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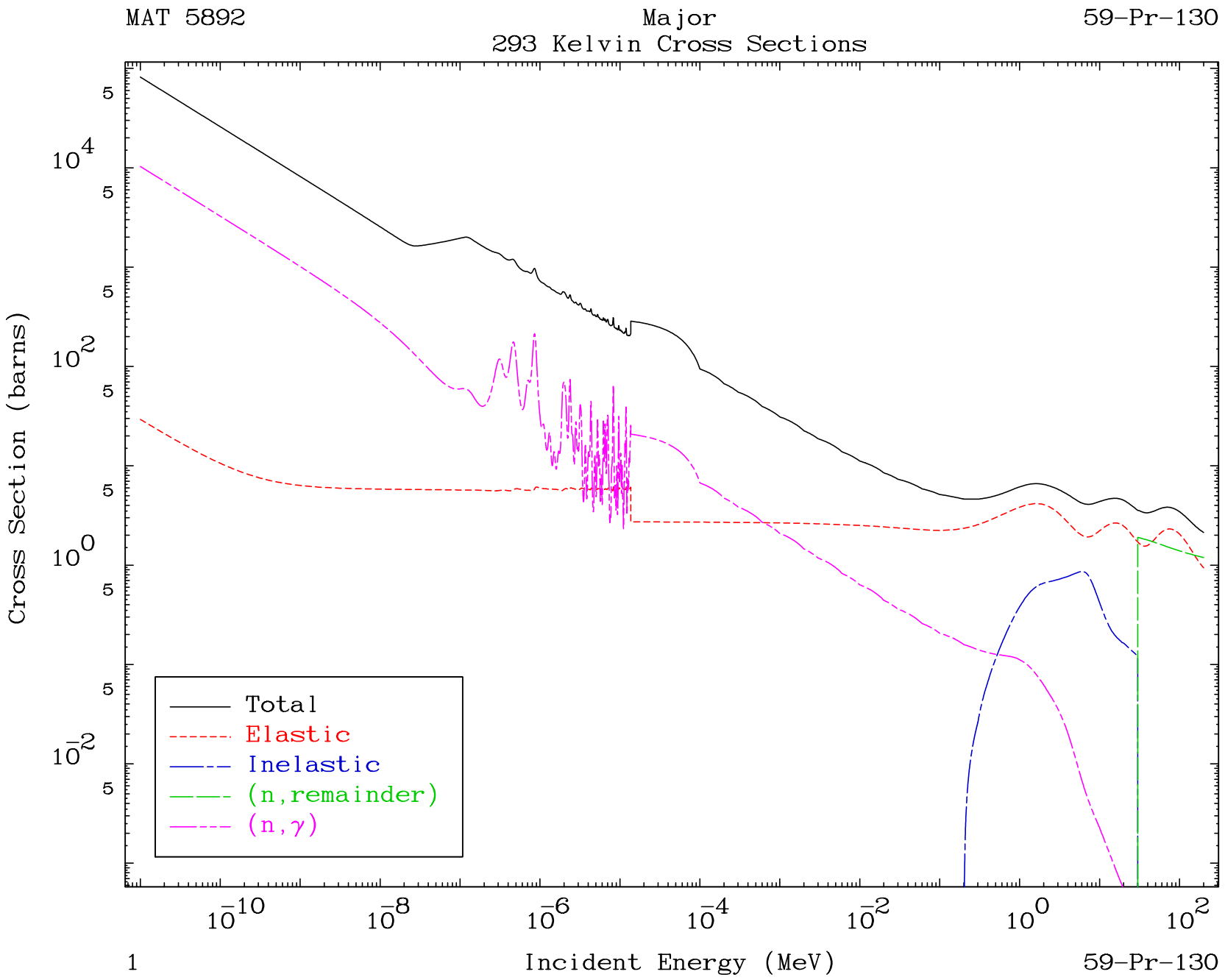
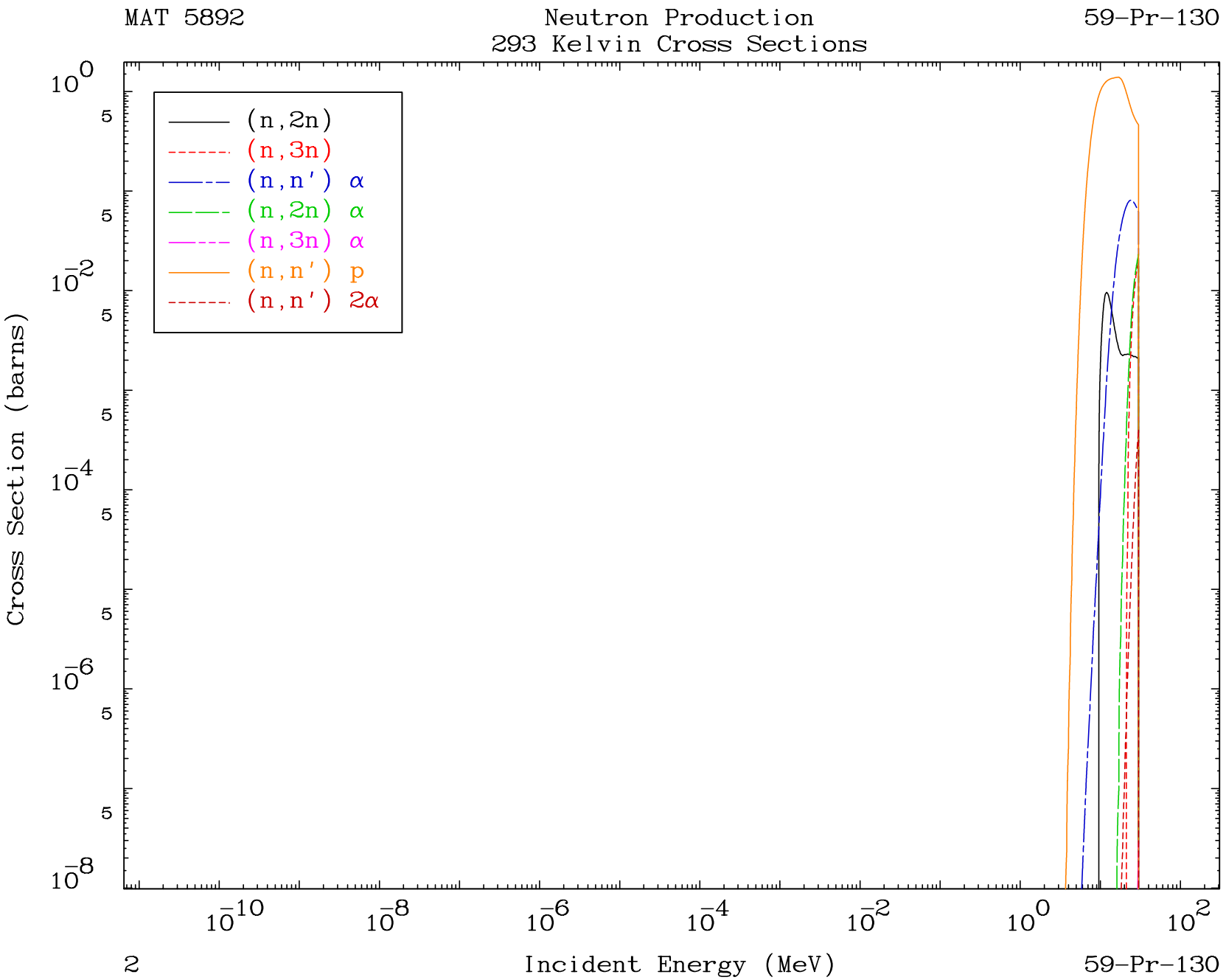
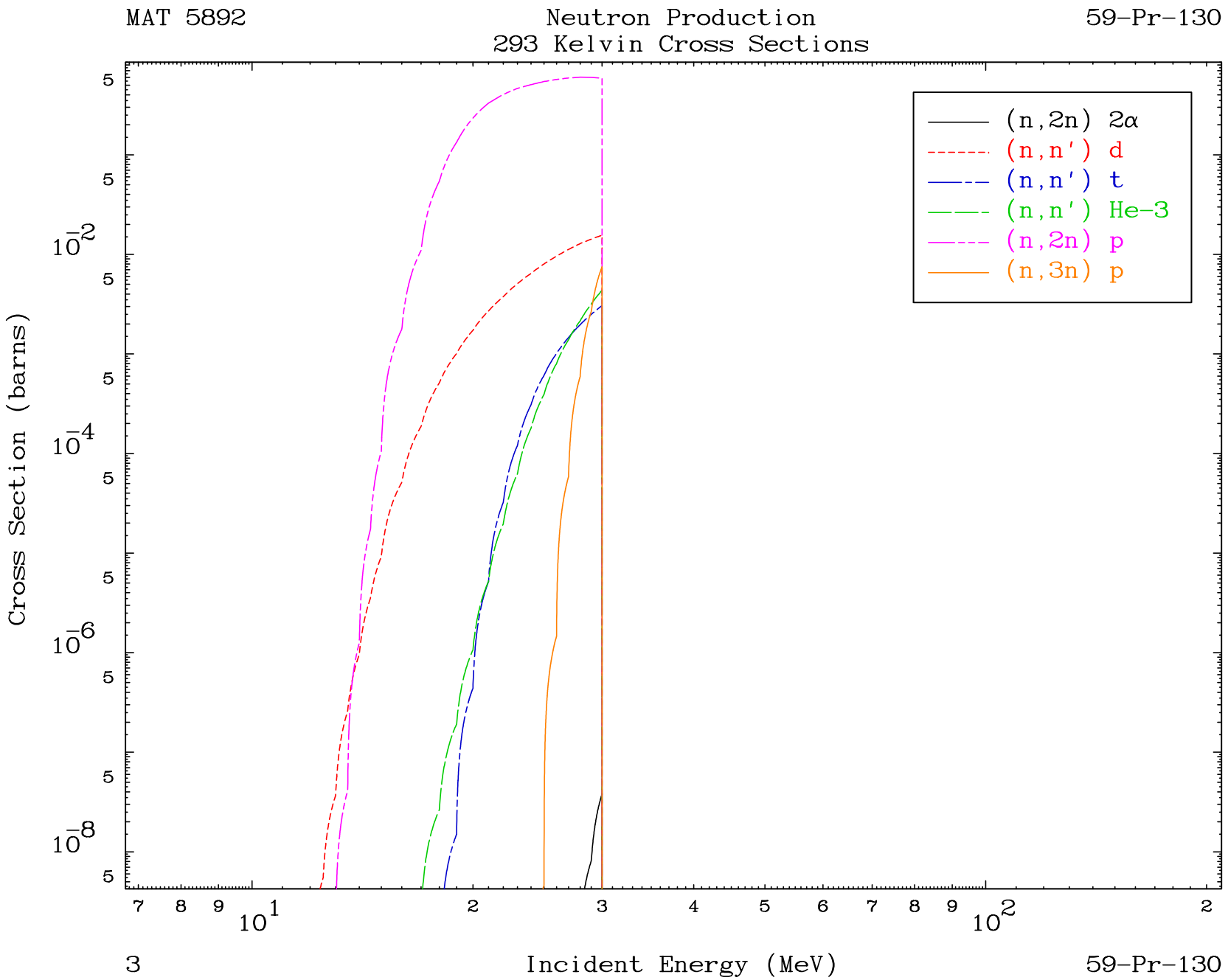
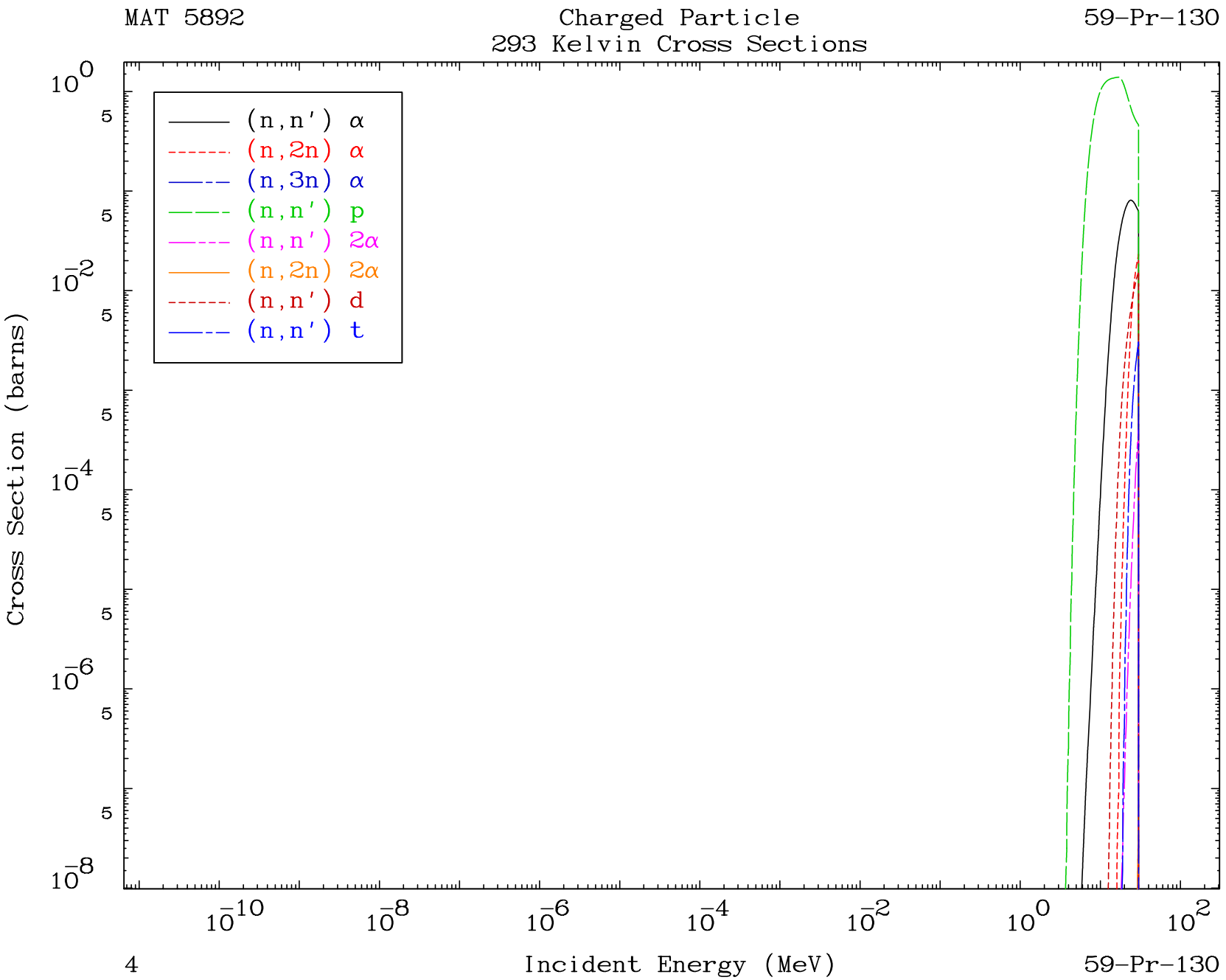
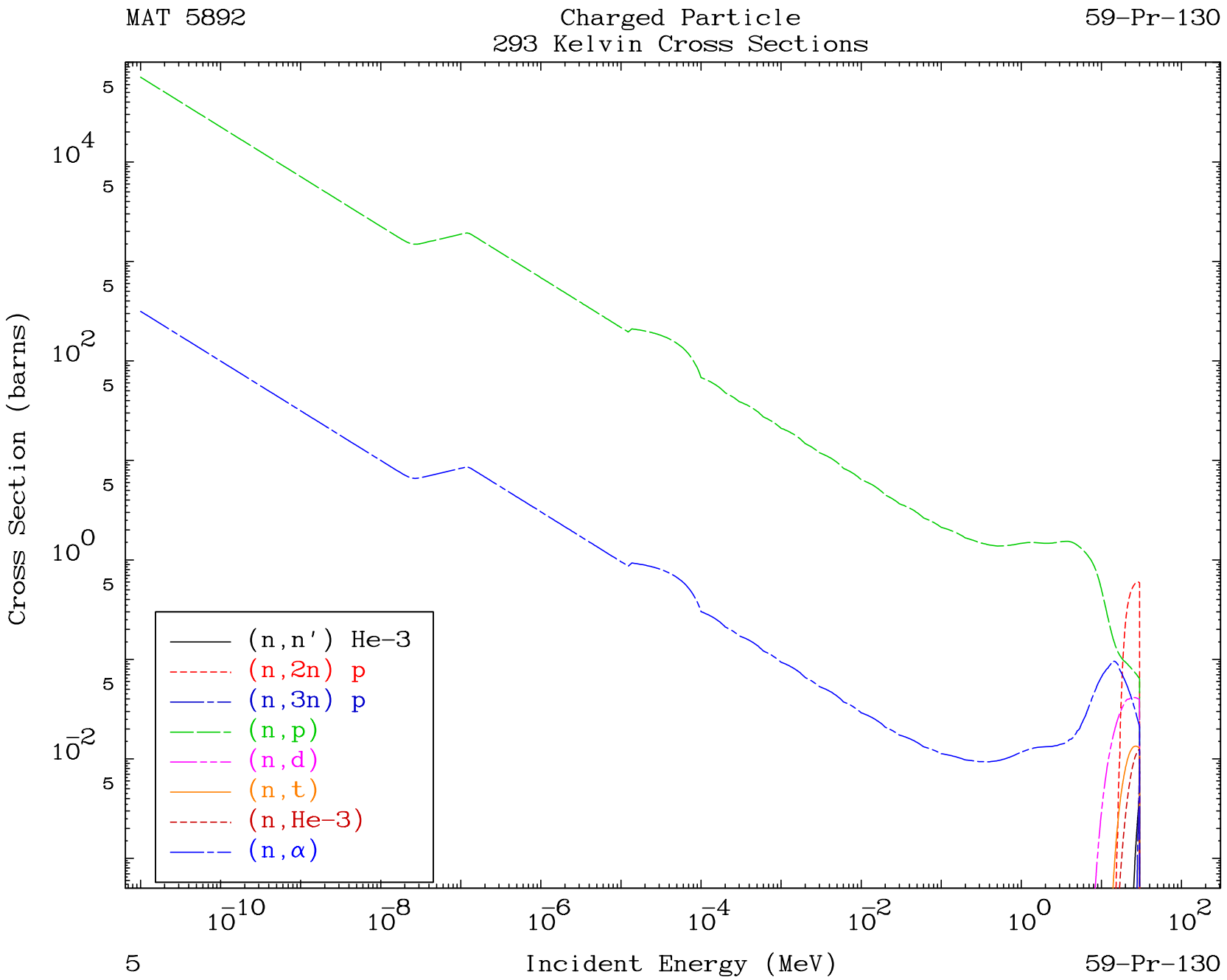
Press Mouse Button to Start

