Program EVALPLOT
(Version 2015-2)
by
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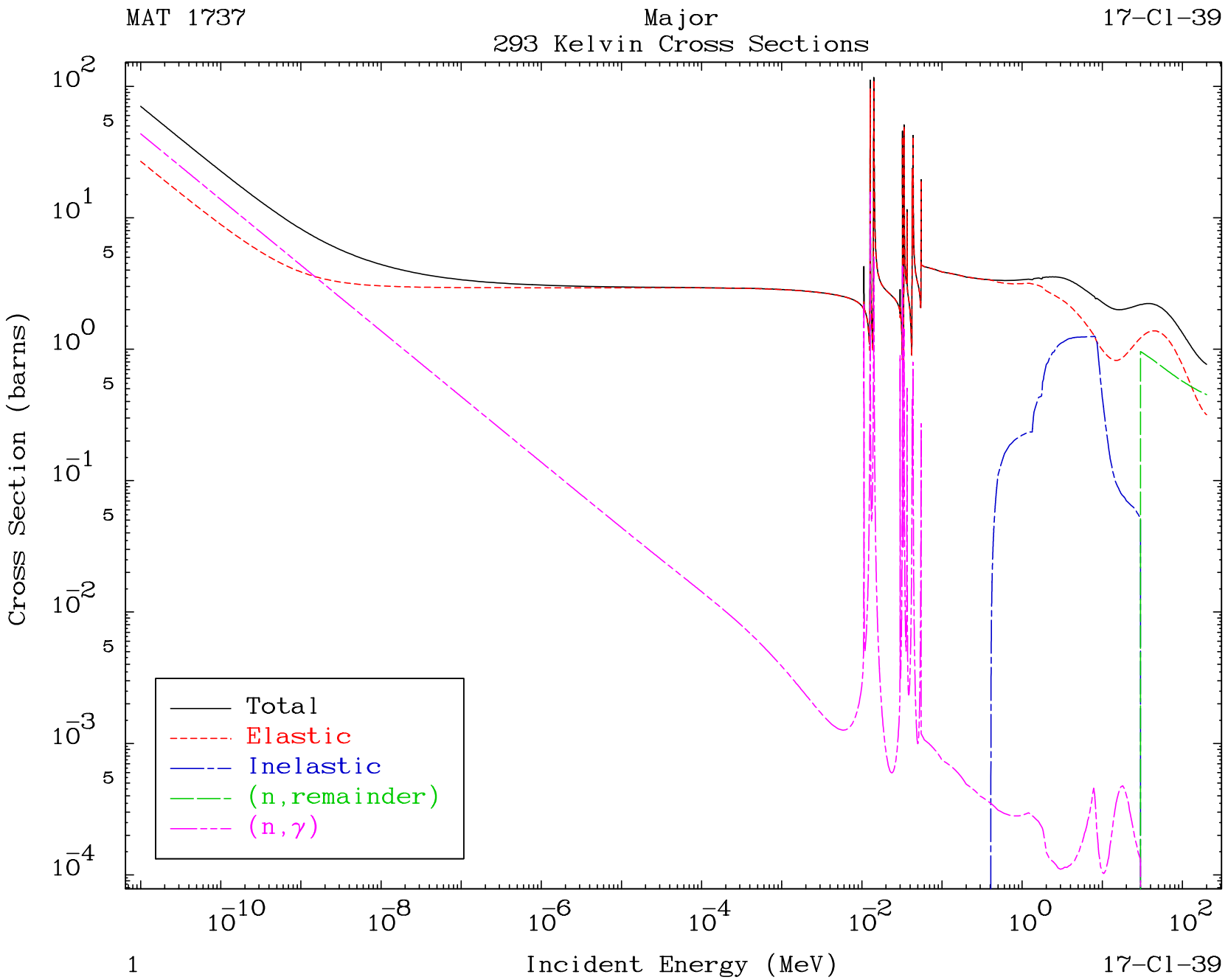
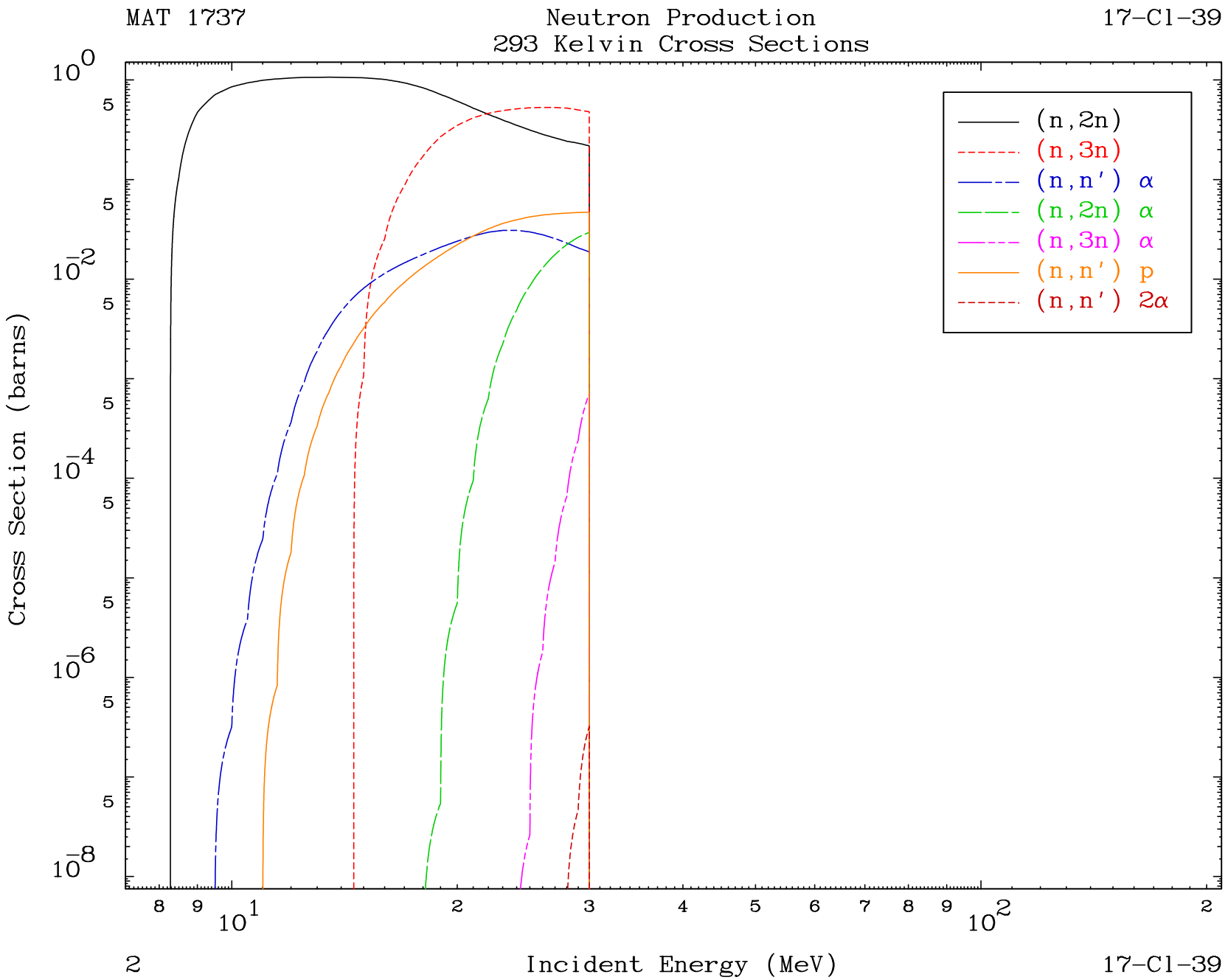
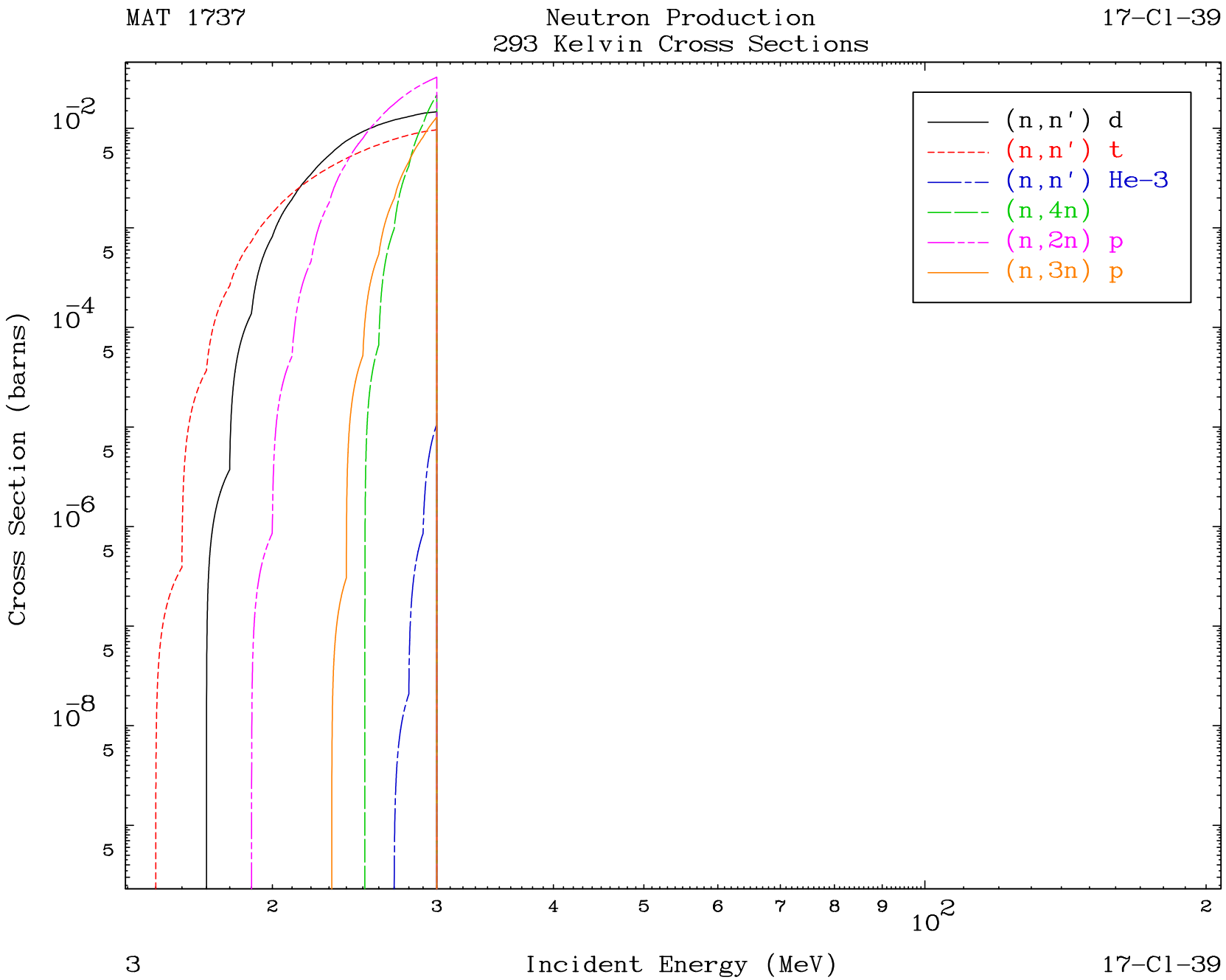
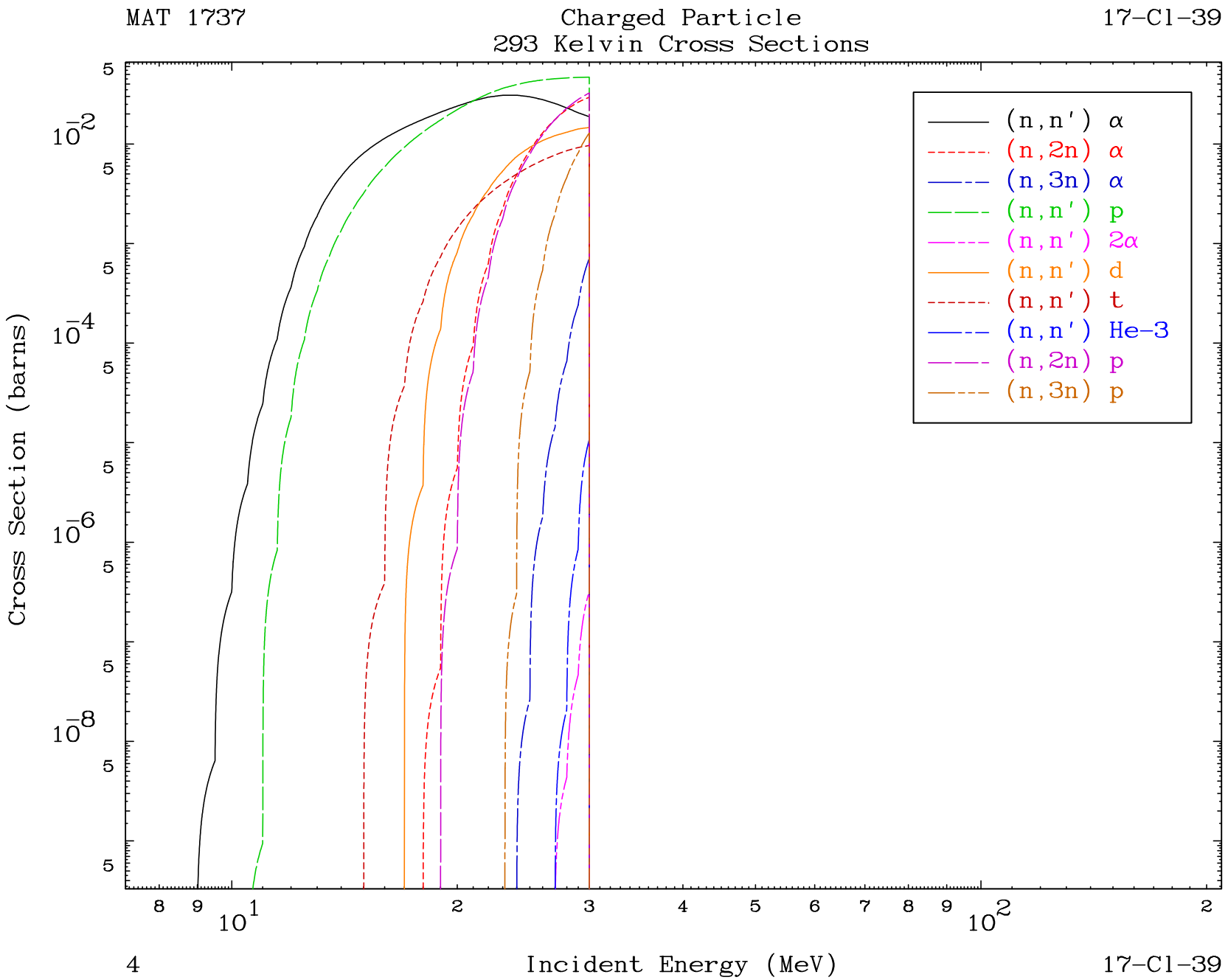
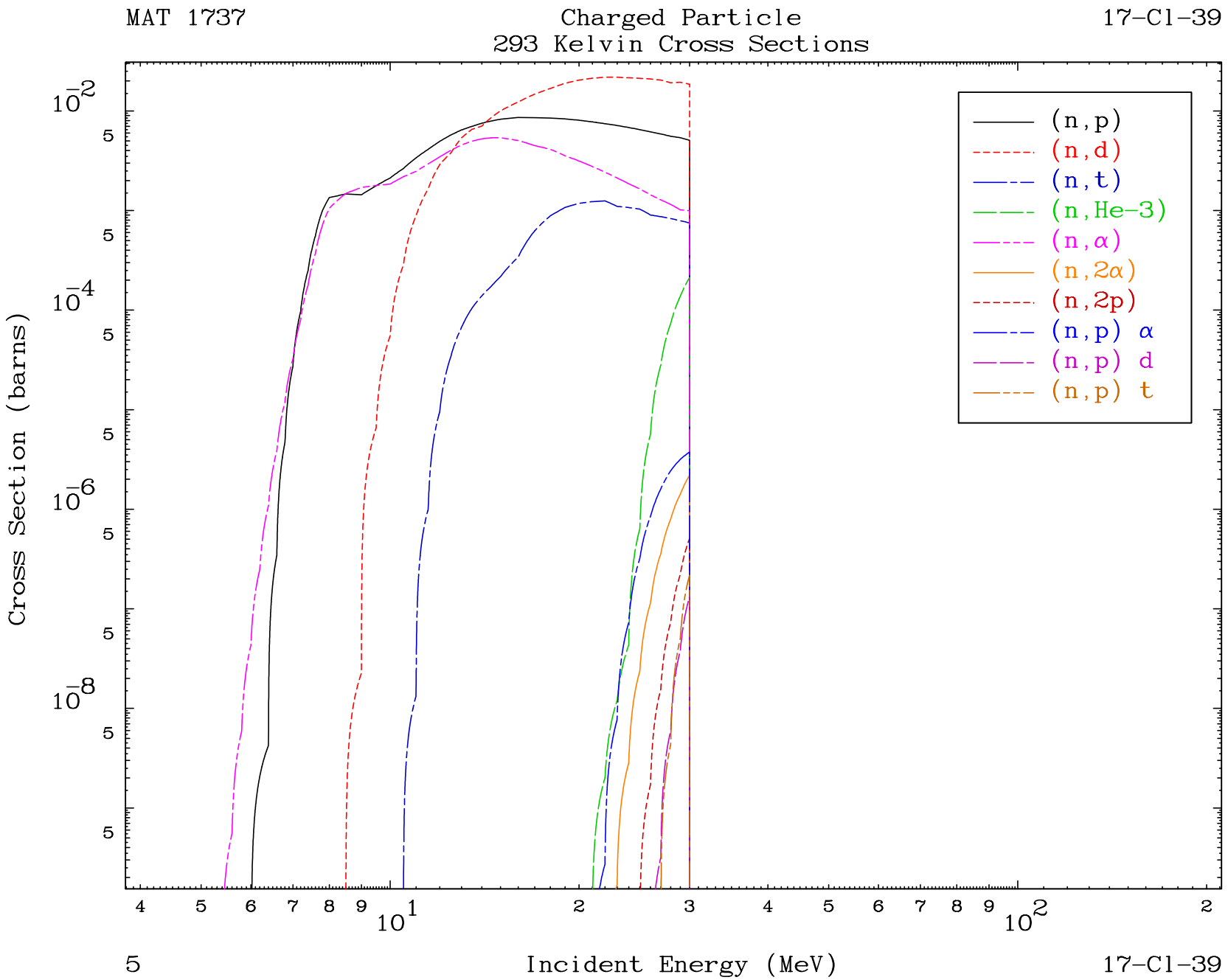
Press Mouse Button to Start

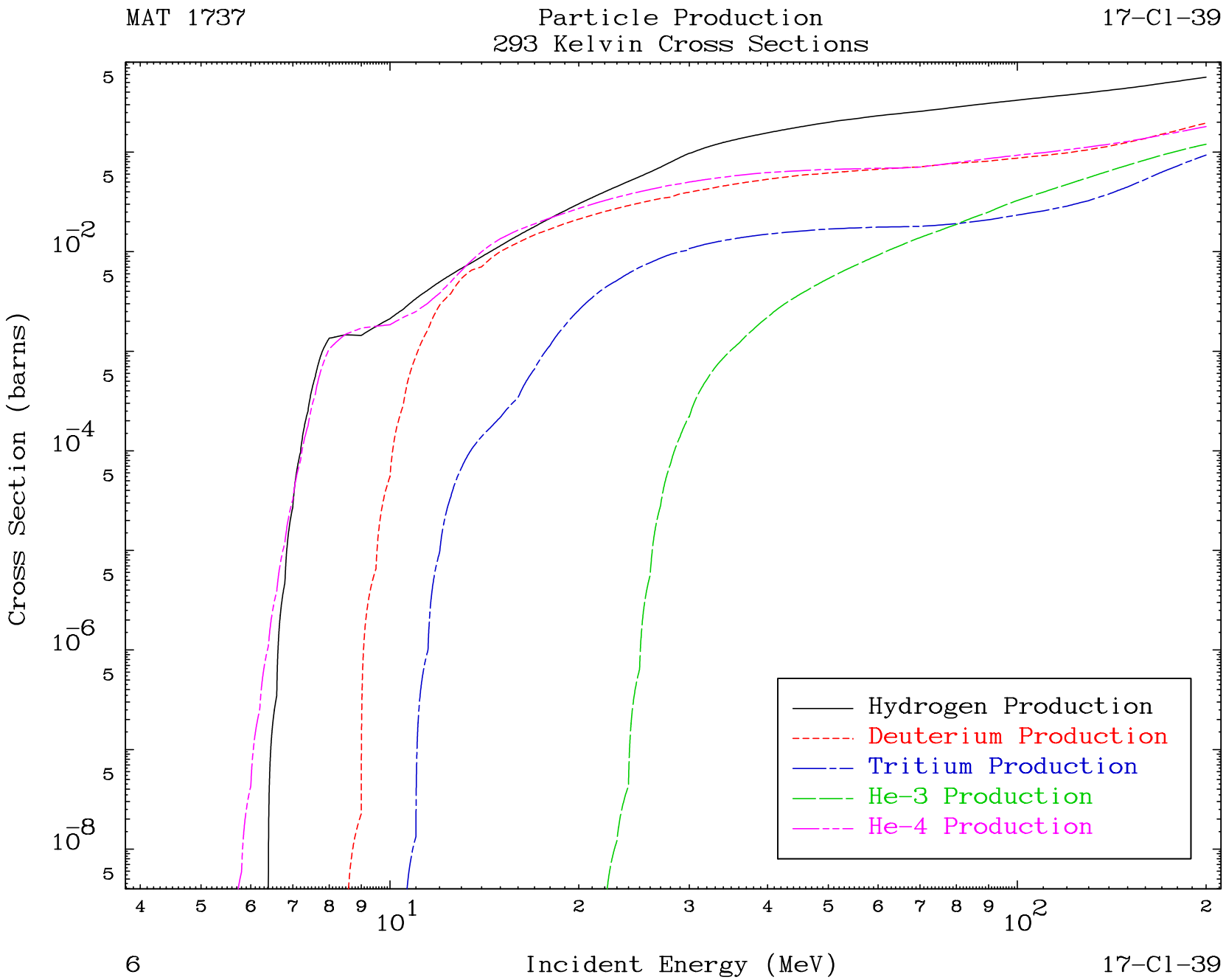

MAT 1737
Major
17-Cl-39
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
17-Cl-39

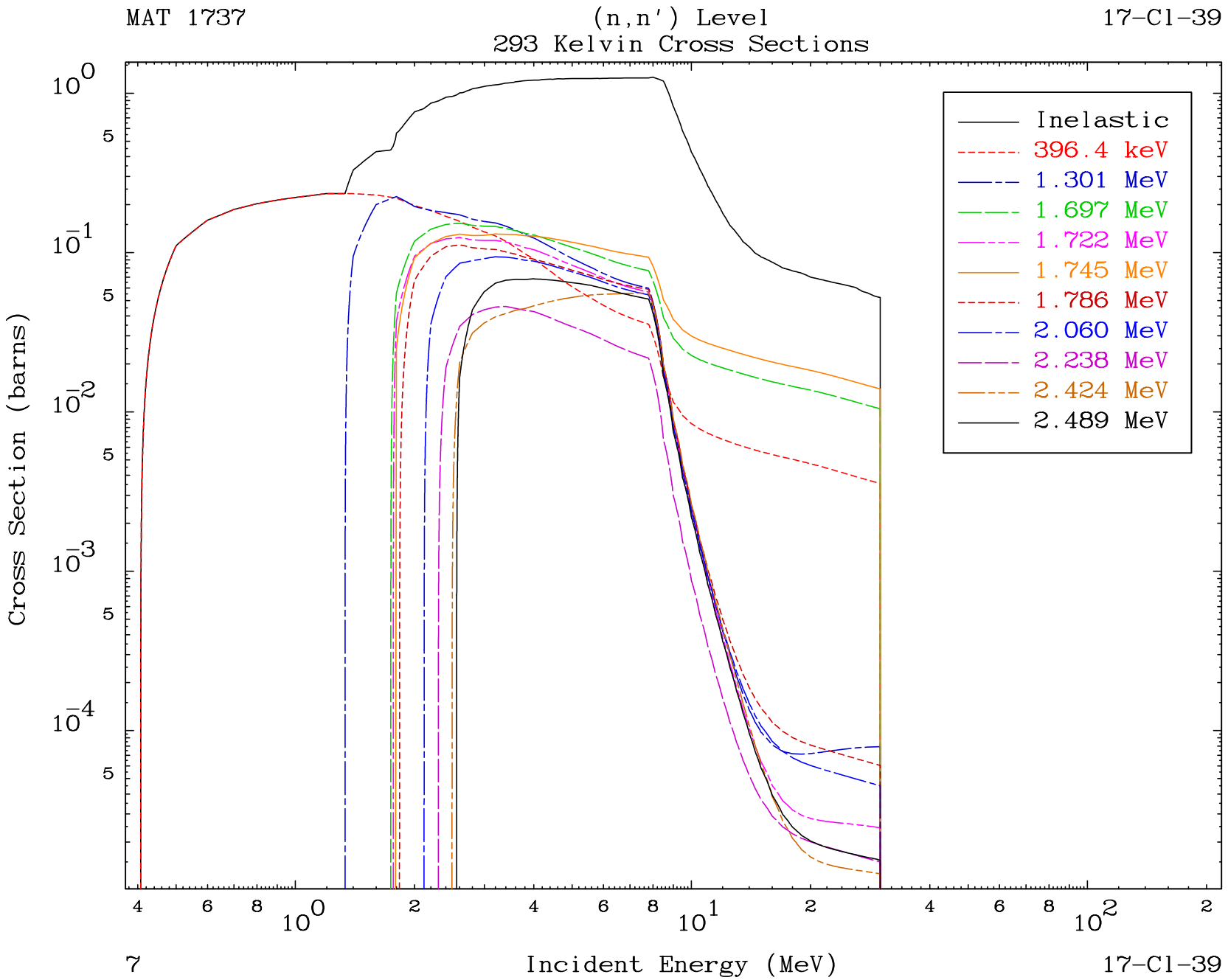

MAT 1737
Neutron Production
293 Kelvin Cross Sections
17-Cl-39
Cross Section (barns)
Incident Energy (MeV)
17-Cl-39
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α

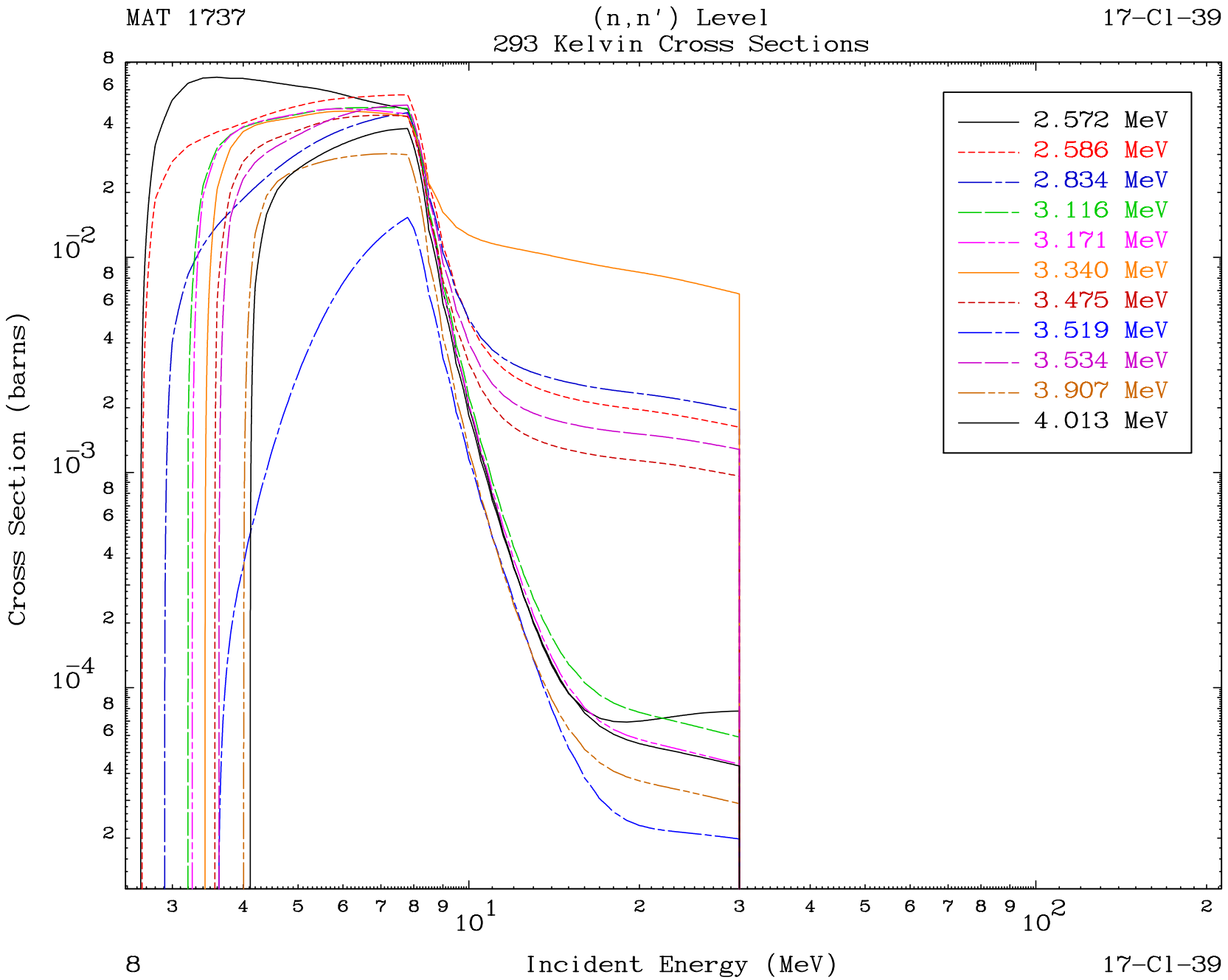

MAT 1737
Neutron Production
293 Kelvin Cross Sections
17-Cl-39
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
17-Cl-39

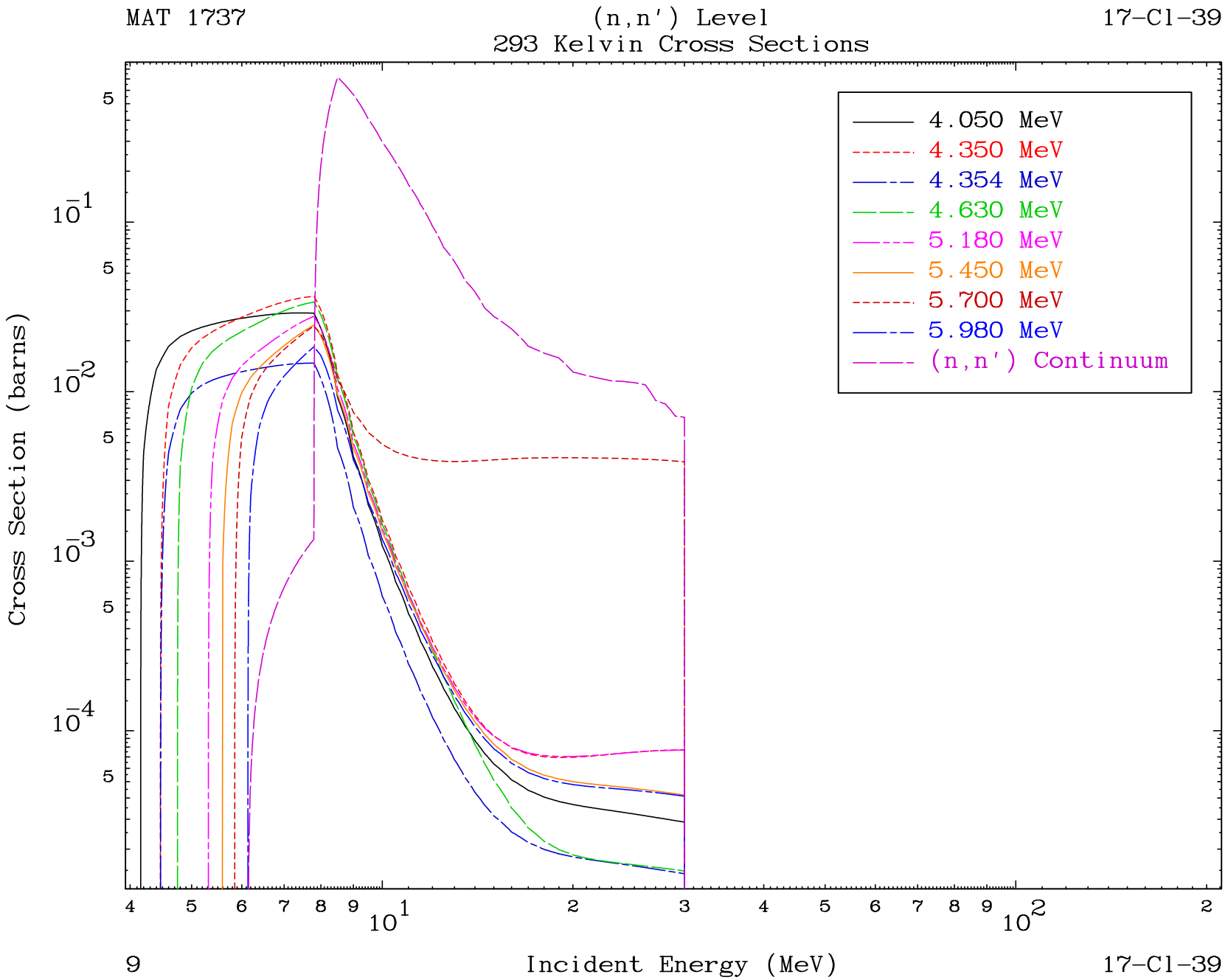

MAT 1737
Charged Particle
17-Cl-39
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
4
17-Cl-39

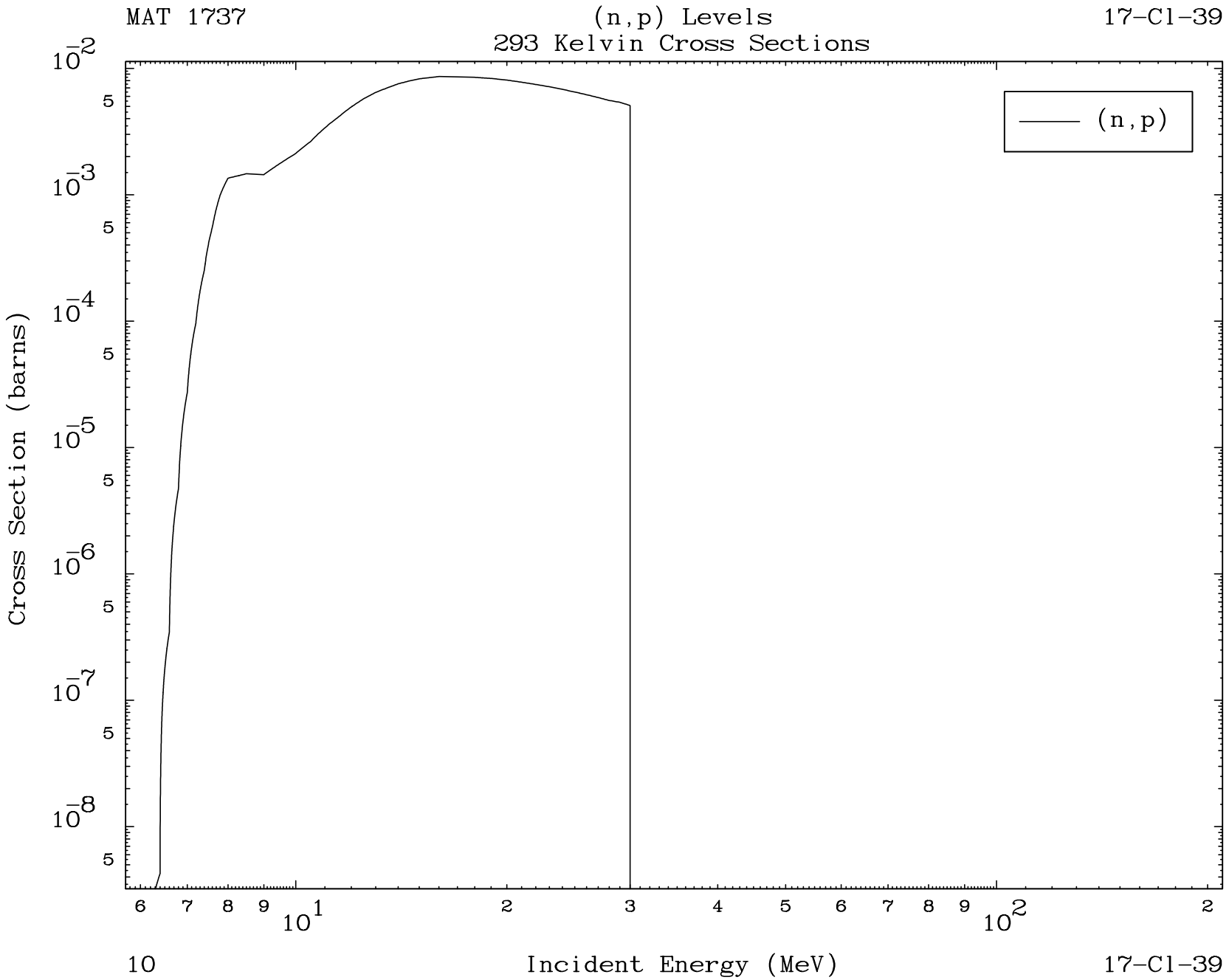

MAT 1737
Charged Particle
293 Kelvin Cross Sections
17-Cl-39
Cross Section (barns)
Incident Energy (MeV)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
5
17-Cl-39

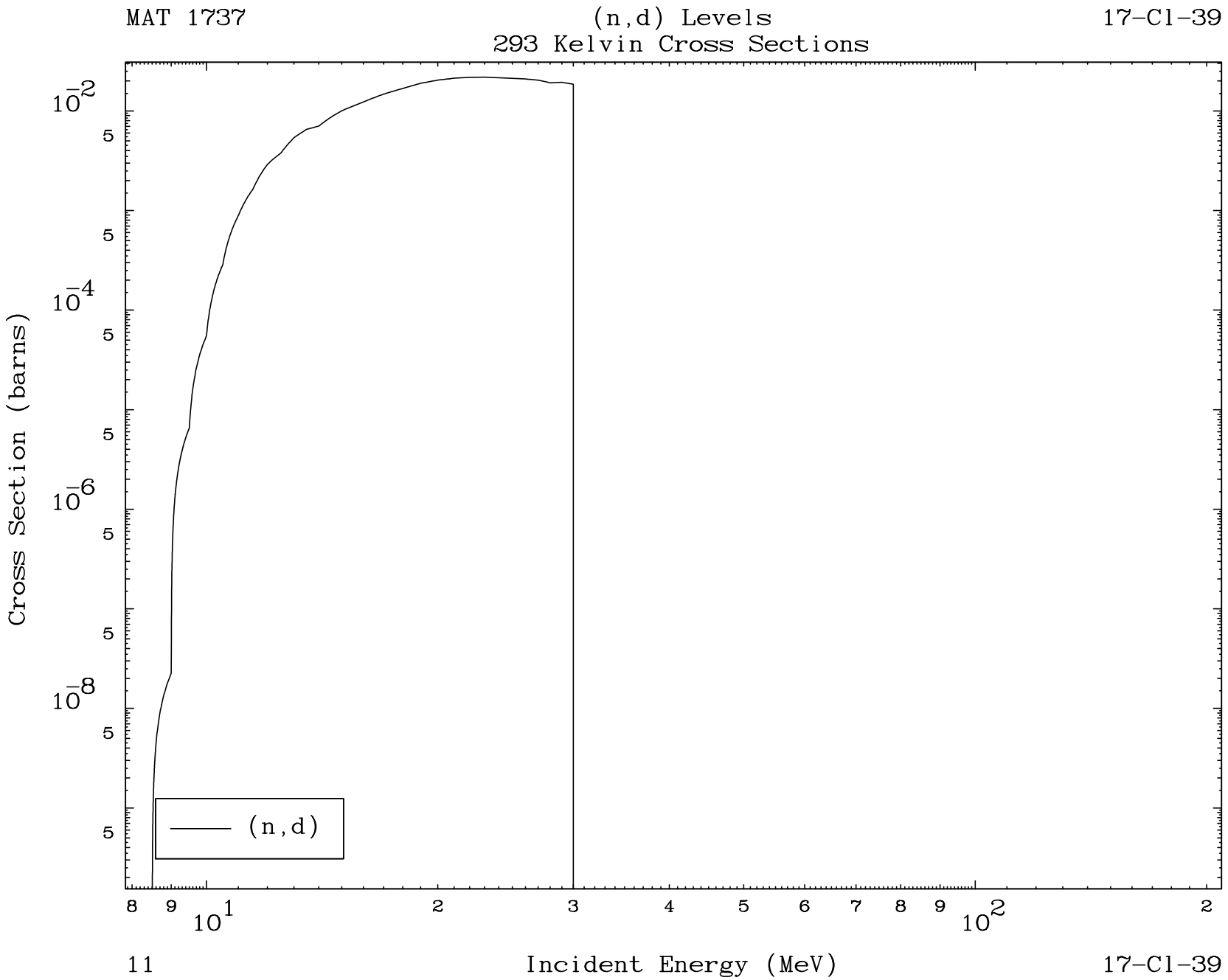

MAT 1737
Particle Production
293 Kelvin Cross Sections
17-Cl-39
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
6
17-Cl-39

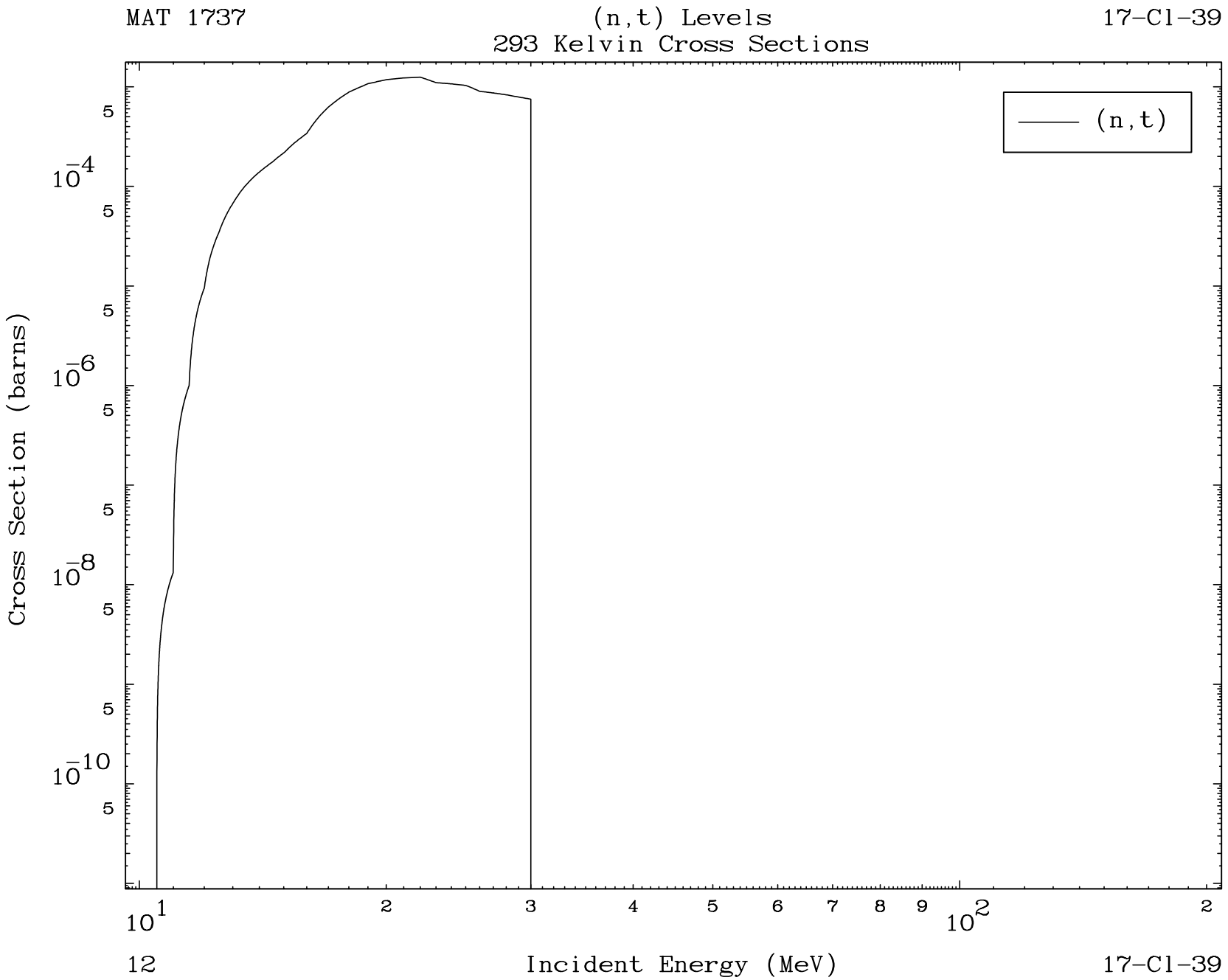

MAT 1737
(n,n') Level
17-Cl-39
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Inelastic
396.4 keV
1.301 MeV
1.697 MeV
1.722 MeV
1.745 MeV
1.786 MeV
2.060 MeV
2.238 MeV
2.424 MeV
2.489 MeV
7
17-Cl-39

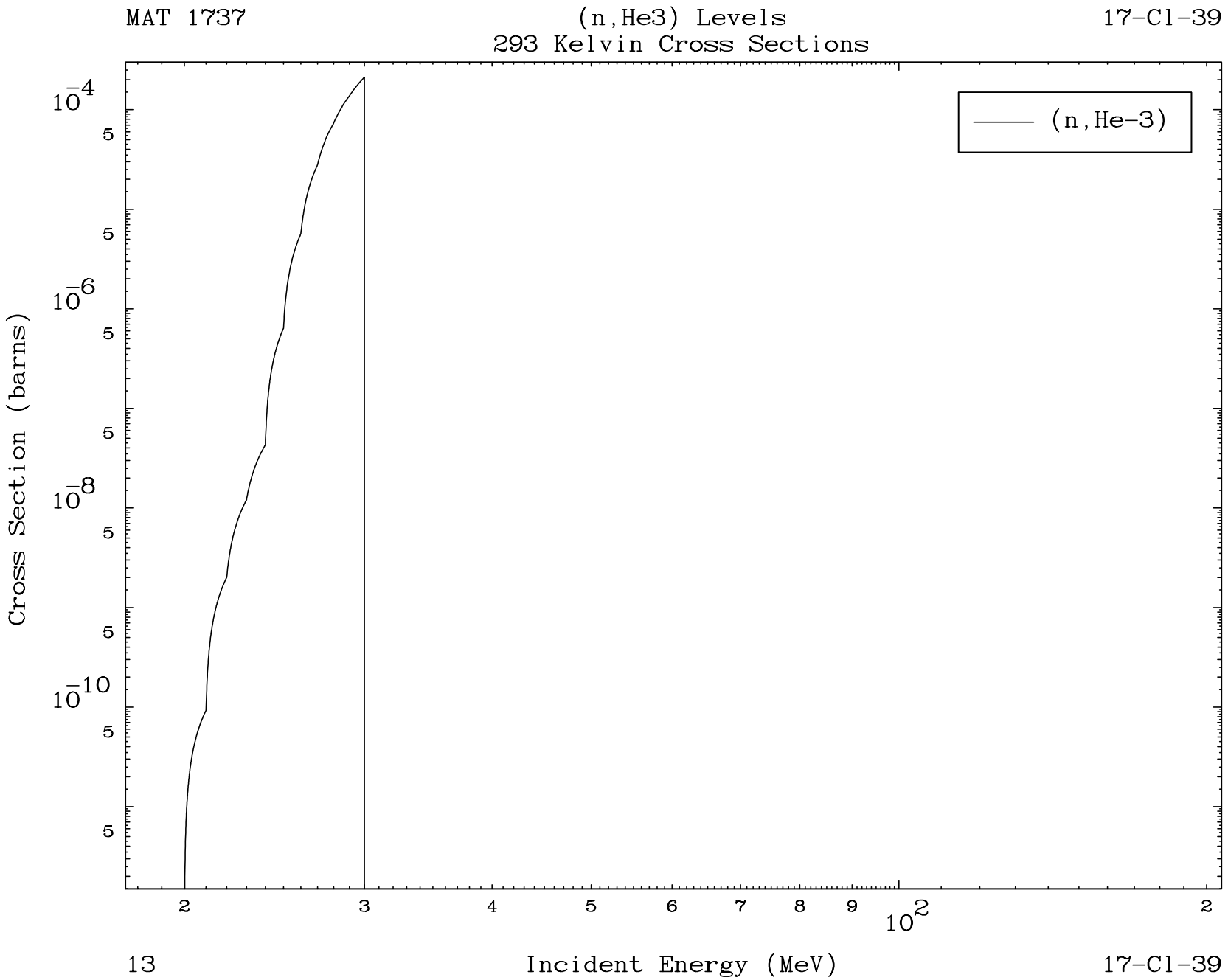

MAT 1737
(n,n') Level
17-Cl-39
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
8
17-Cl-39
2.572 MeV
2.586 MeV
2.834 MeV
3.116 MeV
3.171 MeV
3.340 MeV
3.475 MeV
3.519 MeV
3.534 MeV
3.907 MeV
4.013 MeV

