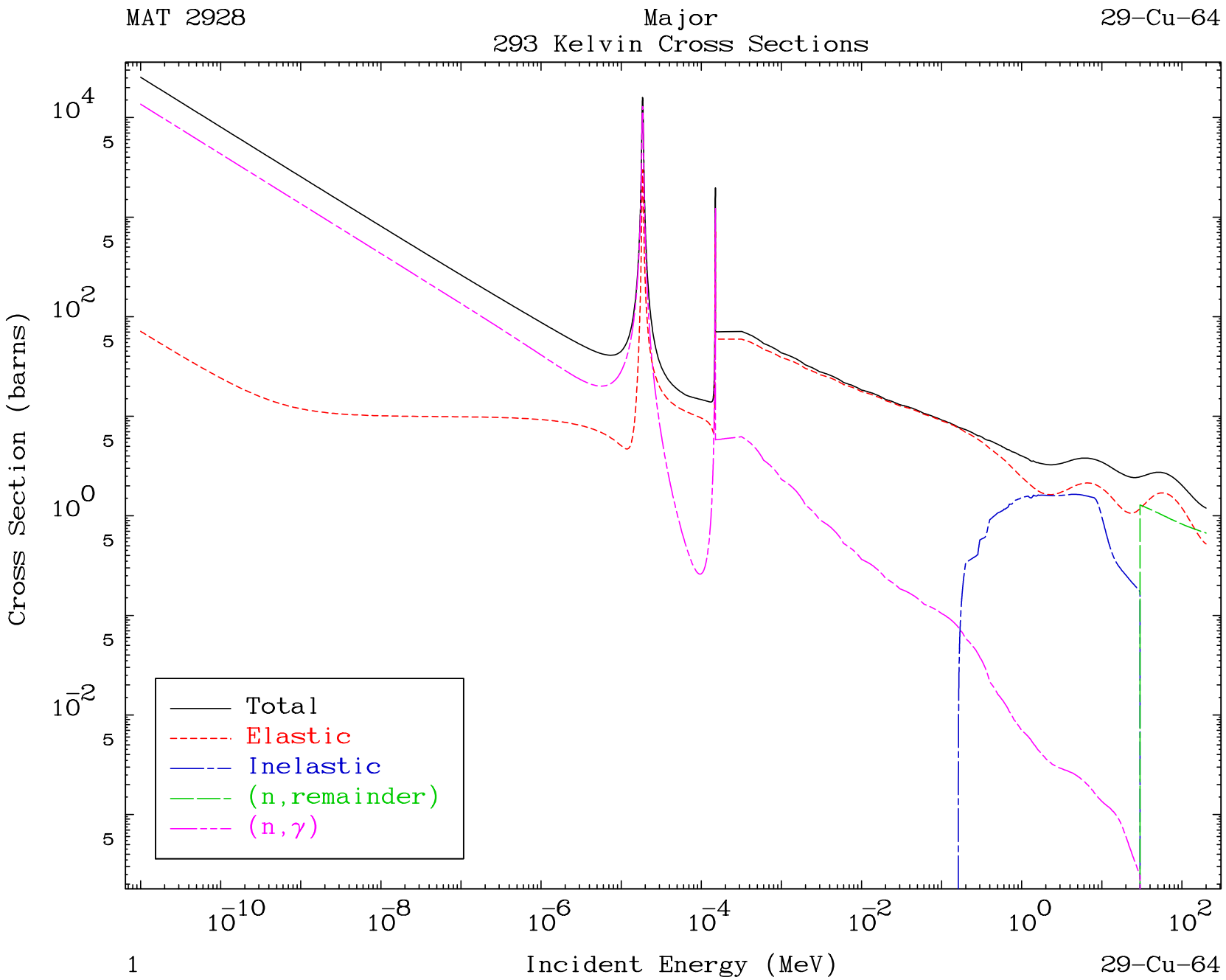
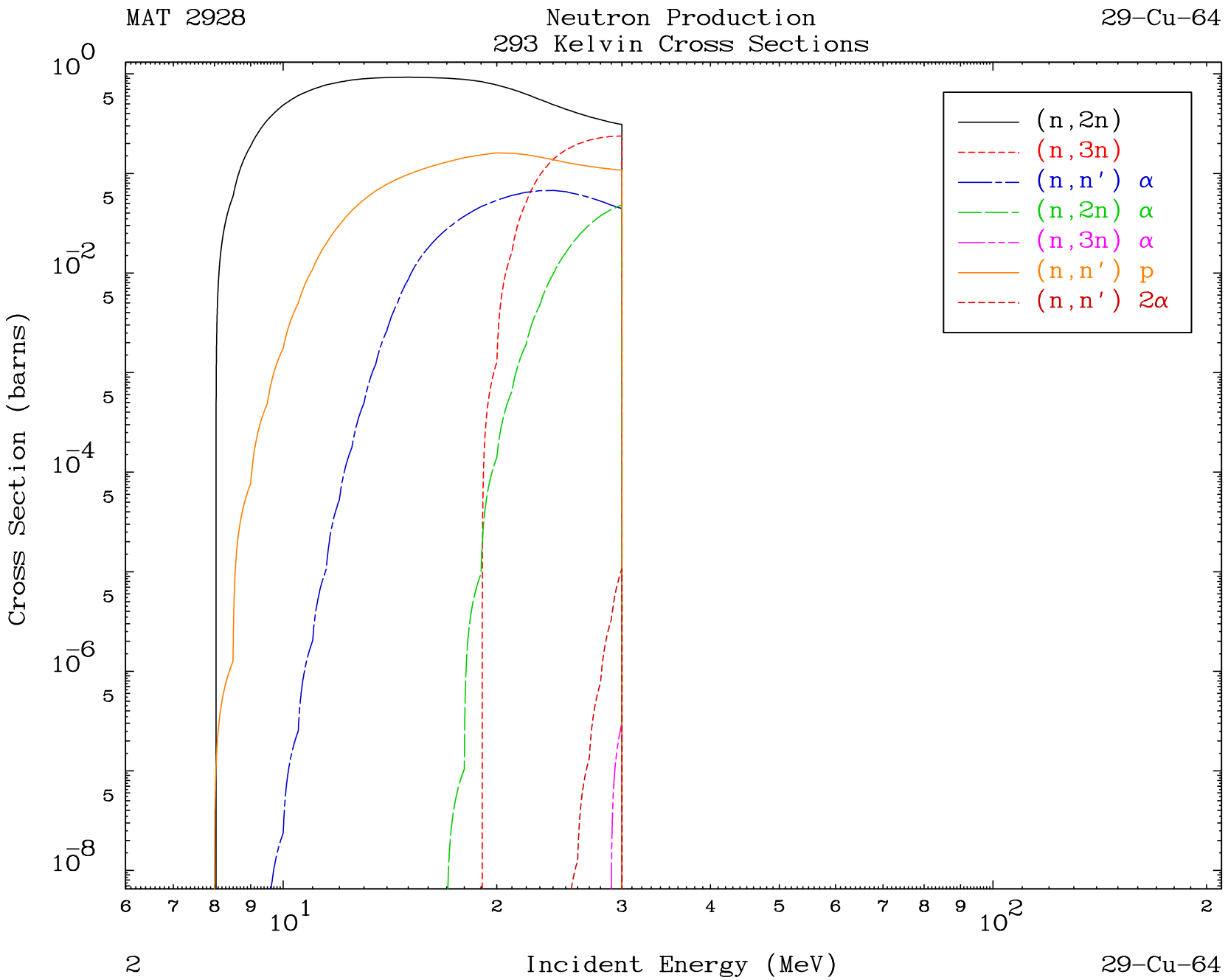
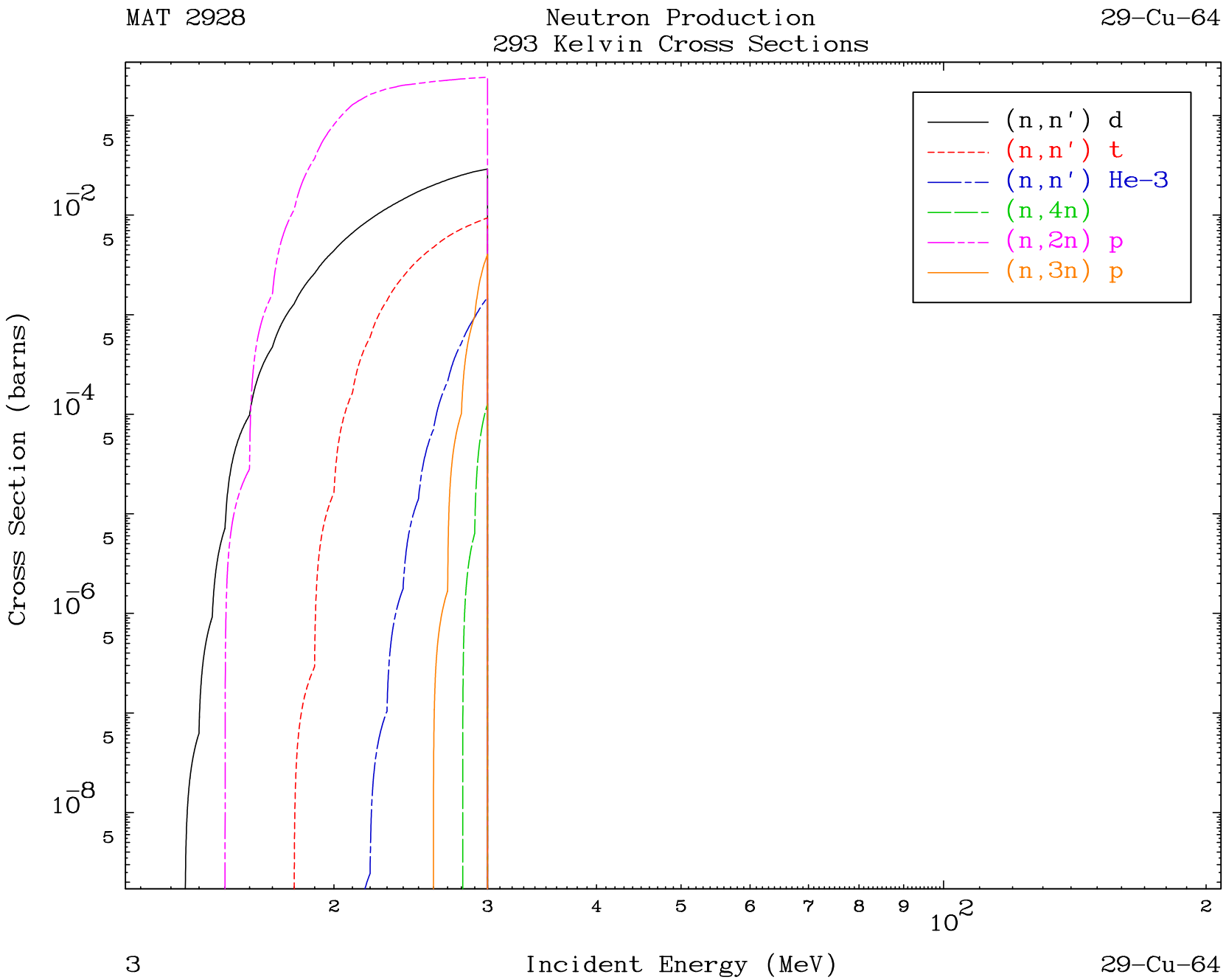
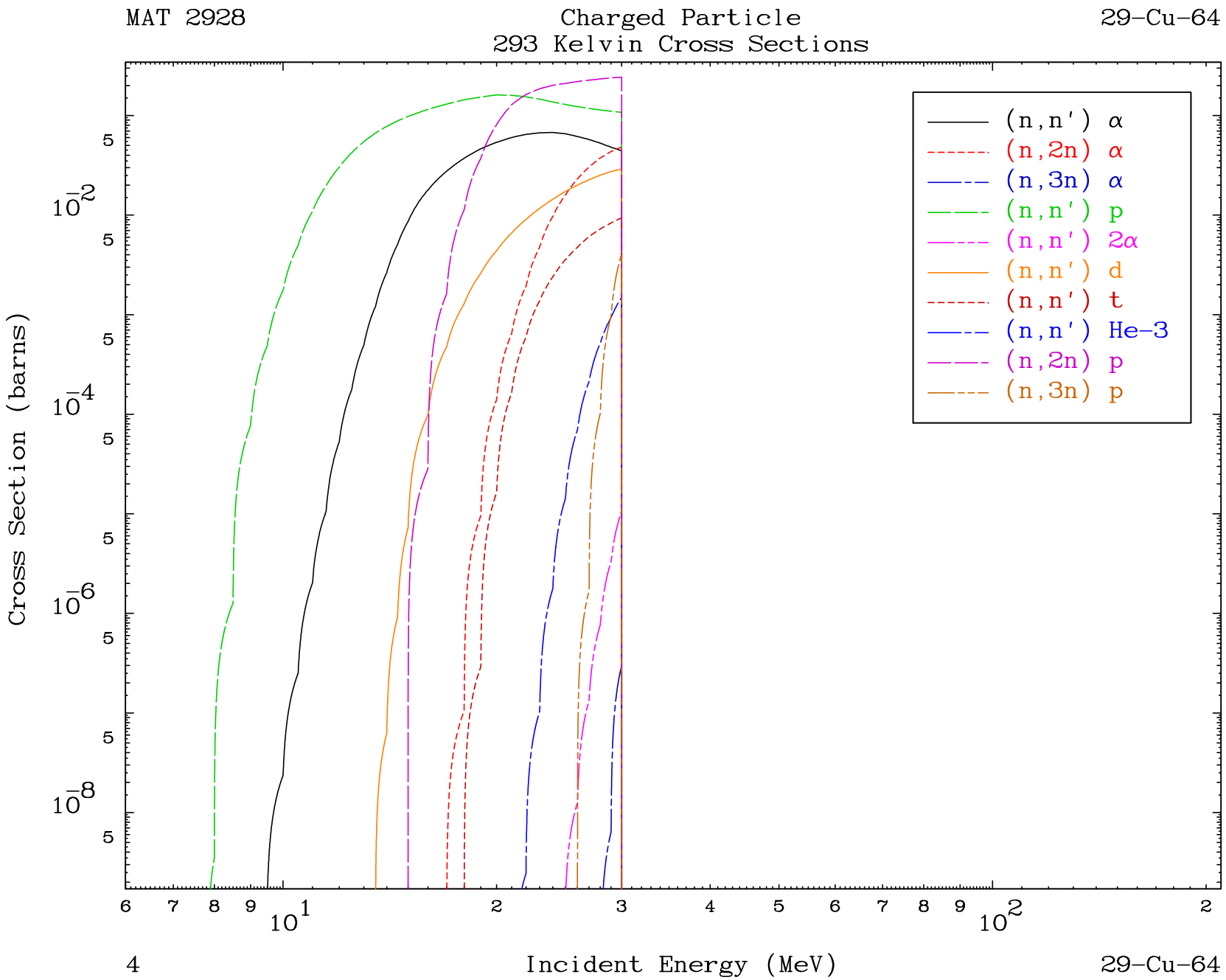
Program EVALPLOT
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

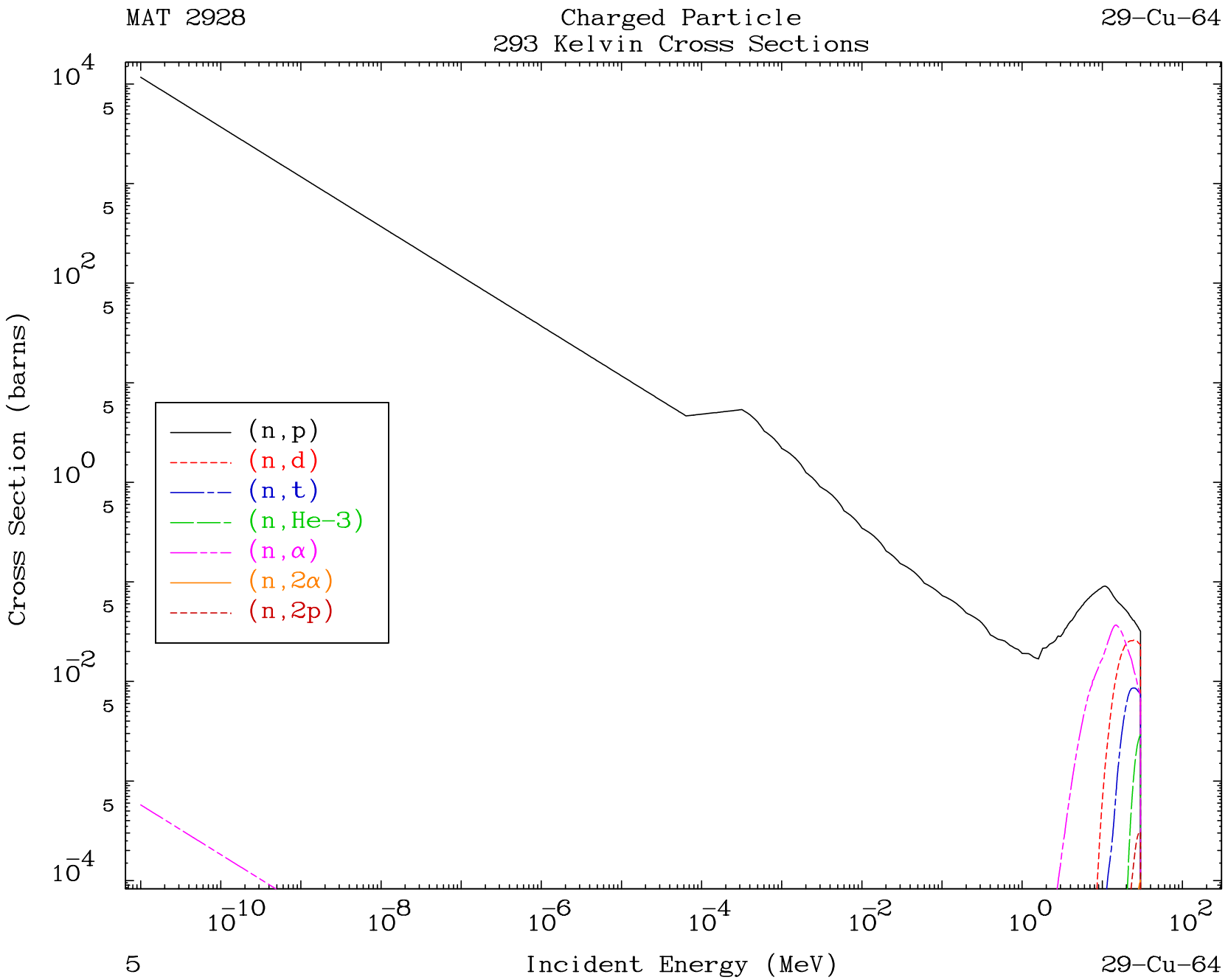
Press Mouse Button to Start

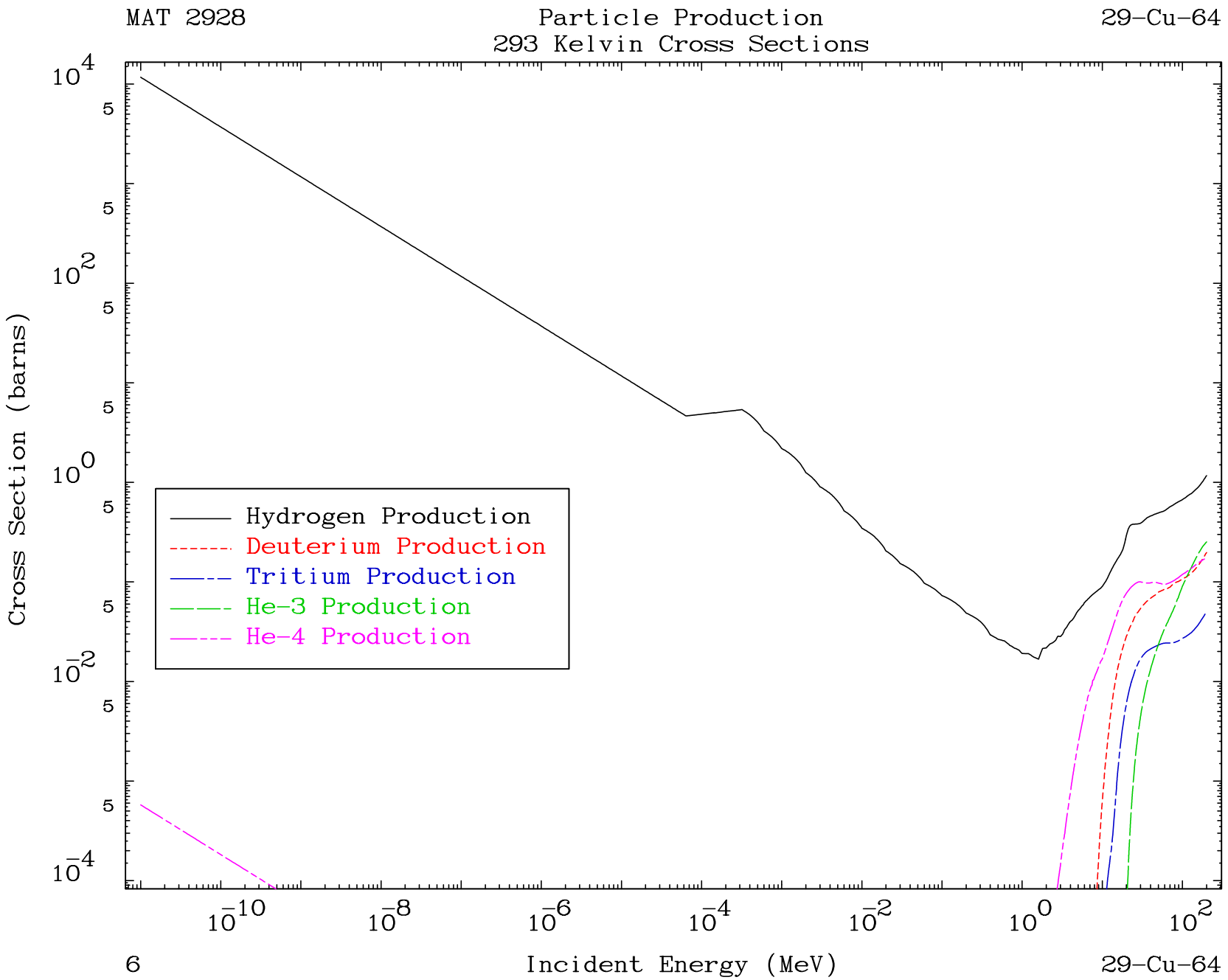

MAT 2928
Major
29-Cu-64
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
29-Cu-64

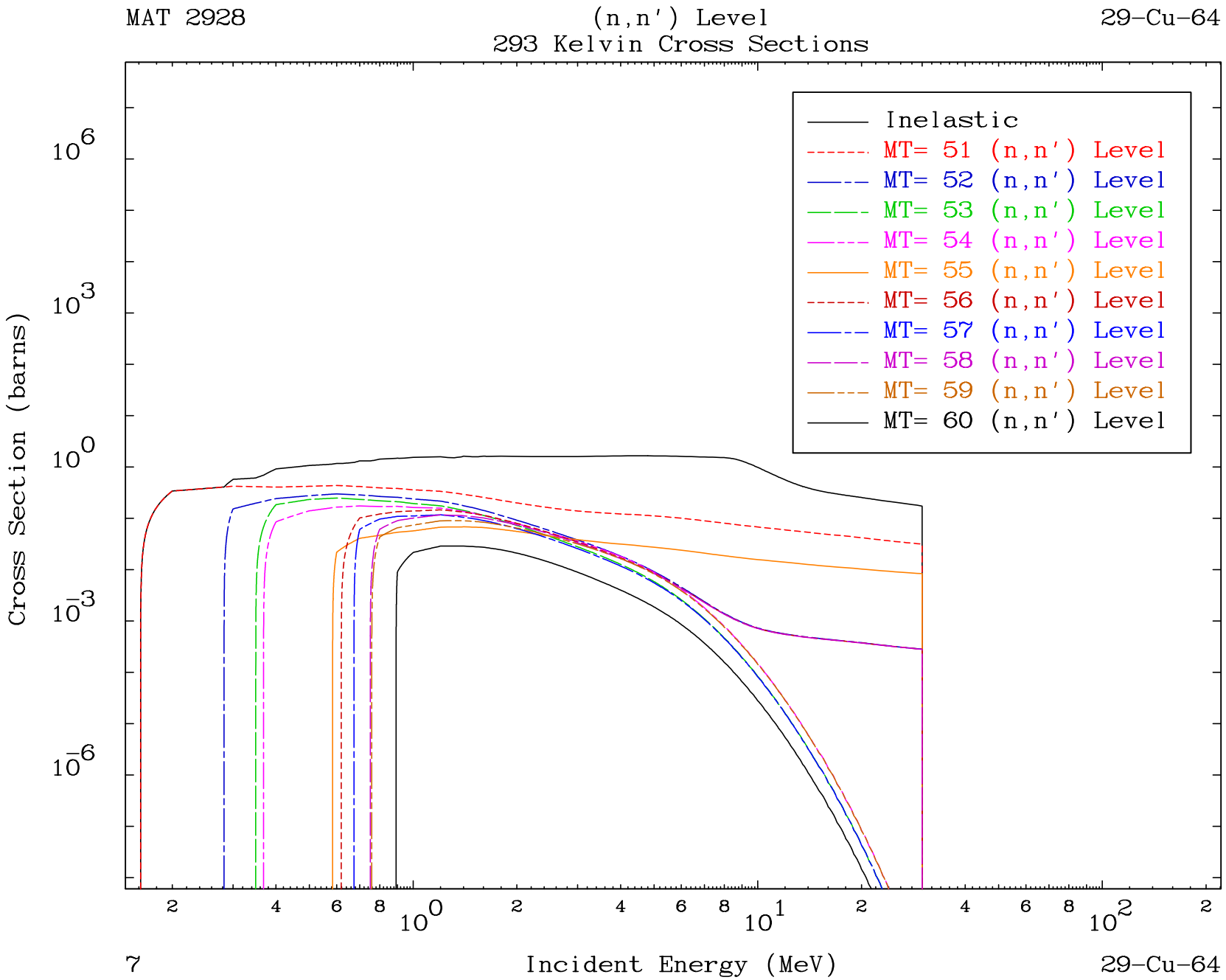

MAT 2928
Neutron Production
293 Kelvin Cross Sections
29-Cu-64
Cross Section (barns)
Incident Energy (MeV)
29-Cu-64
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α

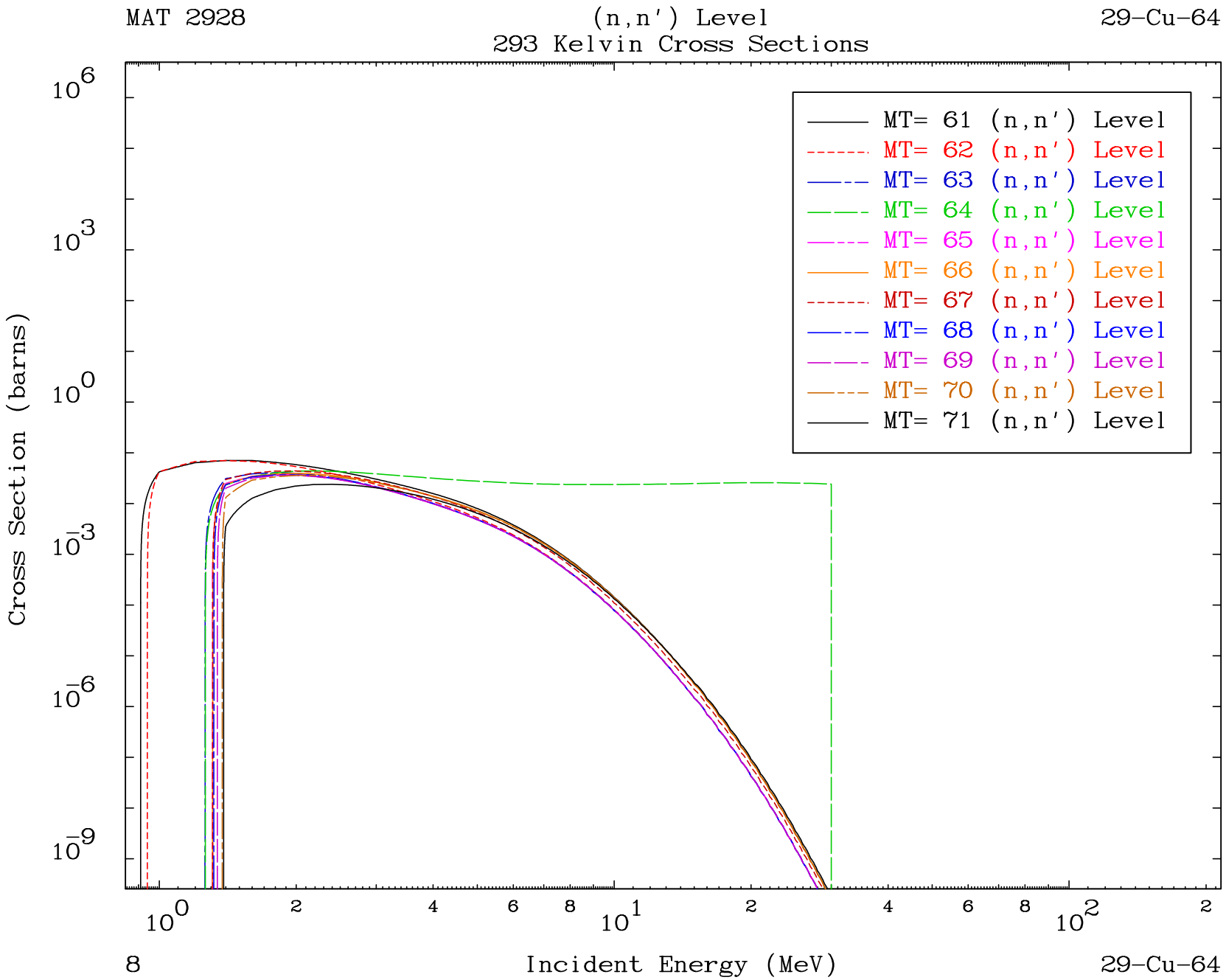

MAT 2928
Neutron Production
293 Kelvin Cross Sections
29-Cu-64
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
29-Cu-64

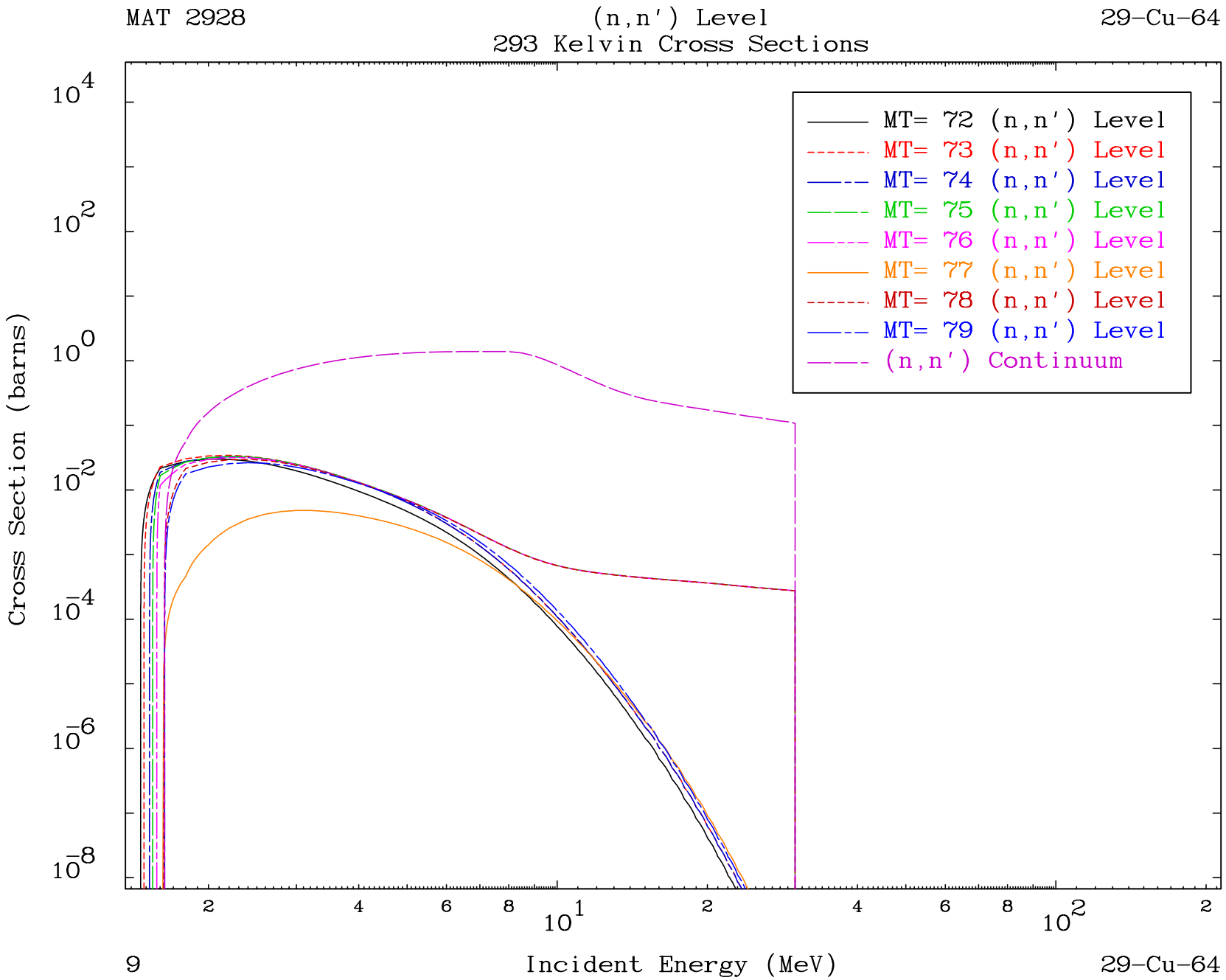

MAT 2928
Charged Particle
293 Kelvin Cross Sections
29-Cu-64
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
4
29-Cu-64

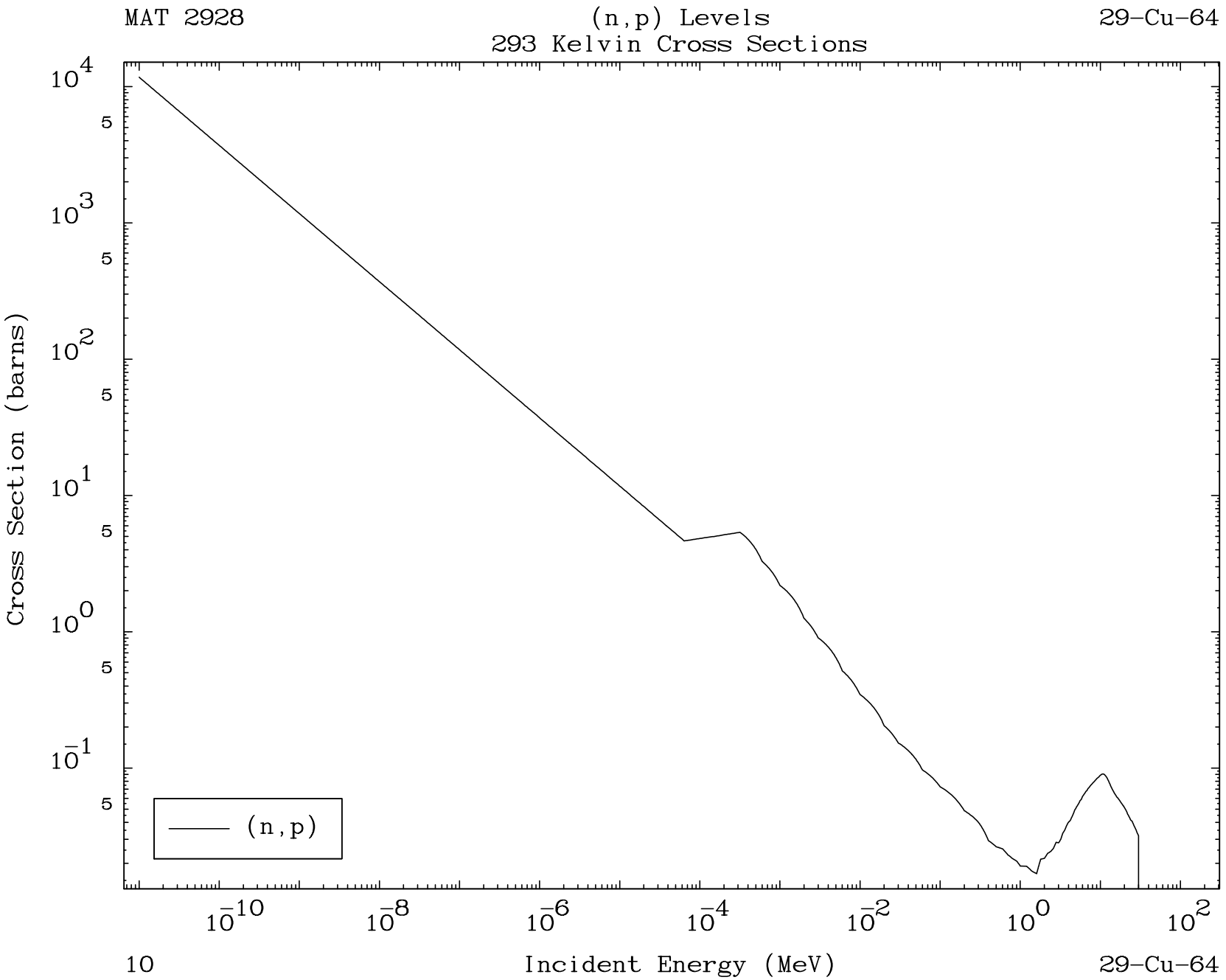

MAT 2928
Charged Particle
293 Kelvin Cross Sections
29-Cu-64
Cross Section (barns)
Incident Energy (MeV)
29-Cu-64
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)

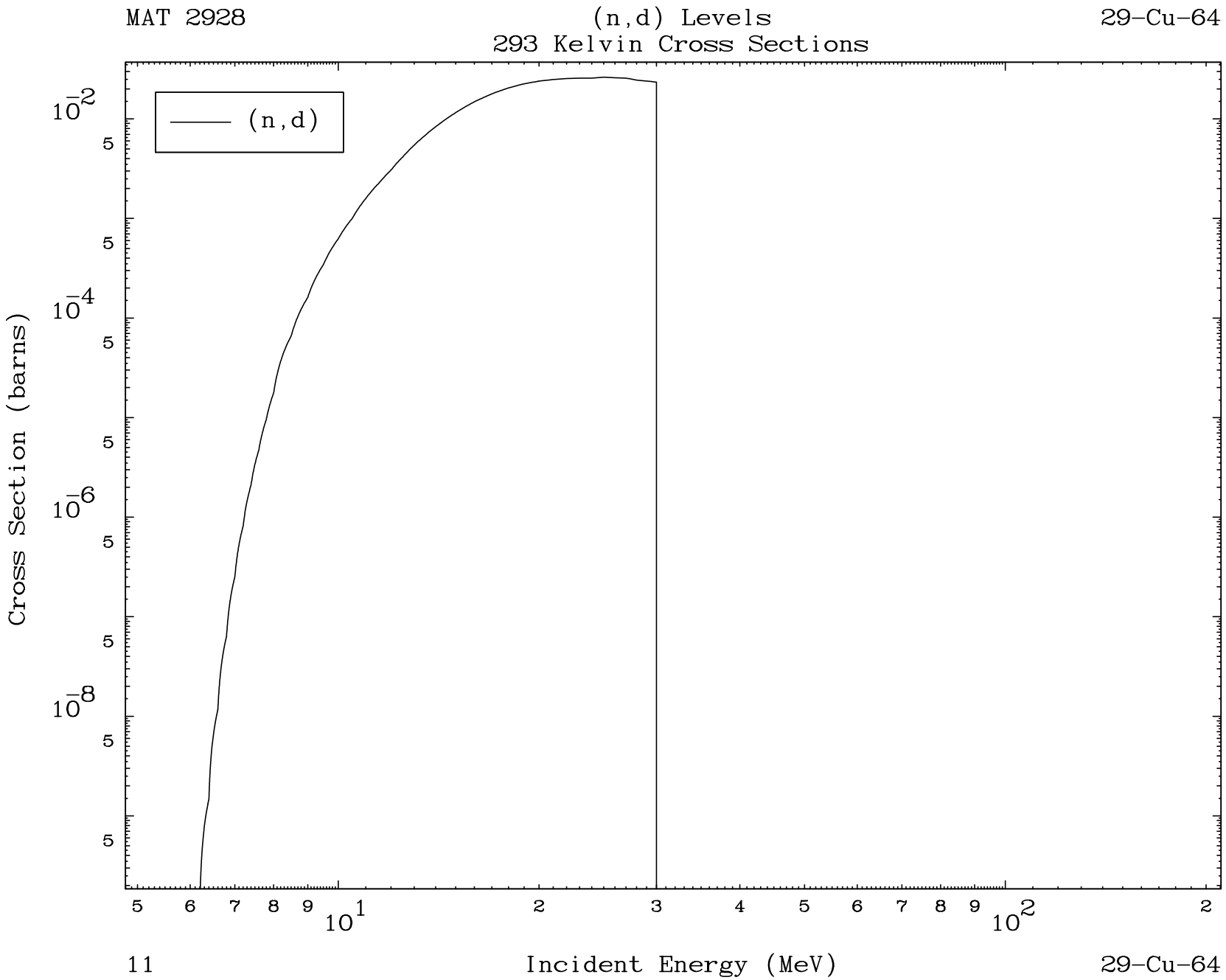

MAT 2928
Particle Production
293 Kelvin Cross Sections
29-Cu-64
Cross Section (barns)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Incident Energy (MeV)
6
29-Cu-64

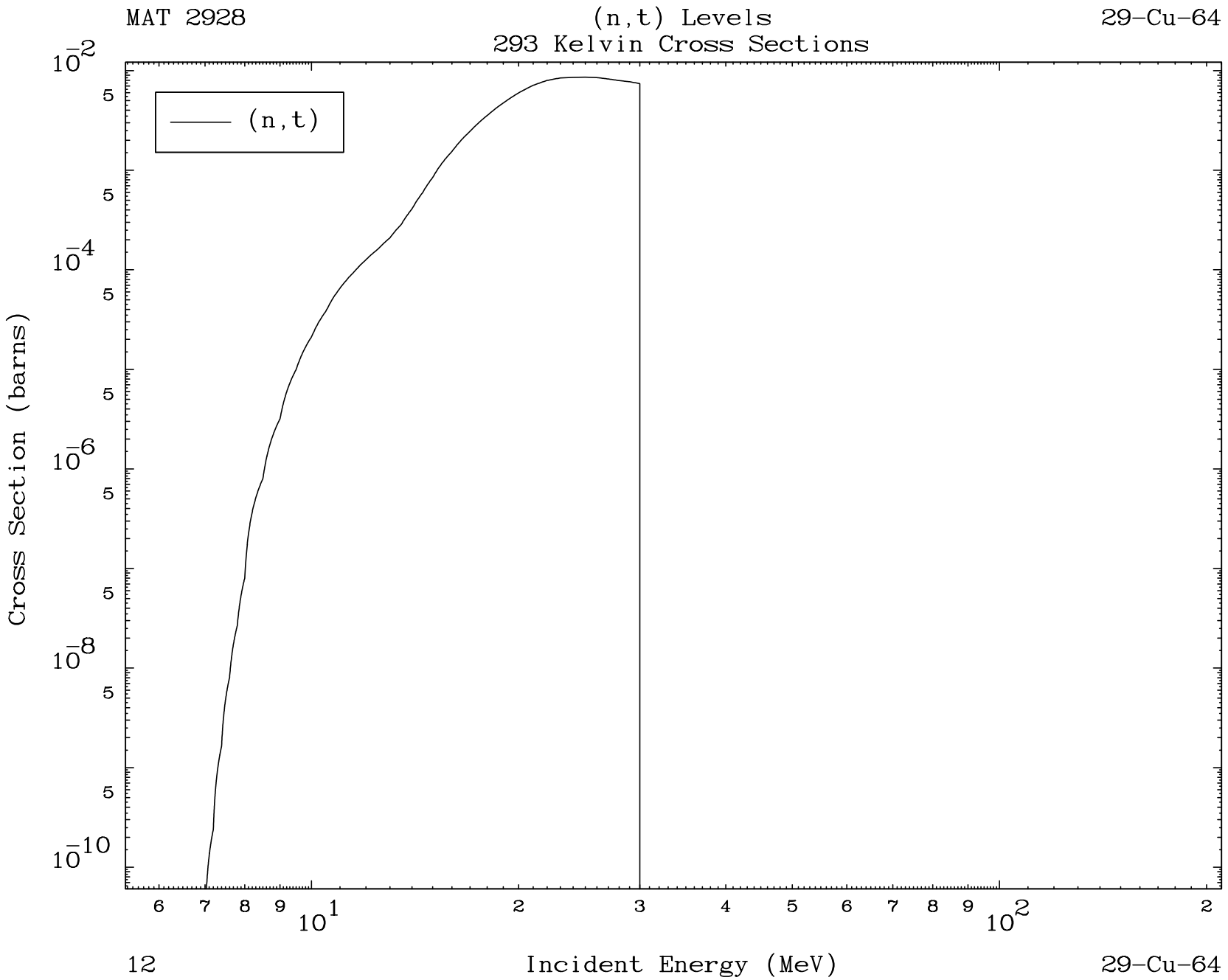

MAT 2928
(n,n') Level
293 Kelvin Cross Sections
29-Cu-64
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
MT= 60 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
7
29-Cu-64

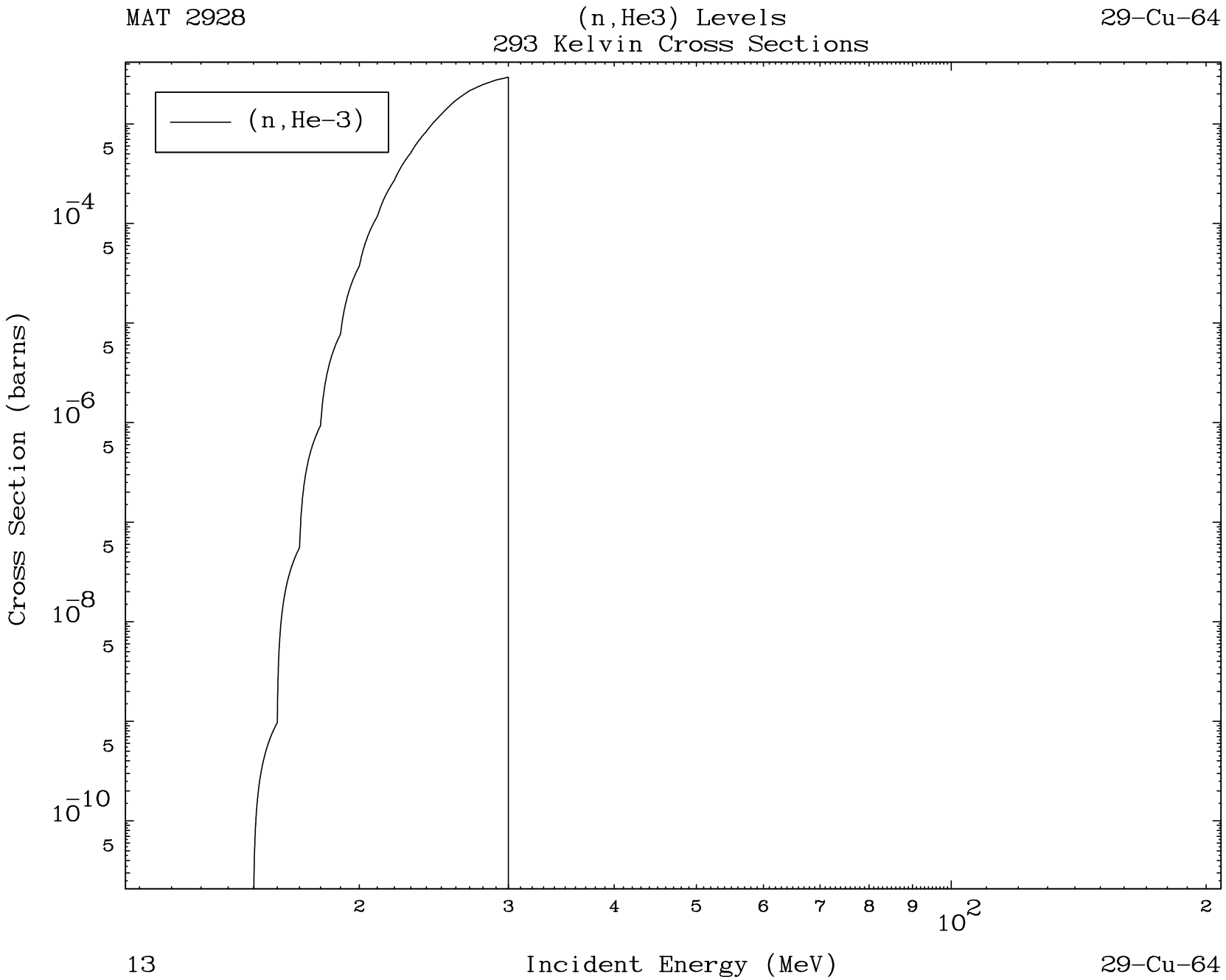

MAT 2928
(n,n') Level
293 Kelvin Cross Sections
29-Cu-64
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
8
29-Cu-64