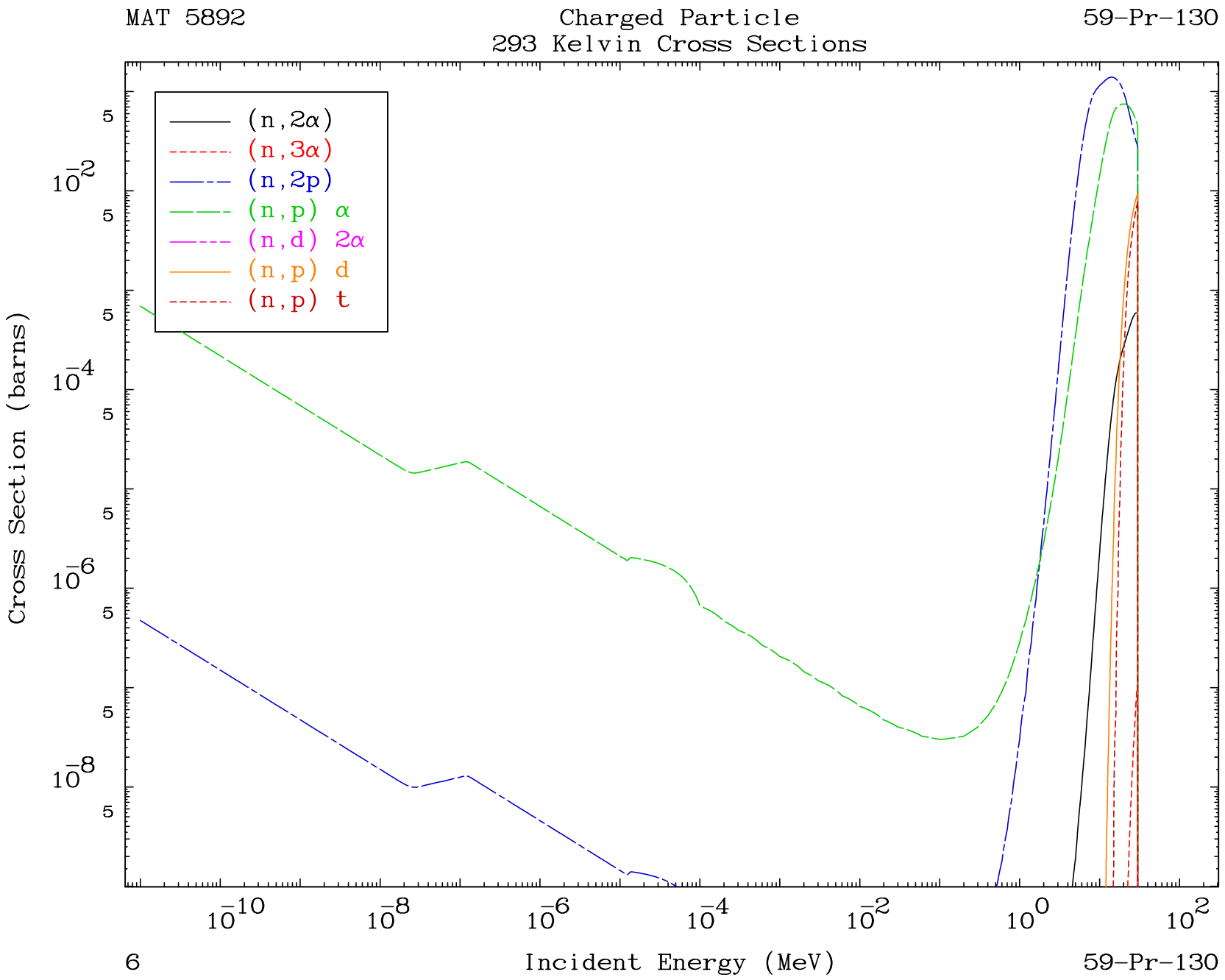

MAT 5892
Major
59-Pr-130
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
59-Pr-130
1

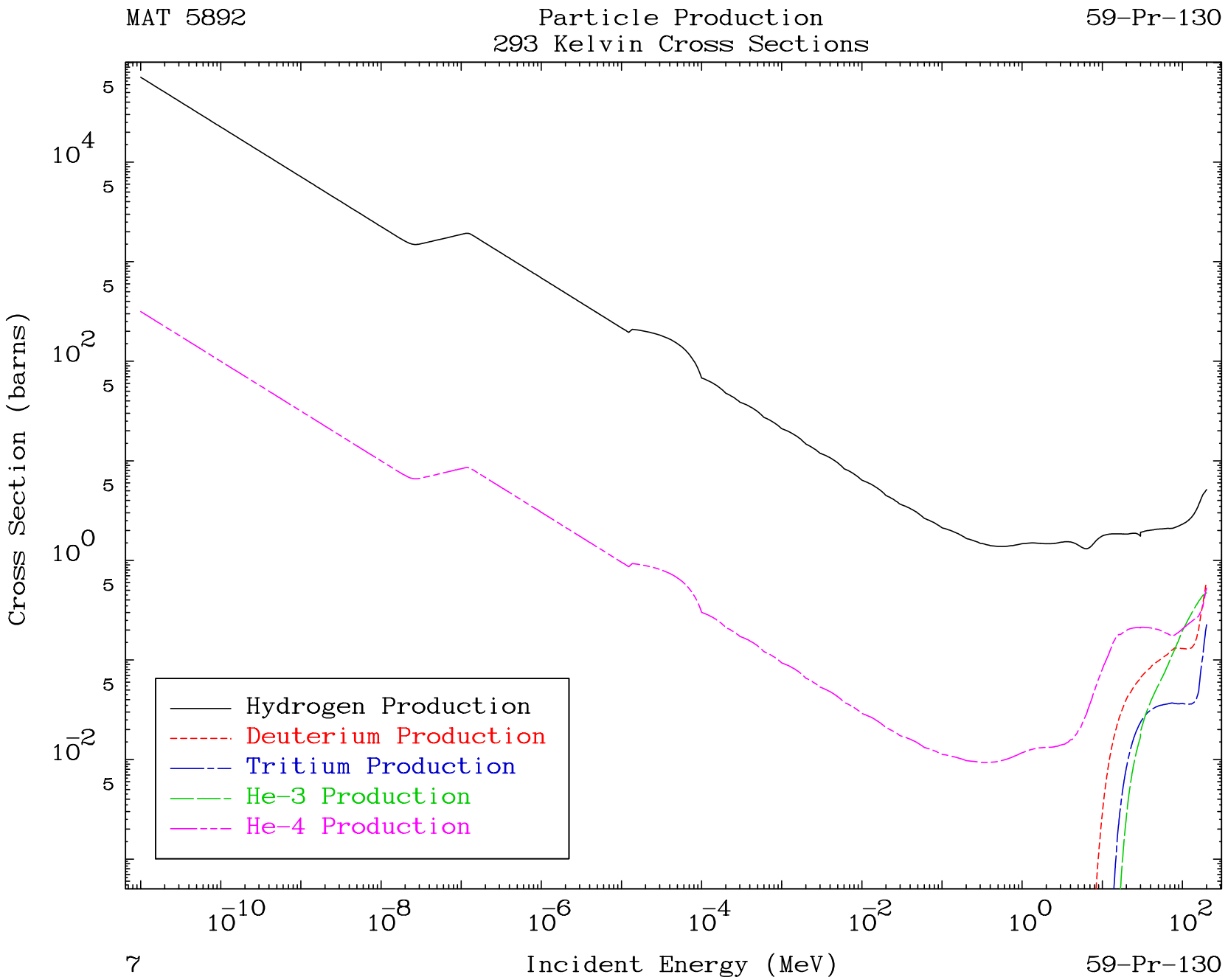

MAT 5892
Neutron Production
293 Kelvin Cross Sections
59-Pr-130
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
59-Pr-130

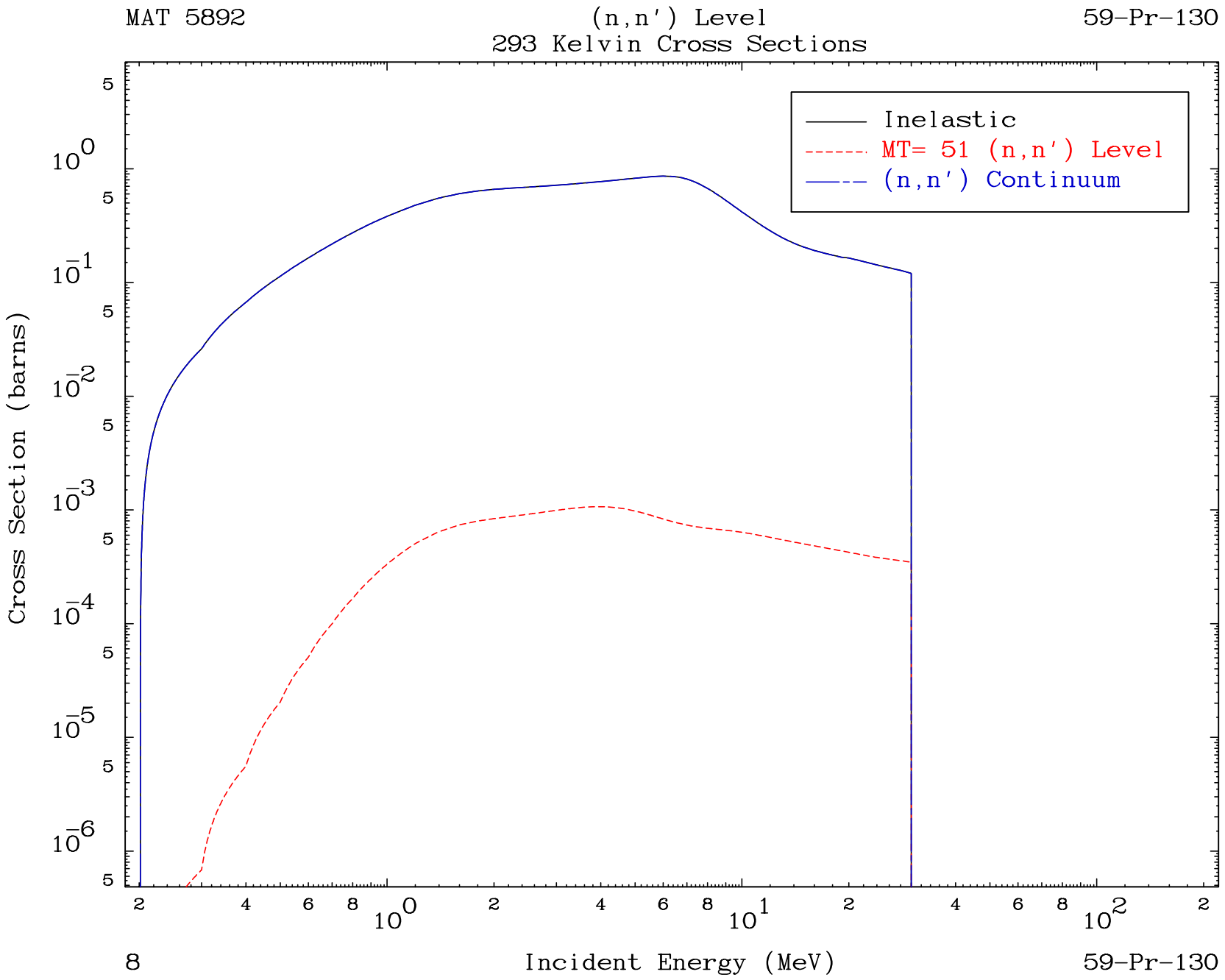

MAT 5892
Neutron Production
293 Kelvin Cross Sections
59-Pr-130
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
59-Pr-130

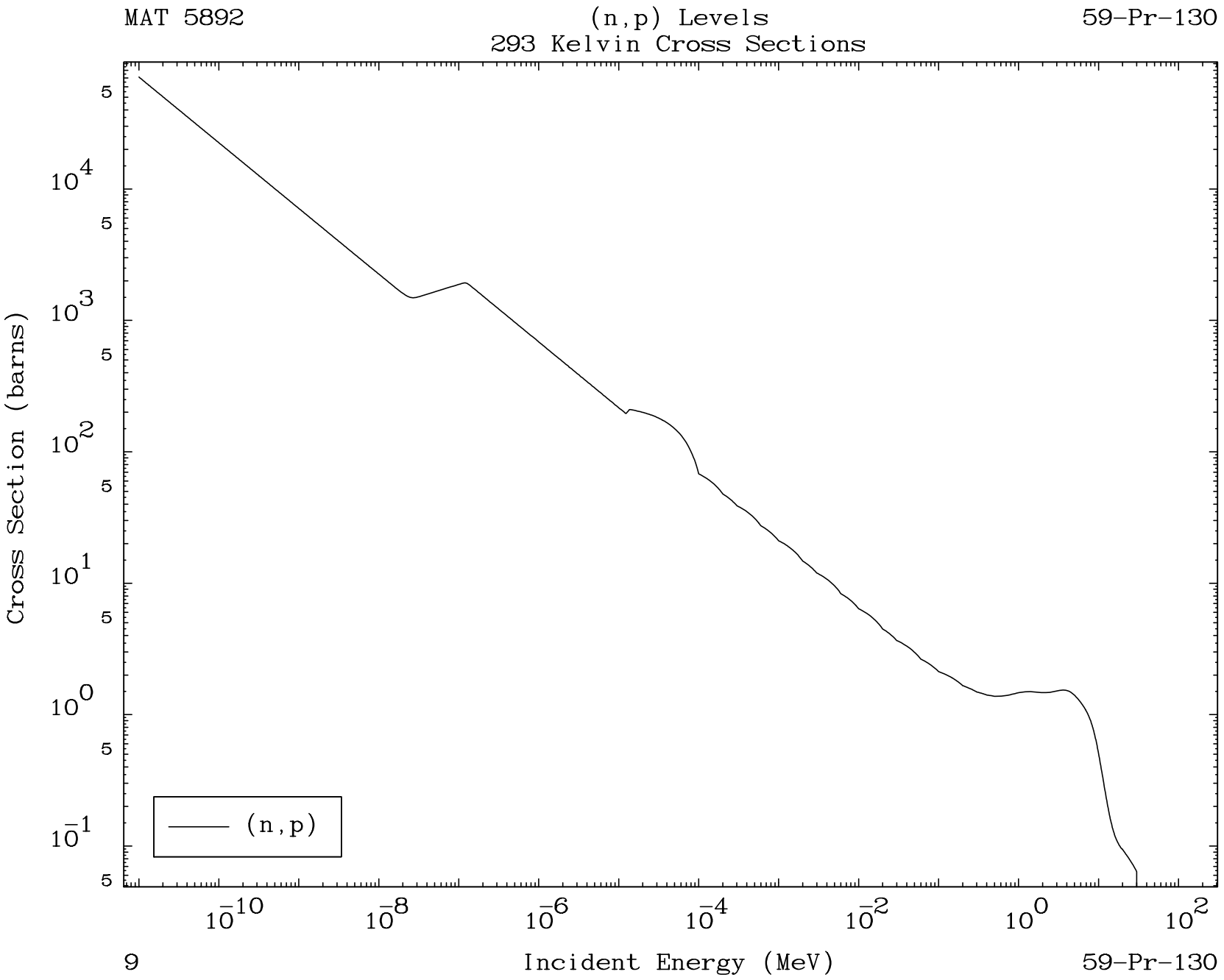

MAT 5892
Charged Particle
293 Kelvin Cross Sections
59-Pr-130
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
(n,n') d
(n,n') t
Cross Section (barns)
Incident Energy (MeV)
4
59-Pr-130

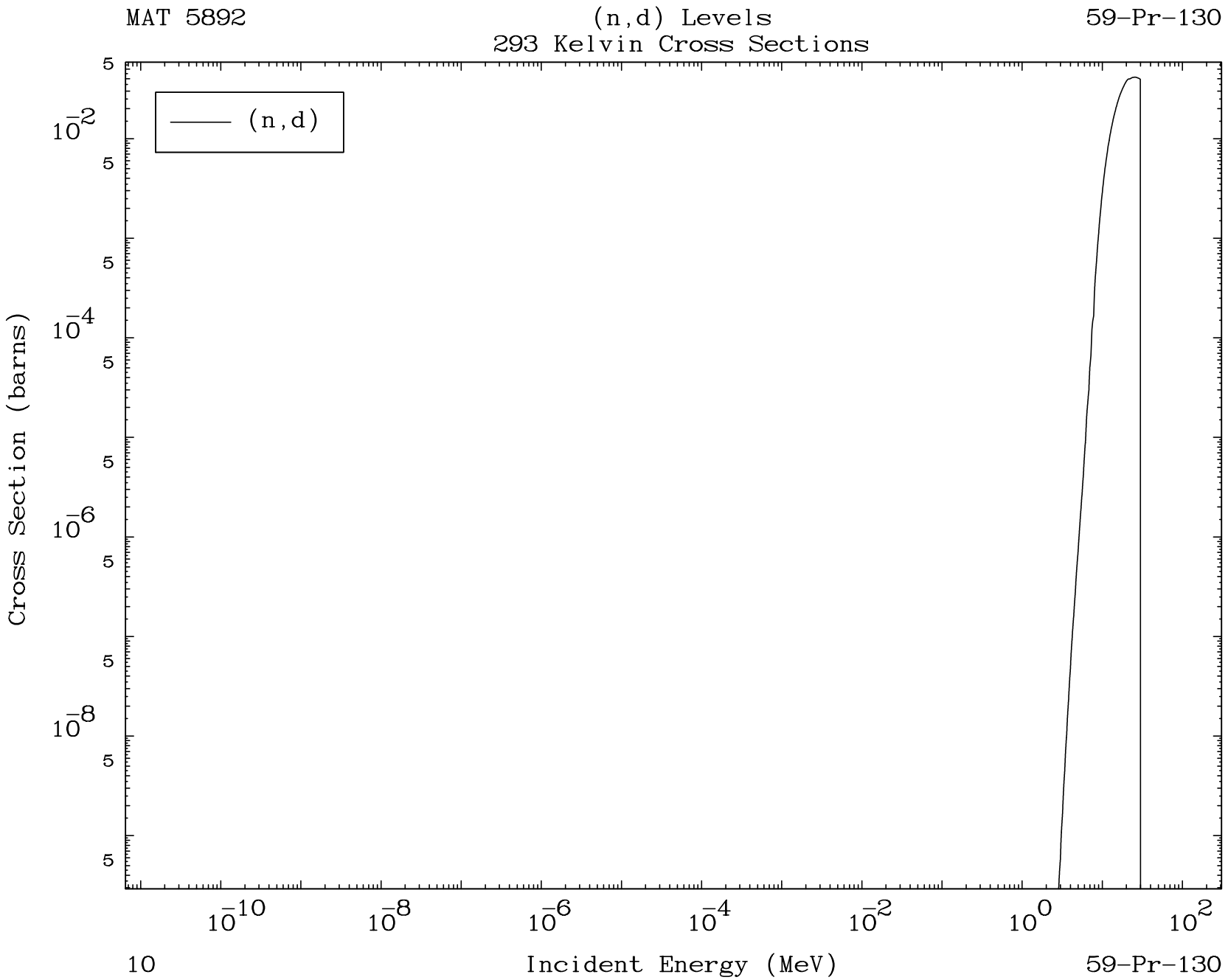

MAT 5892
Charged Particle
293 Kelvin Cross Sections
59-Pr-130
Cross Section (barns)
Incident Energy (MeV)
59-Pr-130
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)