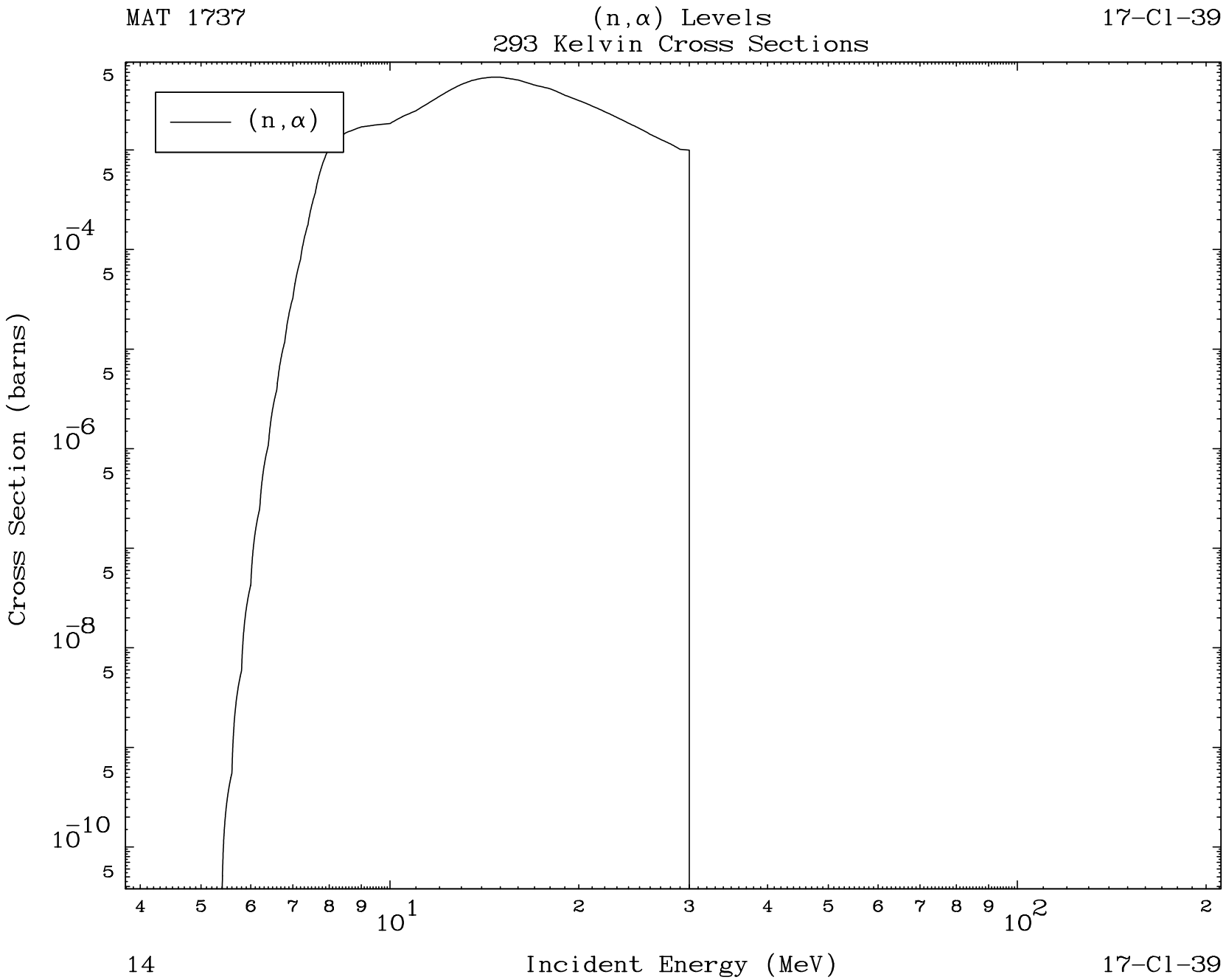

MAT 1737
(n,n') Level
293 Kelvin Cross Sections
17-Cl-39
4.050 MeV
4.350 MeV
4.354 MeV
4.630 MeV
5.180 MeV
5.450 MeV
5.700 MeV
5.980 MeV
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
9
17-Cl-39

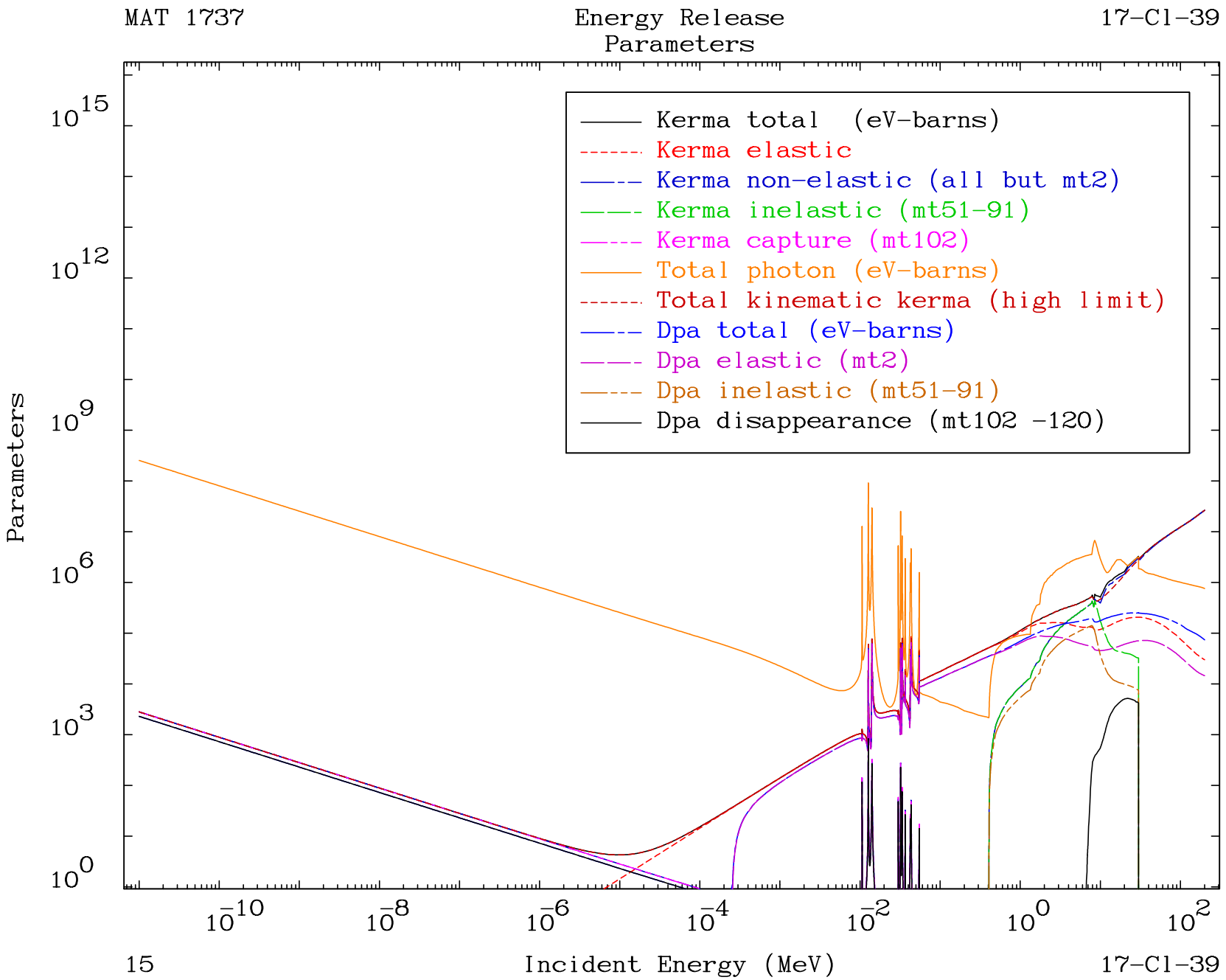

MAT 1737
(n,p) Levels
17-Cl-39
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
17-Cl-39

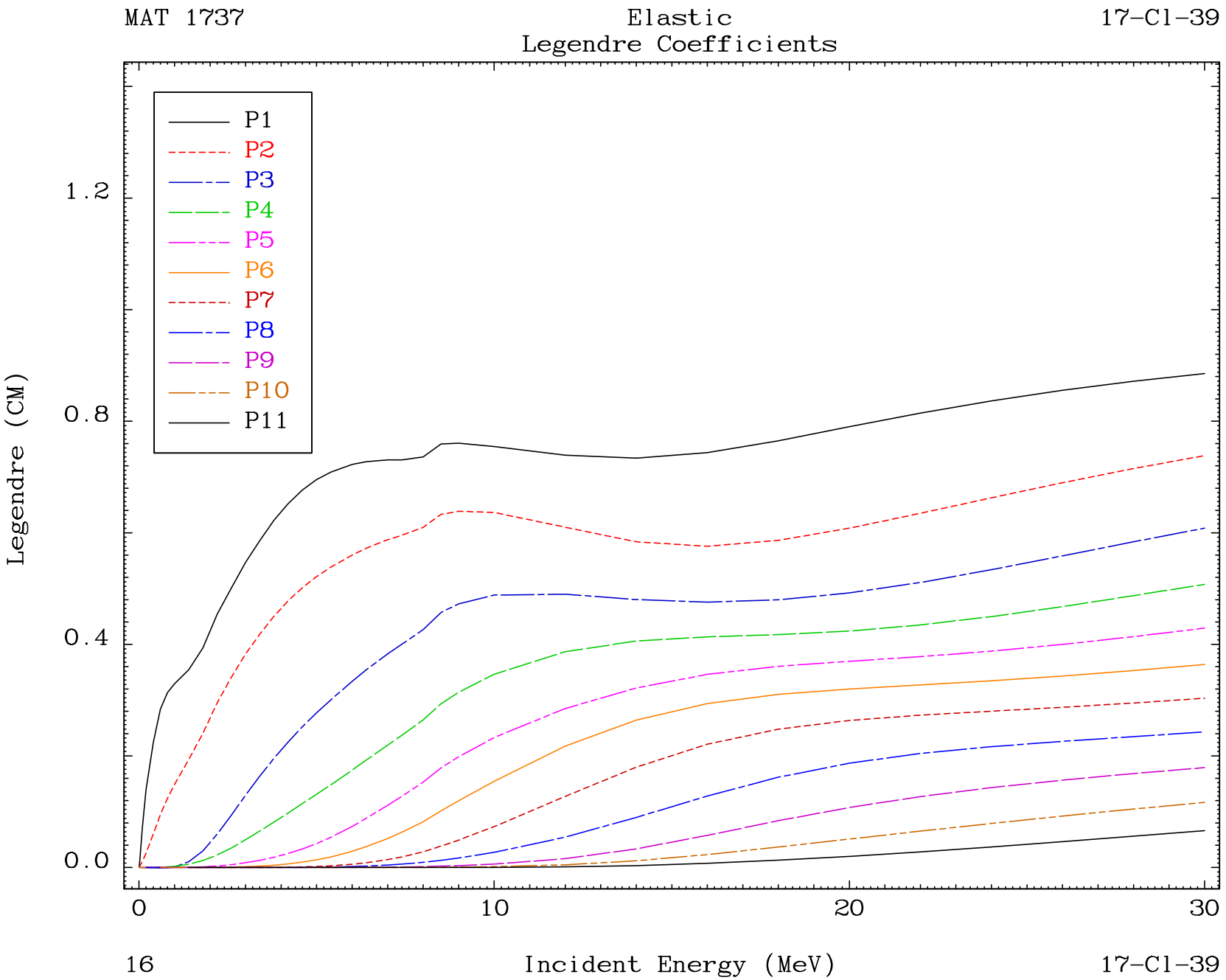

MAT 1737
(n,d) Levels
17-Cl-39
293 Kelvin Cross Sections
Cross Section (barns)
10-2
5
10-4
5
10-6
5
10-8
5
5
(n,d)
8 9 10 1 2 3 4 5 6 7 8 9 10 2 2
11
Incident Energy (MeV)
17-Cl-39

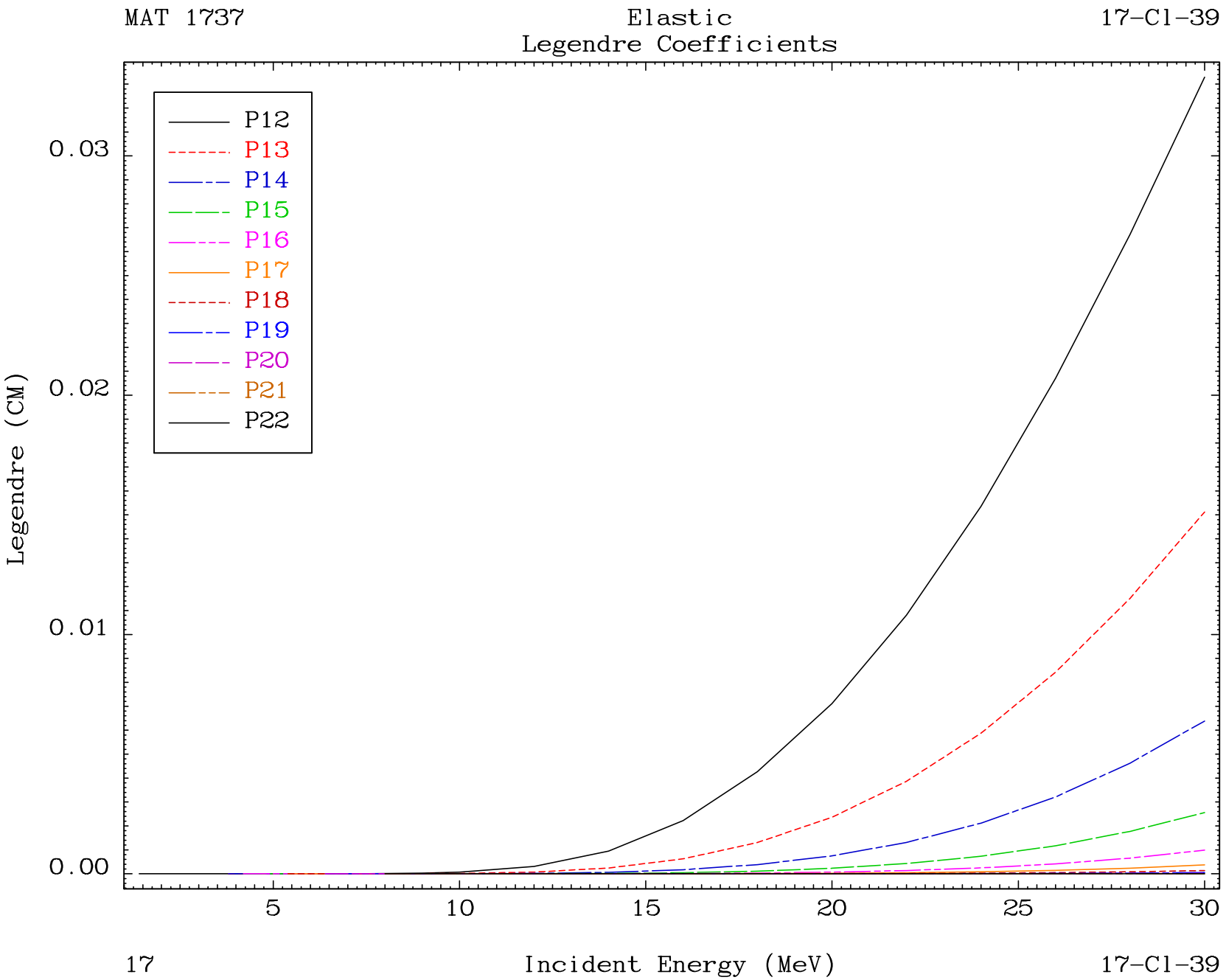

MAT 1737
(n,t) Levels
17-Cl-39
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^1
2
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
12
17-Cl-39

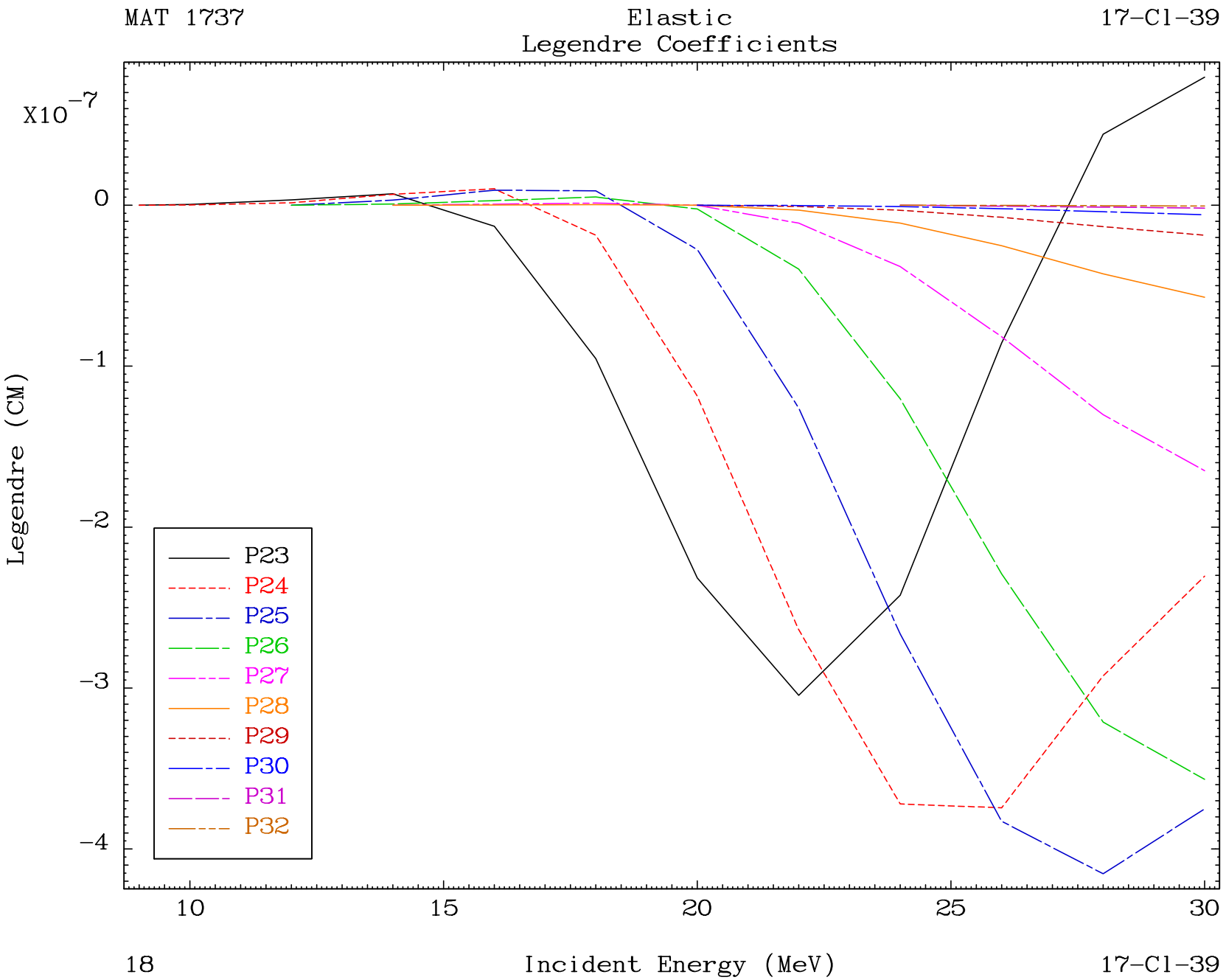

MAT 1737
(n,He3) Levels
17-Cl-39
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10-4
5
10-6
5
10-8
5
10-10
5
2
3
4
5
6
7
8
9
10 2
2
13
Incident Energy (MeV)
17-Cl-39

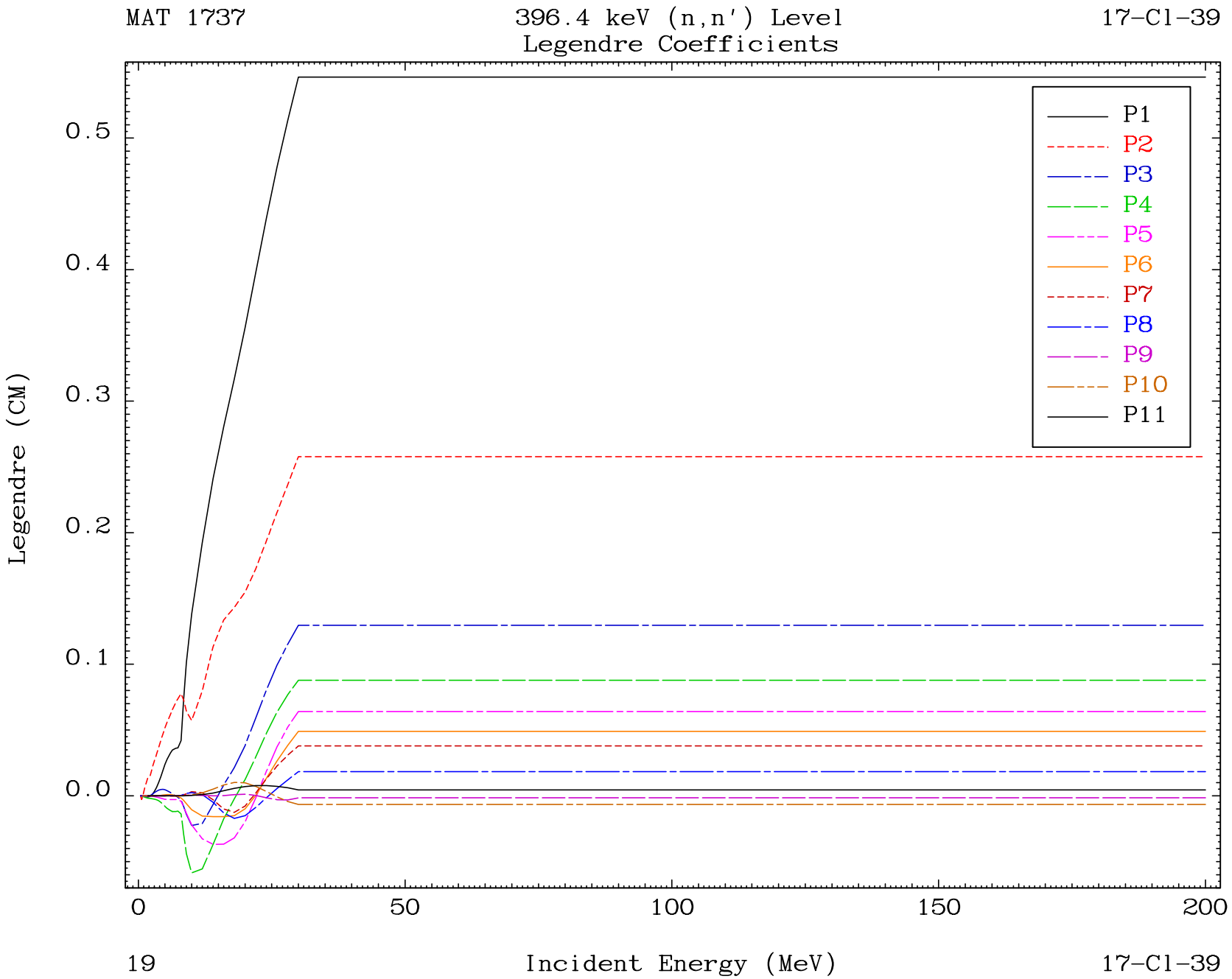

MAT 1737
(n,α) Levels
17-Cl-39
293 Kelvin Cross Sections
(n,α)
Cross Section (barns)
Incident Energy (MeV)
14
17-Cl-39

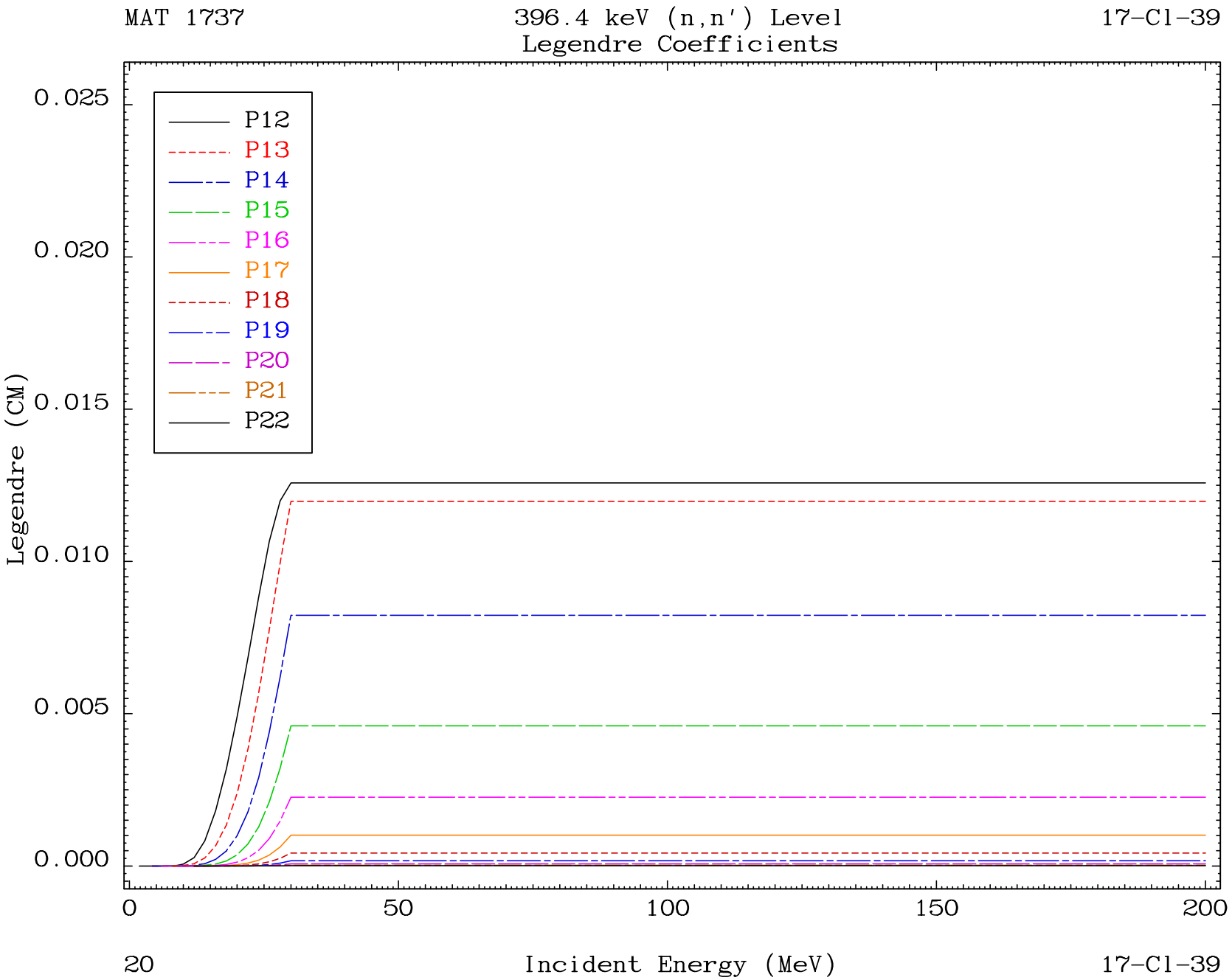

MAT 1737
Energy Release
Parameters
17-Cl-39
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^{15}
10^{12}
10^{9}
10^{6}
10^{3}
10^{0}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
10^{-2}
10^{0}
10^{2}
15
Incident Energy (MeV)
17-Cl-39

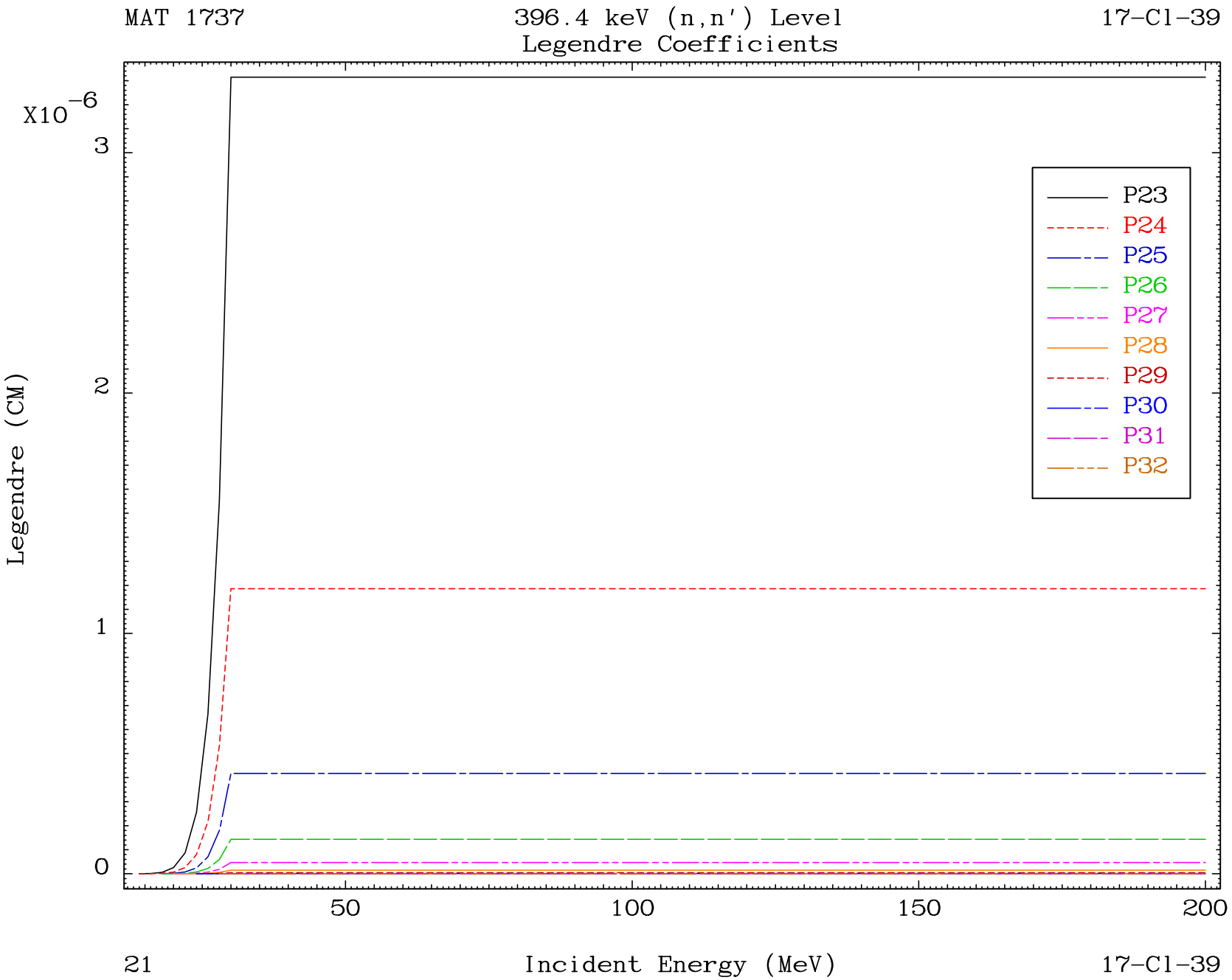

MAT 1737
Elastic
Legendre Coefficients
17-Cl-39
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
Legendre (CM)
1.2
0.8
0.4
0.0
0
10
20
30
16
Incident Energy (MeV)
17-Cl-39

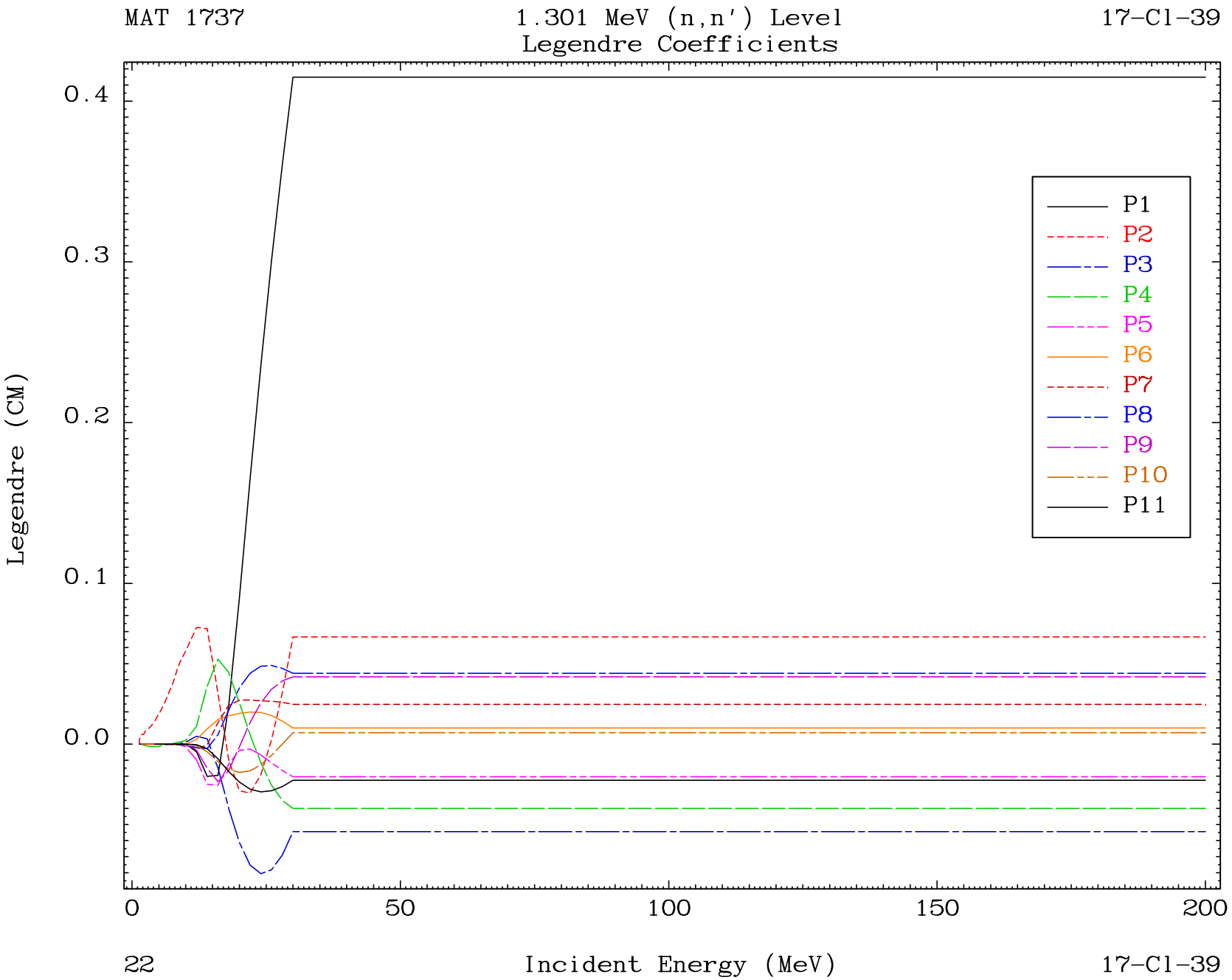

MAT 1737
Elastic
Legendre Coefficients
17-Cl-39
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0.03
0.02
0.01
0.00
Legendre (CM)
5
10
15
20
25
30
17
Incident Energy (MeV)
17-Cl-39

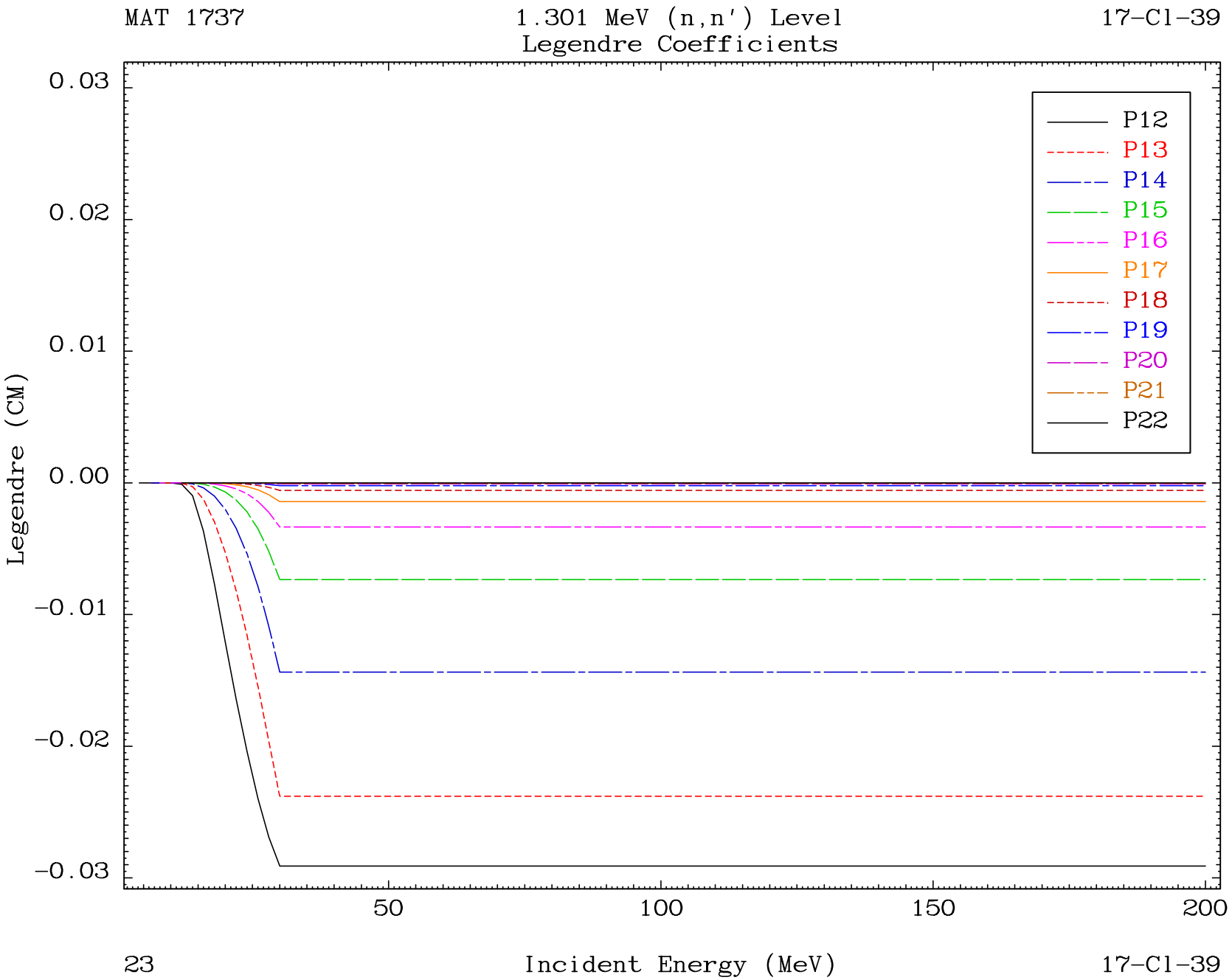

MAT 1737
Elastic
17-Cl-39
Legendre Coefficients
X10^-7
0
-1
-2
-3
-4
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
10
15
20
25
30
18
Incident Energy (MeV)
17-Cl-39

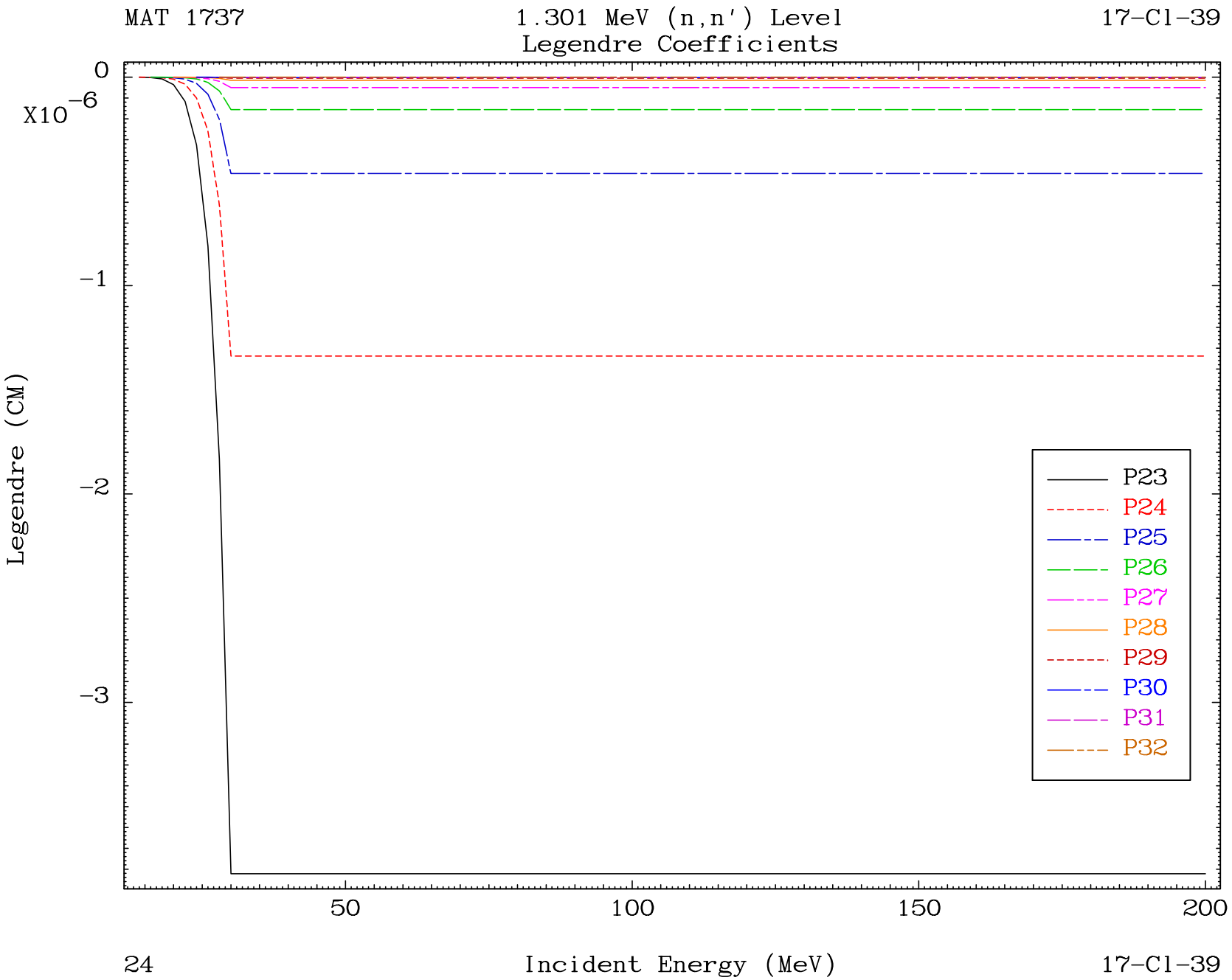

MAT 1737
396.4 keV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
19
Incident Energy (MeV)
17-Cl-39

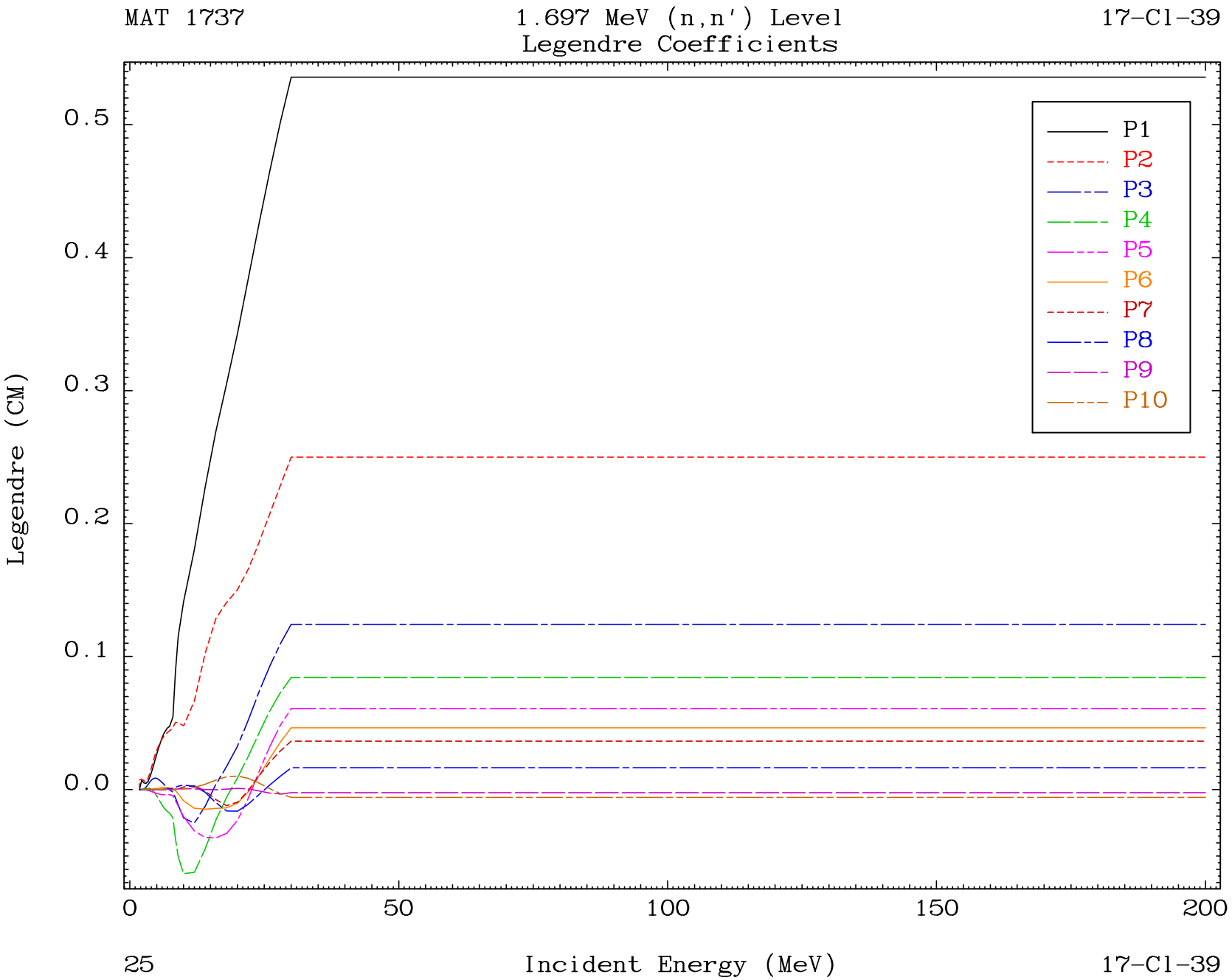

MAT 1737
396.4 keV (n,n') Level
Legendre Coefficients
17-Cl-39
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0.025
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
0
50
100
150
200
20
Incident Energy (MeV)
17-Cl-39

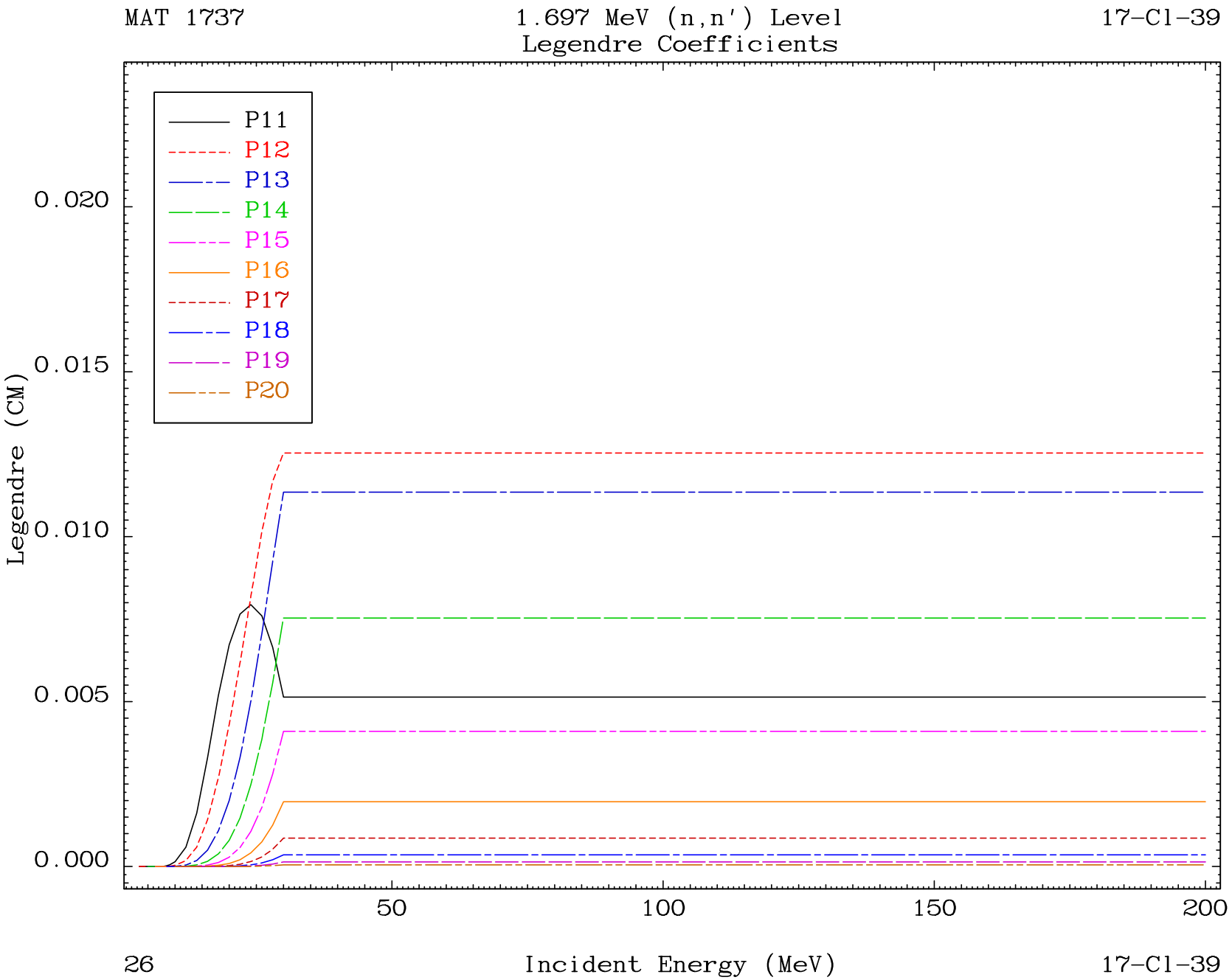

MAT 1737
396.4 keV (n,n') Level
Legendre Coefficients
17-Cl-39
X10 −6
3
2
1
0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
21
Incident Energy (MeV)
17-Cl-39

