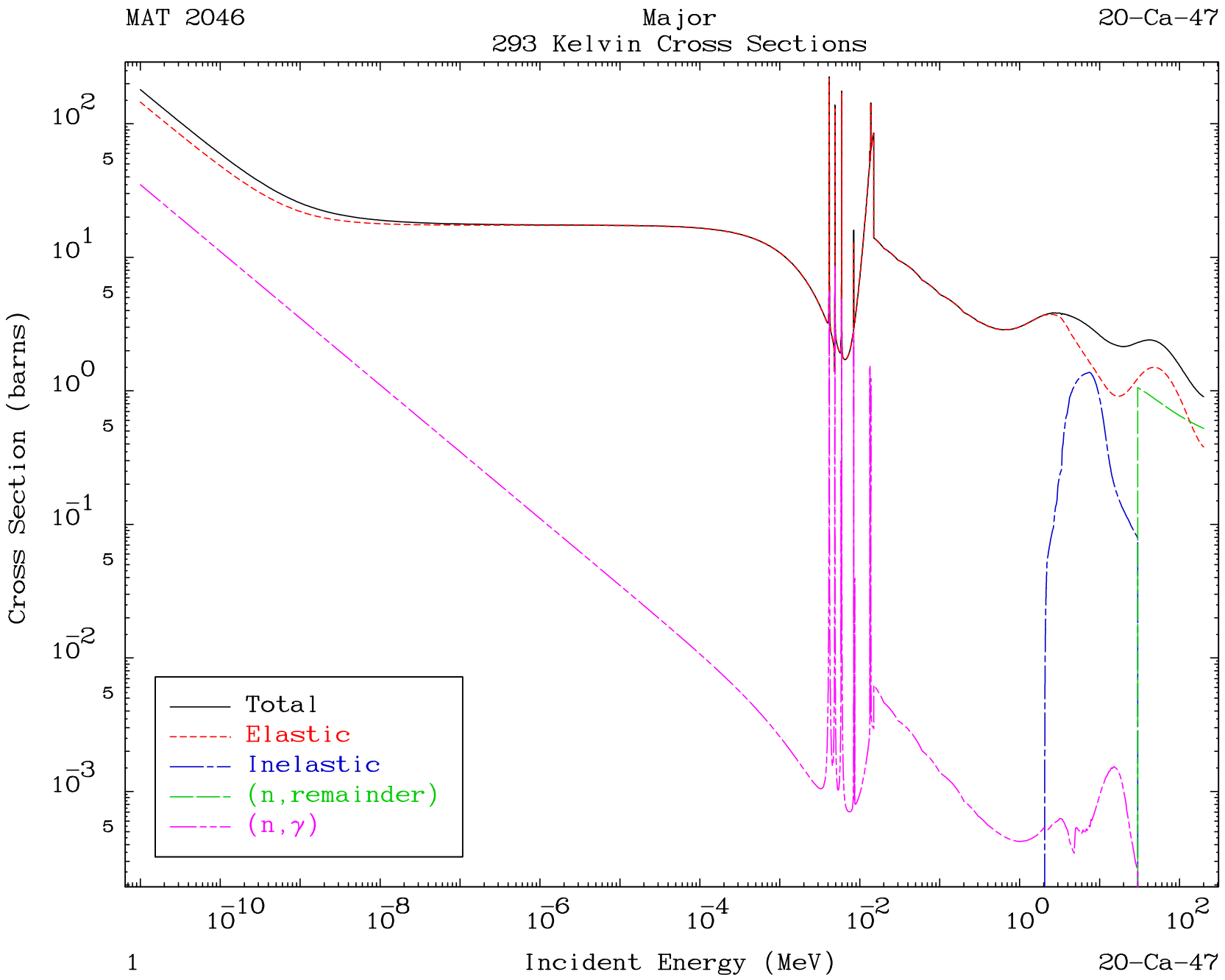
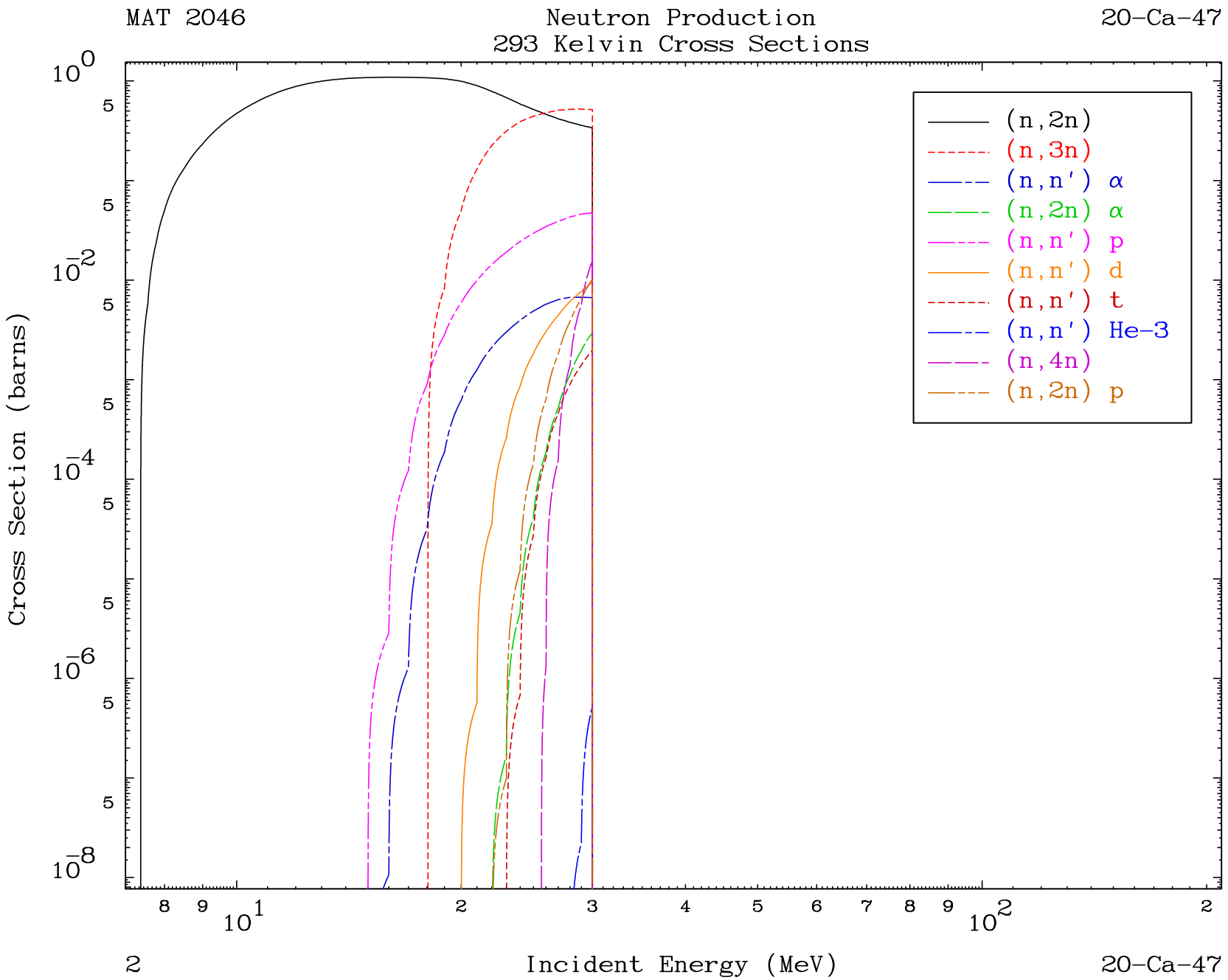
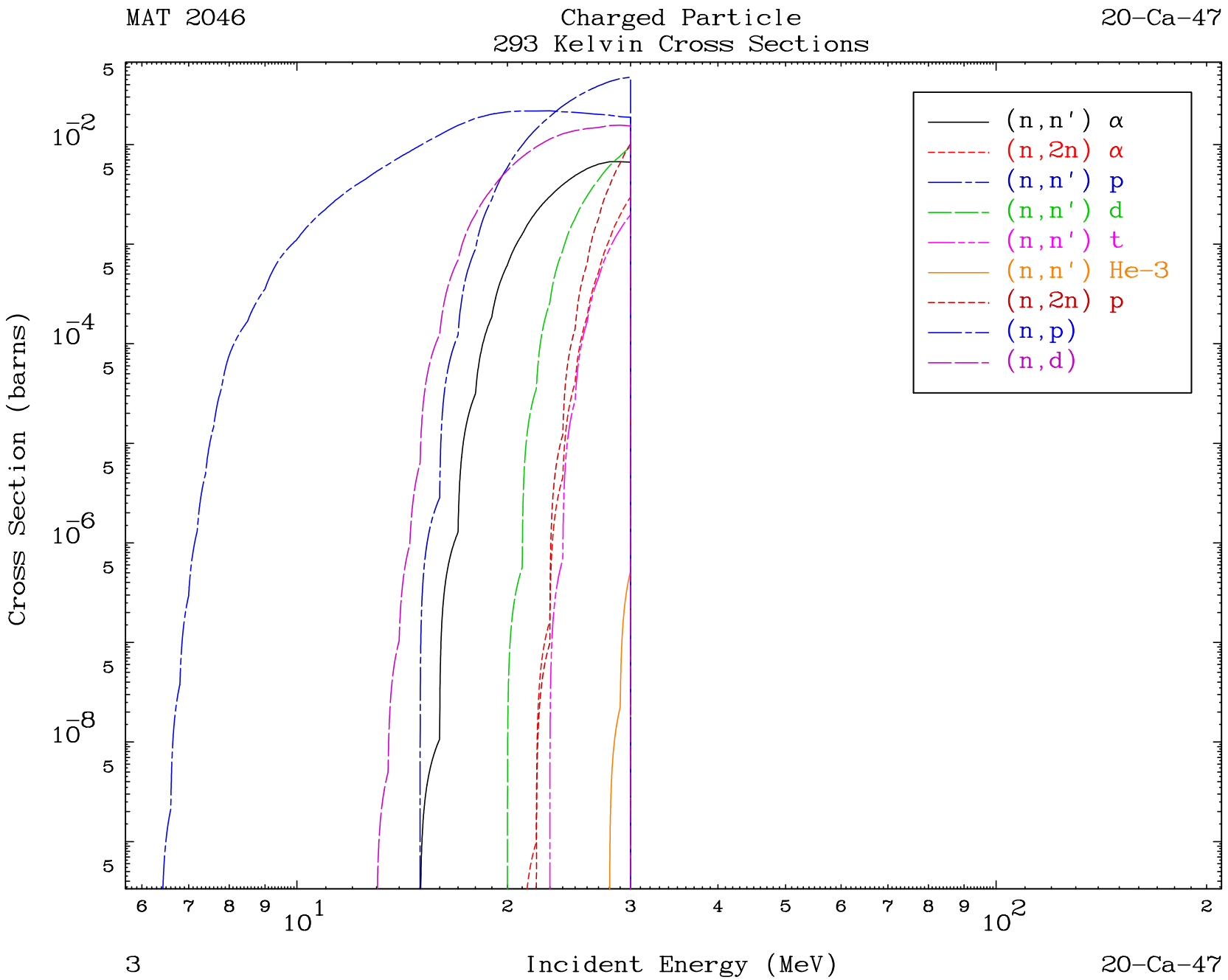
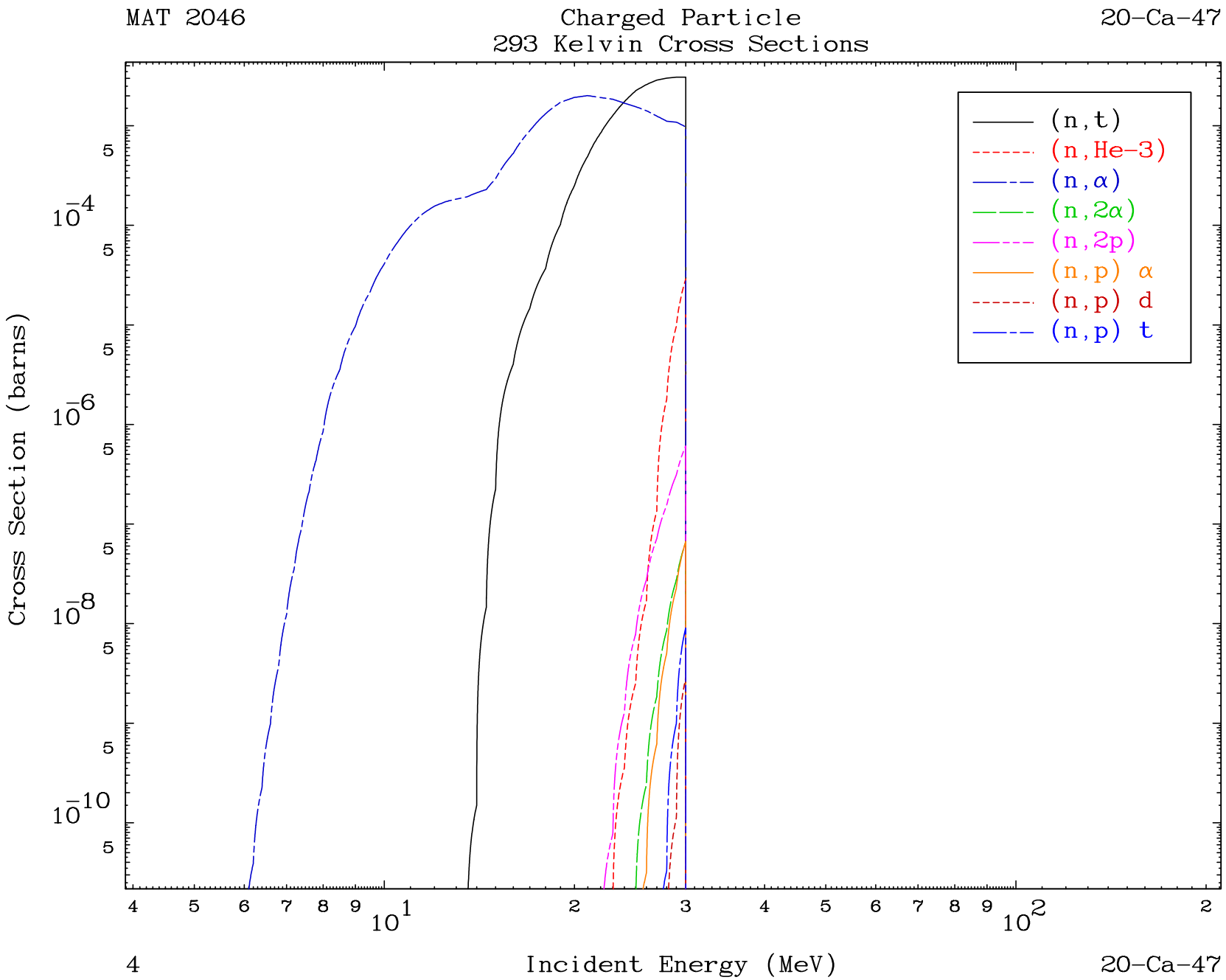
Program EVALPLOT
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

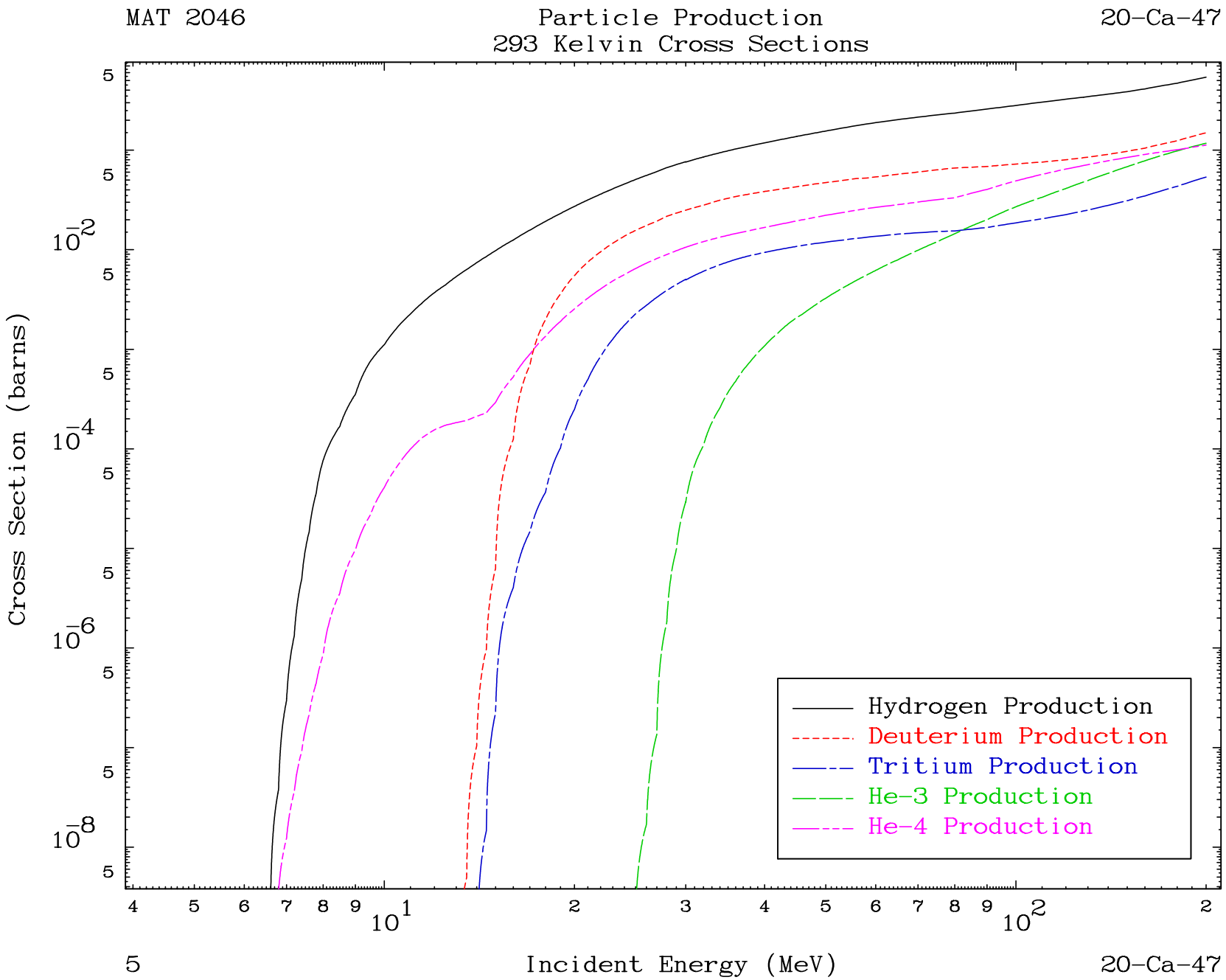
Press Mouse Button to Start

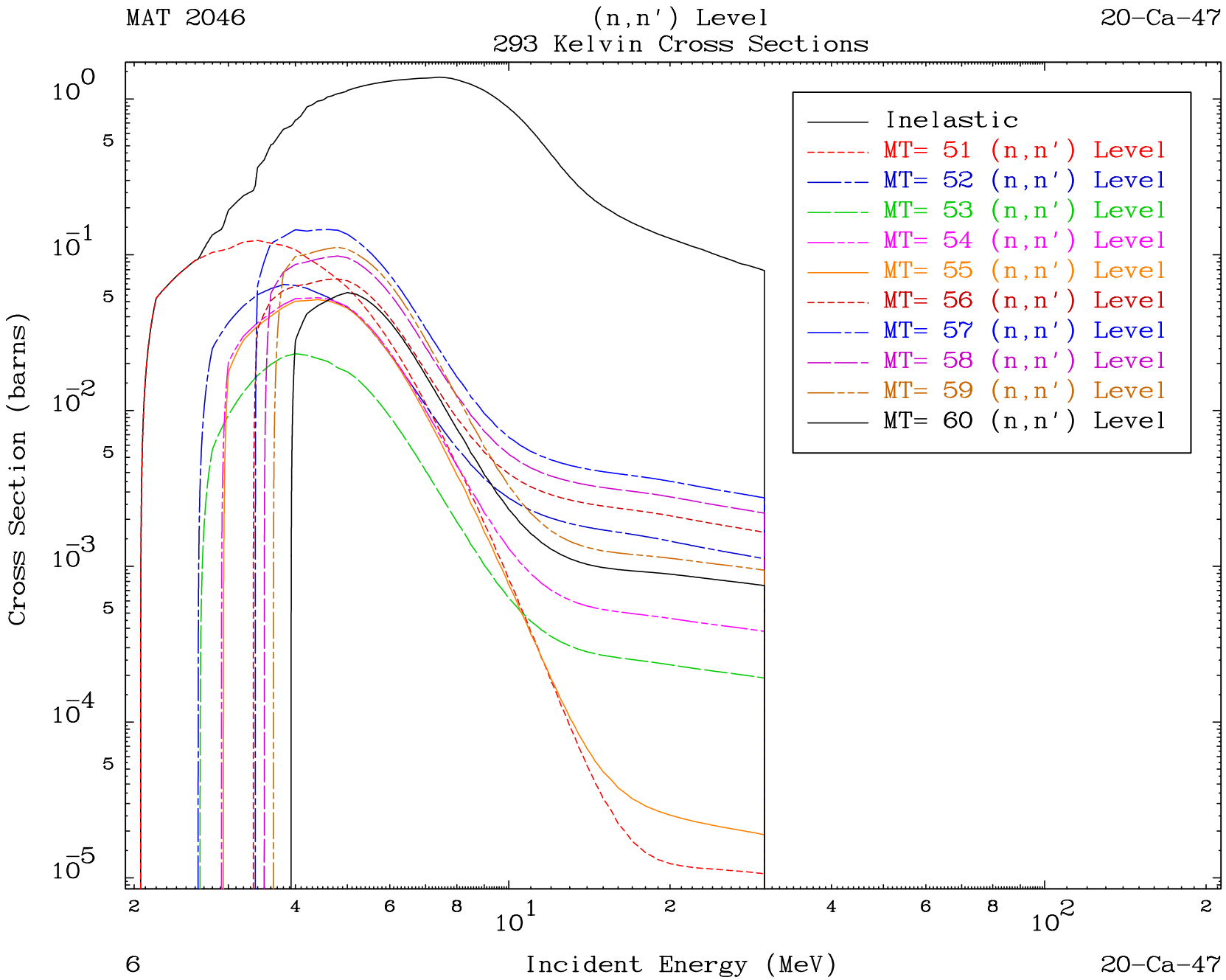

MAT 2046
Major
20-Ca-47
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
20-Ca-47

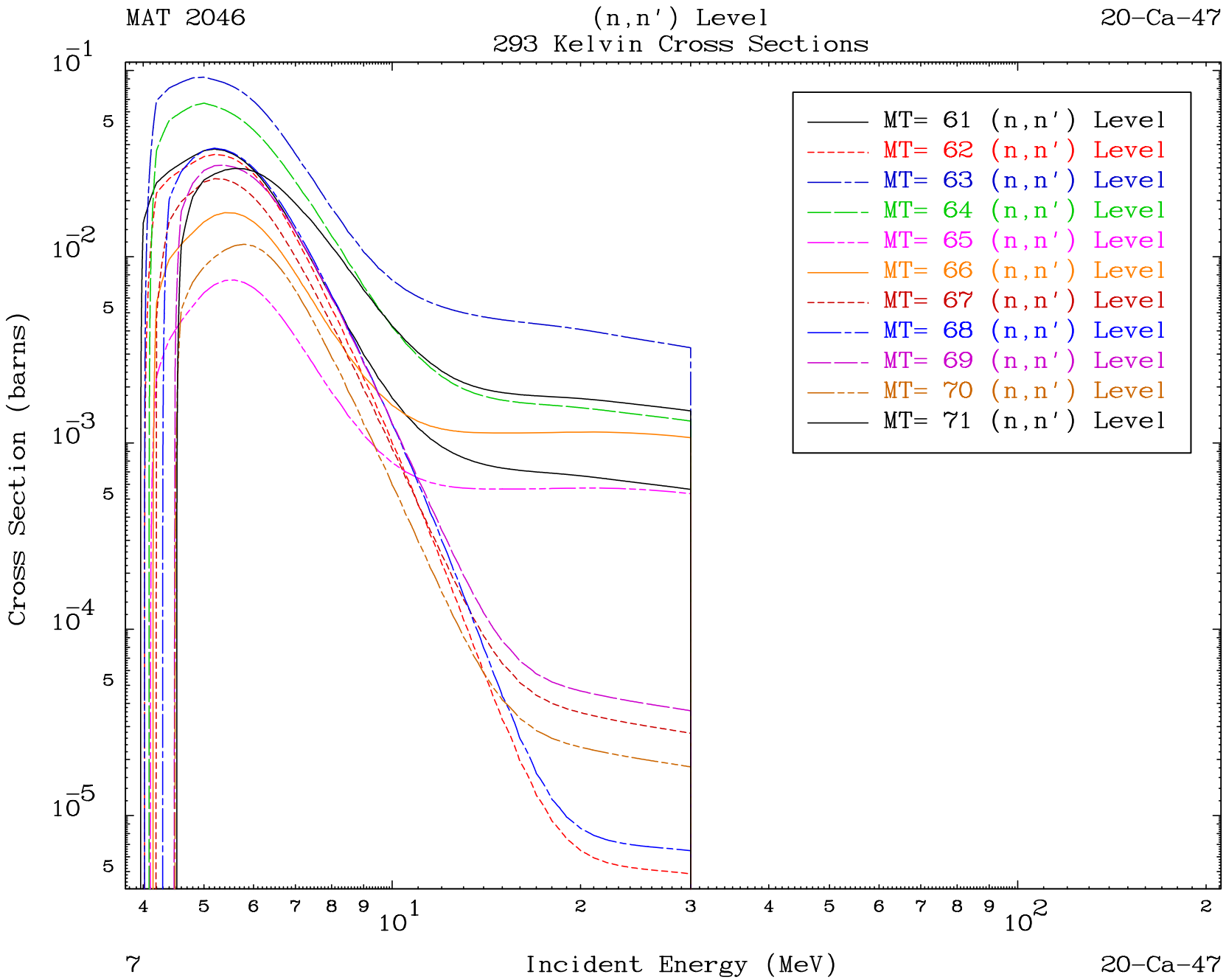

MAT 2046
Neutron Production
293 Kelvin Cross Sections
20-Ca-47
Cross Section (barns)
Incident Energy (MeV)
20-Ca-47
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p

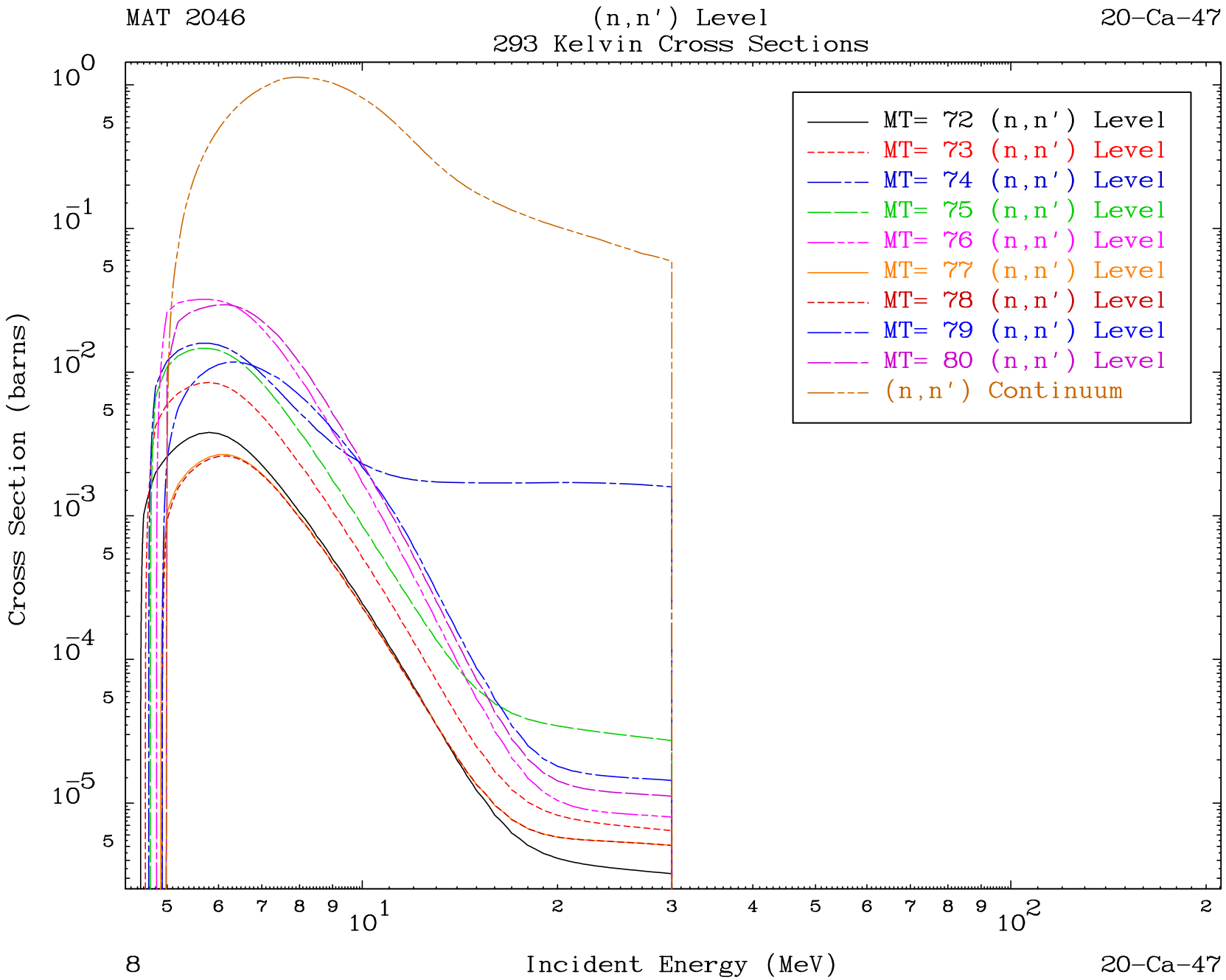

MAT 2046
Charged Particle
293 Kelvin Cross Sections
20-Ca-47
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,2n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,p)
(n,d)
3
20-Ca-47

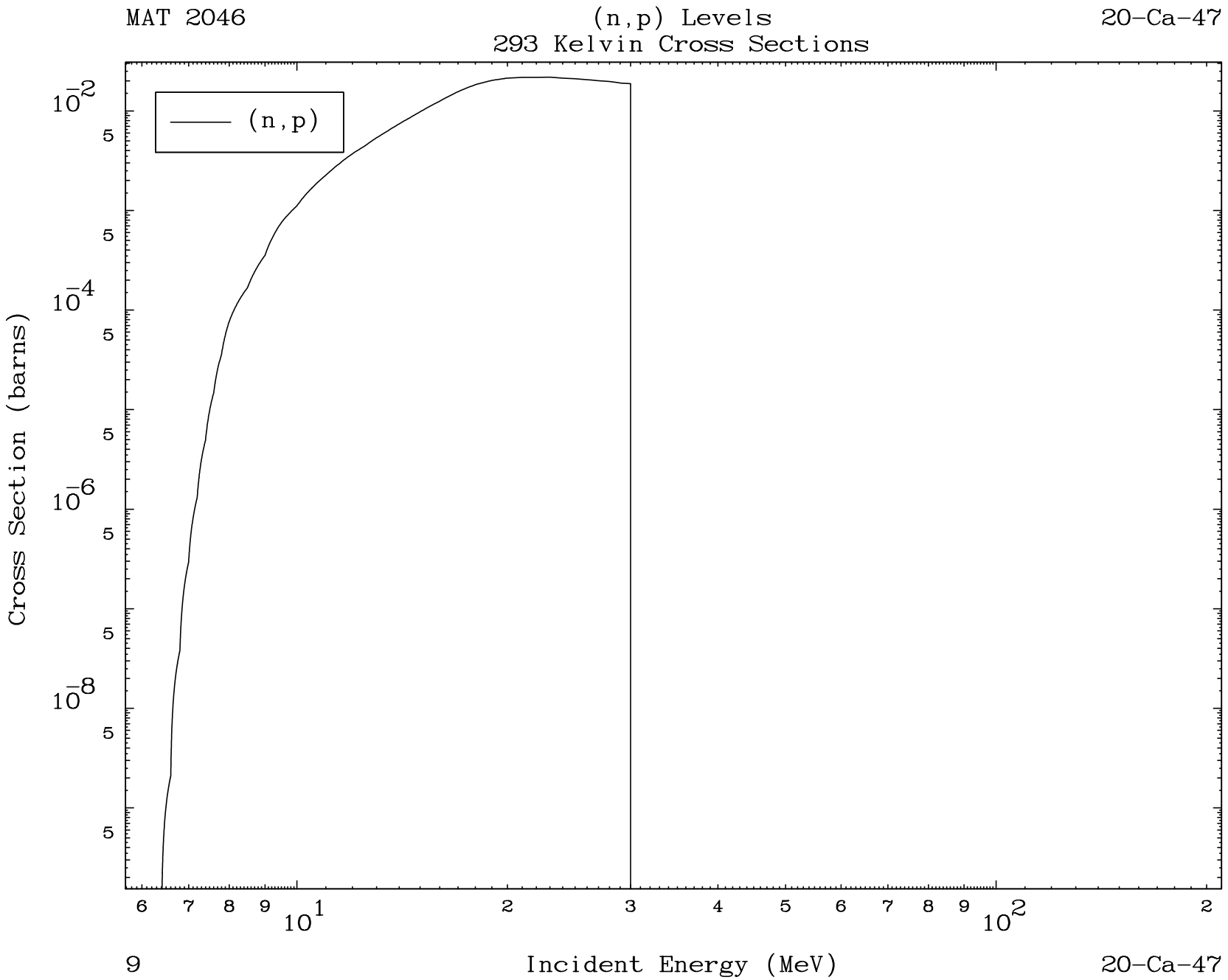

MAT 2046
Charged Particle
293 Kelvin Cross Sections
20-Ca-47
Cross Section (barns)
10-4
10-6
10-8
10-10
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 10 2 2
4
Incident Energy (MeV)
20-Ca-47

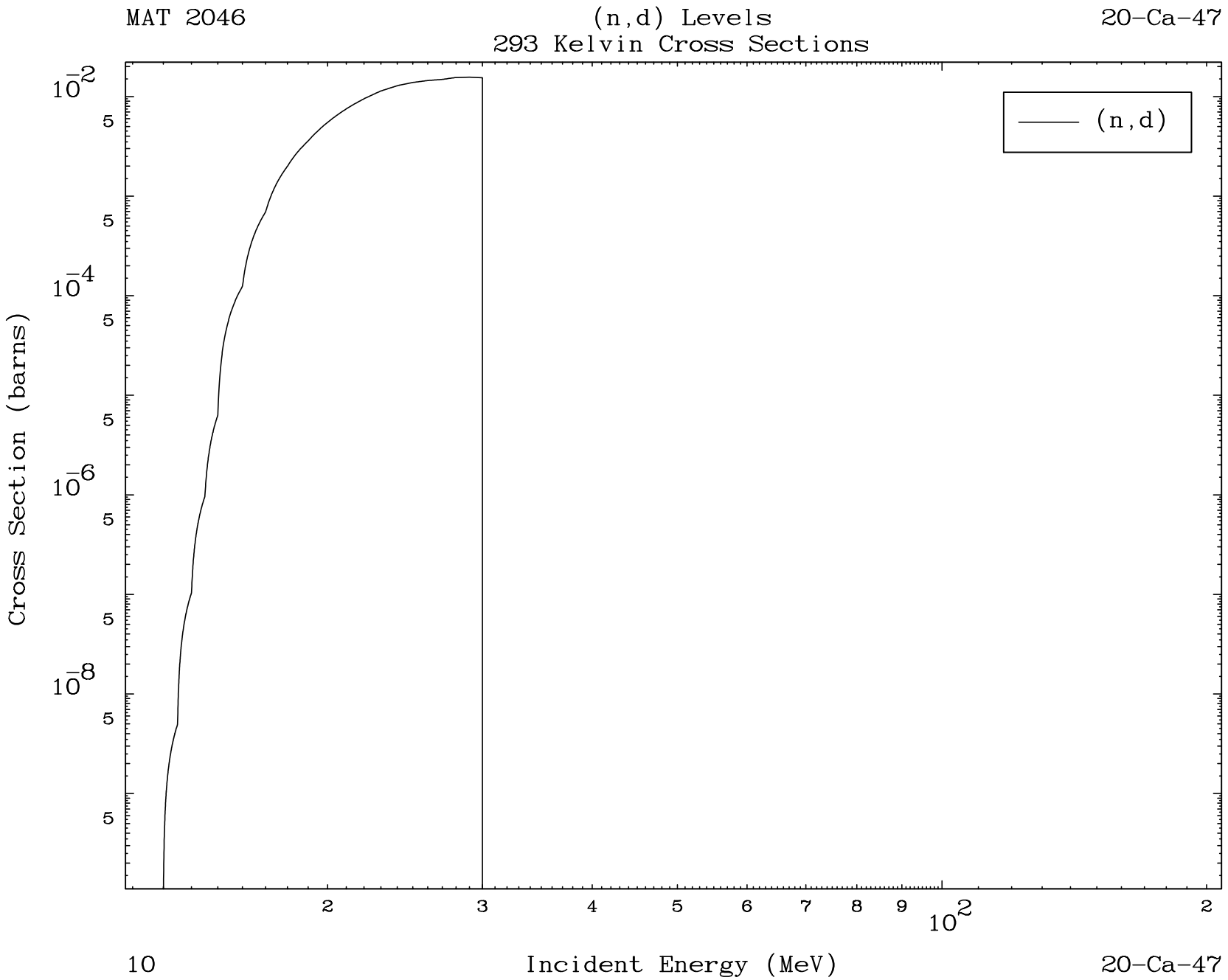

MAT 2046
Particle Production
293 Kelvin Cross Sections
20-Ca-47
Cross Section (barns)
Incident Energy (MeV)
20-Ca-47
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production


MAT 2046
(n,n') Level
20-Ca-47
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
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
MT= 59 (n,n') Level
MT= 60 (n,n') Level
6
20-Ca-47

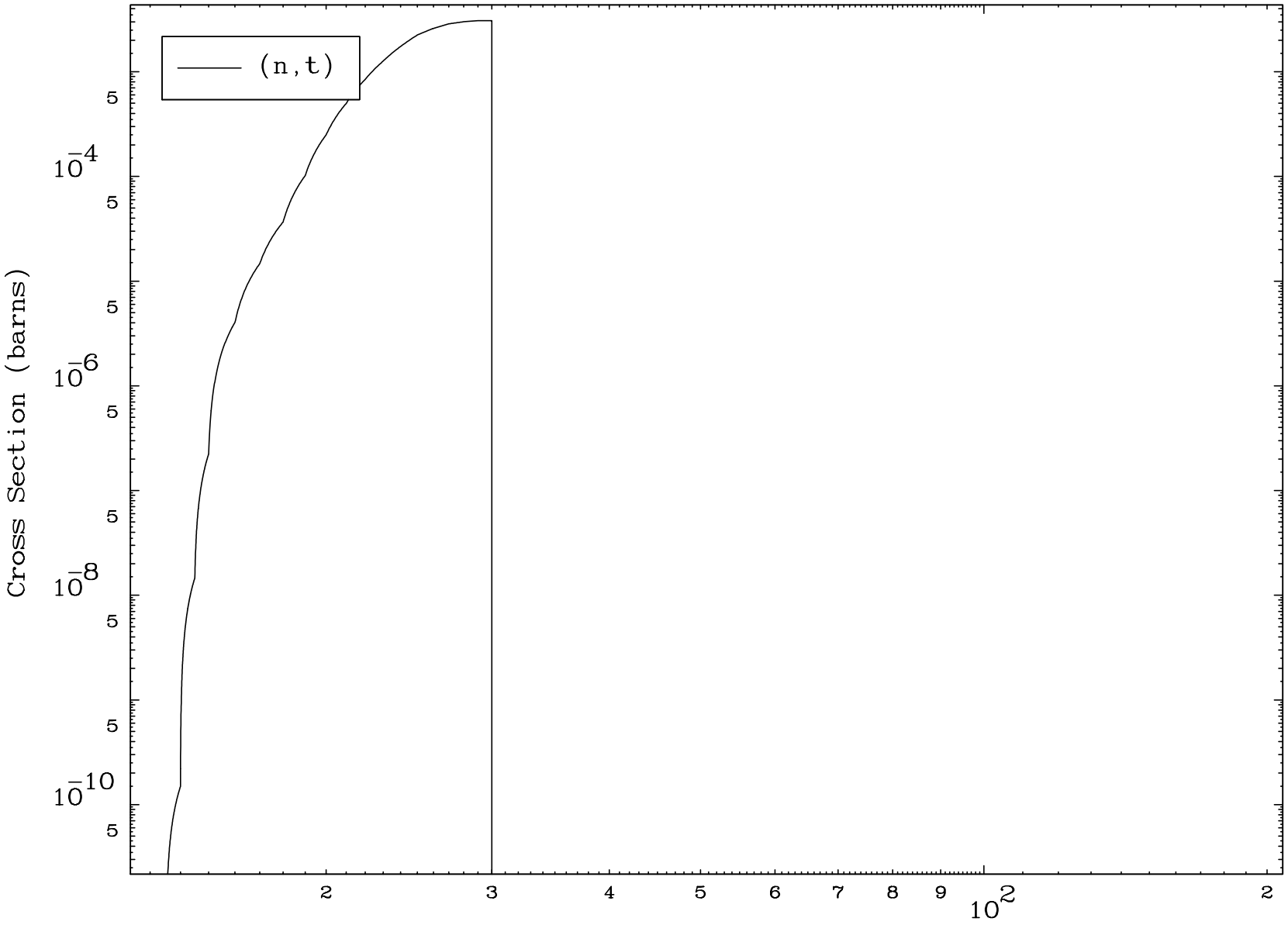

MAT 2046
(n,n') Level
293 Kelvin Cross Sections
20-Ca-47
Cross Section (barns)
Incident Energy (MeV)
20-Ca-47
7
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level

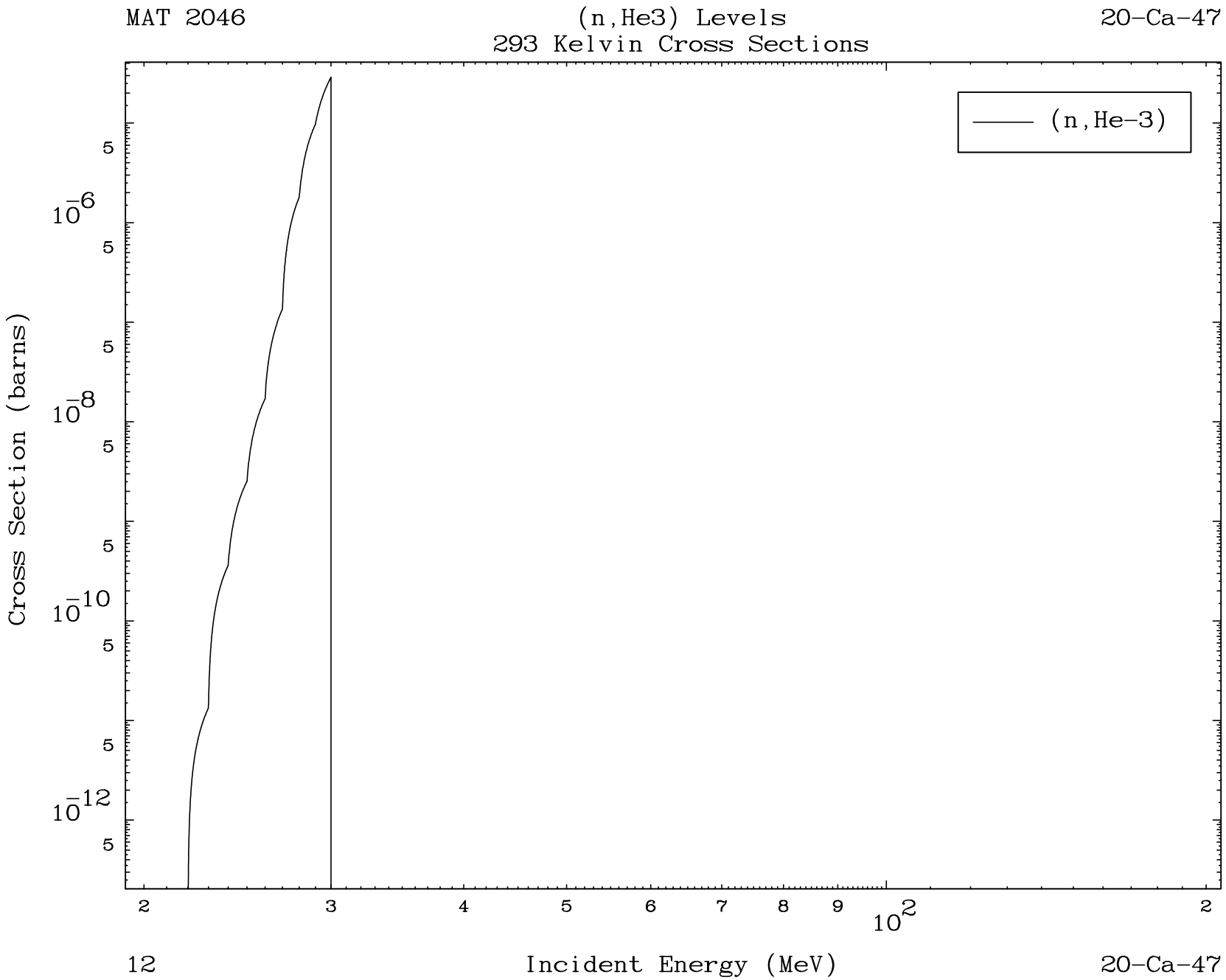

MAT 2046
(n,n') Level
293 Kelvin Cross Sections
20-Ca-47
Cross Section (barns)
Incident Energy (MeV)
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum


MAT 2046
(n,p) Levels
20-Ca-47
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
9
20-Ca-47

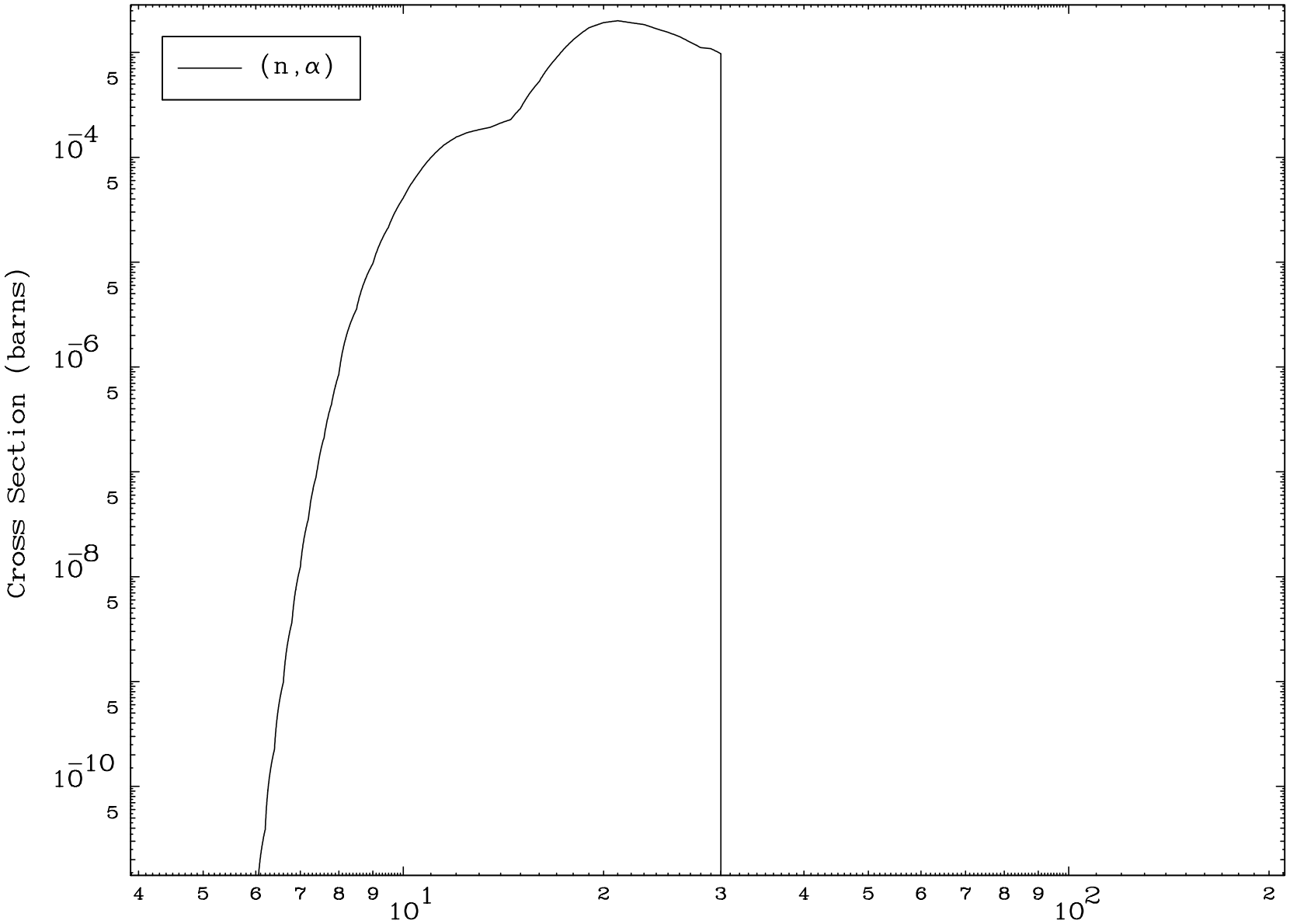

MAT 2046
(n,d) Levels
20-Ca-47
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
10^-2
5
10^-4
5
10^-6
5
10^-8
5
5
2
3
4
5
6
7
8
9
10^2
2
10
Incident Energy (MeV)
20-Ca-47

