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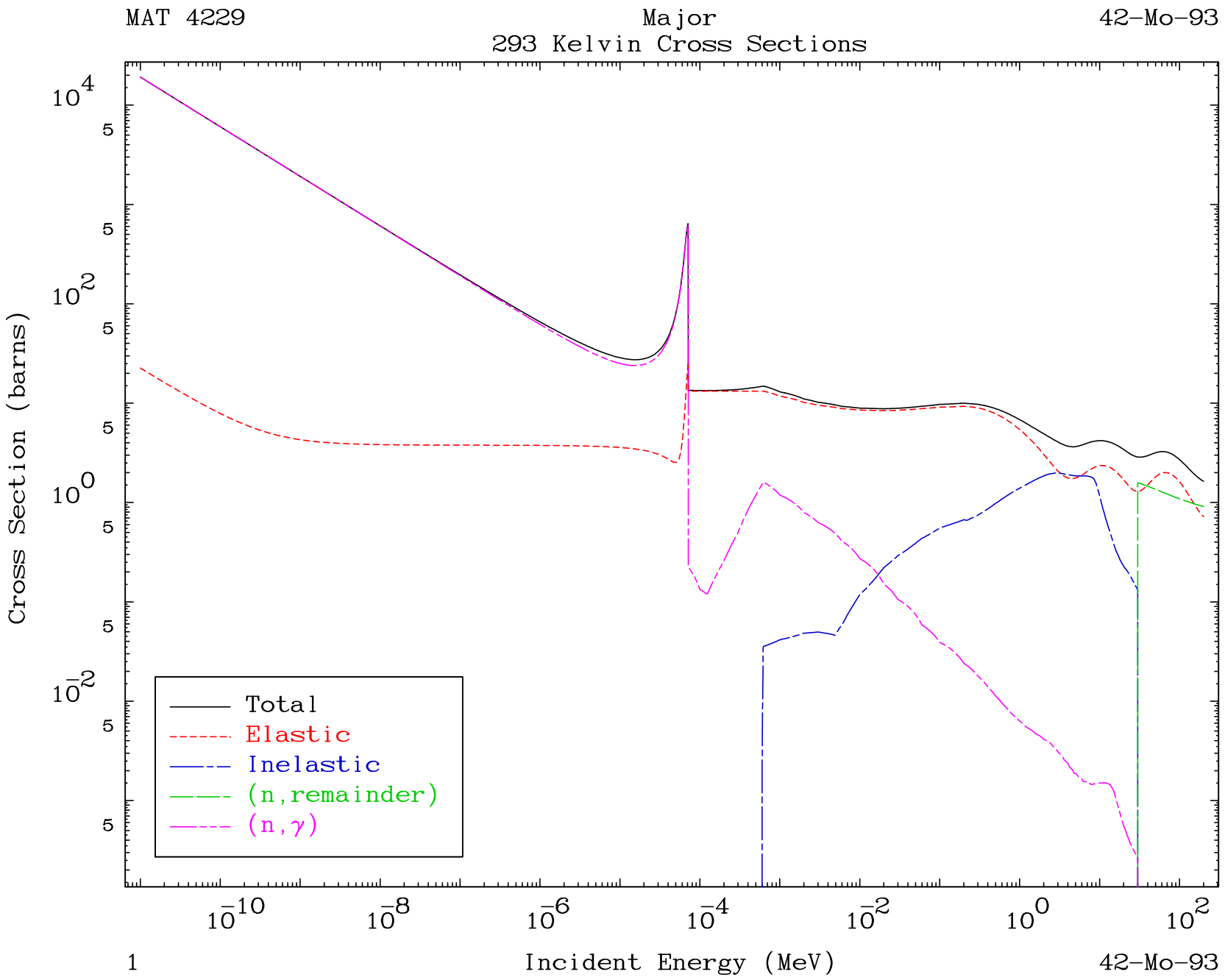
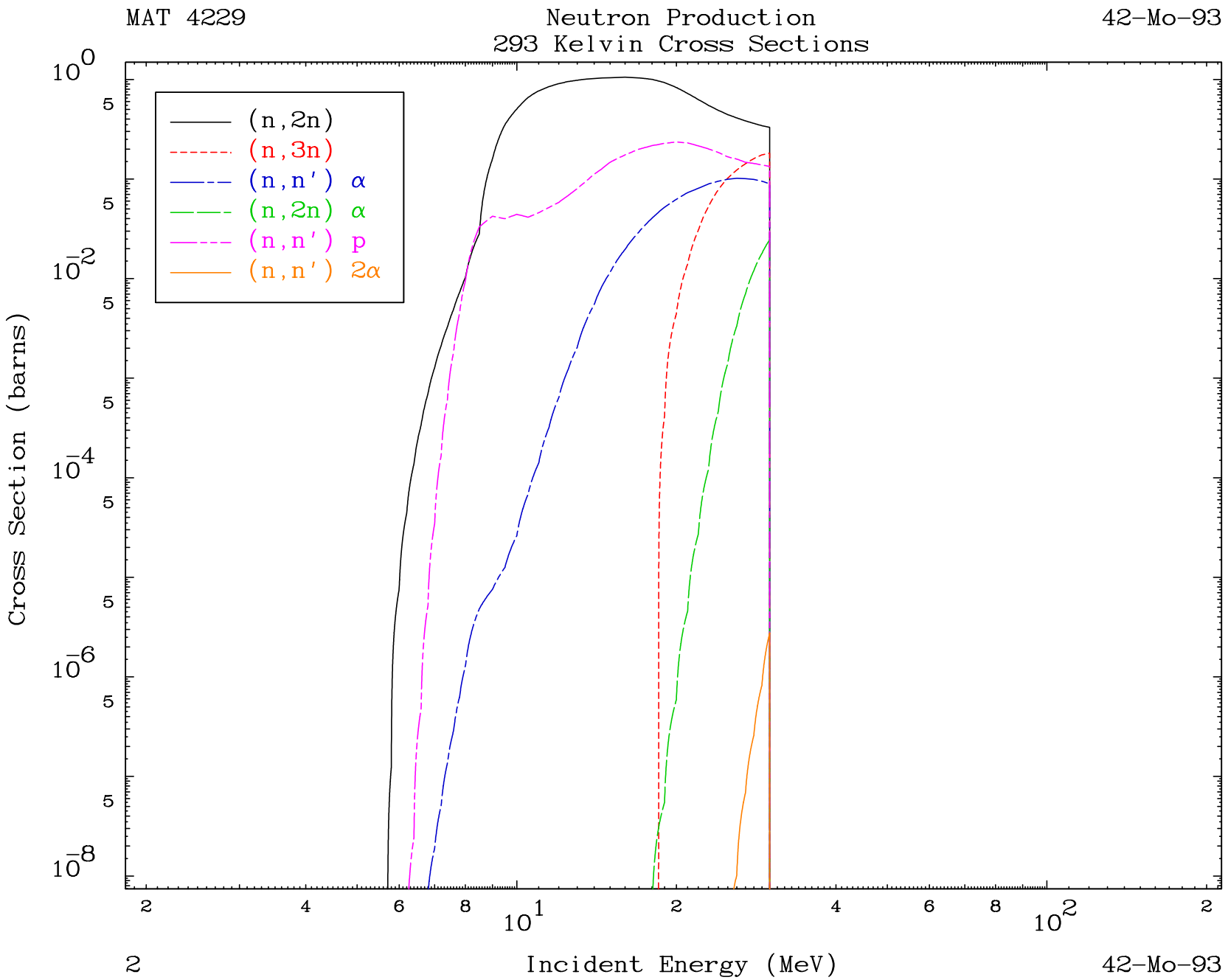