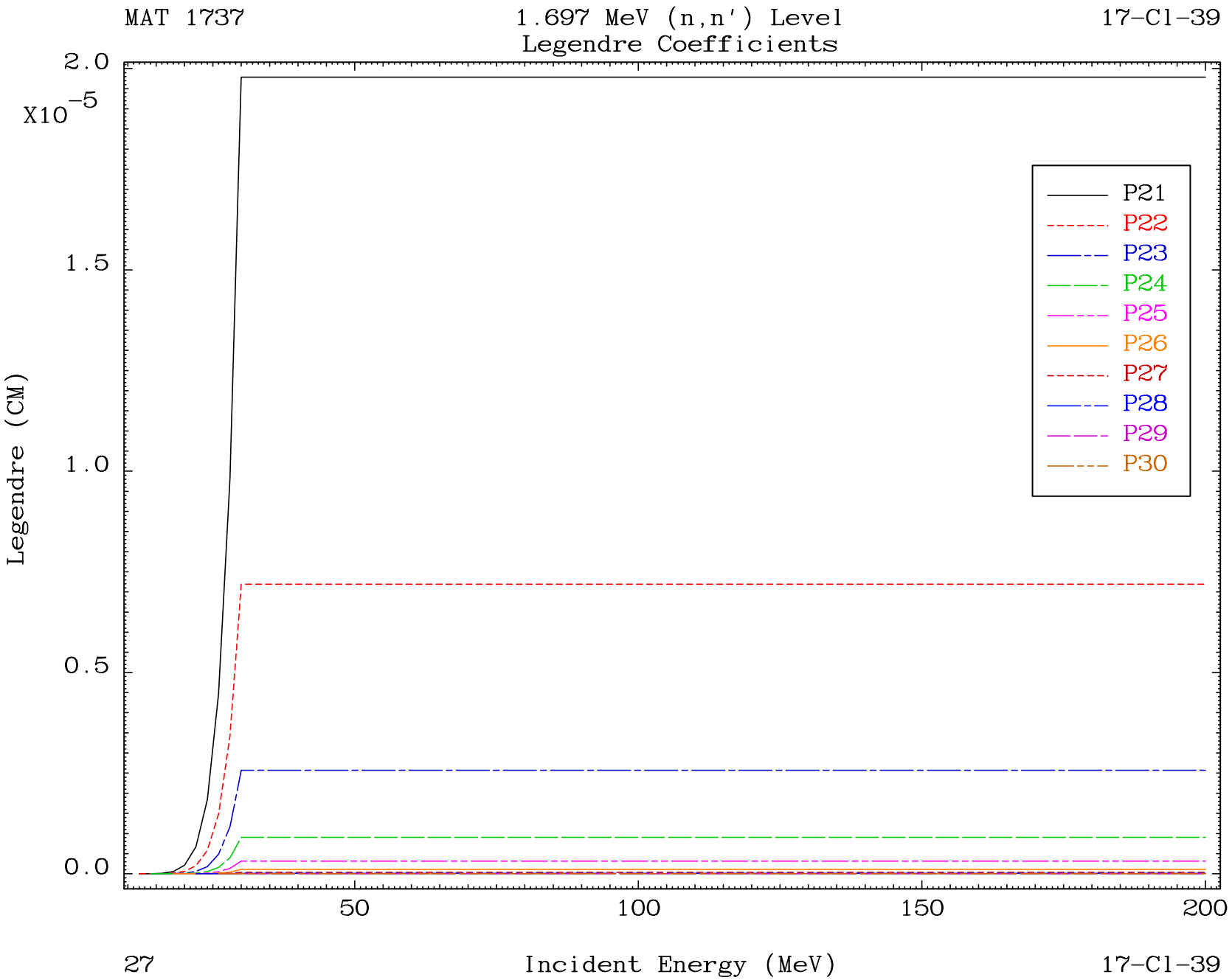

MAT 1737
1.301 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
Incident Energy (MeV)
22
17-Cl-39
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11

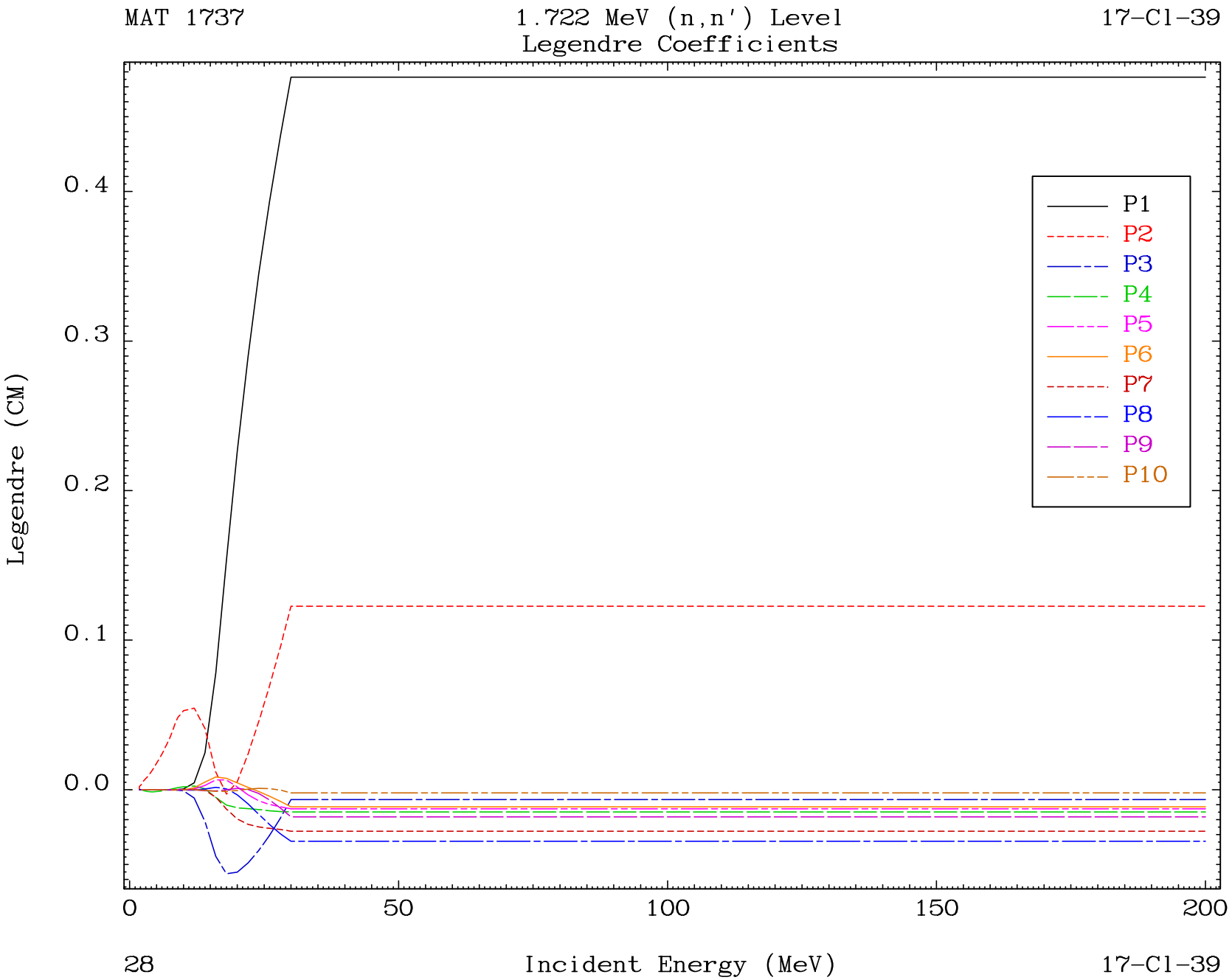

MAT 1737
1.301 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
0.03
0.02
0.01
0.00
-0.01
-0.02
-0.03
Legendre (CM)
50
100
150
200
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
23
Incident Energy (MeV)
17-Cl-39

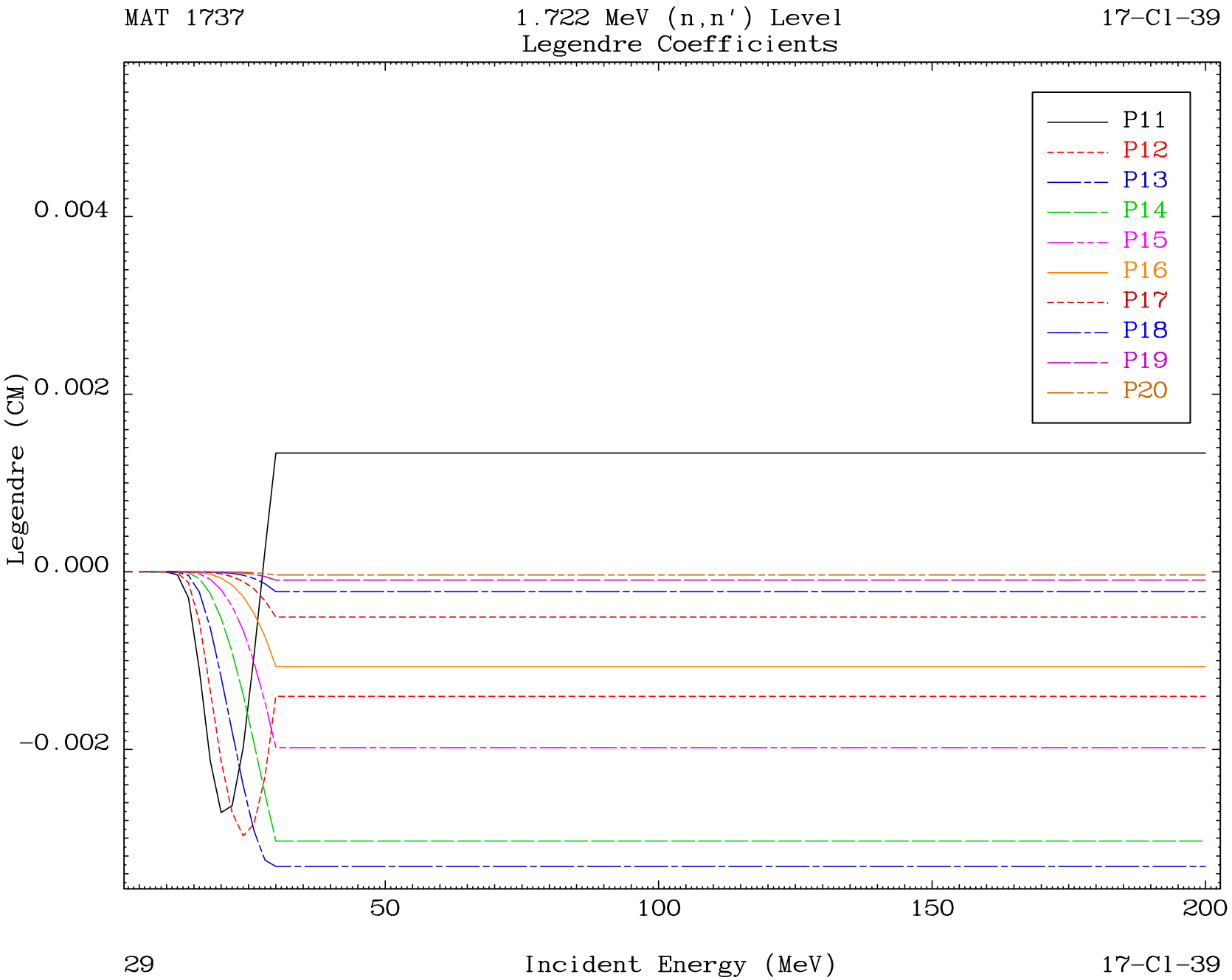

MAT 1737
1.301 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
0
X10^-6
-1
-2
-3
Legendre (CM)
50
100
150
200
24
Incident Energy (MeV)
17-Cl-39
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32

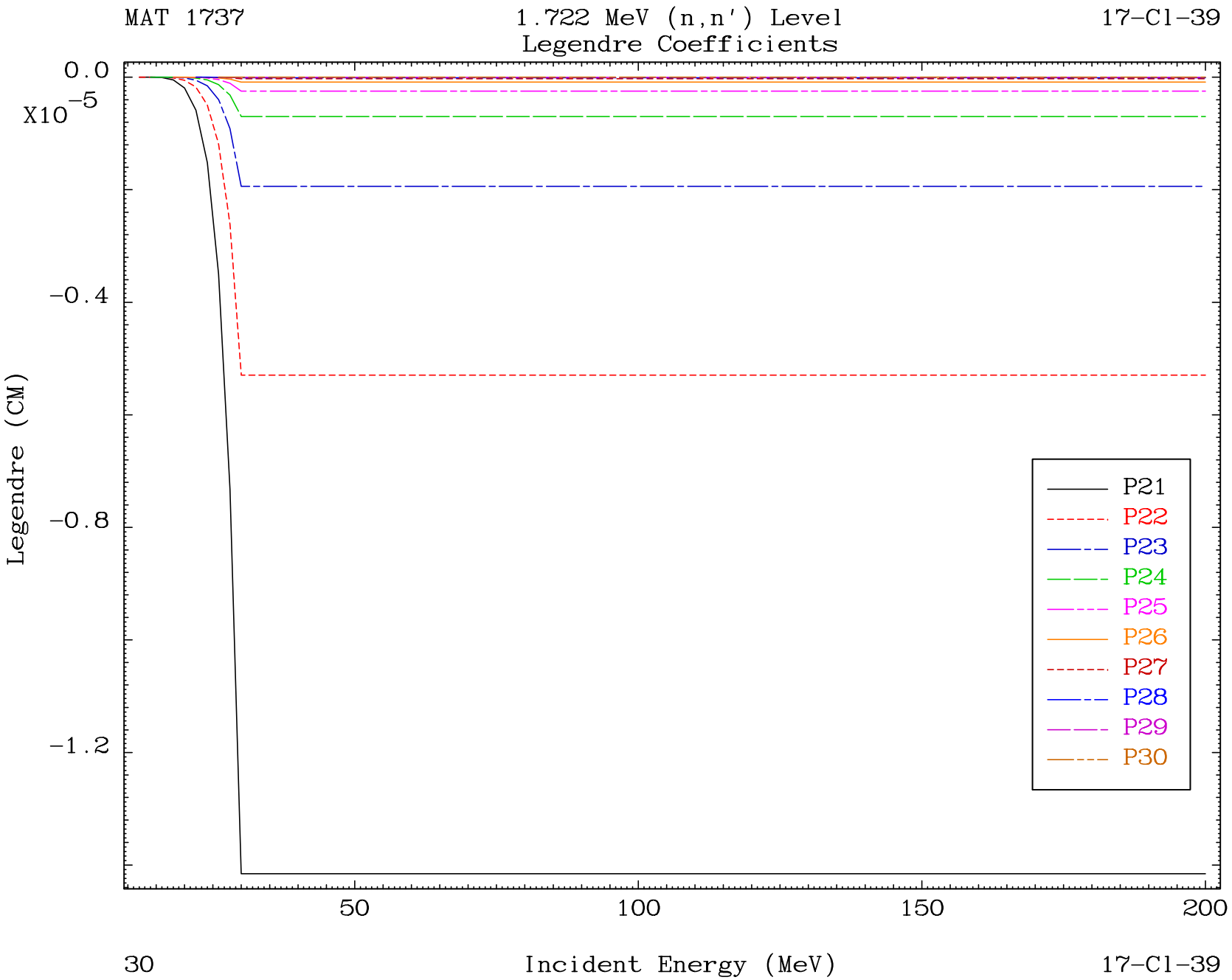

MAT 1737
1.697 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
25
Incident Energy (MeV)
17-Cl-39

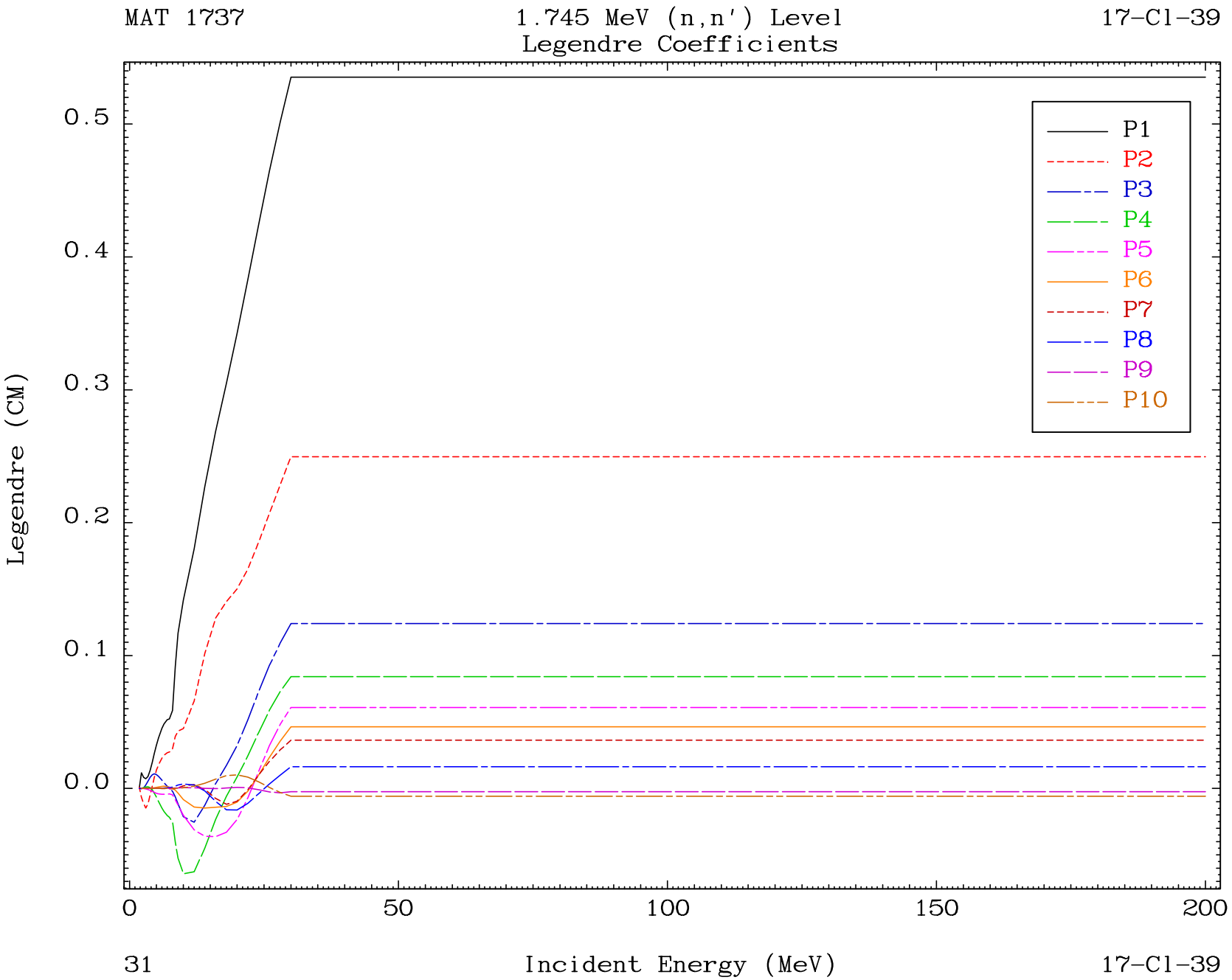

MAT 1737
1.697 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
26
Incident Energy (MeV)
17-Cl-39

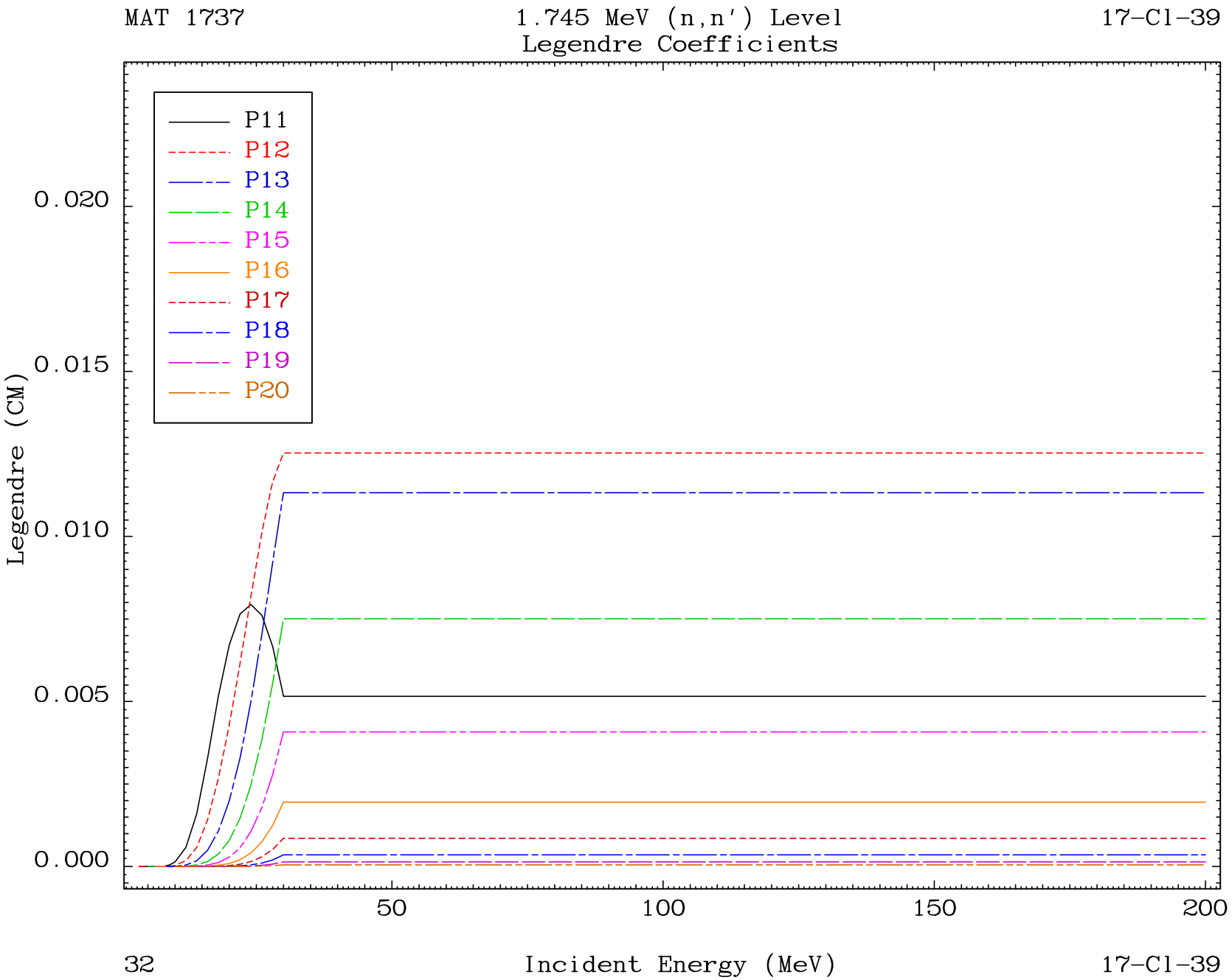

MAT 1737
1.697 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10 −5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
27
Incident Energy (MeV)
17-Cl-39

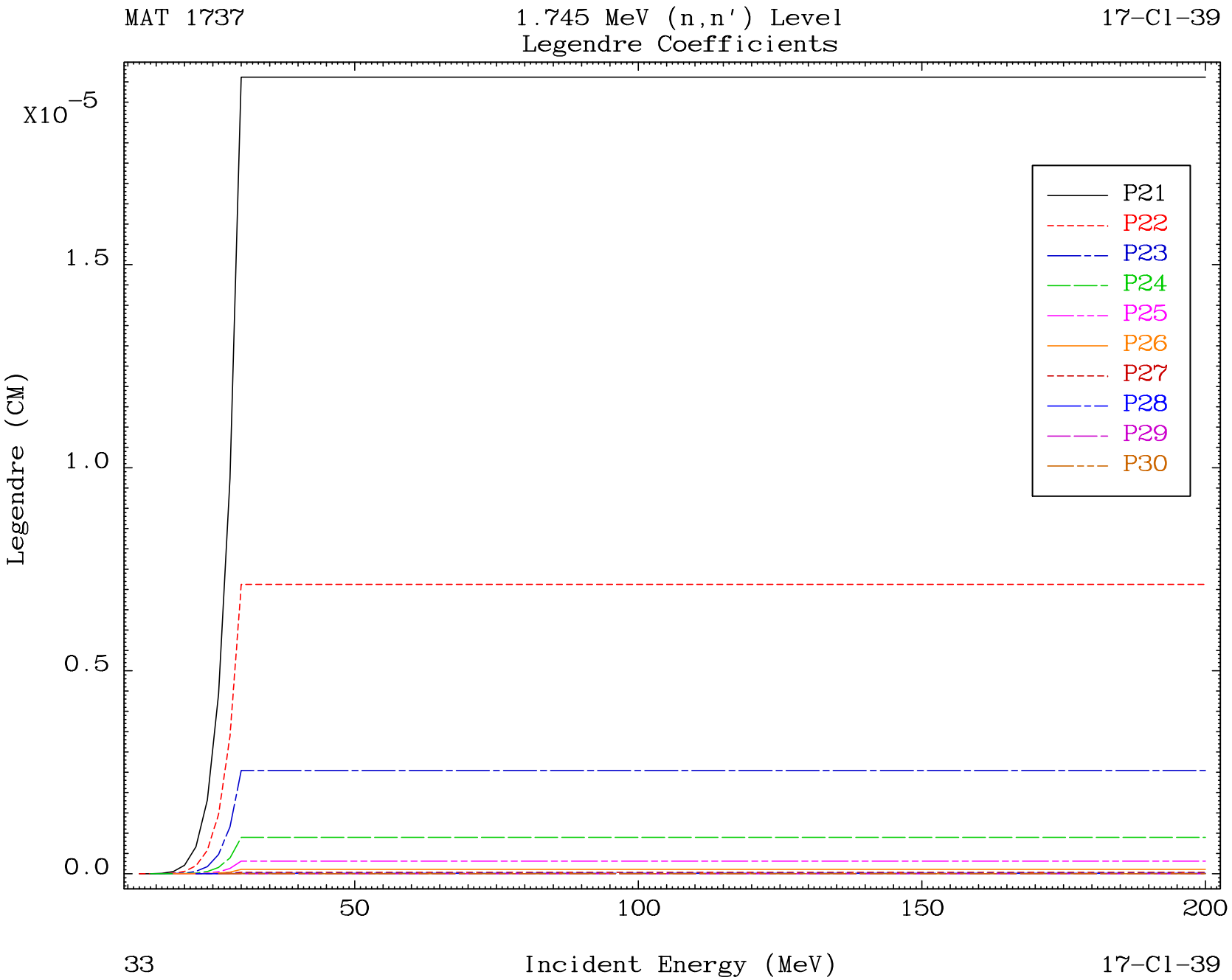

MAT 1737
1.722 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
28
Incident Energy (MeV)
17-Cl-39

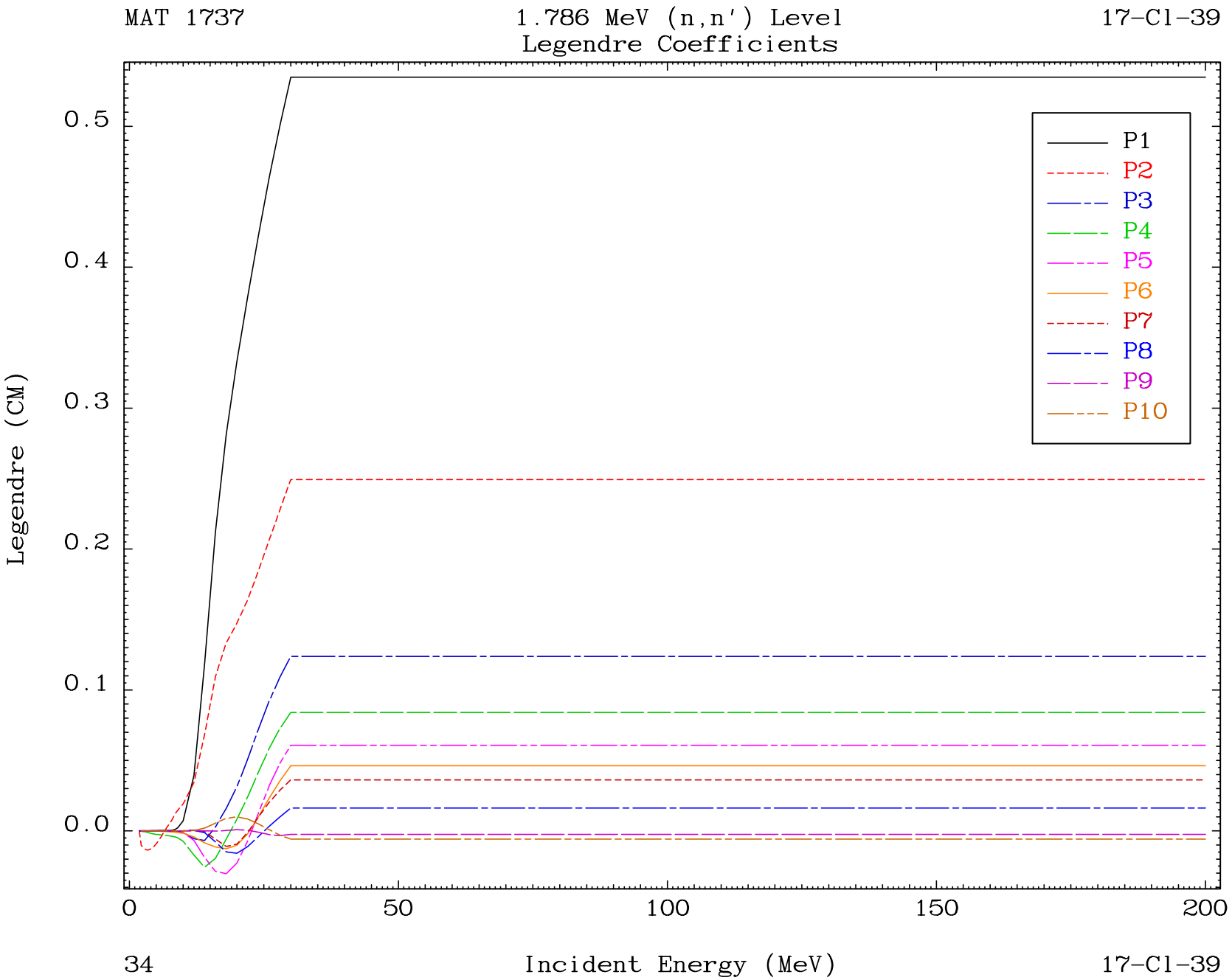

MAT 1737
1.722 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.004
0.002
0.000
-0.002
Legendre (CM)
50
100
150
200
29
Incident Energy (MeV)
17-Cl-39

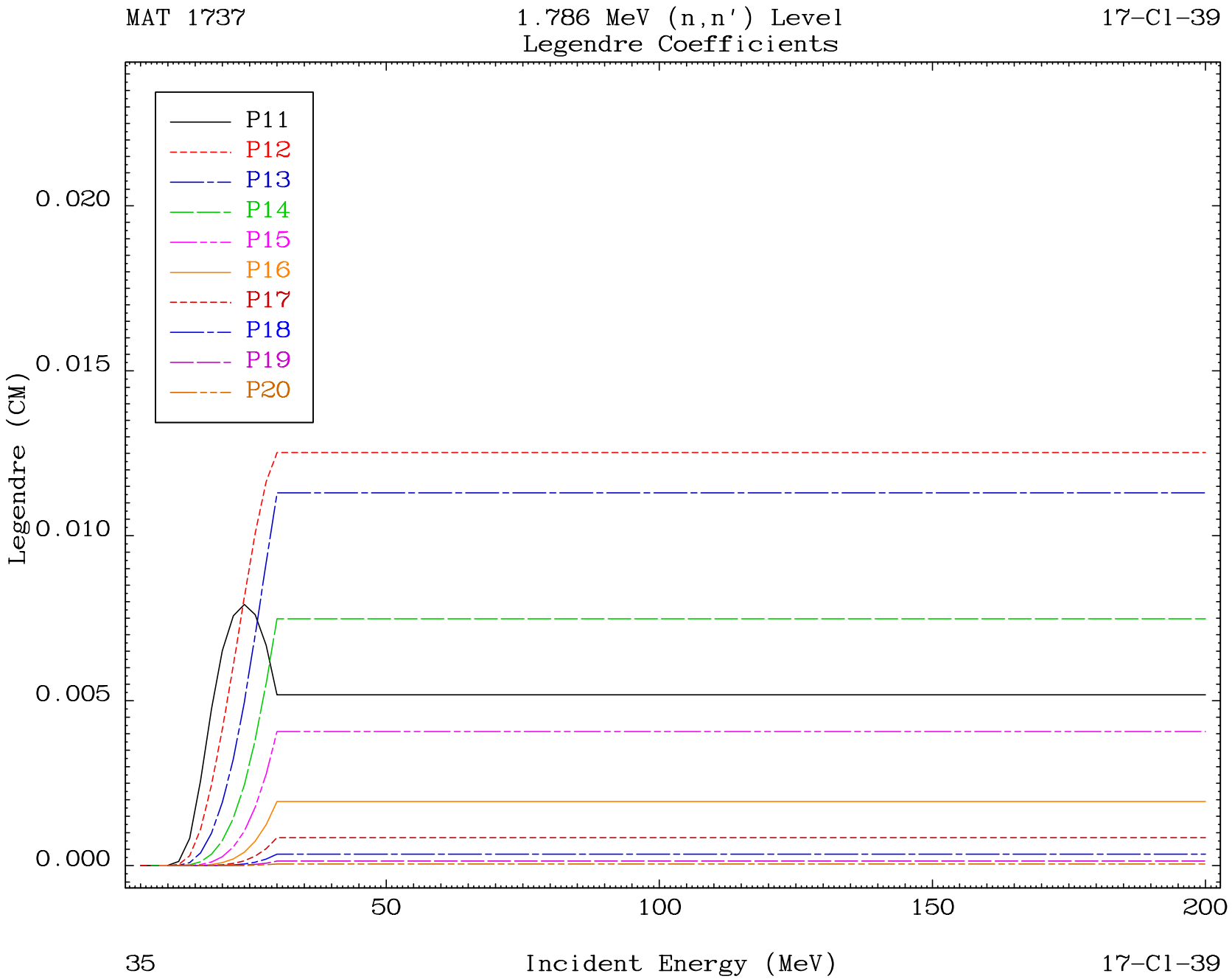

MAT 1737
1.722 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
0.0
X10^-5
-0.4
-0.8
-1.2
Legendre (CM)
50
100
150
200
30
Incident Energy (MeV)
17-Cl-39
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

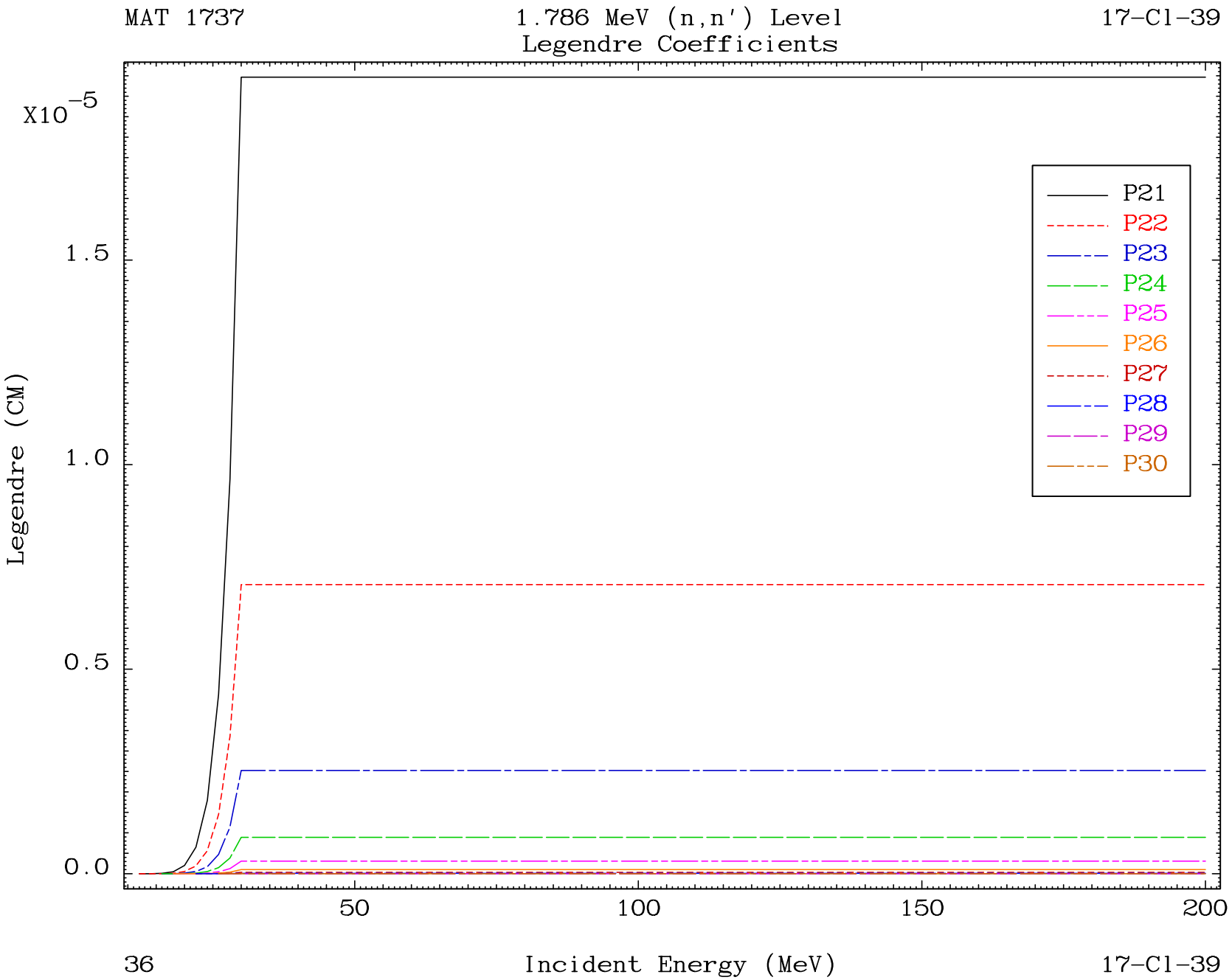

MAT 1737
1.745 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
31
Incident Energy (MeV)
17-Cl-39

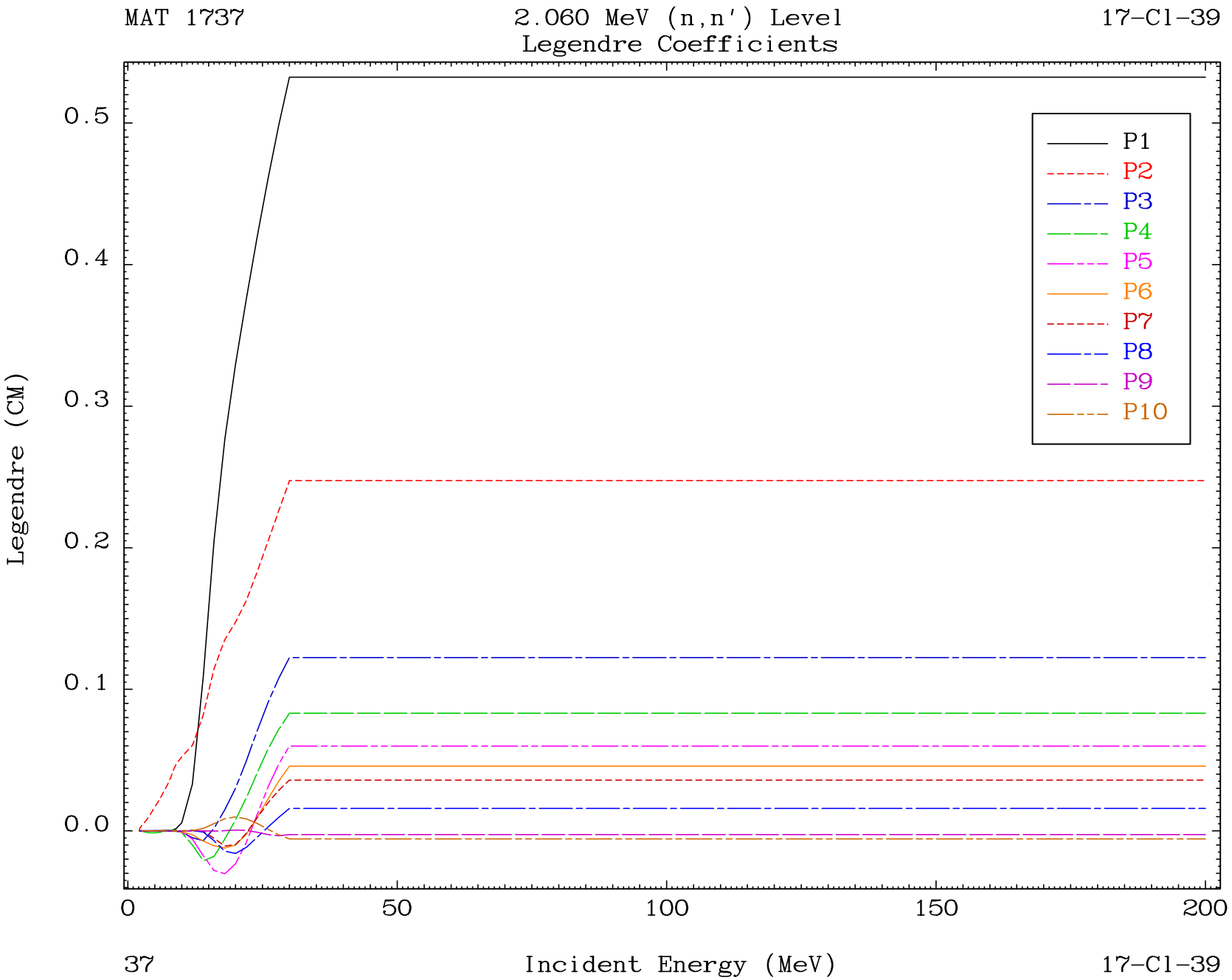

MAT 1737
1.745 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
32
Incident Energy (MeV)
17-Cl-39

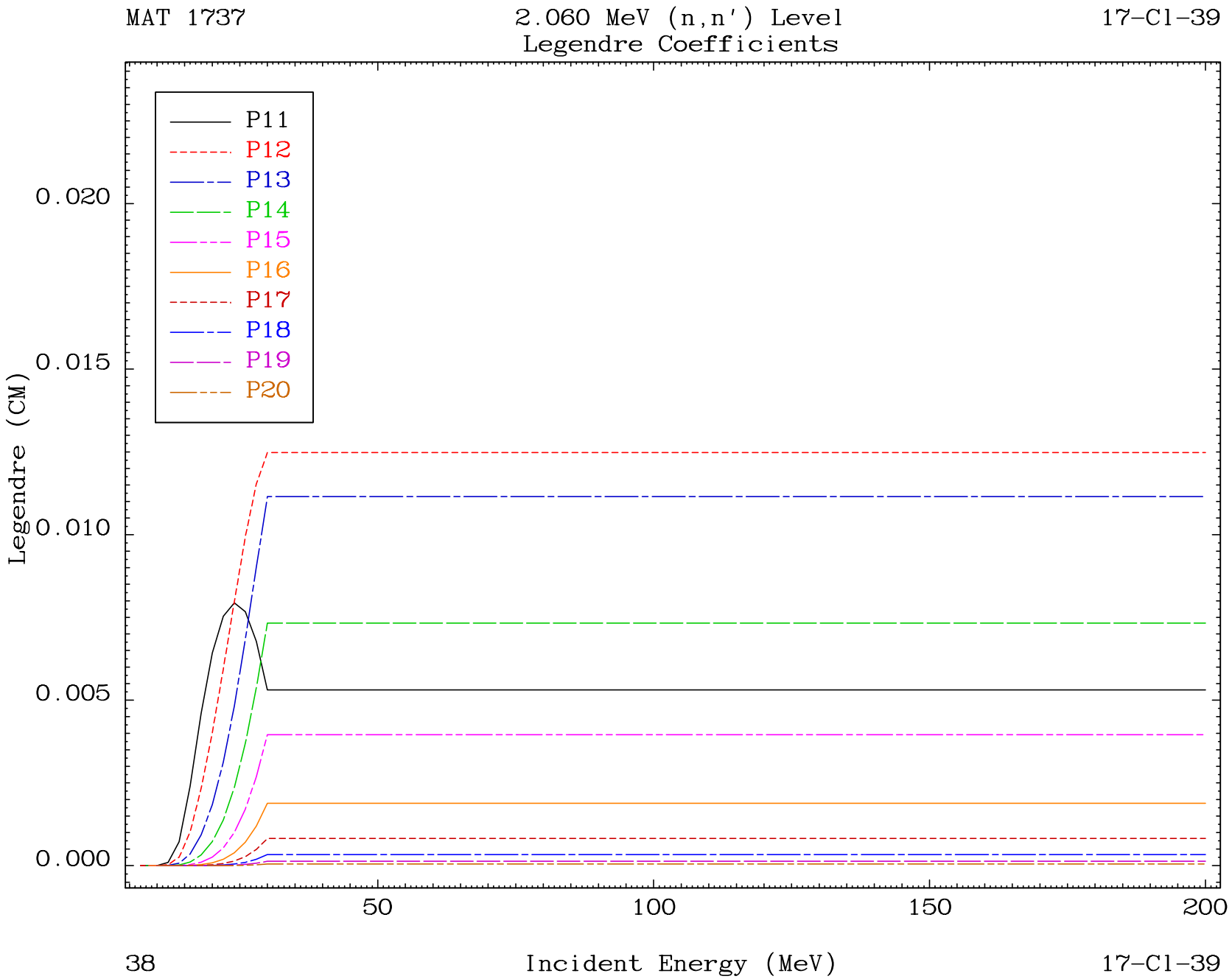

MAT 1737
1.745 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-5
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
33
Incident Energy (MeV)
17-Cl-39

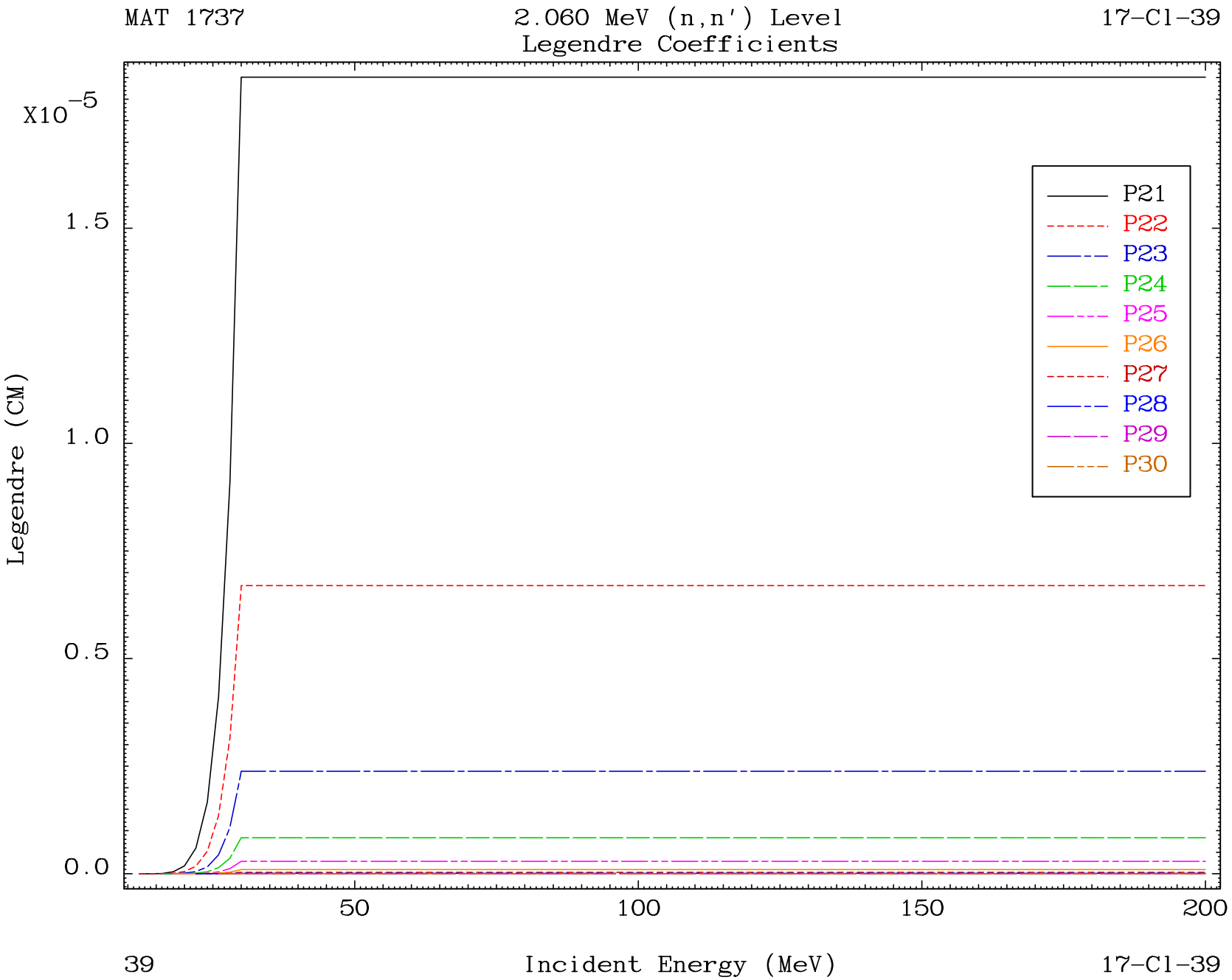

MAT 1737
1.786 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
34
Incident Energy (MeV)
17-Cl-39
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

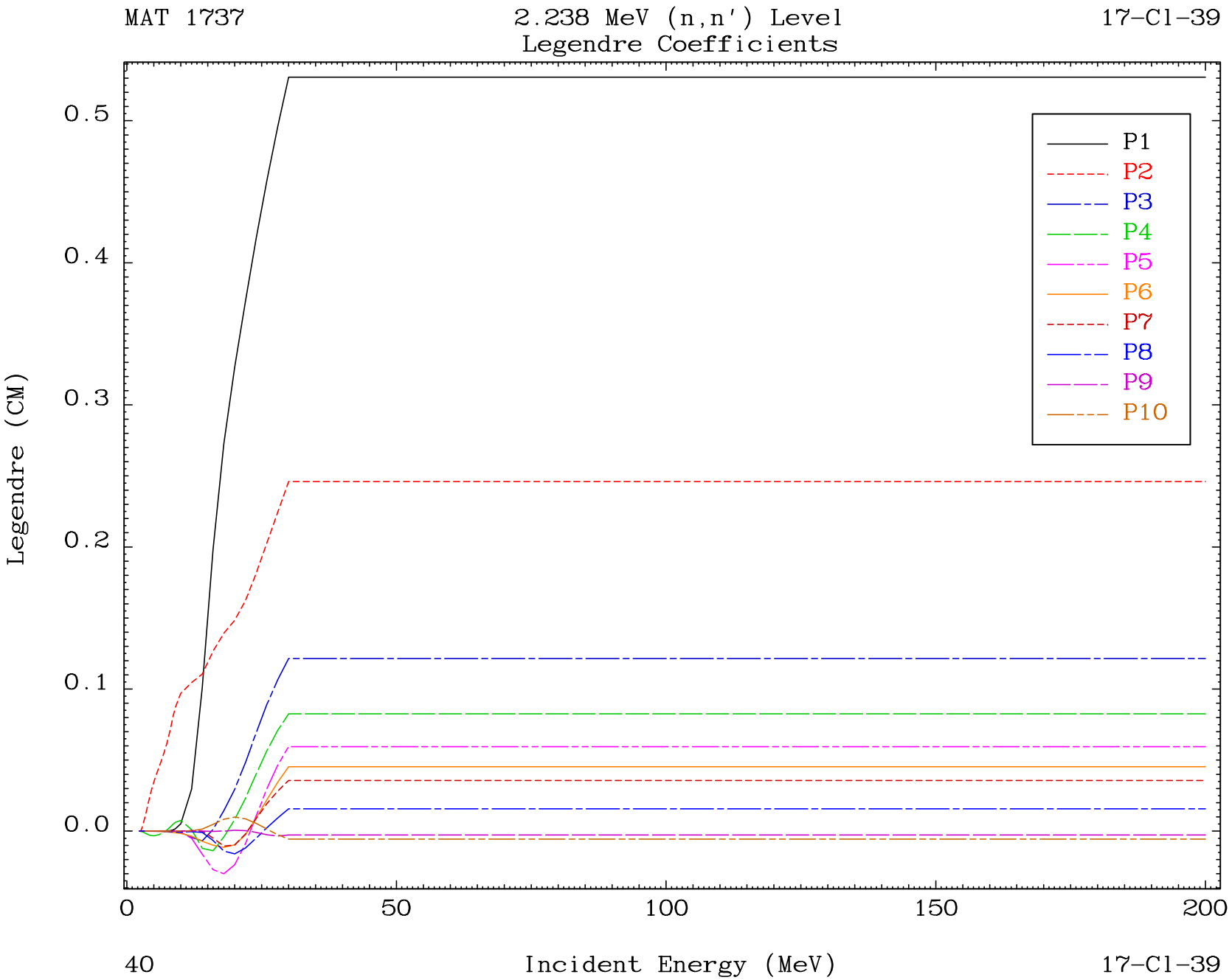

MAT 1737
1.786 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
35
Incident Energy (MeV)
17-Cl-39

