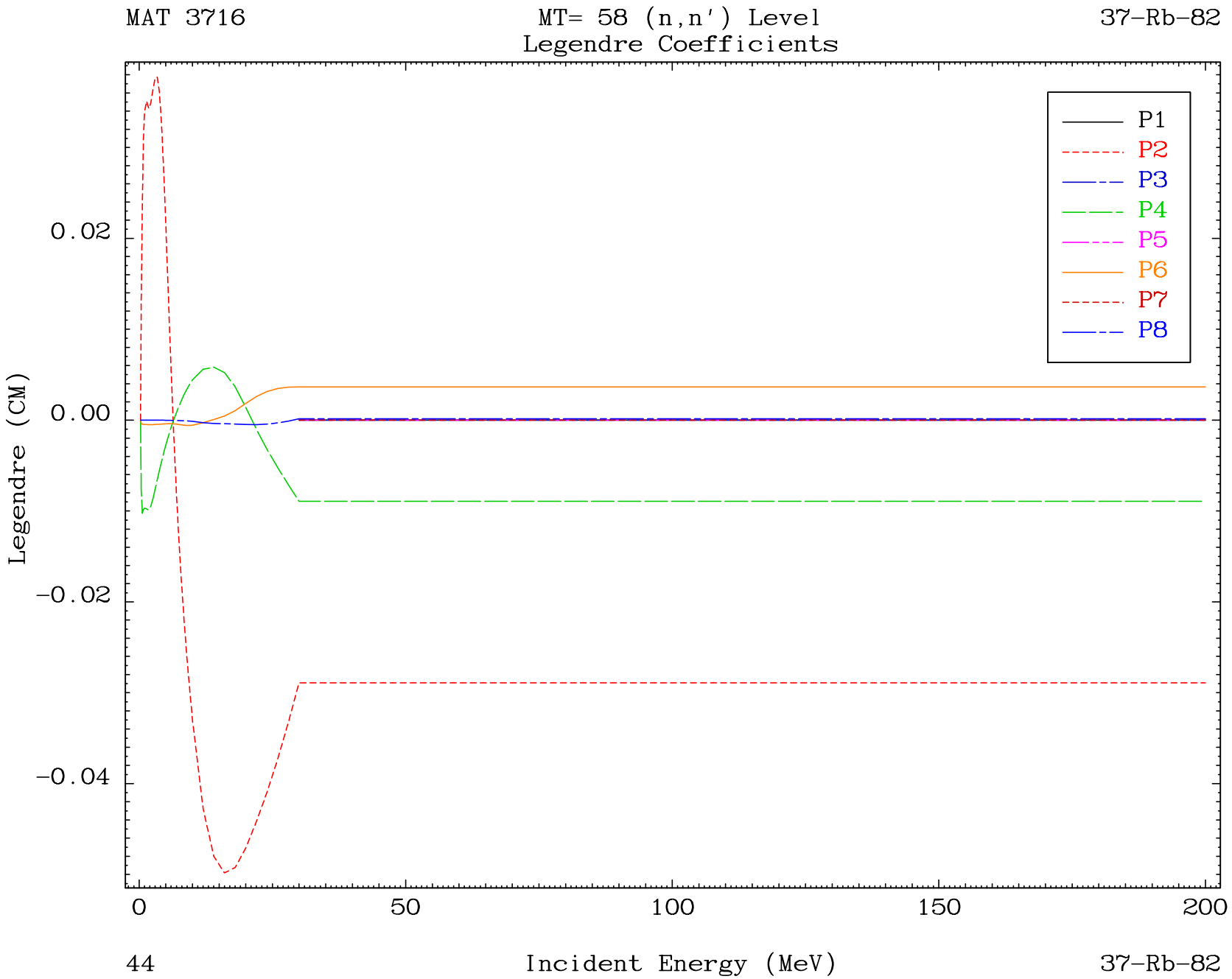

MAT 3716
MT= 56 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-5
4
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
39
Incident Energy (MeV)
37-Rb-82

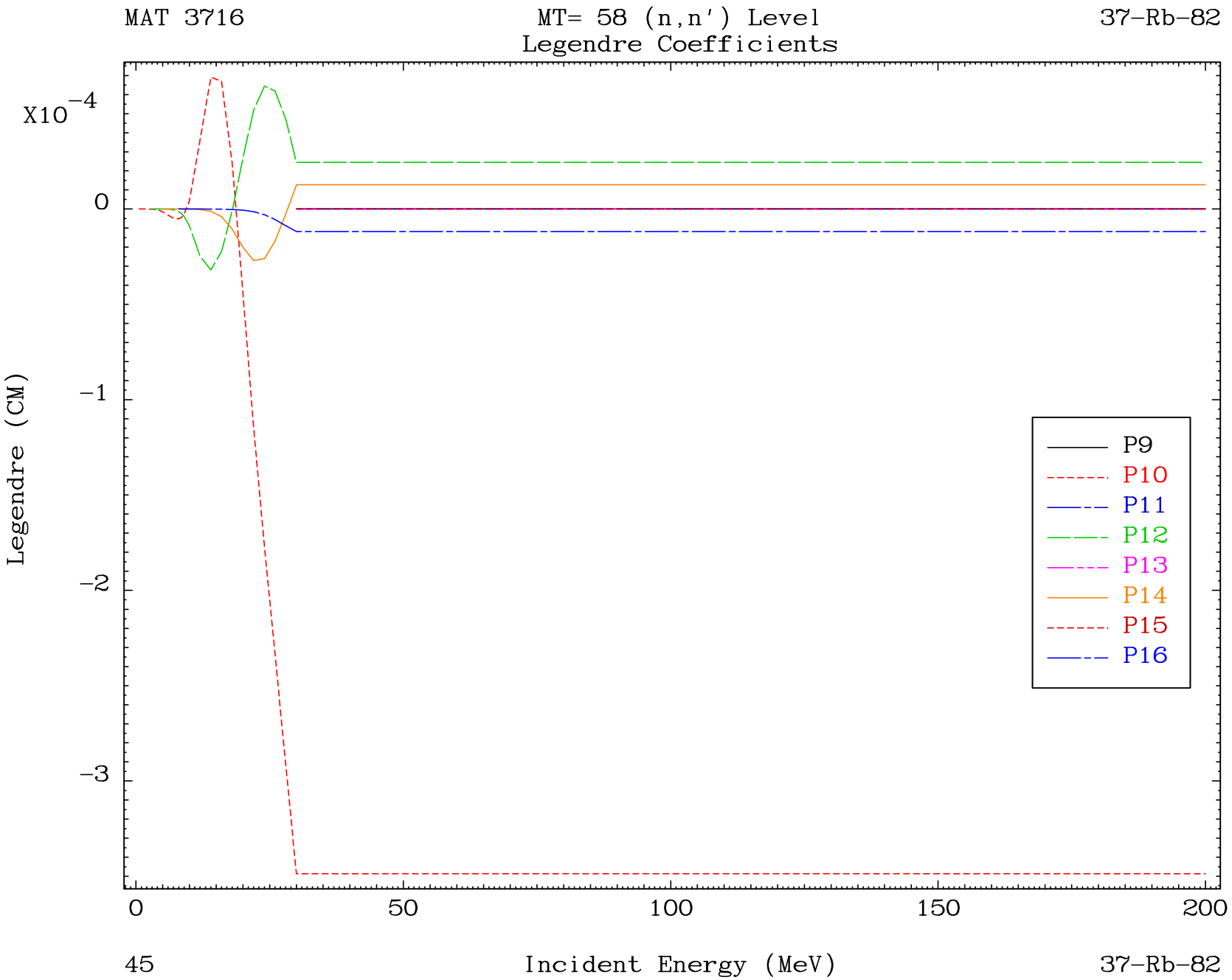

MAT 3716
MT= 57 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
40
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9

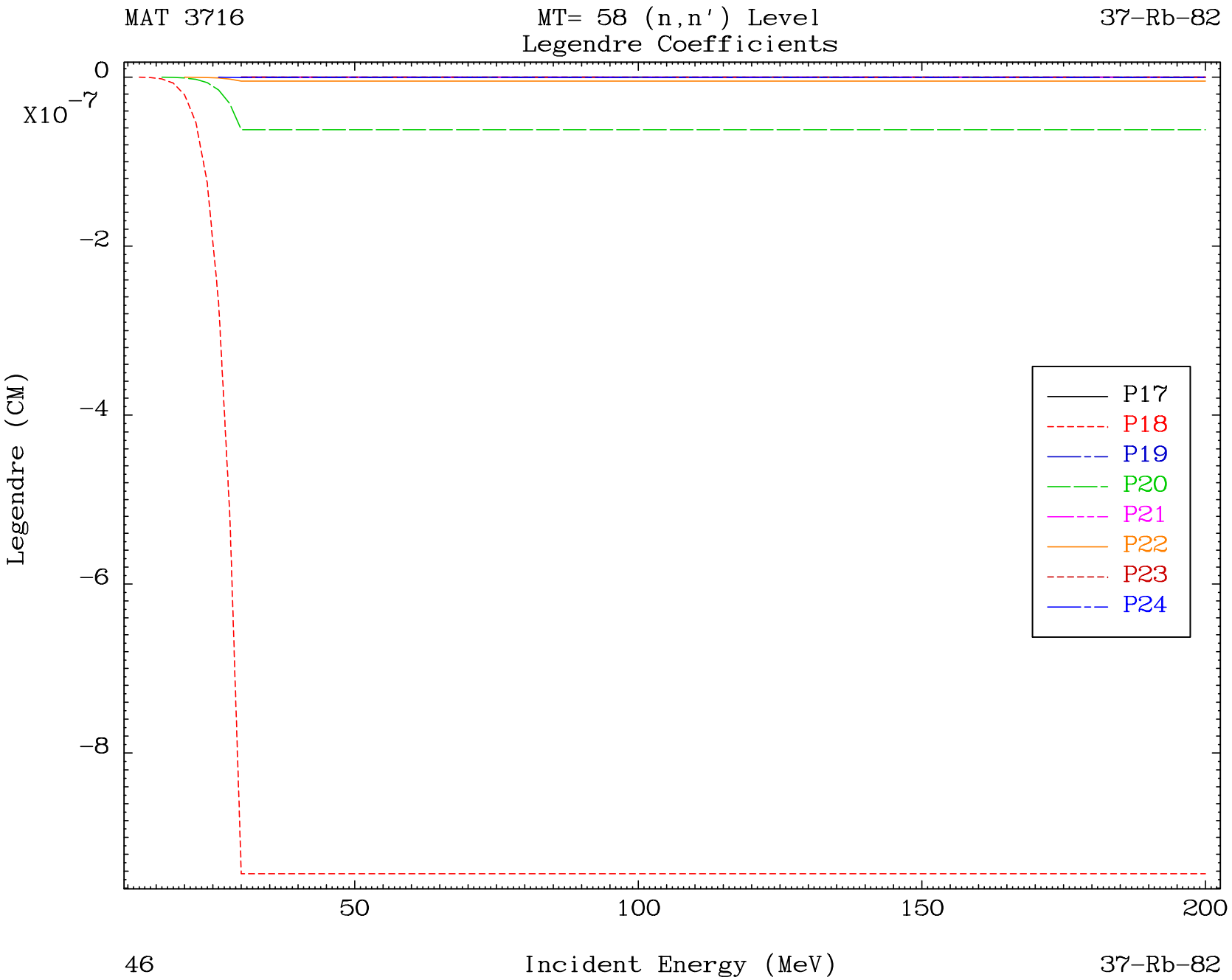

MAT 3716
MT= 57 (n,n') Level
Legendre Coefficients
37-Rb-82
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.015
0.010
0.005
0.000
Legendre (CM)
0
50
100
150
200
41
Incident Energy (MeV)
37-Rb-82

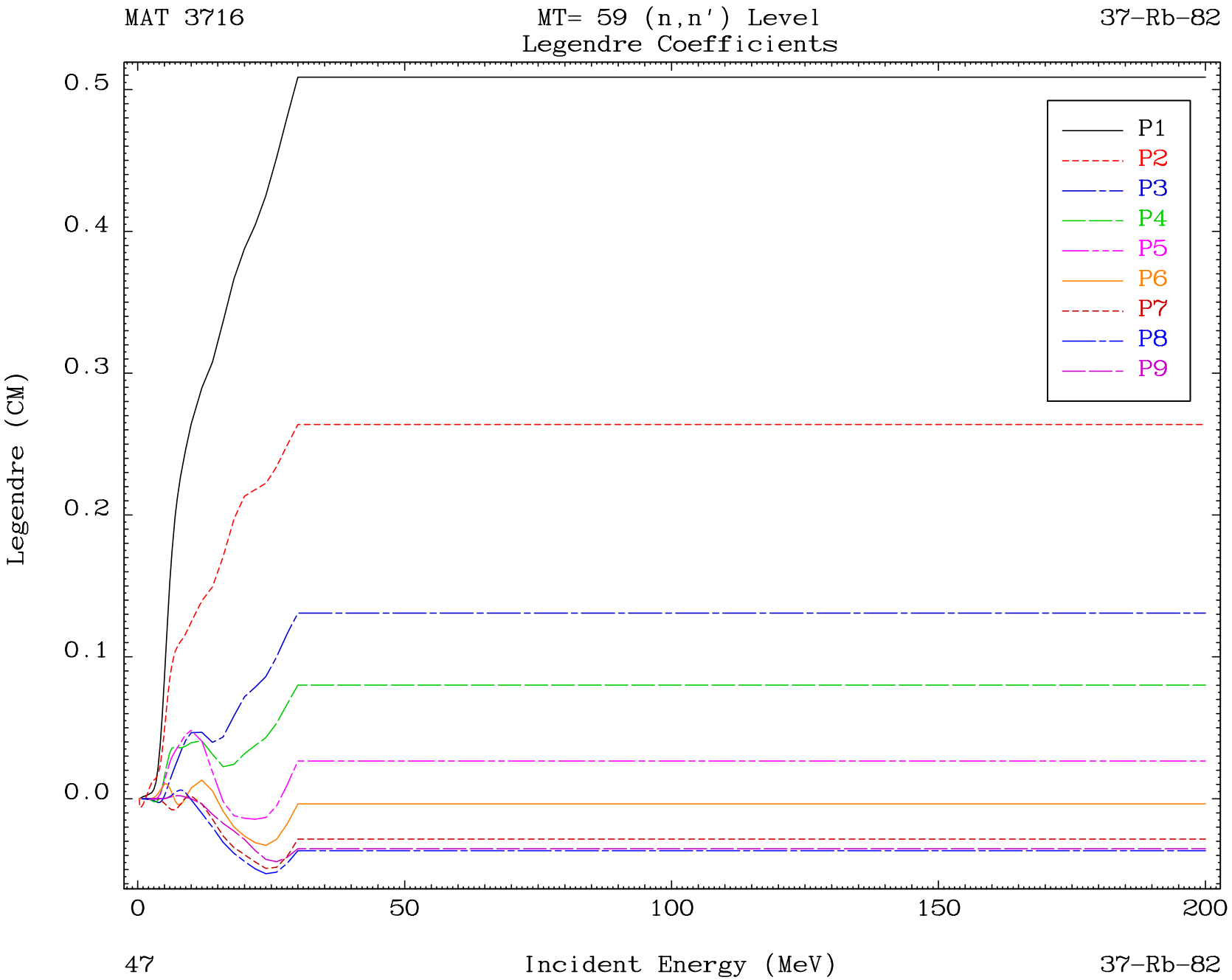

MAT 3716
MT= 57 (n,n') Level
Legendre Coefficients
37-Rb-82
0.0
X10^-3
-0.4
-0.8
-1.2
Legendre (CM)
50
100
150
200
42
Incident Energy (MeV)
37-Rb-82
P19
P20
P21
P22
P23
P24
P25
P26
P27

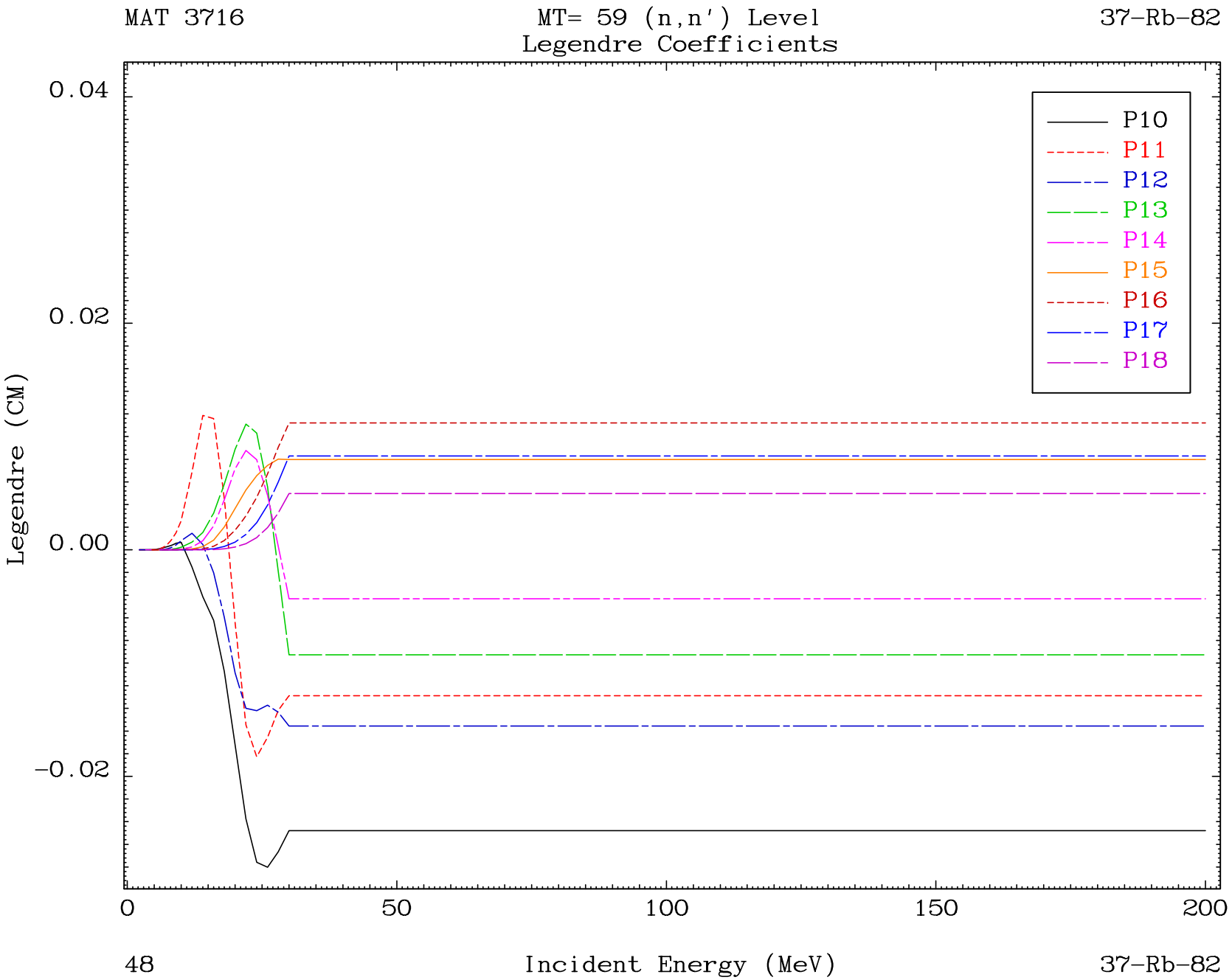

MAT 3716
MT= 57 (n,n') Level
Legendre Coefficients
37-Rb-82
0
X10-7
-1
-2
-3
-4
Legendre (CM)
50
100
150
200
P28
P29
P30
P31
P32
P33
P34
43
Incident Energy (MeV)
37-Rb-82

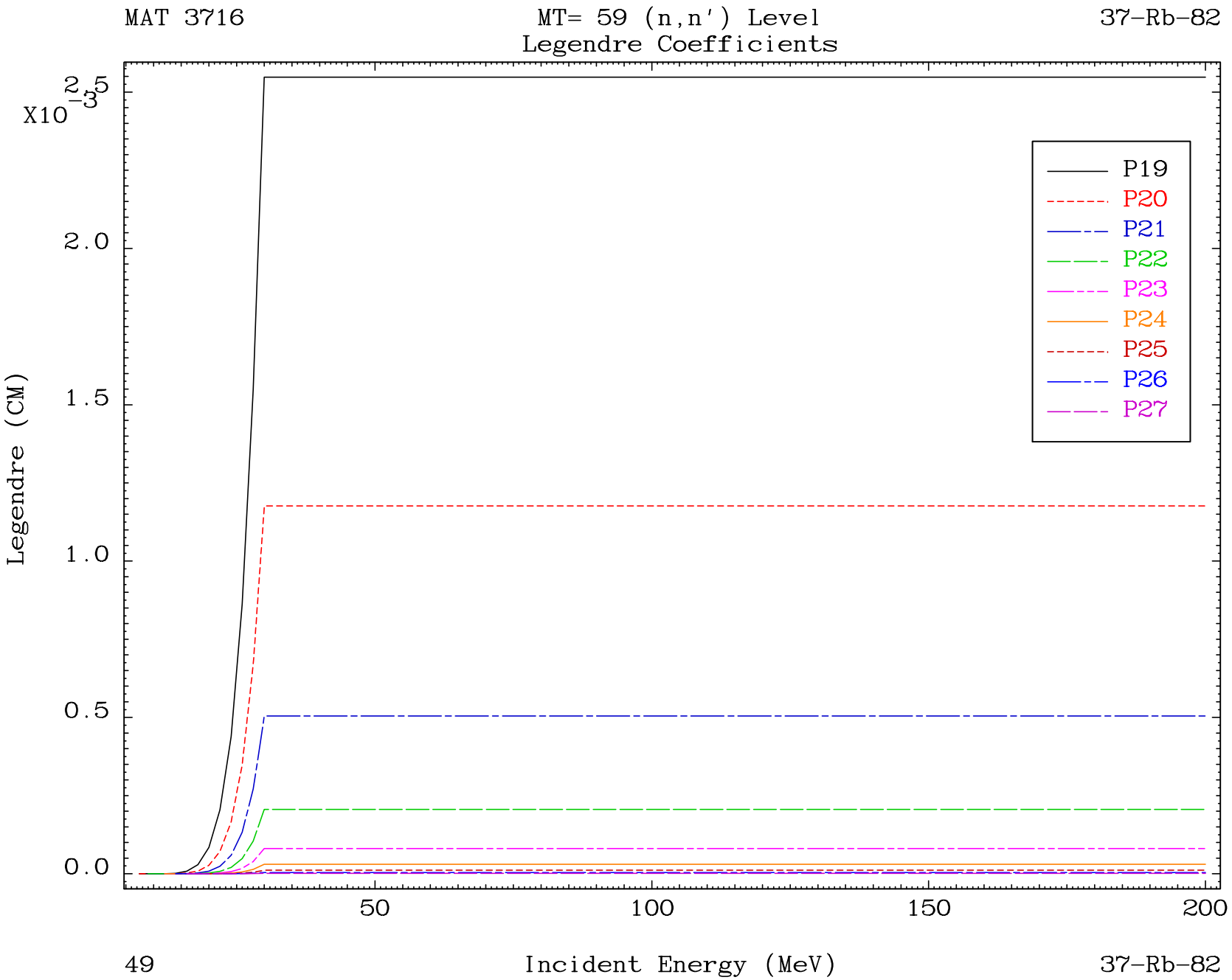

MAT 3716
MT= 58 (n,n') Level
Legendre Coefficients
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
44
Incident Energy (MeV)
37-Rb-82

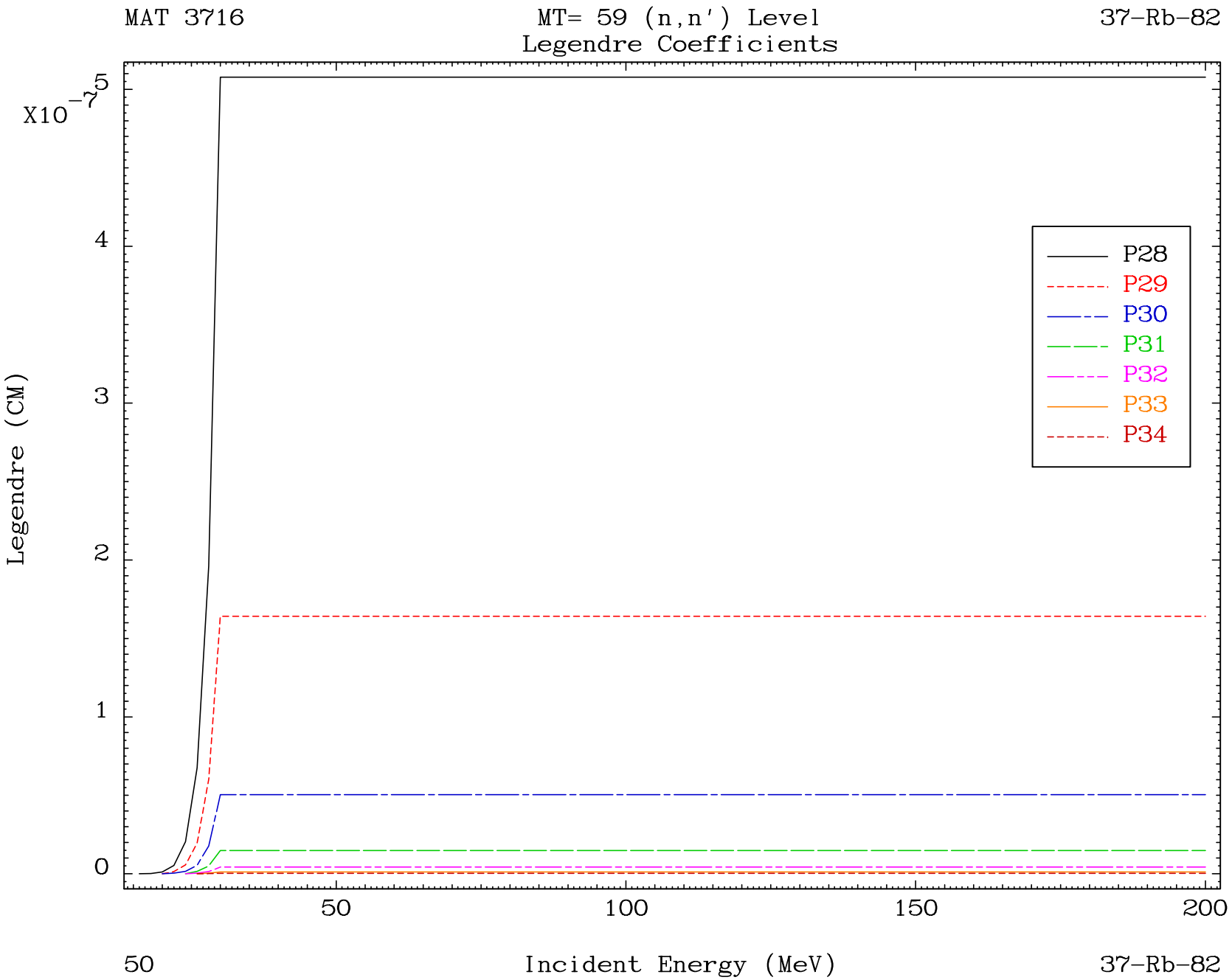

MAT 3716
MT= 58 (n,n') Level
Legendre Coefficients
37-Rb-82
X10^-4
0
-1
-2
-3
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
45
Incident Energy (MeV)
37-Rb-82

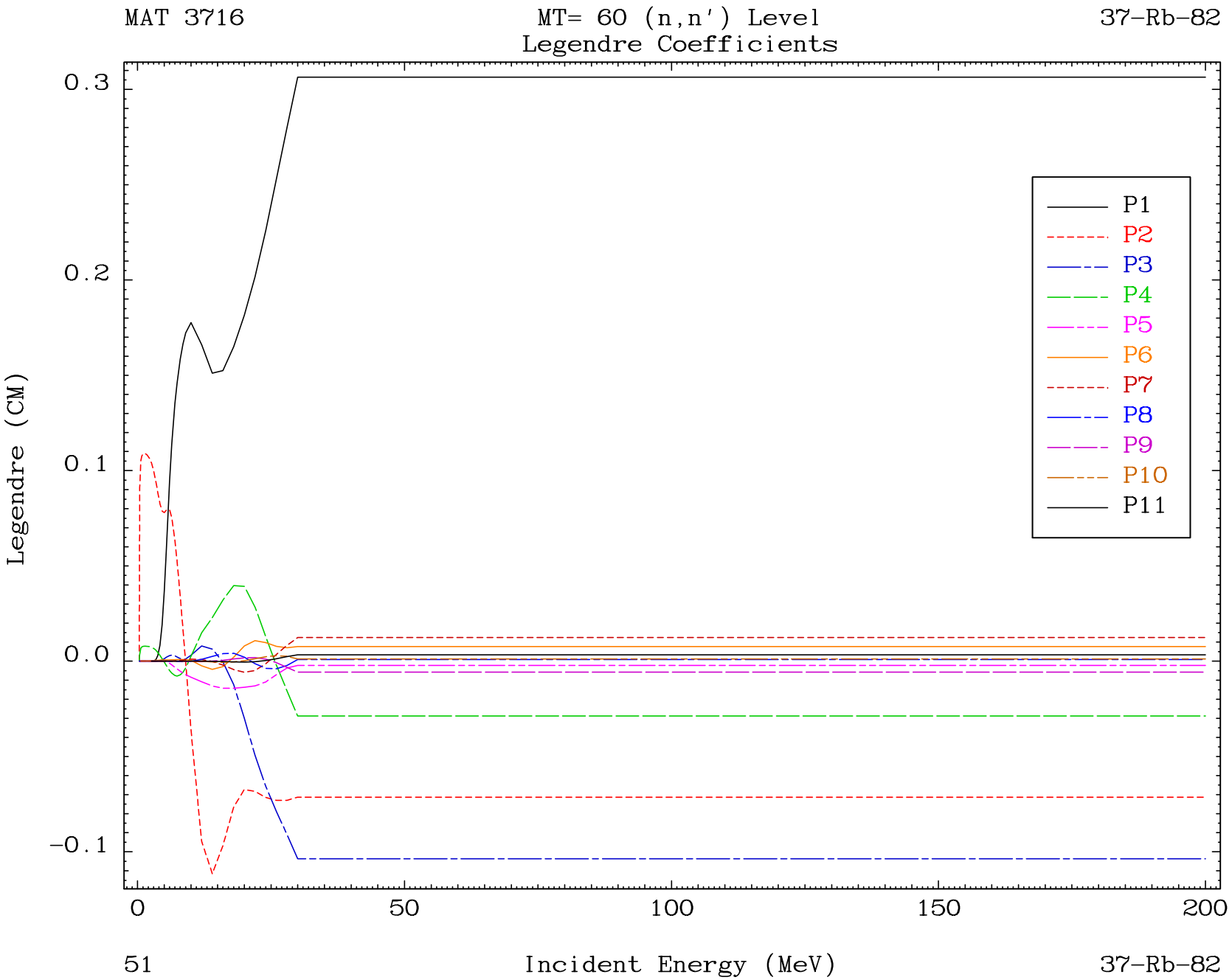

MAT 3716
MT= 58 (n,n') Level
Legendre Coefficients
37-Rb-82
0
X10-7
-2
-4
-6
-8
Legendre (CM)
50
100
150
200
P17
P18
P19
P20
P21
P22
P23
P24
46
Incident Energy (MeV)
37-Rb-82

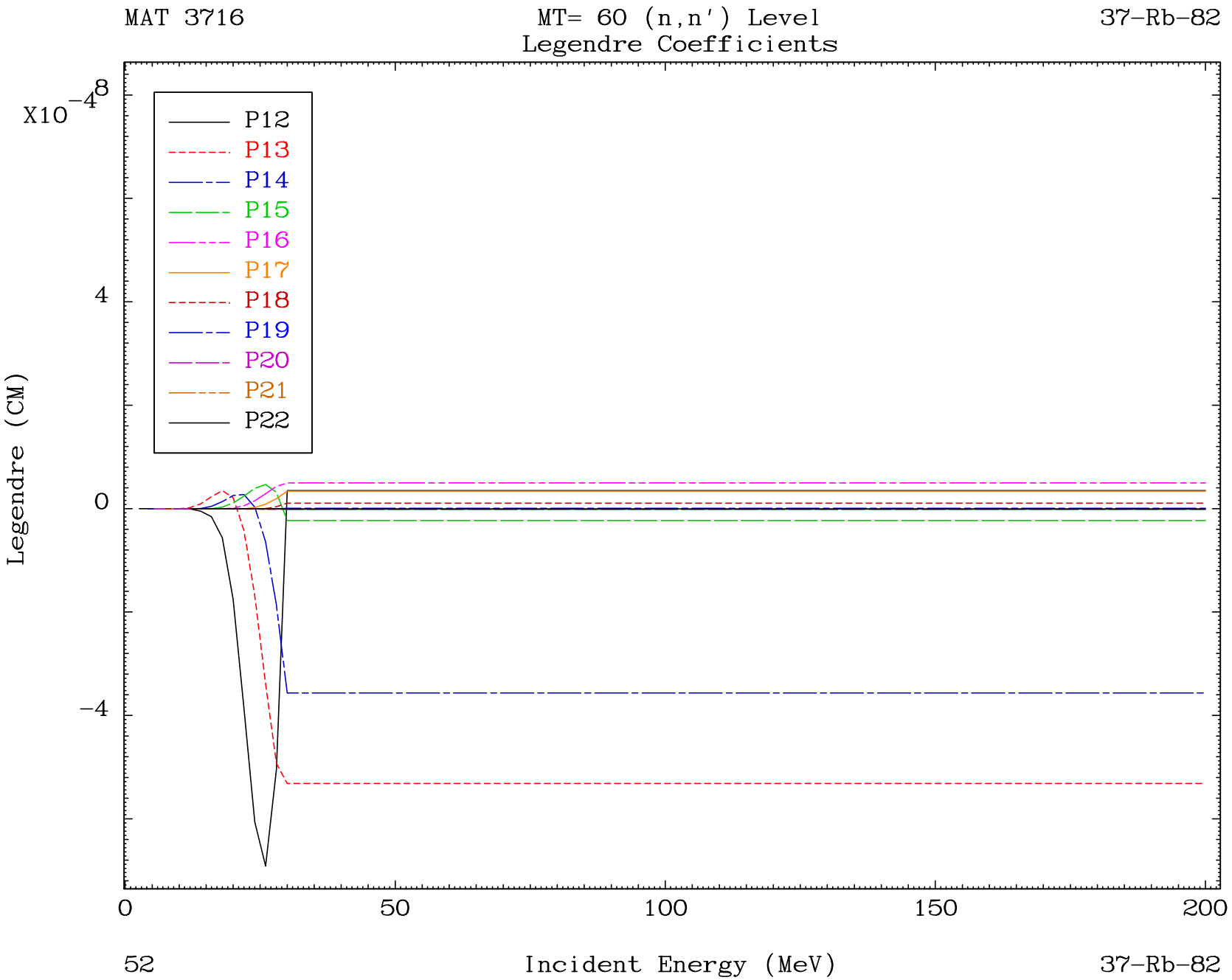

MAT 3716
MT= 59 (n,n') Level
Legendre Coefficients
37-Rb-82
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
47
Incident Energy (MeV)
37-Rb-82

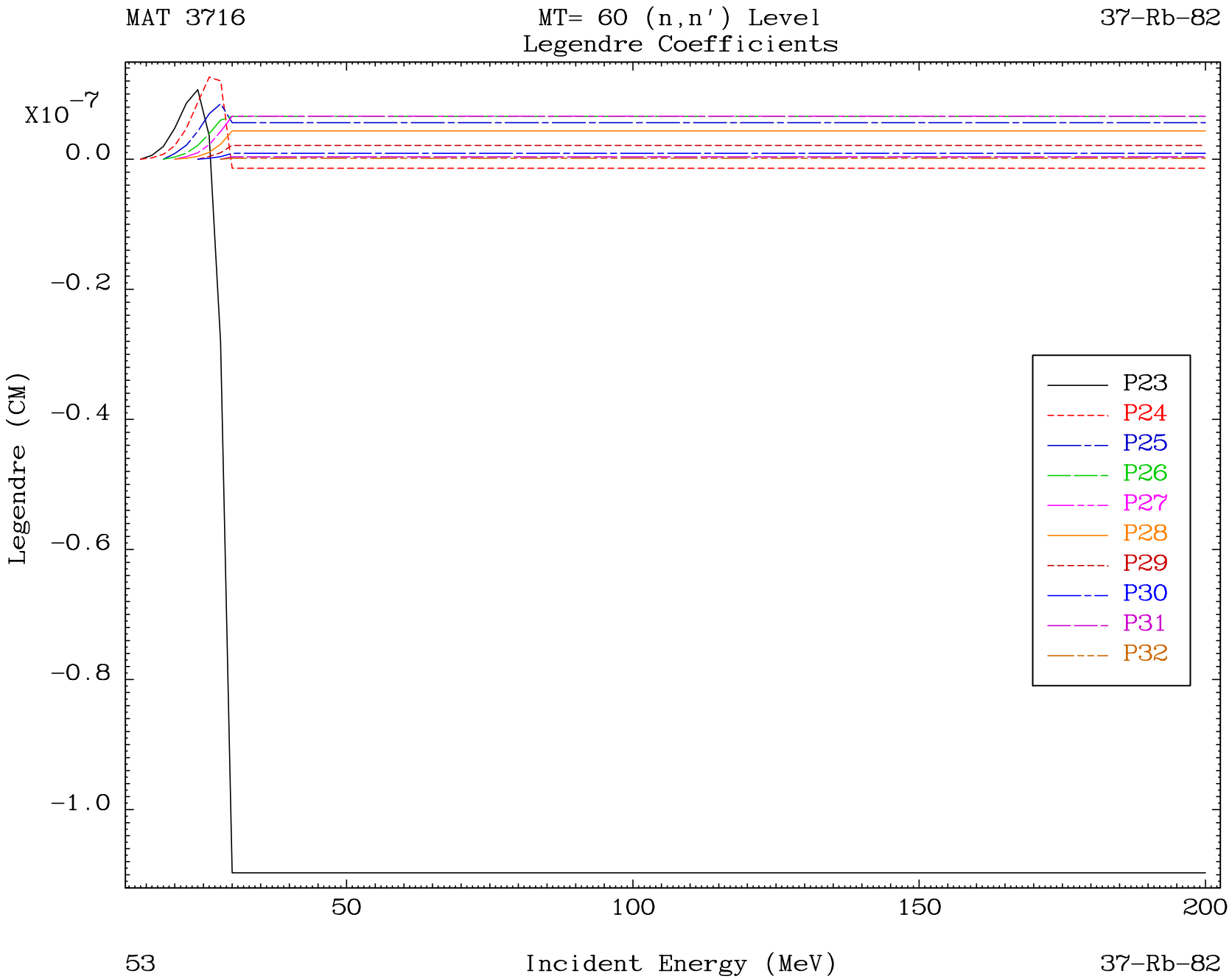

MAT 3716
MT= 59 (n,n') Level
Legendre Coefficients
37-Rb-82
0.04
0.02
0.00
-0.02
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
48
Incident Energy (MeV)
37-Rb-82

