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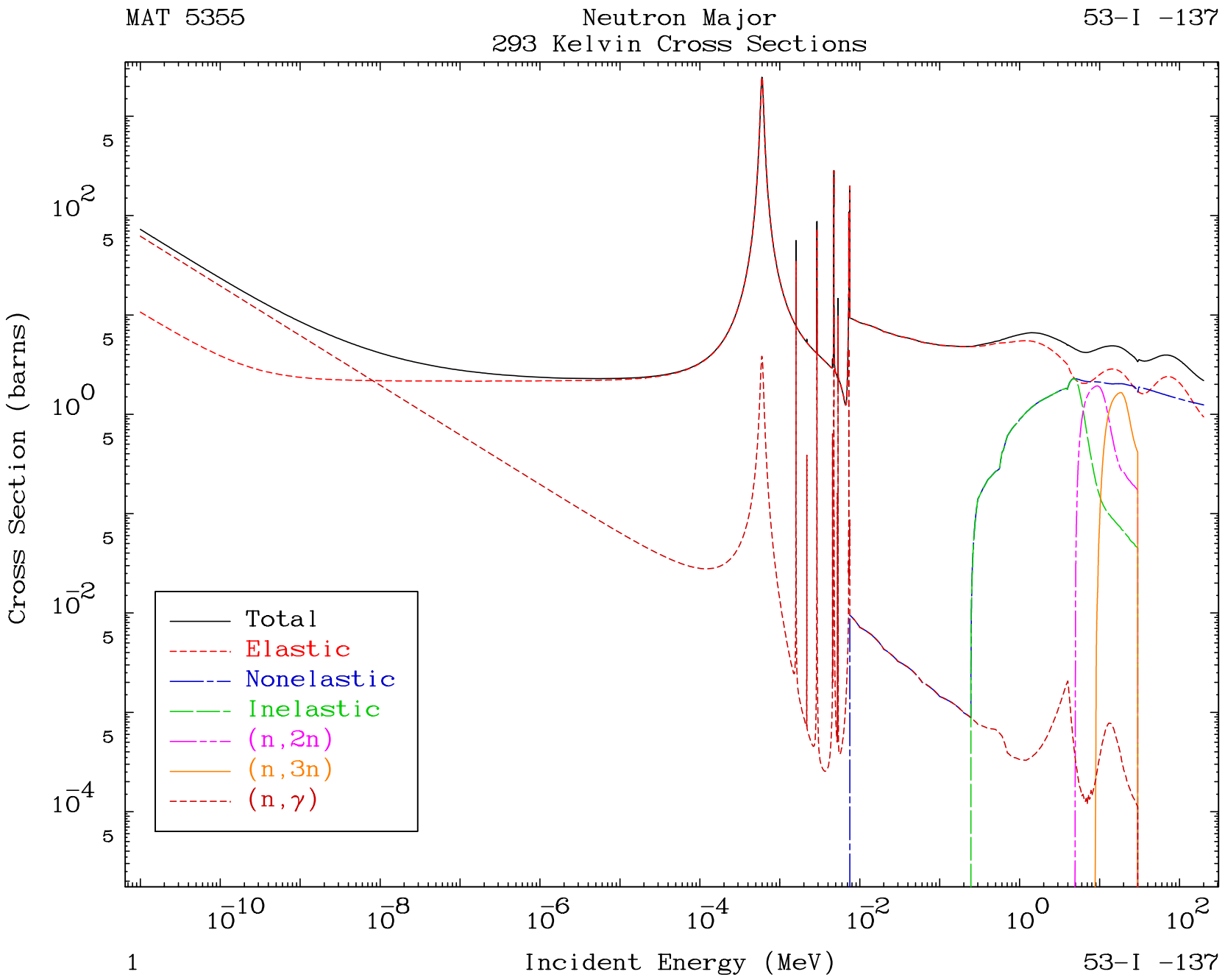
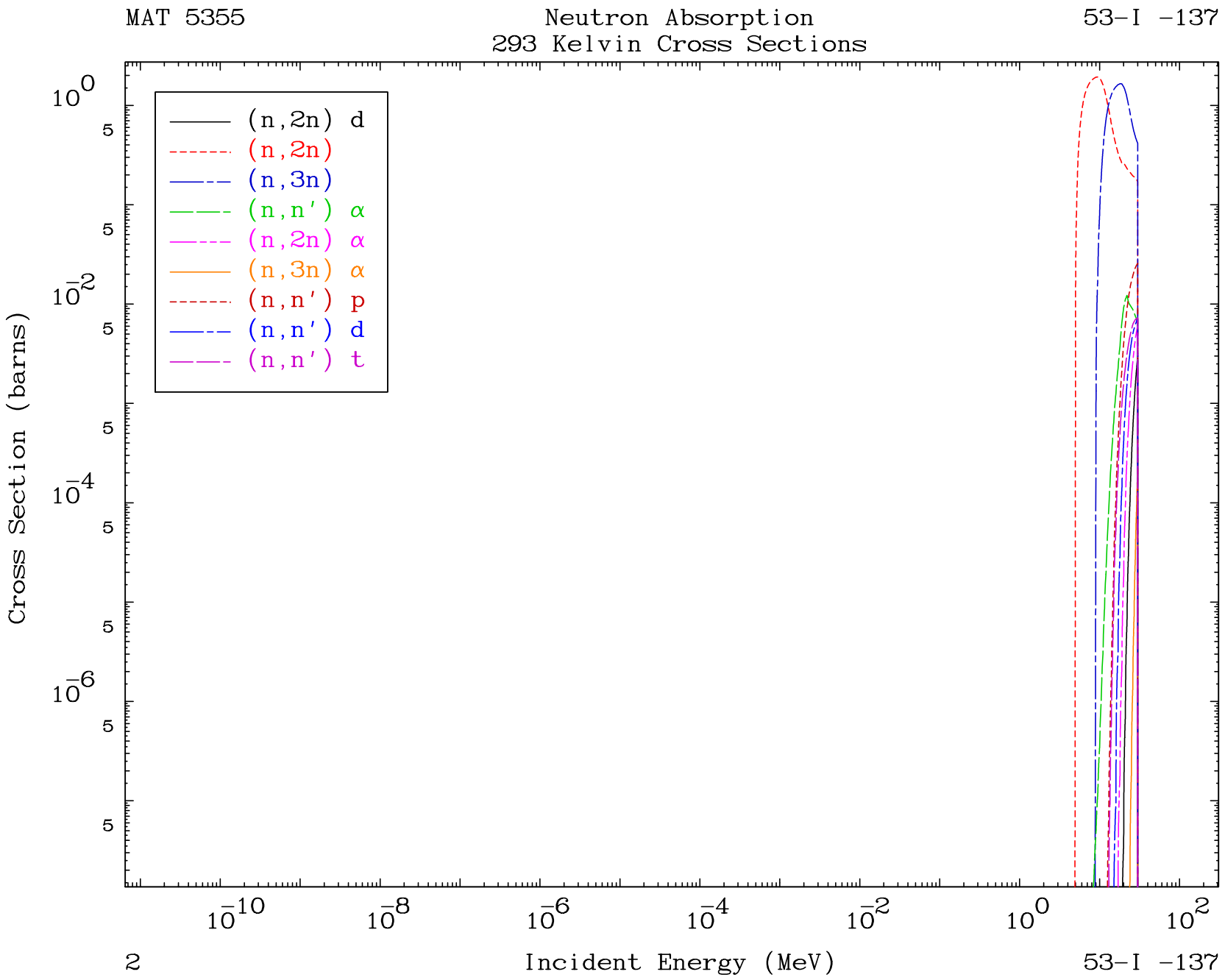
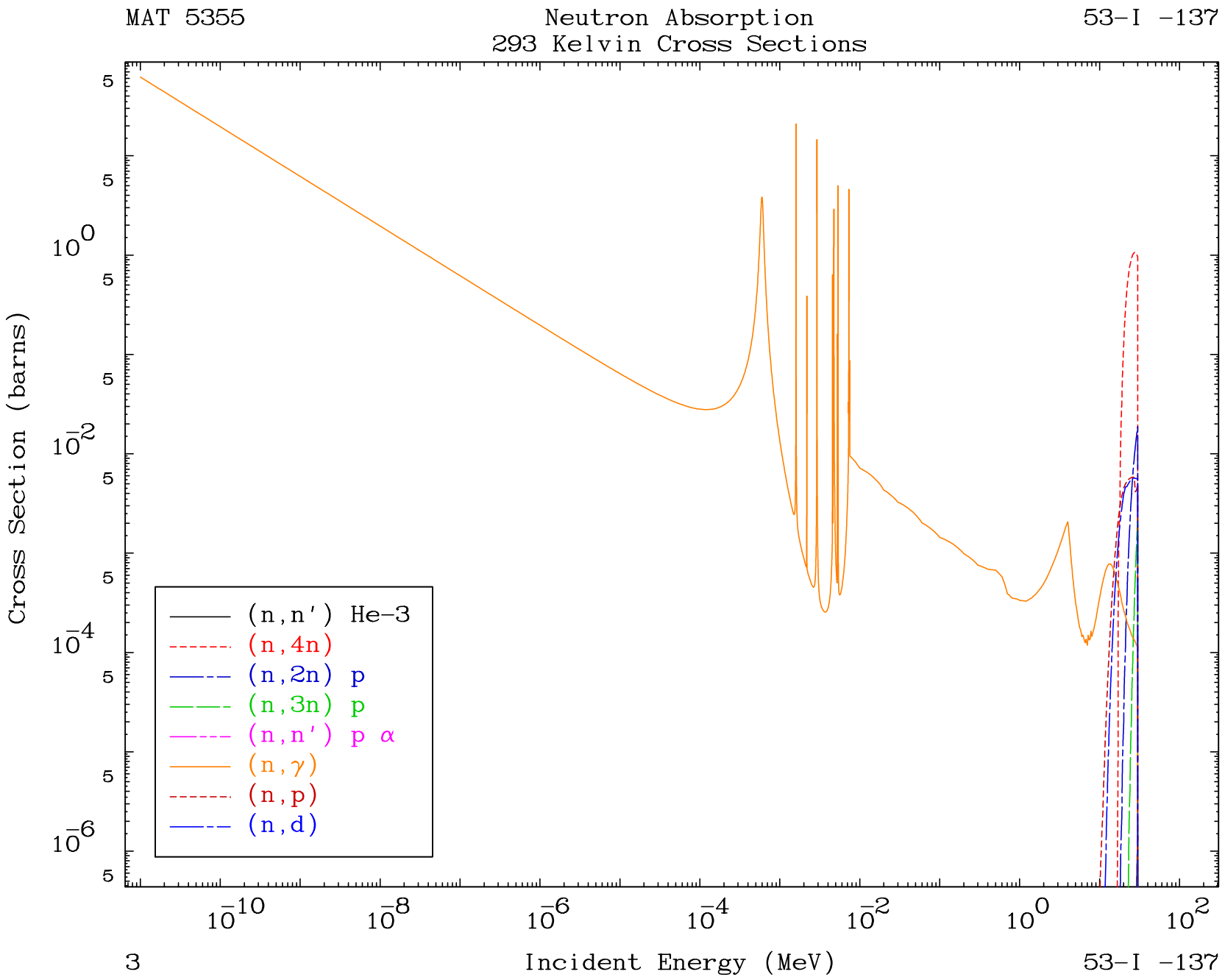
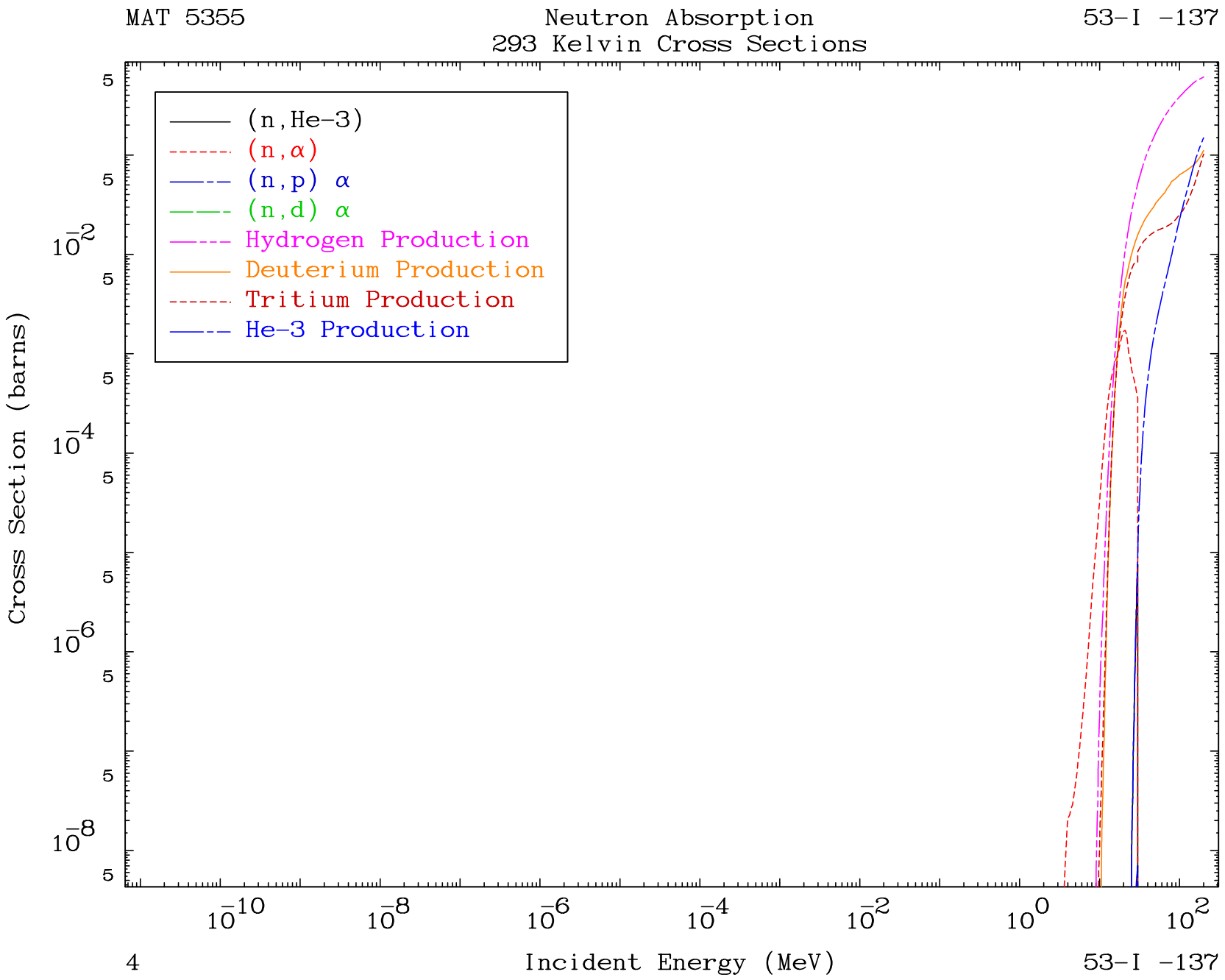
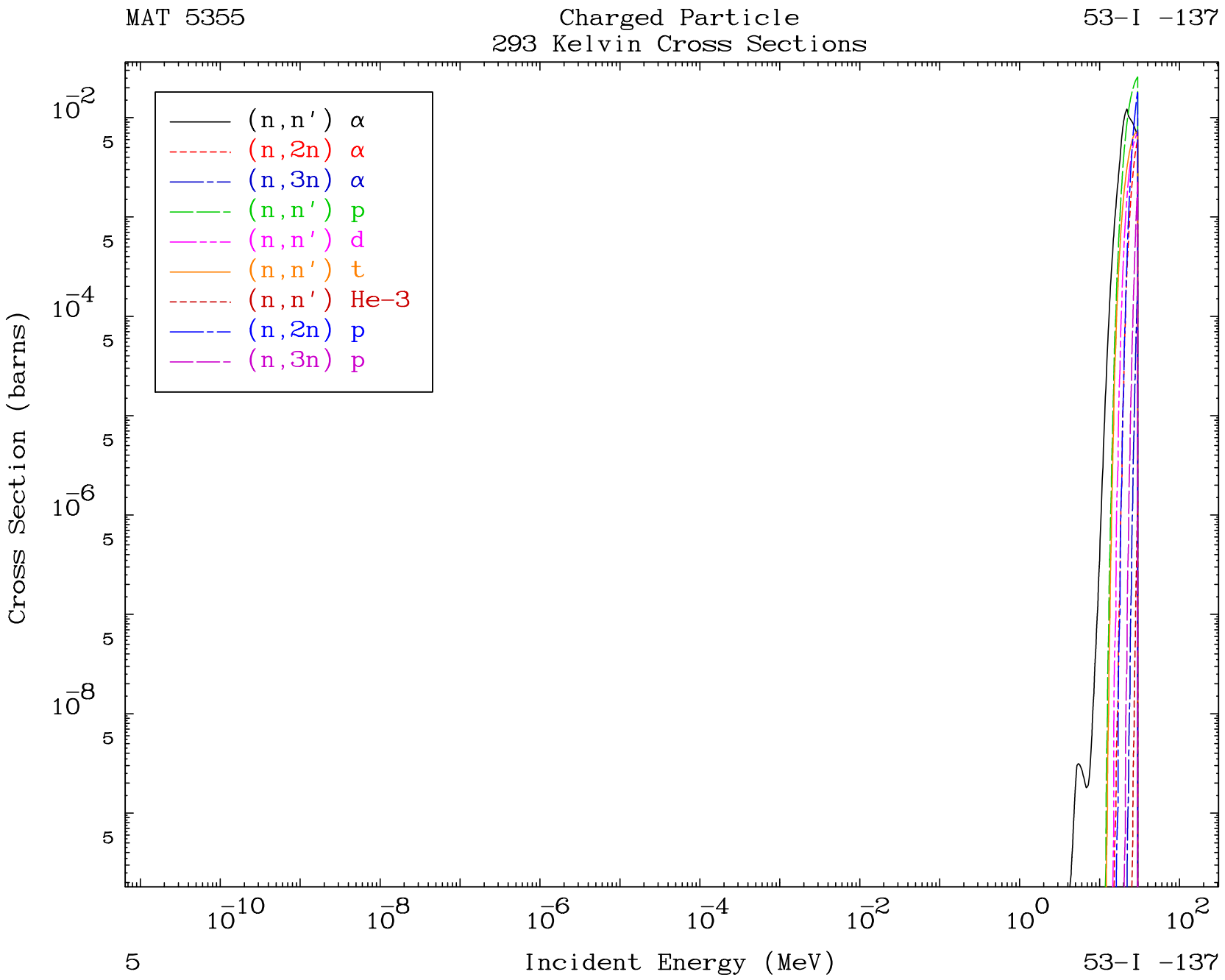
Press Mouse Button to Start

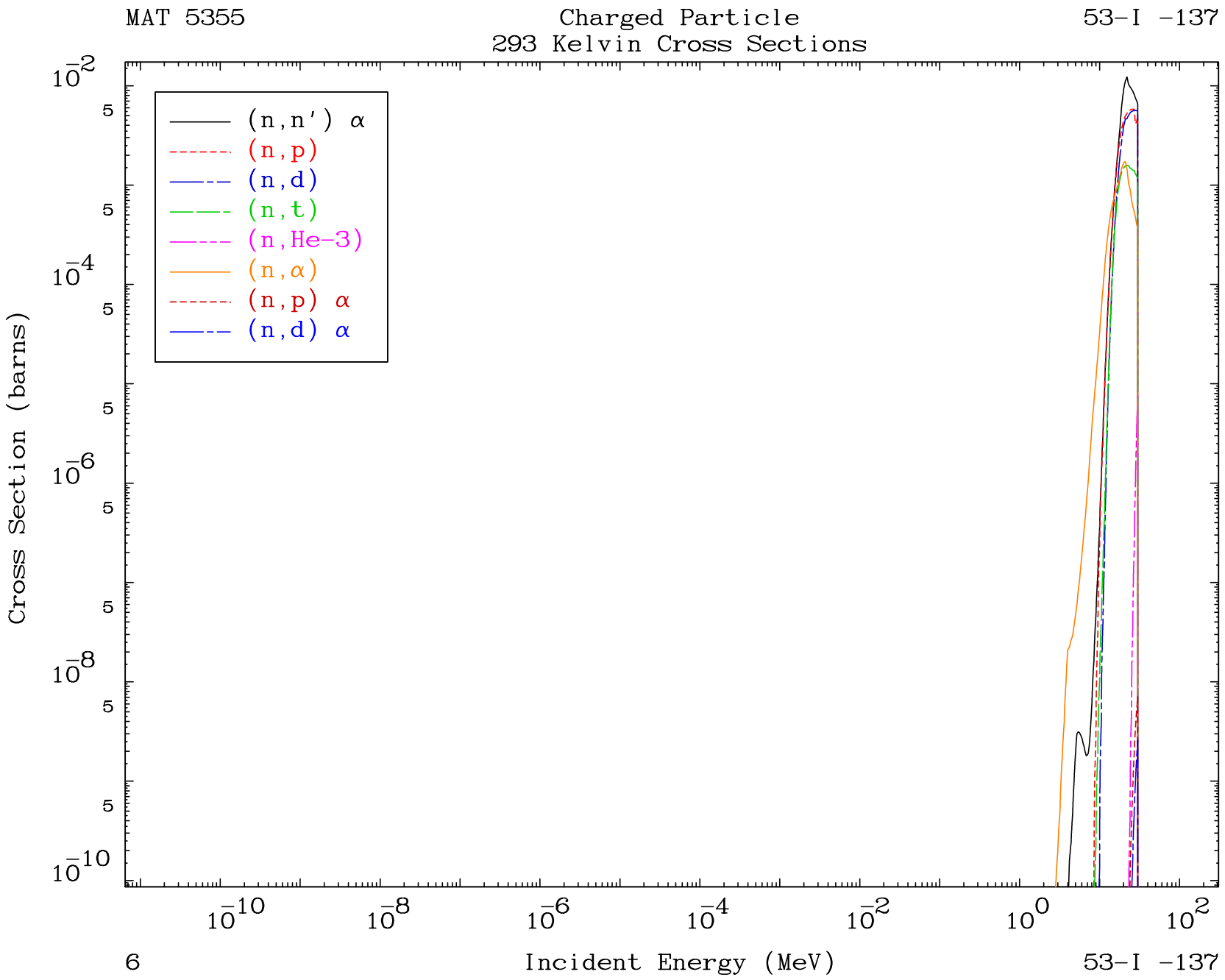

MAT 5355
Neutron Major
293 Kelvin Cross Sections
53-I -137
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
1
53-I -137

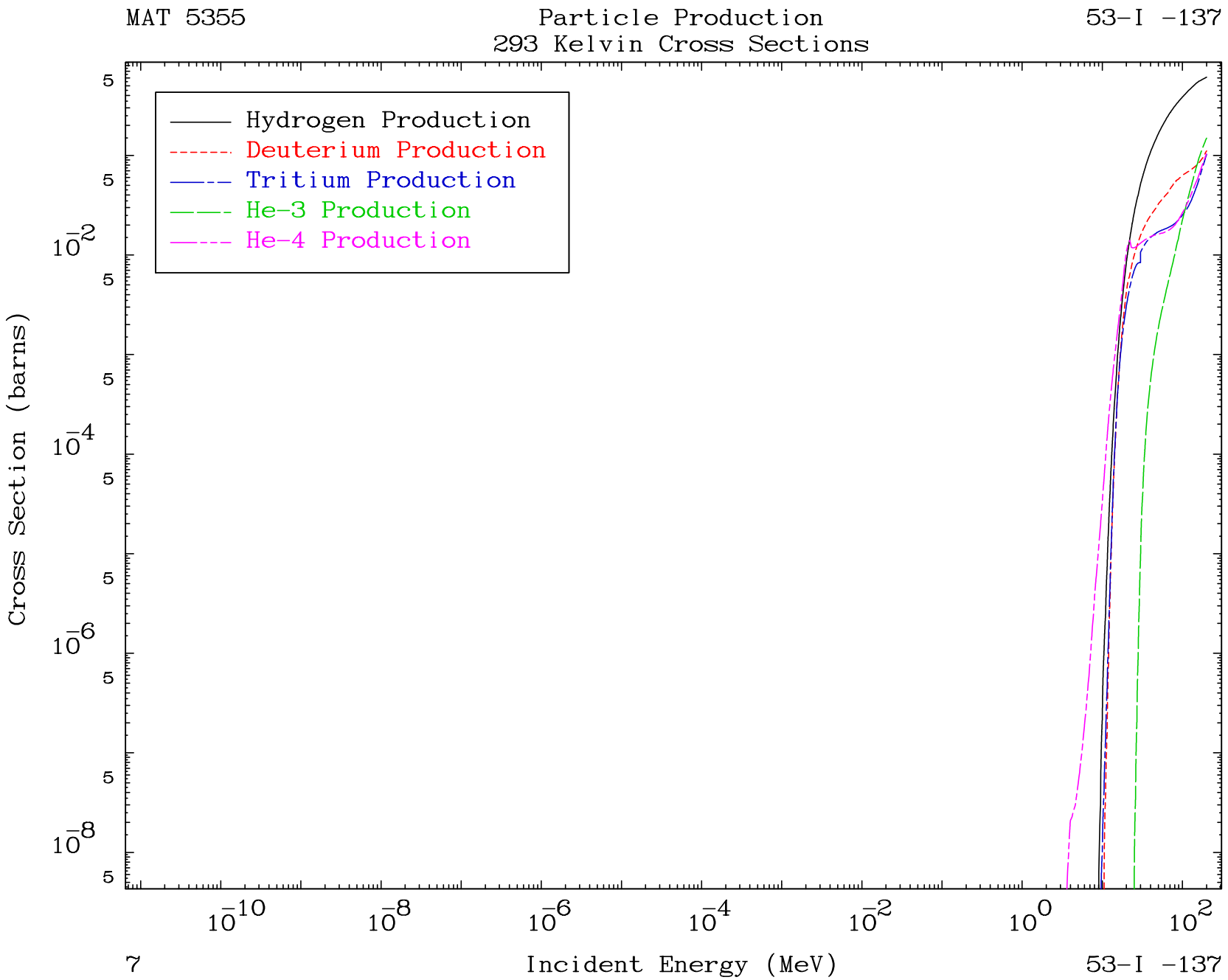

MAT 5355
Neutron Absorption
293 Kelvin Cross Sections
53-I -137
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
Cross Section (barns)
Incident Energy (MeV)
2
53-I -137

