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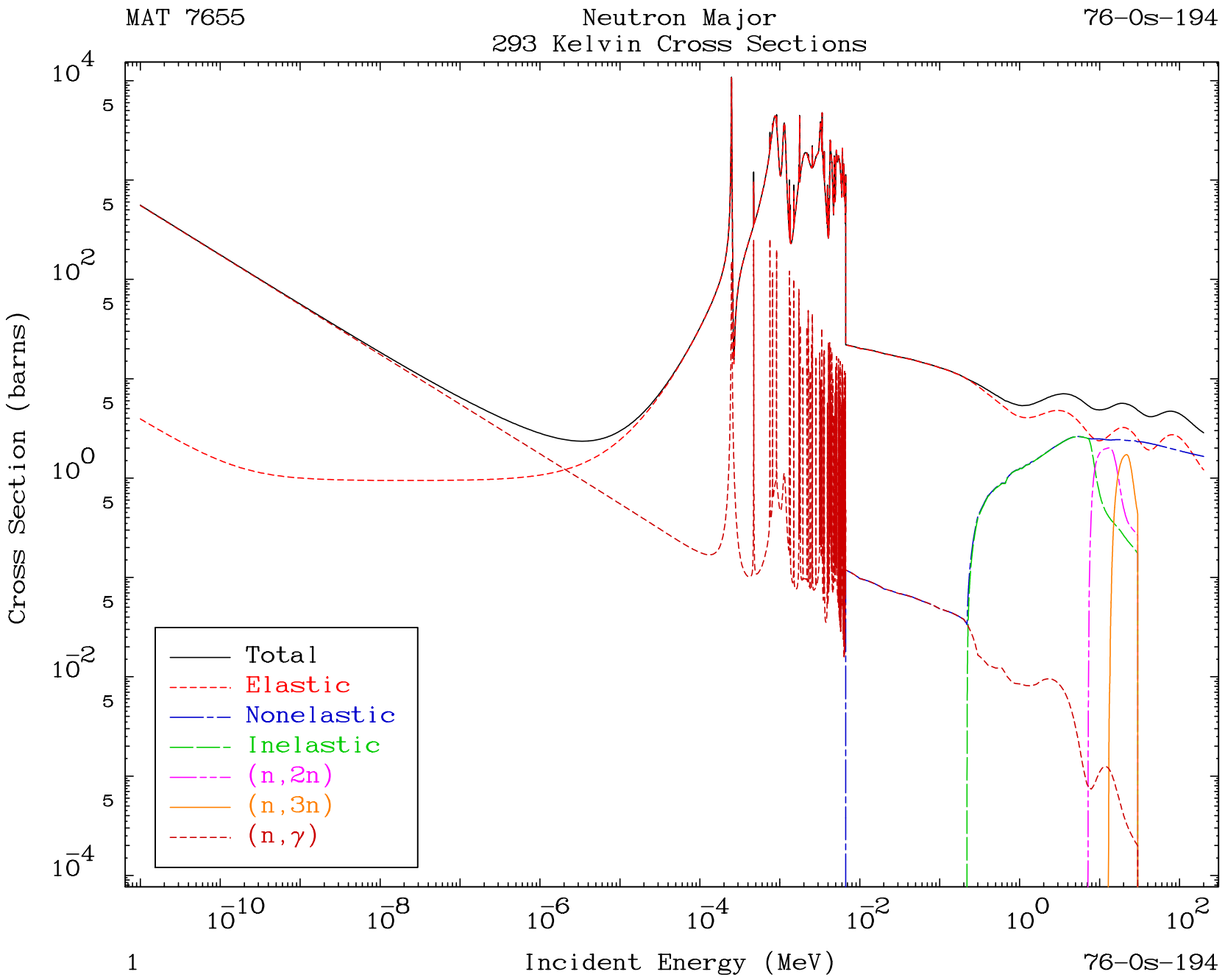
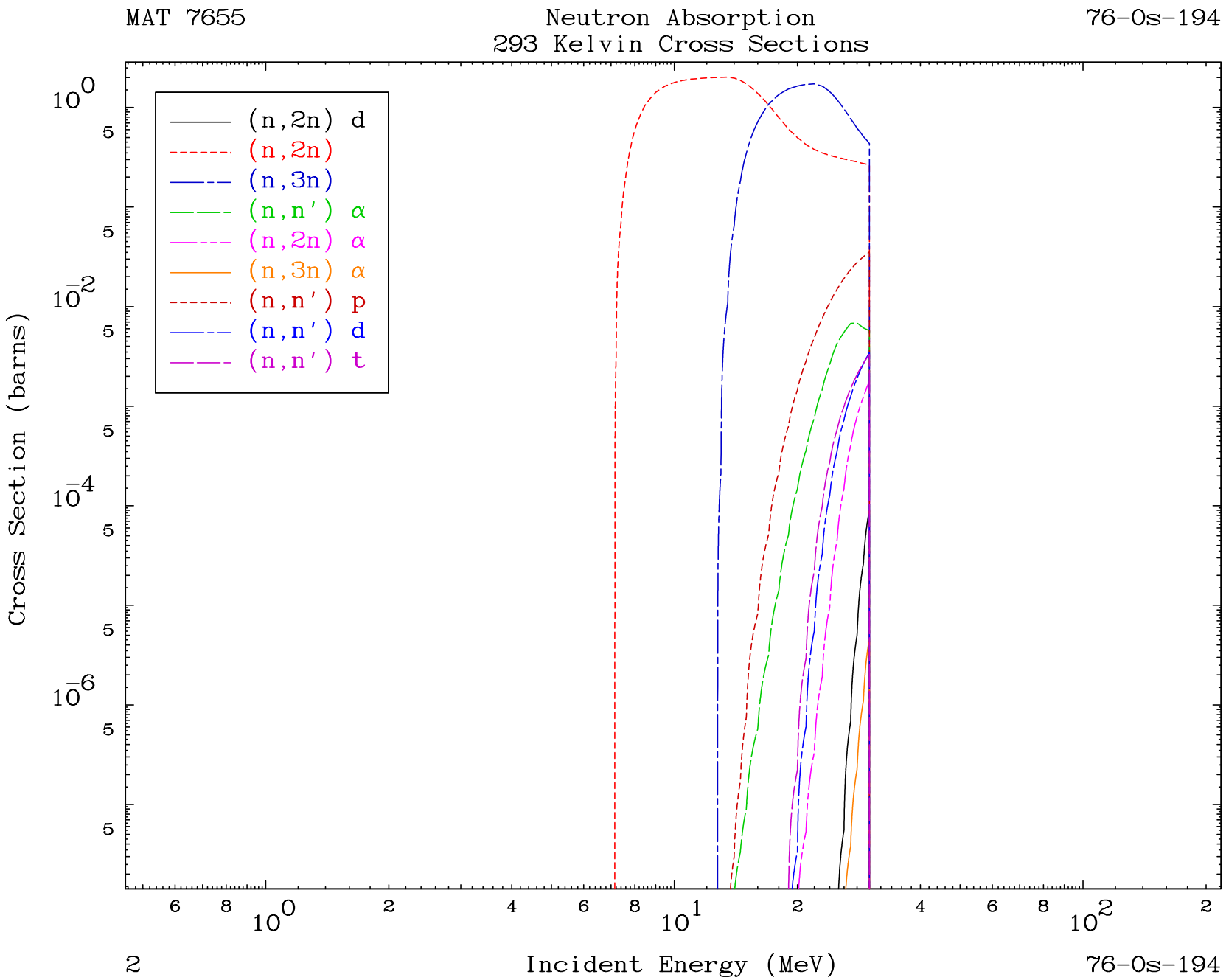
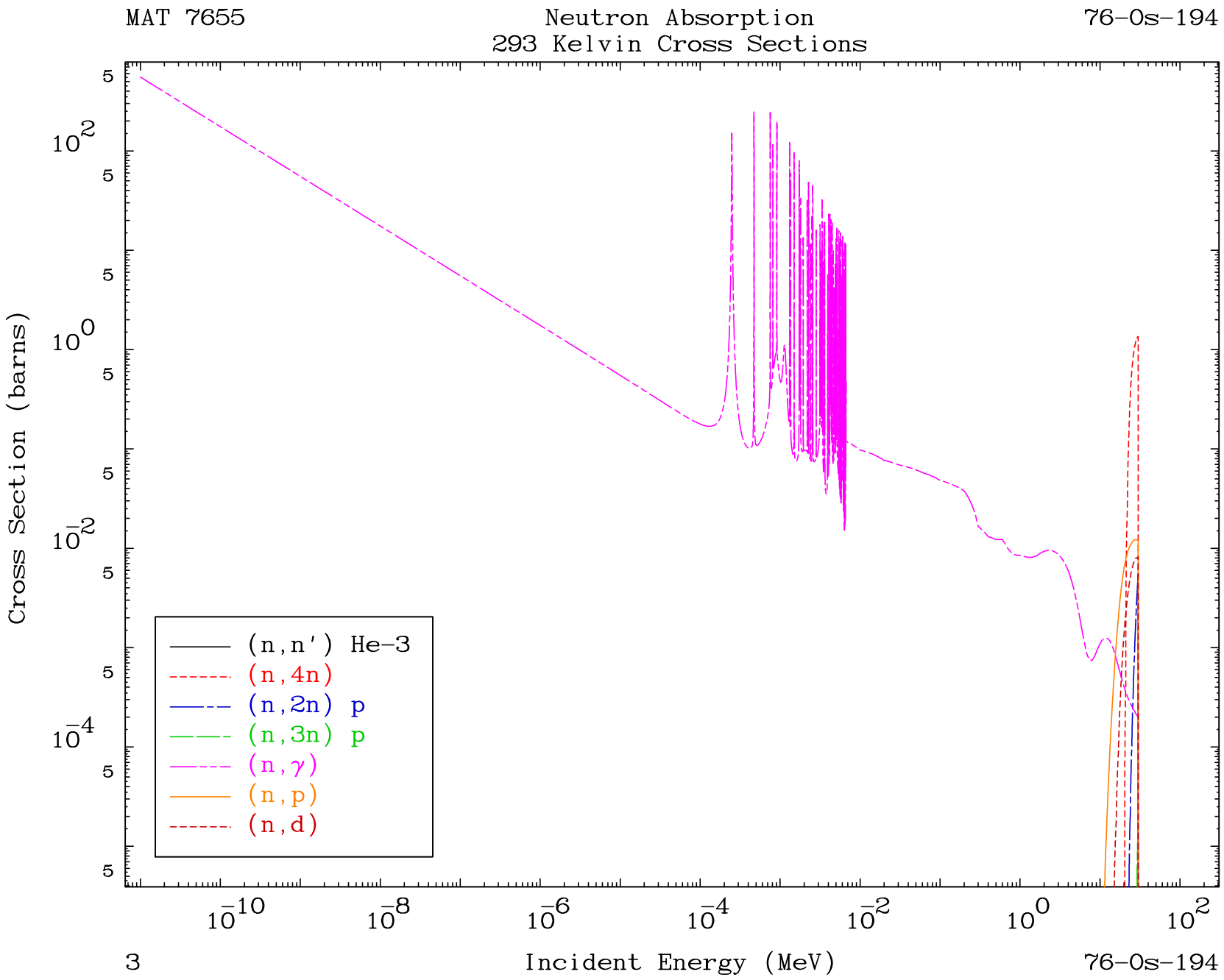
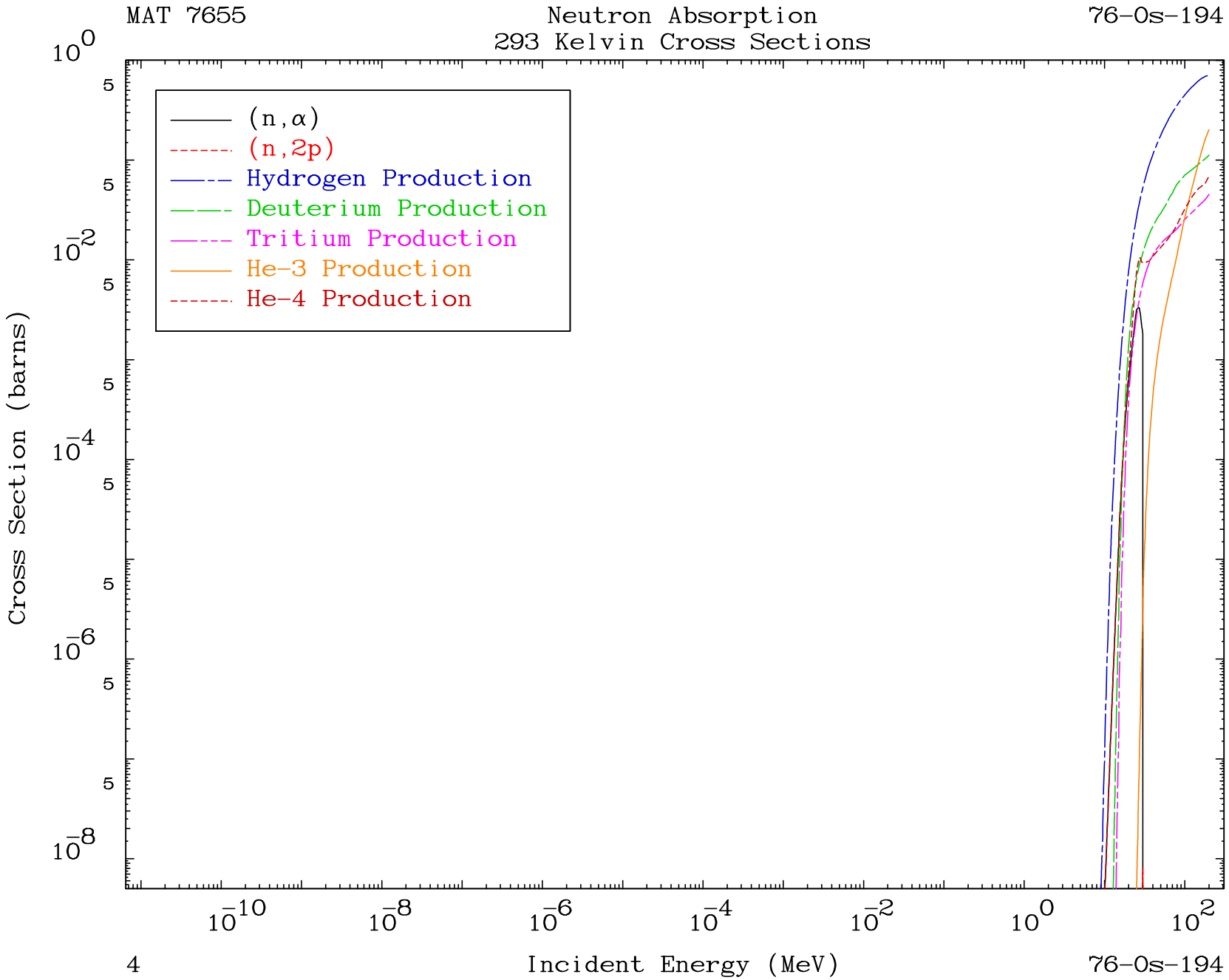
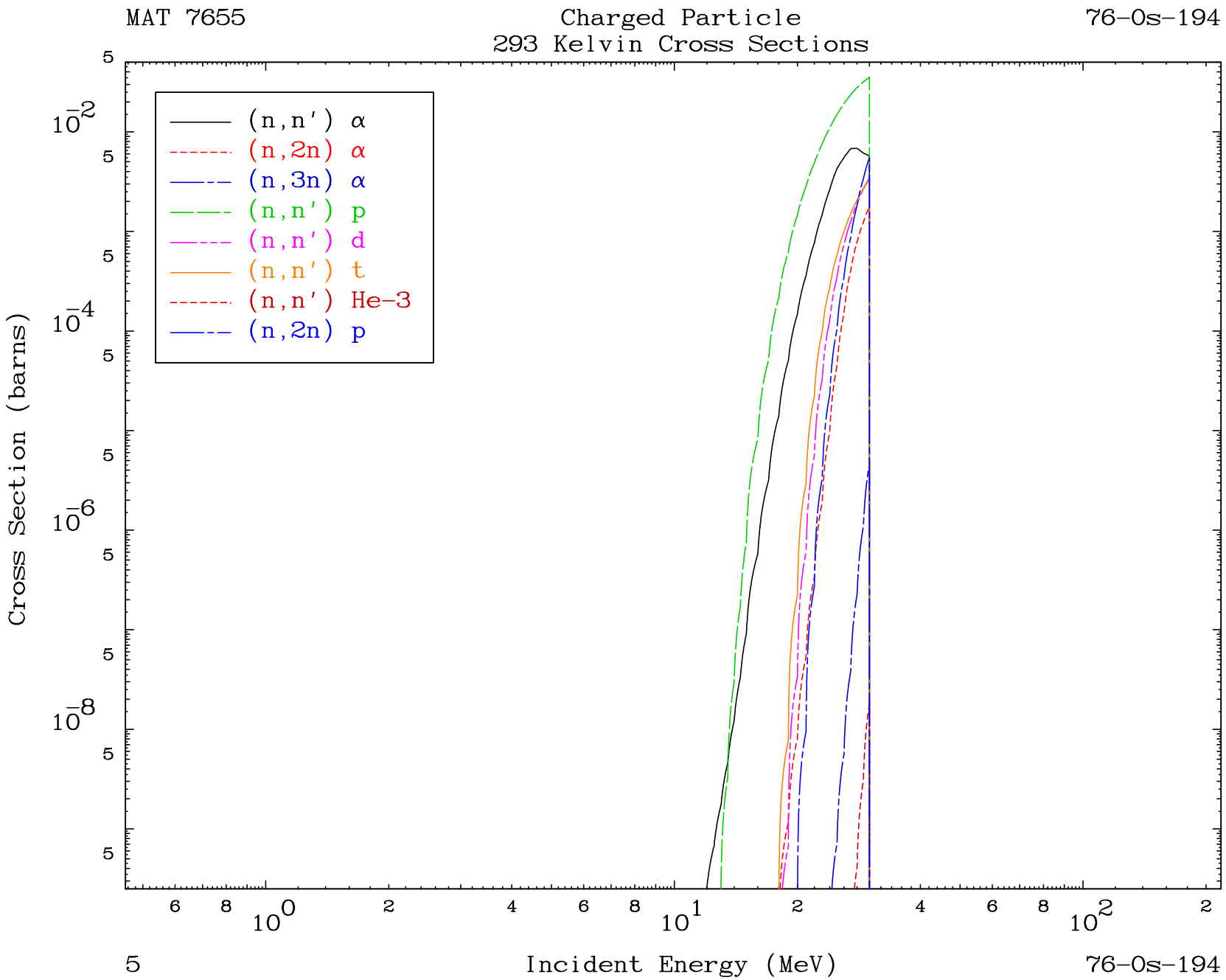
Press Mouse Button to Start

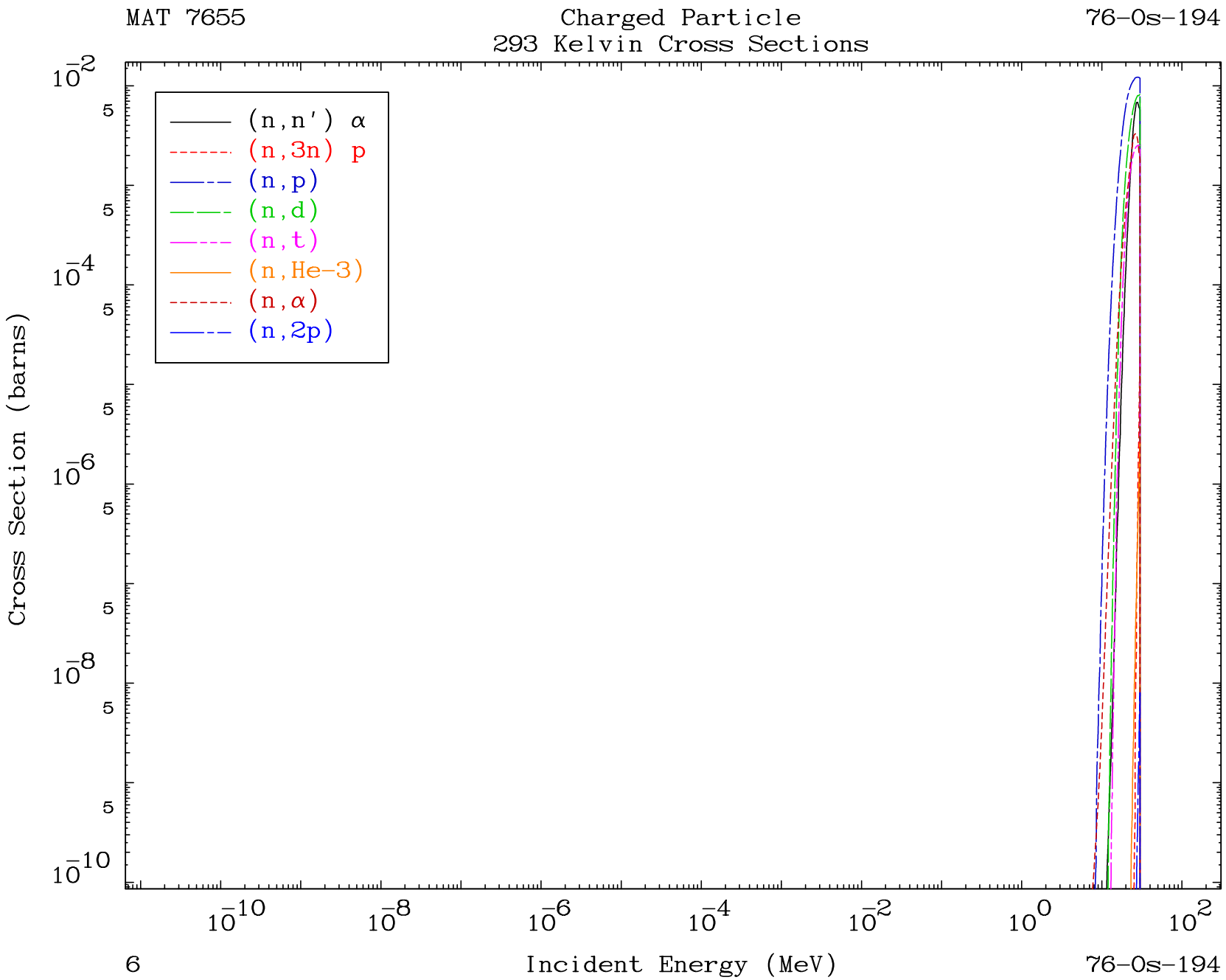

MAT 7655
Neutron Major
293 Kelvin Cross Sections
76-0s-194
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
1
76-0s-194

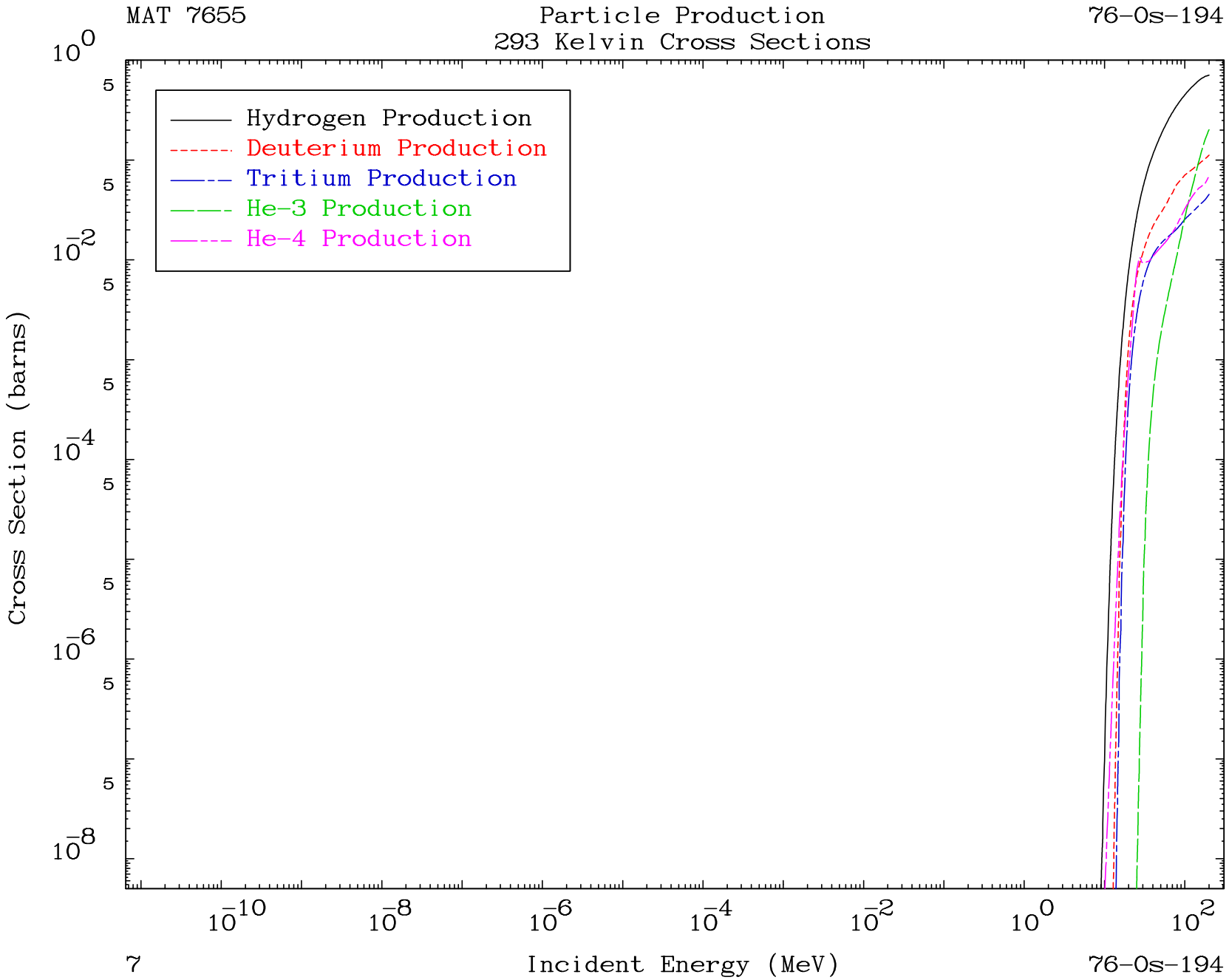

MAT 7655
Neutron Absorption
293 Kelvin Cross Sections
76-0s-194
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
Cross Section (barns)
Incident Energy (MeV)
76-0s-194
2

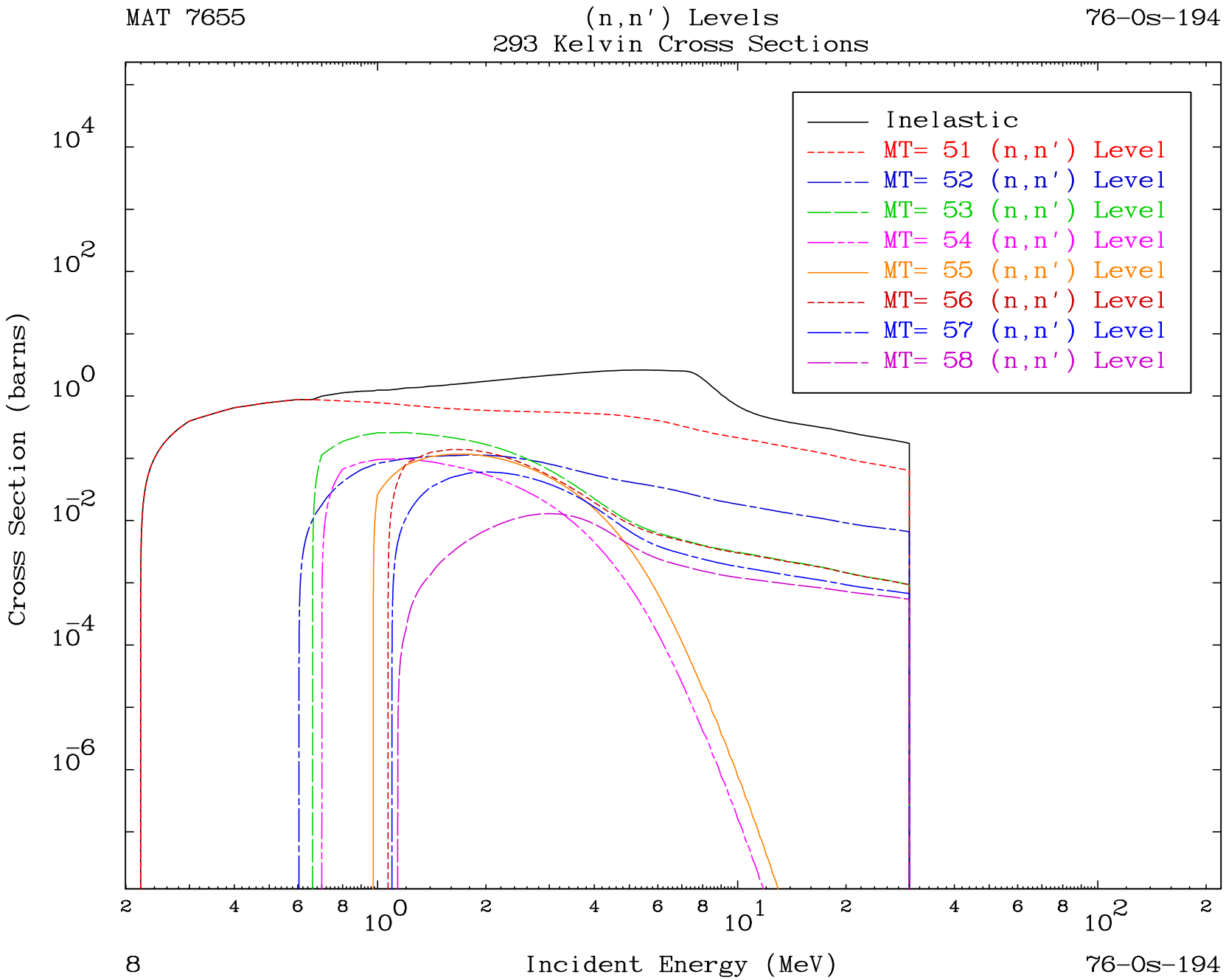

MAT 7655
Neutron Absorption
293 Kelvin Cross Sections
76-0s-194
Cross Section (barns)
Incident Energy (MeV)
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
(n,γ)
(n,p)
(n,d)
3
76-0s-194

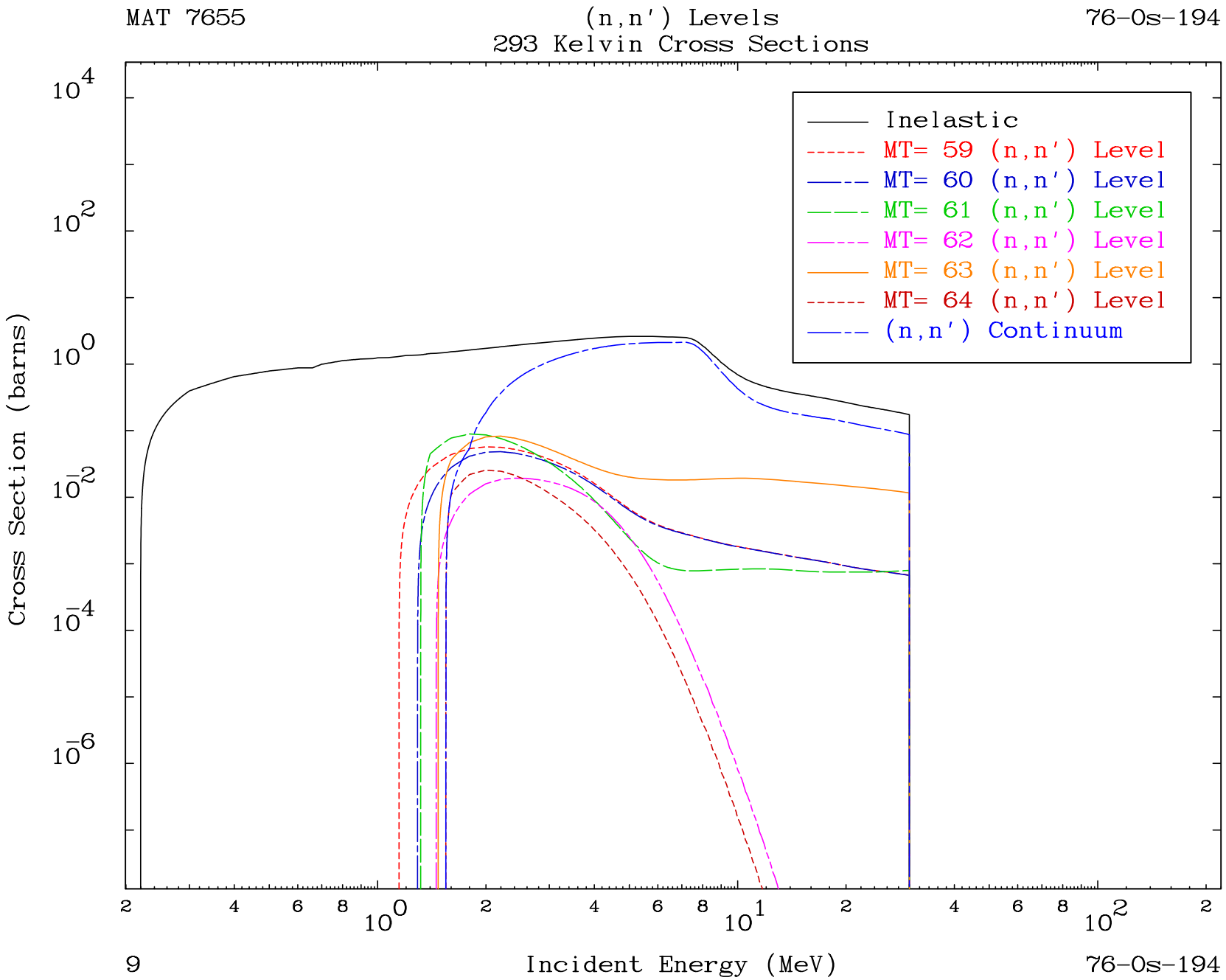

MAT 7655
Neutron Absorption
293 Kelvin Cross Sections
76-0s-194
(n,α)
(n,2p)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
4
76-0s-194

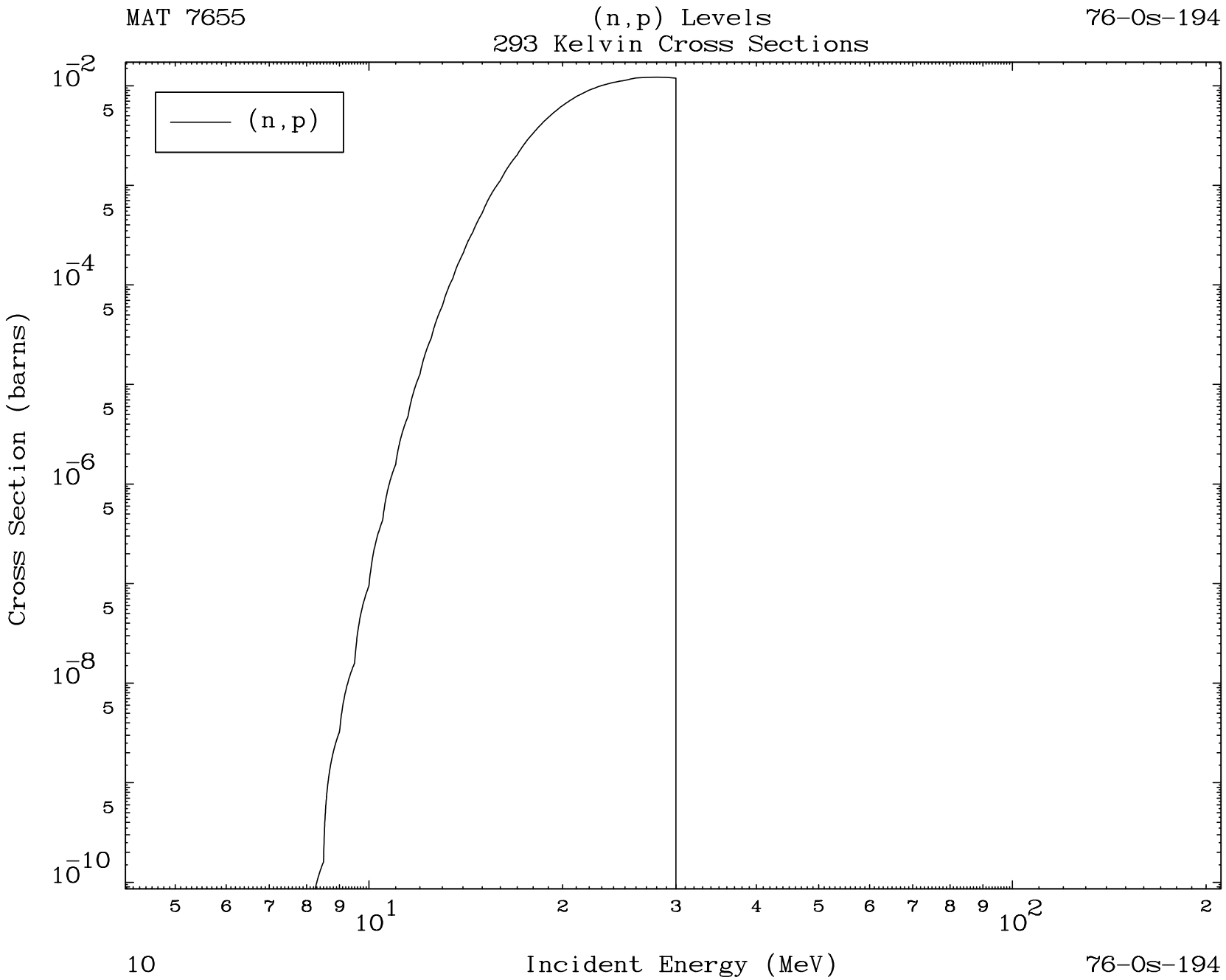

MAT 7655
Charged Particle
293 Kelvin Cross Sections
76-0s-194
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
Cross Section (barns)
Incident Energy (MeV)
76-0s-194