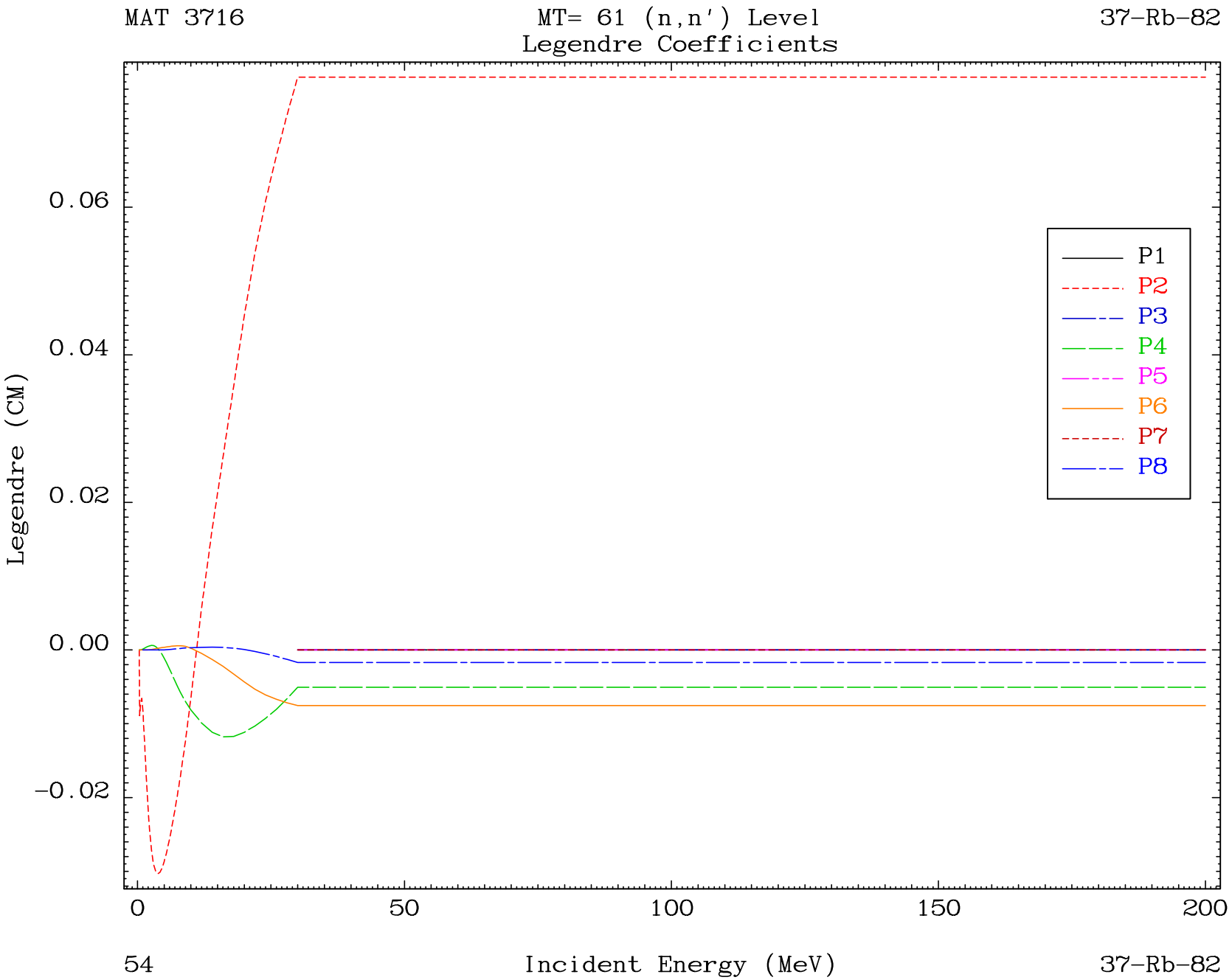

MAT 3716
MT= 59 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
49
Incident Energy (MeV)
37-Rb-82

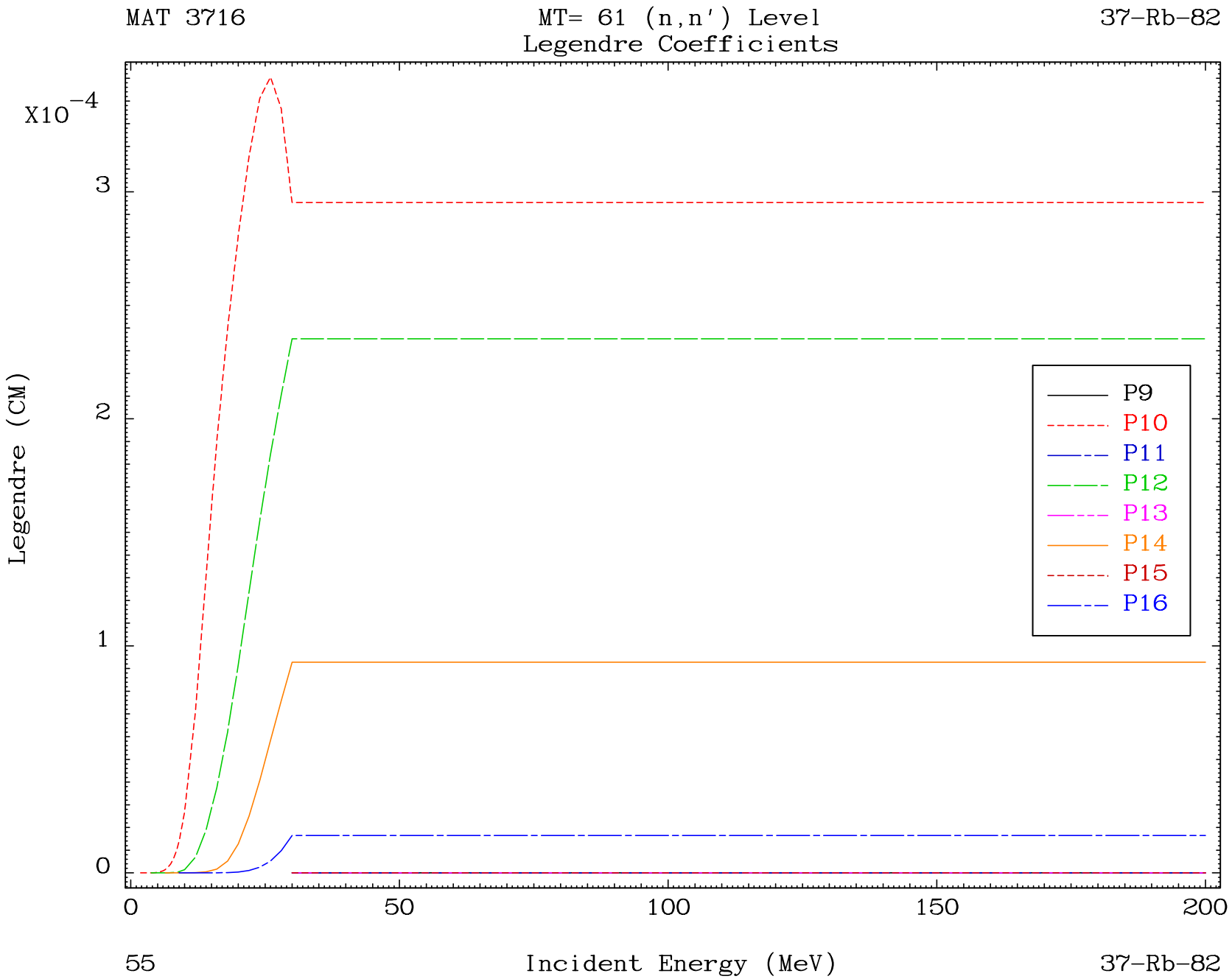

MAT 3716
MT= 59 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-2
5
4
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
50
Incident Energy (MeV)
37-Rb-82

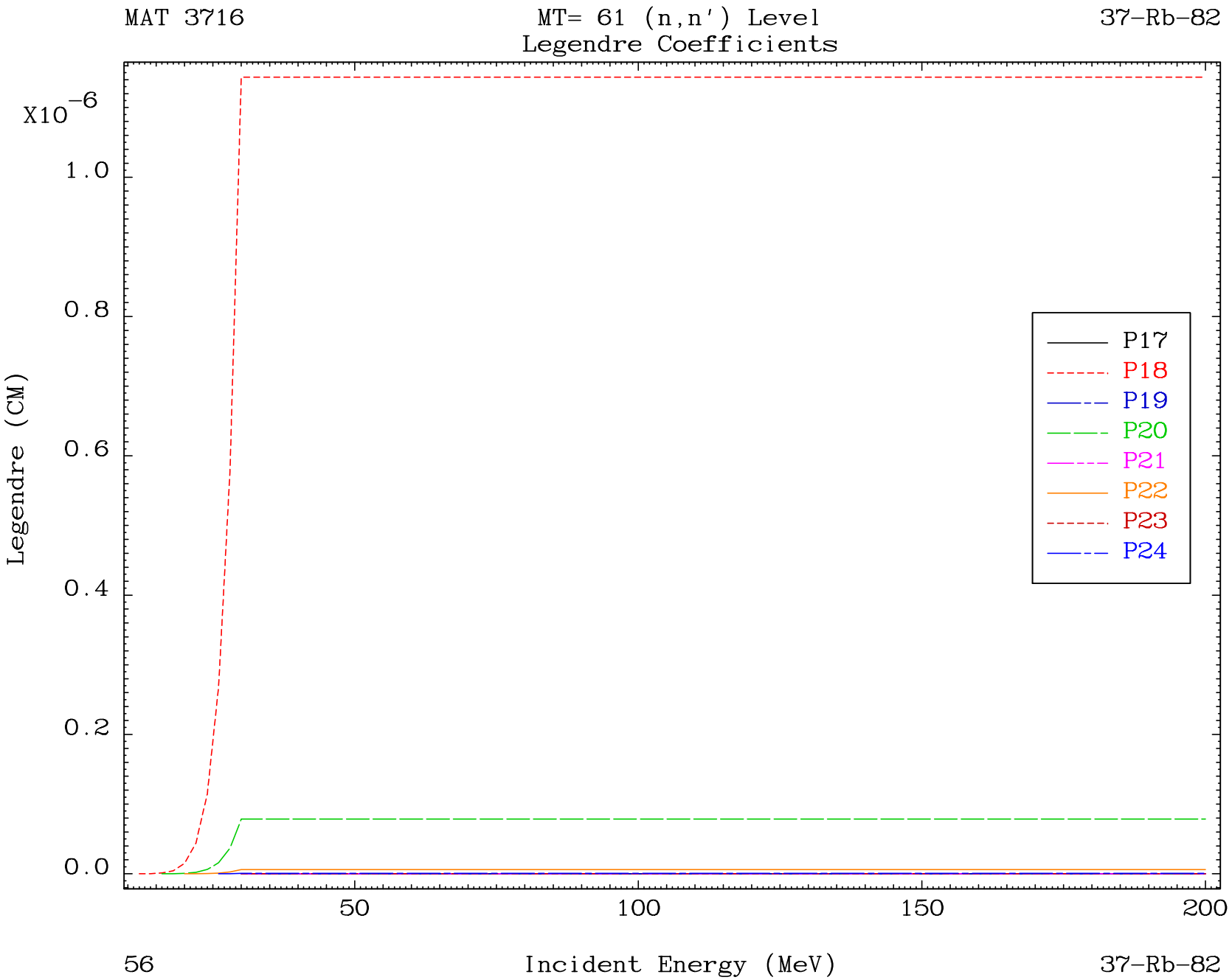

MAT 3716
MT= 60 (n,n') Level
Legendre Coefficients
37-Rb-82
0.3
0.2
0.1
0.0
-0.1
Legendre (CM)
0
50
100
150
200
51
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11

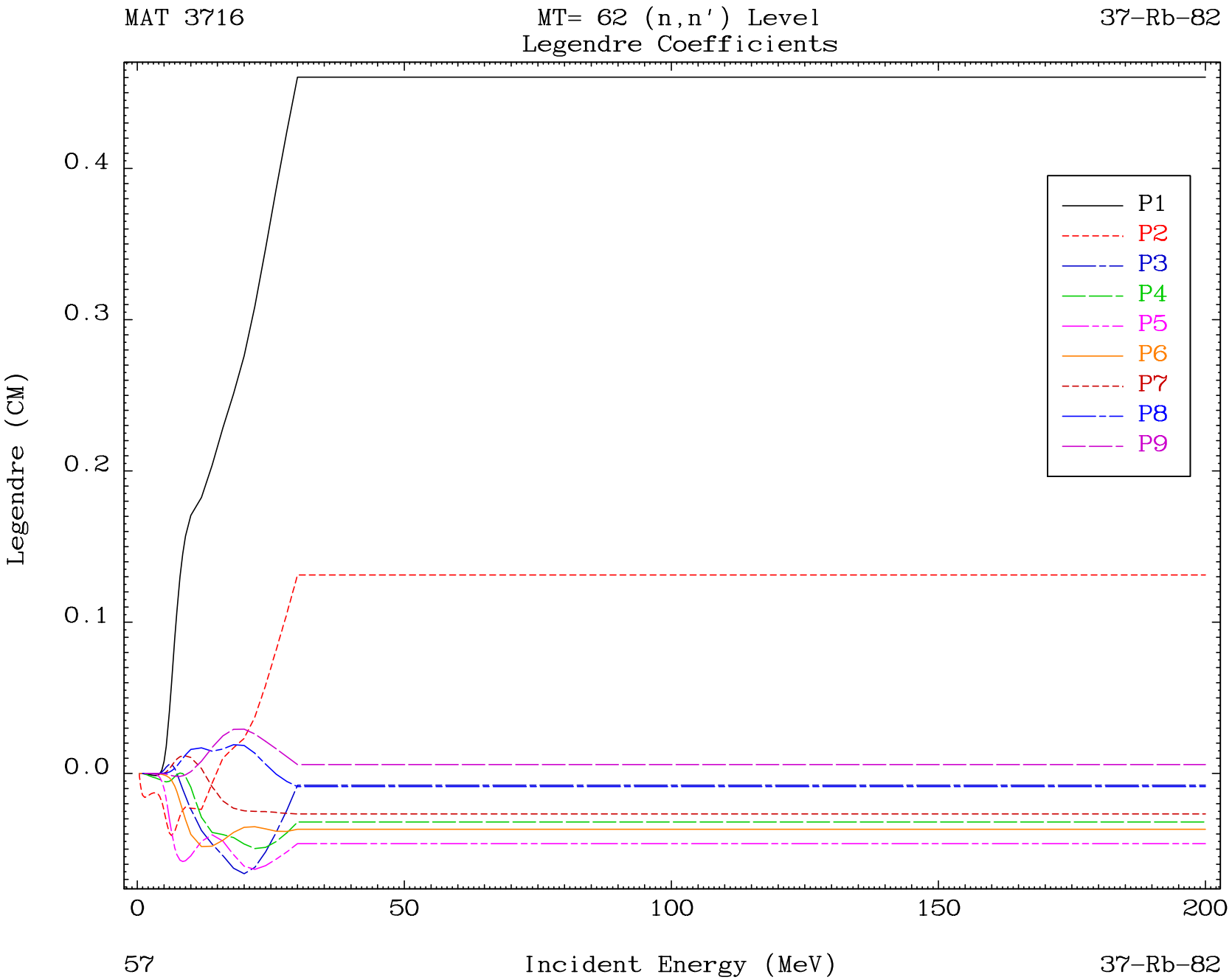

MAT 3716
MT= 60 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-4
8
4
0
-4
Legendre (CM)
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0
50
100
150
200
52
Incident Energy (MeV)
37-Rb-82

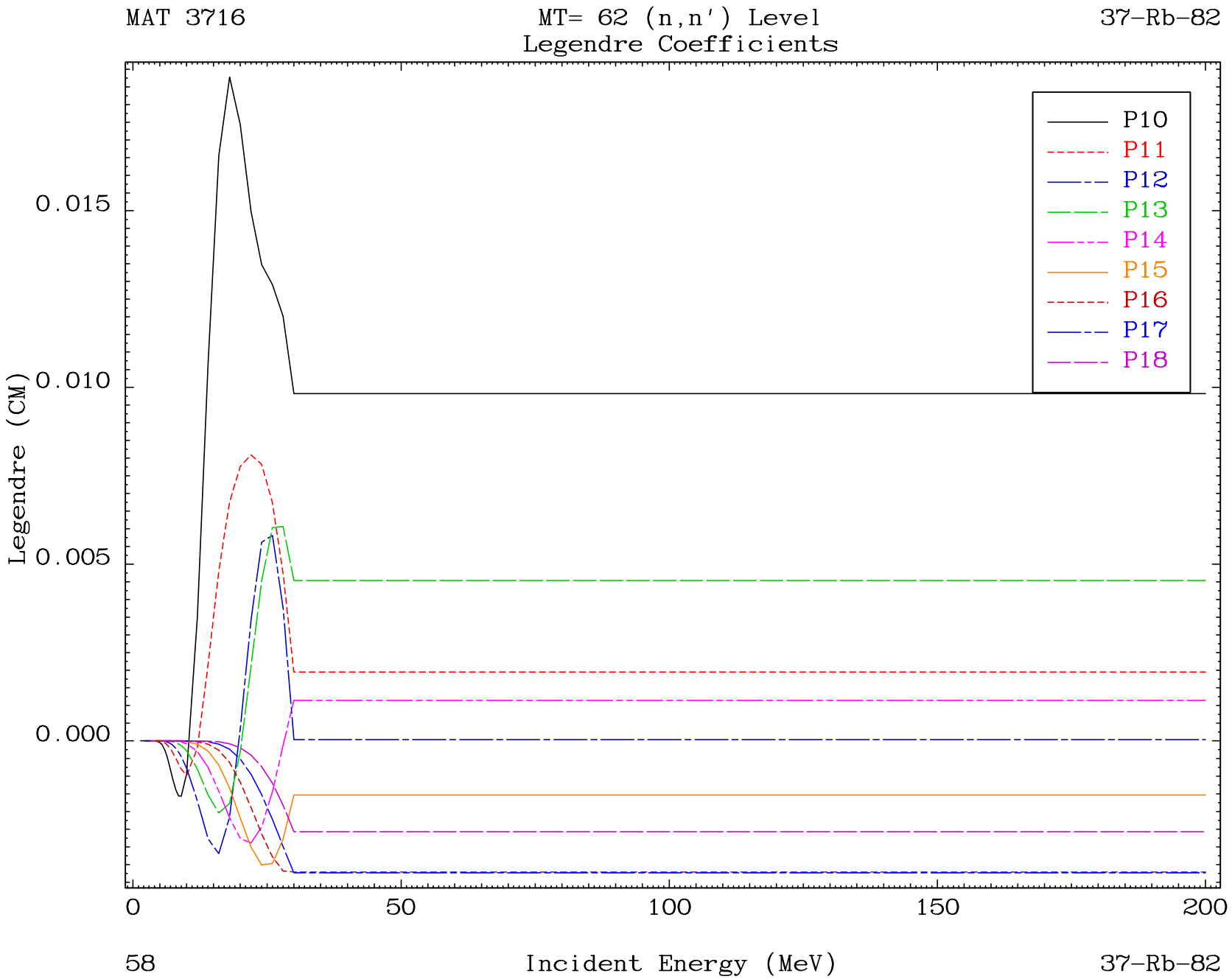

MAT 3716
MT= 60 (n,n') Level
Legendre Coefficients
37-Rb-82
X10^{-7}
0.0
-0.2
-0.4
-0.6
-0.8
-1.0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
53
Incident Energy (MeV)
37-Rb-82

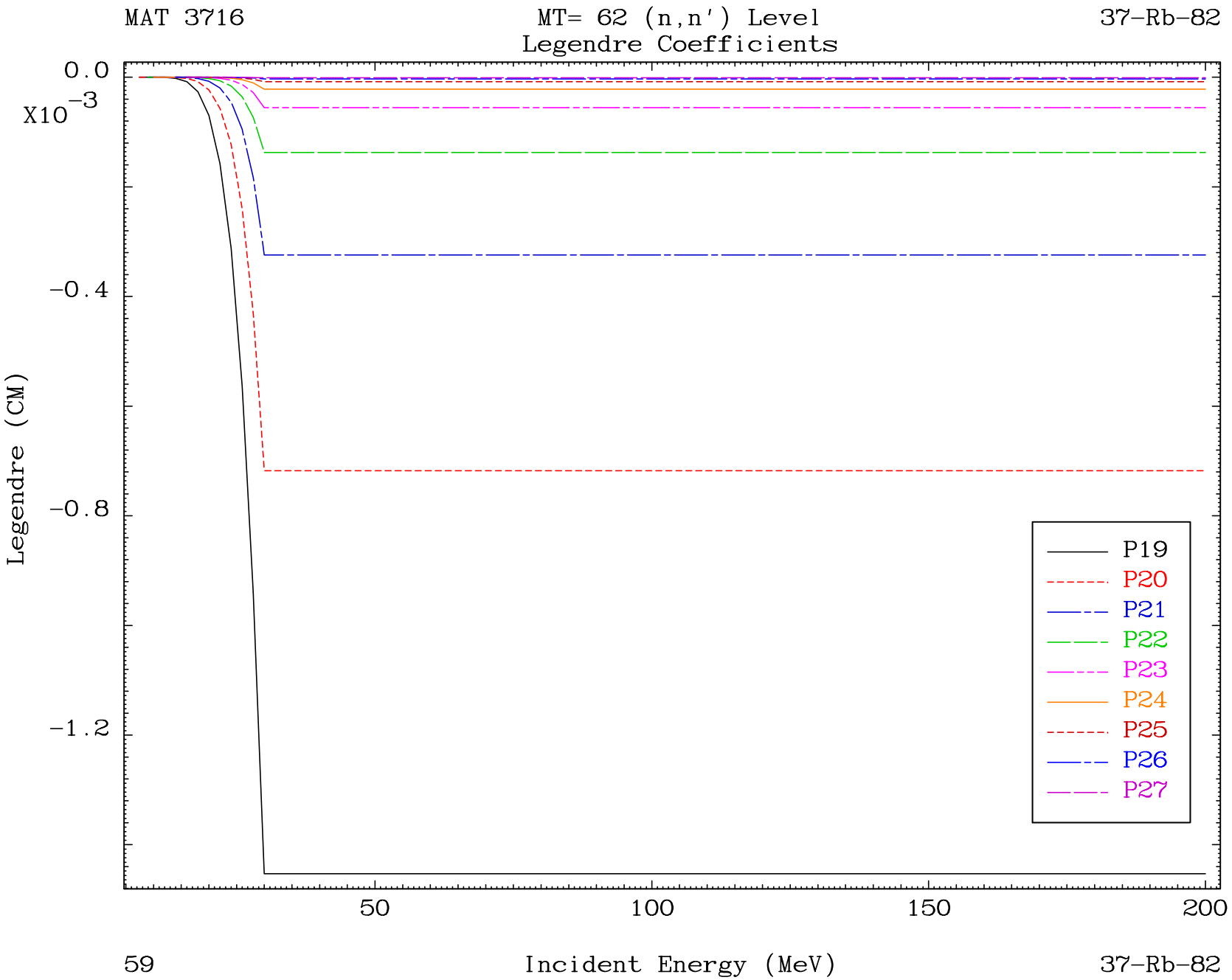

MAT 3716
MT= 61 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.06
0.04
0.02
0.00
-0.02
0
50
100
150
200
Incident Energy (MeV)
54
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8

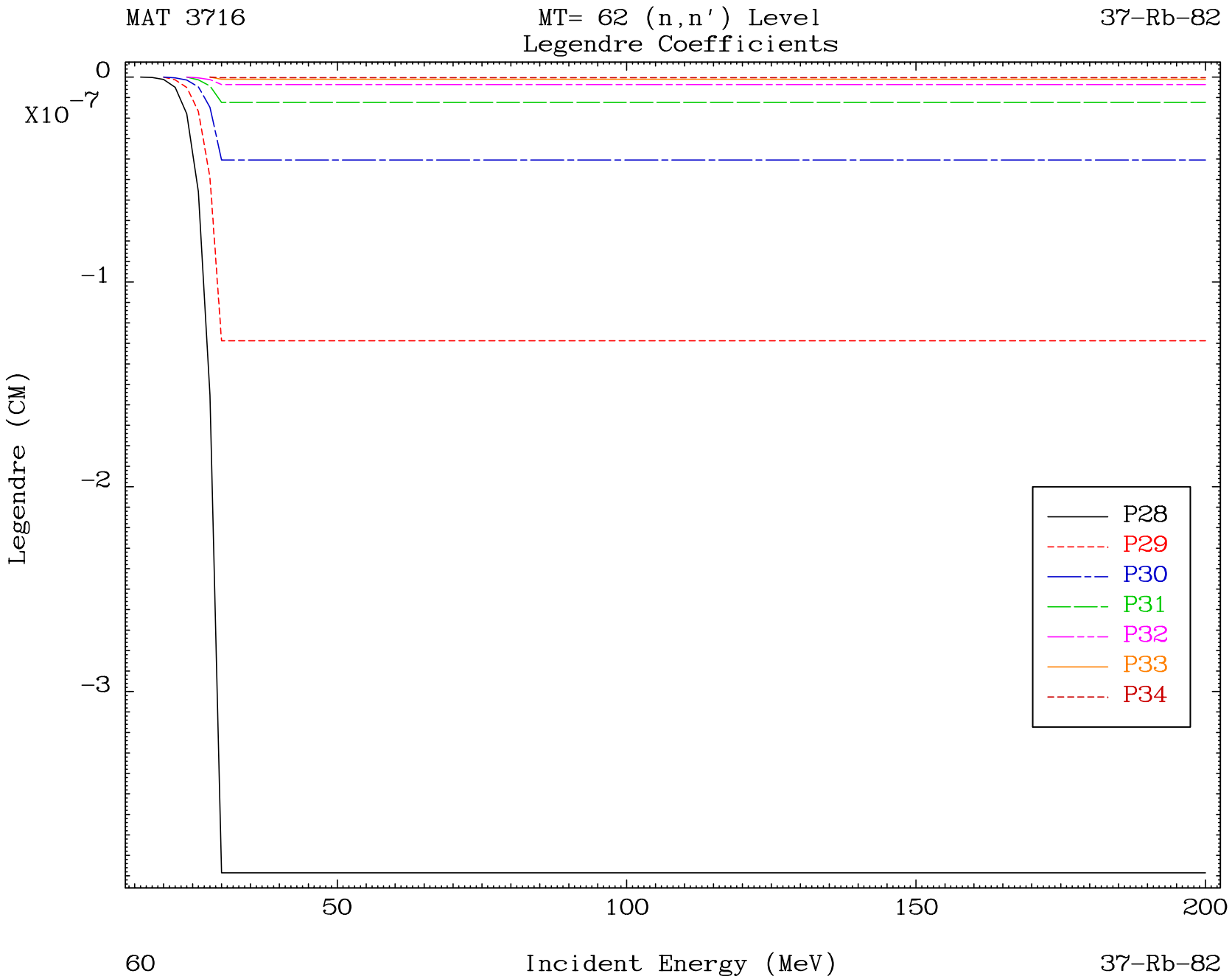

MAT 3716
MT= 61 (n,n') Level
Legendre Coefficients
37-Rb-82
X10^-4
3
2
1
0
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
55
Incident Energy (MeV)
37-Rb-82

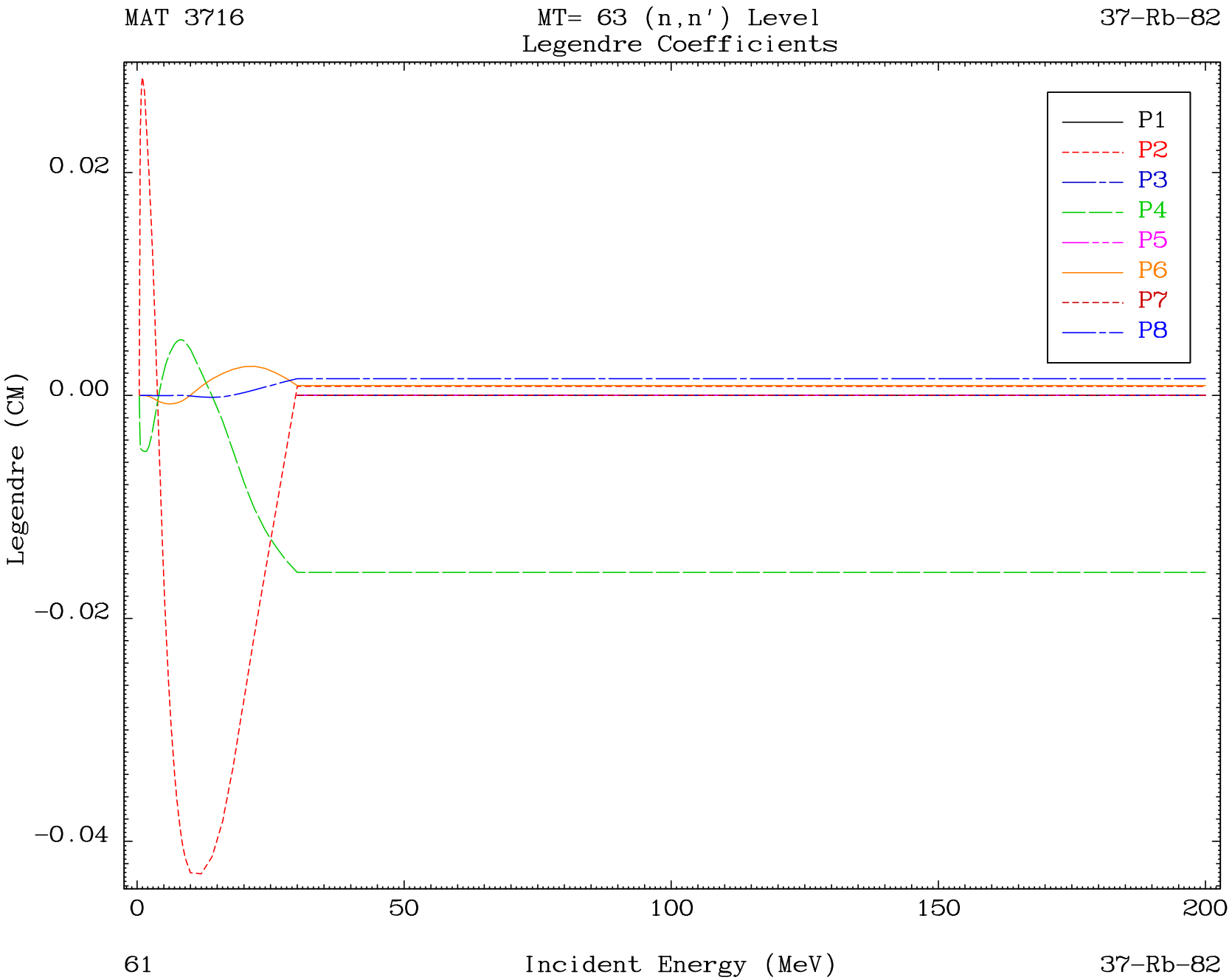

MAT 3716
MT= 61 (n,n') Level
Legendre Coefficients
37-Rb-82
X10^-6
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P17
P18
P19
P20
P21
P22
P23
P24
50
100
150
200
56
Incident Energy (MeV)
37-Rb-82

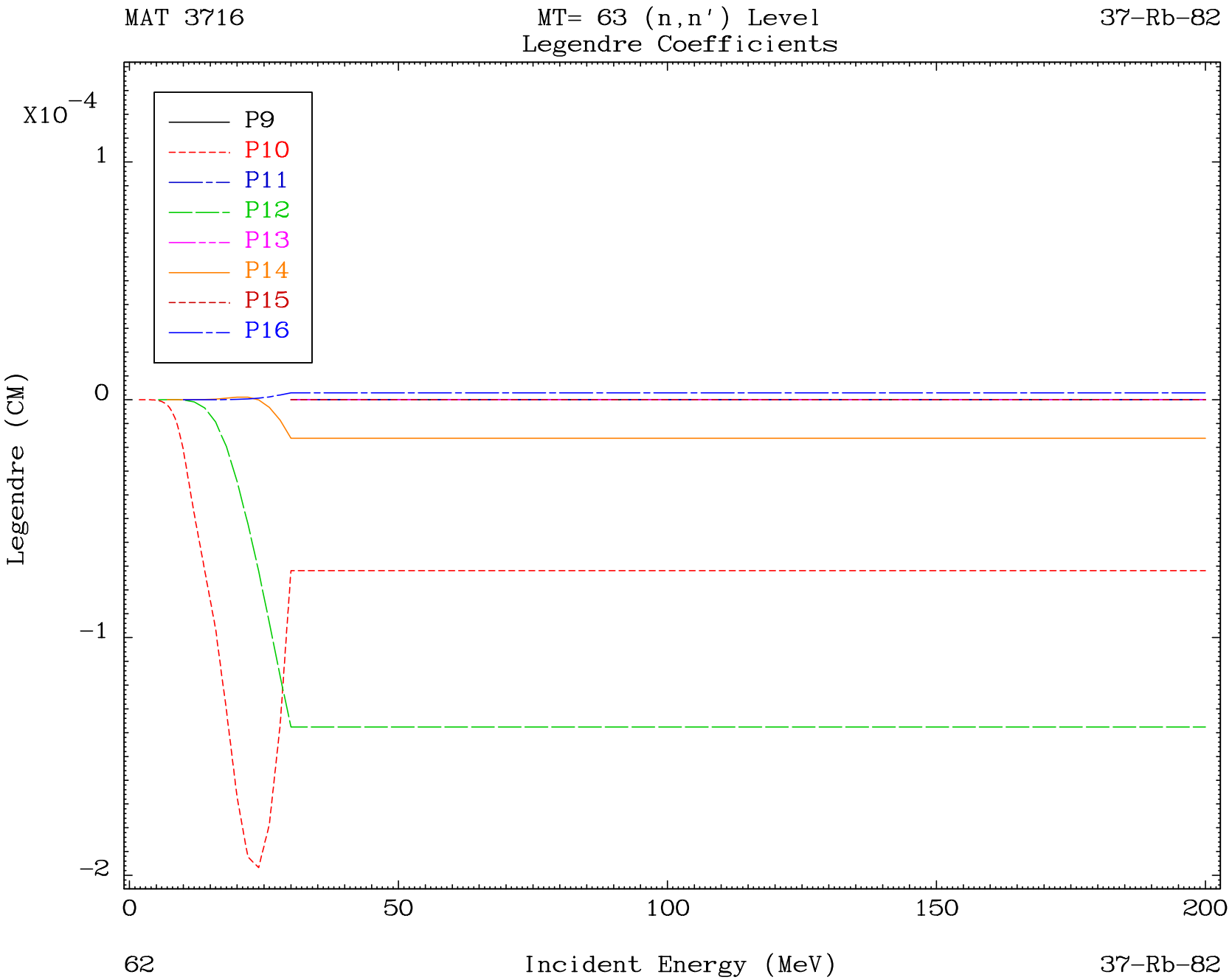

MAT 3716
MT= 62 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
57
Incident Energy (MeV)
37-Rb-82