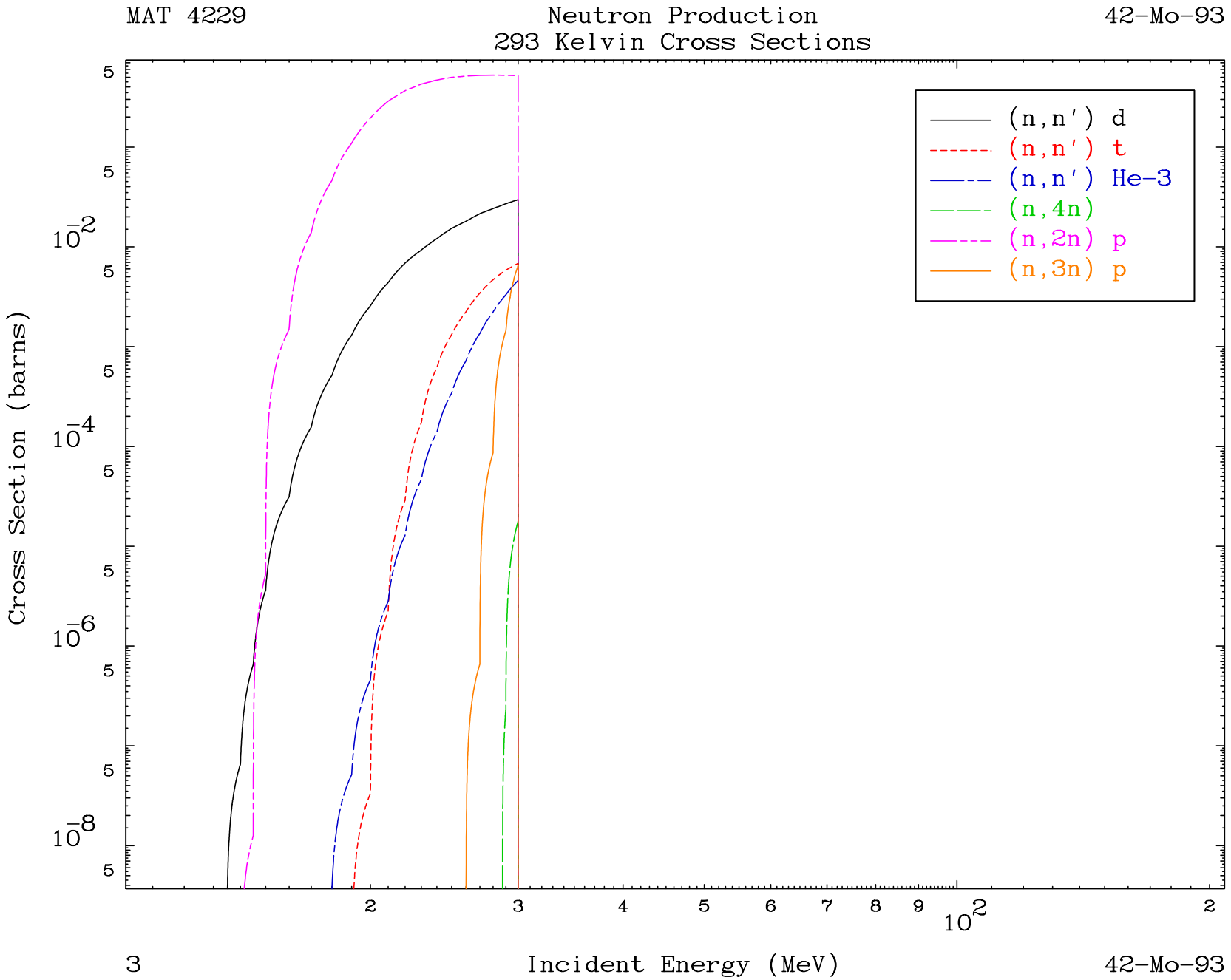
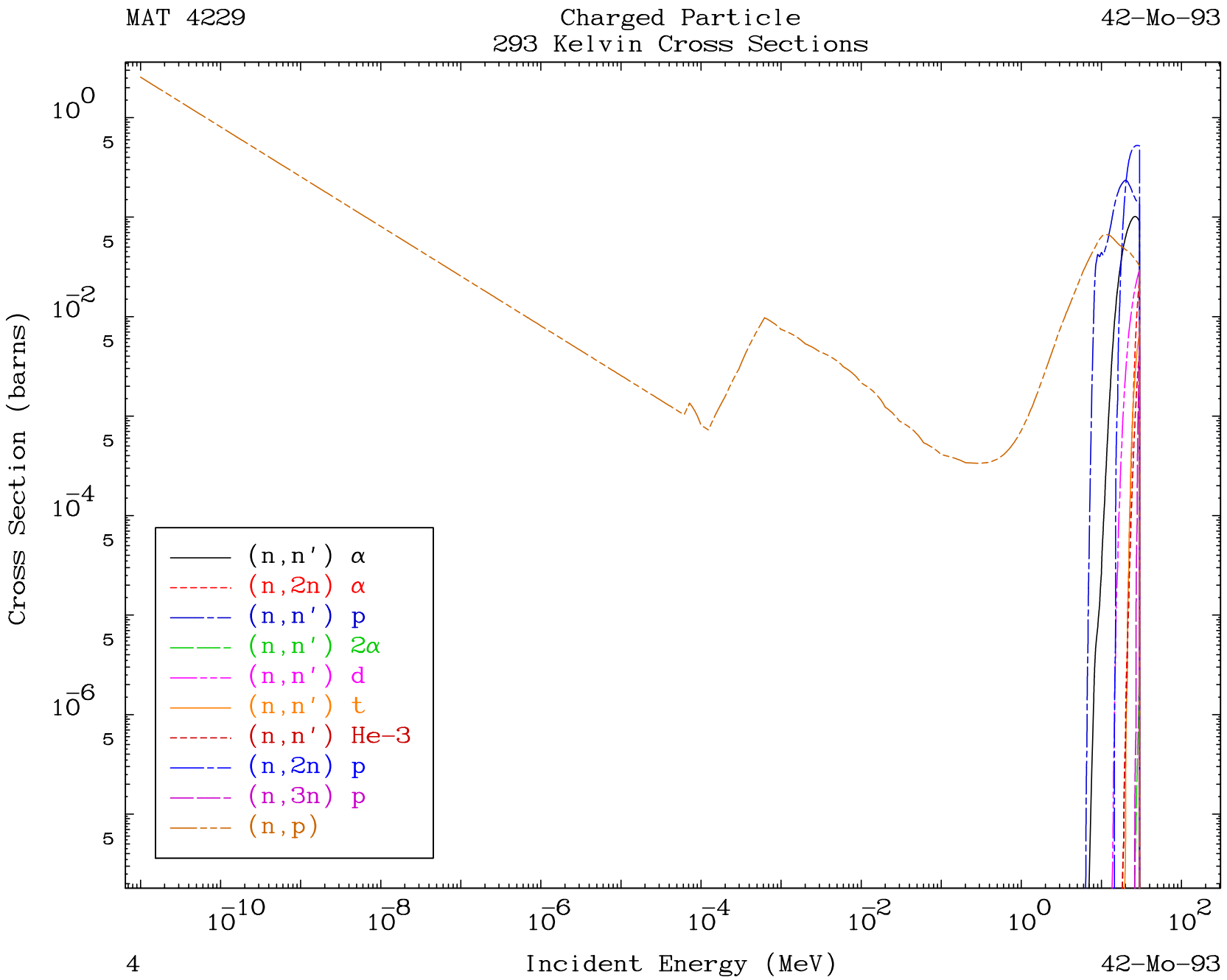
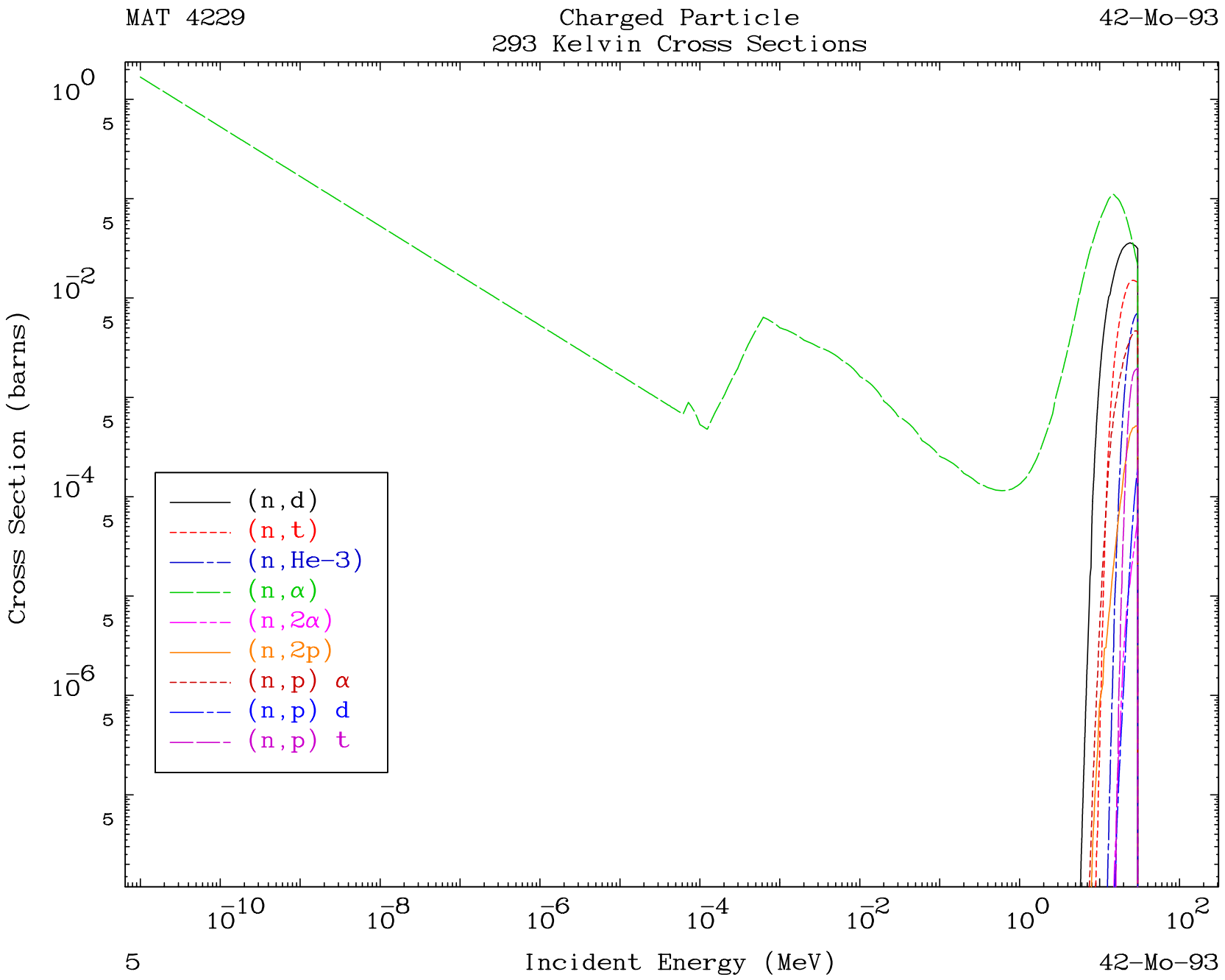
Press Mouse Button to Start

