Program EVALPLOT
(Version 2018-1)
by
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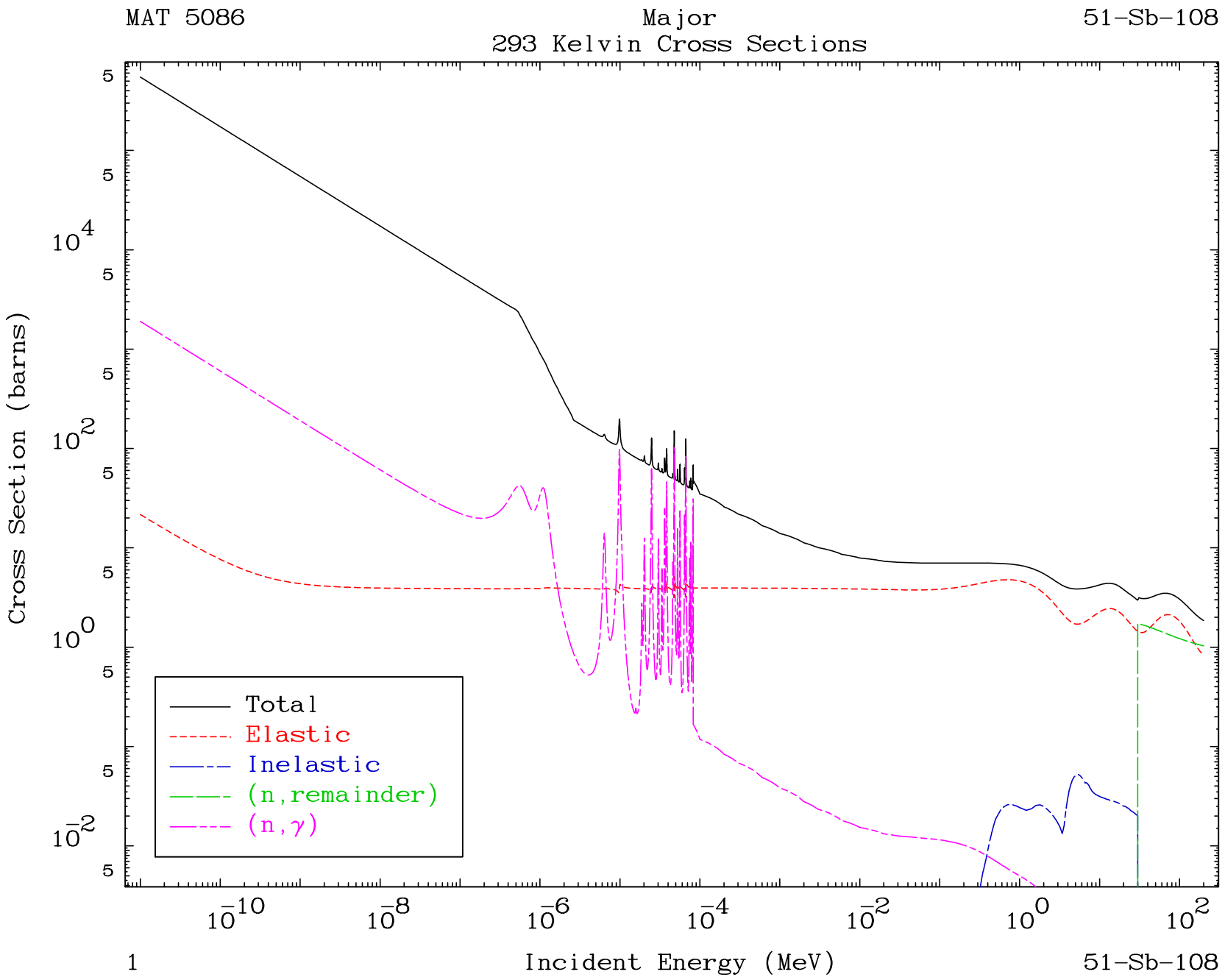
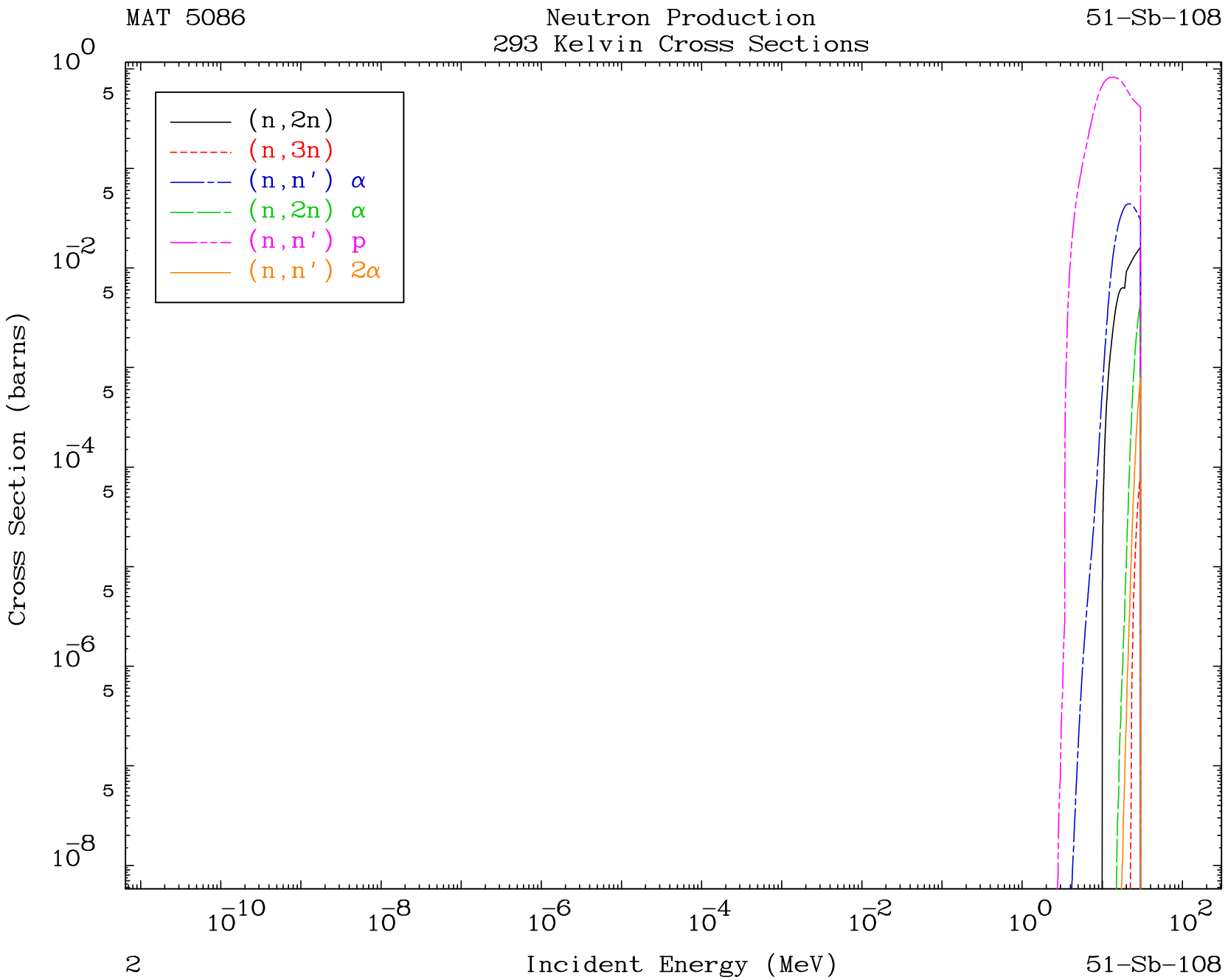
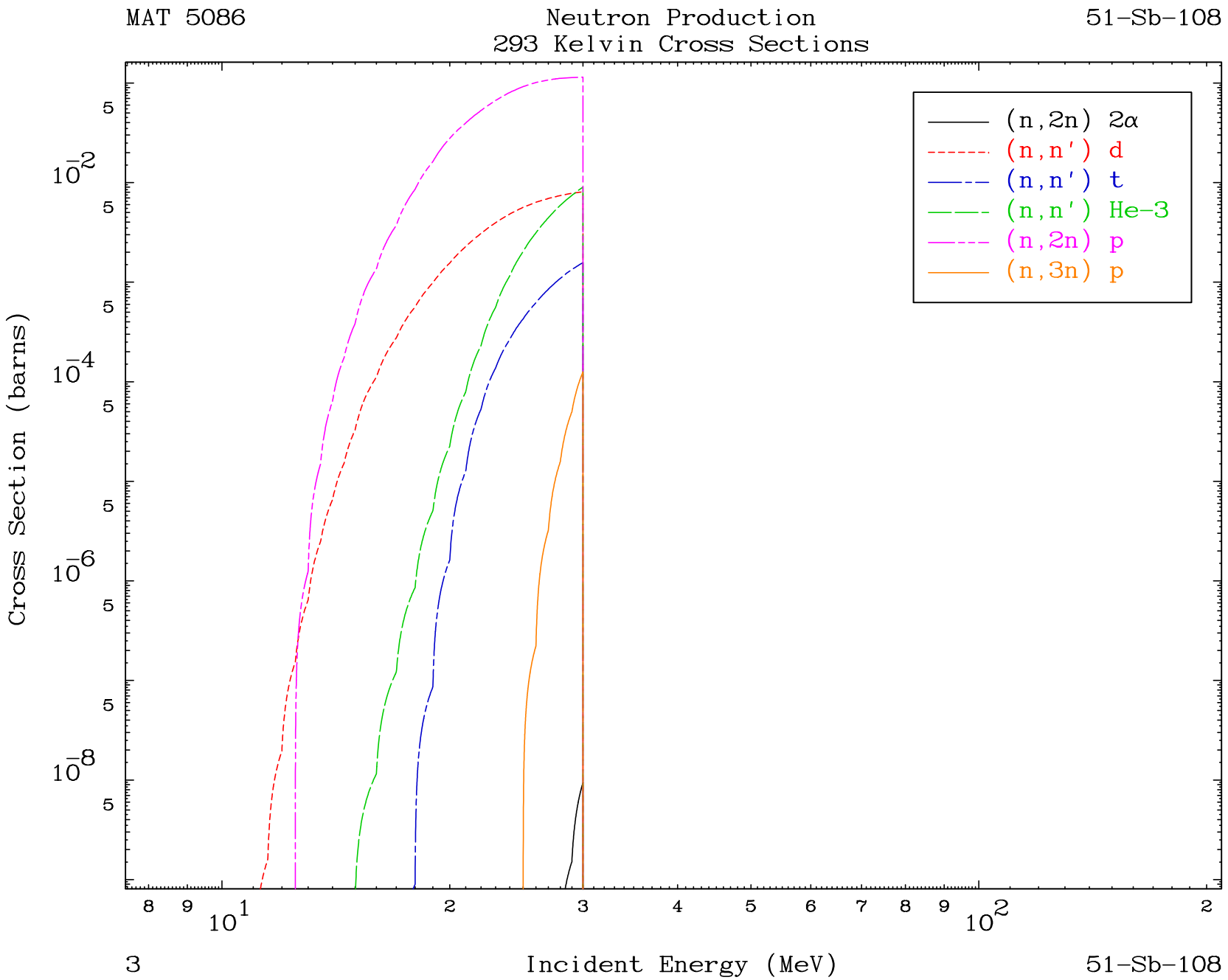
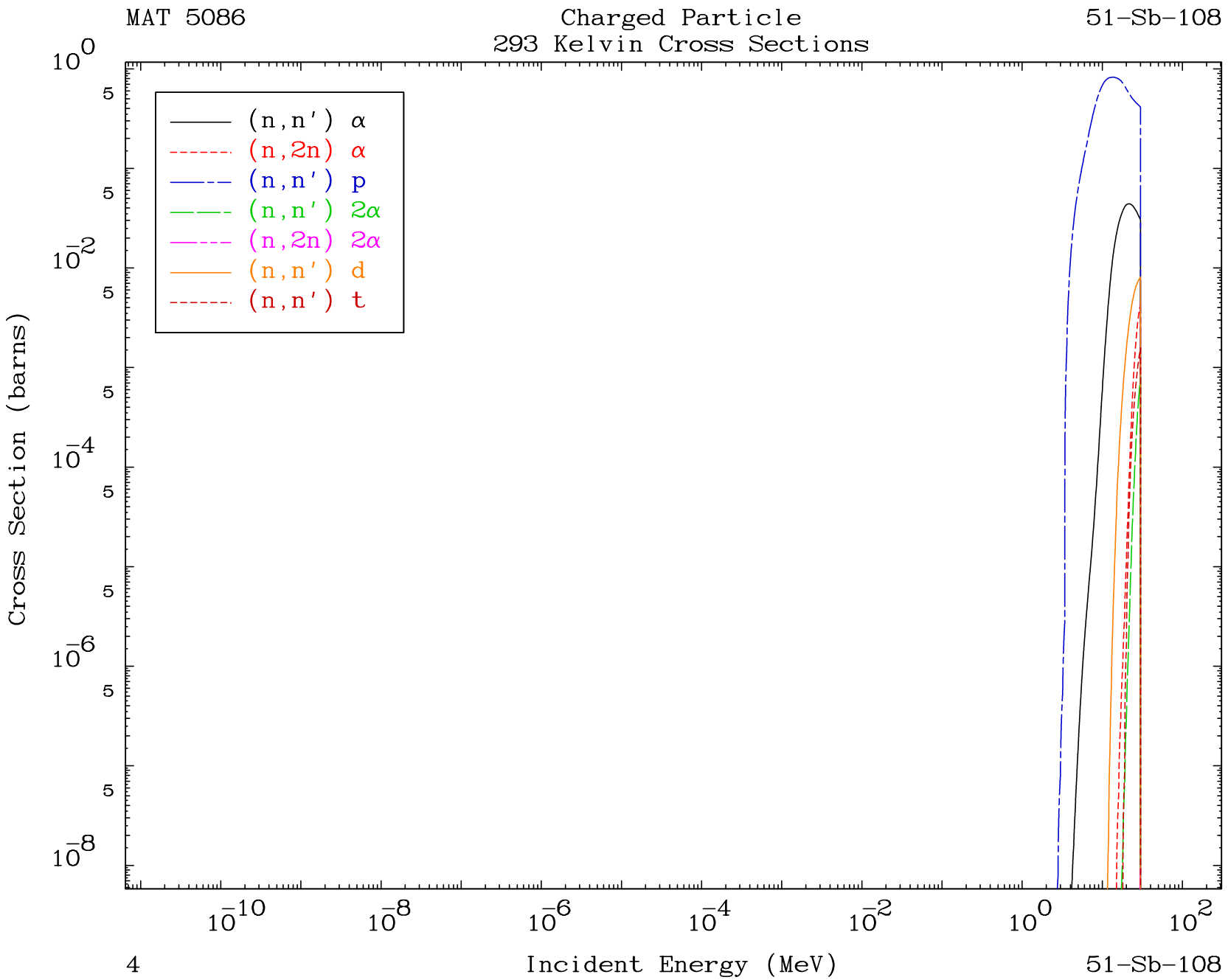
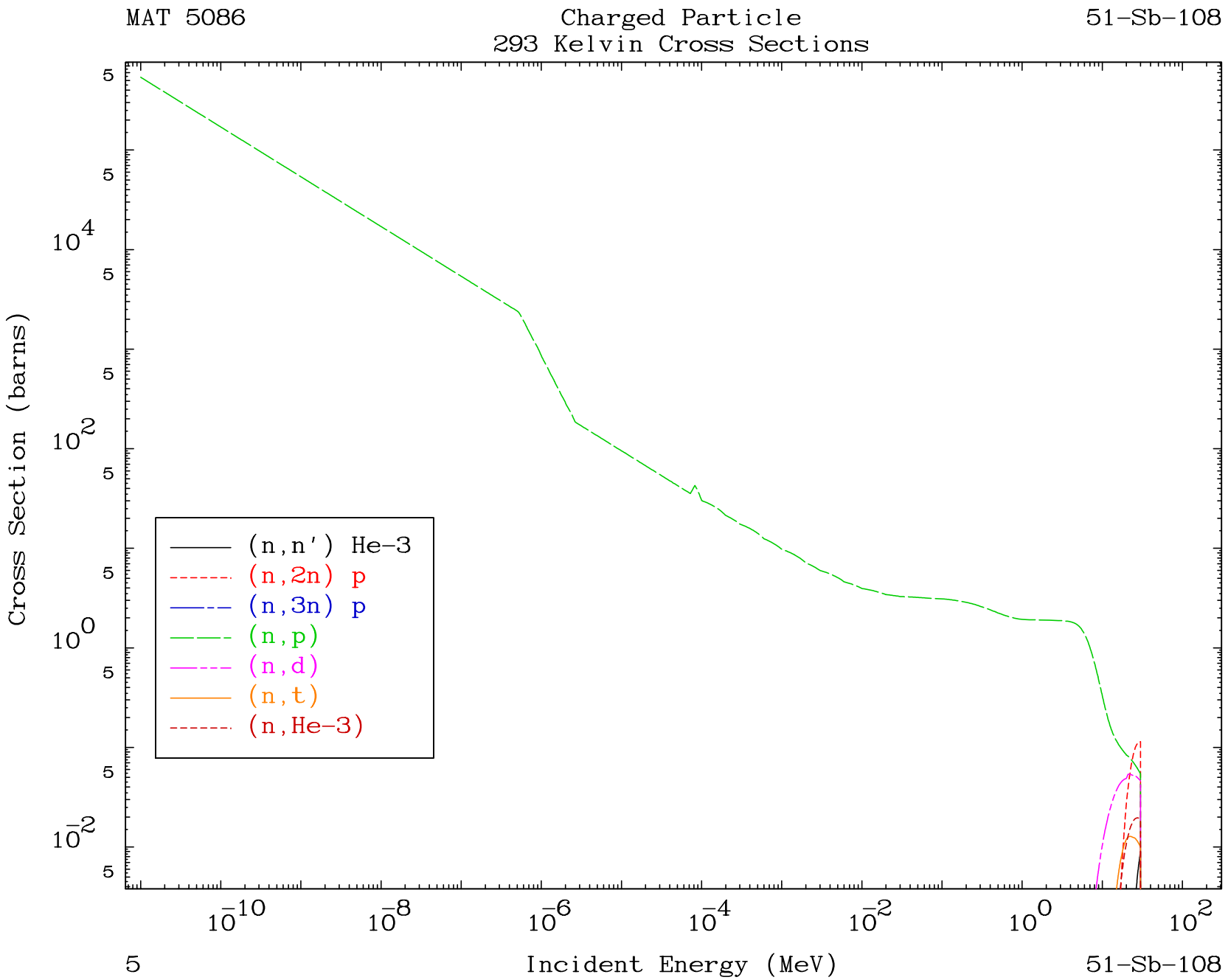
Press Mouse Button to Start

