Program EVALPLOT
(Version 2017-1)
by
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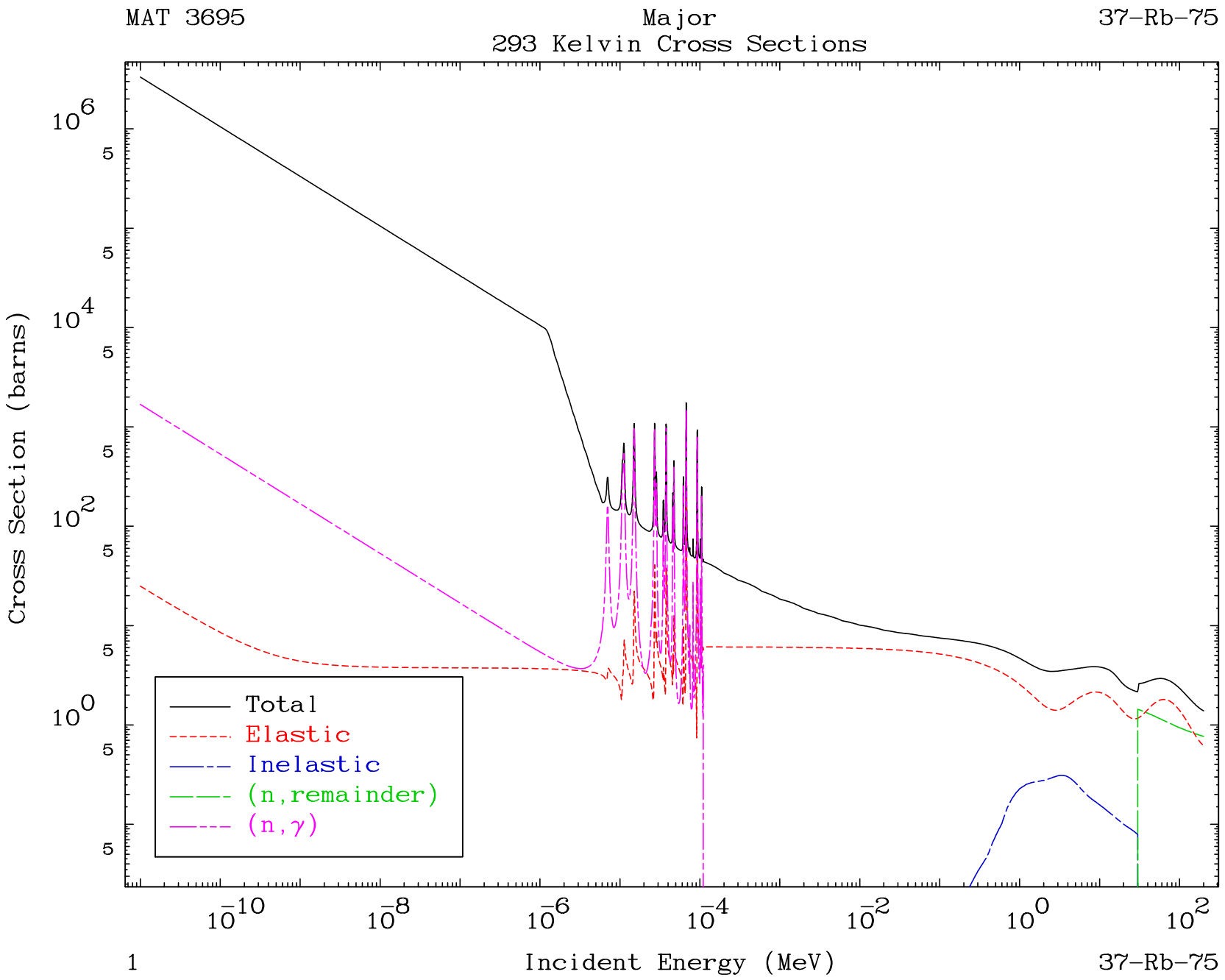
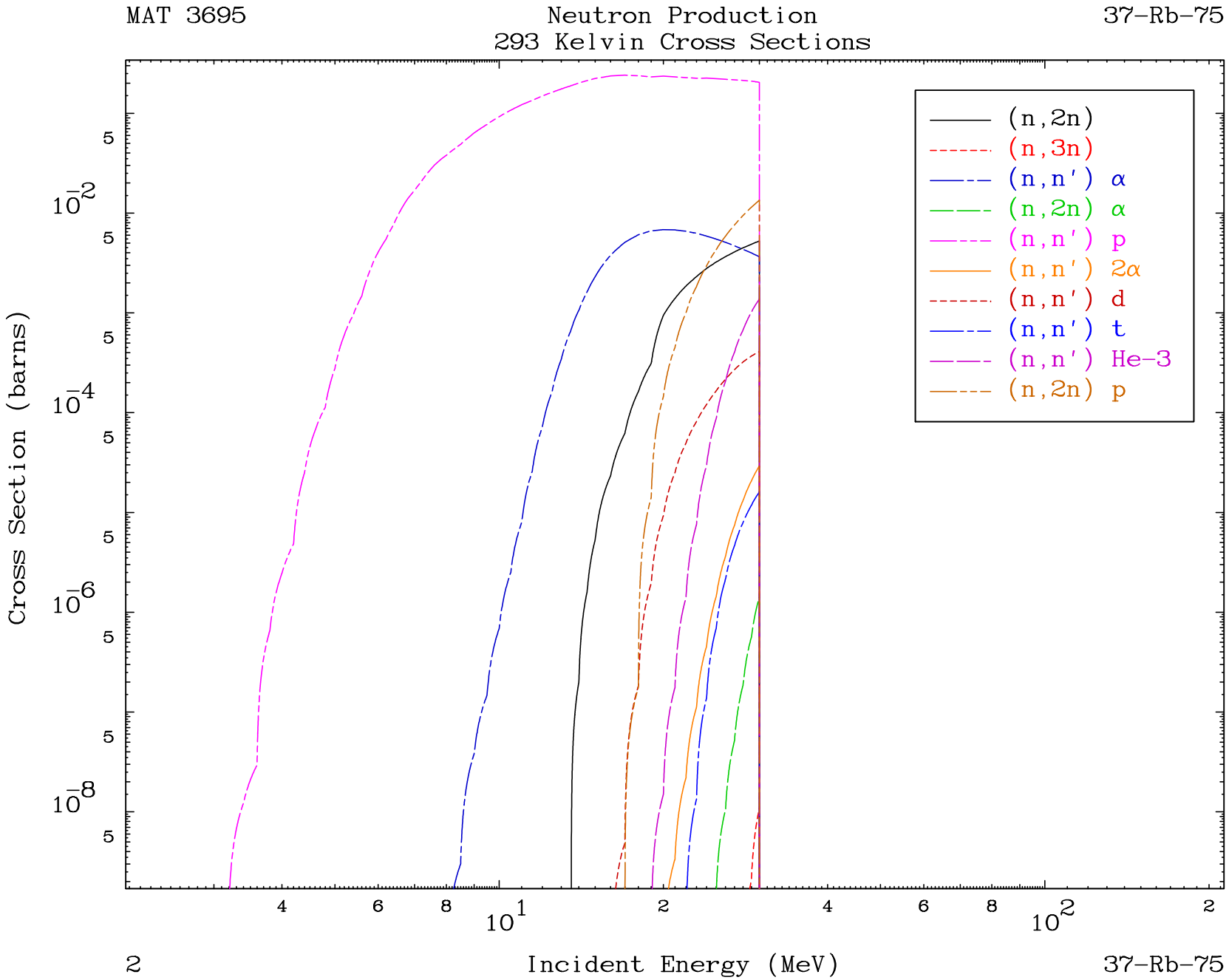
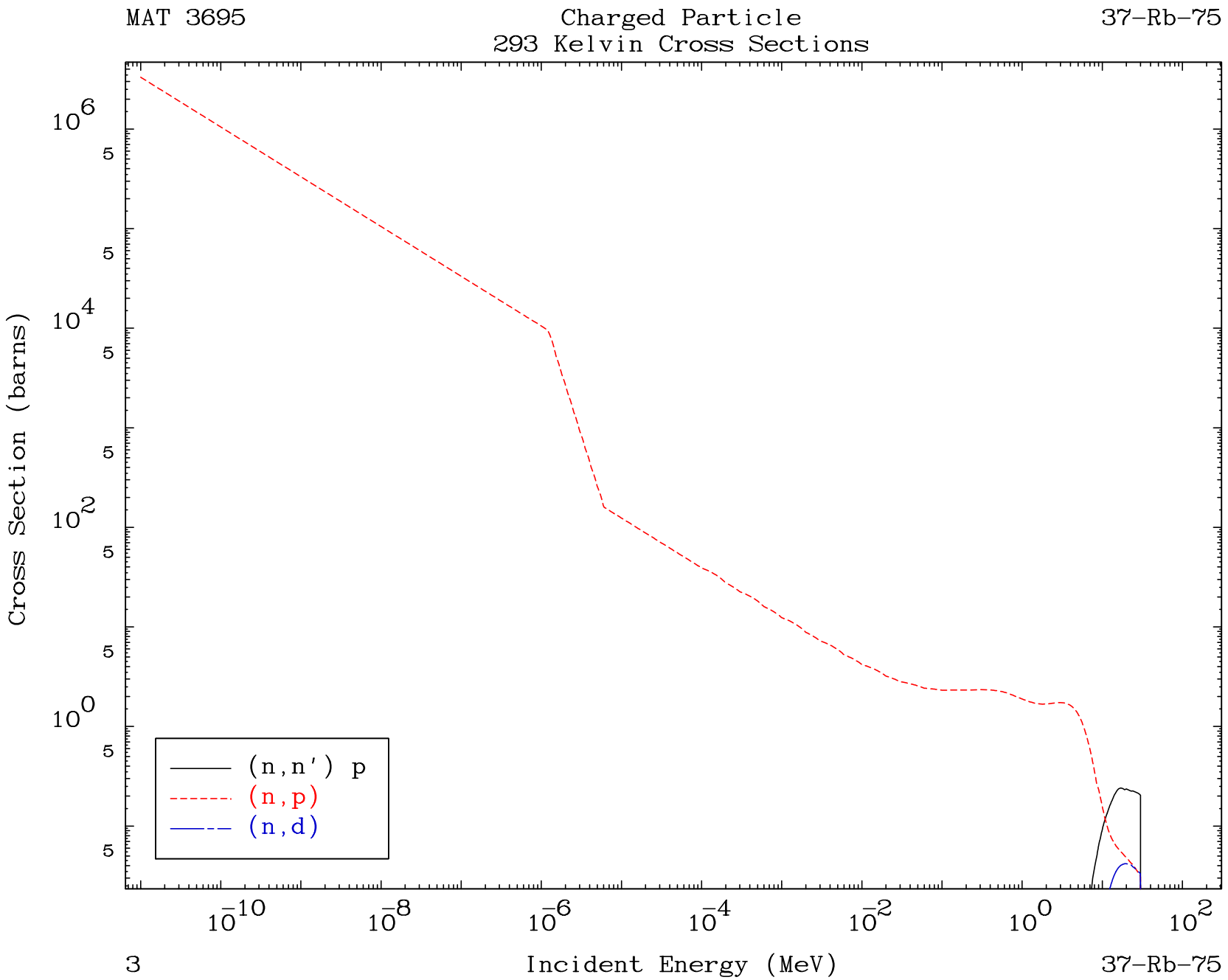
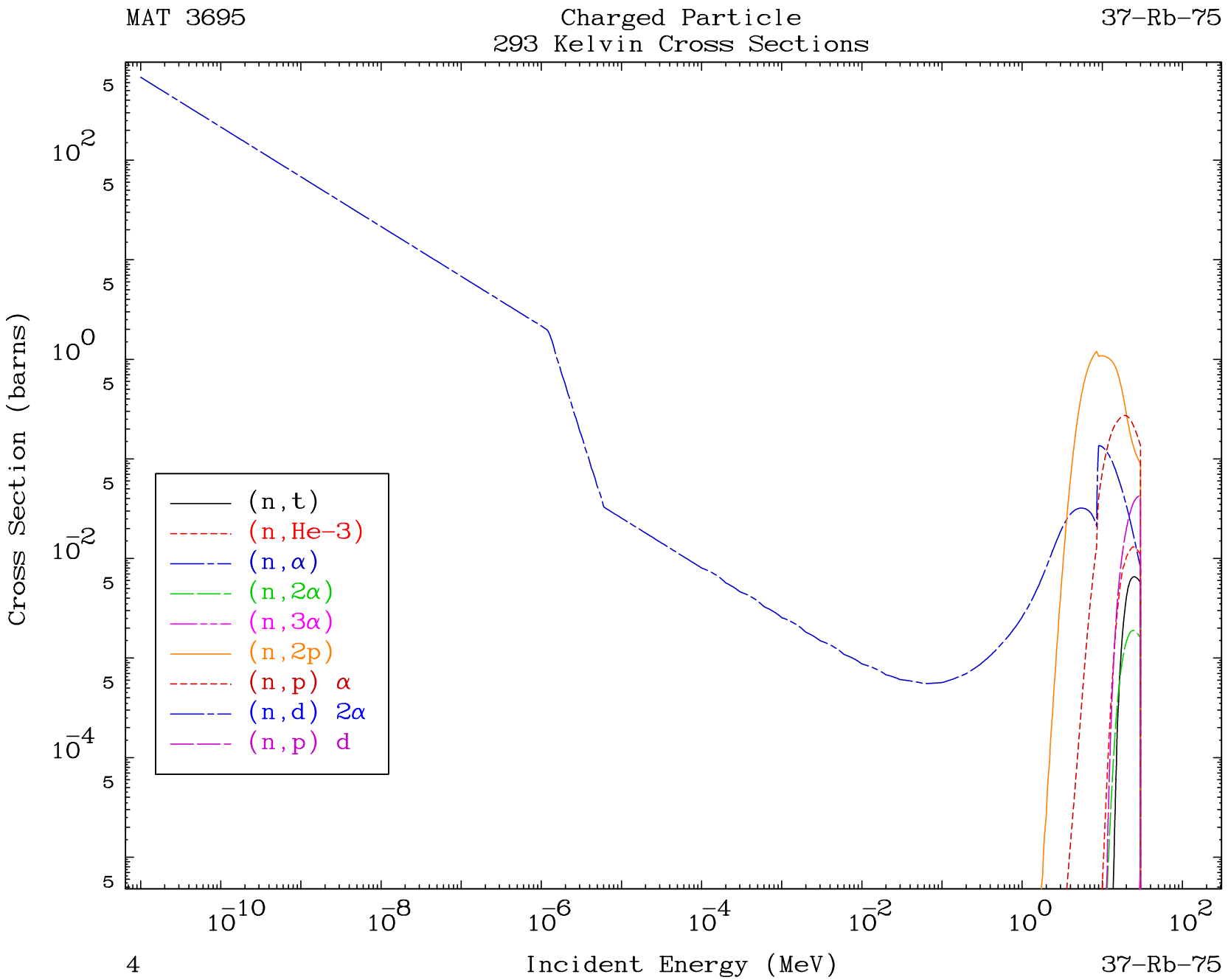
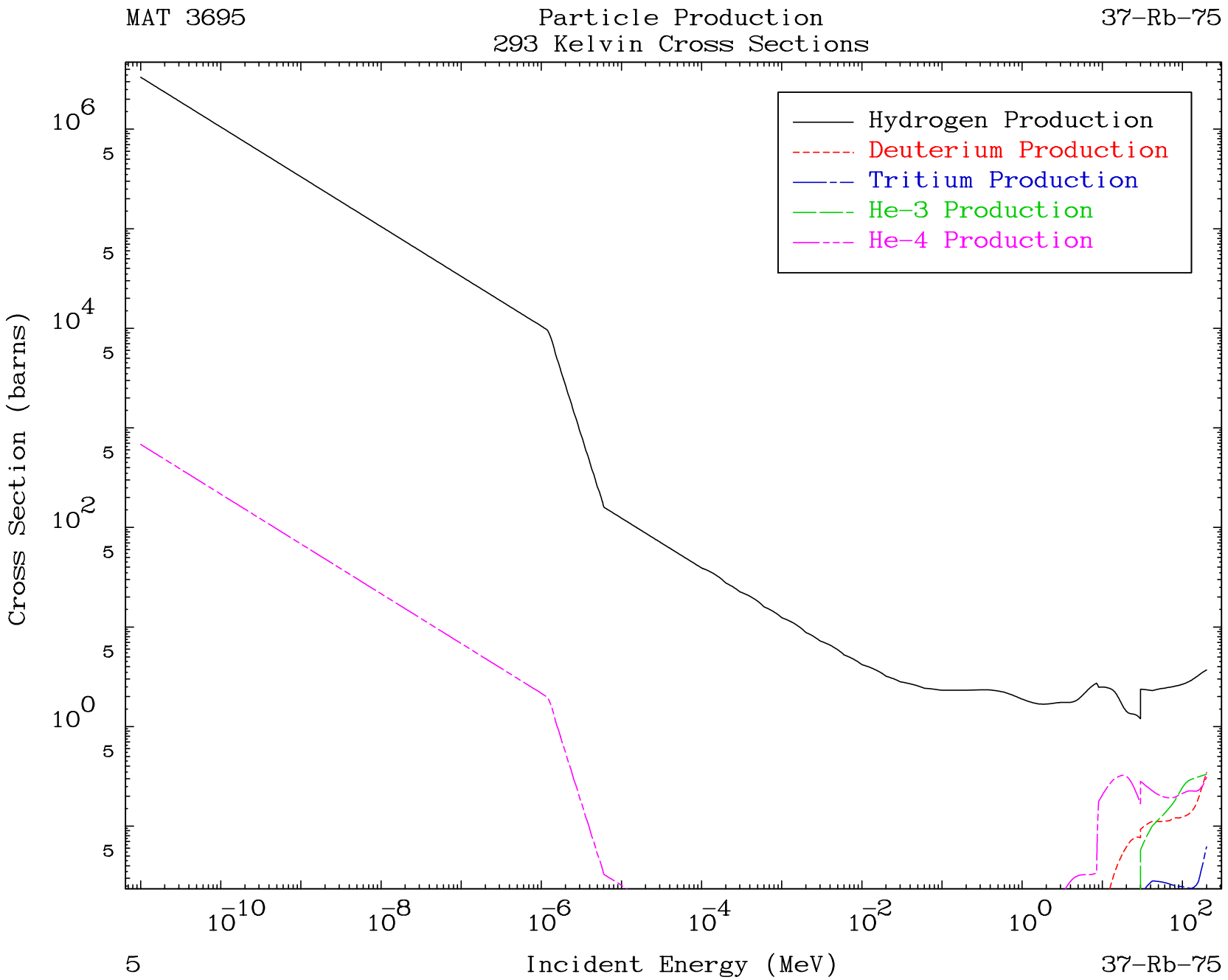
Press Mouse Button to Start