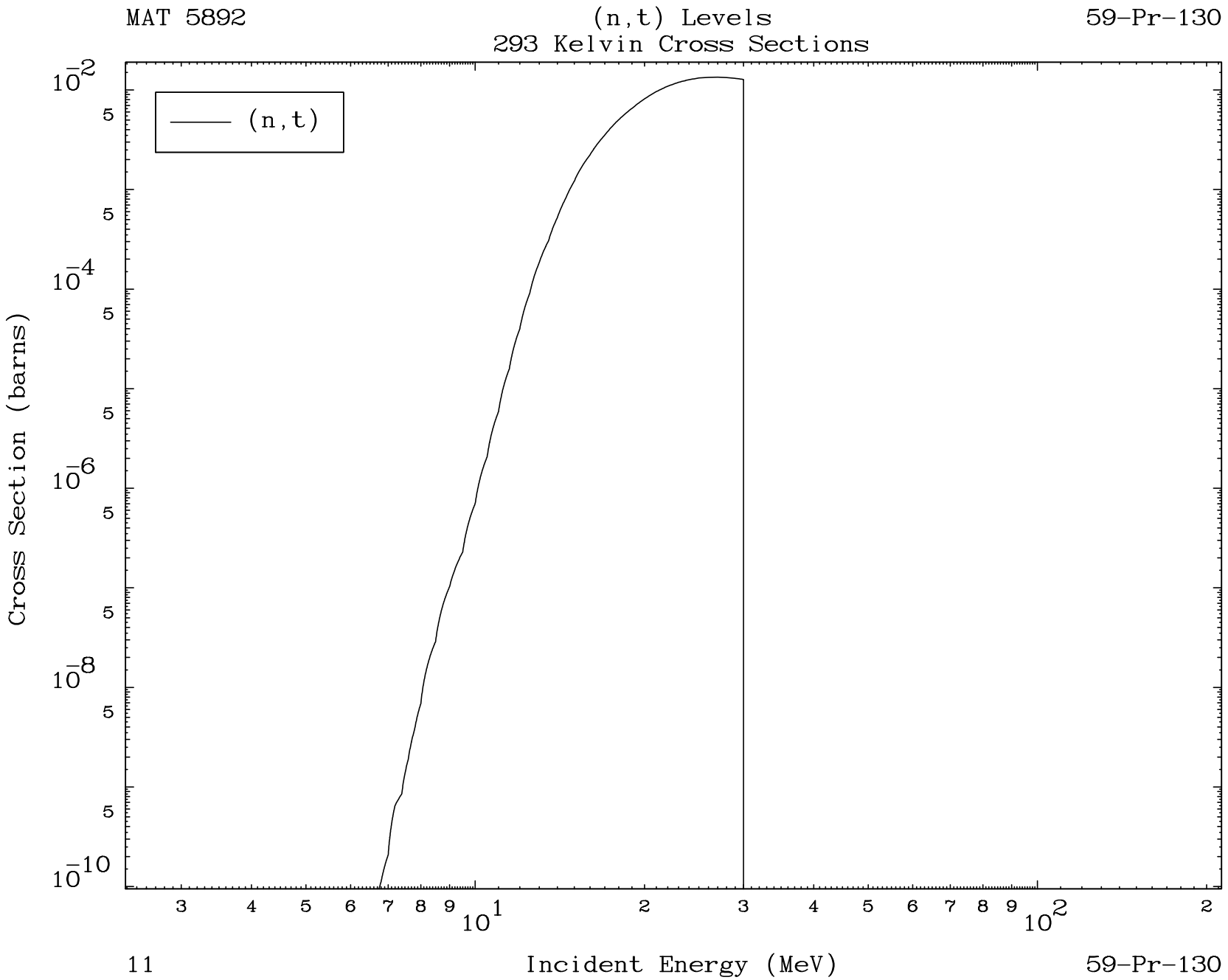

MAT 5892
Charged Particle
293 Kelvin Cross Sections
59-Pr-130
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,d) 2α
(n,p) d
(n,p) t
Cross Section (barns)
Incident Energy (MeV)
6
59-Pr-130

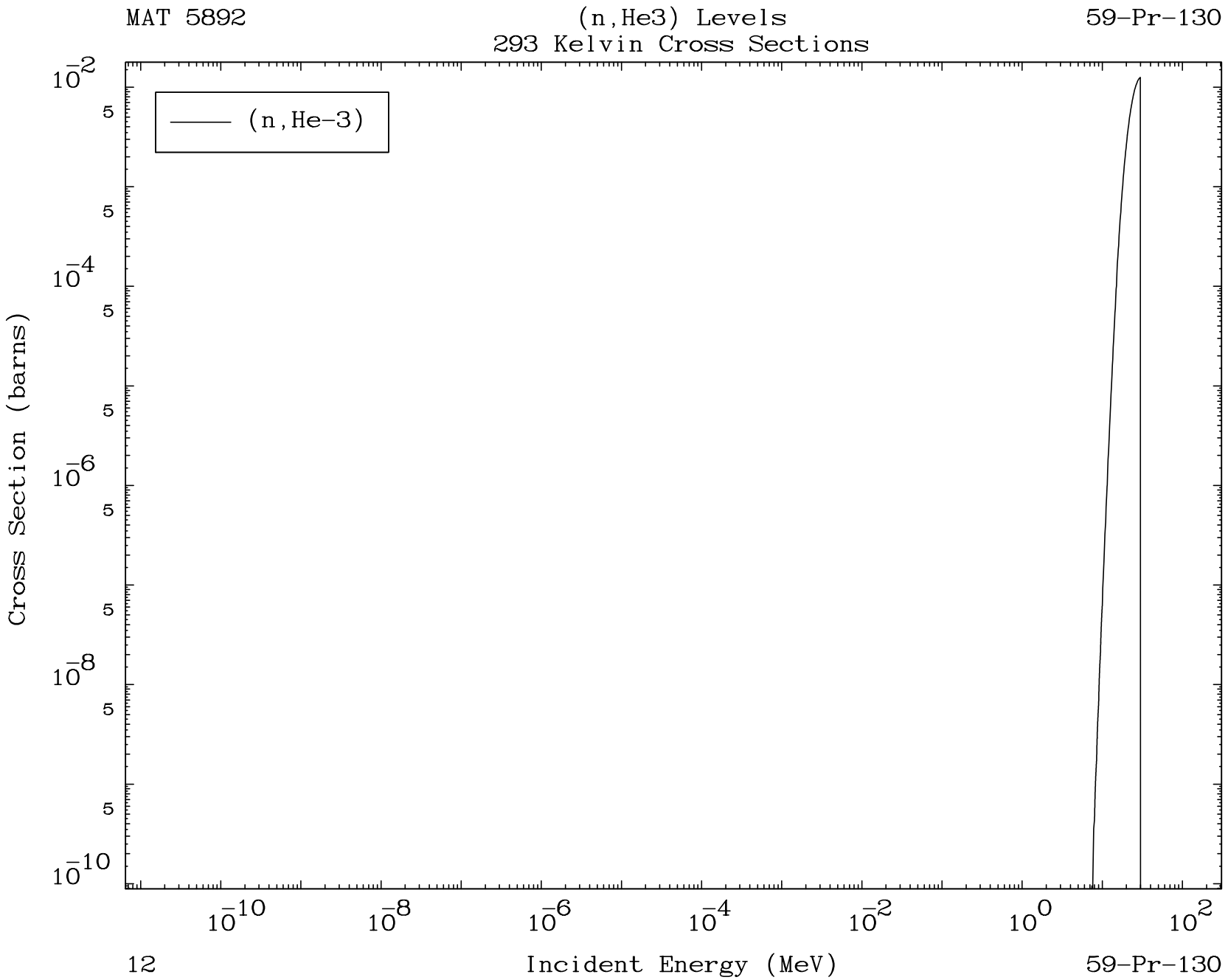

MAT 5892
Particle Production
293 Kelvin Cross Sections
59-Pr-130
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
7
59-Pr-130

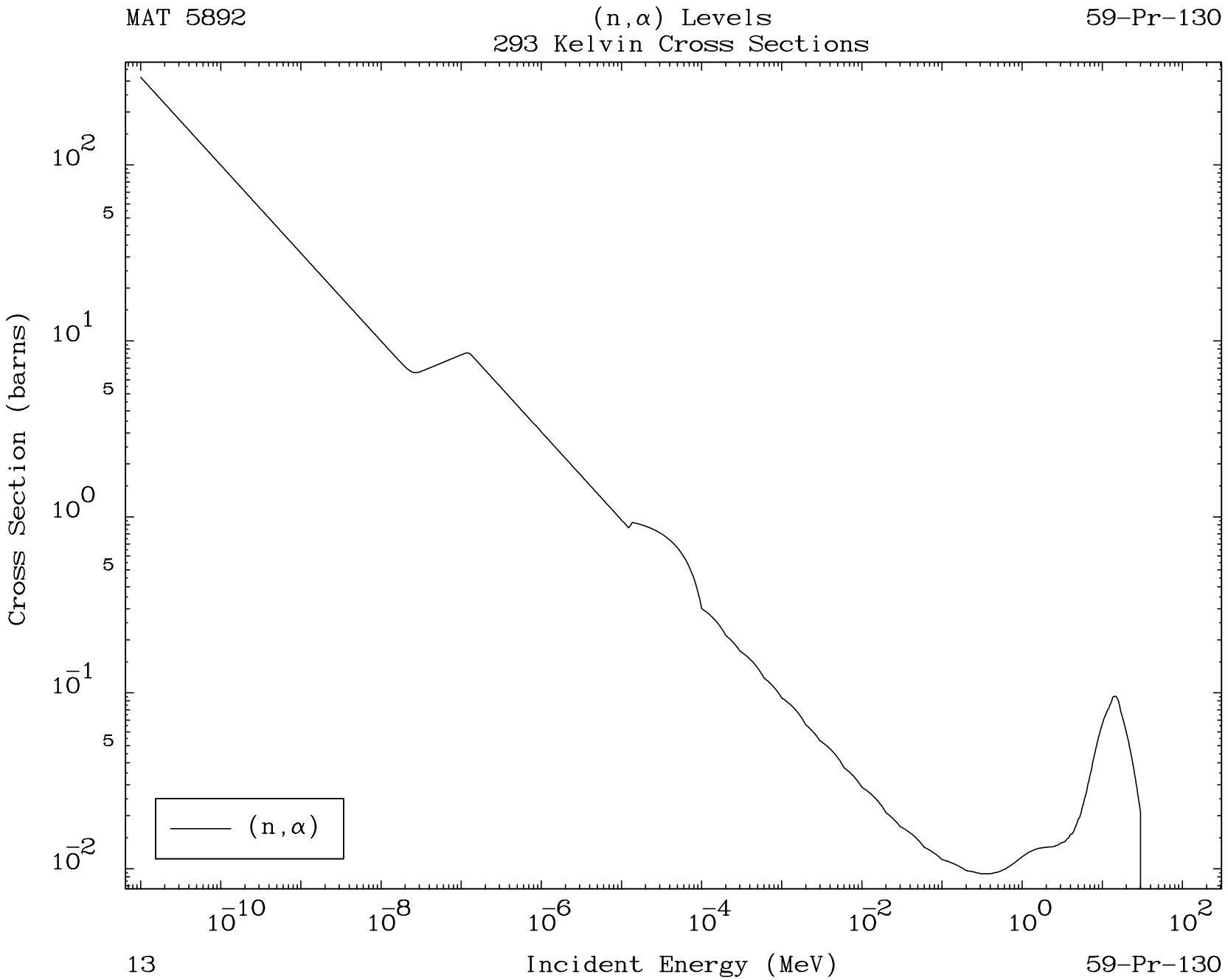

MAT 5892
(n,n') Level
59-Pr-130
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
8
59-Pr-130

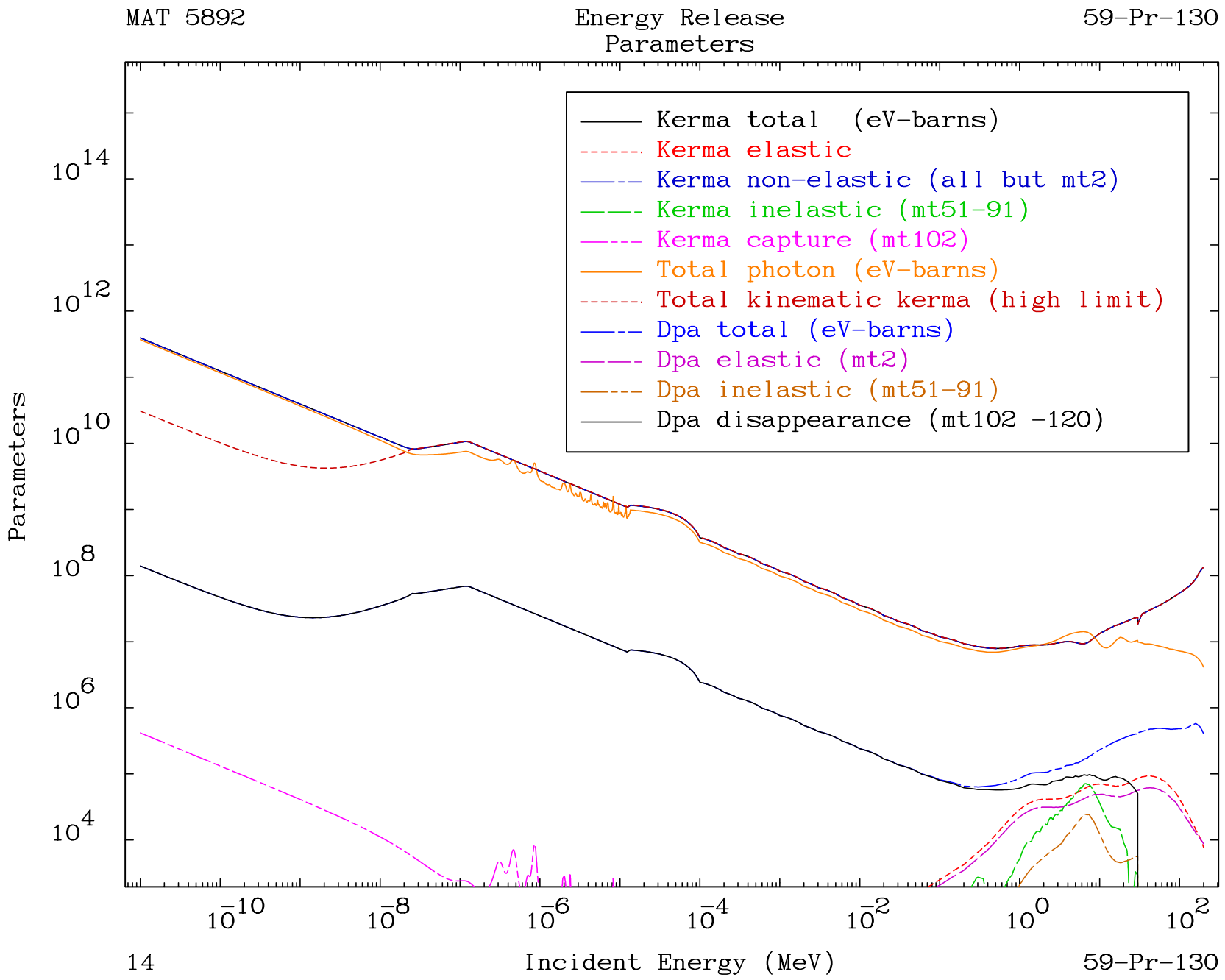

MAT 5892
(n,p) Levels
59-Pr-130
293 Kelvin Cross Sections
Cross Section (barns)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
(n,p)
9
Incident Energy (MeV)
59-Pr-130

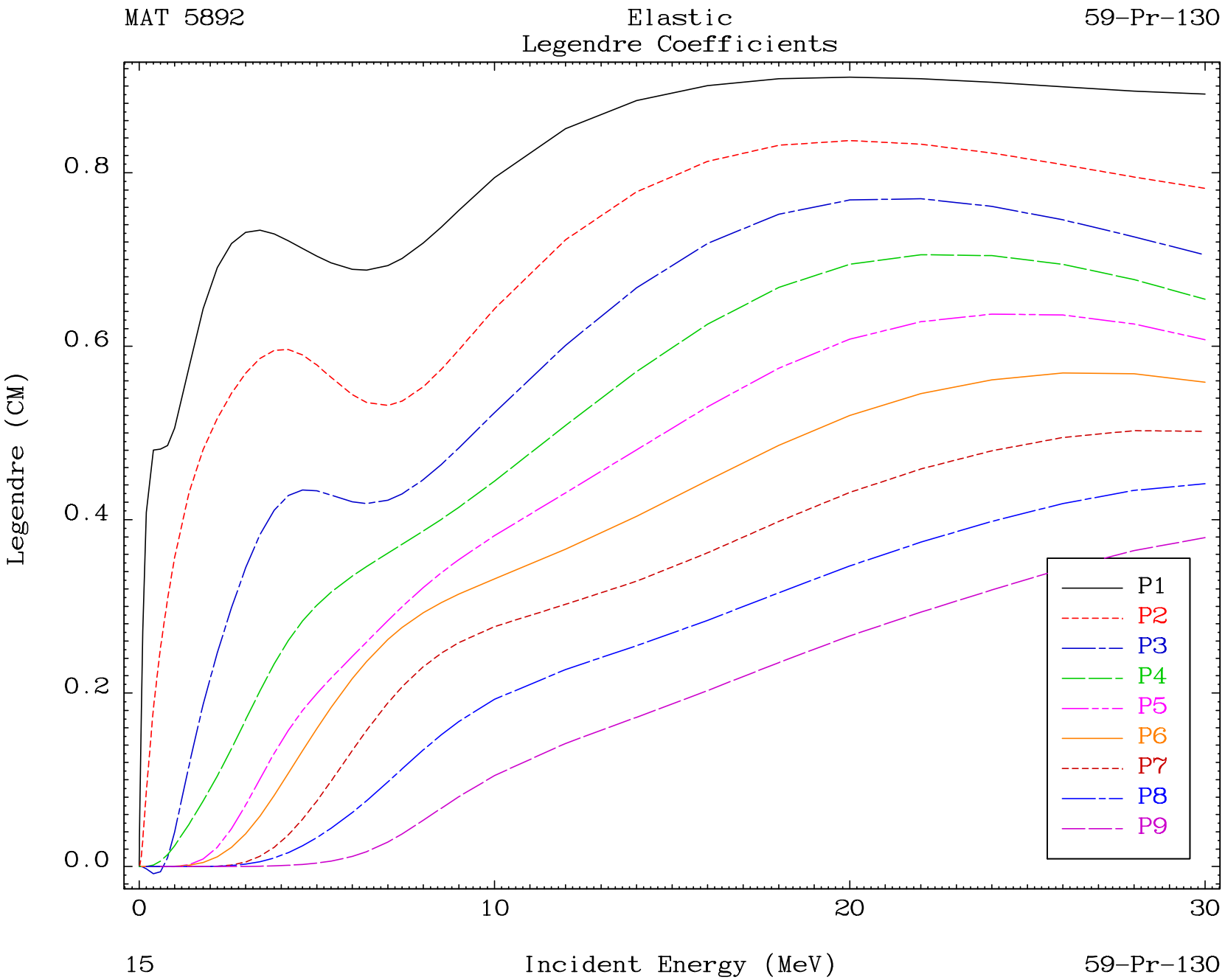

MAT 5892
(n,d) Levels
59-Pr-130
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
59-Pr-130
10