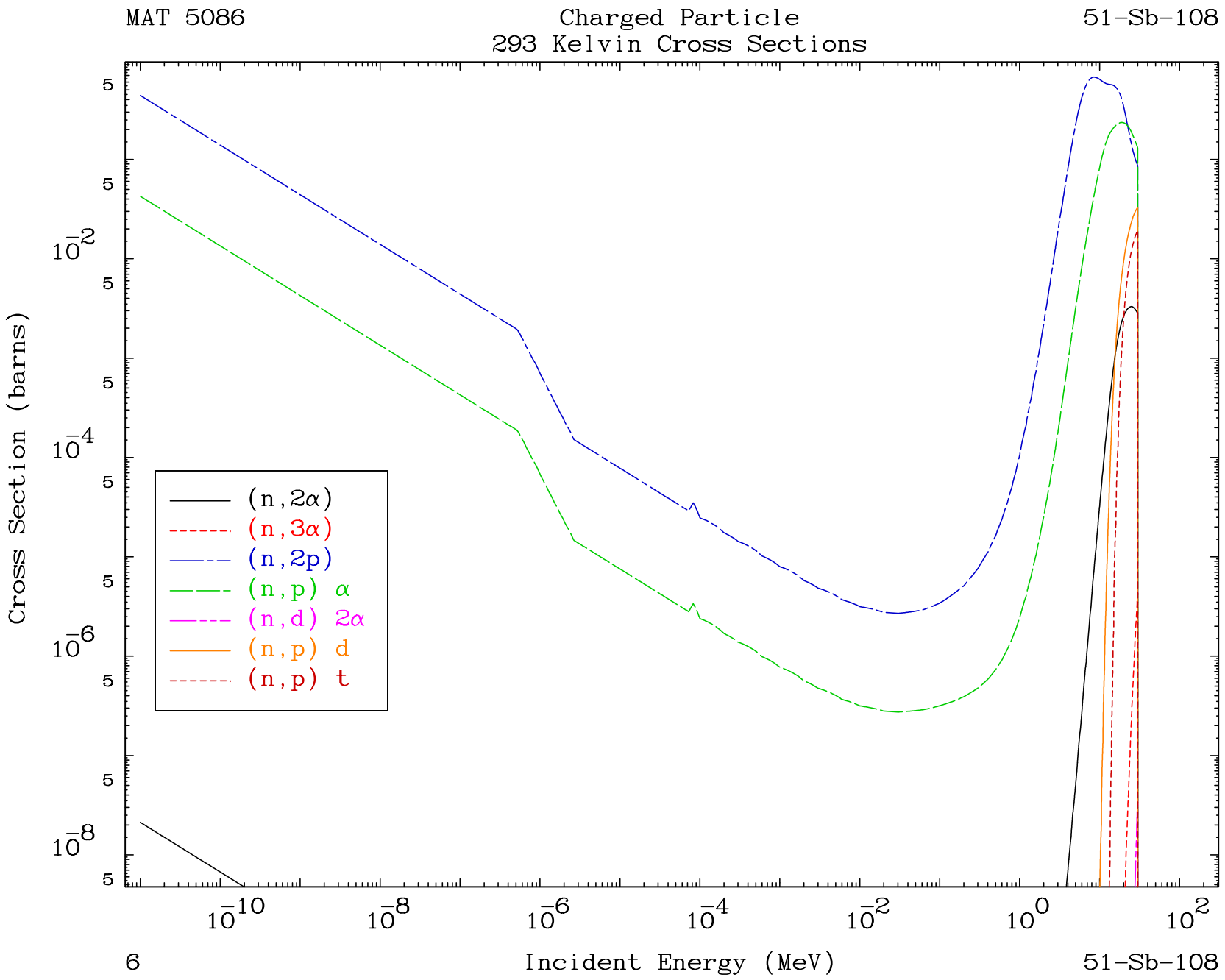

MAT 5086
Major
51-Sb-108
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
51-Sb-108

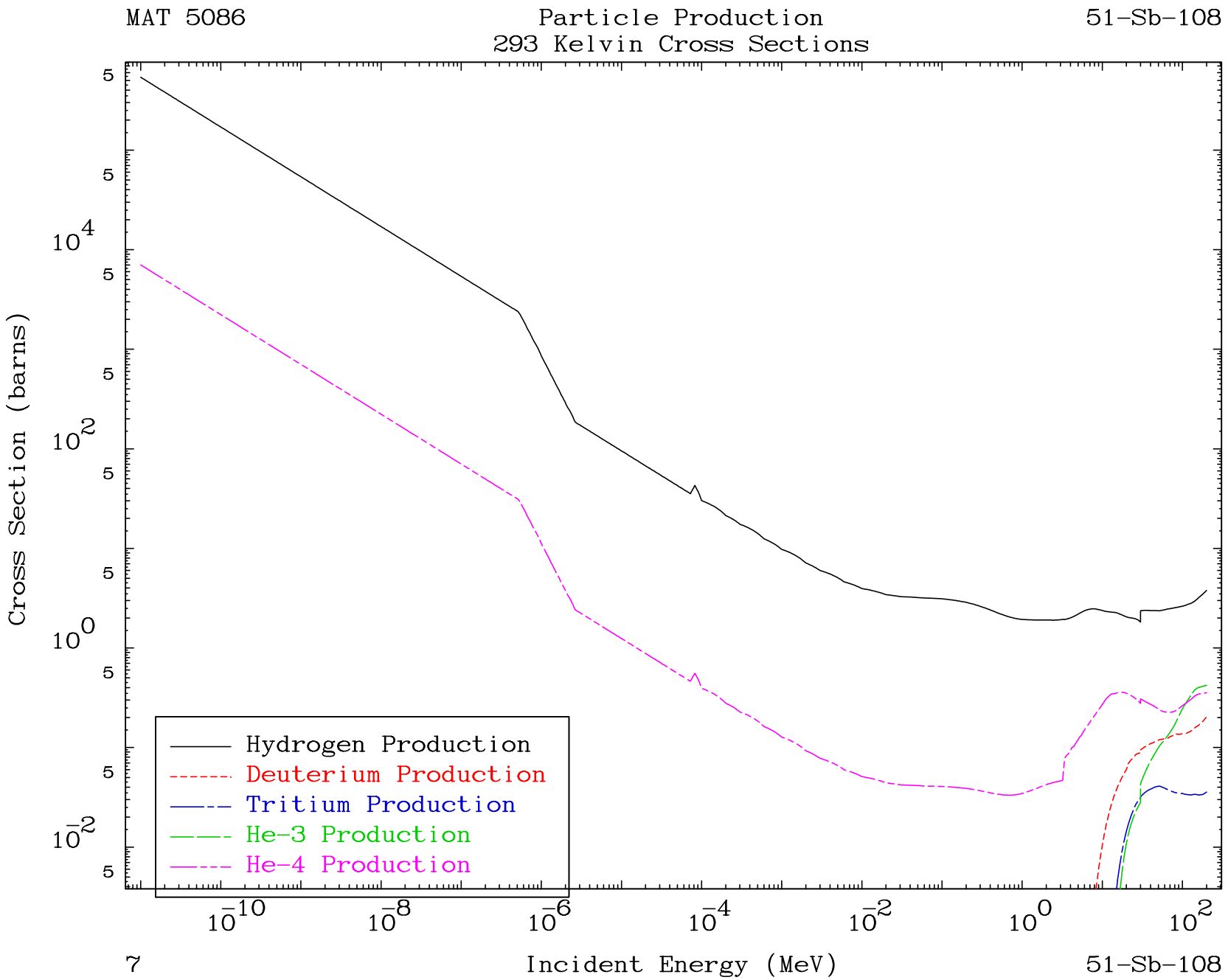

MAT 5086
Neutron Production
293 Kelvin Cross Sections
51-Sb-108
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
51-Sb-108

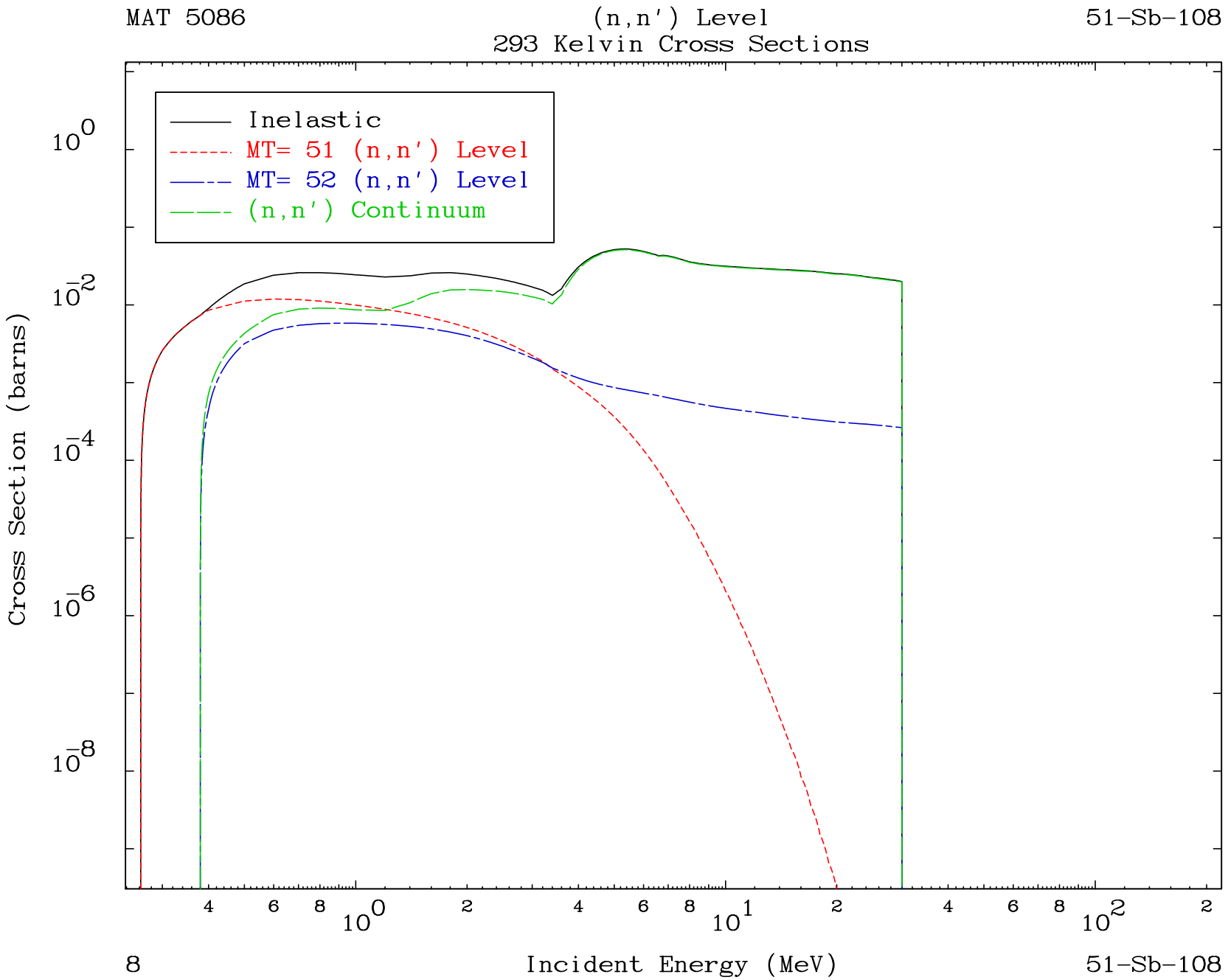

MAT 5086
Neutron Production
293 Kelvin Cross Sections
51-Sb-108
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
Cross Section (barns)
10-2
10-4
10-6
10-8
8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
3
51-Sb-108

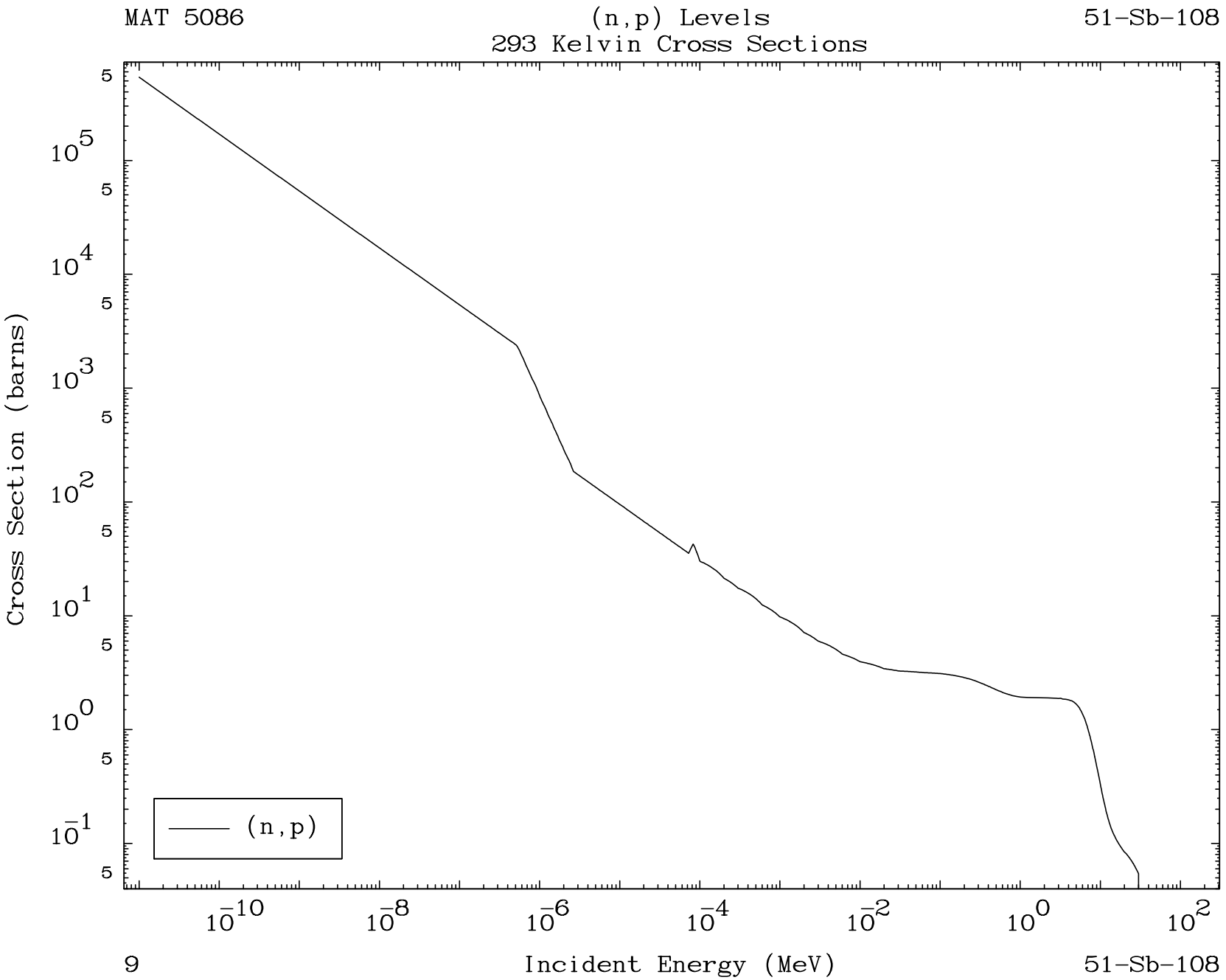

MAT 5086
Charged Particle
51-Sb-108
293 Kelvin Cross Sections
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
(n,n') d
(n,n') t
Cross Section (barns)
Incident Energy (MeV)
4
51-Sb-108

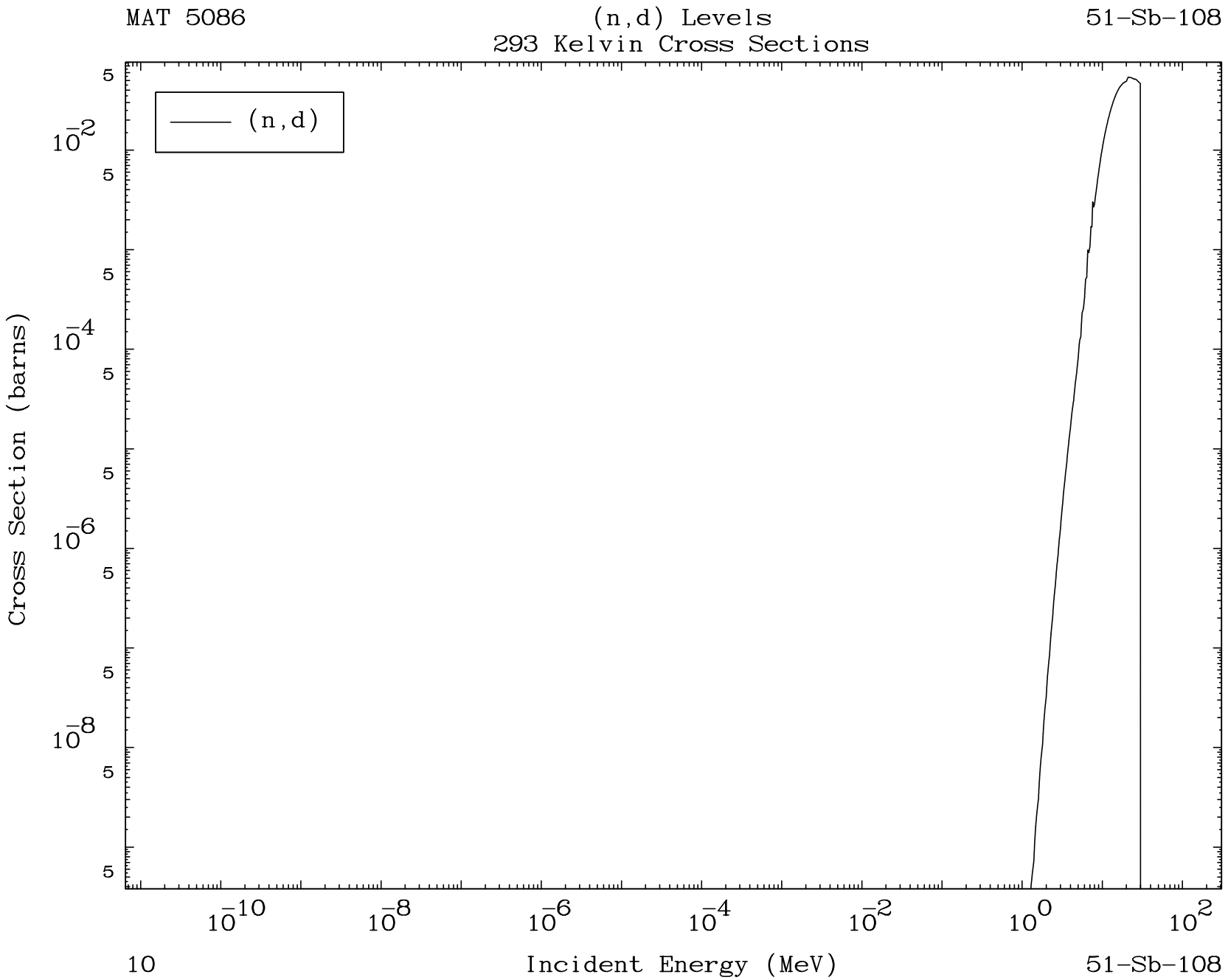

MAT 5086
Charged Particle
51-Sb-108
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
51-Sb-108
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)