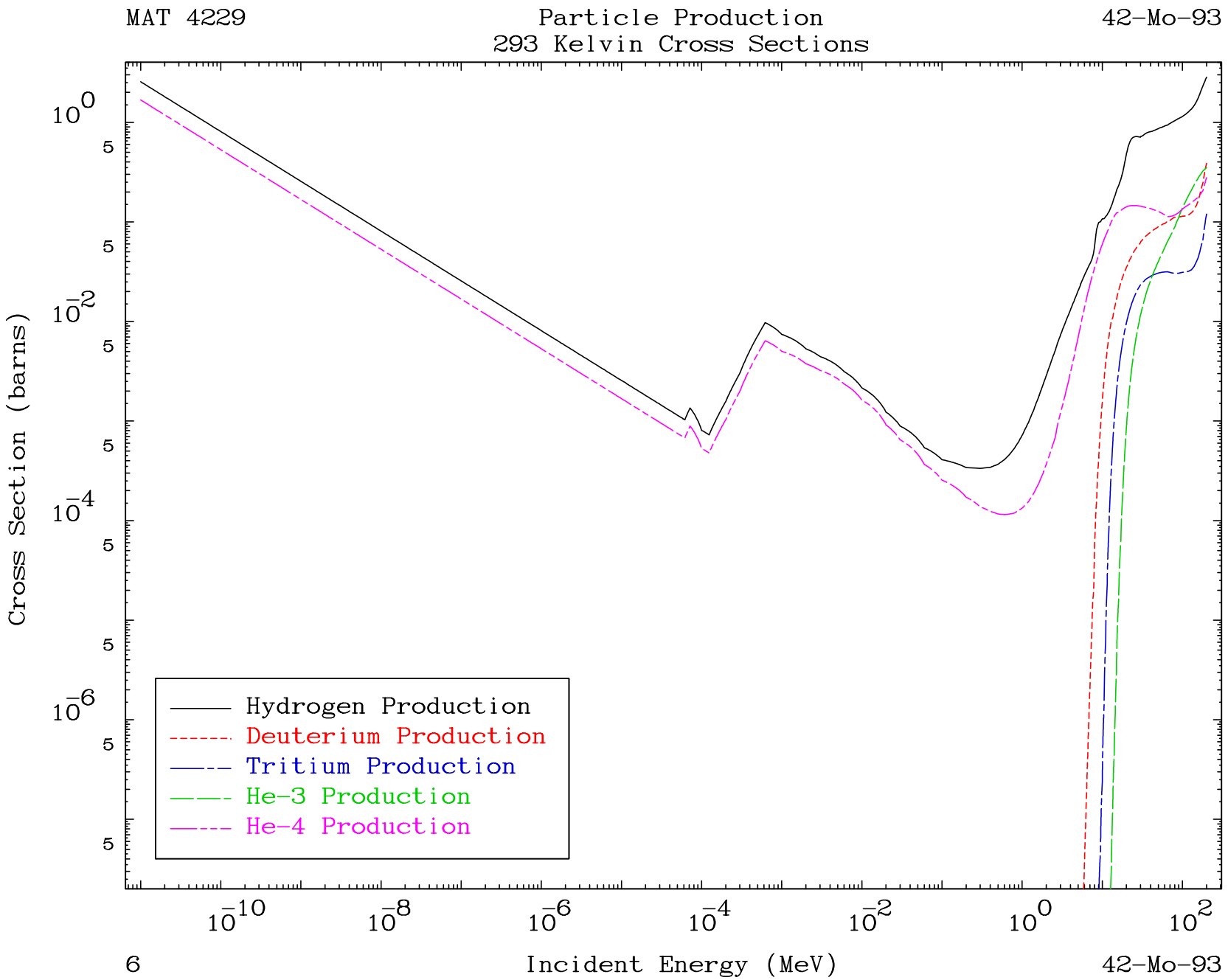

MAT 4229
Major
42-Mo-93
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
42-Mo-93