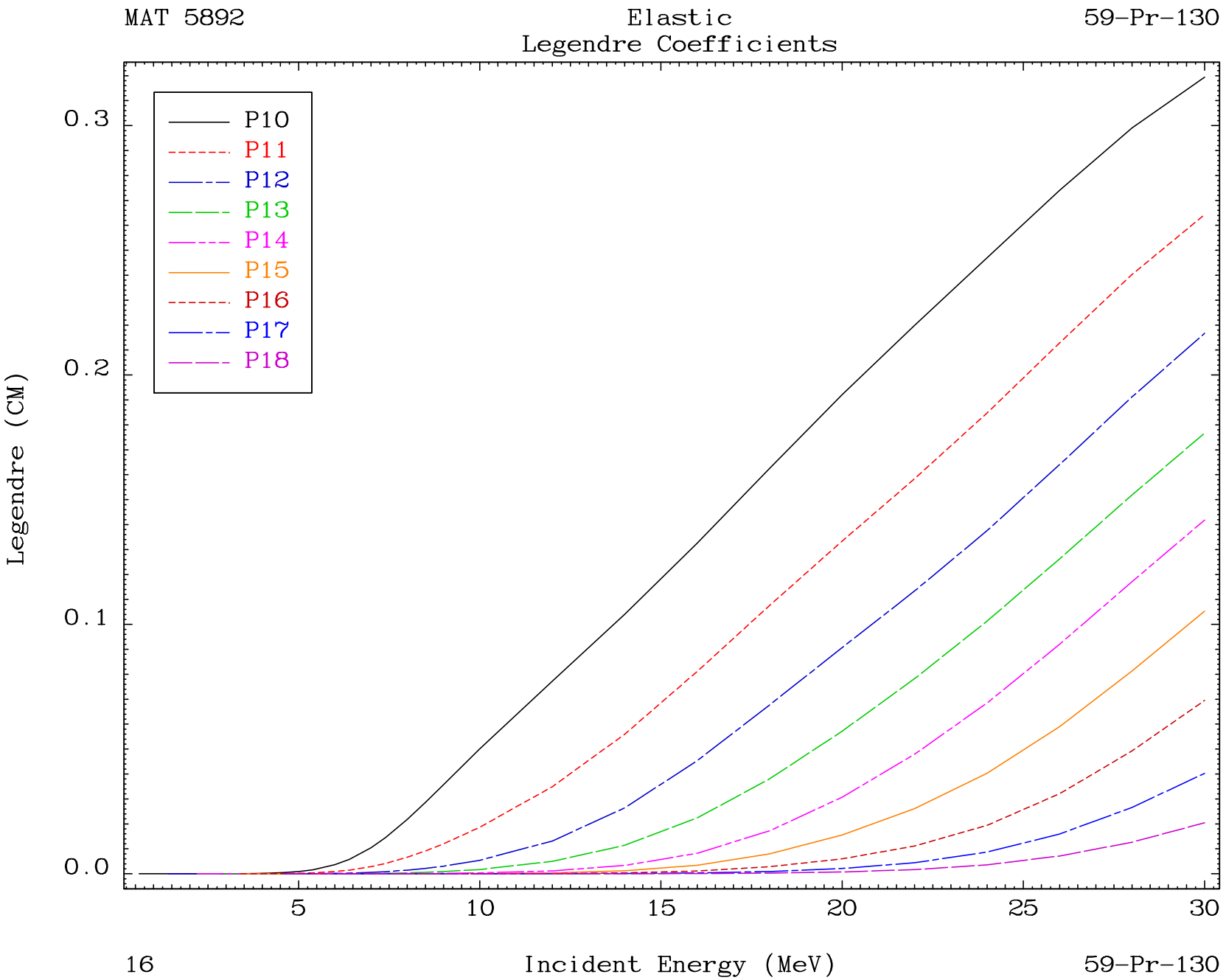

MAT 5892
(n,t) Levels
59-Pr-130
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
11
59-Pr-130

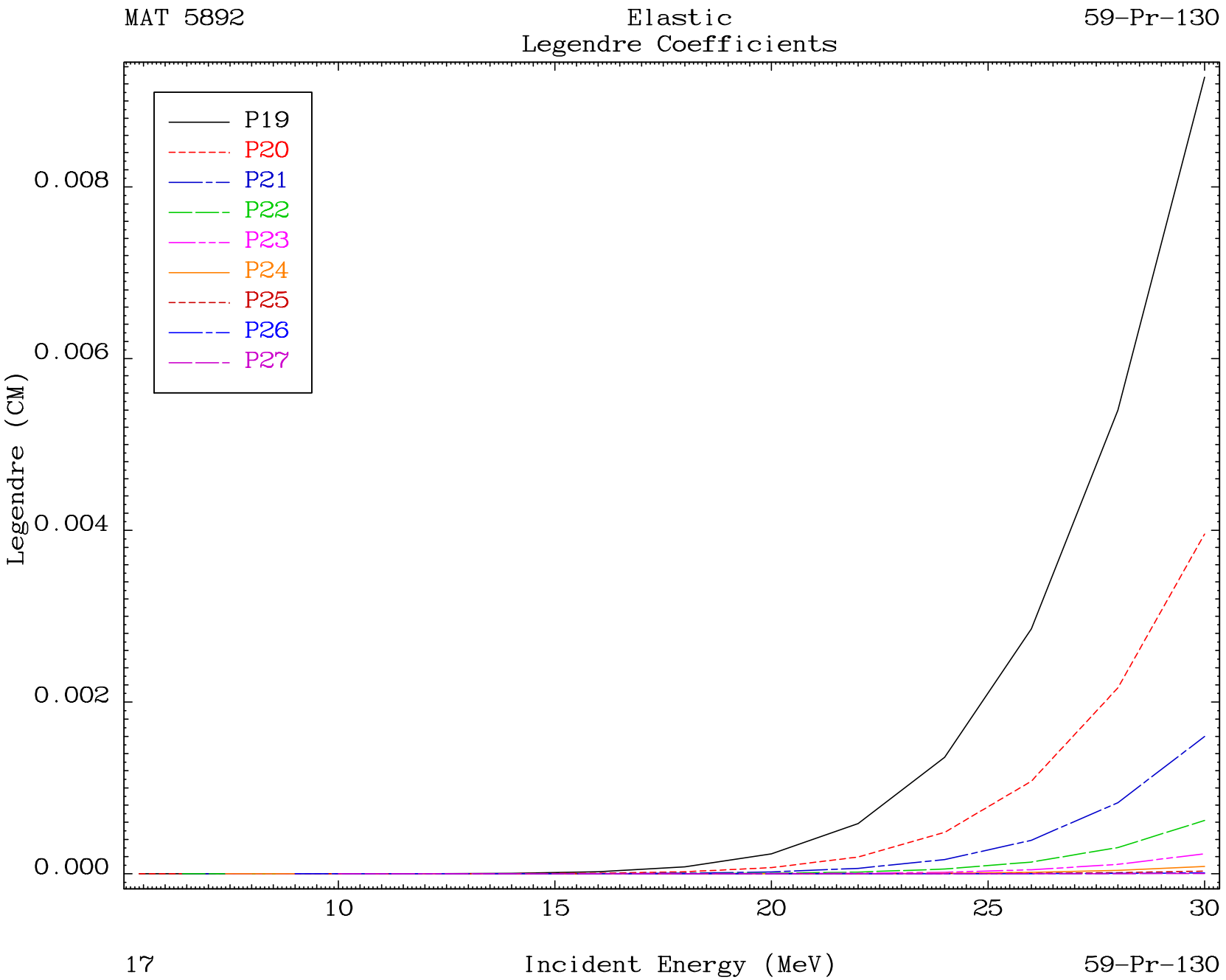

MAT 5892
(n,He3) Levels
59-Pr-130
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
12
59-Pr-130

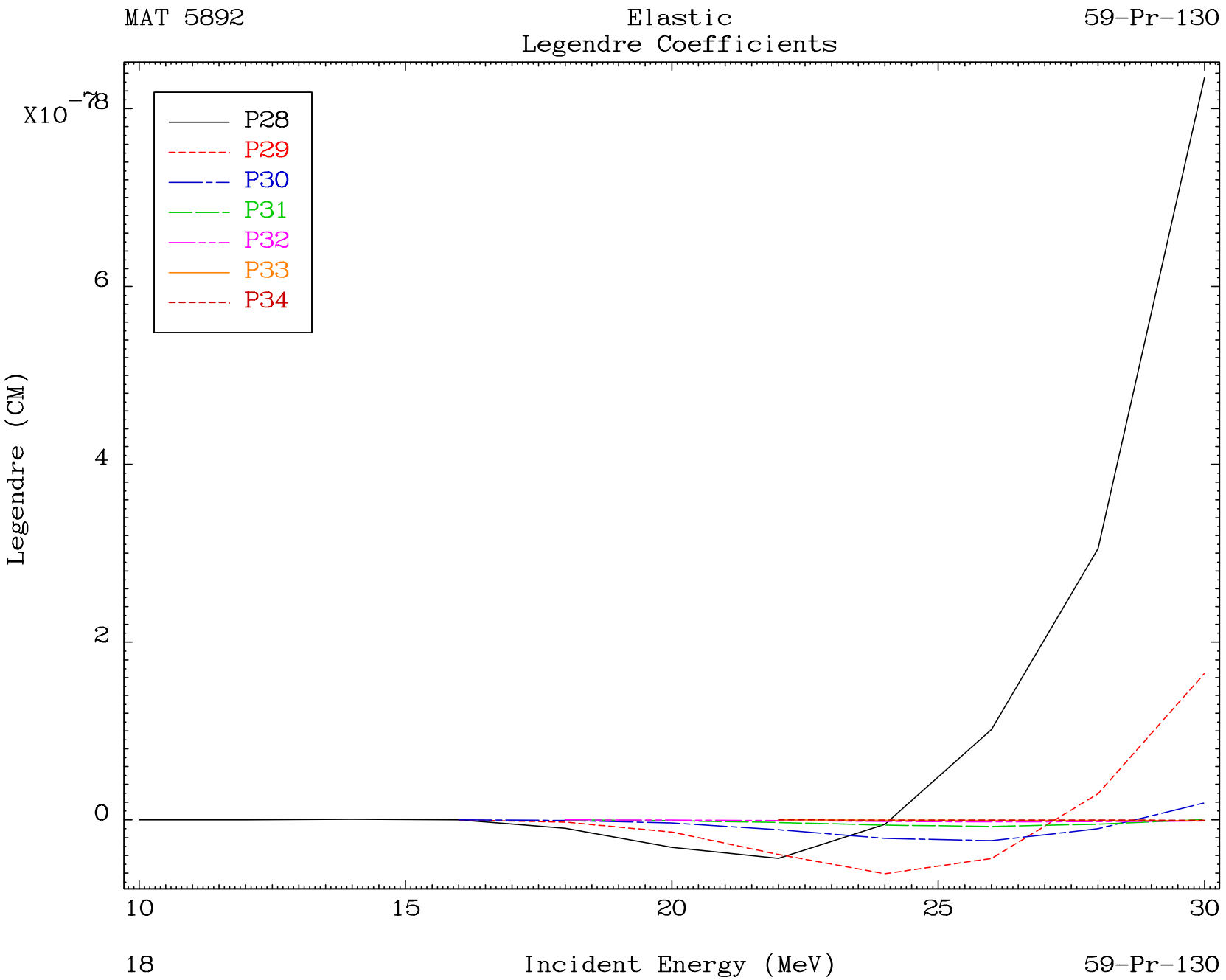

MAT 5892
(n,α) Levels
59-Pr-130
293 Kelvin Cross Sections
Cross Section (barns)
10^2
5
10^1
5
10^0
5
10^-1
5
10^-2
(n,α)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
13
Incident Energy (MeV)
59-Pr-130

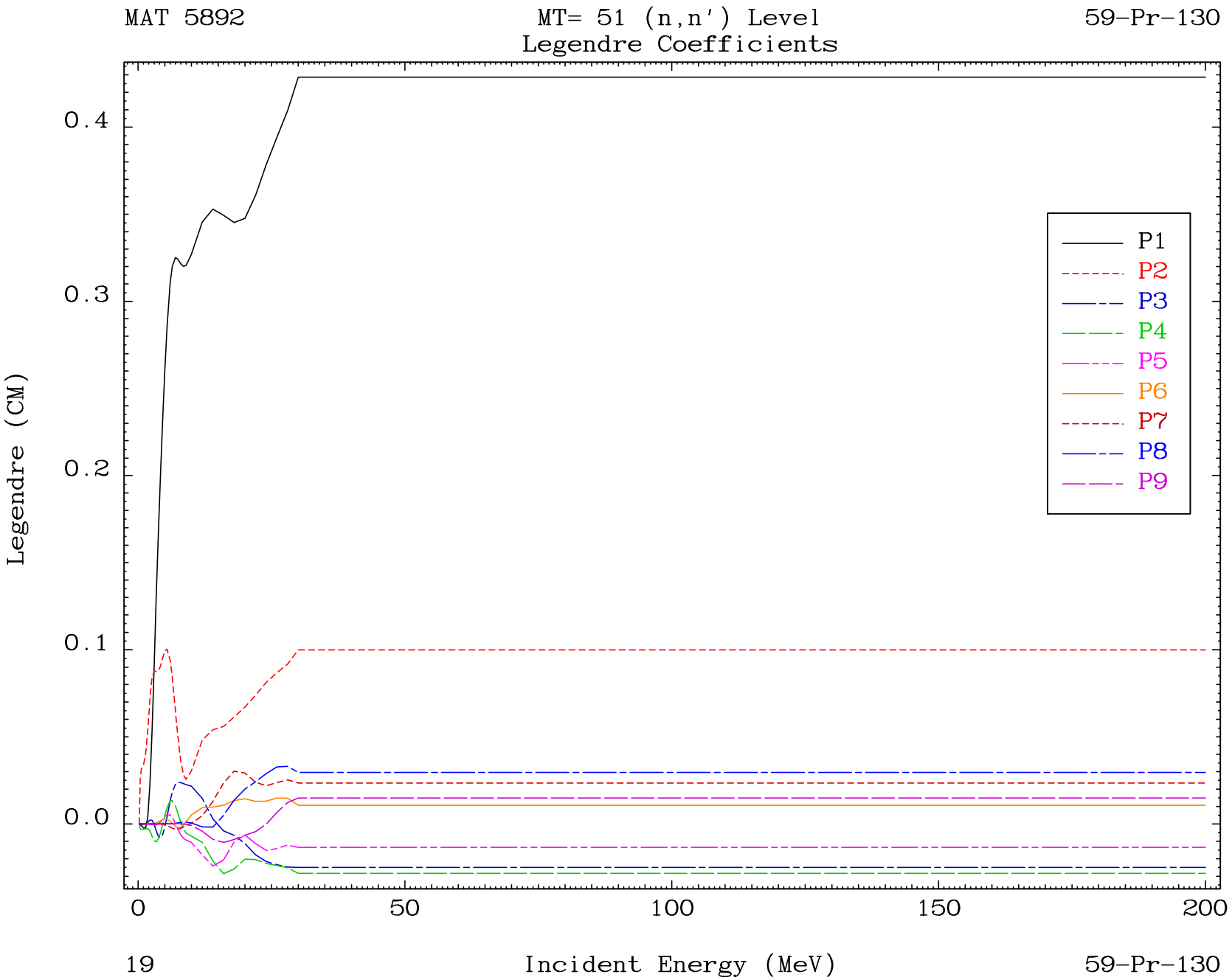

MAT 5892
Energy Release
Parameters
59-Pr-130
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^{14}
10^{12}
10^{10}
10^{8}
10^{6}
10^{4}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
10^{-2}
10^{0}
10^{2}
14
Incident Energy (MeV)
59-Pr-130

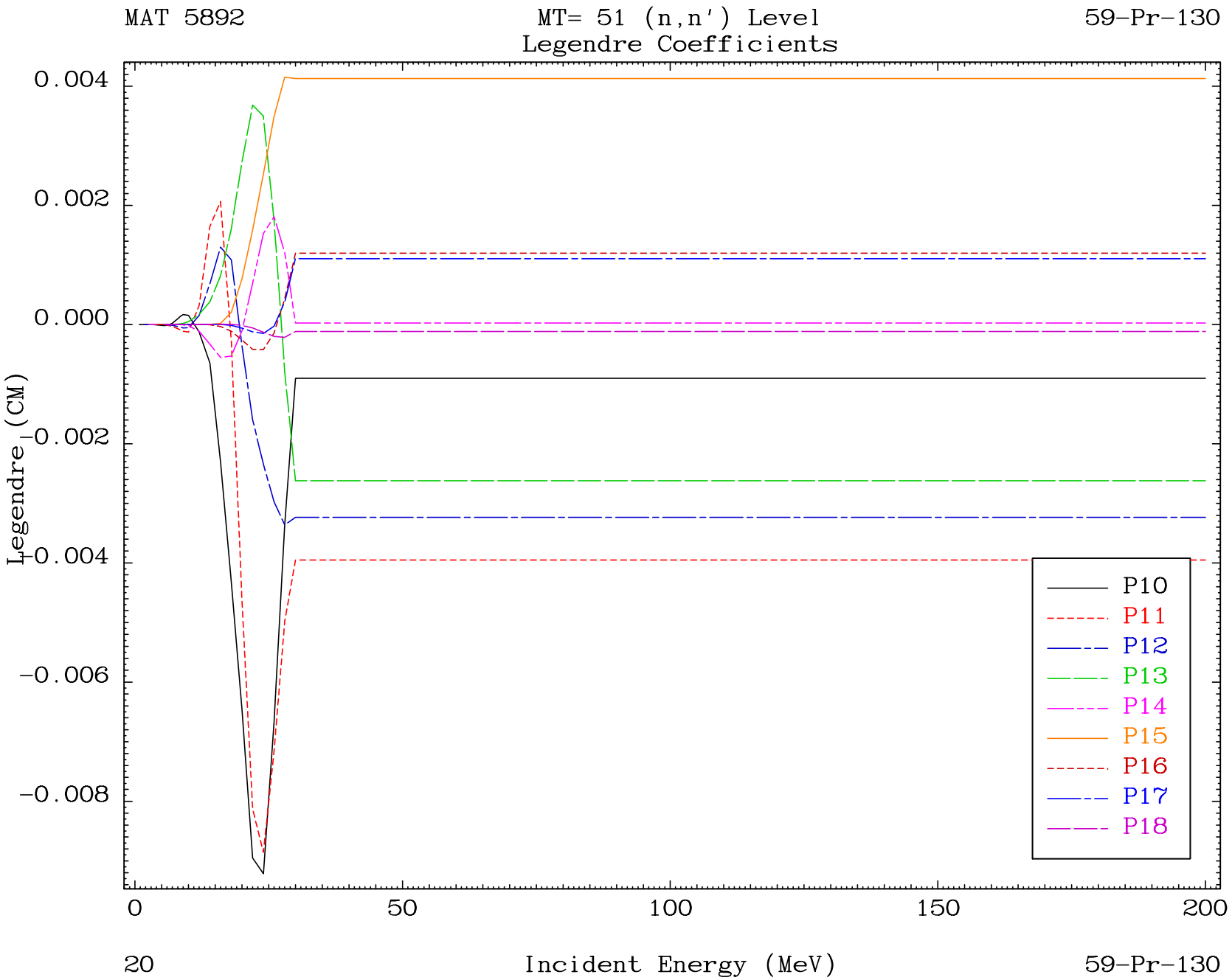

MAT 5892
Elastic
Legendre Coefficients
59-Pr-130
Legendre (CM)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
15
Incident Energy (MeV)
59-Pr-130
P1
P2
P3
P4
P5
P6
P7
P8
P9

