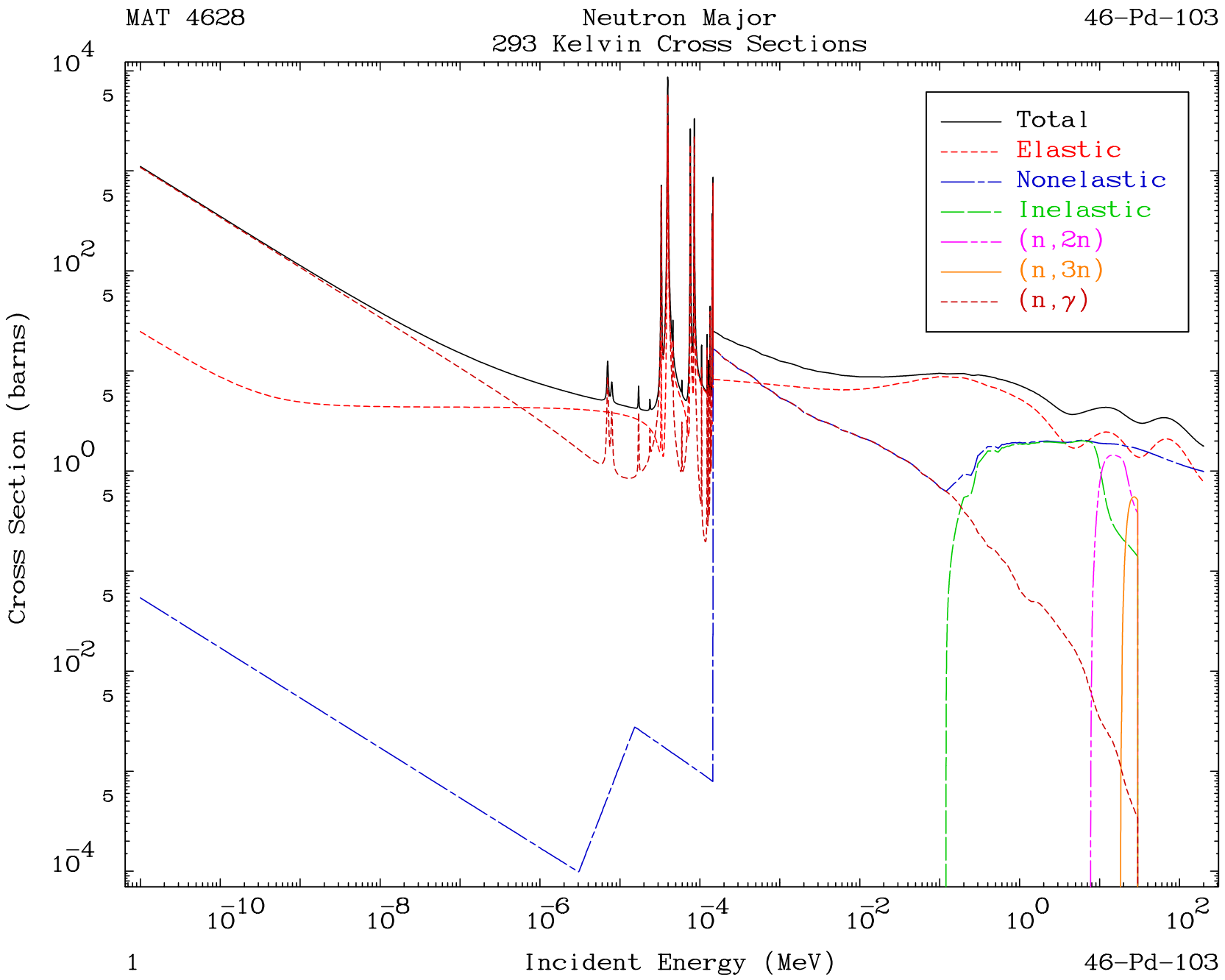
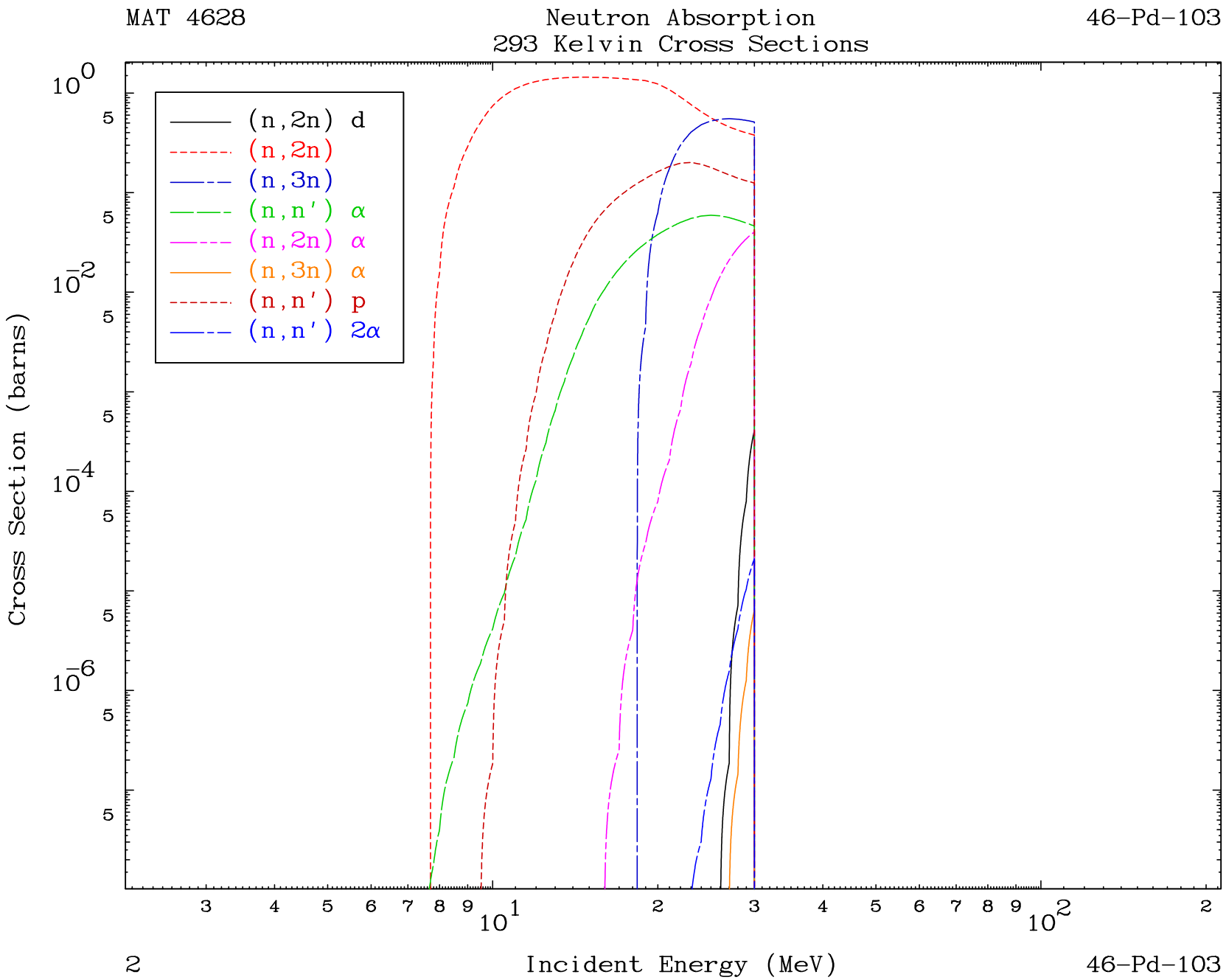
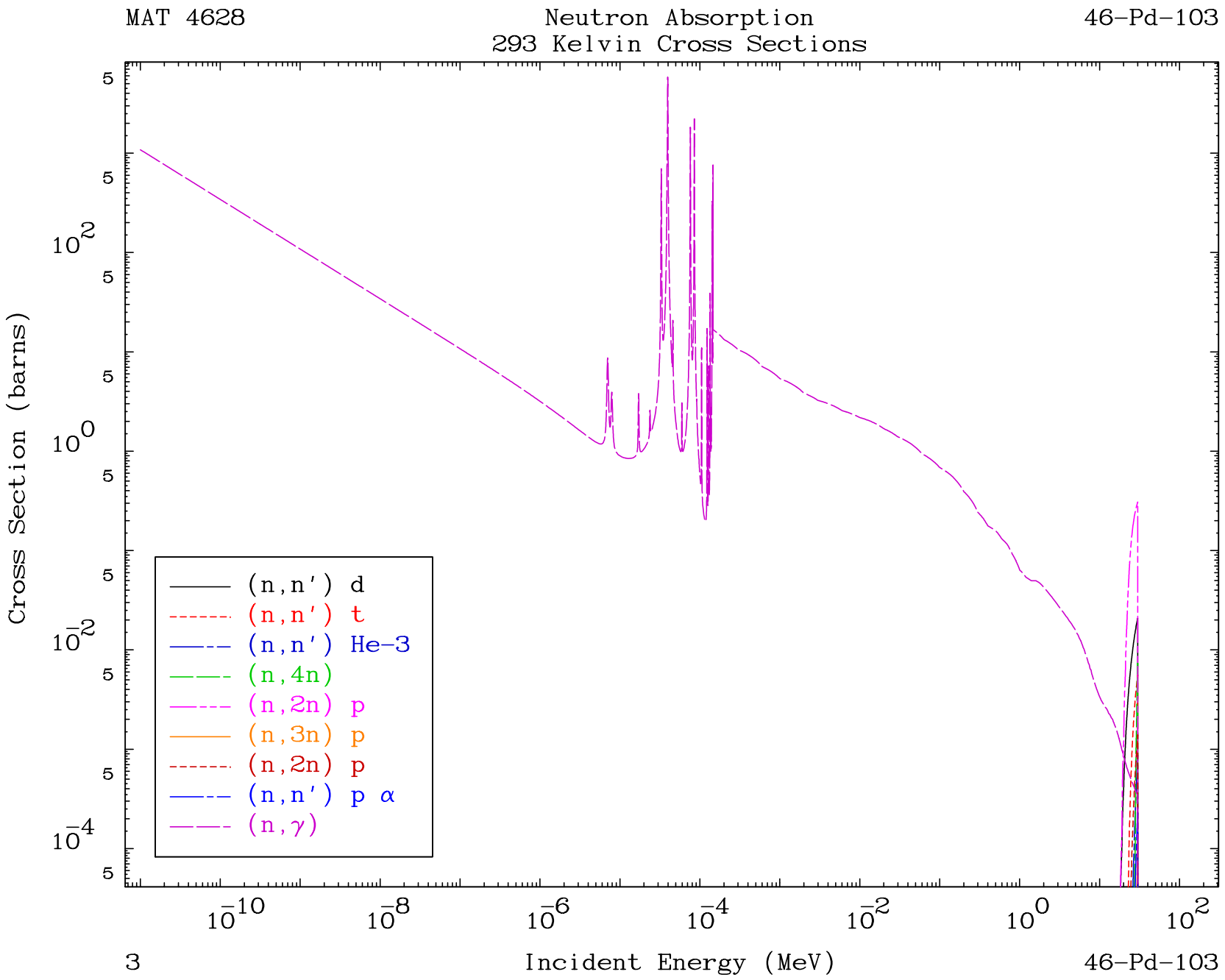
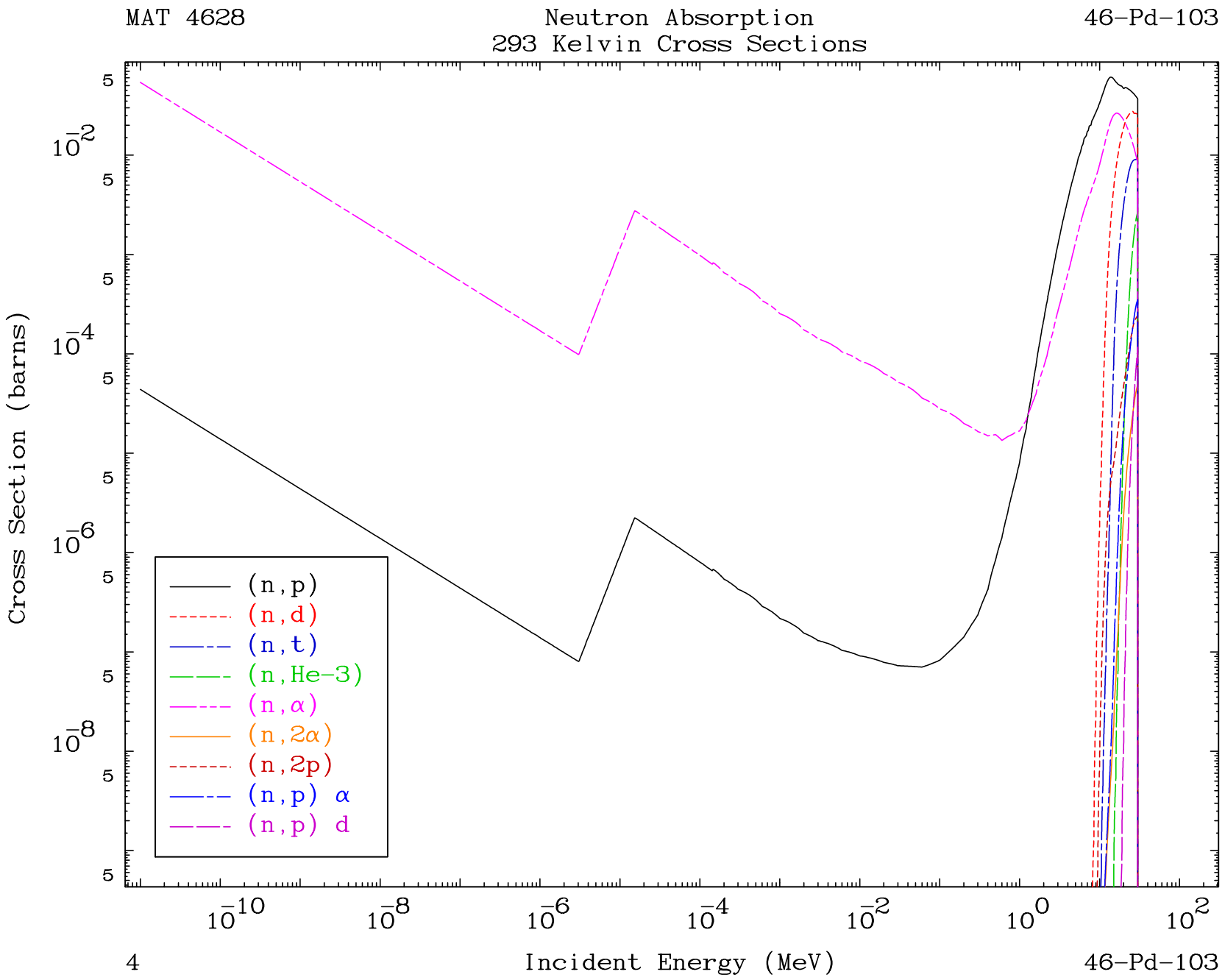
Program EVALPLOT
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

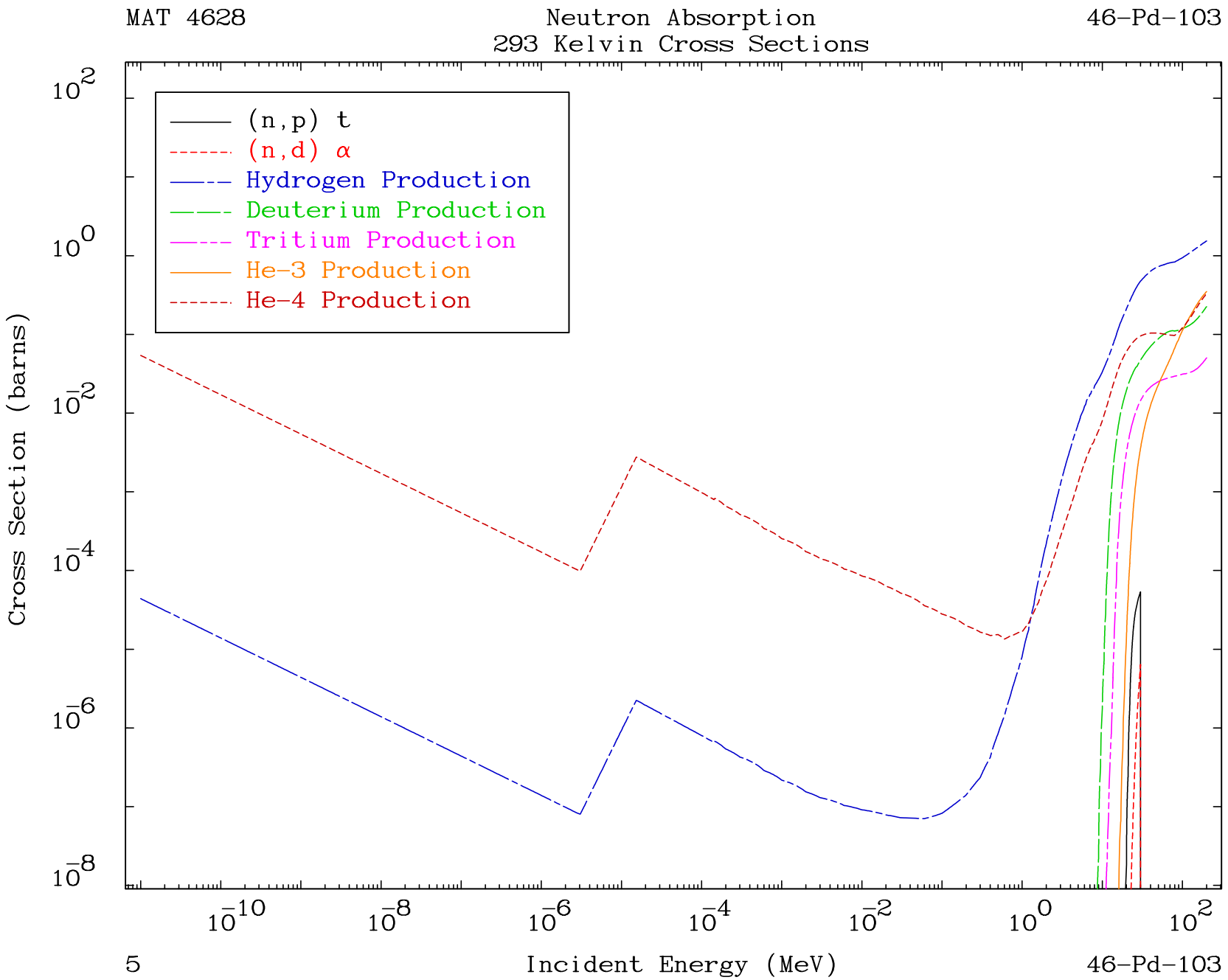
Press Mouse Button to Start

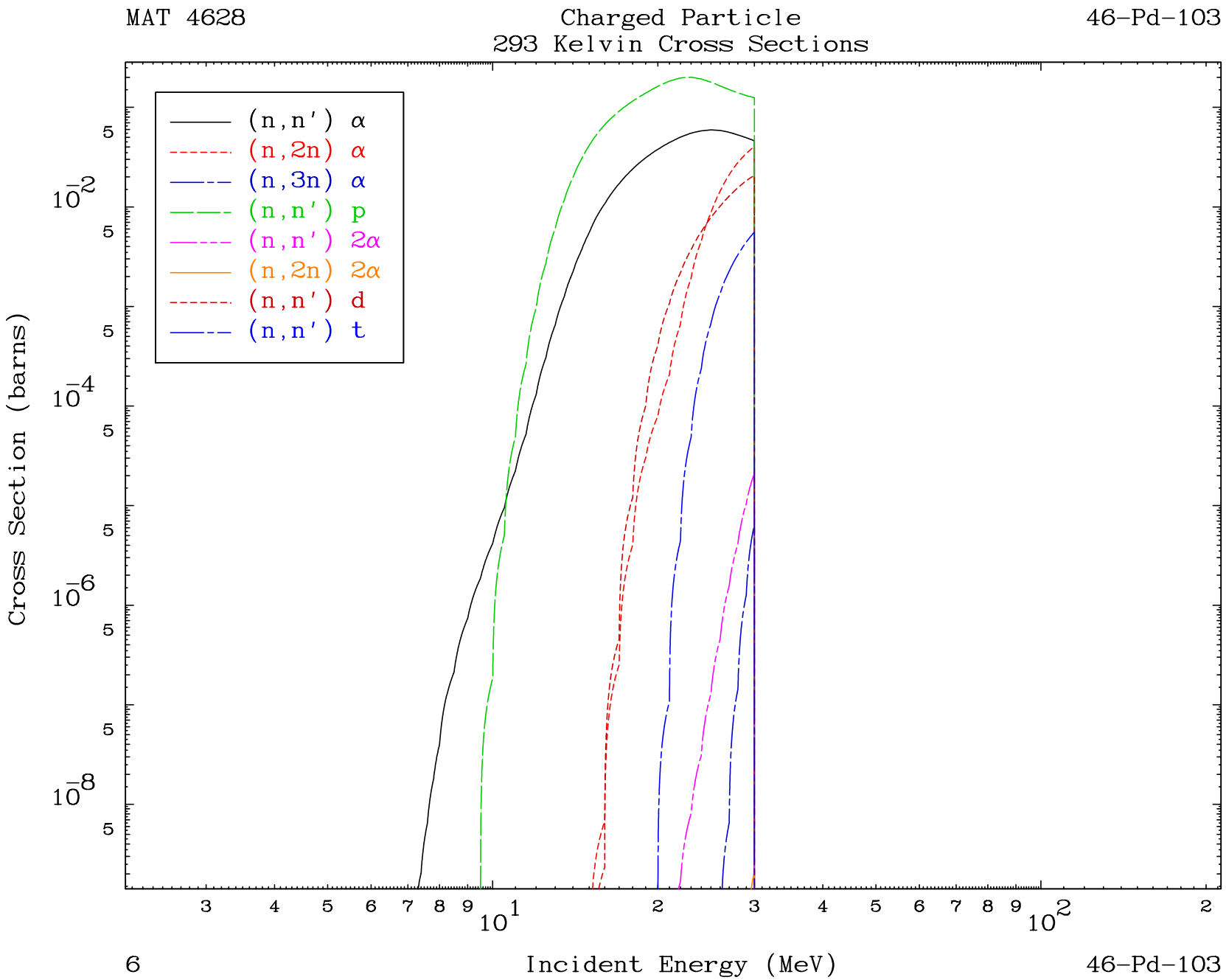

MAT 4628
Neutron Major
293 Kelvin Cross Sections
46-Pd-103
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
46-Pd-103
1

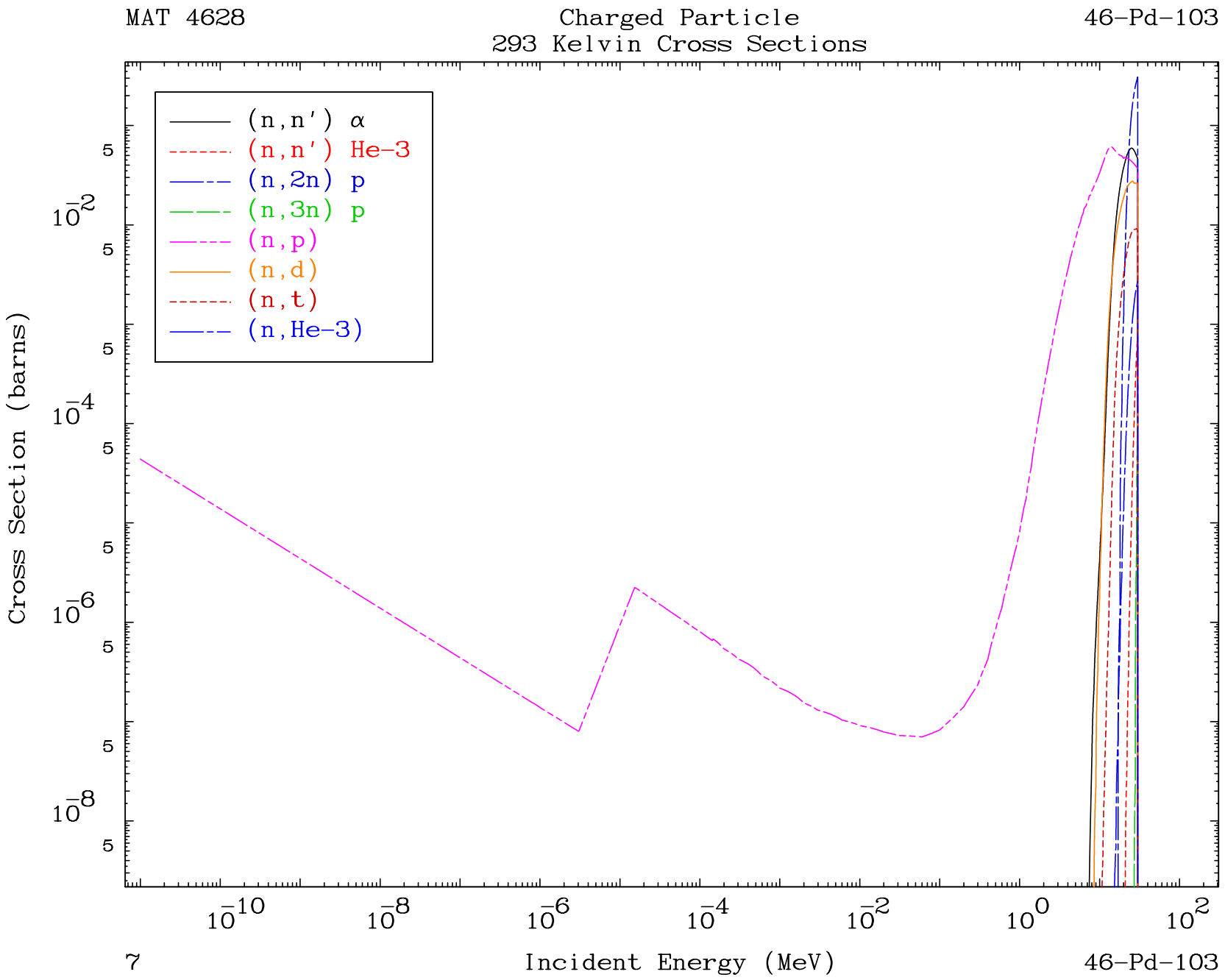

MAT 4628
Neutron Absorption
293 Kelvin Cross Sections
46-Pd-103
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
46-Pd-103

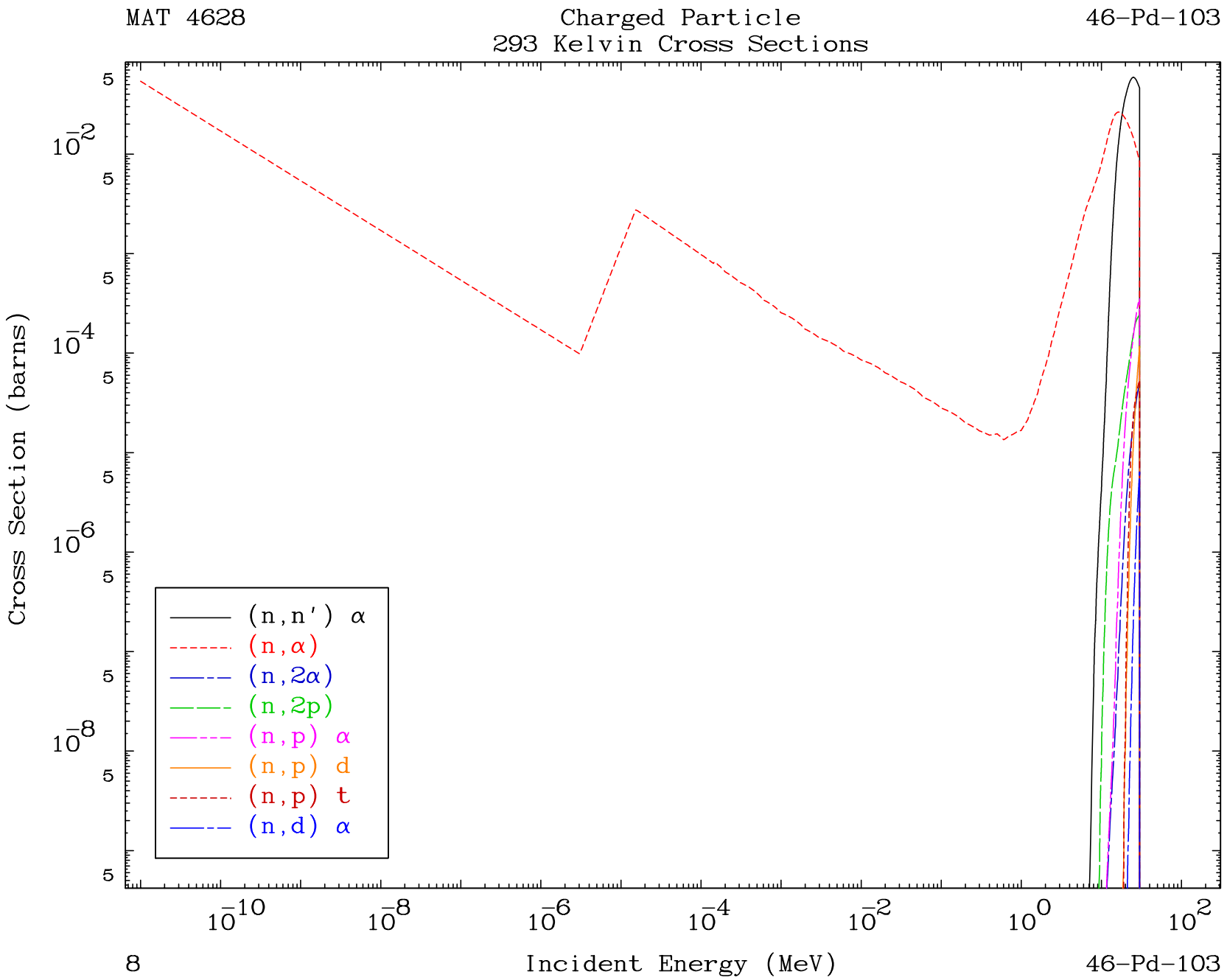

MAT 4628
Neutron Absorption
293 Kelvin Cross Sections
46-Pd-103
Cross Section (barns)
Incident Energy (MeV)
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
(n,2n) p
(n,n') p α
(n,γ)
3
46-Pd-103

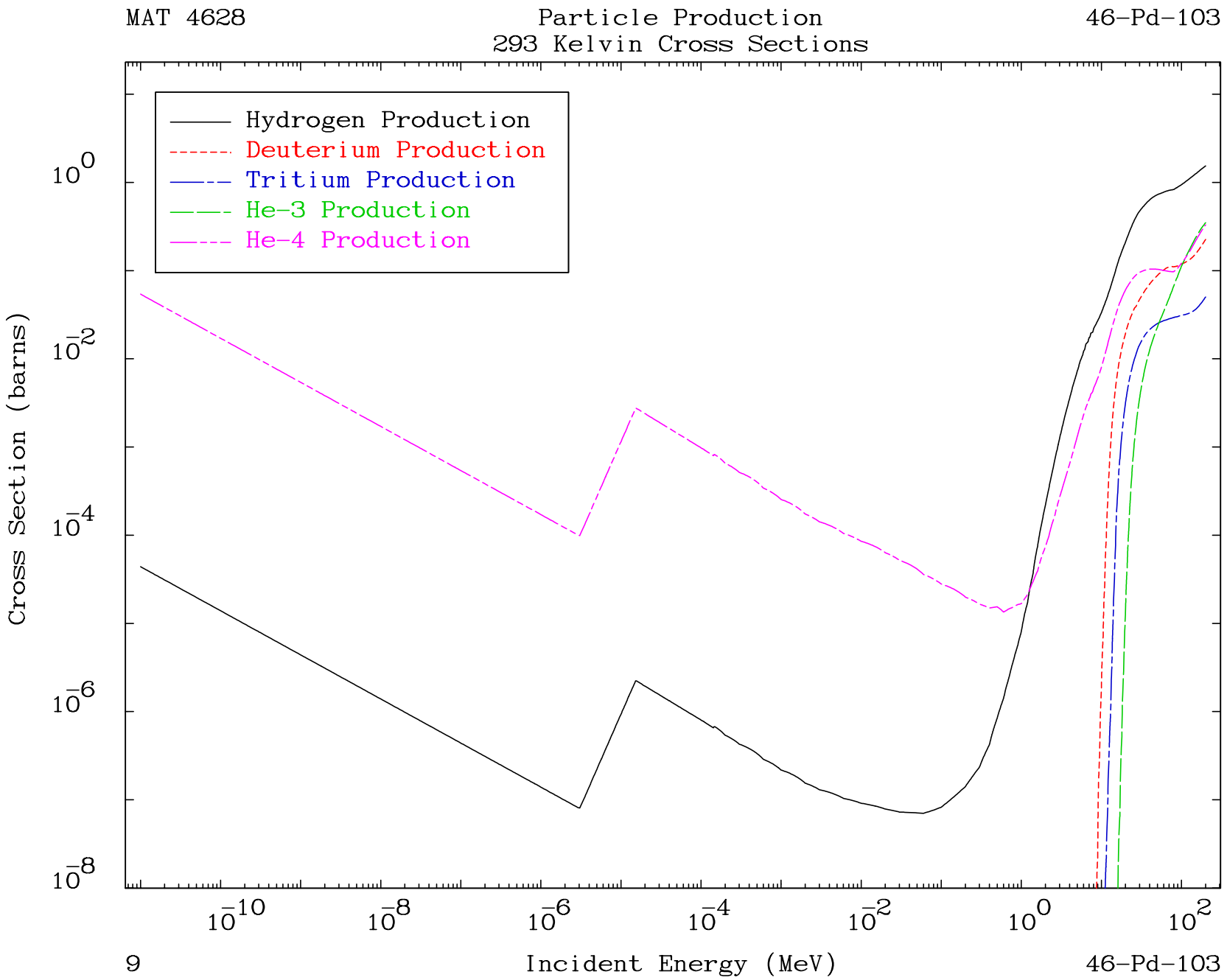

MAT 4628
Neutron Absorption
293 Kelvin Cross Sections
46-Pd-103
Cross Section (barns)
Incident Energy (MeV)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
4
46-Pd-103

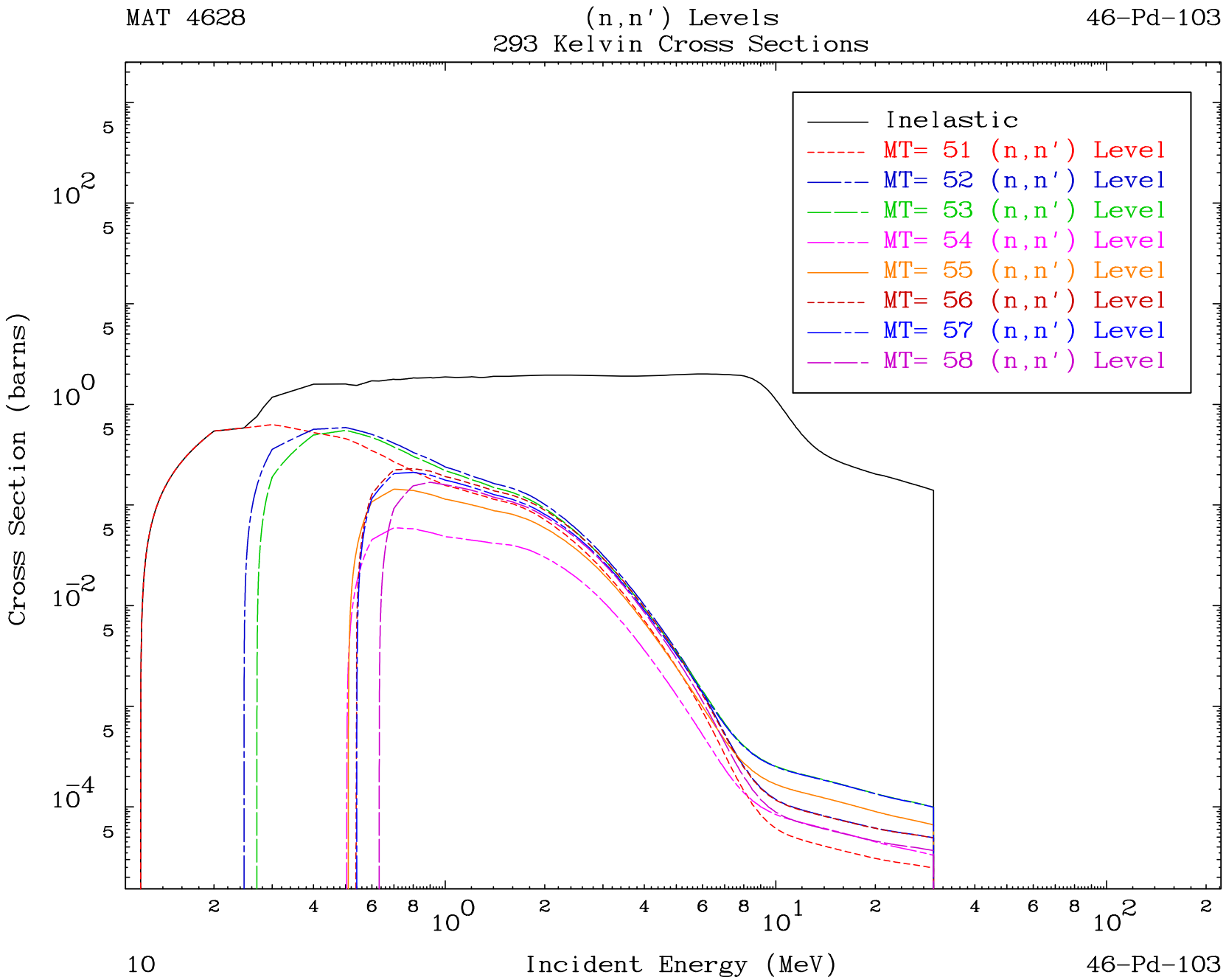

MAT 4628
Neutron Absorption
293 Kelvin Cross Sections
46-Pd-103
(n,p) t
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
5
46-Pd-103

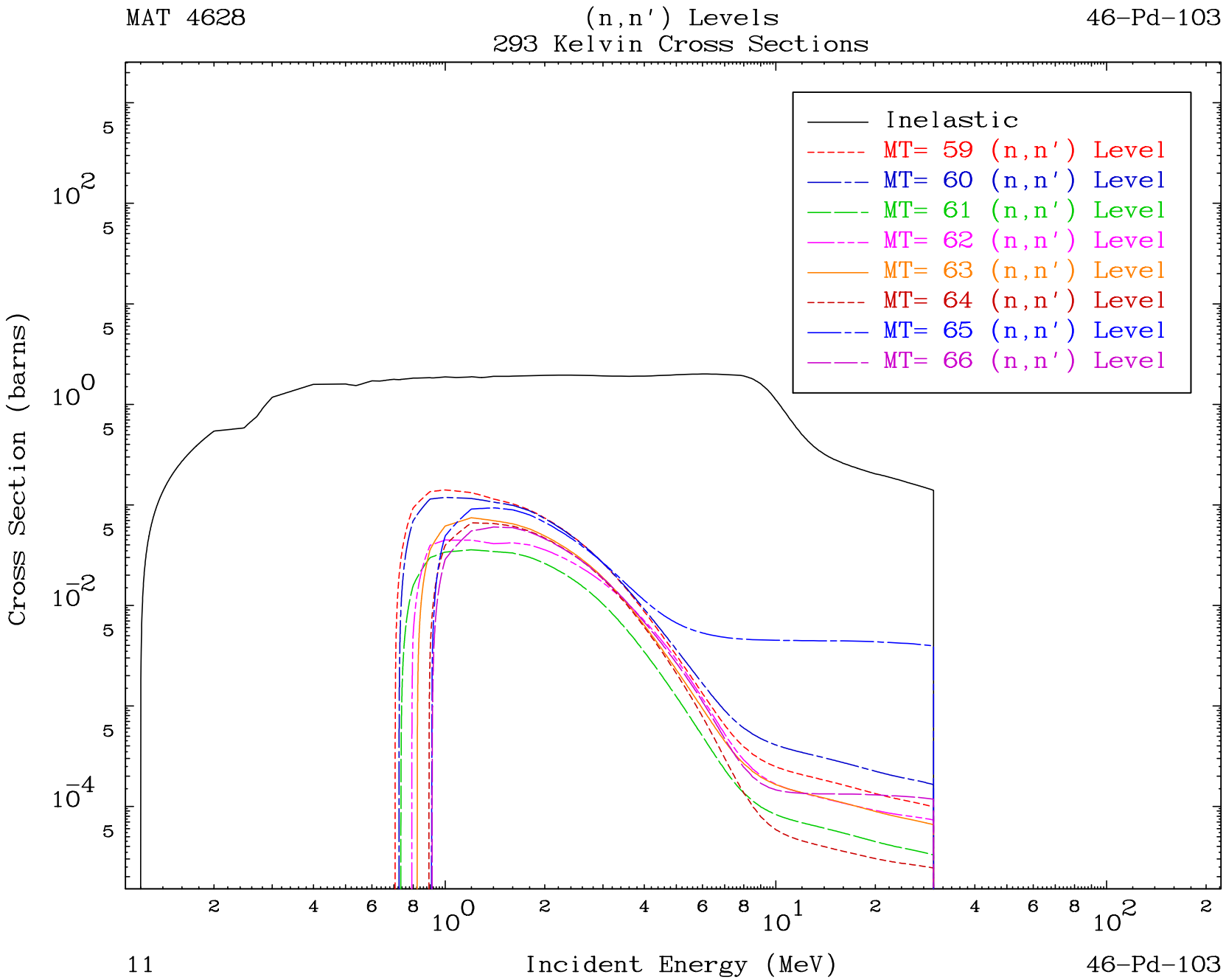

MAT 4628
Charged Particle
46-Pd-103
293 Kelvin Cross Sections
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
(n,n') d
(n,n') t
Cross Section (barns)
Incident Energy (MeV)
6
46-Pd-103

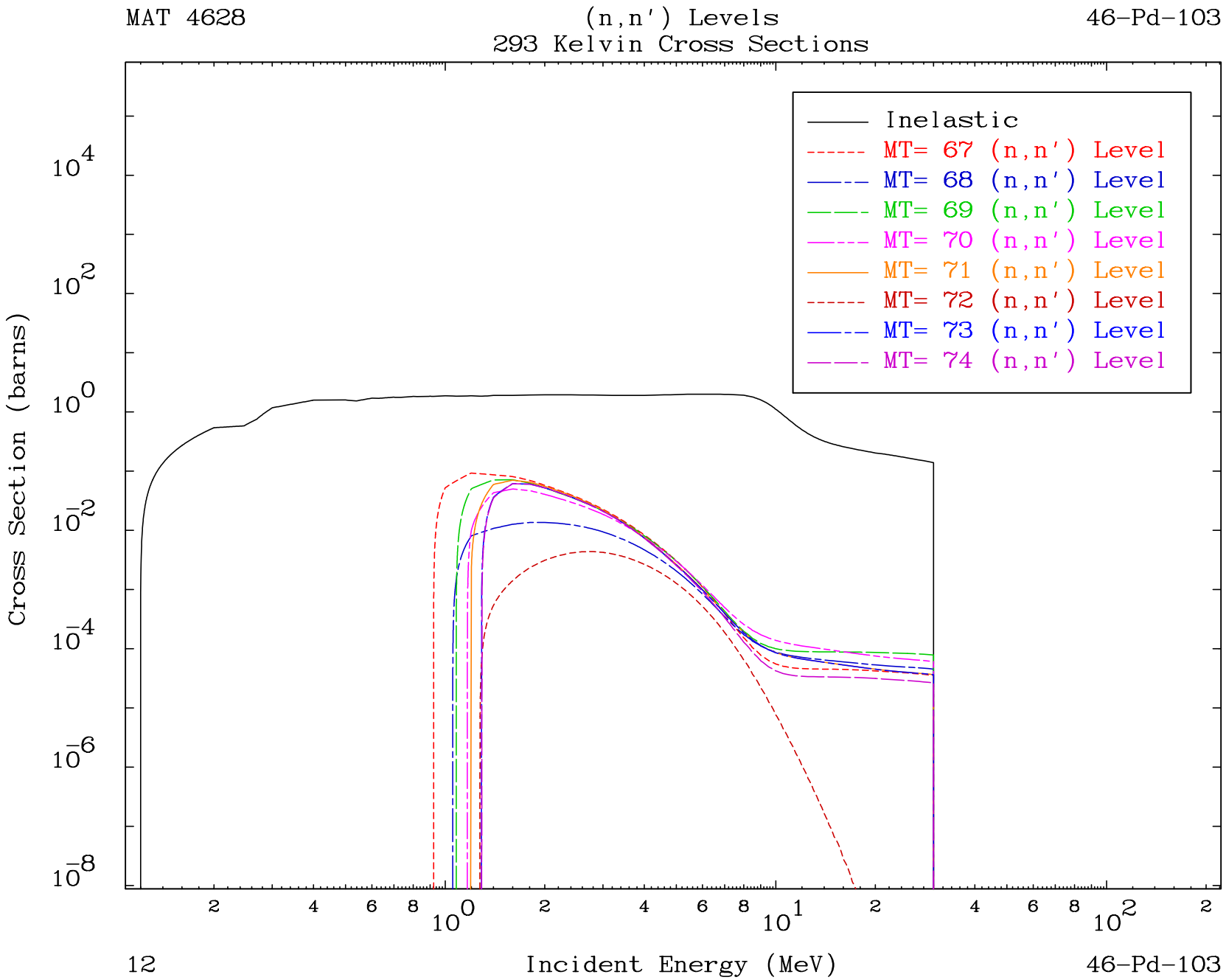

MAT 4628
Charged Particle
46-Pd-103
293 Kelvin Cross Sections
(n,n') α
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
7
46-Pd-103

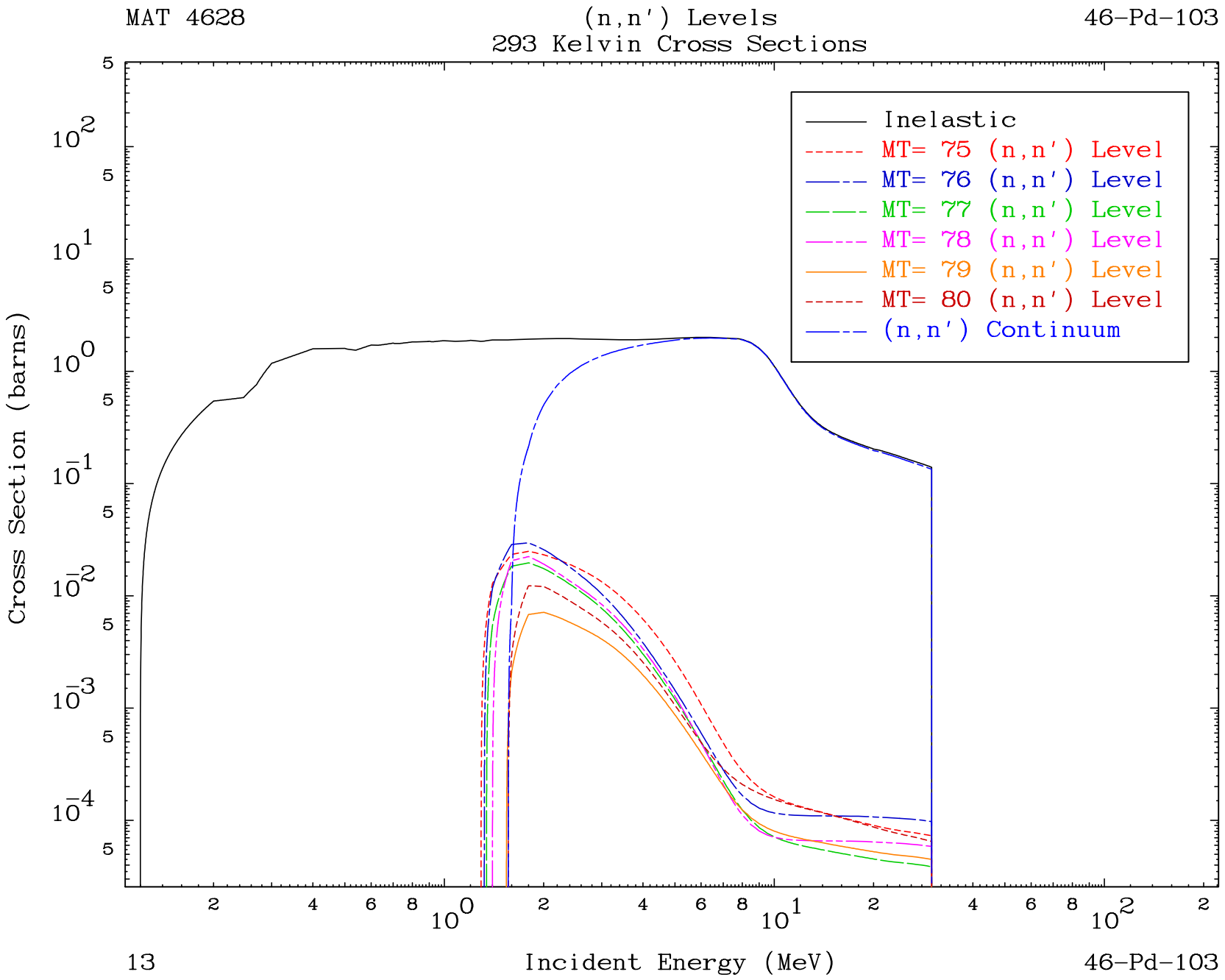

MAT 4628
Charged Particle
293 Kelvin Cross Sections
46-Pd-103
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
8
46-Pd-103

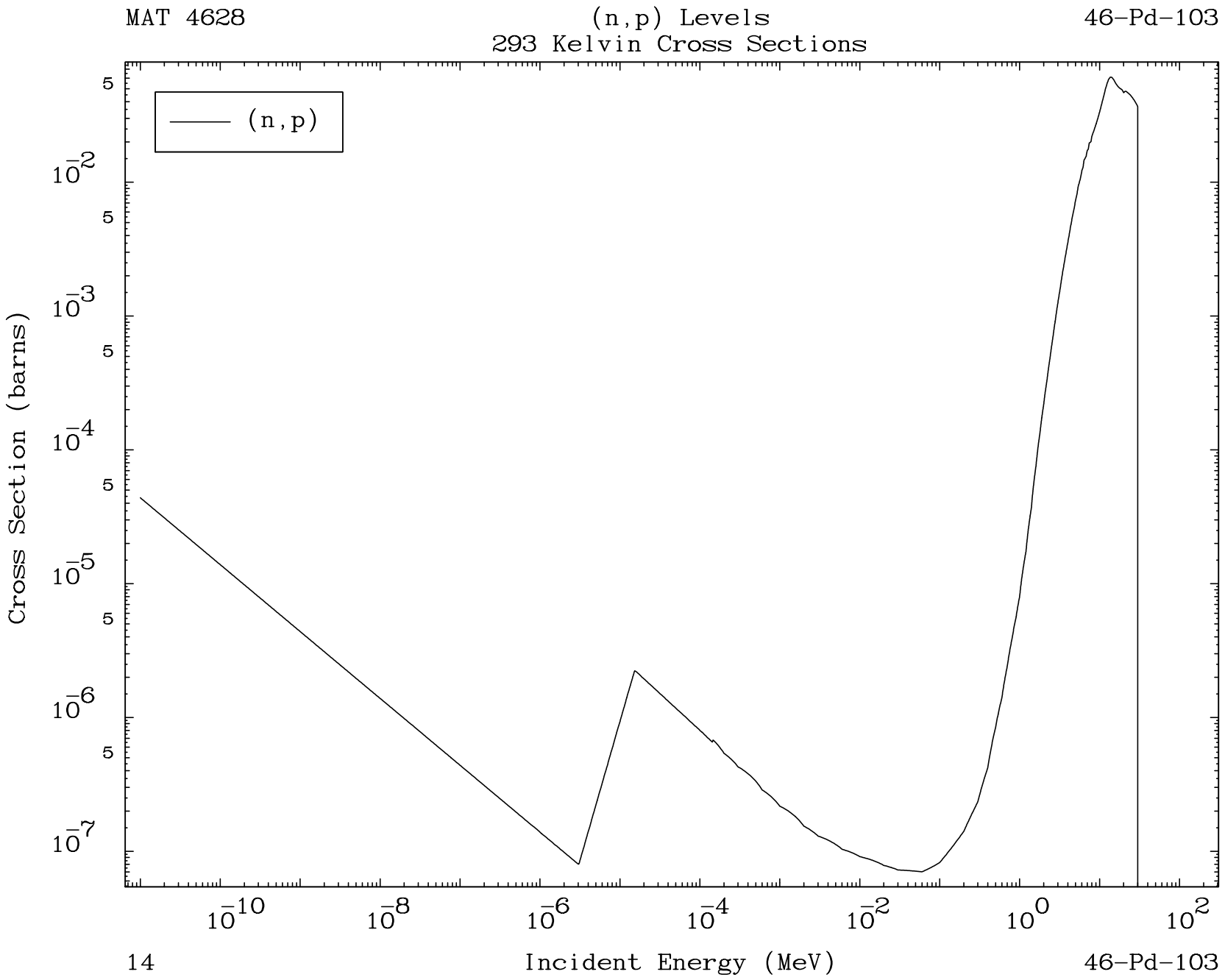

MAT 4628
Particle Production
46-Pd-103
293 Kelvin Cross Sections
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
10^-8
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
9
46-Pd-103

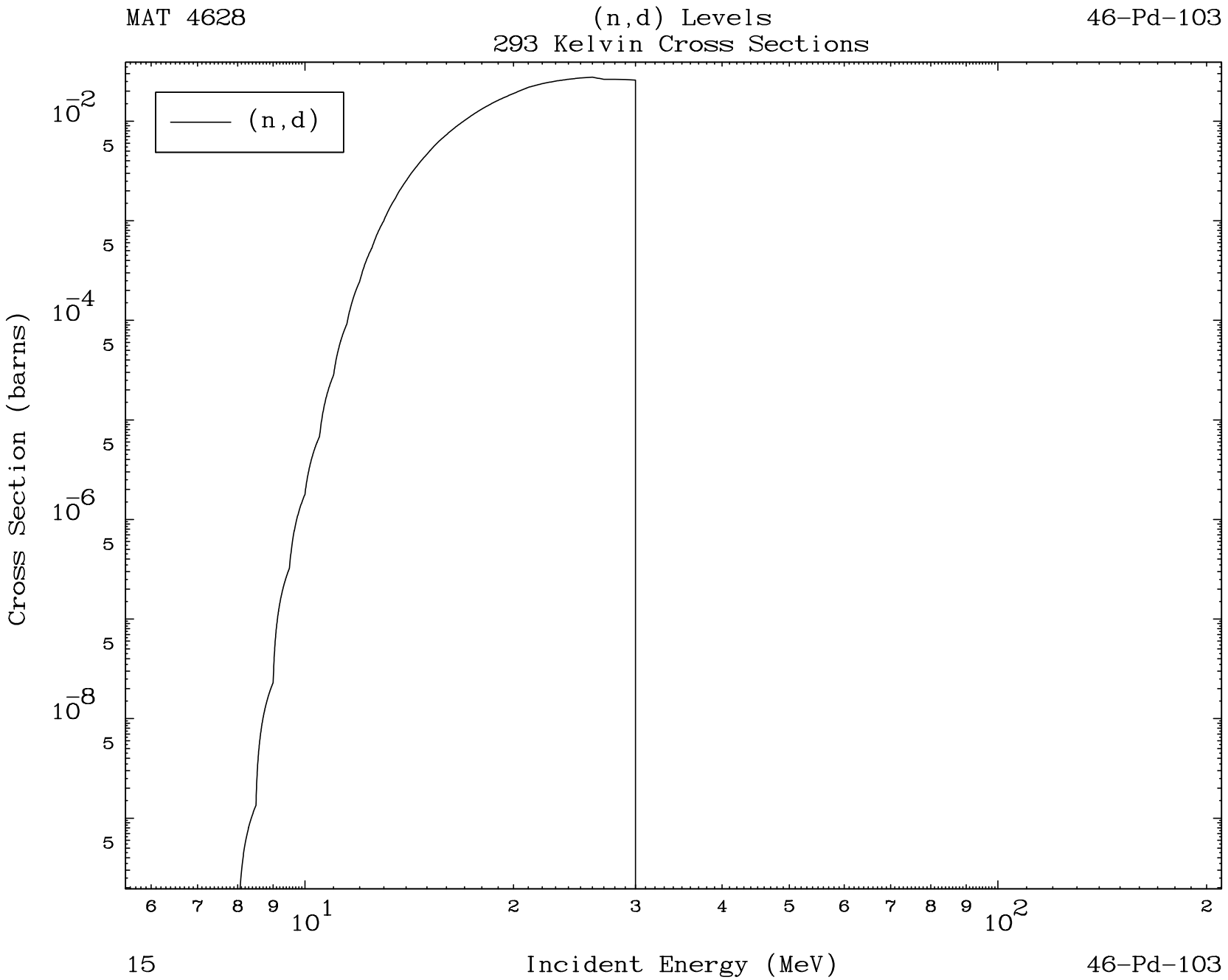

MAT 4628
(n,n') Levels
293 Kelvin Cross Sections
46-Pd-103
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
46-Pd-103

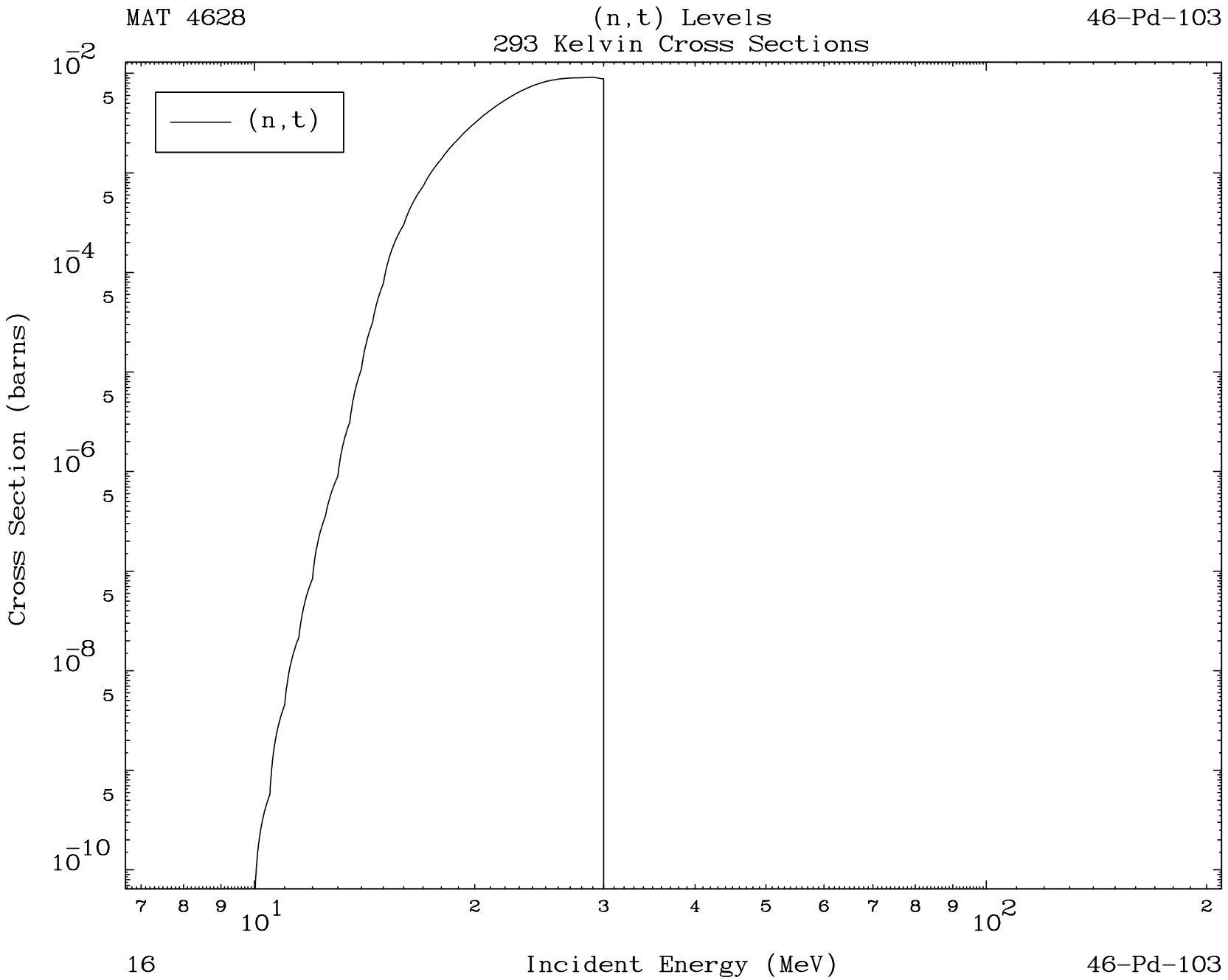

MAT 4628
(n,n') Levels
293 Kelvin Cross Sections
46-Pd-103
Inelastic
MT= 59 (n,n') Level
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
11
46-Pd-103

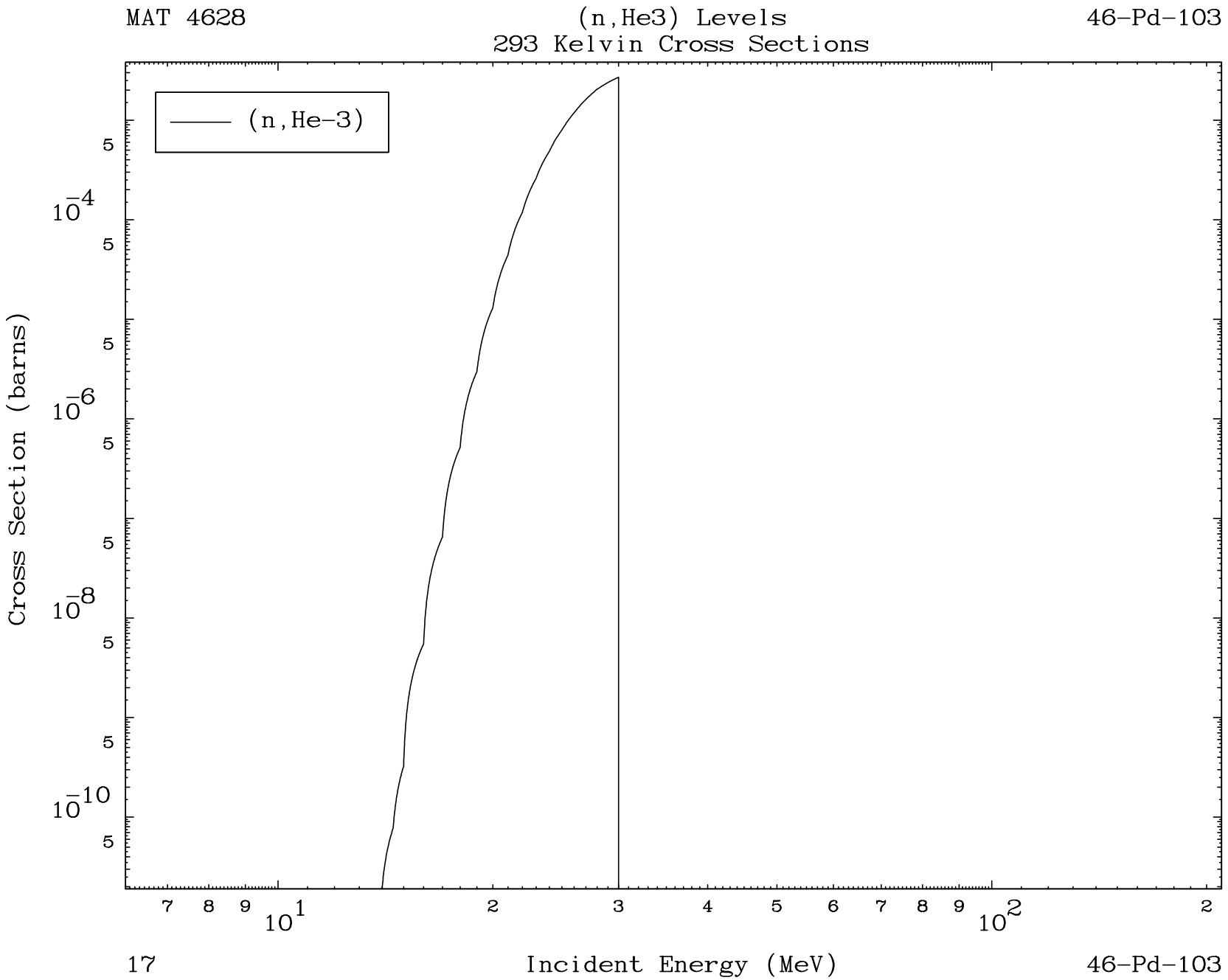

MAT 4628
(n,n') Levels
293 Kelvin Cross Sections
46-Pd-103
Inelastic
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-6
10^-8
2 4 6 8 10^0 2 4 6 8 10^1 2 4 6 8 10^2 2
Incident Energy (MeV)
12
46-Pd-103

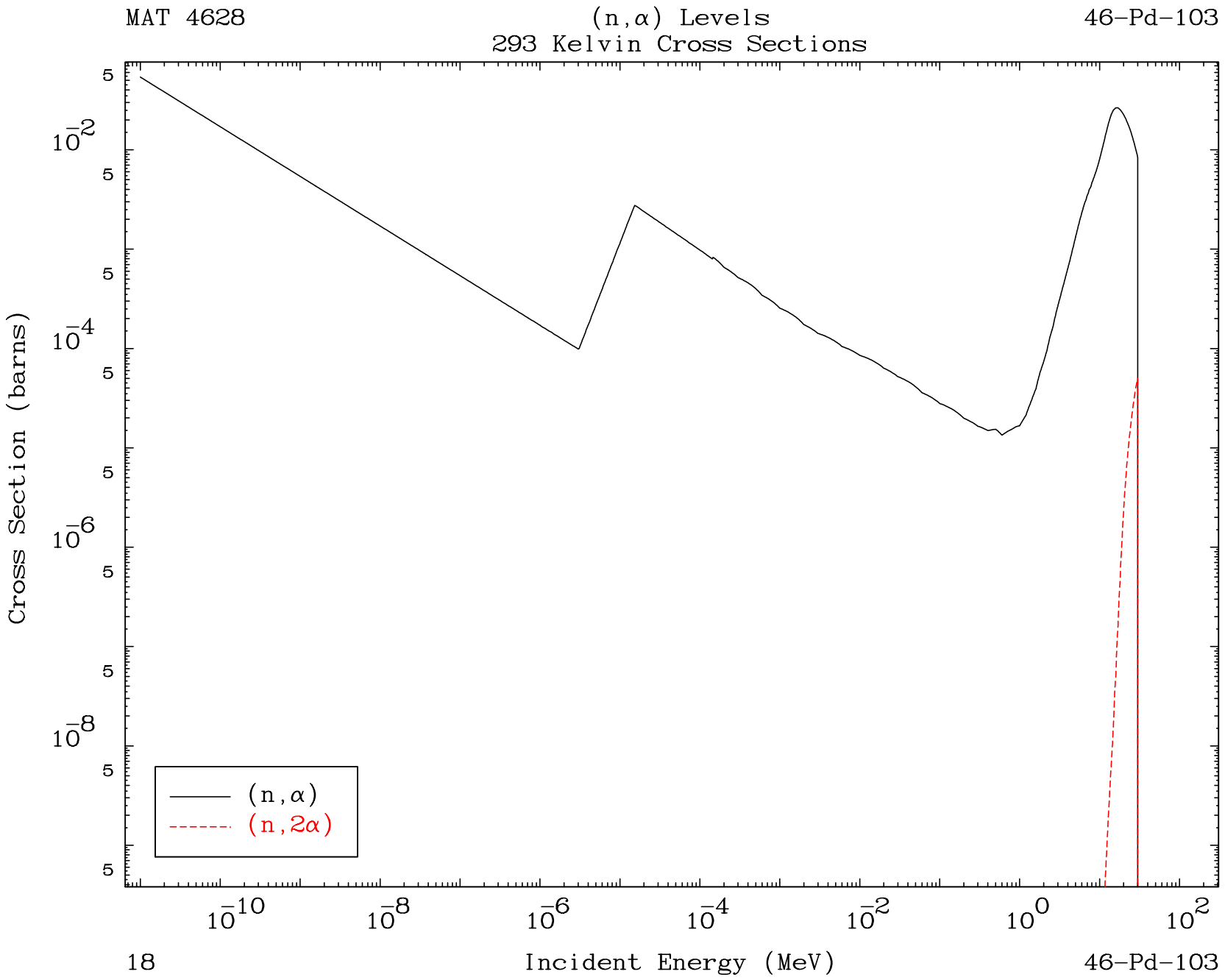

MAT 4628
(n,n') Levels
293 Kelvin Cross Sections
46-Pd-103
Inelastic
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
13
46-Pd-103

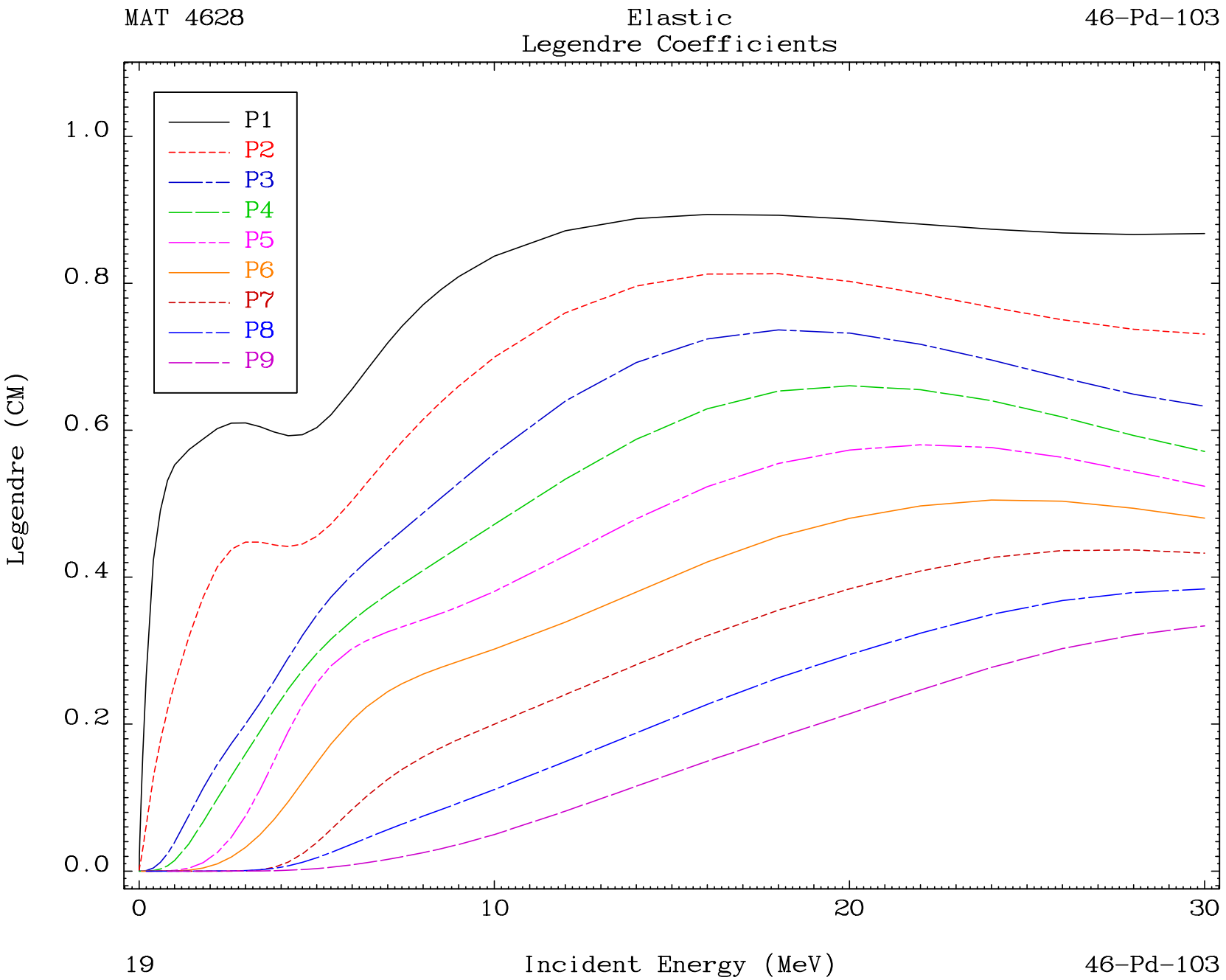

MAT 4628
(n,p) Levels
46-Pd-103
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
14
46-Pd-103