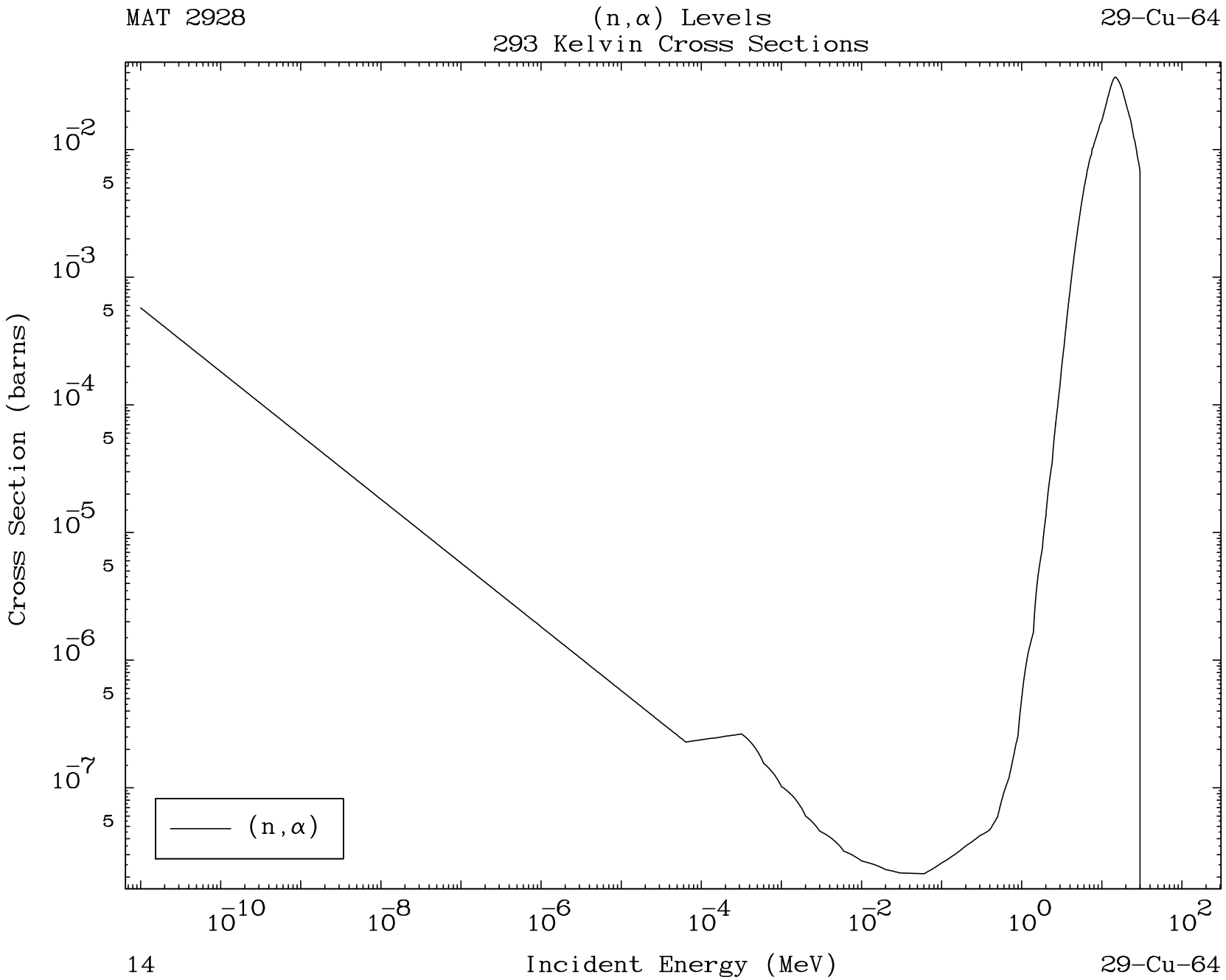

MAT 2928
(n,n') Level
293 Kelvin Cross Sections
29-Cu-64
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
9
29-Cu-64

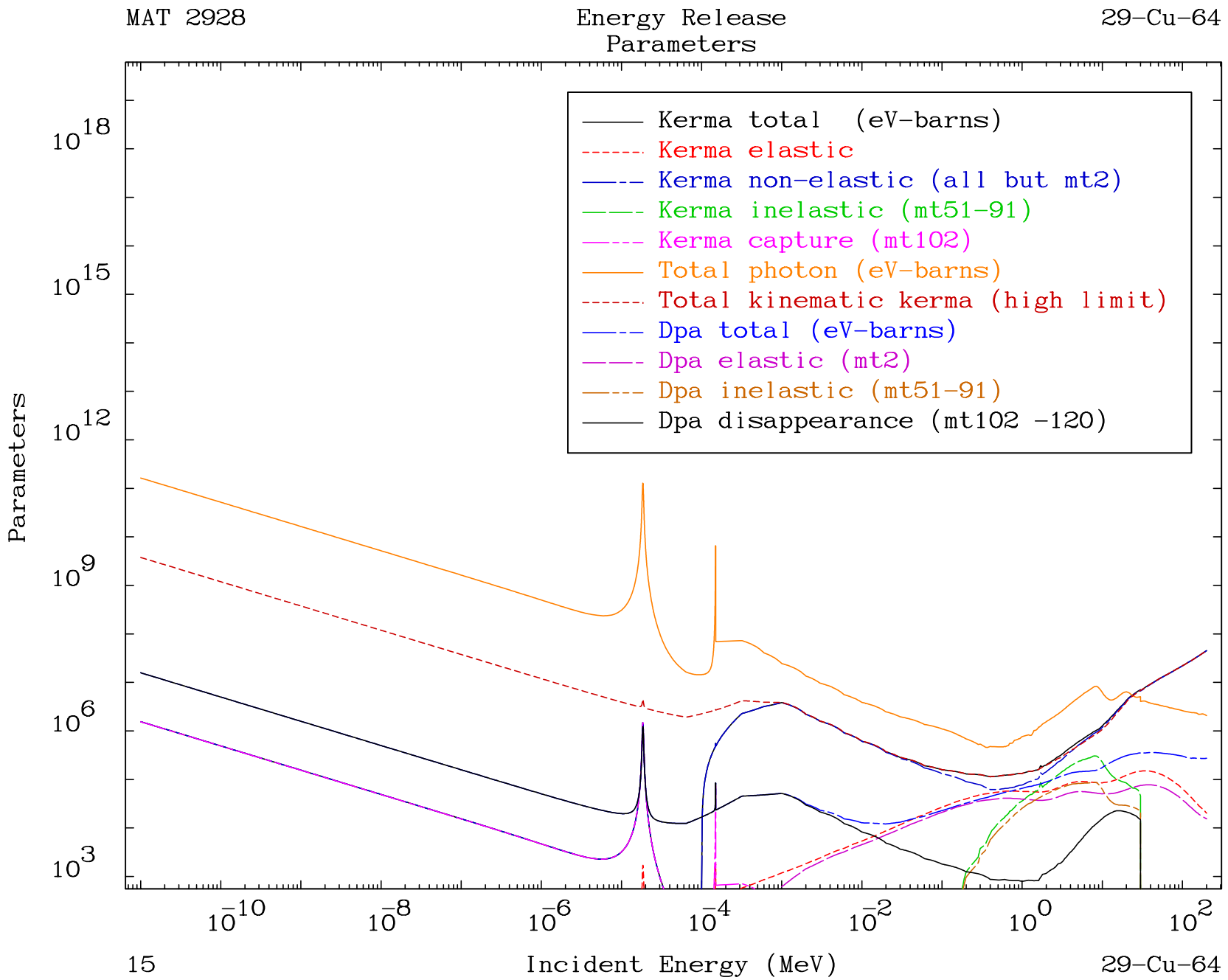

MAT 2928
(n,p) Levels
29-Cu-64
293 Kelvin Cross Sections
Cross Section (barns)
10^4
10^3
10^2
10^1
10^0
10^-1
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
10
Incident Energy (MeV)
29-Cu-64

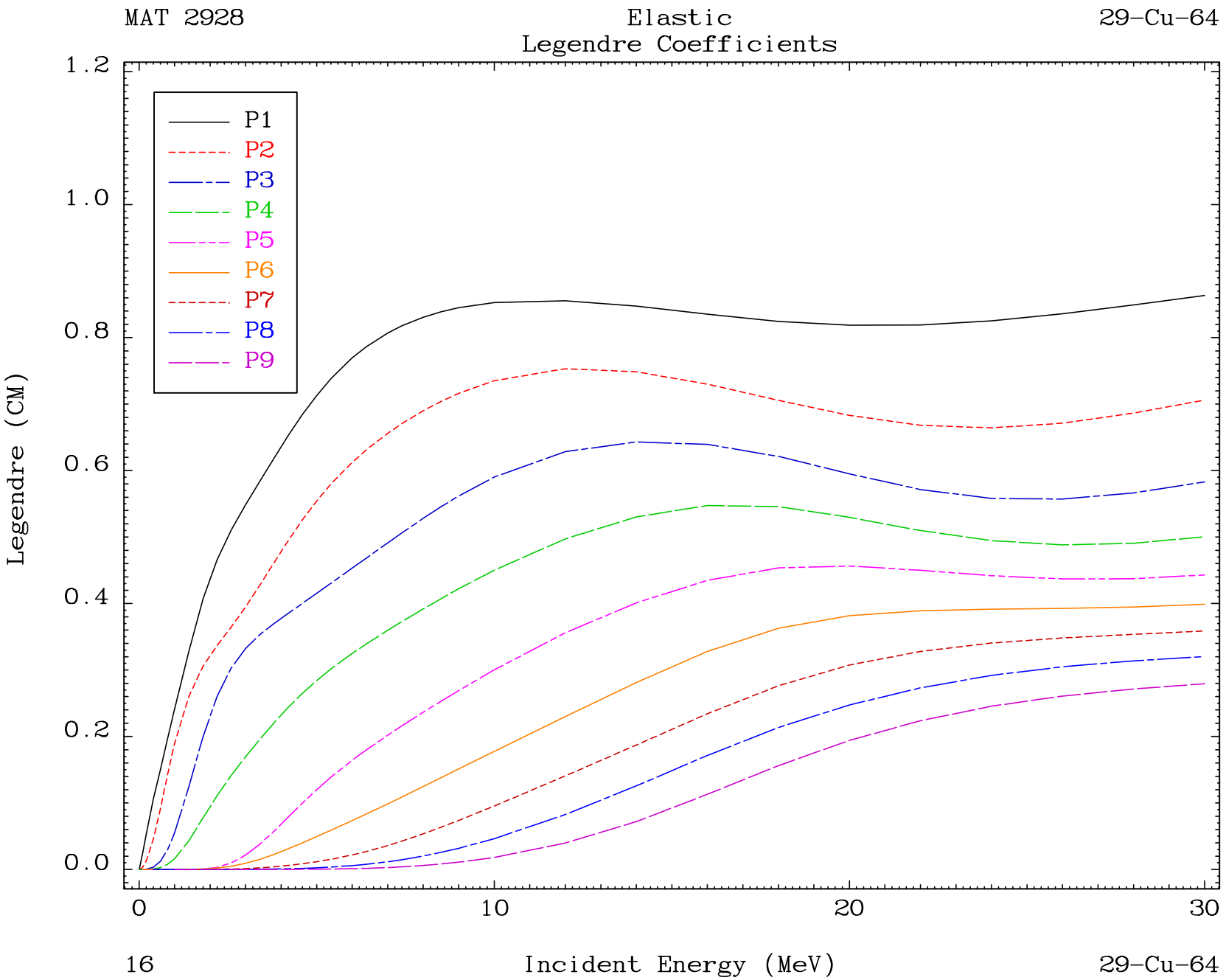

MAT 2928
(n,d) Levels
29-Cu-64
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
11
29-Cu-64

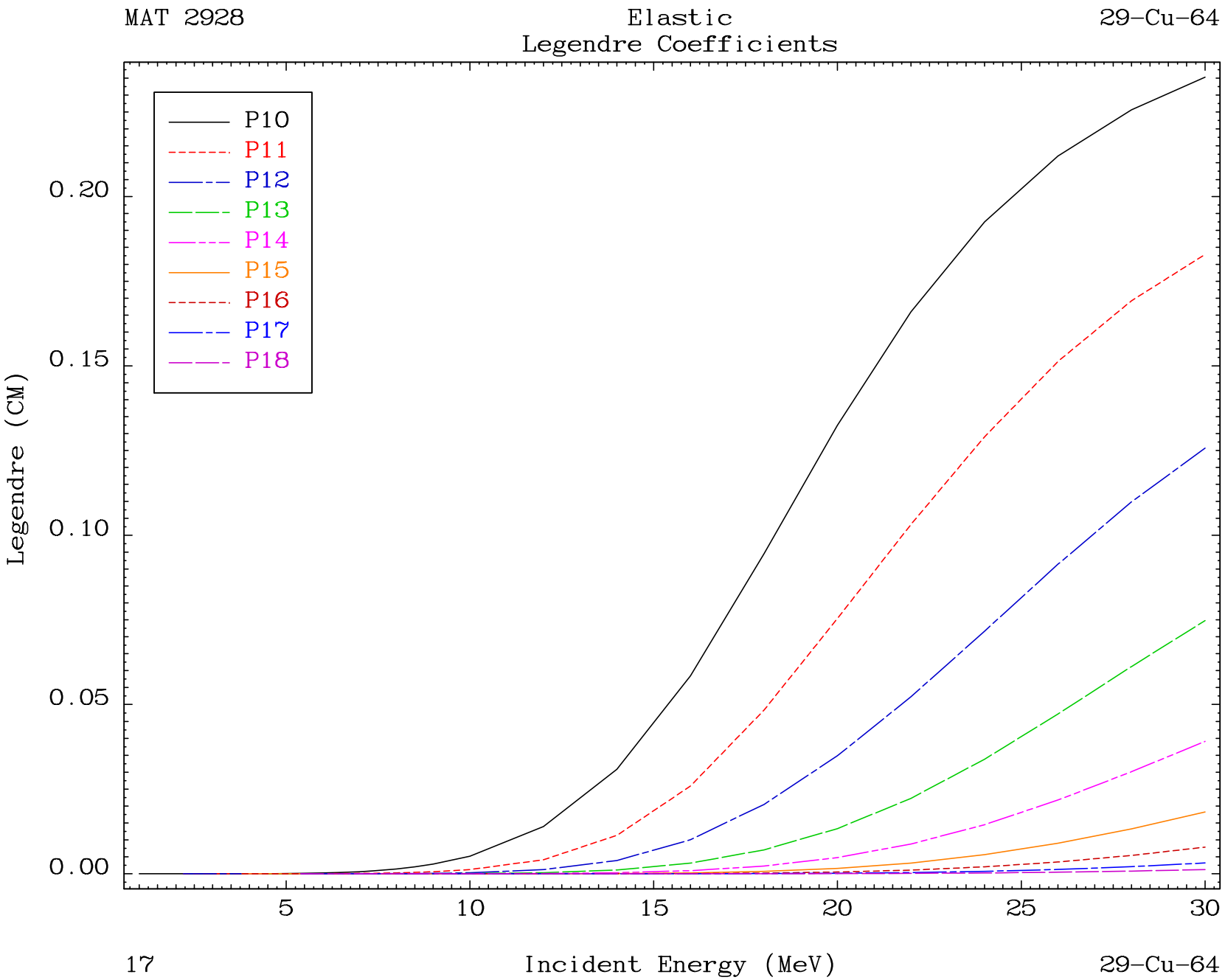

MAT 2928
(n,t) Levels
29-Cu-64
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
12
29-Cu-64

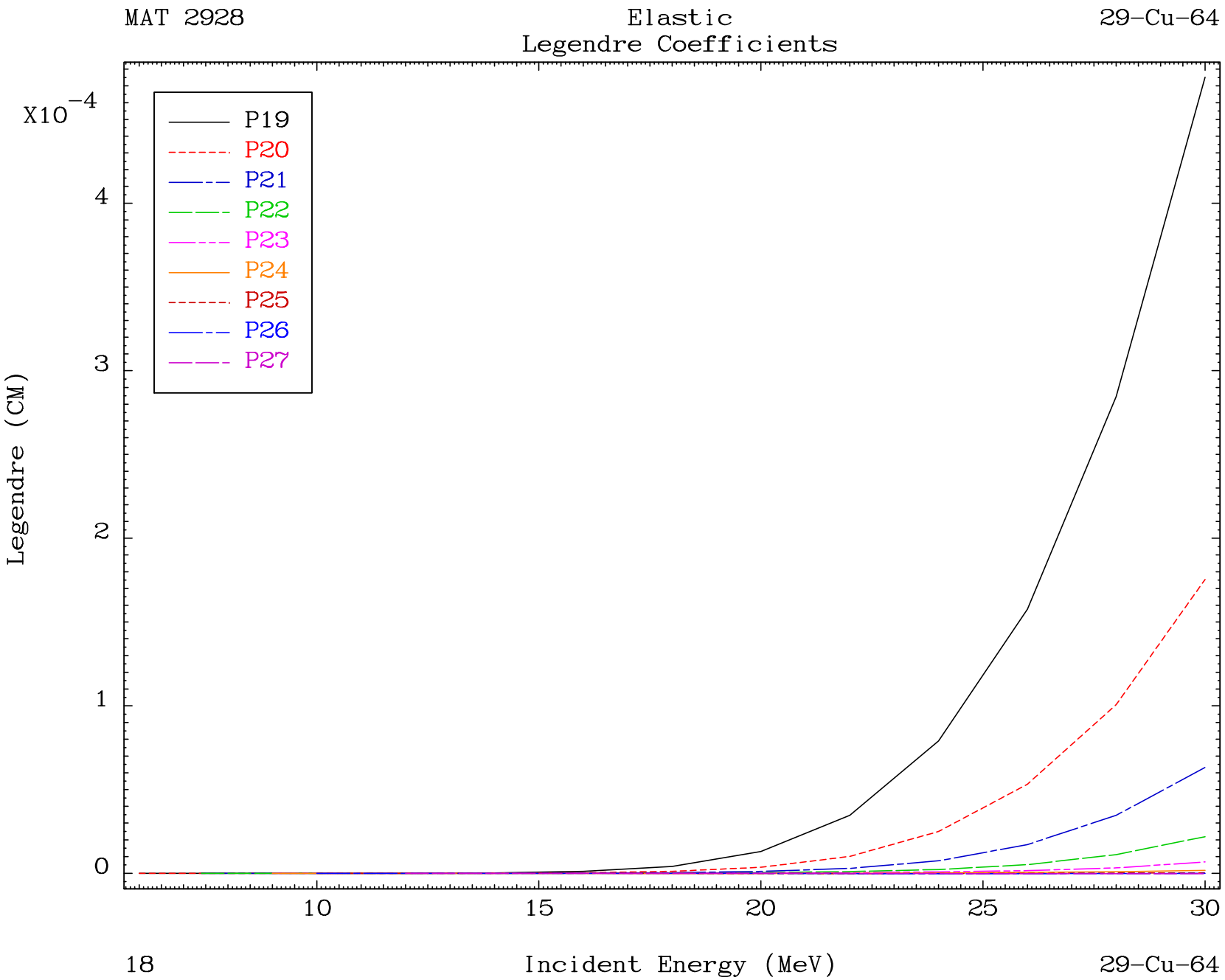

MAT 2928
(n,He3) Levels
29-Cu-64
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10^{-4}
10^{-6}
10^{-8}
10^{-10}
5
2
3
4
5
6
7
8
9
10^{2}
2
13
Incident Energy (MeV)
29-Cu-64

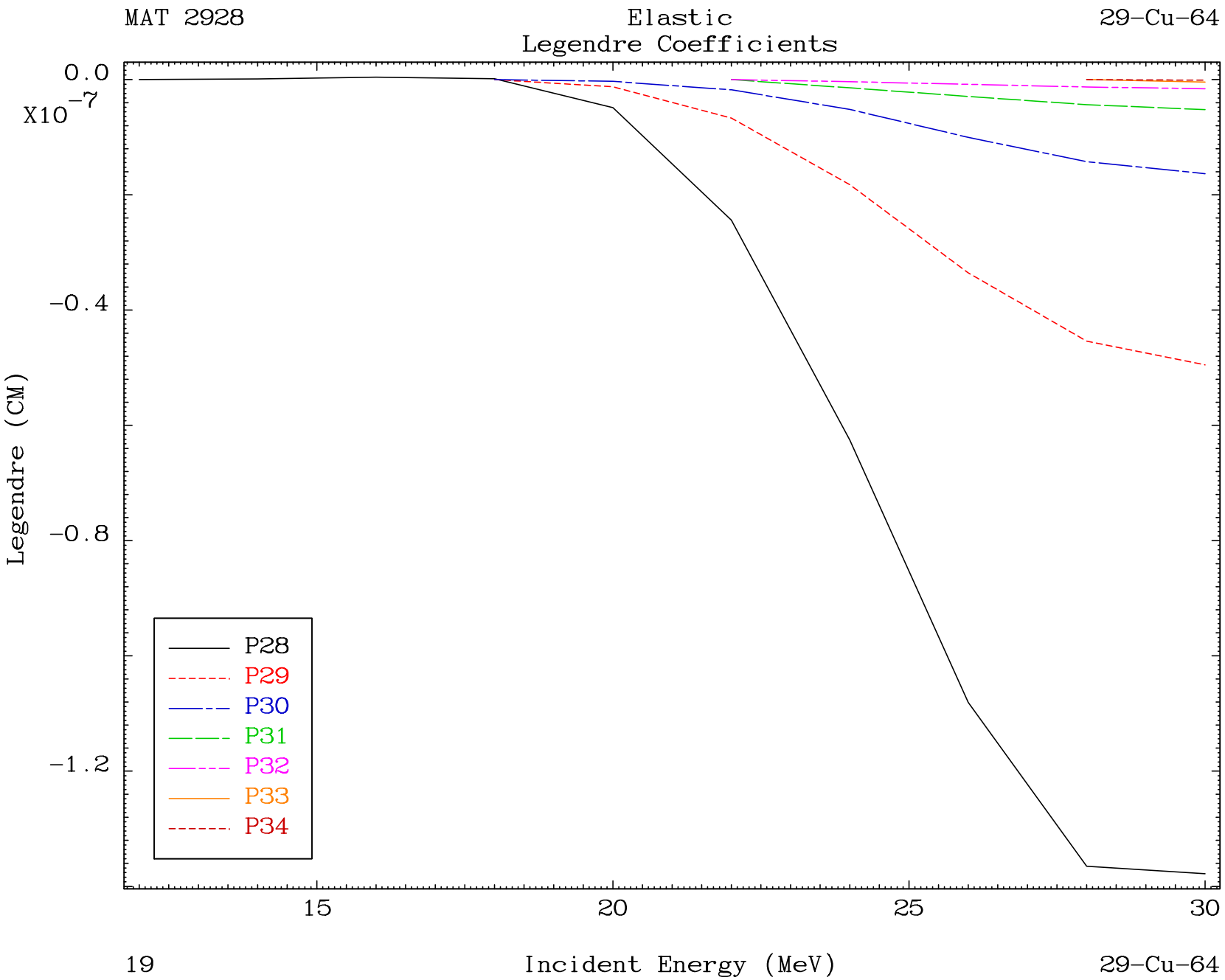

MAT 2928
(n,α) Levels
29-Cu-64
293 Kelvin Cross Sections
Cross Section (barns)
10-2
5
10-3
5
10-4
5
10-5
5
10-6
5
10-7
5
(n,α)
10-10
10-8
10-6
10-4
10-2
100
102
14
Incident Energy (MeV)
29-Cu-64

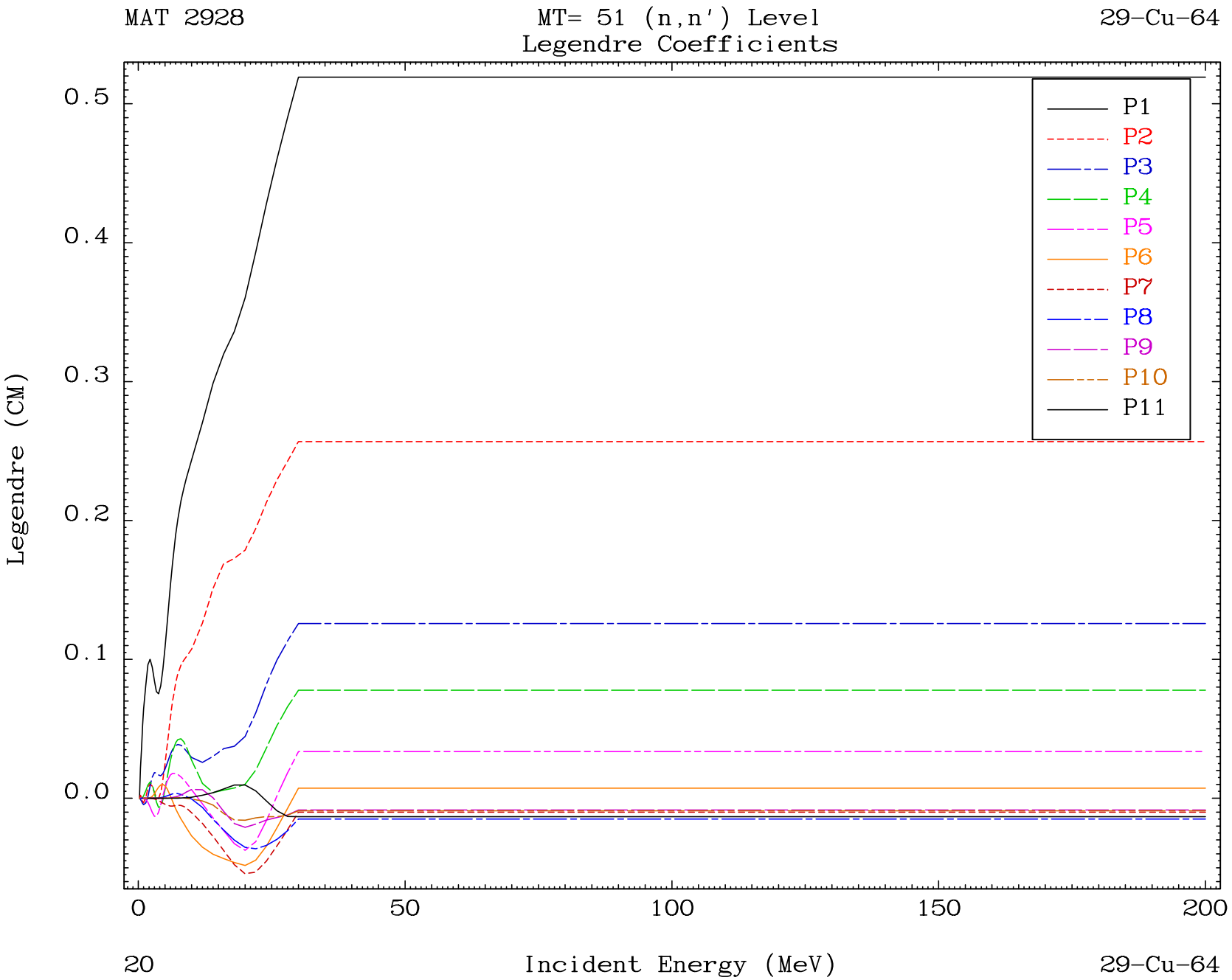

MAT 2928
Energy Release
Parameters
29-Cu-64
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^18
10^15
10^12
10^9
10^6
10^3
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
15
29-Cu-64

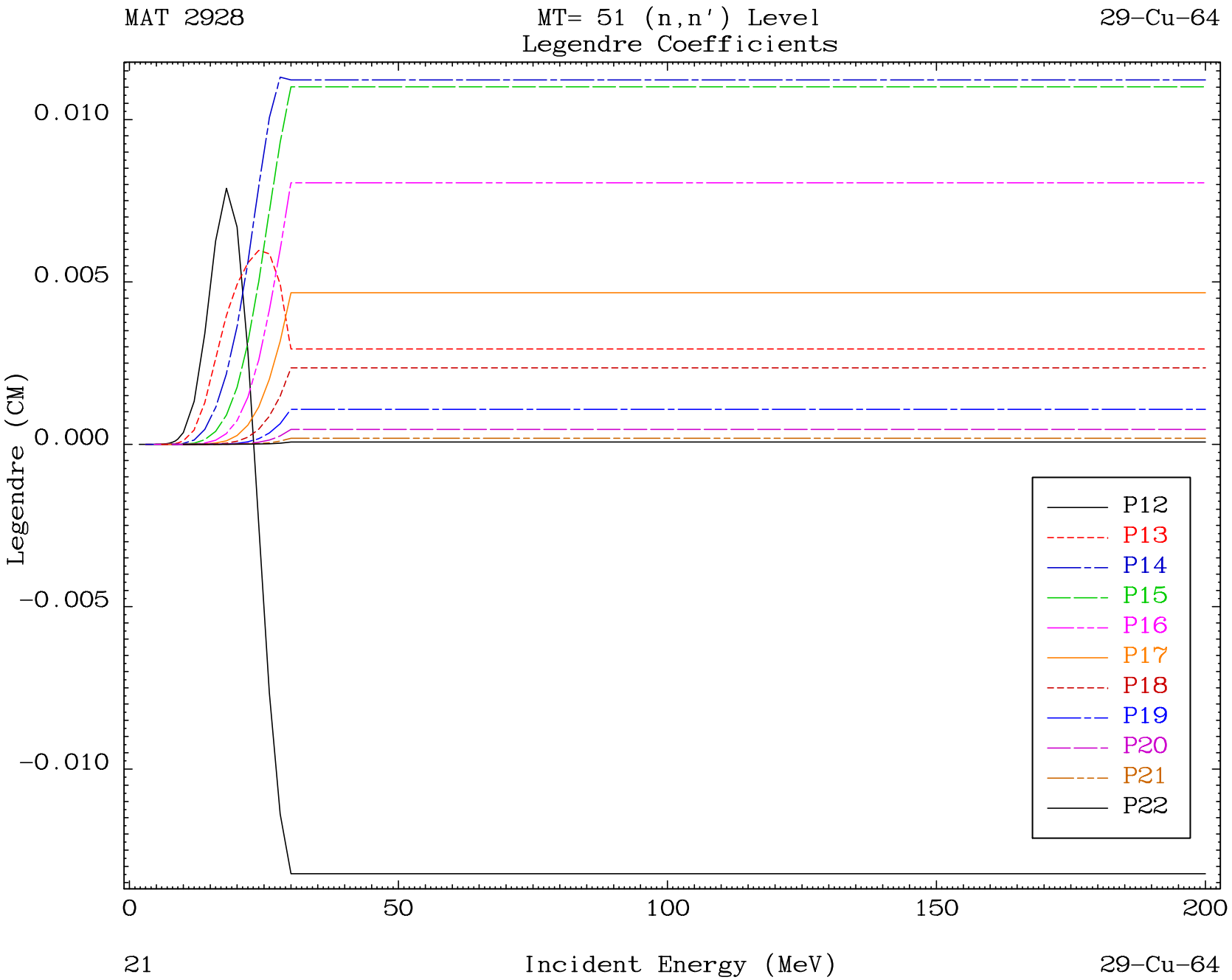

MAT 2928
Elastic
Legendre Coefficients
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
10
20
30
16
Incident Energy (MeV)
29-Cu-64

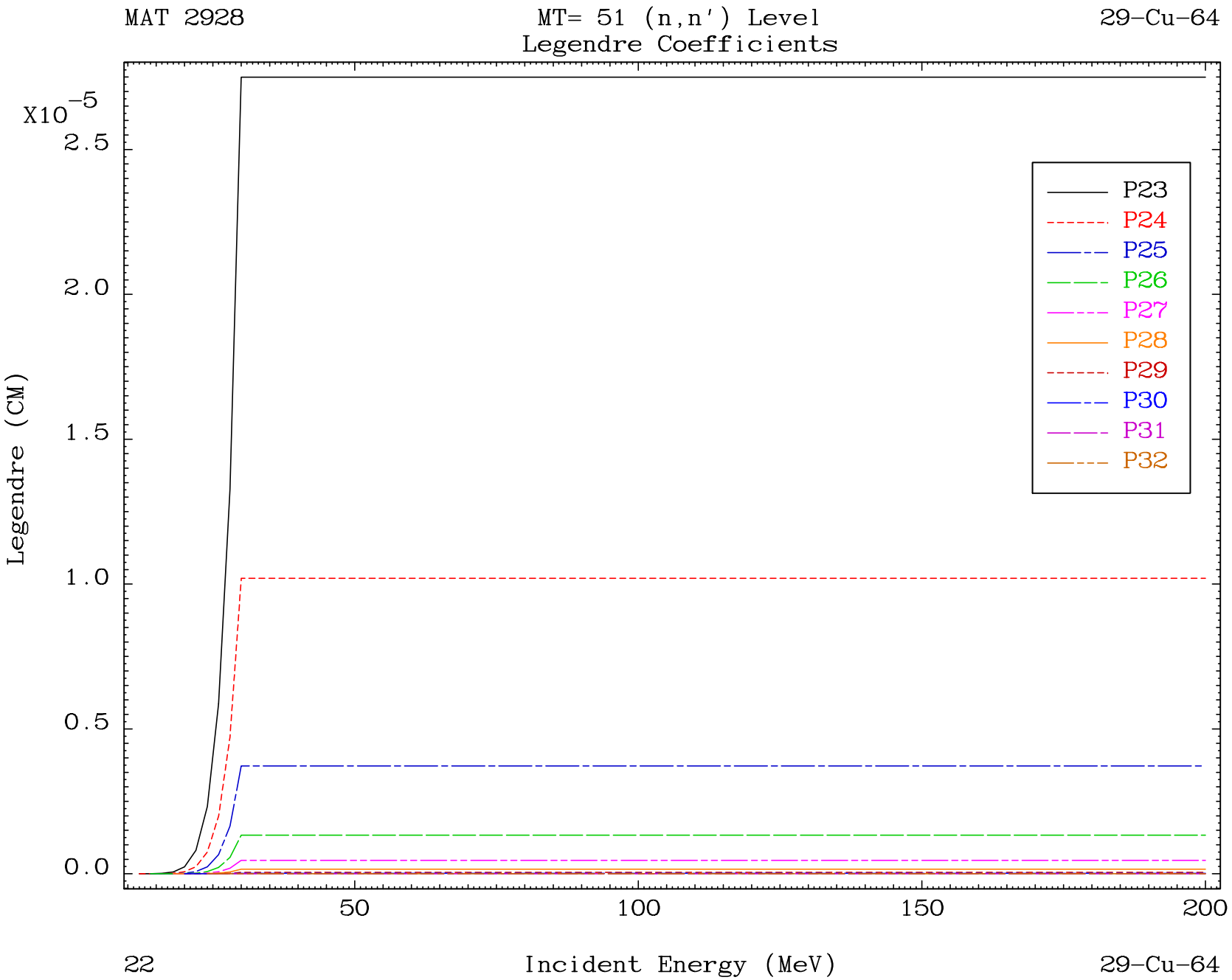

MAT 2928
Elastic
Legendre Coefficients
29-Cu-64
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.20
0.15
0.10
0.05
0.00
5
10
15
20
25
30
17
Incident Energy (MeV)
29-Cu-64

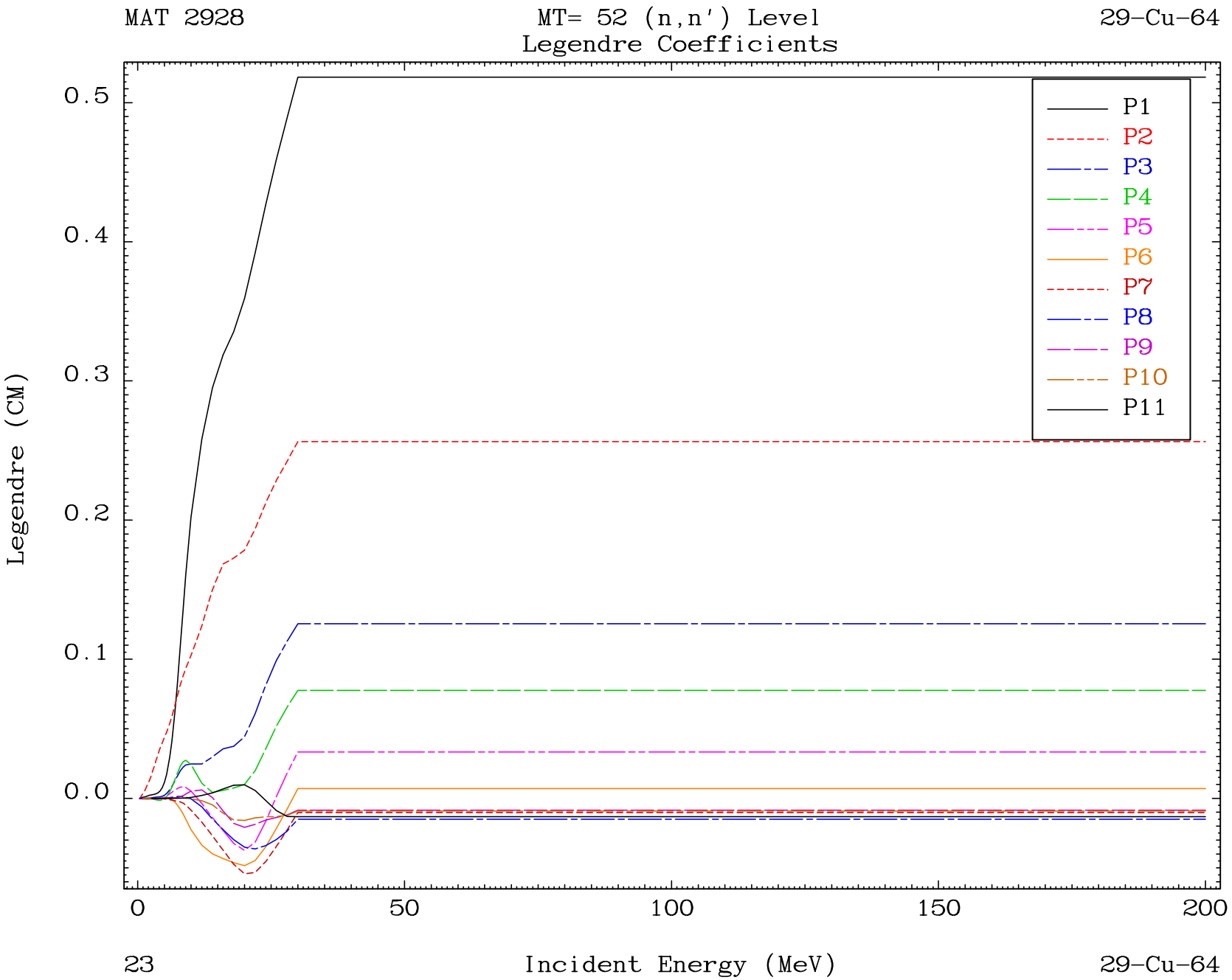

MAT 2928
Elastic
Legendre Coefficients
29-Cu-64
X10^-4
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
0
1
2
3
4
10
15
20
25
30
18
Incident Energy (MeV)
29-Cu-64

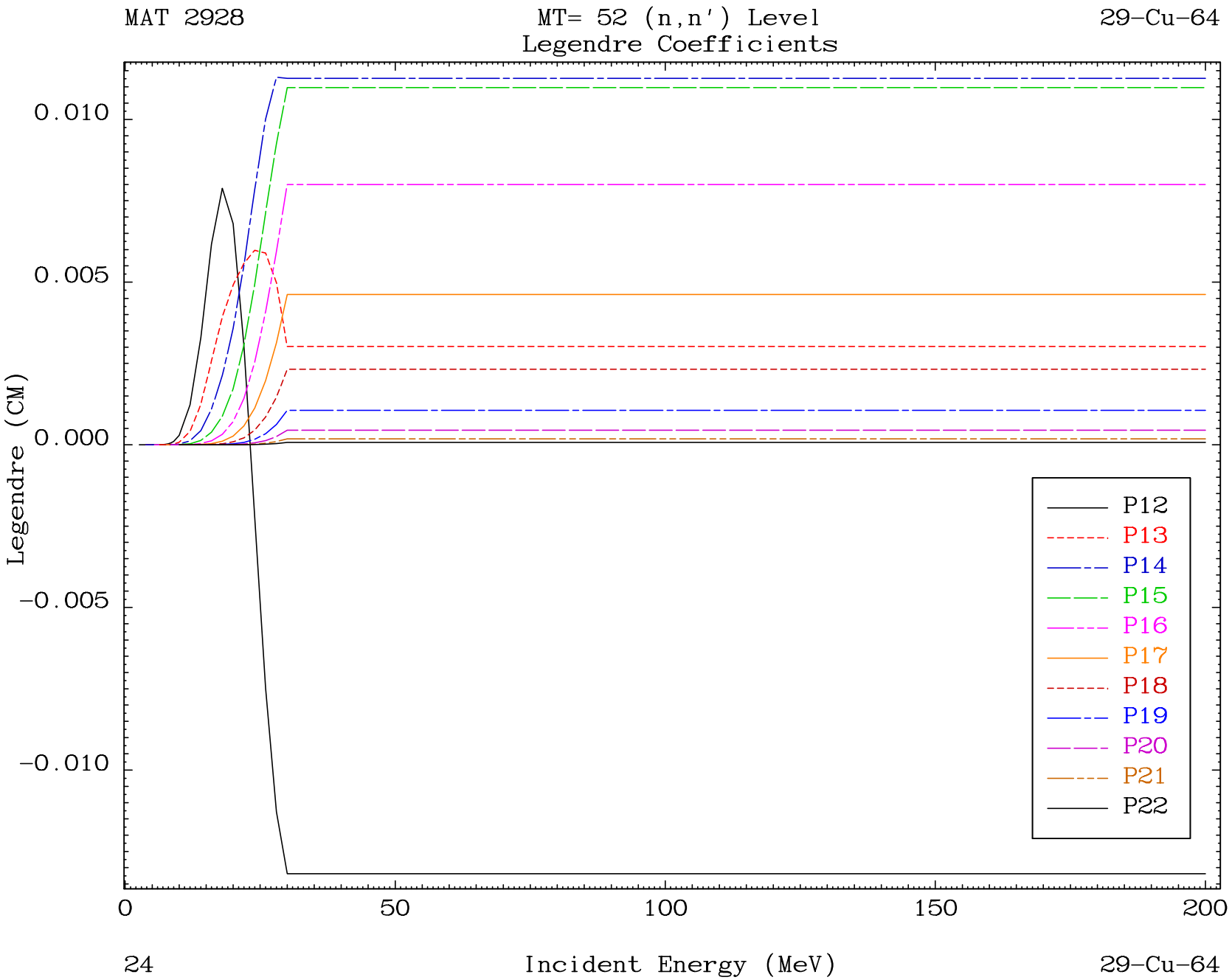

MAT 2928
Elastic
Legendre Coefficients
29-Cu-64
0.0
X10^-7
-0.4
-0.8
-1.2
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
15
20
25
30
19
Incident Energy (MeV)
29-Cu-64

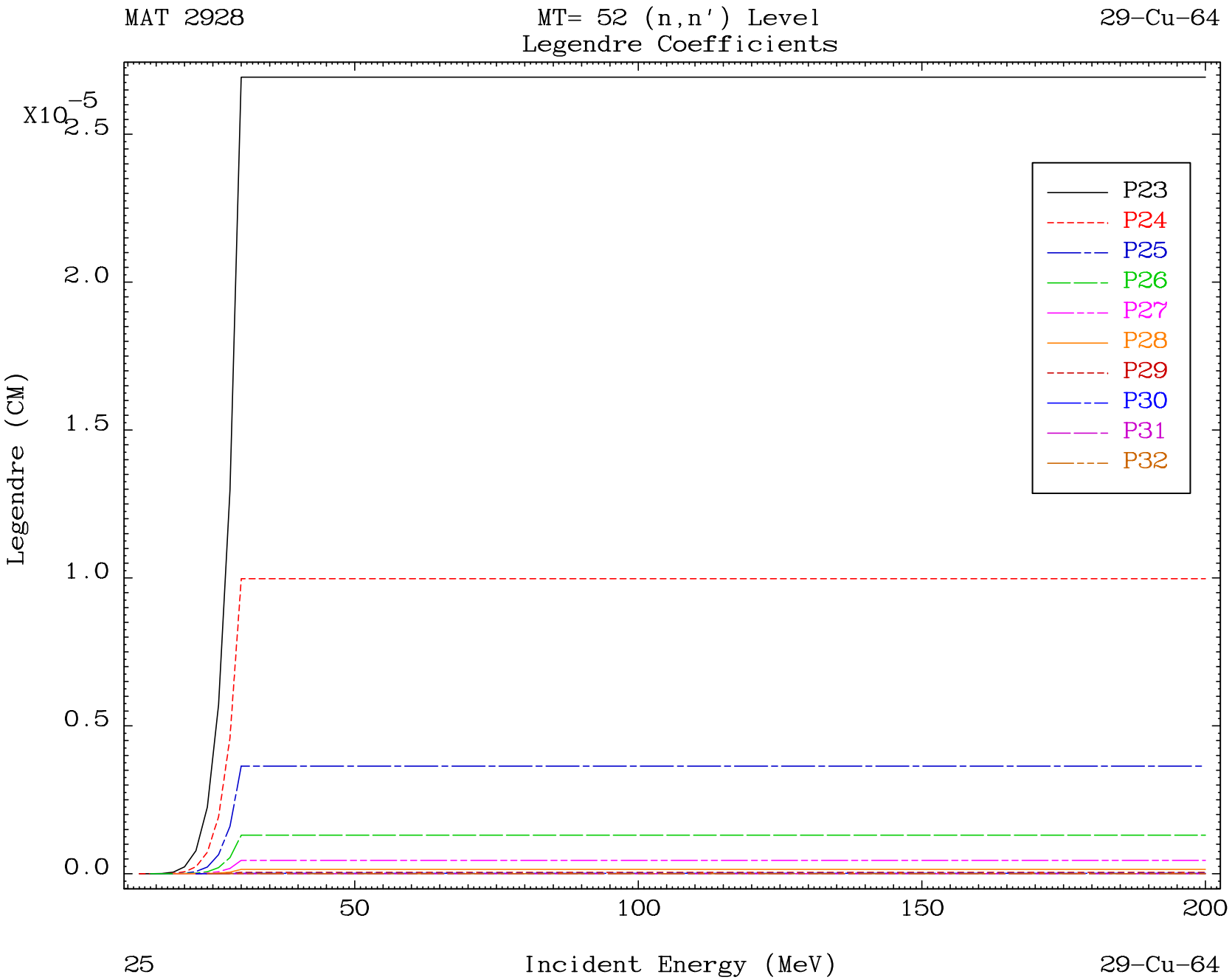

MAT 2928
MT= 51 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
20
Incident Energy (MeV)
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11

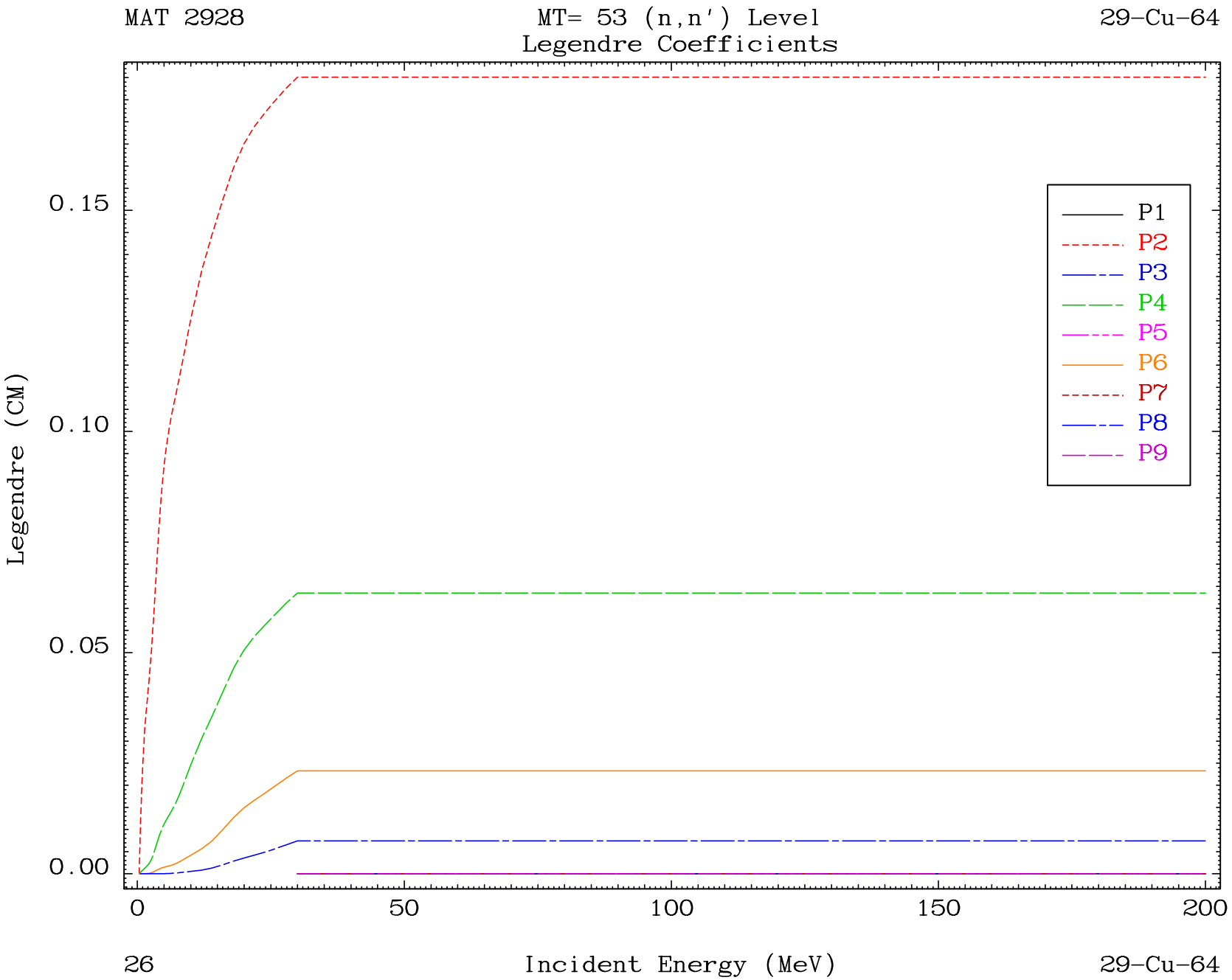

MAT 2928
MT= 51 (n,n') Level
Legendre Coefficients
29-Cu-64
0.010
0.005
0.000
-0.005
-0.010
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
21
29-Cu-64
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

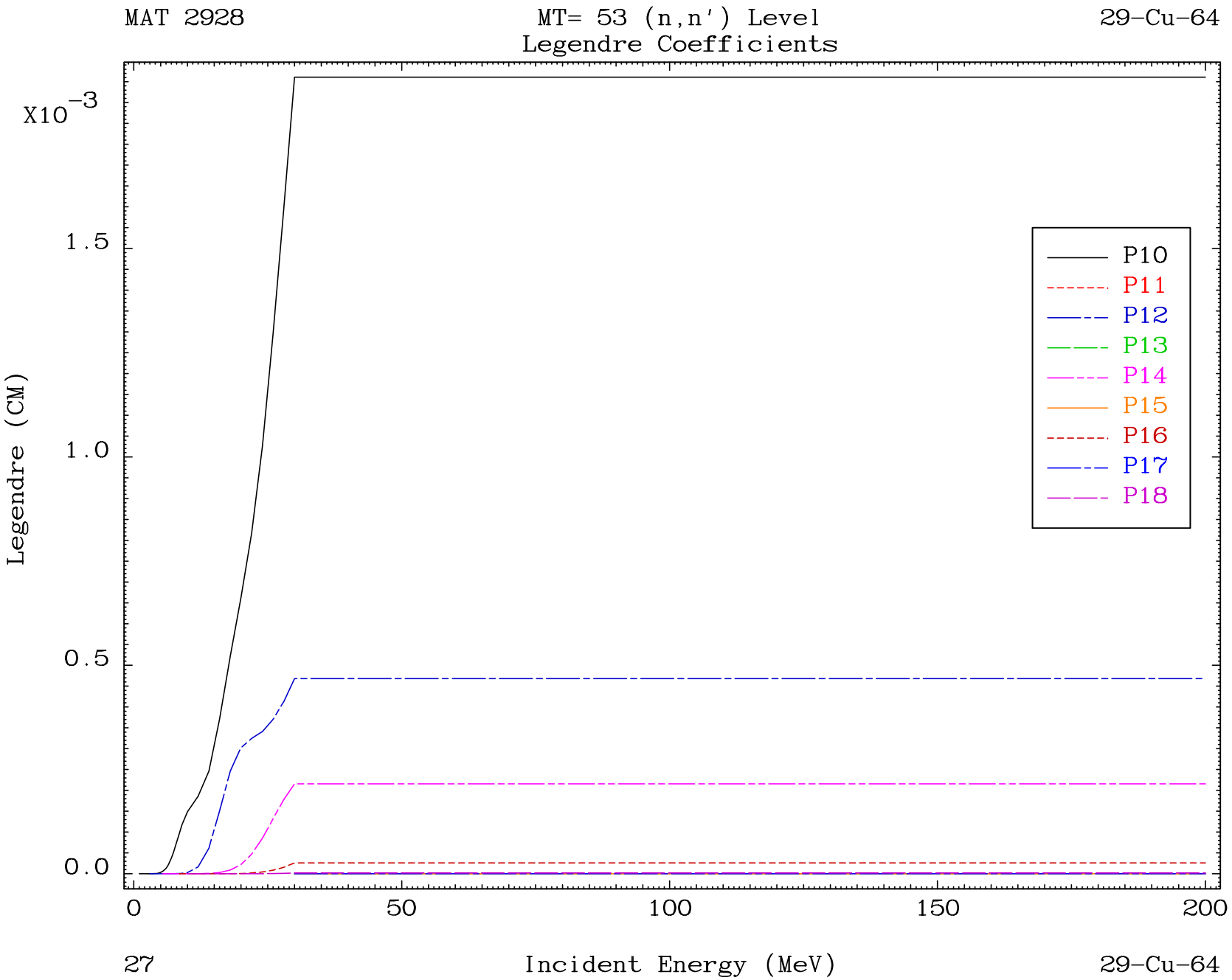

MAT 2928
MT= 51 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-5
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
22
Incident Energy (MeV)
29-Cu-64