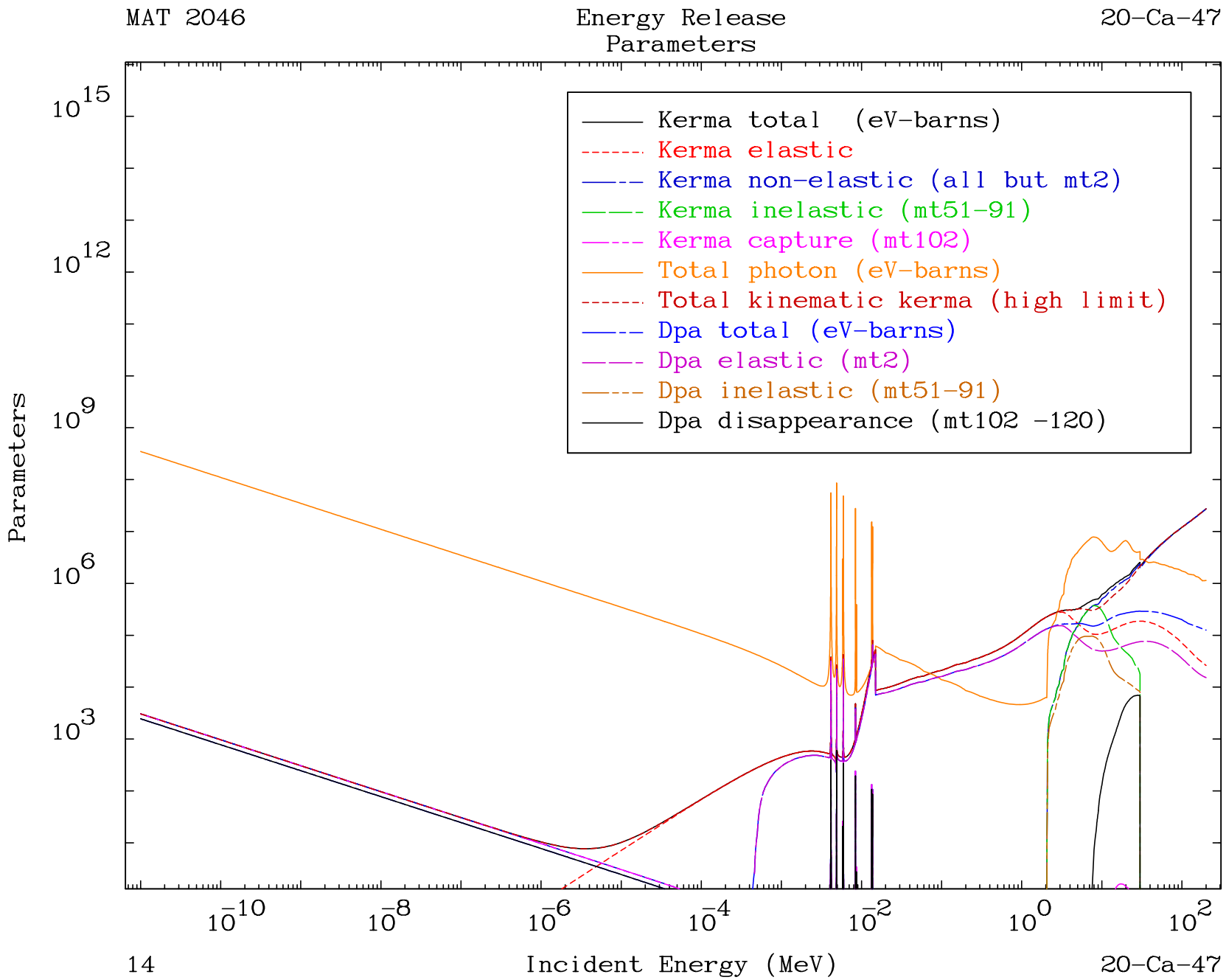
293 Kelvin Cross Sections

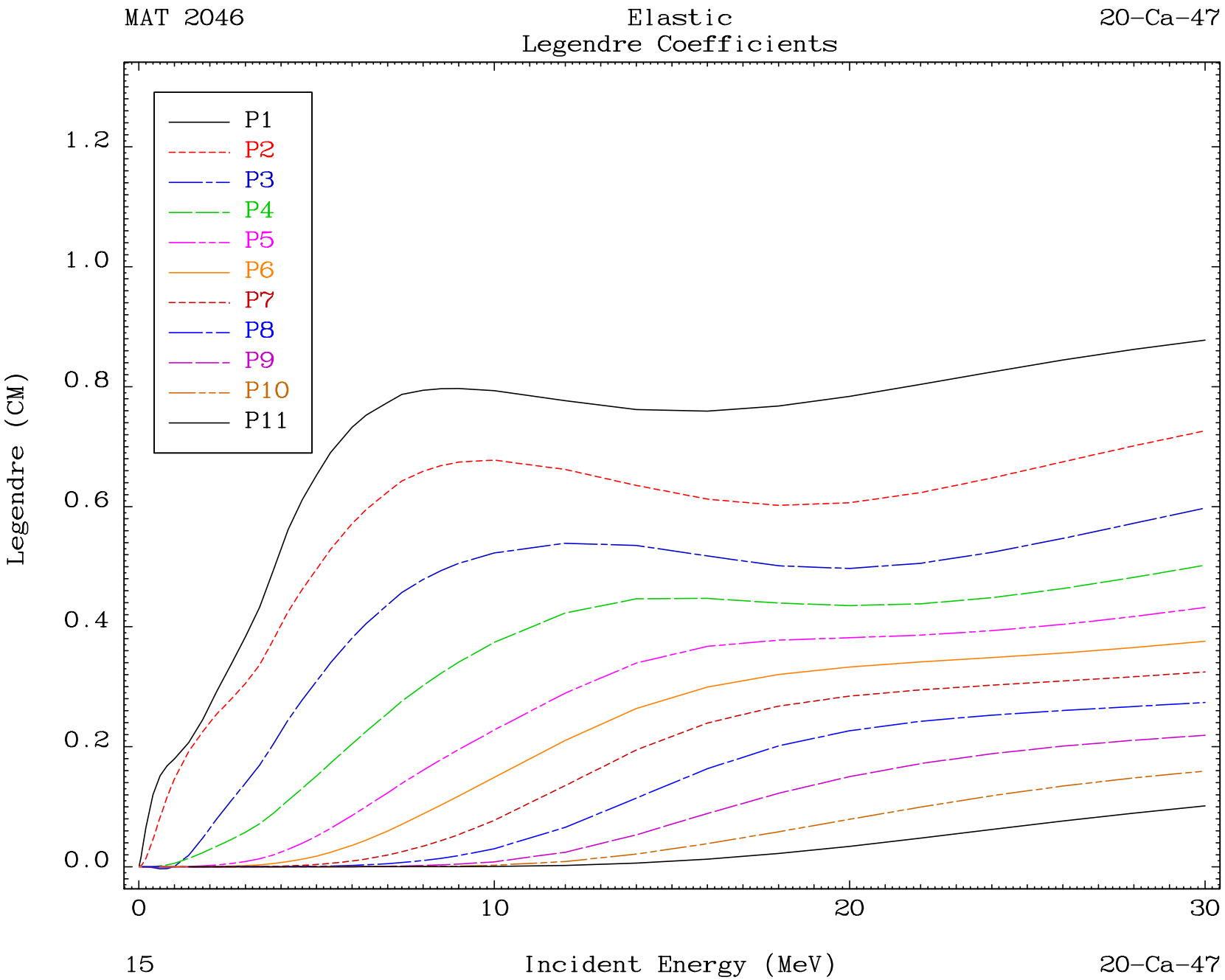


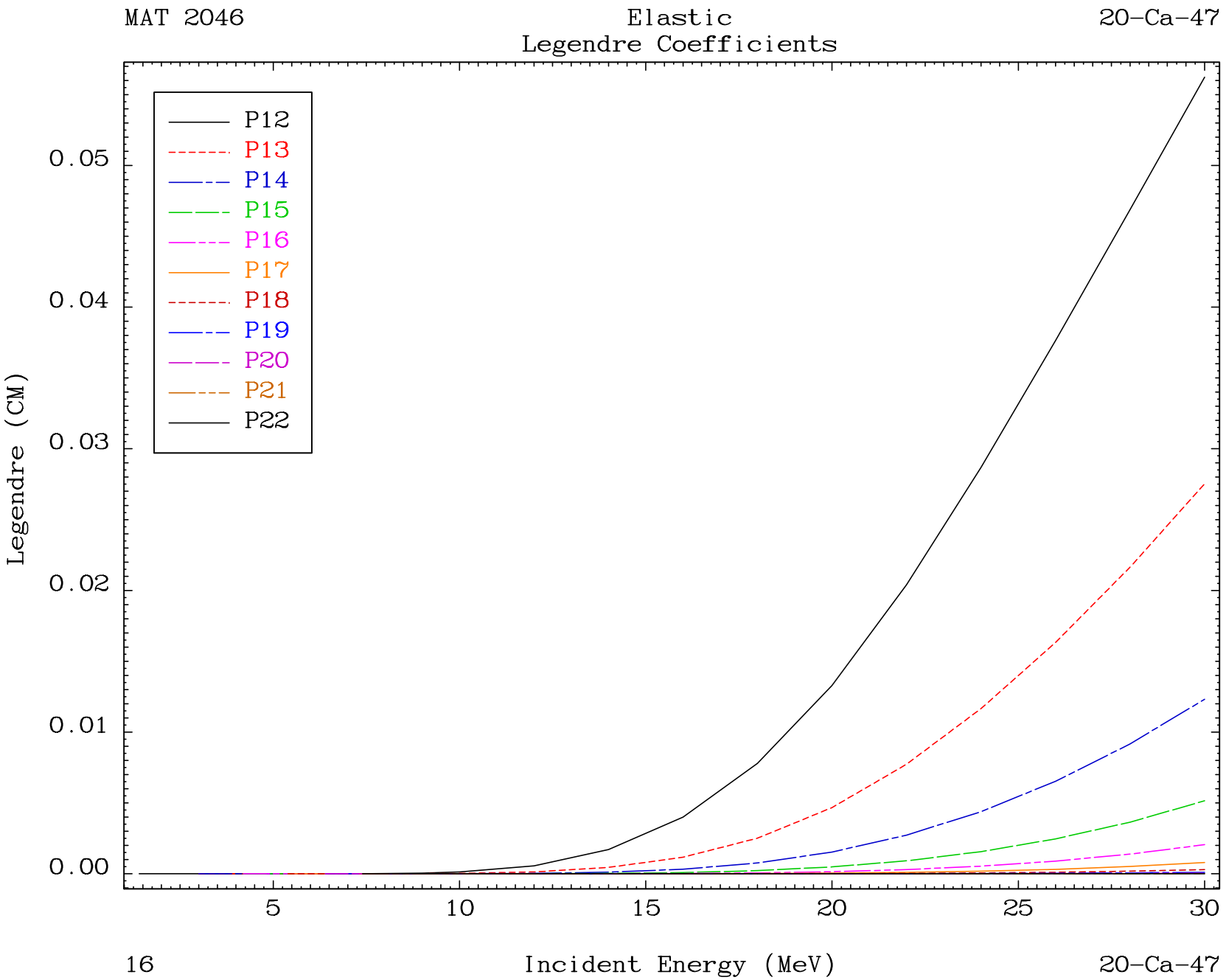

MAT 2046
(n,He3) Levels
293 Kelvin Cross Sections
20-Ca-47
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
12
20-Ca-47

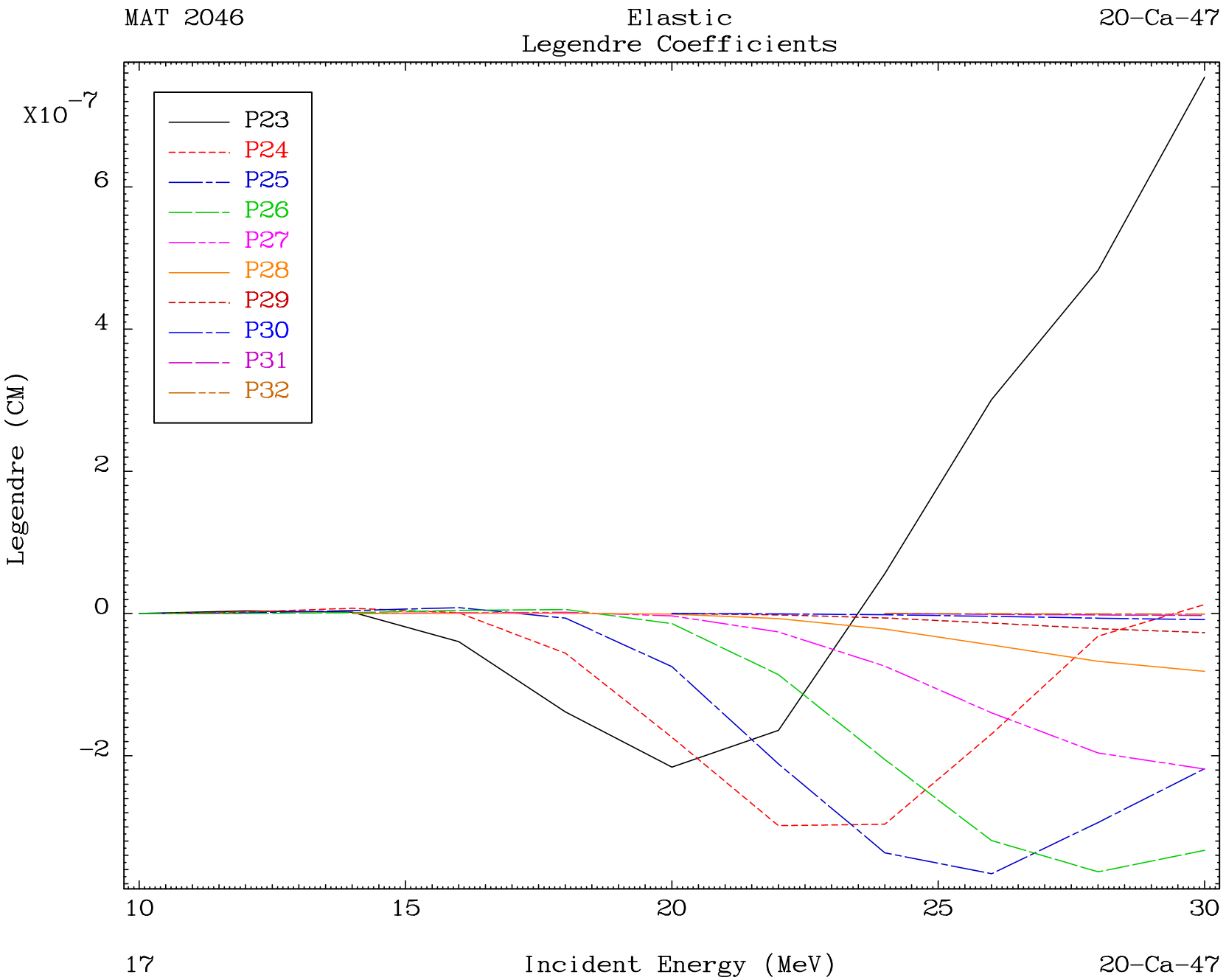
293 Kelvin Cross Sections

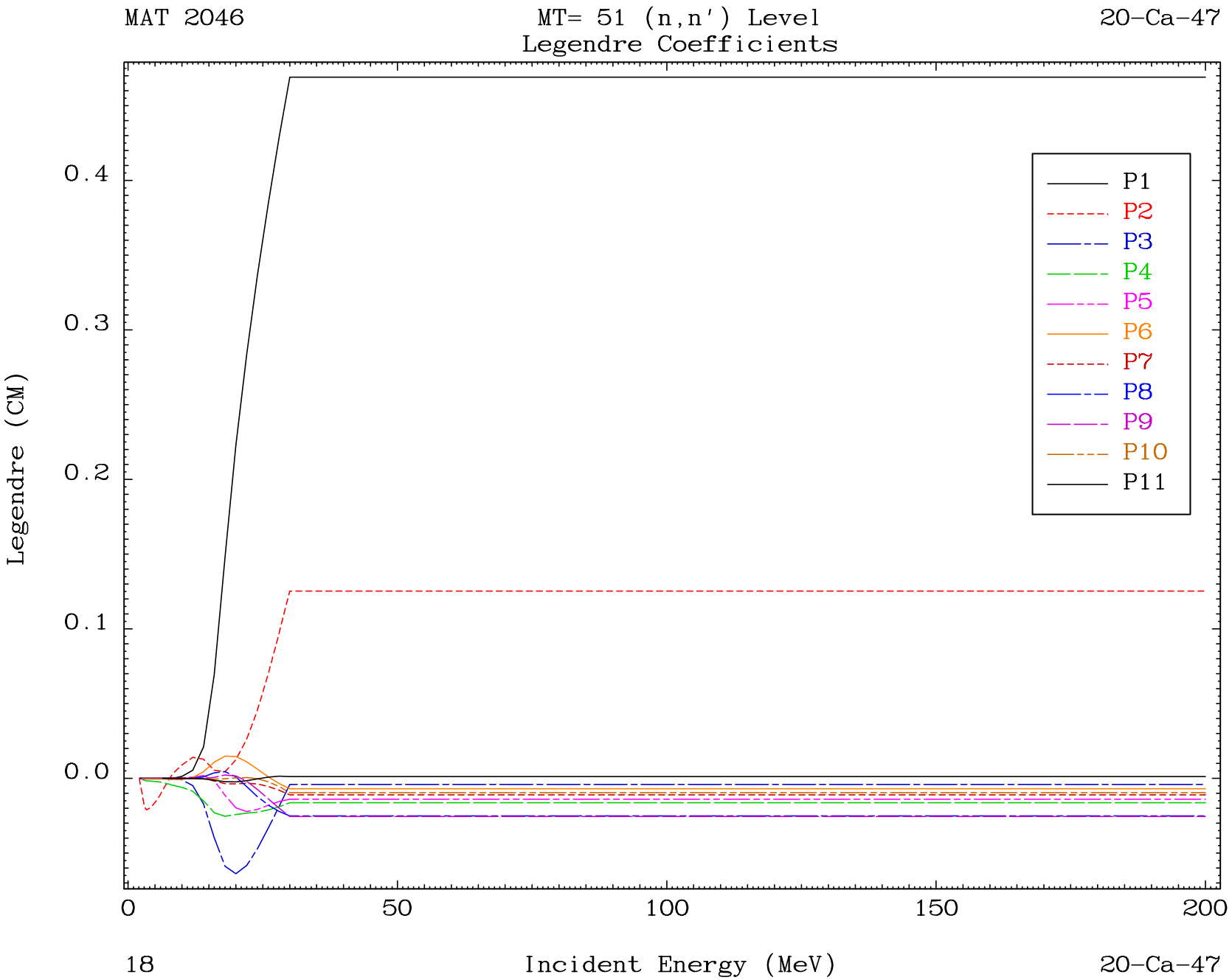


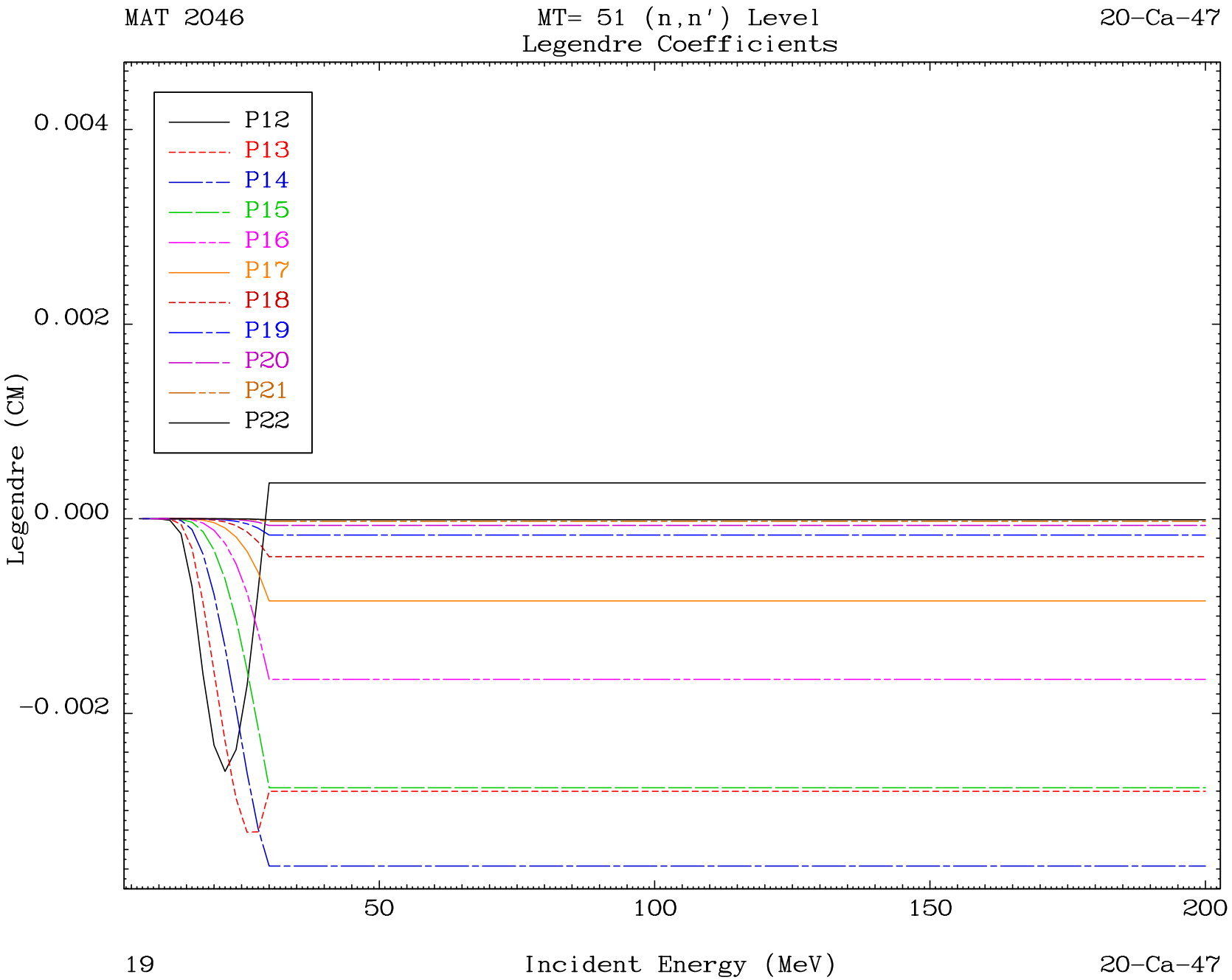

MAT 2046
Energy Release
Parameters
20-Ca-47
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (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)
14
20-Ca-47

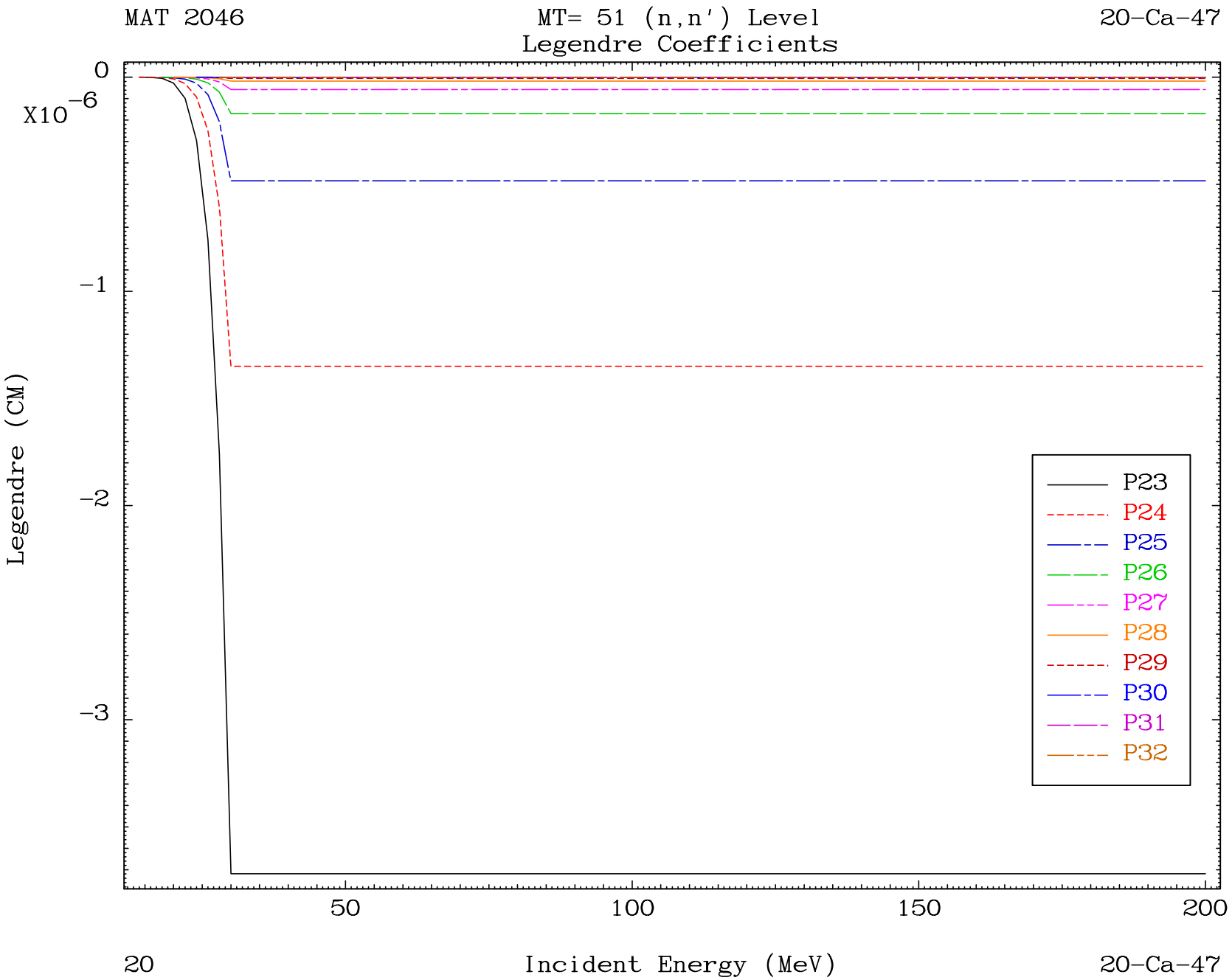

MAT 2046
Elastic
Legendre Coefficients
20-Ca-47
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
Legendre (CM)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
10
20
30
15
Incident Energy (MeV)
20-Ca-47

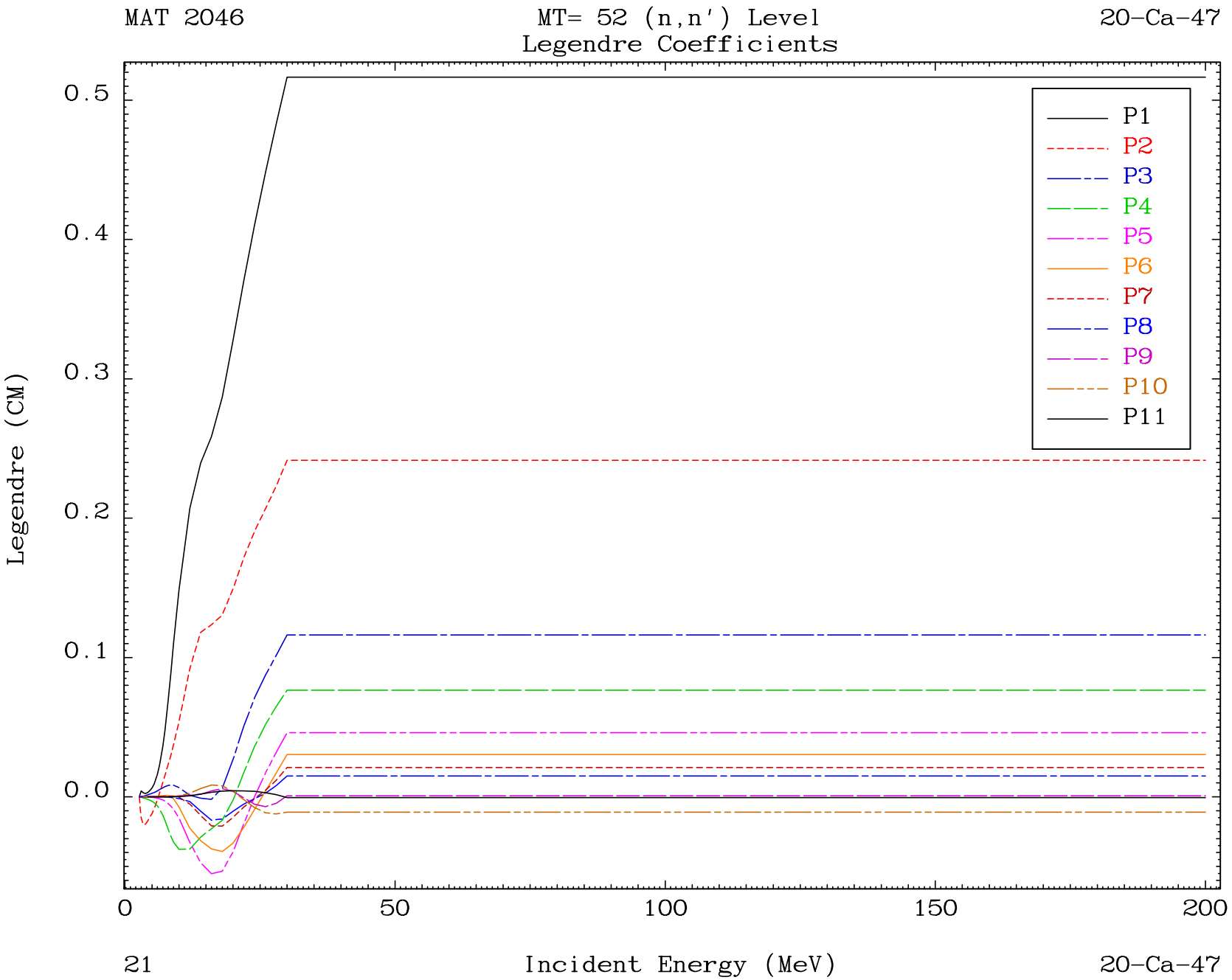

MAT 2046
Elastic
Legendre Coefficients
20-Ca-47
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
Legendre (CM)
0.00
0.01
0.02
0.03
0.04
0.05
5
10
15
20
25
30
16
Incident Energy (MeV)
20-Ca-47

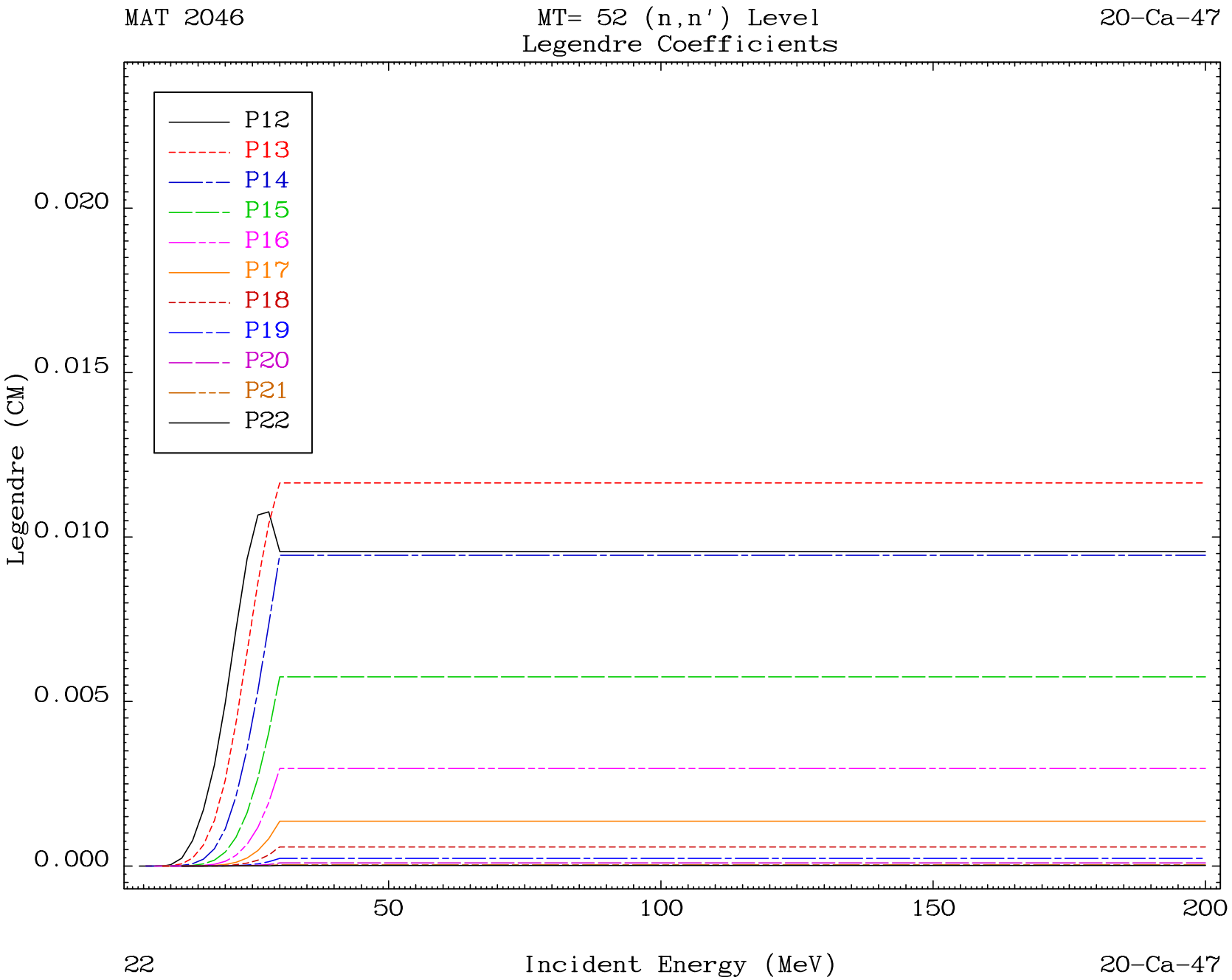

MAT 2046
Elastic
Legendre Coefficients
20-Ca-47
X10^-7
6
4
2
0
-2
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
10
15
20
25
30
17
Incident Energy (MeV)
20-Ca-47

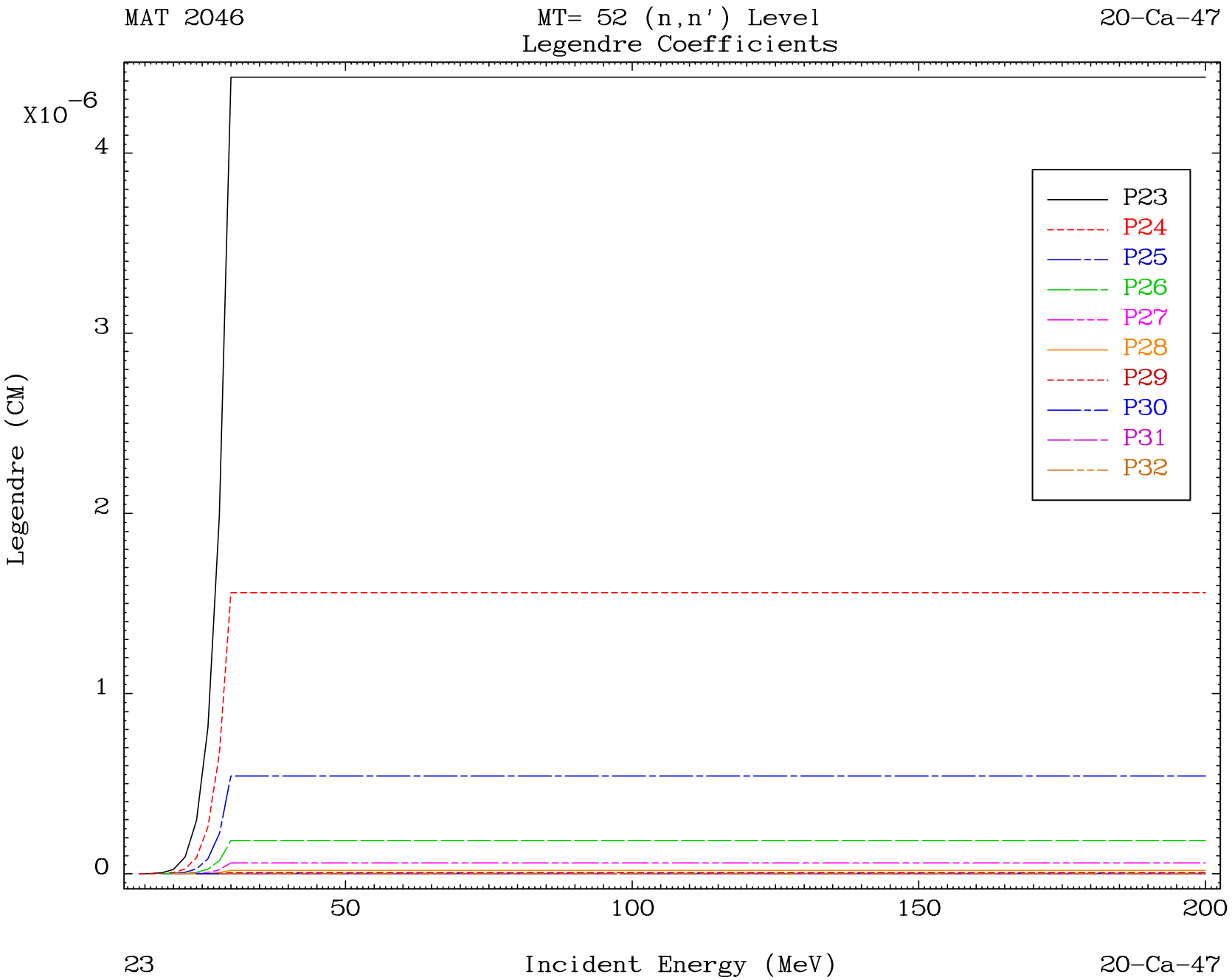

MAT 2046
MT= 51 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
Incident Energy (MeV)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11

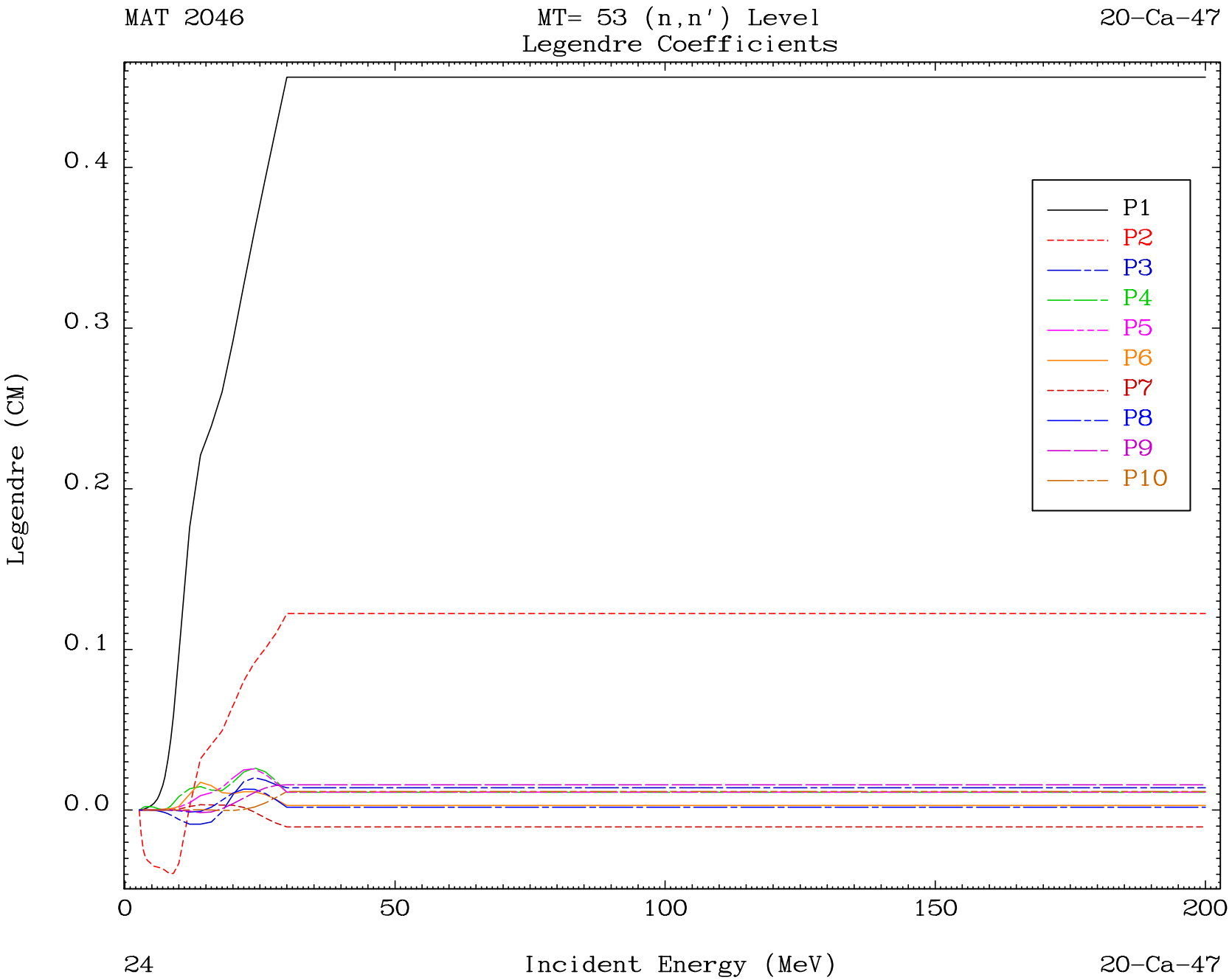

MAT 2046
MT= 51 (n,n') Level
Legendre Coefficients
20-Ca-47
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0.004
0.002
0.000
-0.002
Legendre (CM)
50
100
150
200
19
Incident Energy (MeV)
20-Ca-47

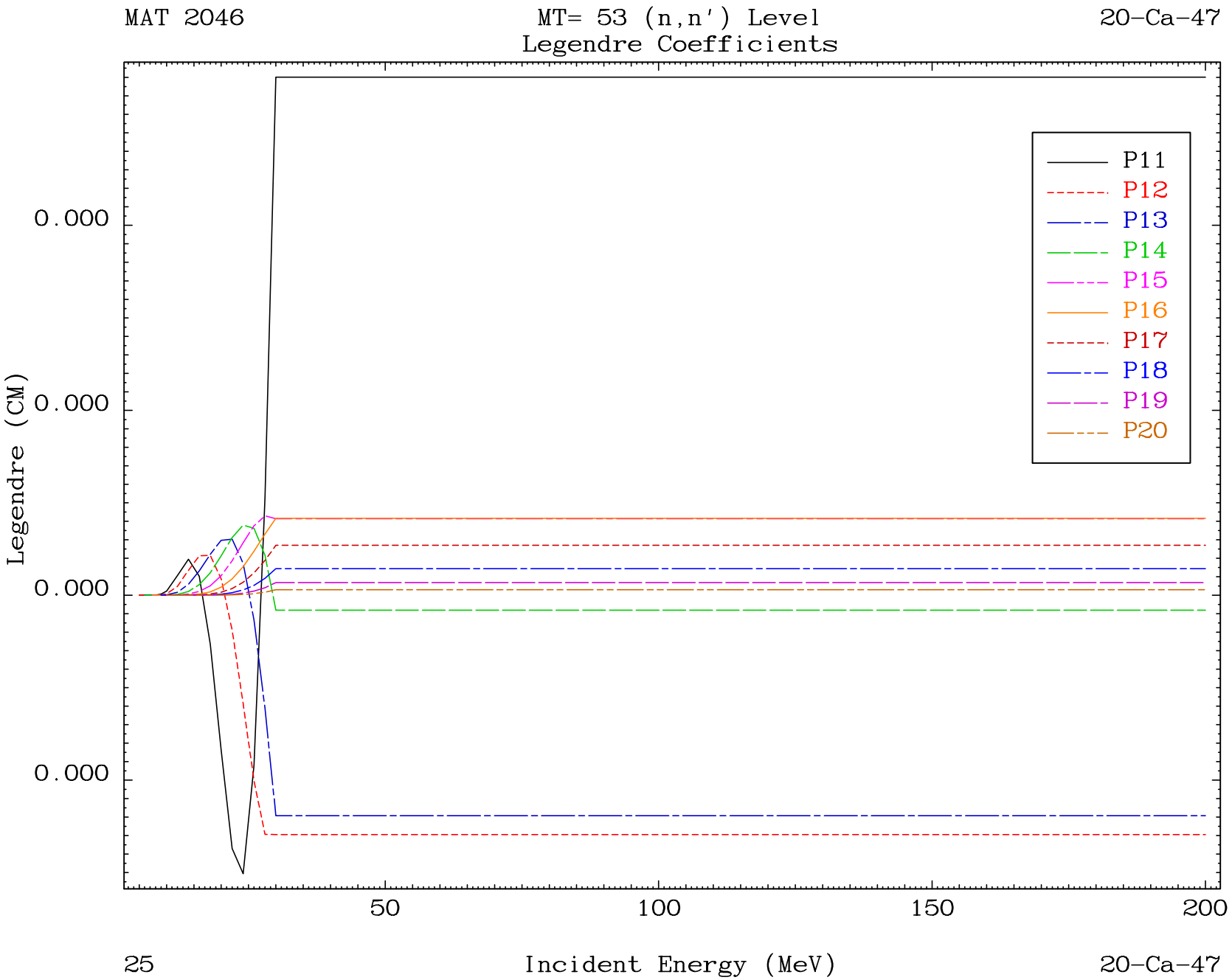

MAT 2046
MT= 51 (n,n') Level
Legendre Coefficients
20-Ca-47
0
X10^-6
-1
-2
-3
Legendre (CM)
50
100
150
200
20
Incident Energy (MeV)
20-Ca-47
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32

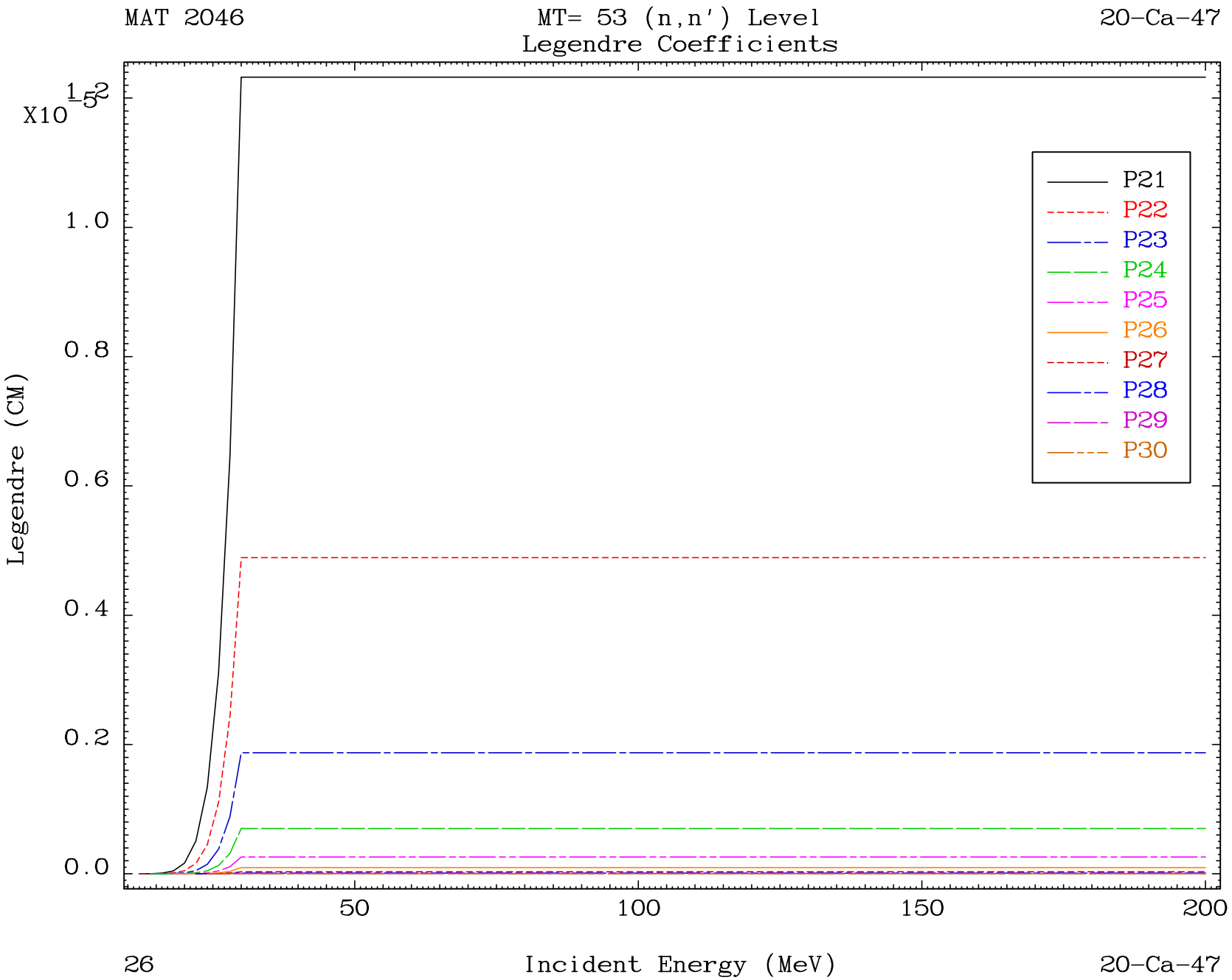

MAT 2046
MT= 52 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
21
Incident Energy (MeV)
20-Ca-47

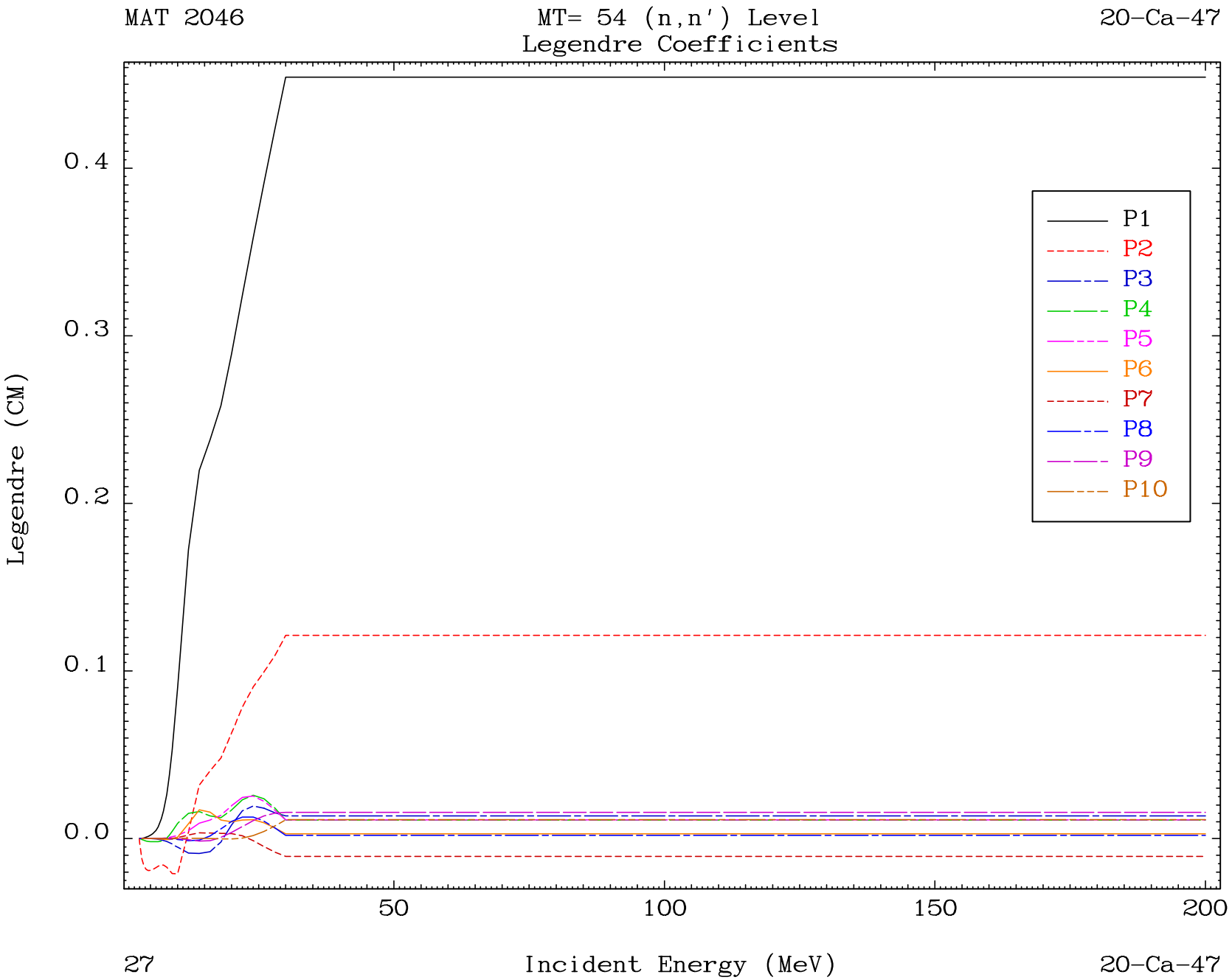

MAT 2046
MT= 52 (n,n') Level
Legendre Coefficients
20-Ca-47
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
22
Incident Energy (MeV)
20-Ca-47