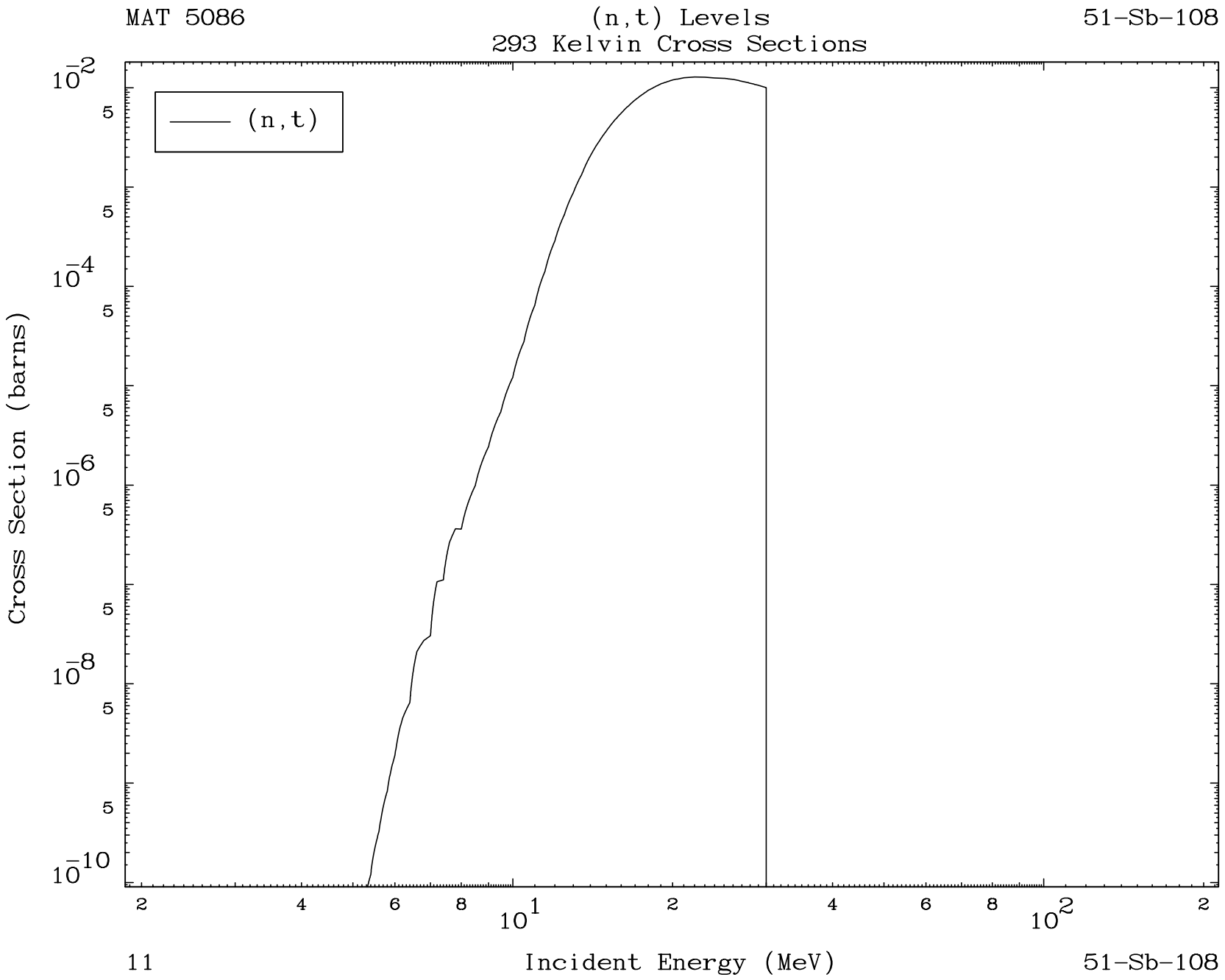

MAT 5086
Charged Particle
293 Kelvin Cross Sections
51-Sb-108
Cross Section (barns)
Incident Energy (MeV)
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,d) 2α
(n,p) d
(n,p) t
6
51-Sb-108

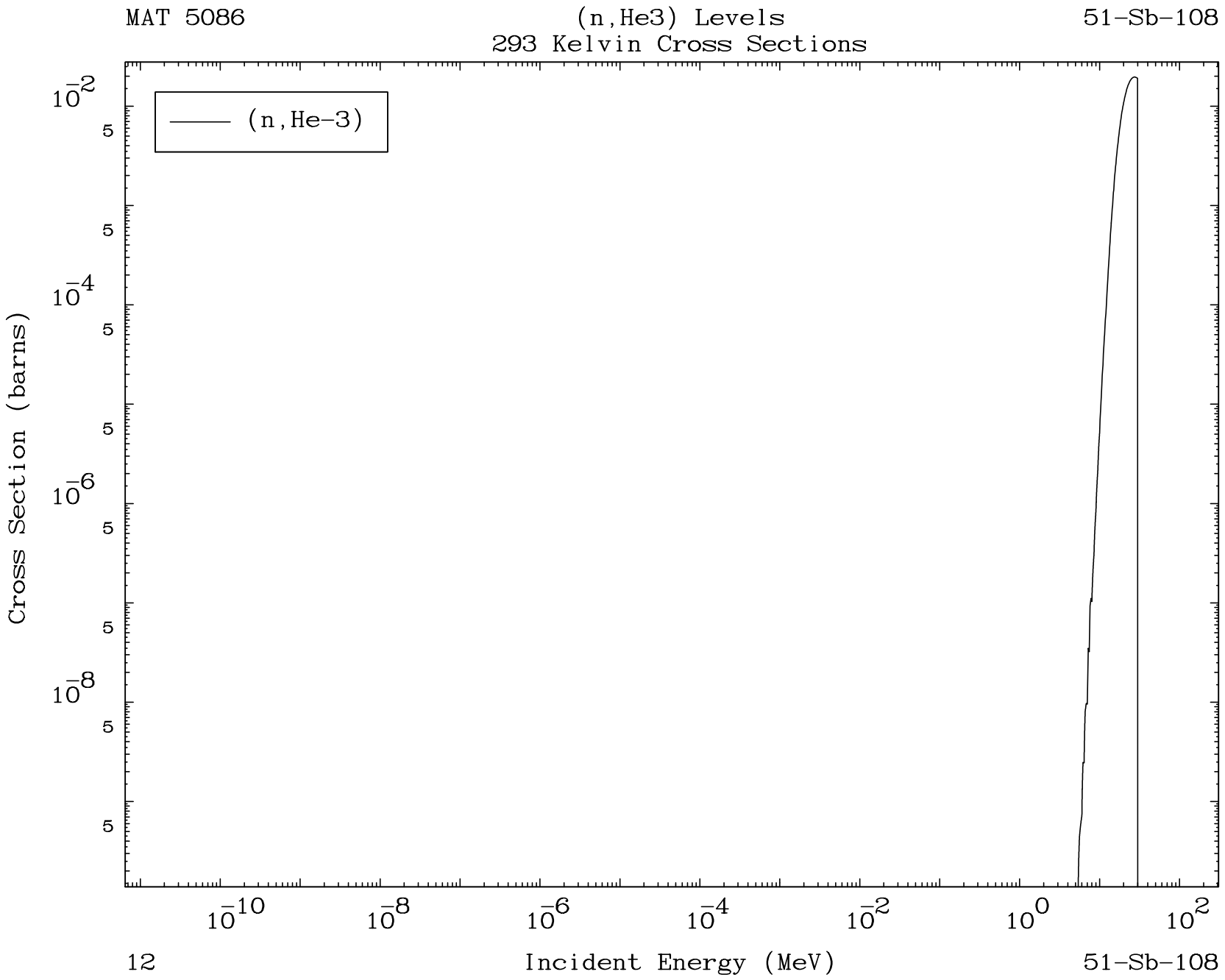

MAT 5086
Particle Production
293 Kelvin Cross Sections
51-Sb-108
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
7
51-Sb-108

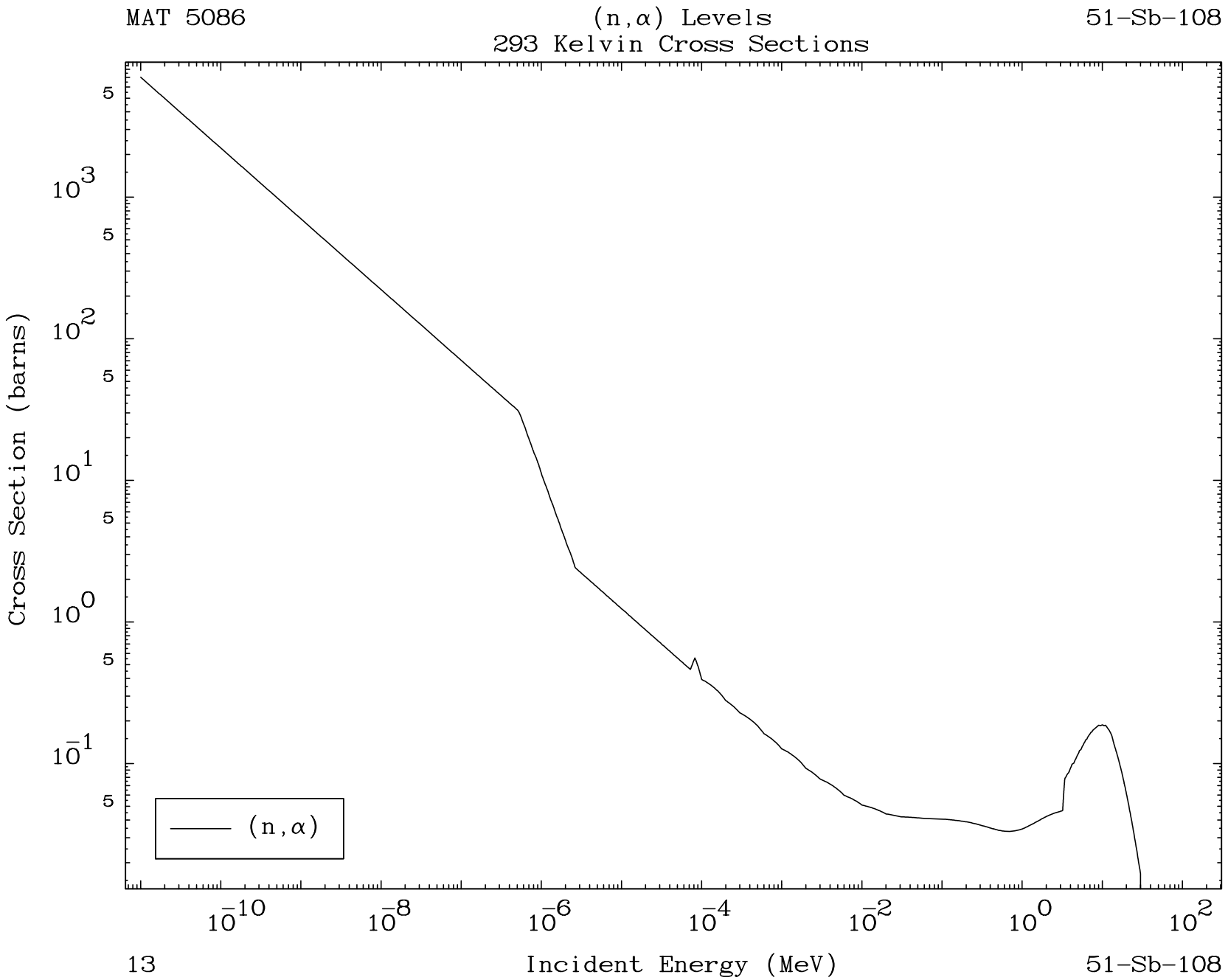

MAT 5086
(n,n') Level
51-Sb-108
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
(n,n') Continuum
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
10^-8
4 6 8 10^0 2 4 6 8 10^1 2 4 6 8 10^2 2
Incident Energy (MeV)
8
51-Sb-108

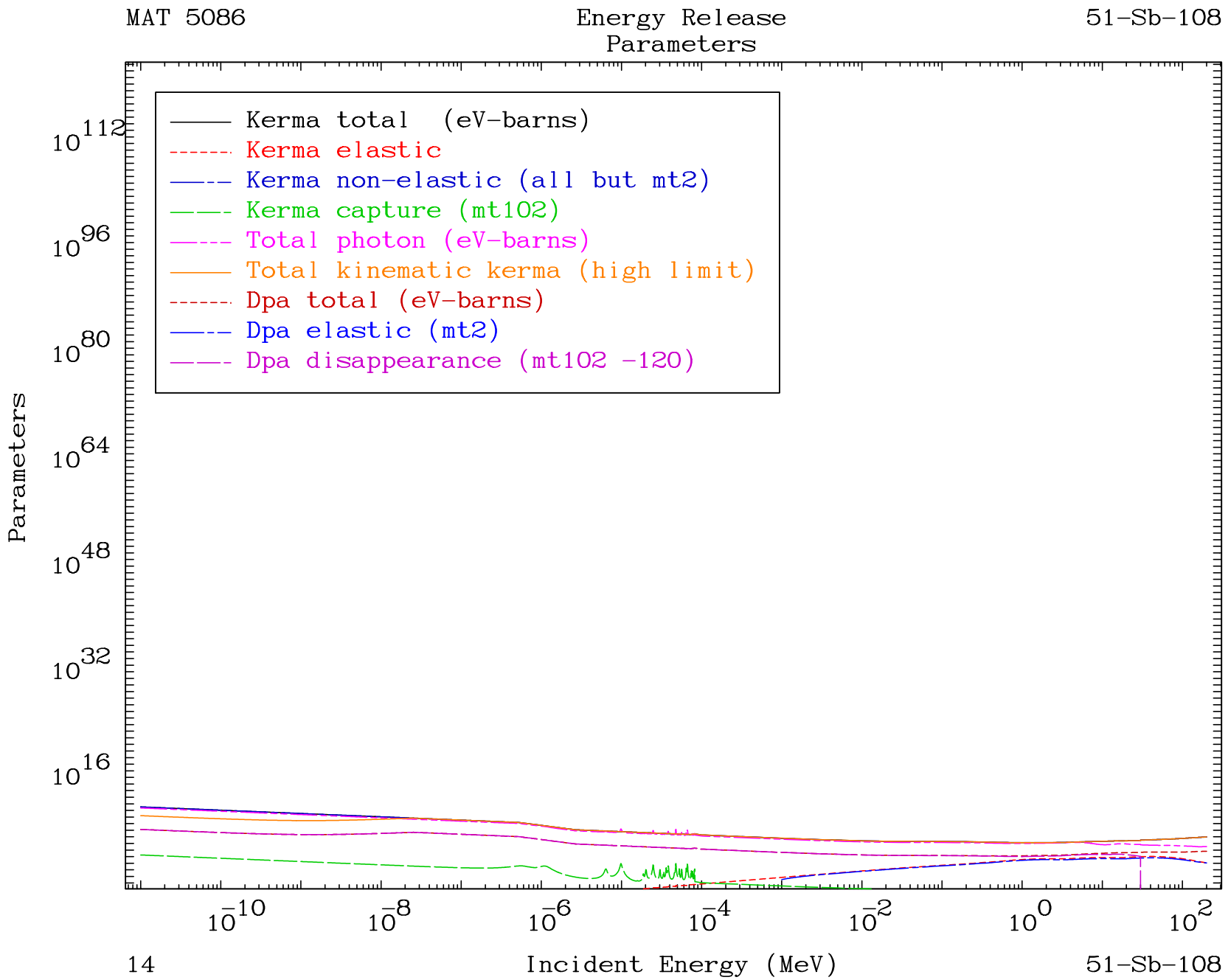

MAT 5086
(n,p) Levels
51-Sb-108
293 Kelvin Cross Sections
Cross Section (barns)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
9
51-Sb-108

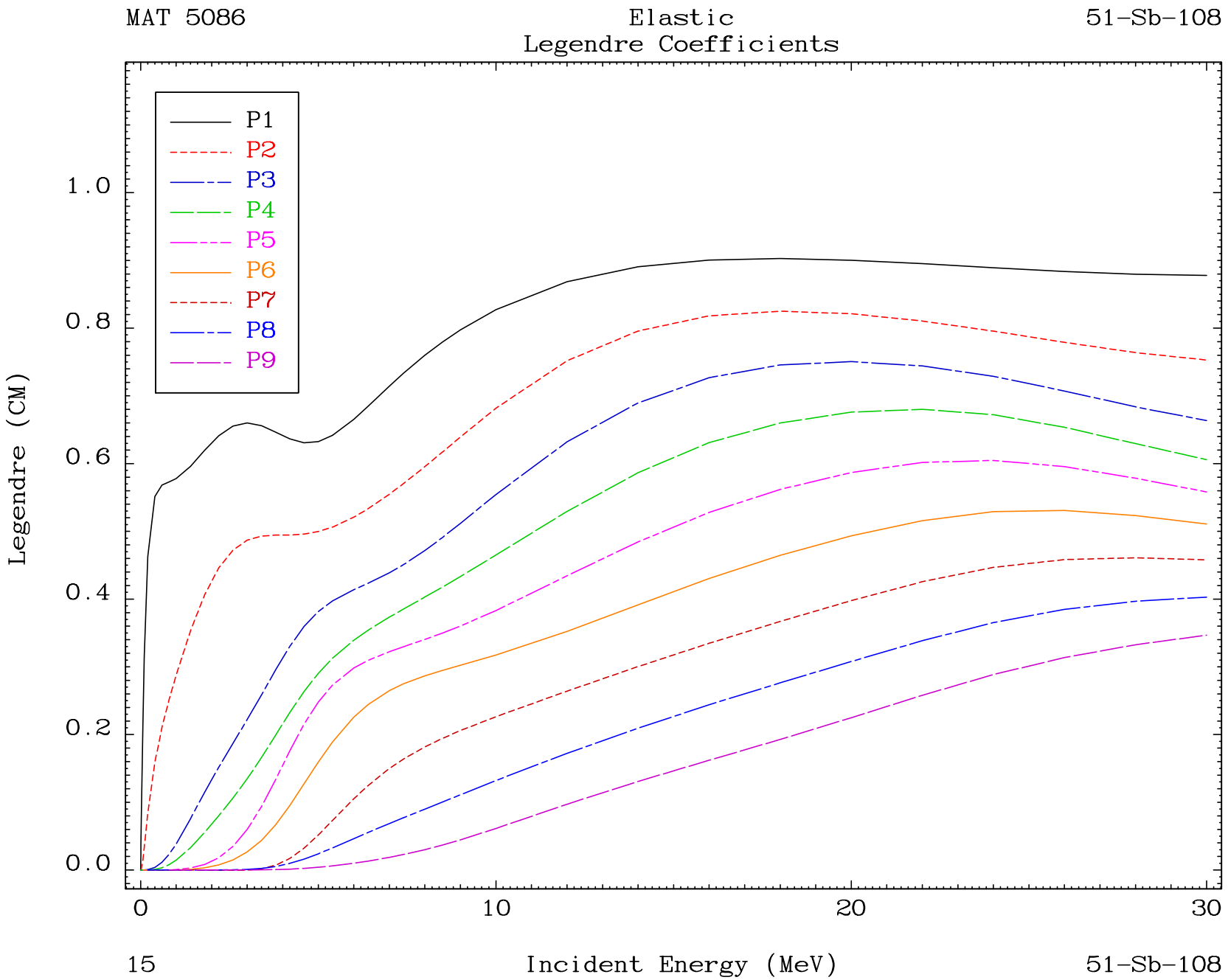

MAT 5086
(n,d) Levels
293 Kelvin Cross Sections
51-Sb-108
(n,d)
Cross Section (barns)
Incident Energy (MeV)
51-Sb-108
10