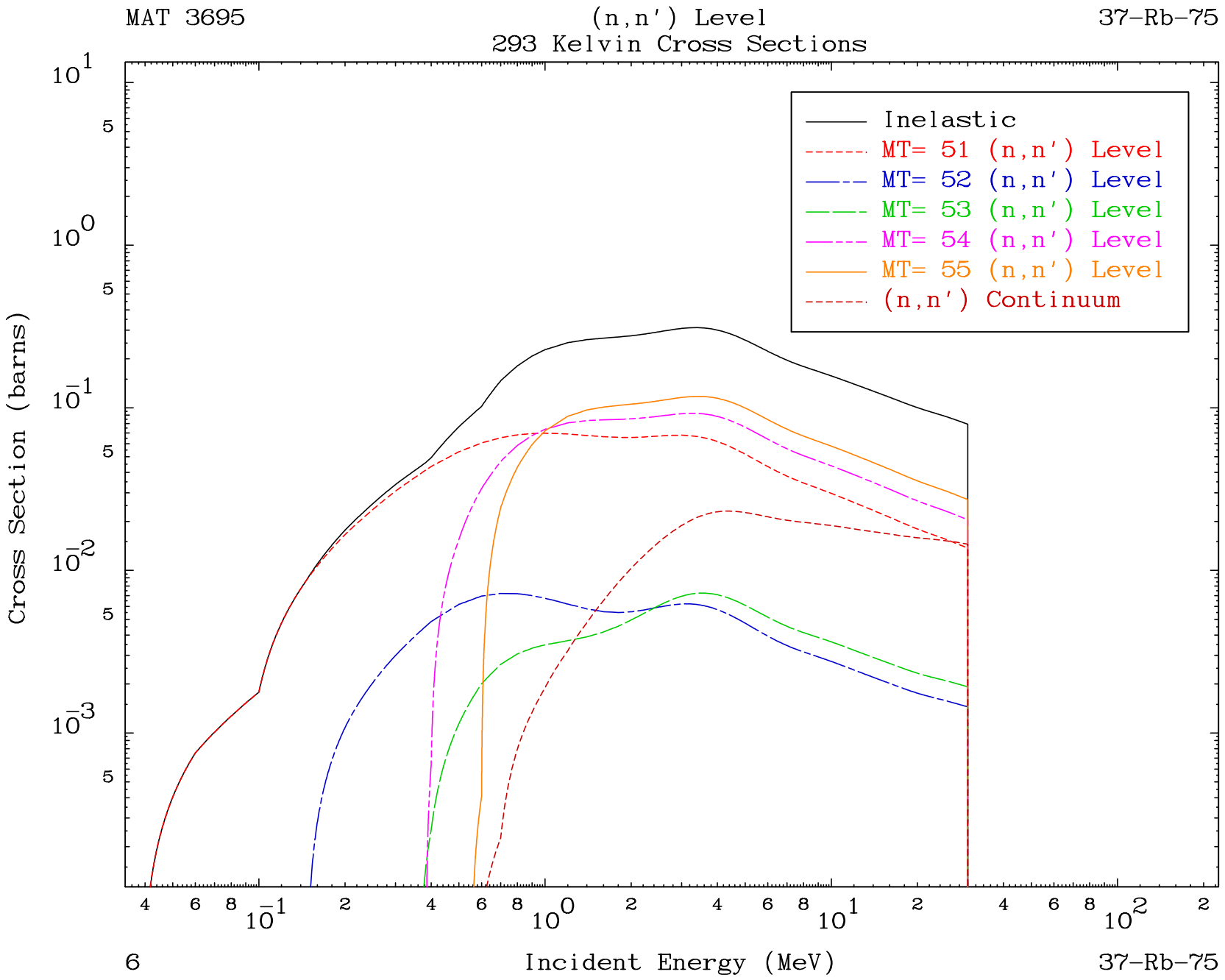

MAT 3695
Major
37-Rb-75
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
37-Rb-75

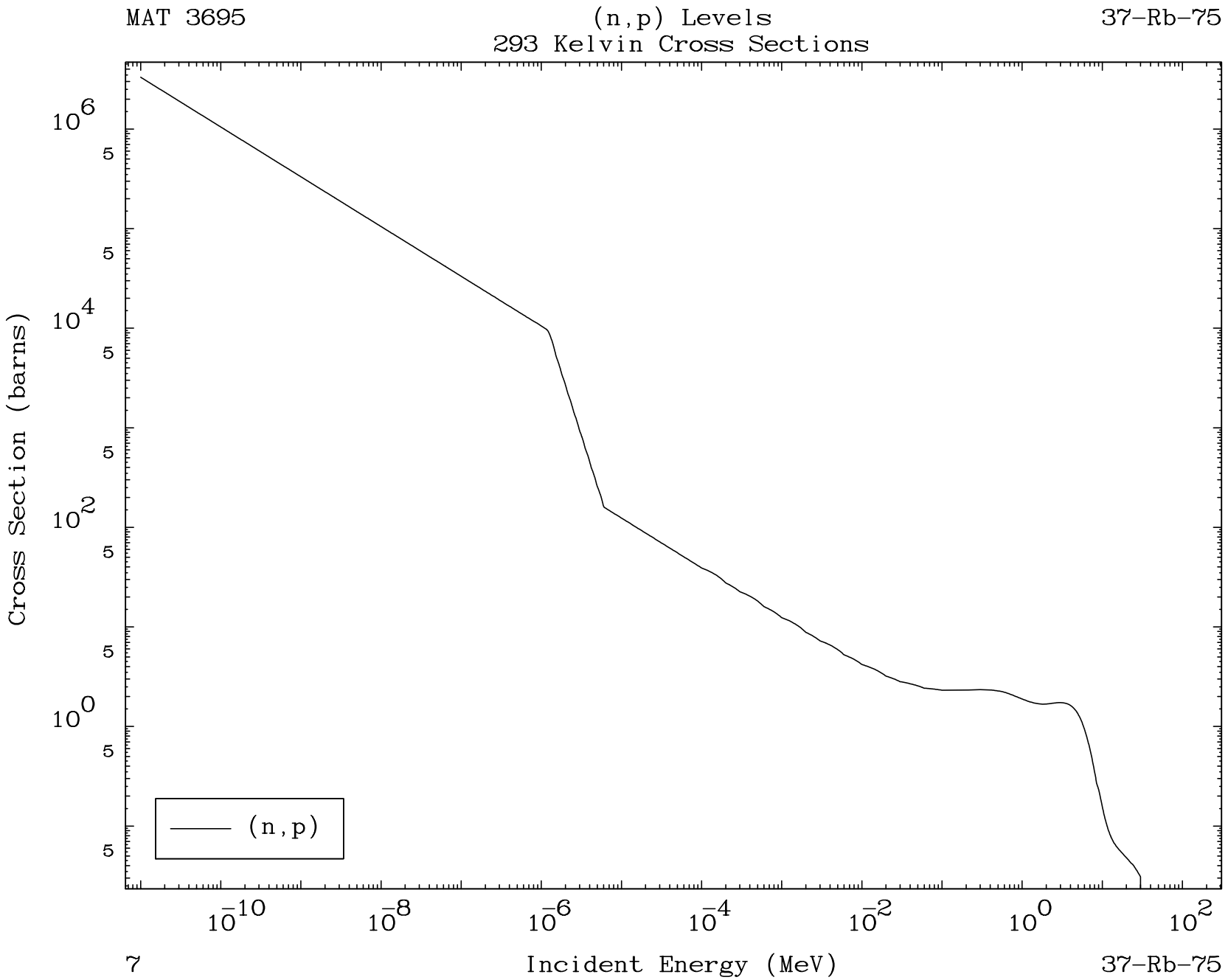

MAT 3695
Neutron Production
293 Kelvin Cross Sections
37-Rb-75
Cross Section (barns)
Incident Energy (MeV)
37-Rb-75
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p

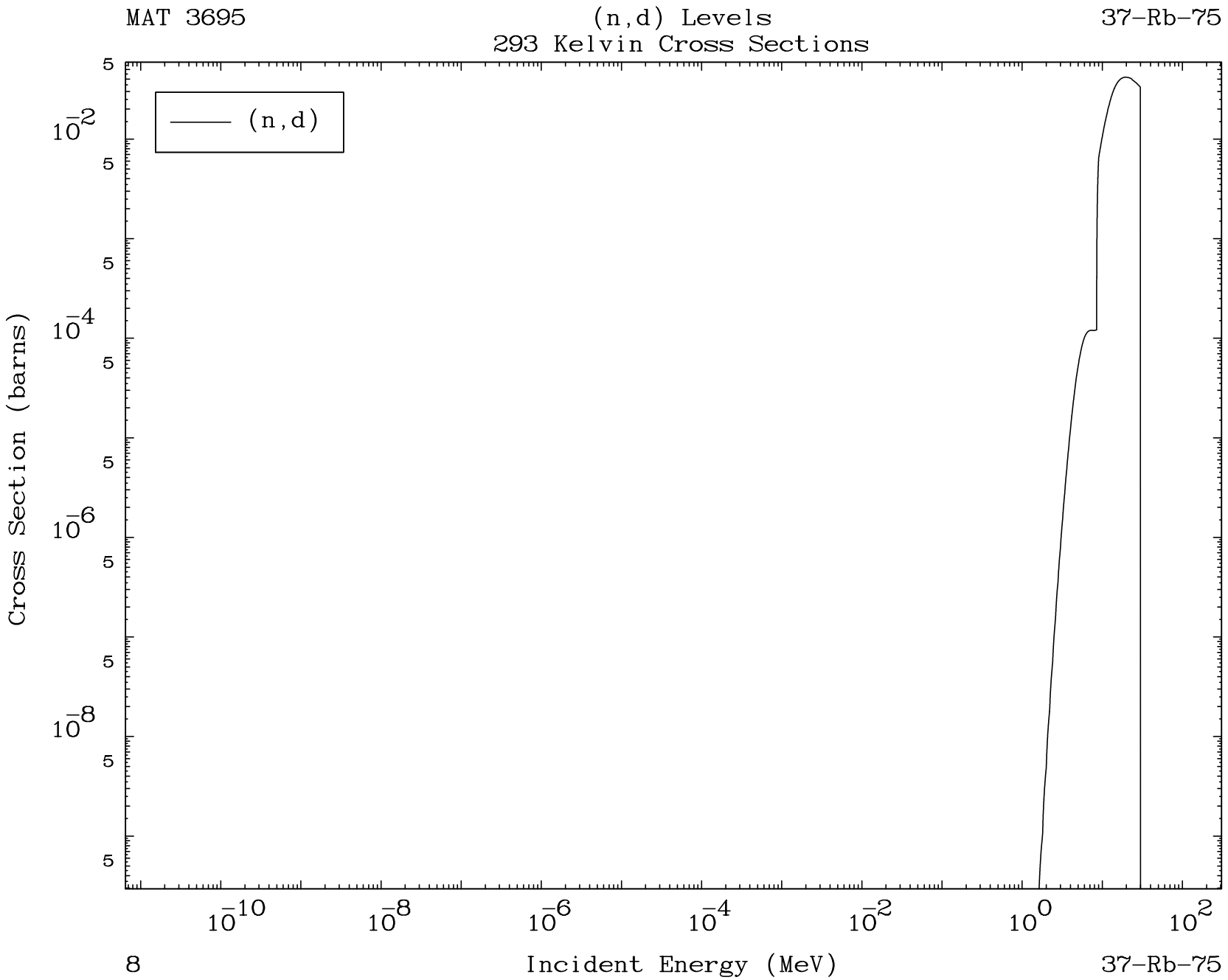

MAT 3695
Charged Particle
37-Rb-75
293 Kelvin Cross Sections
Cross Section (barns)
10^6
10^4
10^2
10^0
5
(n,n') p
(n,p)
(n,d)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
3
37-Rb-75

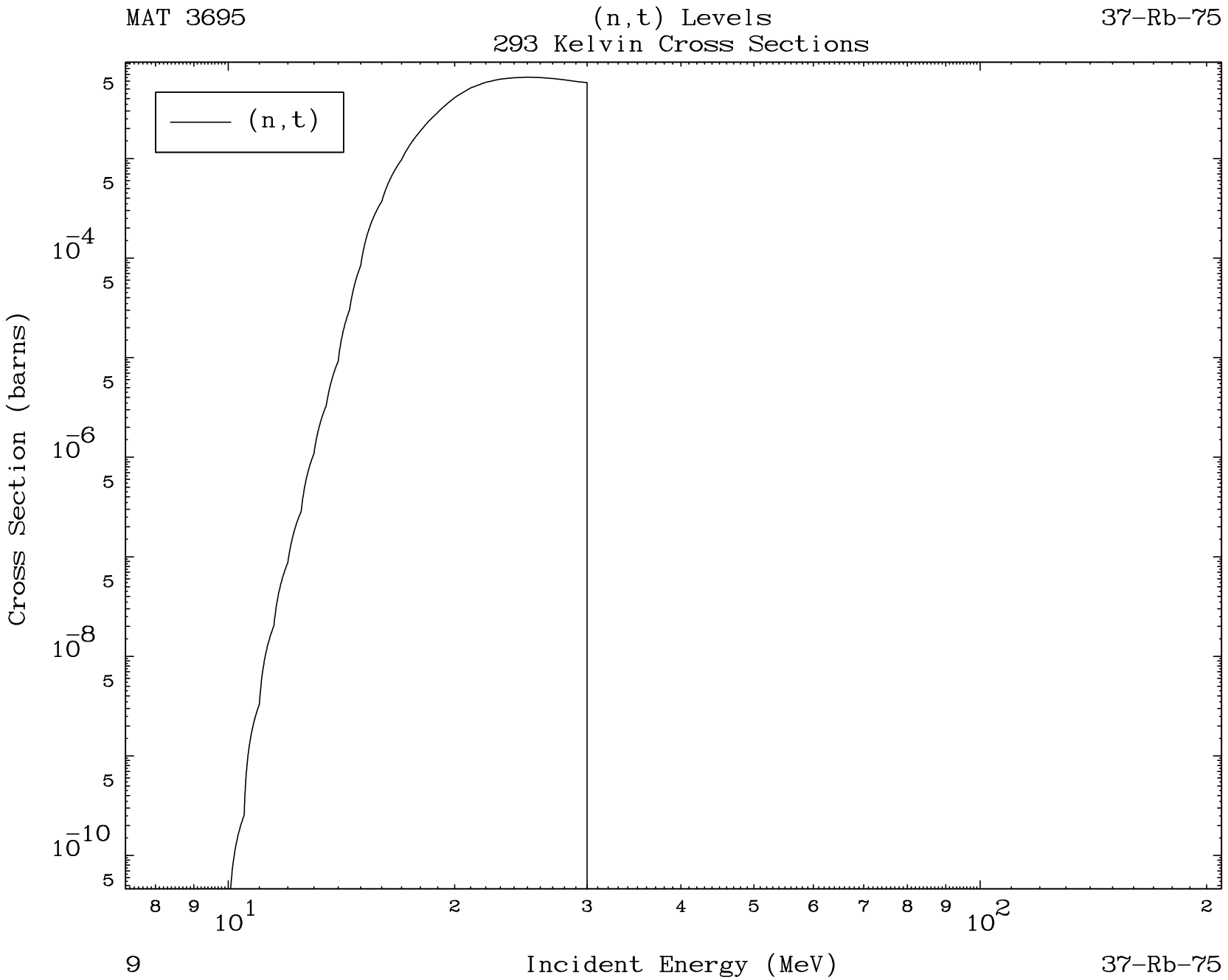

MAT 3695
Charged Particle
293 Kelvin Cross Sections
37-Rb-75
Cross Section (barns)
Incident Energy (MeV)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,d) 2α
(n,p) d
4
37-Rb-75

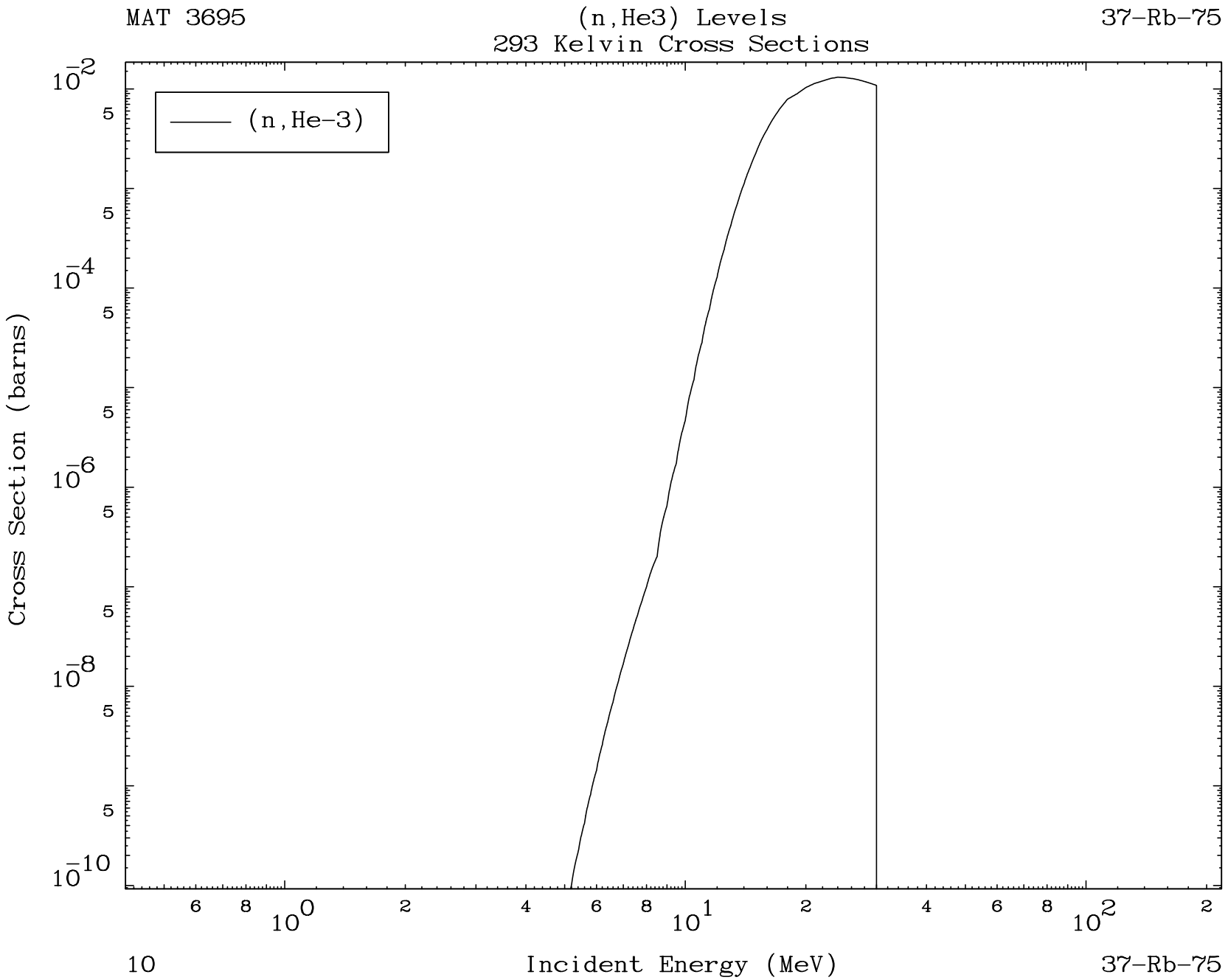

MAT 3695
Particle Production
293 Kelvin Cross Sections
37-Rb-75
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
37-Rb-75

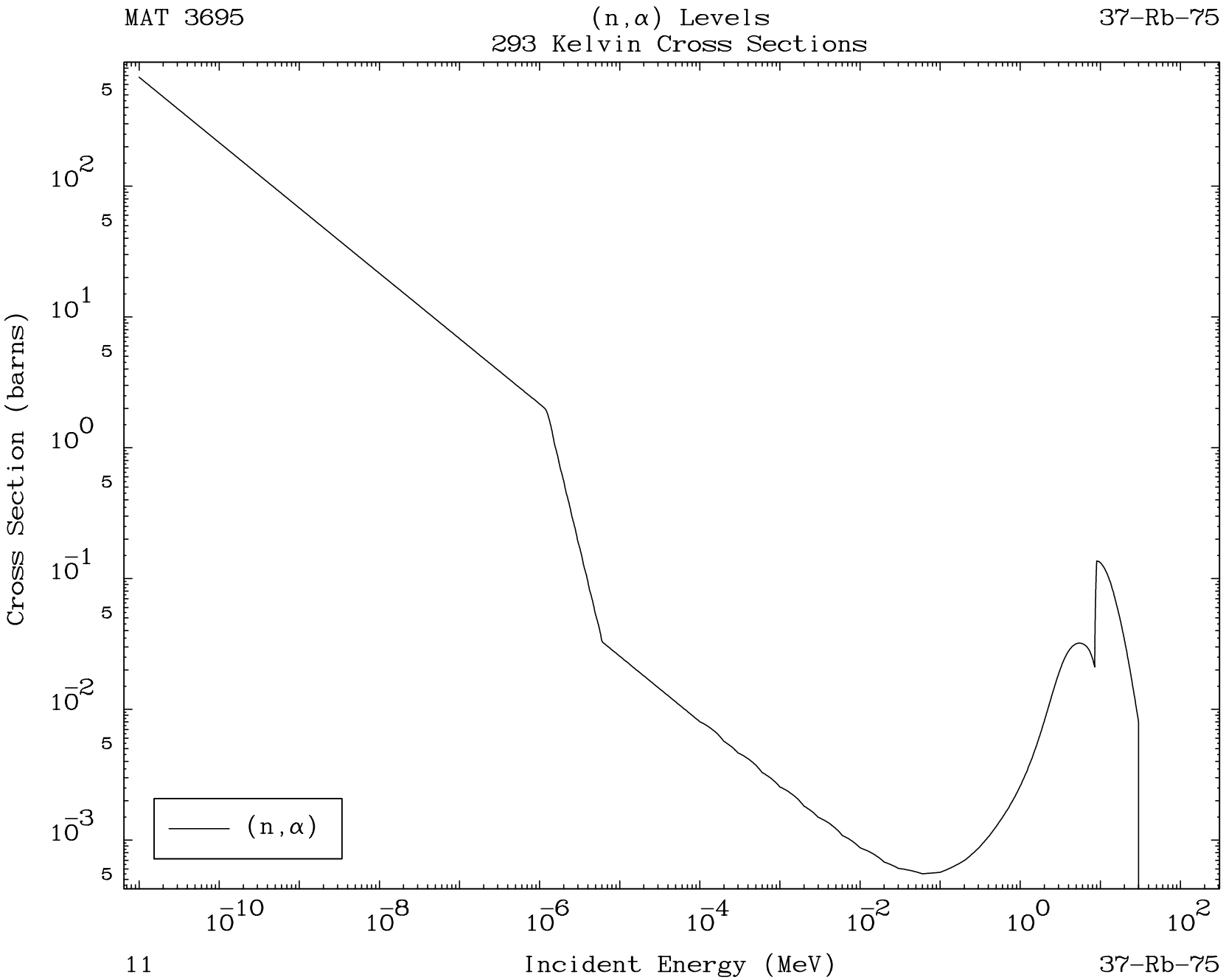

MAT 3695
(n,n') Level
293 Kelvin Cross Sections
37-Rb-75
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
6
37-Rb-75

