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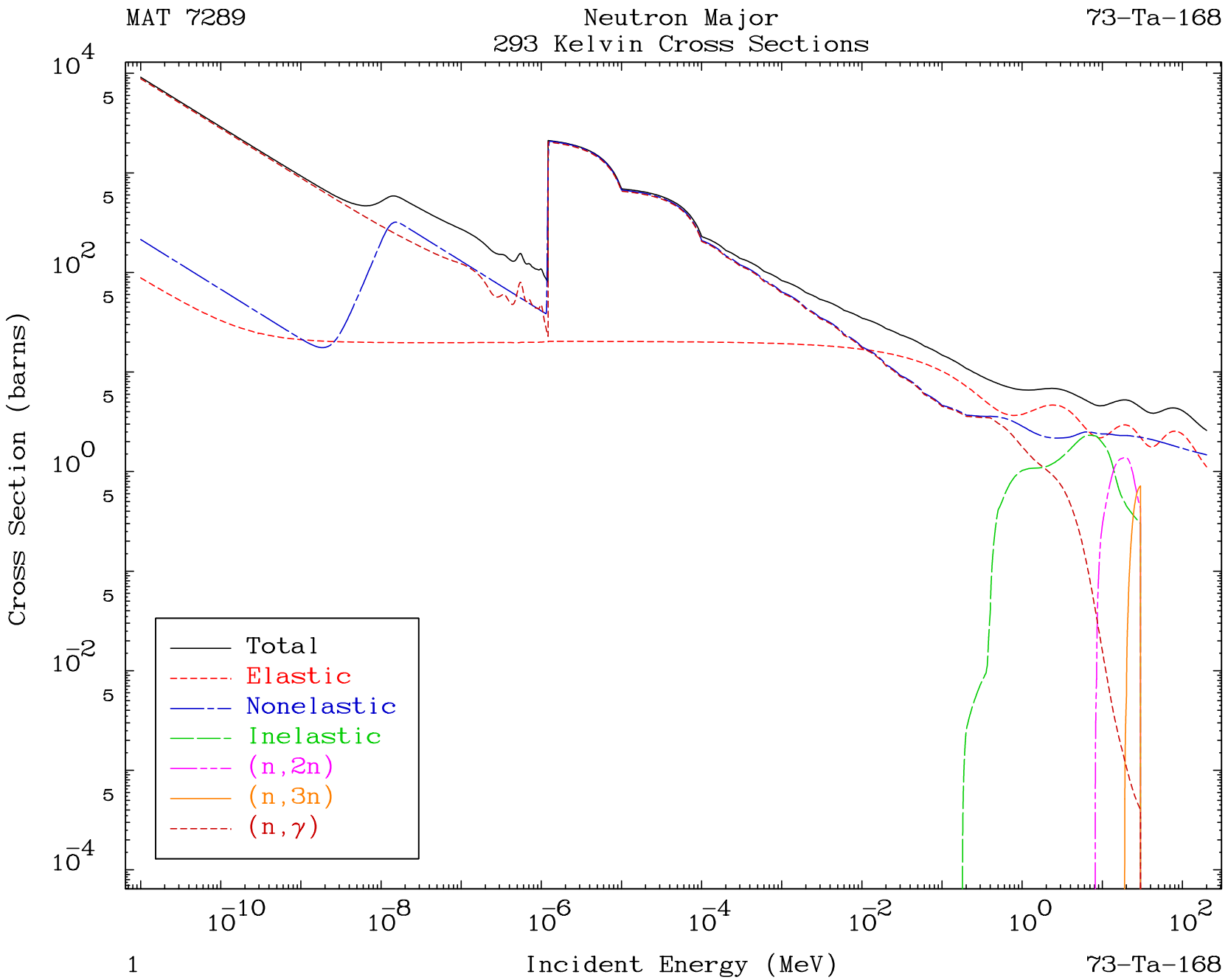
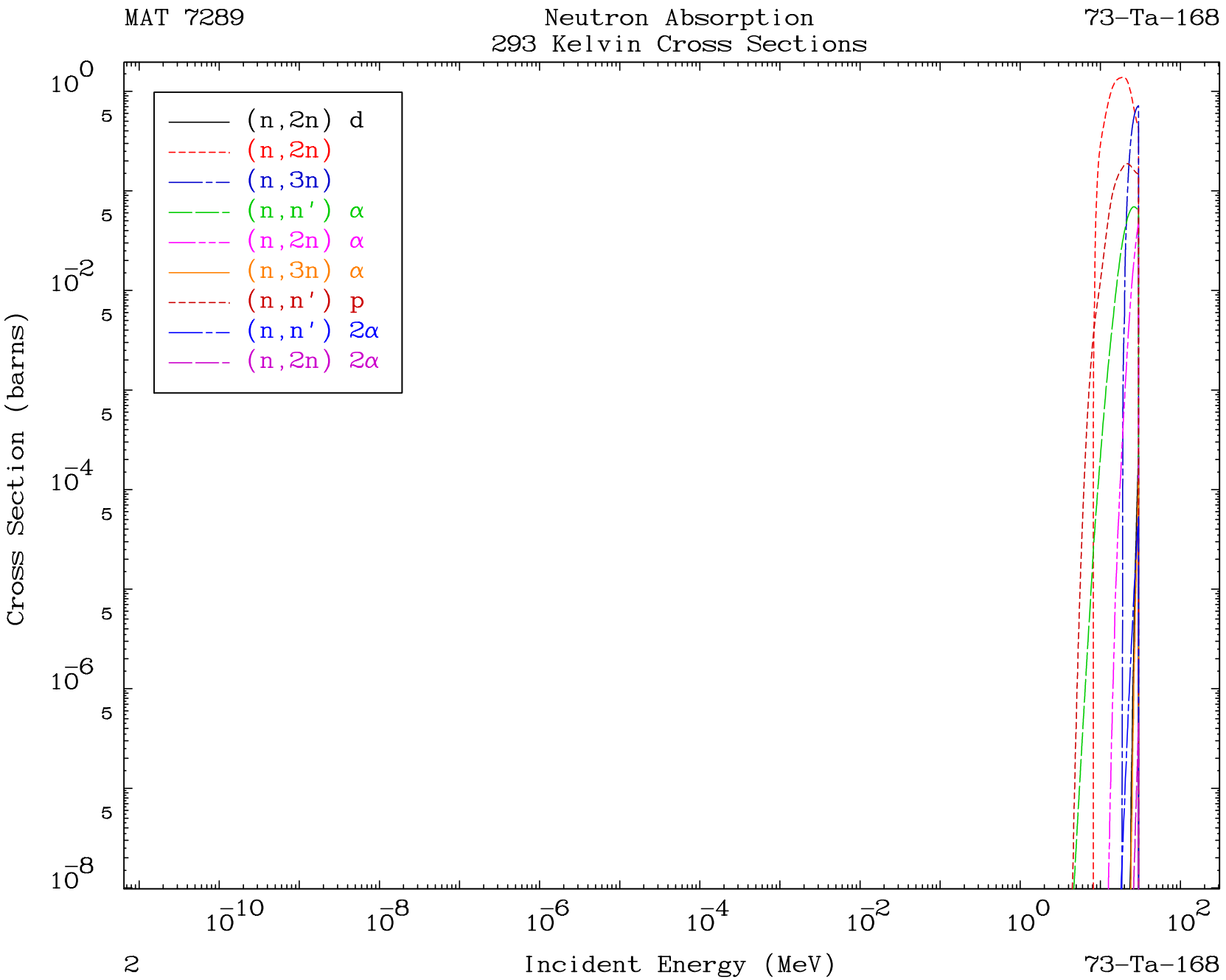
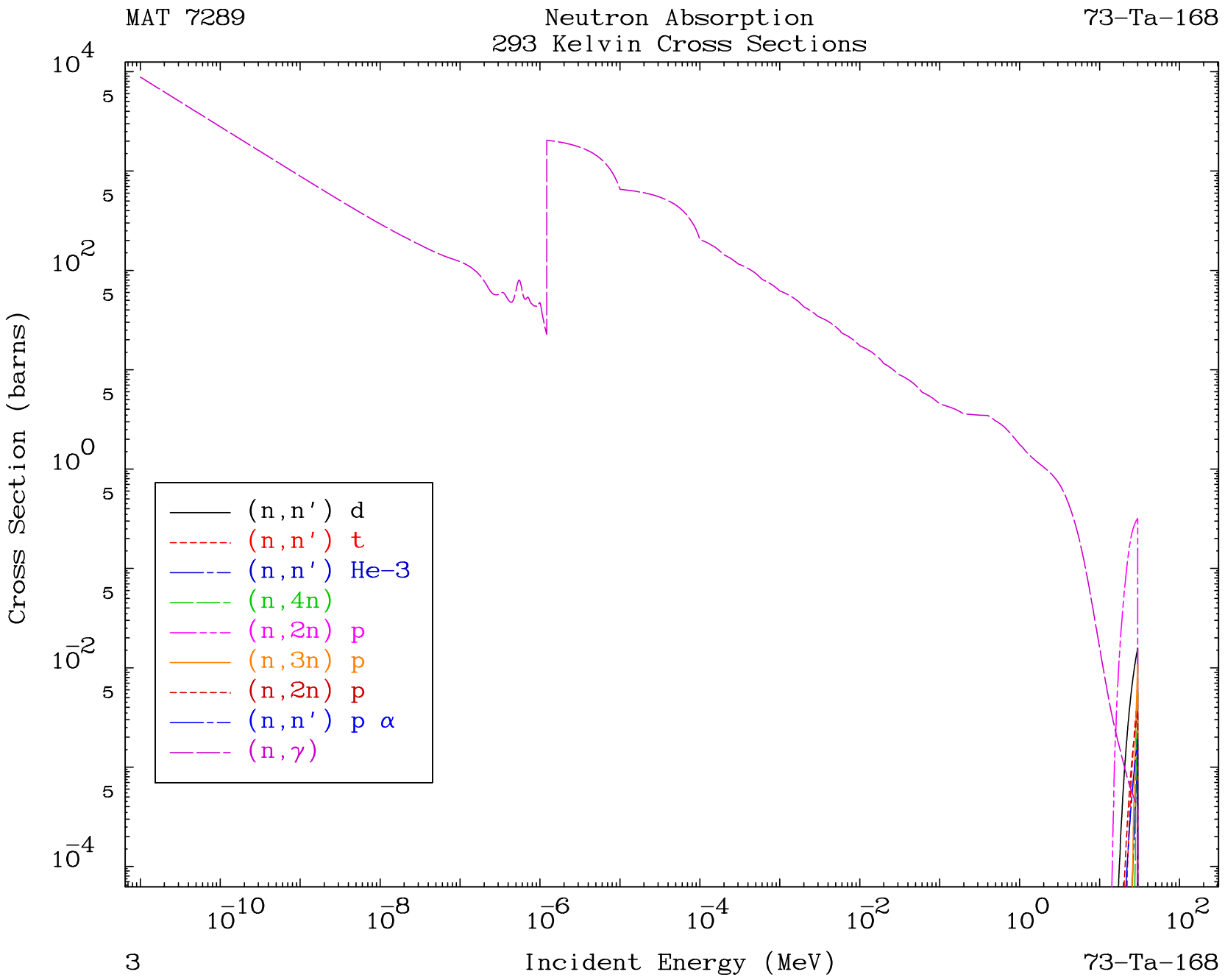
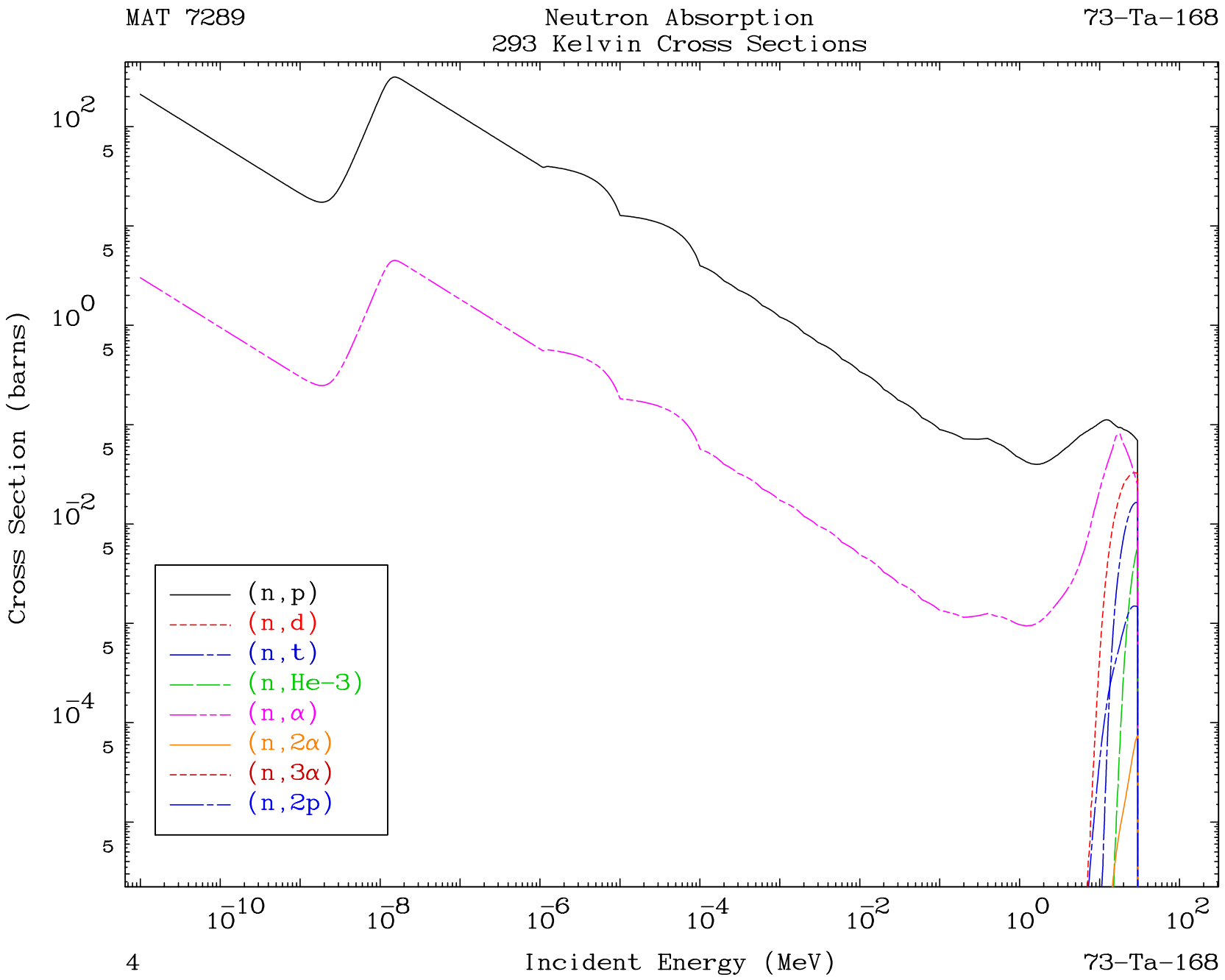
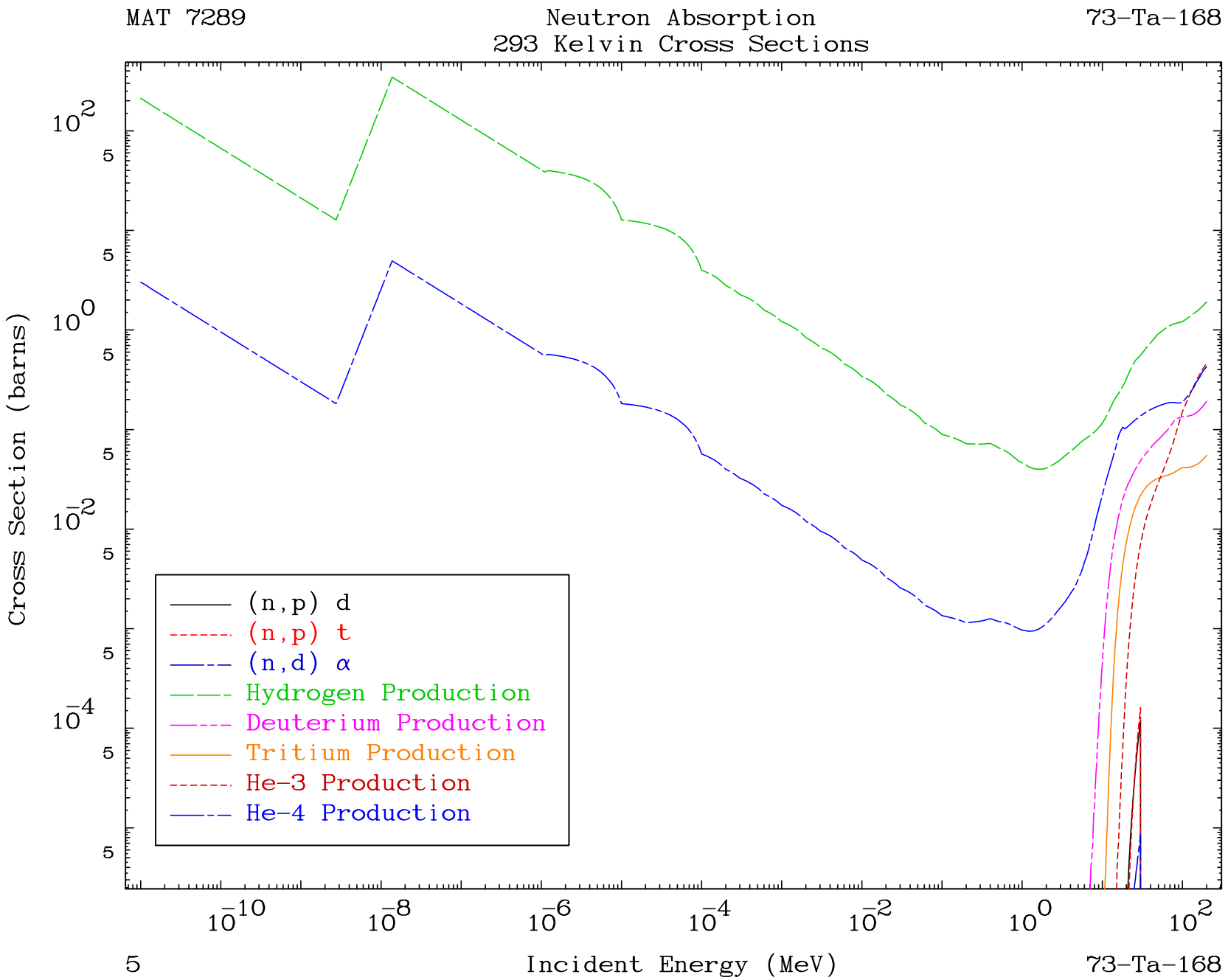
Press Mouse Button to Start

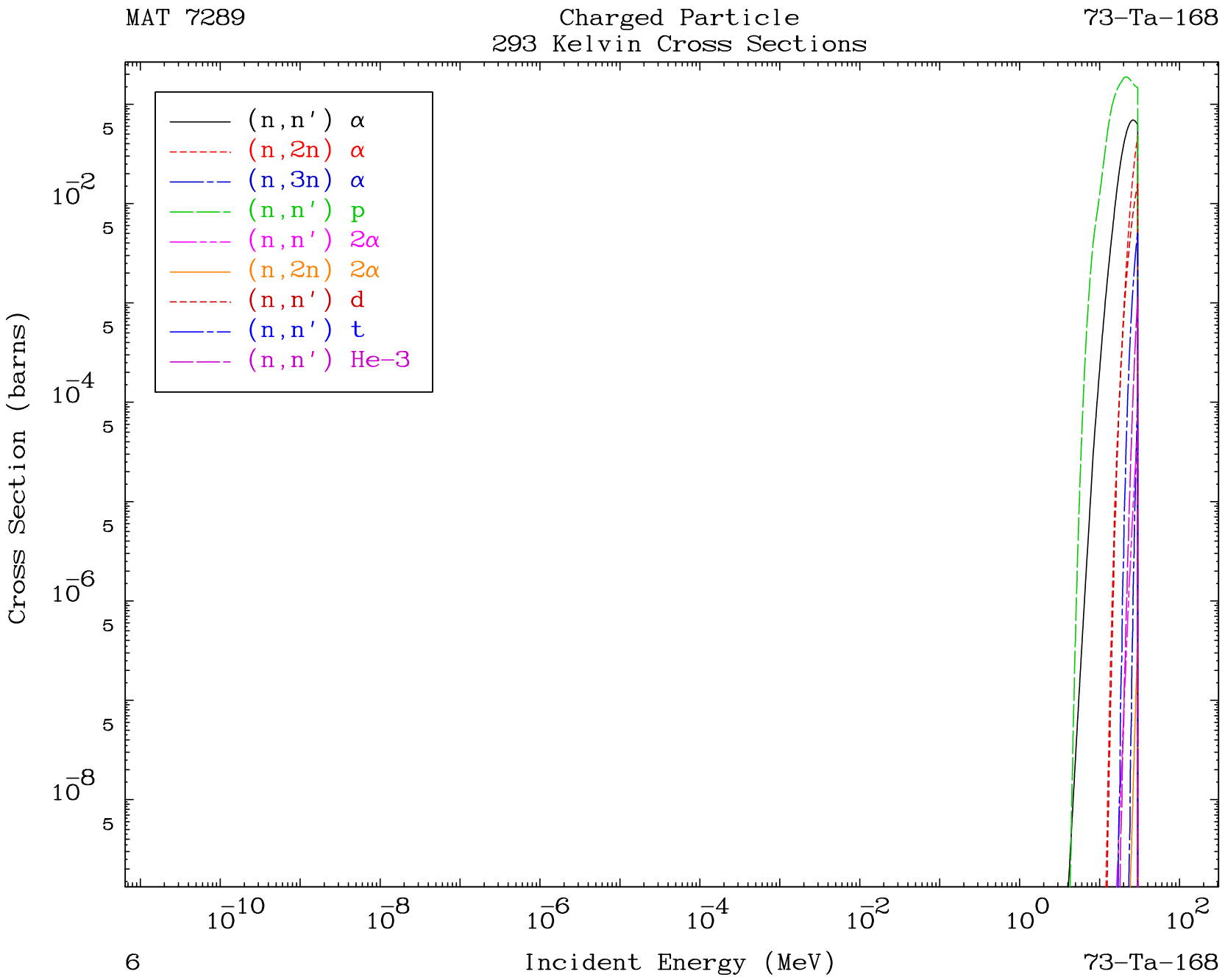

MAT 7289
Neutron Major
293 Kelvin Cross Sections
73-Ta-168
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
1
73-Ta-168

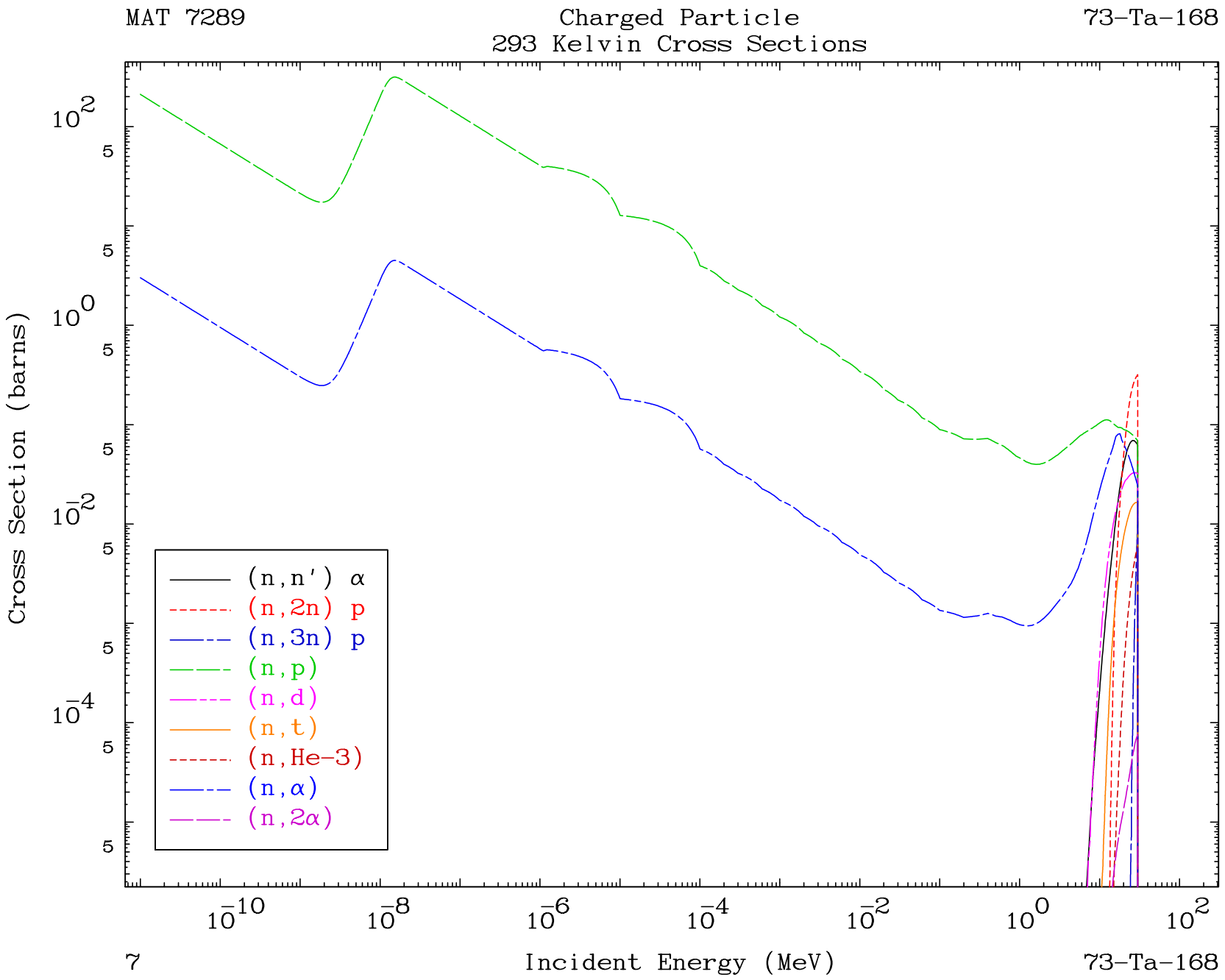

MAT 7289
Neutron Absorption
293 Kelvin Cross Sections
73-Ta-168
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
Cross Section (barns)
Incident Energy (MeV)
2
73-Ta-168

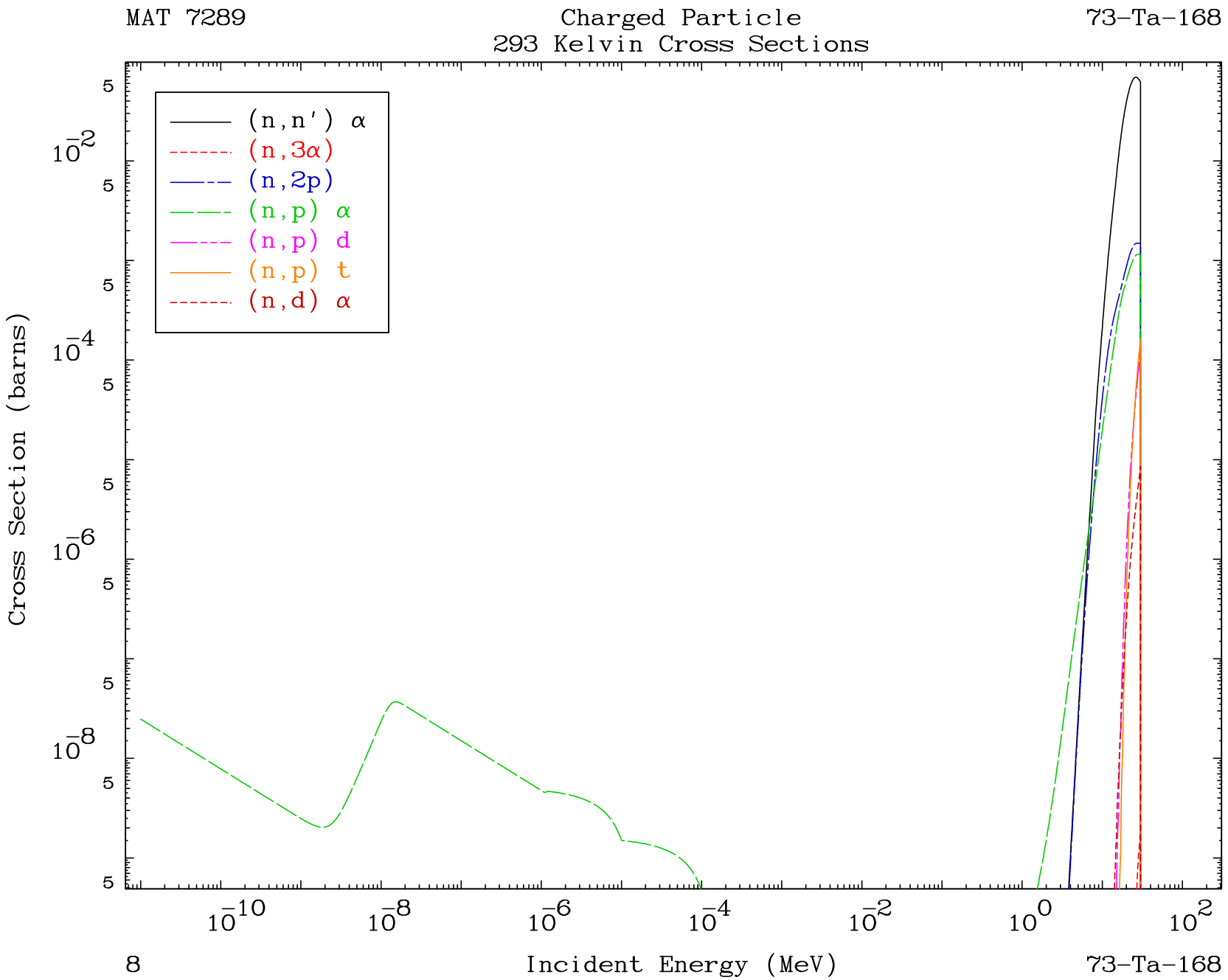

MAT 7289
Neutron Absorption
293 Kelvin Cross Sections
73-Ta-168
Cross Section (barns)
Incident Energy (MeV)
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
(n,2n) p
(n,n') p α
(n,γ)
3
73-Ta-168

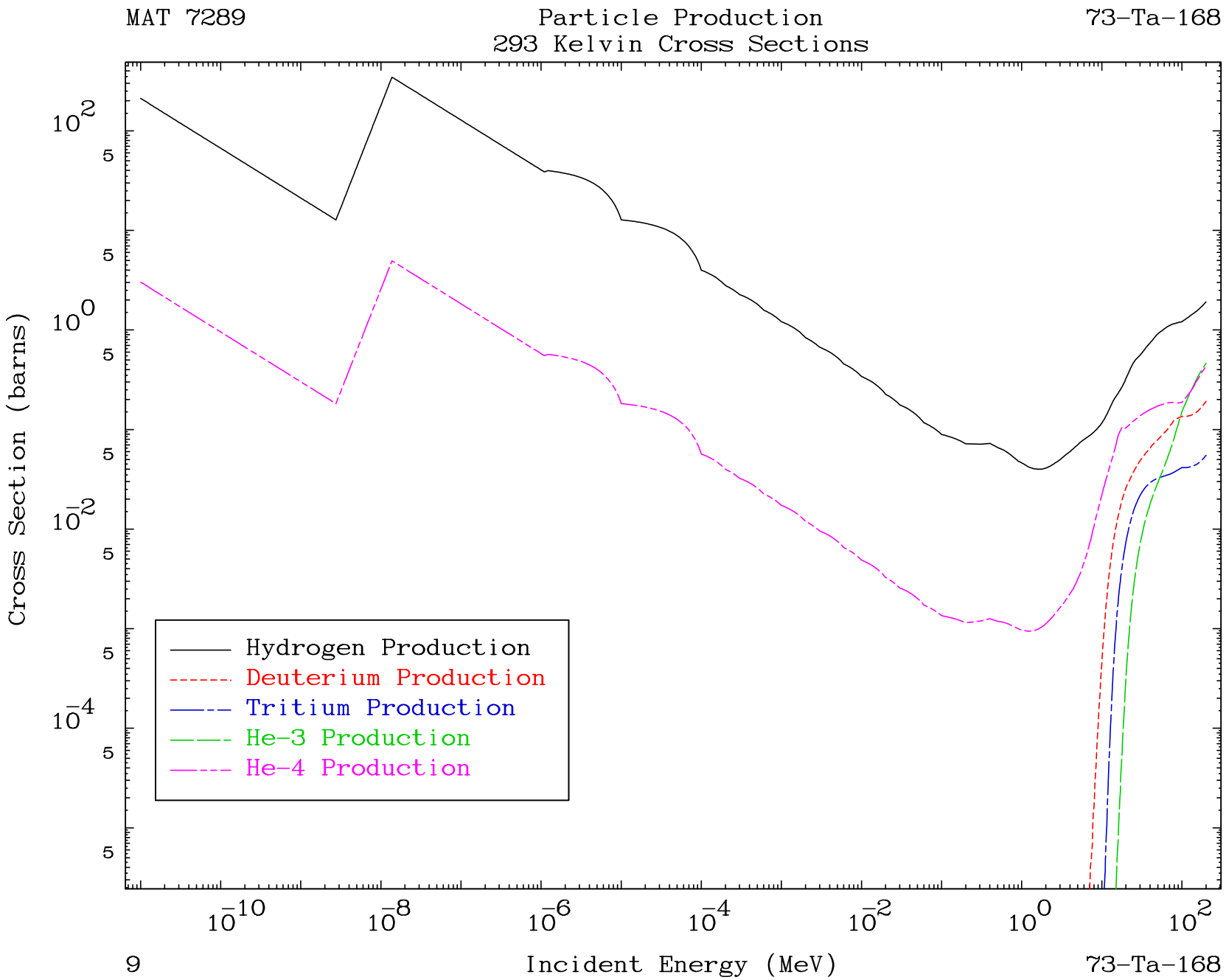

MAT 7289
Neutron Absorption
293 Kelvin Cross Sections
73-Ta-168
Cross Section (barns)
Incident Energy (MeV)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,3α)
(n,2p)
4
73-Ta-168

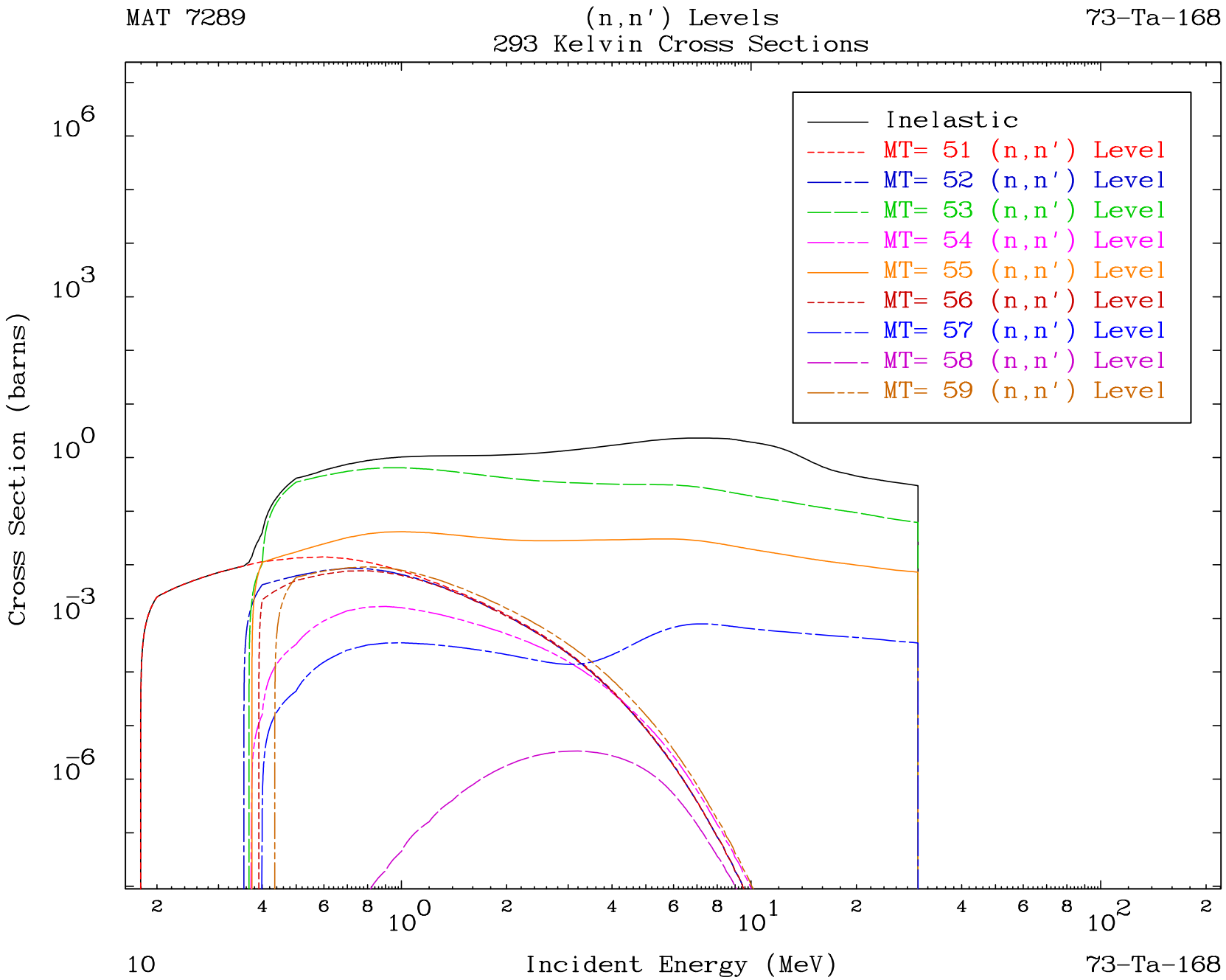

MAT 7289
Neutron Absorption
293 Kelvin Cross Sections
73-Ta-168
Cross Section (barns)
Incident Energy (MeV)
73-Ta-168
5
(n,p) d
(n,p) t
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production

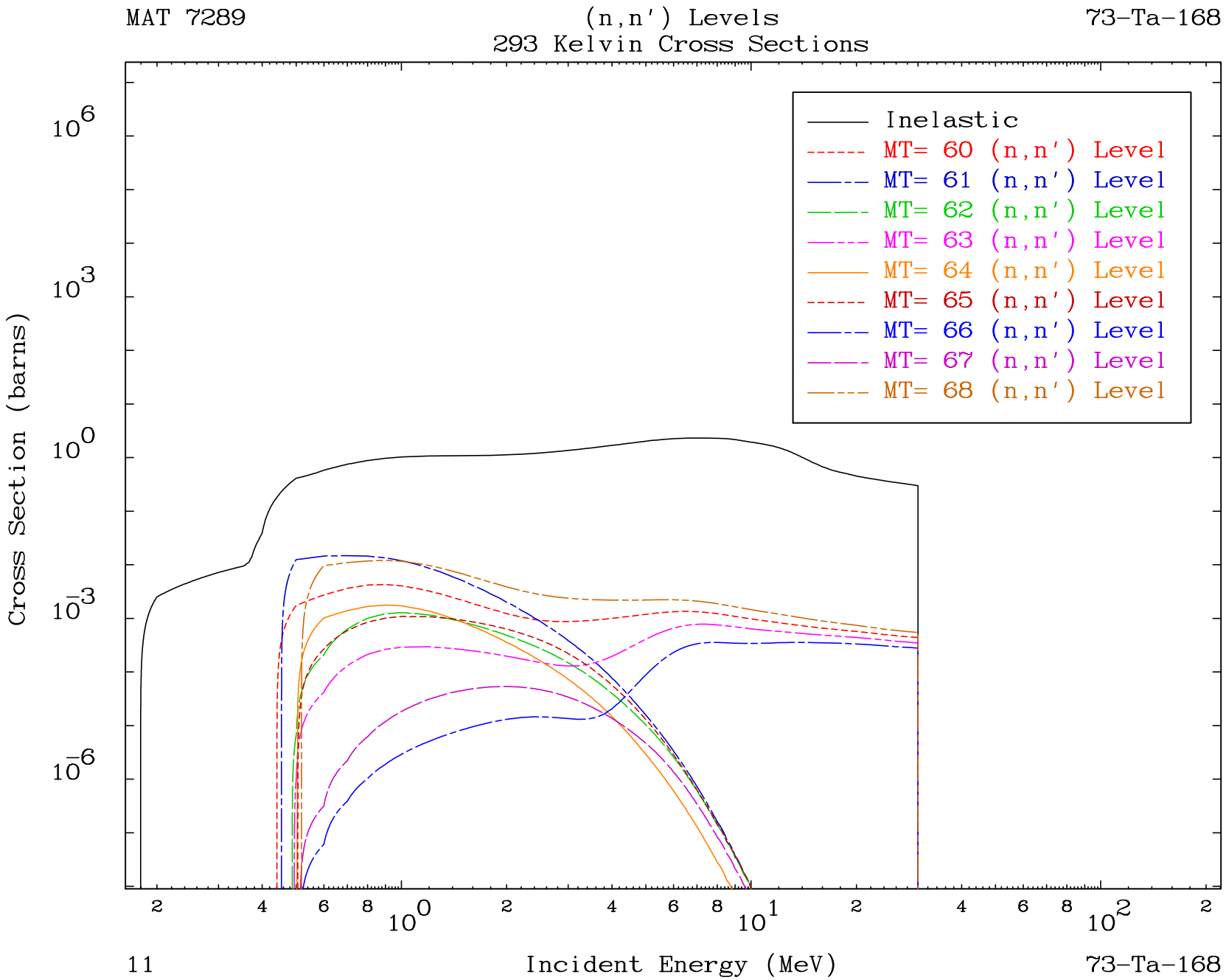

MAT 7289
Charged Particle
293 Kelvin Cross Sections
73-Ta-168
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
Cross Section (barns)
Incident Energy (MeV)
6
73-Ta-168

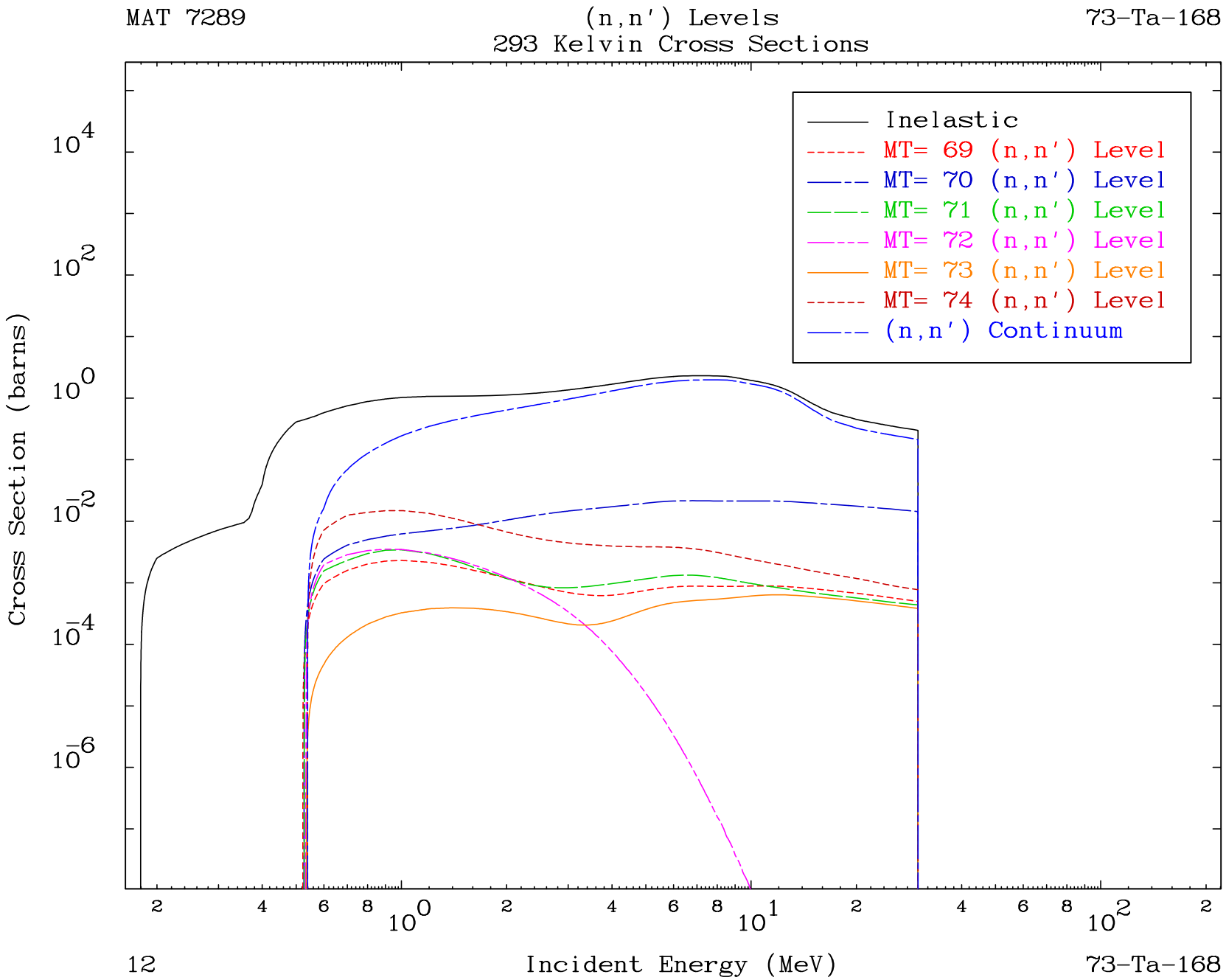

MAT 7289
Charged Particle
293 Kelvin Cross Sections
73-Ta-168
Cross Section (barns)
Incident Energy (MeV)
7
73-Ta-168
(n,n') α
(n,2n) p
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)

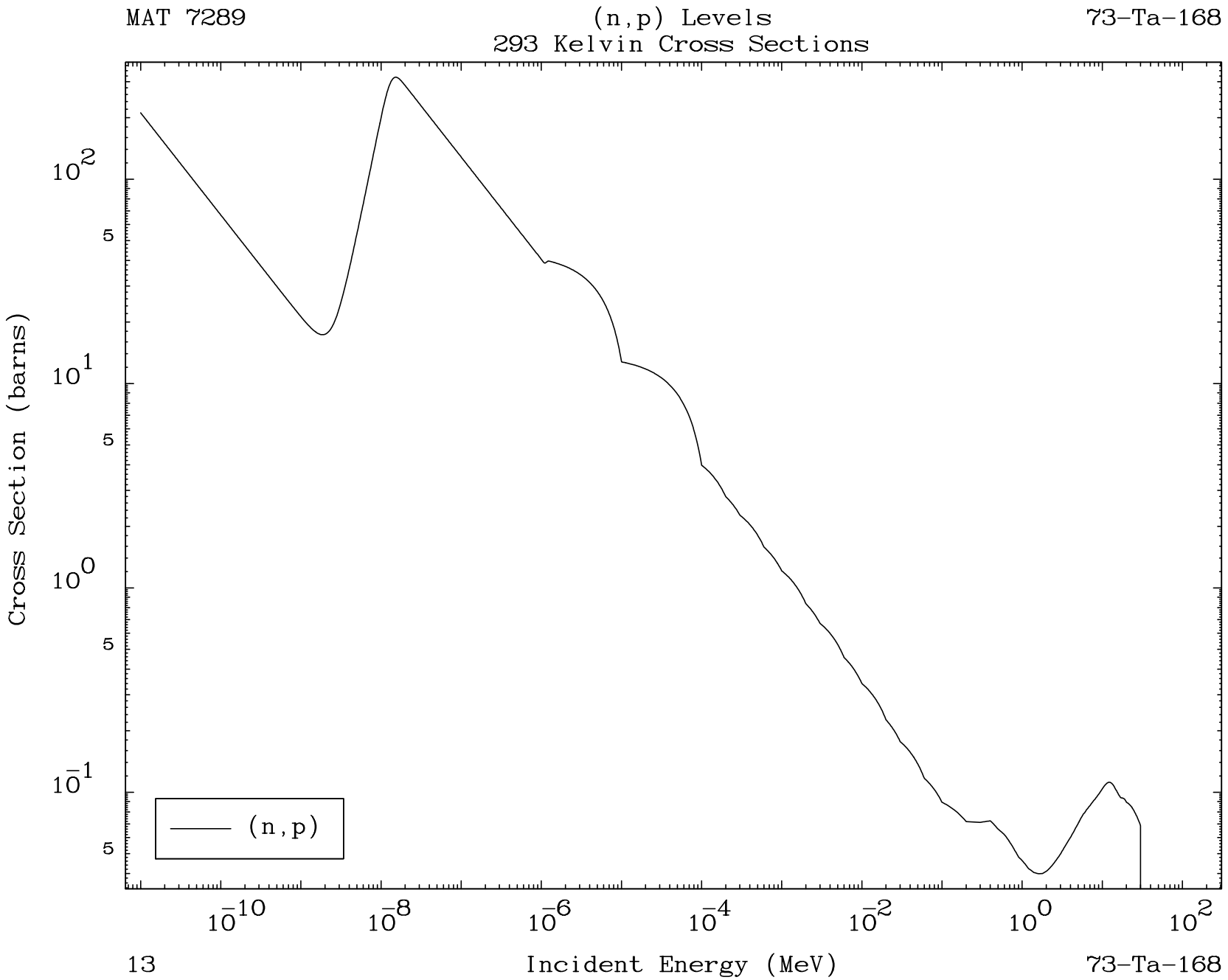

MAT 7289
Charged Particle
293 Kelvin Cross Sections
73-Ta-168
(n,n') α
(n,3α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Cross Section (barns)
Incident Energy (MeV)
73-Ta-168
8

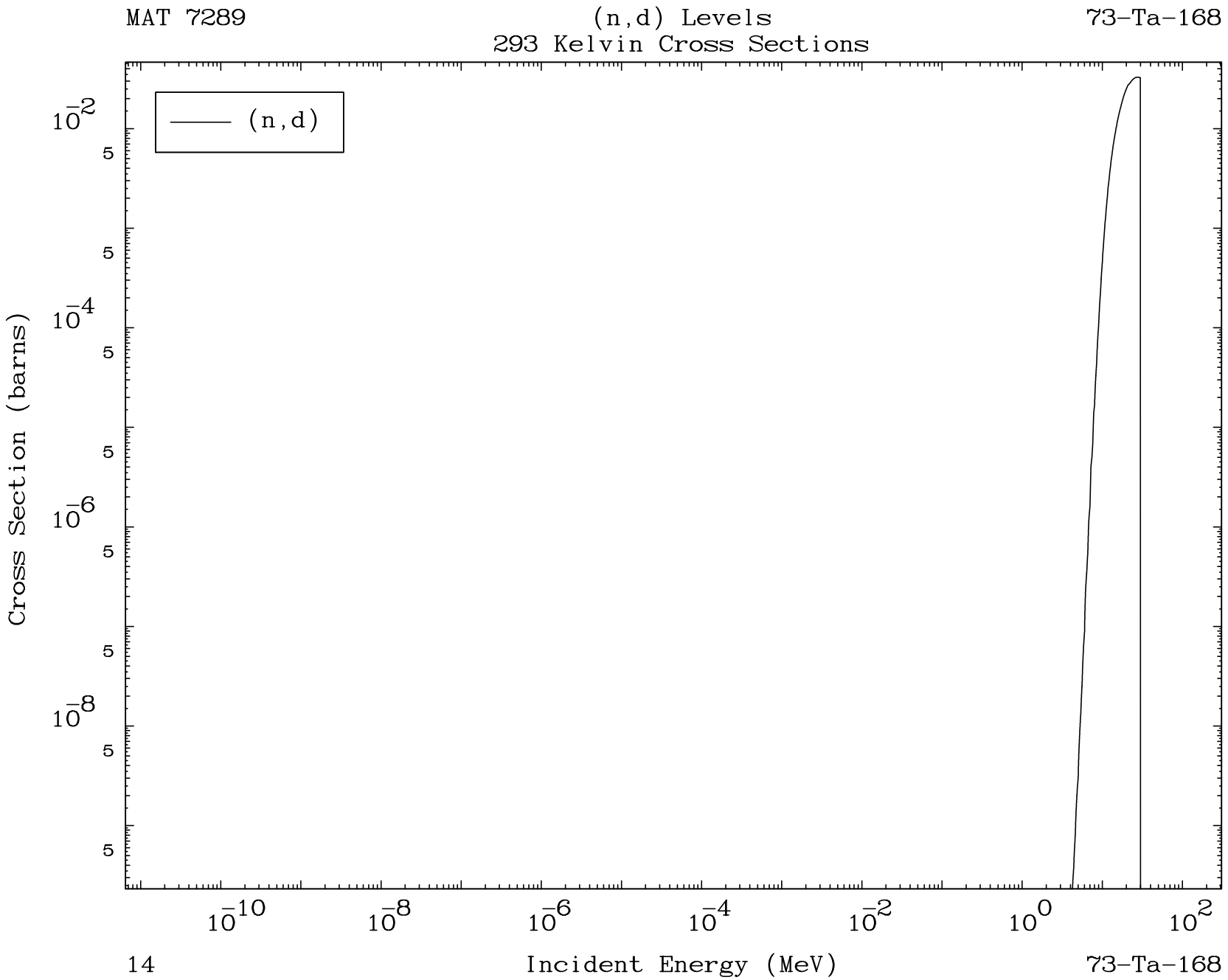

MAT 7289
Particle Production
293 Kelvin Cross Sections
73-Ta-168
Cross Section (barns)
10^2
5
10^0
5
10^-2
5
10^-4
5
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
9
73-Ta-168