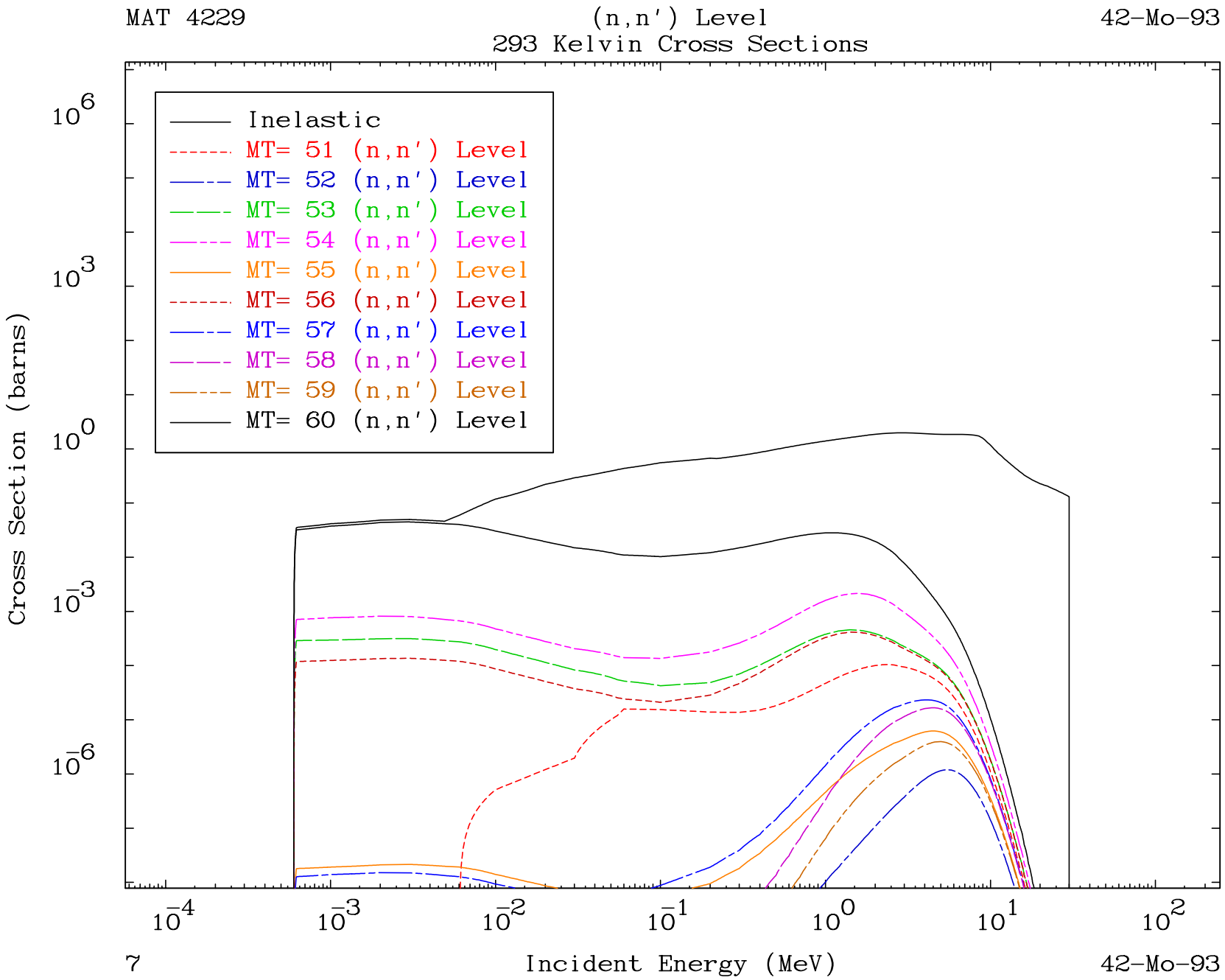

MAT 4229
Neutron Production
293 Kelvin Cross Sections
42-Mo-93
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
42-Mo-93

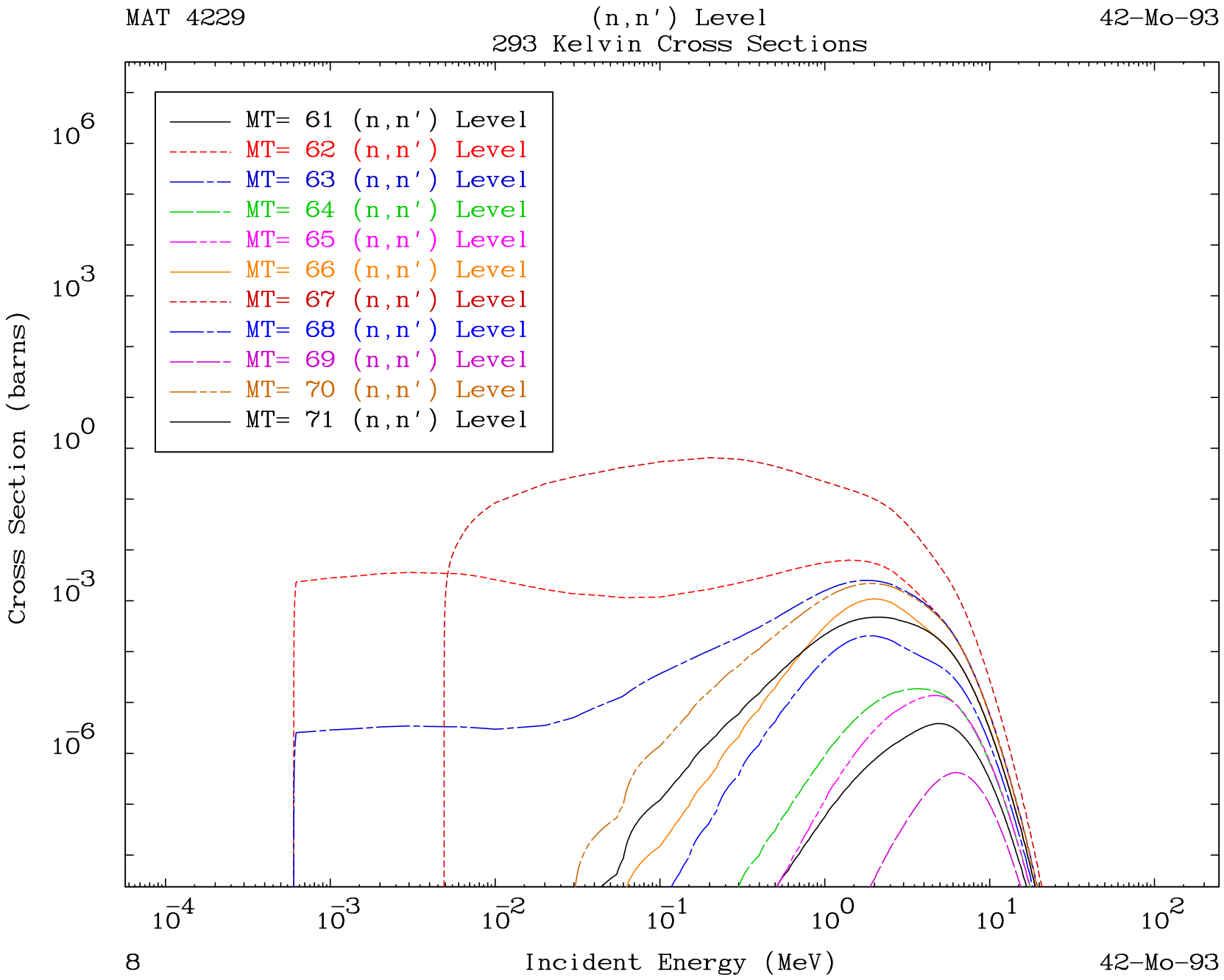

MAT 4229
Neutron Production
293 Kelvin Cross Sections
42-Mo-93
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
42-Mo-93