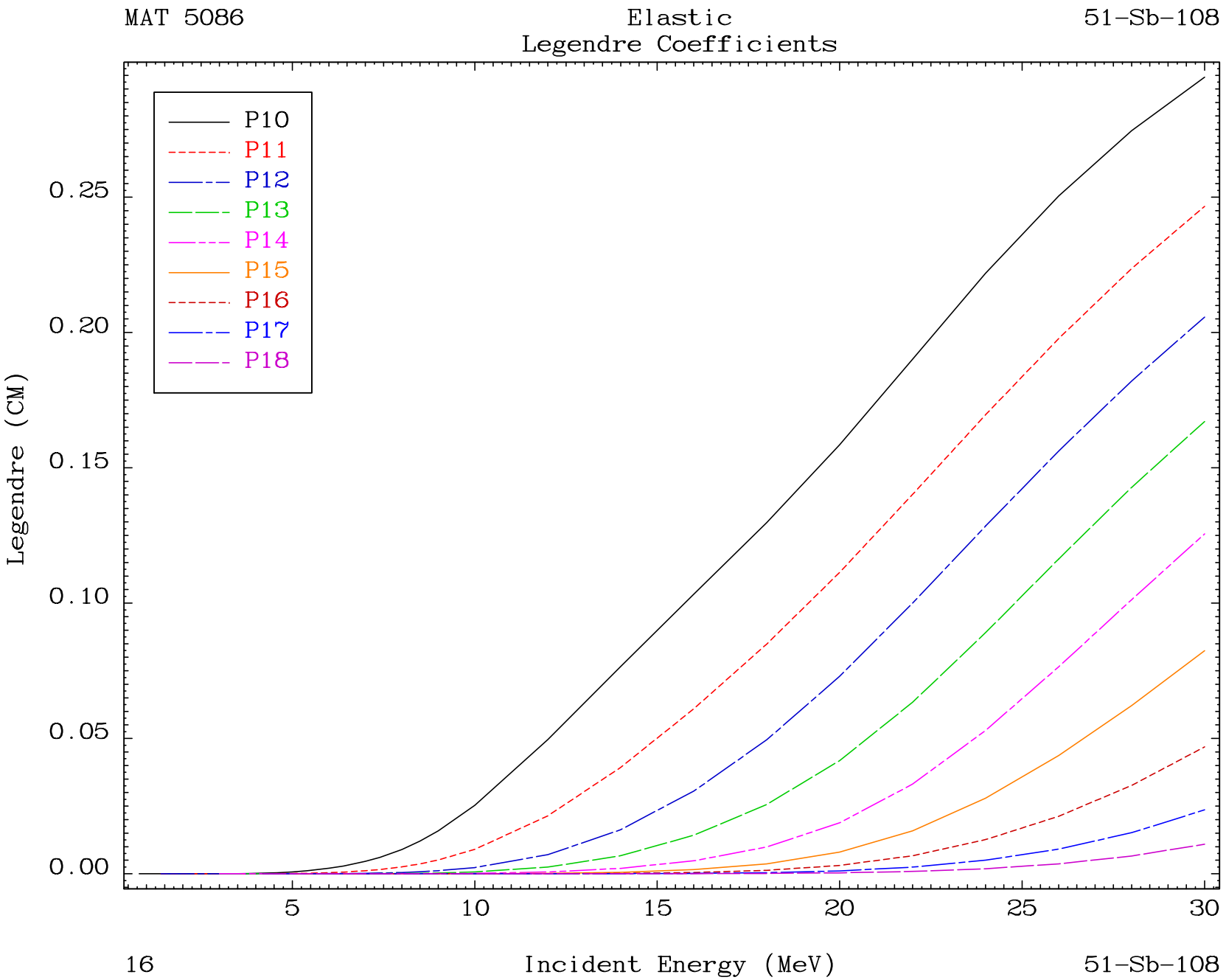

MAT 5086
(n,t) Levels
51-Sb-108
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
11
51-Sb-108

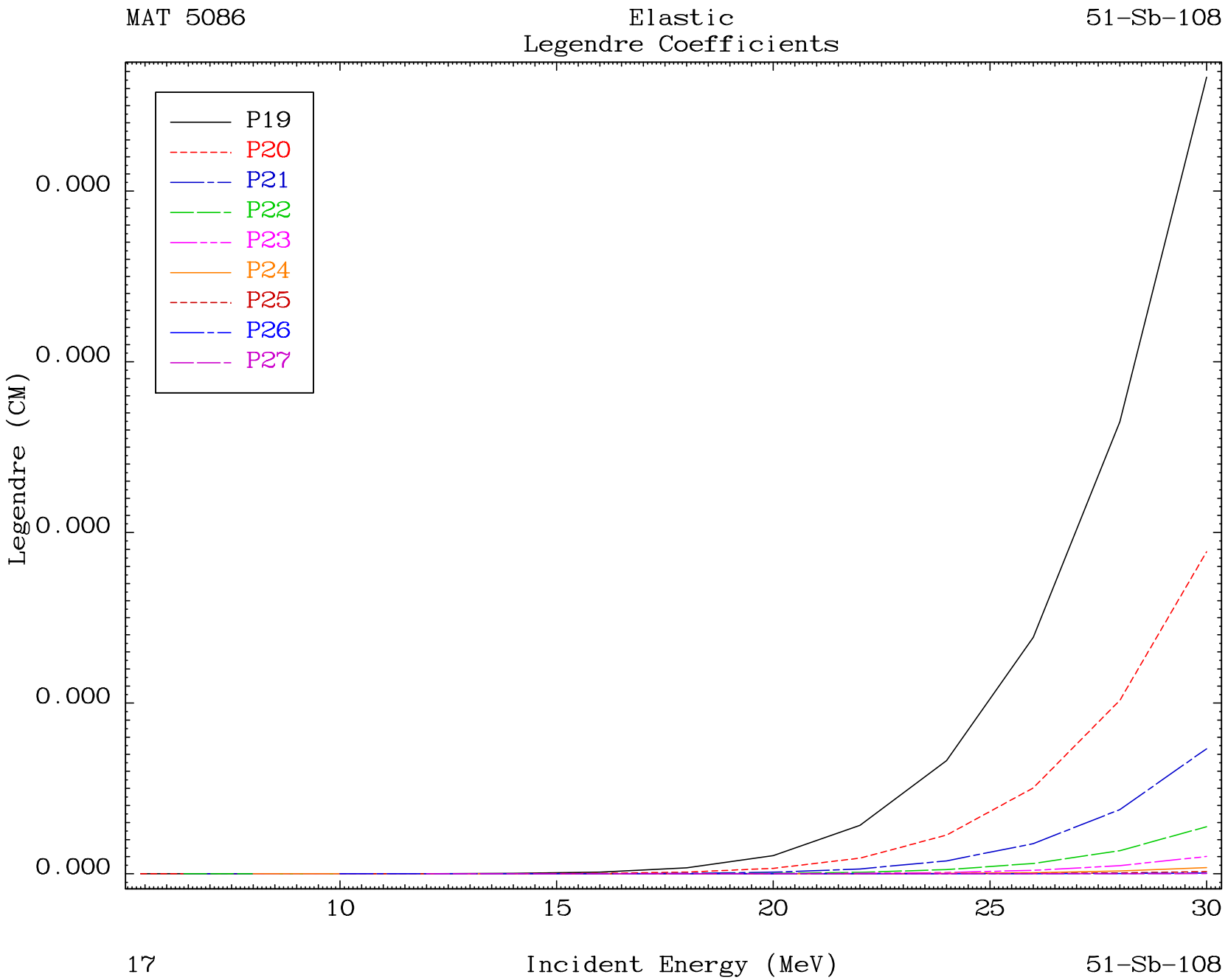

MAT 5086
(n,He3) Levels
51-Sb-108
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
12
51-Sb-108

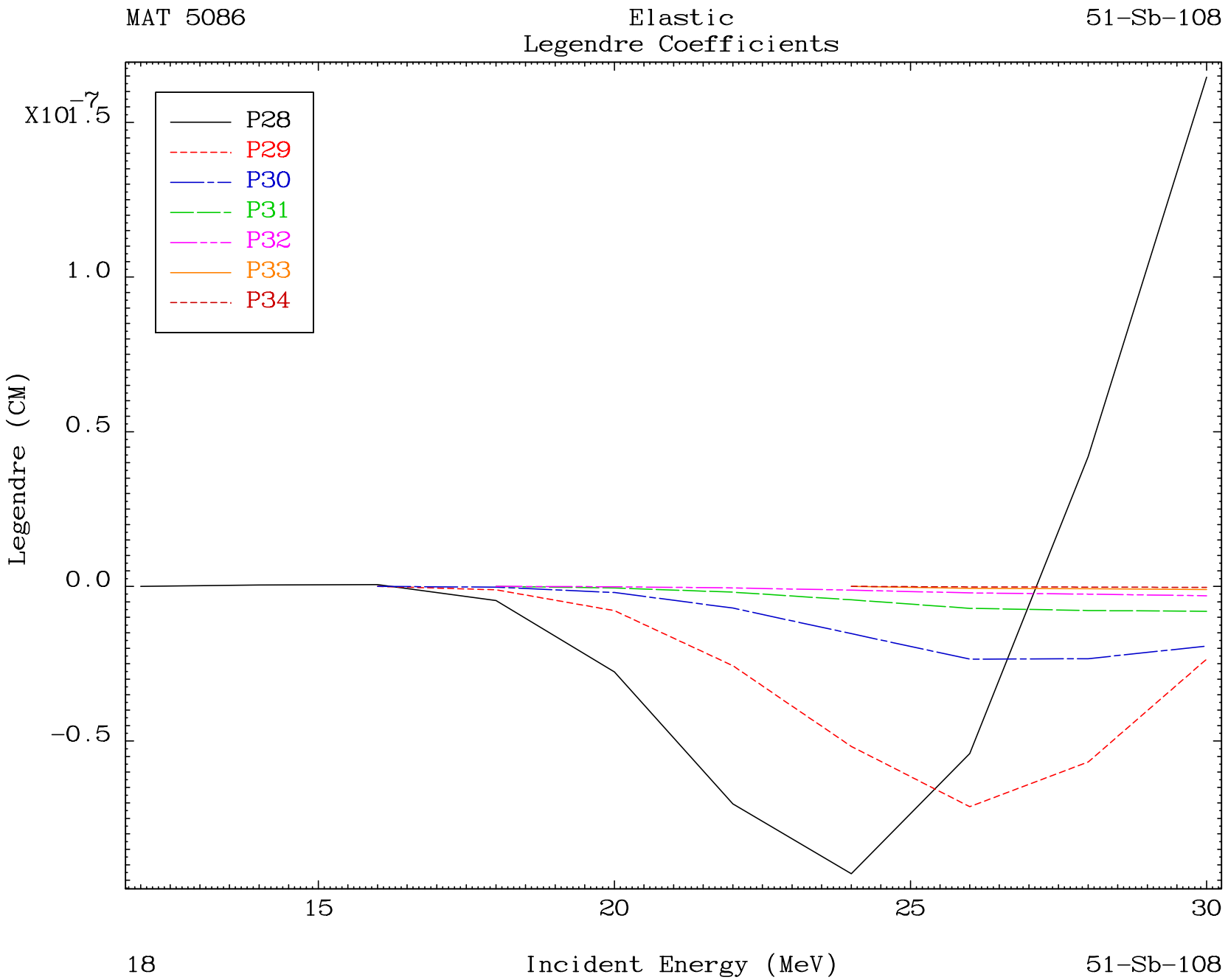

MAT 5086
(n,α) Levels
51-Sb-108
293 Kelvin Cross Sections
Cross Section (barns)
10^3
10^2
10^1
10^0
10^-1
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
(n,α)
13
Incident Energy (MeV)
51-Sb-108

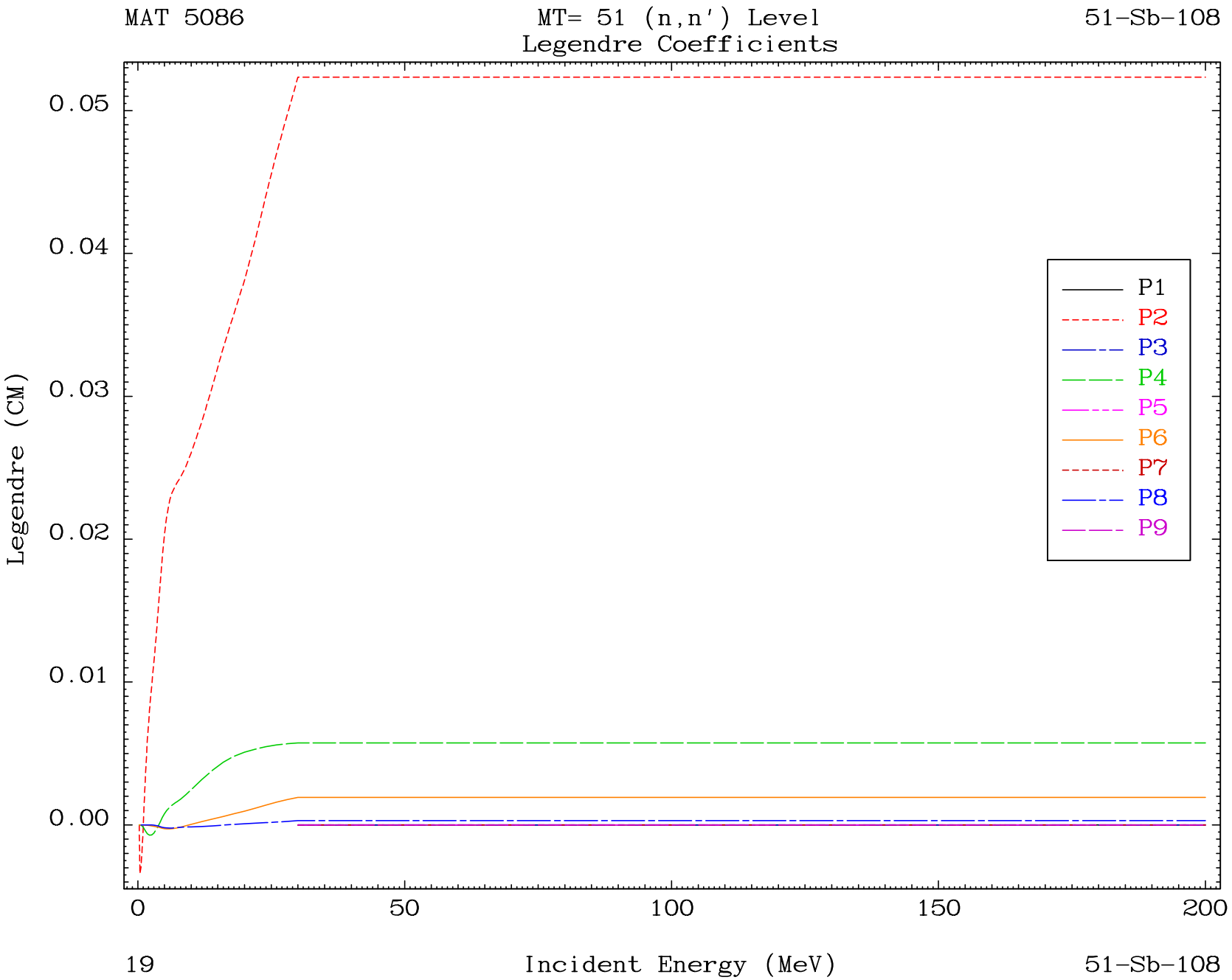

MAT 5086
Energy Release
Parameters
51-Sb-108
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa disappearance (mt102 -120)
Parameters
10^112
10^96
10^80
10^64
10^48
10^32
10^16
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
14
Incident Energy (MeV)
51-Sb-108