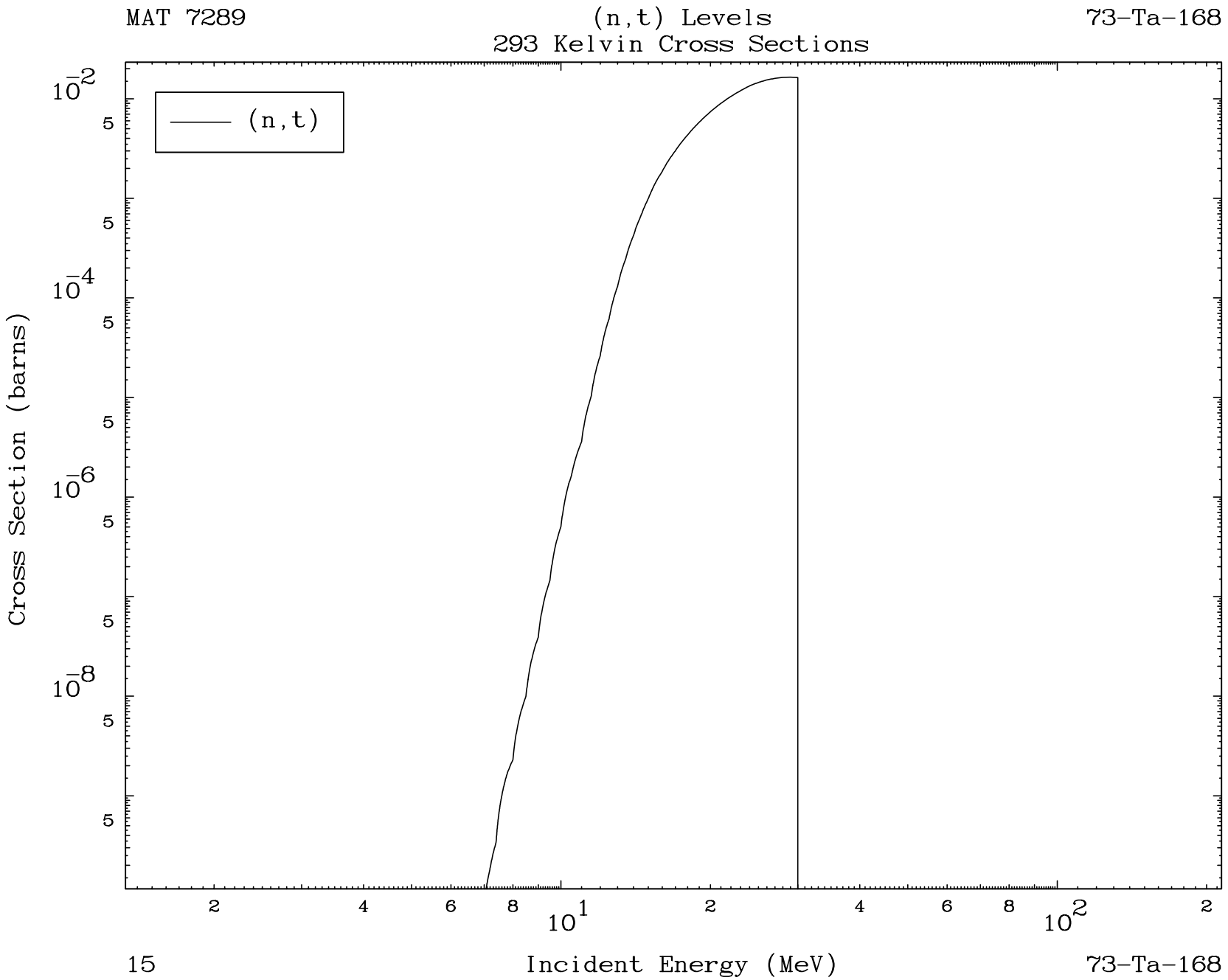

MAT 7289
(n,n') Levels
293 Kelvin Cross Sections
73-Ta-168
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
73-Ta-168

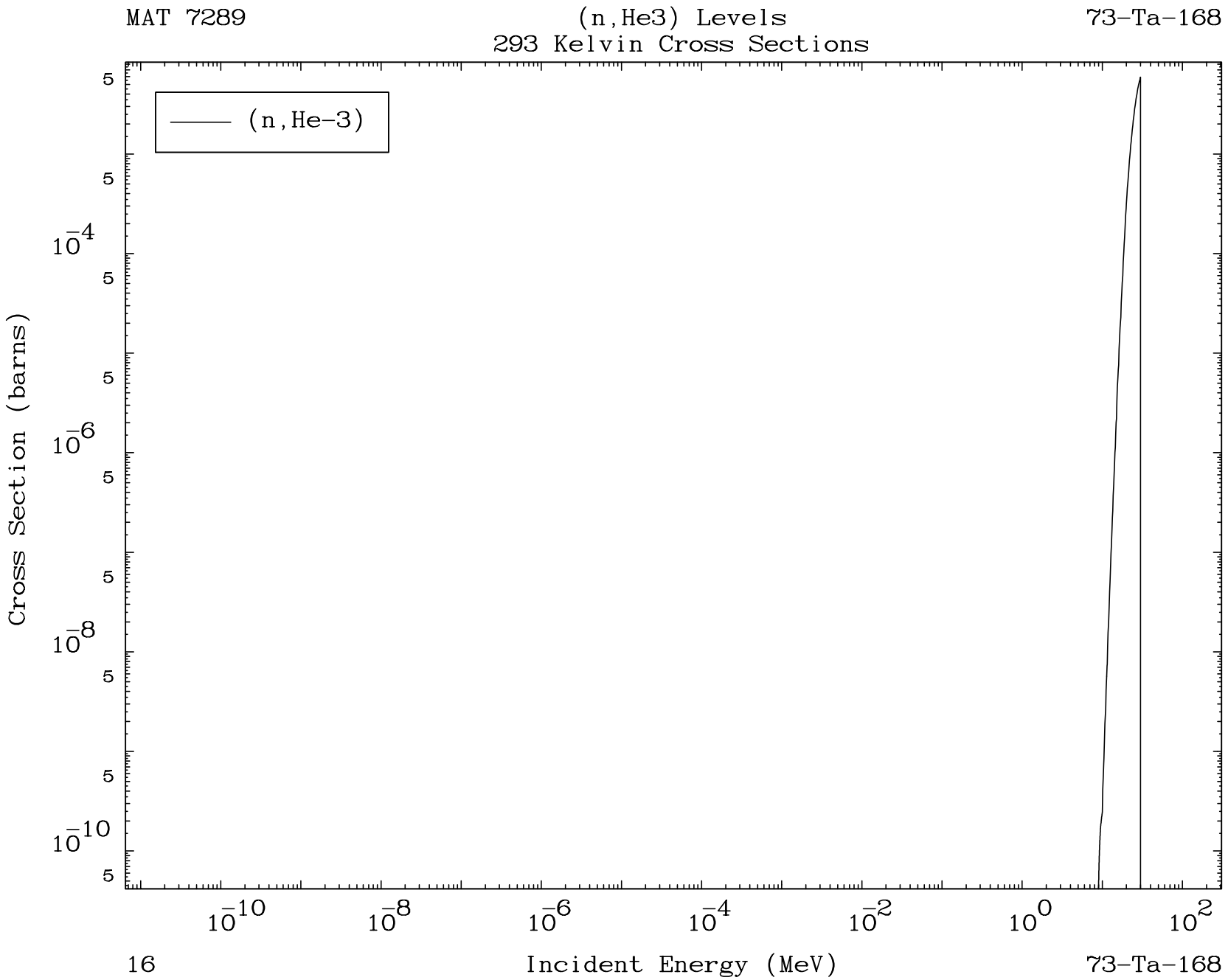

MAT 7289
(n,n') Levels
293 Kelvin Cross Sections
73-Ta-168
Inelastic
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
MT= 68 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
11
73-Ta-168

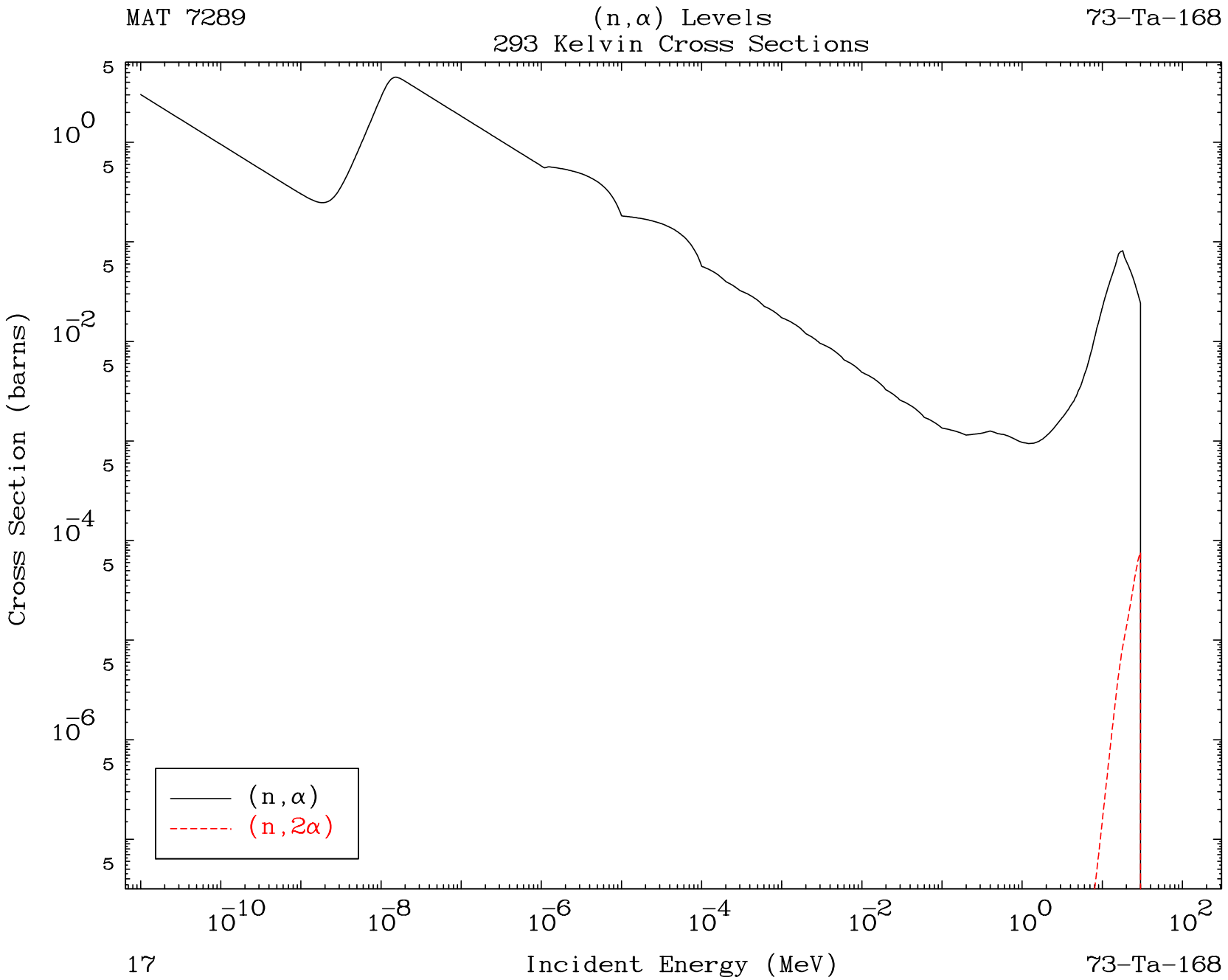

MAT 7289
(n,n') Levels
293 Kelvin Cross Sections
73-Ta-168
Inelastic
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
12
73-Ta-168

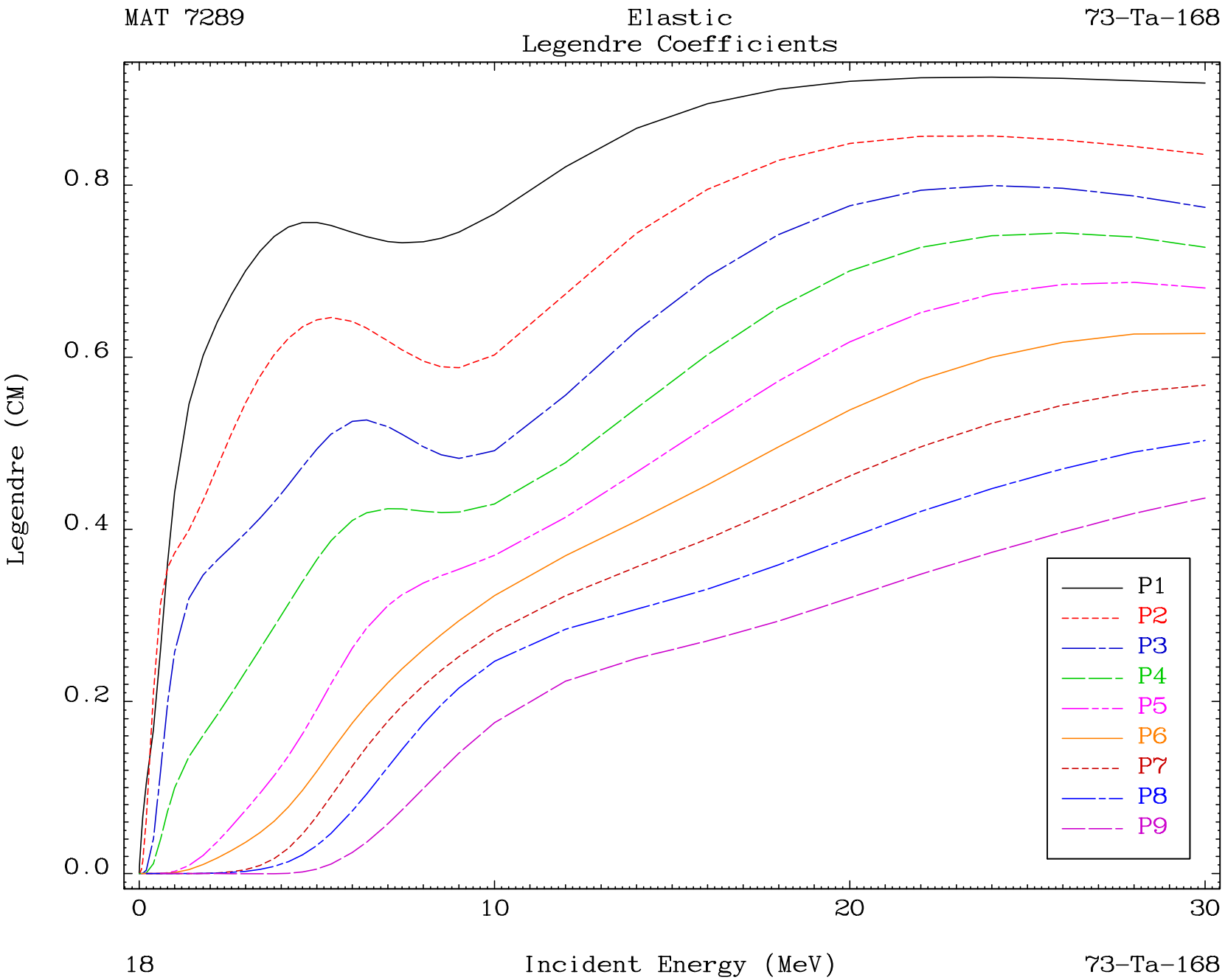

MAT 7289
(n,p) Levels
73-Ta-168
293 Kelvin Cross Sections
Cross Section (barns)
10^2
5
10^1
5
10^0
5
10^-1
5
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
13
Incident Energy (MeV)
73-Ta-168

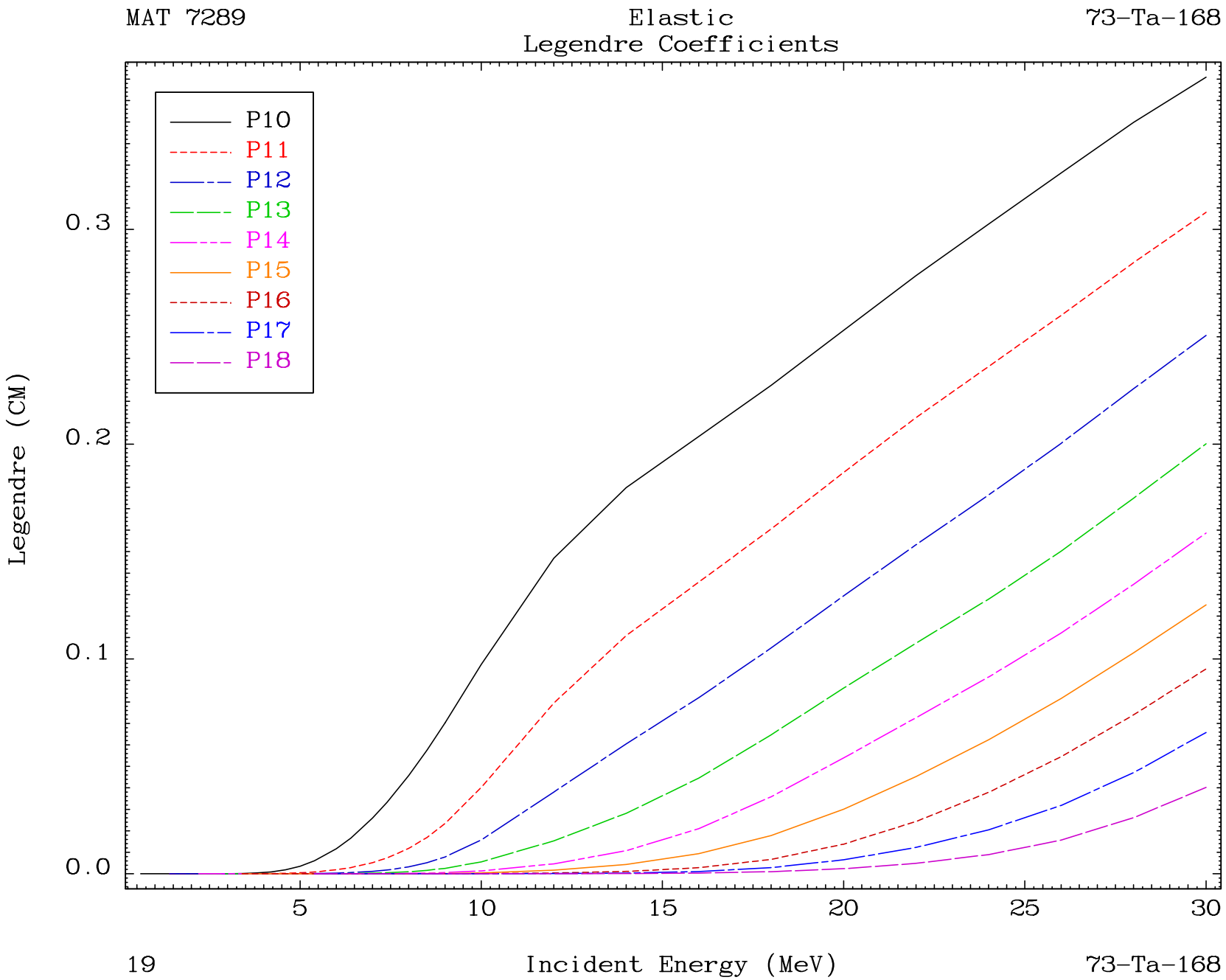

MAT 7289
(n,d) Levels
293 Kelvin Cross Sections
73-Ta-168
(n,d)
Cross Section (barns)
Incident Energy (MeV)
14
73-Ta-168

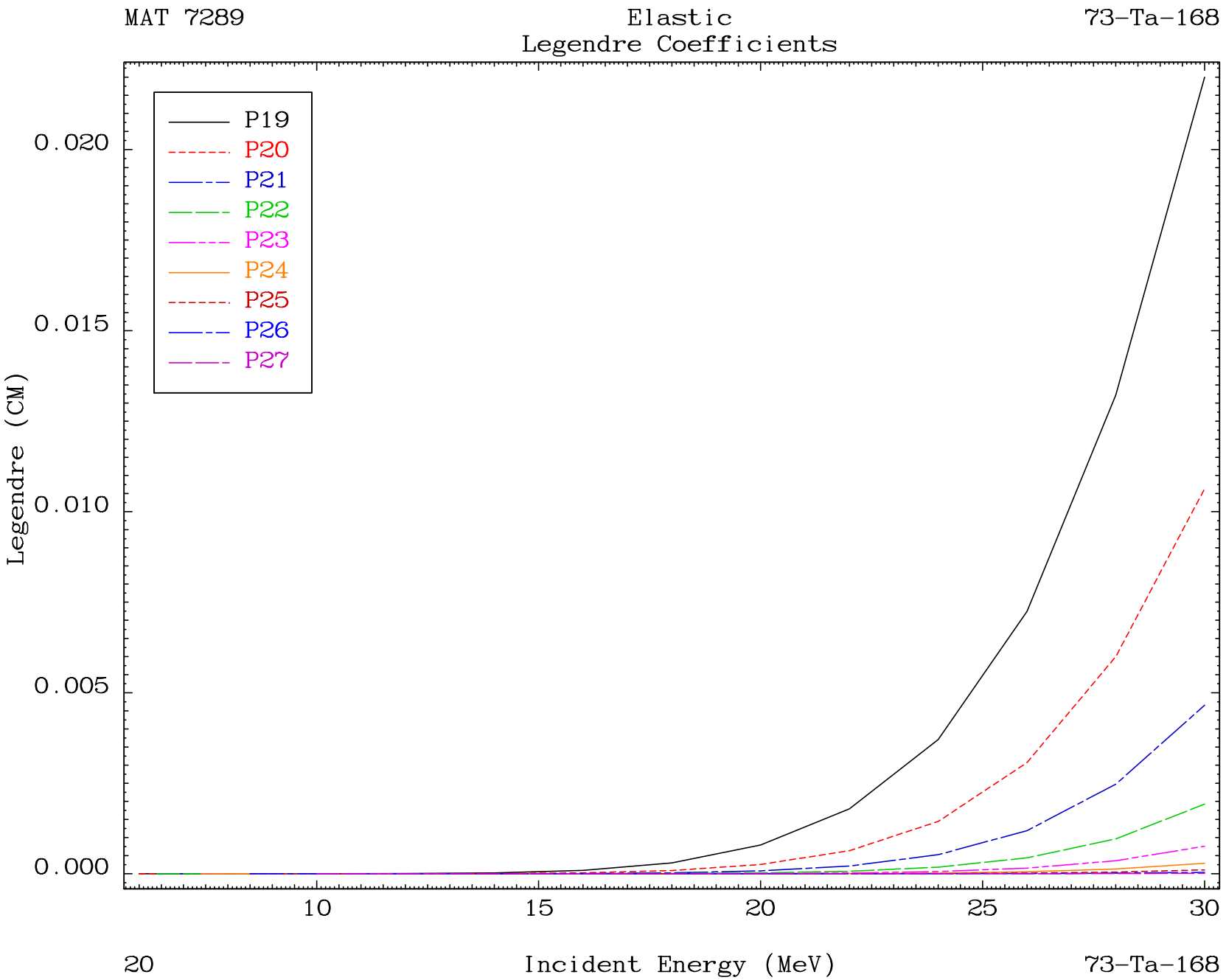

MAT 7289
(n,t) Levels
73-Ta-168
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
15
73-Ta-168

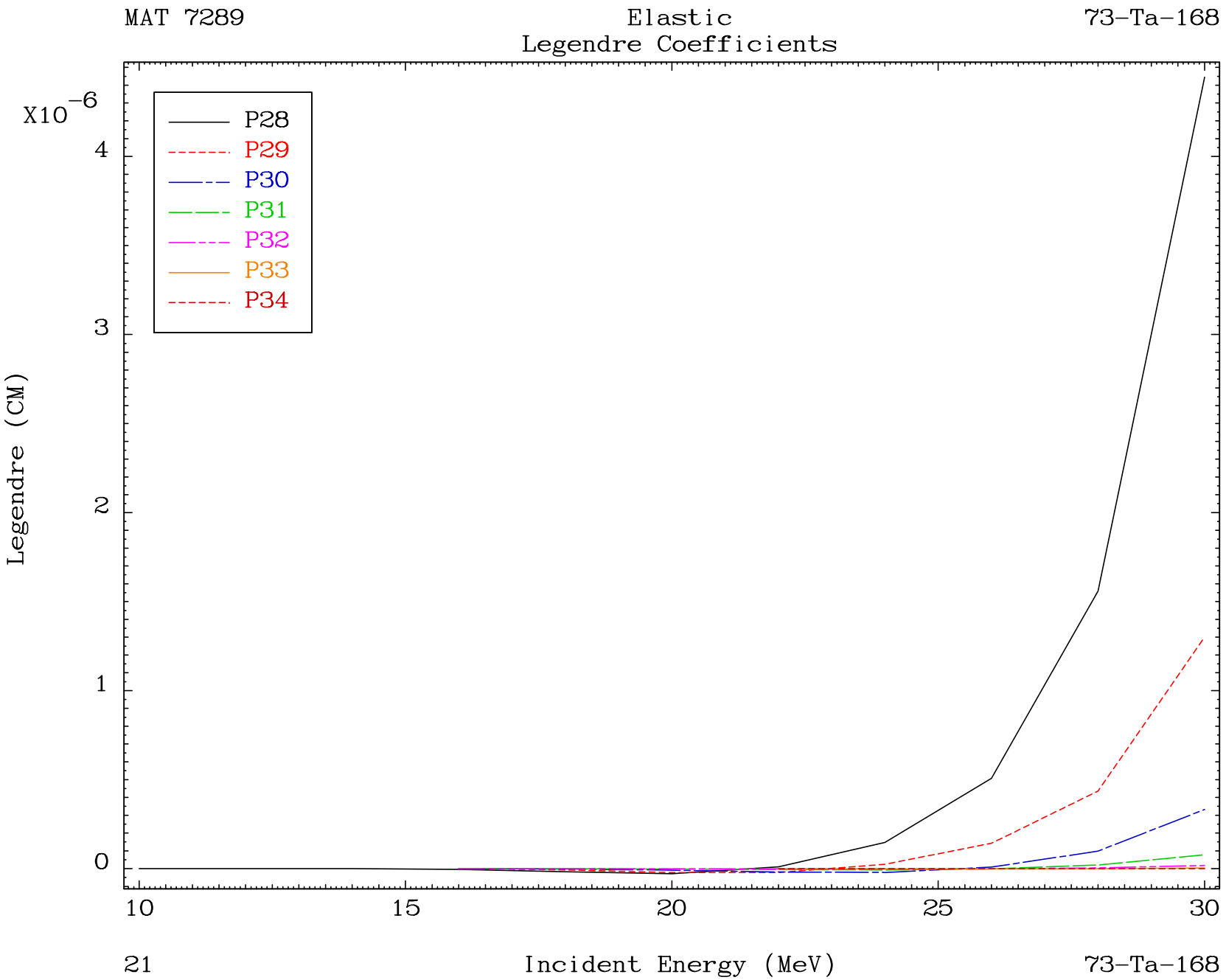

MAT 7289
(n,He3) Levels
73-Ta-168
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
16
73-Ta-168

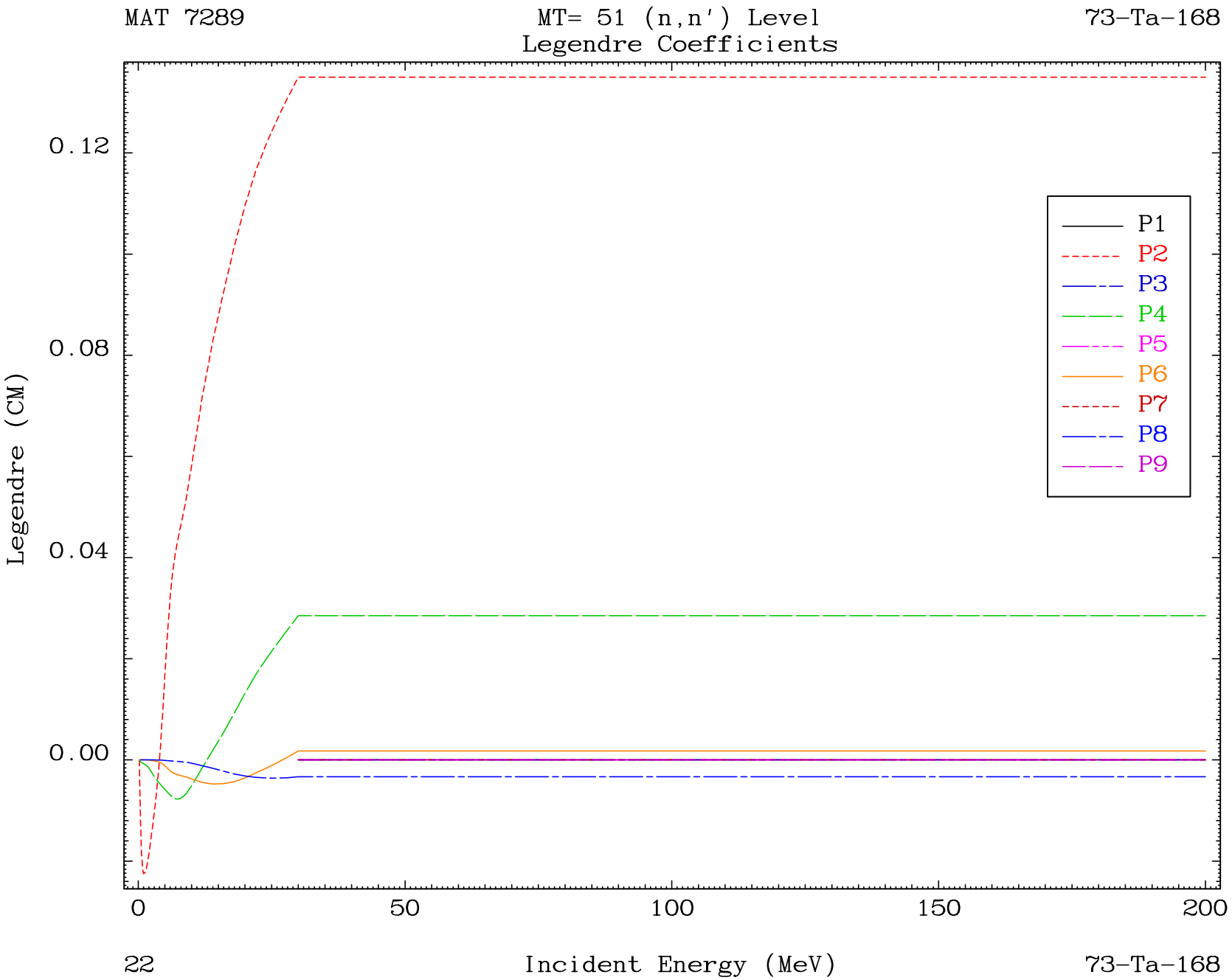

MAT 7289
(n,α) Levels
73-Ta-168
293 Kelvin Cross Sections
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
5
(n,α)
(n,2α)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
17
Incident Energy (MeV)
73-Ta-168

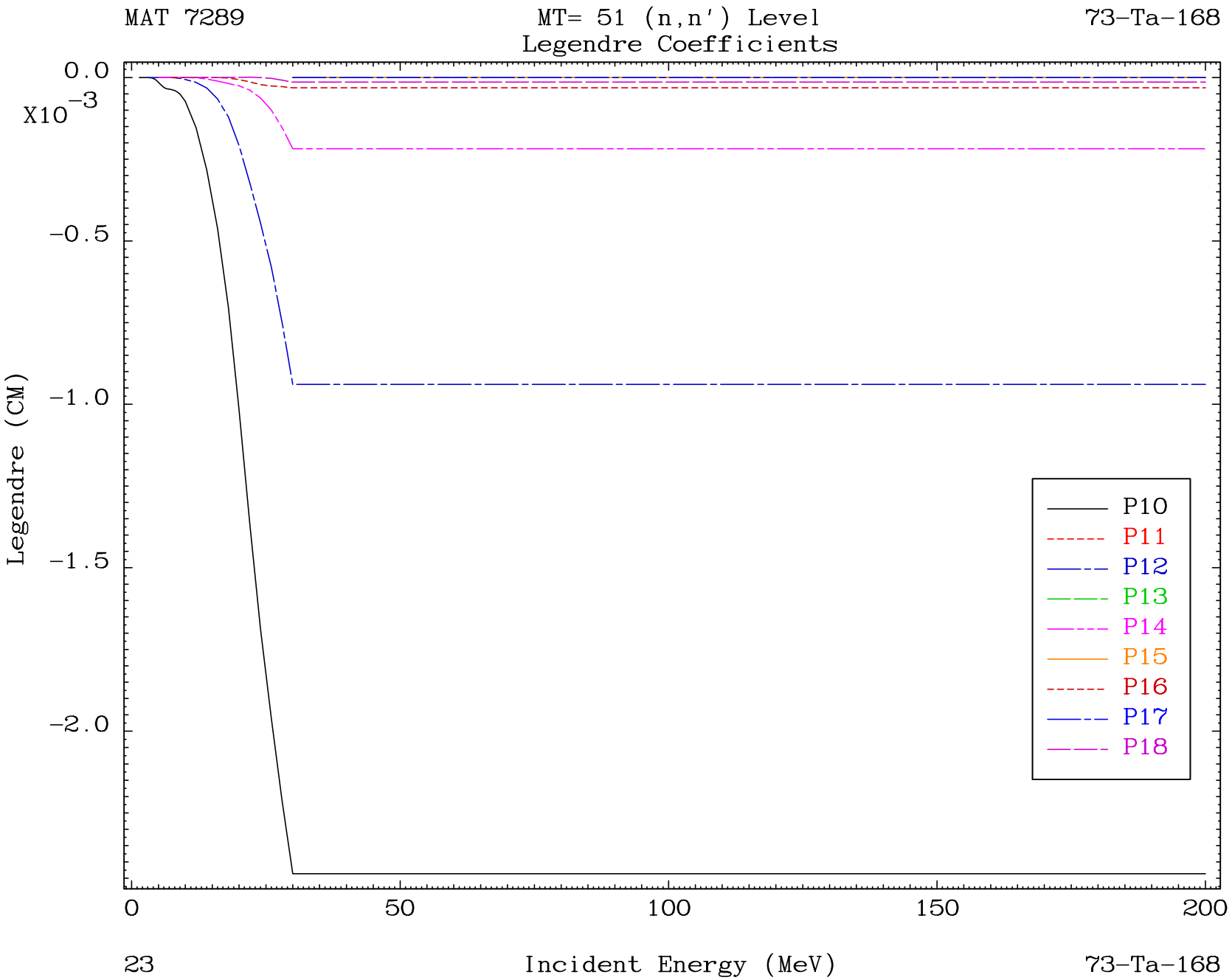

MAT 7289
Elastic
Legendre Coefficients
73-Ta-168
Legendre (CM)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
18
Incident Energy (MeV)
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9

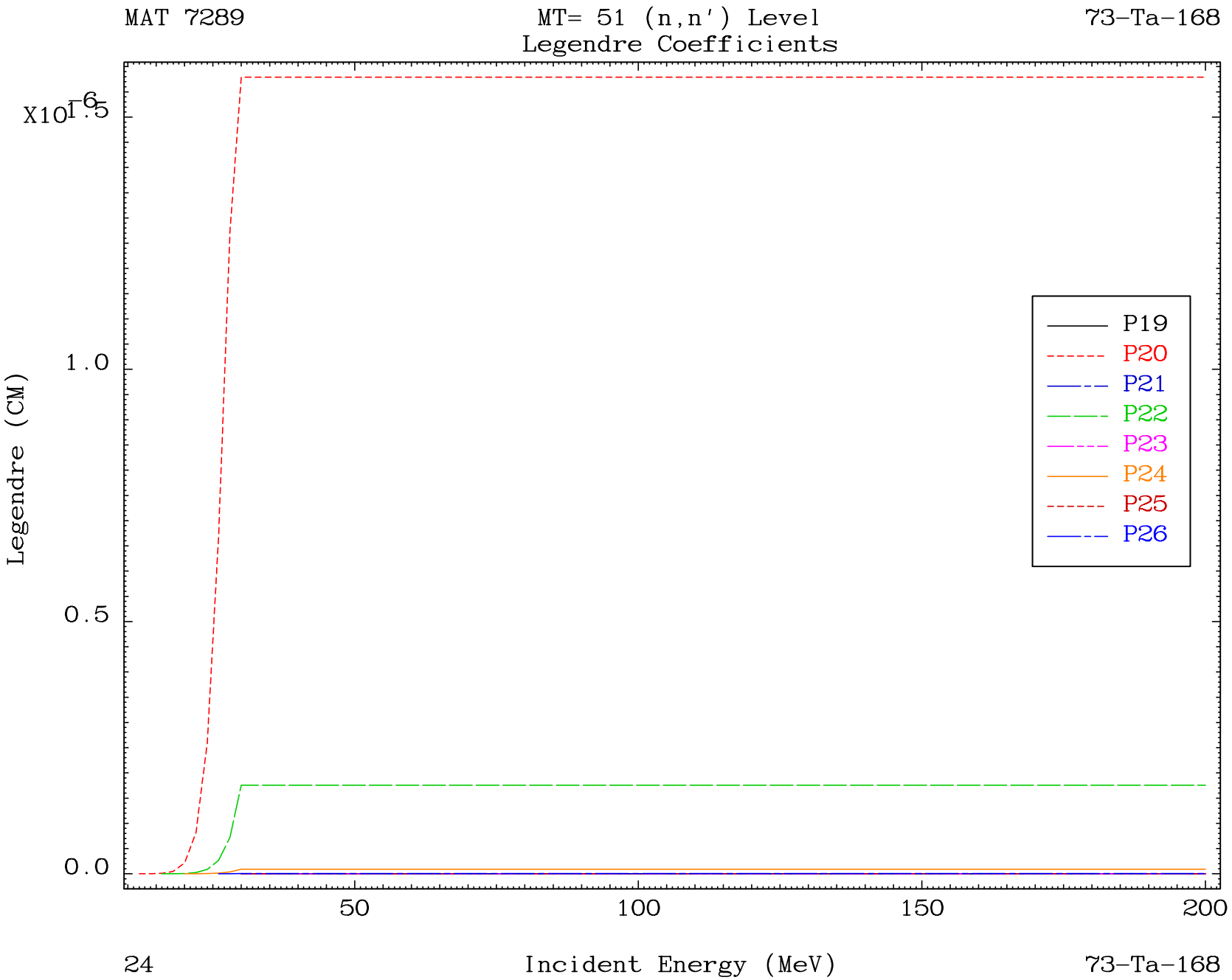

MAT 7289
Elastic
Legendre Coefficients
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.0
0.1
0.2
0.3
5
10
15
20
25
30
19
Incident Energy (MeV)
73-Ta-168

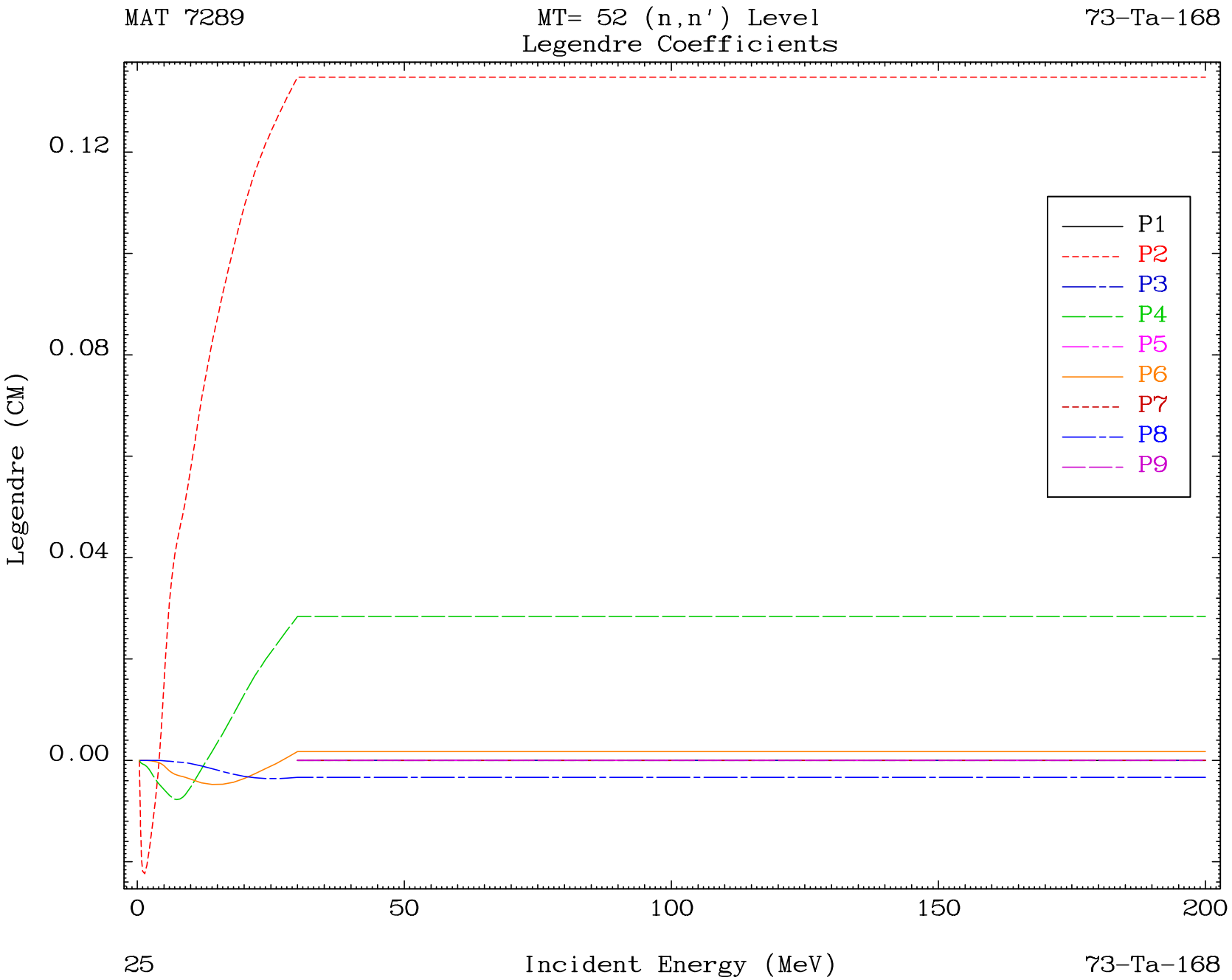

MAT 7289
Elastic
Legendre Coefficients
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
10
15
20
25
30
20
Incident Energy (MeV)
73-Ta-168

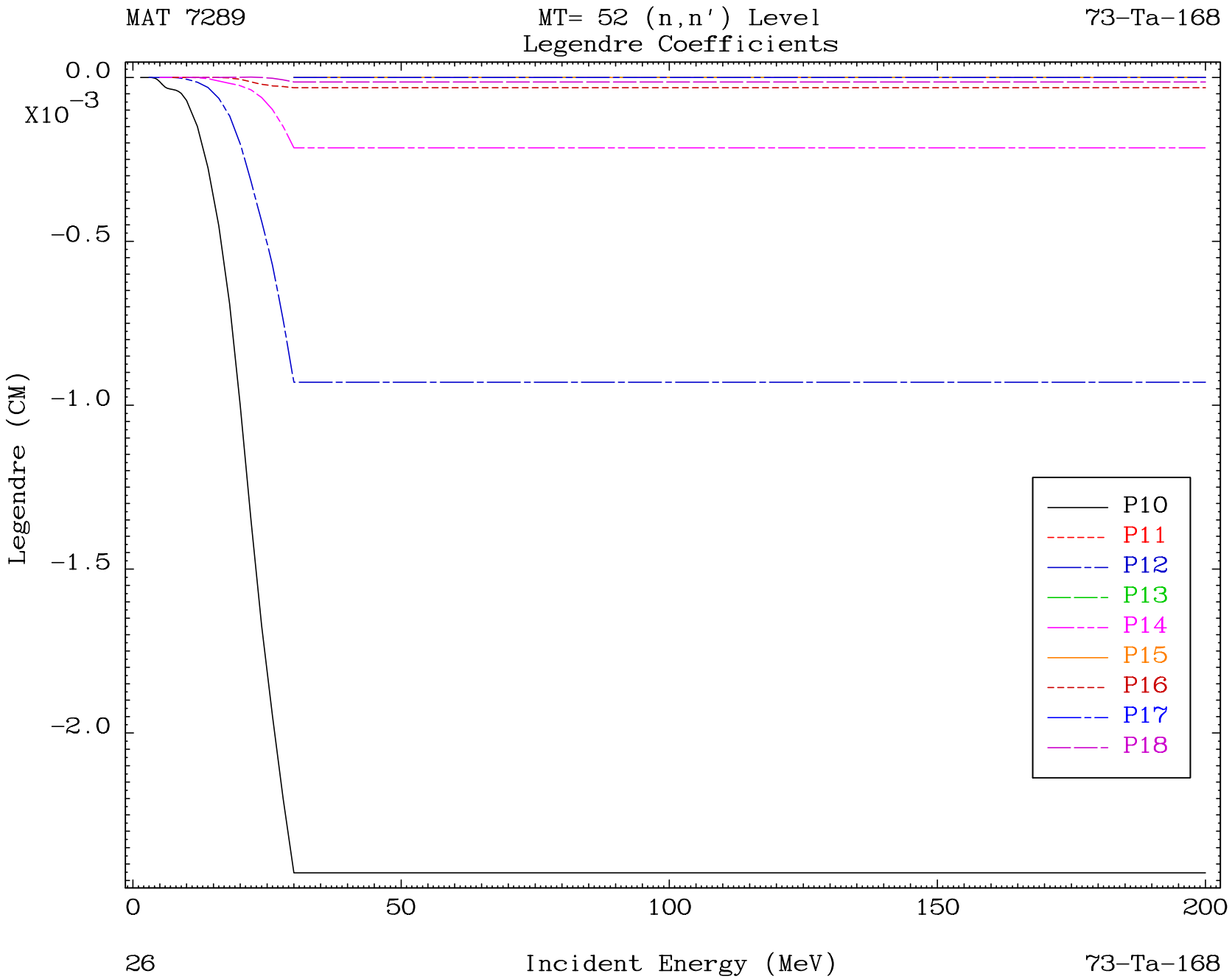

MAT 7289
Elastic
Legendre Coefficients
73-Ta-168
X10 −6
4
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
10
15
20
25
30
21
Incident Energy (MeV)
73-Ta-168

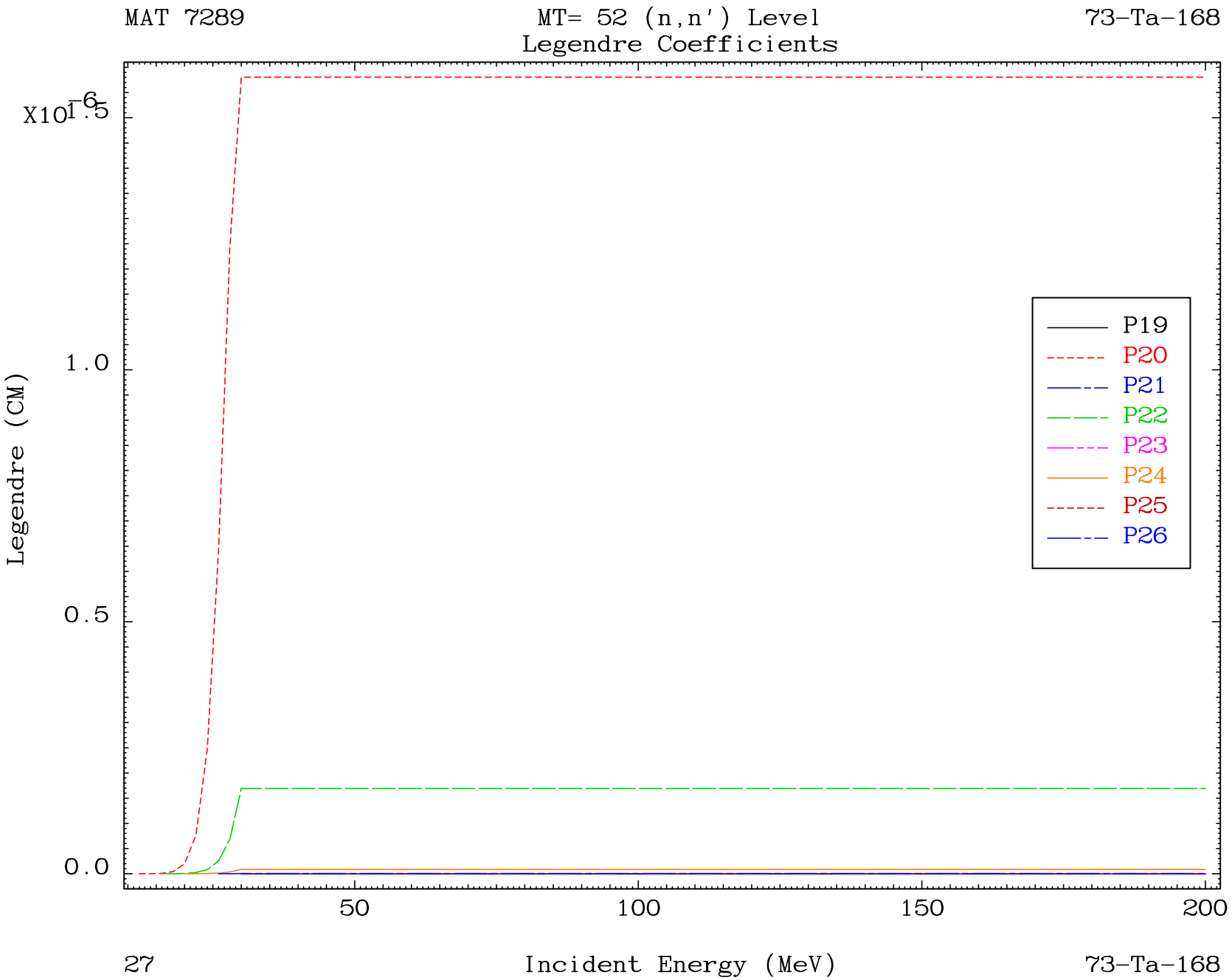

MAT 7289
MT= 51 (n,n') Level
Legendre Coefficients
73-Ta-168
0.12
0.08
0.04
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
22
Incident Energy (MeV)
73-Ta-168

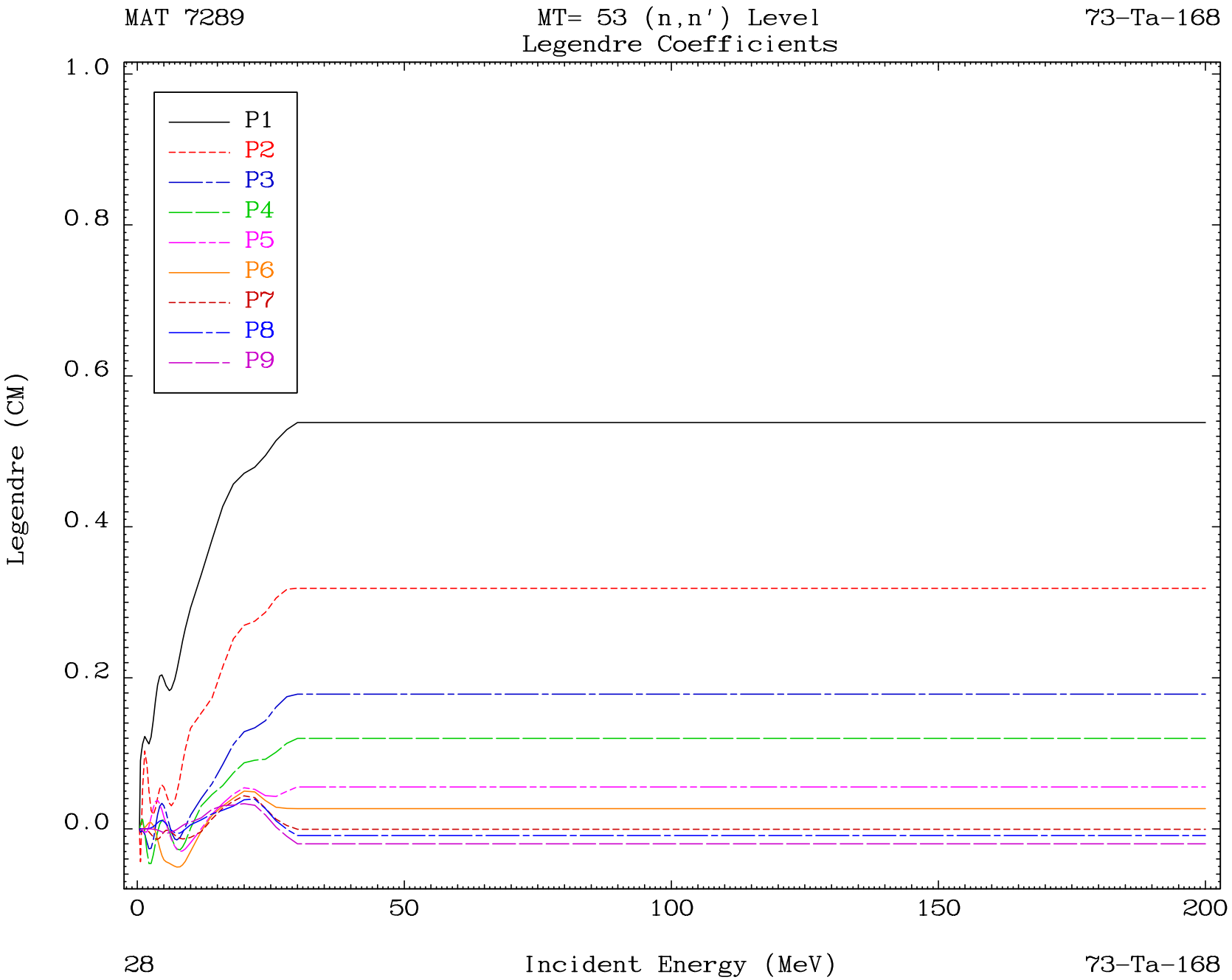

MAT 7289
MT= 51 (n,n') Level
Legendre Coefficients
73-Ta-168
0.0
X10^-3
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
23
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18