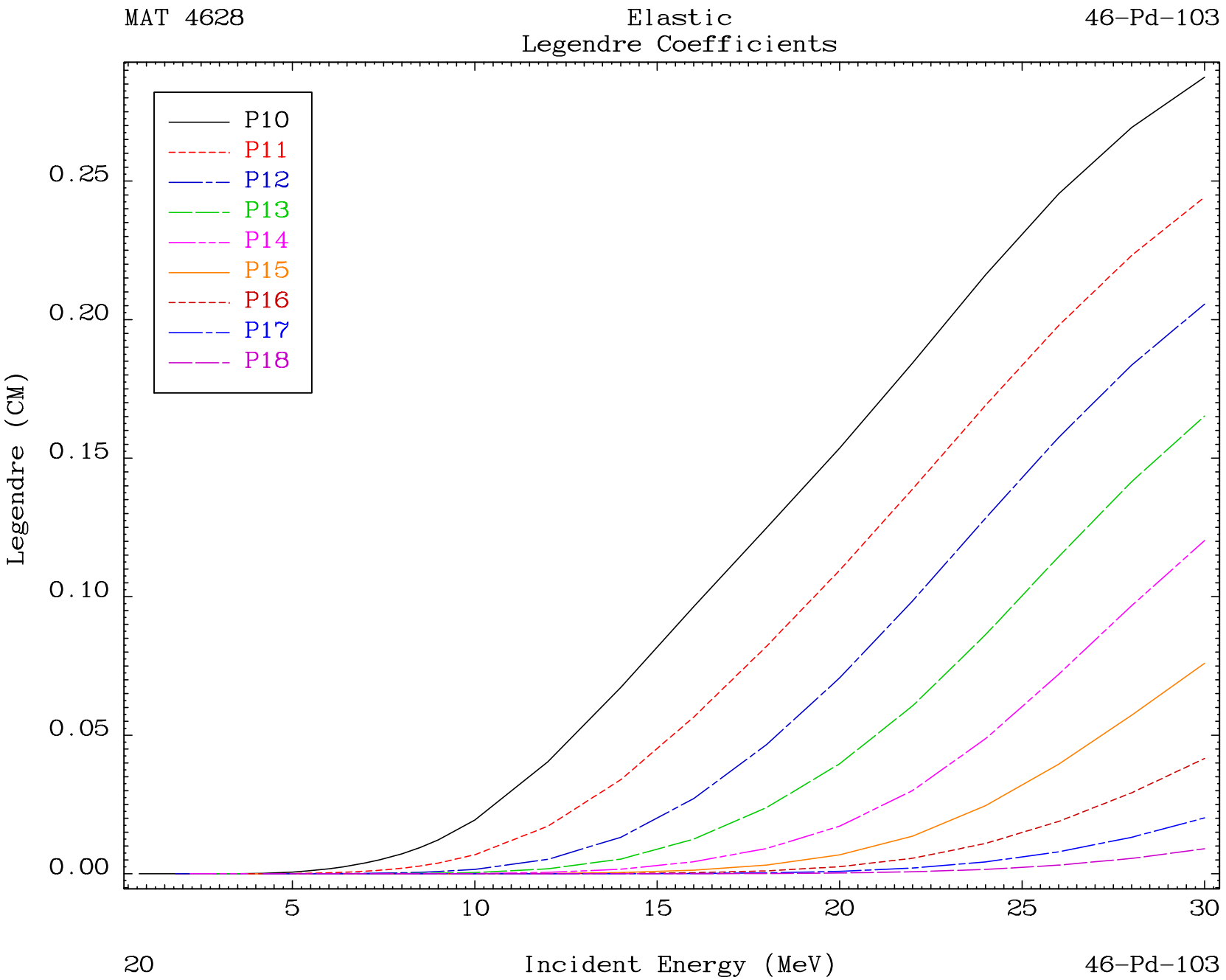

MAT 4628
(n,d) Levels
46-Pd-103
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
15
46-Pd-103

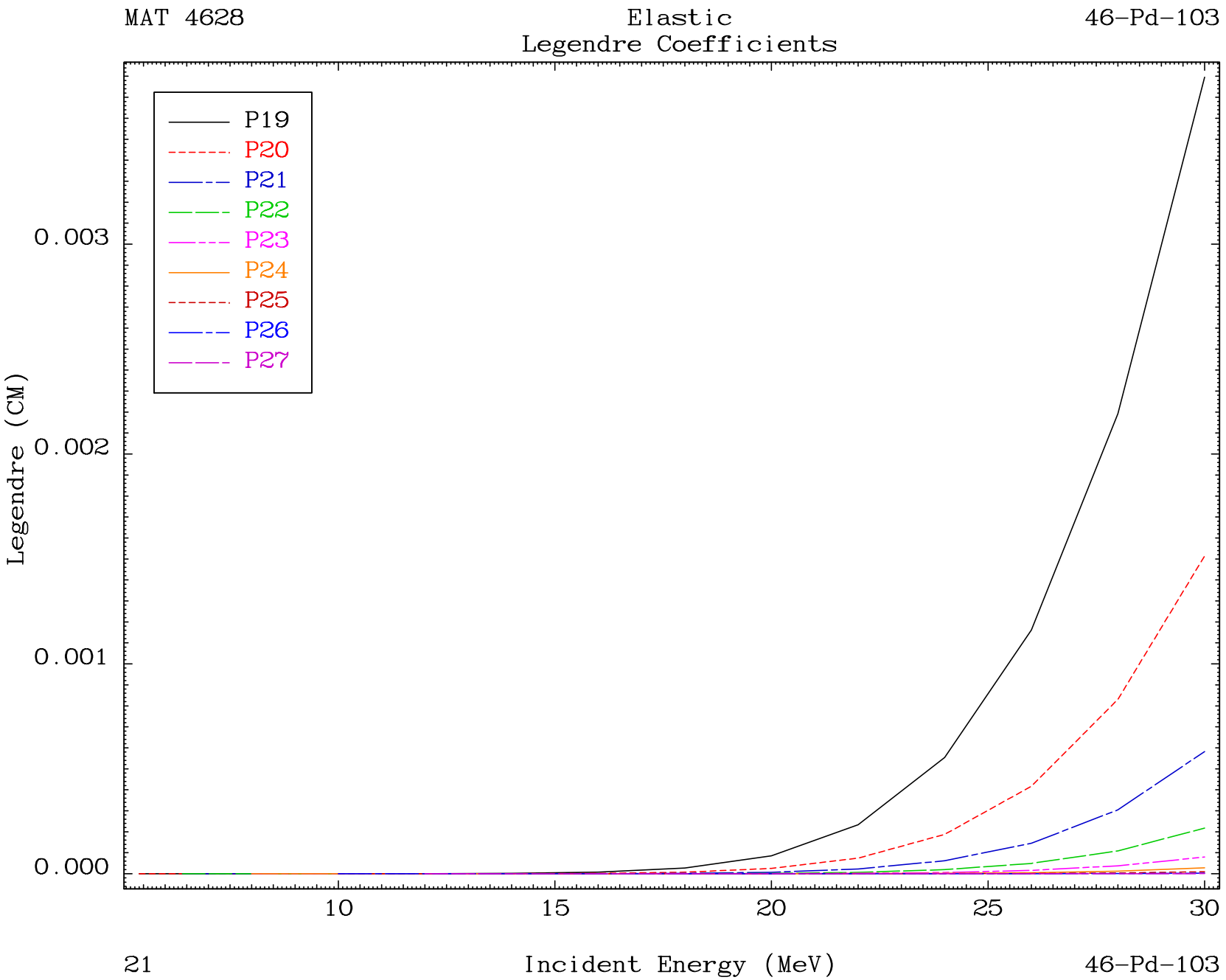

MAT 4628
(n,t) Levels
46-Pd-103
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
16
46-Pd-103

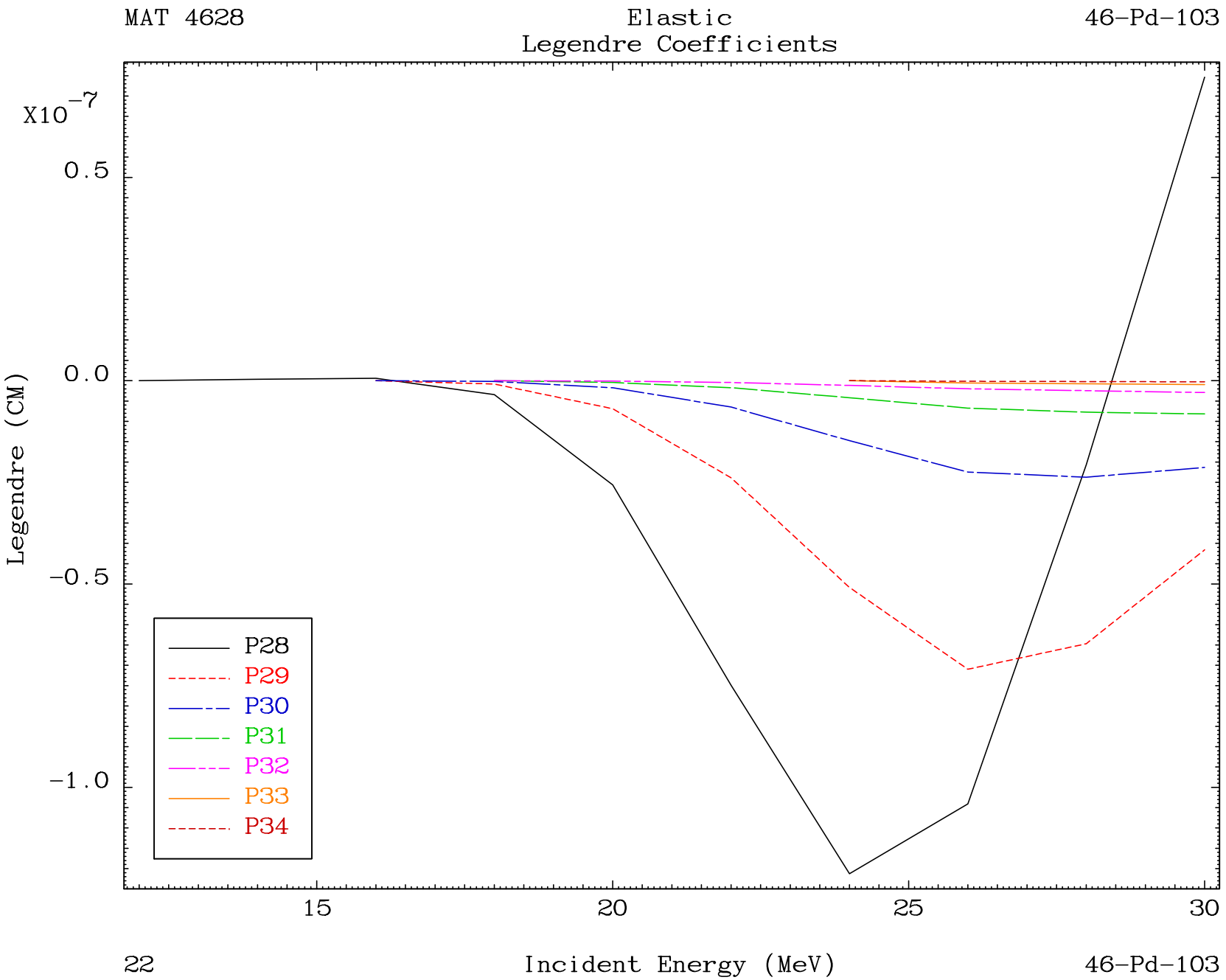

MAT 4628
(n,He3) Levels
46-Pd-103
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
17
Incident Energy (MeV)
46-Pd-103

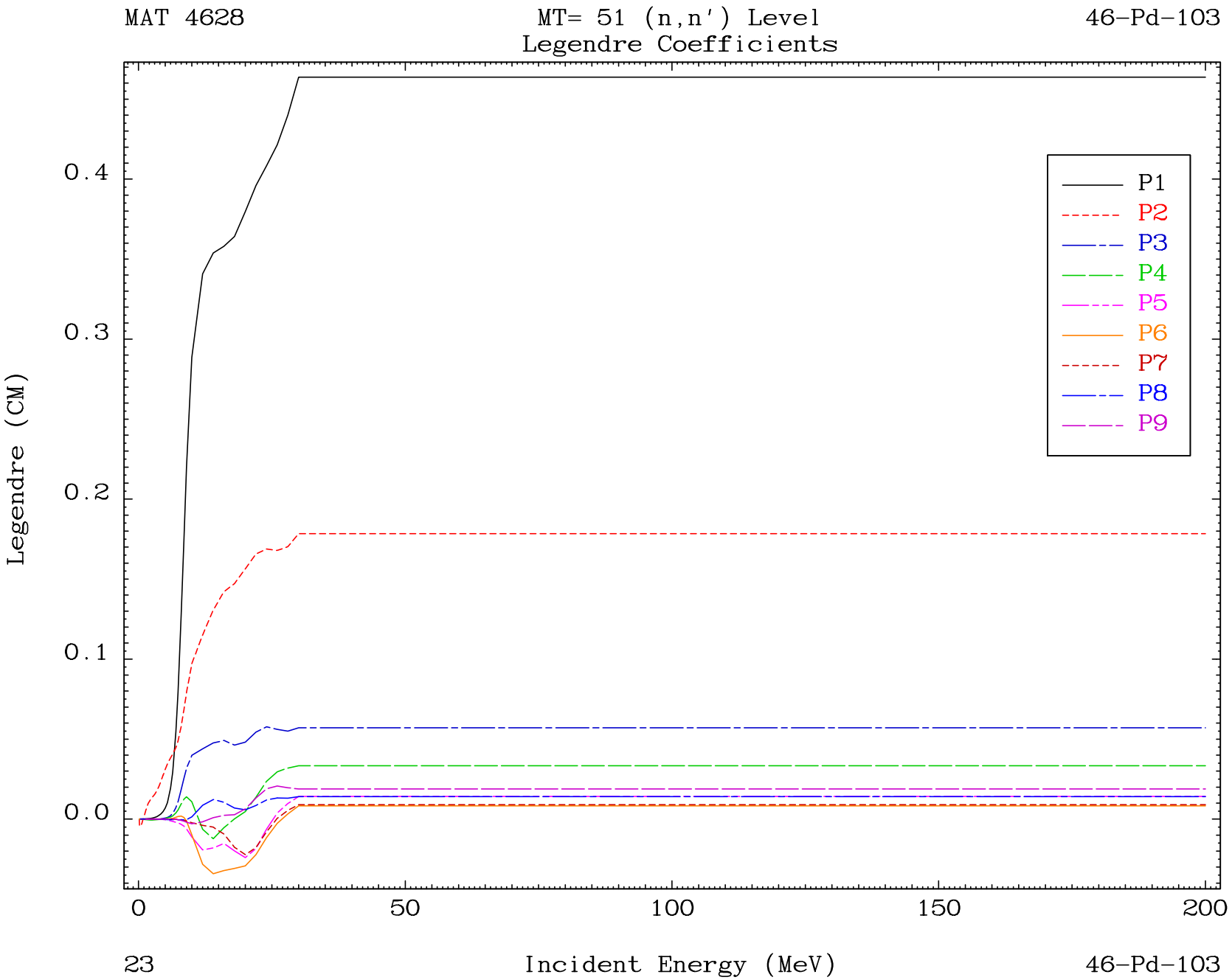

MAT 4628
(n,α) Levels
46-Pd-103
293 Kelvin Cross Sections
Cross Section (barns)
5
10-2
5
5
10-4
5
5
10-6
5
5
10-8
5
5
(n,α)
(n,2α)
10-10
10-8
10-6
10-4
10-2
100
102
18
Incident Energy (MeV)
46-Pd-103

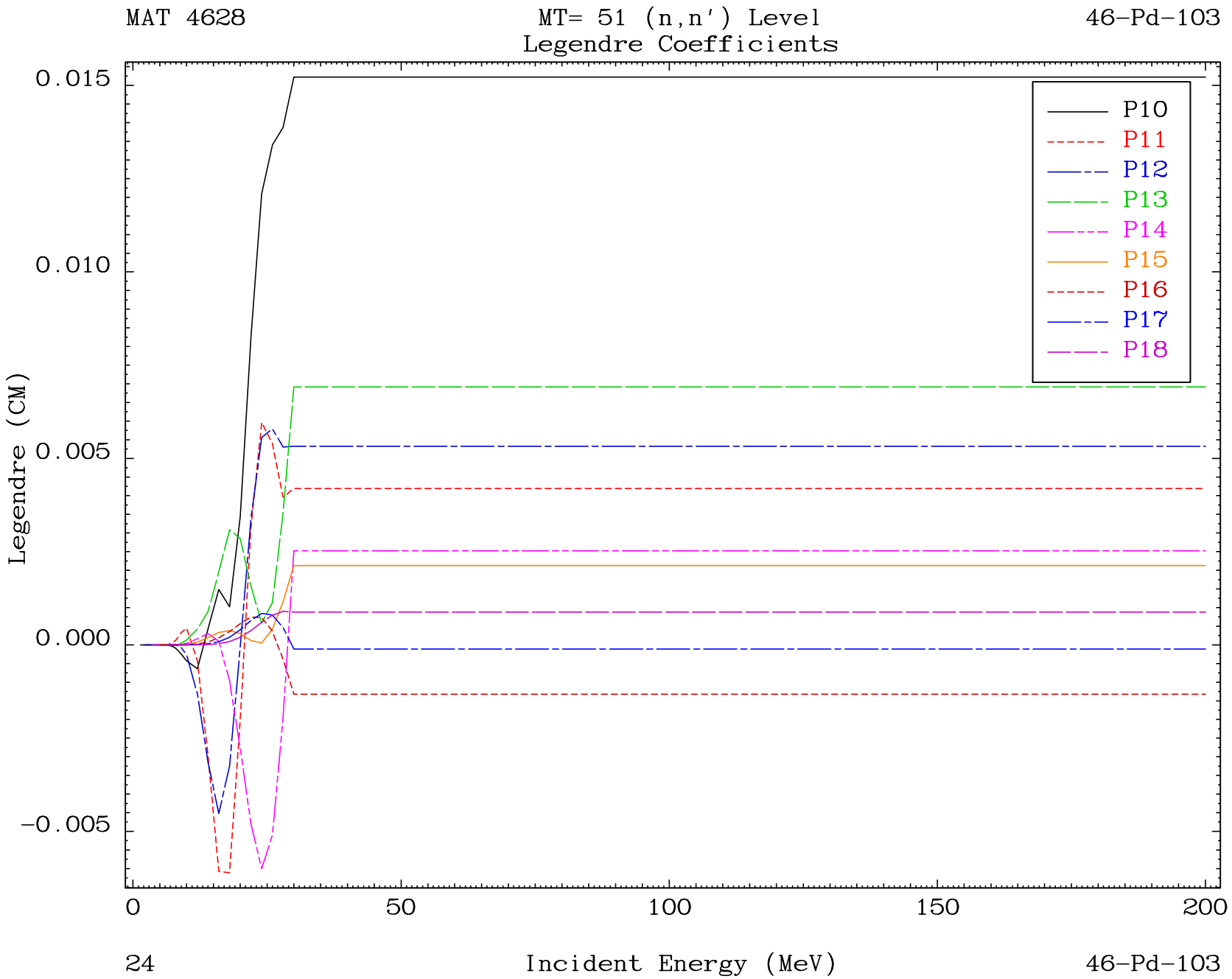

MAT 4628
Elastic
Legendre Coefficients
46-Pd-103
P1
P2
P3
P4
P5
P6
P7
P8
P9
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
10
20
30
19
Incident Energy (MeV)
46-Pd-103

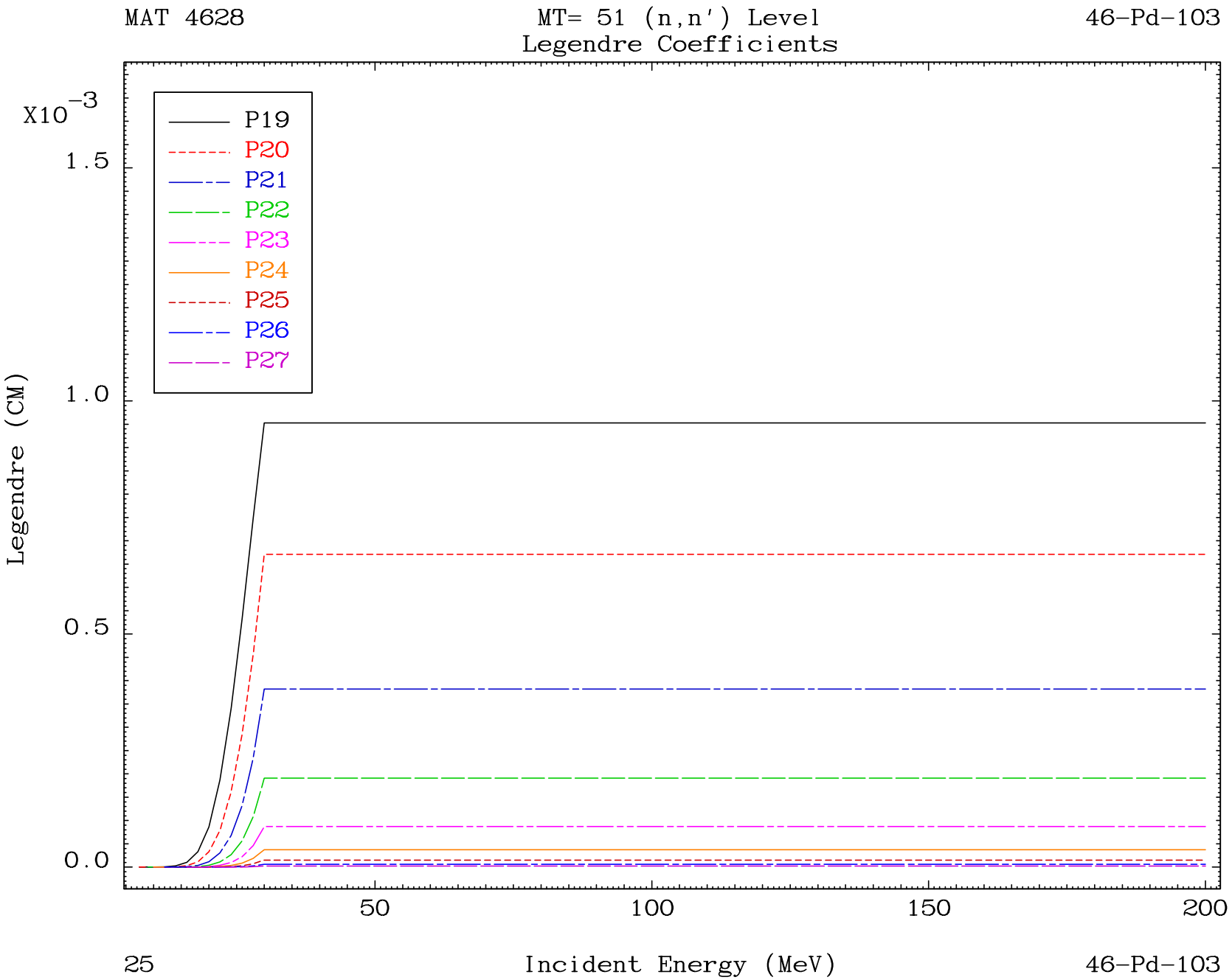

MAT 4628
Elastic
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.25
0.20
0.15
0.10
0.05
0.00
5
10
15
20
25
30
20
Incident Energy (MeV)
46-Pd-103

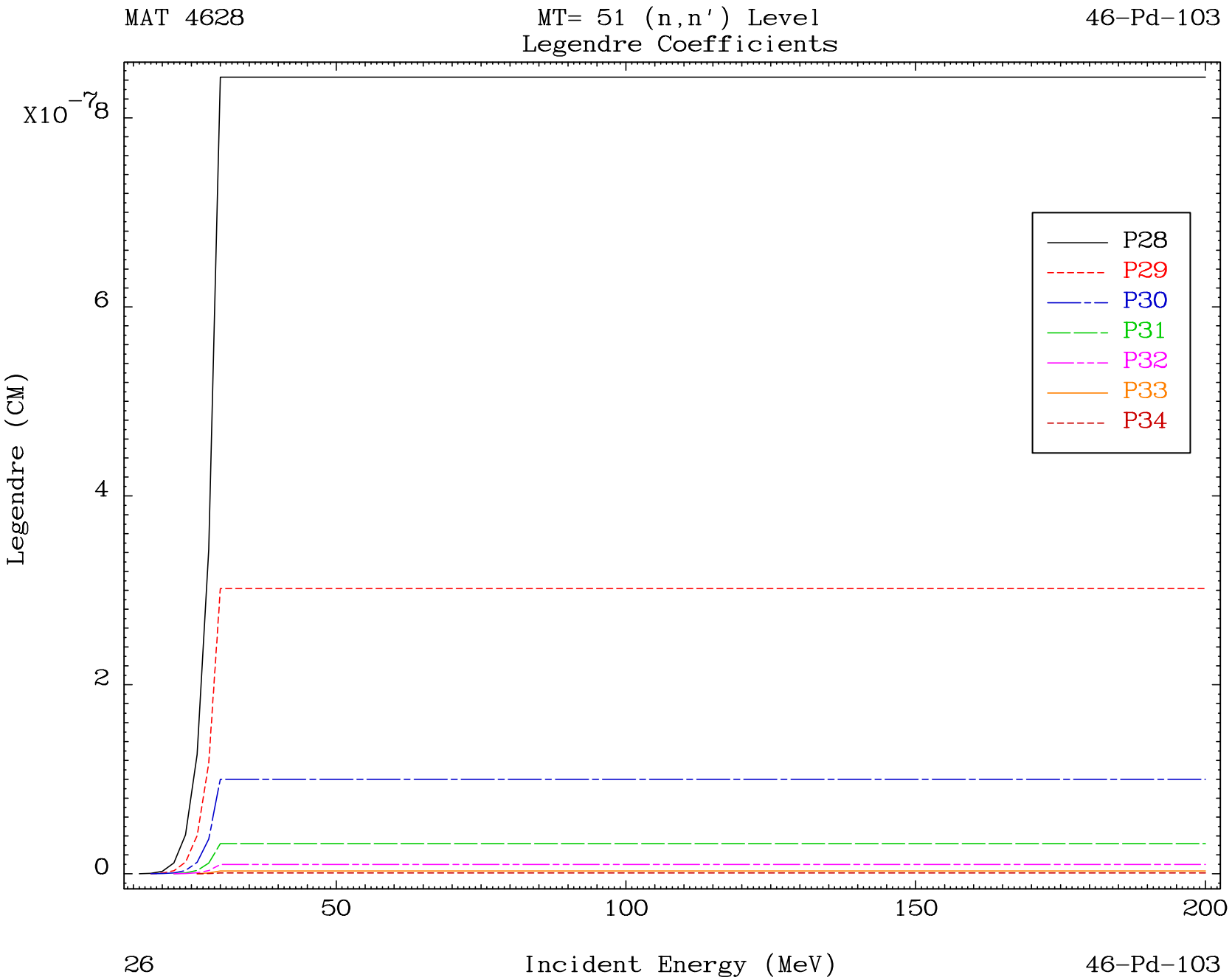

MAT 4628
Elastic
Legendre Coefficients
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.003
0.002
0.001
0.000
Legendre (CM)
10
15
20
25
30
21
Incident Energy (MeV)
46-Pd-103

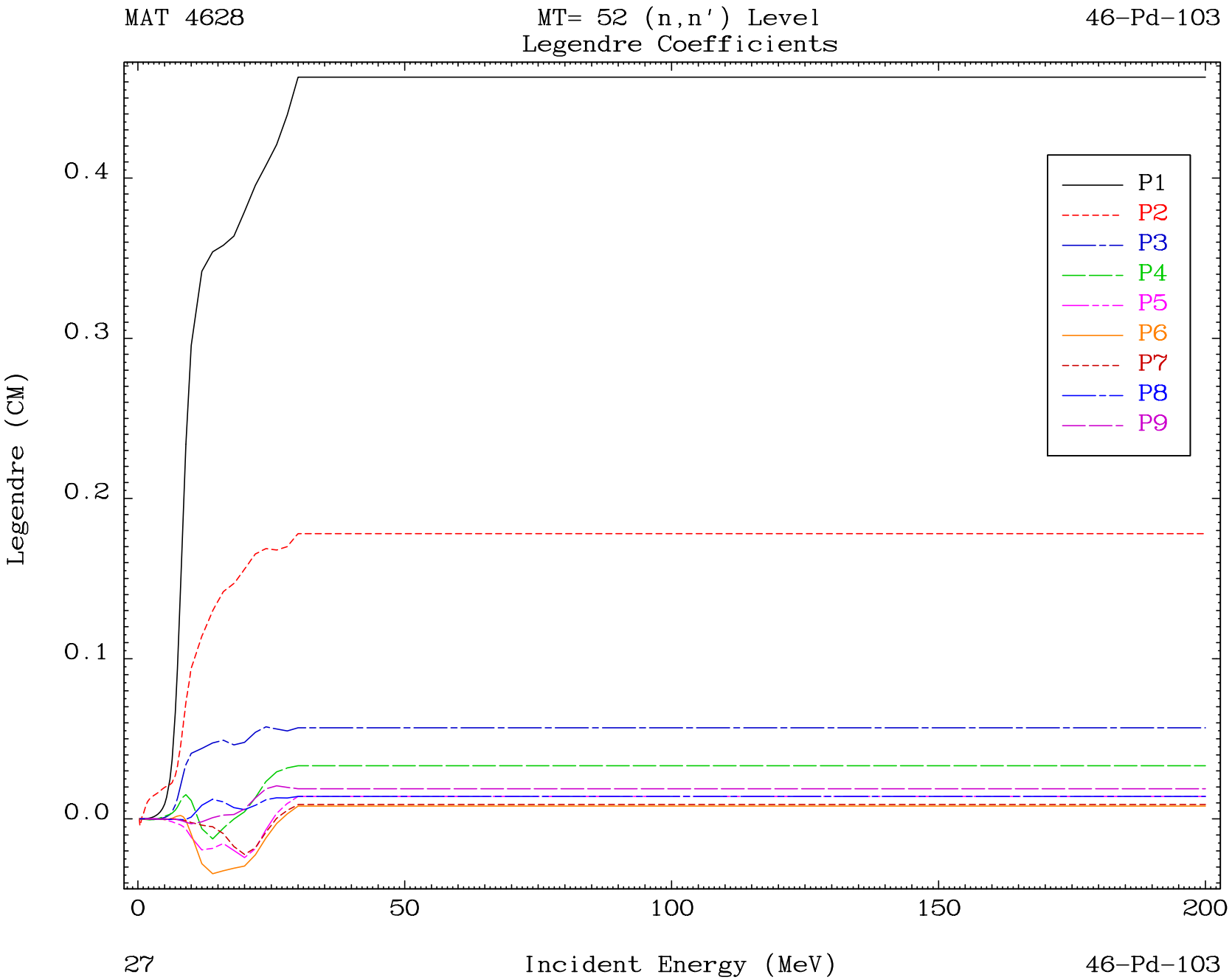

MAT 4628
Elastic
Legendre Coefficients
46-Pd-103
X10−7
0.5
0.0
−0.5
−1.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
15
20
25
30
22
Incident Energy (MeV)
46-Pd-103

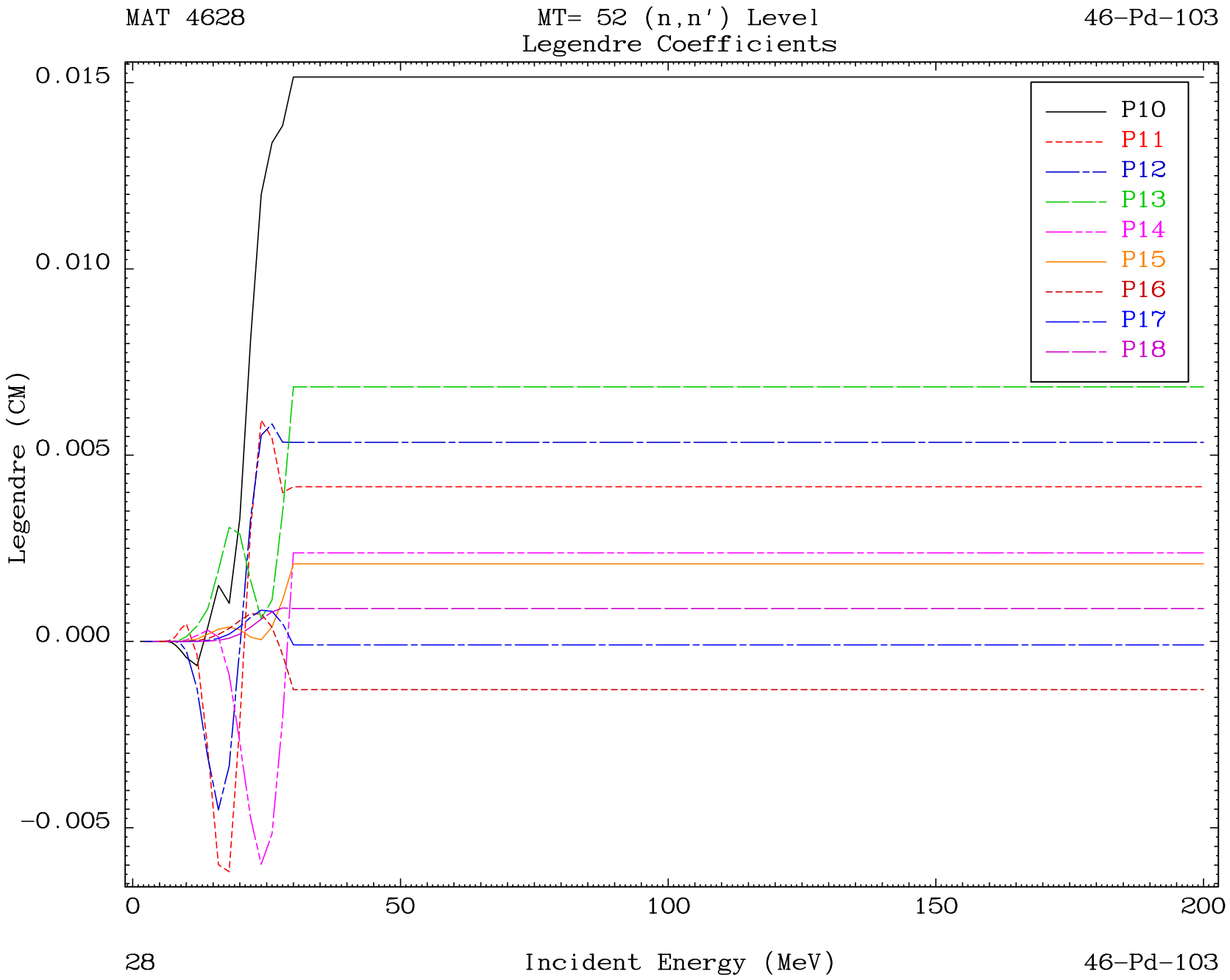

MAT 4628
MT= 51 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
23
Incident Energy (MeV)
46-Pd-103

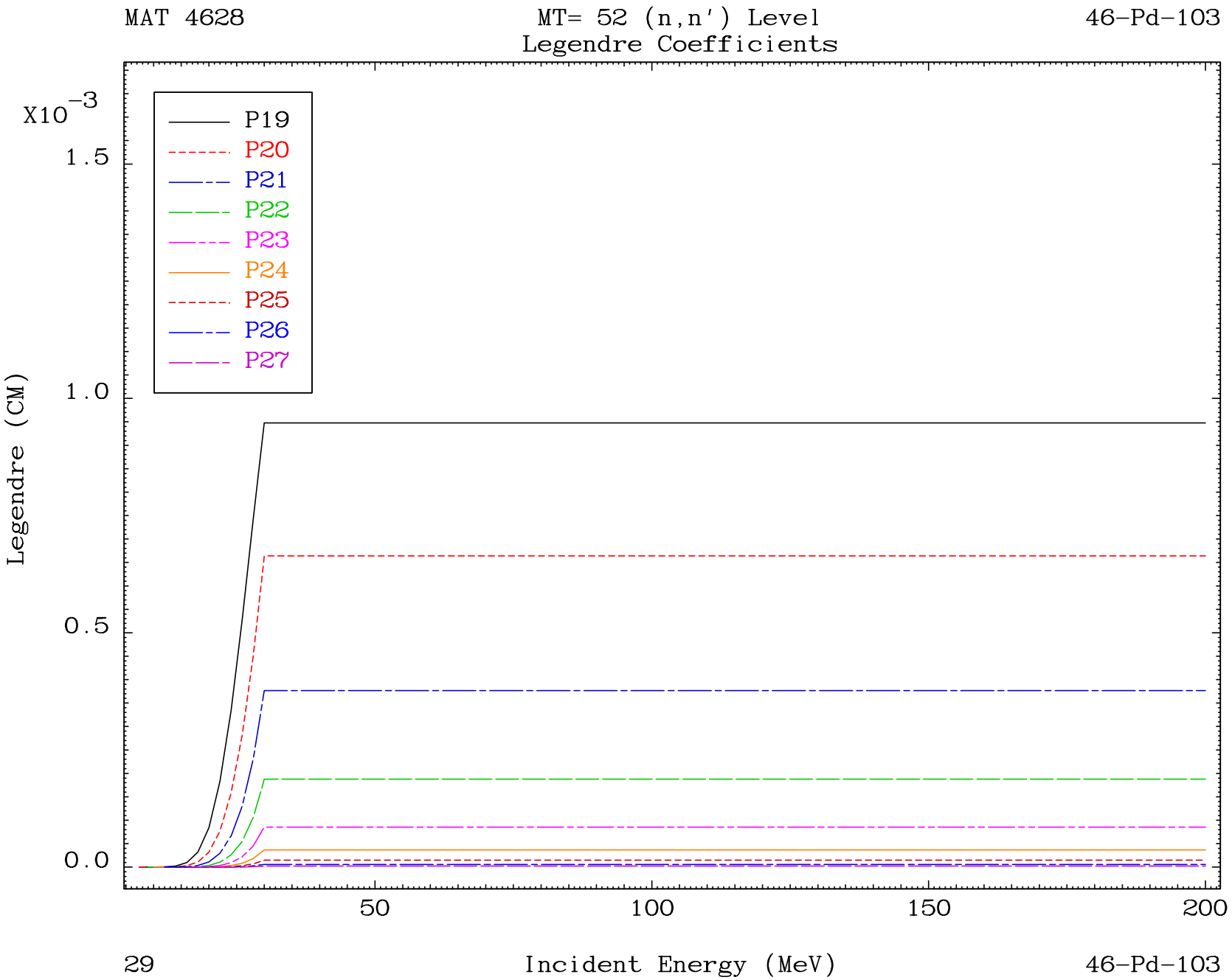

MAT 4628
MT= 51 (n,n') Level
Legendre Coefficients
46-Pd-103
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
24
Incident Energy (MeV)
46-Pd-103

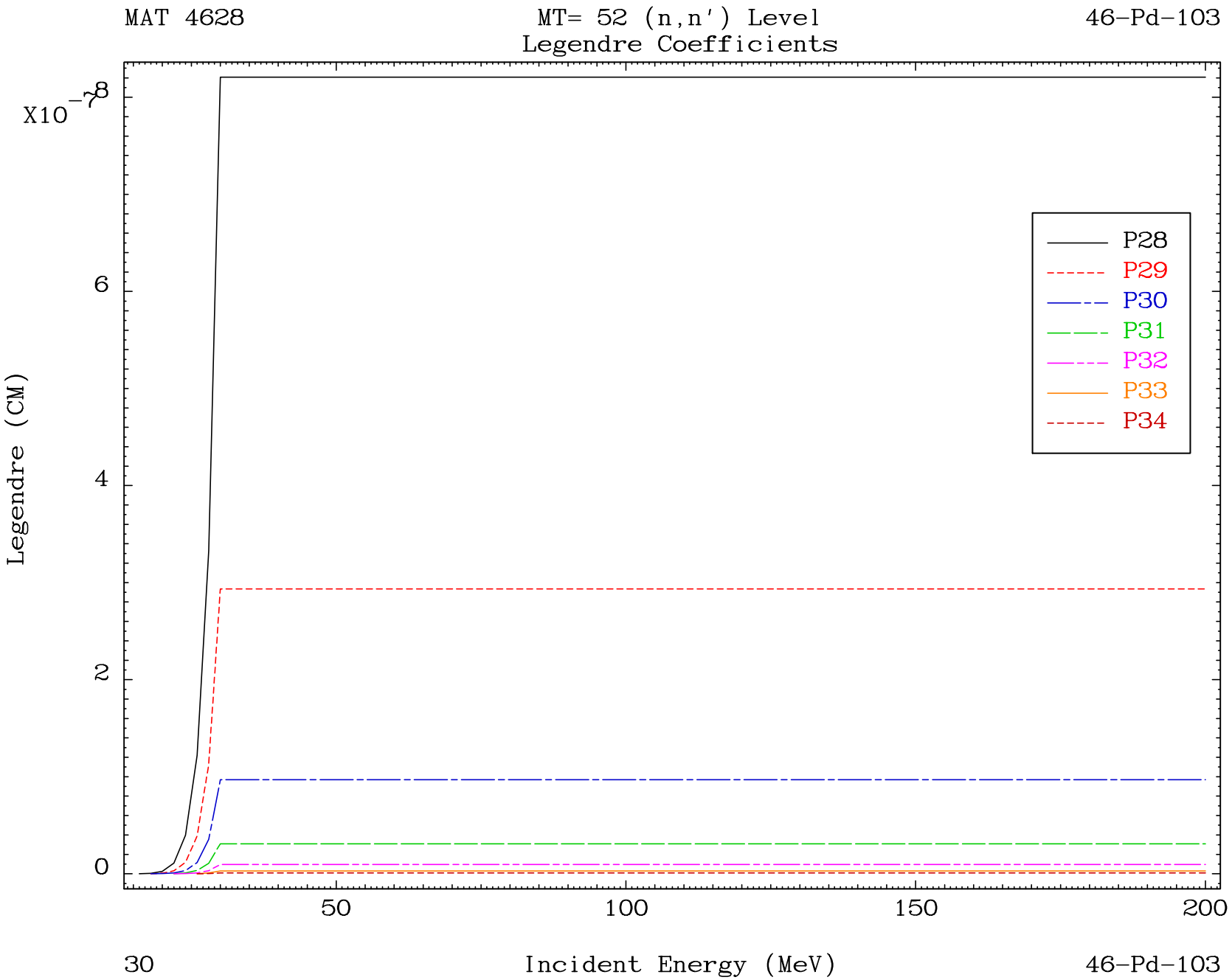

MAT 4628
MT= 51 (n,n') Level
Legendre Coefficients
46-Pd-103
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
25
Incident Energy (MeV)
46-Pd-103

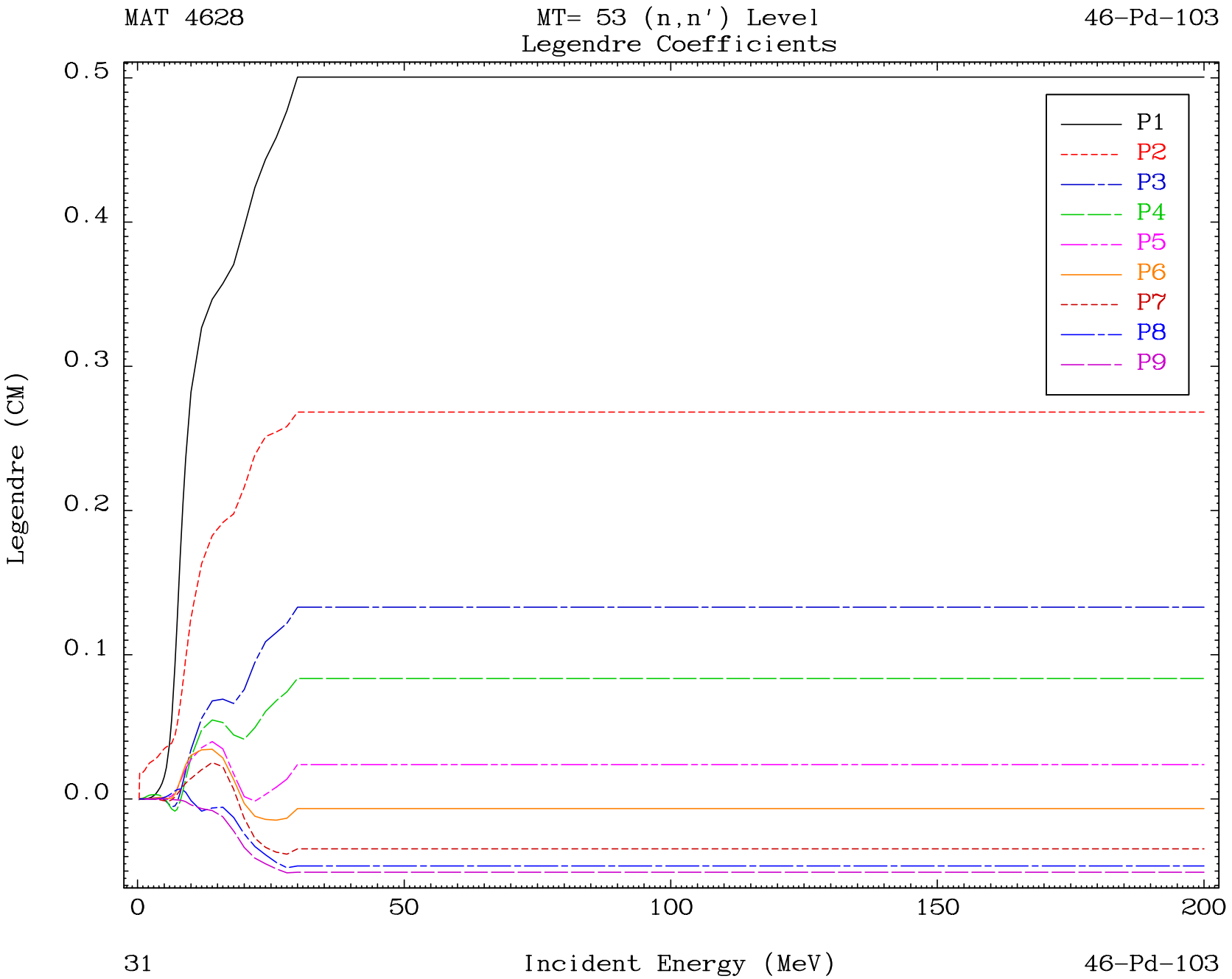

MAT 4628
MT= 51 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-7
8
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
26
Incident Energy (MeV)
46-Pd-103

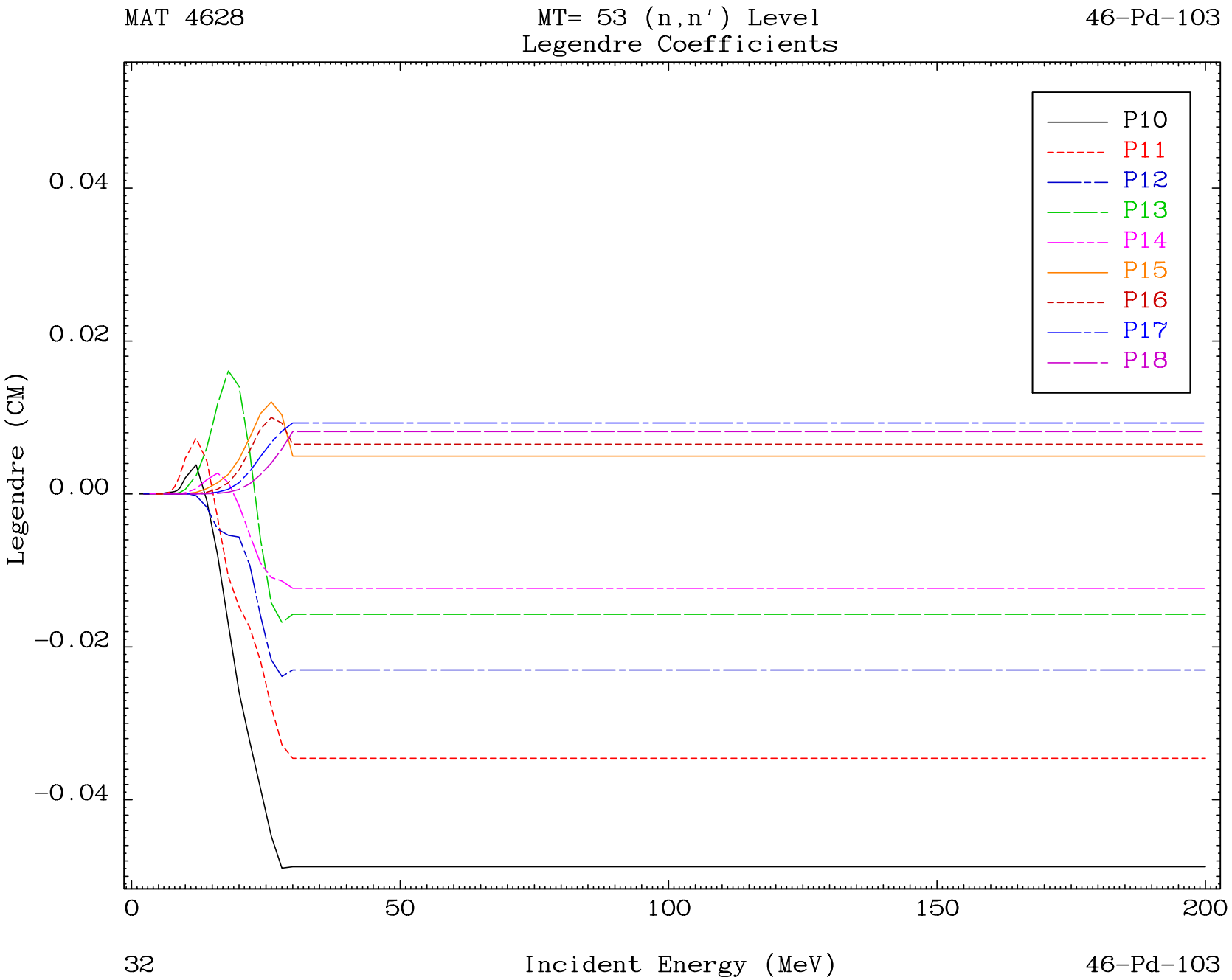

MAT 4628
MT= 52 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
27
Incident Energy (MeV)
46-Pd-103

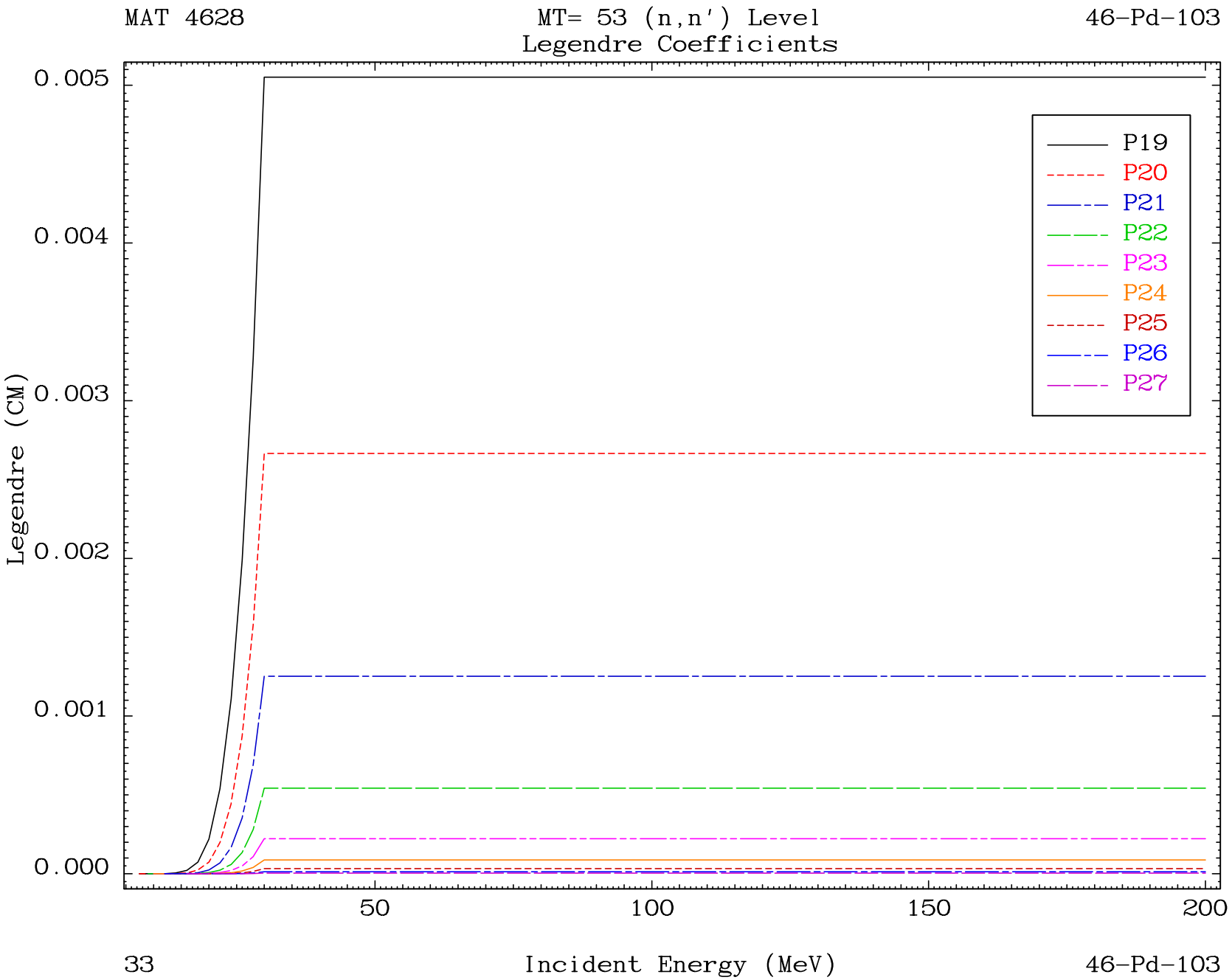

MAT 4628
MT= 52 (n,n') Level
Legendre Coefficients
46-Pd-103
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
28
Incident Energy (MeV)
46-Pd-103

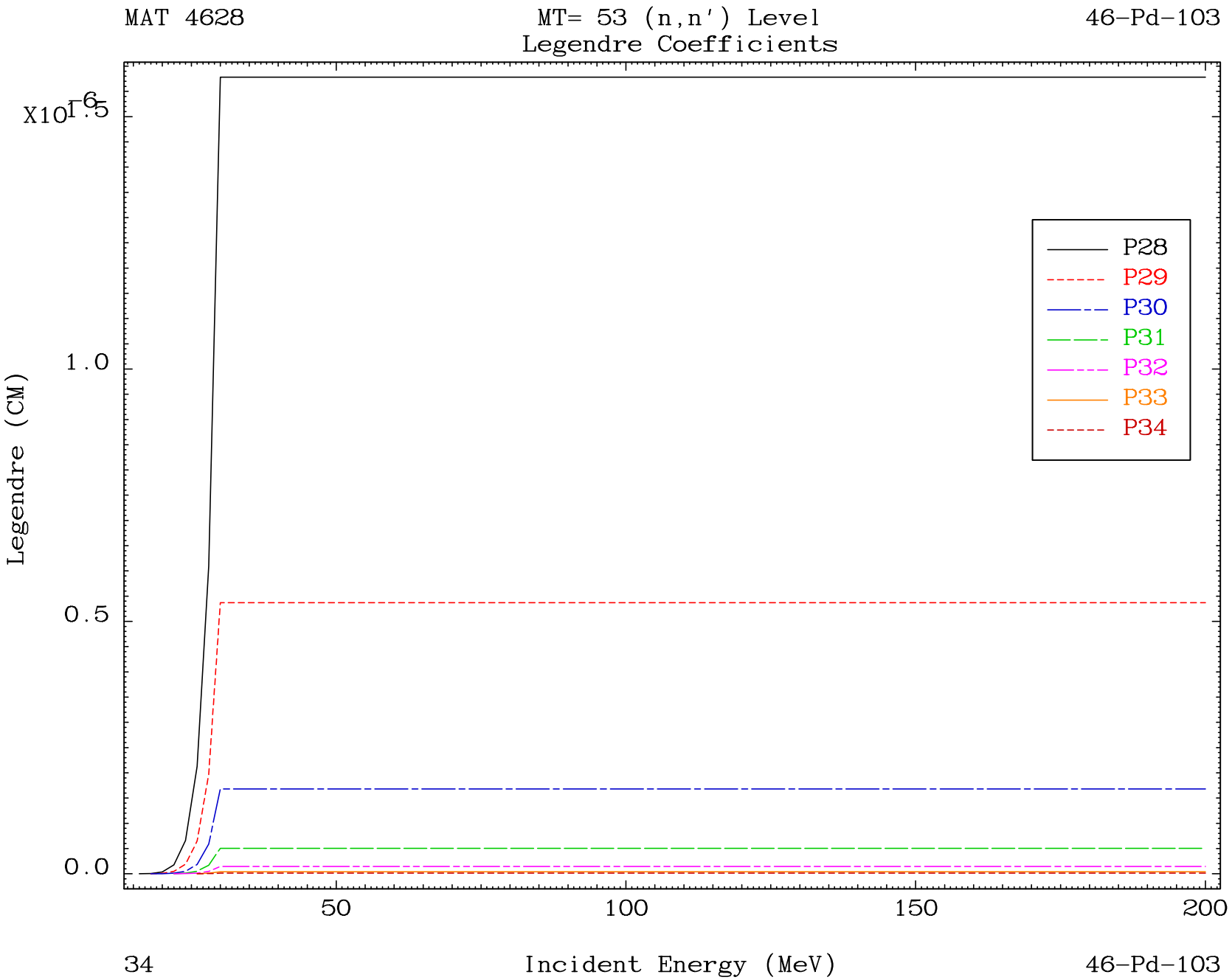

MAT 4628
MT= 52 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
29
Incident Energy (MeV)
46-Pd-103

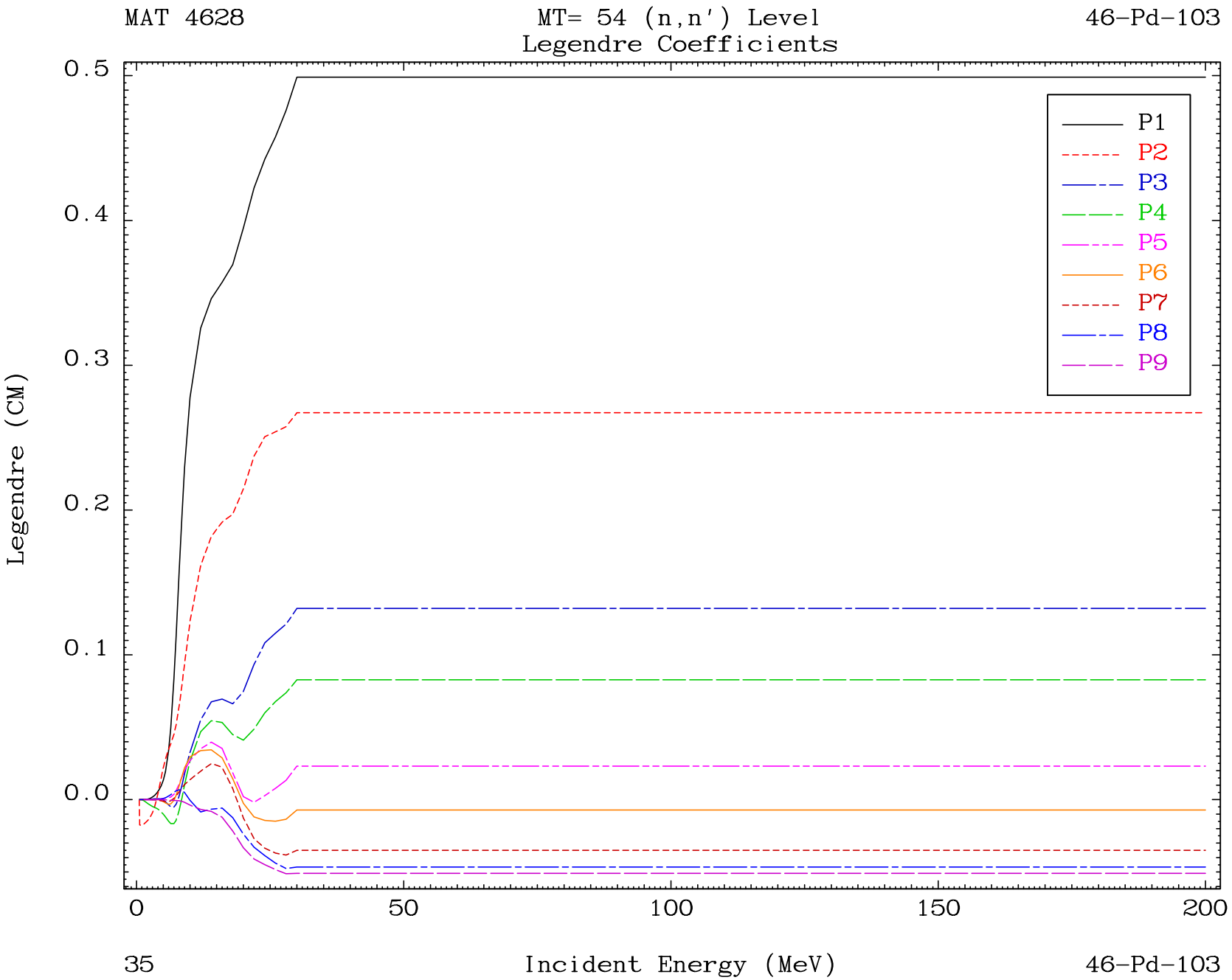

MAT 4628
MT= 52 (n,n') Level
Legendre Coefficients
46-Pd-103
X10-8
8
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
30
50
100
150
200
Incident Energy (MeV)
46-Pd-103

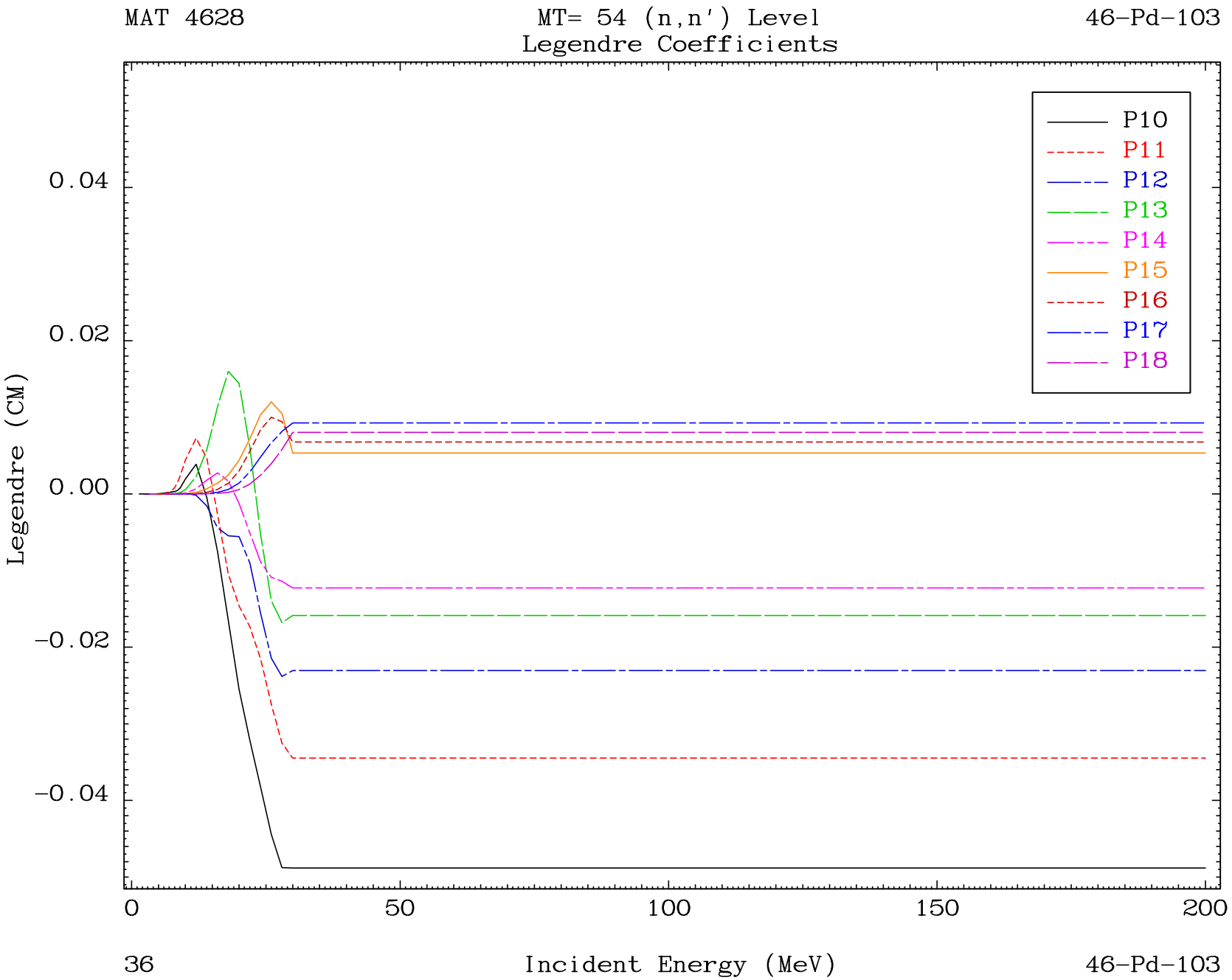

MAT 4628
MT= 53 (n,n') Level
Legendre Coefficients
46-Pd-103
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
31
Incident Energy (MeV)
46-Pd-103

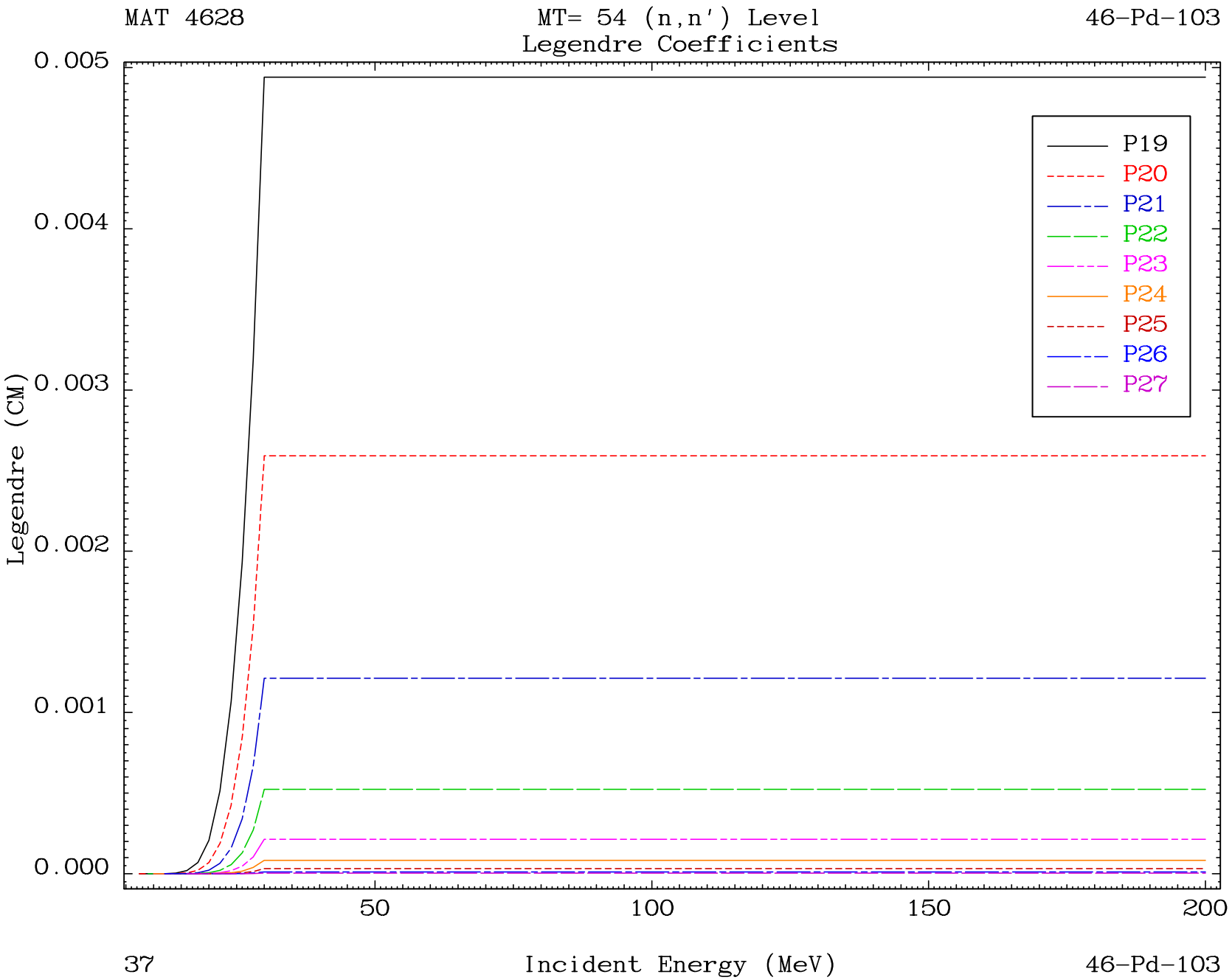

MAT 4628
MT= 53 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
32
Incident Energy (MeV)
46-Pd-103

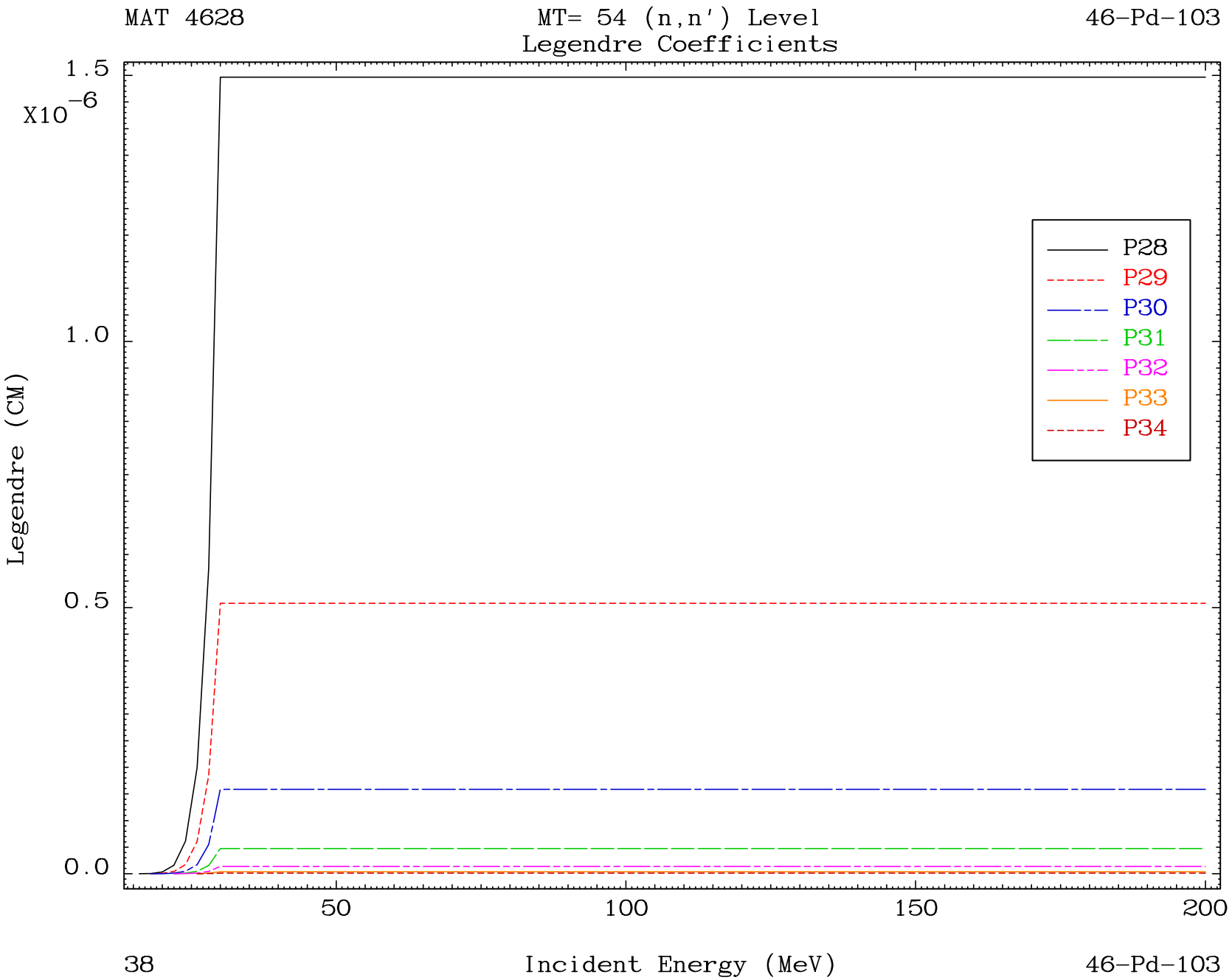

MAT 4628
MT= 53 (n,n') Level
Legendre Coefficients
46-Pd-103
0.005
0.004
0.003
0.002
0.001
0.000
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
33
Incident Energy (MeV)
46-Pd-103