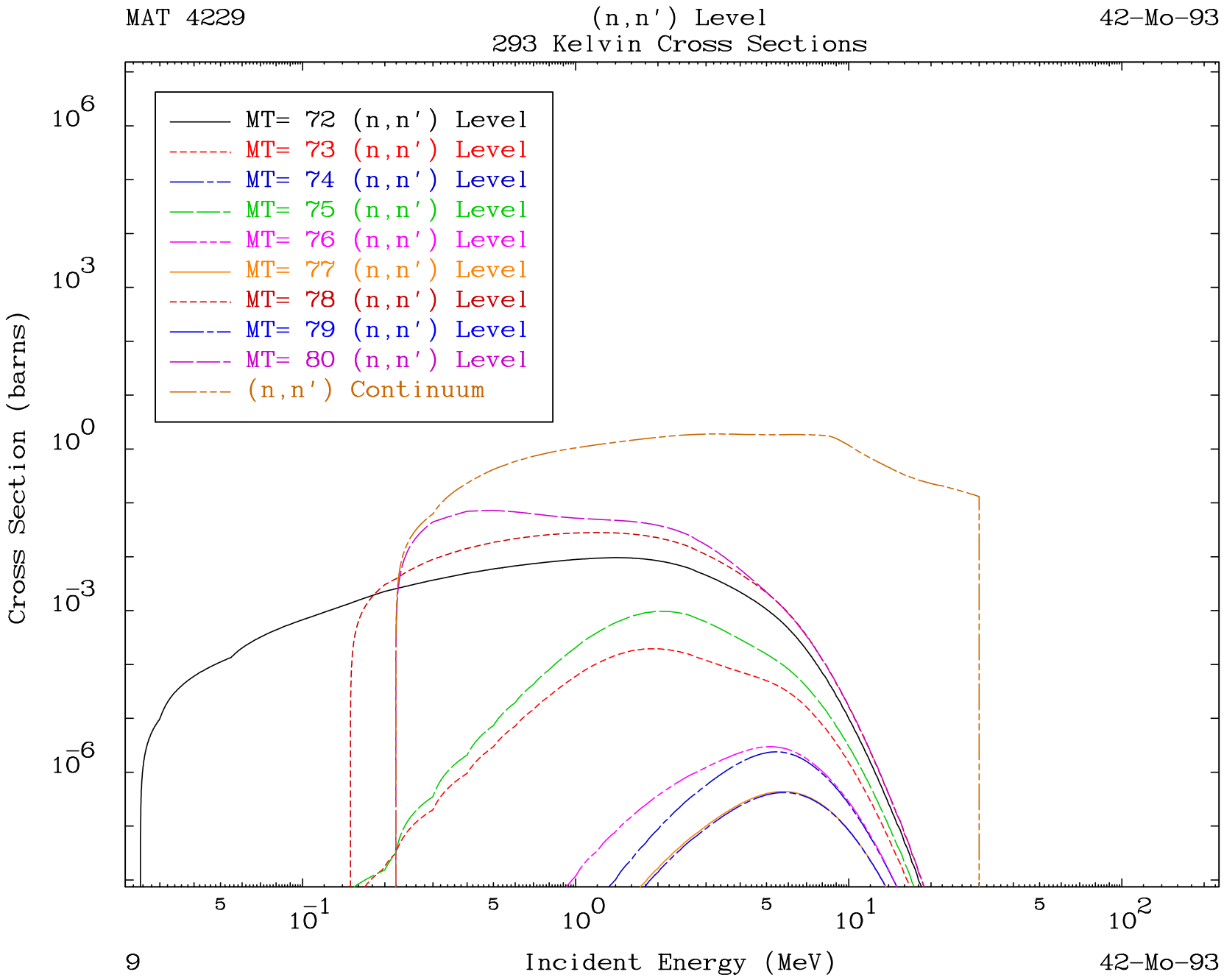

MAT 4229
Charged Particle
293 Kelvin Cross Sections
42-Mo-93
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
4
42-Mo-93

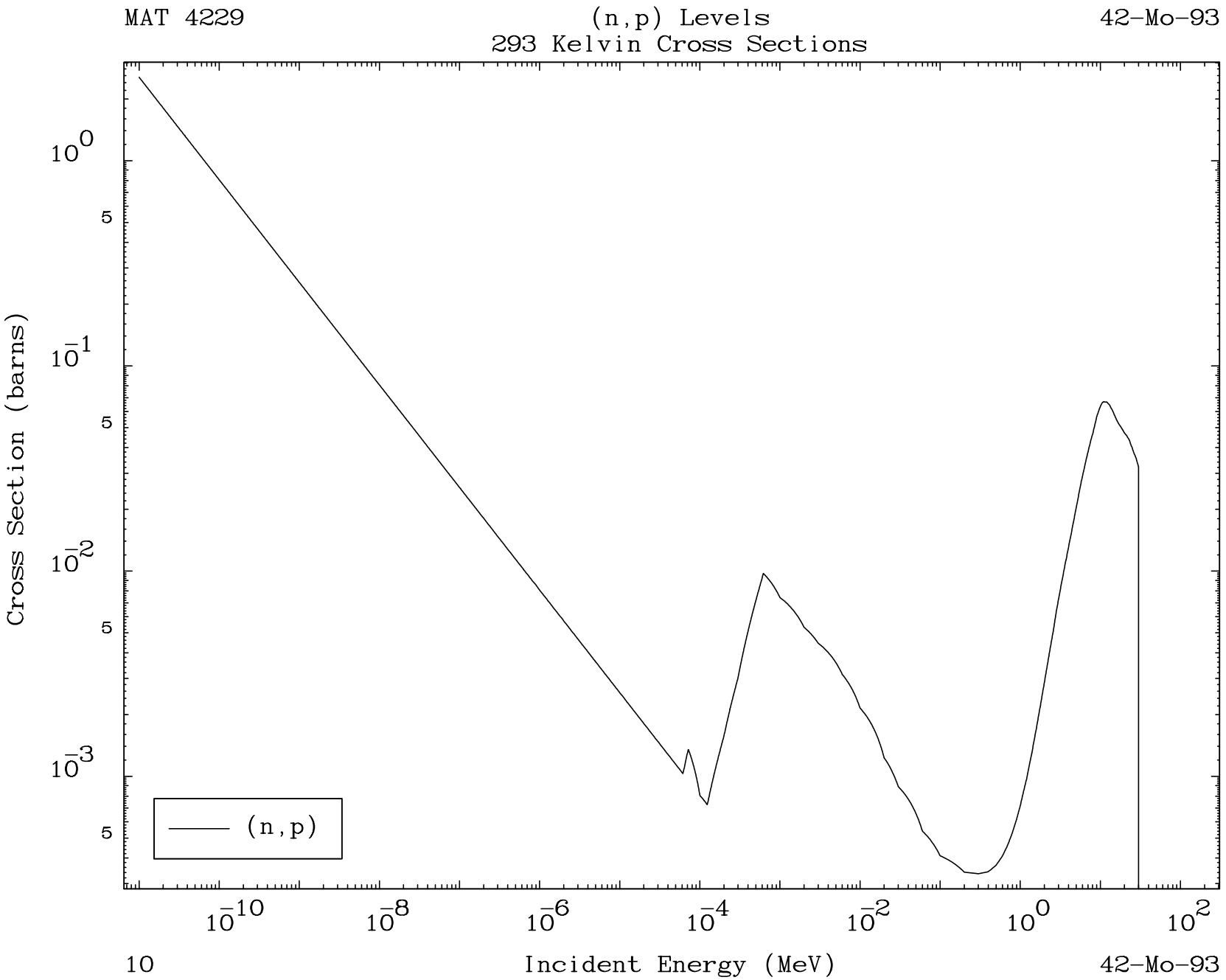

MAT 4229
Charged Particle
293 Kelvin Cross Sections
42-Mo-93
Cross Section (barns)
Incident Energy (MeV)
42-Mo-93
5
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t

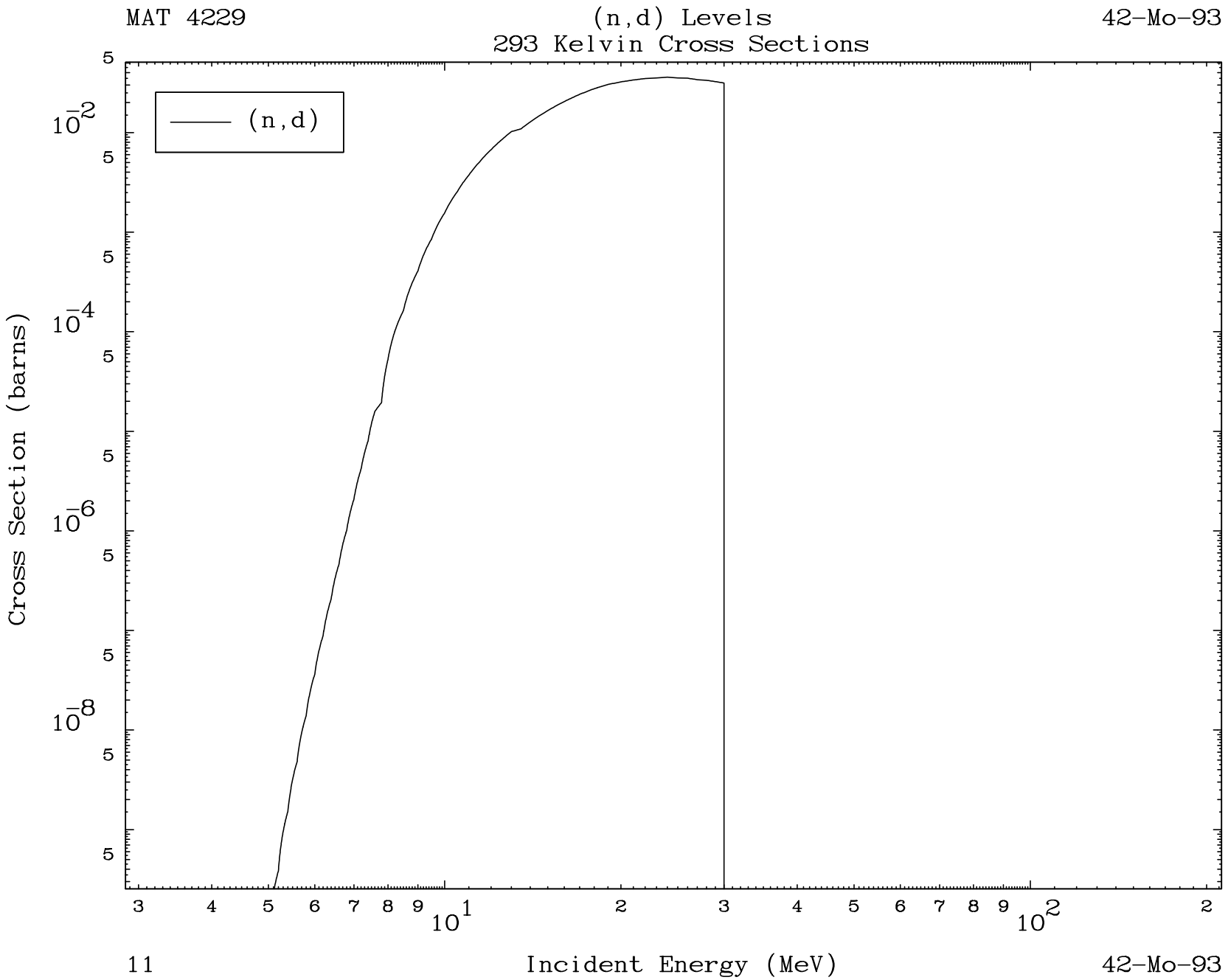

MAT 4229
Particle Production
293 Kelvin Cross Sections
42-Mo-93
Cross Section (barns)
10^0
5
10^-2
5
10^-4
5
10^-6
5
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
6
42-Mo-93