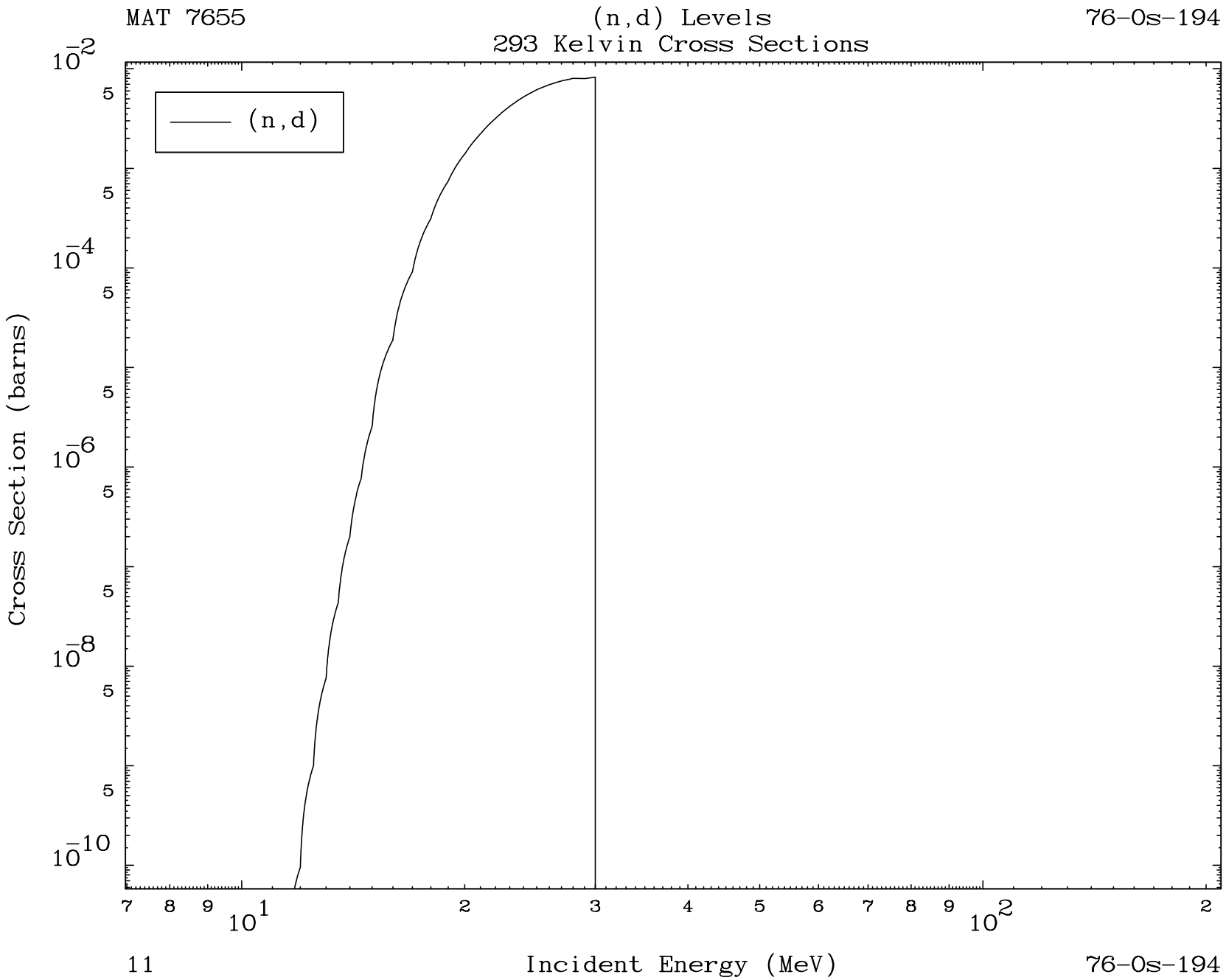

MAT 7655
Charged Particle
293 Kelvin Cross Sections
76-0s-194
(n,n') α
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2p)
Cross Section (barns)
Incident Energy (MeV)
6
76-0s-194

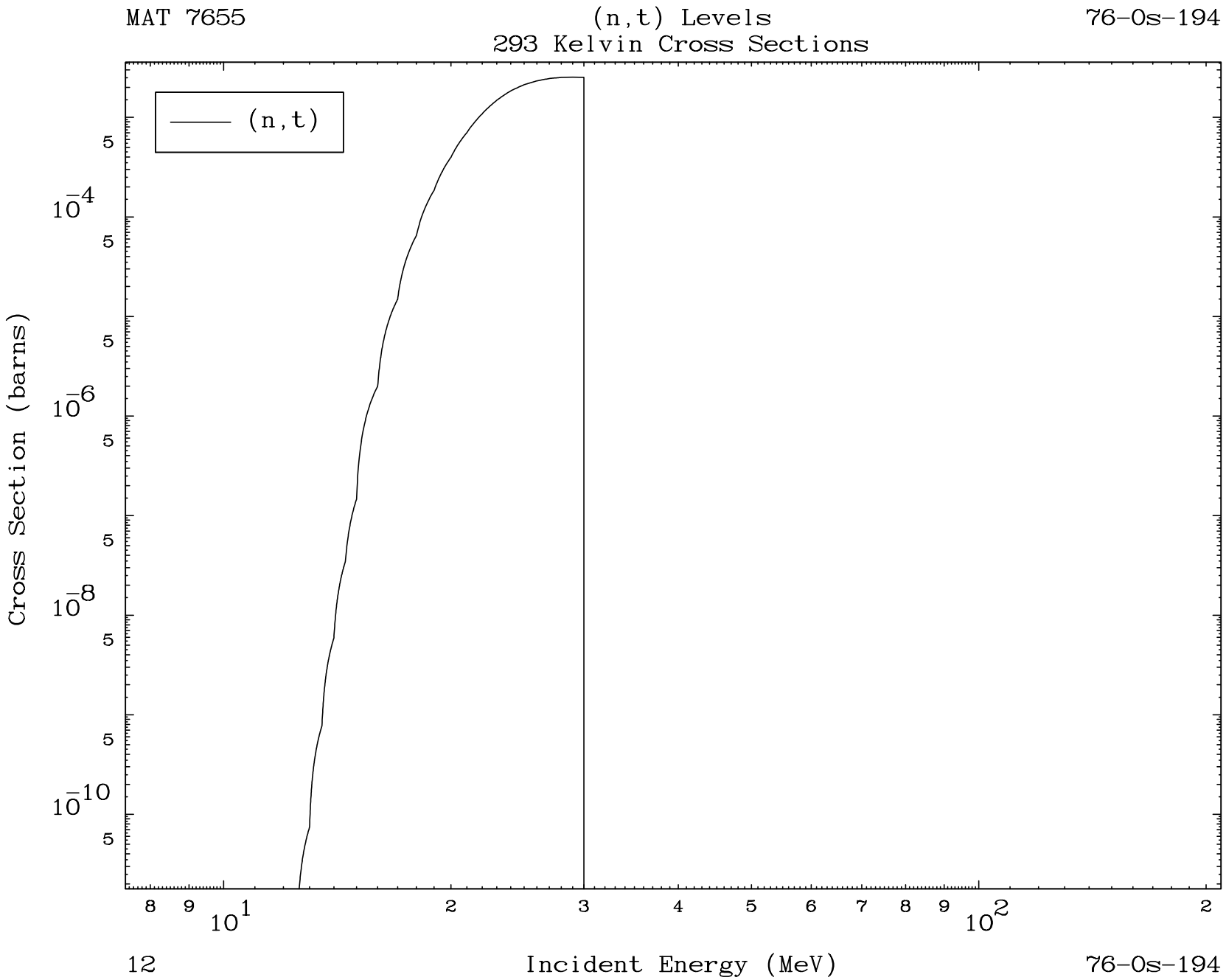

MAT 7655
Particle Production
293 Kelvin Cross Sections
76-0s-194
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
7
76-0s-194

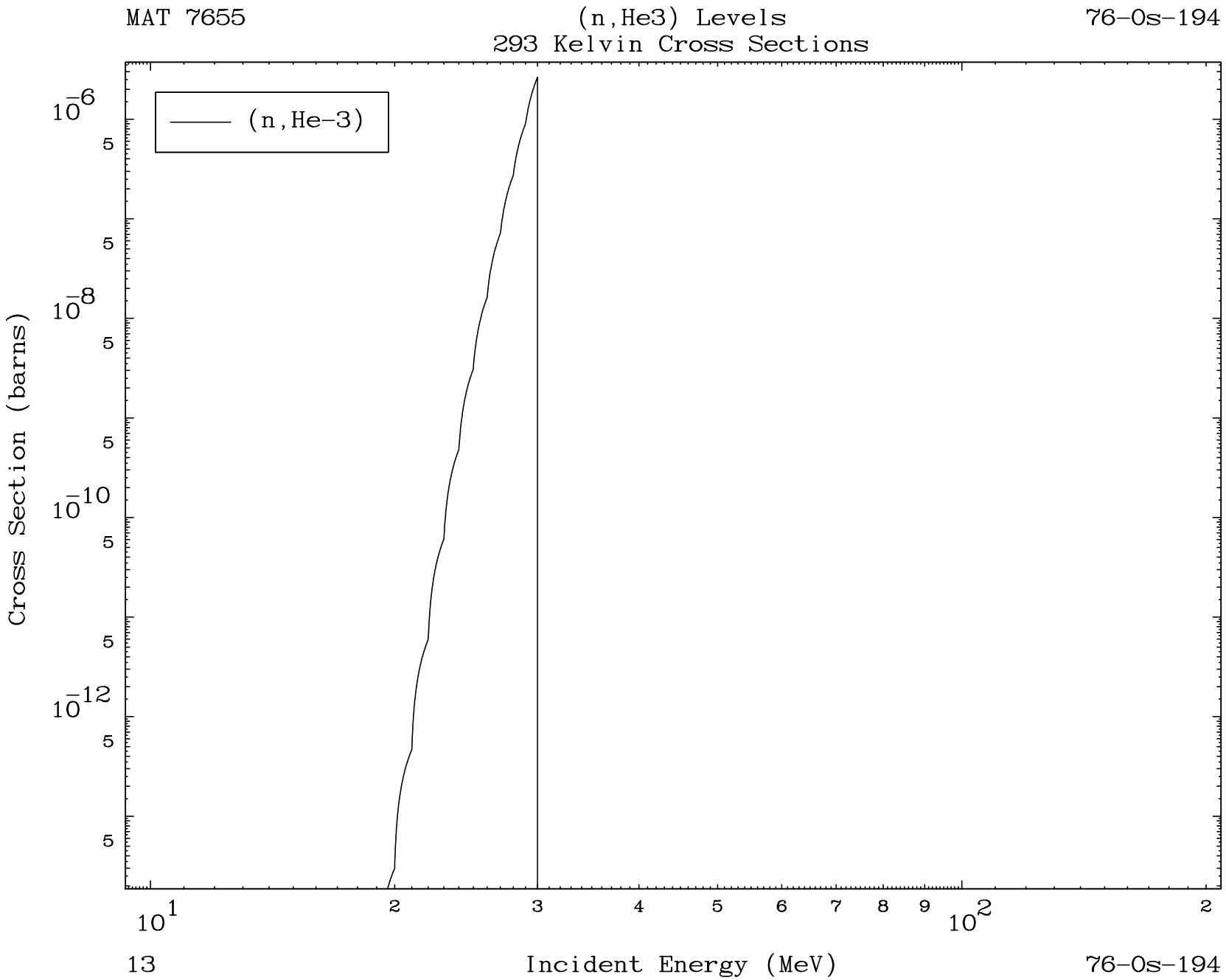

MAT 7655
(n,n') Levels
293 Kelvin Cross Sections
76-0s-194
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
8
76-0s-194


MAT 7655
(n,n') Levels
293 Kelvin Cross Sections
76-0s-194
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
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
9
76-0s-194

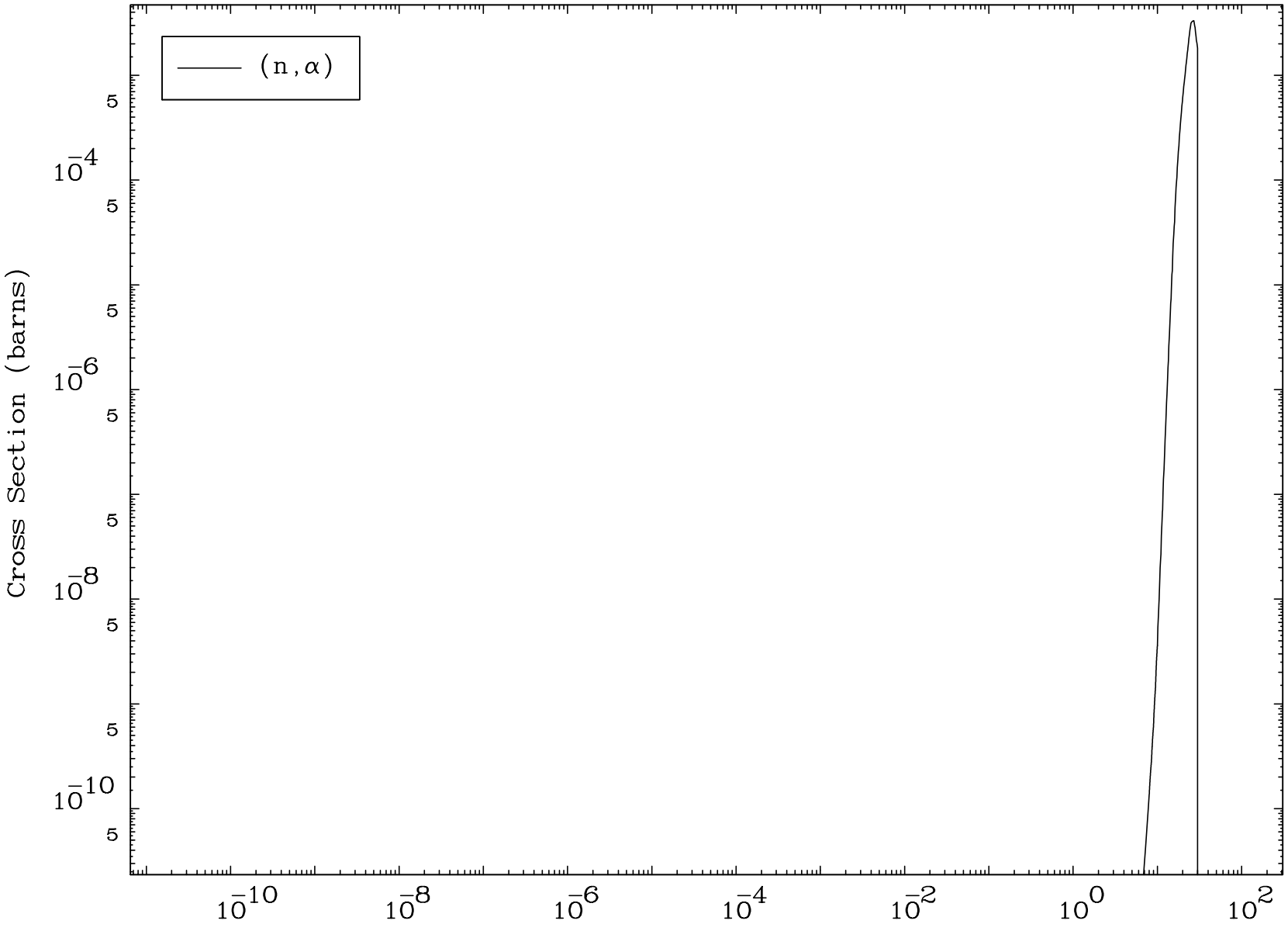

MAT 7655
(n,p) Levels
76-0s-194
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
10
76-0s-194

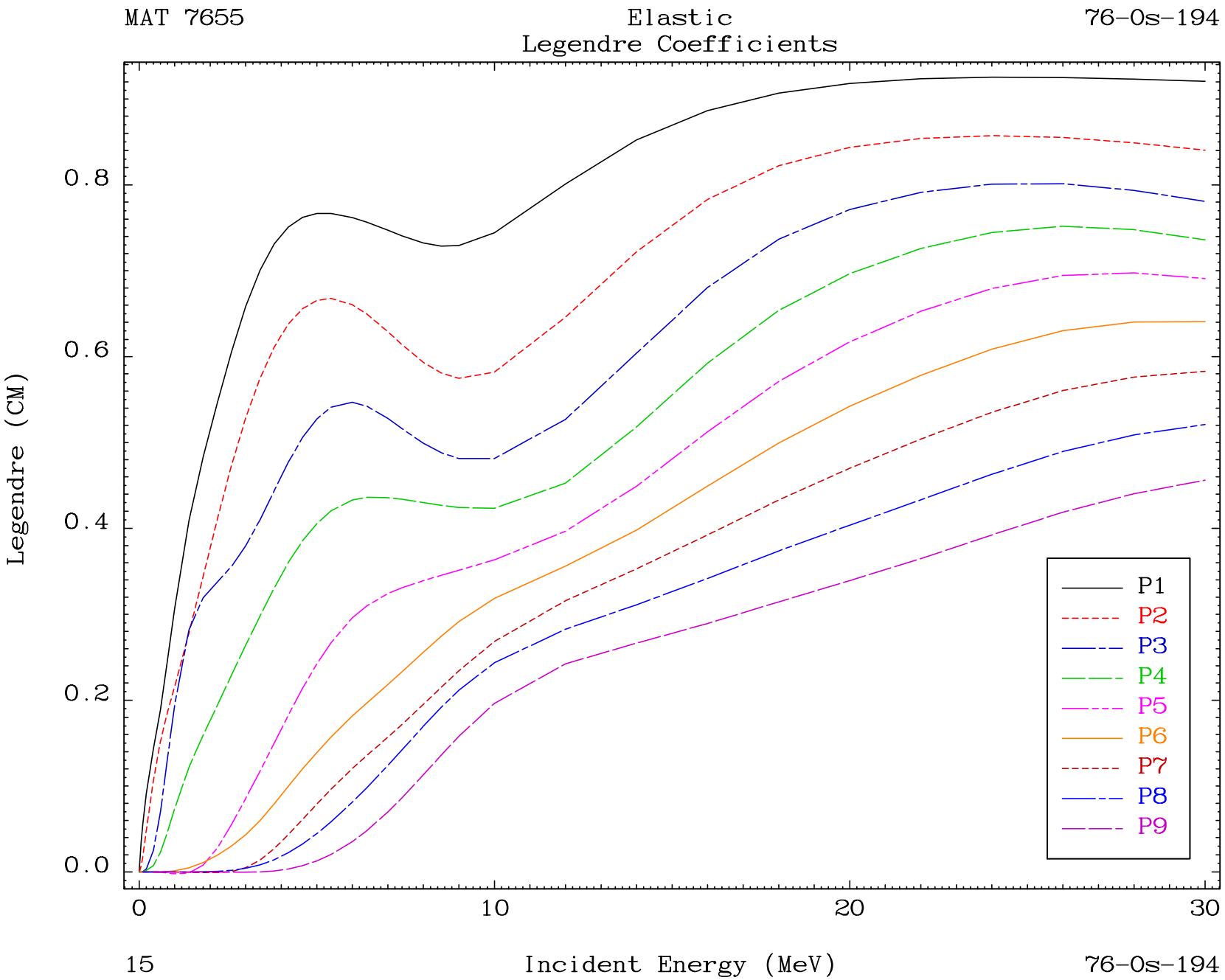

MAT 7655
(n,d) Levels
76-0s-194
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
11
76-0s-194

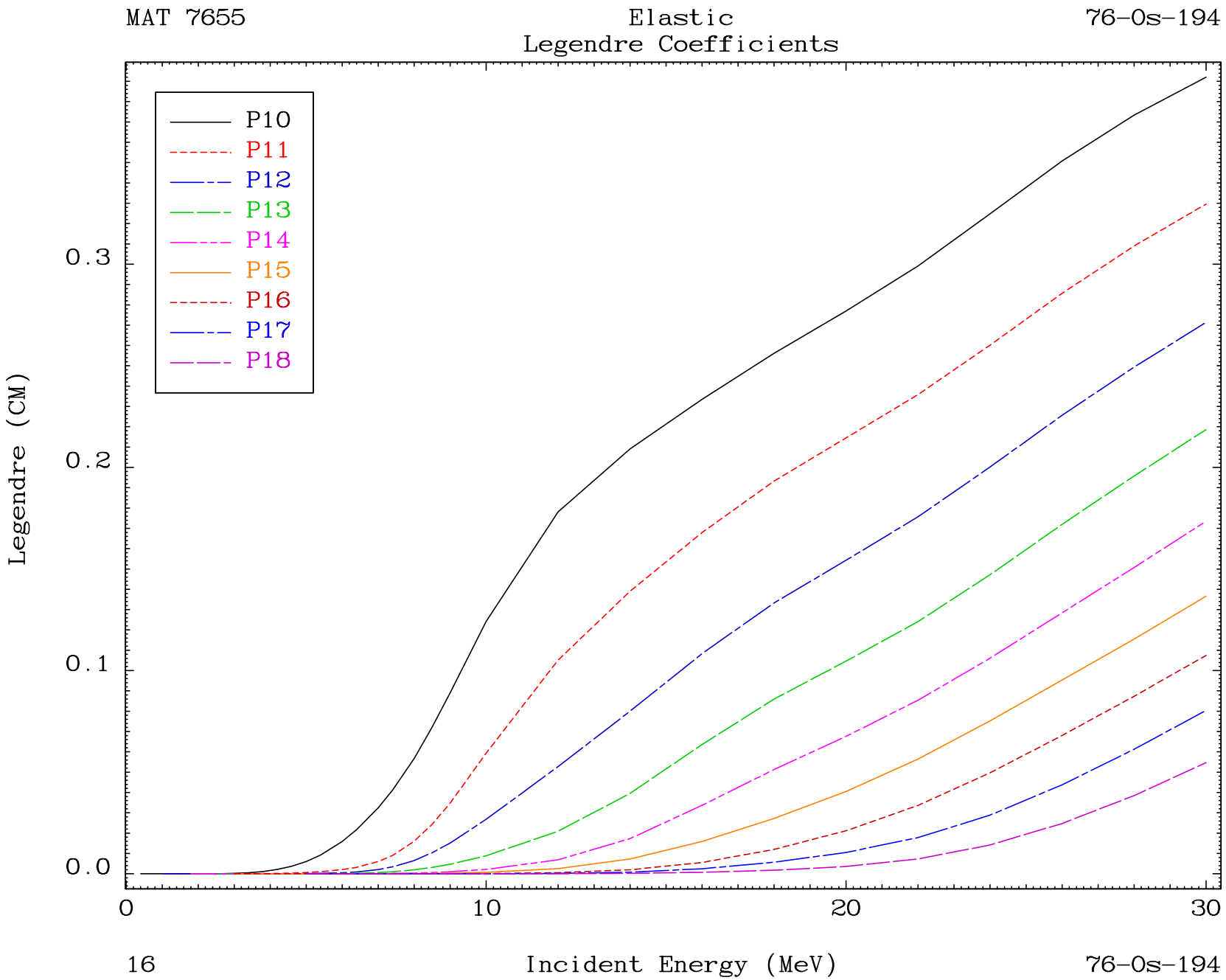

MAT 7655
(n,t) Levels
76-0s-194
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
12
76-0s-194

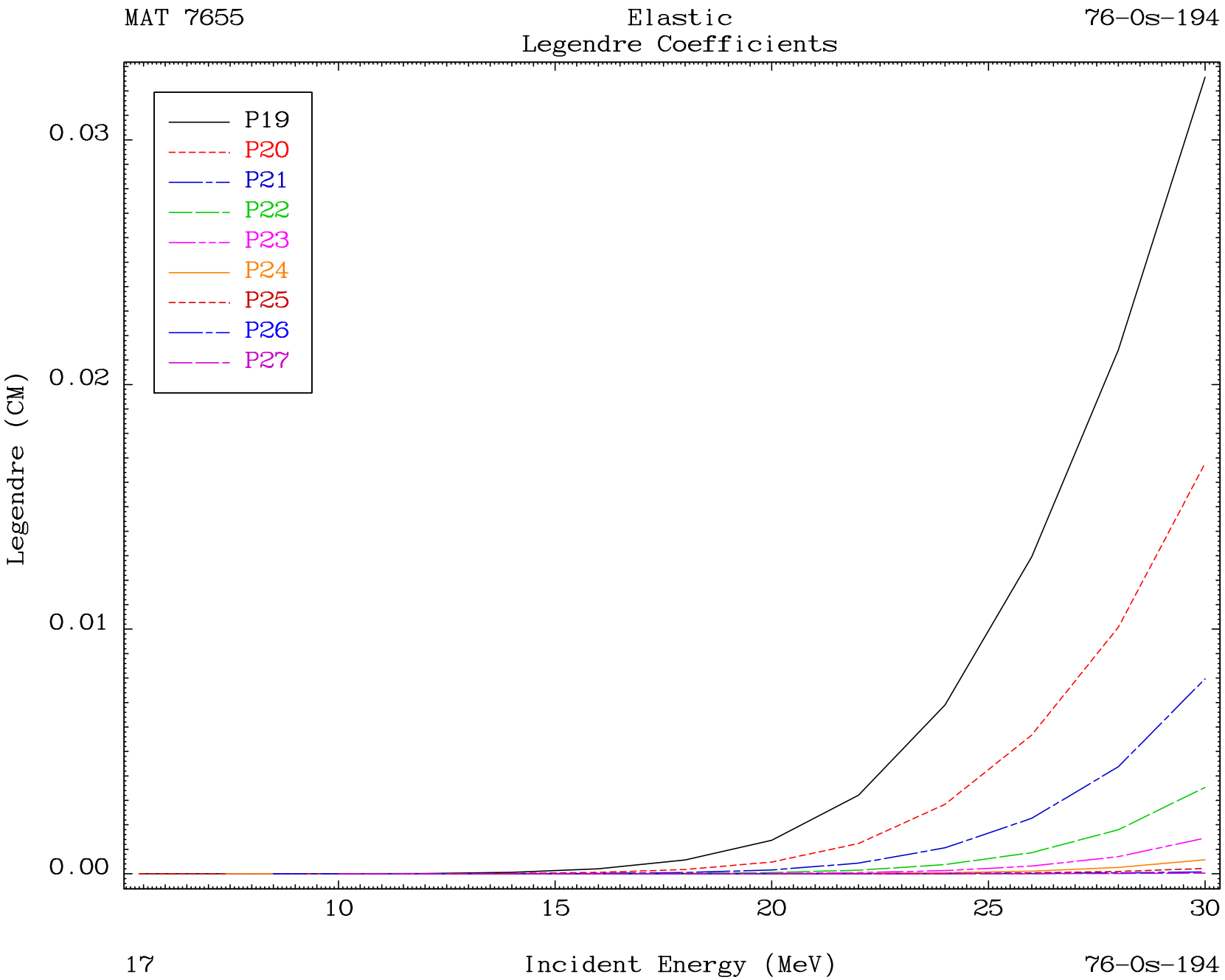

MAT 7655
(n,He3) Levels
76-0s-194
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10-6
10-8
10-10
10-12
5
101
2
3
4
5
6
7
8
9
102
2
13
Incident Energy (MeV)
76-0s-194

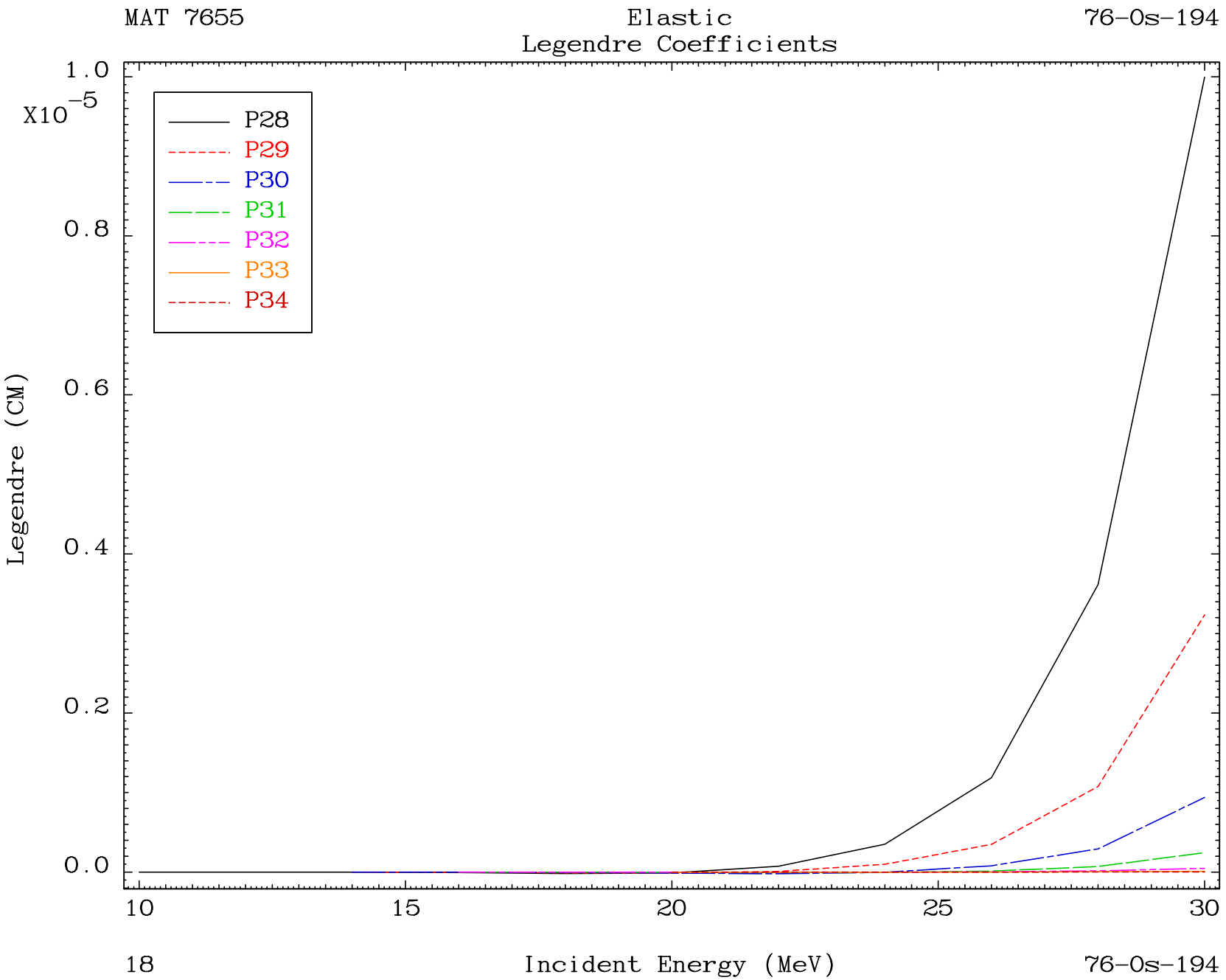
293 Kelvin Cross Sections

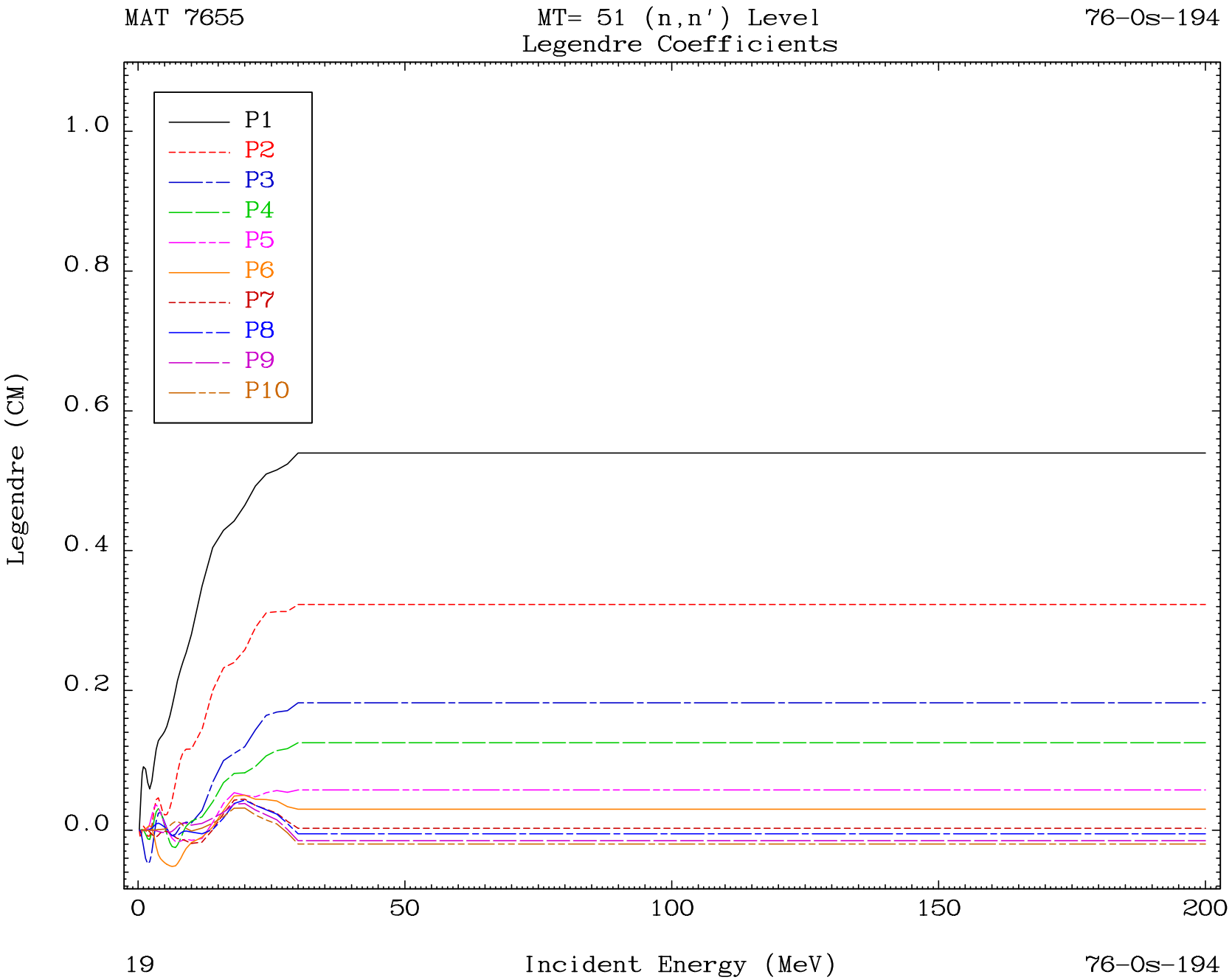


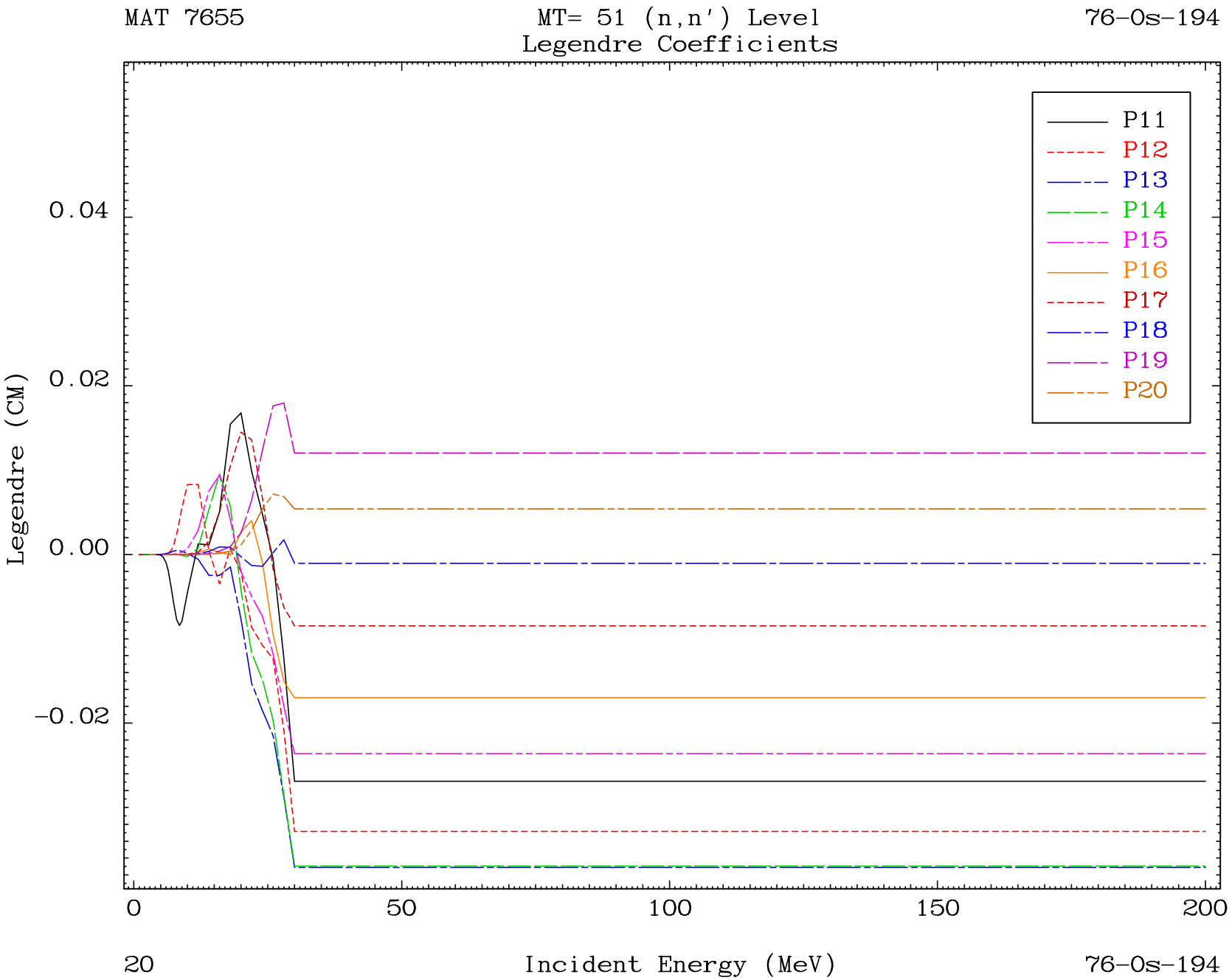

MAT 7655
Elastic
Legendre Coefficients
76-0s-194
Legendre (CM)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
15
Incident Energy (MeV)
76-0s-194
P1
P2
P3
P4
P5
P6
P7
P8
P9