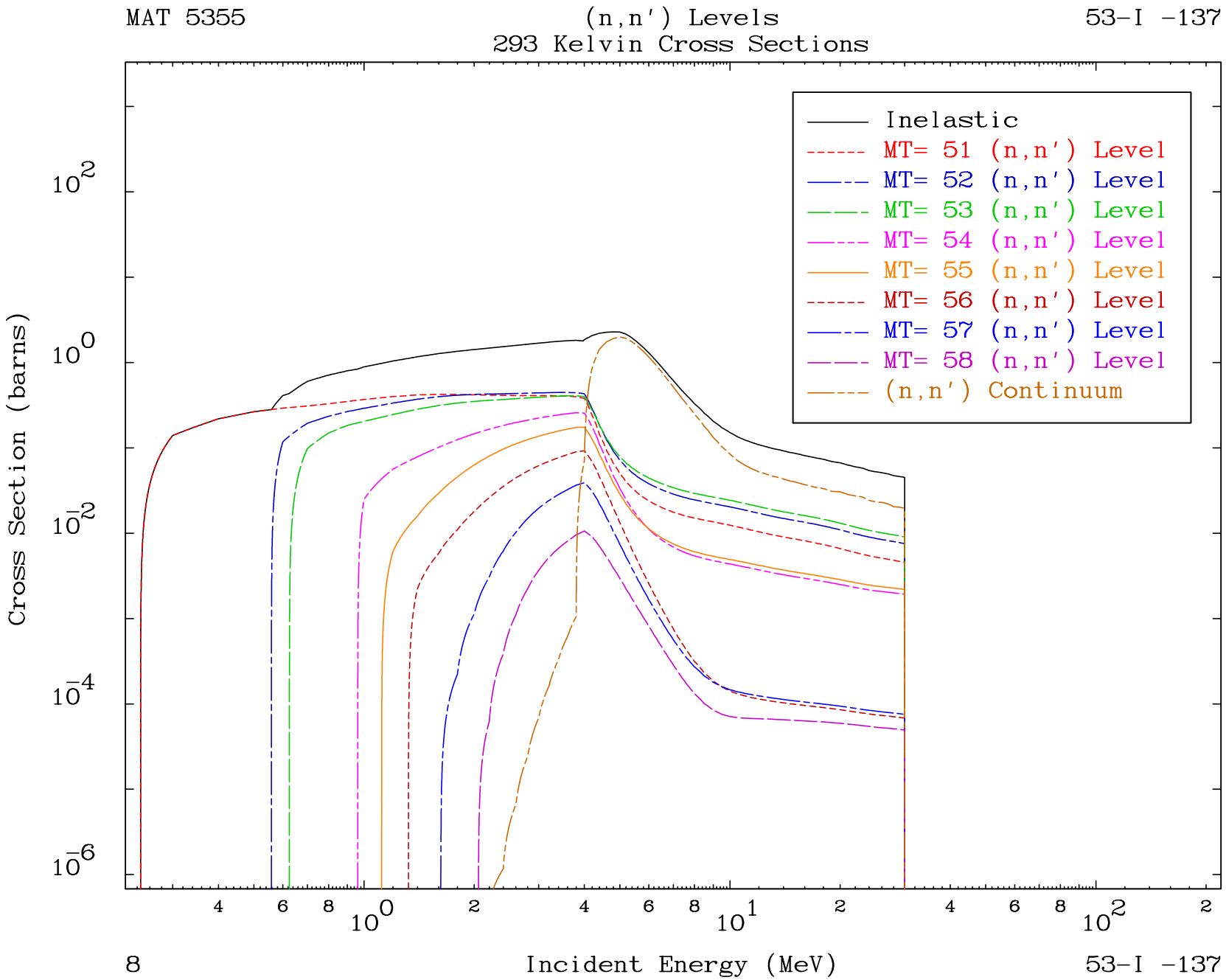

MAT 5355
Neutron Absorption
293 Kelvin Cross Sections
53-I -137
Cross Section (barns)
Incident Energy (MeV)
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
(n,n') p α
(n,γ)
(n,p)
(n,d)
3
53-I -137


MAT 5355
Neutron Absorption
293 Kelvin Cross Sections
53-I -137
(n,He-3)
(n,α)
(n,p) α
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
Cross Section (barns)
Incident Energy (MeV)
4
53-I -137

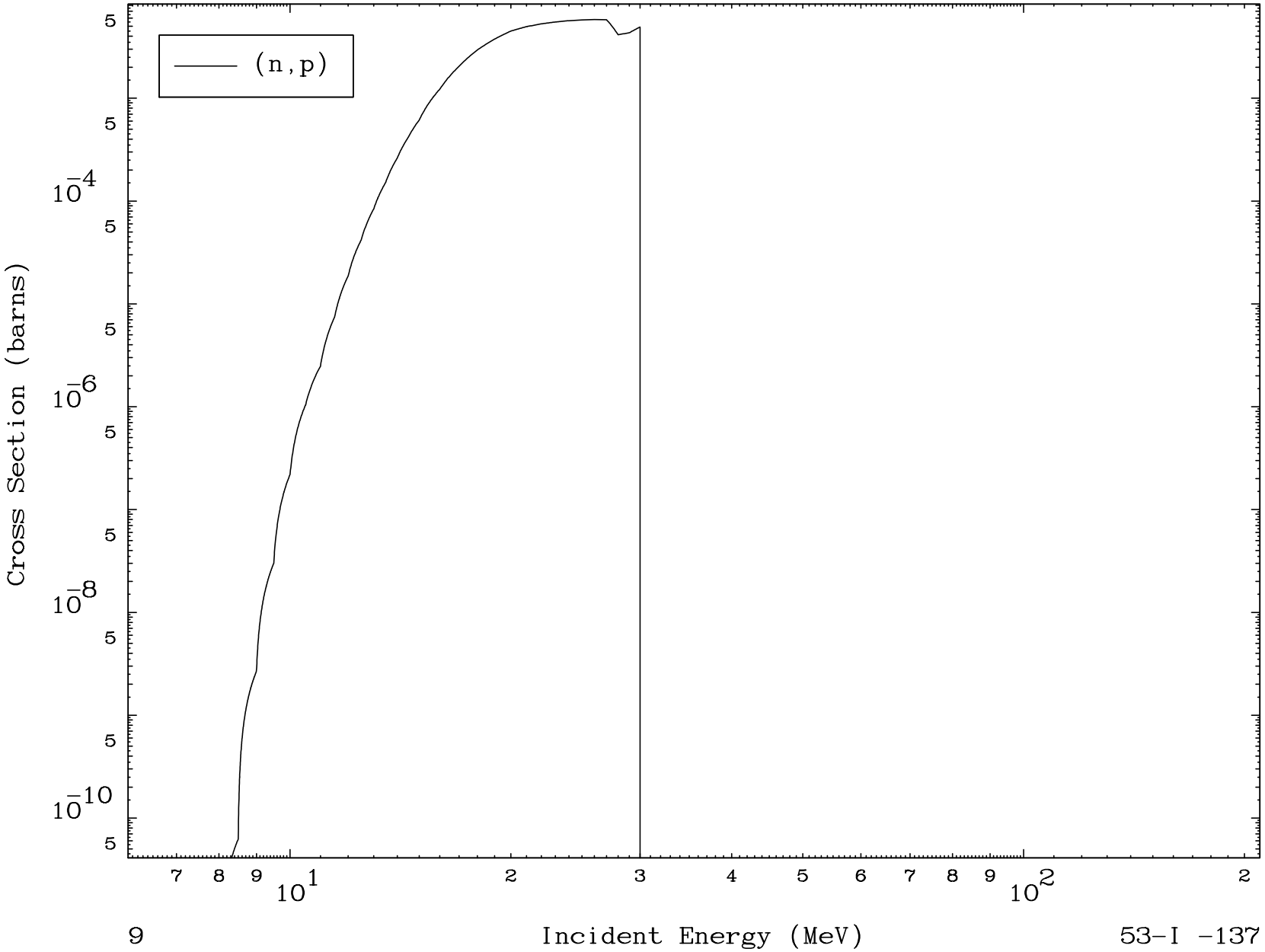

MAT 5355
Charged Particle
293 Kelvin Cross Sections
53-I -137
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
53-I -137

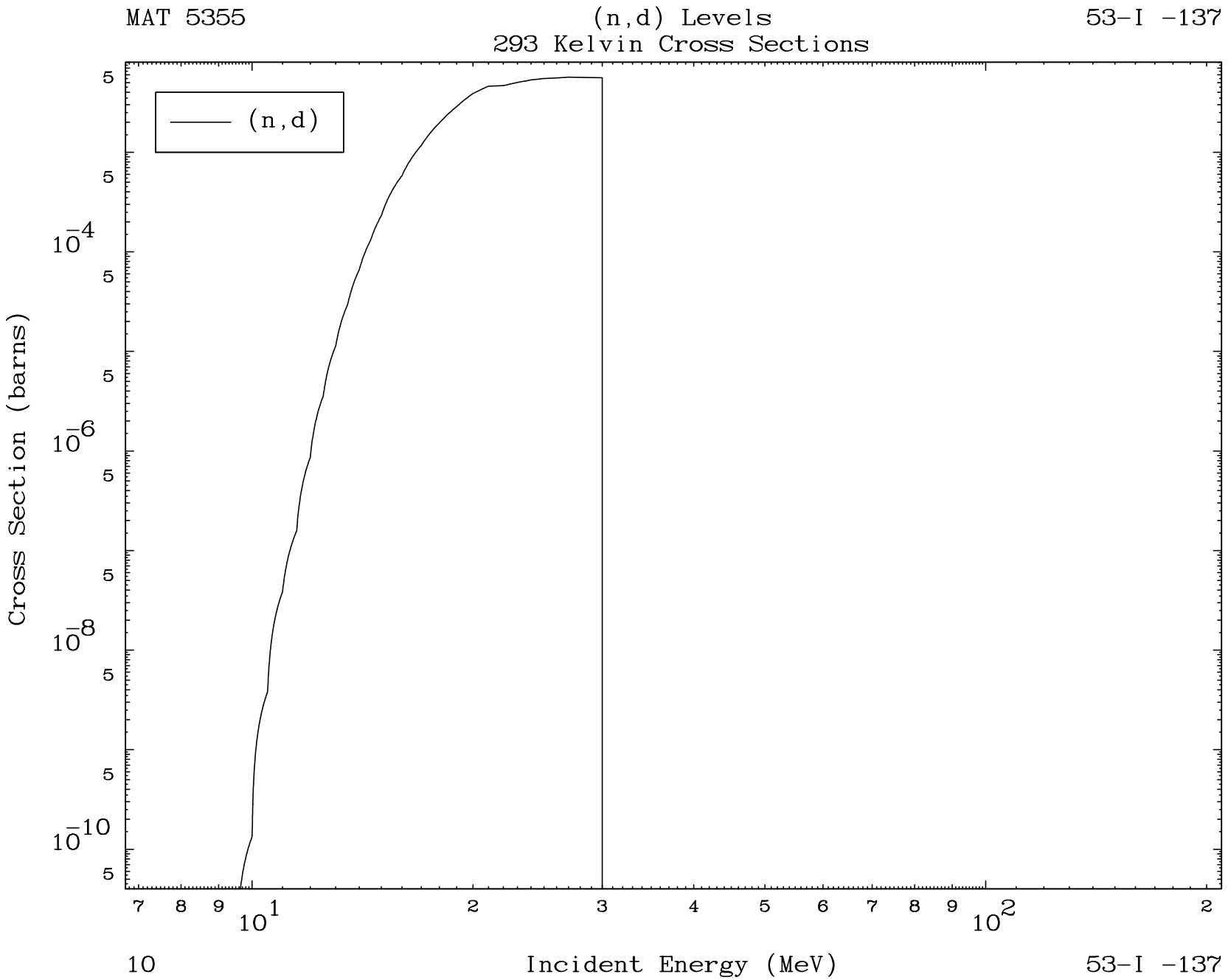

MAT 5355
Charged Particle
293 Kelvin Cross Sections
53-I -137
(n,n') α
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,p) α
(n,d) α
Cross Section (barns)
Incident Energy (MeV)
6
53-I -137

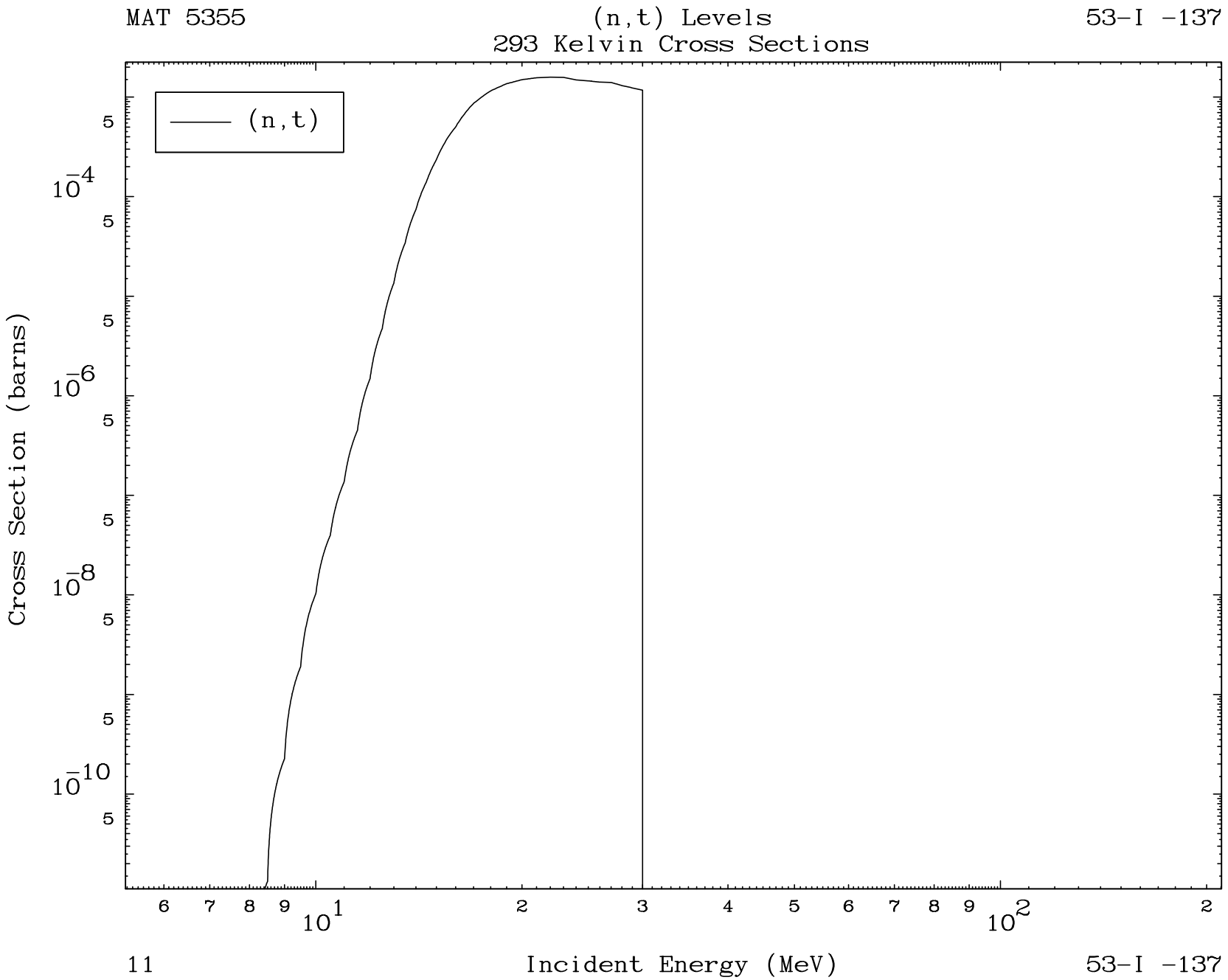

MAT 5355
Particle Production
293 Kelvin Cross Sections
53-I -137
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
7
53-I -137


MAT 5355
(n,n') Levels
293 Kelvin Cross Sections
53-I -137
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
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
8
53-I -137

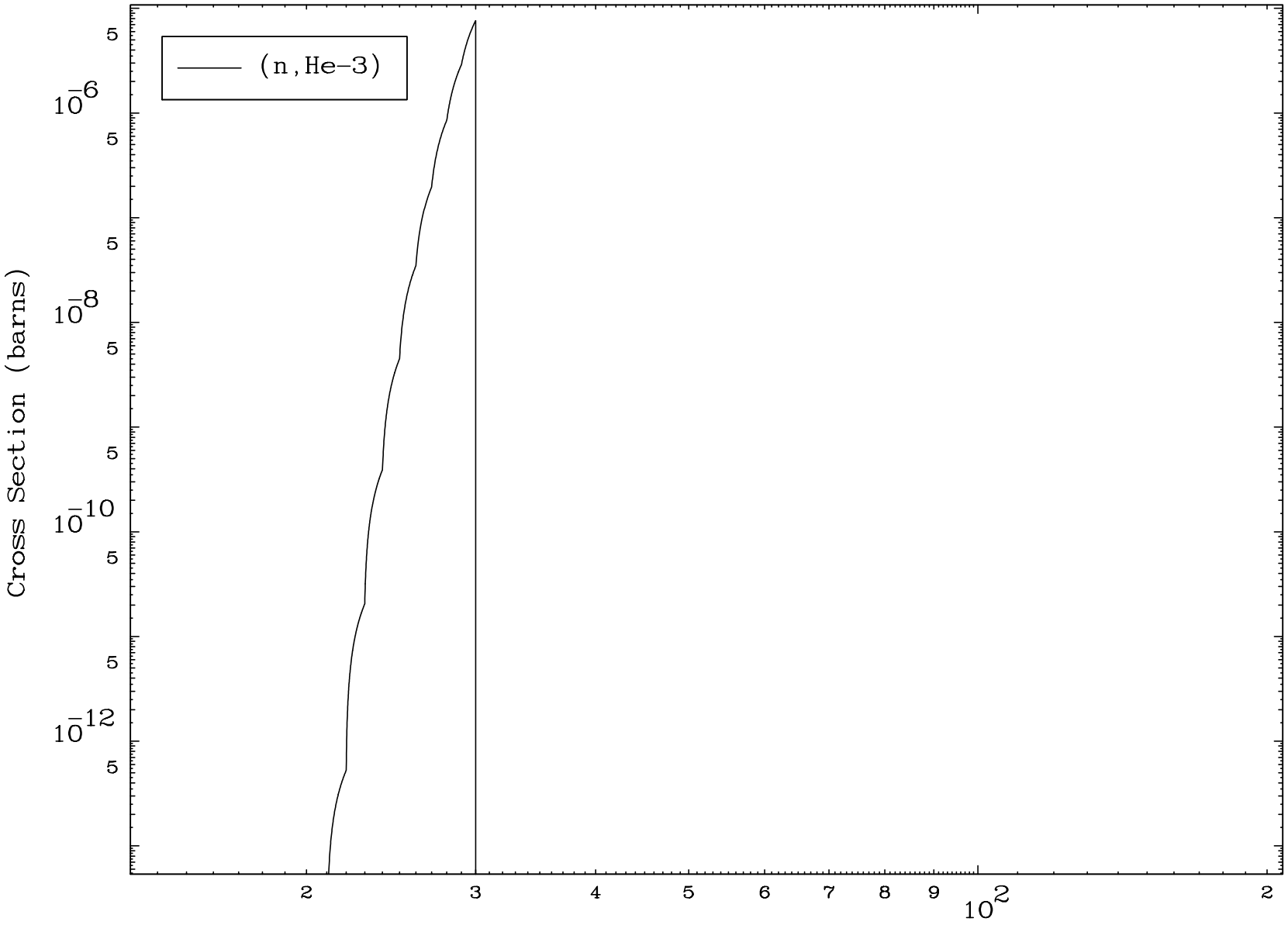
293 Kelvin Cross Sections



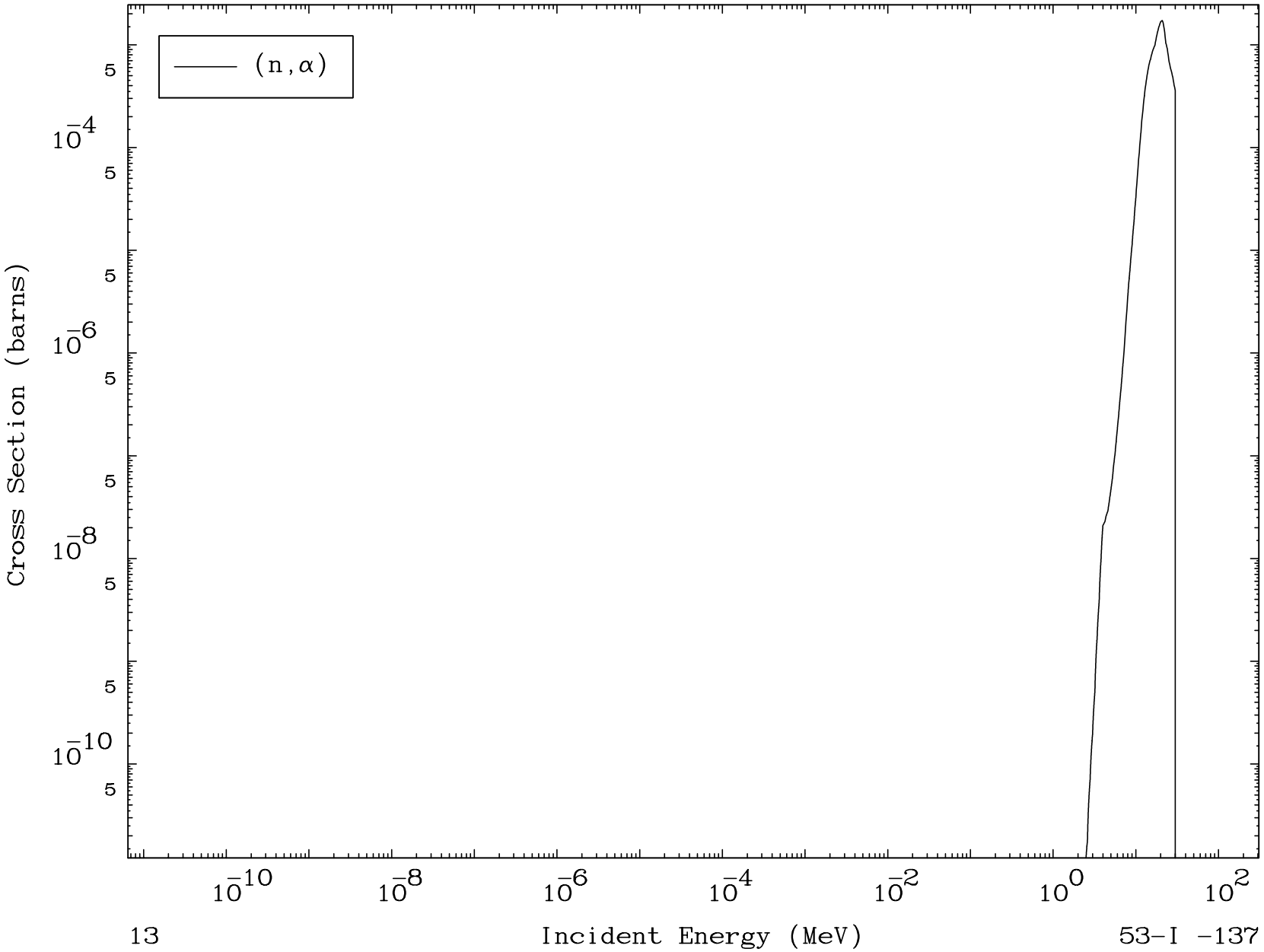

MAT 5355
(n,d) Levels
53-I -137
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
53-I -137

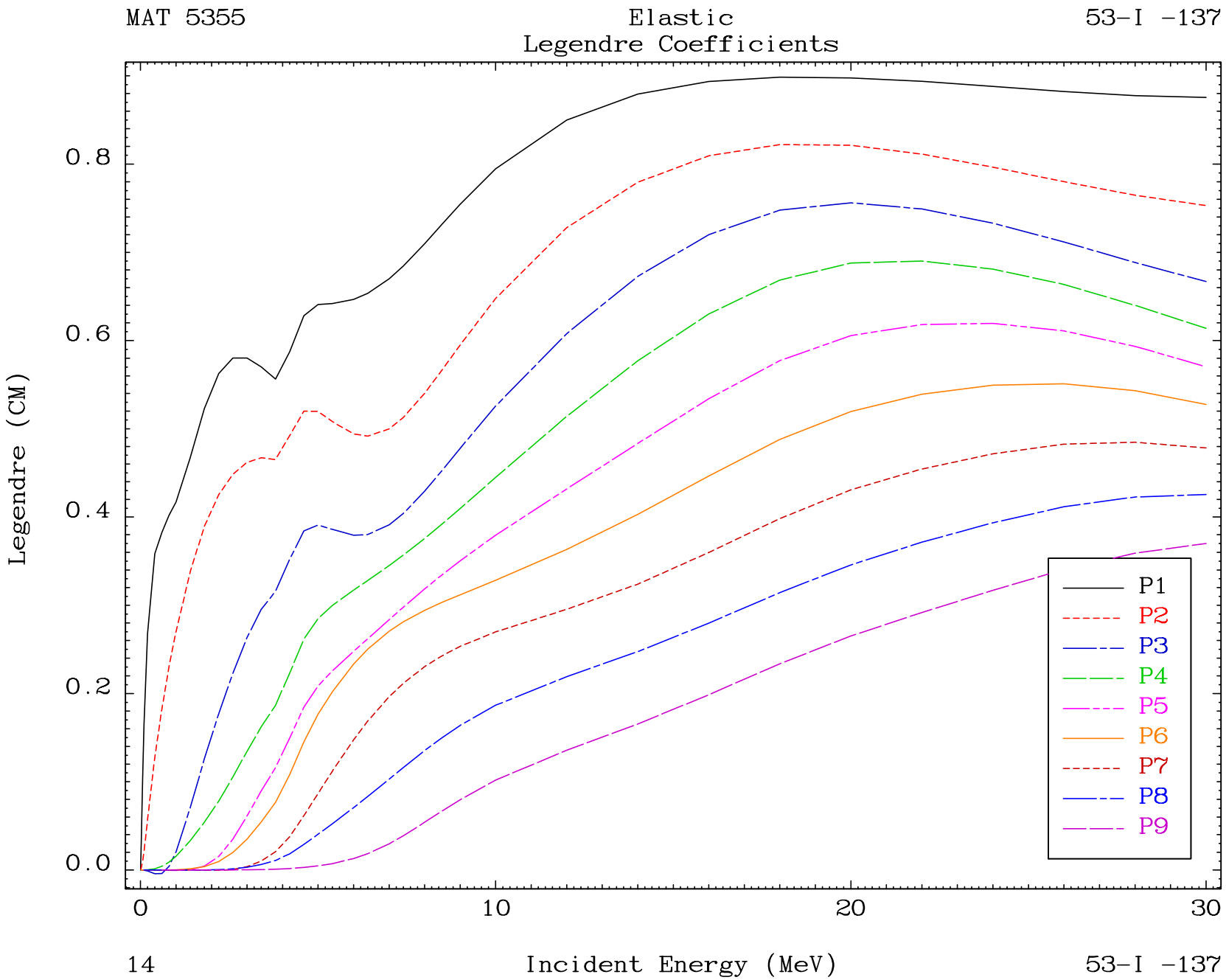

MAT 5355
(n,t) Levels
53-I -137
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^1
10^2
Incident Energy (MeV)
11
53-I -137