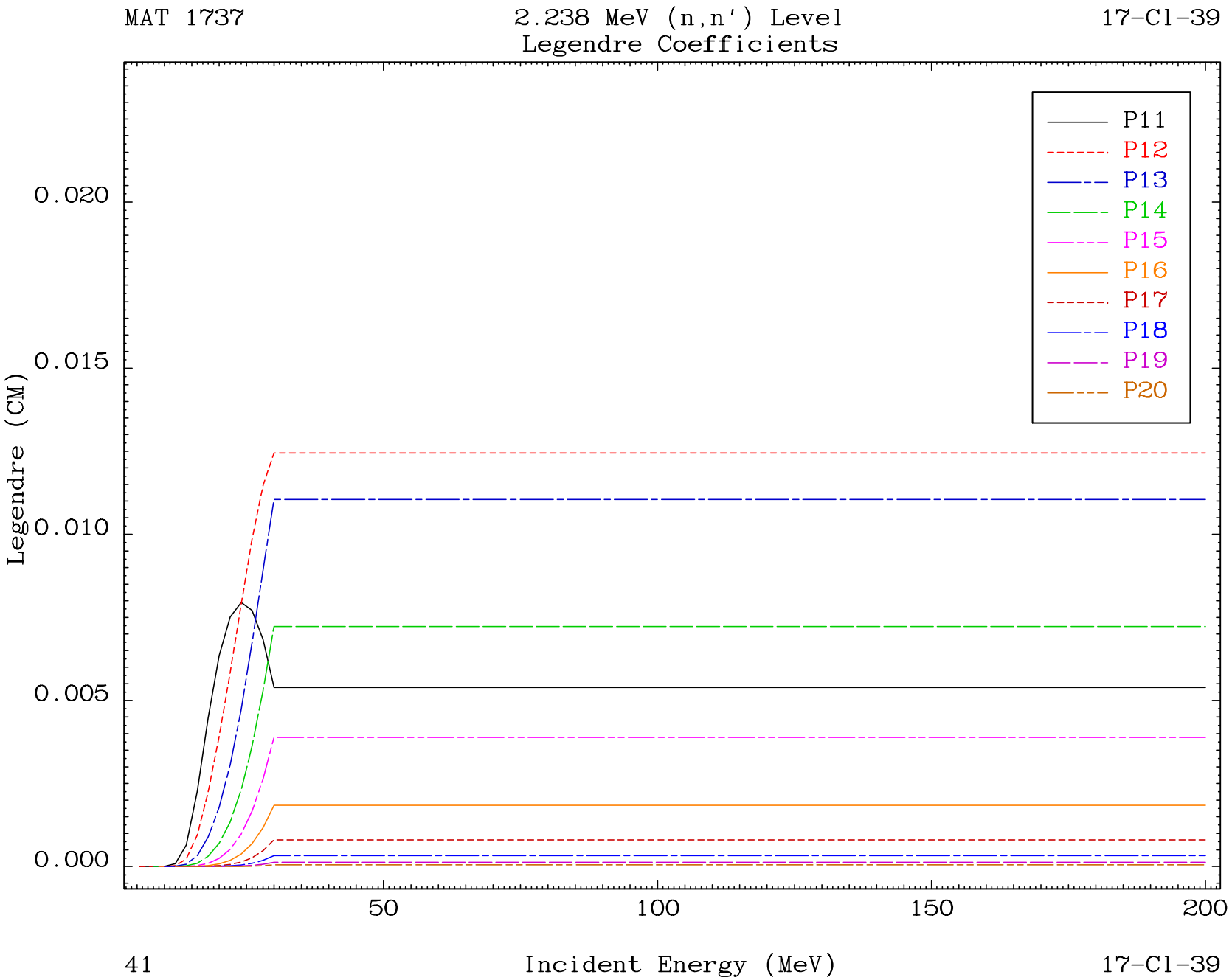

MAT 1737
1.786 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-5
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
36
Incident Energy (MeV)
17-Cl-39

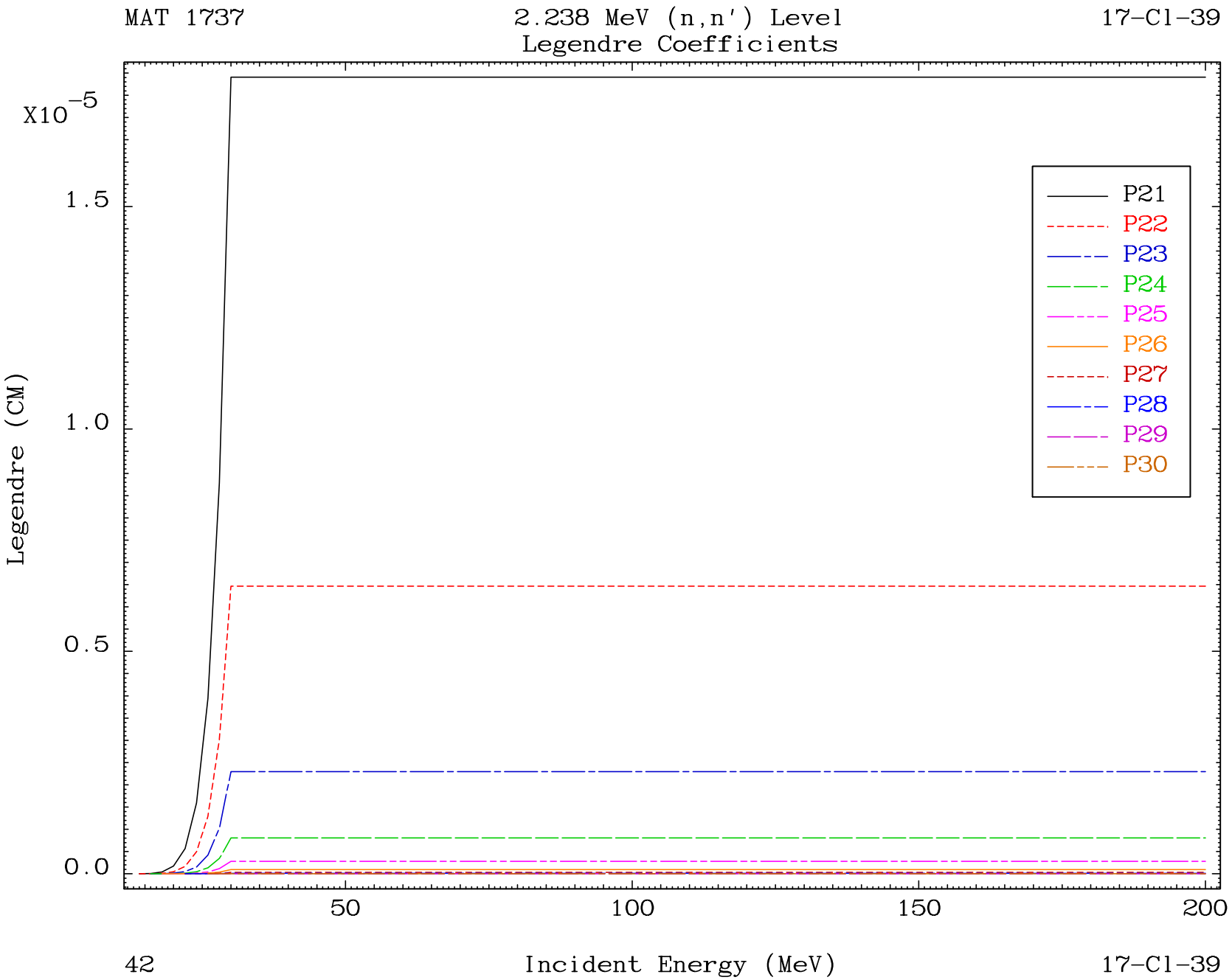

MAT 1737
2.060 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
37
Incident Energy (MeV)
17-Cl-39
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

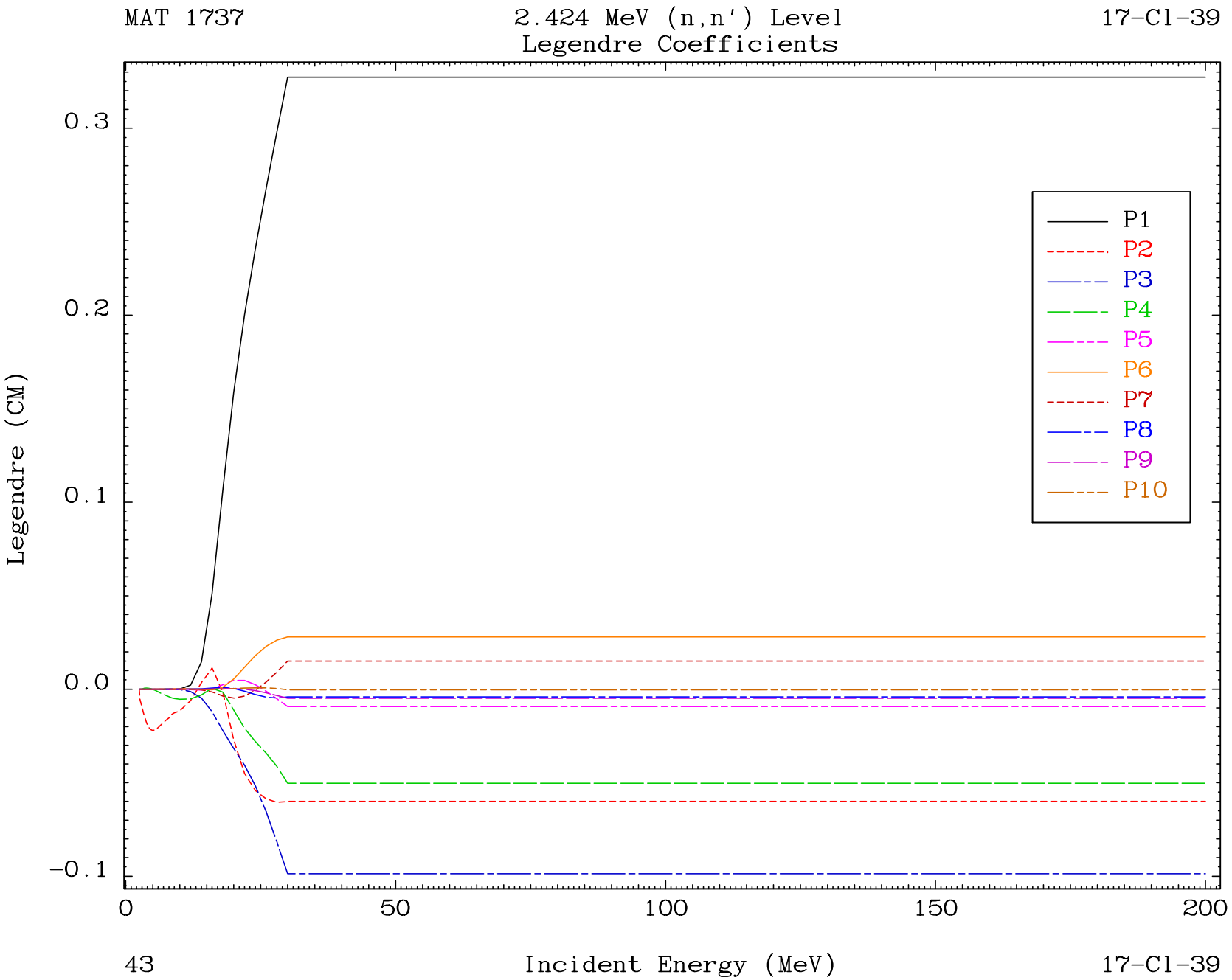

MAT 1737
2.060 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
38
Incident Energy (MeV)
17-Cl-39

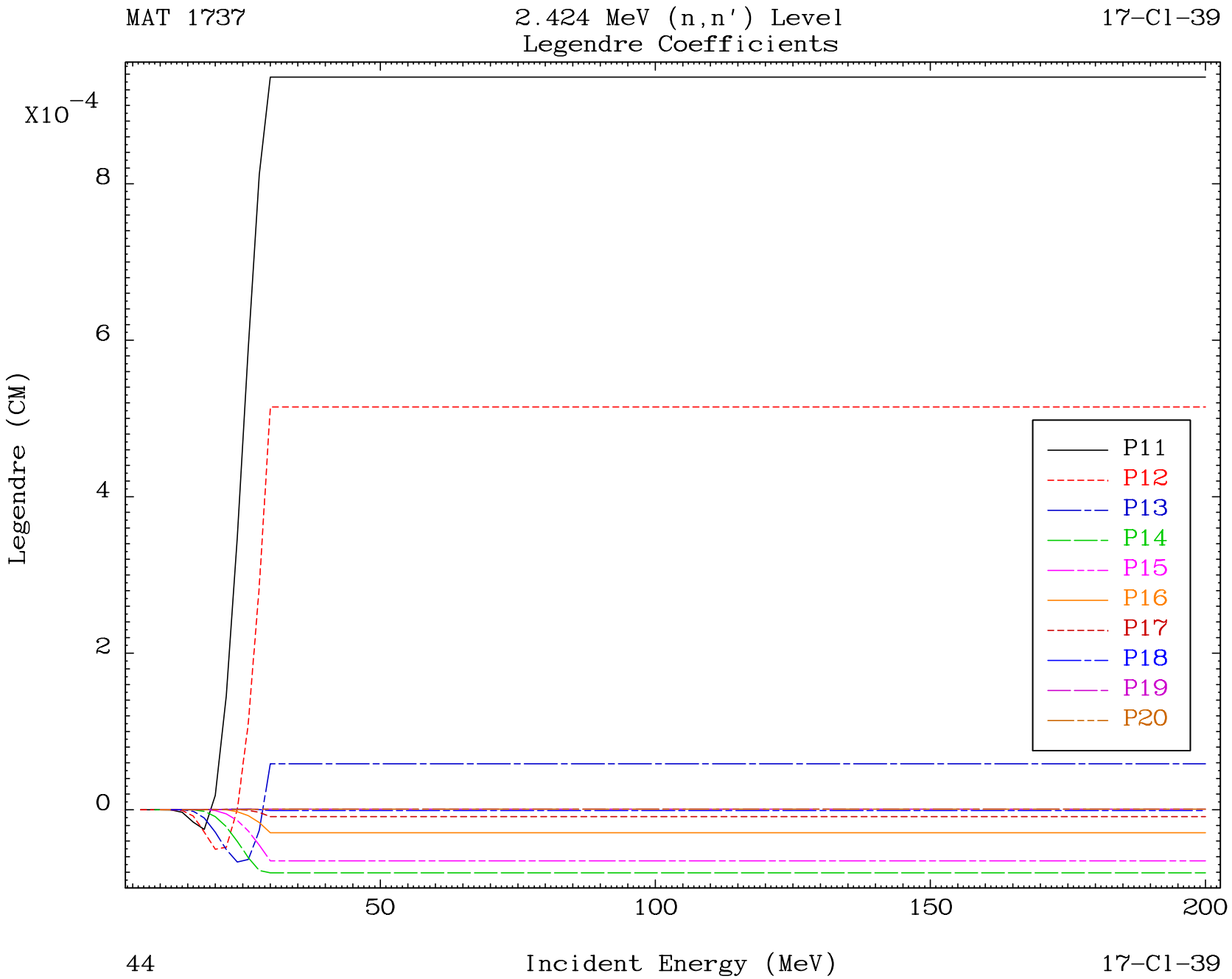

MAT 1737
2.060 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-5
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
39
Incident Energy (MeV)
17-Cl-39

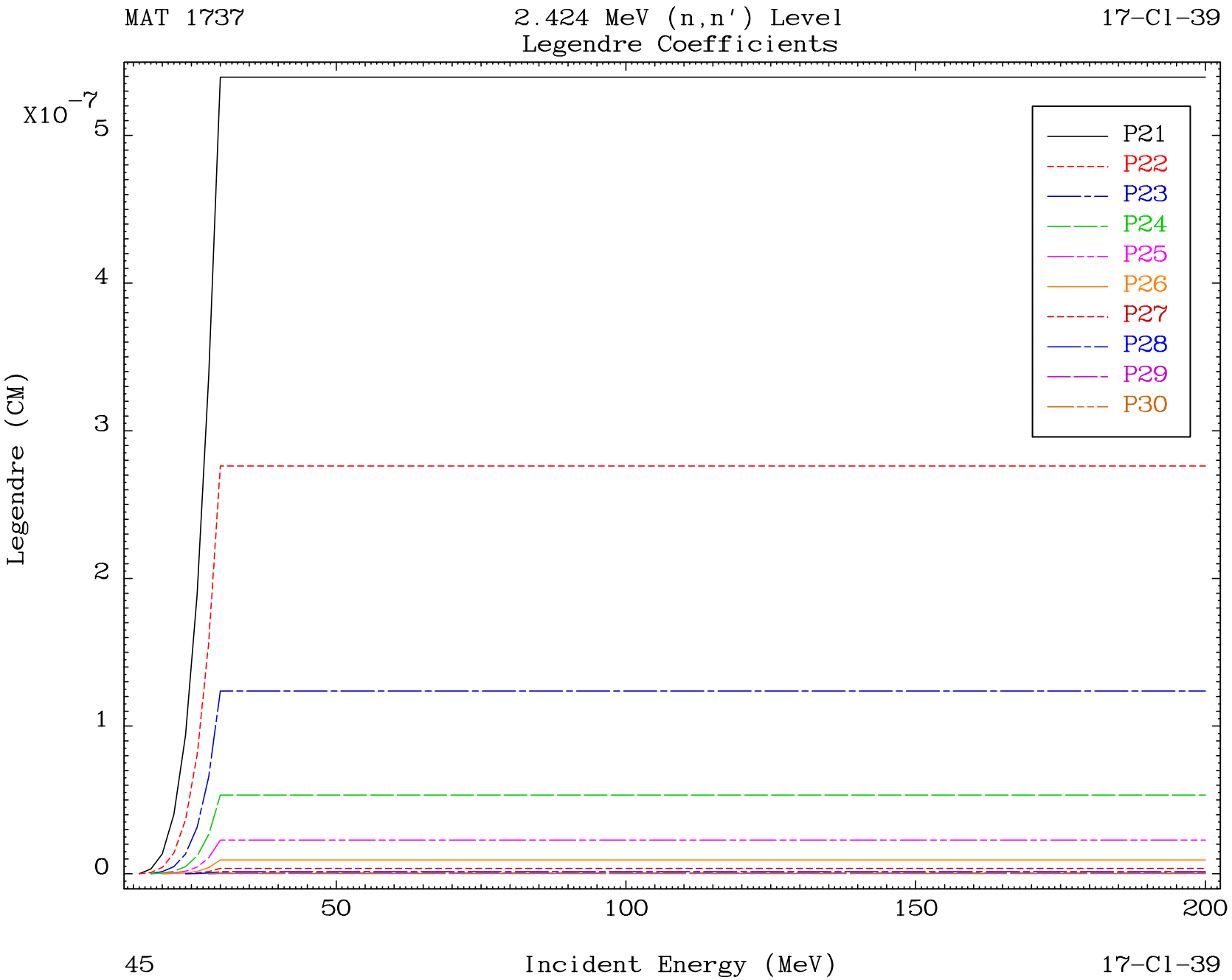

MAT 1737
2.238 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
40
Incident Energy (MeV)
17-Cl-39

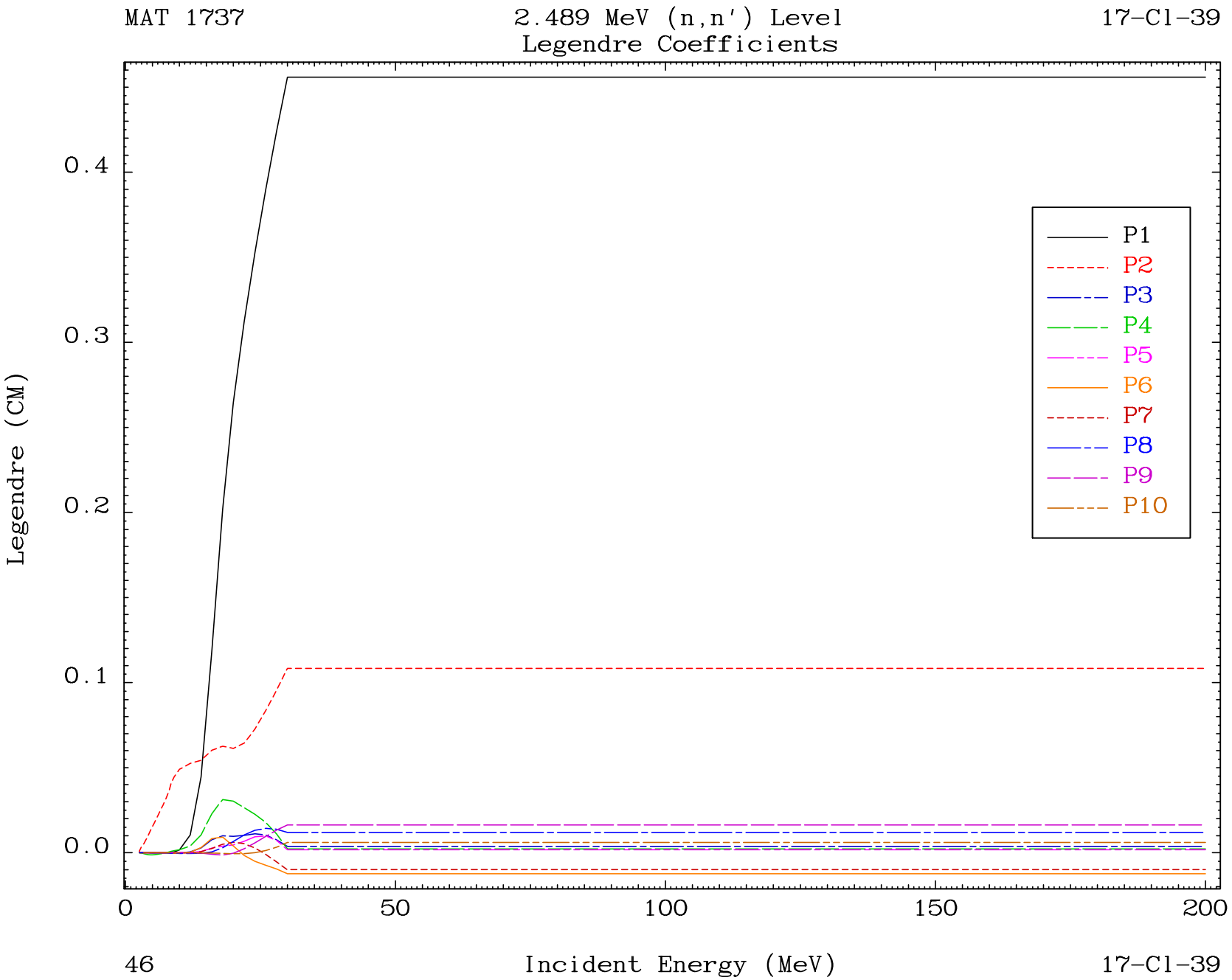

MAT 1737
2.238 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
41
Incident Energy (MeV)
17-Cl-39

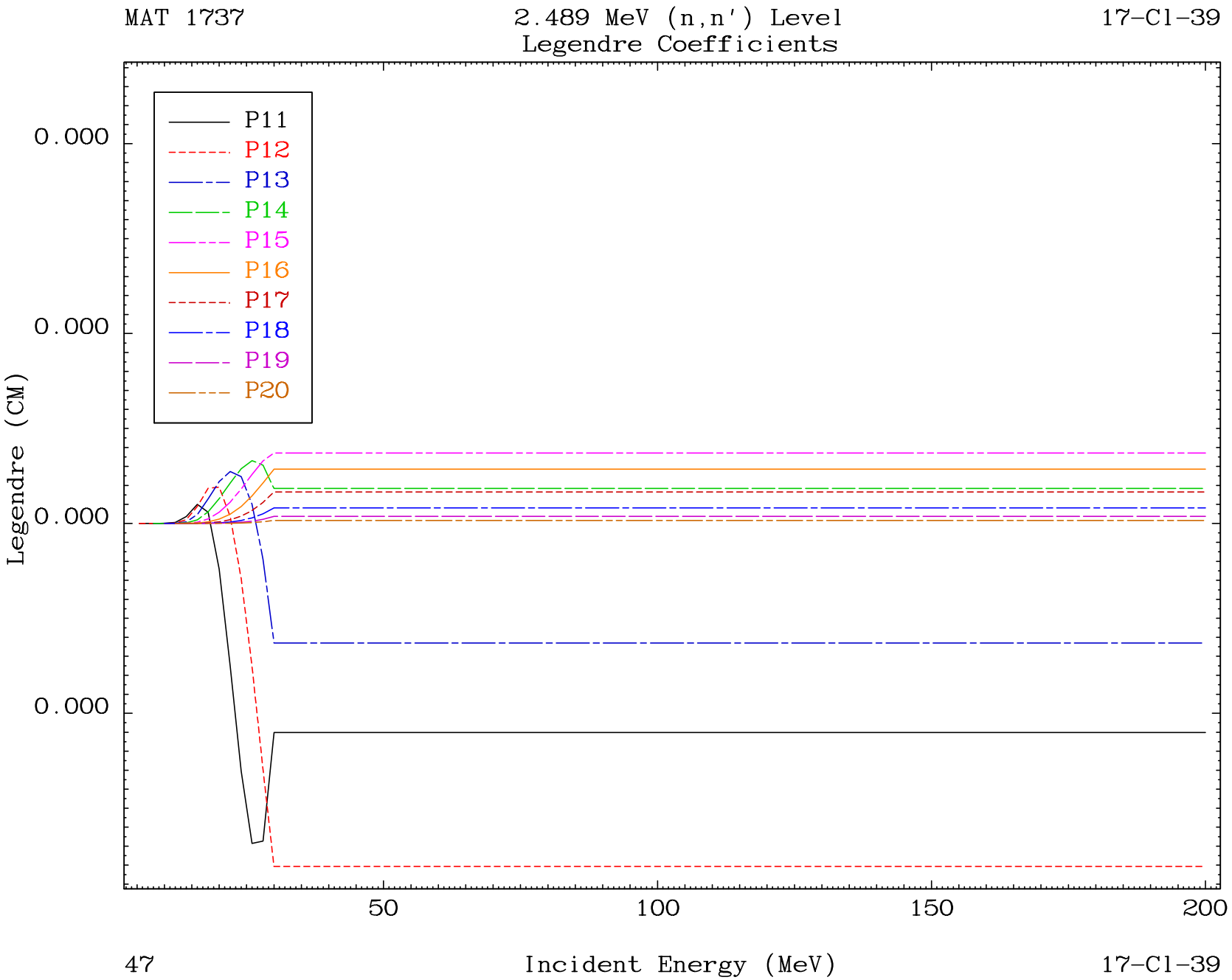

MAT 1737
2.238 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-5
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
42
Incident Energy (MeV)
17-Cl-39

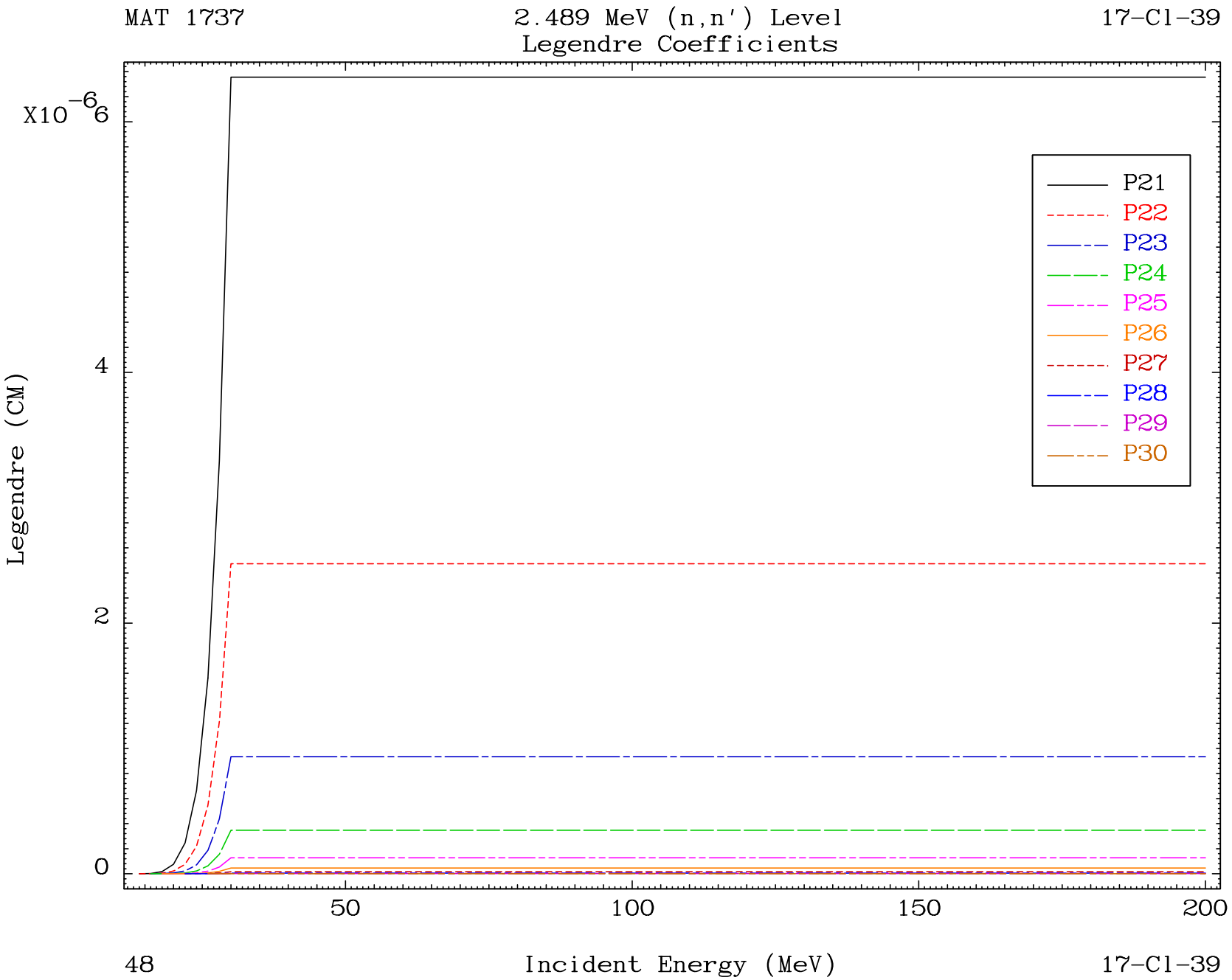

MAT 1737
2.424 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
Incident Energy (MeV)
43
17-Cl-39
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

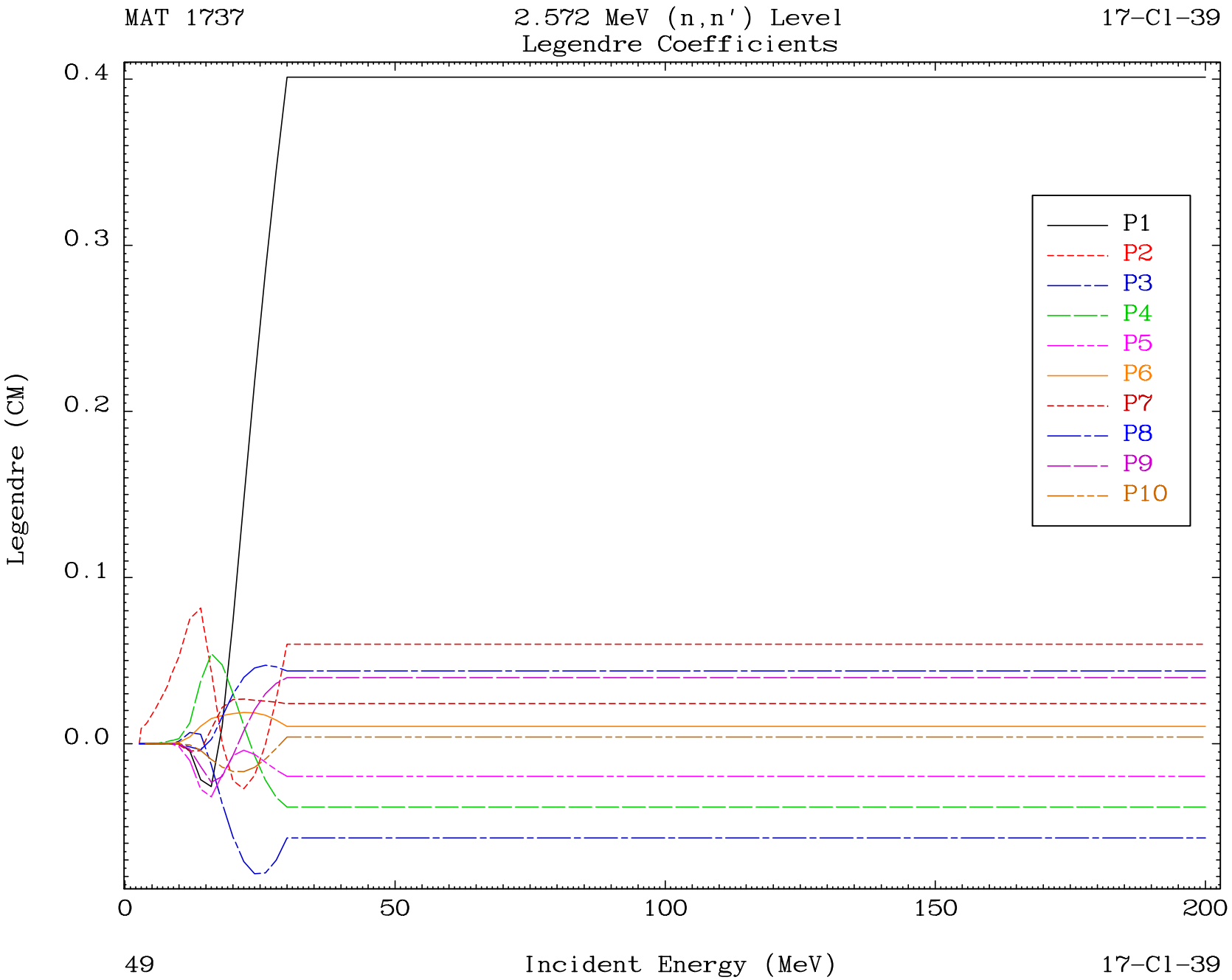

MAT 1737
2.424 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10^-4
8
6
4
2
0
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
50
100
150
200
44
Incident Energy (MeV)
17-Cl-39

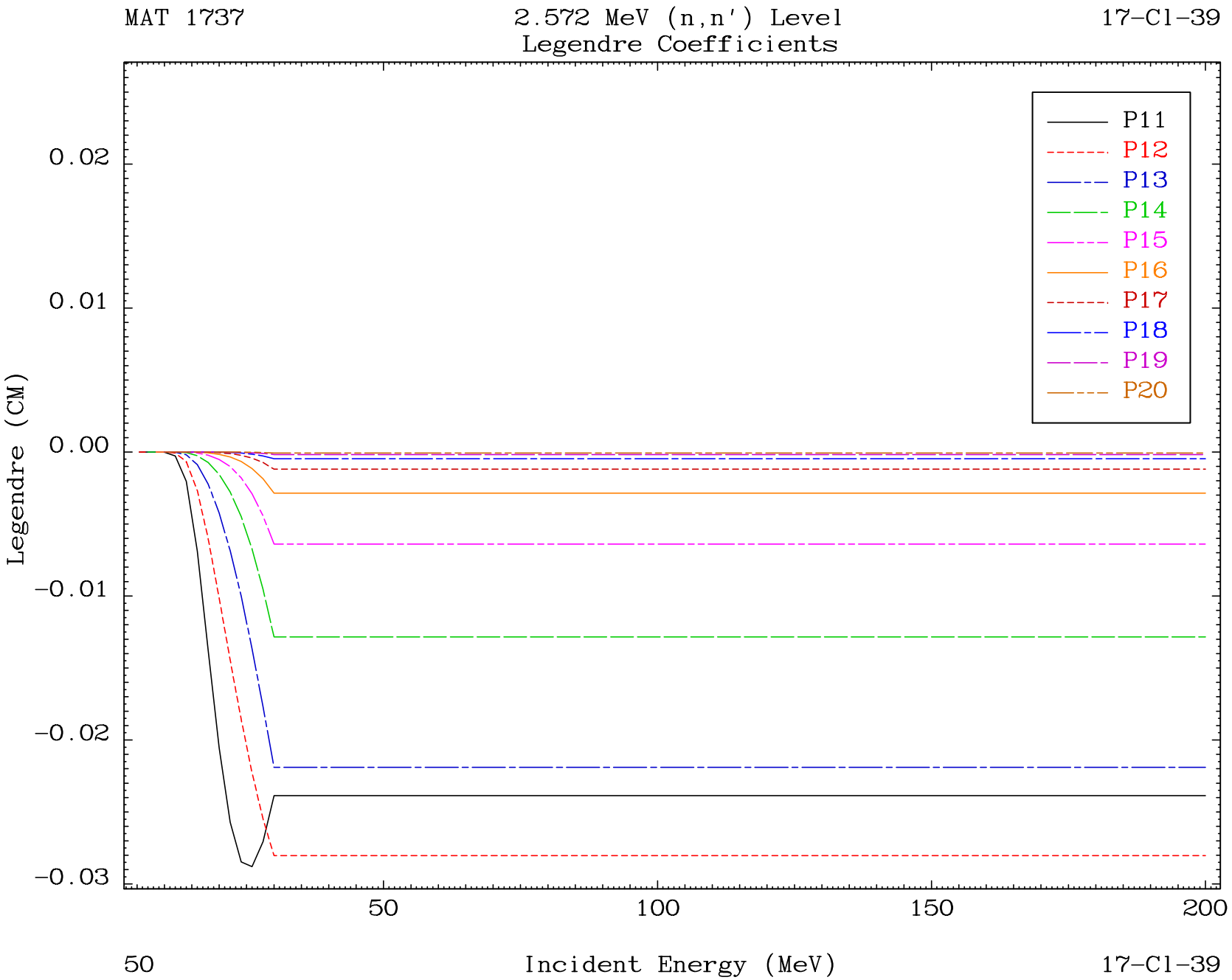

MAT 1737
2.424 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-7
5
4
3
2
1
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
45
Incident Energy (MeV)
17-Cl-39

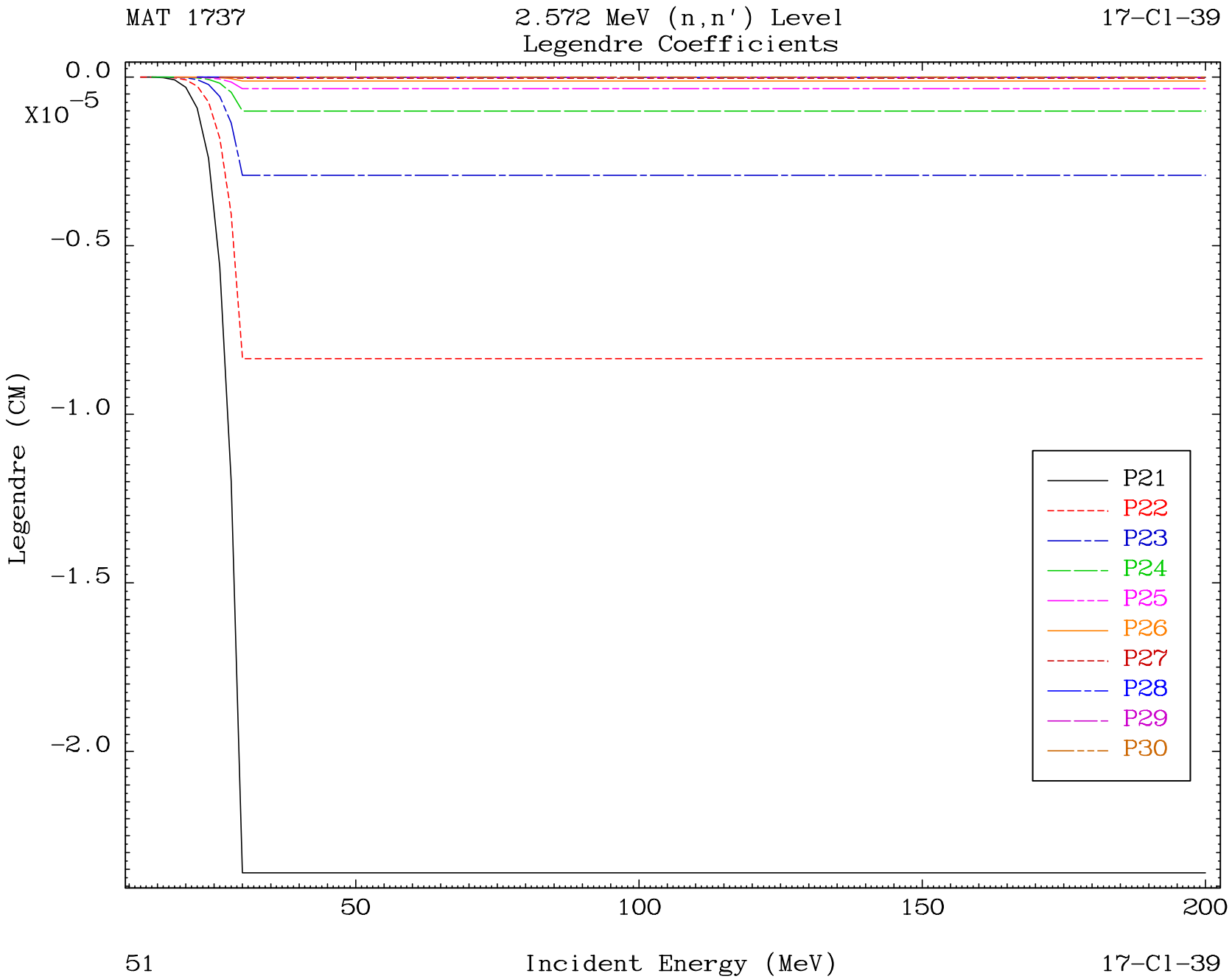

MAT 1737
2.489 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
46
Incident Energy (MeV)
17-Cl-39

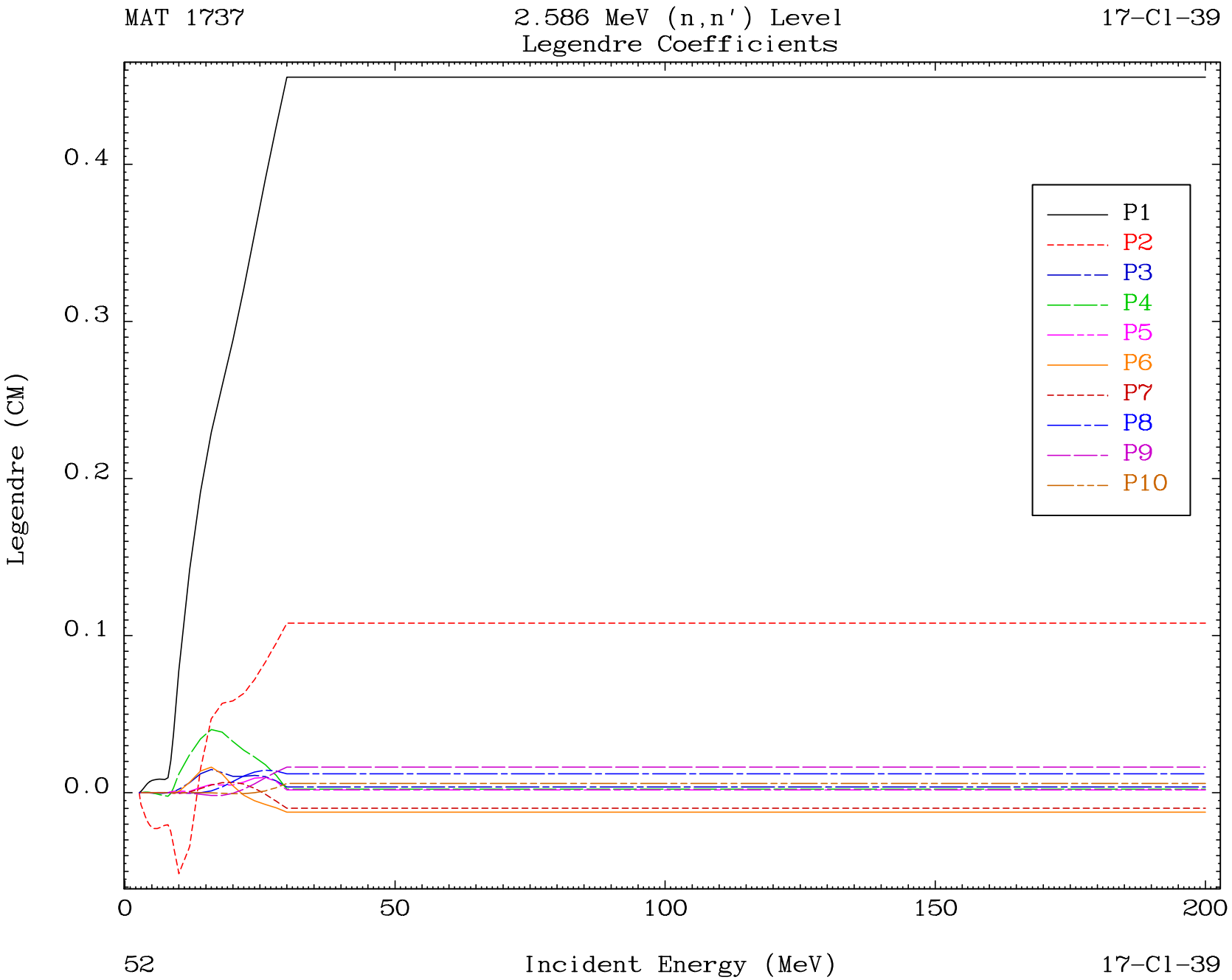

MAT 1737
2.489 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
47
Incident Energy (MeV)
17-Cl-39

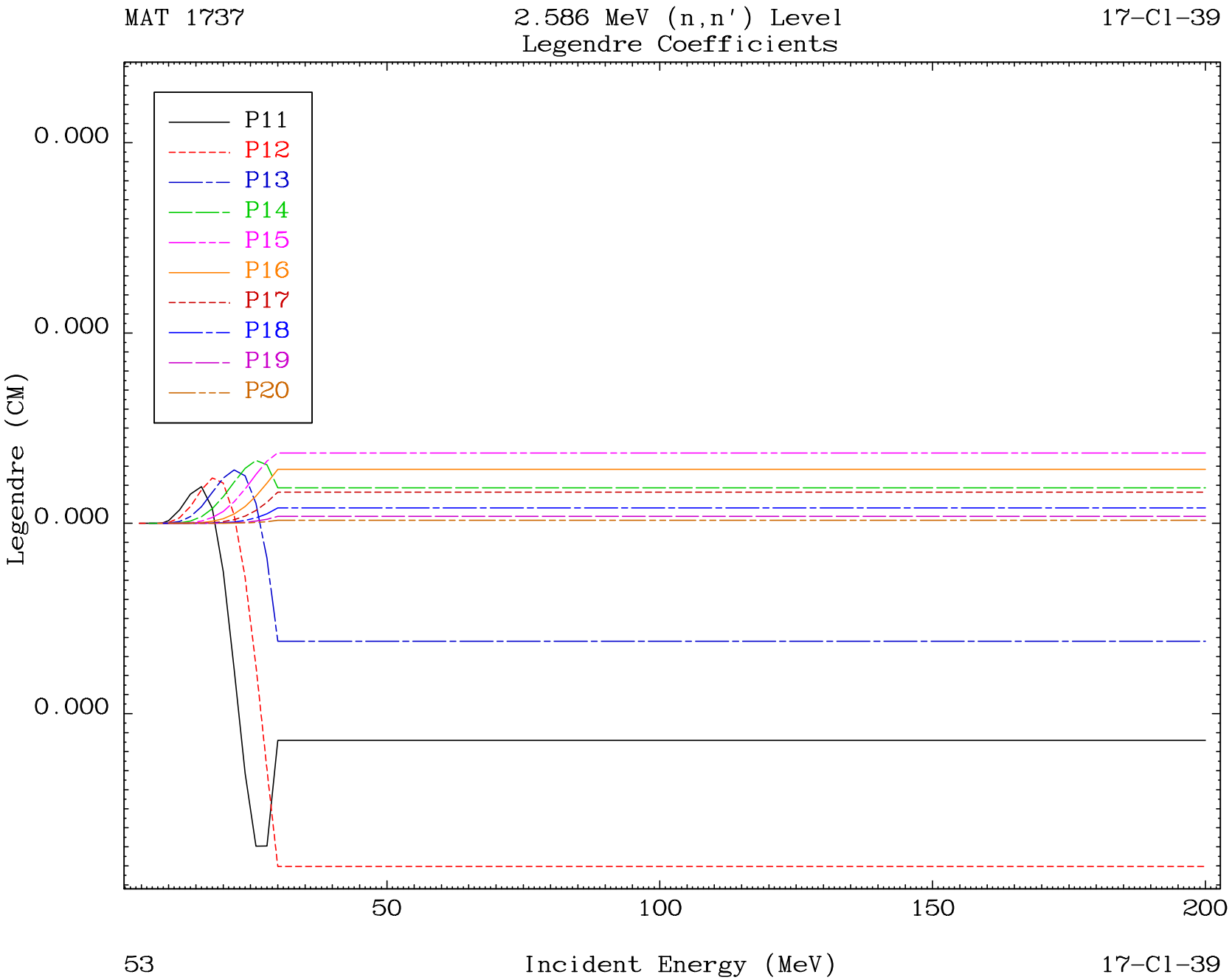

MAT 1737
2.489 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10 -6
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
48
Incident Energy (MeV)
17-Cl-39