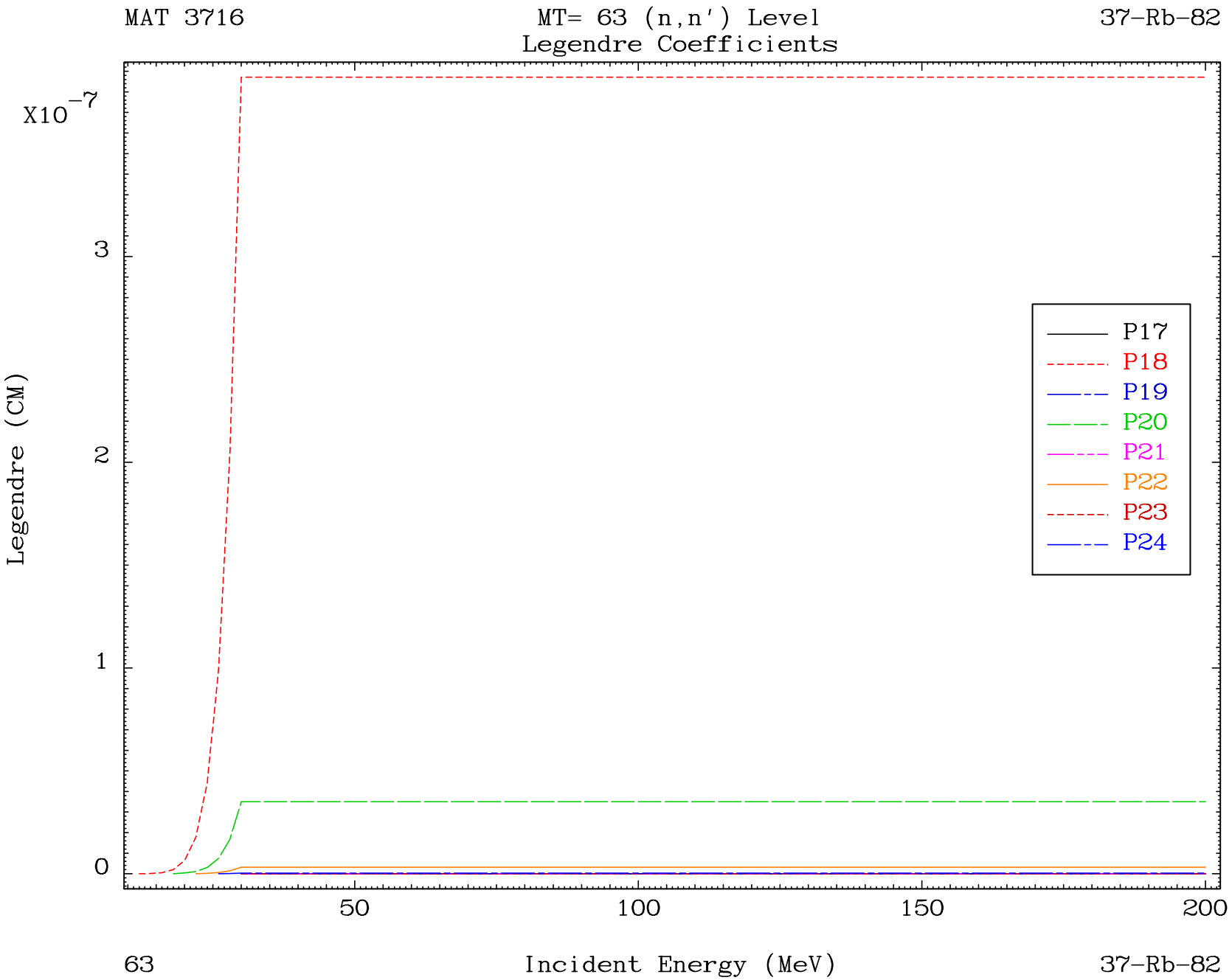

MAT 3716
MT= 62 (n,n') Level
Legendre Coefficients
37-Rb-82
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.015
0.010
0.005
0.000
Legendre (CM)
0
50
100
150
200
58
Incident Energy (MeV)
37-Rb-82

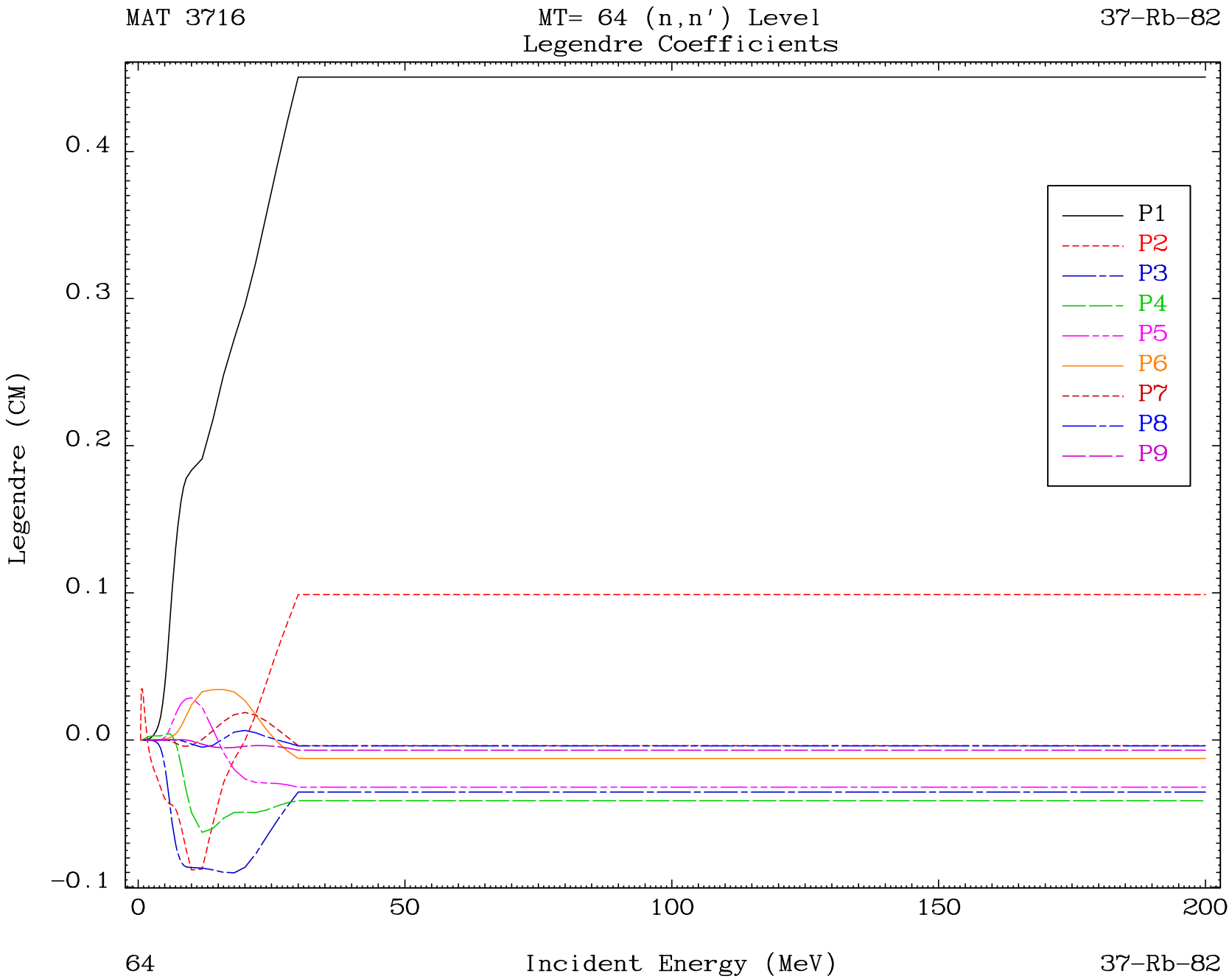

MAT 3716
MT= 62 (n,n') Level
Legendre Coefficients
37-Rb-82
0.0
X10^-3
-0.4
-0.8
-1.2
Legendre (CM)
50
100
150
200
59
Incident Energy (MeV)
37-Rb-82
P19
P20
P21
P22
P23
P24
P25
P26
P27

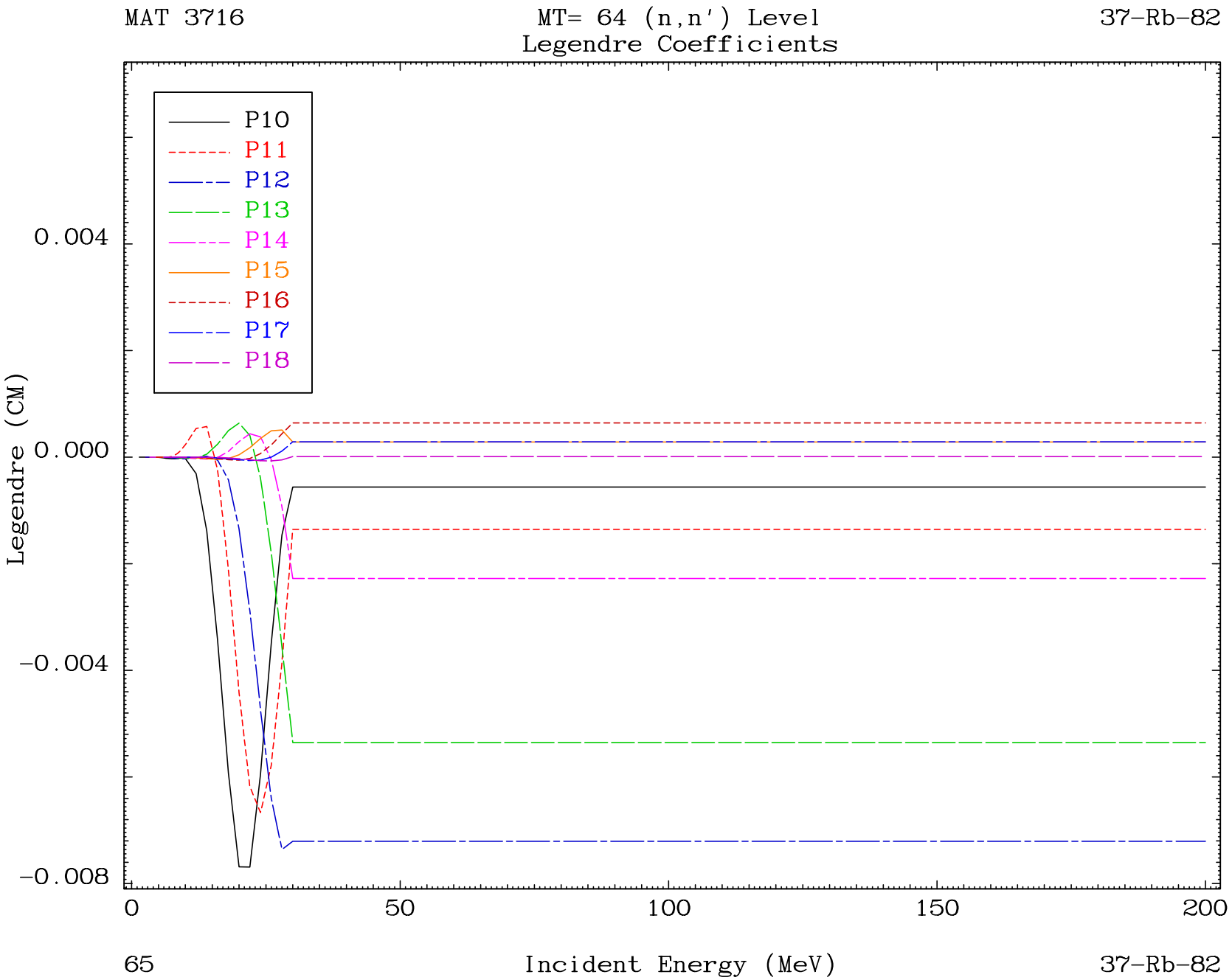

MAT 3716
MT= 62 (n,n') Level
Legendre Coefficients
37-Rb-82
0
X10-7
-1
-2
-3
Legendre (CM)
50
100
150
200
60
Incident Energy (MeV)
37-Rb-82
P28
P29
P30
P31
P32
P33
P34

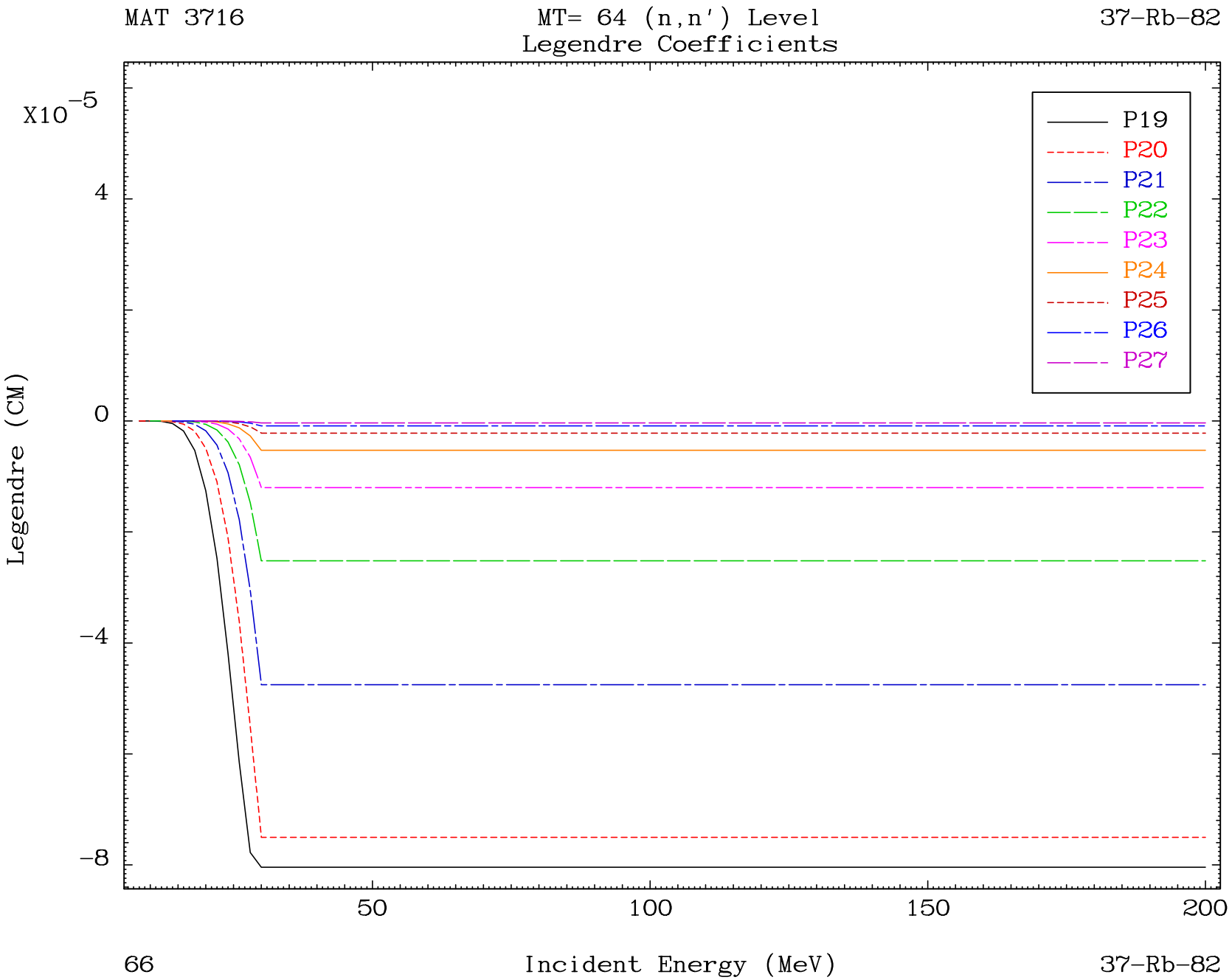

MAT 3716
MT= 63 (n,n') Level
Legendre Coefficients
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
61
Incident Energy (MeV)
37-Rb-82

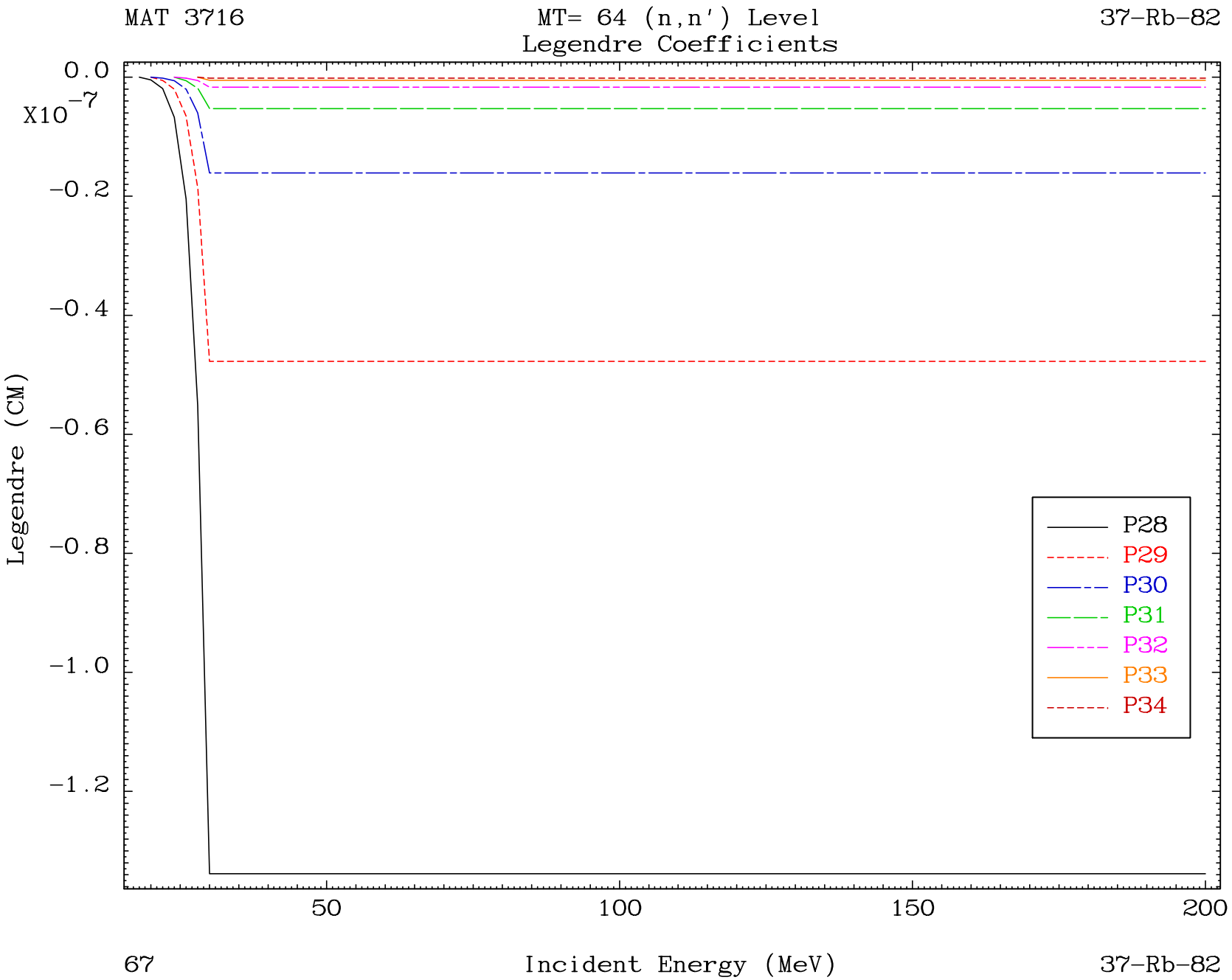

MAT 3716
MT= 63 (n,n') Level
Legendre Coefficients
37-Rb-82
X10^-4
1
0
-1
-2
P9
P10
P11
P12
P13
P14
P15
P16
Legendre (CM)
0
50
100
150
200
62
Incident Energy (MeV)
37-Rb-82

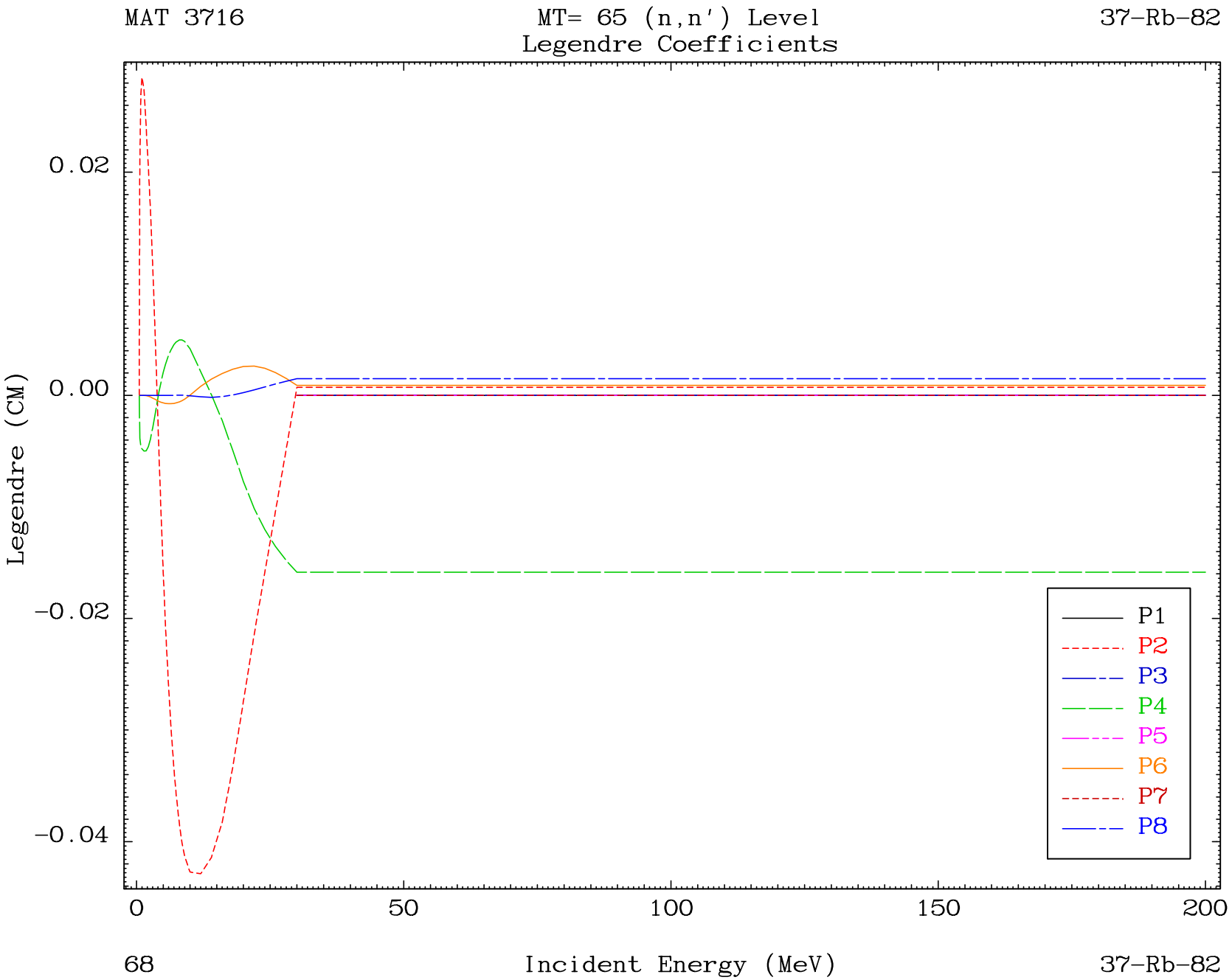

MAT 3716
MT= 63 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-7
3
2
1
0
Legendre (CM)
P17
P18
P19
P20
P21
P22
P23
P24
50
100
150
200
63
Incident Energy (MeV)
37-Rb-82

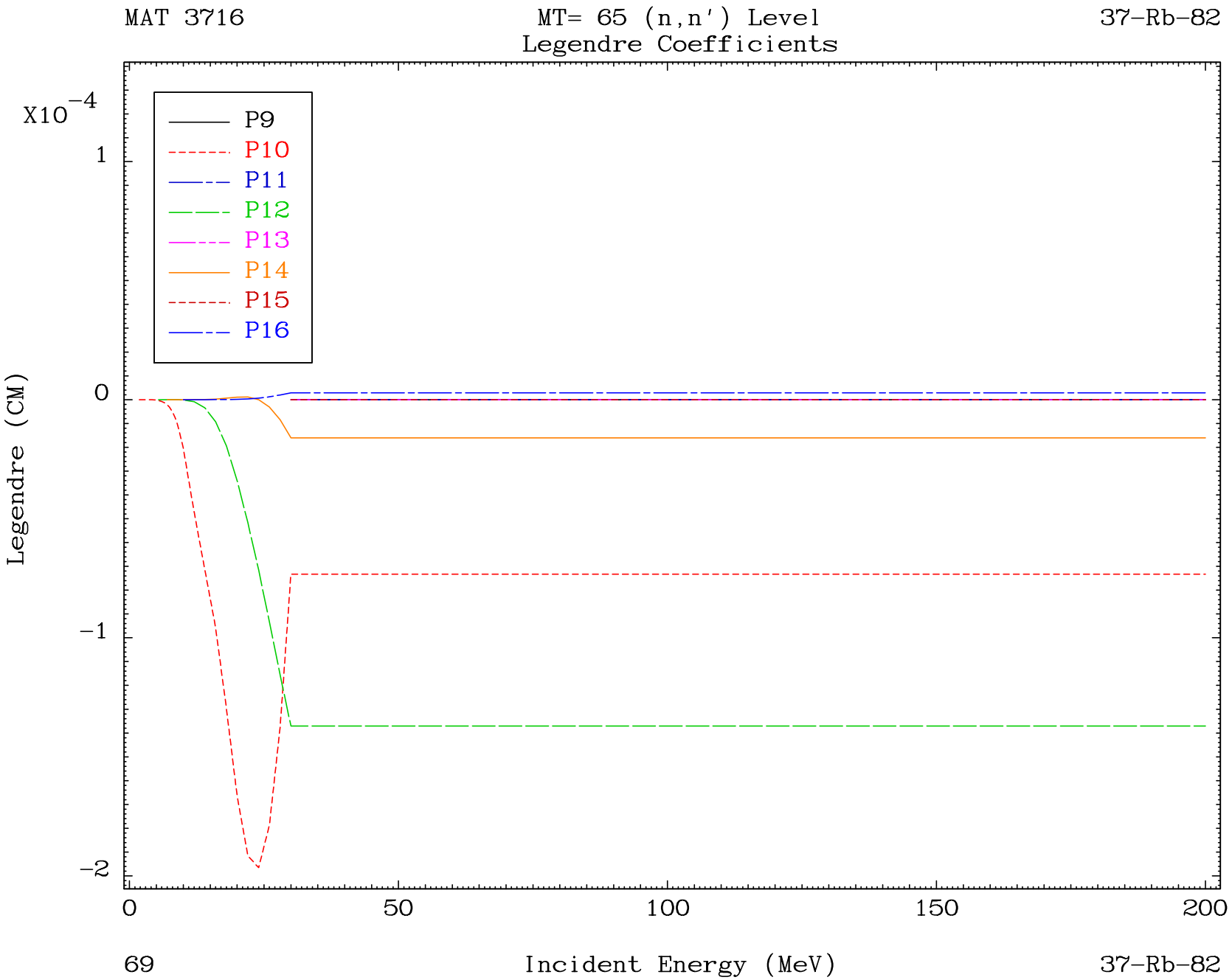

MAT 3716
MT= 64 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
64
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9

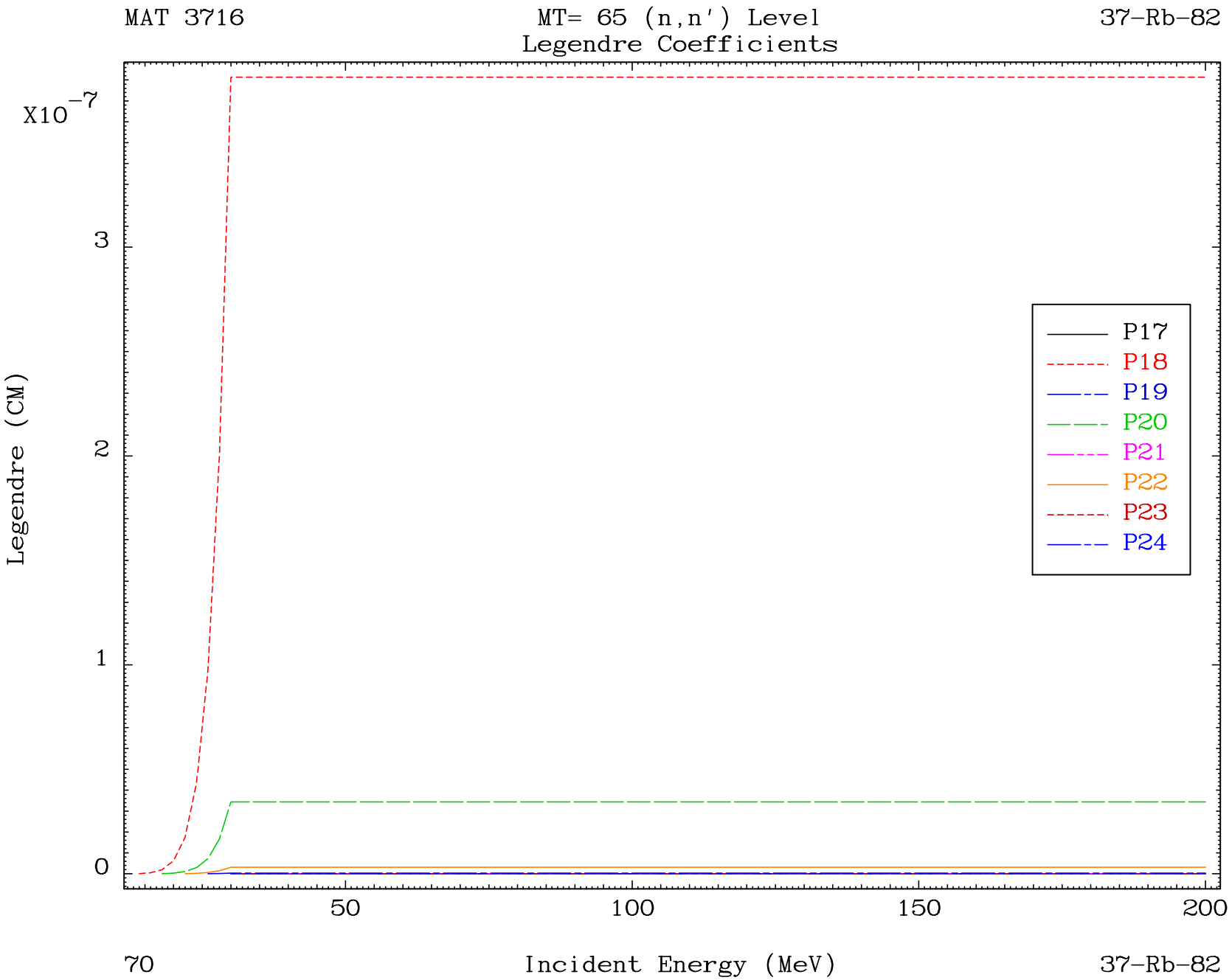

MAT 3716
MT= 64 (n,n') Level
Legendre Coefficients
37-Rb-82
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.004
0.000
-0.004
-0.008
Legendre (CM)
0
50
100
150
200
65
Incident Energy (MeV)
37-Rb-82

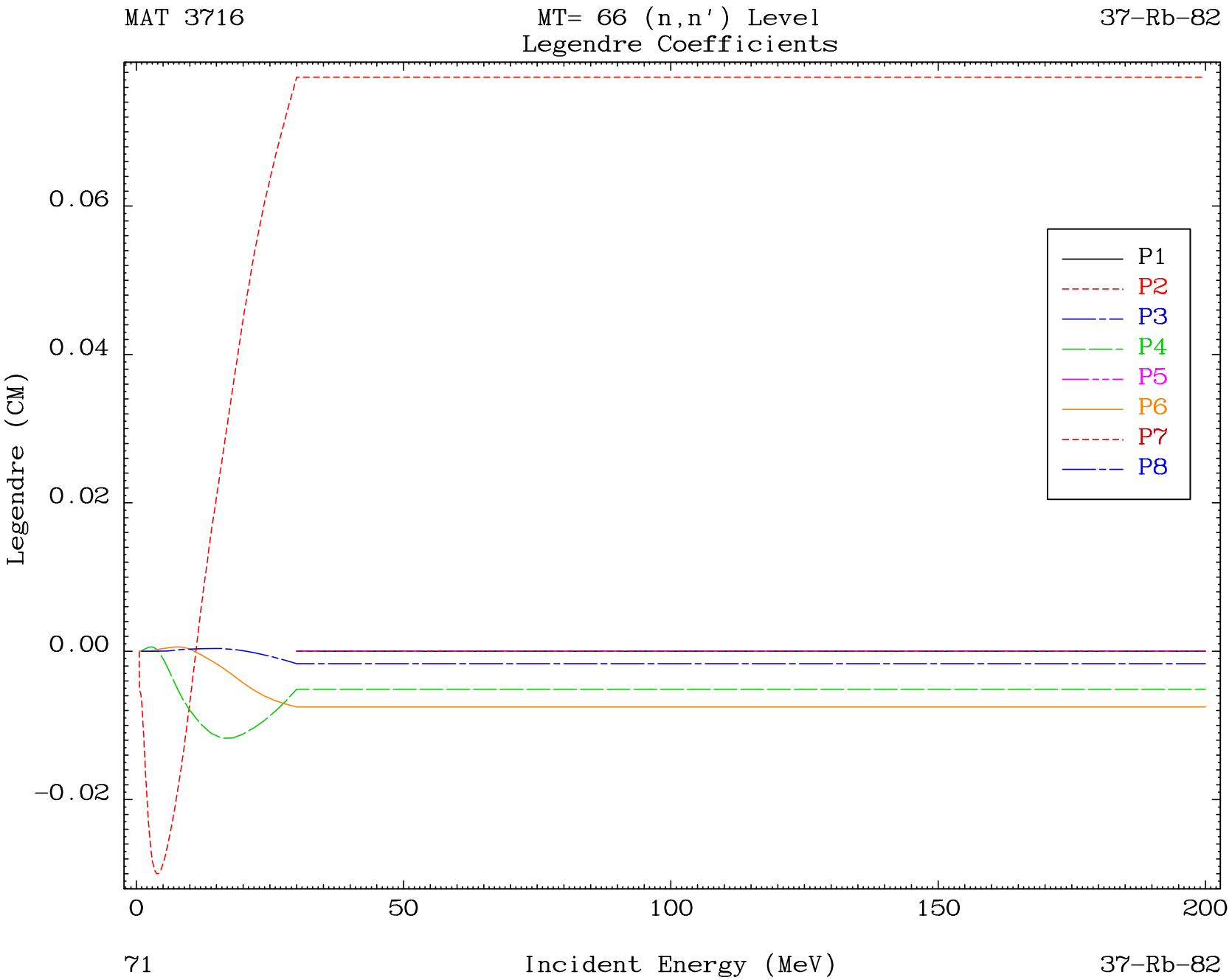

MAT 3716
MT= 64 (n,n') Level
Legendre Coefficients
37-Rb-82
X10 −5
4
0
−4
−8
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
66
Incident Energy (MeV)
37-Rb-82

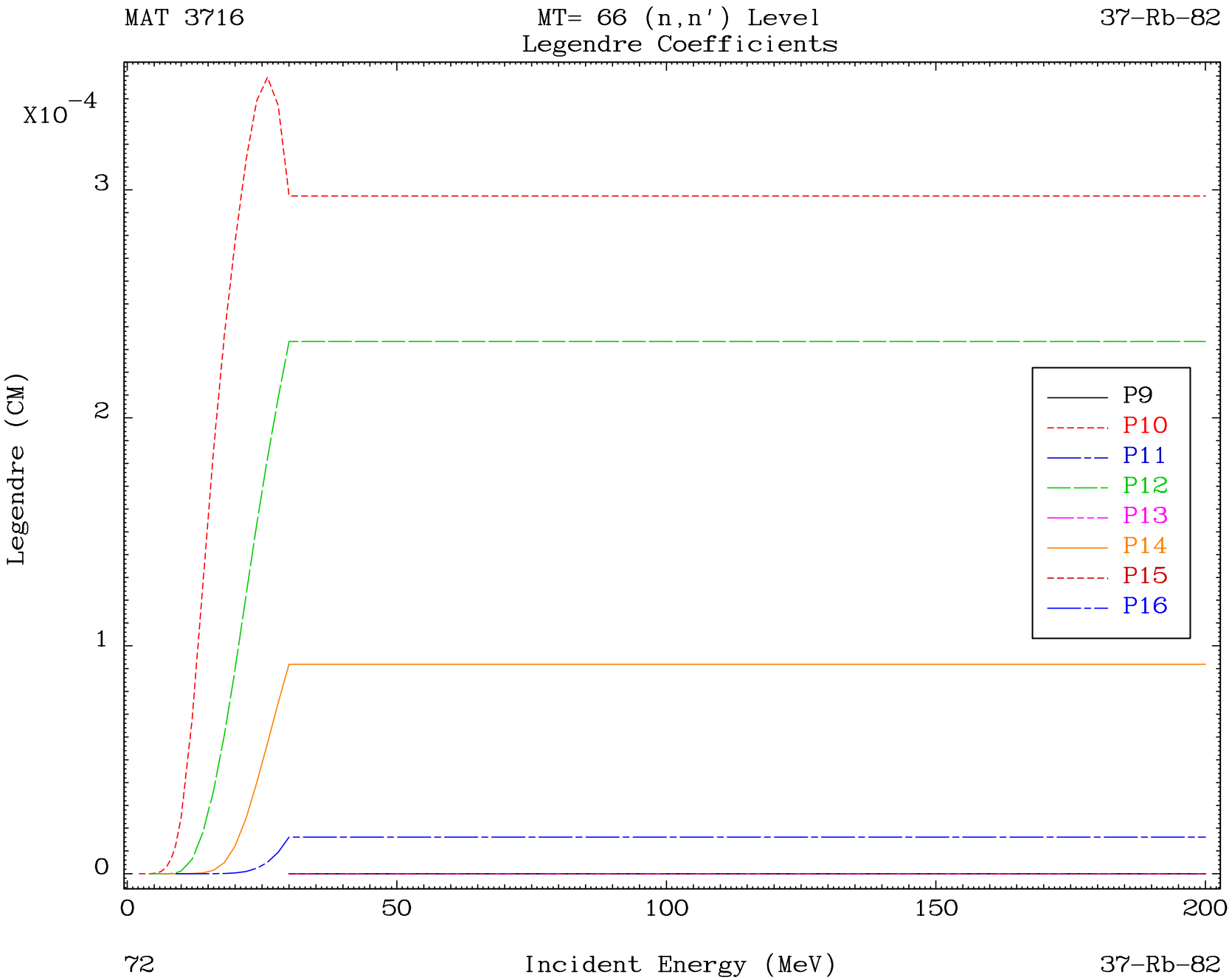

MAT 3716
MT= 64 (n,n') Level
Legendre Coefficients
37-Rb-82
0.0
X10^-7
-0.2
-0.4
-0.6
-0.8
-1.0
-1.2
Legendre (CM)
50
100
150
200
P28
P29
P30
P31
P32
P33
P34
67
Incident Energy (MeV)
37-Rb-82