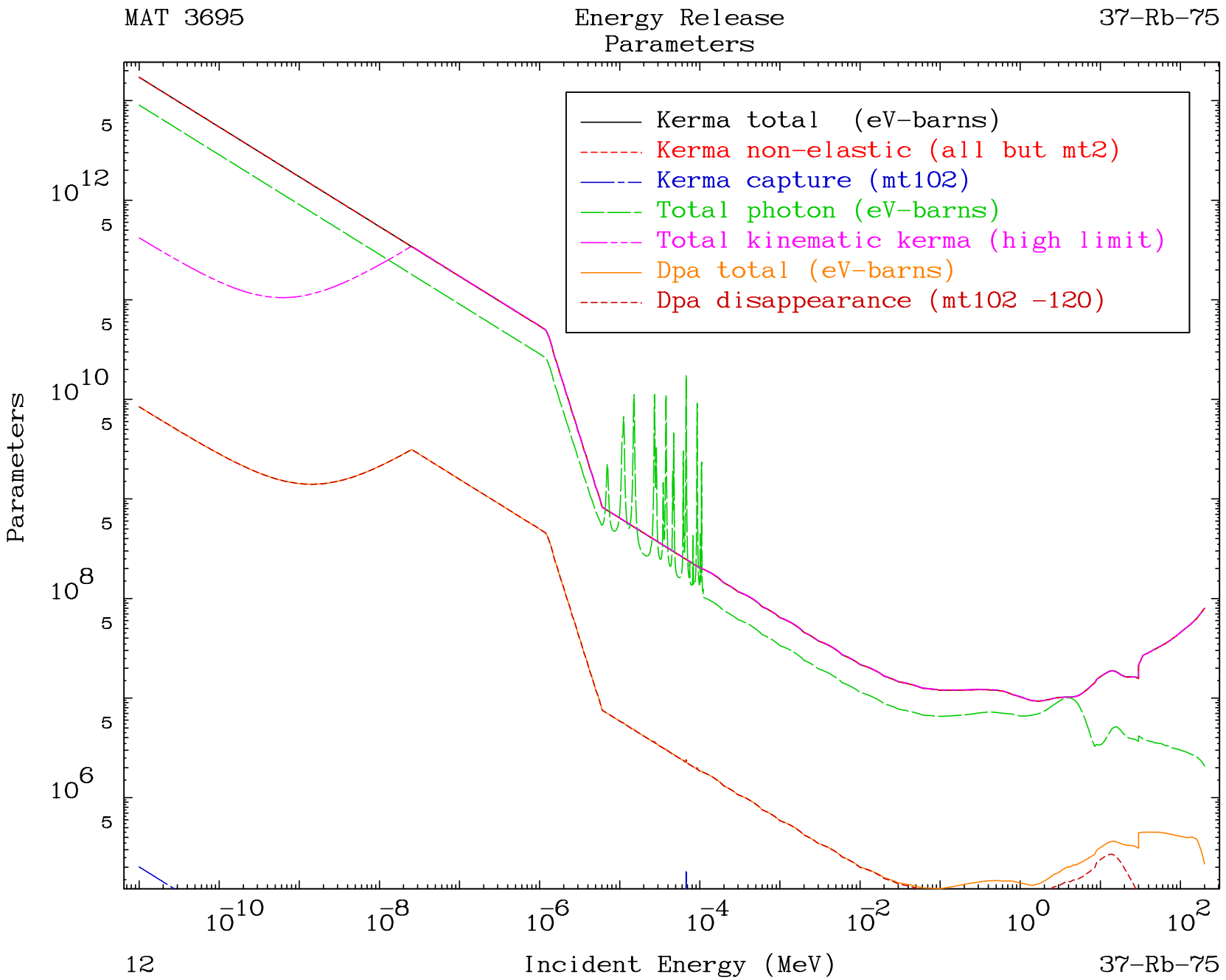

MAT 3695
(n,p) Levels
37-Rb-75
293 Kelvin Cross Sections
Cross Section (barns)
10^6
10^4
10^2
10^0
5
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
7
37-Rb-75

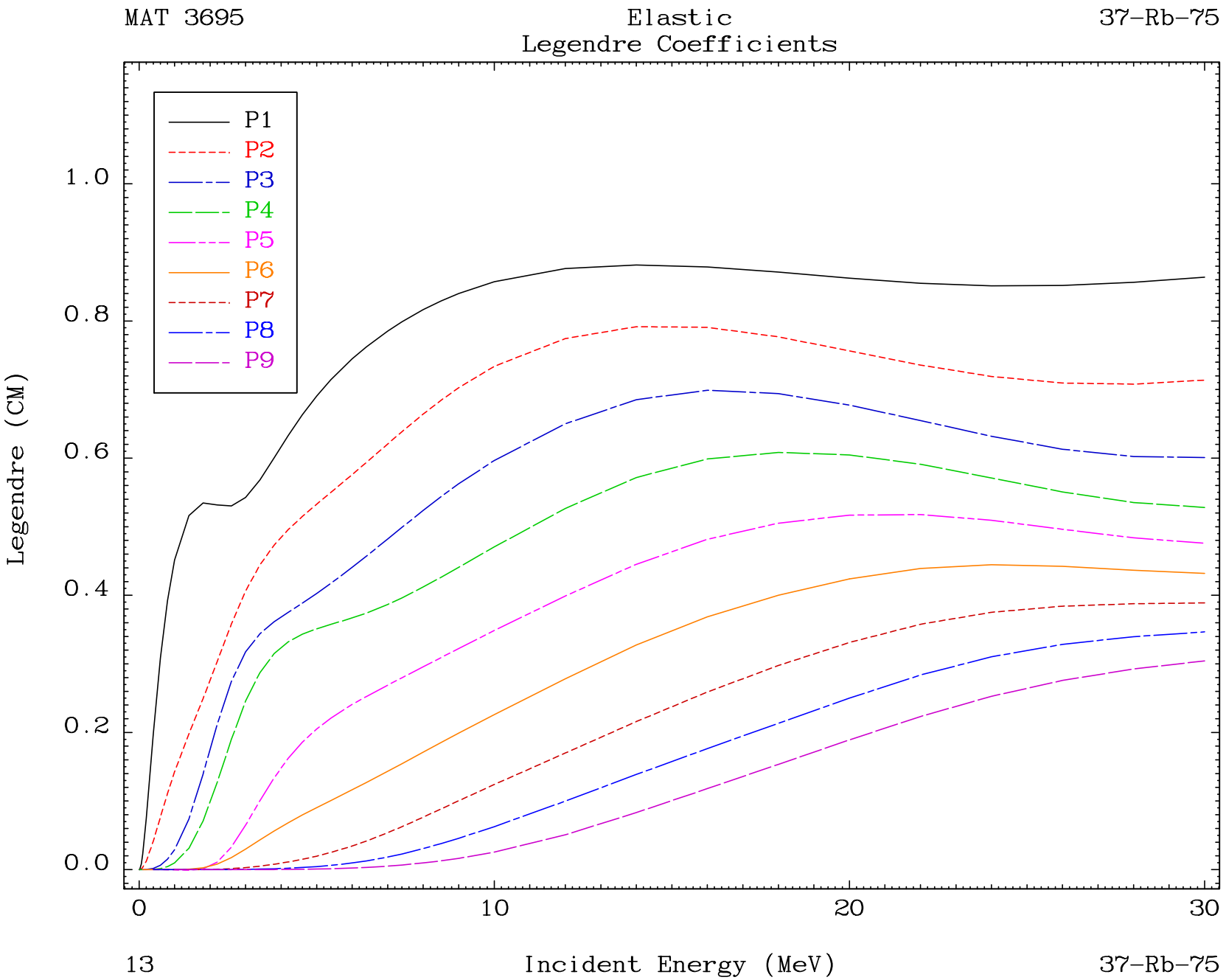

MAT 3695
(n,d) Levels
37-Rb-75
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
8
37-Rb-75

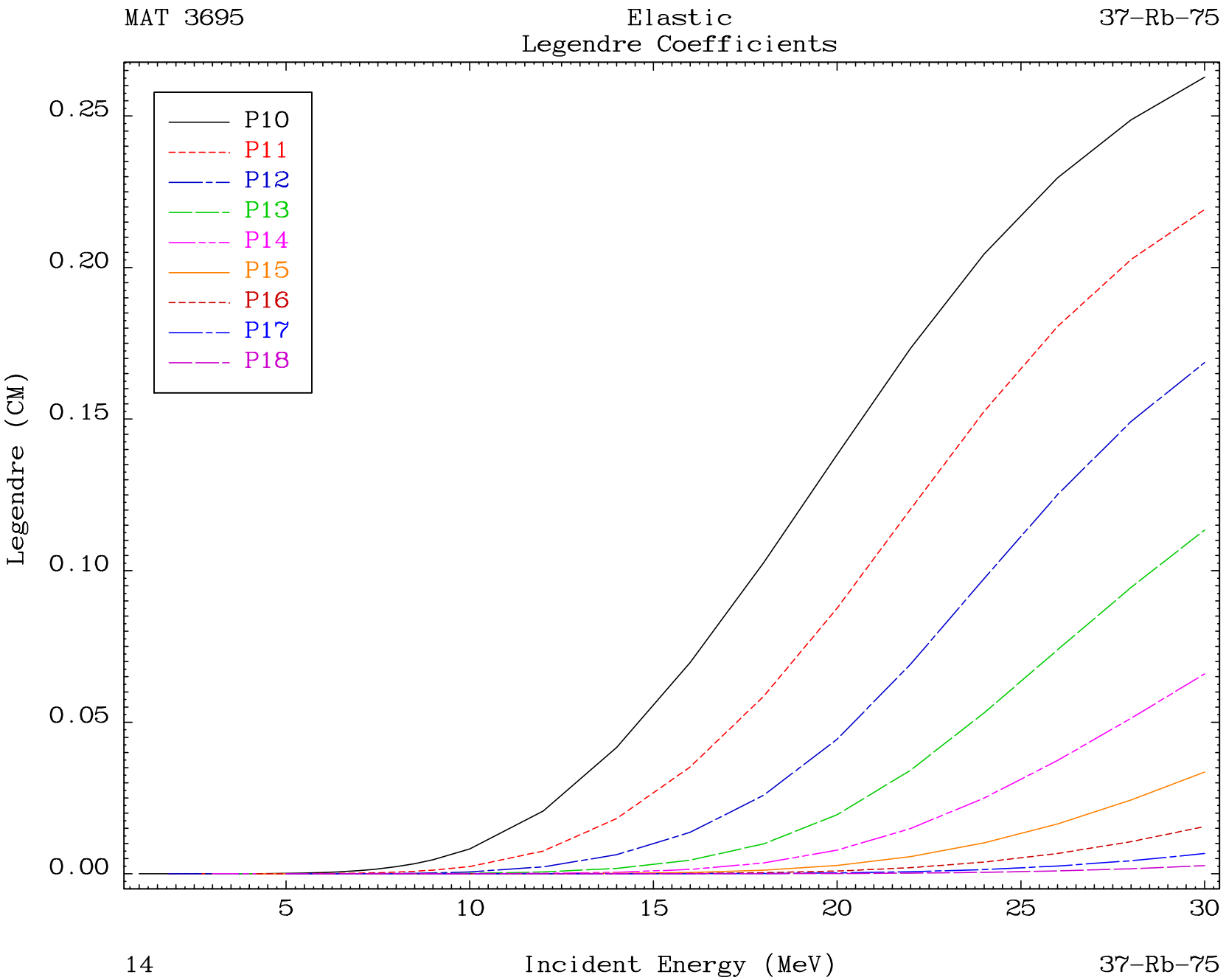

MAT 3695
(n,t) Levels
37-Rb-75
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
9
37-Rb-75

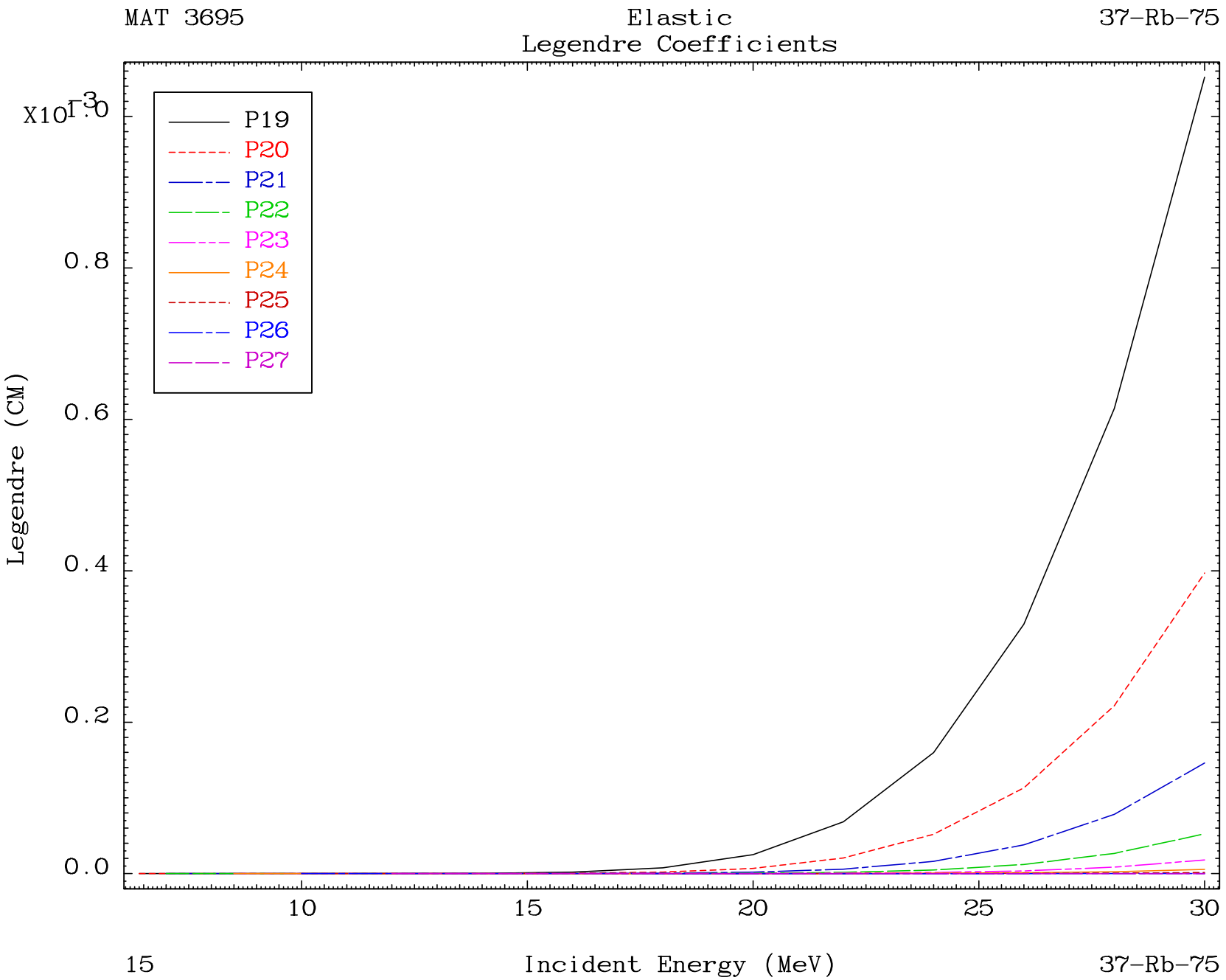

MAT 3695
(n,He3) Levels
37-Rb-75
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
10^-10
10^0
10^1
10^2
Incident Energy (MeV)
37-Rb-75

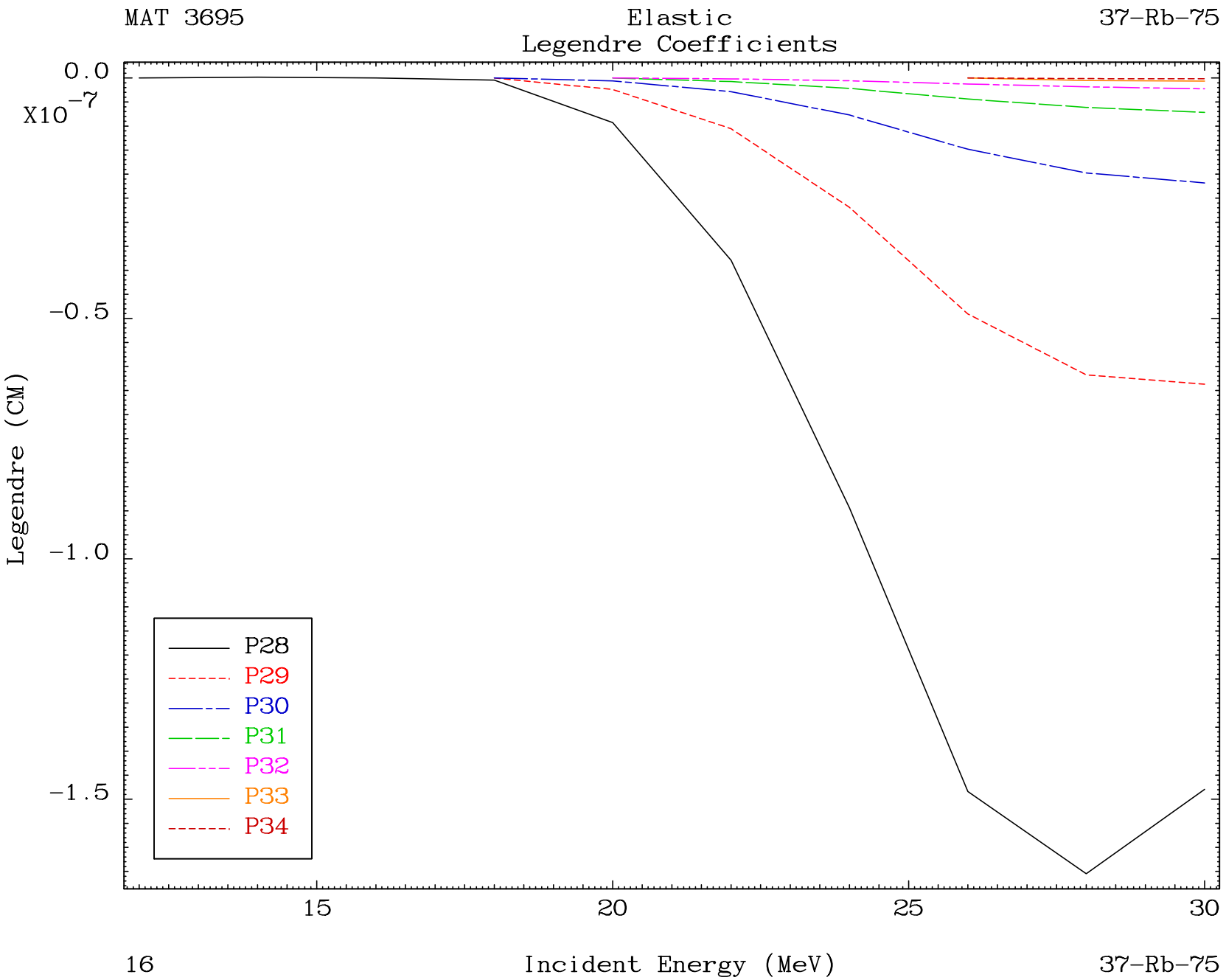

MAT 3695
(n,α) Levels
37-Rb-75
293 Kelvin Cross Sections
Cross Section (barns)
10^2
10^1
10^0
10^-1
10^-2
10^-3
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
(n,α)
11
Incident Energy (MeV)
37-Rb-75