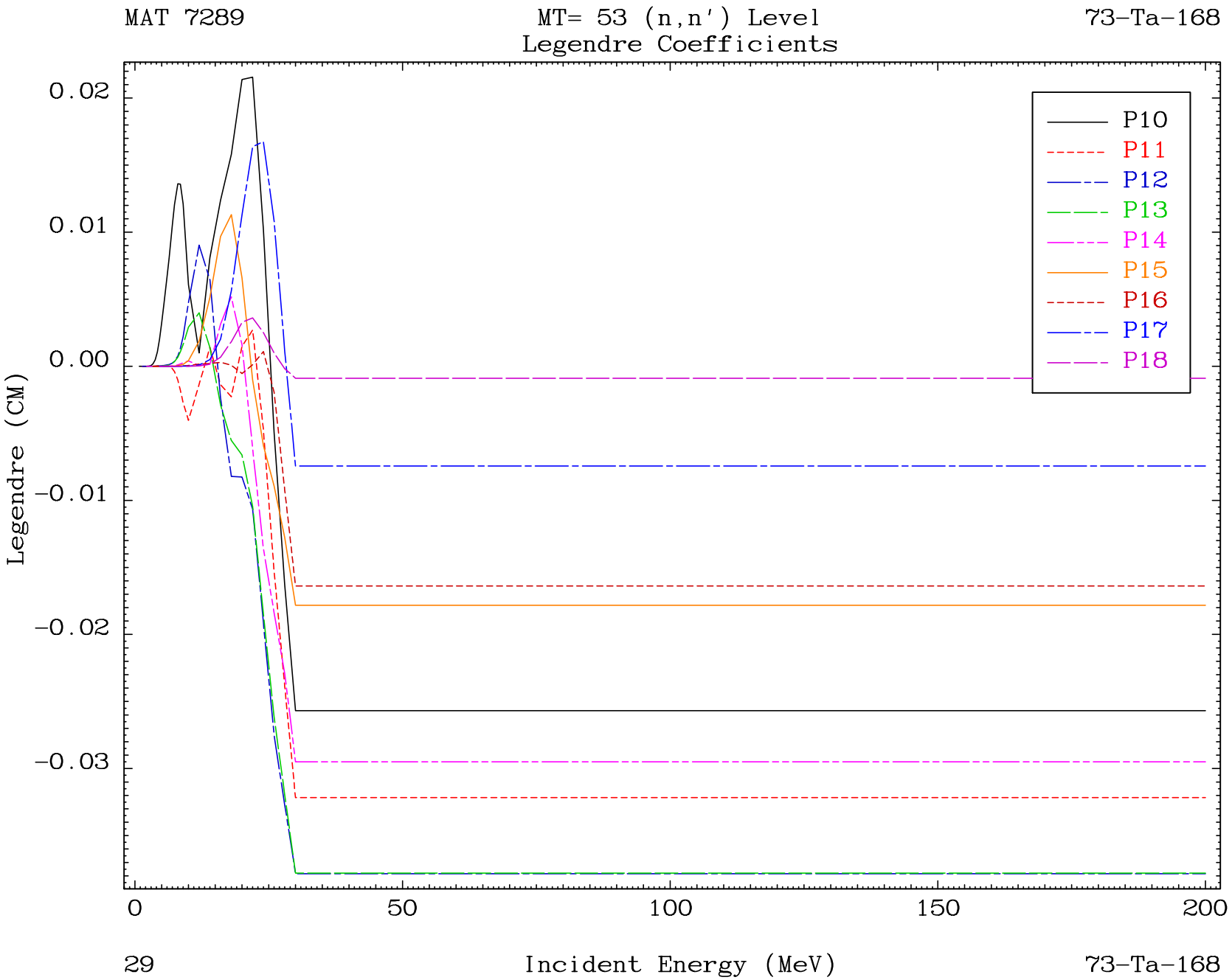

MAT 7289
MT= 51 (n,n') Level
Legendre Coefficients
73-Ta-168
X10-6
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
24
Incident Energy (MeV)
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26

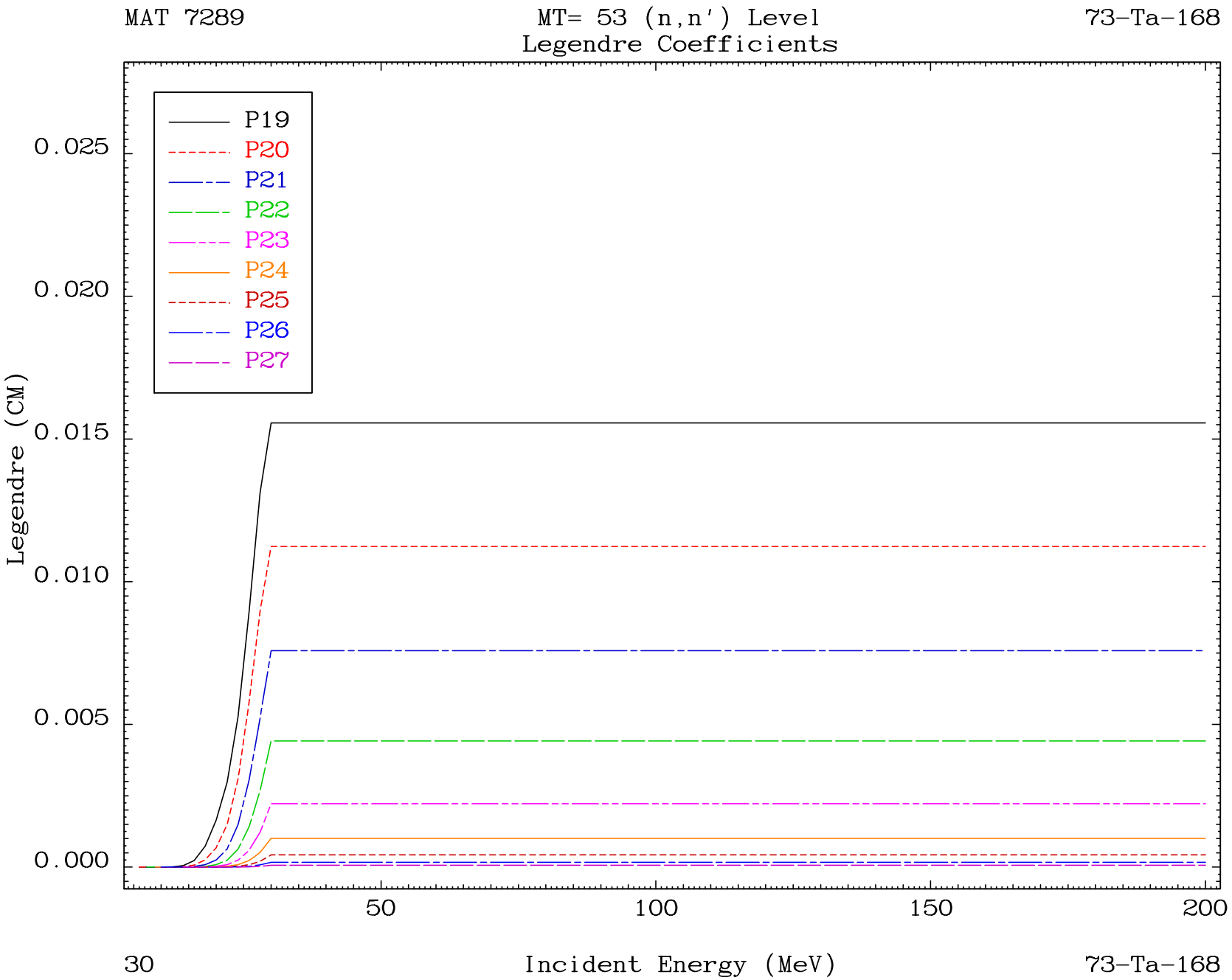

MAT 7289
MT= 52 (n,n') Level
Legendre Coefficients
73-Ta-168
0.12
0.08
0.04
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
25
Incident Energy (MeV)
73-Ta-168

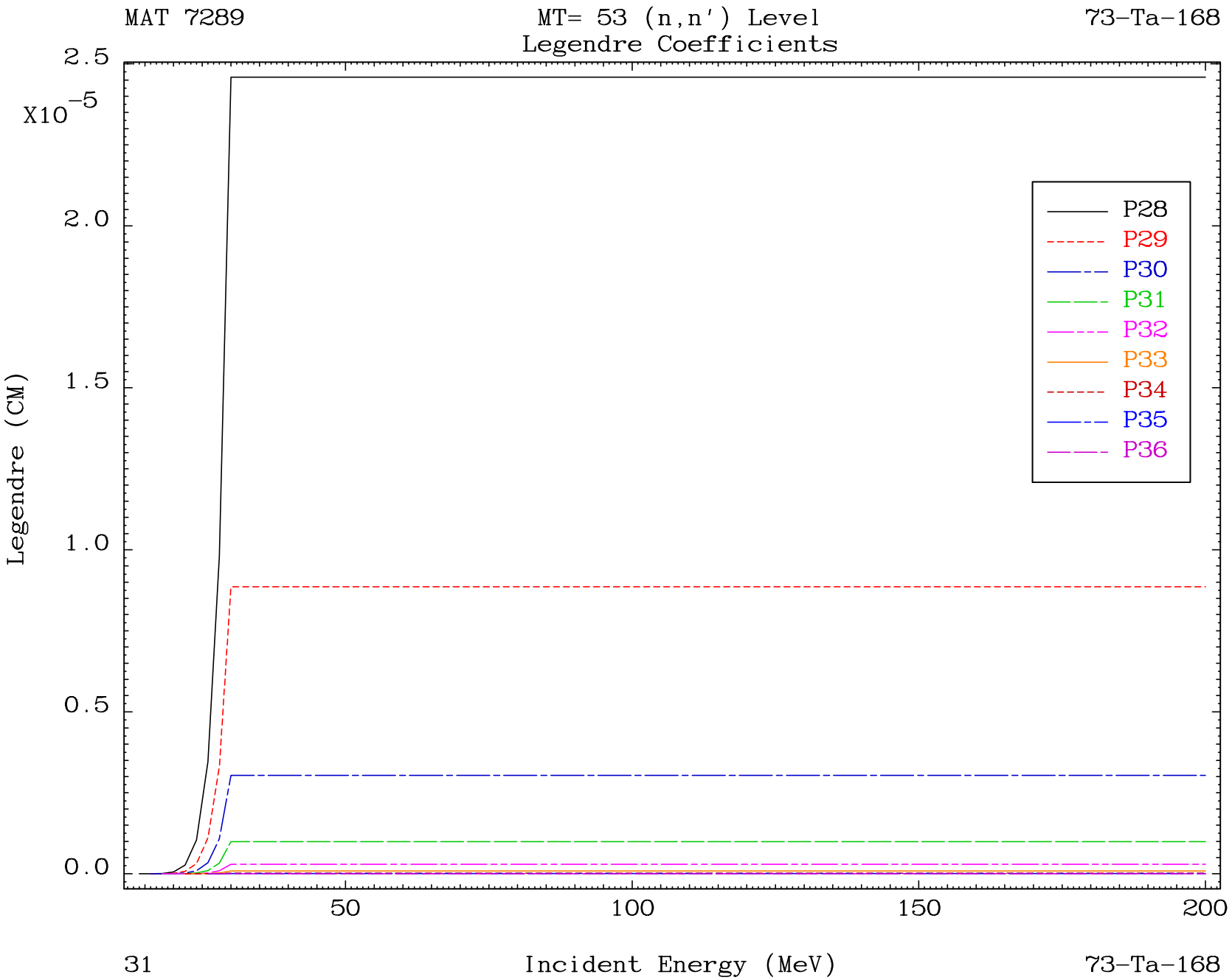

MAT 7289
MT= 52 (n,n') Level
Legendre Coefficients
73-Ta-168
0.0
X10^-3
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
26
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18

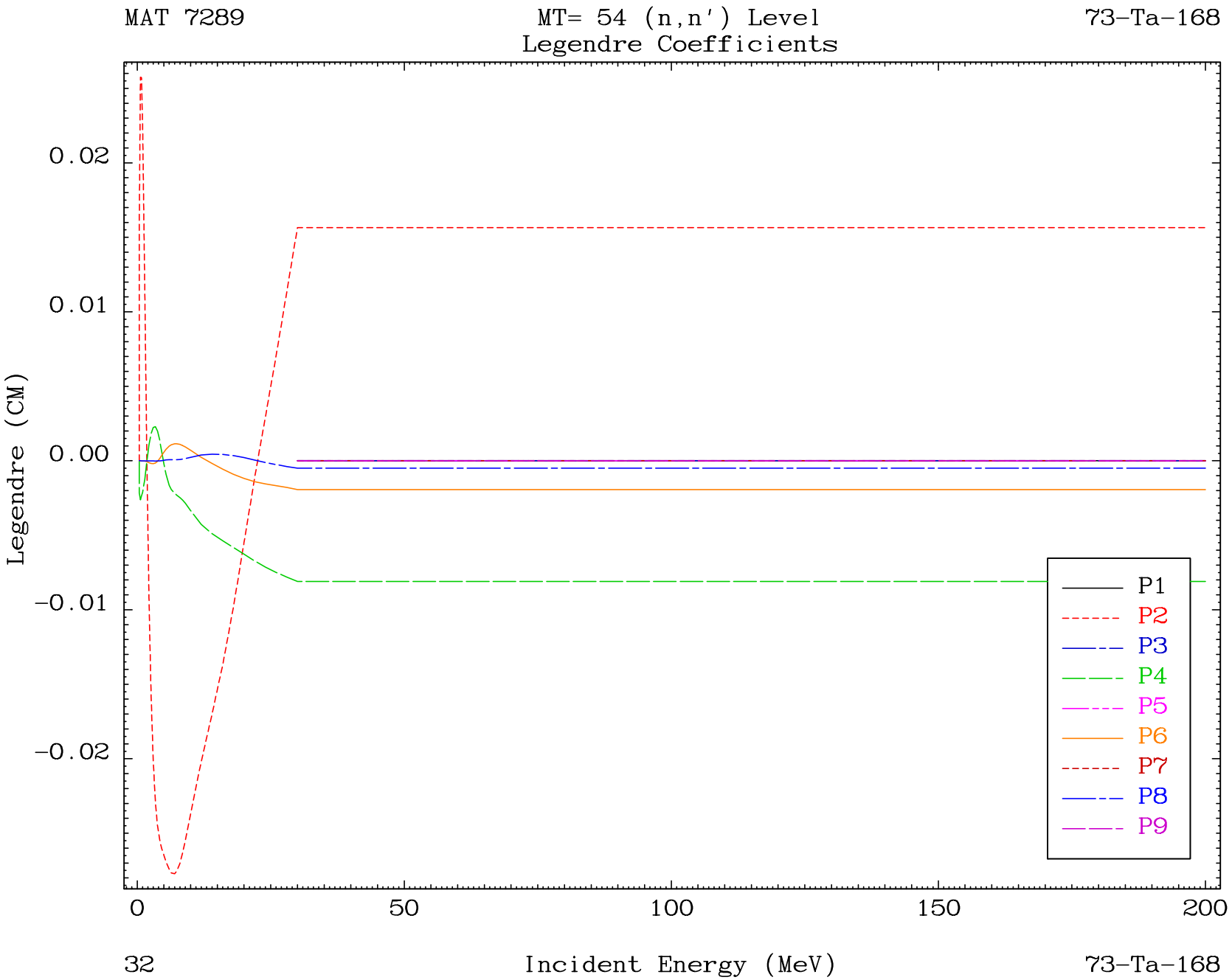

MAT 7289
MT= 52 (n,n') Level
Legendre Coefficients
73-Ta-168
X10-6
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
50
100
150
200
27
Incident Energy (MeV)
73-Ta-168

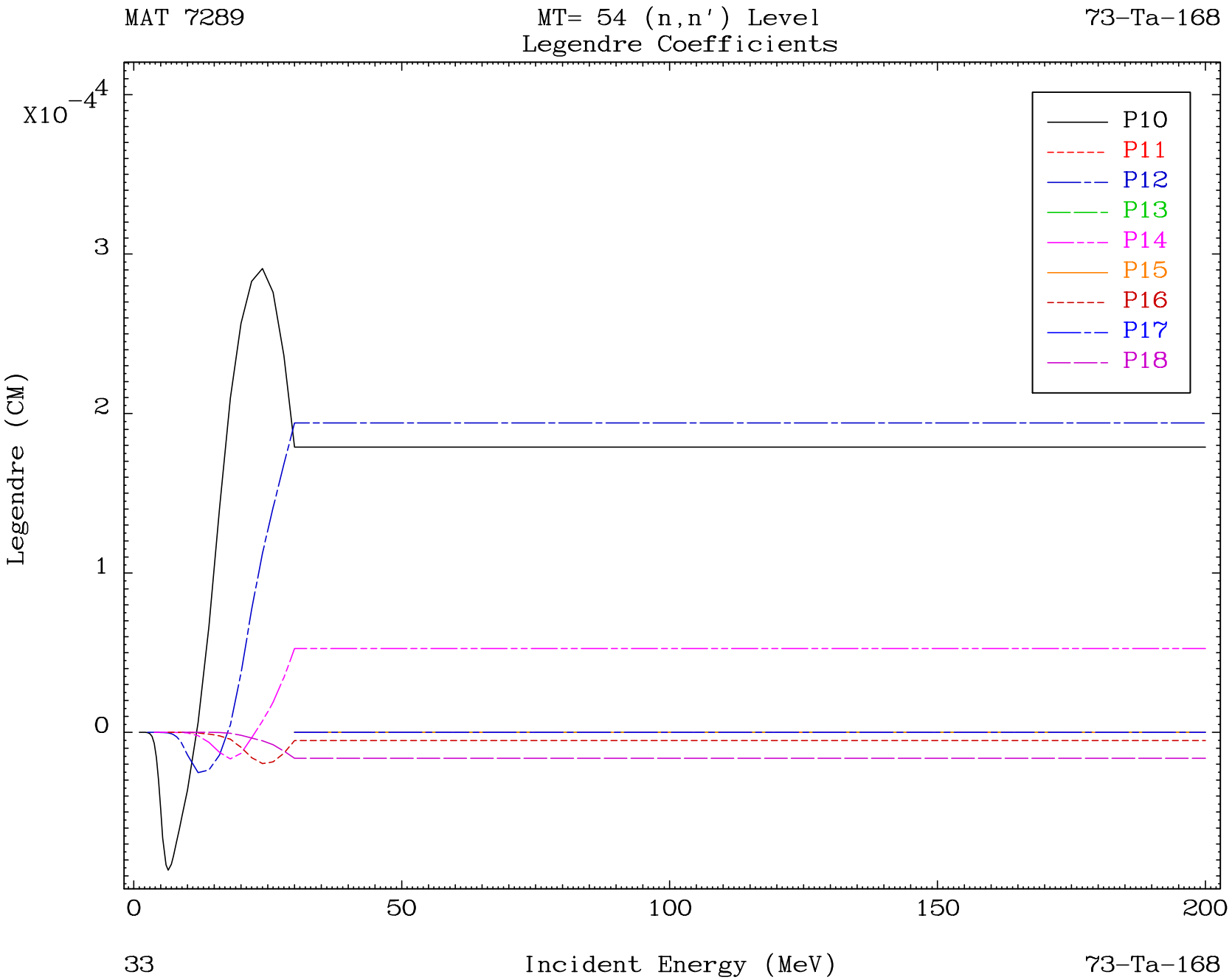

MAT 7289
MT= 53 (n,n') Level
Legendre Coefficients
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
50
100
150
200
28
Incident Energy (MeV)
73-Ta-168

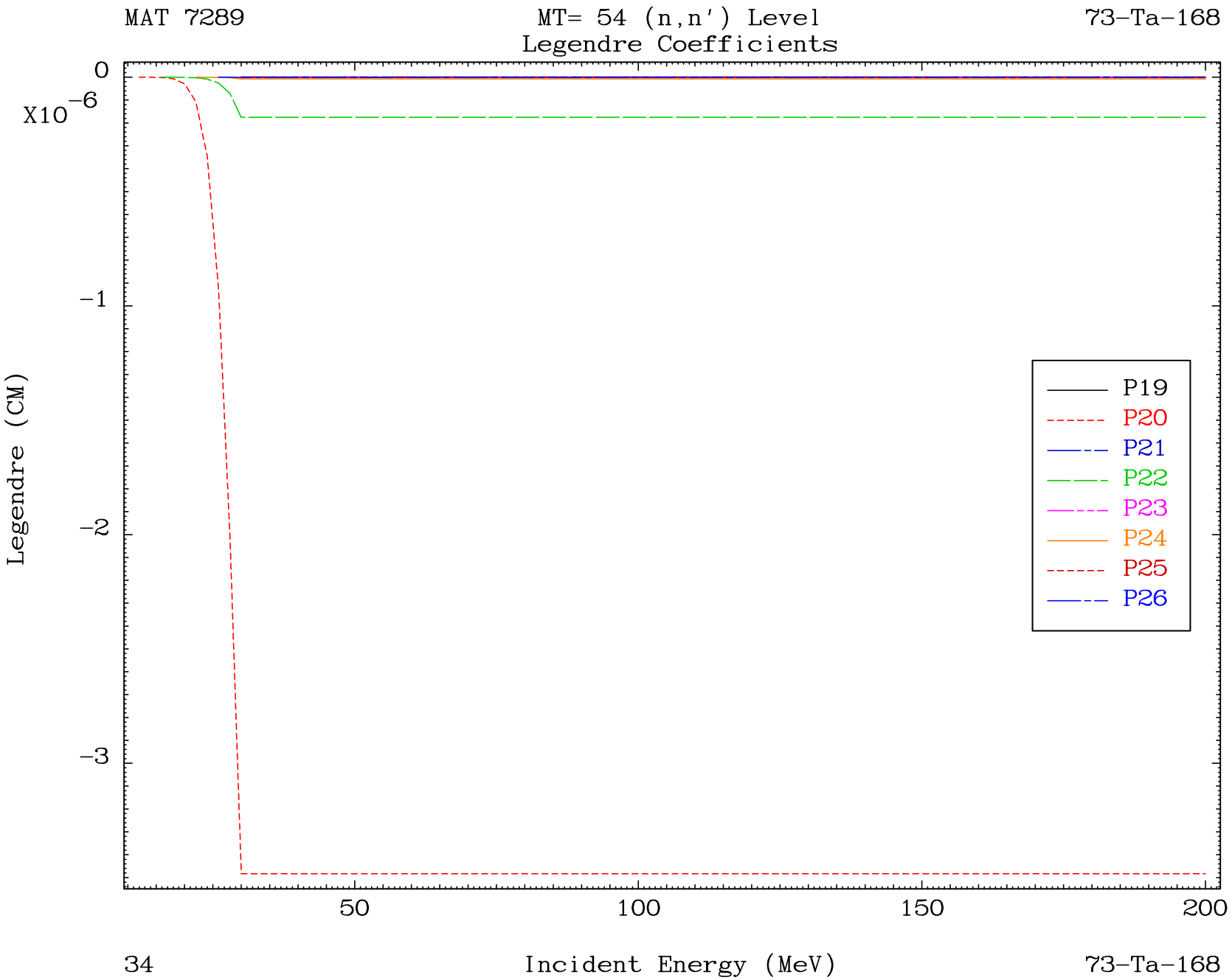

MAT 7289
MT= 53 (n,n') Level
Legendre Coefficients
73-Ta-168
0.02
0.01
0.00
-0.01
-0.02
-0.03
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
29
Incident Energy (MeV)
73-Ta-168

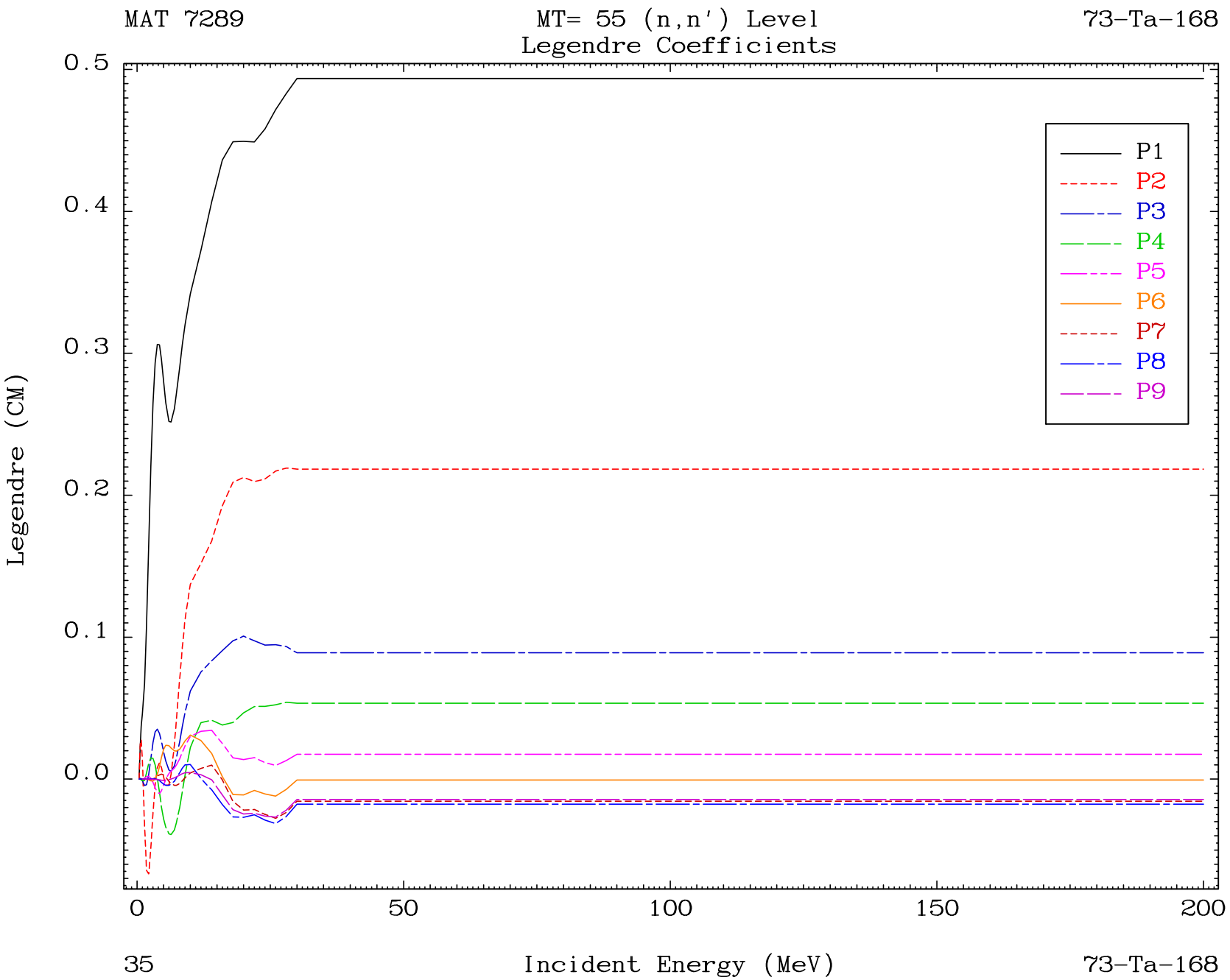

MAT 7289
MT= 53 (n,n') Level
Legendre Coefficients
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.025
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
30
Incident Energy (MeV)
73-Ta-168

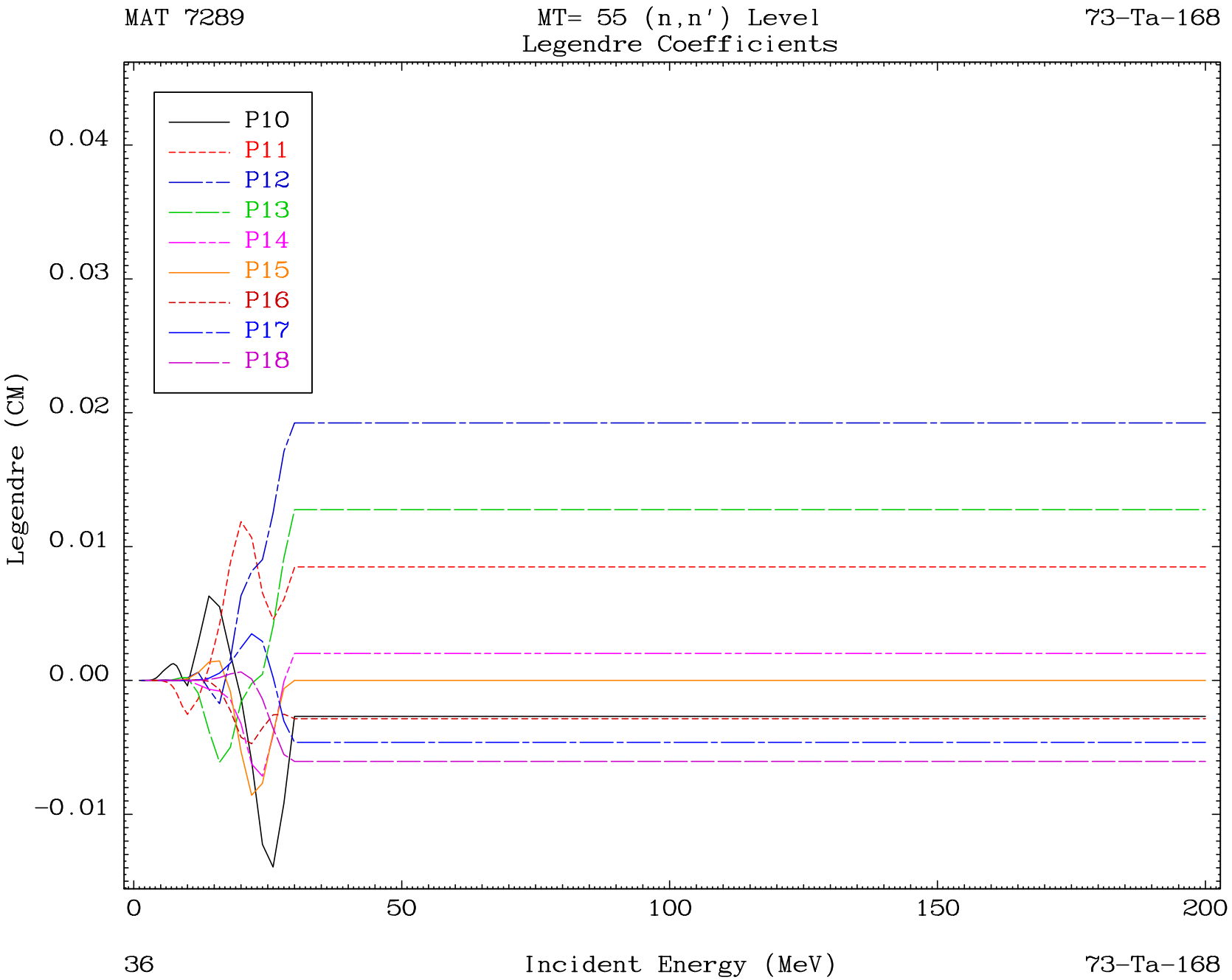

MAT 7289
MT= 53 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-5
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
31
Incident Energy (MeV)
73-Ta-168

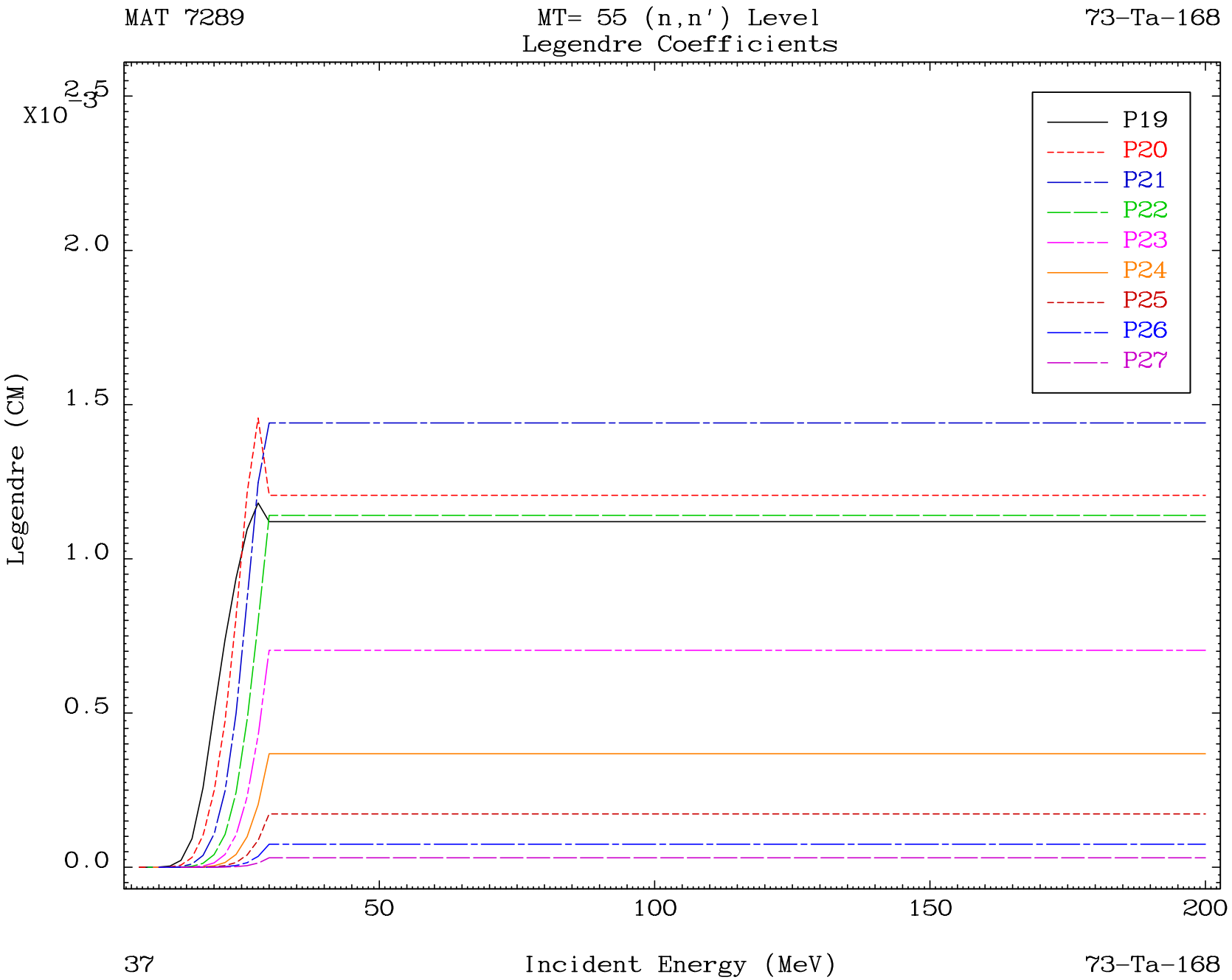

MAT 7289
MT= 54 (n,n') Level
Legendre Coefficients
73-Ta-168
0.02
0.01
0.00
-0.01
-0.02
Legendre (CM)
0
50
100
150
200
32
Incident Energy (MeV)
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9

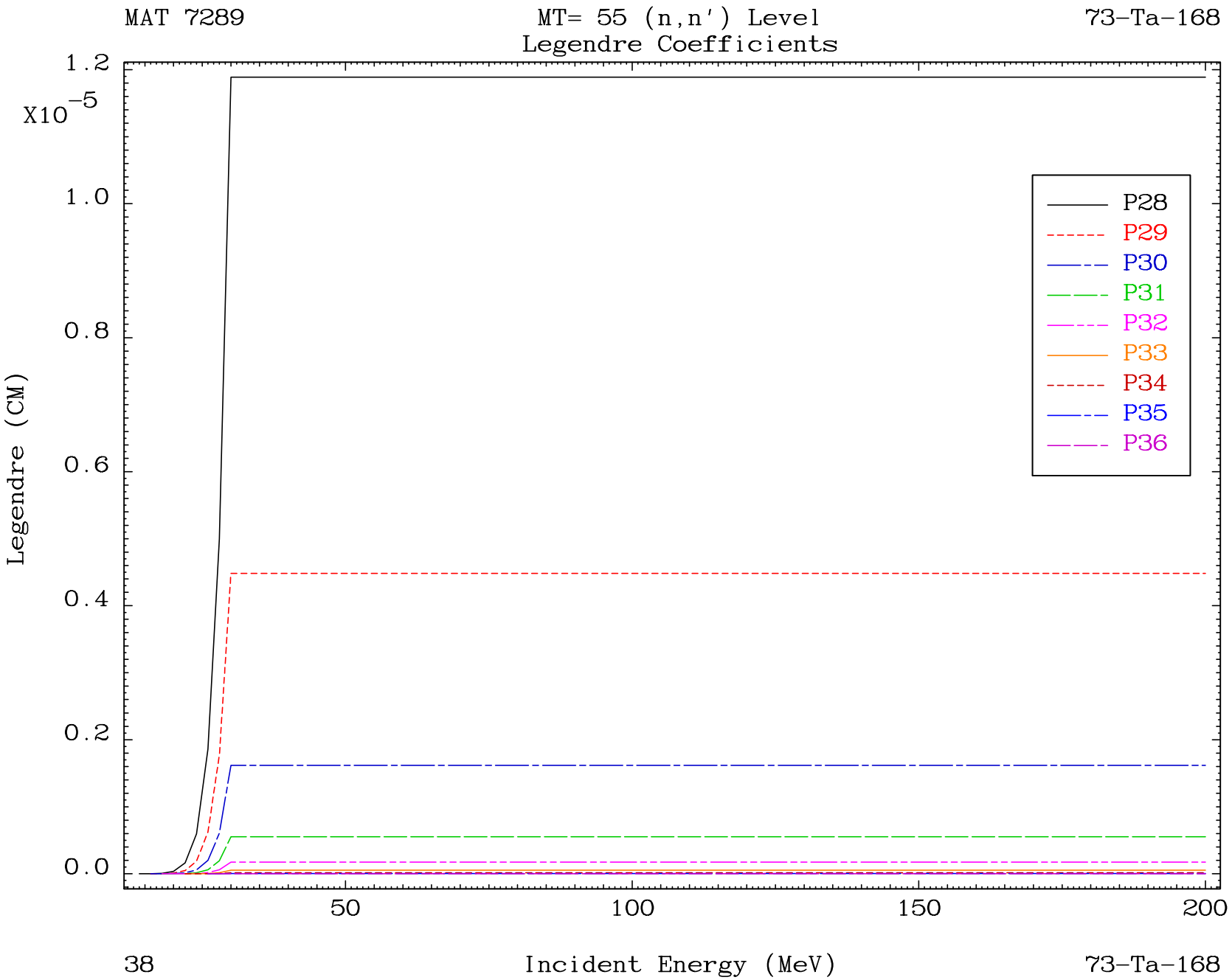

MAT 7289
MT= 54 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-4
4
3
2
1
0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
33
Incident Energy (MeV)
73-Ta-168

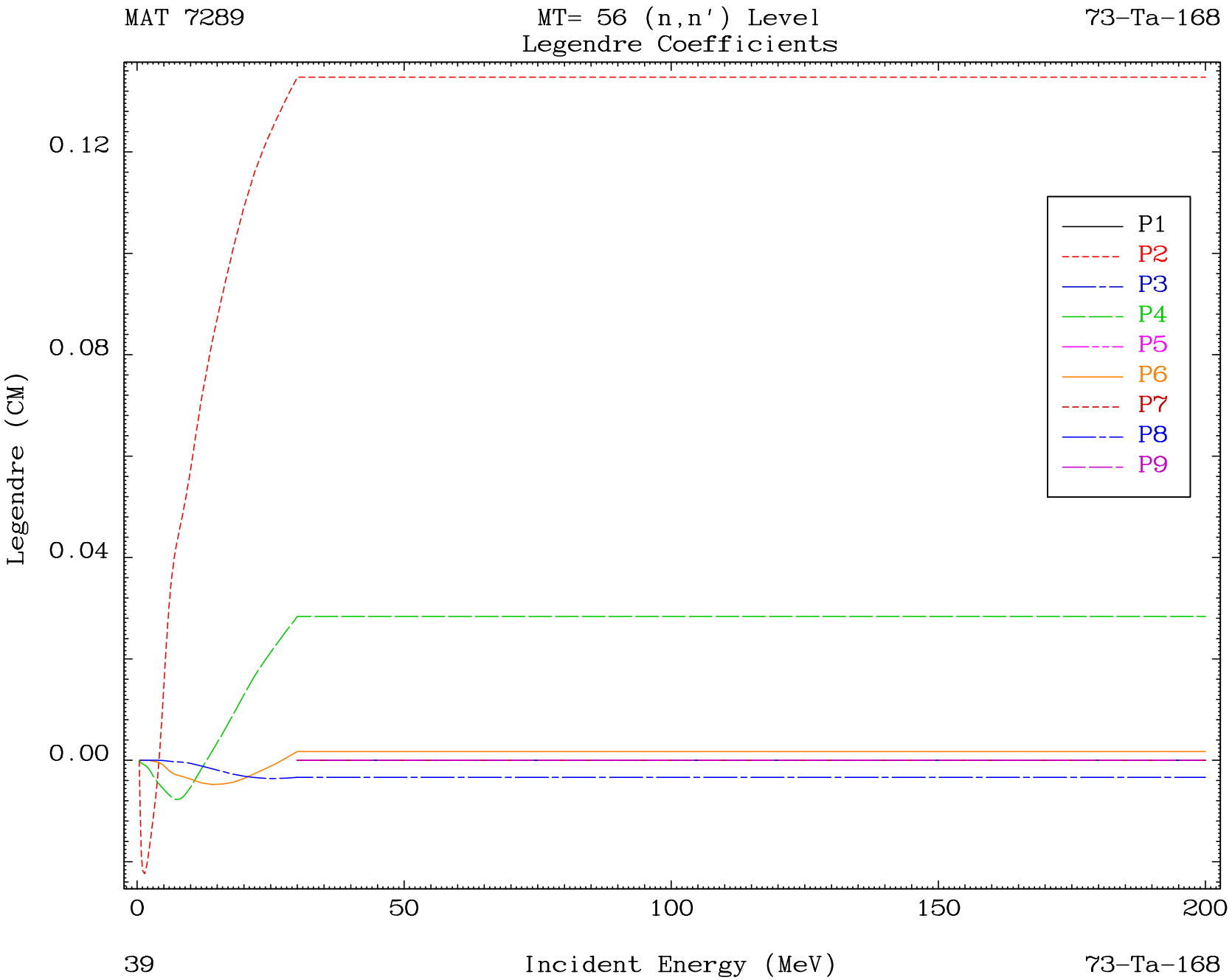

MAT 7289
MT= 54 (n,n') Level
Legendre Coefficients
73-Ta-168
0
X10−6
−1
−2
−3
Legendre (CM)
50
100
150
200
34
Incident Energy (MeV)
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26

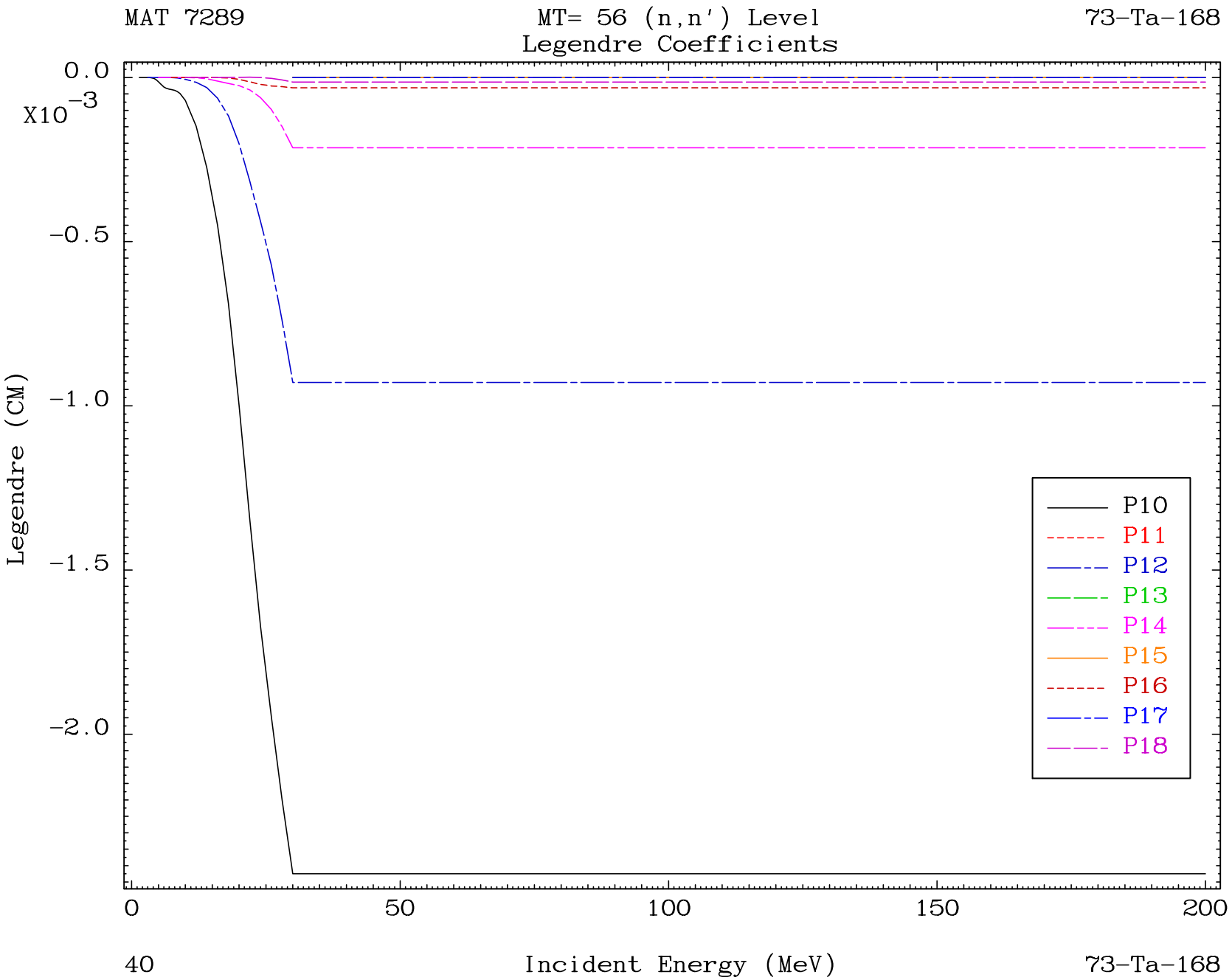

MAT 7289
MT= 55 (n,n') Level
Legendre Coefficients
73-Ta-168
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
35
Incident Energy (MeV)
73-Ta-168

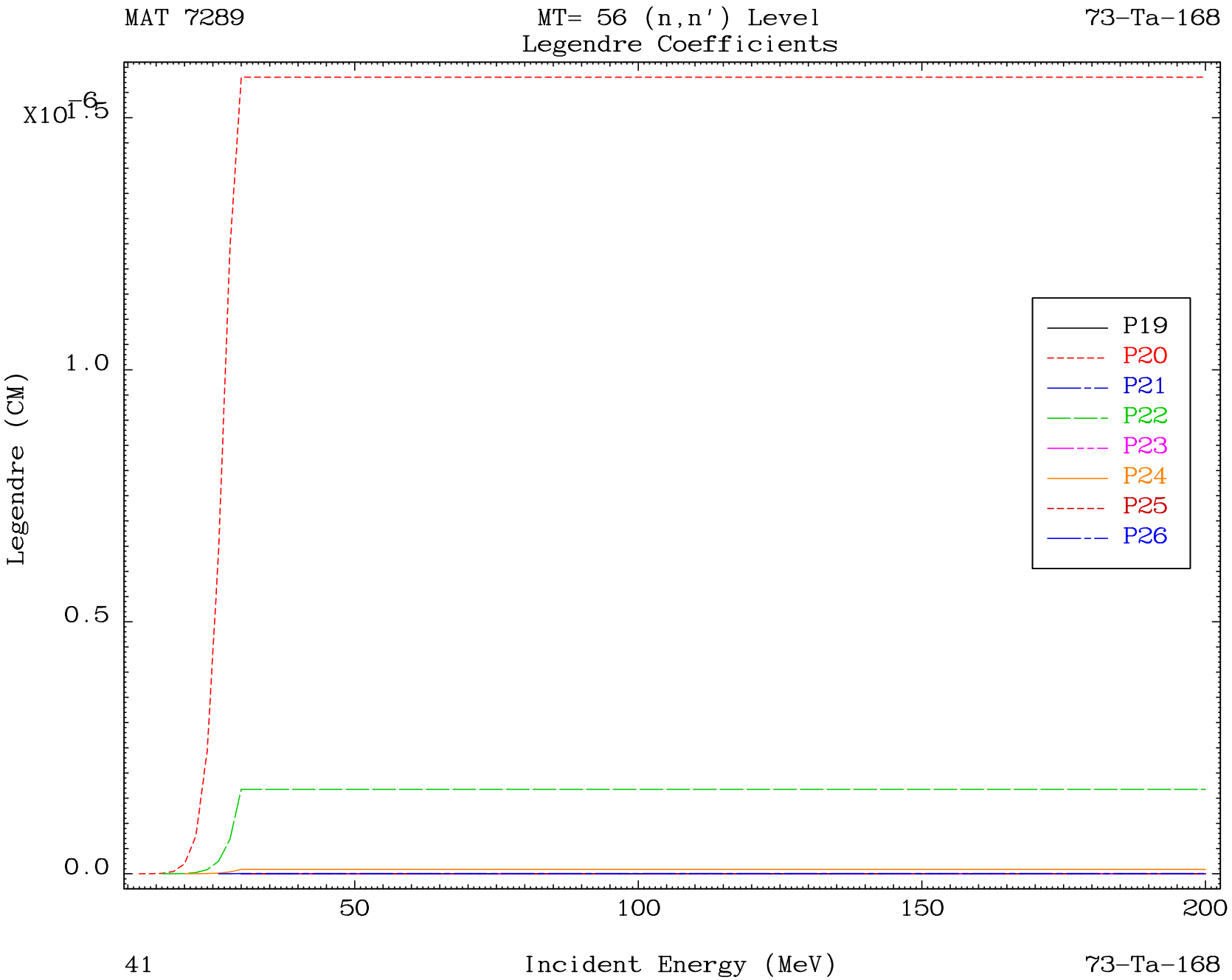

MAT 7289
MT= 55 (n,n') Level
Legendre Coefficients
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.03
0.02
0.01
0.00
-0.01
Legendre (CM)
0
50
100
150
200
36
Incident Energy (MeV)
73-Ta-168

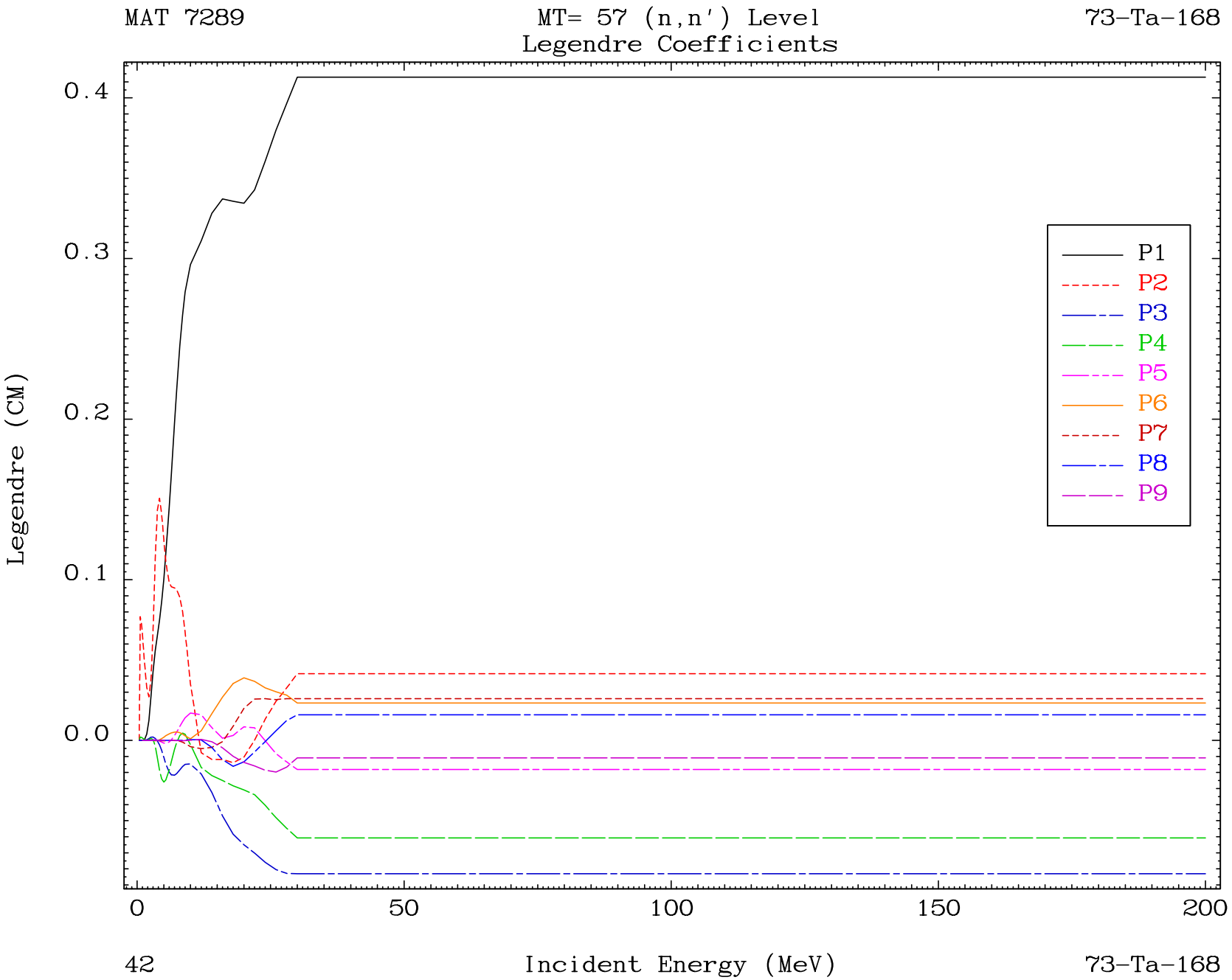

MAT 7289
MT= 55 (n,n') Level
Legendre Coefficients
73-Ta-168
X10-3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
37
Incident Energy (MeV)
73-Ta-168