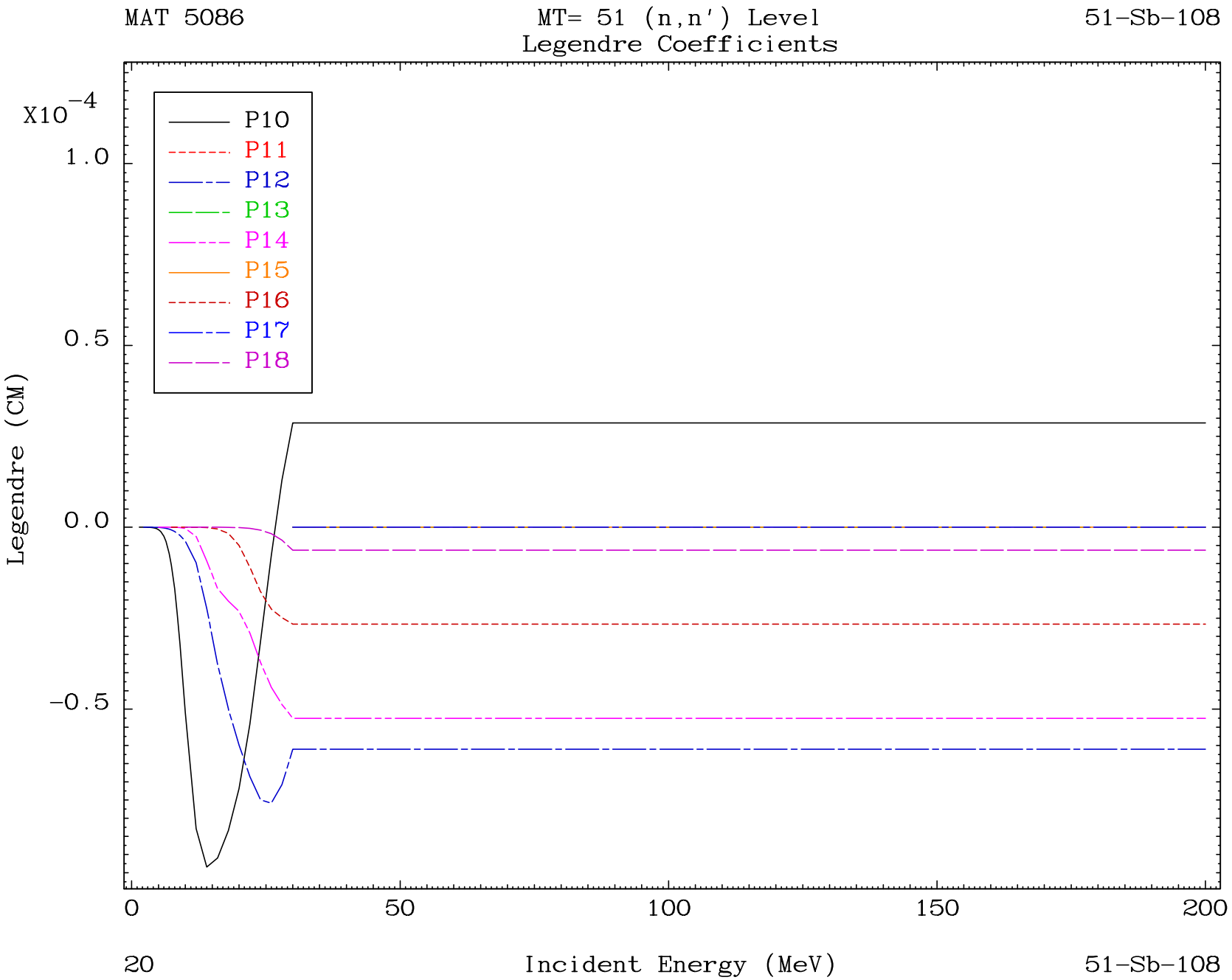

MAT 5086
Elastic
Legendre Coefficients
51-Sb-108
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
1.0
0.8
0.6
0.4
0.2
0.0
0
10
20
30
15
Incident Energy (MeV)
51-Sb-108

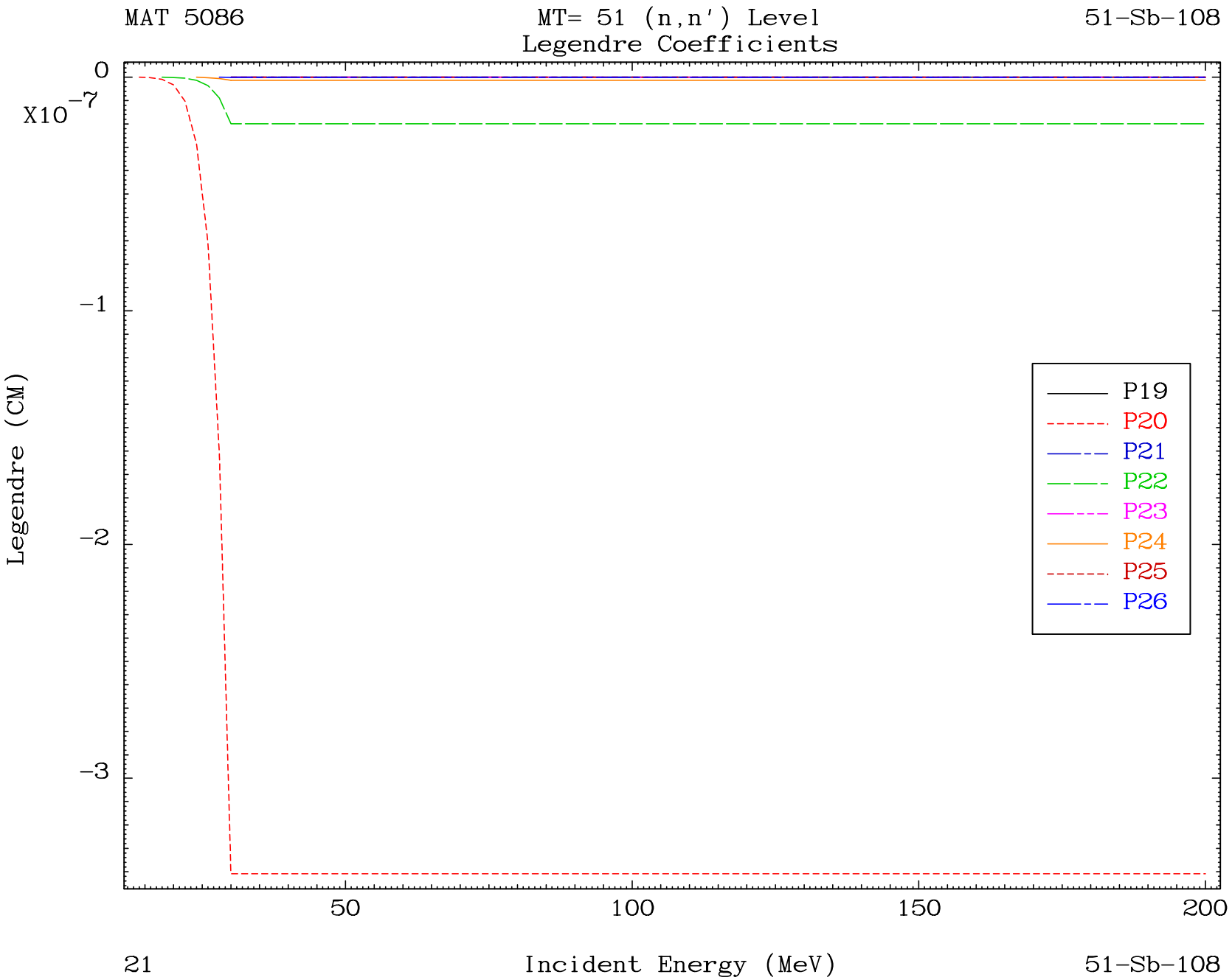

MAT 5086
Elastic
Legendre Coefficients
51-Sb-108
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.25
0.20
0.15
0.10
0.05
0.00
5
10
15
20
25
30
16
Incident Energy (MeV)
51-Sb-108

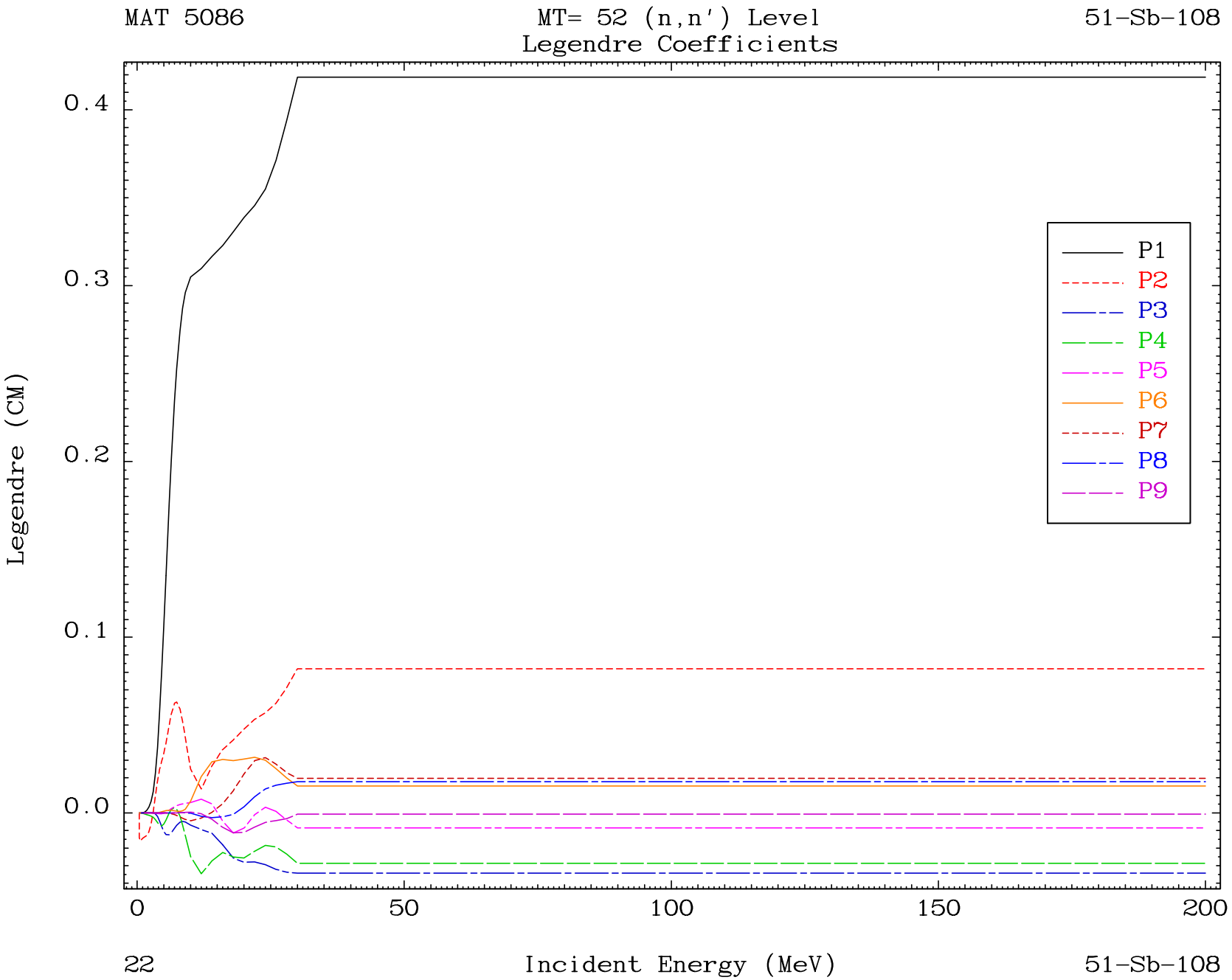

MAT 5086
Elastic
Legendre Coefficients
51-Sb-108
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.000
0.000
0.000
0.000
Legendre (CM)
10
15
20
25
30
17
Incident Energy (MeV)
51-Sb-108

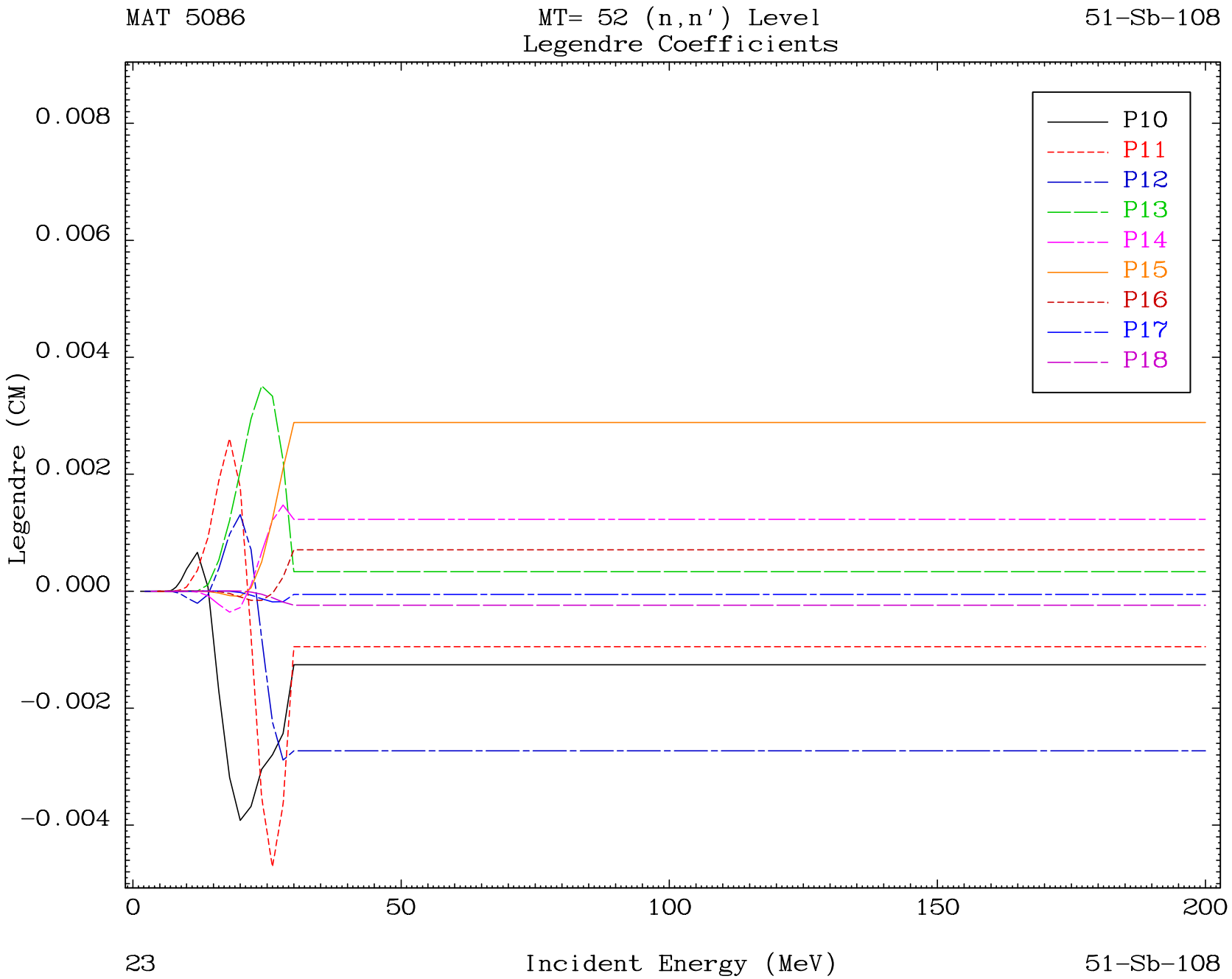

MAT 5086
Elastic
Legendre Coefficients
51-Sb-108
X10^-7
1.5
1.0
0.5
0.0
-0.5
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
15
20
25
30
18
Incident Energy (MeV)
51-Sb-108

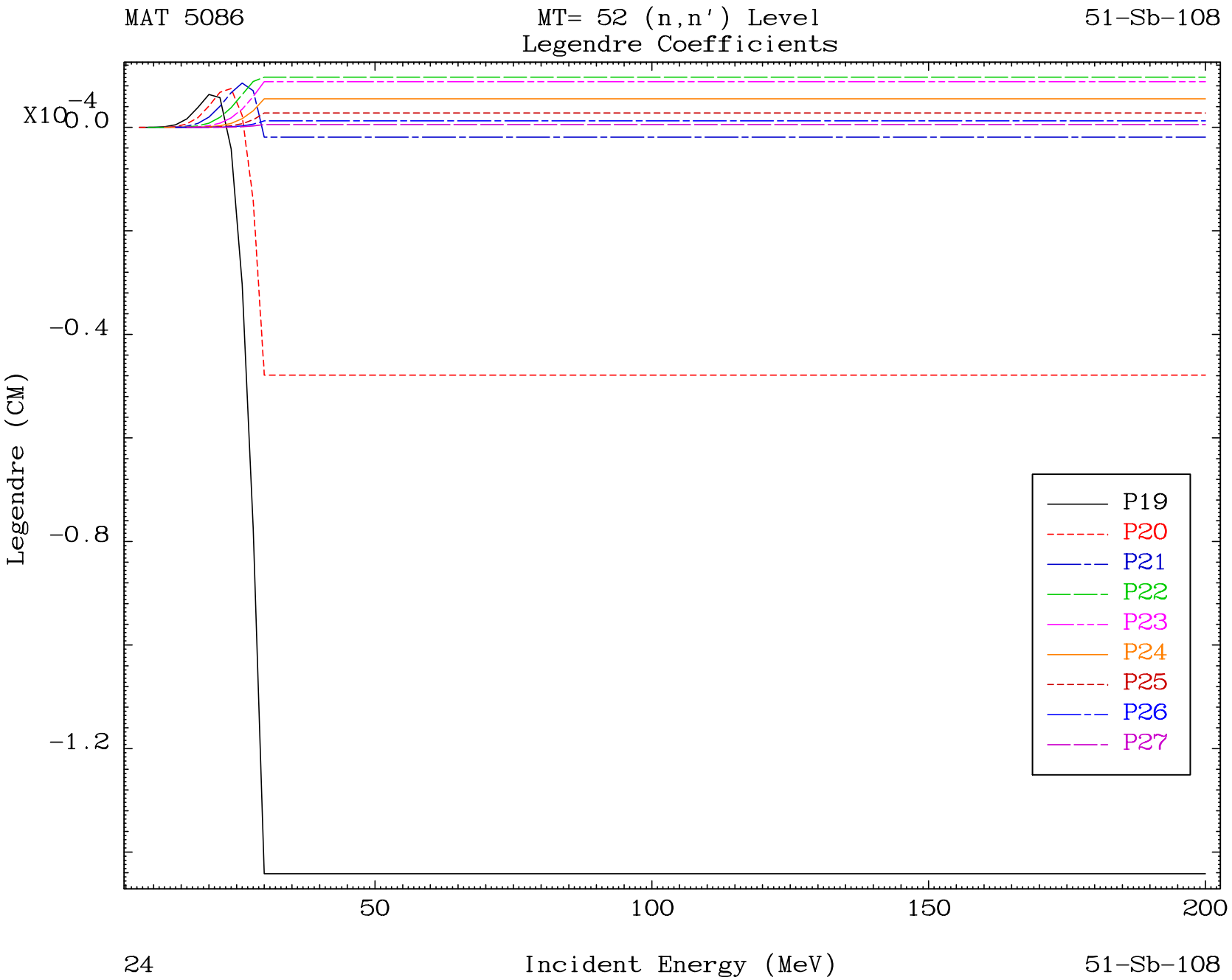

MAT 5086
MT= 51 (n,n') Level
Legendre Coefficients
51-Sb-108
0.05
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
0
50
100
150
200
19
Incident Energy (MeV)
51-Sb-108
P1
P2
P3
P4
P5
P6
P7
P8
P9