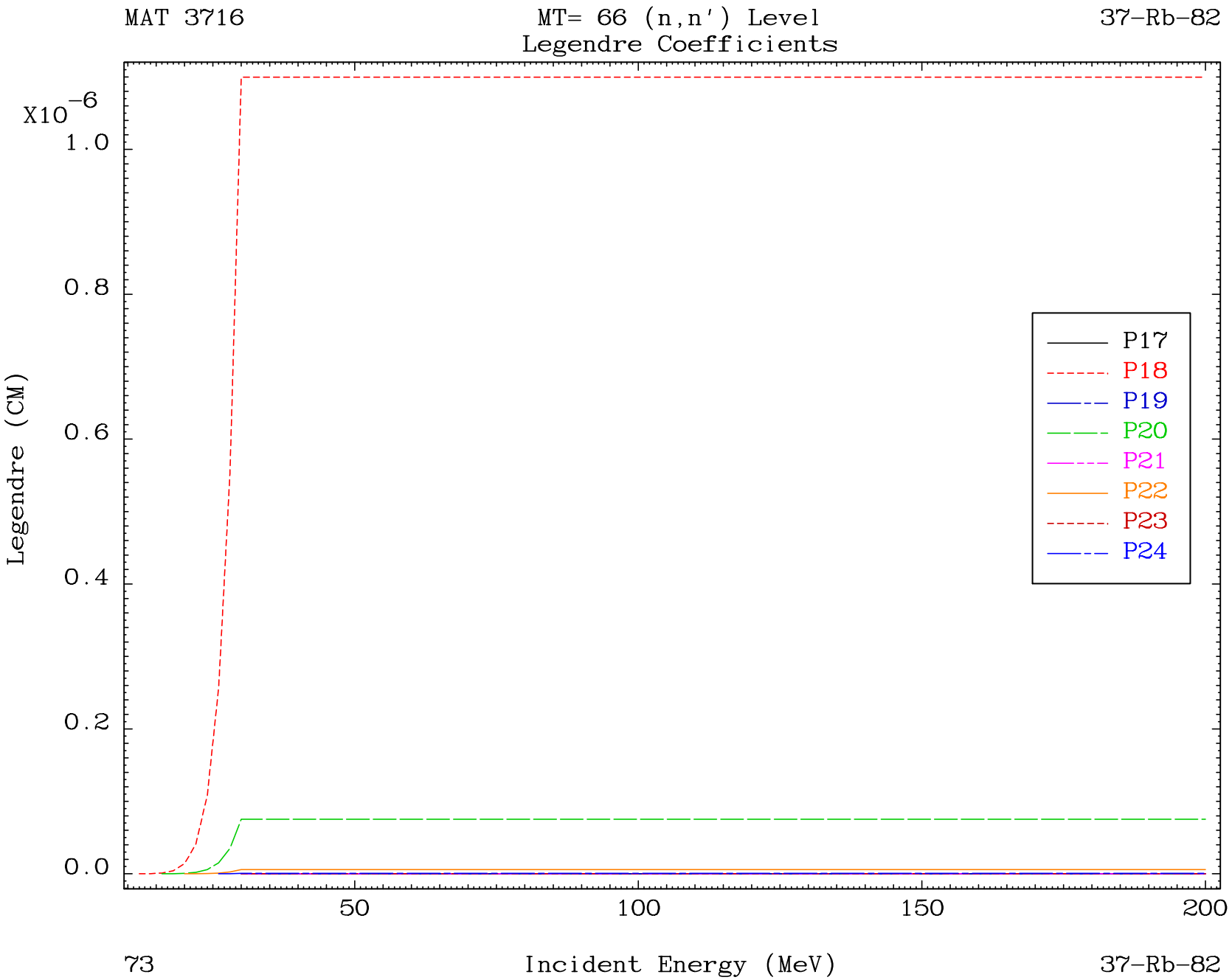

MAT 3716
MT= 65 (n,n') Level
Legendre Coefficients
37-Rb-82
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
68
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8

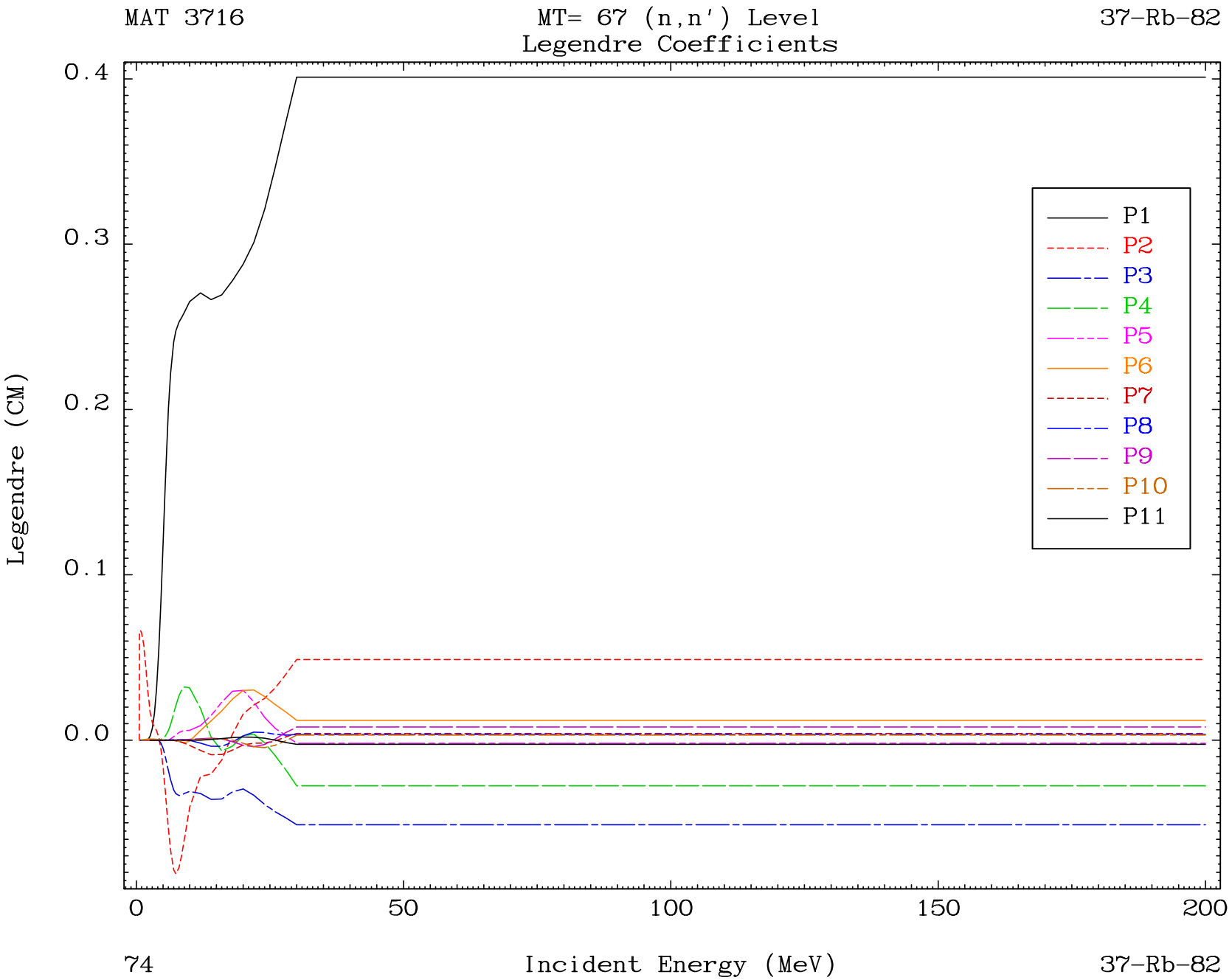

MAT 3716
MT= 65 (n,n') Level
Legendre Coefficients
37-Rb-82
X10^-4
1
0
-1
-2
P9
P10
P11
P12
P13
P14
P15
P16
Legendre (CM)
0
50
100
150
200
69
Incident Energy (MeV)
37-Rb-82

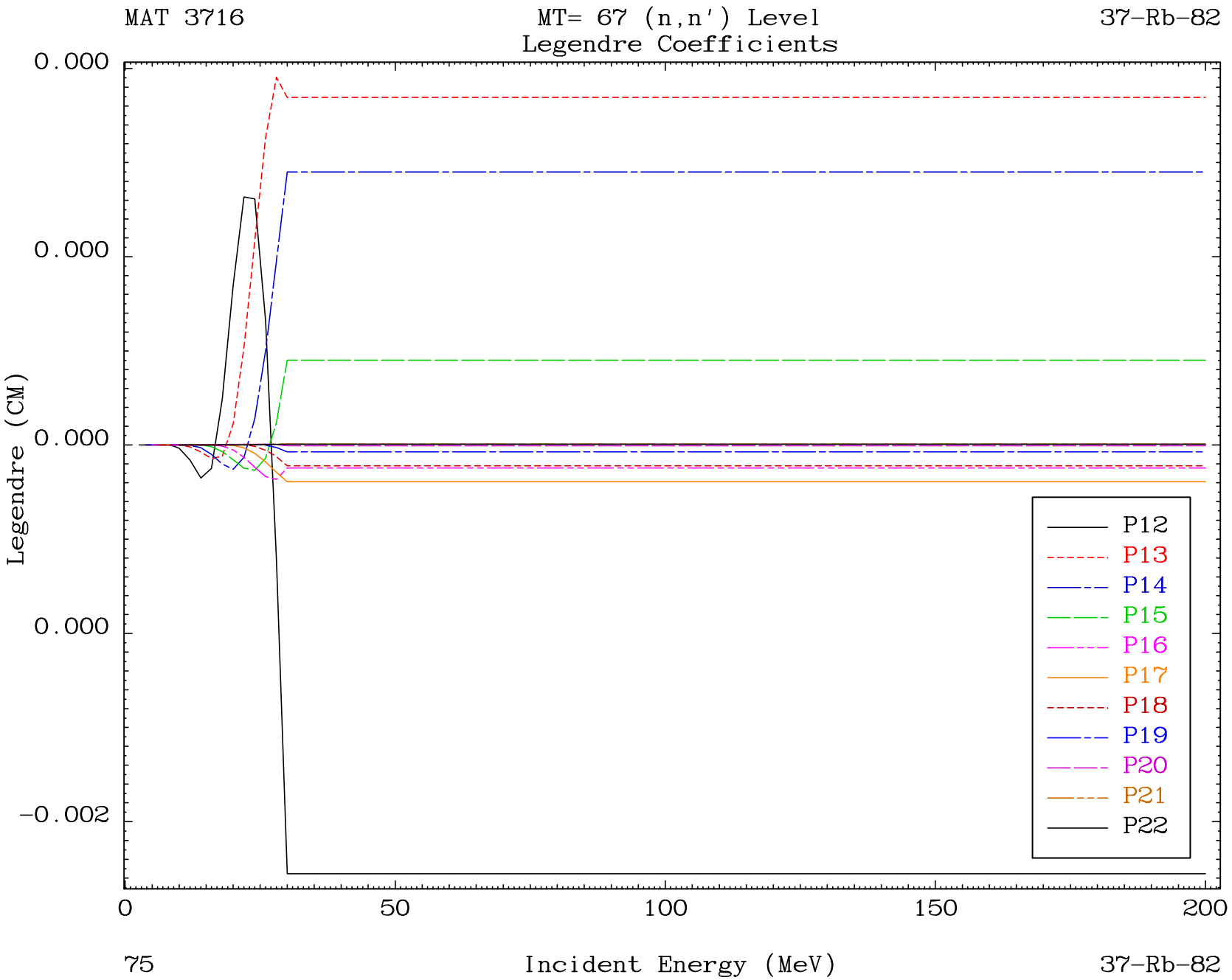

MAT 3716
MT= 65 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-7
3
2
1
0
Legendre (CM)
P17
P18
P19
P20
P21
P22
P23
P24
50
100
150
200
70
Incident Energy (MeV)
37-Rb-82

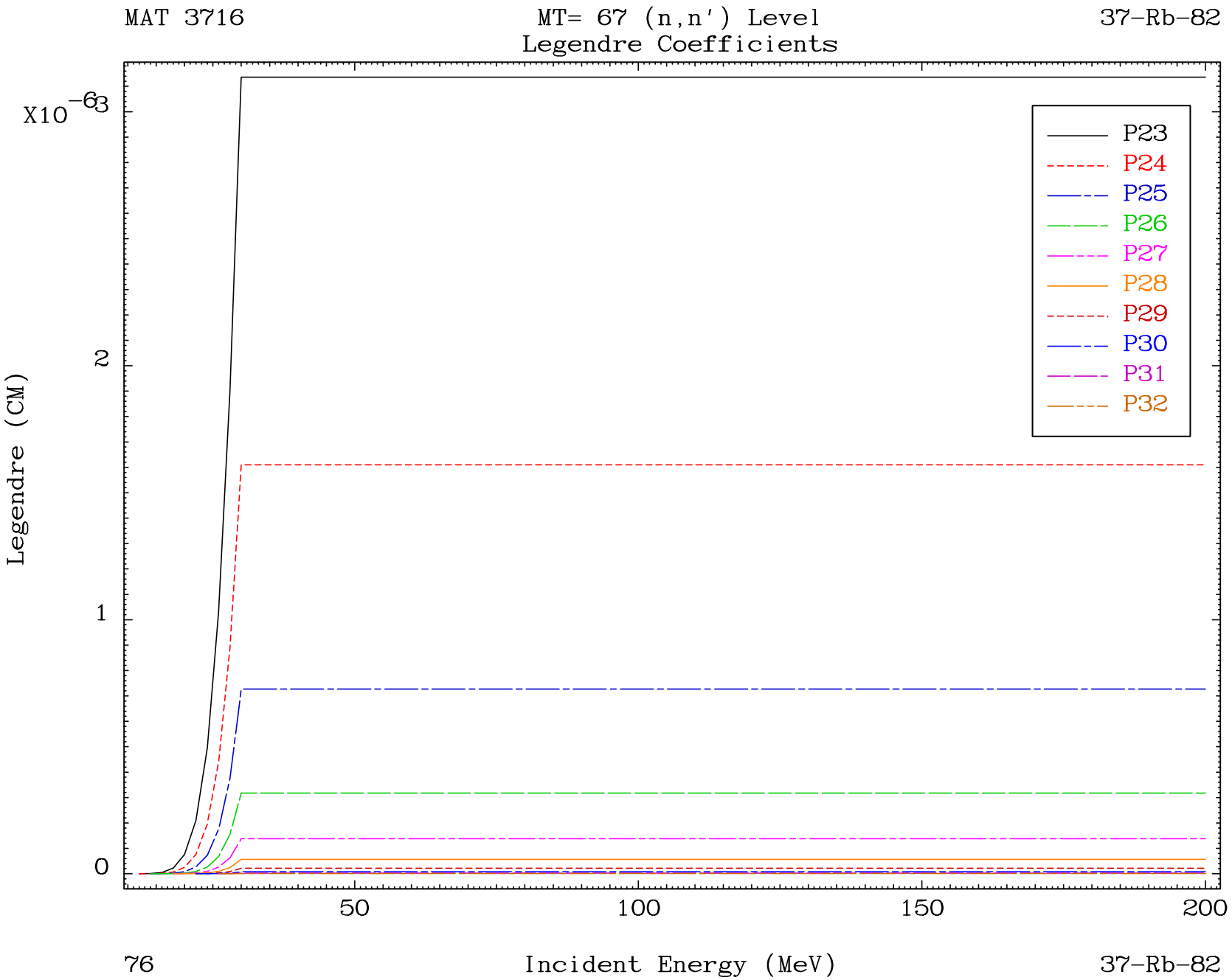

MAT 3716
MT= 66 (n,n') Level
Legendre Coefficients
37-Rb-82
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
0
50
100
150
200
71
Incident Energy (MeV)
37-Rb-82

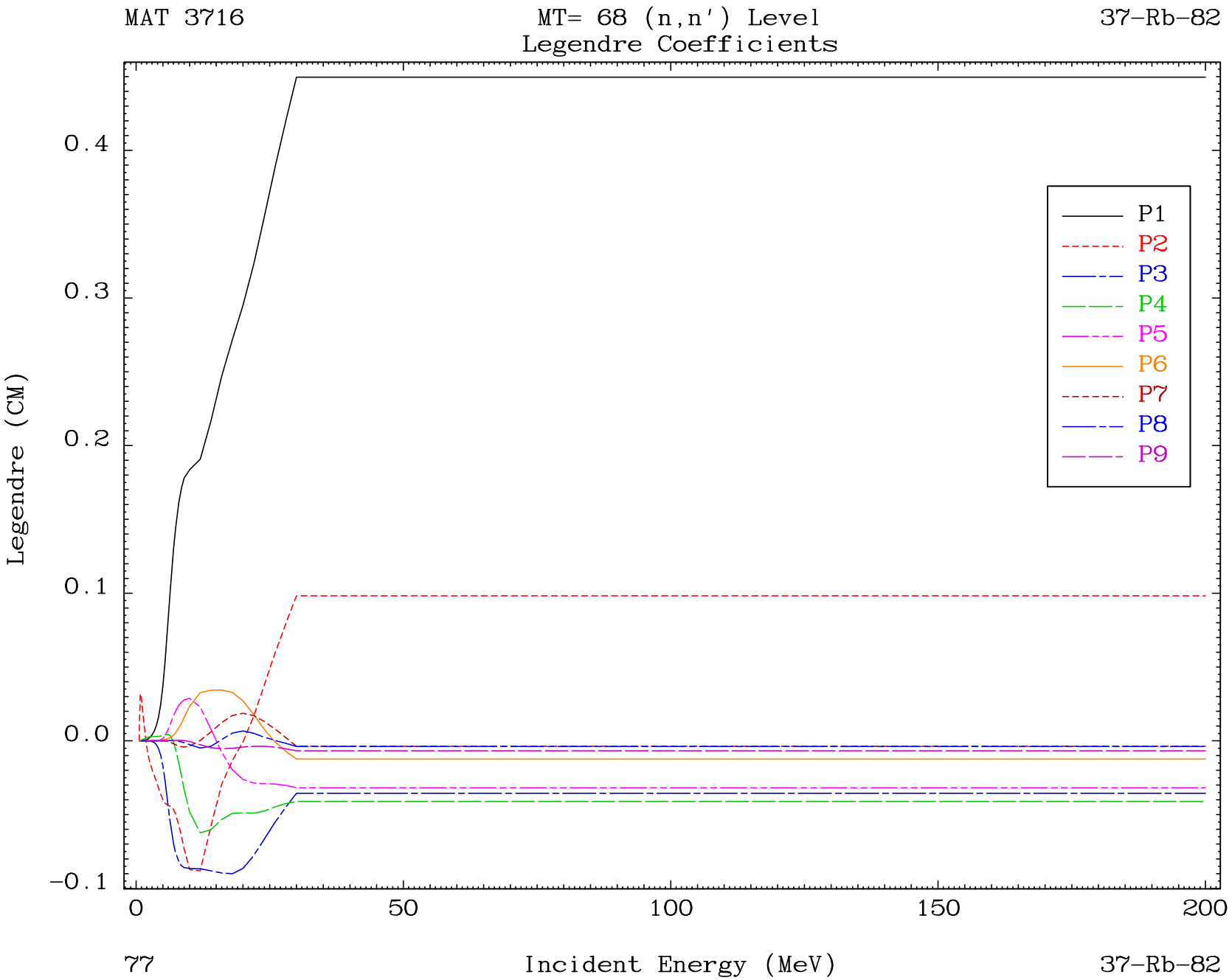

MAT 3716
MT= 66 (n,n') Level
Legendre Coefficients
37-Rb-82
X10^-4
3
2
1
0
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
72
Incident Energy (MeV)
37-Rb-82

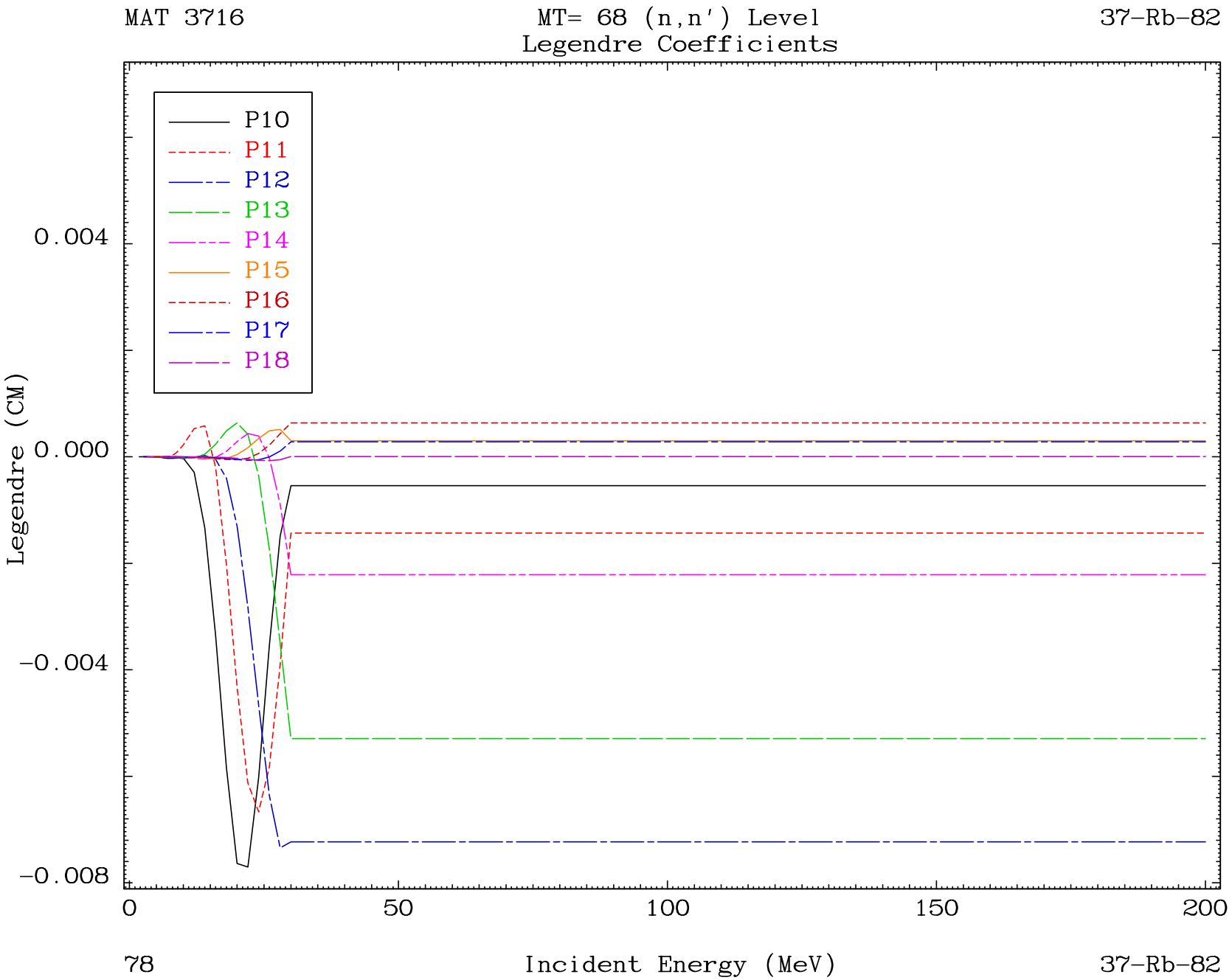

MAT 3716
MT= 66 (n,n') Level
Legendre Coefficients
37-Rb-82
X10 −6
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
50
100
150
200
73
Incident Energy (MeV)
37-Rb-82
P17
P18
P19
P20
P21
P22
P23
P24

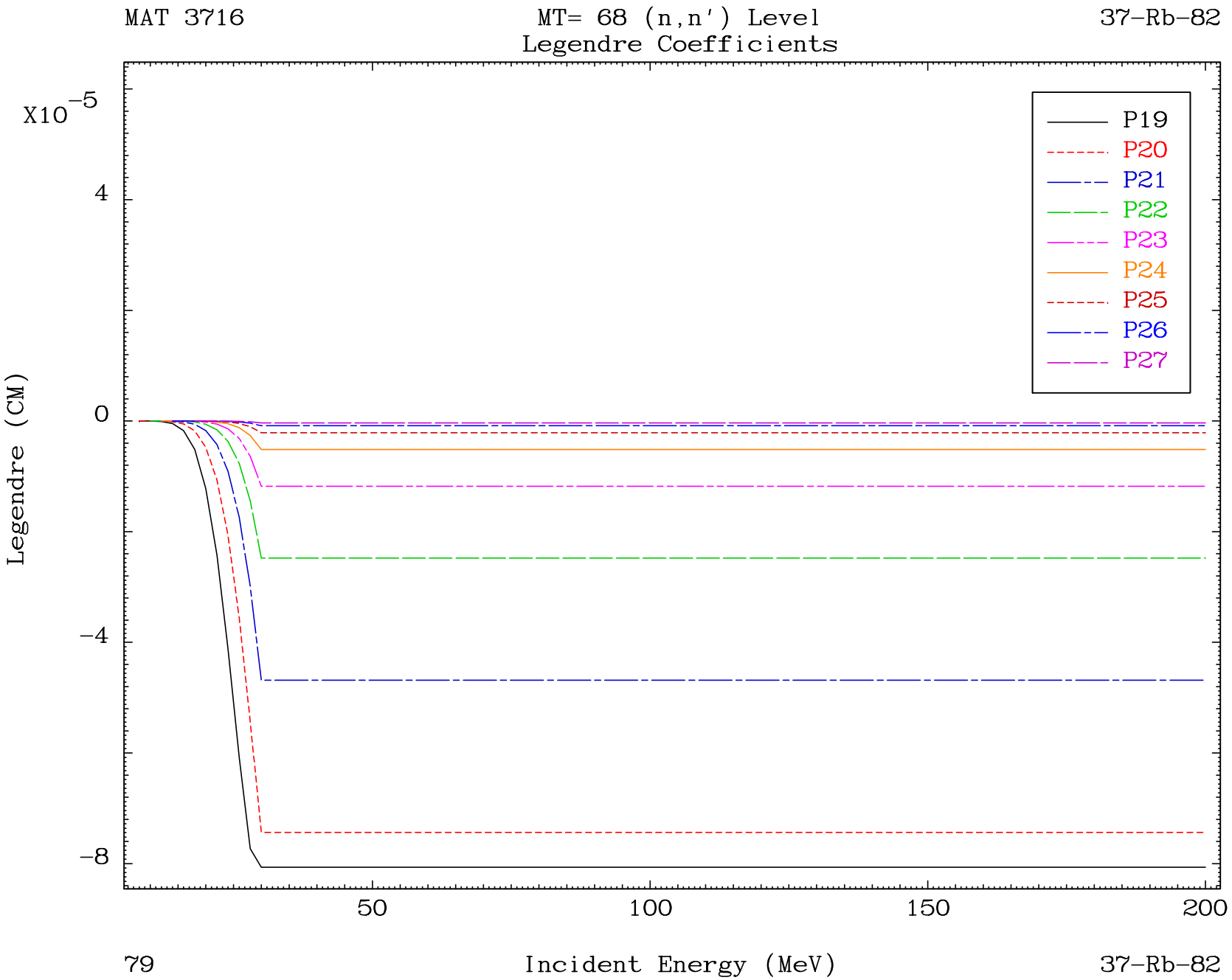

MAT 3716
MT= 67 (n,n') Level
Legendre Coefficients
37-Rb-82
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
0
50
100
150
200
74
Incident Energy (MeV)
37-Rb-82

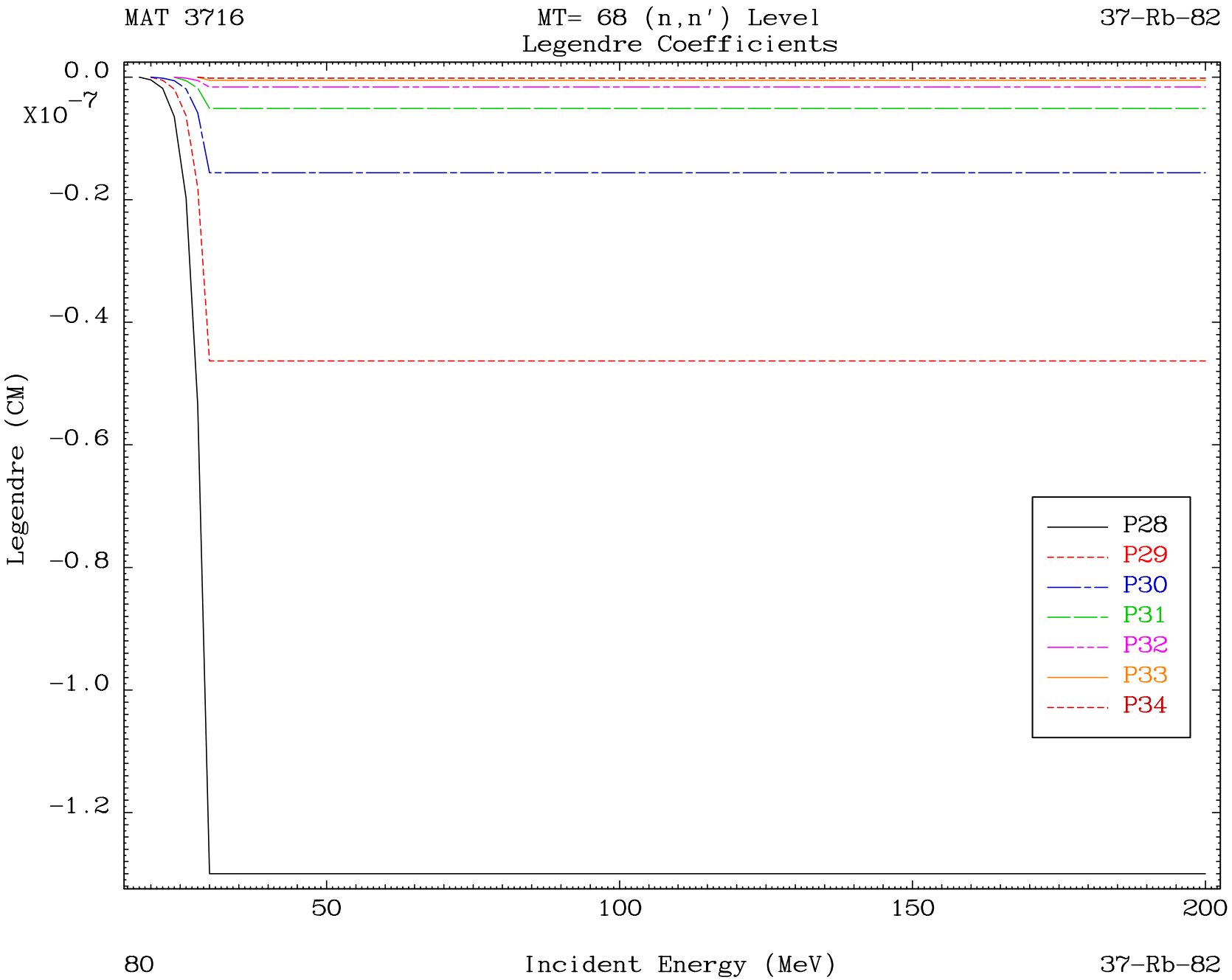

MAT 3716
MT= 67 (n,n') Level
Legendre Coefficients
37-Rb-82
0.000
0.000
0.000
0.000
-0.002
Legendre (CM)
0
50
100
150
200
75
Incident Energy (MeV)
37-Rb-82
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

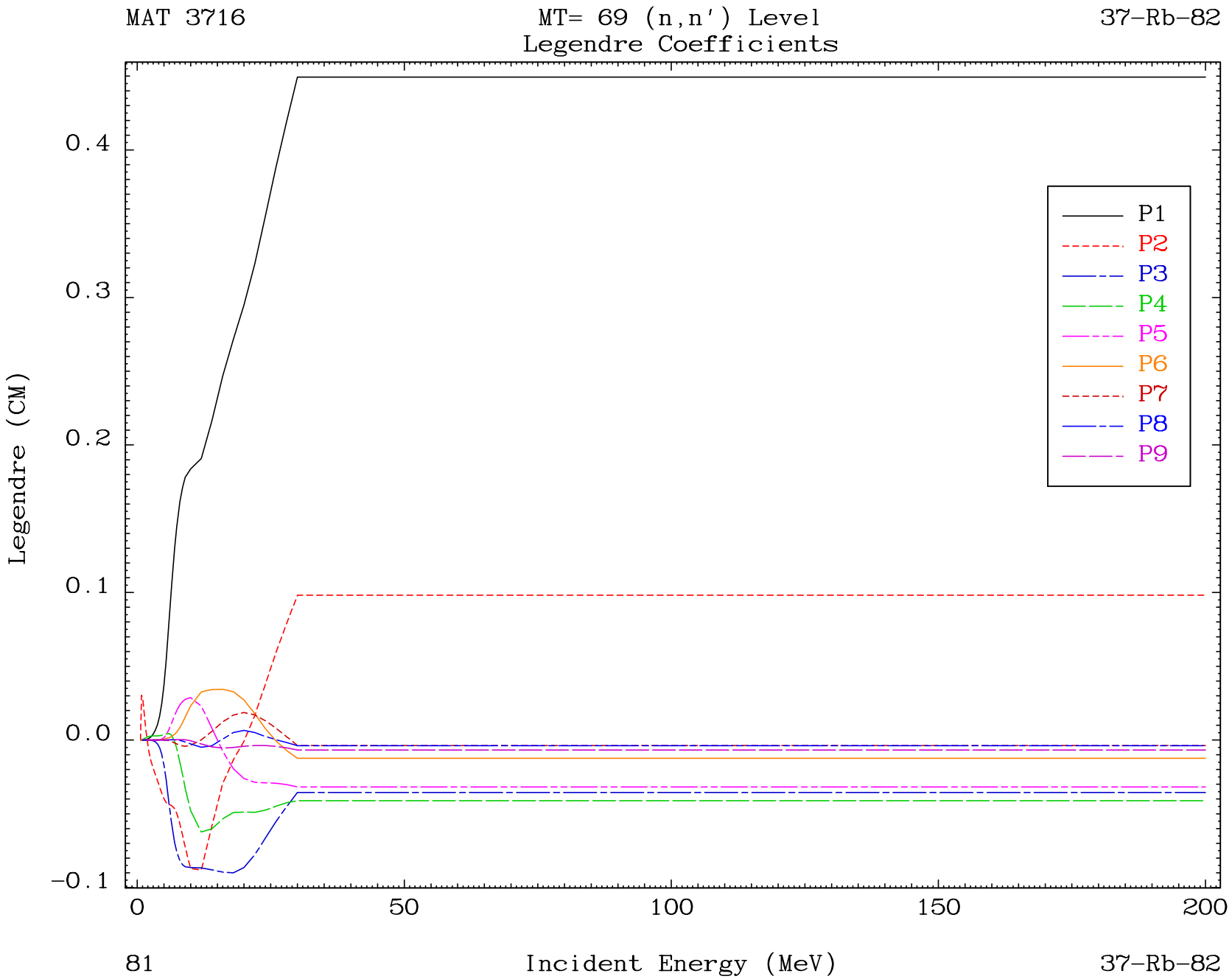

MAT 3716
MT= 67 (n,n') Level
Legendre Coefficients
37-Rb-82
X10 -6
3
2
1
0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
76
Incident Energy (MeV)
37-Rb-82