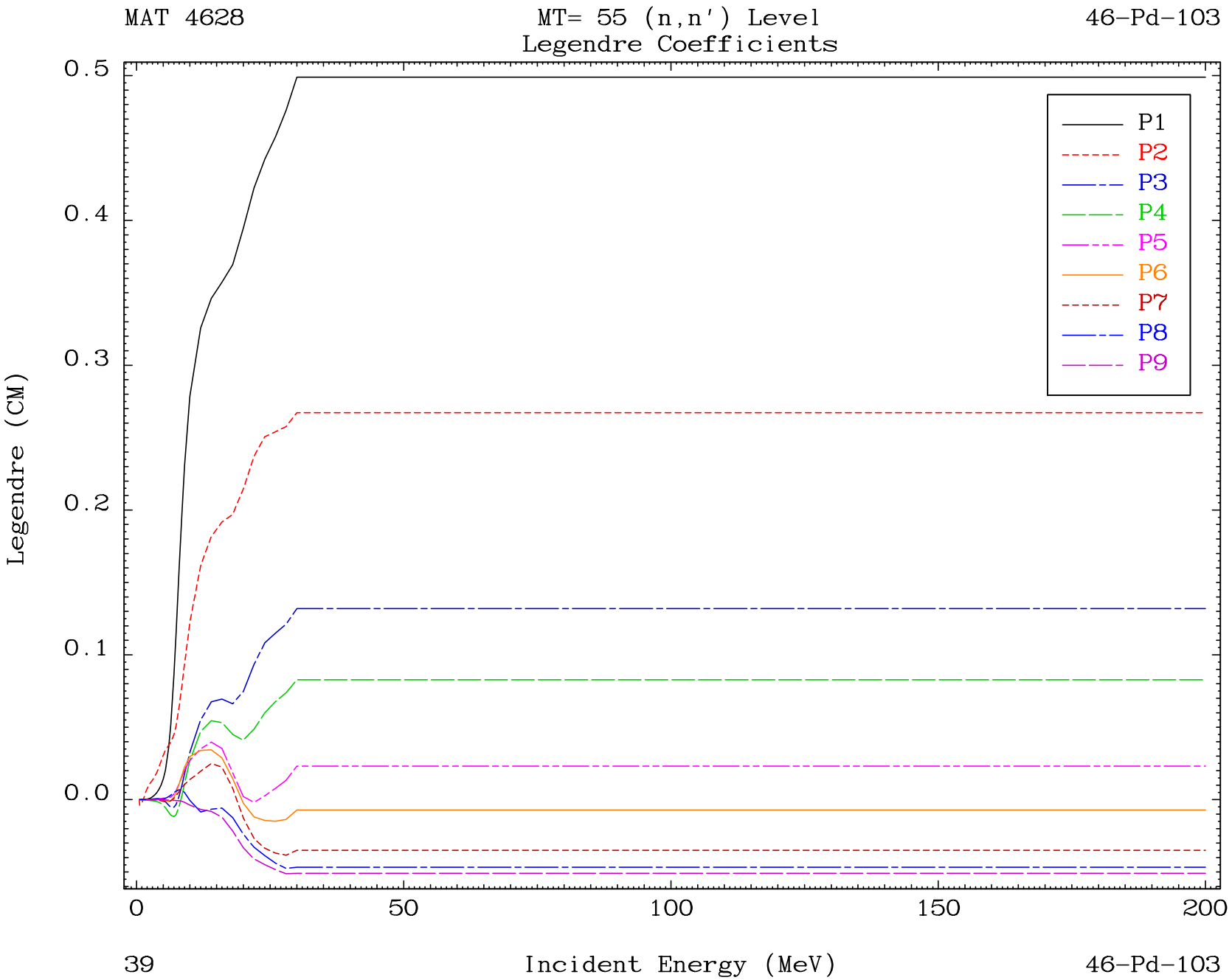

MAT 4628
MT= 53 (n,n') Level
Legendre Coefficients
46-Pd-103
X10-6
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
34
Incident Energy (MeV)
46-Pd-103

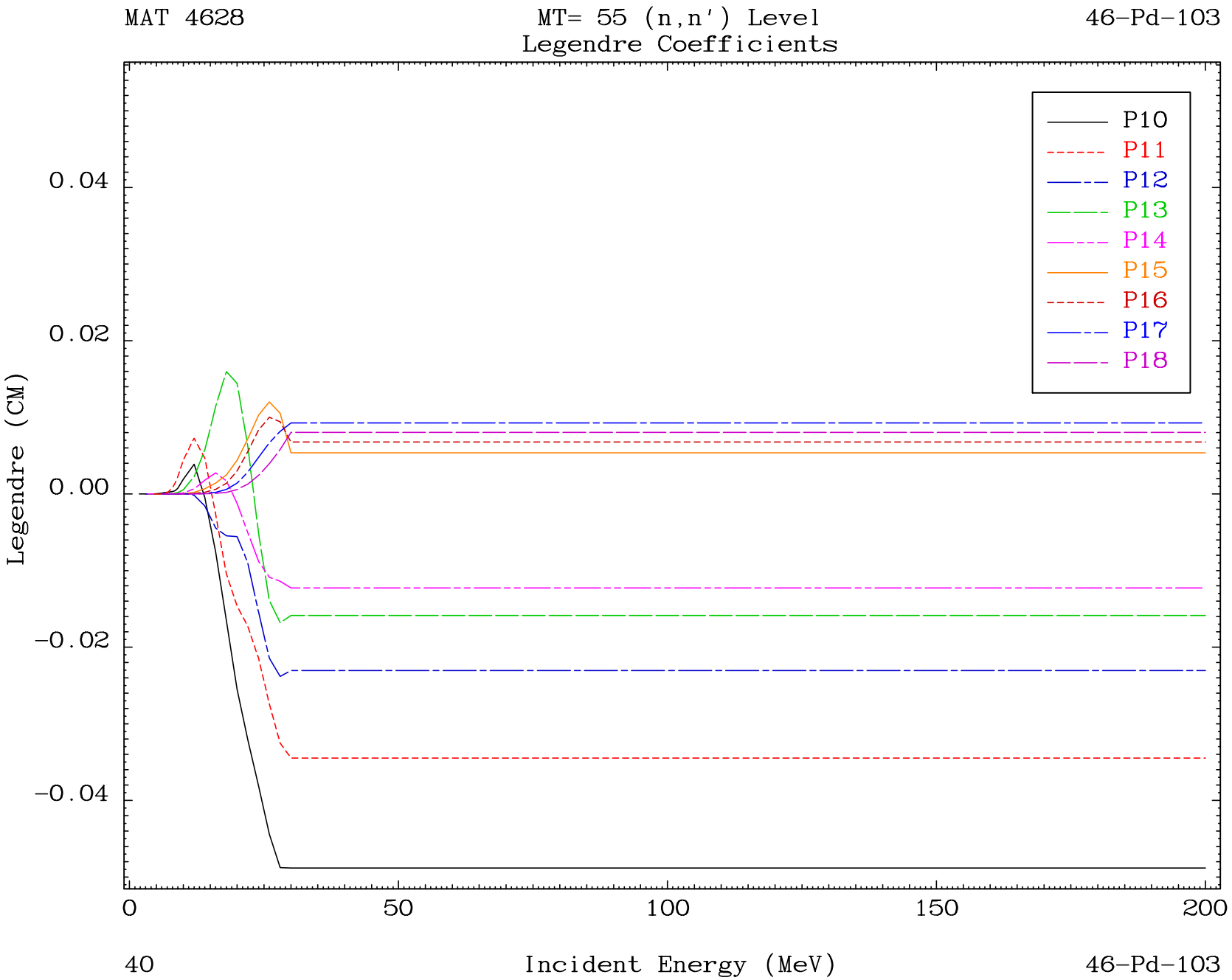

MAT 4628
MT= 54 (n,n') Level
Legendre Coefficients
46-Pd-103
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
35
Incident Energy (MeV)
46-Pd-103

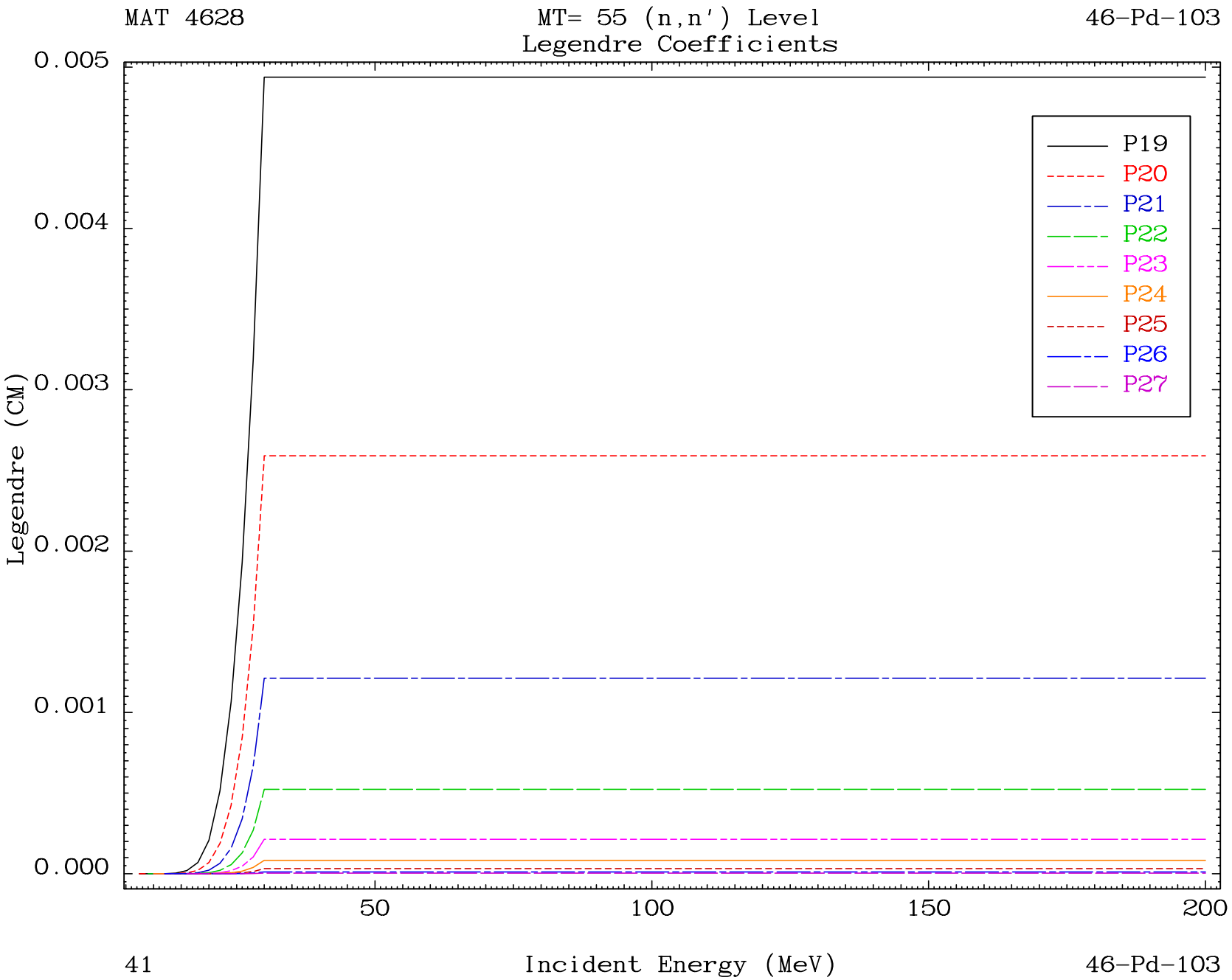

MAT 4628
MT= 54 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
36
Incident Energy (MeV)
46-Pd-103

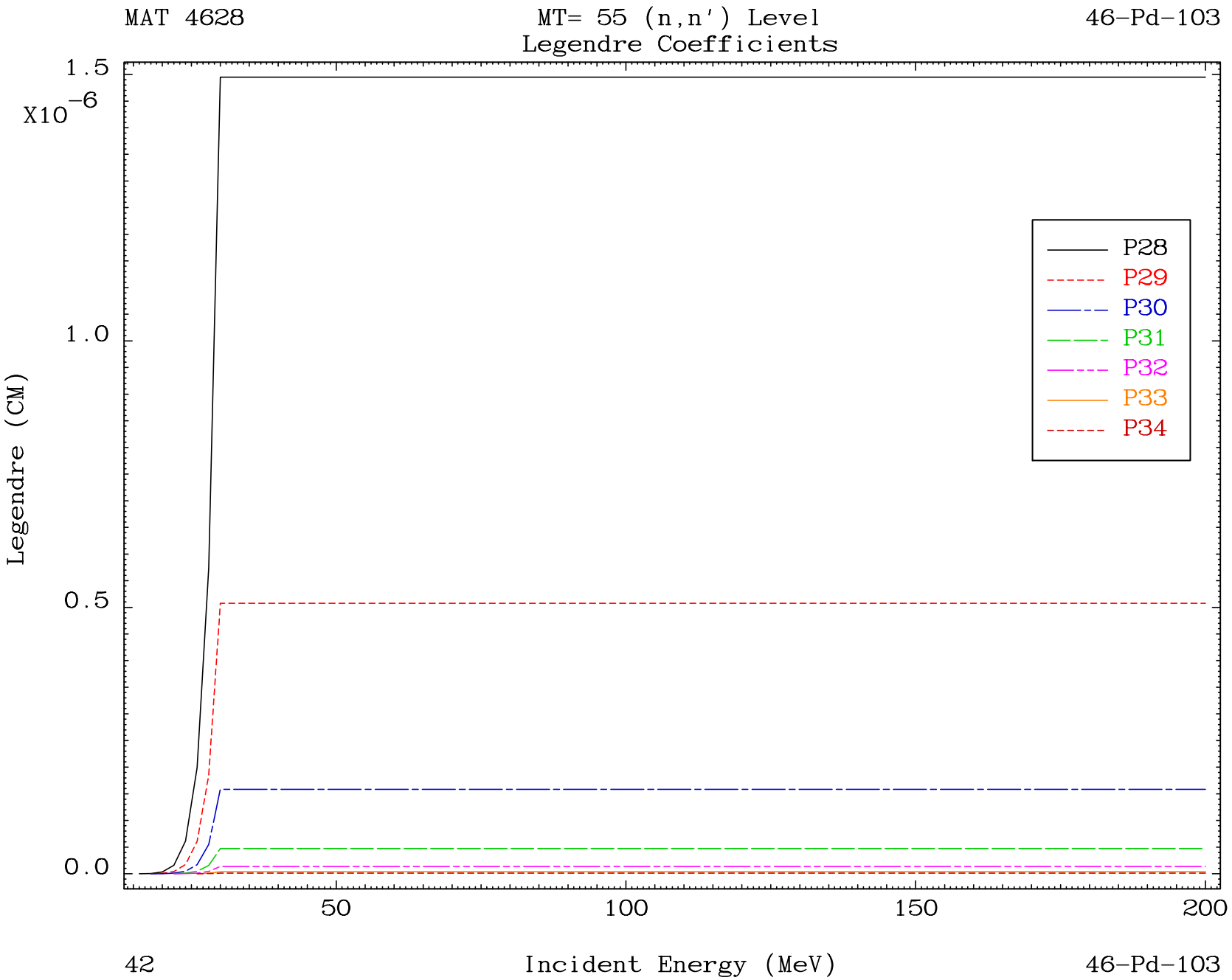

MAT 4628
MT= 54 (n,n') Level
Legendre Coefficients
46-Pd-103
0.005
0.004
0.003
0.002
0.001
0.000
Legendre (CM)
50
100
150
200
37
Incident Energy (MeV)
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27

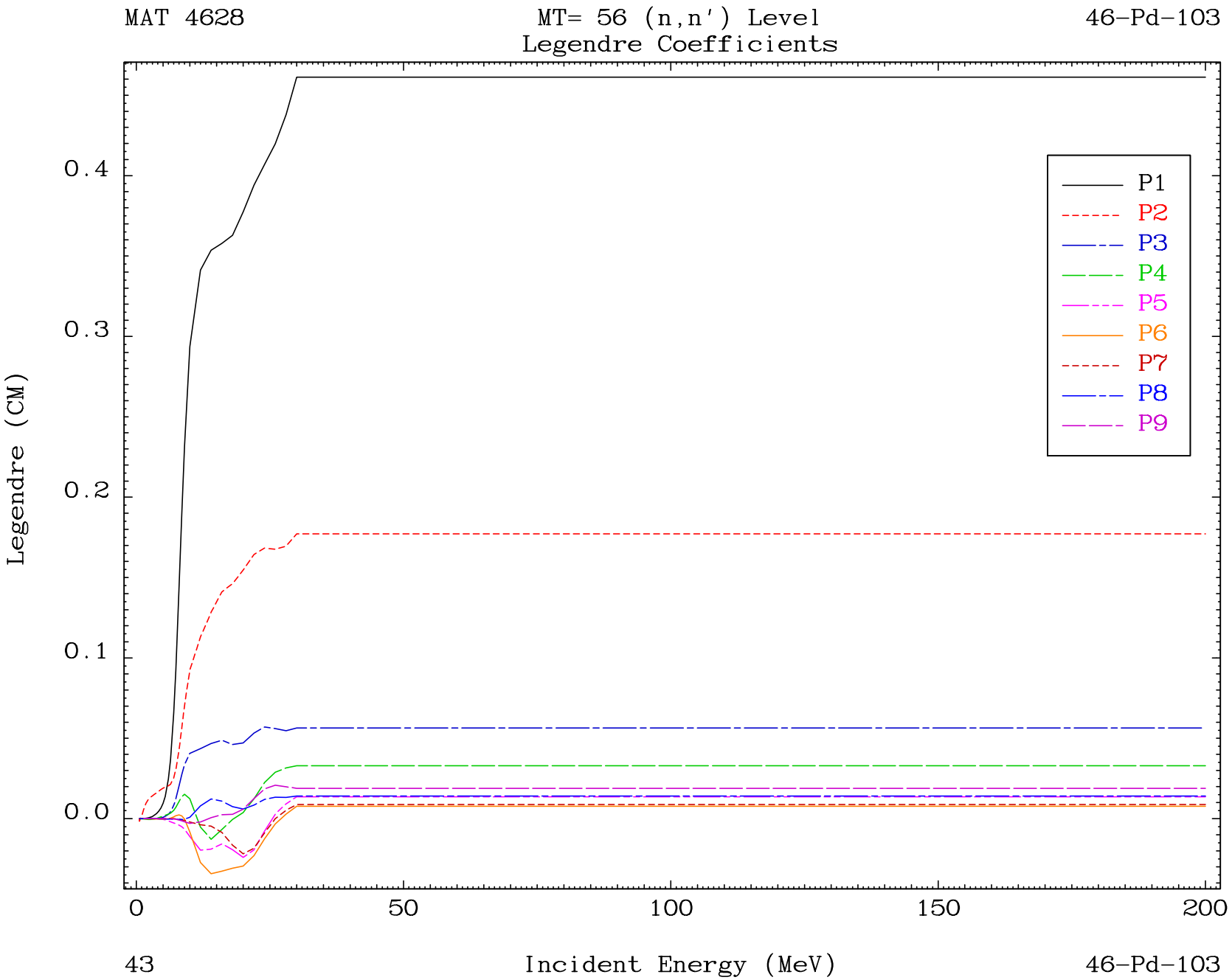

MAT 4628
MT= 54 (n,n') Level
Legendre Coefficients
46-Pd-103
1.5
X10 −6
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
38
Incident Energy (MeV)
46-Pd-103

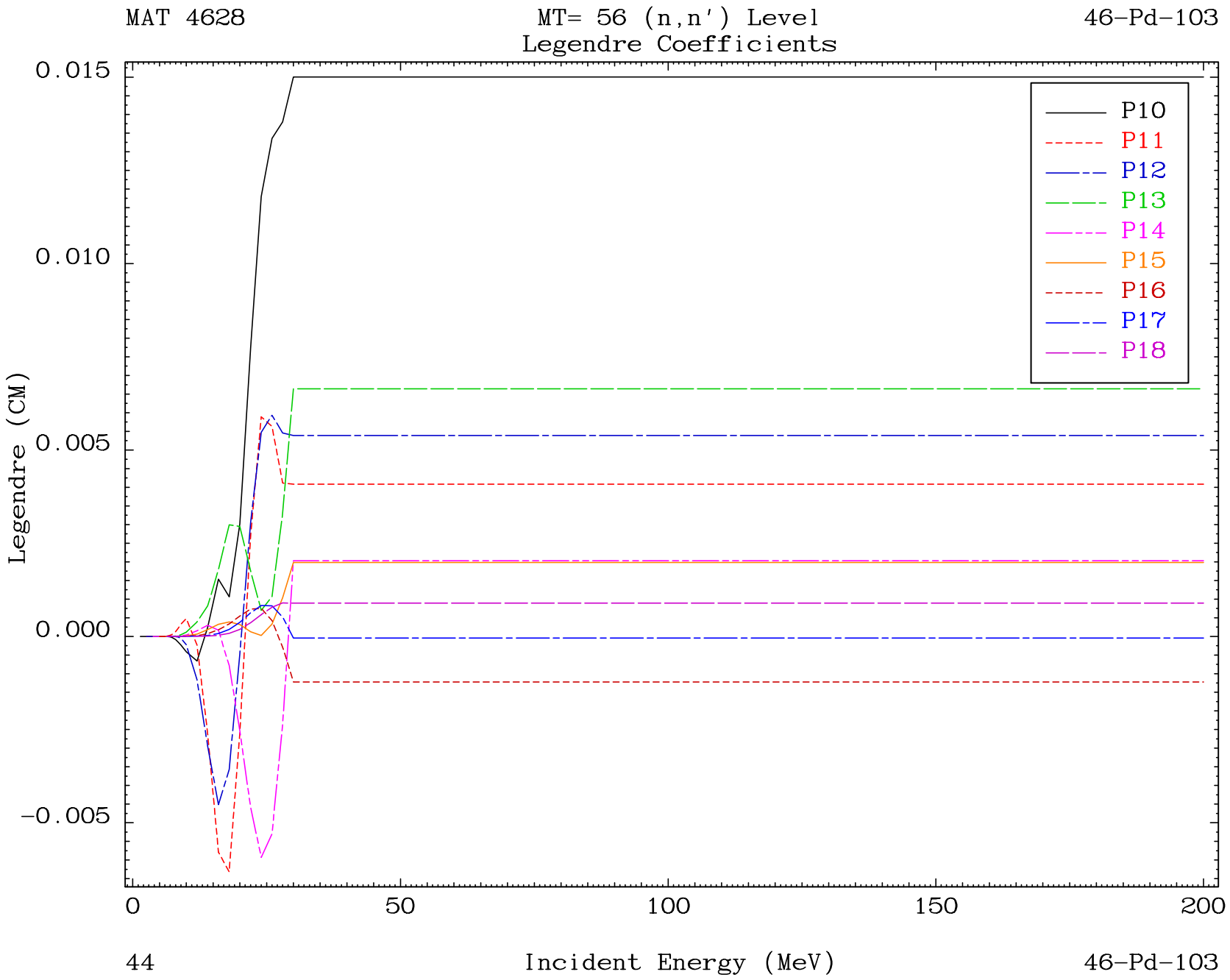

MAT 4628
MT= 55 (n,n') Level
Legendre Coefficients
46-Pd-103
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
39
Incident Energy (MeV)
46-Pd-103

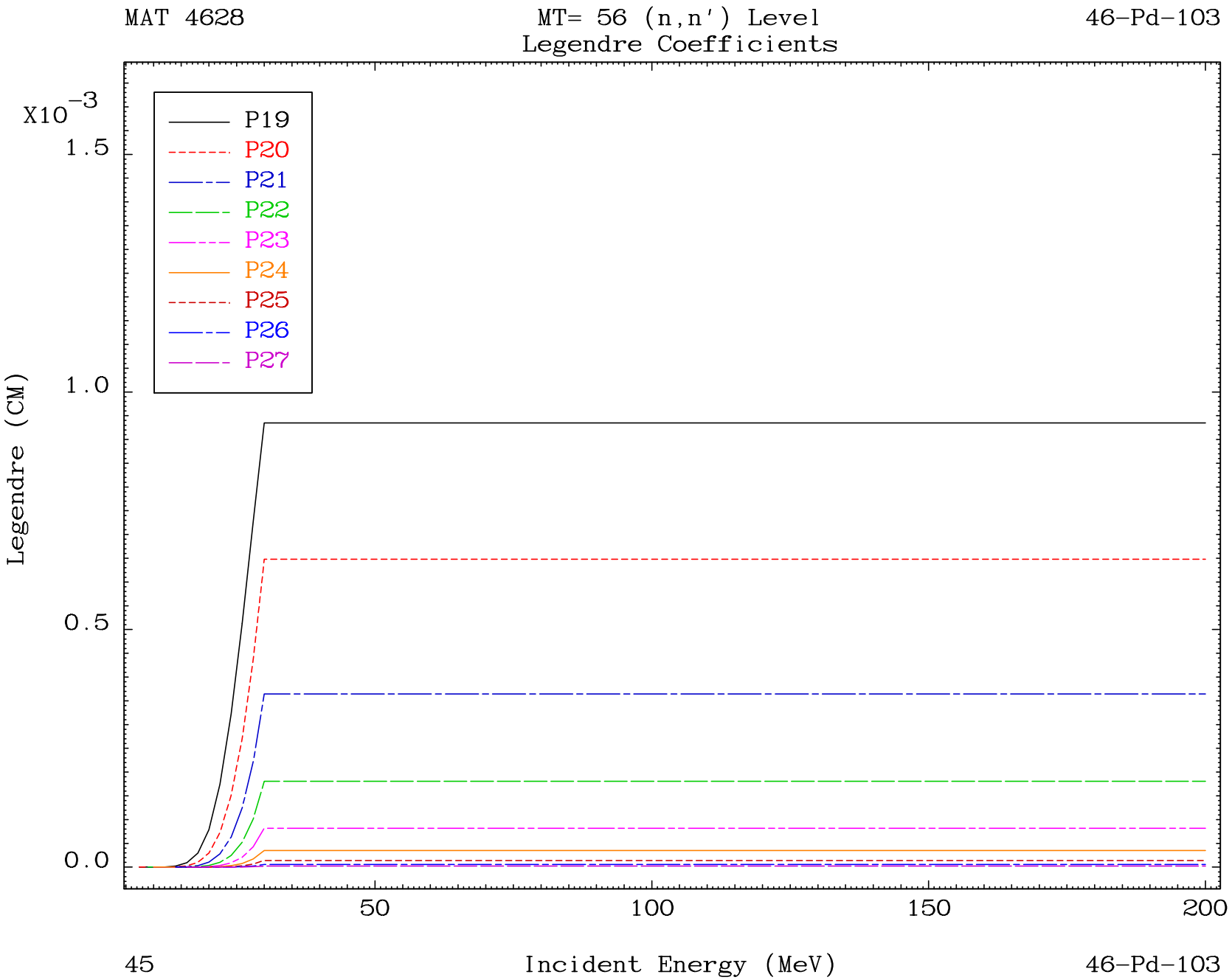

MAT 4628
MT= 55 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
40
Incident Energy (MeV)
46-Pd-103

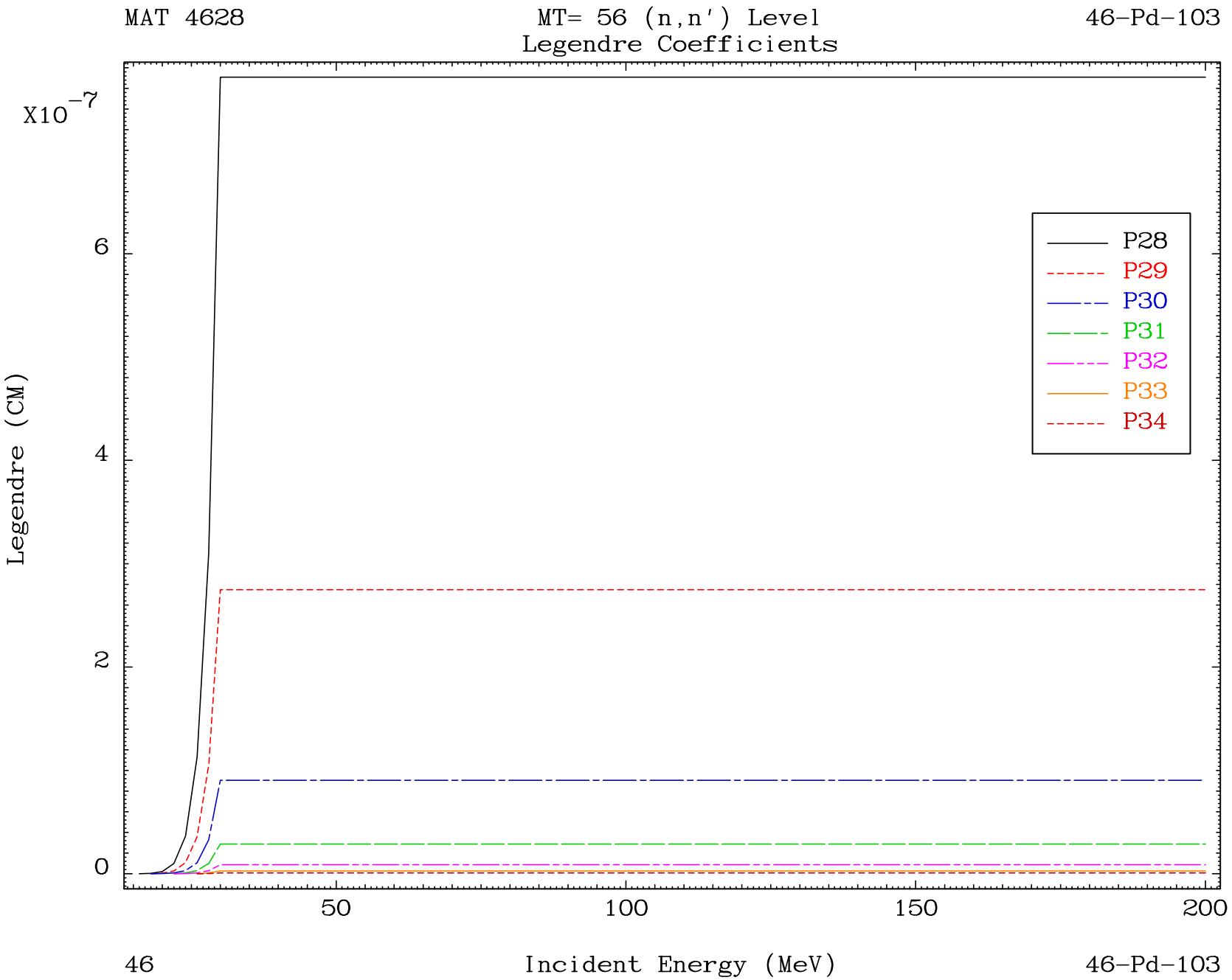

MAT 4628
MT= 55 (n,n') Level
Legendre Coefficients
46-Pd-103
0.005
0.004
0.003
0.002
0.001
0.000
Legendre (CM)
50
100
150
200
41
Incident Energy (MeV)
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27

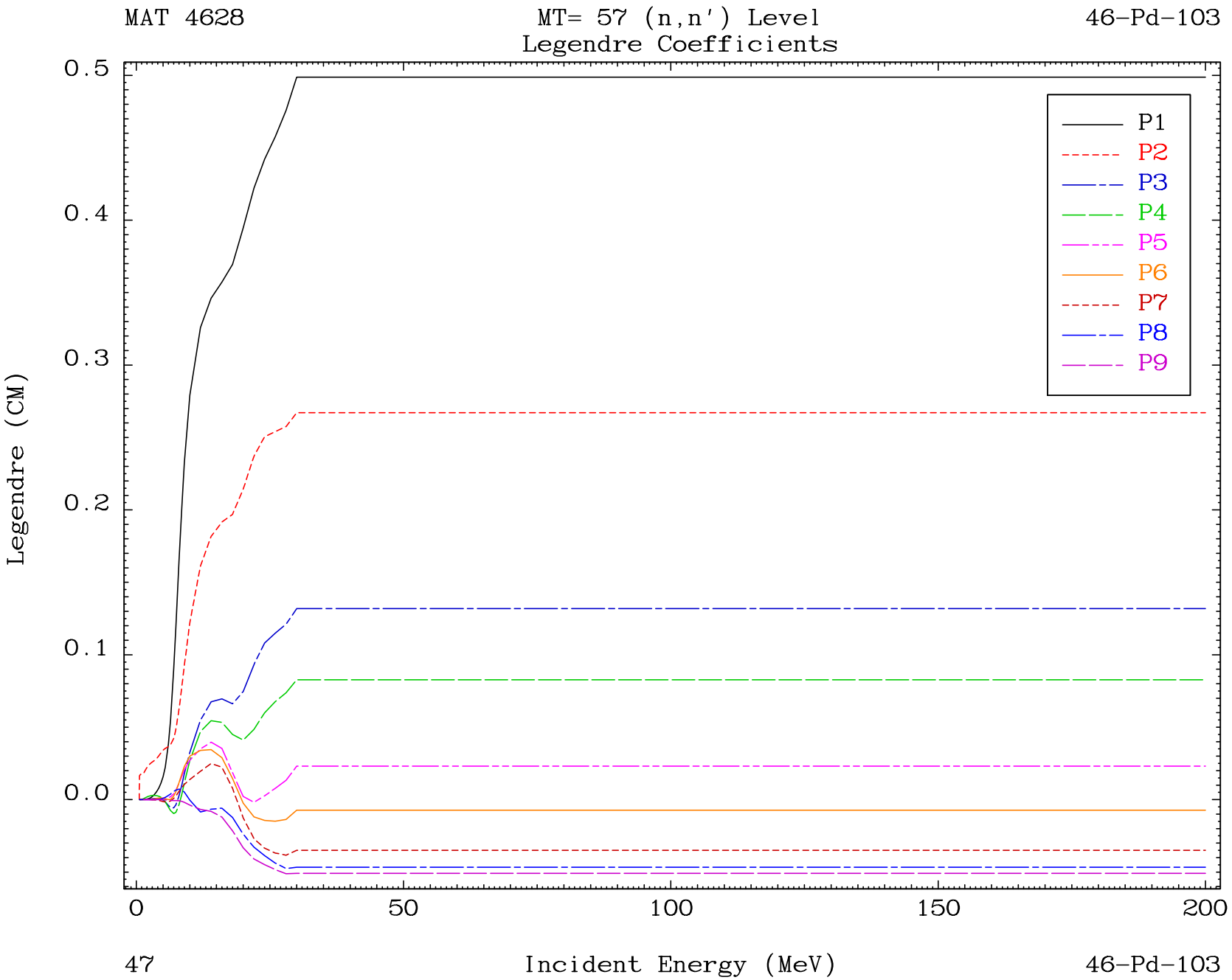

MAT 4628
MT= 55 (n,n') Level
Legendre Coefficients
46-Pd-103
1.5
X10 −6
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
42
Incident Energy (MeV)
46-Pd-103

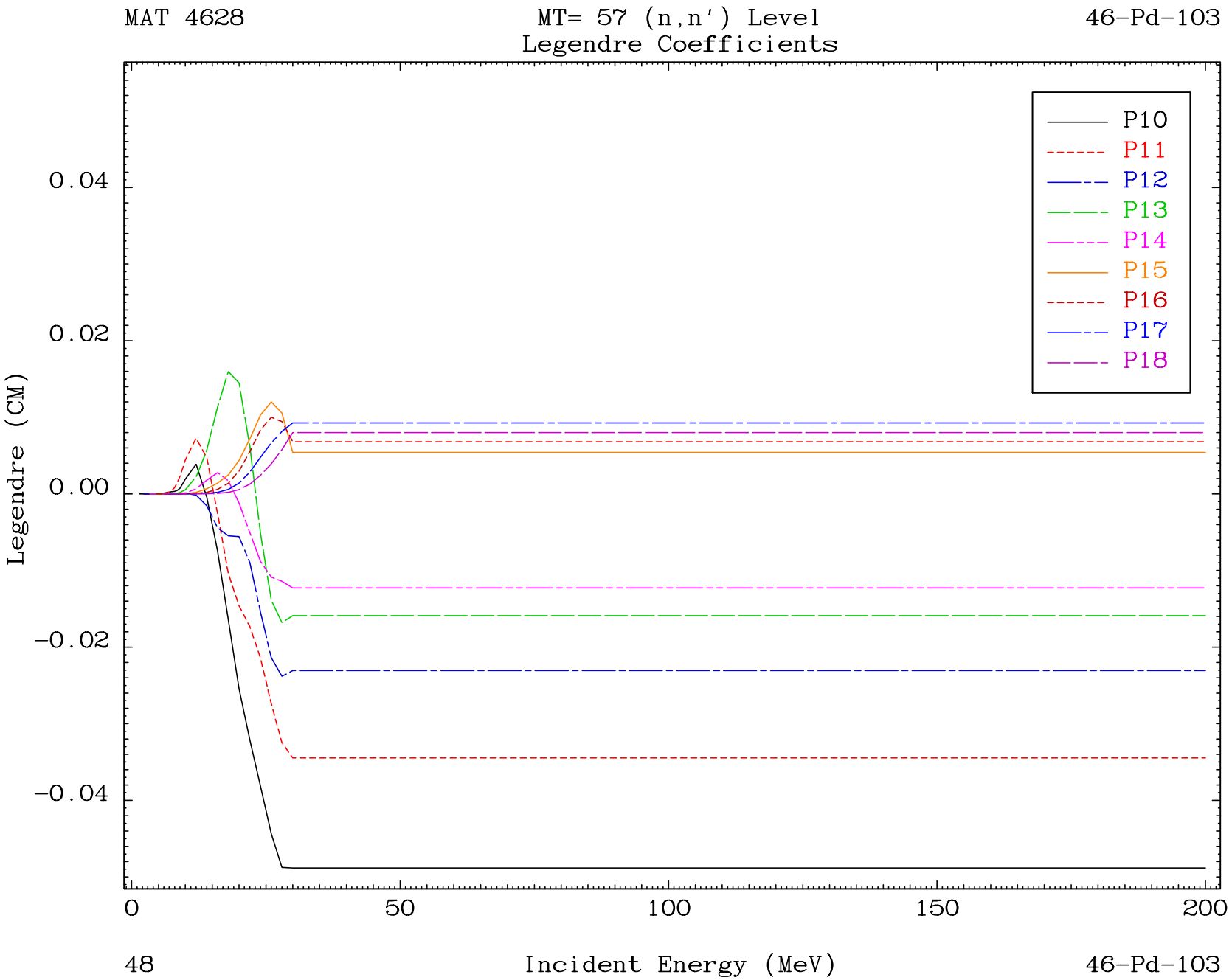

MAT 4628
MT= 56 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
43
Incident Energy (MeV)
46-Pd-103

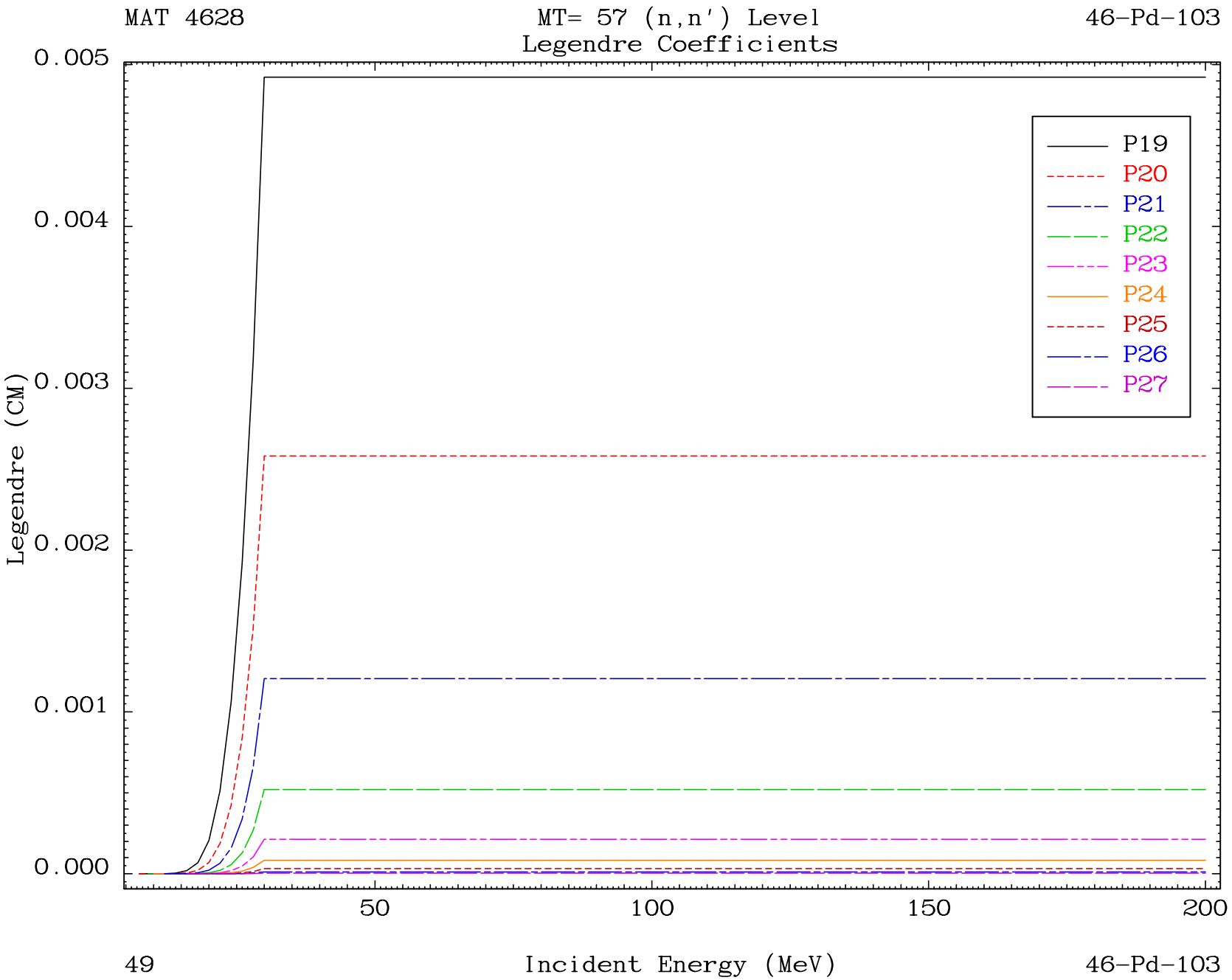

MAT 4628
MT= 56 (n,n') Level
Legendre Coefficients
46-Pd-103
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
44
Incident Energy (MeV)
46-Pd-103

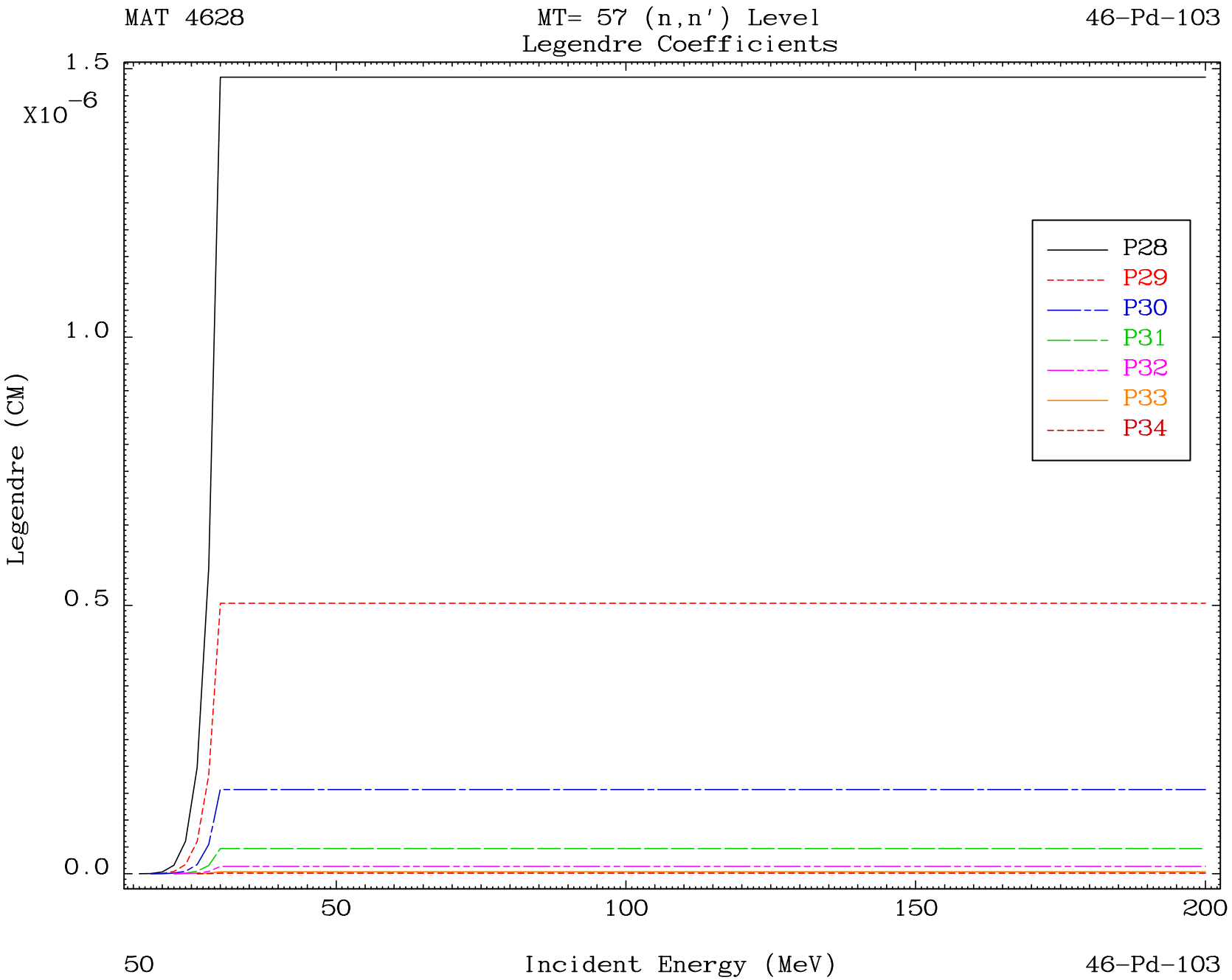

MAT 4628
MT= 56 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
45
Incident Energy (MeV)
46-Pd-103

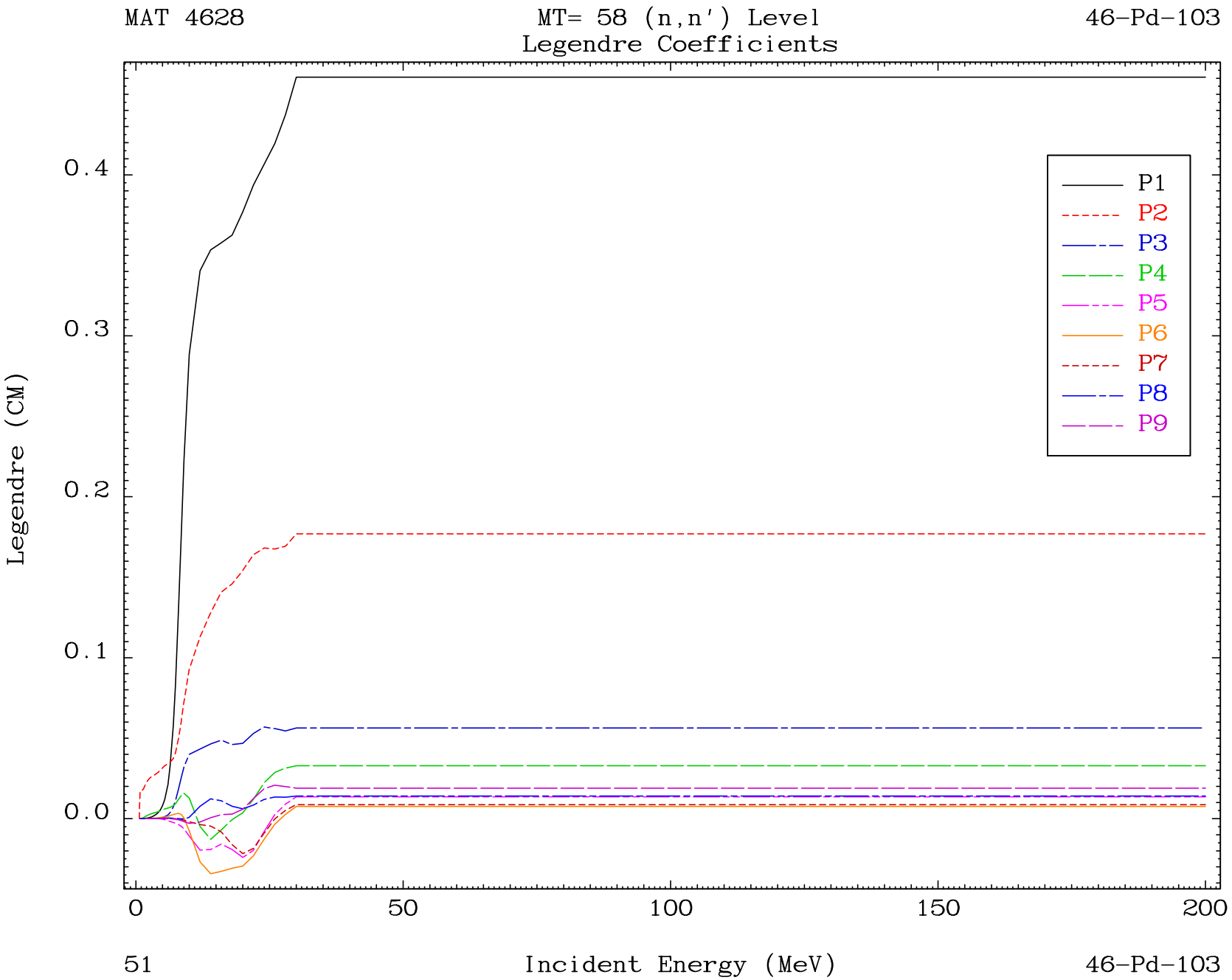

MAT 4628
MT= 56 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-7
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
46
Incident Energy (MeV)
46-Pd-103

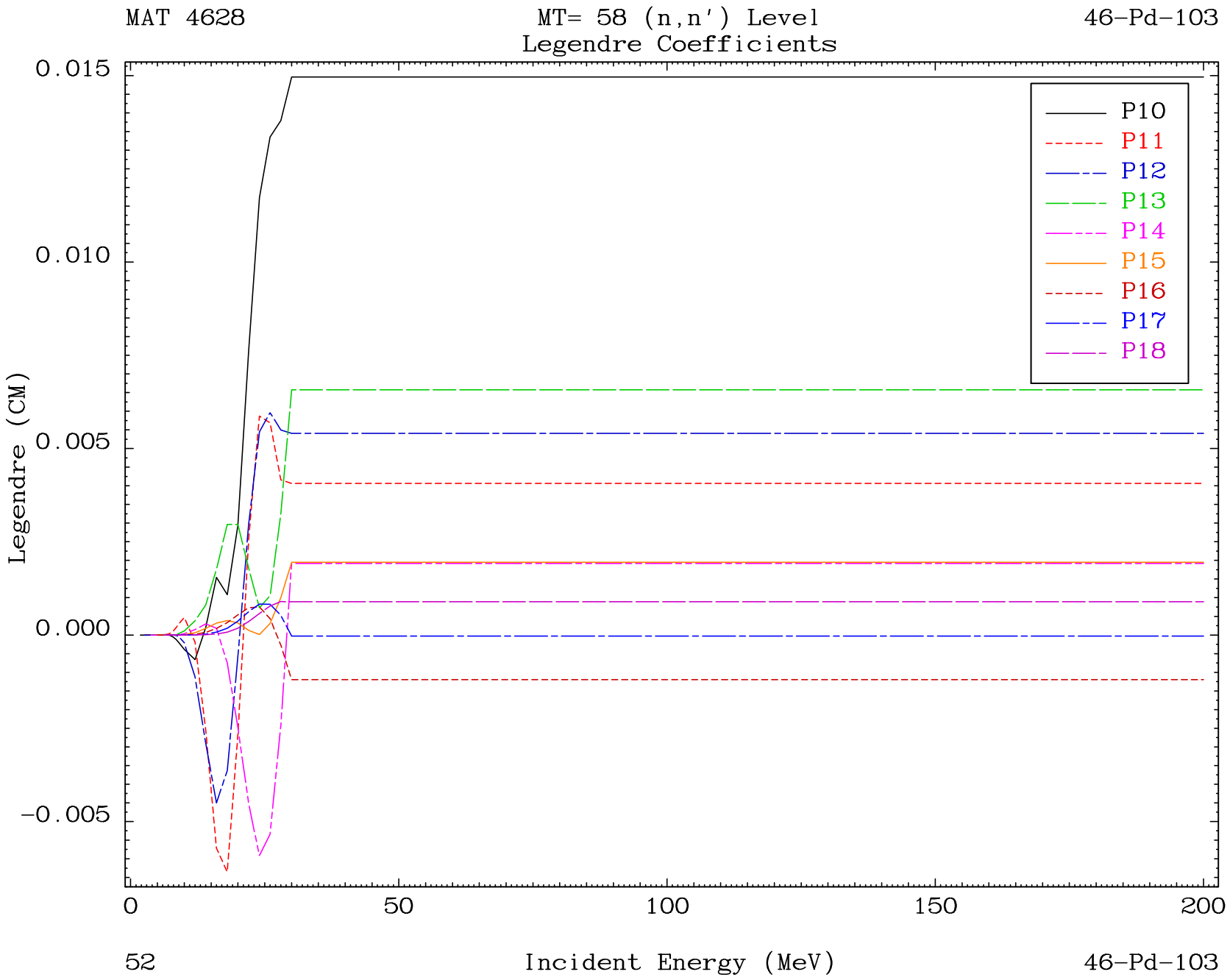

MAT 4628
MT= 57 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
47
Incident Energy (MeV)
46-Pd-103

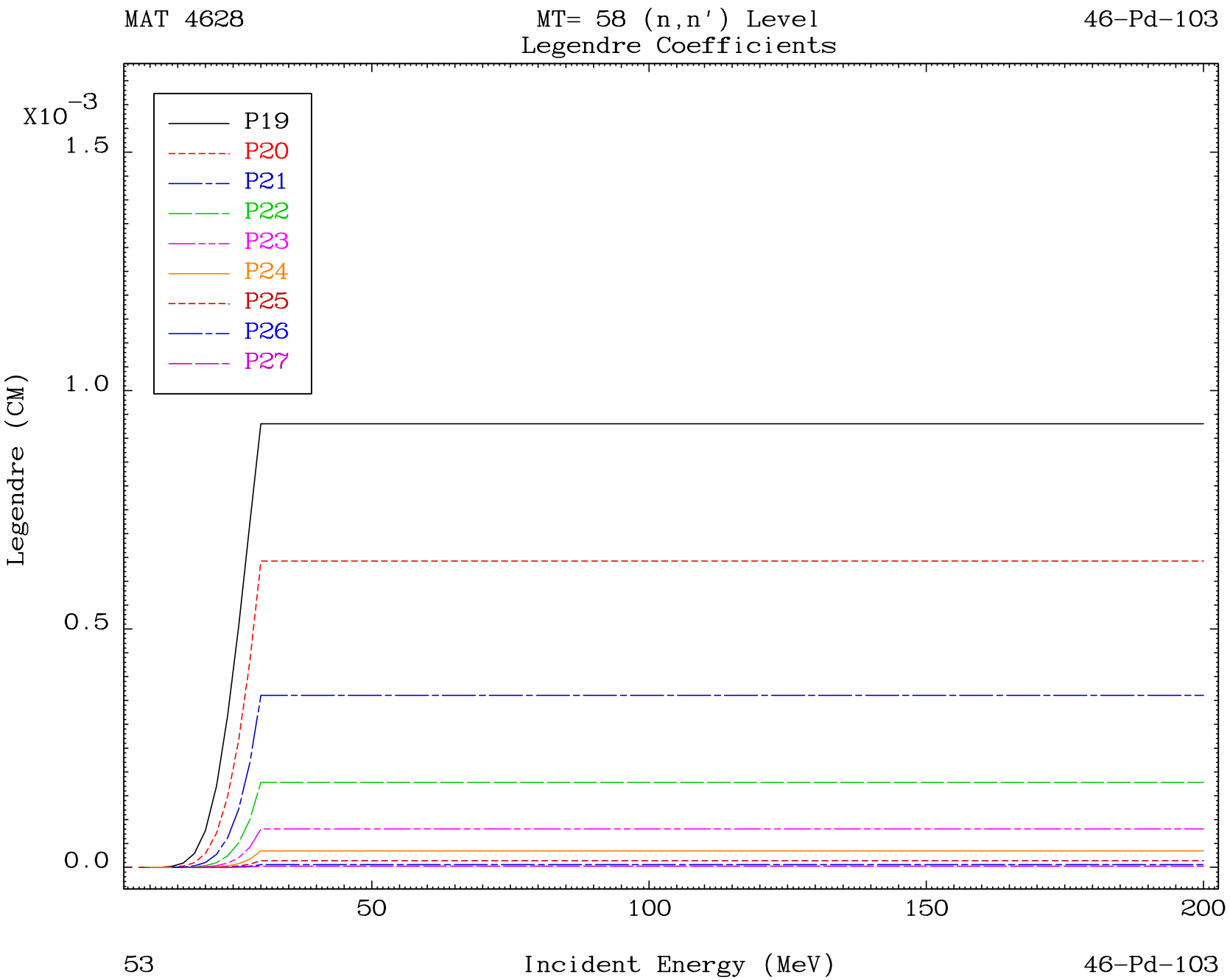

MAT 4628
MT= 57 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
48
Incident Energy (MeV)
46-Pd-103

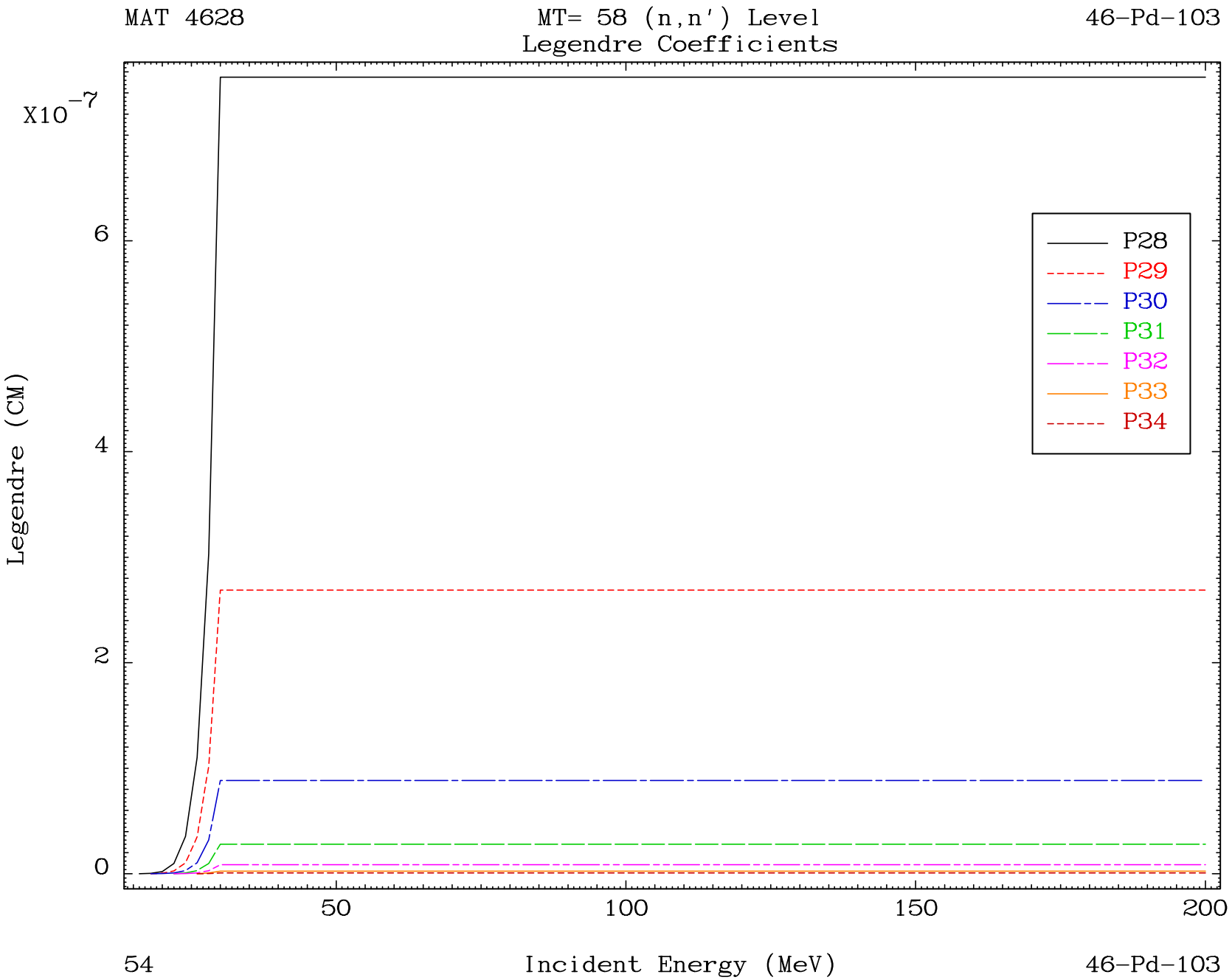

MAT 4628
MT= 57 (n,n') Level
Legendre Coefficients
46-Pd-103
0.005
0.004
0.003
0.002
0.001
0.000
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
49
Incident Energy (MeV)
46-Pd-103

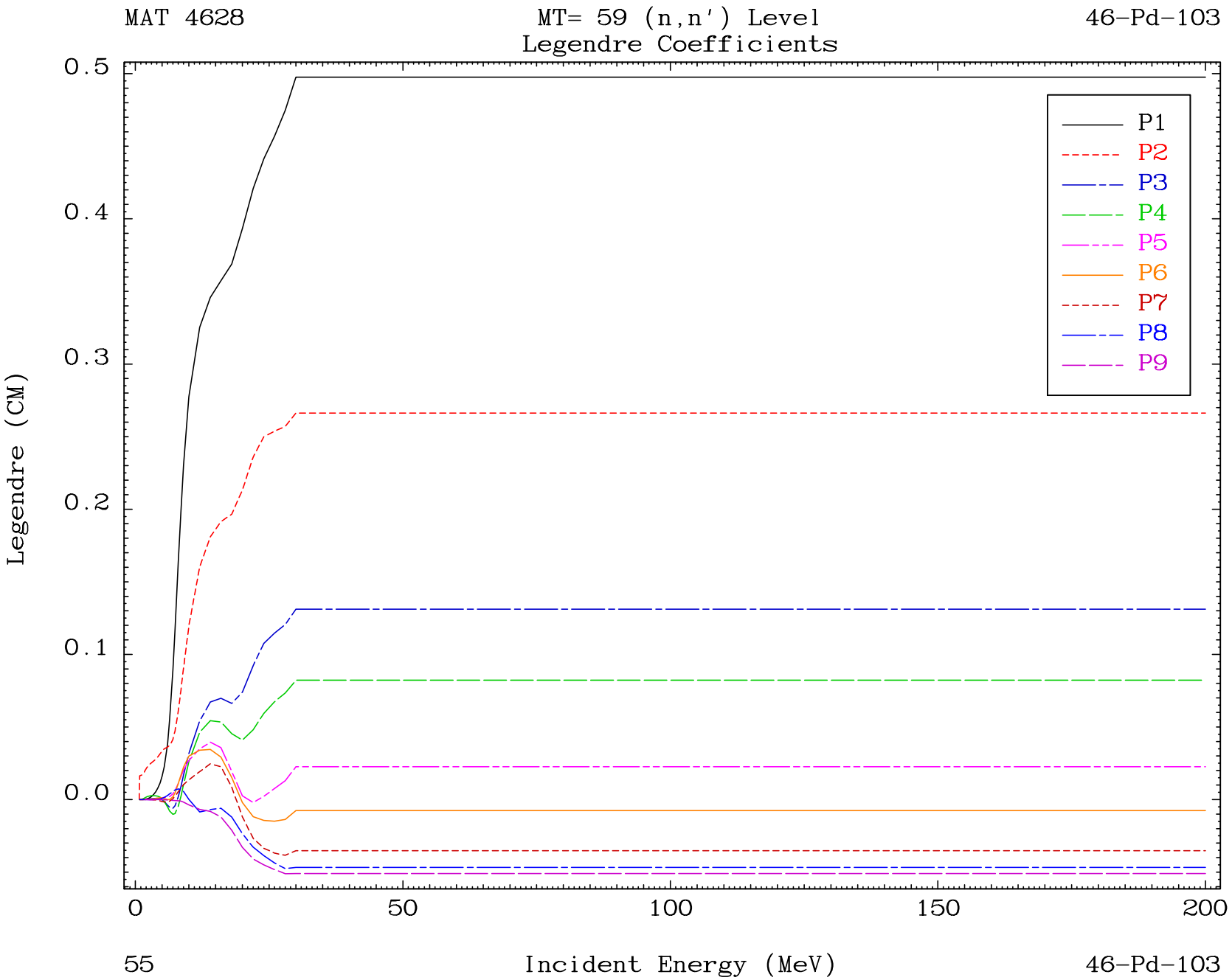

MAT 4628
MT= 57 (n,n') Level
Legendre Coefficients
46-Pd-103
1.5
X10 −6
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
50
Incident Energy (MeV)
46-Pd-103

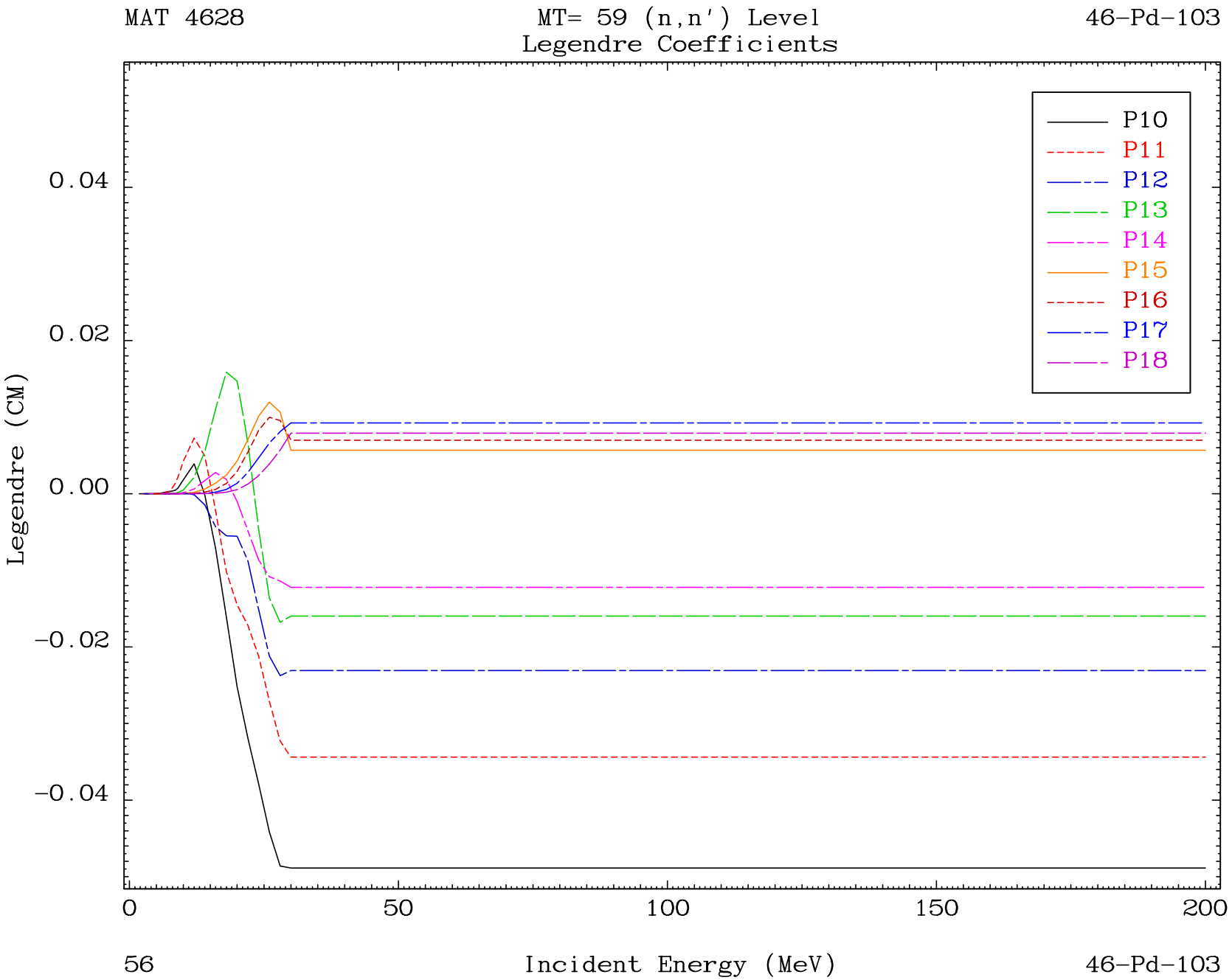

MAT 4628
MT= 58 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
51
Incident Energy (MeV)
46-Pd-103

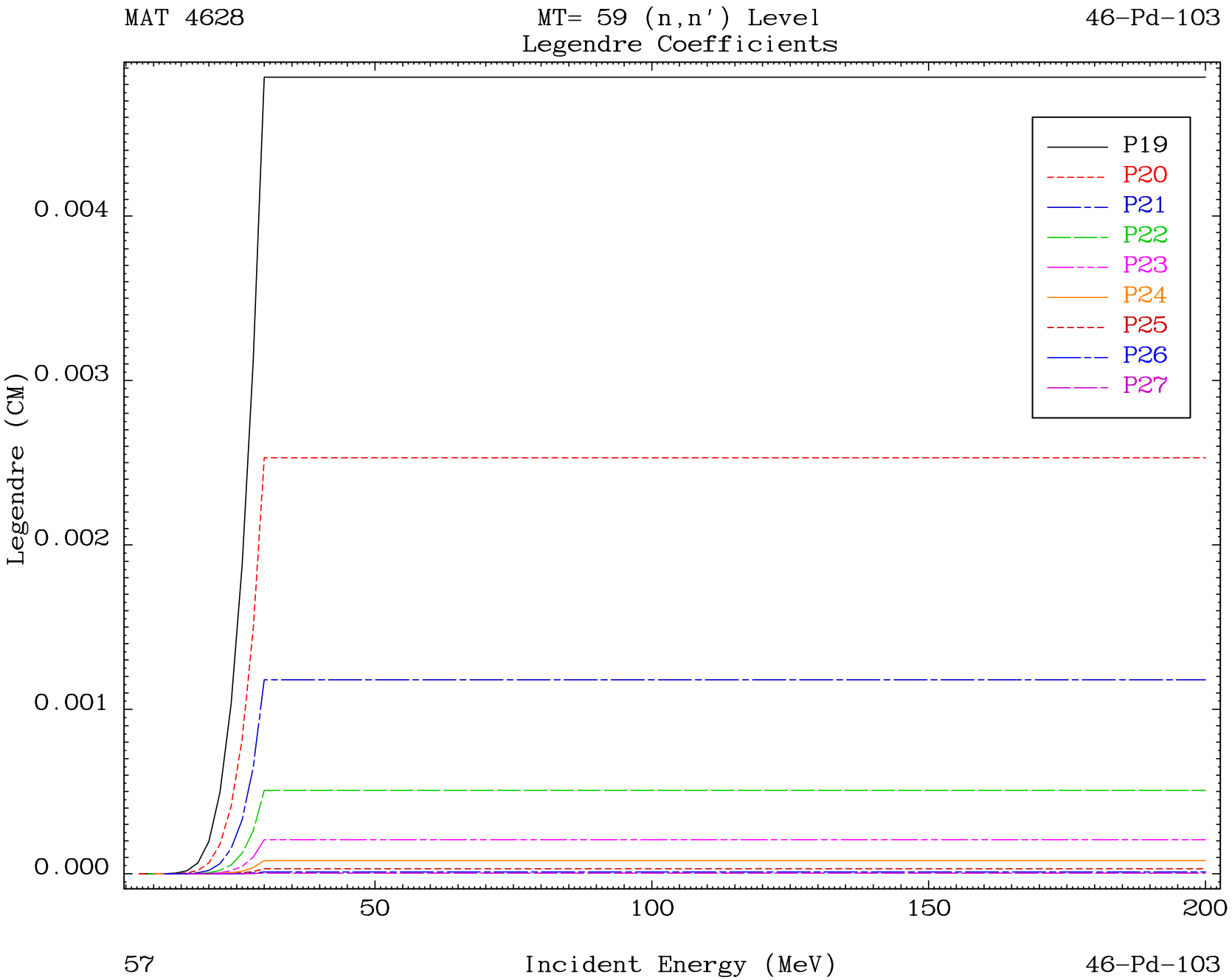

MAT 4628
MT= 58 (n,n') Level
Legendre Coefficients
46-Pd-103
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
52
Incident Energy (MeV)
46-Pd-103