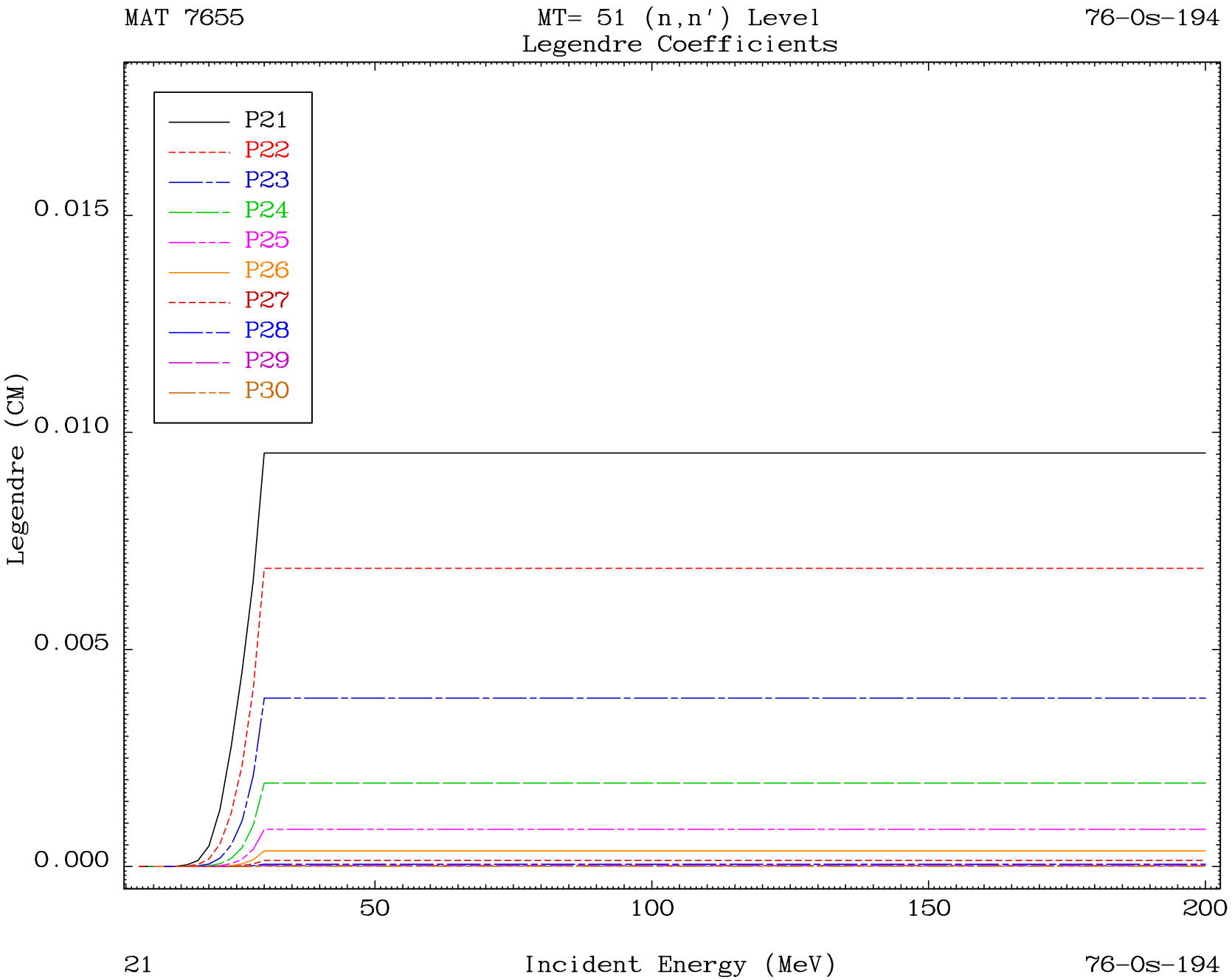

MAT 7655
Elastic
Legendre Coefficients
76-0s-194
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.0
0.1
0.2
0.3
0
10
20
30
16
Incident Energy (MeV)
76-0s-194

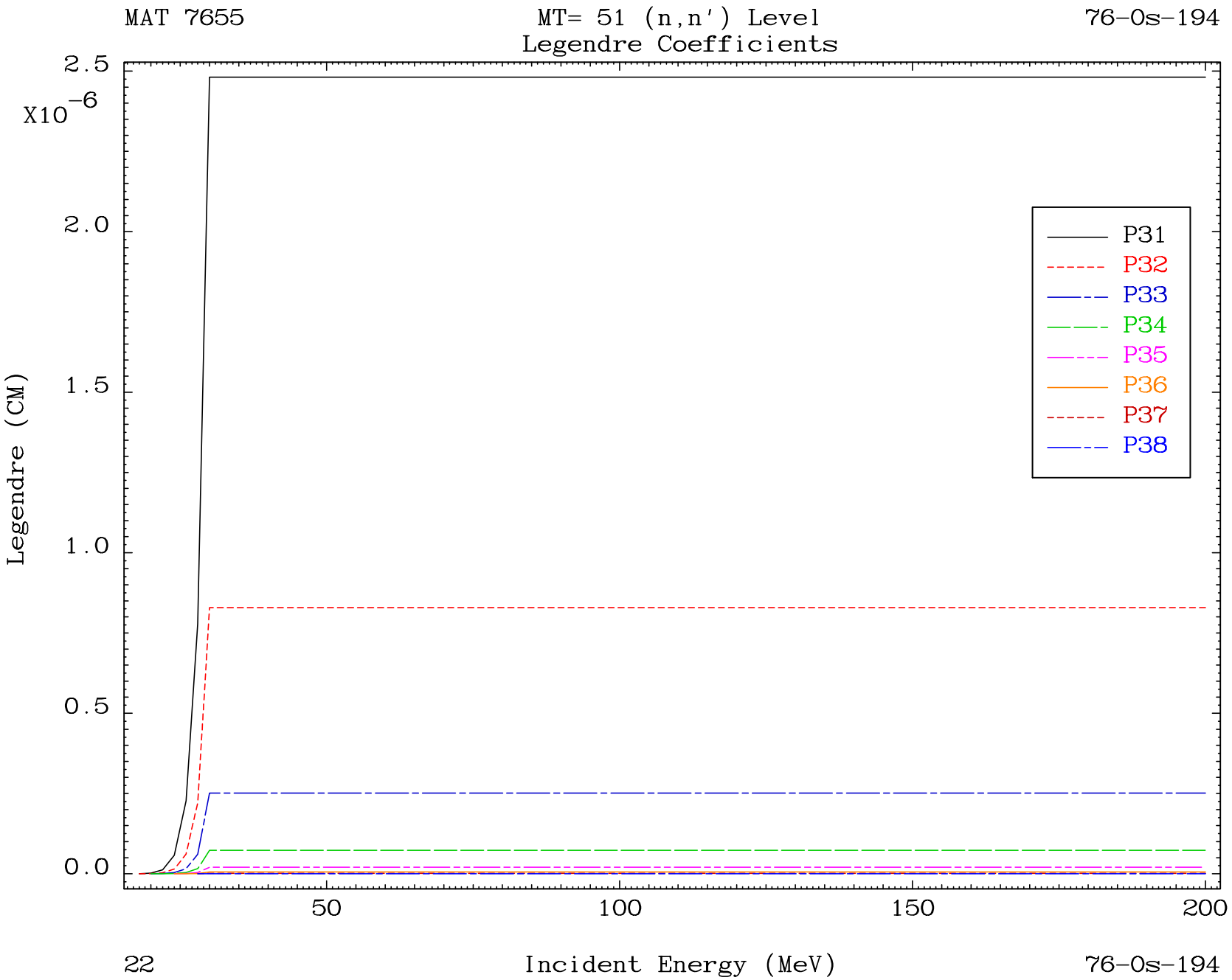

MAT 7655
Elastic
Legendre Coefficients
76-0s-194
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.03
0.02
0.01
0.00
Legendre (CM)
10
15
20
25
30
17
Incident Energy (MeV)
76-0s-194

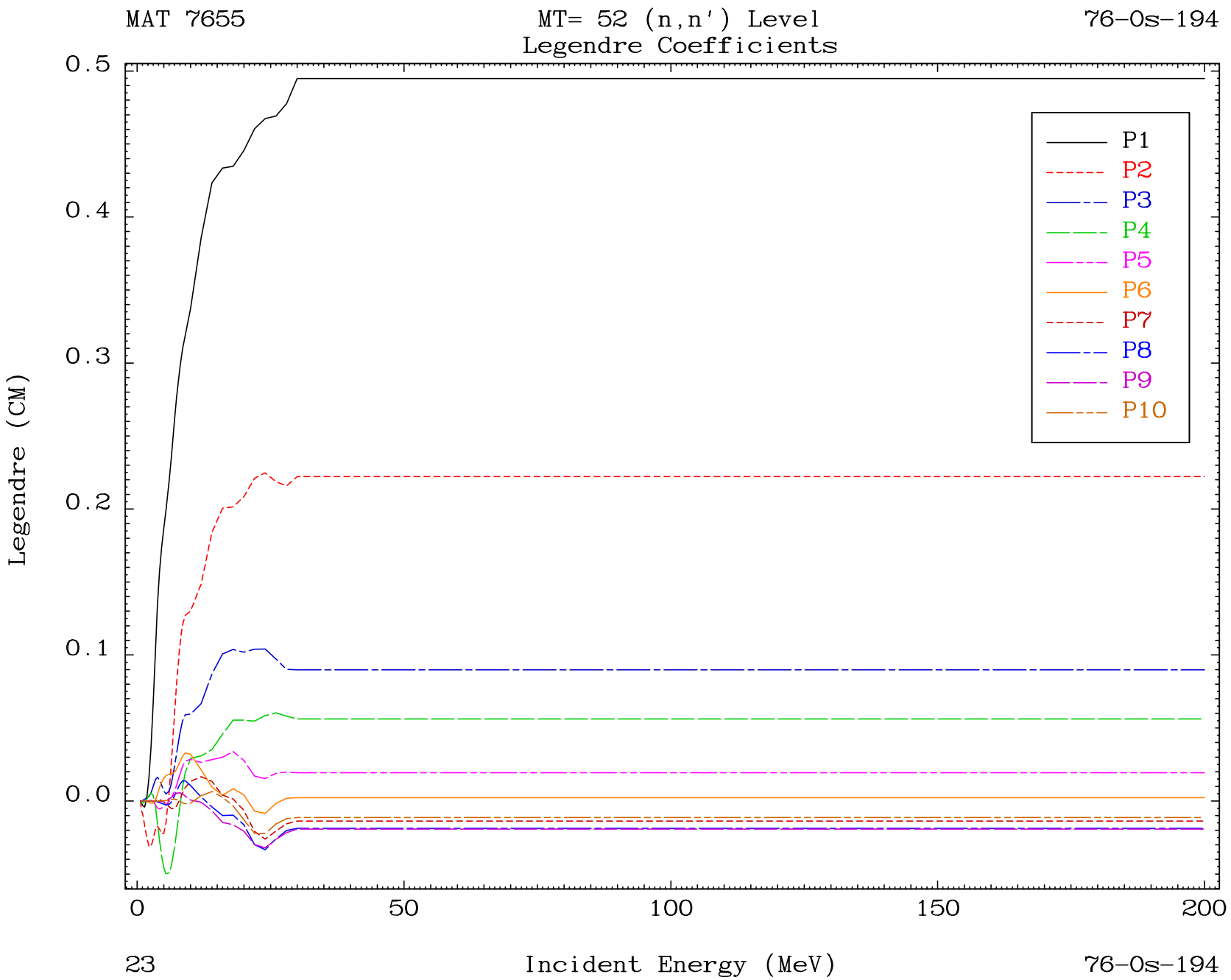

MAT 7655
Elastic
Legendre Coefficients
76-0s-194
1.0
X10 −5
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
10
15
20
25
30
18
Incident Energy (MeV)
76-0s-194

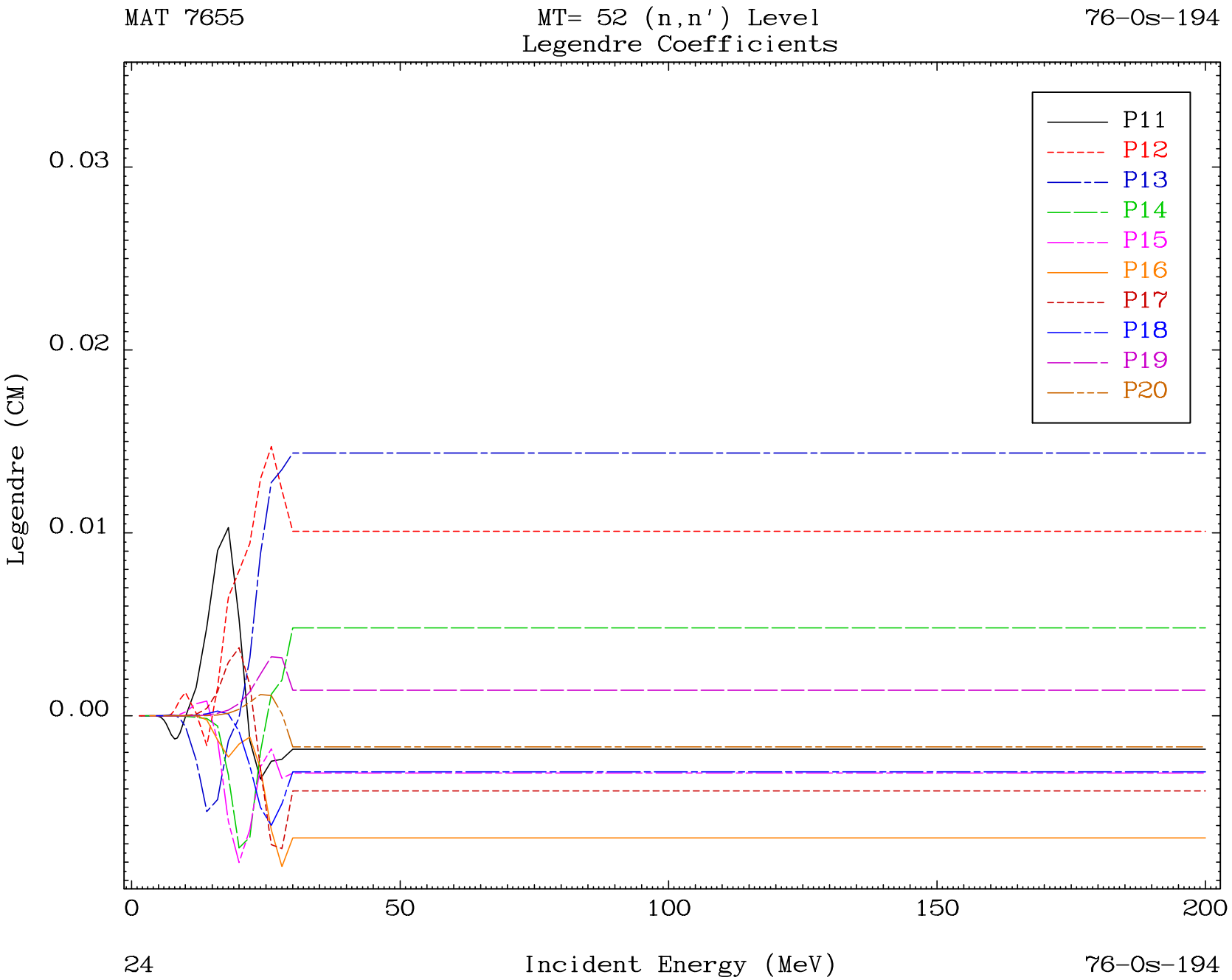

MAT 7655
MT= 51 (n,n') Level
Legendre Coefficients
76-0s-194
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
50
100
150
200
19
Incident Energy (MeV)
76-0s-194

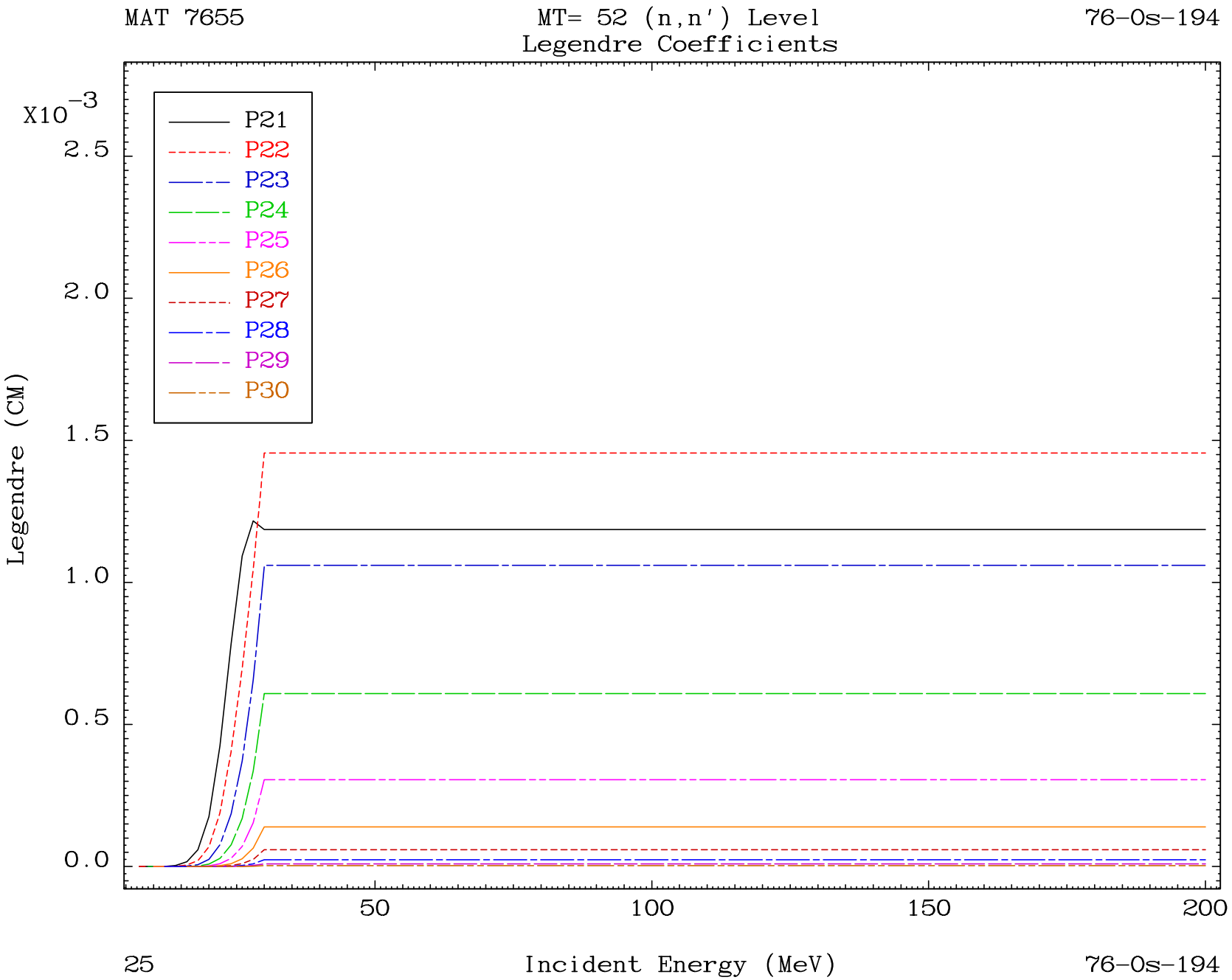

MAT 7655
MT= 51 (n,n') Level
Legendre Coefficients
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
20
Incident Energy (MeV)
76-0s-194

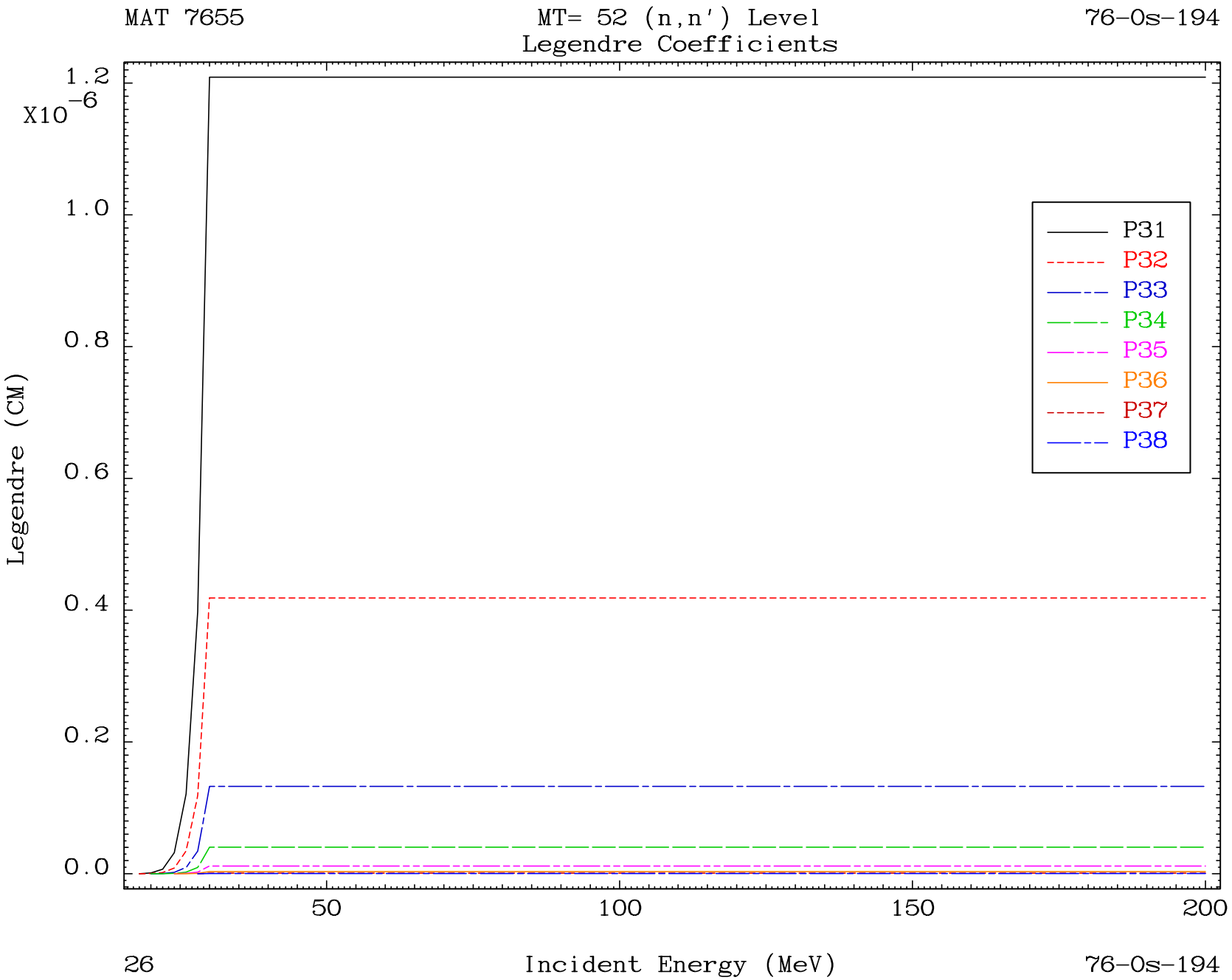

MAT 7655
MT= 51 (n,n') Level
Legendre Coefficients
76-0s-194
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
21
Incident Energy (MeV)
76-0s-194

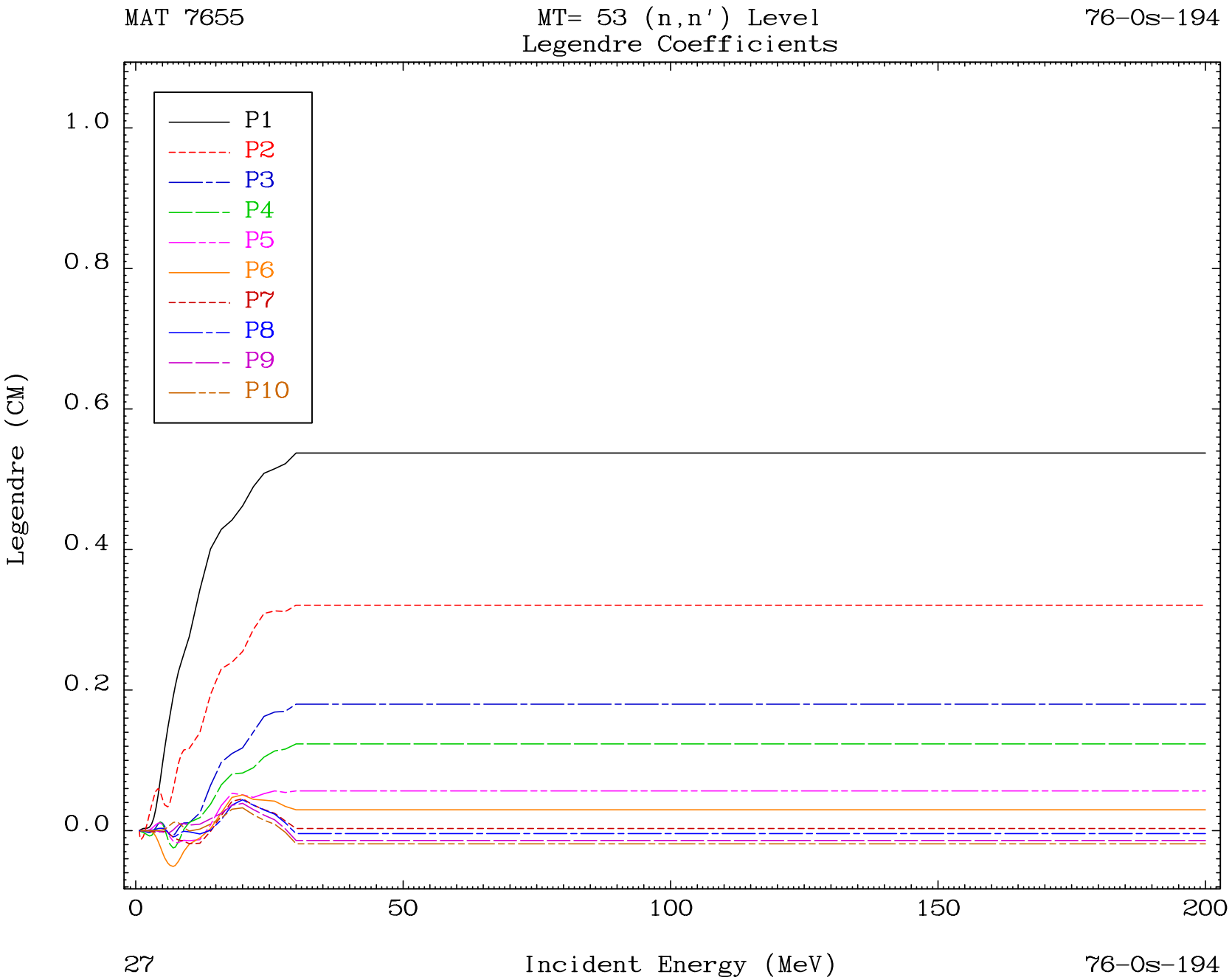

MAT 7655
MT= 51 (n,n') Level
Legendre Coefficients
76-0s-194
X10 −6
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
50
100
150
200
22
Incident Energy (MeV)
76-0s-194

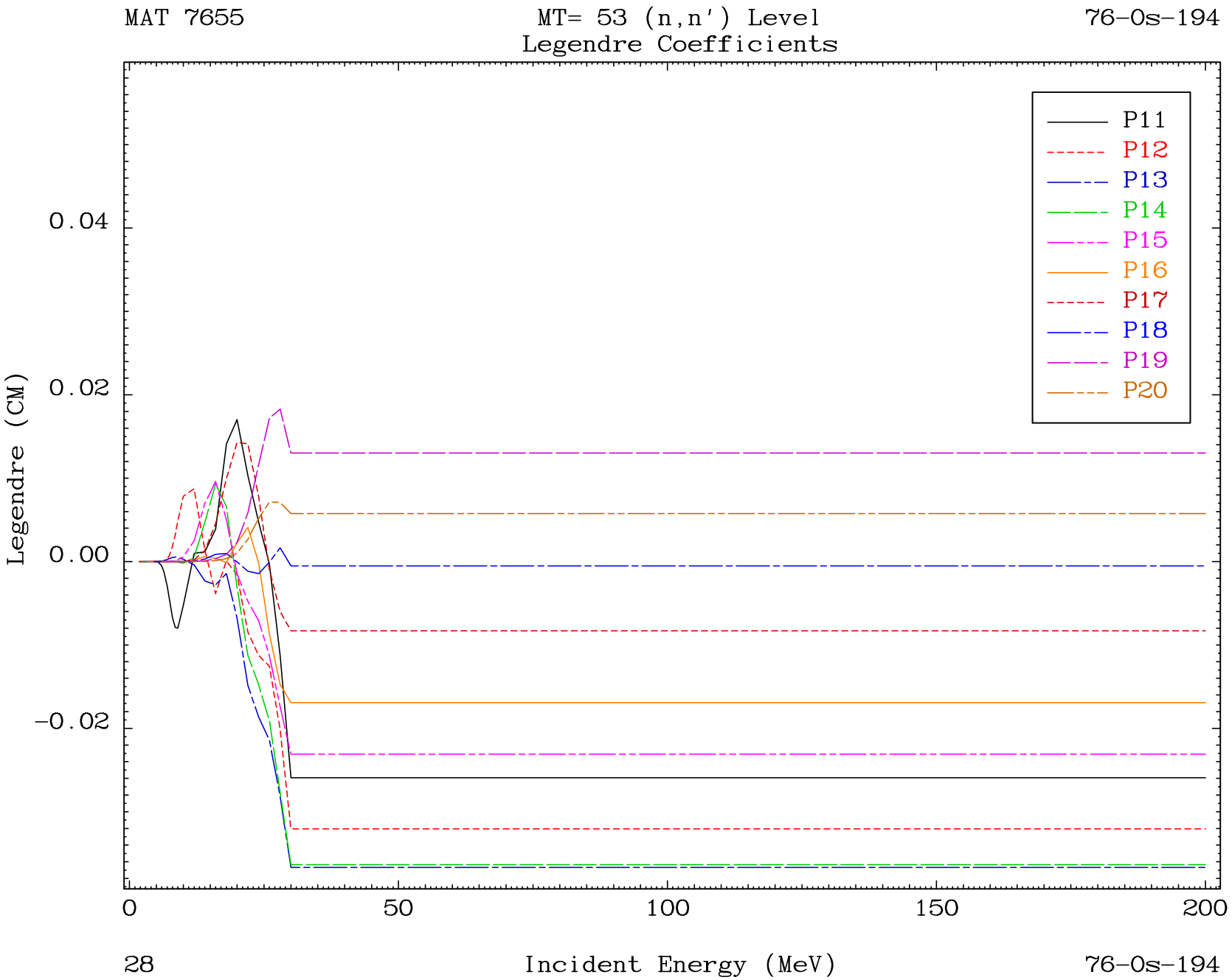

MAT 7655
MT= 52 (n,n') Level
Legendre Coefficients
76-0s-194
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
Incident Energy (MeV)
23
76-0s-194
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

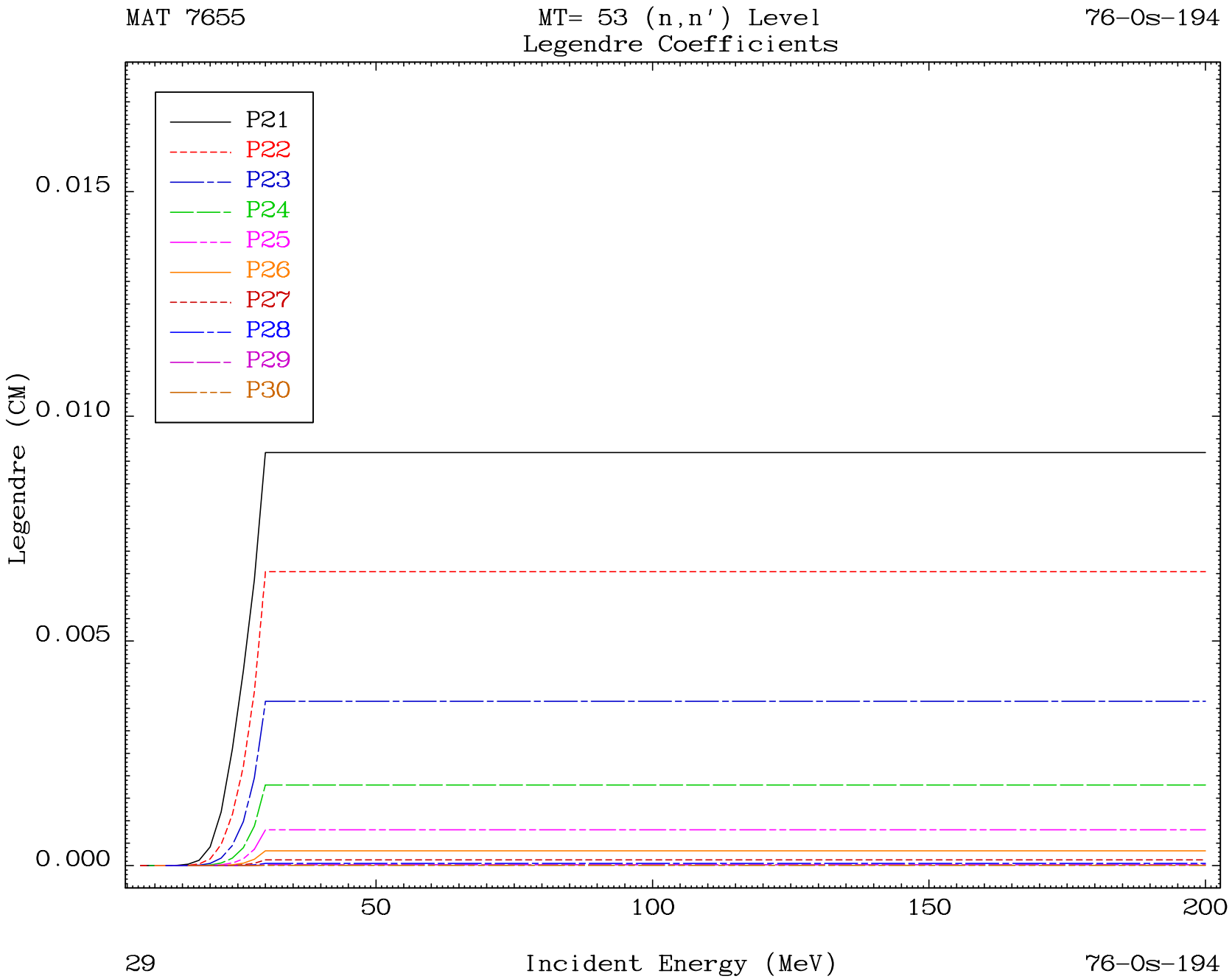

MAT 7655
MT= 52 (n,n') Level
Legendre Coefficients
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
24
Incident Energy (MeV)
76-0s-194

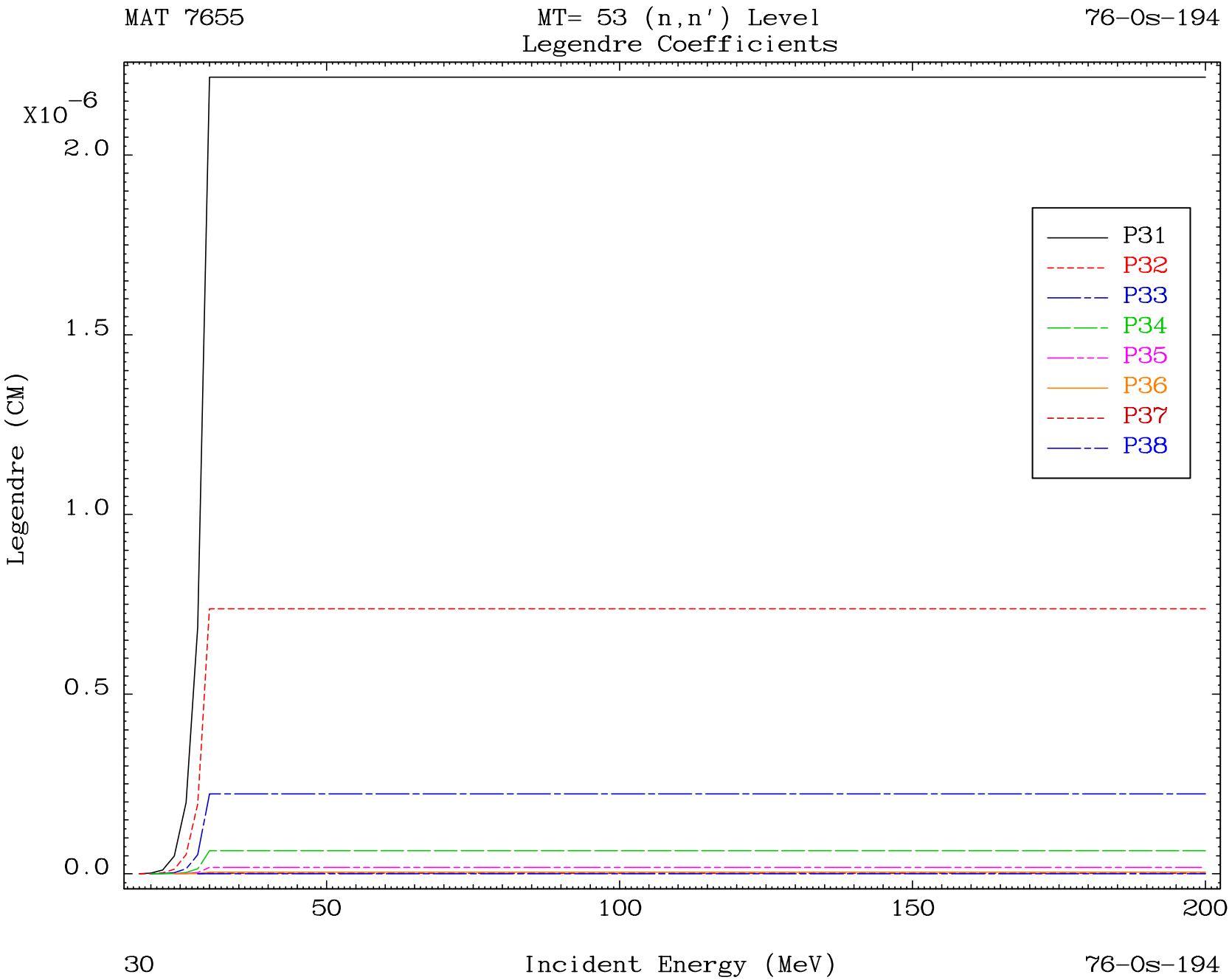

MAT 7655
MT= 52 (n,n') Level
Legendre Coefficients
76-0s-194
X10 -3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
25
Incident Energy (MeV)
76-0s-194