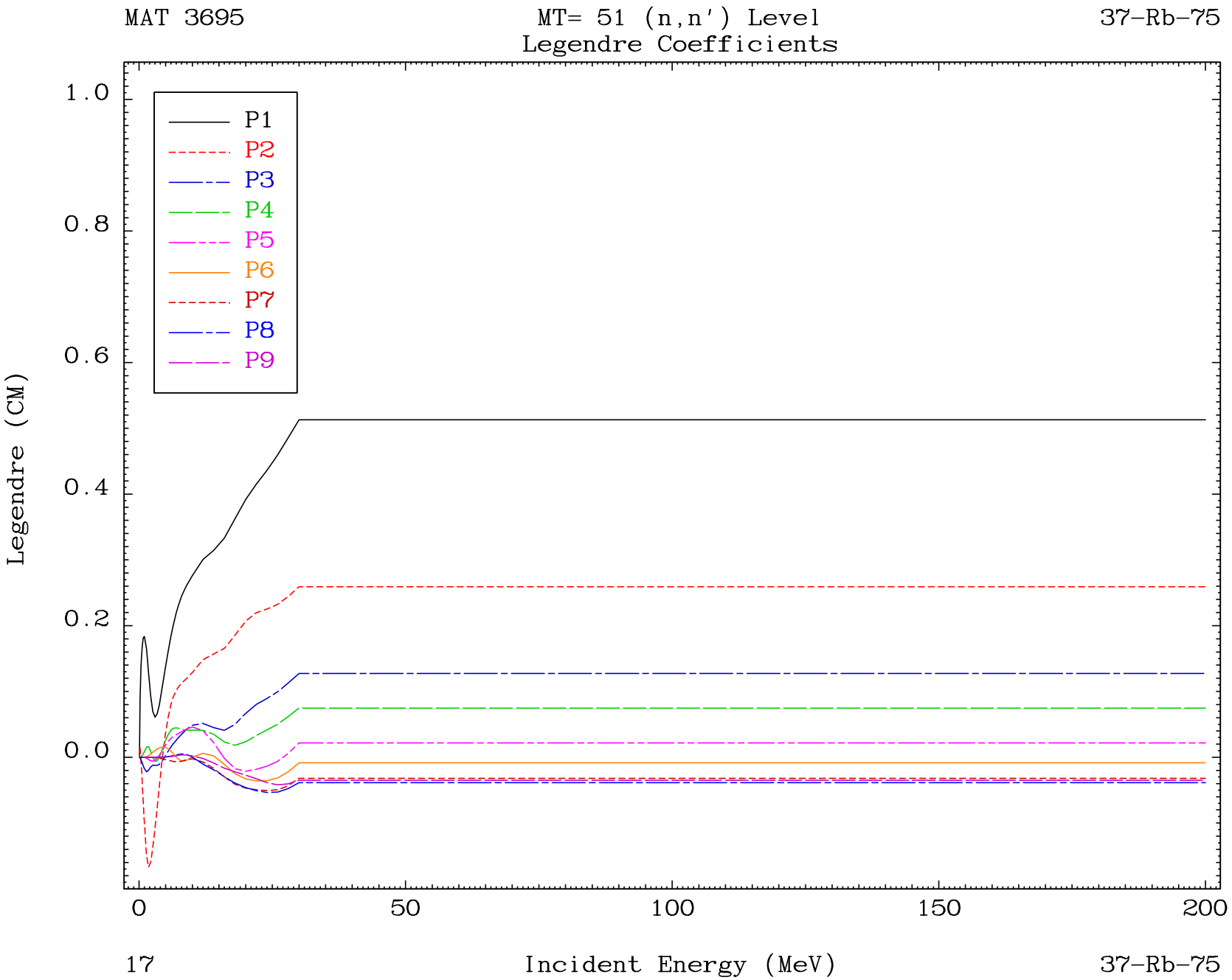

MAT 3695
Energy Release
Parameters
37-Rb-75
Kerma total (eV-barns)
Kerma non-elastic (all but mt2)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa disappearance (mt102 -120)
Parameters
Incident Energy (MeV)
12
37-Rb-75

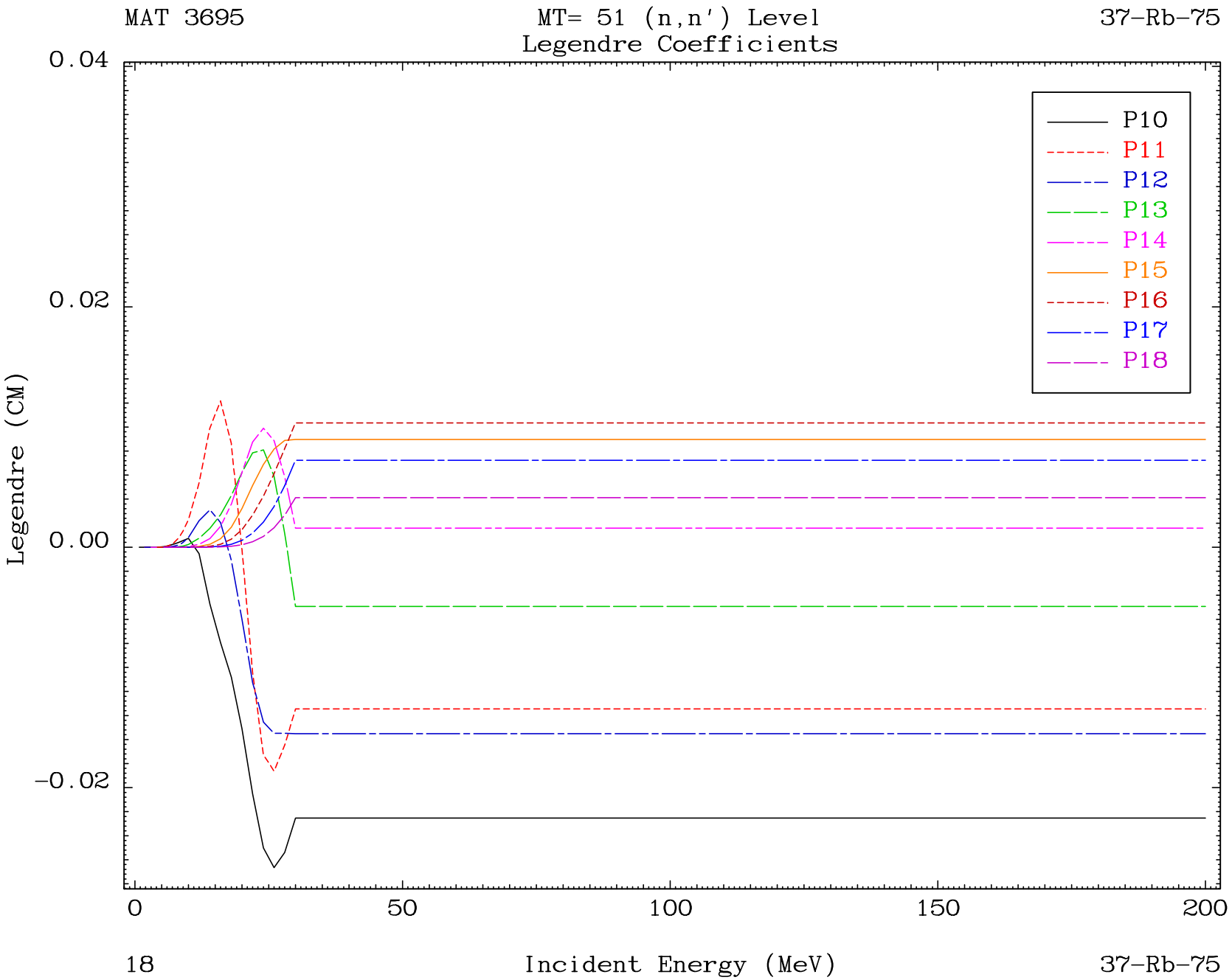

MAT 3695
Elastic
Legendre Coefficients
37-Rb-75
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
1.0
0.8
0.6
0.4
0.2
0.0
0
10
20
30
13
Incident Energy (MeV)
37-Rb-75

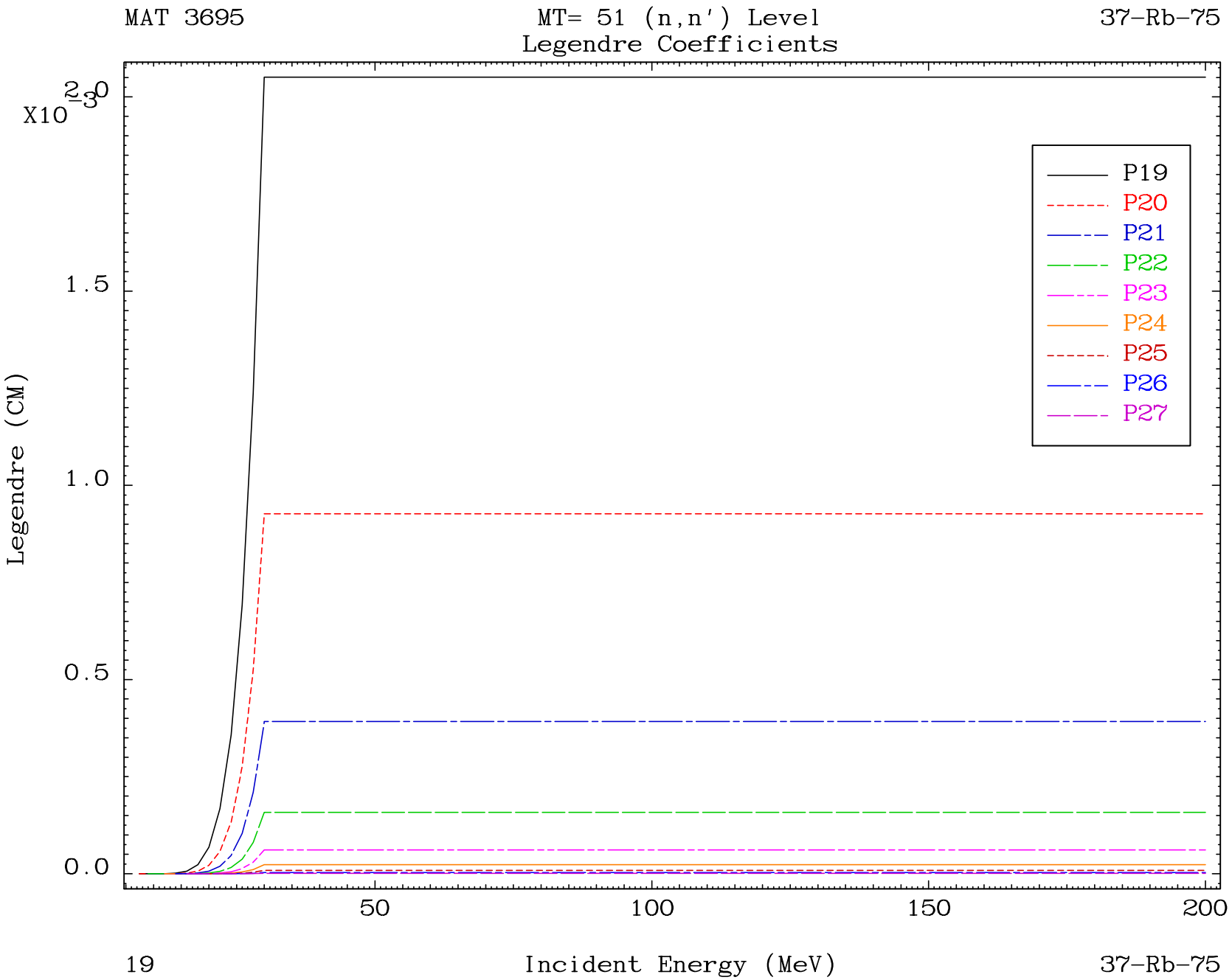

MAT 3695
Elastic
Legendre Coefficients
37-Rb-75
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.25
0.20
0.15
0.10
0.05
0.00
Legendre (CM)
5
10
15
20
25
30
14
Incident Energy (MeV)
37-Rb-75

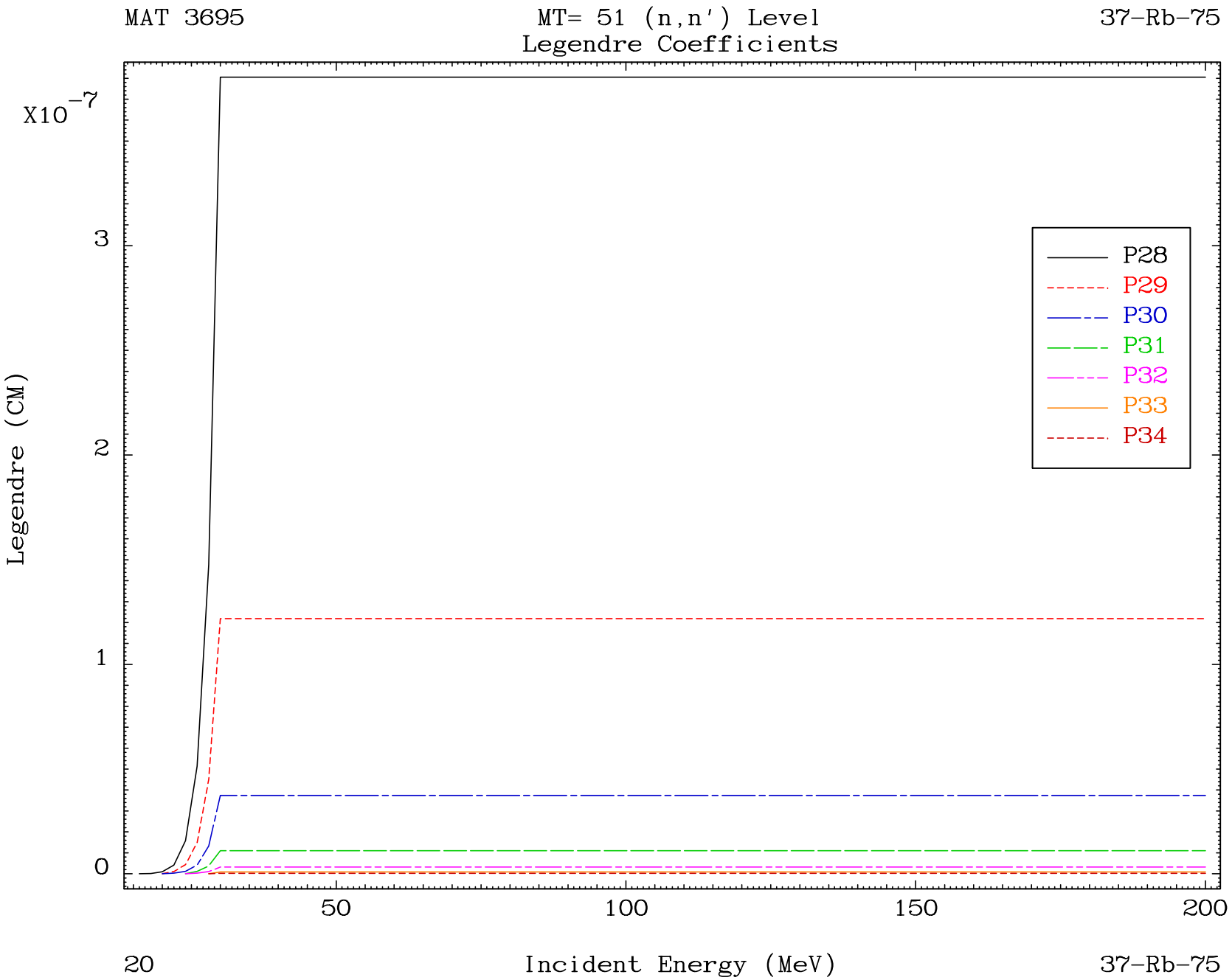

MAT 3695
Elastic
Legendre Coefficients
37-Rb-75
X10-3
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
10
15
20
25
30
15
Incident Energy (MeV)
37-Rb-75

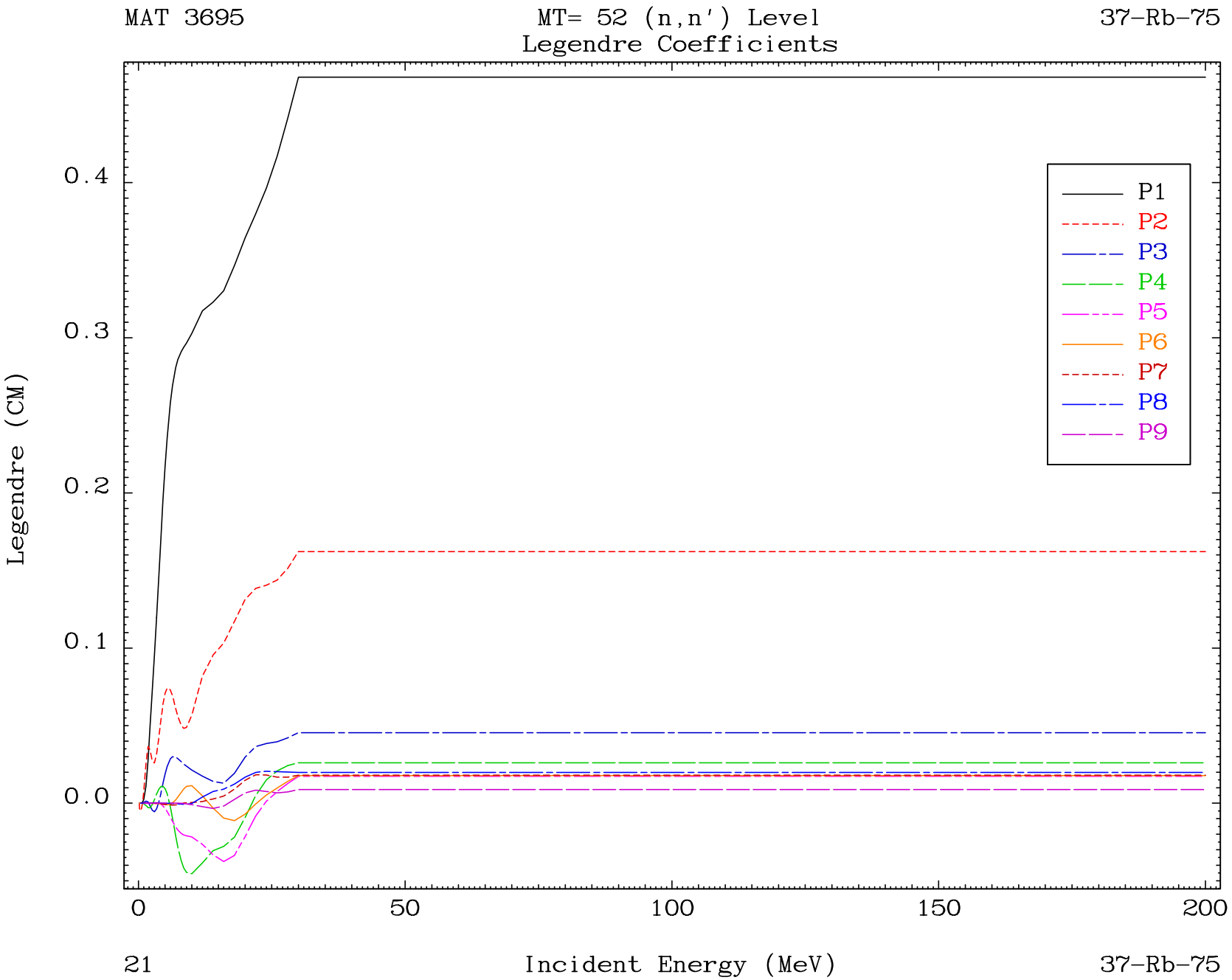

MAT 3695
Elastic
Legendre Coefficients
37-Rb-75
0.0
X10-7
-0.5
-1.0
-1.5
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
15
20
25
30
16
Incident Energy (MeV)
37-Rb-75