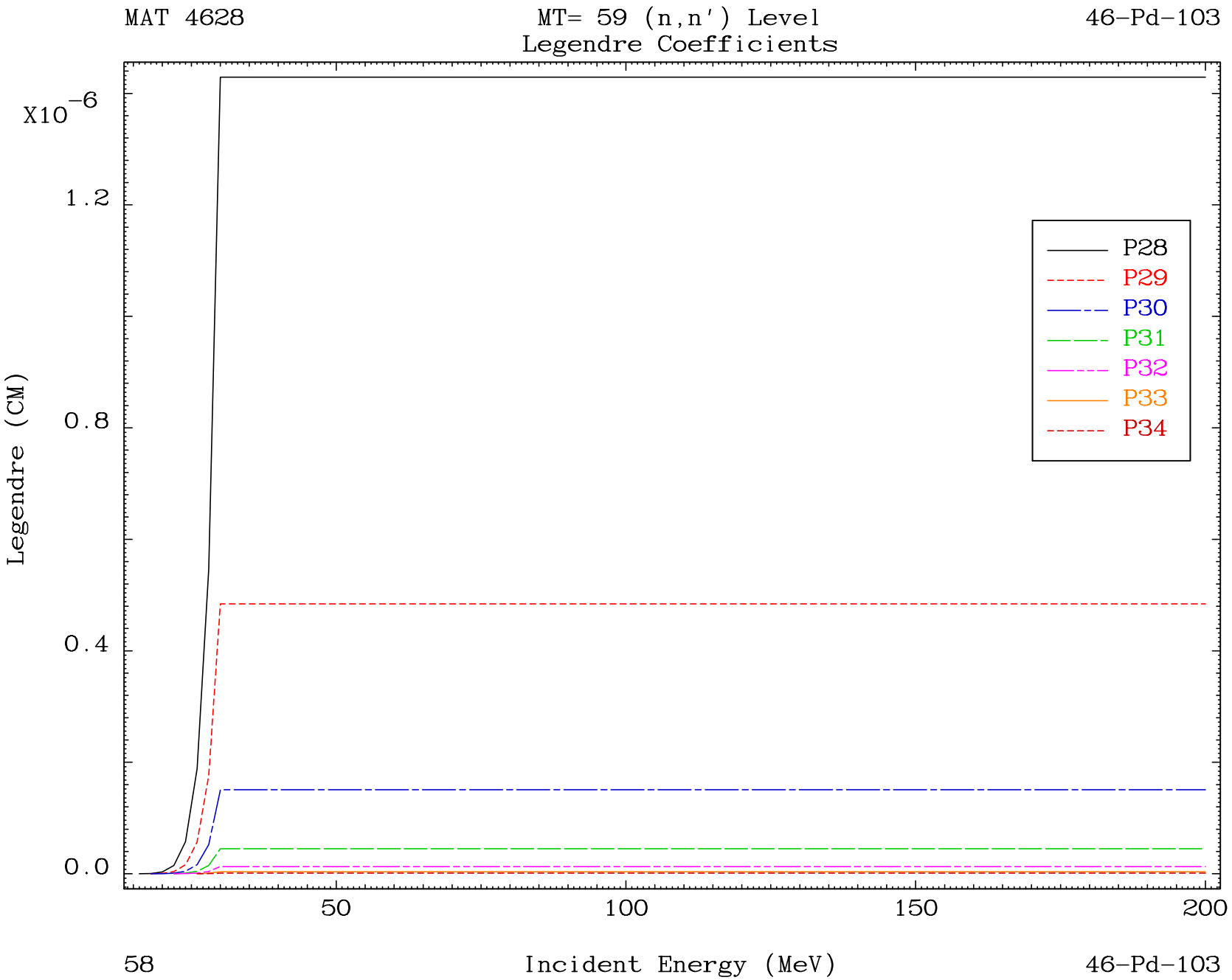

MAT 4628
MT= 58 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
53
Incident Energy (MeV)
46-Pd-103

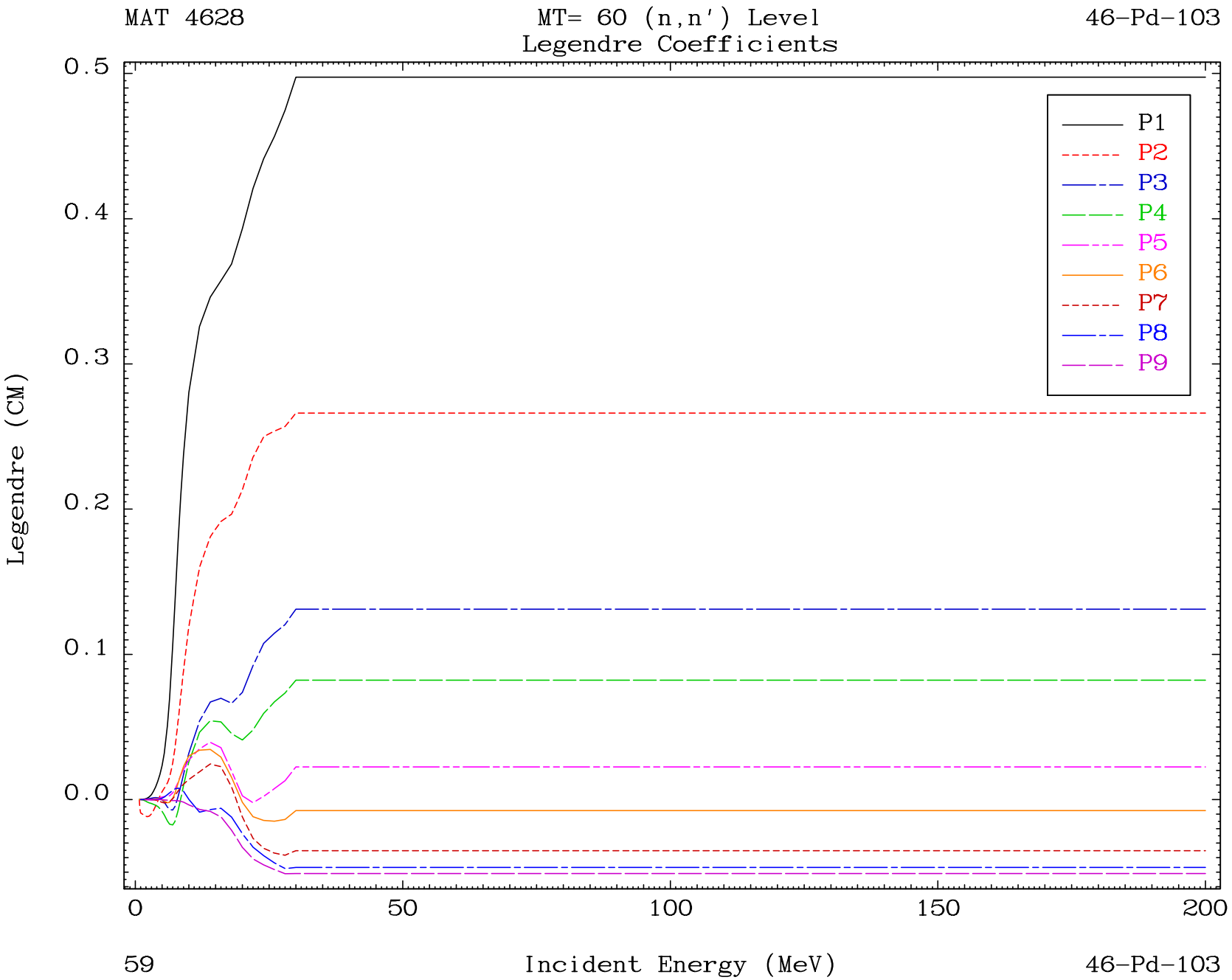

MAT 4628
MT= 58 (n,n') Level
Legendre Coefficients
46-Pd-103
X10-7
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
54
Incident Energy (MeV)
46-Pd-103

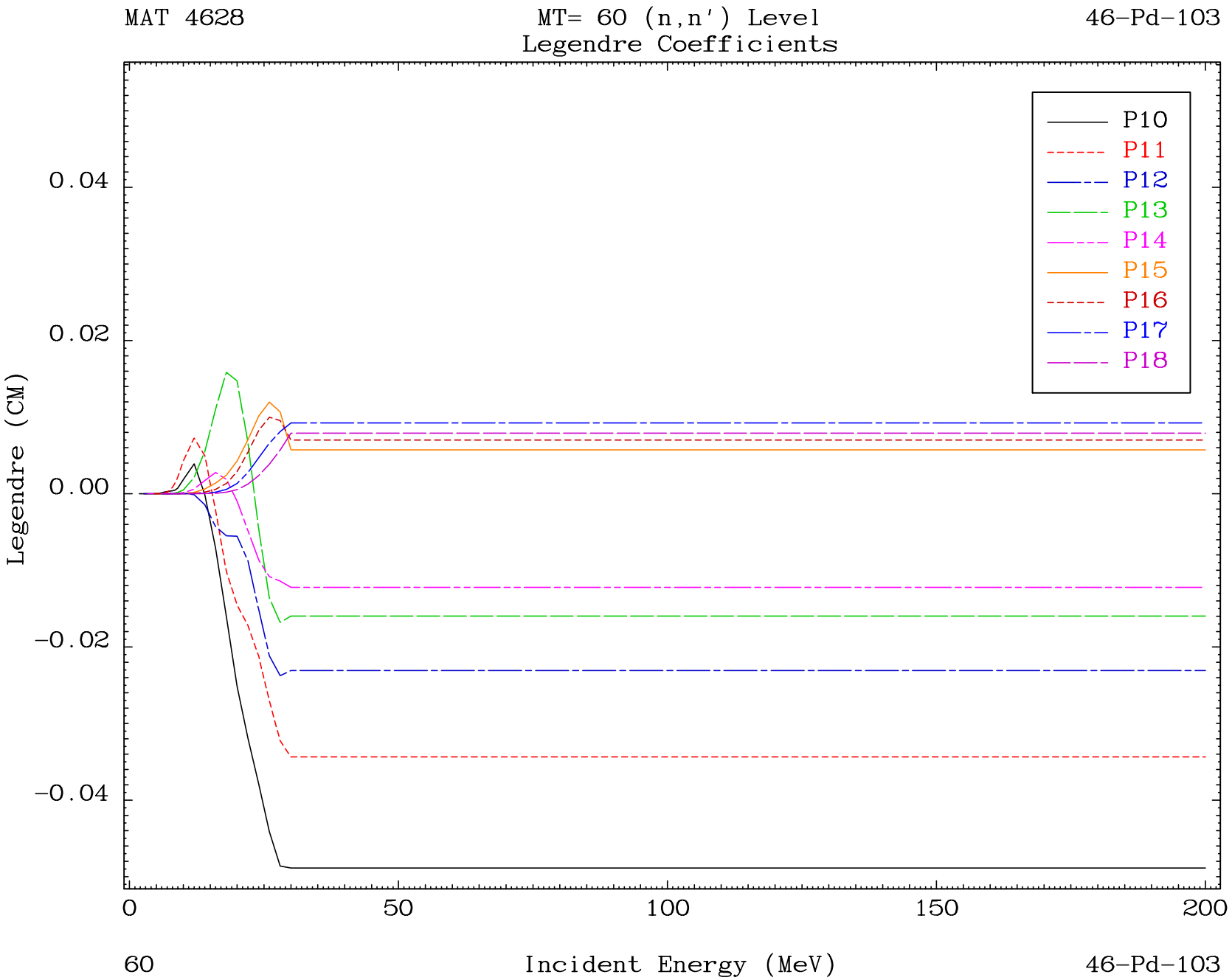

MAT 4628
MT= 59 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
55
Incident Energy (MeV)
46-Pd-103

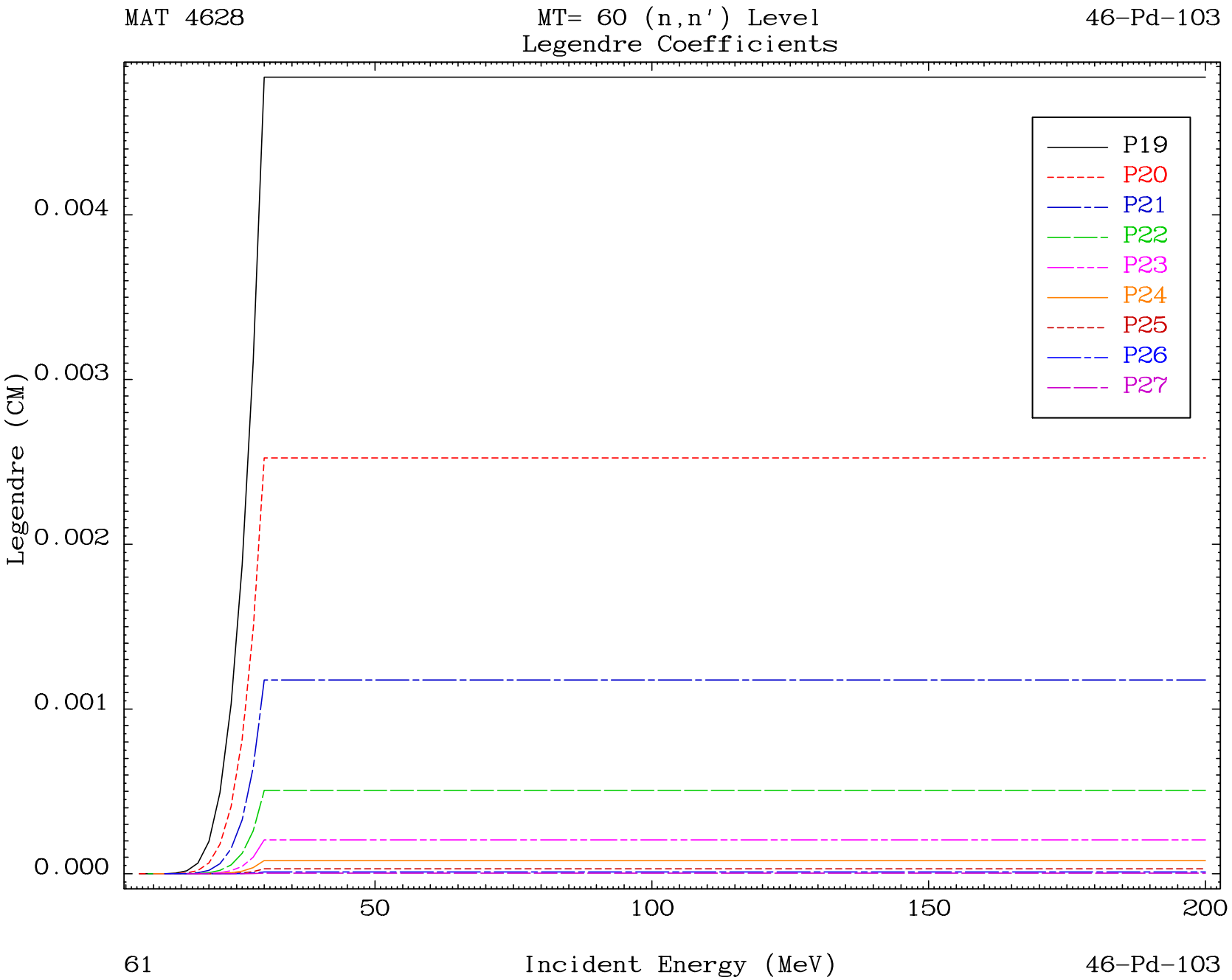

MAT 4628
MT= 59 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
56
Incident Energy (MeV)
46-Pd-103

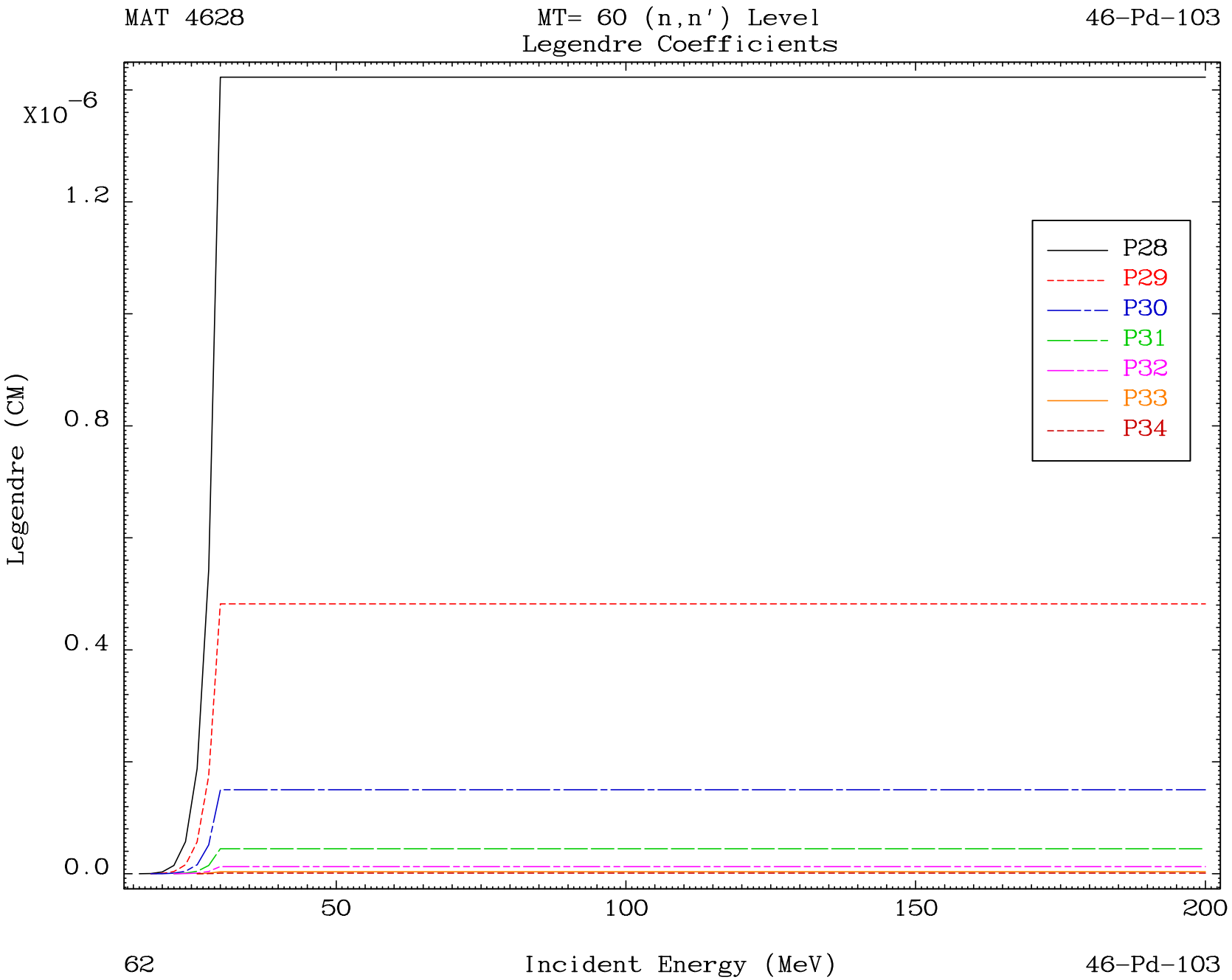

MAT 4628
MT= 59 (n,n') Level
Legendre Coefficients
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.004
0.003
0.002
0.001
0.000
Legendre (CM)
50
100
150
200
57
Incident Energy (MeV)
46-Pd-103

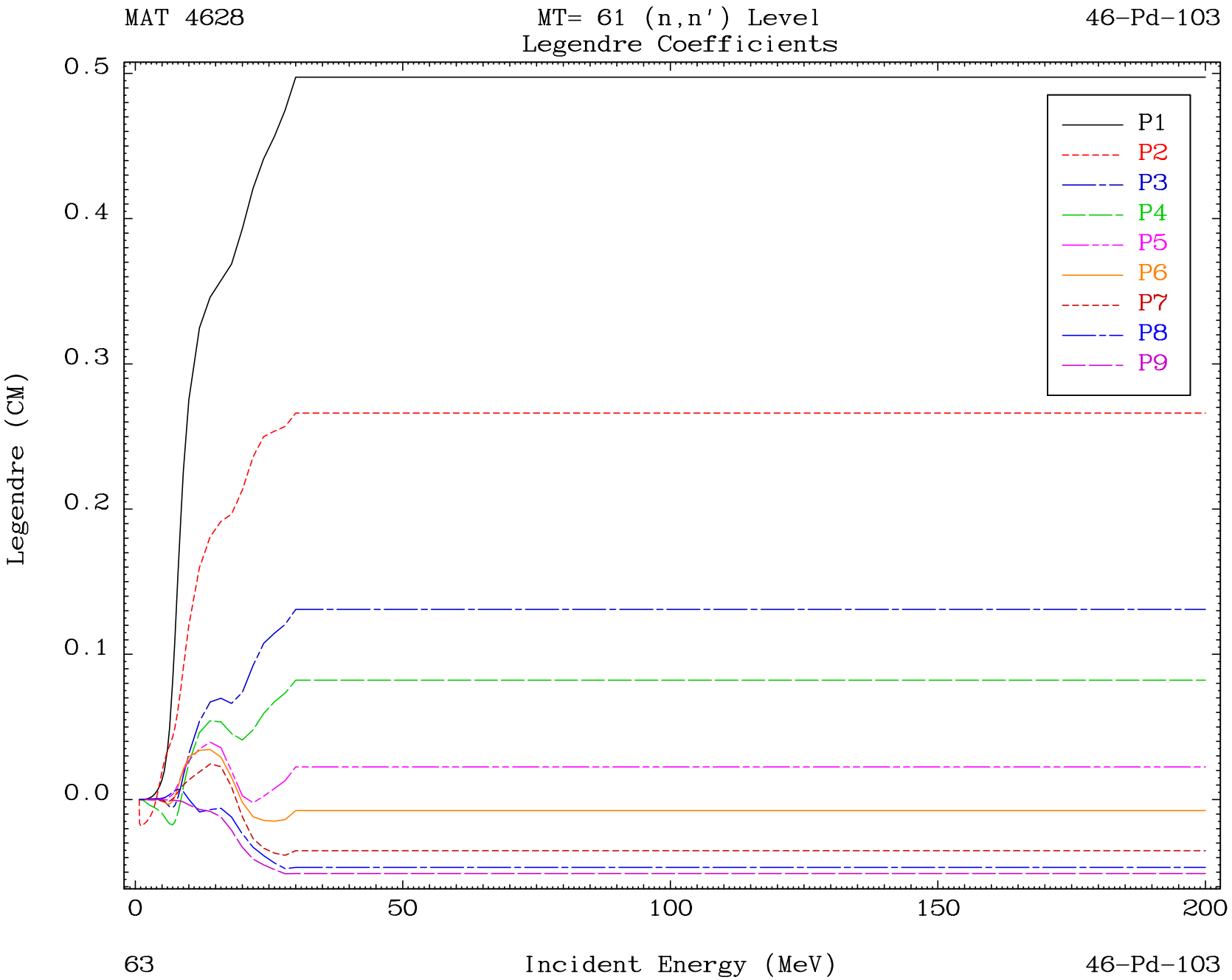

MAT 4628
MT= 59 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-6
1.2
0.8
0.4
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
58
Incident Energy (MeV)
46-Pd-103

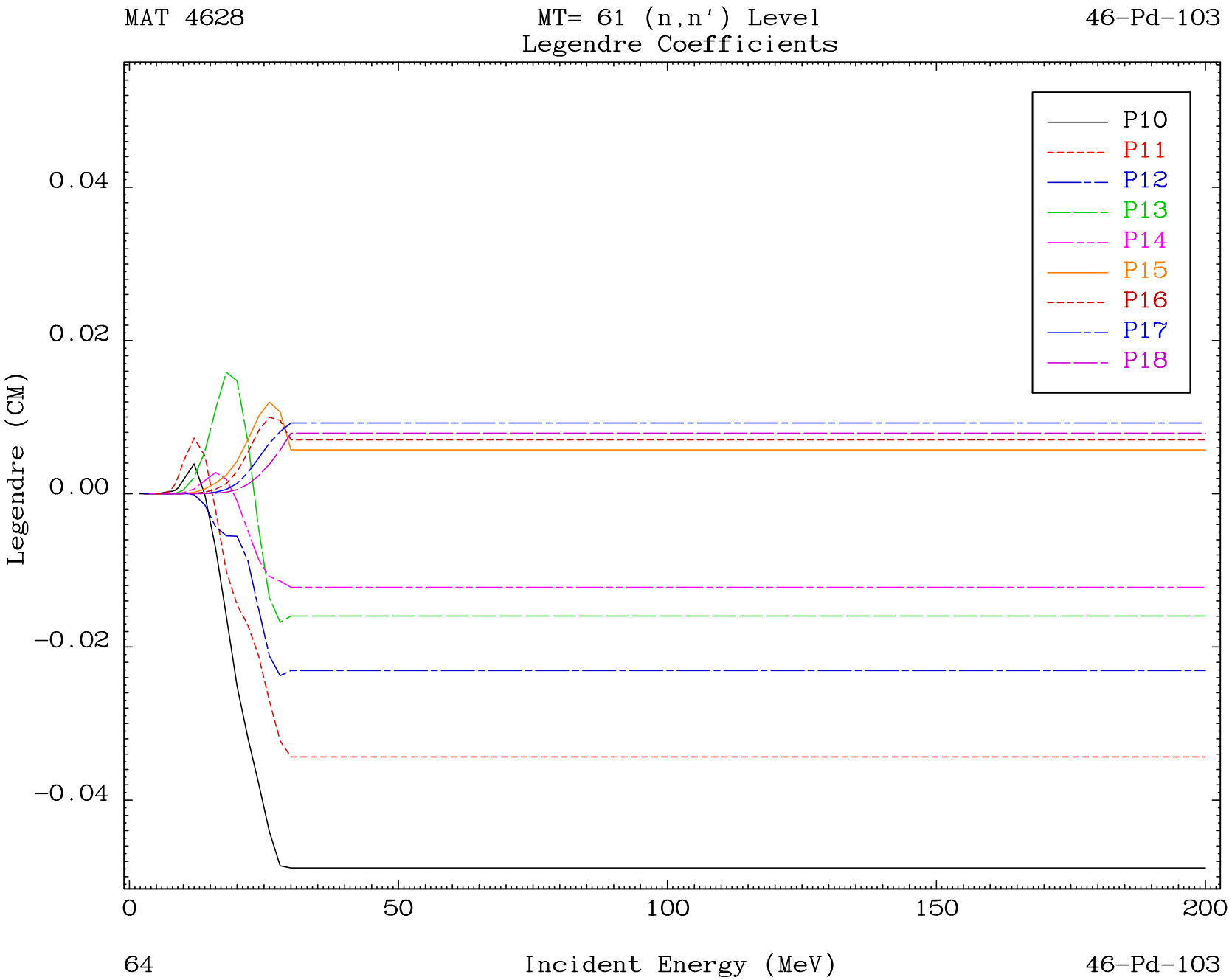

MAT 4628
MT= 60 (n,n') Level
Legendre Coefficients
46-Pd-103
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
59
Incident Energy (MeV)
46-Pd-103

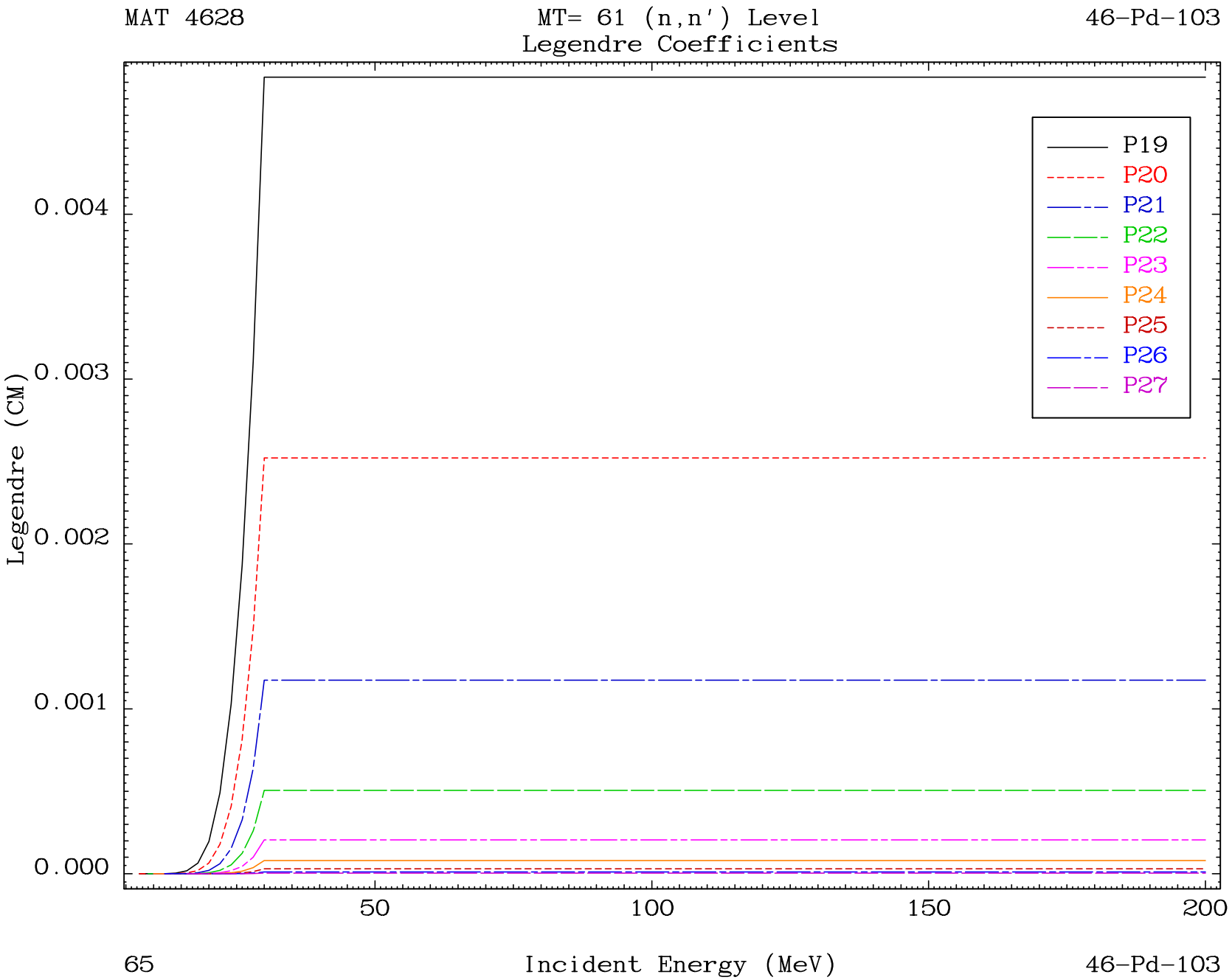

MAT 4628
MT= 60 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
60
Incident Energy (MeV)
46-Pd-103

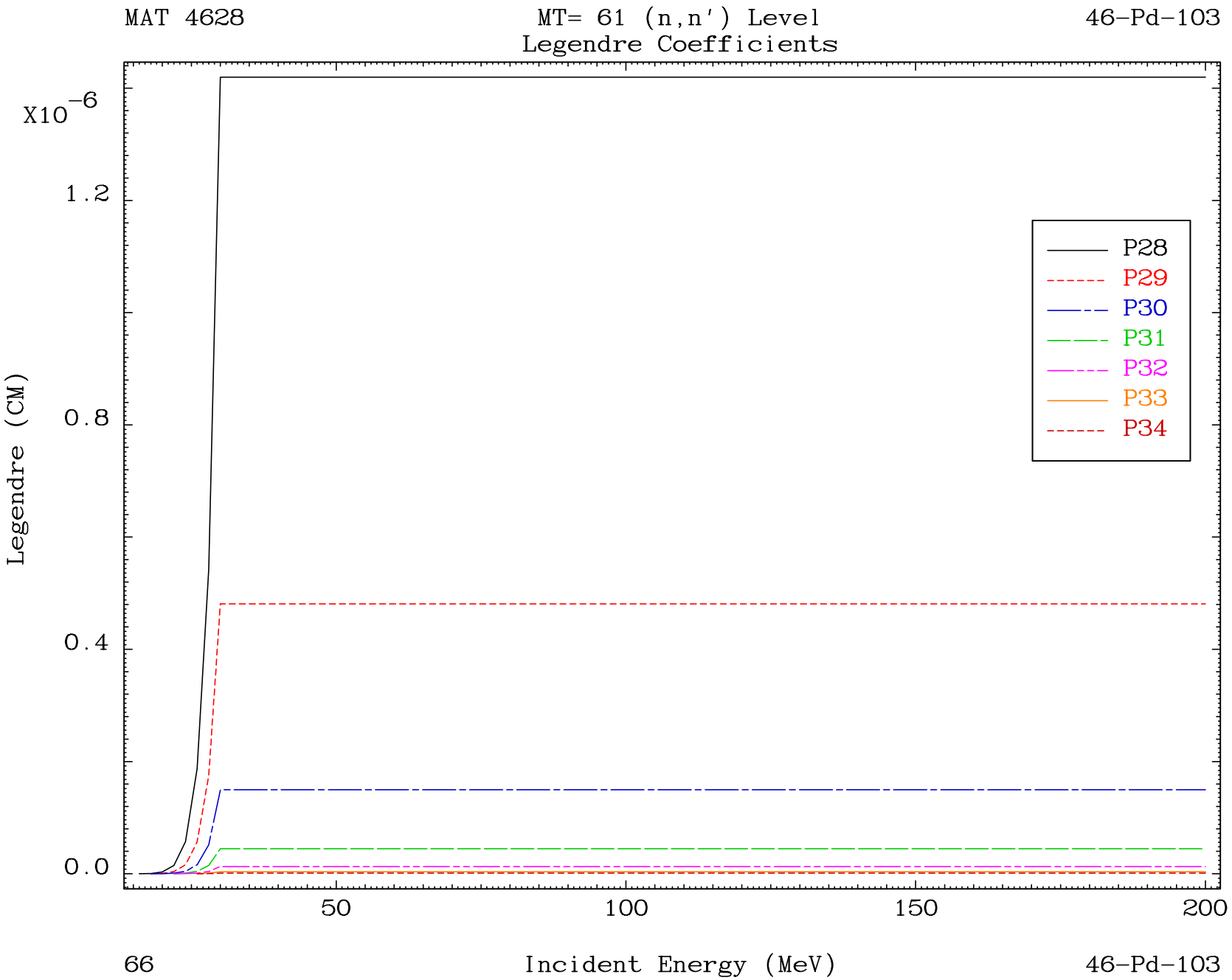

MAT 4628
MT= 60 (n,n') Level
Legendre Coefficients
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.004
0.003
0.002
0.001
0.000
Legendre (CM)
50
100
150
200
61
Incident Energy (MeV)
46-Pd-103

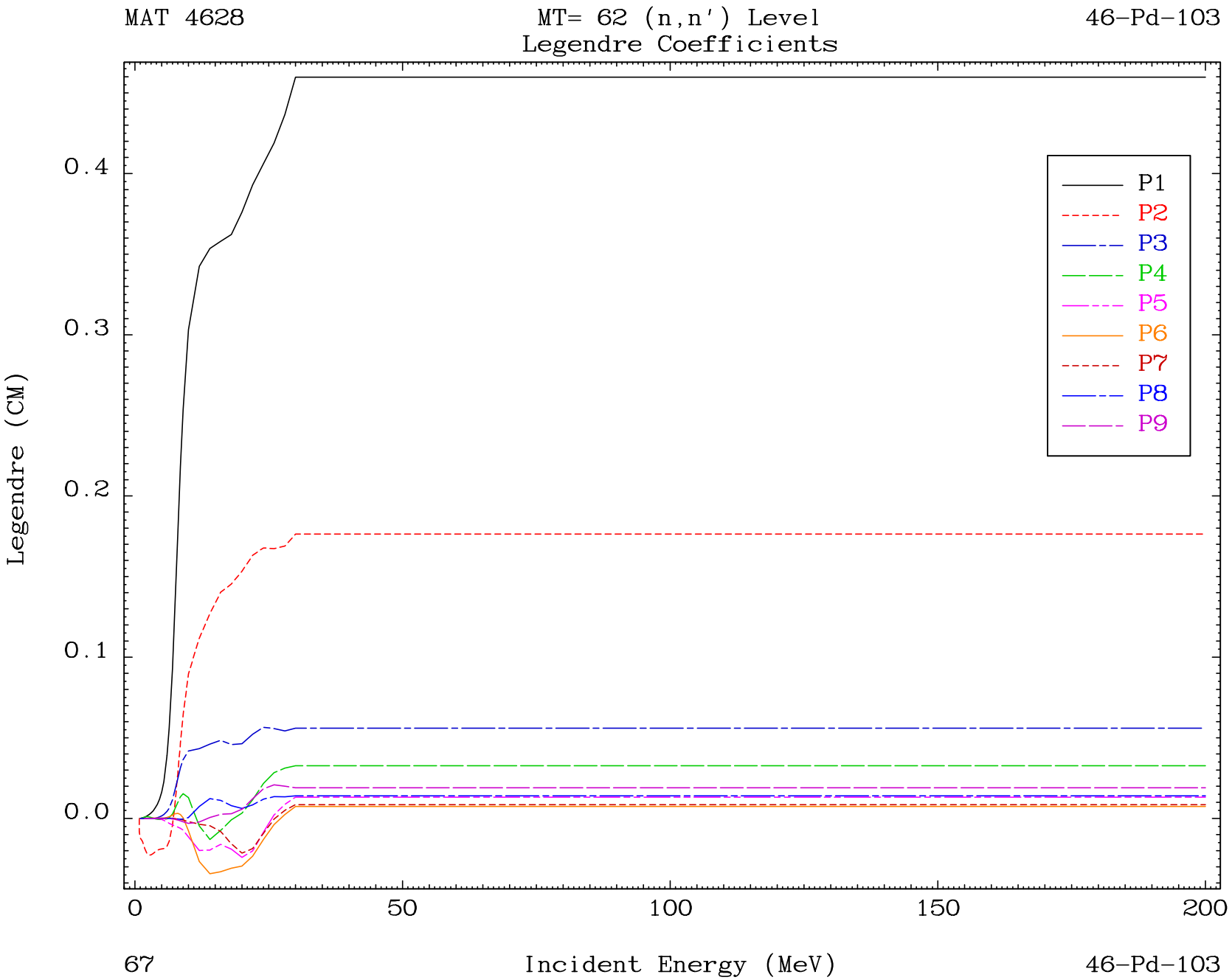

MAT 4628
MT= 60 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-6
1.2
0.8
0.4
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
62
Incident Energy (MeV)
46-Pd-103

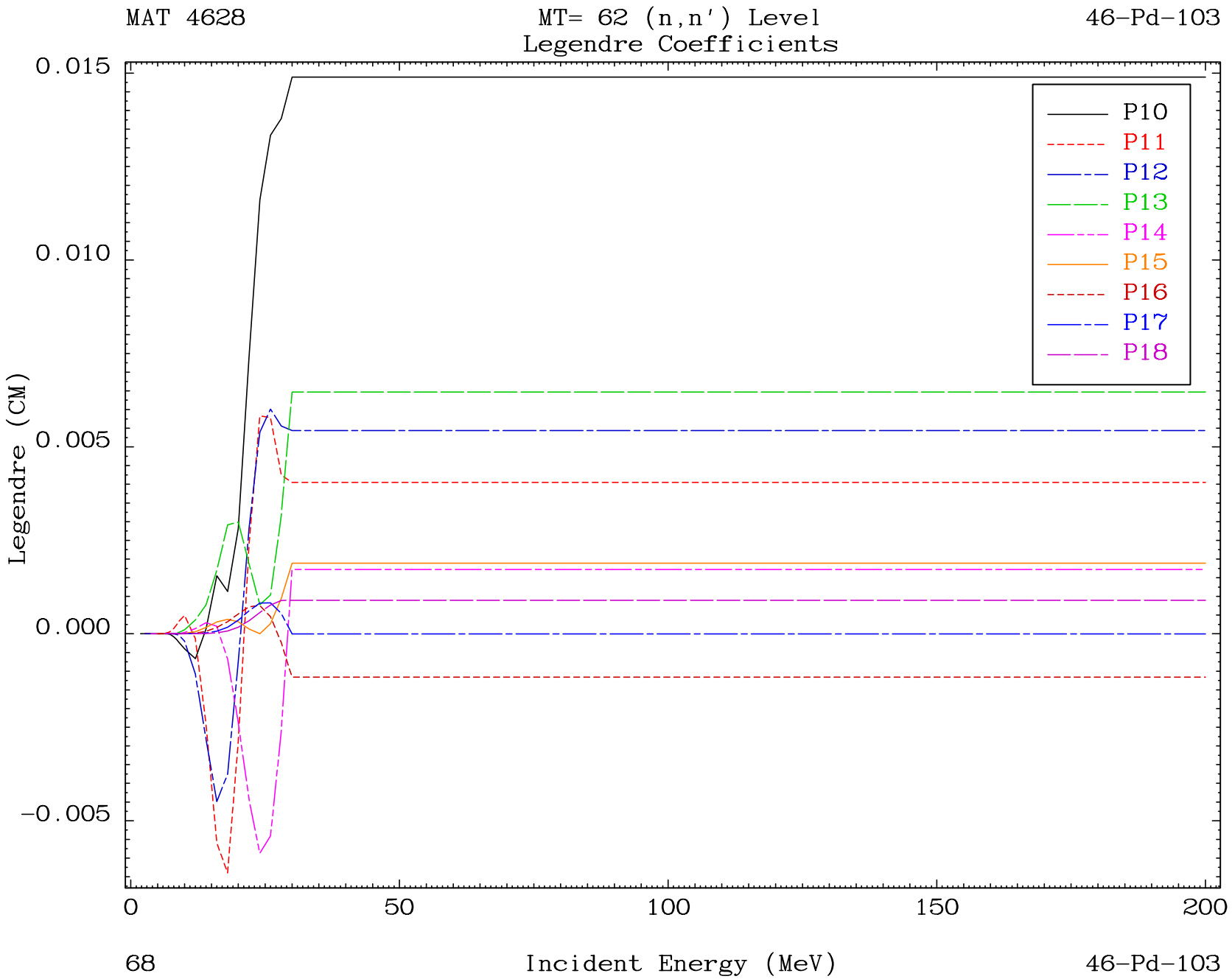

MAT 4628
MT= 61 (n,n') Level
Legendre Coefficients
46-Pd-103
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
63
Incident Energy (MeV)
46-Pd-103

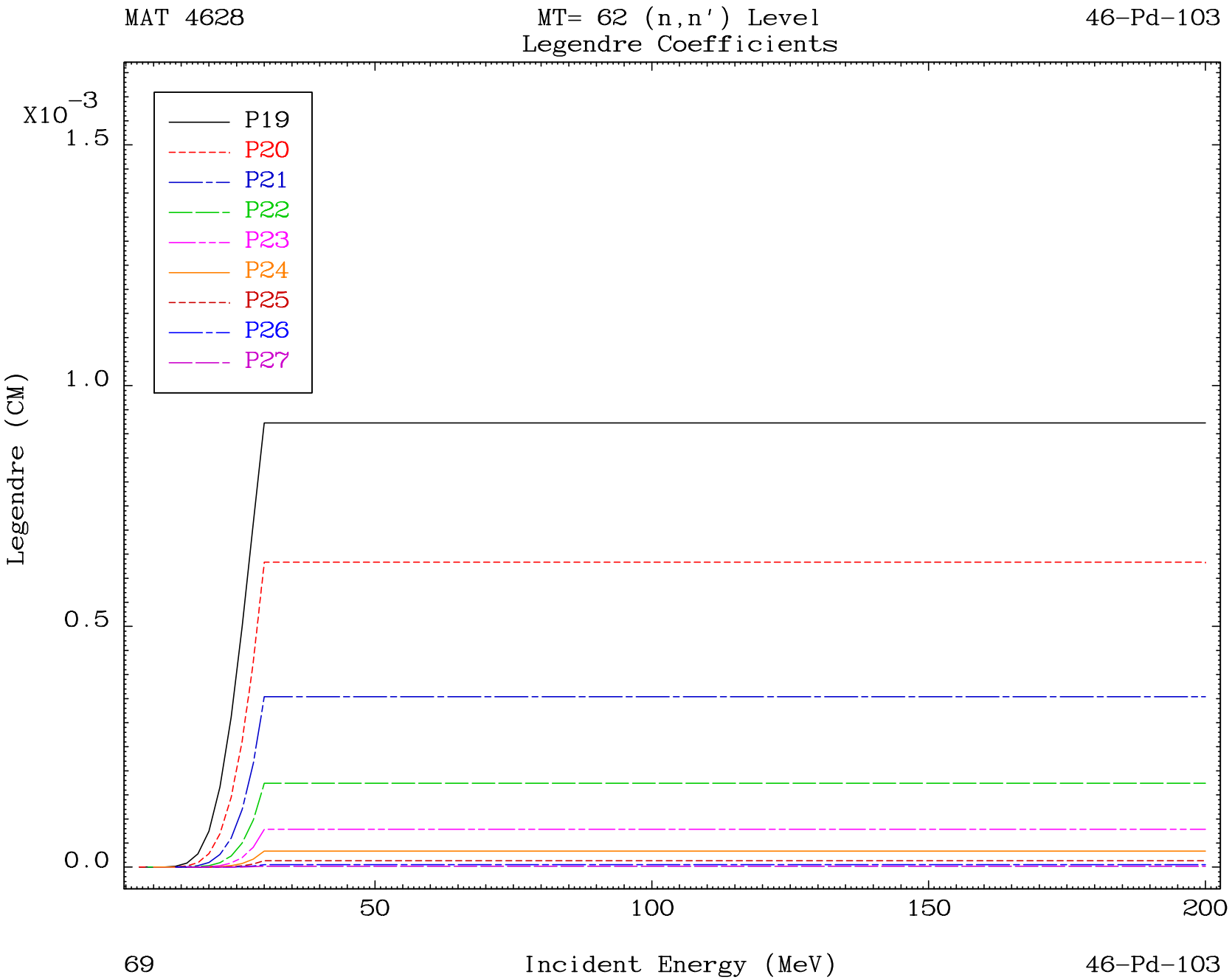

MAT 4628
MT= 61 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
64
Incident Energy (MeV)
46-Pd-103

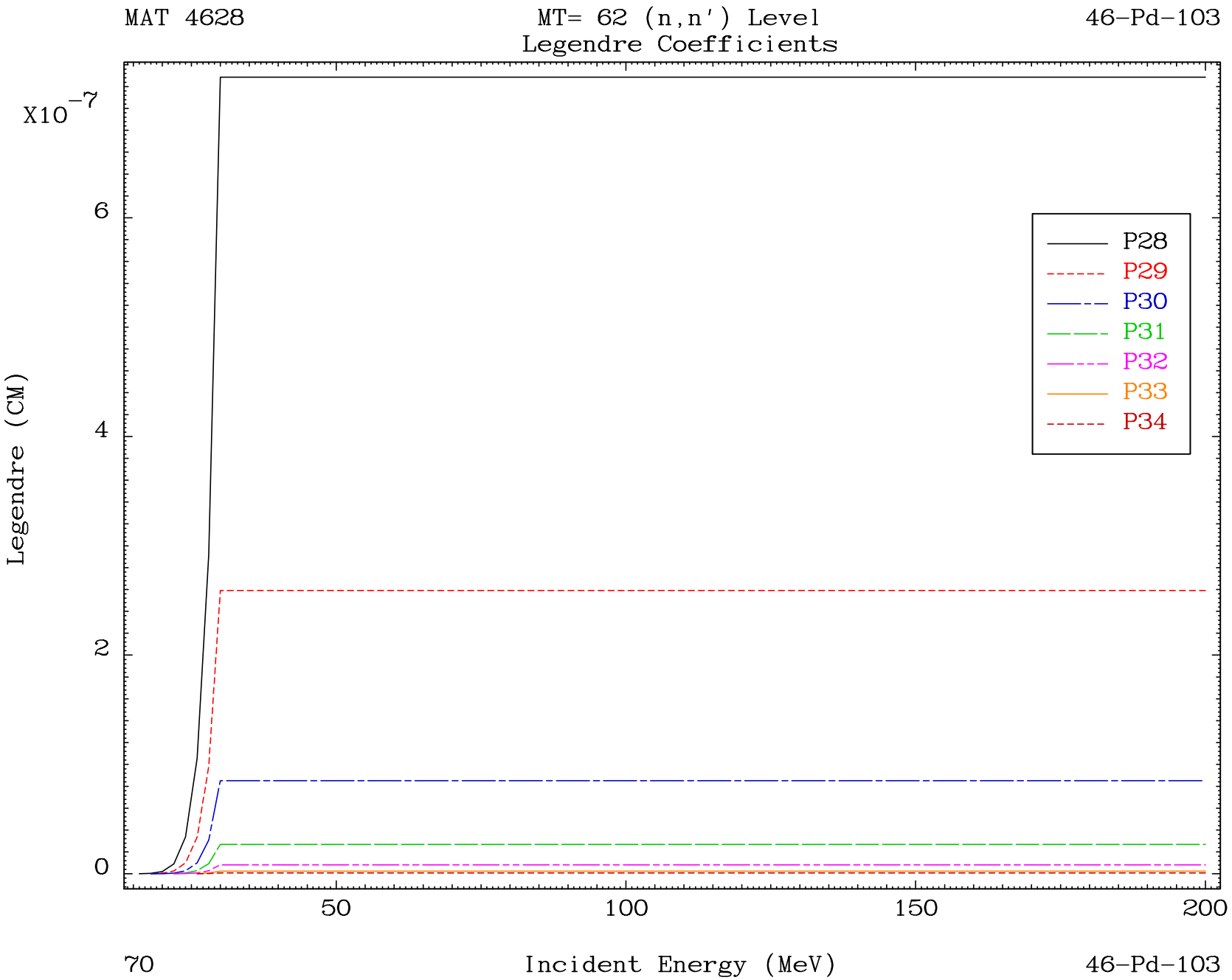

MAT 4628
MT= 61 (n,n') Level
Legendre Coefficients
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.004
0.003
0.002
0.001
0.000
Legendre (CM)
50
100
150
200
65
Incident Energy (MeV)
46-Pd-103

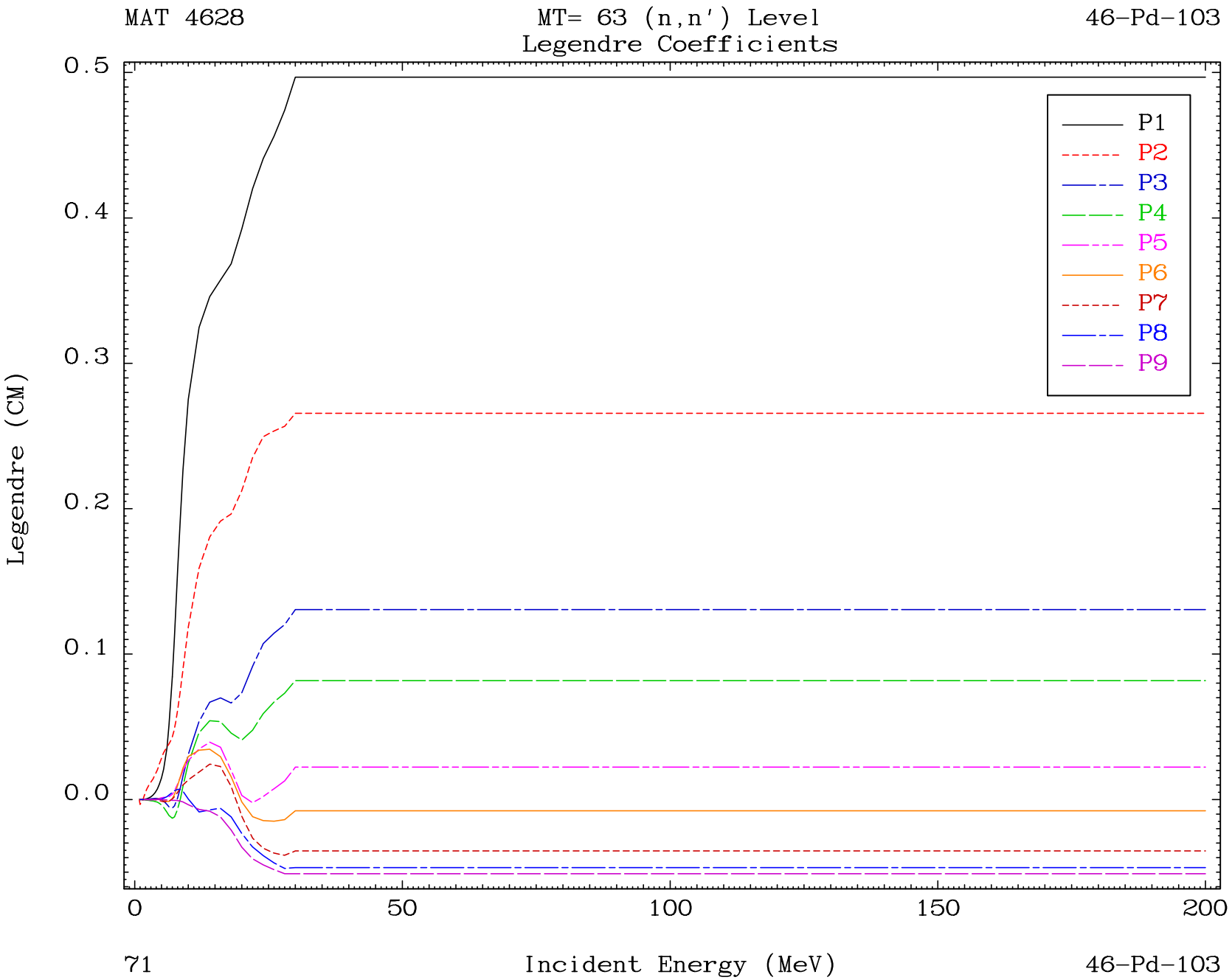

MAT 4628
MT= 61 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-6
1.2
0.8
0.4
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
66
Incident Energy (MeV)
46-Pd-103

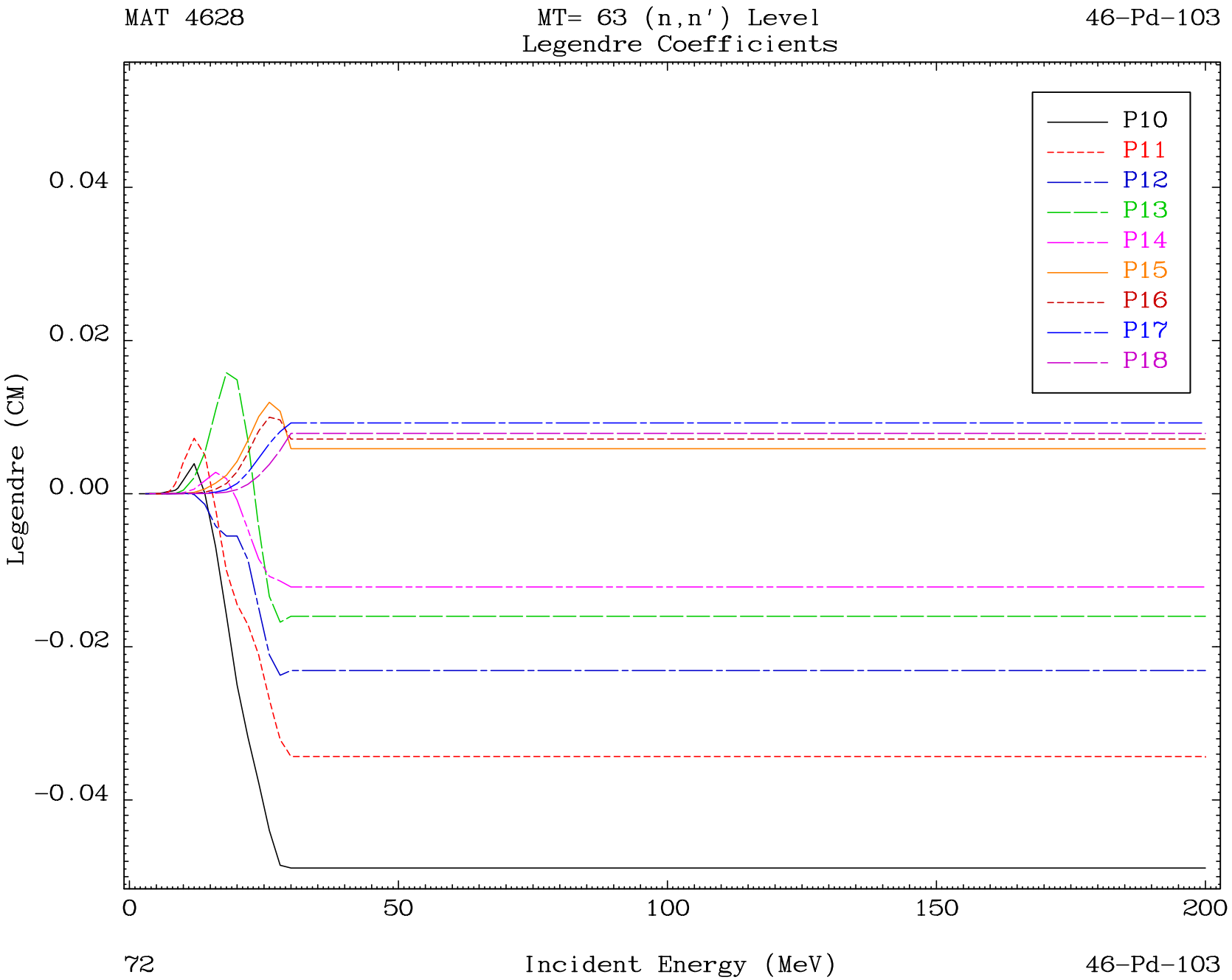

MAT 4628
MT= 62 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
67
Incident Energy (MeV)
46-Pd-103

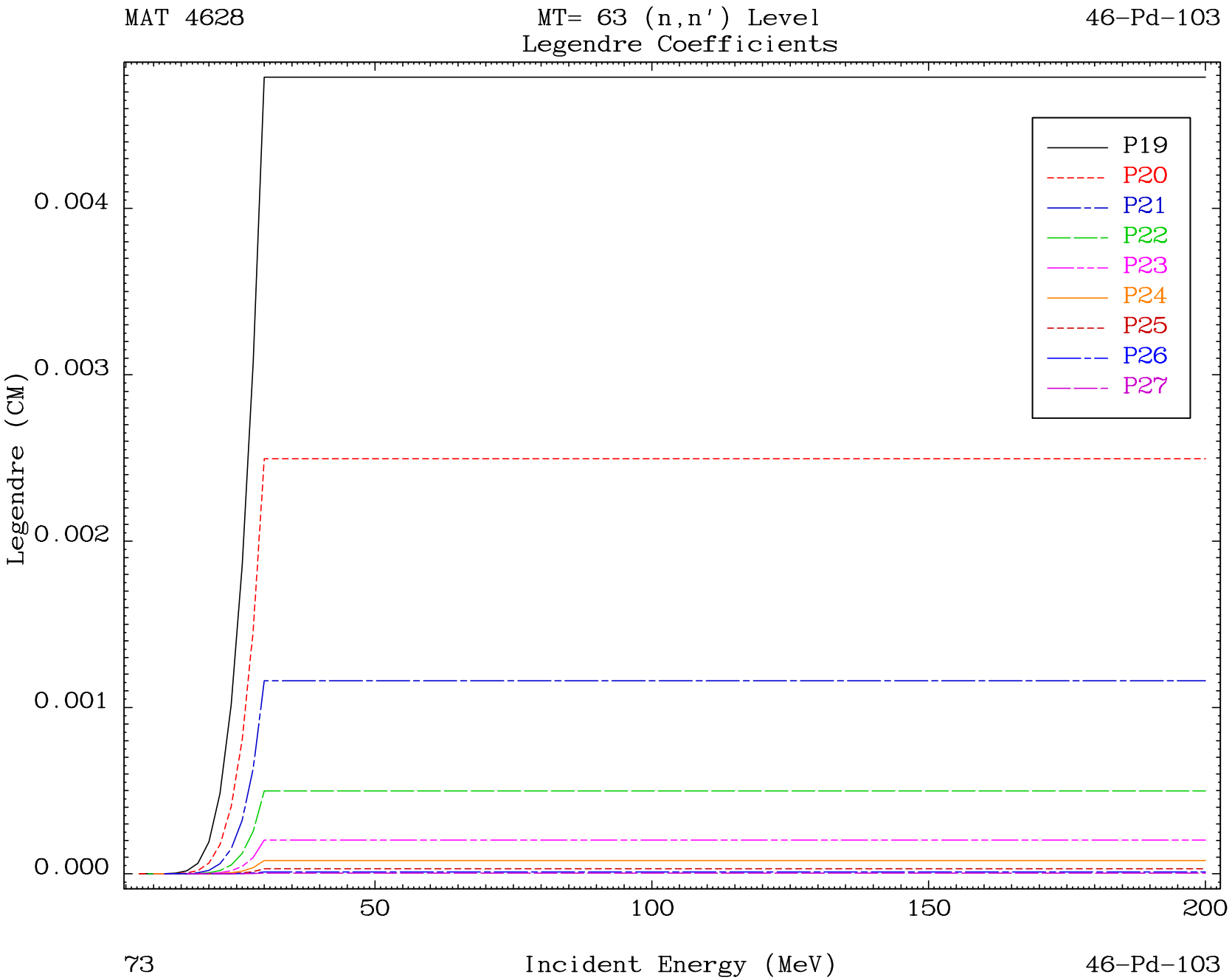

MAT 4628
MT= 62 (n,n') Level
Legendre Coefficients
46-Pd-103
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
68
Incident Energy (MeV)
46-Pd-103

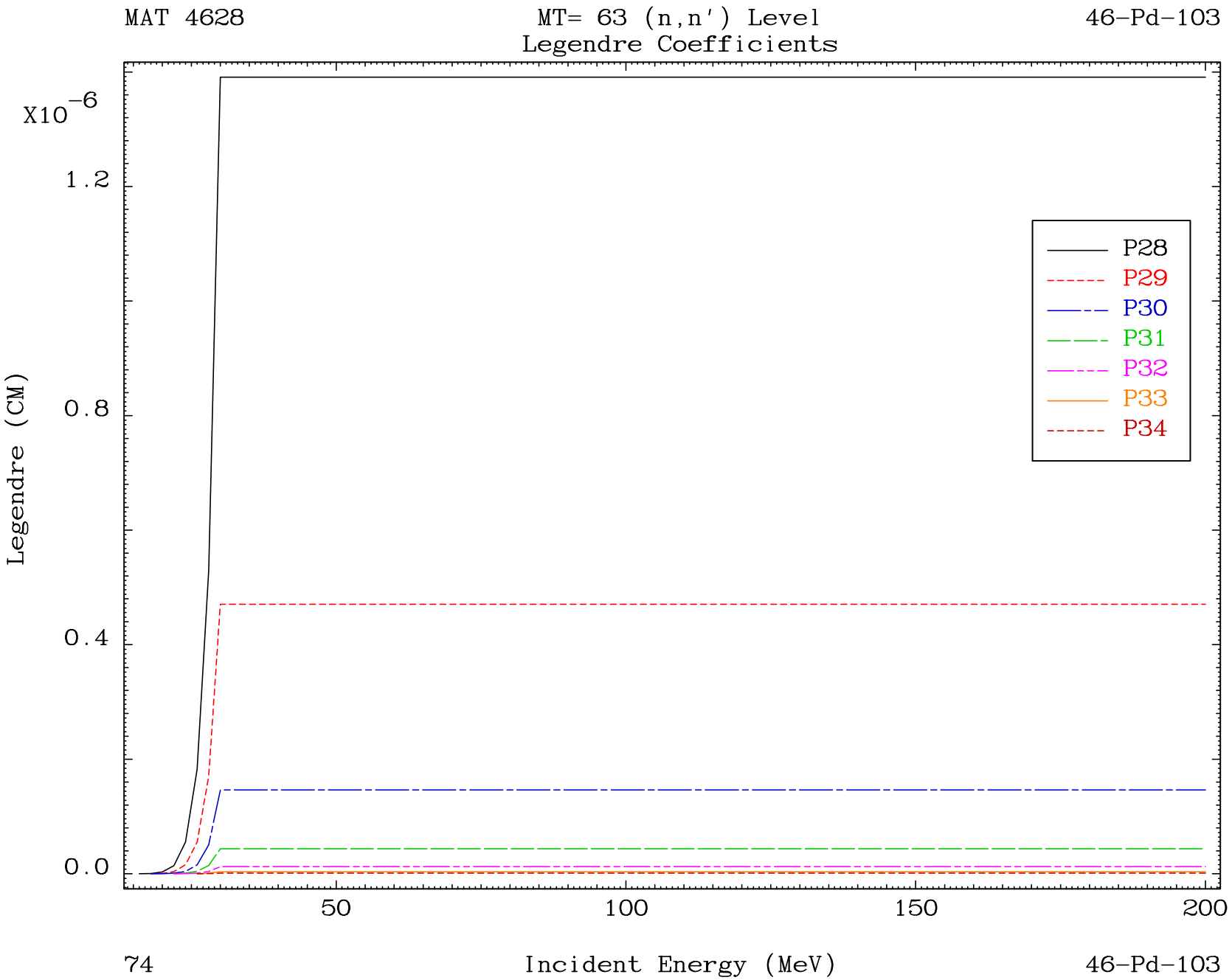

MAT 4628
MT= 62 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
69
Incident Energy (MeV)
46-Pd-103

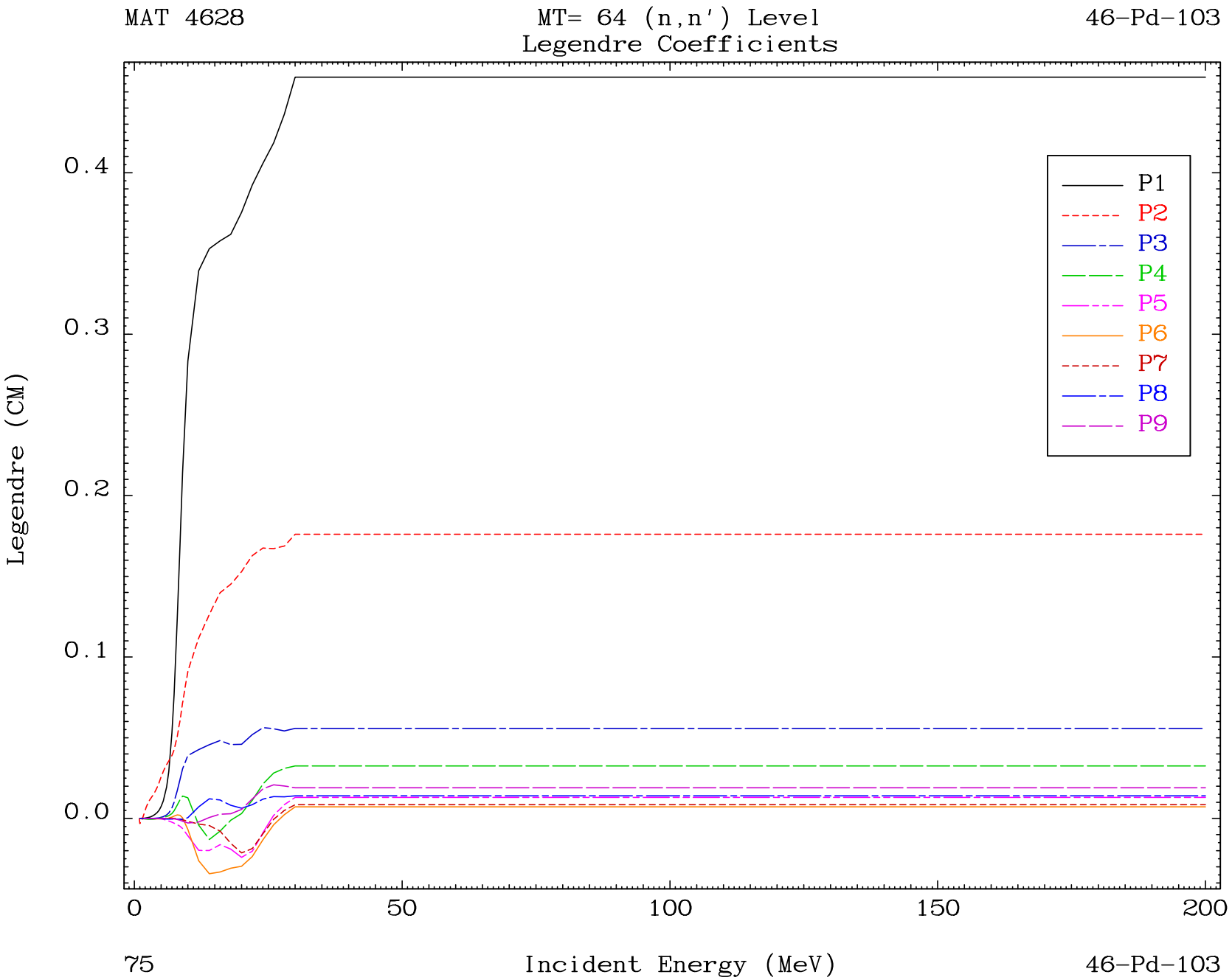

MAT 4628
MT= 62 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-7
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
70
Incident Energy (MeV)
46-Pd-103

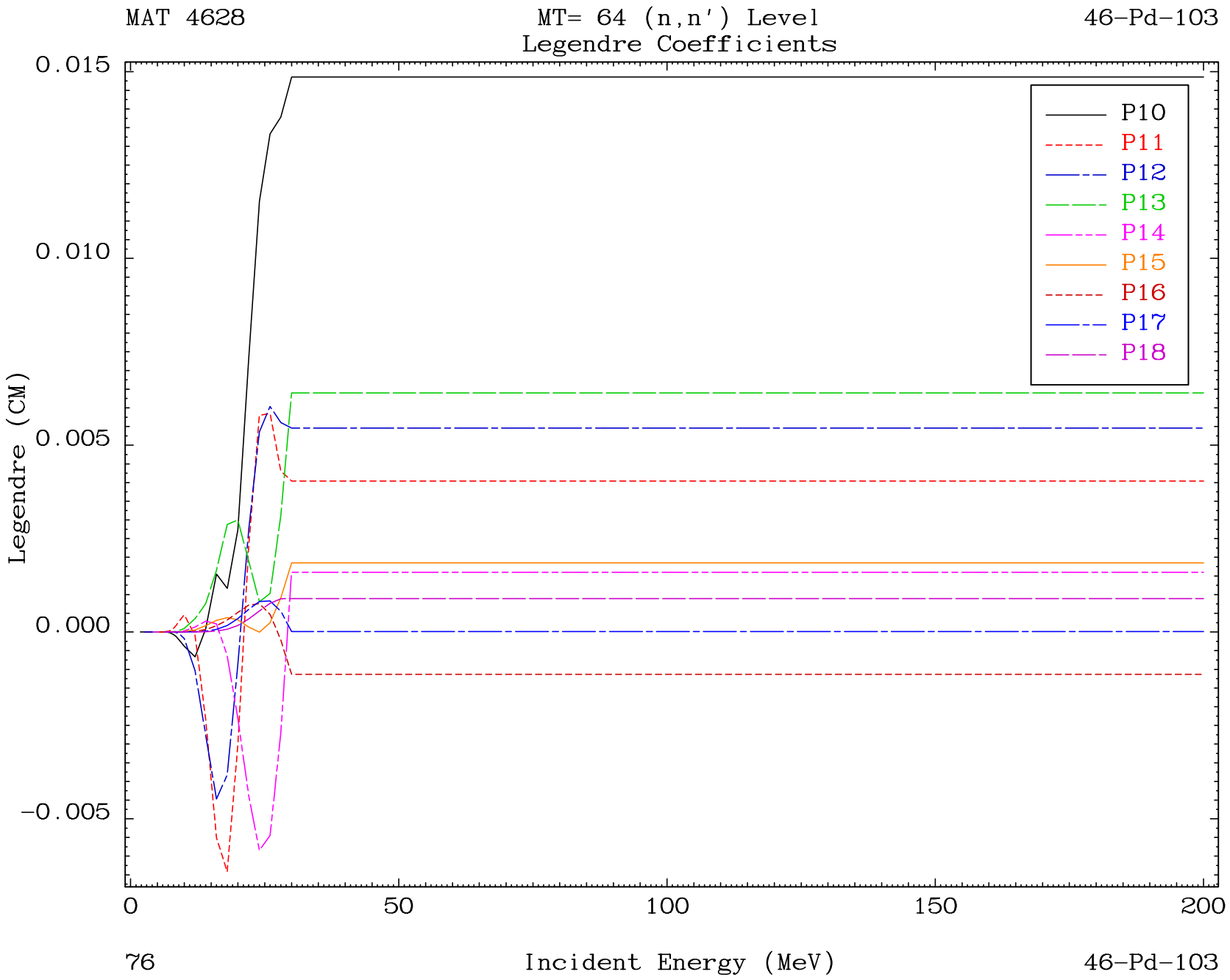

MAT 4628
MT= 63 (n,n') Level
Legendre Coefficients
46-Pd-103
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
71
Incident Energy (MeV)
46-Pd-103