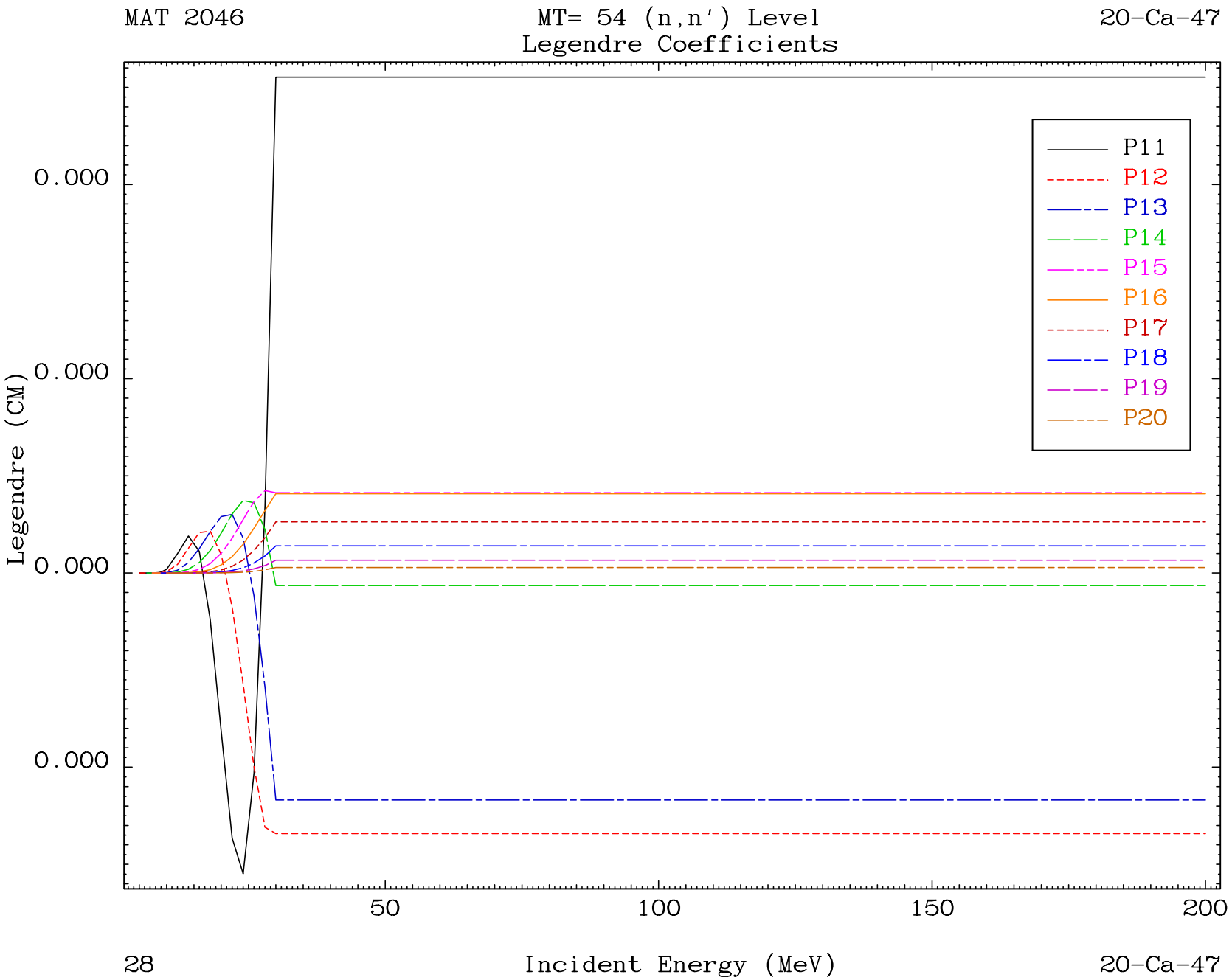

MAT 2046
MT= 52 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-6
4
3
2
1
0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
23
Incident Energy (MeV)
20-Ca-47

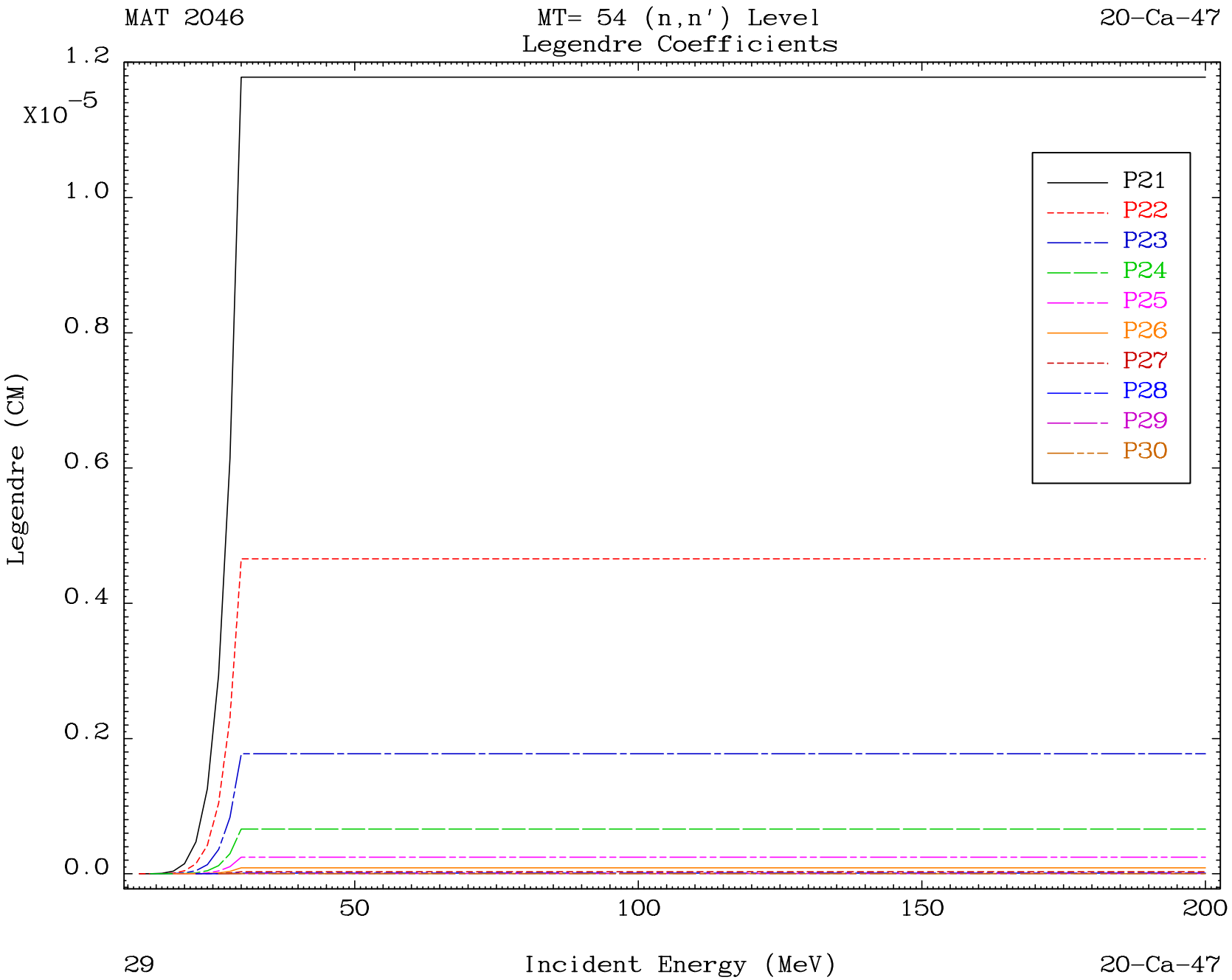

MAT 2046
MT= 53 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
24
Incident Energy (MeV)
20-Ca-47

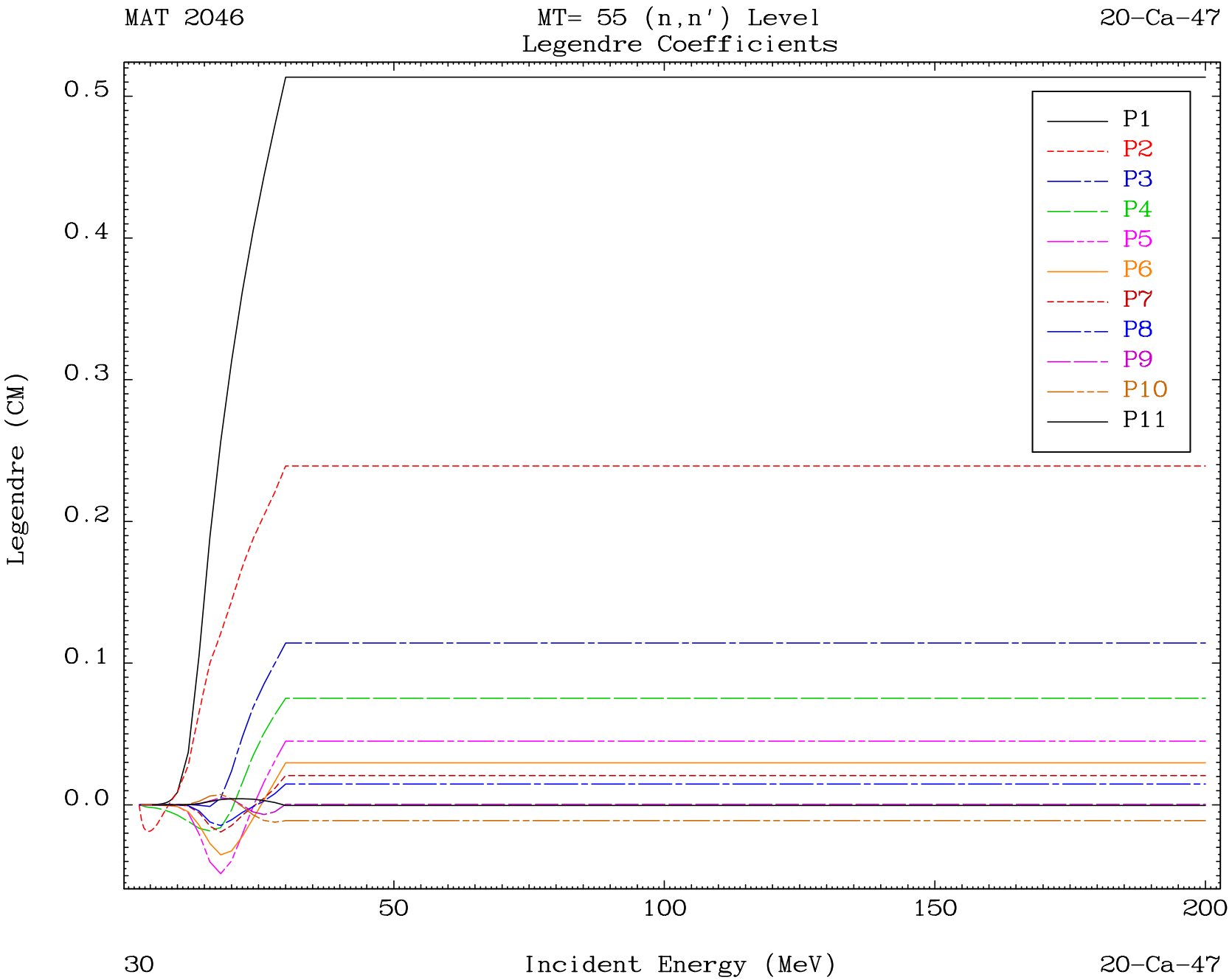

MAT 2046
MT= 53 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
25
Incident Energy (MeV)
20-Ca-47

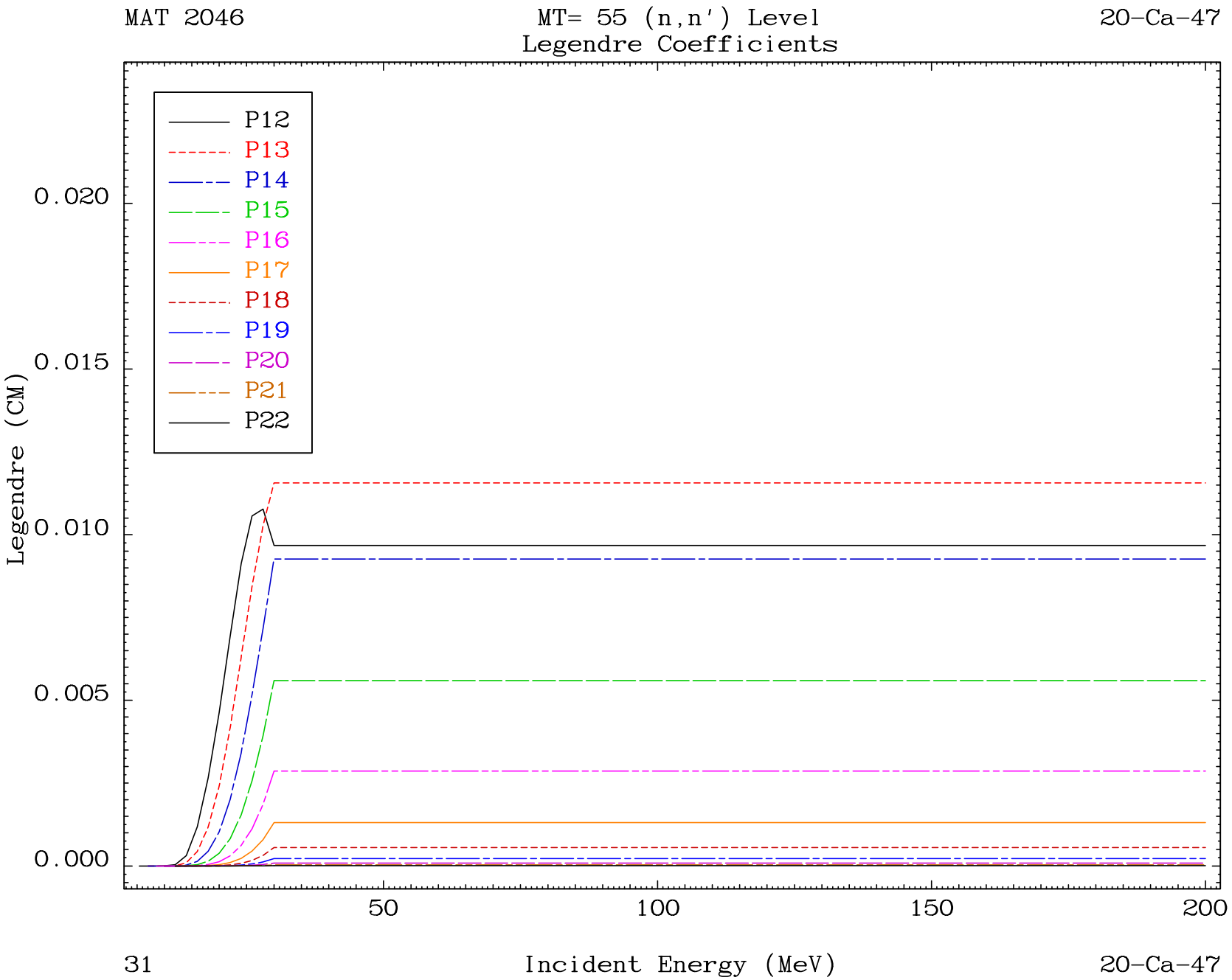

MAT 2046
MT= 53 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-2
1.5
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
Incident Energy (MeV)
26
20-Ca-47

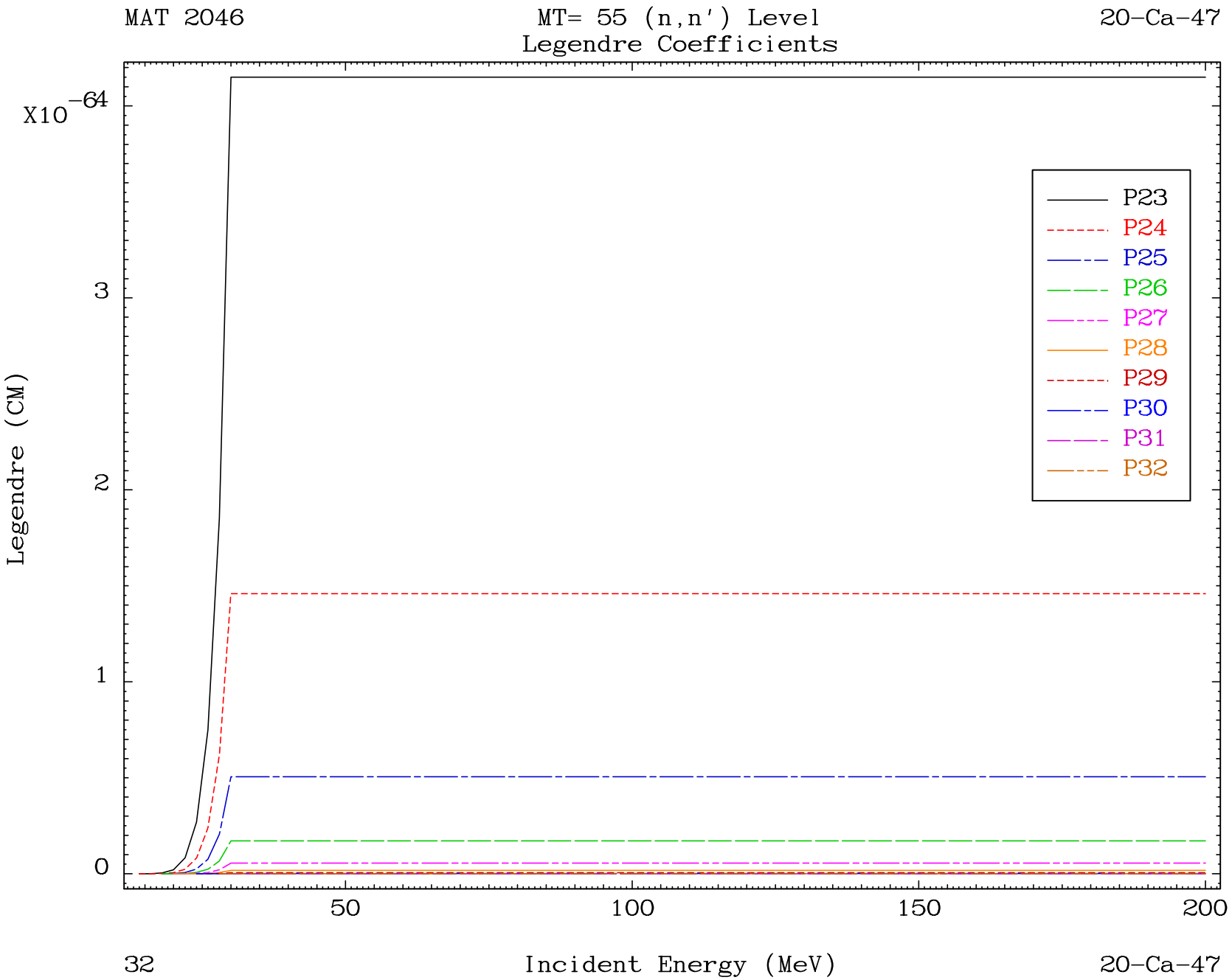

MAT 2046
MT= 54 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
27
Incident Energy (MeV)
20-Ca-47

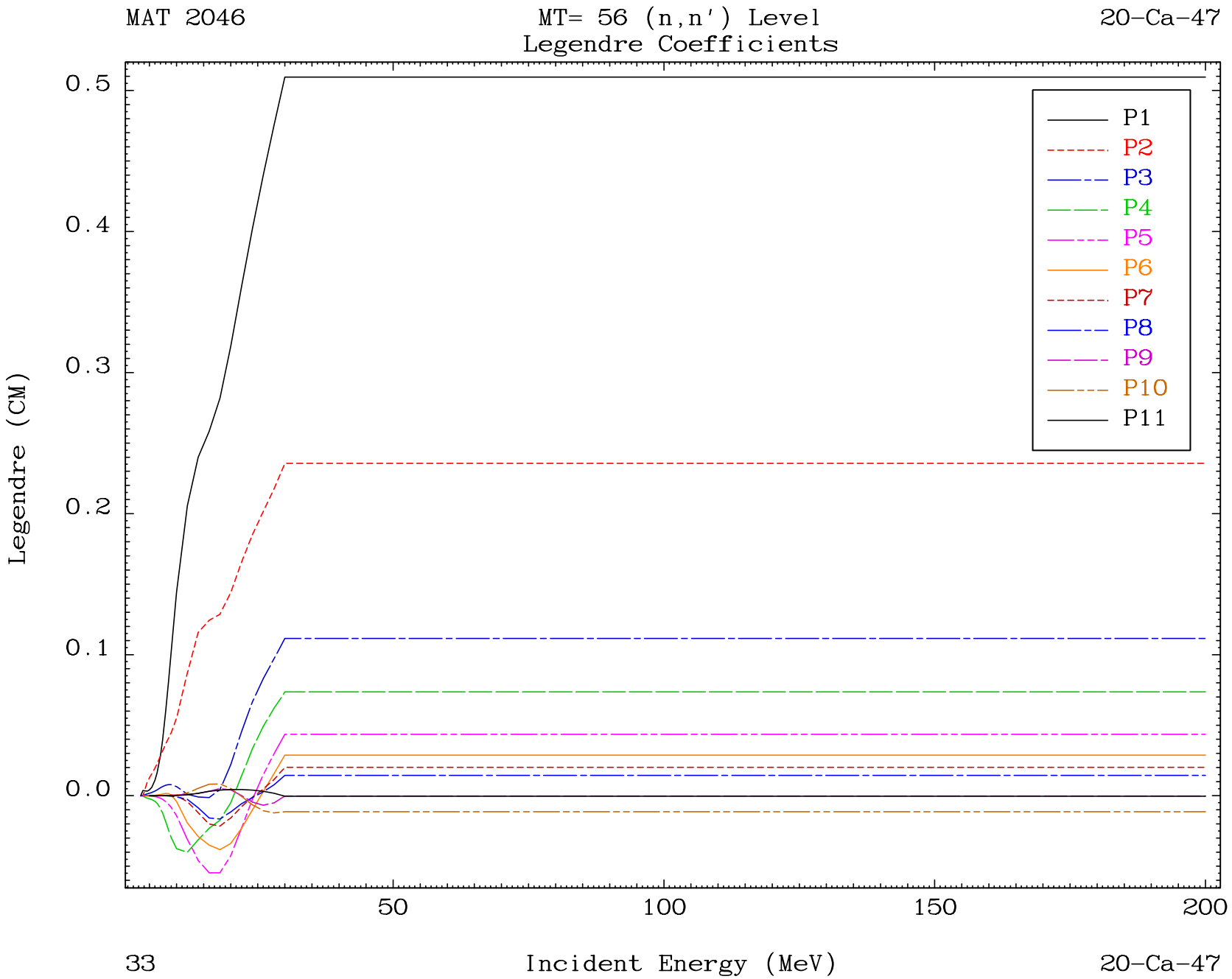

MAT 2046
MT= 54 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
28
Incident Energy (MeV)
20-Ca-47

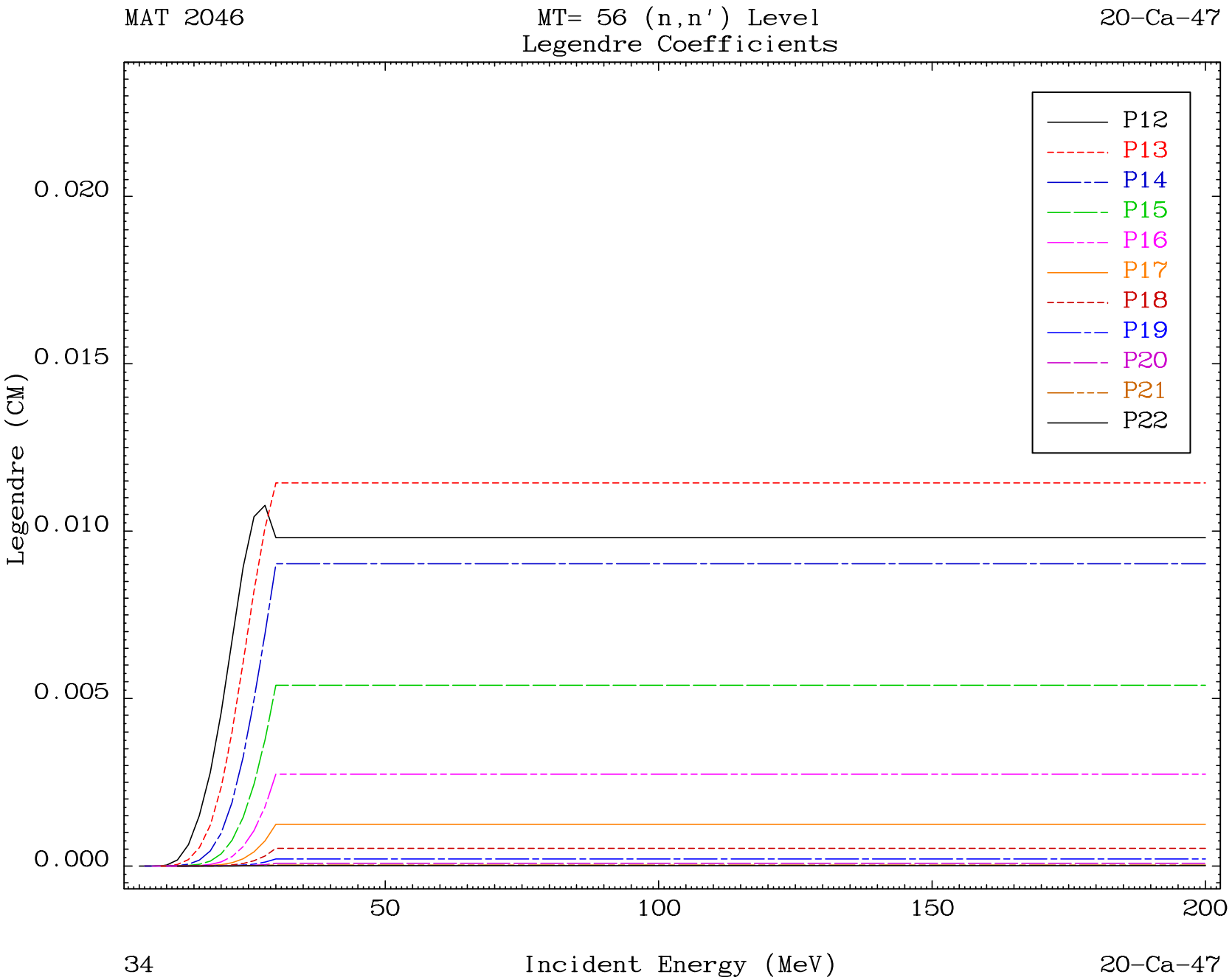

MAT 2046
MT= 54 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -5
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
29
Incident Energy (MeV)
20-Ca-47

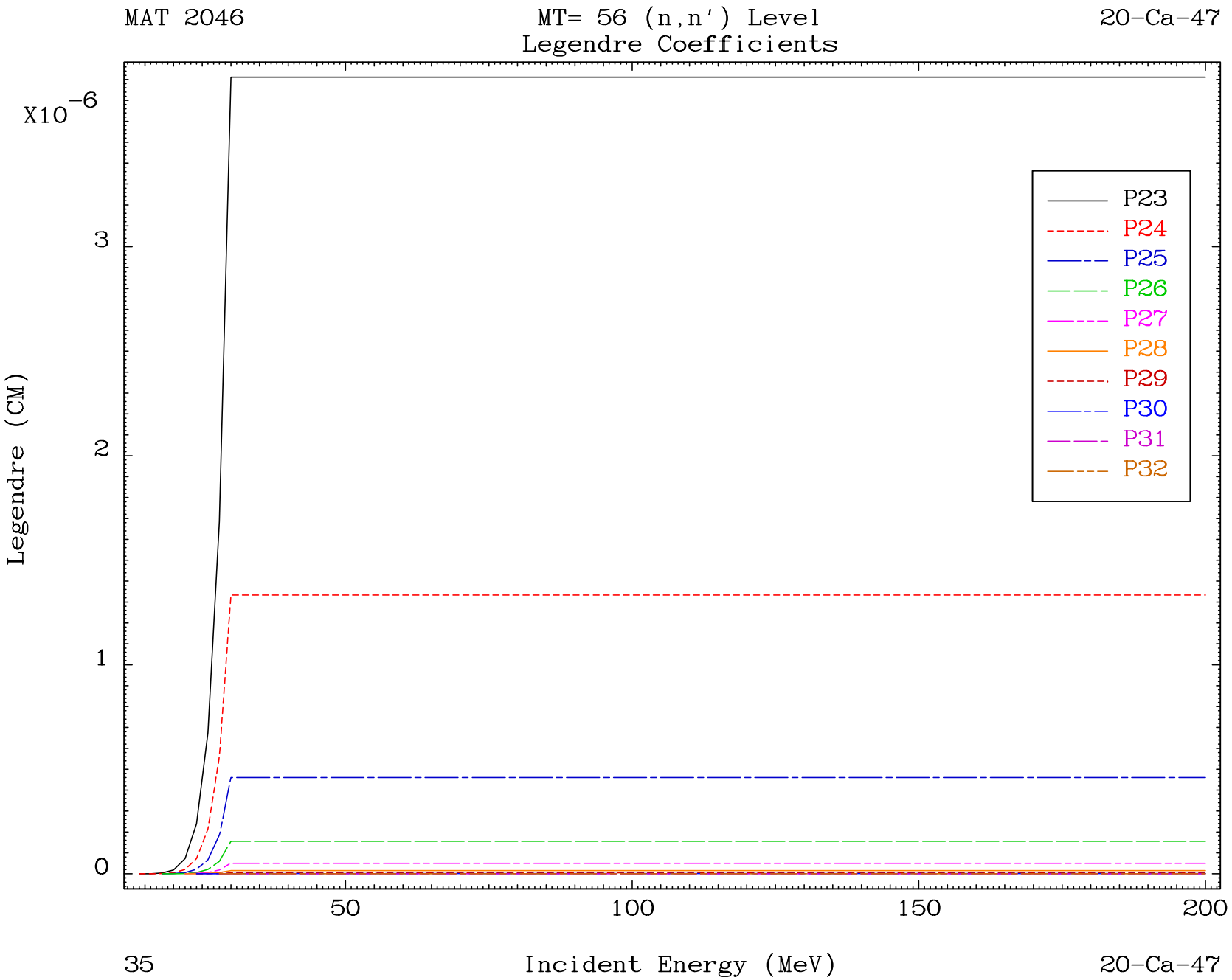

MAT 2046
MT= 55 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
30
50
100
150
200
Incident Energy (MeV)
20-Ca-47

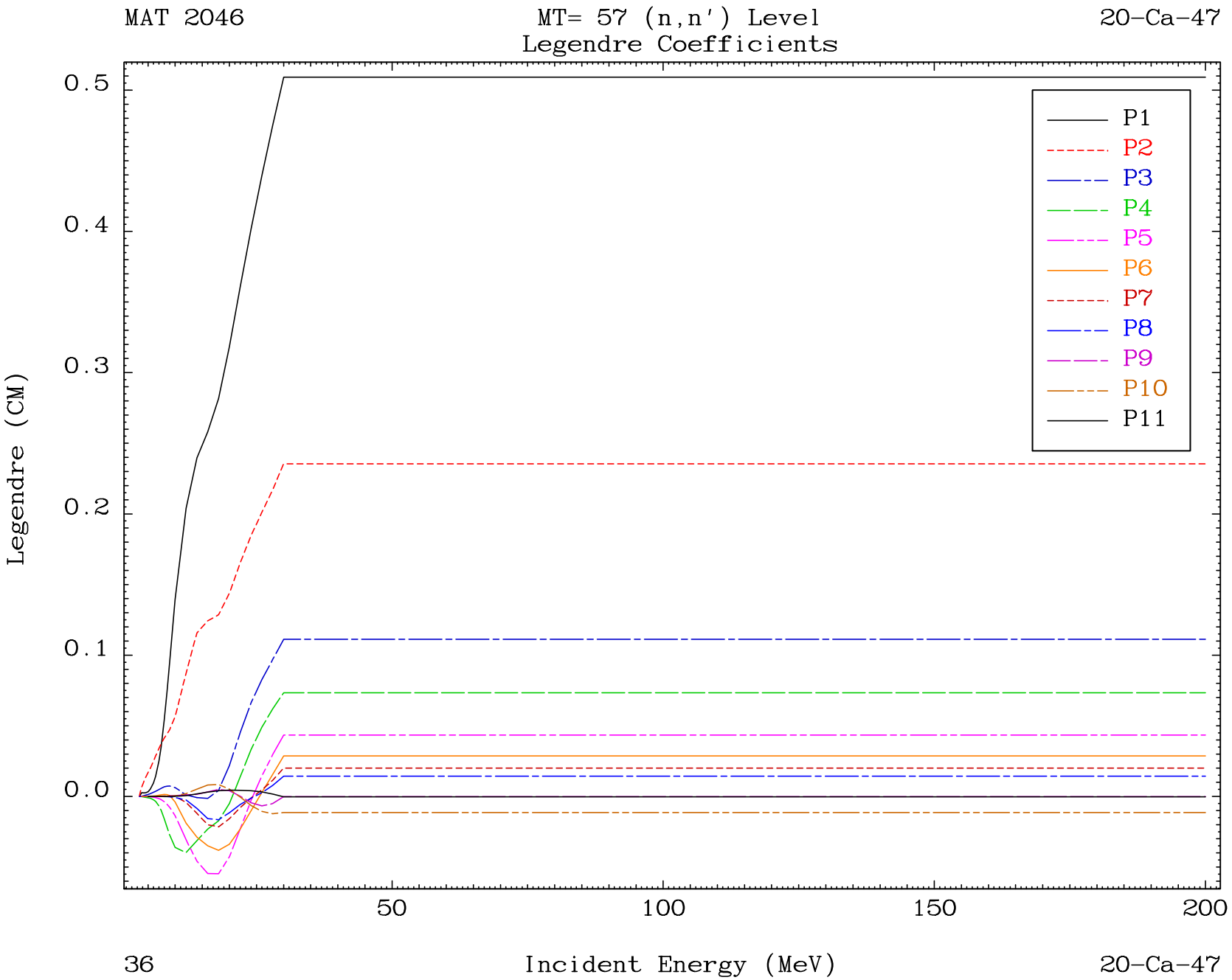

MAT 2046
MT= 55 (n,n') Level
Legendre Coefficients
20-Ca-47
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
31
Incident Energy (MeV)
20-Ca-47

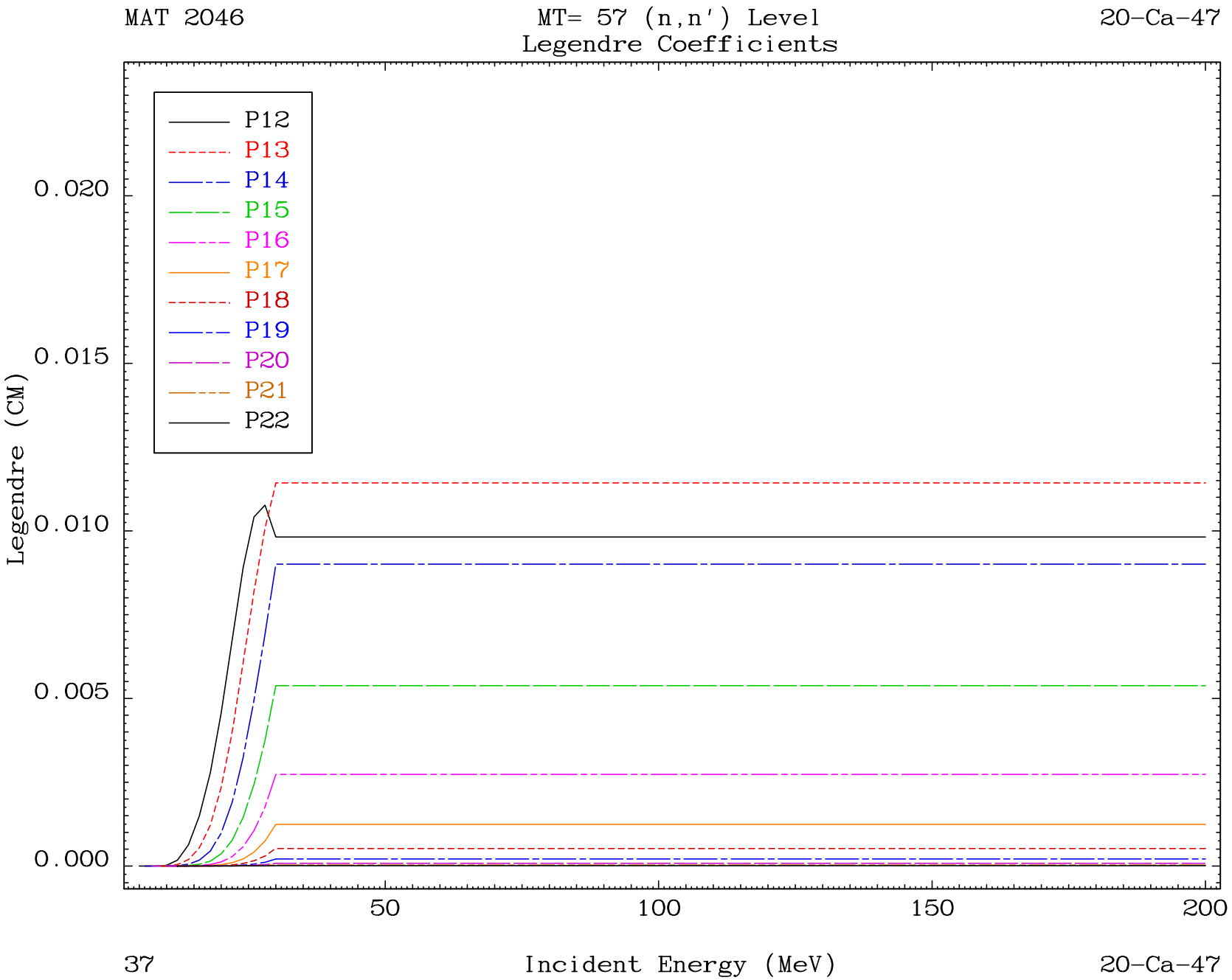

MAT 2046
MT= 55 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -64
3
2
1
0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
32
Incident Energy (MeV)
20-Ca-47

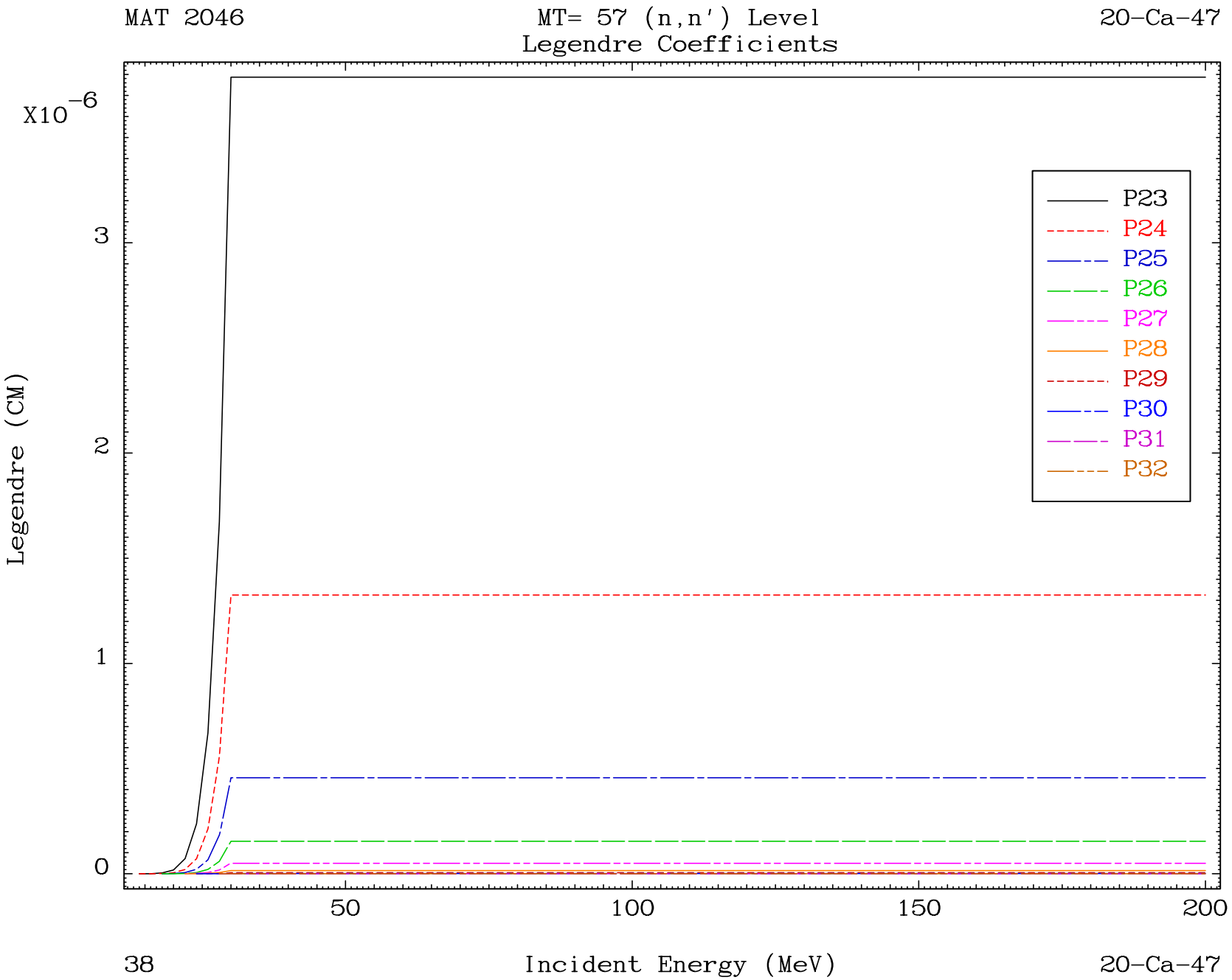

MAT 2046
MT= 56 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
33
Incident Energy (MeV)
20-Ca-47

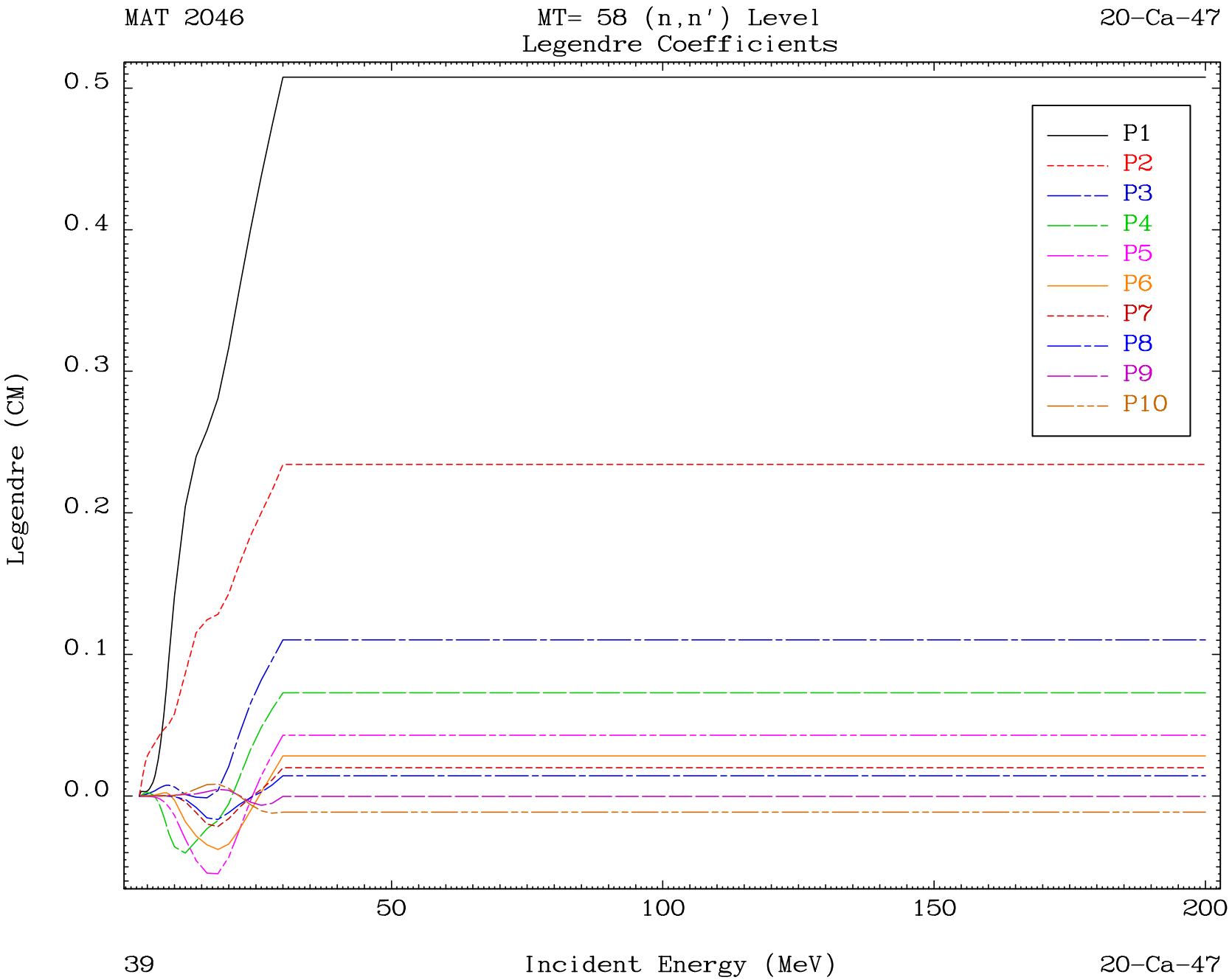

MAT 2046
MT= 56 (n,n') Level
Legendre Coefficients
20-Ca-47
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
34
Incident Energy (MeV)
20-Ca-47

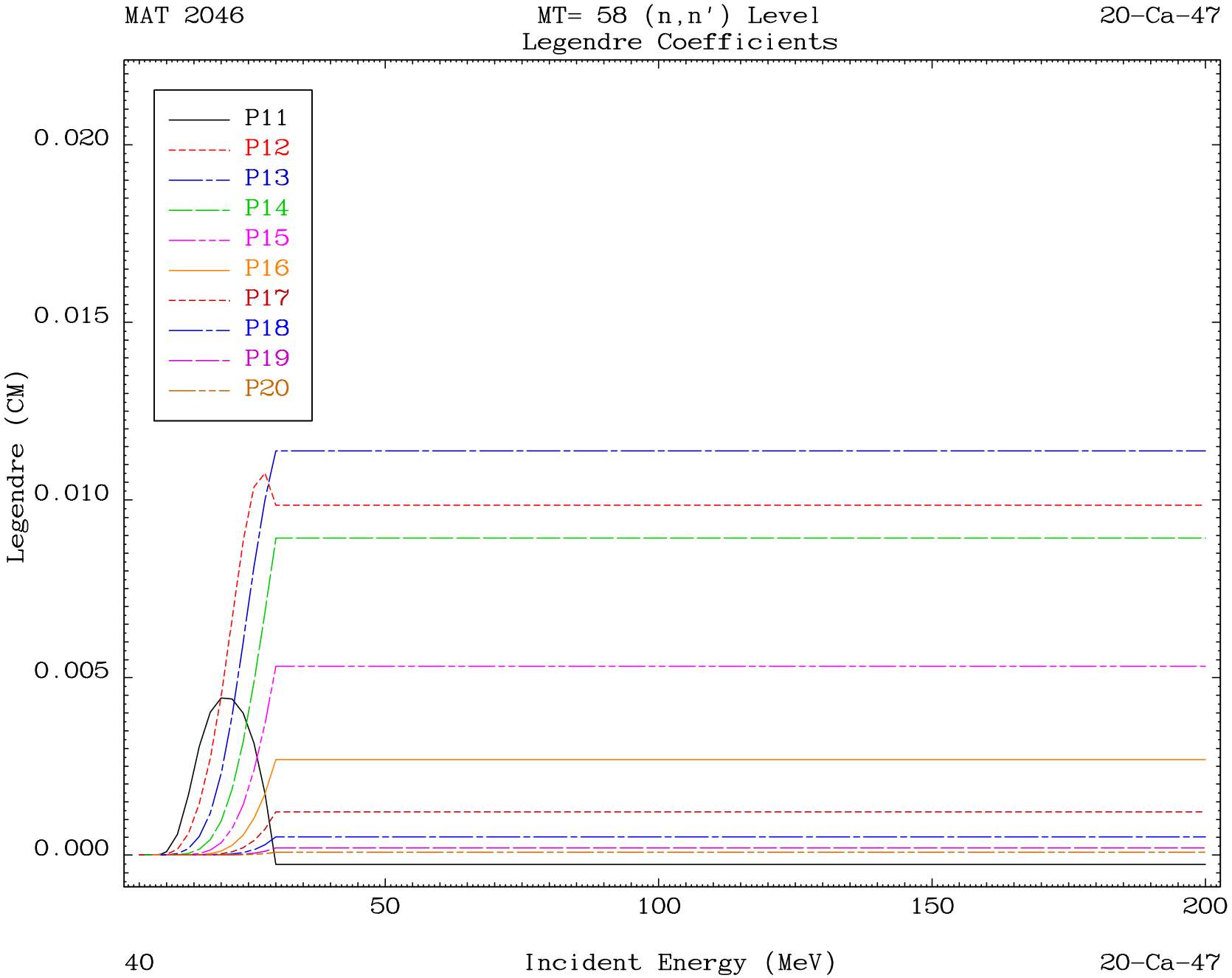

MAT 2046
MT= 56 (n,n') Level
Legendre Coefficients
20-Ca-47
X10^-6
3
2
1
0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
35
Incident Energy (MeV)
20-Ca-47