MAT 4229
(n,n') Level
42-Mo-93
293 Kelvin Cross Sections
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
MT= 60 (n,n') Level
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
Incident Energy (MeV)
7
42-Mo-93


MAT 4229
(n,n') Level
42-Mo-93
293 Kelvin Cross Sections
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
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
Incident Energy (MeV)
8
42-Mo-93


MAT 4229
(n,n') Level
42-Mo-93
293 Kelvin Cross Sections
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
5
10^-1
5
10^0
5
10^1
5
10^2
9
Incident Energy (MeV)
42-Mo-93


MAT 4229
(n,p) Levels
42-Mo-93
293 Kelvin Cross Sections
Cross Section (barns)
10^0
5
10^-1
5
10^-2
5
10^-3
5
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
10
Incident Energy (MeV)
42-Mo-93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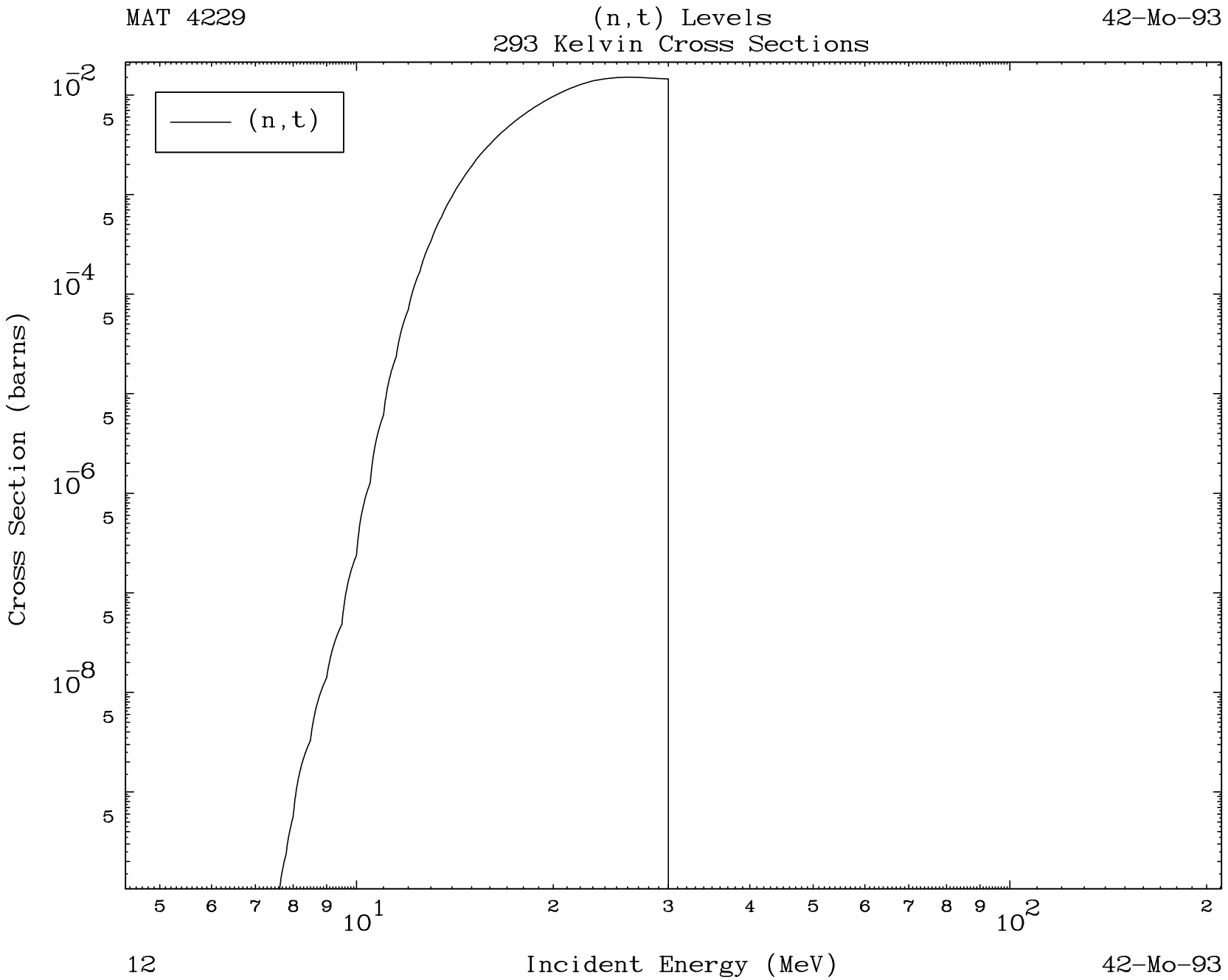
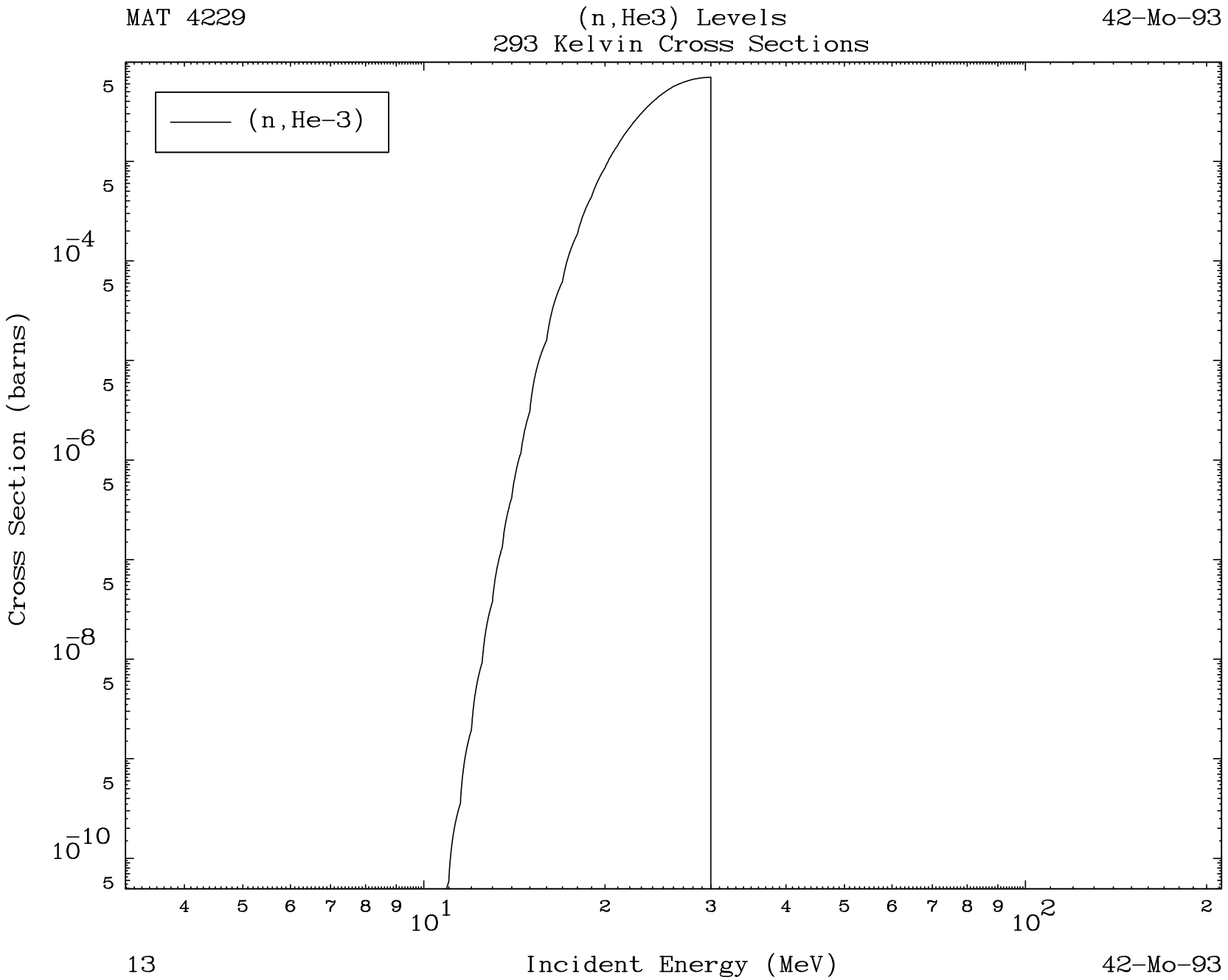
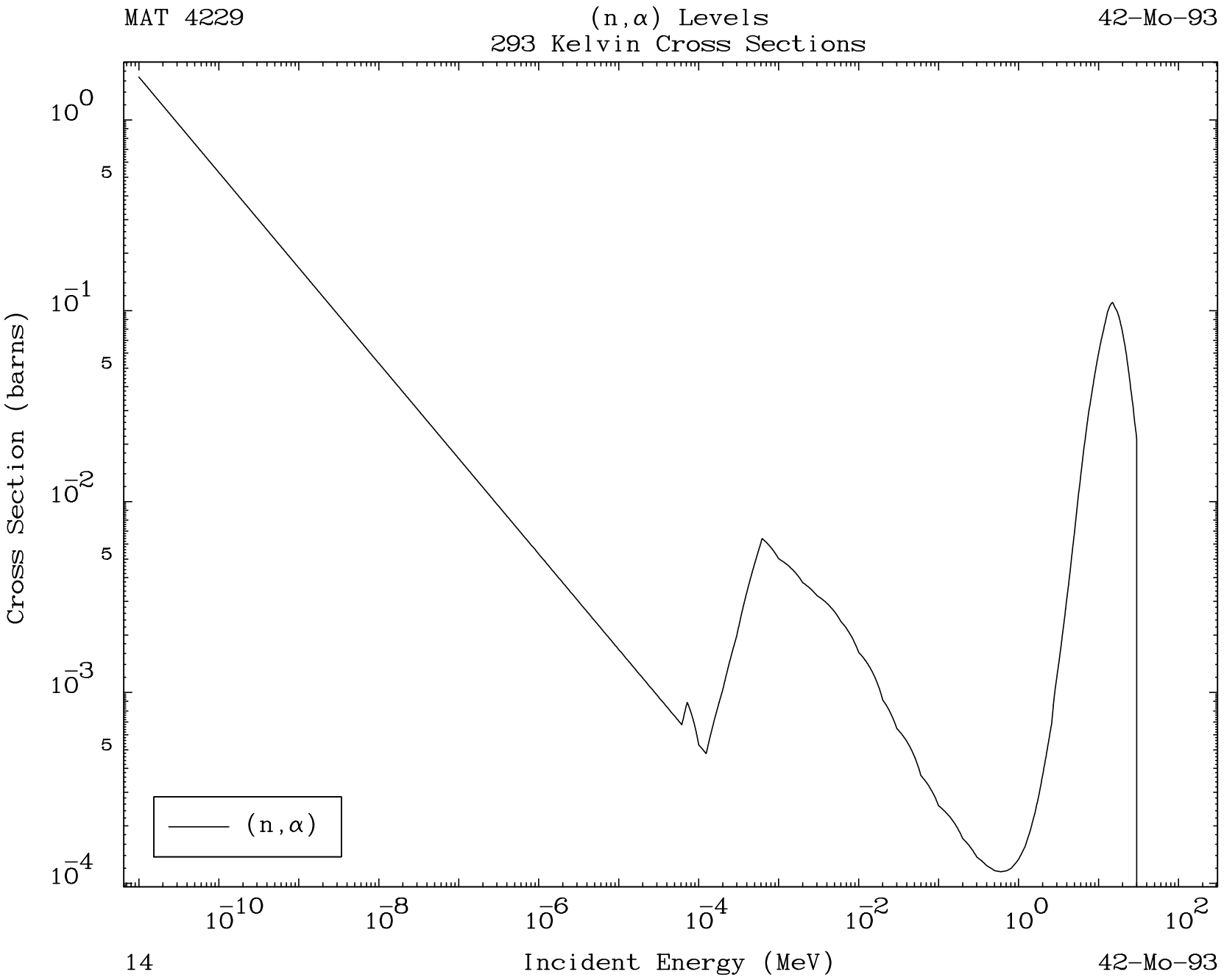
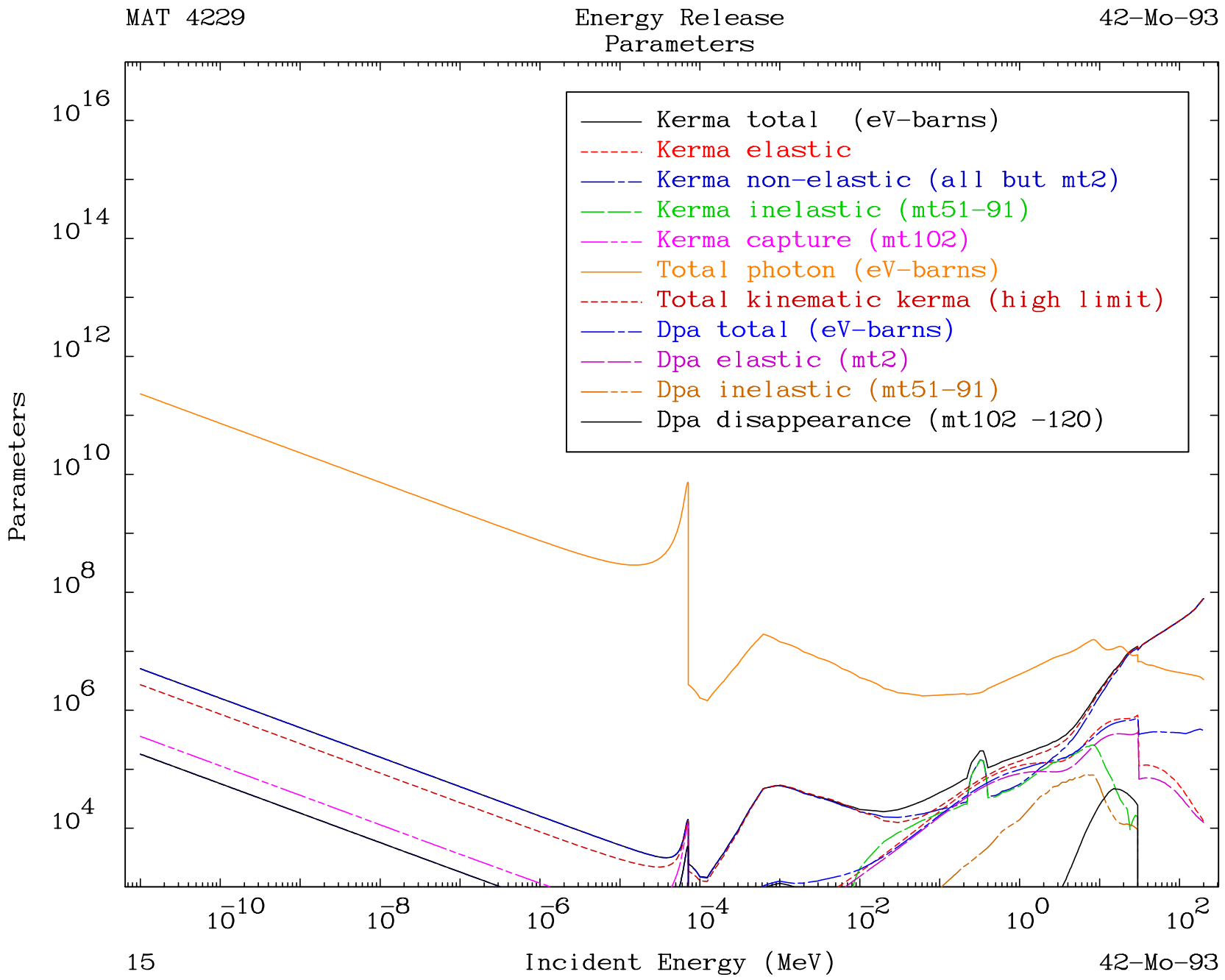
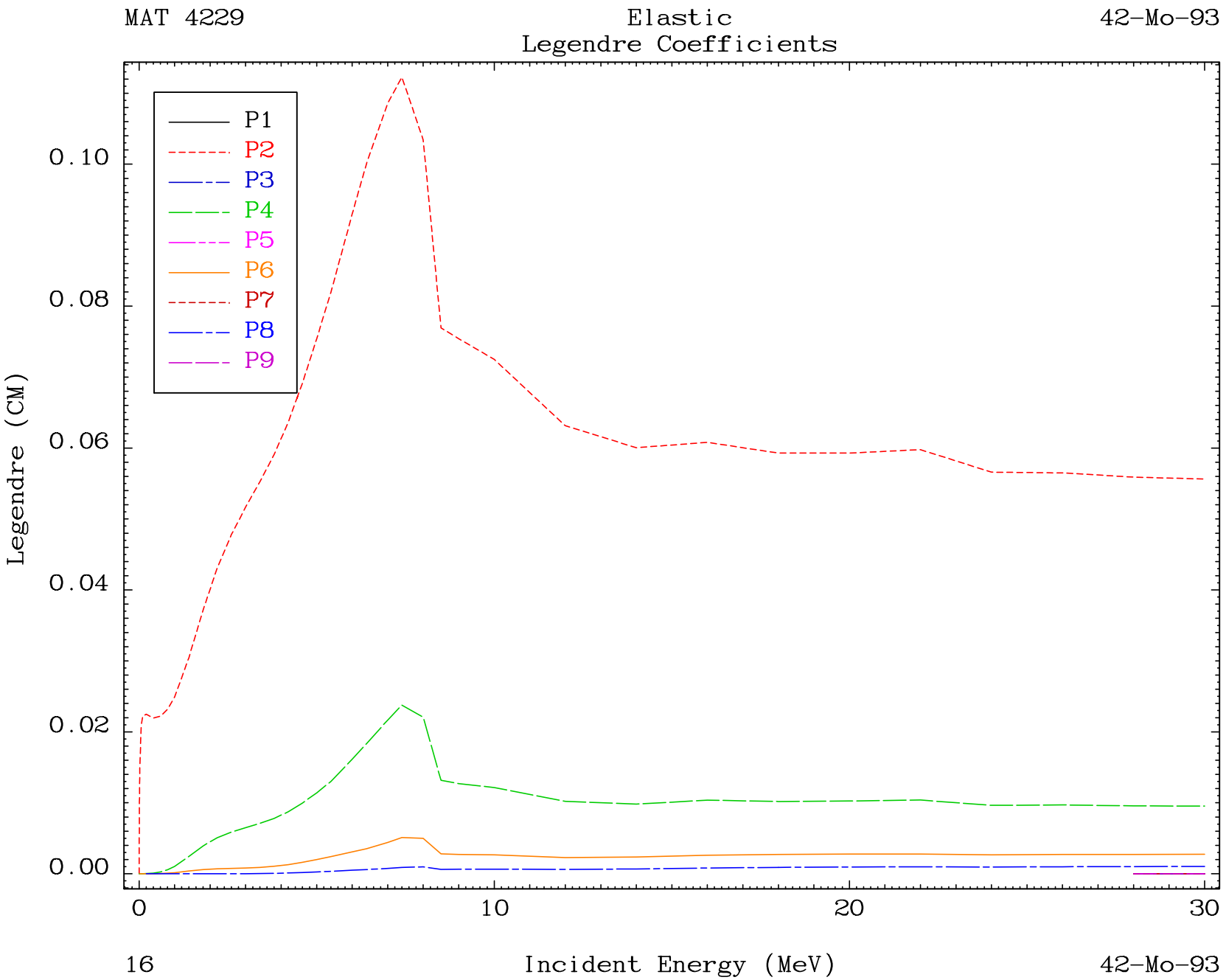
(n,d) Levels
42-Mo-93
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
11
42-Mo-93