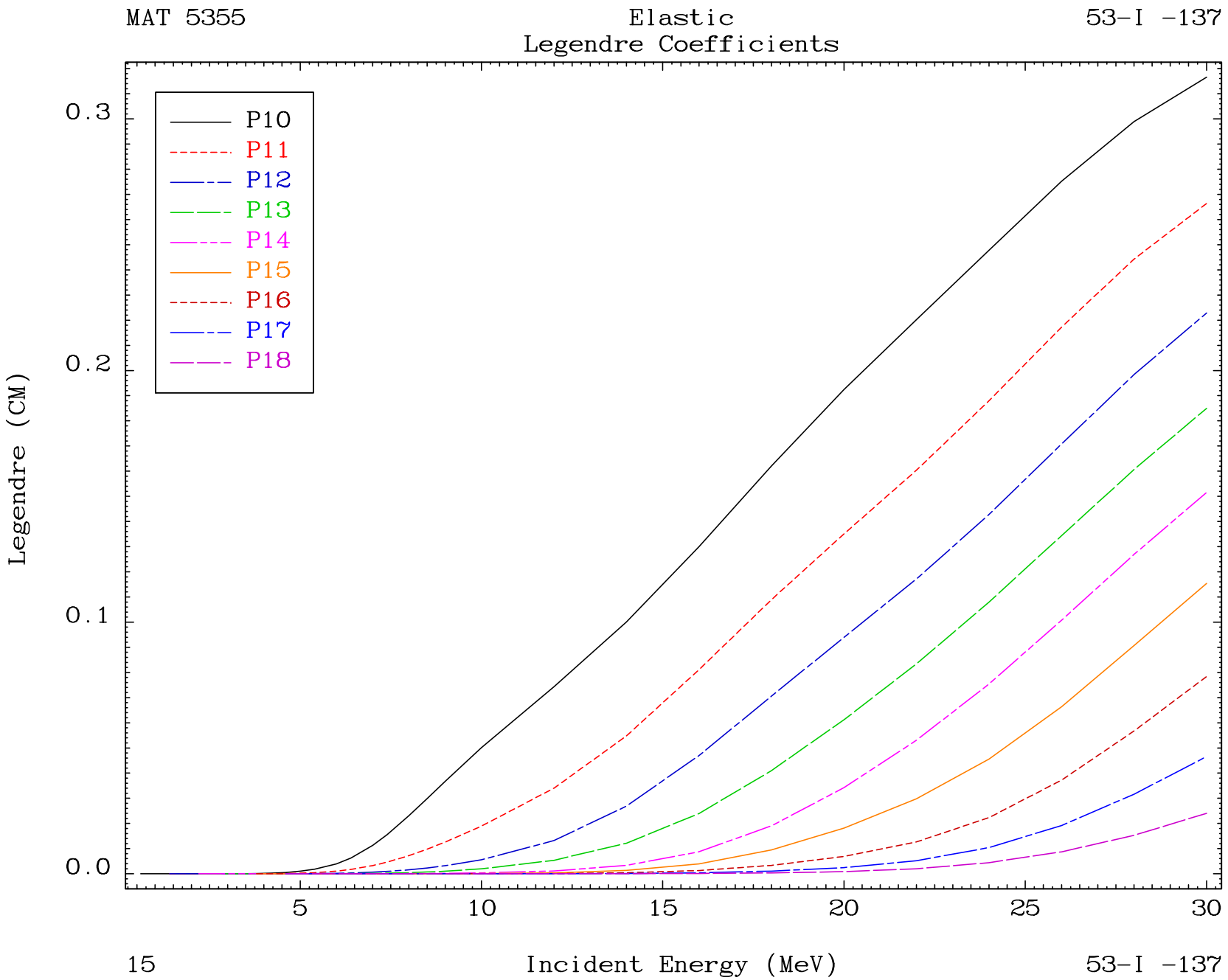
293 Kelvin Cross Sections

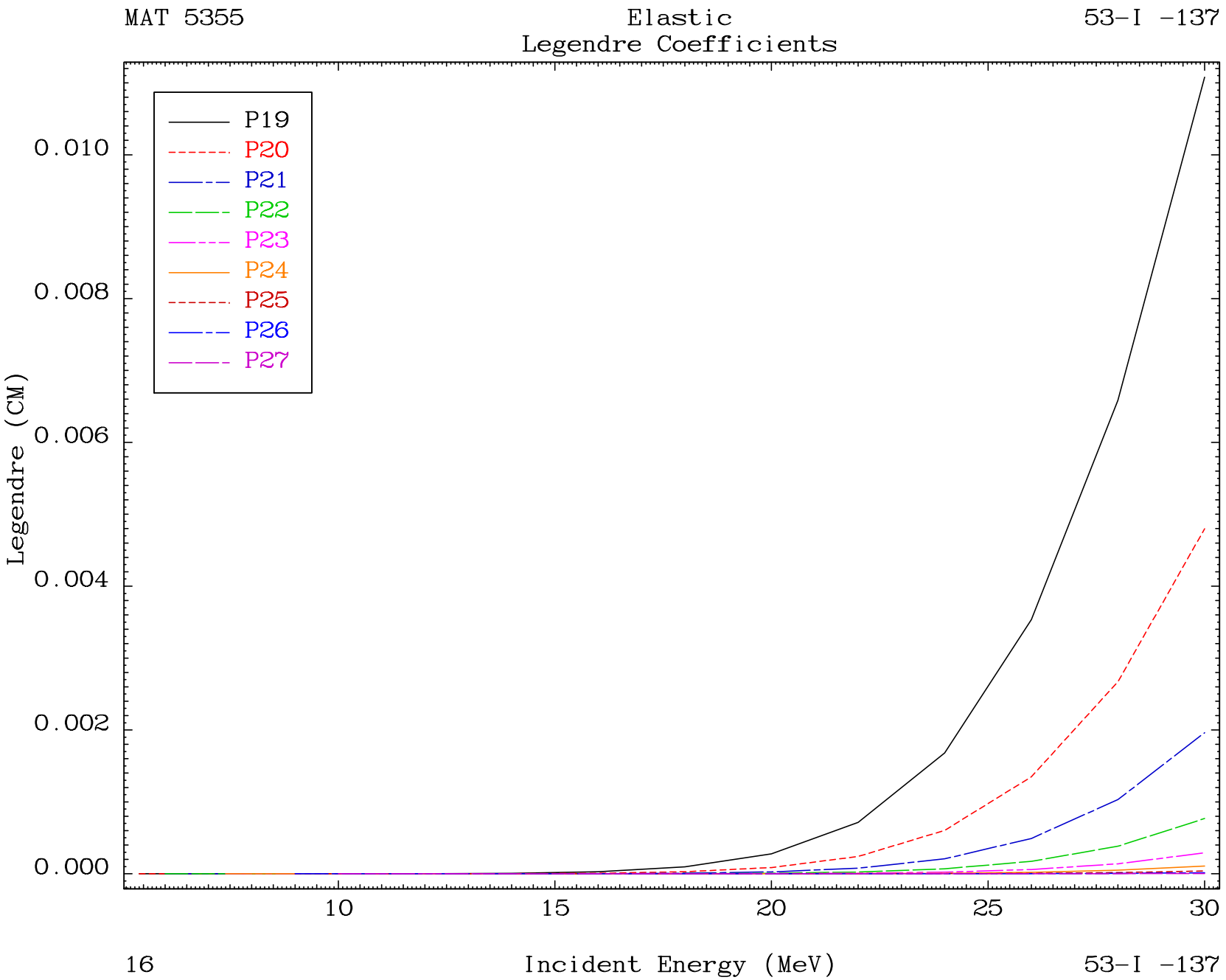


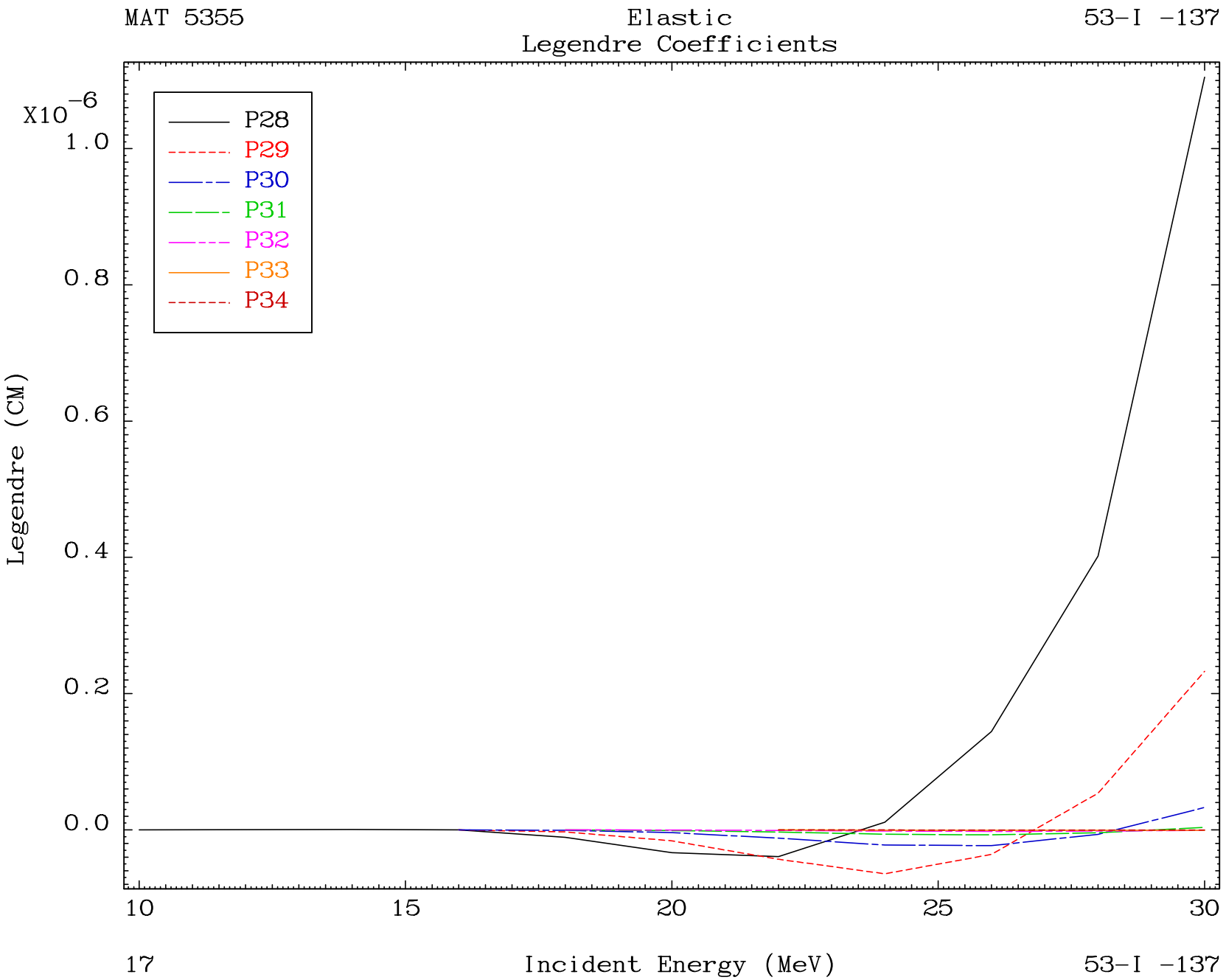
293 Kelvin Cross Sections

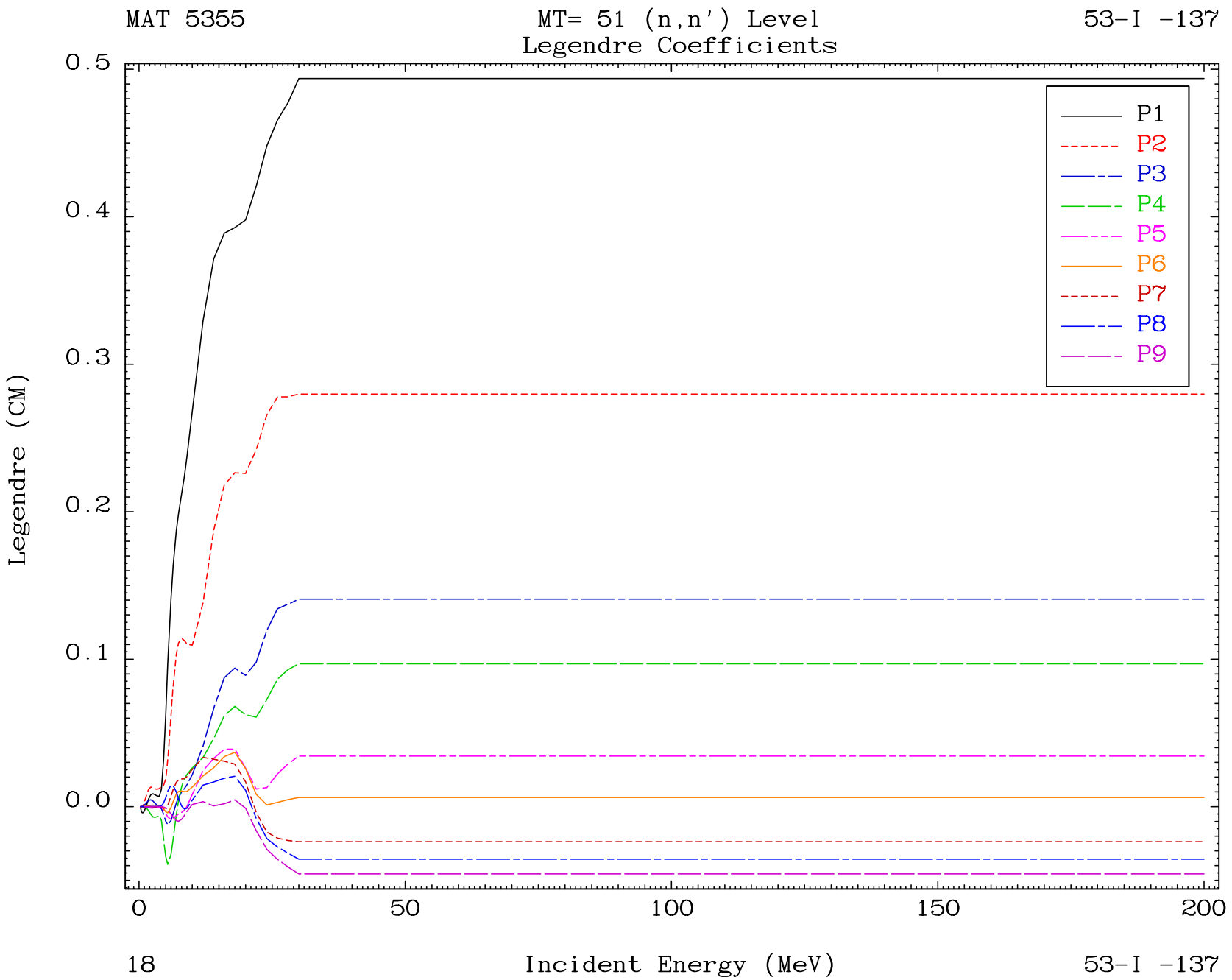


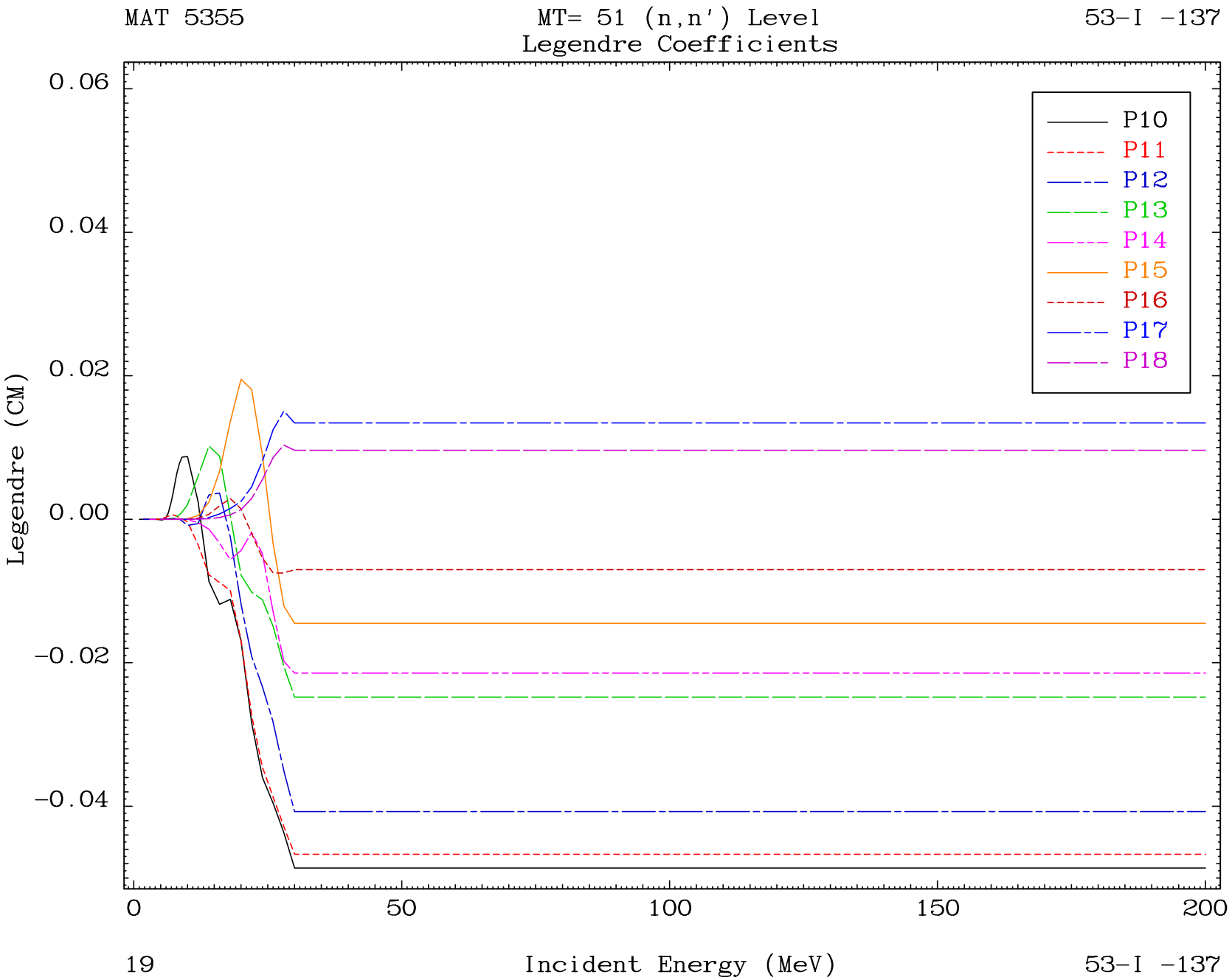

MAT 5355
Elastic
Legendre Coefficients
53-I -137
Legendre (CM)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
14
Incident Energy (MeV)
53-I -137
P1
P2
P3
P4
P5
P6
P7
P8
P9

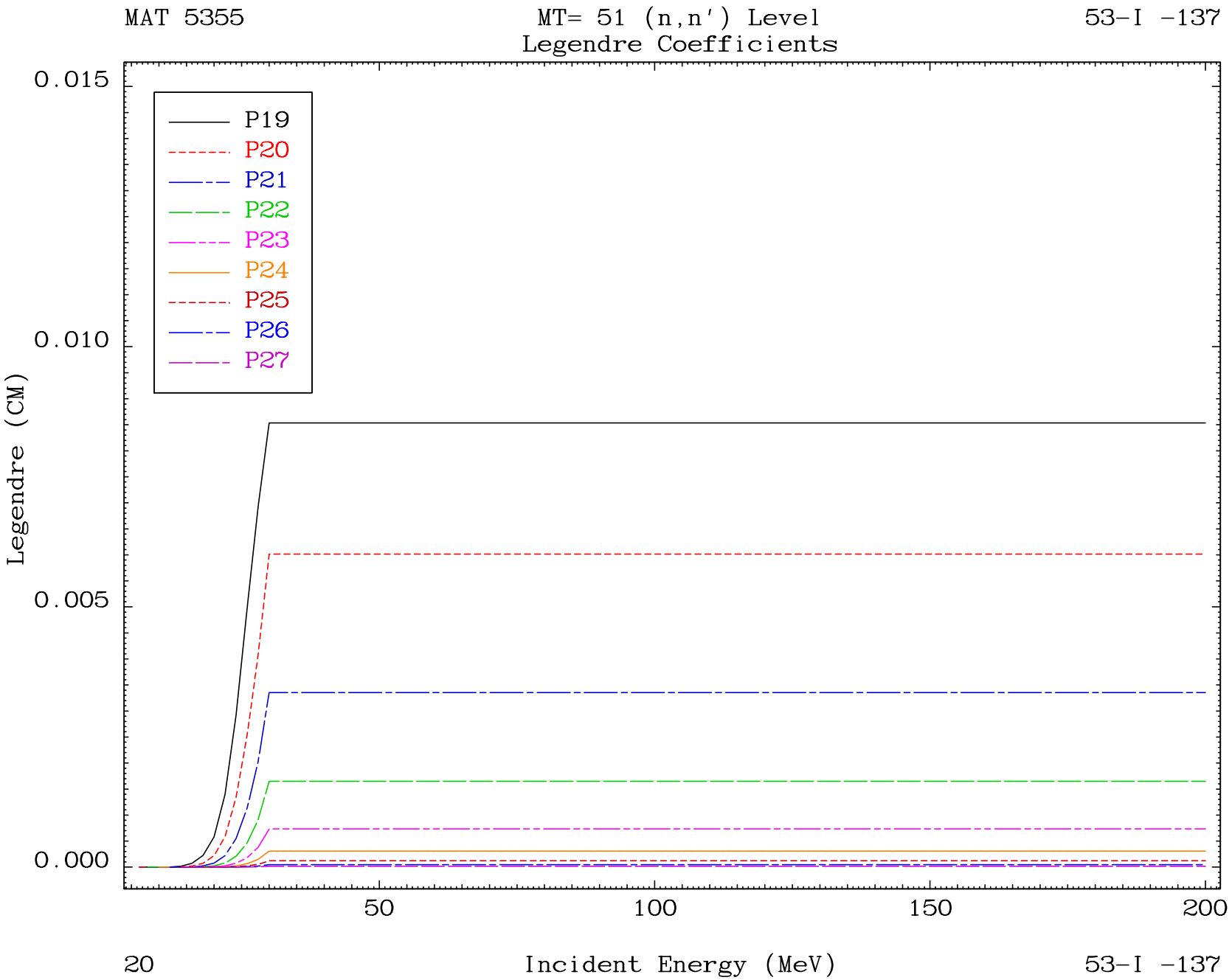

MAT 5355
Elastic
Legendre Coefficients
53-I -137
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.3
0.2
0.1
0.0
Legendre (CM)
5
10
15
20
25
30
15
Incident Energy (MeV)
53-I -137

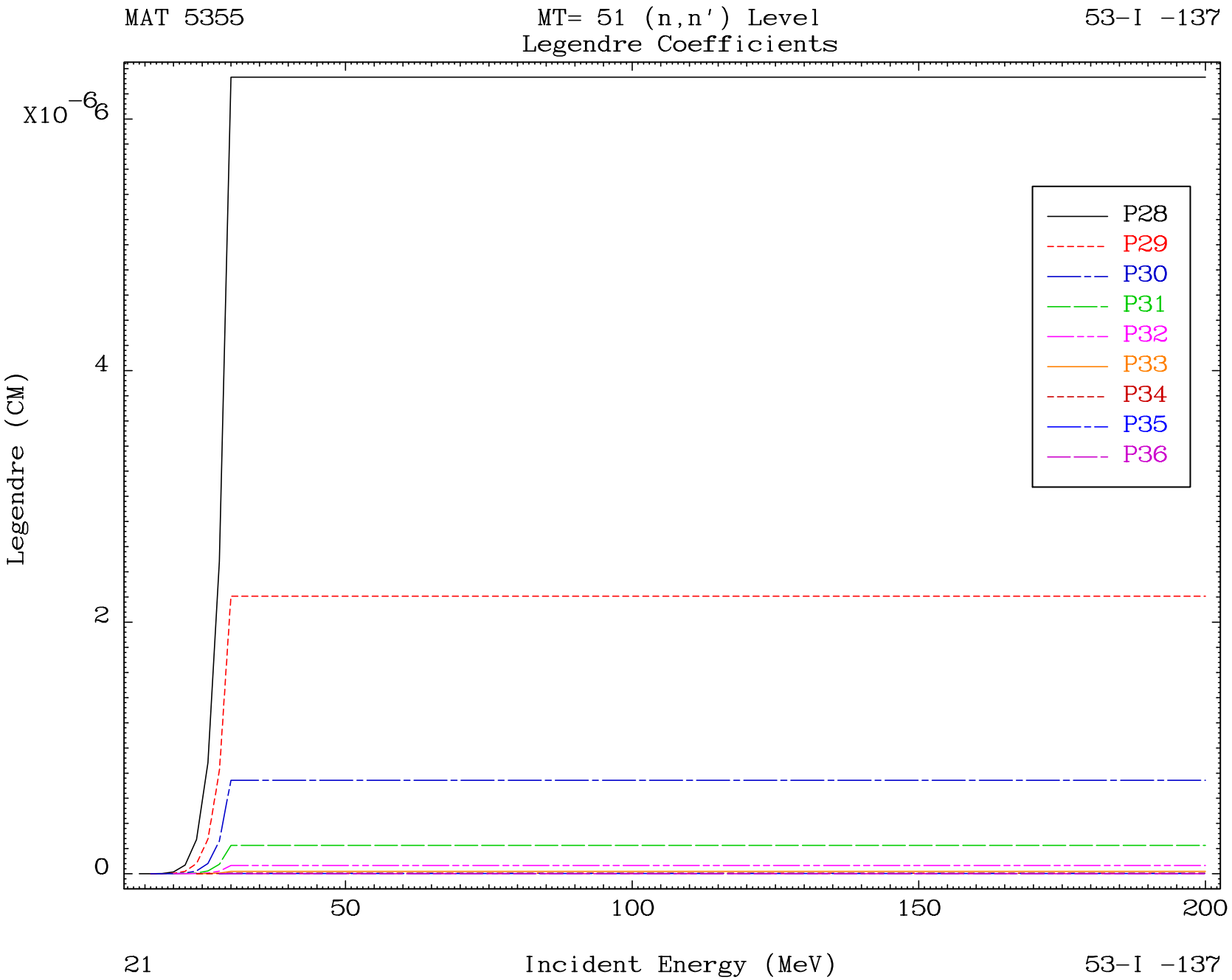

MAT 5355
Elastic
Legendre Coefficients
53-I -137
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.010
0.008
0.006
0.004
0.002
0.000
Legendre (CM)
10
15
20
25
30
16
Incident Energy (MeV)
53-I -137