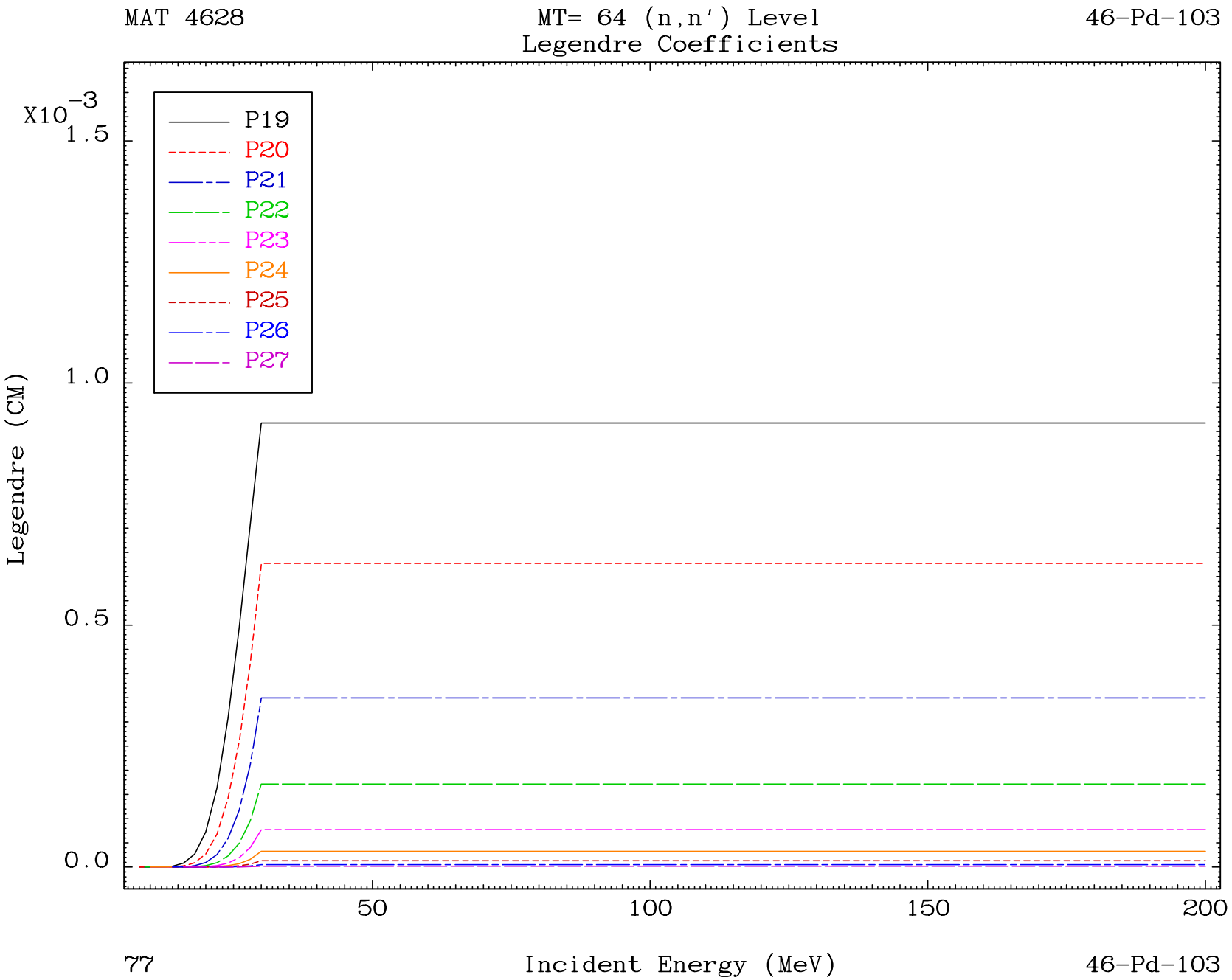

MAT 4628
MT= 63 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
72
Incident Energy (MeV)
46-Pd-103

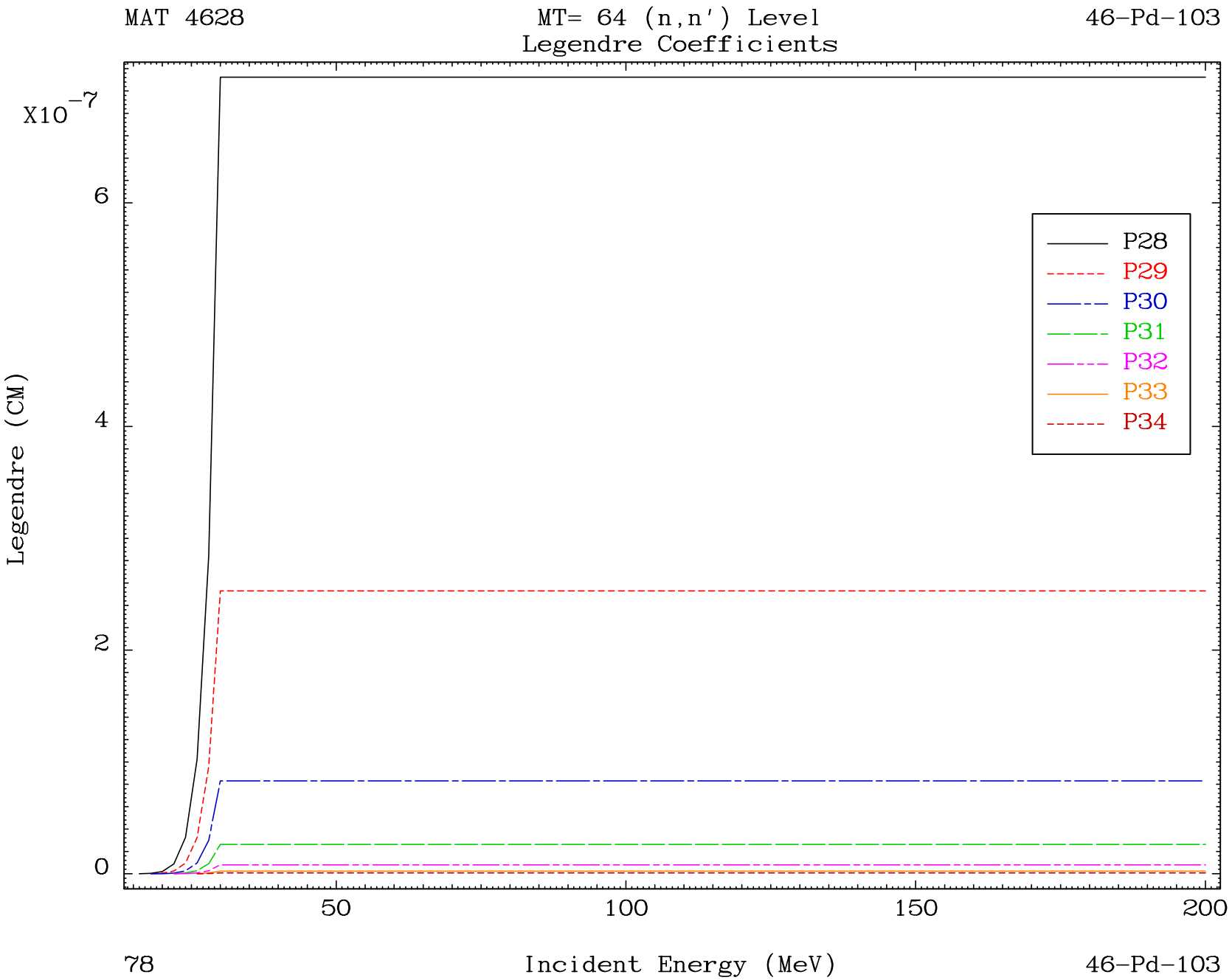

MAT 4628
MT= 63 (n,n') Level
Legendre Coefficients
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.004
0.003
0.002
0.001
0.000
Legendre (CM)
50
100
150
200
73
Incident Energy (MeV)
46-Pd-103

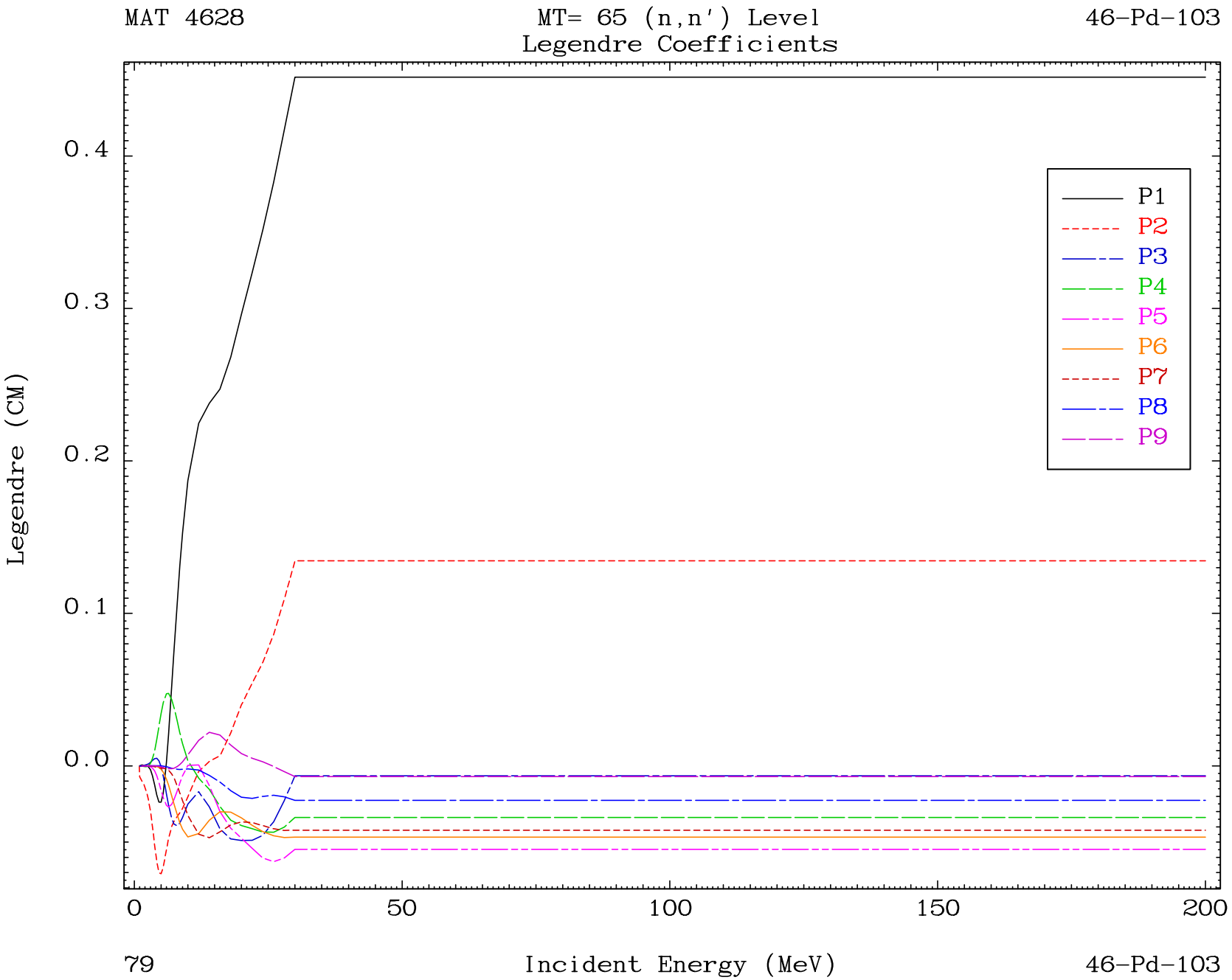

MAT 4628
MT= 63 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-6
1.2
0.8
0.4
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
74
Incident Energy (MeV)
46-Pd-103

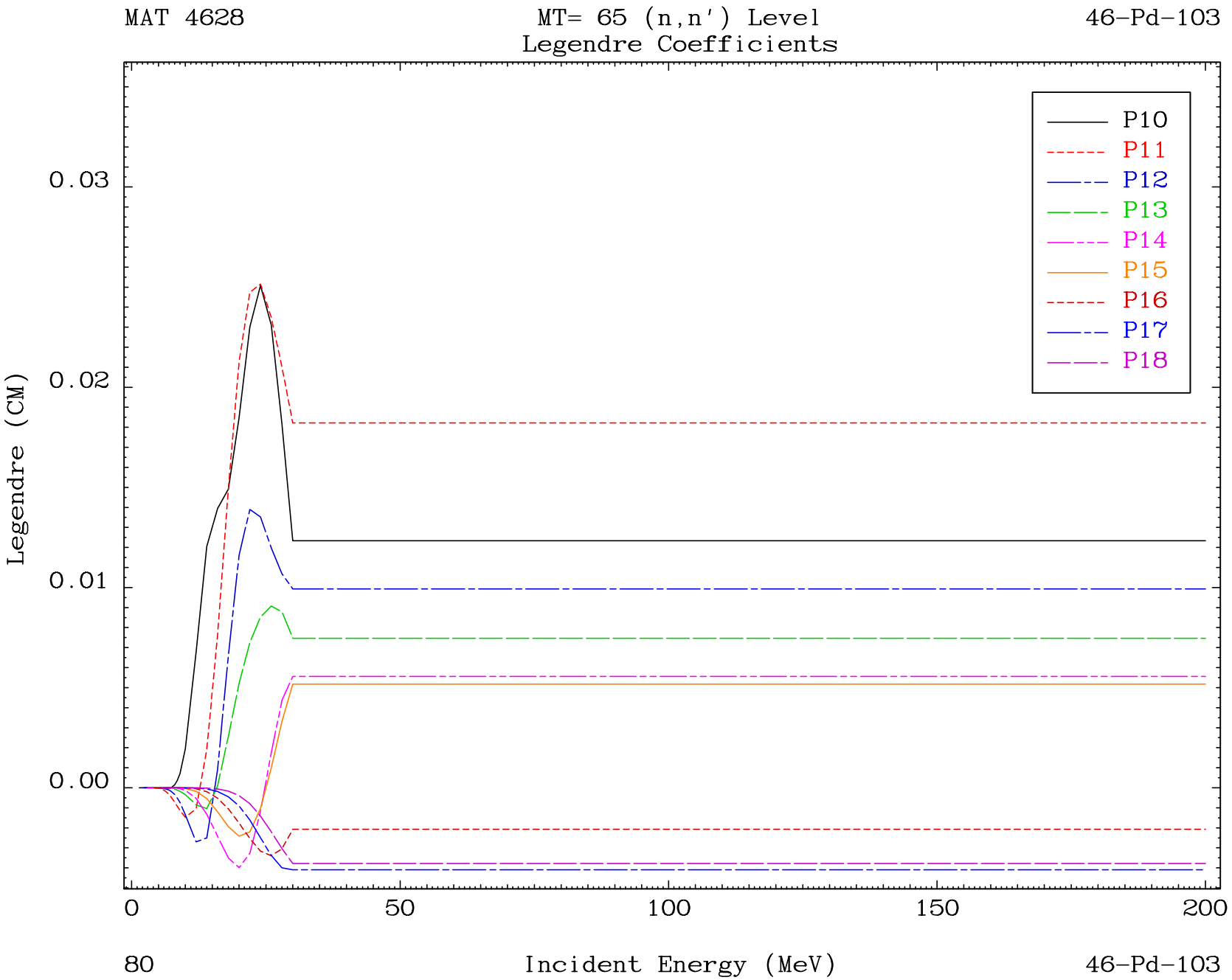

MAT 4628
MT= 64 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
75
Incident Energy (MeV)
46-Pd-103

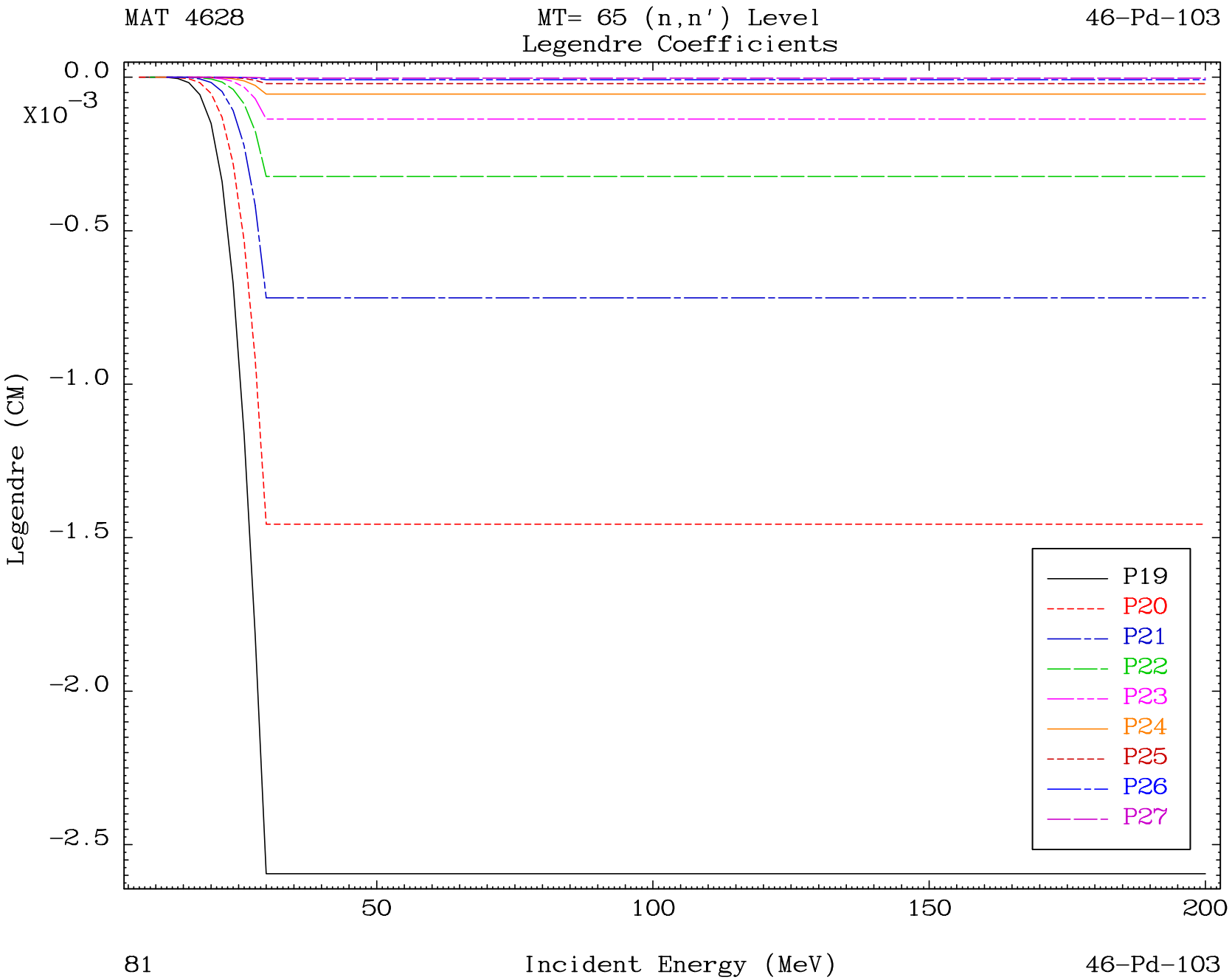

MAT 4628
MT= 64 (n,n') Level
Legendre Coefficients
46-Pd-103
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
0
50
100
150
200
76
Incident Energy (MeV)
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18

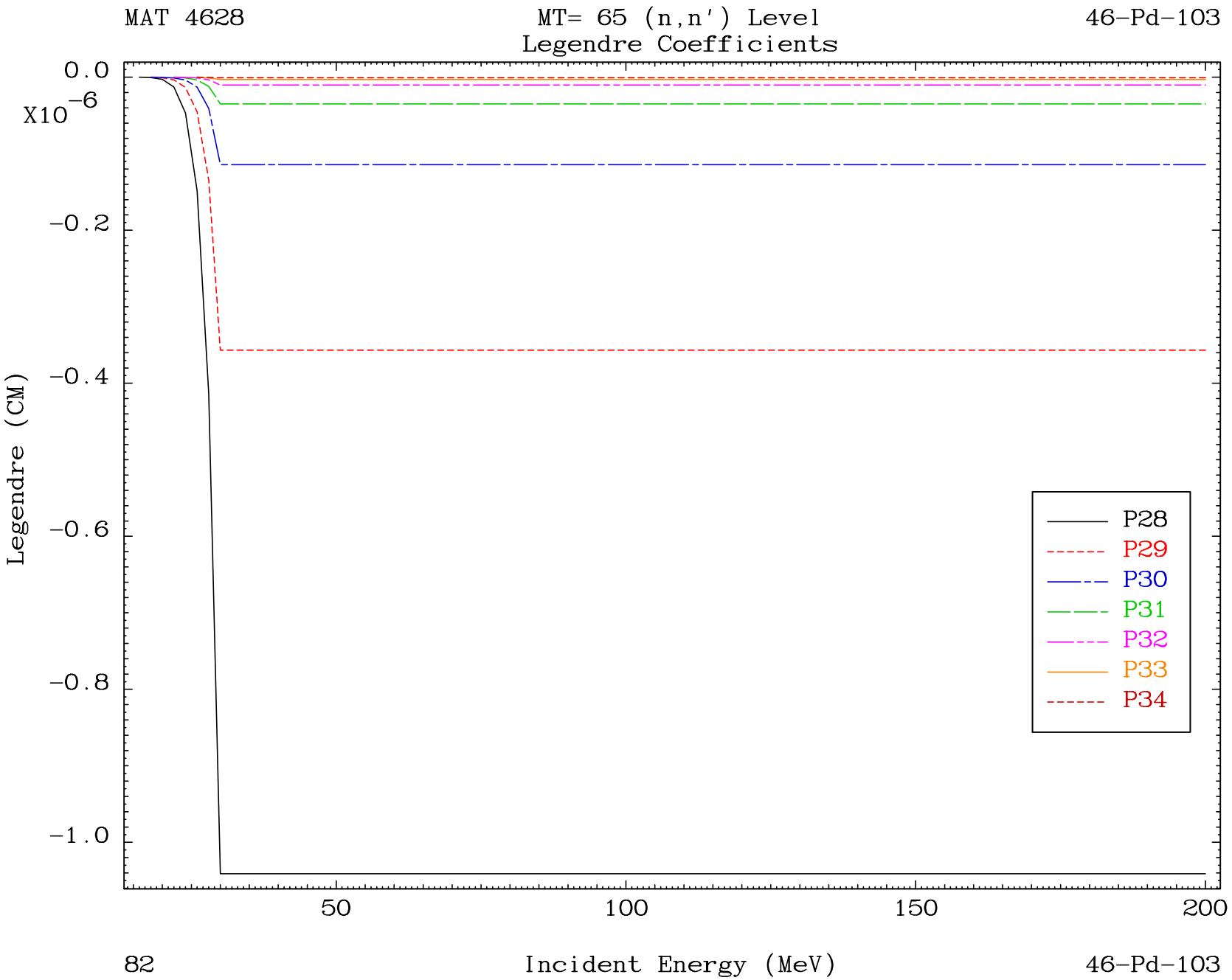

MAT 4628
MT= 64 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
77
Incident Energy (MeV)
46-Pd-103

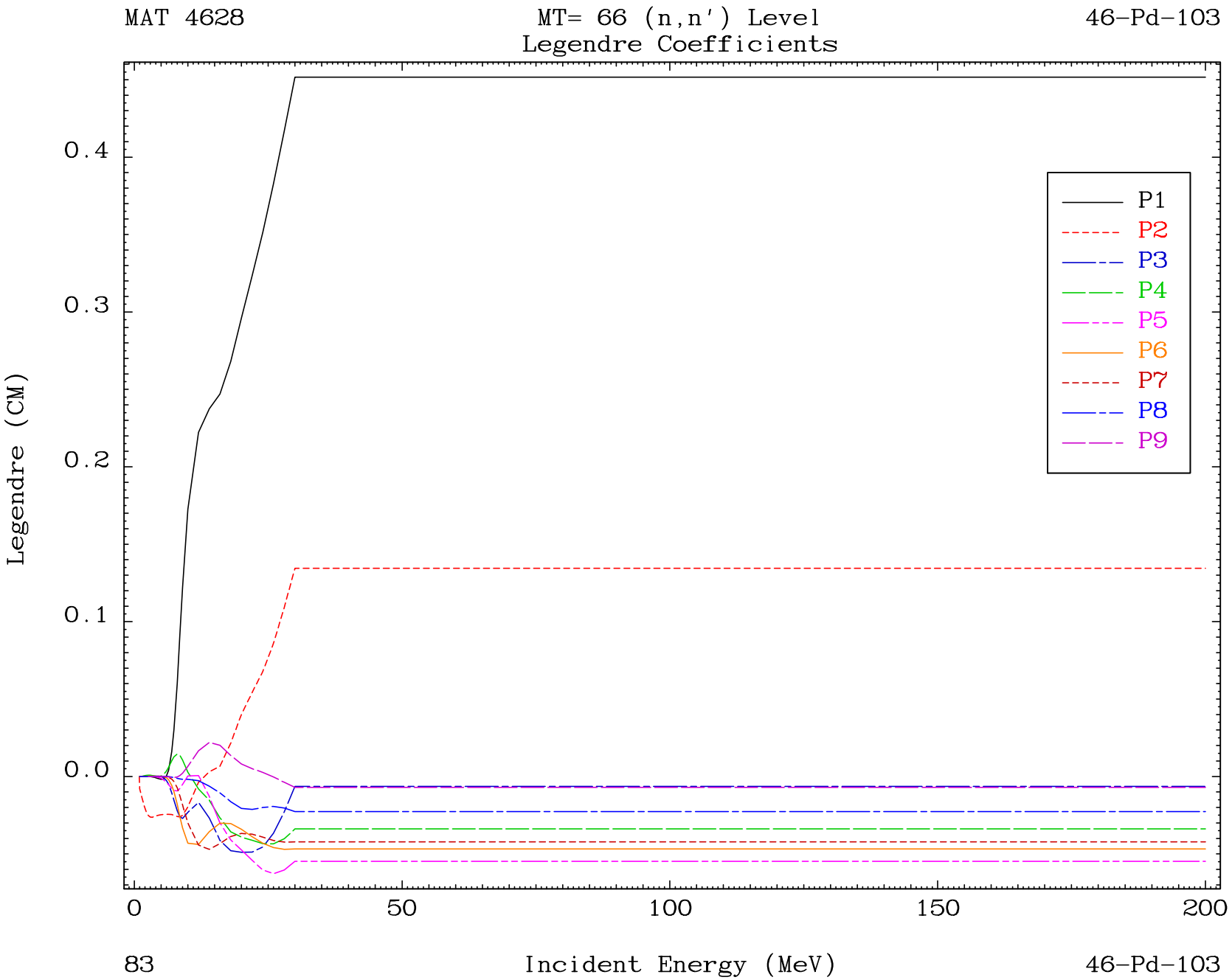

MAT 4628
MT= 64 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-7
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
78
Incident Energy (MeV)
46-Pd-103

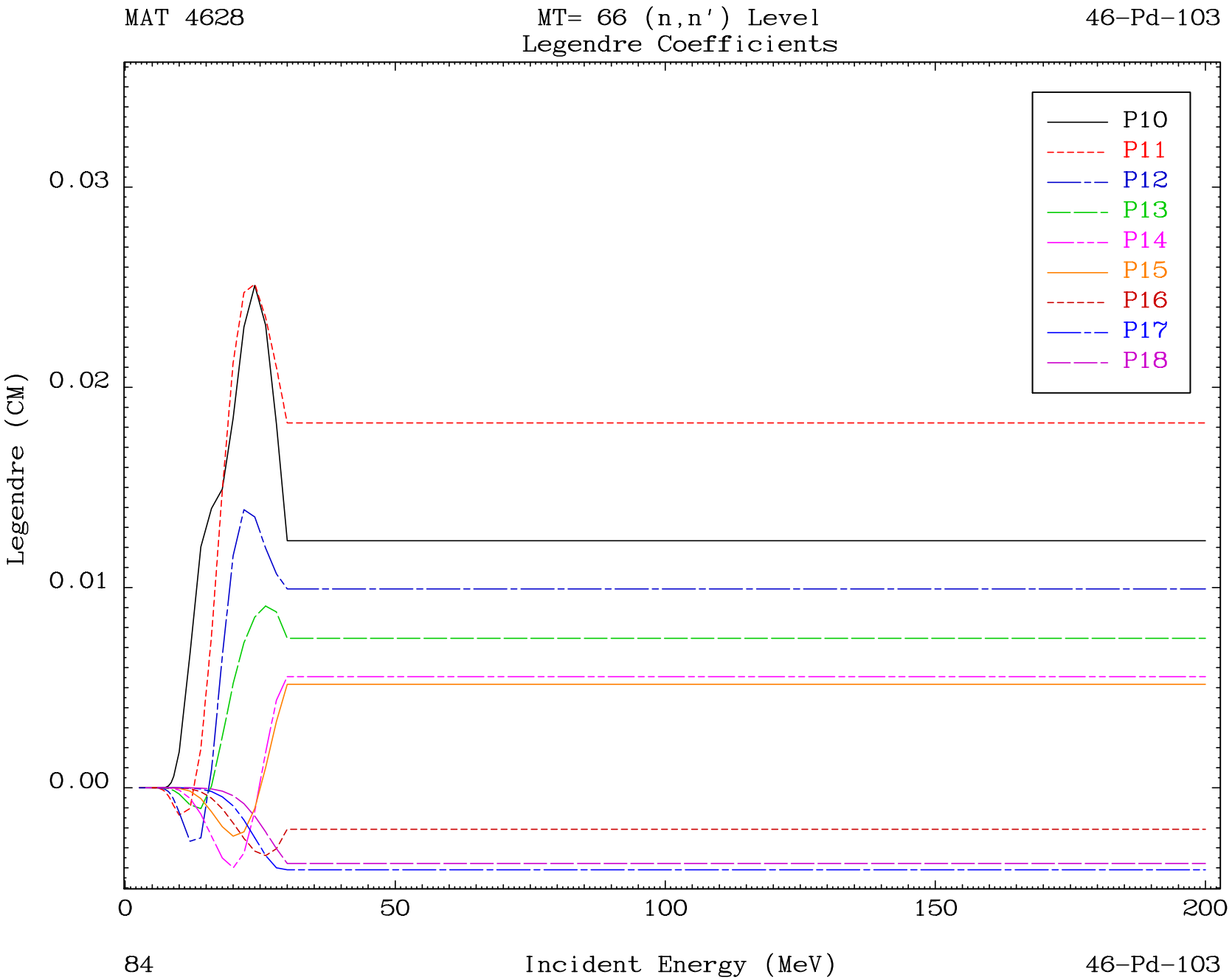

MAT 4628
MT= 65 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
Incident Energy (MeV)
79
46-Pd-103
P1
P2
P3
P4
P5
P6
P7
P8
P9

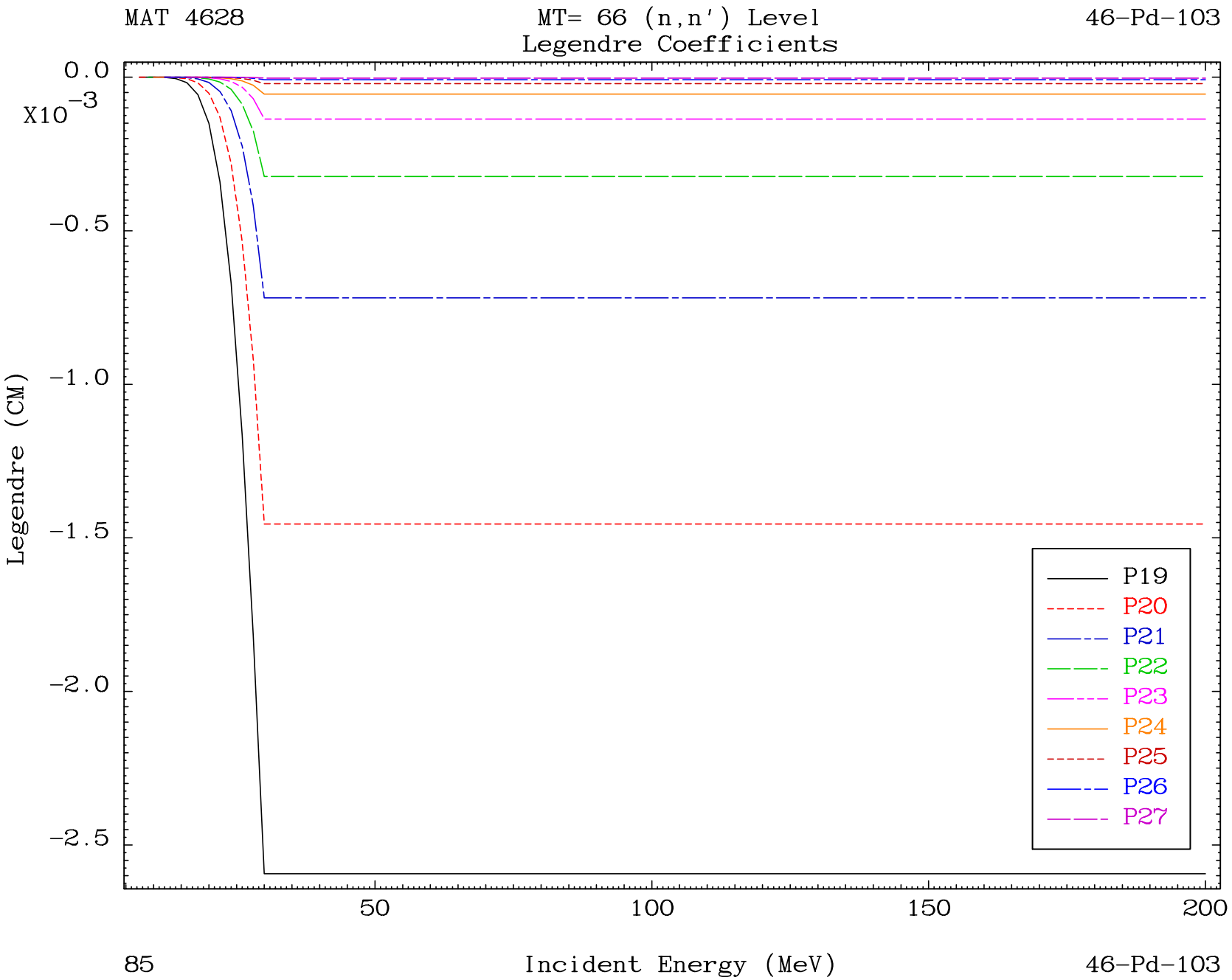

MAT 4628
MT= 65 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
80
Incident Energy (MeV)
46-Pd-103

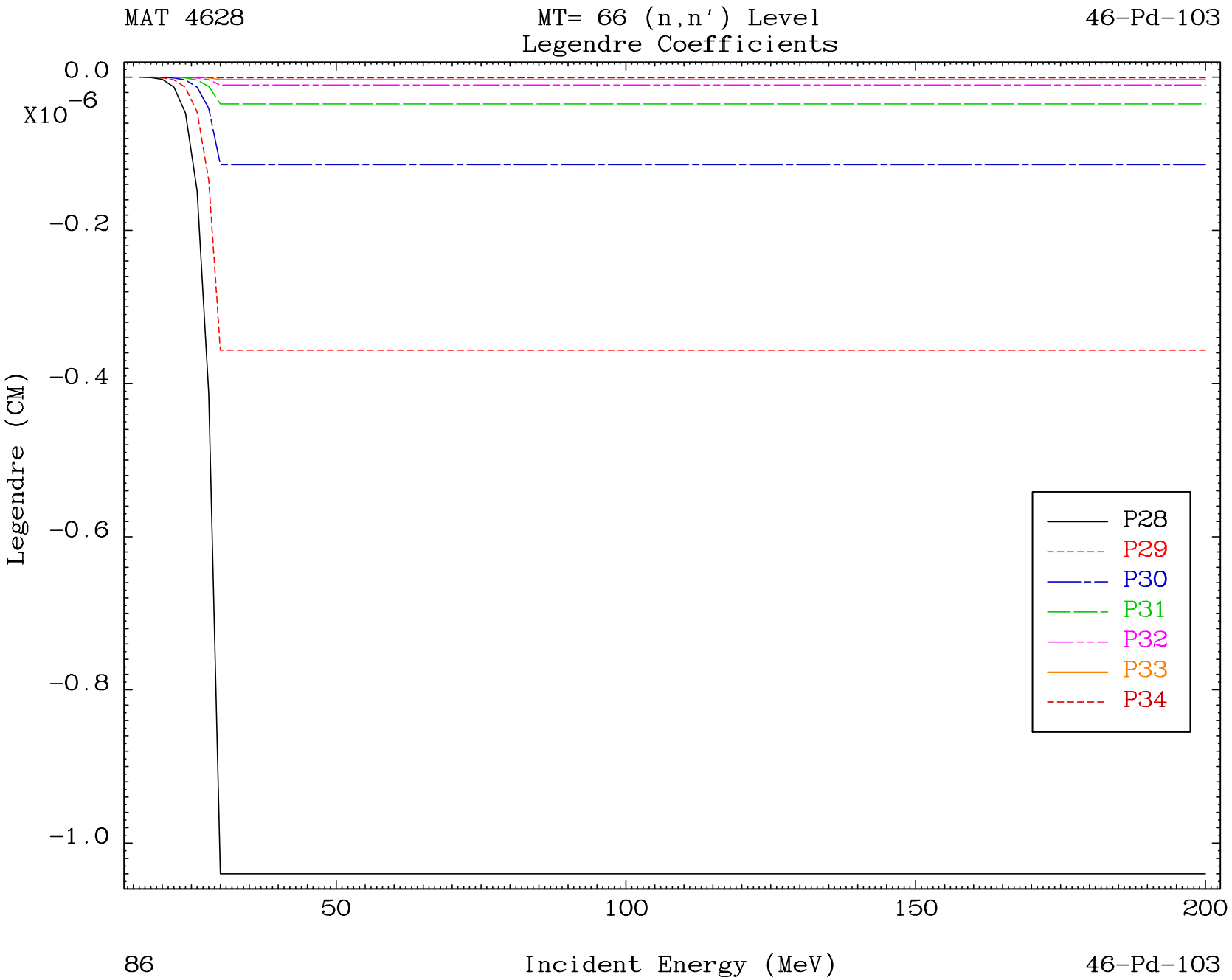

MAT 4628
MT= 65 (n,n') Level
Legendre Coefficients
46-Pd-103
0.0
X10^-3
-0.5
-1.0
-1.5
-2.0
-2.5
Legendre (CM)
50
100
150
200
81
Incident Energy (MeV)
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27

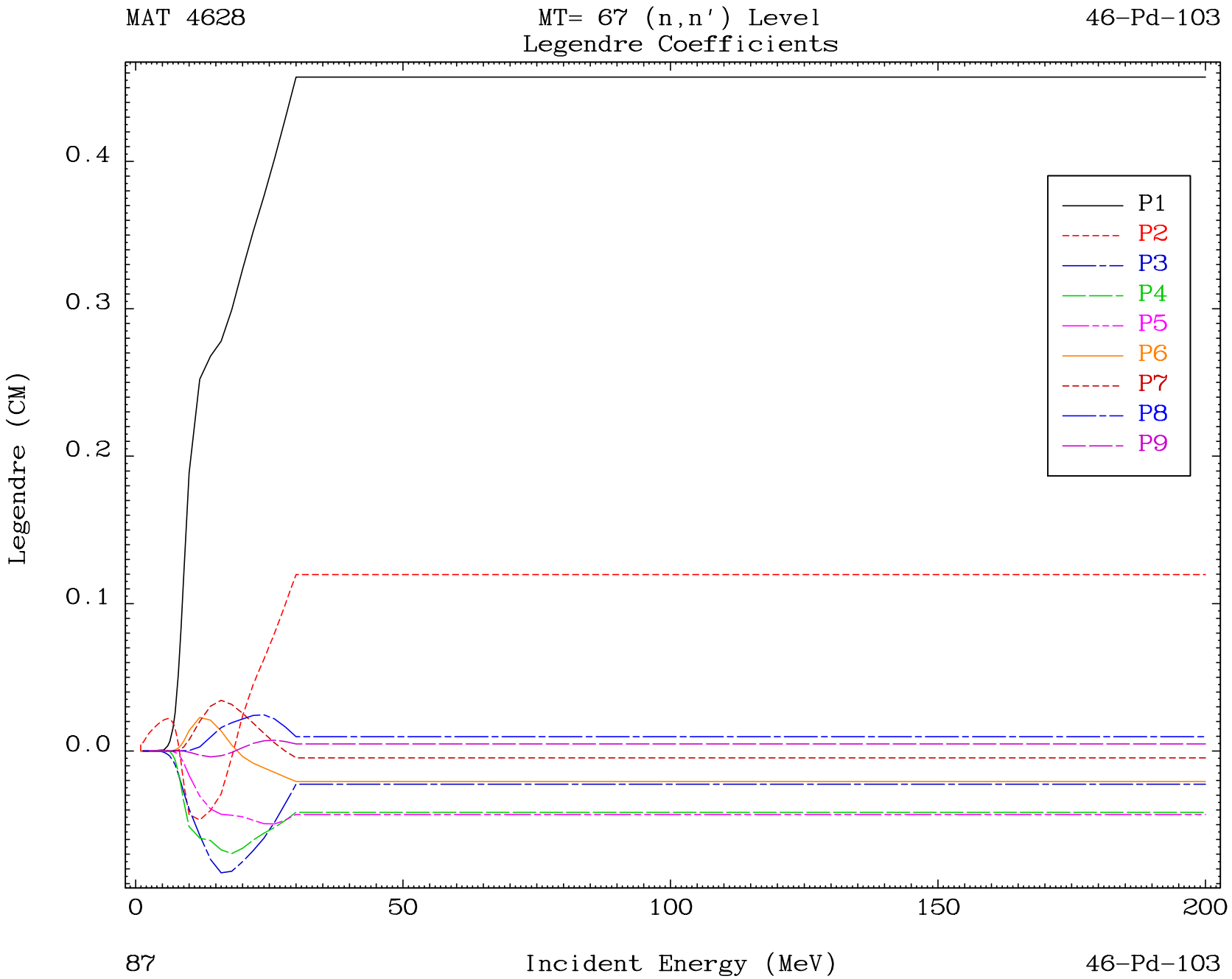

MAT 4628
MT= 65 (n,n') Level
Legendre Coefficients
46-Pd-103
0.0
X10^-6
-0.2
-0.4
-0.6
-0.8
-1.0
Legendre (CM)
50
100
150
200
P28
P29
P30
P31
P32
P33
P34
82
Incident Energy (MeV)
46-Pd-103

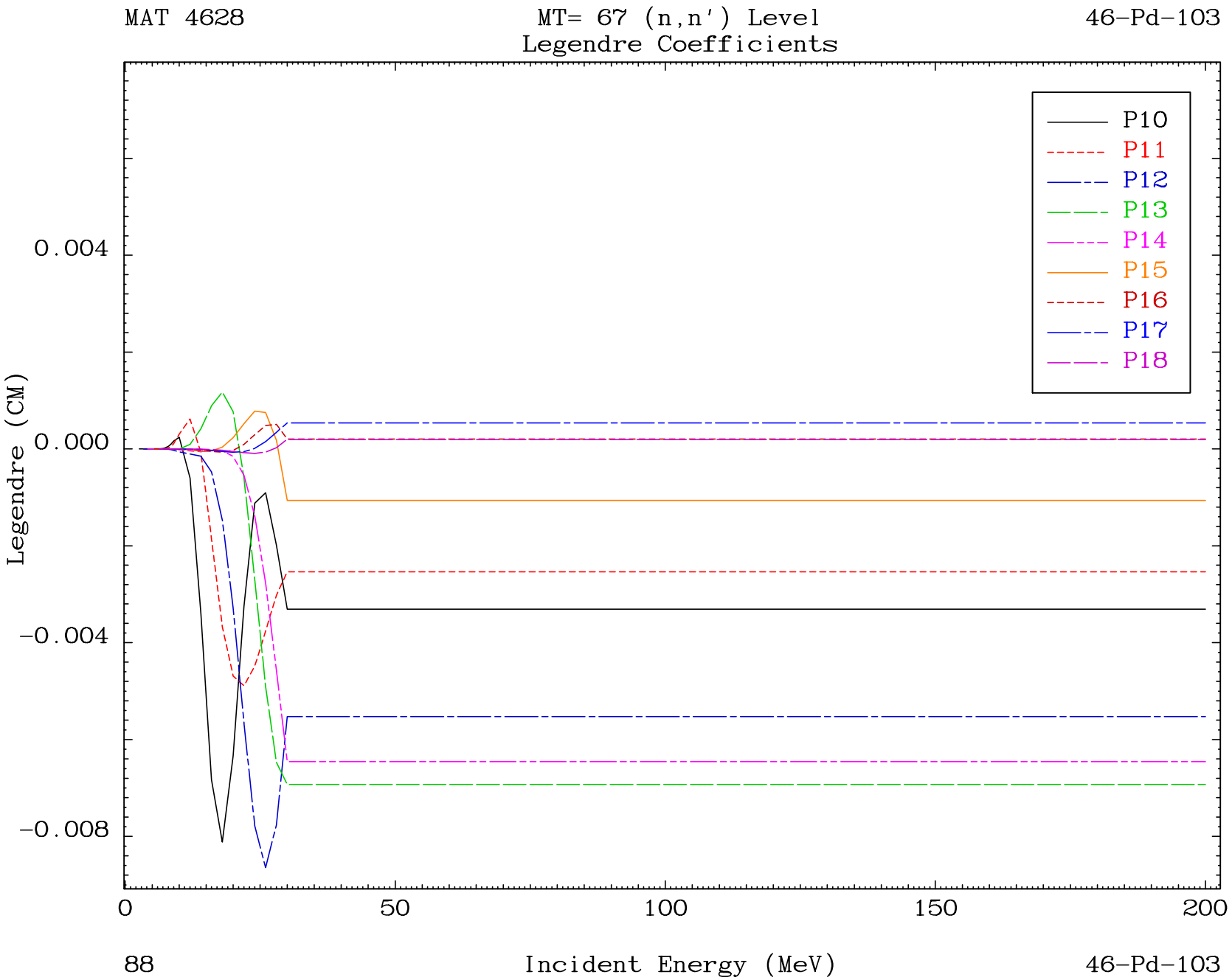

MAT 4628
MT= 66 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
83
Incident Energy (MeV)
46-Pd-103

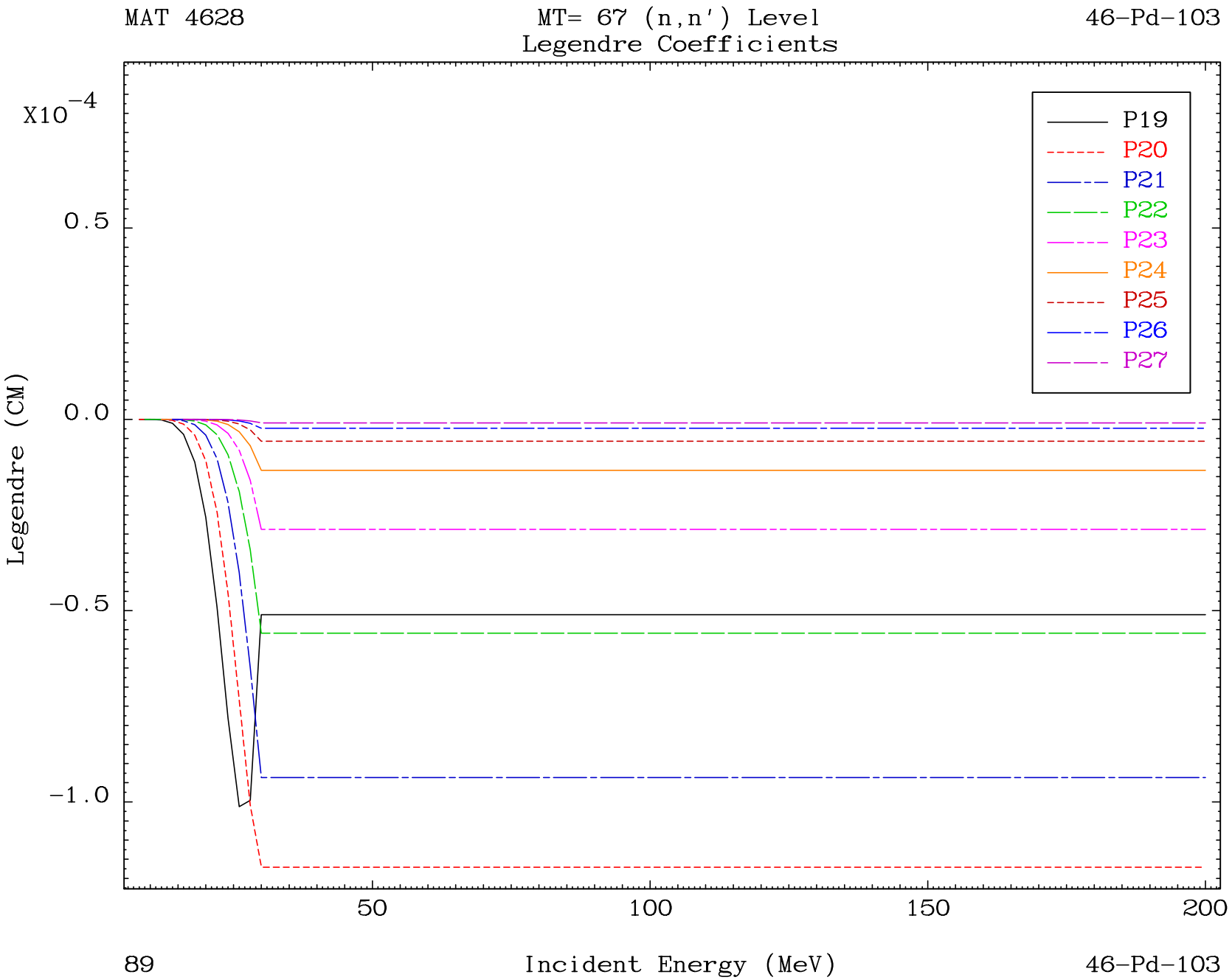

MAT 4628
MT= 66 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
84
Incident Energy (MeV)
46-Pd-103

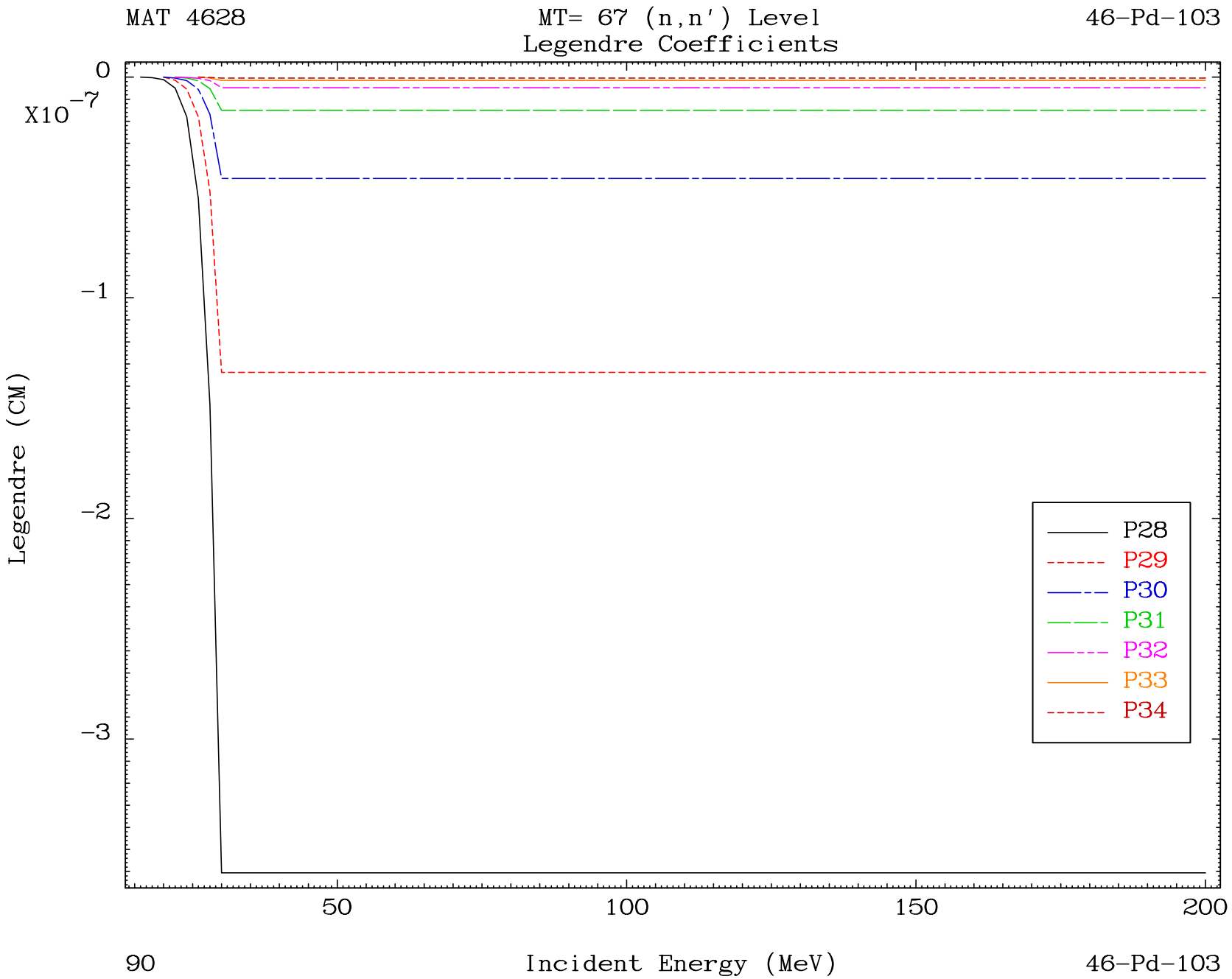

MAT 4628
MT= 66 (n,n') Level
Legendre Coefficients
46-Pd-103
0.0
X10^-3
-0.5
-1.0
-1.5
-2.0
-2.5
Legendre (CM)
50
100
150
200
85
Incident Energy (MeV)
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27

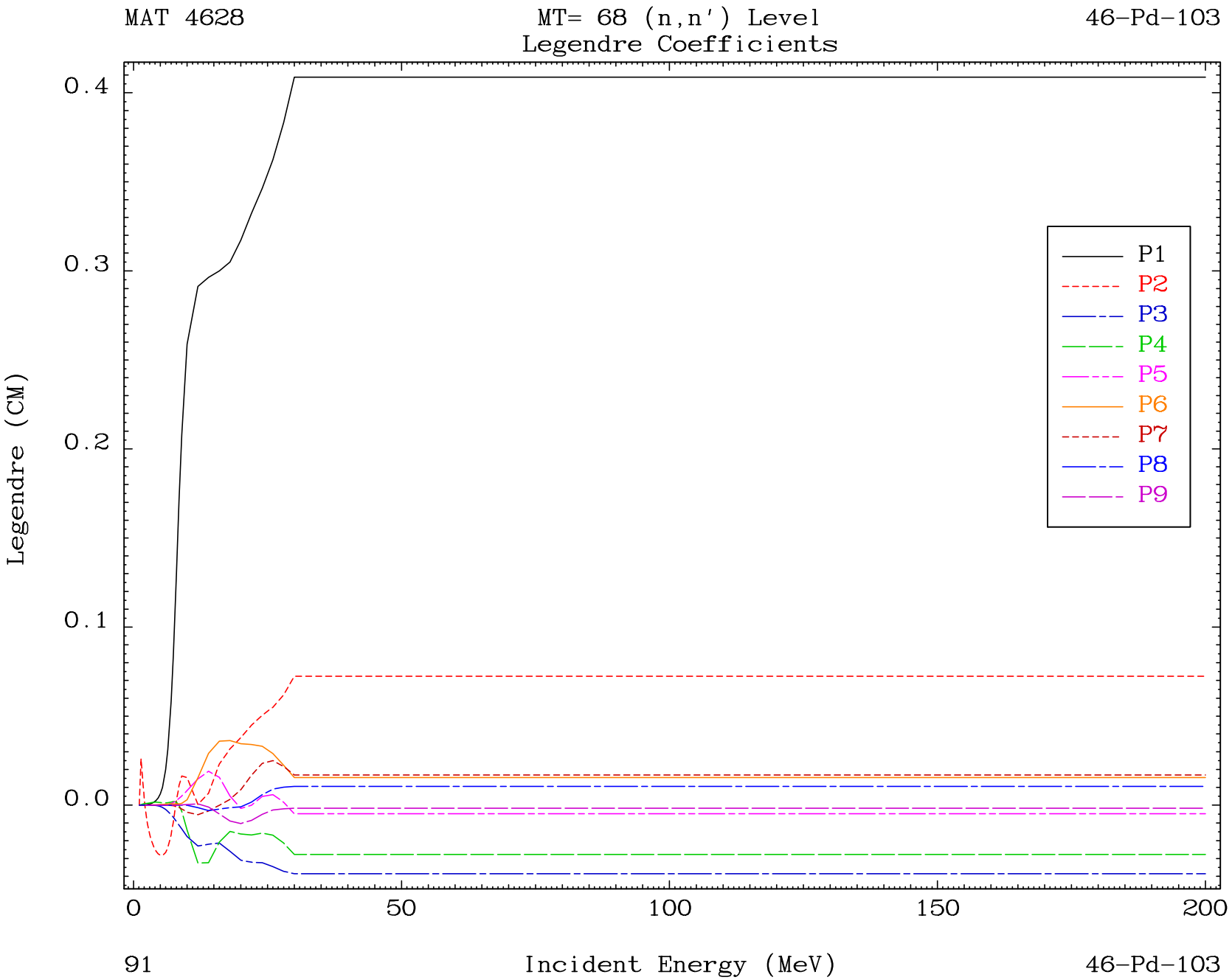

MAT 4628
MT= 66 (n,n') Level
Legendre Coefficients
46-Pd-103
0.0
X10−6
−0.2
−0.4
−0.6
−0.8
−1.0
Legendre (CM)
50
100
150
200
86
Incident Energy (MeV)
46-Pd-103
P28
P29
P30
P31
P32
P33
P34

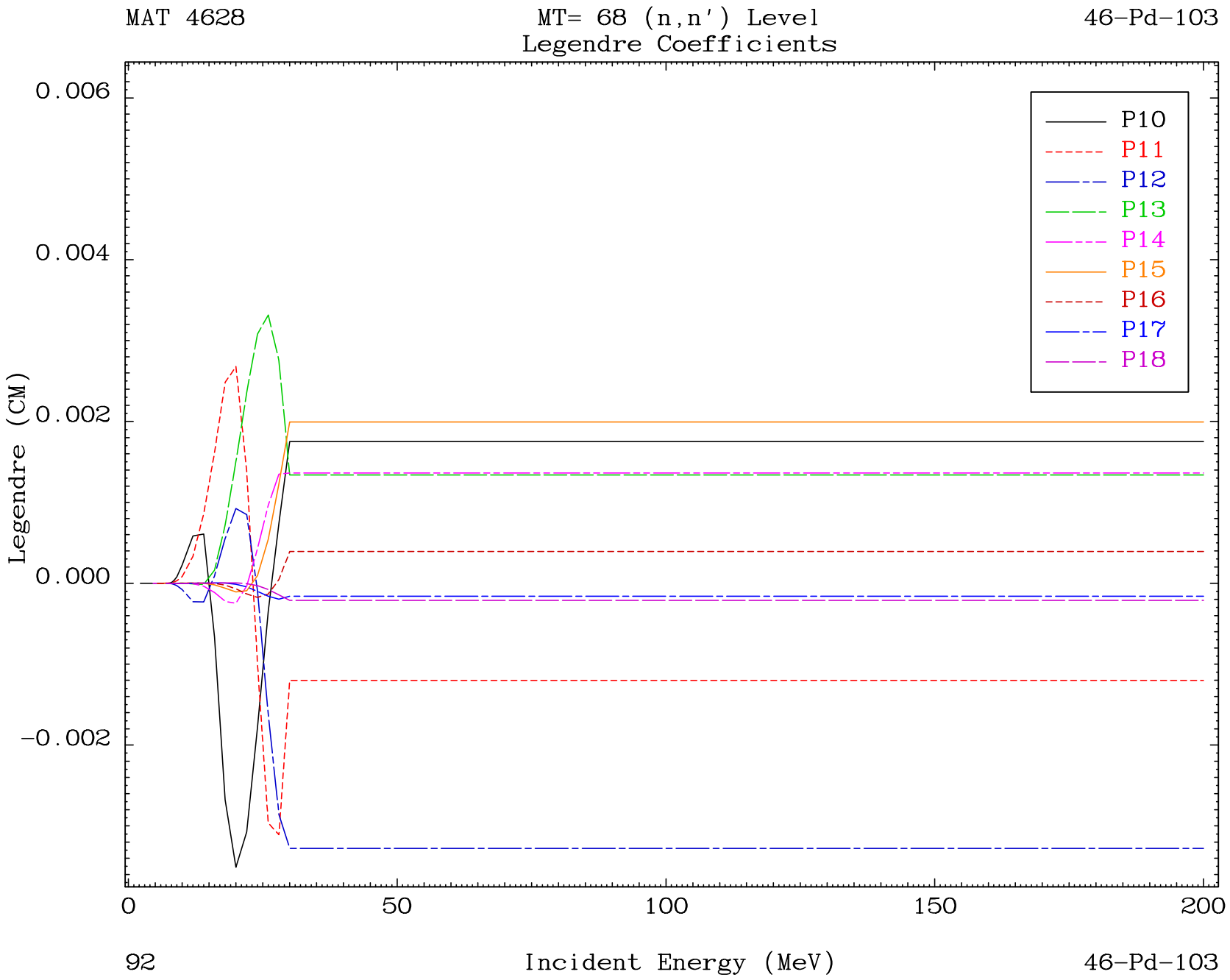

MAT 4628
MT= 67 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
87
Incident Energy (MeV)
46-Pd-103

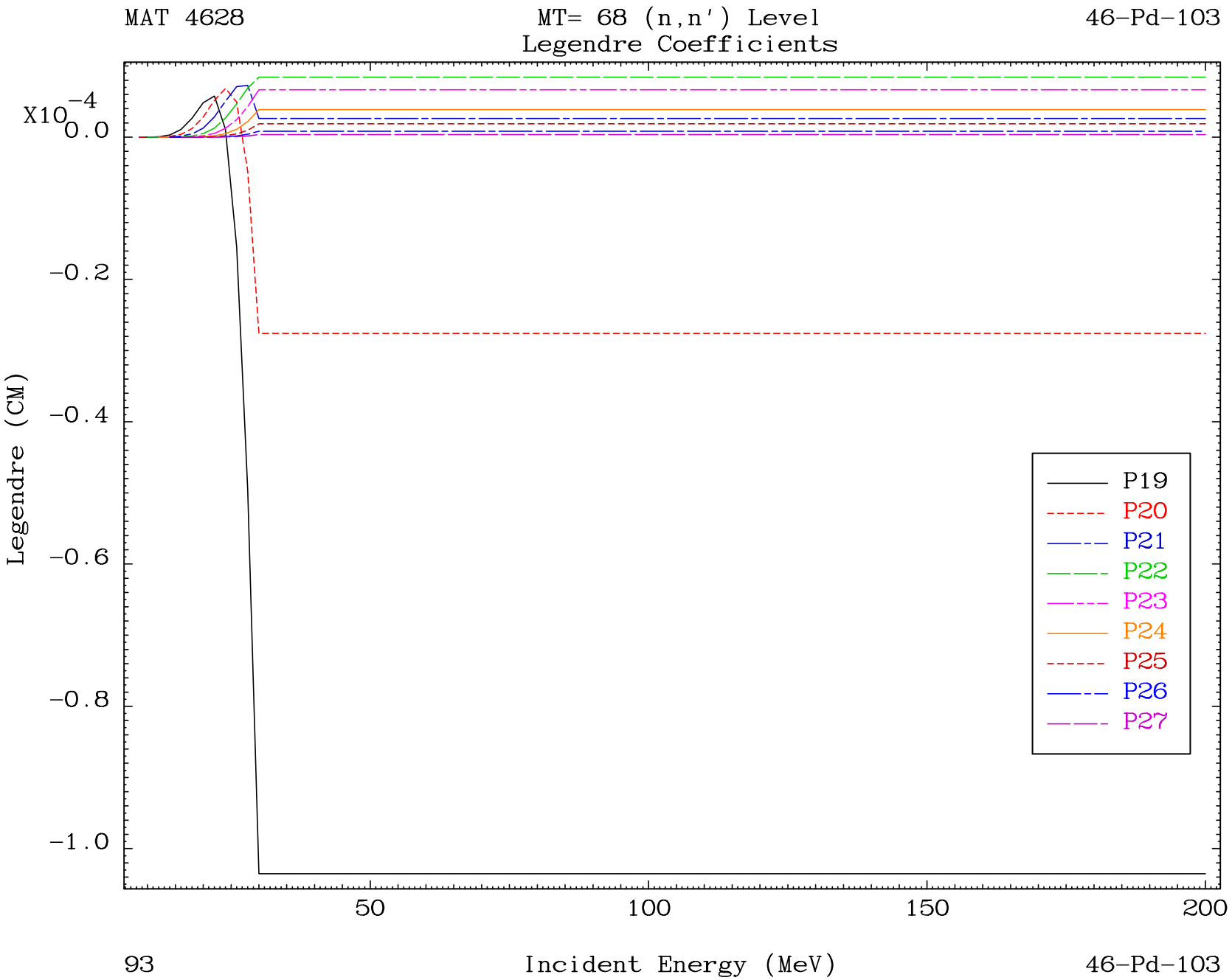

MAT 4628
MT= 67 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.004
0.000
-0.004
-0.008
Legendre (CM)
0
50
100
150
200
88
Incident Energy (MeV)
46-Pd-103

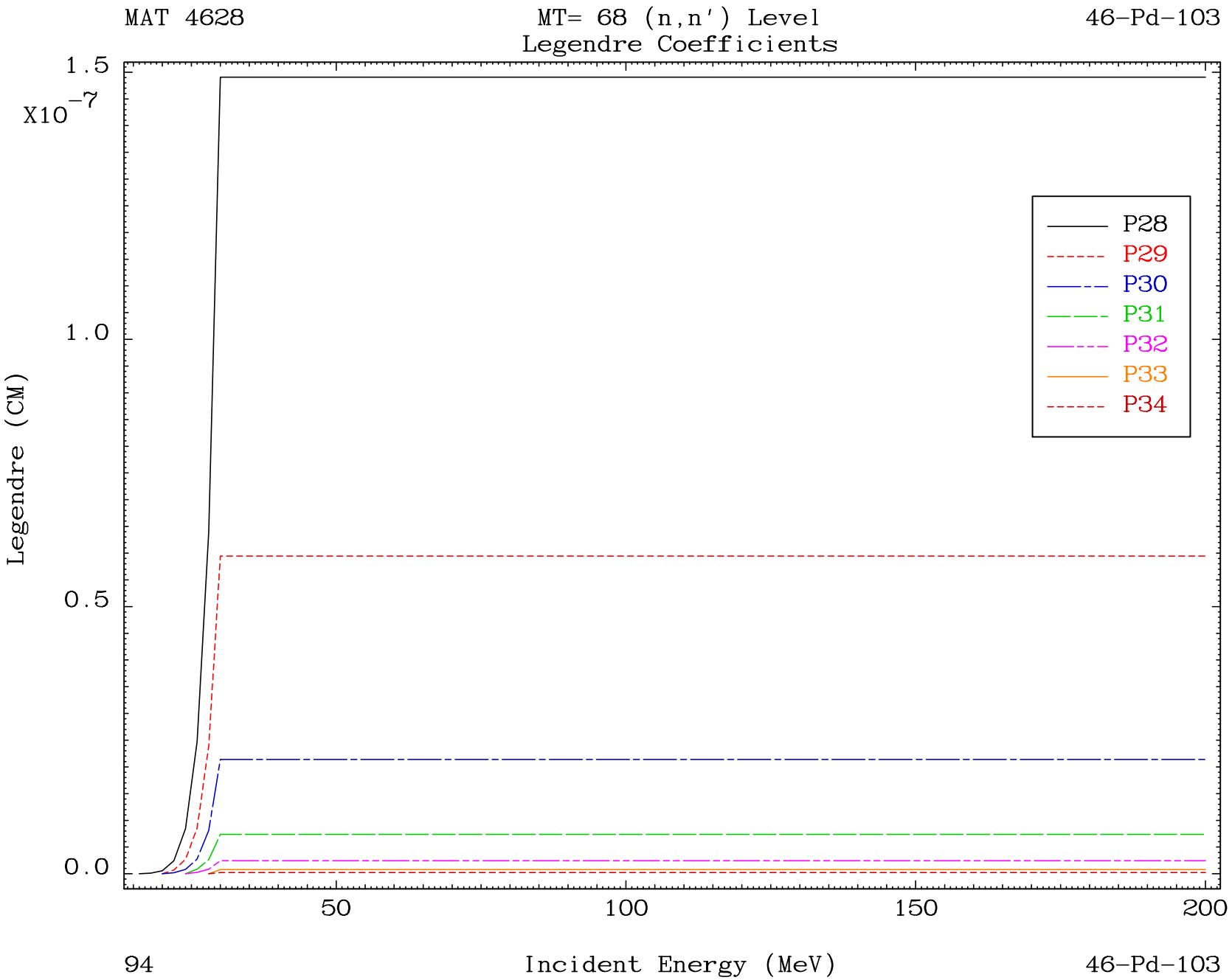

MAT 4628
MT= 67 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-4
0.5
0.0
-0.5
-1.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
89
Incident Energy (MeV)
46-Pd-103

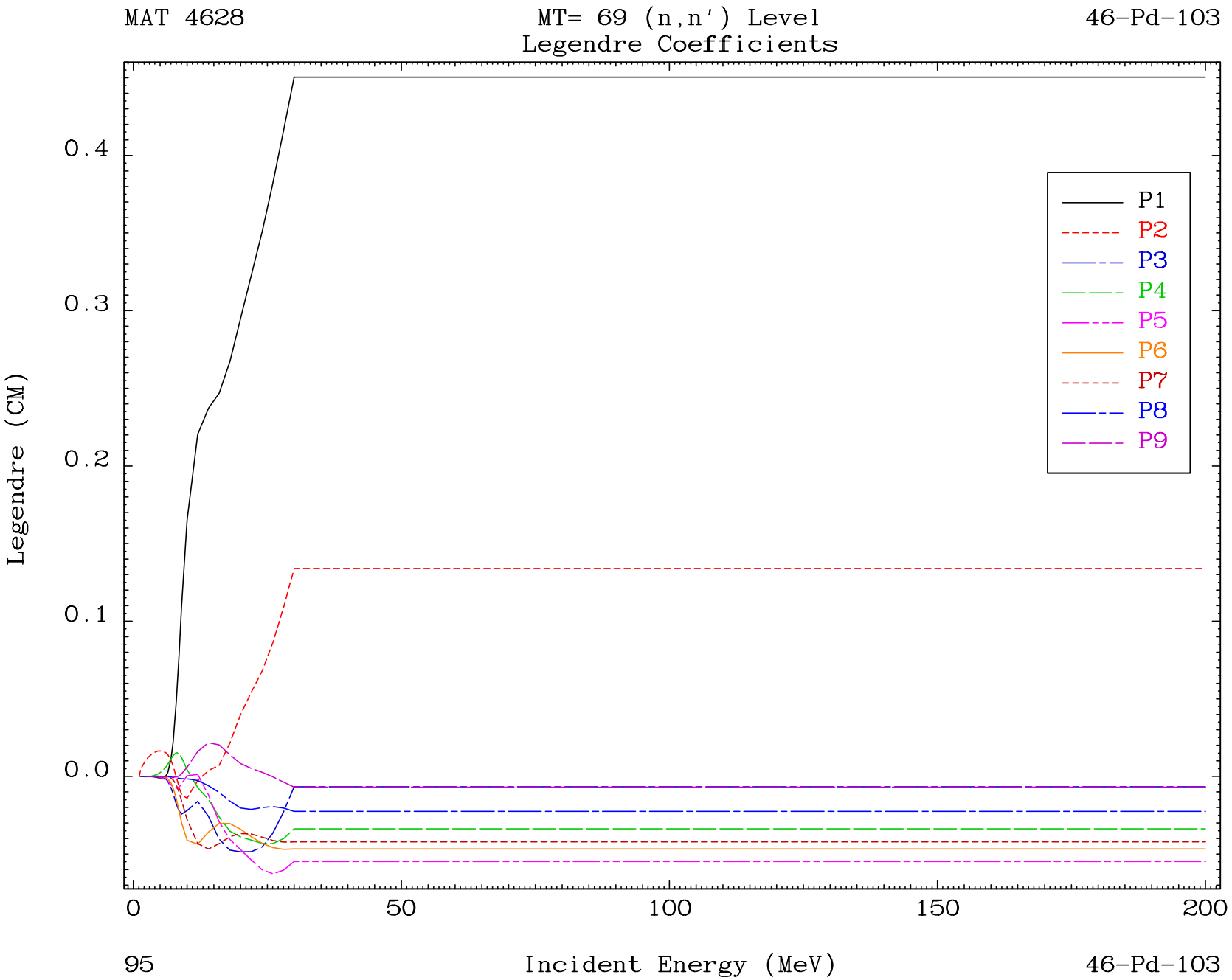

MAT 4628
MT= 67 (n,n') Level
Legendre Coefficients
46-Pd-103
0
X10-7
-1
-2
-3
Legendre (CM)
50
100
150
200
90
Incident Energy (MeV)
46-Pd-103
P28
P29
P30
P31
P32
P33
P34