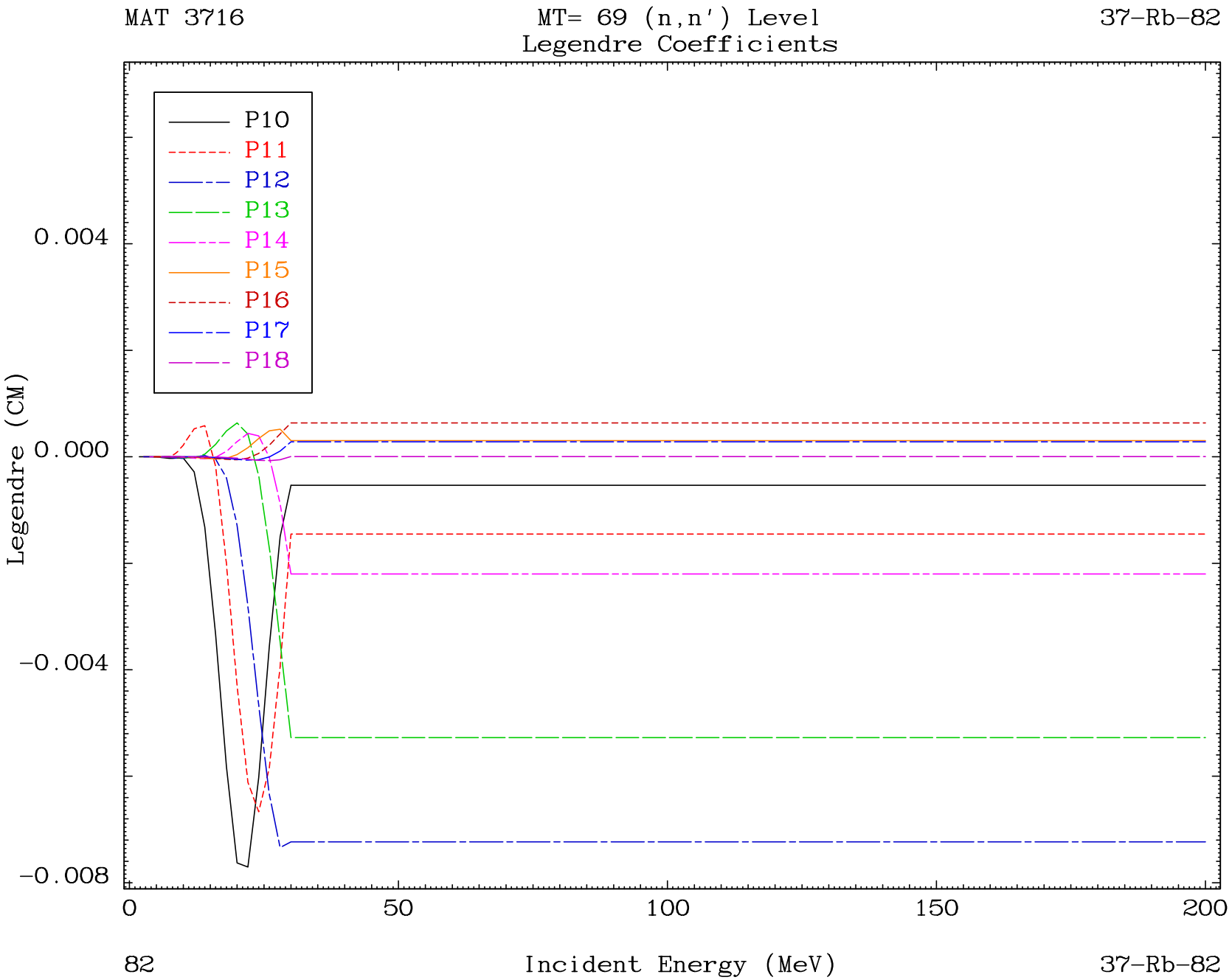

MAT 3716
MT= 68 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
77
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9

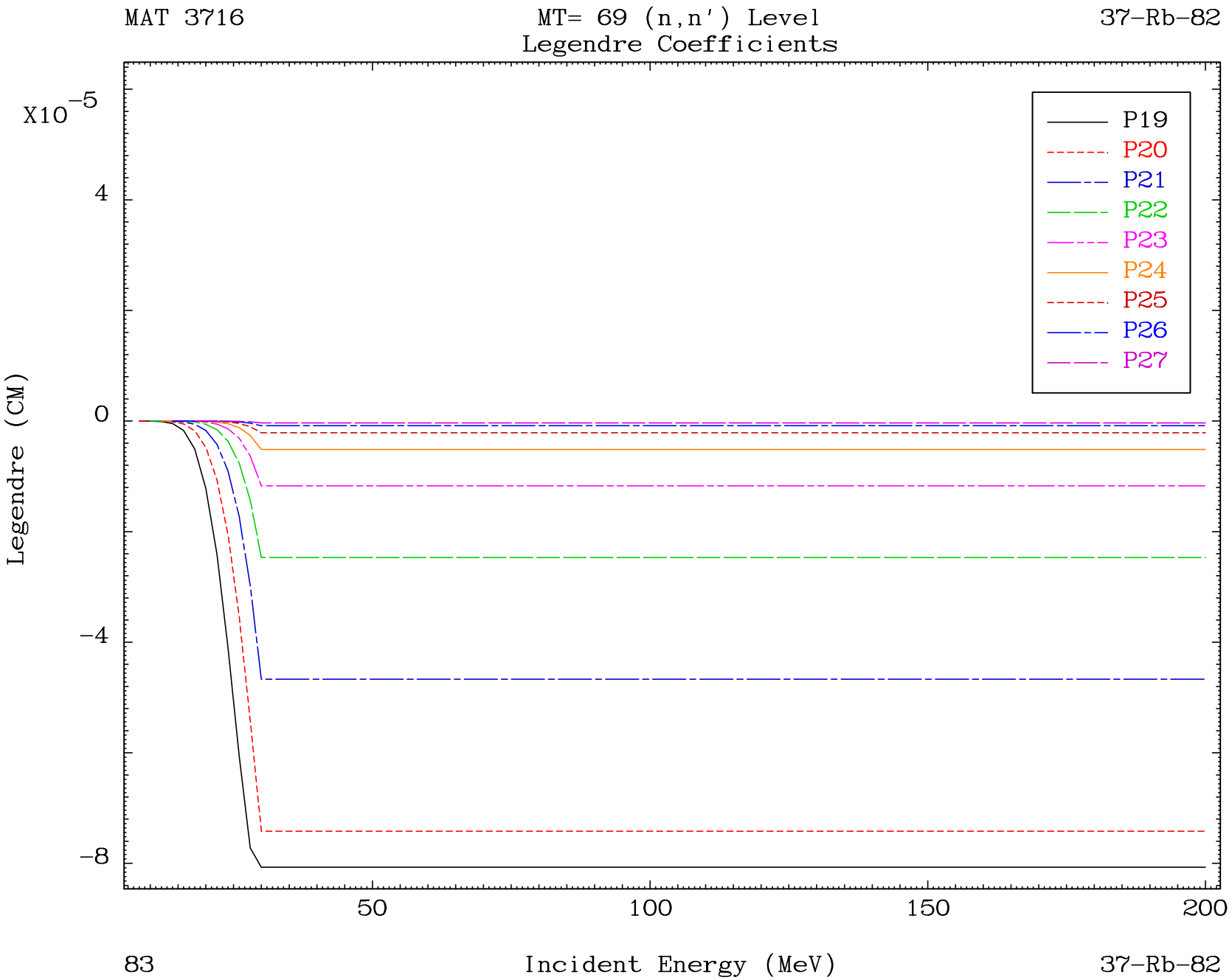

MAT 3716
MT= 68 (n,n') Level
Legendre Coefficients
37-Rb-82
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.004
0.000
-0.004
-0.008
Legendre (CM)
0
50
100
150
200
78
Incident Energy (MeV)
37-Rb-82

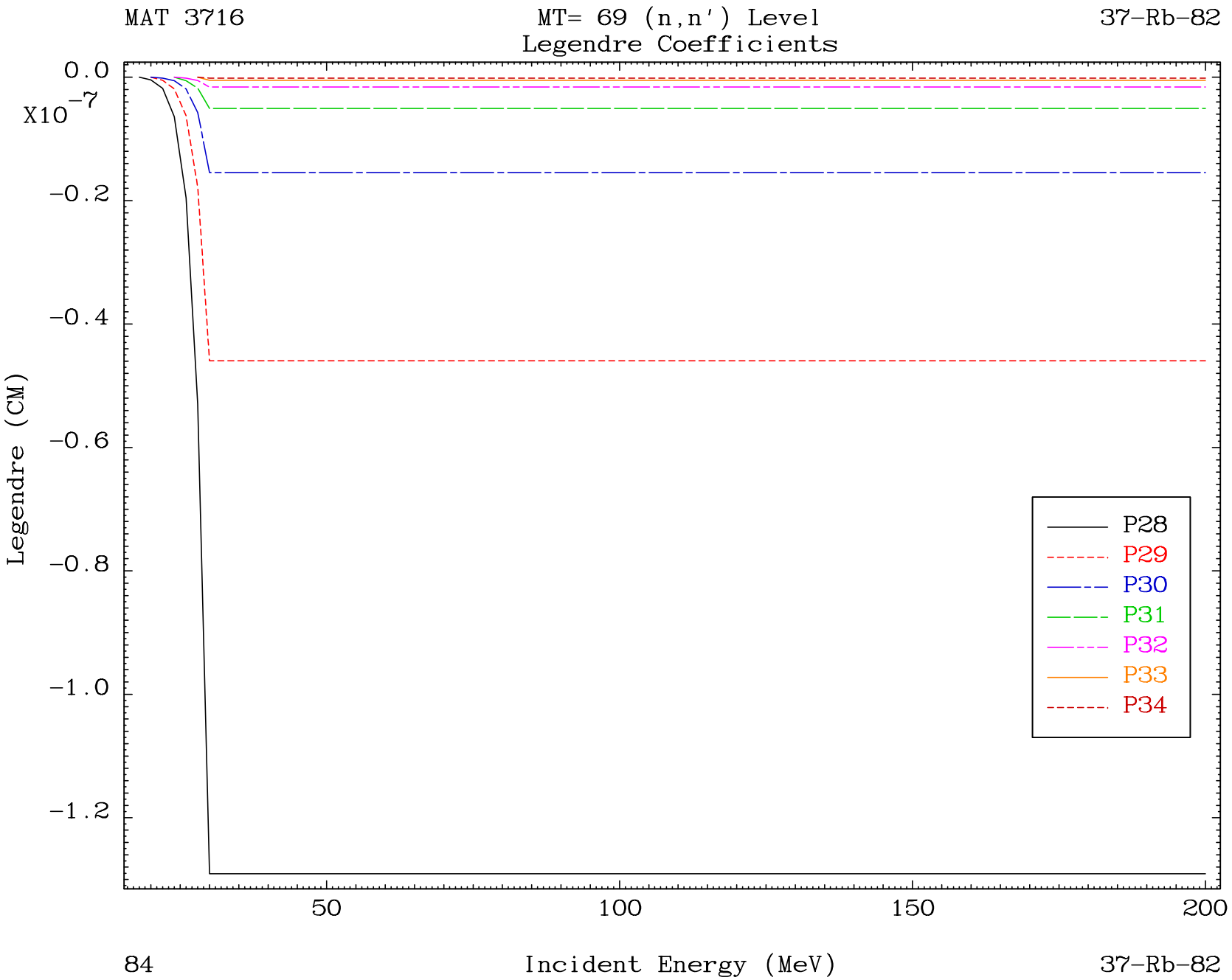

MAT 3716
MT= 68 (n,n') Level
Legendre Coefficients
37-Rb-82
X10 −5
4
0
−4
−8
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
79
Incident Energy (MeV)
37-Rb-82

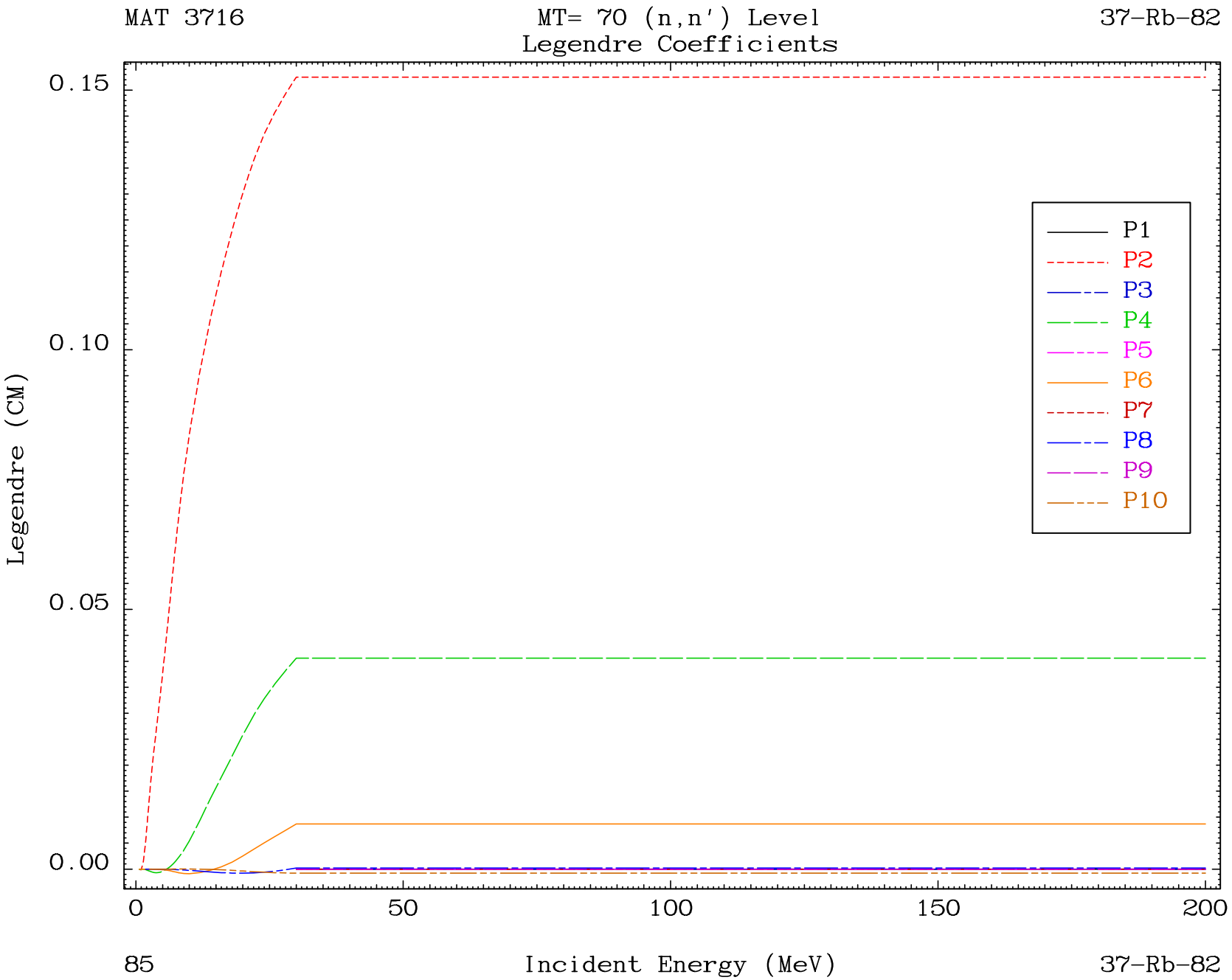

MAT 3716
MT= 68 (n,n') Level
Legendre Coefficients
37-Rb-82
0.0
X10^-7
-0.2
-0.4
-0.6
-0.8
-1.0
-1.2
Legendre (CM)
50
100
150
200
80
Incident Energy (MeV)
37-Rb-82
P28
P29
P30
P31
P32
P33
P34

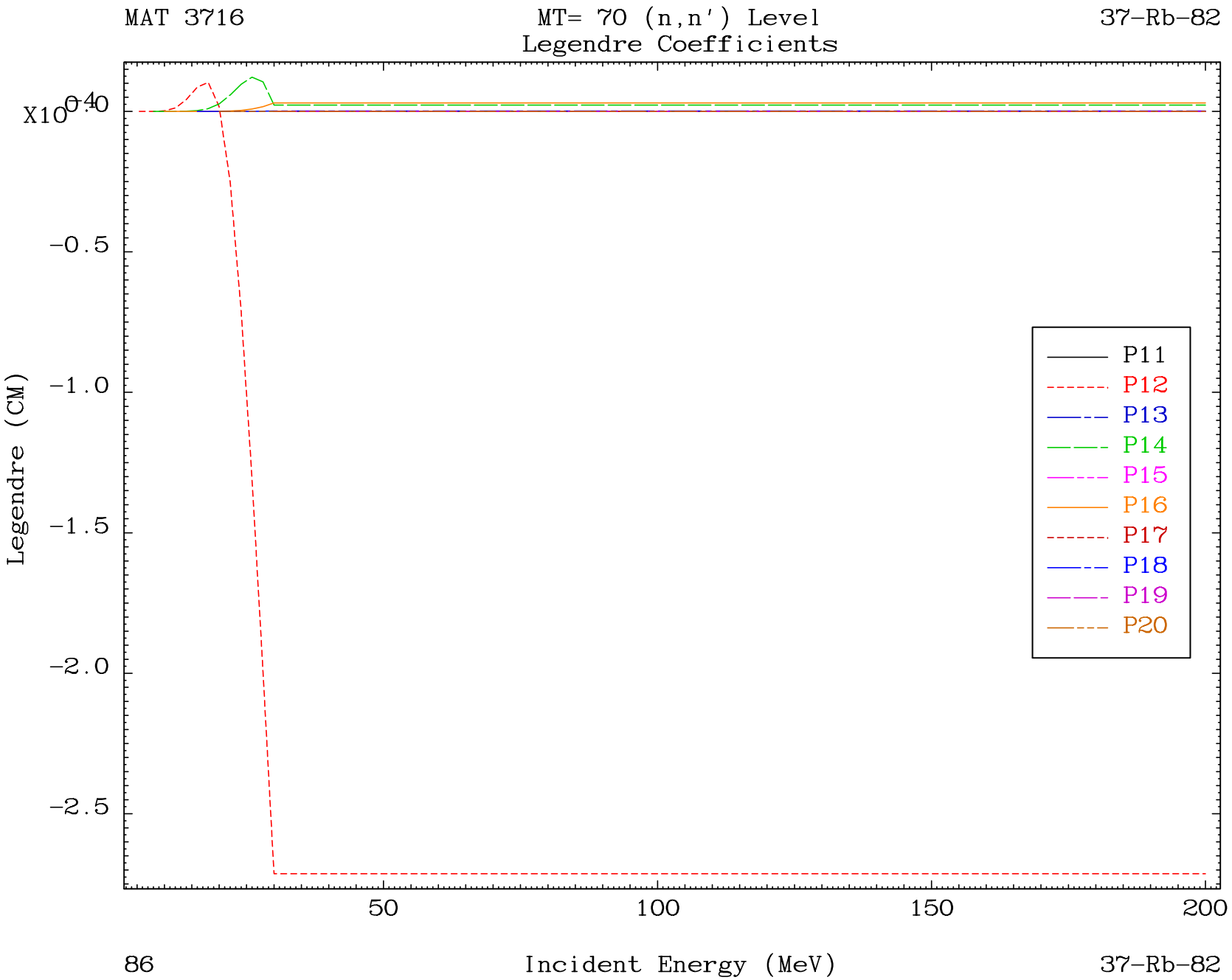

MAT 3716
MT= 69 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
81
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9

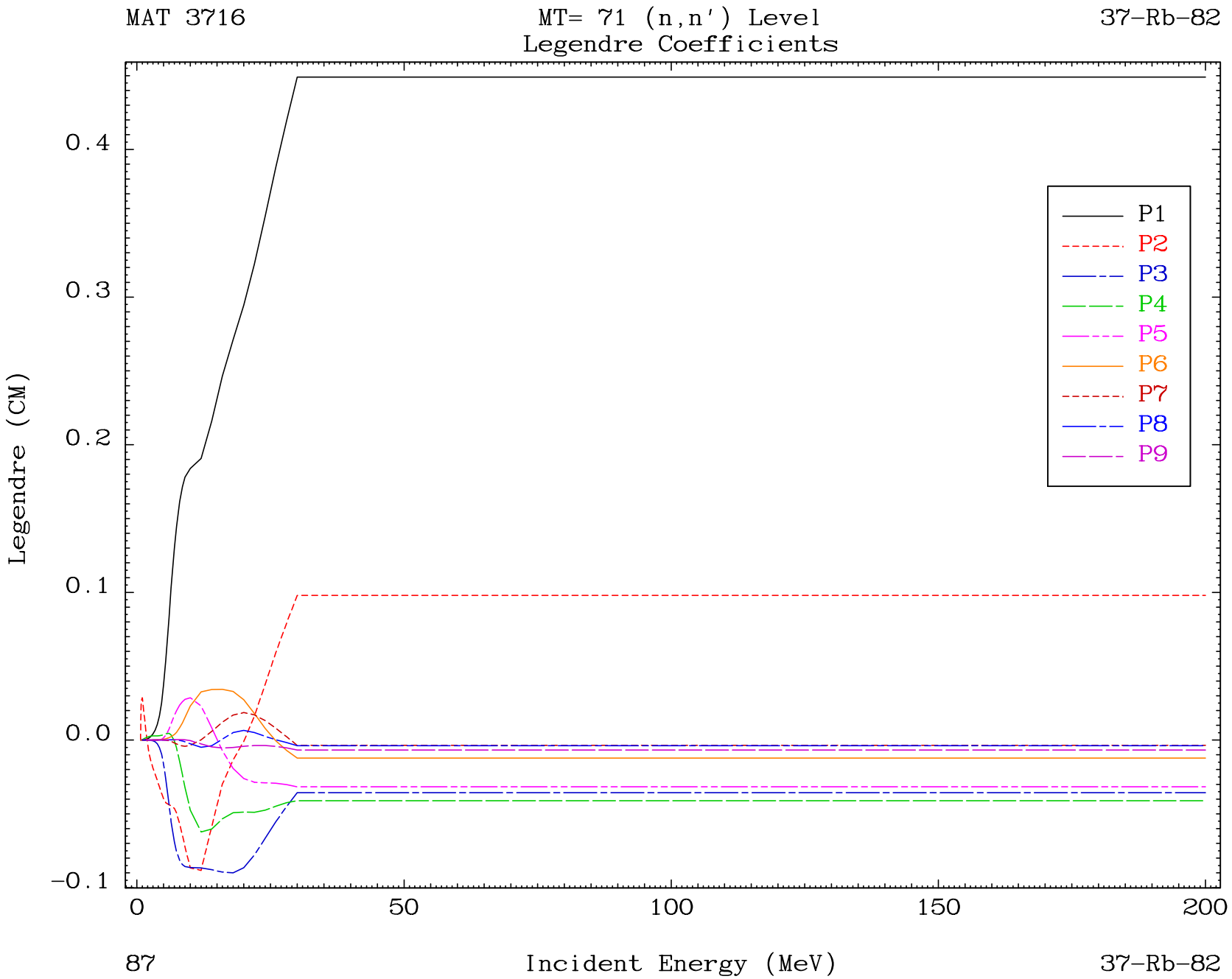

MAT 3716
MT= 69 (n,n') Level
Legendre Coefficients
37-Rb-82
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.004
0.000
-0.004
-0.008
Legendre (CM)
0
50
100
150
200
82
Incident Energy (MeV)
37-Rb-82

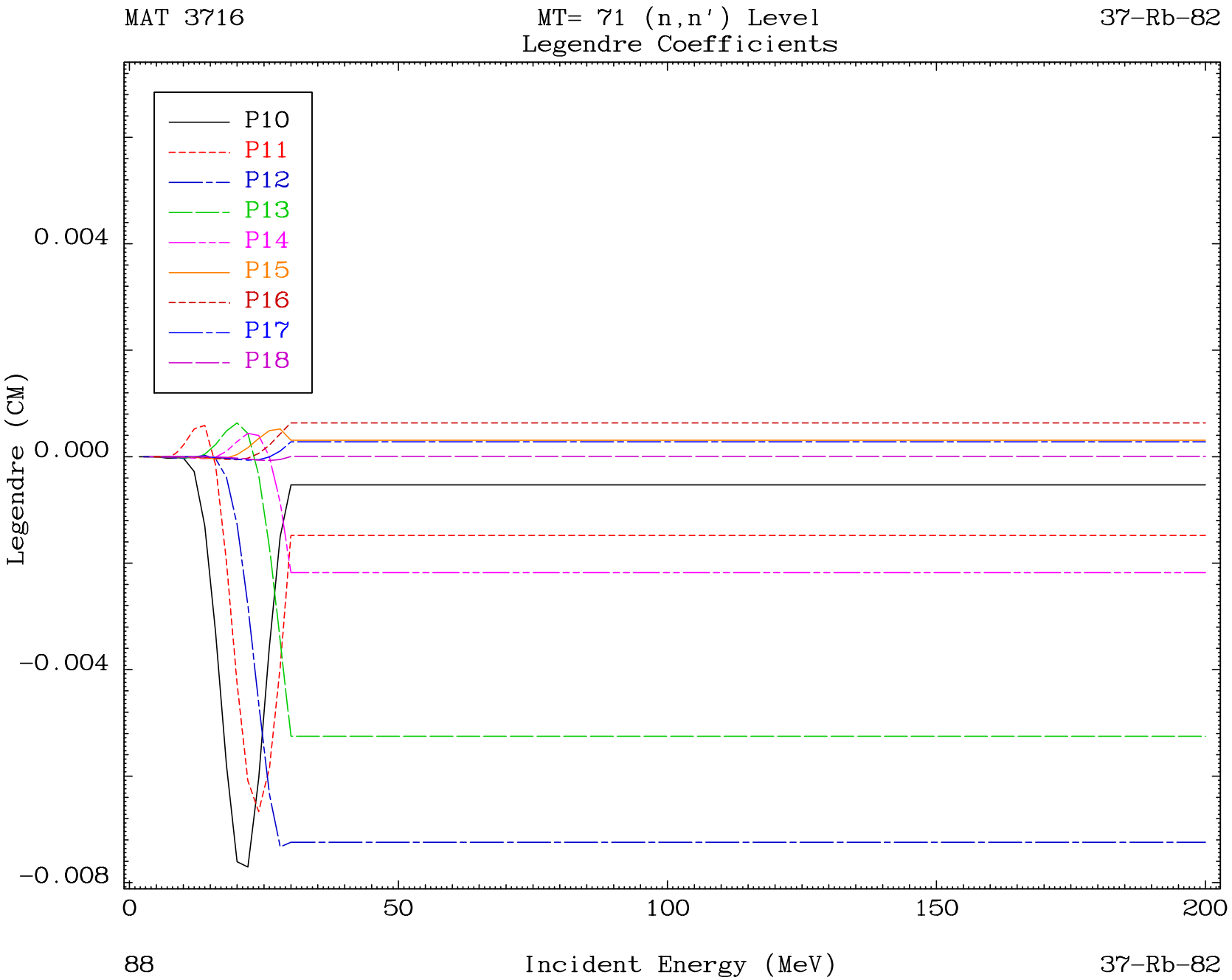

MAT 3716
MT= 69 (n,n') Level
Legendre Coefficients
37-Rb-82
X10 −5
4
0
−4
−8
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
83
Incident Energy (MeV)
37-Rb-82

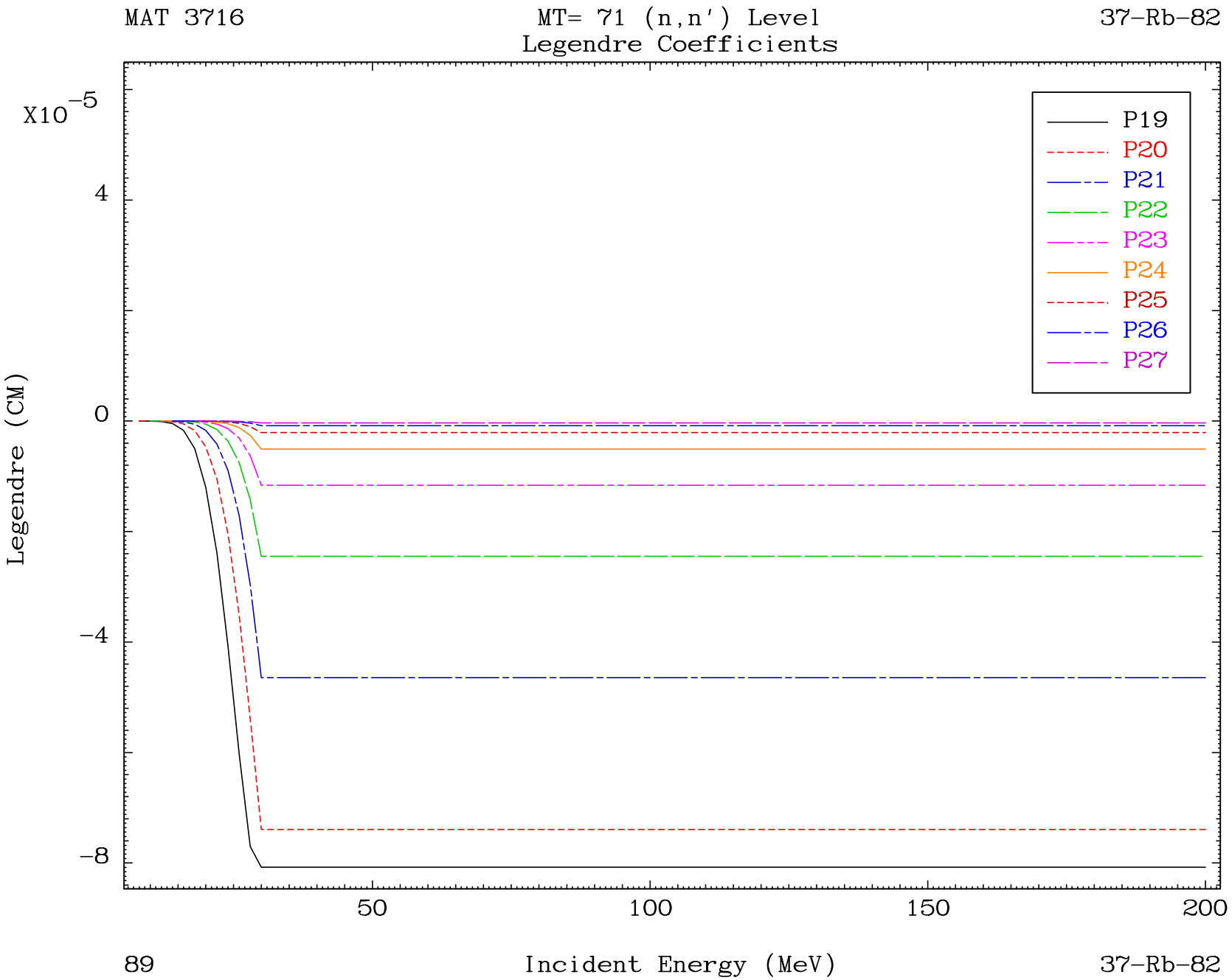

MAT 3716
MT= 69 (n,n') Level
Legendre Coefficients
37-Rb-82
0.0
X10^-7
-0.2
-0.4
-0.6
-0.8
-1.0
-1.2
Legendre (CM)
50
100
150
200
P28
P29
P30
P31
P32
P33
P34
84
Incident Energy (MeV)
37-Rb-82

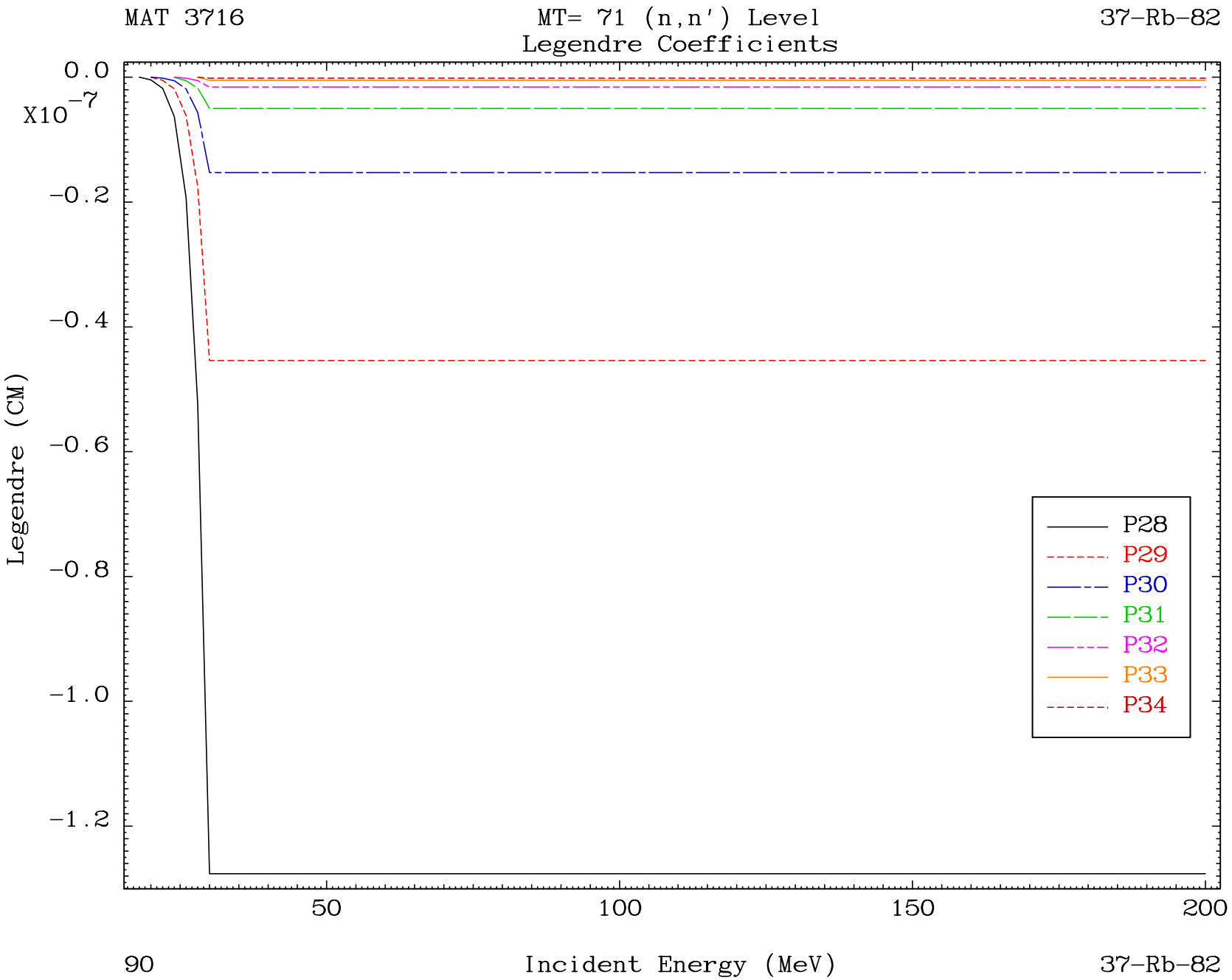

MAT 3716
MT= 70 (n,n') Level
Legendre Coefficients
37-Rb-82
0.15
0.10
0.05
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
85
Incident Energy (MeV)
37-Rb-82

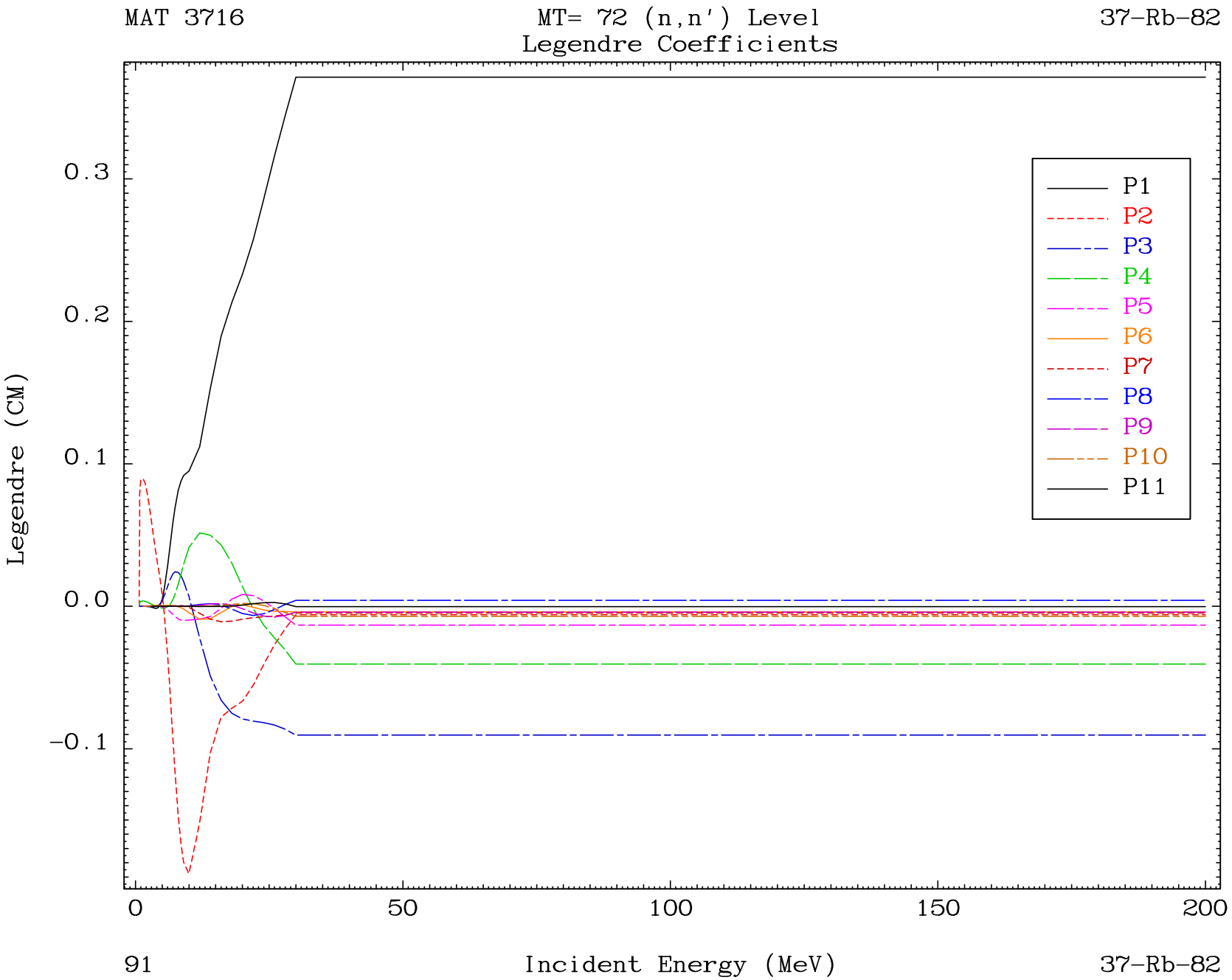

MAT 3716
MT= 70 (n,n') Level
Legendre Coefficients
37-Rb-82
X10^-0
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
86
37-Rb-82
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