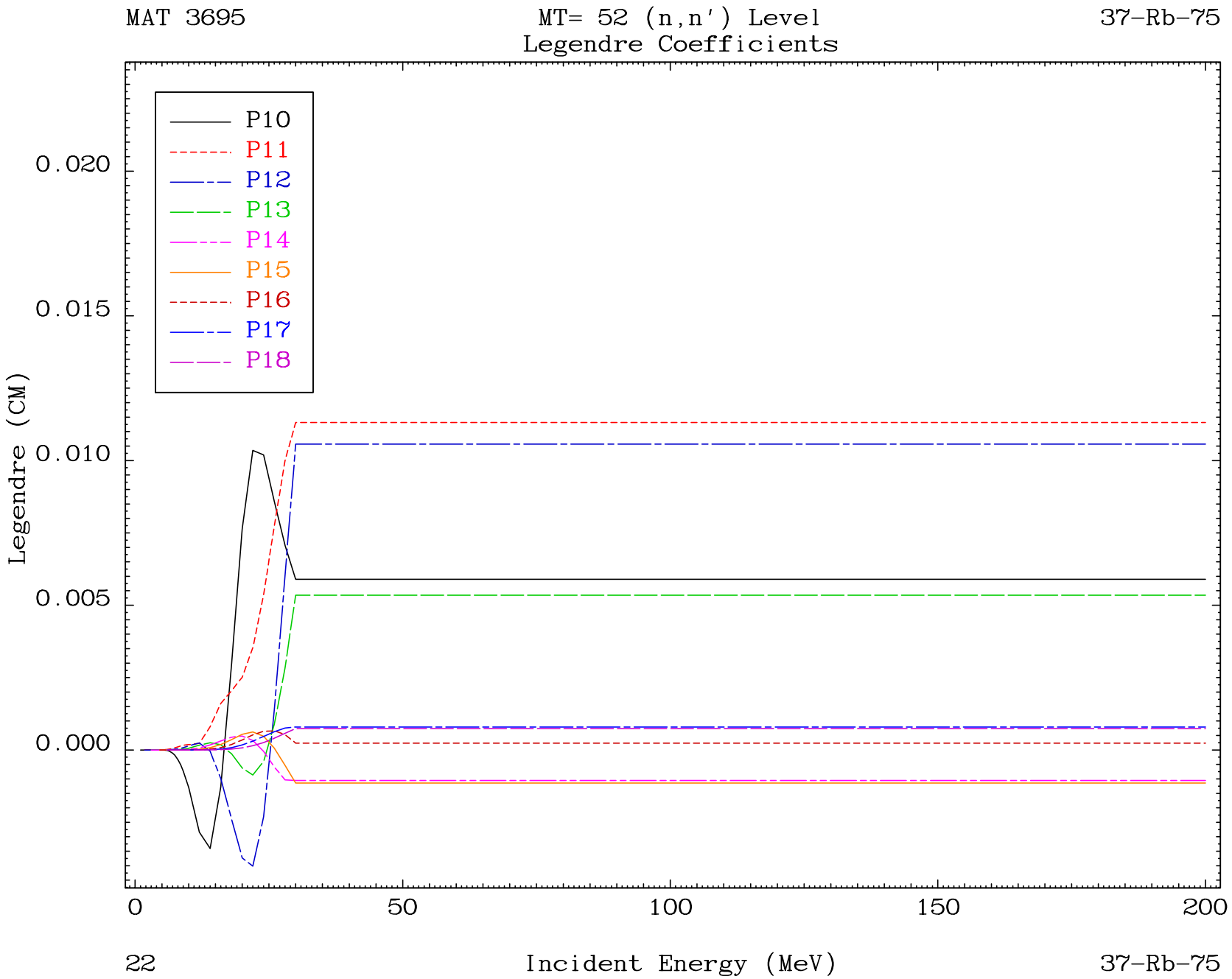

MAT 3695
MT= 51 (n,n') Level
Legendre Coefficients
37-Rb-75
P1
P2
P3
P4
P5
P6
P7
P8
P9
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
50
100
150
200
17
Incident Energy (MeV)
37-Rb-75

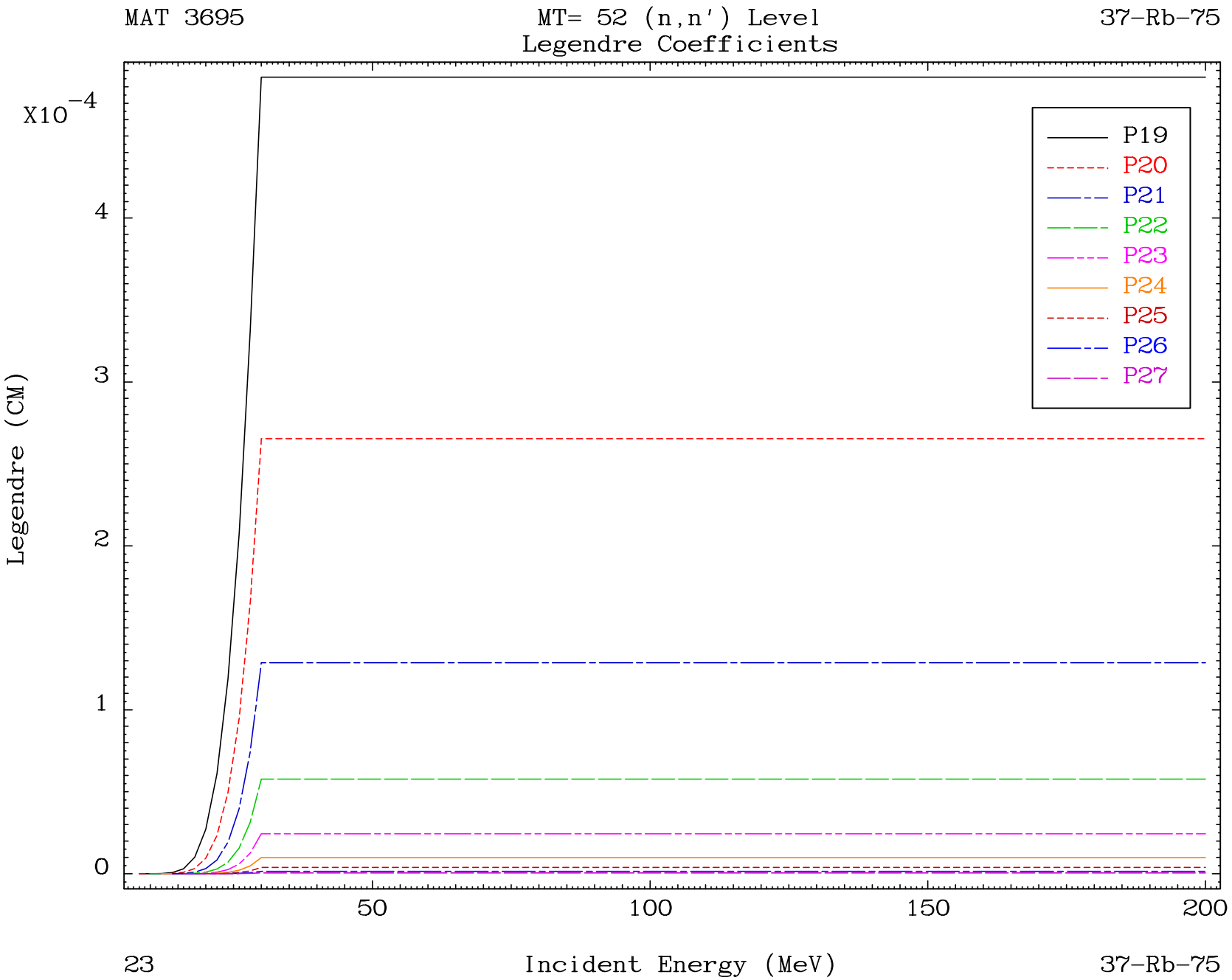

MAT 3695
MT= 51 (n,n') Level
Legendre Coefficients
37-Rb-75
0.04
0.02
0.00
-0.02
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
18
Incident Energy (MeV)
37-Rb-75

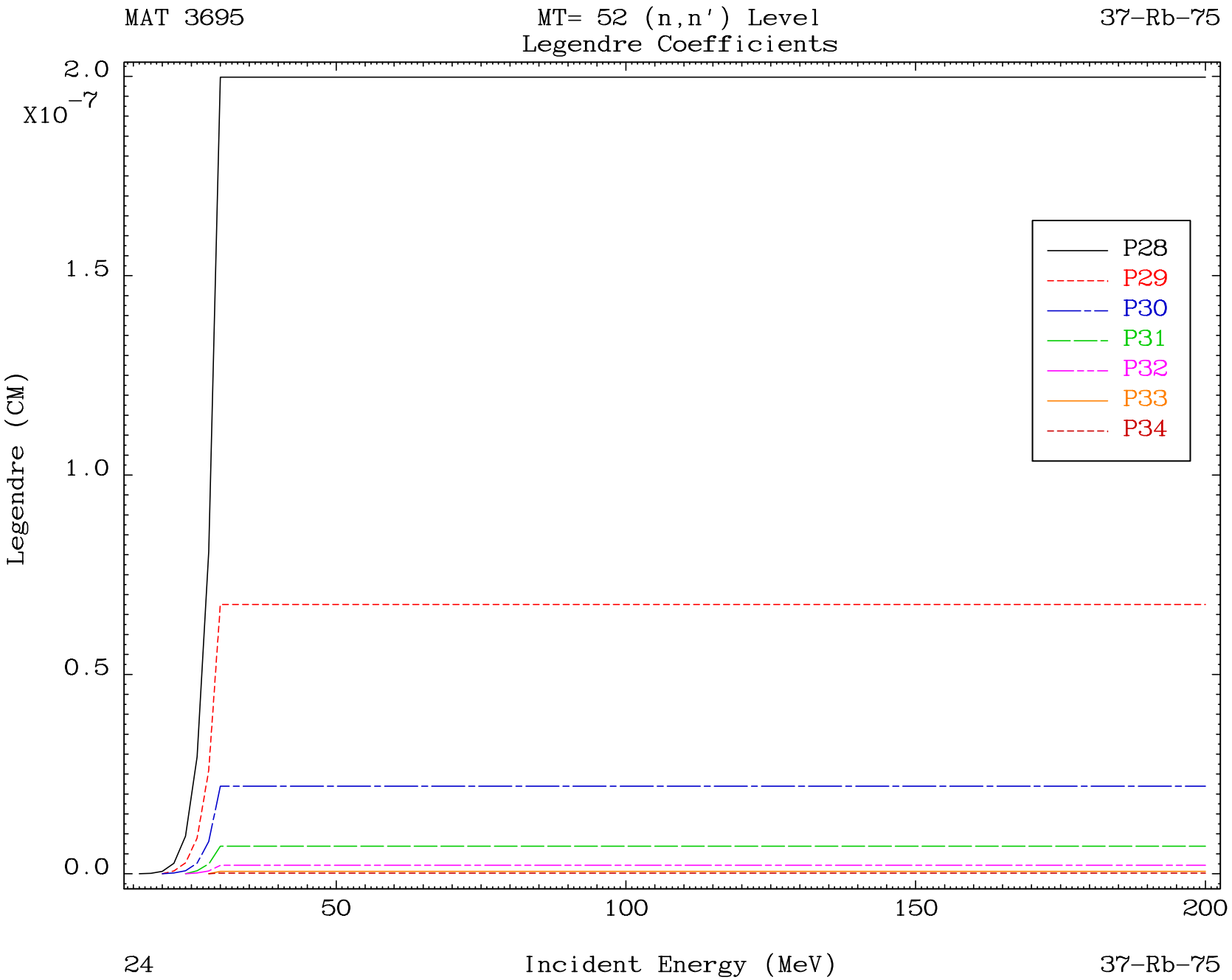

MAT 3695
MT= 51 (n,n') Level
Legendre Coefficients
37-Rb-75
X10-3
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
19
Incident Energy (MeV)
37-Rb-75

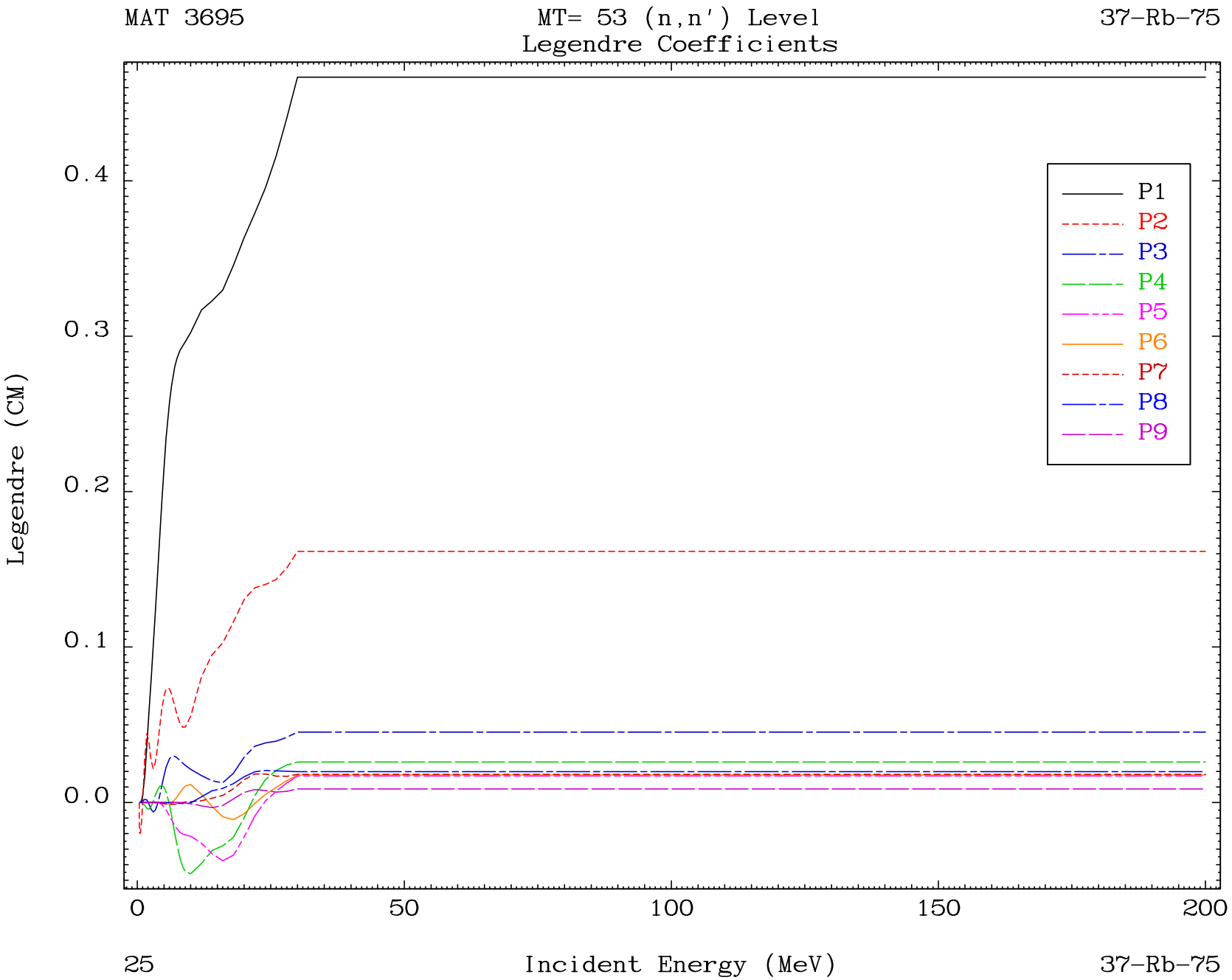

MAT 3695
MT= 51 (n,n') Level
Legendre Coefficients
37-Rb-75
X10-7
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
20
Incident Energy (MeV)
37-Rb-75

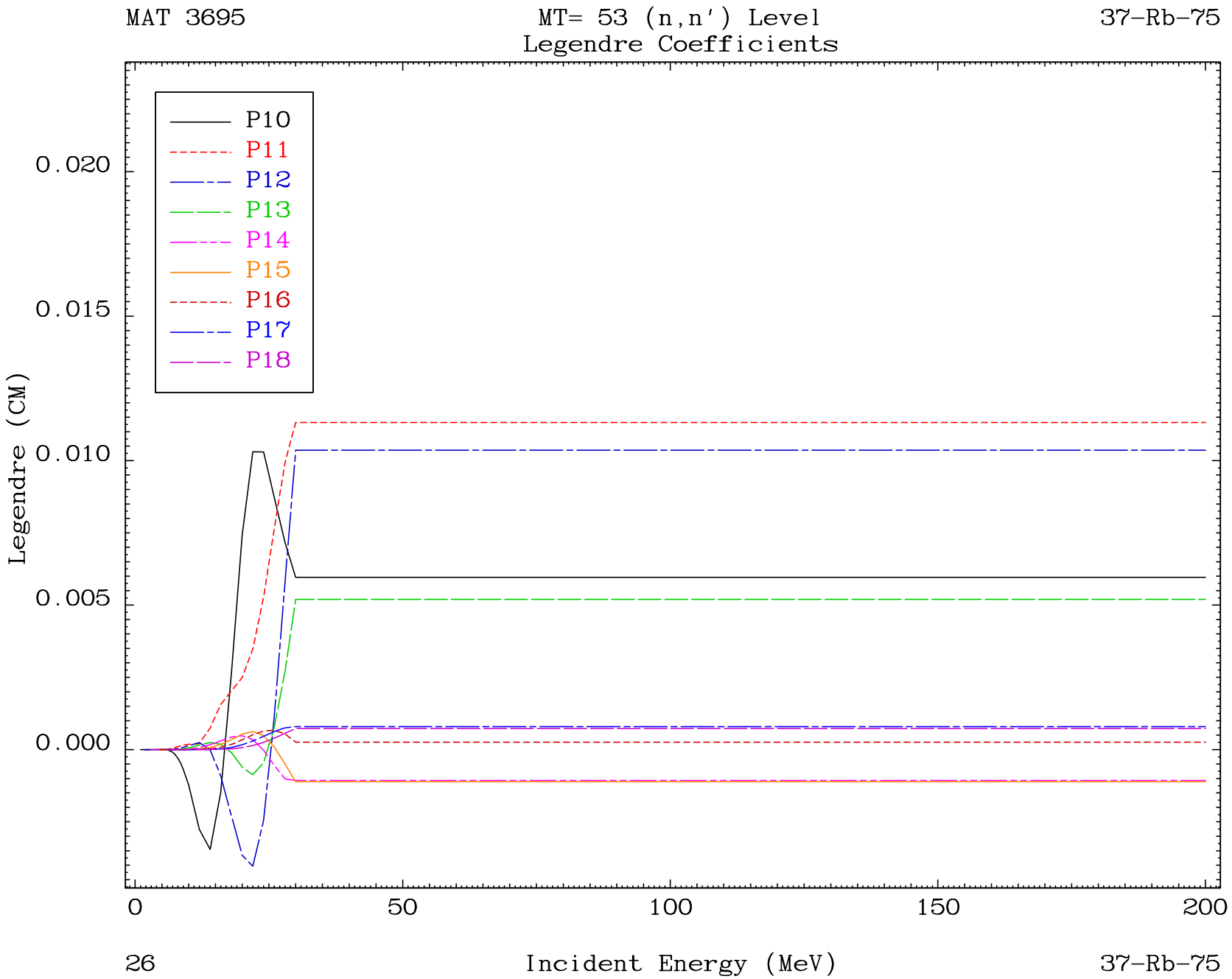

MAT 3695
MT= 52 (n,n') Level
Legendre Coefficients
37-Rb-75
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
21
Incident Energy (MeV)
37-Rb-75