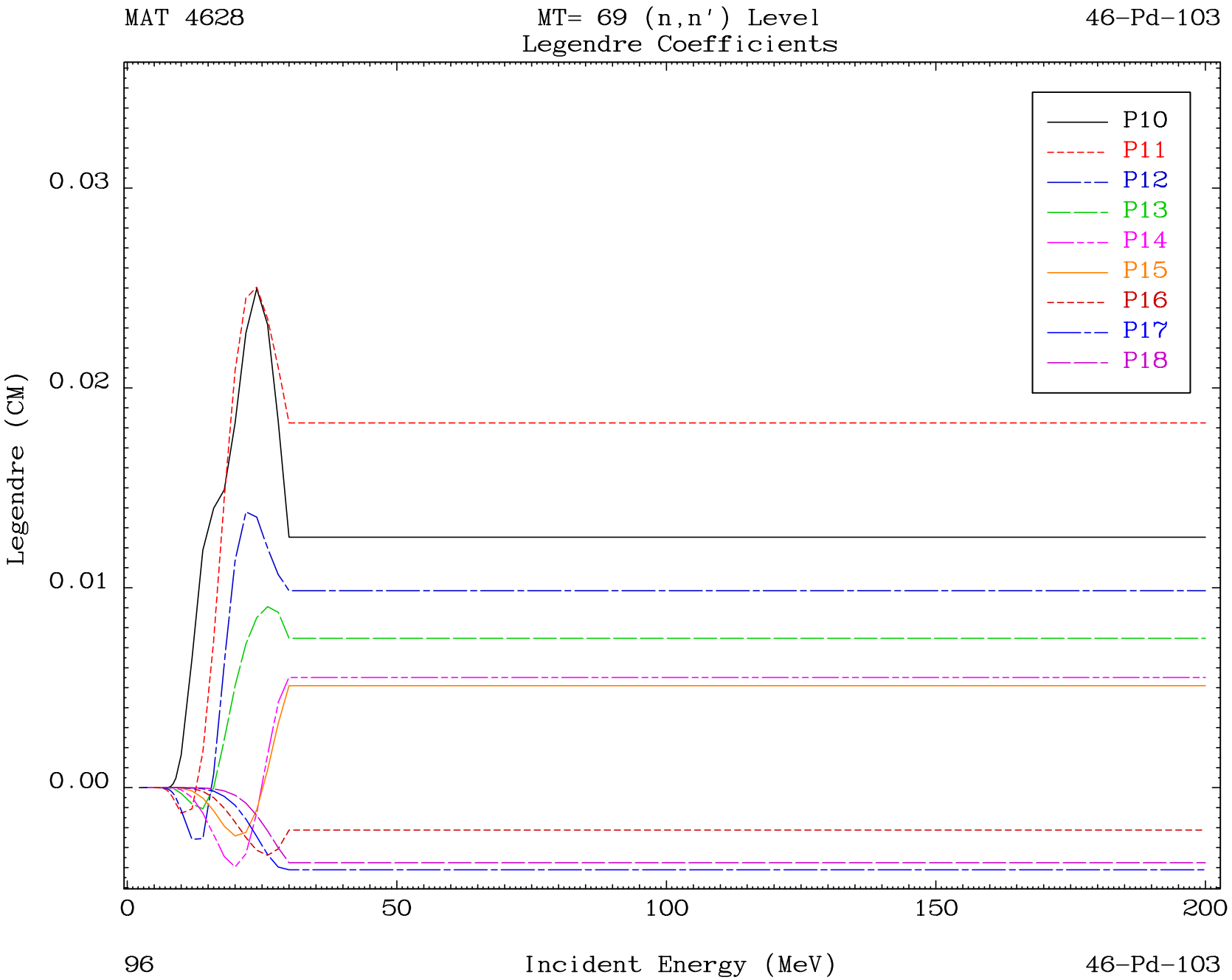

MAT 4628
MT= 68 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
91
Incident Energy (MeV)
46-Pd-103

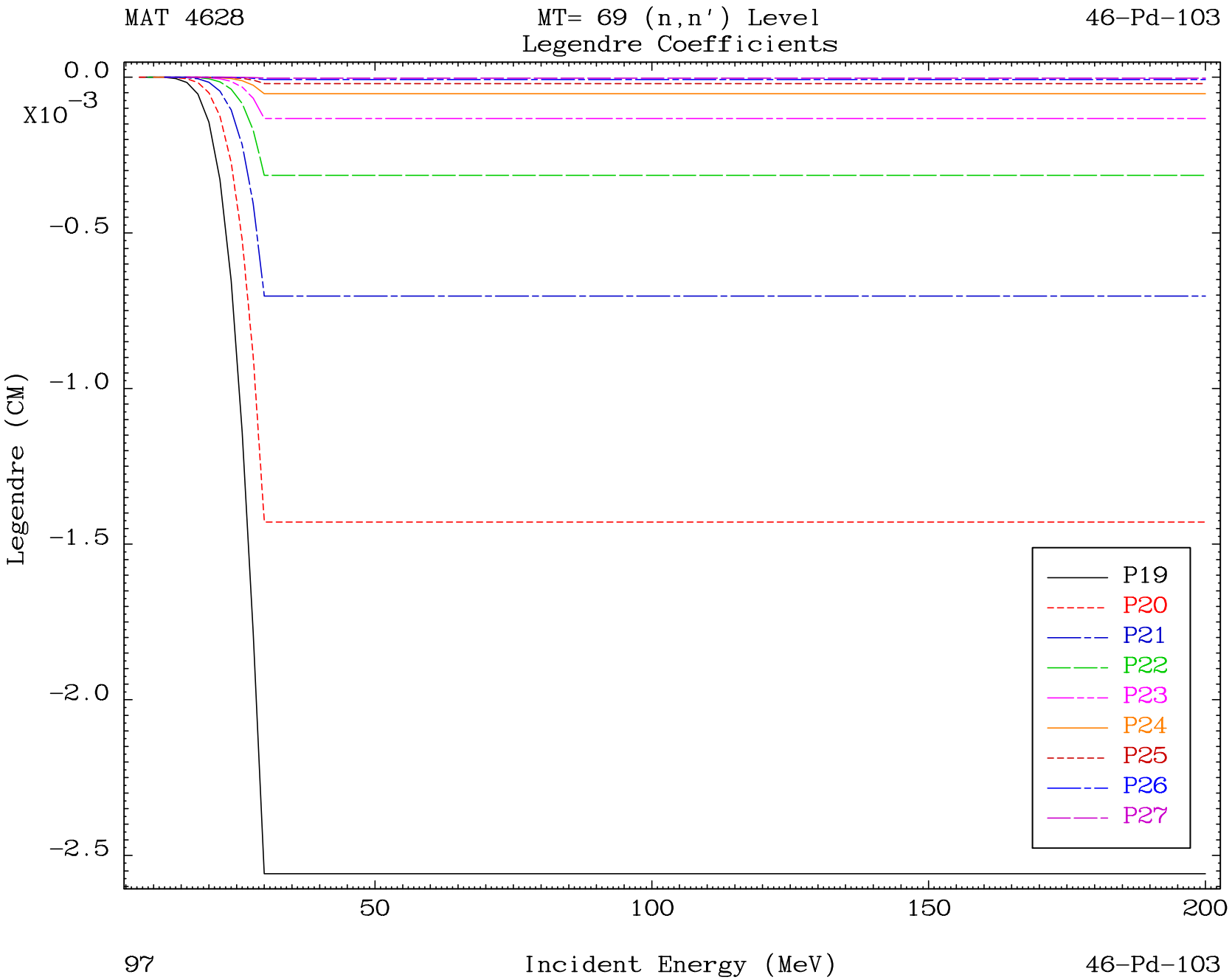

MAT 4628
MT= 68 (n,n') Level
Legendre Coefficients
46-Pd-103
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
92
Incident Energy (MeV)
46-Pd-103

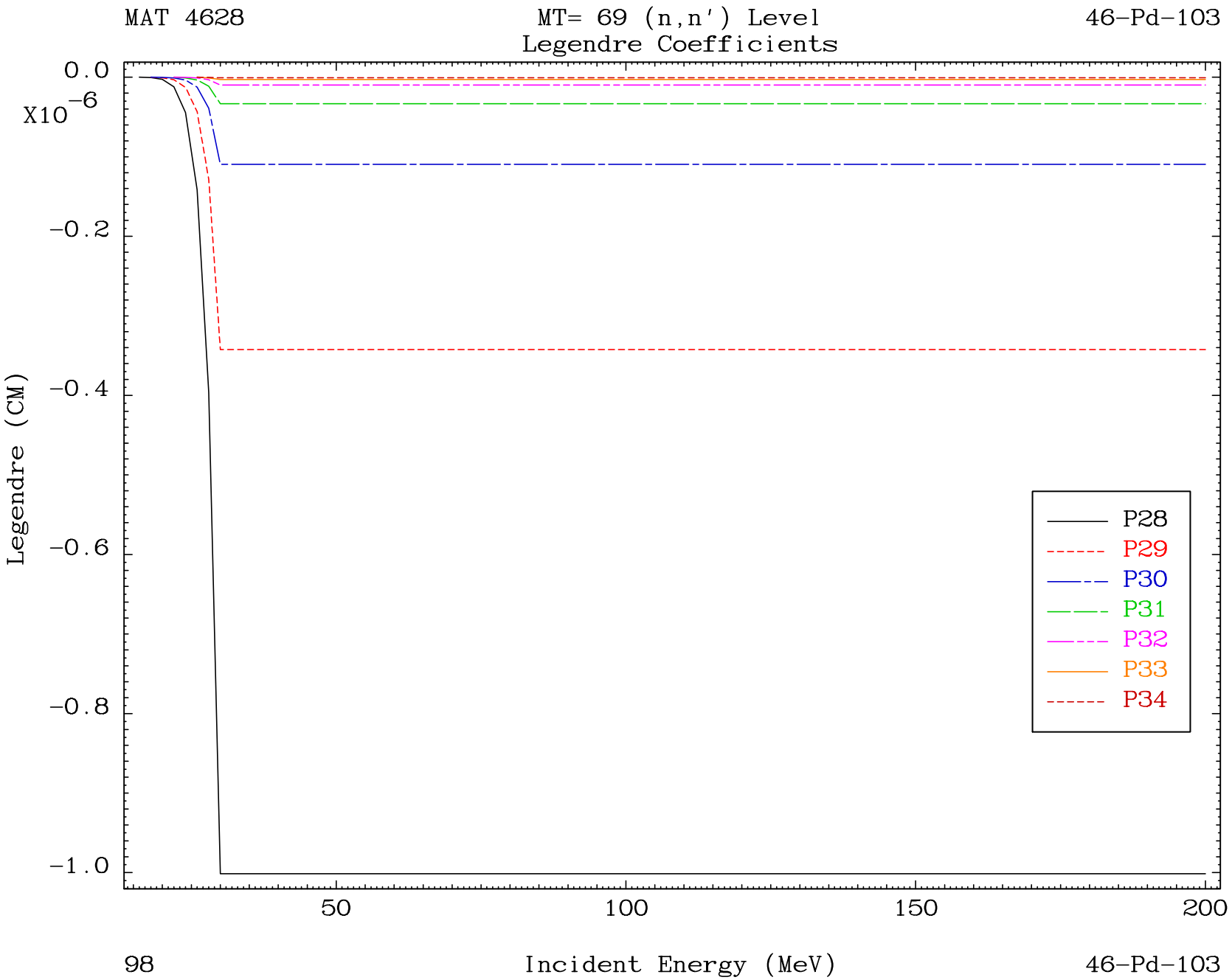

MAT 4628
MT= 68 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-4
0.0
-0.2
-0.4
-0.6
-0.8
-1.0
Legendre (CM)
50
100
150
200
93
Incident Energy (MeV)
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27

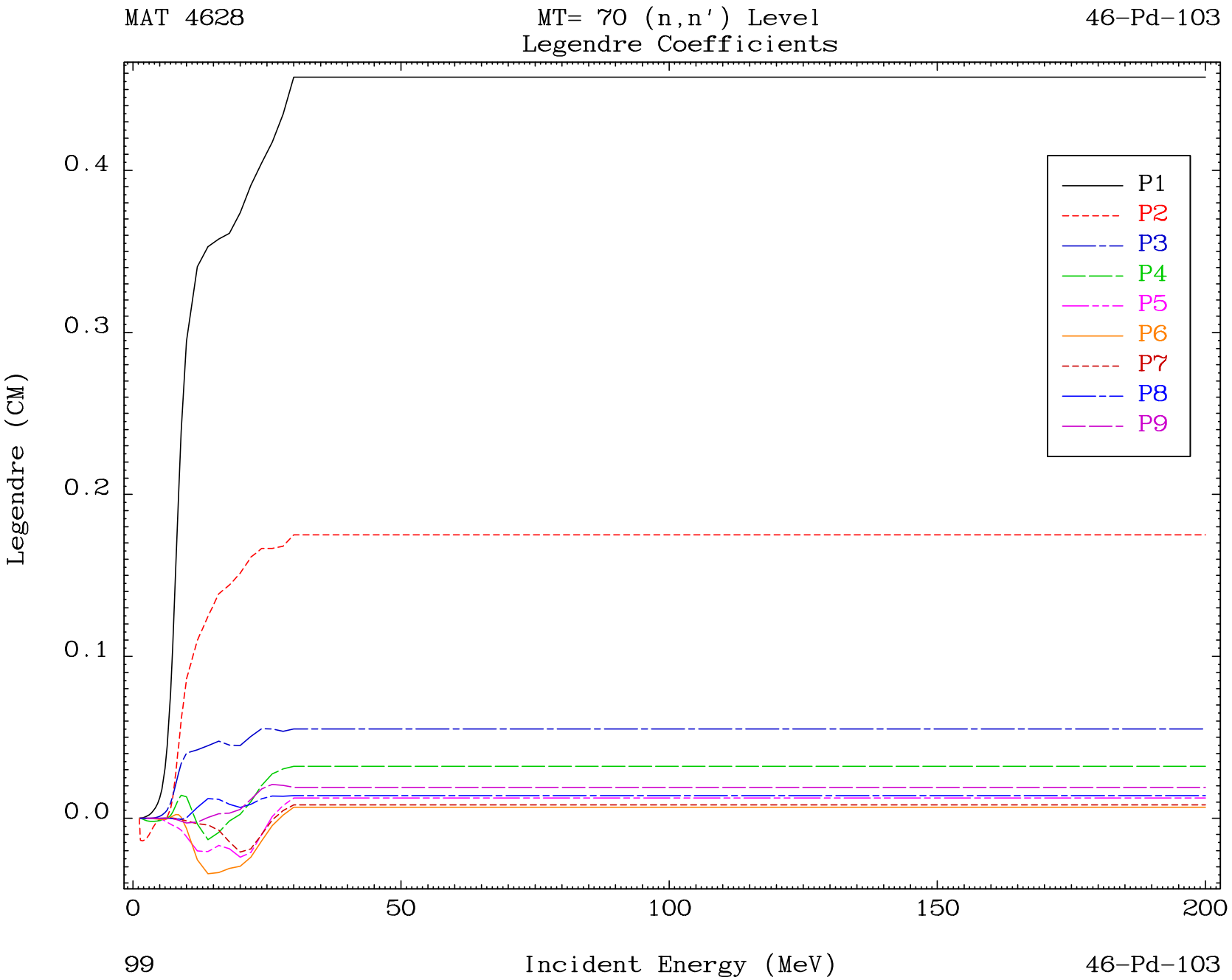

MAT 4628
MT= 68 (n,n') Level
Legendre Coefficients
46-Pd-103
1.5
X10-7
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
94
Incident Energy (MeV)
46-Pd-103

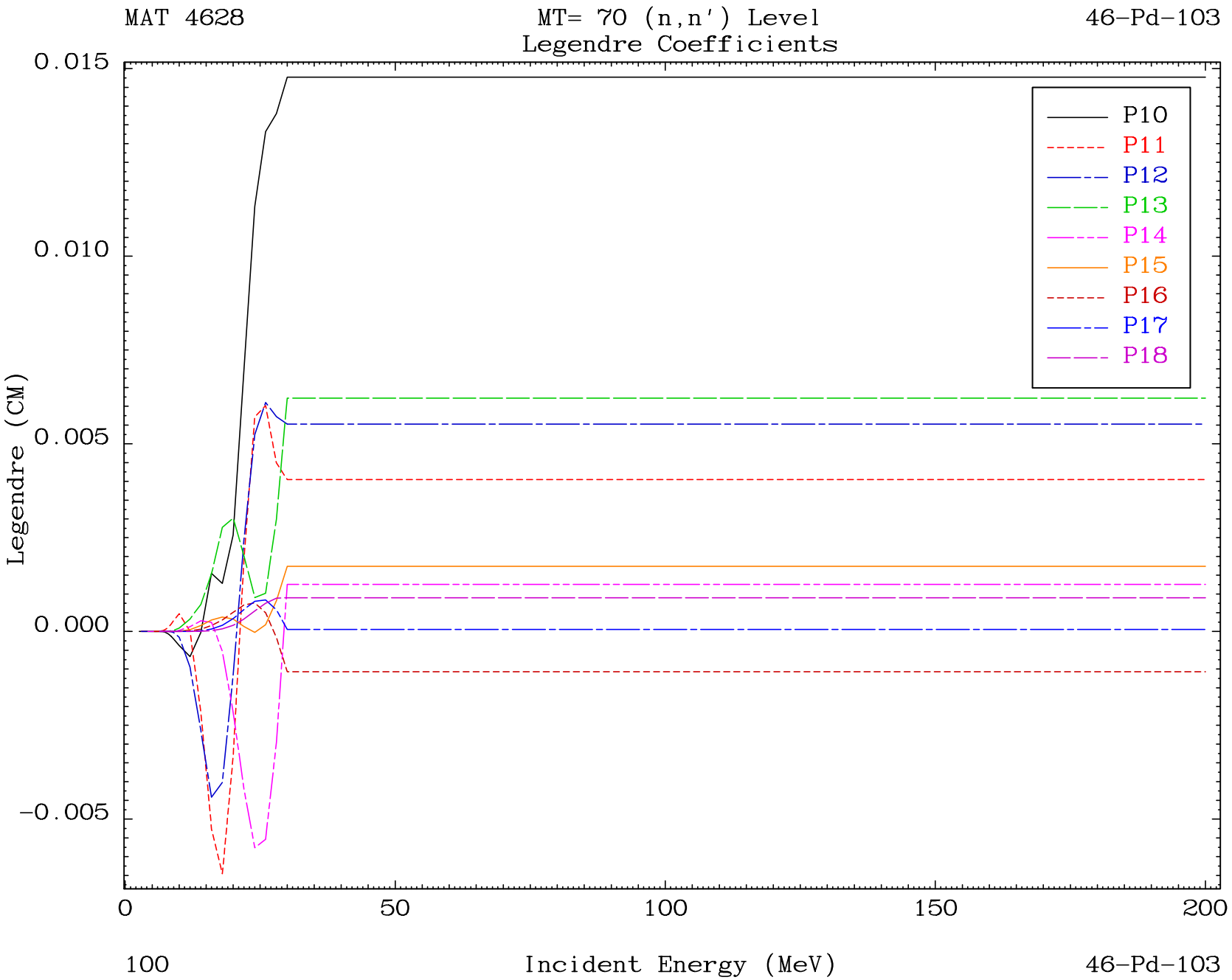

MAT 4628
MT= 69 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
Incident Energy (MeV)
95
46-Pd-103
P1
P2
P3
P4
P5
P6
P7
P8
P9

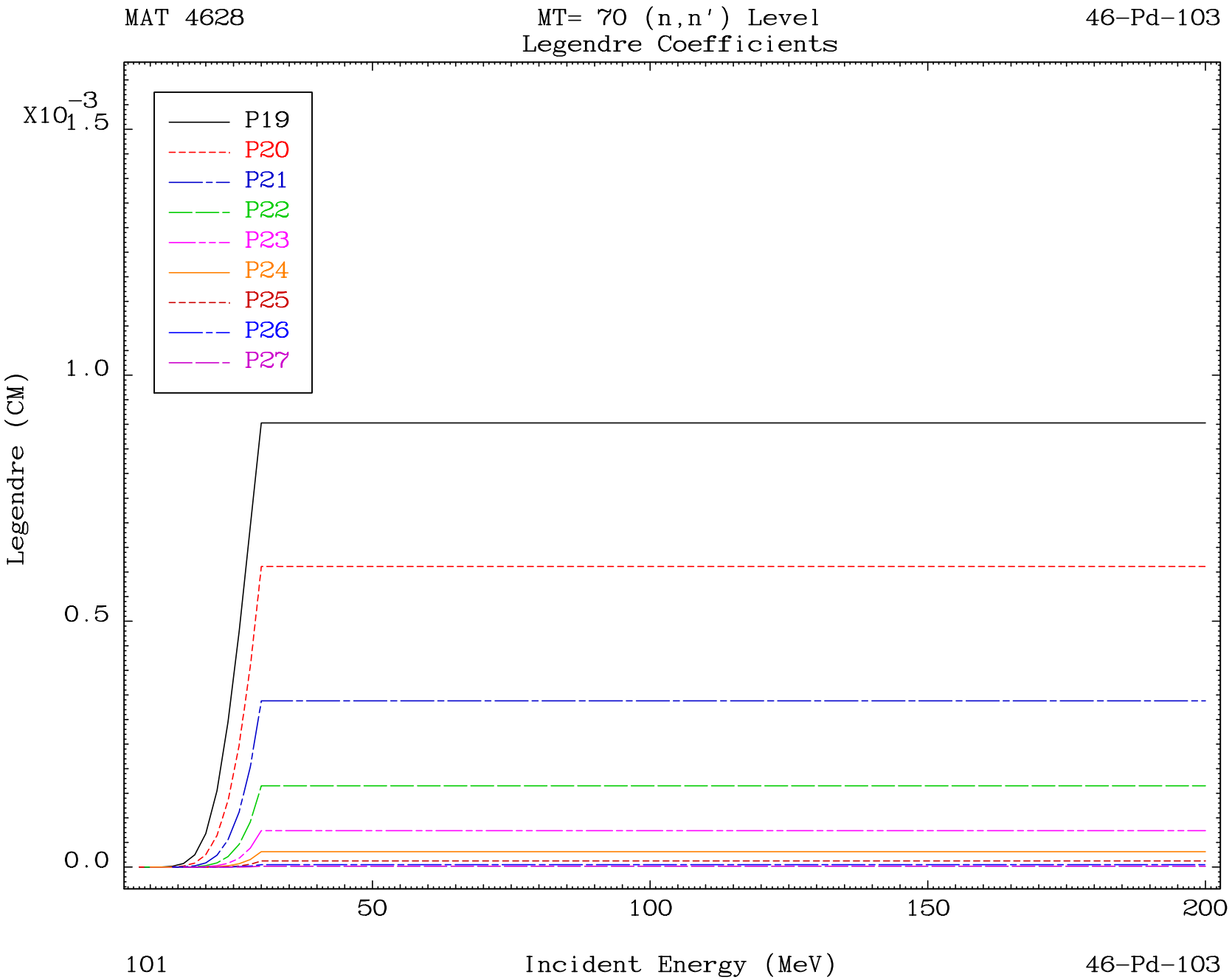

MAT 4628
MT= 69 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
96
Incident Energy (MeV)
46-Pd-103

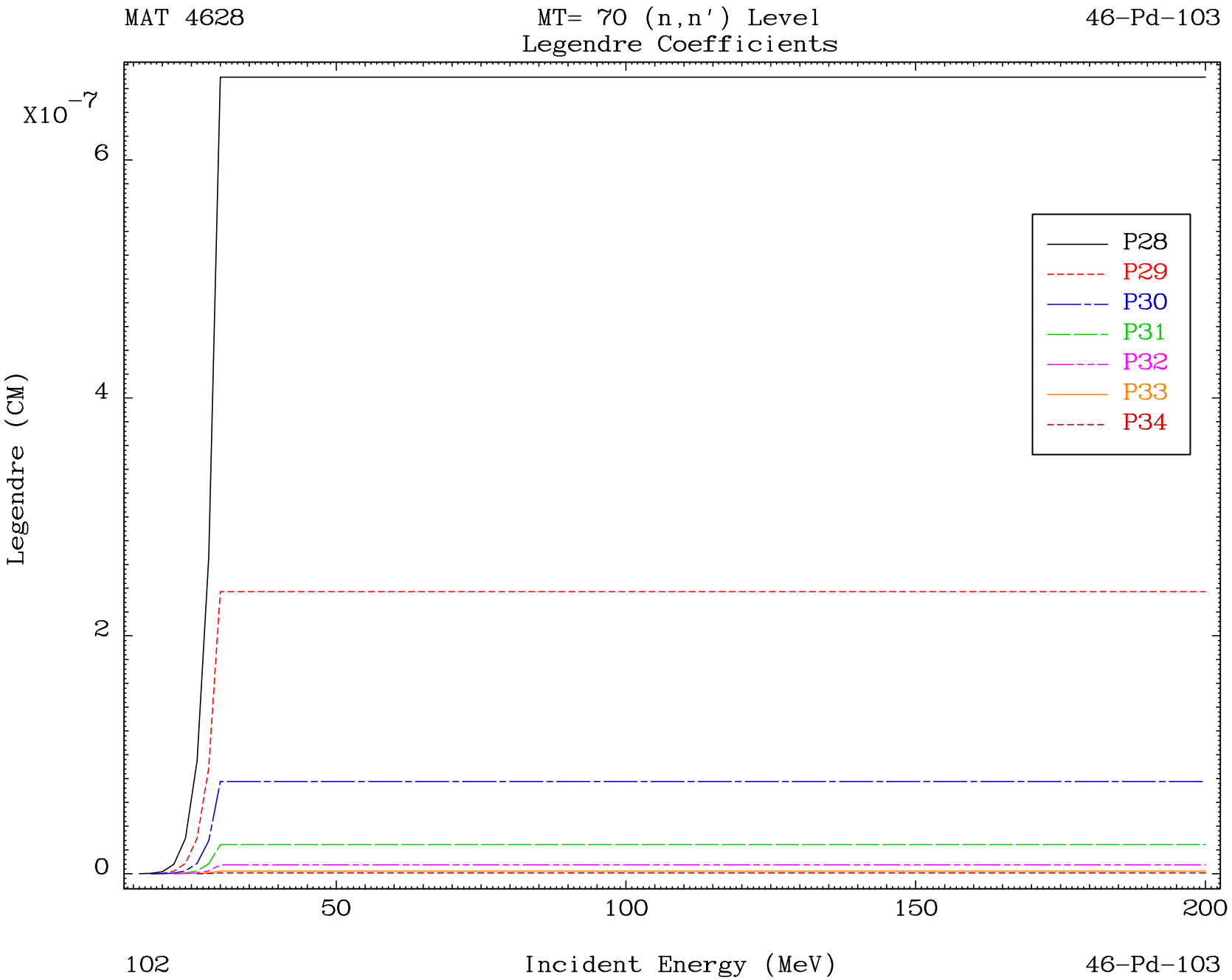

MAT 4628
MT= 69 (n,n') Level
Legendre Coefficients
46-Pd-103
0.0
X10^-3
-0.5
-1.0
-1.5
-2.0
-2.5
Legendre (CM)
50
100
150
200
97
Incident Energy (MeV)
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27

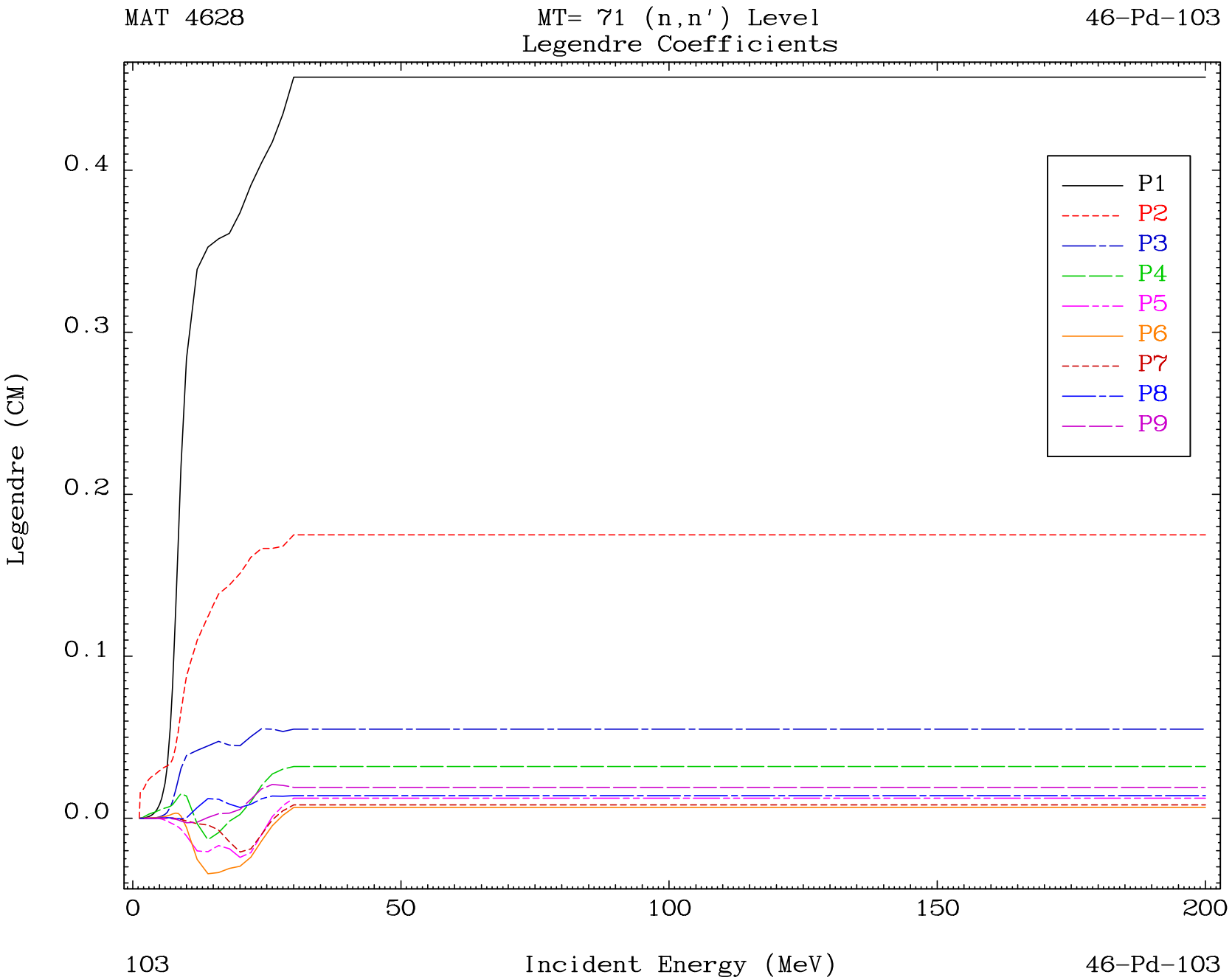

MAT 4628
MT= 69 (n,n') Level
Legendre Coefficients
46-Pd-103
0.0
X10^-6
-0.2
-0.4
-0.6
-0.8
-1.0
Legendre (CM)
50
100
150
200
98
Incident Energy (MeV)
46-Pd-103
P28
P29
P30
P31
P32
P33
P34

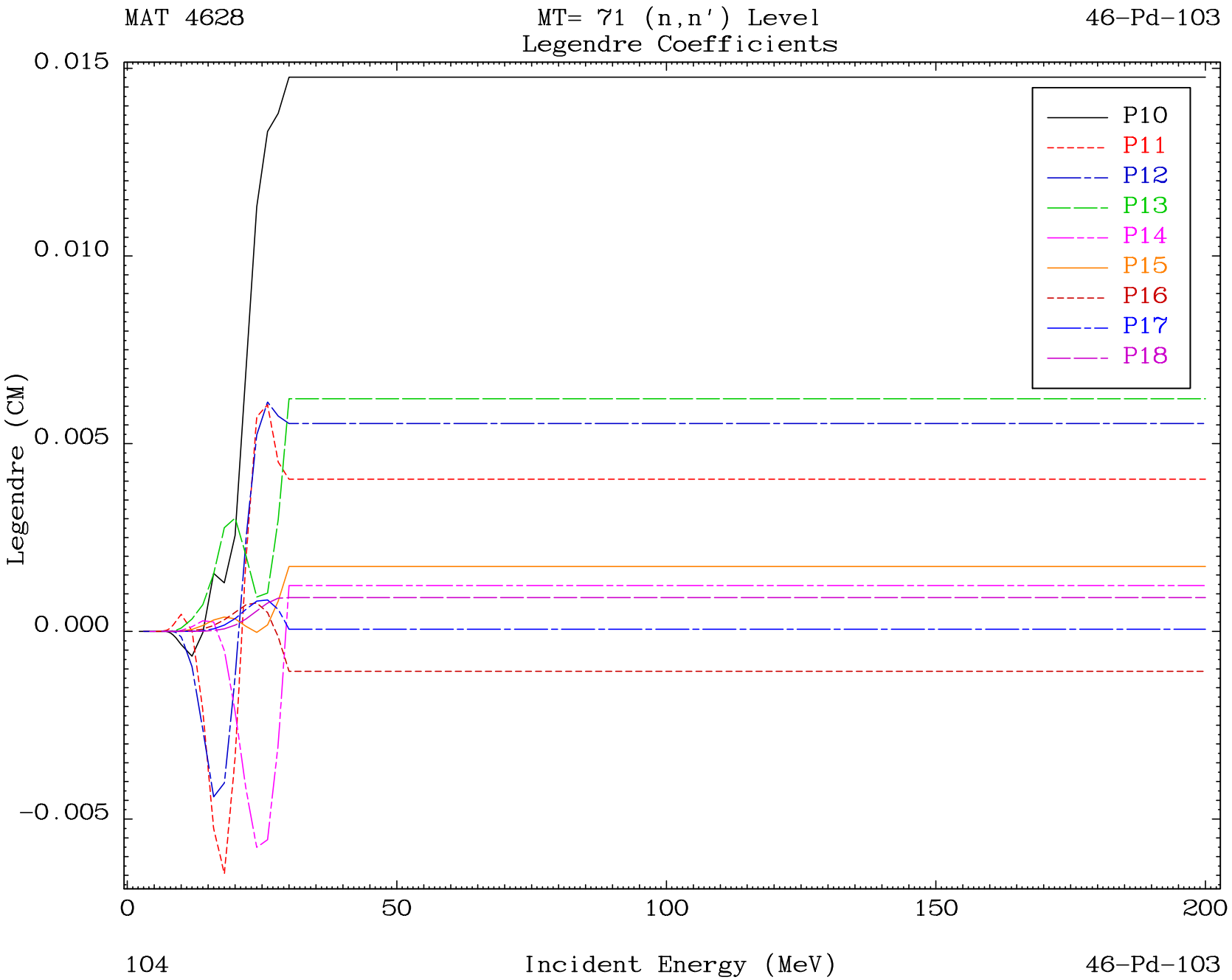

MAT 4628
MT= 70 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
99
Incident Energy (MeV)
46-Pd-103

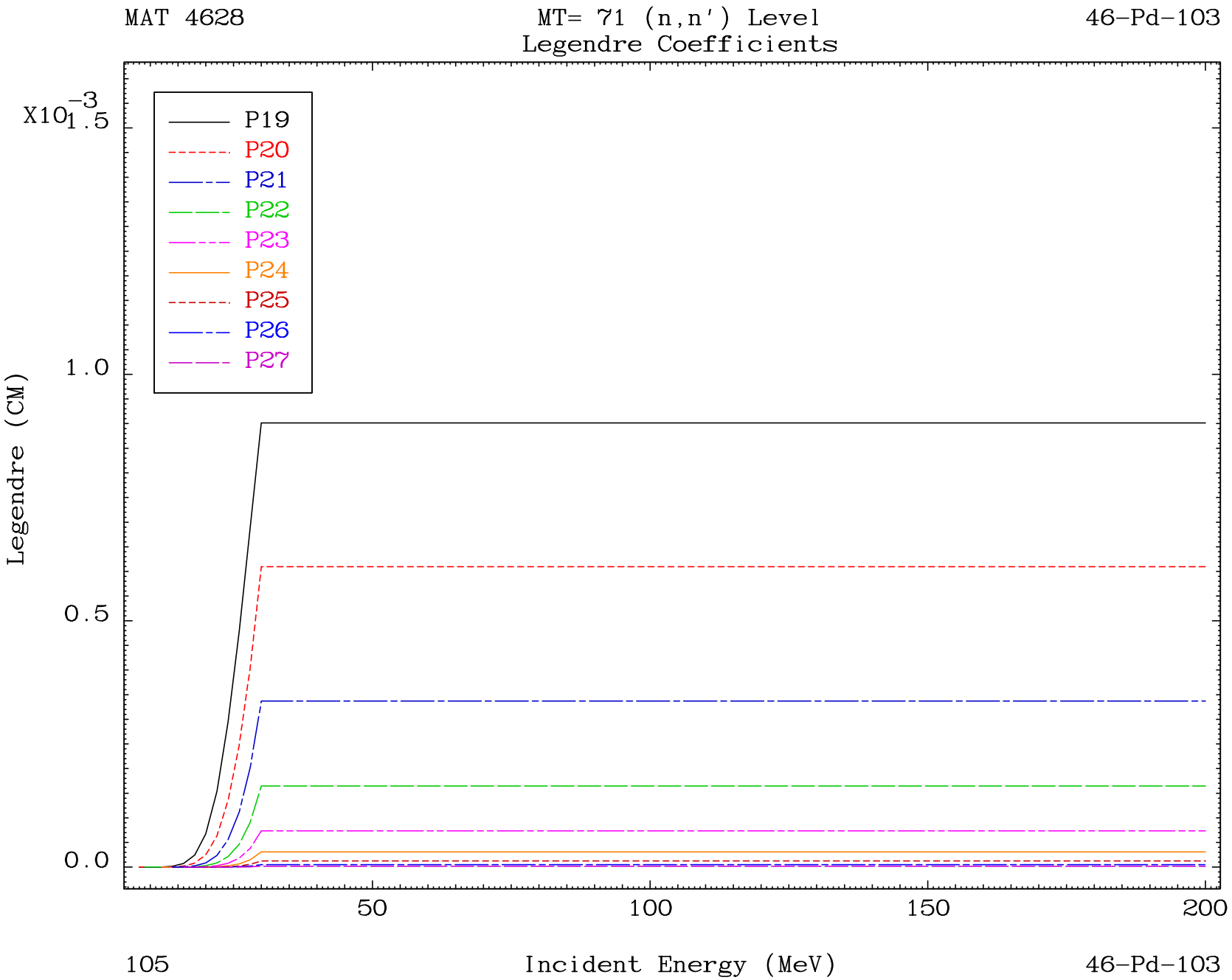

MAT 4628
MT= 70 (n,n') Level
Legendre Coefficients
46-Pd-103
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
100
Incident Energy (MeV)
46-Pd-103

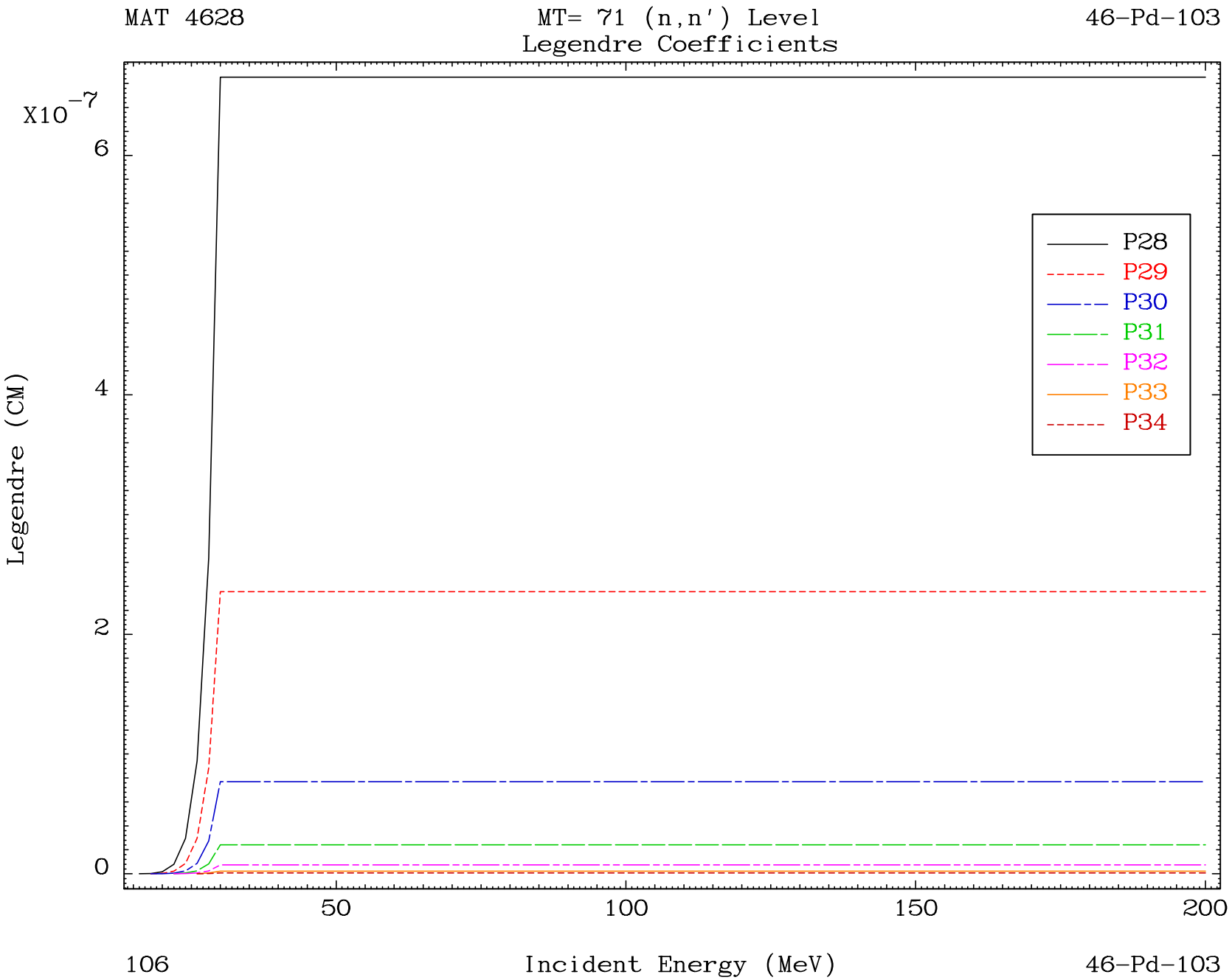

MAT 4628
MT= 70 (n,n') Level
Legendre Coefficients
46-Pd-103
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
101
Incident Energy (MeV)
46-Pd-103

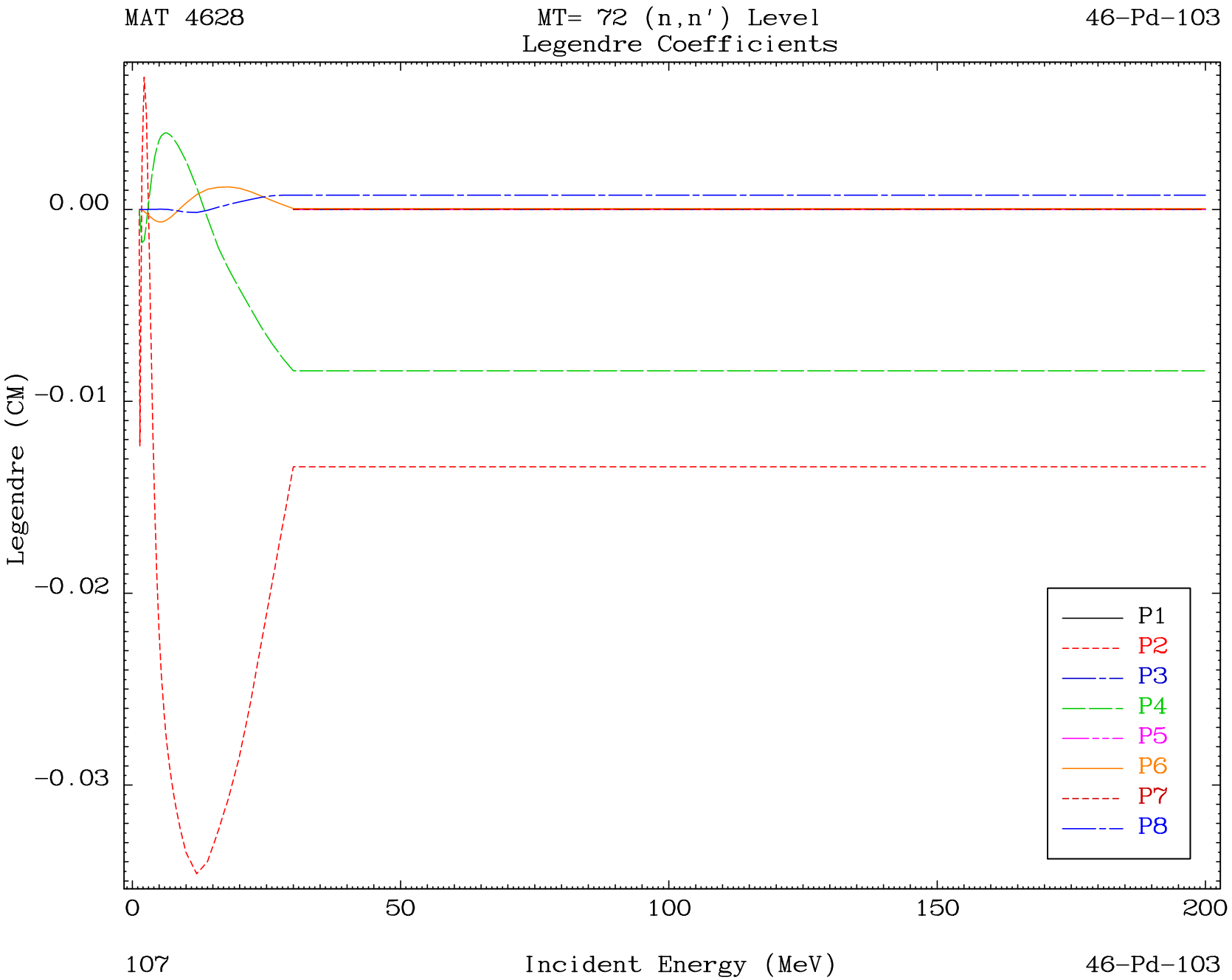

MAT 4628
MT= 70 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-7
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
102
Incident Energy (MeV)
46-Pd-103

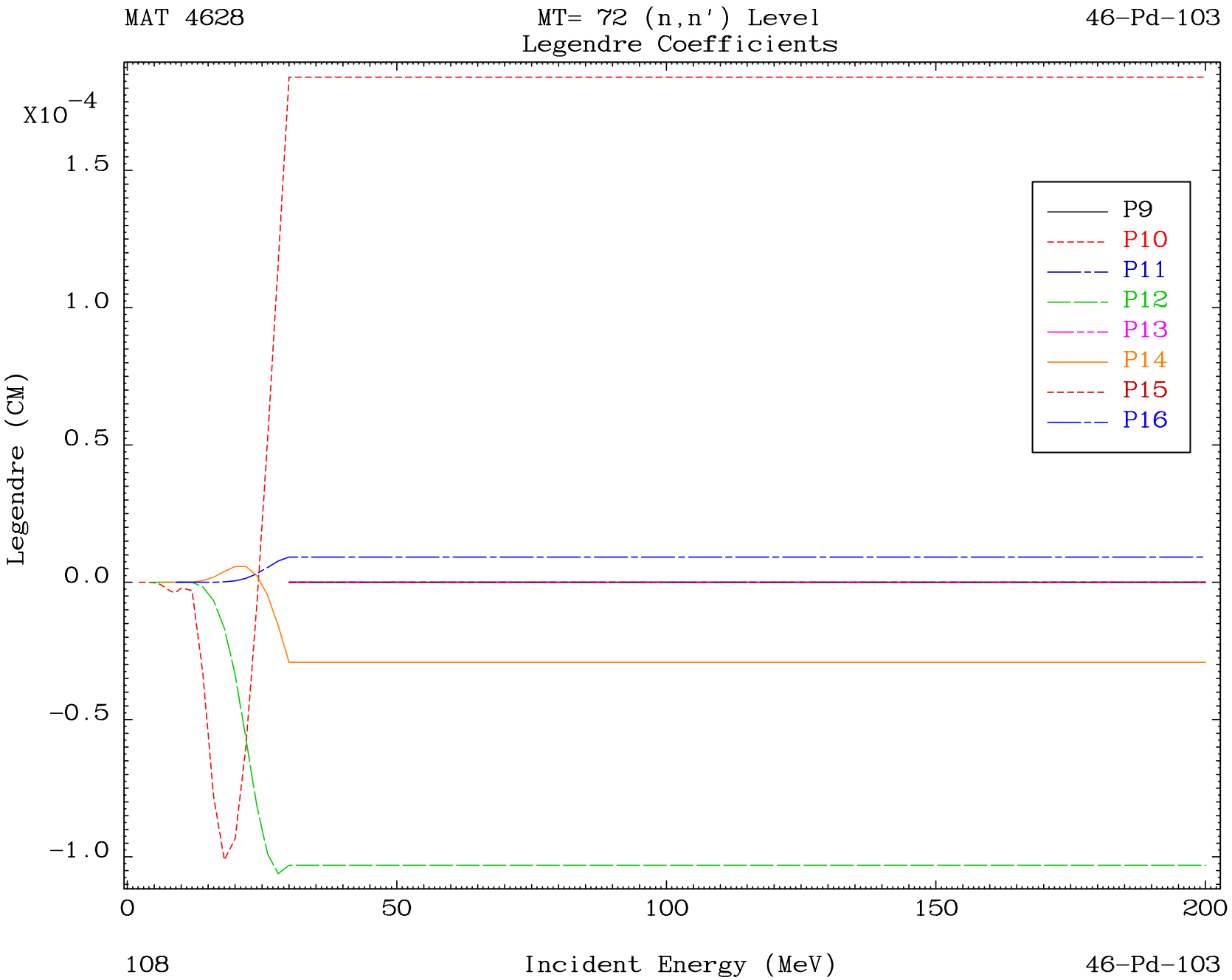

MAT 4628
MT= 71 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
103
Incident Energy (MeV)
46-Pd-103

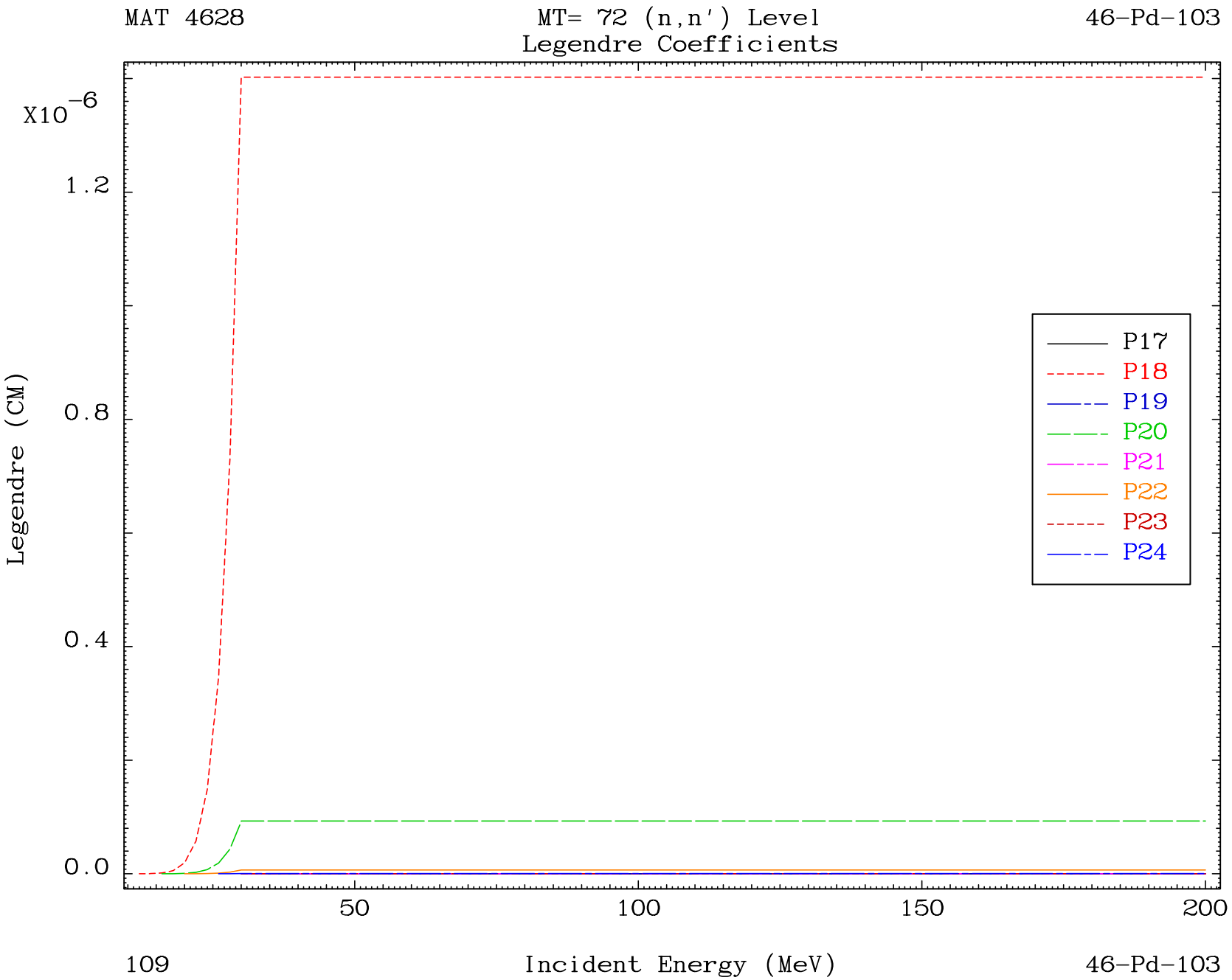

MAT 4628
MT= 71 (n,n') Level
Legendre Coefficients
46-Pd-103
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
104
Incident Energy (MeV)
46-Pd-103

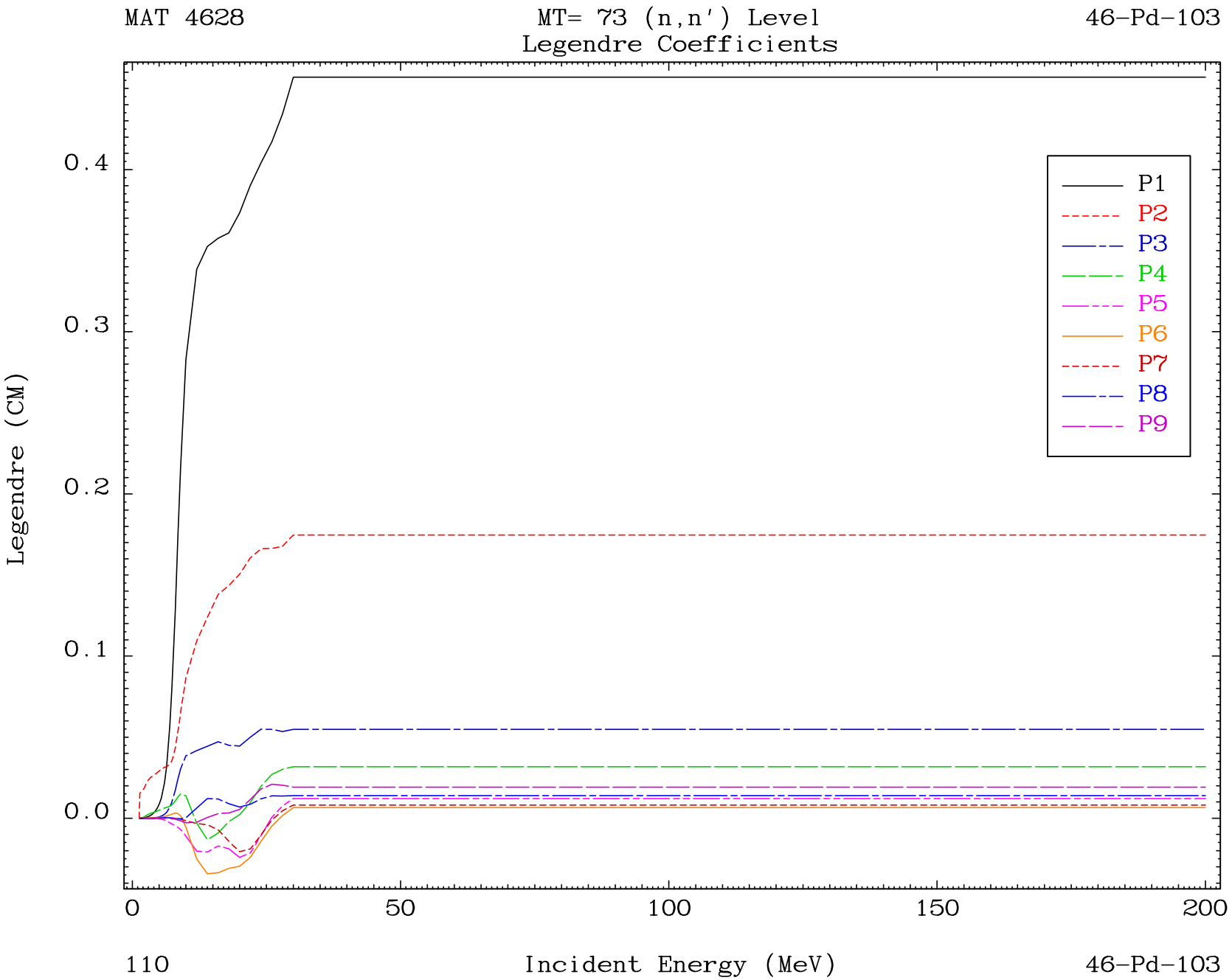

MAT 4628
MT= 71 (n,n') Level
Legendre Coefficients
46-Pd-103
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
105
Incident Energy (MeV)
46-Pd-103

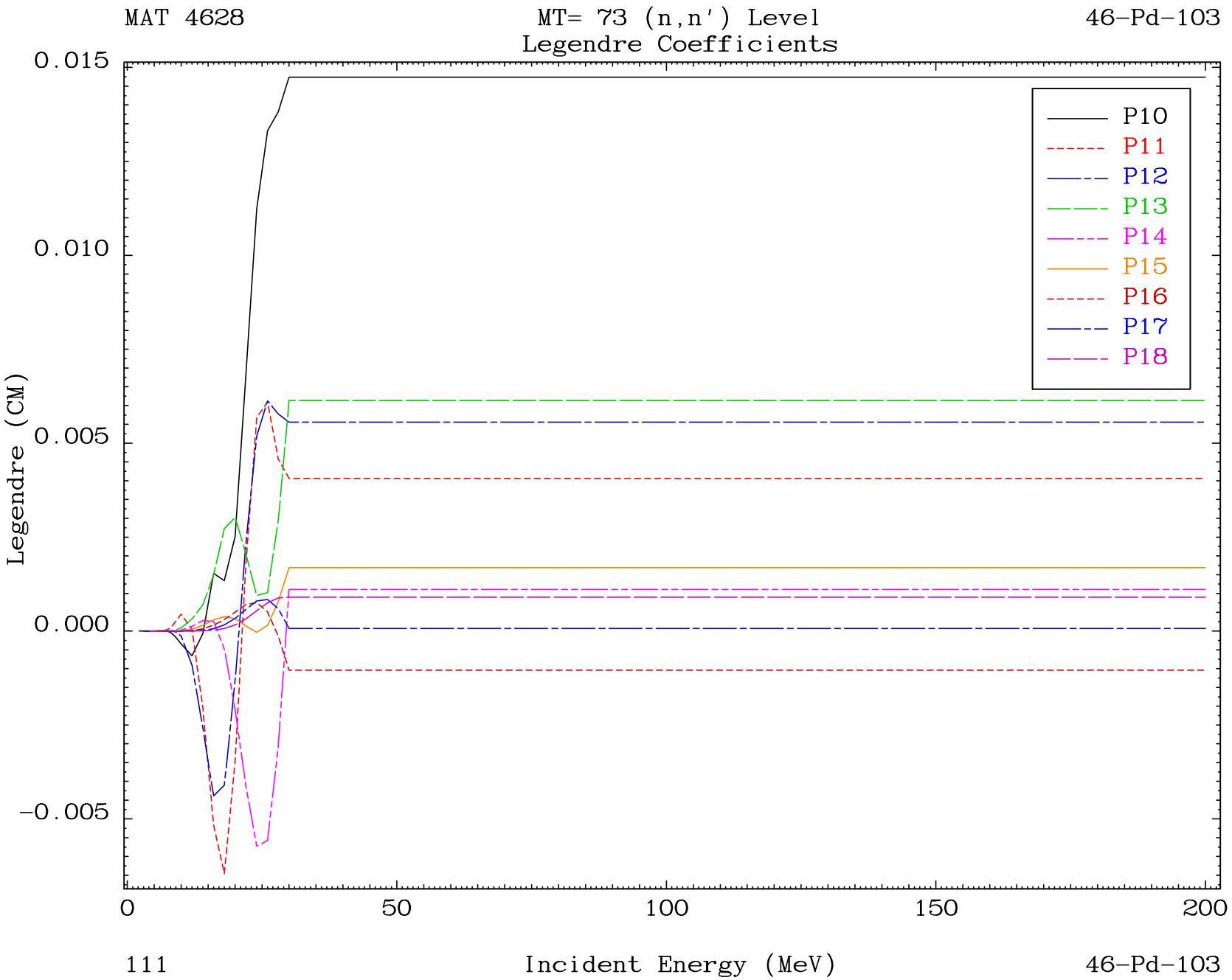

MAT 4628
MT= 71 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-7
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
106
Incident Energy (MeV)
46-Pd-103

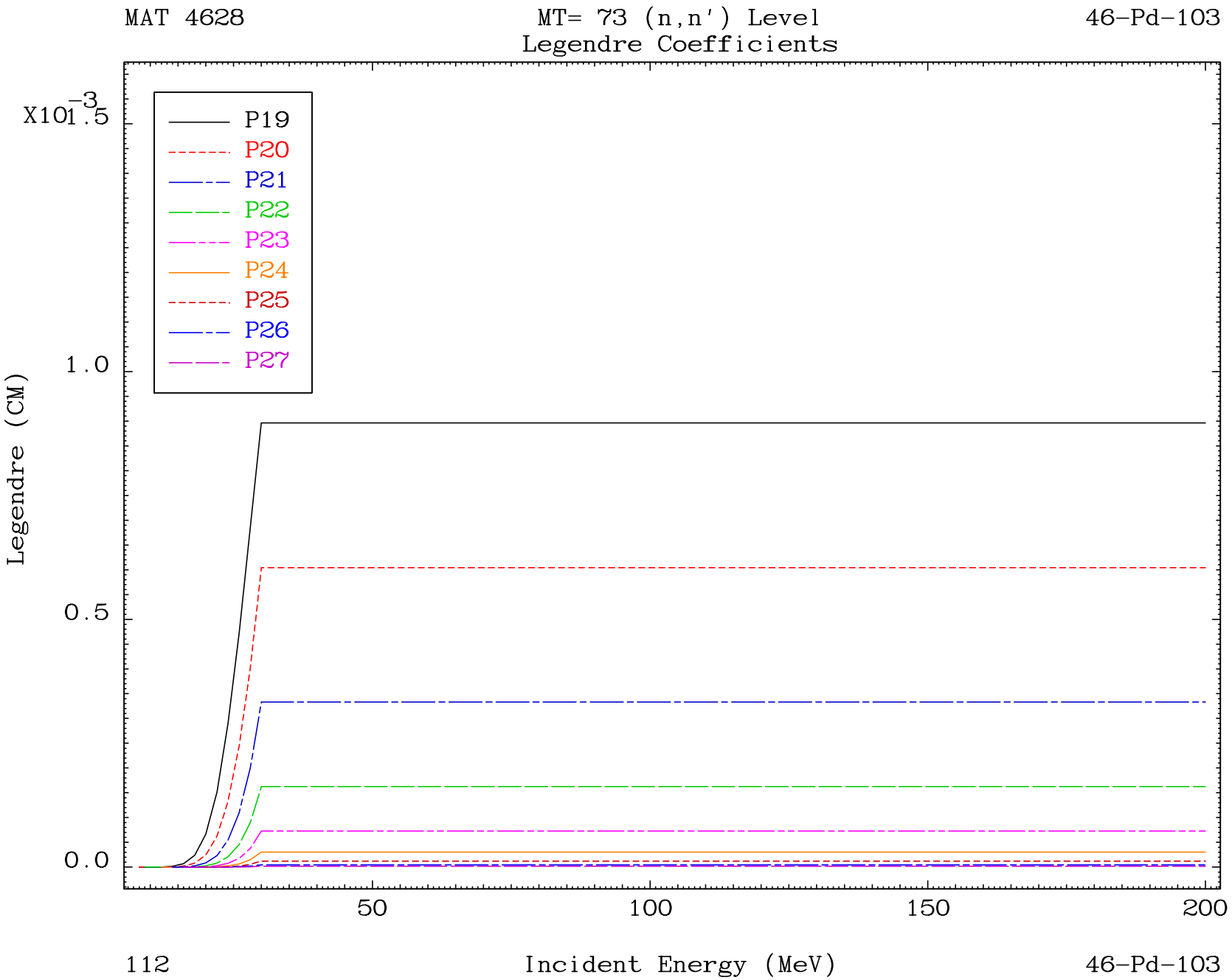

MAT 4628
MT= 72 (n,n') Level
Legendre Coefficients
46-Pd-103
0.00
-0.01
-0.02
-0.03
Legendre (CM)
0
50
100
150
200
107
Incident Energy (MeV)
46-Pd-103
P1
P2
P3
P4
P5
P6
P7
P8

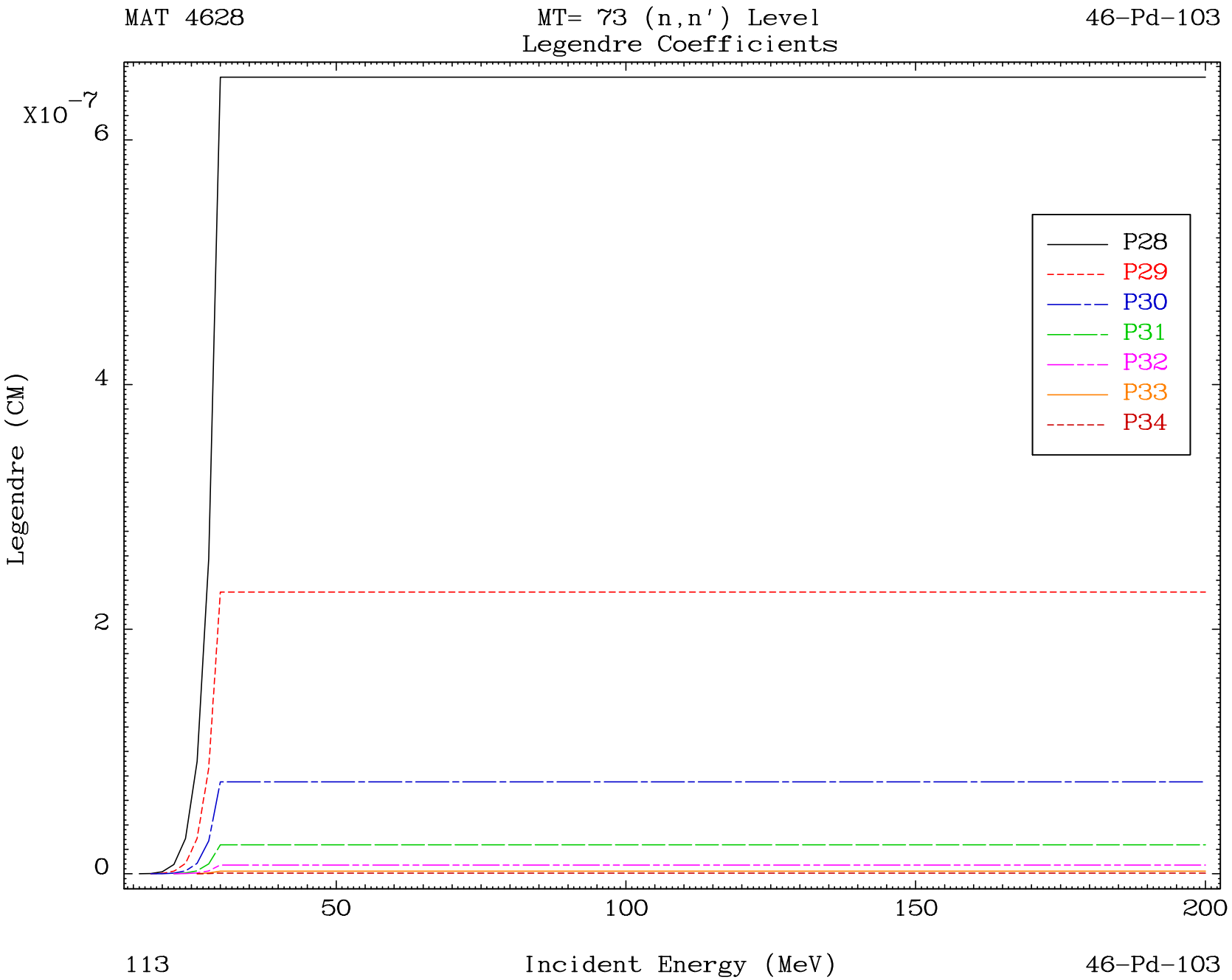

MAT 4628
MT= 72 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-4
1.5
1.0
0.5
0.0
-0.5
-1.0
Legendre (CM)
P9
P10
P11
P12
P13
P14
P15
P16
0
50
100
150
200
108
Incident Energy (MeV)
46-Pd-103

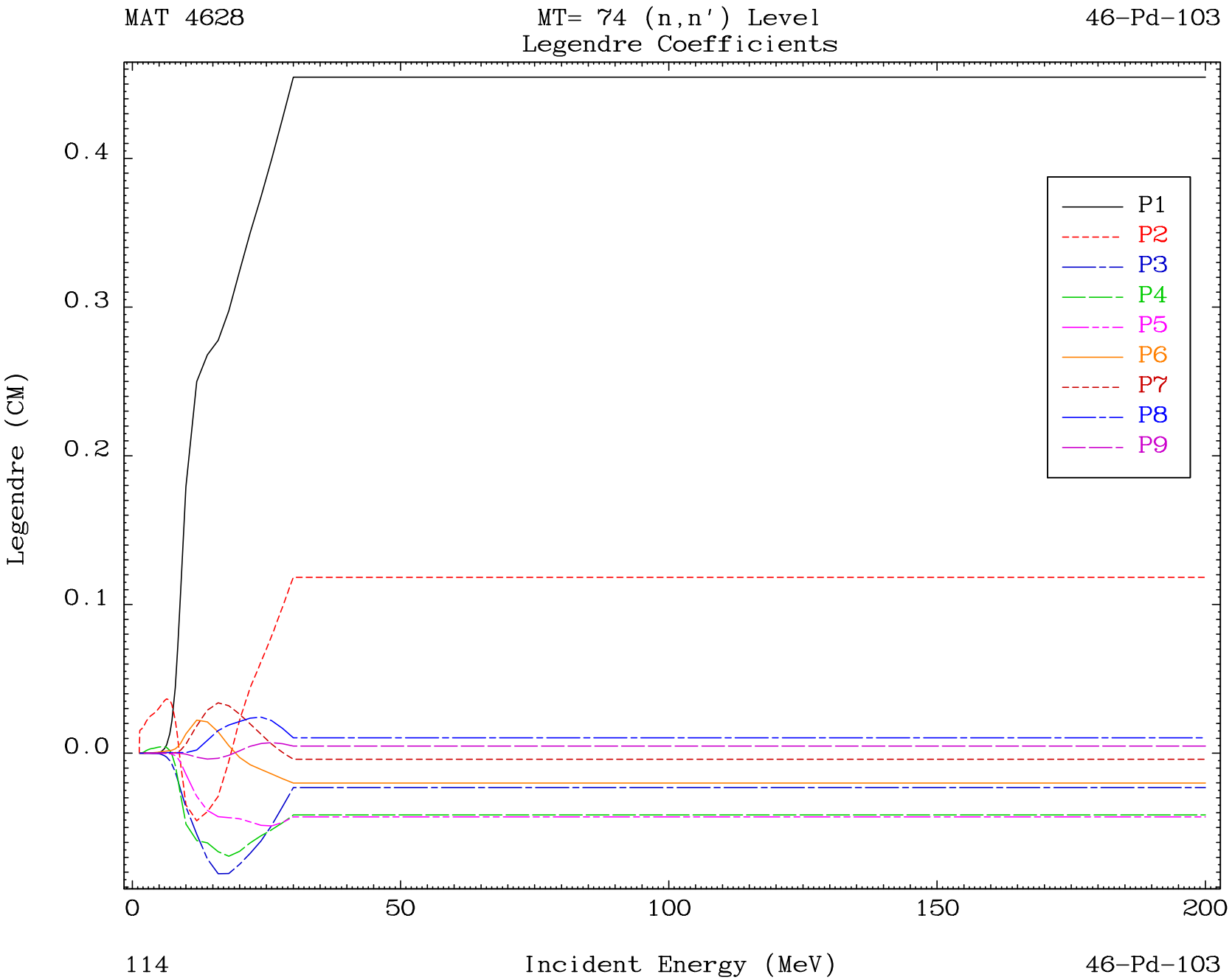

MAT 4628
MT= 72 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-6
1.2
0.8
0.4
0.0
Legendre (CM)
P17
P18
P19
P20
P21
P22
P23
P24
50
100
150
200
109
Incident Energy (MeV)
46-Pd-103