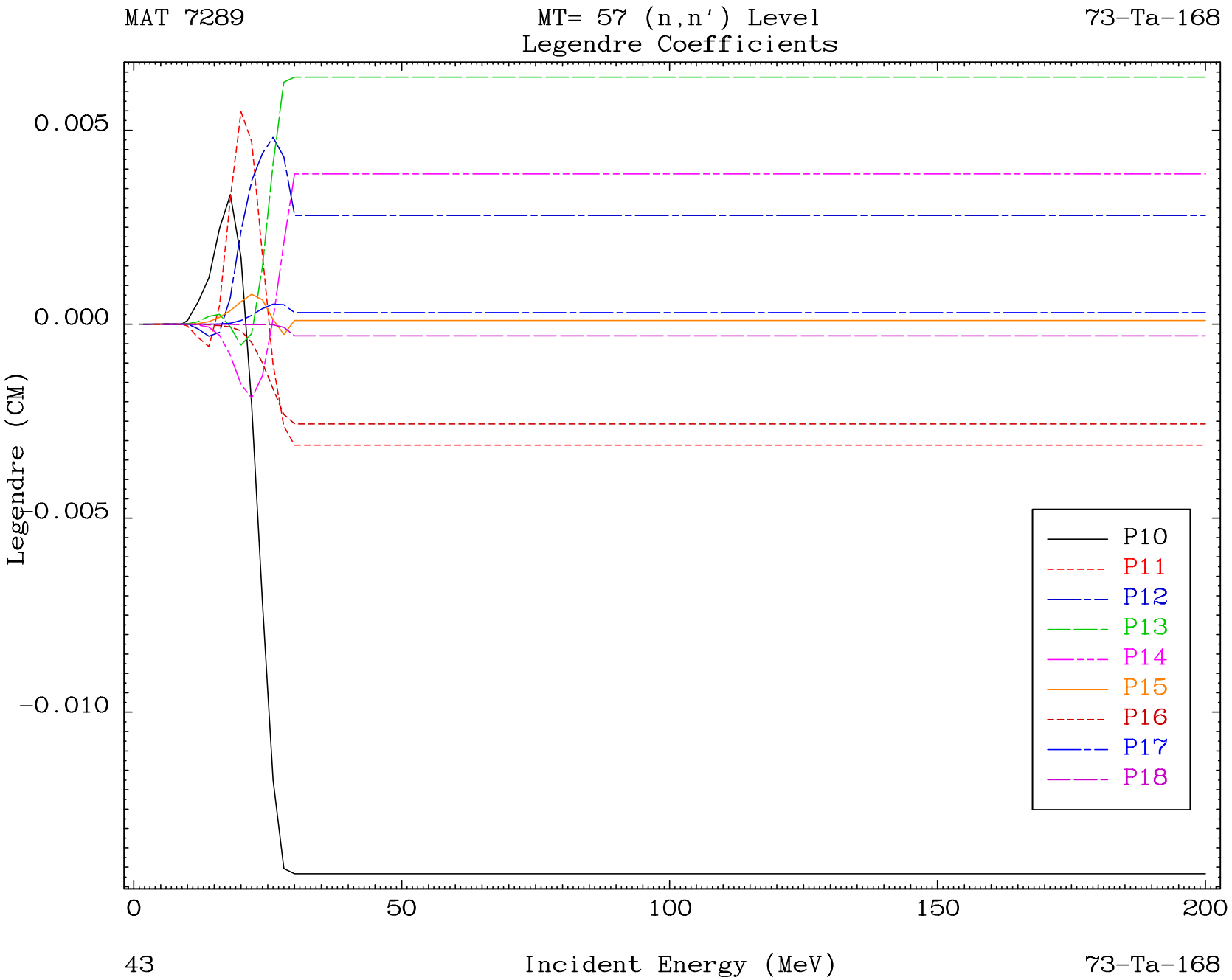

MAT 7289
MT= 55 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-5
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
P28
P29
P30
P31
P32
P33
P34
P35
P36
38
73-Ta-168

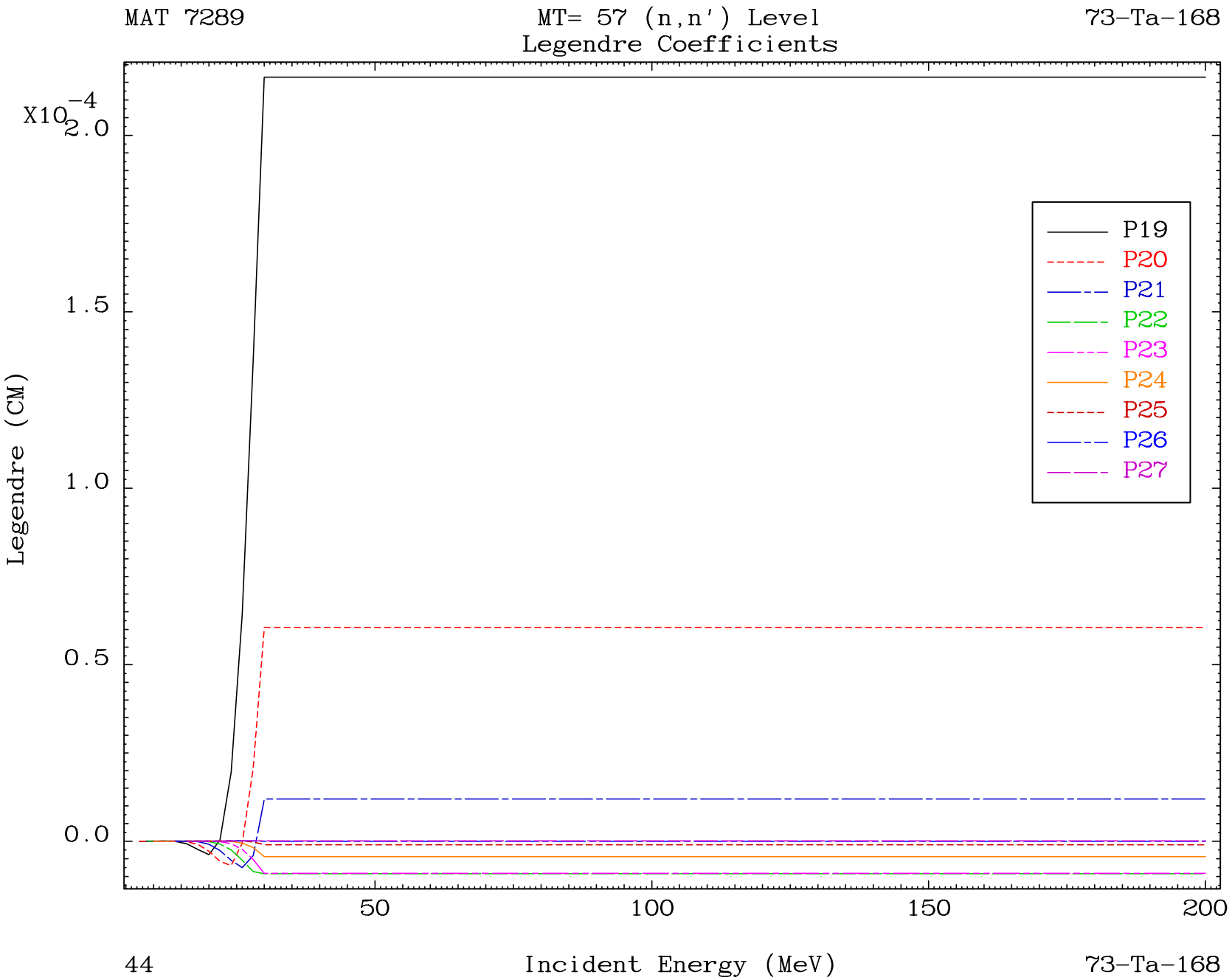

MAT 7289
MT= 56 (n,n') Level
Legendre Coefficients
73-Ta-168
0.12
0.08
0.04
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
39
Incident Energy (MeV)
73-Ta-168

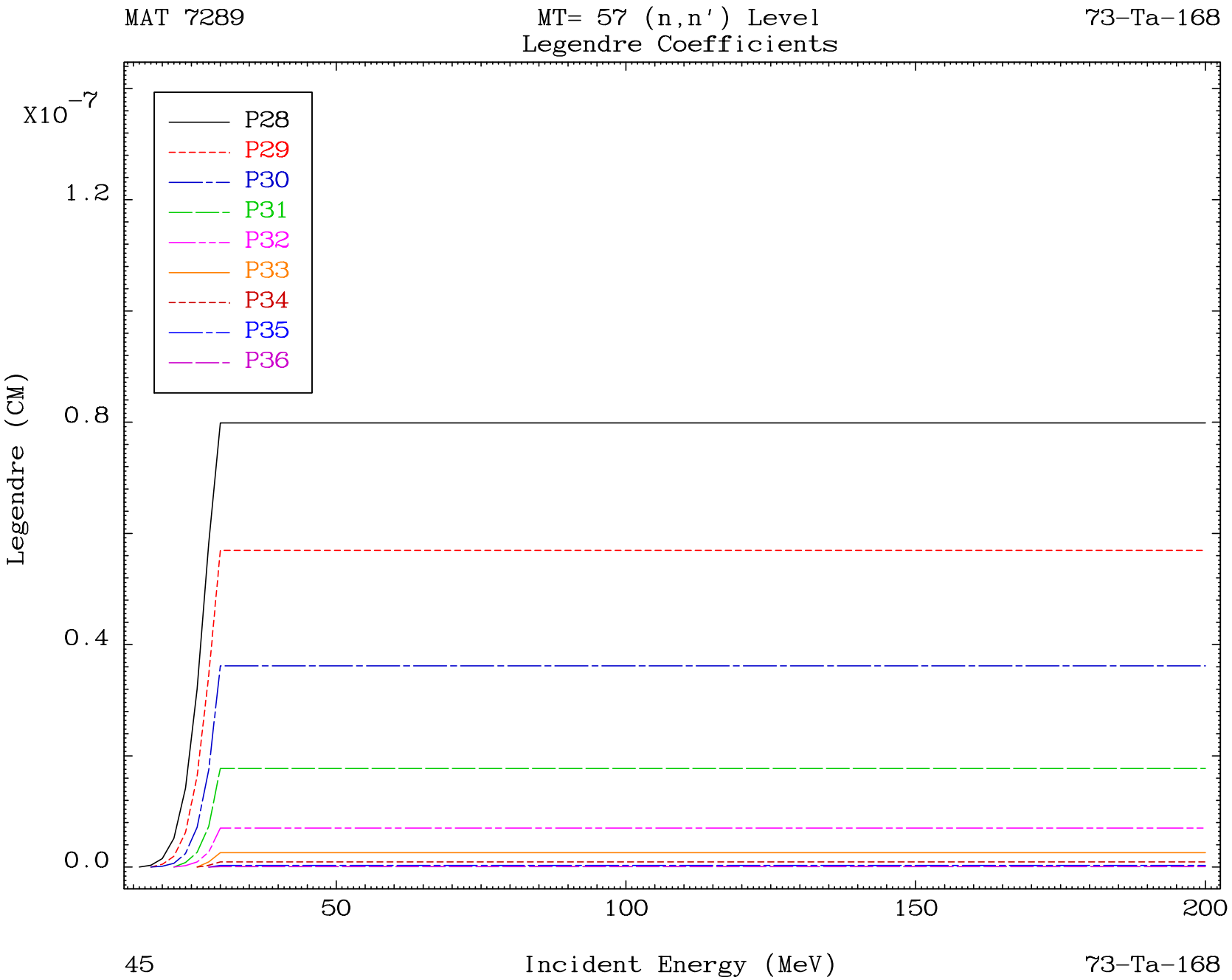

MAT 7289
MT= 56 (n,n') Level
Legendre Coefficients
73-Ta-168
0.0
X10^-3
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
0
50
100
150
200
40
Incident Energy (MeV)
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18

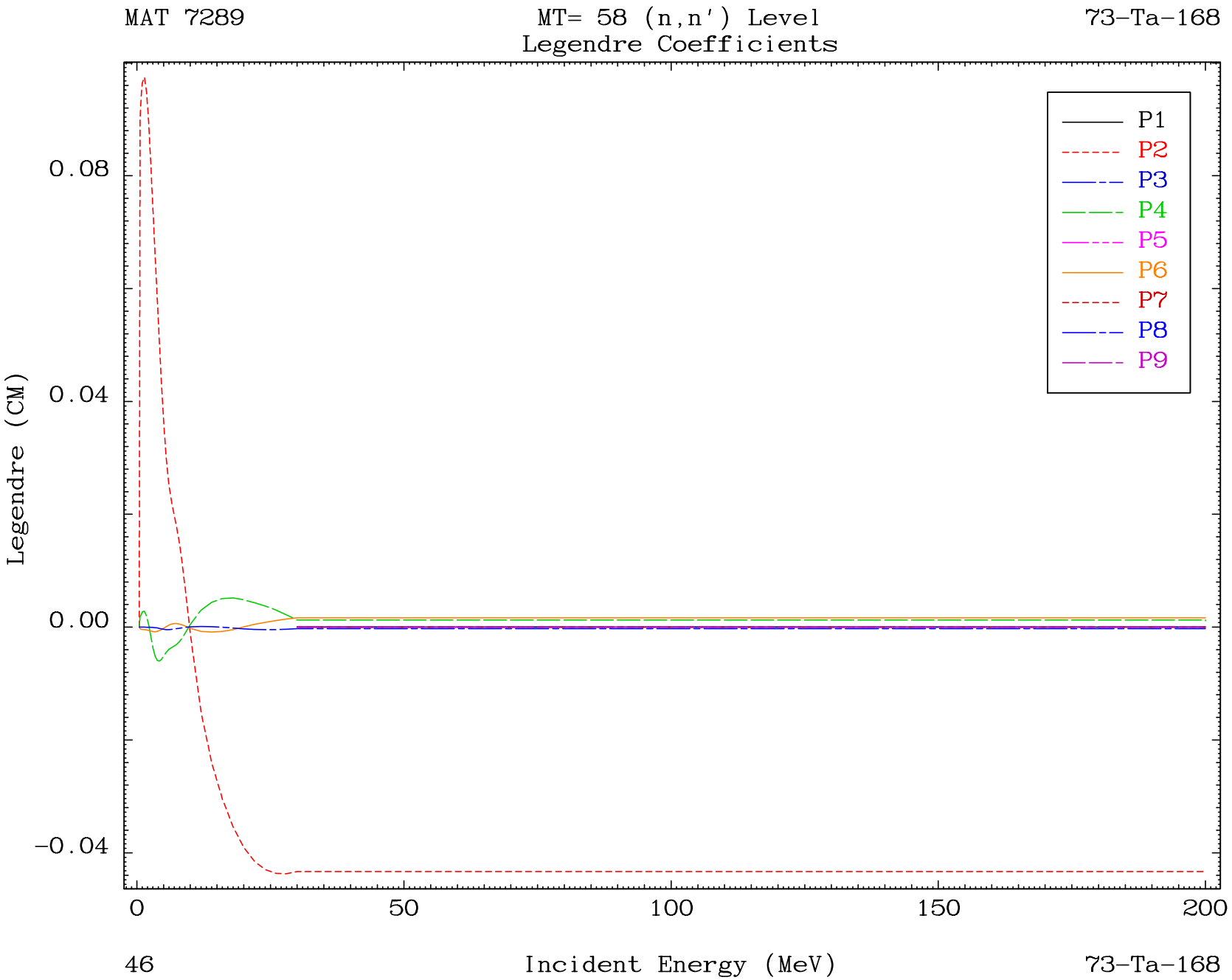

MAT 7289
MT= 56 (n,n') Level
Legendre Coefficients
73-Ta-168
X10-6
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
41
Incident Energy (MeV)
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26

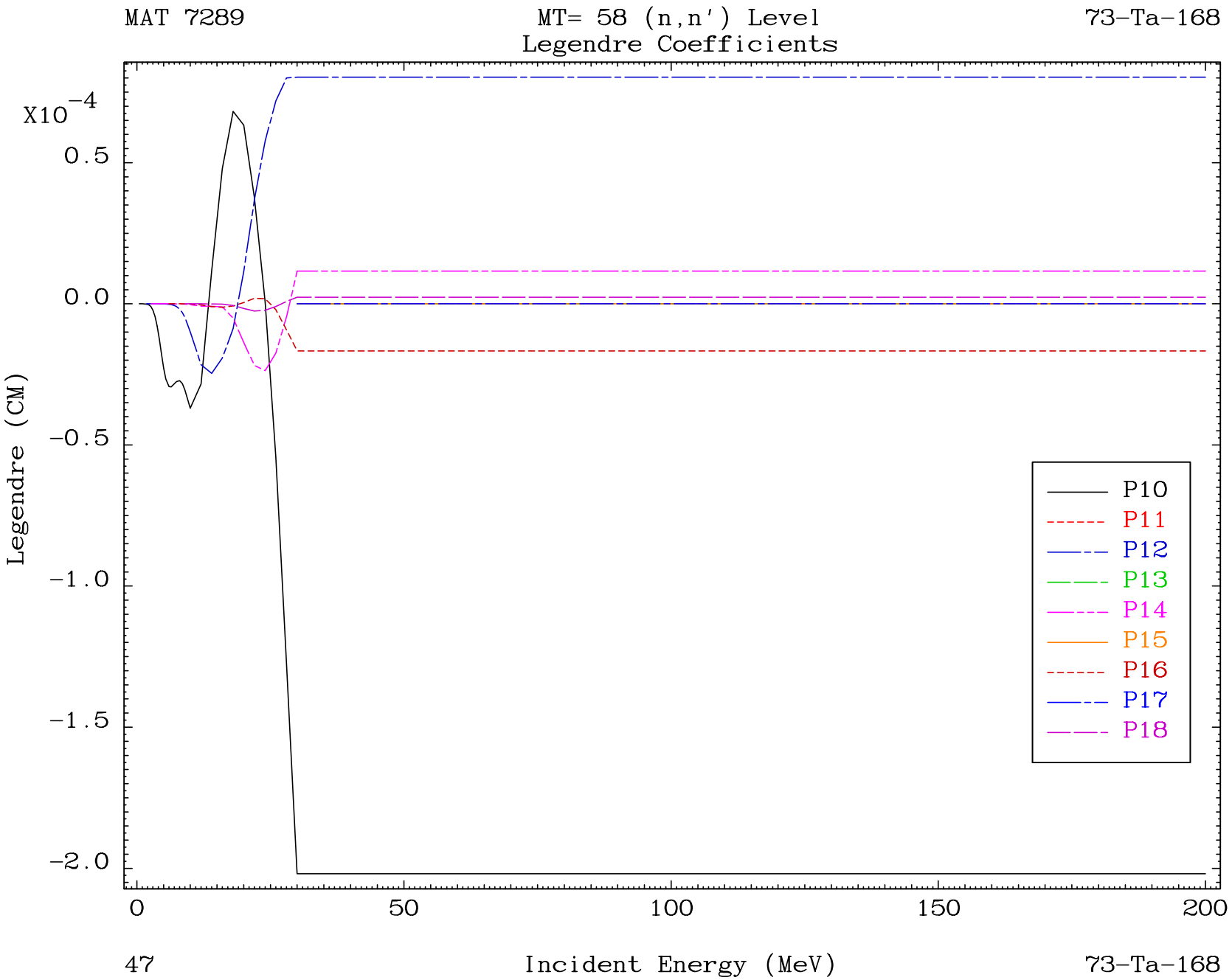

MAT 7289
MT= 57 (n,n') Level
Legendre Coefficients
73-Ta-168
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
Incident Energy (MeV)
42
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9

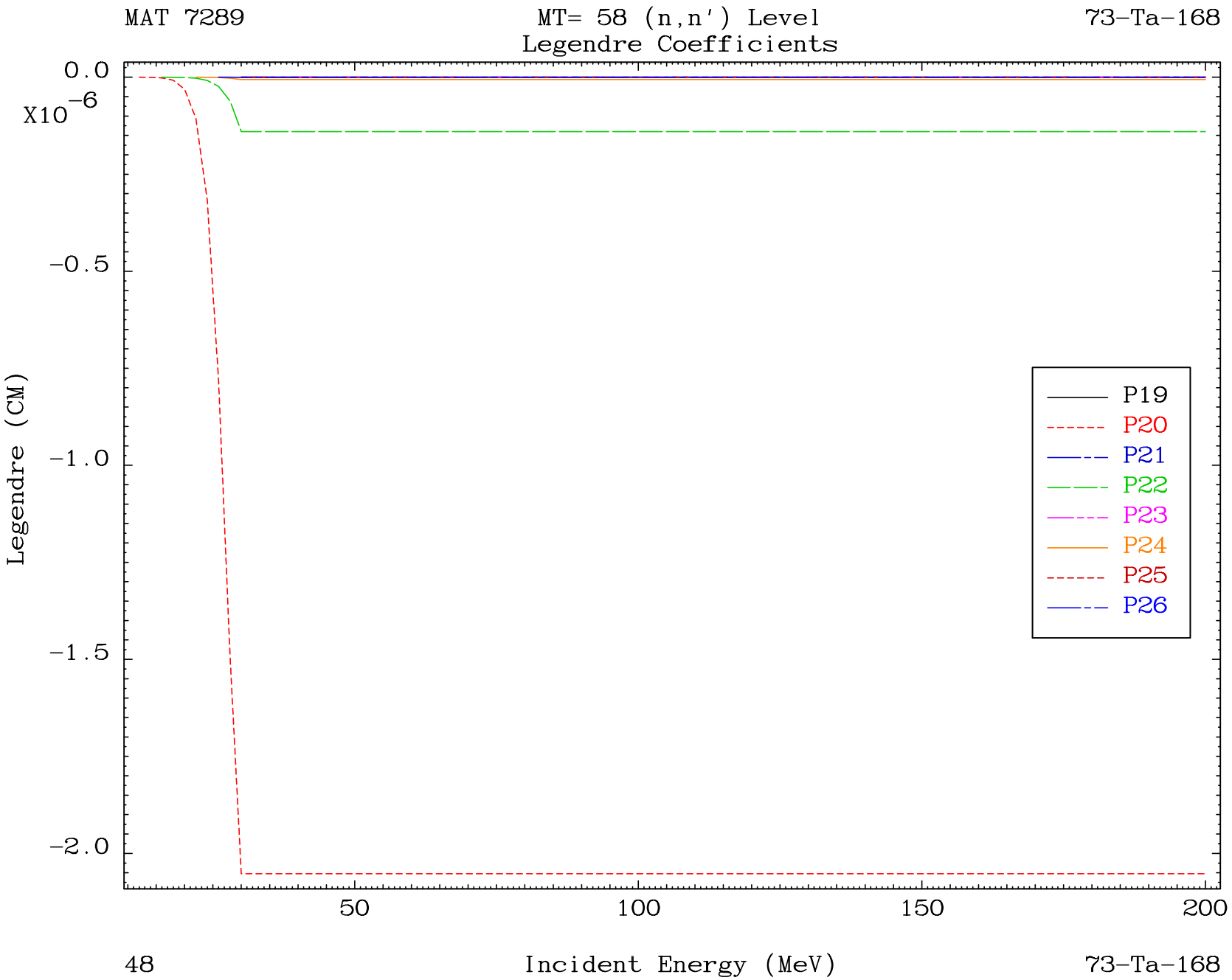

MAT 7289
MT= 57 (n,n') Level
Legendre Coefficients
73-Ta-168
0.005
0.000
-0.005
-0.010
Legendre (CM)
0
50
100
150
200
43
Incident Energy (MeV)
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18

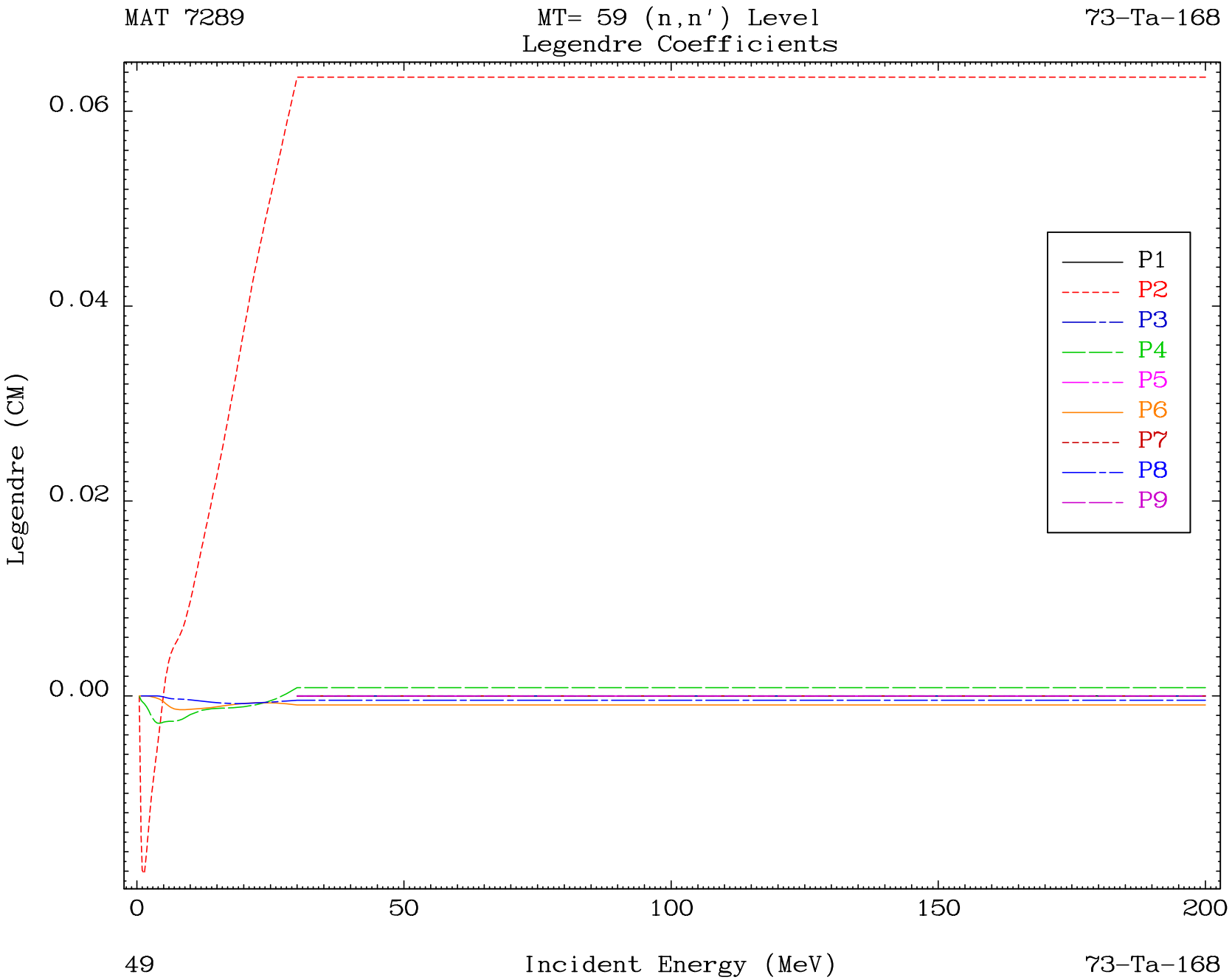

MAT 7289
MT= 57 (n,n') Level
Legendre Coefficients
73-Ta-168
X10-4
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
44
Incident Energy (MeV)
73-Ta-168

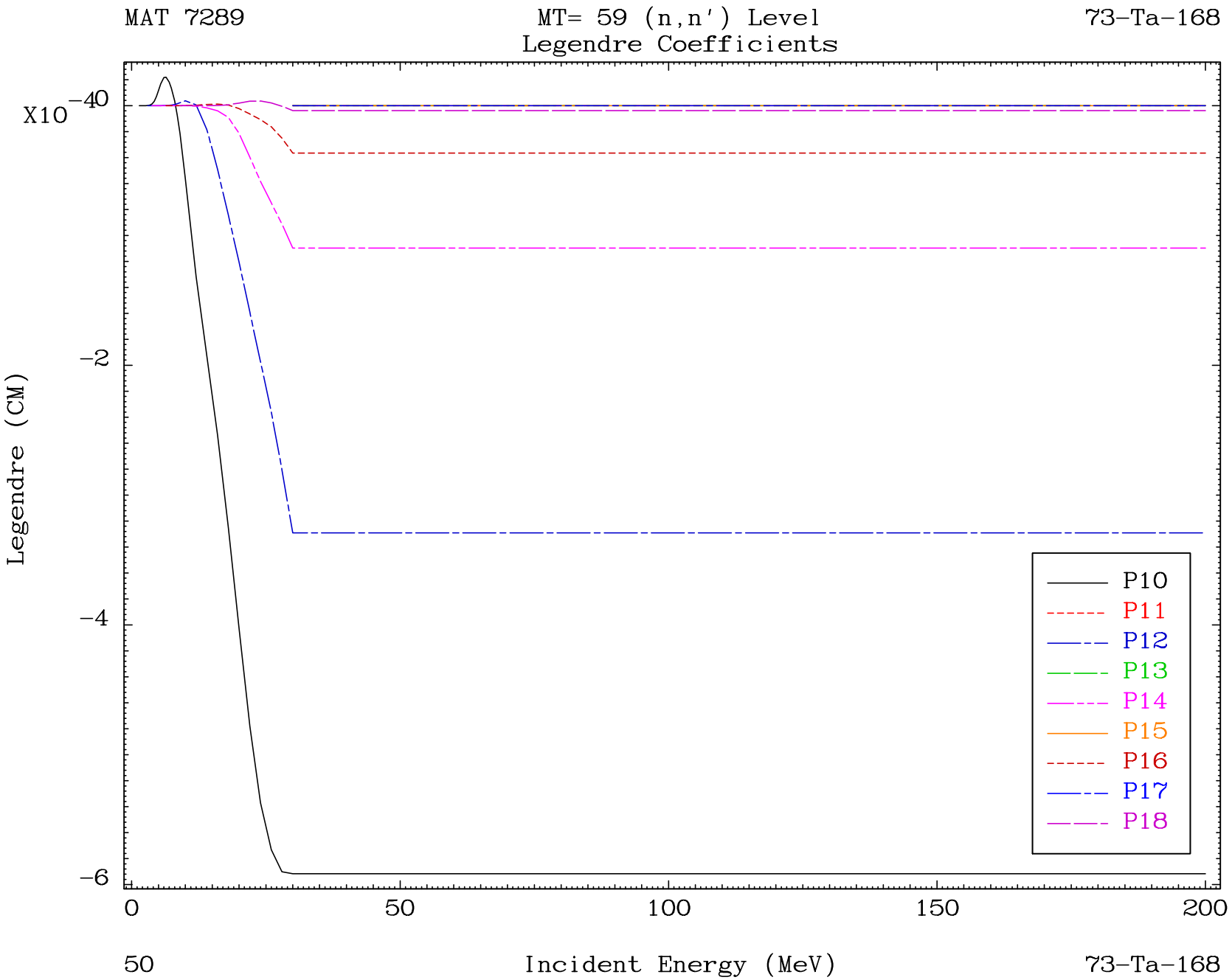

MAT 7289
MT= 57 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-7
1.2
0.8
0.4
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
45
Incident Energy (MeV)
73-Ta-168

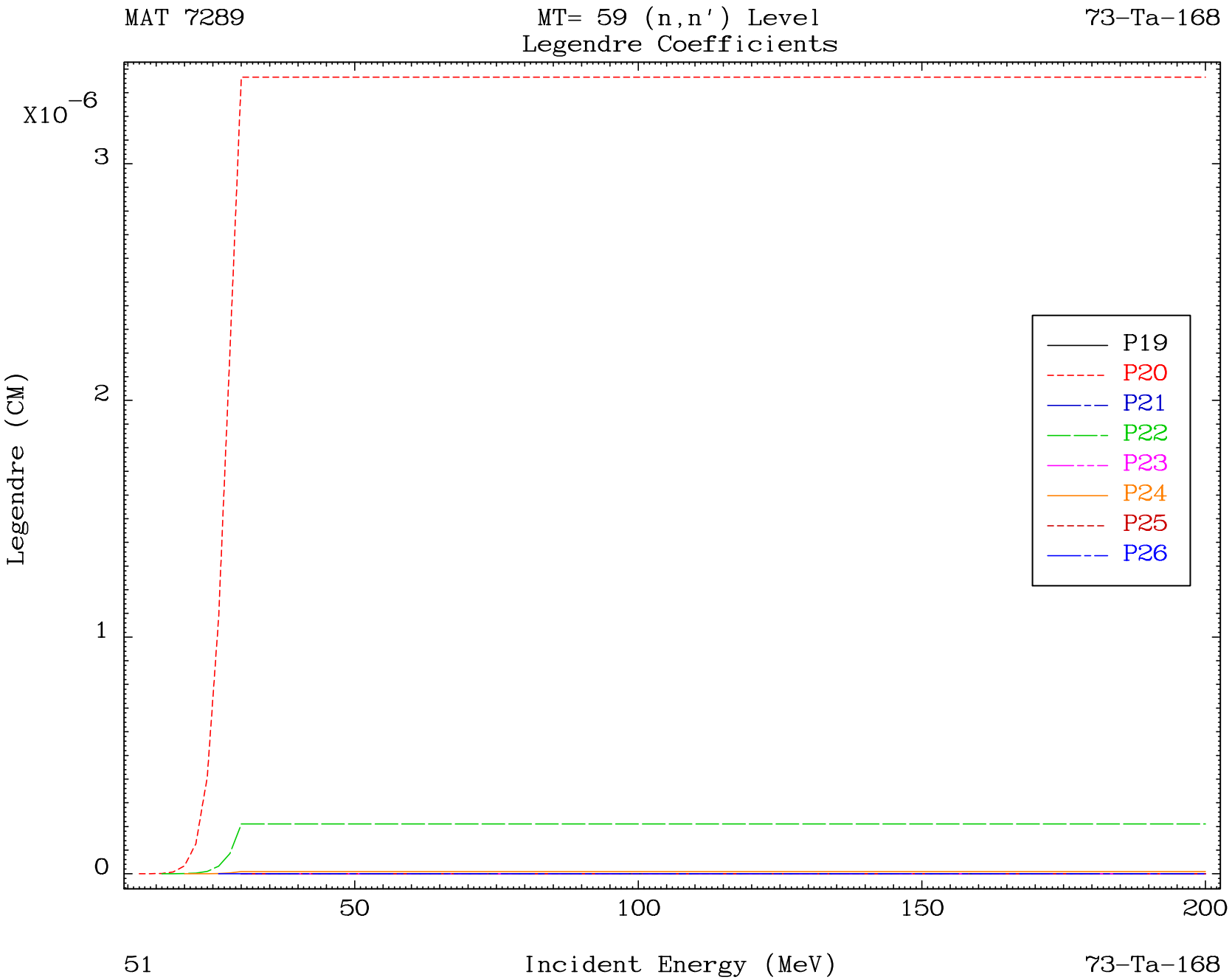

MAT 7289
MT= 58 (n,n') Level
Legendre Coefficients
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9
0.08
0.04
0.00
-0.04
Legendre (CM)
0
50
100
150
200
46
Incident Energy (MeV)
73-Ta-168

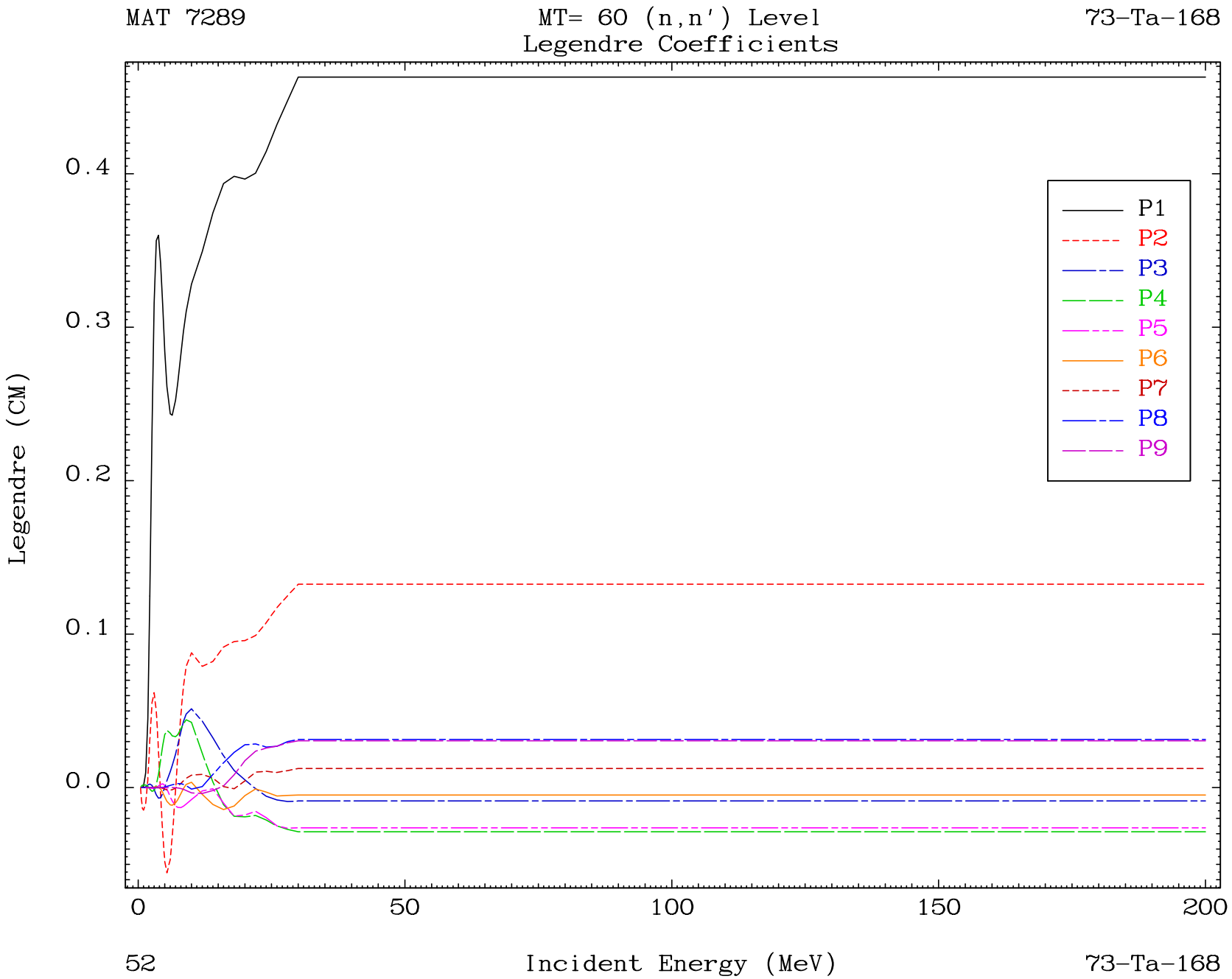

MAT 7289
MT= 58 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-4
0.5
0.0
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
0
50
100
150
200
47
Incident Energy (MeV)
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18

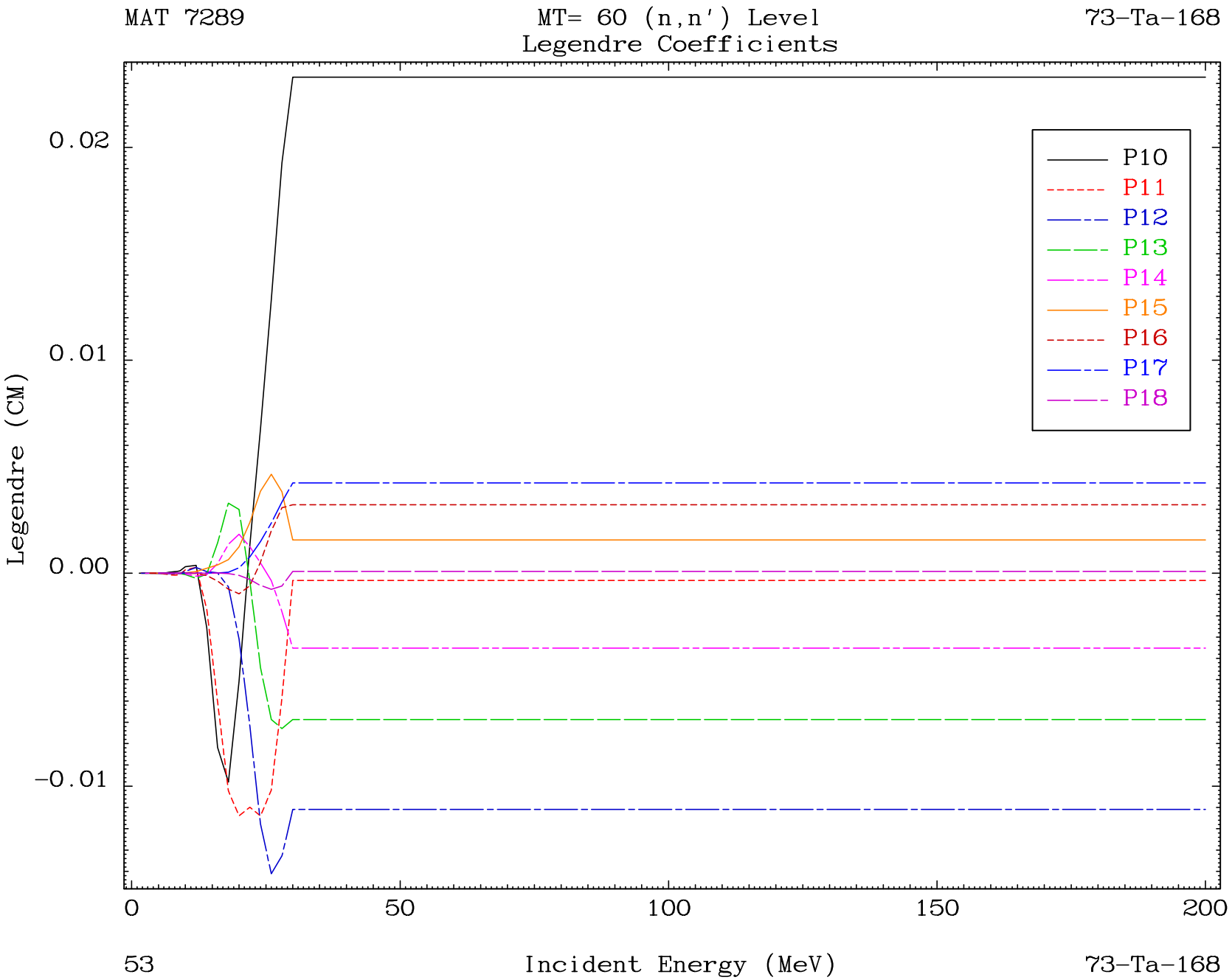

MAT 7289
MT= 58 (n,n') Level
Legendre Coefficients
73-Ta-168
0.0
X10−6
−0.5
−1.0
−1.5
−2.0
Legendre (CM)
50
100
150
200
48
Incident Energy (MeV)
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26

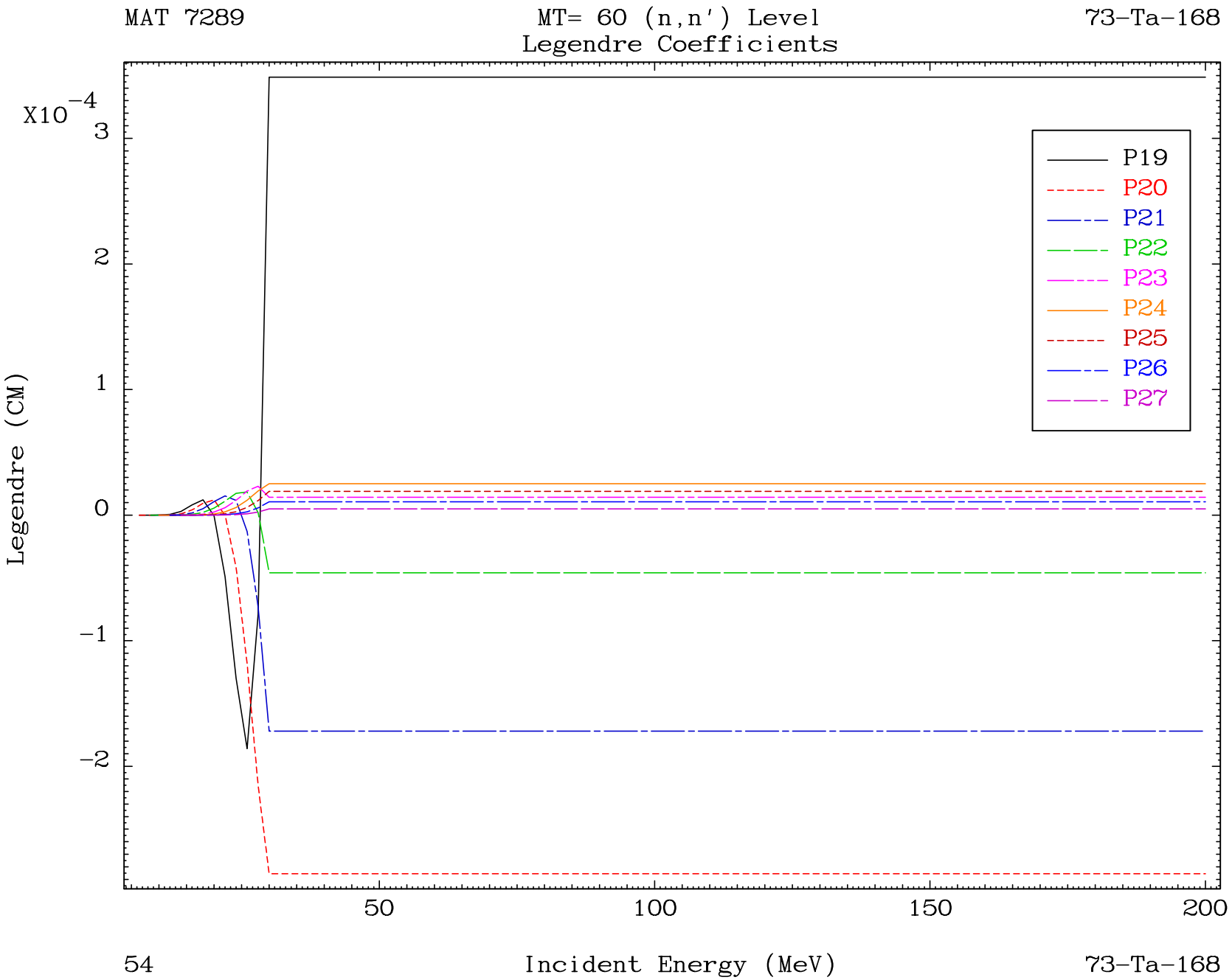

MAT 7289
MT= 59 (n,n') Level
Legendre Coefficients
73-Ta-168
0.06
0.04
0.02
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
49
Incident Energy (MeV)
73-Ta-168

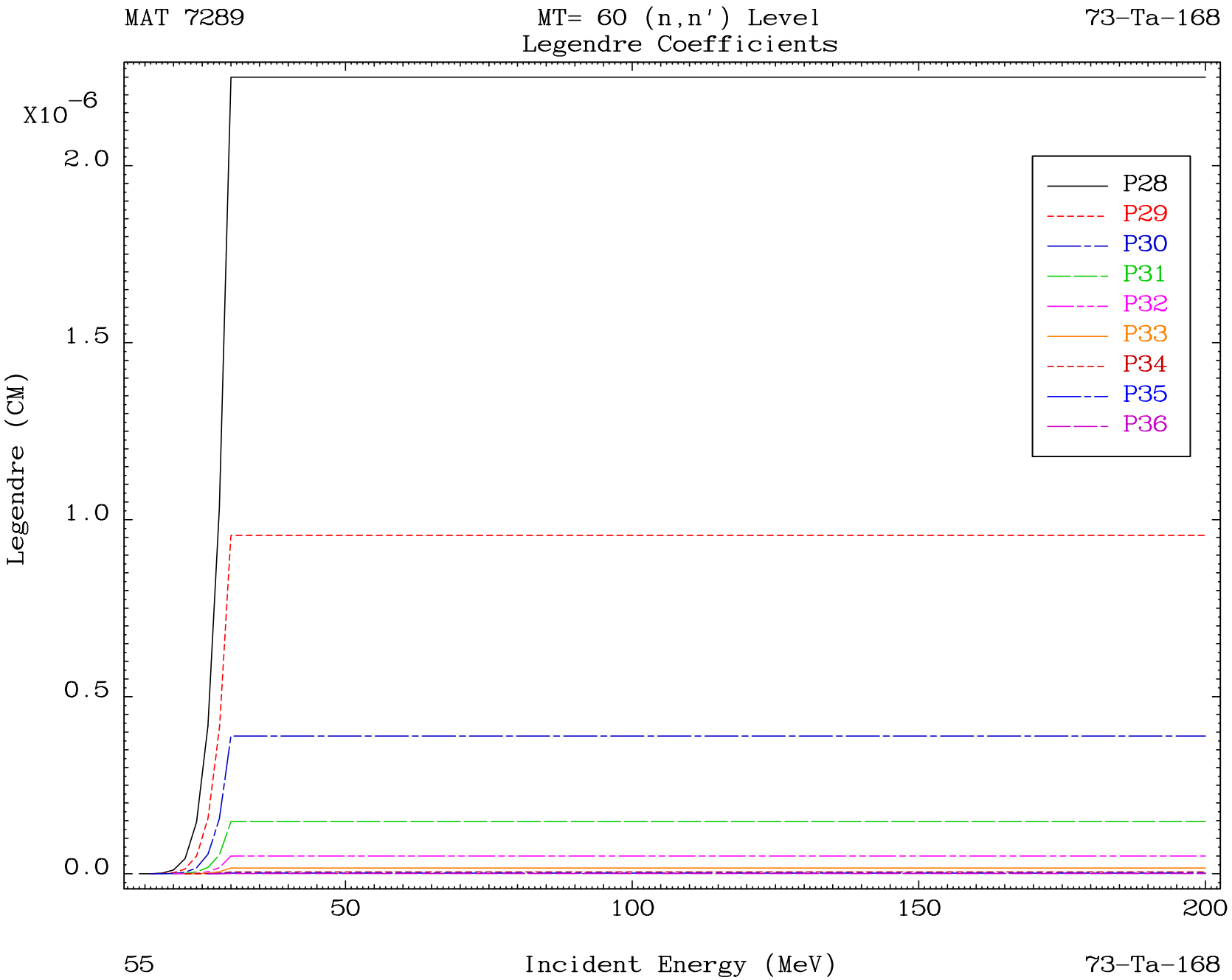

MAT 7289
MT= 59 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-40
-2
-4
-6
Legendre (CM)
0
50
100
150
200
50
Incident Energy (MeV)
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18