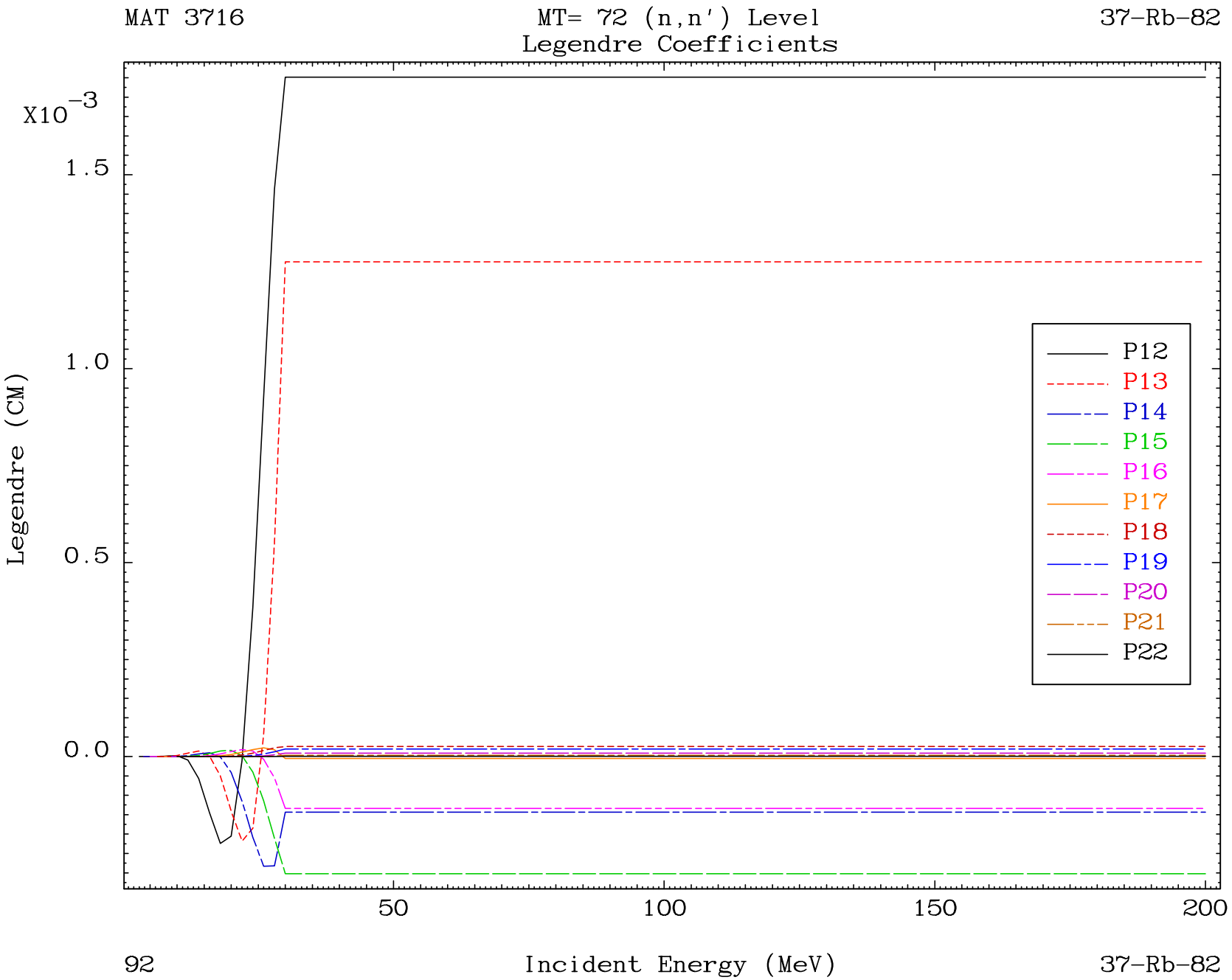

MAT 3716
MT= 71 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
87
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9

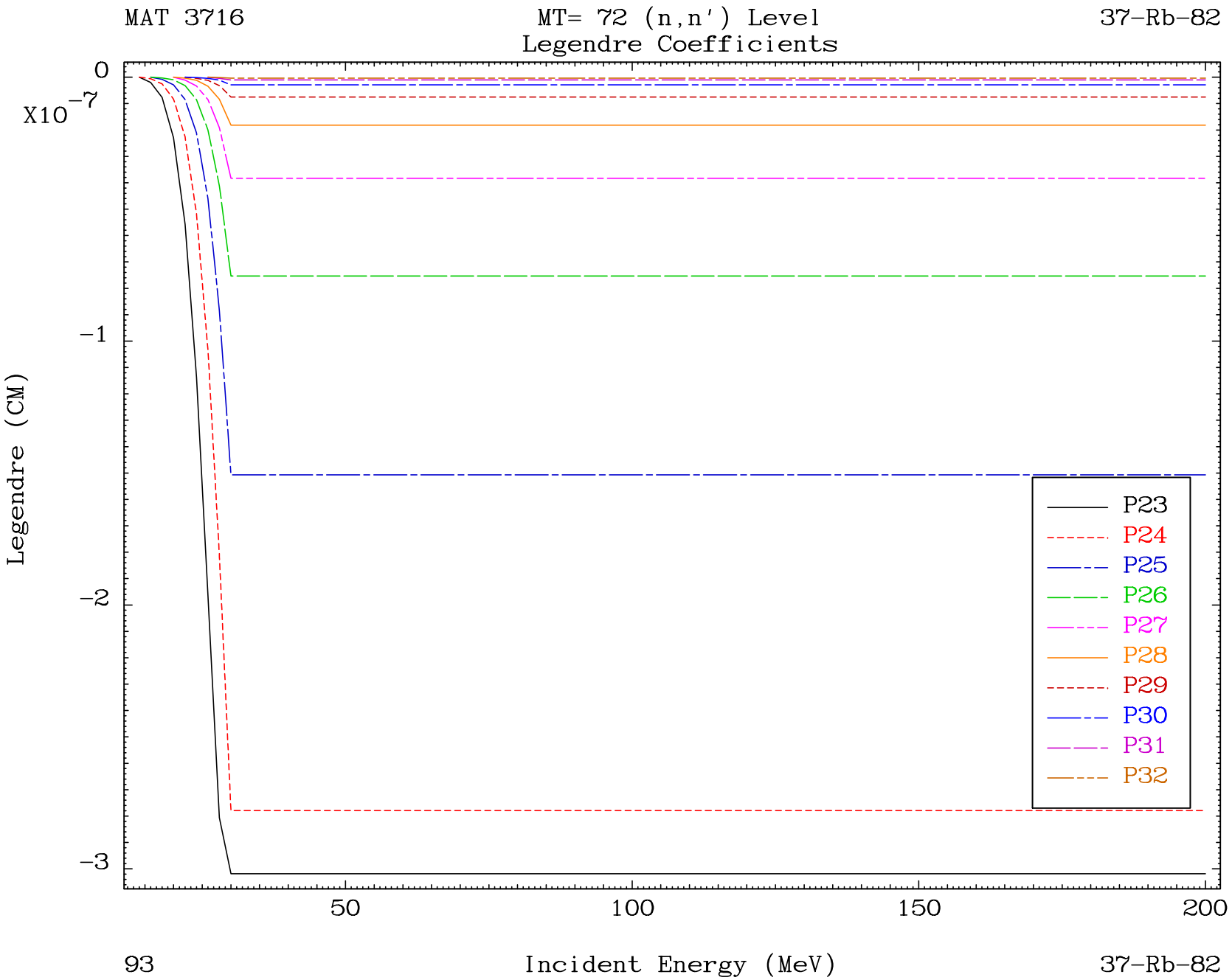

MAT 3716
MT= 71 (n,n') Level
Legendre Coefficients
37-Rb-82
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.004
0.000
-0.004
-0.008
Legendre (CM)
0
50
100
150
200
88
Incident Energy (MeV)
37-Rb-82

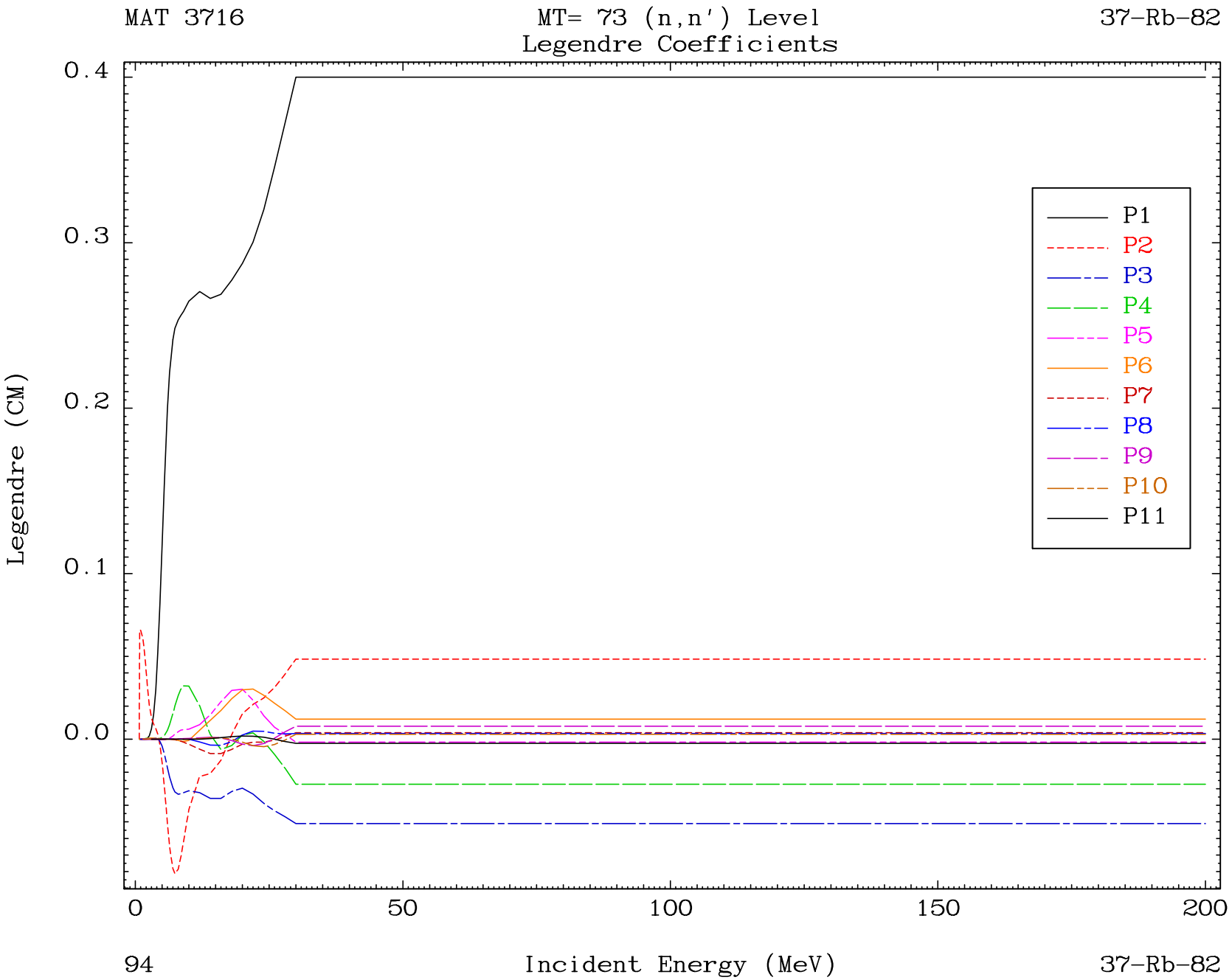

MAT 3716
MT= 71 (n,n') Level
Legendre Coefficients
37-Rb-82
X10 −5
4
0
−4
−8
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
89
Incident Energy (MeV)
37-Rb-82

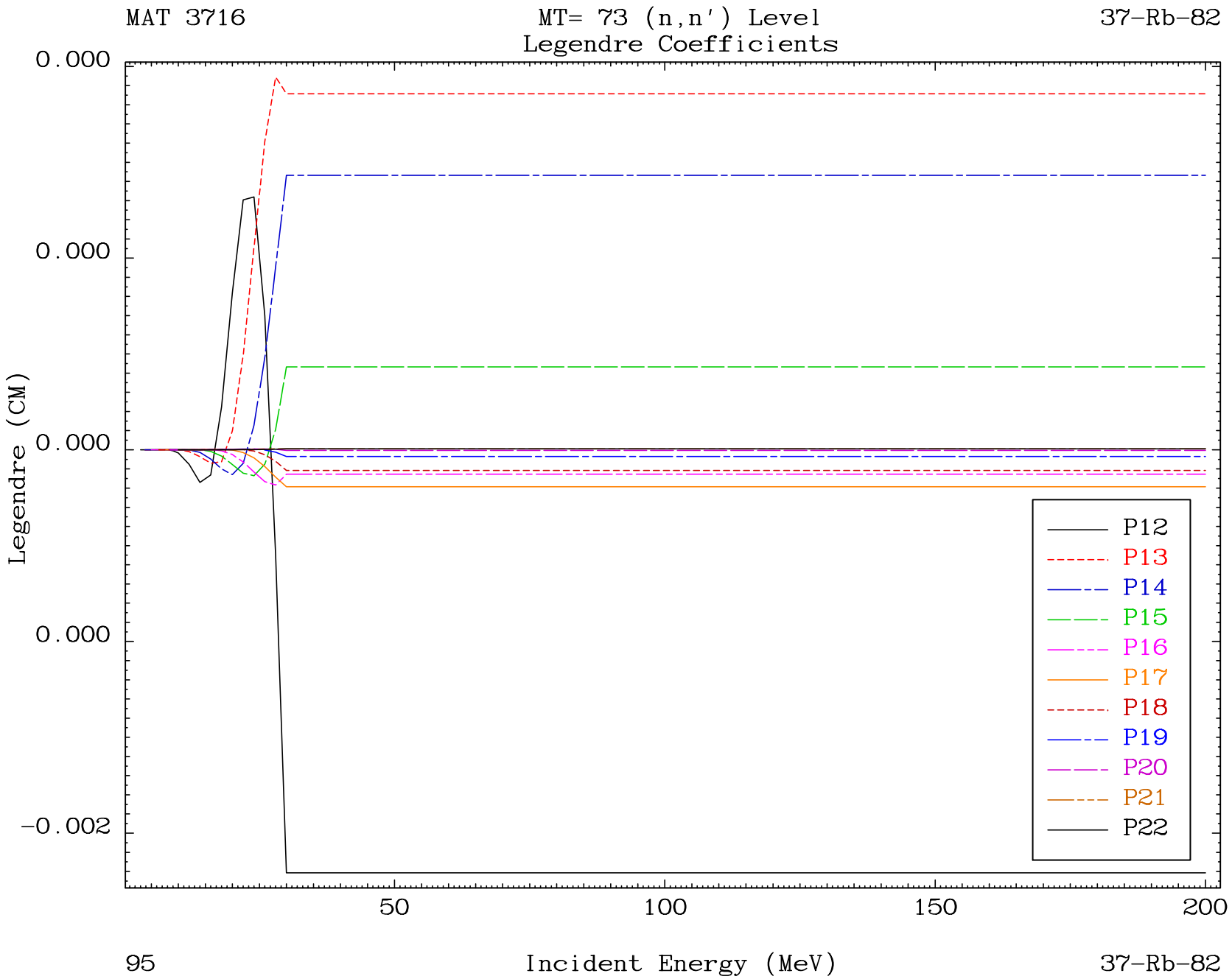

MAT 3716
MT= 71 (n,n') Level
Legendre Coefficients
37-Rb-82
0.0
X10^-7
-0.2
-0.4
-0.6
-0.8
-1.0
-1.2
Legendre (CM)
50
100
150
200
90
Incident Energy (MeV)
37-Rb-82
P28
P29
P30
P31
P32
P33
P34

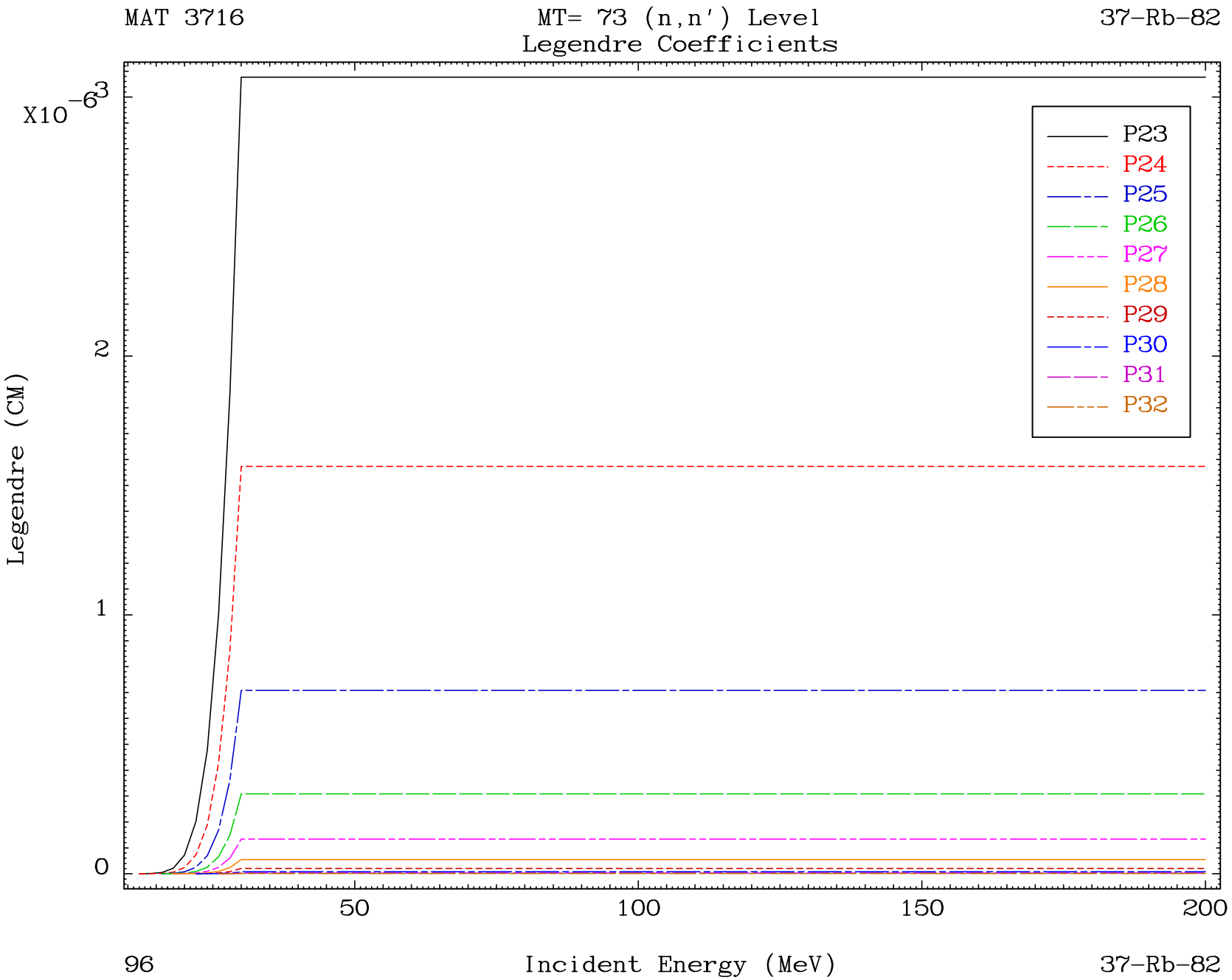

MAT 3716
MT= 72 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
91
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11

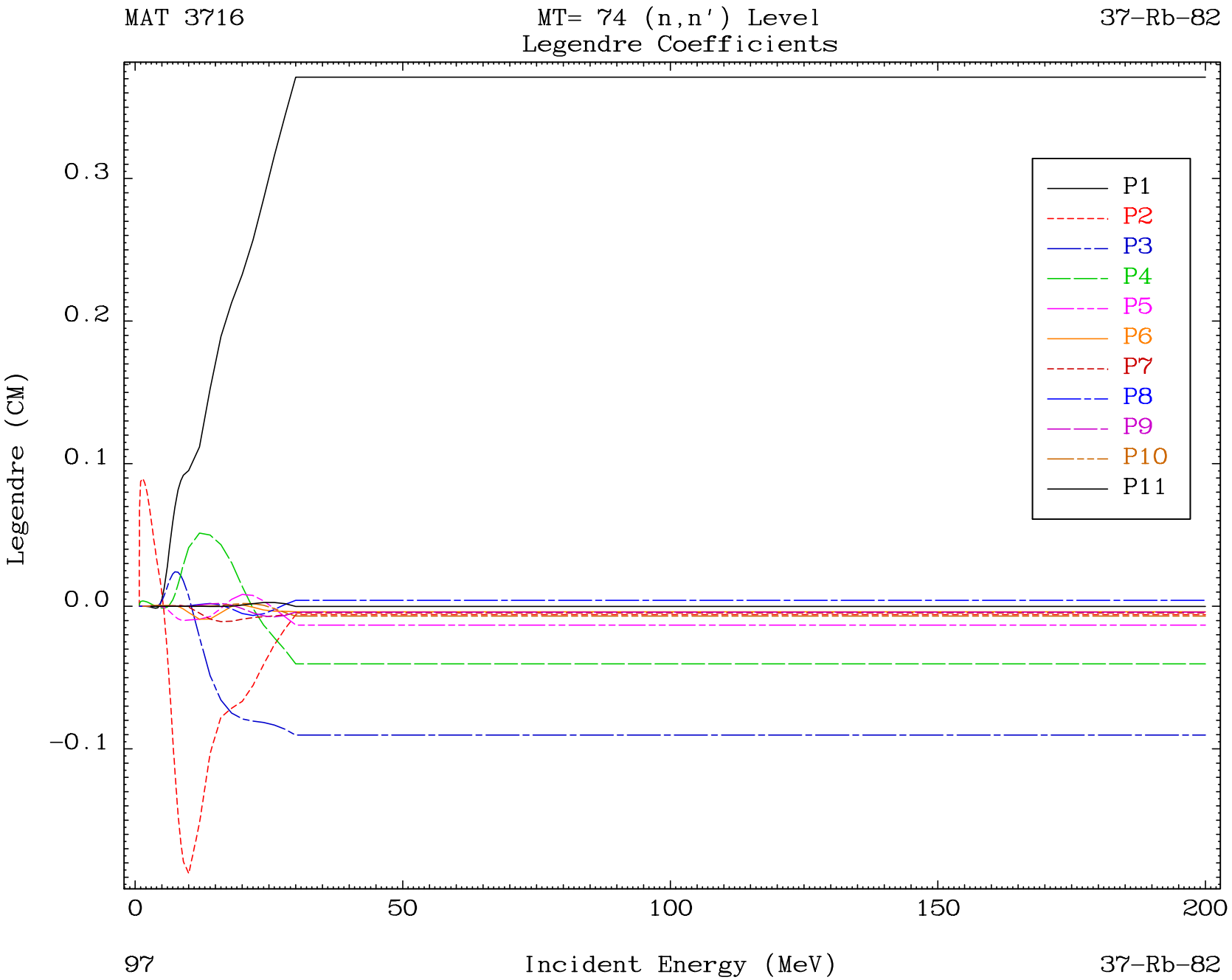

MAT 3716
MT= 72 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
50
100
150
200
92
Incident Energy (MeV)
37-Rb-82

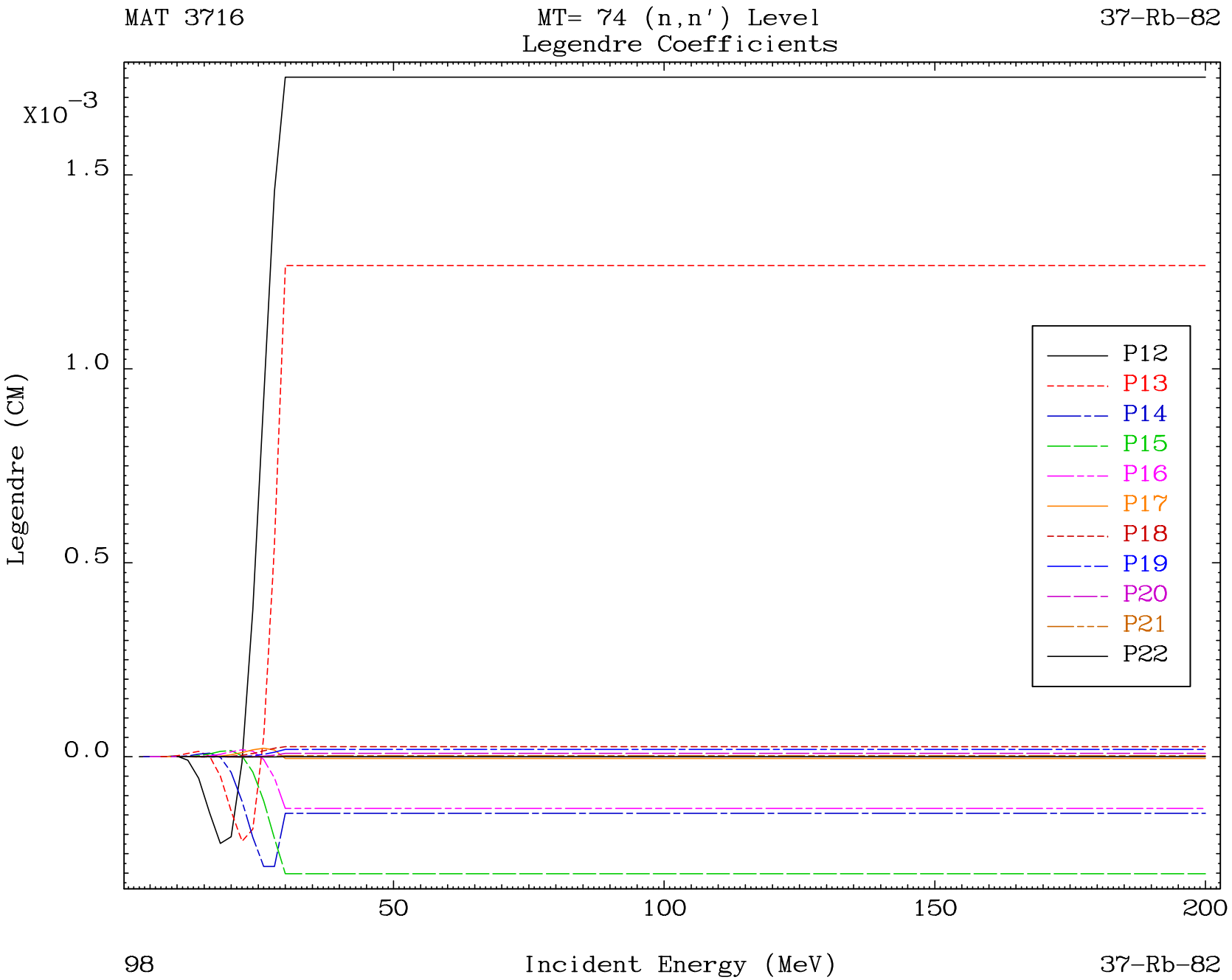

MAT 3716
MT= 72 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-7
0
-1
-2
-3
Legendre (CM)
50
100
150
200
93
Incident Energy (MeV)
37-Rb-82
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32

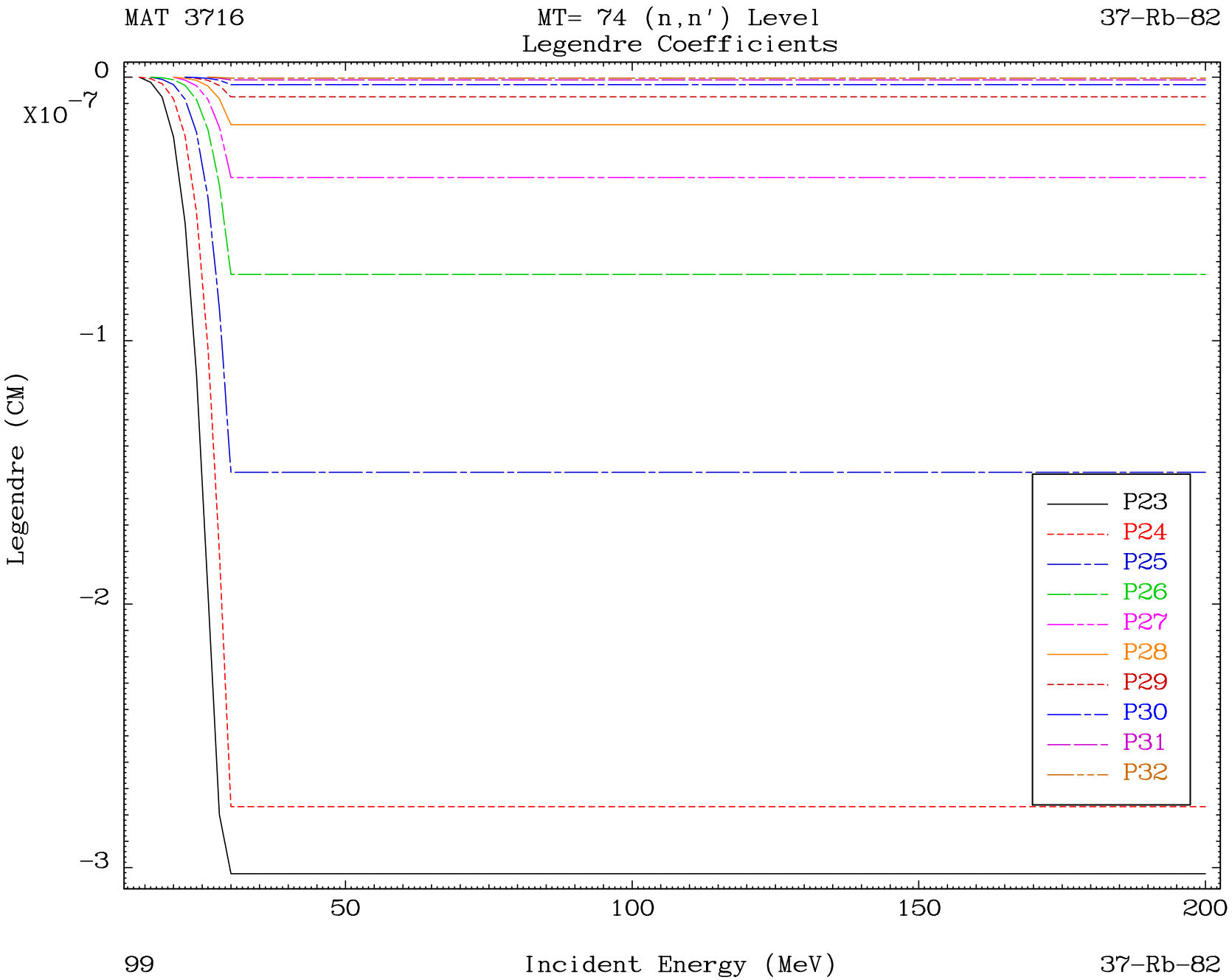

MAT 3716
MT= 73 (n,n') Level
Legendre Coefficients
37-Rb-82
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
0
50
100
150
200
94
Incident Energy (MeV)
37-Rb-82

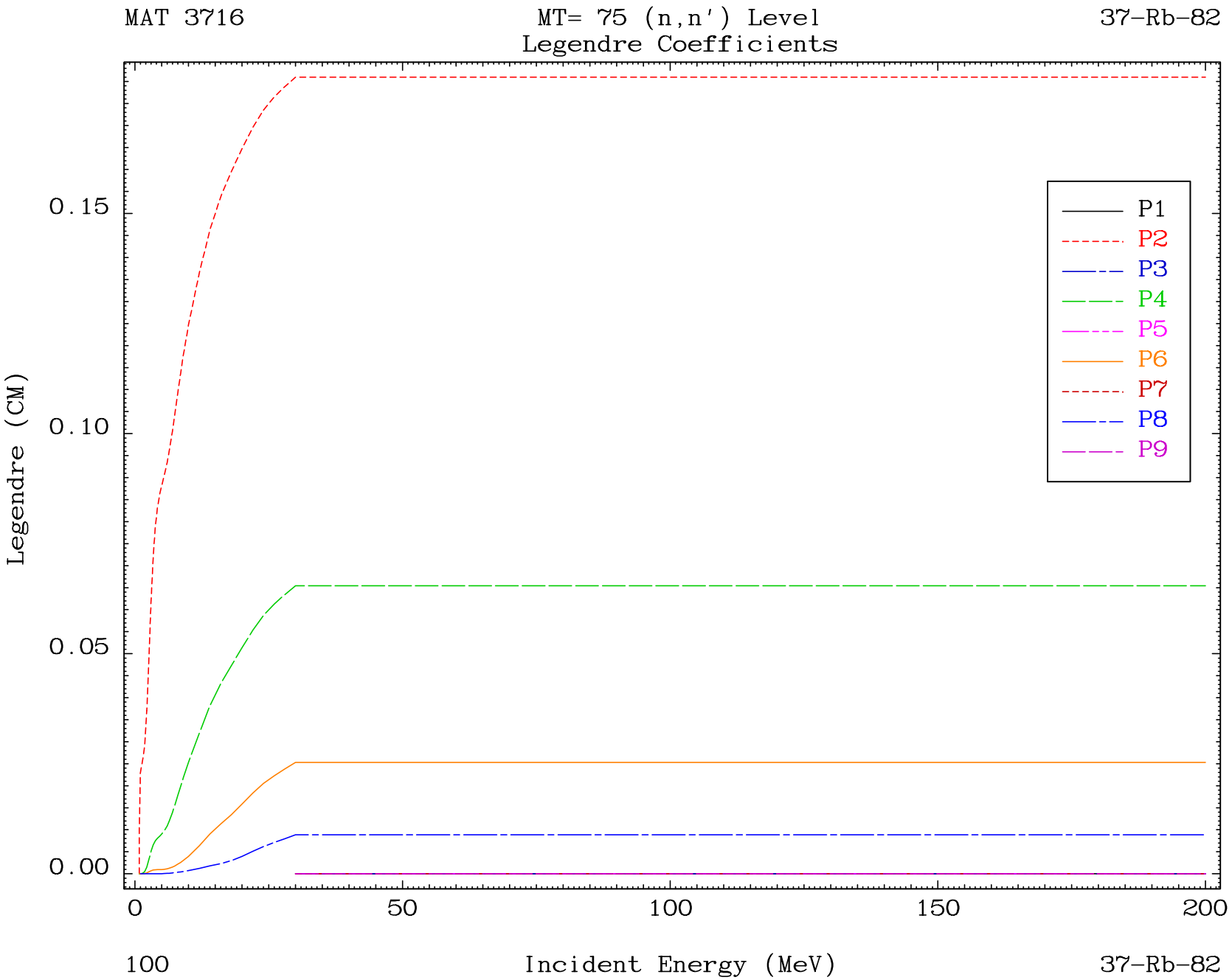

MAT 3716
MT= 73 (n,n') Level
Legendre Coefficients
37-Rb-82
0.000
0.000
0.000
0.000
-0.002
Legendre (CM)
50
100
150
200
95
Incident Energy (MeV)
37-Rb-82
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