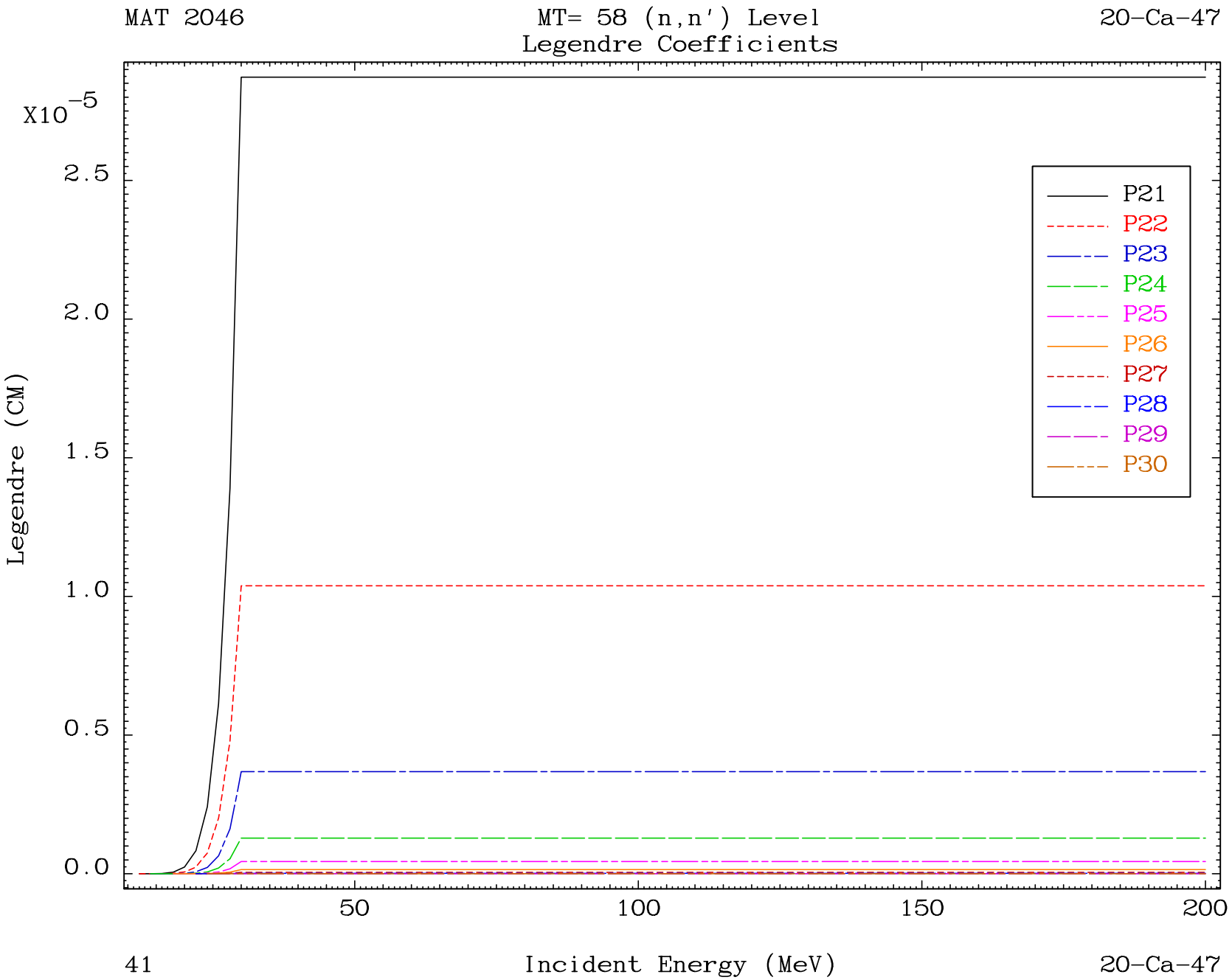

MAT 2046
MT= 57 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
36
Incident Energy (MeV)
20-Ca-47

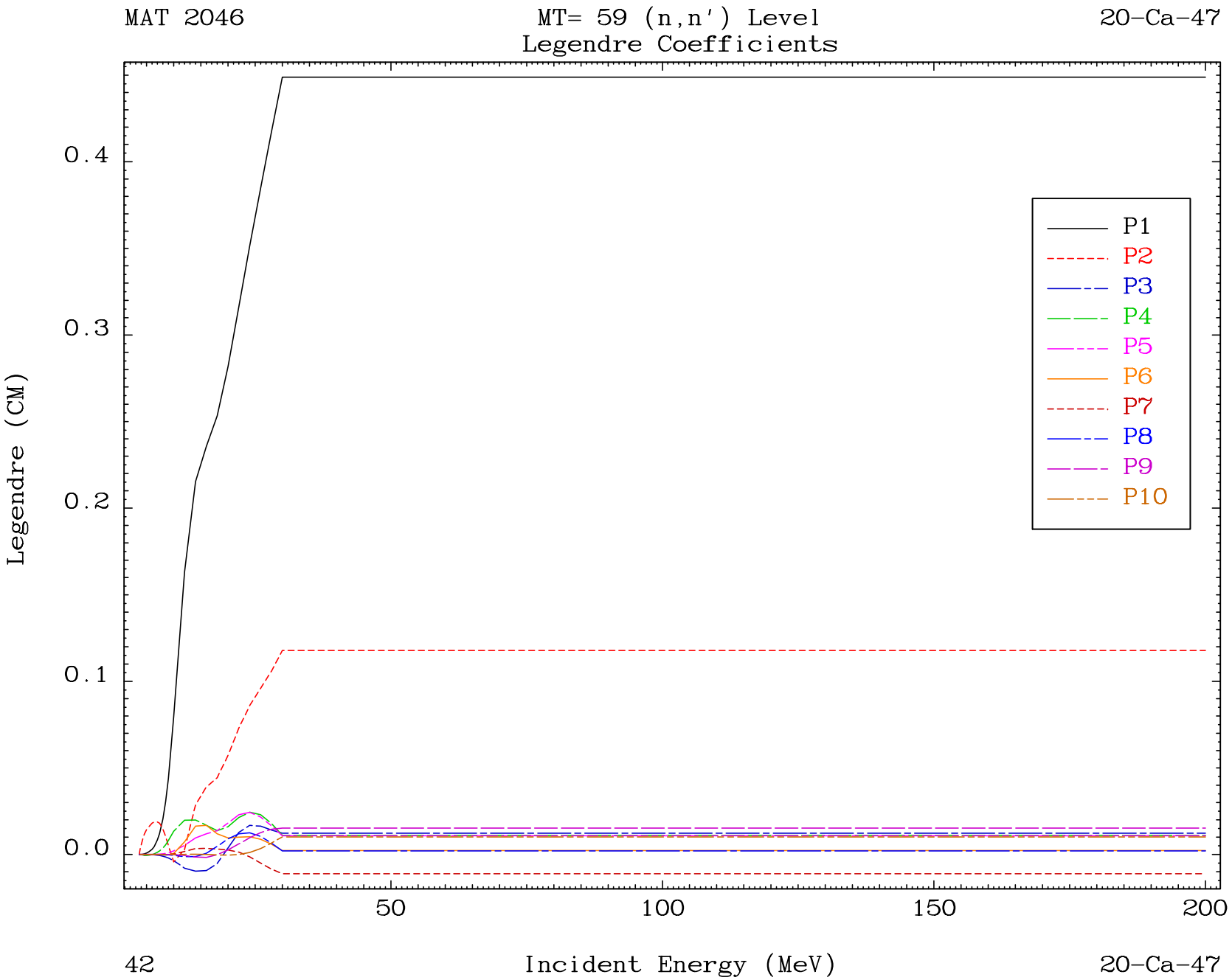

MAT 2046
MT= 57 (n,n') Level
Legendre Coefficients
20-Ca-47
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
37
Incident Energy (MeV)
20-Ca-47

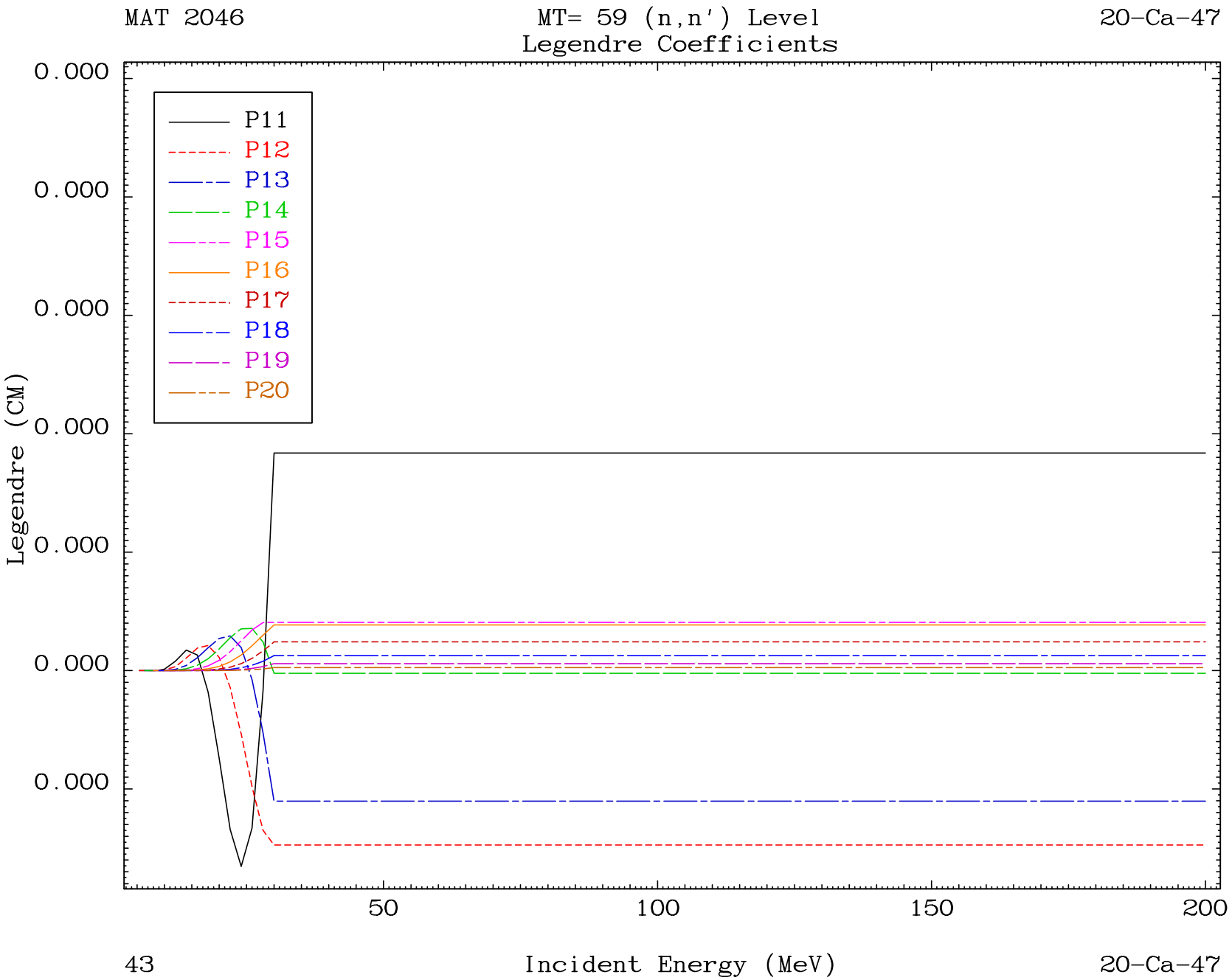

MAT 2046
MT= 57 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 −6
3
2
1
0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
38
Incident Energy (MeV)
20-Ca-47

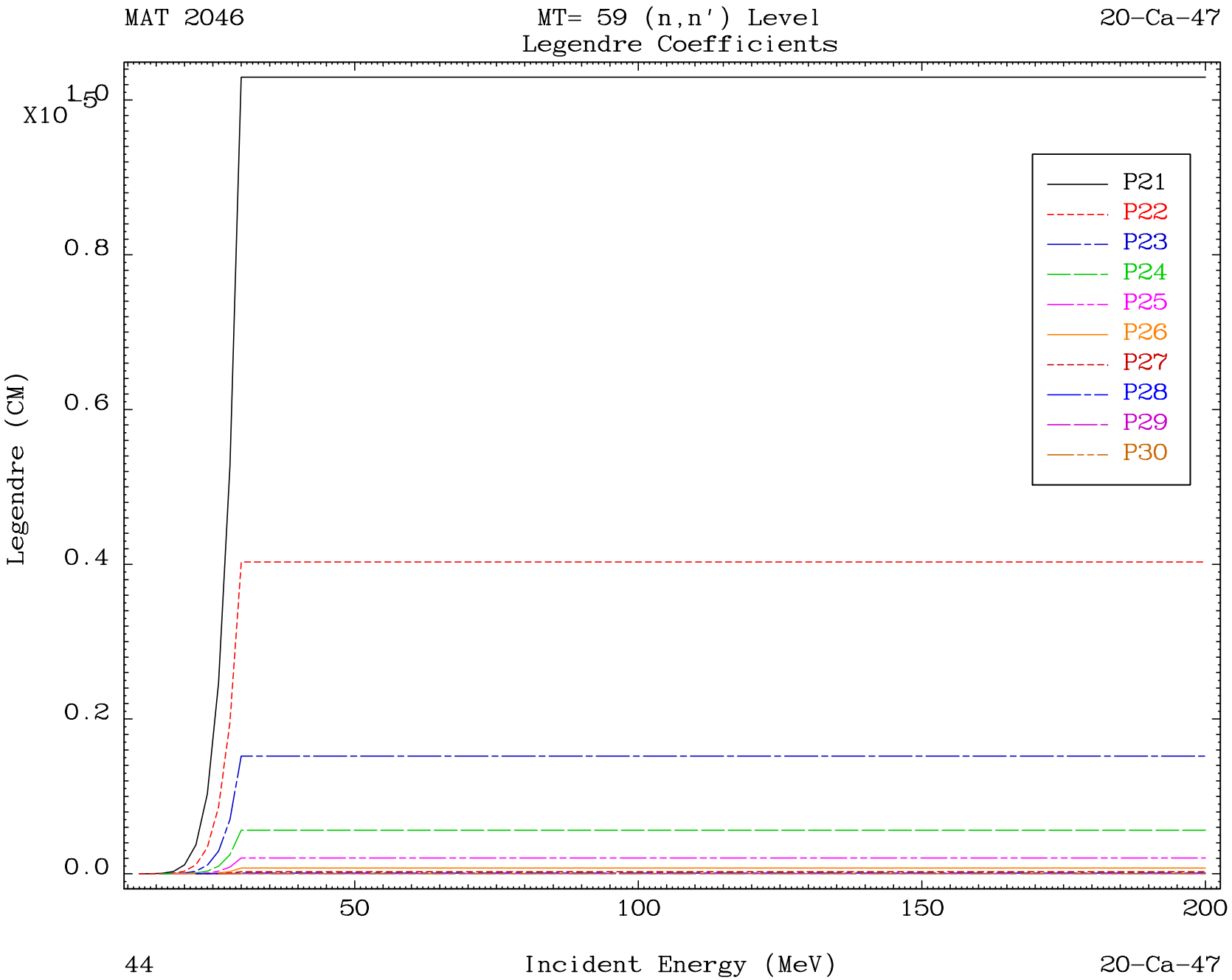

MAT 2046
MT= 58 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
39
Incident Energy (MeV)
20-Ca-47

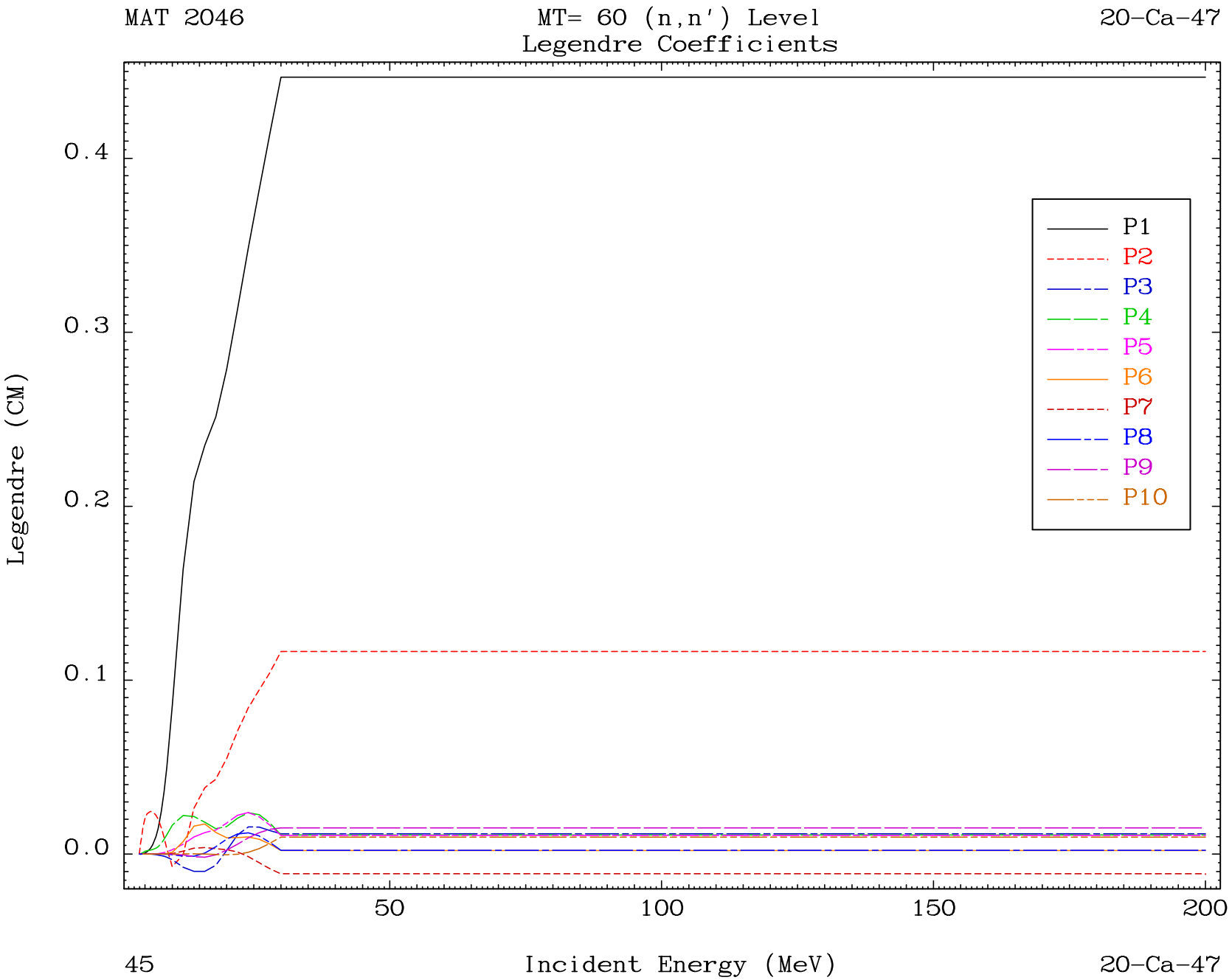

MAT 2046
MT= 58 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
40
50
100
150
200
Incident Energy (MeV)
20-Ca-47

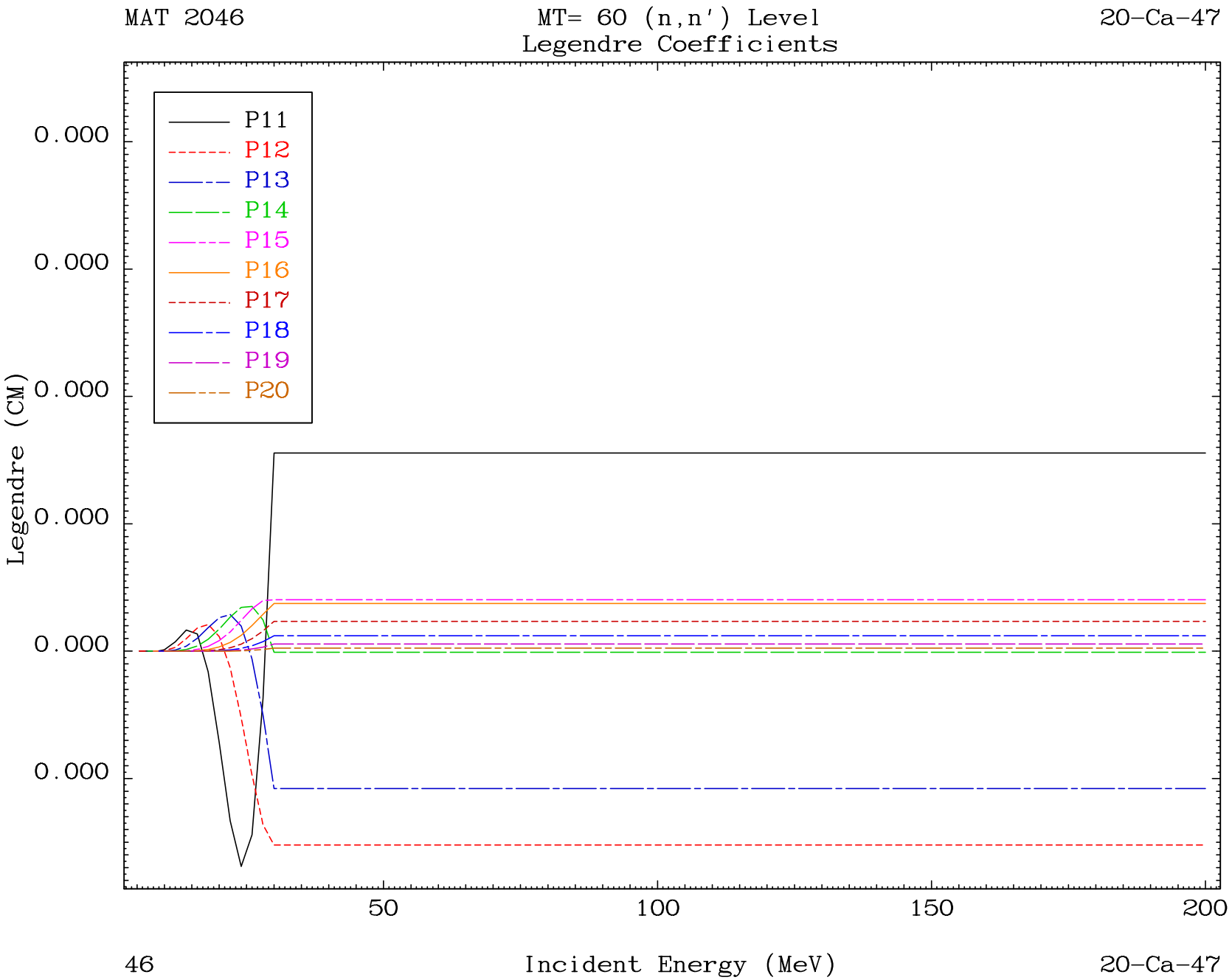

MAT 2046
MT= 58 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-5
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
41
Incident Energy (MeV)
20-Ca-47

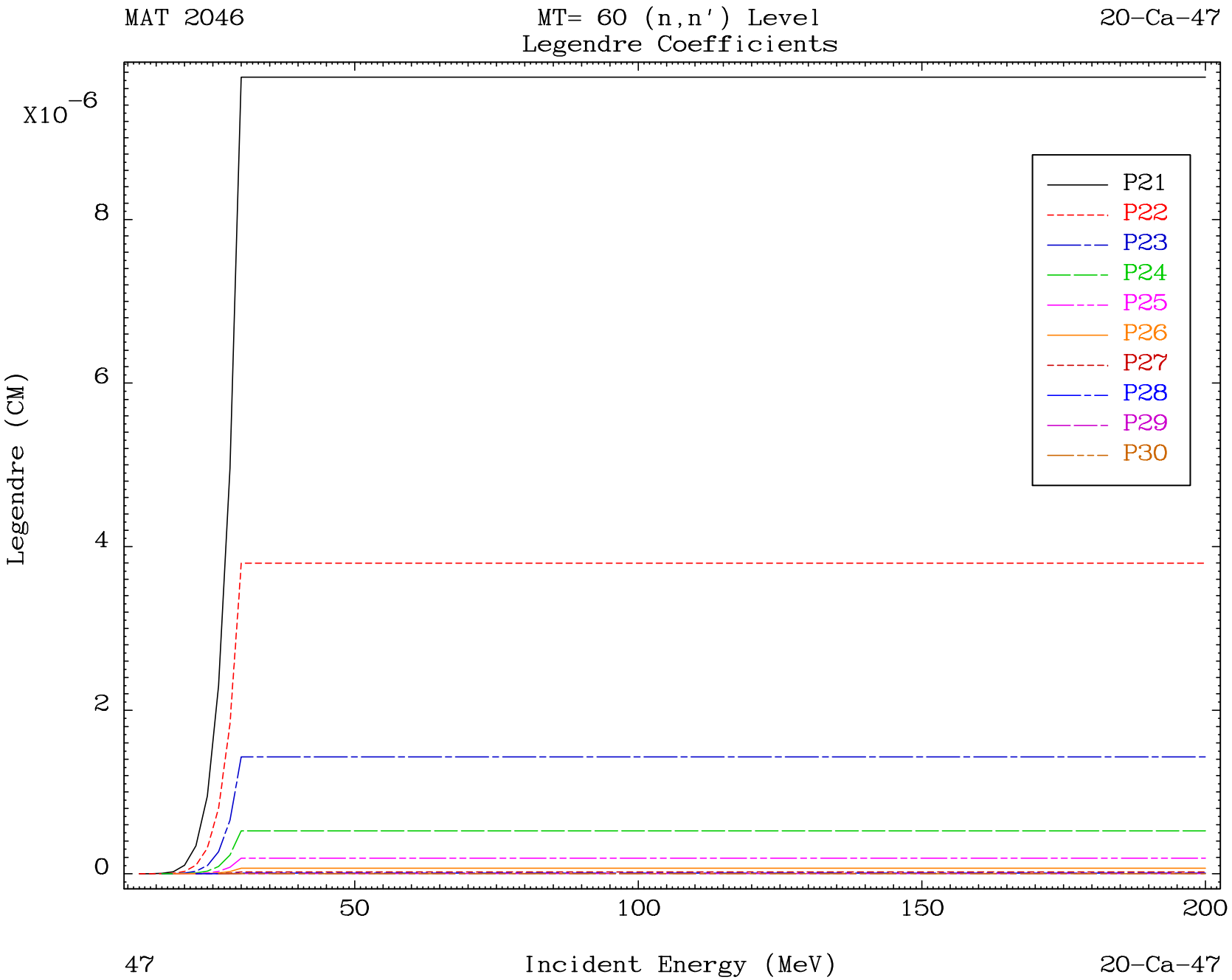

MAT 2046
MT= 59 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
42
Incident Energy (MeV)
20-Ca-47

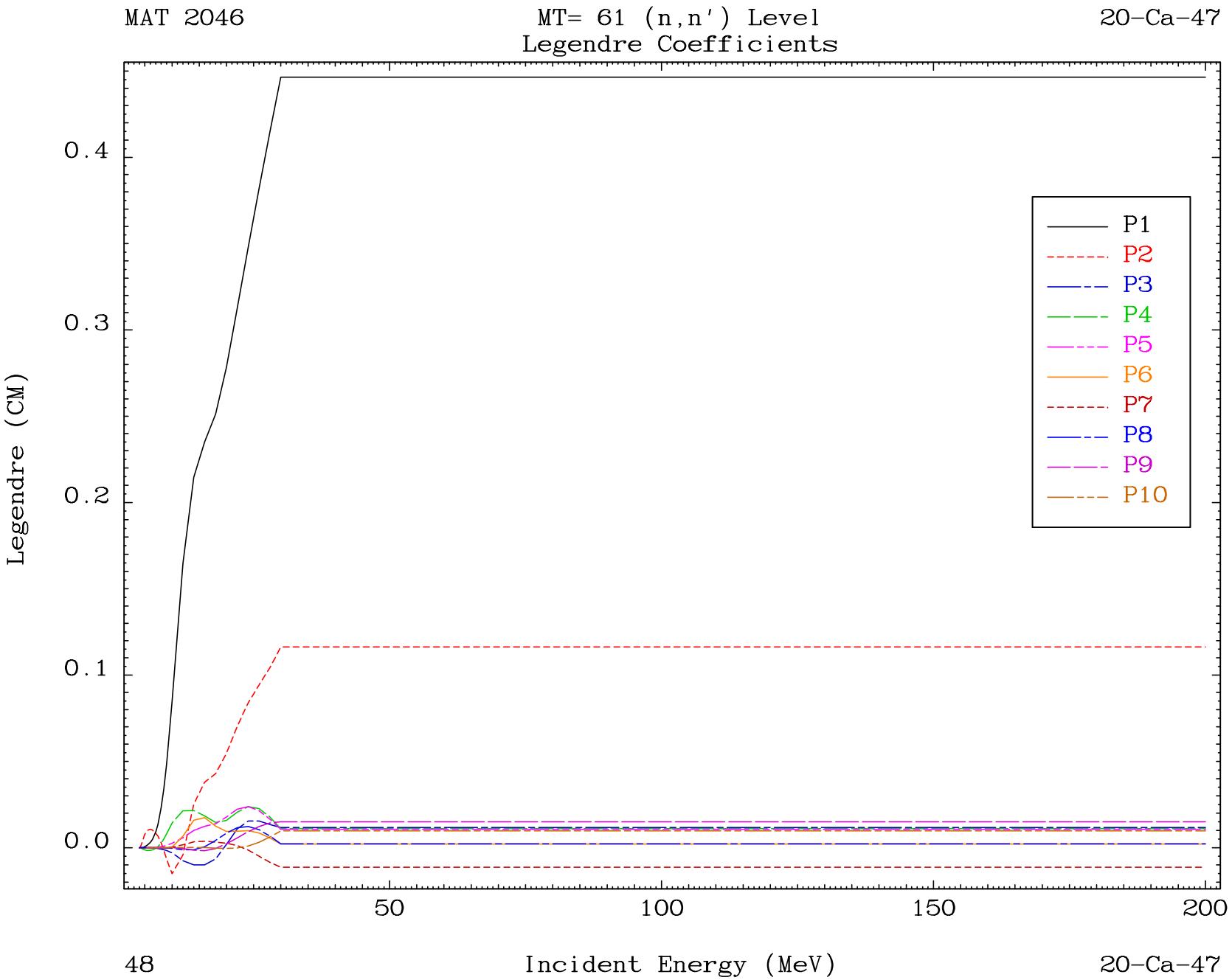

MAT 2046
MT= 59 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
43
Incident Energy (MeV)
20-Ca-47

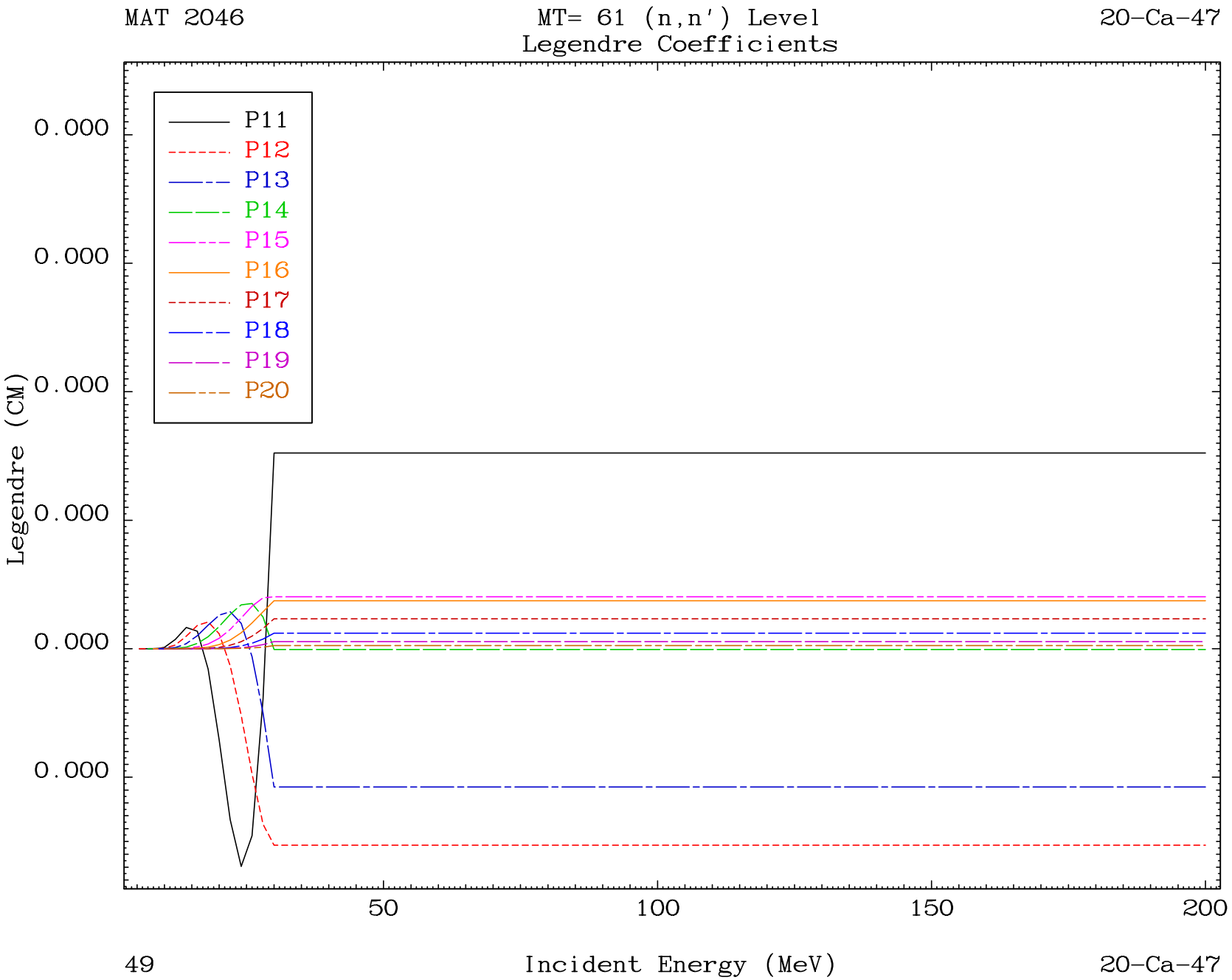

MAT 2046
MT= 59 (n,n') Level
Legendre Coefficients
20-Ca-47
X10
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
44
Incident Energy (MeV)
20-Ca-47

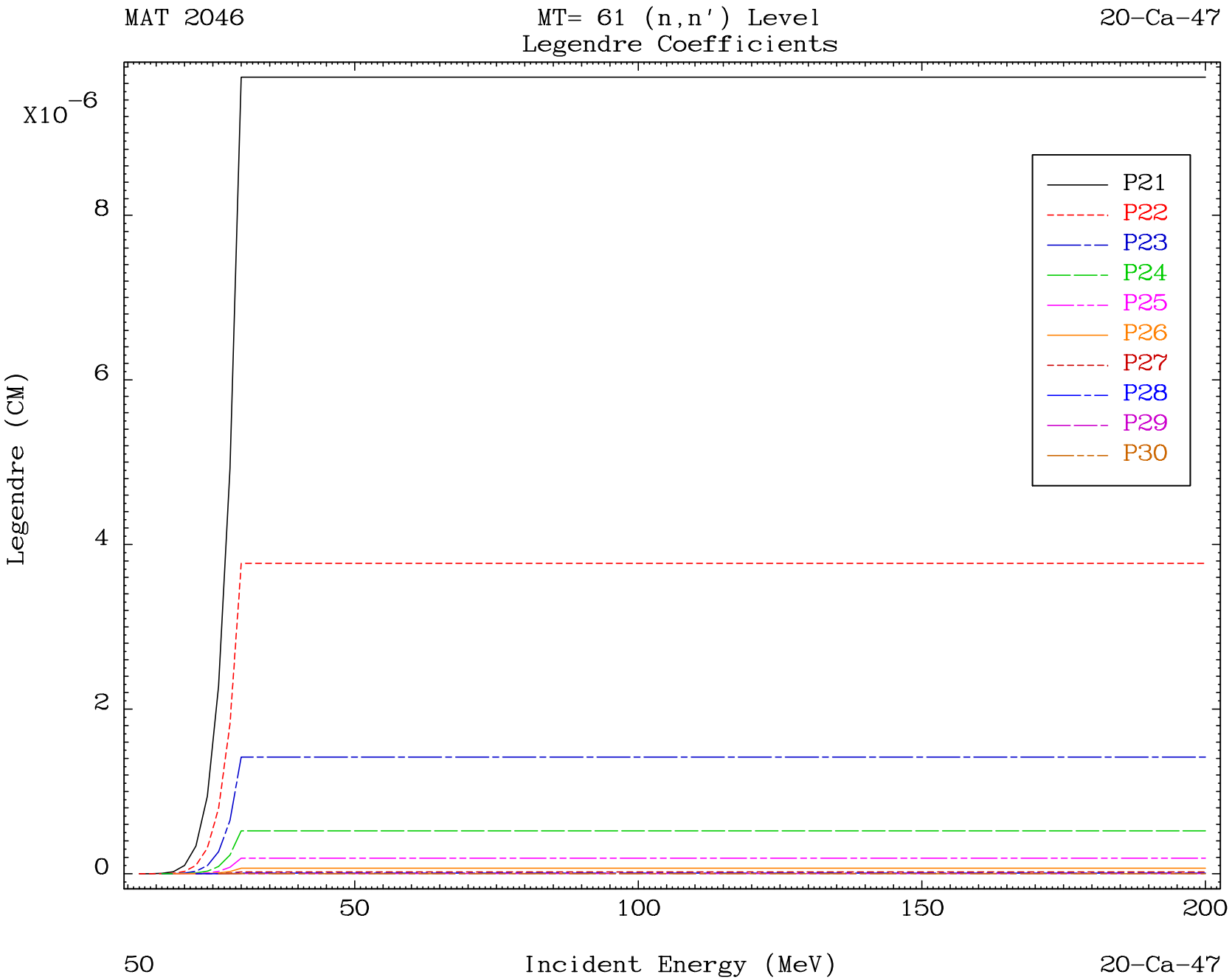

MAT 2046
MT= 60 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
45
Incident Energy (MeV)
20-Ca-47

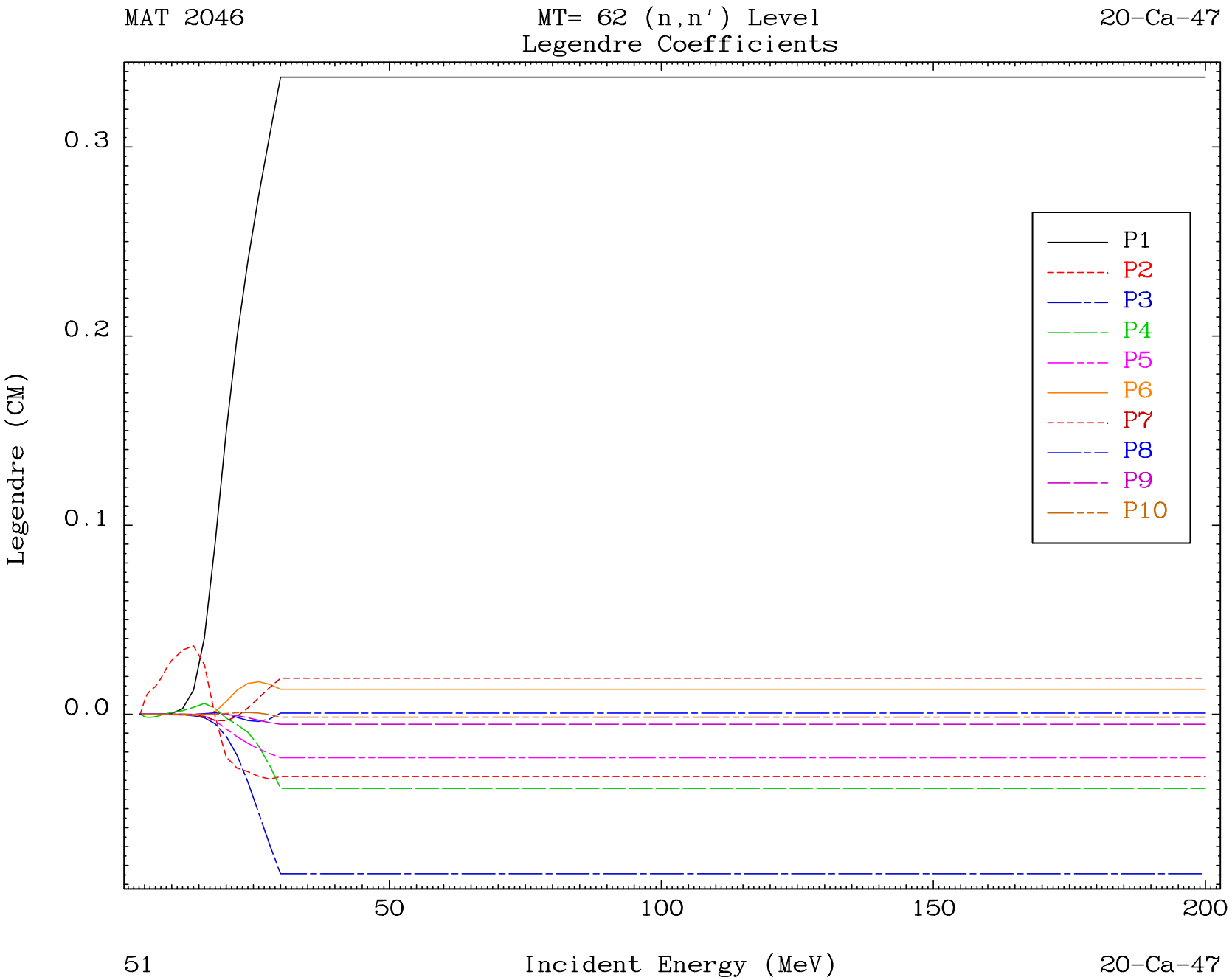

MAT 2046
MT= 60 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
46
Incident Energy (MeV)
20-Ca-47

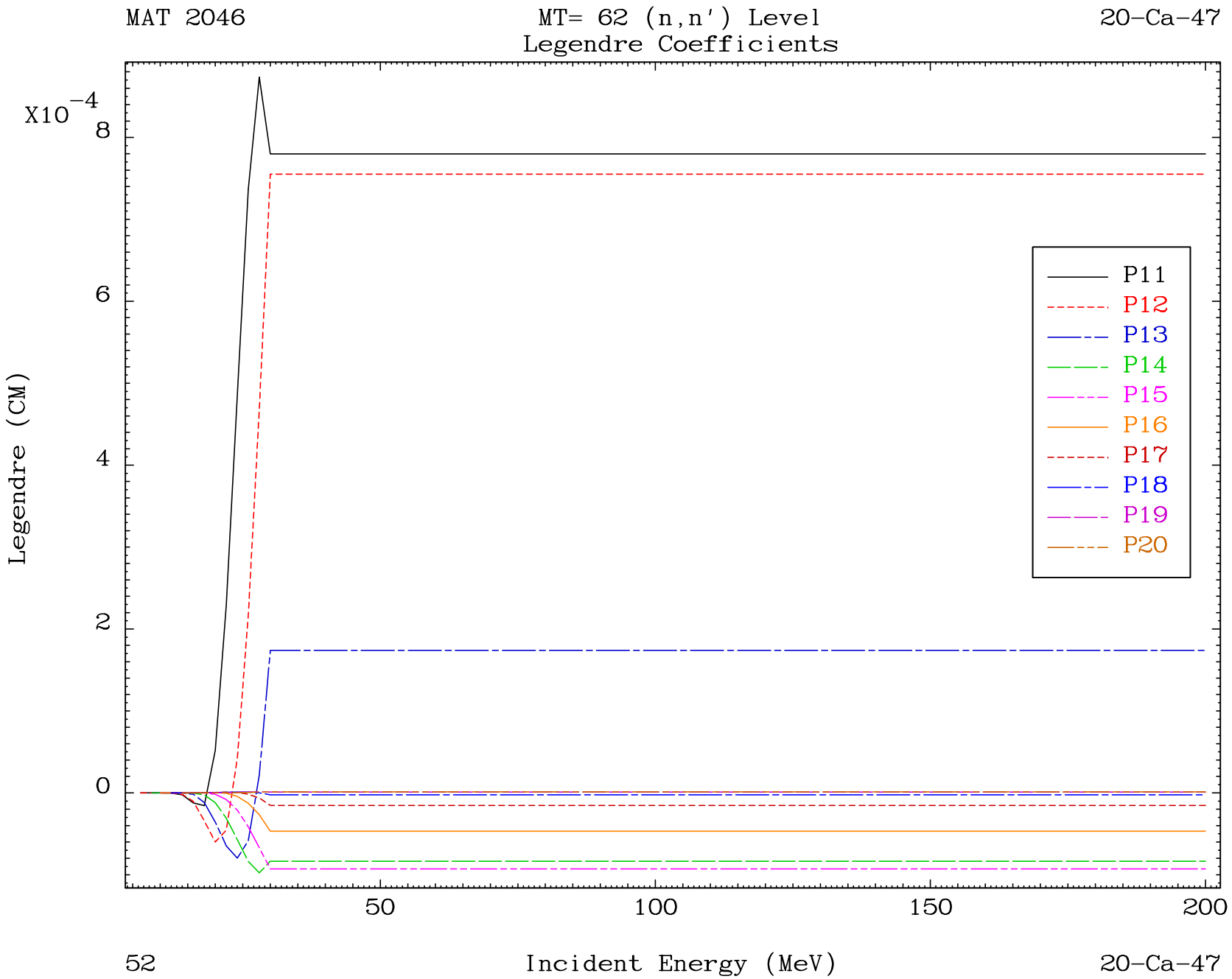

MAT 2046
MT= 60 (n,n') Level
Legendre Coefficients
20-Ca-47
X10^-6
8
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
47
Incident Energy (MeV)
20-Ca-47

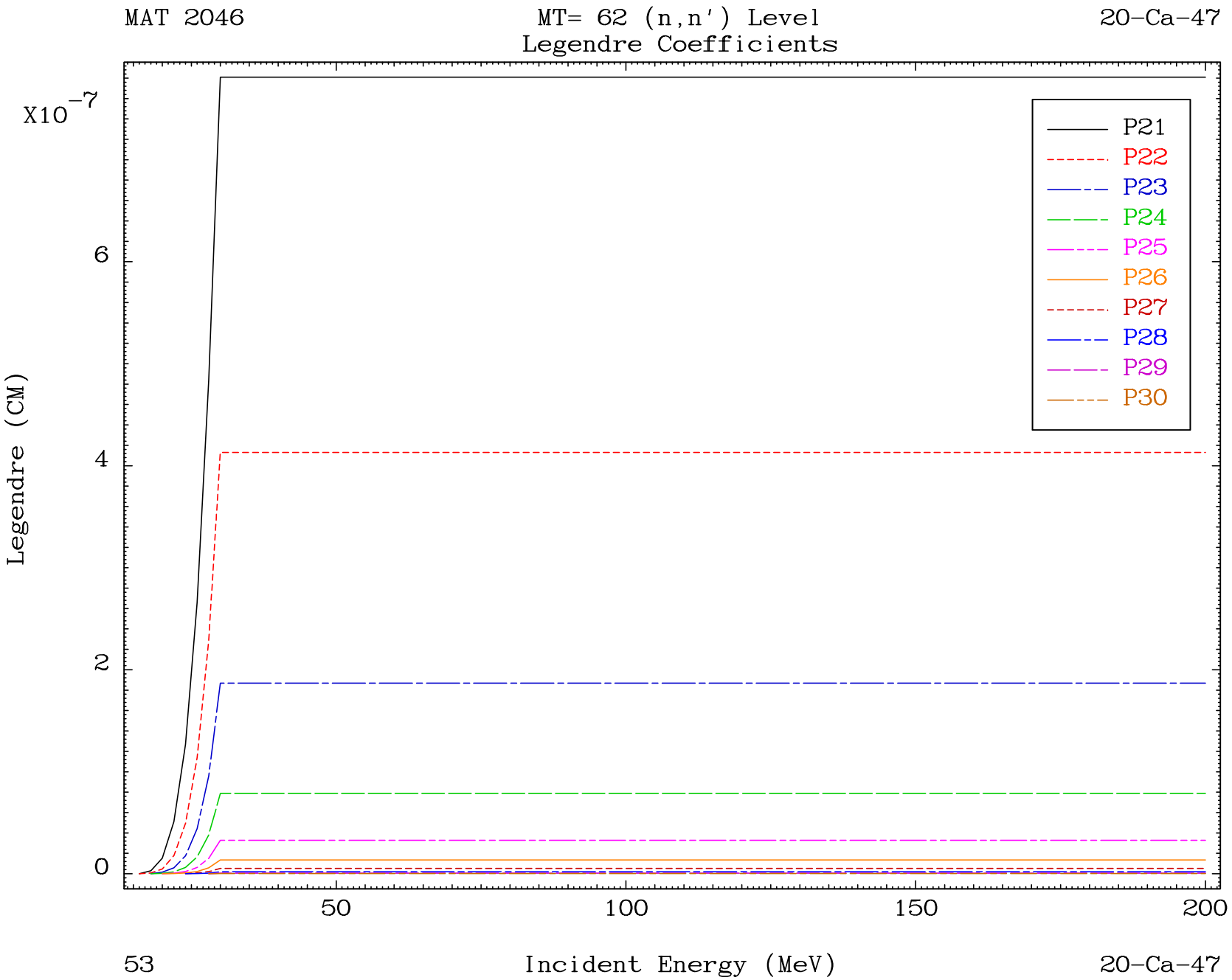

MAT 2046
MT= 61 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
48
Incident Energy (MeV)
20-Ca-47

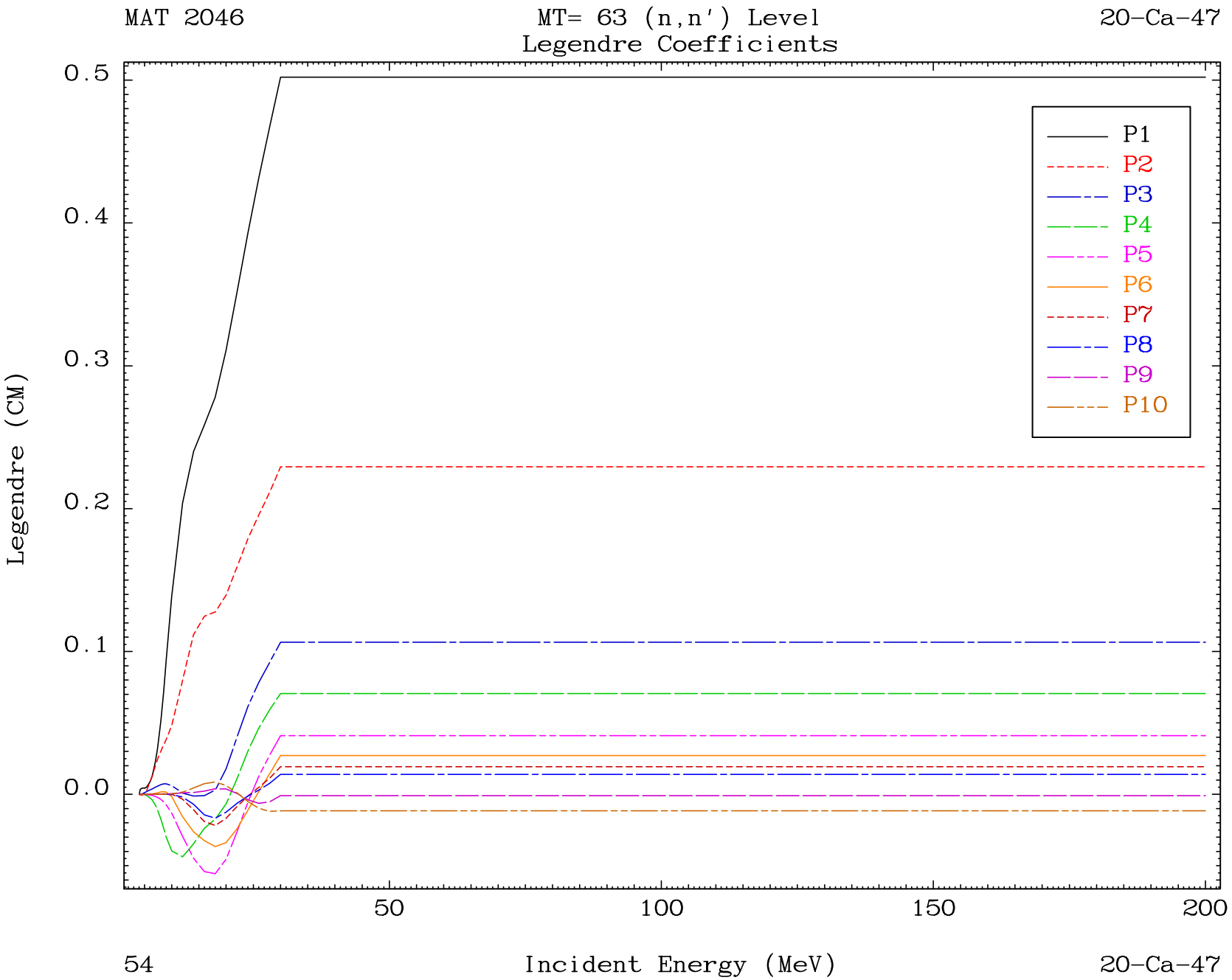

MAT 2046
MT= 61 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
49
Incident Energy (MeV)
20-Ca-47