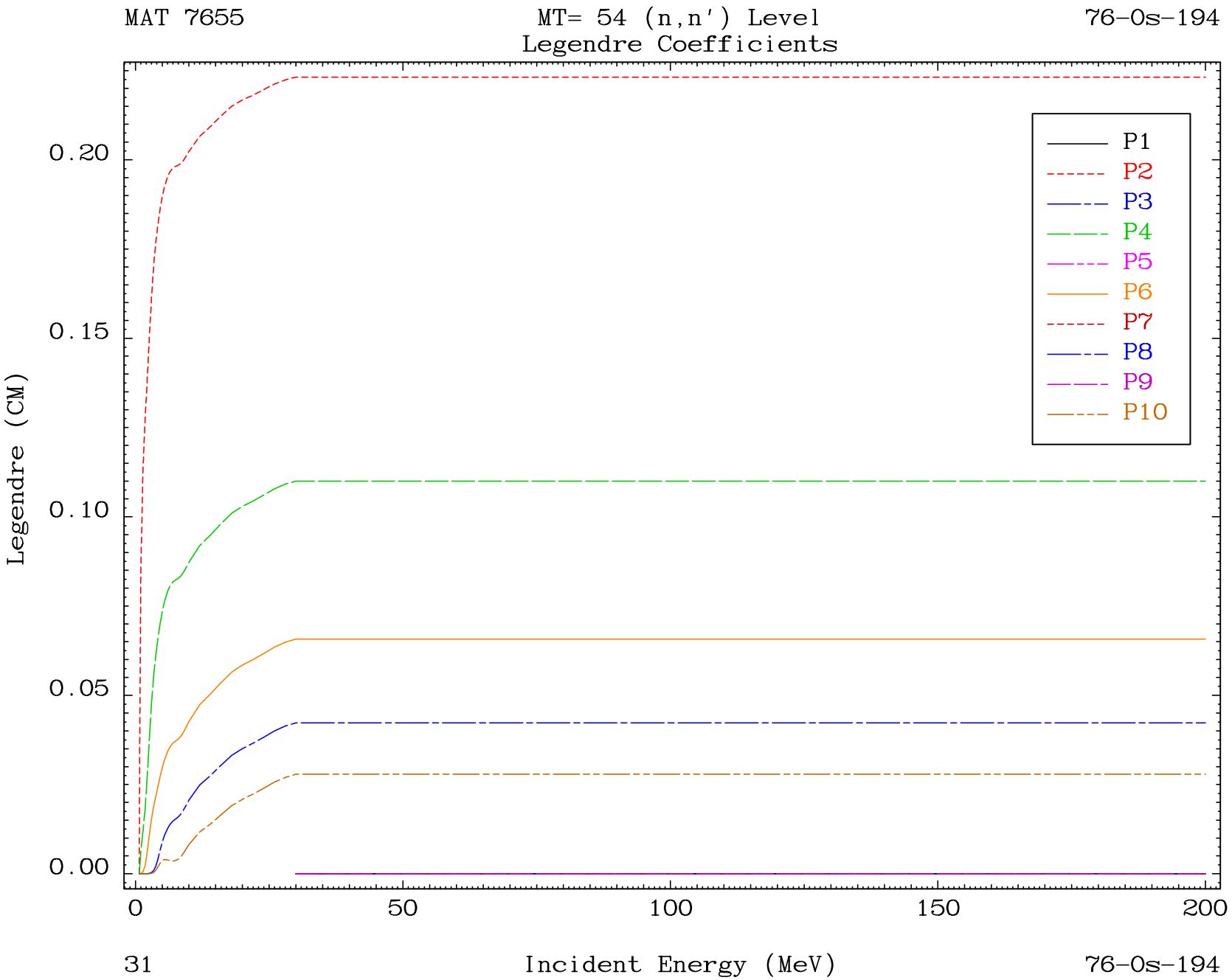

MAT 7655
MT= 52 (n,n') Level
Legendre Coefficients
76-0s-194
X10 -6
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
50
100
150
200
26
Incident Energy (MeV)
76-0s-194

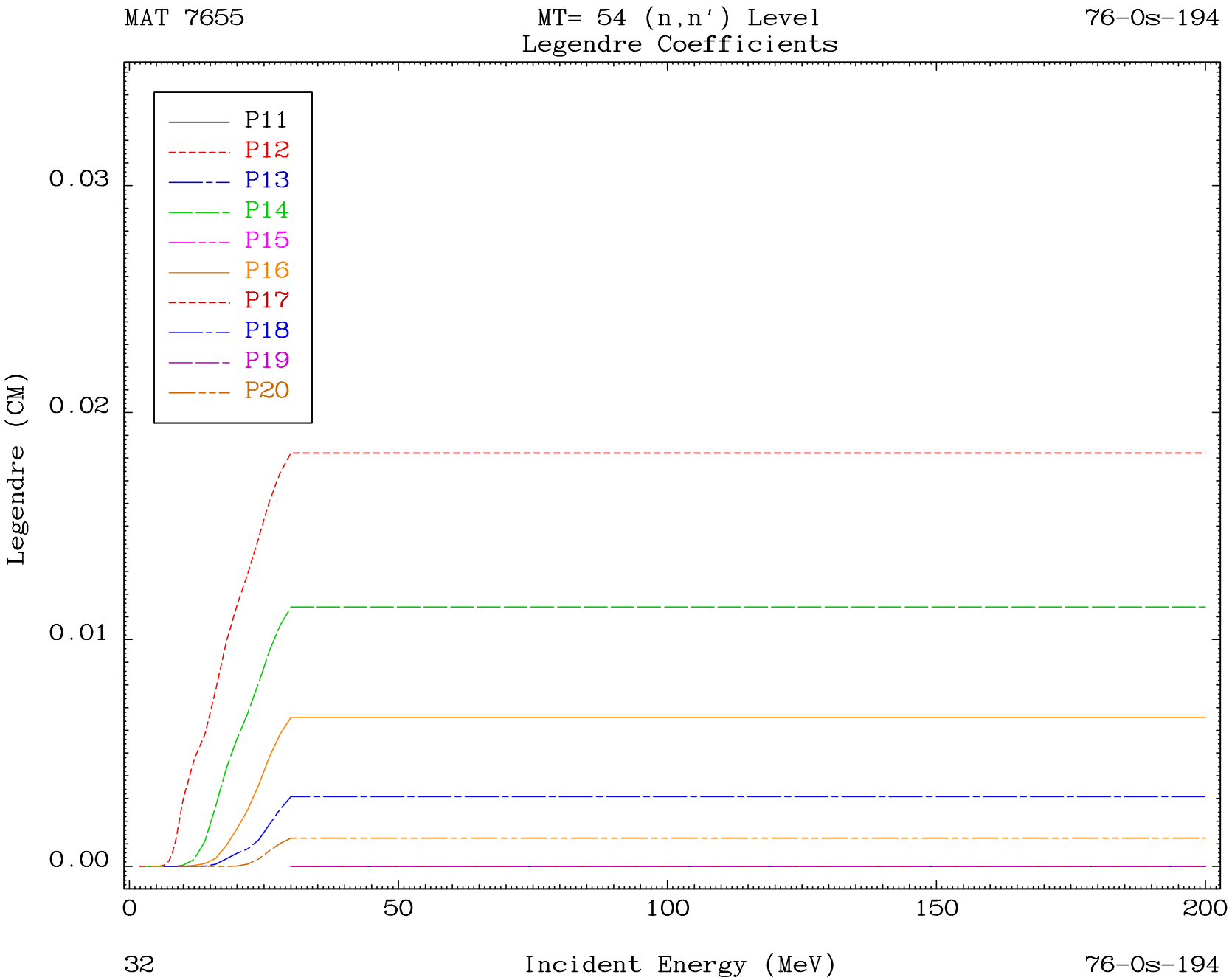

MAT 7655
MT= 53 (n,n') Level
Legendre Coefficients
76-0s-194
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
50
100
150
200
27
Incident Energy (MeV)
76-0s-194

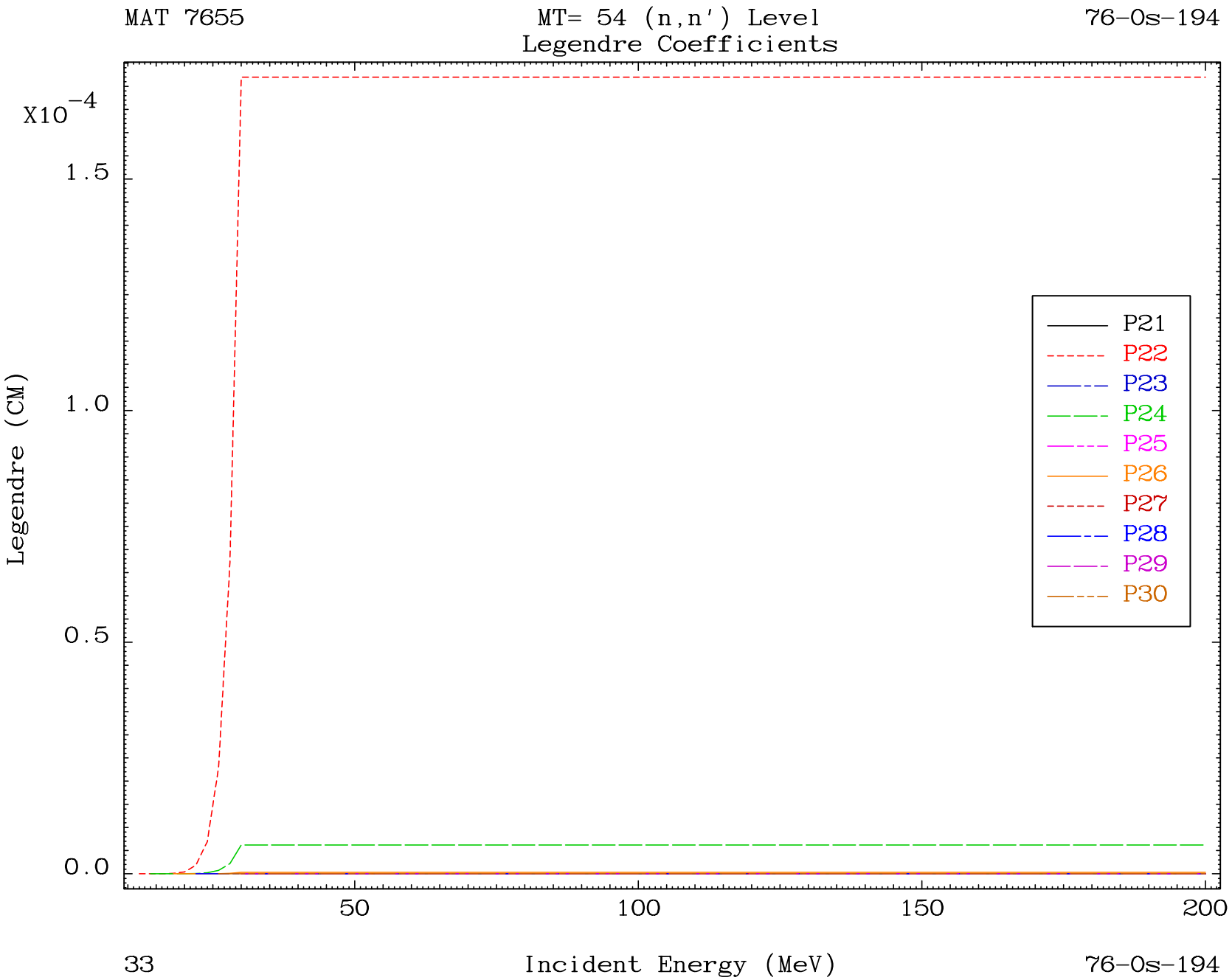

MAT 7655
MT= 53 (n,n') Level
Legendre Coefficients
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
28
Incident Energy (MeV)
76-0s-194

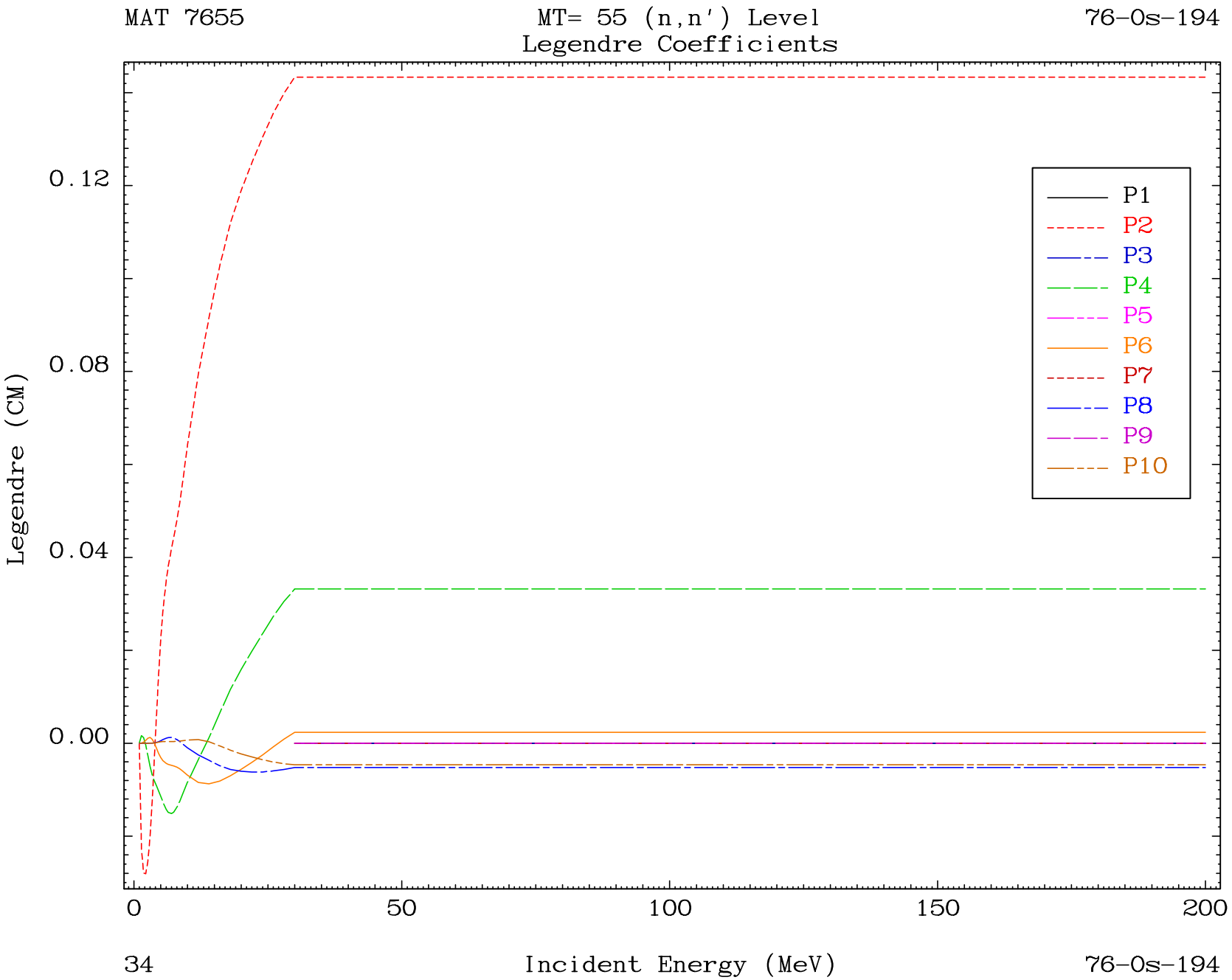

MAT 7655
MT= 53 (n,n') Level
Legendre Coefficients
76-0s-194
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
29
Incident Energy (MeV)
76-0s-194

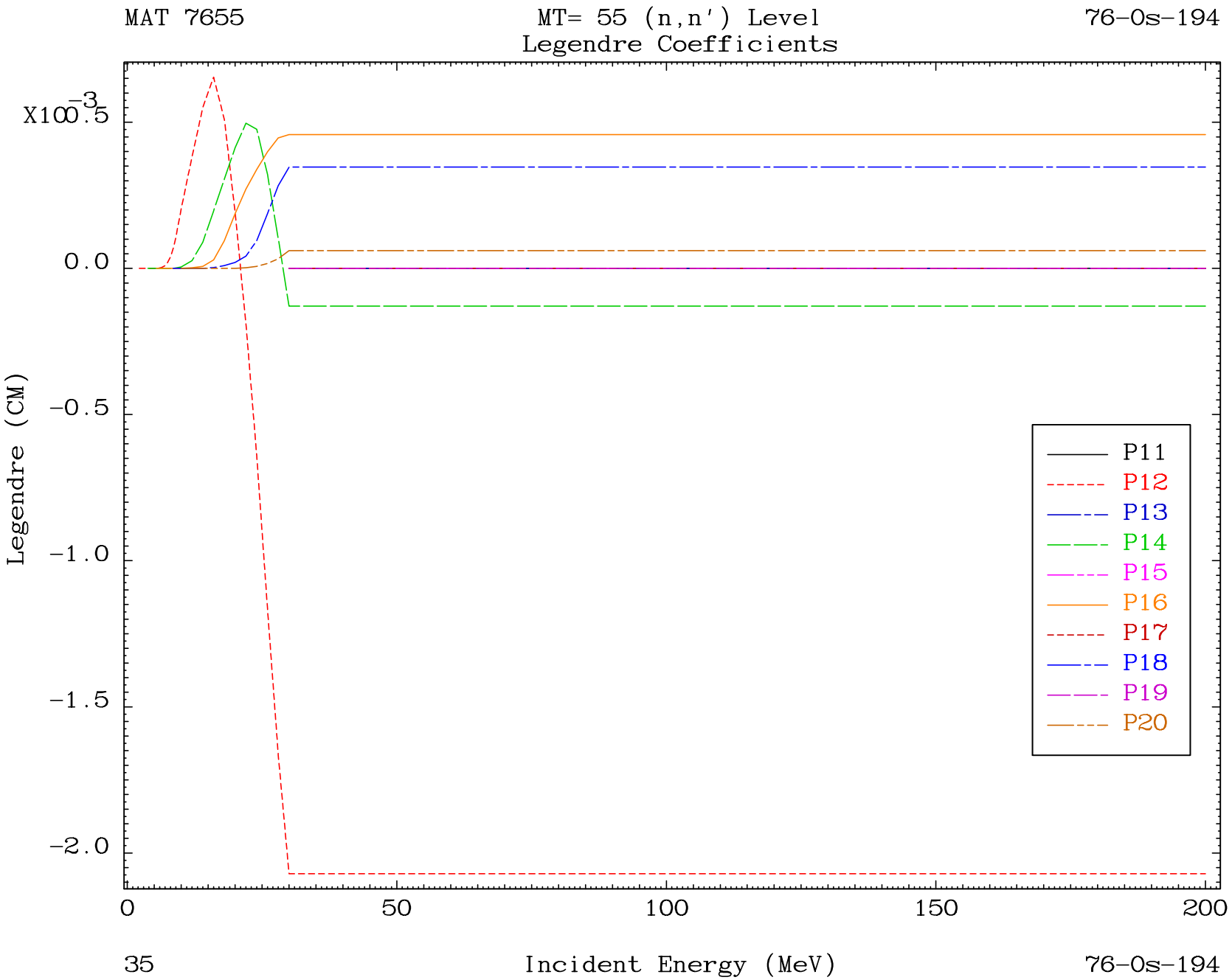

MAT 7655
MT= 53 (n,n') Level
Legendre Coefficients
76-0s-194
X10^-6
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
30
50
100
150
200
Incident Energy (MeV)
76-0s-194

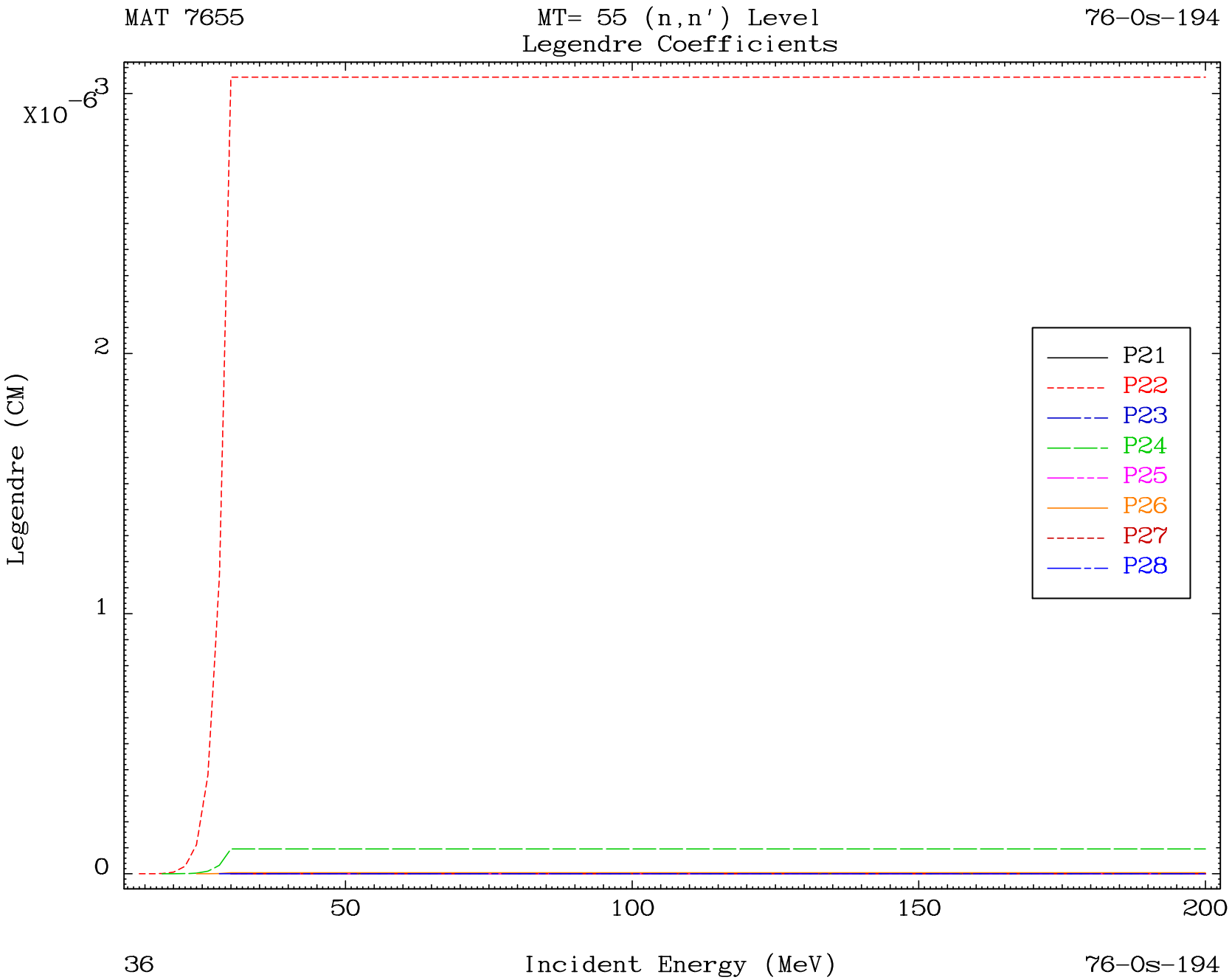

MAT 7655
MT= 54 (n,n') Level
Legendre Coefficients
76-0s-194
Legendre (CM)
0.20
0.15
0.10
0.05
0.00
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
31
Incident Energy (MeV)
76-0s-194

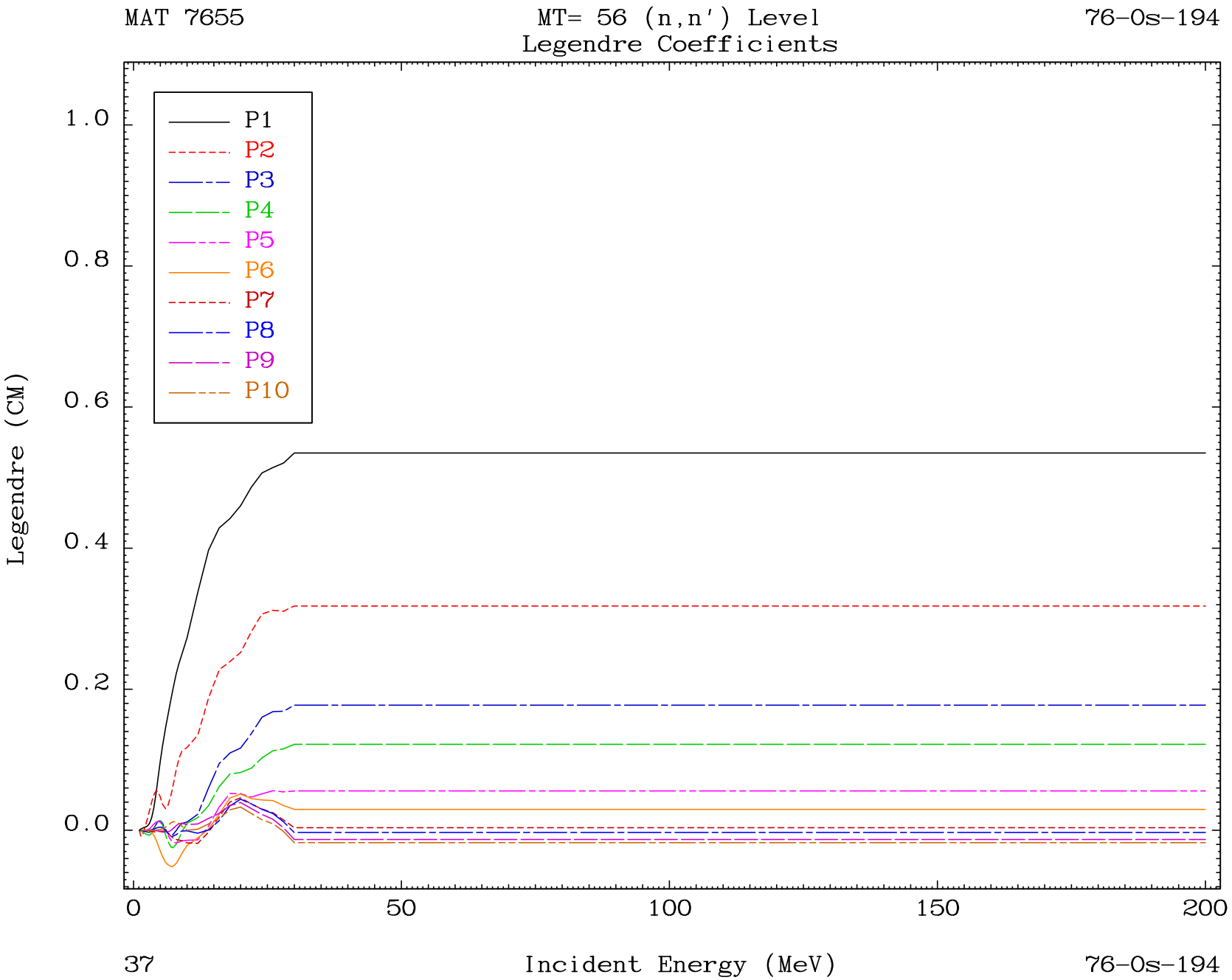

MAT 7655
MT= 54 (n,n') Level
Legendre Coefficients
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
32
Incident Energy (MeV)
76-0s-194

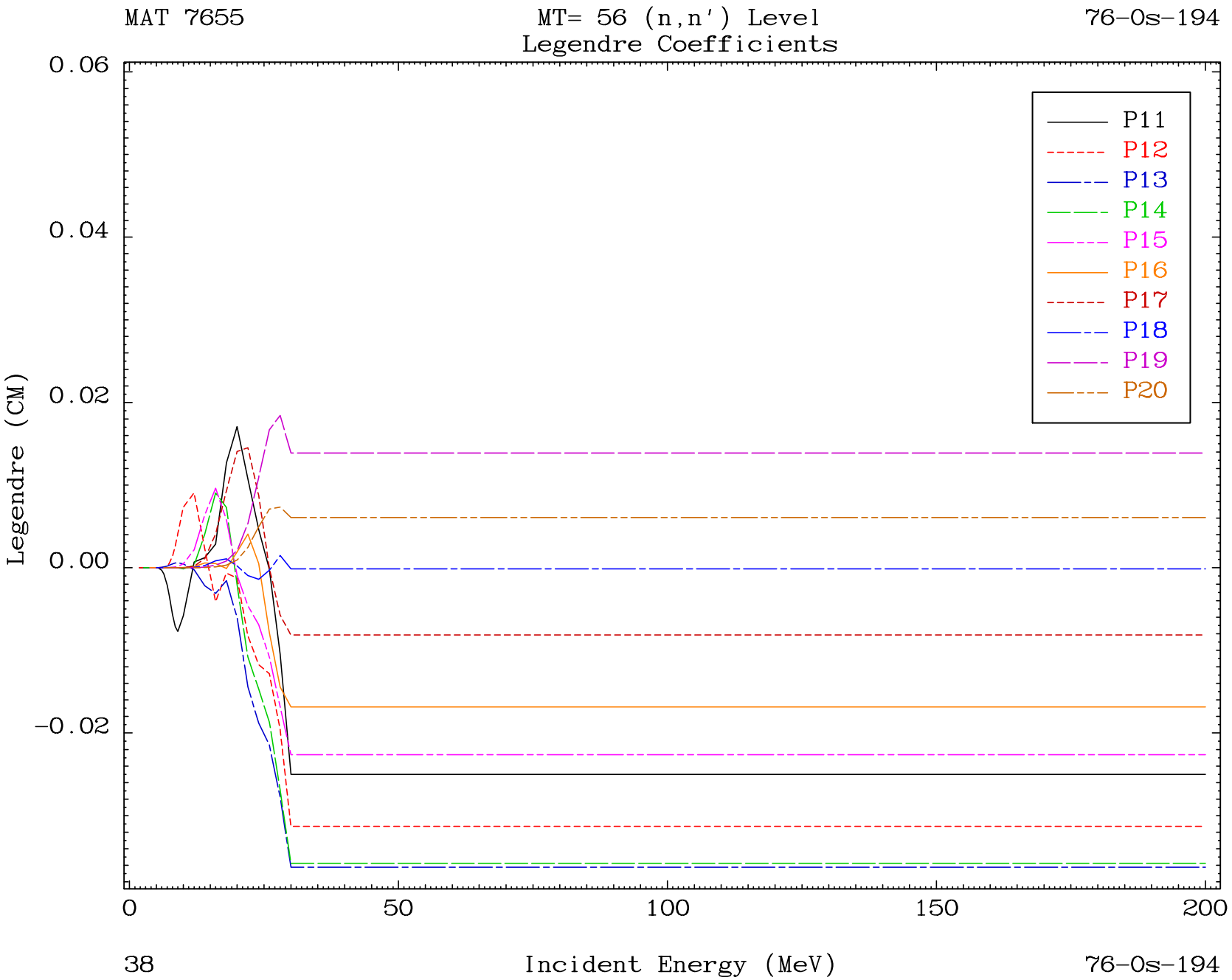

MAT 7655
MT= 54 (n,n') Level
Legendre Coefficients
76-0s-194
X10^-4
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
33
Incident Energy (MeV)
76-0s-194

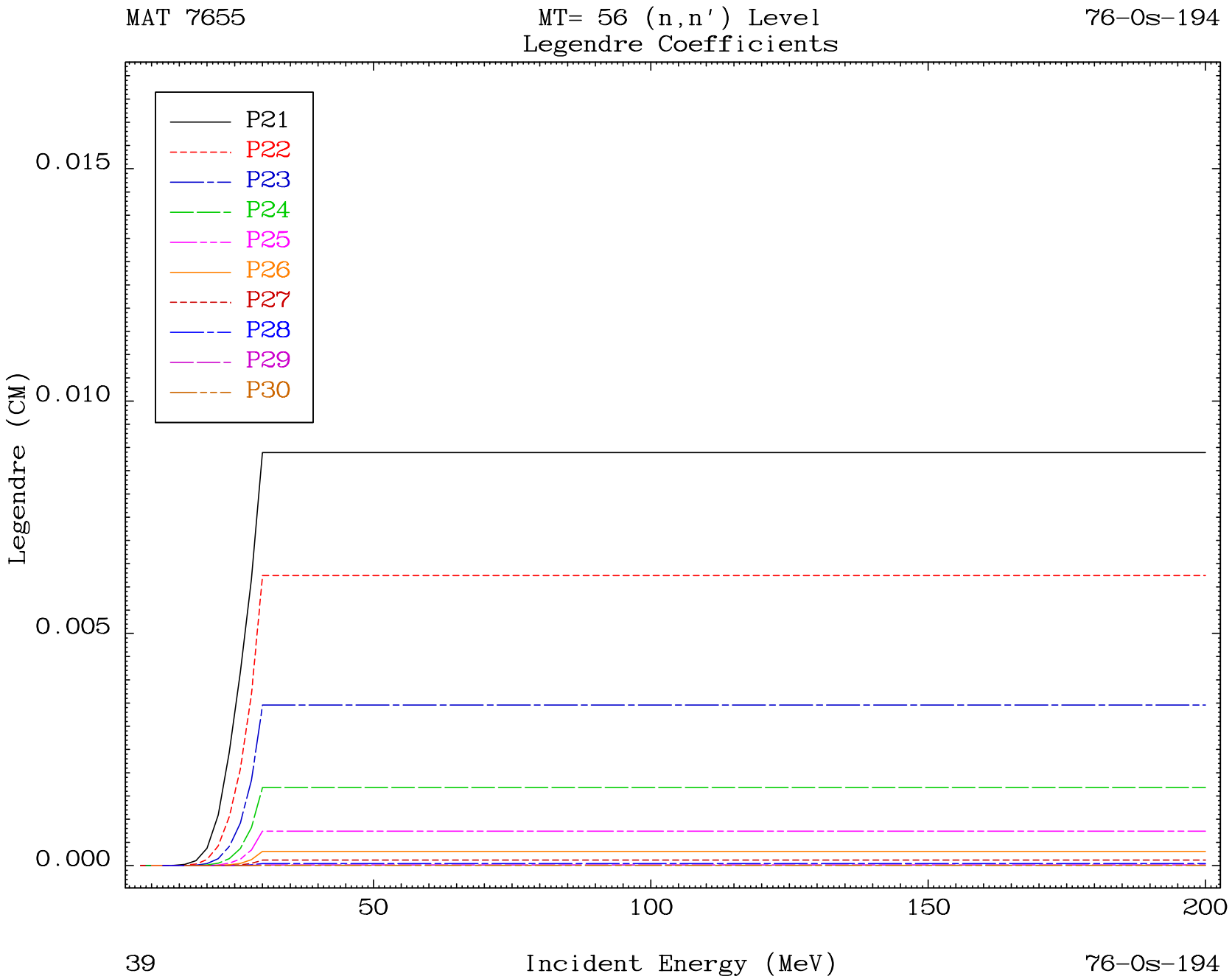

MAT 7655
MT= 55 (n,n') Level
Legendre Coefficients
76-0s-194
0.12
0.08
0.04
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
34
Incident Energy (MeV)
76-0s-194