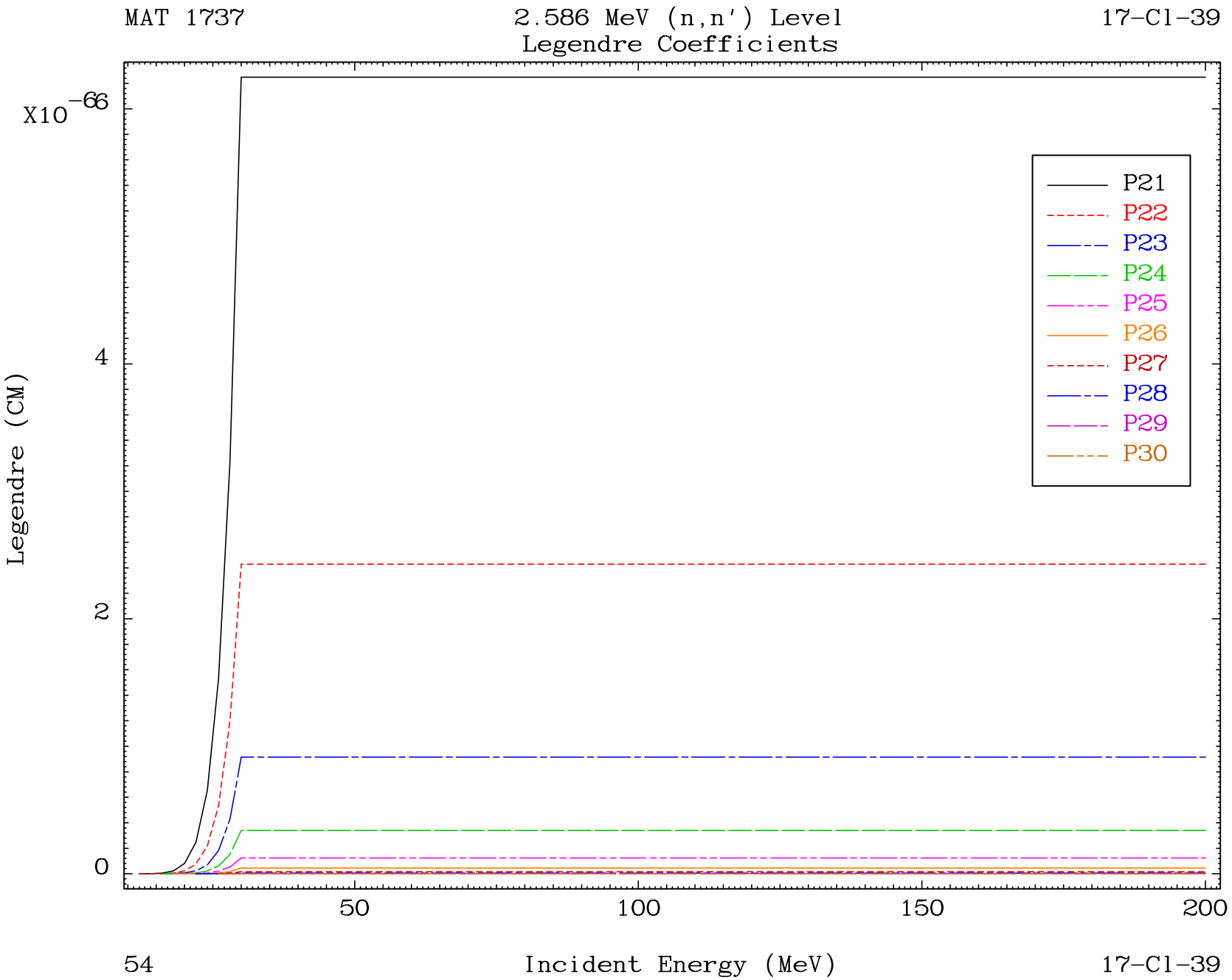

MAT 1737
2.572 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
49
Incident Energy (MeV)
17-Cl-39

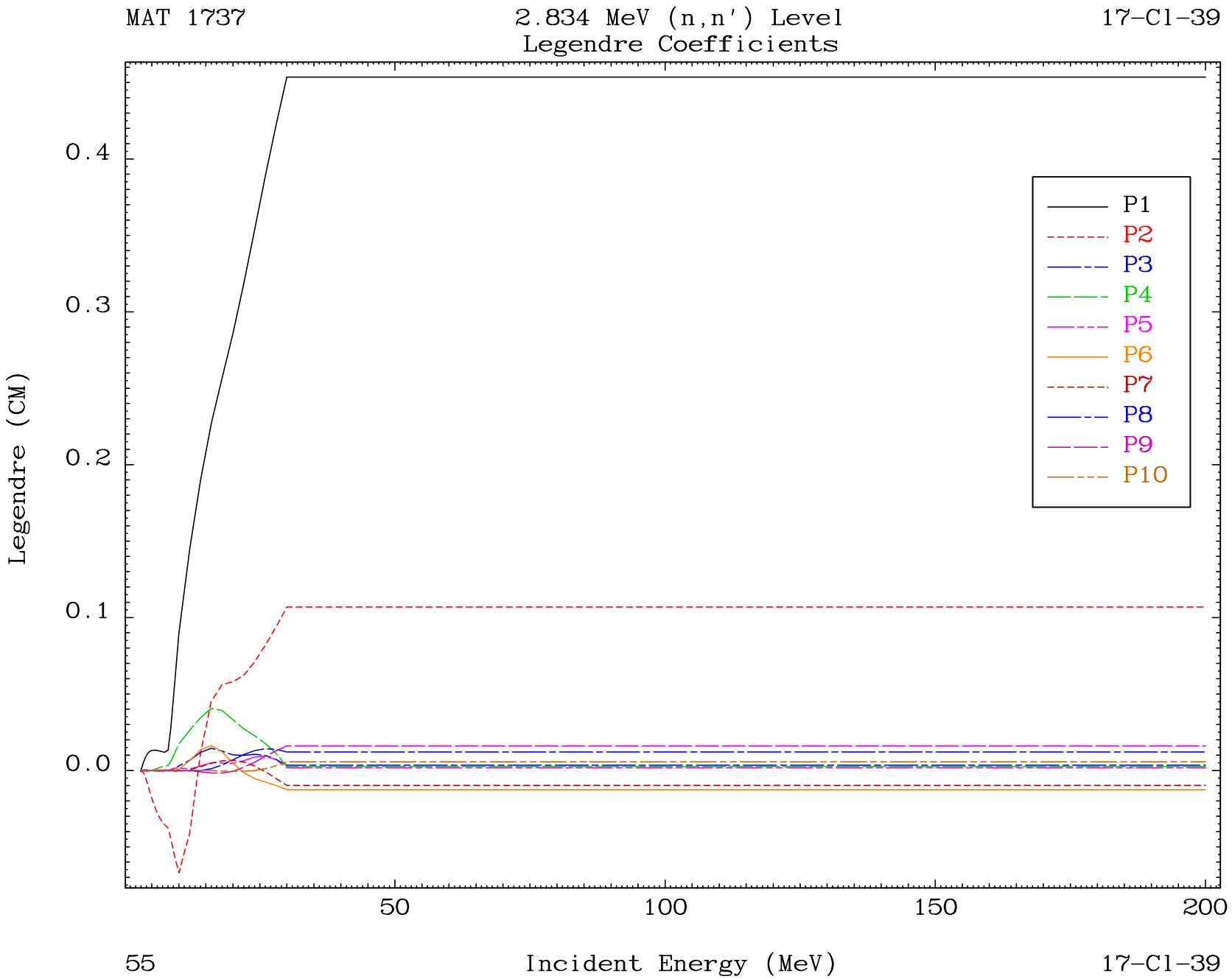

MAT 1737
2.572 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.02
0.01
0.00
-0.01
-0.02
-0.03
Legendre (CM)
50
100
150
200
50
Incident Energy (MeV)
17-Cl-39

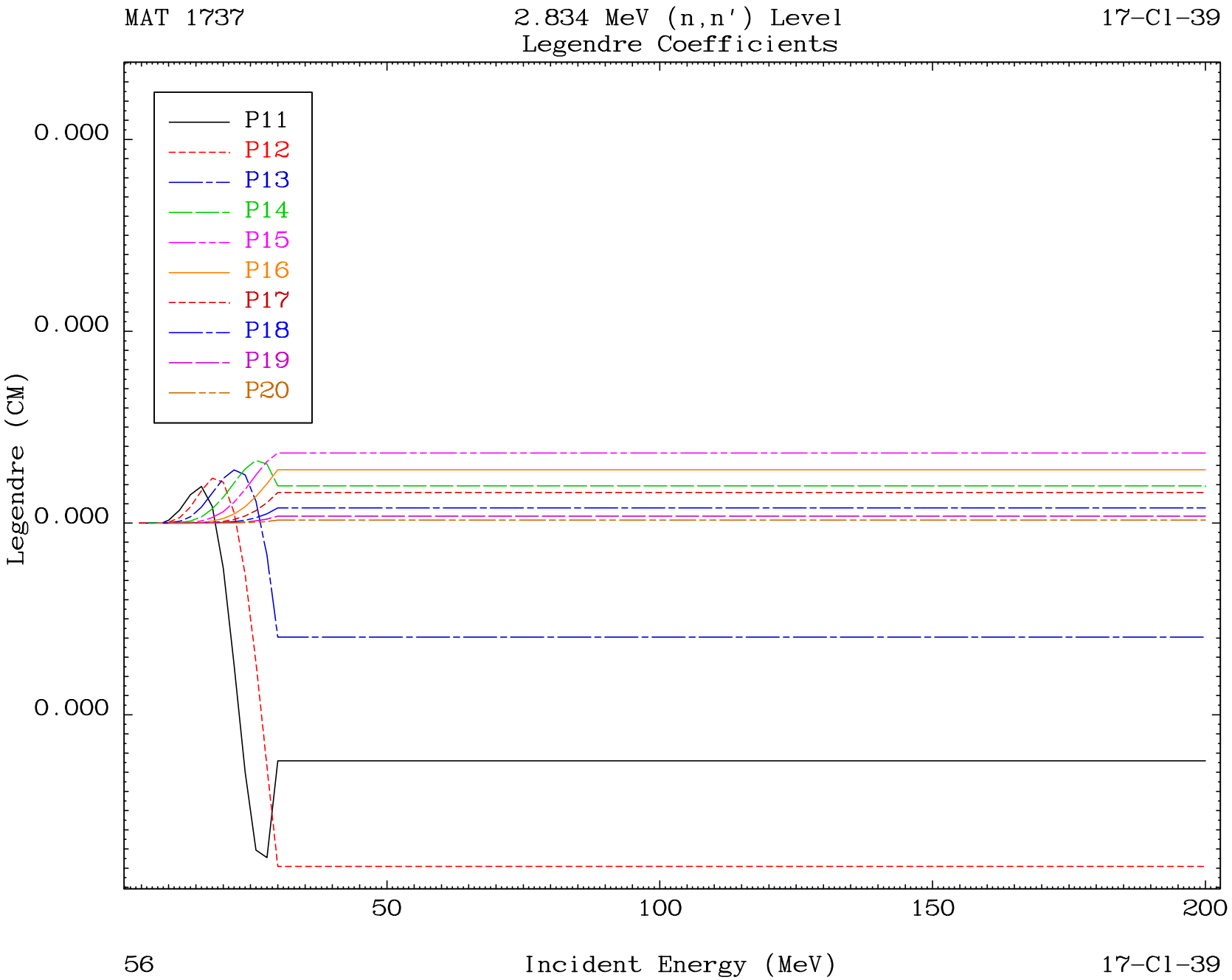

MAT 1737
2.572 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
0.0
X10^-5
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
50
100
150
200
51
Incident Energy (MeV)
17-Cl-39
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

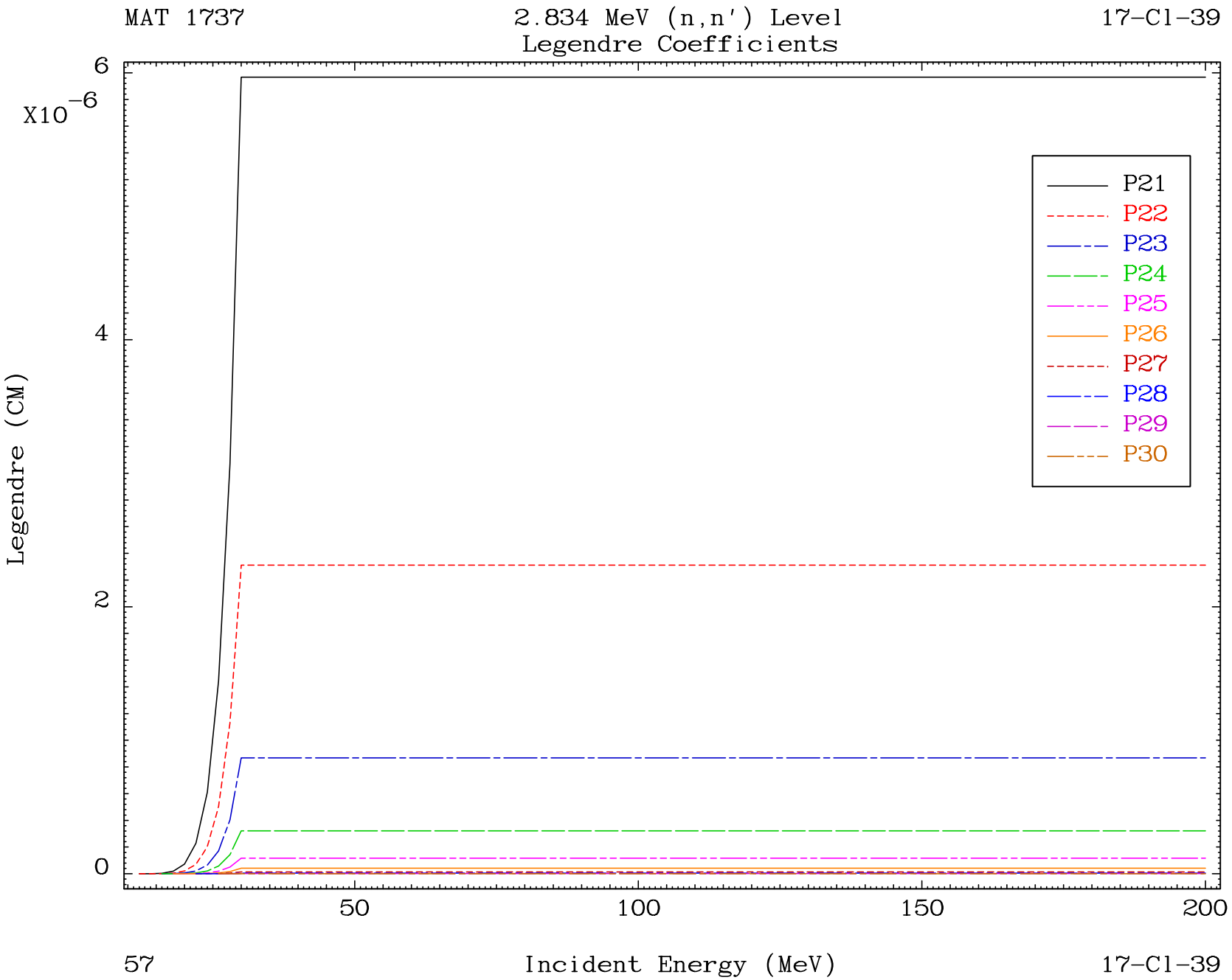

MAT 1737
2.586 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
52
Incident Energy (MeV)
17-Cl-39

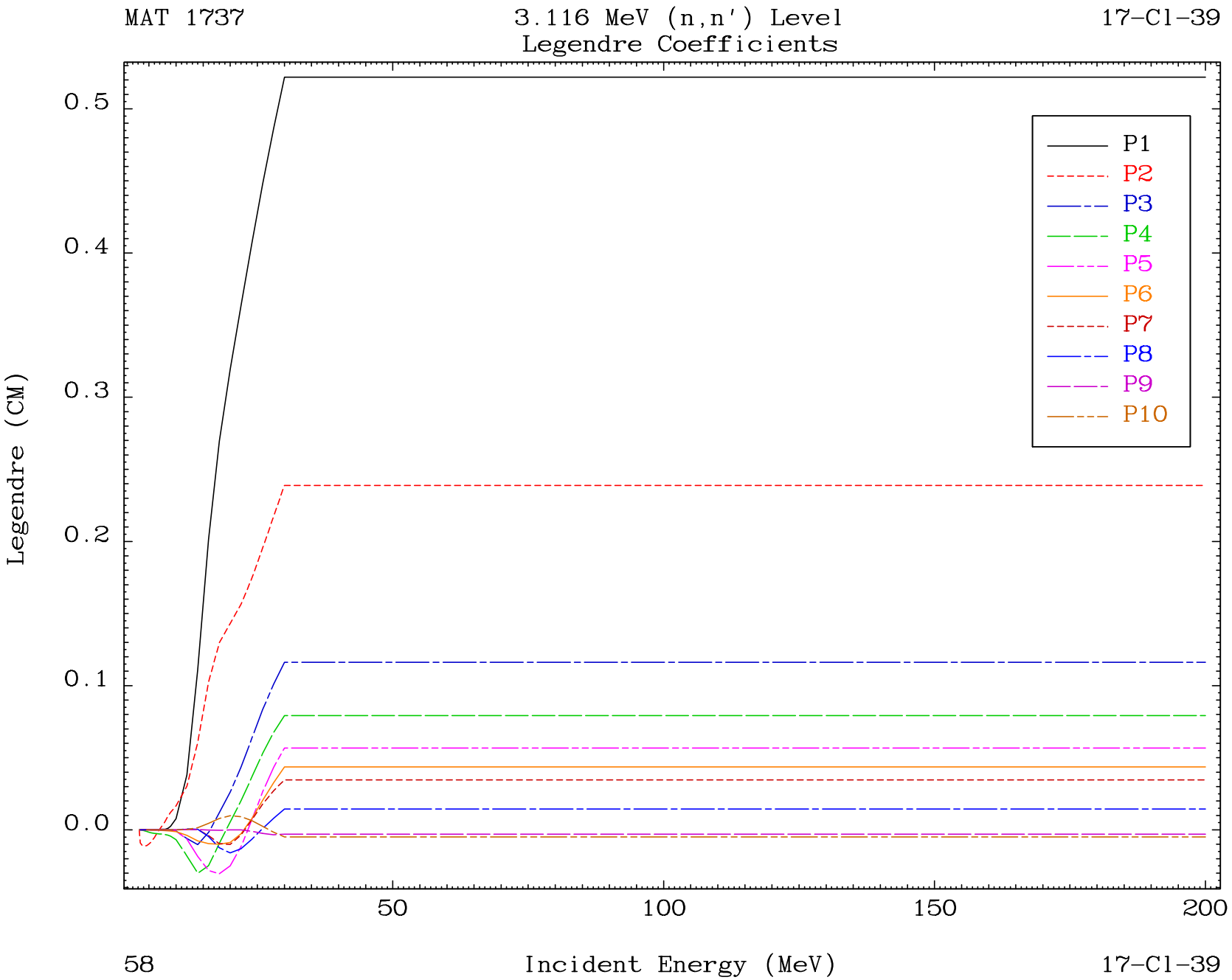

MAT 1737
2.586 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
53
Incident Energy (MeV)
17-Cl-39

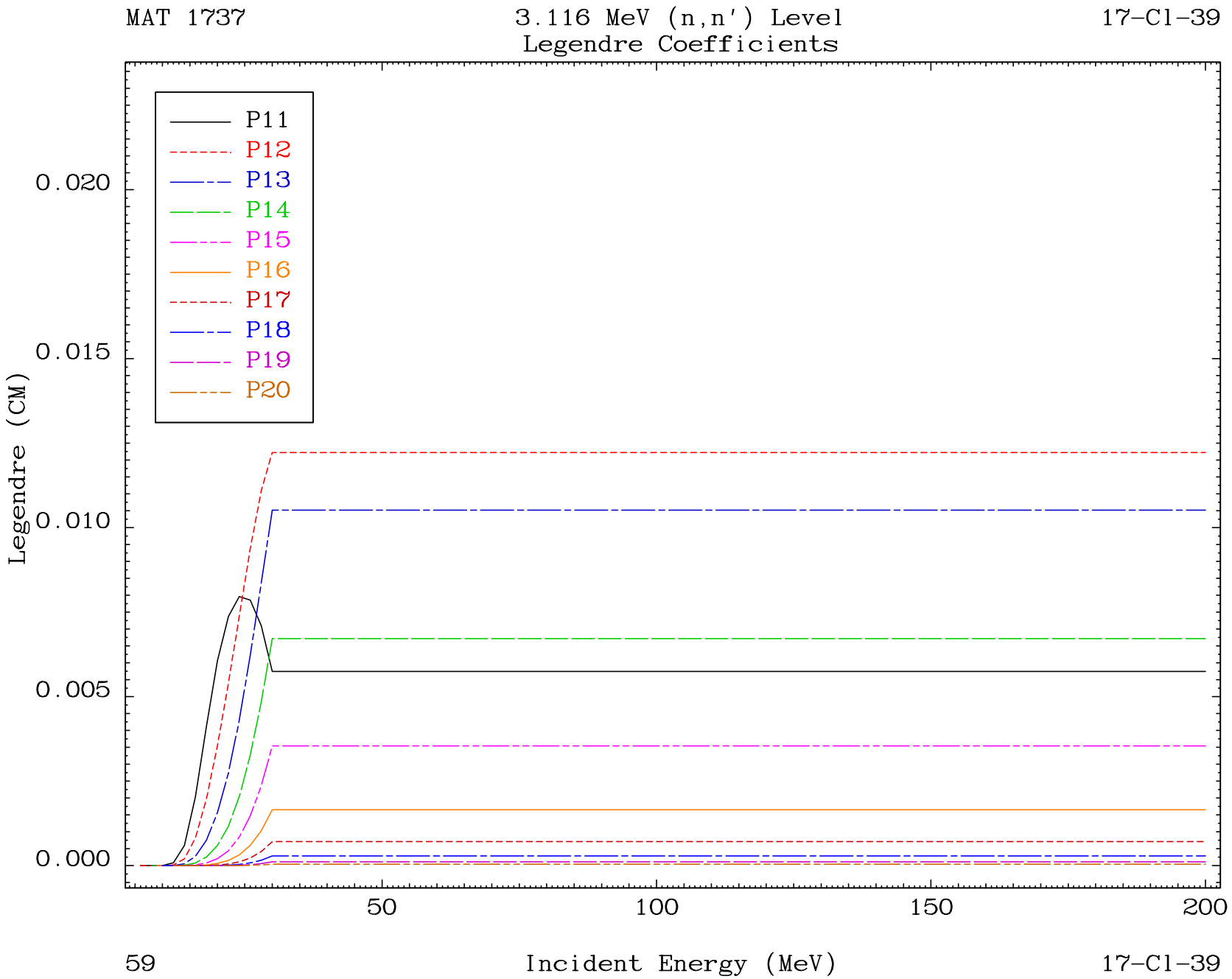

MAT 1737
2.586 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-66
4
2
0
Legendre (CM)
50
100
150
200
54
Incident Energy (MeV)
17-Cl-39
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

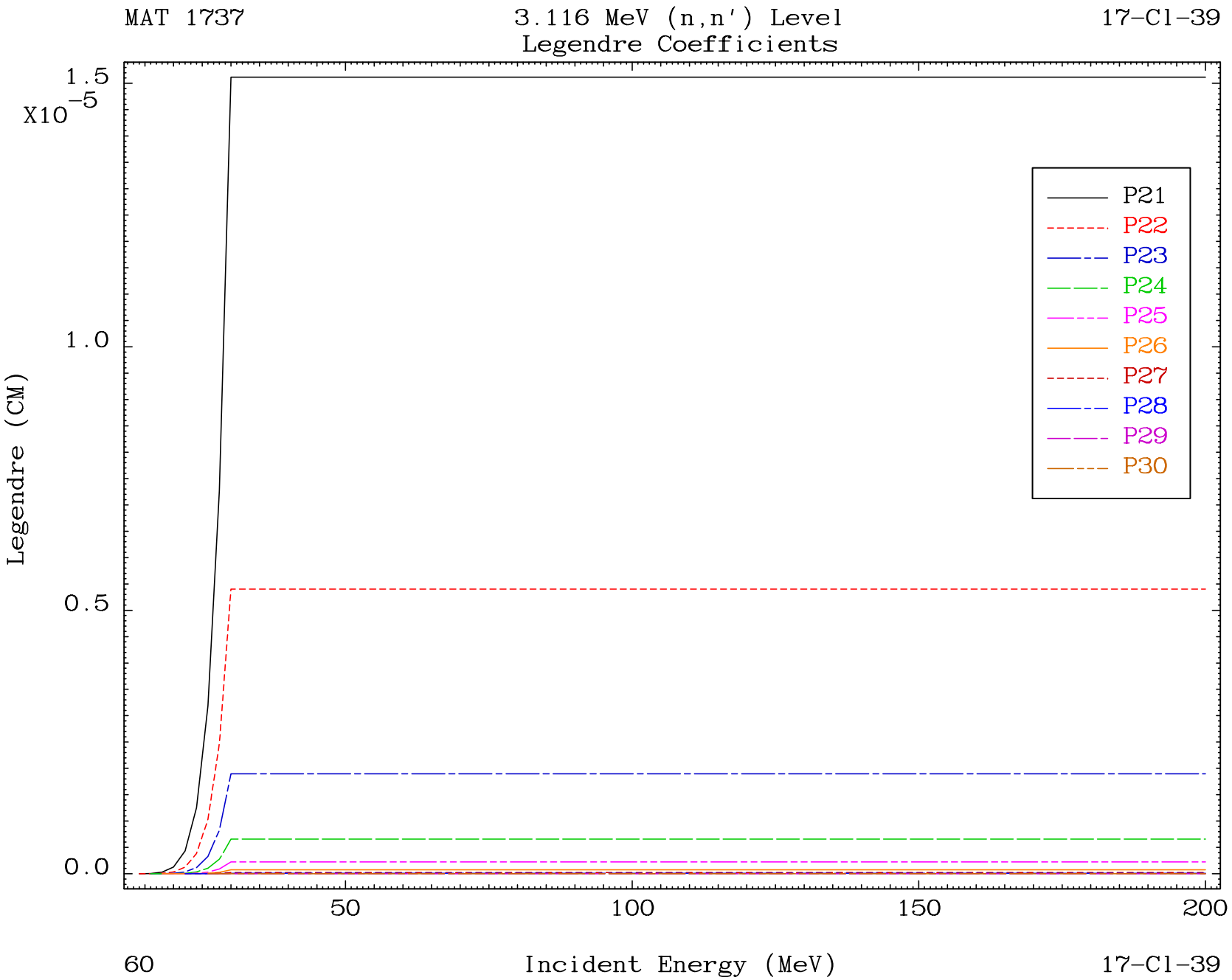

MAT 1737
2.834 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
50
100
150
200
55
Incident Energy (MeV)
17-Cl-39

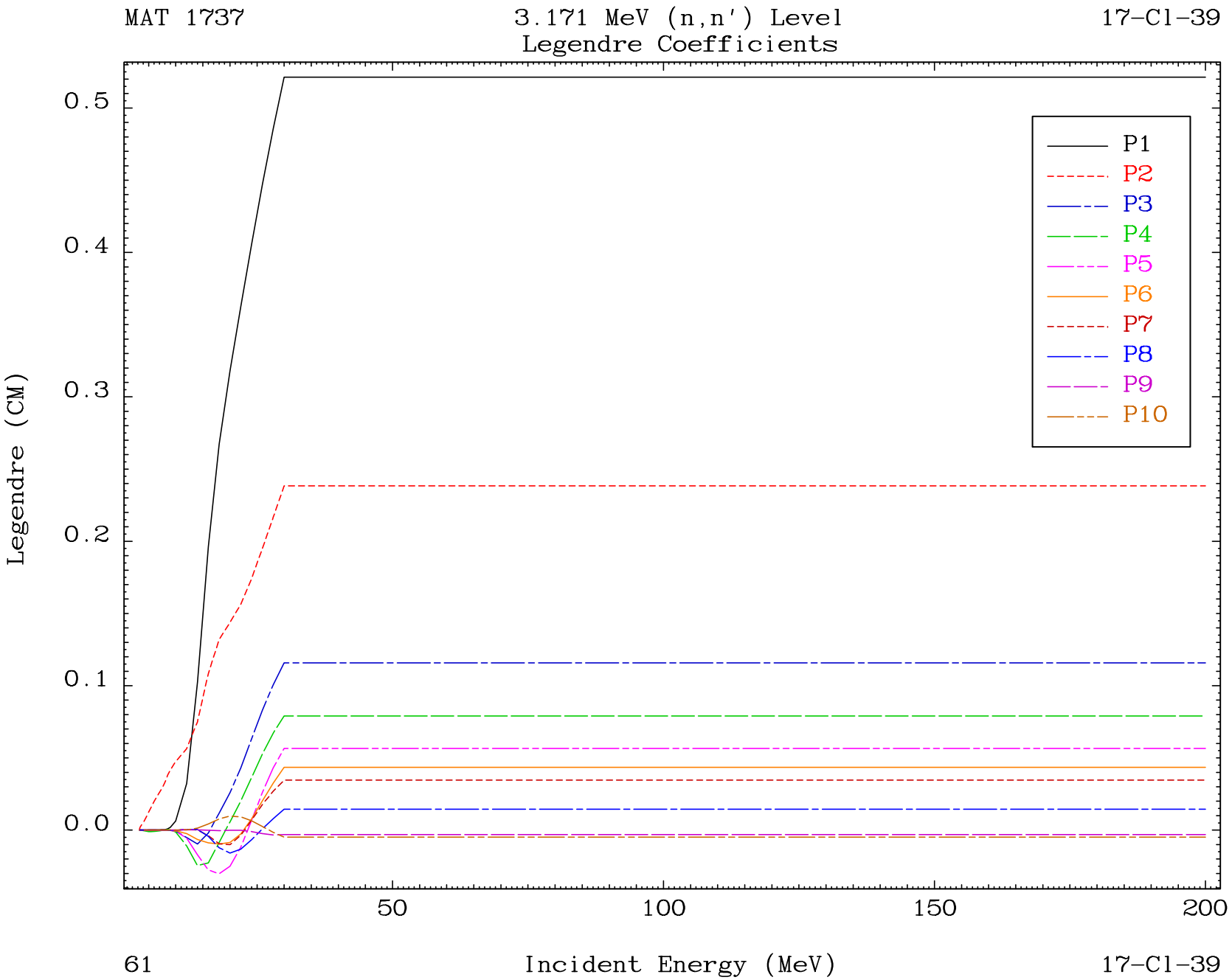

MAT 1737
2.834 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
56
Incident Energy (MeV)
17-Cl-39

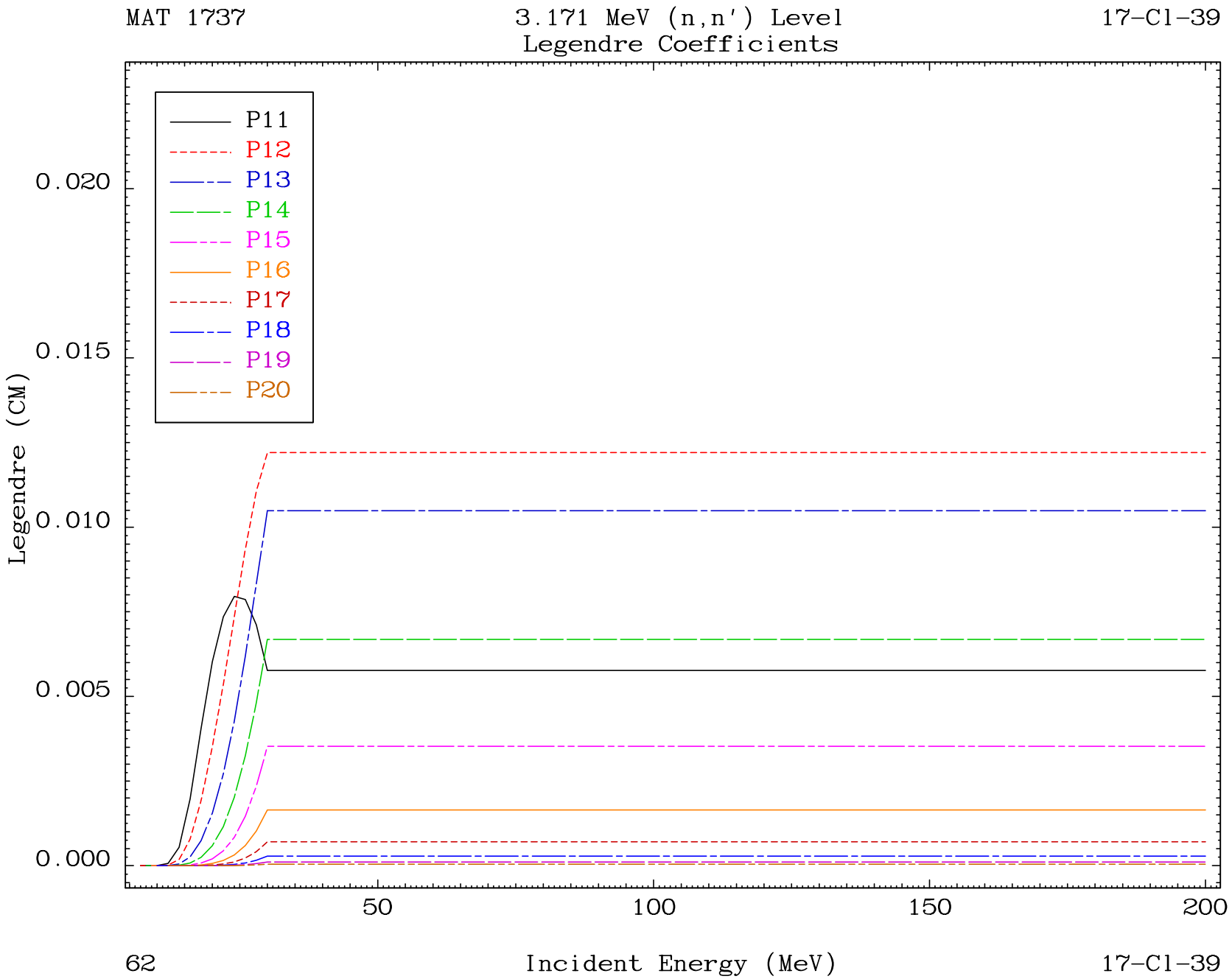

MAT 1737
2.834 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10 −6
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
57
Incident Energy (MeV)
17-Cl-39

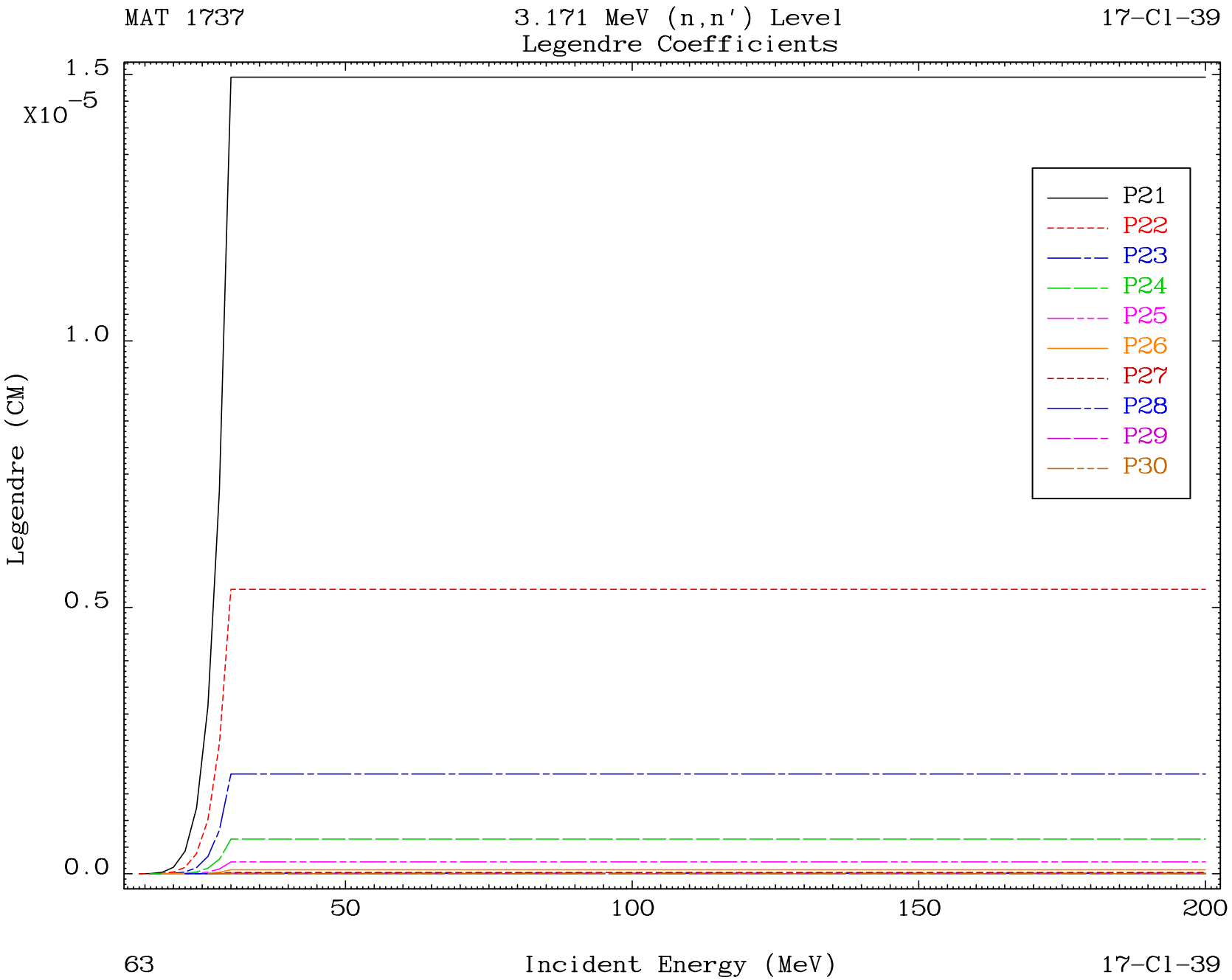

MAT 1737
3.116 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
58
Incident Energy (MeV)
17-Cl-39

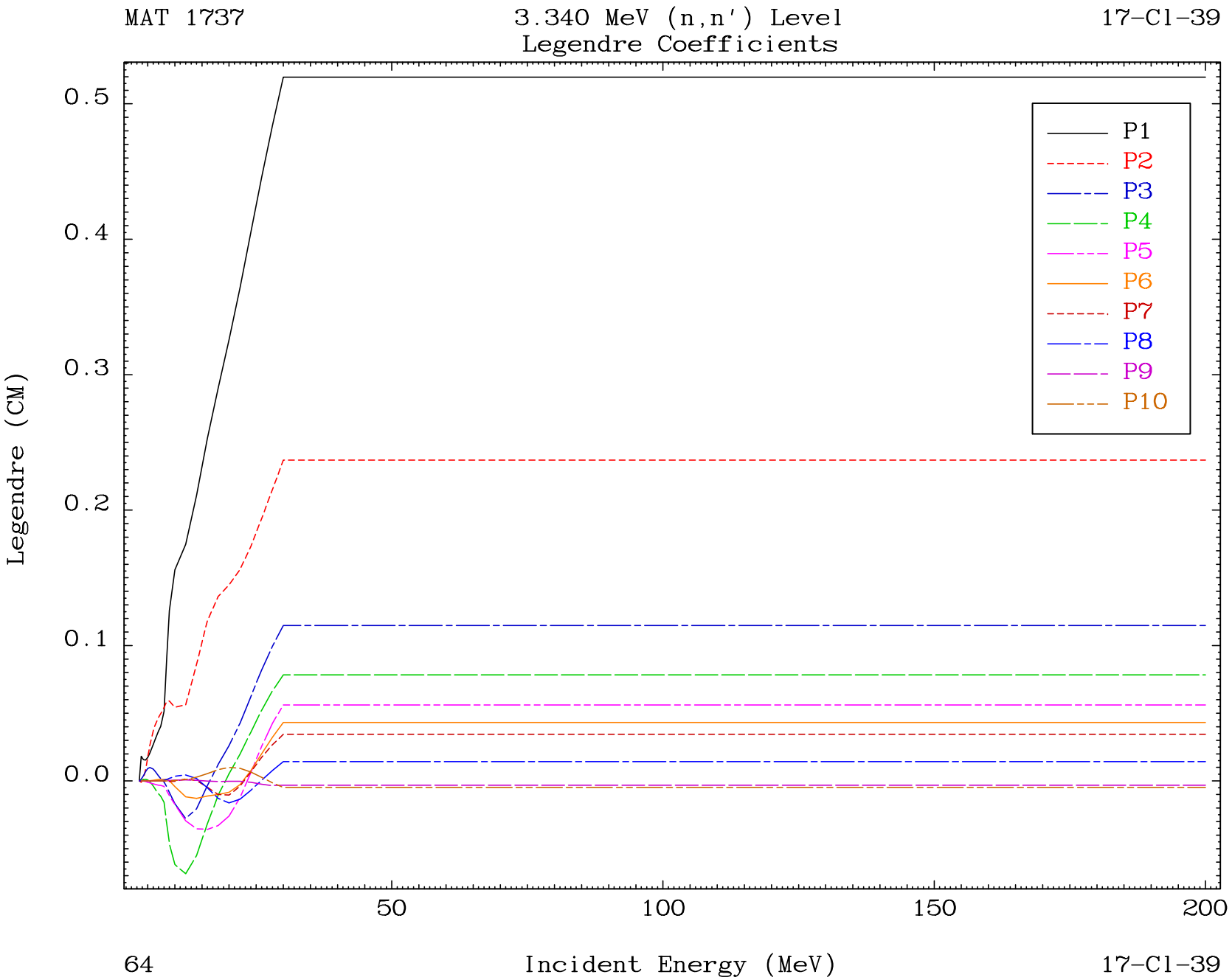

MAT 1737
3.116 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
59
Incident Energy (MeV)
17-Cl-39

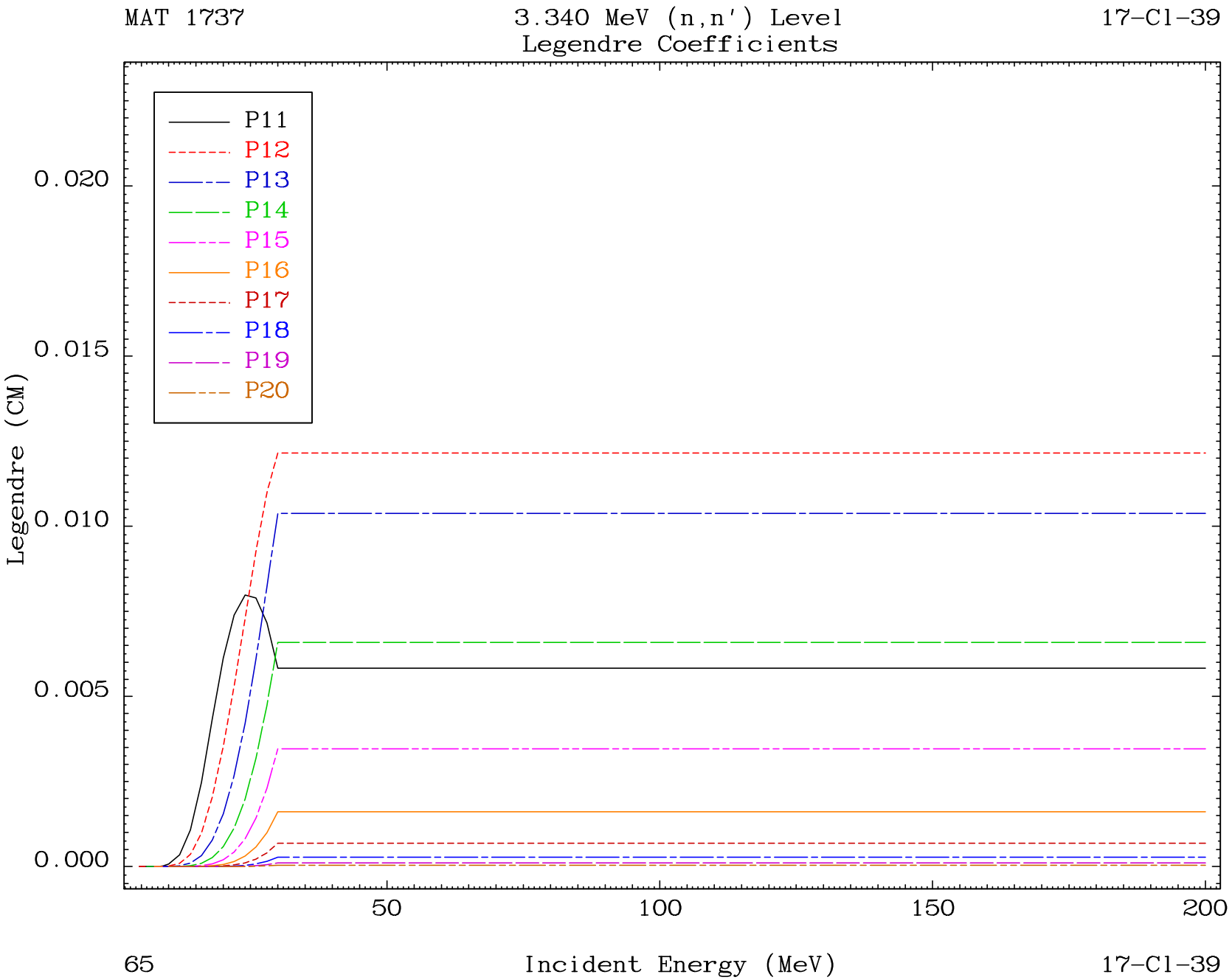

MAT 1737
3.116 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
1.5
X10 -5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
60
Incident Energy (MeV)
17-Cl-39

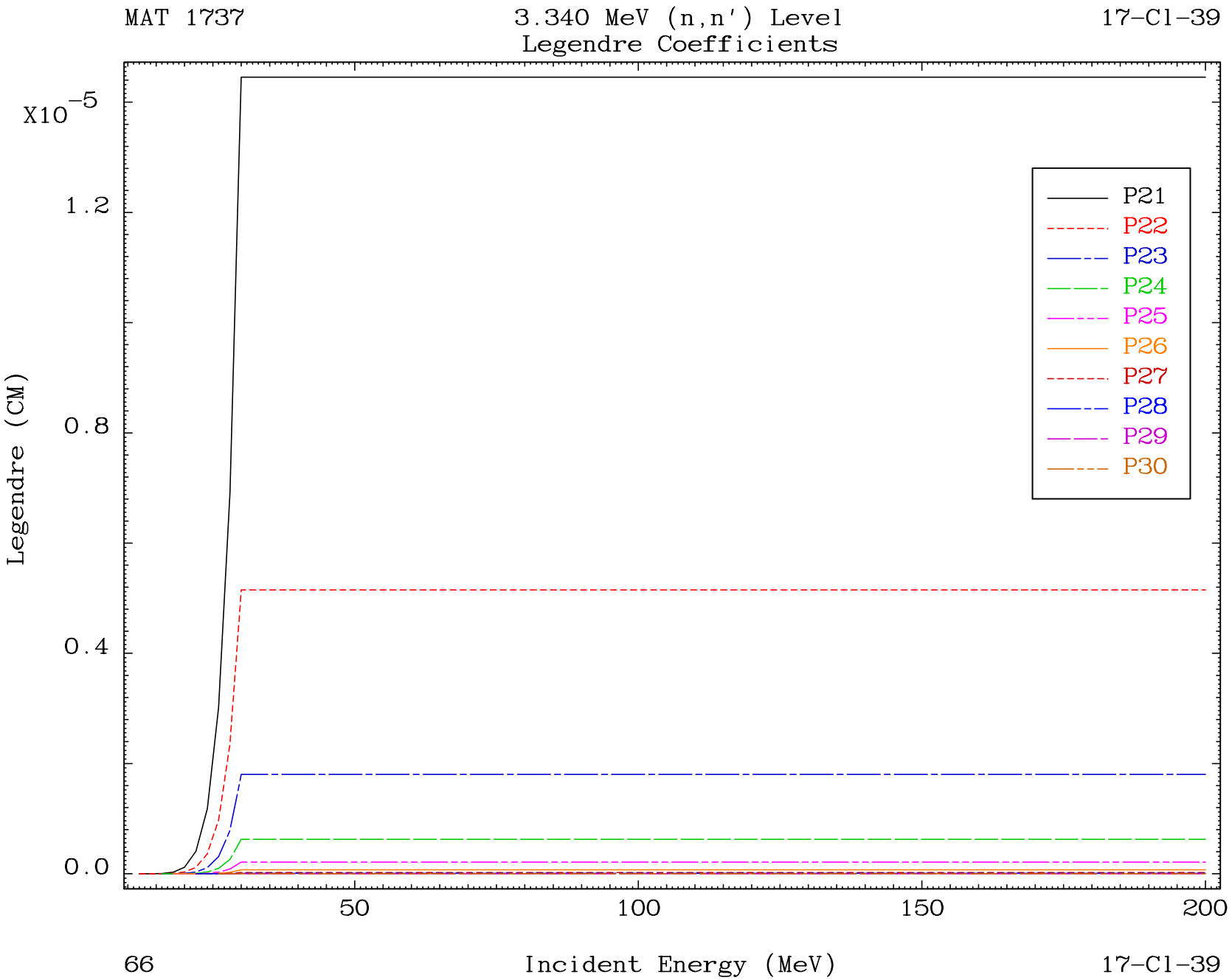

MAT 1737
3.171 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
61
Incident Energy (MeV)
17-Cl-39