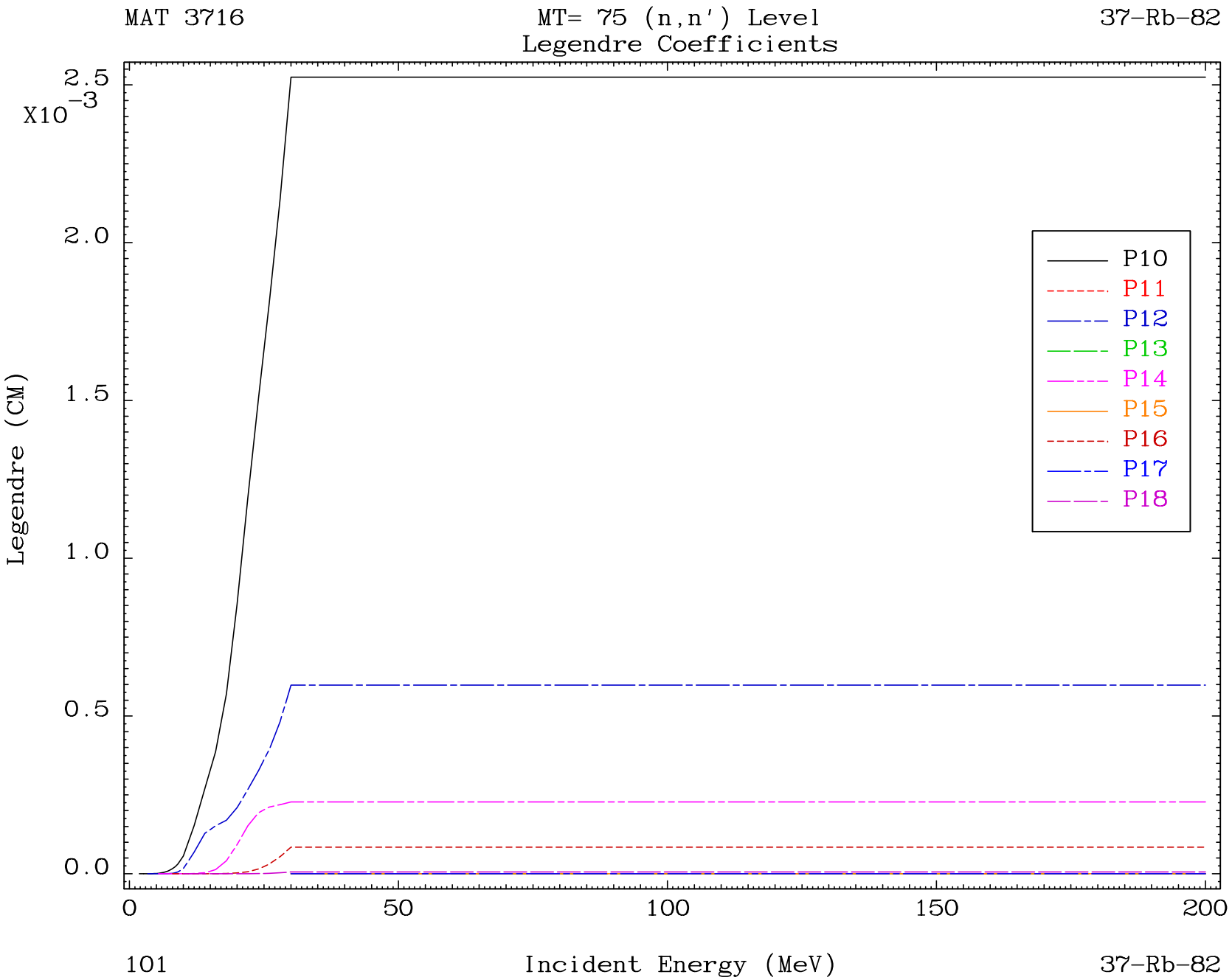

MAT 3716
MT= 73 (n,n') Level
Legendre Coefficients
37-Rb-82
X10 -6
3
2
1
0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
96
Incident Energy (MeV)
37-Rb-82

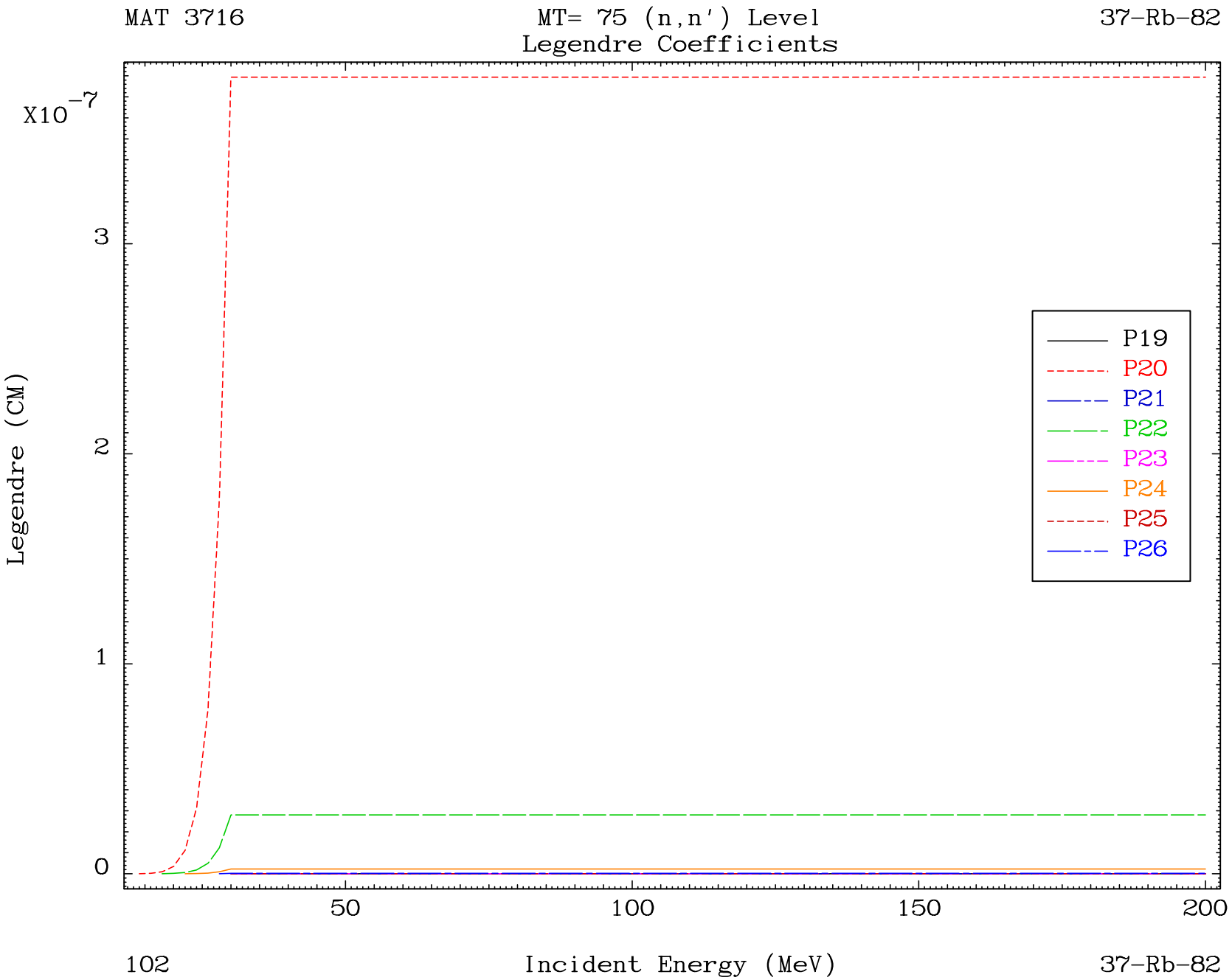

MAT 3716
MT= 74 (n,n') Level
Legendre Coefficients
37-Rb-82
Legendre (CM)
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
97
Incident Energy (MeV)
37-Rb-82
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11

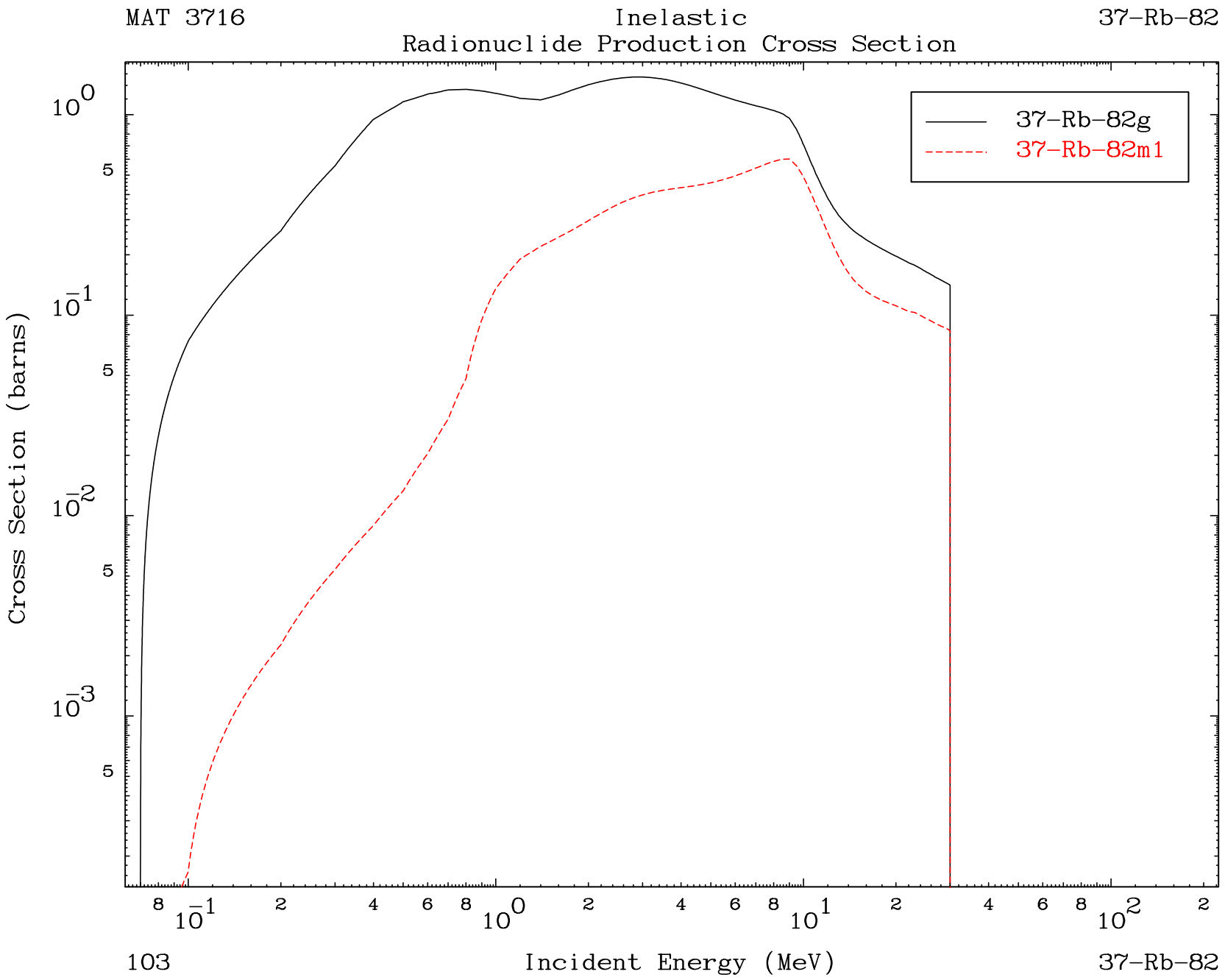

MAT 3716
MT= 74 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
98
Incident Energy (MeV)
37-Rb-82
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

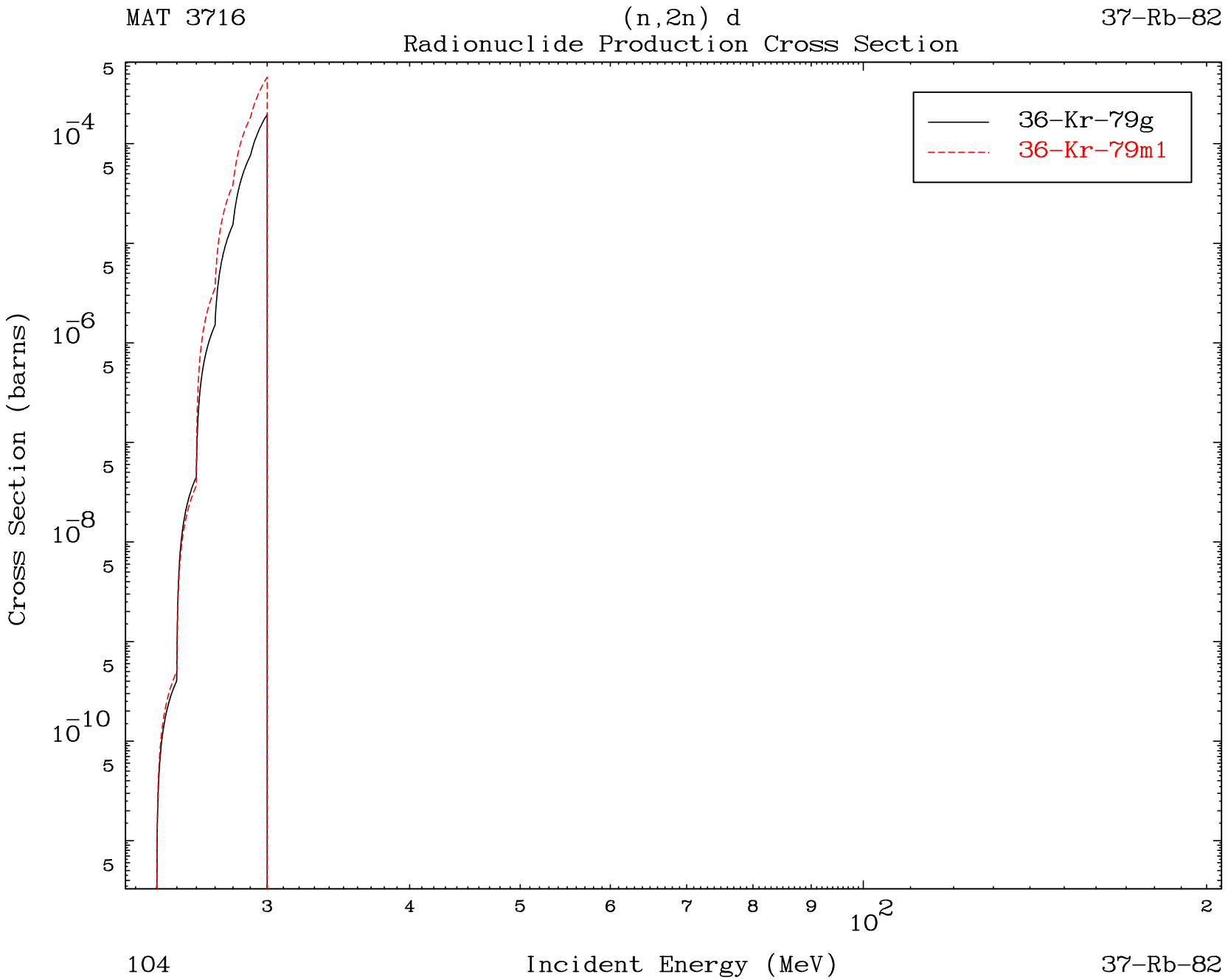

MAT 3716
MT= 74 (n,n') Level
Legendre Coefficients
37-Rb-82
0
X10-7
-1
-2
-3
Legendre (CM)
50
100
150
200
99
Incident Energy (MeV)
37-Rb-82
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32

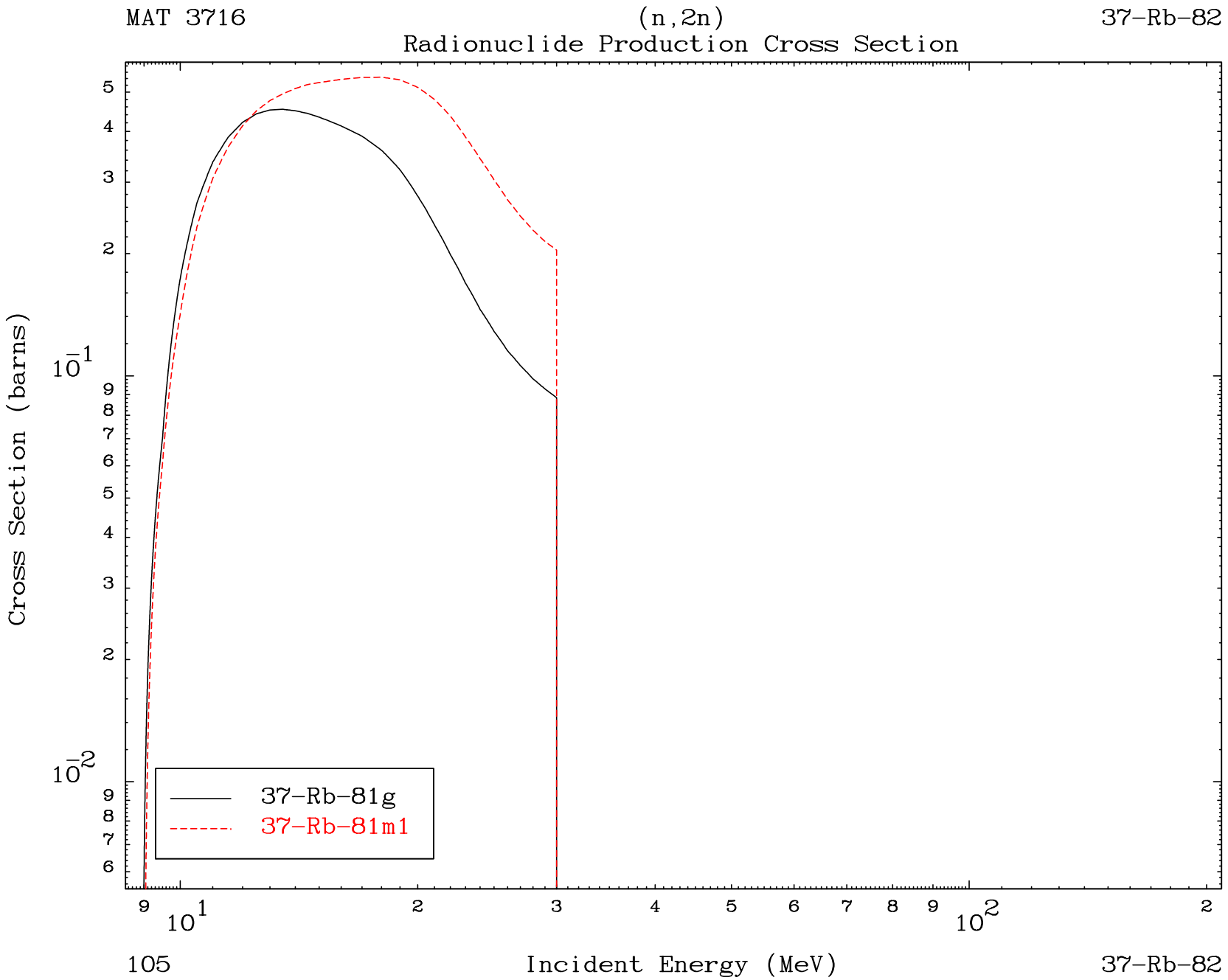

MAT 3716
MT= 75 (n,n') Level
Legendre Coefficients
37-Rb-82
0.15
0.10
0.05
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
100
Incident Energy (MeV)
37-Rb-82

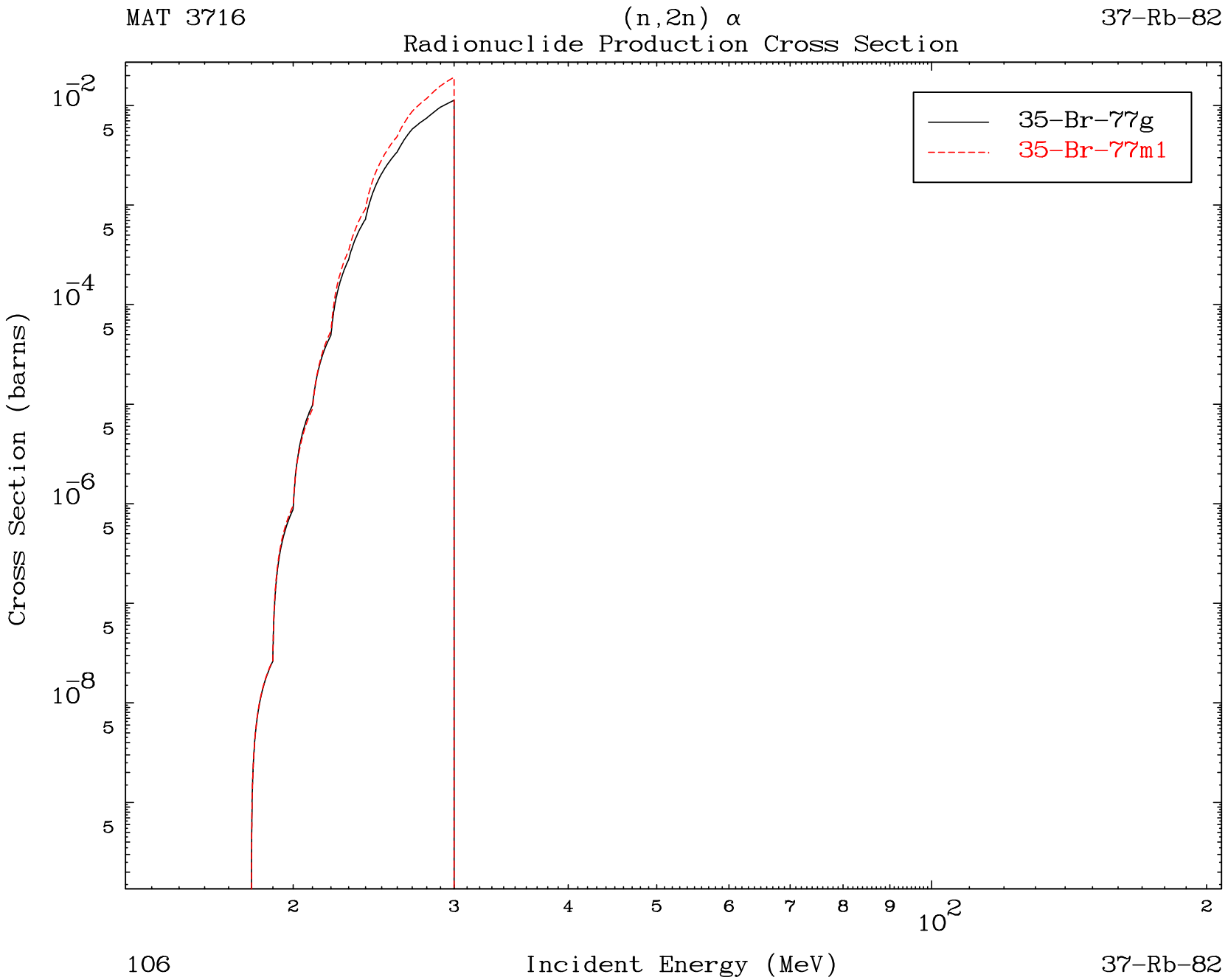

MAT 3716
MT= 75 (n,n') Level
Legendre Coefficients
37-Rb-82
X10 -3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
101
Incident Energy (MeV)
37-Rb-82

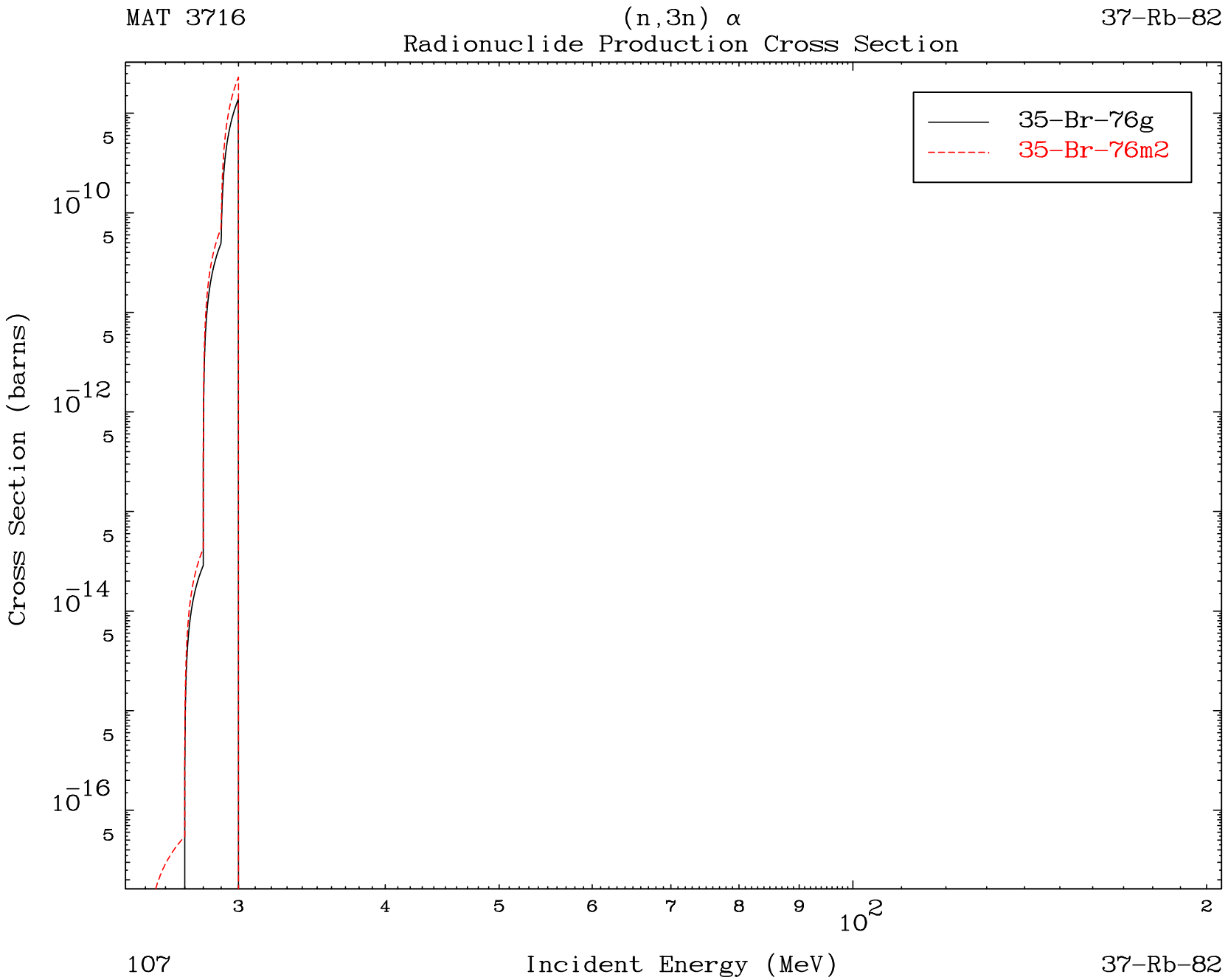

MAT 3716
MT= 75 (n,n') Level
Legendre Coefficients
37-Rb-82
X10-7
3
2
1
0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
50
100
150
200
102
Incident Energy (MeV)
37-Rb-82

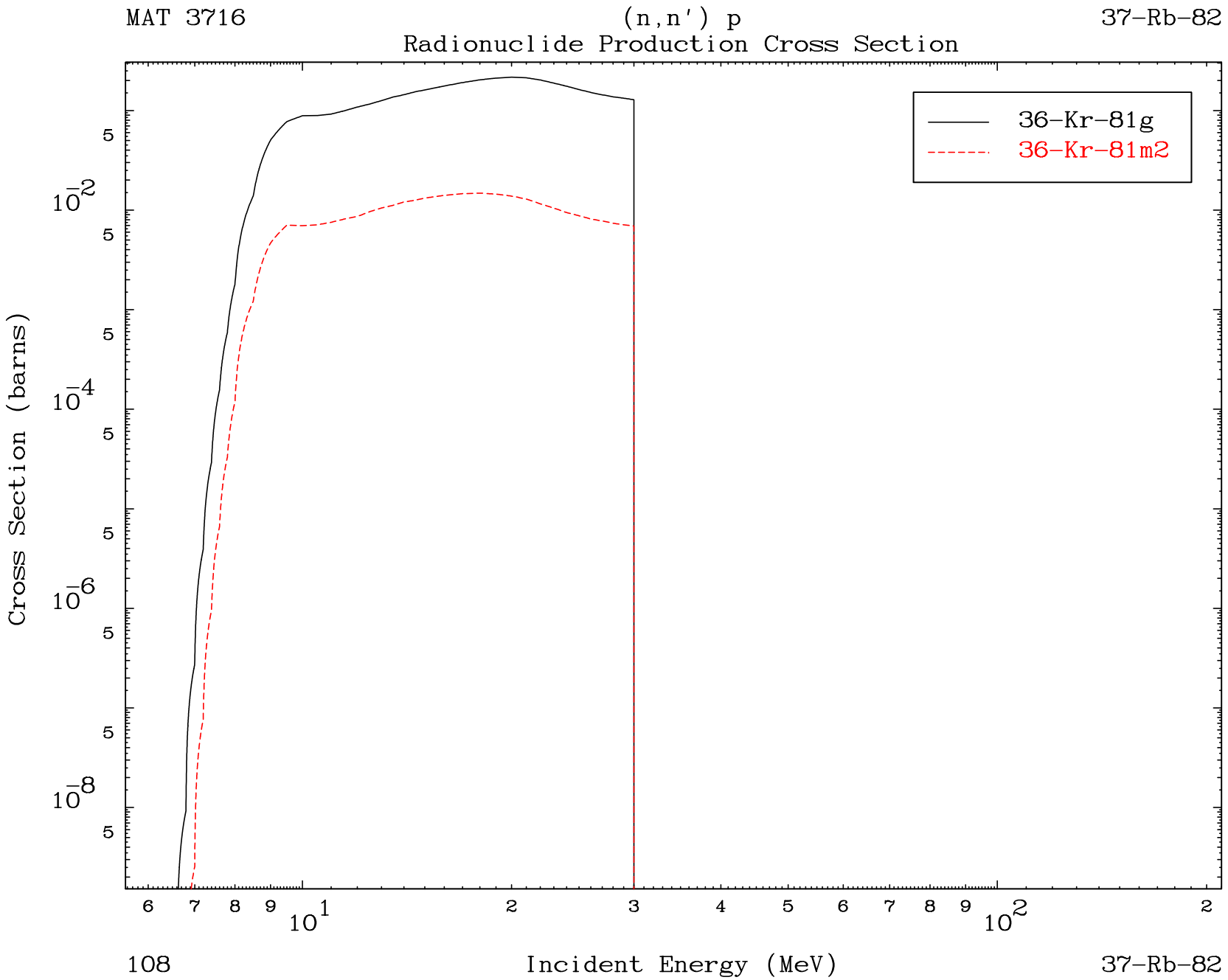

MAT 3716
Inelastic
37-Rb-82
Radionuclide Production Cross Section
37-Rb-82g
37-Rb-82m1
Cross Section (barns)
Incident Energy (MeV)
103
37-Rb-82

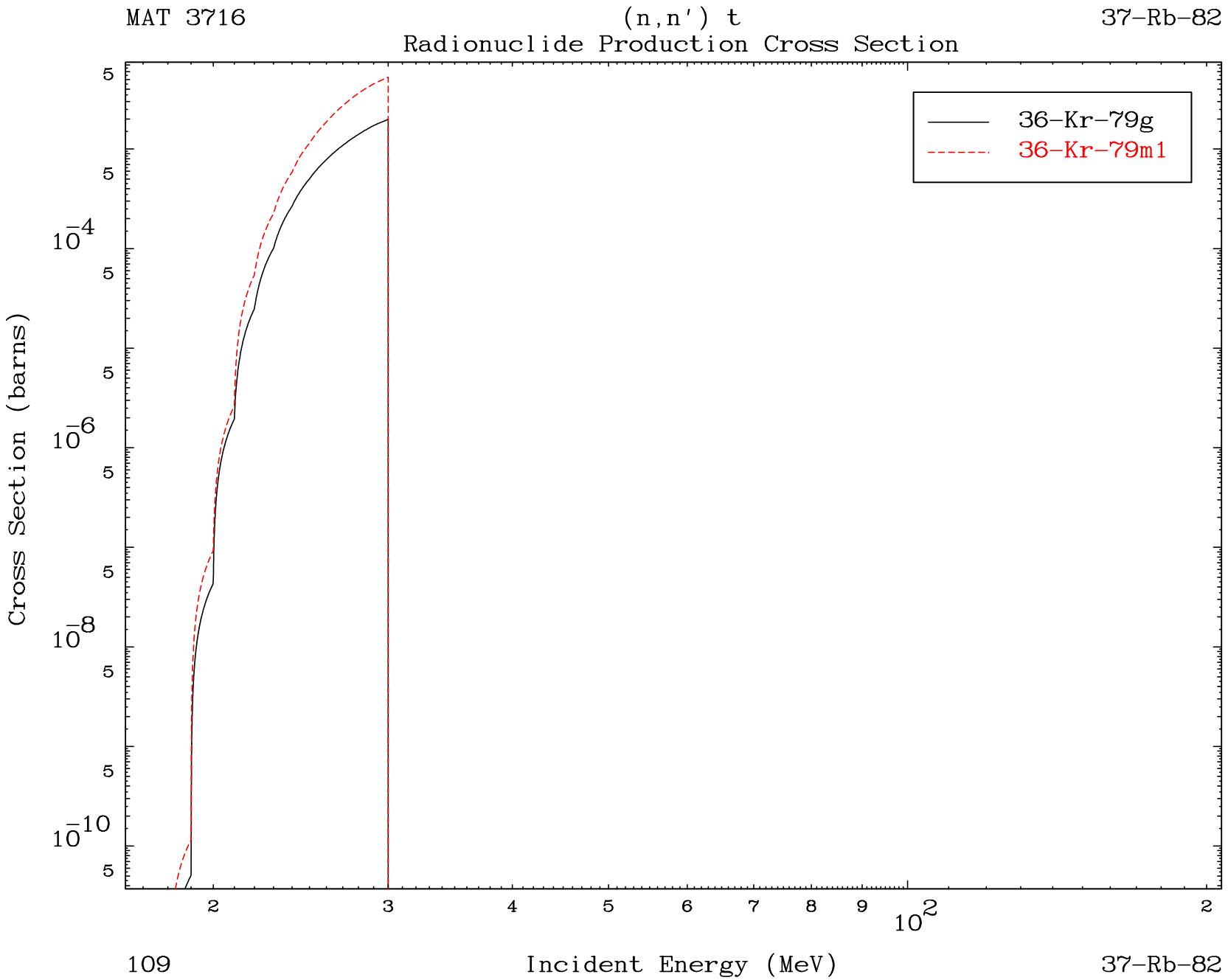

MAT 3716
(n,2n) d
37-Rb-82
Radionuclide Production Cross Section
36-Kr-79g
36-Kr-79m1
Cross Section (barns)
Incident Energy (MeV)
104
37-Rb-82

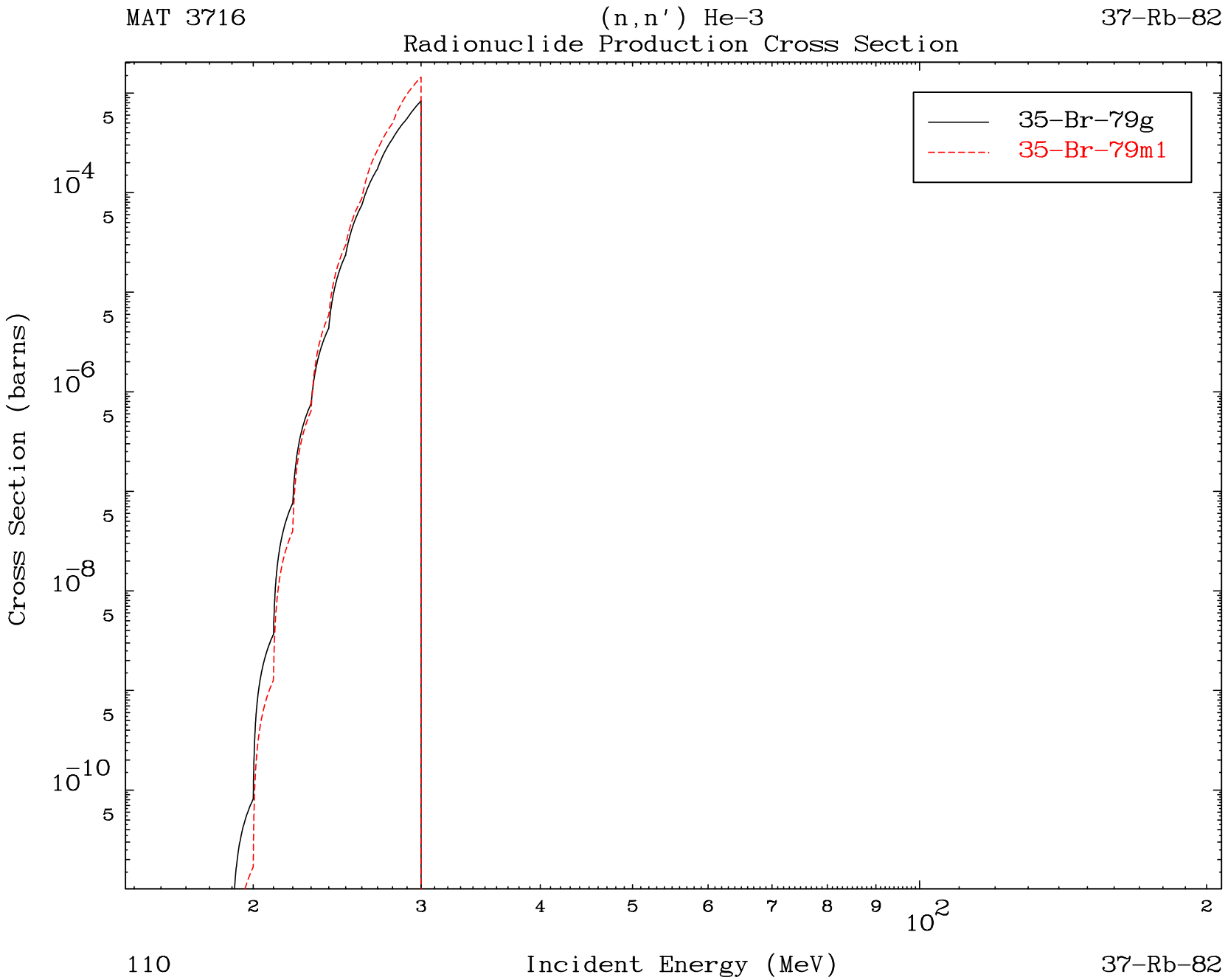

MAT 3716
(n,2n)
37-Rb-82
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
37-Rb-81g
37-Rb-81m1
105
37-Rb-82