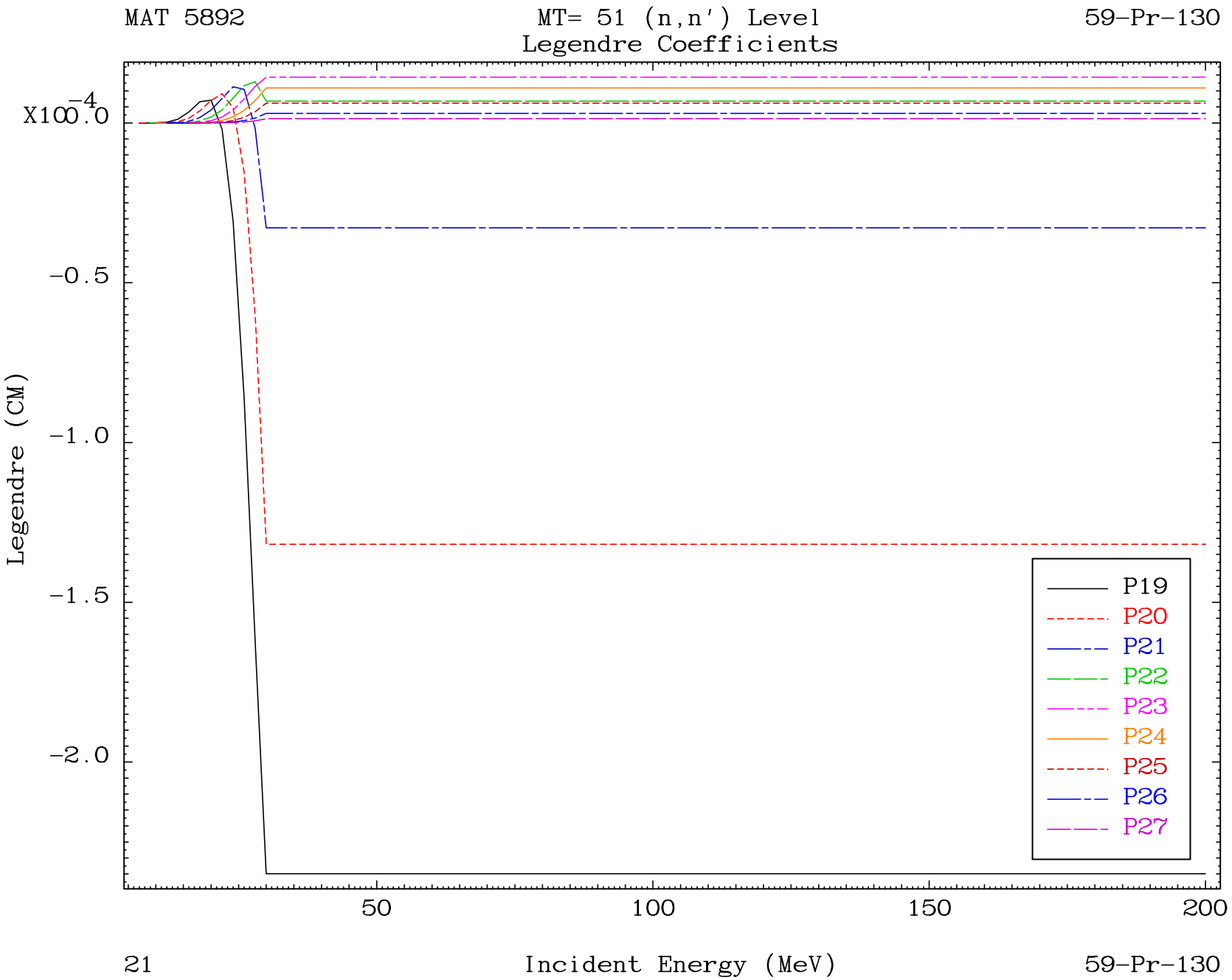

MAT 5892
Elastic
Legendre Coefficients
59-Pr-130
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.0
0.1
0.2
0.3
5
10
15
20
25
30
16
Incident Energy (MeV)
59-Pr-130

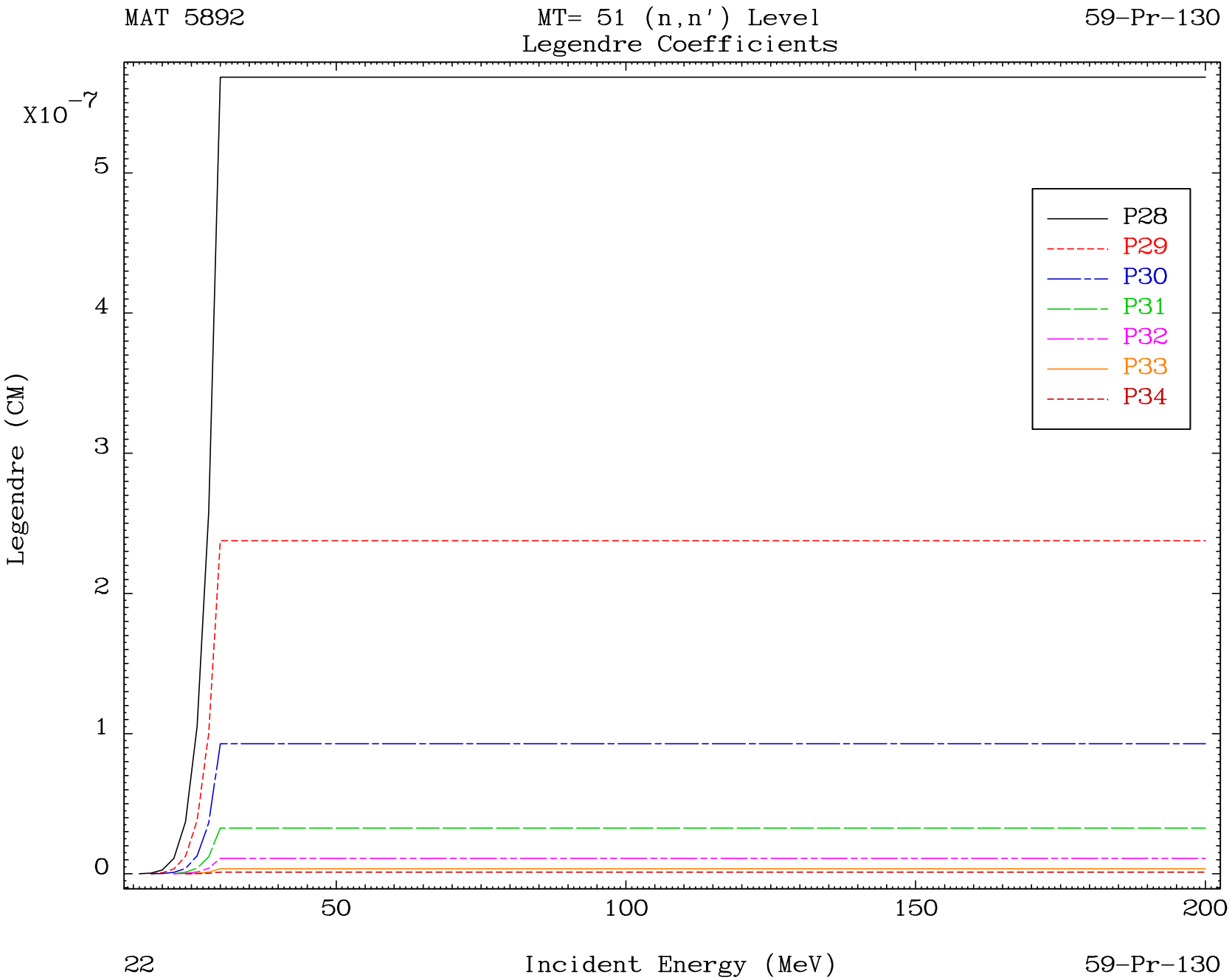

MAT 5892
Elastic
Legendre Coefficients
59-Pr-130
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.008
0.006
0.004
0.002
0.000
Legendre (CM)
10
15
20
25
30
17
Incident Energy (MeV)
59-Pr-130

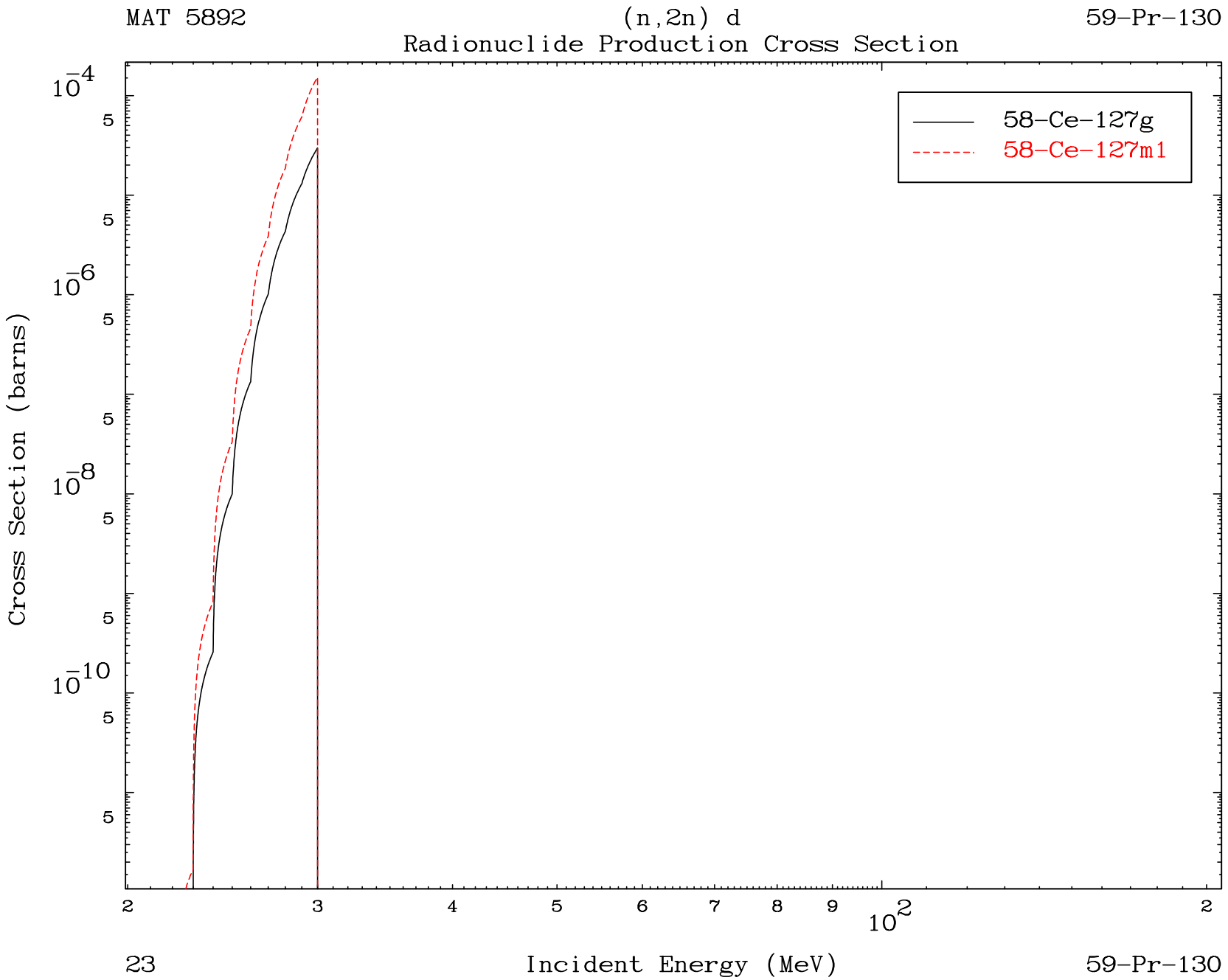

MAT 5892
Elastic
Legendre Coefficients
59-Pr-130
X10^-78
P28
P29
P30
P31
P32
P33
P34
Legendre (CM)
6
4
2
0
10
15
20
25
30
18
Incident Energy (MeV)
59-Pr-130

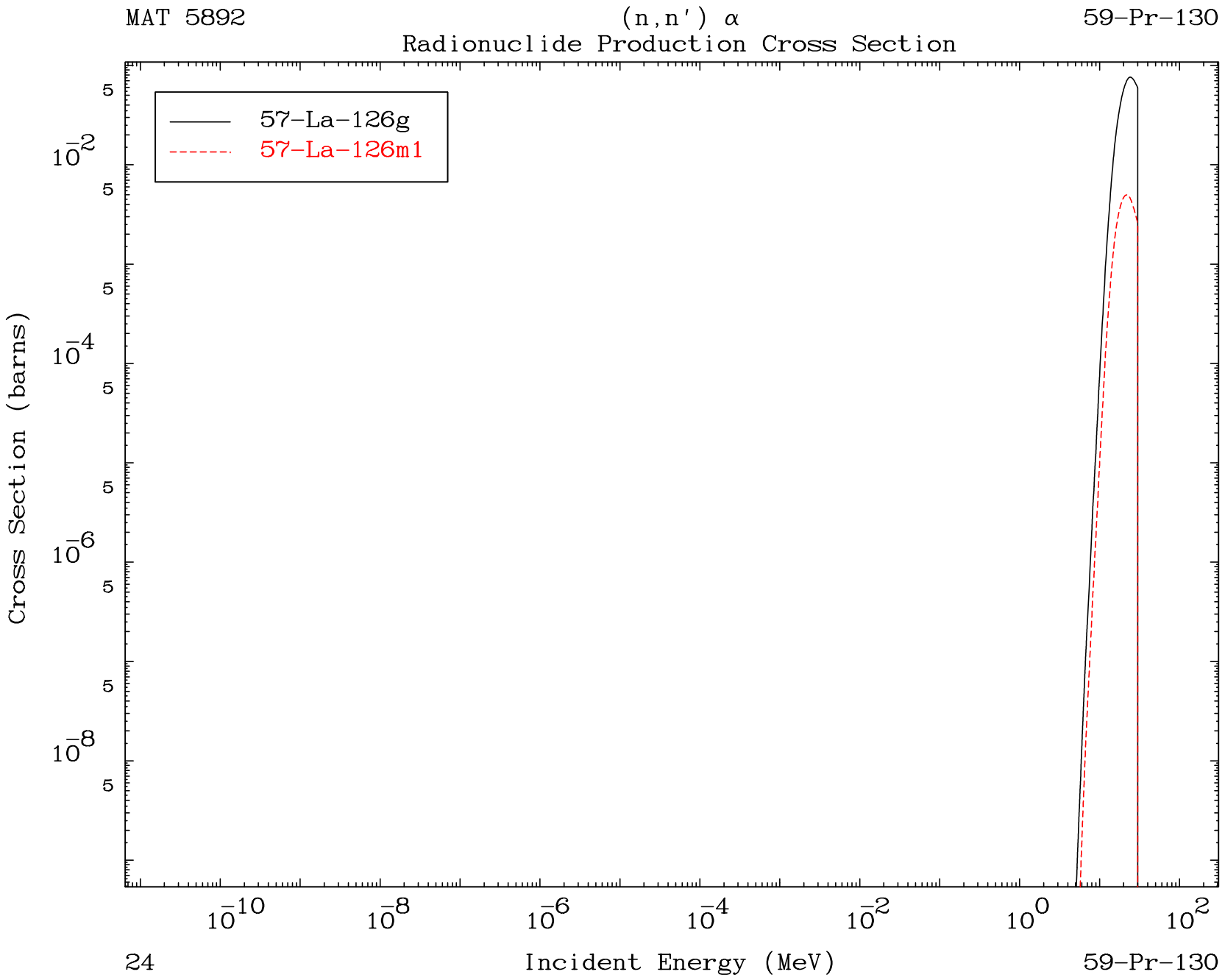

MAT 5892
MT= 51 (n,n') Level
Legendre Coefficients
59-Pr-130
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
19
Incident Energy (MeV)
59-Pr-130

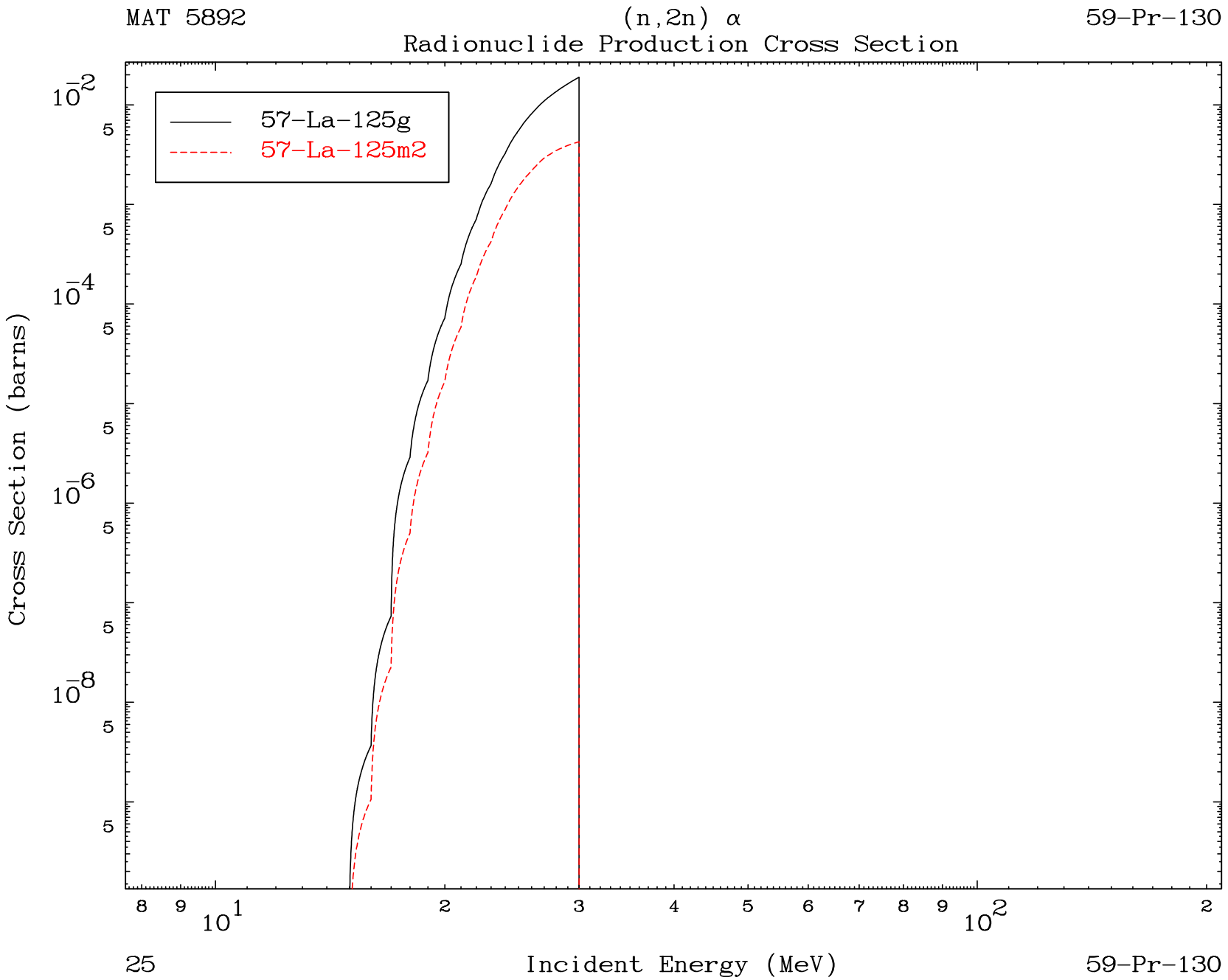

MAT 5892
MT= 51 (n,n') Level
Legendre Coefficients
59-Pr-130
0.004
0.002
0.000
−0.002
−0.004
−0.006
−0.008
Legendre (CM)
0
50
100
150
200
20
Incident Energy (MeV)
59-Pr-130
P10
P11
P12
P13
P14
P15
P16
P17
P18