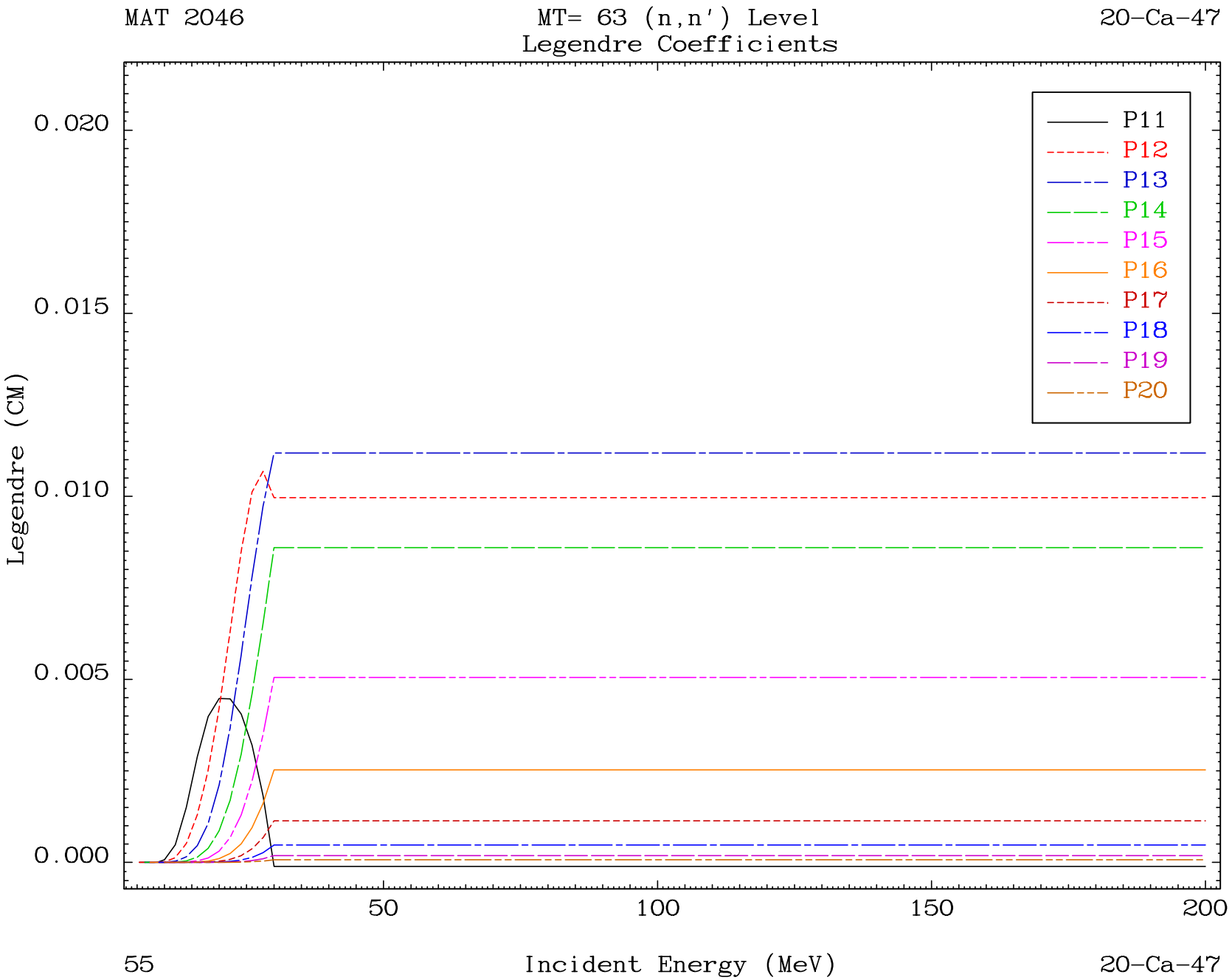

MAT 2046
MT= 61 (n,n') Level
Legendre Coefficients
20-Ca-47
X10^-6
8
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
50
Incident Energy (MeV)
20-Ca-47

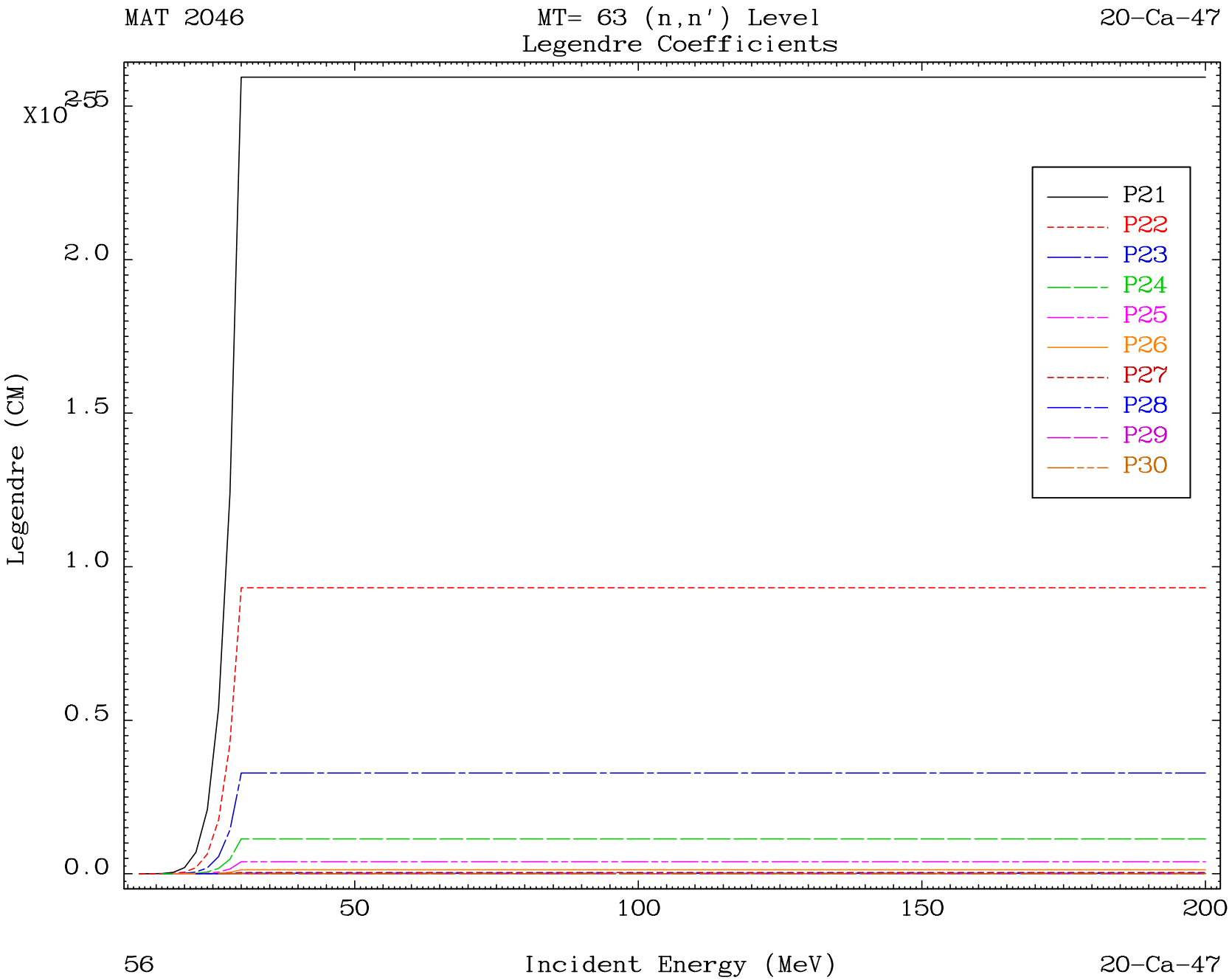

MAT 2046
MT= 62 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
51
Incident Energy (MeV)
20-Ca-47

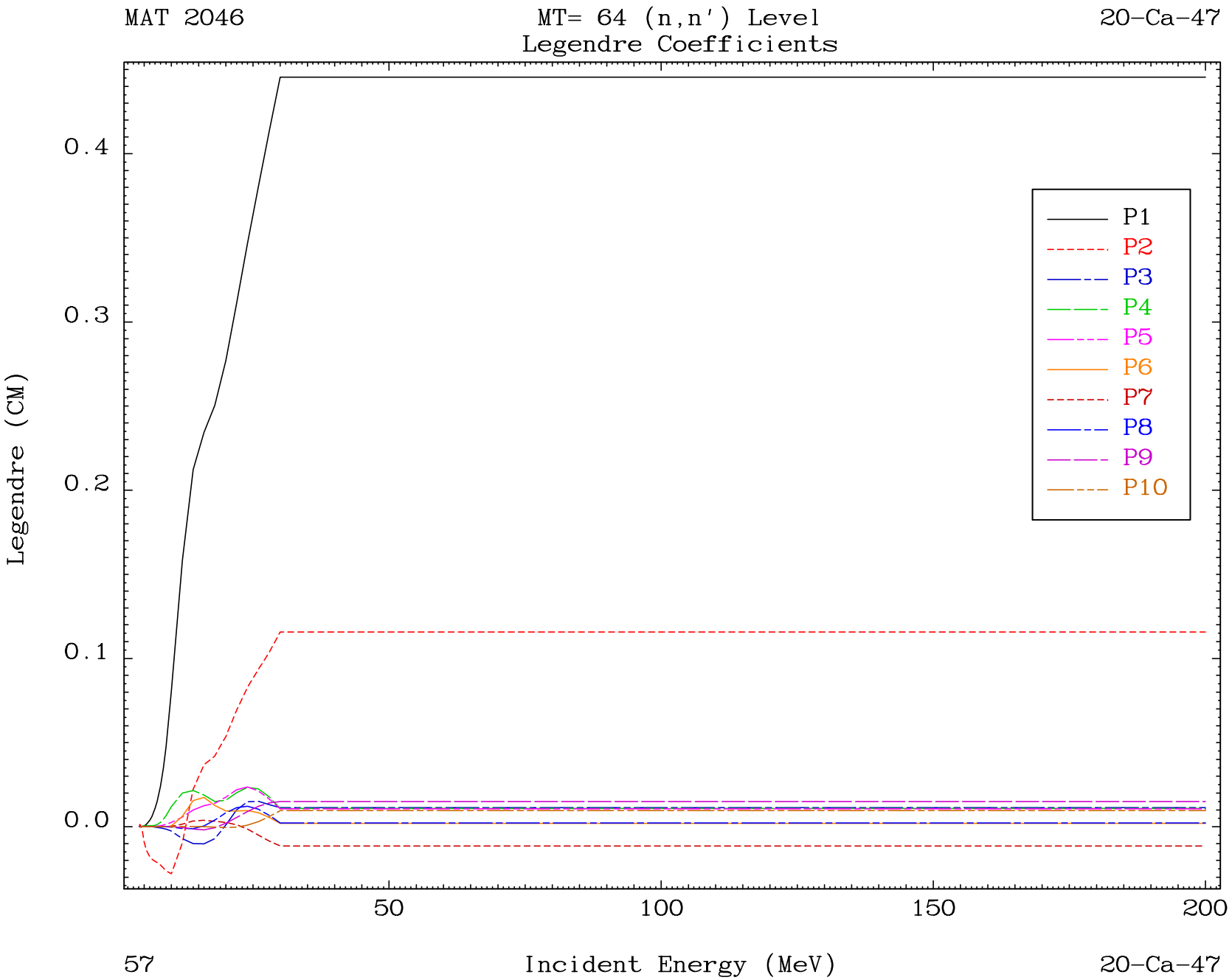

MAT 2046
MT= 62 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -4
8
6
4
2
0
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
50
100
150
200
52
Incident Energy (MeV)
20-Ca-47

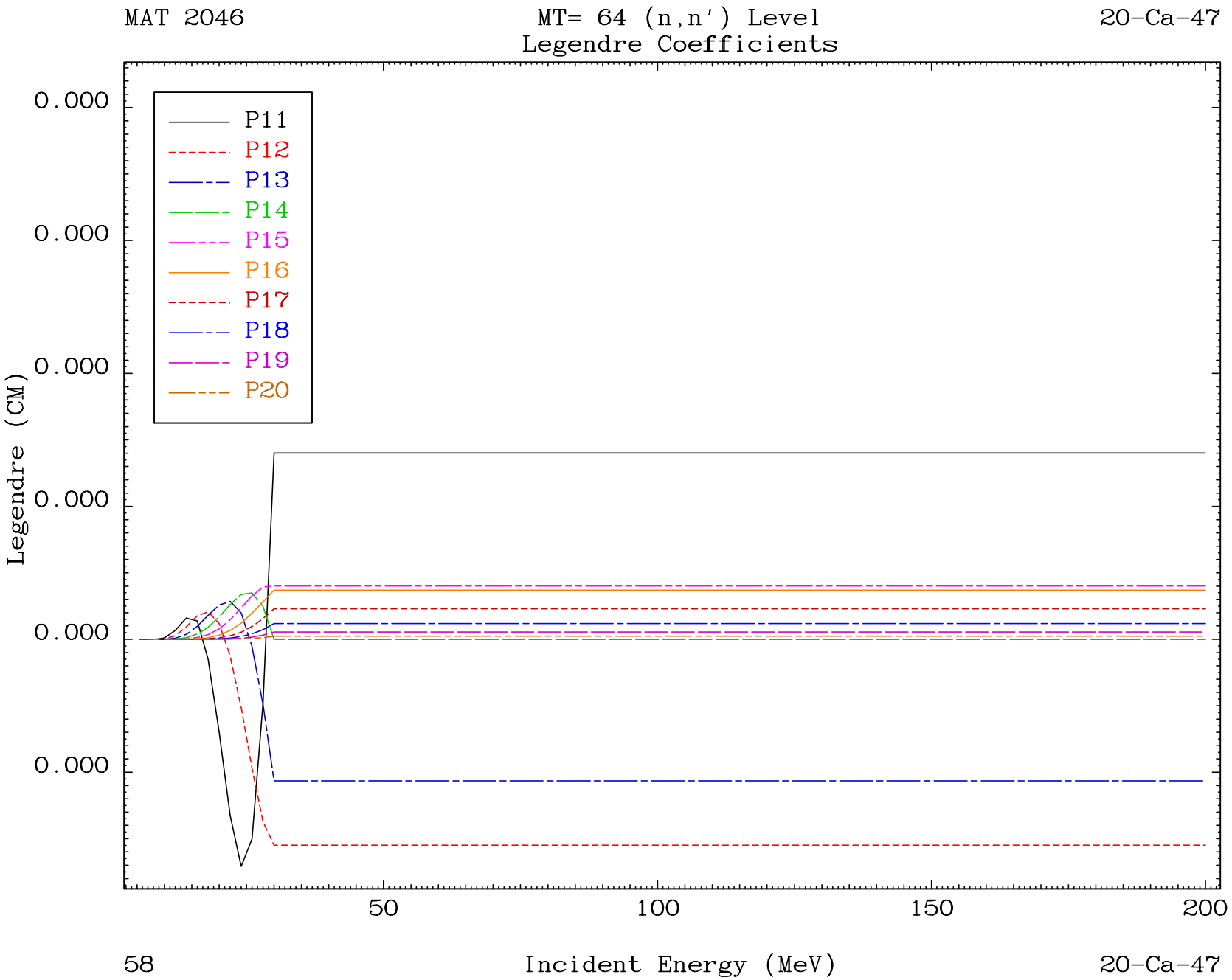

MAT 2046
MT= 62 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-7
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
53
Incident Energy (MeV)
20-Ca-47

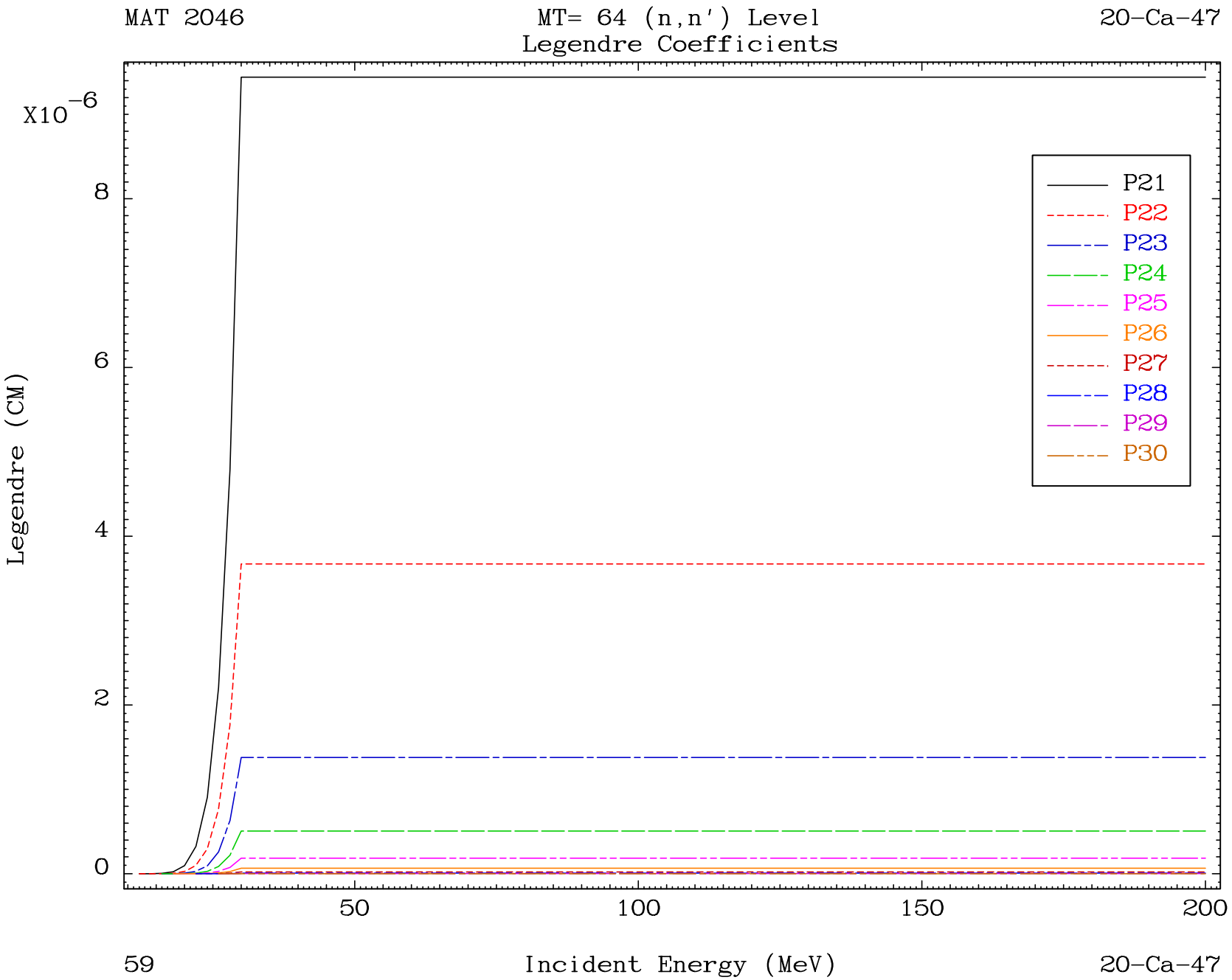

MAT 2046
MT= 63 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
54
Incident Energy (MeV)
20-Ca-47

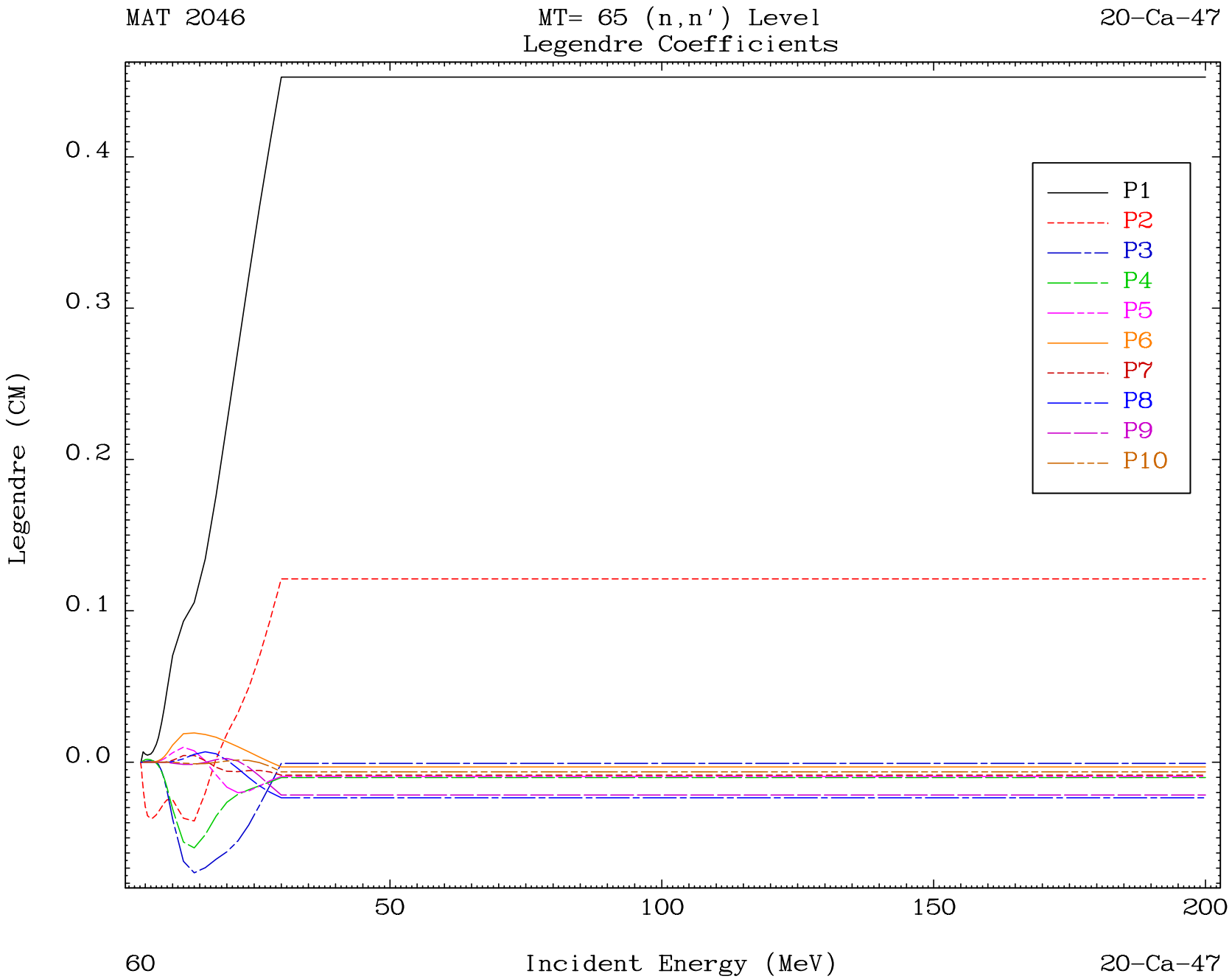

MAT 2046
MT= 63 (n,n') Level
Legendre Coefficients
20-Ca-47
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
55
Incident Energy (MeV)
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

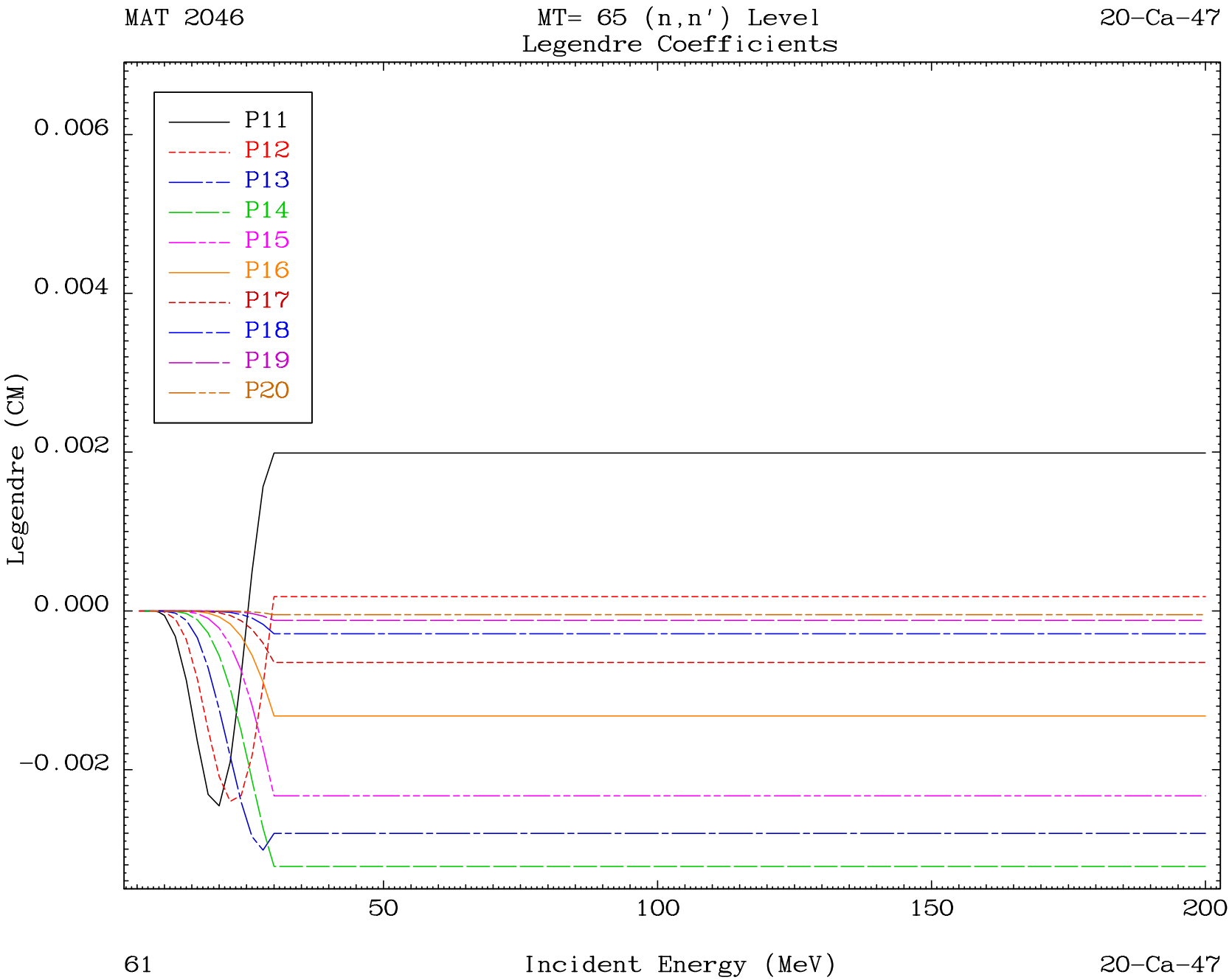

MAT 2046
MT= 63 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-5
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
56
Incident Energy (MeV)
20-Ca-47

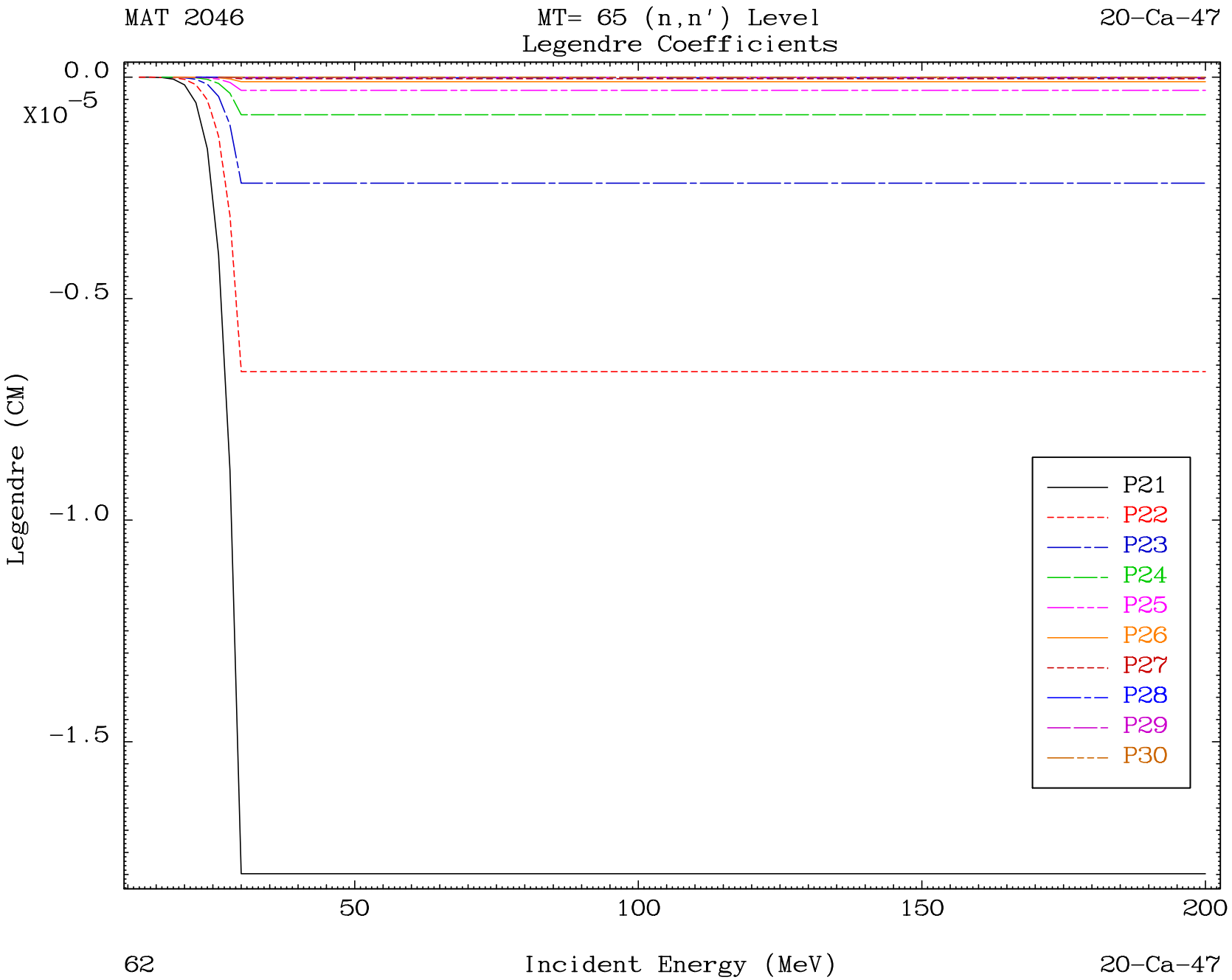

MAT 2046
MT= 64 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
57
Incident Energy (MeV)
20-Ca-47

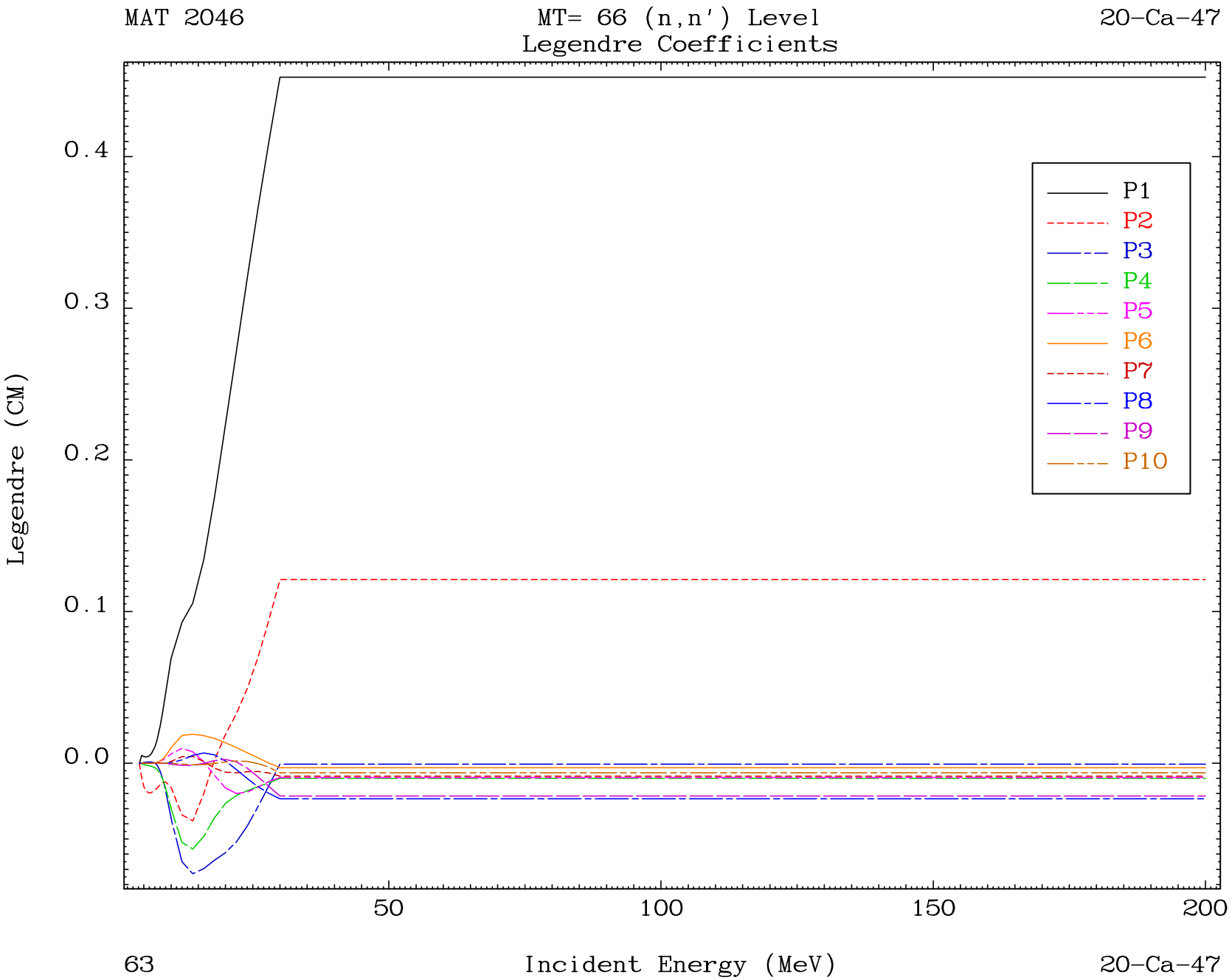

MAT 2046
MT= 64 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
58
Incident Energy (MeV)
20-Ca-47

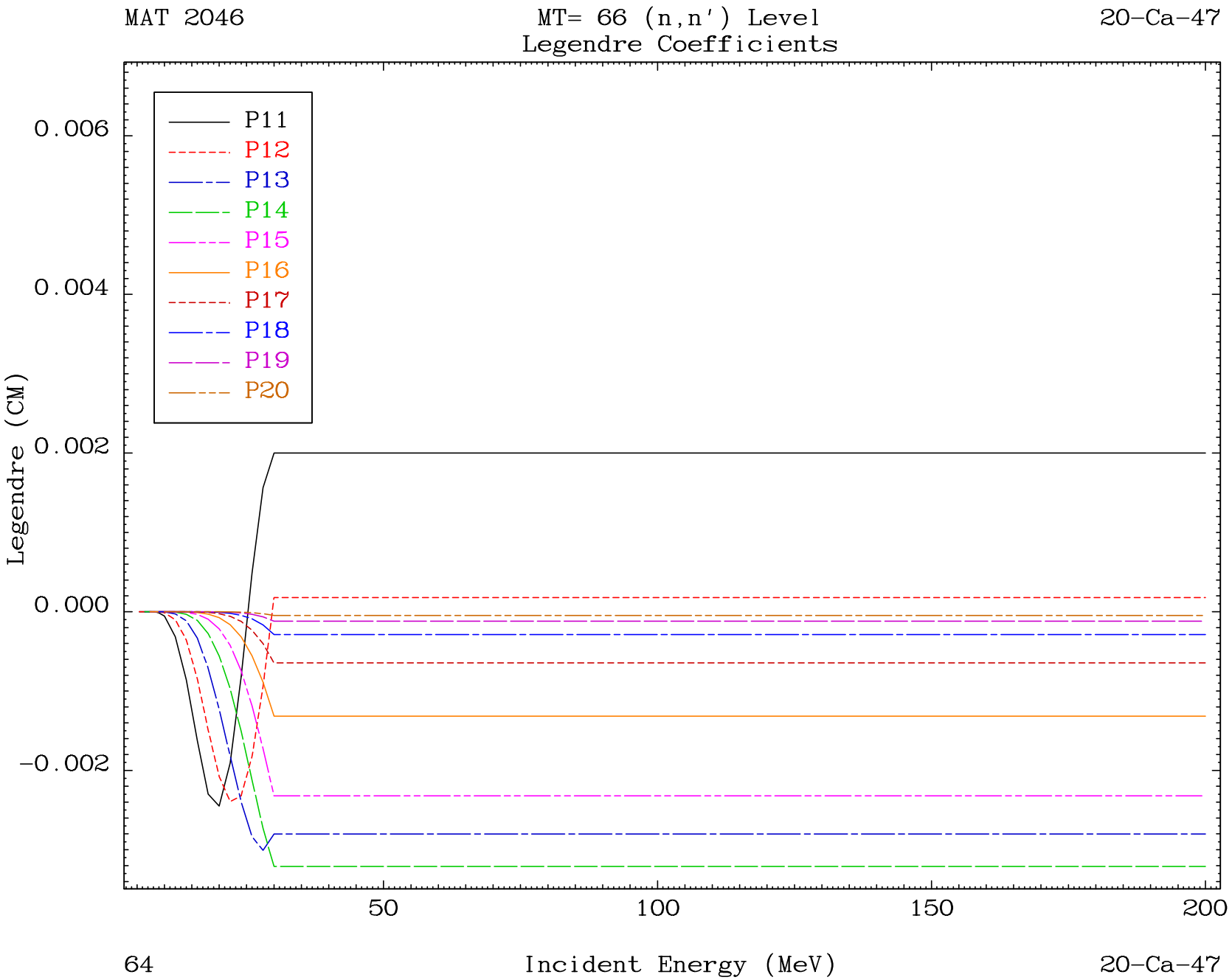

MAT 2046
MT= 64 (n,n') Level
Legendre Coefficients
20-Ca-47
X10^-6
8
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
59
Incident Energy (MeV)
20-Ca-47

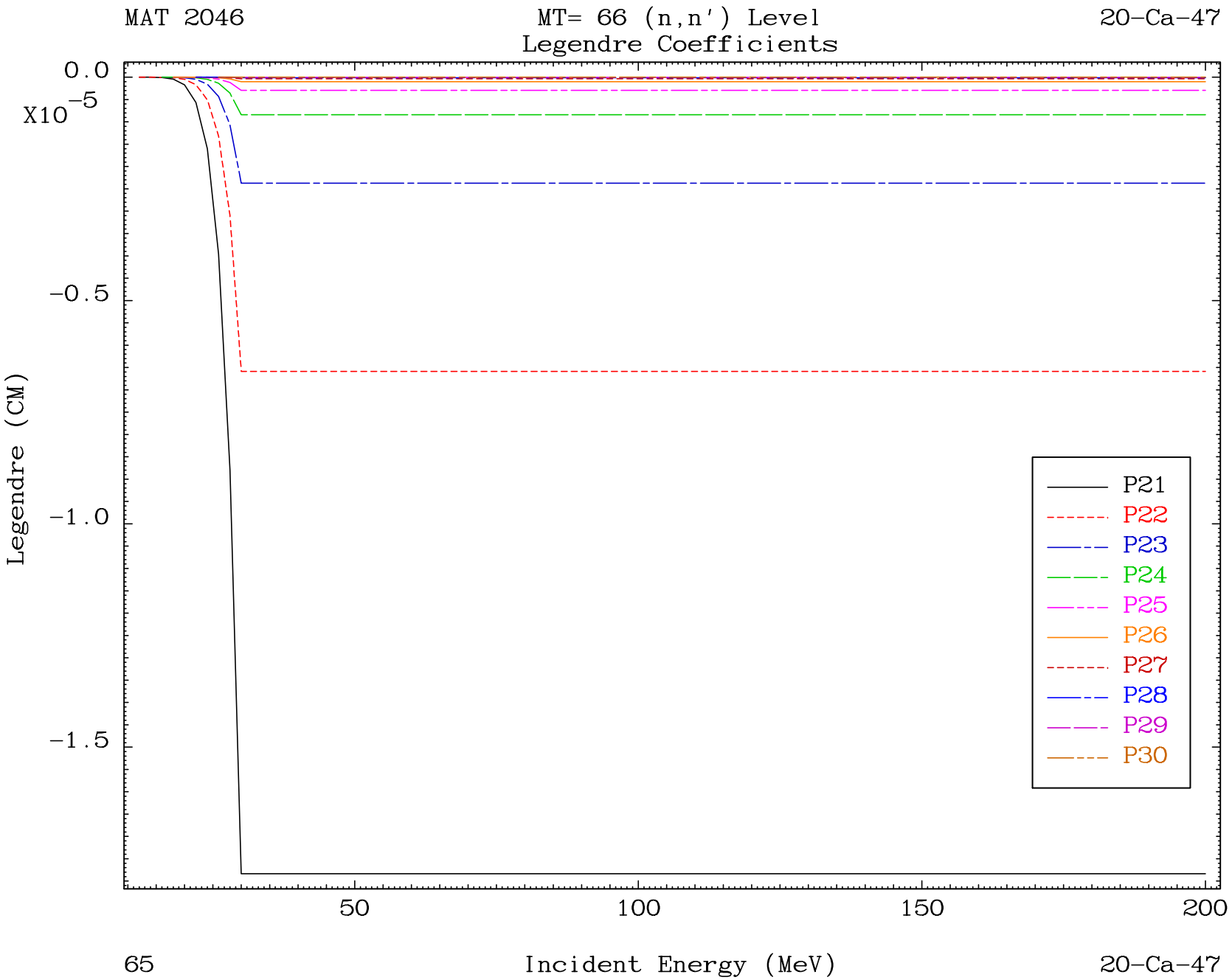

MAT 2046
MT= 65 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
50
100
150
200
60
Incident Energy (MeV)
20-Ca-47

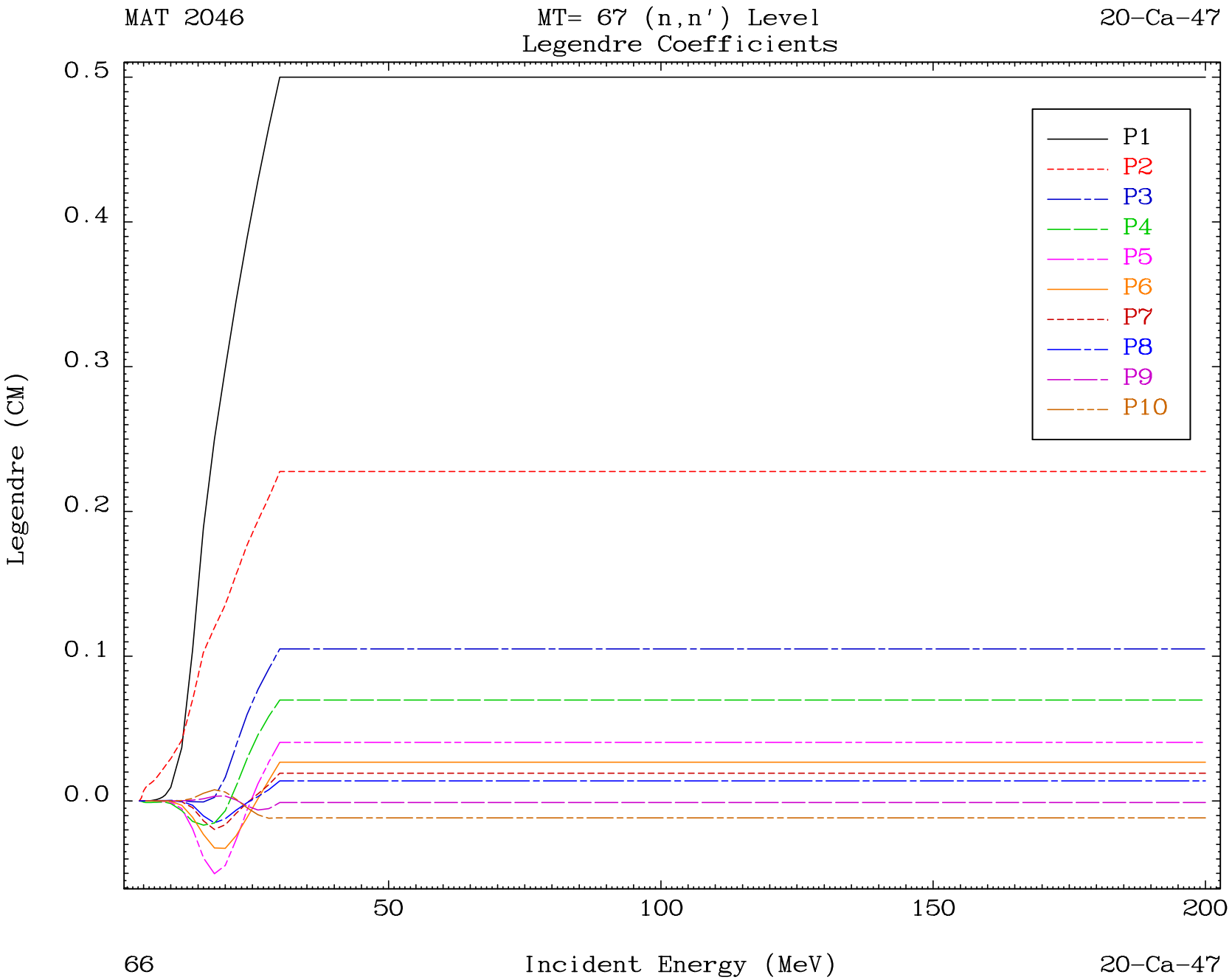

MAT 2046
MT= 65 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
50
100
150
200
61
Incident Energy (MeV)
20-Ca-47

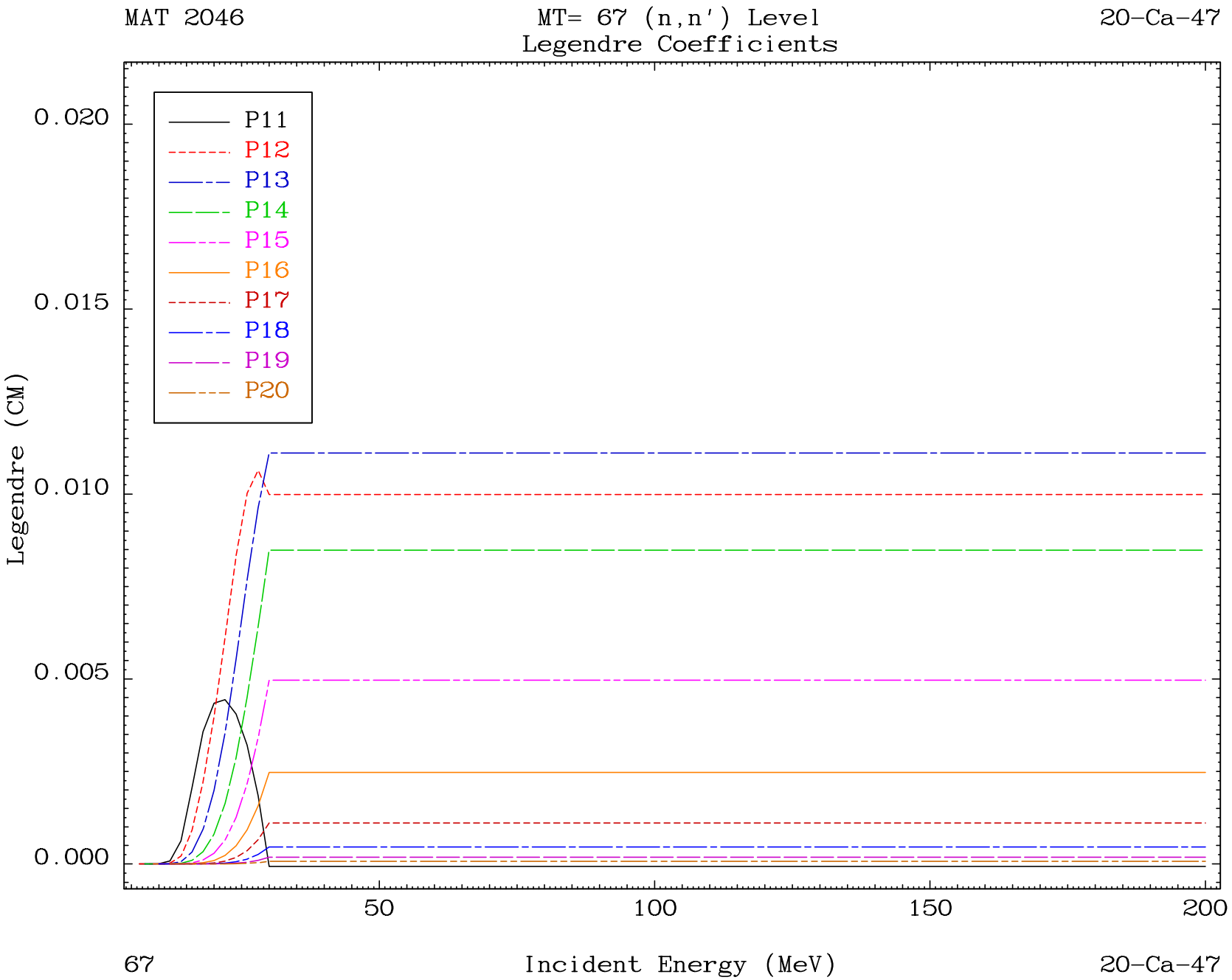

MAT 2046
MT= 65 (n,n') Level
Legendre Coefficients
20-Ca-47
0.0
X10^-5
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
62
Incident Energy (MeV)
20-Ca-47
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