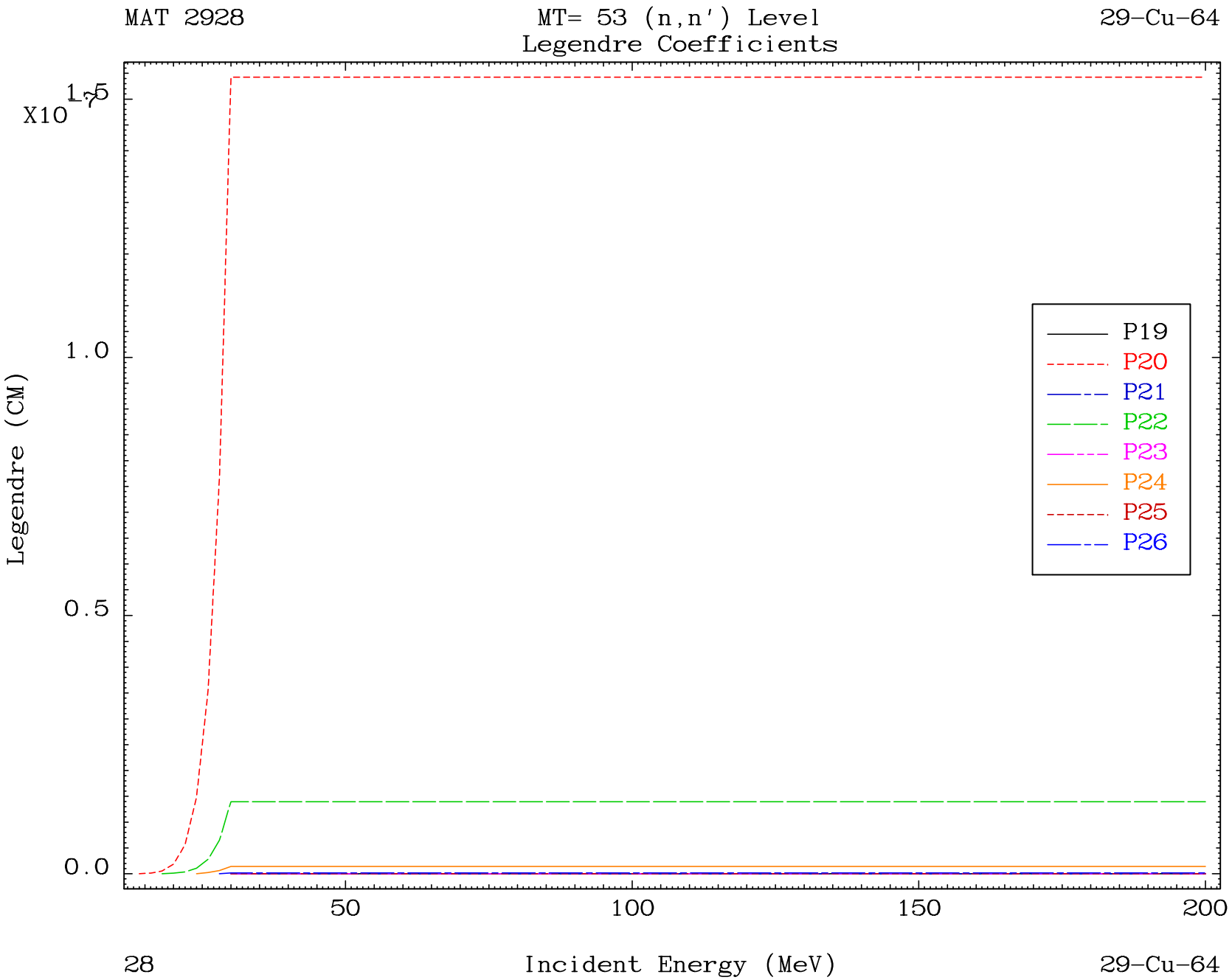

MAT 2928
MT= 52 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
Incident Energy (MeV)
23
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11

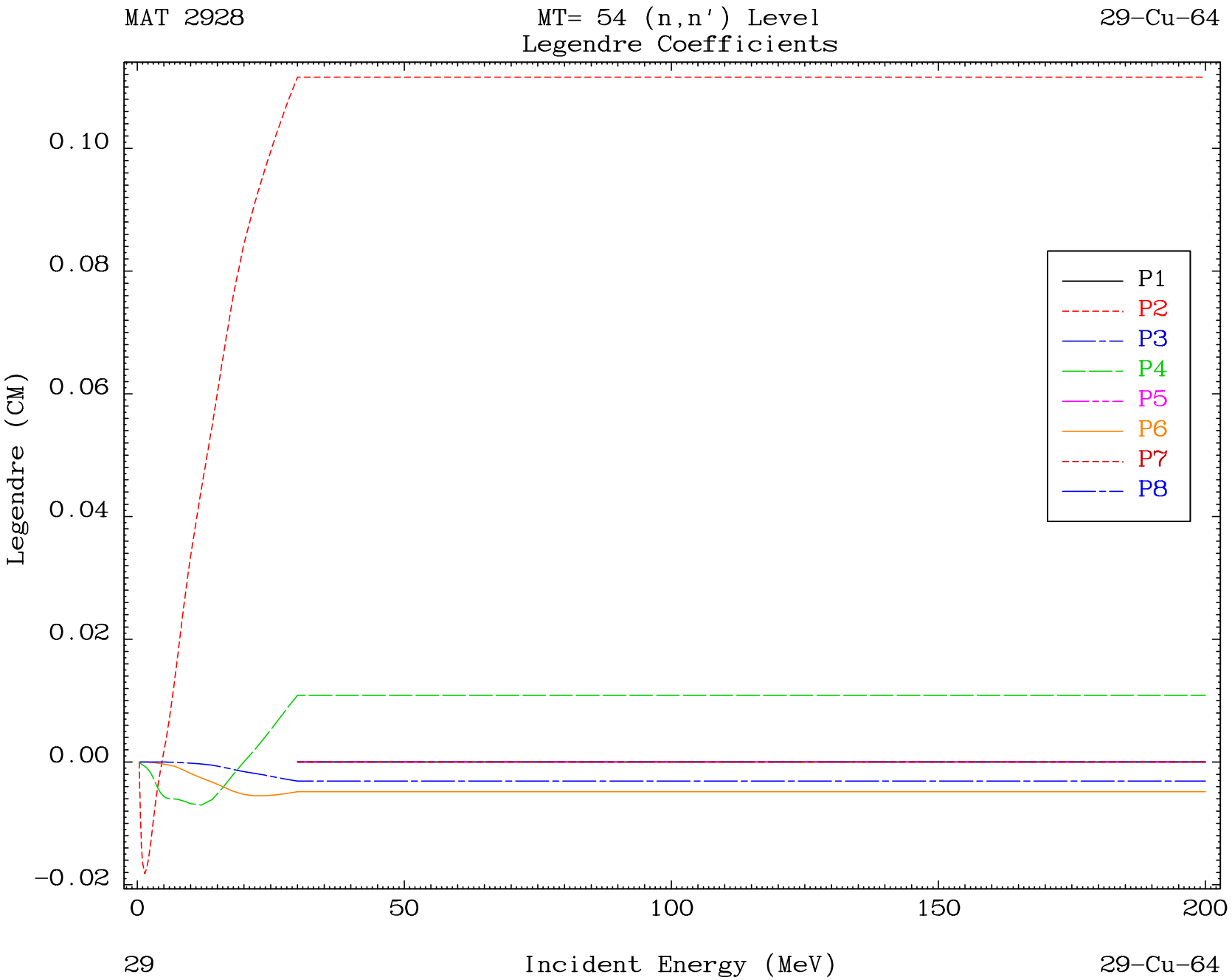

MAT 2928
MT= 52 (n,n') Level
Legendre Coefficients
29-Cu-64
0.010
0.005
0.000
-0.005
-0.010
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
24
29-Cu-64
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

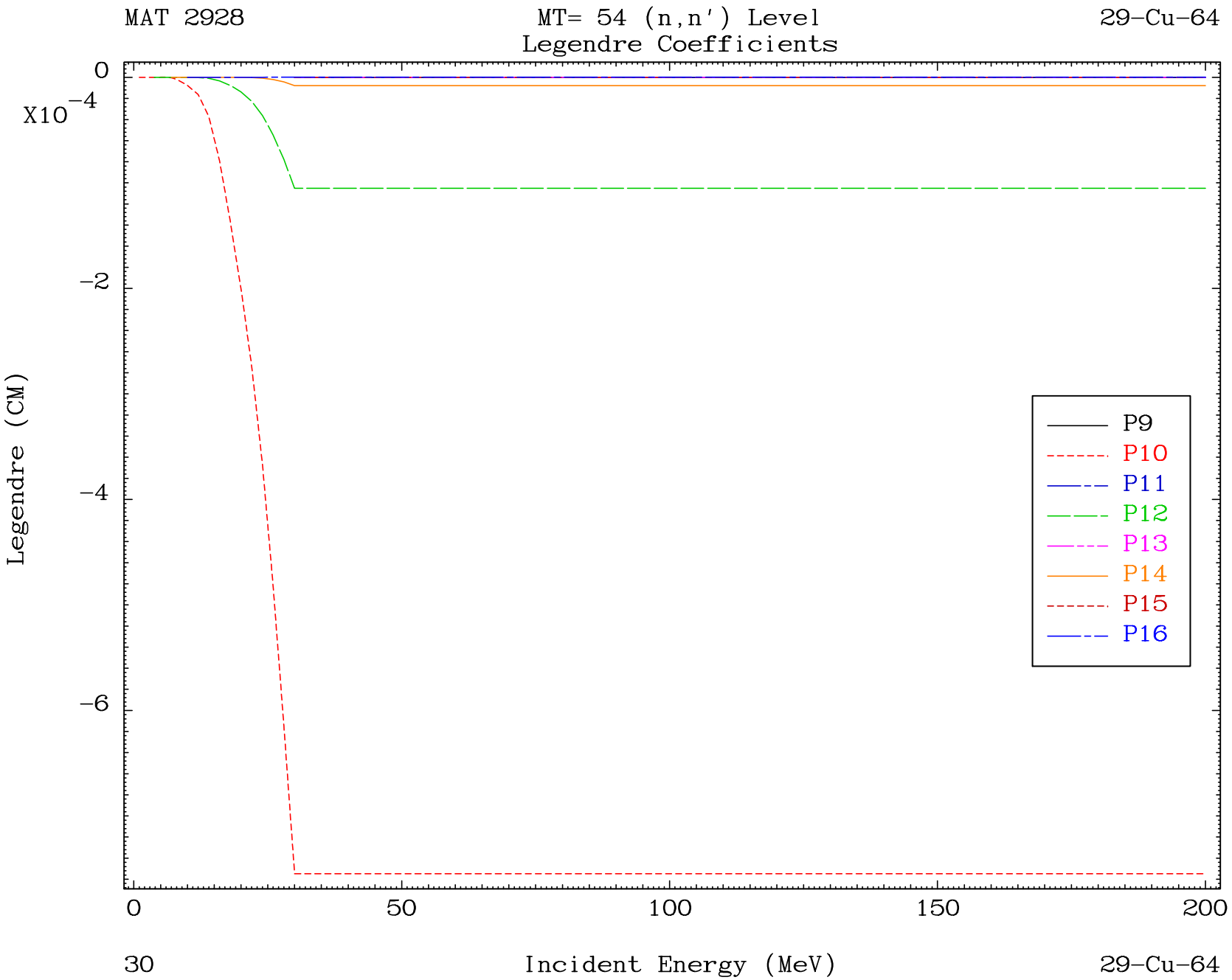

MAT 2928
MT= 52 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-5
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
25
Incident Energy (MeV)
29-Cu-64

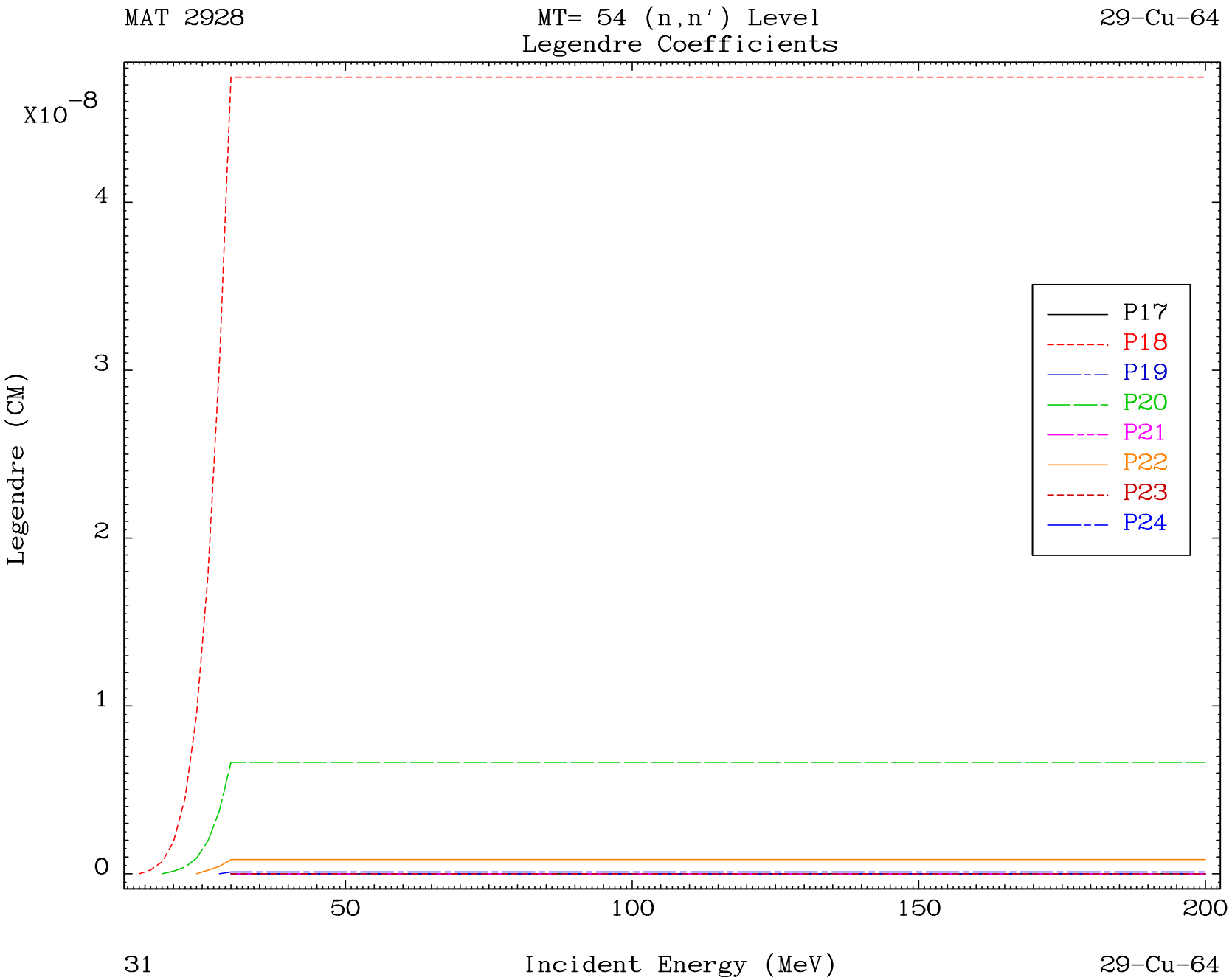

MAT 2928
MT= 53 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.15
0.10
0.05
0.00
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
26
Incident Energy (MeV)
29-Cu-64

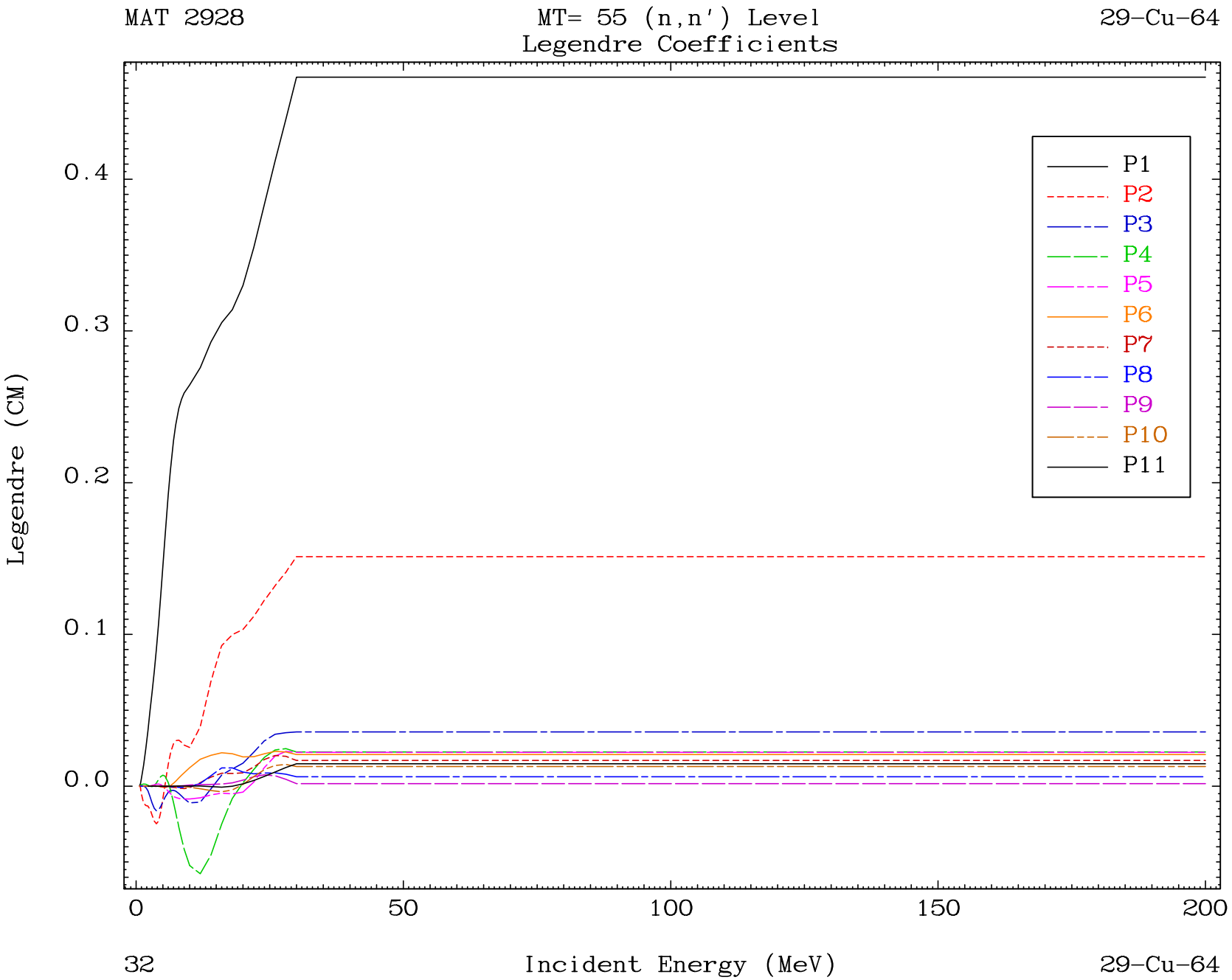

MAT 2928
MT= 53 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
27
Incident Energy (MeV)
29-Cu-64

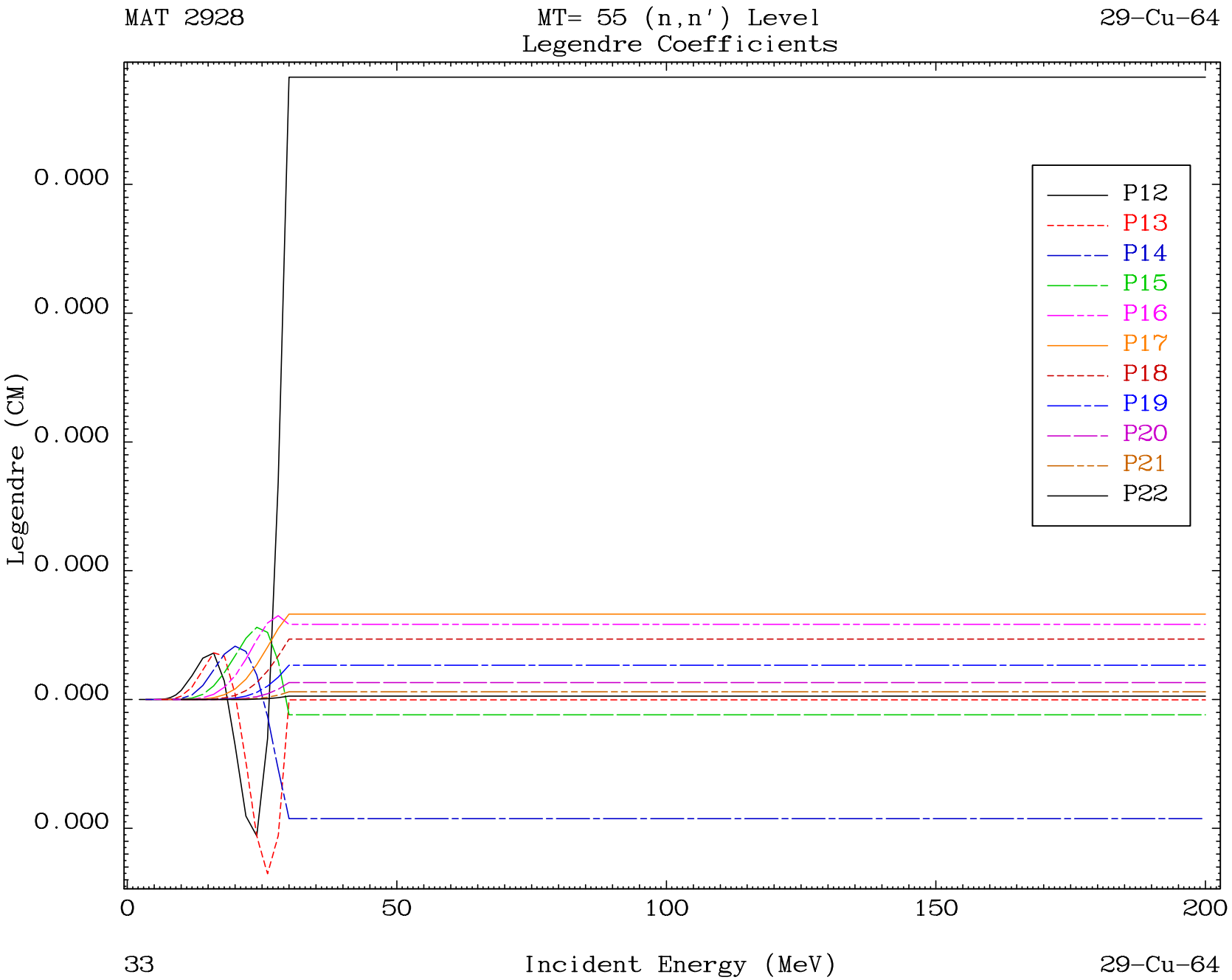

MAT 2928
MT= 53 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-5
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
28
Incident Energy (MeV)
29-Cu-64
P19
P20
P21
P22
P23
P24
P25
P26

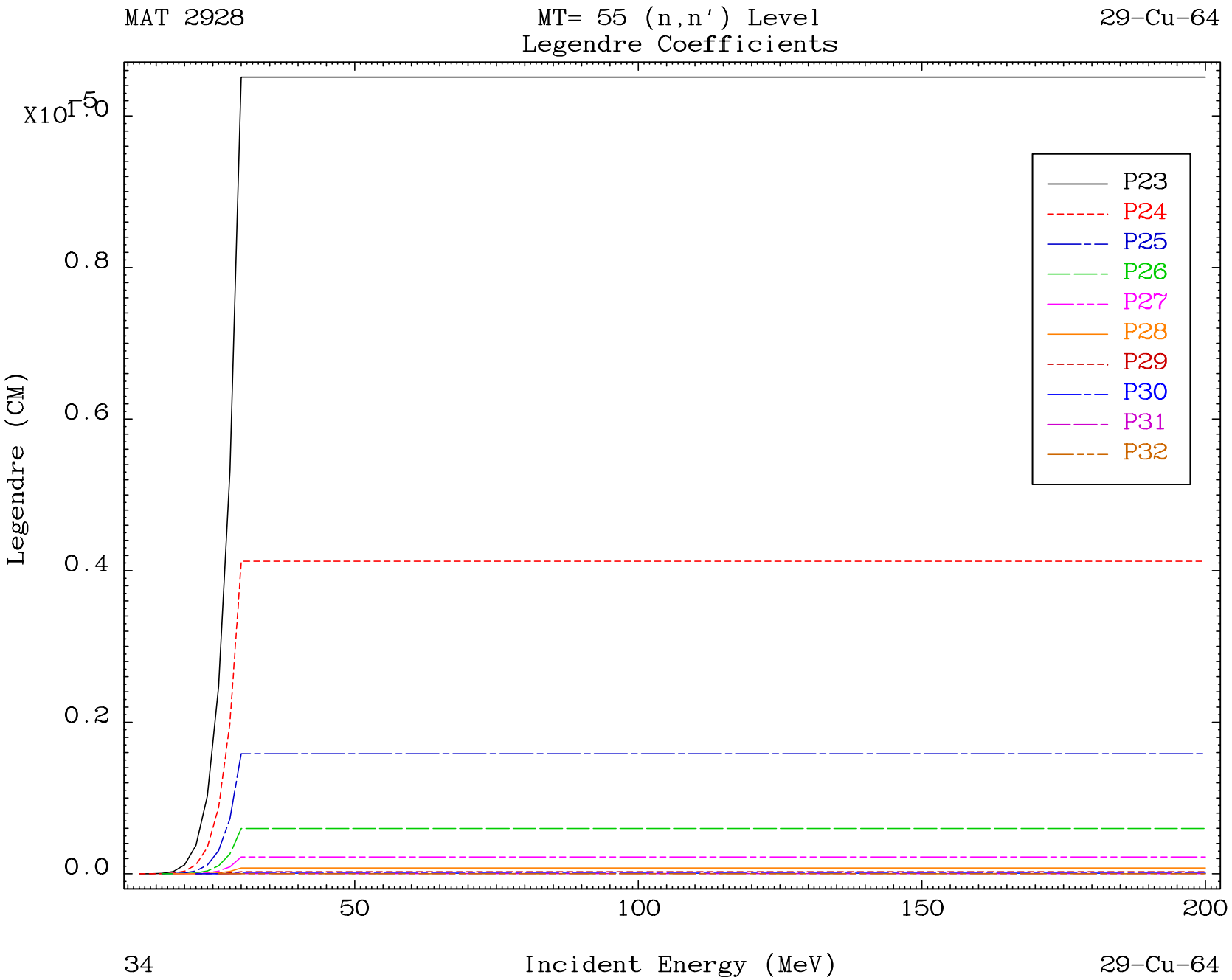

MAT 2928
MT= 54 (n,n') Level
Legendre Coefficients
29-Cu-64
0.10
0.08
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
29
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8

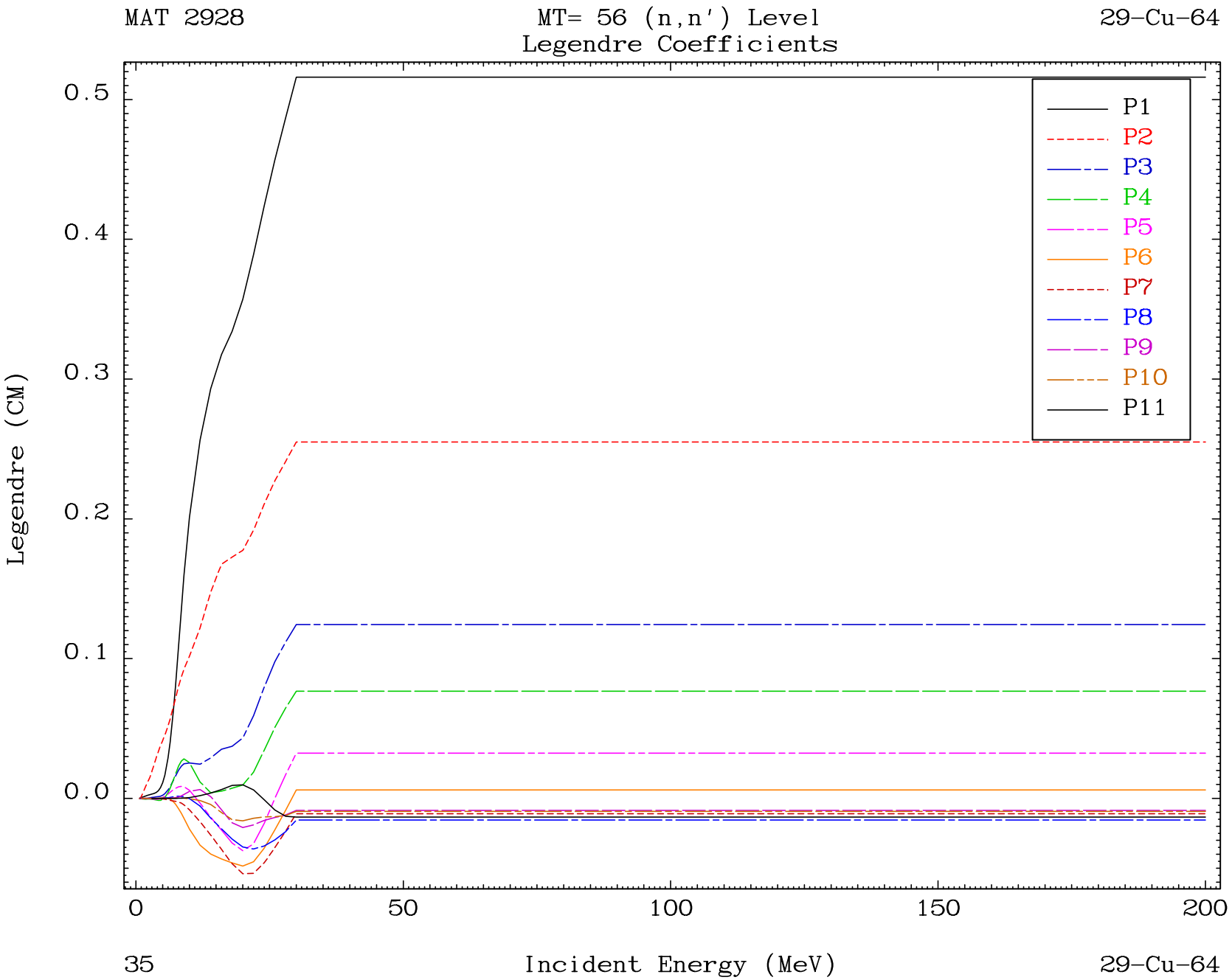

MAT 2928
MT= 54 (n,n') Level
Legendre Coefficients
29-Cu-64
0
X10^-4
-2
-4
-6
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
30
Incident Energy (MeV)
29-Cu-64

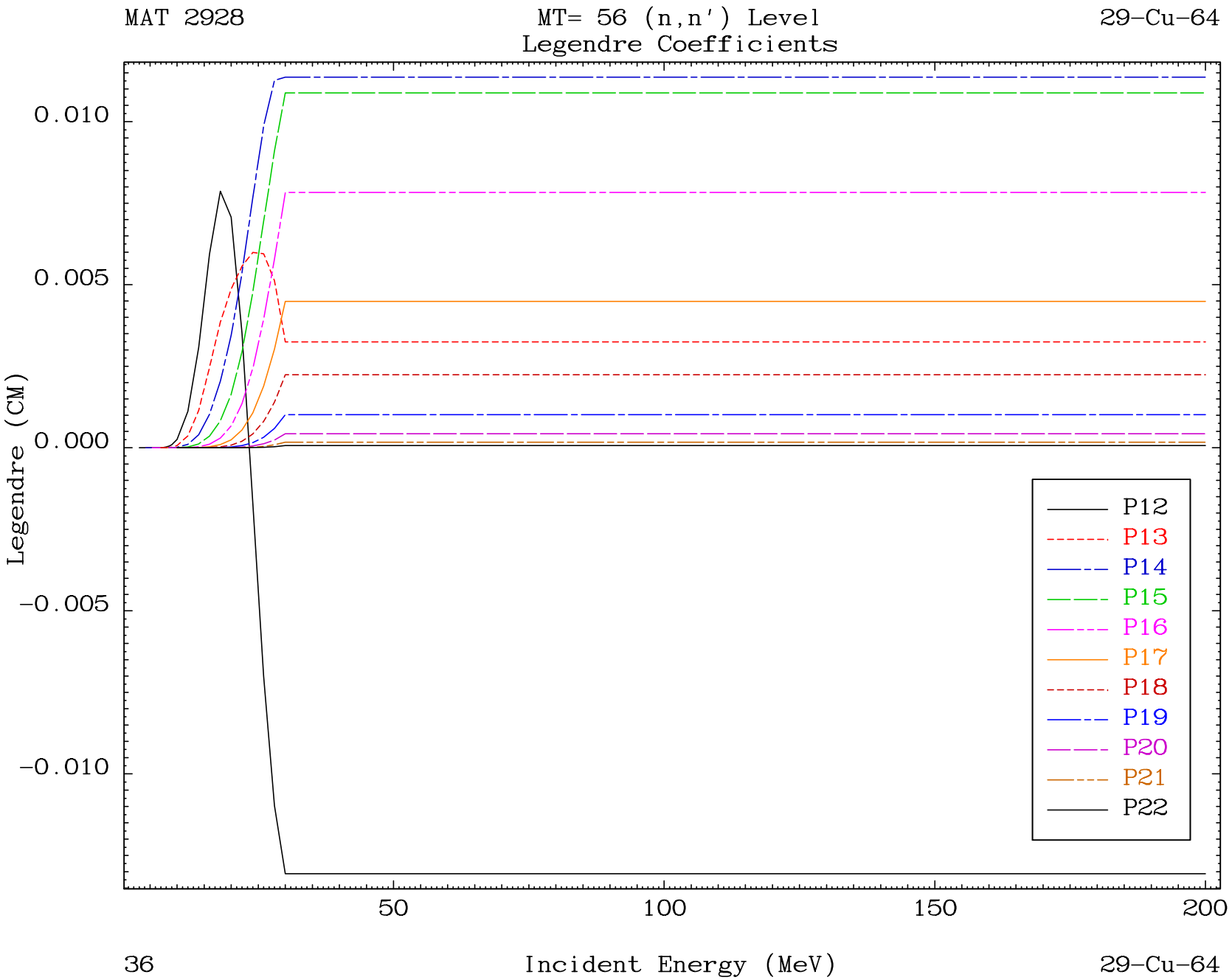

MAT 2928
MT= 54 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-8
4
3
2
1
0
Legendre (CM)
50
100
150
200
P17
P18
P19
P20
P21
P22
P23
P24
31
Incident Energy (MeV)
29-Cu-64


MAT 2928
MT= 55 (n,n') Level
Legendre Coefficients
29-Cu-64
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
P11
32
Incident Energy (MeV)
29-Cu-64

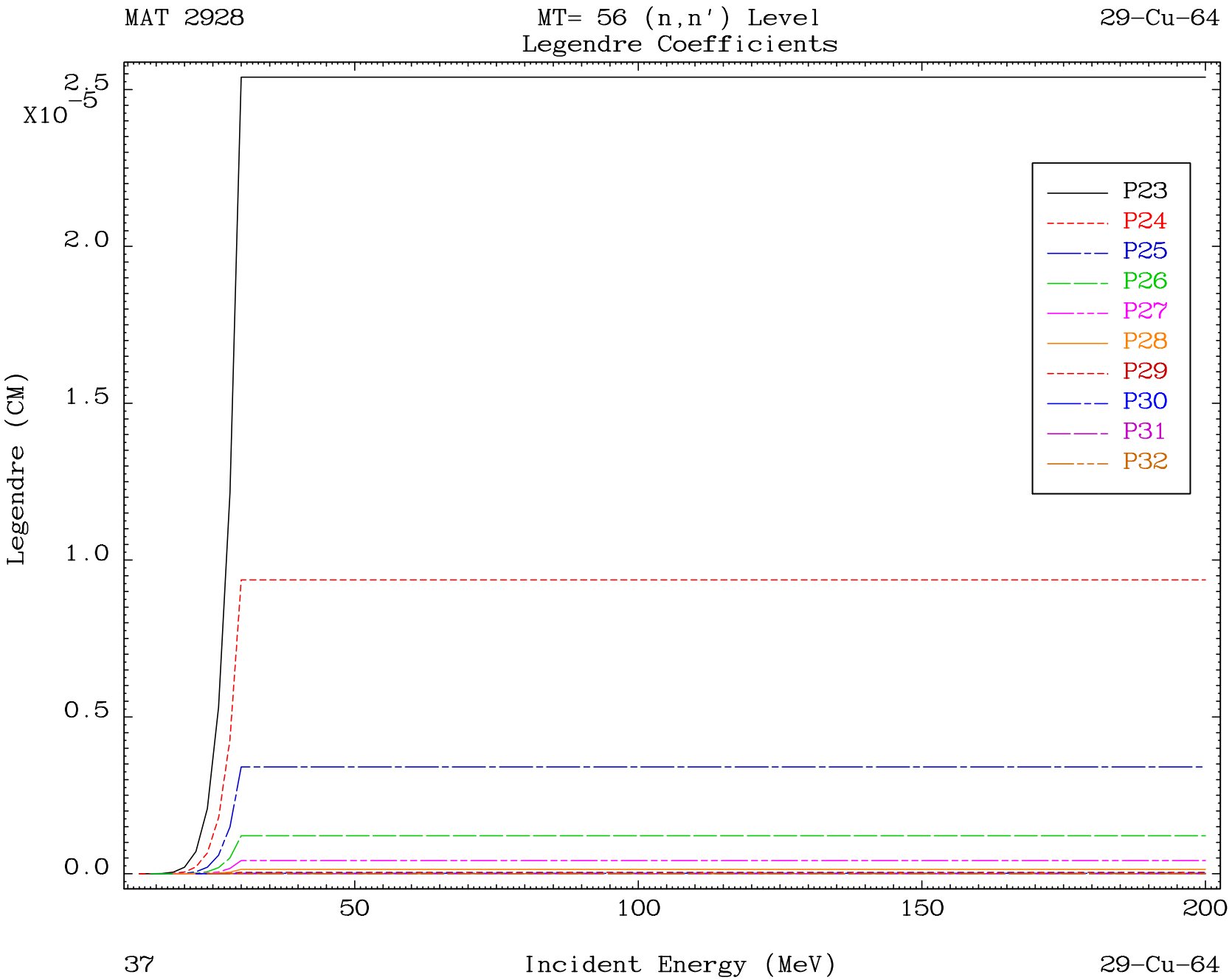

MAT 2928
MT= 55 (n,n') Level
Legendre Coefficients
29-Cu-64
0.000
0.000
0.000
0.000
0.000
Legendre (CM)
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0
50
100
150
200
33
Incident Energy (MeV)
29-Cu-64

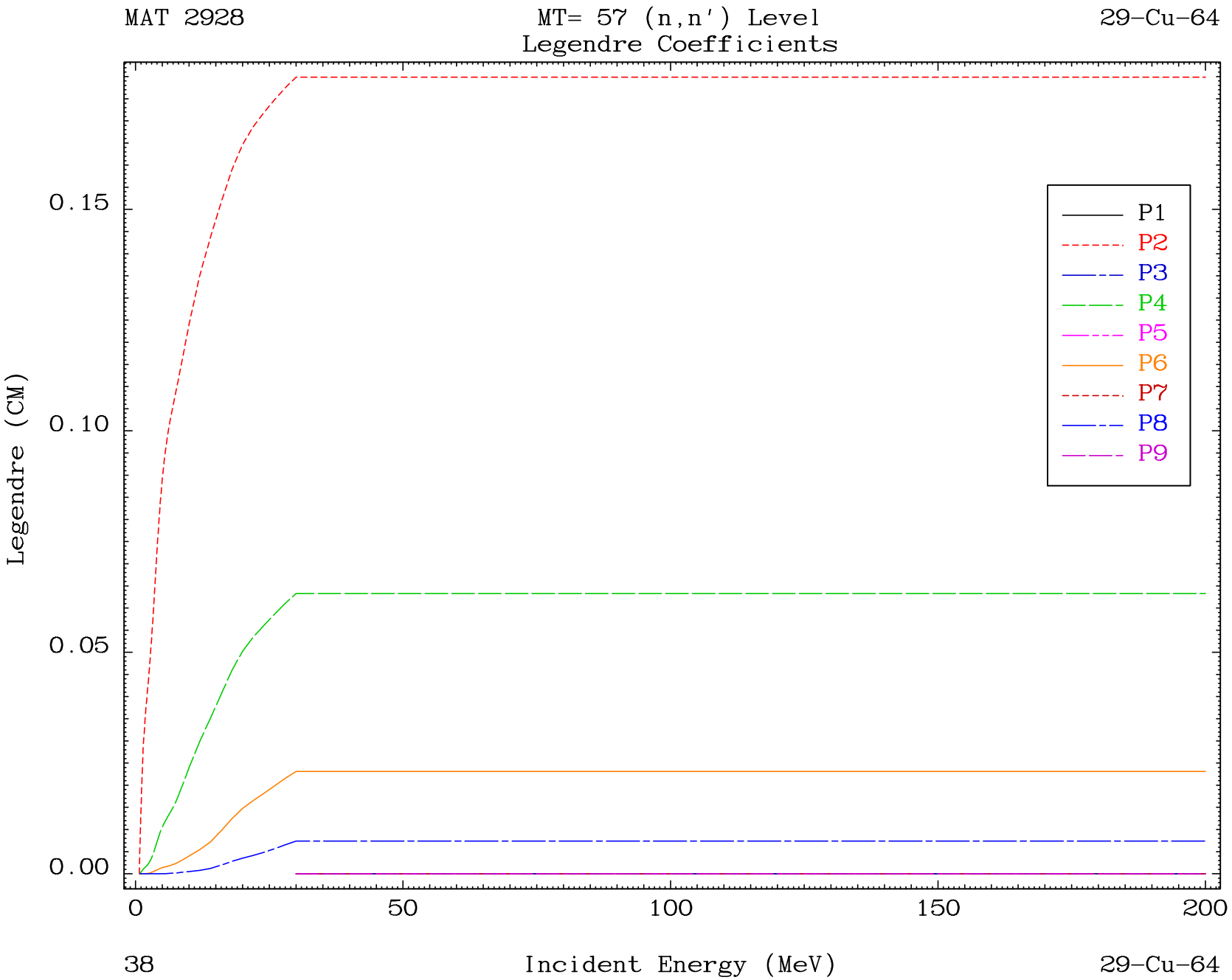

MAT 2928
MT= 55 (n,n') Level
Legendre Coefficients
29-Cu-64
X10+5
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
50
100
150
200
34
Incident Energy (MeV)
29-Cu-64
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32

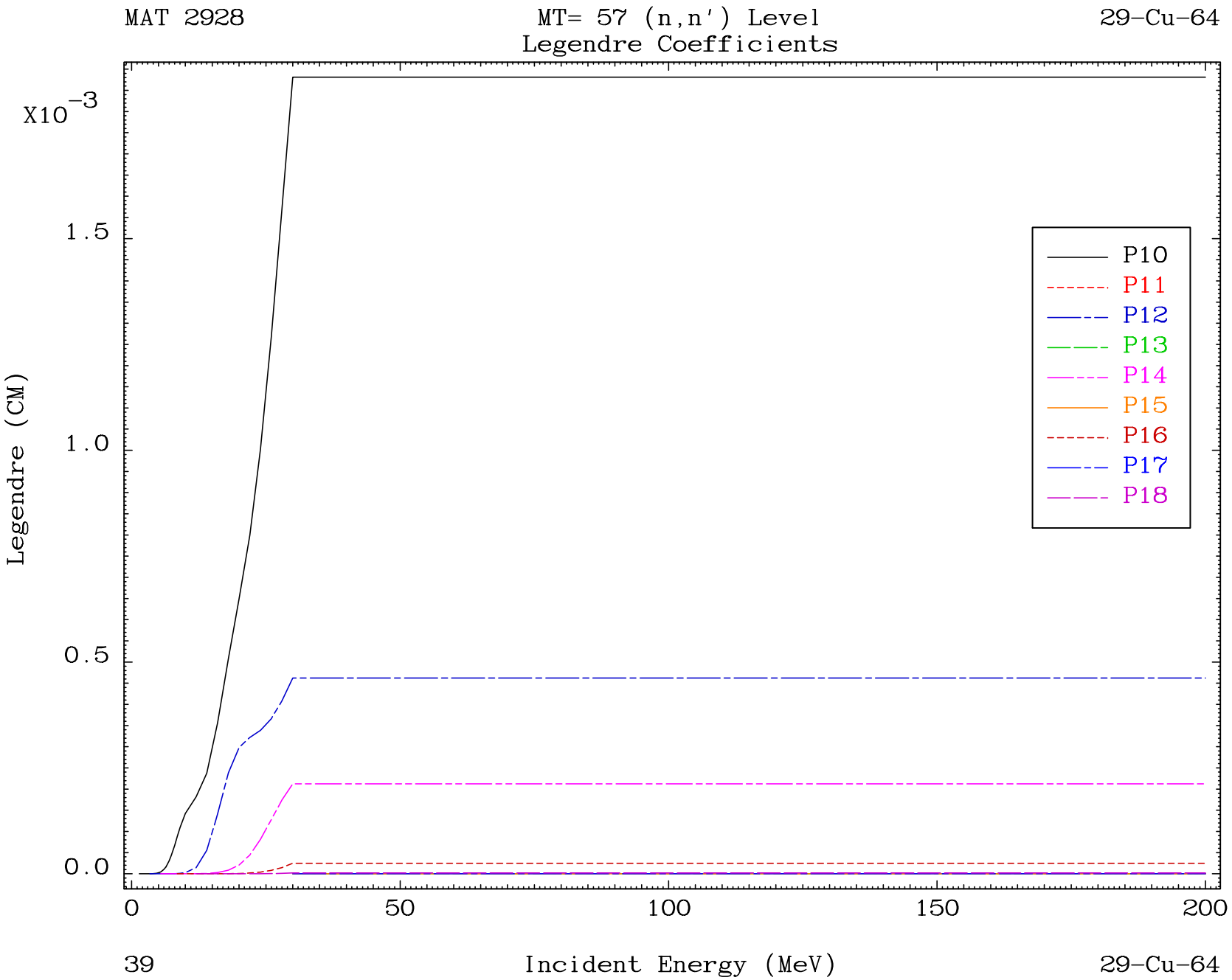

MAT 2928
MT= 56 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
35
Incident Energy (MeV)
29-Cu-64

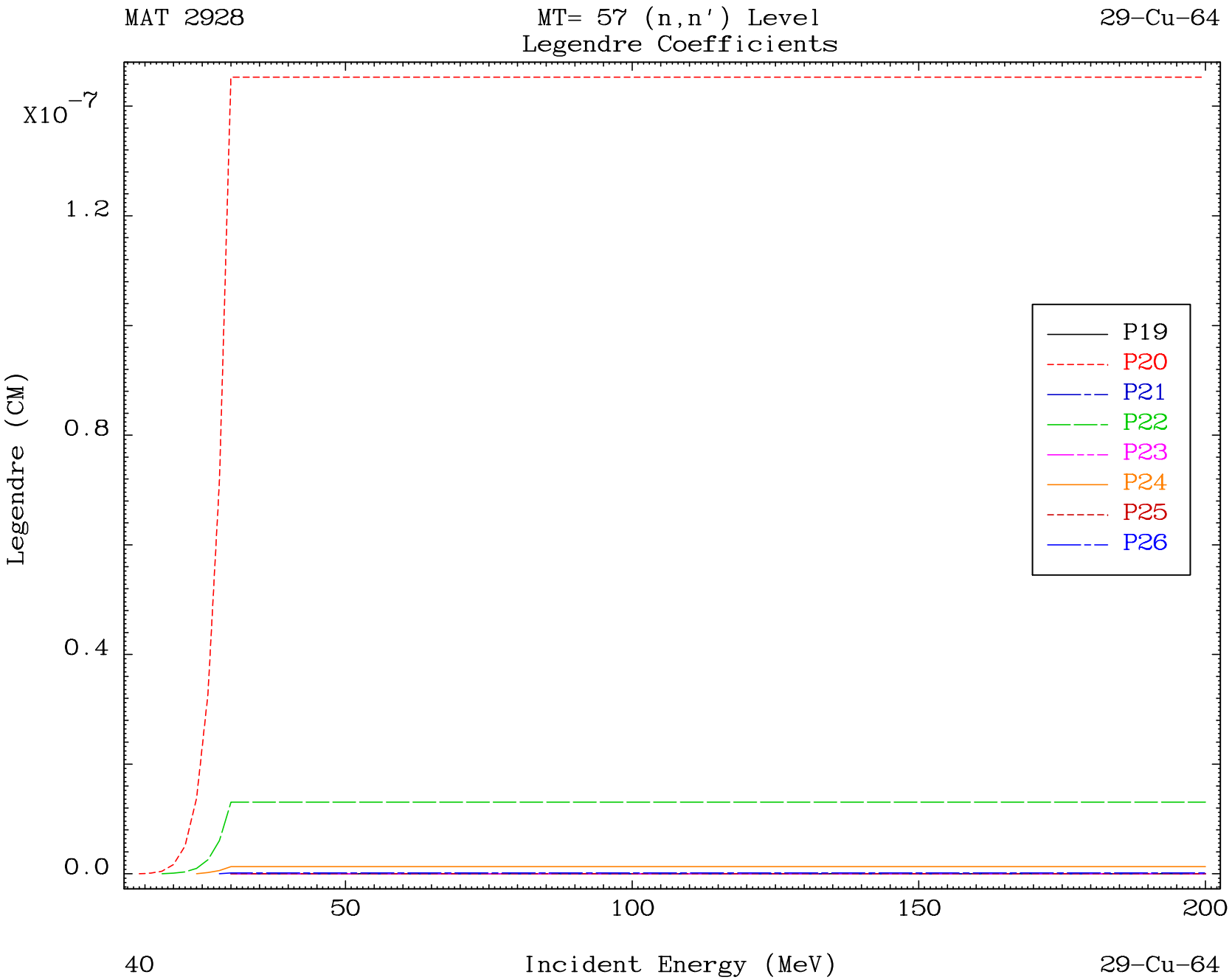

MAT 2928
MT= 56 (n,n') Level
Legendre Coefficients
29-Cu-64
0.010
0.005
0.000
-0.005
-0.010
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