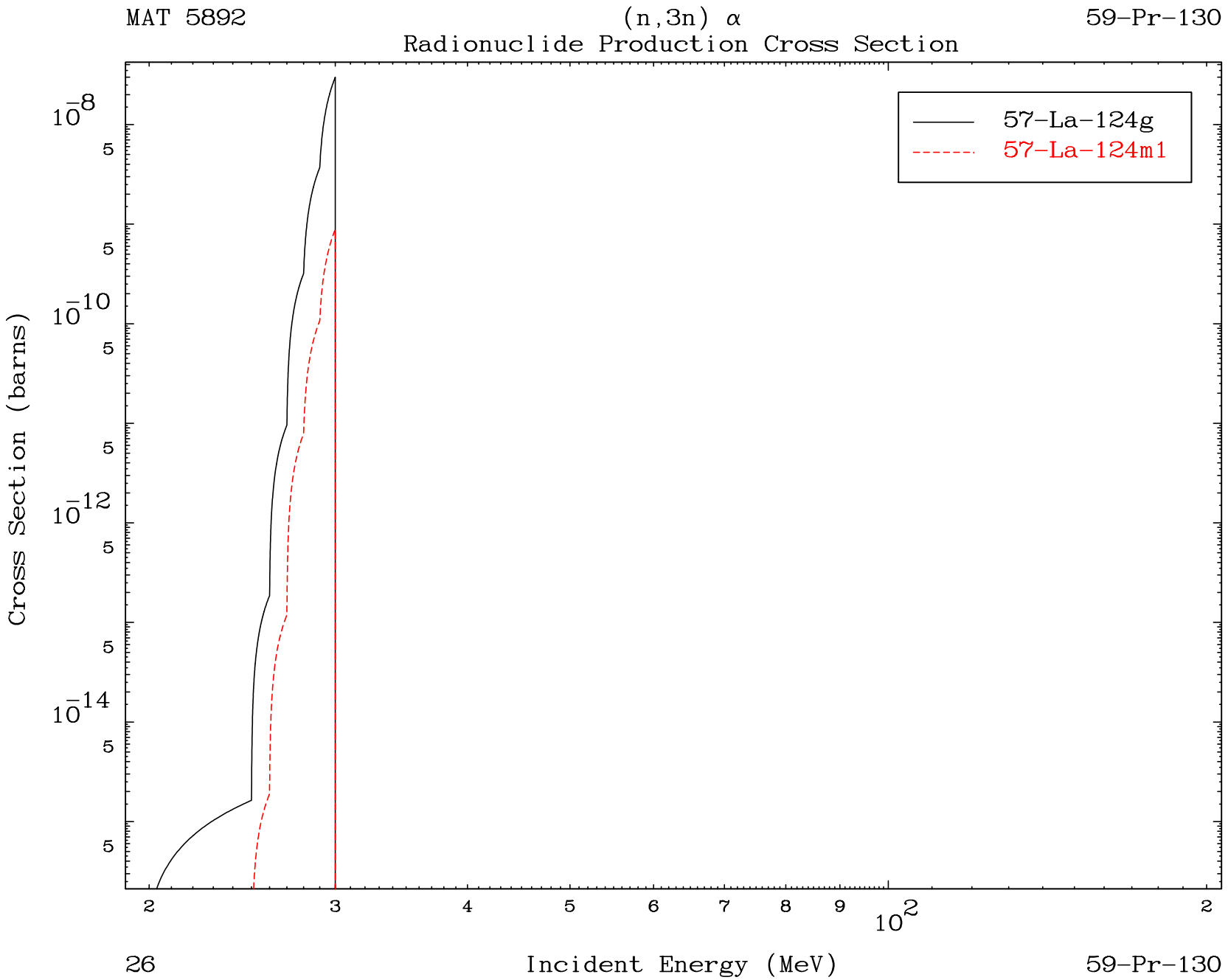

MAT 5892
MT= 51 (n,n') Level
Legendre Coefficients
59-Pr-130
X10^-4
0.0
-0.5
-1.0
-1.5
-2.0
Legendre (CM)
50
100
150
200
21
Incident Energy (MeV)
59-Pr-130
P19
P20
P21
P22
P23
P24
P25
P26
P27

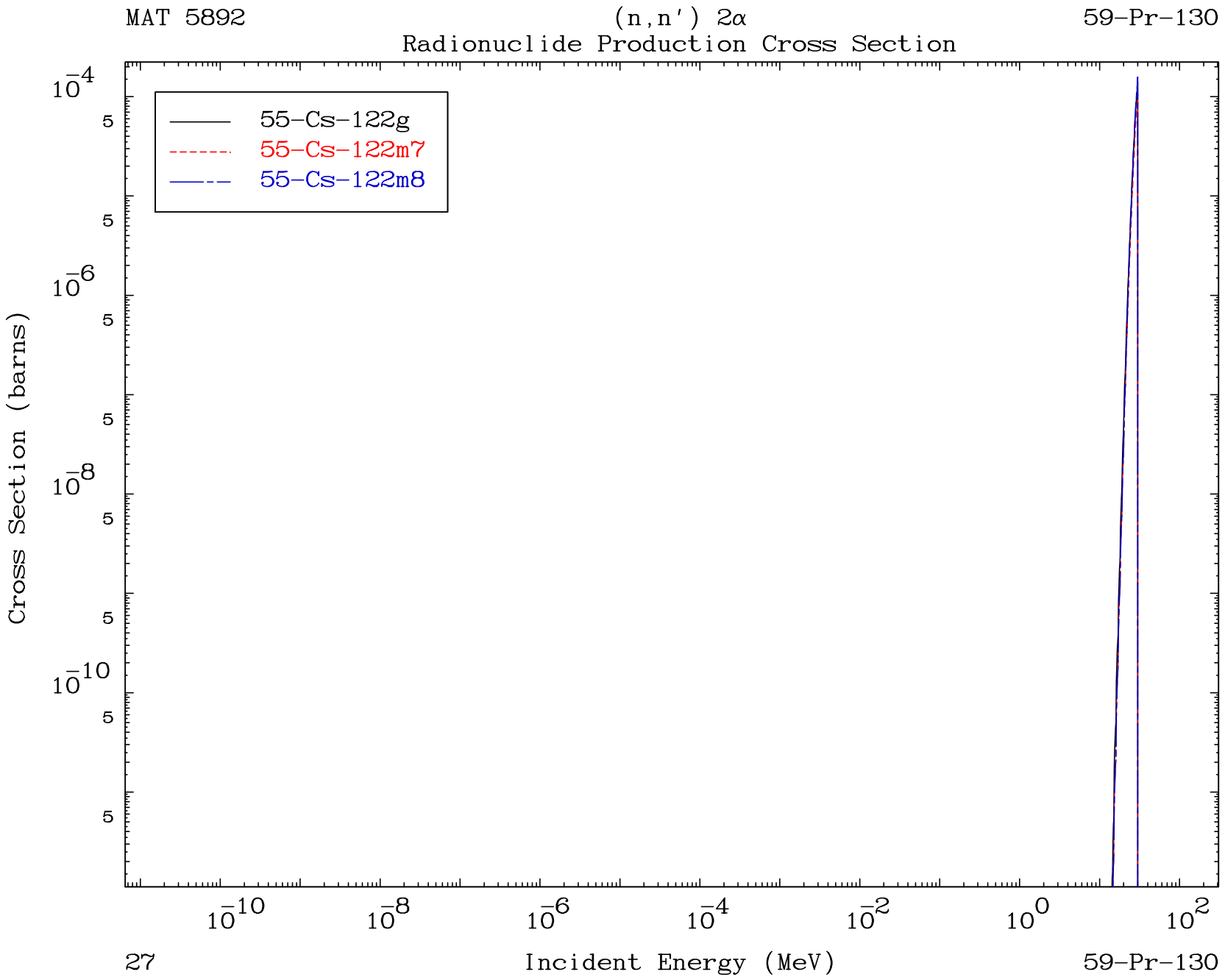

MAT 5892
MT= 51 (n,n') Level
Legendre Coefficients
59-Pr-130
X10^-7
5
4
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
50
100
150
200
22
Incident Energy (MeV)
59-Pr-130

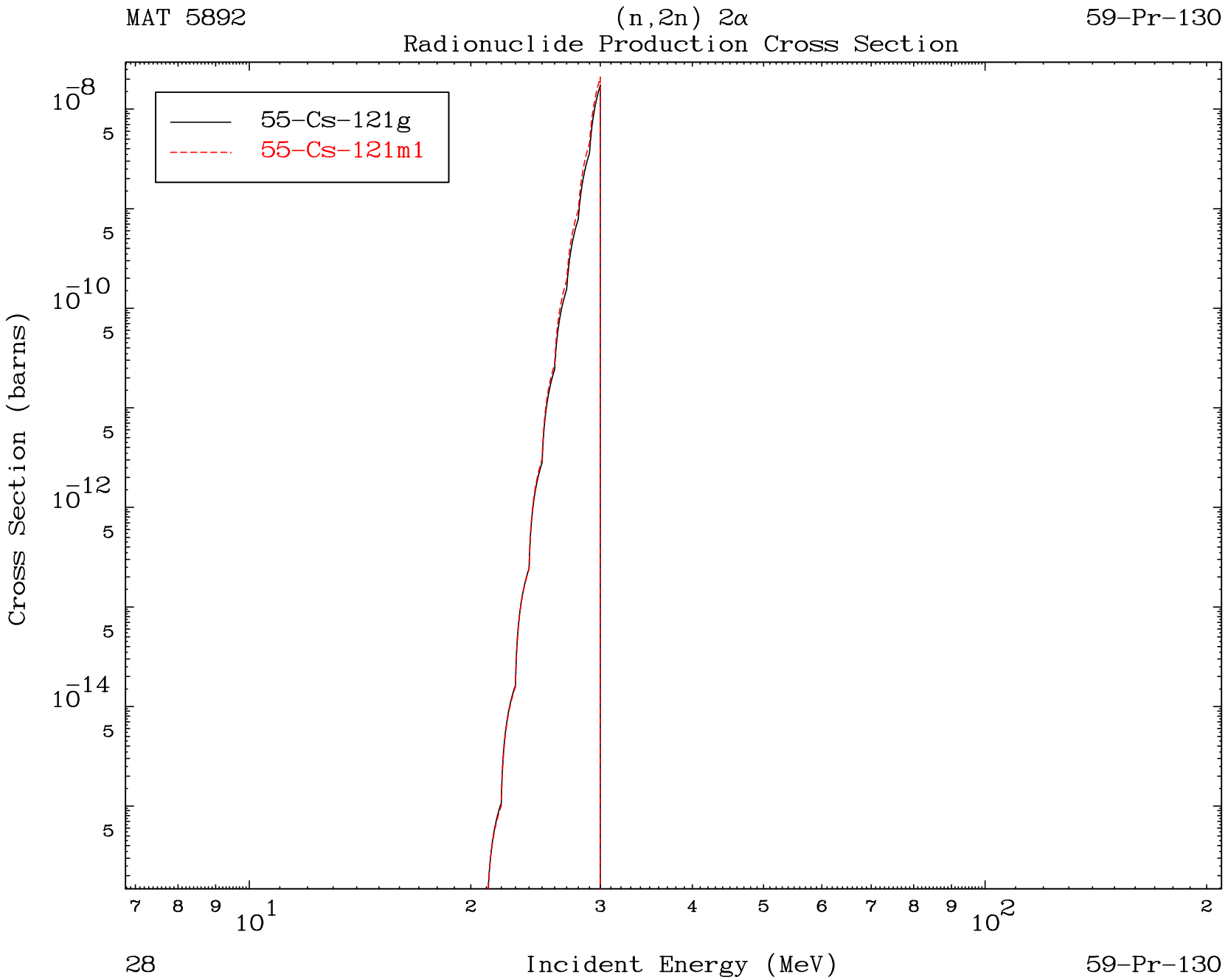

MAT 5892
(n,2n) d
59-Pr-130
Radionuclide Production Cross Section
58-Ce-127g
58-Ce-127m1
Cross Section (barns)
Incident Energy (MeV)
23
59-Pr-130

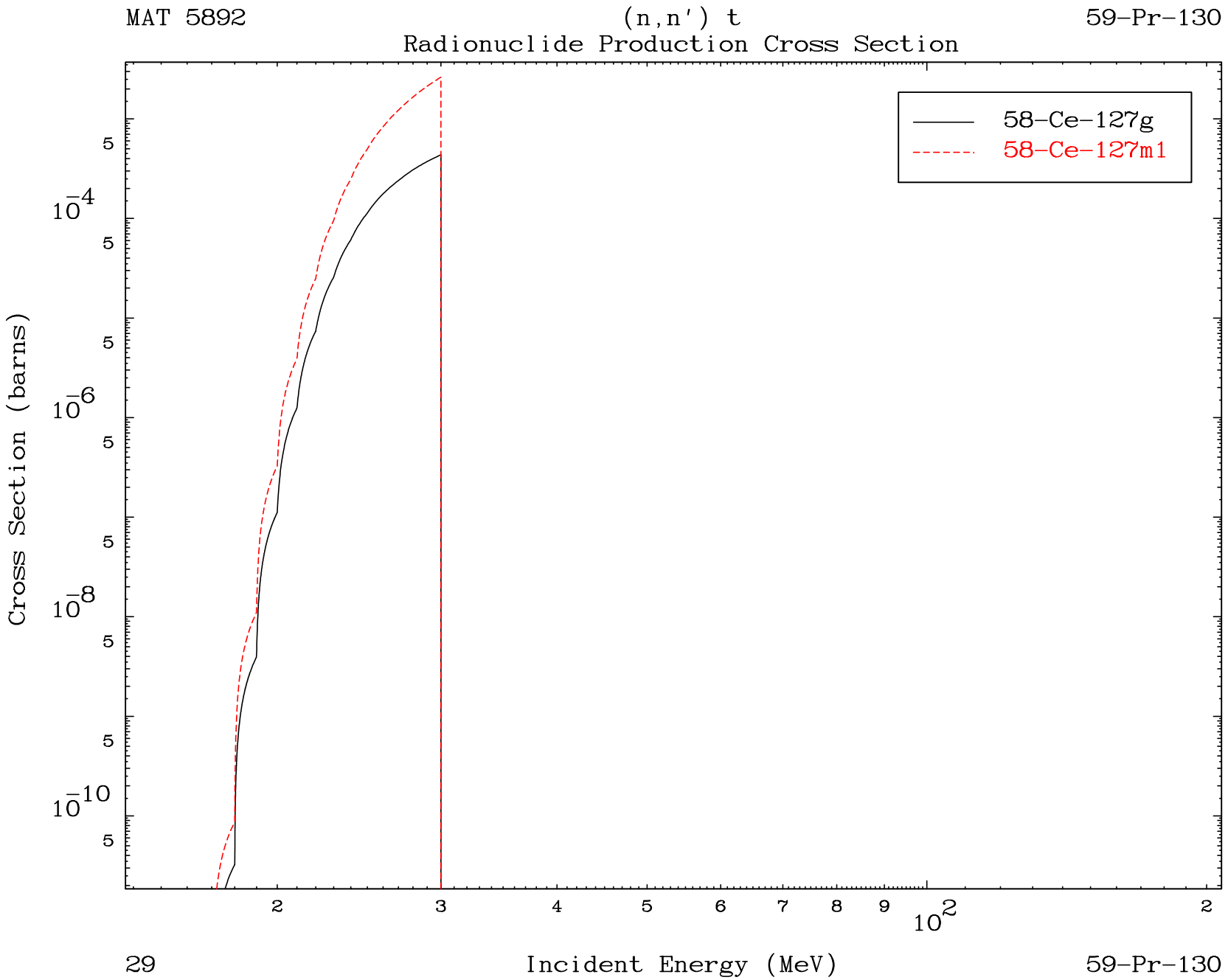

MAT 5892
(n,n') α
59-Pr-130
Radionuclide Production Cross Section
57-La-126g
57-La-126m1
Cross Section (barns)
Incident Energy (MeV)
24
59-Pr-130

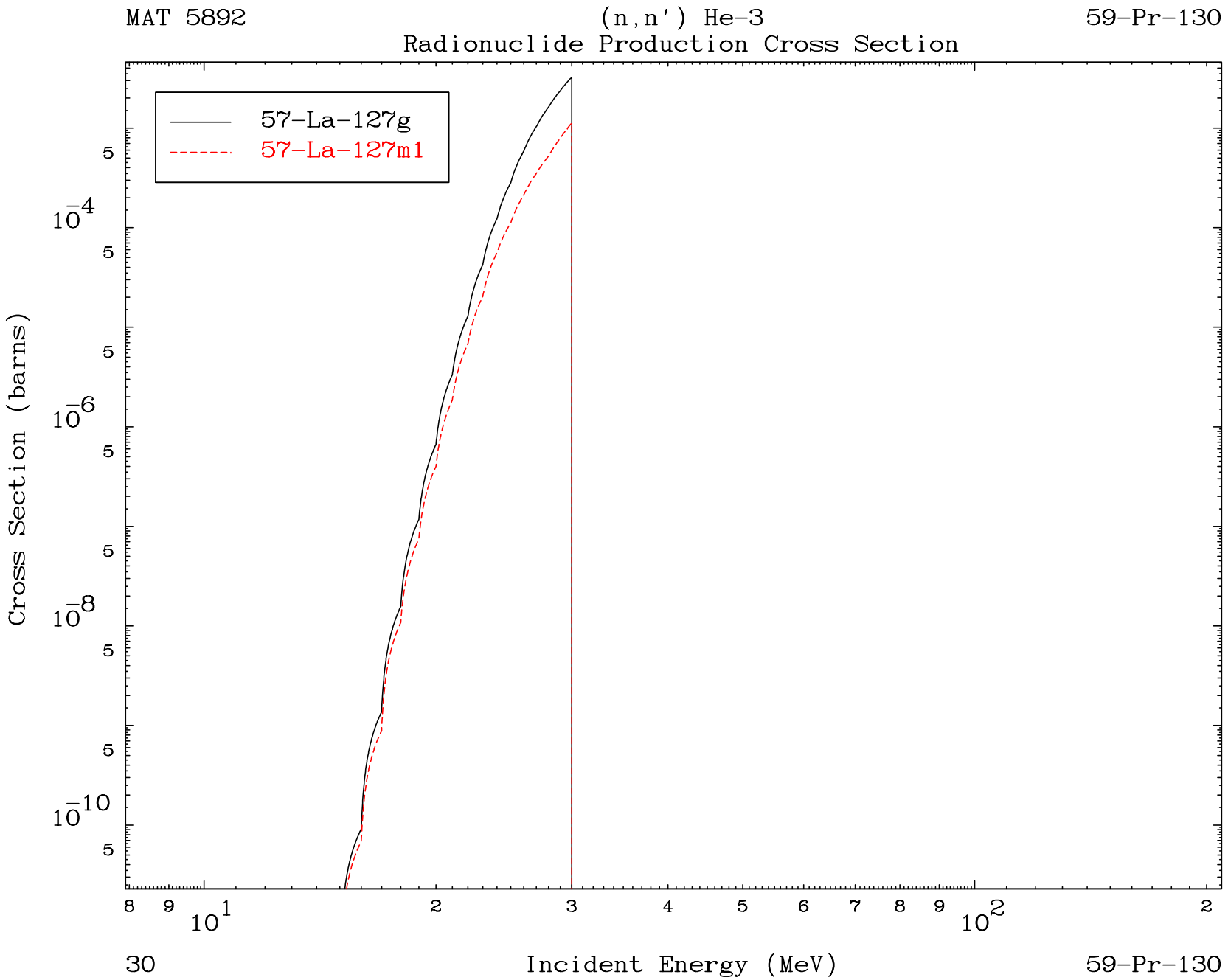

MAT 5892
(n,2n) α
59-Pr-130
Radionuclide Production Cross Section
57-La-125g
57-La-125m2
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
25
59-Pr-130