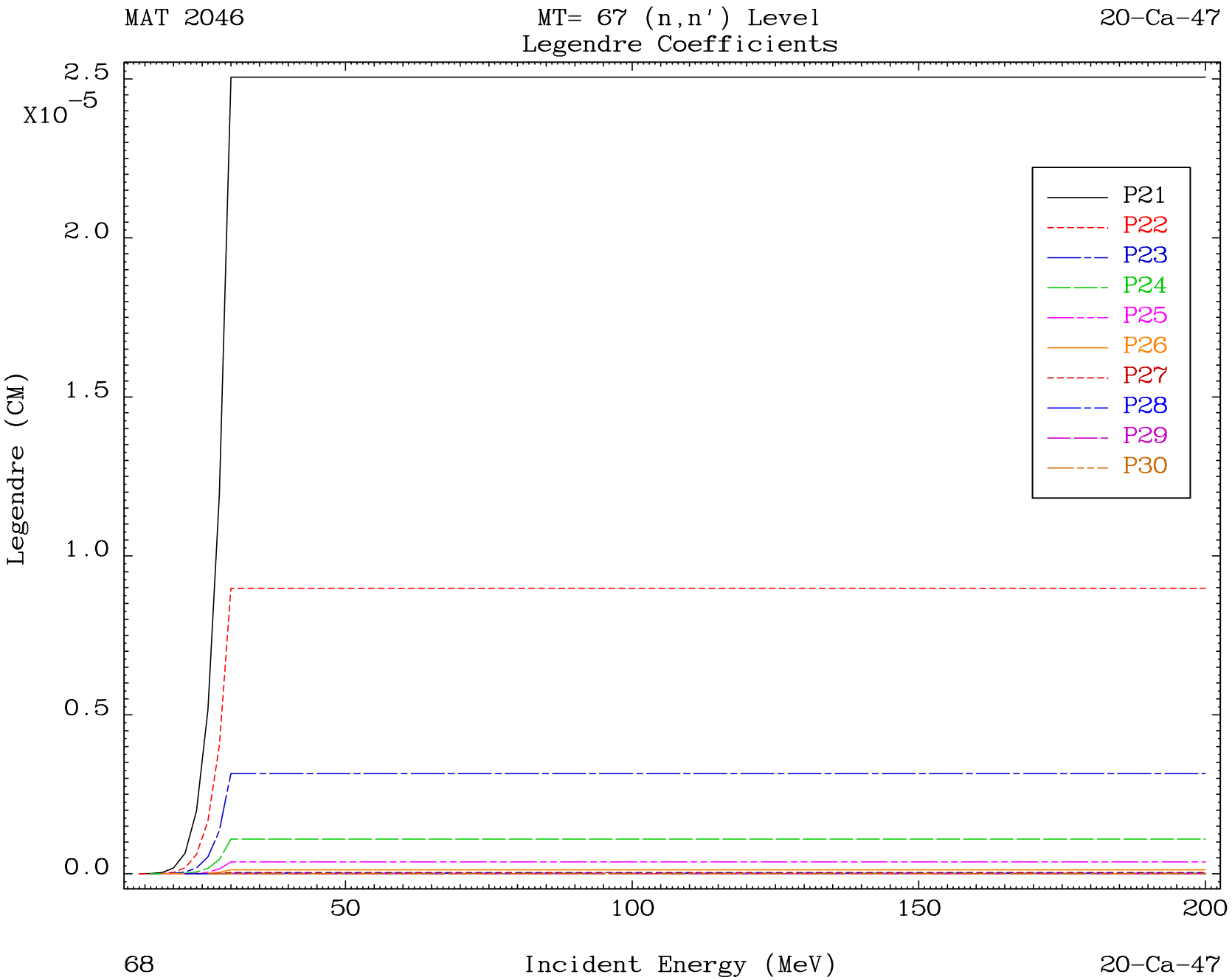

MAT 2046
MT= 66 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
63
Incident Energy (MeV)
20-Ca-47

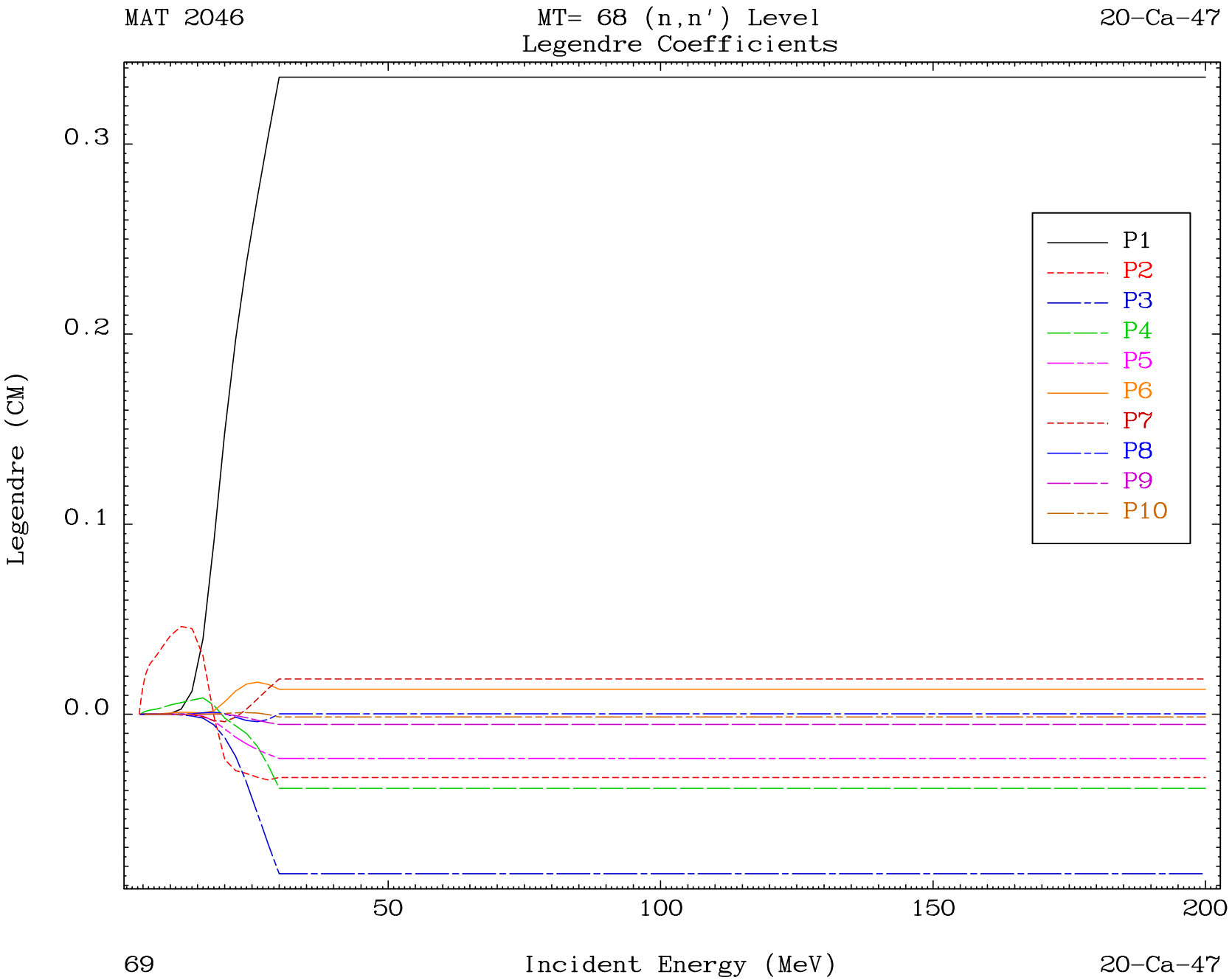

MAT 2046
MT= 66 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
50
100
150
200
64
Incident Energy (MeV)
20-Ca-47

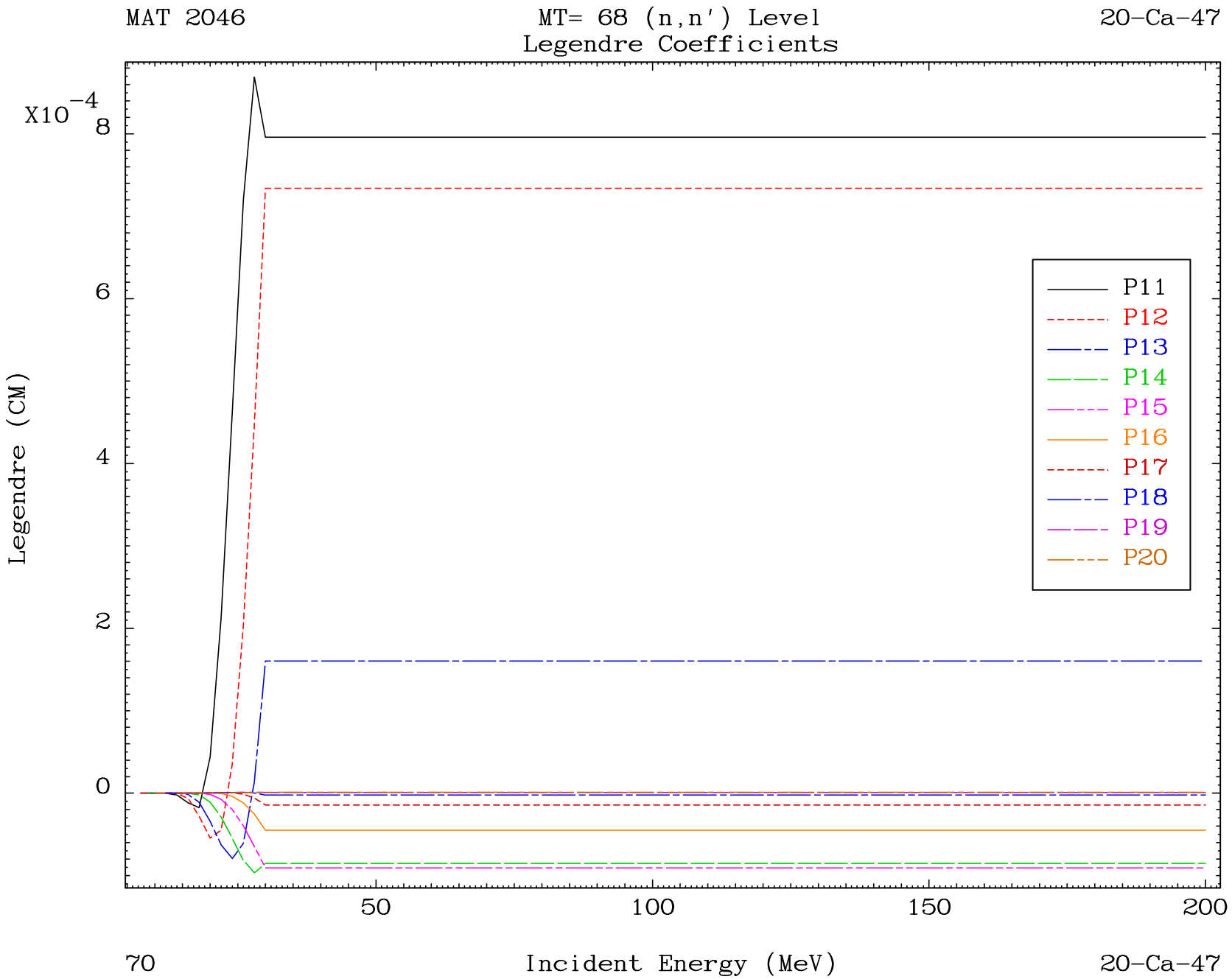

MAT 2046
MT= 66 (n,n') Level
Legendre Coefficients
20-Ca-47
0.0
X10^-5
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
65
Incident Energy (MeV)
20-Ca-47
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

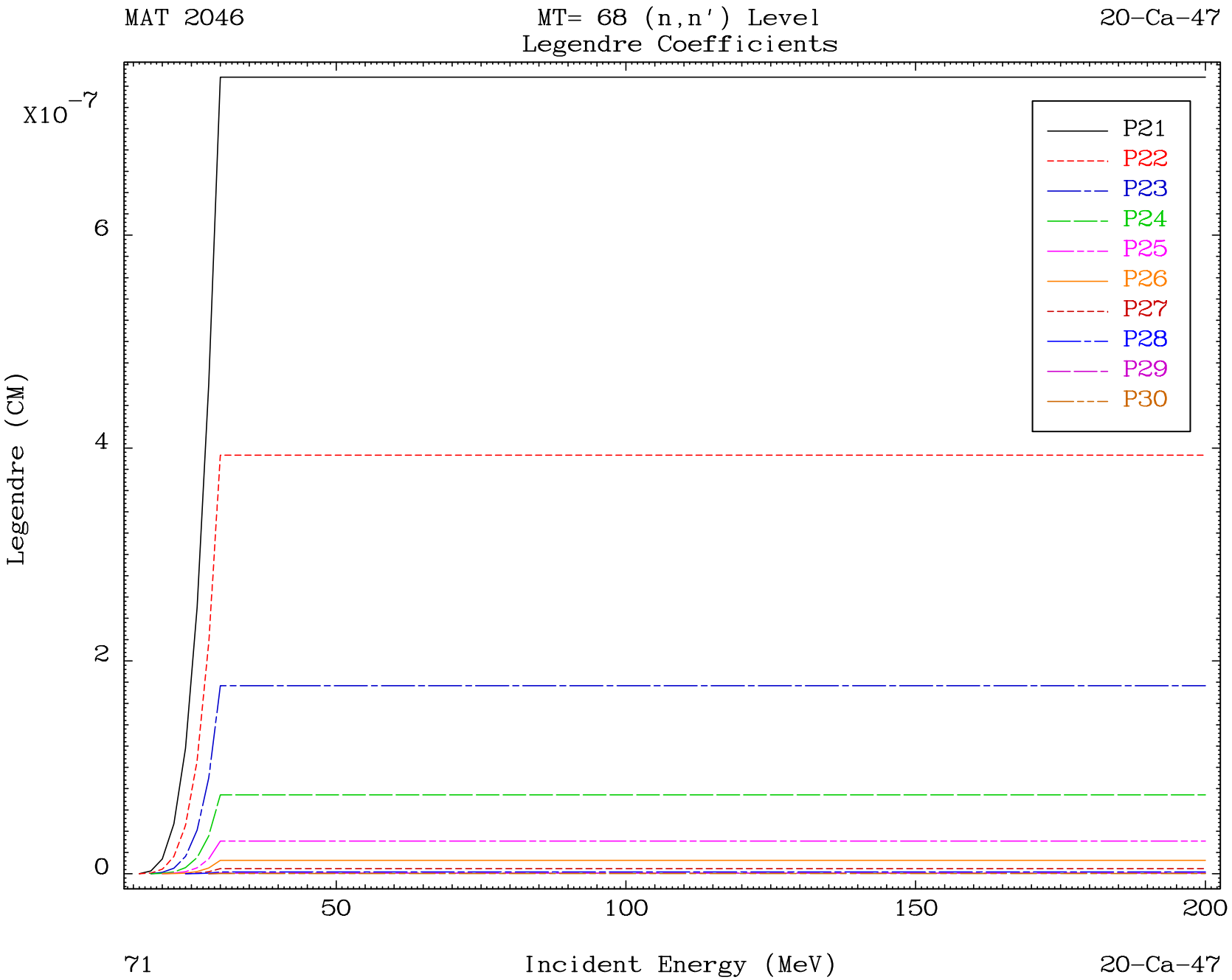

MAT 2046
MT= 67 (n,n') Level
Legendre Coefficients
20-Ca-47
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
50
100
150
200
66
Incident Energy (MeV)
20-Ca-47

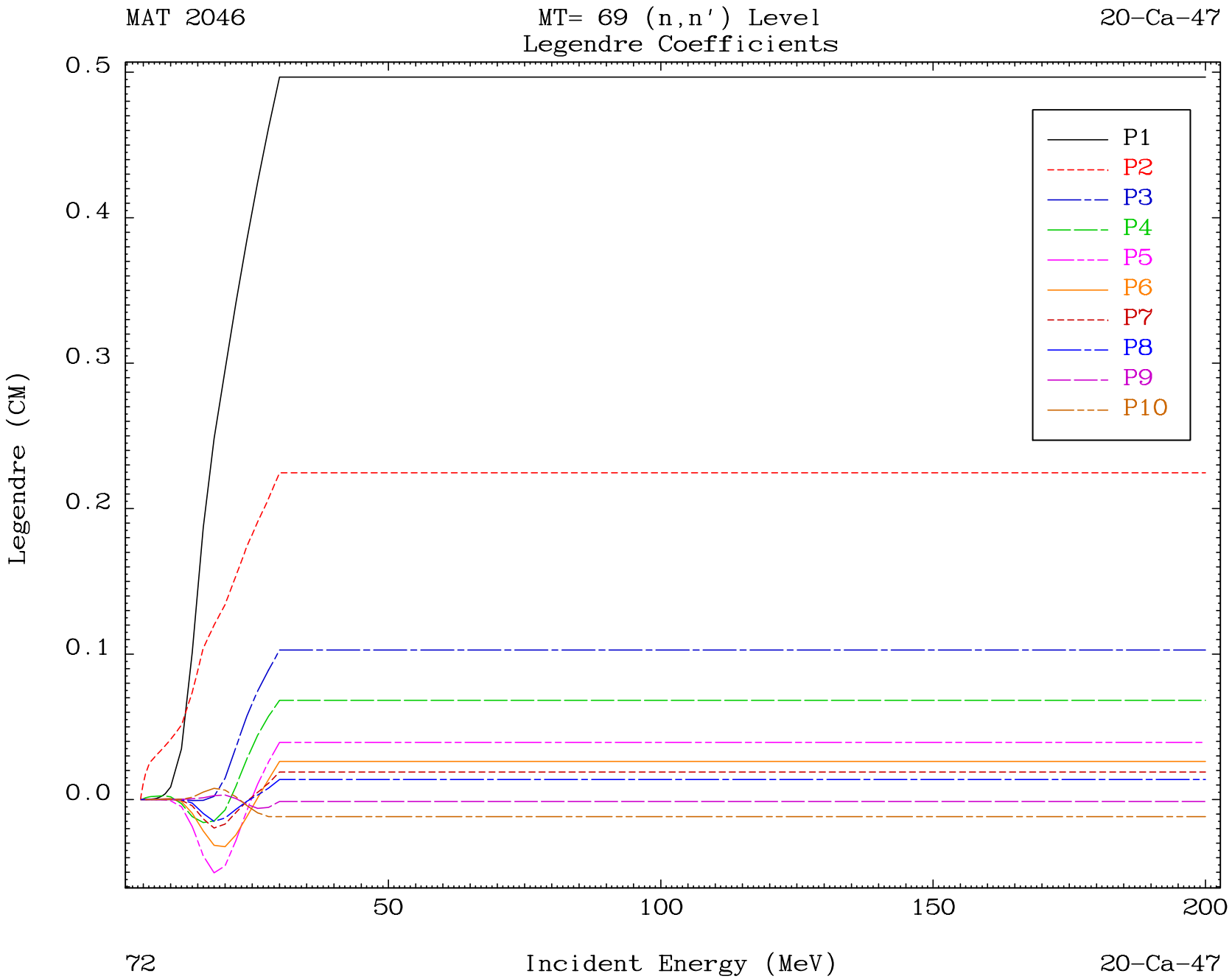

MAT 2046
MT= 67 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
67
Incident Energy (MeV)
20-Ca-47

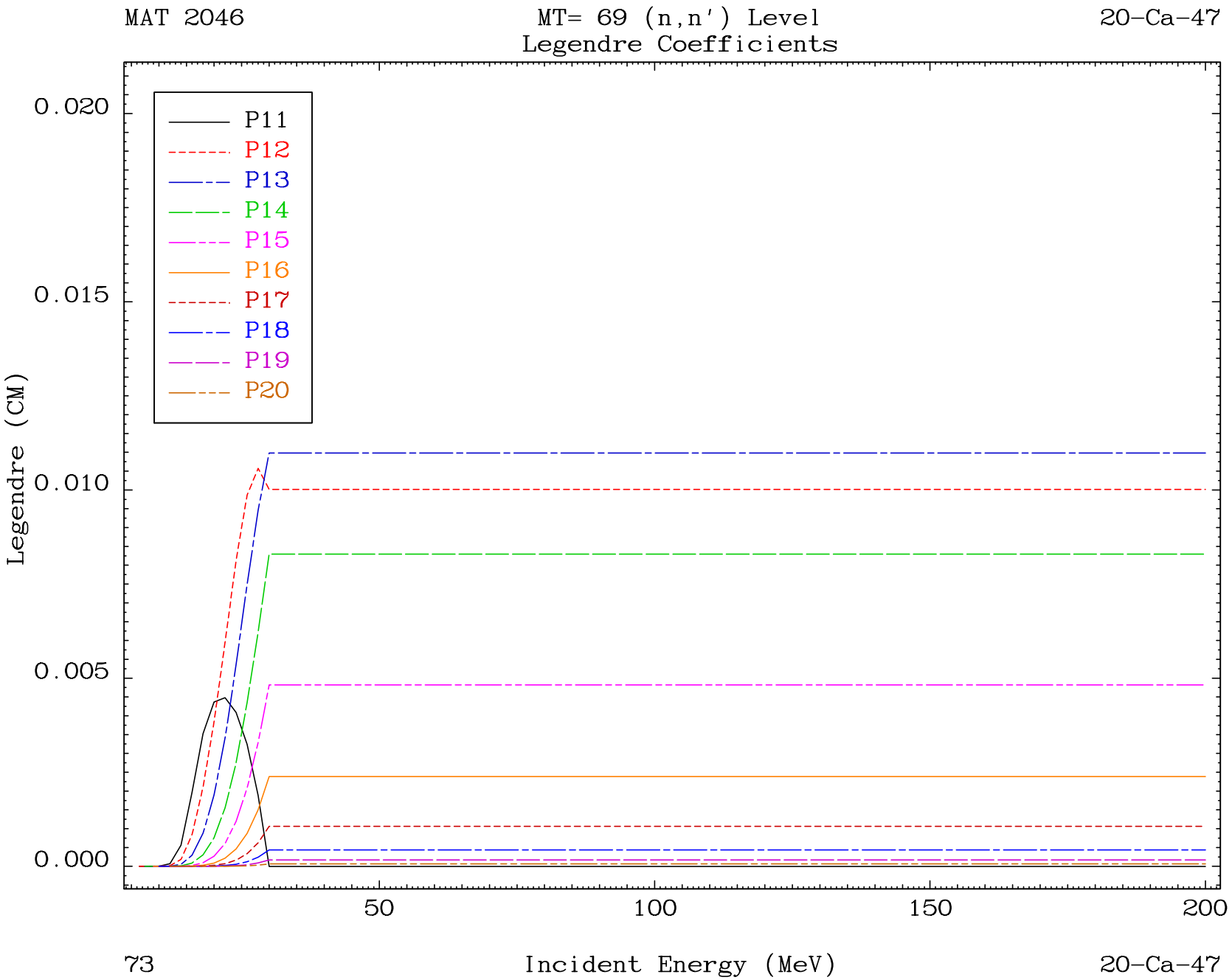

MAT 2046
MT= 67 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -5
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
68
Incident Energy (MeV)
20-Ca-47
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

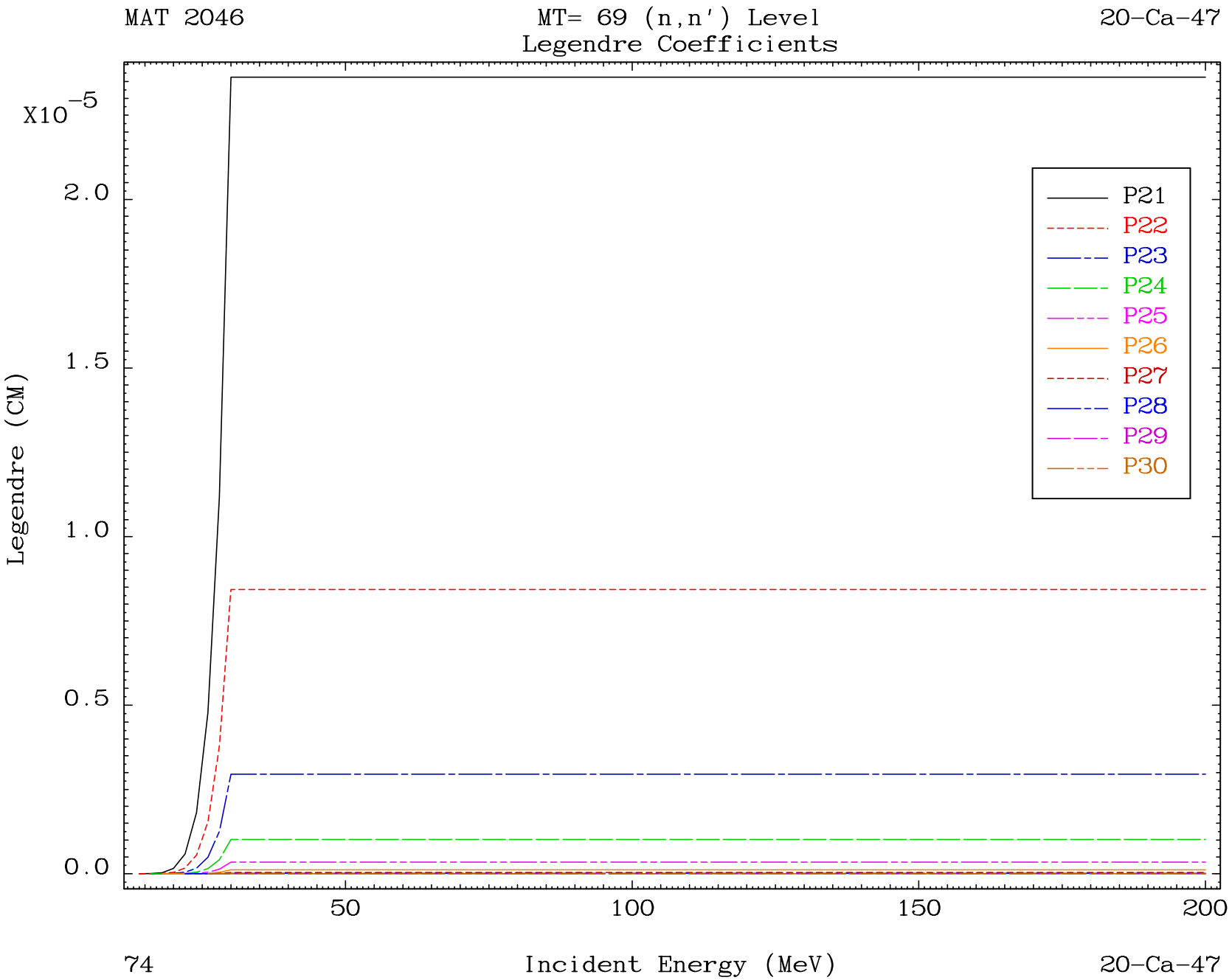

MAT 2046
MT= 68 (n,n') Level
Legendre Coefficients
20-Ca-47
0.3
0.2
0.1
0.0
Legendre (CM)
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
69
Incident Energy (MeV)
20-Ca-47

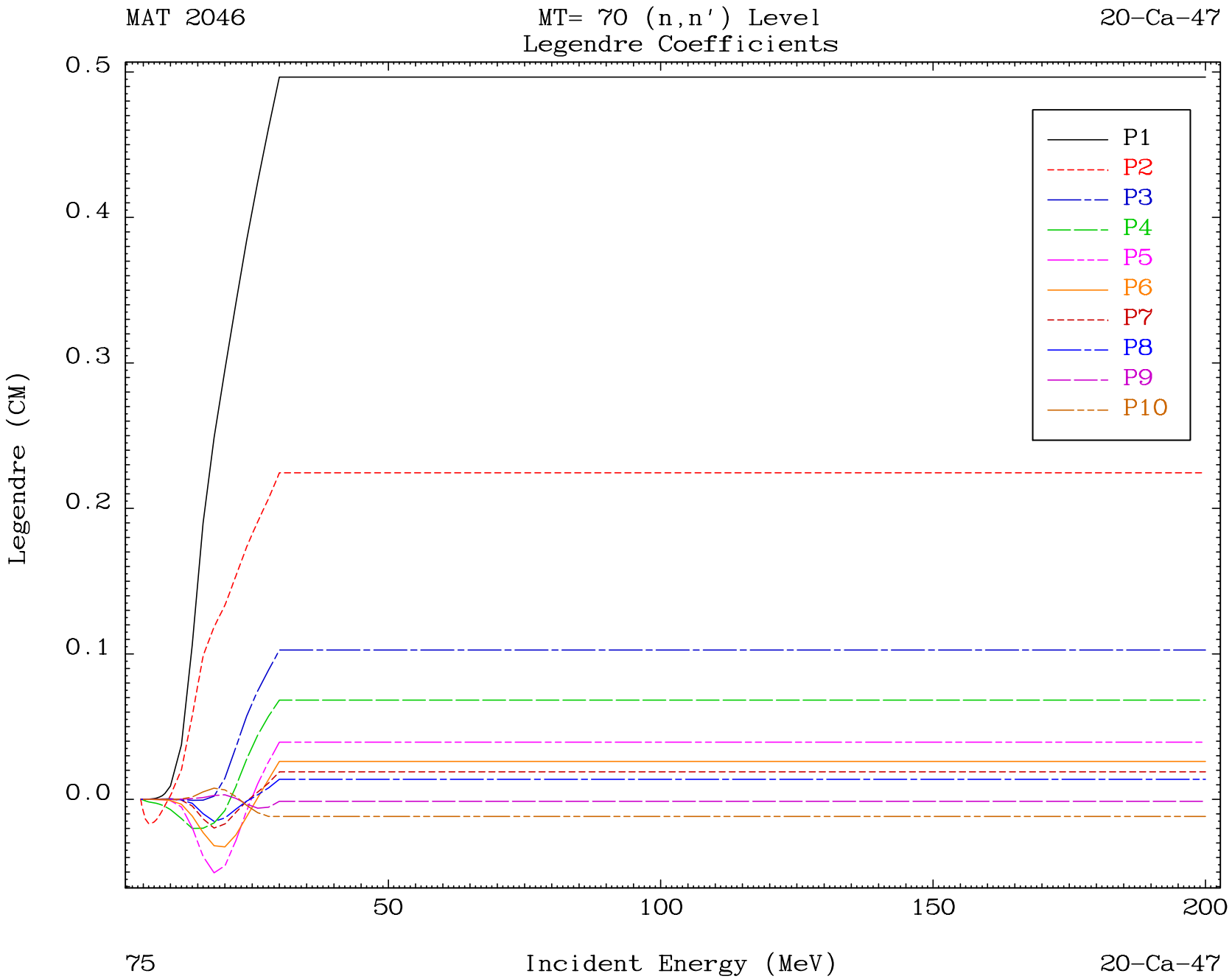

MAT 2046
MT= 68 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -4
8
6
4
2
0
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
50
100
150
200
70
Incident Energy (MeV)
20-Ca-47

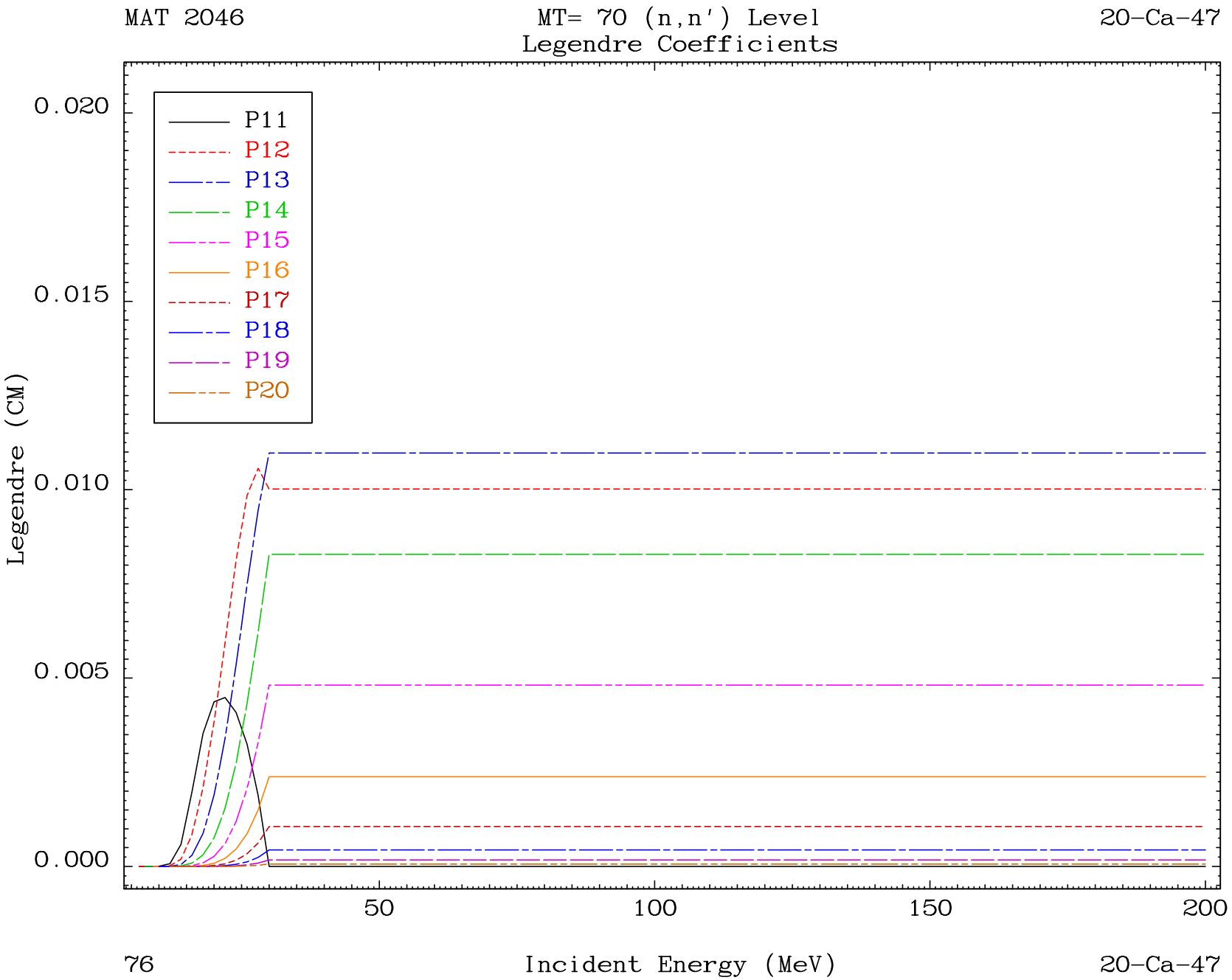

MAT 2046
MT= 68 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-7
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
71
Incident Energy (MeV)
20-Ca-47

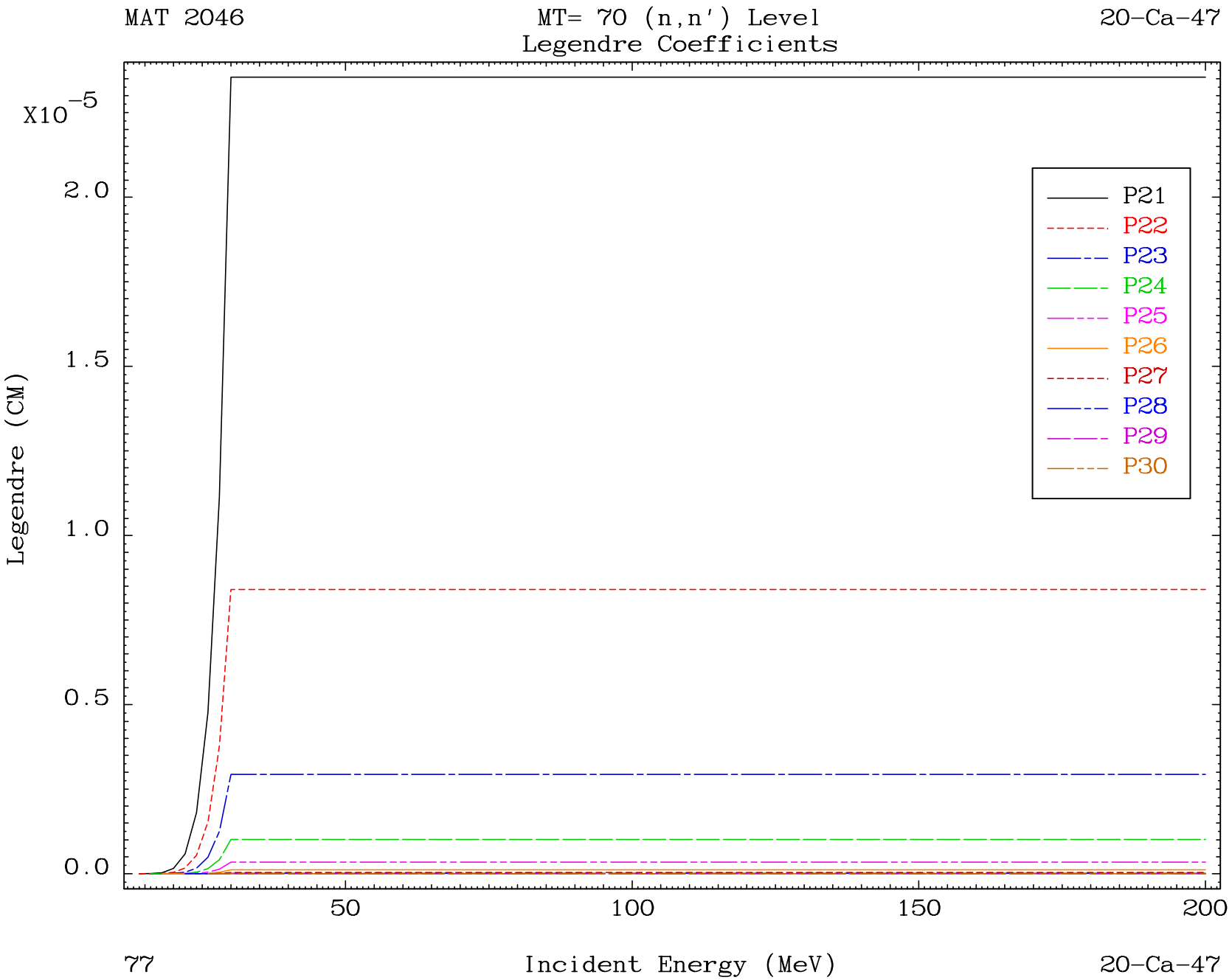

MAT 2046
MT= 69 (n,n') Level
Legendre Coefficients
20-Ca-47
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
50
100
150
200
72
Incident Energy (MeV)
20-Ca-47

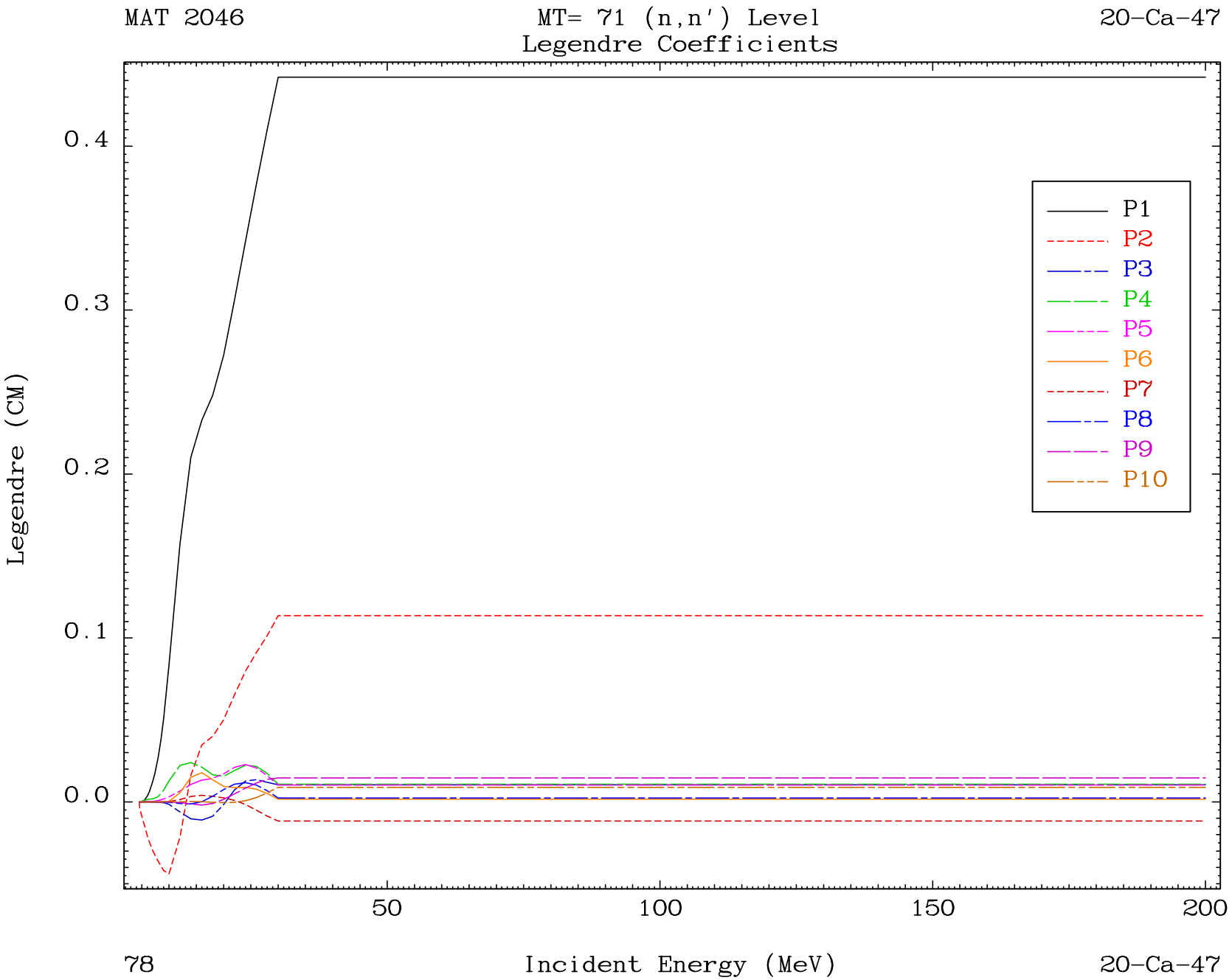

MAT 2046
MT= 69 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
73
Incident Energy (MeV)
20-Ca-47

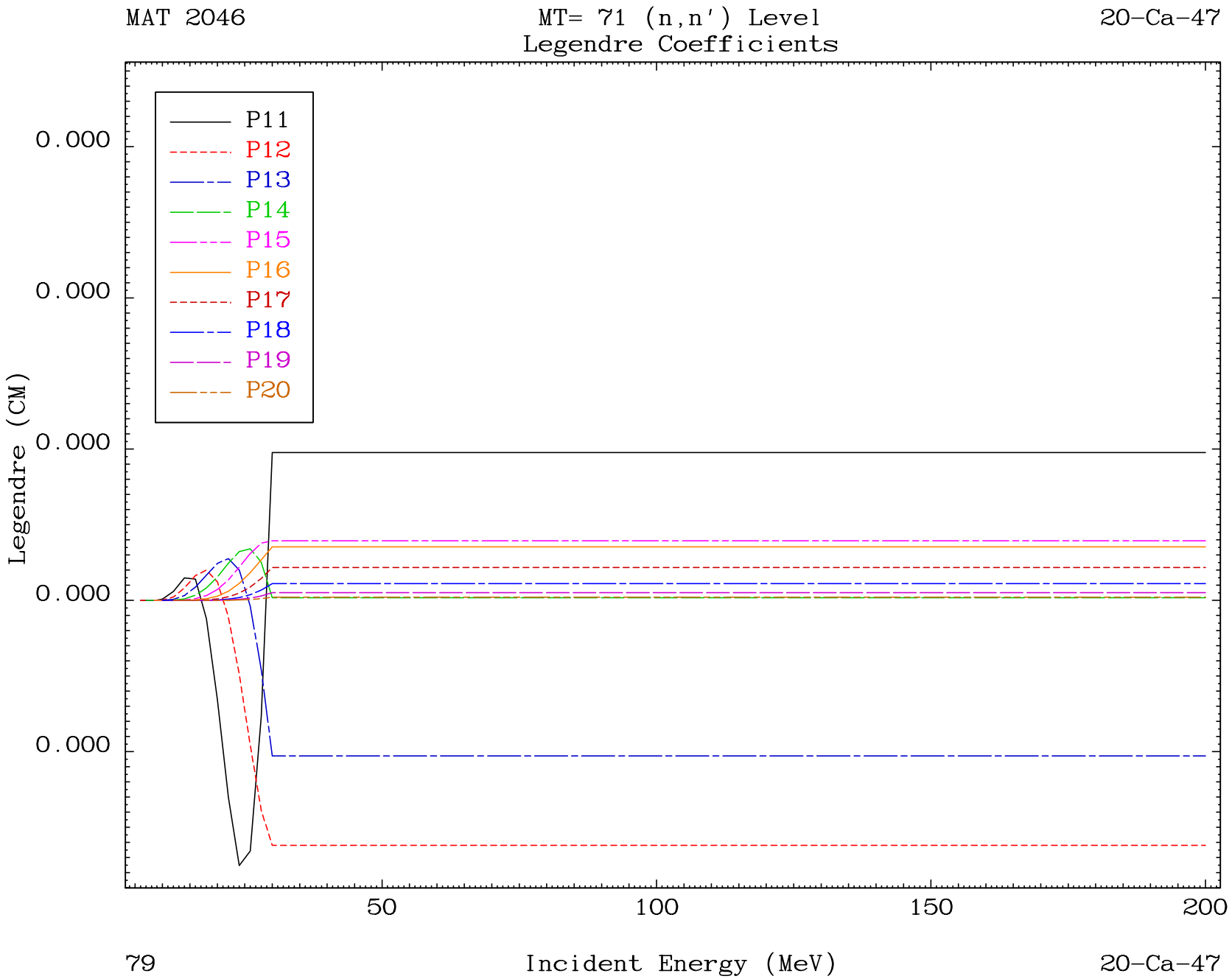

MAT 2046
MT= 69 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
74
Incident Energy (MeV)
20-Ca-47

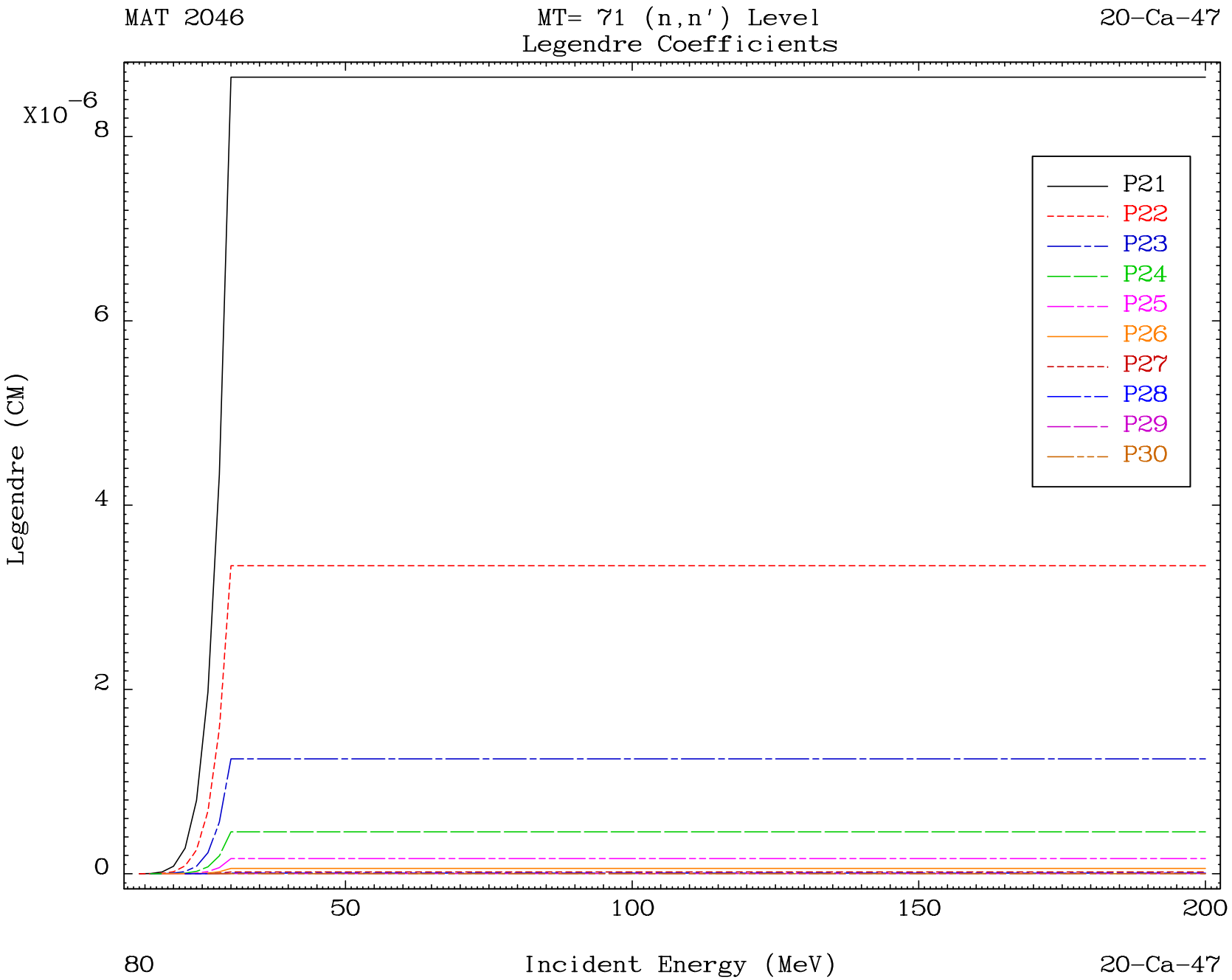

MAT 2046
MT= 70 (n,n') Level
Legendre Coefficients
20-Ca-47
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
50
100
150
200
75
Incident Energy (MeV)
20-Ca-47