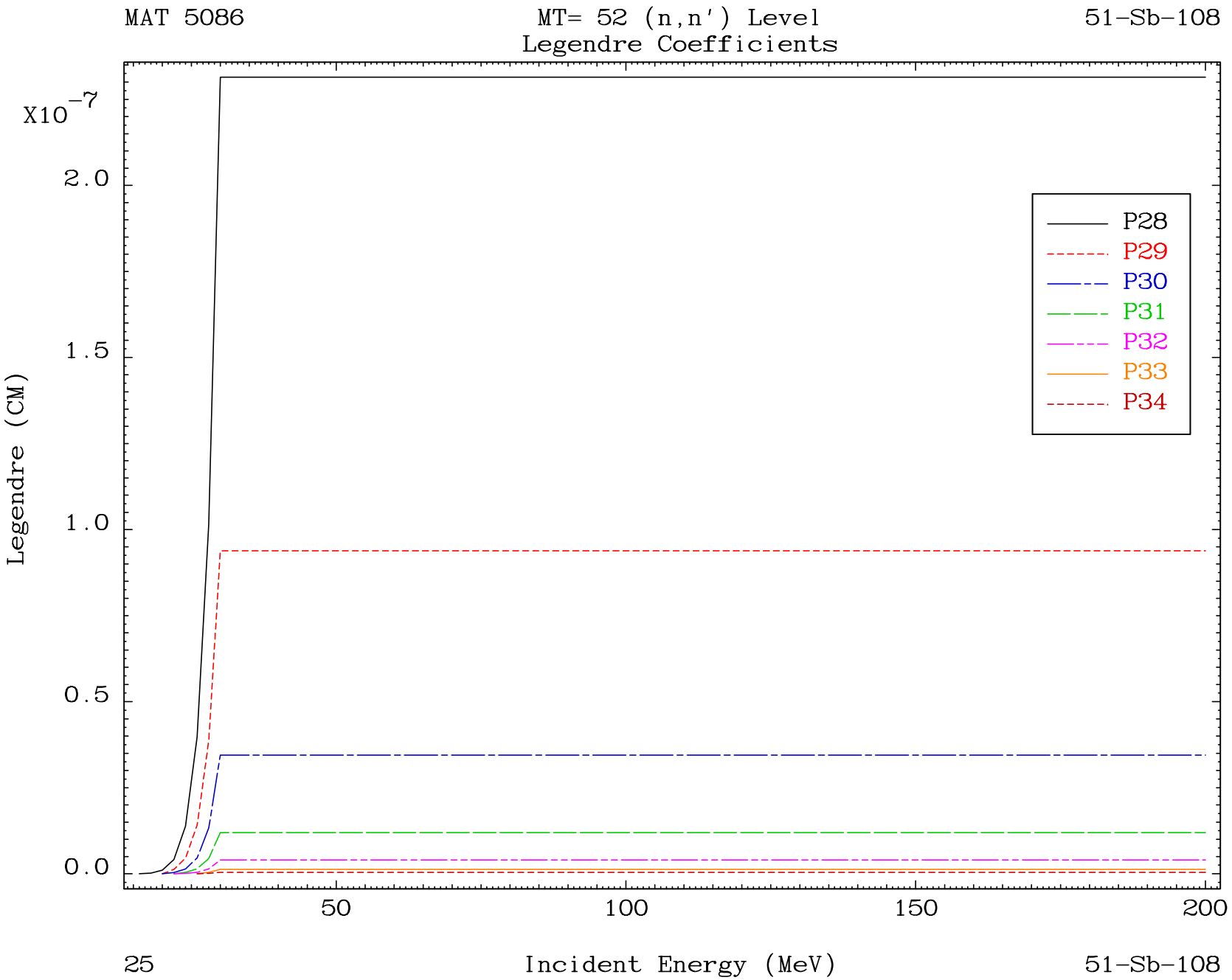

MAT 5086
MT= 51 (n,n') Level
Legendre Coefficients
51-Sb-108
X10^-4
1.0
0.5
0.0
-0.5
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
20
Incident Energy (MeV)
51-Sb-108

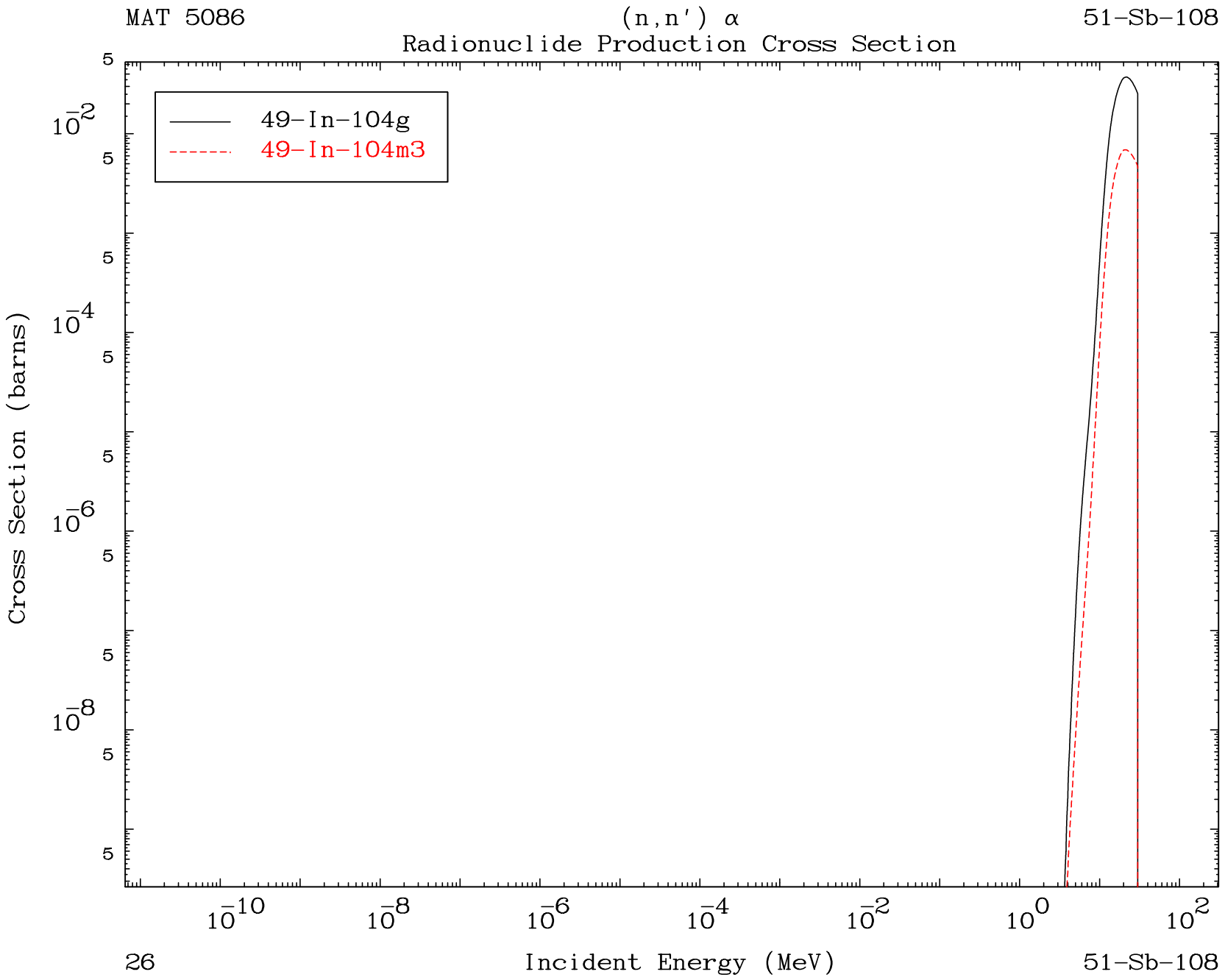

MAT 5086
MT= 51 (n,n') Level
Legendre Coefficients
51-Sb-108
0
X10-7
-1
-2
-3
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
50
100
150
200
21
Incident Energy (MeV)
51-Sb-108

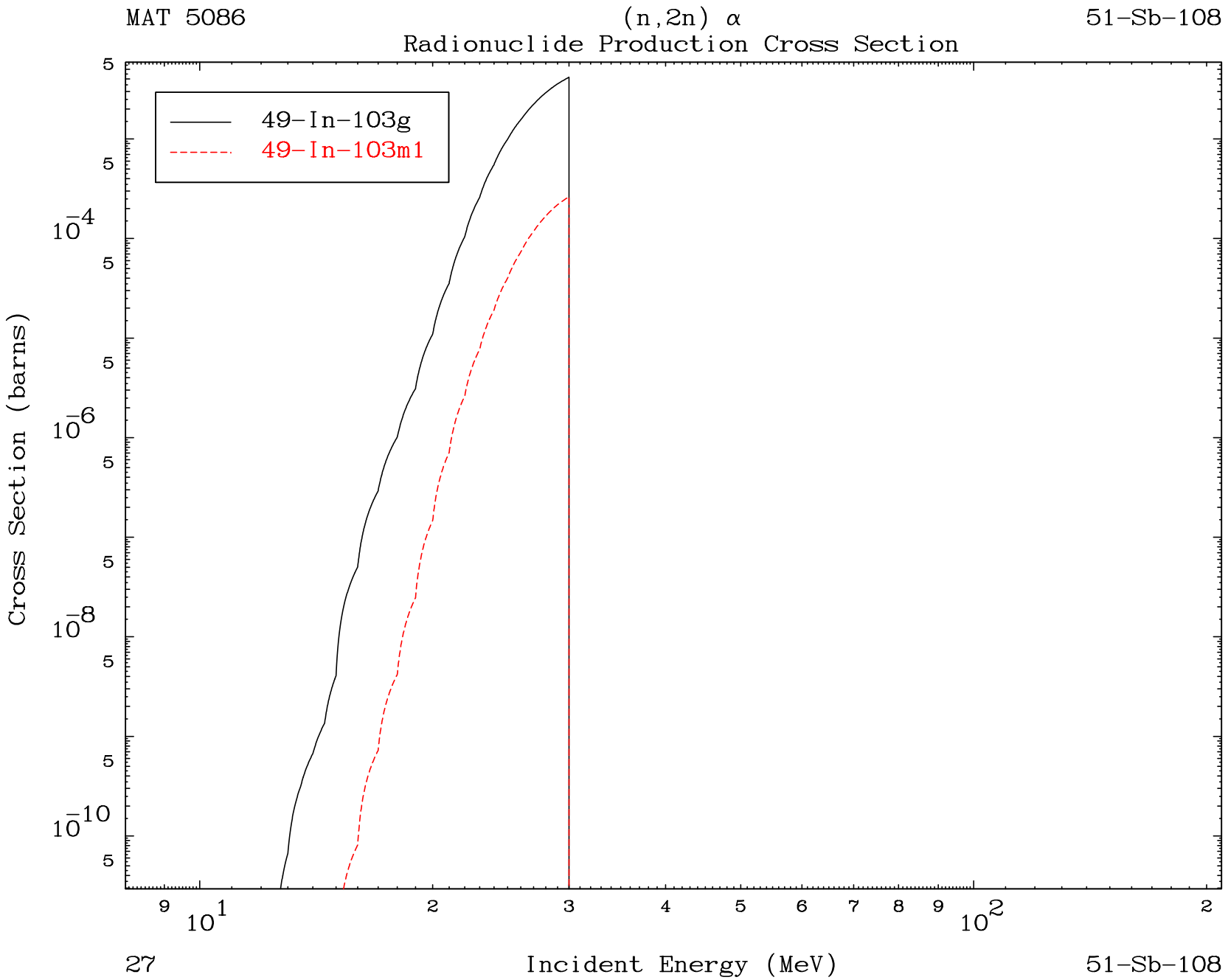

MAT 5086
MT= 52 (n,n') Level
Legendre Coefficients
51-Sb-108
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
22
Incident Energy (MeV)
51-Sb-108
P1
P2
P3
P4
P5
P6
P7
P8
P9

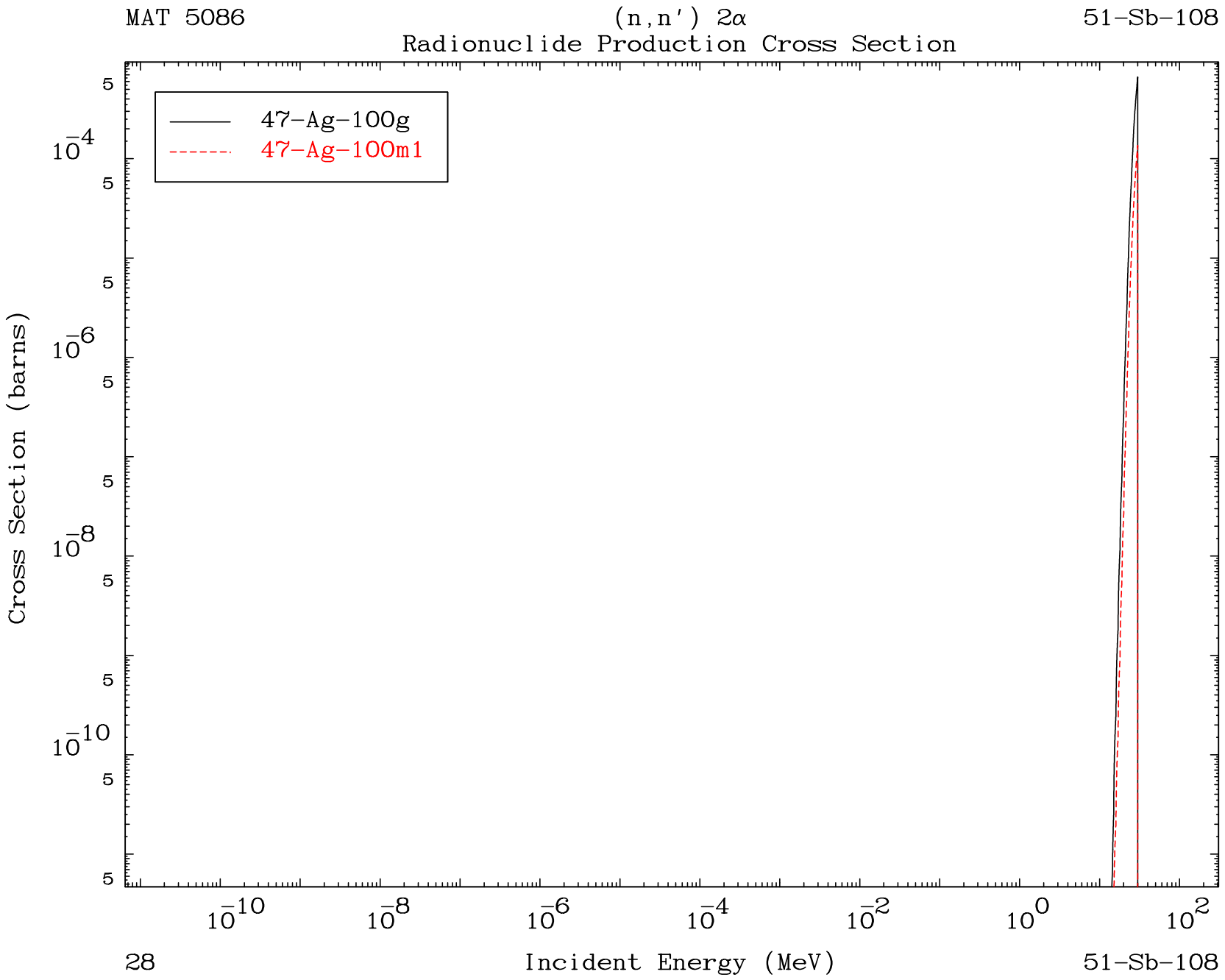

MAT 5086
MT= 52 (n,n') Level
Legendre Coefficients
51-Sb-108
0.008
0.006
0.004
0.002
0.000
-0.002
-0.004
Legendre (CM)
0
50
100
150
200
Incident Energy (MeV)
23
51-Sb-108
P10
P11
P12
P13
P14
P15
P16
P17
P18

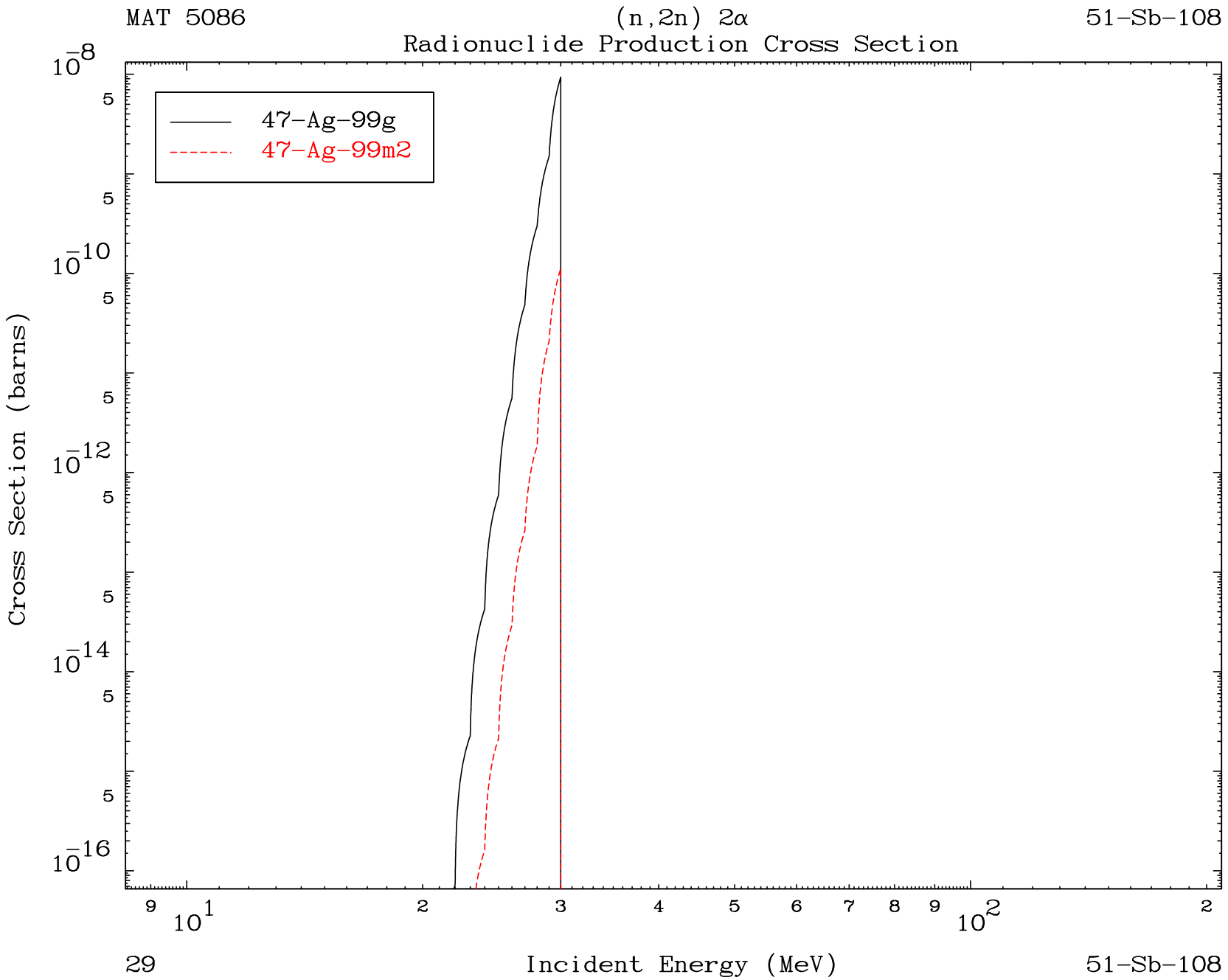

MAT 5086
MT= 52 (n,n') Level
Legendre Coefficients
51-Sb-108
X10^-4
0.0
-0.4
-0.8
-1.2
Legendre (CM)
50
100
150
200
P19
P20
P21
P22
P23
P24
P25
P26
P27
24
Incident Energy (MeV)
51-Sb-108