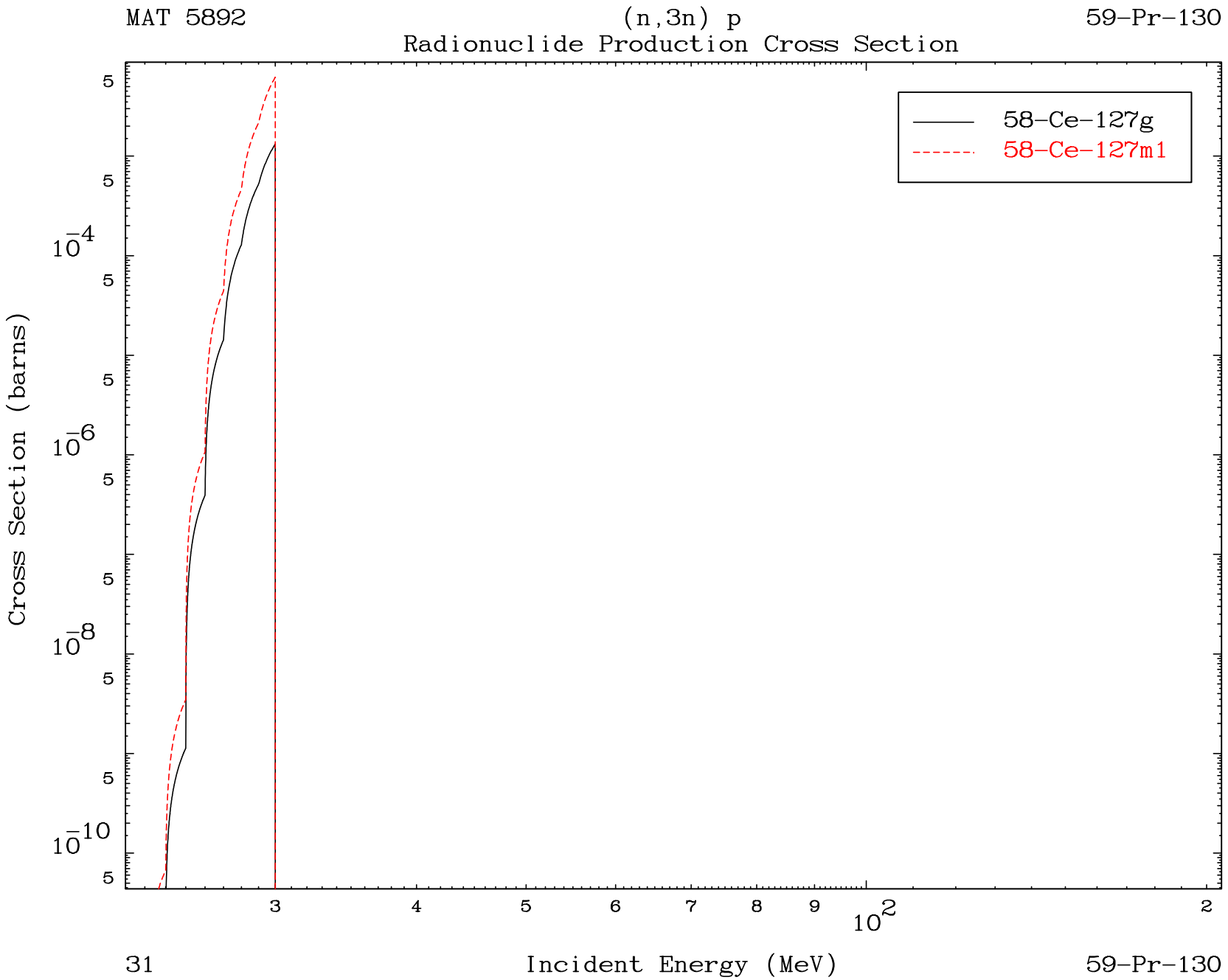

MAT 5892
(n,3n) α
59-Pr-130
Radionuclide Production Cross Section
57-La-124g
57-La-124m1
Cross Section (barns)
10-8
10-10
10-12
10-14
5
2
3
4
5
6
7
8
9
10 2
2
26
Incident Energy (MeV)
59-Pr-130

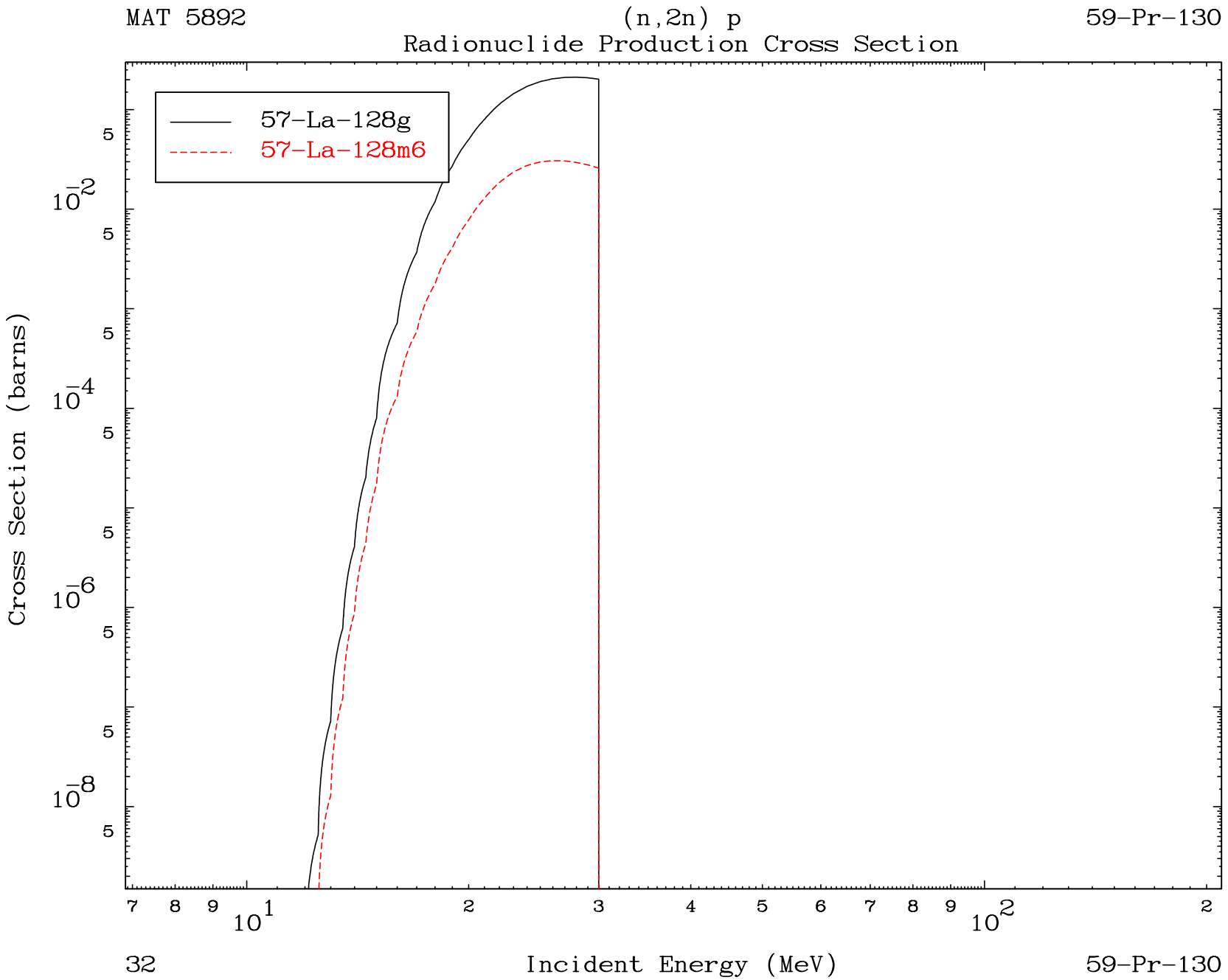

MAT 5892
(n,n') 2α
59-Pr-130
Radionuclide Production Cross Section
55-Cs-122g
55-Cs-122m7
55-Cs-122m8
Cross Section (barns)
Incident Energy (MeV)
27
59-Pr-130

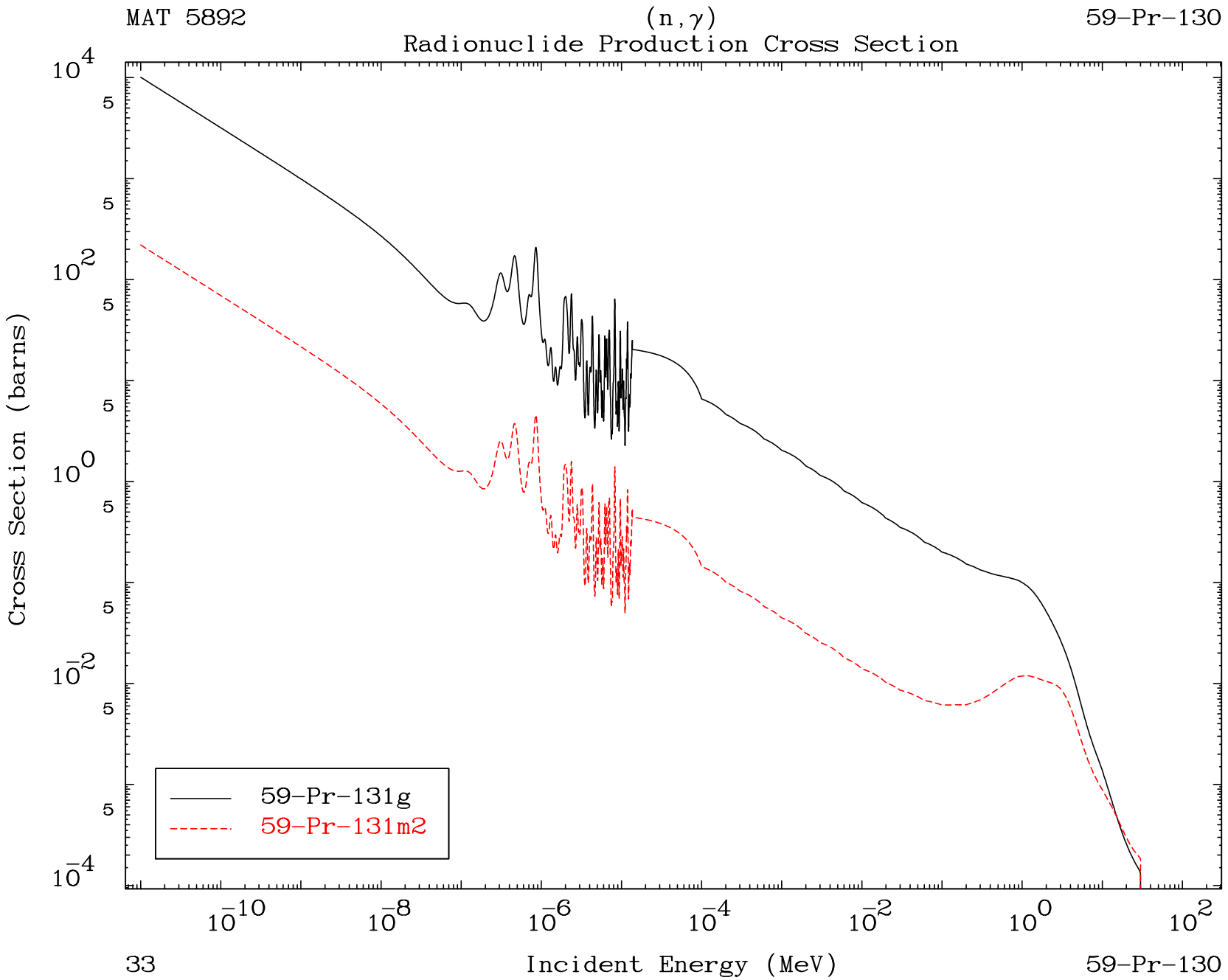

MAT 5892
(n,2n) 2α
59-Pr-130
Radionuclide Production Cross Section
55-Cs-121g
55-Cs-121m1
Cross Section (barns)
Incident Energy (MeV)
28
59-Pr-130

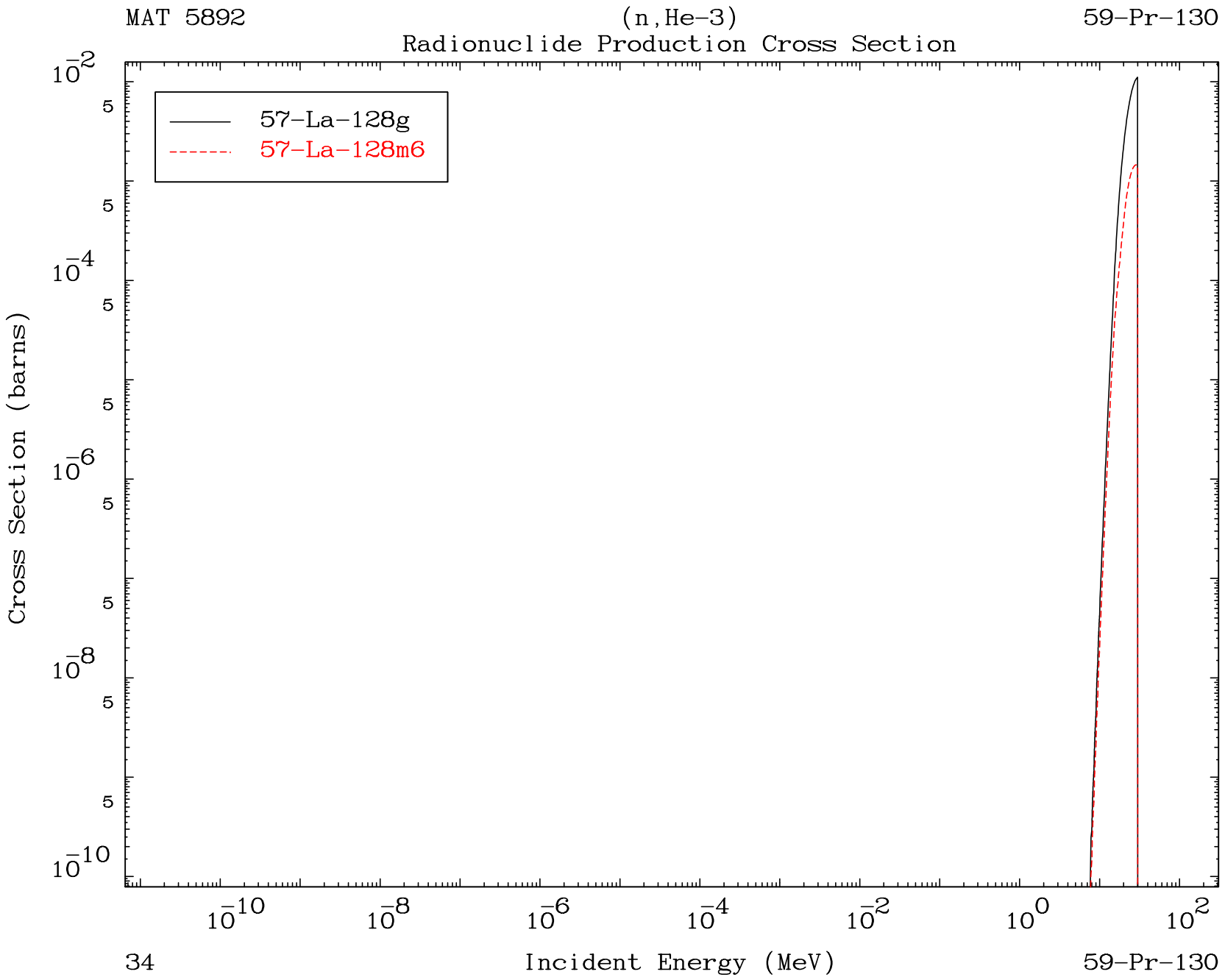

MAT 5892
(n,n') t
59-Pr-130
Radionuclide Production Cross Section
58-Ce-127g
58-Ce-127m1
Cross Section (barns)
10-4
10-6
10-8
10-10
2
3
4
5
6
7
8
9
10 2
2
29
Incident Energy (MeV)
59-Pr-130