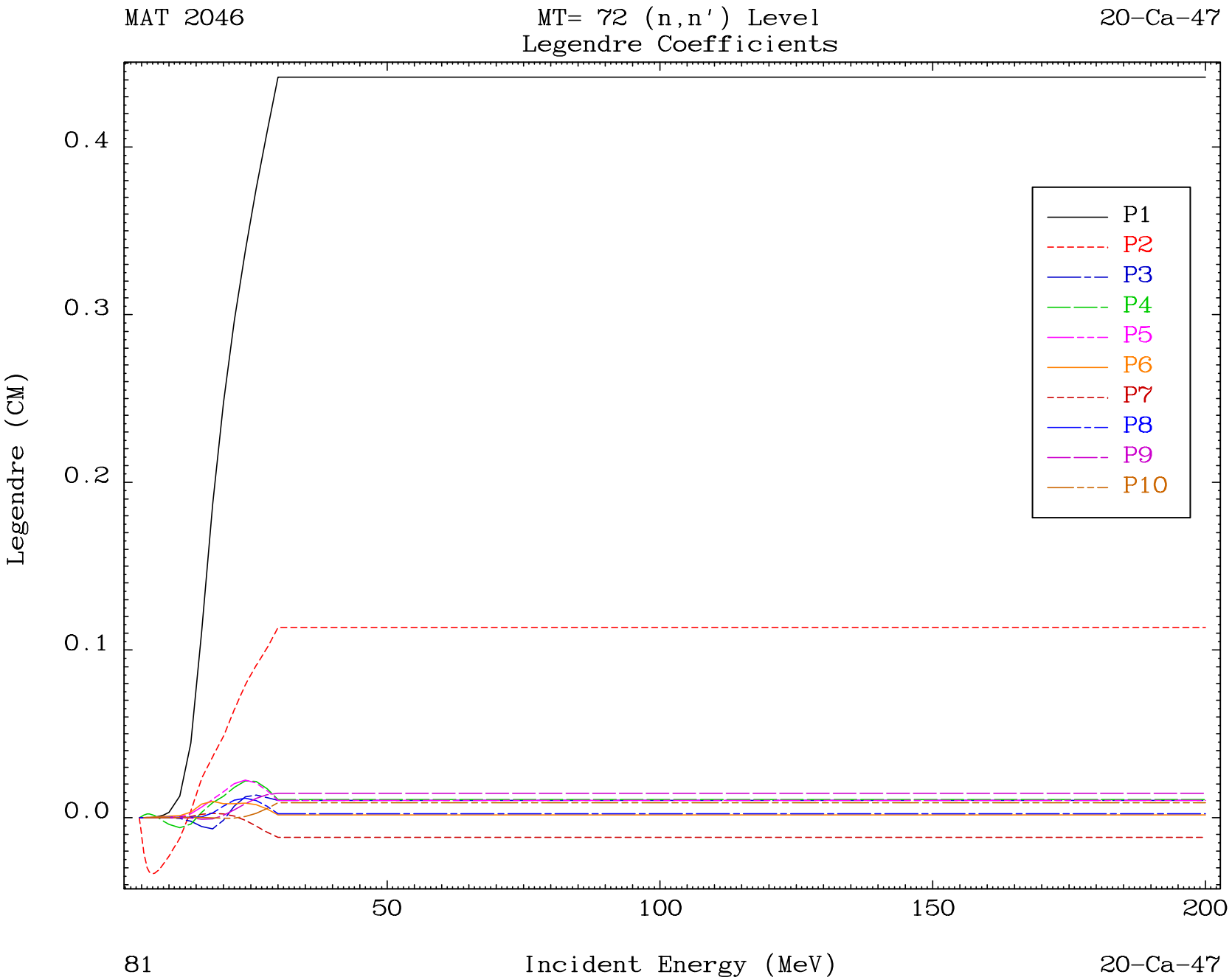

MAT 2046
MT= 70 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
76
Incident Energy (MeV)
20-Ca-47

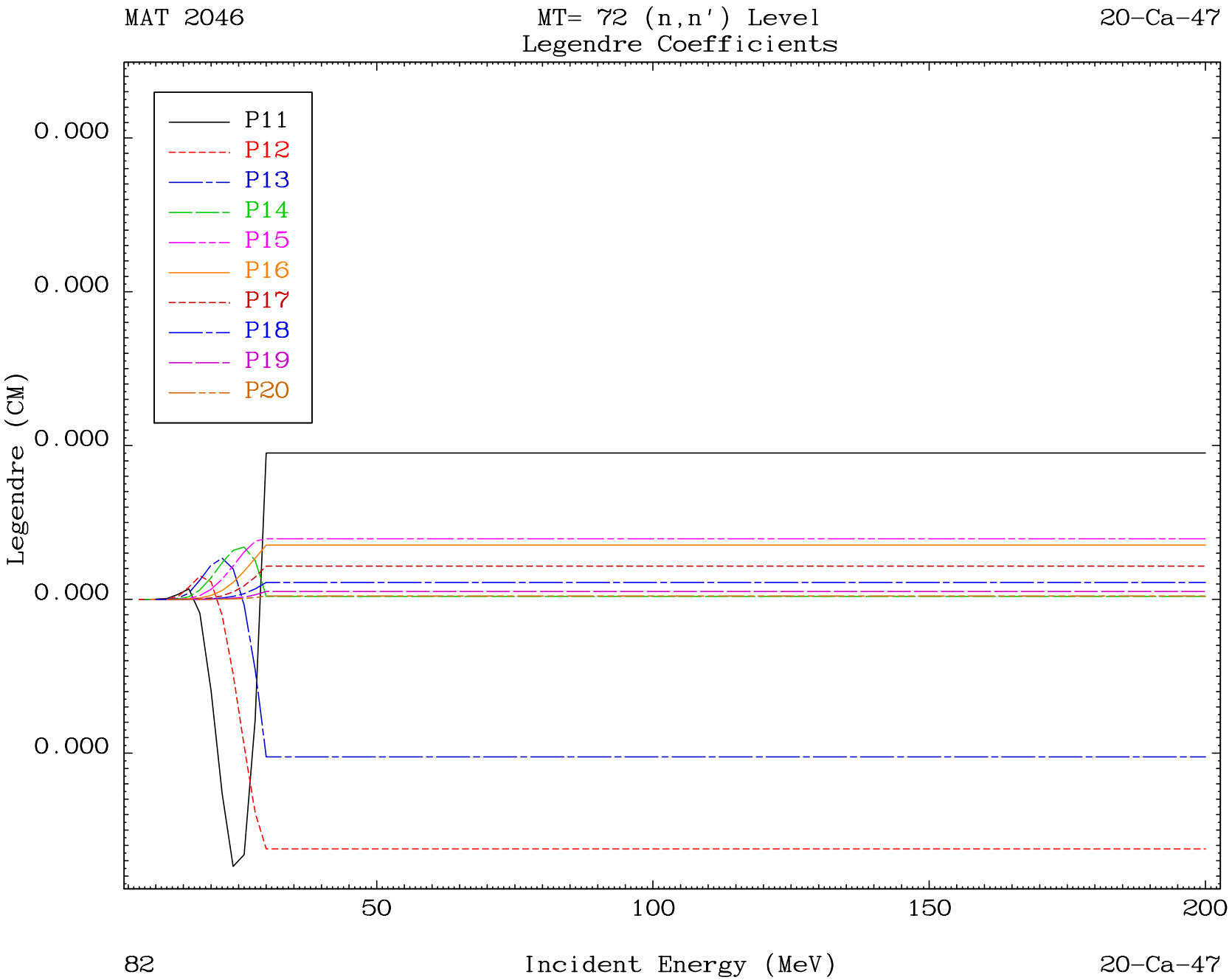

MAT 2046
MT= 70 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
77
Incident Energy (MeV)
20-Ca-47

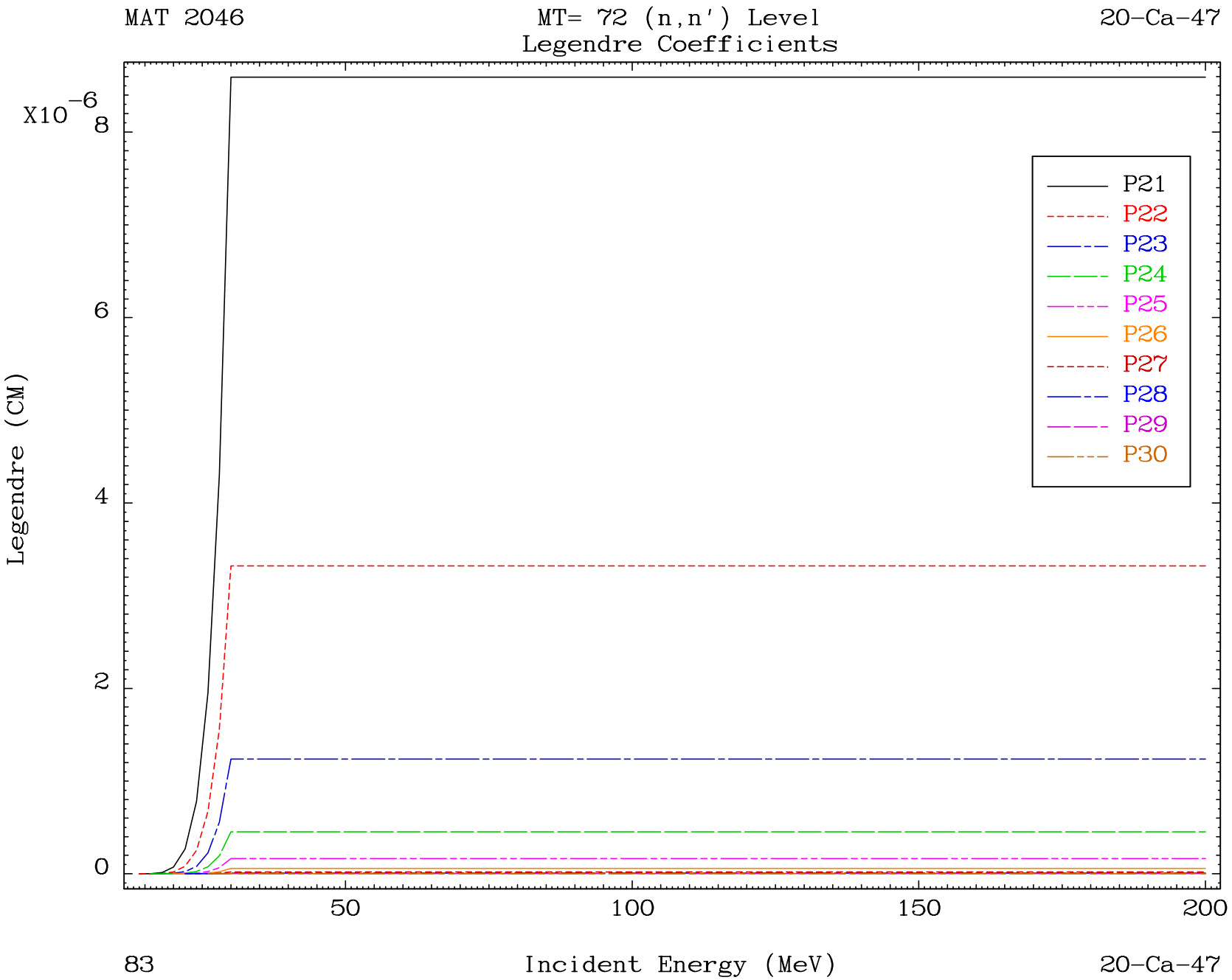

MAT 2046
MT= 71 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
78
Incident Energy (MeV)
20-Ca-47

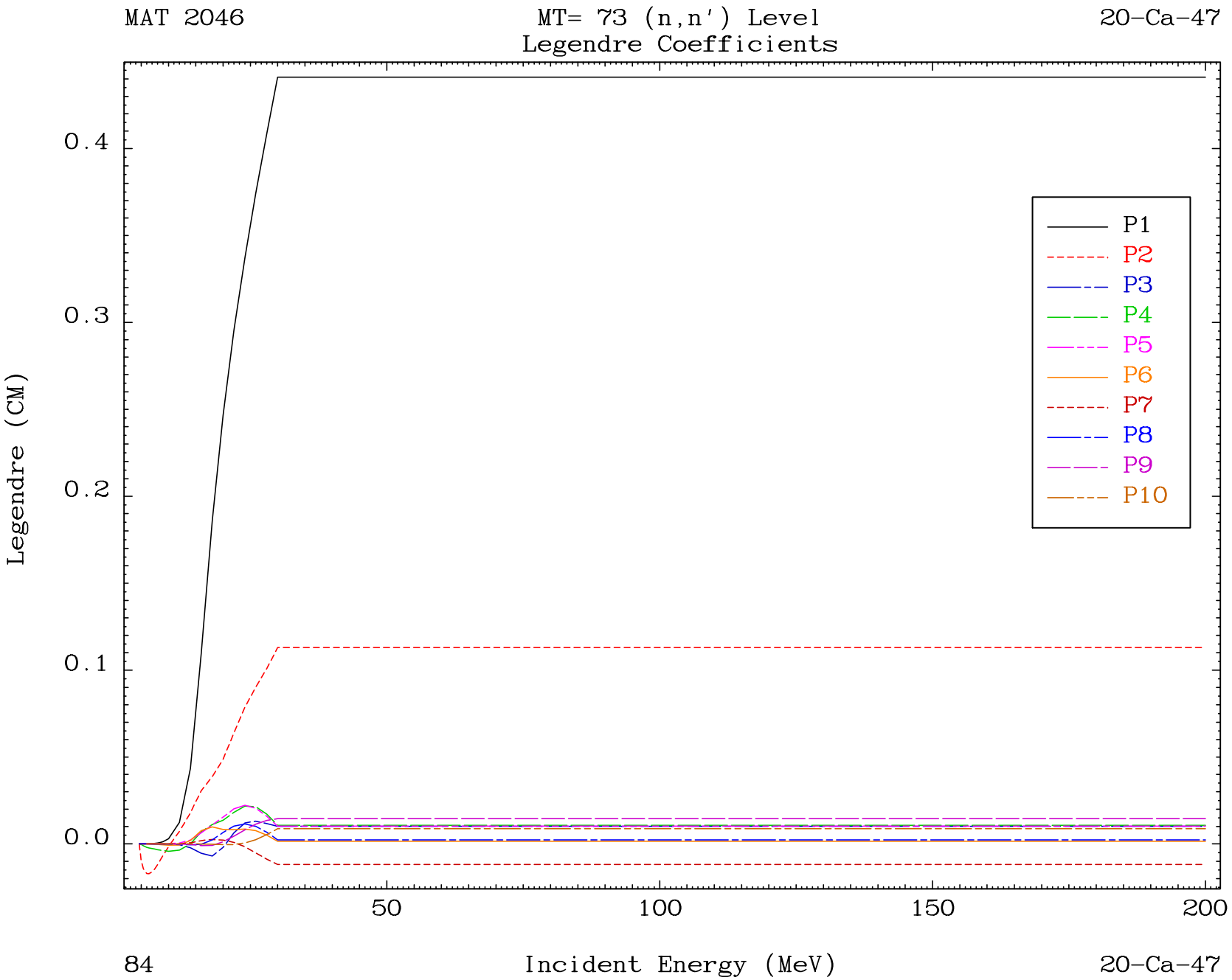

MAT 2046
MT= 71 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
79
Incident Energy (MeV)
20-Ca-47

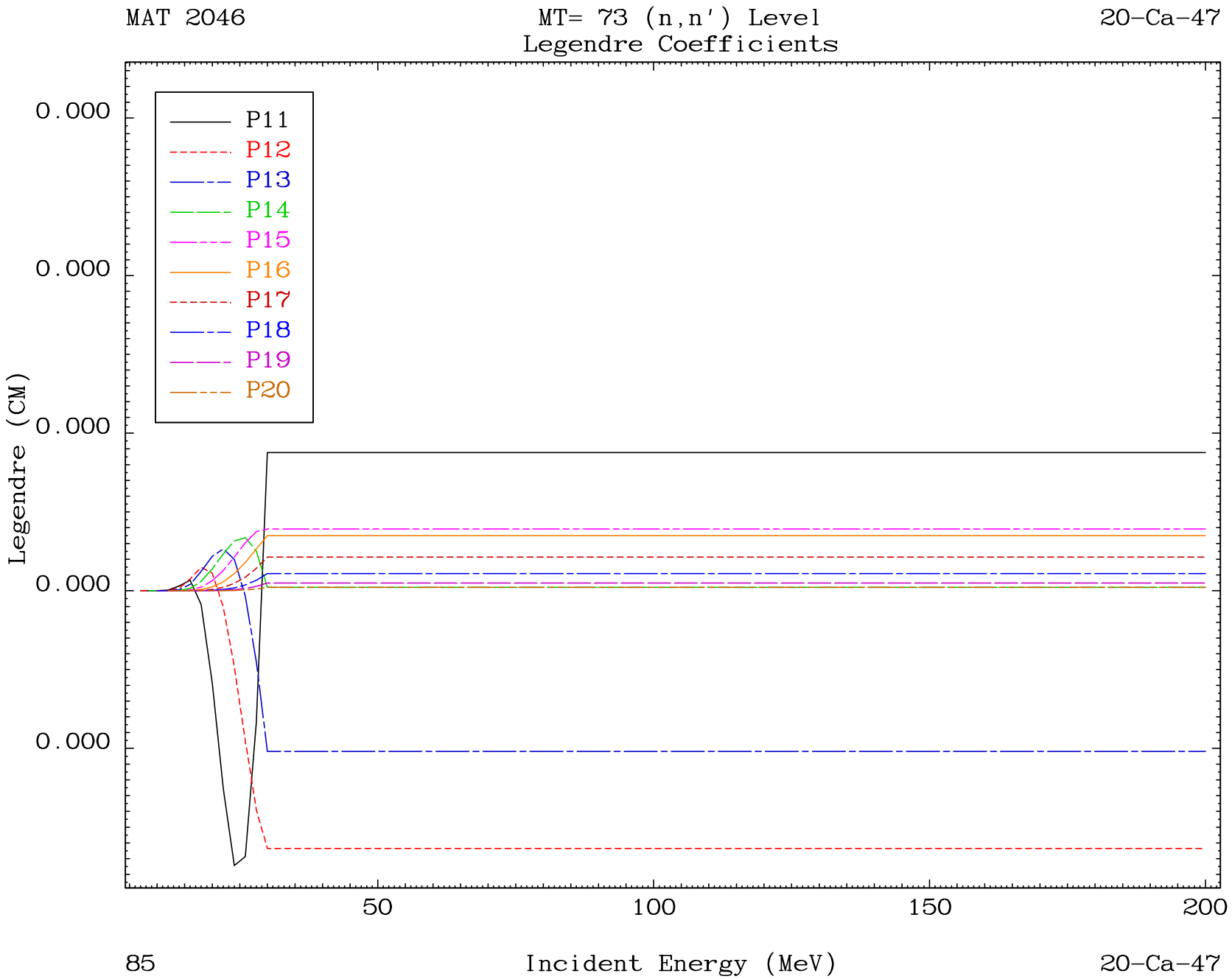

MAT 2046
MT= 71 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -6
8
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
80
Incident Energy (MeV)
20-Ca-47

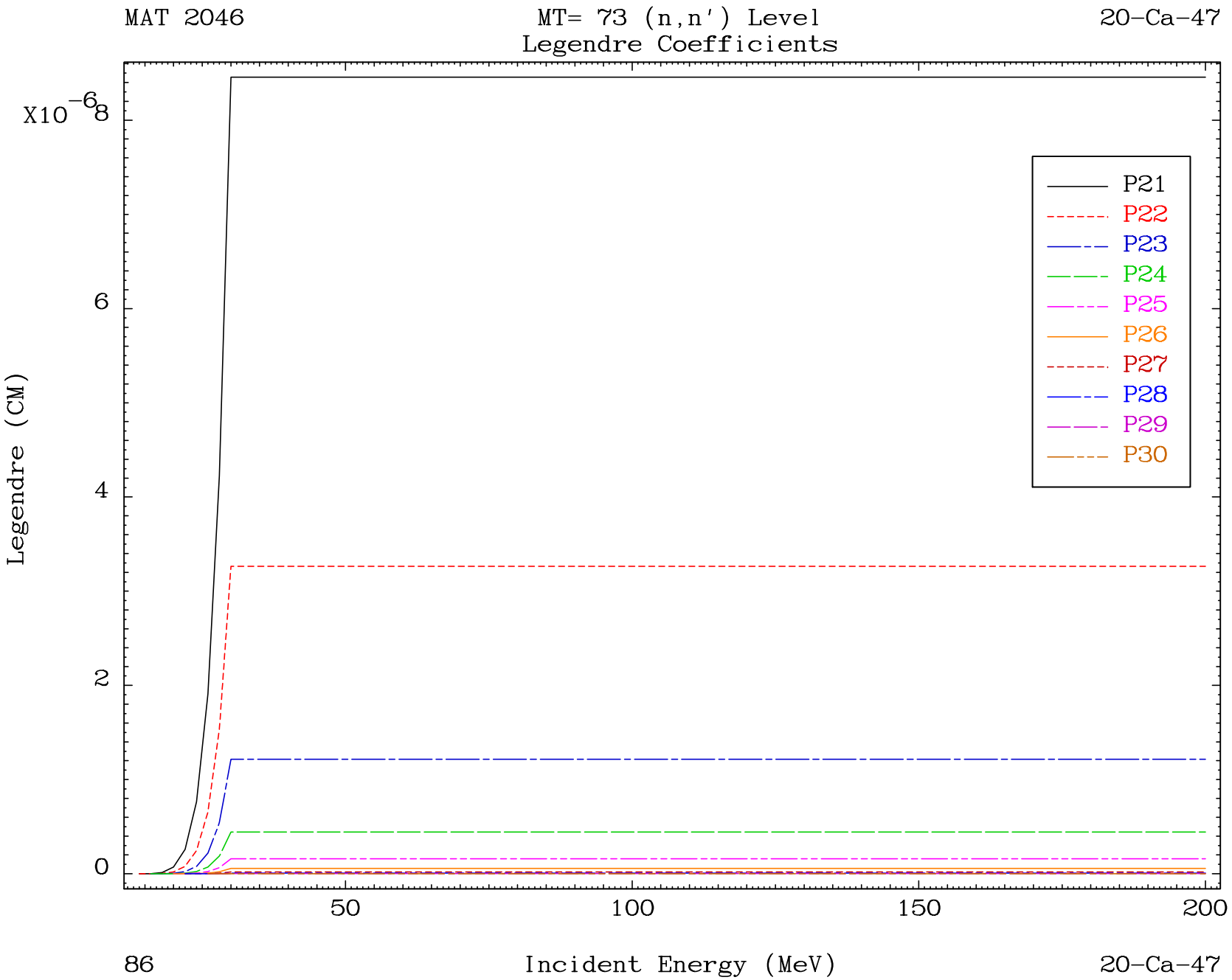

MAT 2046
MT= 72 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
81
Incident Energy (MeV)
20-Ca-47

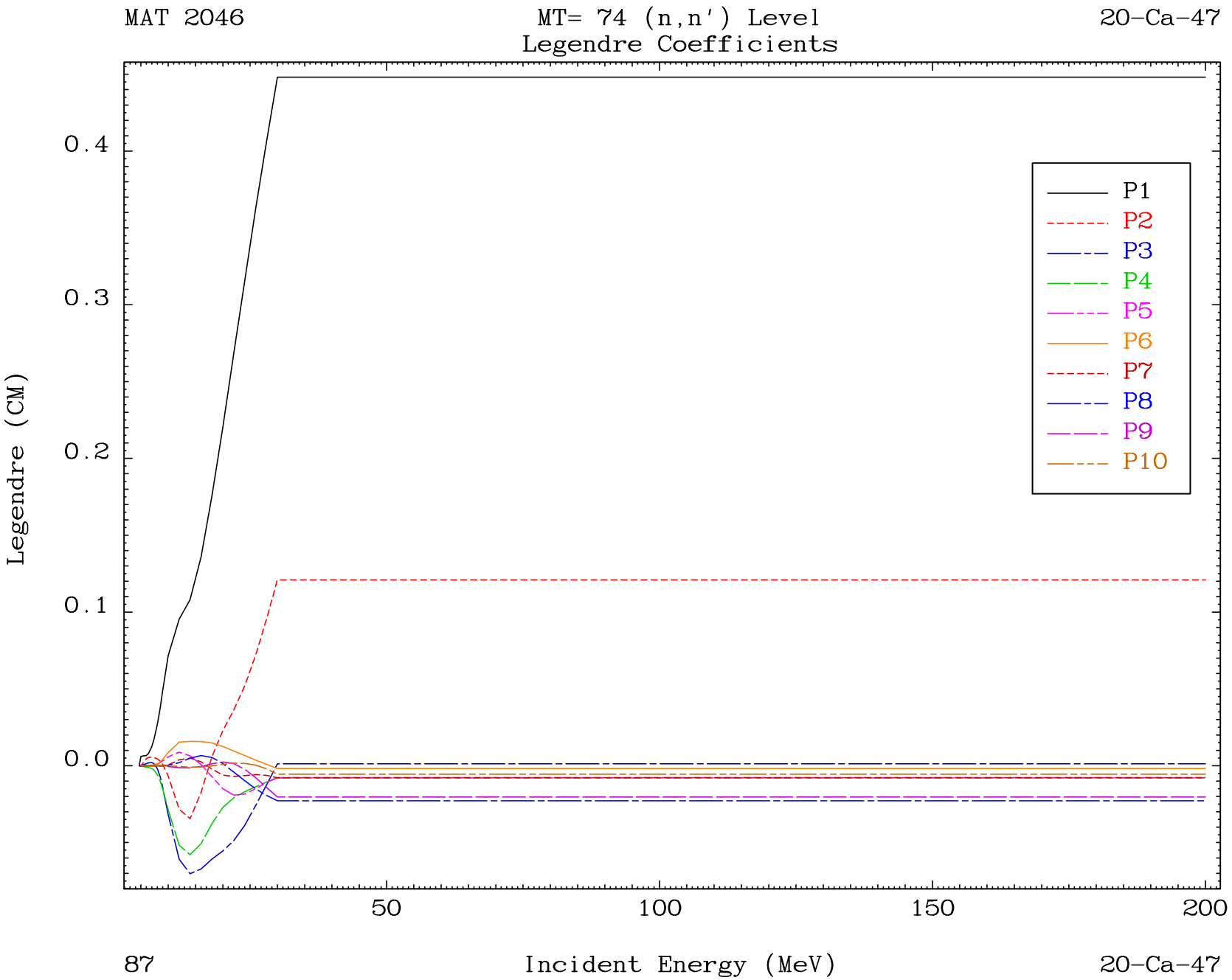

MAT 2046
MT= 72 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
82
Incident Energy (MeV)
20-Ca-47

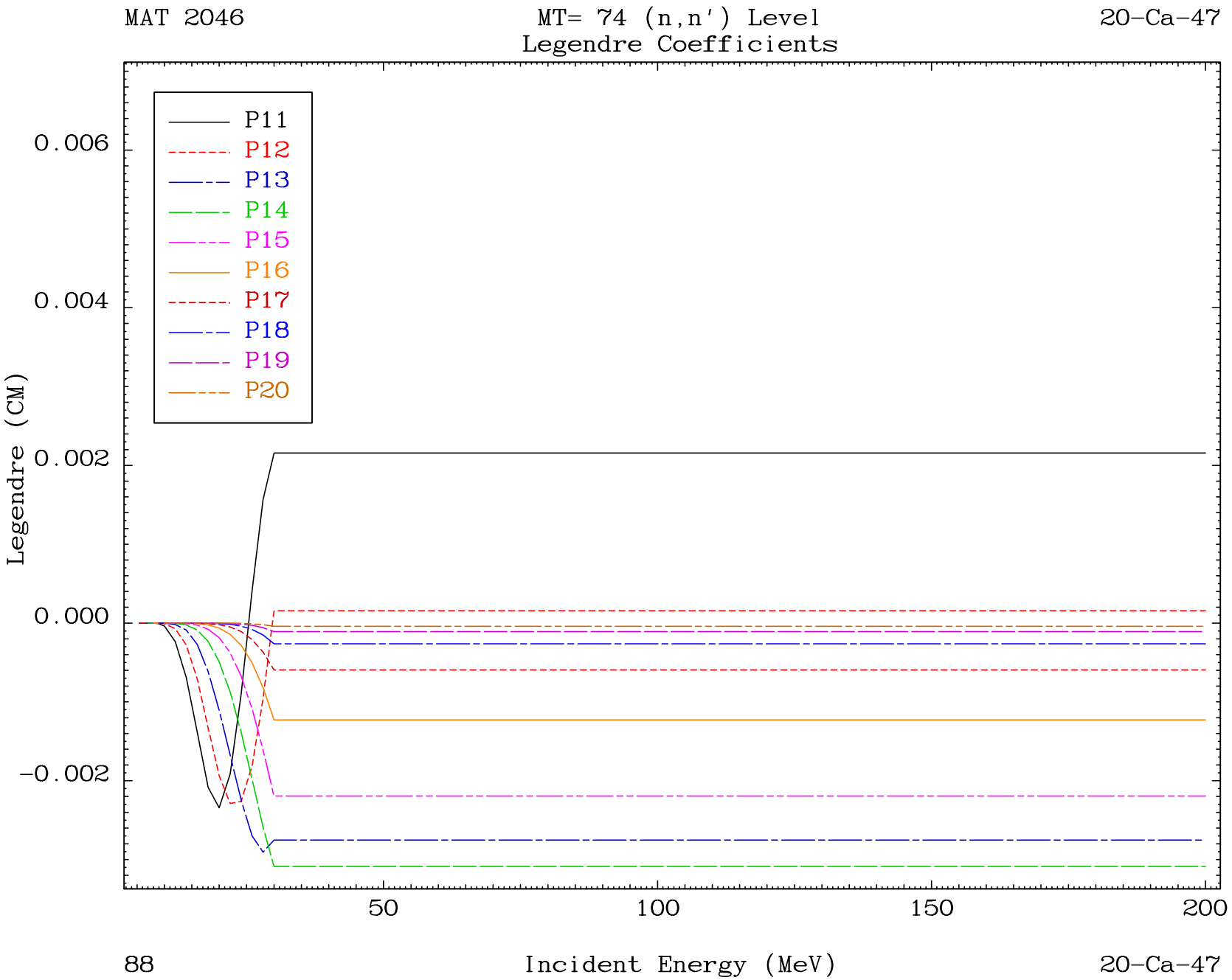

MAT 2046
MT= 72 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -6
8
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
83
Incident Energy (MeV)
20-Ca-47

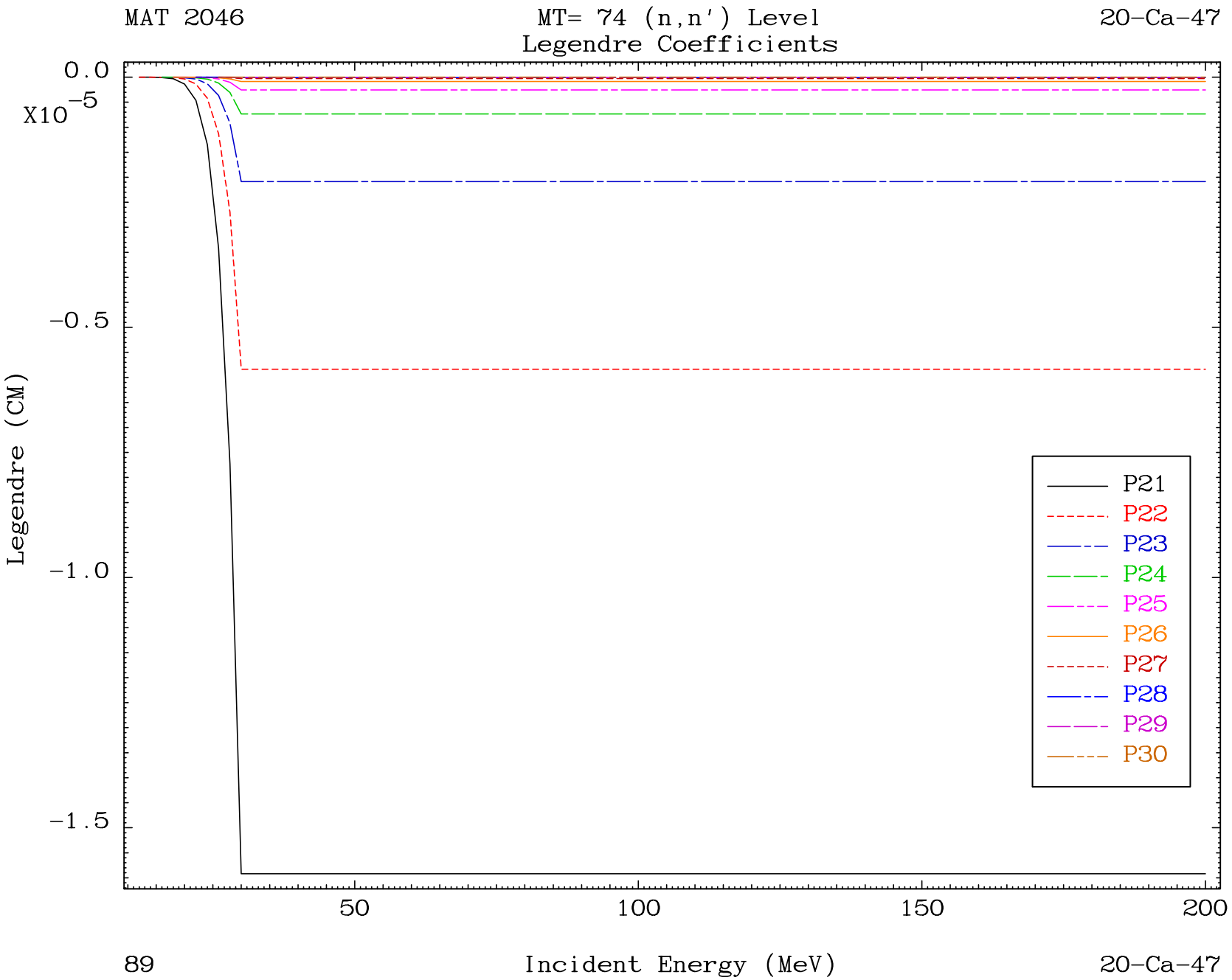

MAT 2046
MT= 73 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
84
Incident Energy (MeV)
20-Ca-47

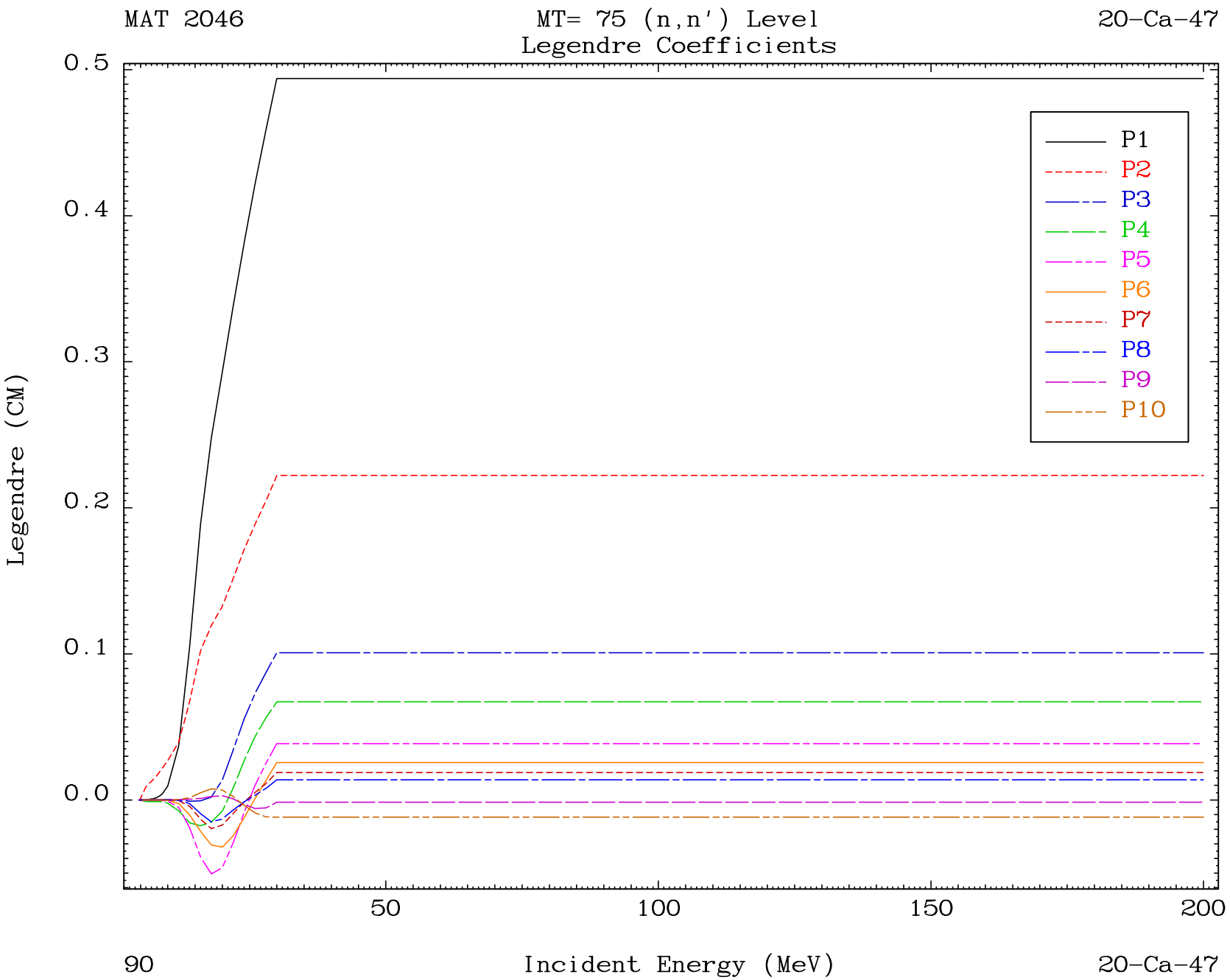

MAT 2046
MT= 73 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.000
0.000
0.000
0.000
Legendre (CM)
50
100
150
200
85
Incident Energy (MeV)
20-Ca-47

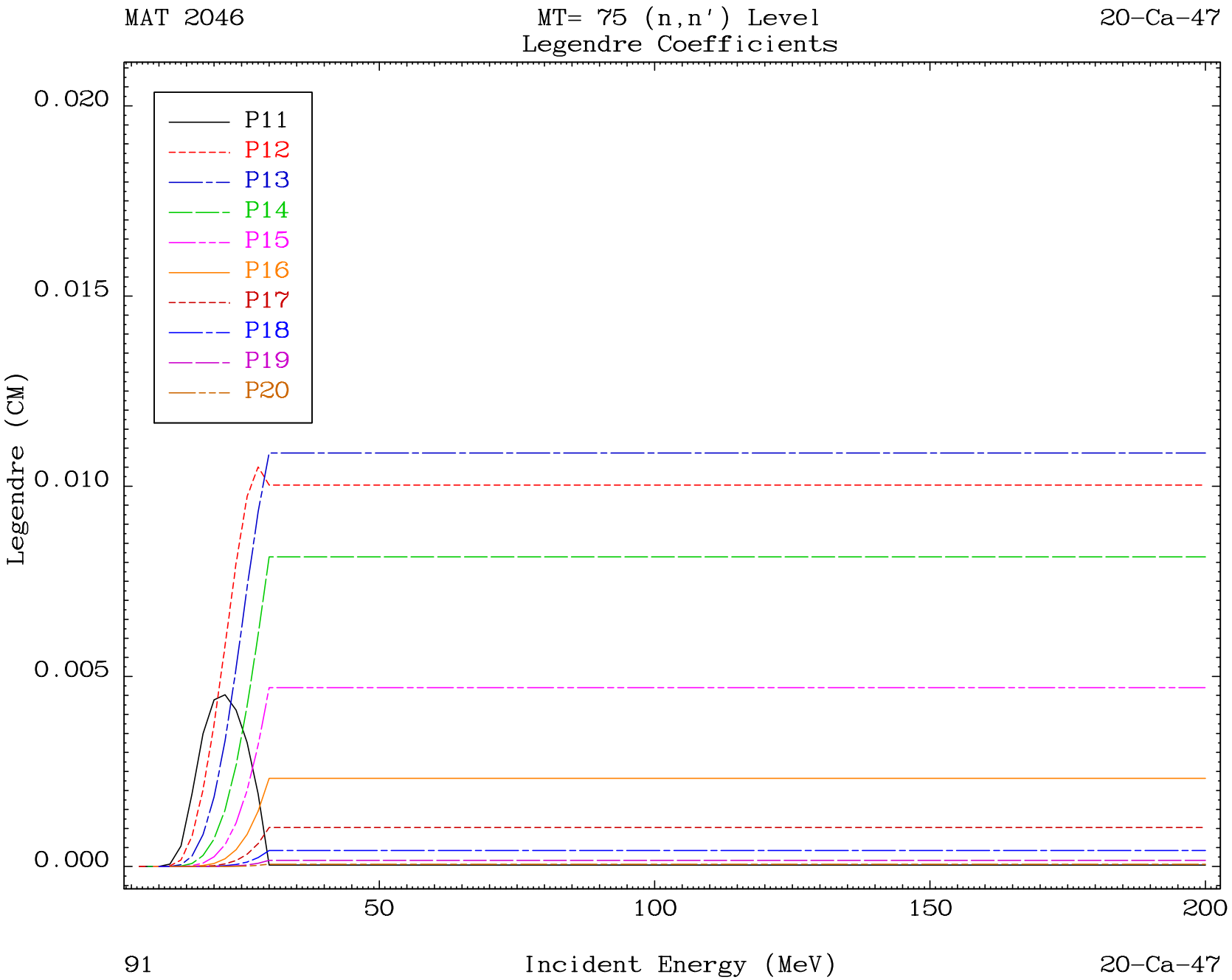

MAT 2046
MT= 73 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -6
8
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
86
Incident Energy (MeV)
20-Ca-47

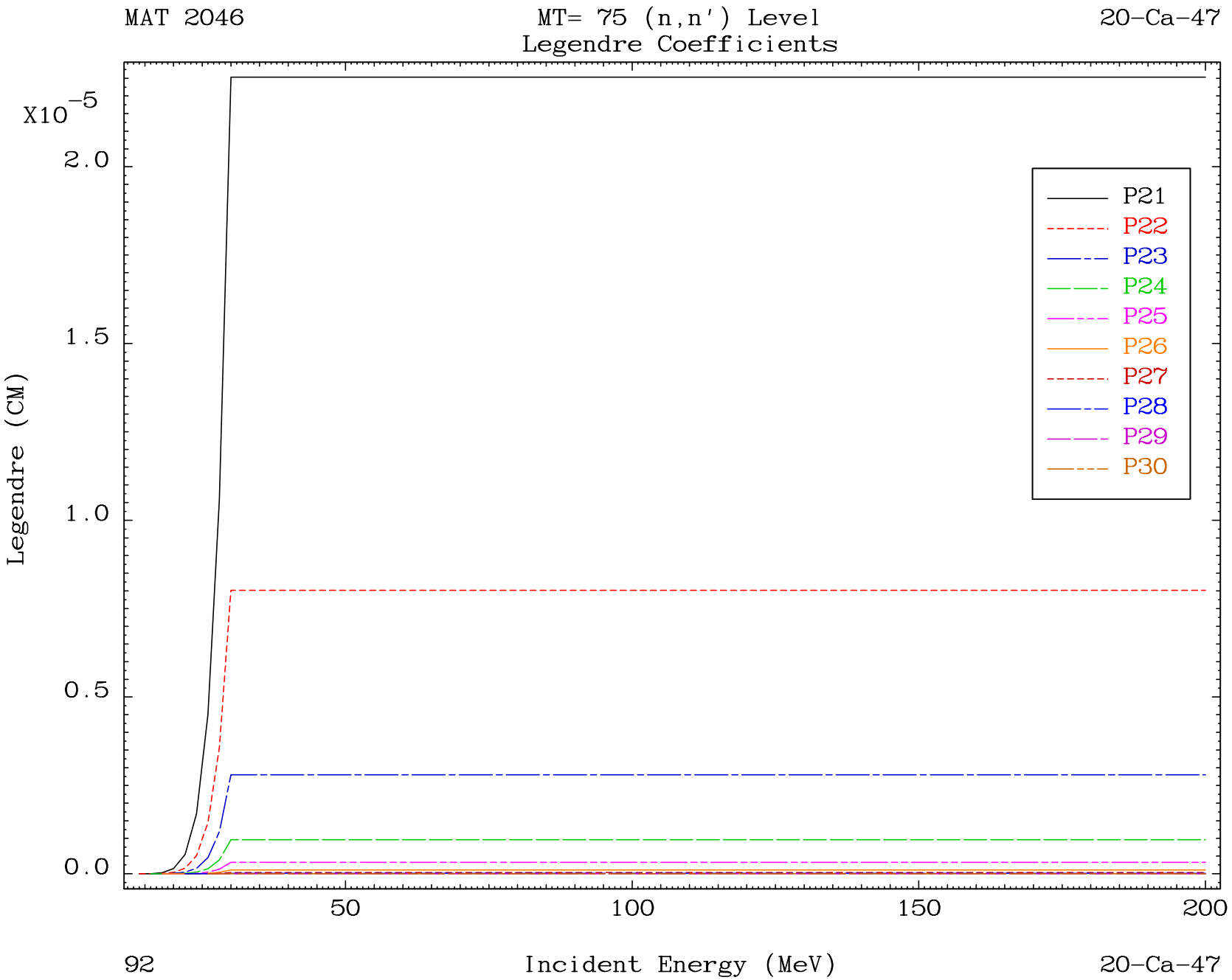

MAT 2046
MT= 74 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
87
Incident Energy (MeV)
20-Ca-47

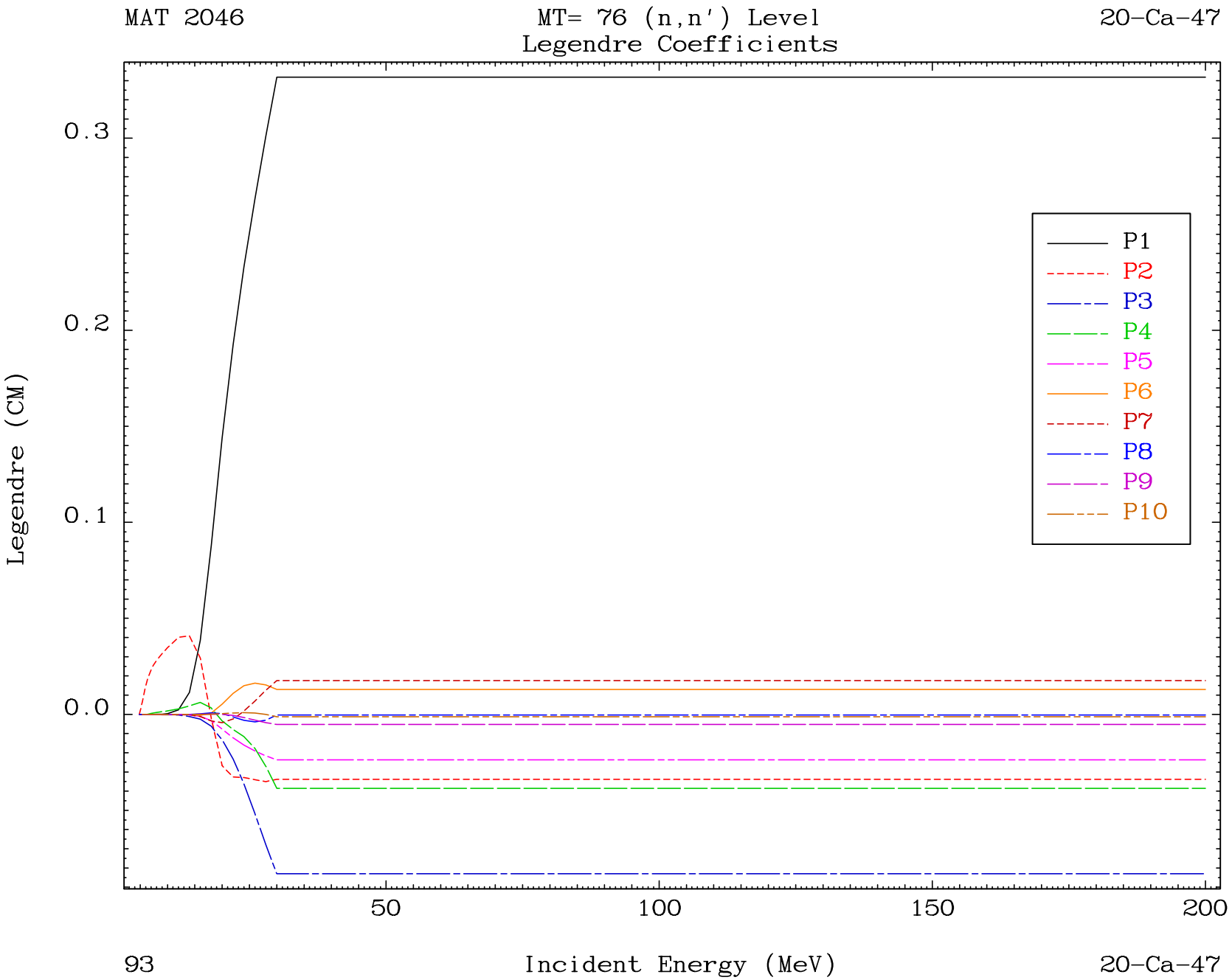

MAT 2046
MT= 74 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
50
100
150
200
88
Incident Energy (MeV)
20-Ca-47

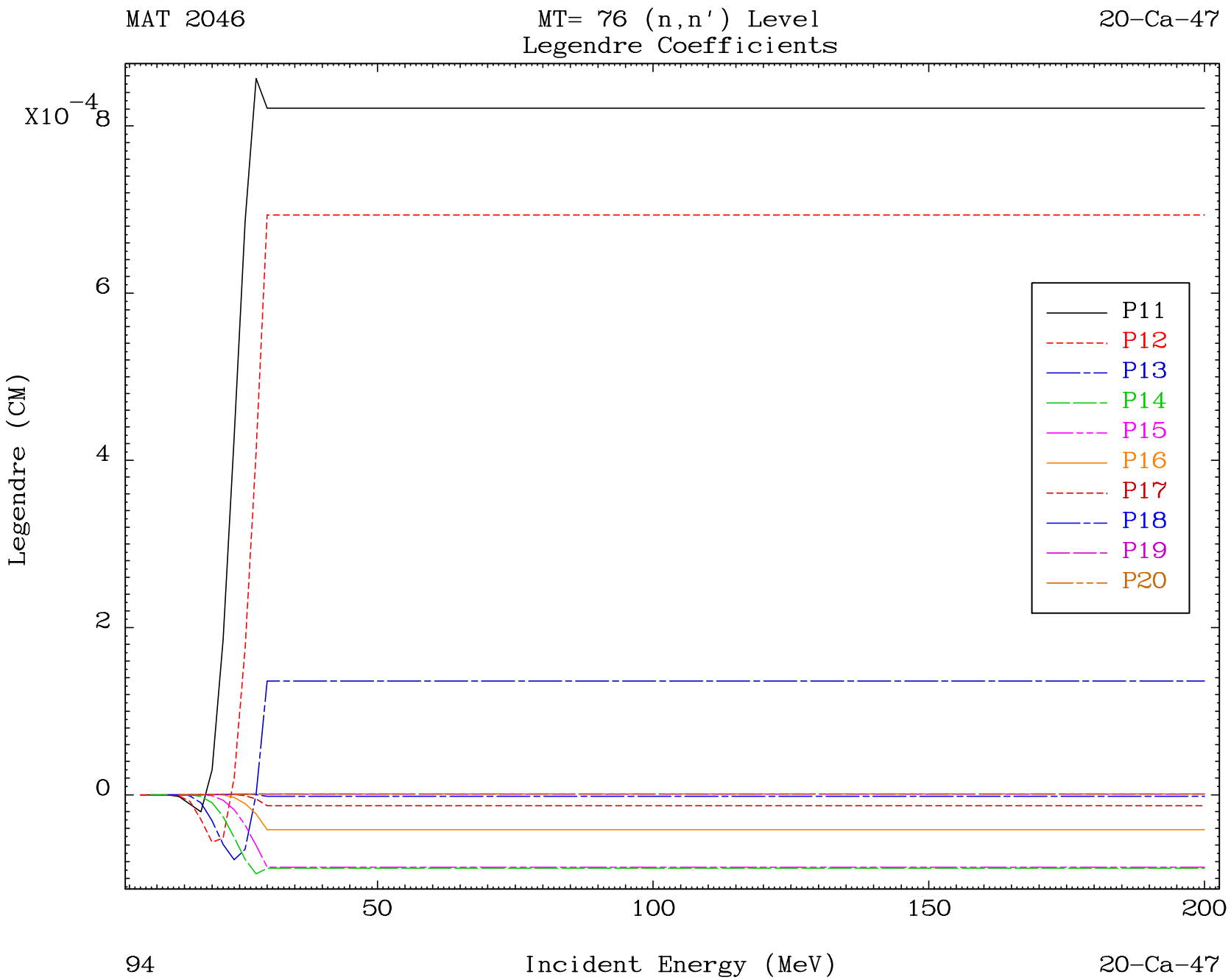

MAT 2046
MT= 74 (n,n') Level
Legendre Coefficients
20-Ca-47
0.0
X10^-5
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
89
Incident Energy (MeV)
20-Ca-47
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