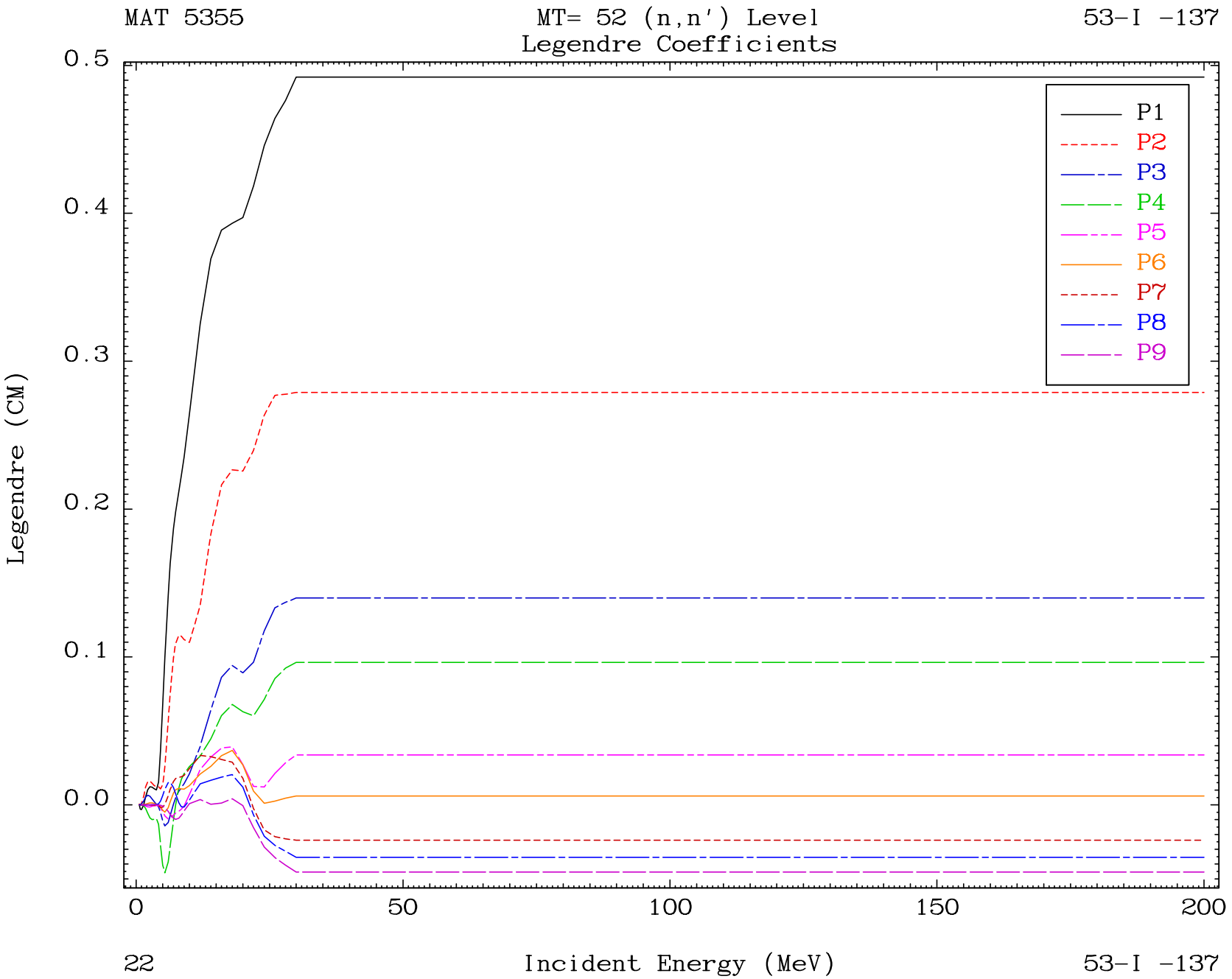

MAT 5355
Elastic
Legendre Coefficients
53-I -137
X10 −6
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
10
15
20
25
30
17
Incident Energy (MeV)
53-I -137


MAT 5355
MT= 51 (n,n') Level
Legendre Coefficients
53-I -137
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
18
Incident Energy (MeV)
53-I -137


MAT 5355
MT= 51 (n,n') Level
Legendre Coefficients
53-I -137
0.06
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
19
Incident Energy (MeV)
53-I -137


MAT 5355
MT= 51 (n,n') Level
Legendre Coefficients
53-I -137
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
20
Incident Energy (MeV)
53-I -137


MAT 5355
MT= 51 (n,n') Level
Legendre Coefficients
53-I -137
X10 -6
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
21
Incident Energy (MeV)
53-I -137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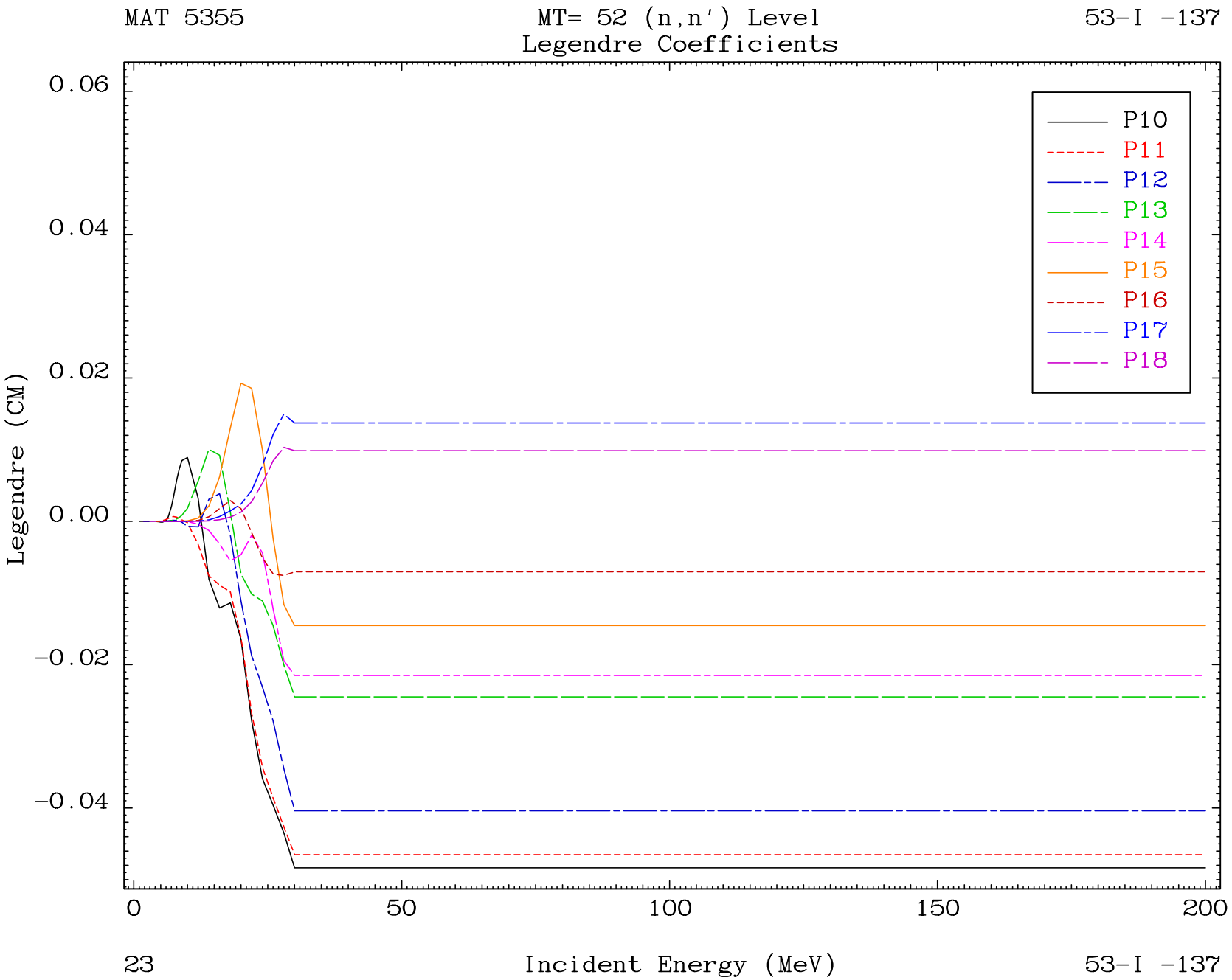
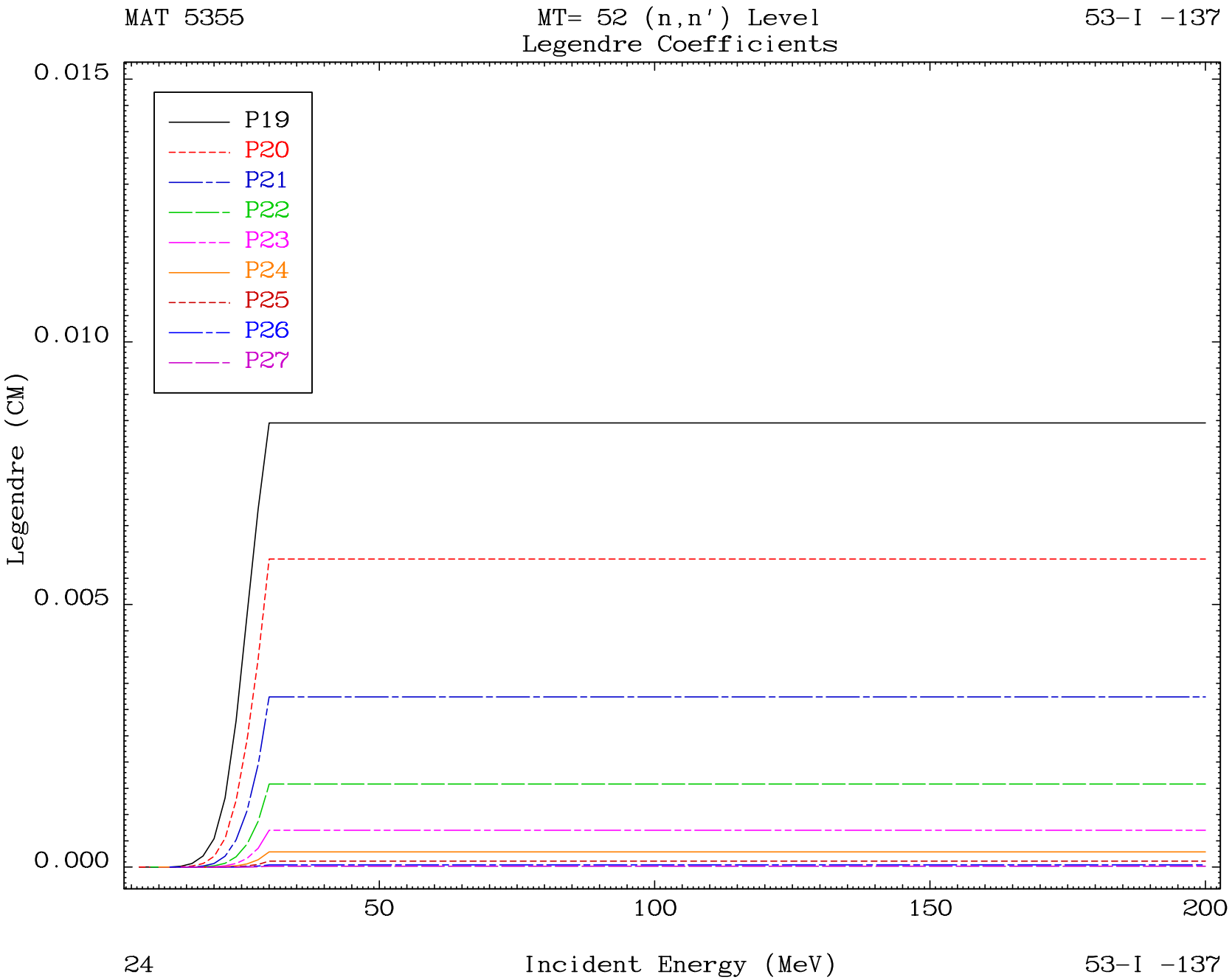
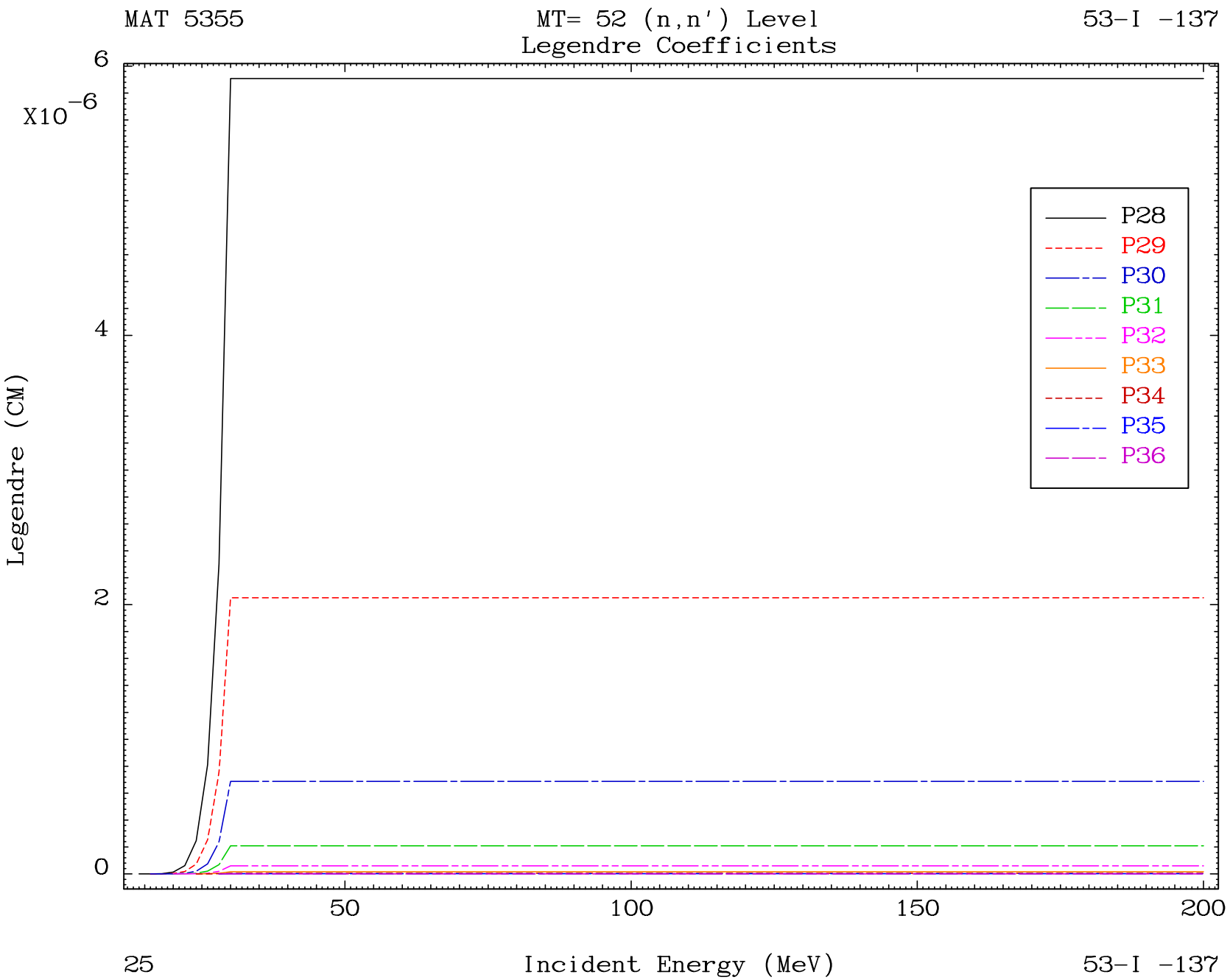
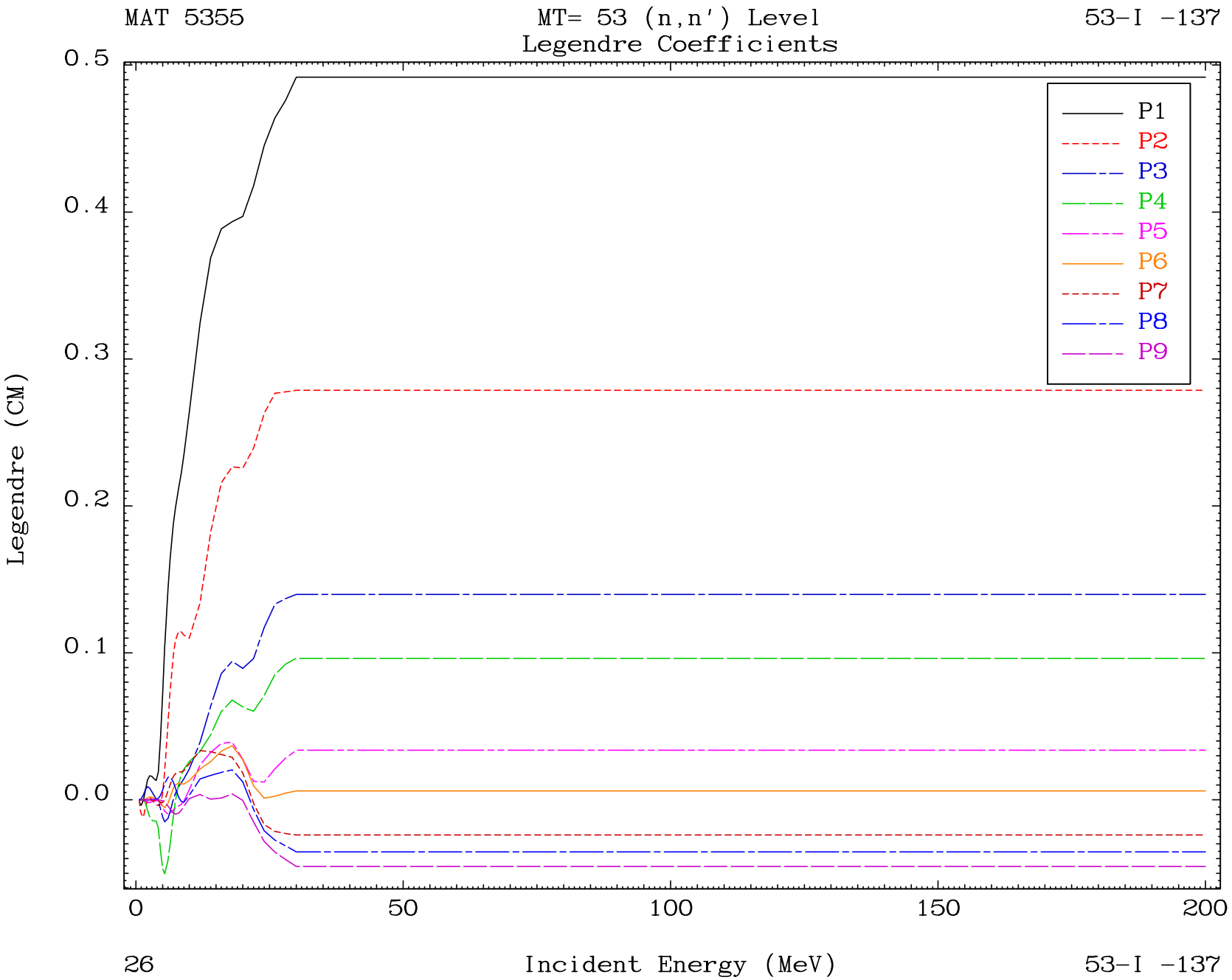
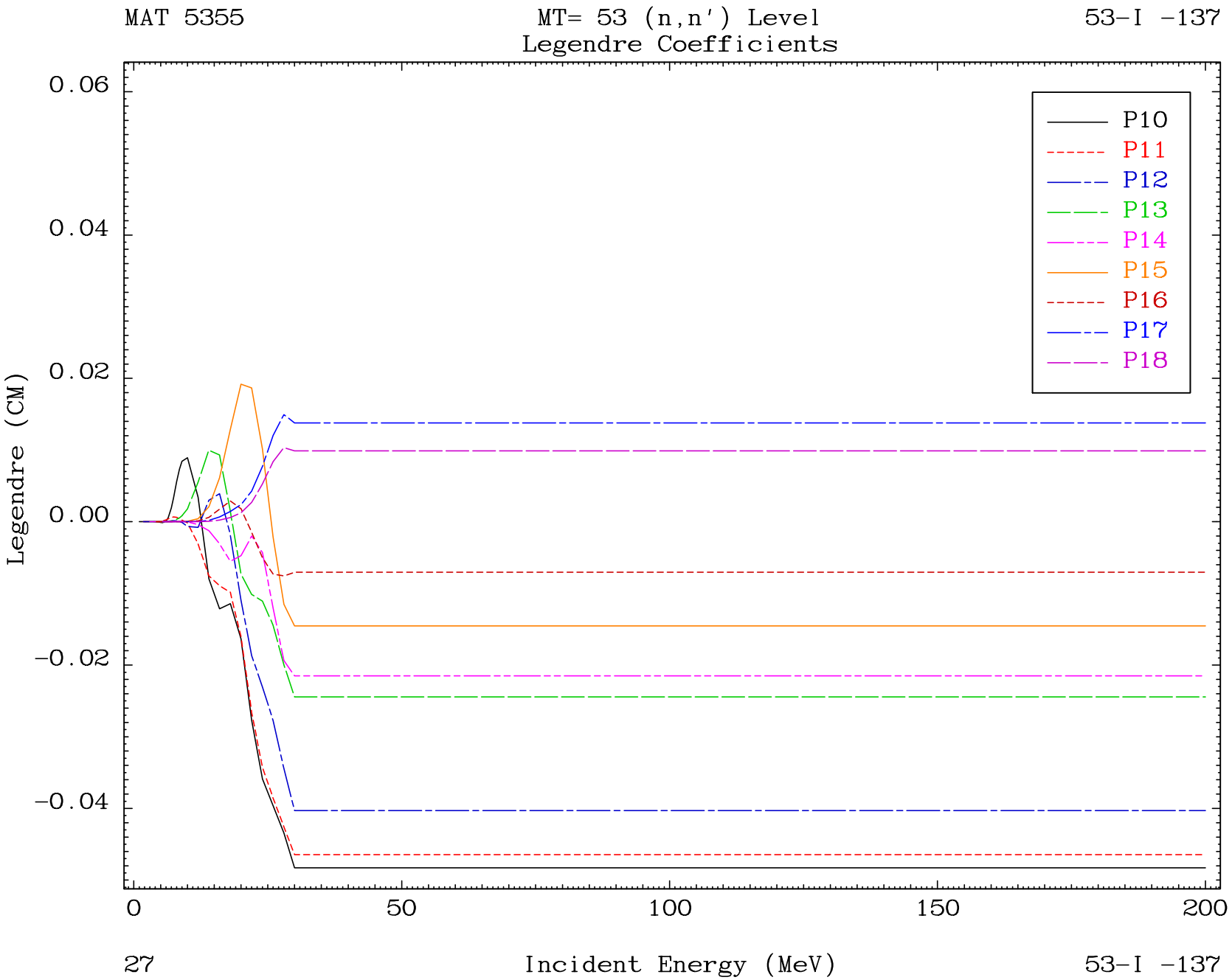
MT= 52 (n,n') Level
Legendre Coefficients
53-I -137
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
22
Incident Energy (MeV)
53-I -137