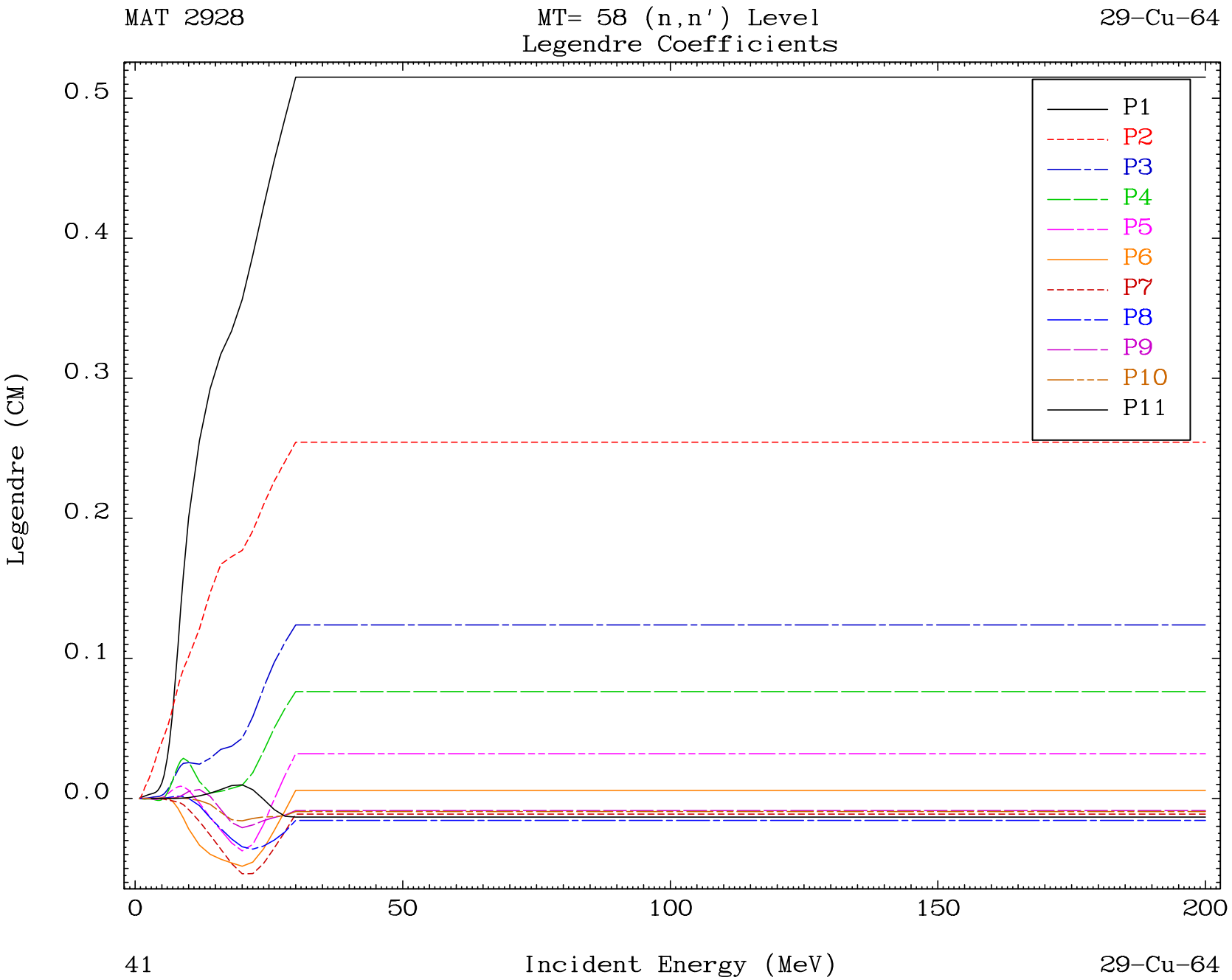
29-Cu-64

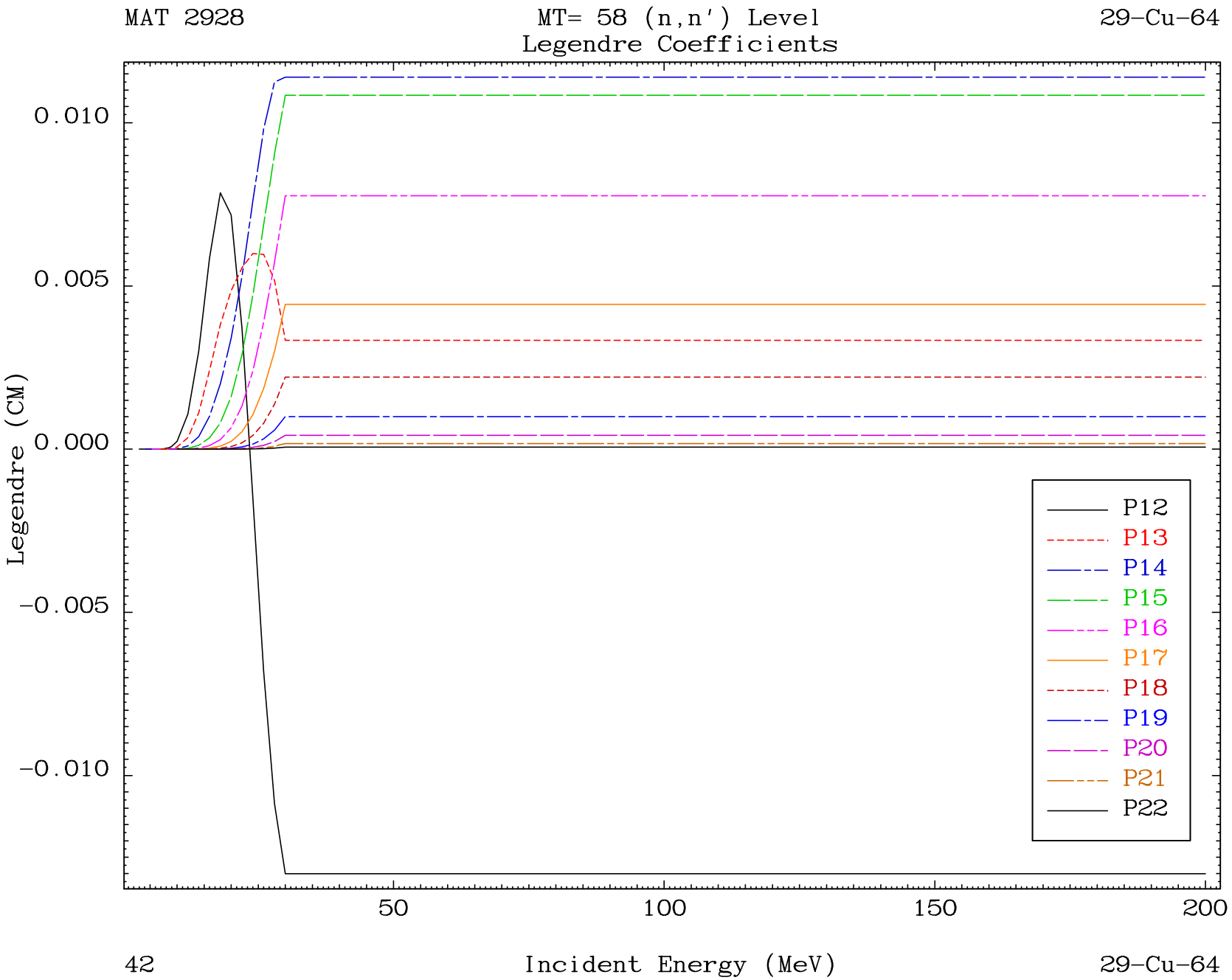

MAT 2928
MT= 56 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-5
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
37
29-Cu-64
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32

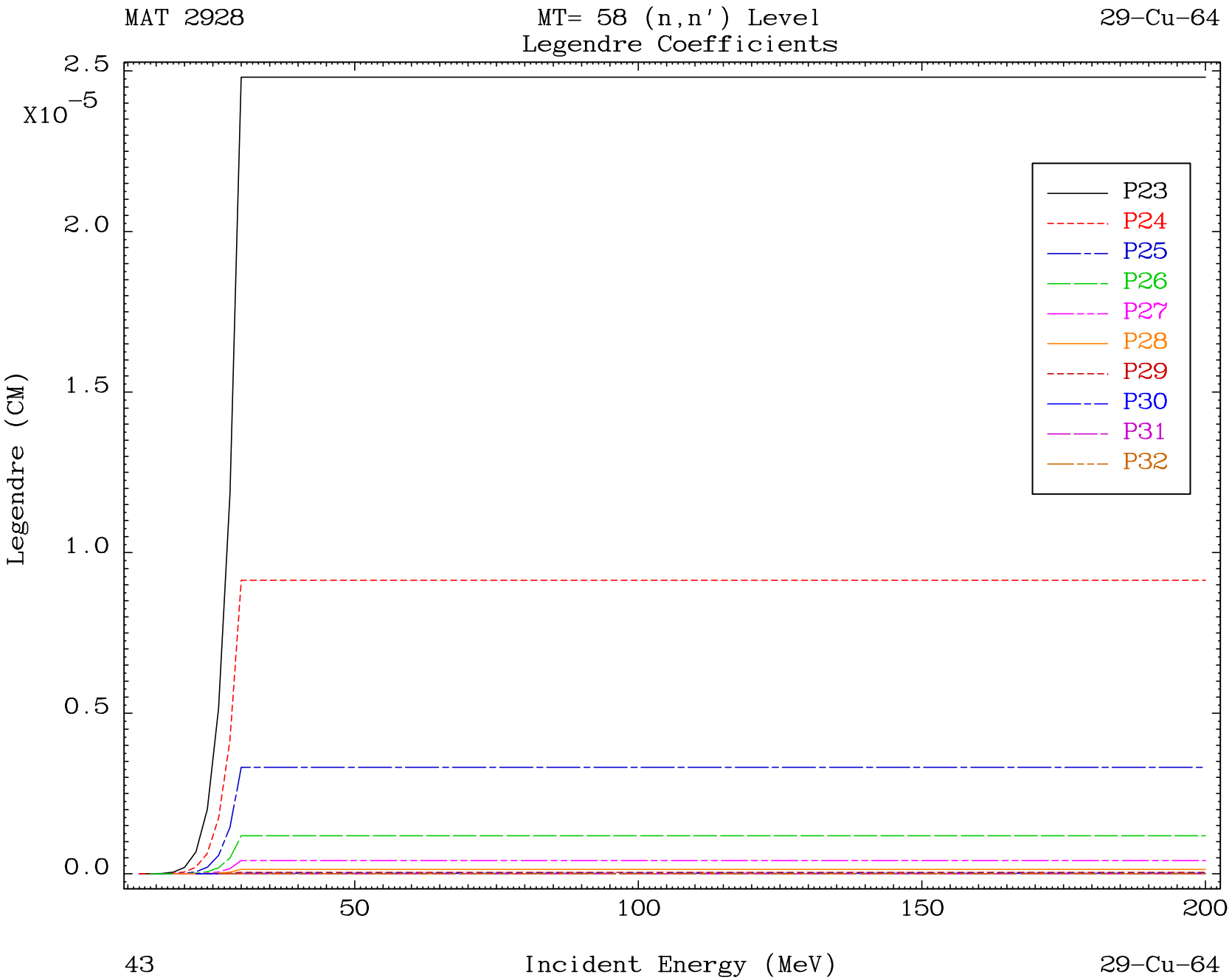

MAT 2928
MT= 57 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.15
0.10
0.05
0.00
0
50
100
150
200
Incident Energy (MeV)
38
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8
P9

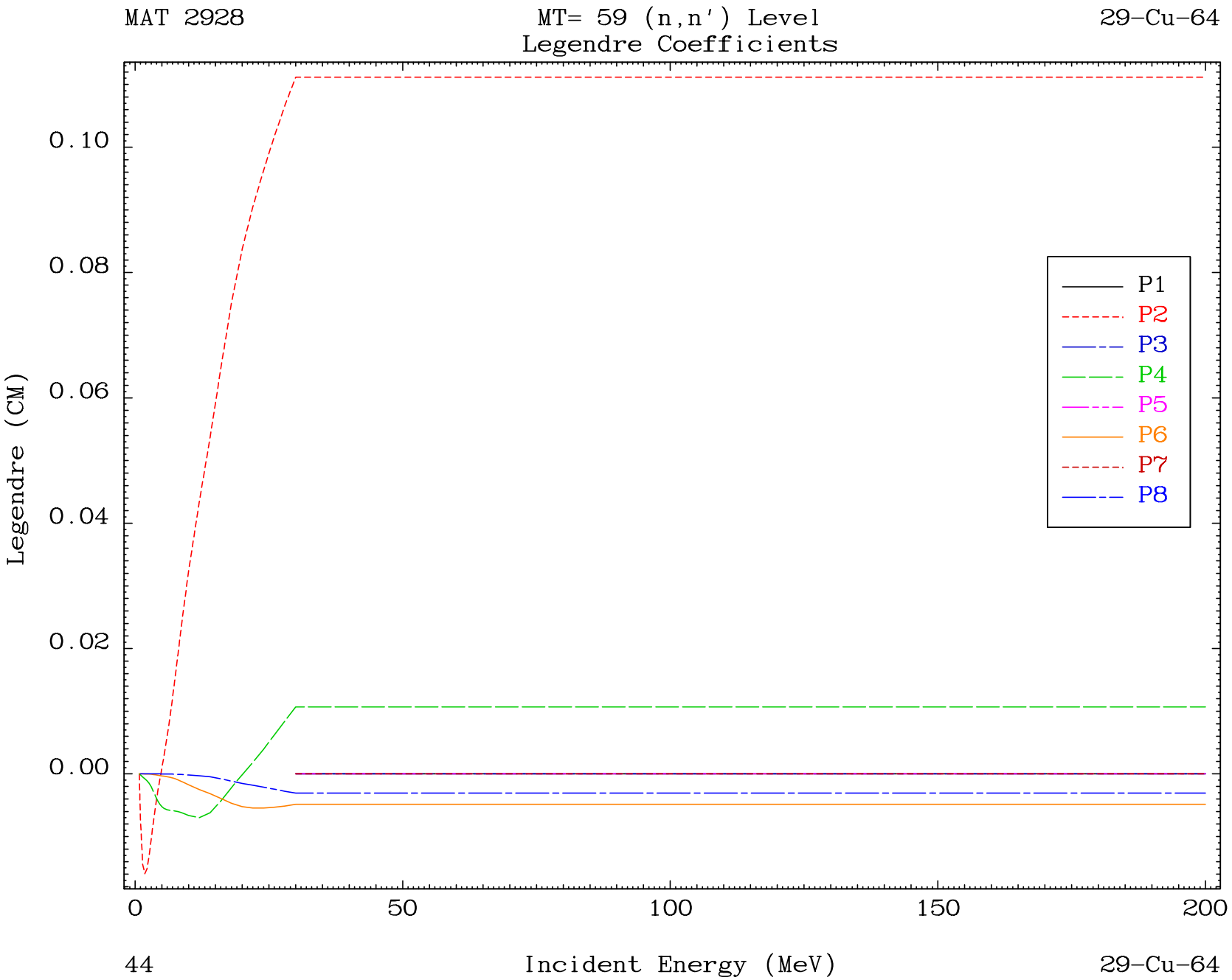

MAT 2928
MT= 57 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
39
Incident Energy (MeV)
29-Cu-64

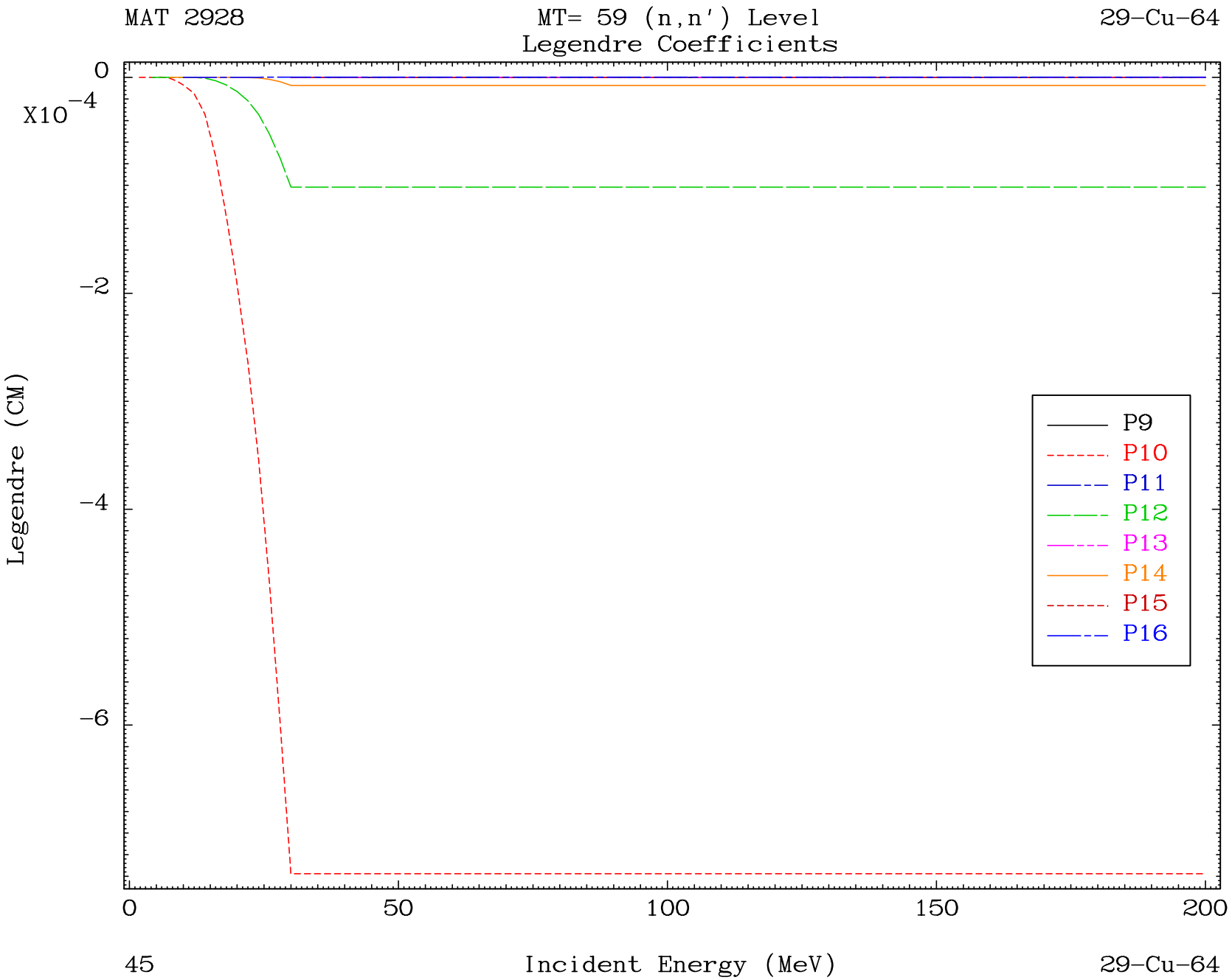

MAT 2928
MT= 57 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-7
1.2
0.8
0.4
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
40
50
100
150
200
Incident Energy (MeV)
29-Cu-64

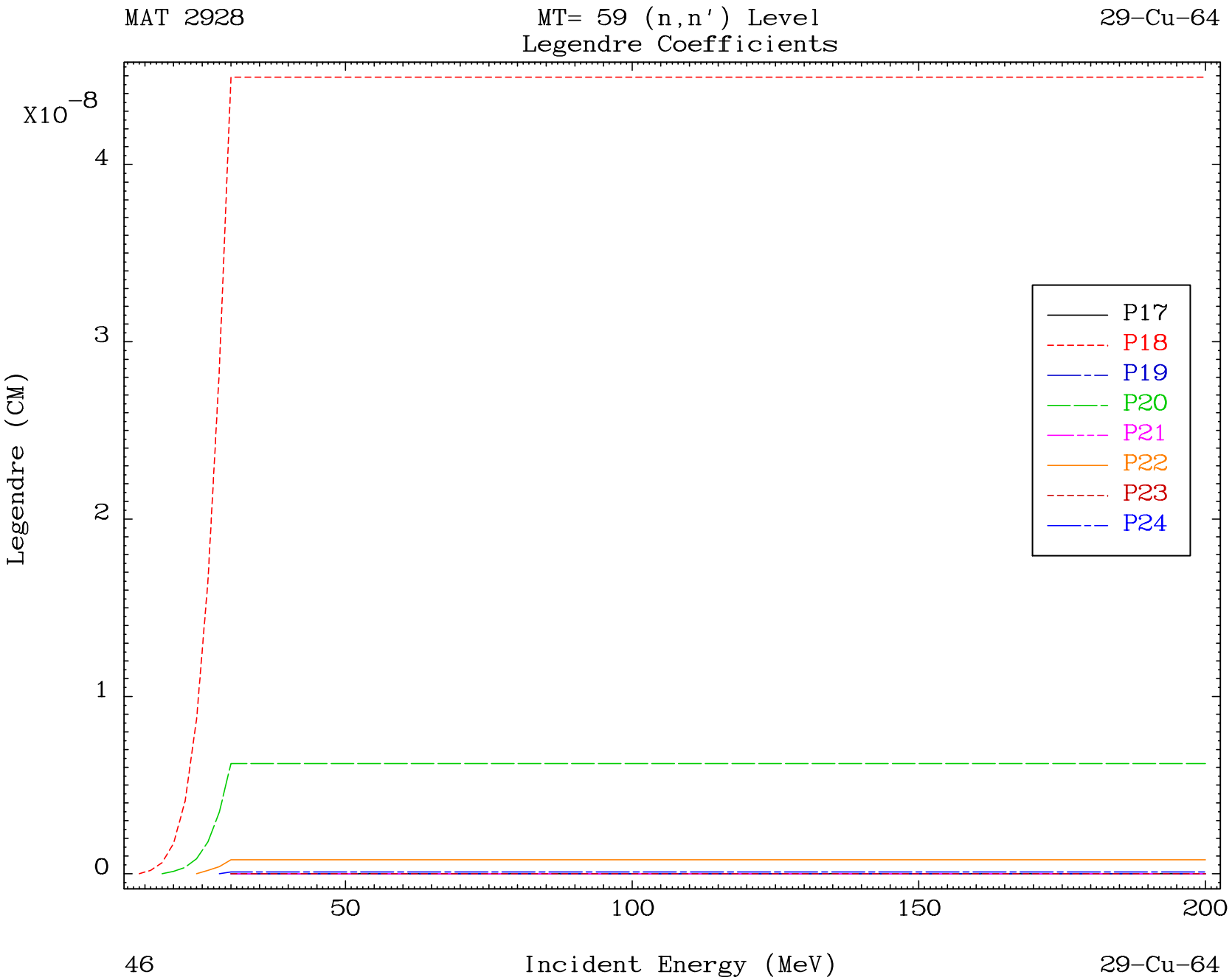

MAT 2928
MT= 58 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
Incident Energy (MeV)
41
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11

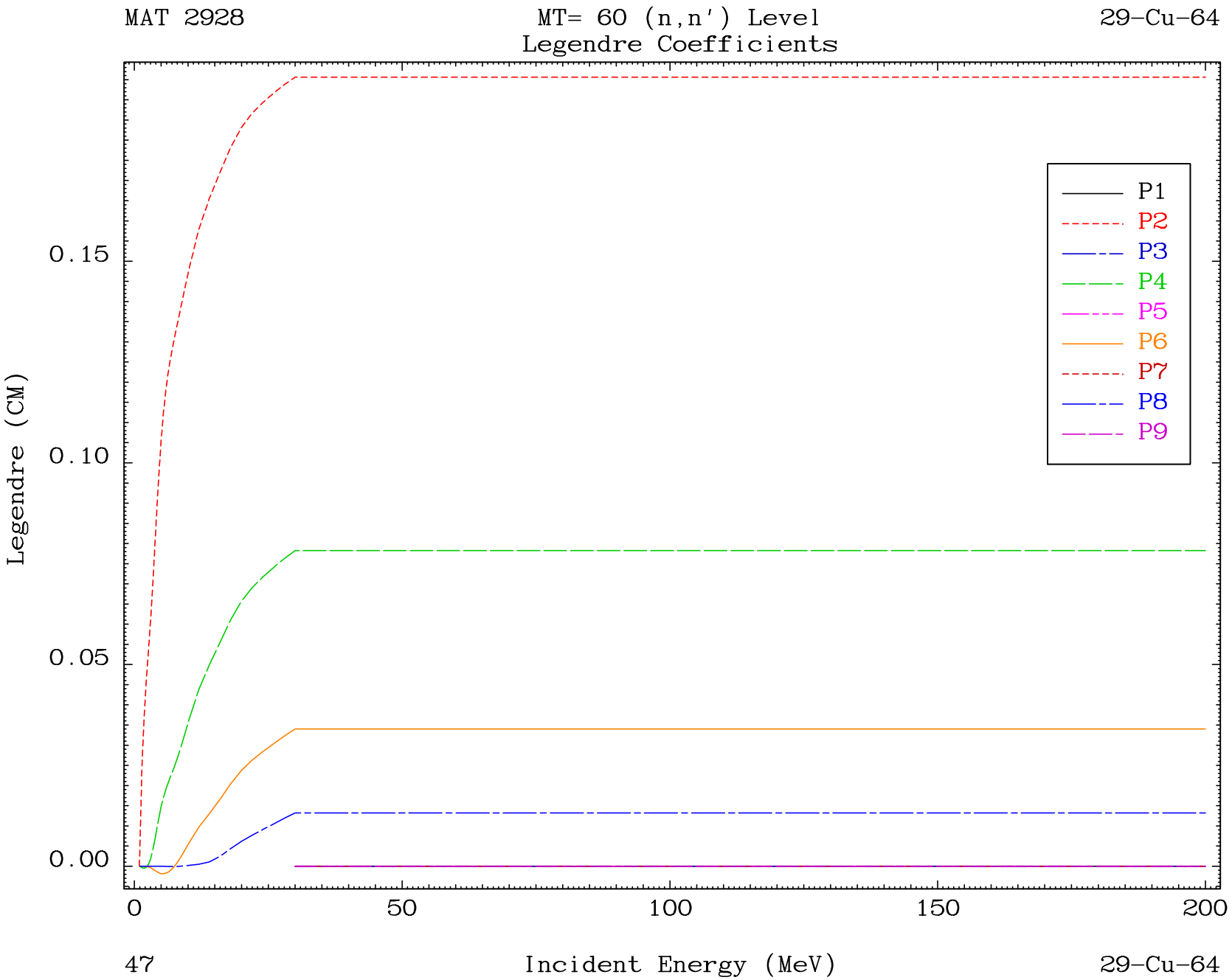

MAT 2928
MT= 58 (n,n') Level
Legendre Coefficients
29-Cu-64
0.010
0.005
0.000
-0.005
-0.010
Legendre (CM)
50
100
150
200
42
Incident Energy (MeV)
29-Cu-64
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

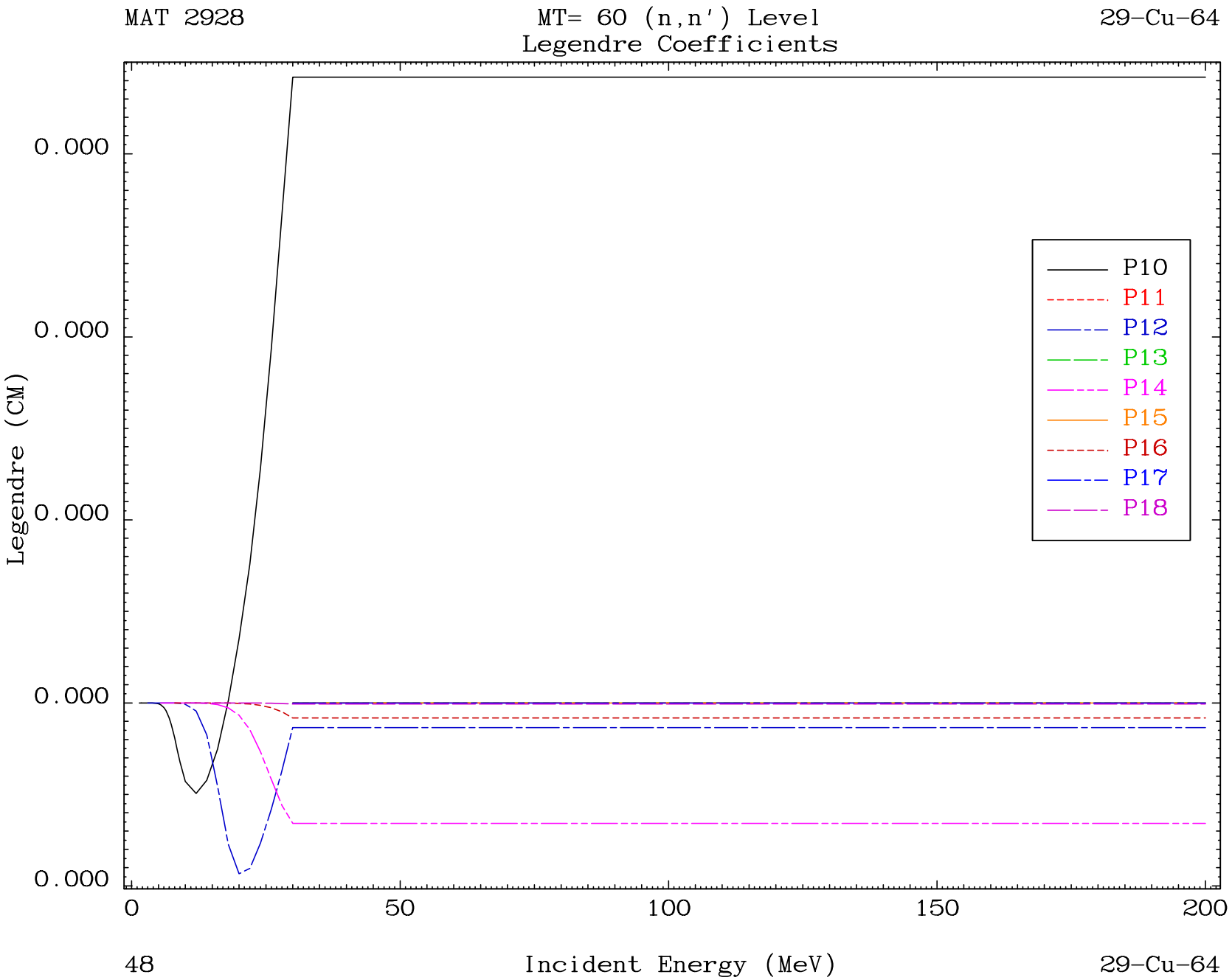

MAT 2928
MT= 58 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-5
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
43
Incident Energy (MeV)
29-Cu-64

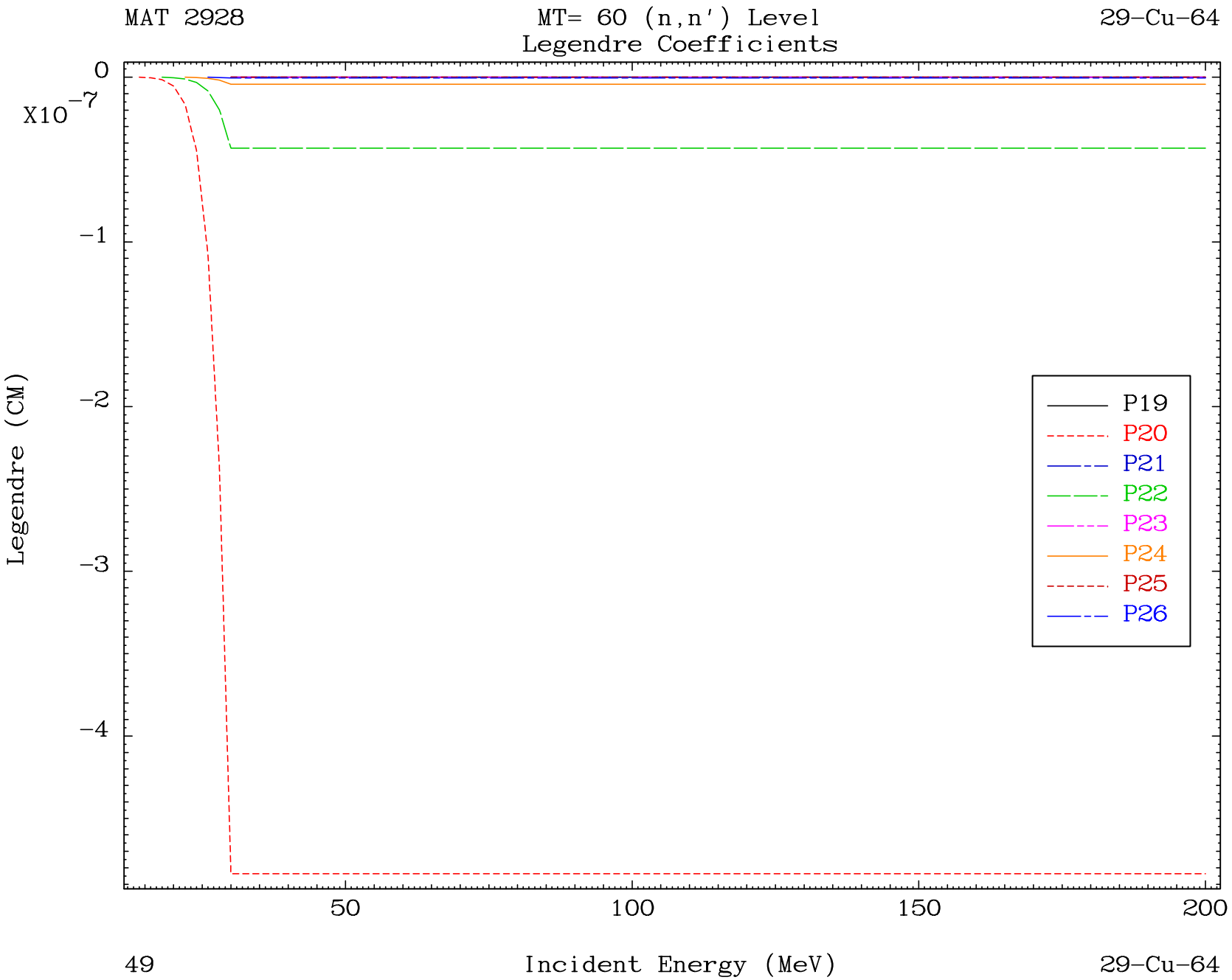

MAT 2928
MT= 59 (n,n') Level
Legendre Coefficients
29-Cu-64
0.10
0.08
0.06
0.04
0.02
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
0
50
100
150
200
44
Incident Energy (MeV)
29-Cu-64

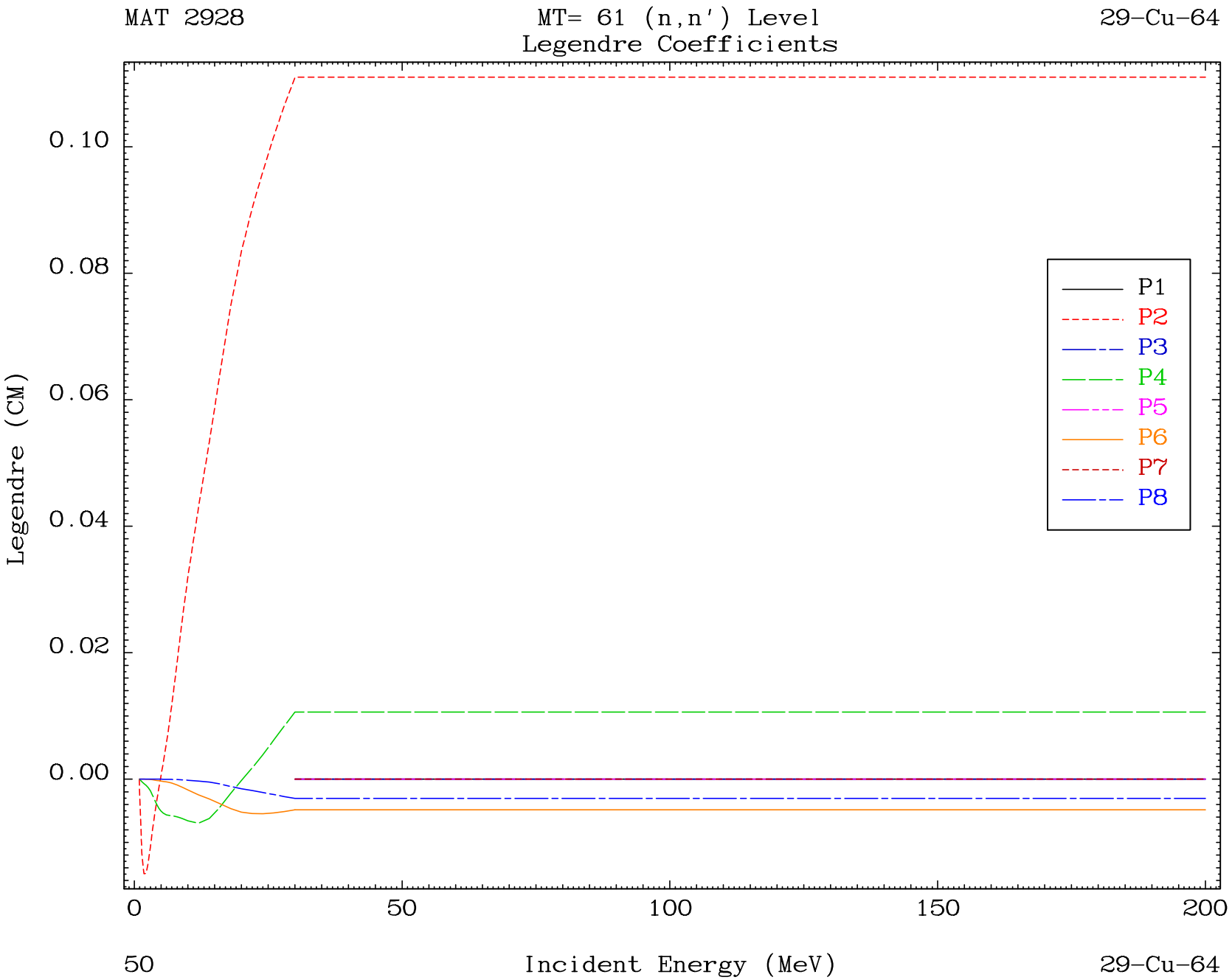

MAT 2928
MT= 59 (n,n') Level
Legendre Coefficients
29-Cu-64
0
X10^-4
-2
-4
-6
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
45
Incident Energy (MeV)
29-Cu-64

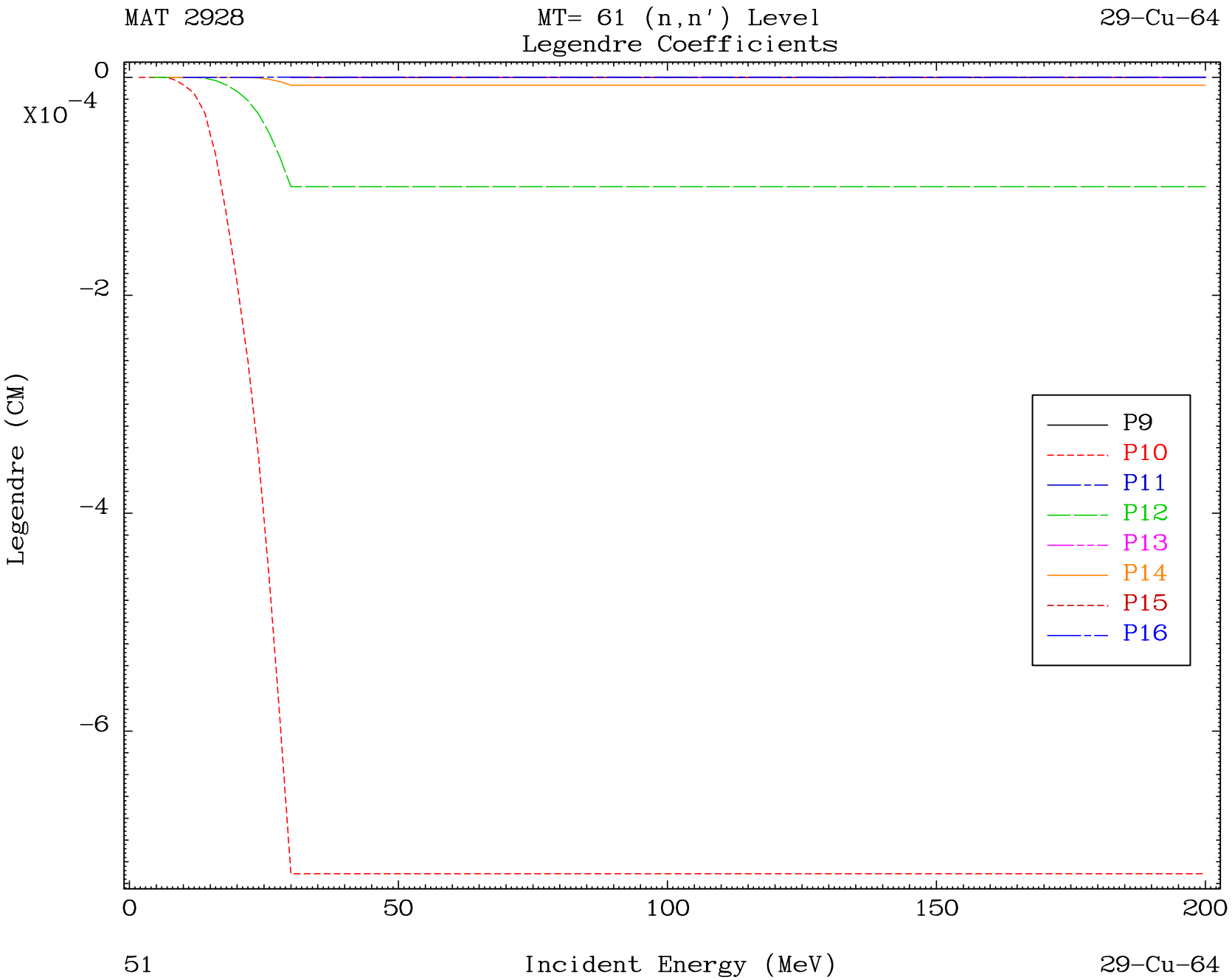

MAT 2928
MT= 59 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-8
4
3
2
1
0
Legendre (CM)
50
100
150
200
P17
P18
P19
P20
P21
P22
P23
P24
46
Incident Energy (MeV)
29-Cu-64

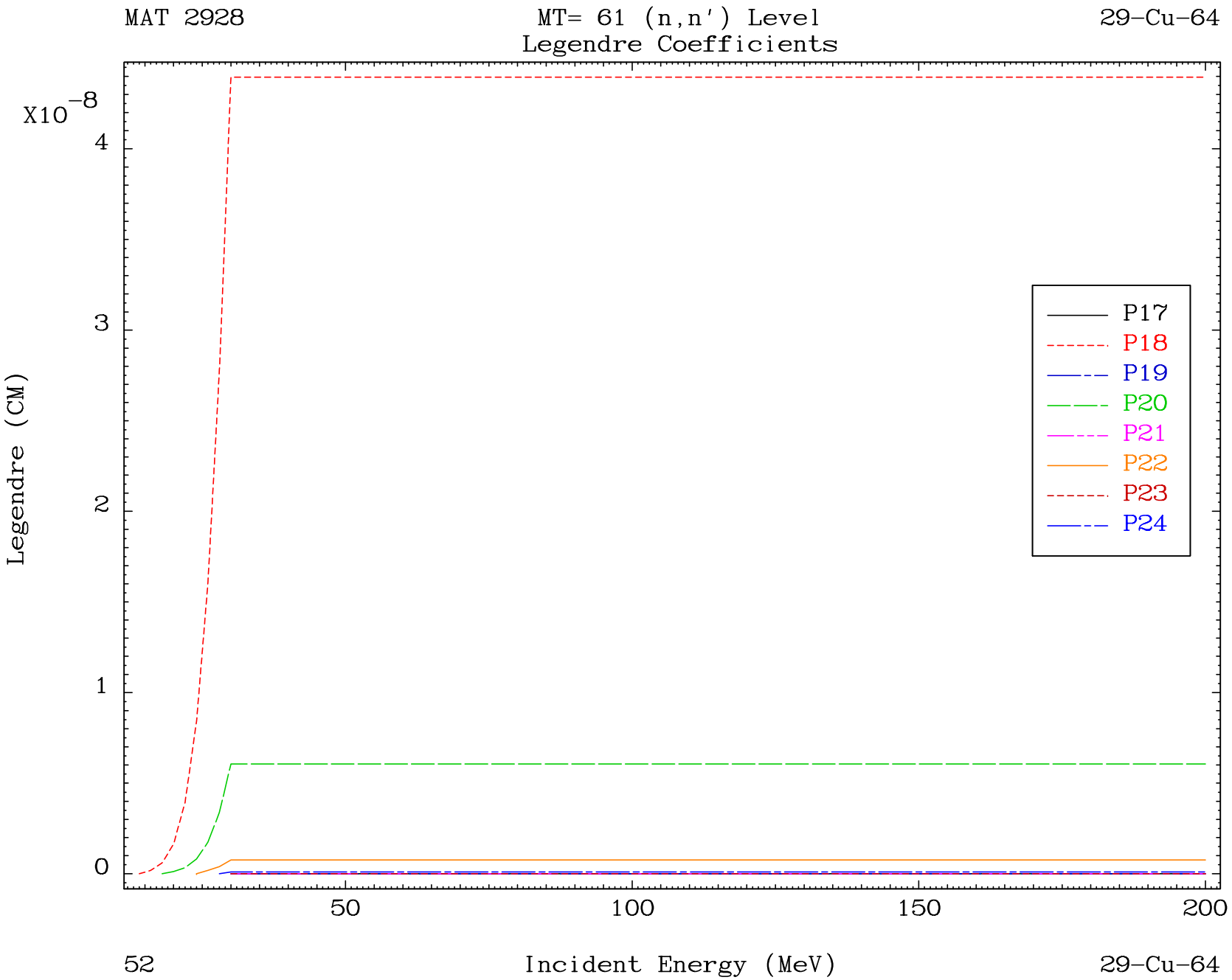

MAT 2928
MT= 60 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.15
0.10
0.05
0.00
0
50
100
150
200
Incident Energy (MeV)
47
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8
P9

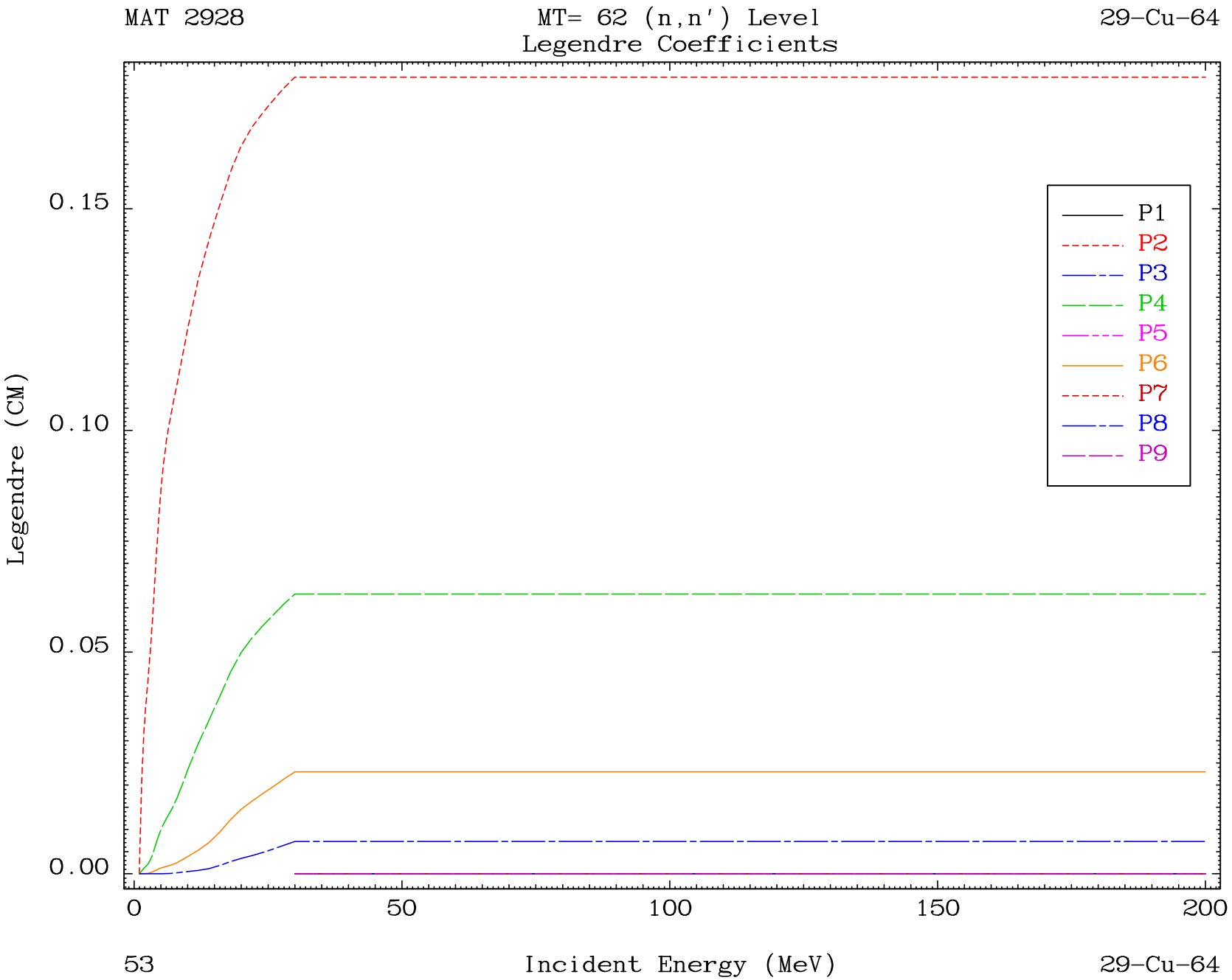

MAT 2928
MT= 60 (n,n') Level
Legendre Coefficients
29-Cu-64
0.000
0.000
0.000
0.000
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
48
Incident Energy (MeV)
29-Cu-64