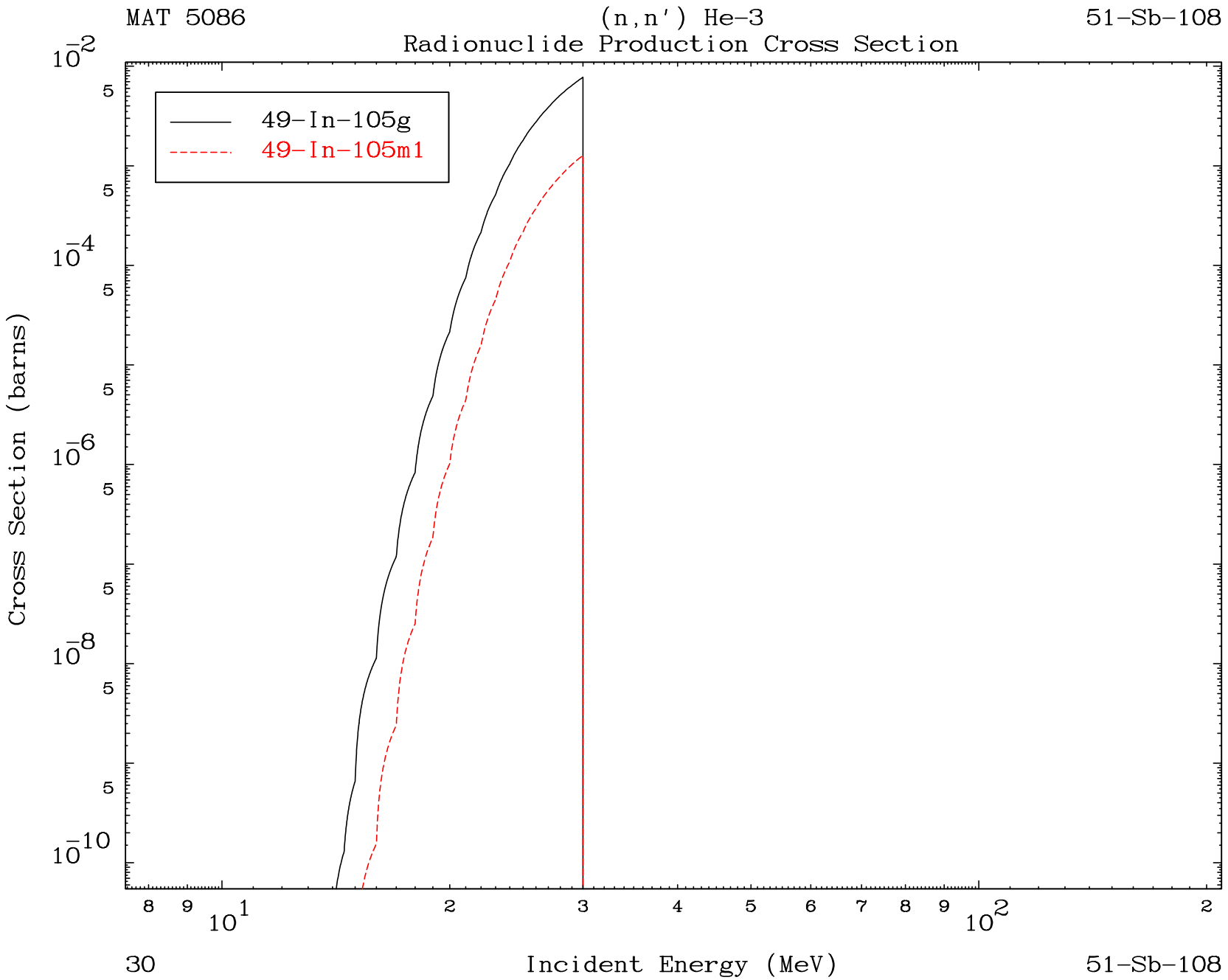

MAT 5086
MT= 52 (n,n') Level
Legendre Coefficients
51-Sb-108
X10-7
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
25
50
100
150
200
Incident Energy (MeV)
51-Sb-108

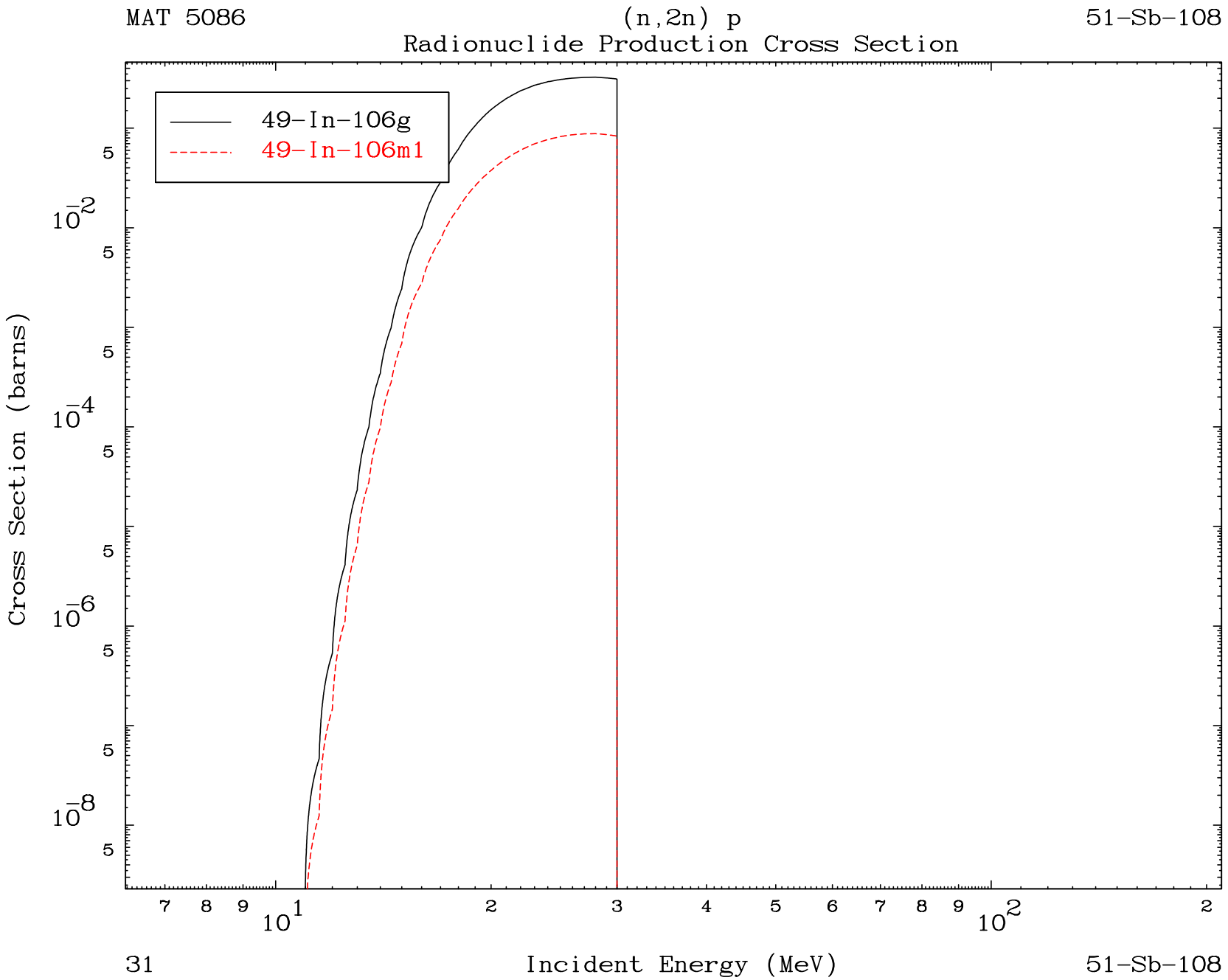

MAT 5086
(n,n') α
51-Sb-108
Radionuclide Production Cross Section
49-In-104g
49-In-104m3
Cross Section (barns)
Incident Energy (MeV)
26
51-Sb-108

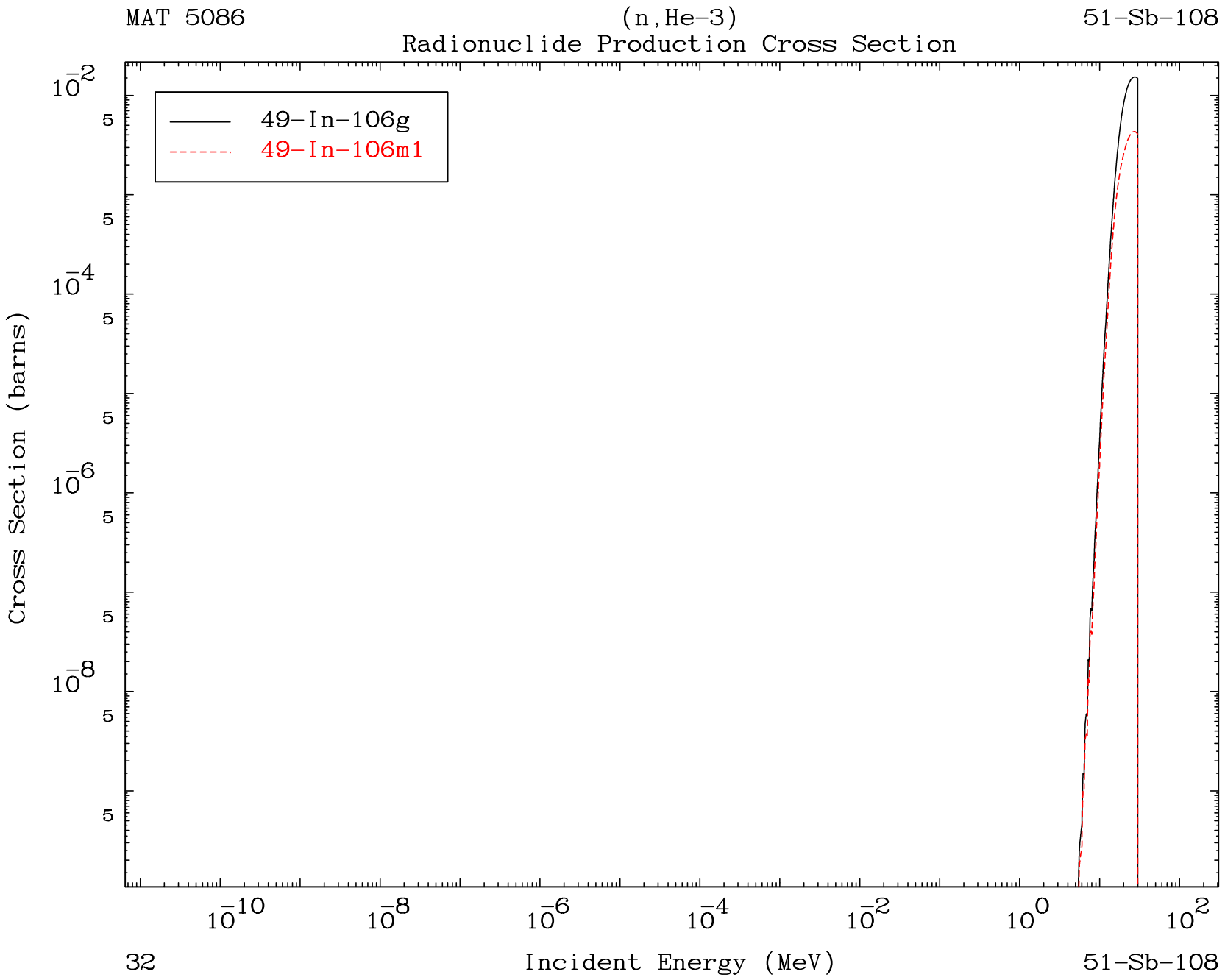

MAT 5086
(n,2n) α
51-Sb-108
Radionuclide Production Cross Section
49-In-103g
49-In-103m1
Cross Section (barns)
Incident Energy (MeV)
27
51-Sb-108

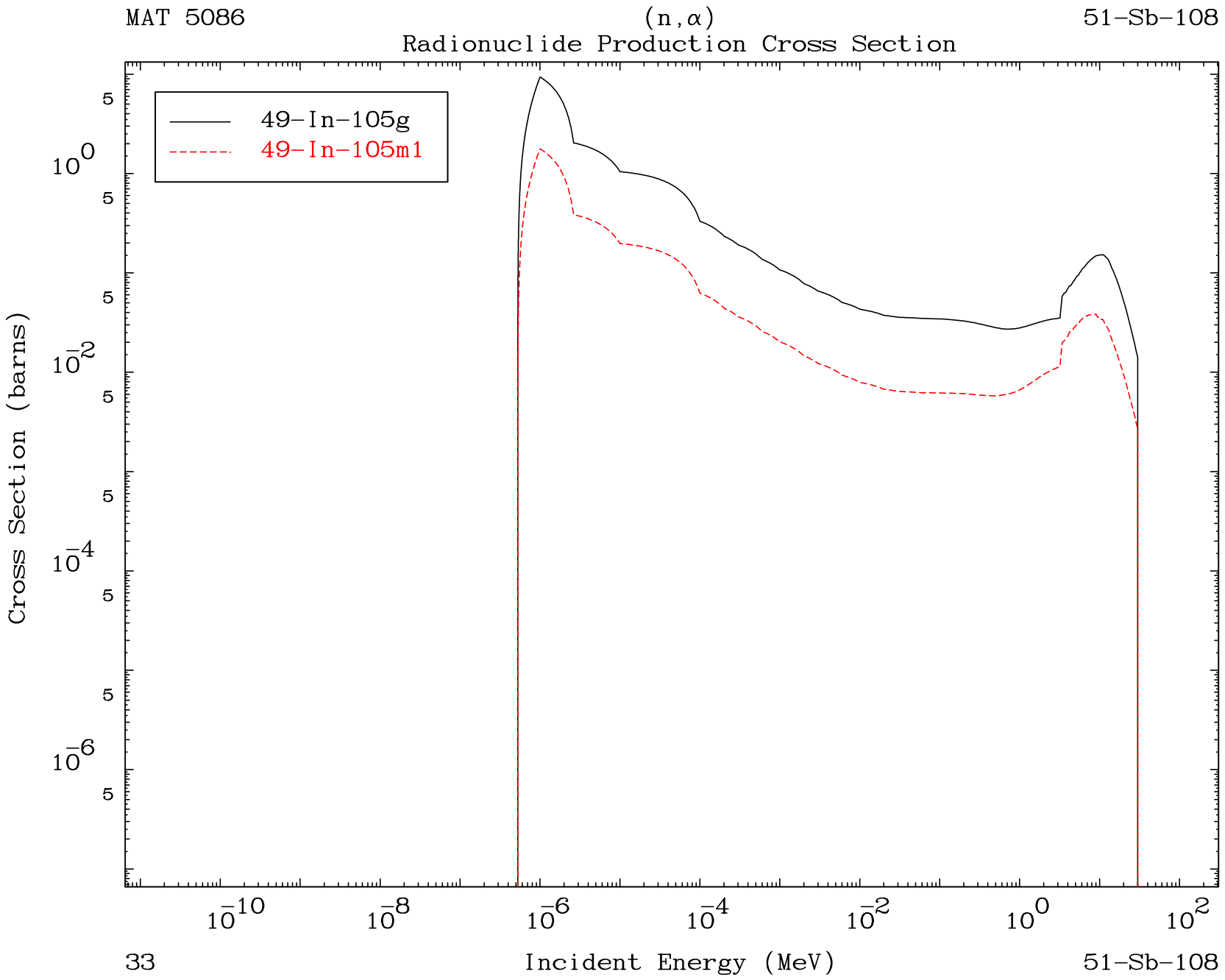

MAT 5086
(n,n') 2α
51-Sb-108
Radionuclide Production Cross Section
47-Ag-100g
47-Ag-100m1
Cross Section (barns)
Incident Energy (MeV)
28
51-Sb-108

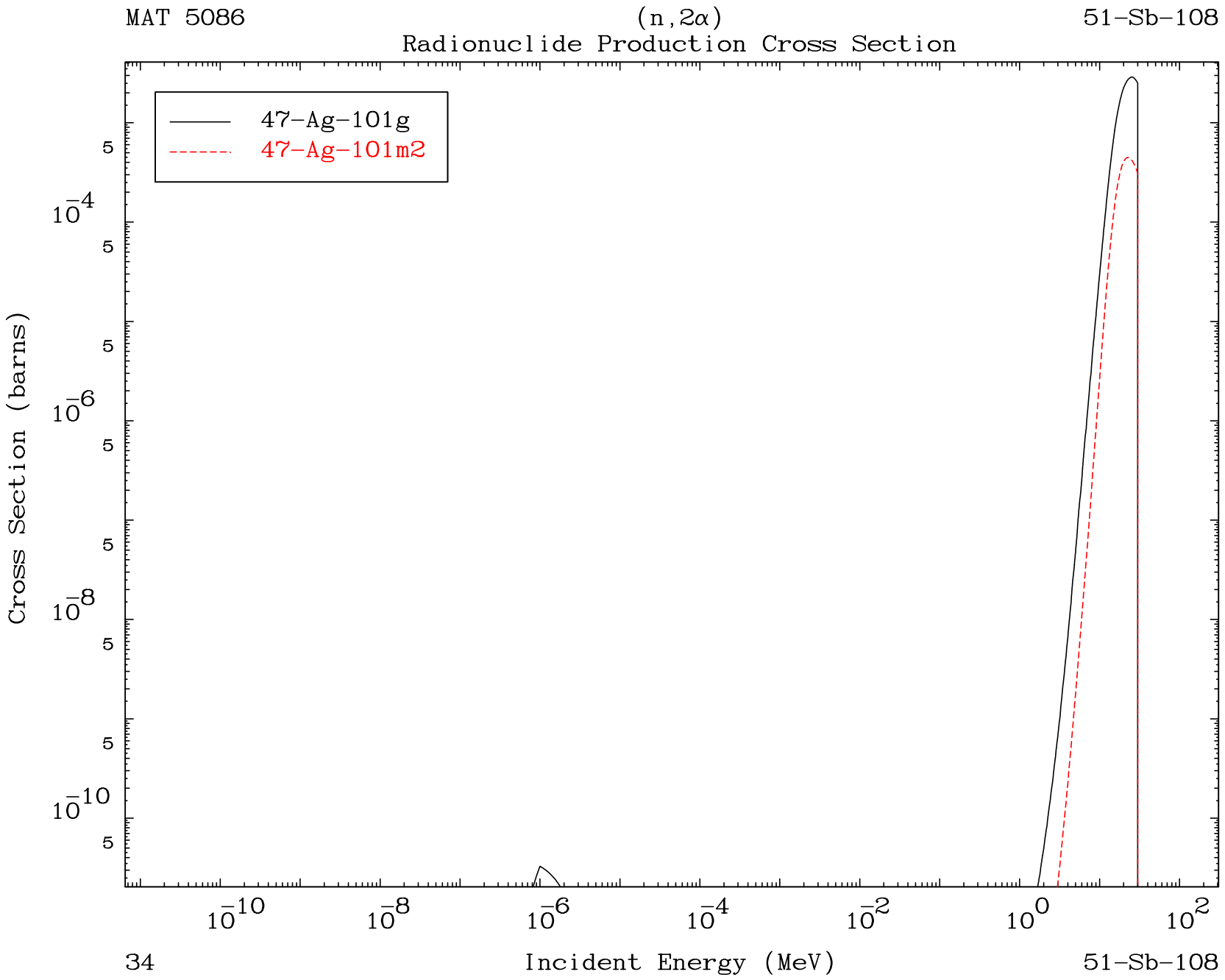

MAT 5086
(n,2n) 2α
51-Sb-108
Radionuclide Production Cross Section
47-Ag-99g
47-Ag-99m2
Cross Section (barns)
Incident Energy (MeV)
29
51-Sb-108