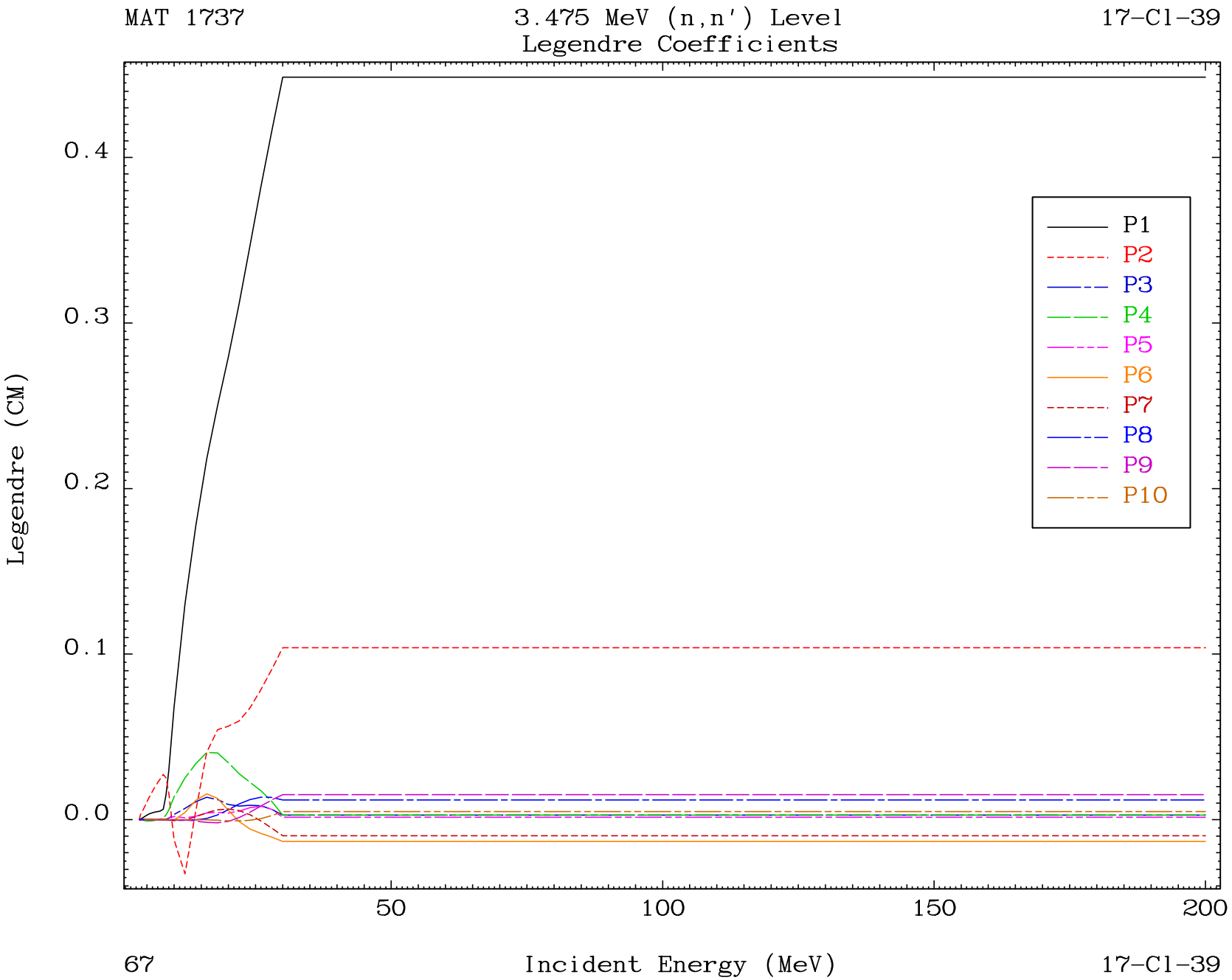

MAT 1737
3.171 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
62
Incident Energy (MeV)
17-Cl-39

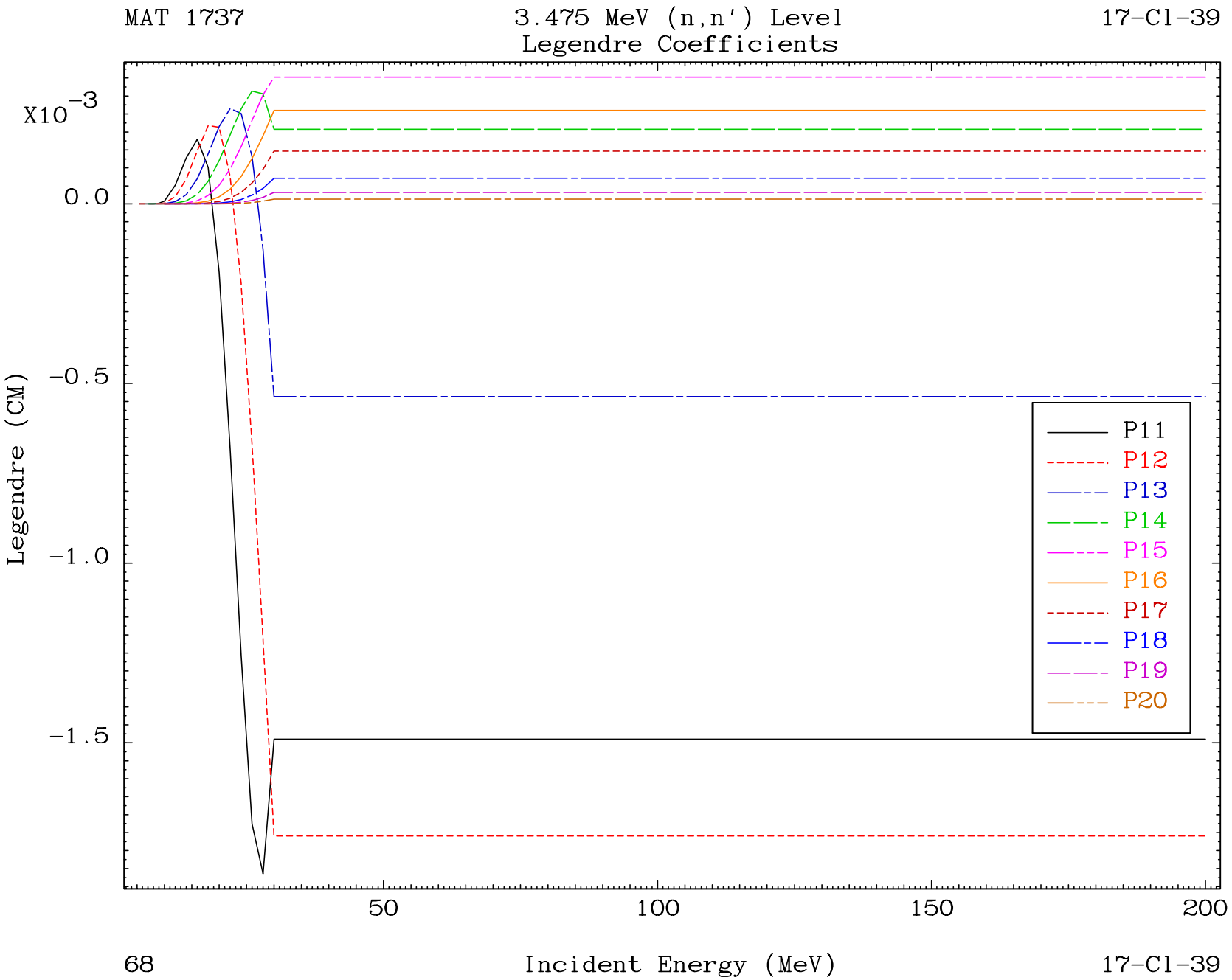

MAT 1737
3.171 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10 -5
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
63
Incident Energy (MeV)
17-Cl-39

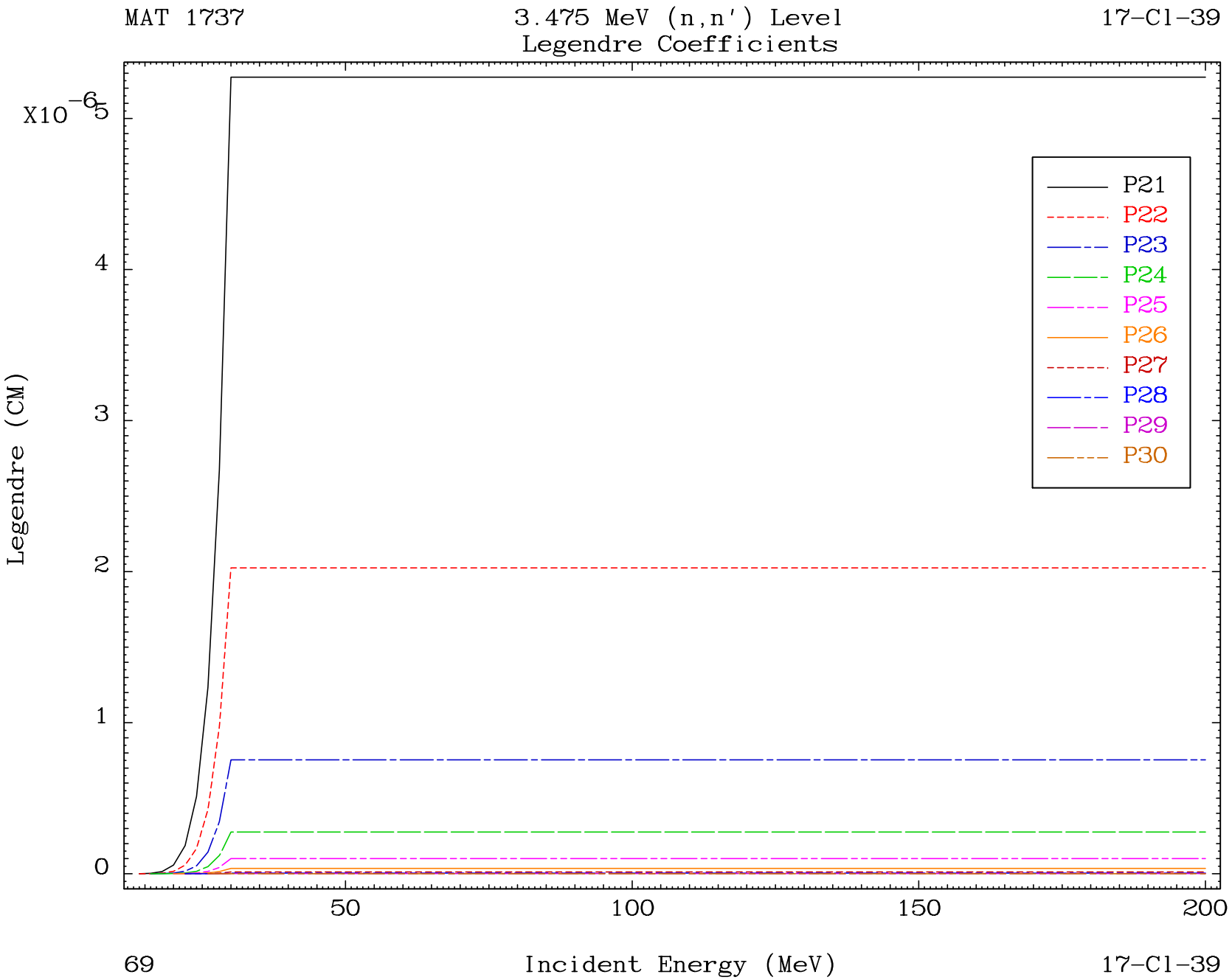

MAT 1737
3.340 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
64
Incident Energy (MeV)
17-Cl-39

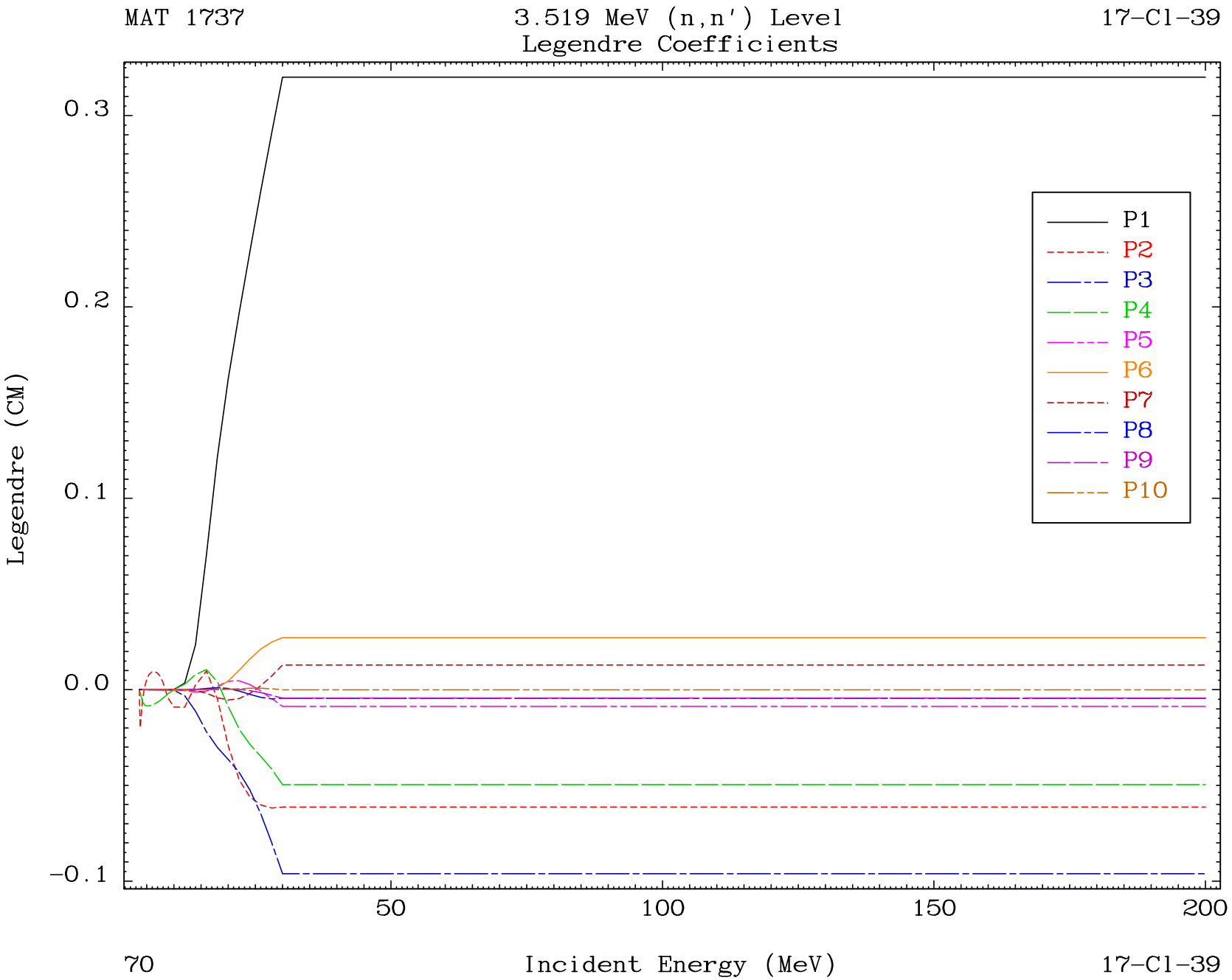

MAT 1737
3.340 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
65
Incident Energy (MeV)
17-Cl-39

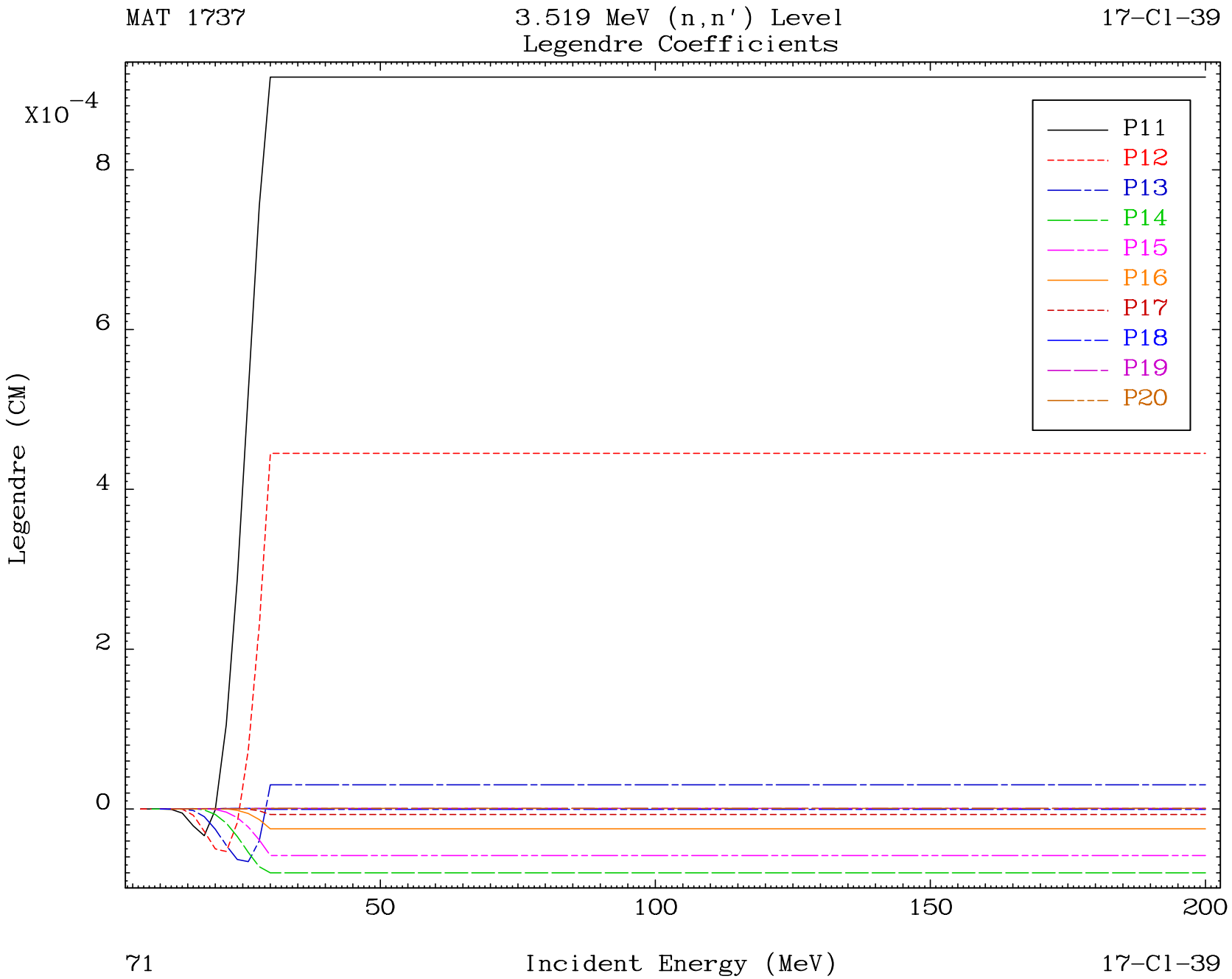

MAT 1737
3.340 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-5
1.2
0.8
0.4
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
66
Incident Energy (MeV)
17-Cl-39

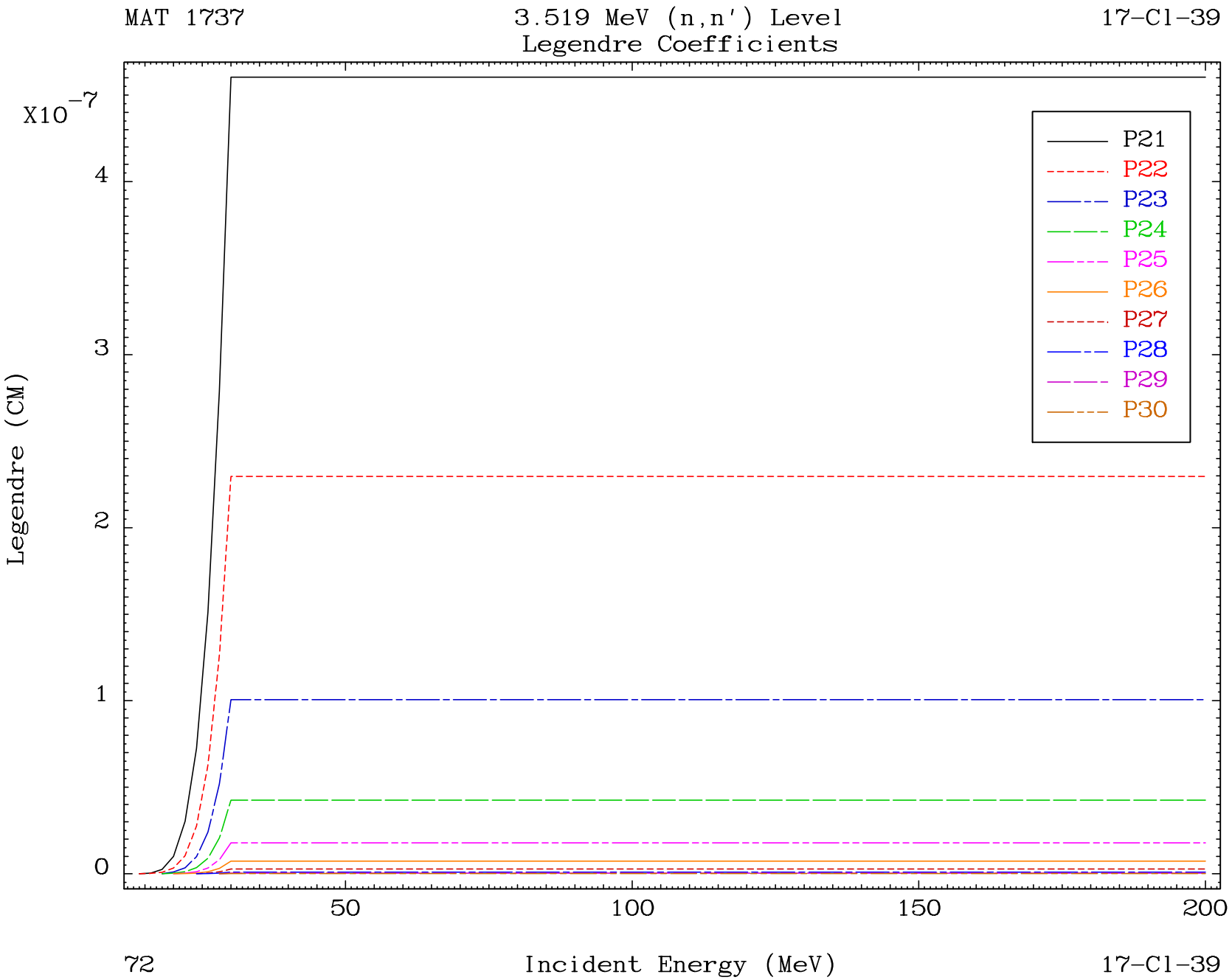

MAT 1737
3.475 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
67
Incident Energy (MeV)
17-Cl-39

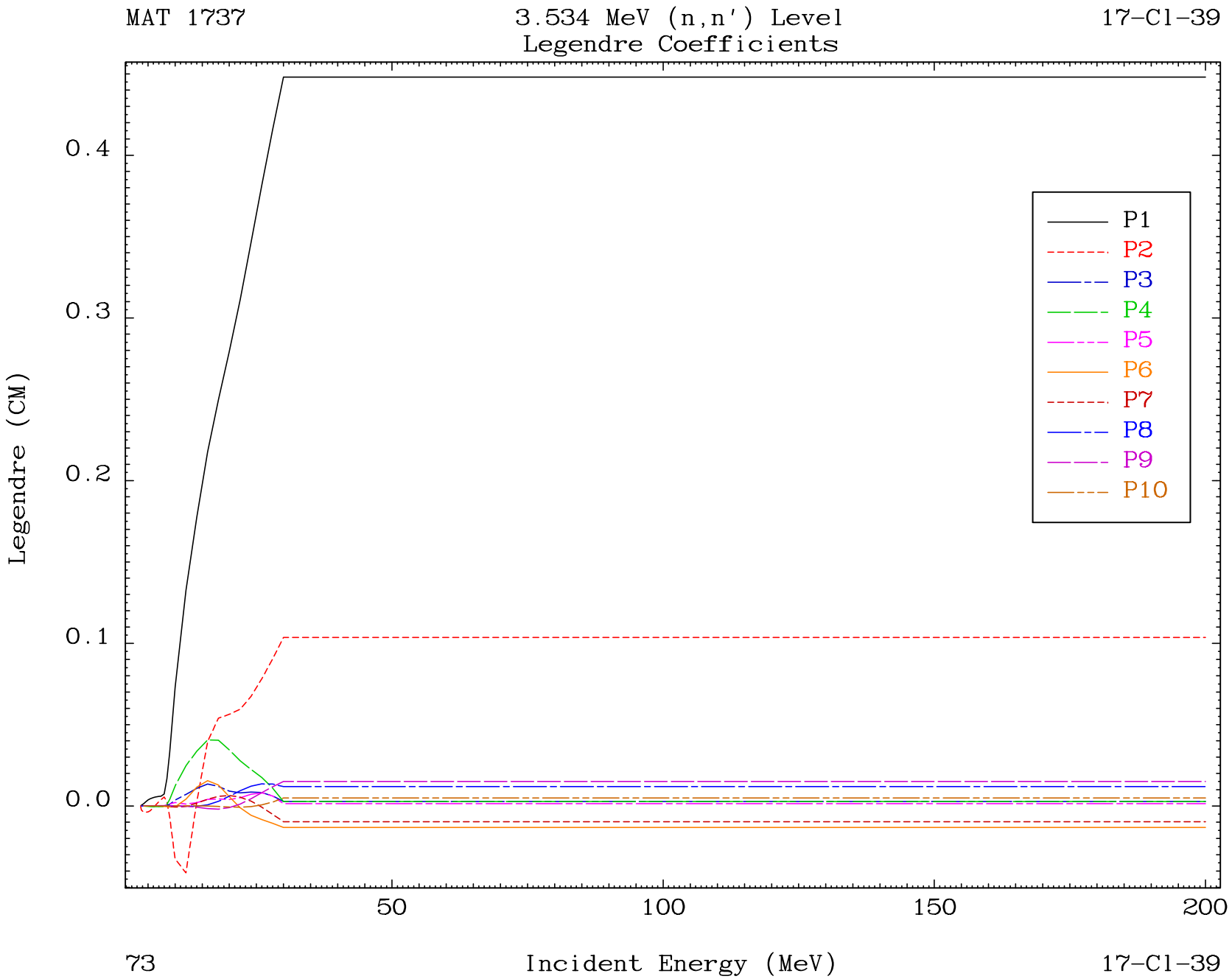

MAT 1737
3.475 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-3
0.0
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
68
Incident Energy (MeV)
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

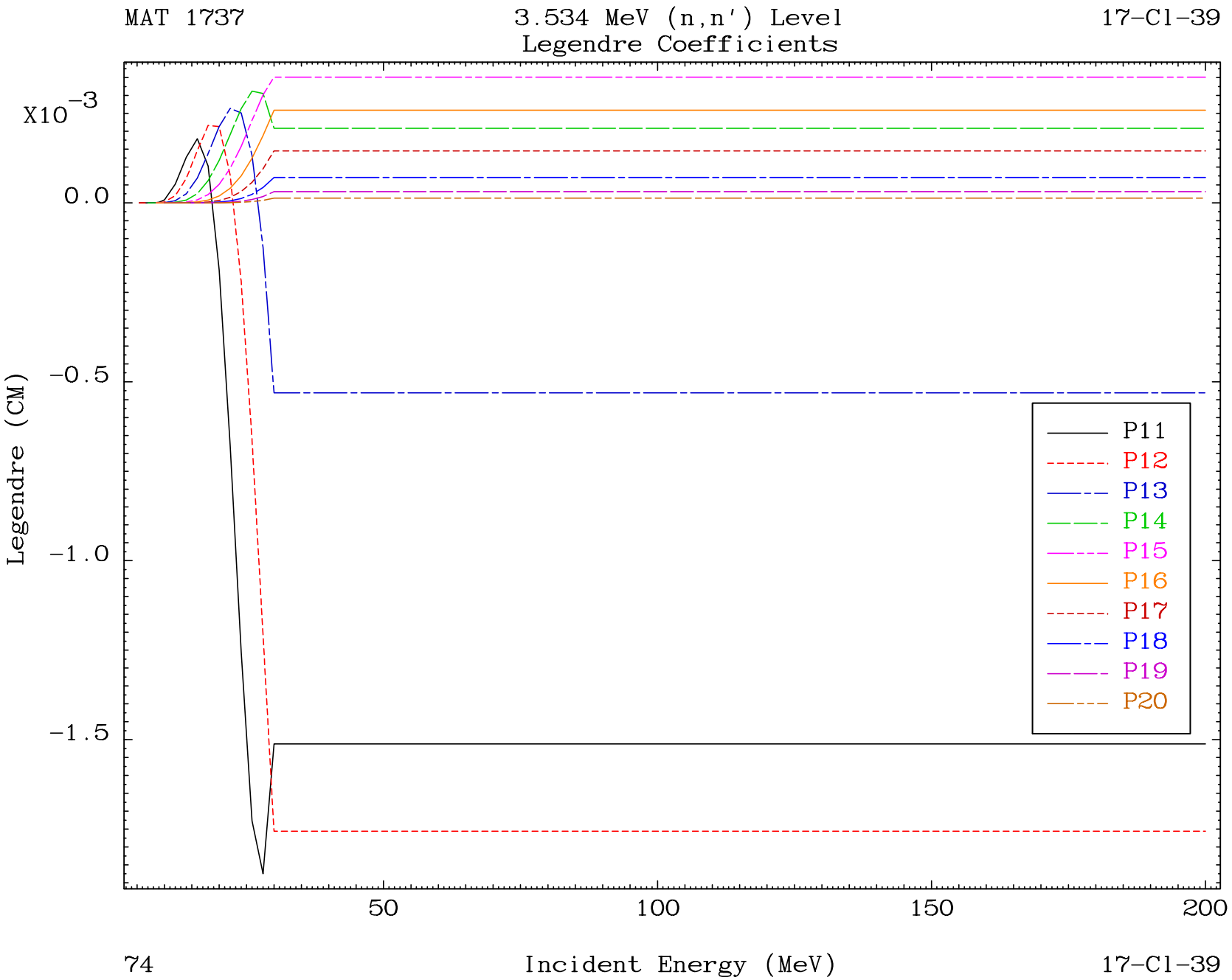

MAT 1737
3.475 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10 -6
5
4
3
2
1
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
69
Incident Energy (MeV)
17-Cl-39

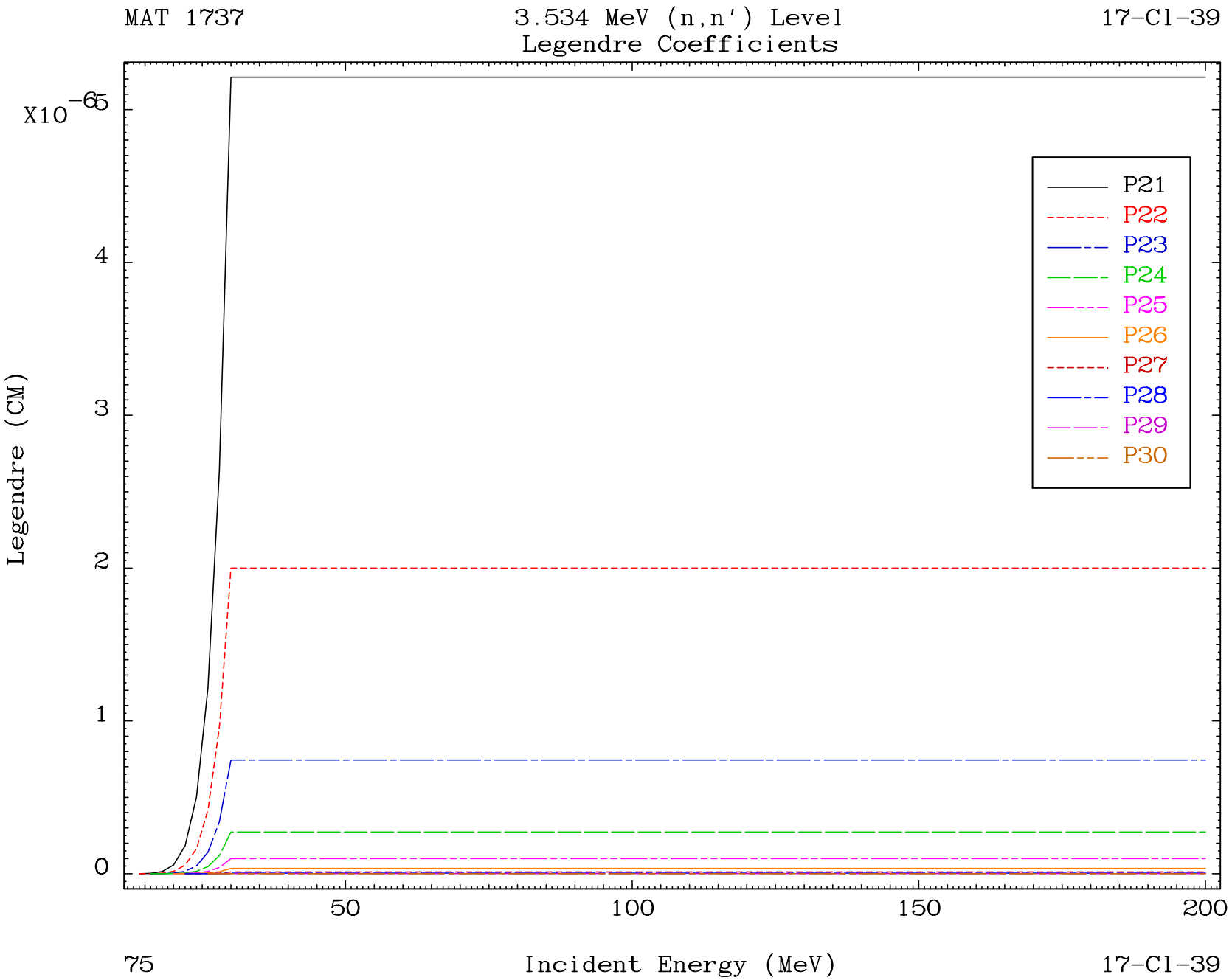

MAT 1737
3.519 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
0.3
0.2
0.1
0.0
-0.1
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
50
100
150
200
70
Incident Energy (MeV)
17-Cl-39

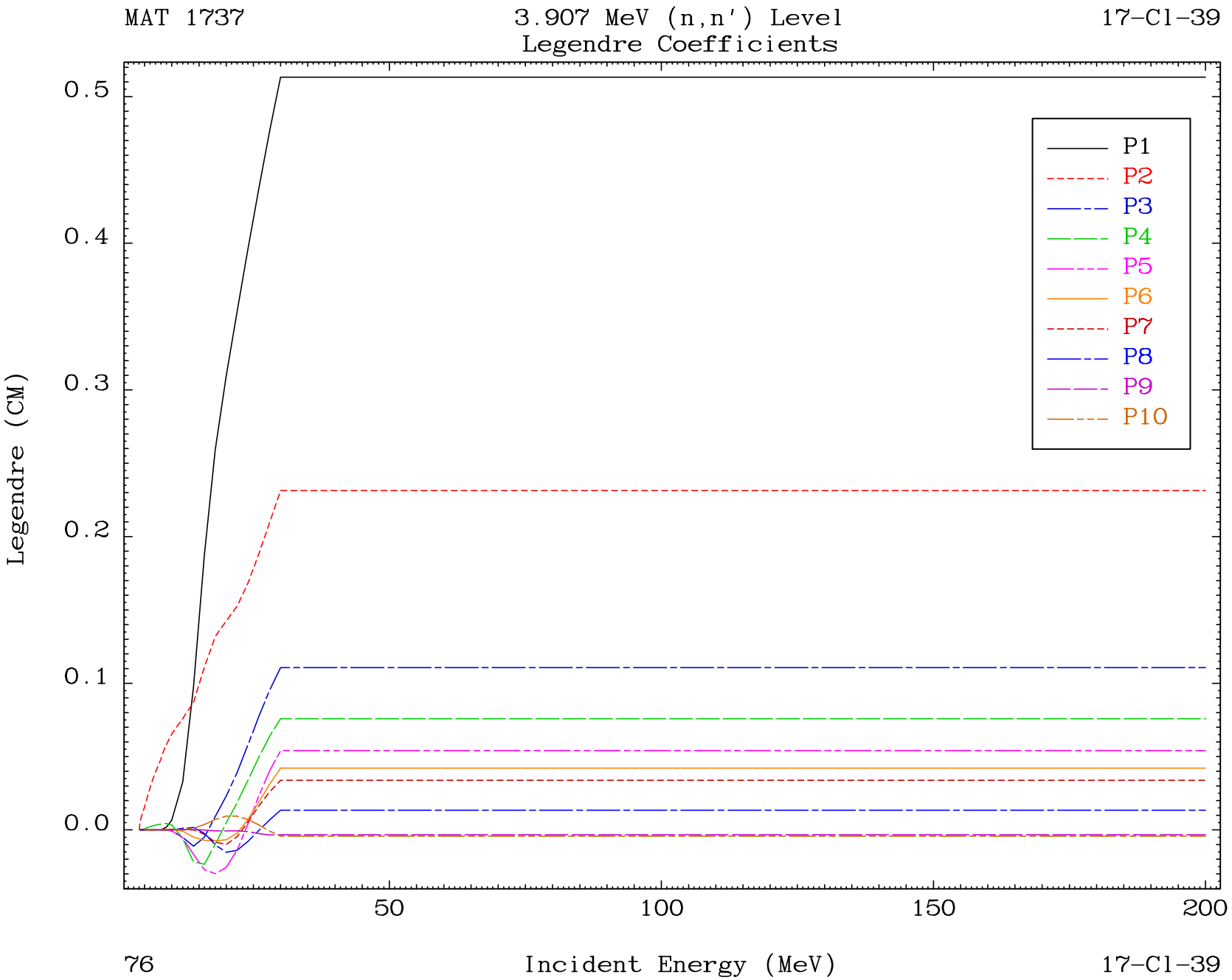

MAT 1737
3.519 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10^-4
8
6
4
2
0
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
50
100
150
200
71
Incident Energy (MeV)
17-Cl-39

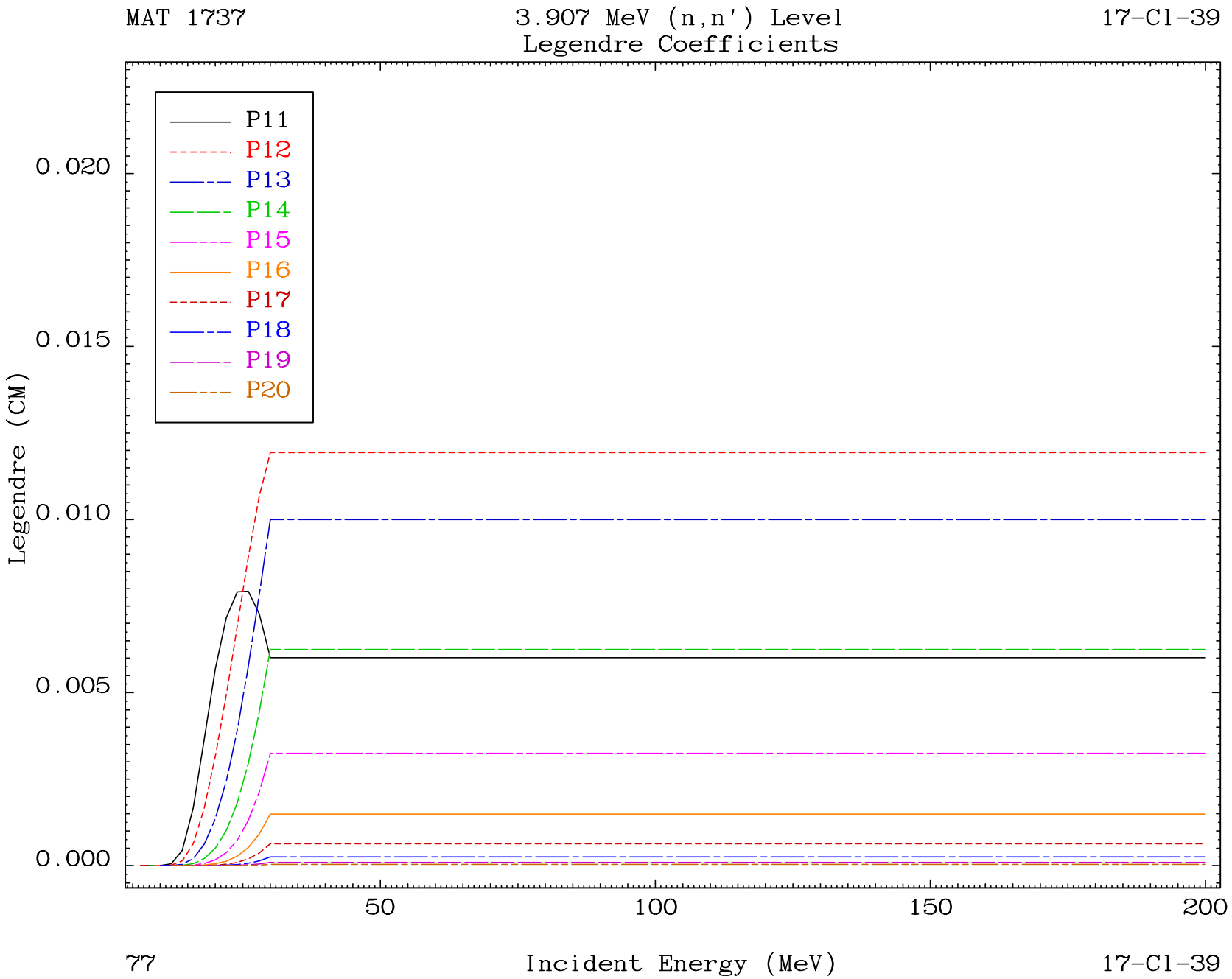

MAT 1737
3.519 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-7
4
3
2
1
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
72
Incident Energy (MeV)
17-Cl-39

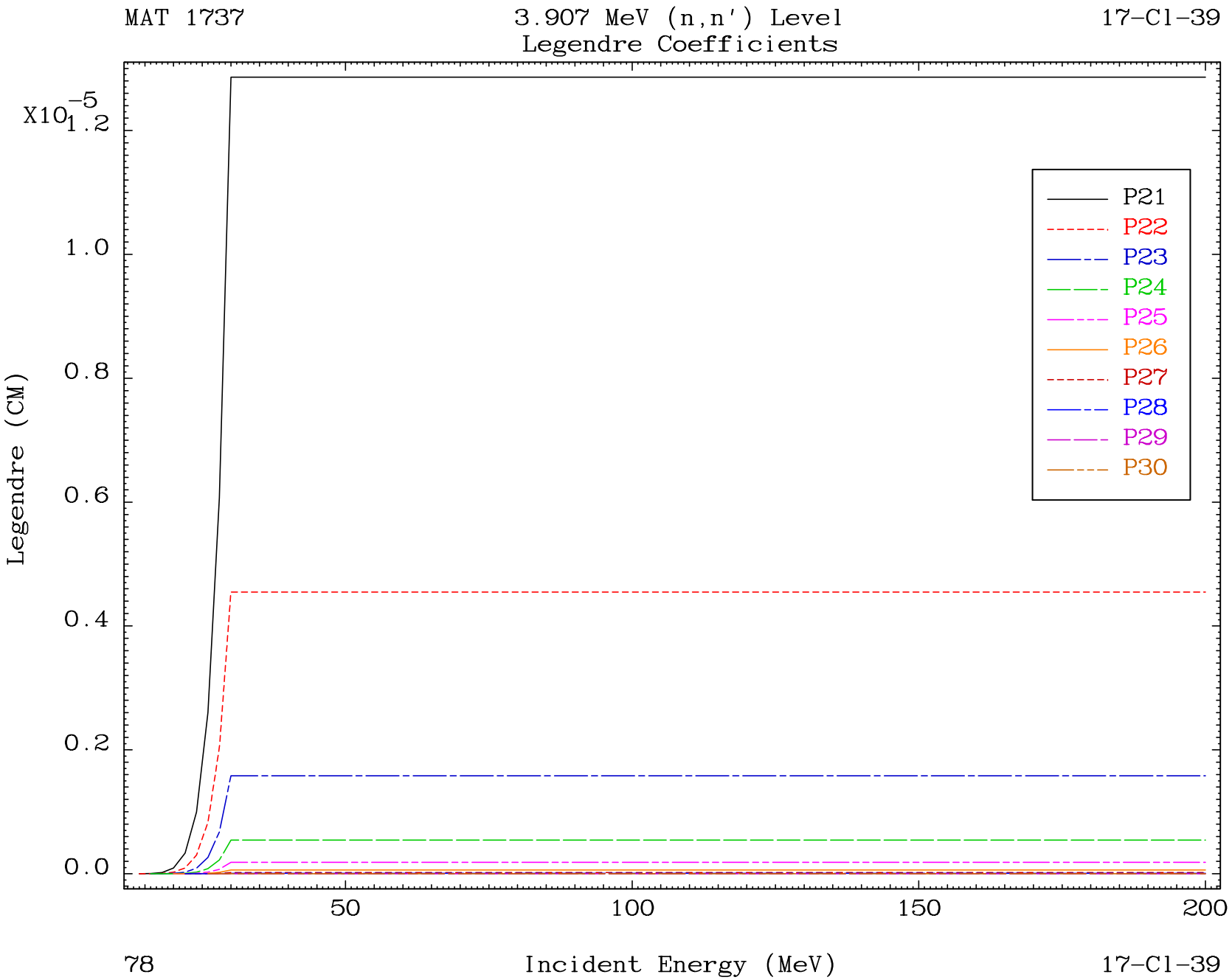

MAT 1737
3.534 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
73
Incident Energy (MeV)
17-Cl-39

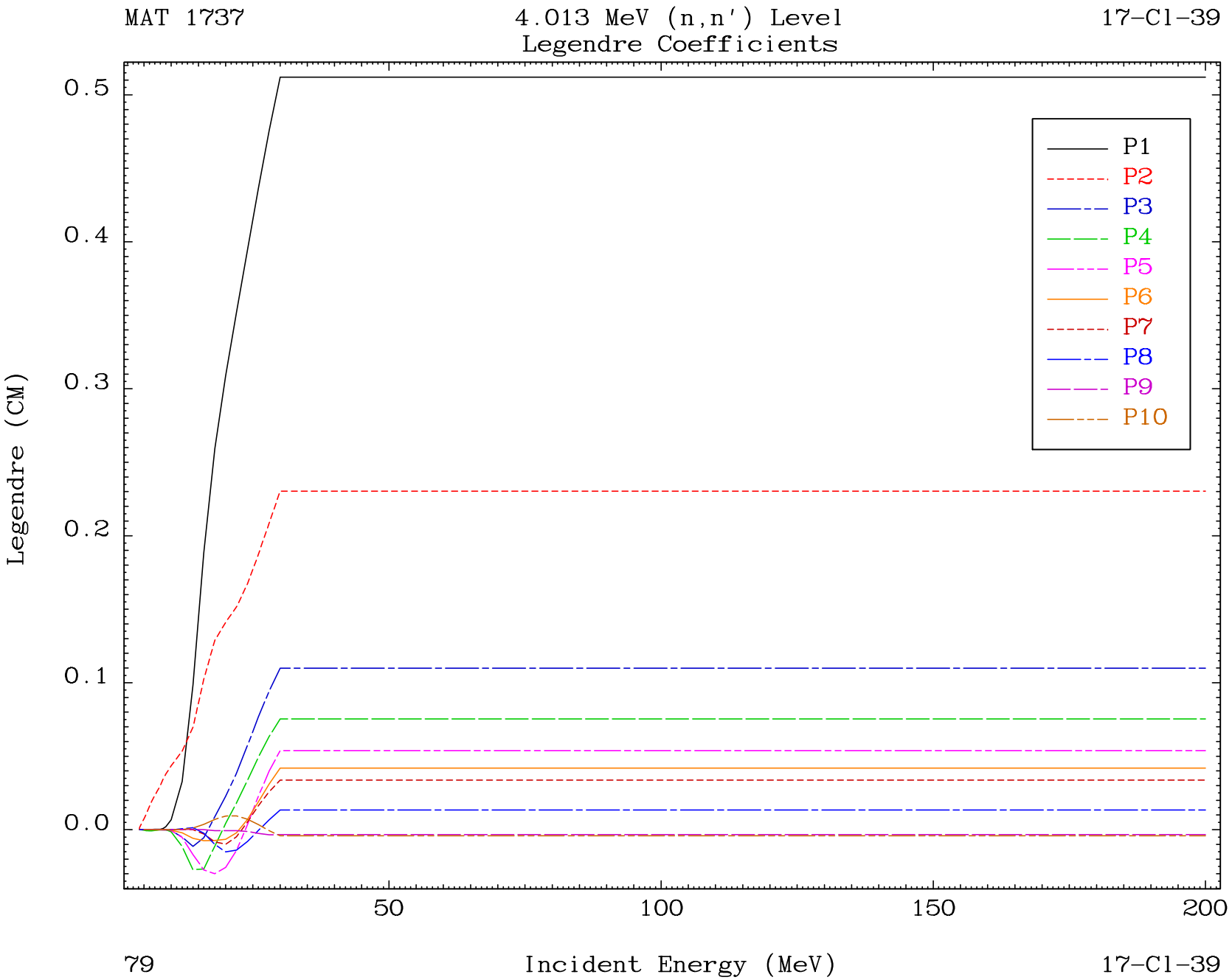

MAT 1737
3.534 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-3
0.0
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
74
Incident Energy (MeV)
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

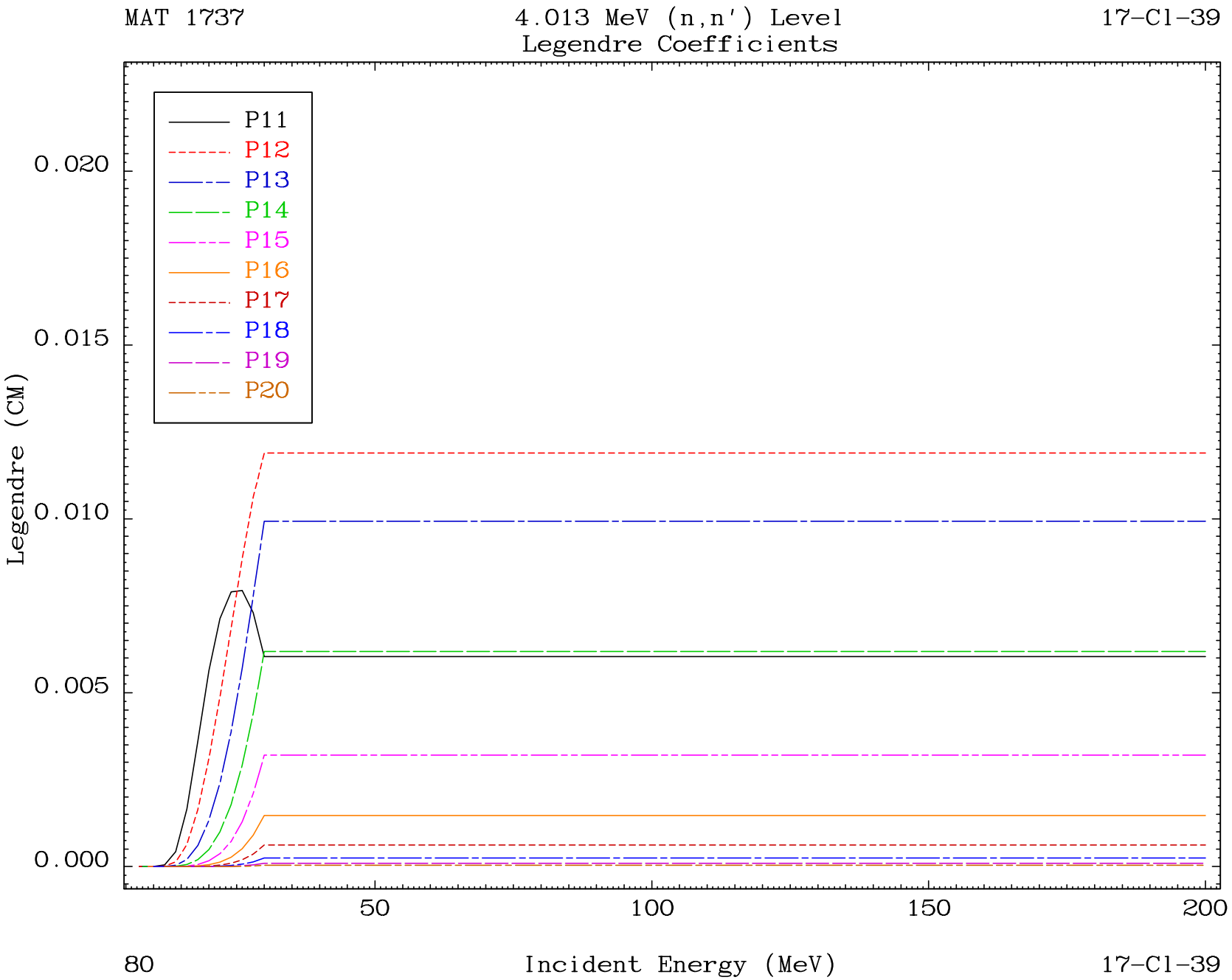

MAT 1737
3.534 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10 -6
5
4
3
2
1
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
75
Incident Energy (MeV)
17-Cl-39