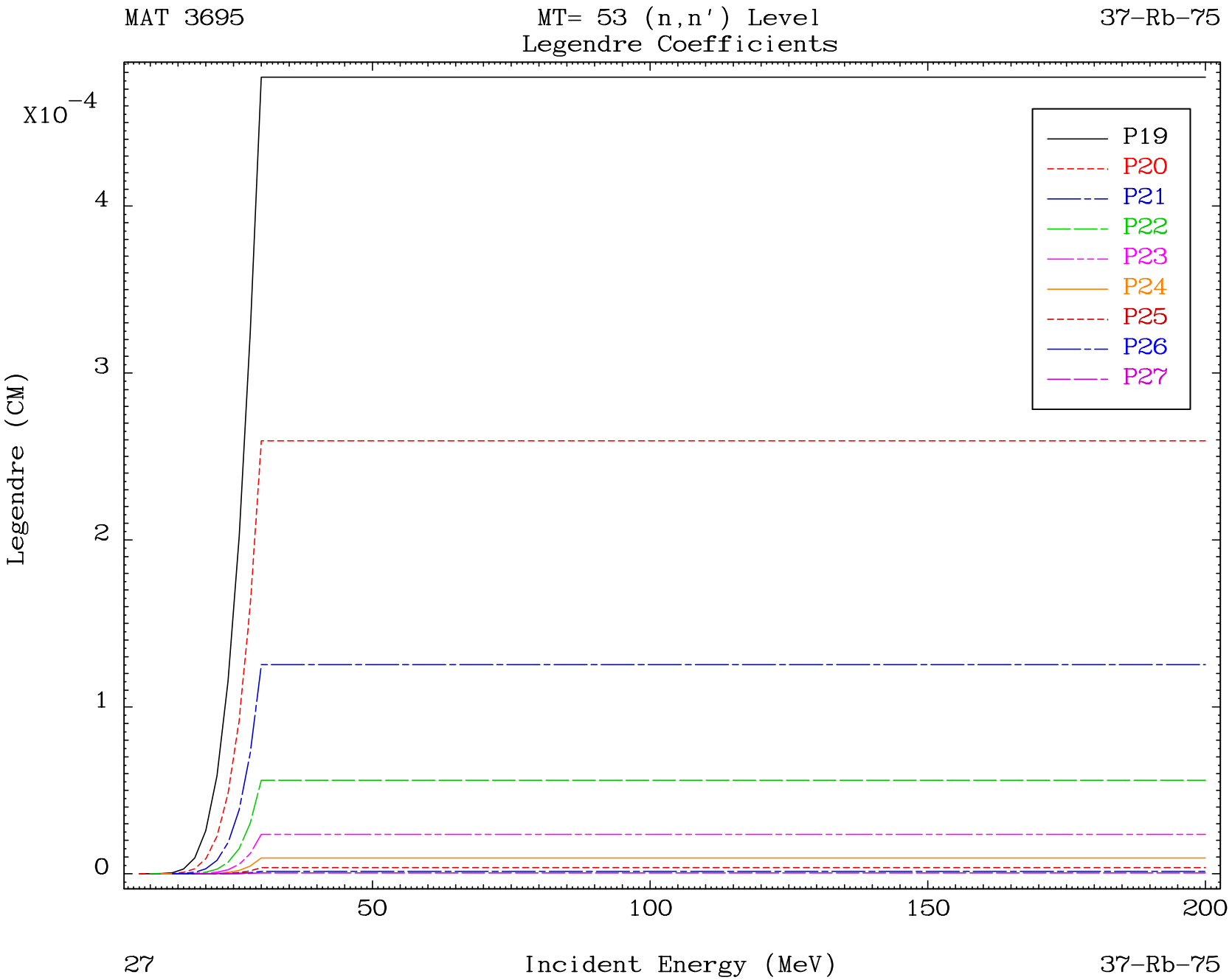

MAT 3695
MT= 52 (n,n') Level
Legendre Coefficients
37-Rb-75
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
0
50
100
150
200
22
Incident Energy (MeV)
37-Rb-75

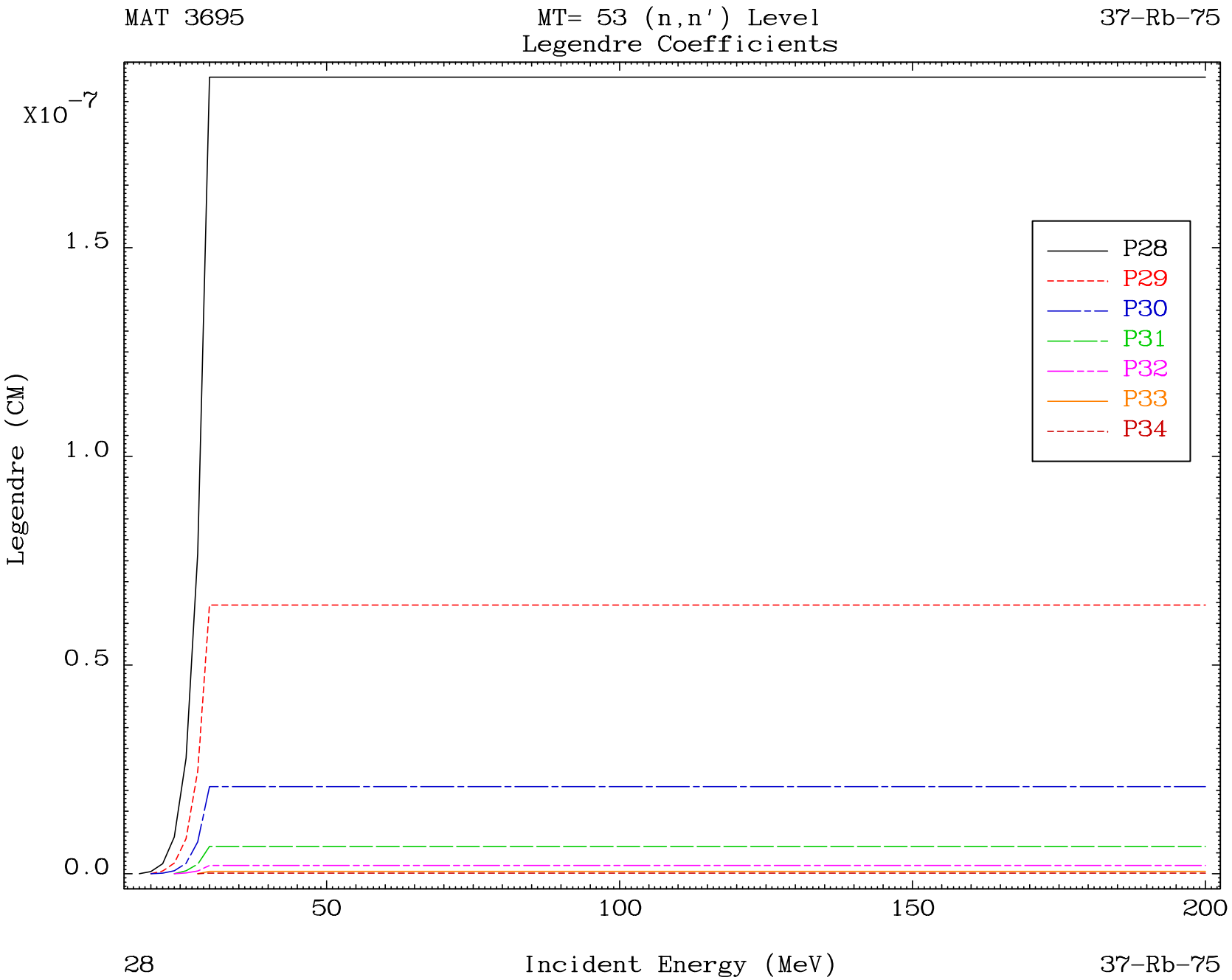

MAT 3695
MT= 52 (n,n') Level
Legendre Coefficients
37-Rb-75
X10 -4
4
3
2
1
0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
23
Incident Energy (MeV)
37-Rb-75

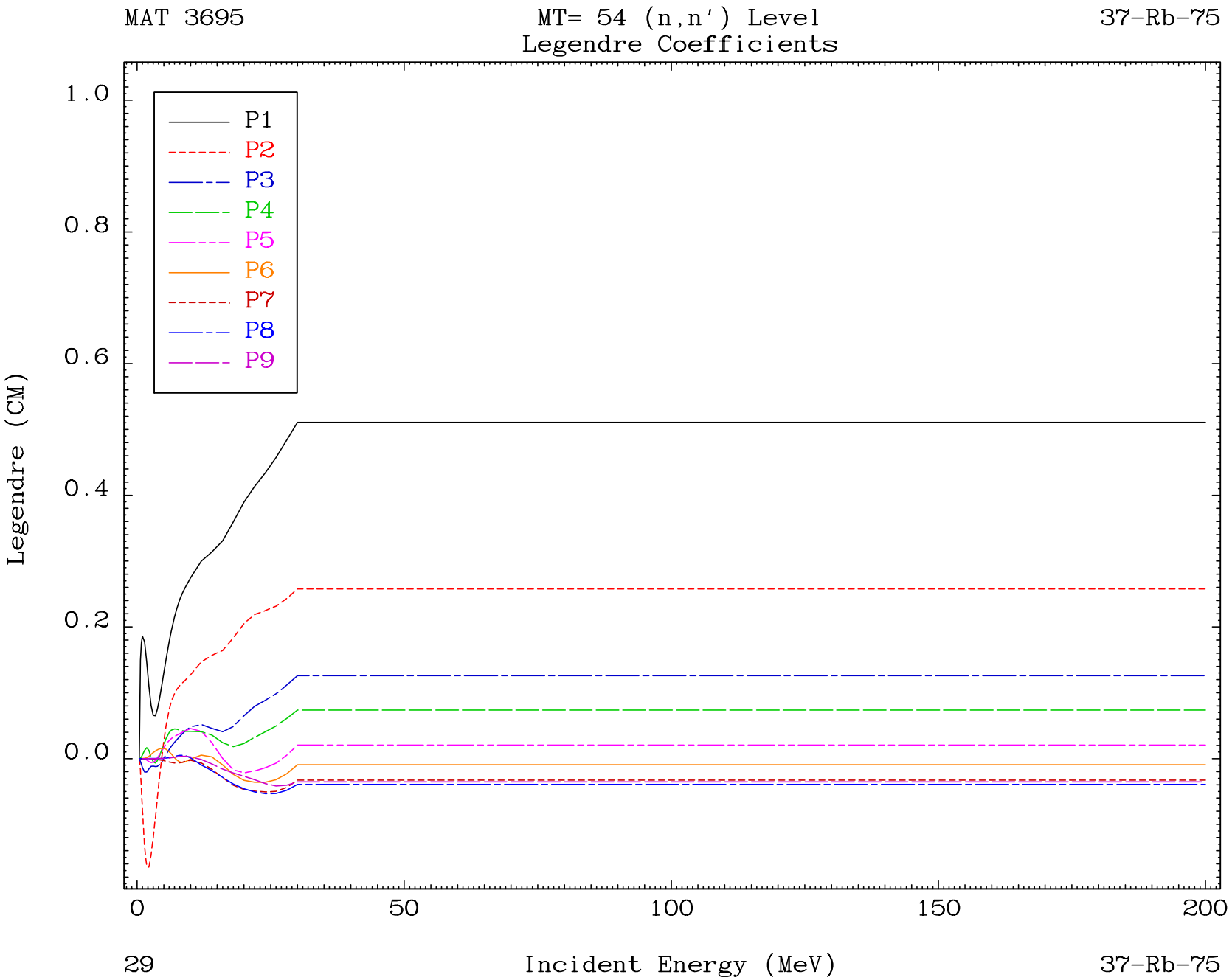

MAT 3695
MT= 52 (n,n') Level
Legendre Coefficients
37-Rb-75
X10 -7
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
24
Incident Energy (MeV)
37-Rb-75

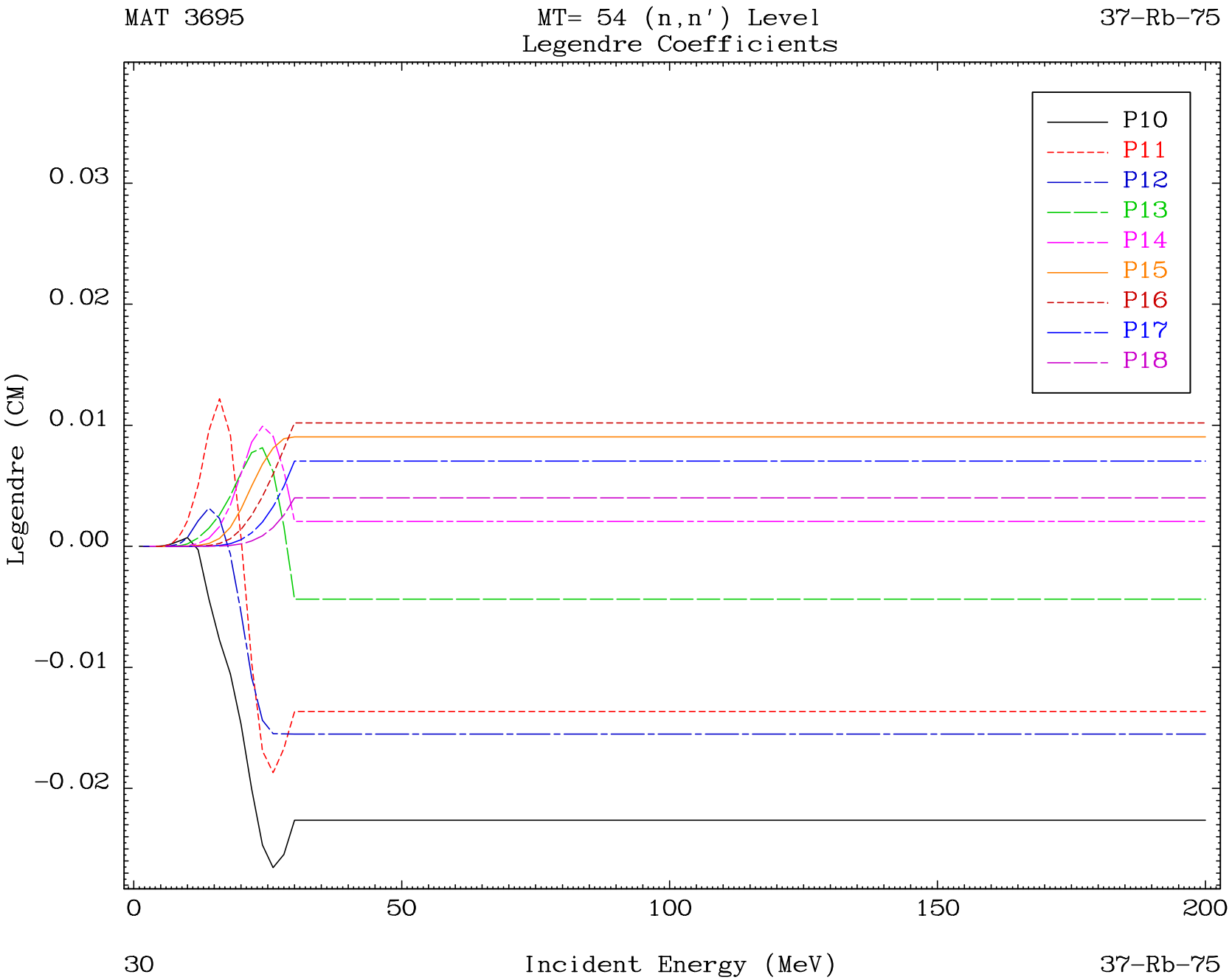

MAT 3695
MT= 53 (n,n') Level
Legendre Coefficients
37-Rb-75
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
25
Incident Energy (MeV)
37-Rb-75
P1
P2
P3
P4
P5
P6
P7
P8
P9

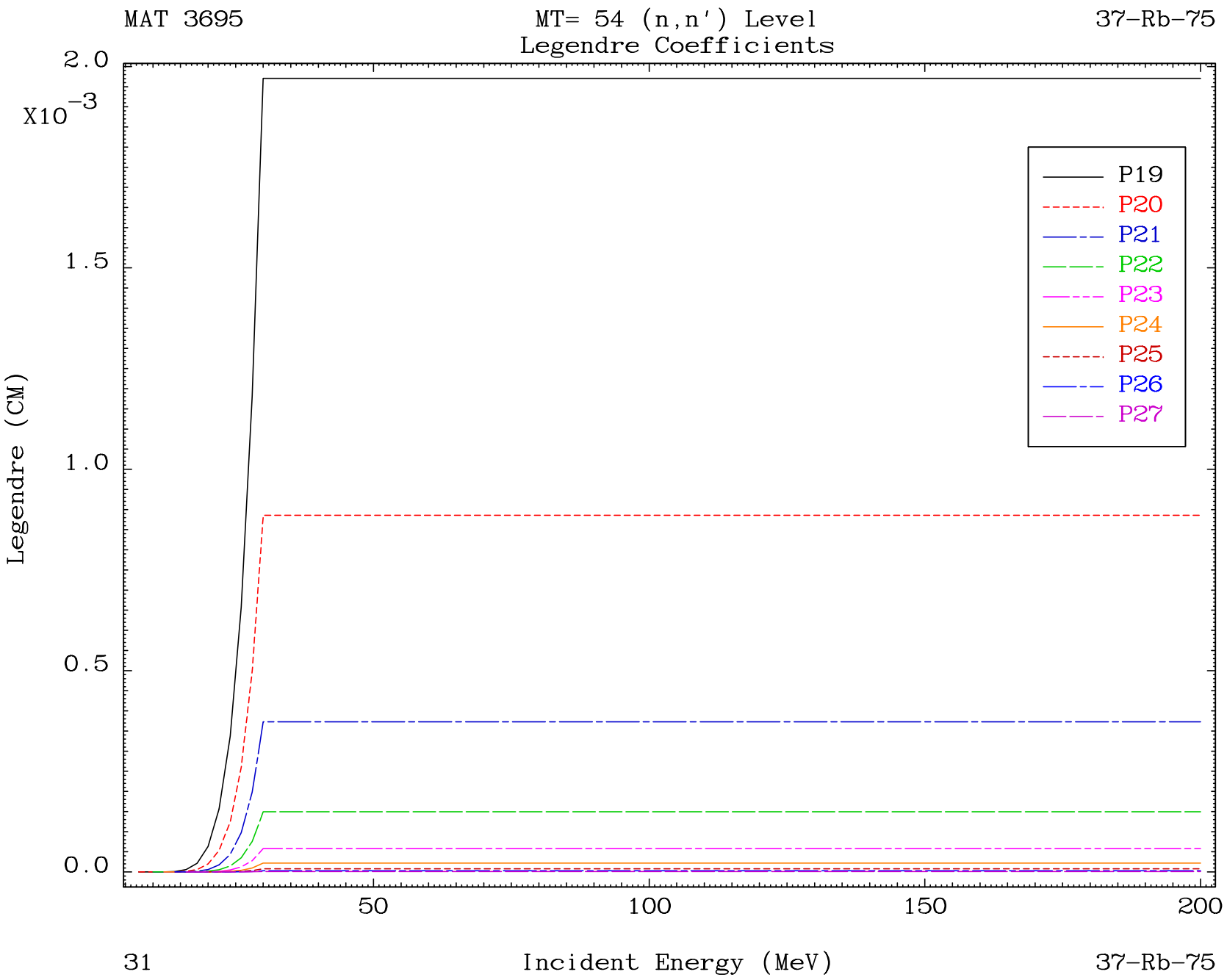

MAT 3695
MT= 53 (n,n') Level
Legendre Coefficients
37-Rb-75
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.020
0.015
0.010
0.005
0.000
Legendre (CM)
0
50
100
150
200
26
Incident Energy (MeV)
37-Rb-75