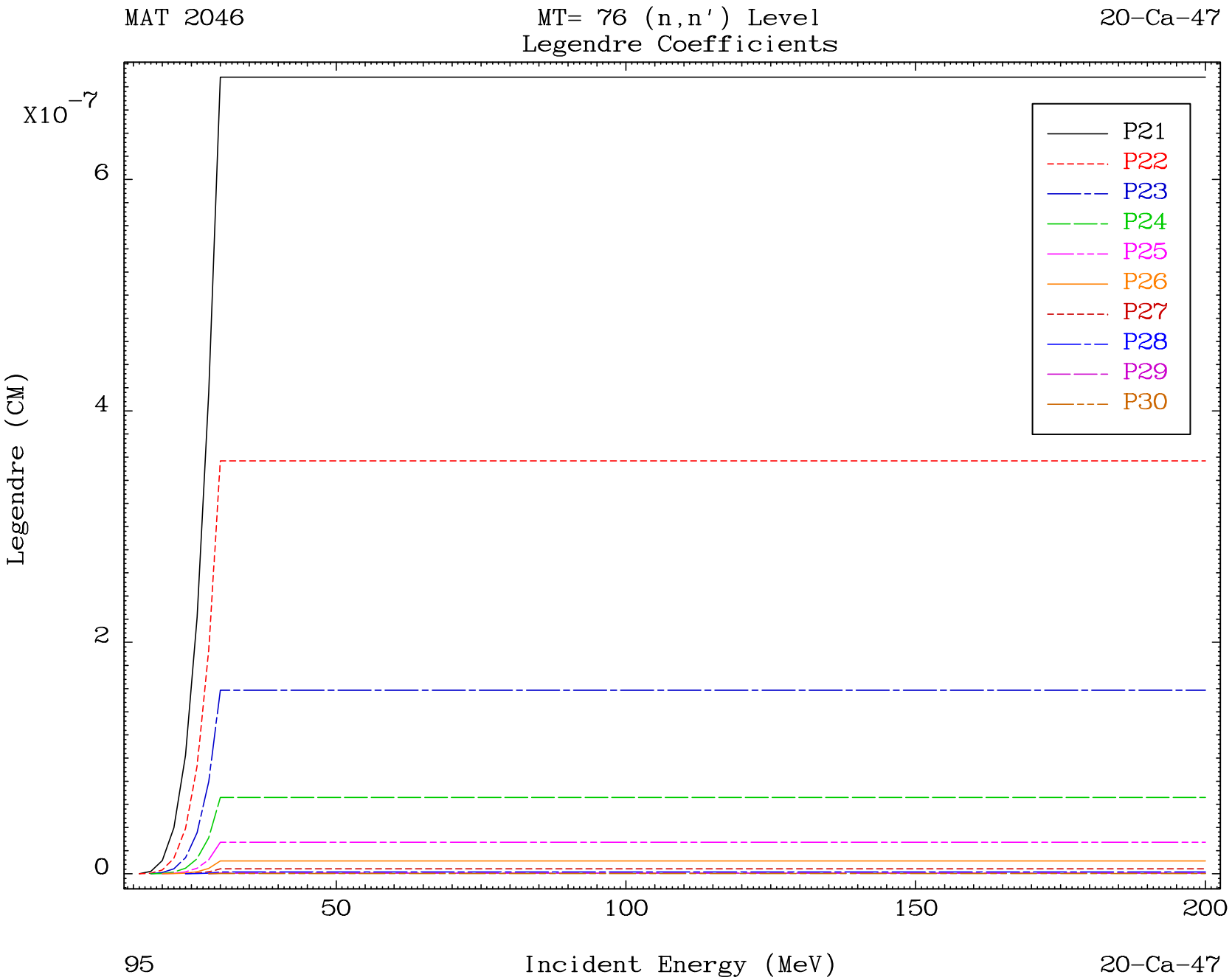

MAT 2046
MT= 75 (n,n') Level
Legendre Coefficients
20-Ca-47
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
50
100
150
200
90
Incident Energy (MeV)
20-Ca-47

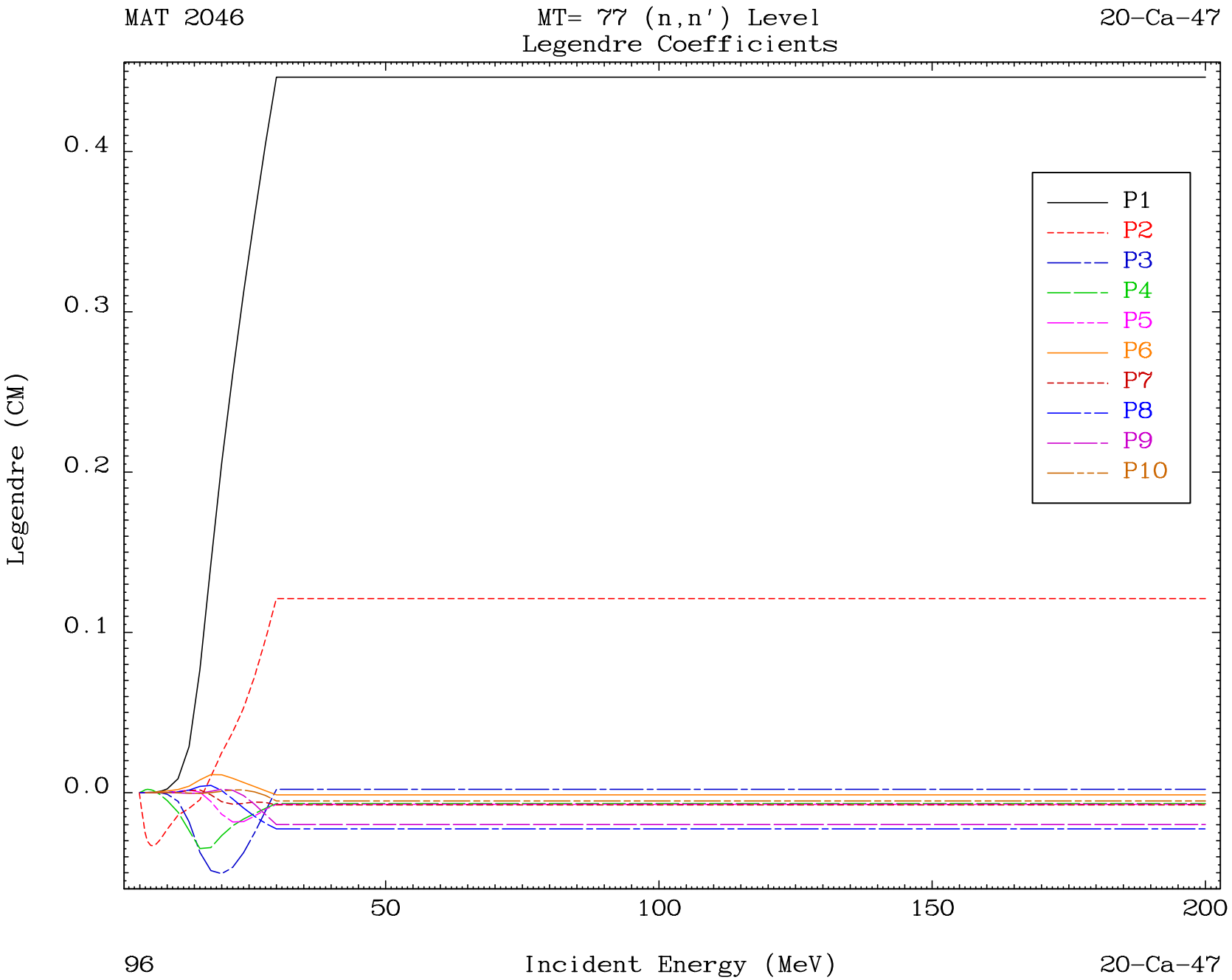

MAT 2046
MT= 75 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
91
Incident Energy (MeV)
20-Ca-47

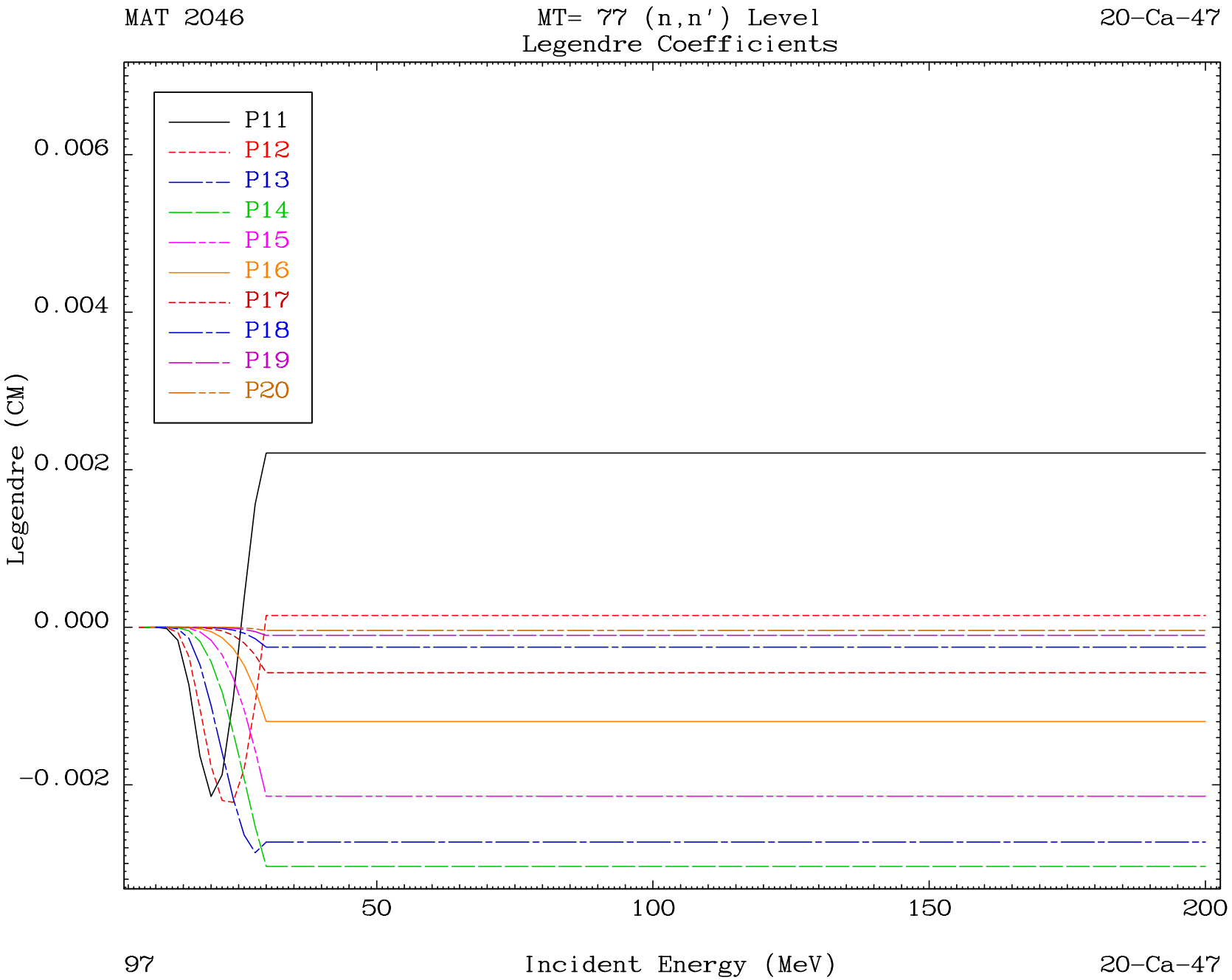

MAT 2046
MT= 75 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
92
Incident Energy (MeV)
20-Ca-47

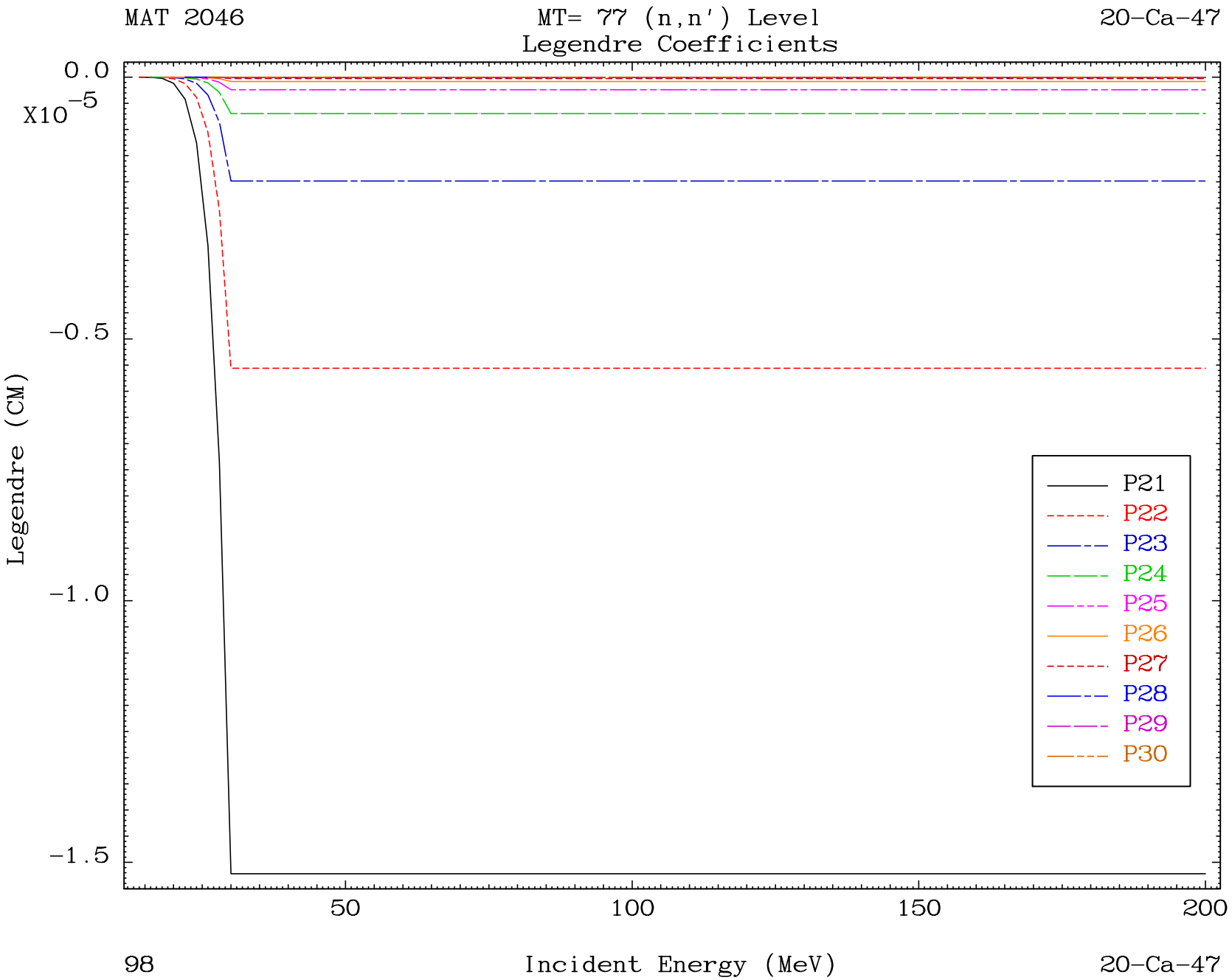

MAT 2046
MT= 76 (n,n') Level
Legendre Coefficients
20-Ca-47
0.3
0.2
0.1
0.0
Legendre (CM)
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
93
Incident Energy (MeV)
20-Ca-47

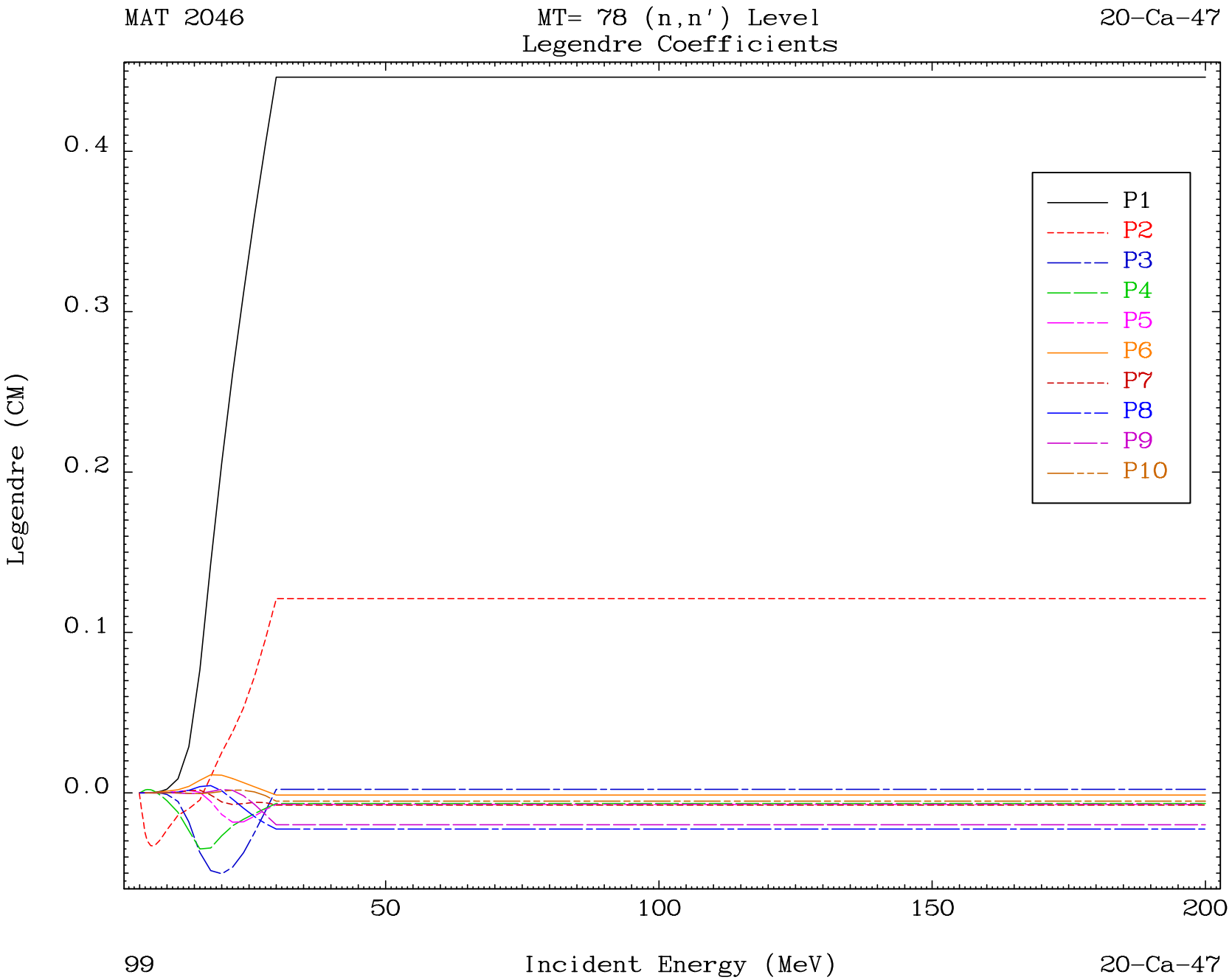

MAT 2046
MT= 76 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -4
8
6
4
2
0
Legendre (CM)
50
100
150
200
94
Incident Energy (MeV)
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

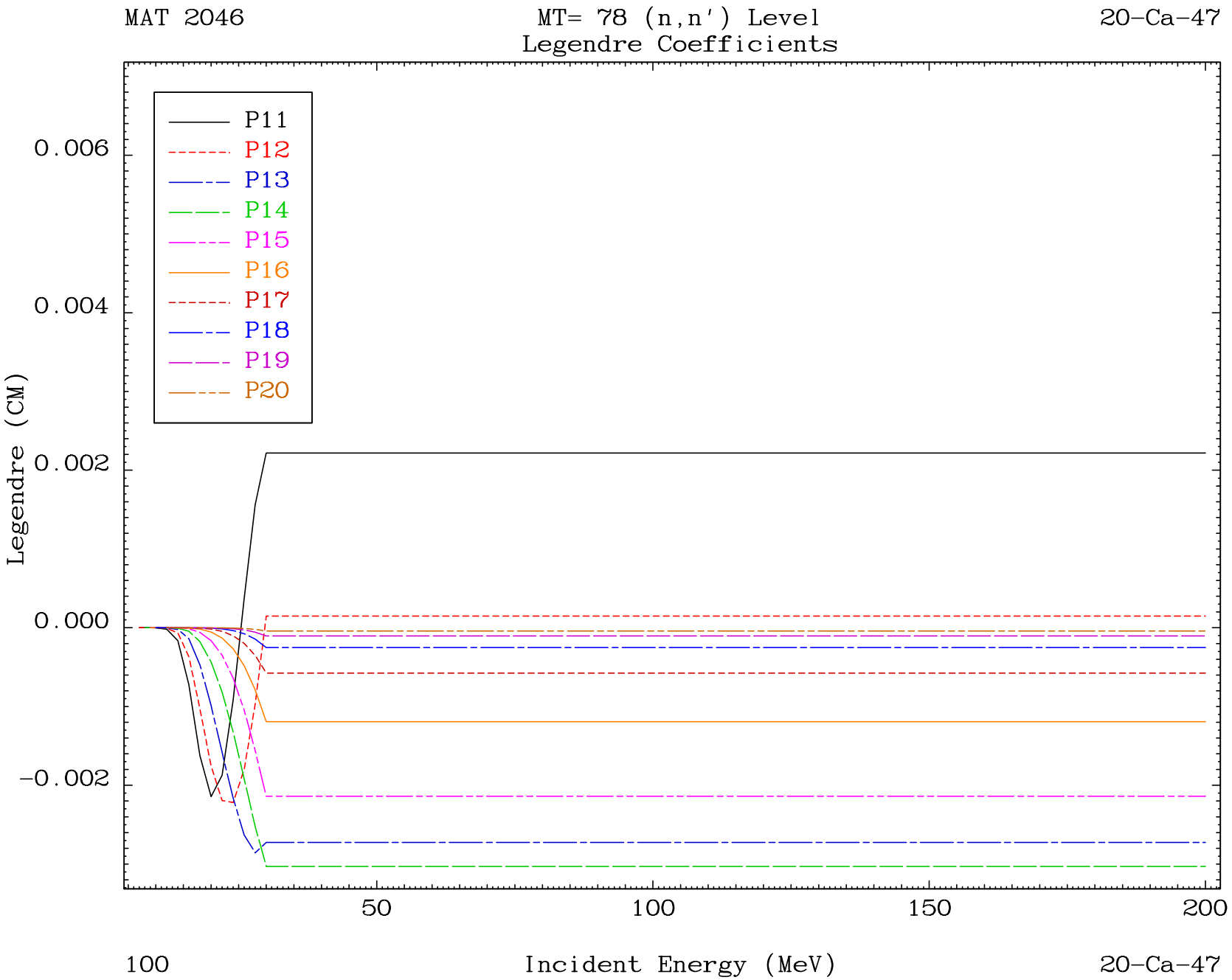

MAT 2046
MT= 76 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-7
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
95
Incident Energy (MeV)
20-Ca-47

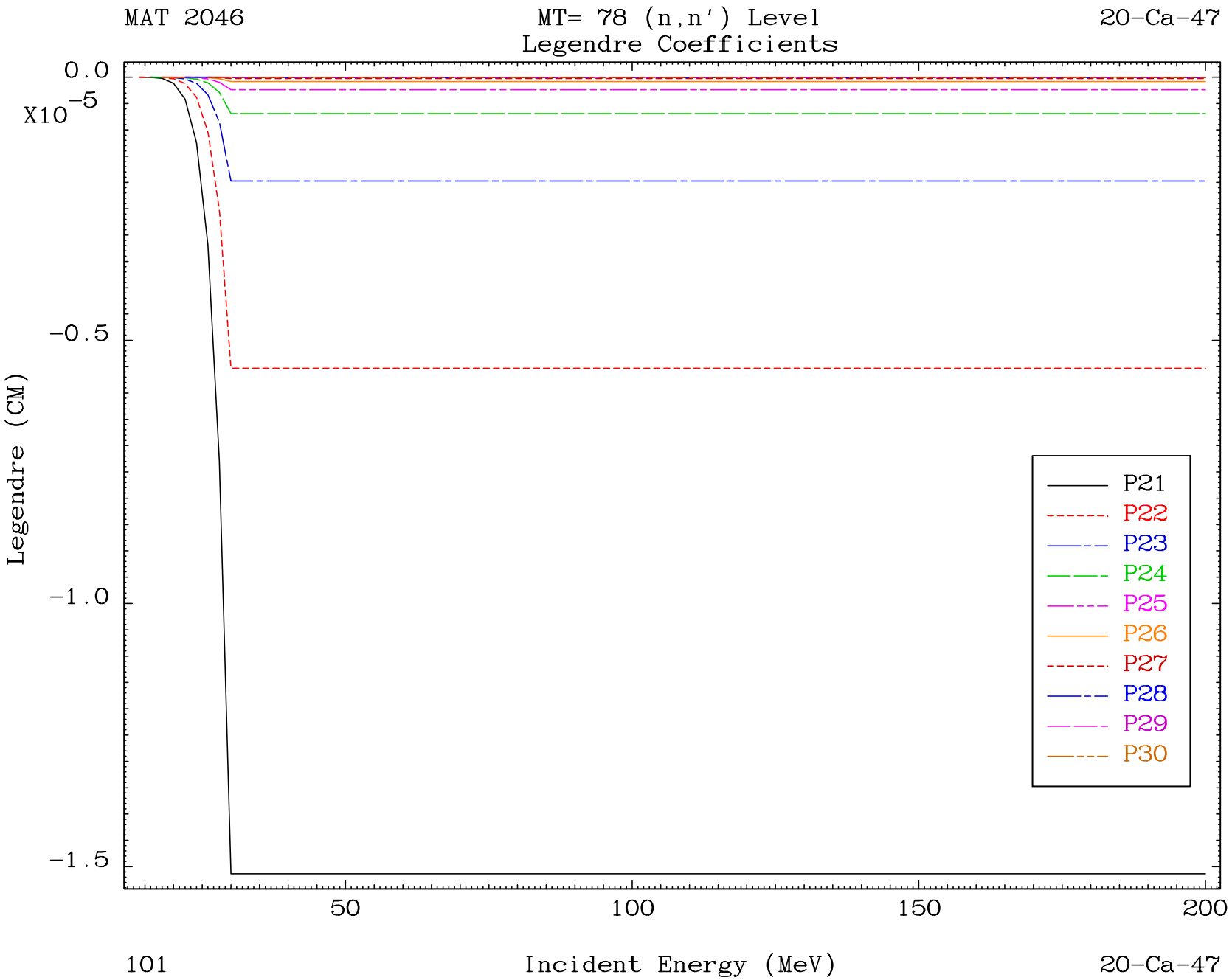

MAT 2046
MT= 77 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
96
Incident Energy (MeV)
20-Ca-47

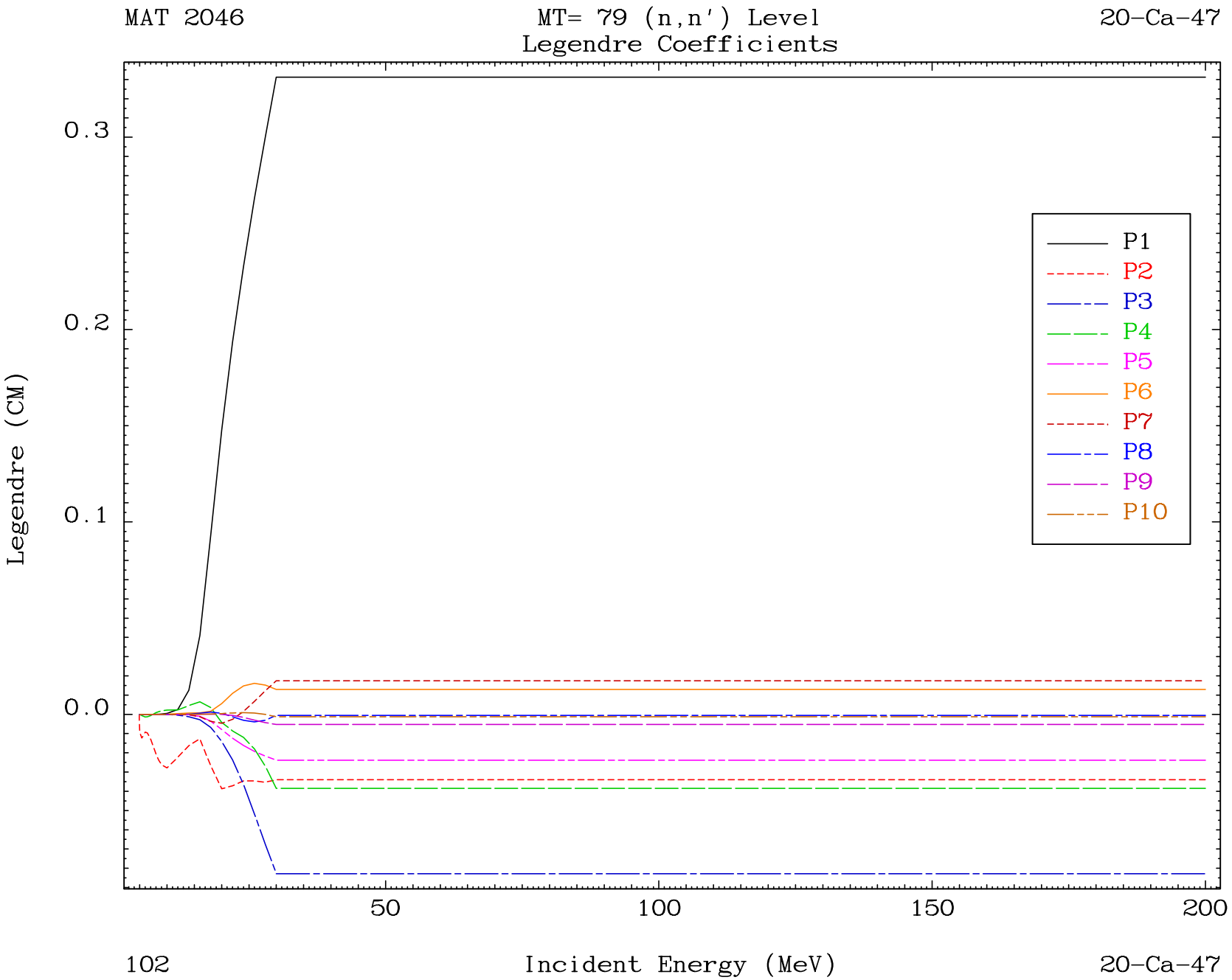

MAT 2046
MT= 77 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
50
100
150
200
97
Incident Energy (MeV)
20-Ca-47

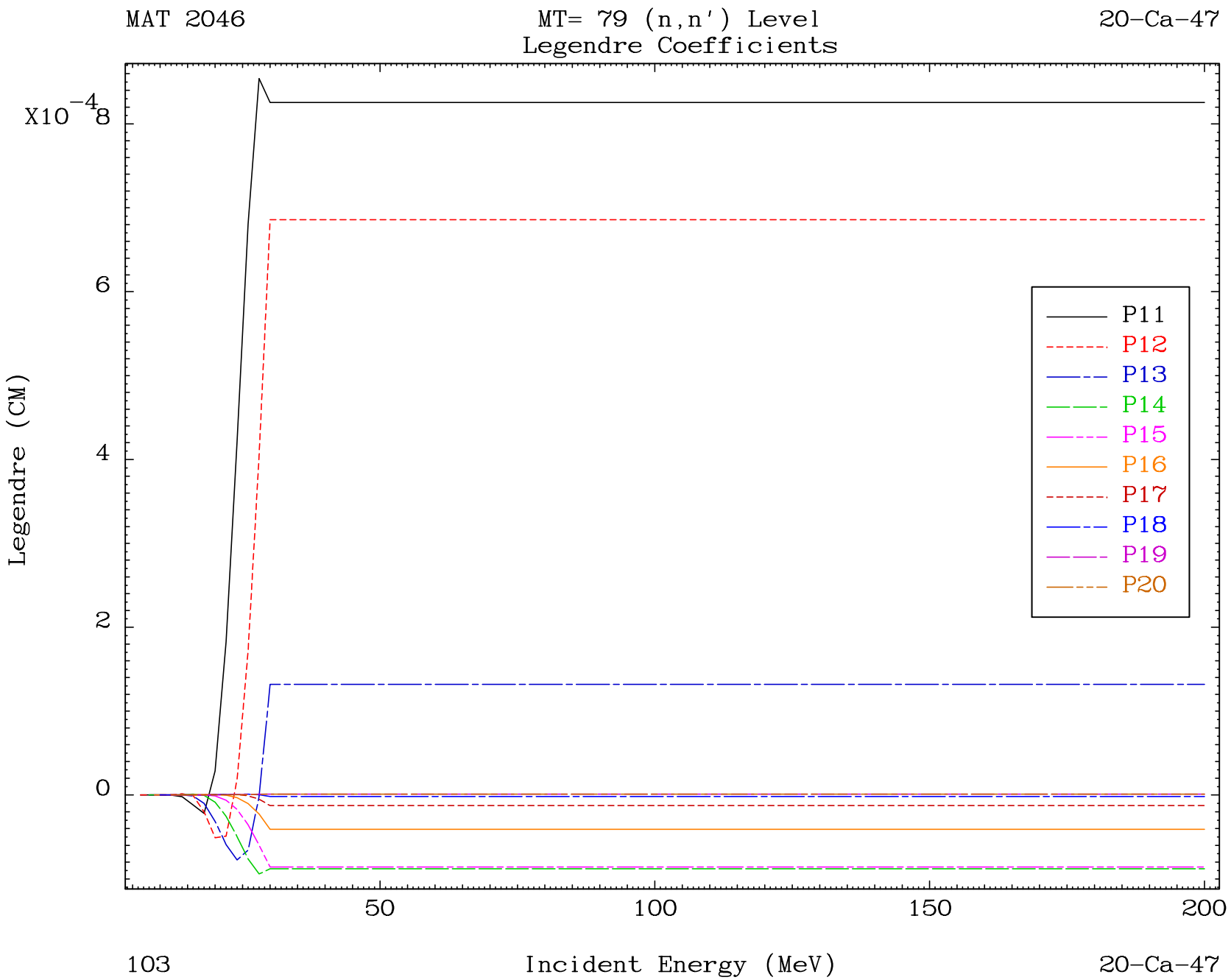

MAT 2046
MT= 77 (n,n') Level
Legendre Coefficients
20-Ca-47
0.0
X10^-5
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
98
Incident Energy (MeV)
20-Ca-47
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

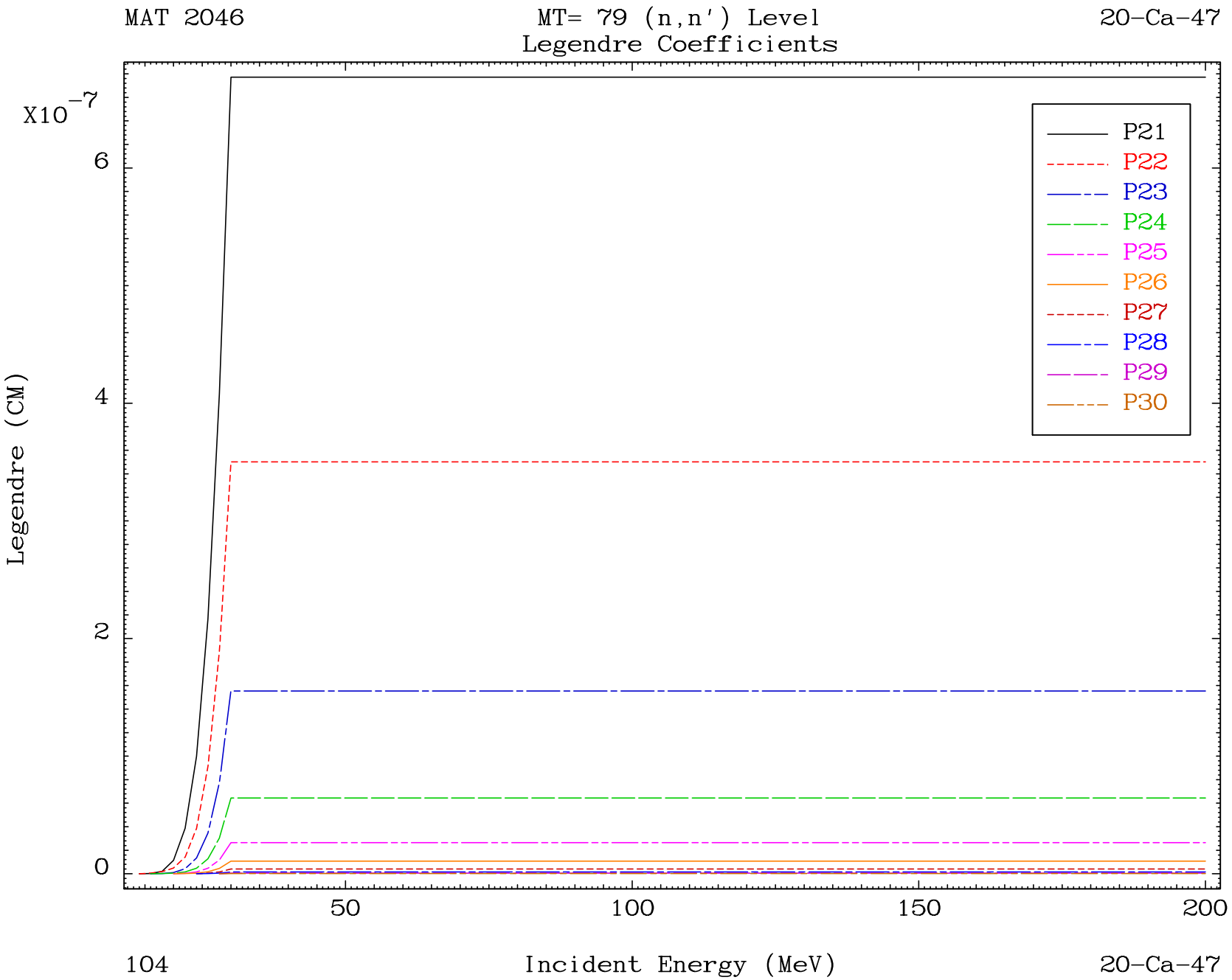

MAT 2046
MT= 78 (n,n') Level
Legendre Coefficients
20-Ca-47
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
99
Incident Energy (MeV)
20-Ca-47

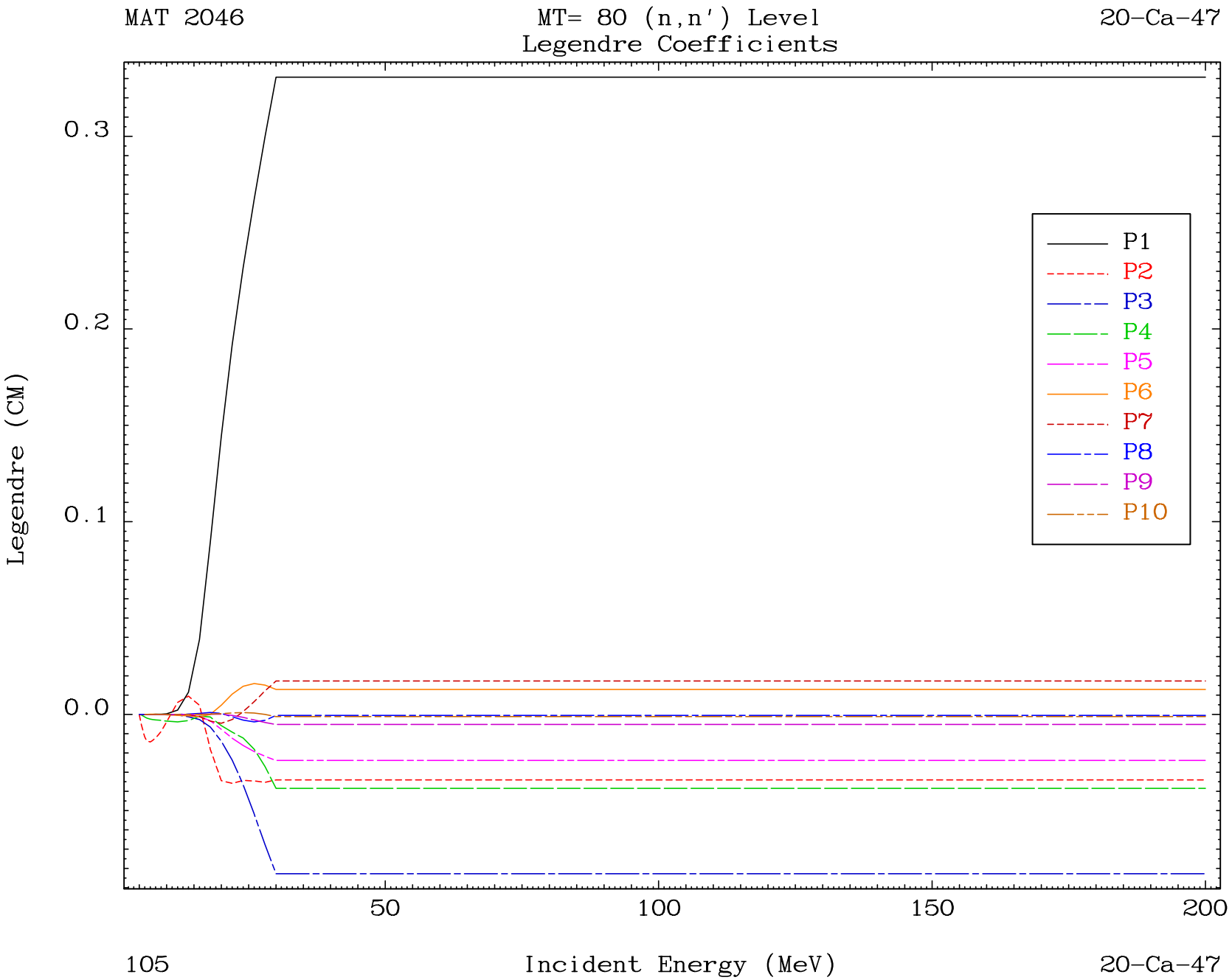

MAT 2046
MT= 78 (n,n') Level
Legendre Coefficients
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
50
100
150
200
100
Incident Energy (MeV)
20-Ca-47

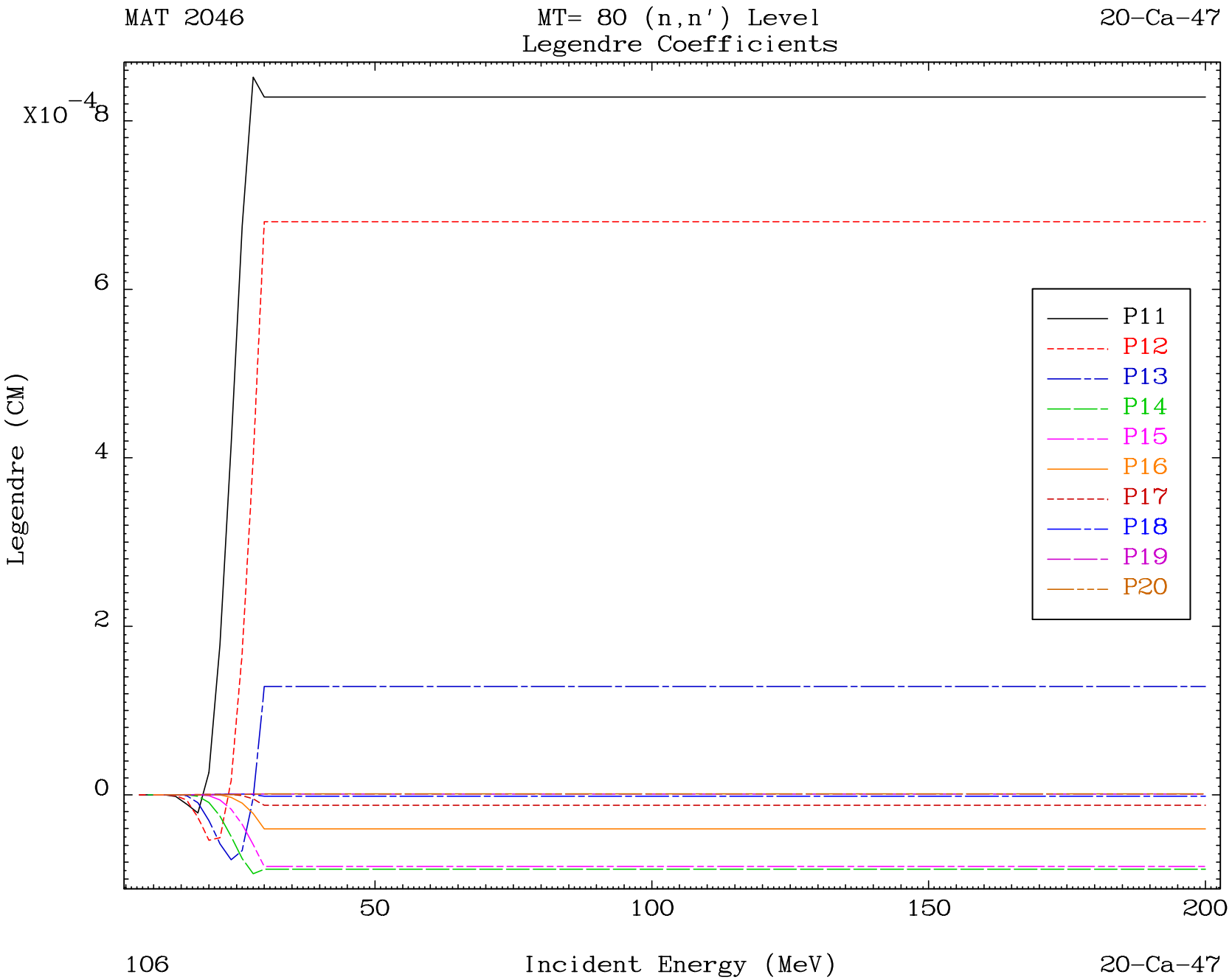

MAT 2046
MT= 78 (n,n') Level
Legendre Coefficients
20-Ca-47
0.0
X10^-5
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
101
Incident Energy (MeV)
20-Ca-47
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30

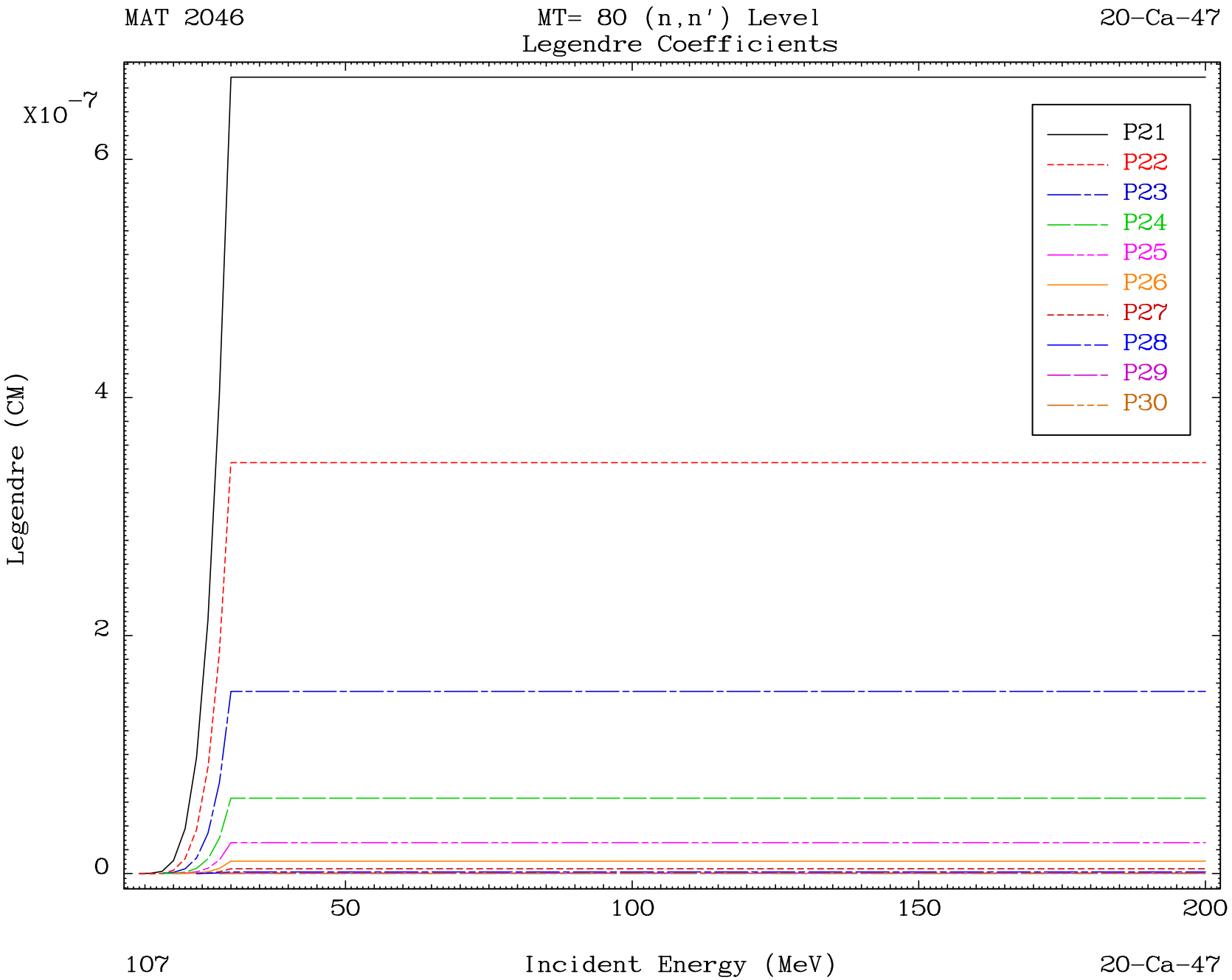

MAT 2046
MT= 79 (n,n') Level
Legendre Coefficients
20-Ca-47
0.3
0.2
0.1
0.0
Legendre (CM)
50
100
150
200
102
Incident Energy (MeV)
20-Ca-47
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10


MAT 2046
MT= 79 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -4
8
6
4
2
0
Legendre (CM)
50
100
150
200
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
103
Incident Energy (MeV)
20-Ca-47


MAT 2046
MT= 79 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-7
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
104
Incident Energy (MeV)
20-Ca-47


MAT 2046
MT= 80 (n,n') Level
Legendre Coefficients
20-Ca-47
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
50
100
150
200
105
Incident Energy (MeV)
20-Ca-47


MAT 2046
MT= 80 (n,n') Level
Legendre Coefficients
20-Ca-47
X10 -4
8
6
4
2
0
Legendre (CM)
50
100
150
200
106
Incident Energy (MeV)
20-Ca-47
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20


MAT 2046
MT= 80 (n,n') Level
Legendre Coefficients
20-Ca-47
X10-7
6
4
2
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
107
Incident Energy (MeV)
20-Ca-47