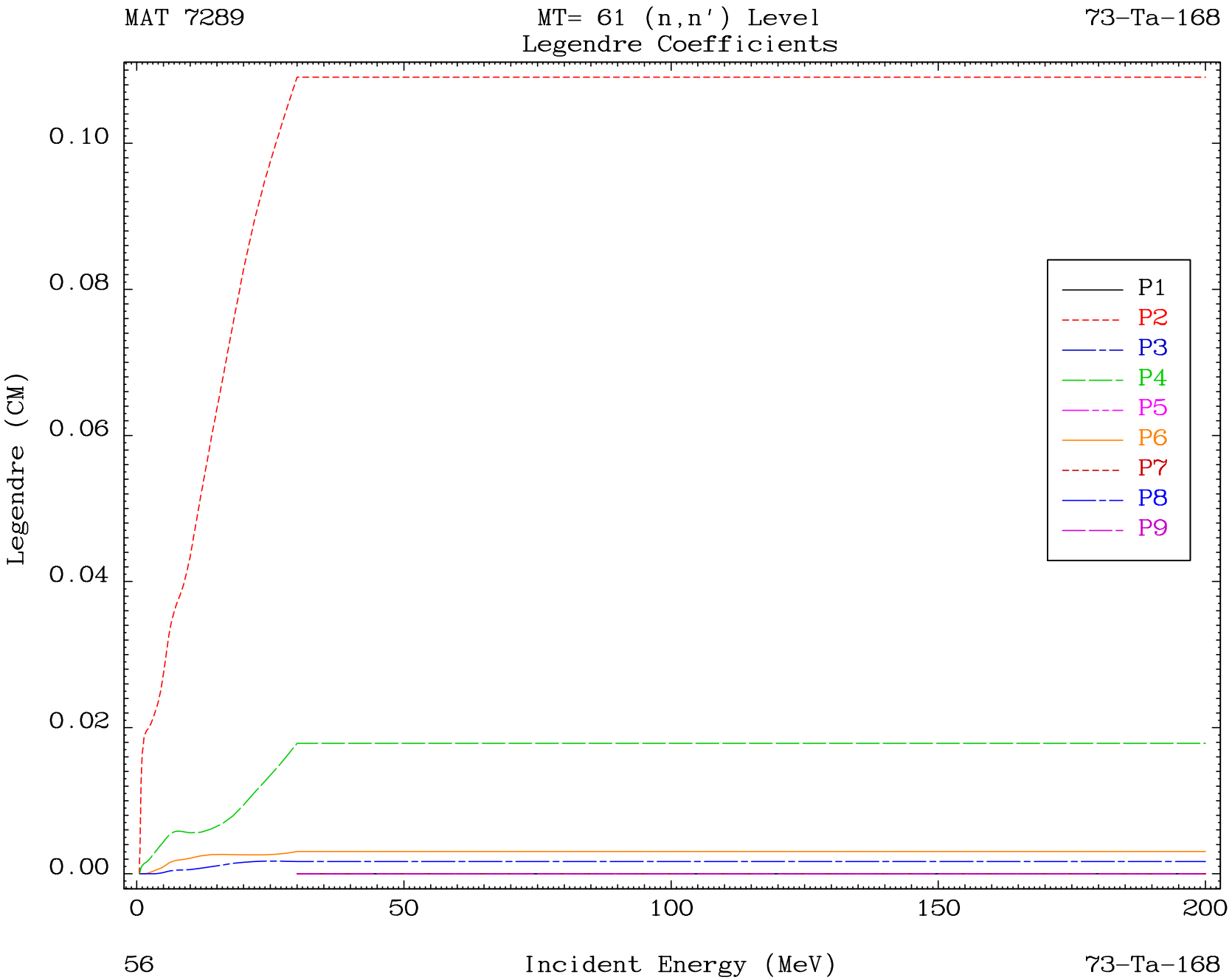

MAT 7289
MT= 59 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-6
3
2
1
0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
50
100
150
200
51
Incident Energy (MeV)
73-Ta-168

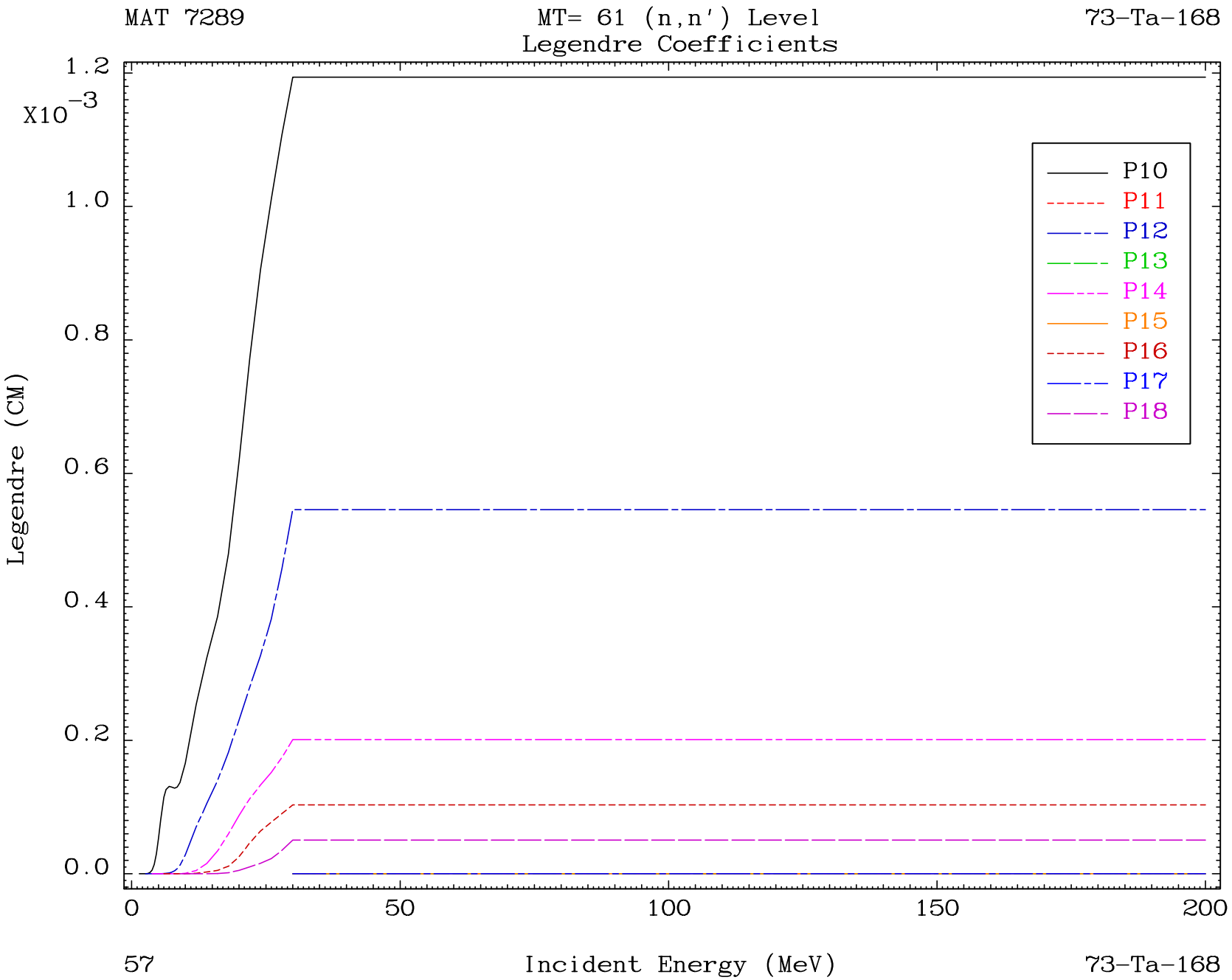

MAT 7289
MT= 60 (n,n') Level
Legendre Coefficients
73-Ta-168
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
52
Incident Energy (MeV)
73-Ta-168

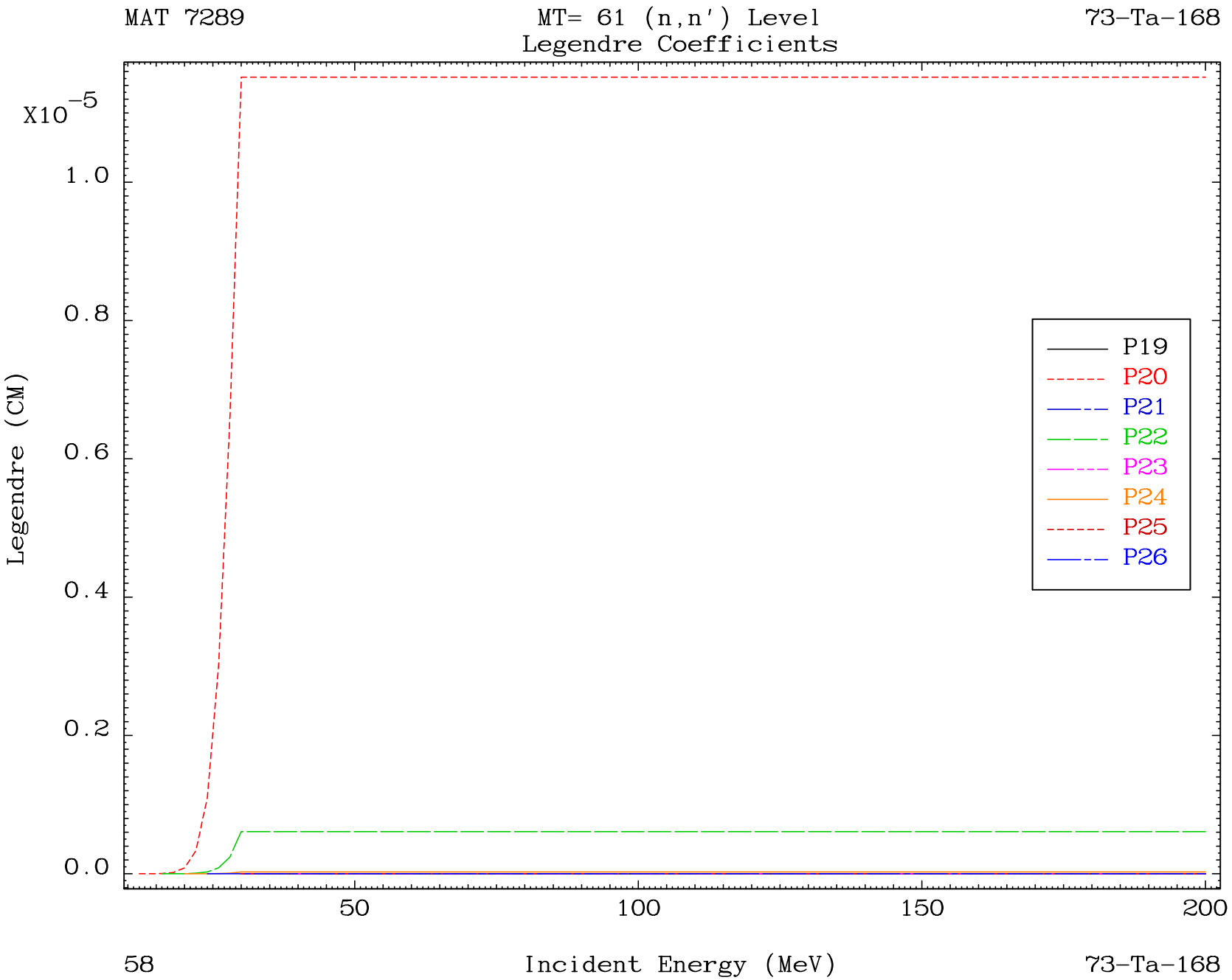

MAT 7289
MT= 60 (n,n') Level
Legendre Coefficients
73-Ta-168
0.02
0.01
0.00
-0.01
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
53
Incident Energy (MeV)
73-Ta-168

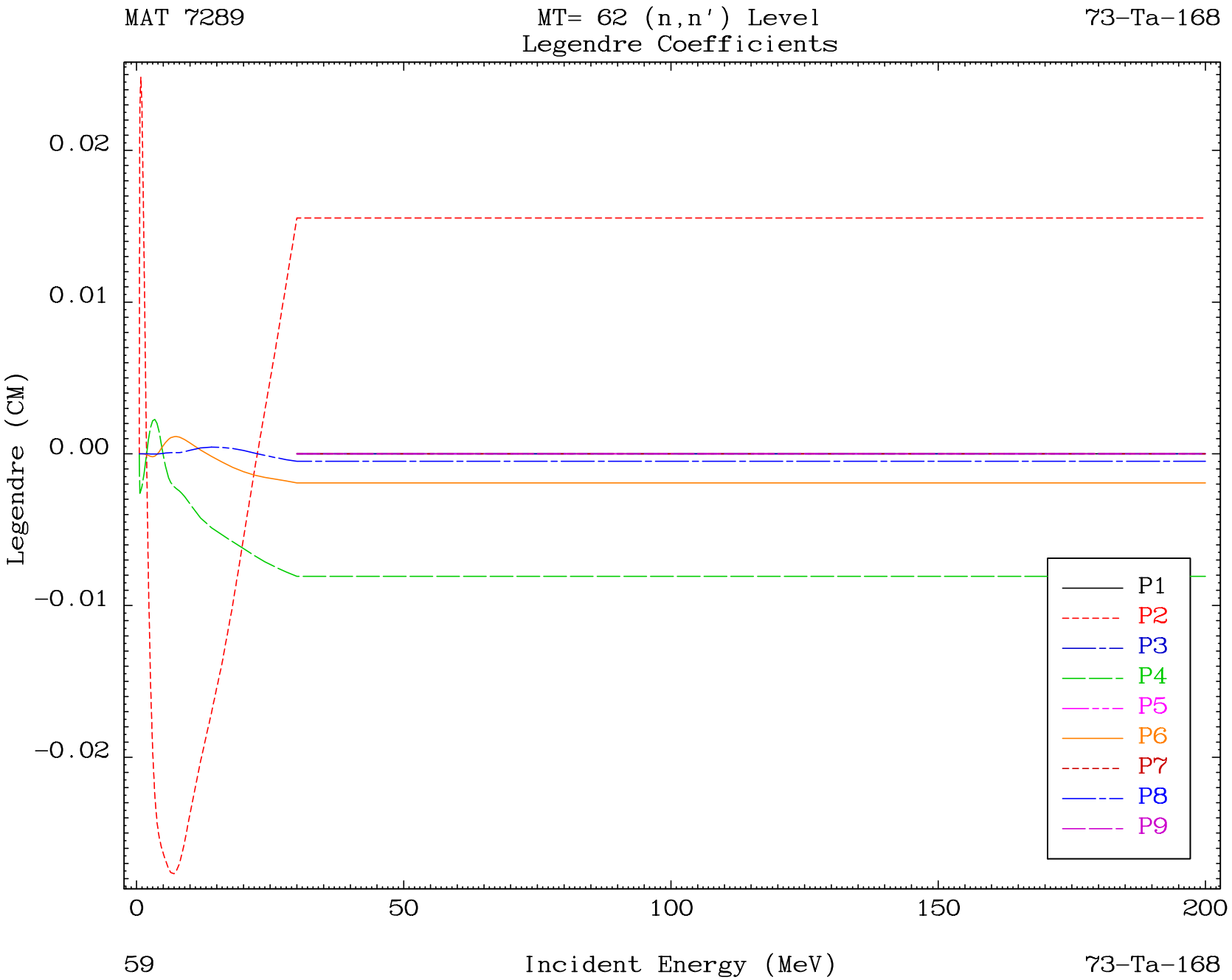

MAT 7289
MT= 60 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-4
3
2
1
0
-1
-2
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
54
Incident Energy (MeV)
73-Ta-168

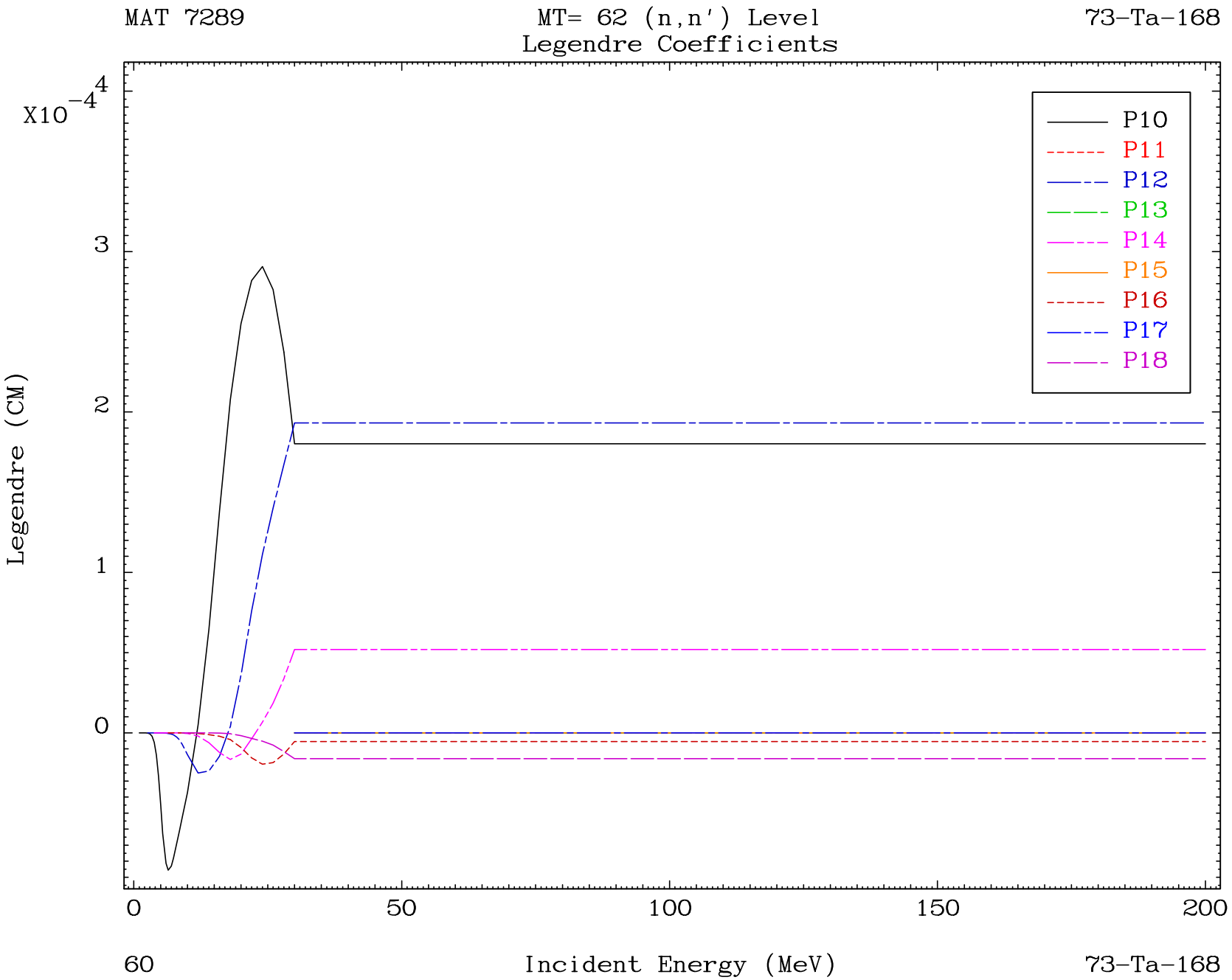

MAT 7289
MT= 60 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-6
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
55
Incident Energy (MeV)
73-Ta-168

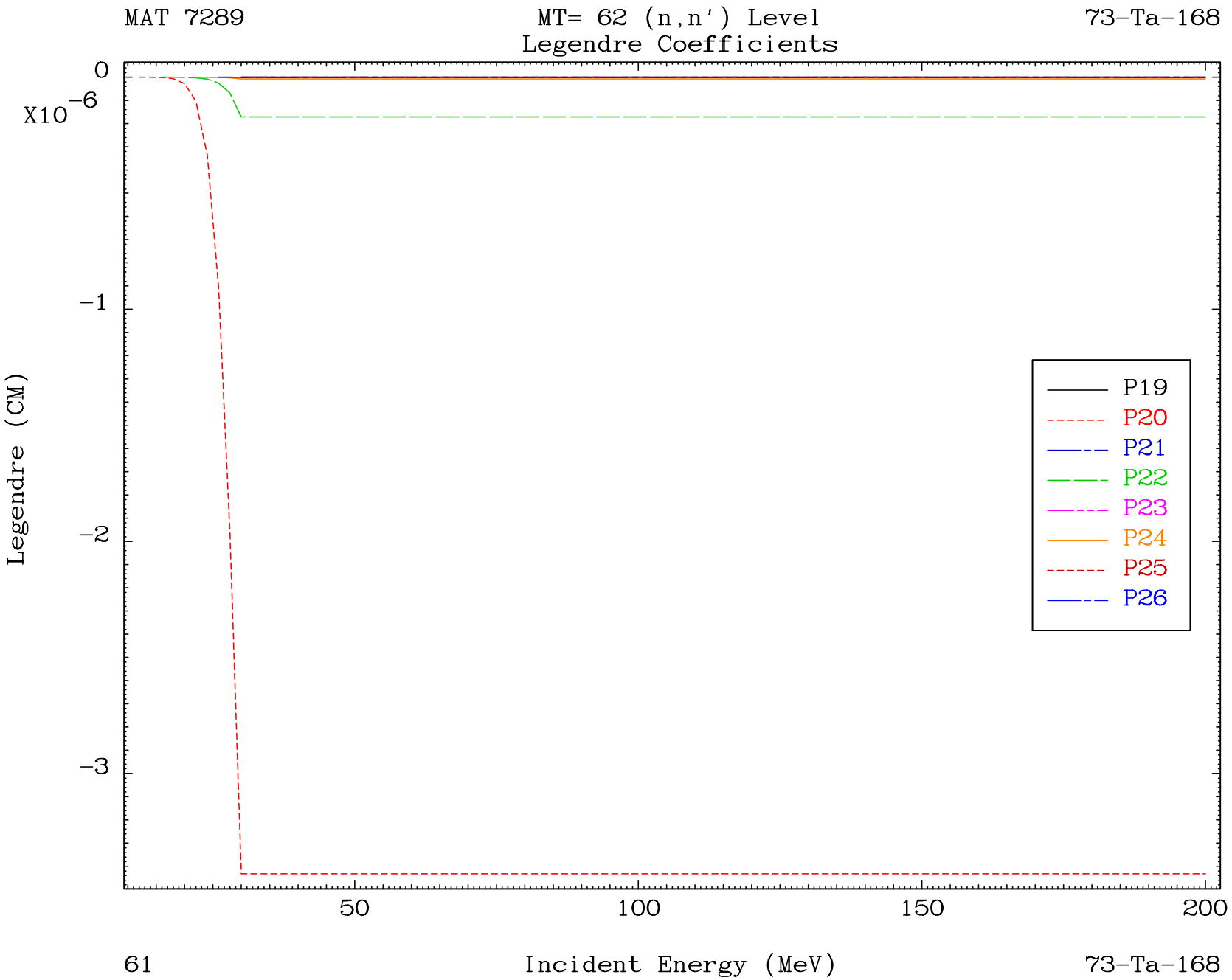

MAT 7289
MT= 61 (n,n') Level
Legendre Coefficients
73-Ta-168
0.10
0.08
0.06
0.04
0.02
0.00
Legendre (CM)
0
50
100
150
200
56
Incident Energy (MeV)
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9

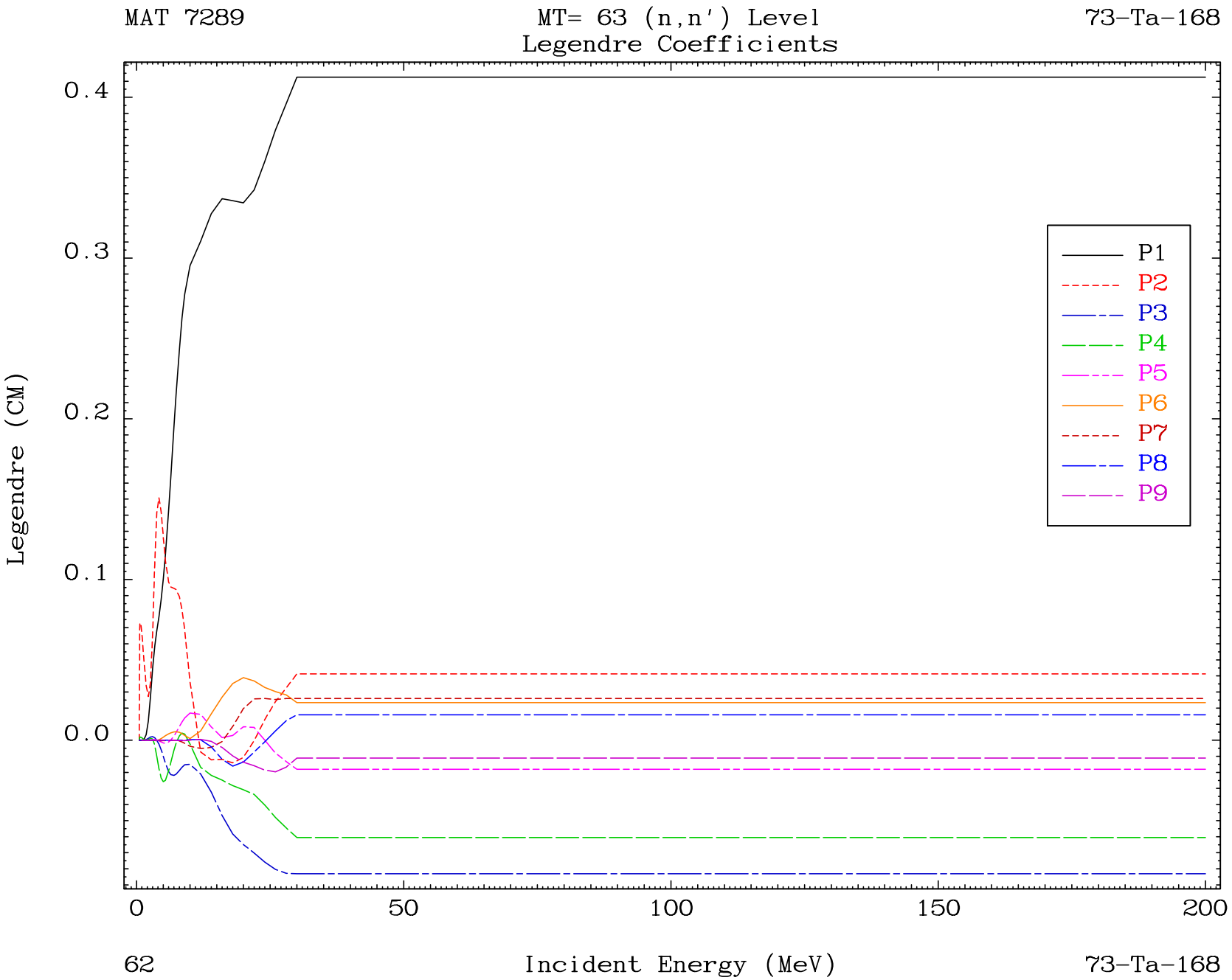

MAT 7289
MT= 61 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-3
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
57
Incident Energy (MeV)
73-Ta-168

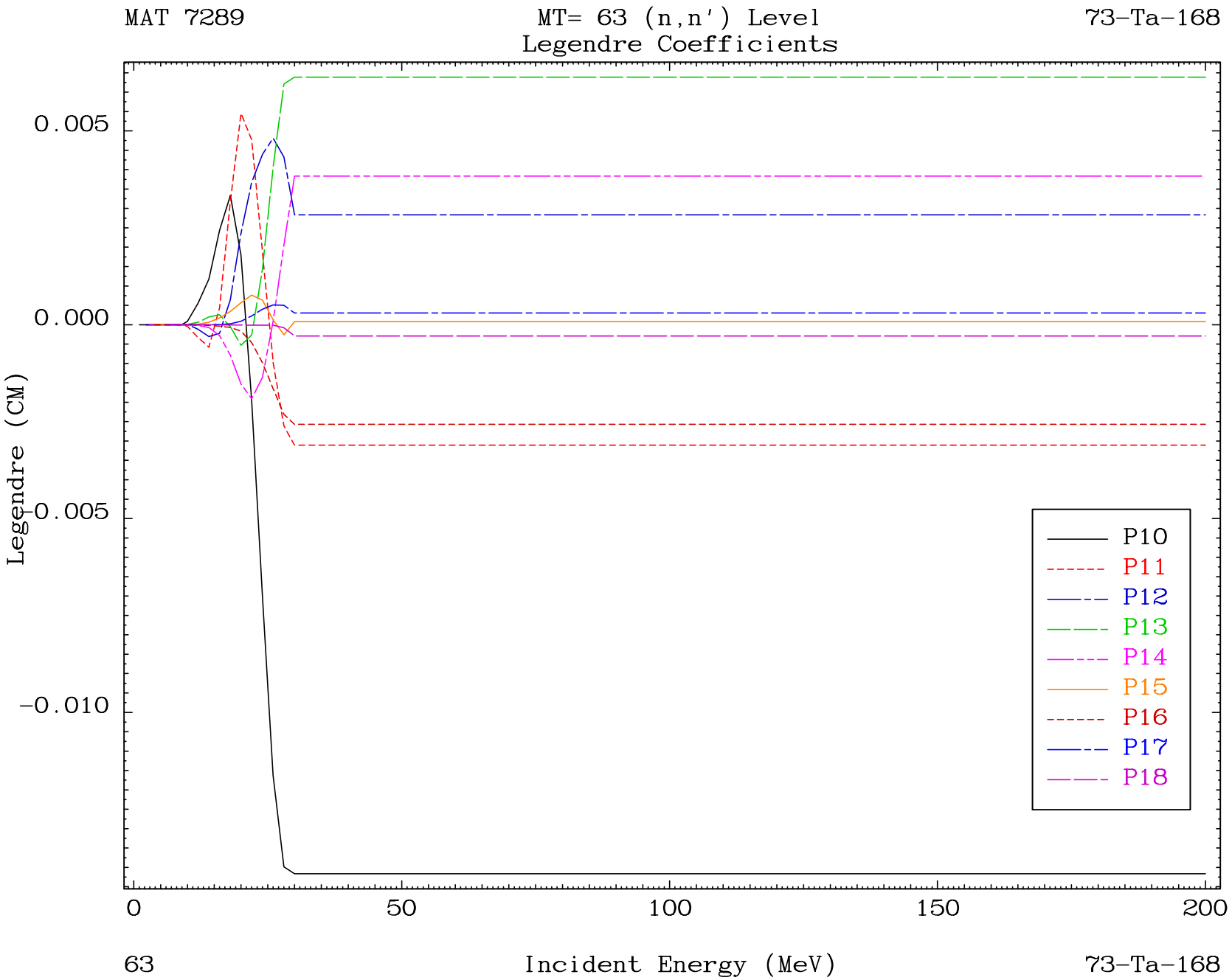

MAT 7289
MT= 61 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-5
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
50
100
150
200
58
Incident Energy (MeV)
73-Ta-168

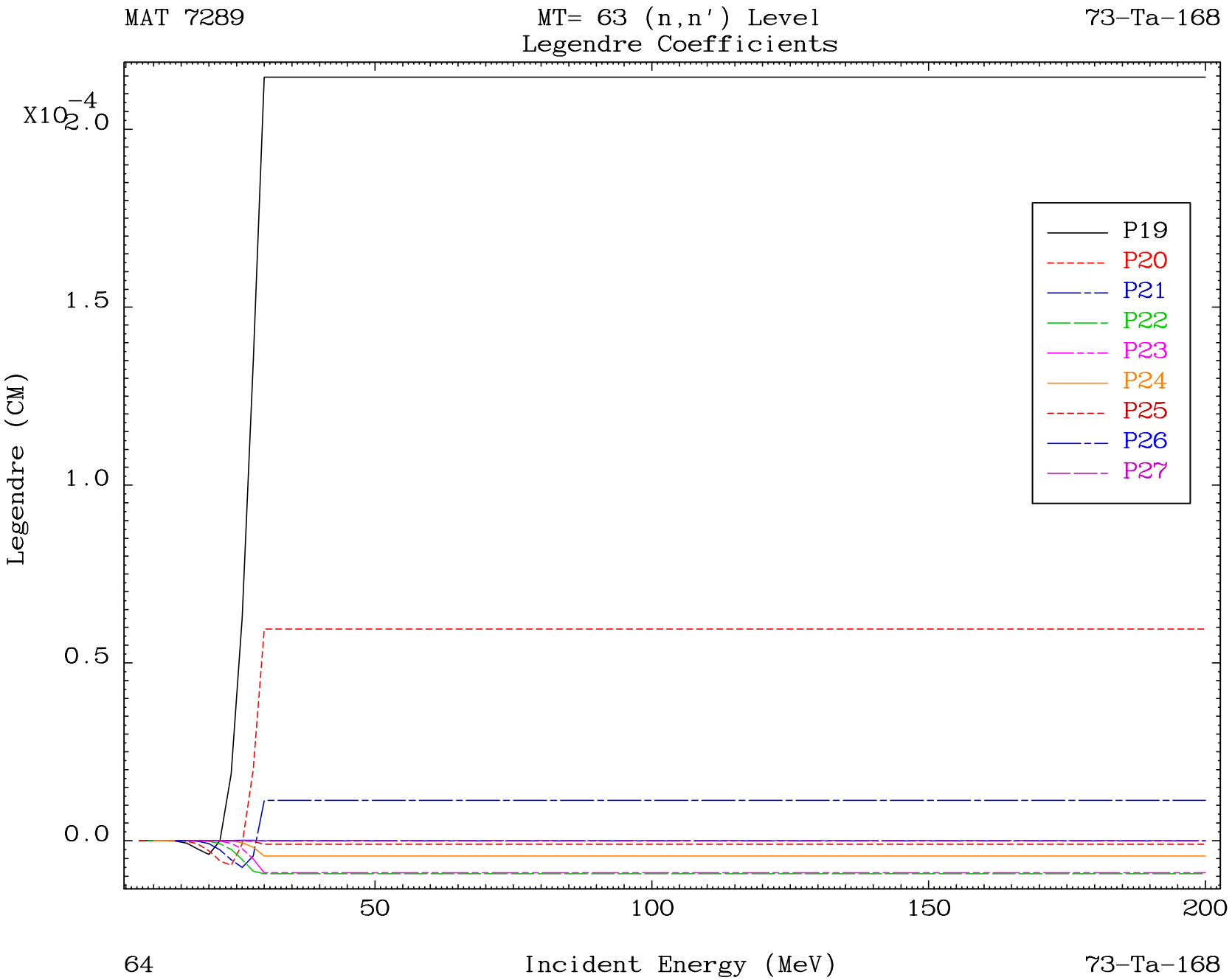

MAT 7289
MT= 62 (n,n') Level
Legendre Coefficients
73-Ta-168
0.02
0.01
0.00
-0.01
-0.02
Legendre (CM)
0
50
100
150
200
59
Incident Energy (MeV)
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9

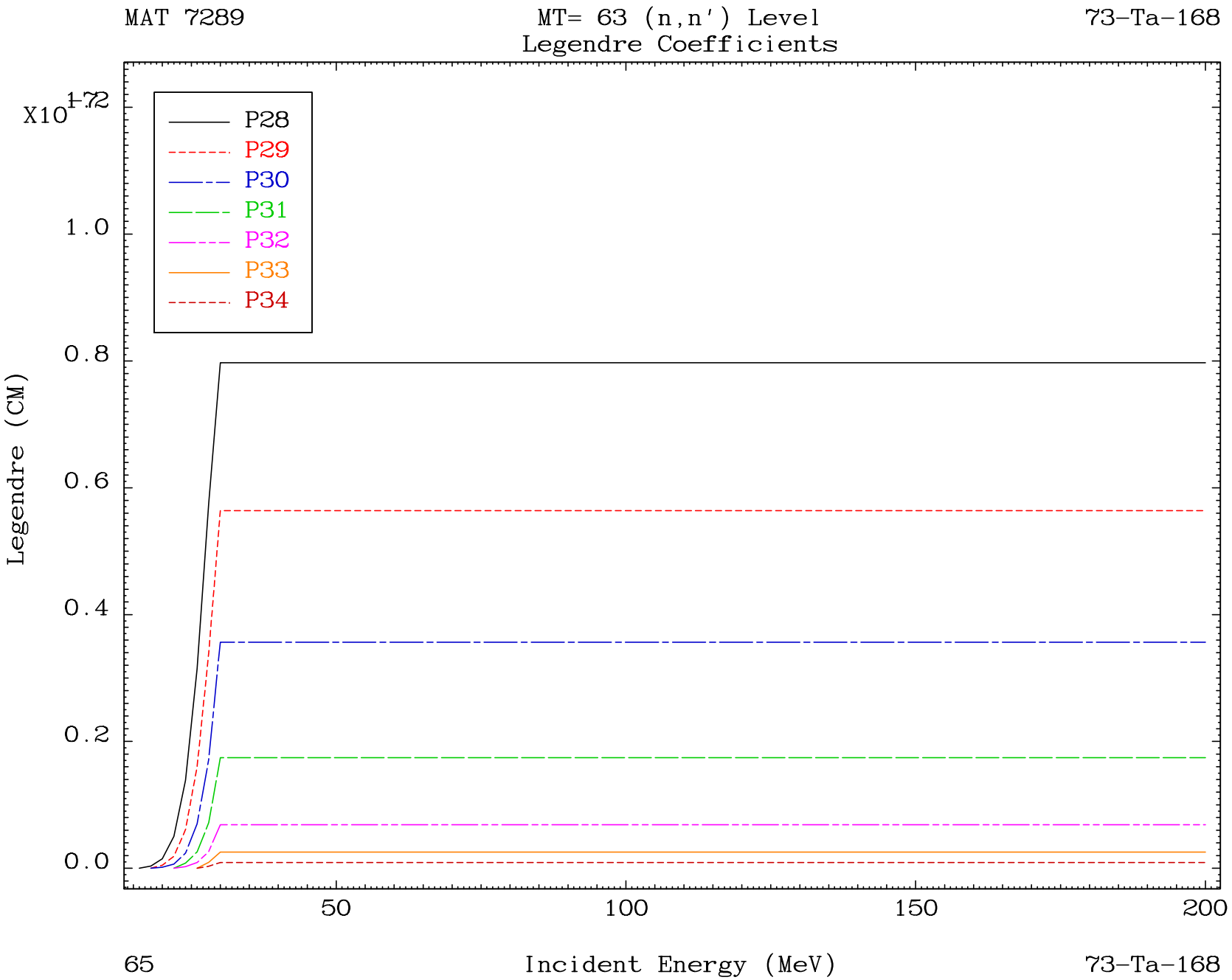

MAT 7289
MT= 62 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-4
4
3
2
1
0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
60
Incident Energy (MeV)
73-Ta-168

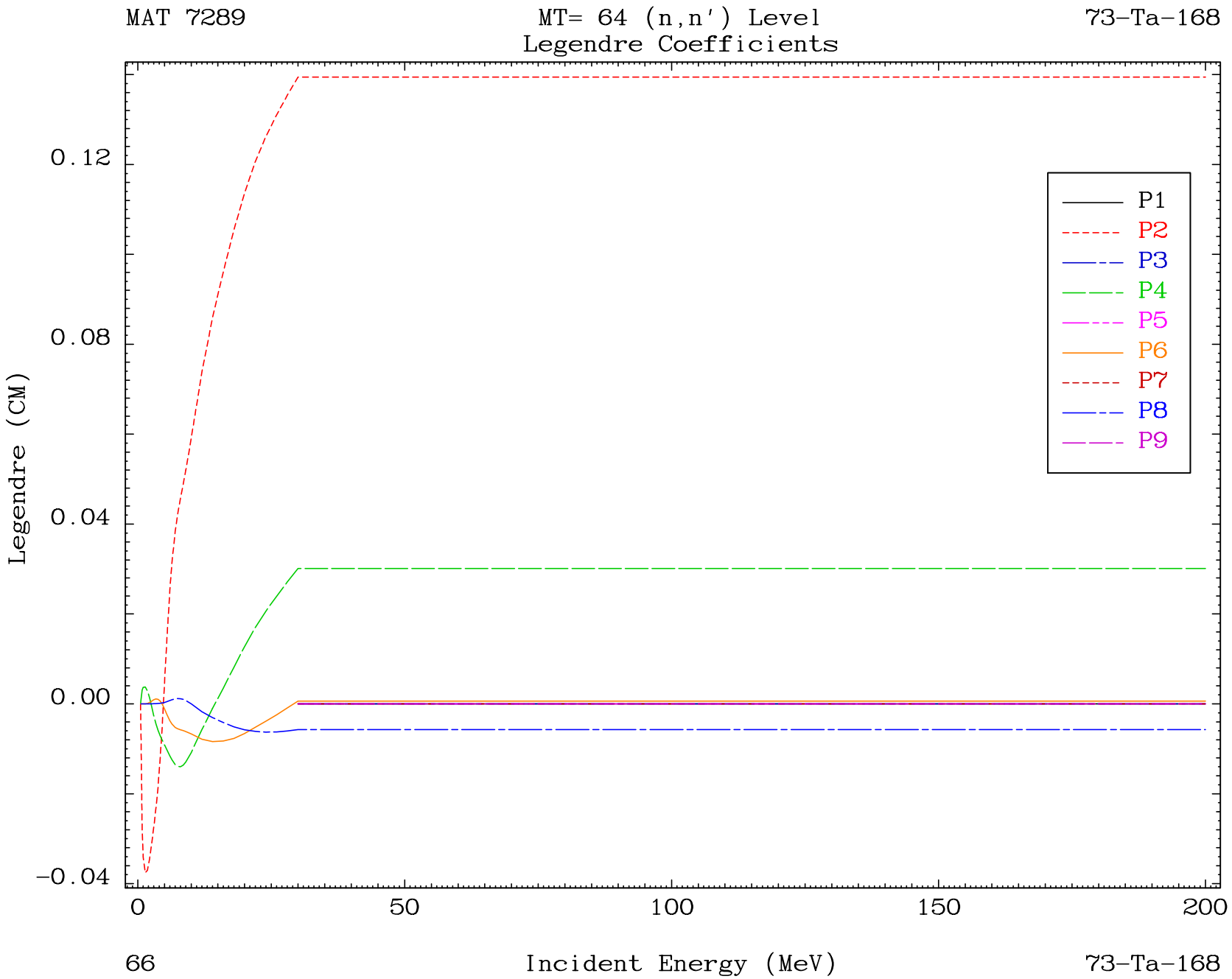

MAT 7289
MT= 62 (n,n') Level
Legendre Coefficients
73-Ta-168
0
X10−6
−1
−2
−3
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
50
100
150
200
61
Incident Energy (MeV)
73-Ta-168

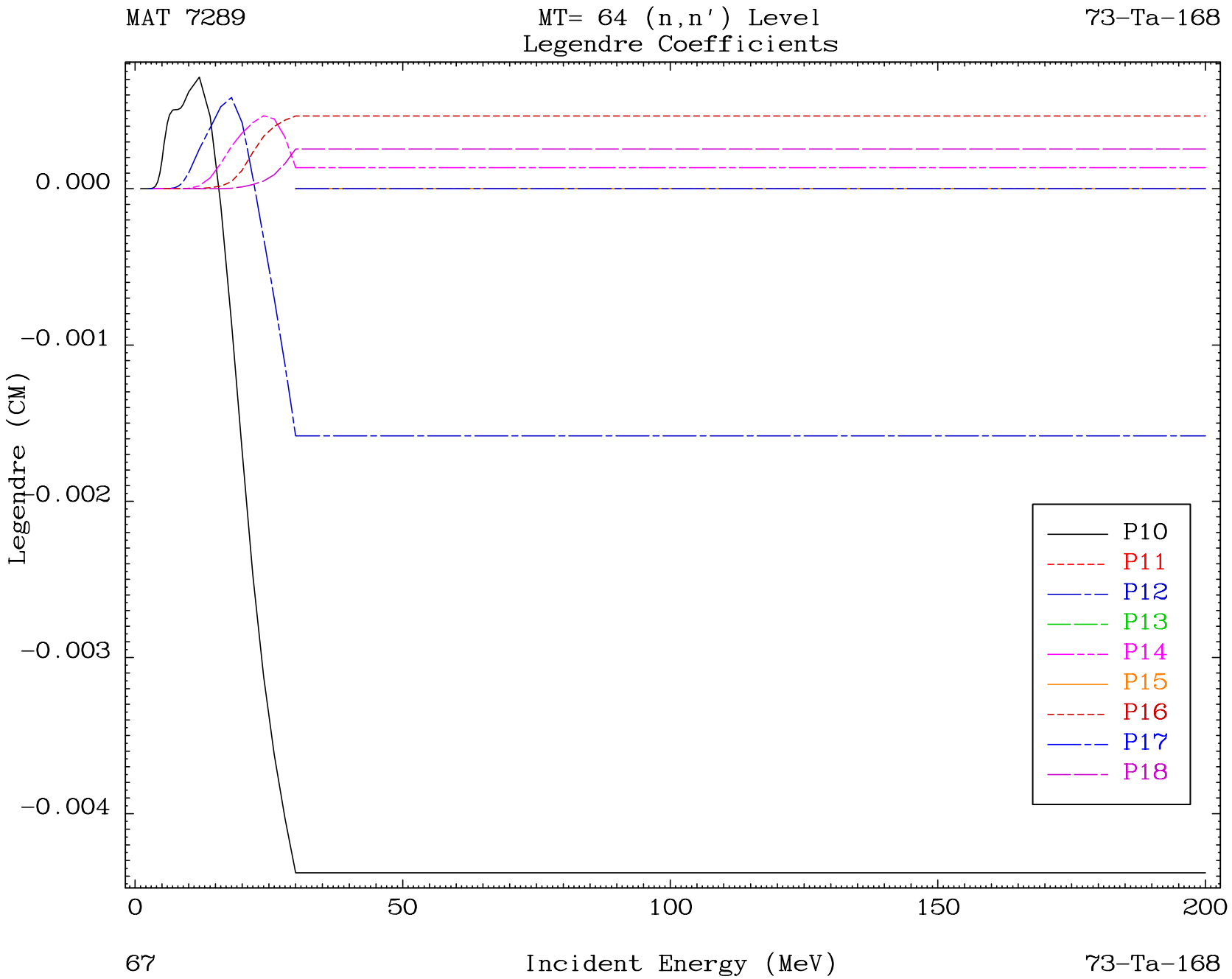

MAT 7289
MT= 63 (n,n') Level
Legendre Coefficients
73-Ta-168
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
62
Incident Energy (MeV)
73-Ta-168

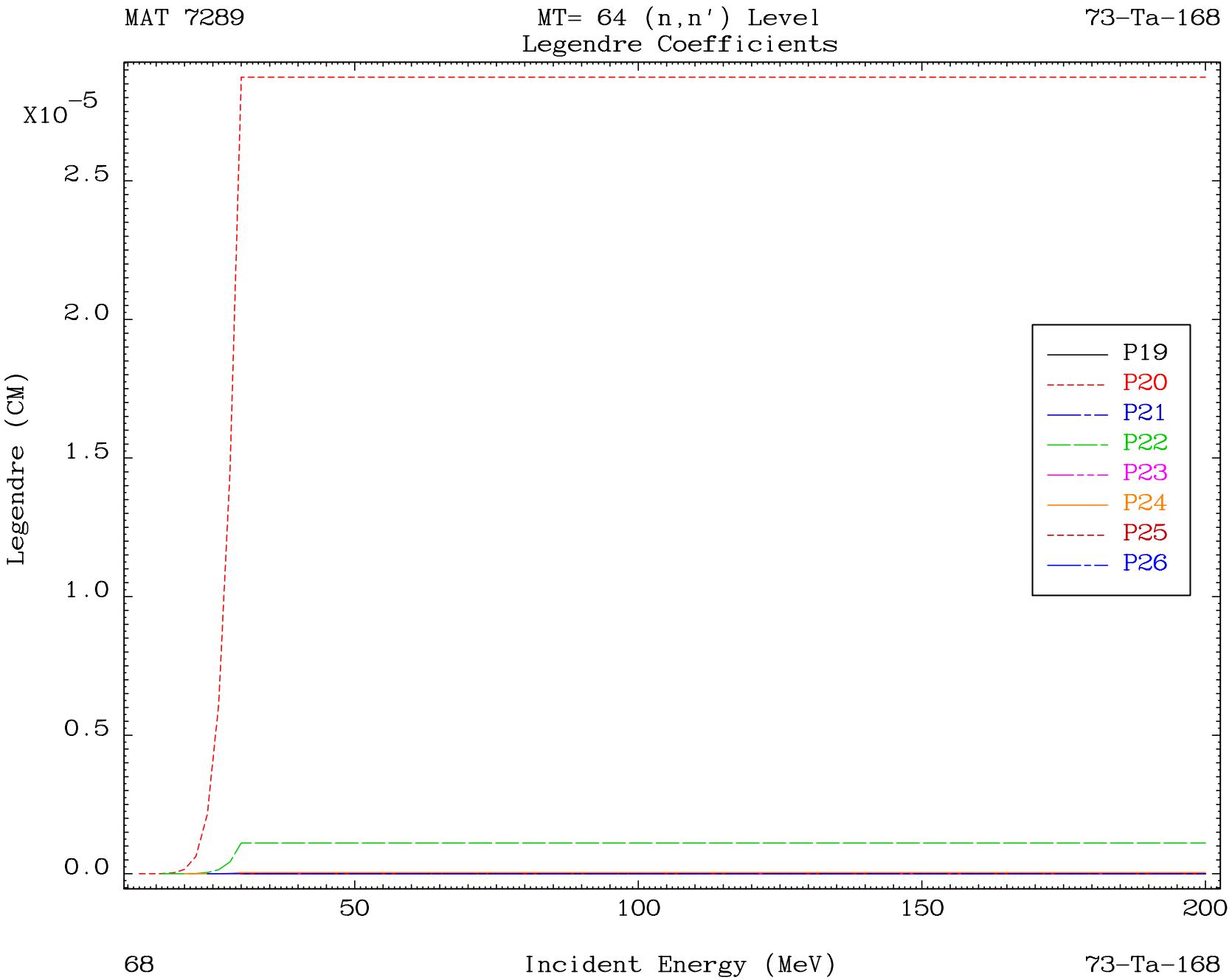

MAT 7289
MT= 63 (n,n') Level
Legendre Coefficients
73-Ta-168
0.005
0.000
-0.005
-0.010
Legendre (CM)
0
50
100
150
200
63
Incident Energy (MeV)
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18

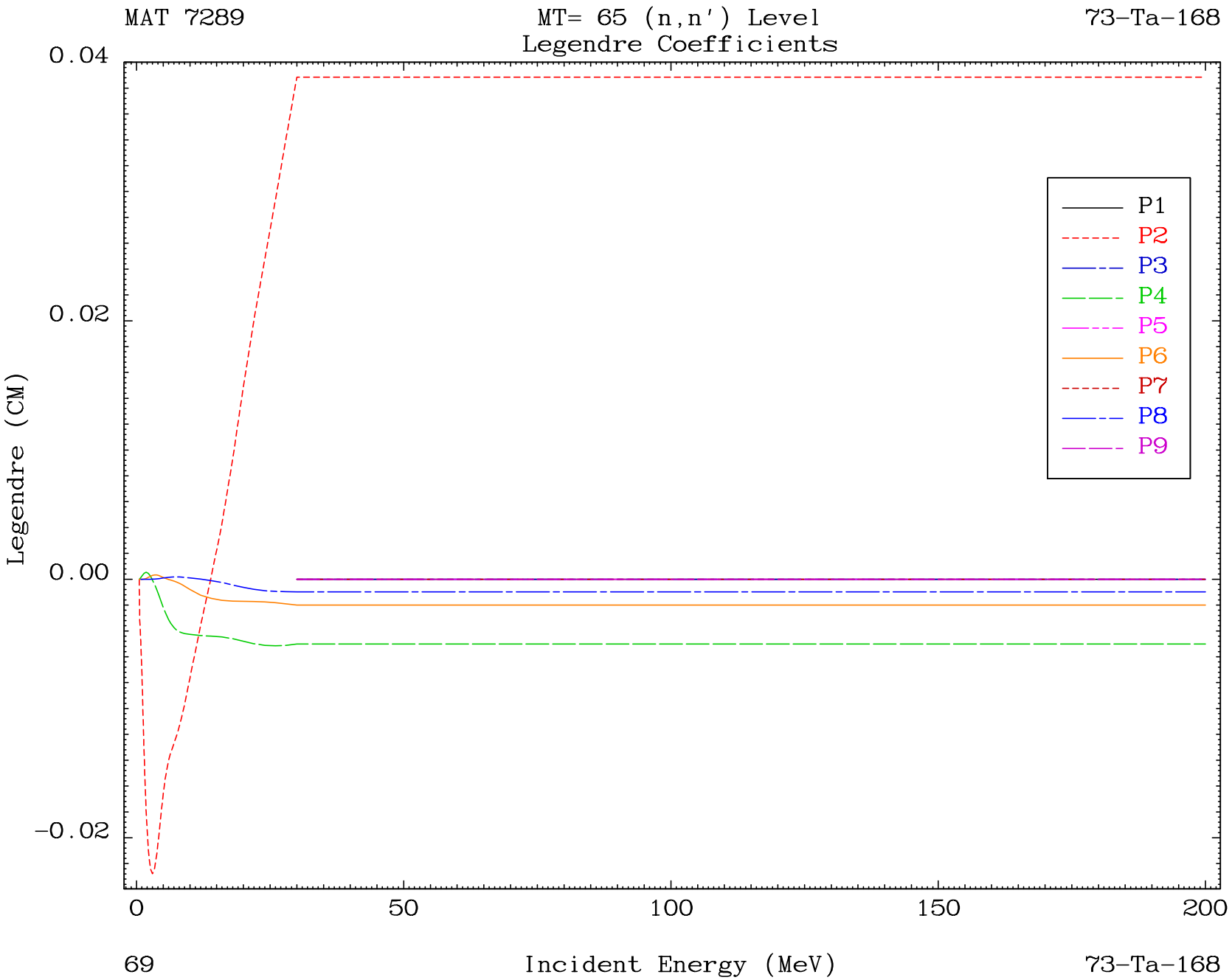

MAT 7289
MT= 63 (n,n') Level
Legendre Coefficients
73-Ta-168
X10-4
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
64
Incident Energy (MeV)
73-Ta-168