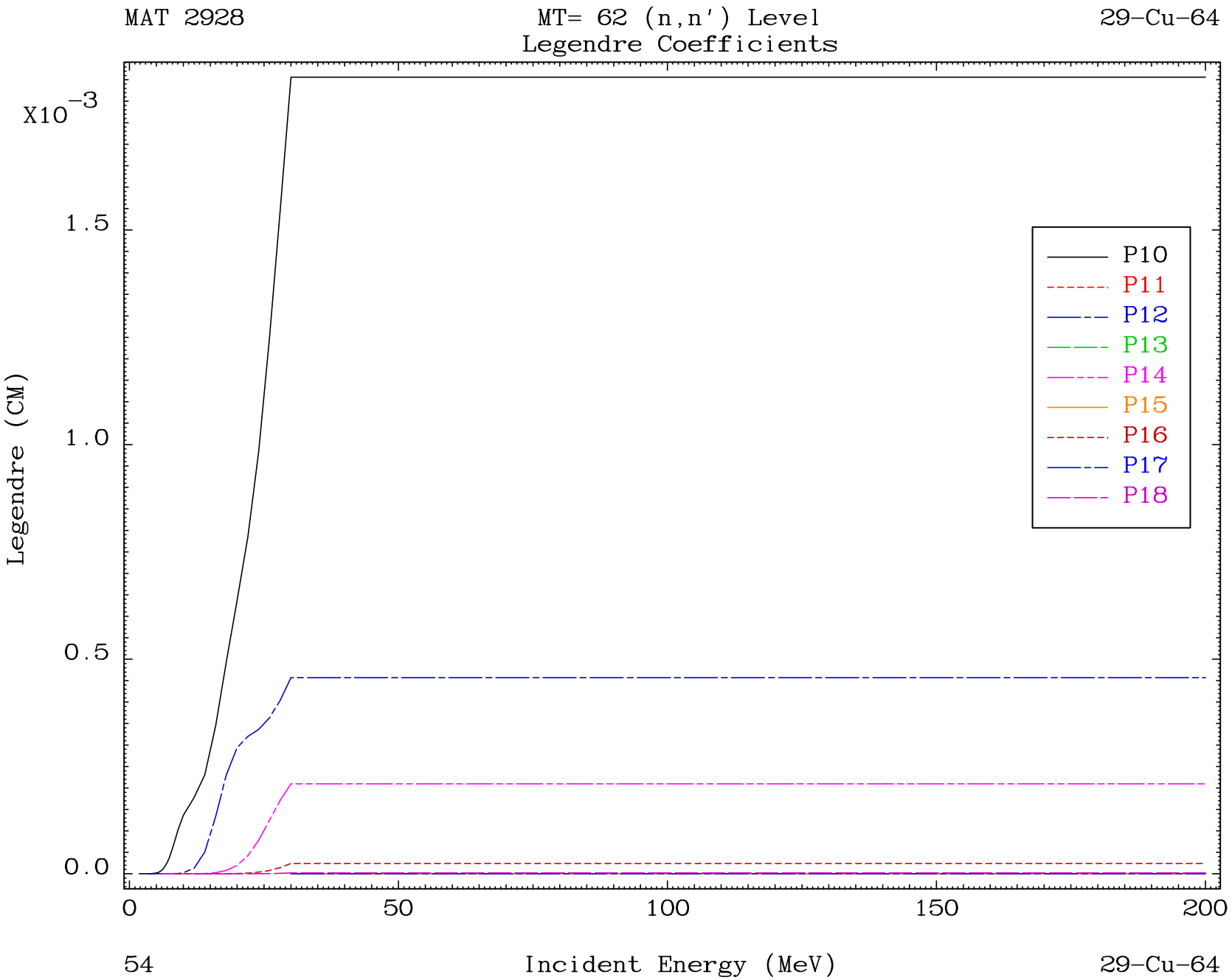

MAT 2928
MT= 60 (n,n') Level
Legendre Coefficients
29-Cu-64
X10^-7
0
-1
-2
-3
-4
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P19
P20
P21
P22
P23
P24
P25
P26
49
29-Cu-64

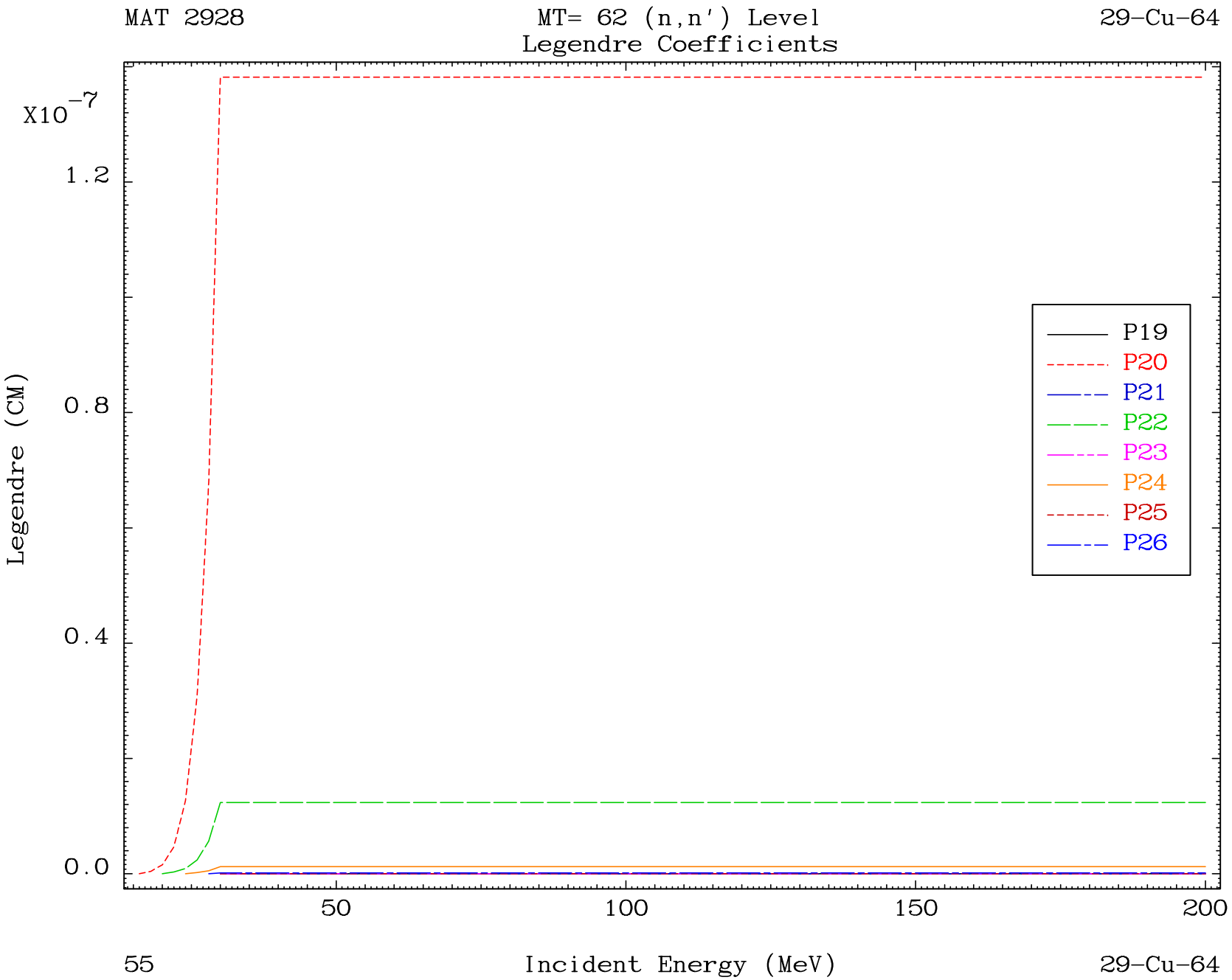

MAT 2928
MT= 61 (n,n') Level
Legendre Coefficients
29-Cu-64
0.10
0.08
0.06
0.04
0.02
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
0
50
100
150
200
50
Incident Energy (MeV)
29-Cu-64

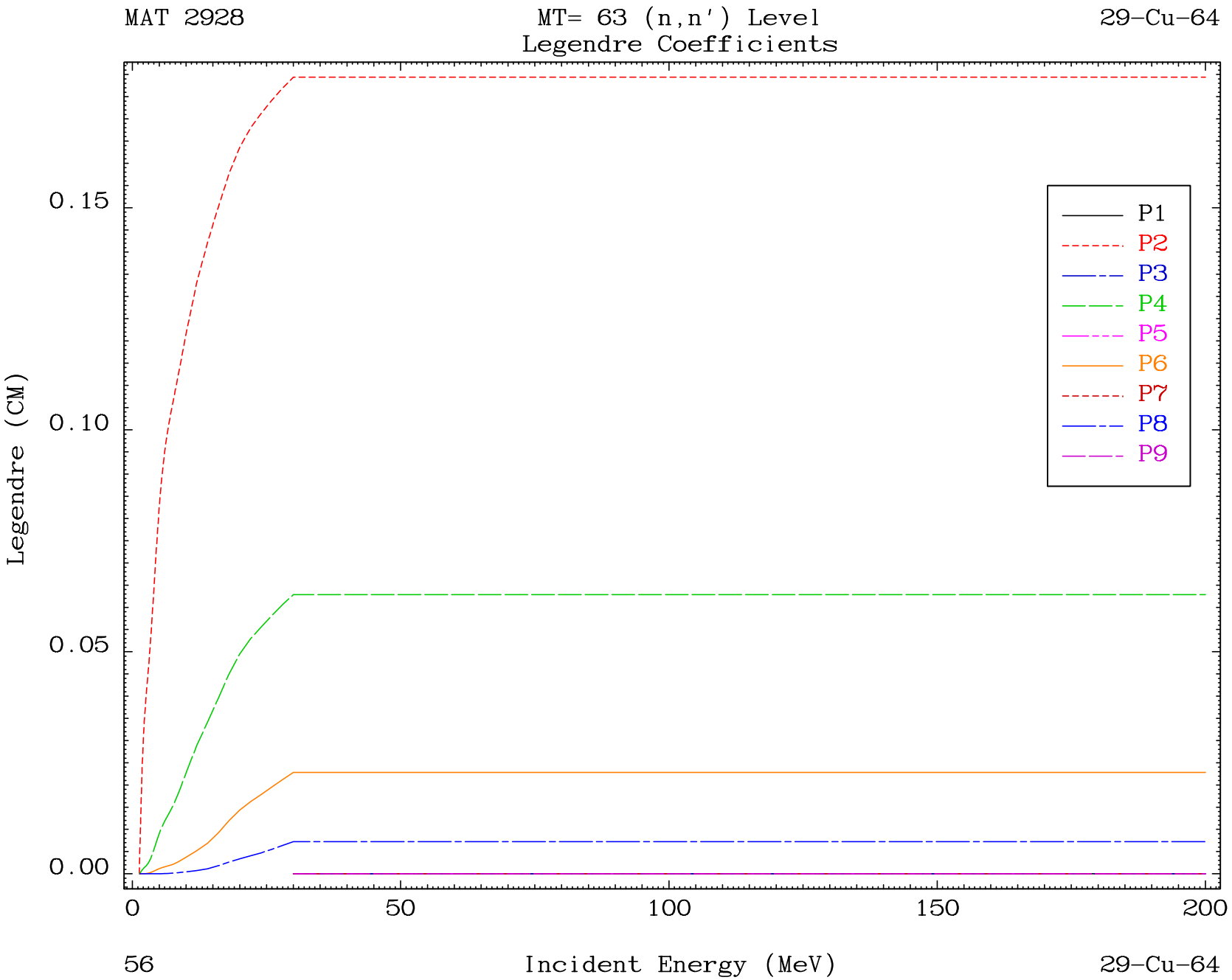

MAT 2928
MT= 61 (n,n') Level
Legendre Coefficients
29-Cu-64
X10^-4
0
-2
-4
-6
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
51
Incident Energy (MeV)
29-Cu-64

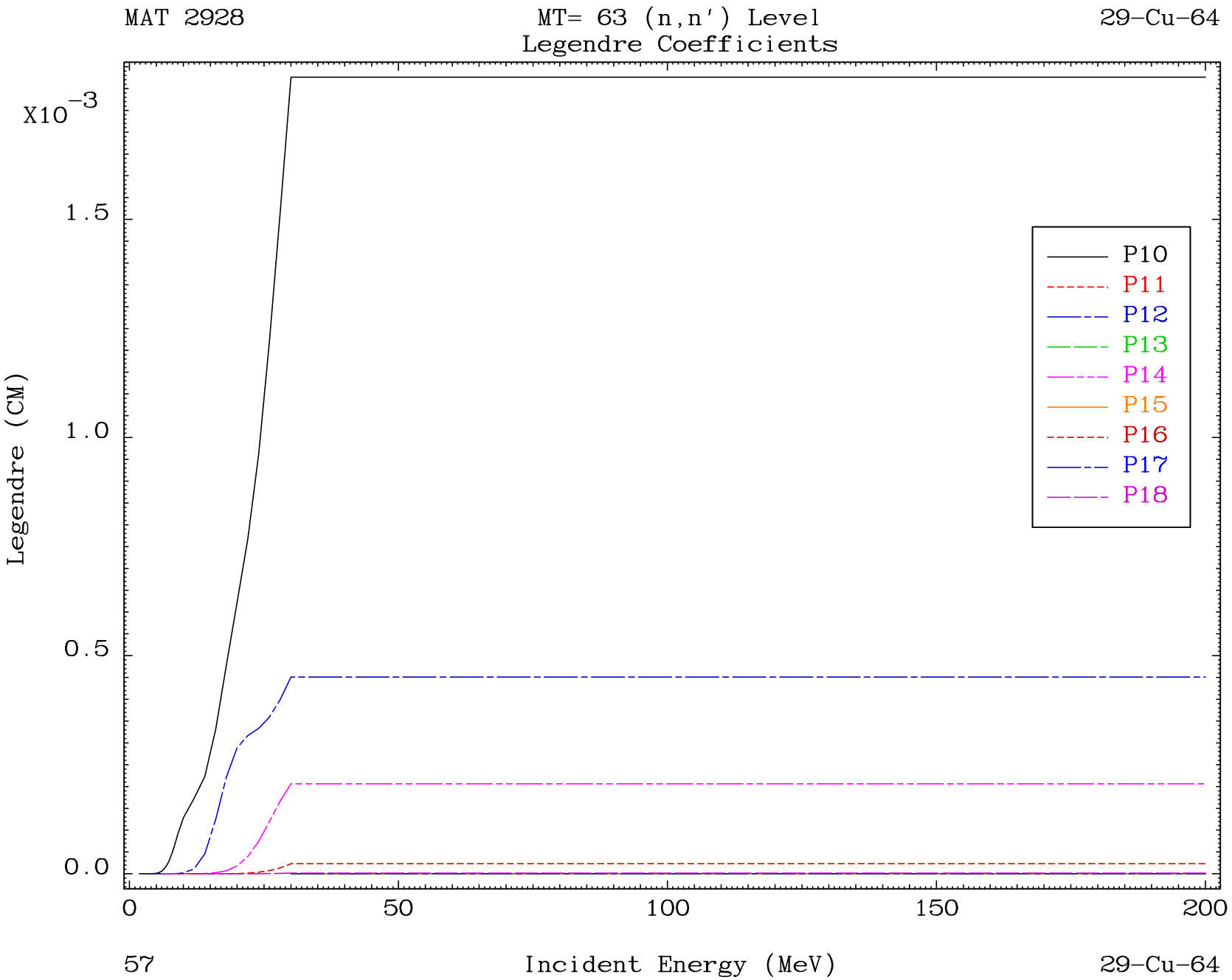

MAT 2928
MT= 61 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-8
4
3
2
1
0
Legendre (CM)
50
100
150
200
52
Incident Energy (MeV)
29-Cu-64
P17
P18
P19
P20
P21
P22
P23
P24

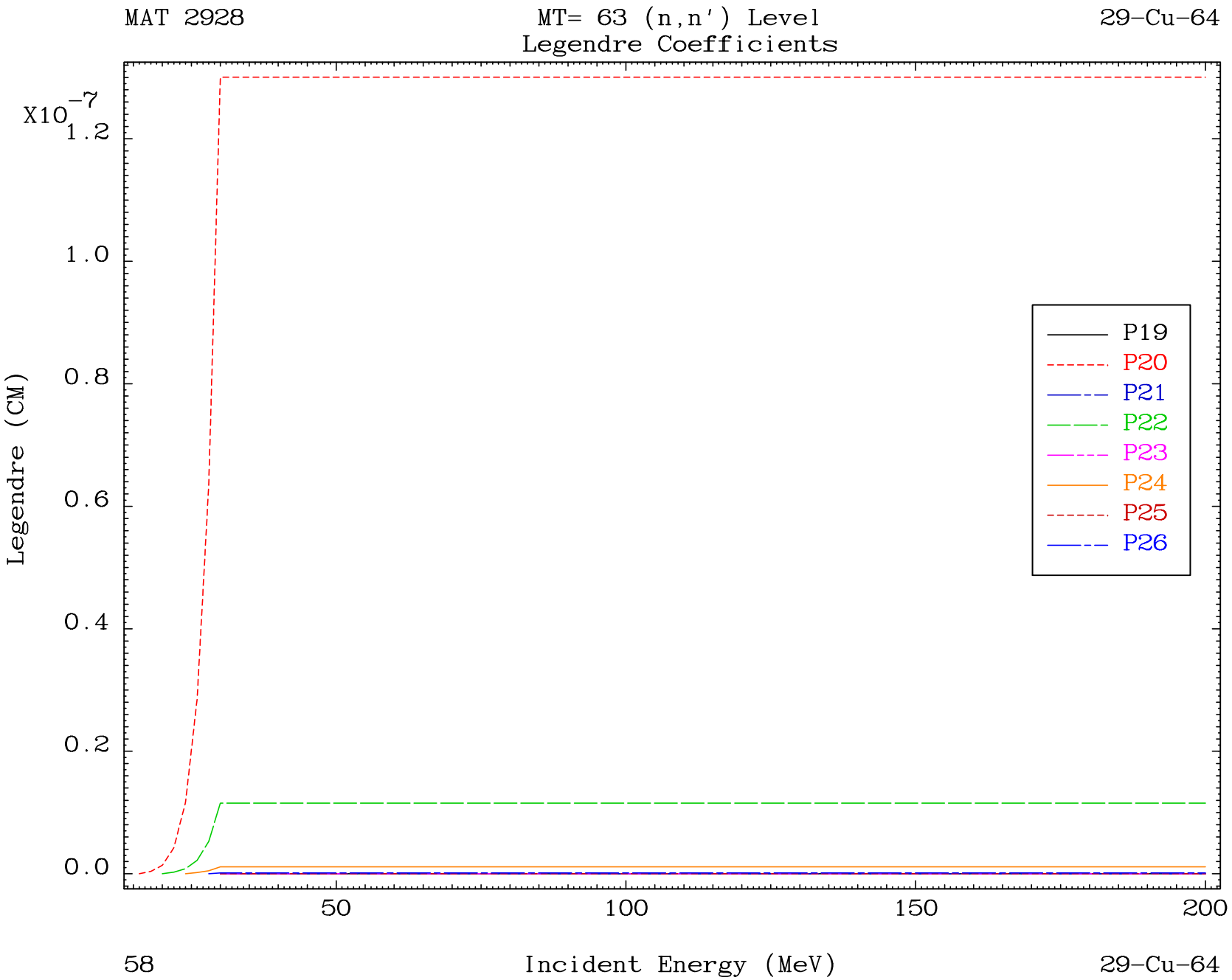

MAT 2928
MT= 62 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.15
0.10
0.05
0.00
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
53
Incident Energy (MeV)
29-Cu-64

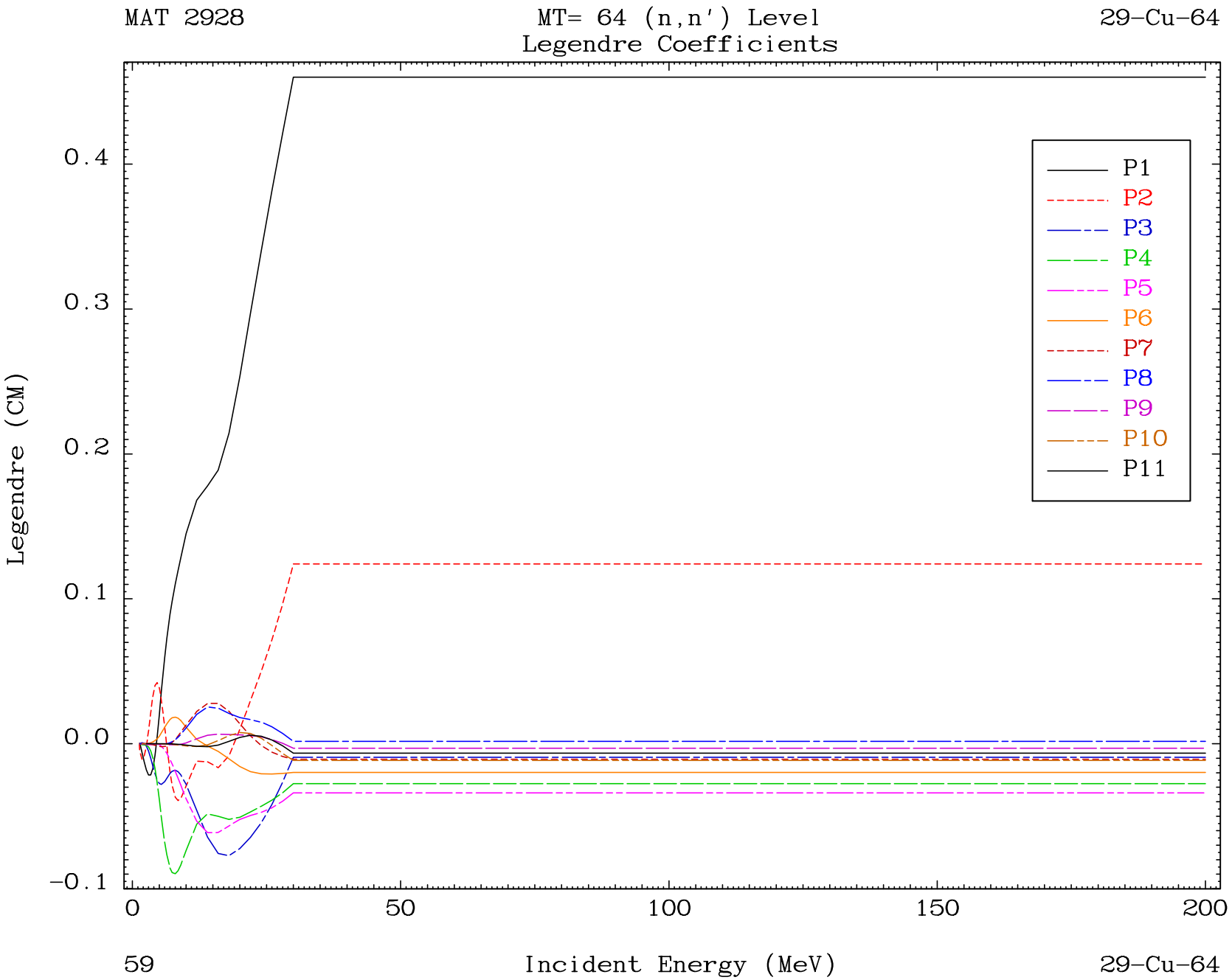

MAT 2928
MT= 62 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
54
Incident Energy (MeV)
29-Cu-64

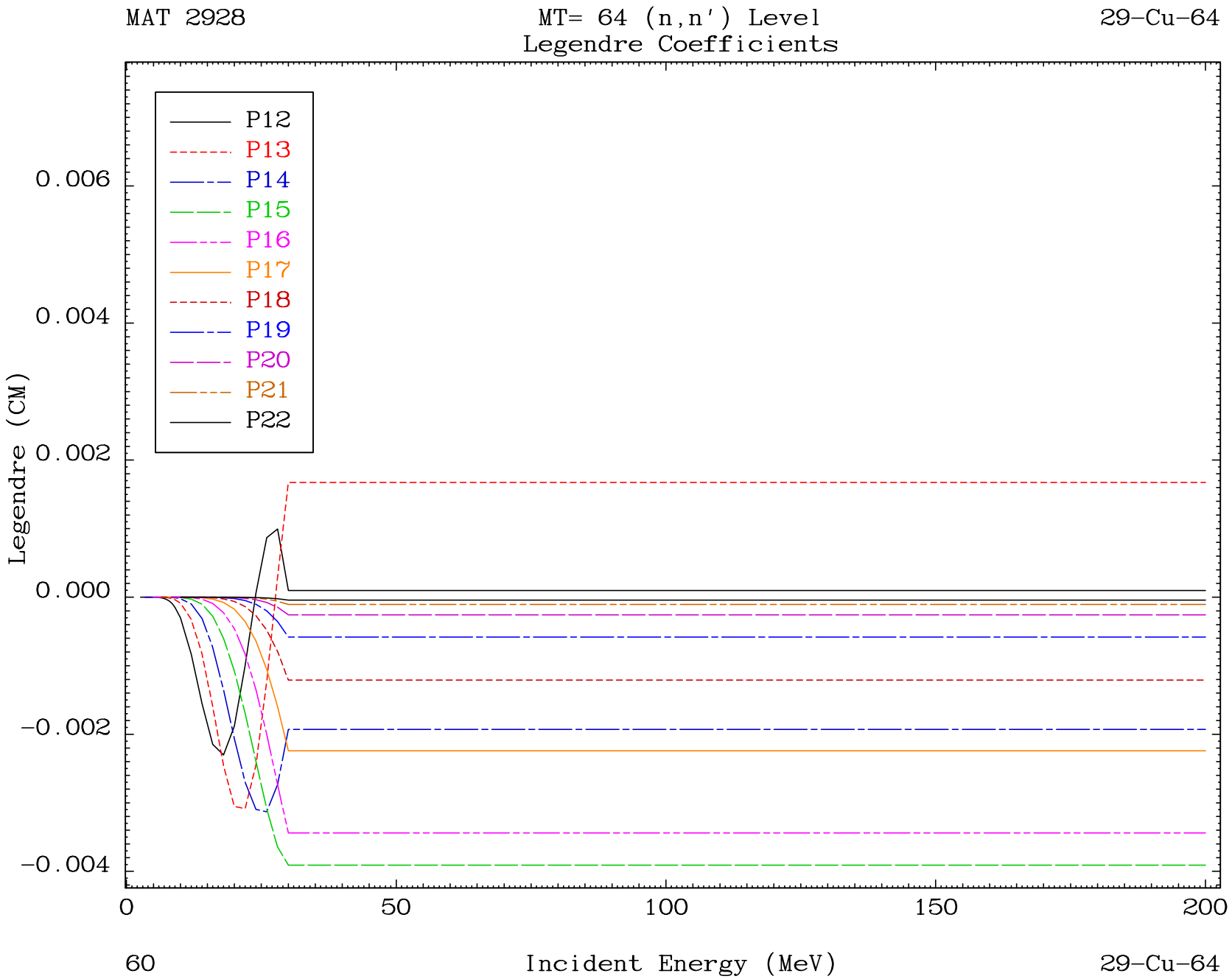

MAT 2928
MT= 62 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-7
1.2
0.8
0.4
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
50
100
150
200
55
Incident Energy (MeV)
29-Cu-64

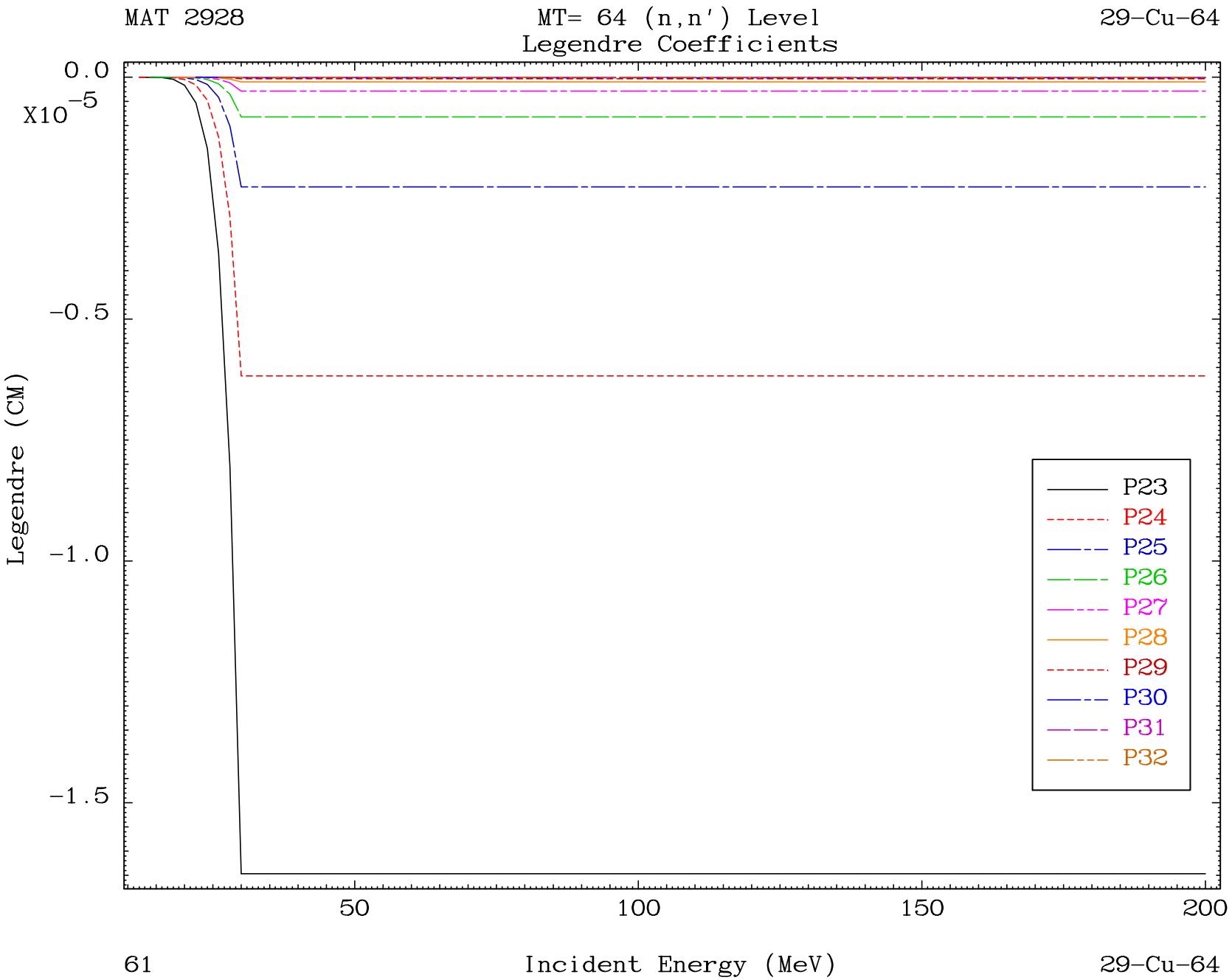

MAT 2928
MT= 63 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.15
0.10
0.05
0.00
0
50
100
150
200
Incident Energy (MeV)
56
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8
P9

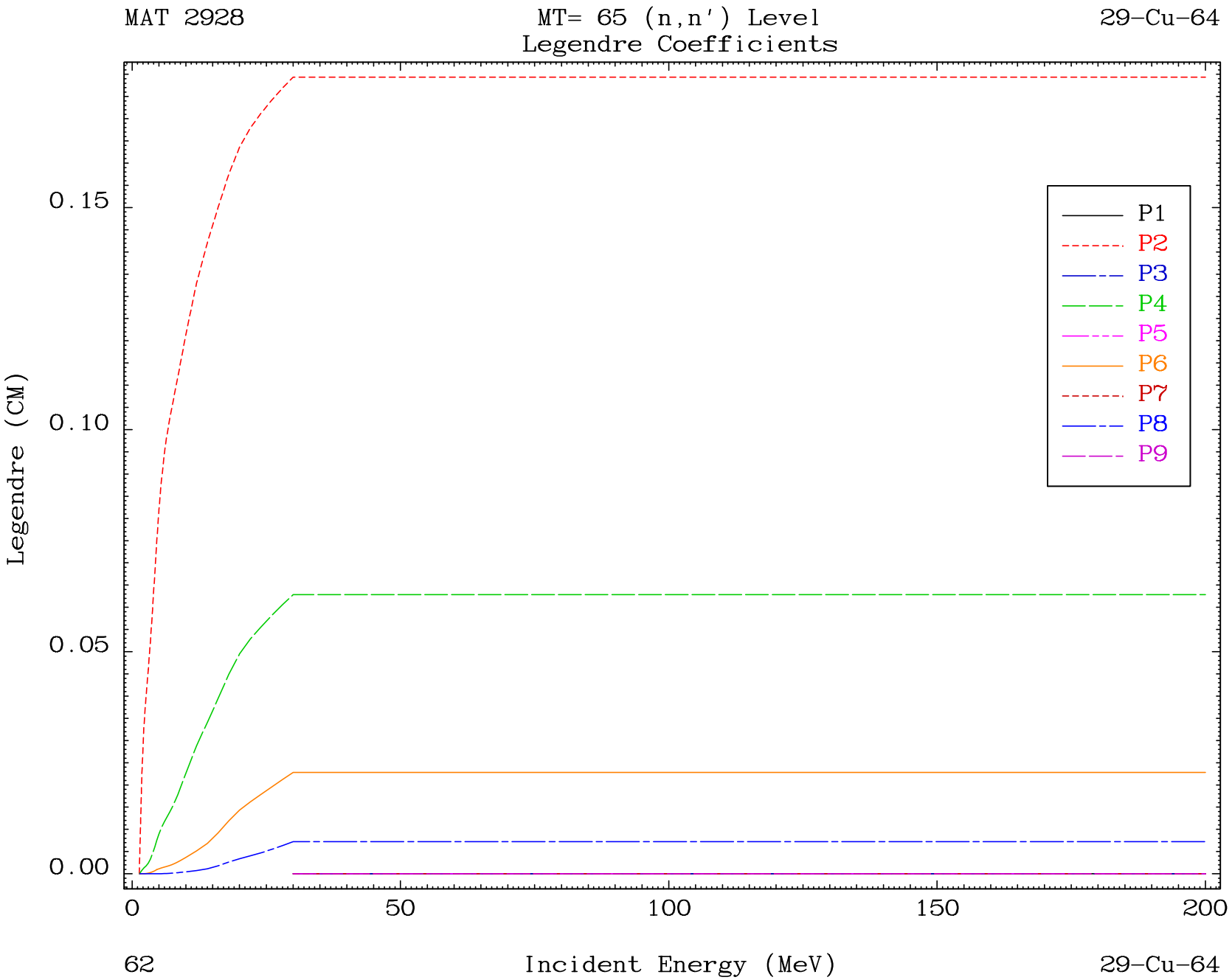

MAT 2928
MT= 63 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
57
Incident Energy (MeV)
29-Cu-64

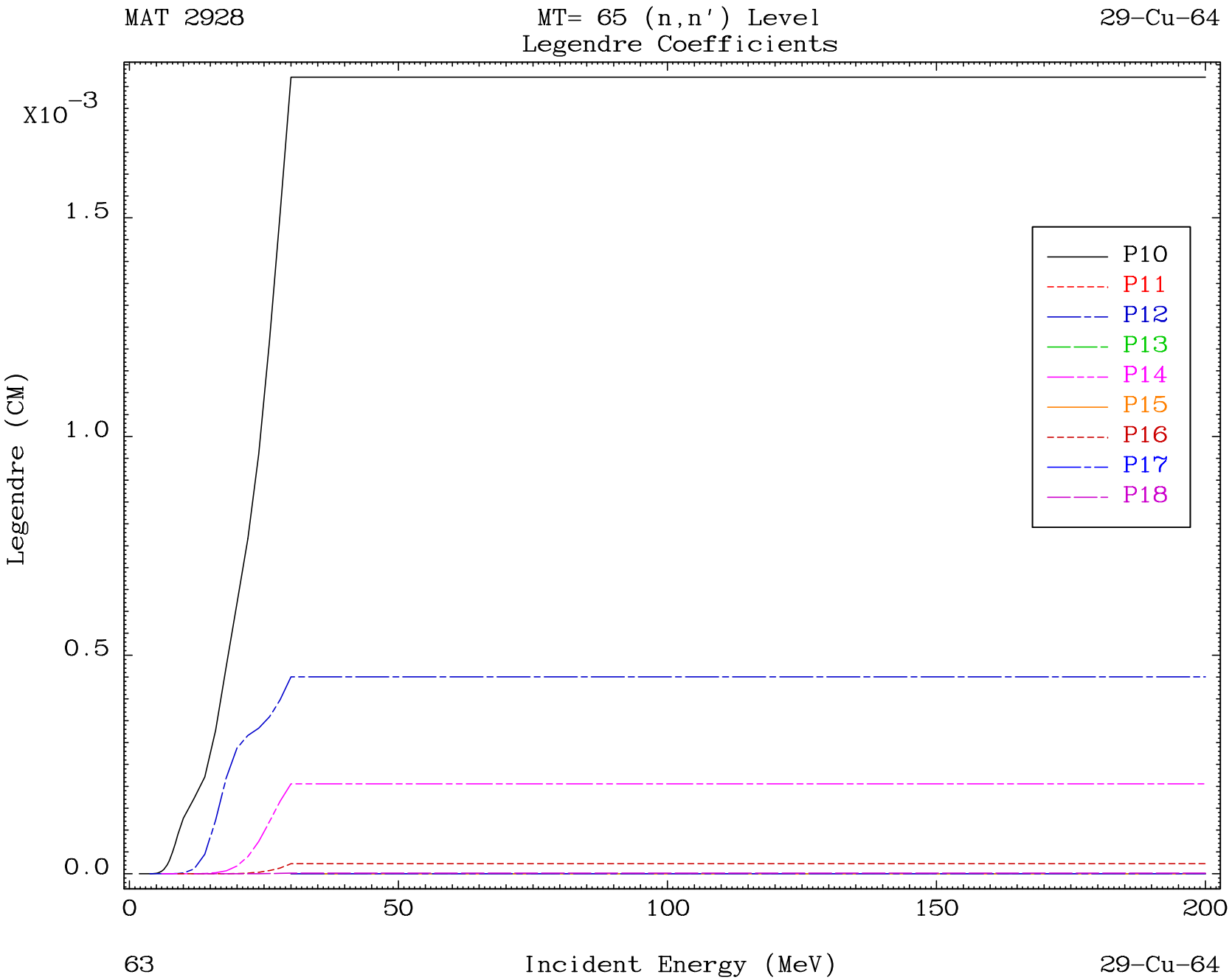

MAT 2928
MT= 63 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-7
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
50
100
150
200
58
Incident Energy (MeV)
29-Cu-64

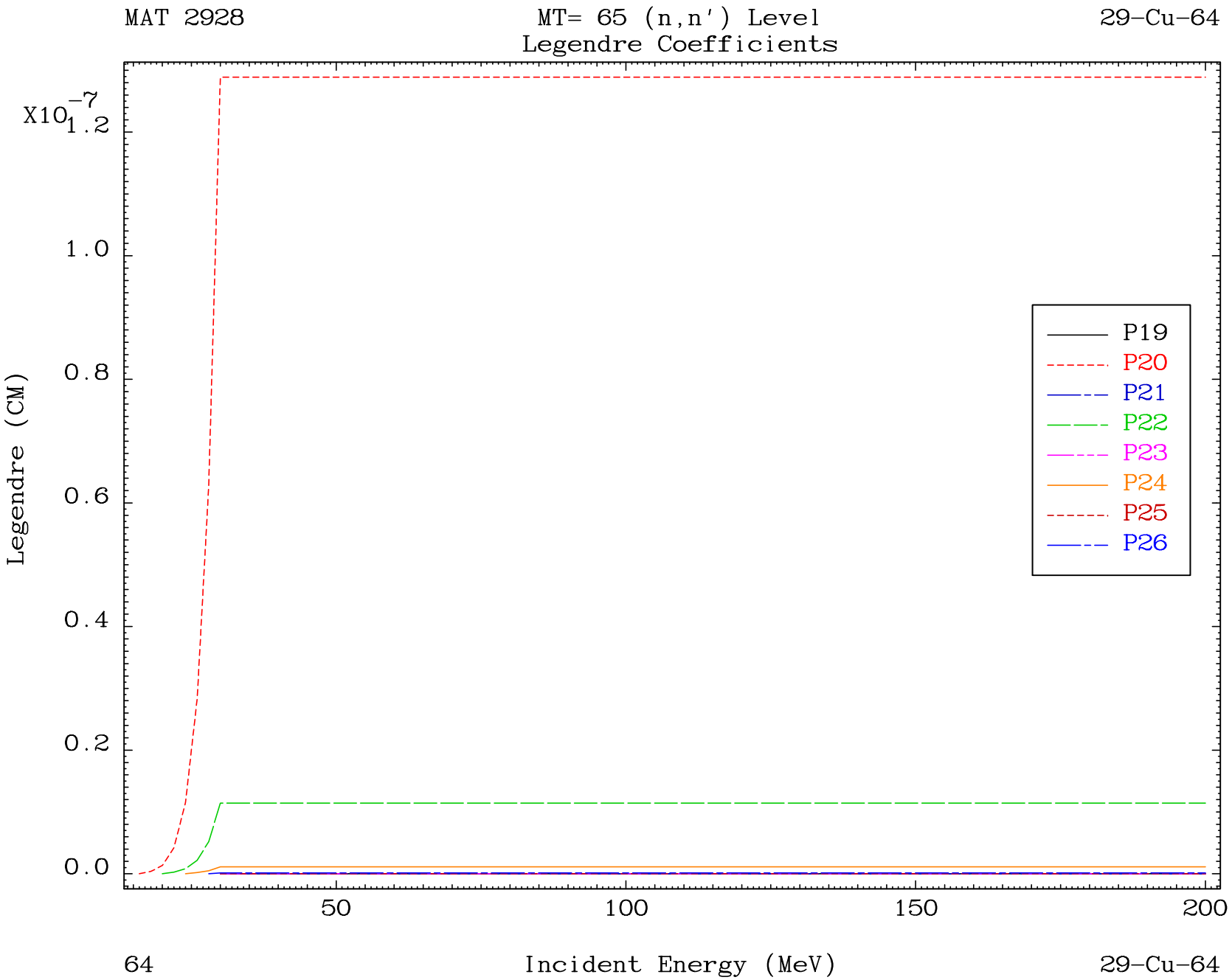

MAT 2928
MT= 64 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
59
Incident Energy (MeV)
29-Cu-64

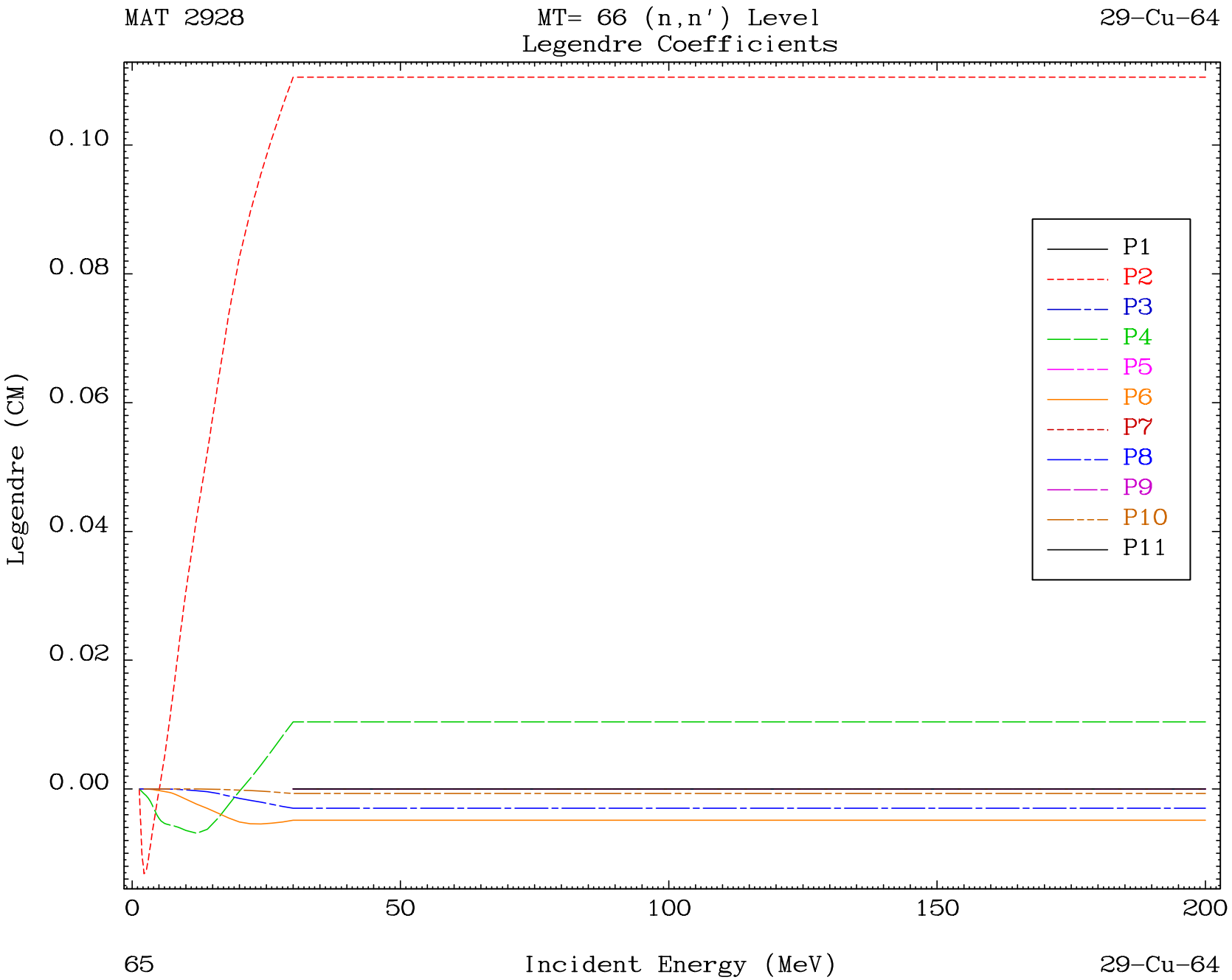

MAT 2928
MT= 64 (n,n') Level
Legendre Coefficients
29-Cu-64
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0.006
0.004
0.002
0.000
-0.002
-0.004
Legendre (CM)
0
50
100
150
200
60
Incident Energy (MeV)
29-Cu-64

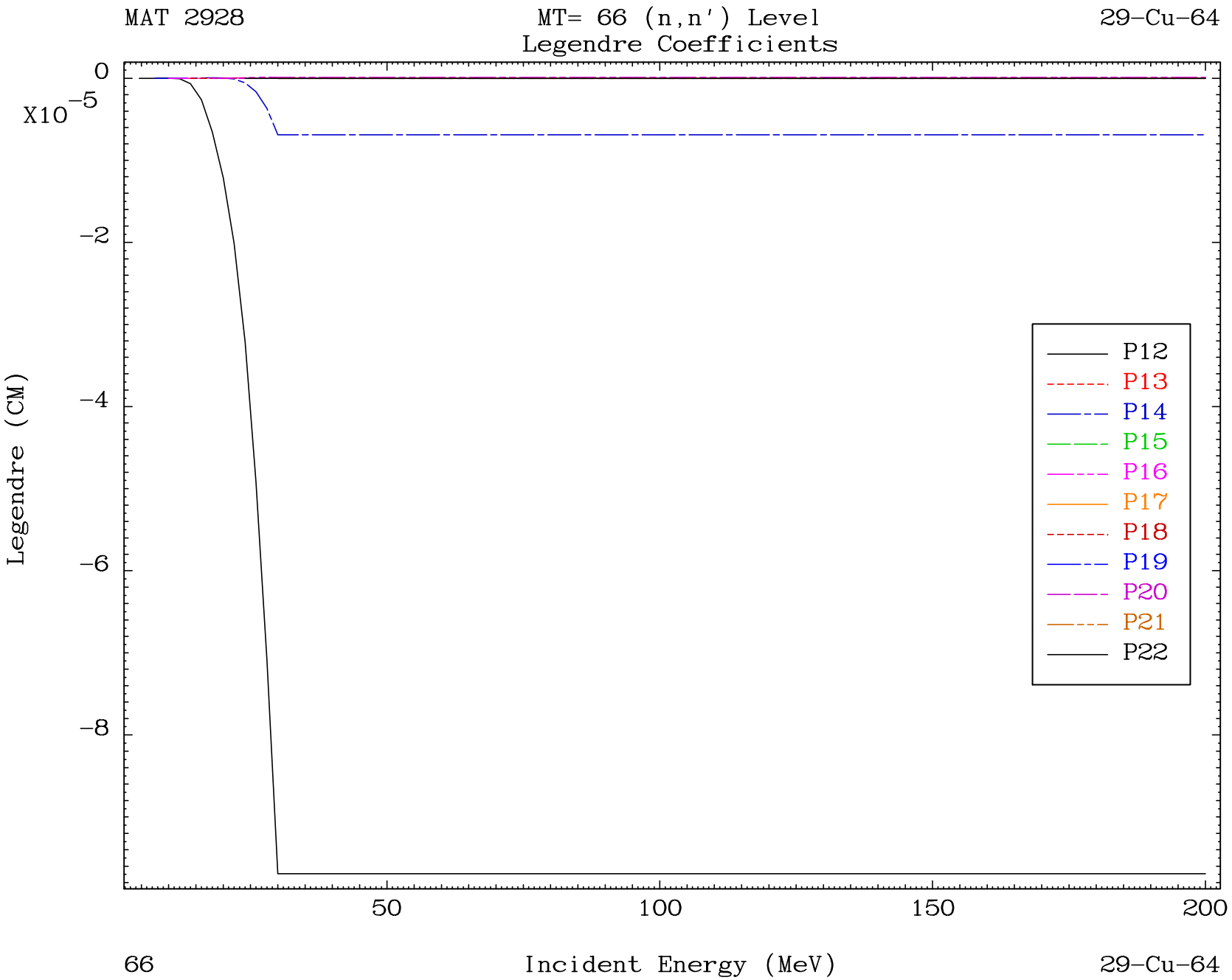

MAT 2928
MT= 64 (n,n') Level
Legendre Coefficients
29-Cu-64
0.0
X10^-5
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
61
Incident Energy (MeV)
29-Cu-64
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32