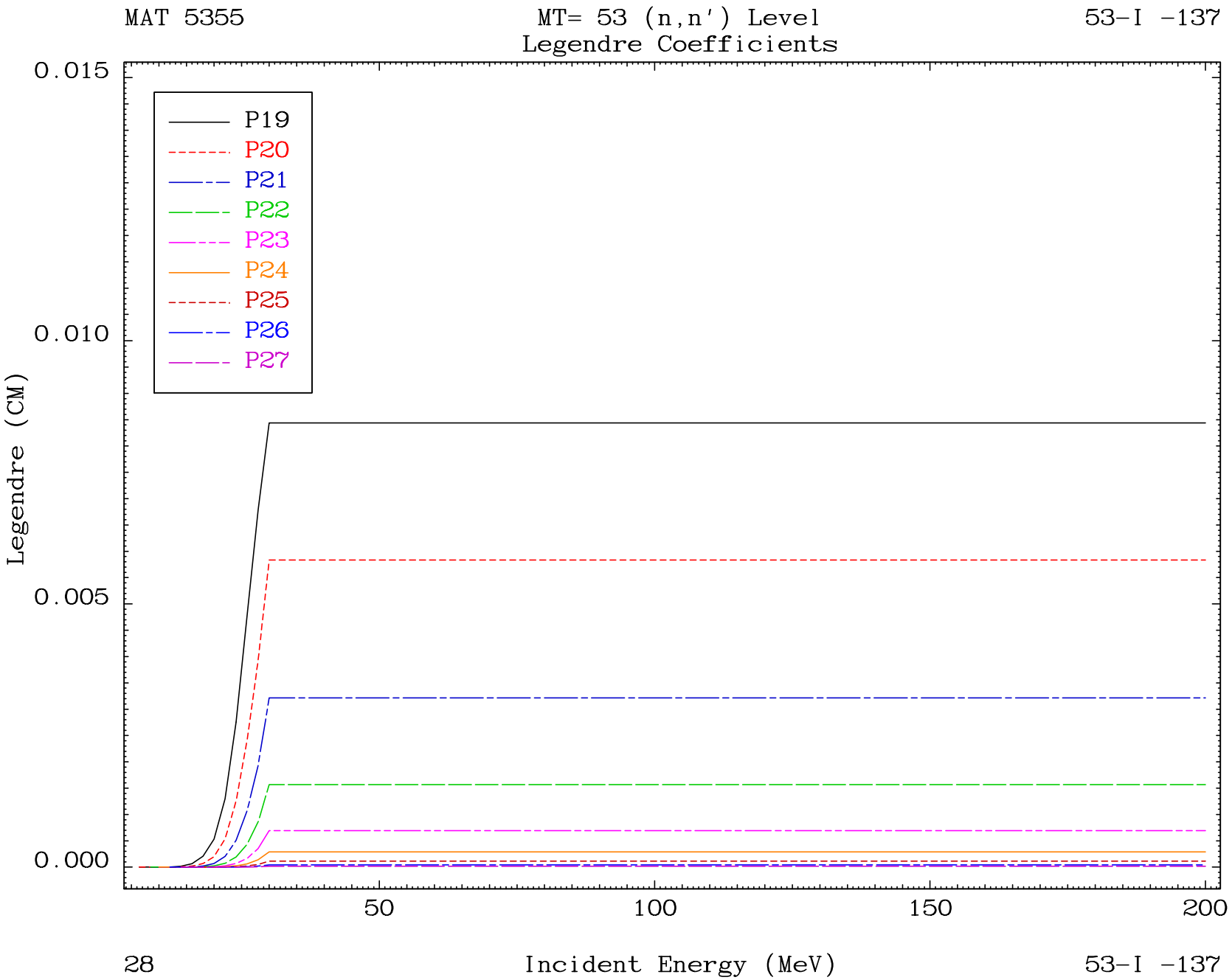

MAT 5355
MT= 52 (n,n') Level
Legendre Coefficients
53-I -137
0.06
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
23
Incident Energy (MeV)
53-I -137

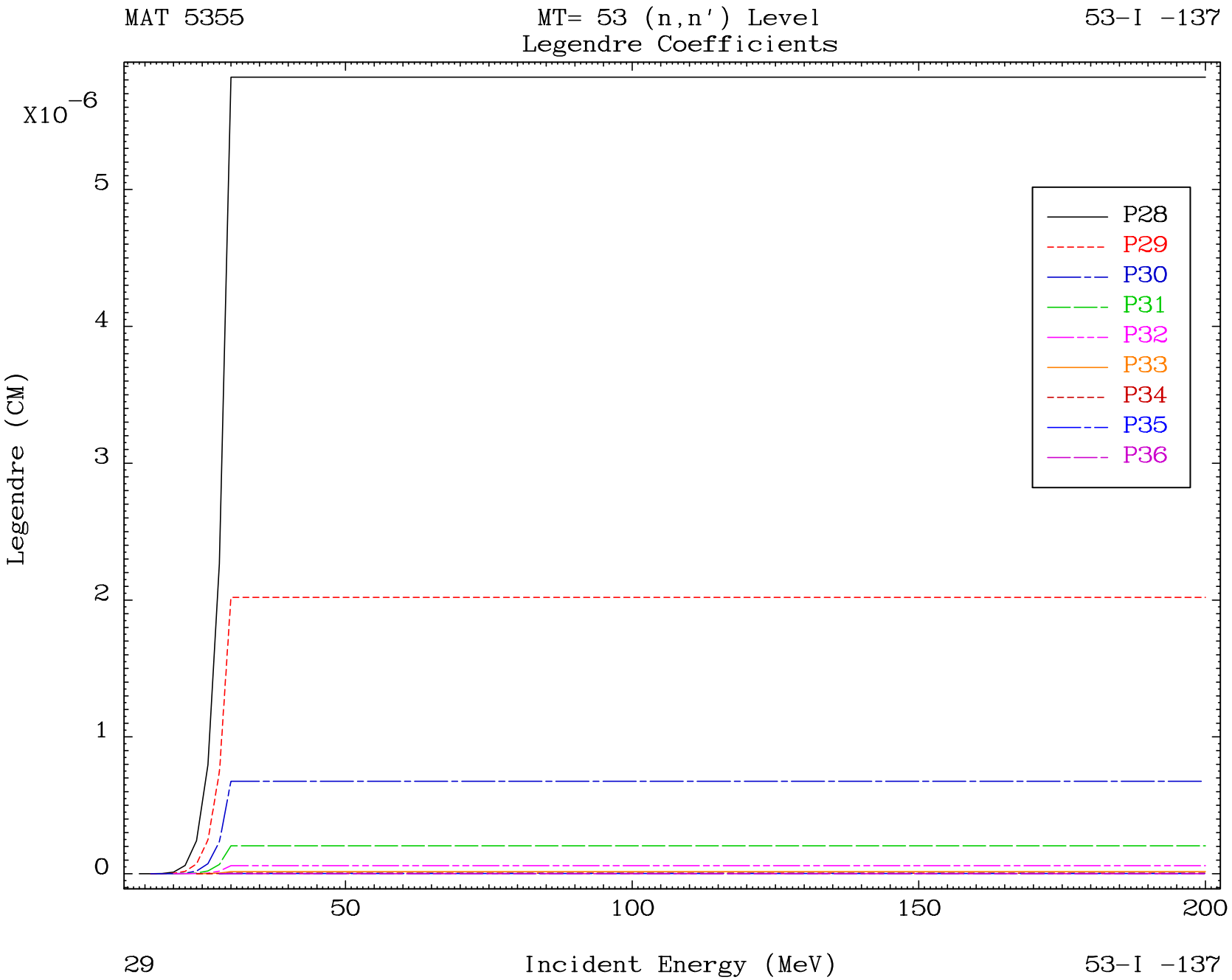

MAT 5355
MT= 52 (n,n') Level
Legendre Coefficients
53-I -137
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
24
Incident Energy (MeV)
53-I -137

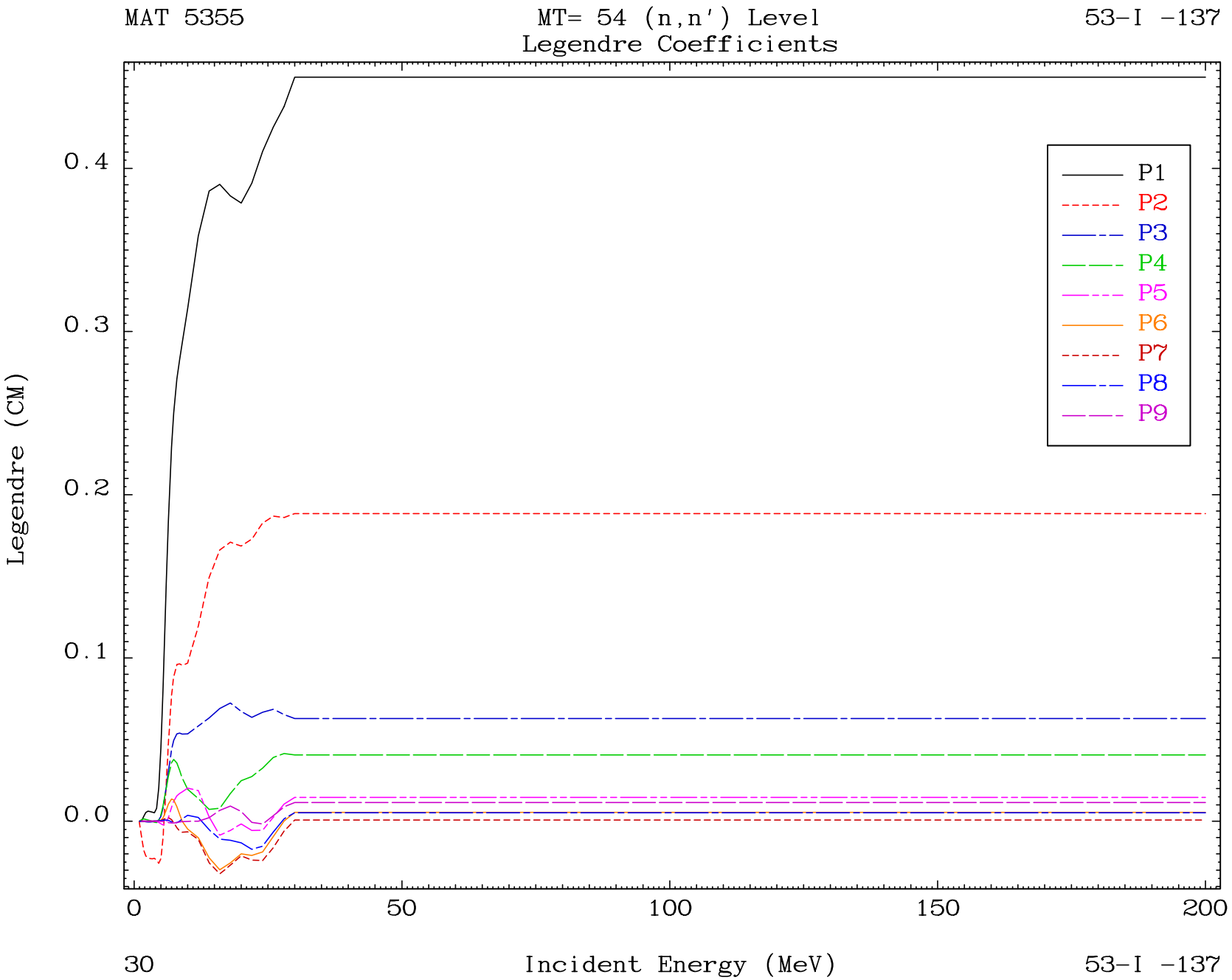

MAT 5355
MT= 52 (n,n') Level
Legendre Coefficients
53-I -137
X10^-6
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
25
50
100
150
200
Incident Energy (MeV)
53-I -137

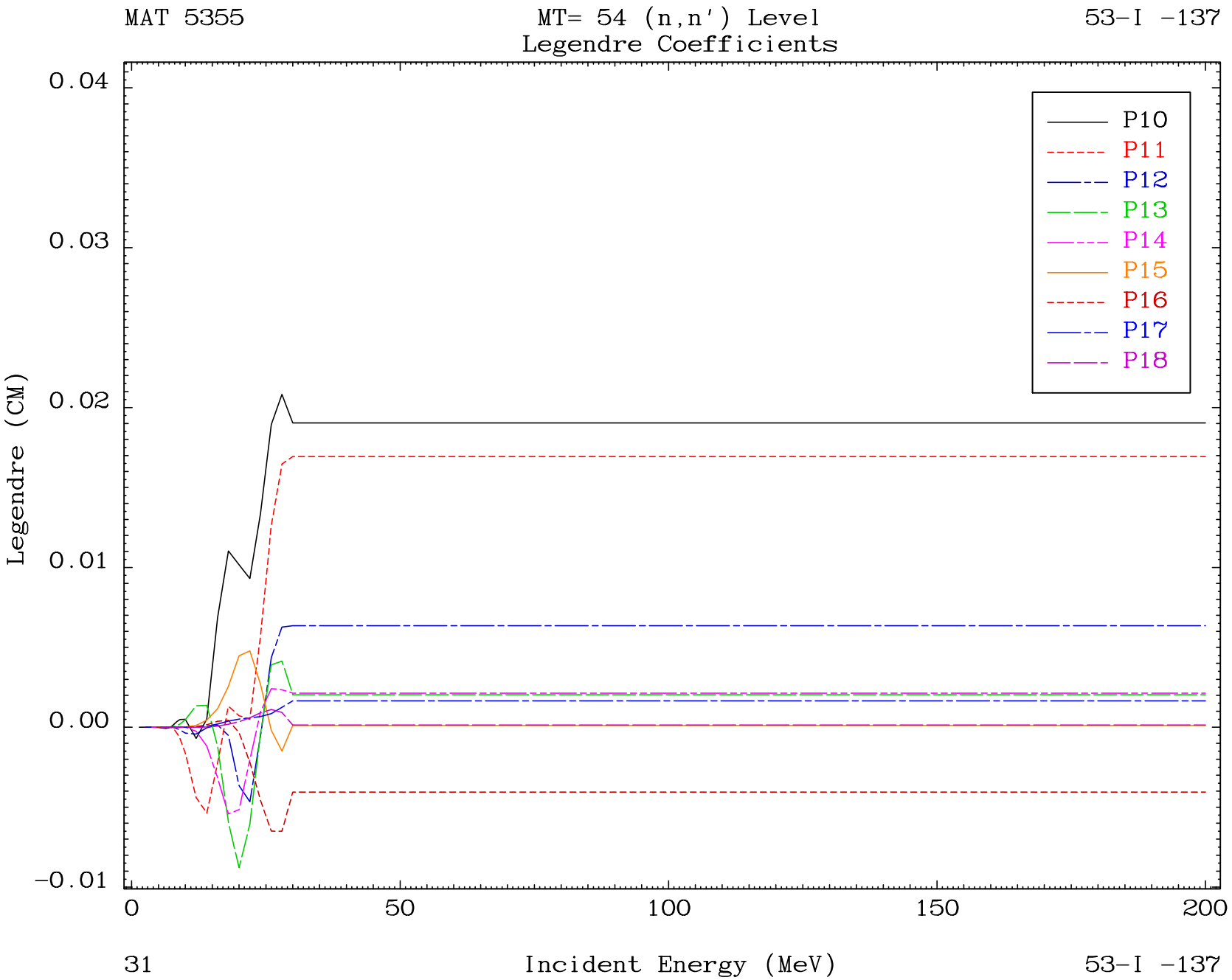

MAT 5355
MT= 53 (n,n') Level
Legendre Coefficients
53-I -137
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
26
Incident Energy (MeV)
53-I -137

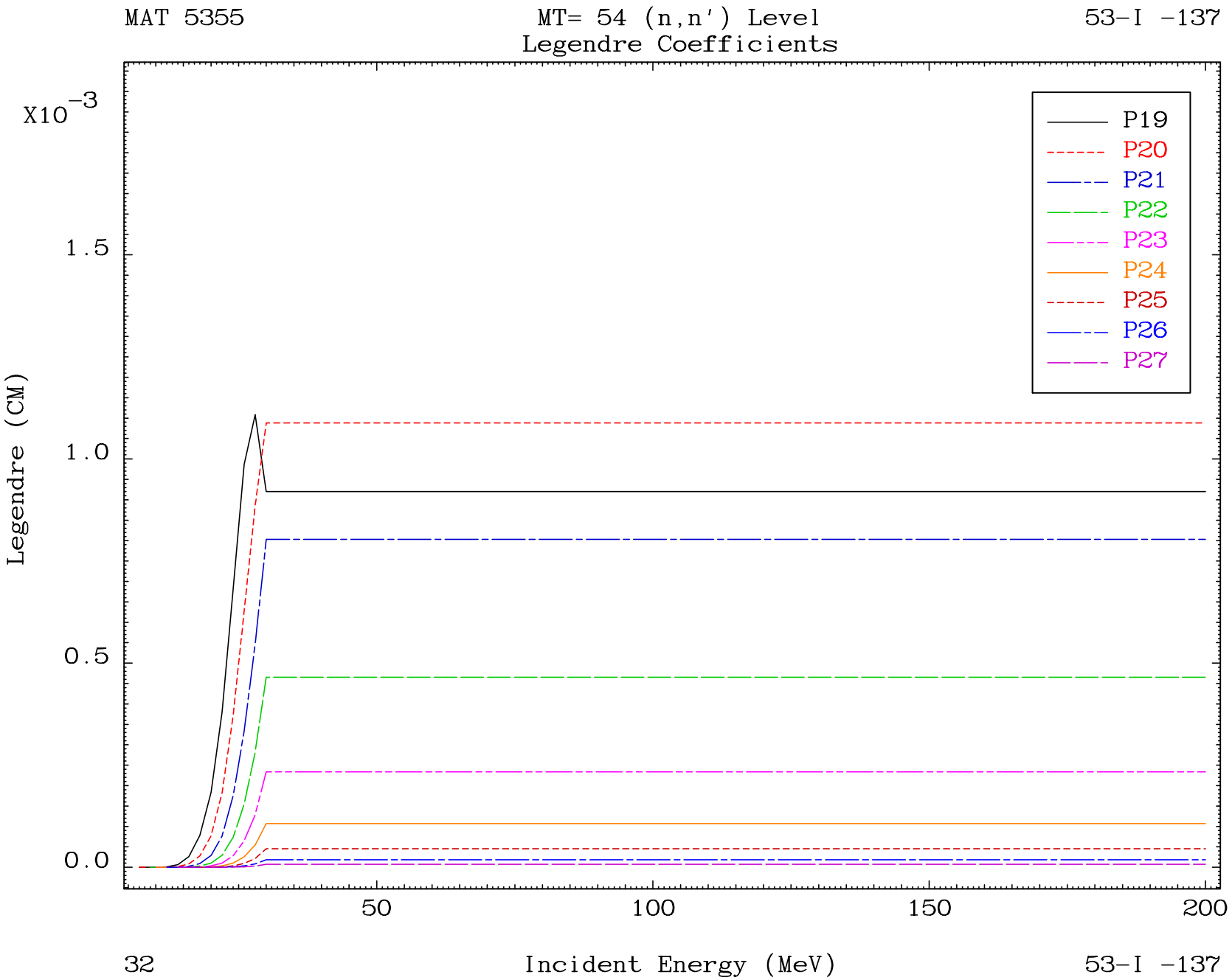

MAT 5355
MT= 53 (n,n') Level
Legendre Coefficients
53-I -137
0.06
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
27
Incident Energy (MeV)
53-I -137

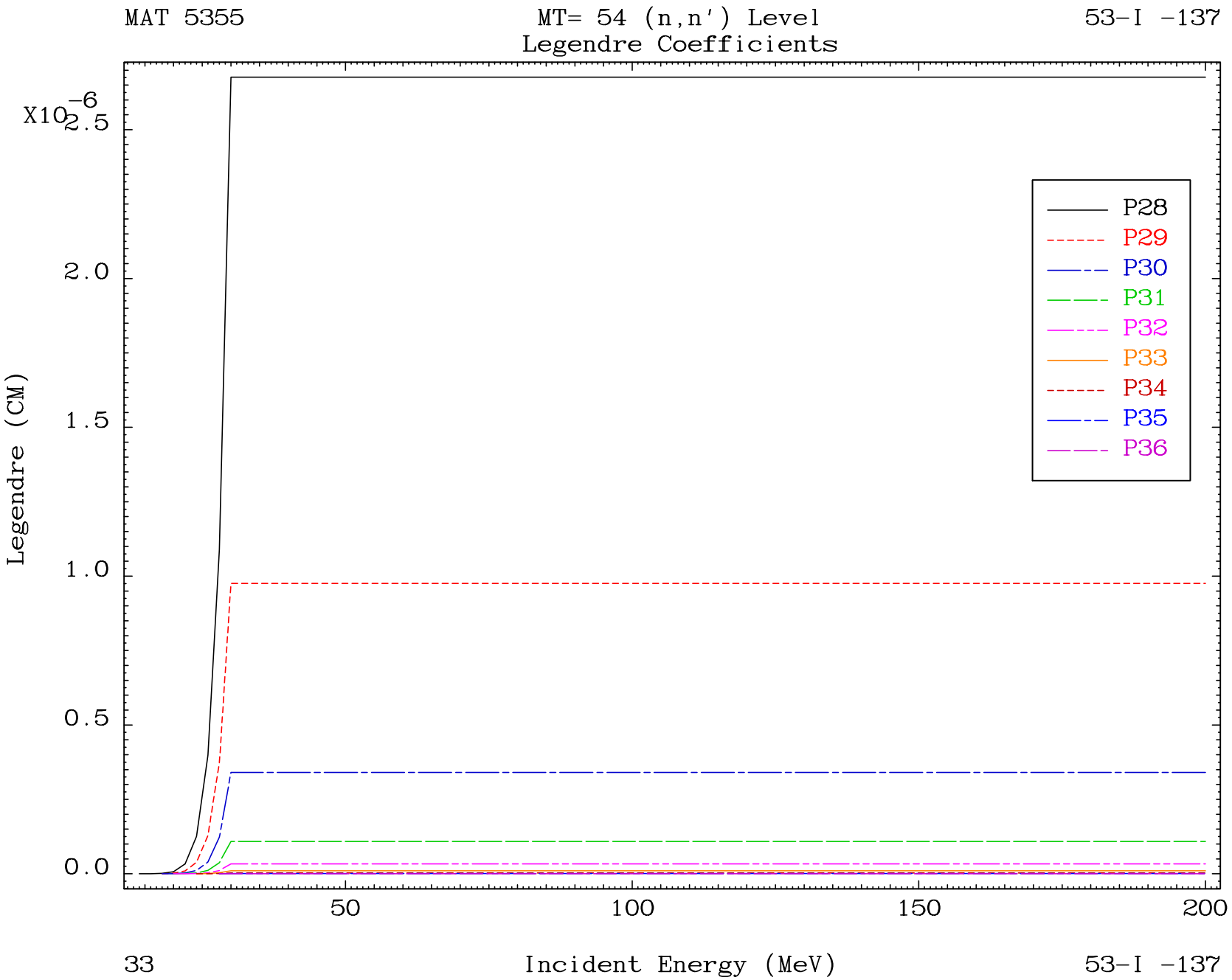

MAT 5355
MT= 53 (n,n') Level
Legendre Coefficients
53-I -137
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
28
Incident Energy (MeV)
53-I -137

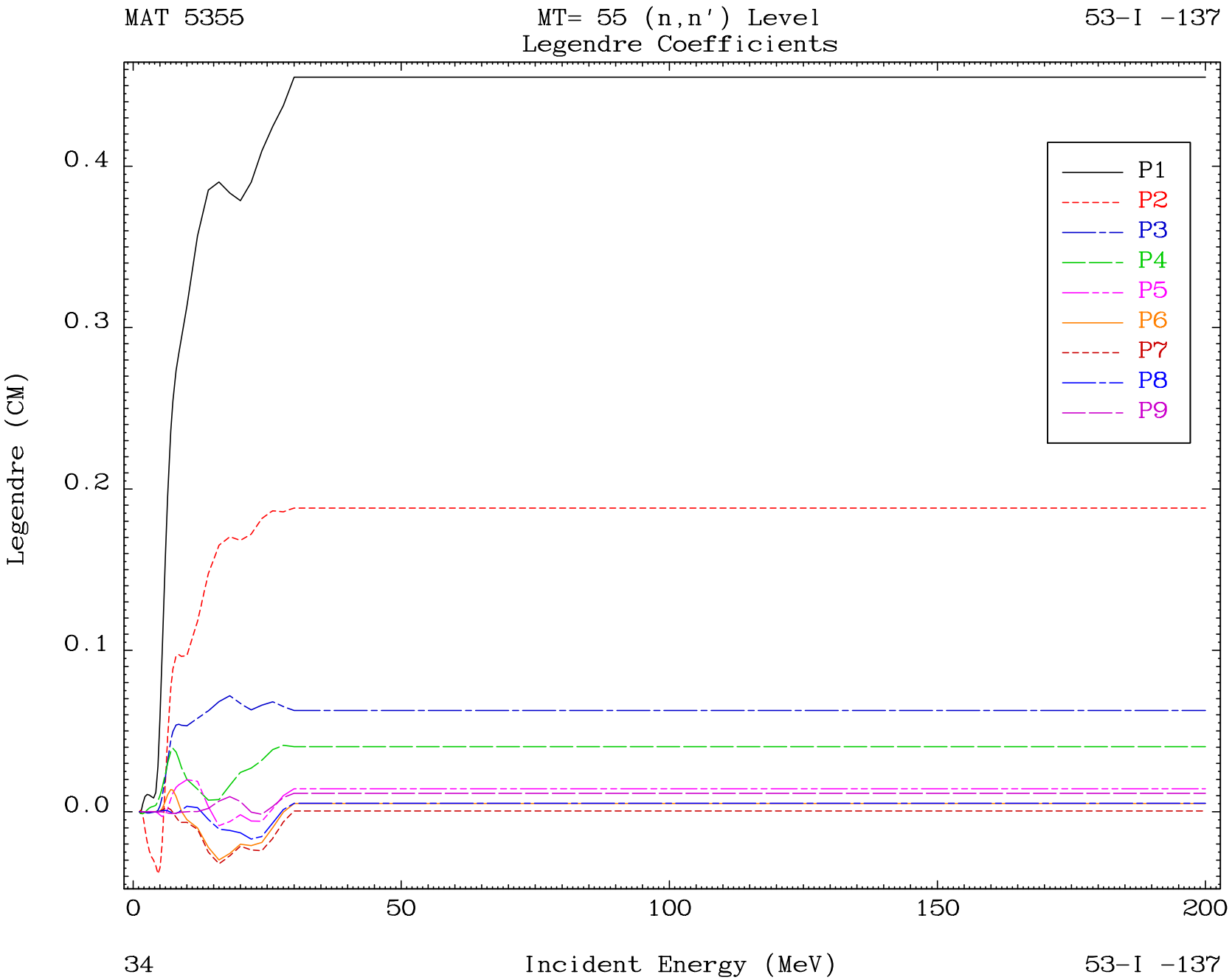

MAT 5355
MT= 53 (n,n') Level
Legendre Coefficients
53-I -137
X10 -6
5
4
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
29
Incident Energy (MeV)
53-I -137