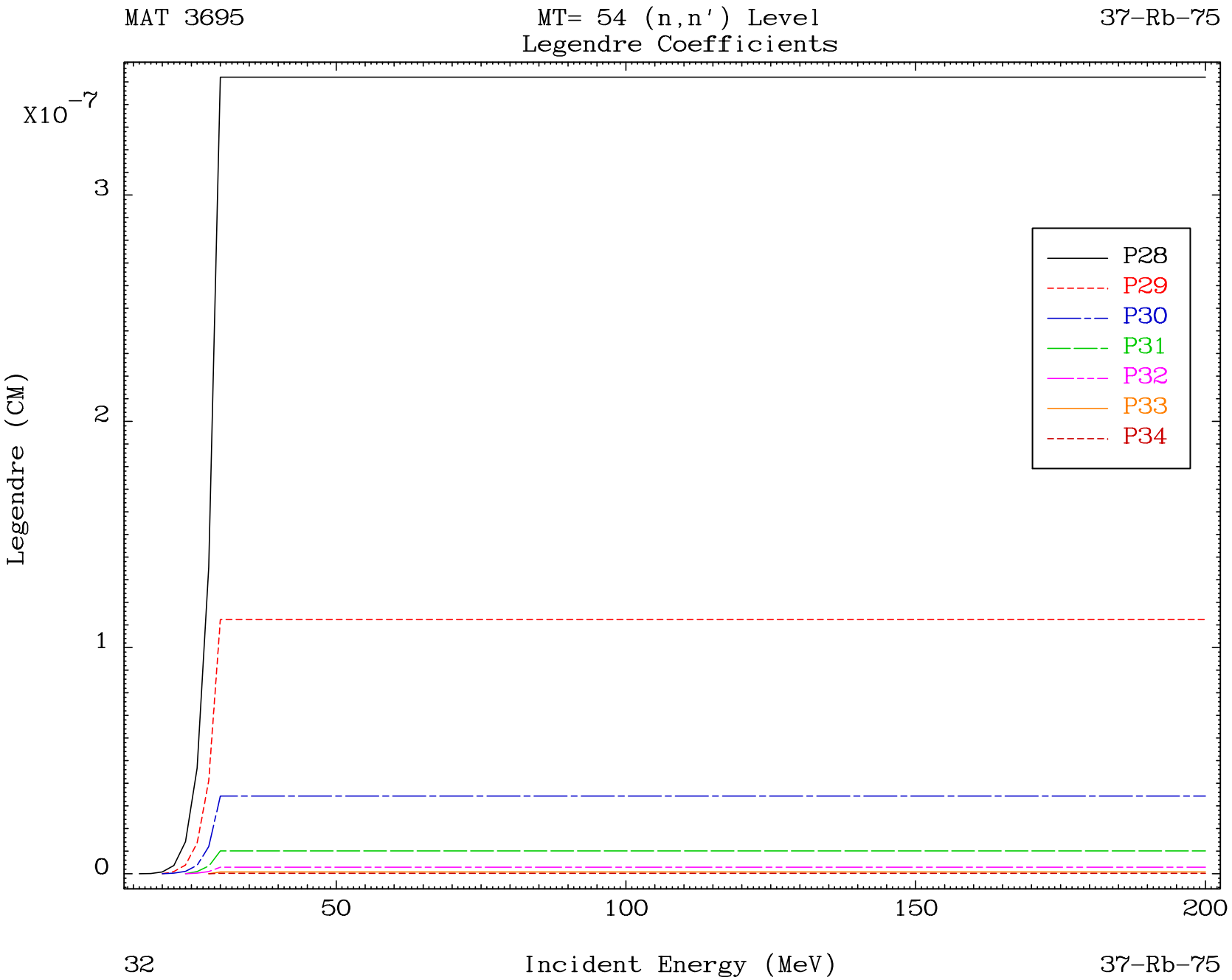

MAT 3695
MT= 53 (n,n') Level
Legendre Coefficients
37-Rb-75
X10 -4
4
3
2
1
0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
27
Incident Energy (MeV)
37-Rb-75

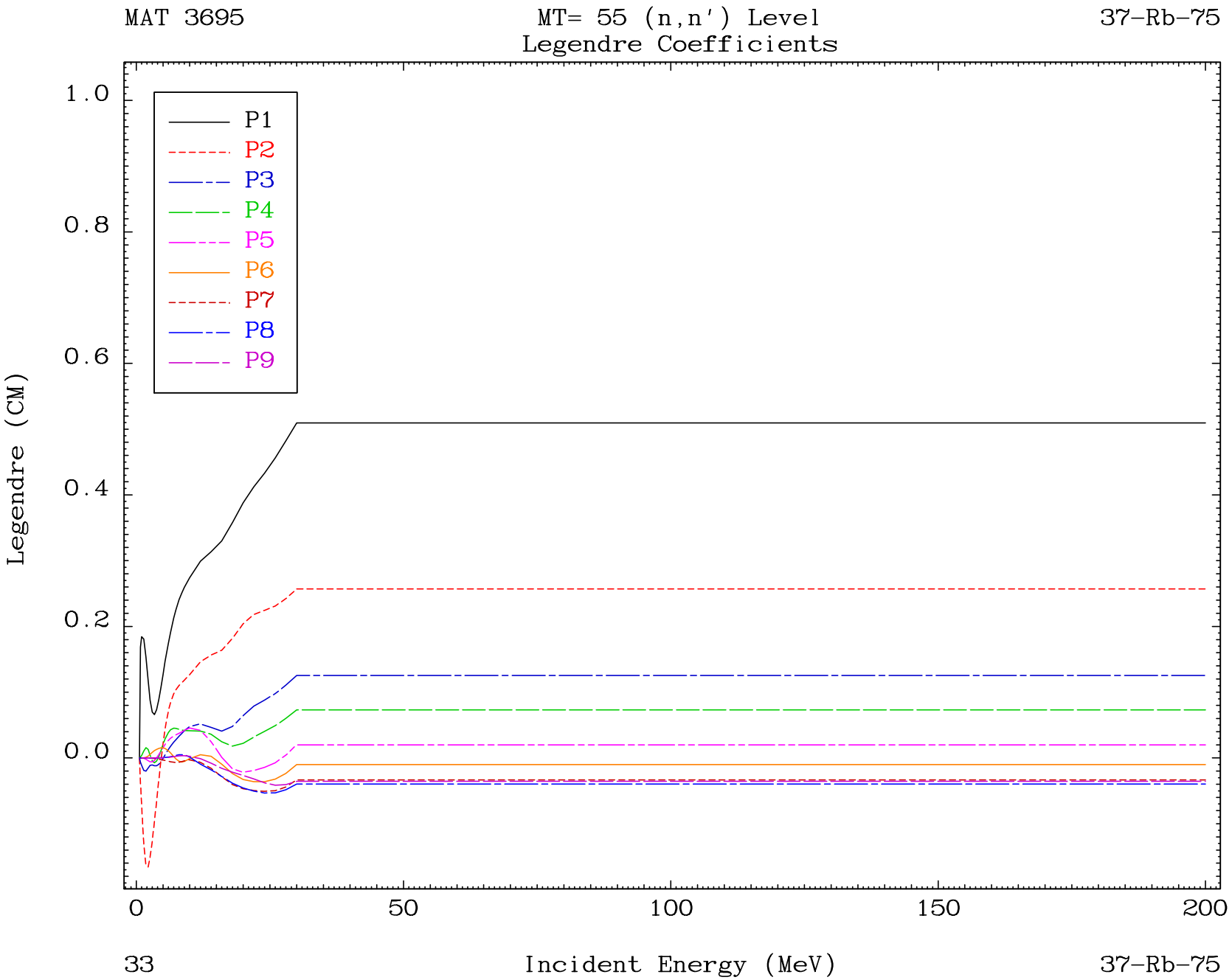

MAT 3695
MT= 53 (n,n') Level
Legendre Coefficients
37-Rb-75
X10-7
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
28
Incident Energy (MeV)
37-Rb-75

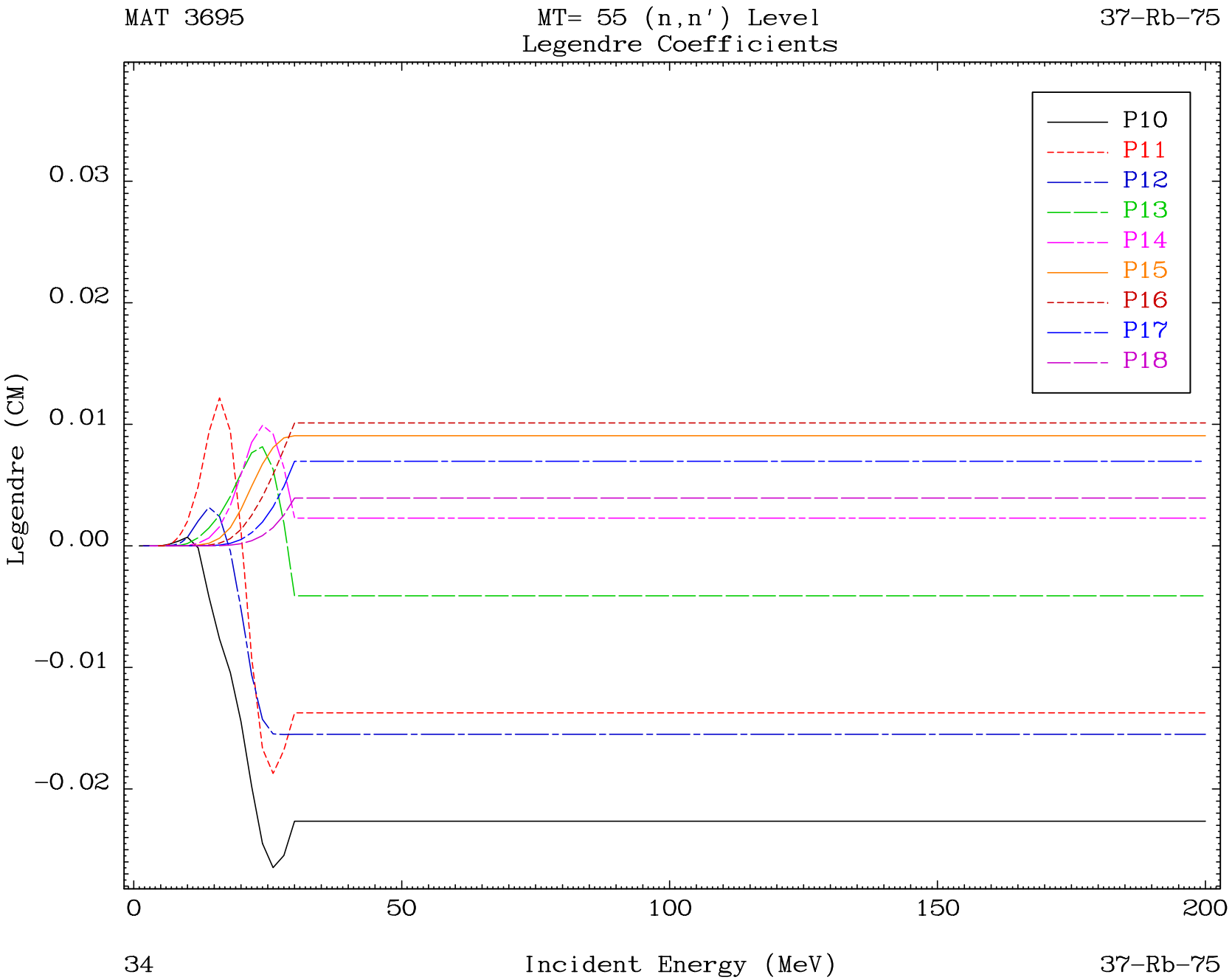

MAT 3695
MT= 54 (n,n') Level
Legendre Coefficients
37-Rb-75
P1
P2
P3
P4
P5
P6
P7
P8
P9
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
0
50
100
150
200
29
Incident Energy (MeV)
37-Rb-75

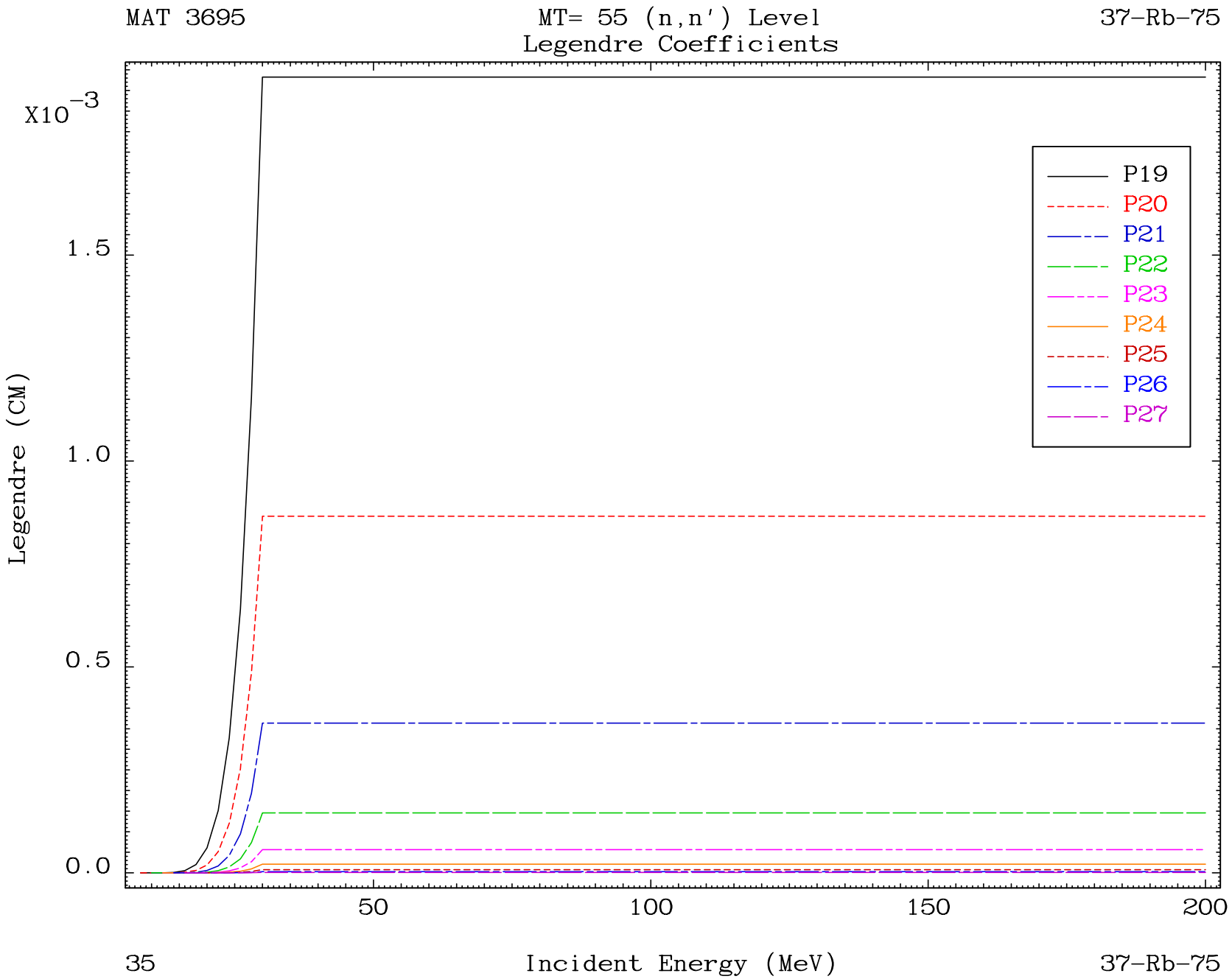

MAT 3695
MT= 54 (n,n') Level
Legendre Coefficients
37-Rb-75
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
-0.01
-0.02
Legendre (CM)
0
50
100
150
200
30
Incident Energy (MeV)
37-Rb-75

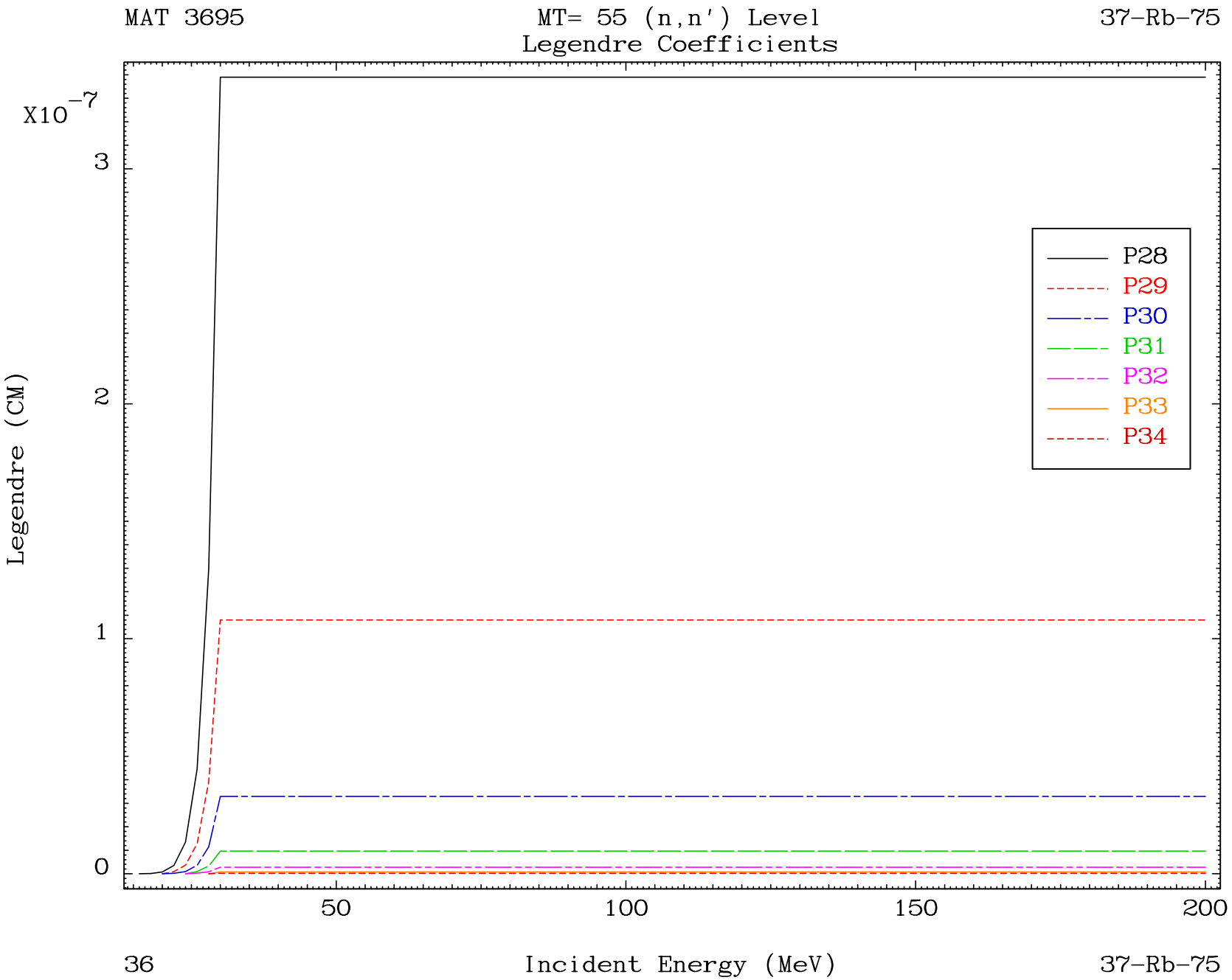

MAT 3695
MT= 54 (n,n') Level
Legendre Coefficients
37-Rb-75
X10^-3
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
50
100
150
200
Incident Energy (MeV)
31
37-Rb-75
P19
P20
P21
P22
P23
P24
P25
P26
P27