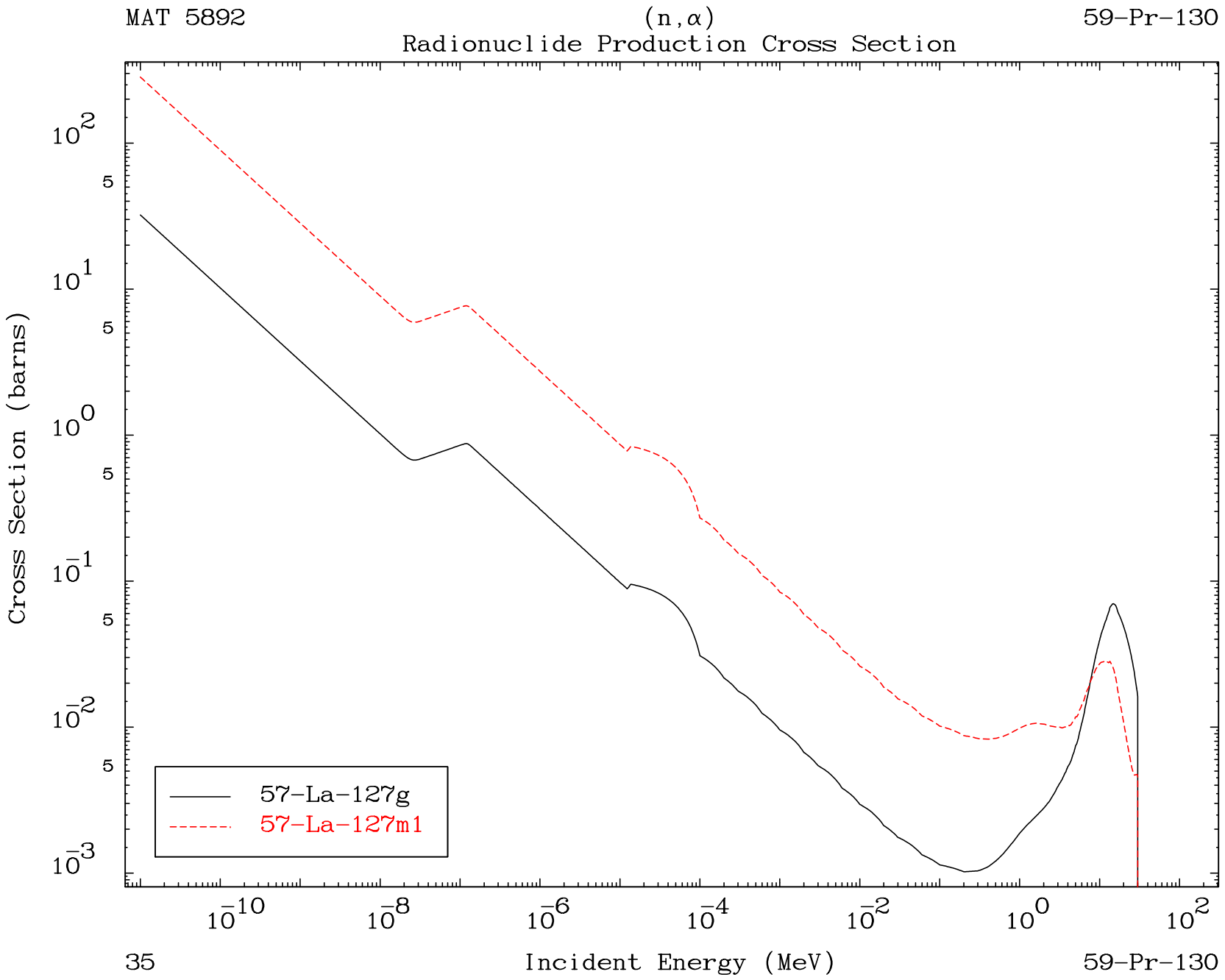

MAT 5892
(n,n') He-3
59-Pr-130
Radionuclide Production Cross Section
57-La-127g
57-La-127m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
30
Incident Energy (MeV)
59-Pr-130

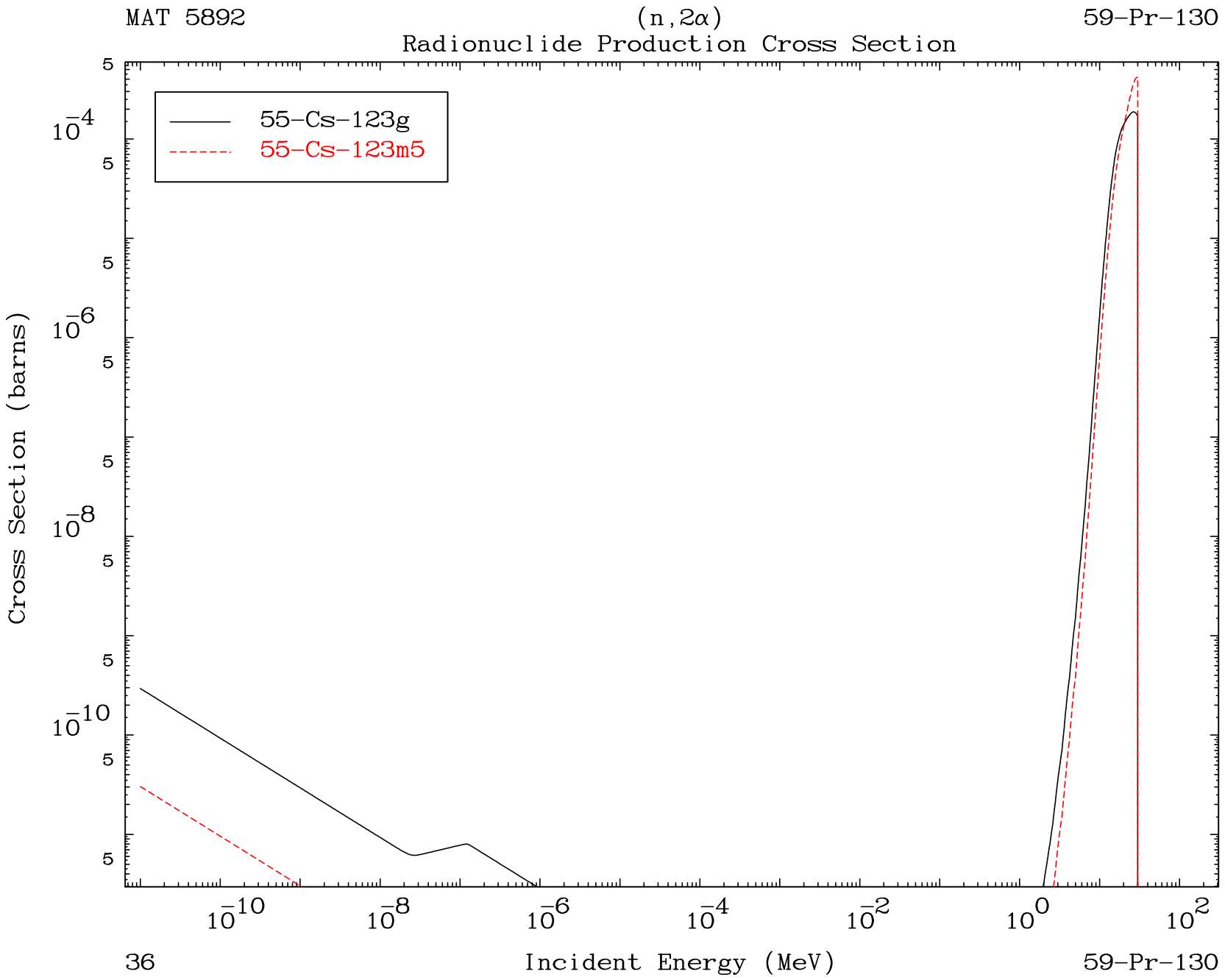

MAT 5892
(n,3n) p
59-Pr-130
Radionuclide Production Cross Section
58-Ce-127g
58-Ce-127m1
Cross Section (barns)
10-4
10-6
10-8
10-10
3
4
5
6
7
8
9
10^2
2
31
Incident Energy (MeV)
59-Pr-130

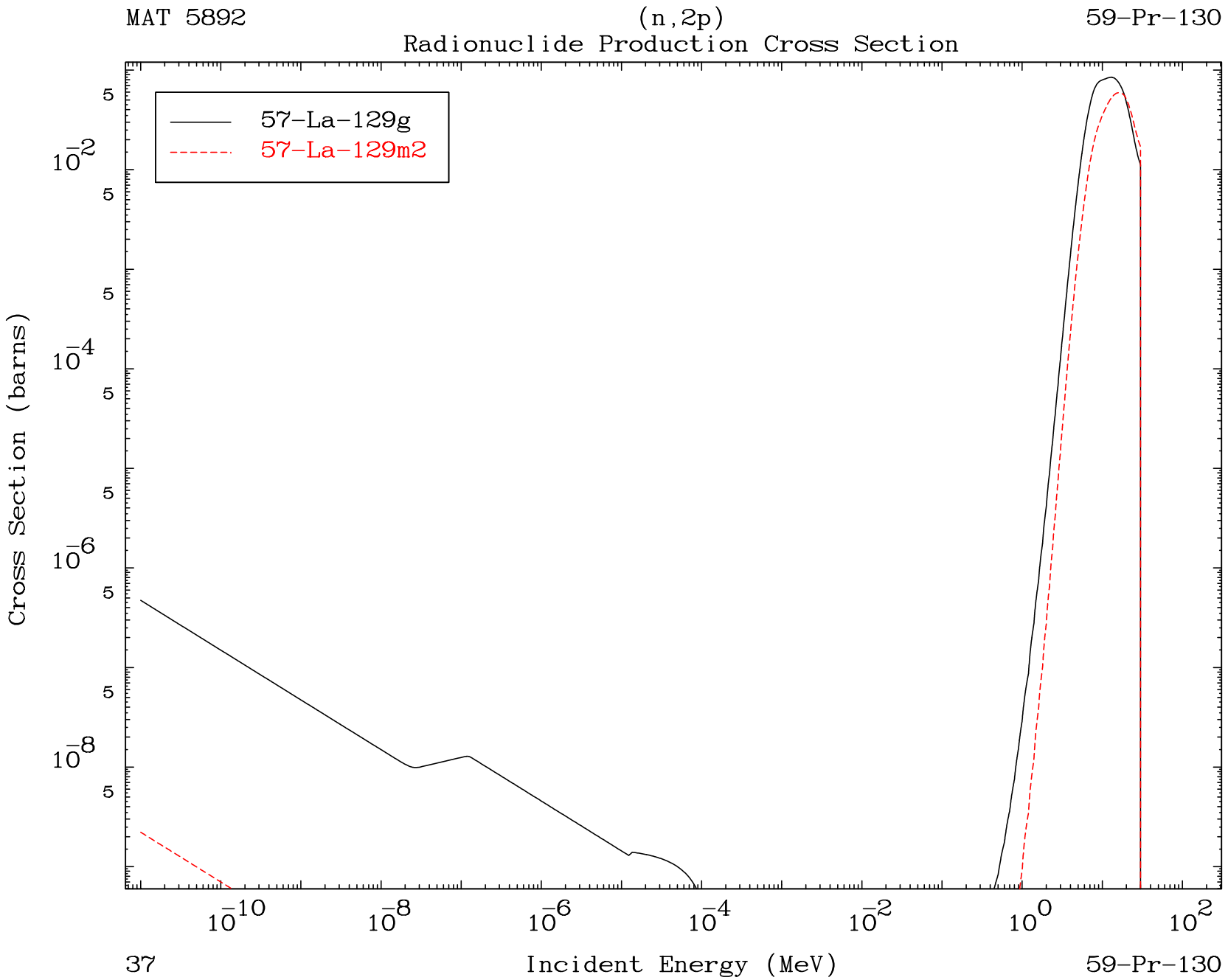

MAT 5892
(n,2n) p
59-Pr-130
Radionuclide Production Cross Section
57-La-128g
57-La-128m6
Cross Section (barns)
10-2
10-4
10-6
10-8
7 8 9 10 1 2 3 4 5 6 7 8 9 10 2 2
32
Incident Energy (MeV)
59-Pr-130

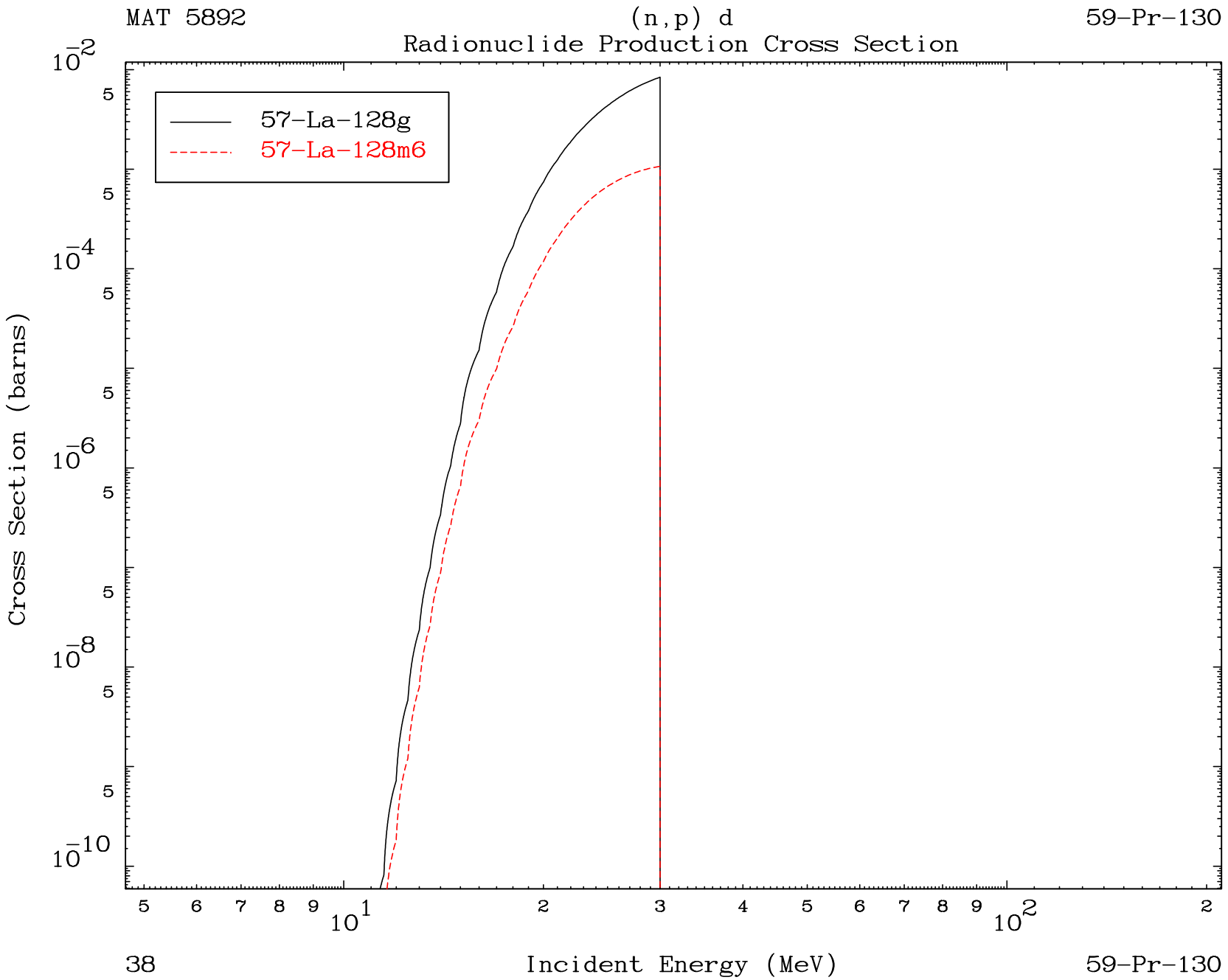

MAT 5892
(n,γ)
59-Pr-130
Radionuclide Production Cross Section
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
59-Pr-131g
59-Pr-131m2
33
Incident Energy (MeV)
59-Pr-130

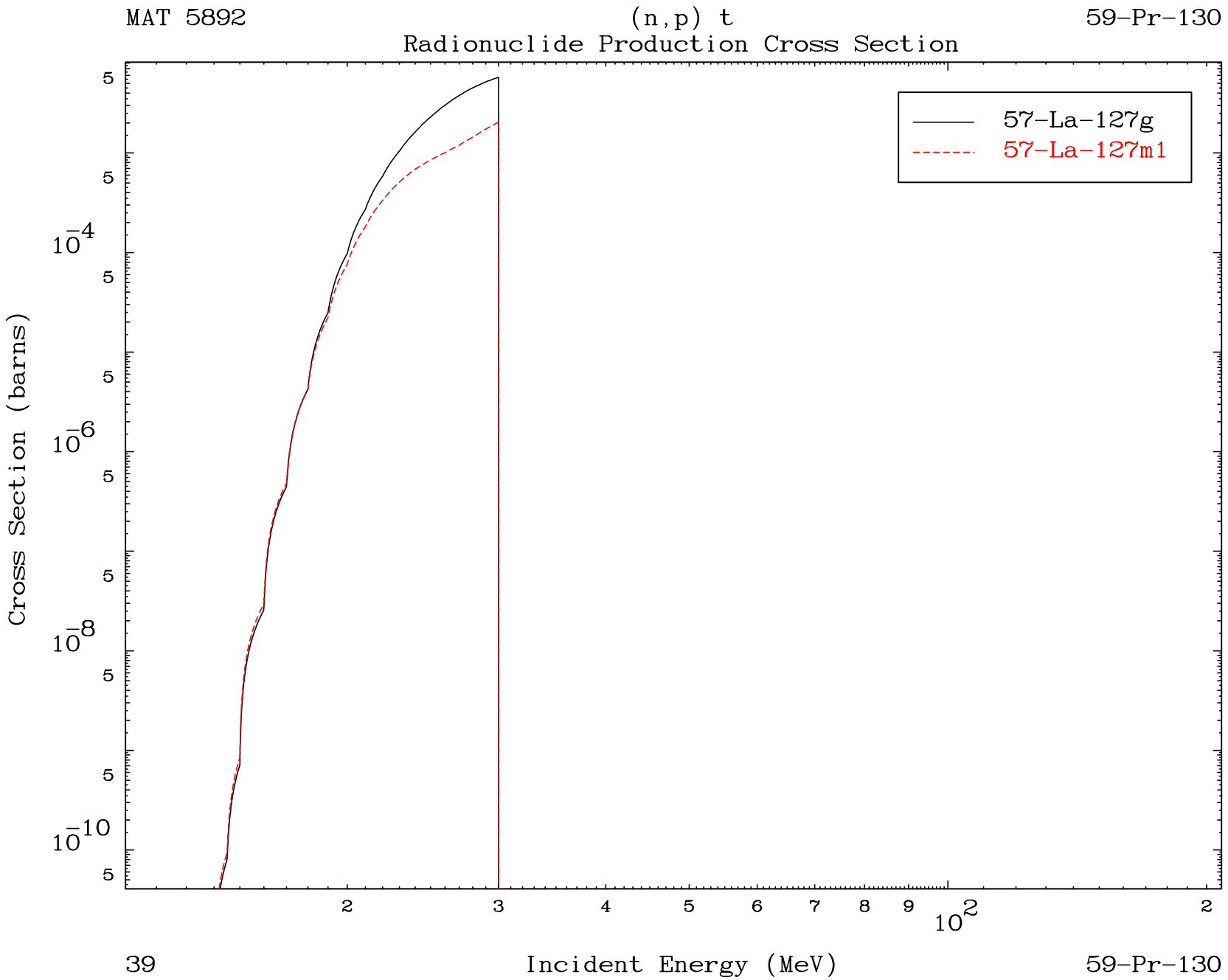

MAT 5892
(n,He-3)
59-Pr-130
Radionuclide Production Cross Section
57-La-128g
57-La-128m6
Cross Section (barns)
Incident Energy (MeV)
34
59-Pr-130


MAT 5892
(n,α)
59-Pr-130
Radionuclide Production Cross Section
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
57-La-127g
57-La-127m1
35
Incident Energy (MeV)
59-Pr-130


MAT 5892
(n,2α)
59-Pr-130
Radionuclide Production Cross Section
55-Cs-123g
55-Cs-123m5
Cross Section (barns)
Incident Energy (MeV)
36
59-Pr-130


MAT 5892
(n,2p)
59-Pr-130
Radionuclide Production Cross Section
57-La-129g
57-La-129m2
Cross Section (barns)
Incident Energy (MeV)
37
59-Pr-130


MAT 5892
(n,p) d
59-Pr-130
Radionuclide Production Cross Section
57-La-128g
57-La-128m6
Cross Section (barns)
Incident Energy (MeV)
38
59-Pr-130


MAT 5892
(n,p) t
59-Pr-130
Radionuclide Production Cross Section
57-La-127g
57-La-127m1
Cross Section (barns)
Incident Energy (MeV)
39
59-Pr-130