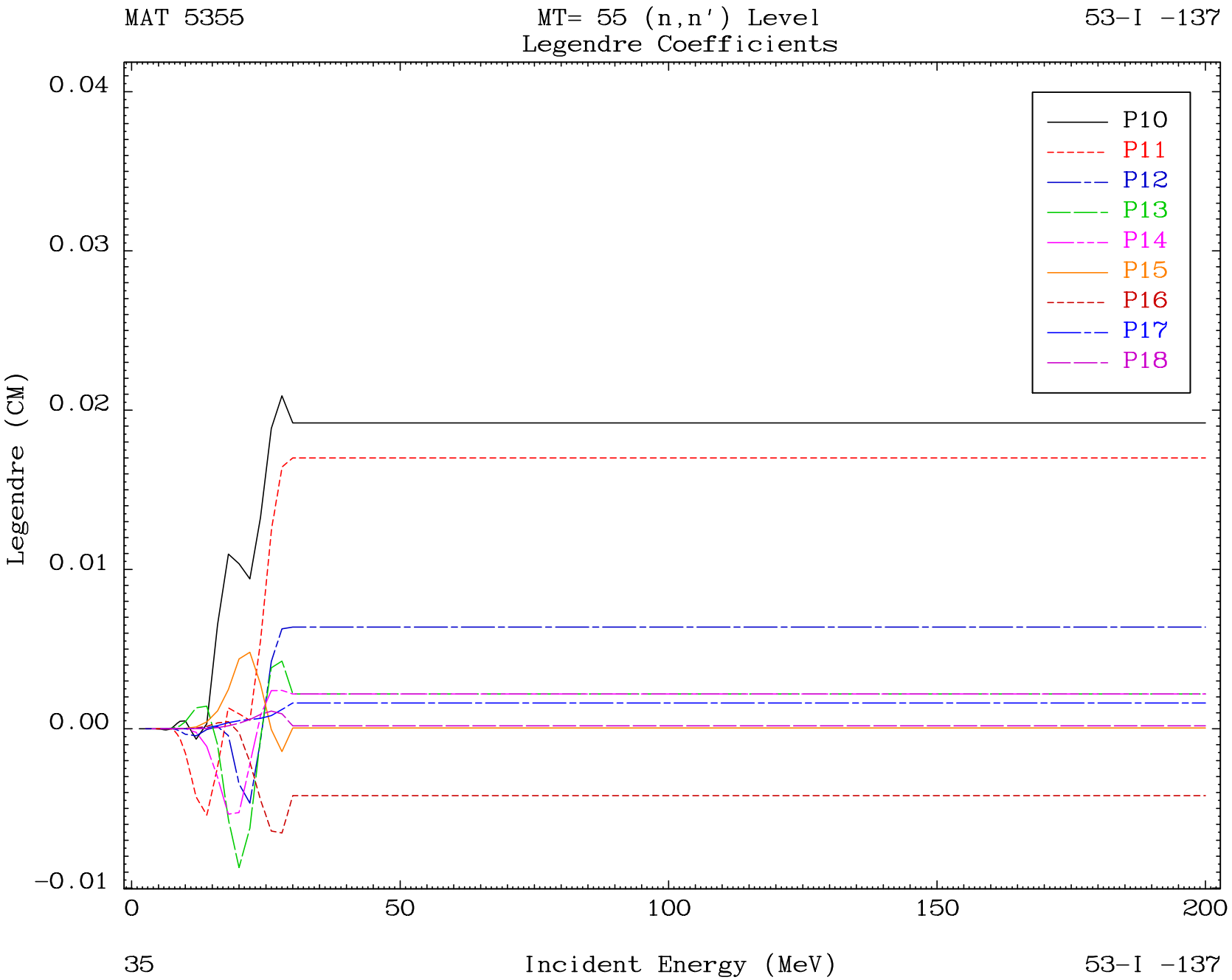

MAT 5355
MT= 54 (n,n') Level
Legendre Coefficients
53-I -137
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
30
Incident Energy (MeV)
53-I -137

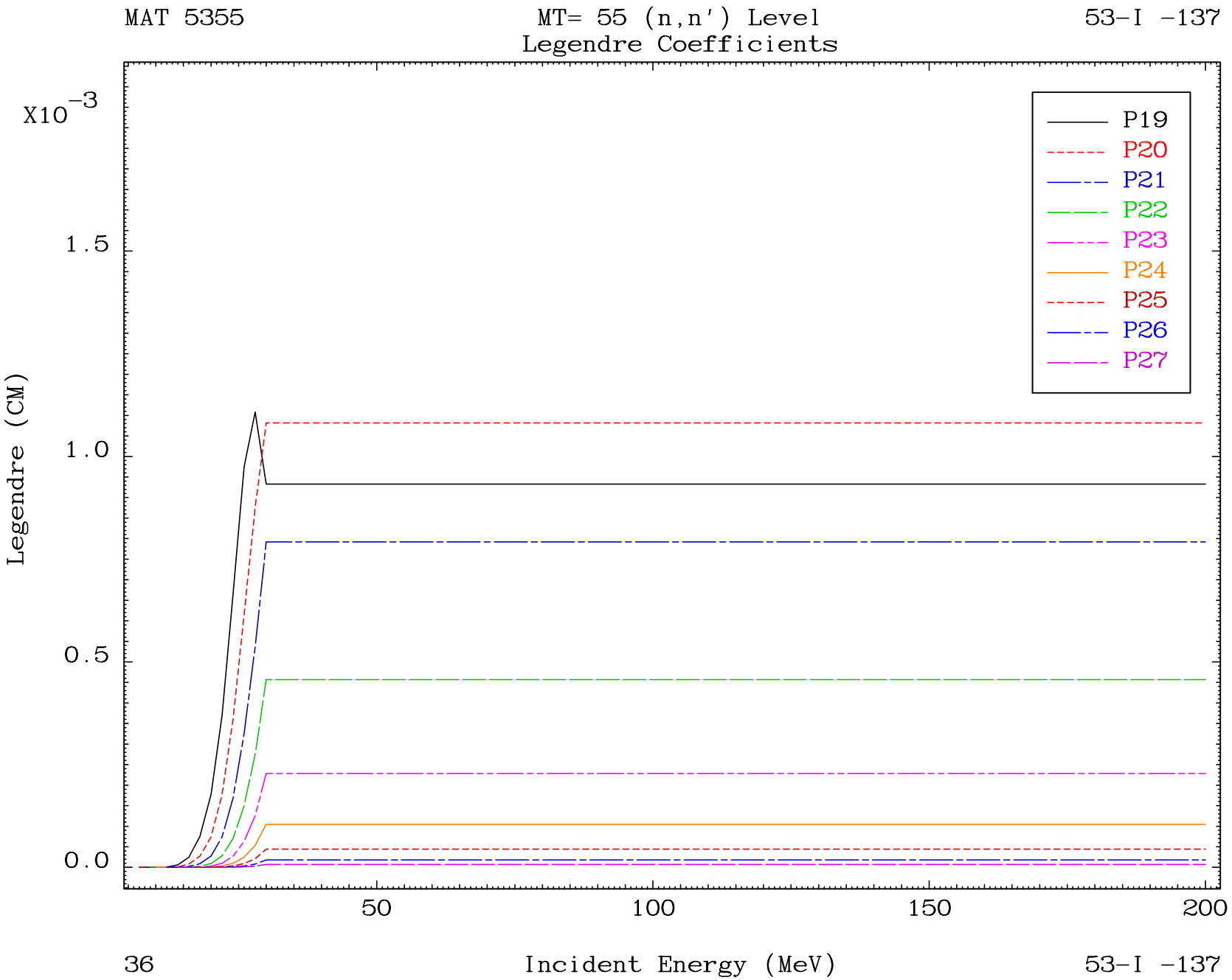

MAT 5355
MT= 54 (n,n') Level
Legendre Coefficients
53-I -137
0.04
0.03
0.02
0.01
0.00
-0.01
Legendre (CM)
0
50
100
150
200
31
Incident Energy (MeV)
53-I -137
P10
P11
P12
P13
P14
P15
P16
P17
P18

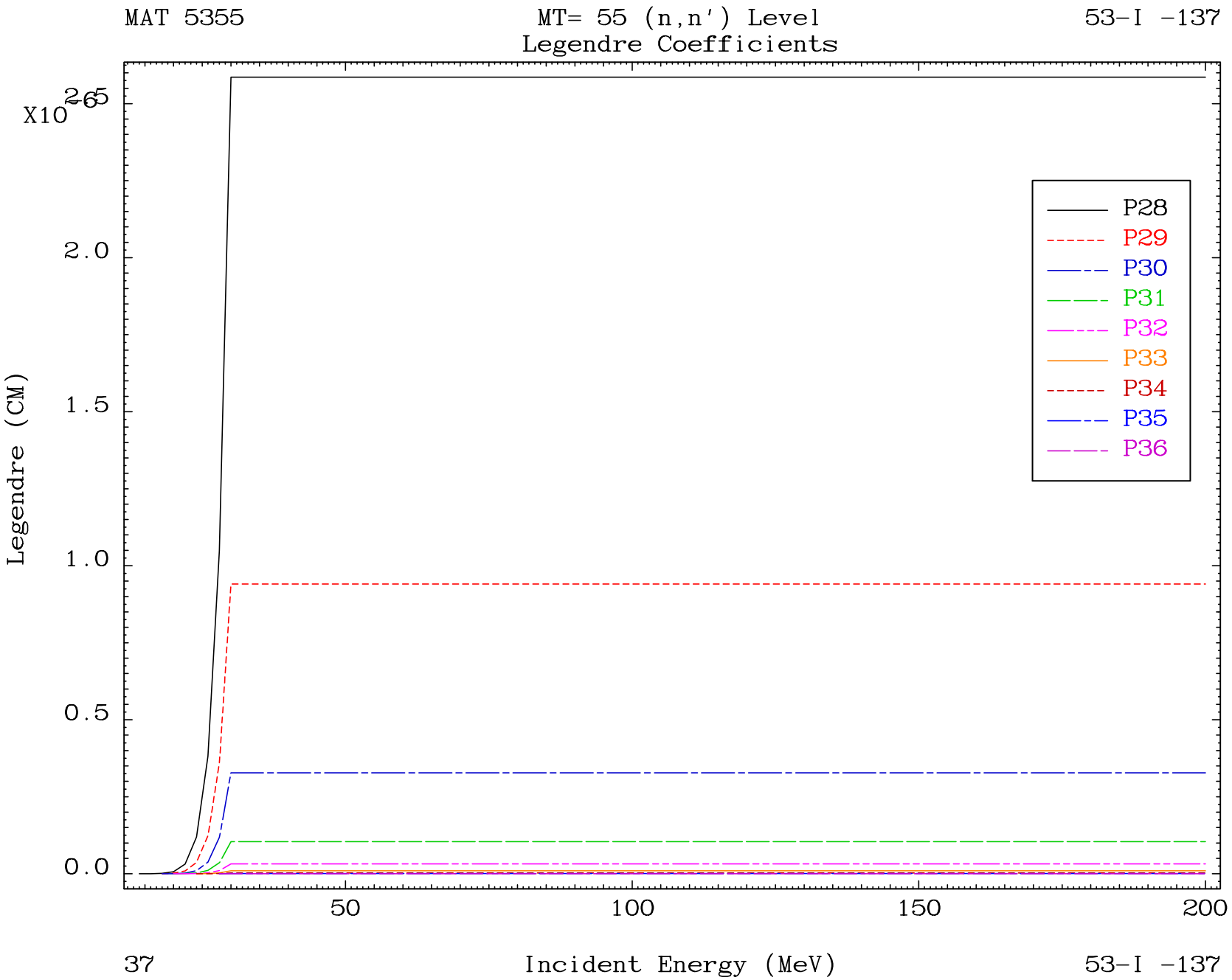

MAT 5355
MT= 54 (n,n') Level
Legendre Coefficients
53-I -137
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
32
Incident Energy (MeV)
53-I -137

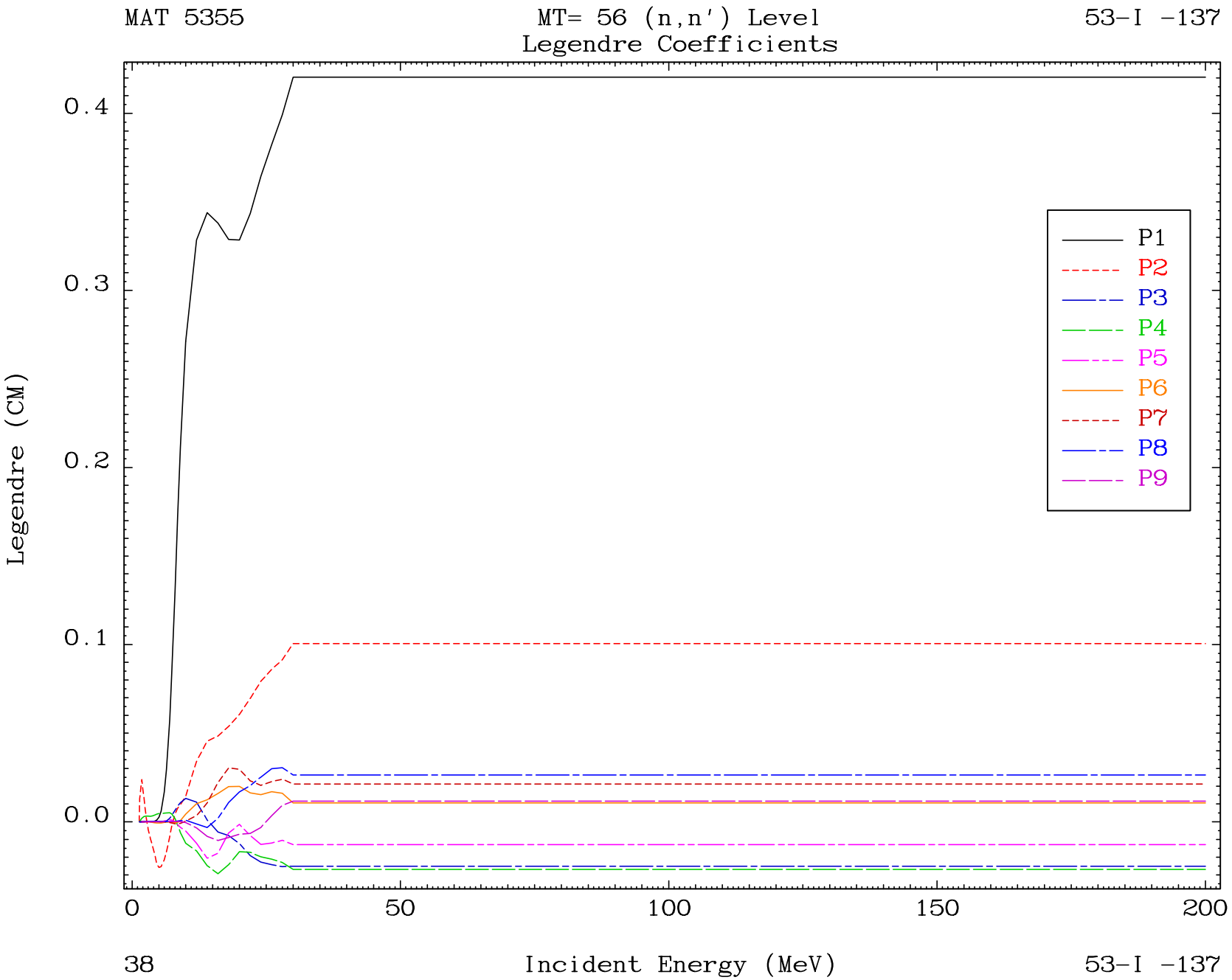

MAT 5355
MT= 54 (n,n') Level
Legendre Coefficients
53-I -137
X10-6
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
33
Incident Energy (MeV)
53-I -137
P28
P29
P30
P31
P32
P33
P34
P35
P36

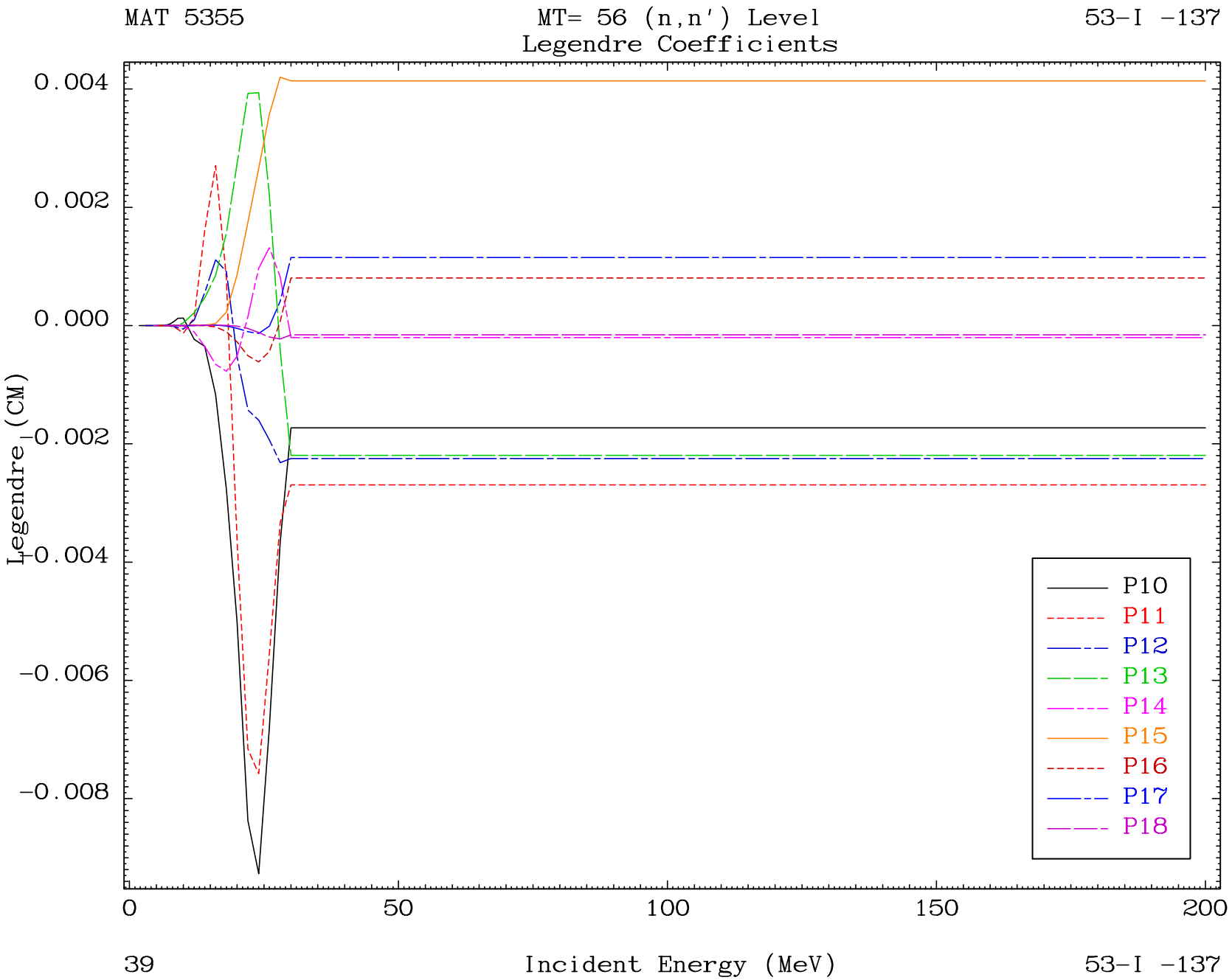

MAT 5355
MT= 55 (n,n') Level
Legendre Coefficients
53-I -137
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
34
Incident Energy (MeV)
53-I -137

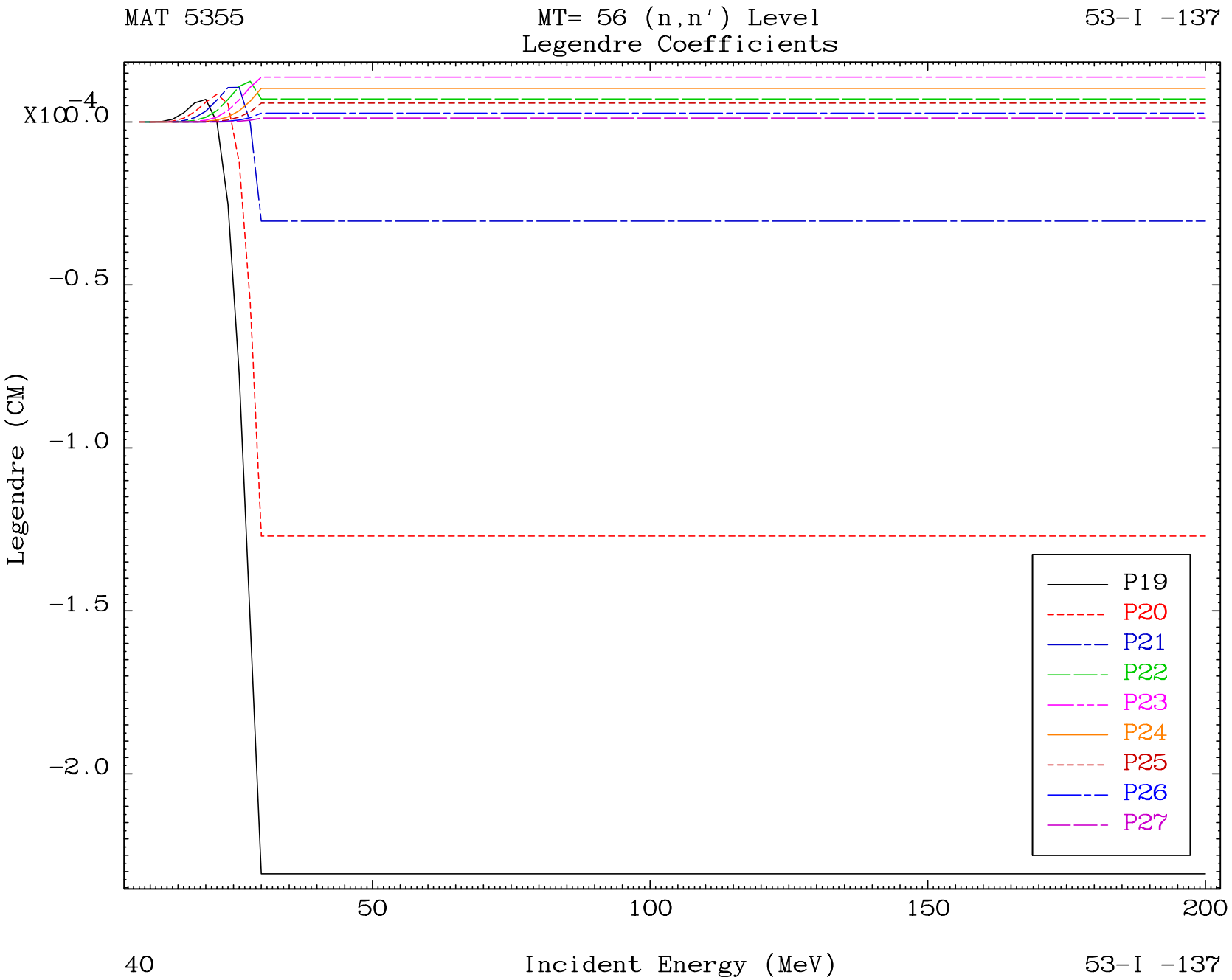

MAT 5355
MT= 55 (n,n') Level
Legendre Coefficients
53-I -137
0.04
0.03
0.02
0.01
0.00
-0.01
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
35
Incident Energy (MeV)
53-I -137

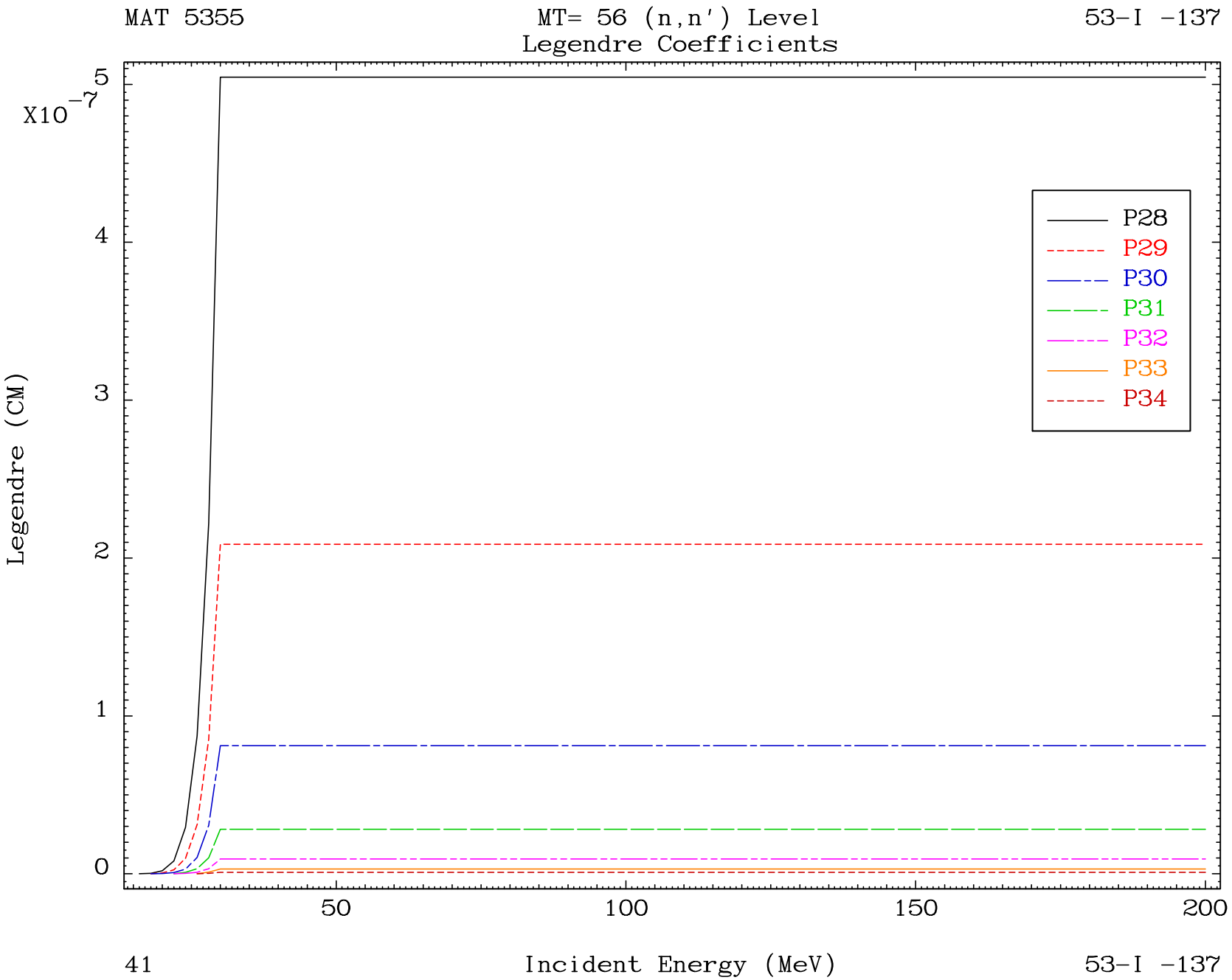

MAT 5355
MT= 55 (n,n') Level
Legendre Coefficients
53-I -137
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
36
Incident Energy (MeV)
53-I -137