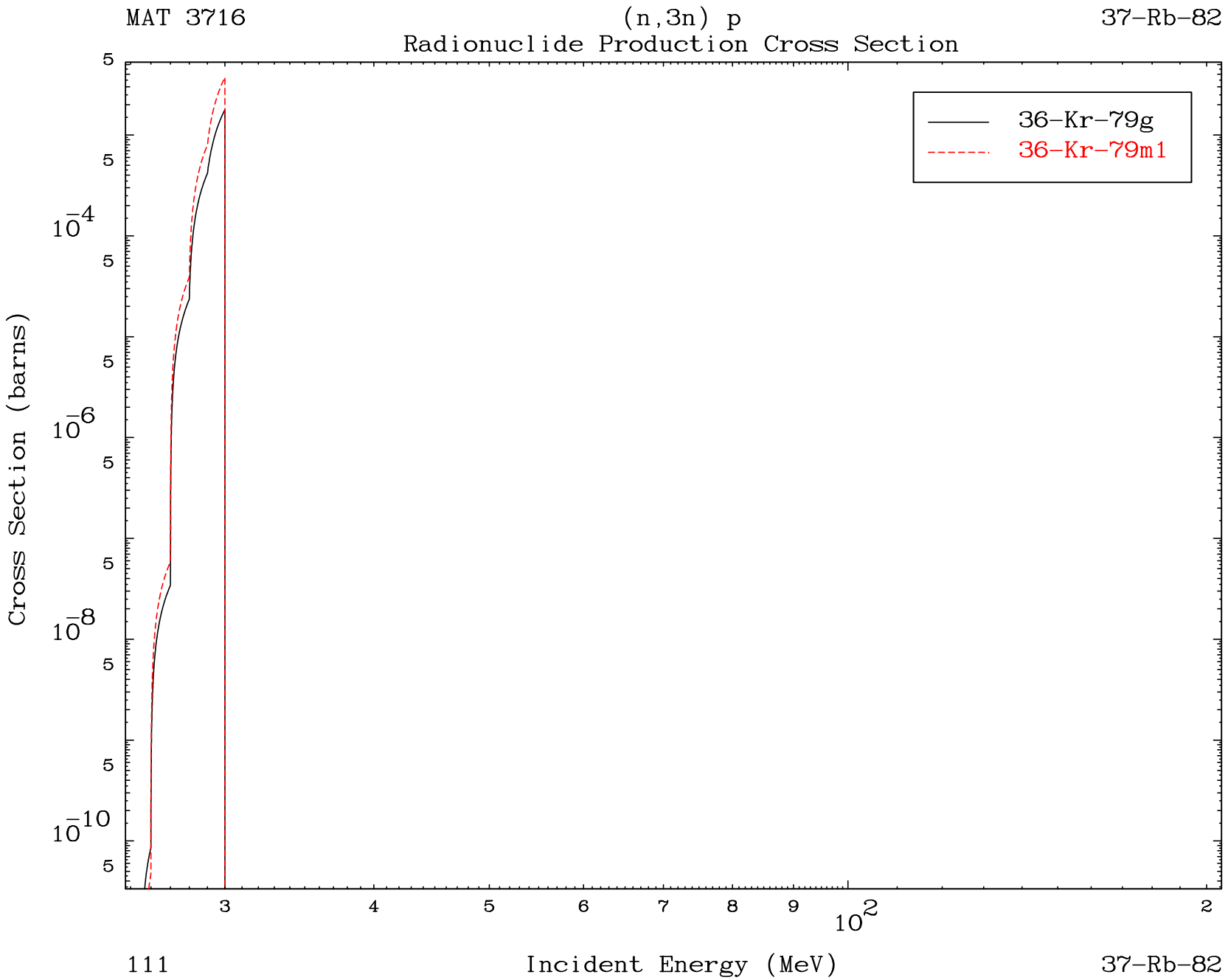

MAT 3716
(n,2n) α
37-Rb-82
Radionuclide Production Cross Section
35-Br-77g
35-Br-77m1
Cross Section (barns)
Incident Energy (MeV)
106
37-Rb-82

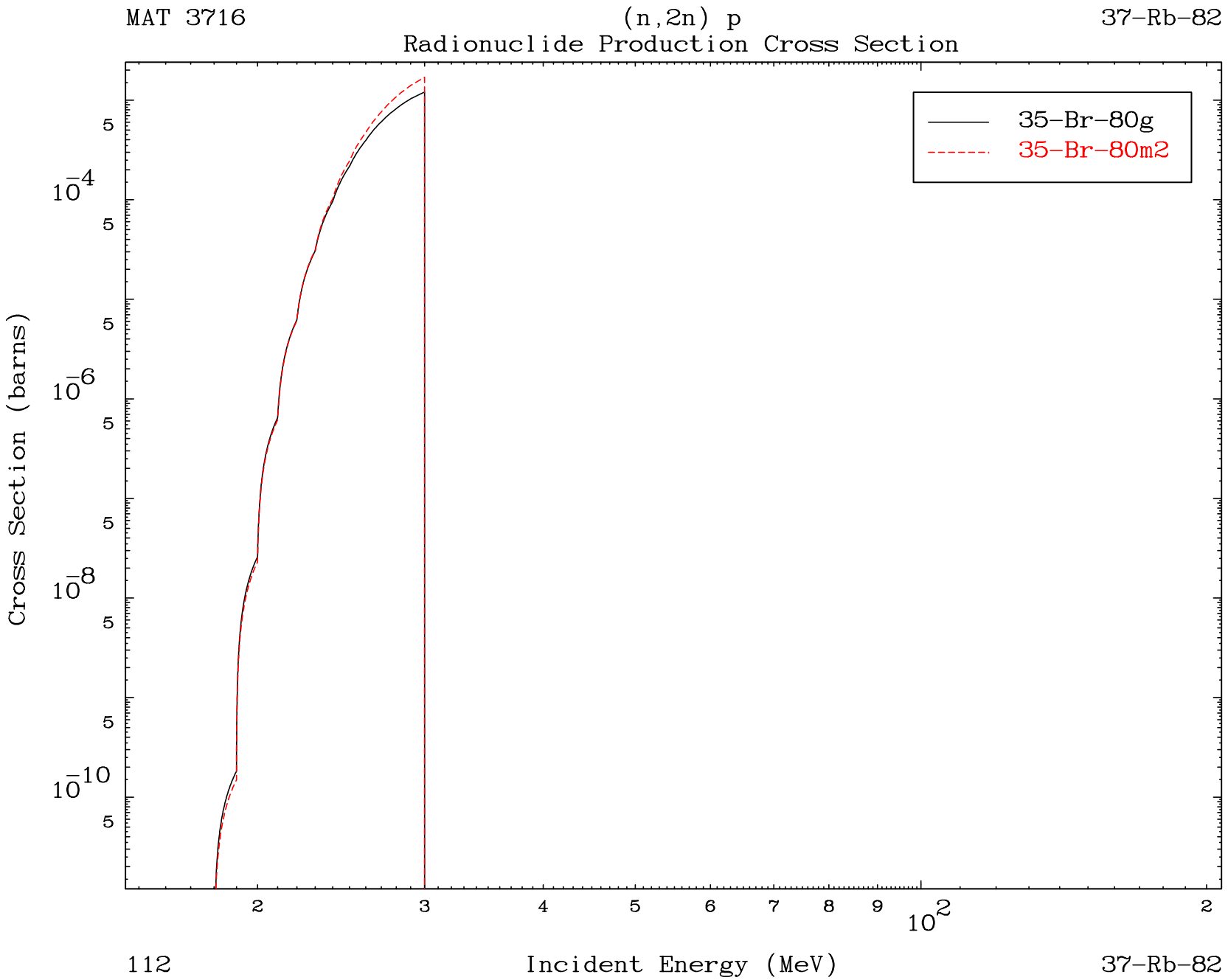

MAT 3716
(n,3n) α
37-Rb-82
Radionuclide Production Cross Section
35-Br-76g
35-Br-76m2
Cross Section (barns)
10-10
10-12
10-14
10-16
5
3
4
5
6
7
8
9
10 2
2
107
Incident Energy (MeV)
37-Rb-82

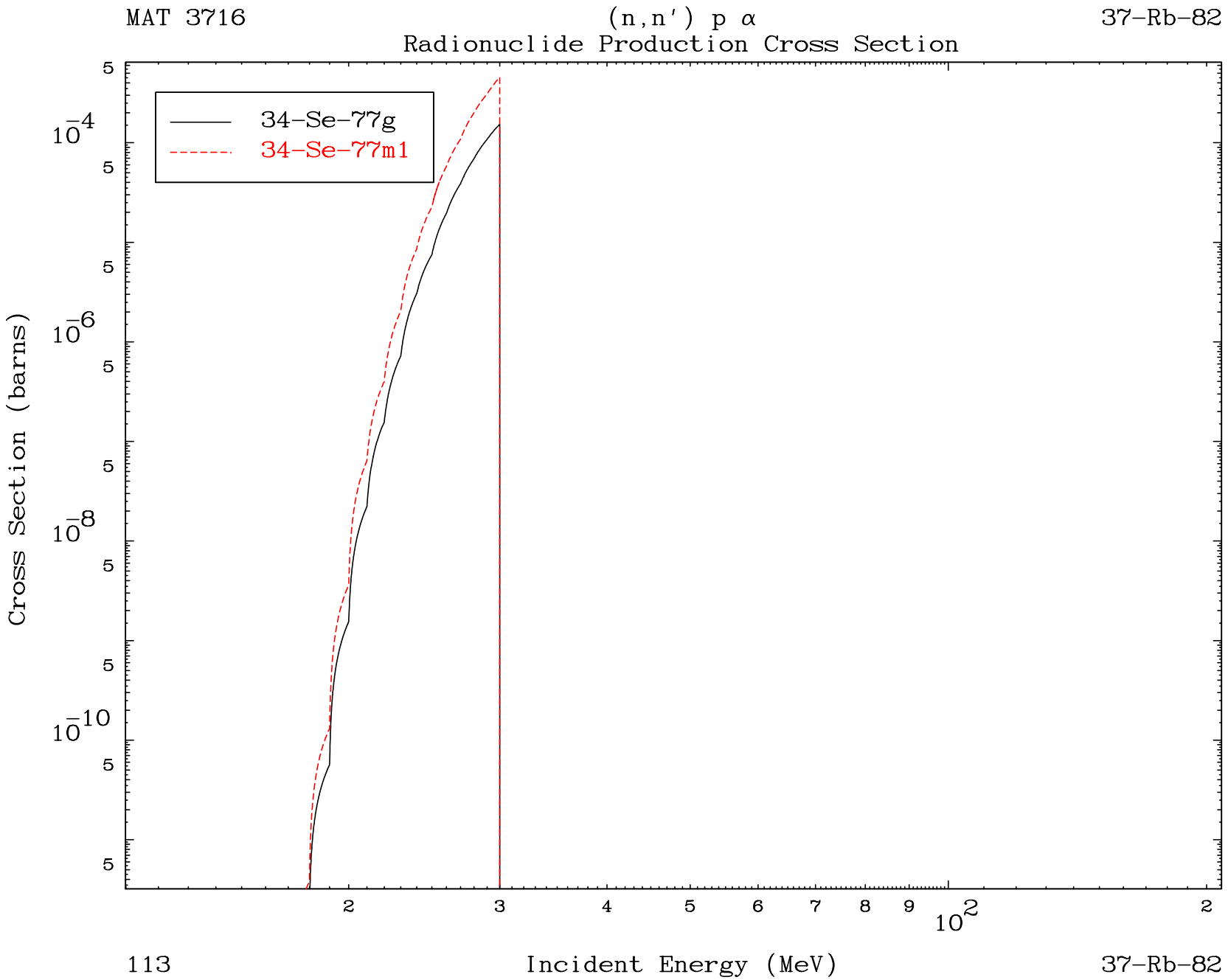

MAT 3716
(n,n') p
37-Rb-82
Radionuclide Production Cross Section
36-Kr-81g
36-Kr-81m2
Cross Section (barns)
Incident Energy (MeV)
108
37-Rb-82

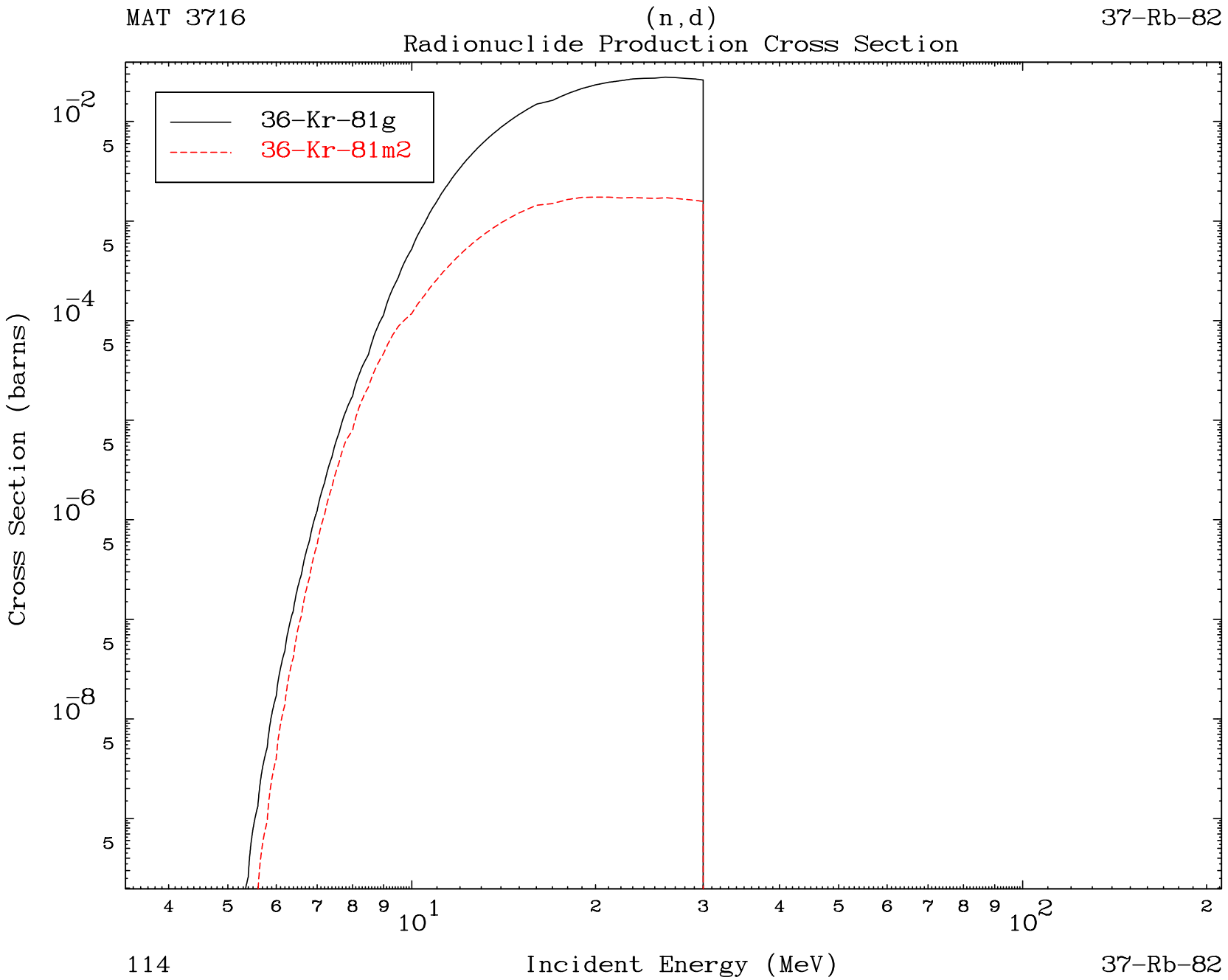

MAT 3716
(n,n') t
37-Rb-82
Radionuclide Production Cross Section
36-Kr-79g
36-Kr-79m1
Cross Section (barns)
Incident Energy (MeV)
109
37-Rb-82

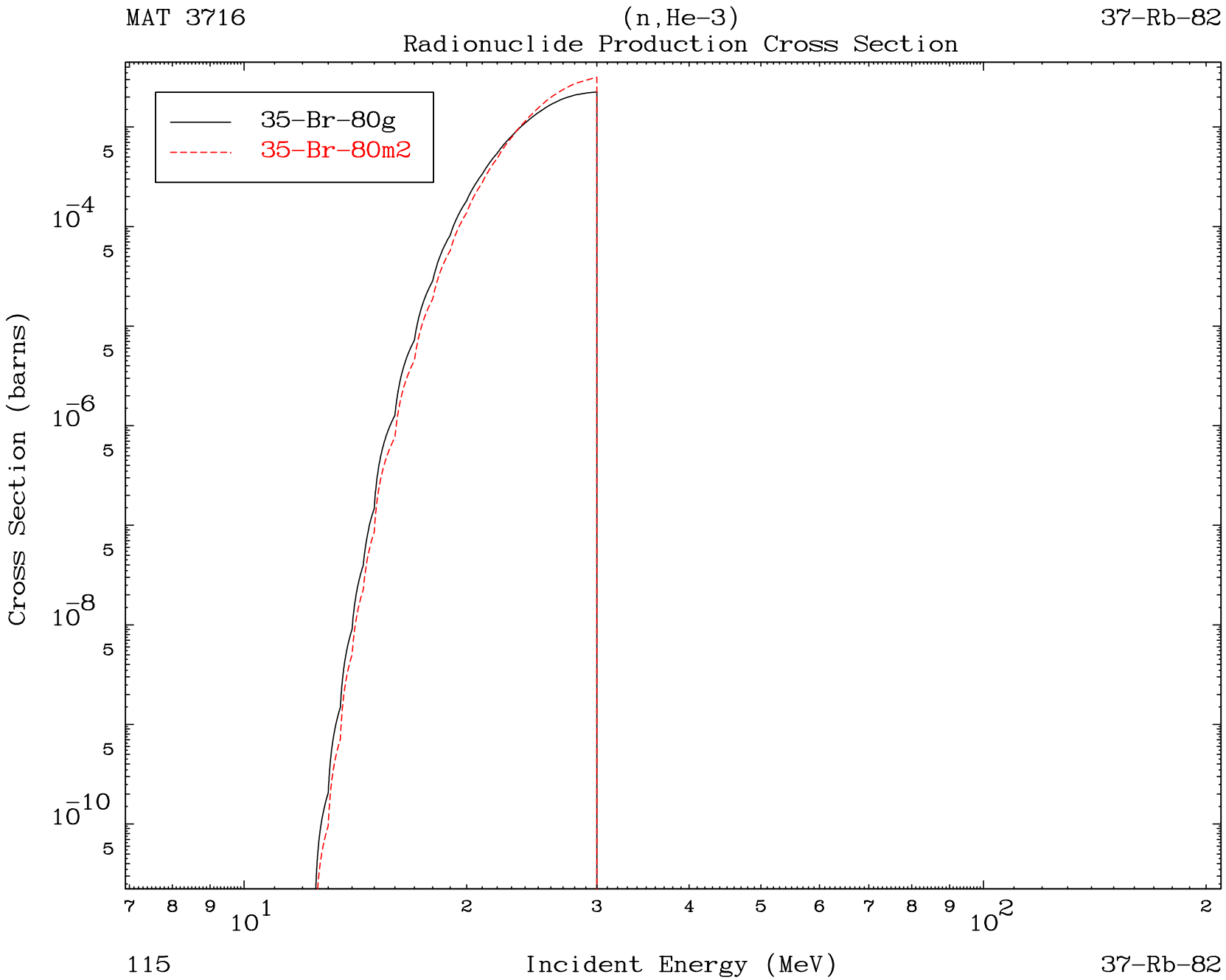

MAT 3716
(n,n') He-3
37-Rb-82
Radionuclide Production Cross Section
35-Br-79g
35-Br-79m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
2
3
4
5
6
7
8
9
10^2
2
110
Incident Energy (MeV)
37-Rb-82

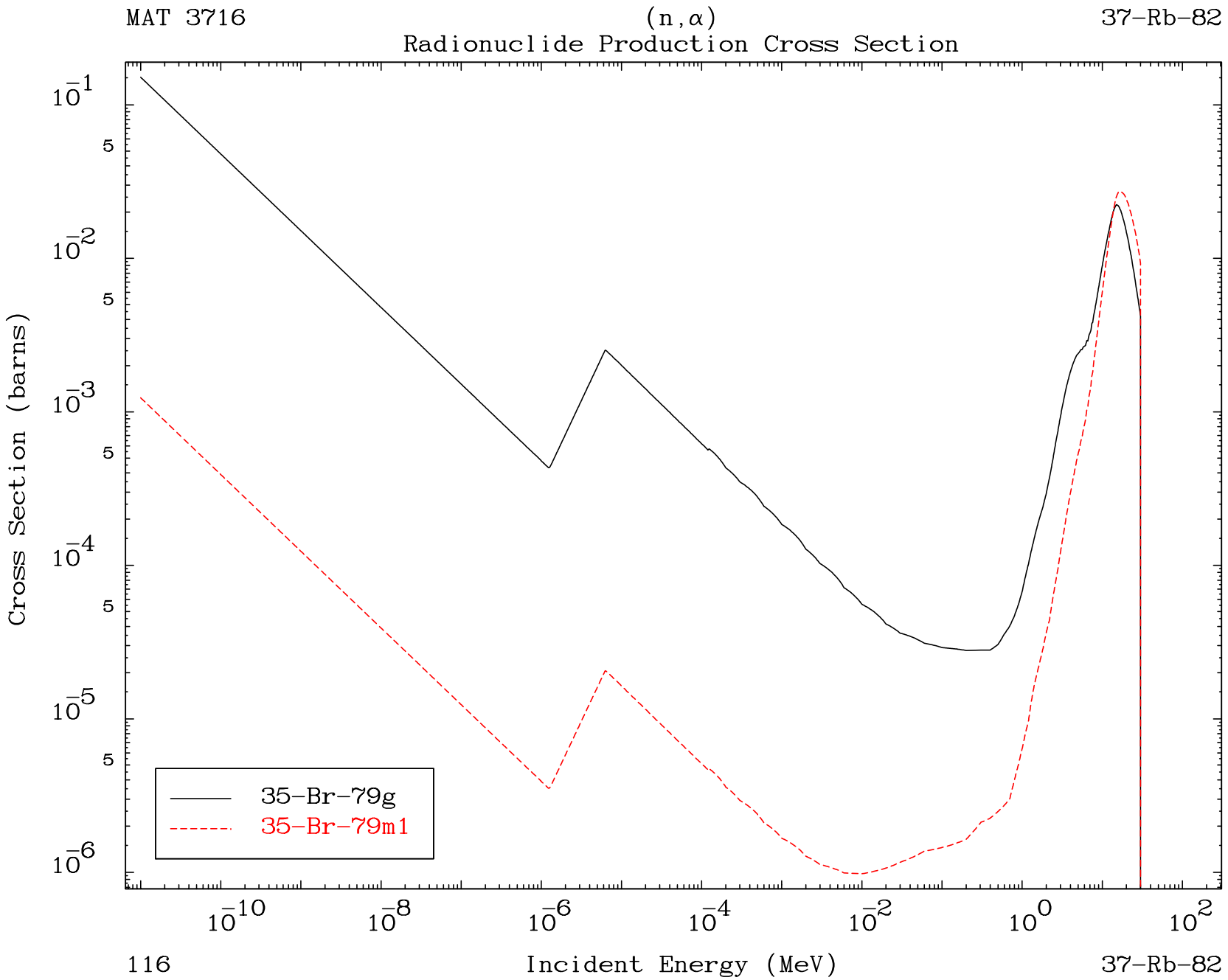

MAT 3716
(n,3n) p
37-Rb-82
Radionuclide Production Cross Section
36-Kr-79g
36-Kr-79m1
Cross Section (barns)
Incident Energy (MeV)
111
37-Rb-82

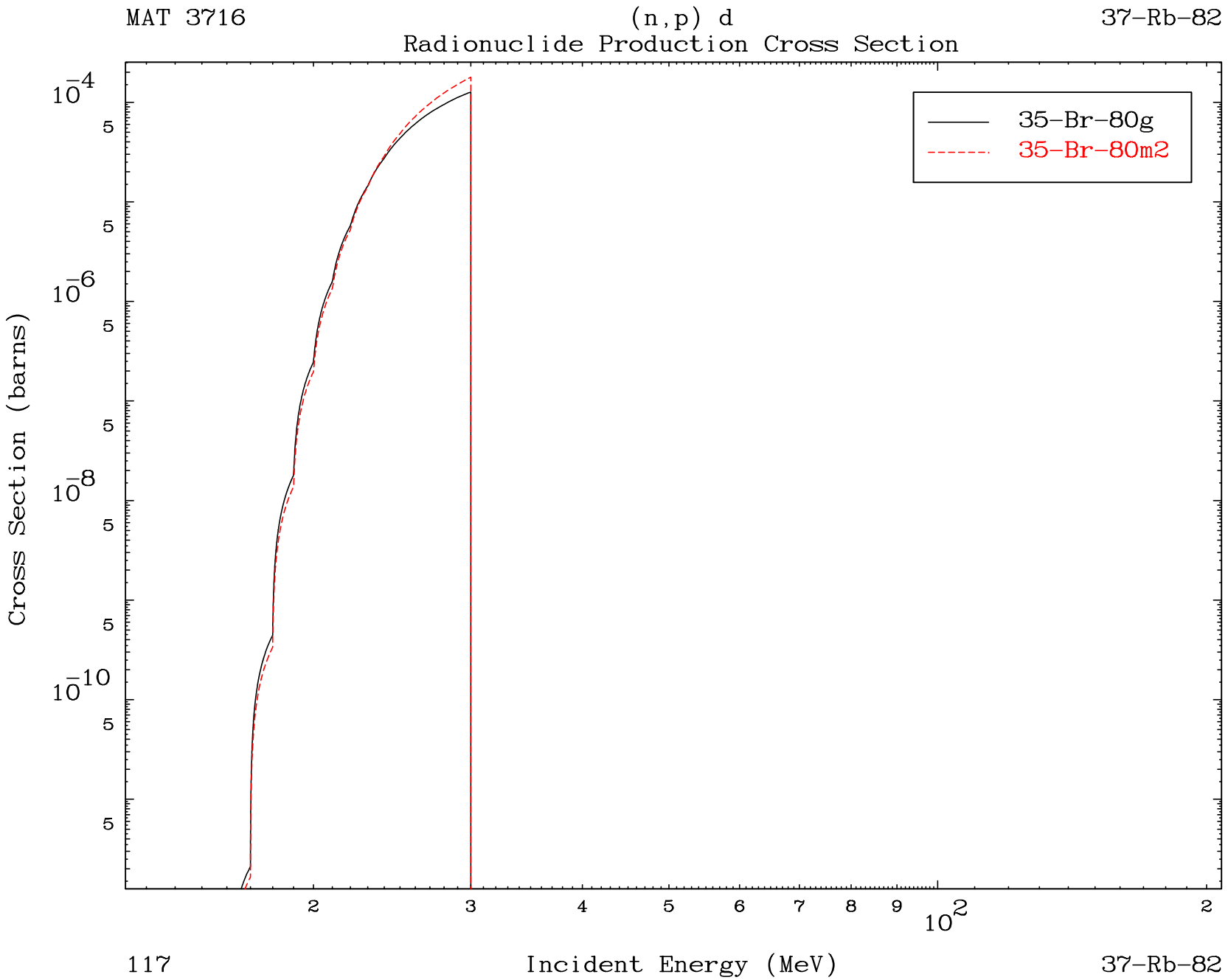

MAT 3716
(n,2n) p
37-Rb-82
Radionuclide Production Cross Section
35-Br-80g
35-Br-80m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
2
3
4
5
6
7
8
9
10^2
2
112
Incident Energy (MeV)
37-Rb-82

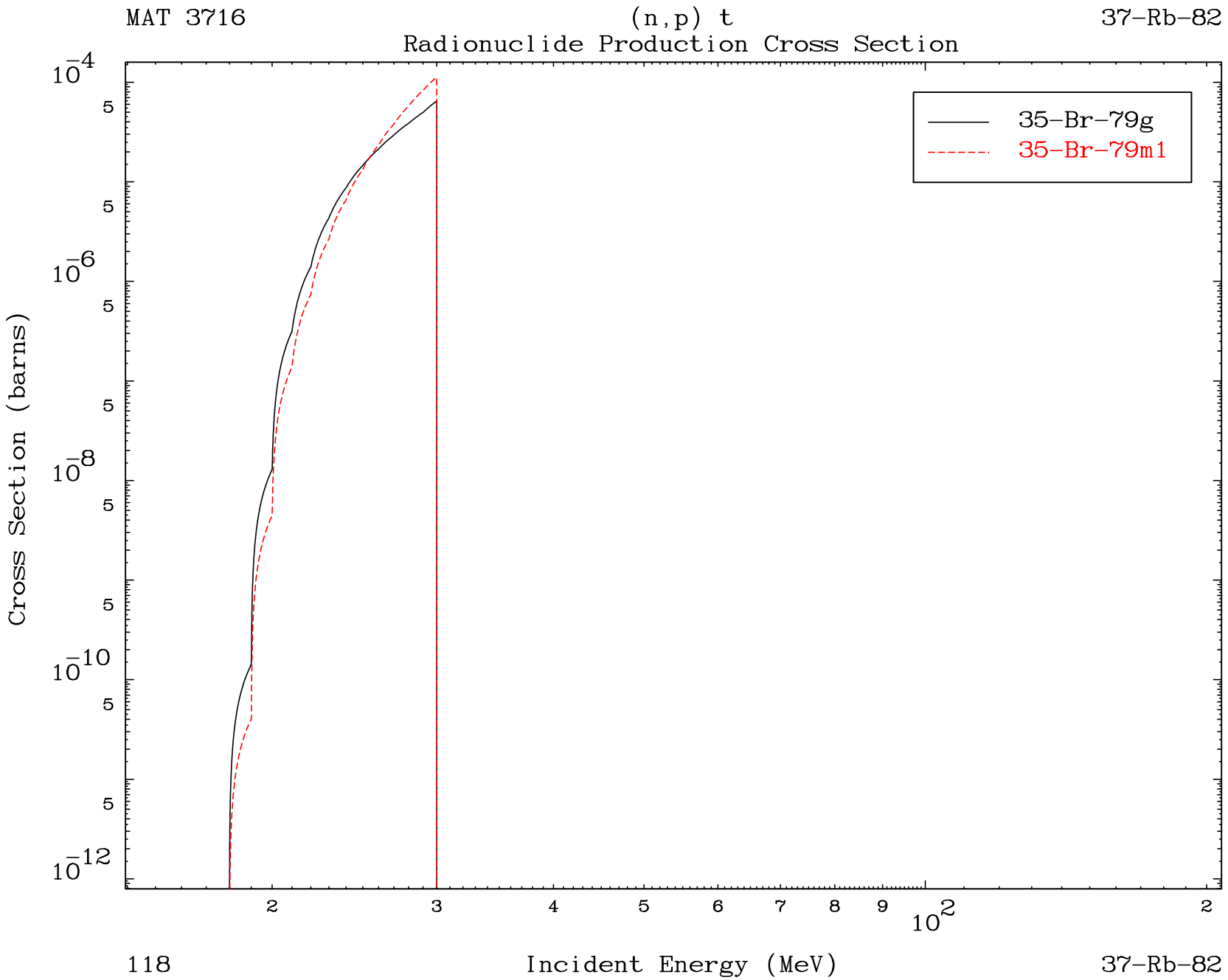

MAT 3716
(n,n') p α
37-Rb-82
Radionuclide Production Cross Section
34-Se-77g
34-Se-77m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
2
3
4
5
6
7
8
9
10^2
2
113
Incident Energy (MeV)
37-Rb-82

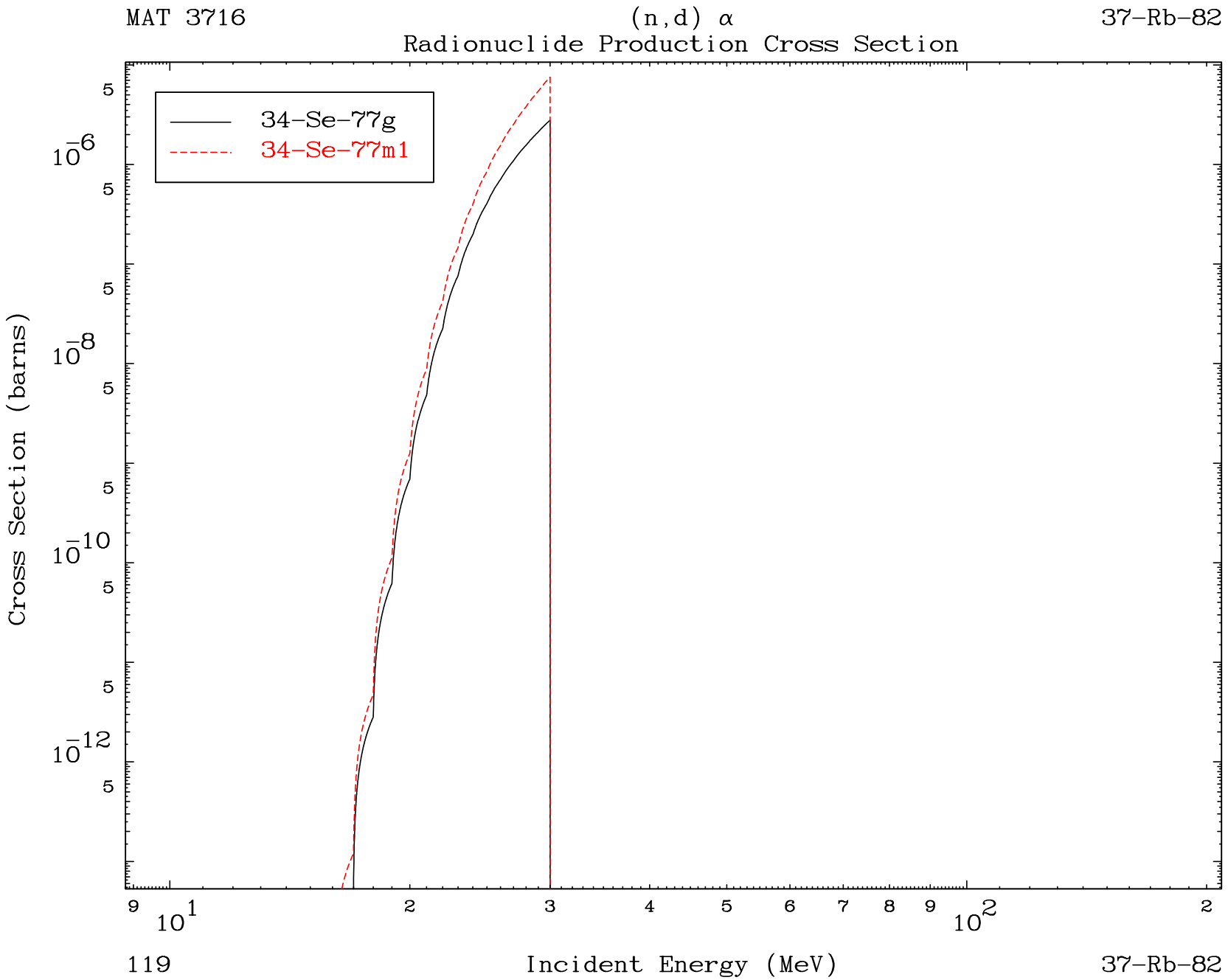

MAT 3716
(n,d)
37-Rb-82
Radionuclide Production Cross Section
36-Kr-81g
36-Kr-81m2
Cross Section (barns)
Incident Energy (MeV)
114
37-Rb-82


MAT 3716
(n,He-3)
37-Rb-82
Radionuclide Production Cross Section
35-Br-80g
35-Br-80m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
115
37-Rb-82


MAT 3716
(n,α)
37-Rb-82
Radionuclide Production Cross Section
Cross Section (barns)
10-1
5
10-2
5
10-3
5
10-4
5
10-5
5
10-6
35-Br-79g
35-Br-79m1
10-10
10-8
10-6
10-4
10-2
100
102
116
Incident Energy (MeV)
37-Rb-82


MAT 3716
(n,p) d
37-Rb-82
Radionuclide Production Cross Section
35-Br-80g
35-Br-80m2
Cross Section (barns)
Incident Energy (MeV)
117
37-Rb-82


MAT 3716
(n,p) t
37-Rb-82
Radionuclide Production Cross Section
35-Br-79g
35-Br-79m1
Cross Section (barns)
Incident Energy (MeV)
118
37-Rb-82


MAT 3716
(n,d) α
37-Rb-82
Radionuclide Production Cross Section
34-Se-77g
34-Se-77m1
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
9
10^1
2
3
4
5
6
7
8
9
10^2
2
119
Incident Energy (MeV)
37-Rb-82