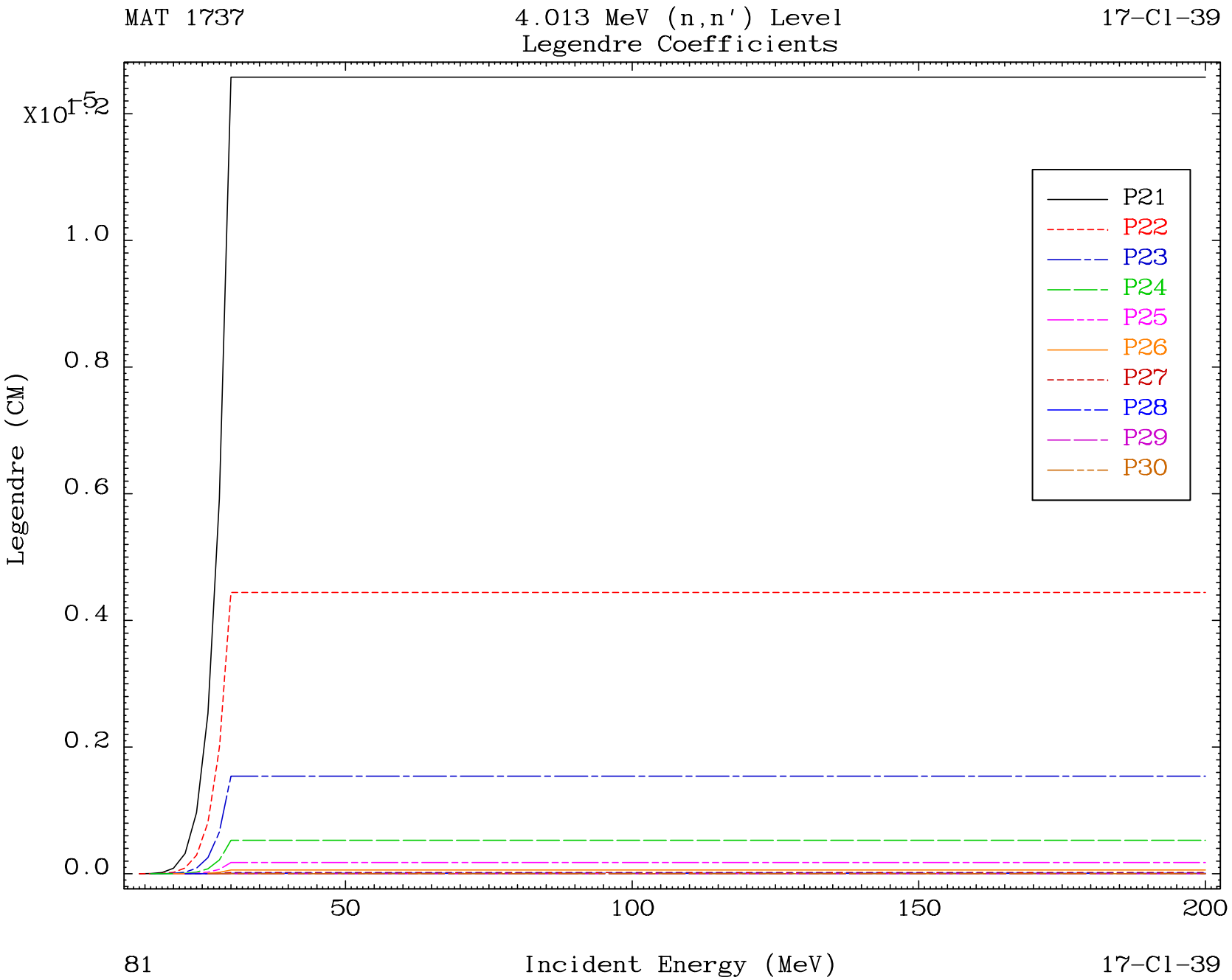

MAT 1737
3.907 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
76
Incident Energy (MeV)
17-Cl-39

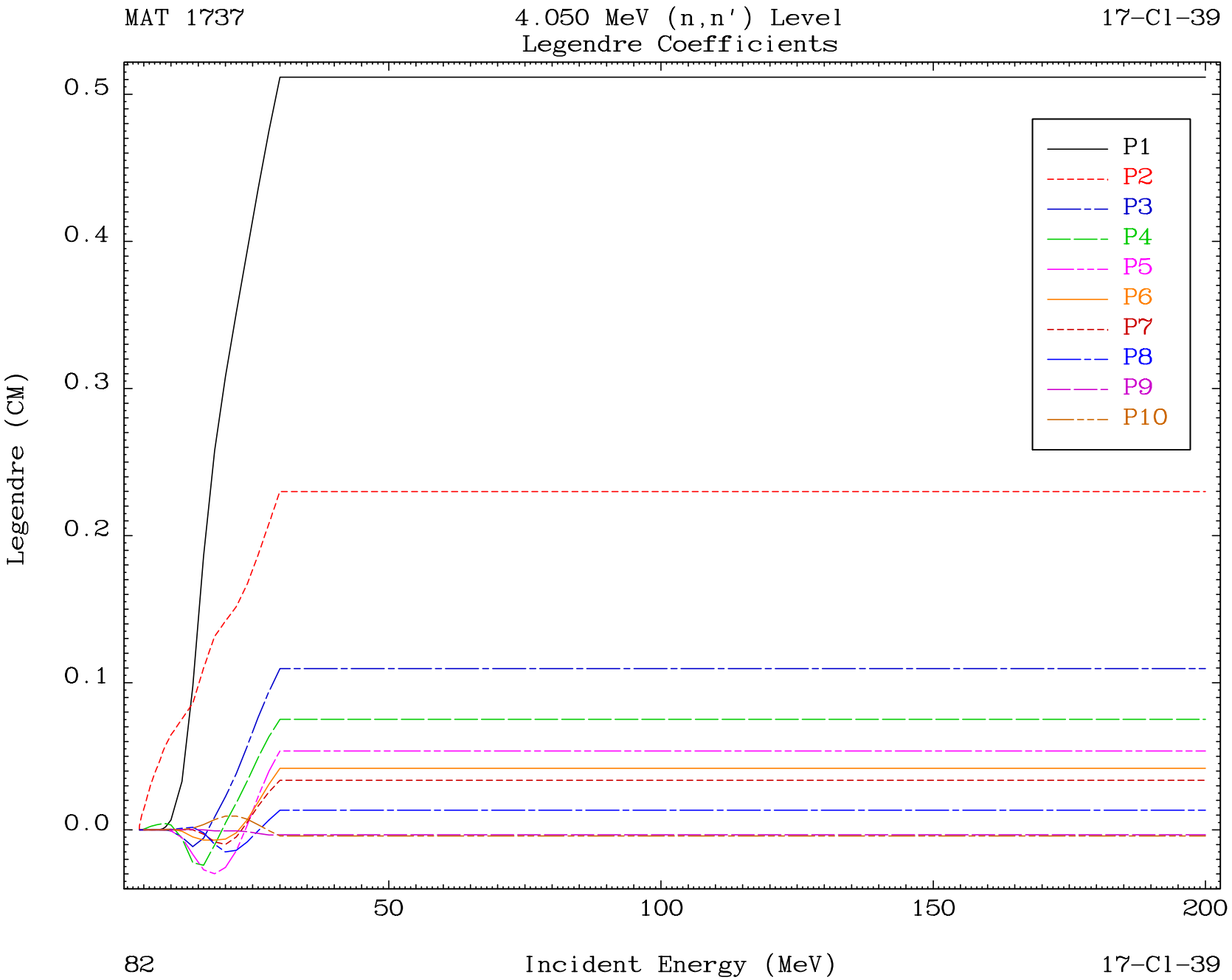

MAT 1737
3.907 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
77
Incident Energy (MeV)
17-Cl-39

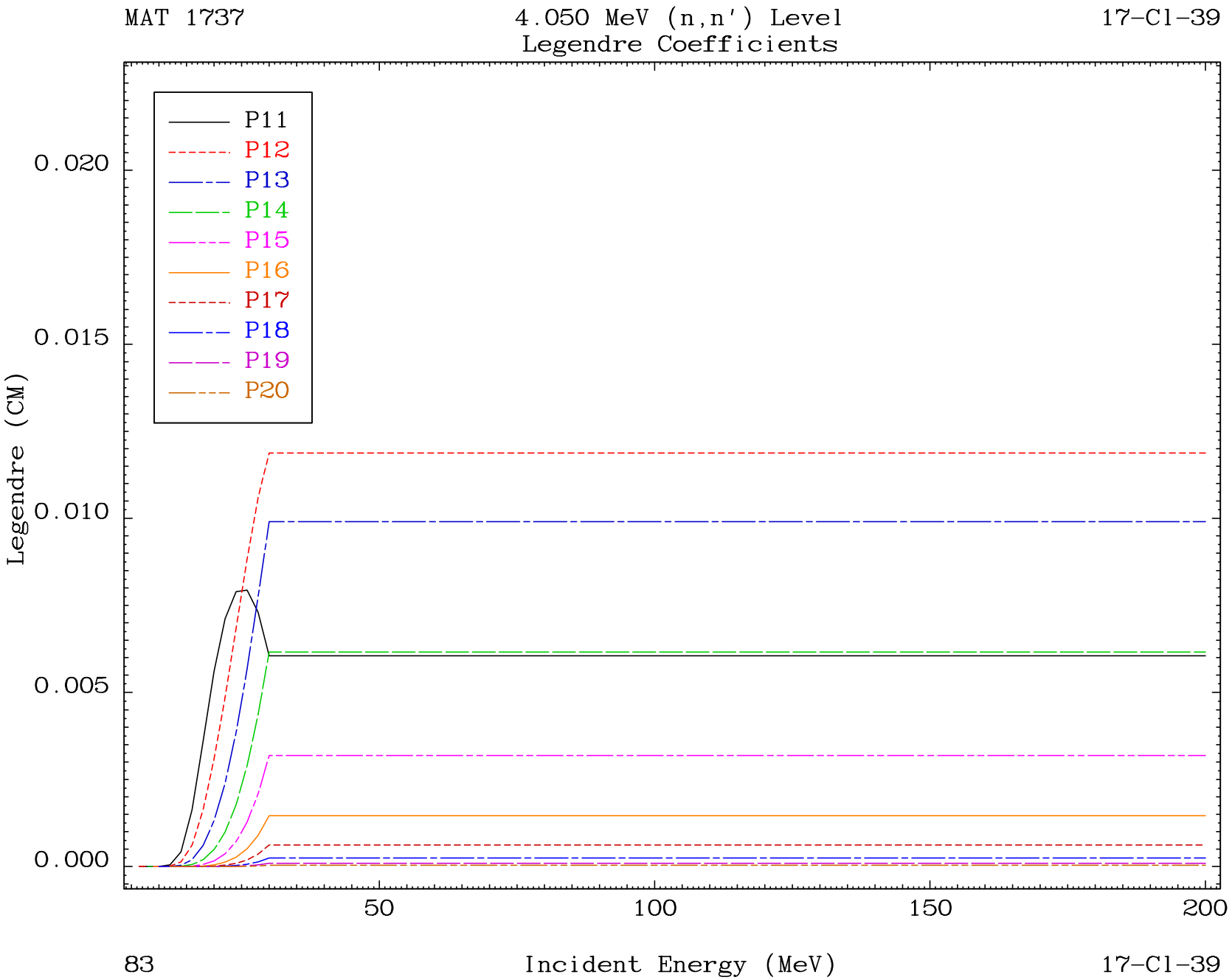

MAT 1737
3.907 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-5
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
78
Incident Energy (MeV)
17-Cl-39

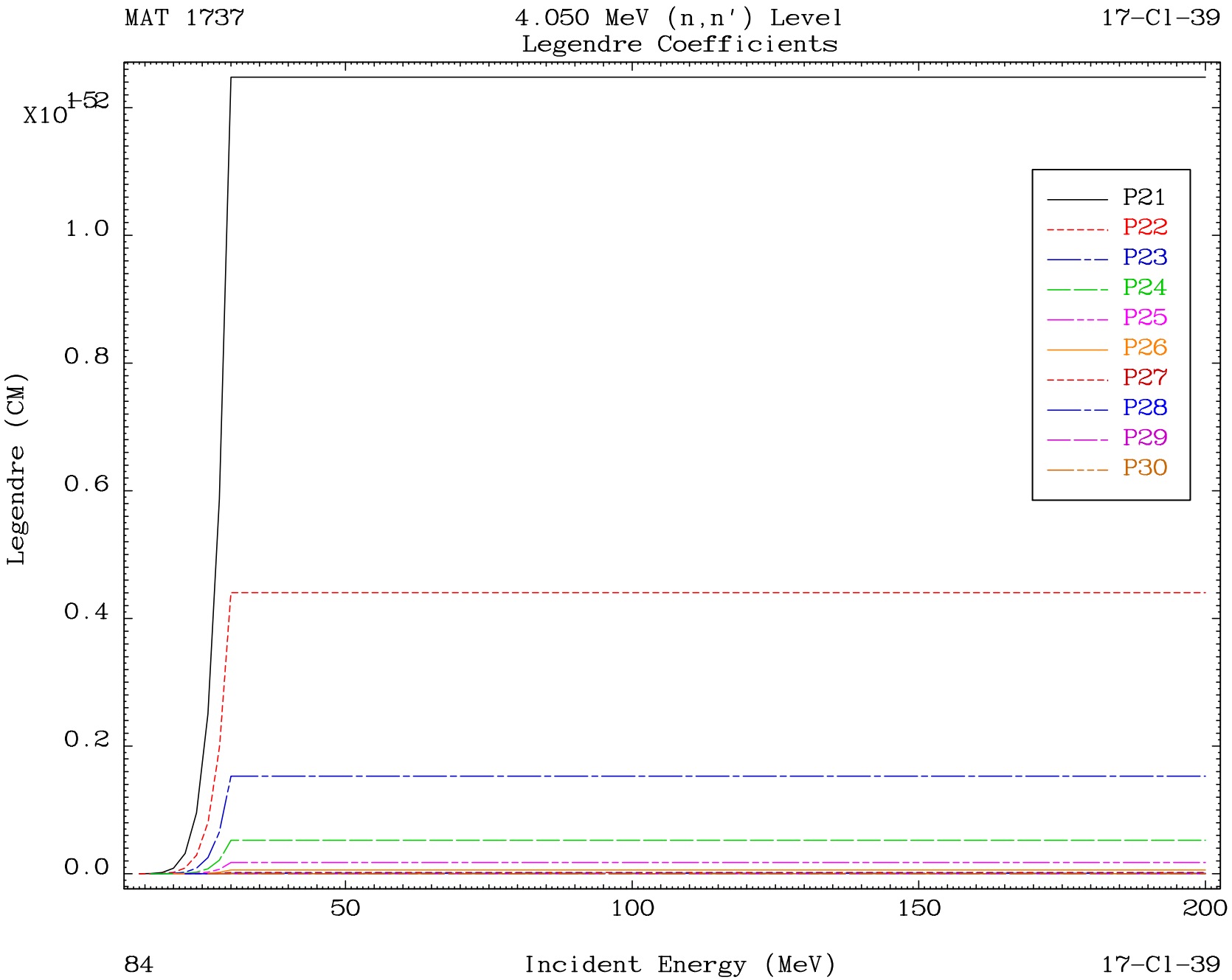

MAT 1737
4.013 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
79
Incident Energy (MeV)
17-Cl-39

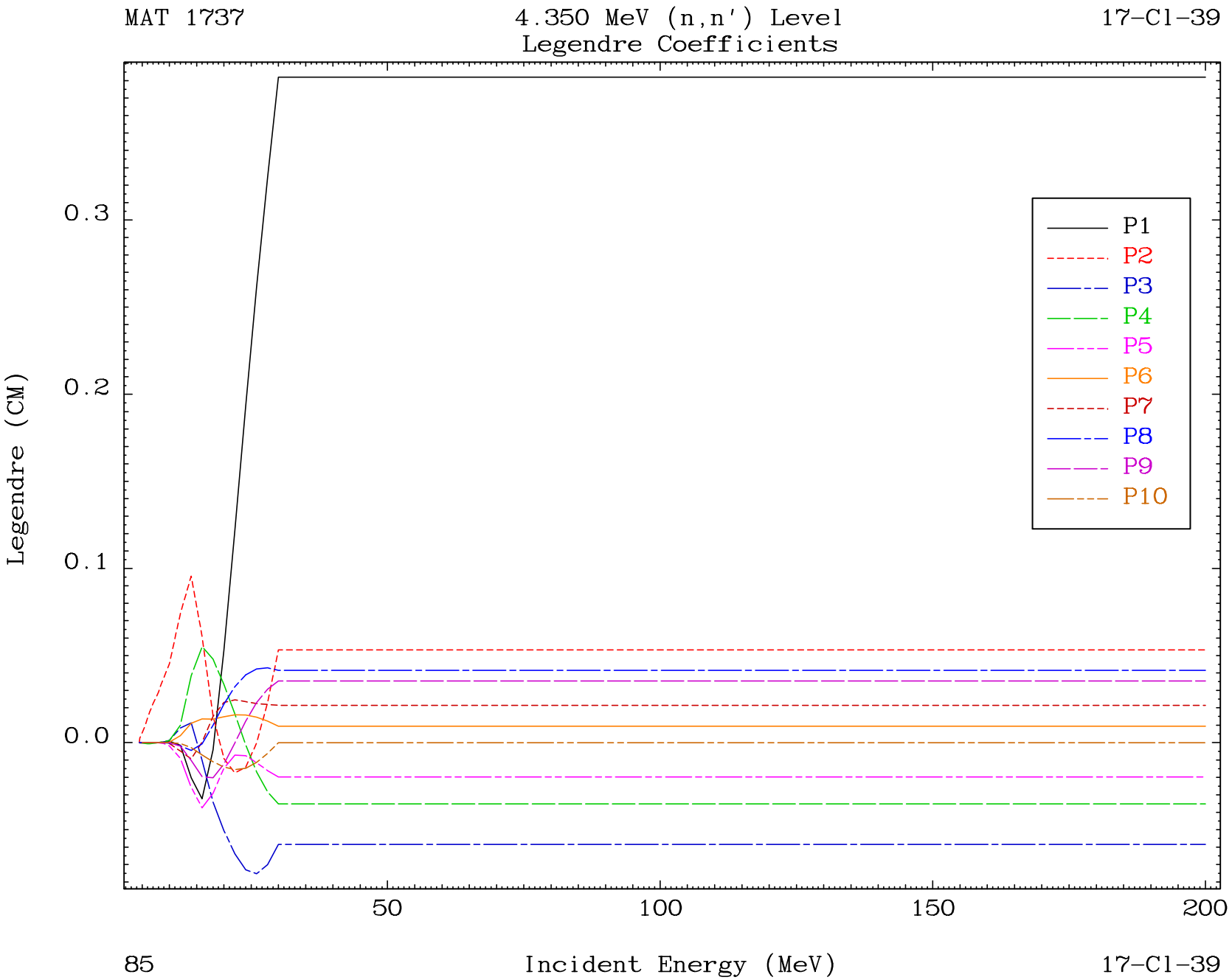

MAT 1737
4.013 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
80
50
100
150
200
Incident Energy (MeV)
17-Cl-39

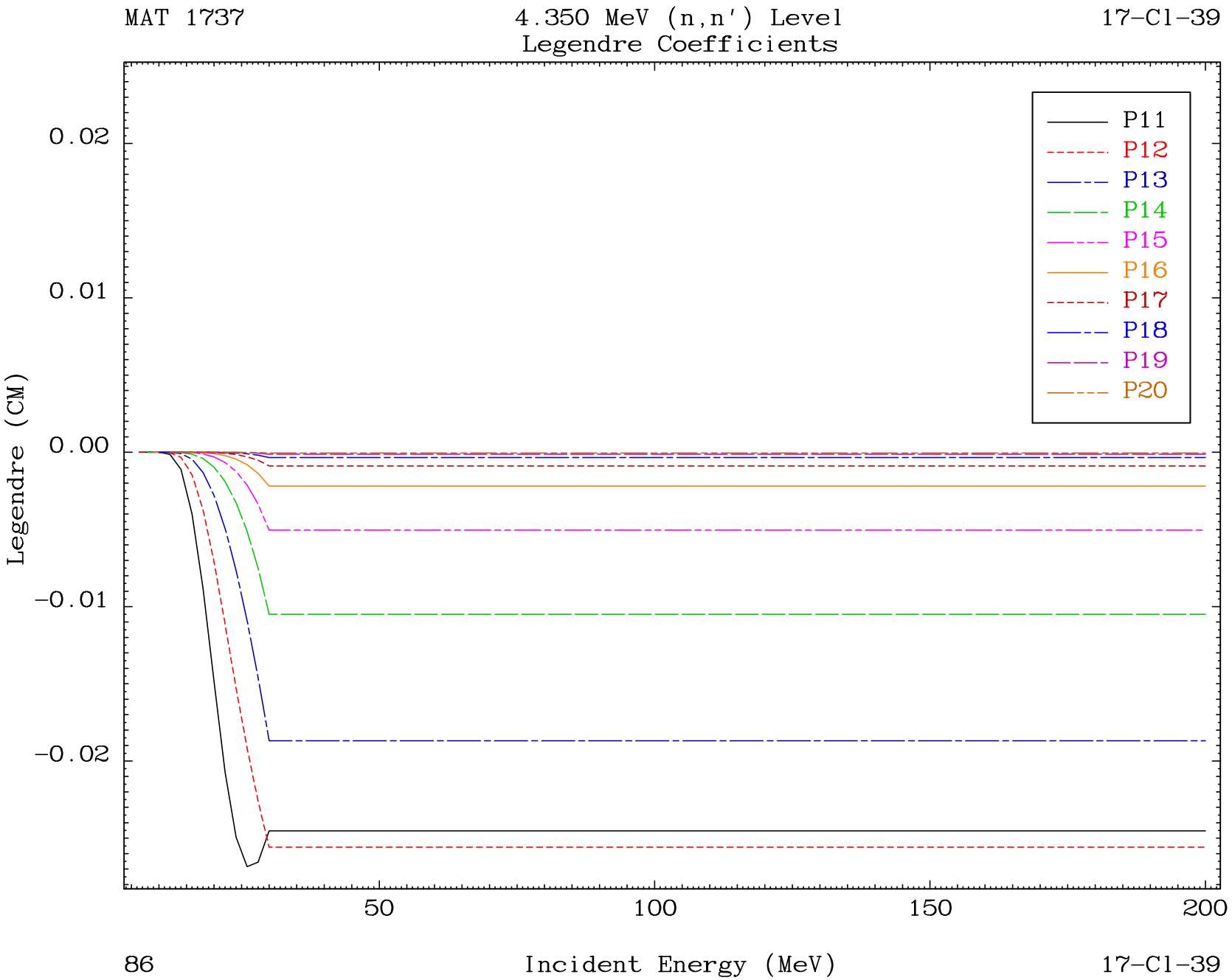

MAT 1737
4.013 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-5
2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
81
Incident Energy (MeV)
17-Cl-39

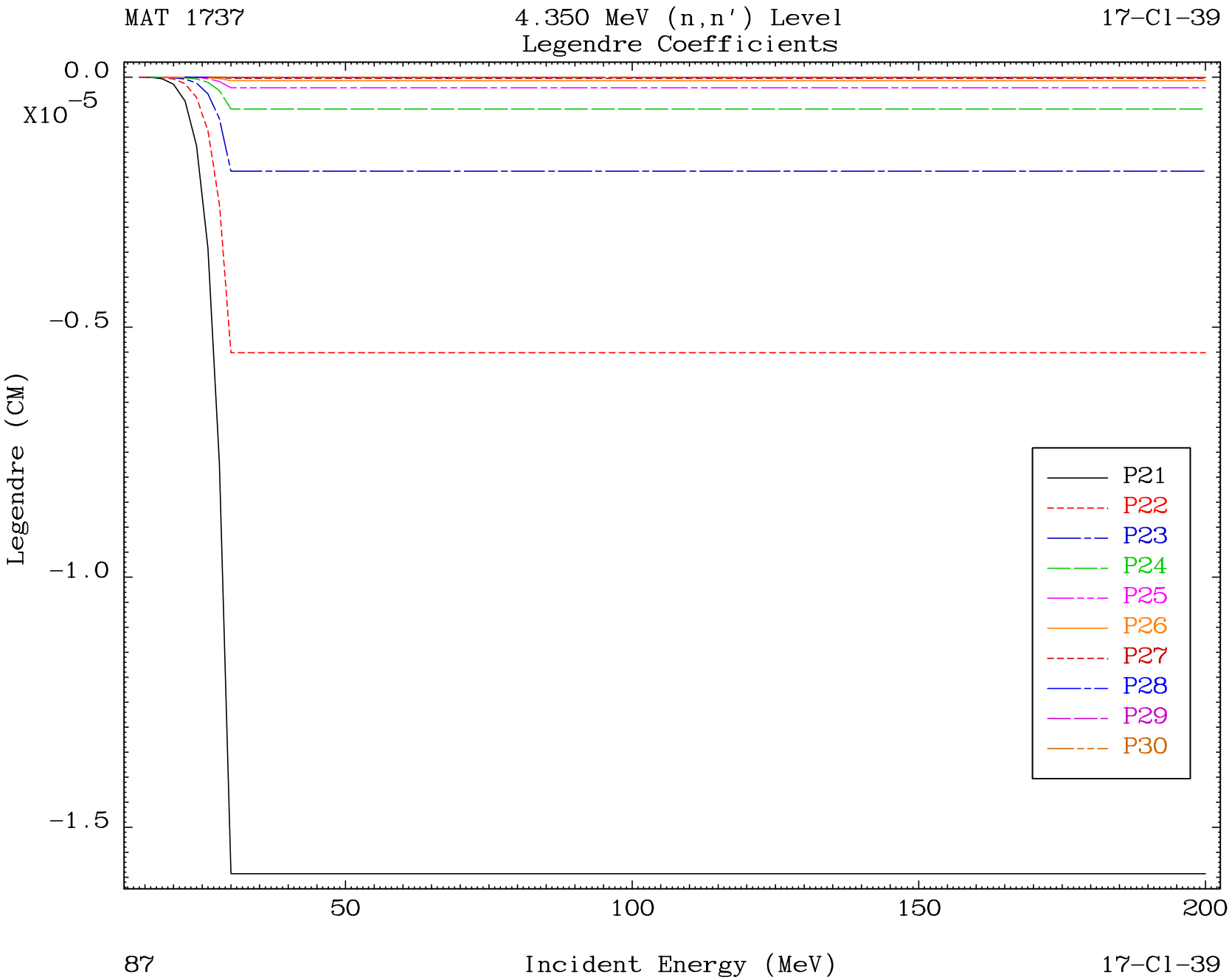

MAT 1737
4.050 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
82
Incident Energy (MeV)
17-Cl-39

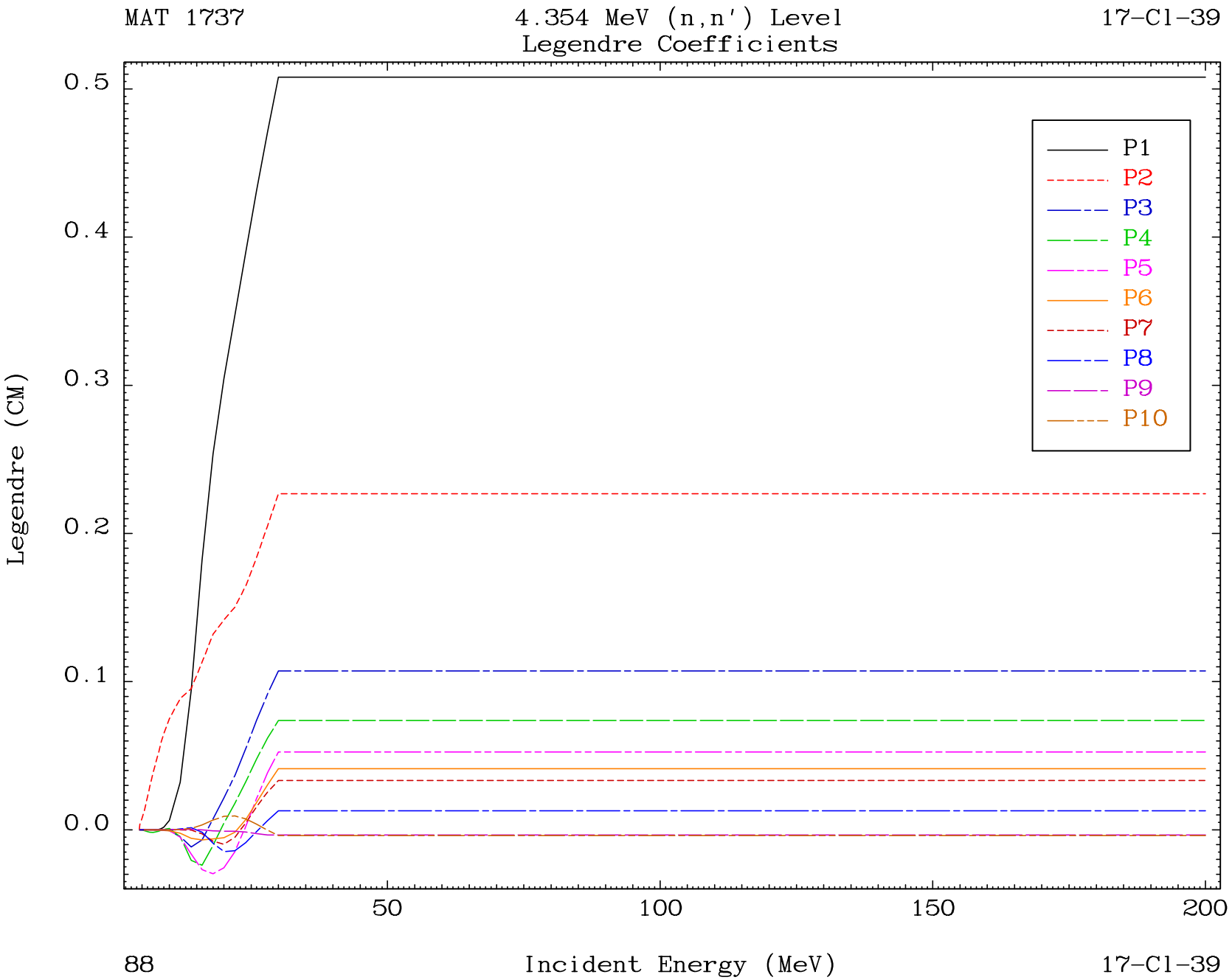

MAT 1737
4.050 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
83
Incident Energy (MeV)
17-Cl-39

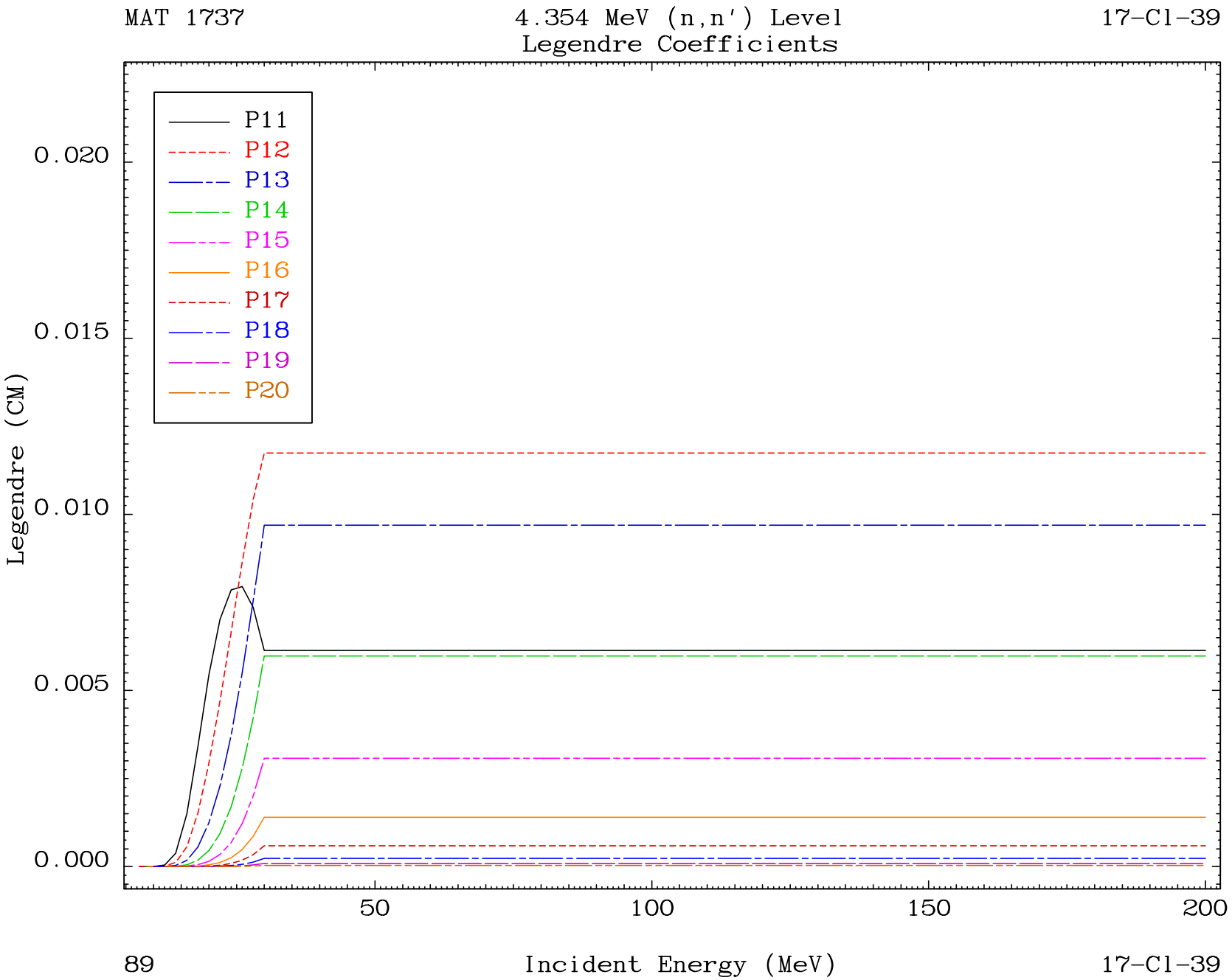

MAT 1737
4.050 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-02
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
50
100
150
200
84
Incident Energy (MeV)
17-Cl-39
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

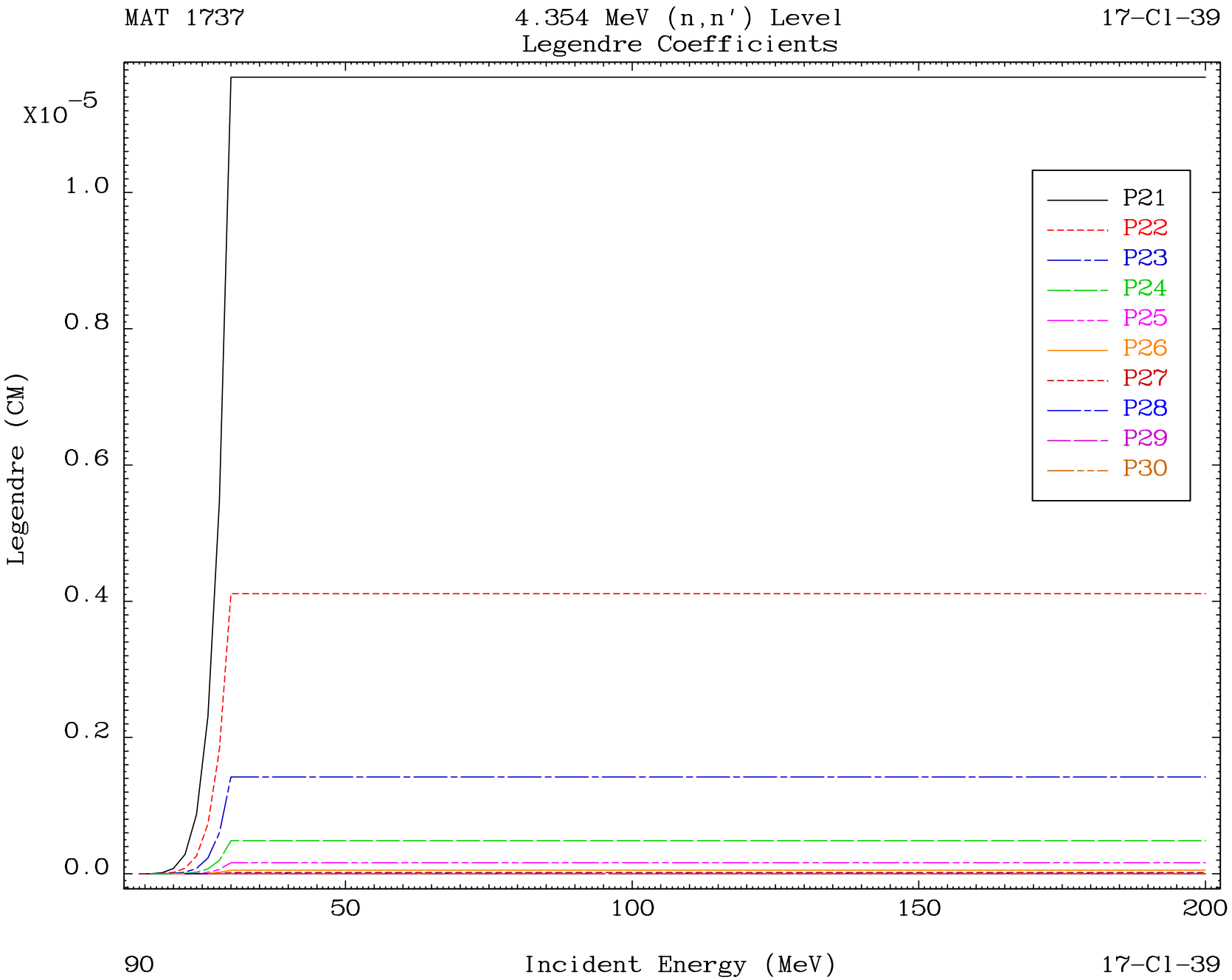

MAT 1737
4.350 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
85
Incident Energy (MeV)
17-Cl-39

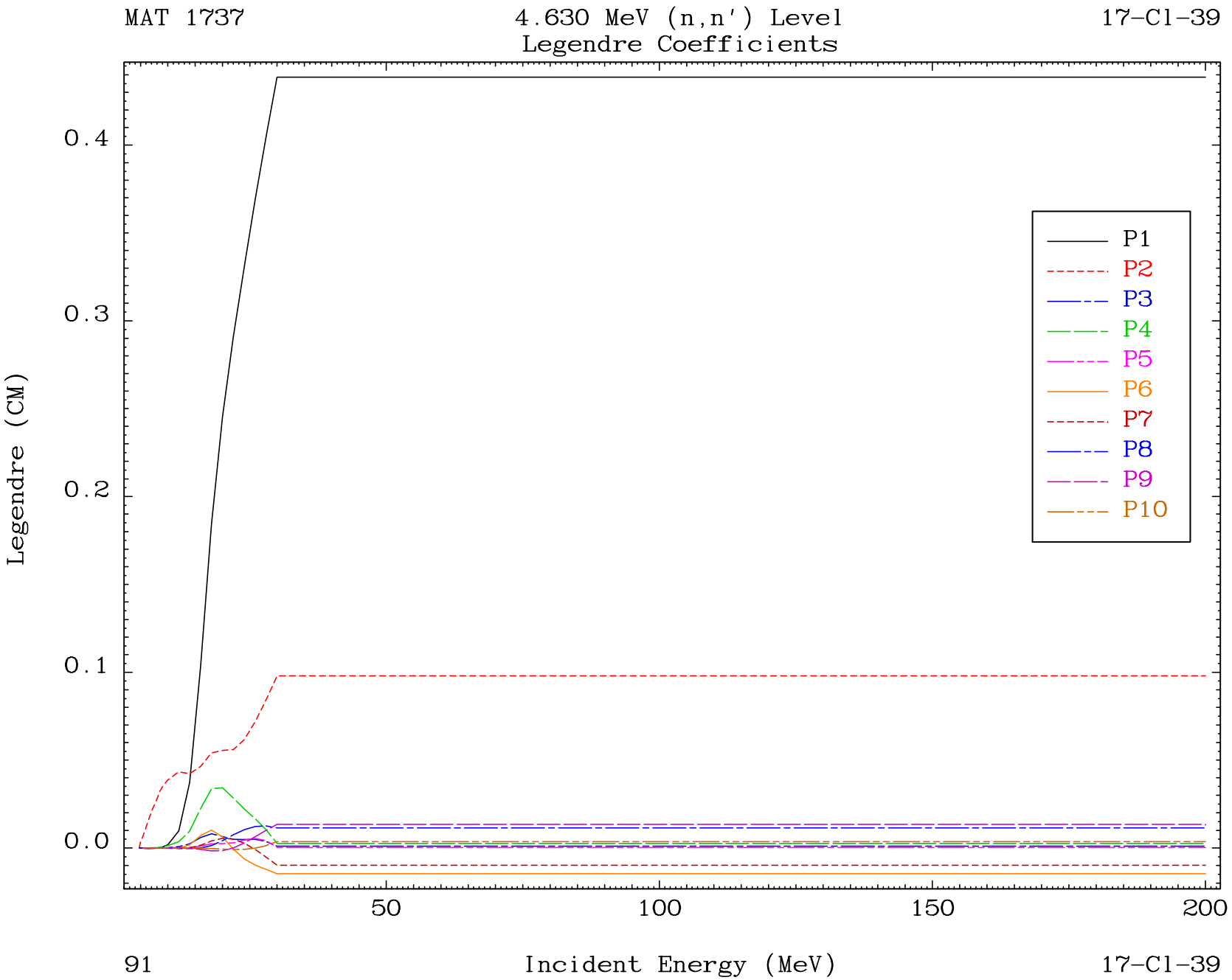

MAT 1737
4.350 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.02
0.01
0.00
-0.01
-0.02
Legendre (CM)
50
100
150
200
86
Incident Energy (MeV)
17-Cl-39

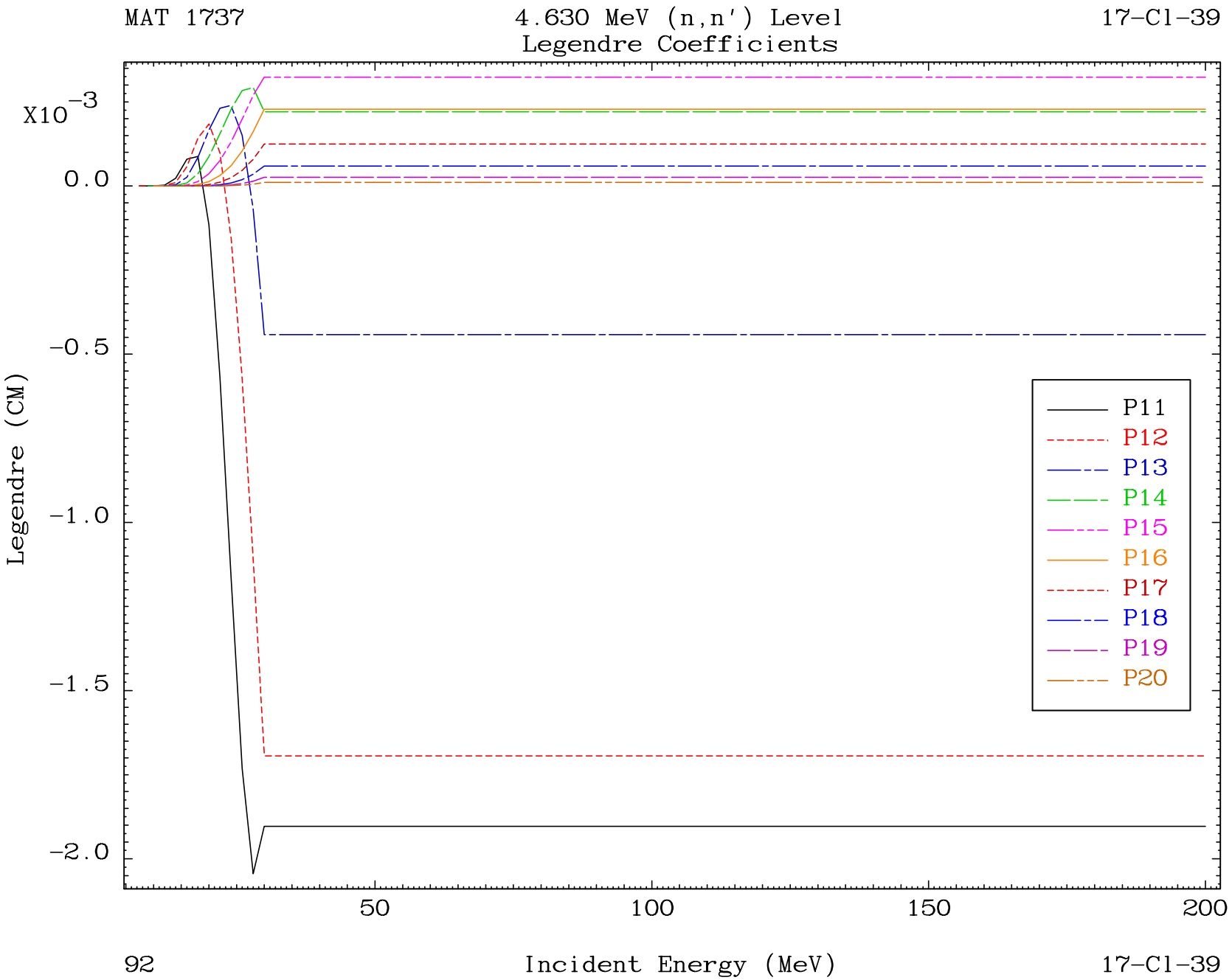

MAT 1737
4.350 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
0.0
X10^-5
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
87
Incident Energy (MeV)
17-Cl-39
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

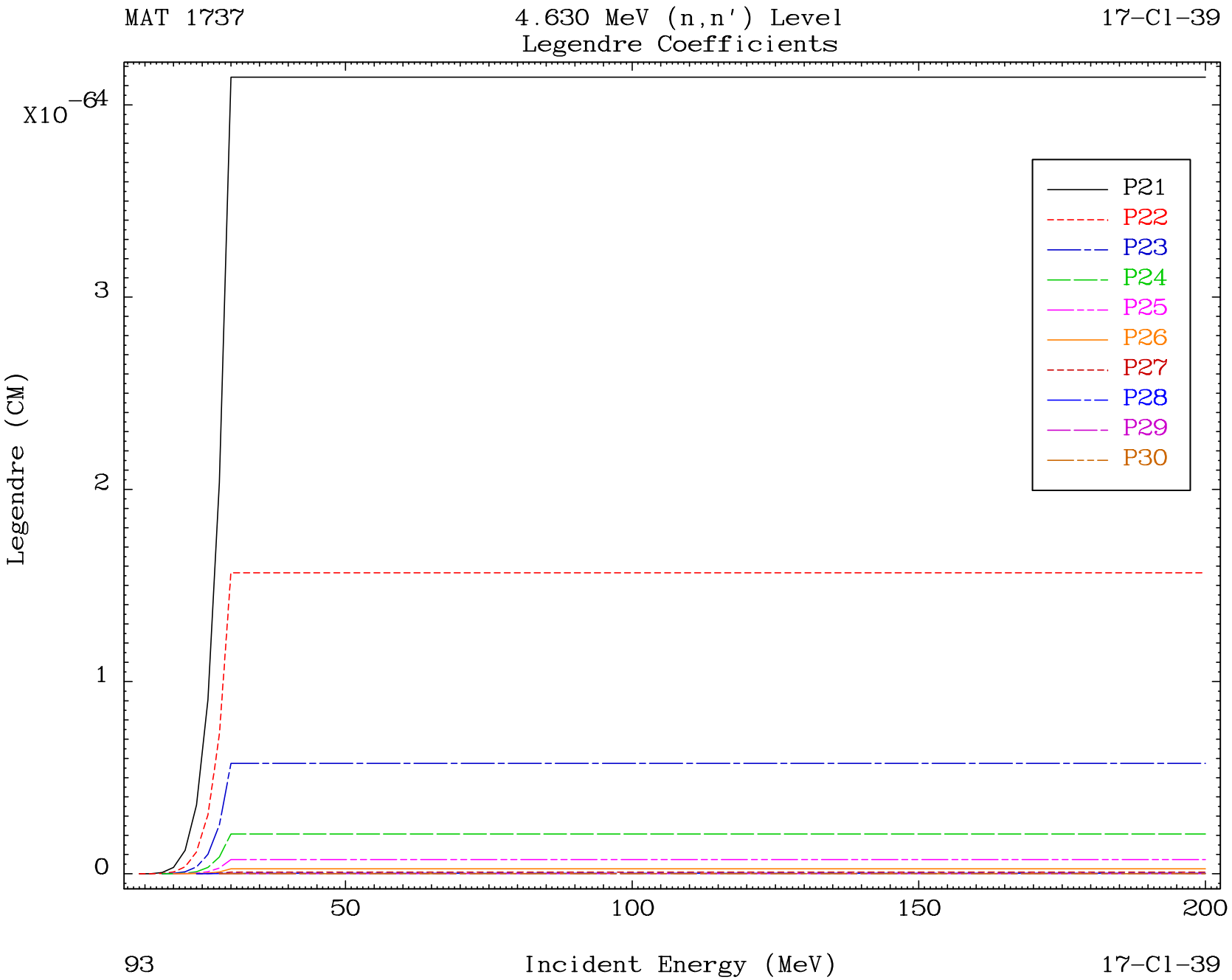

MAT 1737
4.354 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
88
Incident Energy (MeV)
17-Cl-39