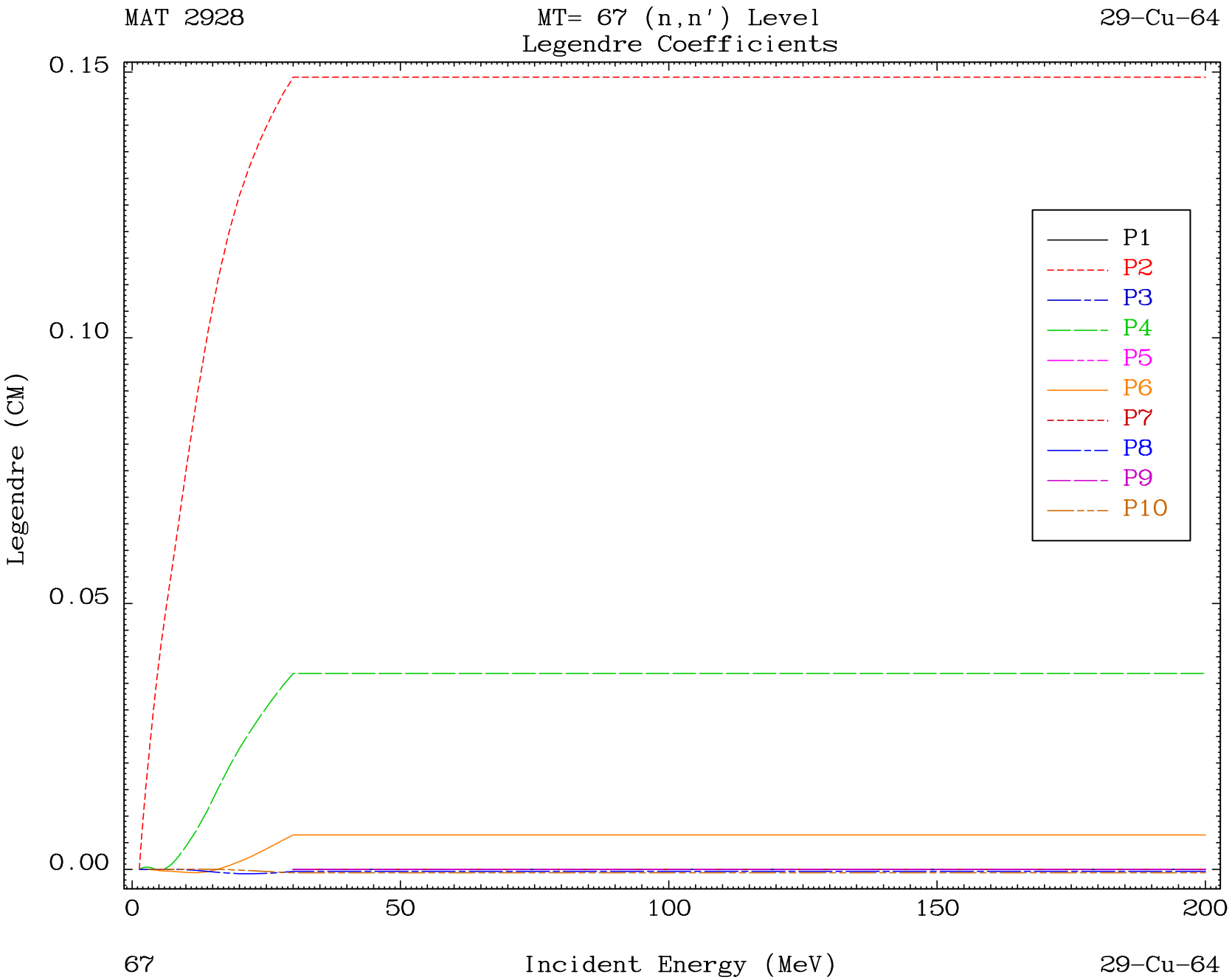

MAT 2928
MT= 65 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.15
0.10
0.05
0.00
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
62
Incident Energy (MeV)
29-Cu-64

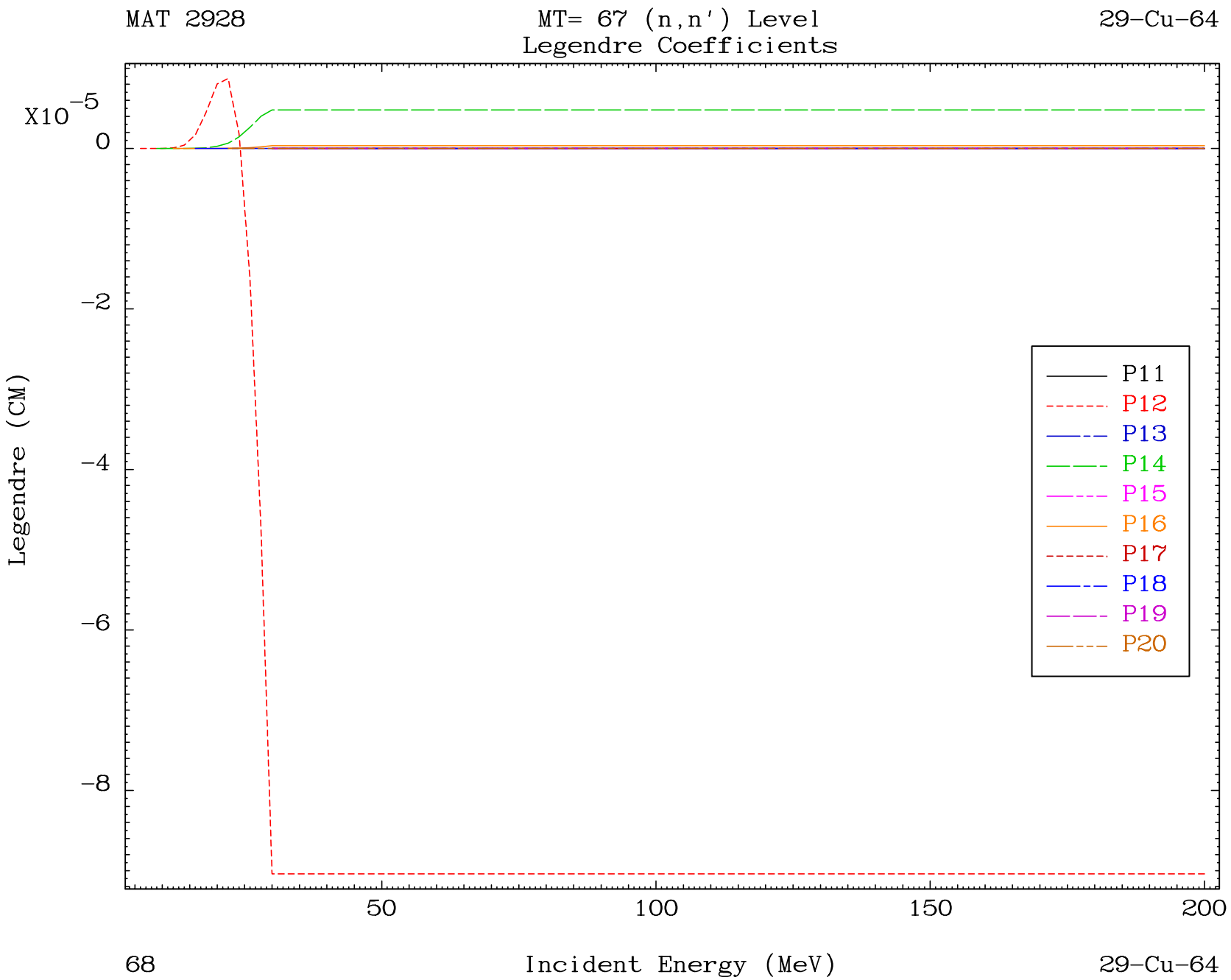

MAT 2928
MT= 65 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
63
Incident Energy (MeV)
29-Cu-64

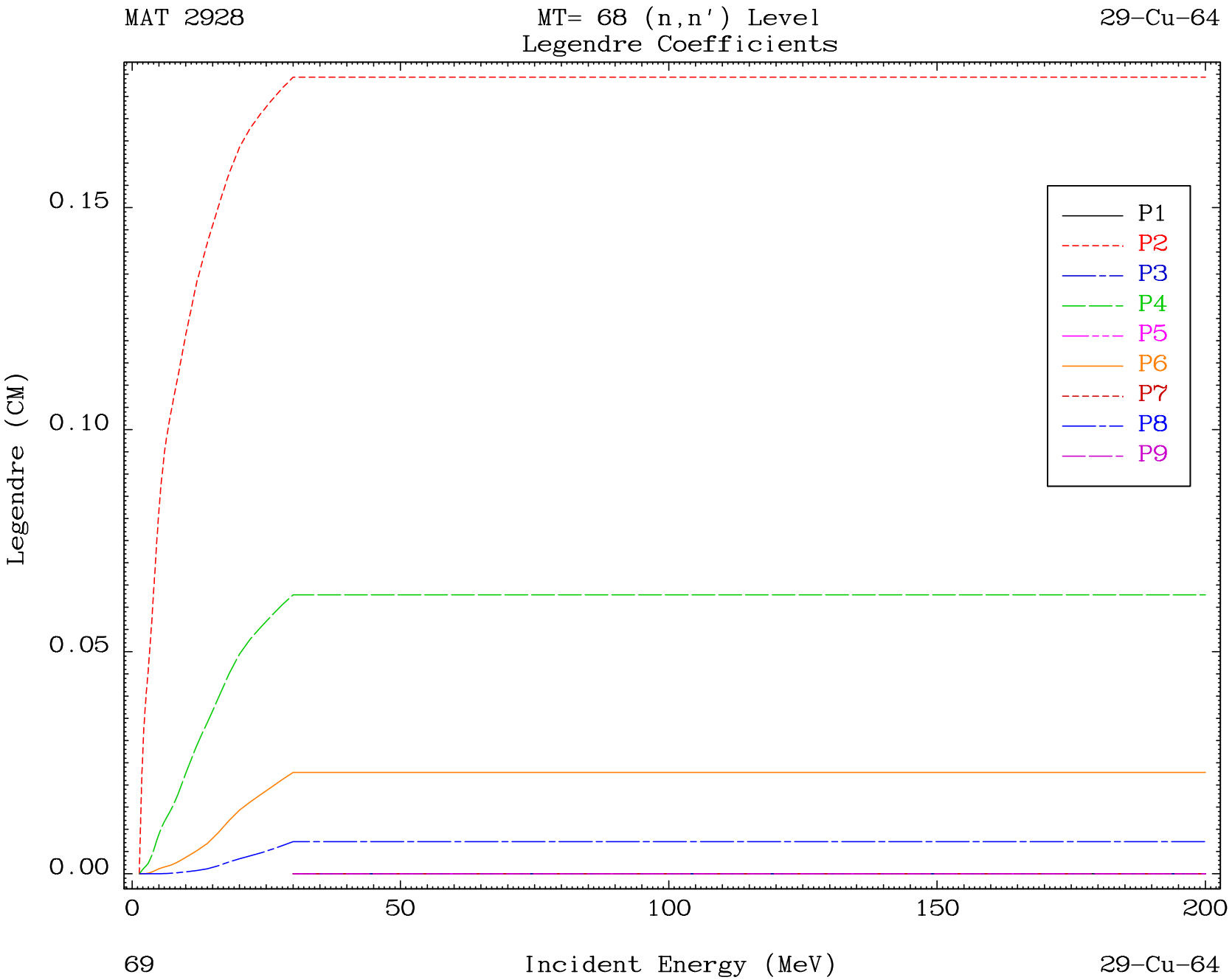

MAT 2928
MT= 65 (n,n') Level
Legendre Coefficients
29-Cu-64
X10^-7
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
50
100
150
200
64
Incident Energy (MeV)
29-Cu-64
P19
P20
P21
P22
P23
P24
P25
P26

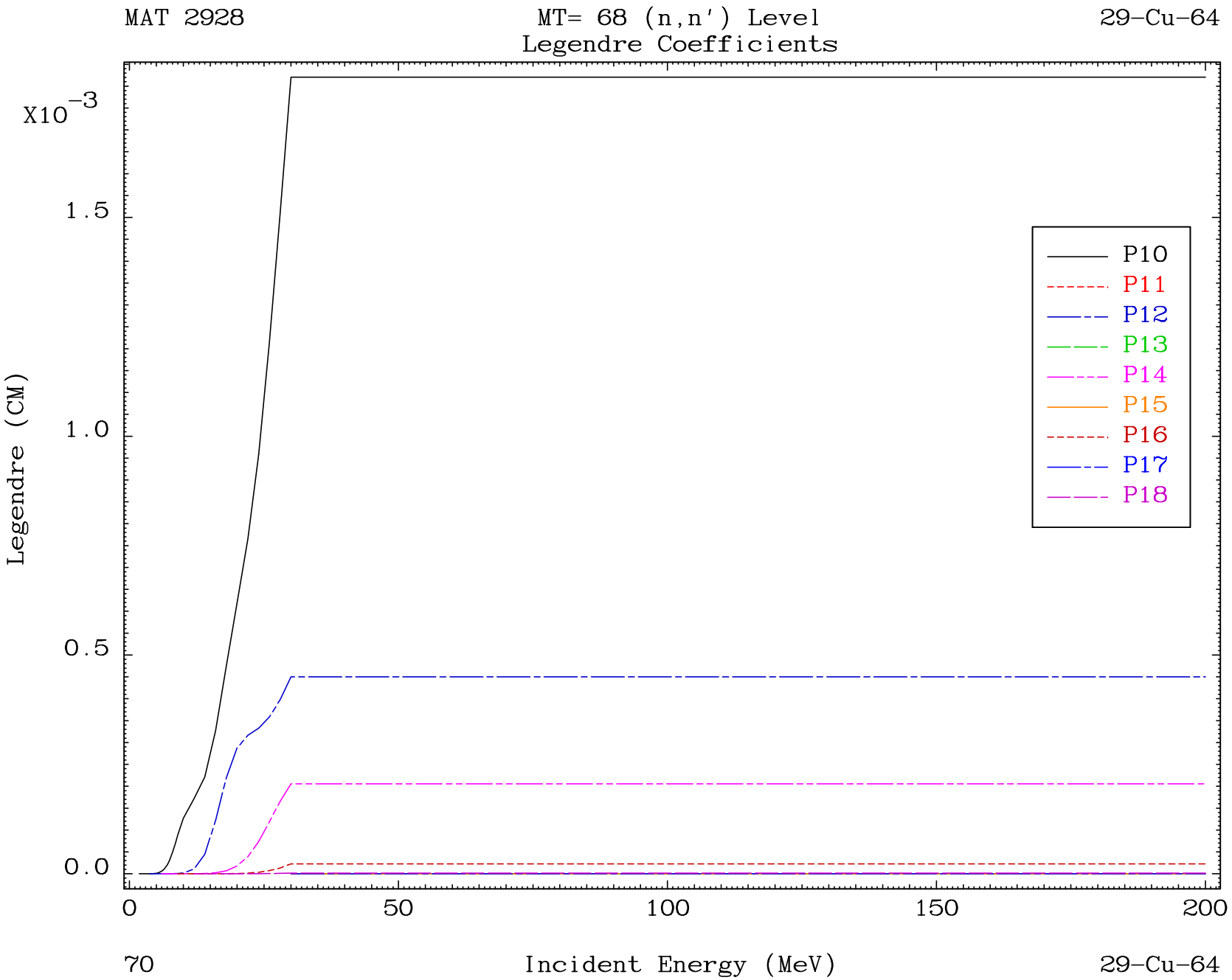

MAT 2928
MT= 66 (n,n') Level
Legendre Coefficients
29-Cu-64
0.10
0.08
0.06
0.04
0.02
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
0
50
100
150
200
65
Incident Energy (MeV)
29-Cu-64

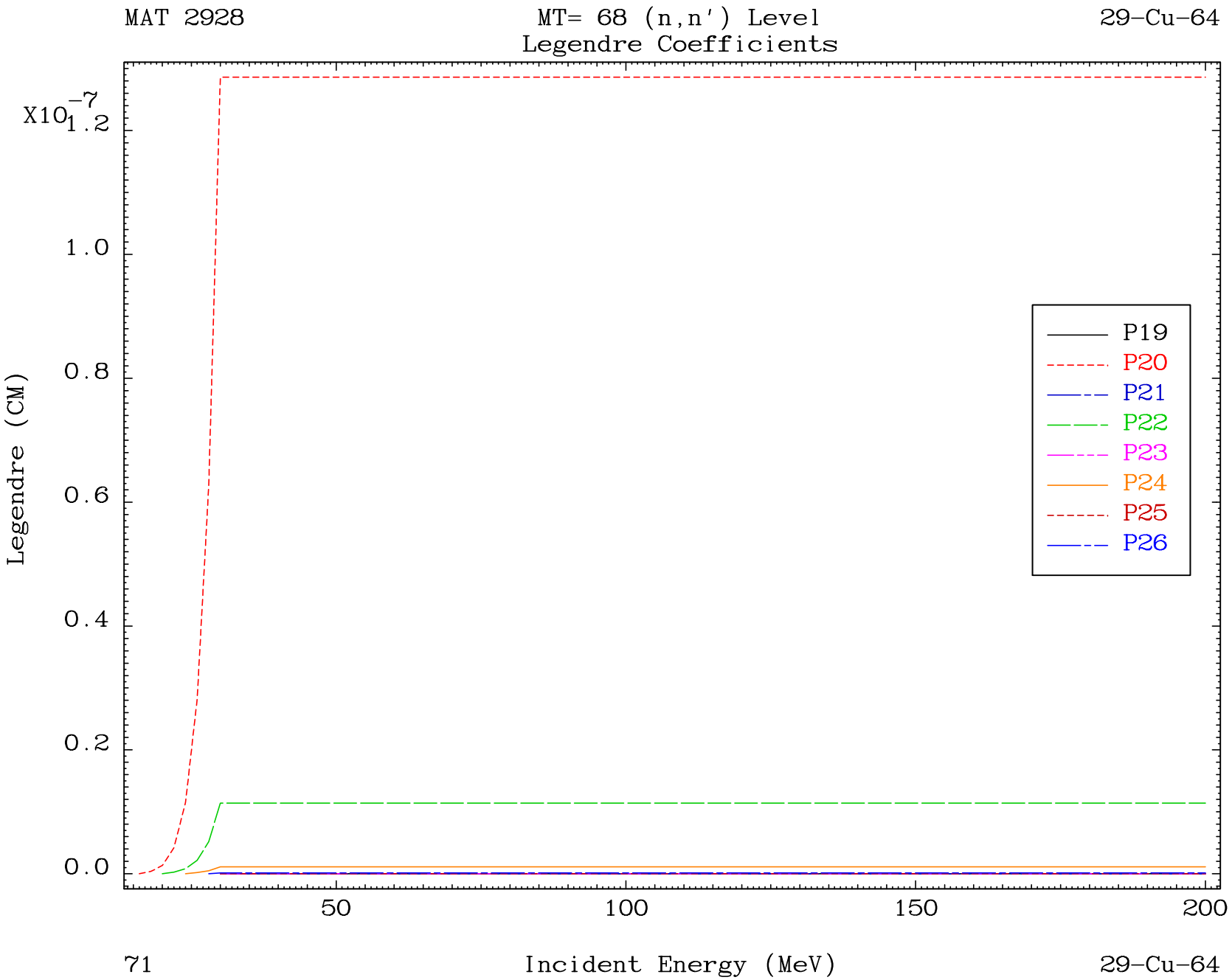

MAT 2928
MT= 66 (n,n') Level
Legendre Coefficients
29-Cu-64
X10^-5
0
-2
-4
-6
-8
Legendre (CM)
50
100
150
200
66
Incident Energy (MeV)
29-Cu-64
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

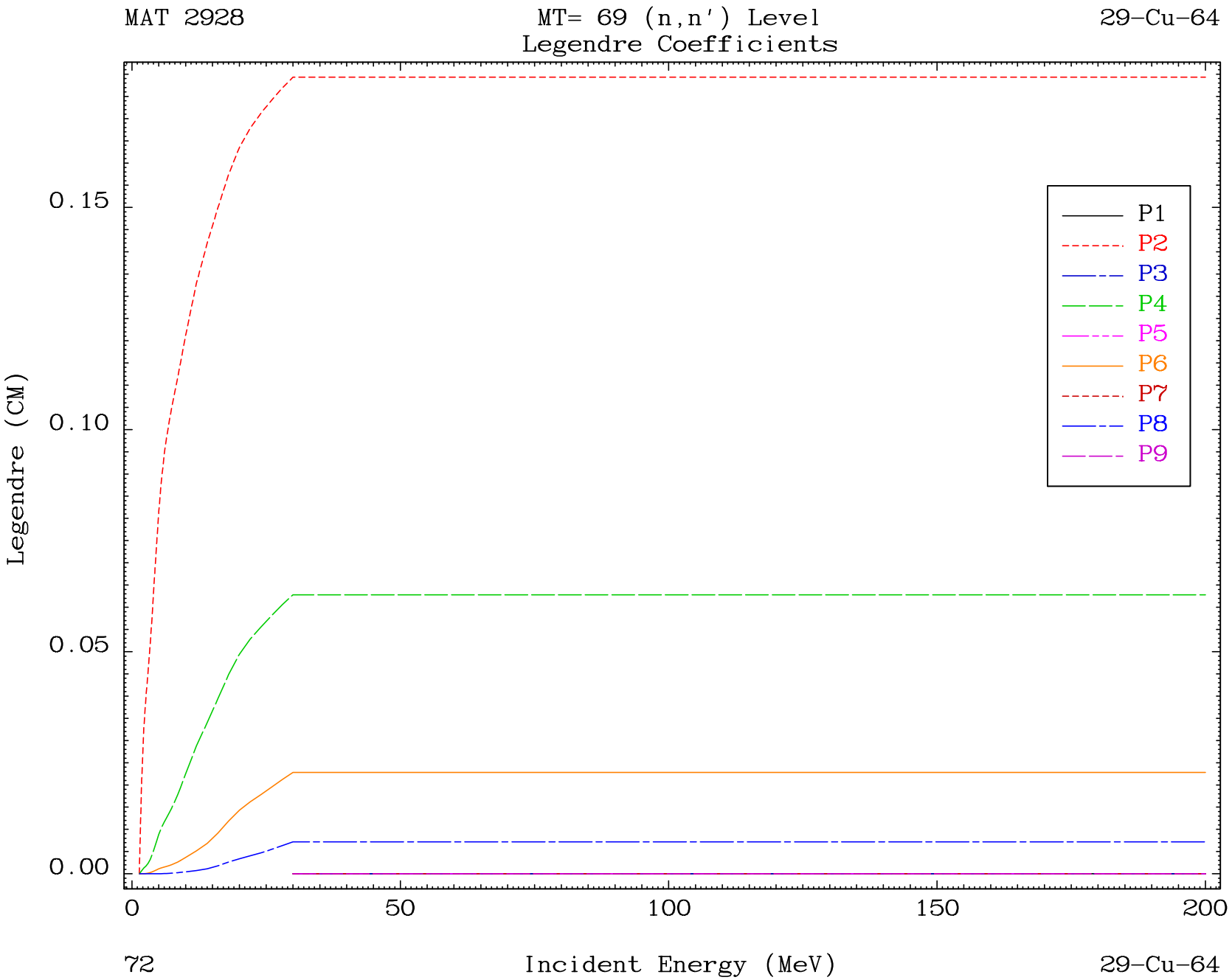

MAT 2928
MT= 67 (n,n') Level
Legendre Coefficients
29-Cu-64
0.15
0.10
0.05
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
67
Incident Energy (MeV)
29-Cu-64

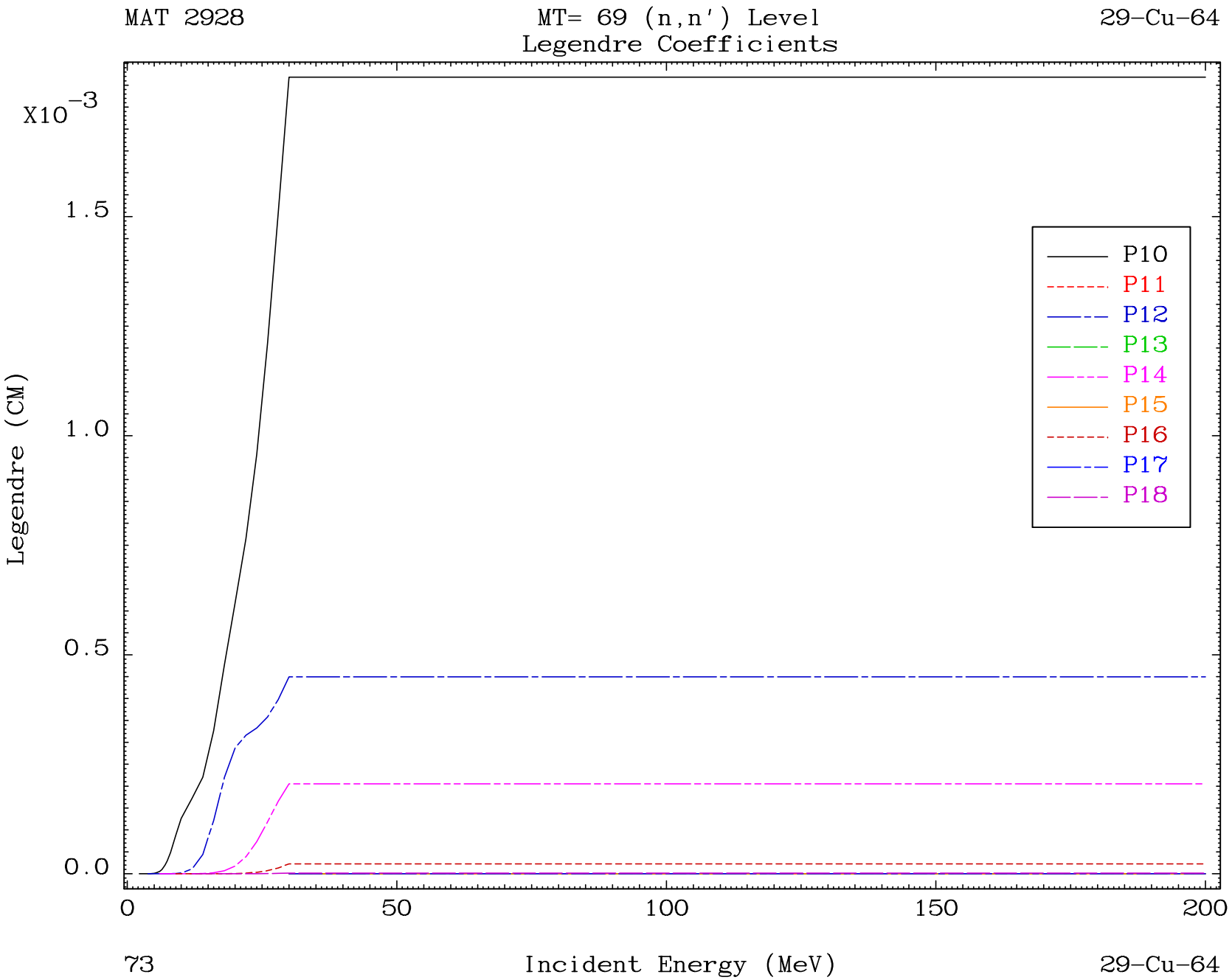

MAT 2928
MT= 67 (n,n') Level
Legendre Coefficients
29-Cu-64
X10^-5
0
-2
-4
-6
-8
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
50
100
150
200
68
Incident Energy (MeV)
29-Cu-64

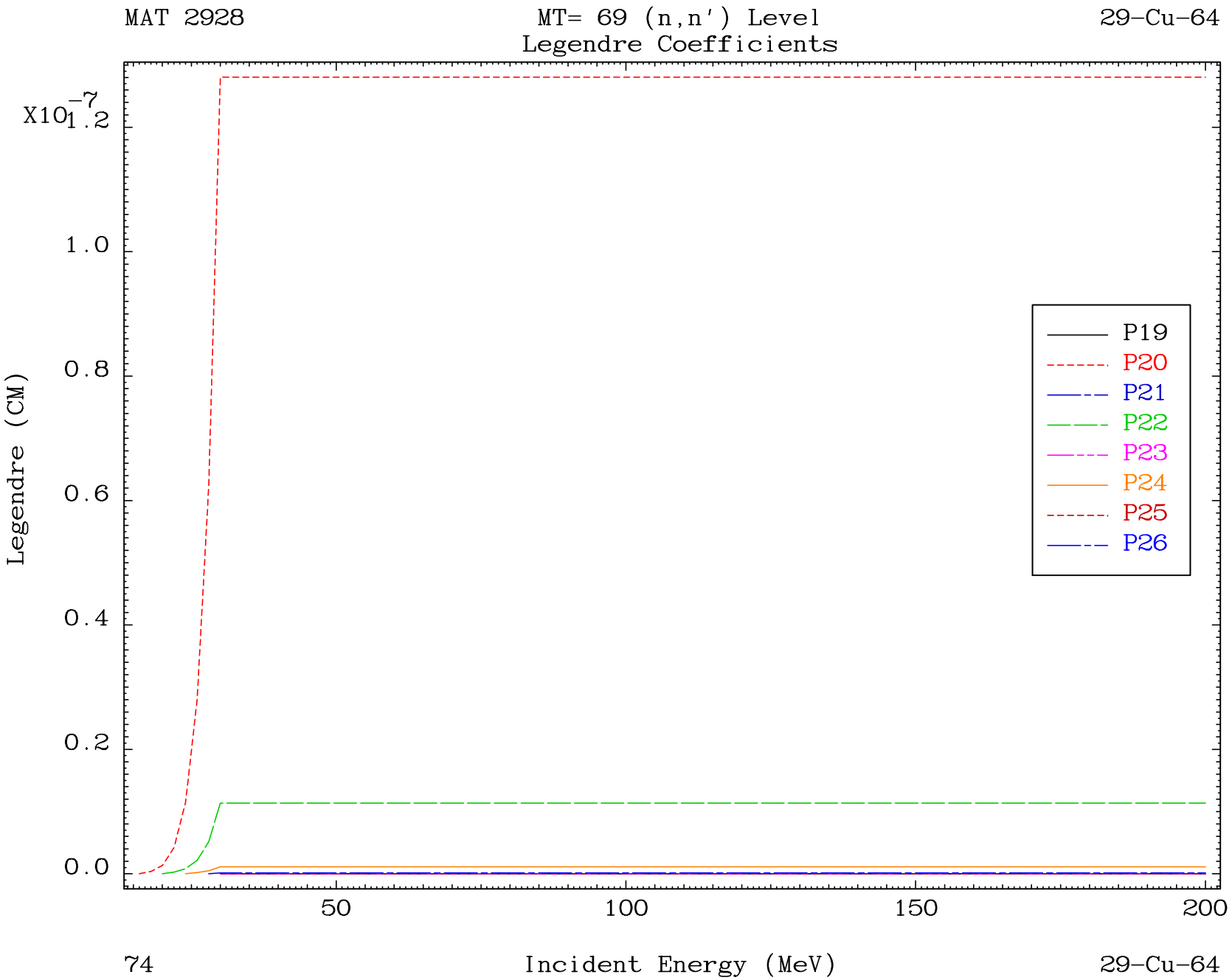

MAT 2928
MT= 68 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.15
0.10
0.05
0.00
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
69
Incident Energy (MeV)
29-Cu-64

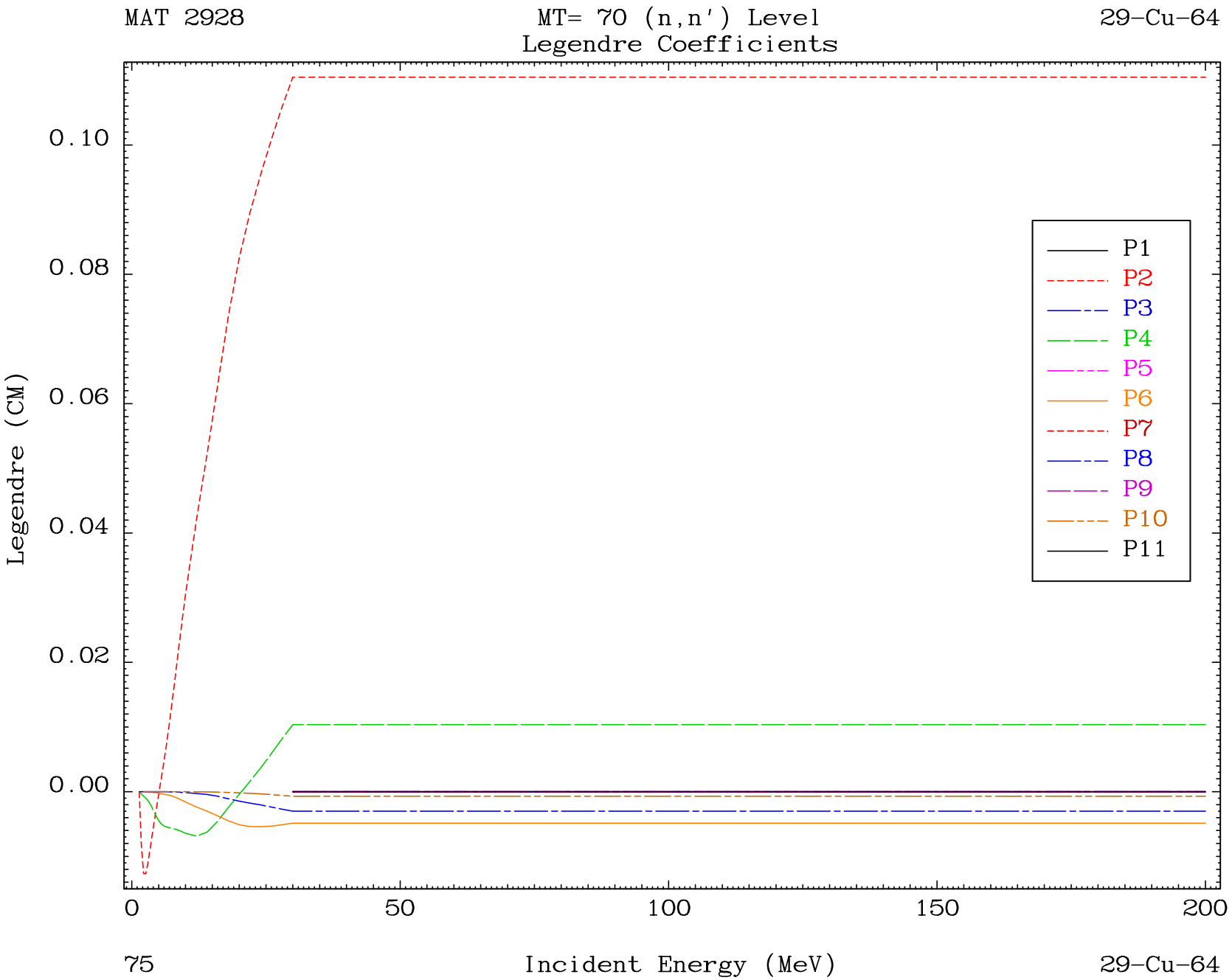

MAT 2928
MT= 68 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
70
Incident Energy (MeV)
29-Cu-64

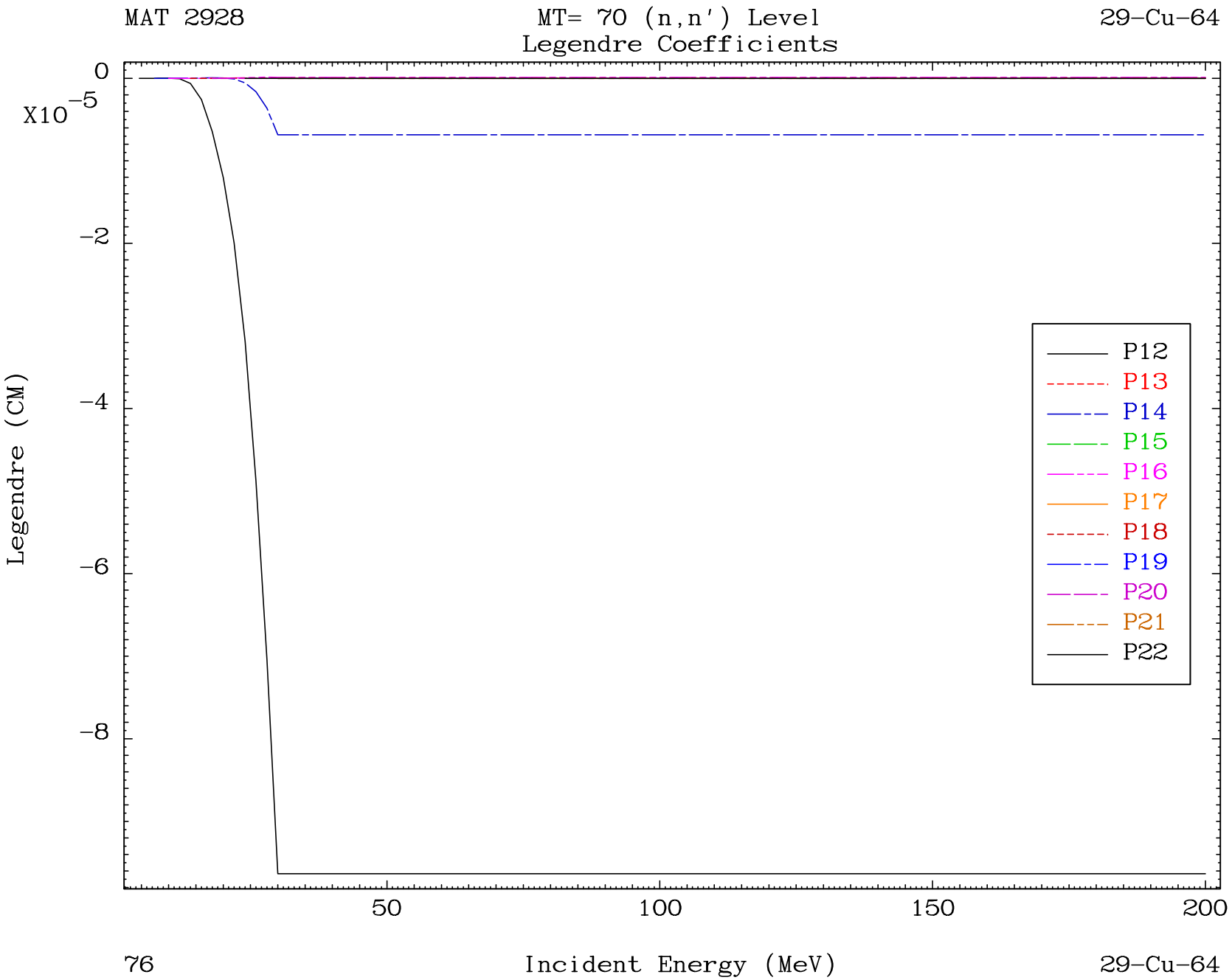

MAT 2928
MT= 68 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-7
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
50
100
150
200
71
Incident Energy (MeV)
29-Cu-64
P19
P20
P21
P22
P23
P24
P25
P26

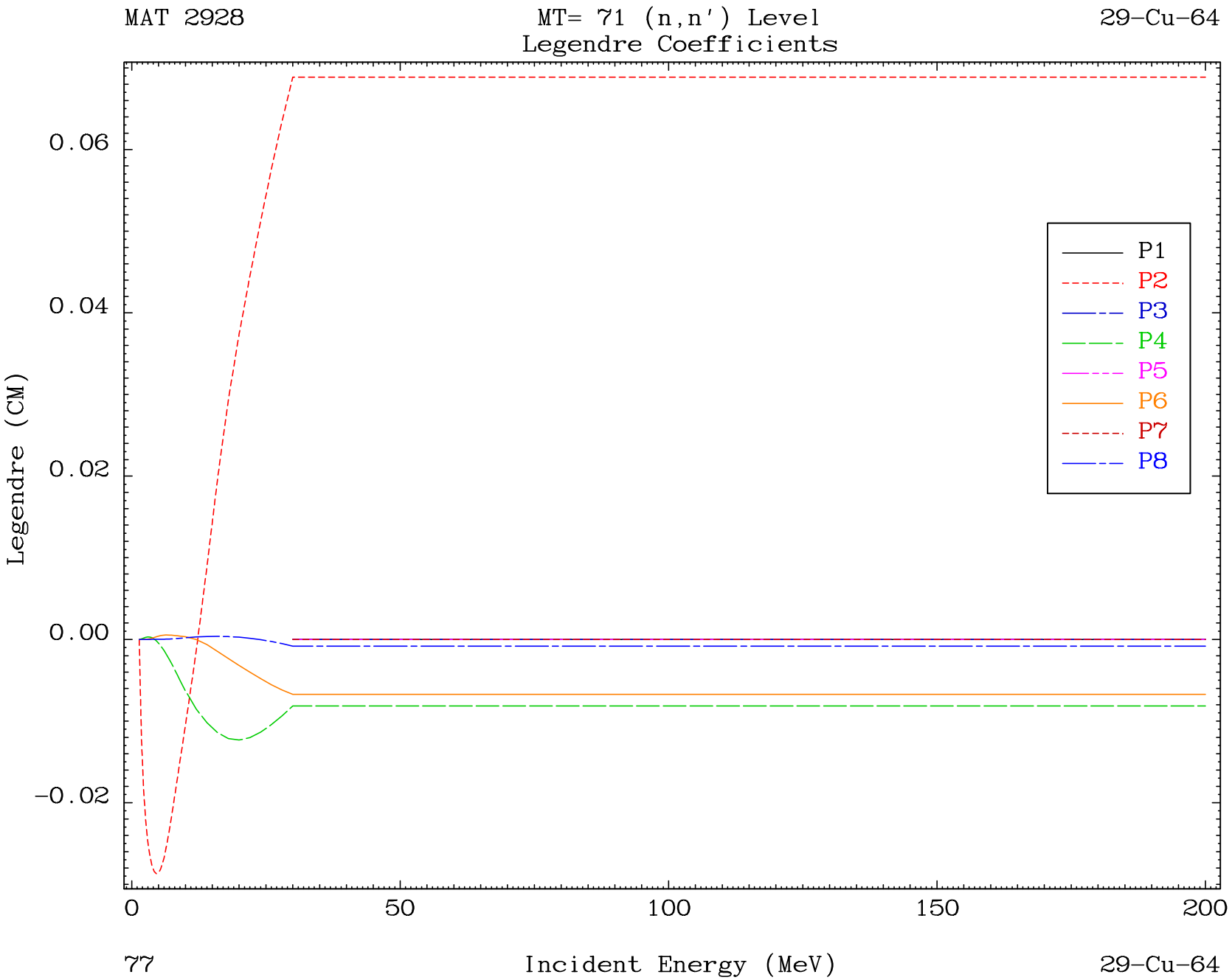

MAT 2928
MT= 69 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.15
0.10
0.05
0.00
0
50
100
150
200
Incident Energy (MeV)
72
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8
P9

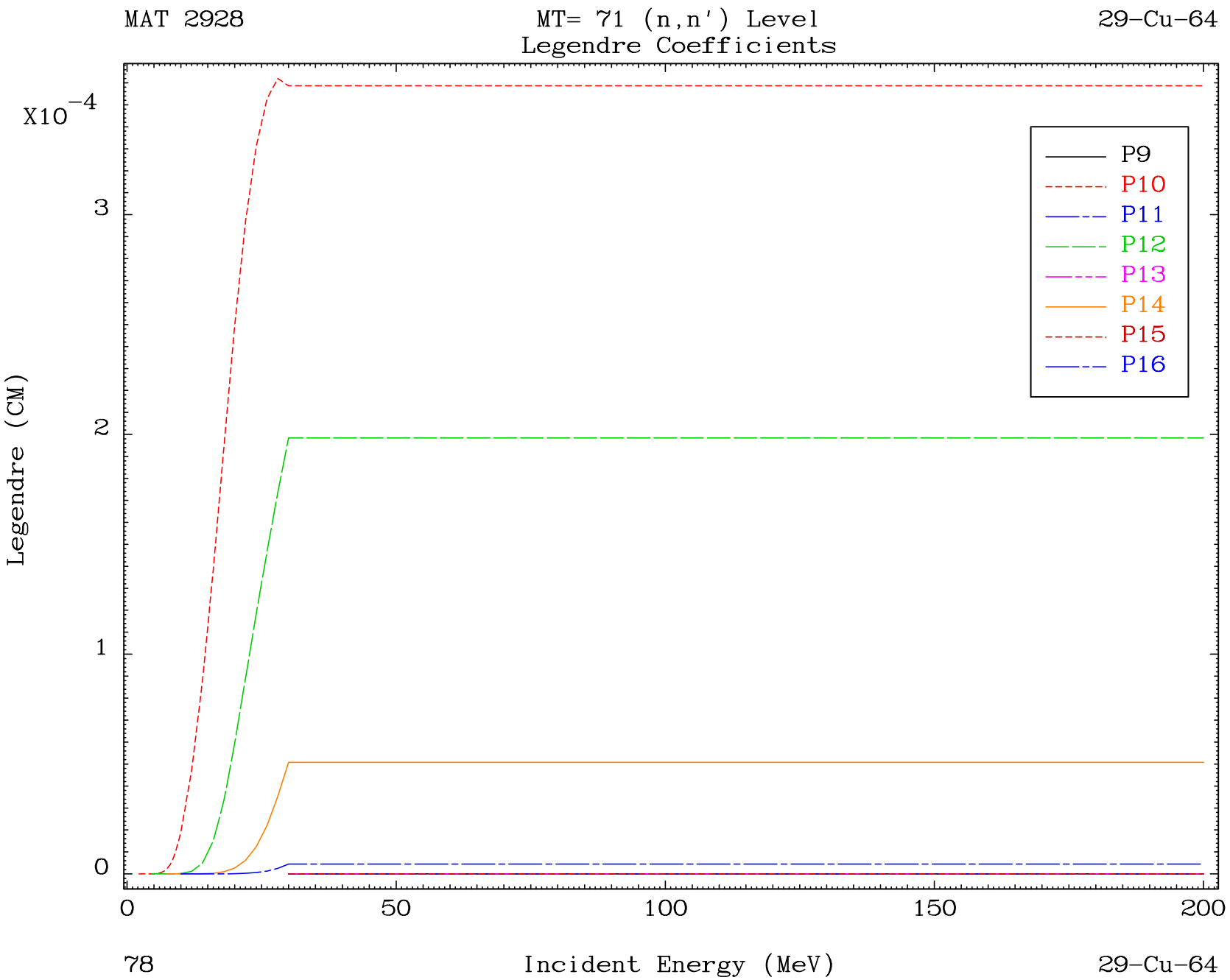

MAT 2928
MT= 69 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
73
Incident Energy (MeV)
29-Cu-64

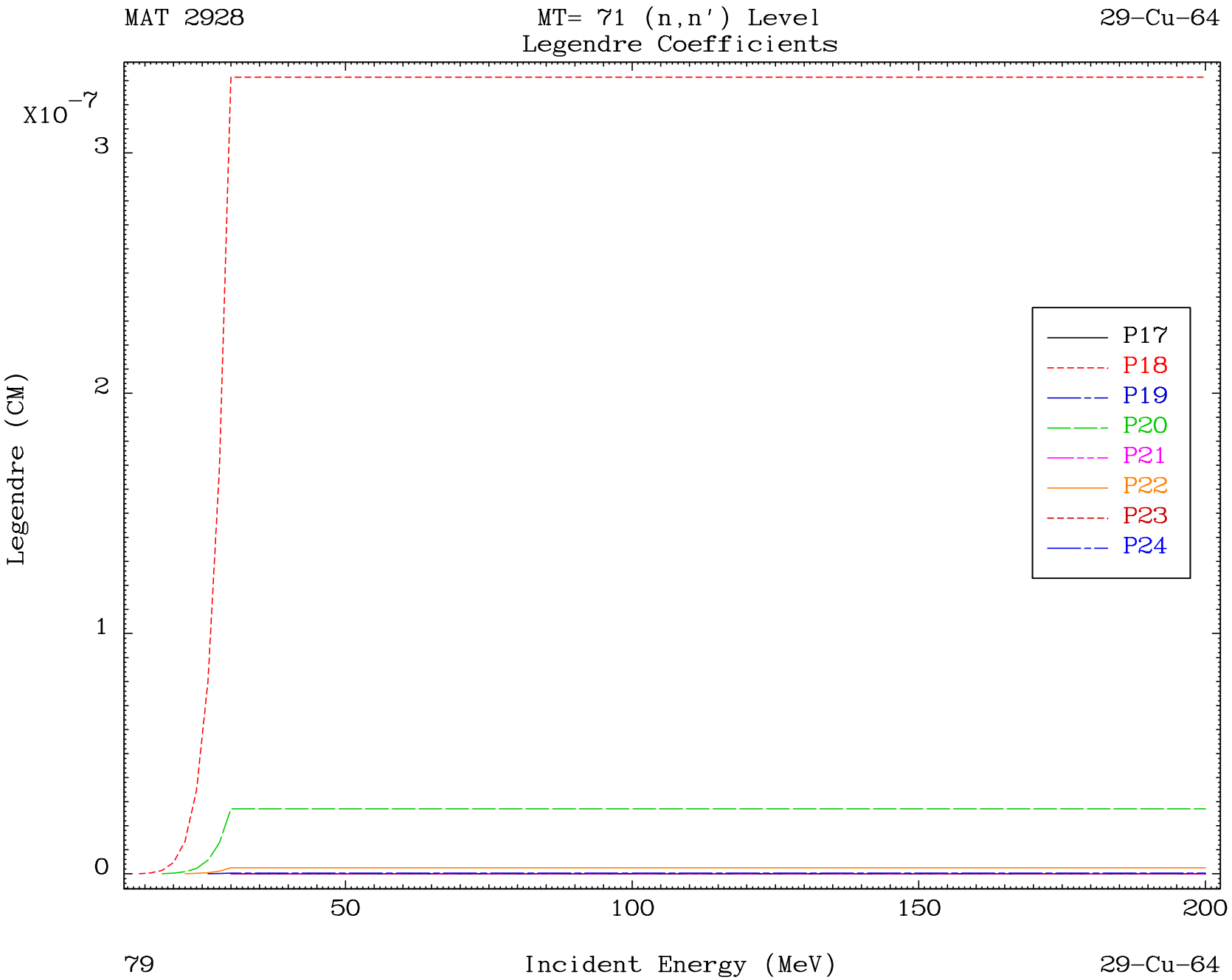

MAT 2928
MT= 69 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-7
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
50
100
150
200
74
Incident Energy (MeV)
29-Cu-64
P19
P20
P21
P22
P23
P24
P25
P26