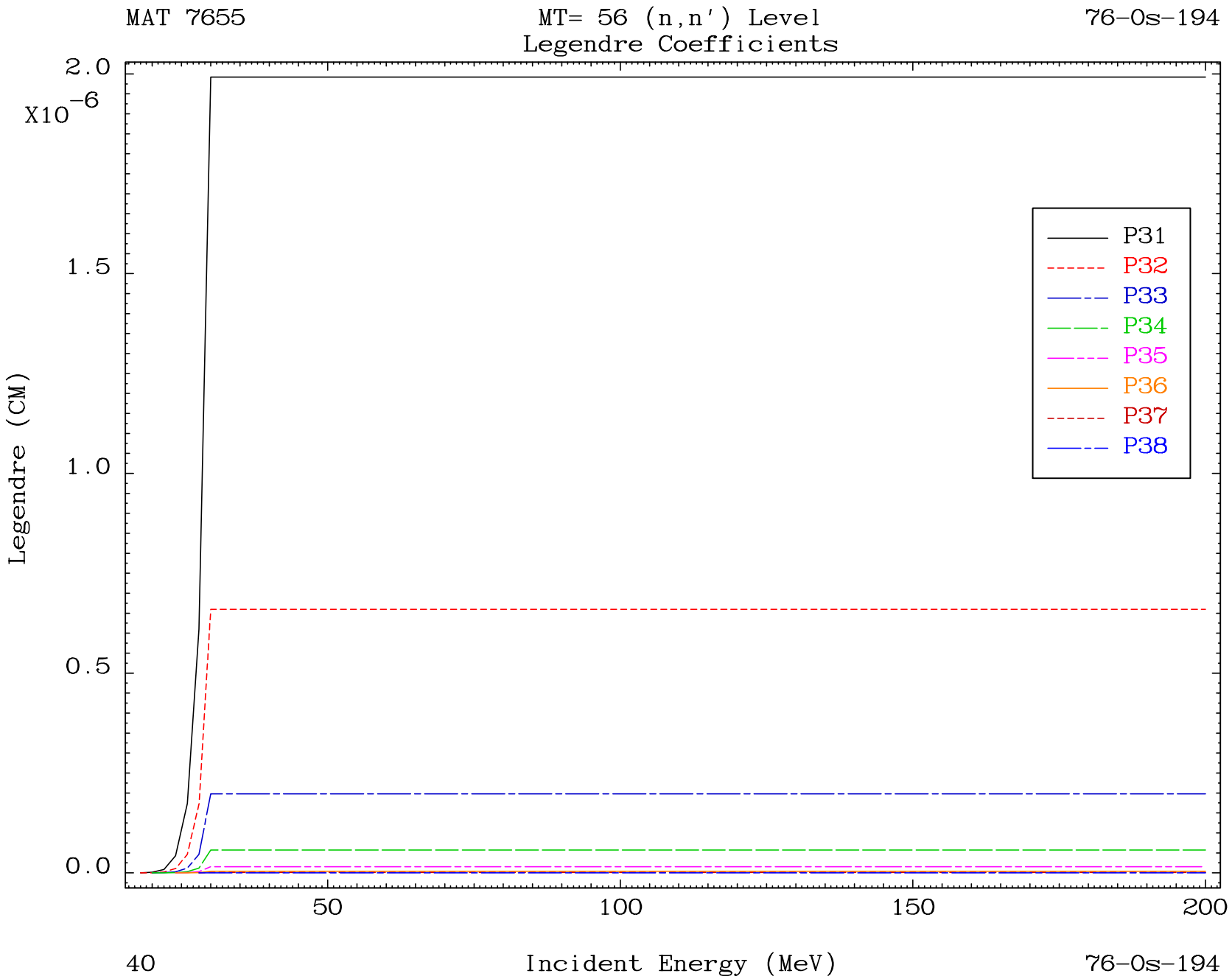

MAT 7655
MT= 55 (n,n') Level
Legendre Coefficients
76-0s-194
X10^-3
0.5
0.0
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
0
50
100
150
200
35
Incident Energy (MeV)
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

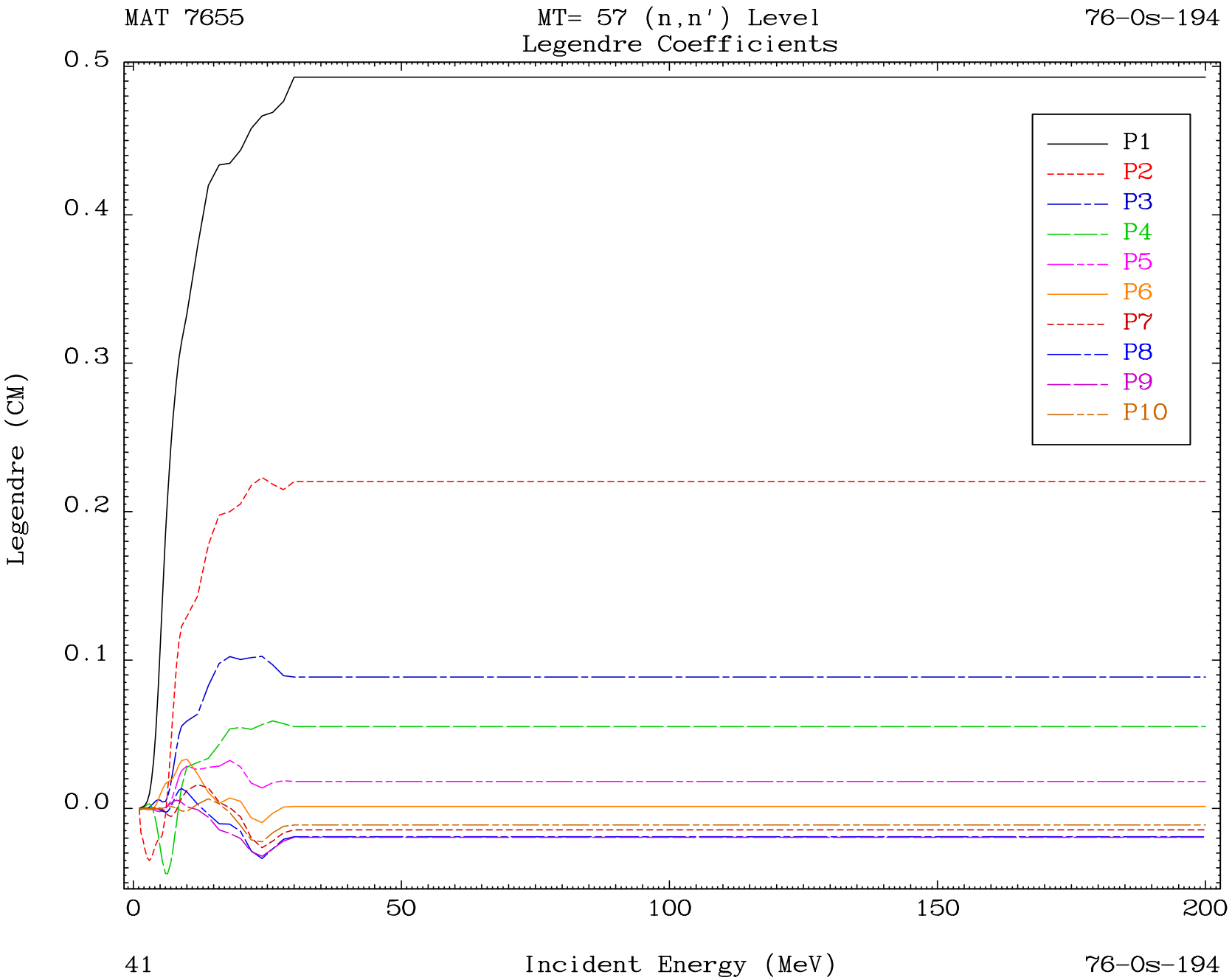

MAT 7655
MT= 55 (n,n') Level
Legendre Coefficients
76-0s-194
X10 -6
3
2
1
0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
50
100
150
200
36
Incident Energy (MeV)
76-0s-194

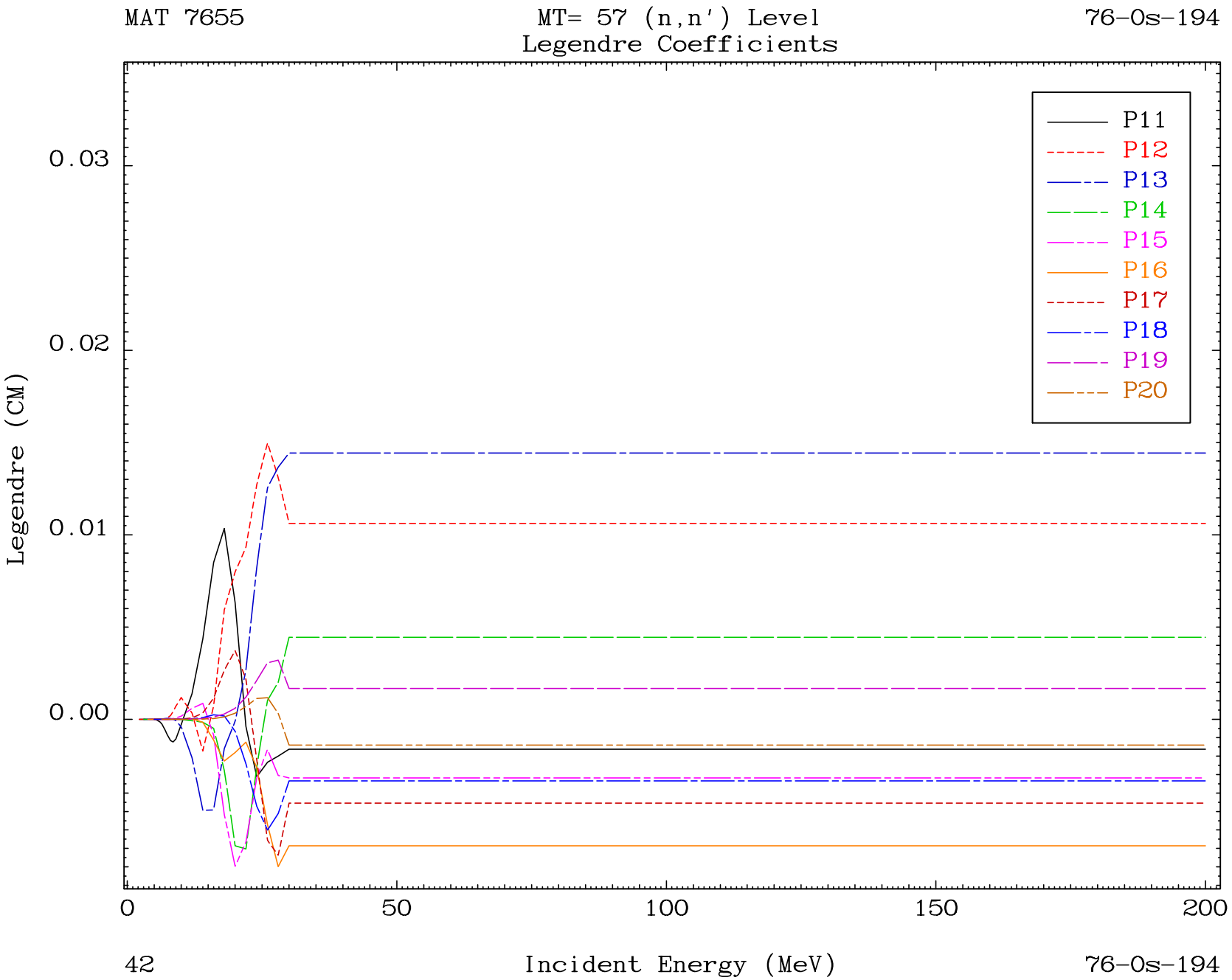

MAT 7655
MT= 56 (n,n') Level
Legendre Coefficients
76-0s-194
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
50
100
150
200
37
Incident Energy (MeV)
76-0s-194

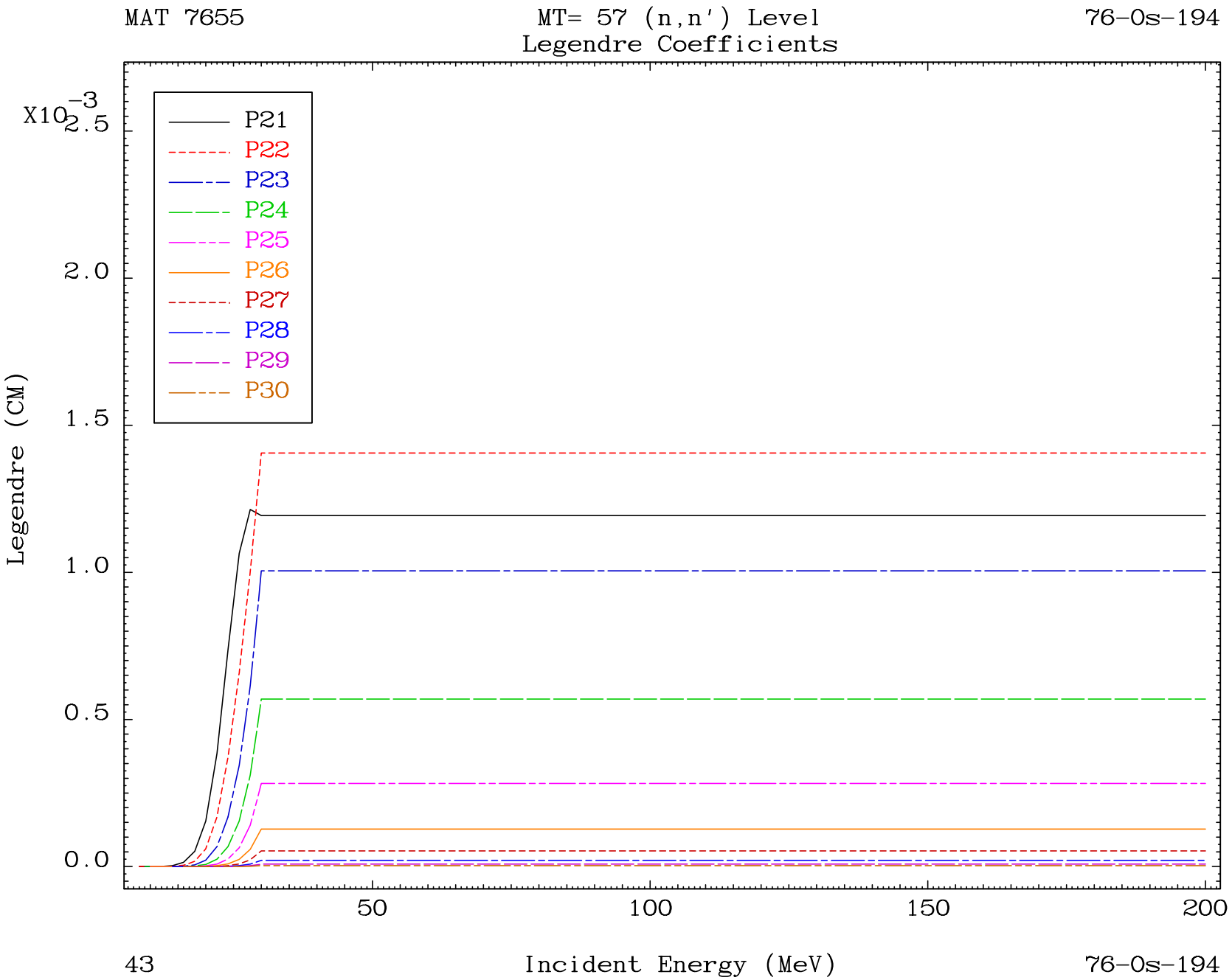

MAT 7655
MT= 56 (n,n') Level
Legendre Coefficients
76-0s-194
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0
50
100
150
200
38
Incident Energy (MeV)
76-0s-194

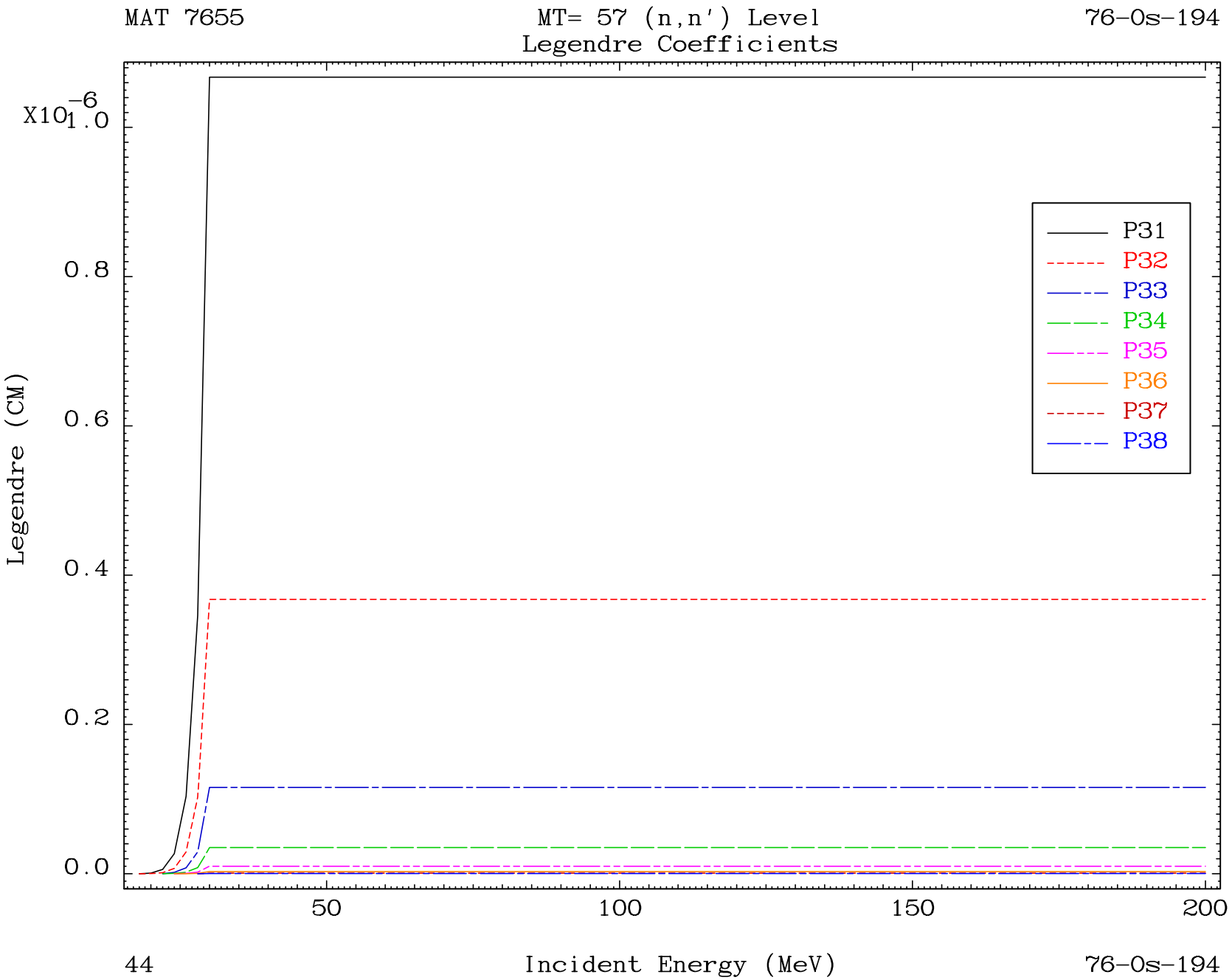

MAT 7655
MT= 56 (n,n') Level
Legendre Coefficients
76-0s-194
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
39
Incident Energy (MeV)
76-0s-194

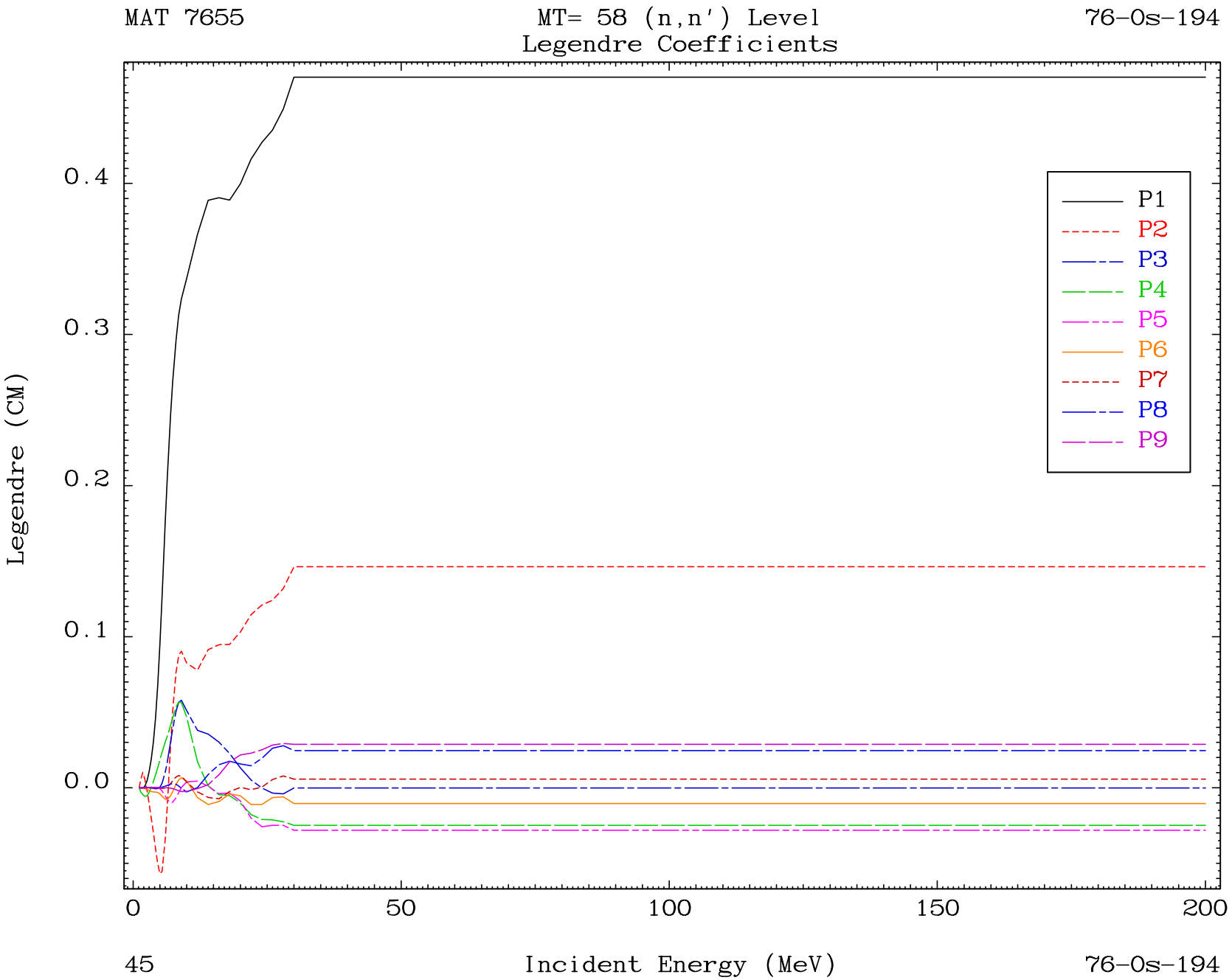

MAT 7655
MT= 56 (n,n') Level
Legendre Coefficients
76-0s-194
2.0
X10 −6
1.5
1.0
0.5
0.0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
40
50
100
150
200
Incident Energy (MeV)
76-0s-194

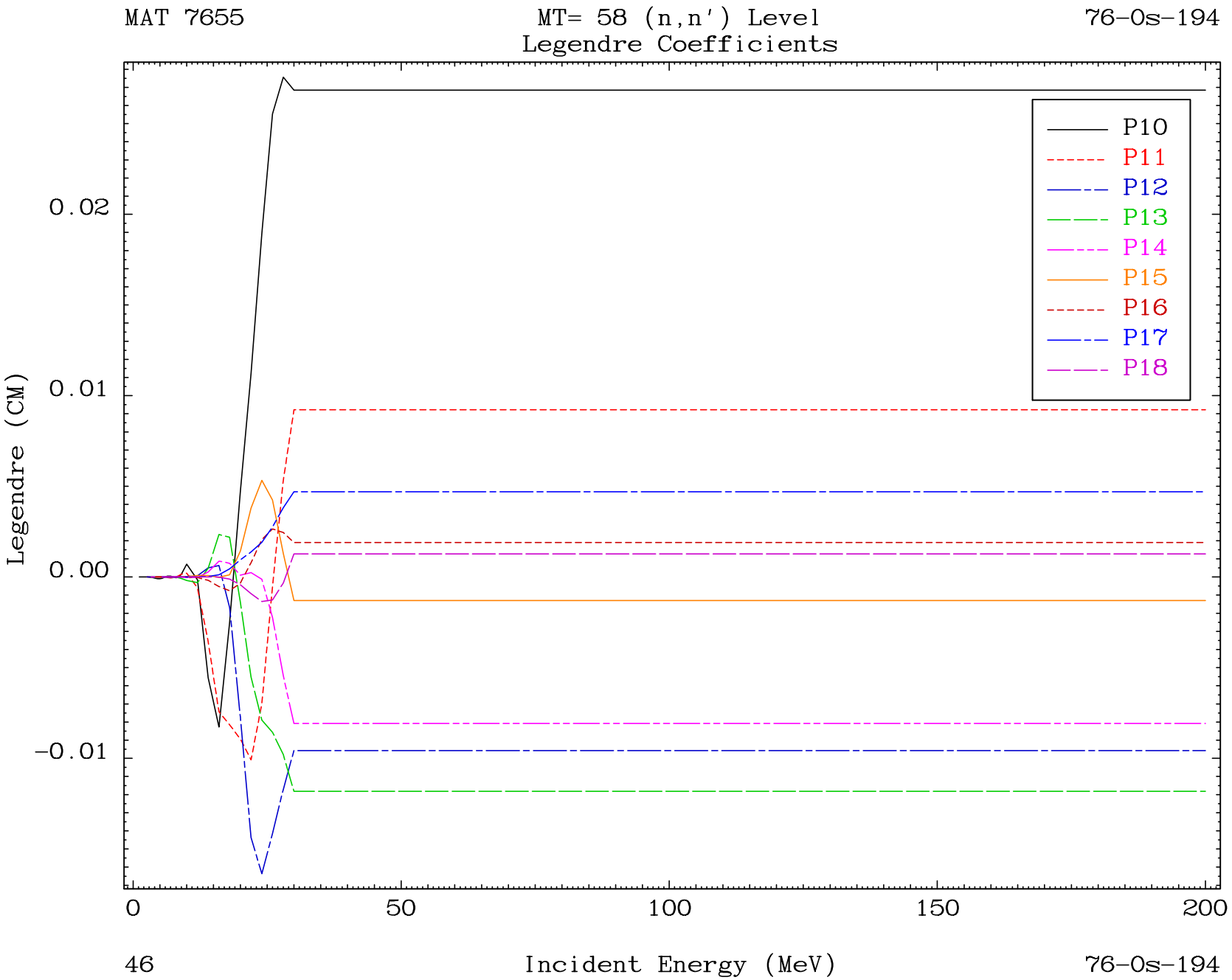

MAT 7655
MT= 57 (n,n') Level
Legendre Coefficients
76-0s-194
0.5
0.4
0.3
0.2
0.1
0.0
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
41
Incident Energy (MeV)
76-0s-194

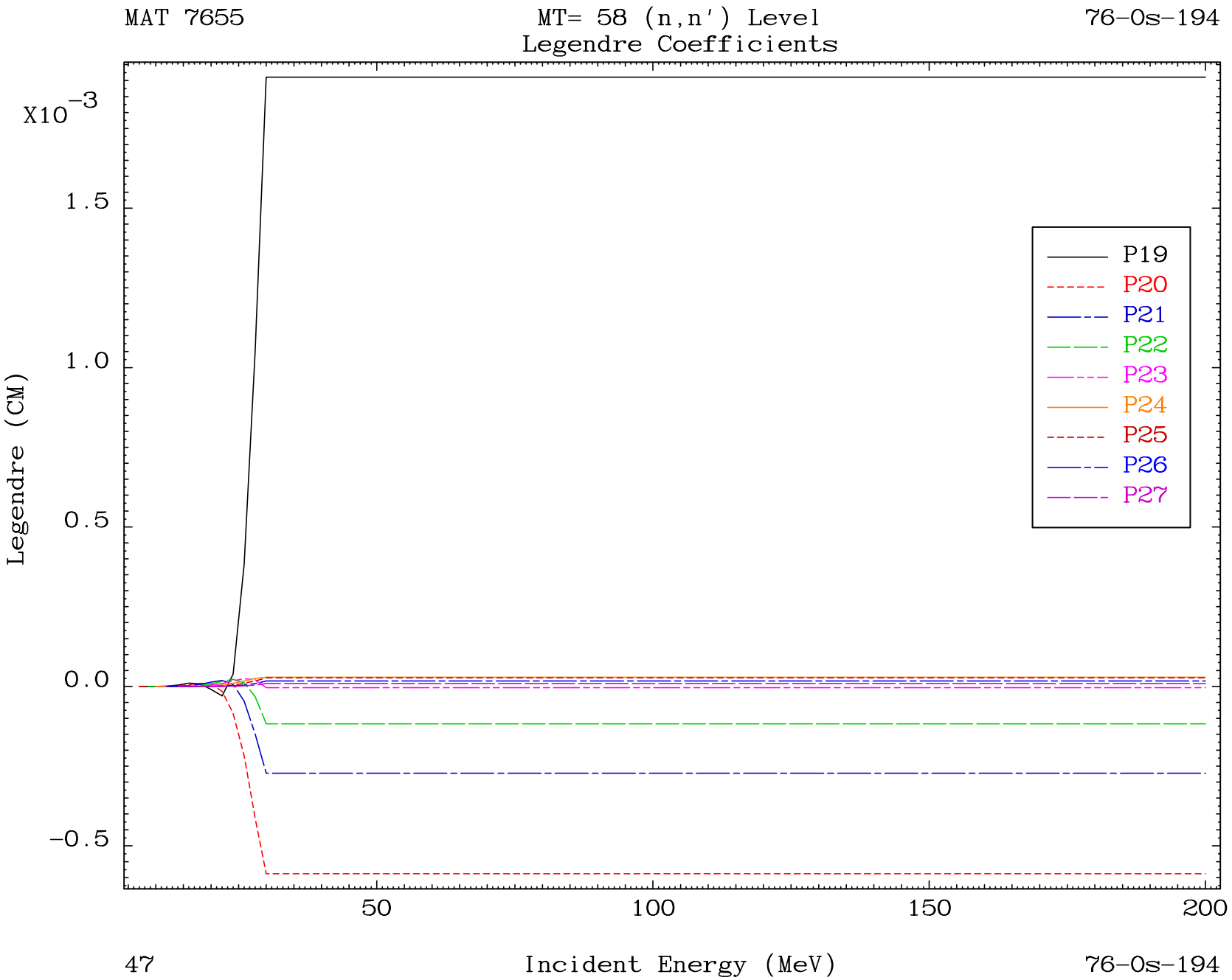

MAT 7655
MT= 57 (n,n') Level
Legendre Coefficients
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
42
Incident Energy (MeV)
76-0s-194

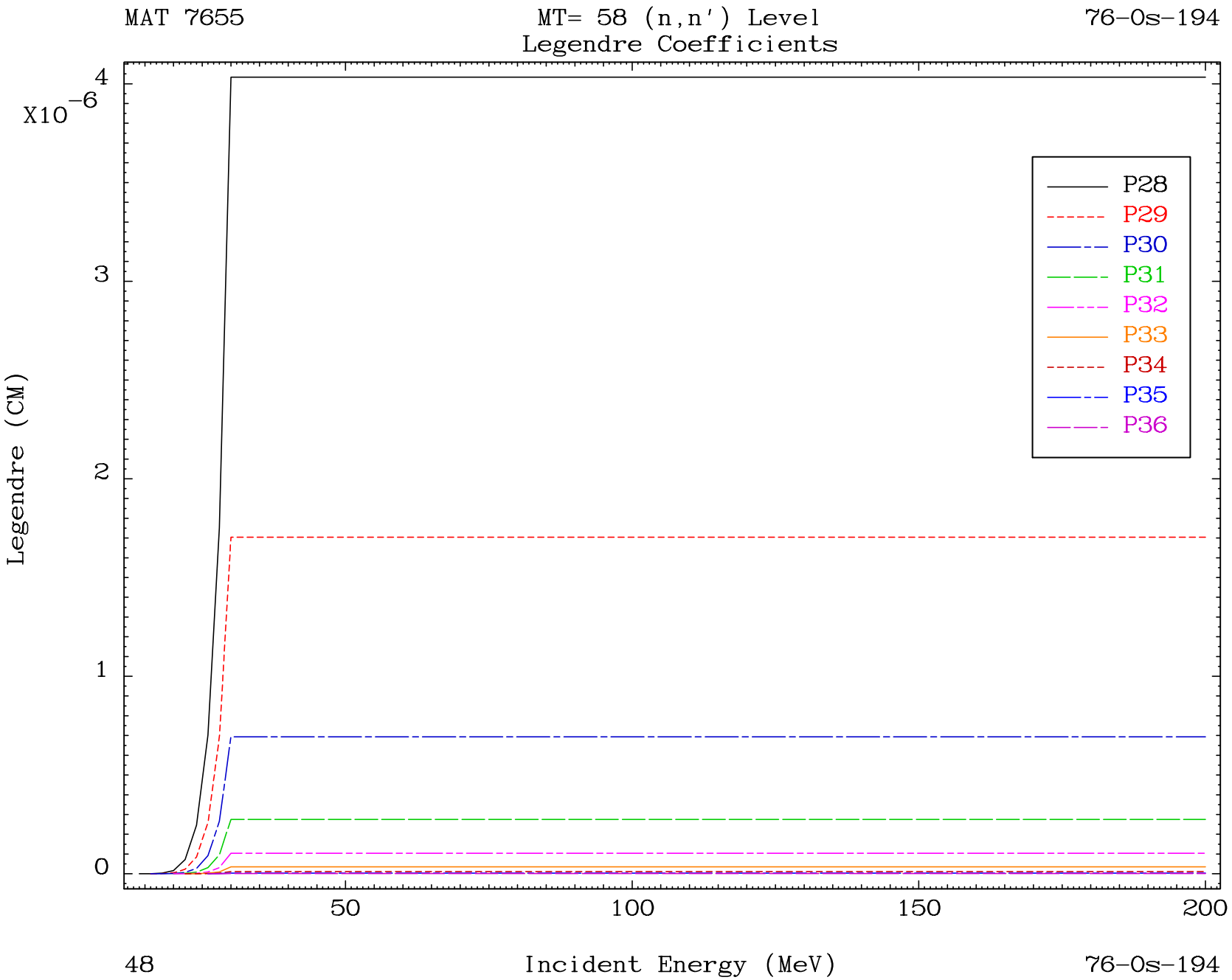

MAT 7655
MT= 57 (n,n') Level
Legendre Coefficients
76-0s-194
X10-3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
43
Incident Energy (MeV)
76-0s-194

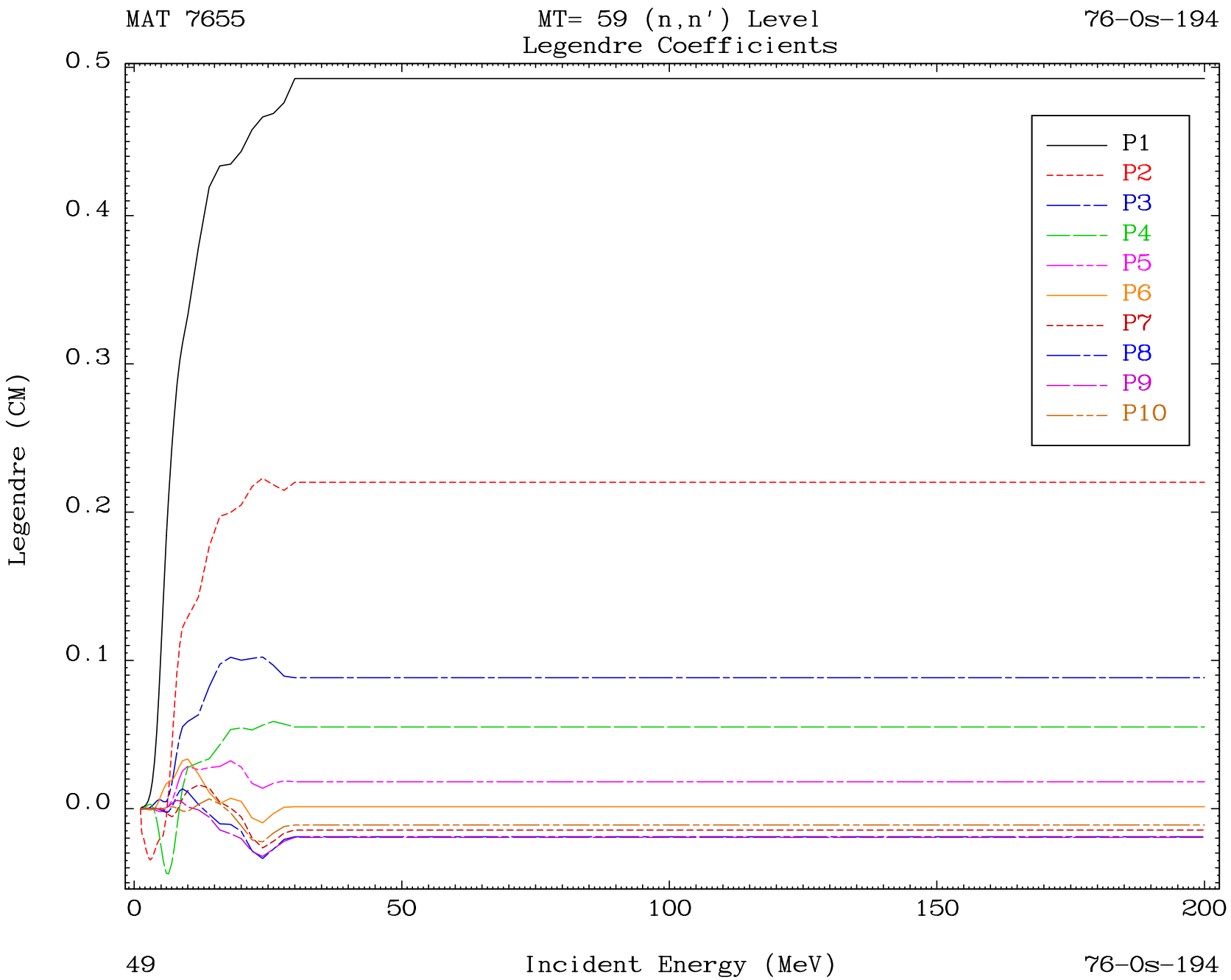

MAT 7655
MT= 57 (n,n') Level
Legendre Coefficients
76-0s-194
X10 -6
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
50
100
150
200
44
Incident Energy (MeV)
76-0s-194