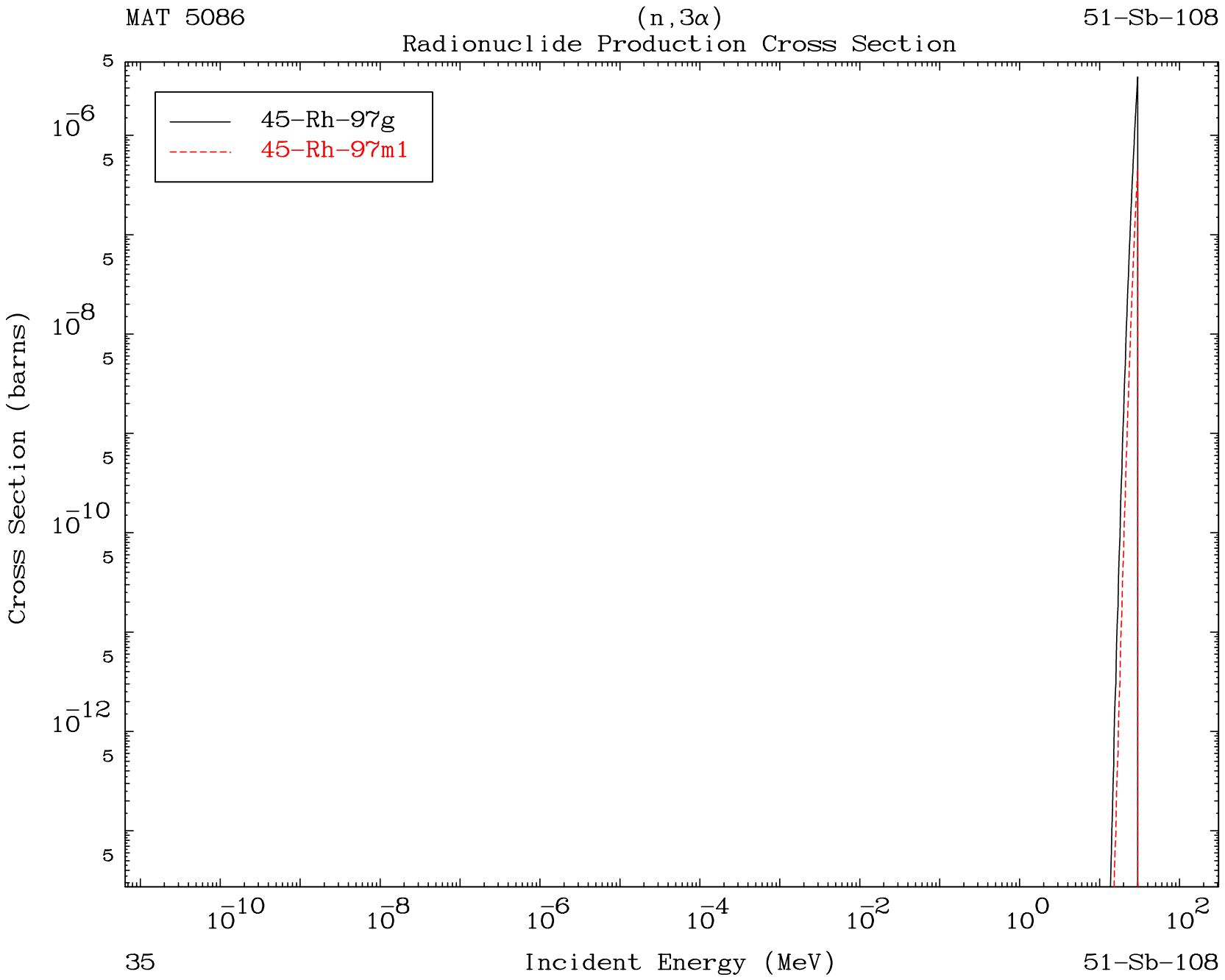

MAT 5086
(n,n') He-3
51-Sb-108
Radionuclide Production Cross Section
49-In-105g
49-In-105m1
Cross Section (barns)
Incident Energy (MeV)
30
51-Sb-108

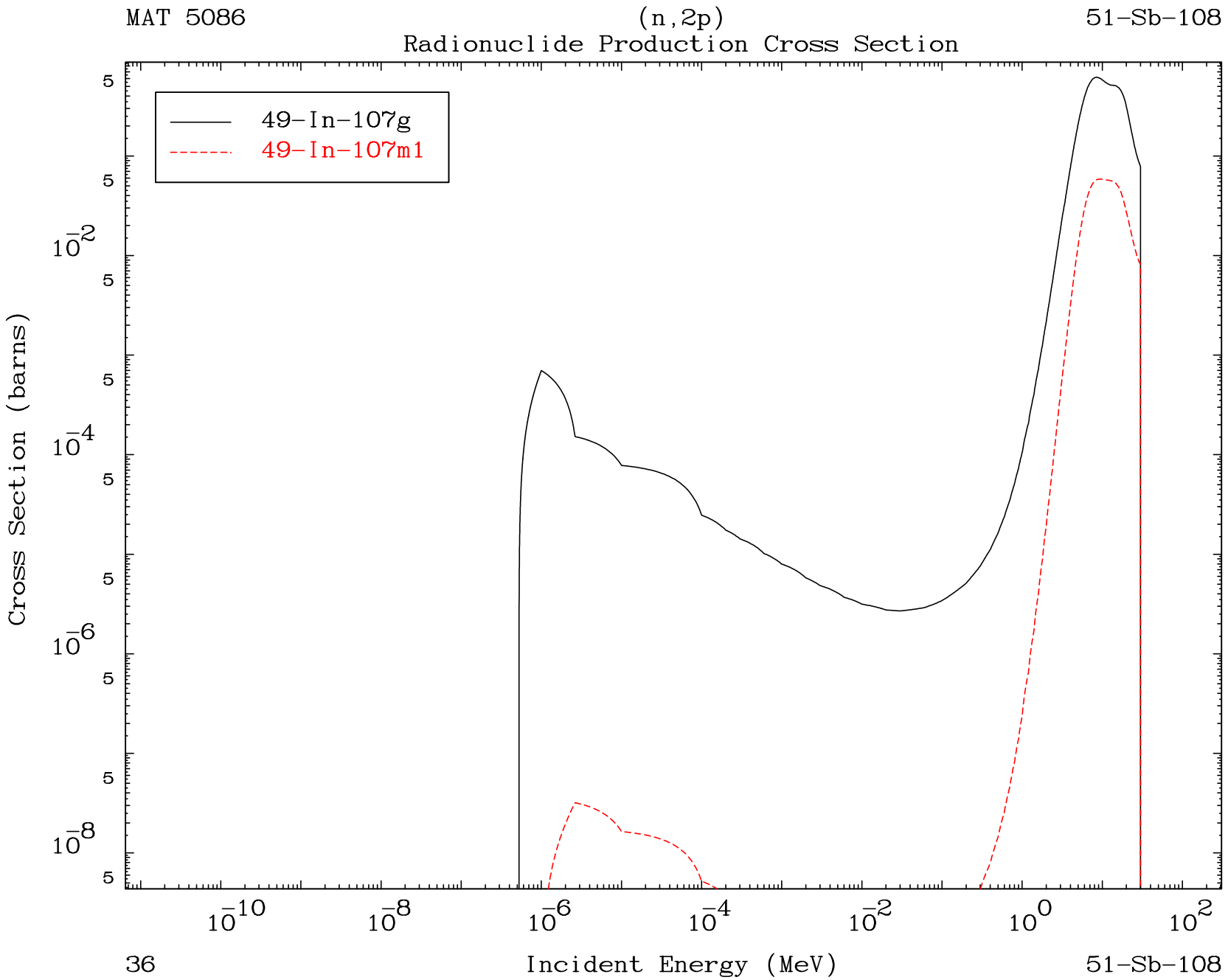

MAT 5086
(n,2n) p
51-Sb-108
Radionuclide Production Cross Section
49-In-106g
49-In-106m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
7 8 9 10 1 2 3 4 5 6 7 8 9 10 2 2
Incident Energy (MeV)
31
51-Sb-108

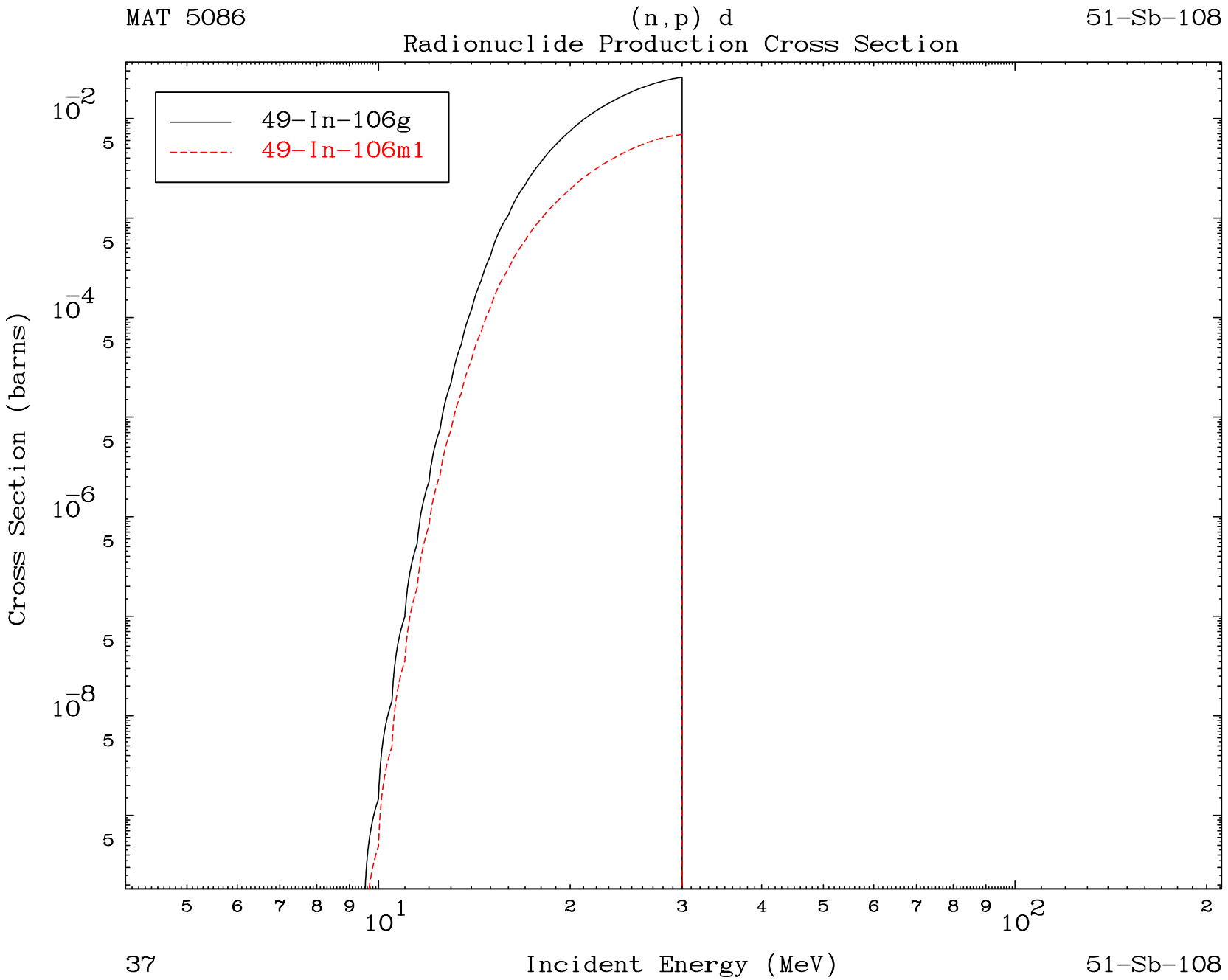

MAT 5086
(n,He-3)
51-Sb-108
Radionuclide Production Cross Section
49-In-106g
49-In-106m1
Cross Section (barns)
Incident Energy (MeV)
32
51-Sb-108

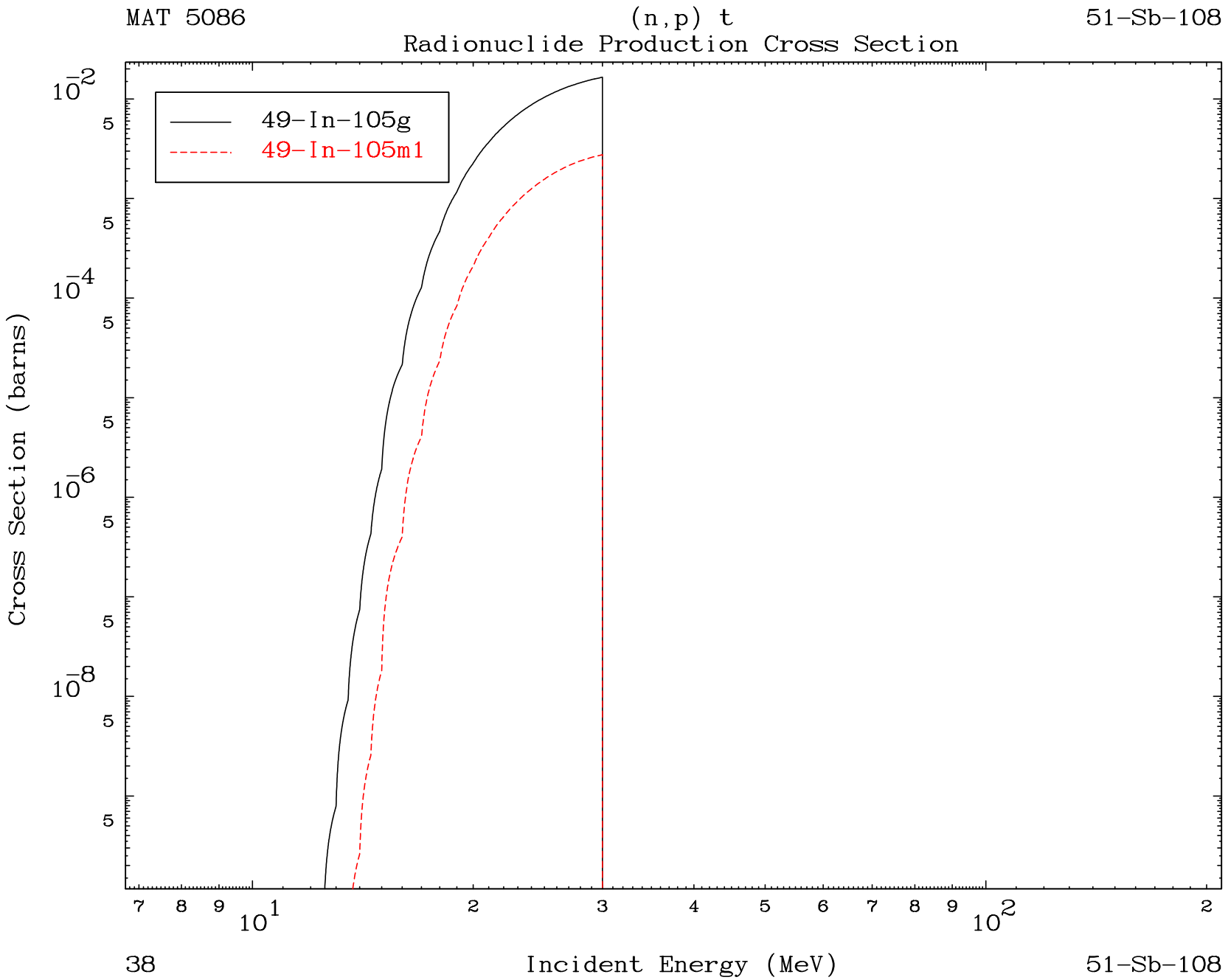

MAT 5086
(n,α)
51-Sb-108
Radionuclide Production Cross Section
49-In-105g
49-In-105m1
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
33
51-Sb-108


MAT 5086
(n,2α)
51-Sb-108
Radionuclide Production Cross Section
47-Ag-101g
47-Ag-101m2
Cross Section (barns)
Incident Energy (MeV)
34
51-Sb-108


MAT 5086
(n,3α)
51-Sb-108
Radionuclide Production Cross Section
45-Rh-97g
45-Rh-97m1
Cross Section (barns)
Incident Energy (MeV)
35
51-Sb-108


MAT 5086
(n,2p)
51-Sb-108
Radionuclide Production Cross Section
49-In-107g
49-In-107m1
Cross Section (barns)
Incident Energy (MeV)
36
51-Sb-108


MAT 5086
(n,p) d
51-Sb-108
Radionuclide Production Cross Section
49-In-106g
49-In-106m1
Cross Section (barns)
Incident Energy (MeV)
37
51-Sb-108


MAT 5086
(n,p) t
51-Sb-108
Radionuclide Production Cross Section
49-In-105g
49-In-105m1
Cross Section (barns)
Incident Energy (MeV)
38
51-Sb-108