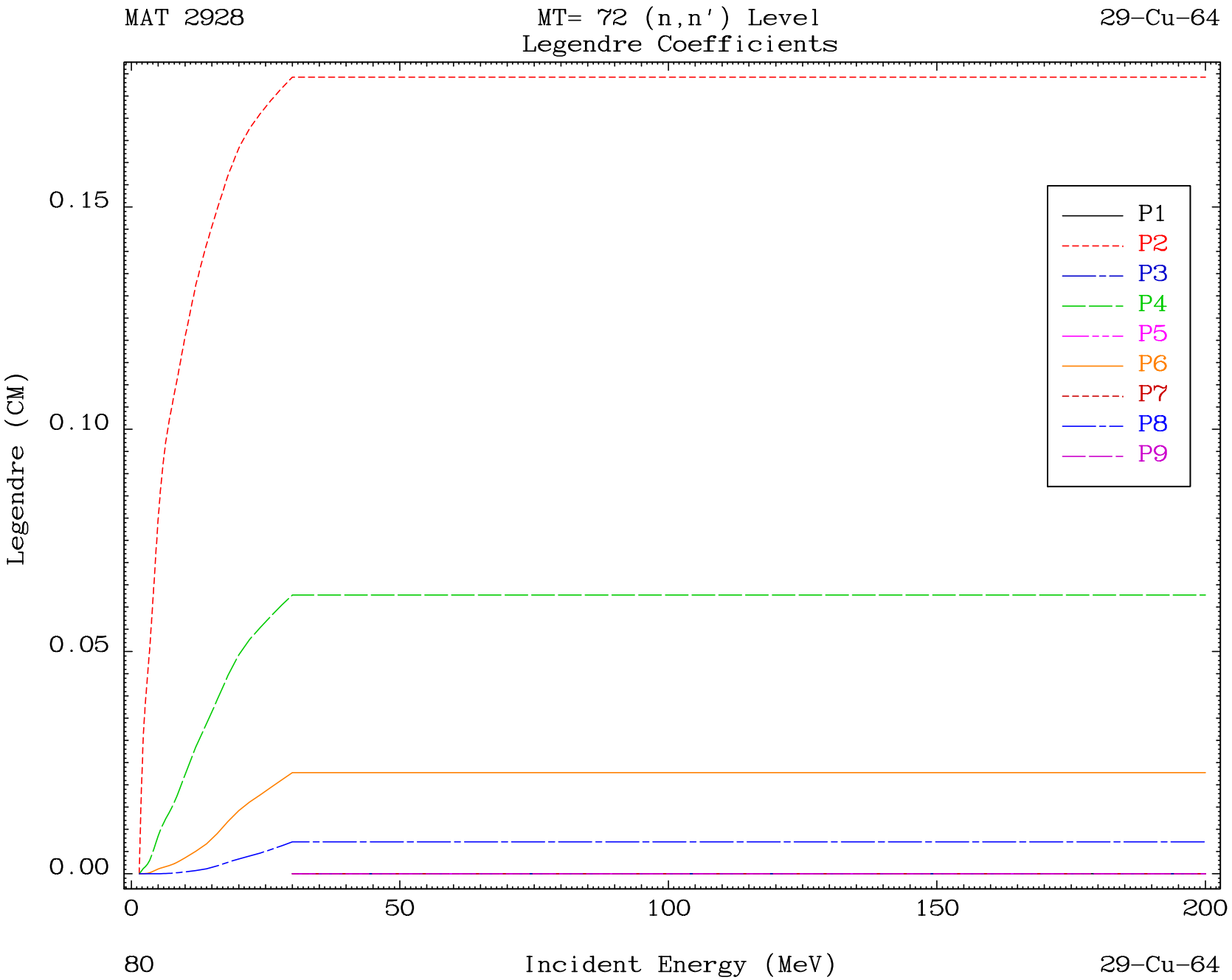

MAT 2928
MT= 70 (n,n') Level
Legendre Coefficients
29-Cu-64
0.10
0.08
0.06
0.04
0.02
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
0
50
100
150
200
75
Incident Energy (MeV)
29-Cu-64

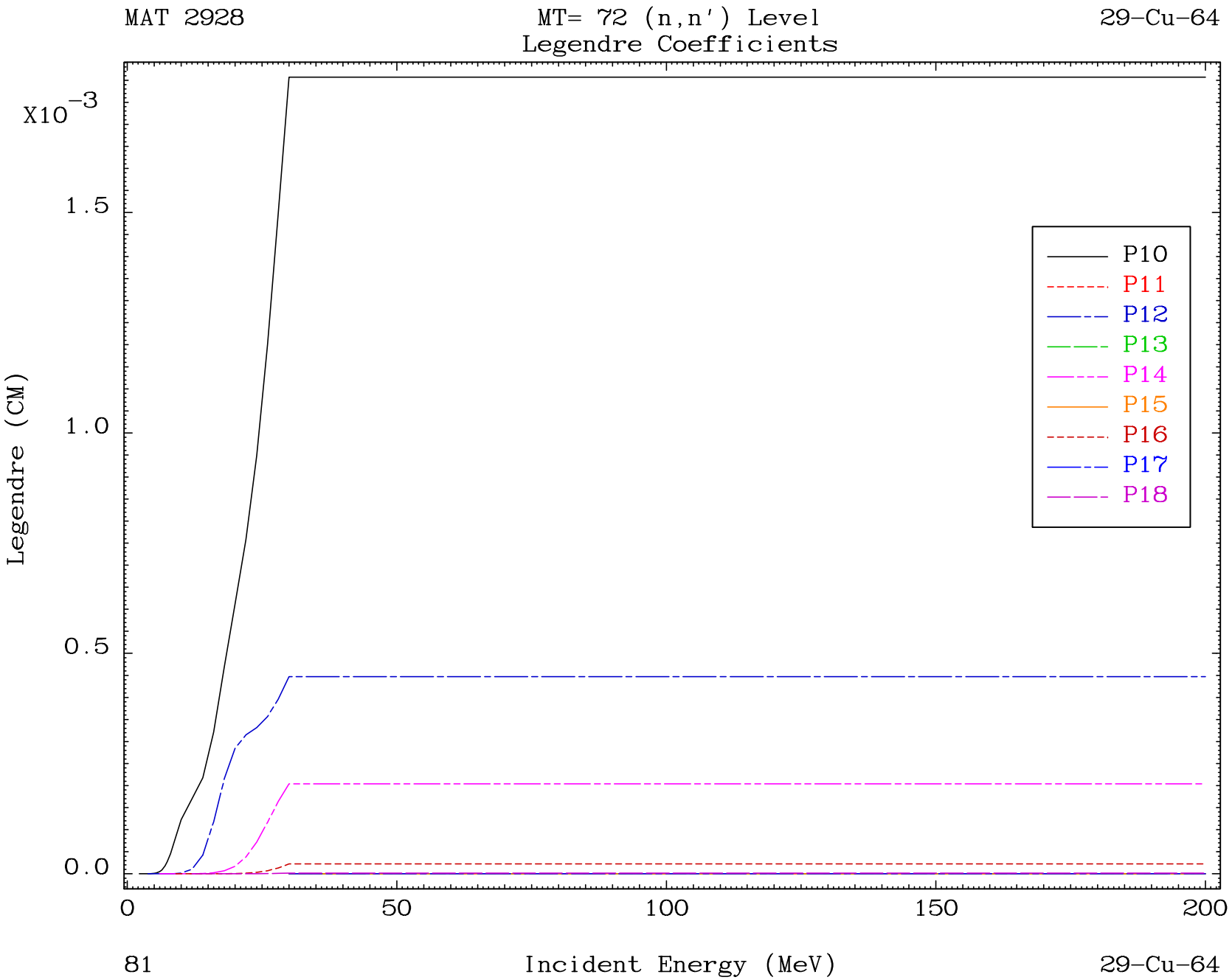

MAT 2928
MT= 70 (n,n') Level
Legendre Coefficients
29-Cu-64
0
X10-5
-2
-4
-6
-8
Legendre (CM)
50
100
150
200
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
76
Incident Energy (MeV)
29-Cu-64

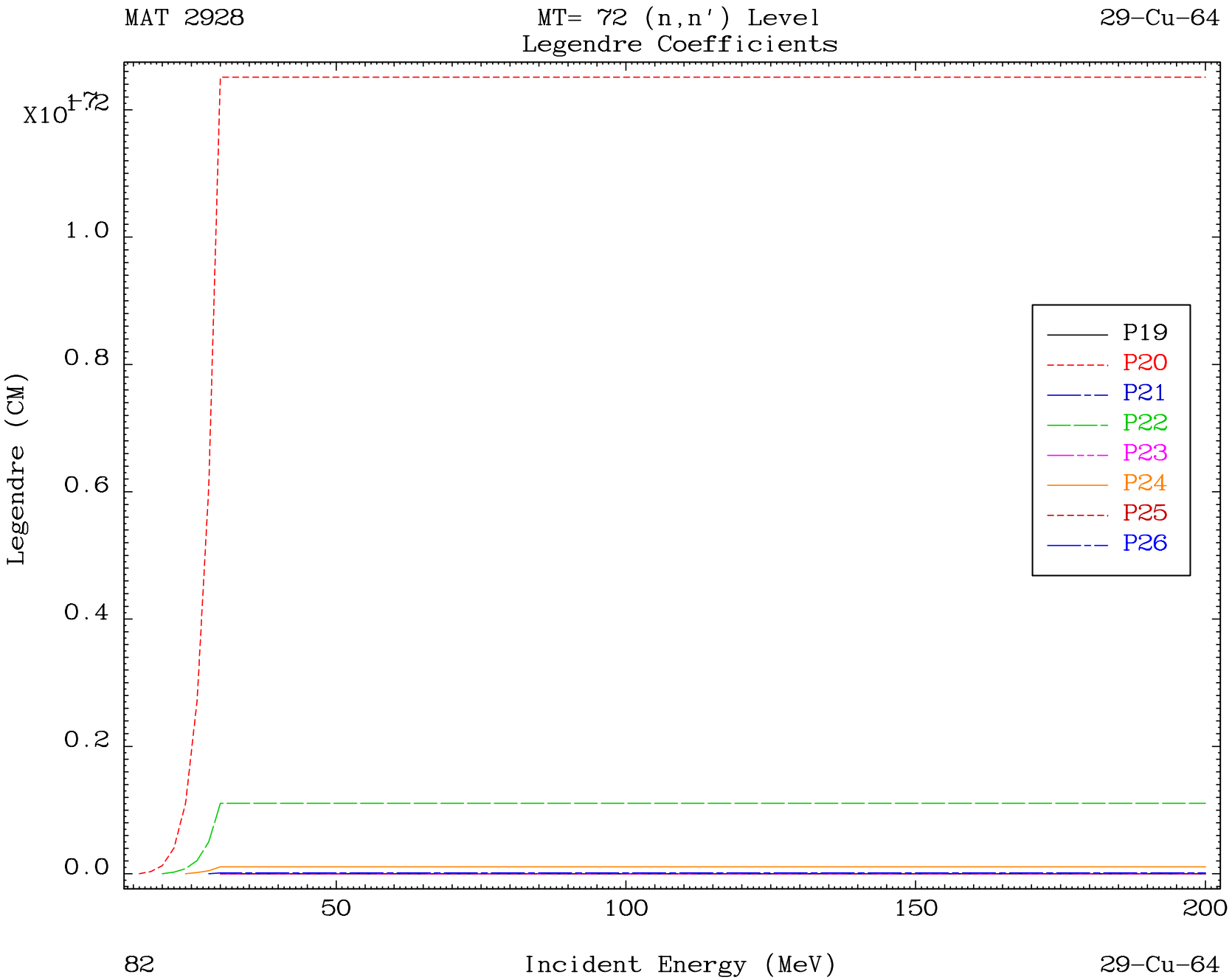

MAT 2928
MT= 71 (n,n') Level
Legendre Coefficients
29-Cu-64
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
0
50
100
150
200
77
Incident Energy (MeV)
29-Cu-64

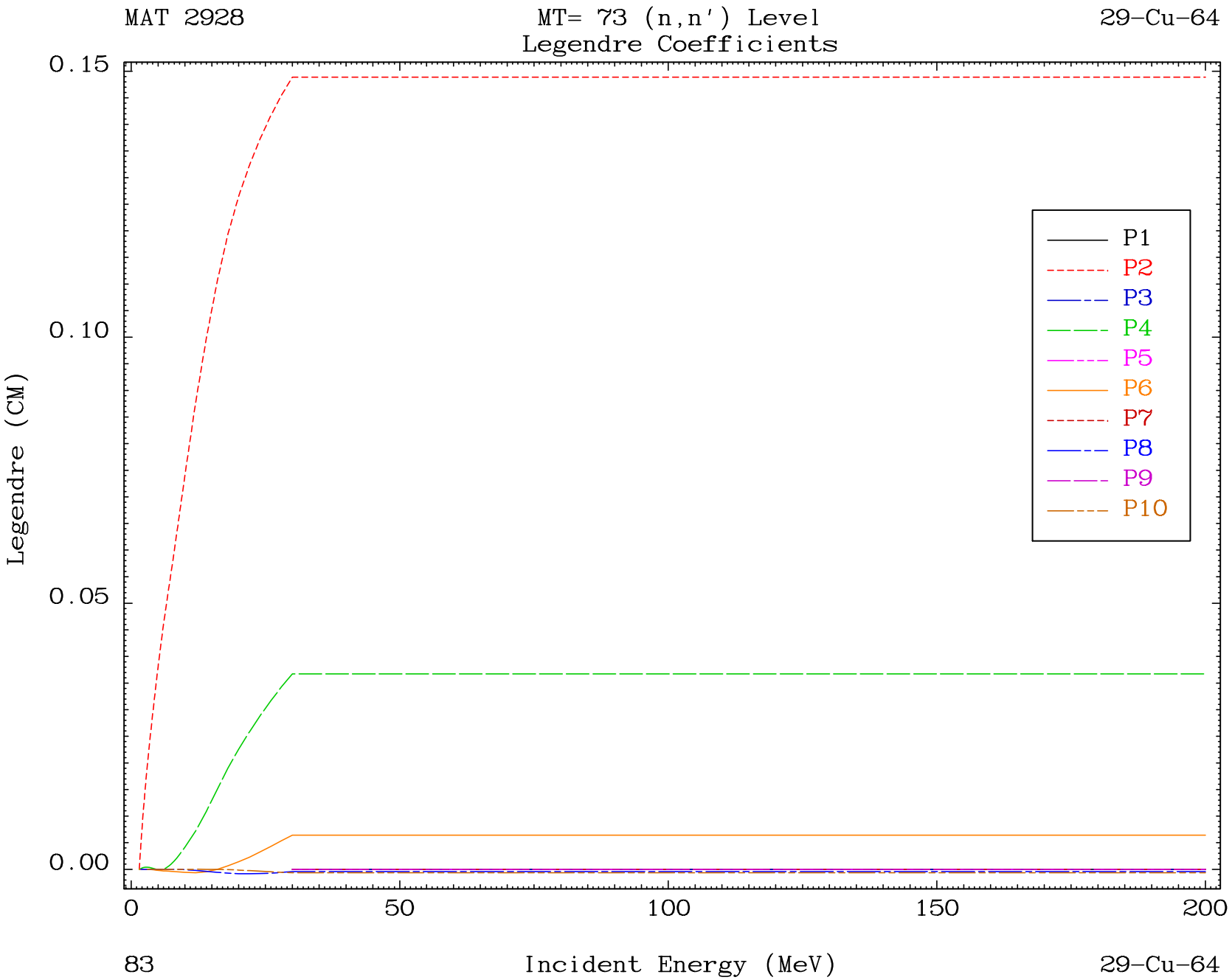

MAT 2928
MT= 71 (n,n') Level
Legendre Coefficients
29-Cu-64
X10^-4
3
2
1
0
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
78
Incident Energy (MeV)
29-Cu-64

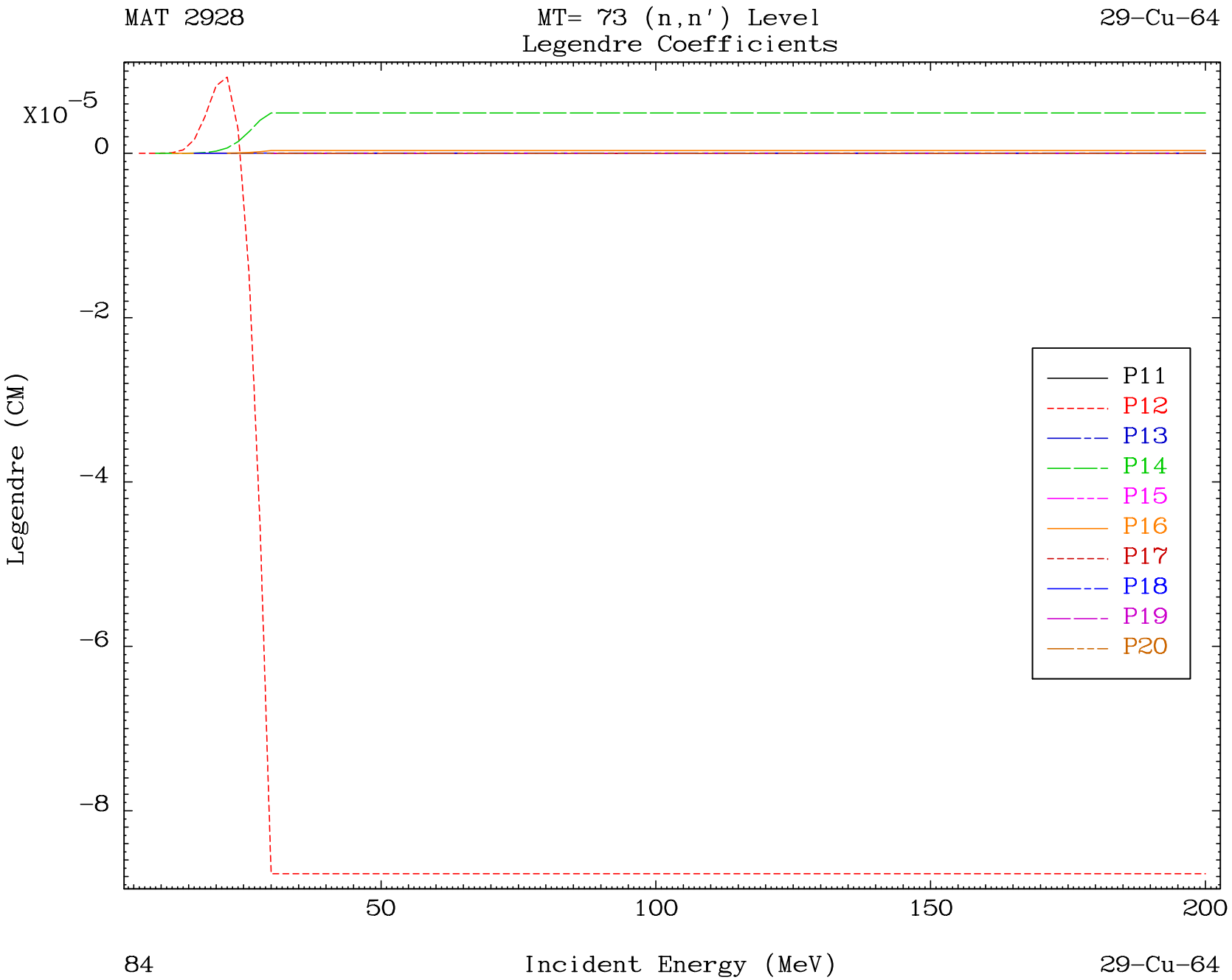

MAT 2928
MT= 71 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-7
3
2
1
0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P17
P18
P19
P20
P21
P22
P23
P24
79
29-Cu-64

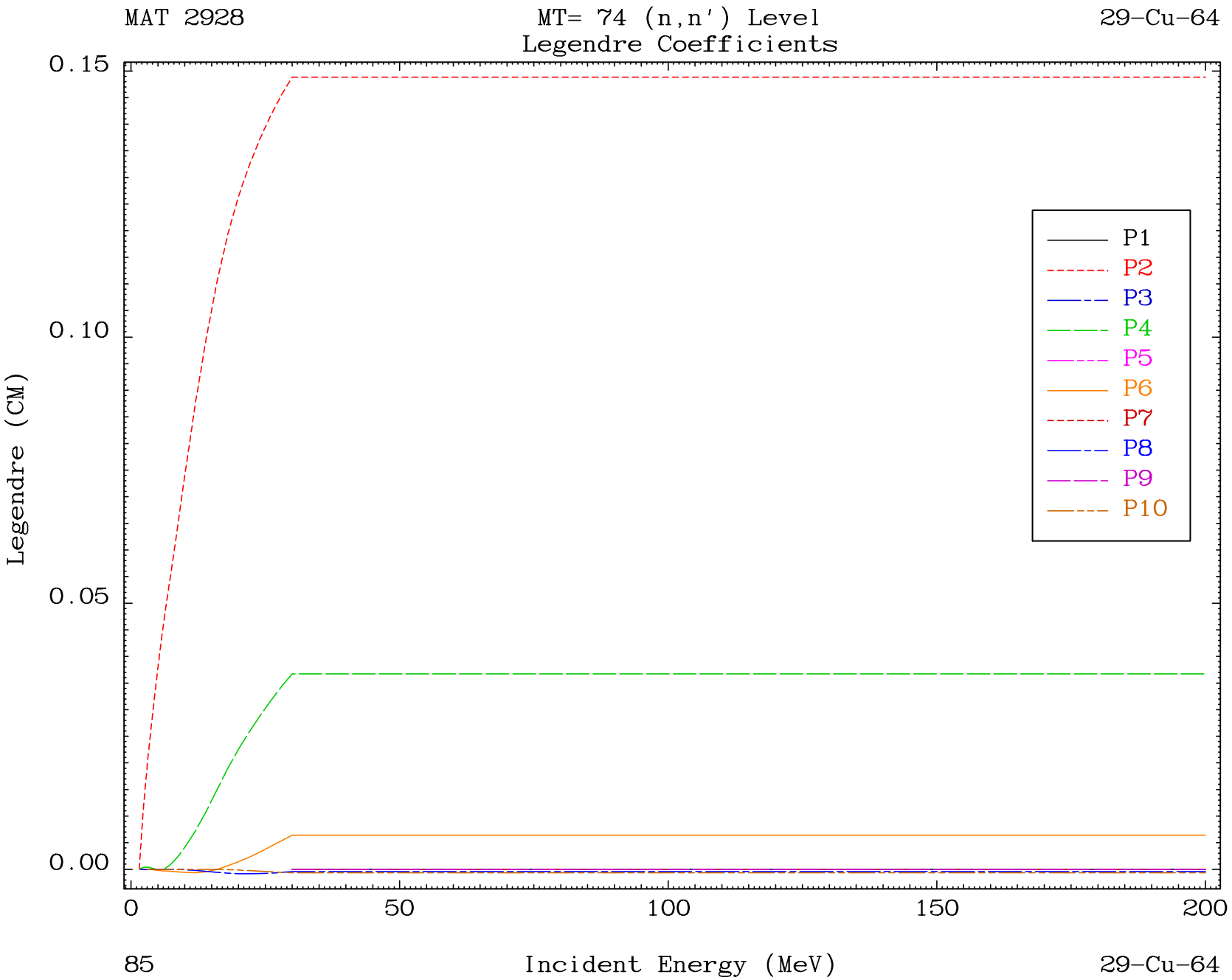

MAT 2928
MT= 72 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.15
0.10
0.05
0.00
0
50
100
150
200
80
Incident Energy (MeV)
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8
P9

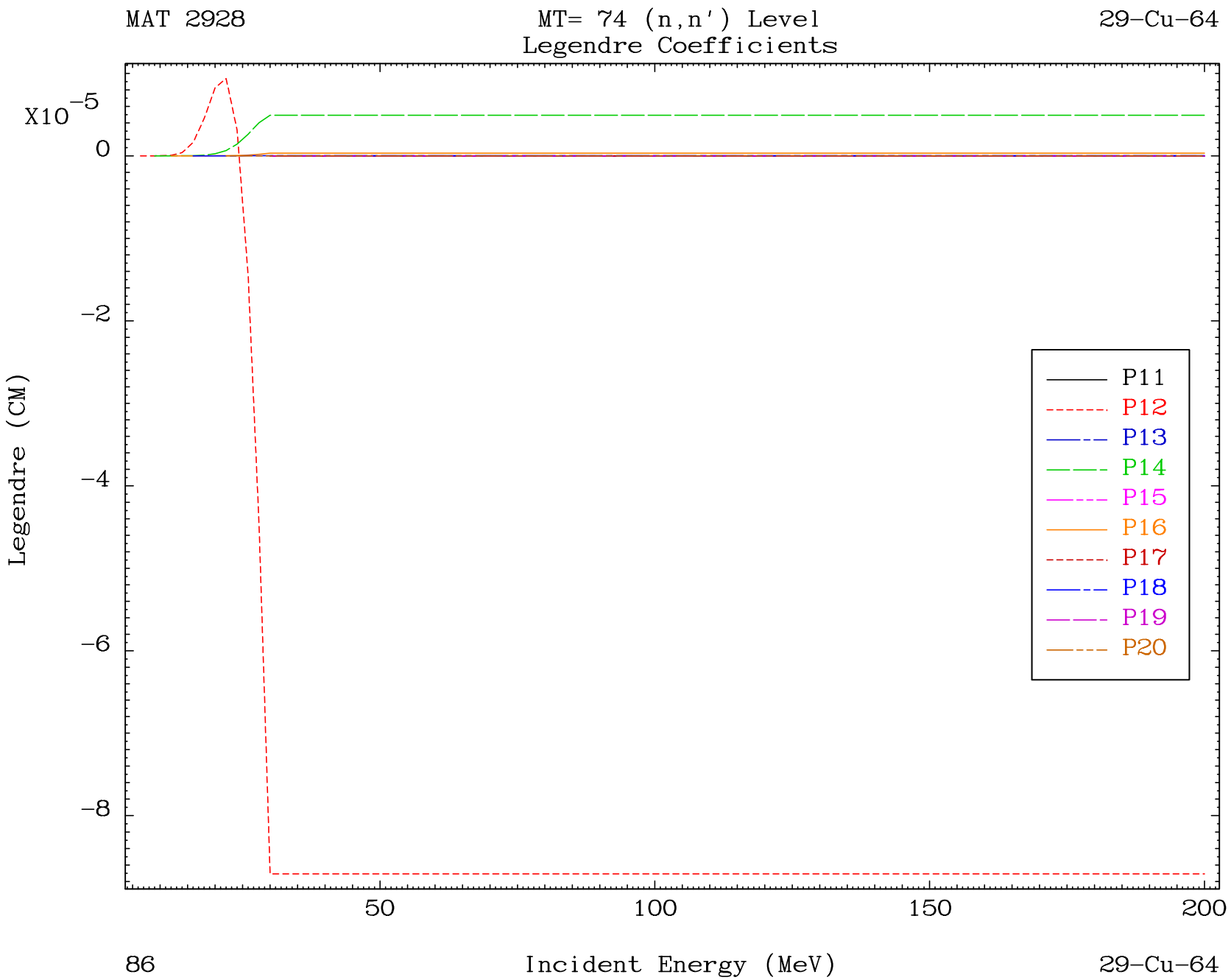

MAT 2928
MT= 72 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
81
Incident Energy (MeV)
29-Cu-64

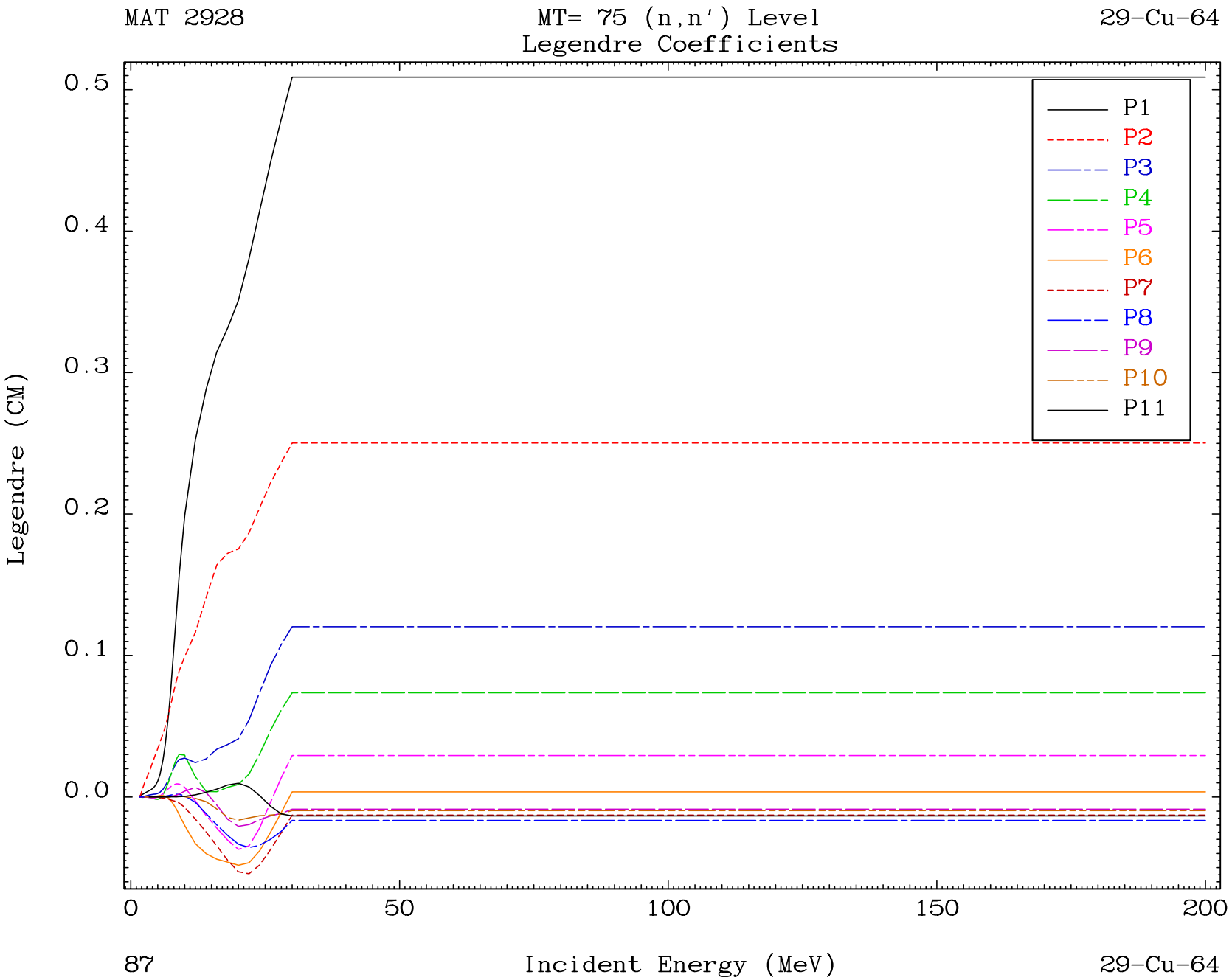

MAT 2928
MT= 72 (n,n') Level
Legendre Coefficients
29-Cu-64
X10+72
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
50
100
150
200
82
Incident Energy (MeV)
29-Cu-64
P19
P20
P21
P22
P23
P24
P25
P26

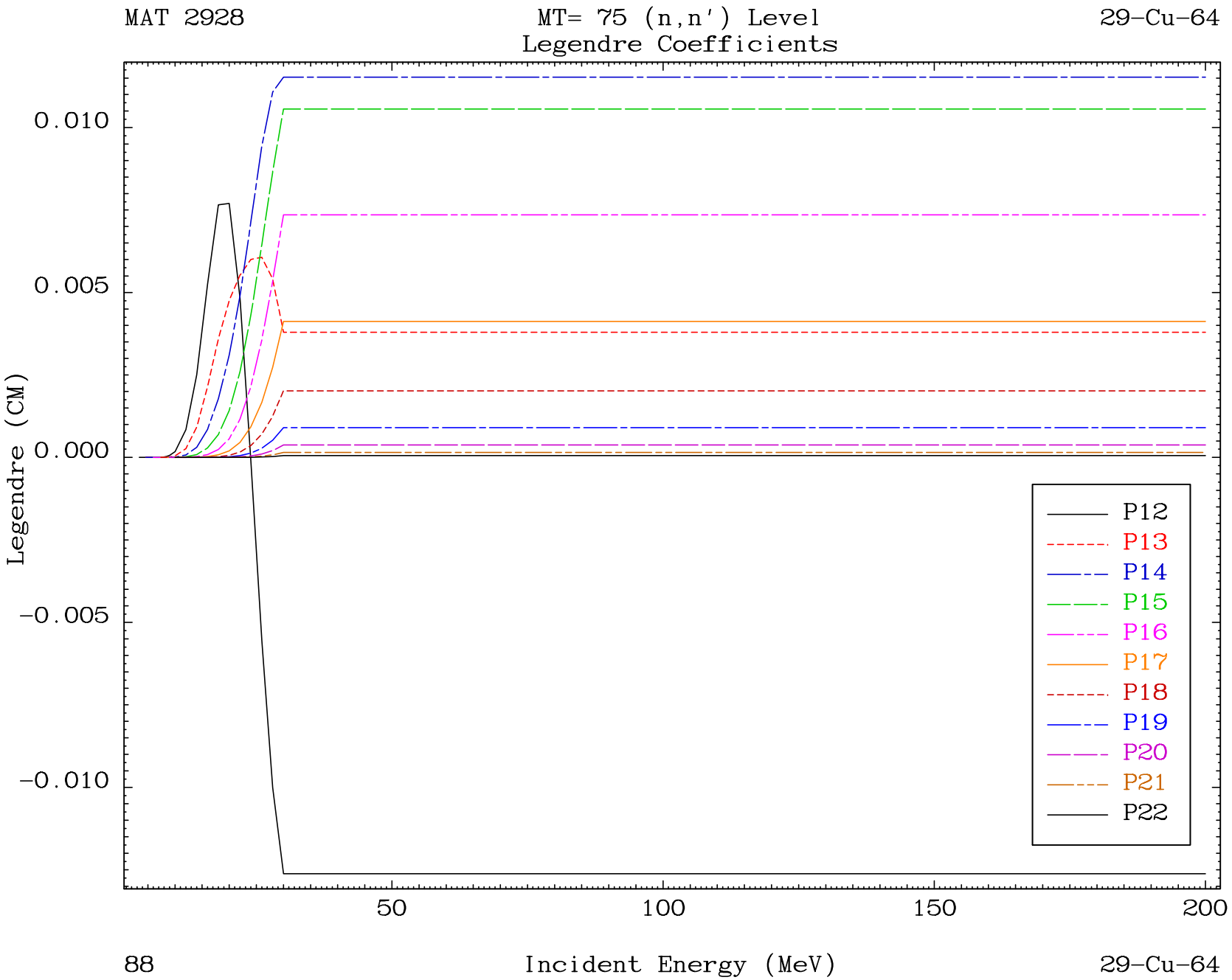

MAT 2928
MT= 73 (n,n') Level
Legendre Coefficients
29-Cu-64
0.15
0.10
0.05
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
83
Incident Energy (MeV)
29-Cu-64

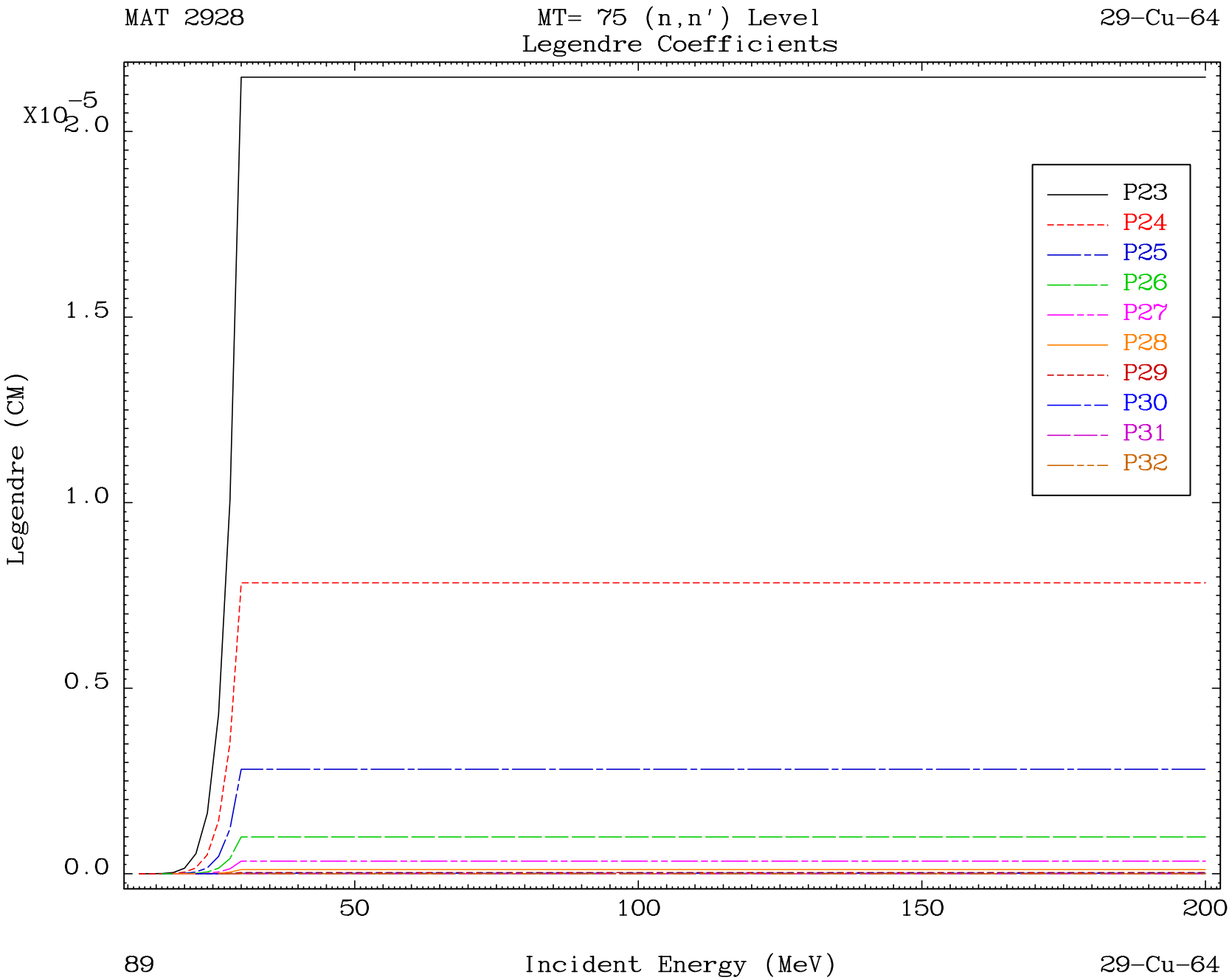

MAT 2928
MT= 73 (n,n') Level
Legendre Coefficients
29-Cu-64
X10^-5
0
-2
-4
-6
-8
Legendre (CM)
50
100
150
200
84
Incident Energy (MeV)
29-Cu-64
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

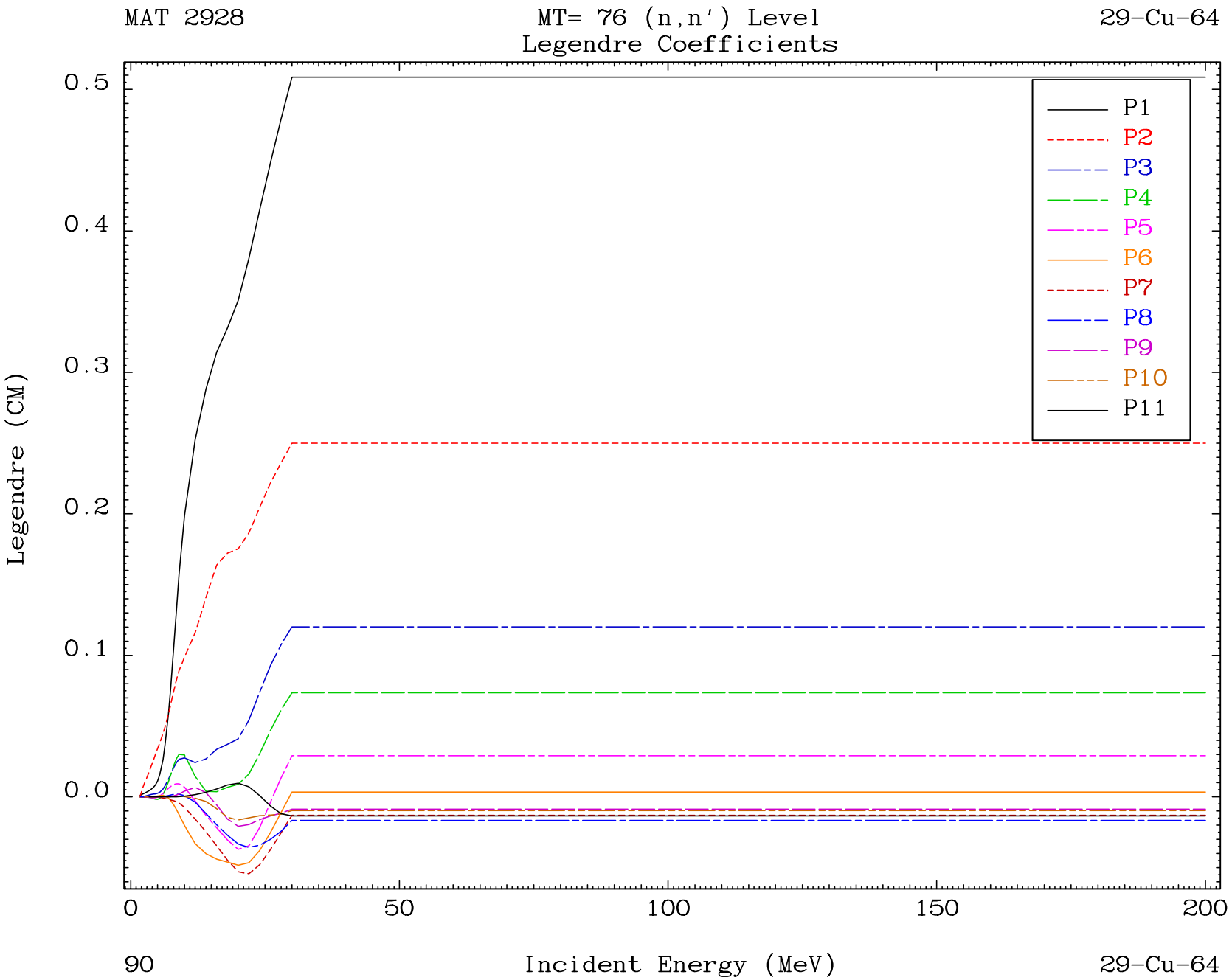

MAT 2928
MT= 74 (n,n') Level
Legendre Coefficients
29-Cu-64
0.15
0.10
0.05
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
85
Incident Energy (MeV)
29-Cu-64

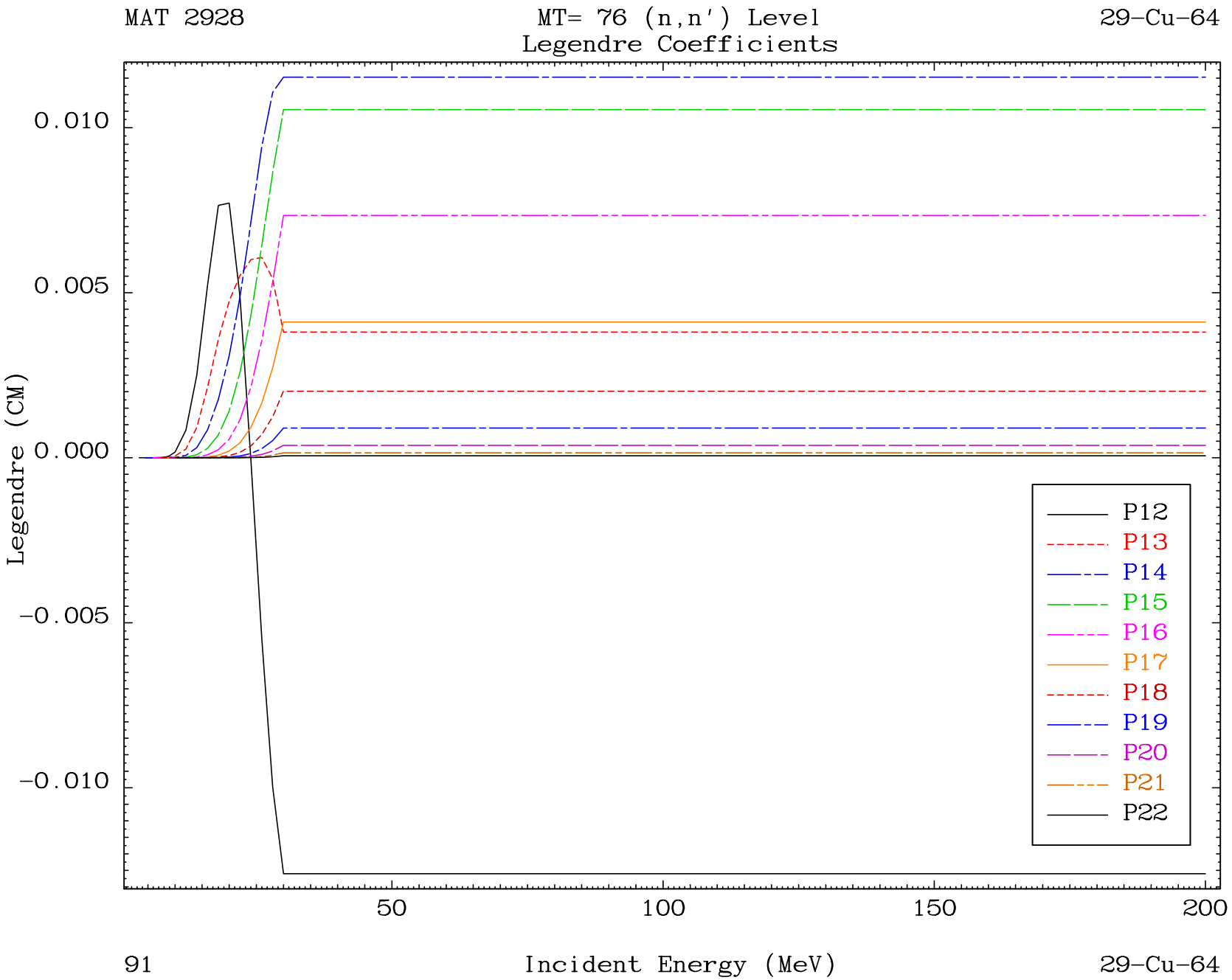

MAT 2928
MT= 74 (n,n') Level
Legendre Coefficients
29-Cu-64
X10^-5
0
-2
-4
-6
-8
Legendre (CM)
50
100
150
200
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
86
Incident Energy (MeV)
29-Cu-64

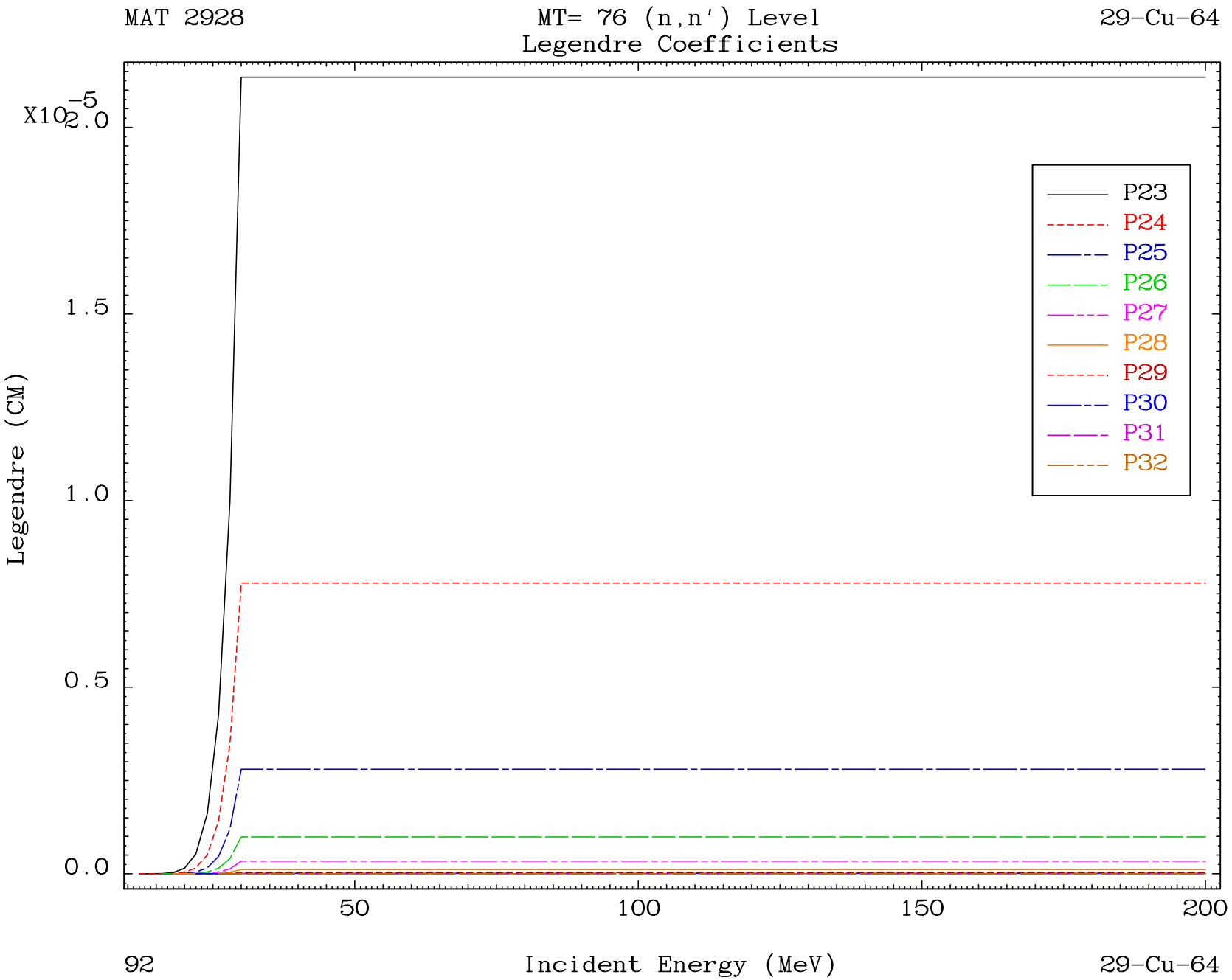

MAT 2928
MT= 75 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
87
Incident Energy (MeV)
29-Cu-64