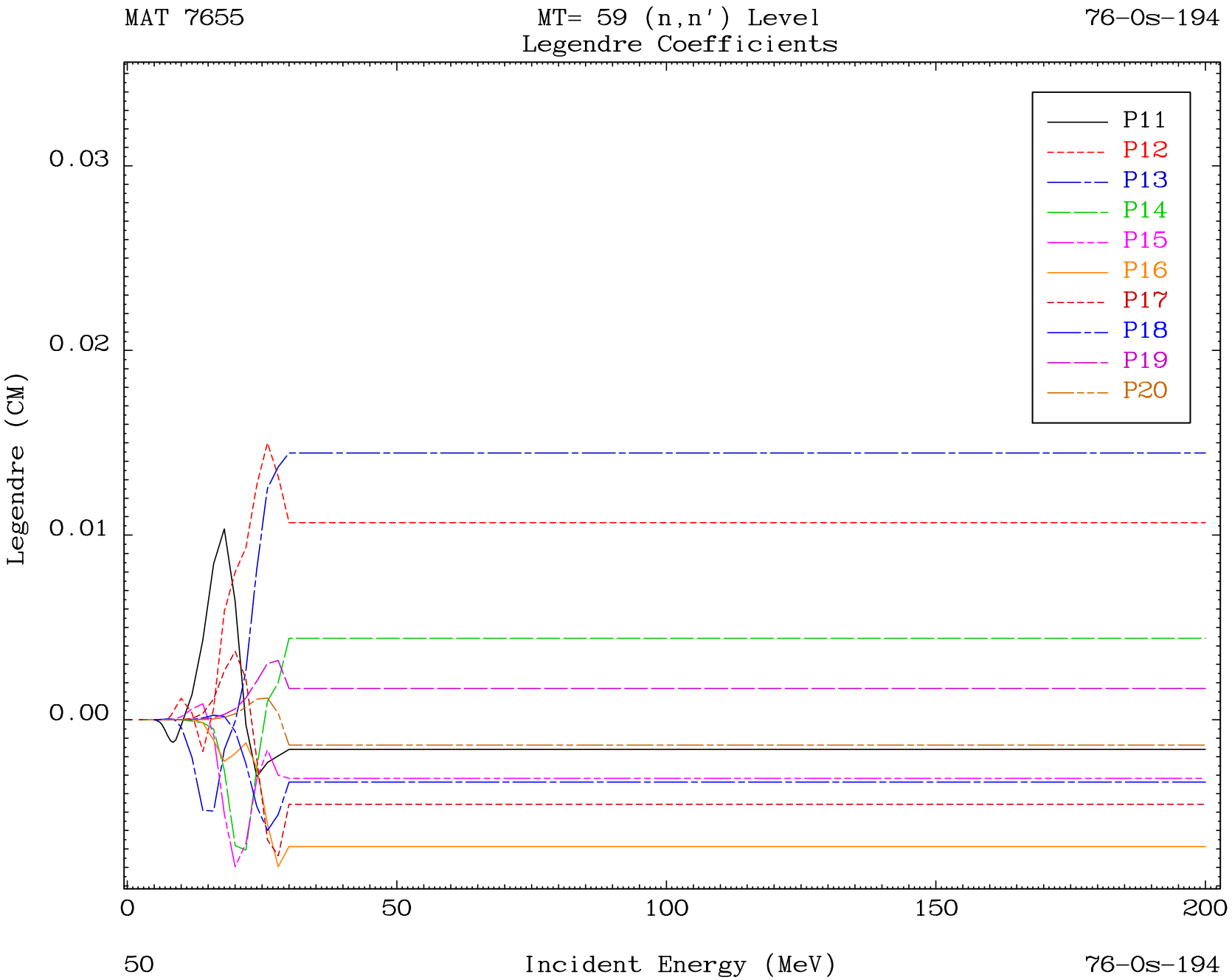

MAT 7655
MT= 58 (n,n') Level
Legendre Coefficients
76-0s-194
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
50
100
150
200
45
Incident Energy (MeV)
76-0s-194

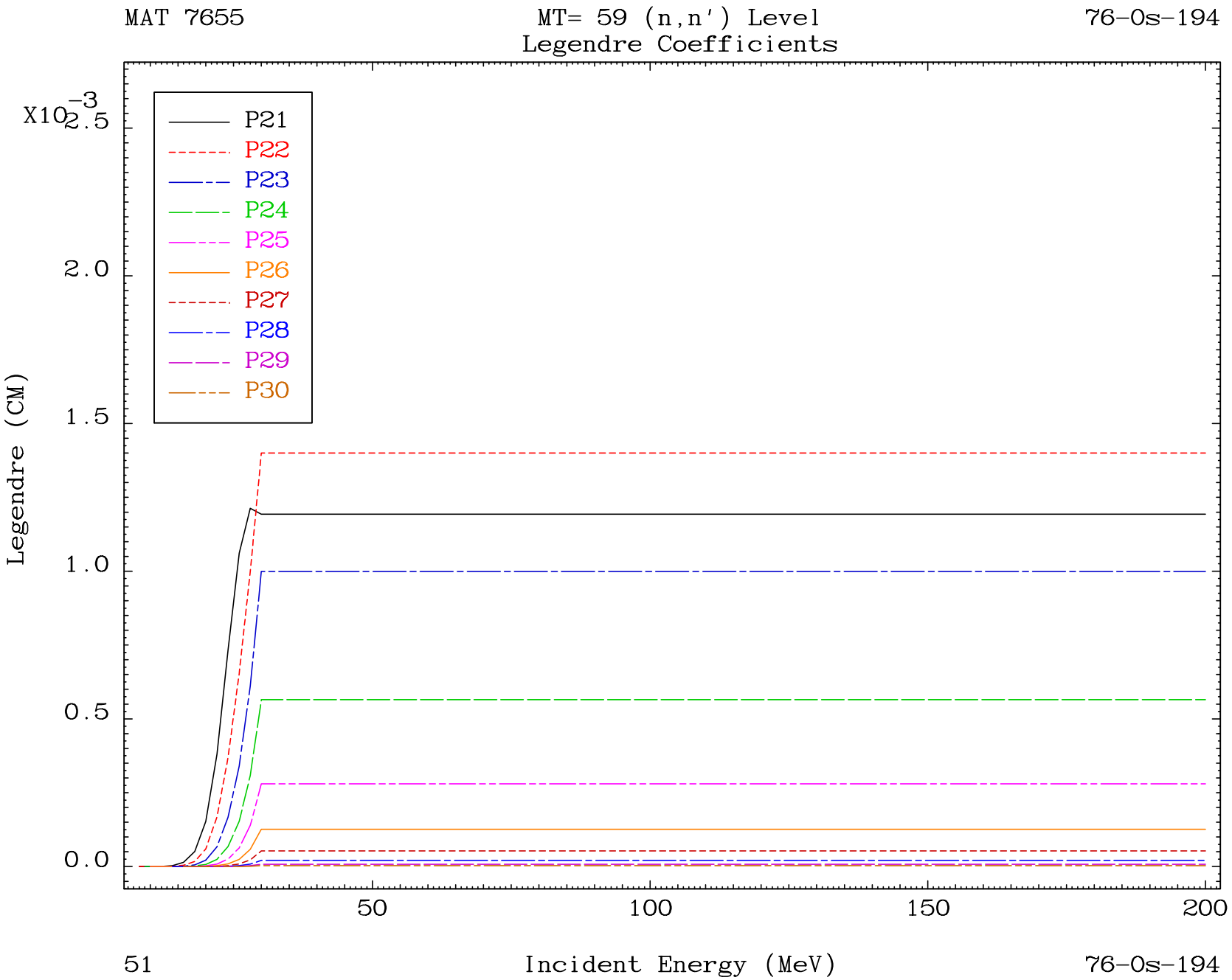

MAT 7655
MT= 58 (n,n') Level
Legendre Coefficients
76-0s-194
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.02
0.01
0.00
-0.01
Legendre (CM)
0
50
100
150
200
46
Incident Energy (MeV)
76-0s-194

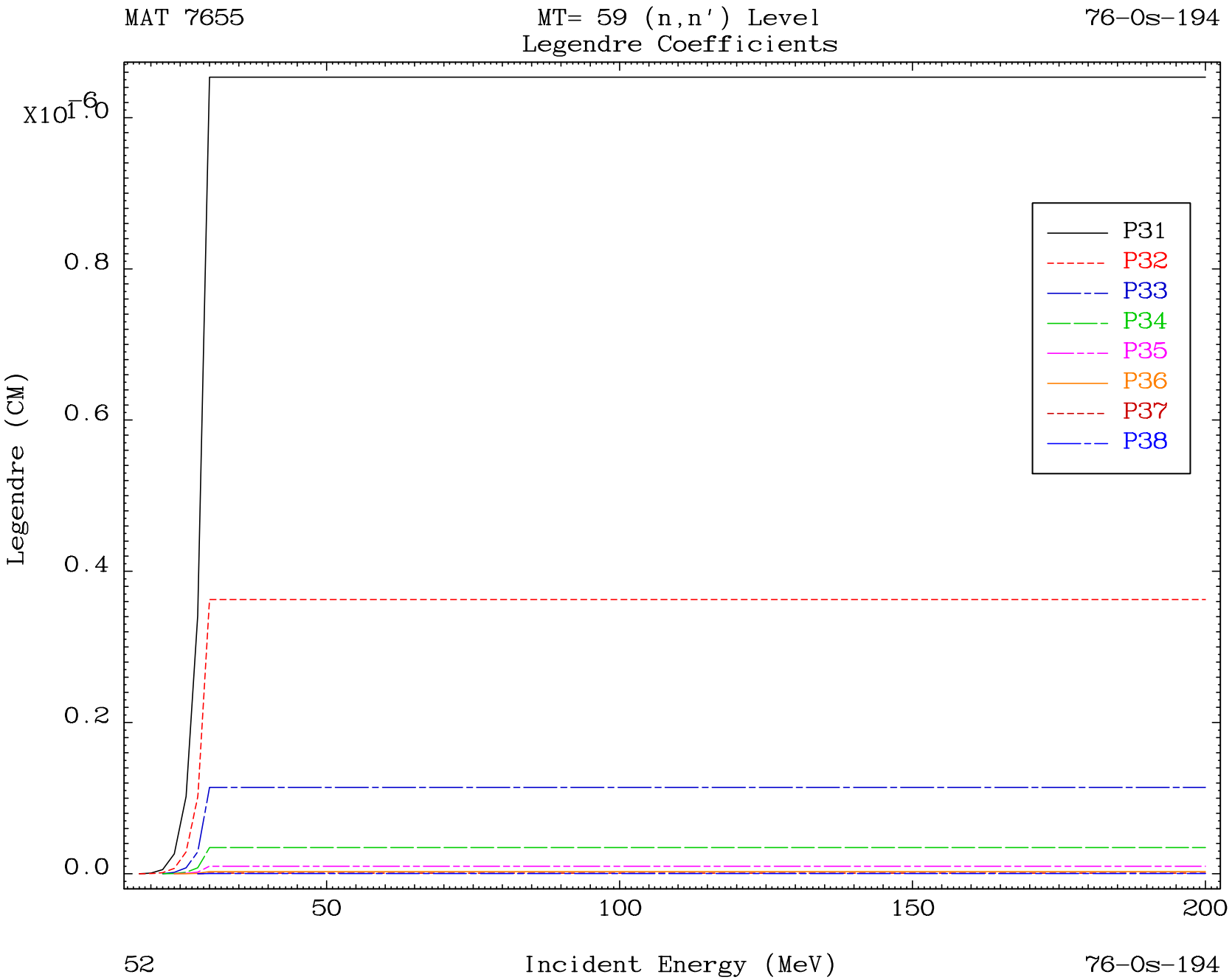

MAT 7655
MT= 58 (n,n') Level
Legendre Coefficients
76-0s-194
X10^-3
1.5
1.0
0.5
0.0
-0.5
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
47
Incident Energy (MeV)
76-0s-194

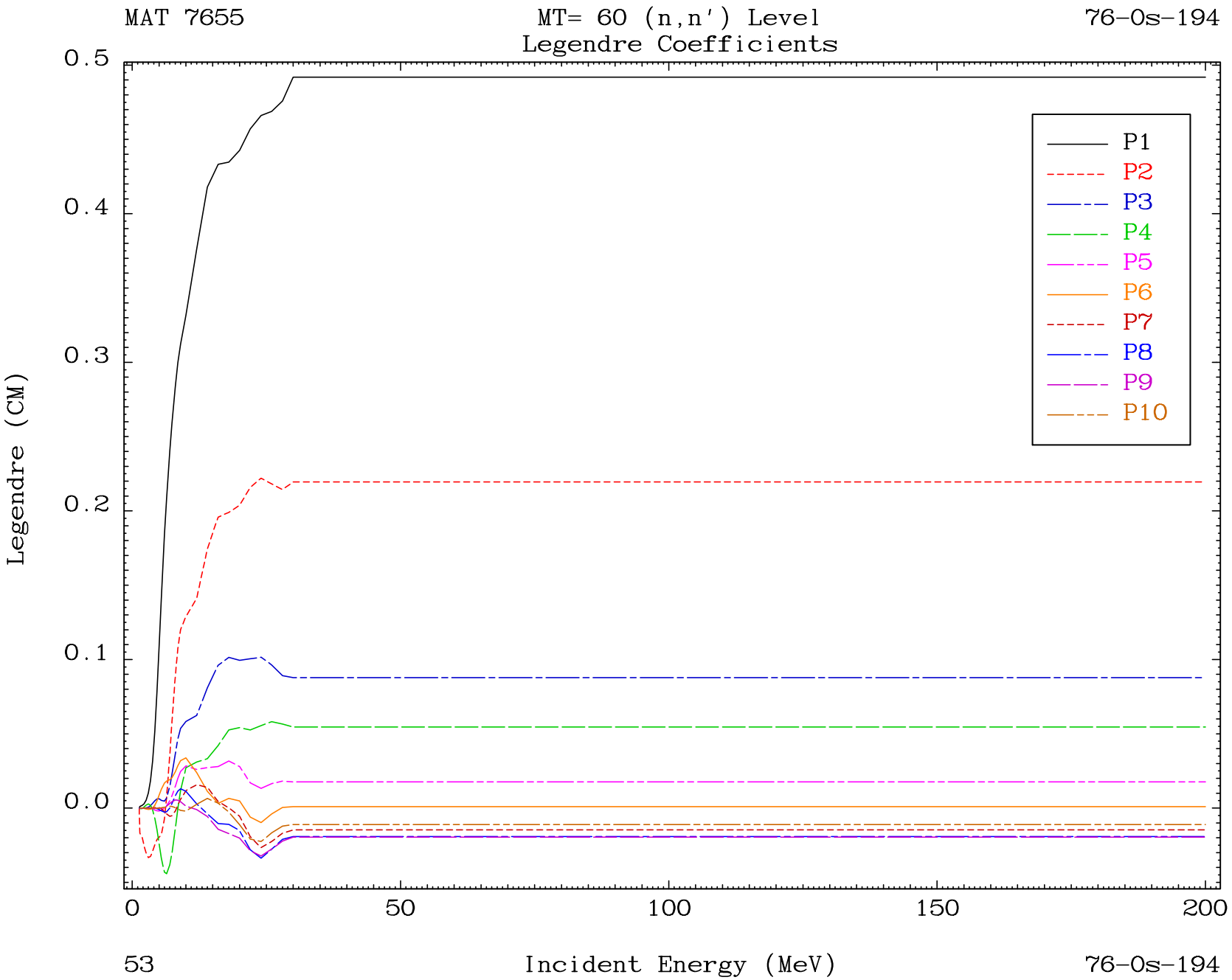

MAT 7655
MT= 58 (n,n') Level
Legendre Coefficients
76-0s-194
X10 −6
4
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
48
Incident Energy (MeV)
76-0s-194

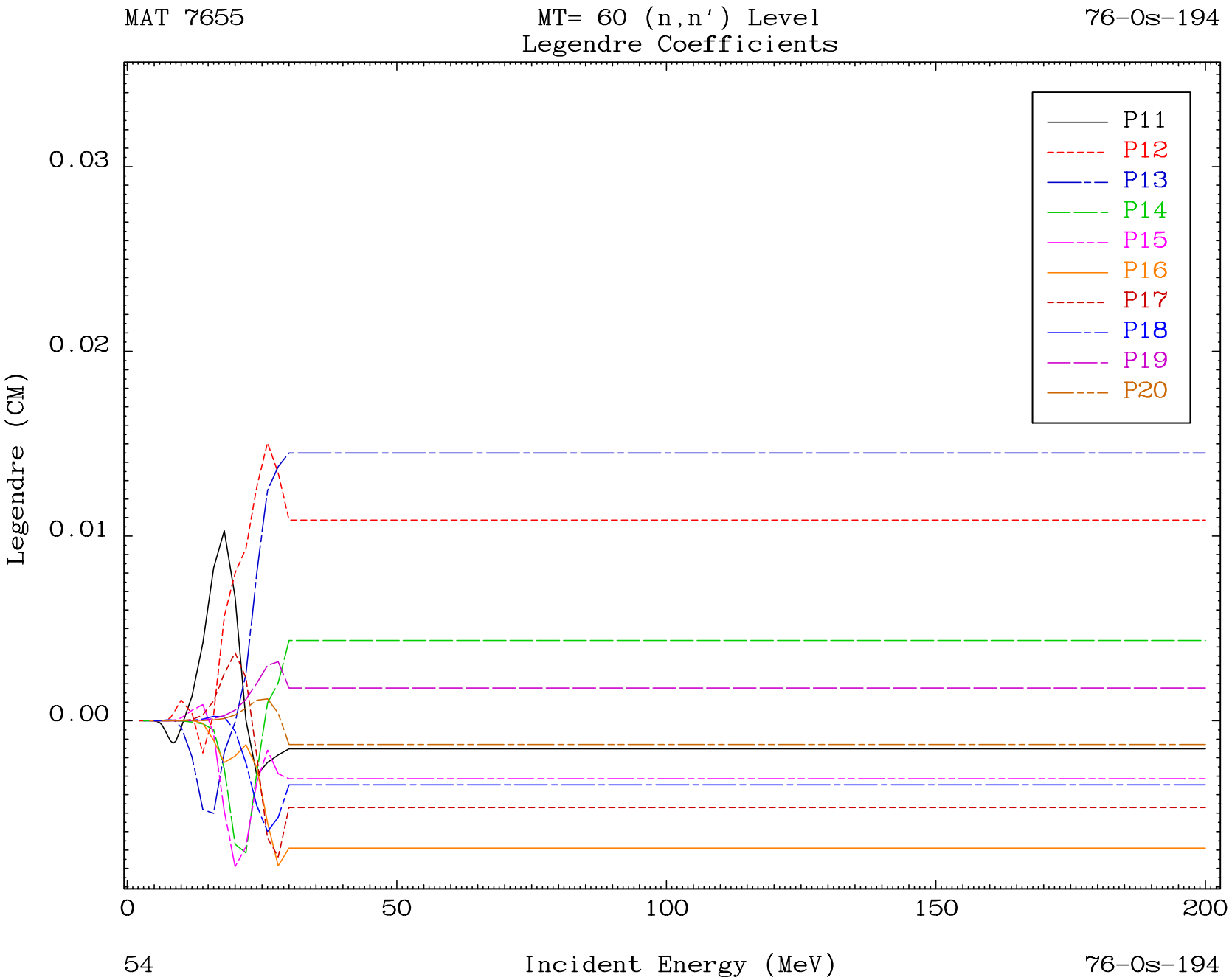

MAT 7655
MT= 59 (n,n') Level
Legendre Coefficients
76-0s-194
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
49
Incident Energy (MeV)
76-0s-194

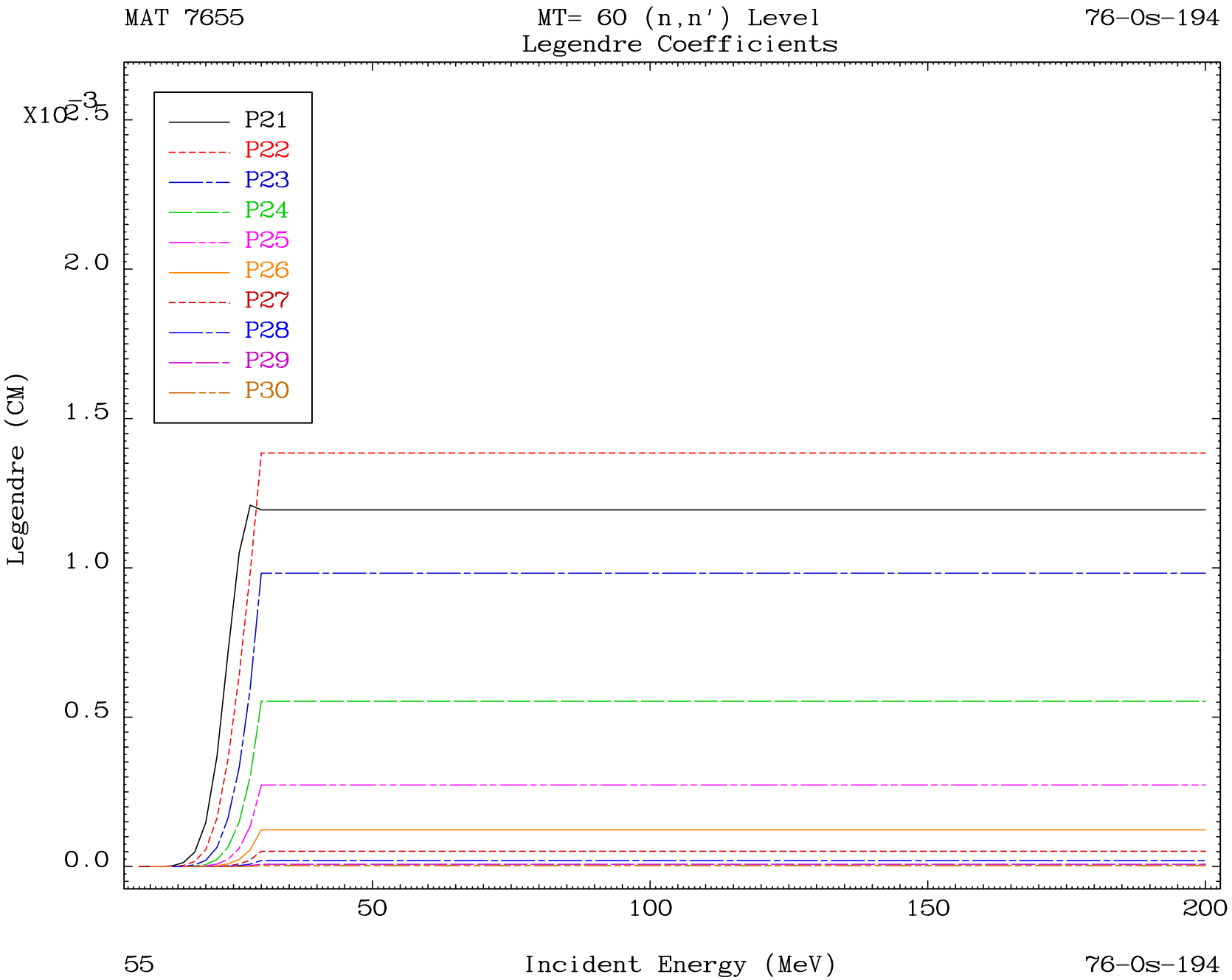

MAT 7655
MT= 59 (n,n') Level
Legendre Coefficients
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
50
Incident Energy (MeV)
76-0s-194

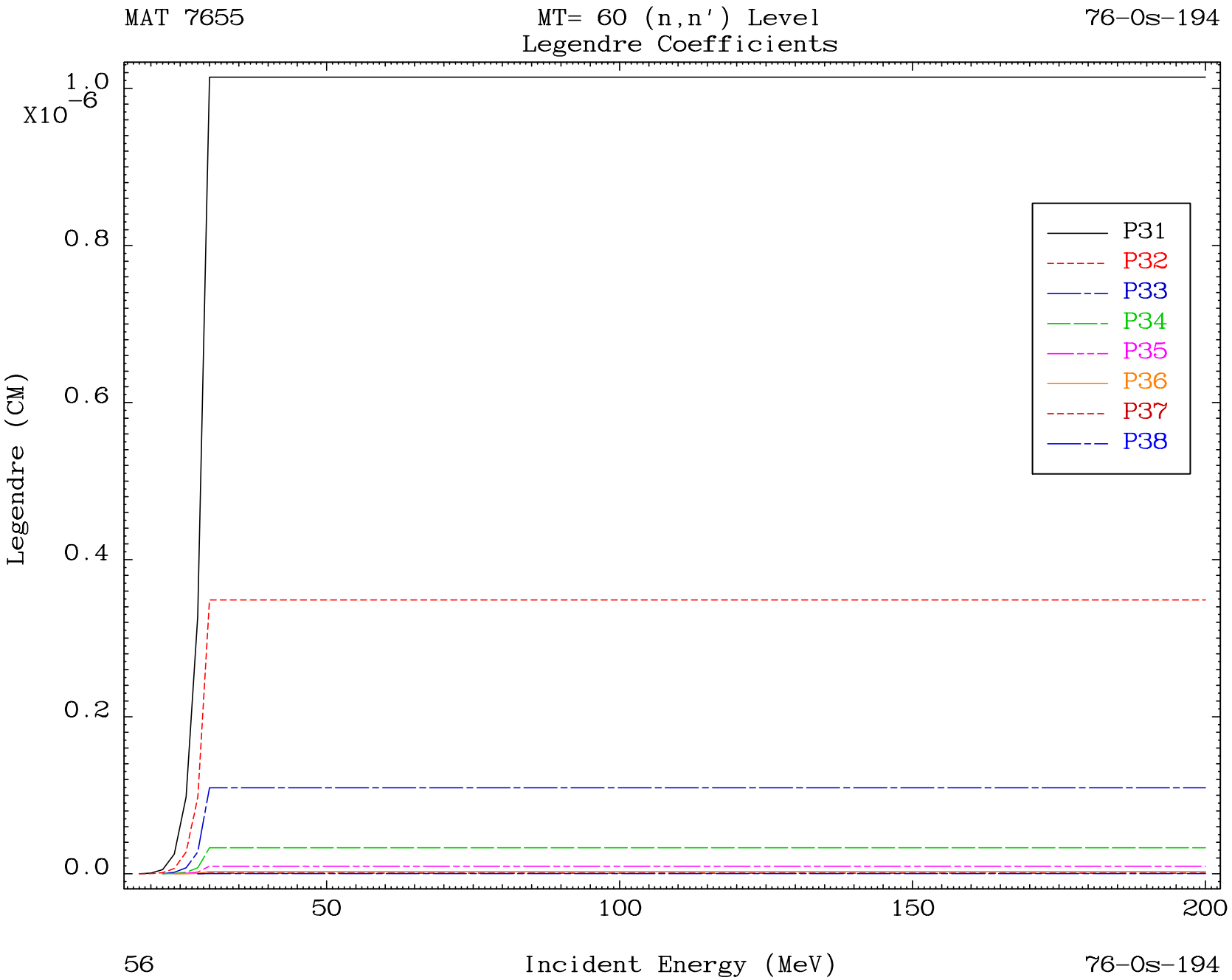

MAT 7655
MT= 59 (n,n') Level
Legendre Coefficients
76-0s-194
X10-3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
51
Incident Energy (MeV)
76-0s-194

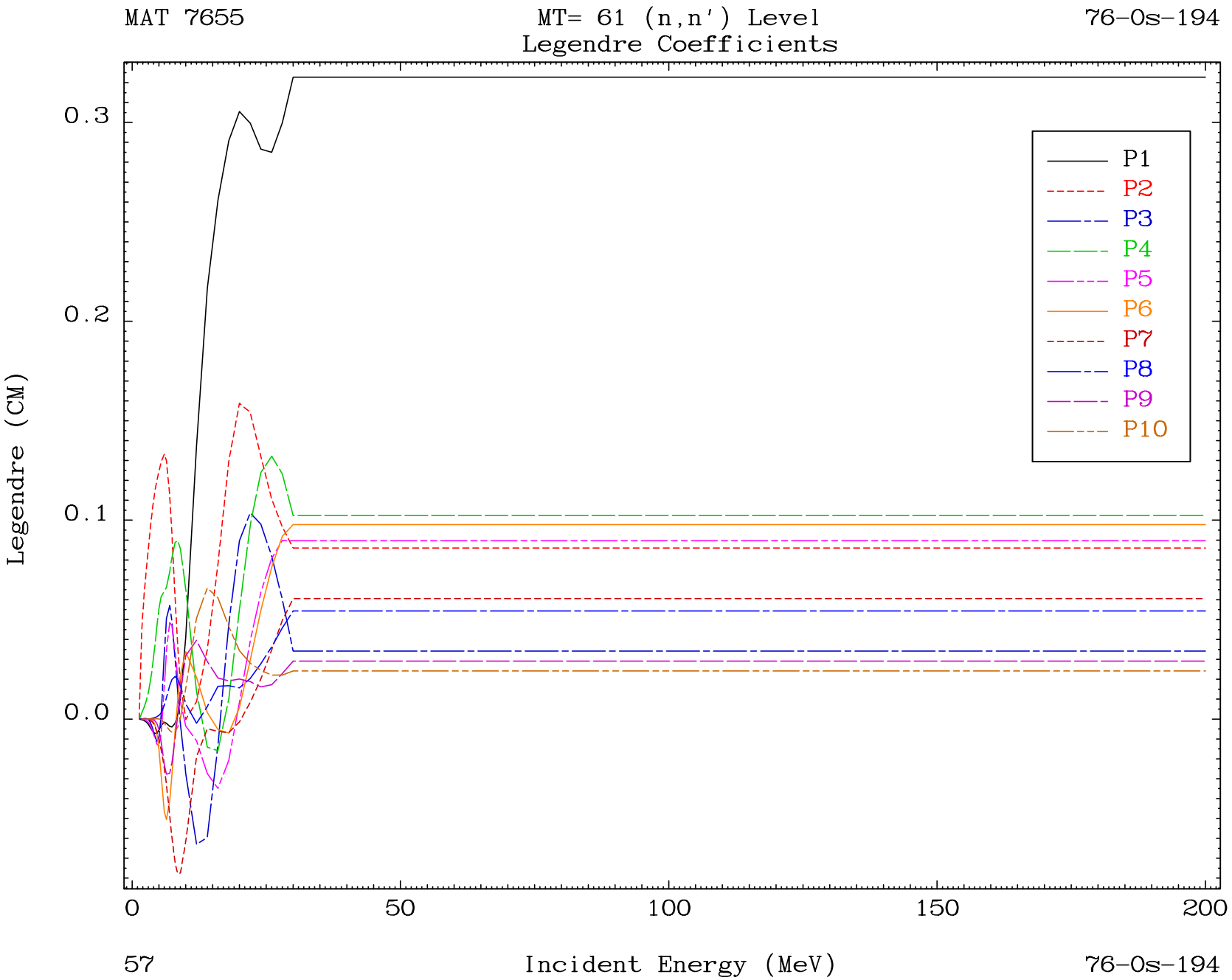

MAT 7655
MT= 59 (n,n') Level
Legendre Coefficients
76-0s-194
X10-6
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
50
100
150
200
52
Incident Energy (MeV)
76-0s-194

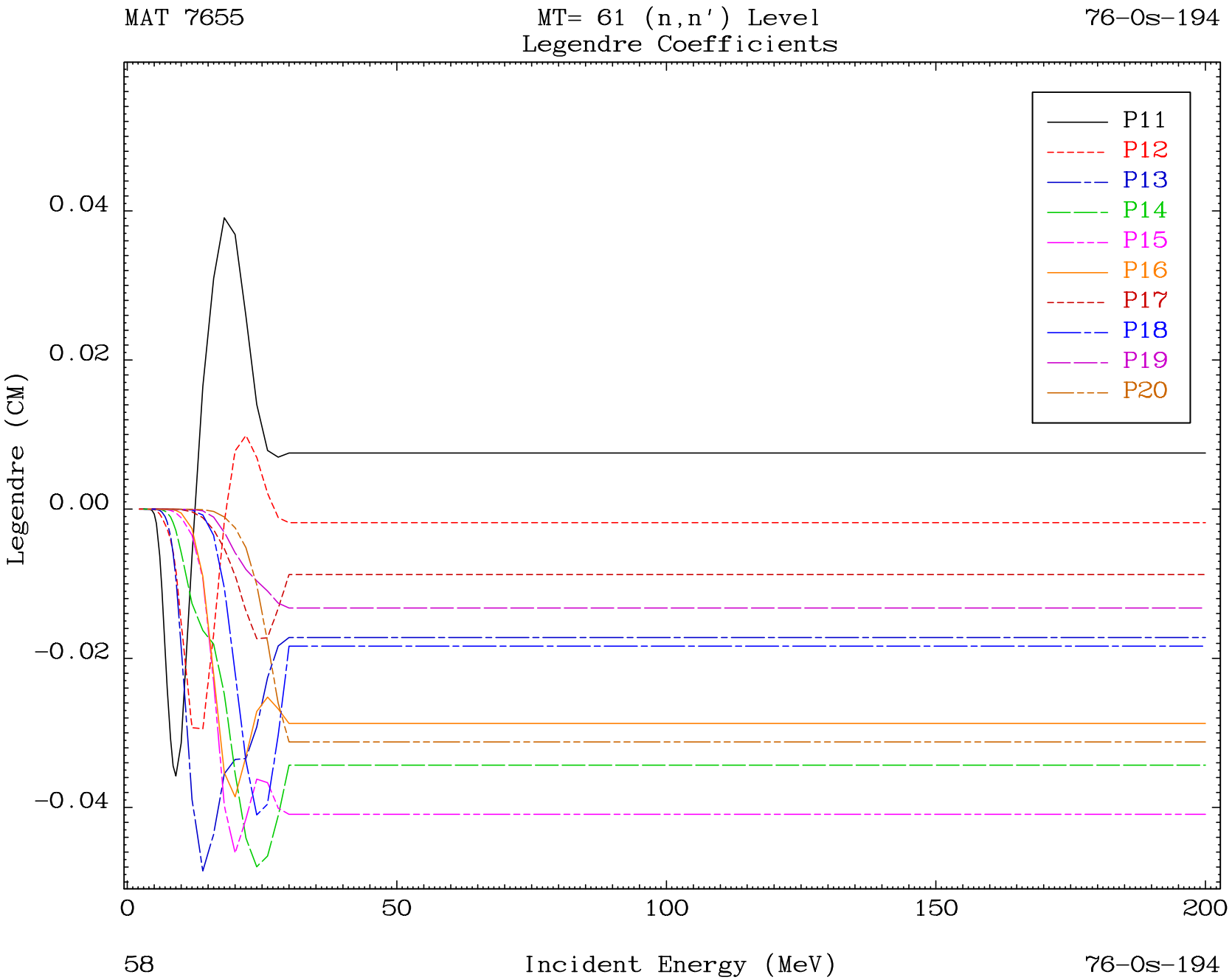

MAT 7655
MT= 60 (n,n') Level
Legendre Coefficients
76-0s-194
Legendre (CM)
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
53
Incident Energy (MeV)
76-0s-194

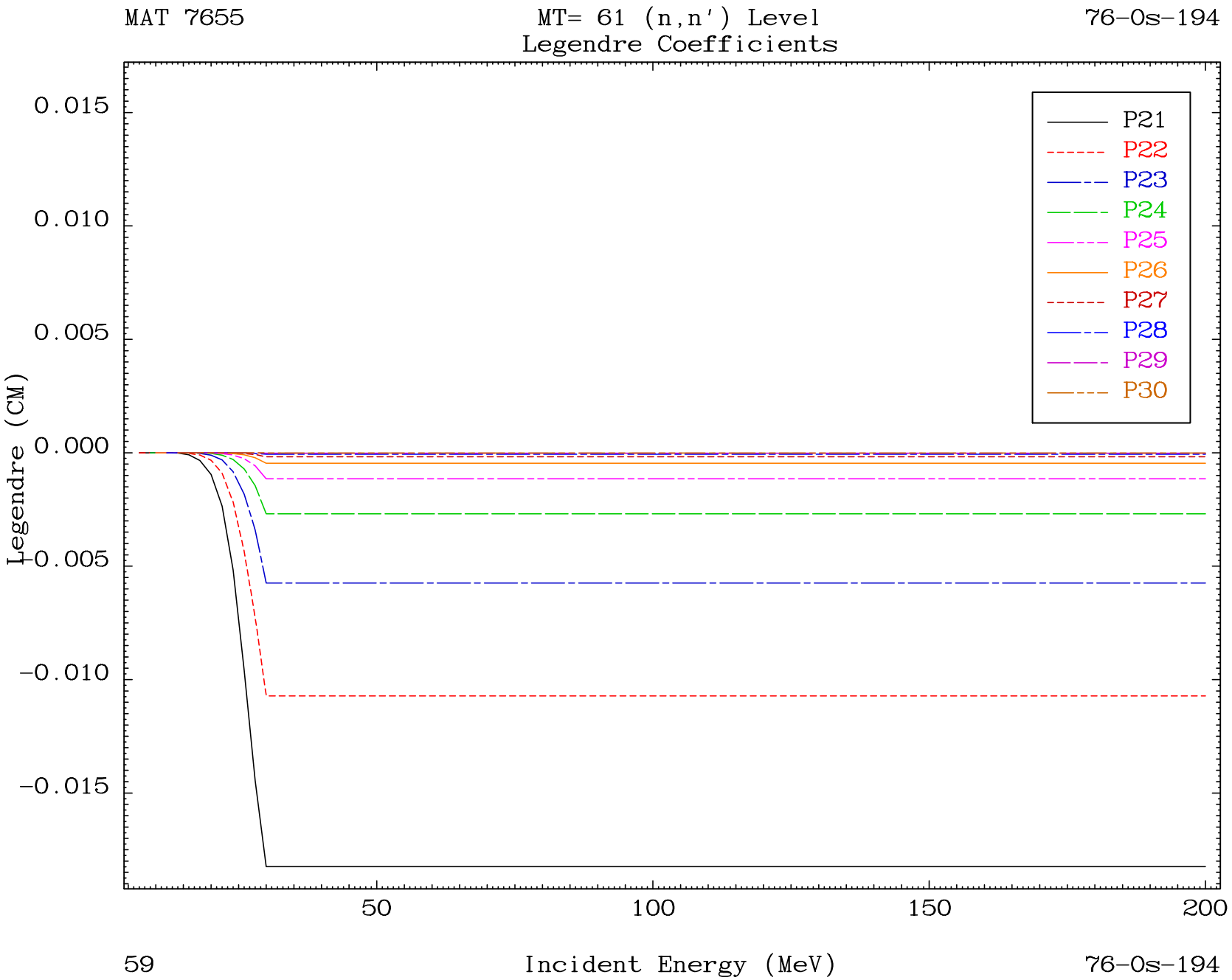

MAT 7655
MT= 60 (n,n') Level
Legendre Coefficients
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
54
Incident Energy (MeV)
76-0s-194