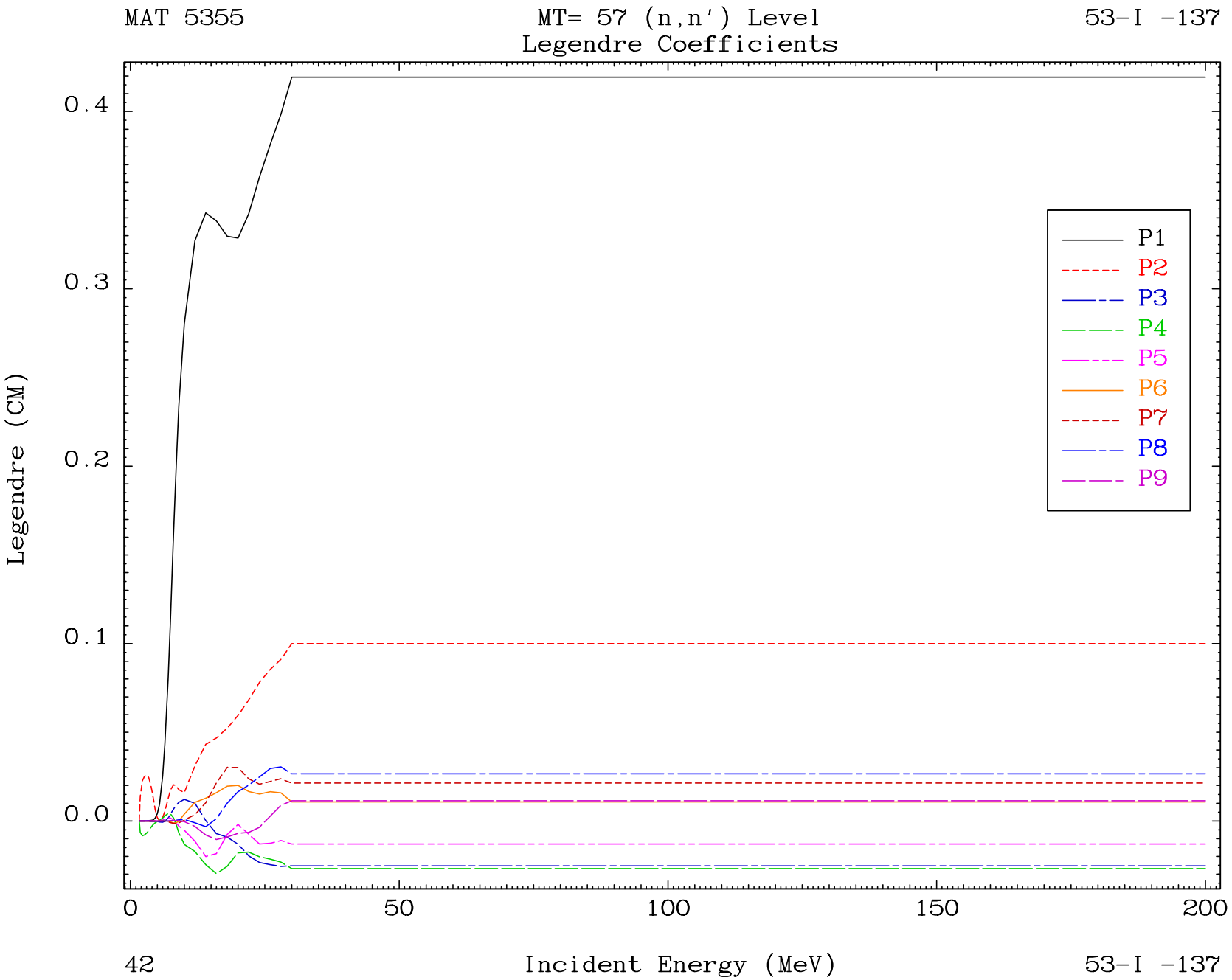

MAT 5355
MT= 55 (n,n') Level
Legendre Coefficients
53-I -137
X10-25
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
37
Incident Energy (MeV)
53-I -137
P28
P29
P30
P31
P32
P33
P34
P35
P36

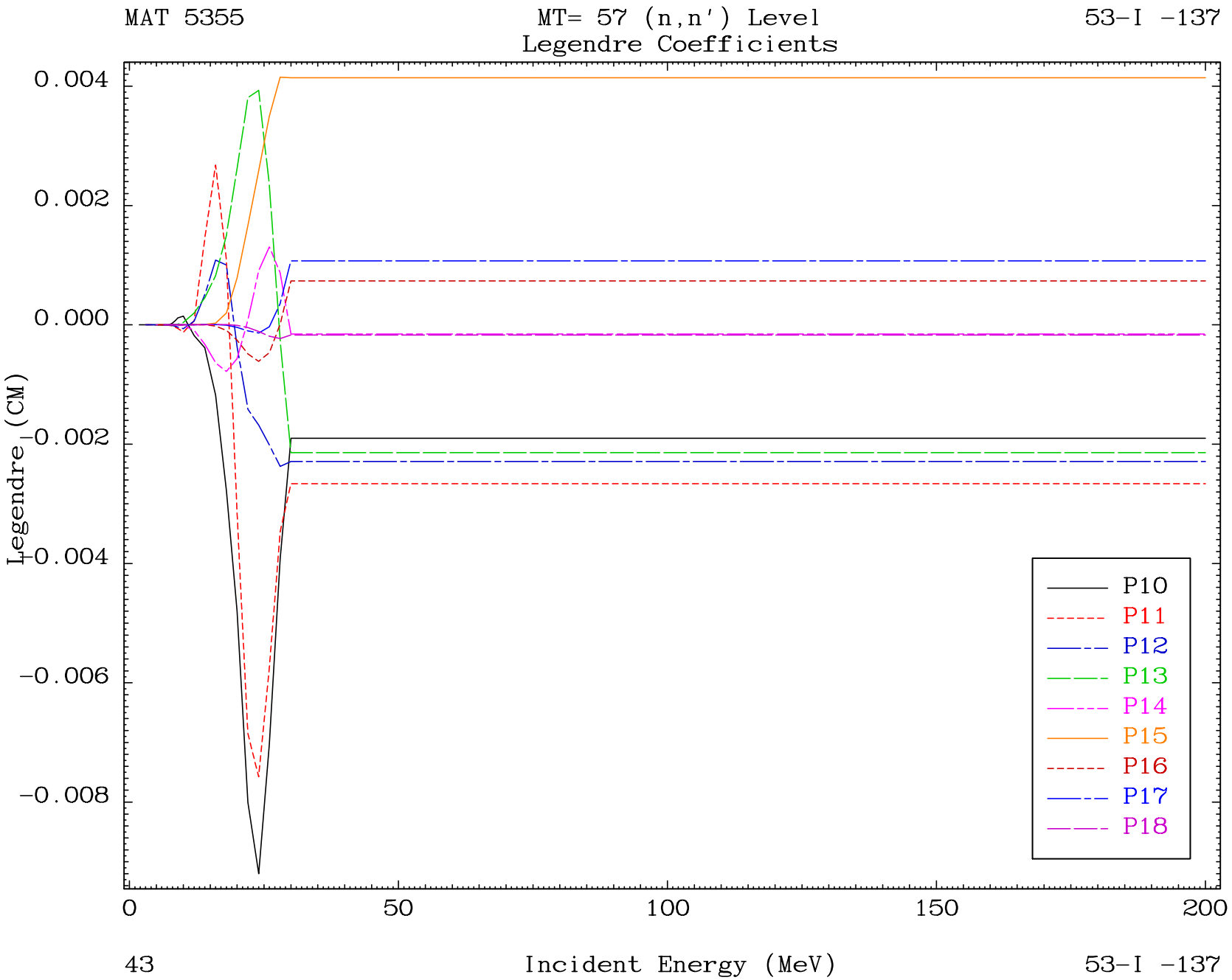

MAT 5355
MT= 56 (n,n') Level
Legendre Coefficients
53-I -137
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
38
Incident Energy (MeV)
53-I -137

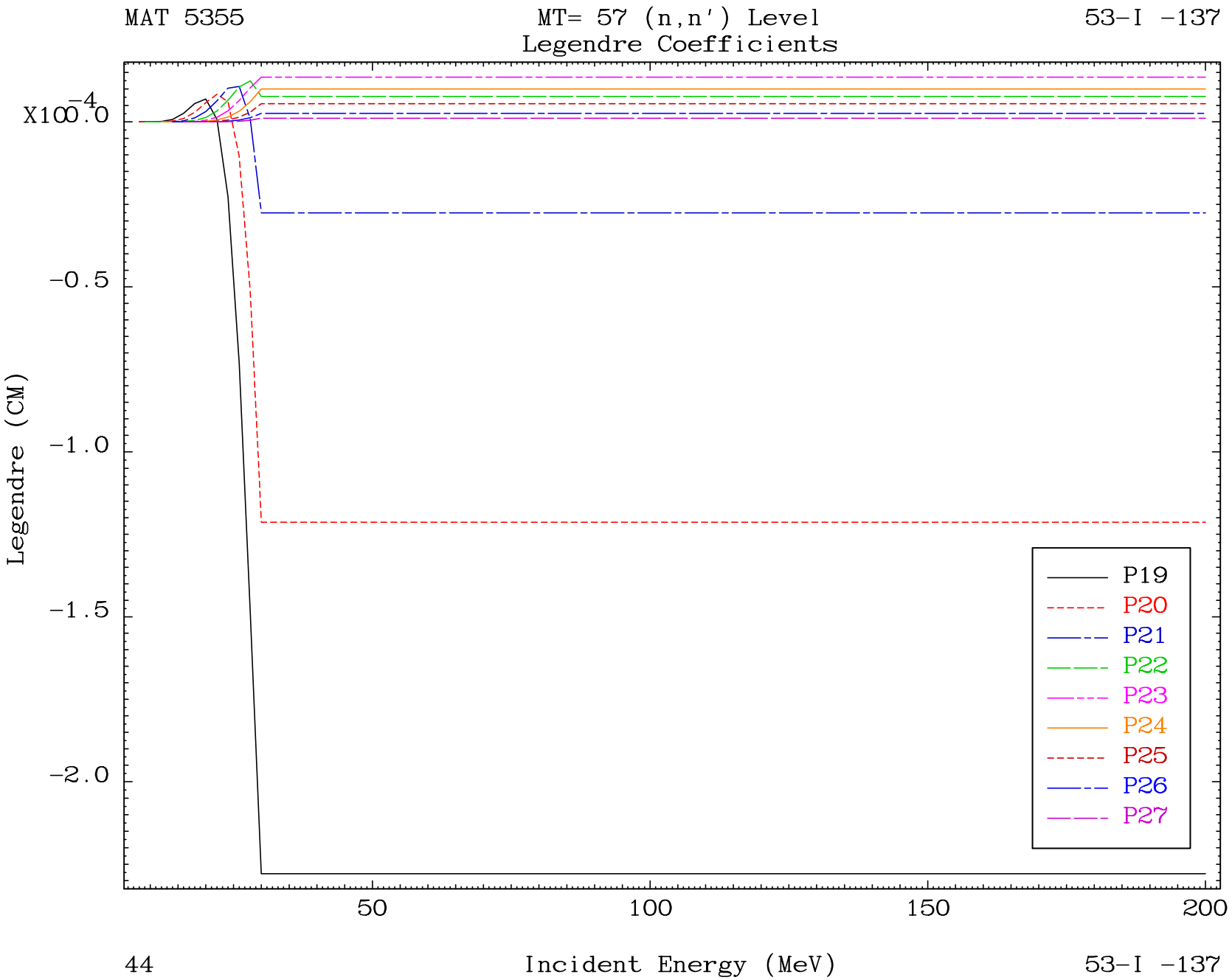

MAT 5355
MT= 56 (n,n') Level
Legendre Coefficients
53-I -137
0.004
0.002
0.000
-0.002
-0.004
-0.006
-0.008
Legendre (CM)
0
50
100
150
200
39
Incident Energy (MeV)
53-I -137
P10
P11
P12
P13
P14
P15
P16
P17
P18

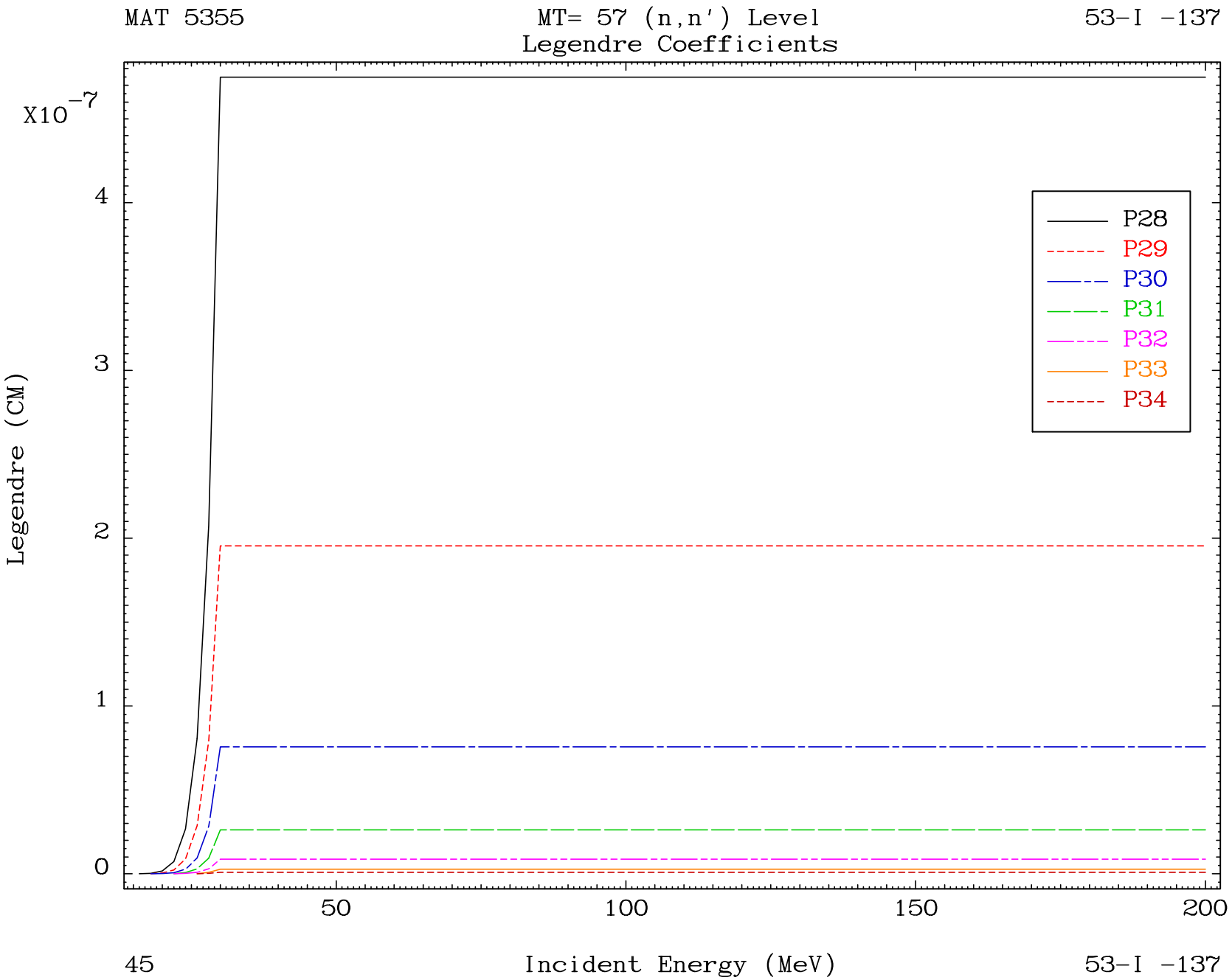

MAT 5355
MT= 56 (n,n') Level
Legendre Coefficients
53-I -137
X10^-4
0.0
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
50
100
150
200
40
Incident Energy (MeV)
53-I -137
P19
P20
P21
P22
P23
P24
P25
P26
P27

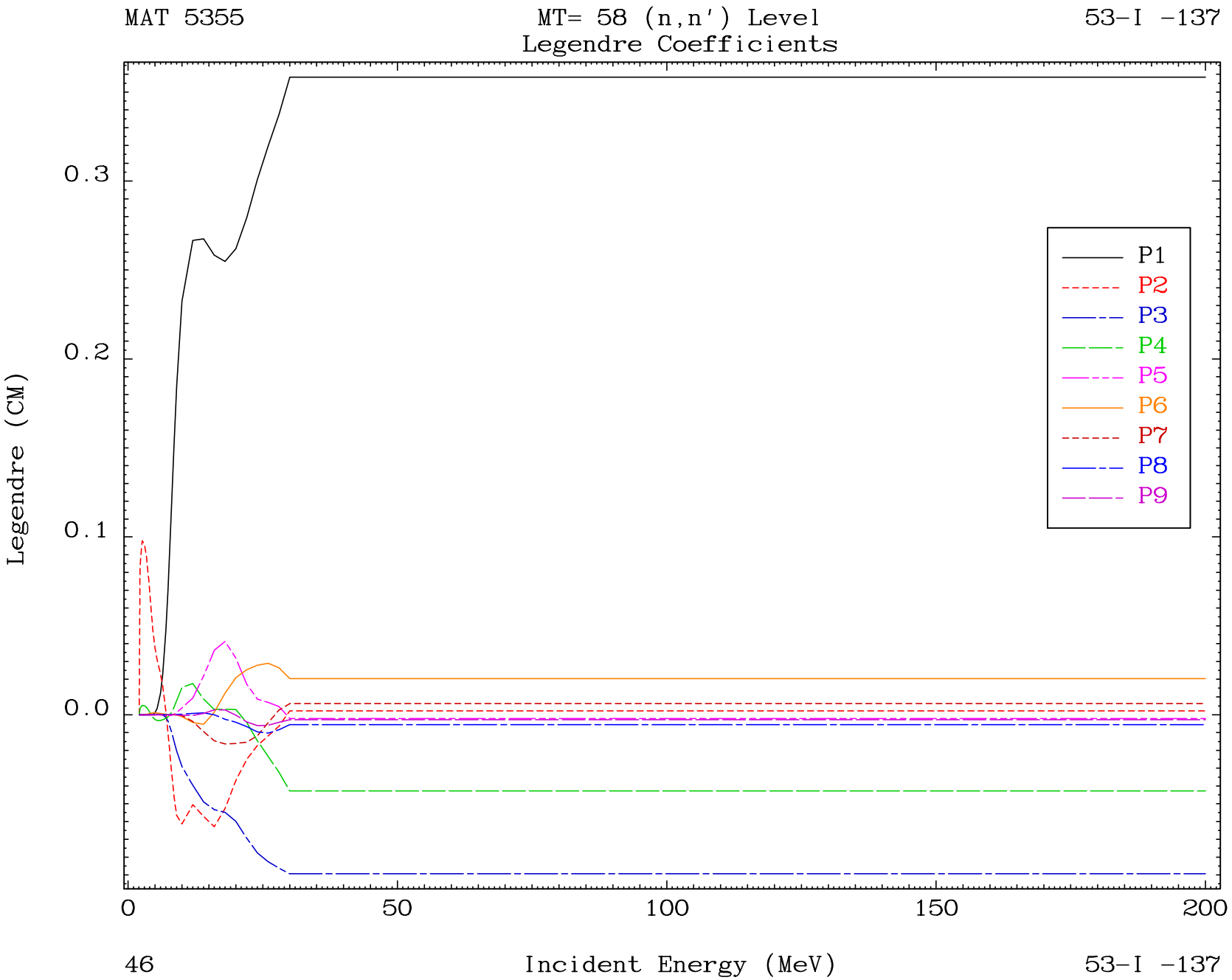

MAT 5355
MT= 56 (n,n') Level
Legendre Coefficients
53-I -137
X10-2
5
4
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
41
Incident Energy (MeV)
53-I -137

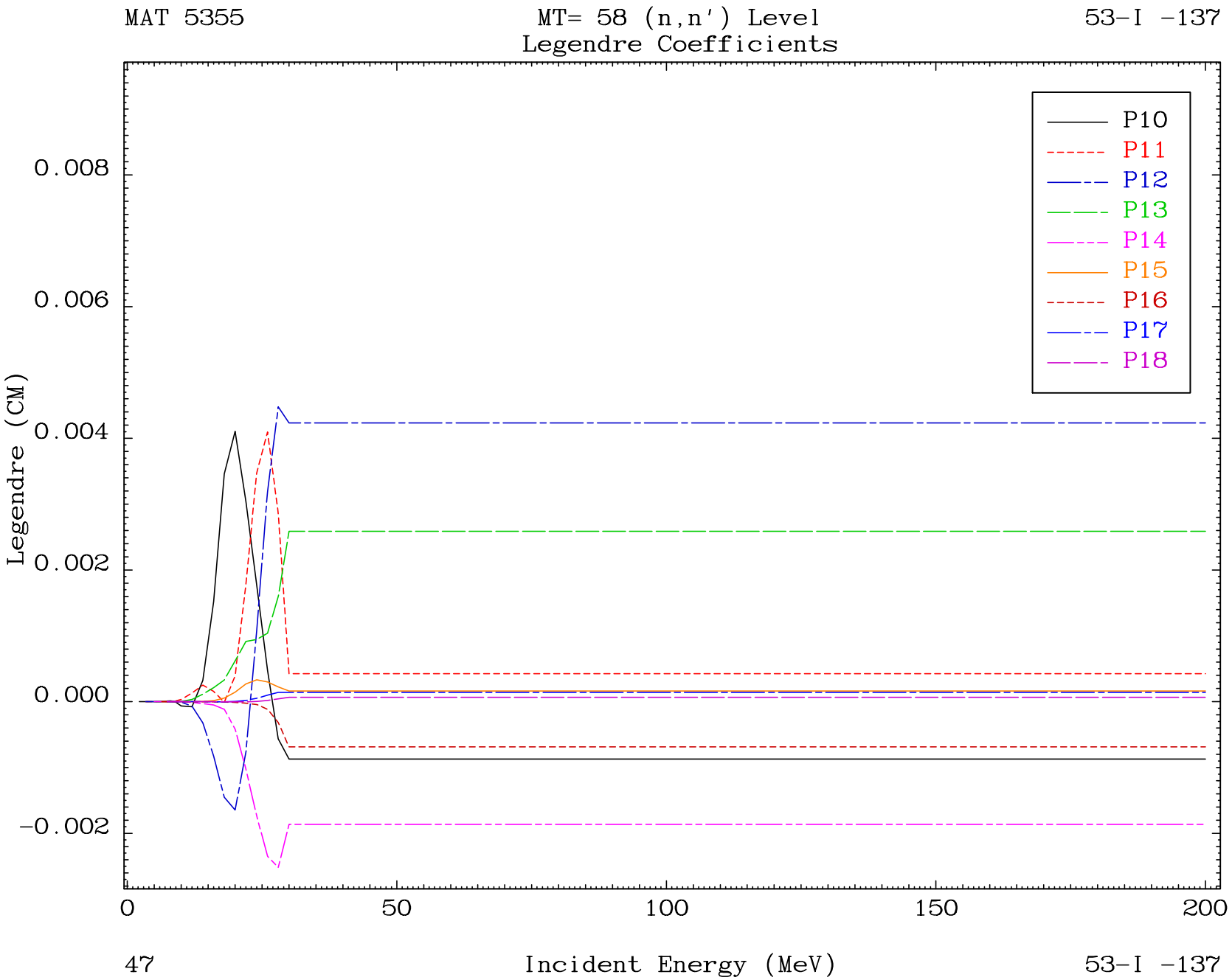

MAT 5355
MT= 57 (n,n') Level
Legendre Coefficients
53-I -137
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
42
Incident Energy (MeV)
53-I -137

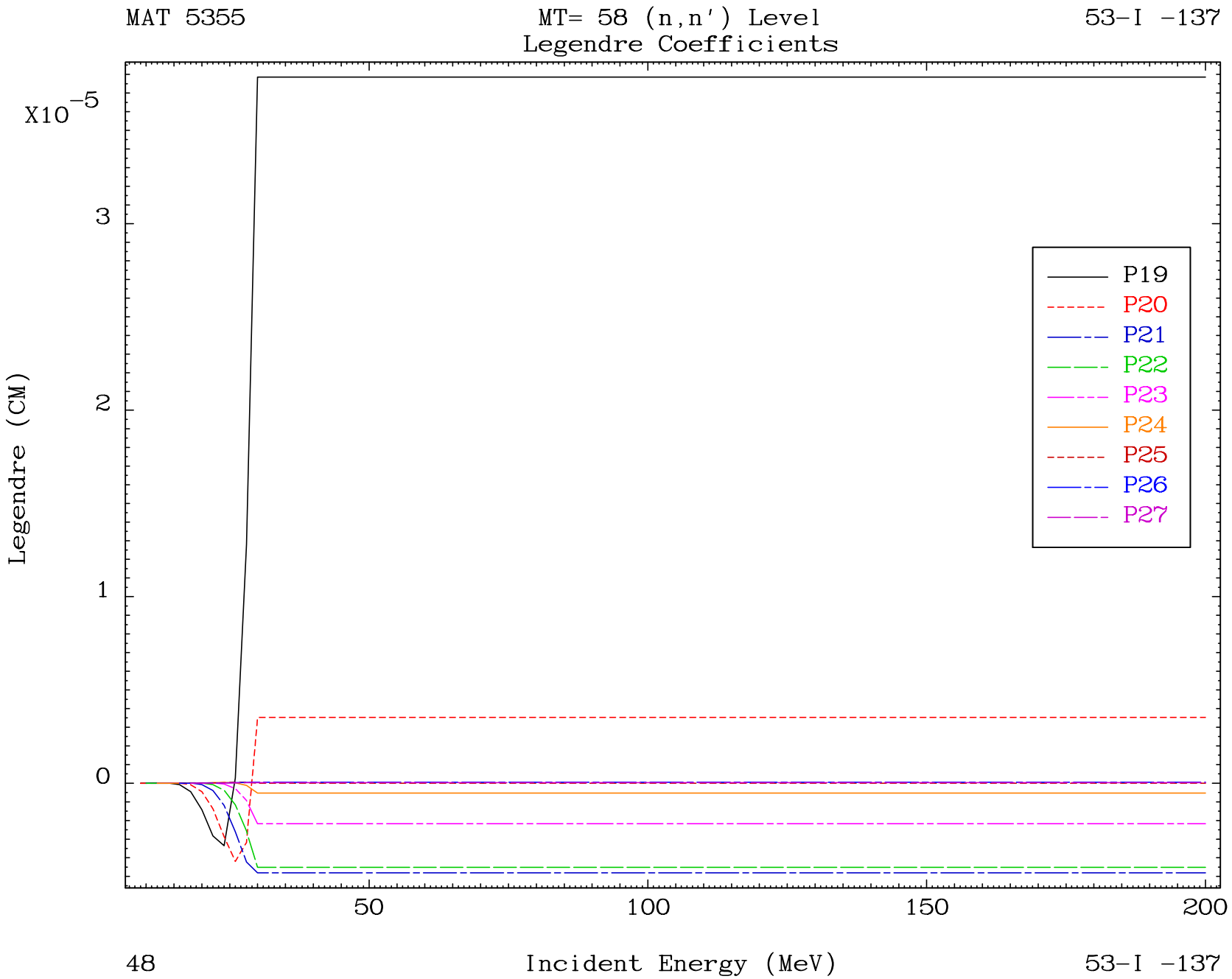

MAT 5355
MT= 57 (n,n') Level
Legendre Coefficients
53-I -137
0.004
0.002
0.000
−0.002
−0.004
−0.006
−0.008
Legendre_l (CM)
0
50
100
150
200
43
Incident Energy (MeV)
53-I -137
P10
P11
P12
P13
P14
P15
P16
P17
P18