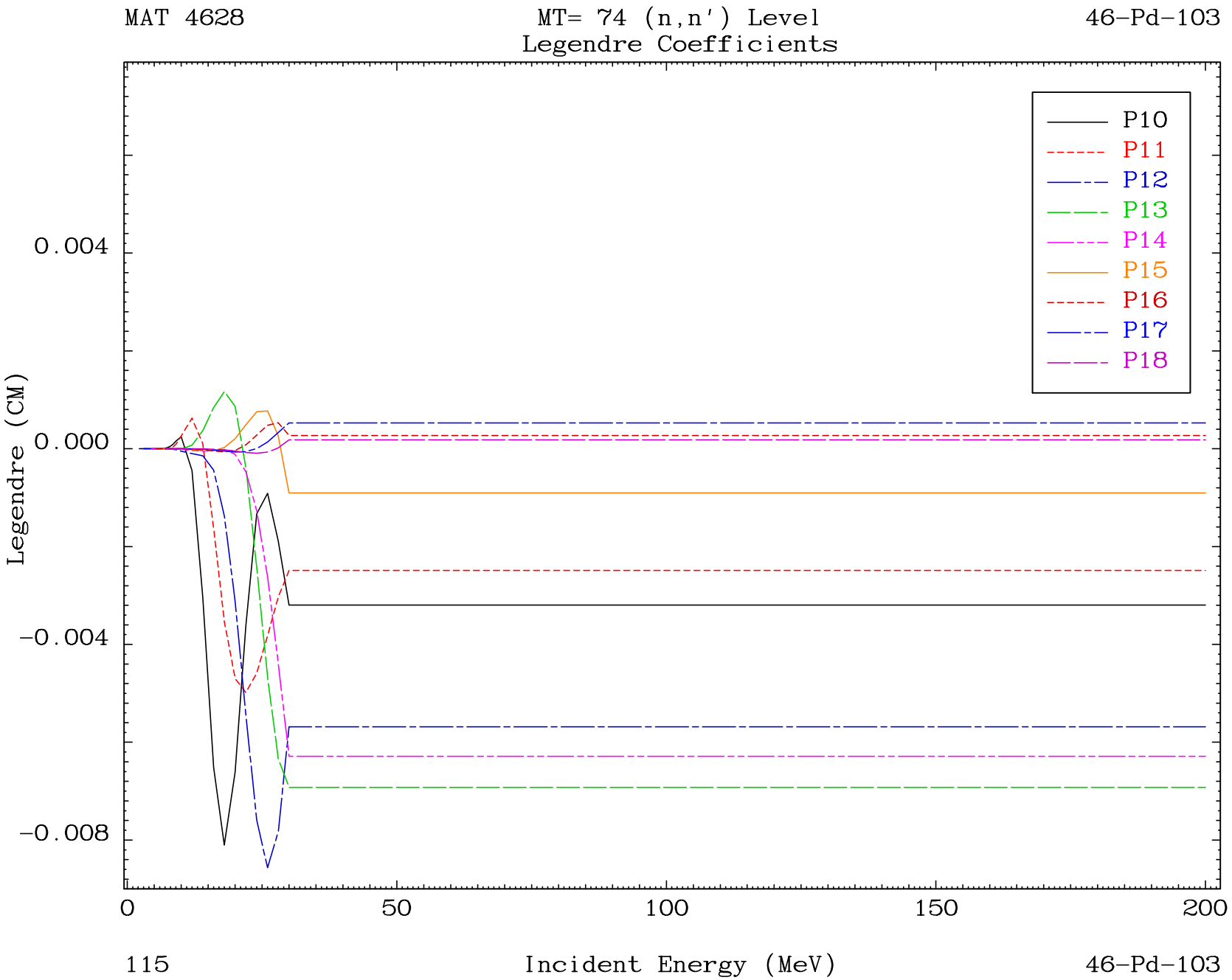

MAT 4628
MT= 73 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
110
Incident Energy (MeV)
46-Pd-103

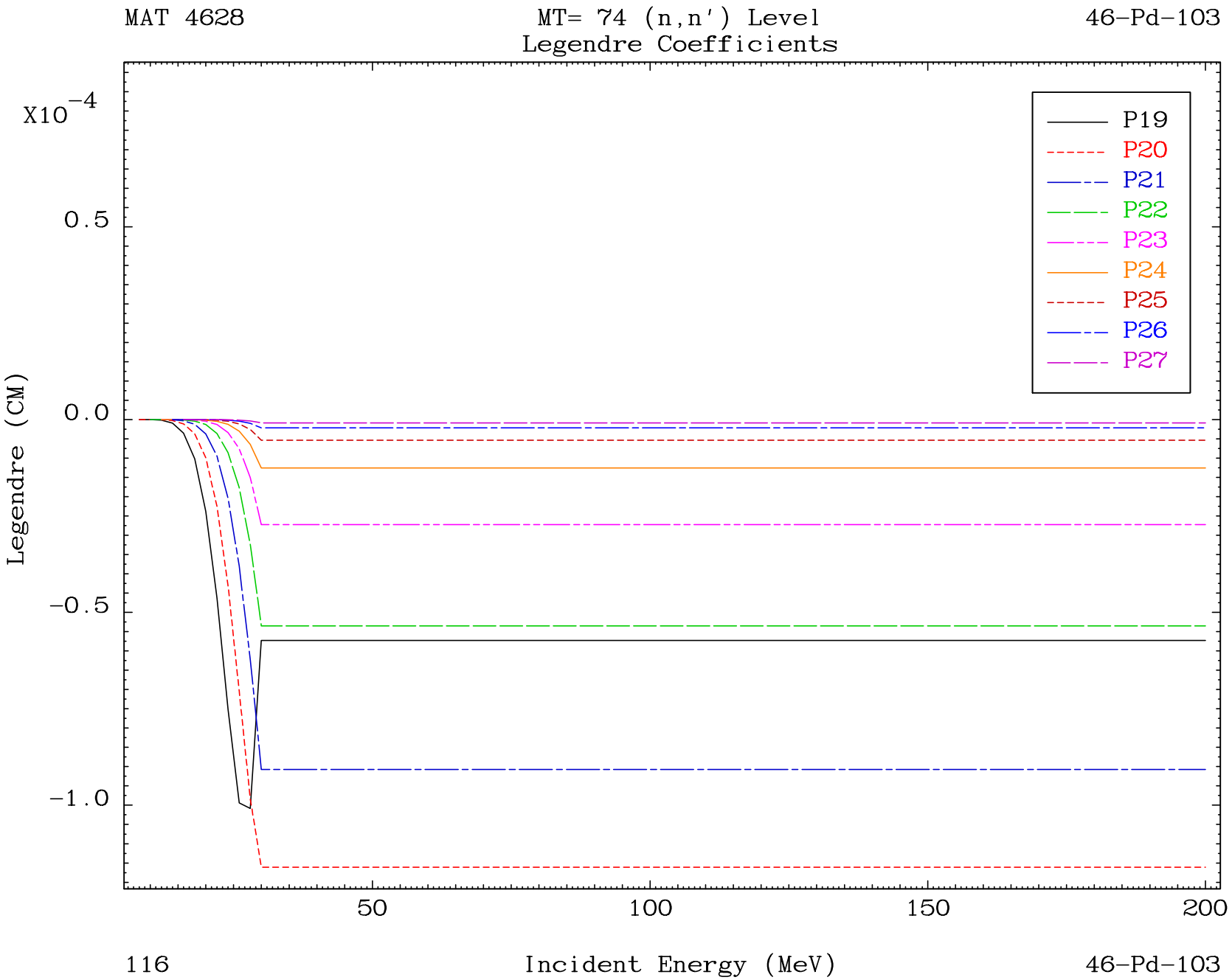

MAT 4628
MT= 73 (n,n') Level
Legendre Coefficients
46-Pd-103
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
111
Incident Energy (MeV)
46-Pd-103

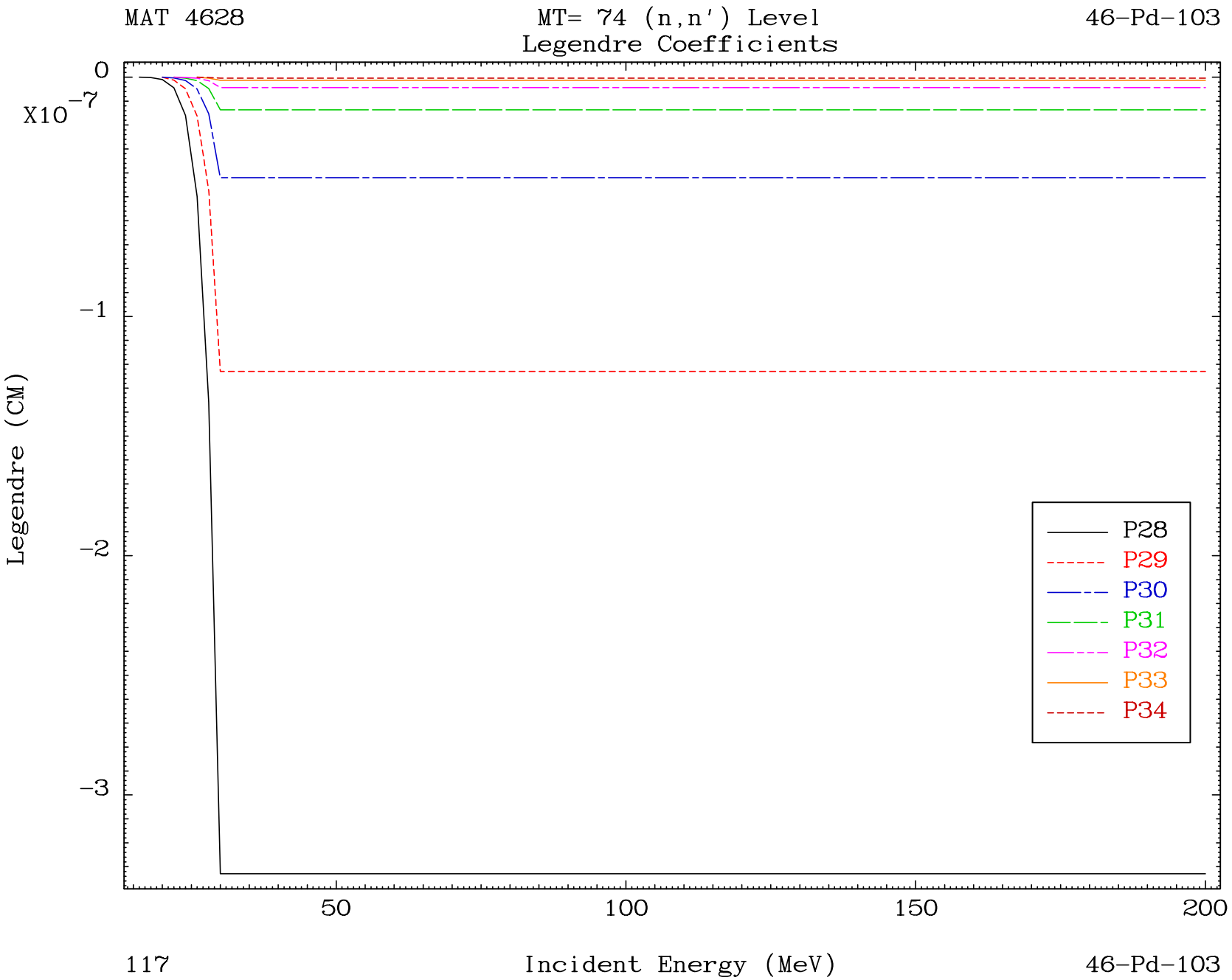

MAT 4628
MT= 73 (n,n') Level
Legendre Coefficients
46-Pd-103
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
112
Incident Energy (MeV)
46-Pd-103

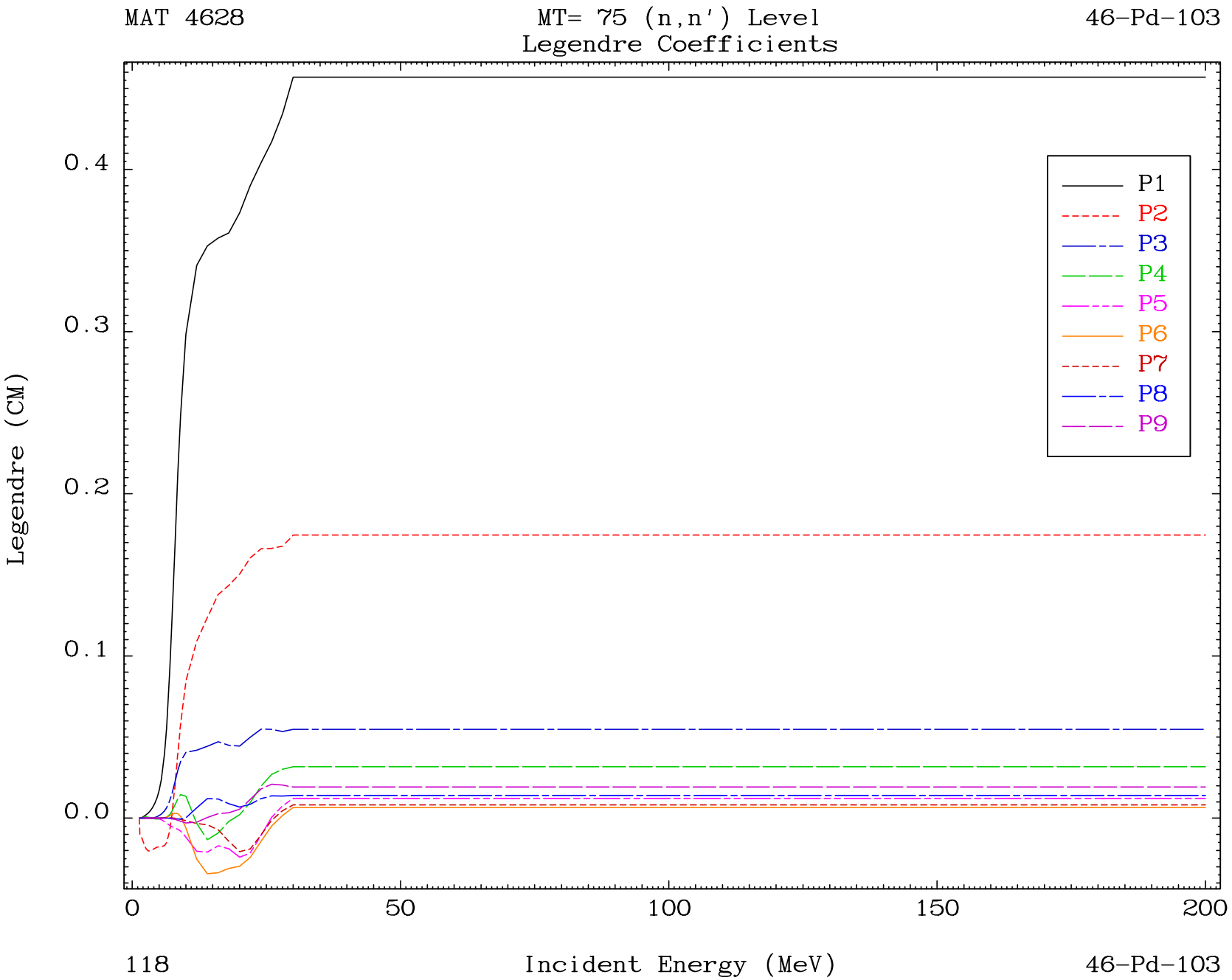

MAT 4628
MT= 73 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-7
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
113
Incident Energy (MeV)
46-Pd-103

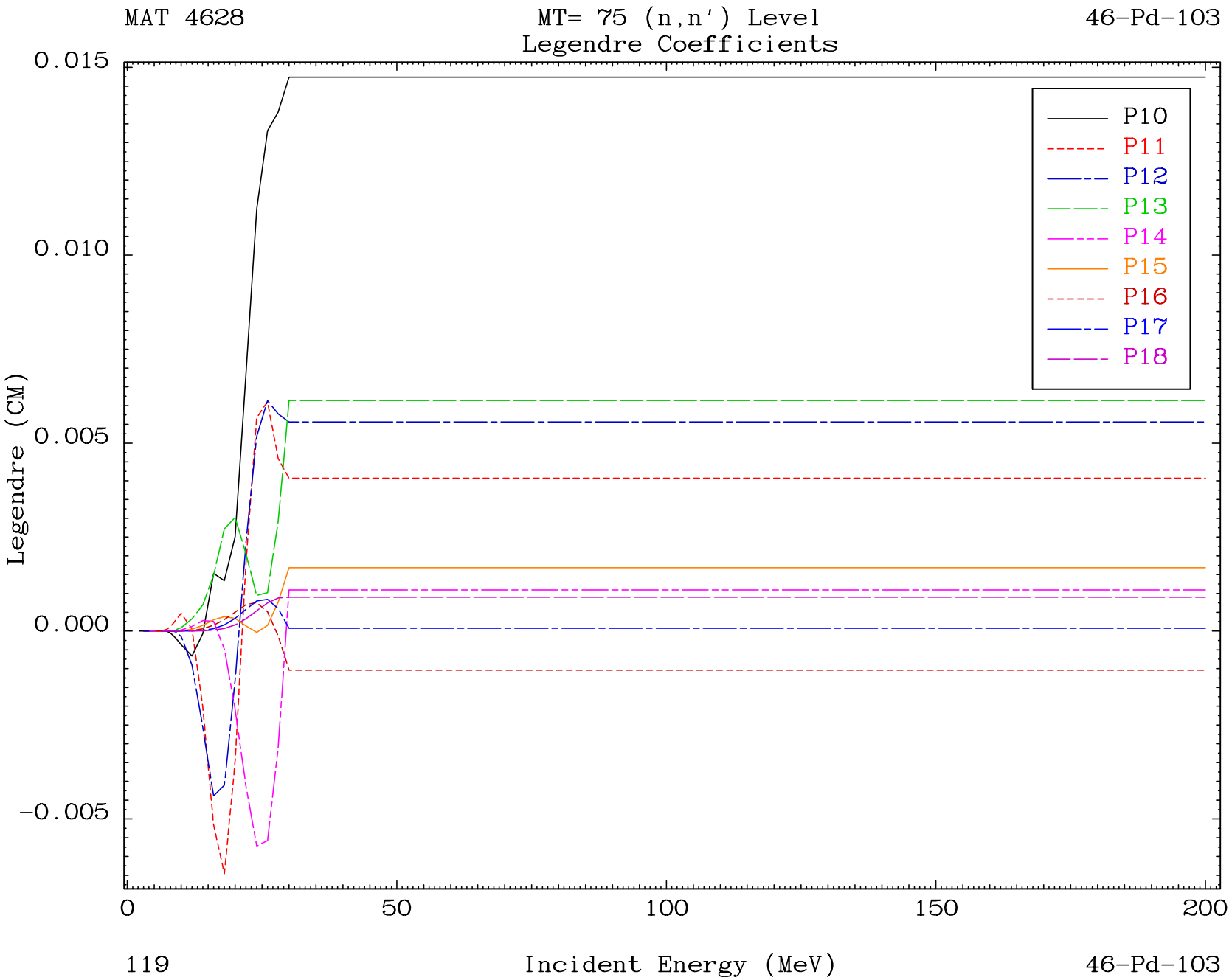

MAT 4628
MT= 74 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
114
Incident Energy (MeV)
46-Pd-103

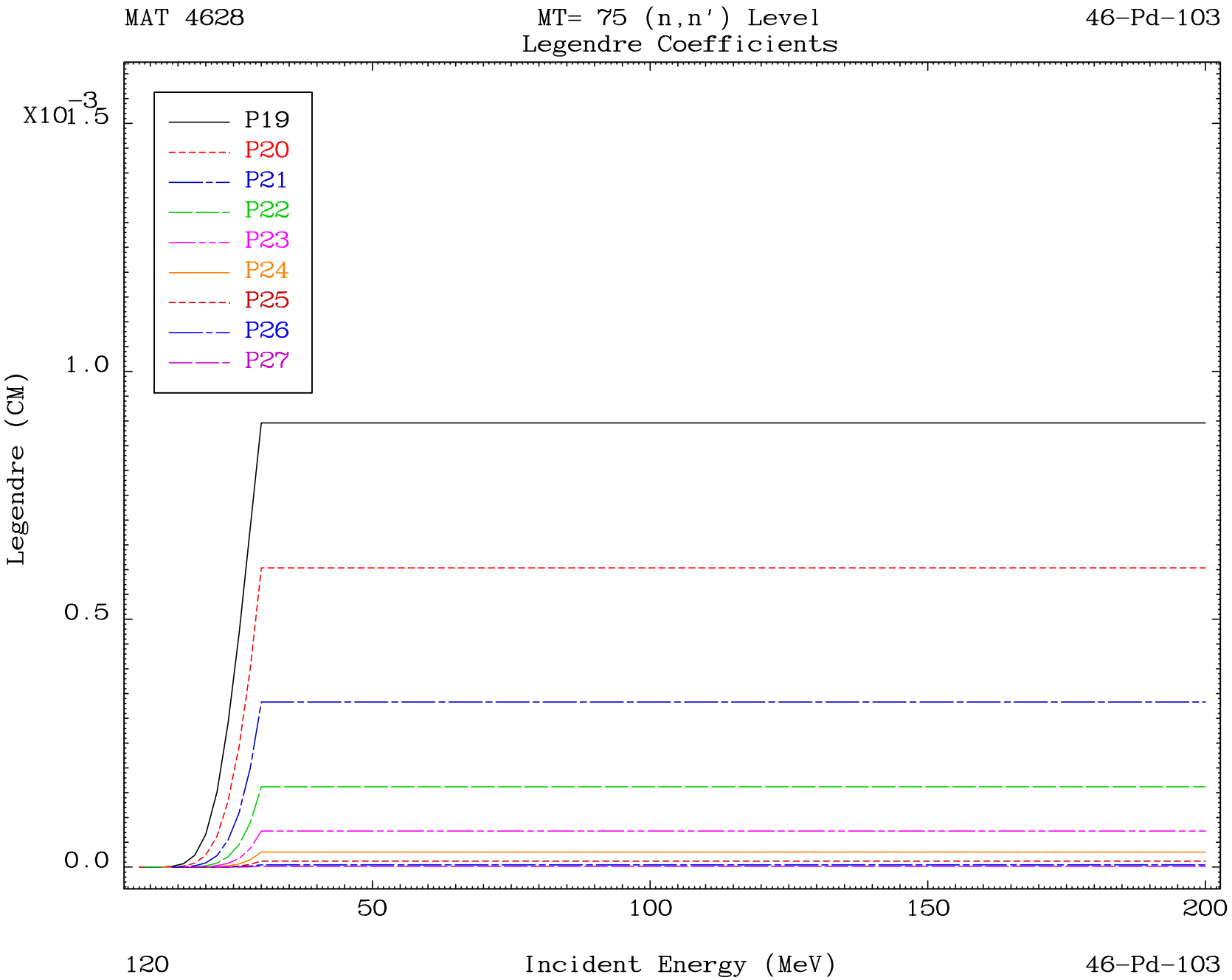

MAT 4628
MT= 74 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.004
0.000
-0.004
-0.008
Legendre (CM)
0
50
100
150
200
115
Incident Energy (MeV)
46-Pd-103

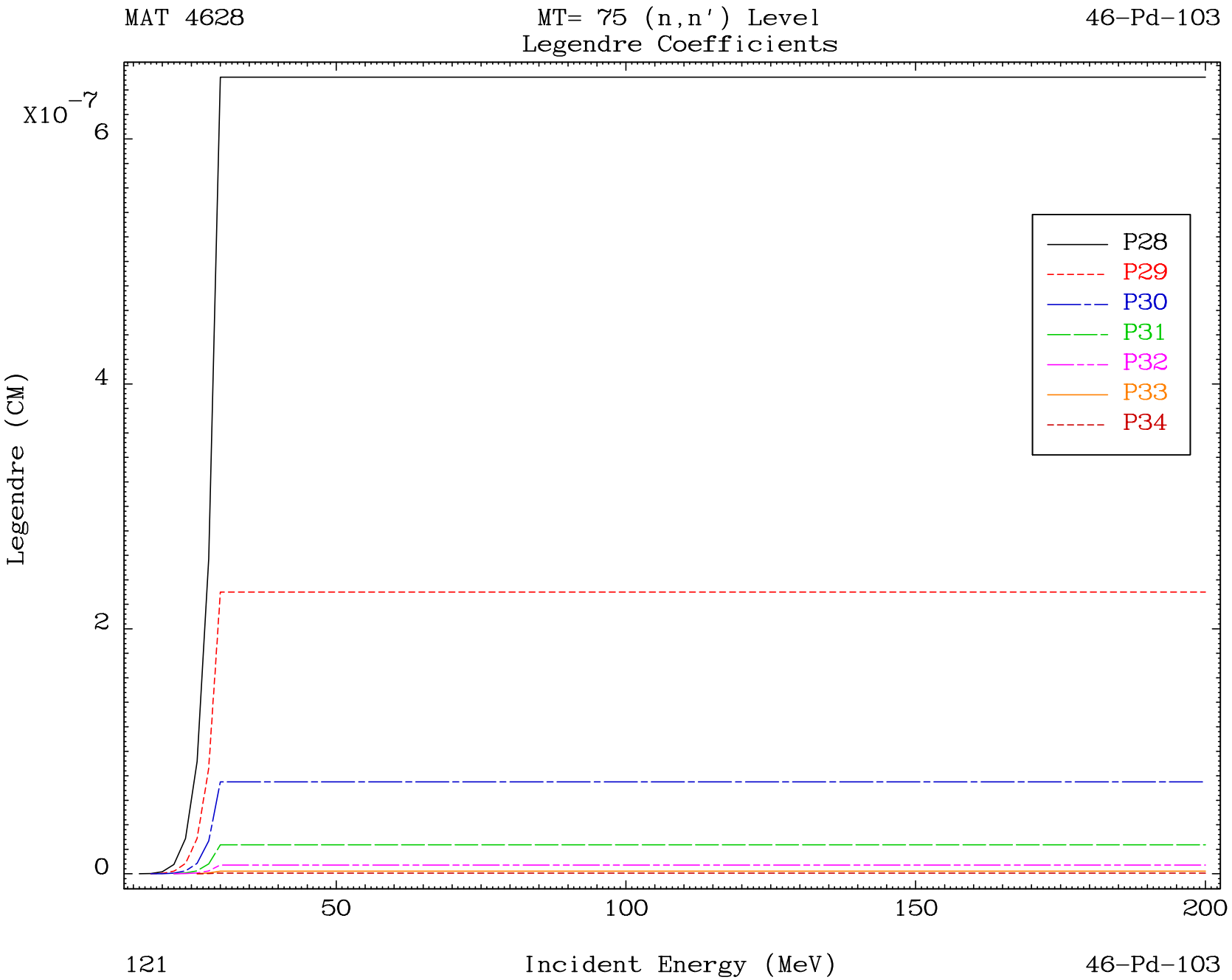

MAT 4628
MT= 74 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-4
0.5
0.0
-0.5
-1.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
116
Incident Energy (MeV)
46-Pd-103

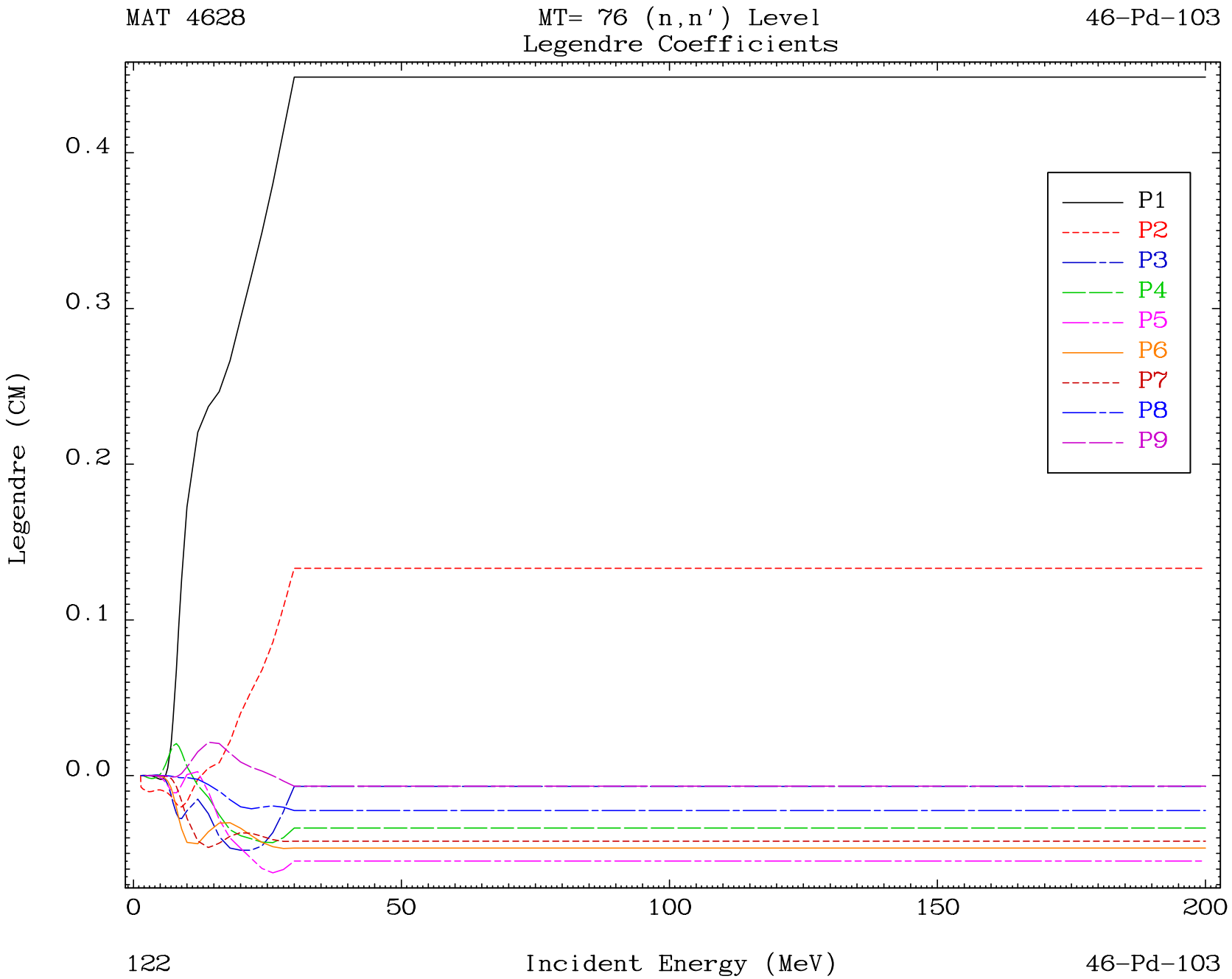

MAT 4628
MT= 74 (n,n') Level
Legendre Coefficients
46-Pd-103
0
X10-7
-1
-2
-3
Legendre (CM)
50
100
150
200
P28
P29
P30
P31
P32
P33
P34
117
Incident Energy (MeV)
46-Pd-103

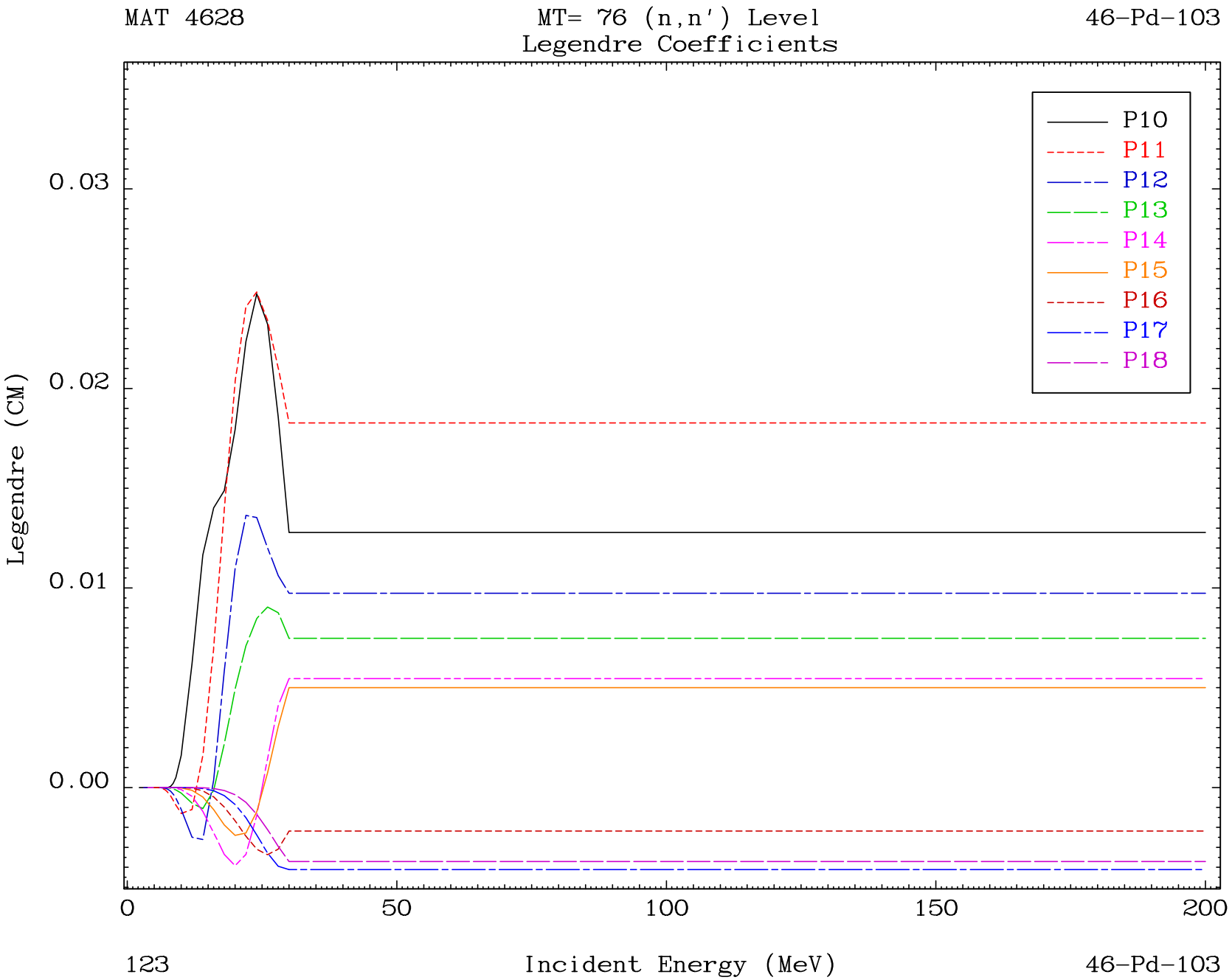

MAT 4628
MT= 75 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
118
Incident Energy (MeV)
46-Pd-103

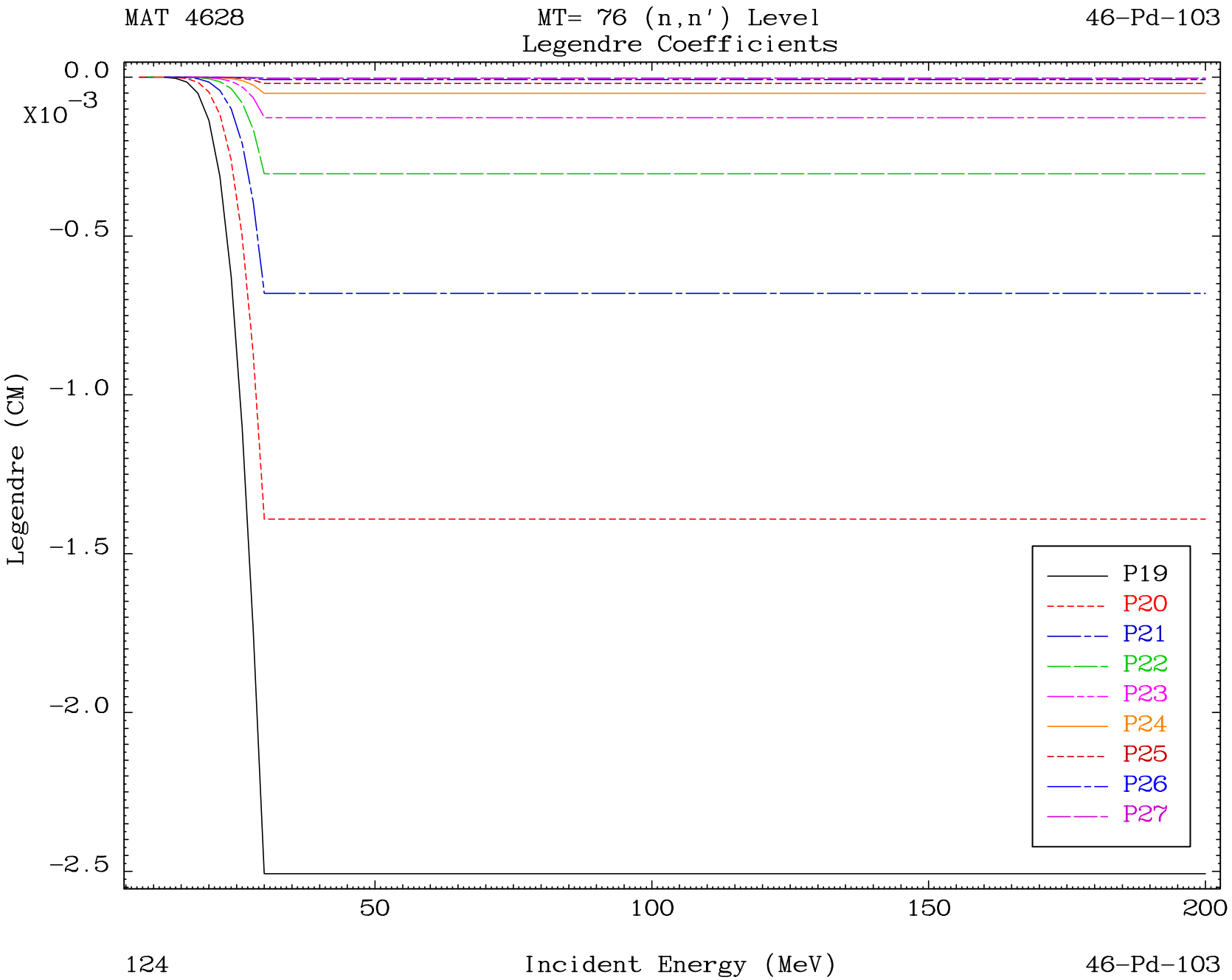

MAT 4628
MT= 75 (n,n') Level
Legendre Coefficients
46-Pd-103
0.015
0.010
0.005
0.000
-0.005
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
119
Incident Energy (MeV)
46-Pd-103

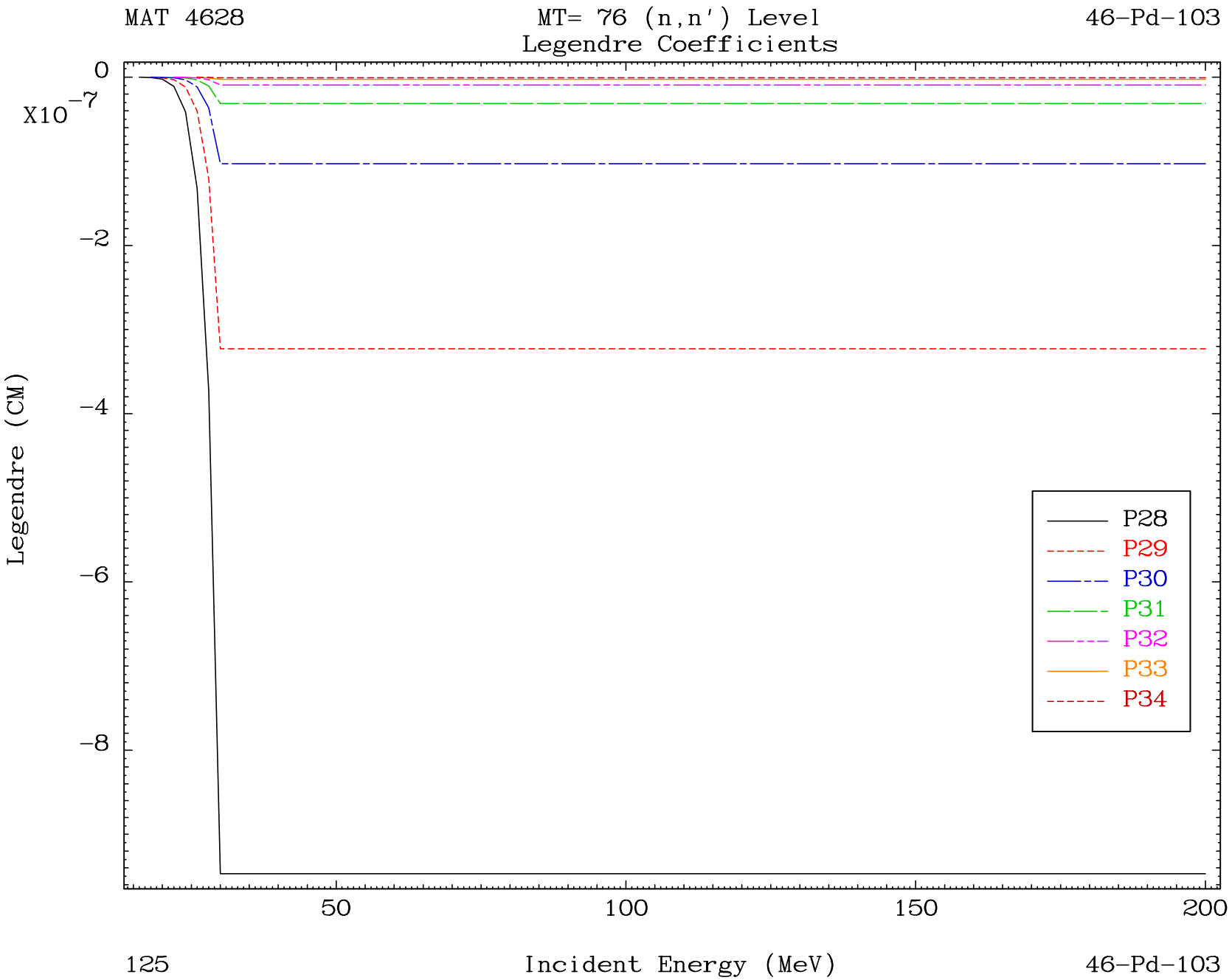

MAT 4628
MT= 75 (n,n') Level
Legendre Coefficients
46-Pd-103
X10-3
1.5
1.0
0.5
0.0
P19
P20
P21
P22
P23
P24
P25
P26
P27
Legendre (CM)
120
50
100
150
200
Incident Energy (MeV)
46-Pd-103

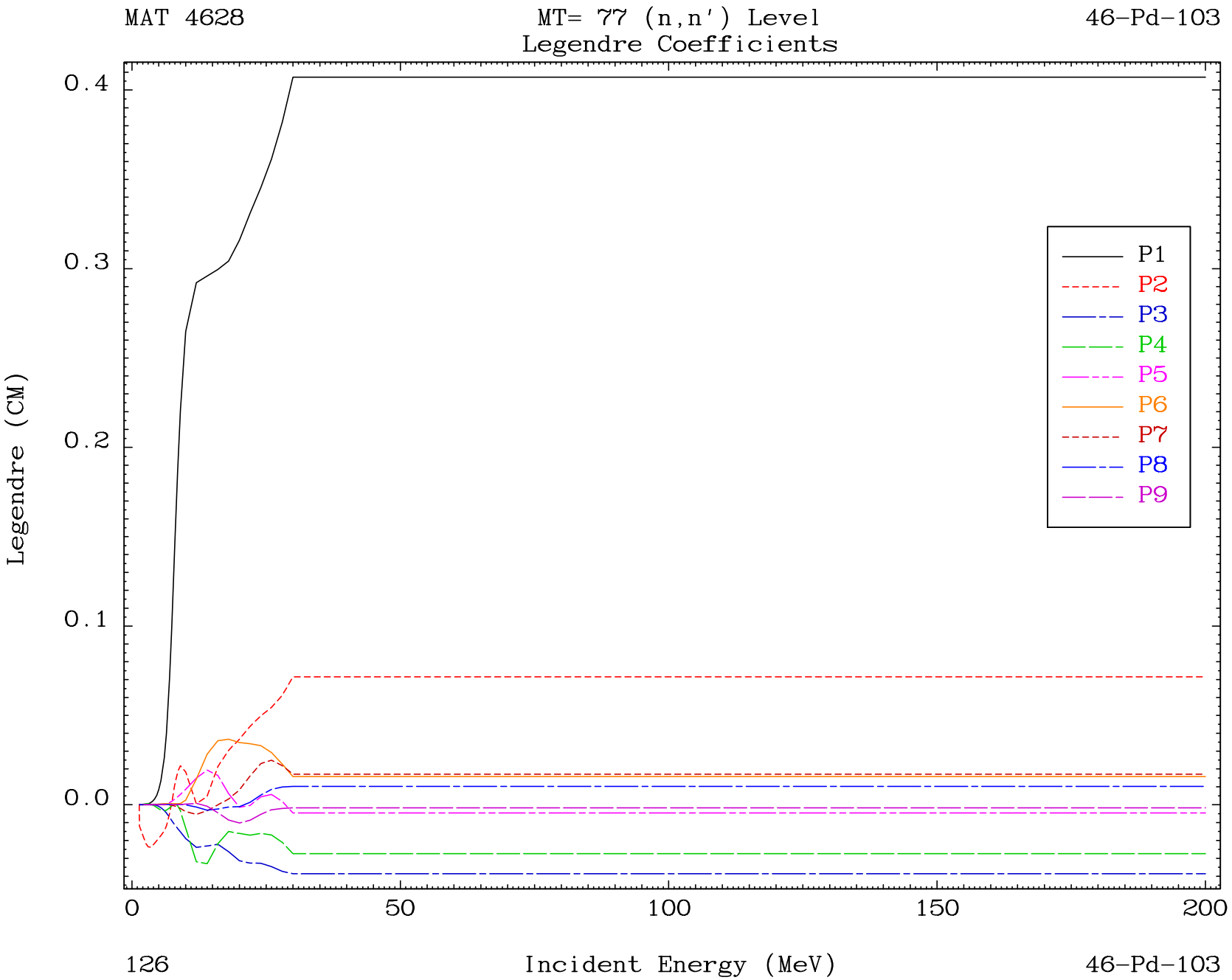

MAT 4628
MT= 75 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-7
6
4
2
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
121
Incident Energy (MeV)
46-Pd-103

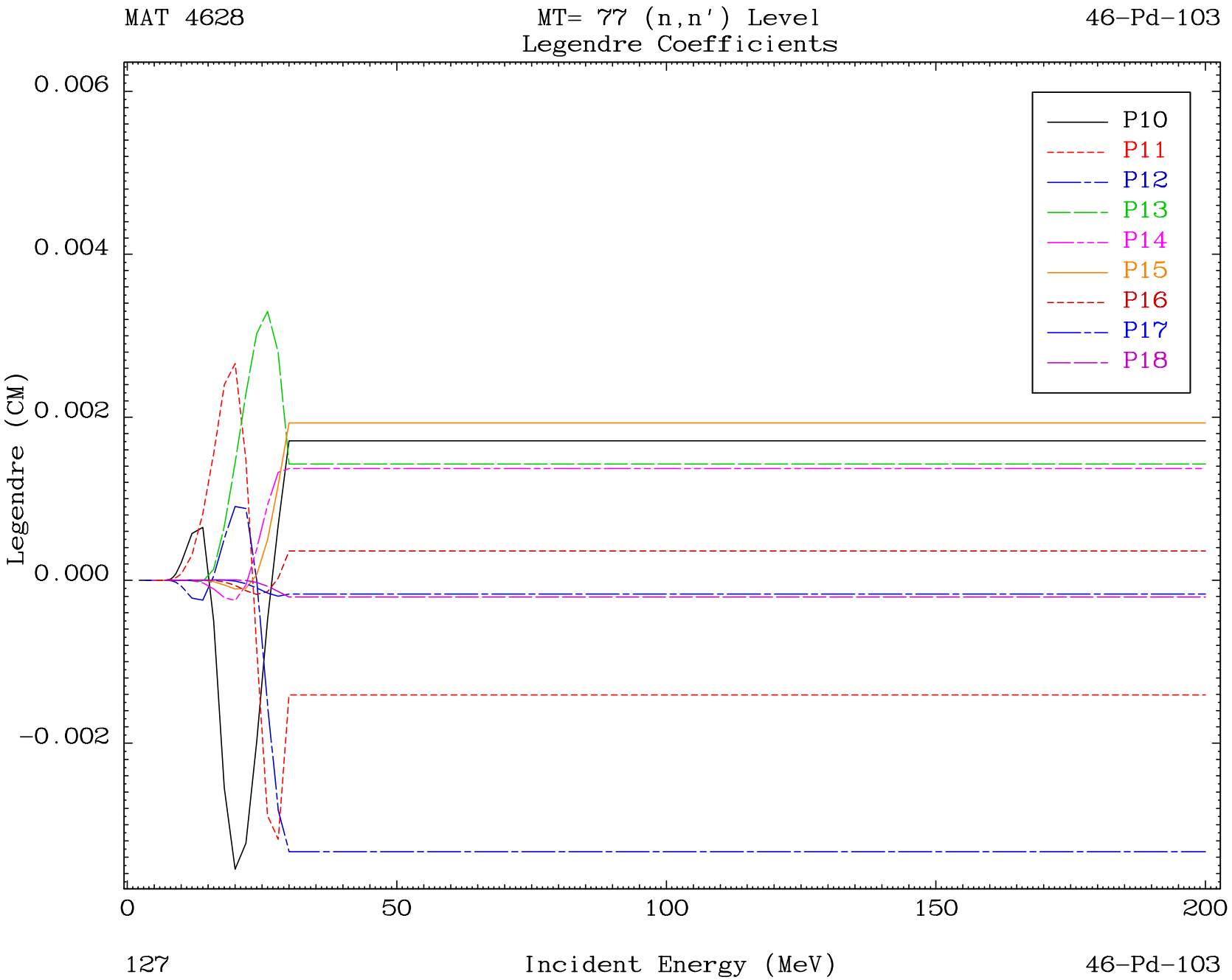

MAT 4628
MT= 76 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
122
Incident Energy (MeV)
46-Pd-103

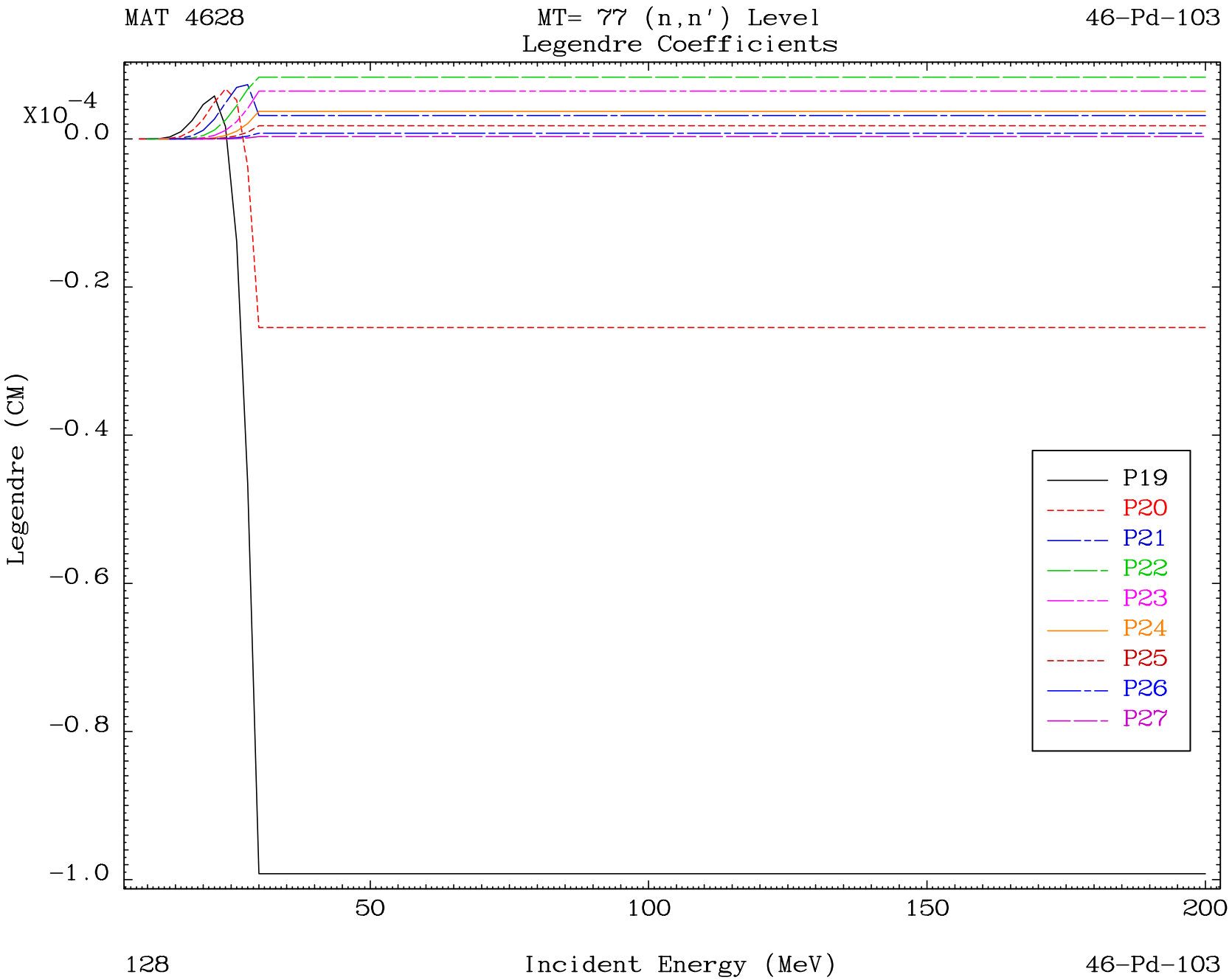

MAT 4628
MT= 76 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
123
Incident Energy (MeV)
46-Pd-103

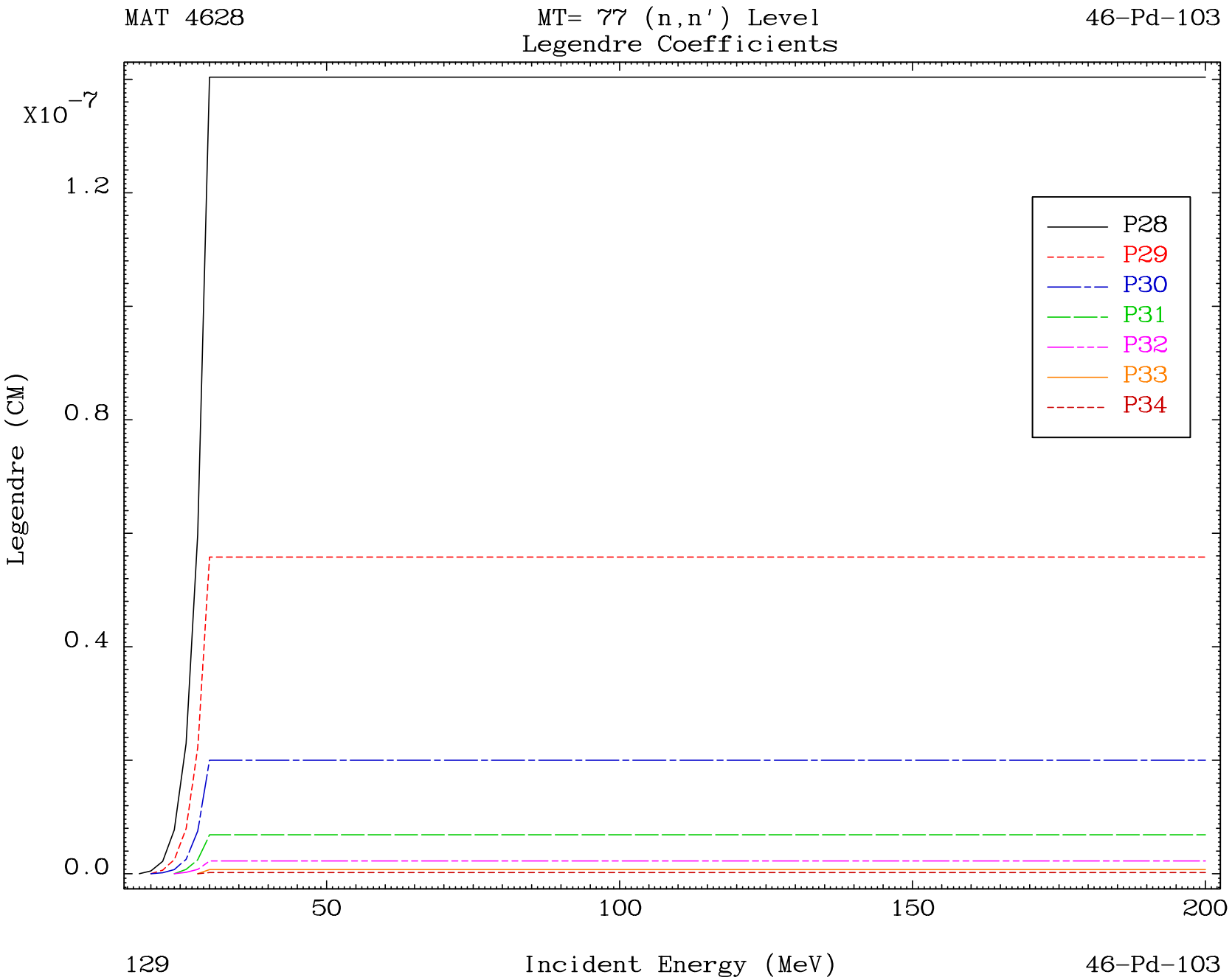

MAT 4628
MT= 76 (n,n') Level
Legendre Coefficients
46-Pd-103
0.0
X10^-3
-0.5
-1.0
-1.5
-2.0
-2.5
Legendre (CM)
50
100
150
200
124
Incident Energy (MeV)
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27

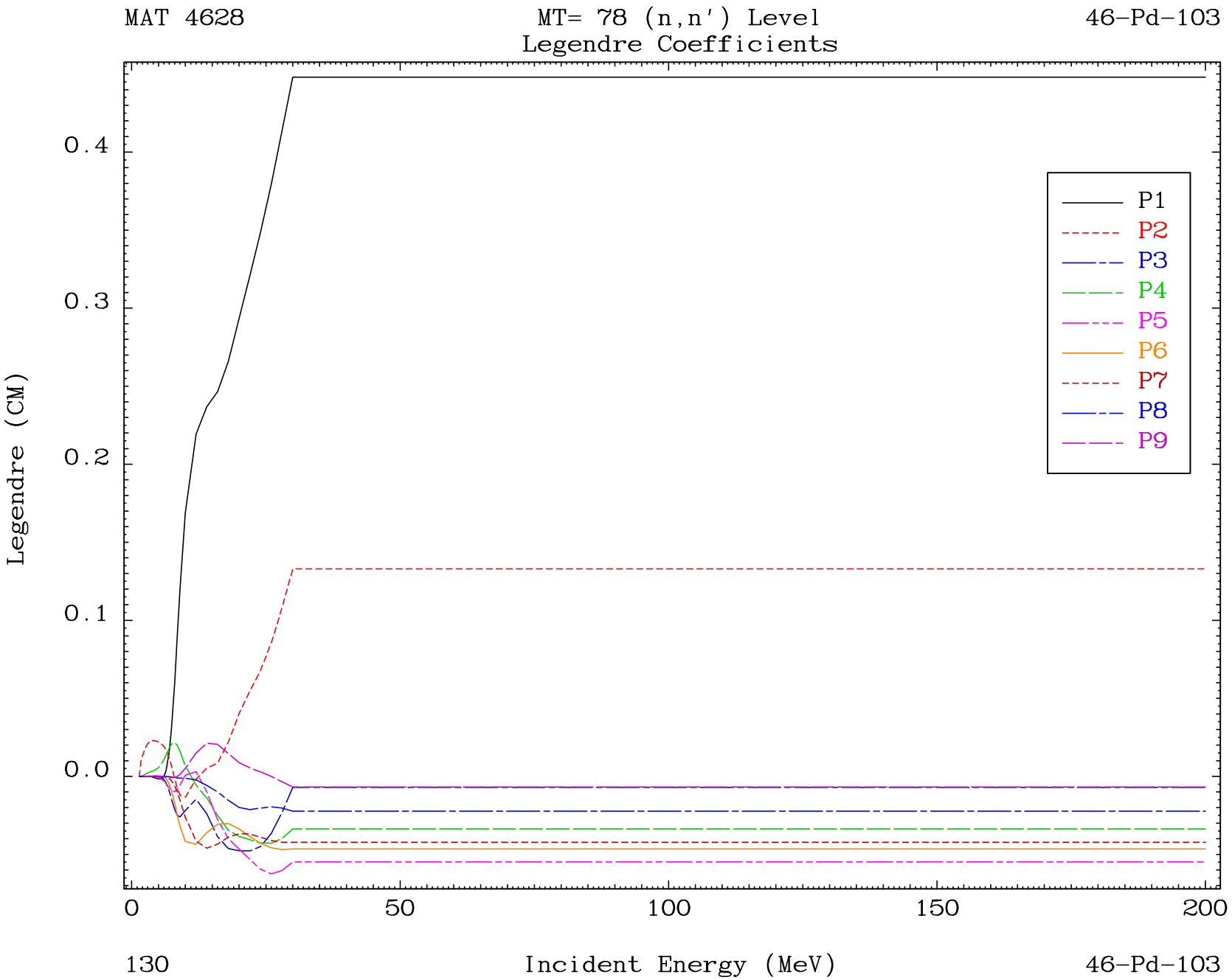

MAT 4628
MT= 76 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-7
0
-2
-4
-6
-8
Legendre (CM)
50
100
150
200
125
Incident Energy (MeV)
46-Pd-103
P28
P29
P30
P31
P32
P33
P34

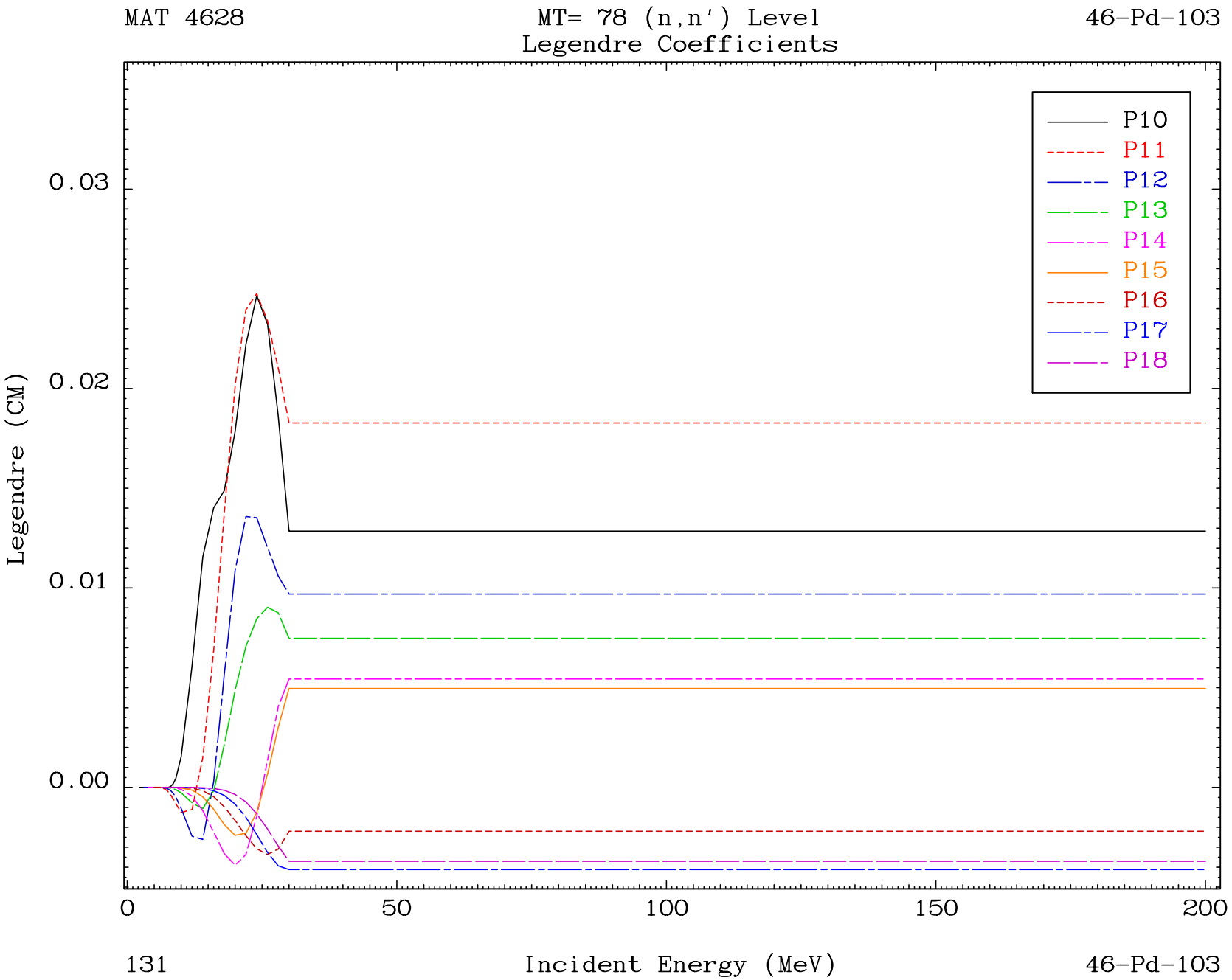

MAT 4628
MT= 77 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
126
Incident Energy (MeV)
46-Pd-103

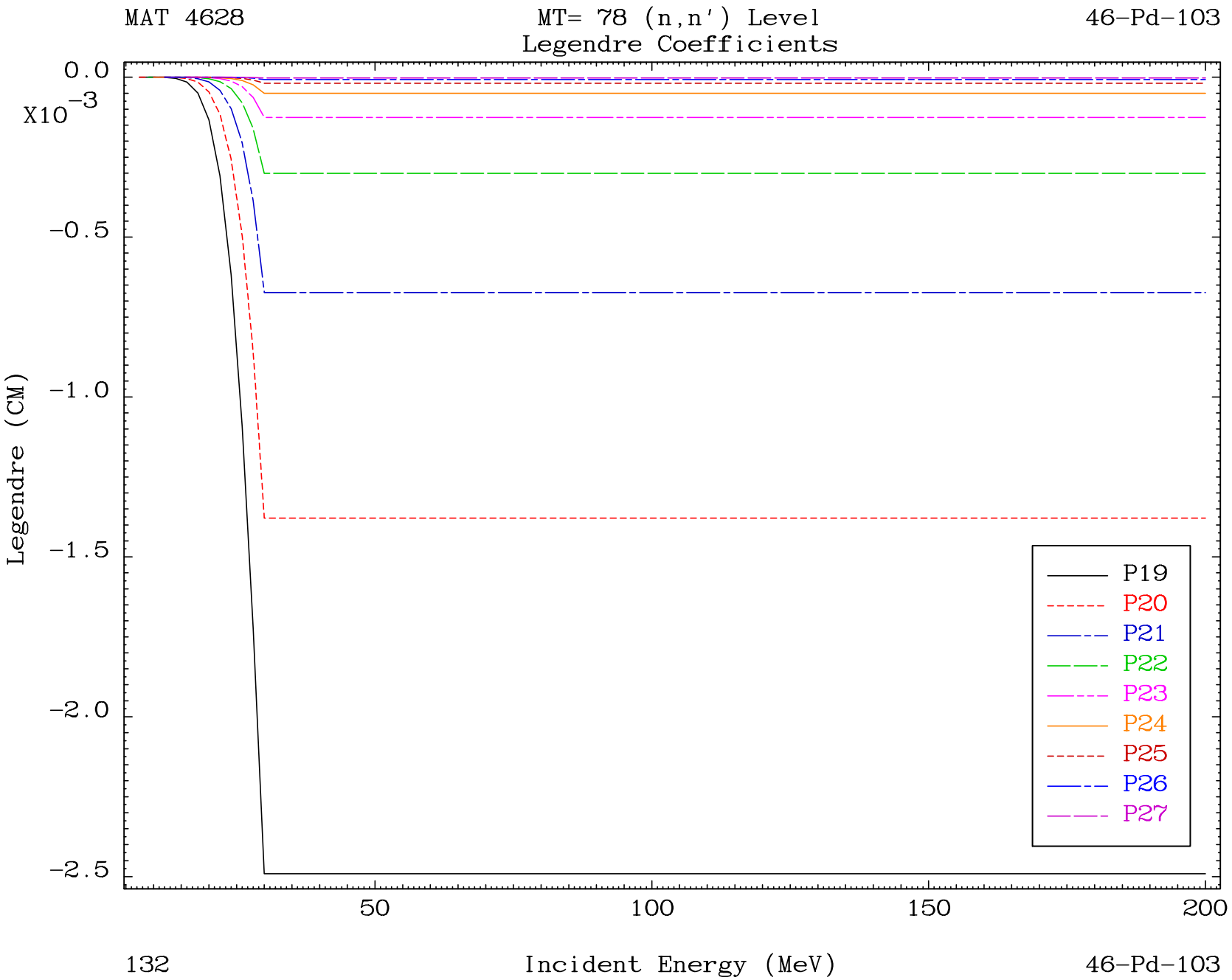

MAT 4628
MT= 77 (n,n') Level
Legendre Coefficients
46-Pd-103
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
127
Incident Energy (MeV)
46-Pd-103

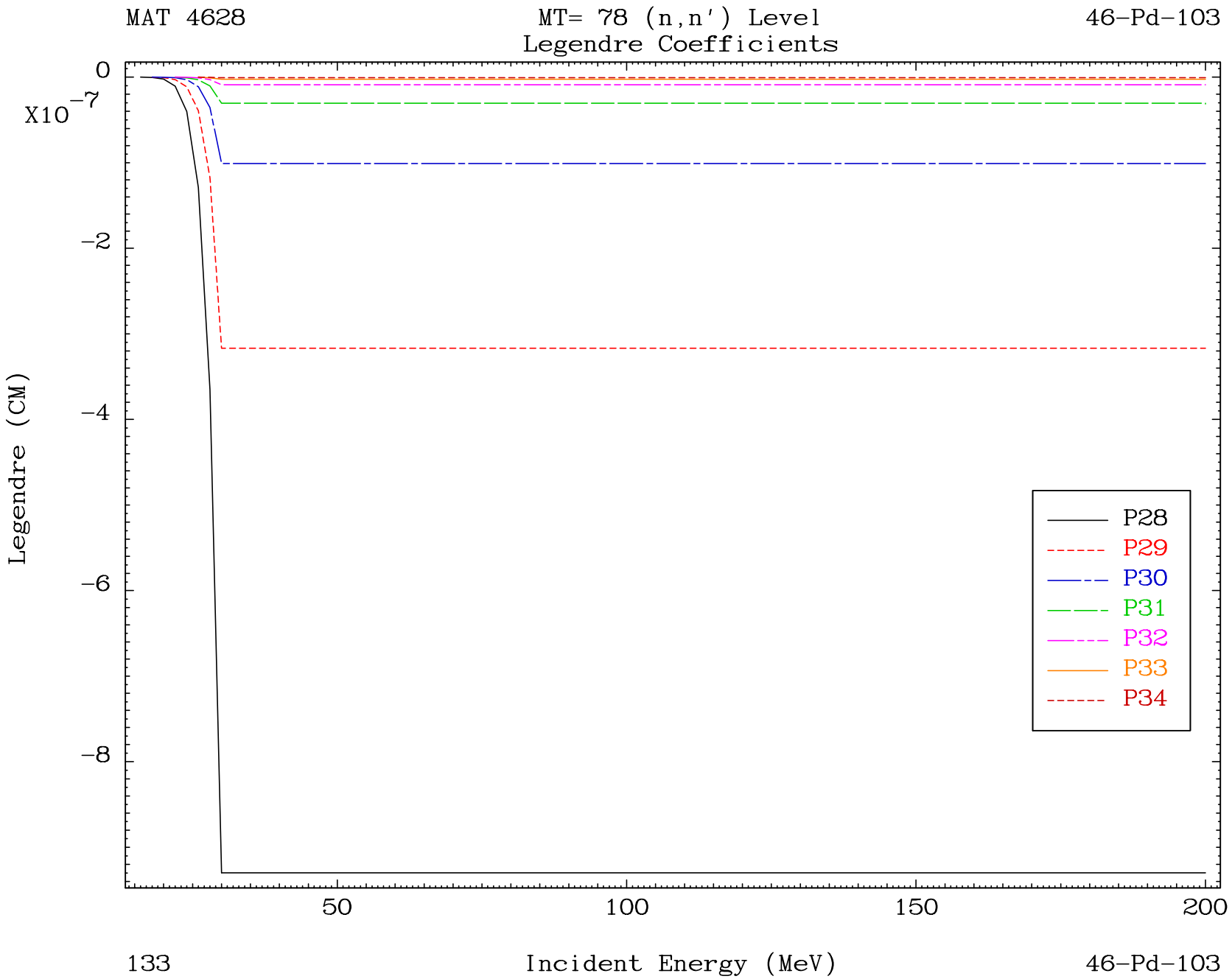

MAT 4628
MT= 77 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-4
0.0
-0.2
-0.4
-0.6
-0.8
-1.0
Legendre (CM)
50
100
150
200
128
Incident Energy (MeV)
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27