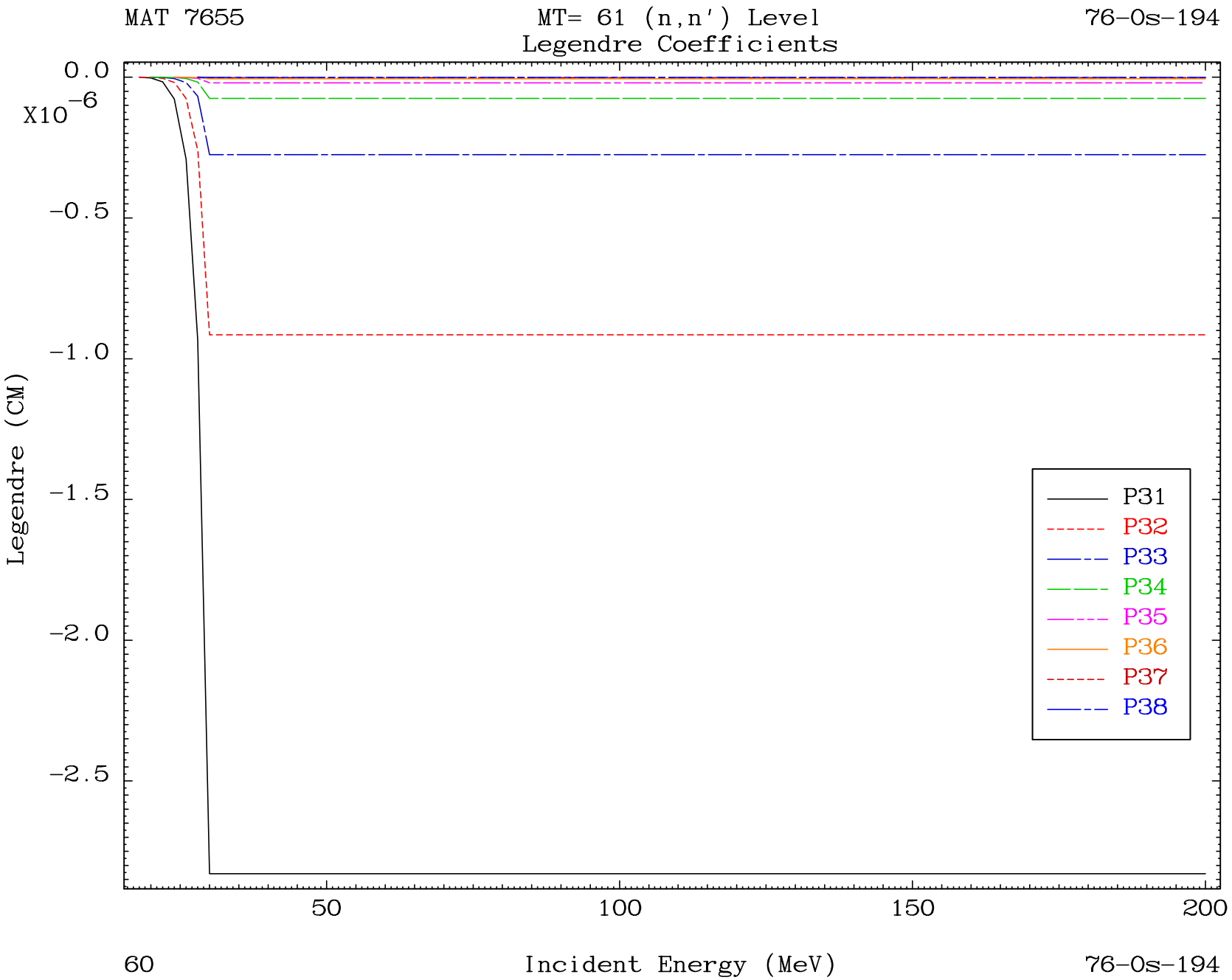

MAT 7655
MT= 60 (n,n') Level
Legendre Coefficients
76-0s-194
X10-3
2.5
2.0
1.5
1.0
0.5
0.0
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
Legendre (CM)
50
100
150
200
55
Incident Energy (MeV)
76-0s-194

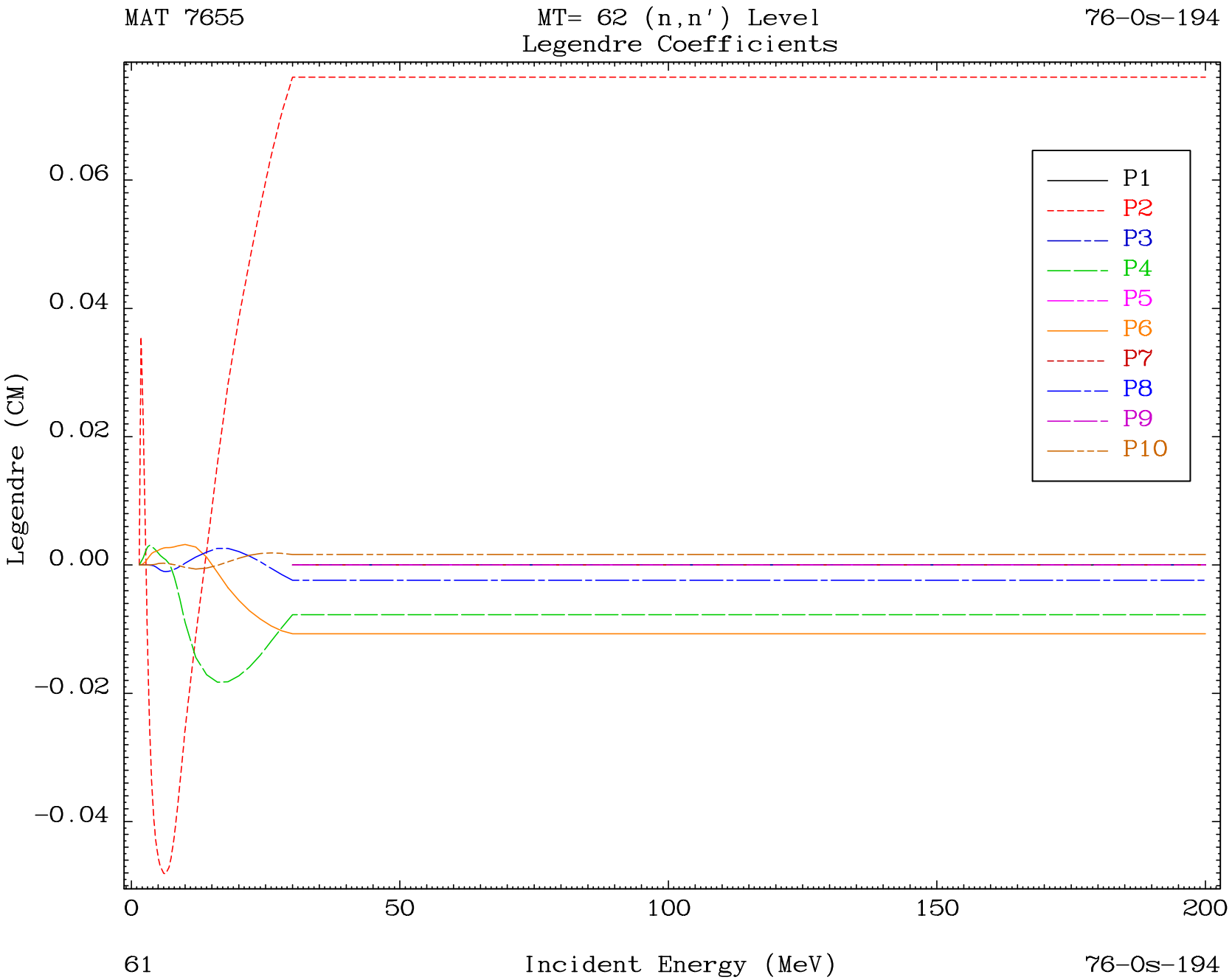

MAT 7655
MT= 60 (n,n') Level
Legendre Coefficients
76-0s-194
X10 -6
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P31
P32
P33
P34
P35
P36
P37
P38
50
100
150
200
56
Incident Energy (MeV)
76-0s-194

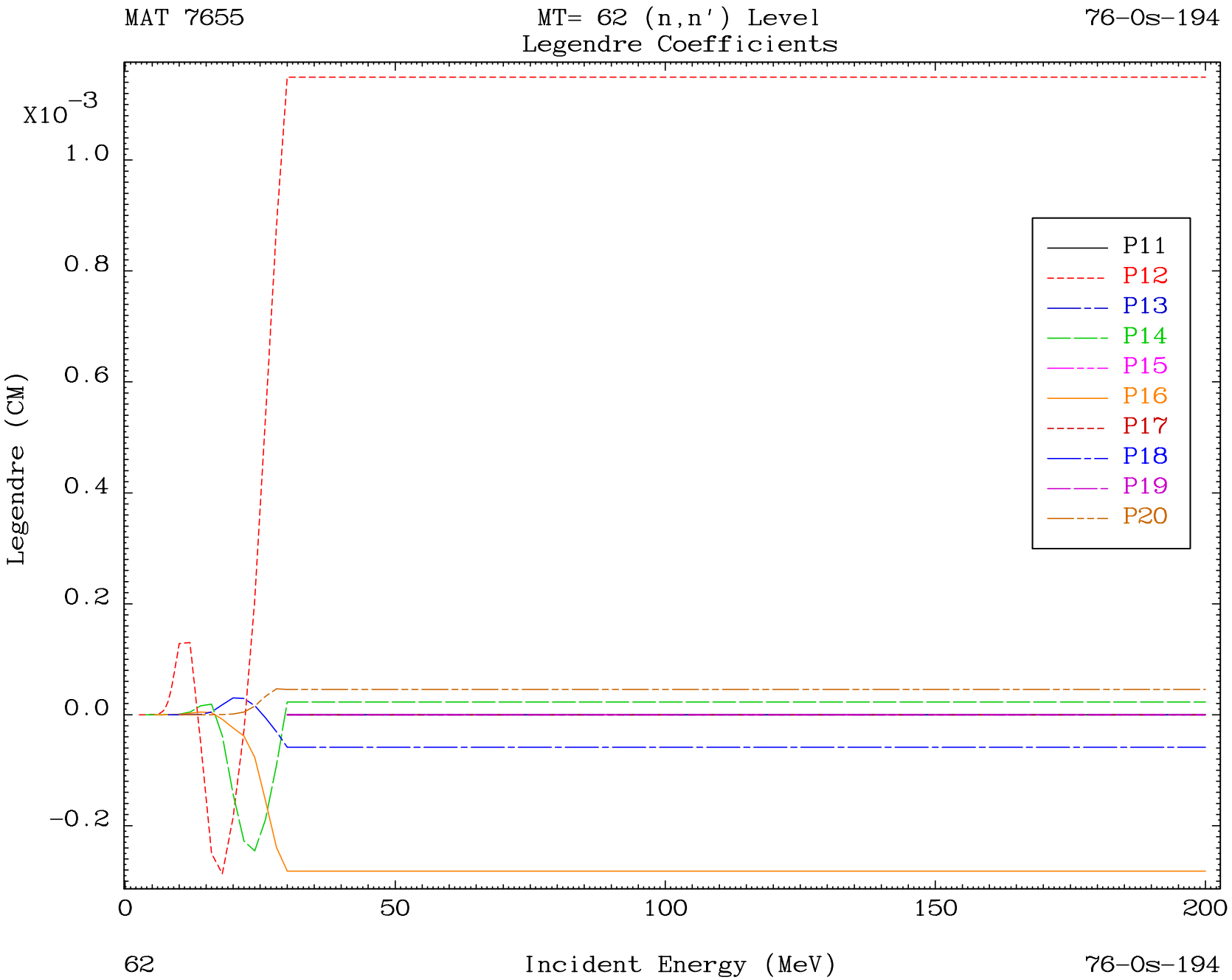

MAT 7655
MT= 61 (n,n') Level
Legendre Coefficients
76-0s-194
Legendre (CM)
0.3
0.2
0.1
0.0
0
50
100
150
200
57
Incident Energy (MeV)
76-0s-194
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

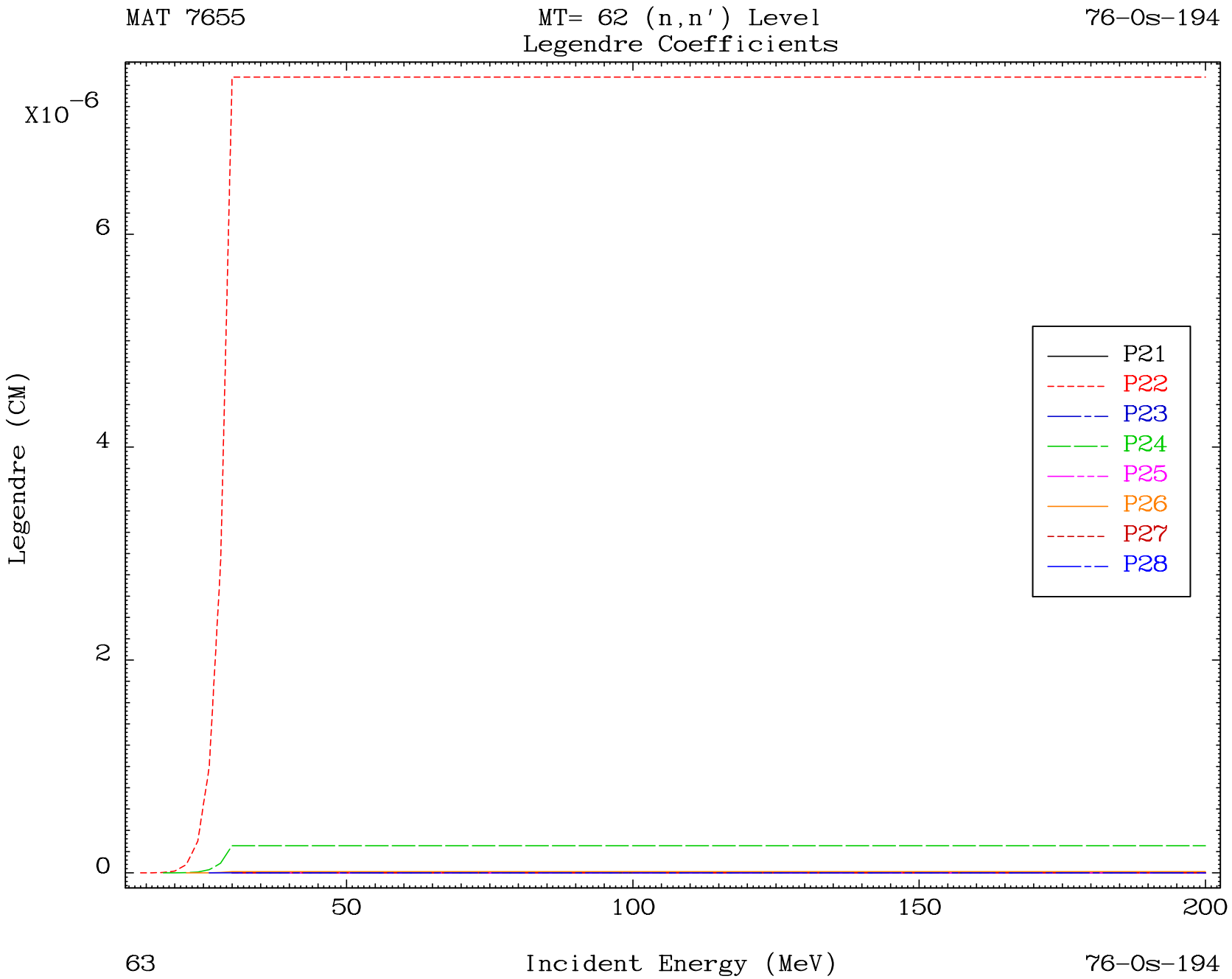

MAT 7655
MT= 61 (n,n') Level
Legendre Coefficients
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
58
Incident Energy (MeV)
76-0s-194

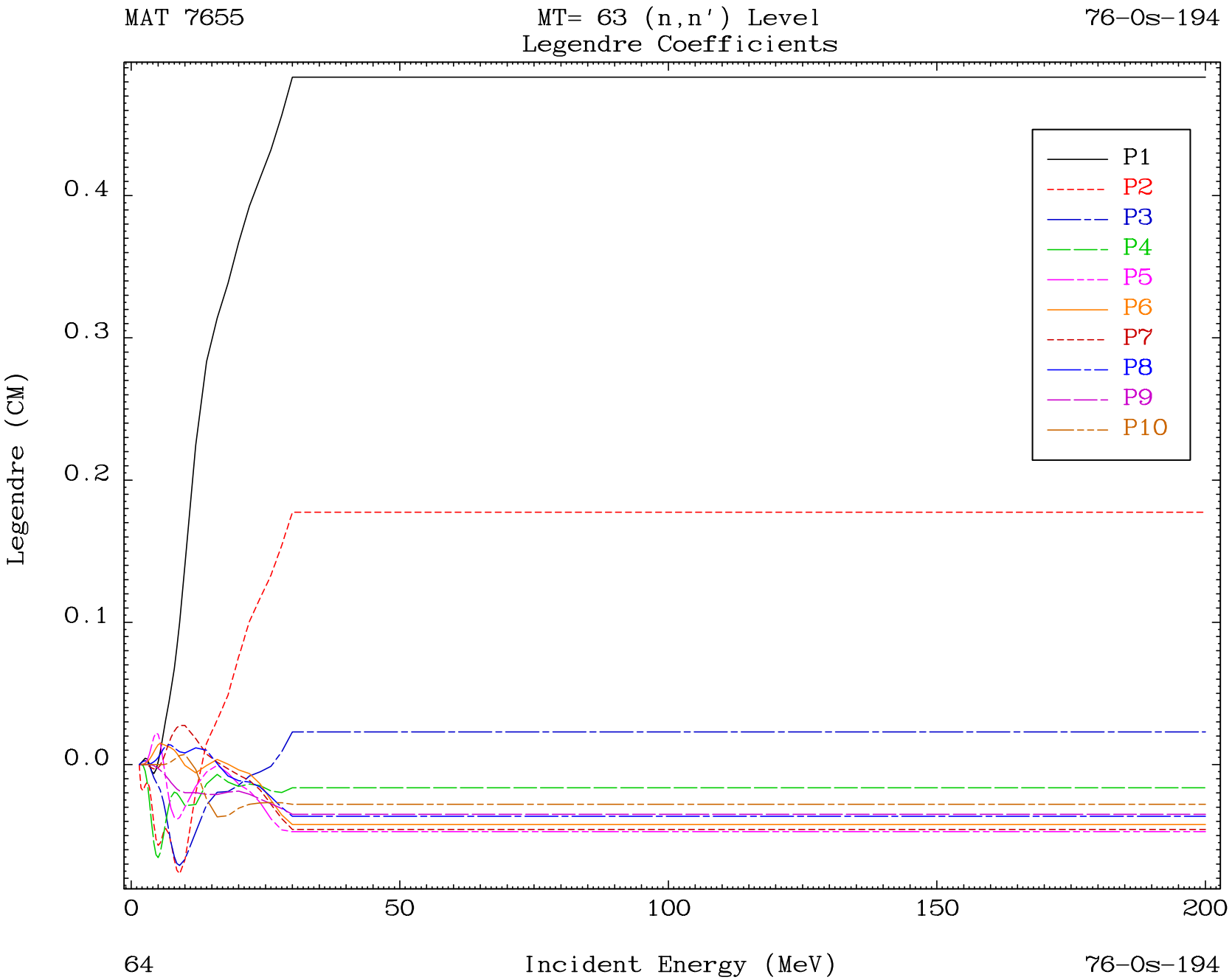

MAT 7655
MT= 61 (n,n') Level
Legendre Coefficients
76-0s-194
0.015
0.010
0.005
0.000
-0.005
-0.010
-0.015
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
59
Incident Energy (MeV)
76-0s-194

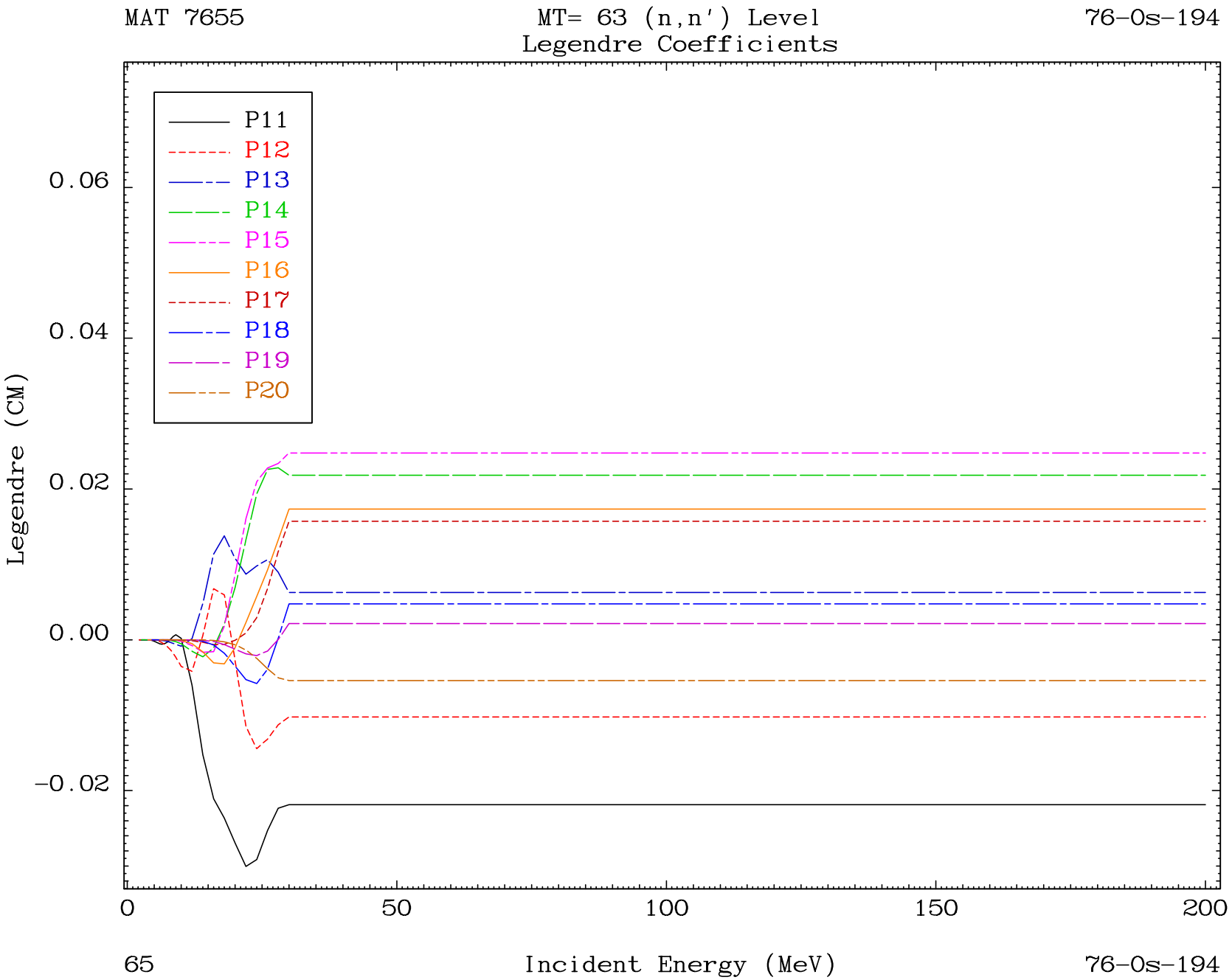

MAT 7655
MT= 61 (n,n') Level
Legendre Coefficients
76-0s-194
0.0
X10^-6
-0.5
-1.0
-1.5
-2.0
-2.5
Legendre (CM)
50
100
150
200
60
Incident Energy (MeV)
76-0s-194
P31
P32
P33
P34
P35
P36
P37
P38

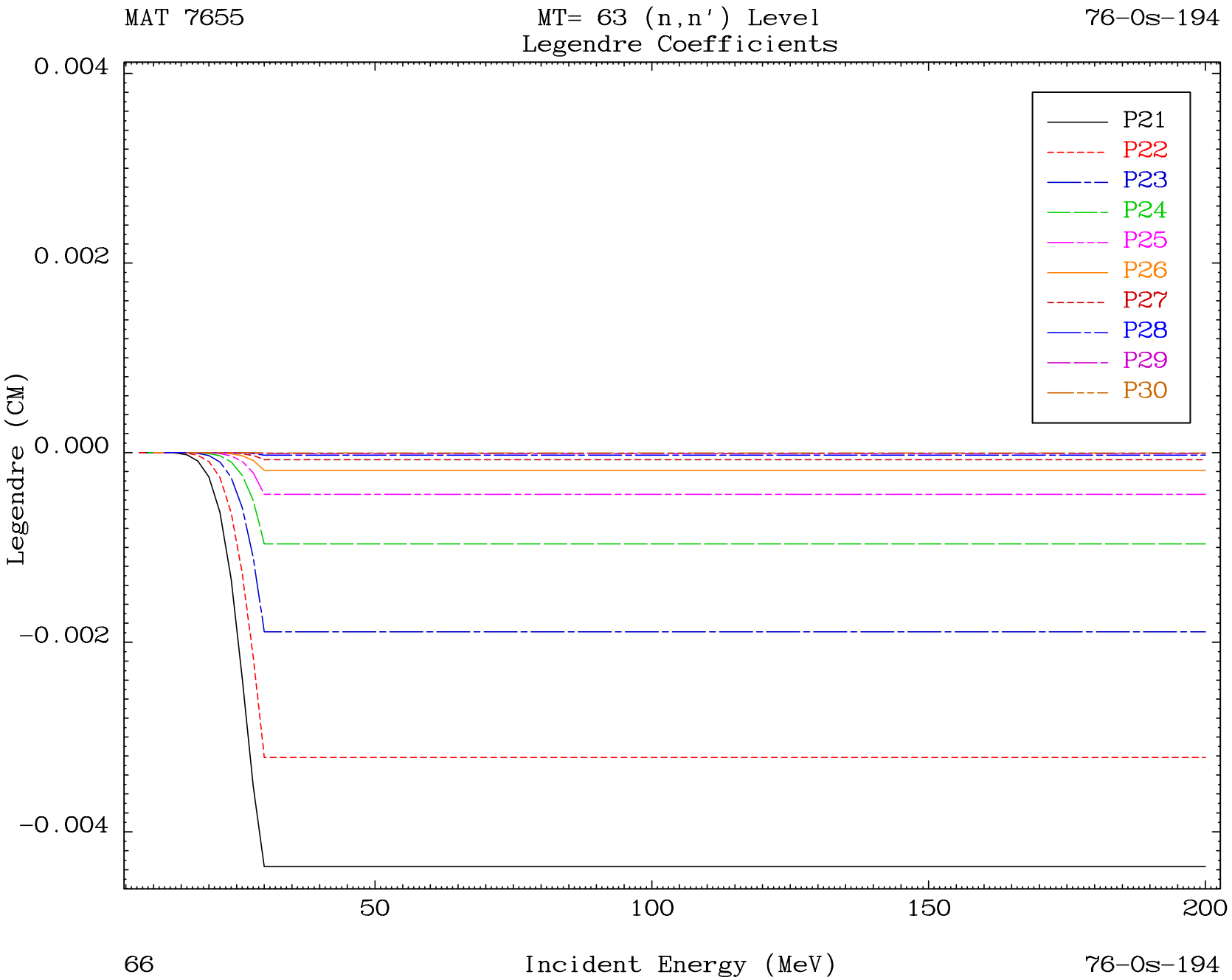

MAT 7655
MT= 62 (n,n') Level
Legendre Coefficients
76-0s-194
0.06
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
50
100
150
200
61
Incident Energy (MeV)
76-0s-194

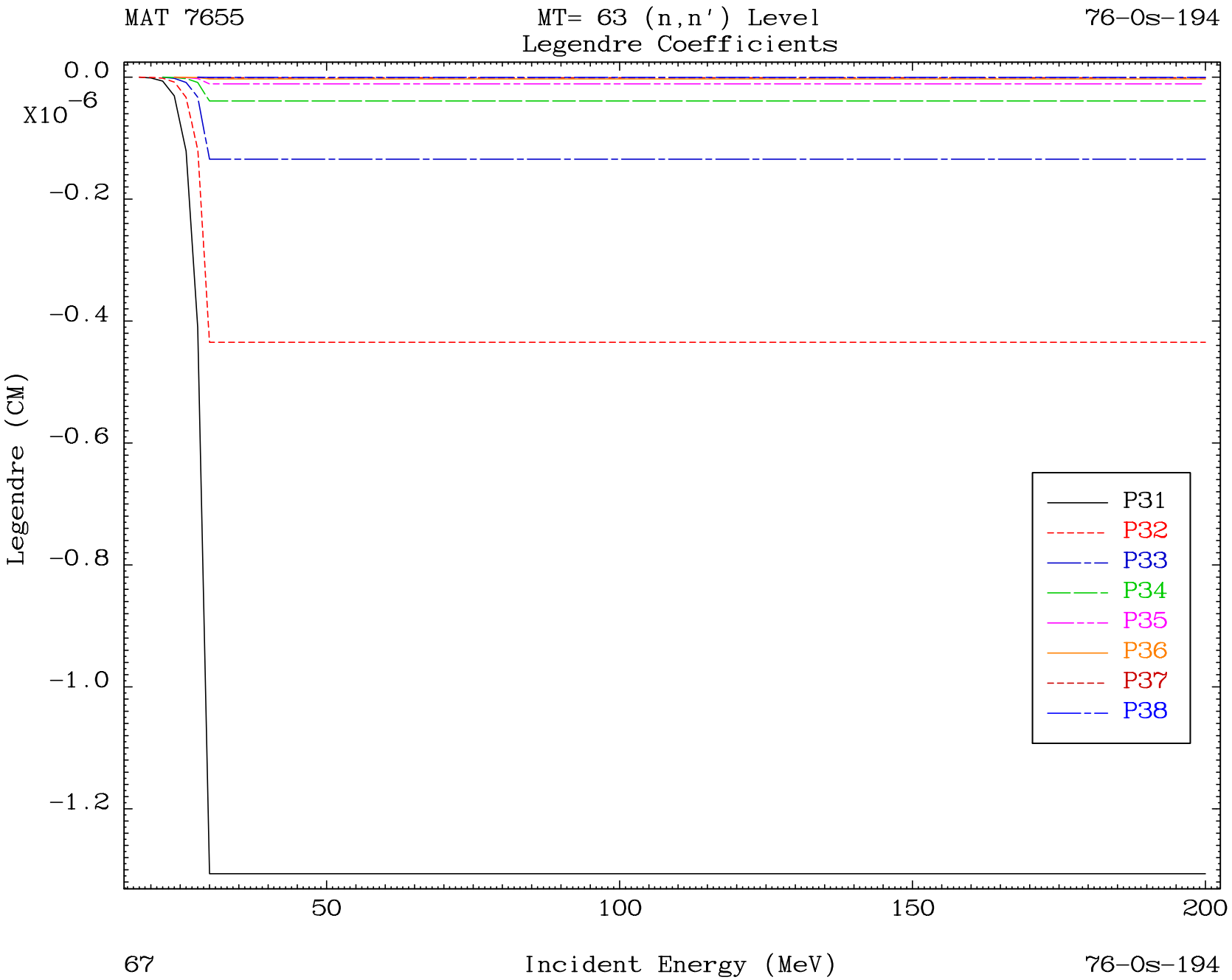

MAT 7655
MT= 62 (n,n') Level
Legendre Coefficients
76-0s-194
X10^-3
1.0
0.8
0.6
0.4
0.2
0.0
-0.2
Legendre (CM)
0
50
100
150
200
62
Incident Energy (MeV)
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20

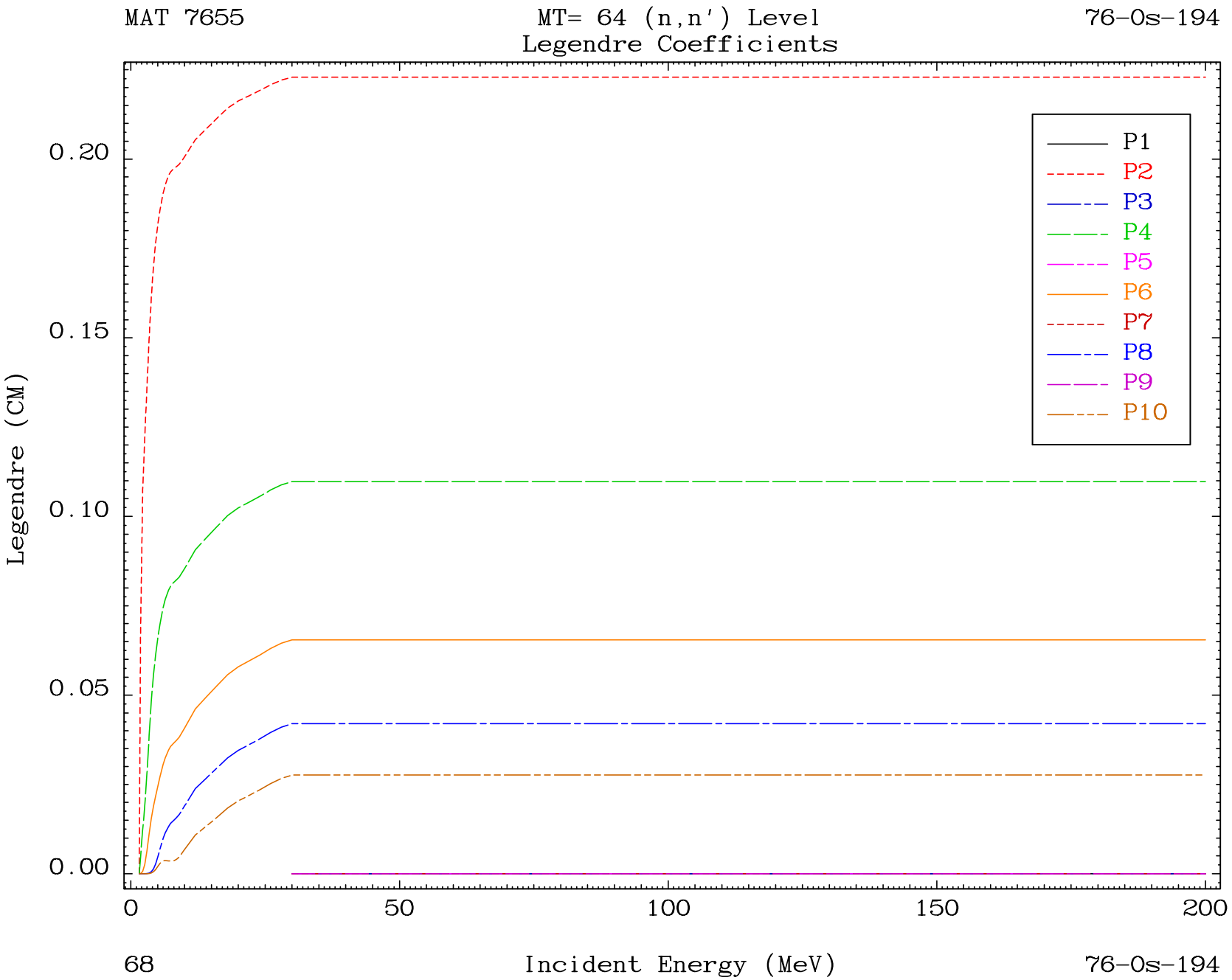

MAT 7655
MT= 62 (n,n') Level
Legendre Coefficients
76-0s-194
X10^-6
6
4
2
0
Legendre (CM)
50
100
150
200
P21
P22
P23
P24
P25
P26
P27
P28
63
Incident Energy (MeV)
76-0s-194

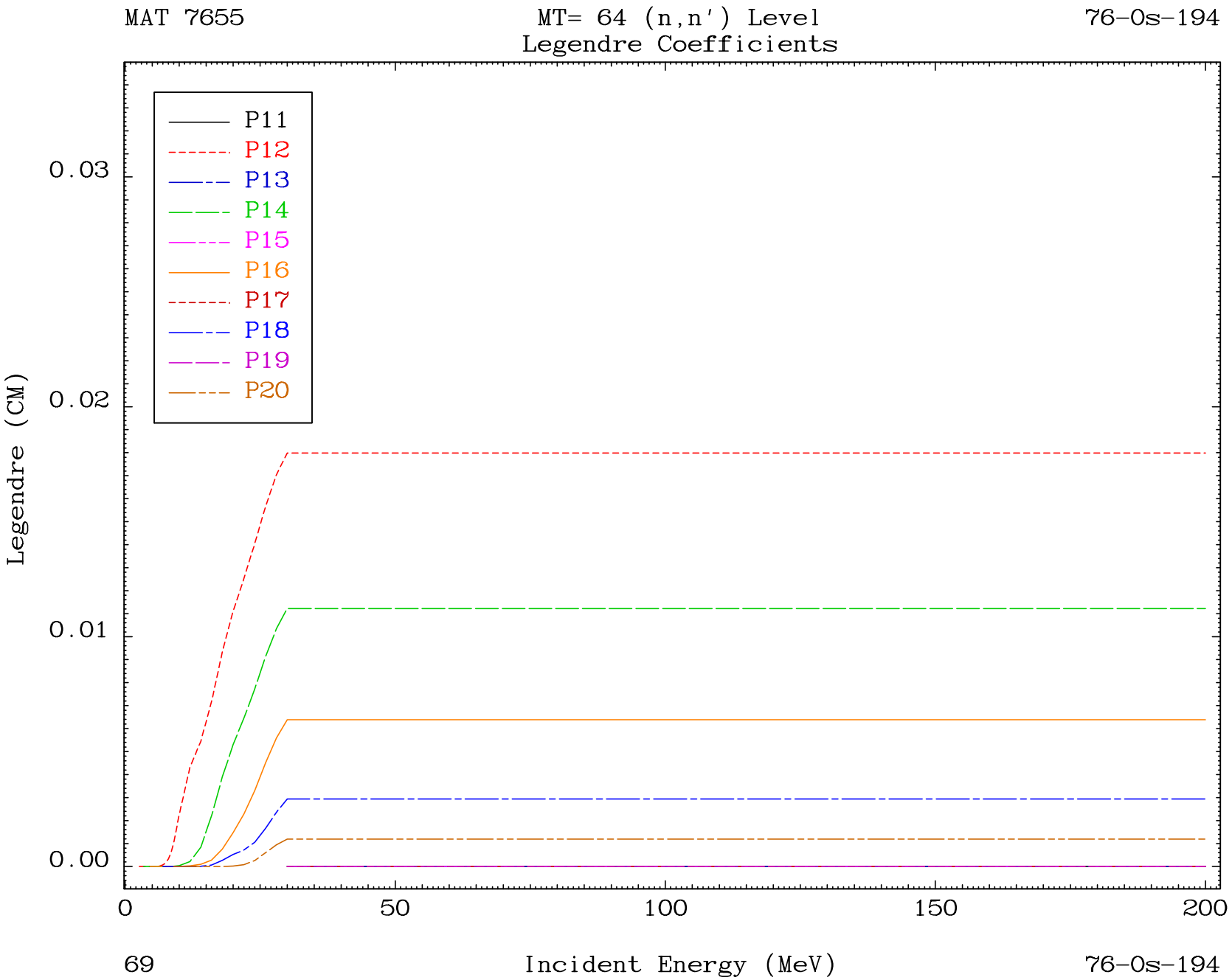

MAT 7655
MT= 63 (n,n') Level
Legendre Coefficients
76-0s-194
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
64
Incident Energy (MeV)
76-0s-194
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