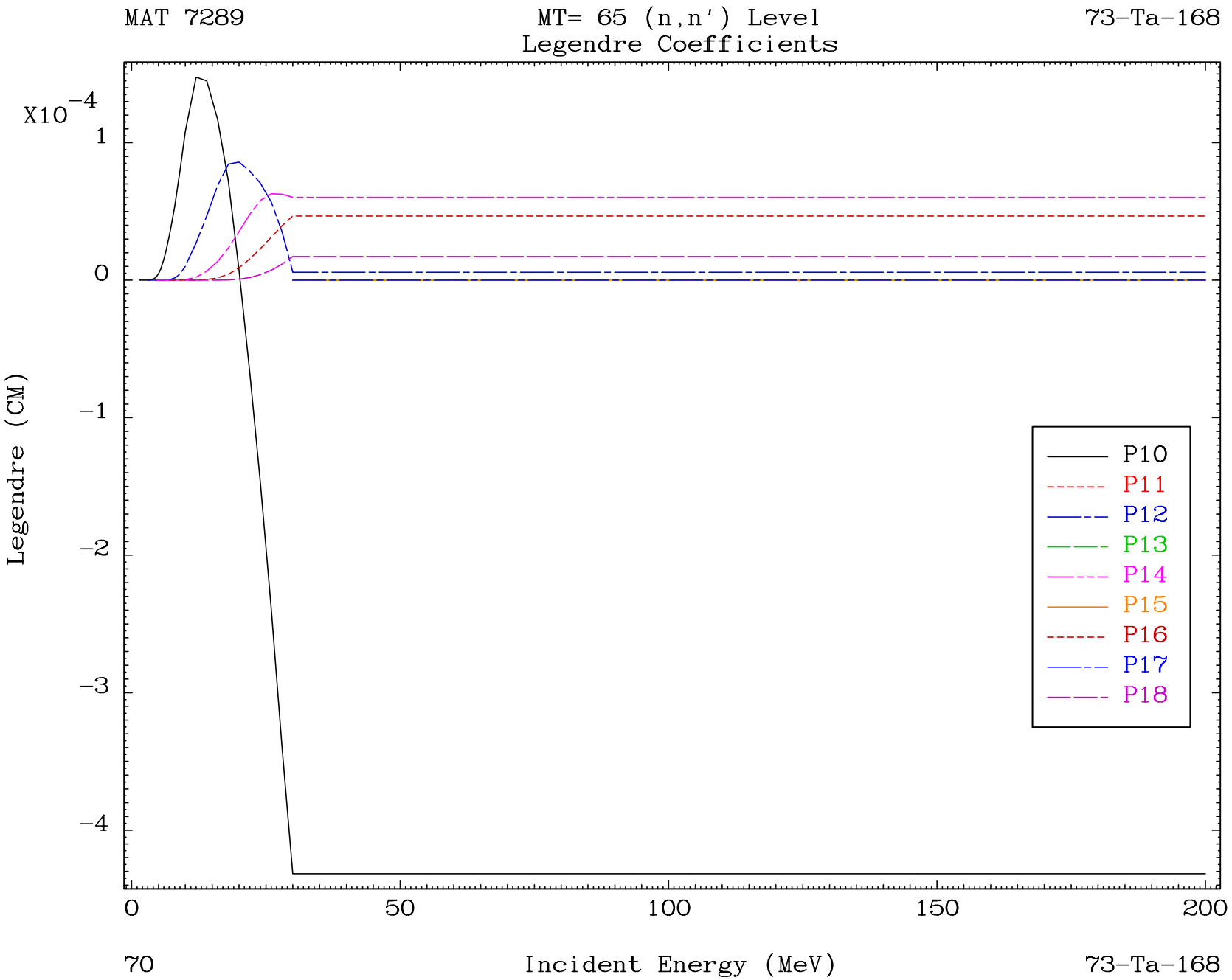

MAT 7289
MT= 63 (n,n') Level
Legendre Coefficients
73-Ta-168
X10+-2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
65
Incident Energy (MeV)
73-Ta-168

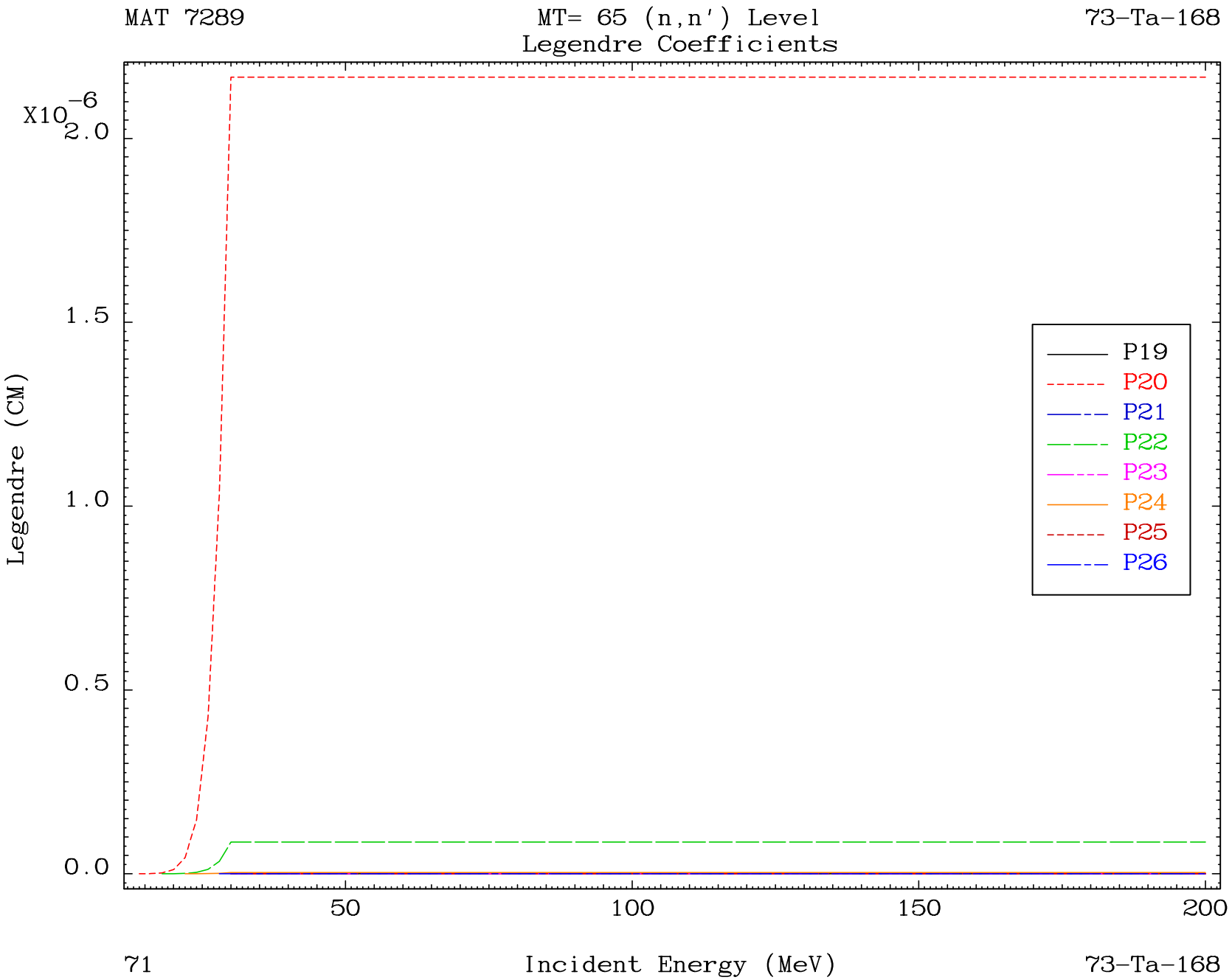

MAT 7289
MT= 64 (n,n') Level
Legendre Coefficients
73-Ta-168
0.12
0.08
0.04
0.00
-0.04
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
66
Incident Energy (MeV)
73-Ta-168

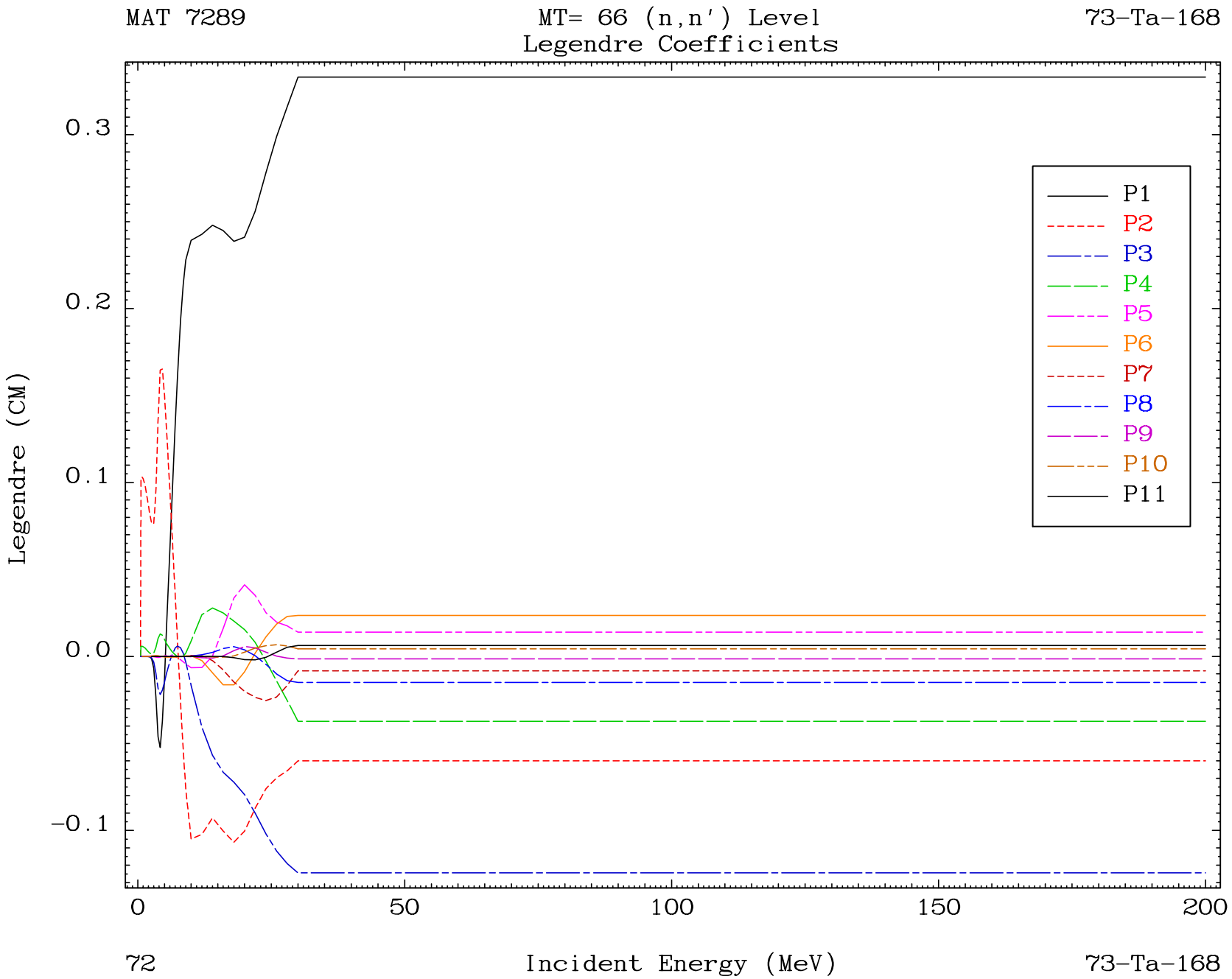

MAT 7289
MT= 64 (n,n') Level
Legendre Coefficients
73-Ta-168
0.000
-0.001
-0.002
-0.003
-0.004
Legendre (CM)
0
50
100
150
200
67
Incident Energy (MeV)
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18

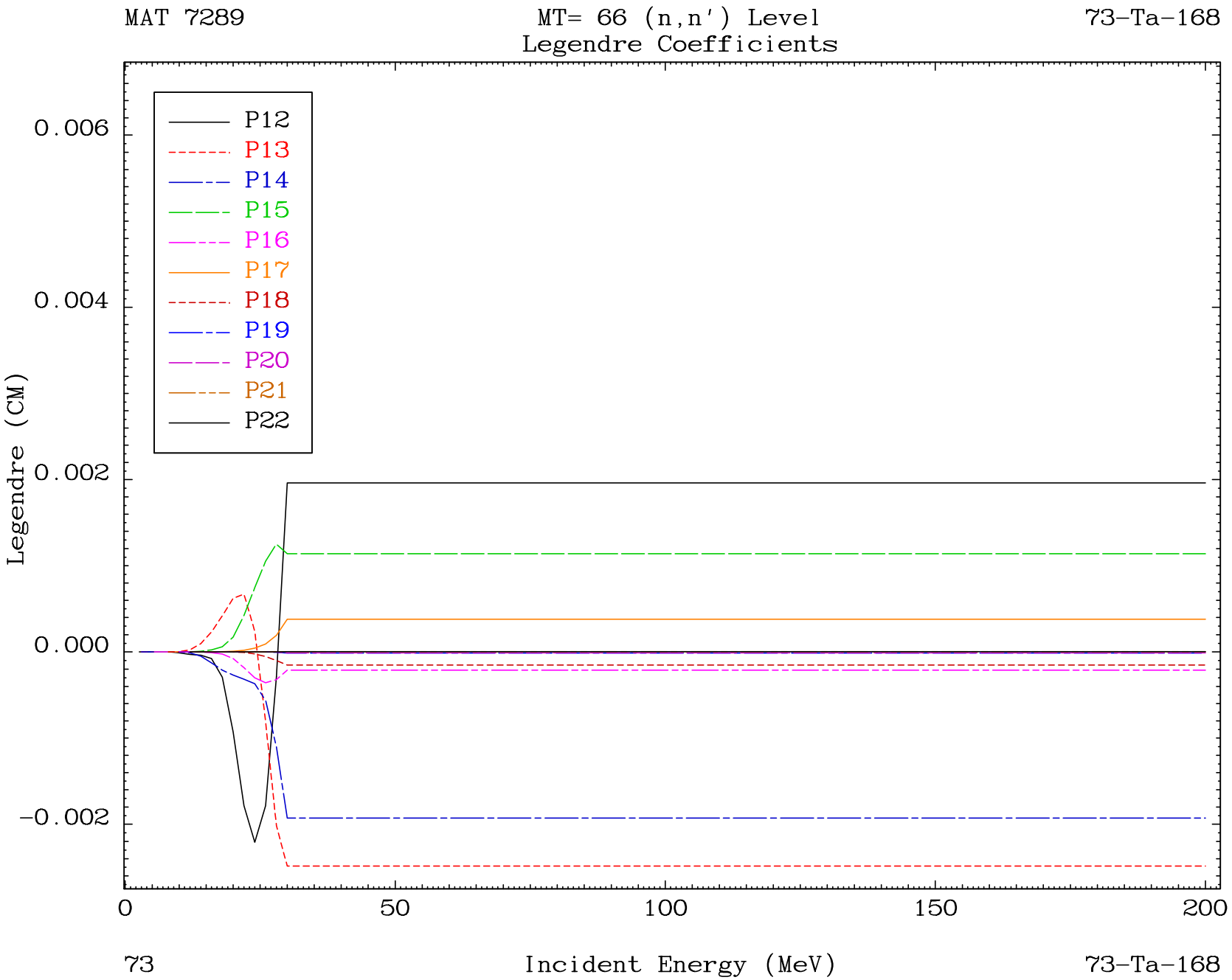

MAT 7289
MT= 64 (n,n') Level
Legendre Coefficients
73-Ta-168
X10 -5
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
50
100
150
200
68
Incident Energy (MeV)
73-Ta-168

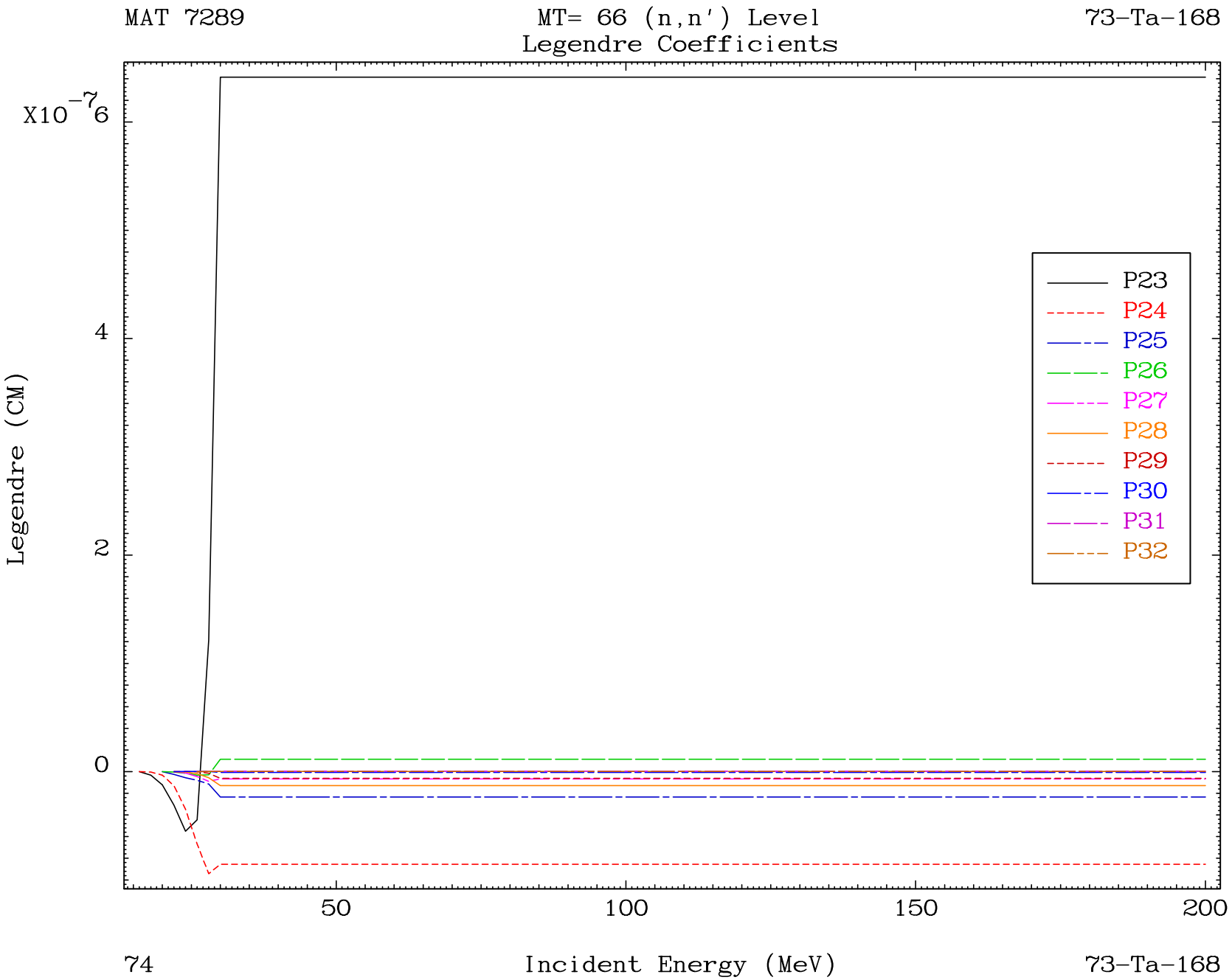

MAT 7289
MT= 65 (n,n') Level
Legendre Coefficients
73-Ta-168
0.04
0.02
0.00
-0.02
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
69
Incident Energy (MeV)
73-Ta-168

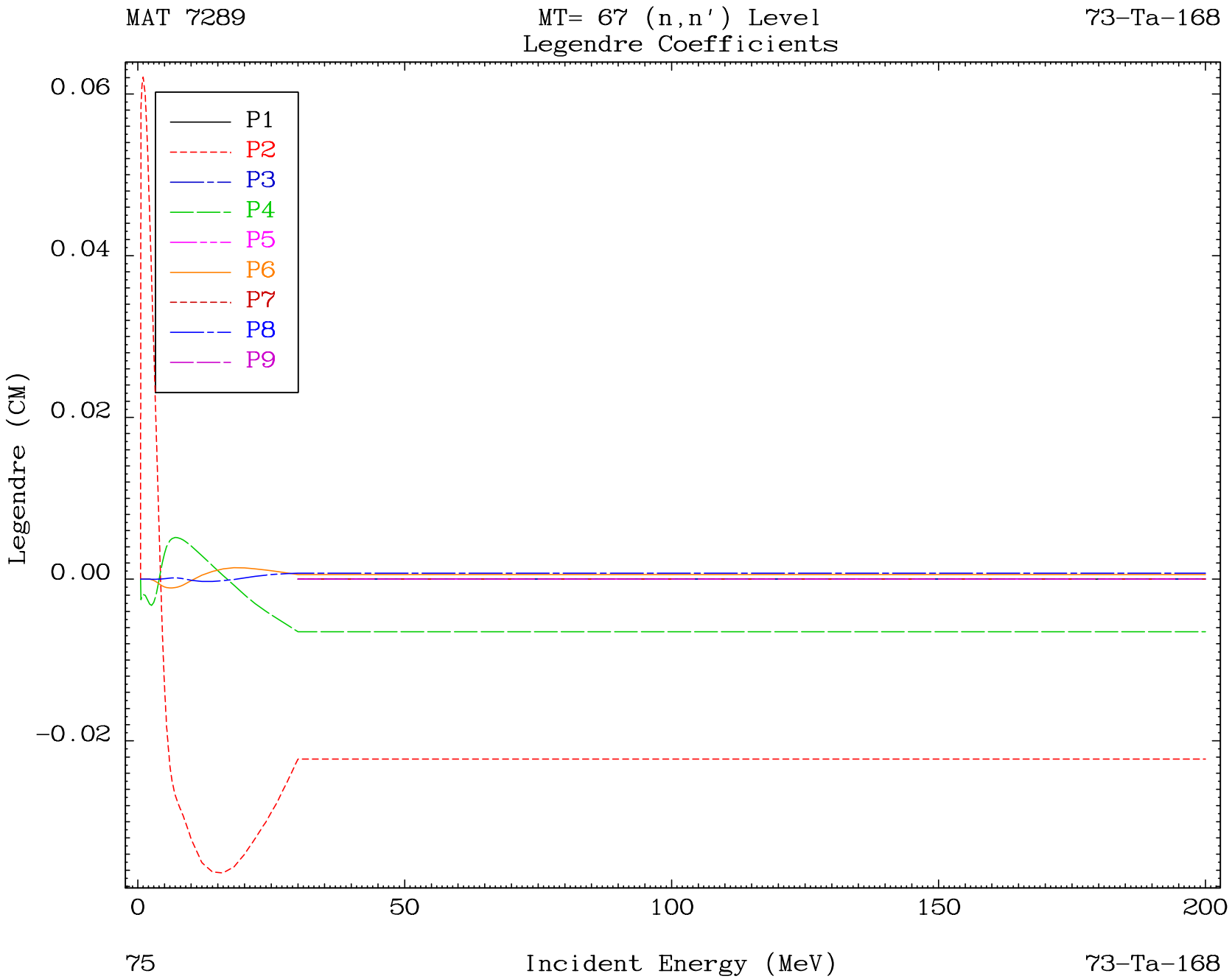

MAT 7289
MT= 65 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-4
1
0
-1
-2
-3
-4
Legendre (CM)
0
50
100
150
200
70
Incident Energy (MeV)
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18

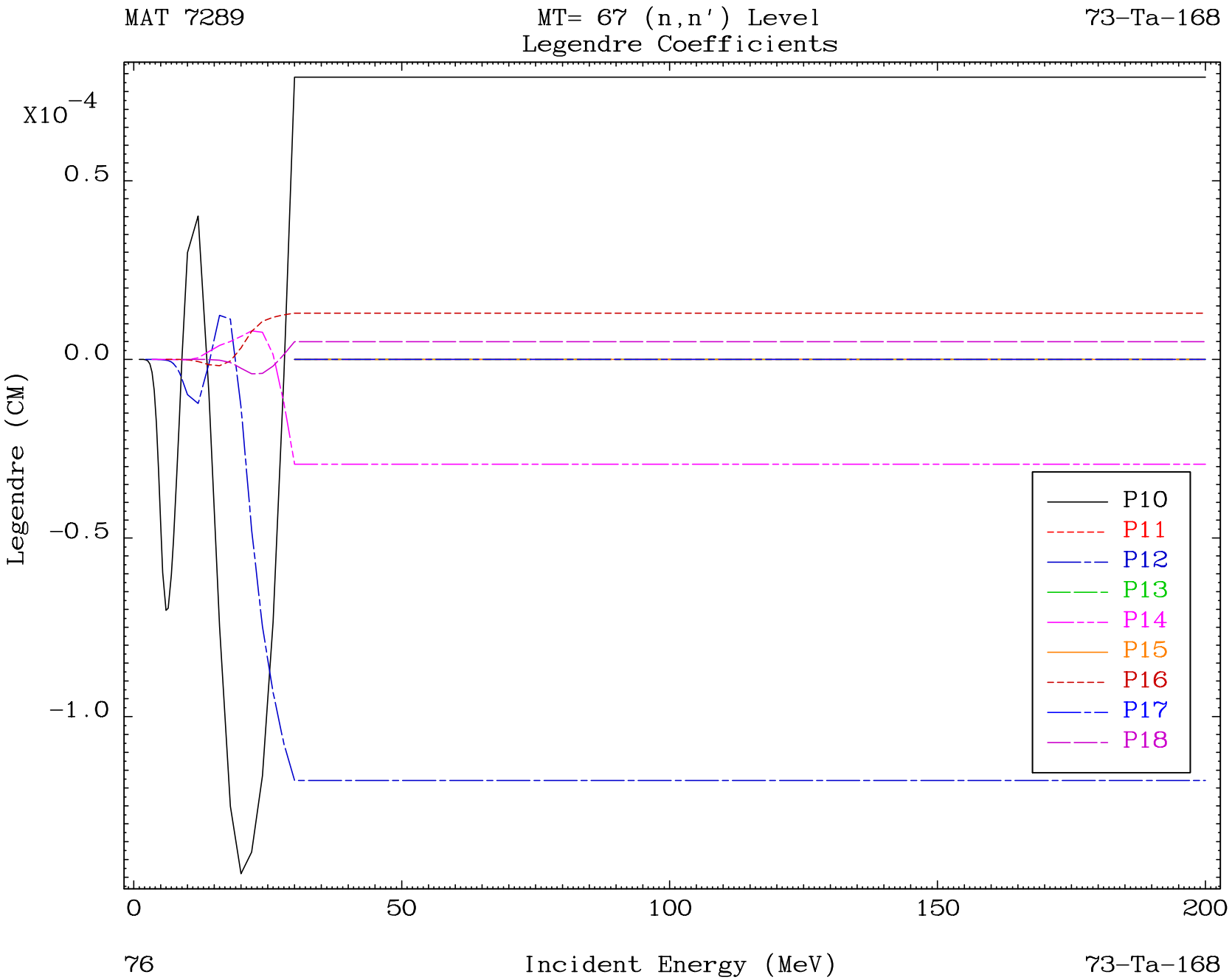

MAT 7289
MT= 65 (n,n') Level
Legendre Coefficients
73-Ta-168
X10 −6
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
71
Incident Energy (MeV)
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26

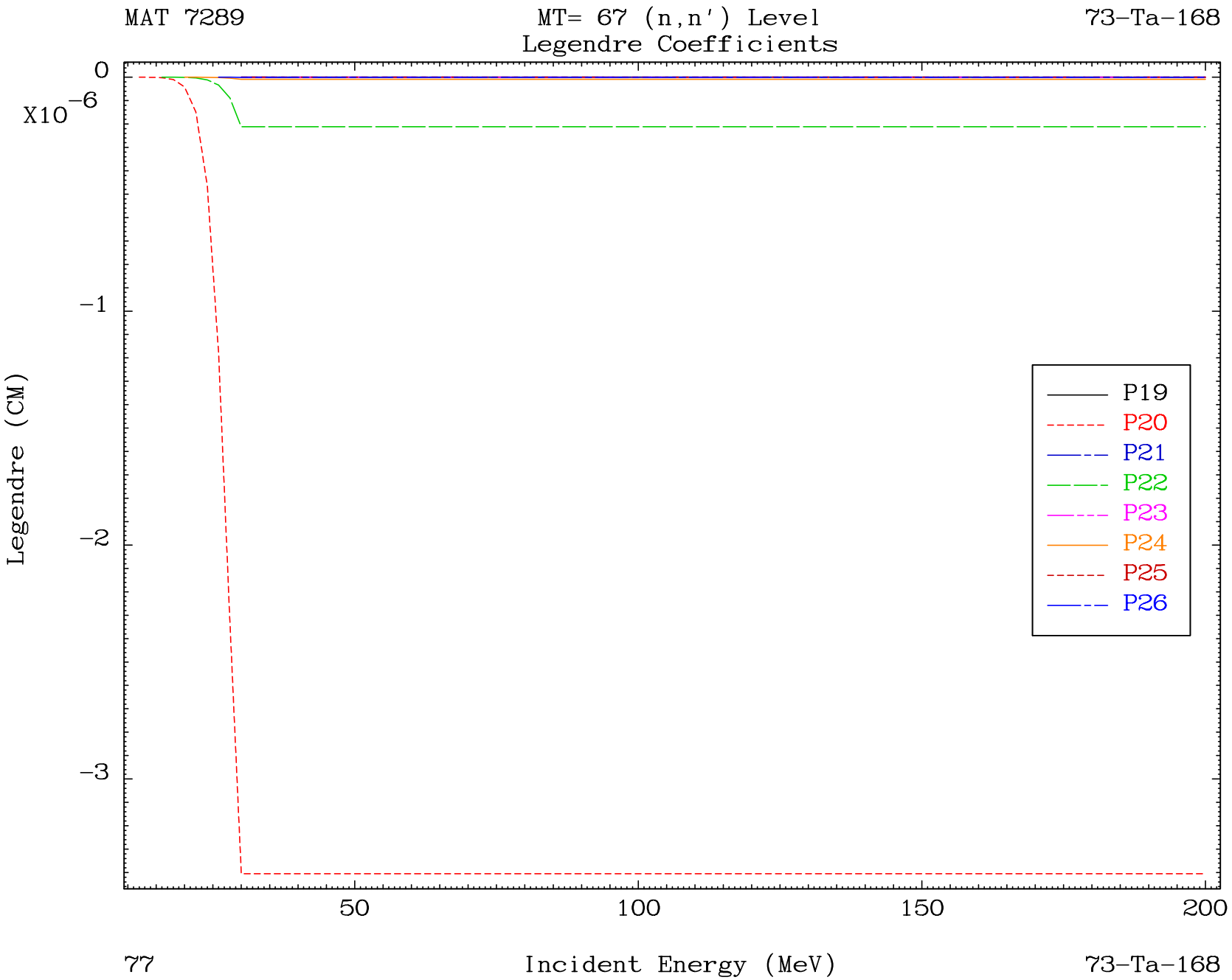

MAT 7289
MT= 66 (n,n') Level
Legendre Coefficients
73-Ta-168
Legendre (CM)
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
72
Incident Energy (MeV)
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11

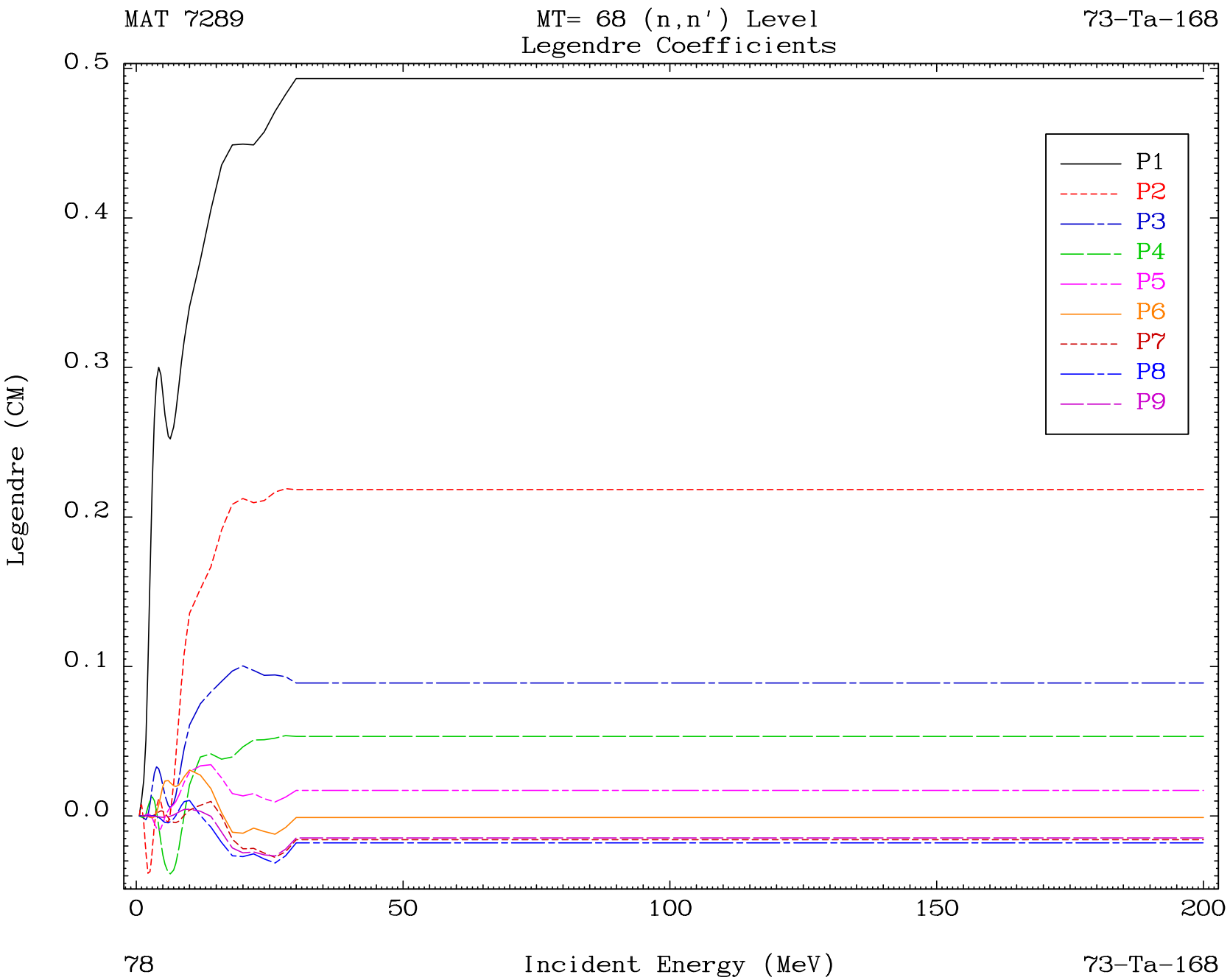

MAT 7289
MT= 66 (n,n') Level
Legendre Coefficients
73-Ta-168
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
0.006
0.004
0.002
0.000
-0.002
Legendre (CM)
0
50
100
150
200
73
Incident Energy (MeV)
73-Ta-168

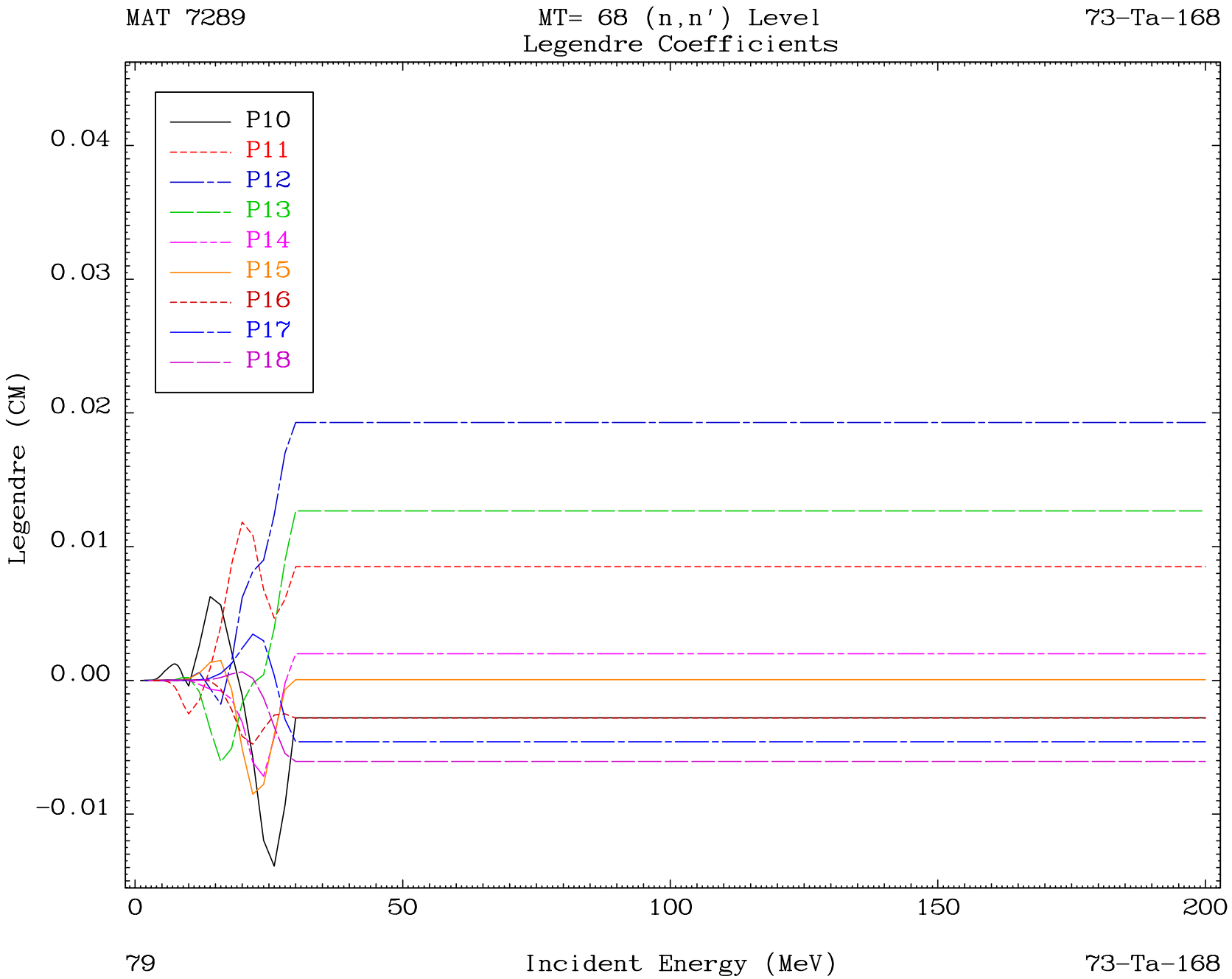

MAT 7289
MT= 66 (n,n') Level
Legendre Coefficients
73-Ta-168
X10 -7
6
4
2
0
Legendre (CM)
50
100
150
200
74
Incident Energy (MeV)
73-Ta-168
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32

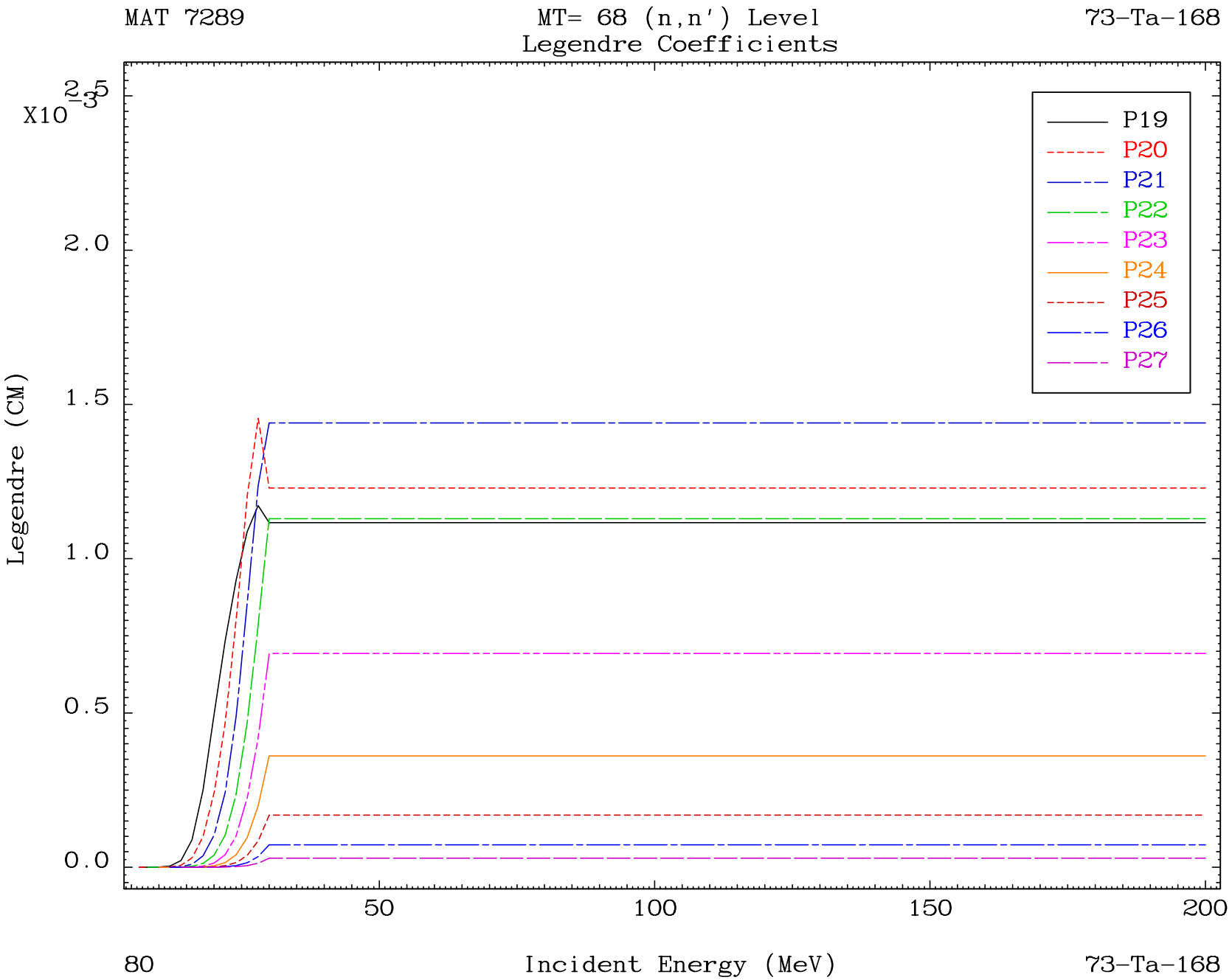

MAT 7289
MT= 67 (n,n') Level
Legendre Coefficients
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
75
Incident Energy (MeV)
73-Ta-168

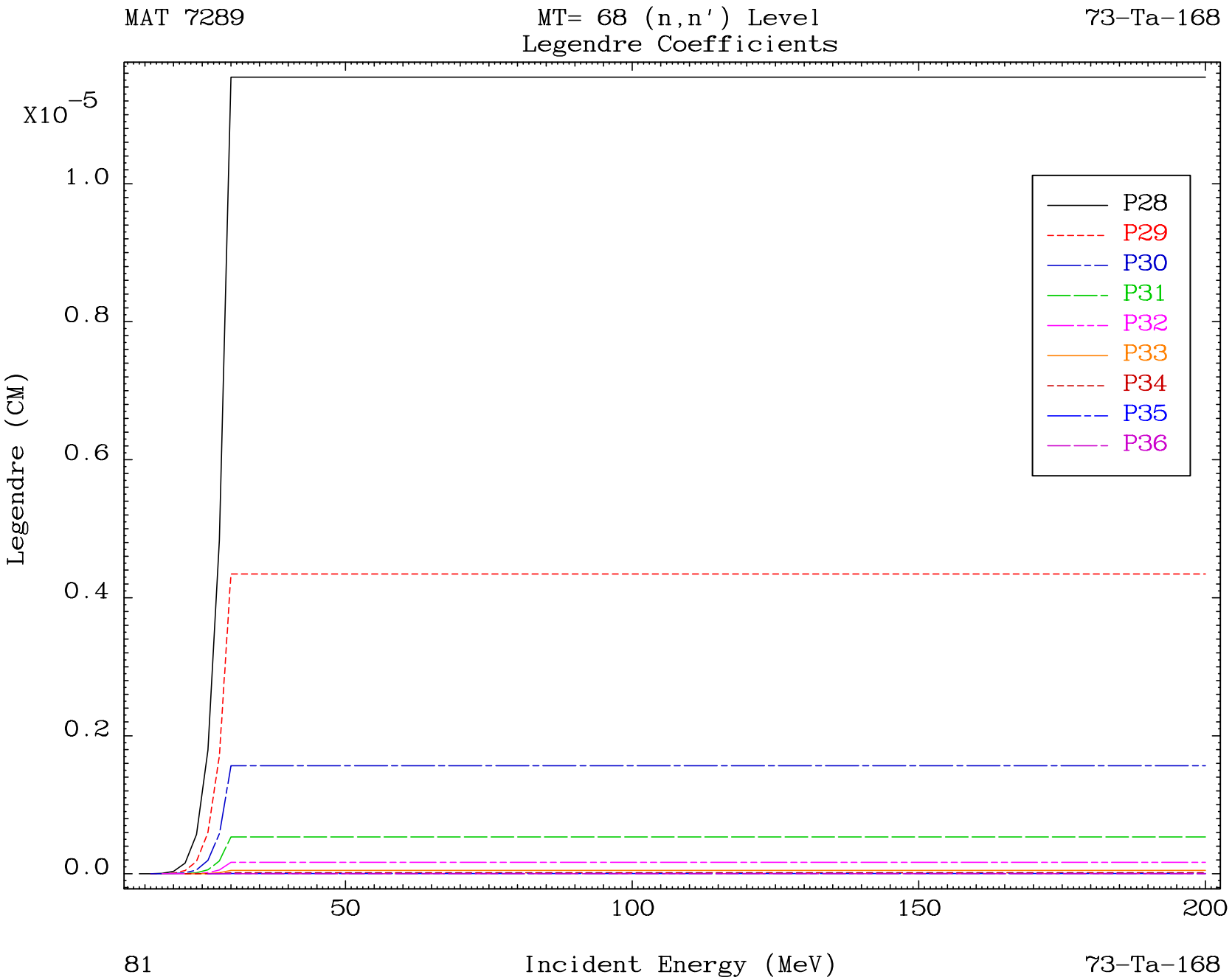

MAT 7289
MT= 67 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-4
0.5
0.0
-0.5
-1.0
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
76
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18

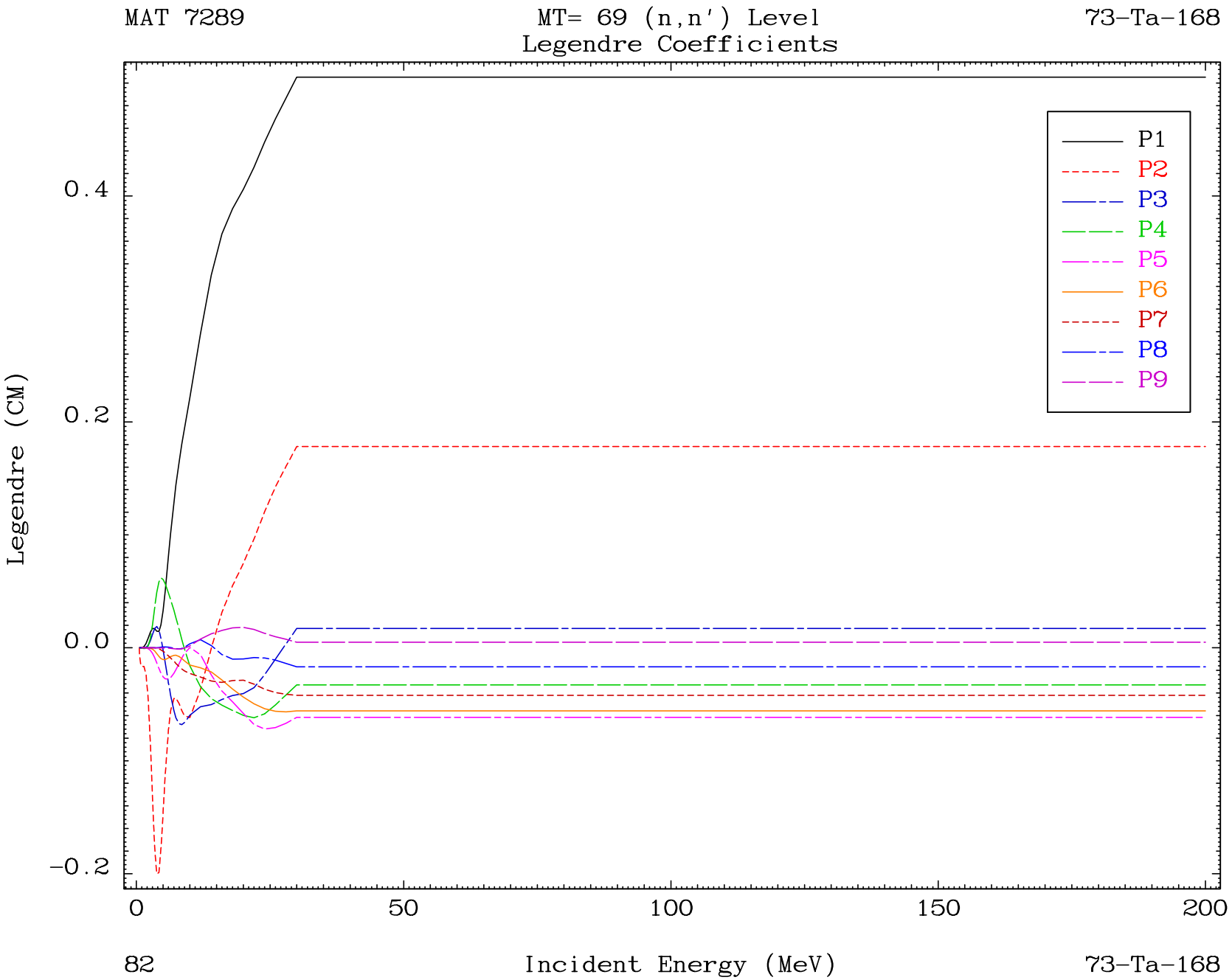

MAT 7289
MT= 67 (n,n') Level
Legendre Coefficients
73-Ta-168
0
X10^-6
-1
-2
-3
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
50
100
150
200
77
Incident Energy (MeV)
73-Ta-168

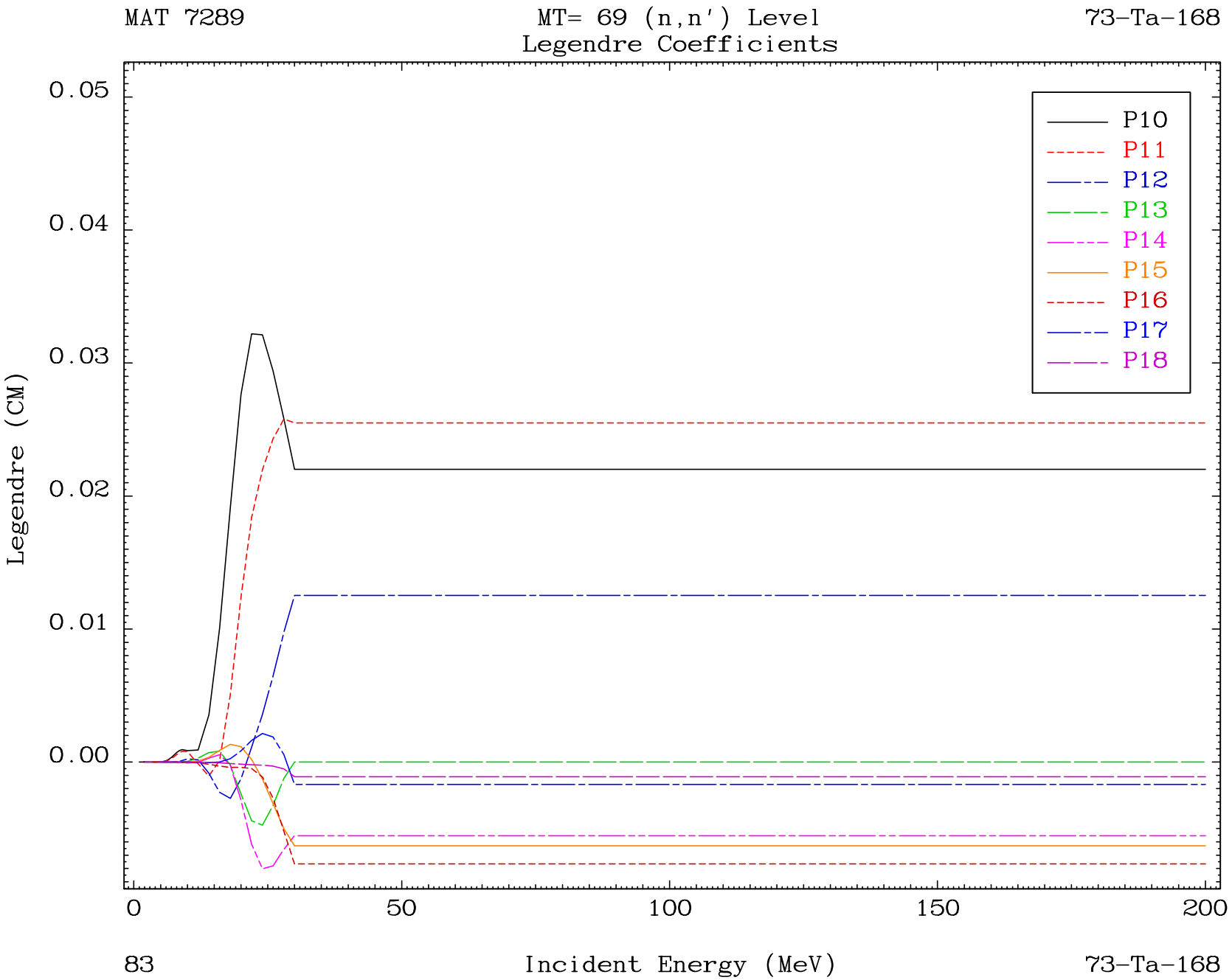

MAT 7289
MT= 68 (n,n') Level
Legendre Coefficients
73-Ta-168
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
78
Incident Energy (MeV)
73-Ta-168