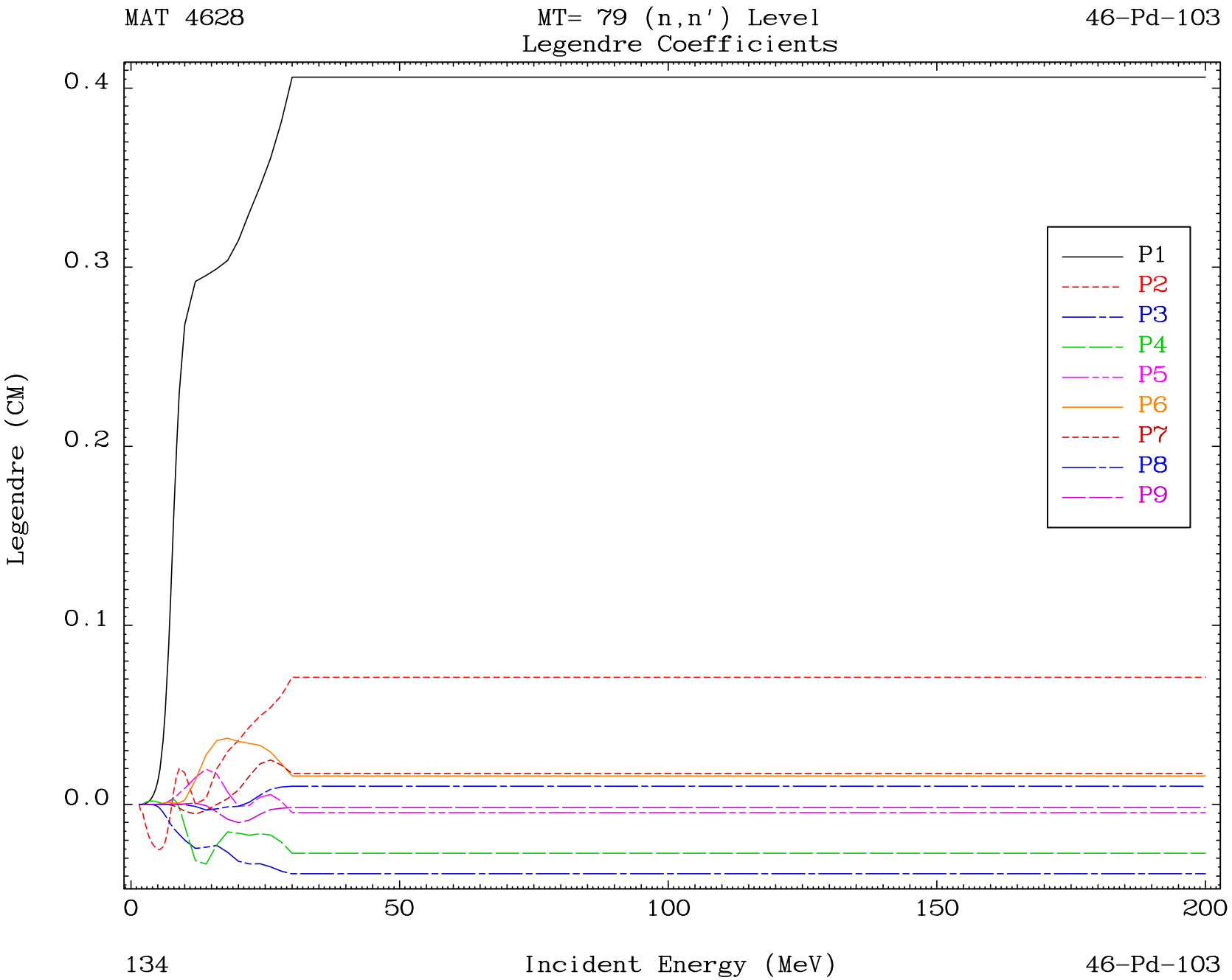

MAT 4628
MT= 77 (n,n') Level
Legendre Coefficients
46-Pd-103
X10-7
1.2
0.8
0.4
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
129
Incident Energy (MeV)
46-Pd-103

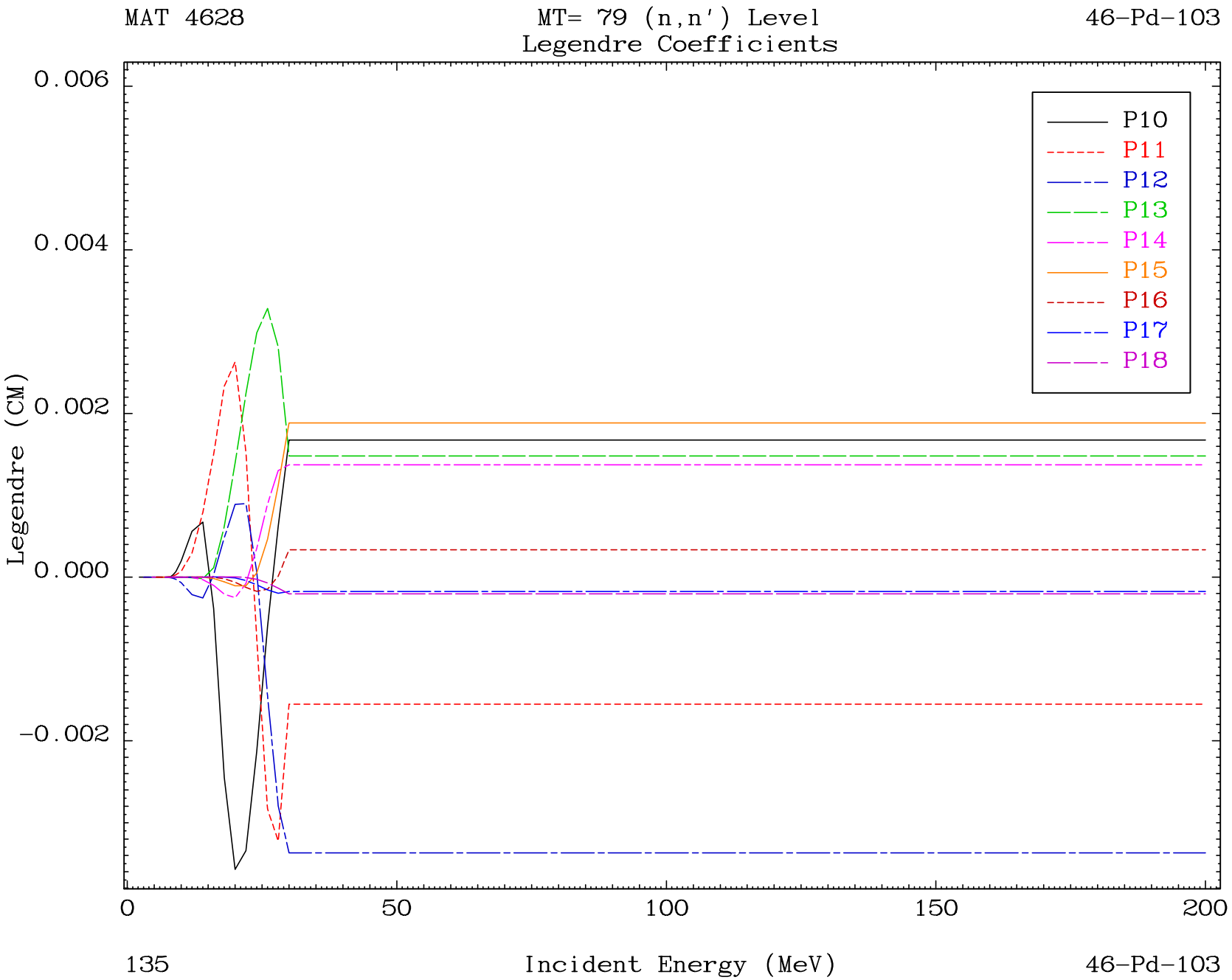

MAT 4628
MT= 78 (n,n') Level
Legendre Coefficients
46-Pd-103
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
130
Incident Energy (MeV)
46-Pd-103

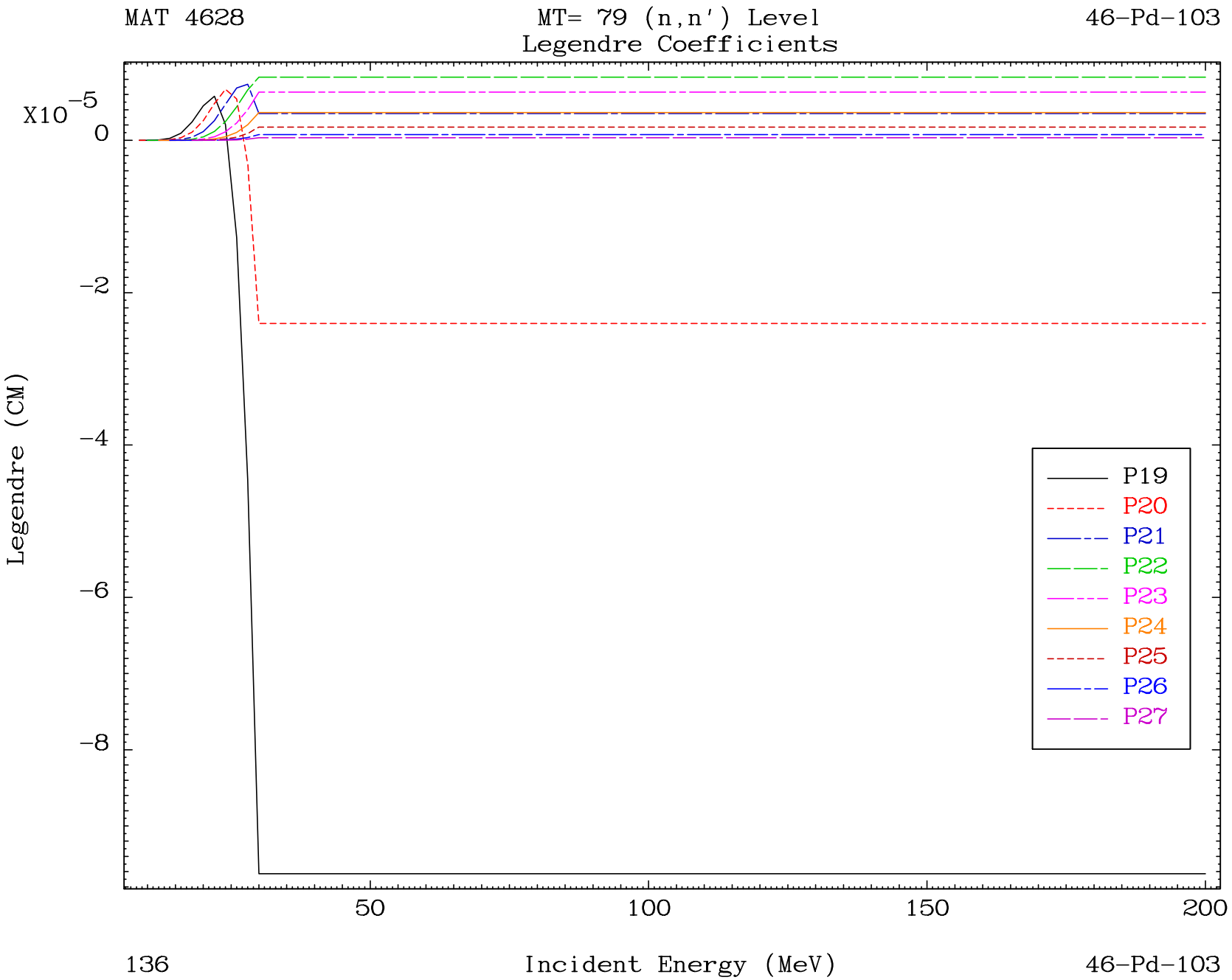

MAT 4628
MT= 78 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
131
Incident Energy (MeV)
46-Pd-103

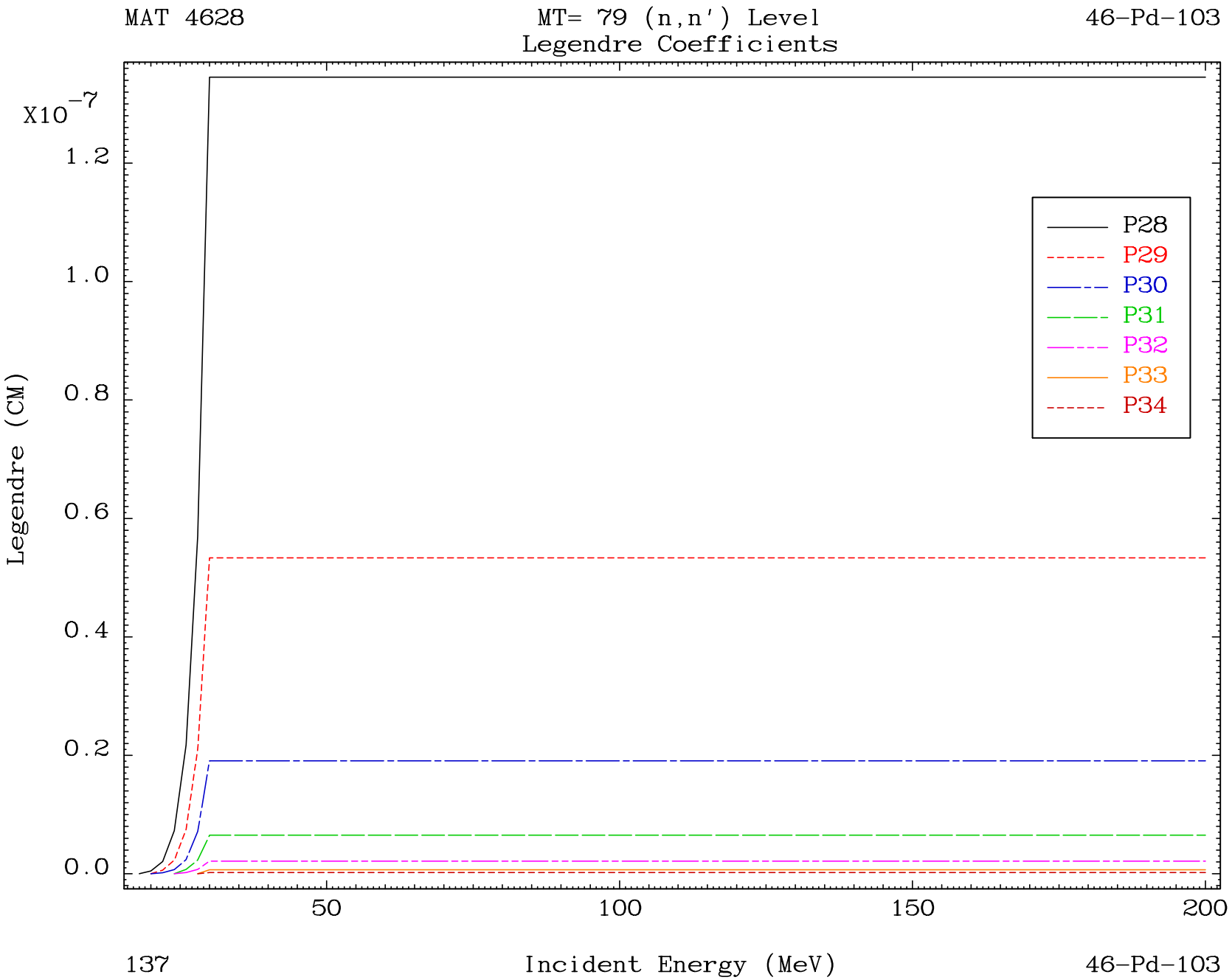

MAT 4628
MT= 78 (n,n') Level
Legendre Coefficients
46-Pd-103
0.0
X10^-3
-0.5
-1.0
-1.5
-2.0
-2.5
Legendre (CM)
50
100
150
200
132
Incident Energy (MeV)
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27

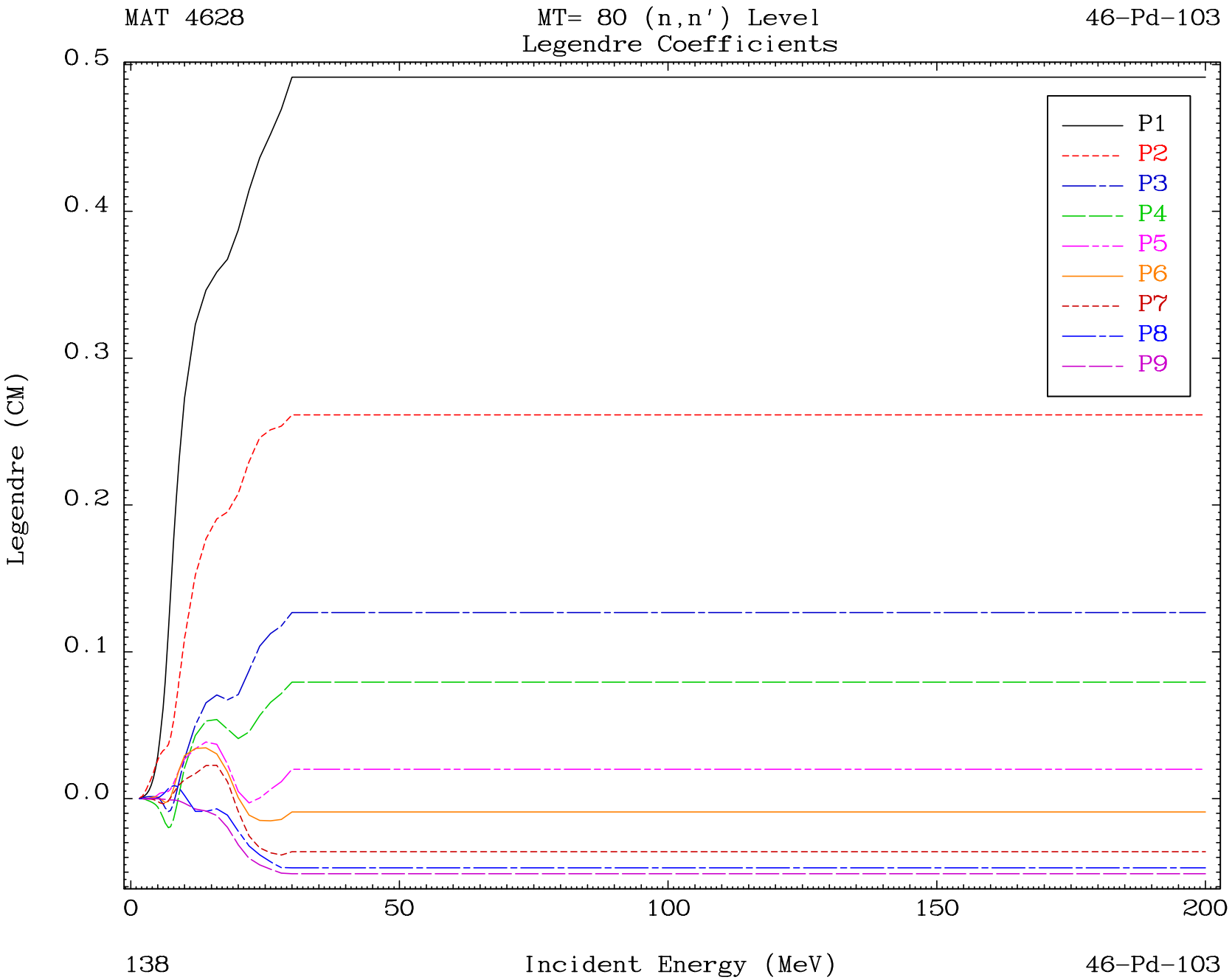

MAT 4628
MT= 78 (n,n') Level
Legendre Coefficients
46-Pd-103
X10-7
0
-2
-4
-6
-8
Legendre (CM)
50
100
150
200
133
Incident Energy (MeV)
46-Pd-103
P28
P29
P30
P31
P32
P33
P34

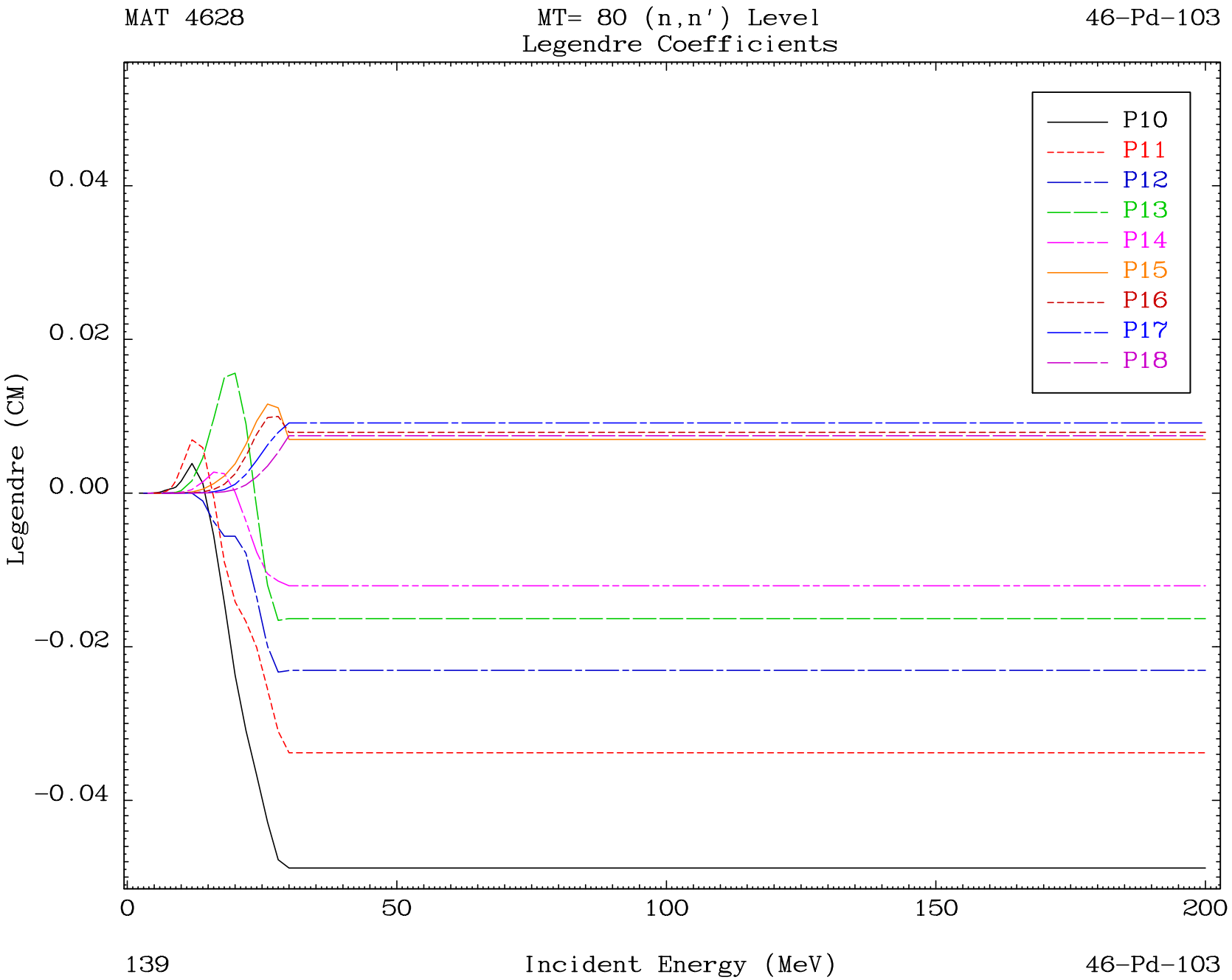

MAT 4628
MT= 79 (n,n') Level
Legendre Coefficients
46-Pd-103
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
134
Incident Energy (MeV)
46-Pd-103

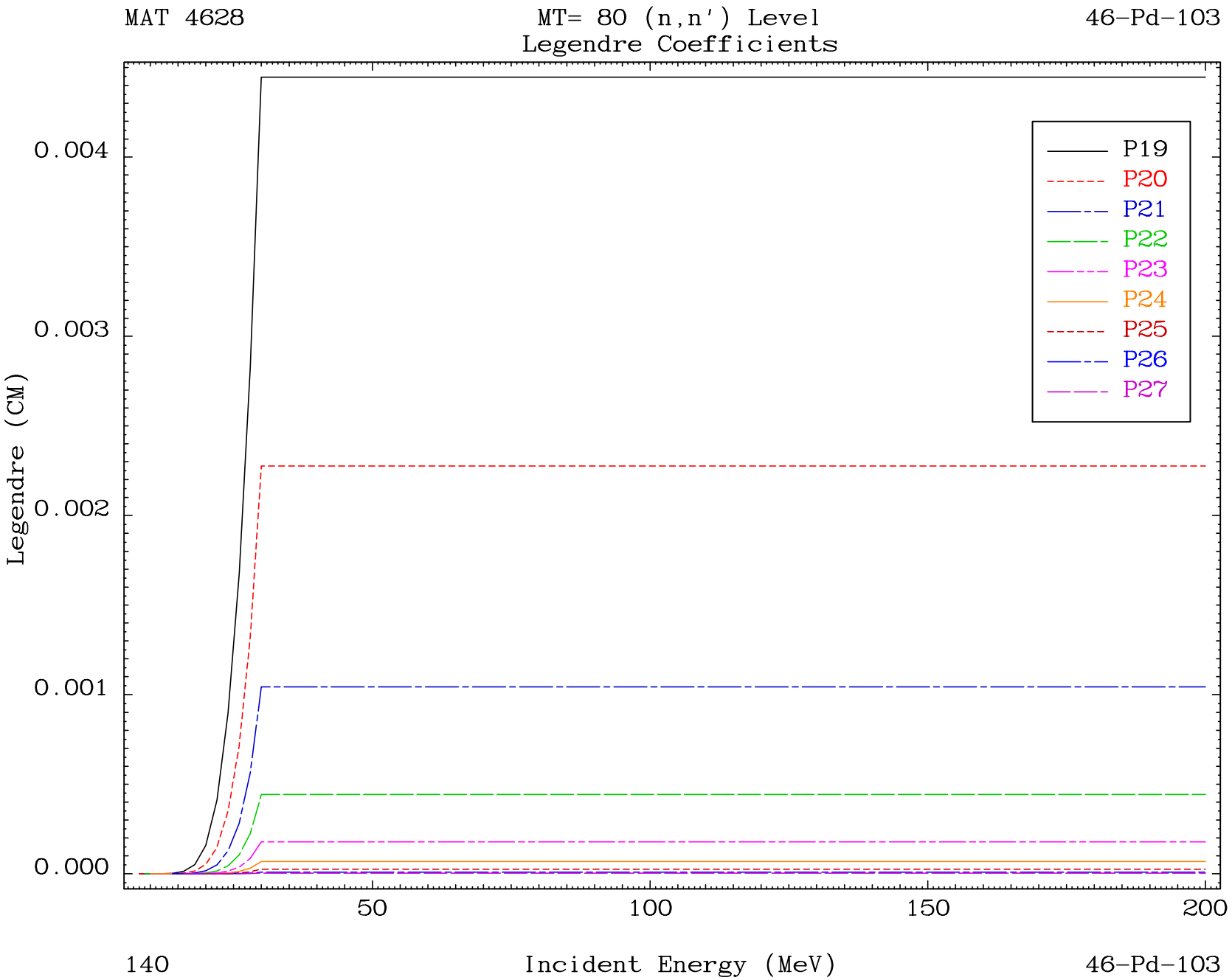

MAT 4628
MT= 79 (n,n') Level
Legendre Coefficients
46-Pd-103
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
135
Incident Energy (MeV)
46-Pd-103

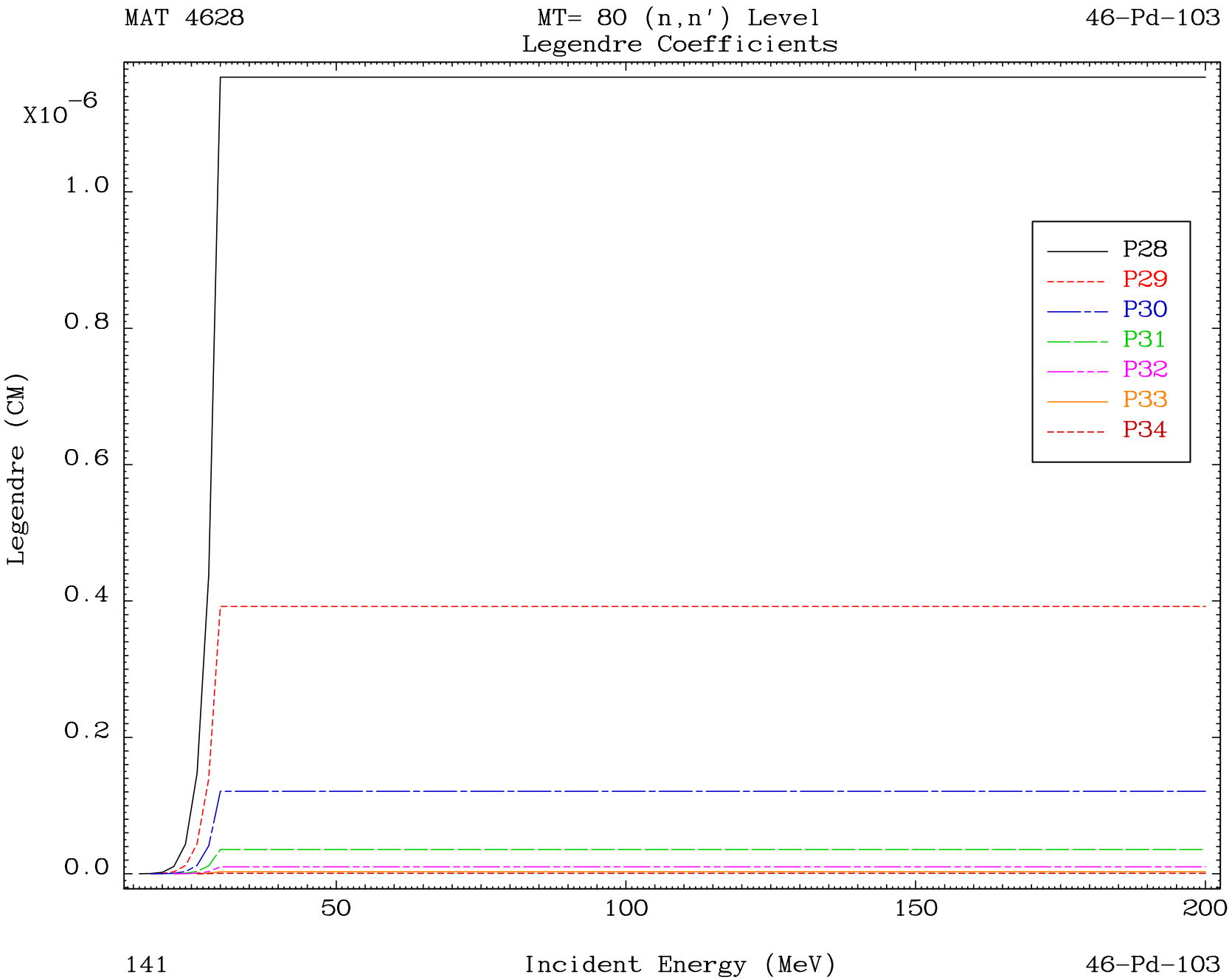

MAT 4628
MT= 79 (n,n') Level
Legendre Coefficients
46-Pd-103
X10 −5
0
−2
−4
−6
−8
Legendre (CM)
50
100
150
200
136
Incident Energy (MeV)
46-Pd-103
P19
P20
P21
P22
P23
P24
P25
P26
P27

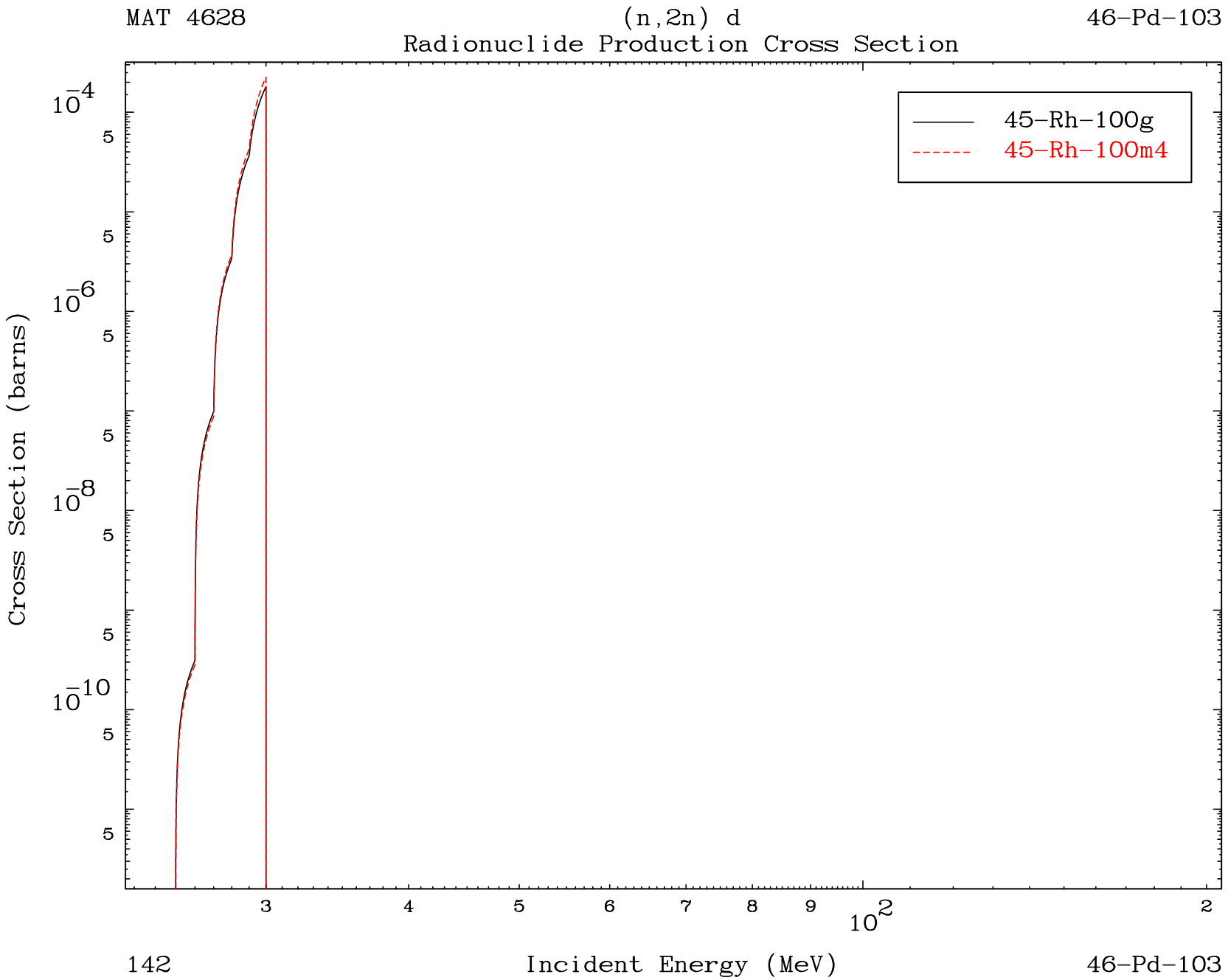

MAT 4628
MT= 79 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-7
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
137
Incident Energy (MeV)
46-Pd-103

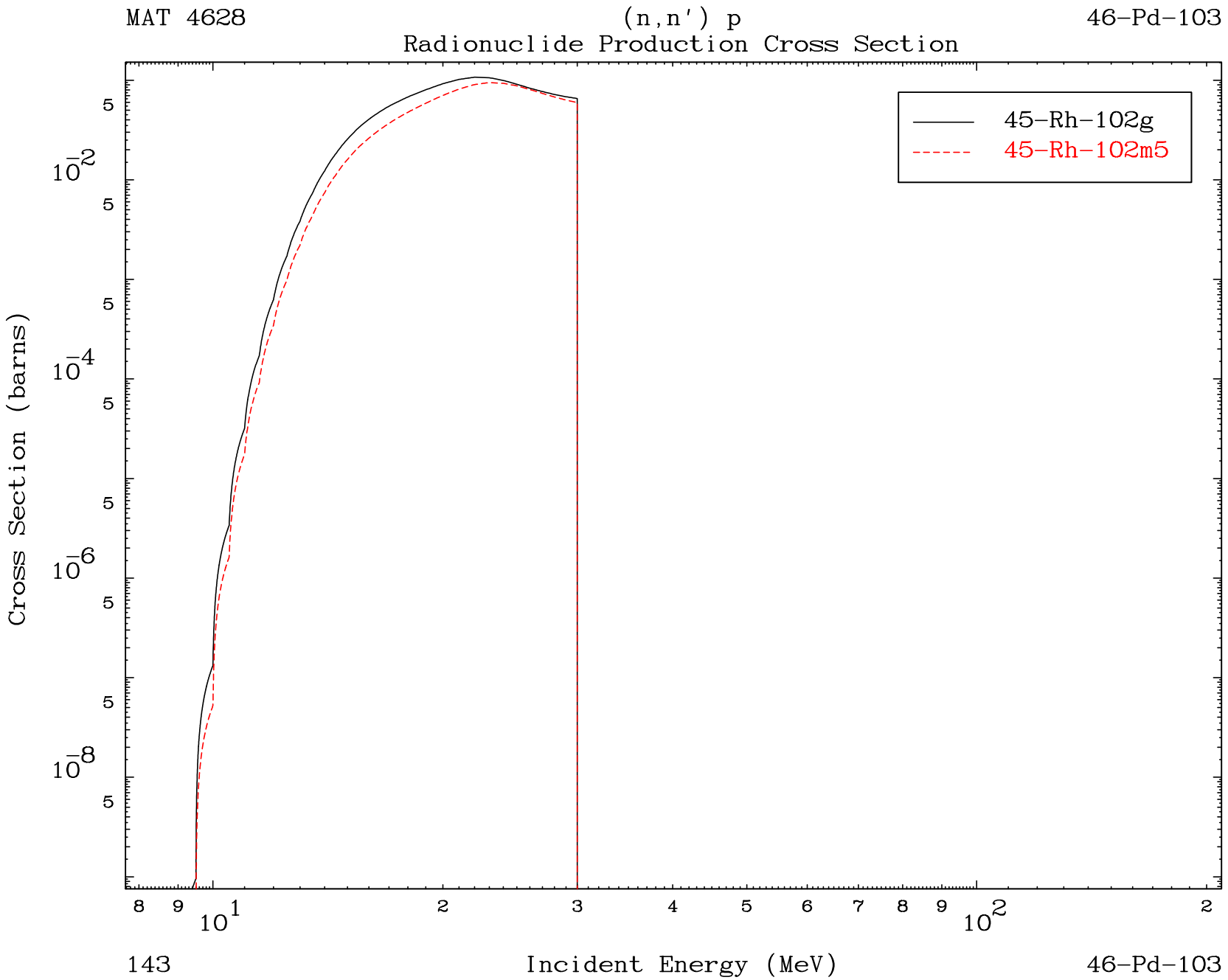

MAT 4628
MT= 80 (n,n') Level
Legendre Coefficients
46-Pd-103
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
138
Incident Energy (MeV)
46-Pd-103

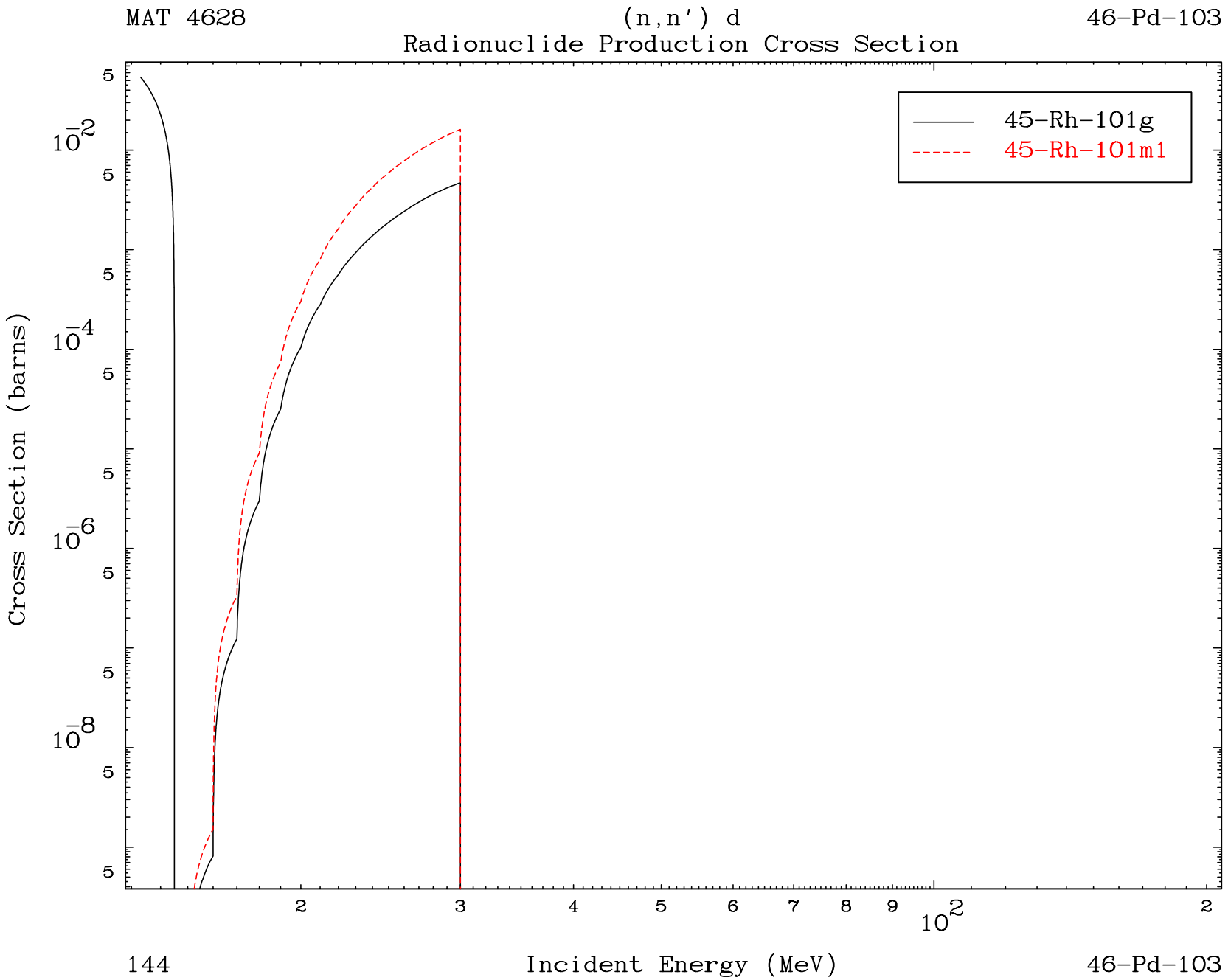

MAT 4628
MT= 80 (n,n') Level
Legendre Coefficients
46-Pd-103
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
139
Incident Energy (MeV)
46-Pd-103

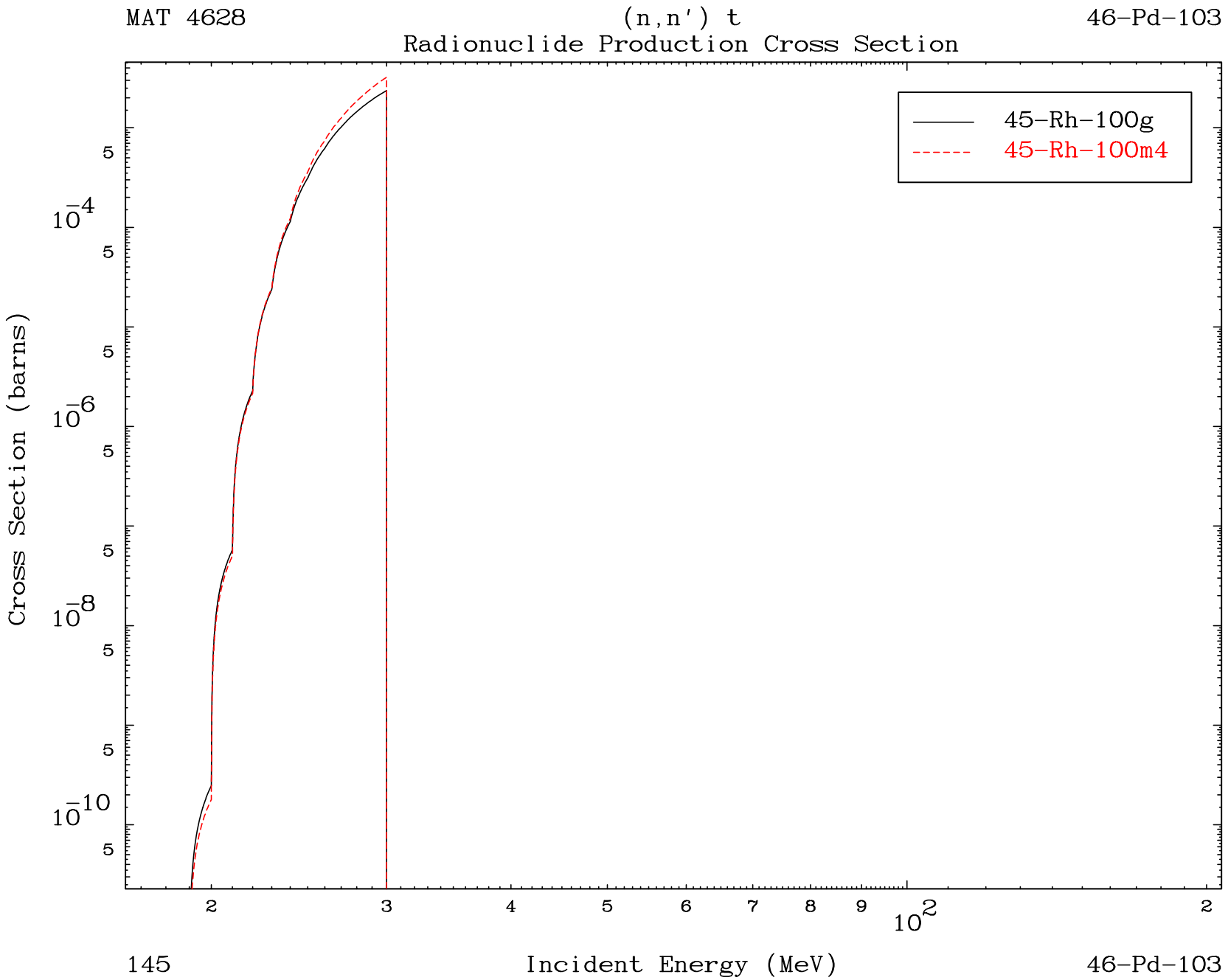

MAT 4628
MT= 80 (n,n') Level
Legendre Coefficients
46-Pd-103
0.004
0.003
0.002
0.001
0.000
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
140
Incident Energy (MeV)
46-Pd-103

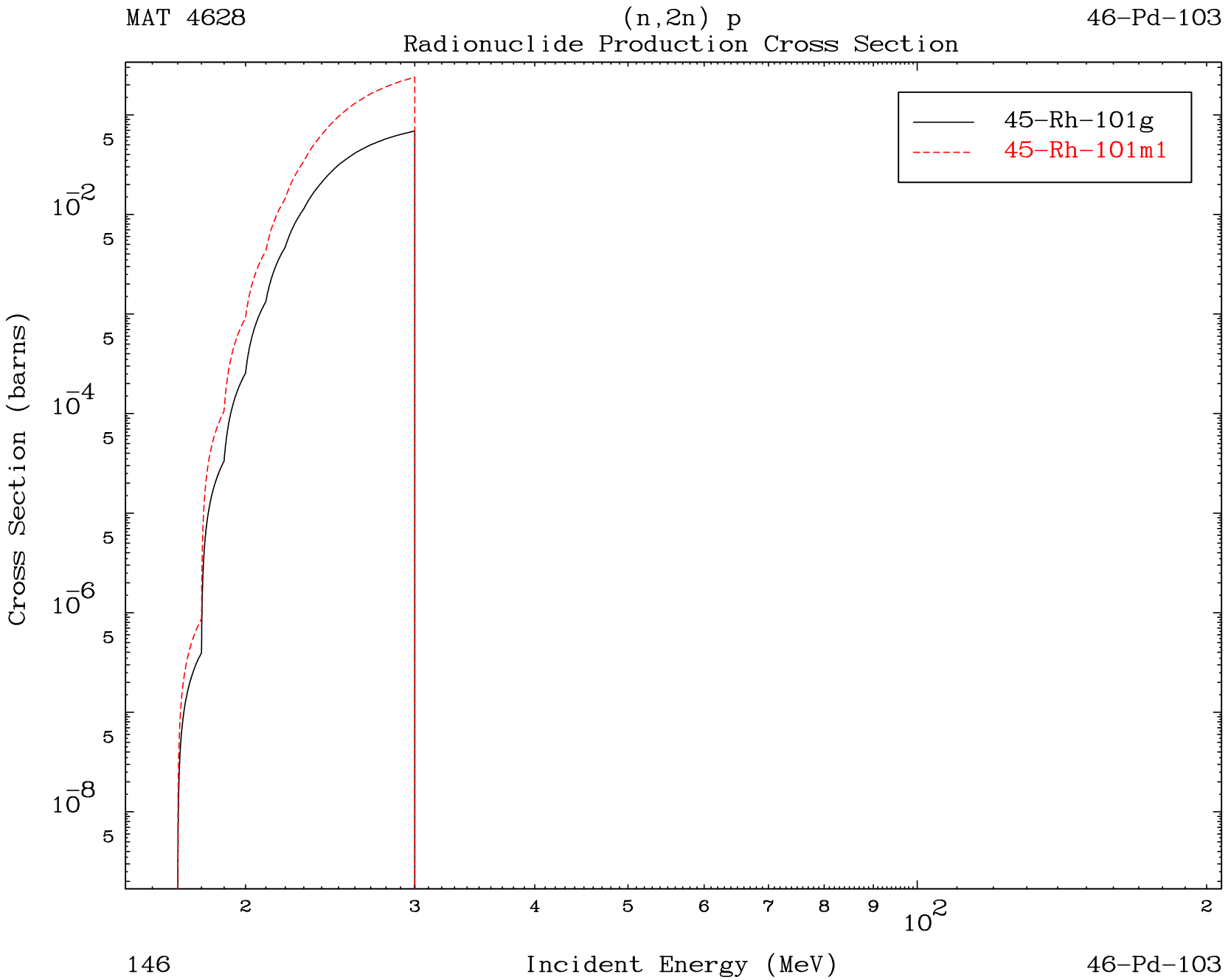

MAT 4628
MT= 80 (n,n') Level
Legendre Coefficients
46-Pd-103
X10^-6
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
141
Incident Energy (MeV)
46-Pd-103

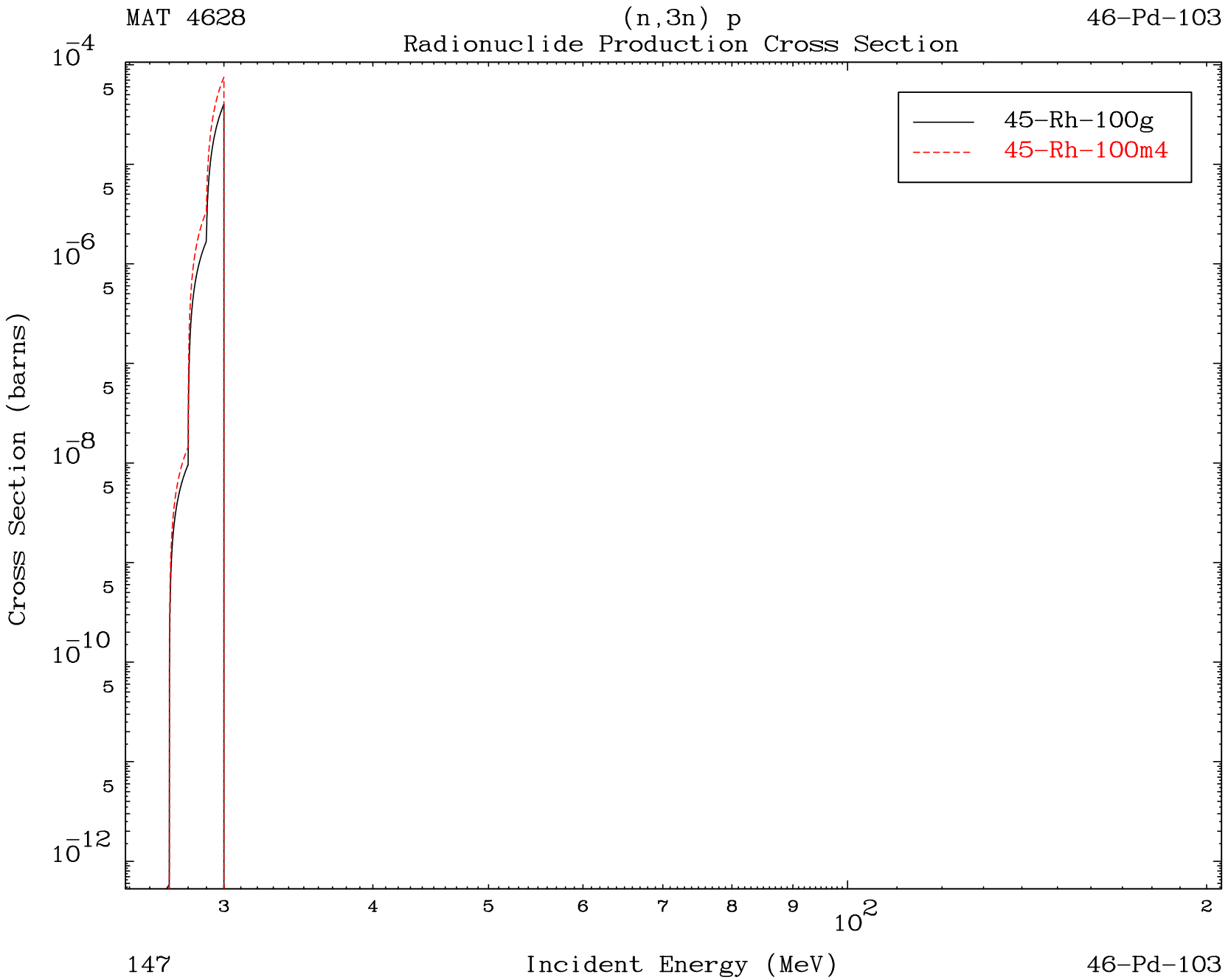

MAT 4628
(n,2n) d
46-Pd-103
Radionuclide Production Cross Section
45-Rh-100g
45-Rh-100m4
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
3
4
5
6
7
8
9
10^2
2
142
Incident Energy (MeV)
46-Pd-103

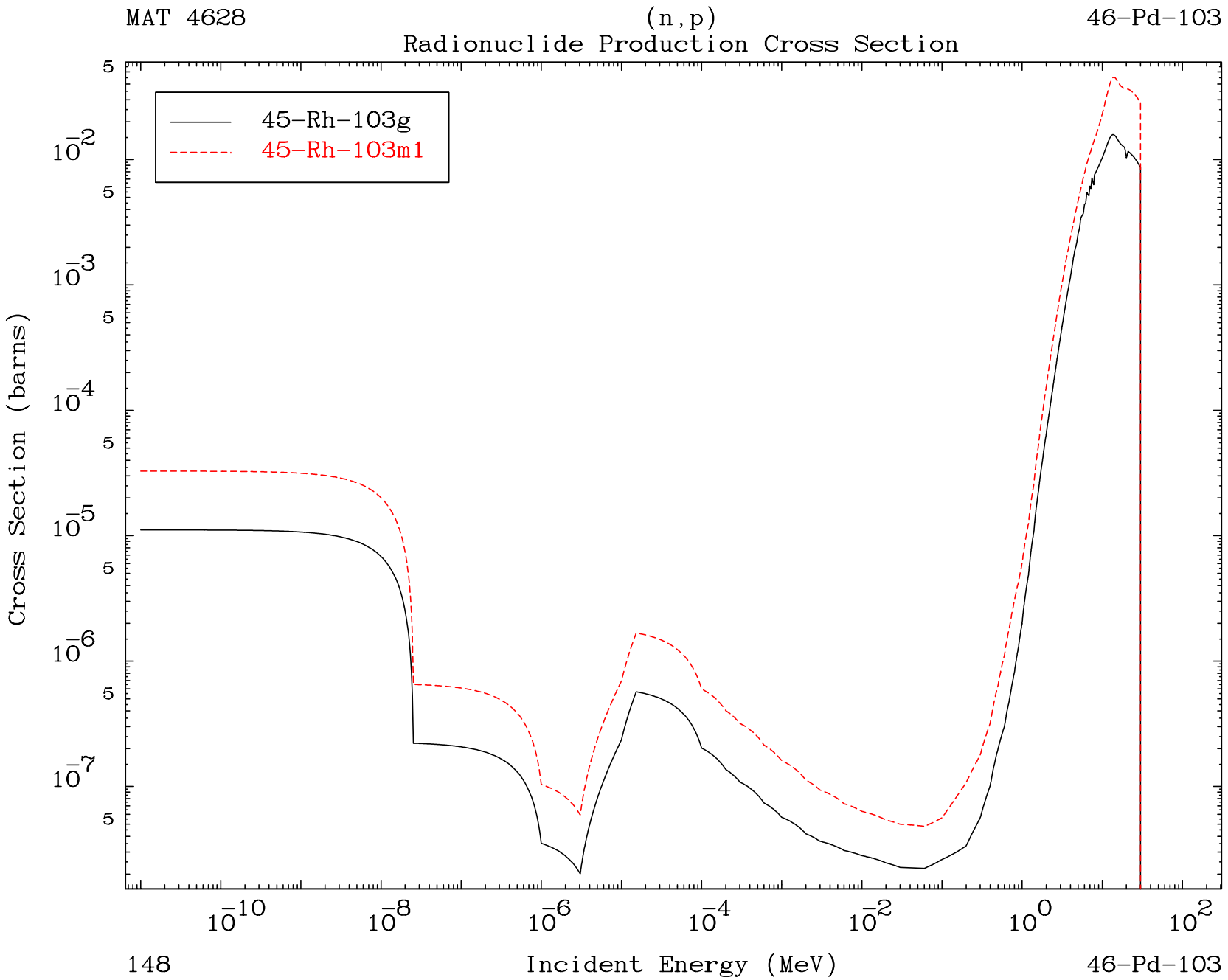

MAT 4628
(n,n') p
46-Pd-103
Radionuclide Production Cross Section
45-Rh-102g
45-Rh-102m5
Cross Section (barns)
10-2
10-4
10-6
10-8
8 9 10 1 2 3 4 5 6 7 8 9 10 2 2
143
Incident Energy (MeV)
46-Pd-103

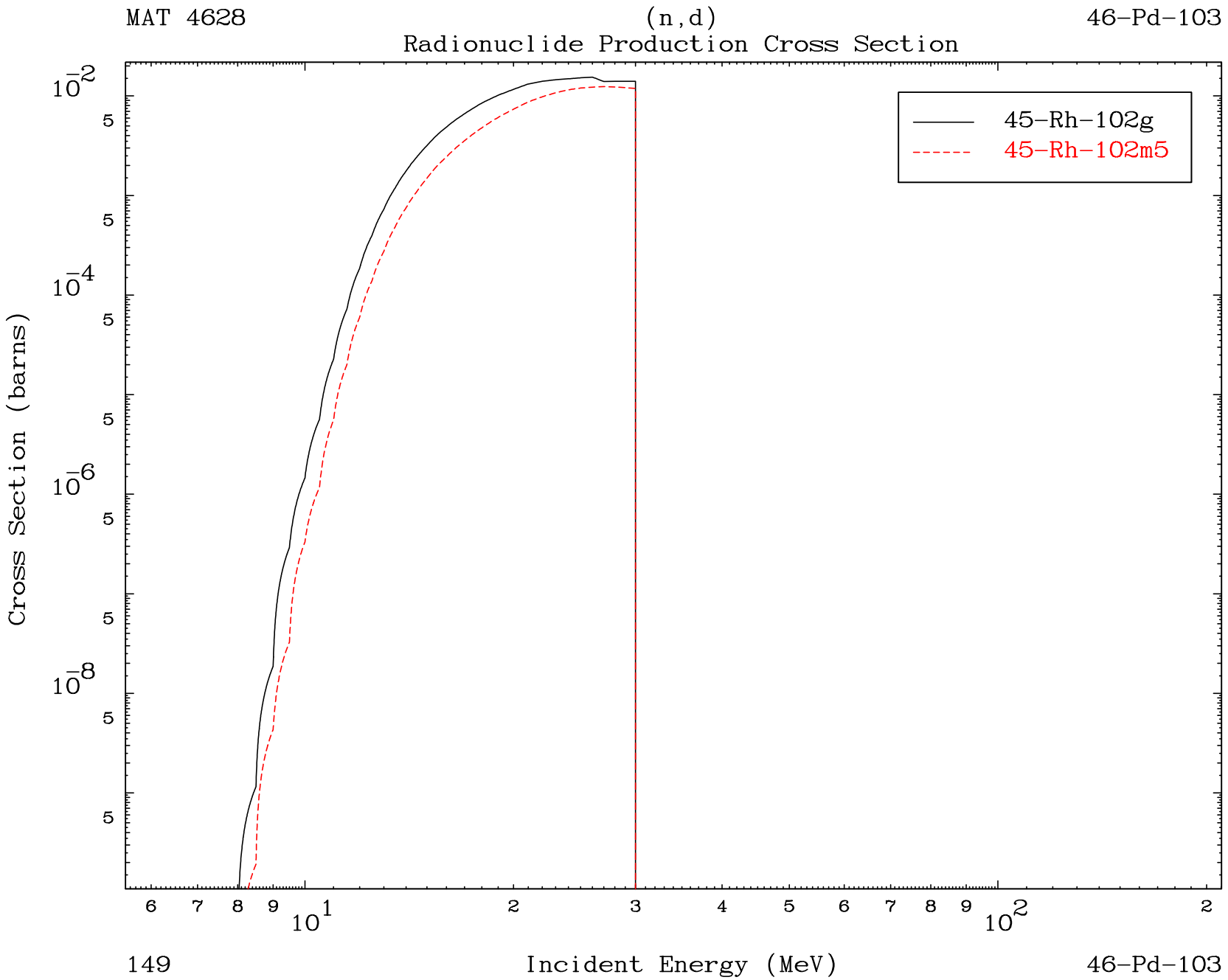

MAT 4628
(n,n') d
46-Pd-103
Radionuclide Production Cross Section
45-Rh-101g
45-Rh-101m1
Cross Section (barns)
Incident Energy (MeV)
144
46-Pd-103

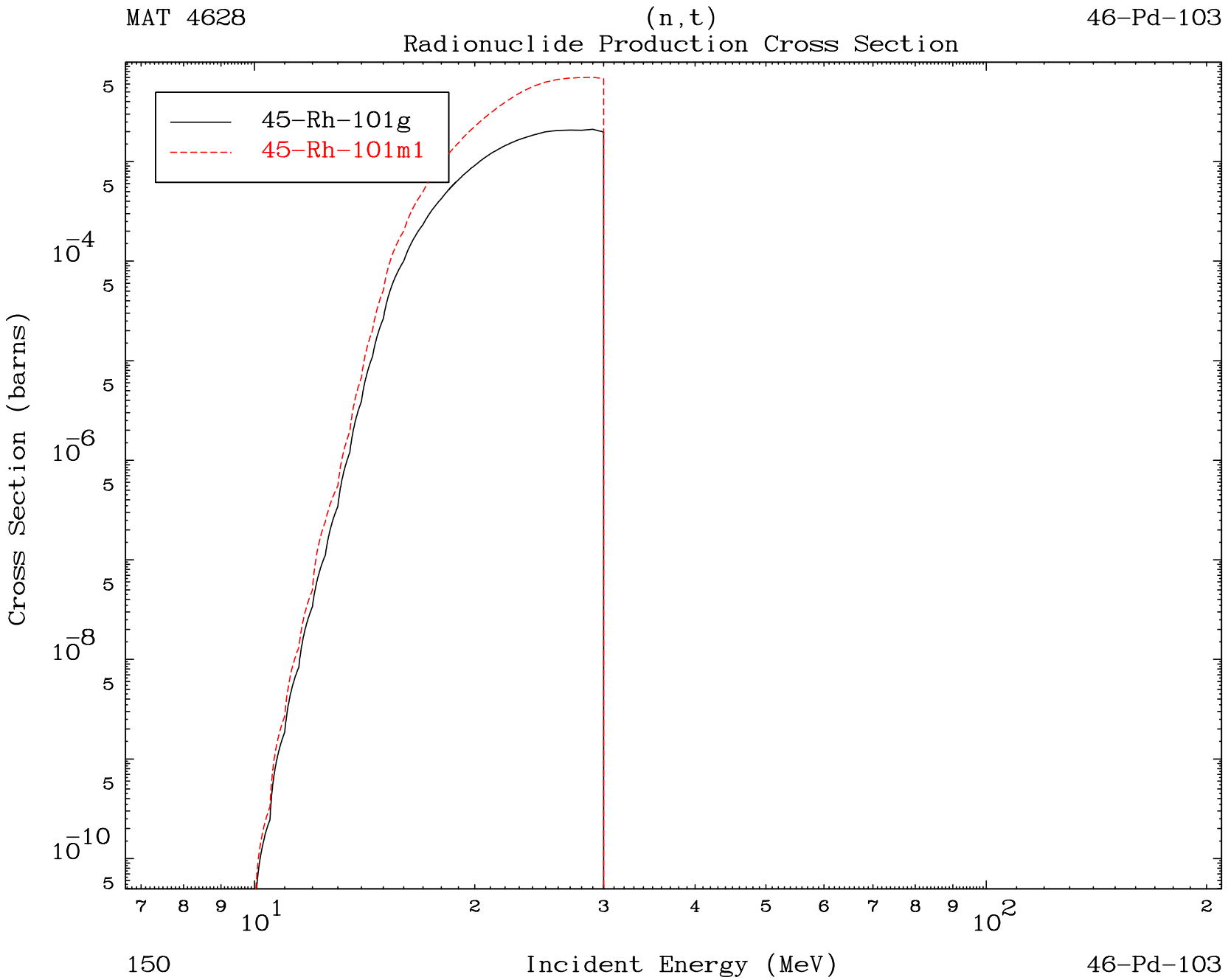

MAT 4628
(n,n') t
46-Pd-103
Radionuclide Production Cross Section
45-Rh-100g
45-Rh-100m4
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
145
Incident Energy (MeV)
46-Pd-103

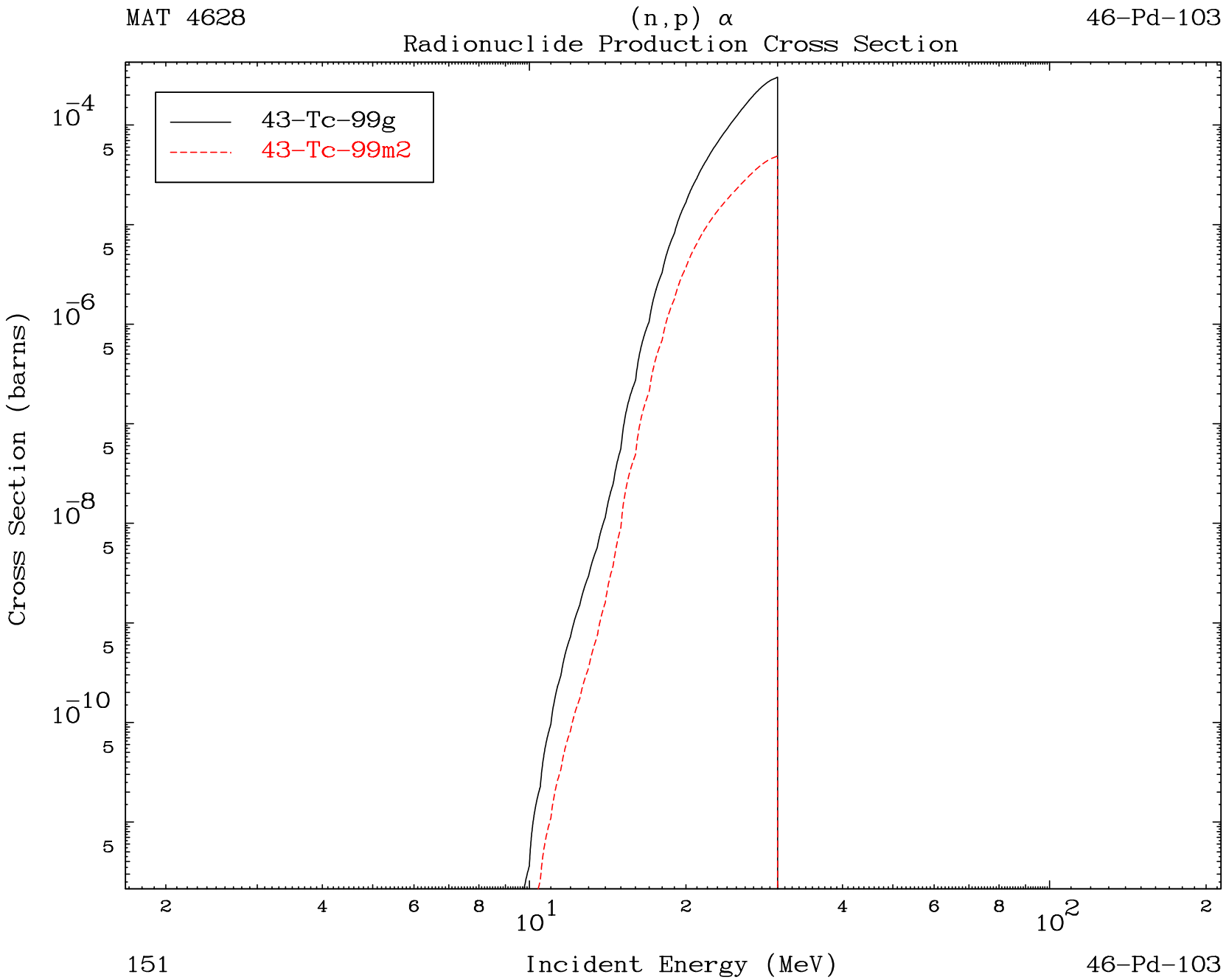

MAT 4628
(n,2n) p
46-Pd-103
Radionuclide Production Cross Section
45-Rh-101g
45-Rh-101m1
Cross Section (barns)
10-2
10-4
10-6
10-8
2
3
4
5
6
7
8
9
10 2
2
146
Incident Energy (MeV)
46-Pd-103


MAT 4628
(n,3n) p
46-Pd-103
Radionuclide Production Cross Section
45-Rh-100g
45-Rh-100m4
Cross Section (barns)
Incident Energy (MeV)
147
46-Pd-103


MAT 4628
(n,p)
46-Pd-103
Radionuclide Production Cross Section
45-Rh-103g
45-Rh-103m1
Cross Section (barns)
Incident Energy (MeV)
148
46-Pd-103


MAT 4628
(n,d)
46-Pd-103
Radionuclide Production Cross Section
45-Rh-102g
45-Rh-102m5
Cross Section (barns)
Incident Energy (MeV)
149
46-Pd-103


MAT 4628
(n,t)
46-Pd-103
Radionuclide Production Cross Section
45-Rh-101g
45-Rh-101m1
Cross Section (barns)
Incident Energy (MeV)
150
46-Pd-103


MAT 4628
(n,p) α
46-Pd-103
Radionuclide Production Cross Section
43-Tc-99g
43-Tc-99m2
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
4
6
8
101
102
151
Incident Energy (MeV)
46-Pd-103