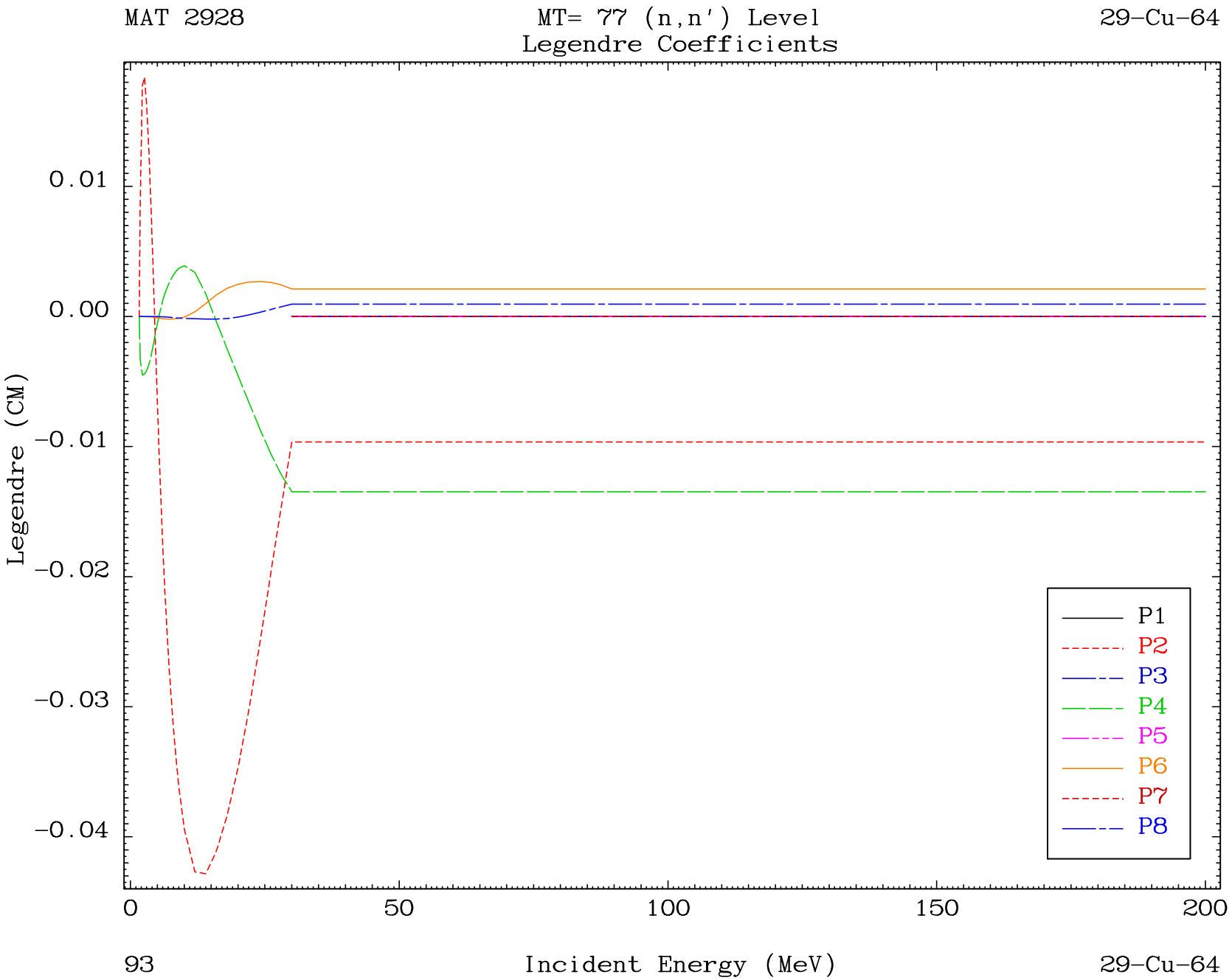

MAT 2928
MT= 75 (n,n') Level
Legendre Coefficients
29-Cu-64
0.010
0.005
0.000
-0.005
-0.010
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
88
29-Cu-64
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

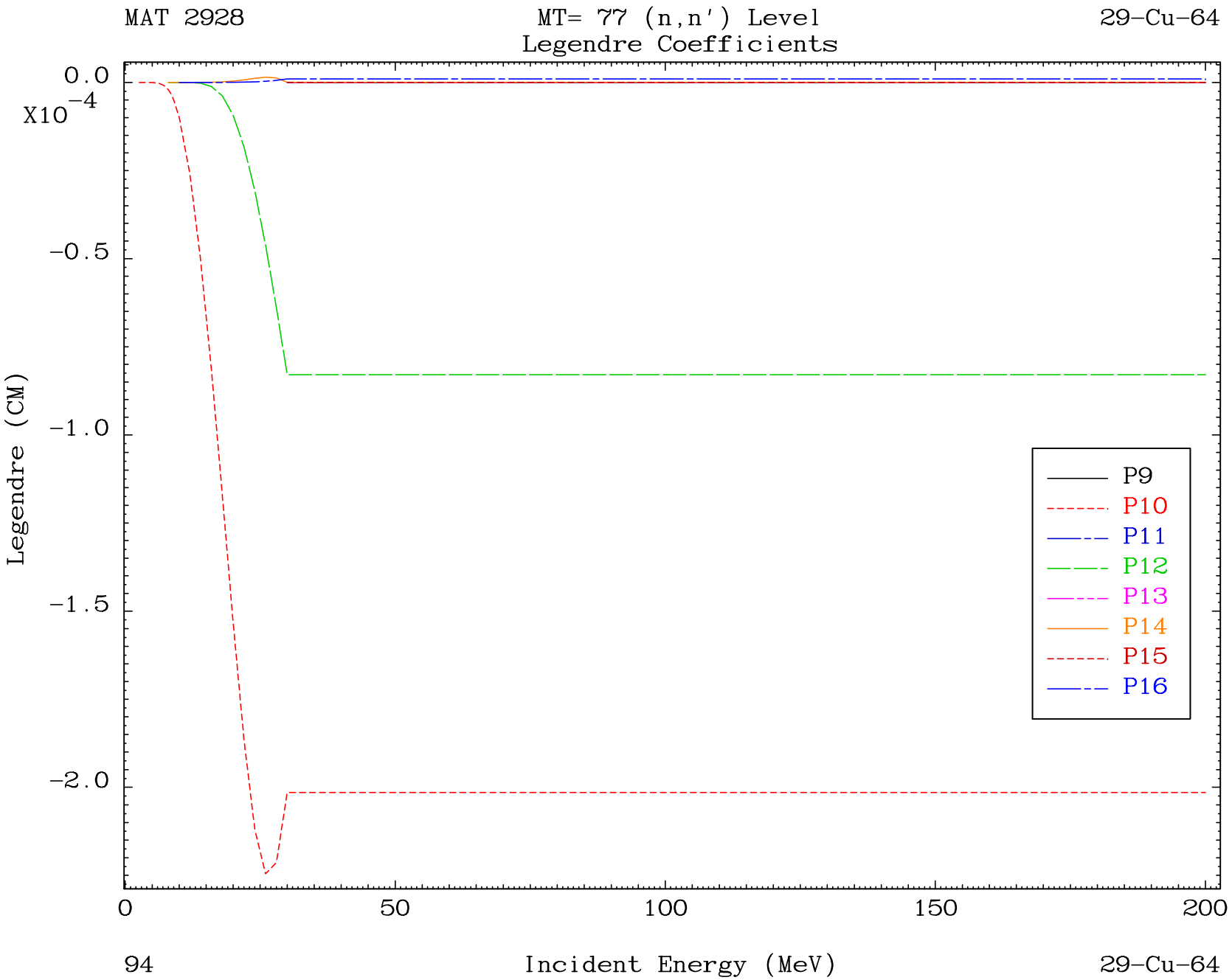

MAT 2928
MT= 75 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
89
Incident Energy (MeV)
29-Cu-64

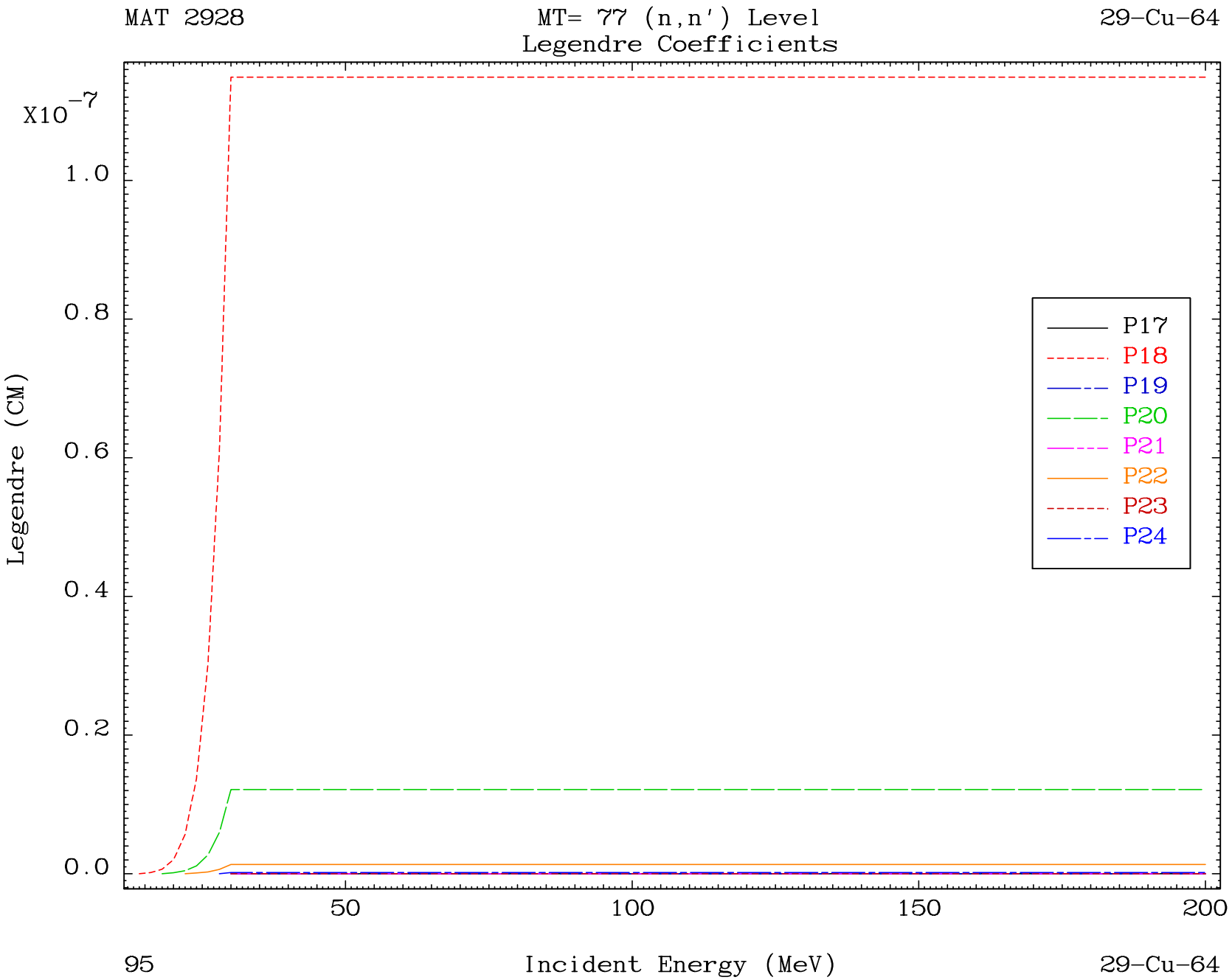

MAT 2928
MT= 76 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
90
Incident Energy (MeV)
29-Cu-64

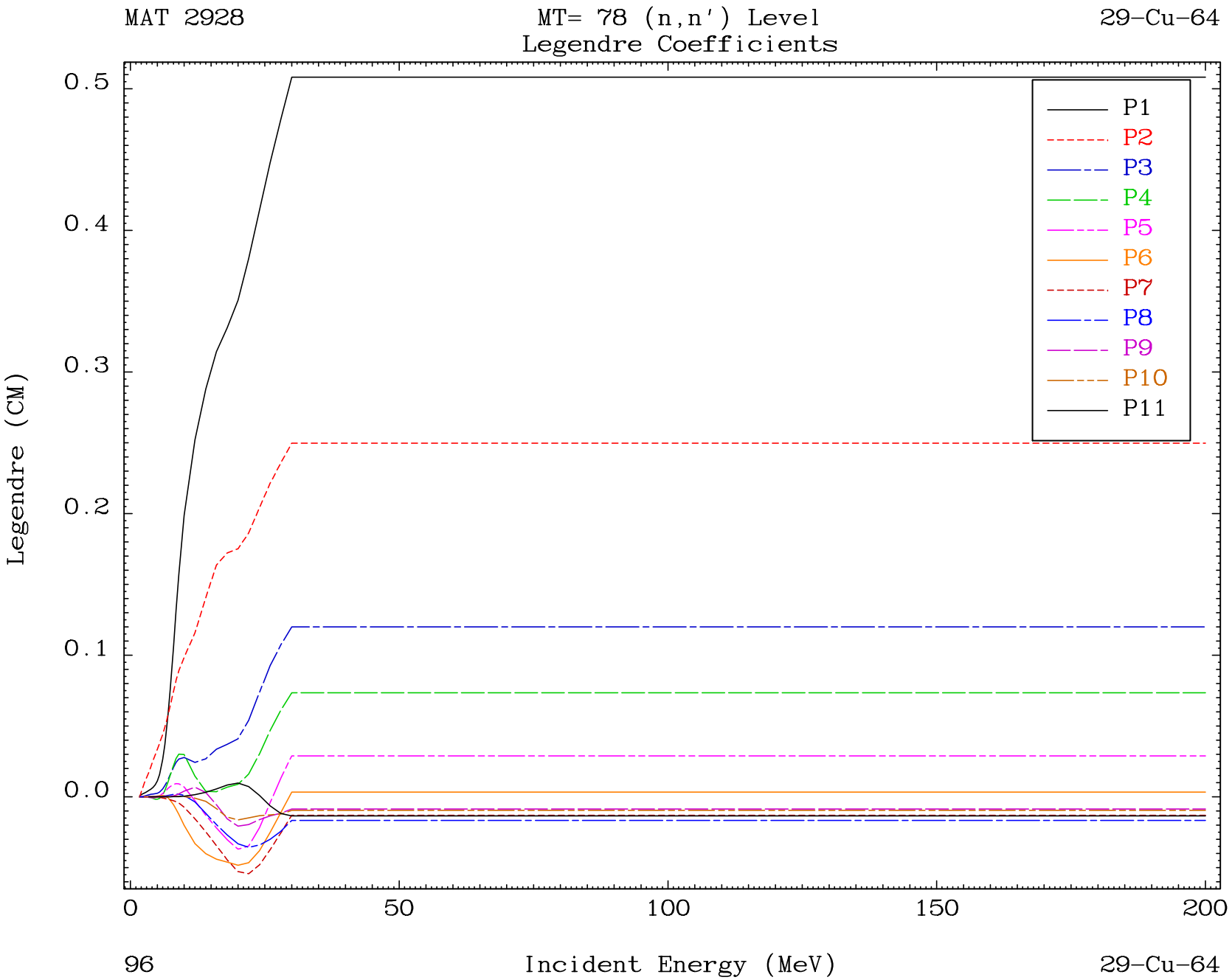

MAT 2928
MT= 76 (n,n') Level
Legendre Coefficients
29-Cu-64
0.010
0.005
0.000
-0.005
-0.010
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
91
29-Cu-64
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

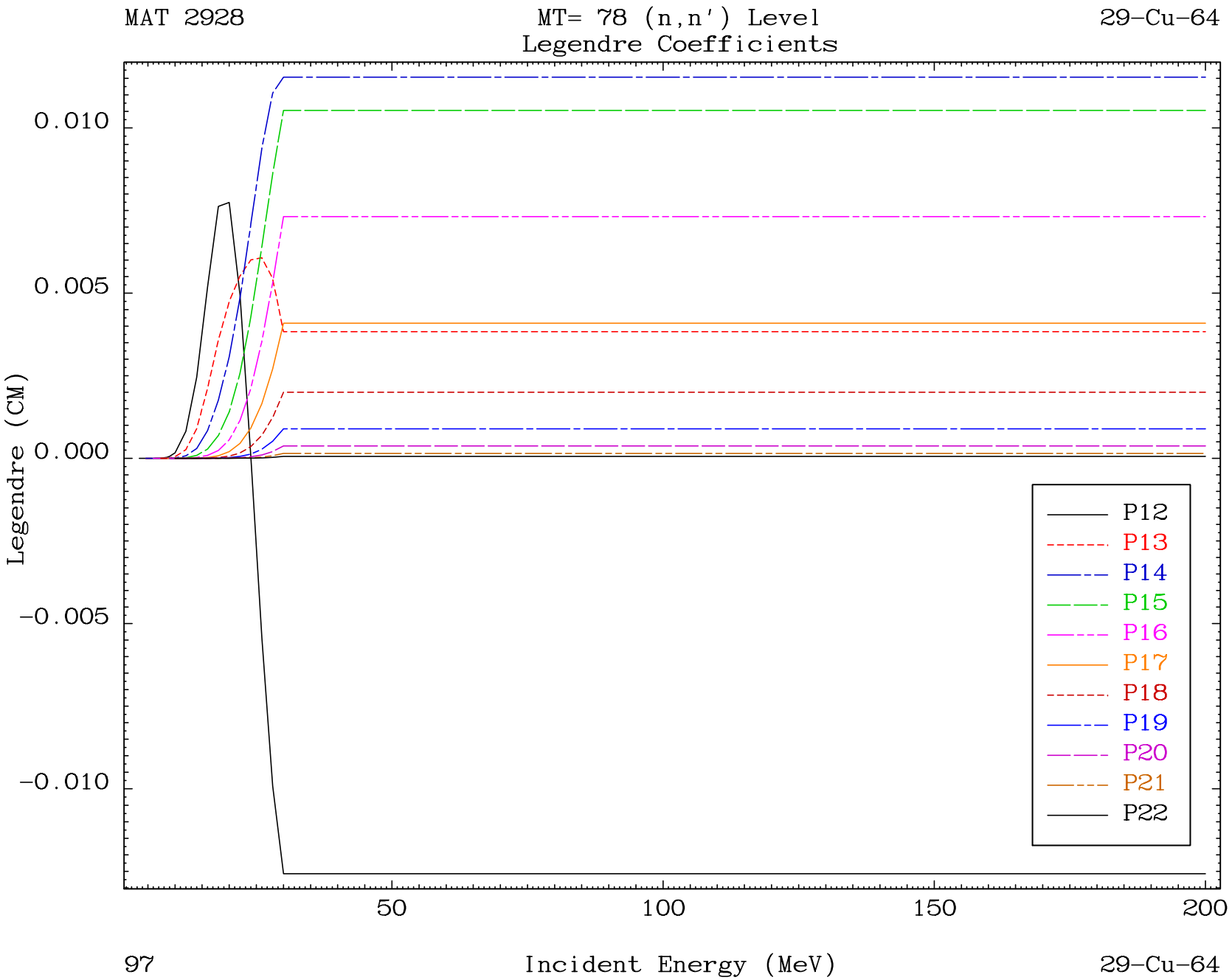

MAT 2928
MT= 76 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
50
100
150
200
92
Incident Energy (MeV)
29-Cu-64

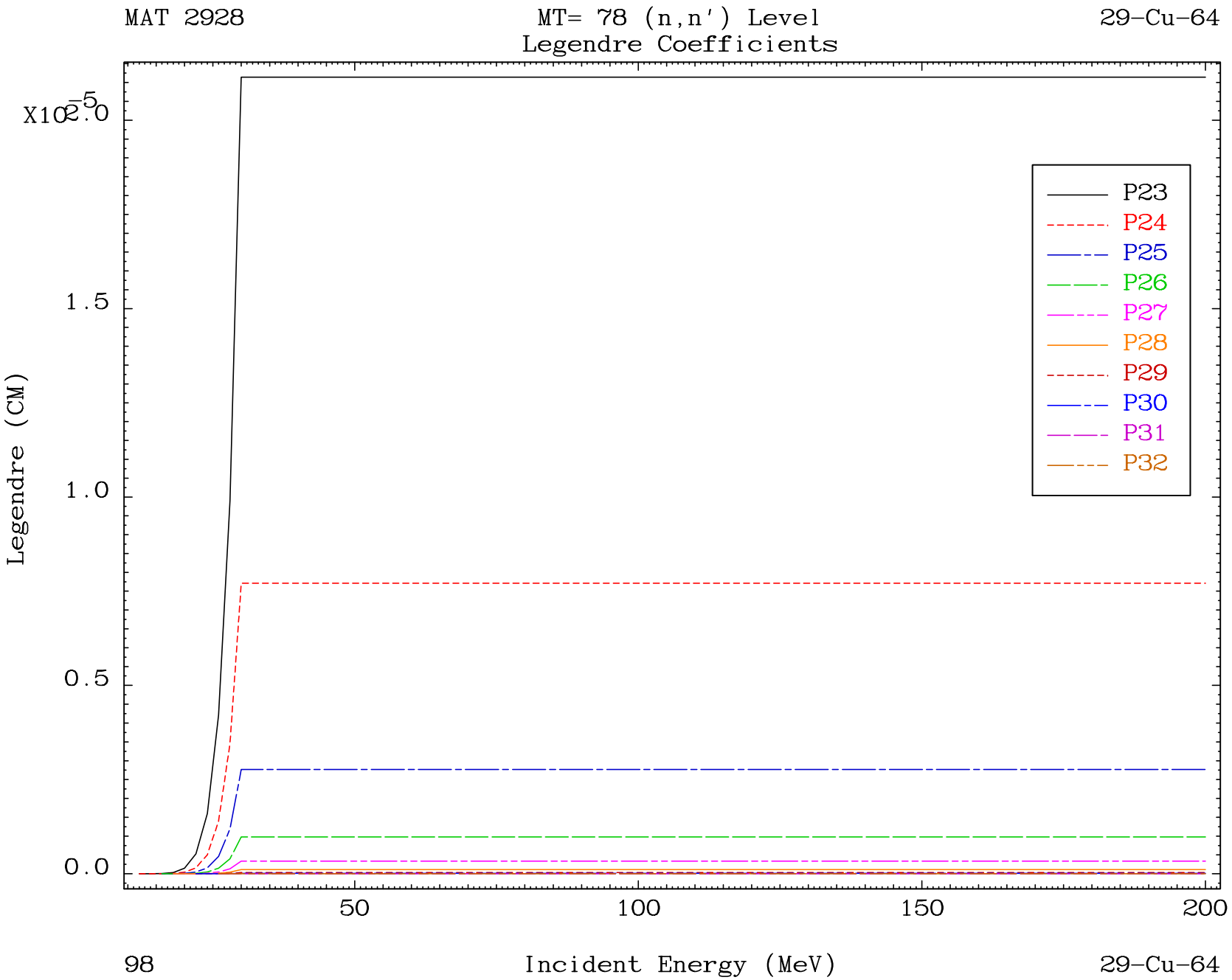

MAT 2928
MT= 77 (n,n') Level
Legendre Coefficients
29-Cu-64
0.01
0.00
-0.01
-0.02
-0.03
-0.04
Legendre (CM)
0
50
100
150
200
93
Incident Energy (MeV)
29-Cu-64
P1
P2
P3
P4
P5
P6
P7
P8

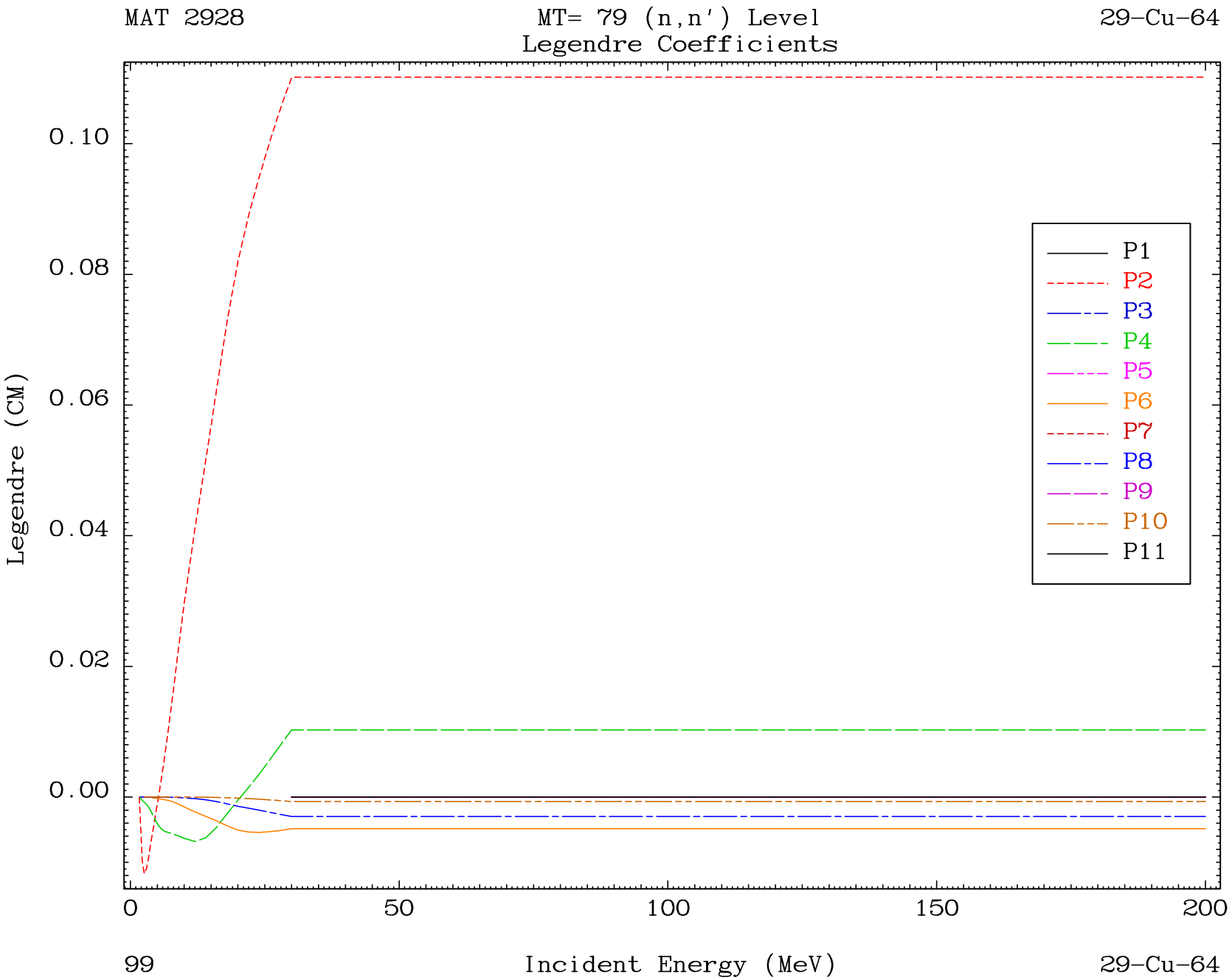

MAT 2928
MT= 77 (n,n') Level
Legendre Coefficients
29-Cu-64
0.0
X10^-4
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
0
50
100
150
200
94
Incident Energy (MeV)
29-Cu-64
P9
P10
P11
P12
P13
P14
P15
P16

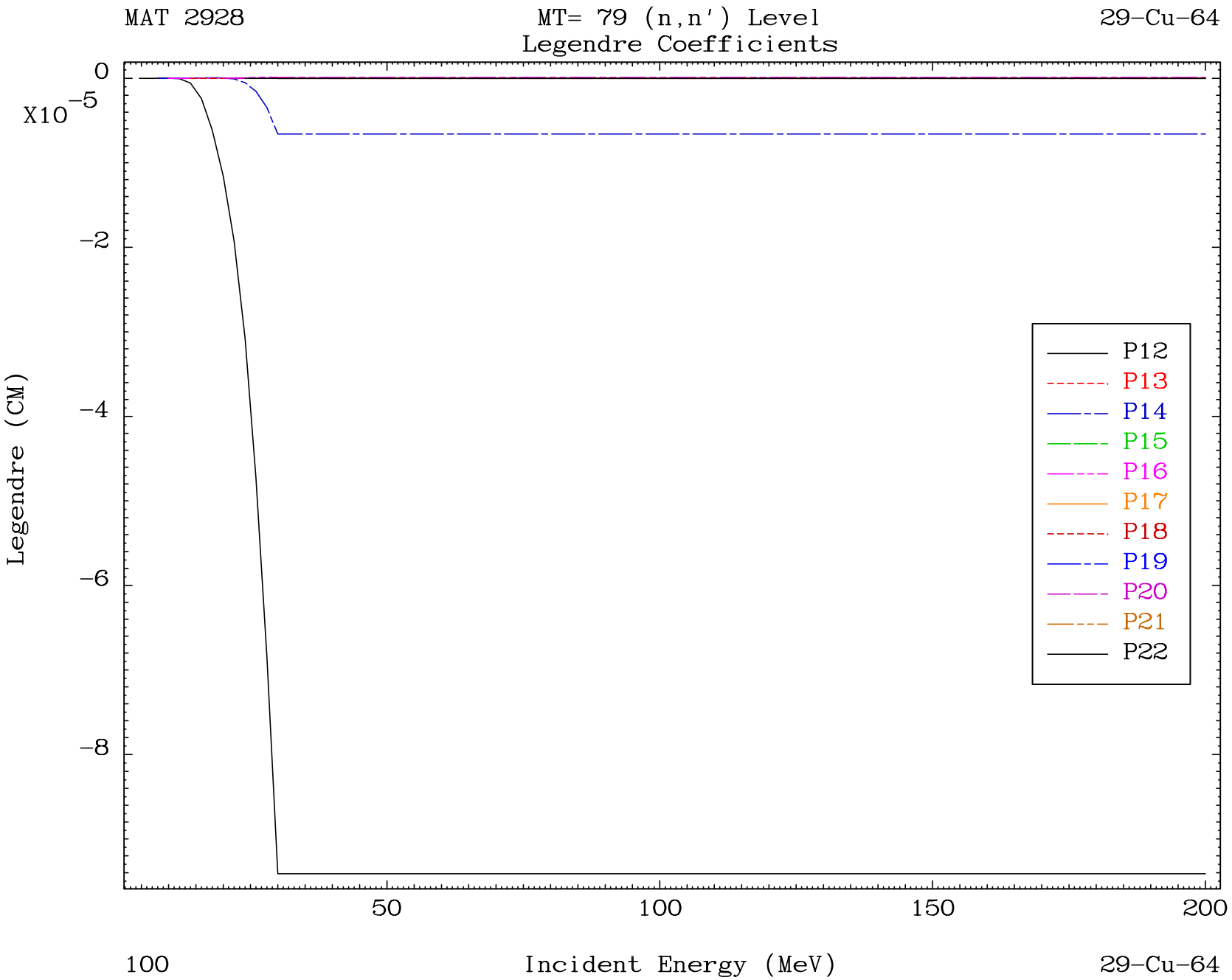

MAT 2928
MT= 77 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-7
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P17
P18
P19
P20
P21
P22
P23
P24
50
100
150
200
95
Incident Energy (MeV)
29-Cu-64

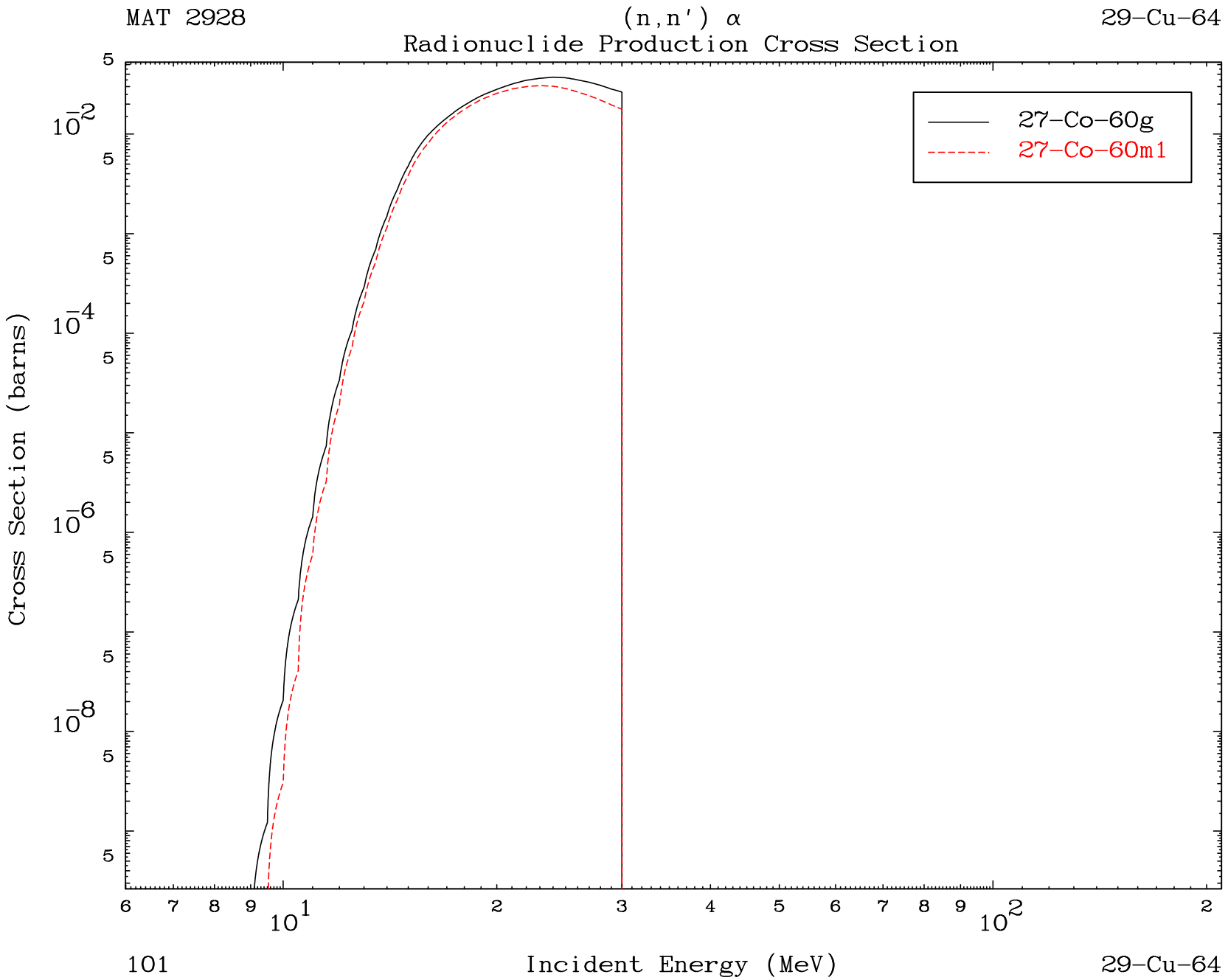

MAT 2928
MT= 78 (n,n') Level
Legendre Coefficients
29-Cu-64
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
96
Incident Energy (MeV)
29-Cu-64

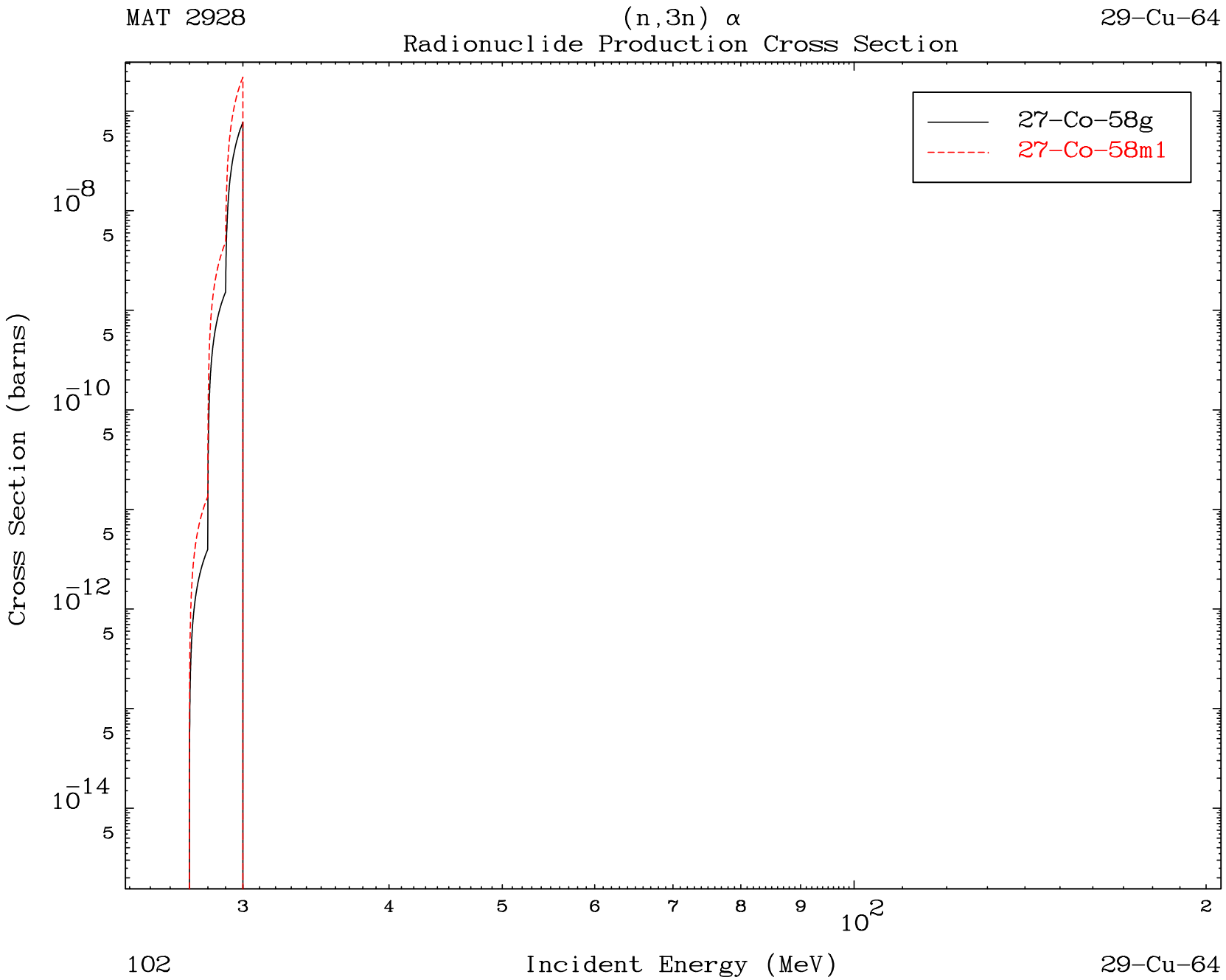

MAT 2928
MT= 78 (n,n') Level
Legendre Coefficients
29-Cu-64
0.010
0.005
0.000
-0.005
-0.010
Legendre (CM)
50
100
150
200
97
Incident Energy (MeV)
29-Cu-64
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22

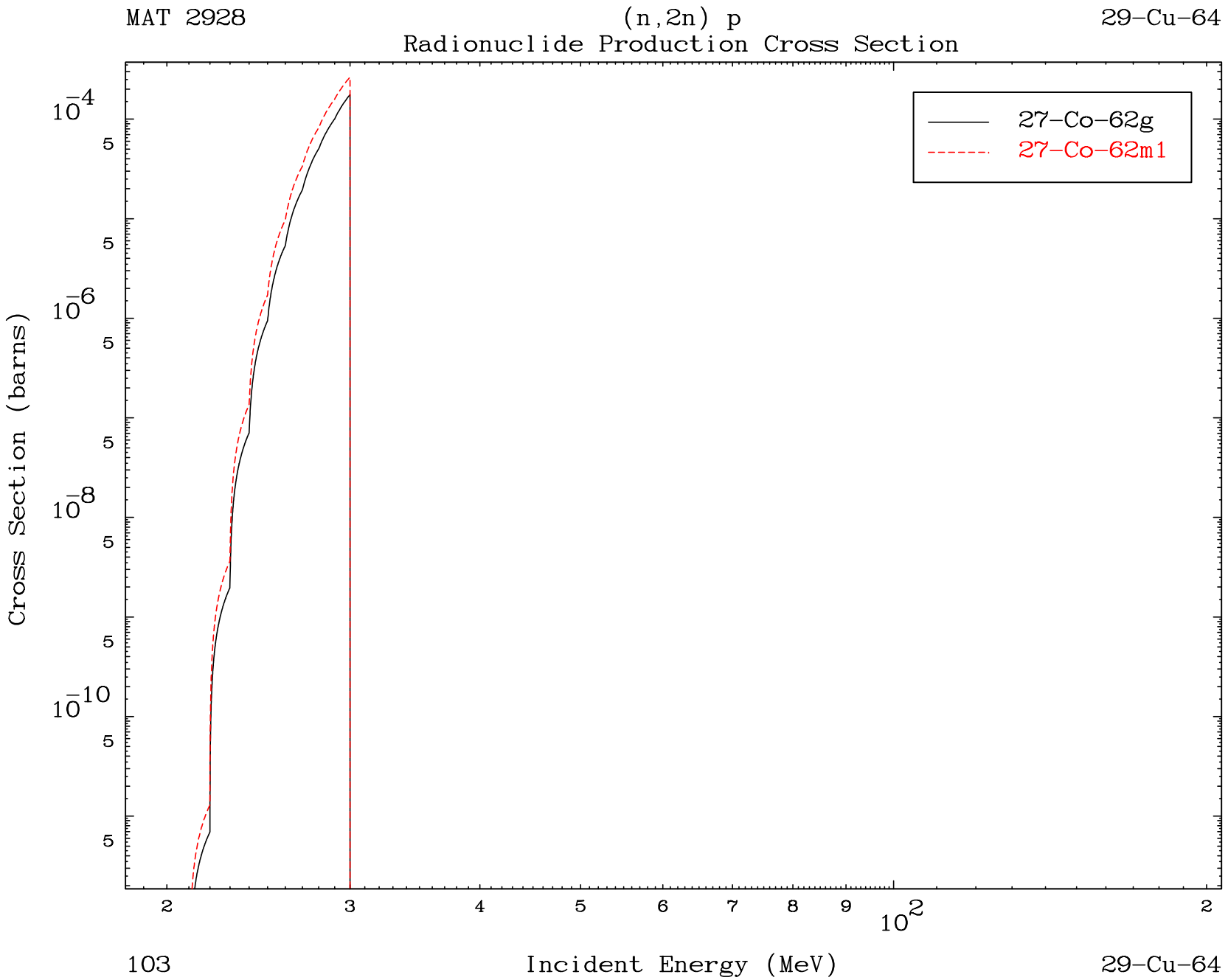

MAT 2928
MT= 78 (n,n') Level
Legendre Coefficients
29-Cu-64
X10-5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
98
Incident Energy (MeV)
29-Cu-64
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32

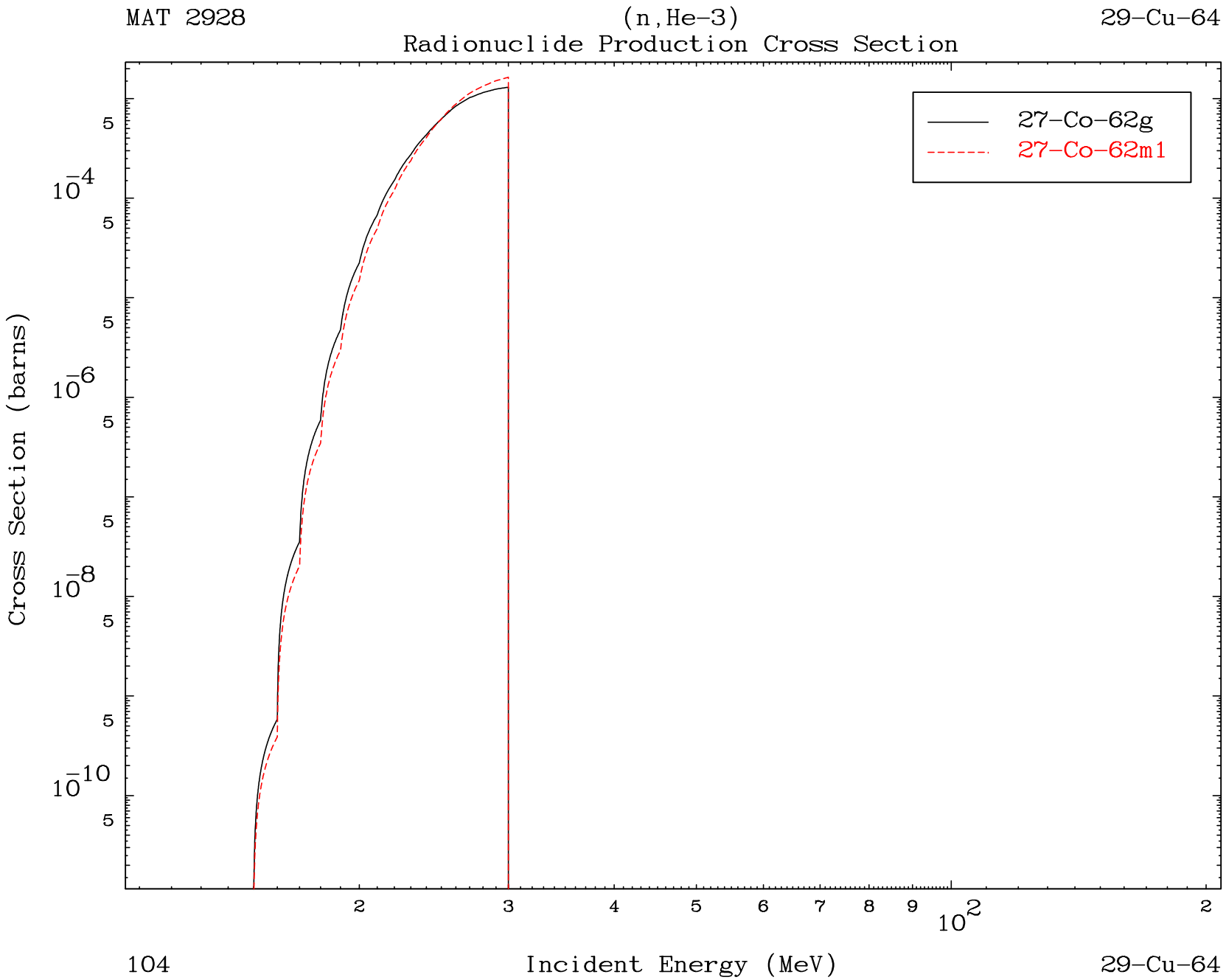

MAT 2928
MT= 79 (n,n') Level
Legendre Coefficients
29-Cu-64
0.10
0.08
0.06
0.04
0.02
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
0
50
100
150
200
99
Incident Energy (MeV)
29-Cu-64

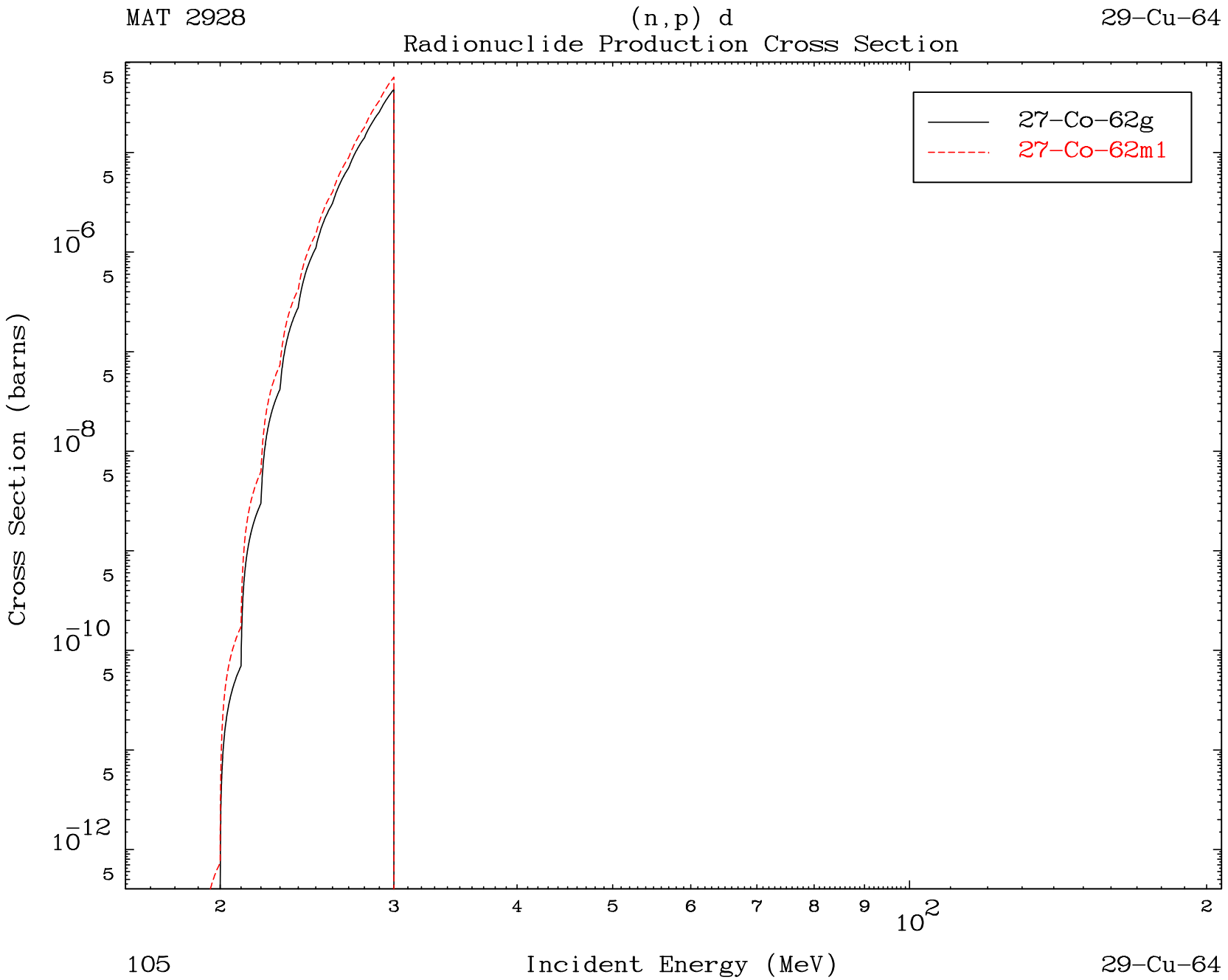

MAT 2928
MT= 79 (n,n') Level
Legendre Coefficients
29-Cu-64
0
X10^-5
-2
-4
-6
-8
Legendre (CM)
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
50
100
150
200
100
Incident Energy (MeV)
29-Cu-64


MAT 2928
(n,n') α
29-Cu-64
Radionuclide Production Cross Section
27-Co-60g
27-Co-60m1
Cross Section (barns)
Incident Energy (MeV)
101
29-Cu-64


MAT 2928
(n,3n) α
29-Cu-64
Radionuclide Production Cross Section
27-Co-58g
27-Co-58m1
Cross Section (barns)
10-8
10-10
10-12
10-14
5
3
4
5
6
7
8
9
10 2
2
102
Incident Energy (MeV)
29-Cu-64


MAT 2928
(n,2n) p
29-Cu-64
Radionuclide Production Cross Section
27-Co-62g
27-Co-62m1
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
103
Incident Energy (MeV)
29-Cu-64


MAT 2928
(n,He-3)
29-Cu-64
Radionuclide Production Cross Section
27-Co-62g
27-Co-62m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
2
3
4
5
6
7
8
9
10^2
2
104
Incident Energy (MeV)
29-Cu-64


MAT 2928
(n,p) d
29-Cu-64
Radionuclide Production Cross Section
27-Co-62g
27-Co-62m1
Cross Section (barns)
Incident Energy (MeV)
105
29-Cu-64