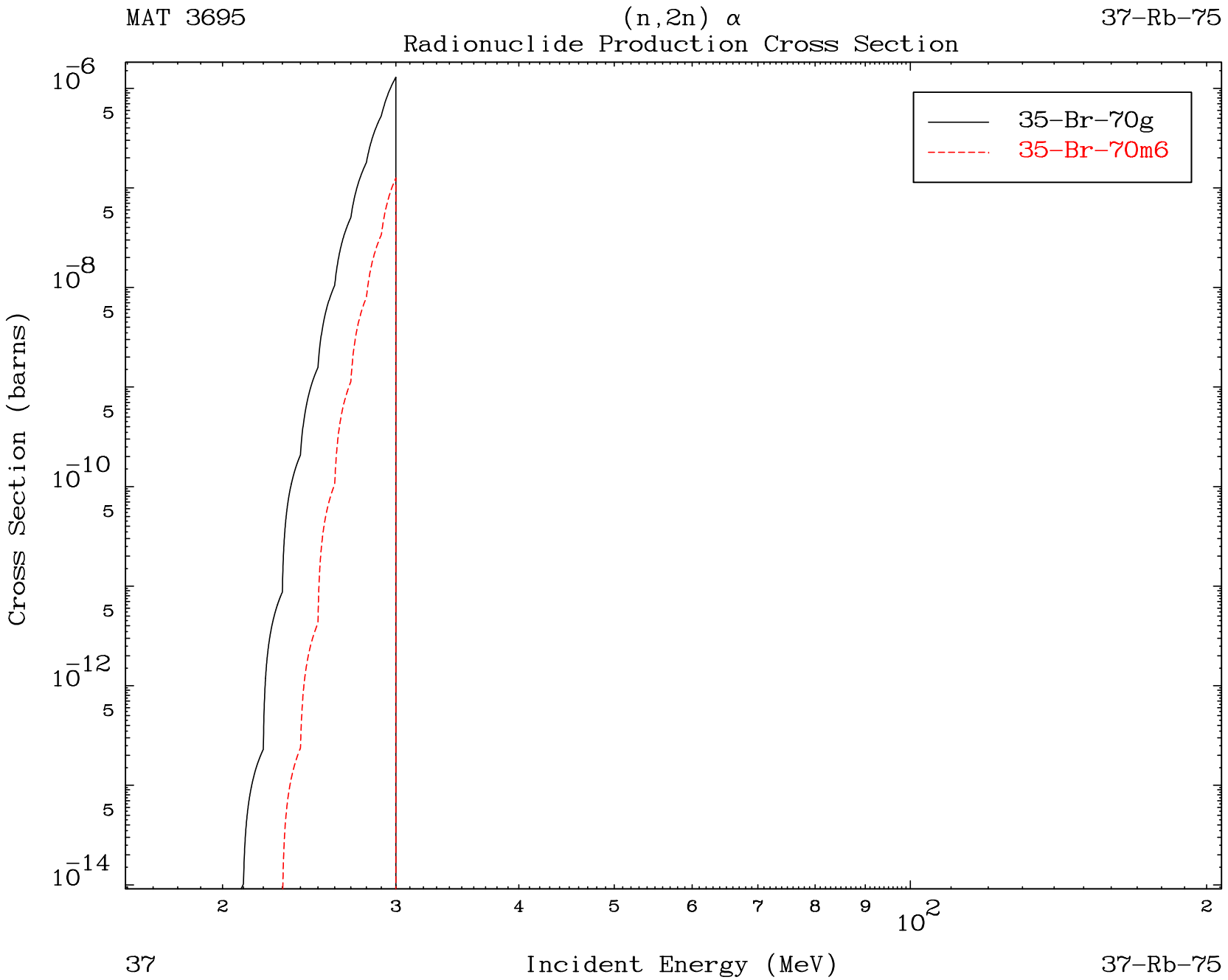

MAT 3695
MT= 54 (n,n') Level
Legendre Coefficients
37-Rb-75
X10-7
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
32
Incident Energy (MeV)
37-Rb-75

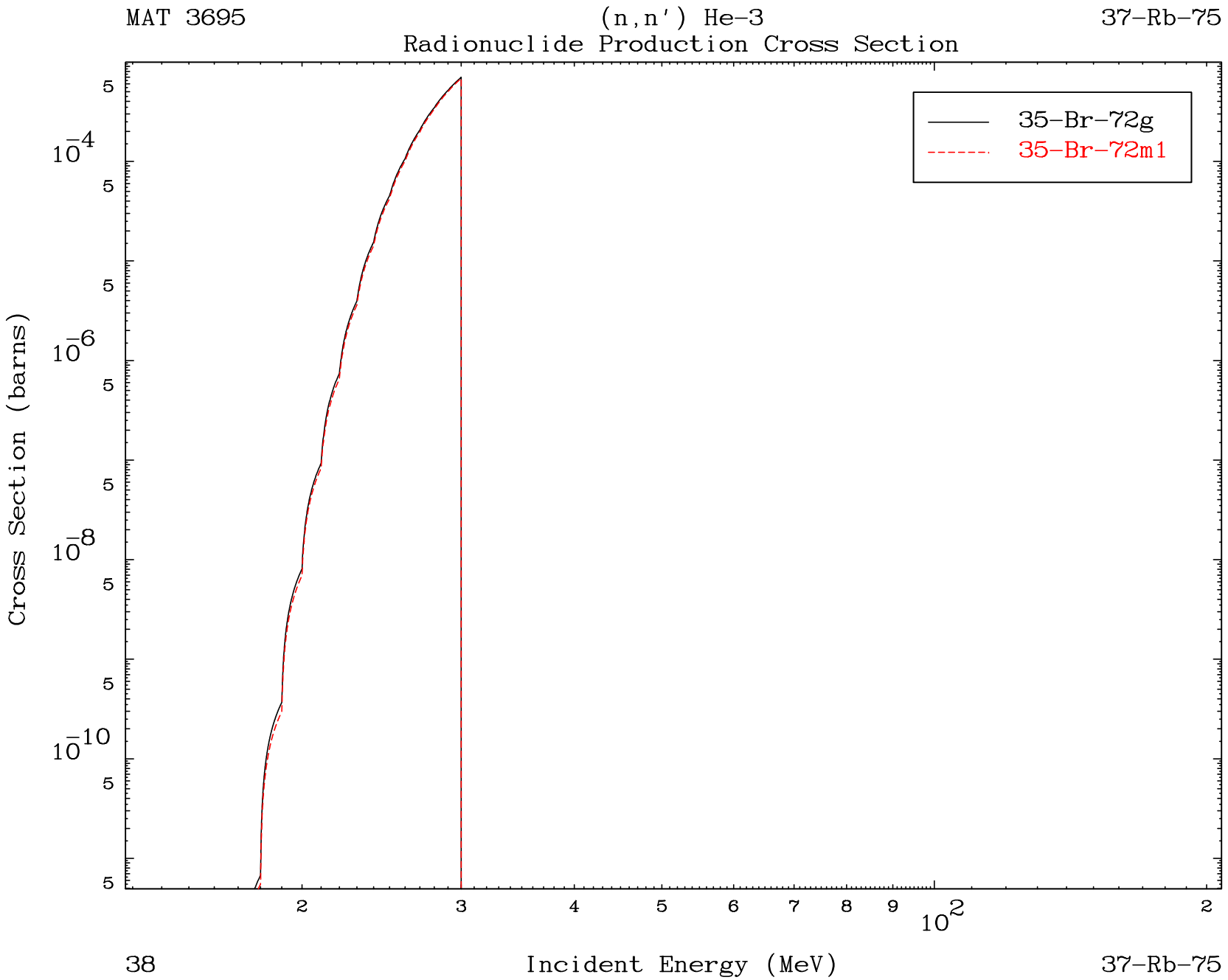

MAT 3695
MT= 55 (n,n') Level
Legendre Coefficients
37-Rb-75
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
1.0
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
33
Incident Energy (MeV)
37-Rb-75

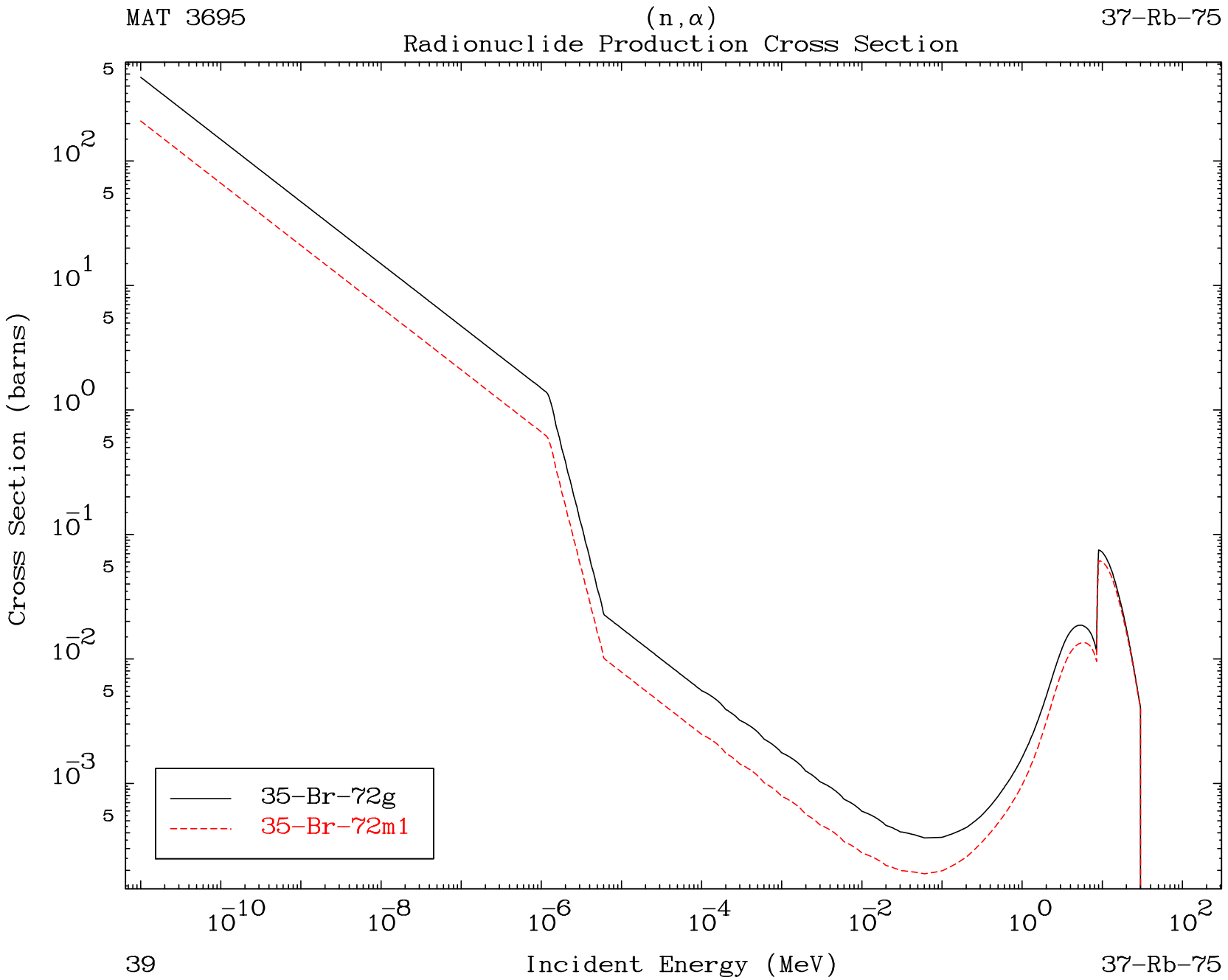

MAT 3695
MT= 55 (n,n') Level
Legendre Coefficients
37-Rb-75
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.03
0.02
0.01
0.00
-0.01
-0.02
Legendre (CM)
0
50
100
150
200
34
Incident Energy (MeV)
37-Rb-75

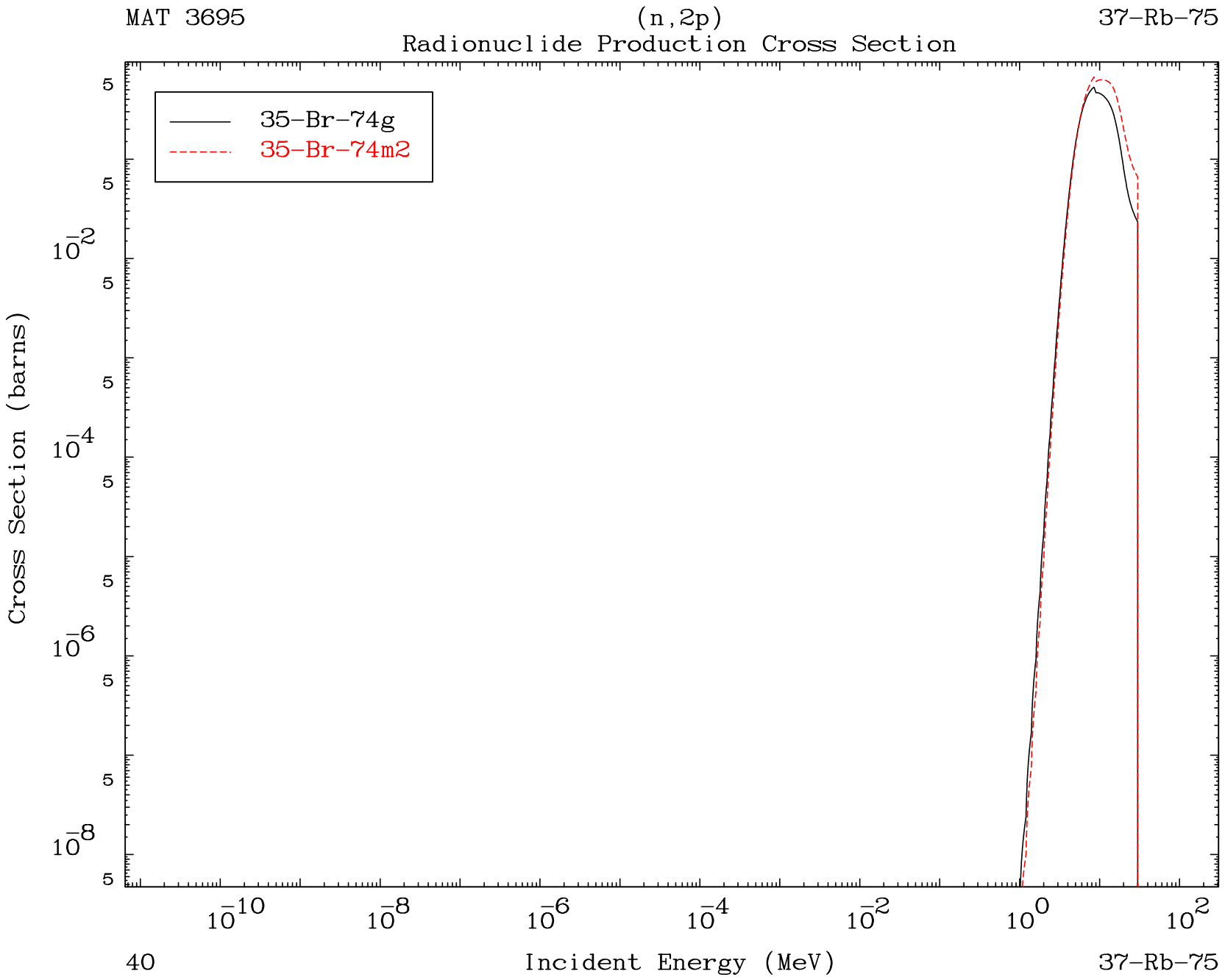

MAT 3695
MT= 55 (n,n') Level
Legendre Coefficients
37-Rb-75
X10-3
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
35
Incident Energy (MeV)
37-Rb-75

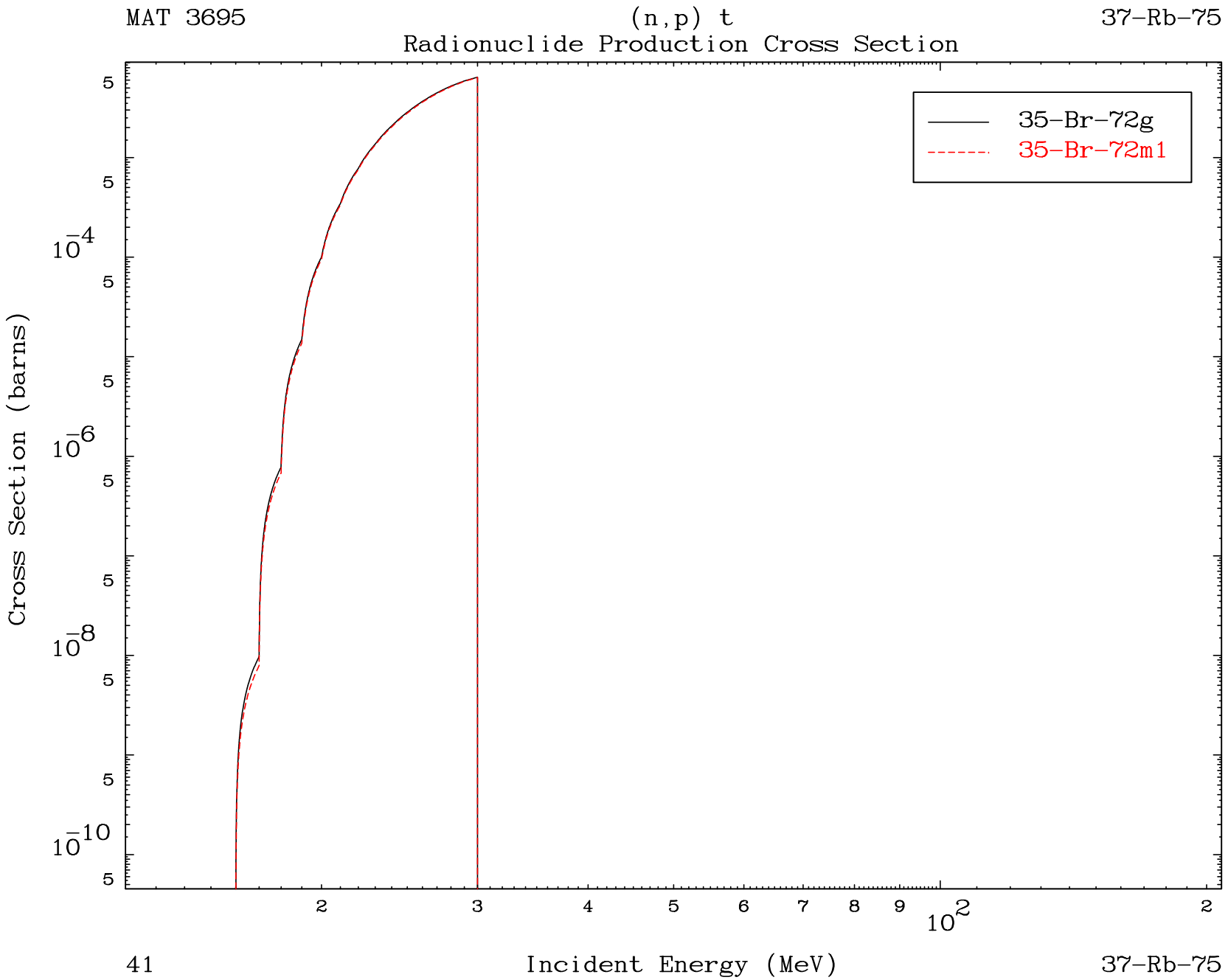

MAT 3695
MT= 55 (n,n') Level
Legendre Coefficients
37-Rb-75
X10-7
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
36
Incident Energy (MeV)
37-Rb-75


MAT 3695
(n,2n) α
37-Rb-75
Radionuclide Production Cross Section
35-Br-70g
35-Br-70m6
Cross Section (barns)
Incident Energy (MeV)
37
37-Rb-75


MAT 3695
(n,n') He-3
37-Rb-75
Radionuclide Production Cross Section
35-Br-72g
35-Br-72m1
Cross Section (barns)
Incident Energy (MeV)
38
37-Rb-75


MAT 3695
(n,α)
37-Rb-75
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
35-Br-72g
35-Br-72m1
39
37-Rb-75


MAT 3695
(n,2p)
37-Rb-75
Radionuclide Production Cross Section
35-Br-74g
35-Br-74m2
Cross Section (barns)
Incident Energy (MeV)
40
37-Rb-75


MAT 3695
(n,p) t
37-Rb-75
Radionuclide Production Cross Section
35-Br-72g
35-Br-72m1
Cross Section (barns)
Incident Energy (MeV)
41
37-Rb-75