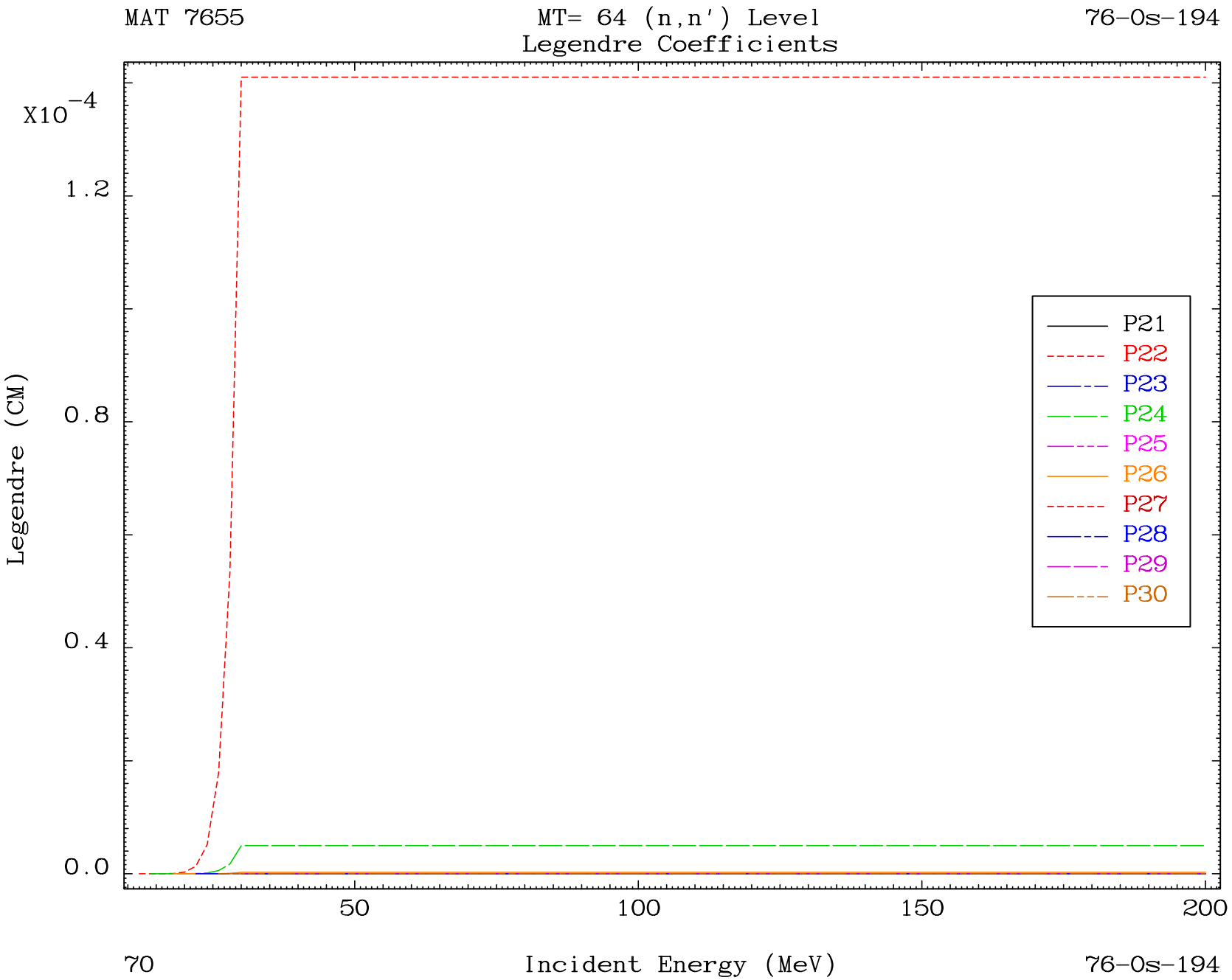

MAT 7655
MT= 63 (n,n') Level
Legendre Coefficients
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.06
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
65
Incident Energy (MeV)
76-0s-194

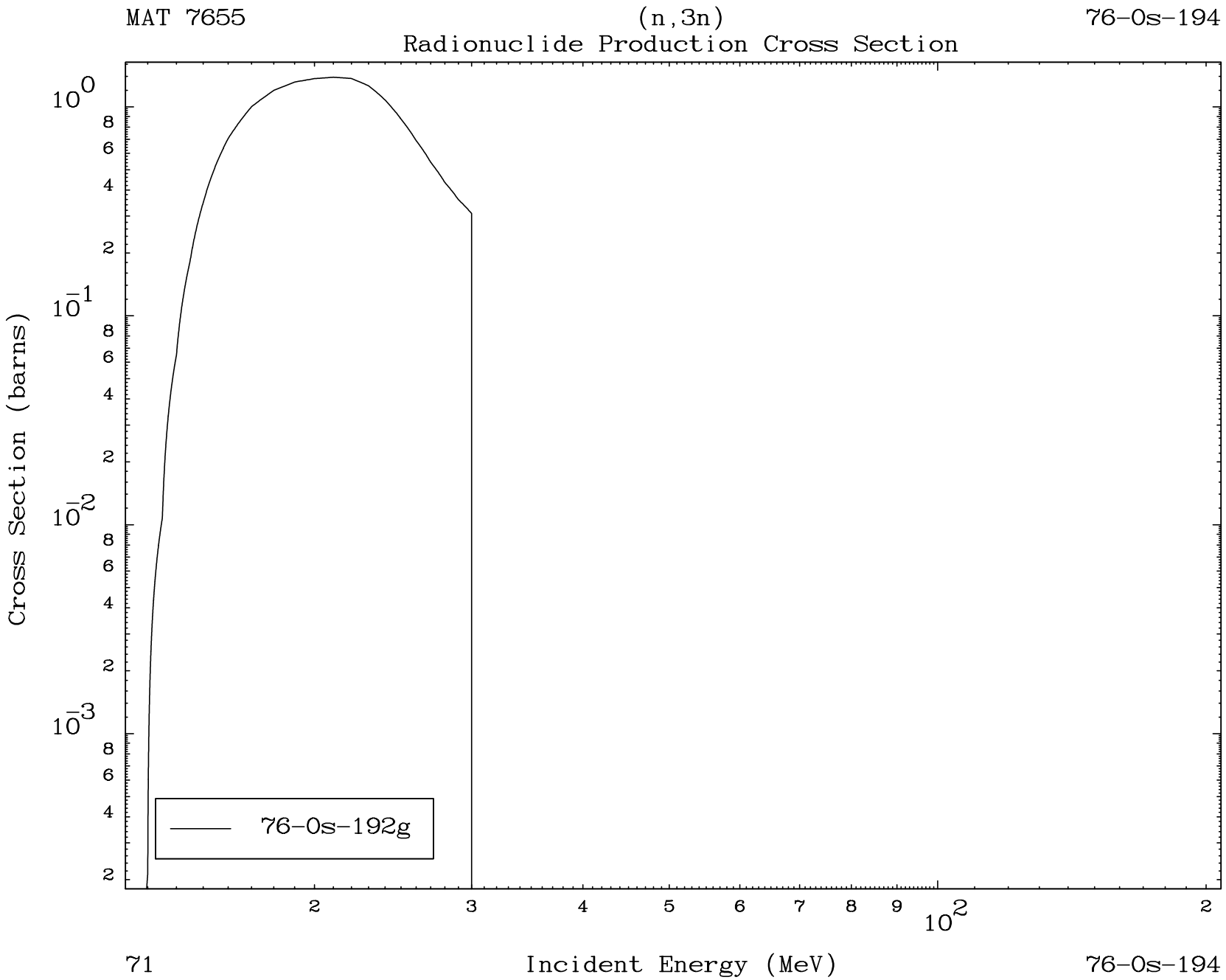

MAT 7655
MT= 63 (n,n') Level
Legendre Coefficients
76-0s-194
0.004
0.002
0.000
-0.002
-0.004
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
66
Incident Energy (MeV)
76-0s-194

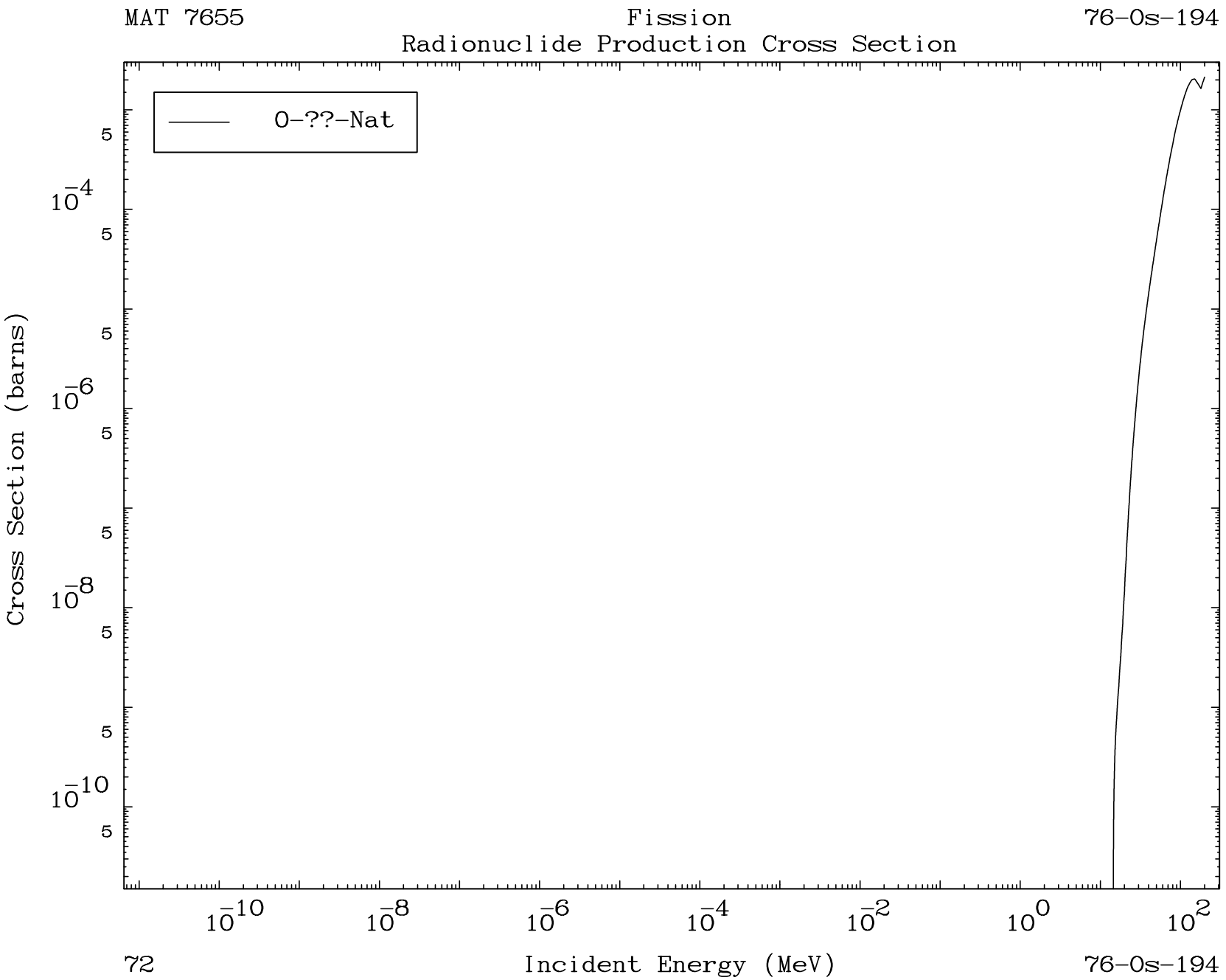

MAT 7655
MT= 63 (n,n') Level
Legendre Coefficients
76-0s-194
0.0
X10 −6
−0.2
−0.4
−0.6
−0.8
−1.0
−1.2
Legendre (CM)
50
100
150
200
67
Incident Energy (MeV)
76-0s-194
P31
P32
P33
P34
P35
P36
P37
P38

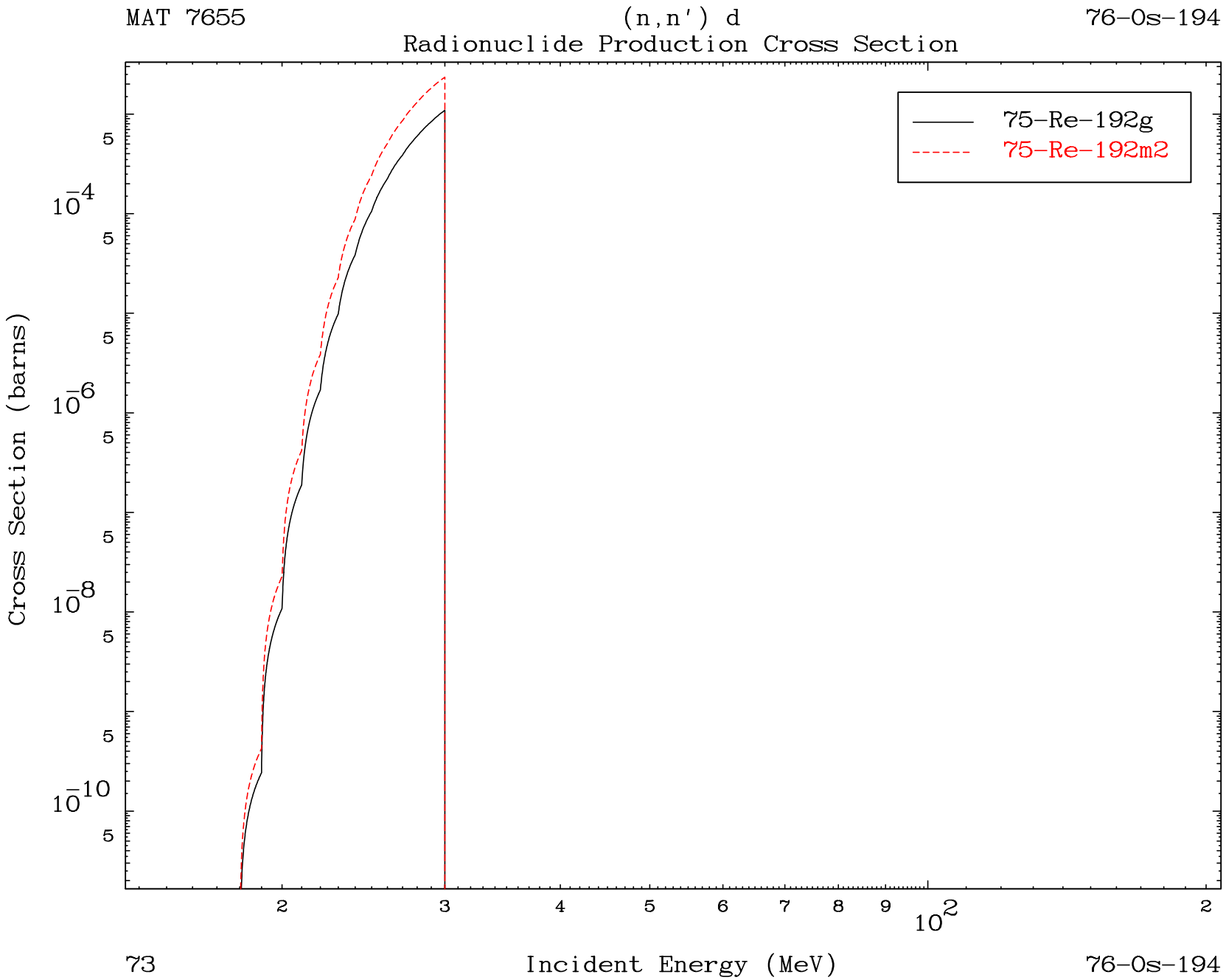

MAT 7655
MT= 64 (n,n') Level
Legendre Coefficients
76-0s-194
Legendre (CM)
0.20
0.15
0.10
0.05
0.00
0
50
100
150
200
68
Incident Energy (MeV)
76-0s-194
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

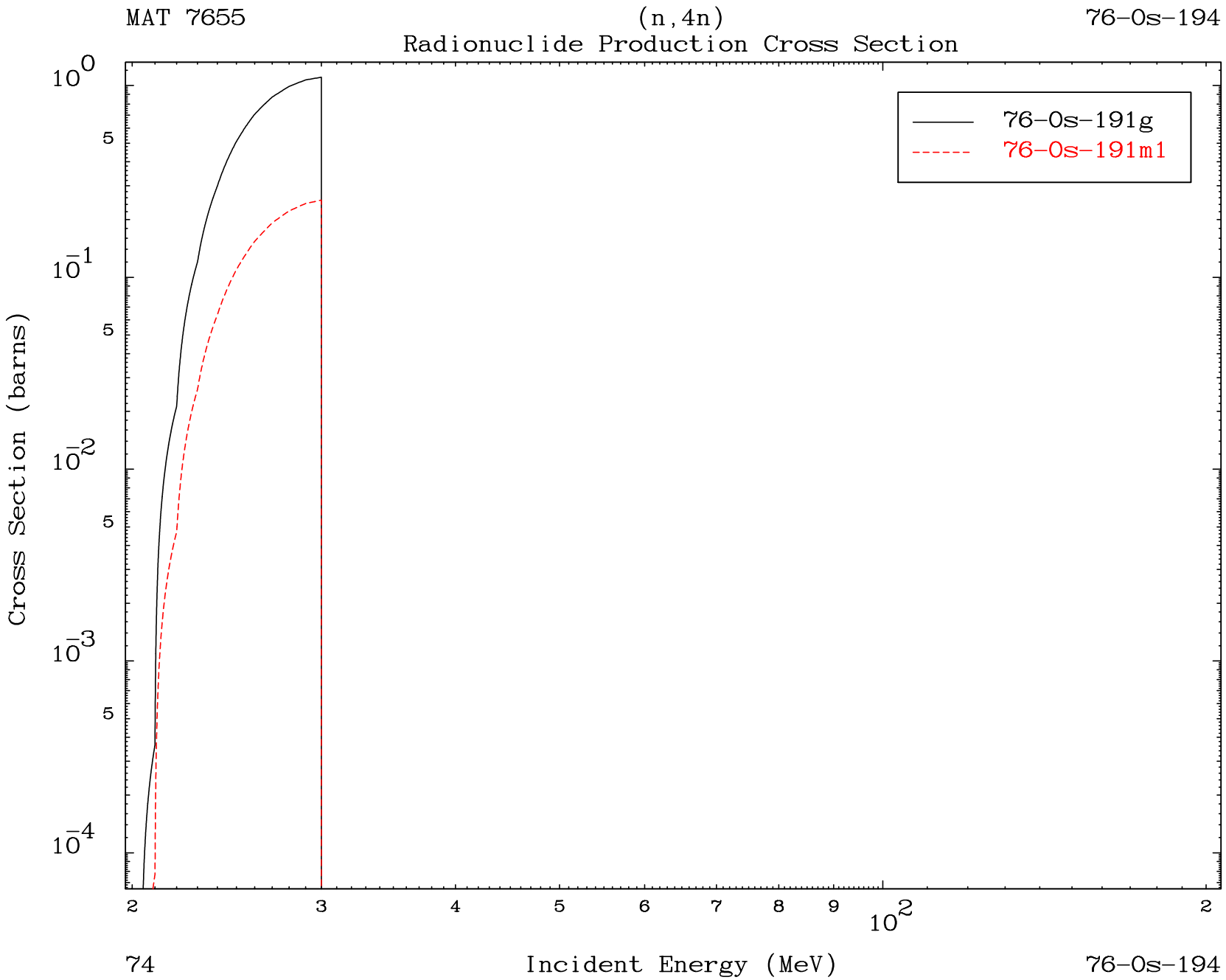

MAT 7655
MT= 64 (n,n') Level
Legendre Coefficients
76-0s-194
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
69
Incident Energy (MeV)
76-0s-194

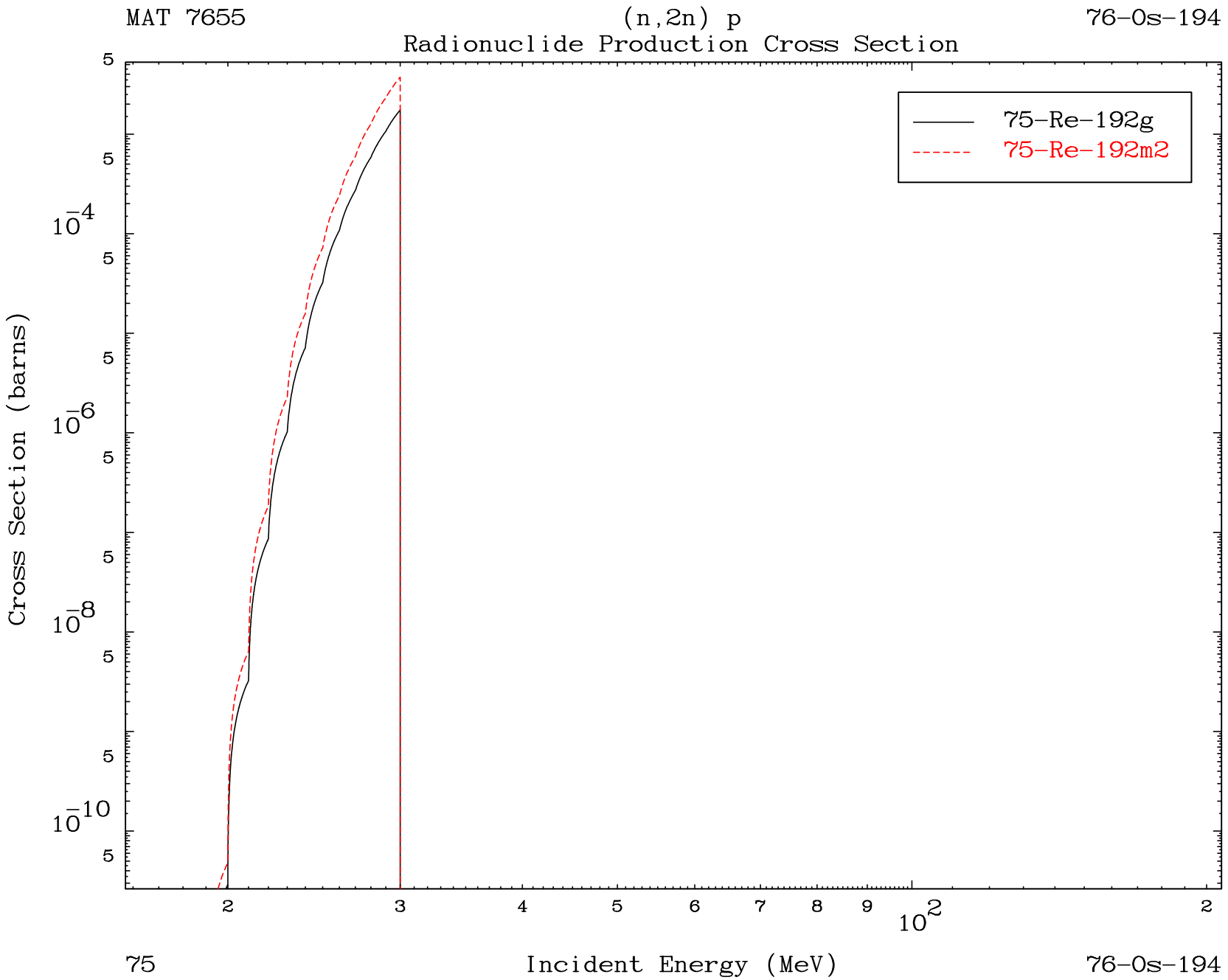

MAT 7655
MT= 64 (n,n') Level
Legendre Coefficients
76-0s-194
X10^-4
1.2
0.8
0.4
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
50
100
150
200
70
Incident Energy (MeV)
76-0s-194

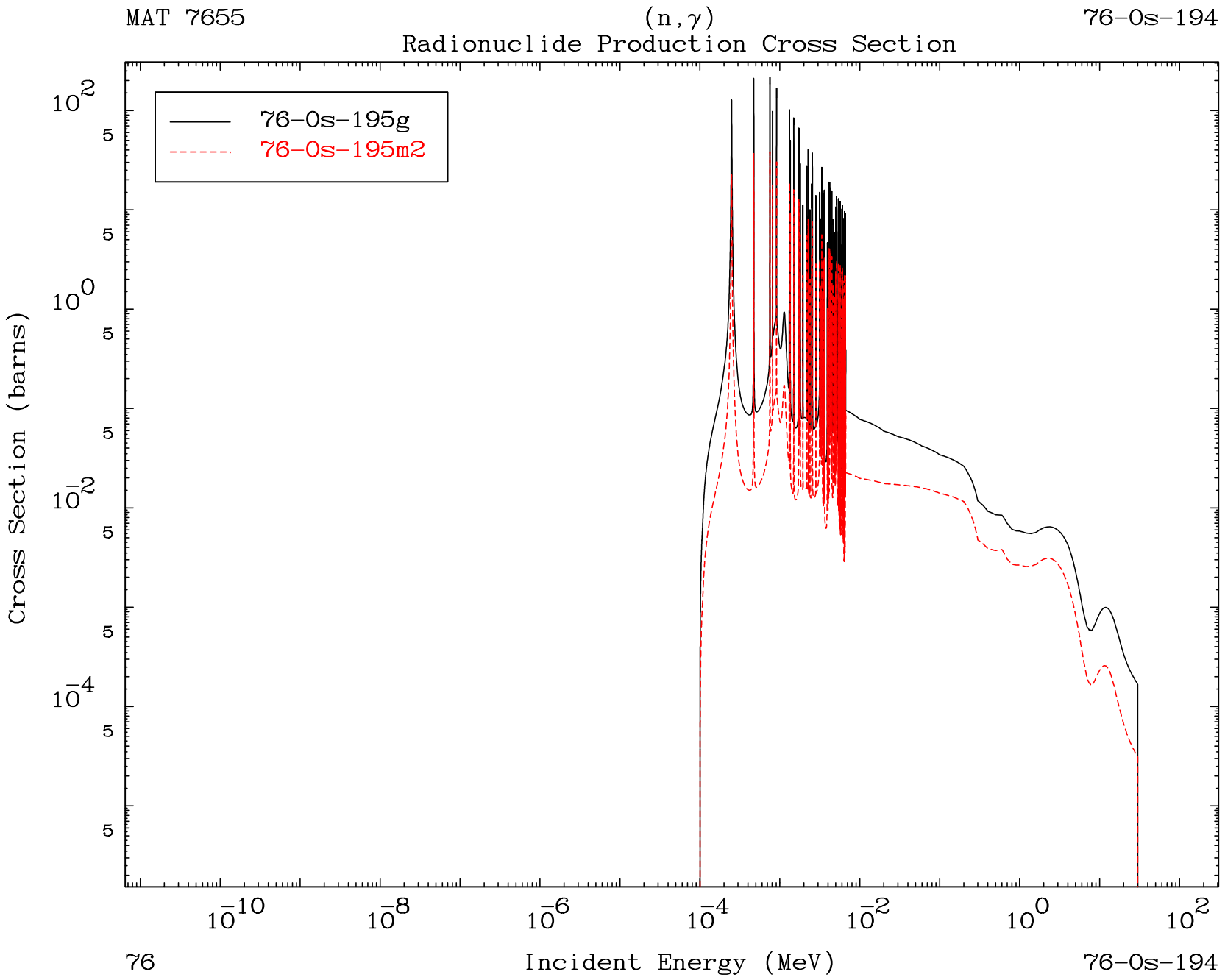

MAT 7655
(n,3n)
76-0s-194
Radionuclide Production Cross Section
Cross Section (barns)
$10^{0}$
$10^{-1}$
$10^{-2}$
$10^{-3}$
8
6
4
2
76-0s-192g
2
3
4
5
6
7
8
9
$10^{2}$
2
71
Incident Energy (MeV)
76-0s-194

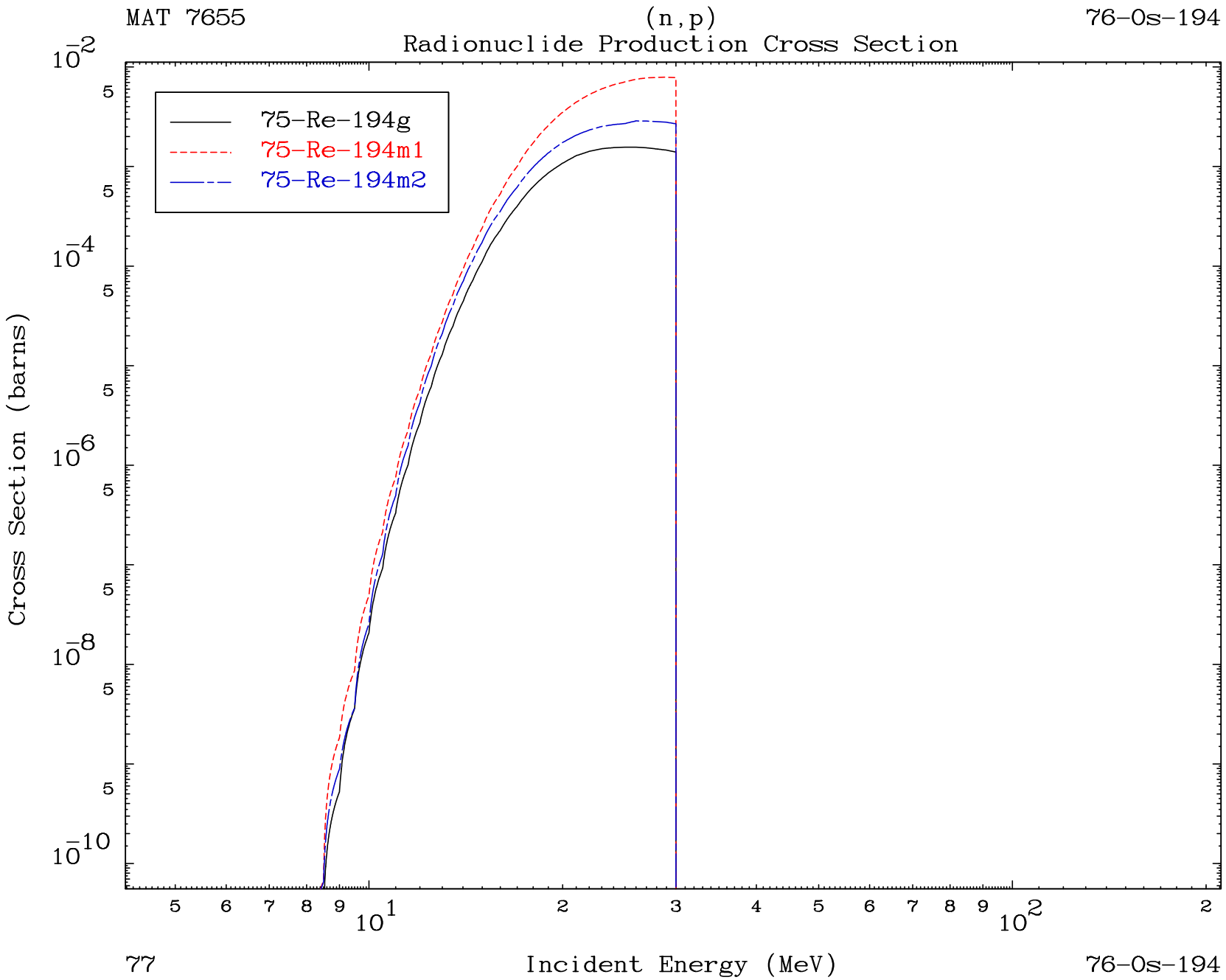

MAT 7655
Fission
76-0s-194
Radionuclide Production Cross Section
0-??-Nat
Cross Section (barns)
Incident Energy (MeV)
72
76-0s-194

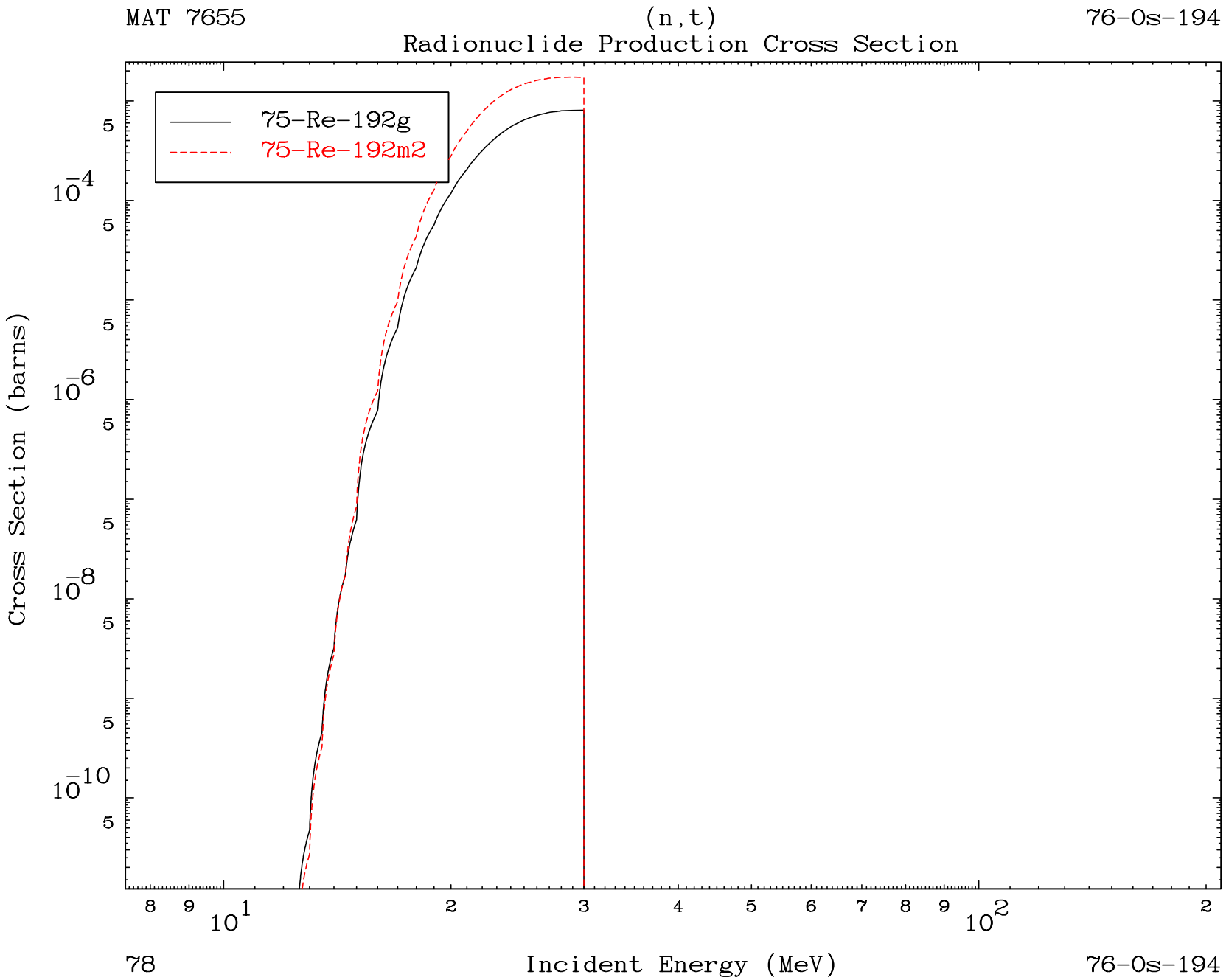

MAT 7655
(n,n') d
76-Os-194
Radionuclide Production Cross Section
75-Re-192g
75-Re-192m2
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
73
Incident Energy (MeV)
76-Os-194


MAT 7655
(n,4n)
76-Os-194
Radionuclide Production Cross Section
76-Os-191g
76-Os-191m1
Cross Section (barns)
Incident Energy (MeV)
74
76-Os-194


MAT 7655
(n,2n) p
76-Os-194
Radionuclide Production Cross Section
75-Re-192g
75-Re-192m2
Cross Section (barns)
Incident Energy (MeV)
75
76-Os-194


MAT 7655
(n,γ)
76-0s-194
Radionuclide Production Cross Section
76-0s-195g
76-0s-195m2
Cross Section (barns)
Incident Energy (MeV)
76
76-0s-194


MAT 7655
(n,p)
76-Os-194
Radionuclide Production Cross Section
75-Re-194g
75-Re-194m1
75-Re-194m2
Cross Section (barns)
Incident Energy (MeV)
77
76-Os-194


MAT 7655
(n,t)
76-Os-194
Radionuclide Production Cross Section
75-Re-192g
75-Re-192m2
Cross Section (barns)
Incident Energy (MeV)
78
76-Os-194