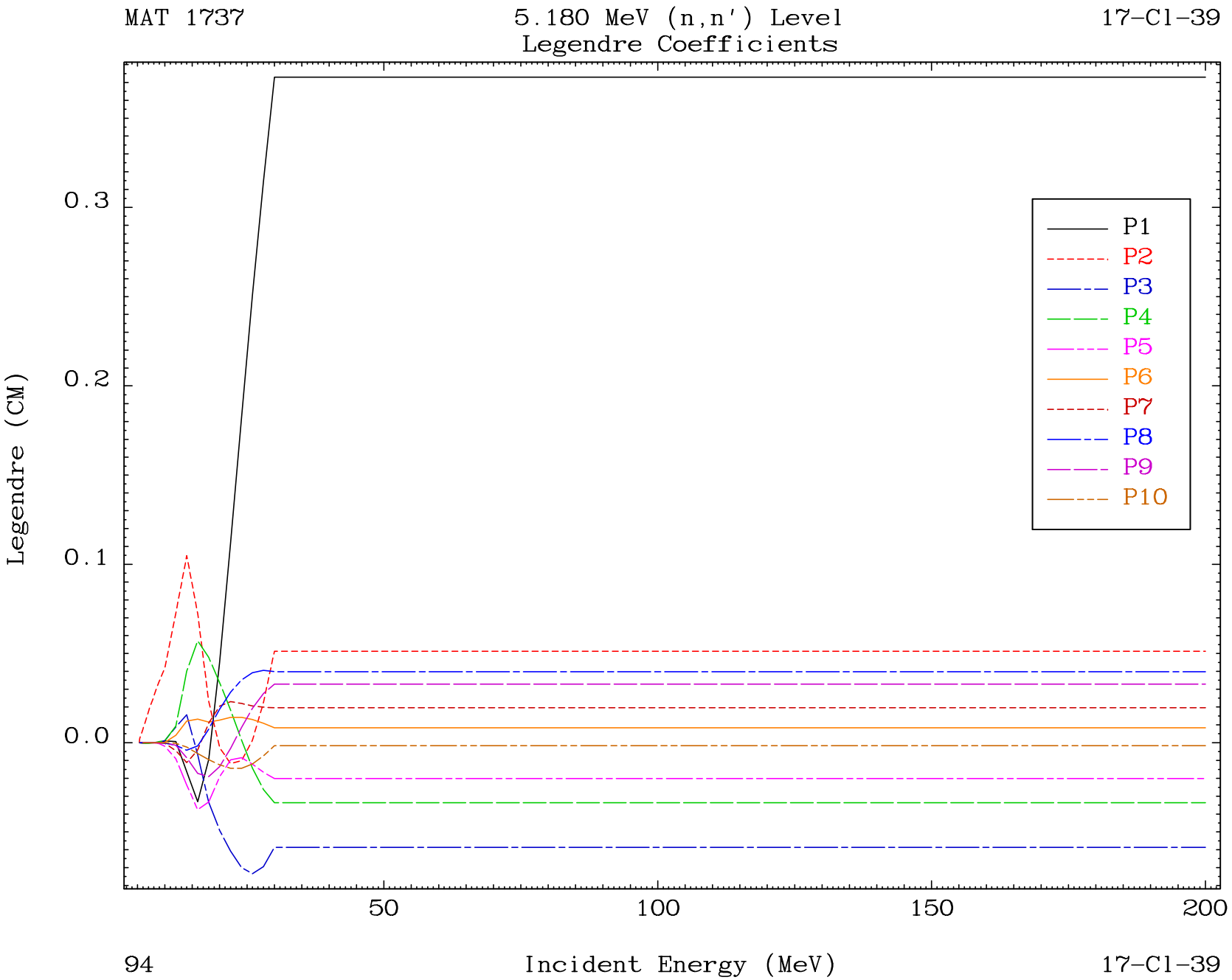

MAT 1737
4.354 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
89
Incident Energy (MeV)
17-Cl-39

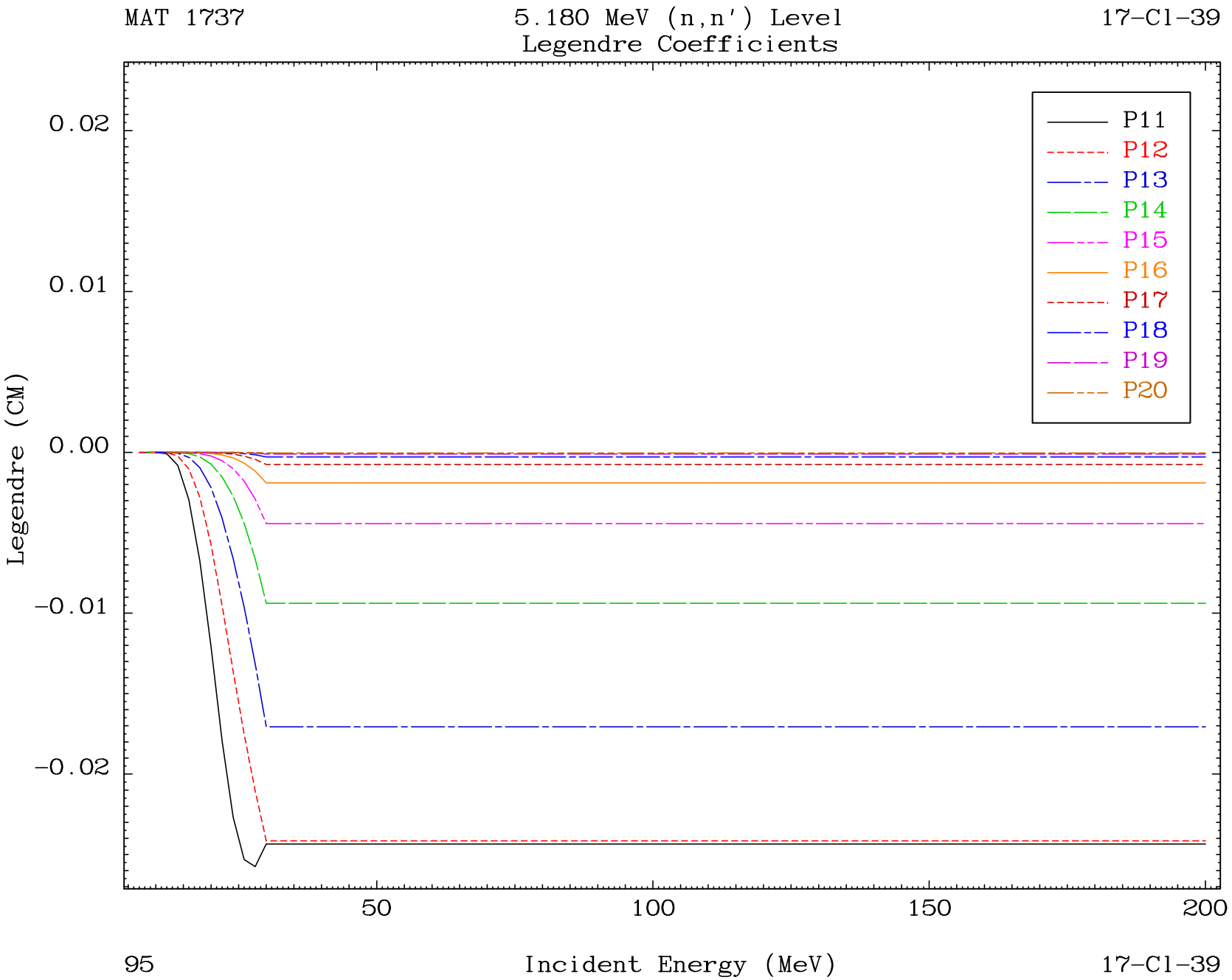

MAT 1737
4.354 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-5
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
90
Incident Energy (MeV)
17-Cl-39

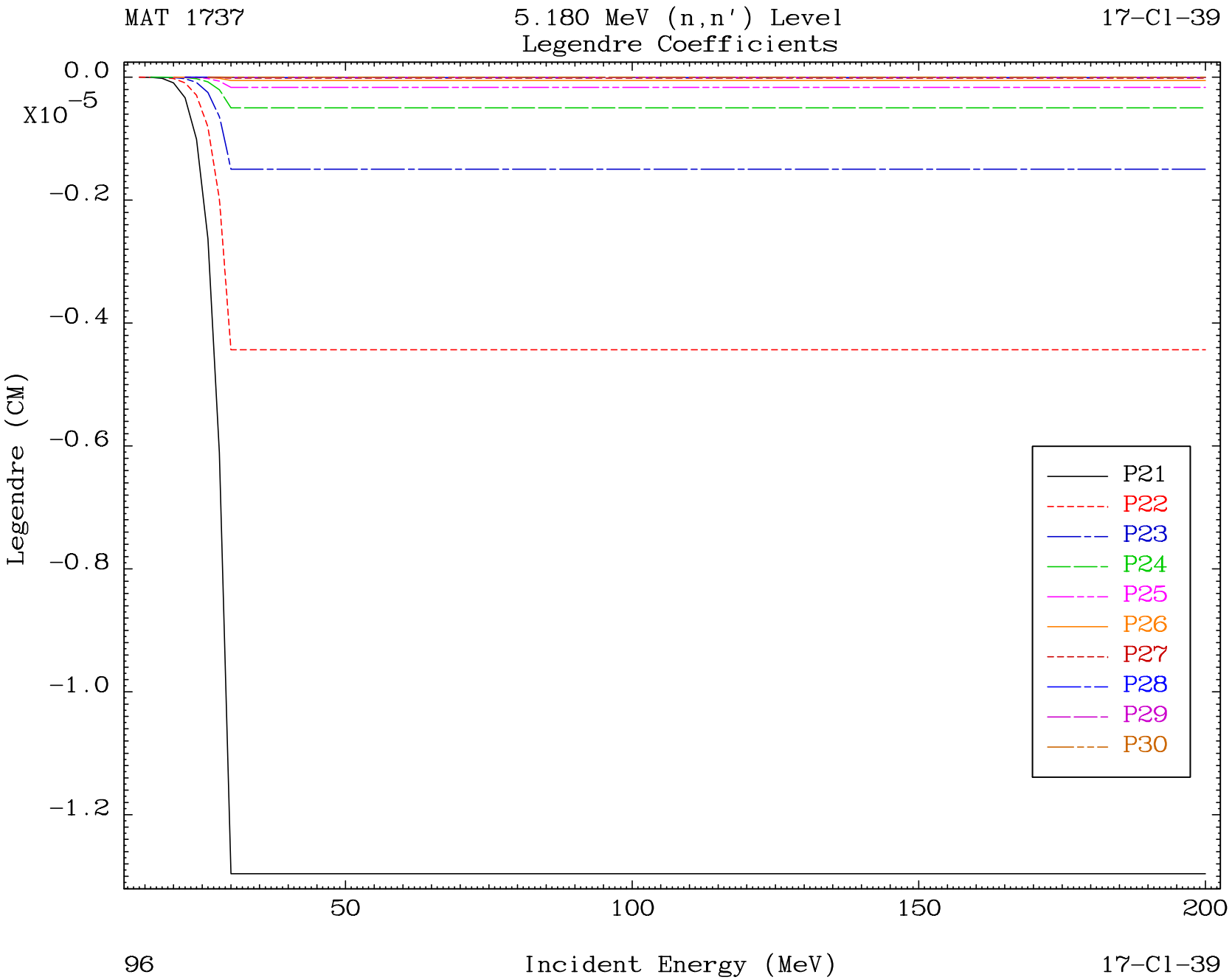

MAT 1737
4.630 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
91
Incident Energy (MeV)
17-Cl-39

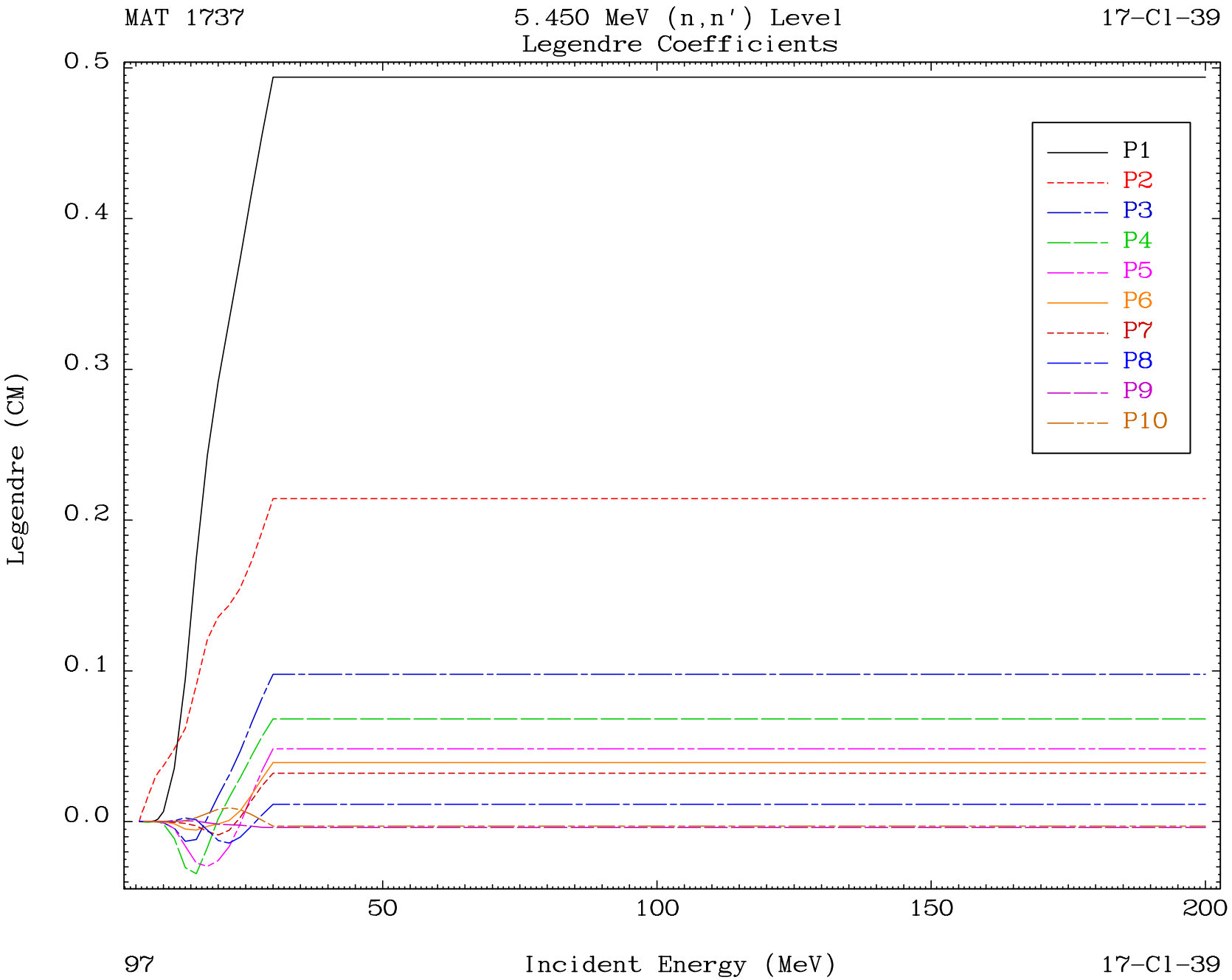

MAT 1737
4.630 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10^-3
0.0
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
50
100
150
200
92
Incident Energy (MeV)
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

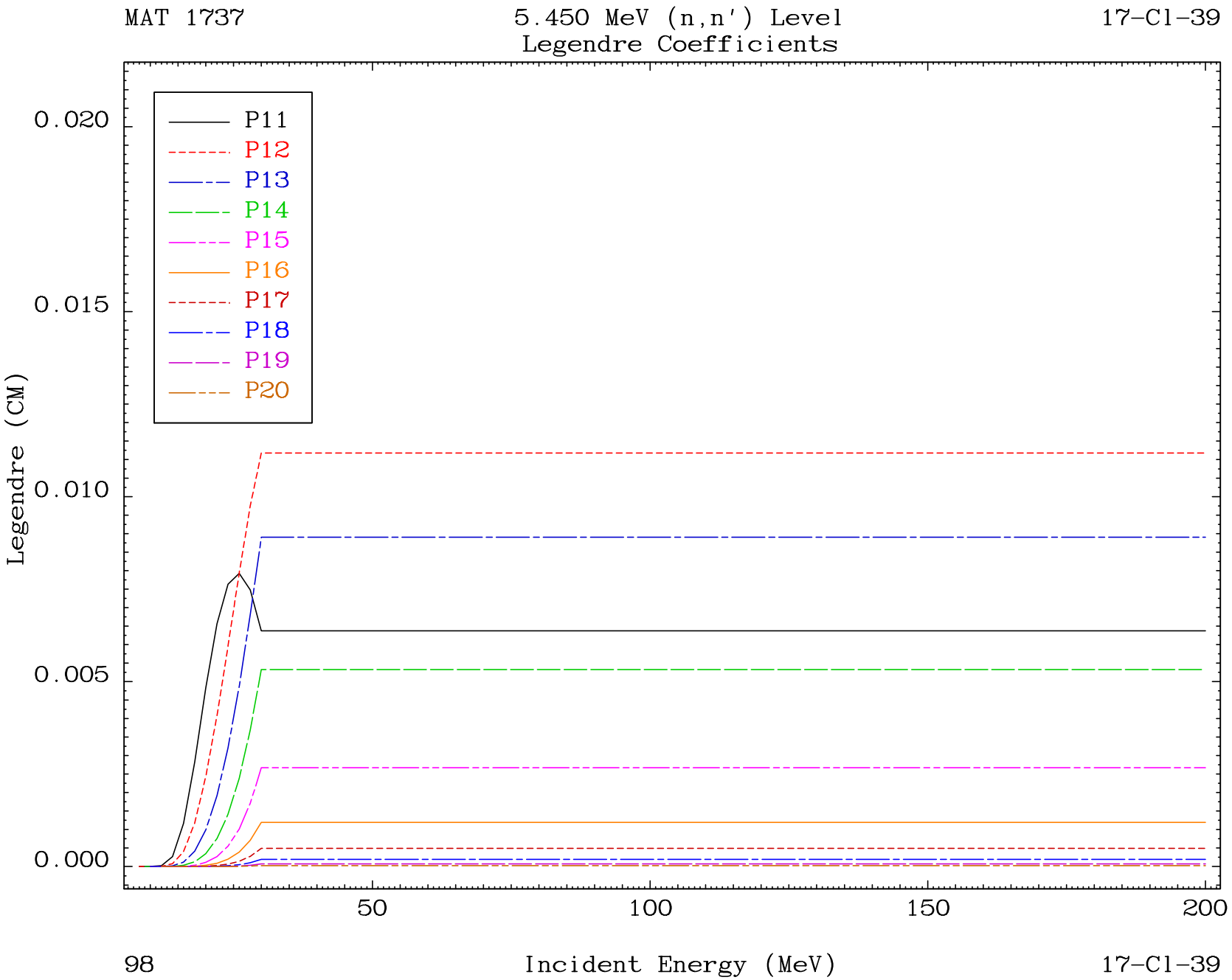

MAT 1737
4.630 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10 -64
3
2
1
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
93
Incident Energy (MeV)
17-Cl-39

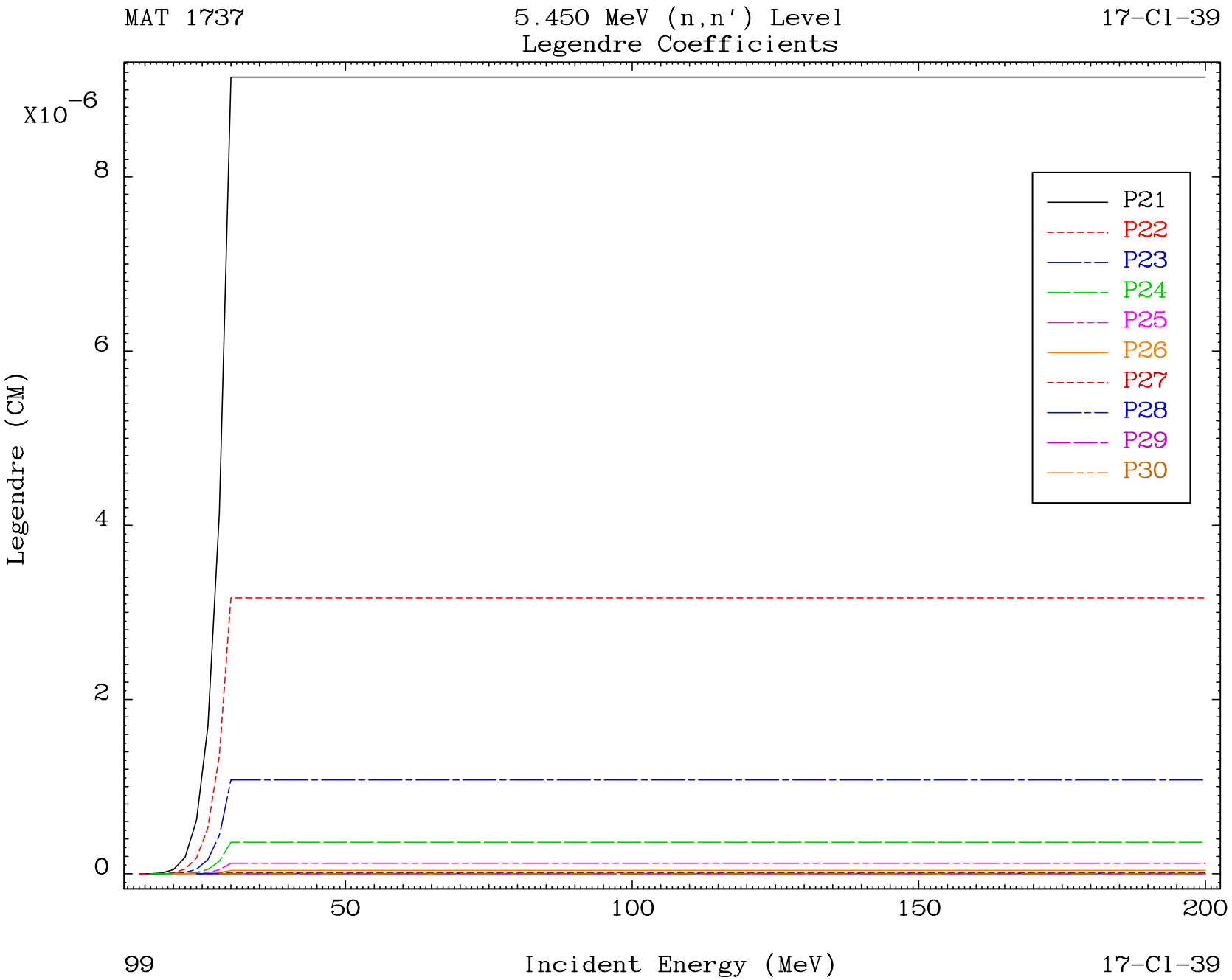

MAT 1737
5.180 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
94
Incident Energy (MeV)
17-Cl-39

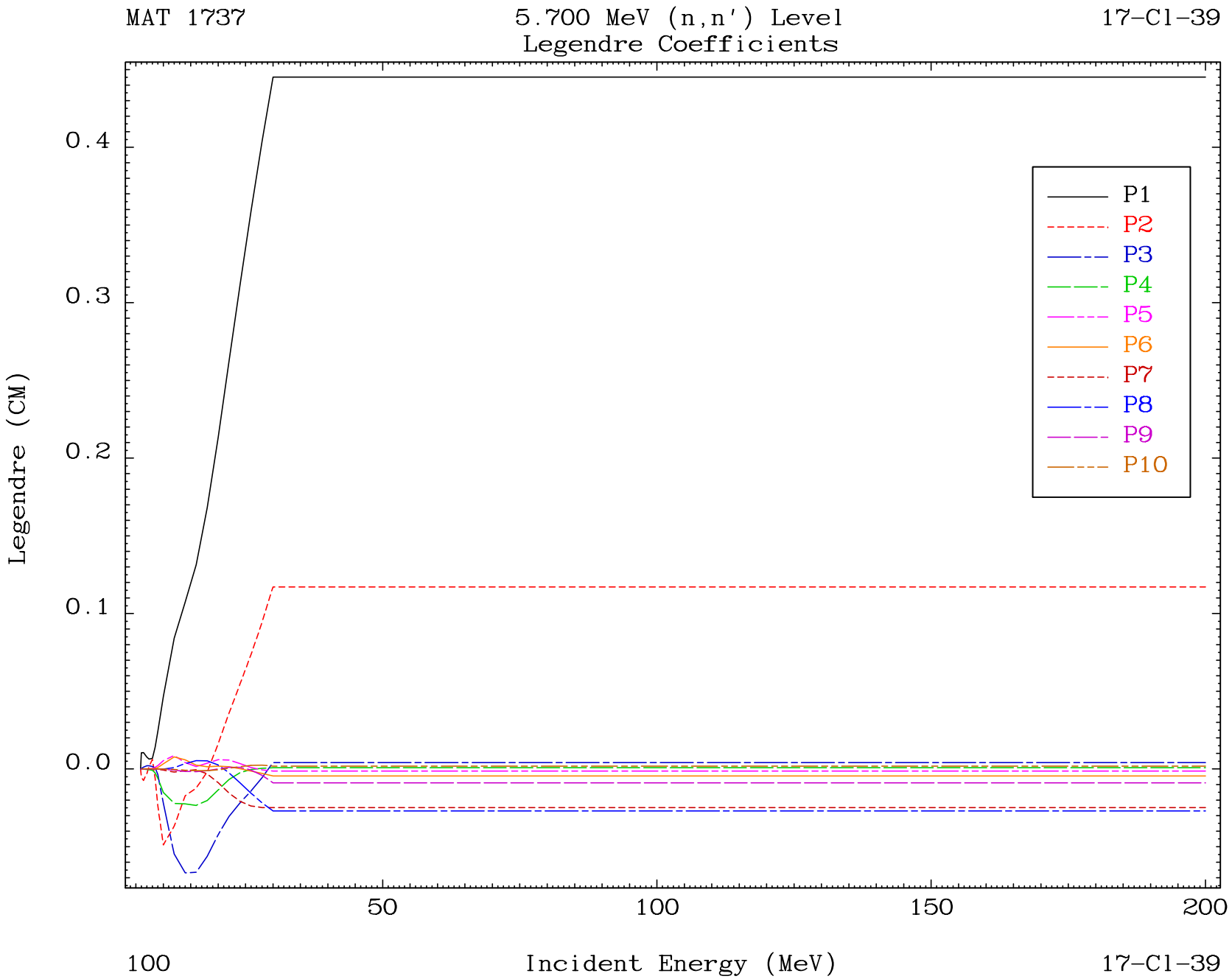

MAT 1737
5.180 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.02
0.01
0.00
-0.01
-0.02
Legendre (CM)
50
100
150
200
95
Incident Energy (MeV)
17-Cl-39

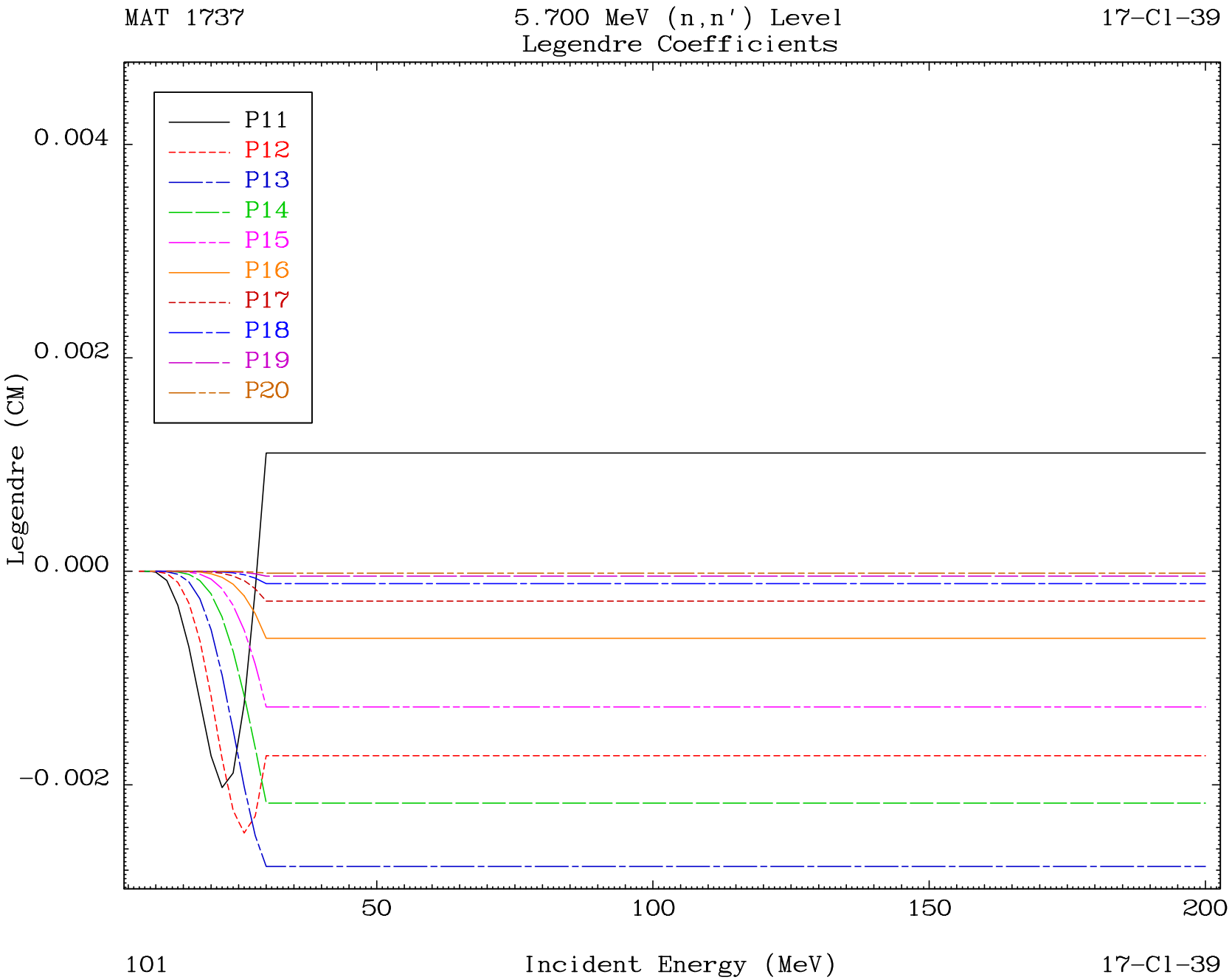

MAT 1737
5.180 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
0.0
X10^-5
-0.2
-0.4
-0.6
-0.8
-1.0
-1.2
Legendre (CM)
50
100
150
200
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
96
Incident Energy (MeV)
17-Cl-39

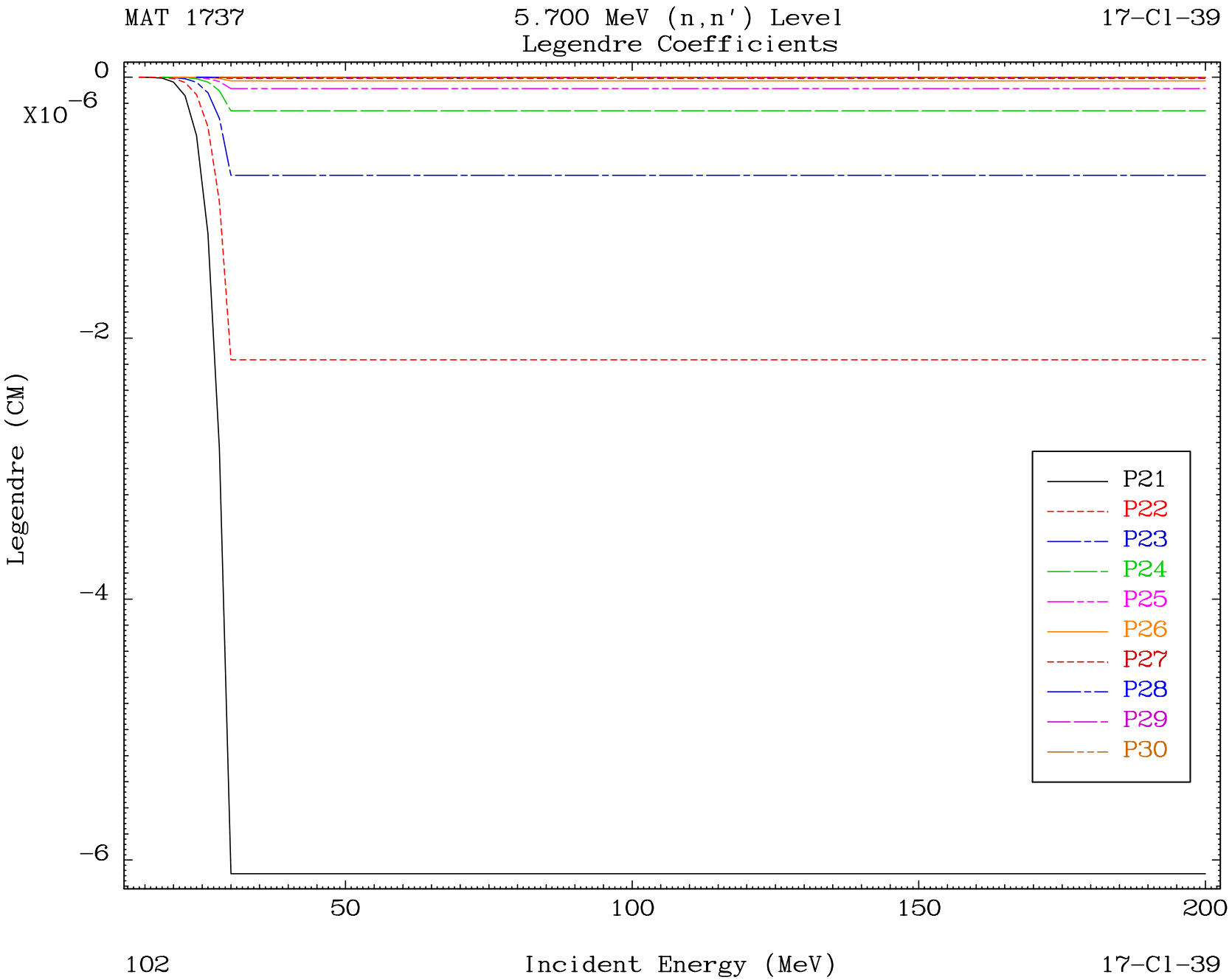

MAT 1737
5.450 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
50
100
150
200
97
Incident Energy (MeV)
17-Cl-39

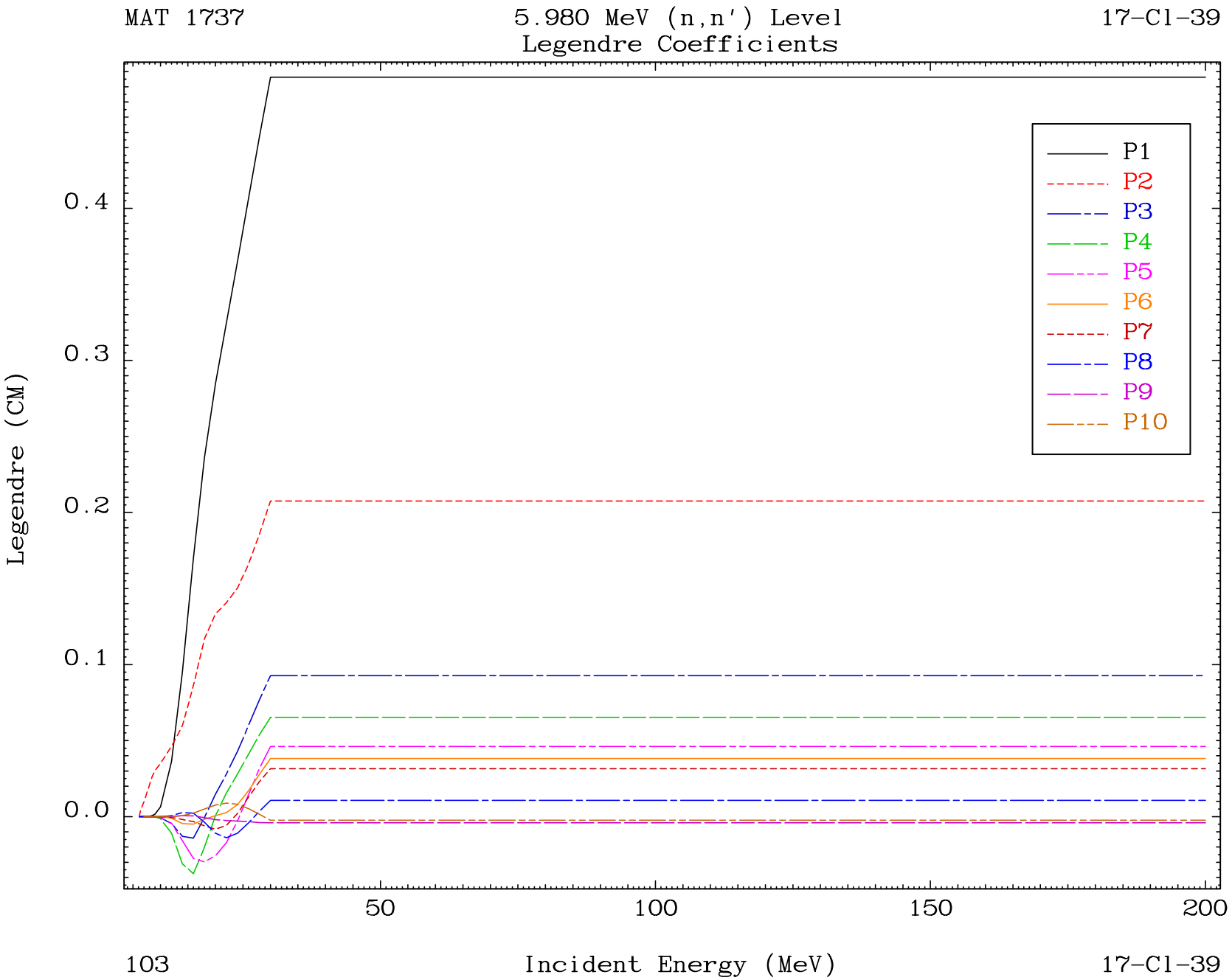

MAT 1737
5.450 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
98
Incident Energy (MeV)
17-Cl-39

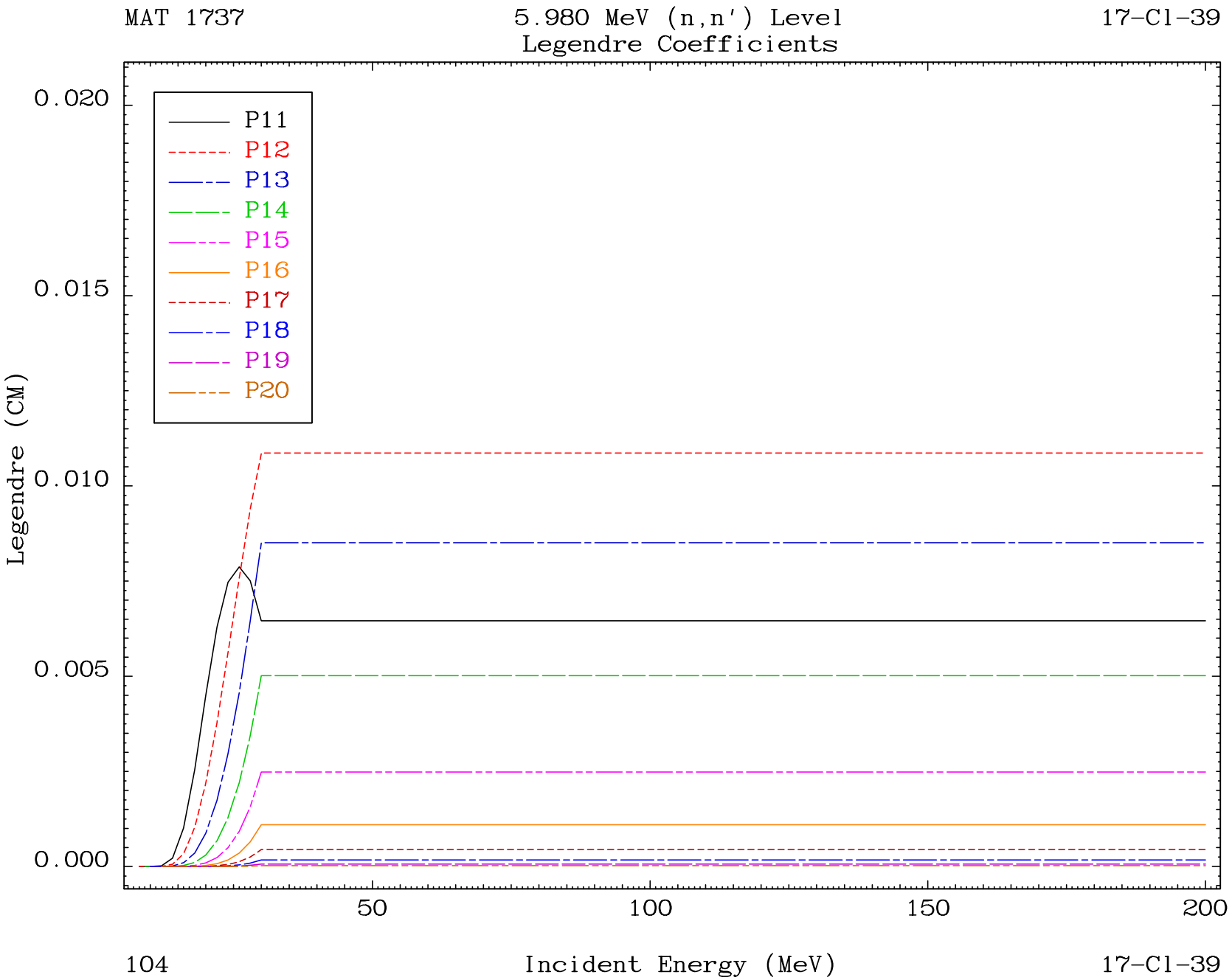

MAT 1737
5.450 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10-6
8
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
99
Incident Energy (MeV)
17-Cl-39

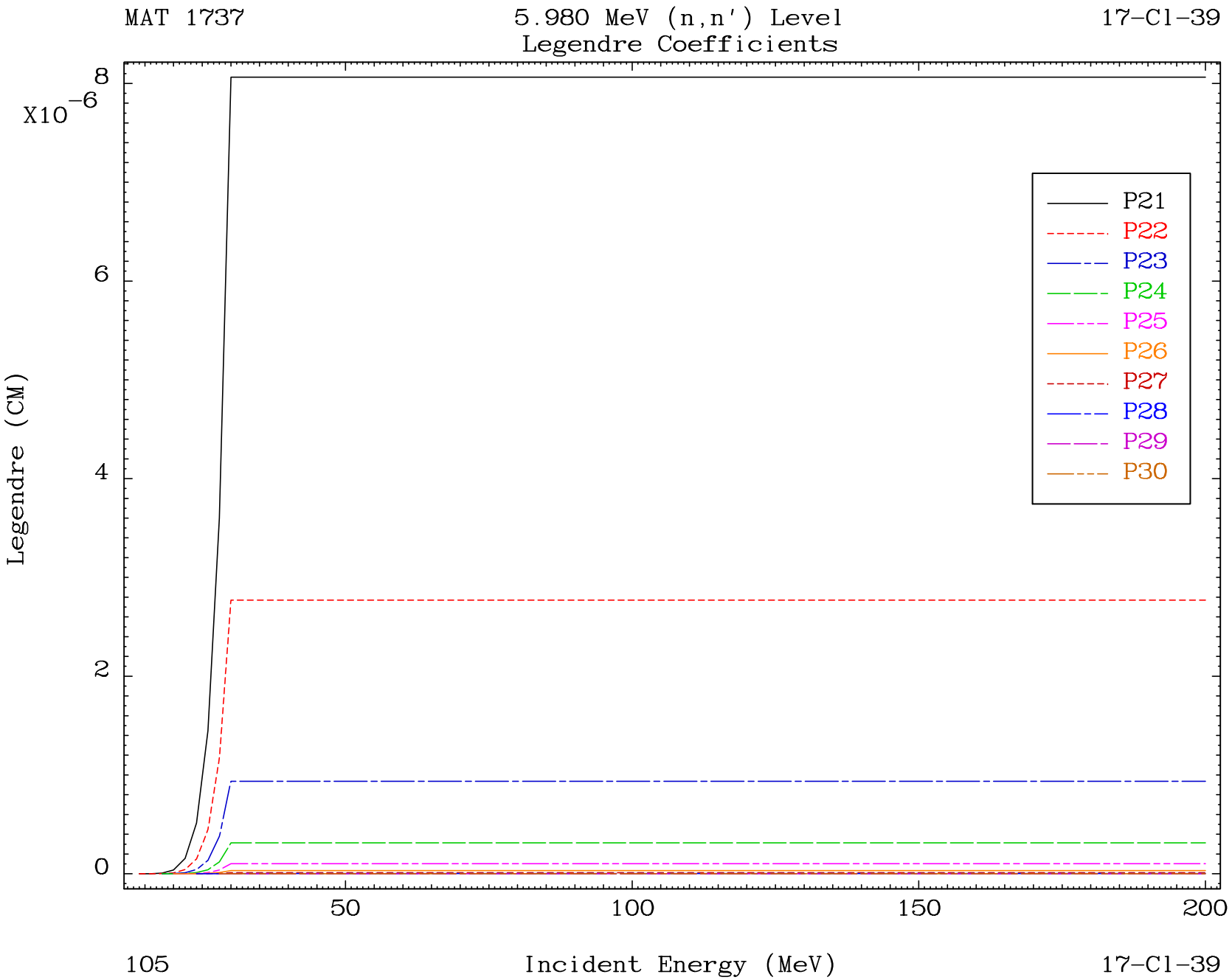

MAT 1737
5.700 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
50
100
150
200
100
Incident Energy (MeV)
17-Cl-39

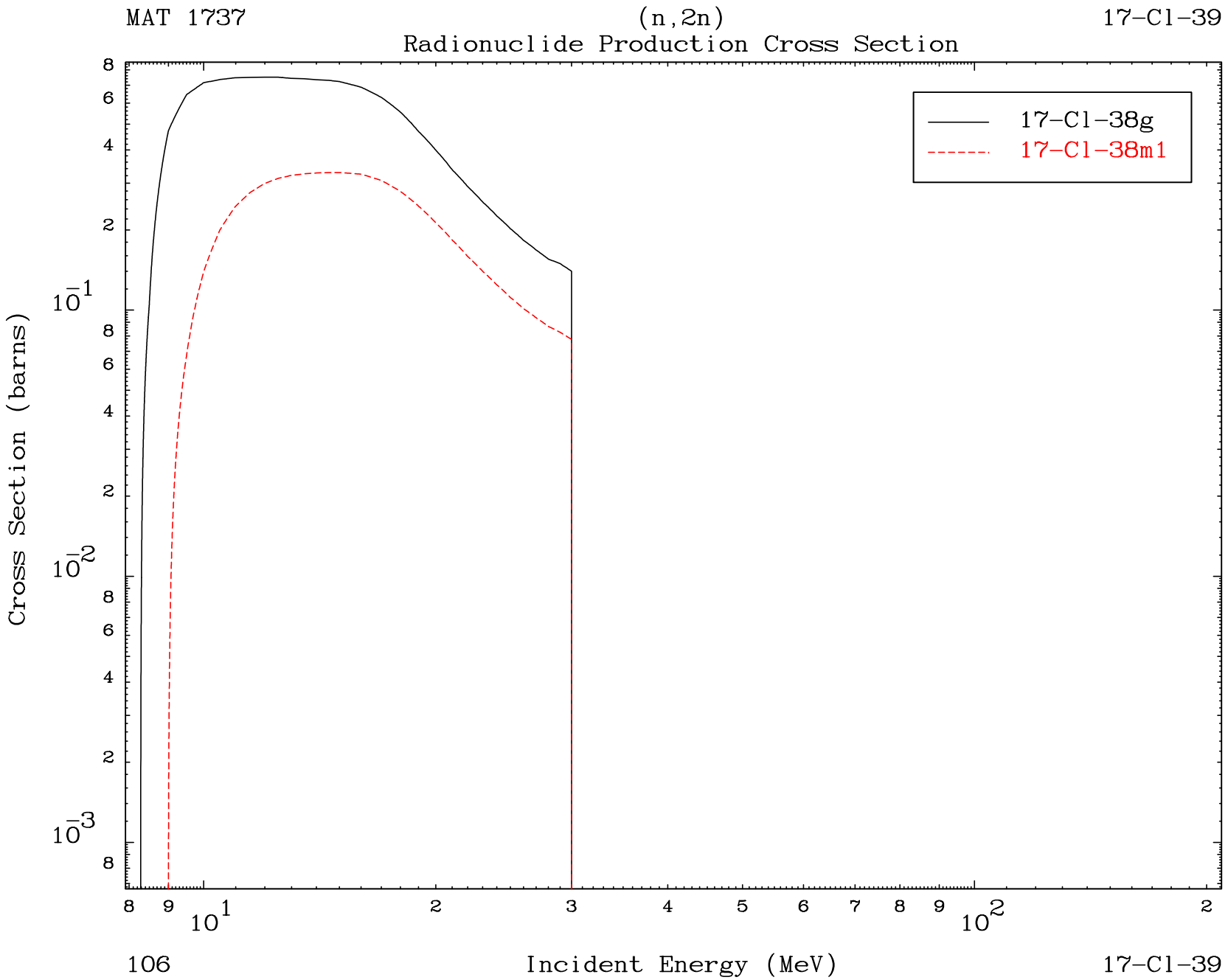

MAT 1737
5.700 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.004
0.002
0.000
-0.002
Legendre (CM)
50
100
150
200
101
Incident Energy (MeV)
17-Cl-39


MAT 1737
5.700 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
0
X10 −6
−2
−4
−6
Legendre (CM)
50
100
150
200
102
Incident Energy (MeV)
17-Cl-39
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30


MAT 1737
5.980 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
103
Incident Energy (MeV)
17-Cl-39


MAT 1737
5.980 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
104
Incident Energy (MeV)
17-Cl-39


MAT 1737
5.980 MeV (n,n') Level
Legendre Coefficients
17-Cl-39
X10 -6
8
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
105
Incident Energy (MeV)
17-Cl-39


MAT 1737
(n,2n)
17-Cl-39
Radionuclide Production Cross Section
17-Cl-38g
17-Cl-38m1
Cross Section (barns)
Incident Energy (MeV)
106
17-Cl-39