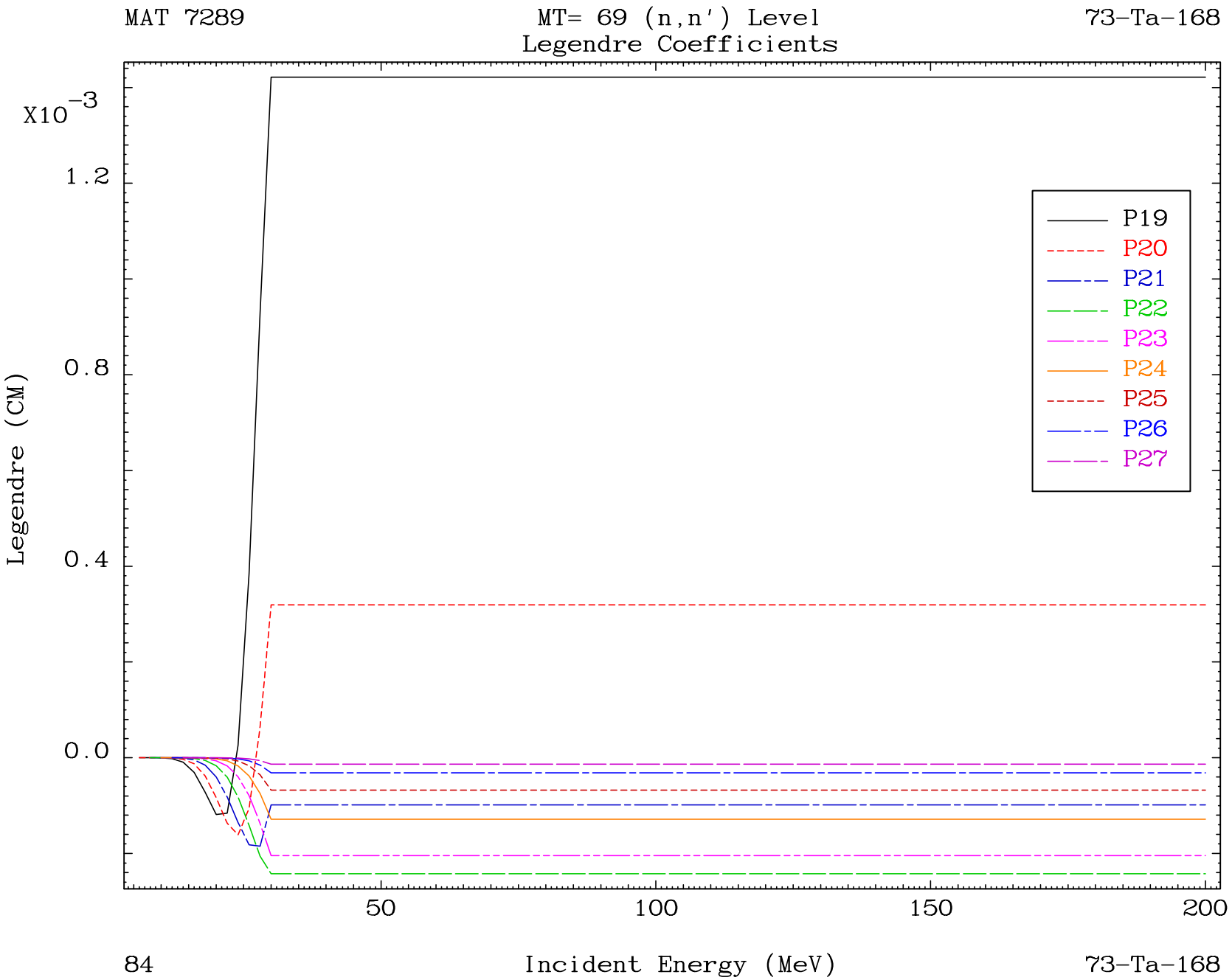

MAT 7289
MT= 68 (n,n') Level
Legendre Coefficients
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.03
0.02
0.01
0.00
-0.01
Legendre (CM)
0
50
100
150
200
79
Incident Energy (MeV)
73-Ta-168

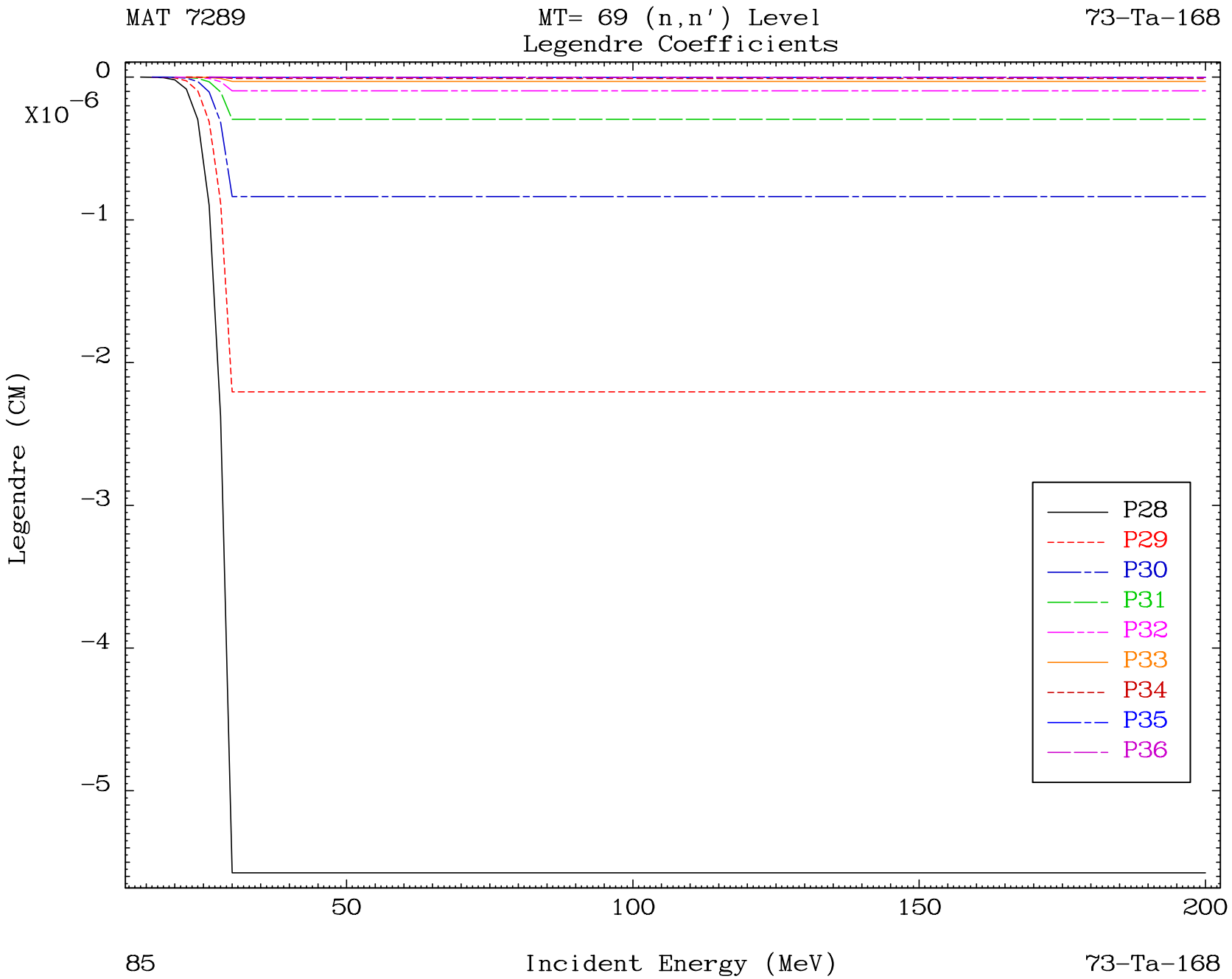

MAT 7289
MT= 68 (n,n') Level
Legendre Coefficients
73-Ta-168
X10-3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
80
Incident Energy (MeV)
73-Ta-168

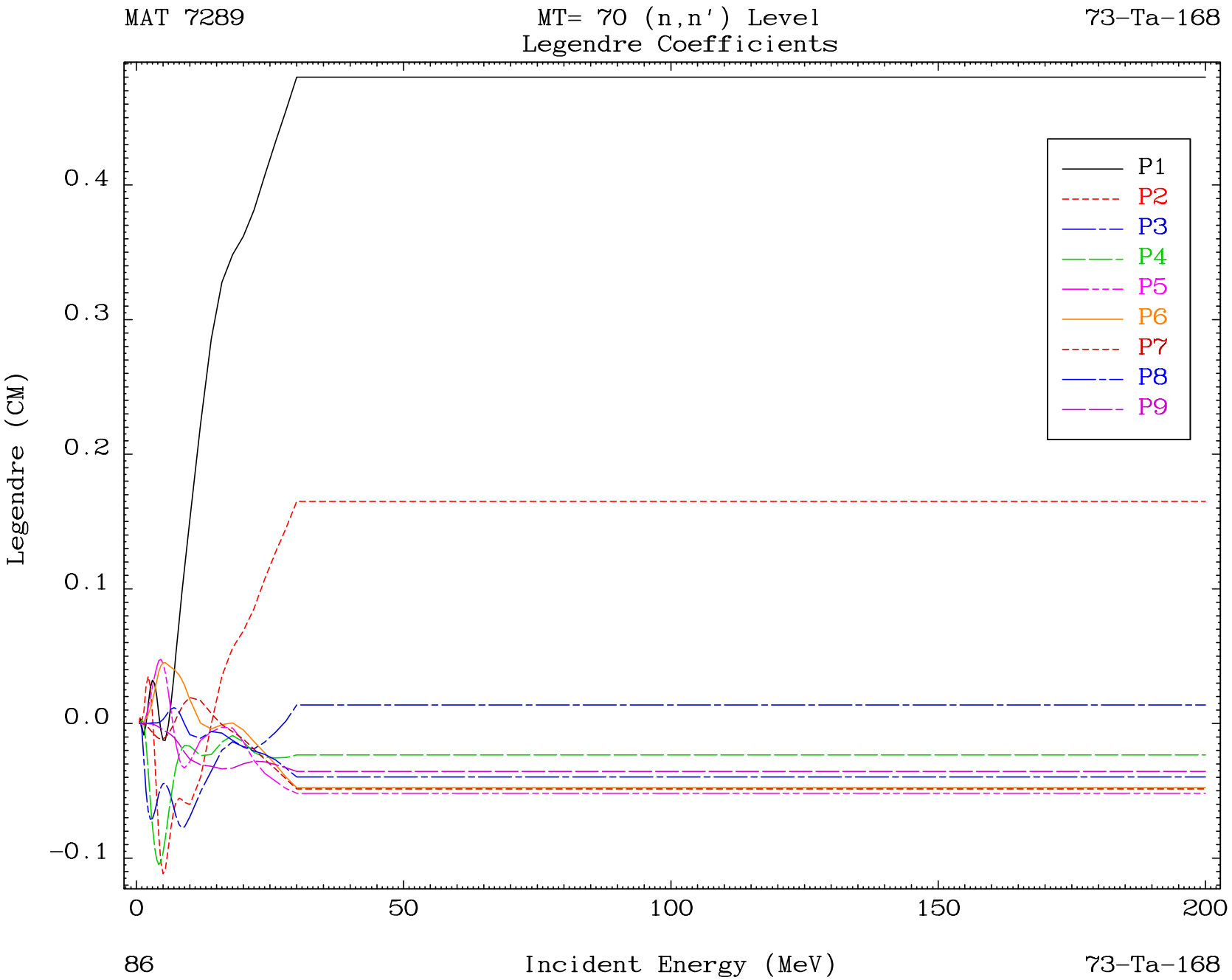

MAT 7289
MT= 68 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-5
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
81
Incident Energy (MeV)
73-Ta-168

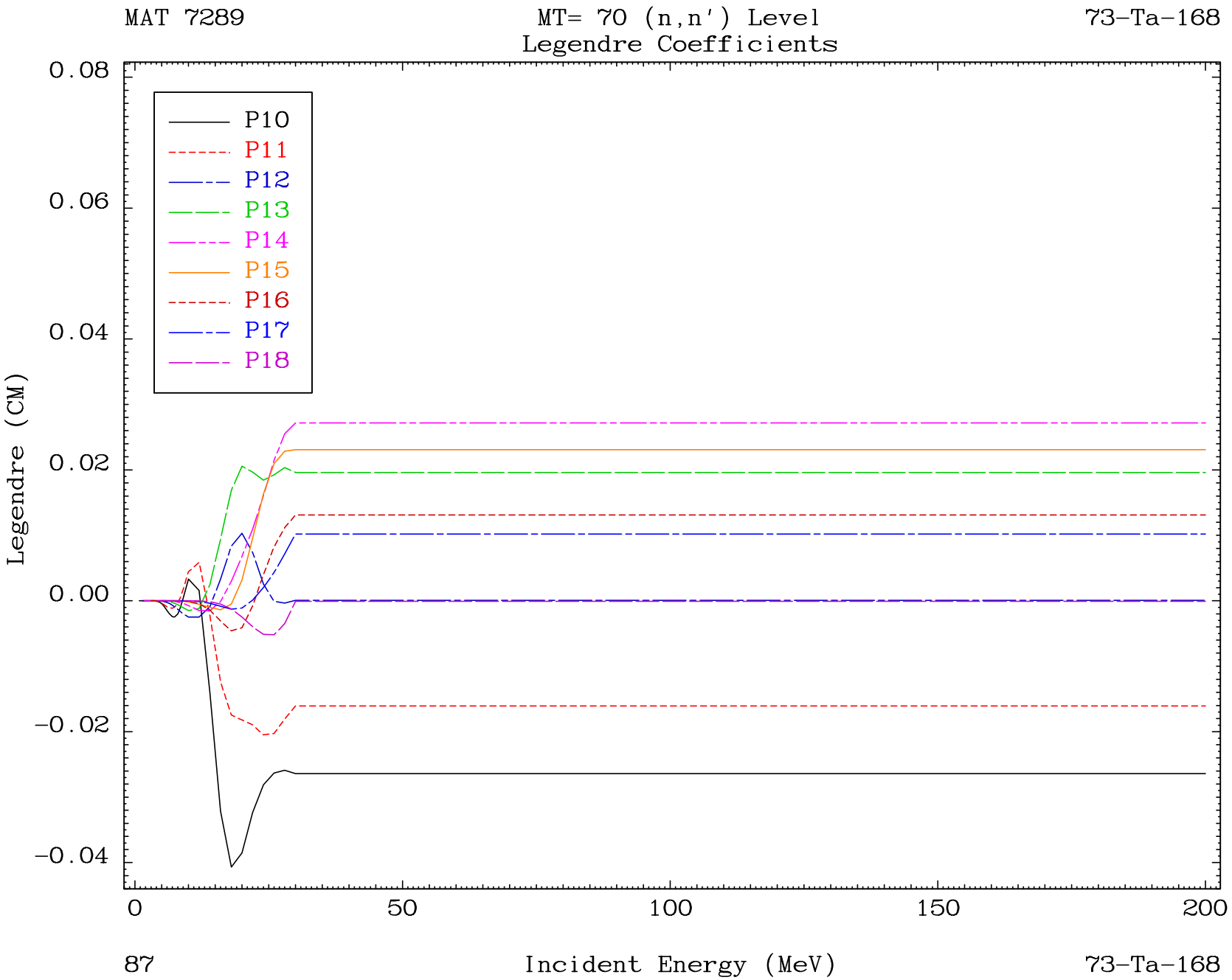

MAT 7289
MT= 69 (n,n') Level
Legendre Coefficients
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
0.4
0.2
0.0
-0.2
0
50
100
150
200
82
Incident Energy (MeV)
73-Ta-168

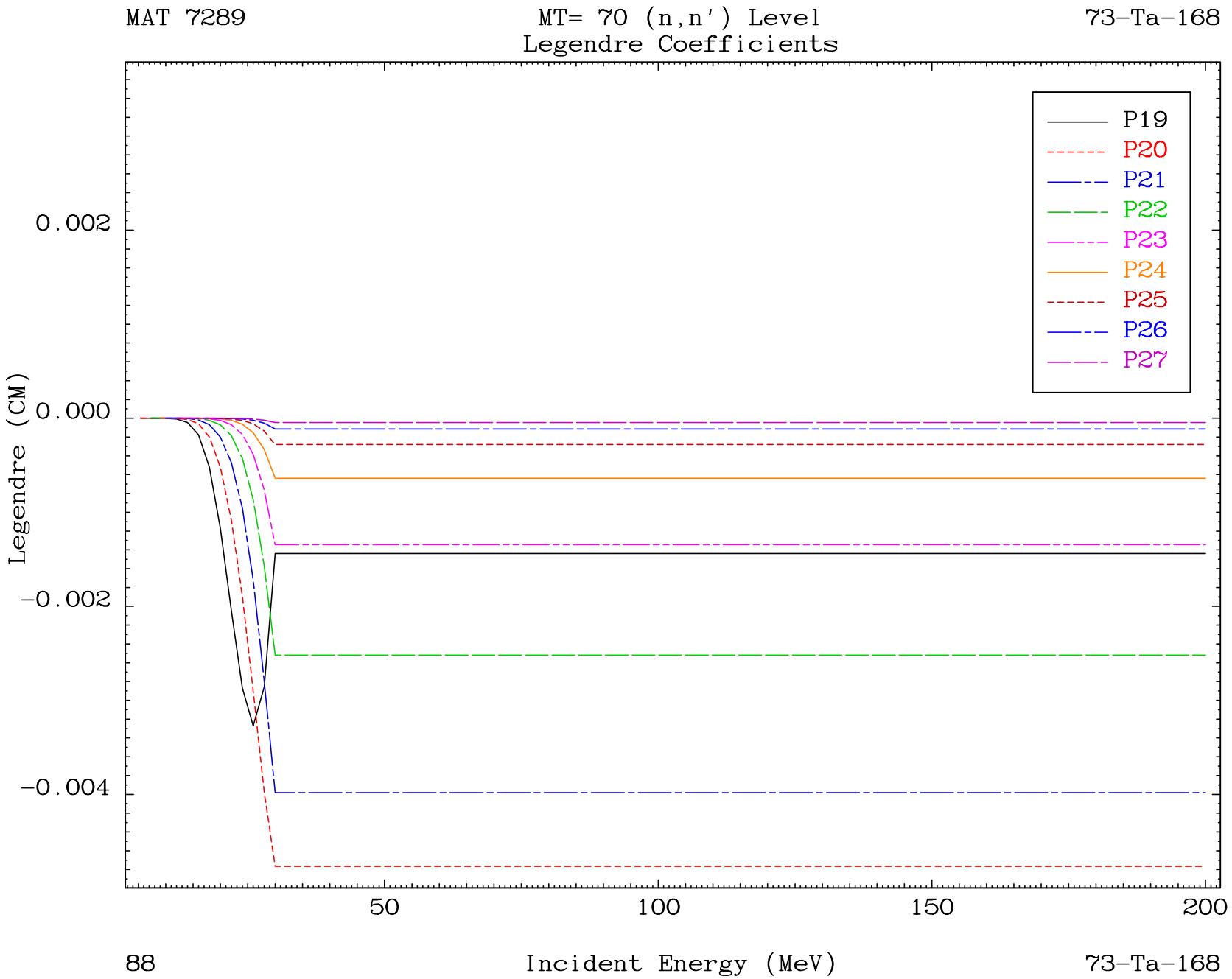

MAT 7289
MT= 69 (n,n') Level
Legendre Coefficients
73-Ta-168
0.05
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
83
Incident Energy (MeV)
73-Ta-168

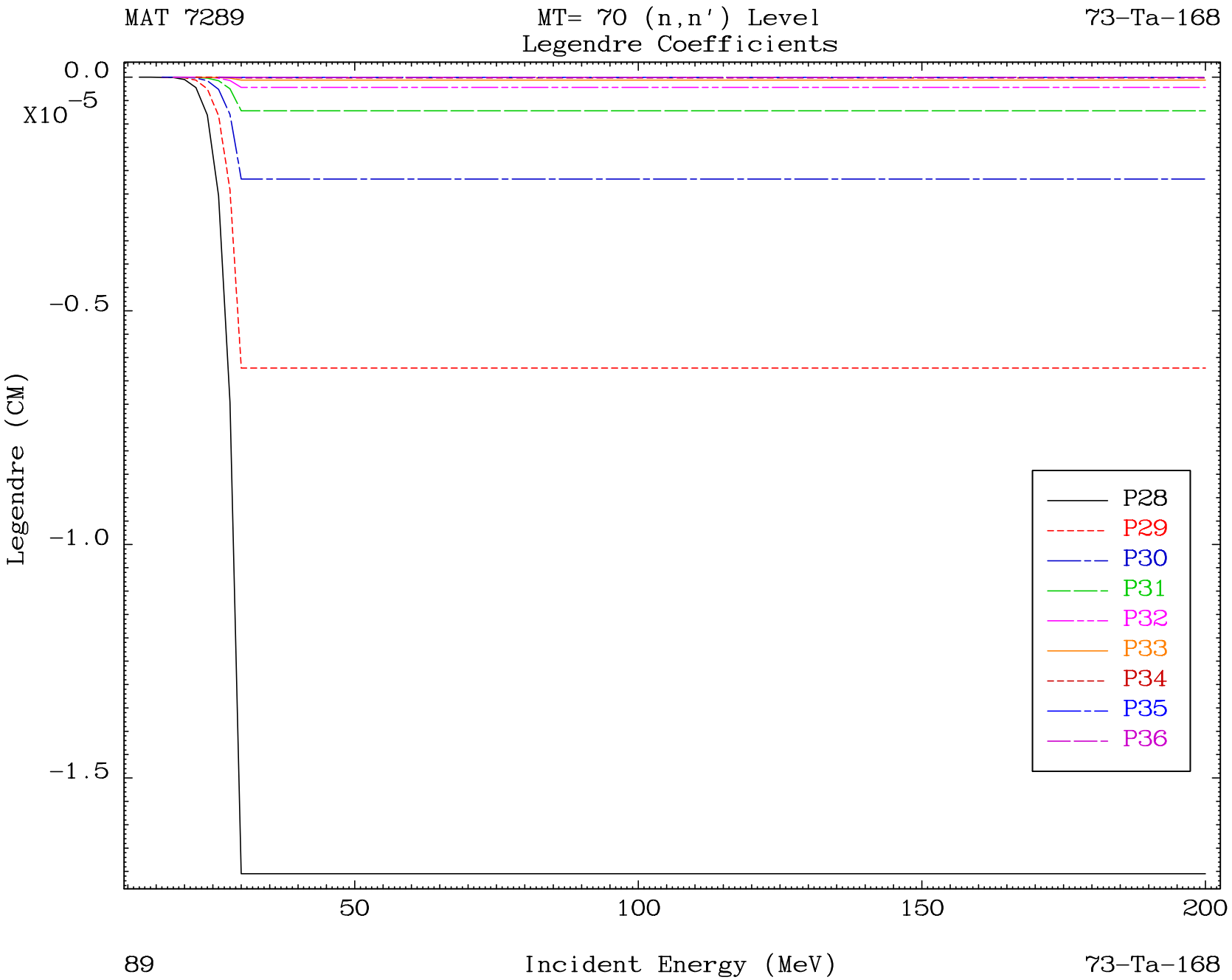

MAT 7289
MT= 69 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-3
1.2
0.8
0.4
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
84
Incident Energy (MeV)
73-Ta-168

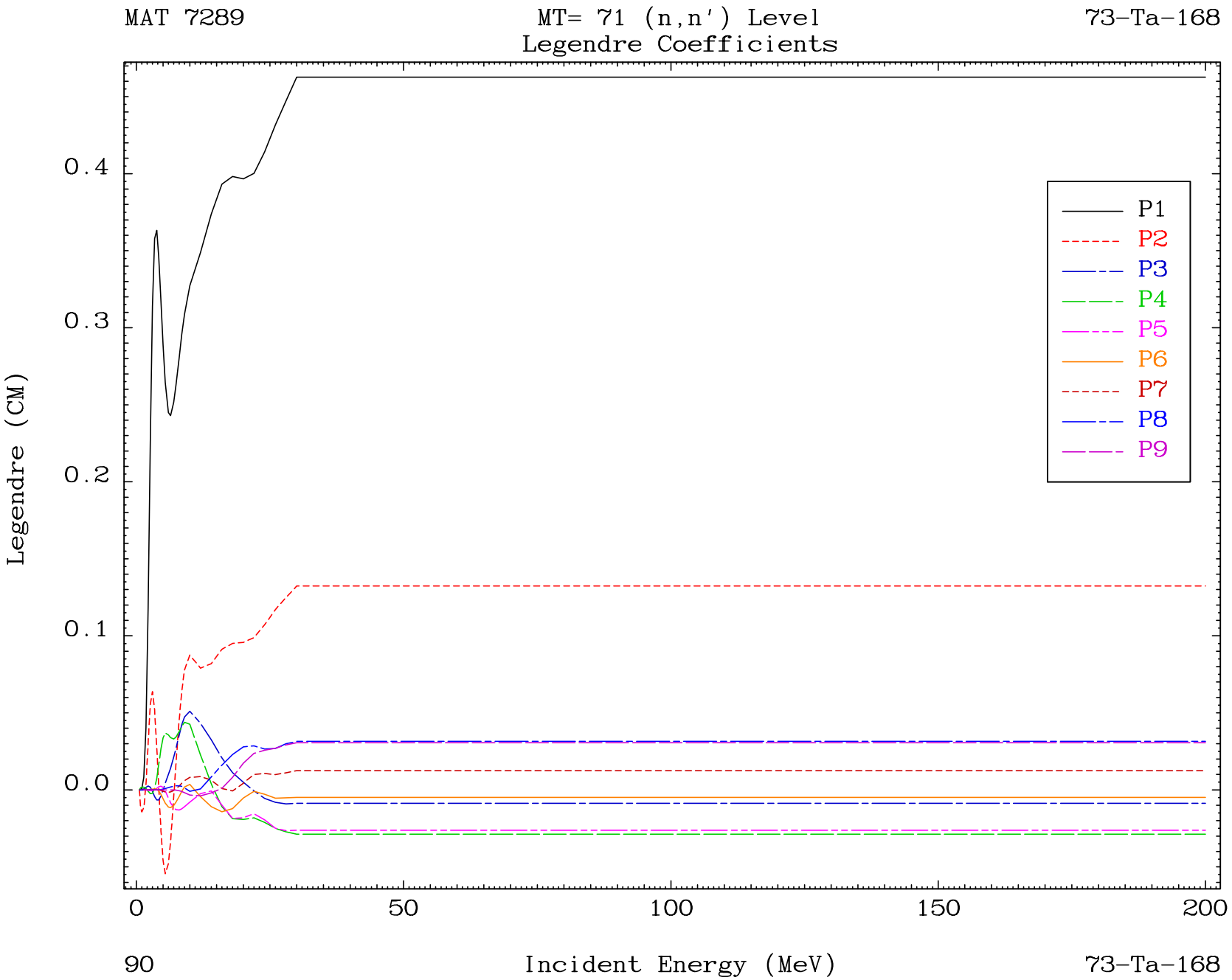

MAT 7289
MT= 69 (n,n') Level
Legendre Coefficients
73-Ta-168
0
X10^-6
-1
-2
-3
-4
-5
Legendre (CM)
50
100
150
200
85
Incident Energy (MeV)
73-Ta-168
P28
P29
P30
P31
P32
P33
P34
P35
P36

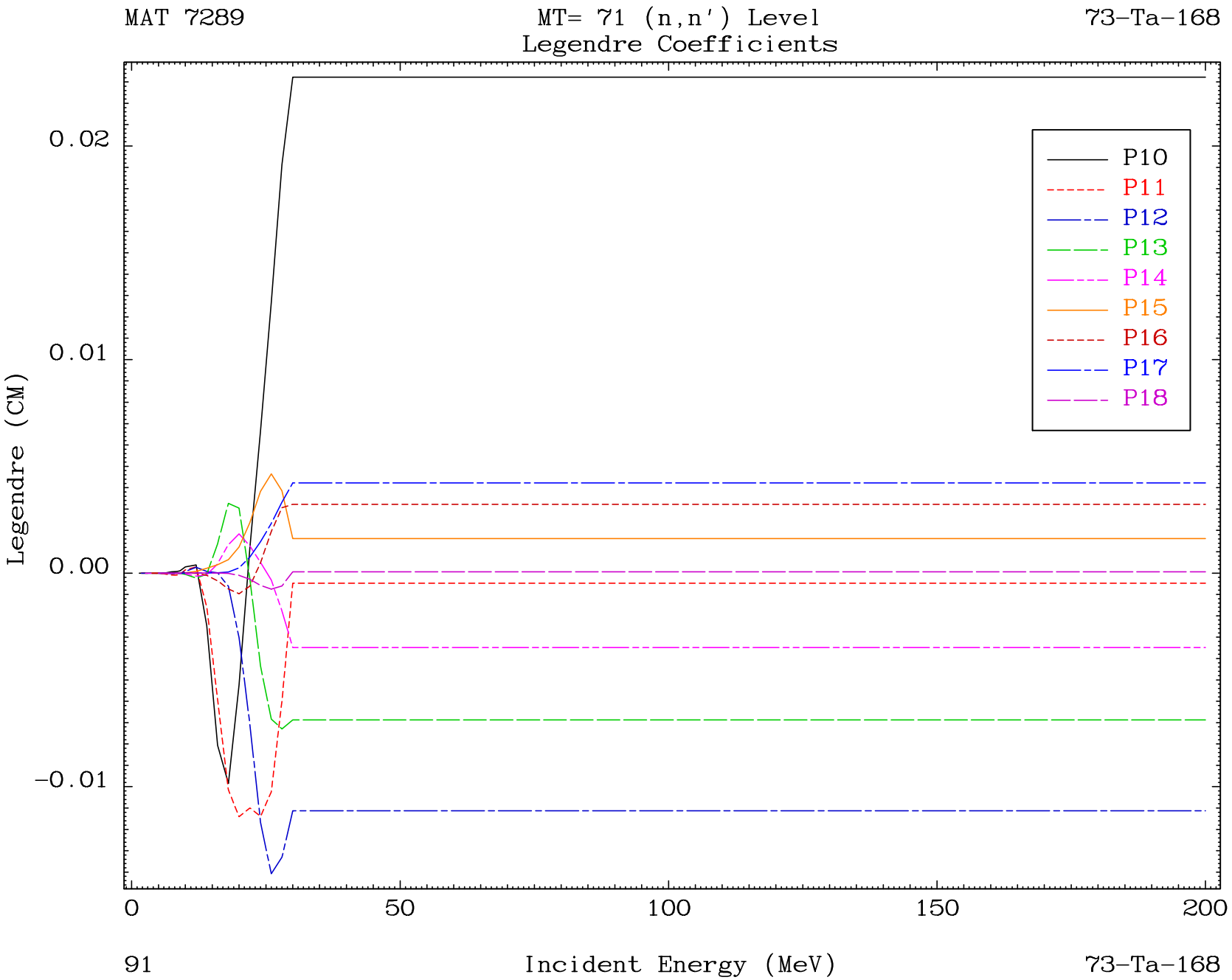

MAT 7289
MT= 70 (n,n') Level
Legendre Coefficients
73-Ta-168
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
-0.1
0
50
100
150
200
Incident Energy (MeV)
86
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9

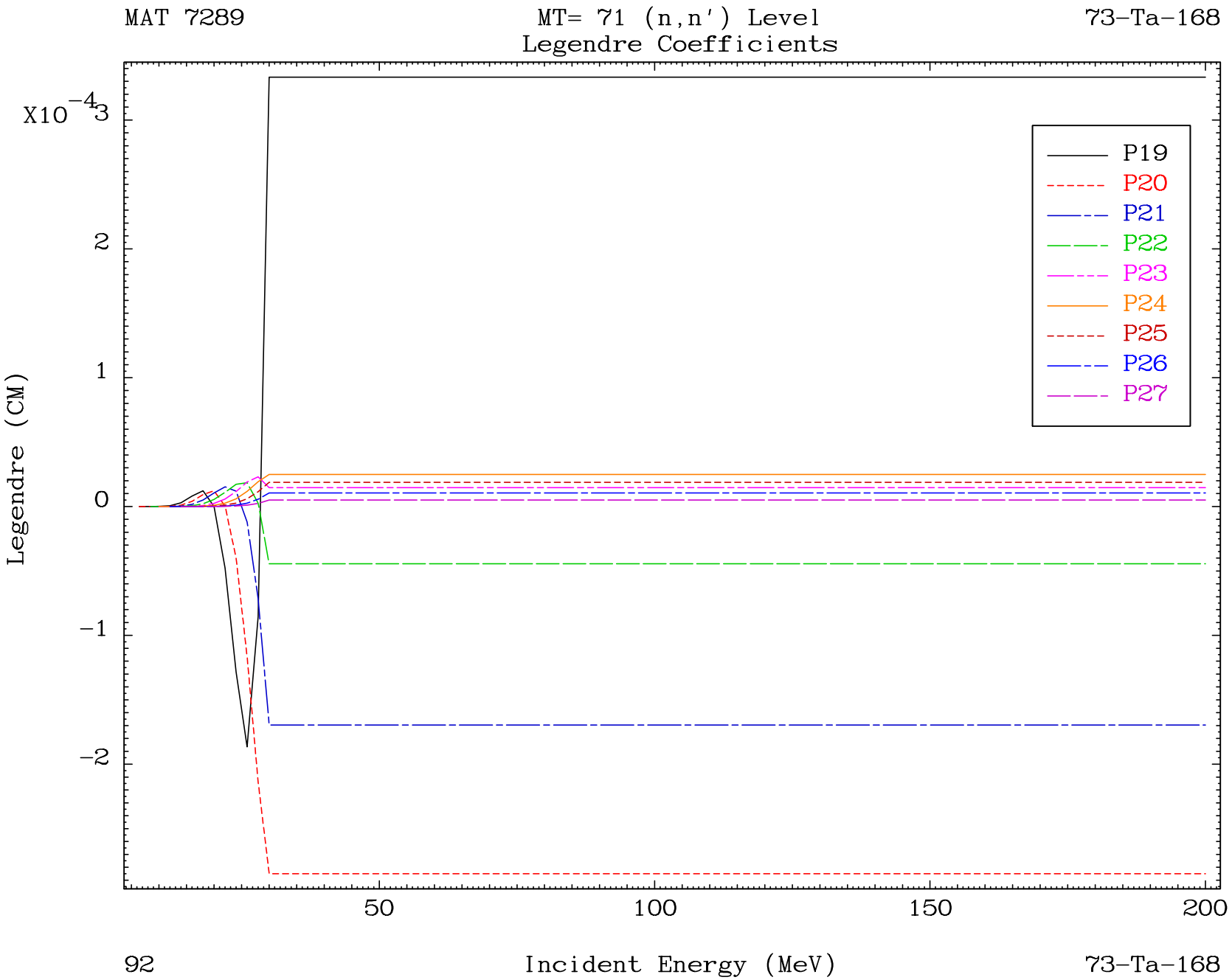

MAT 7289
MT= 70 (n,n') Level
Legendre Coefficients
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.08
0.06
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
87
Incident Energy (MeV)
73-Ta-168

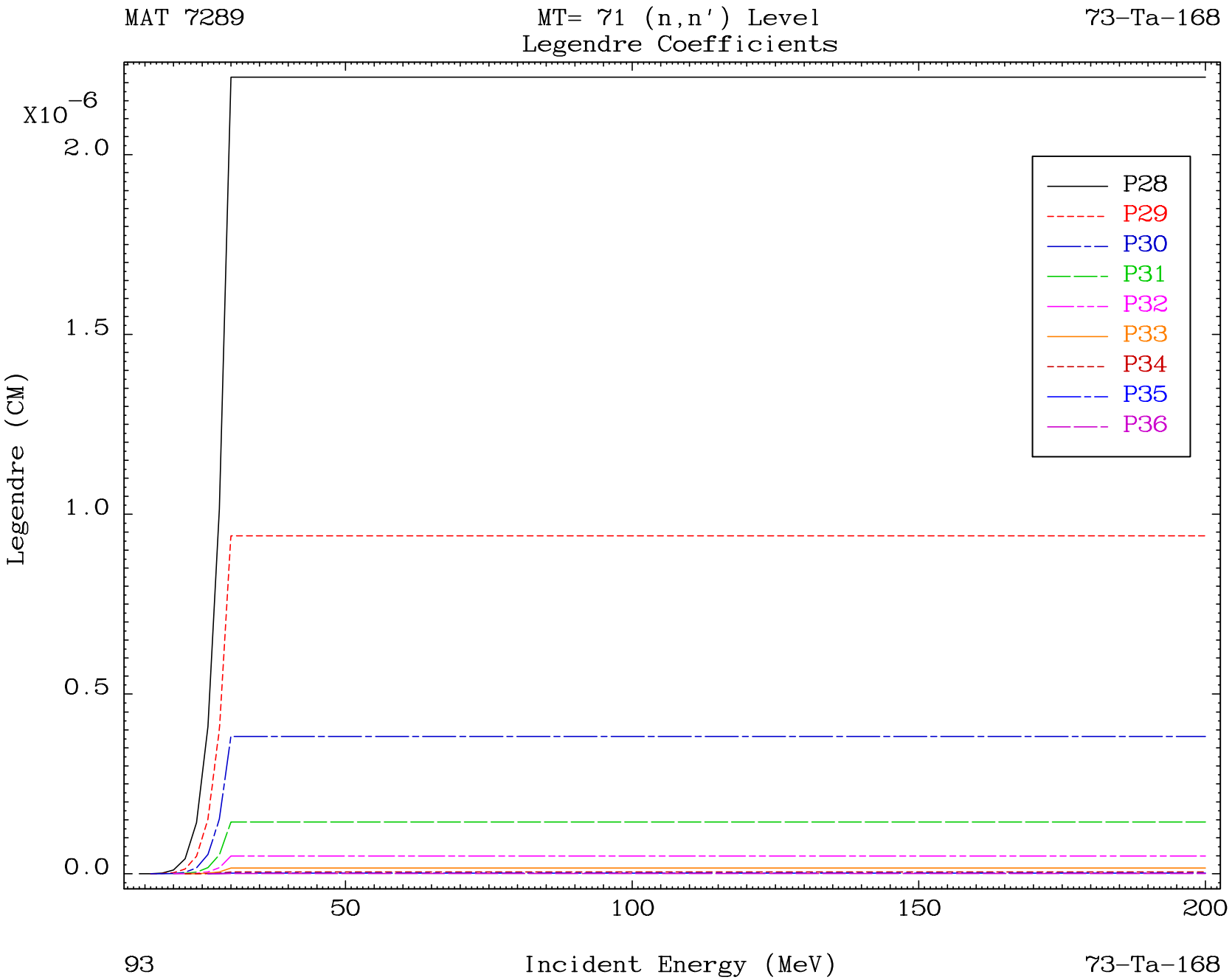

MAT 7289
MT= 70 (n,n') Level
Legendre Coefficients
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.002
0.000
-0.002
-0.004
Legendre (CM)
50
100
150
200
88
Incident Energy (MeV)
73-Ta-168

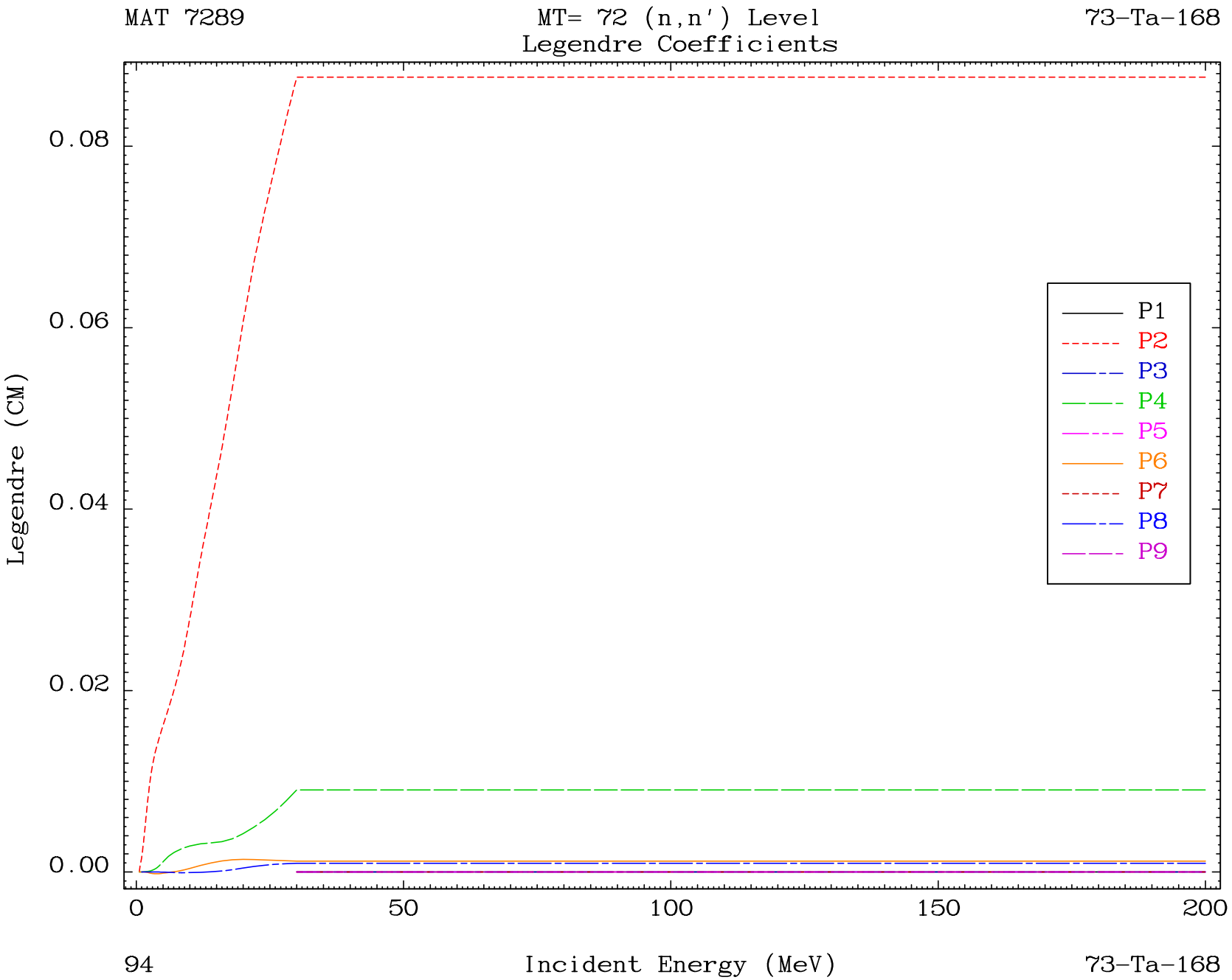

MAT 7289
MT= 70 (n,n') Level
Legendre Coefficients
73-Ta-168
0.0
X10^-5
-0.5
-1.0
-1.5
Legendre (CM)
50
100
150
200
89
Incident Energy (MeV)
73-Ta-168
P28
P29
P30
P31
P32
P33
P34
P35
P36

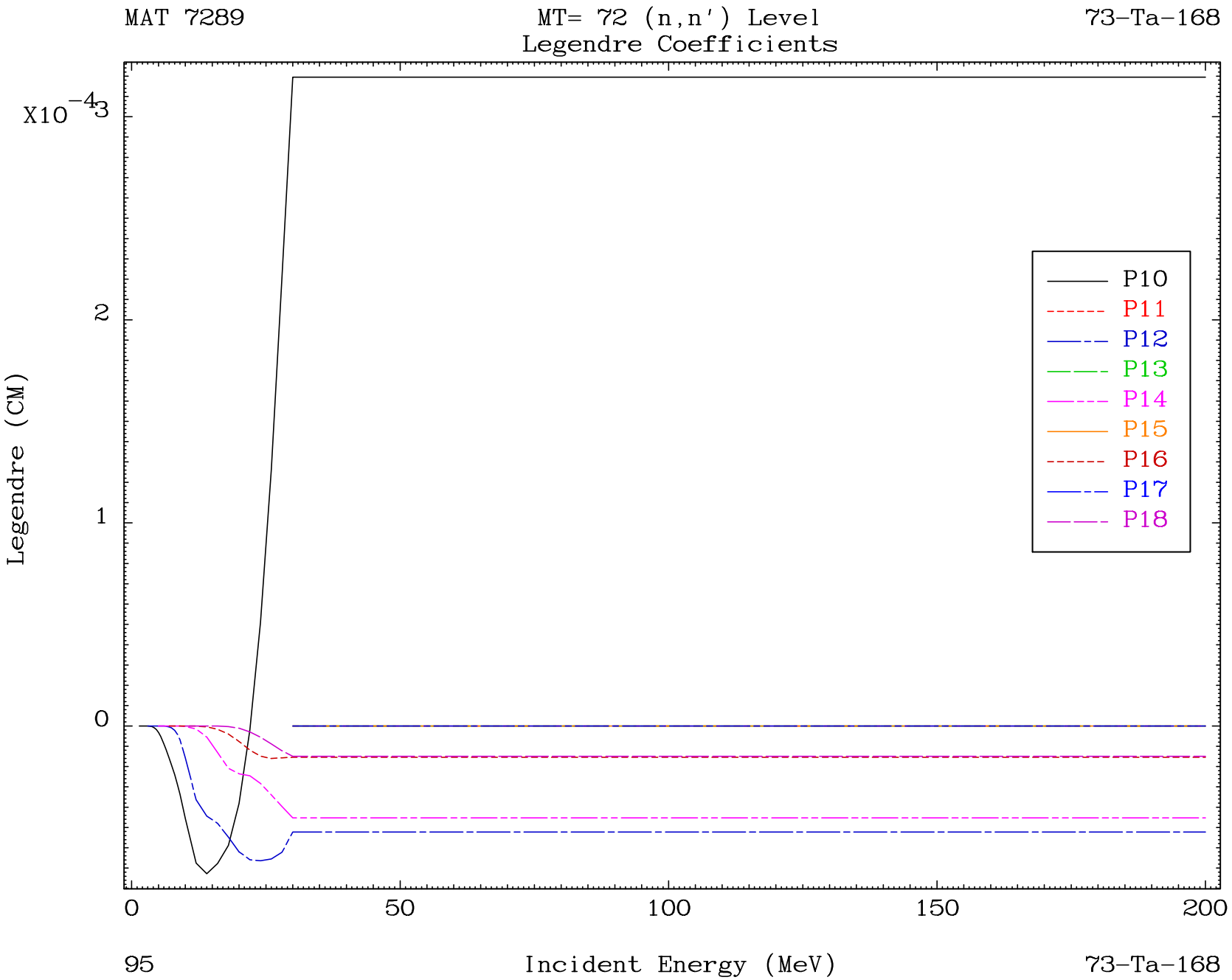

MAT 7289
MT= 71 (n,n') Level
Legendre Coefficients
73-Ta-168
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
90
Incident Energy (MeV)
73-Ta-168

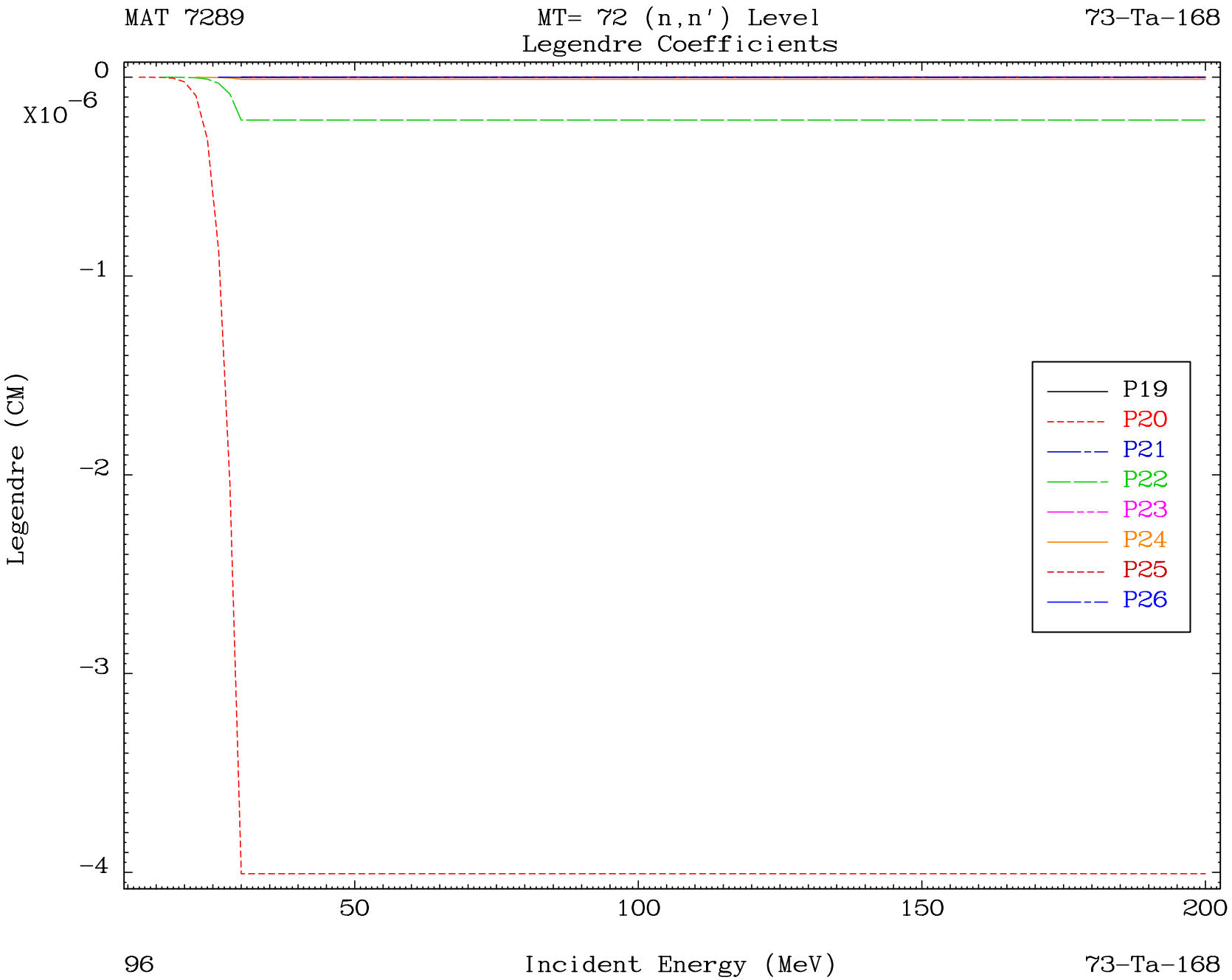

MAT 7289
MT= 71 (n,n') Level
Legendre Coefficients
73-Ta-168
0.02
0.01
0.00
-0.01
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
91
Incident Energy (MeV)
73-Ta-168

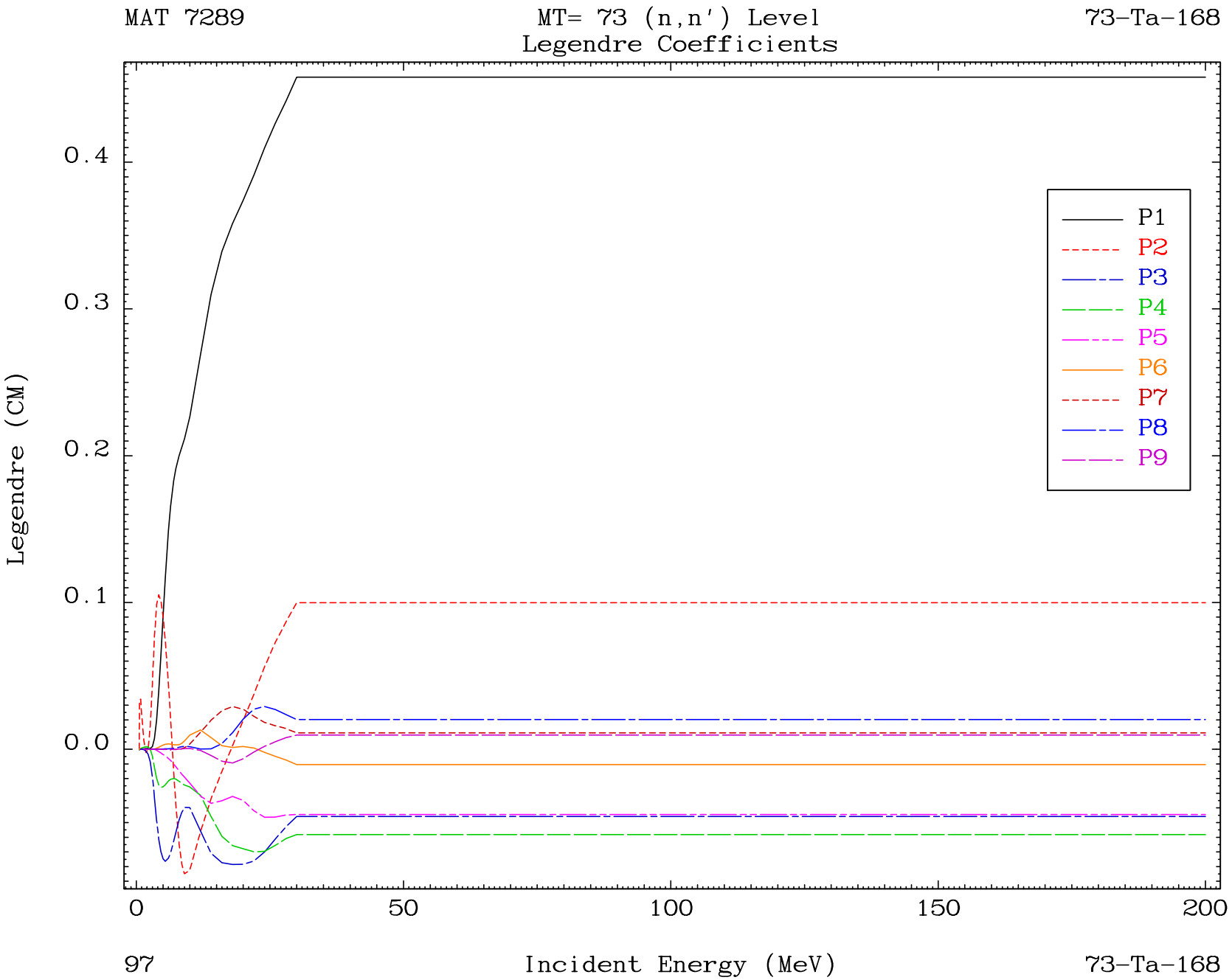

MAT 7289
MT= 71 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-4
3
2
1
0
-1
-2
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
92
Incident Energy (MeV)
73-Ta-168