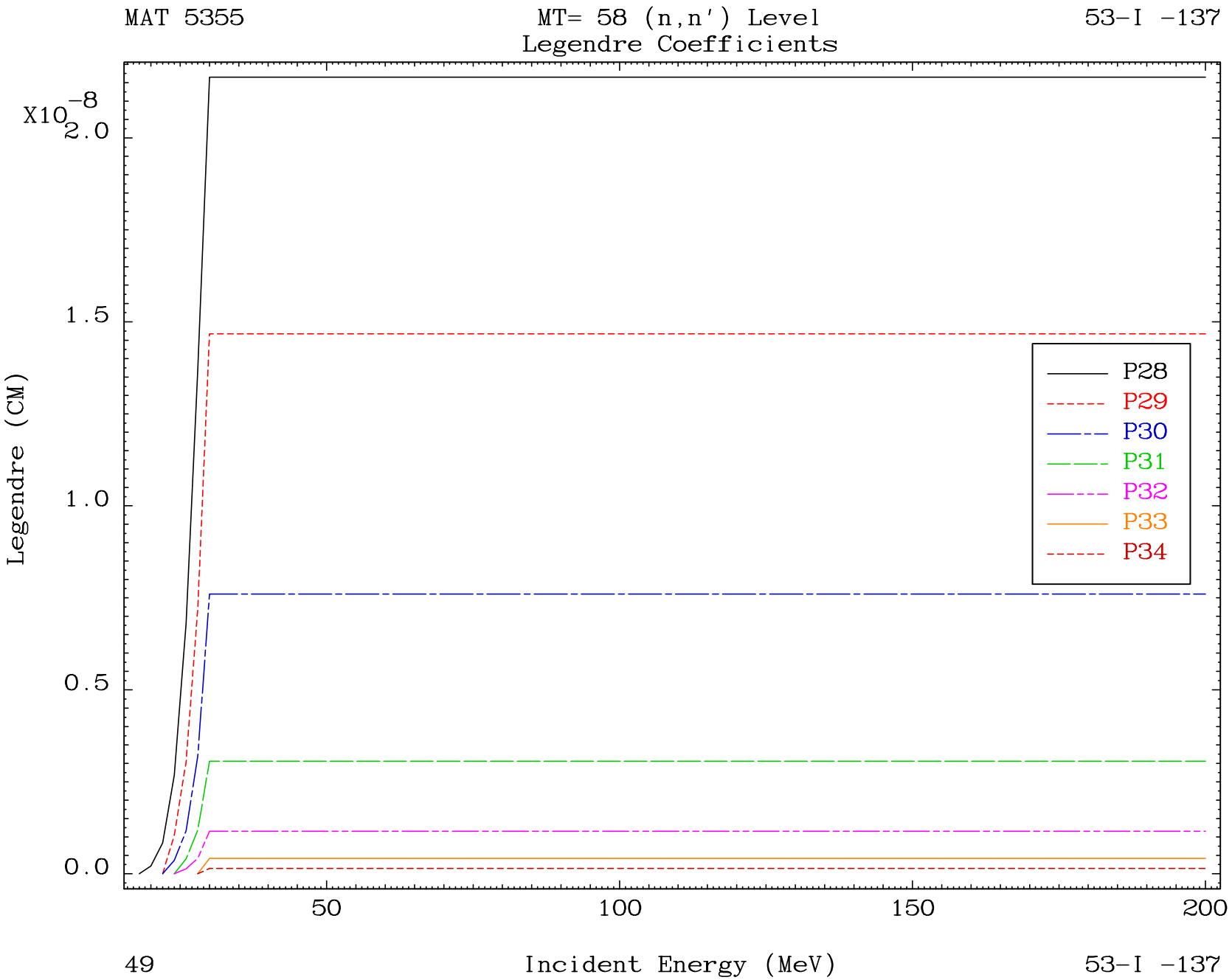

MAT 5355
MT= 57 (n,n') Level
Legendre Coefficients
53-I -137
X10^-4
0.0
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P19
P20
P21
P22
P23
P24
P25
P26
P27

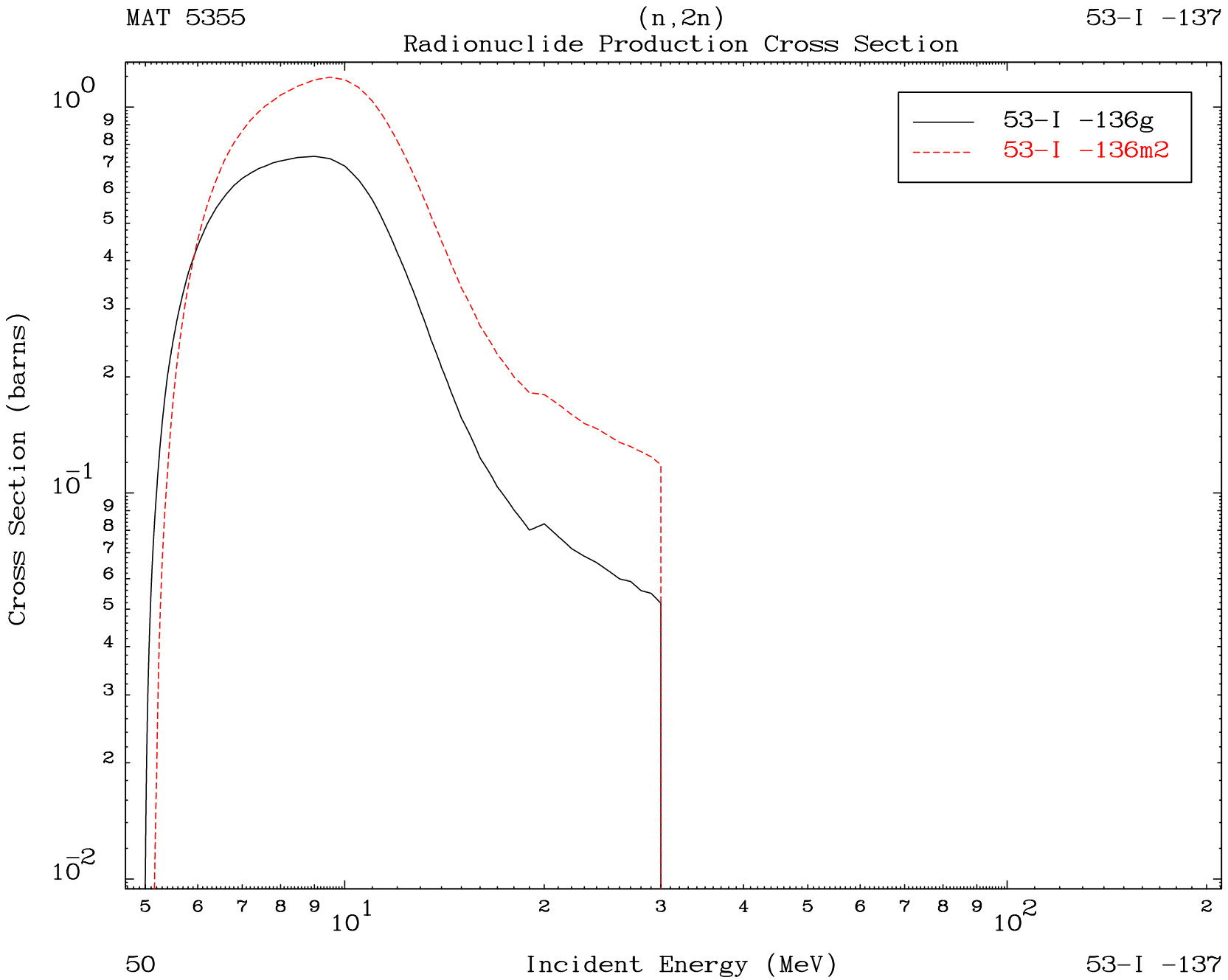

MAT 5355
MT= 57 (n,n') Level
Legendre Coefficients
53-I -137
X10-7
4
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
45
Incident Energy (MeV)
53-I -137

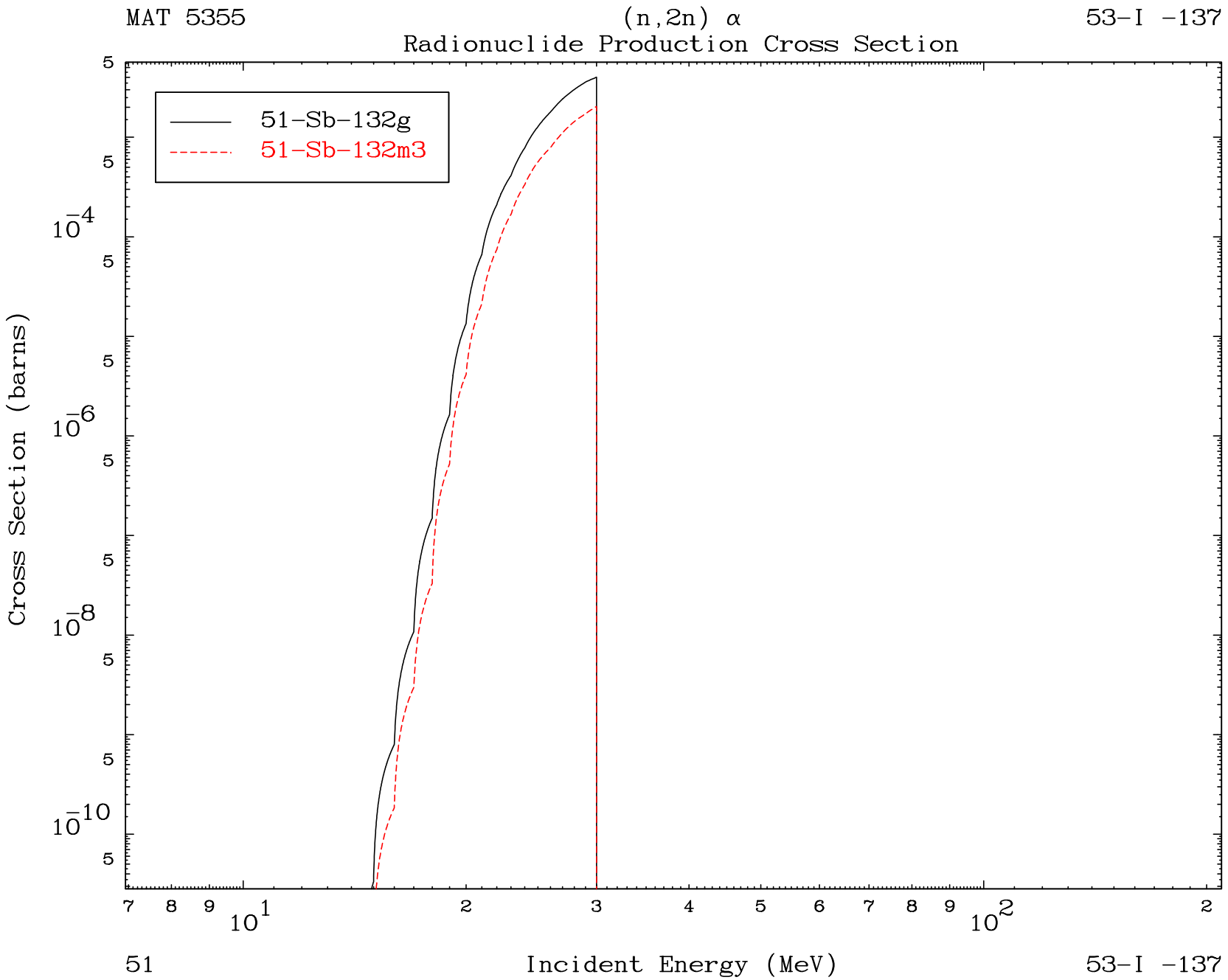

MAT 5355
MT= 58 (n,n') Level
Legendre Coefficients
53-I -137
Legendre (CM)
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
46
Incident Energy (MeV)
53-I -137

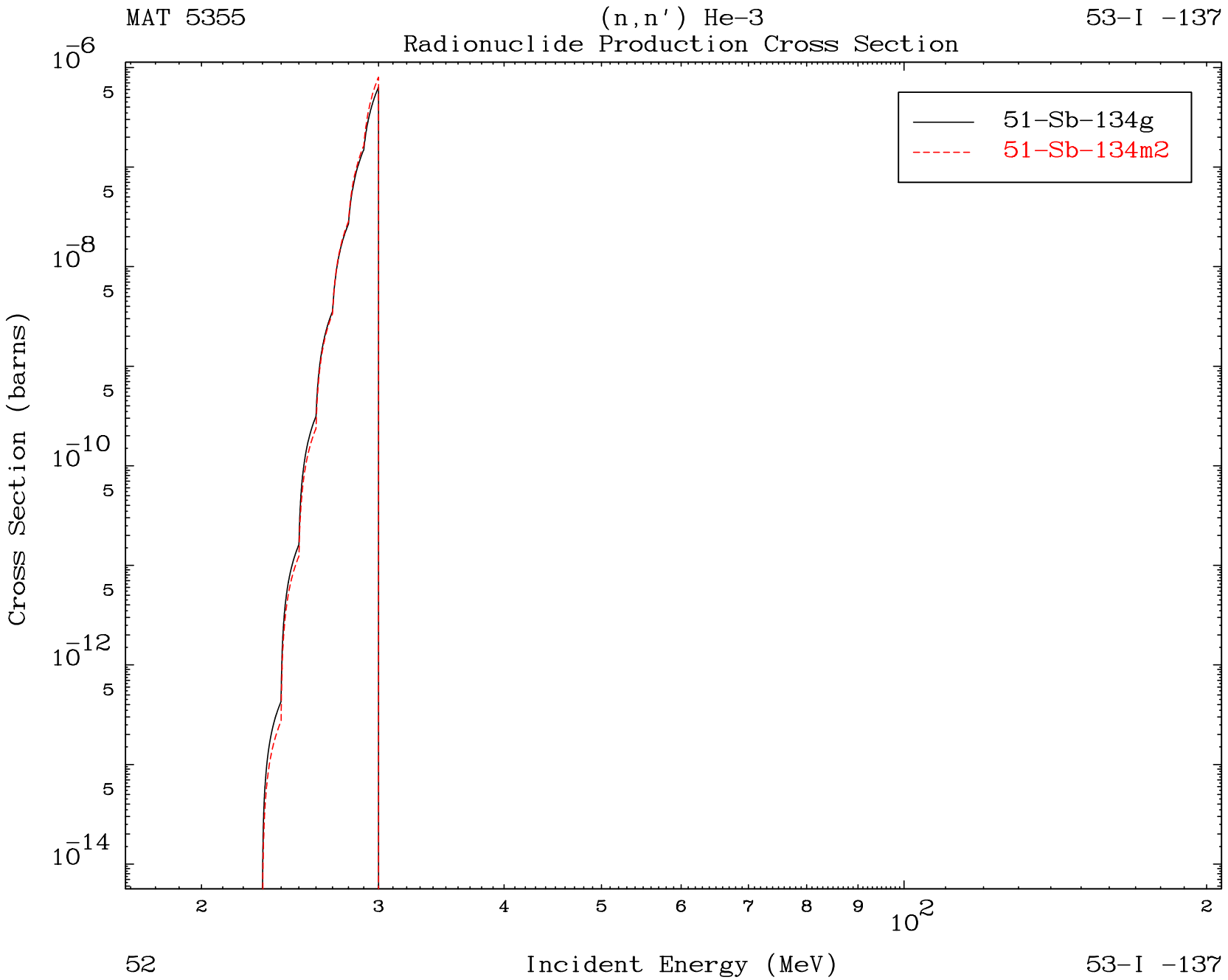

MAT 5355
MT= 58 (n,n') Level
Legendre Coefficients
53-I -137
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.008
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
0
50
100
150
200
47
Incident Energy (MeV)
53-I -137

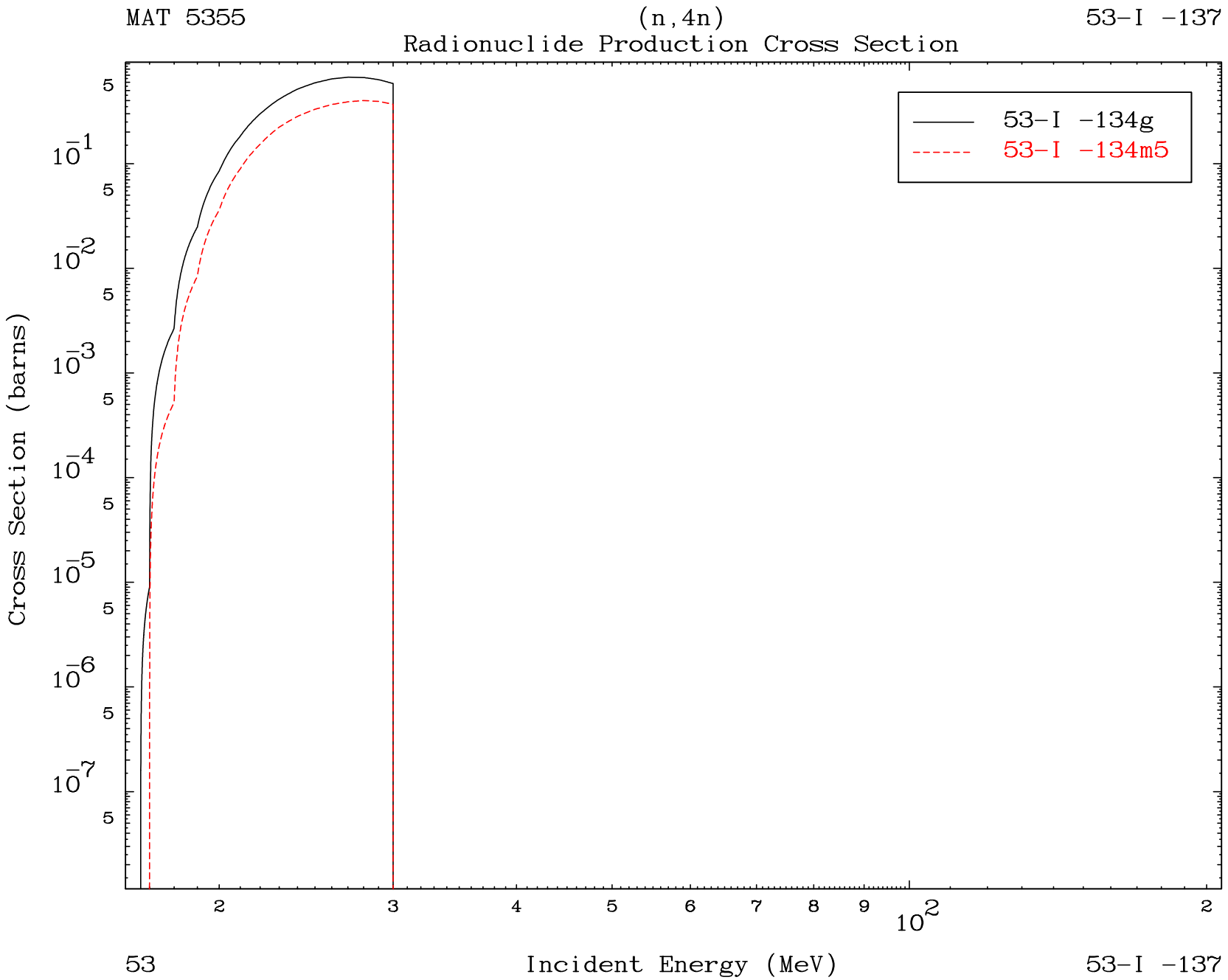

MAT 5355
MT= 58 (n,n') Level
Legendre Coefficients
53-I -137
X10-5
3
2
1
0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
48
Incident Energy (MeV)
53-I -137

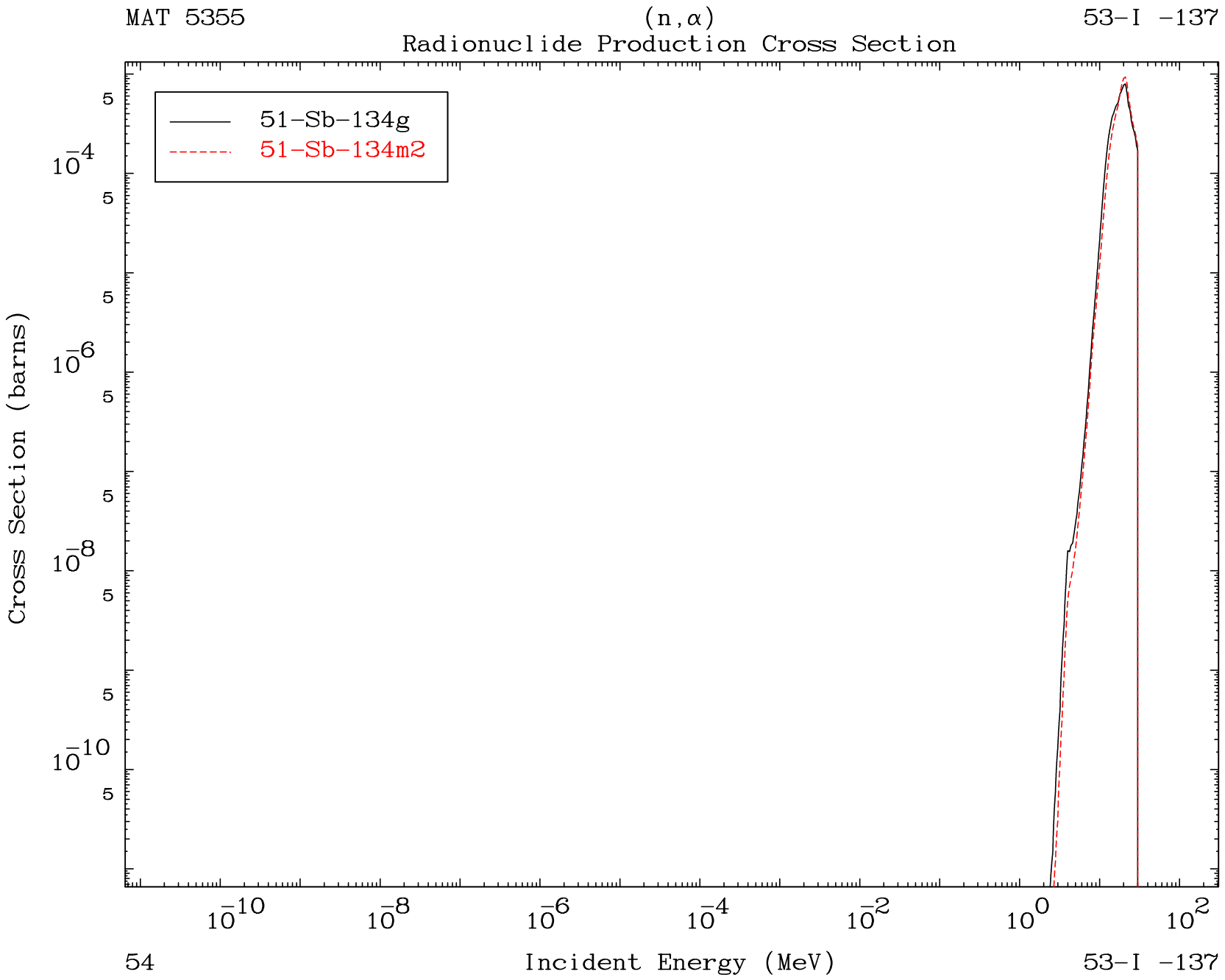

MAT 5355
MT= 58 (n,n') Level
Legendre Coefficients
53-I -137
X10-8
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
P28
P29
P30
P31
P32
P33
P34
49
Incident Energy (MeV)
53-I -137


MAT 5355
(n,2n)
53-I -137
Radionuclide Production Cross Section
53-I -136g
53-I -136m2
Cross Section (barns)
Incident Energy (MeV)
50
53-I -137


MAT 5355
(n,2n) α
53-I -137
Radionuclide Production Cross Section
51-Sb-132g
51-Sb-132m3
Cross Section (barns)
Incident Energy (MeV)
51
53-I -137


MAT 5355
(n,n') He-3
53-I -137
Radionuclide Production Cross Section
51-Sb-134g
51-Sb-134m2
Cross Section (barns)
Incident Energy (MeV)
52
53-I -137


MAT 5355
(n,4n)
53-I -137
Radionuclide Production Cross Section
53-I -134g
53-I -134m5
Cross Section (barns)
Incident Energy (MeV)
53
53-I -137


MAT 5355
(n,α)
53-I -137
Radionuclide Production Cross Section
51-Sb-134g
51-Sb-134m2
Cross Section (barns)
Incident Energy (MeV)
54
53-I -137