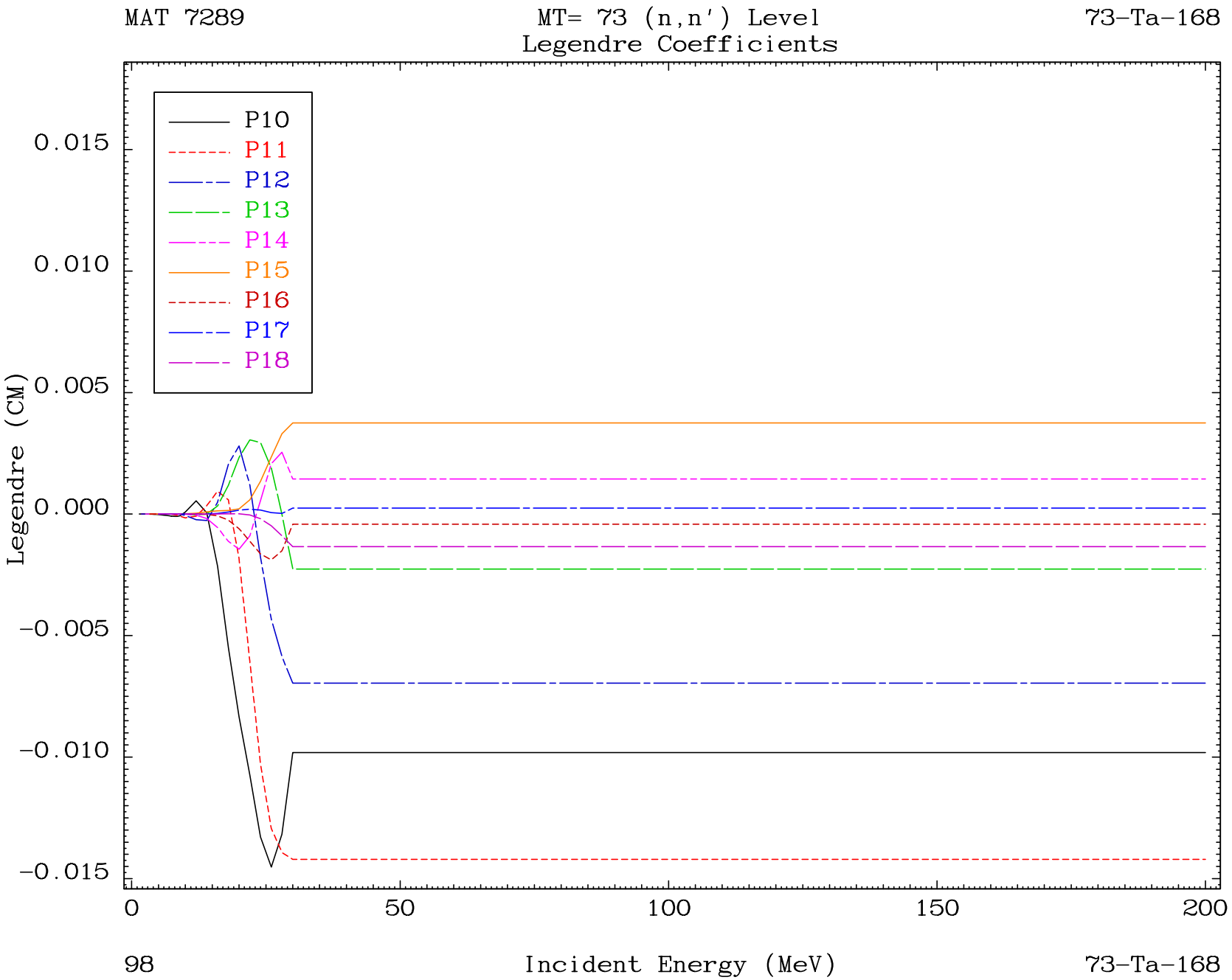

MAT 7289
MT= 71 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-6
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
93
Incident Energy (MeV)
73-Ta-168

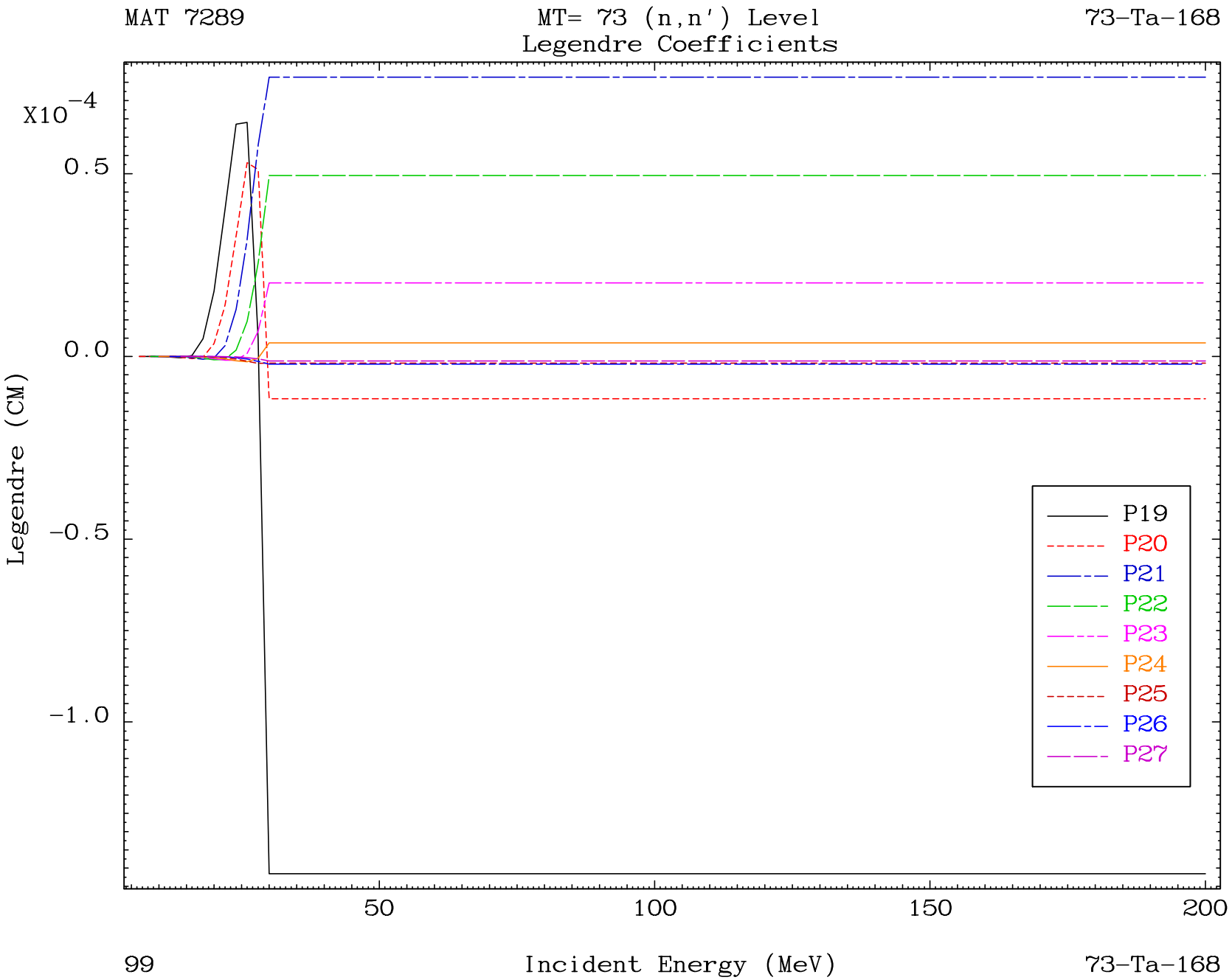

MAT 7289
MT= 72 (n,n') Level
Legendre Coefficients
73-Ta-168
Legendre (CM)
0.08
0.06
0.04
0.02
0.00
0
50
100
150
200
94
Incident Energy (MeV)
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9

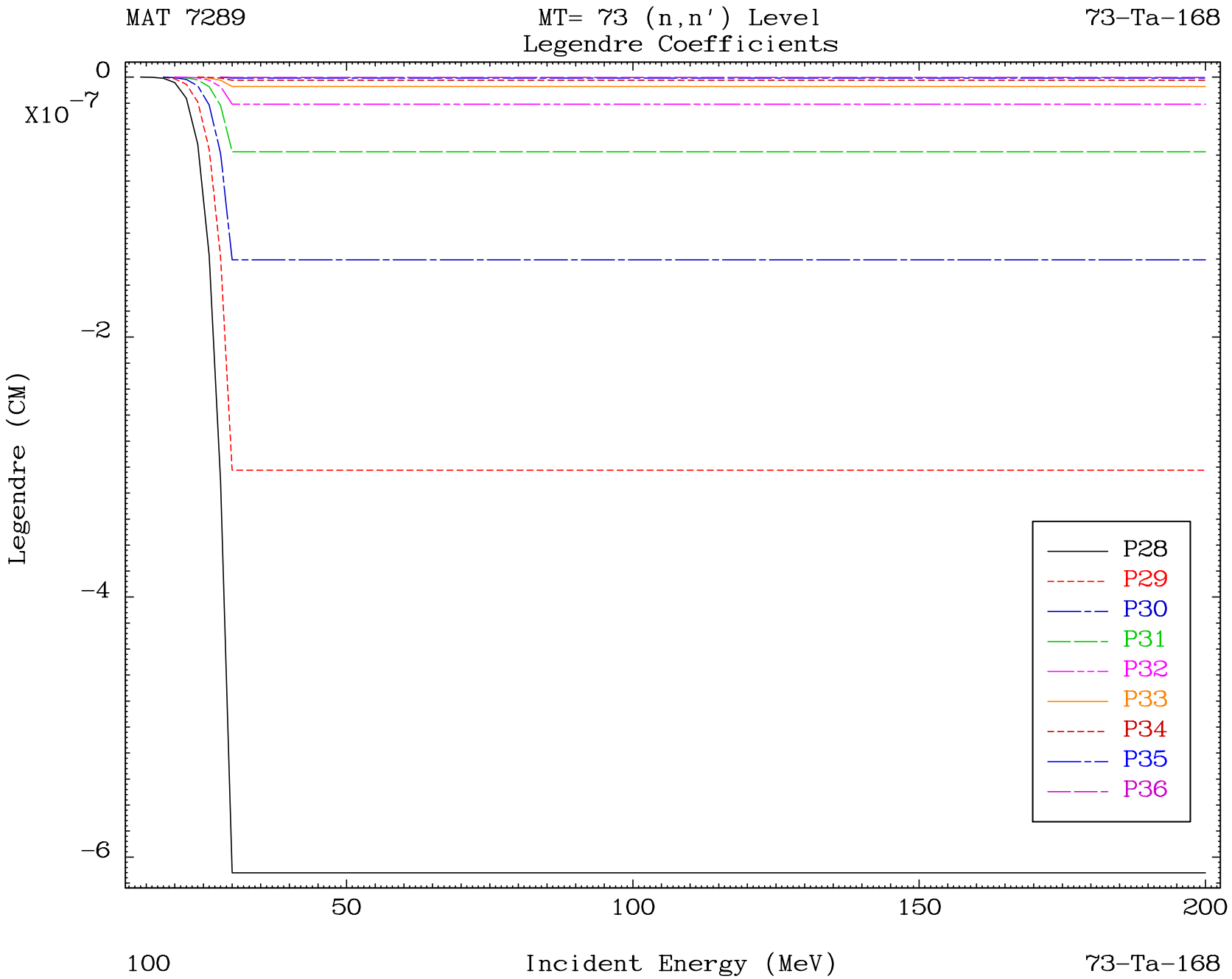

MAT 7289
MT= 72 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-4
3
2
1
0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
95
Incident Energy (MeV)
73-Ta-168

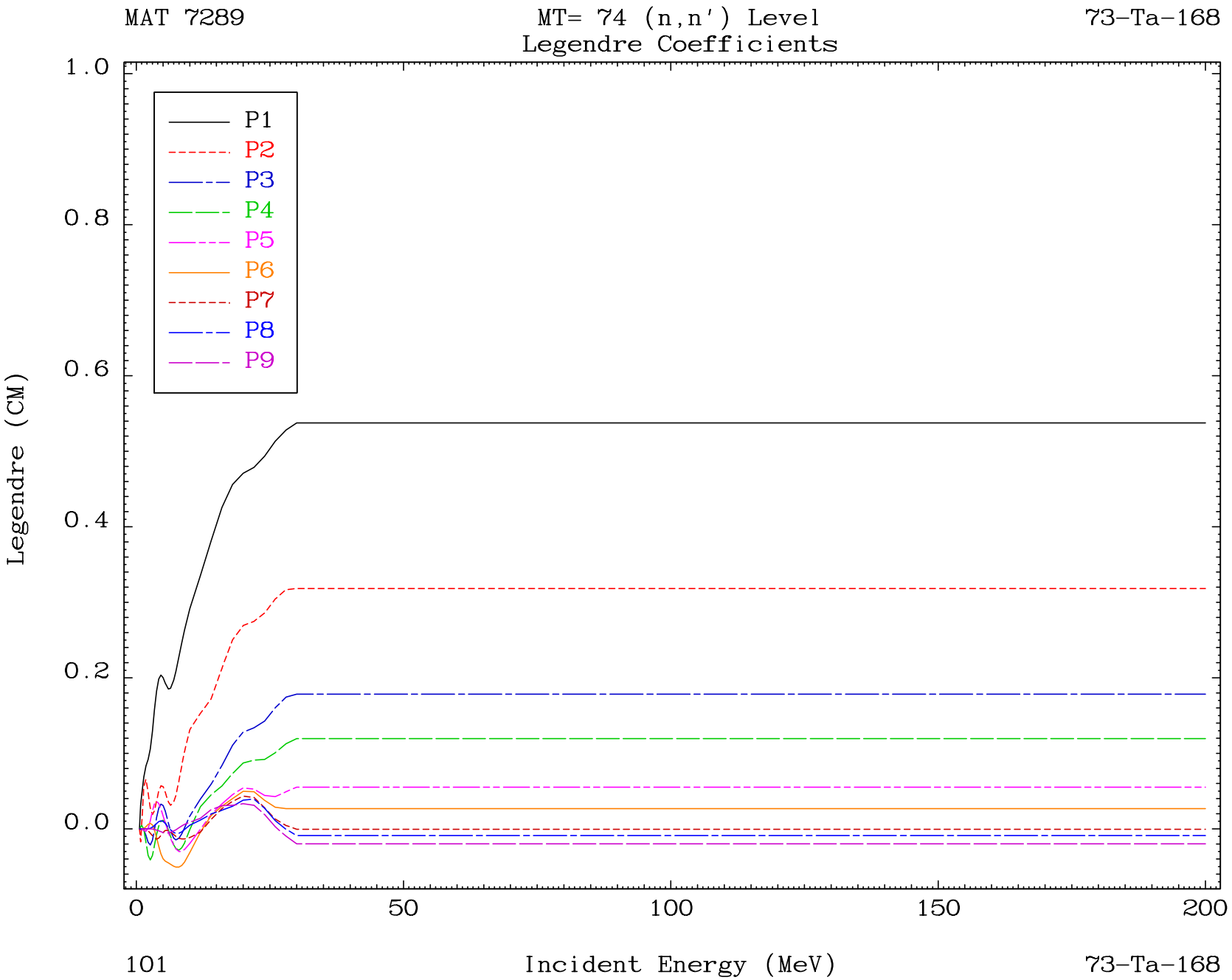

MAT 7289
MT= 72 (n,n') Level
Legendre Coefficients
73-Ta-168
0
X10−6
−1
−2
−3
−4
Legendre (CM)
50
100
150
200
96
Incident Energy (MeV)
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26

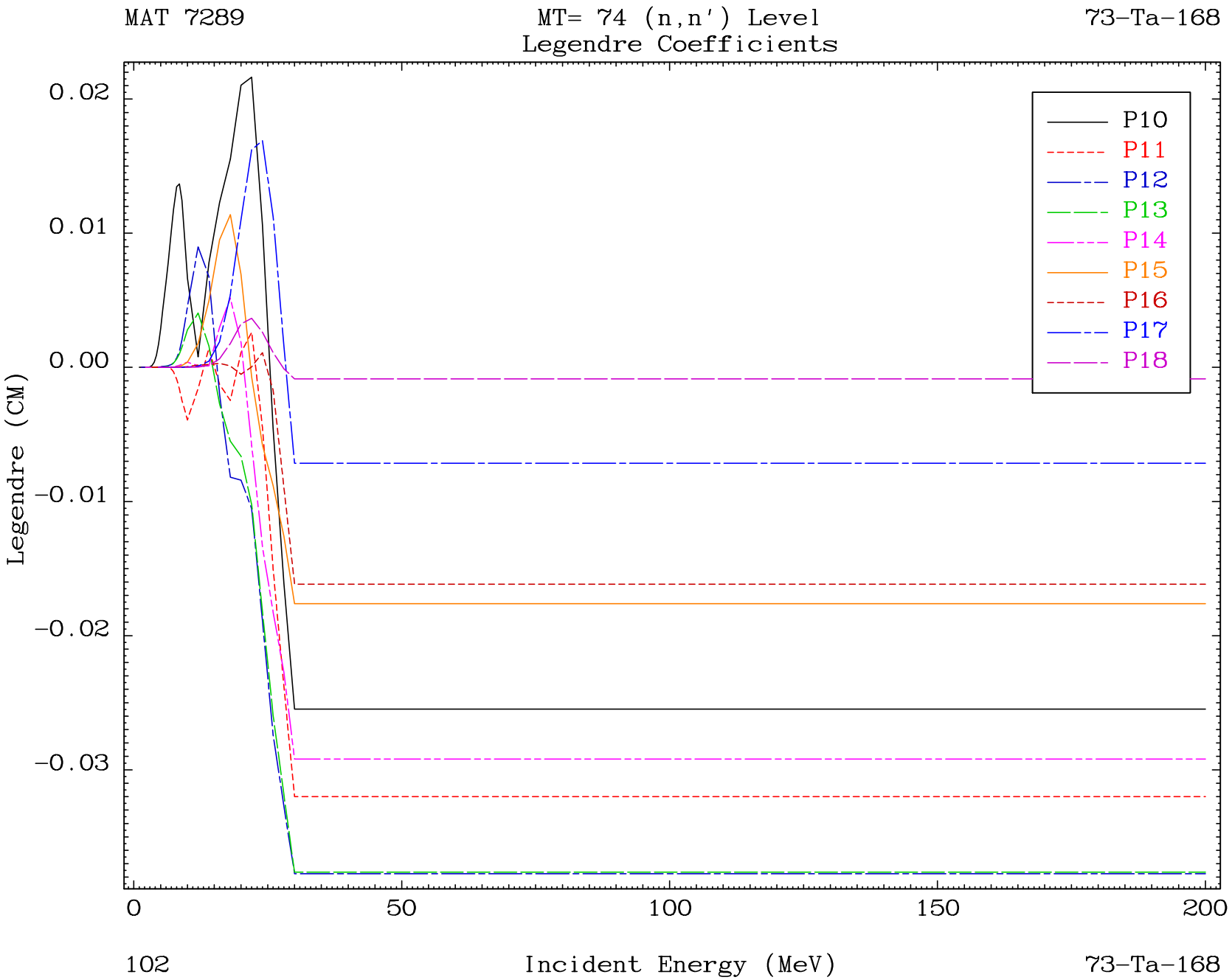

MAT 7289
MT= 73 (n,n') Level
Legendre Coefficients
73-Ta-168
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
97
Incident Energy (MeV)
73-Ta-168

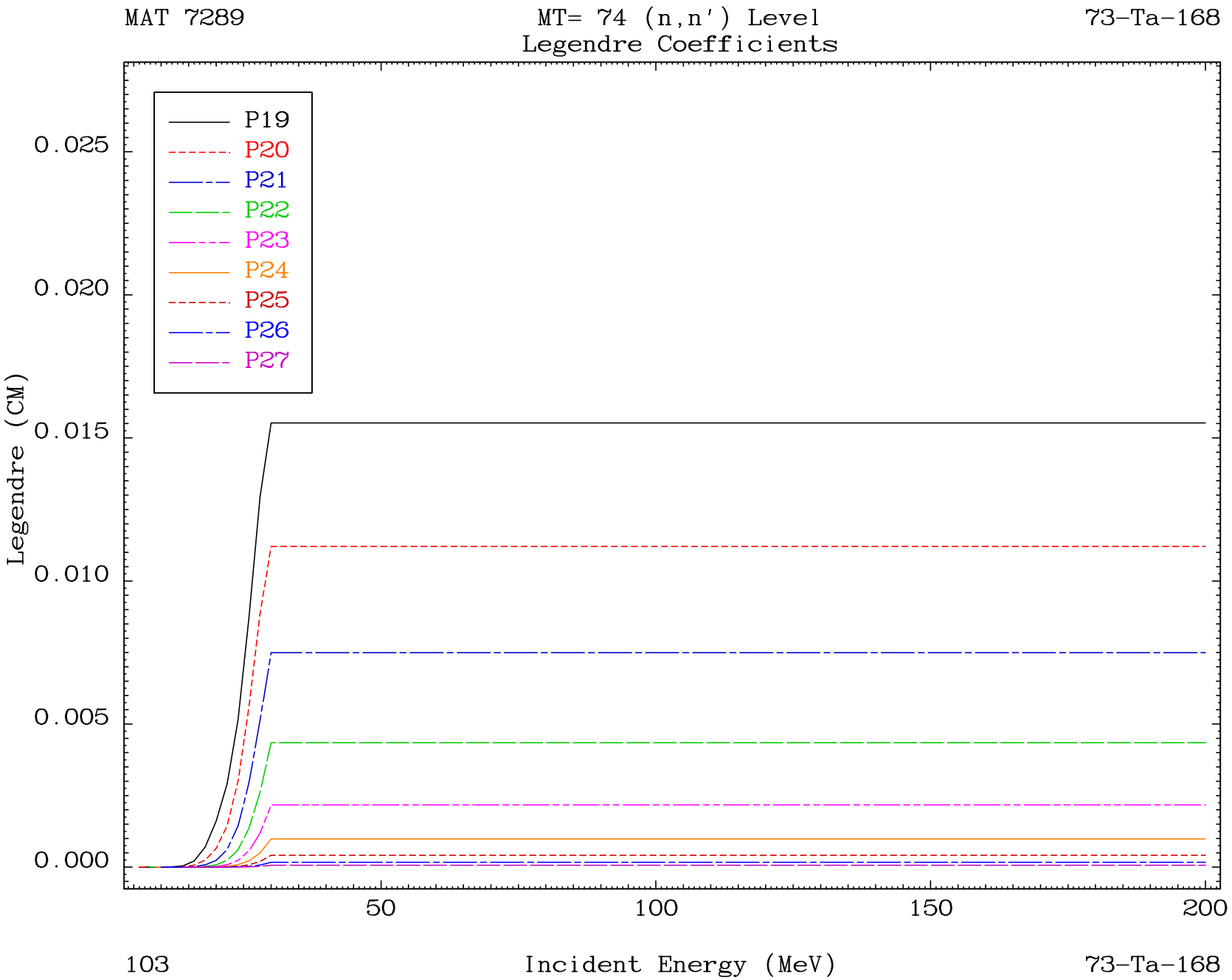

MAT 7289
MT= 73 (n,n') Level
Legendre Coefficients
73-Ta-168
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.015
0.010
0.005
0.000
-0.005
-0.010
-0.015
Legendre (CM)
0
50
100
150
200
98
Incident Energy (MeV)
73-Ta-168

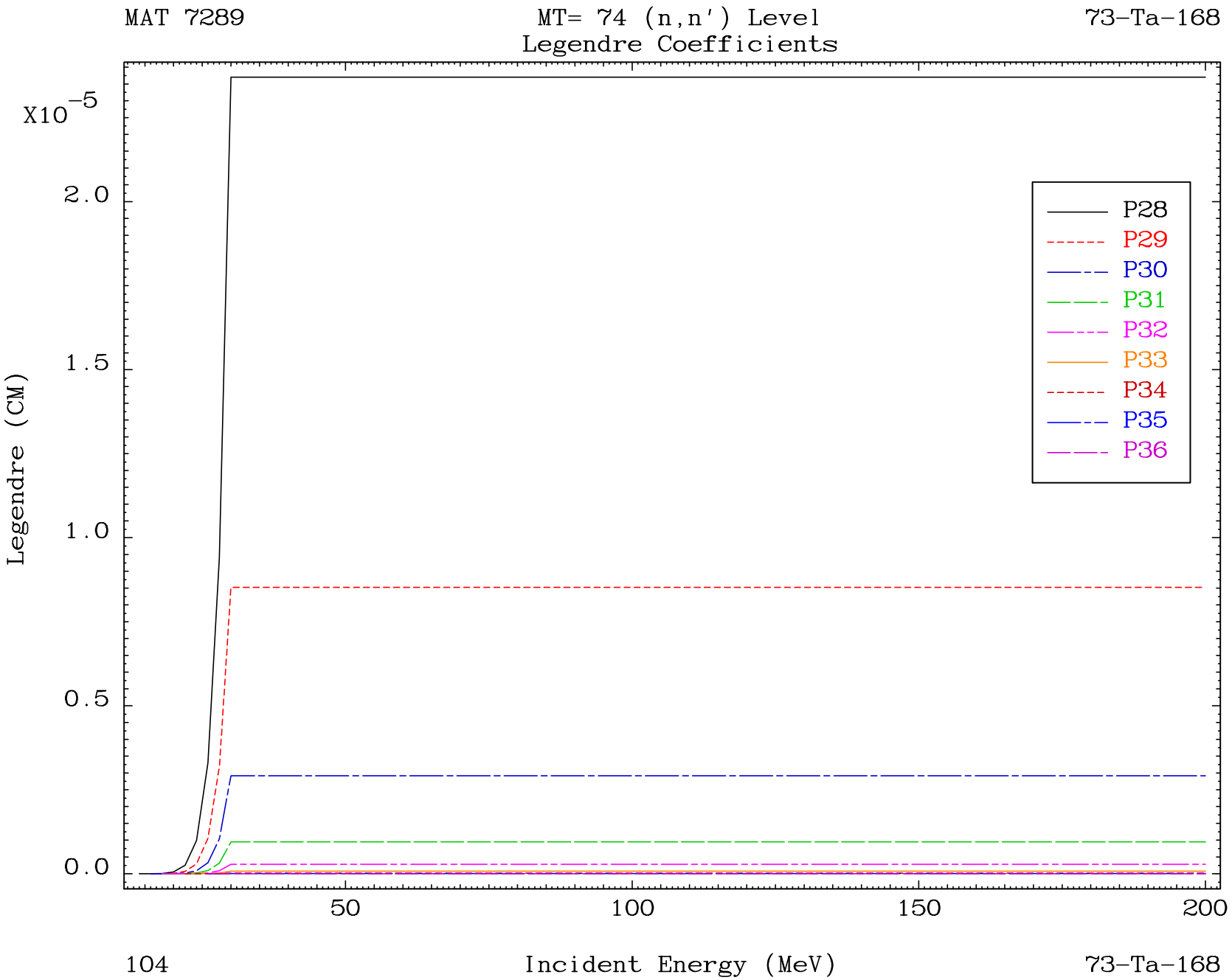

MAT 7289
MT= 73 (n,n') Level
Legendre Coefficients
73-Ta-168
X10^-4
0.5
0.0
-0.5
-1.0
Legendre (CM)
50
100
150
200
99
Incident Energy (MeV)
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26
P27

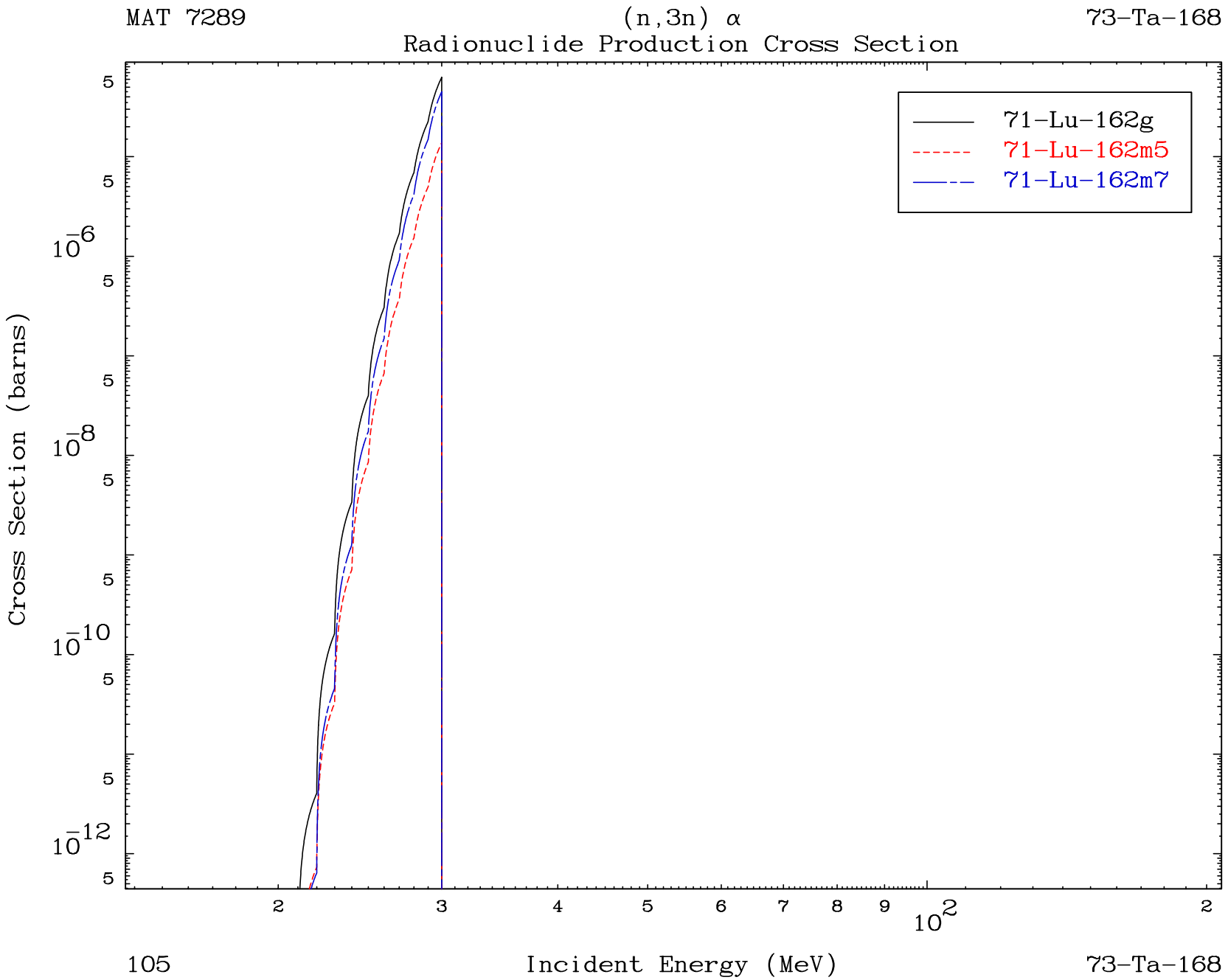

MAT 7289
MT= 73 (n,n') Level
Legendre Coefficients
73-Ta-168
0
X10-7
-2
-4
-6
Legendre (CM)
50
100
150
200
100
Incident Energy (MeV)
73-Ta-168
P28
P29
P30
P31
P32
P33
P34
P35
P36

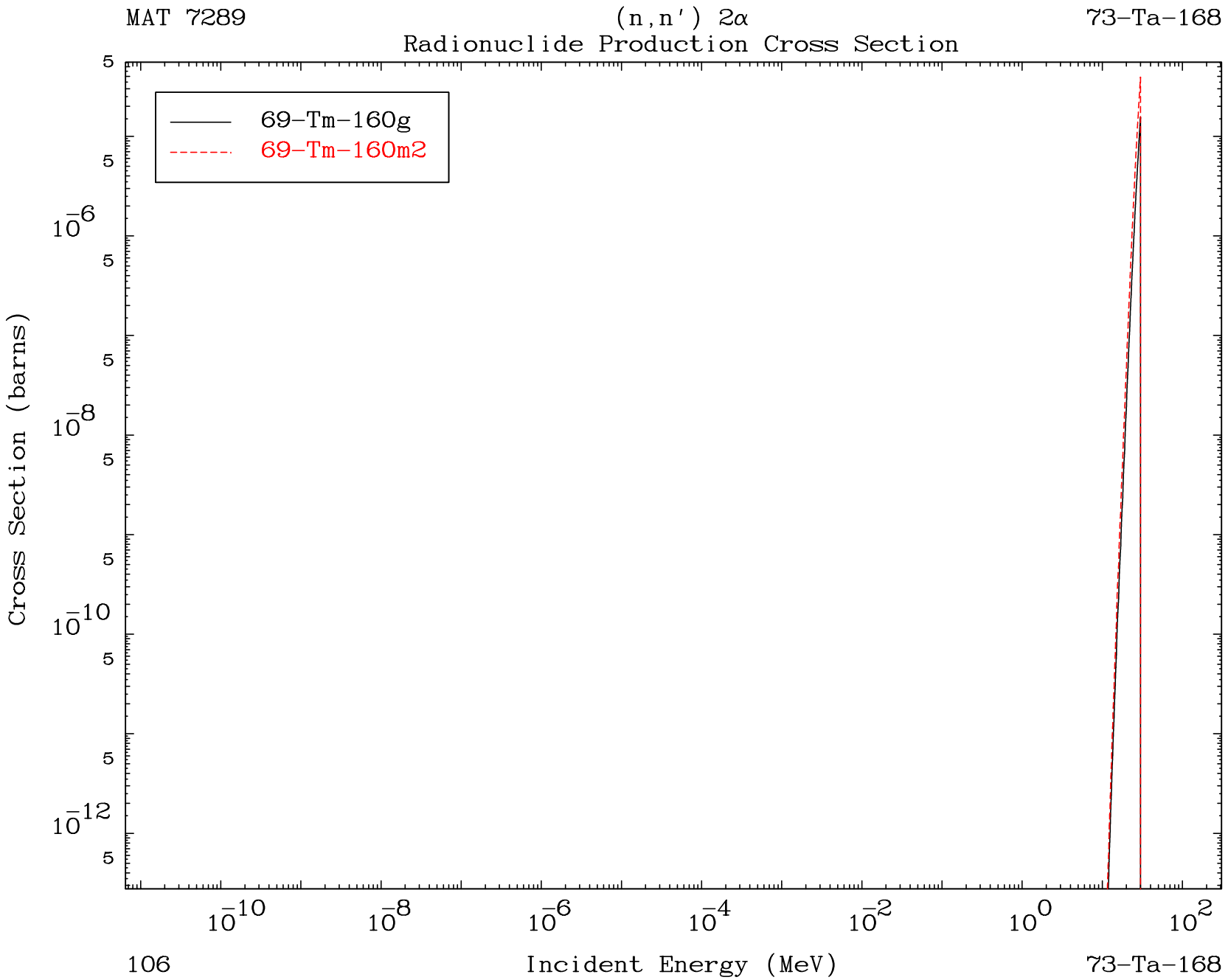

MAT 7289
MT= 74 (n,n') Level
Legendre Coefficients
73-Ta-168
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
1.0
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
101
Incident Energy (MeV)
73-Ta-168

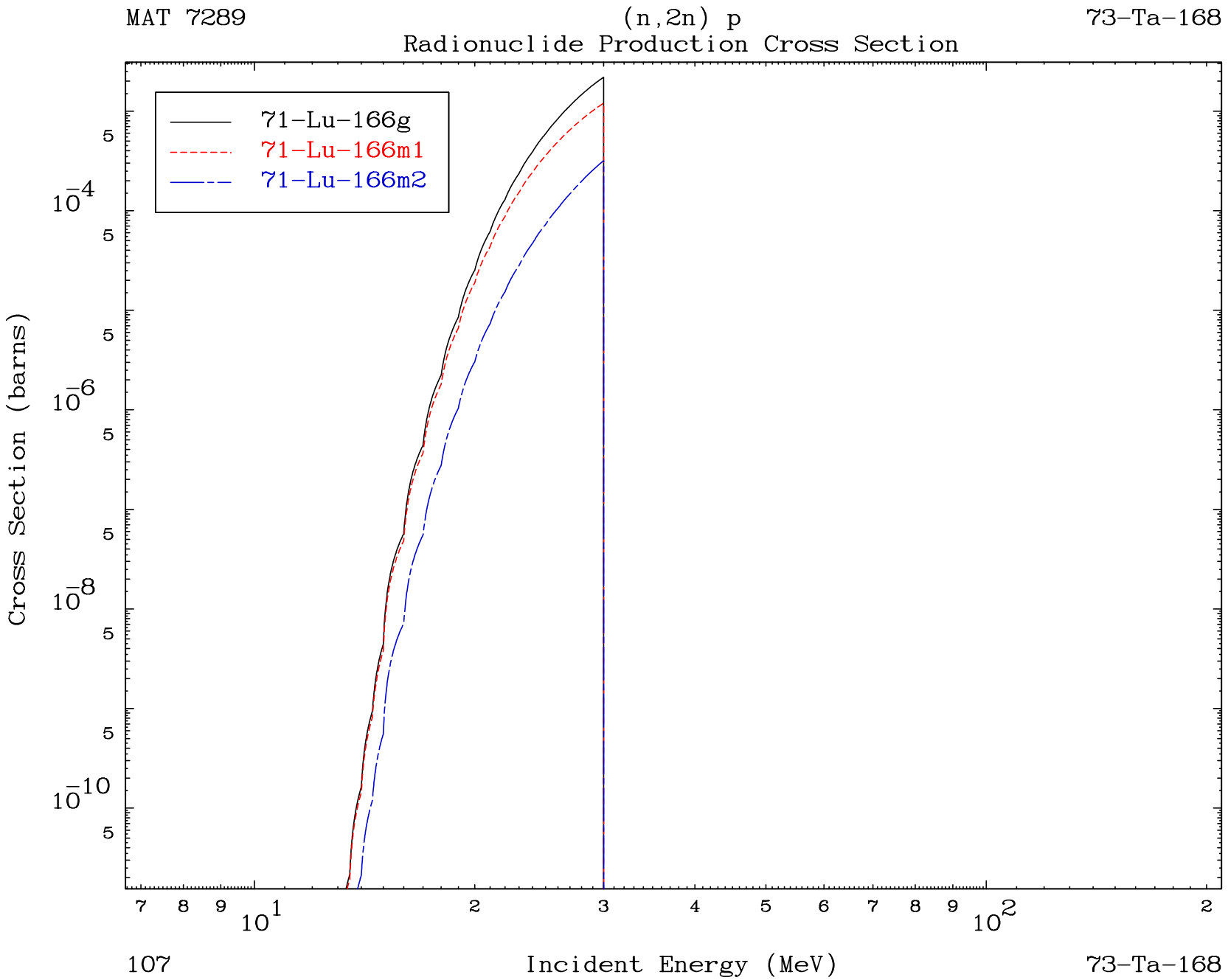

MAT 7289
MT= 74 (n,n') Level
Legendre Coefficients
73-Ta-168
0.02
0.01
0.00
-0.01
-0.02
-0.03
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
102
Incident Energy (MeV)
73-Ta-168

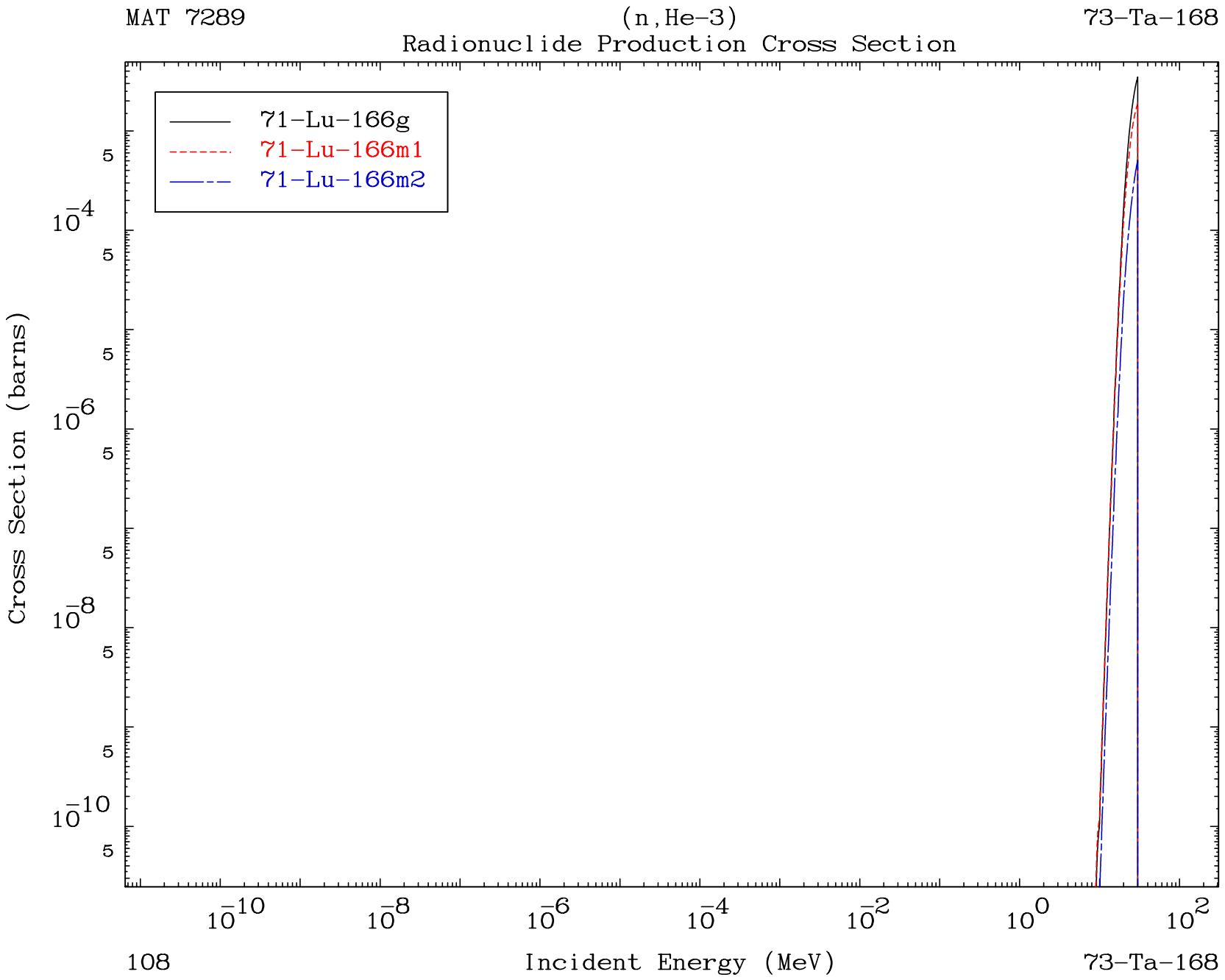

MAT 7289
MT= 74 (n,n') Level
Legendre Coefficients
73-Ta-168
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.025
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
103
Incident Energy (MeV)
73-Ta-168

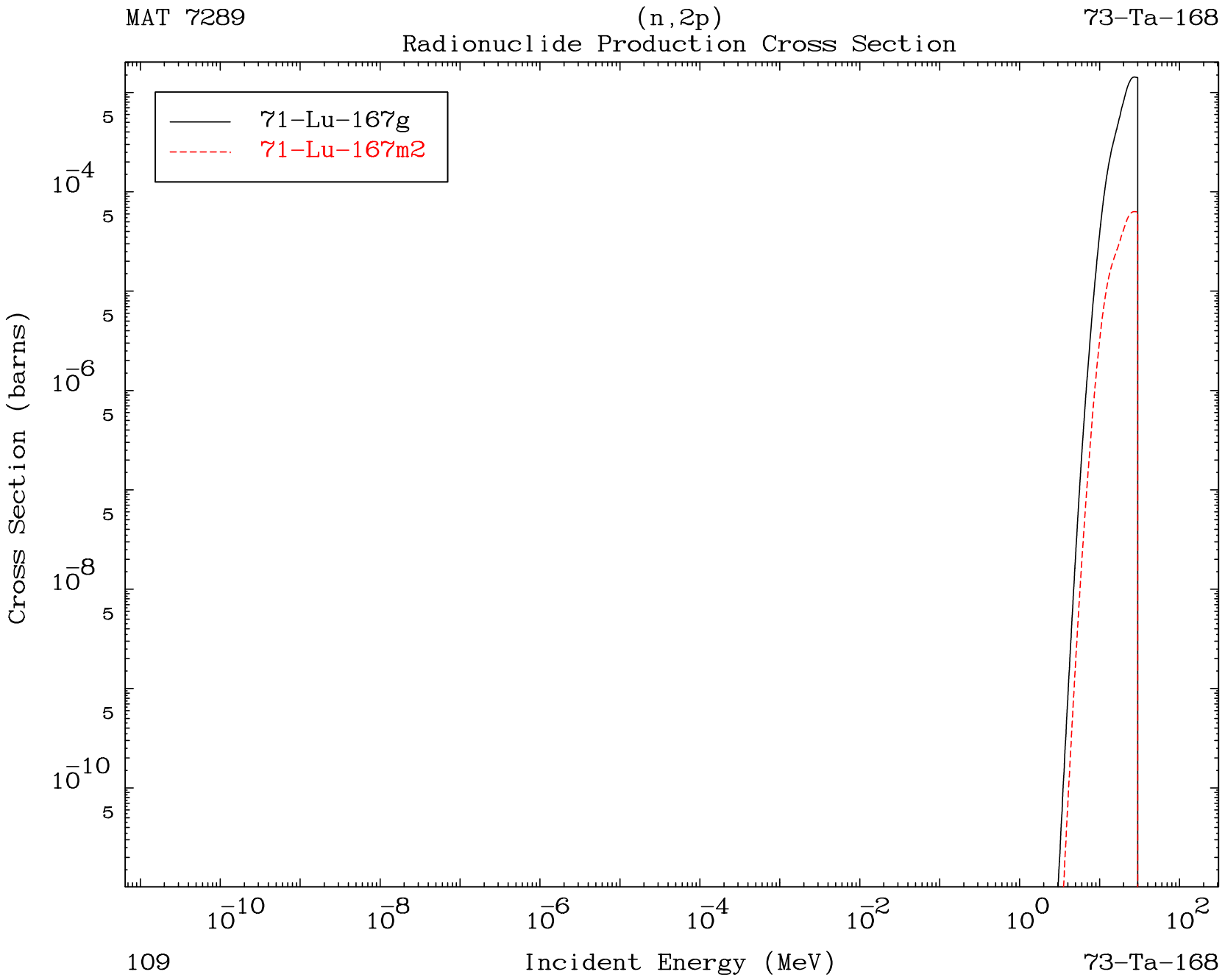

MAT 7289
MT= 74 (n,n') Level
Legendre Coefficients
73-Ta-168
X10-5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
104
Incident Energy (MeV)
73-Ta-168
P28
P29
P30
P31
P32
P33
P34
P35
P36

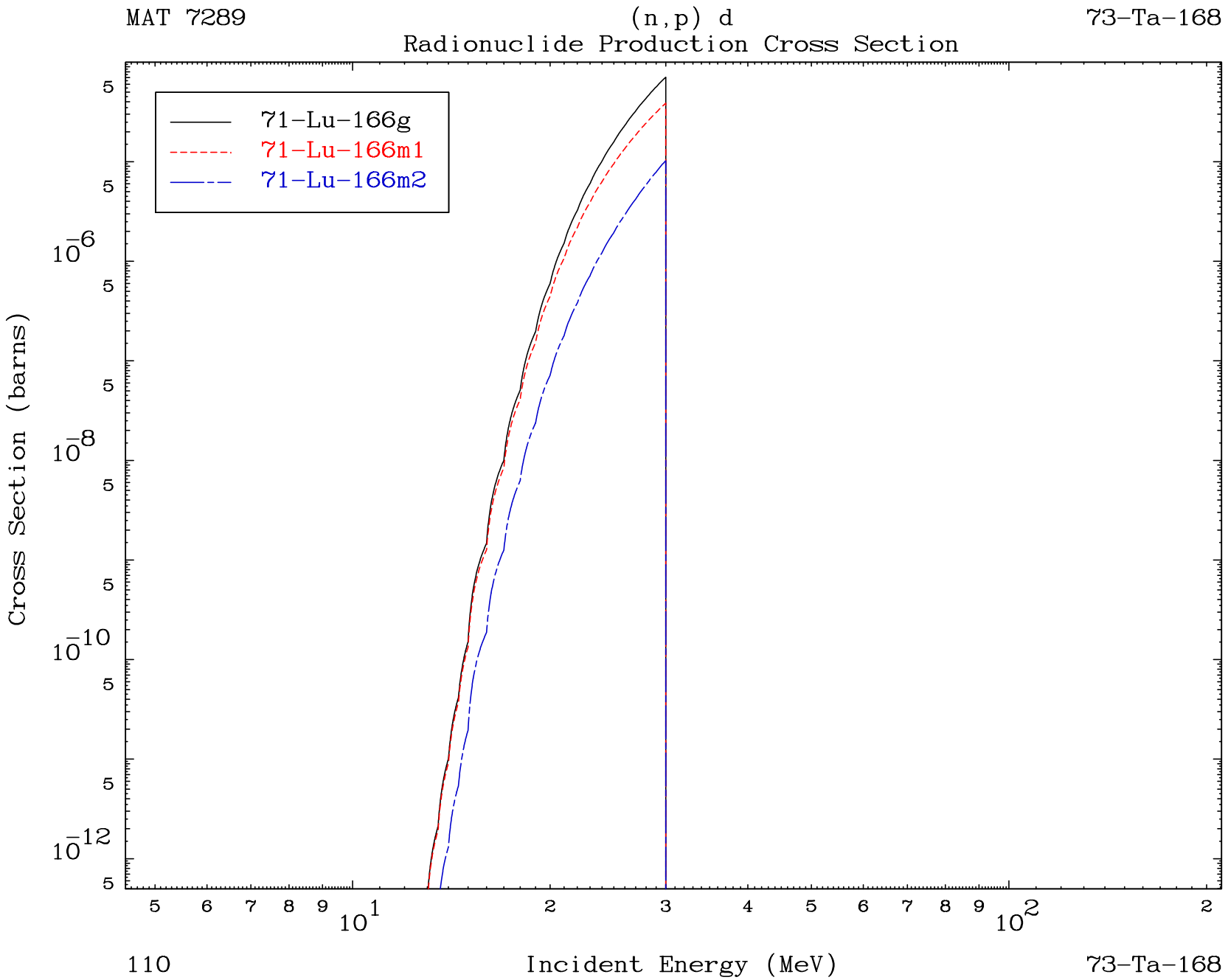

MAT 7289
(n,3n) α
73-Ta-168
Radionuclide Production Cross Section
71-Lu-162g
71-Lu-162m5
71-Lu-162m7
Cross Section (barns)
Incident Energy (MeV)
105
73-Ta-168


MAT 7289
(n,n') 2α
73-Ta-168
Radionuclide Production Cross Section
69-Tm-160g
69-Tm-160m2
Cross Section (barns)
Incident Energy (MeV)
106
73-Ta-168


MAT 7289
(n,2n) p
73-Ta-168
Radionuclide Production Cross Section
71-Lu-166g
71-Lu-166m1
71-Lu-166m2
Cross Section (barns)
Incident Energy (MeV)
107
73-Ta-168


MAT 7289
(n,He-3)
73-Ta-168
Radionuclide Production Cross Section
71-Lu-166g
71-Lu-166m1
71-Lu-166m2
Cross Section (barns)
Incident Energy (MeV)
108
73-Ta-168


MAT 7289
(n,2p)
73-Ta-168
Radionuclide Production Cross Section
71-Lu-167g
71-Lu-167m2
Cross Section (barns)
Incident Energy (MeV)
109
73-Ta-168


MAT 7289
(n,p) d
73-Ta-168
Radionuclide Production Cross Section
71-Lu-166g
71-Lu-166m1
71-Lu-166m2
Cross Section (barns)
Incident Energy (MeV)
110
73-Ta-168