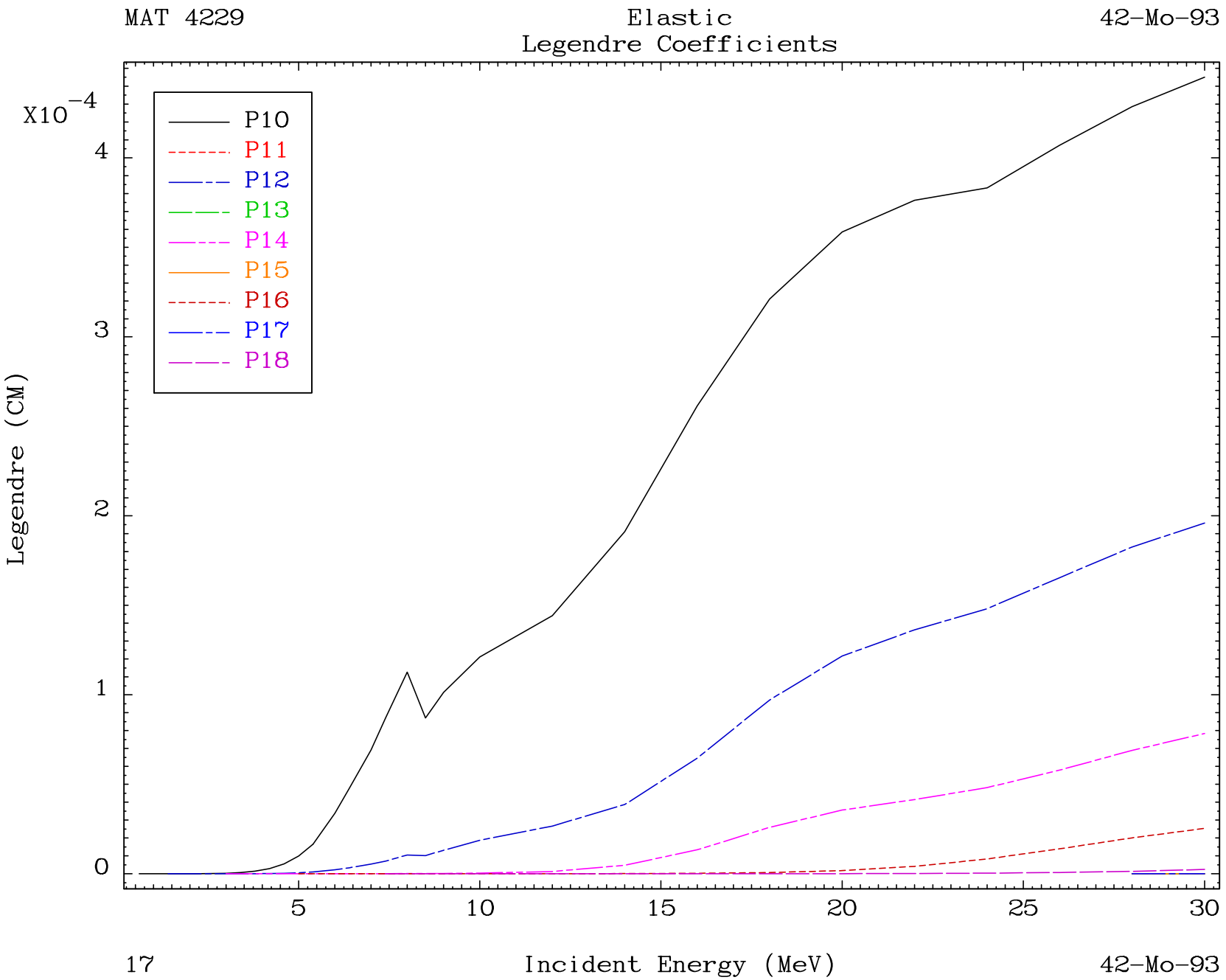

MAT 4229
(n,t) Levels
42-Mo-93
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
12
42-Mo-93

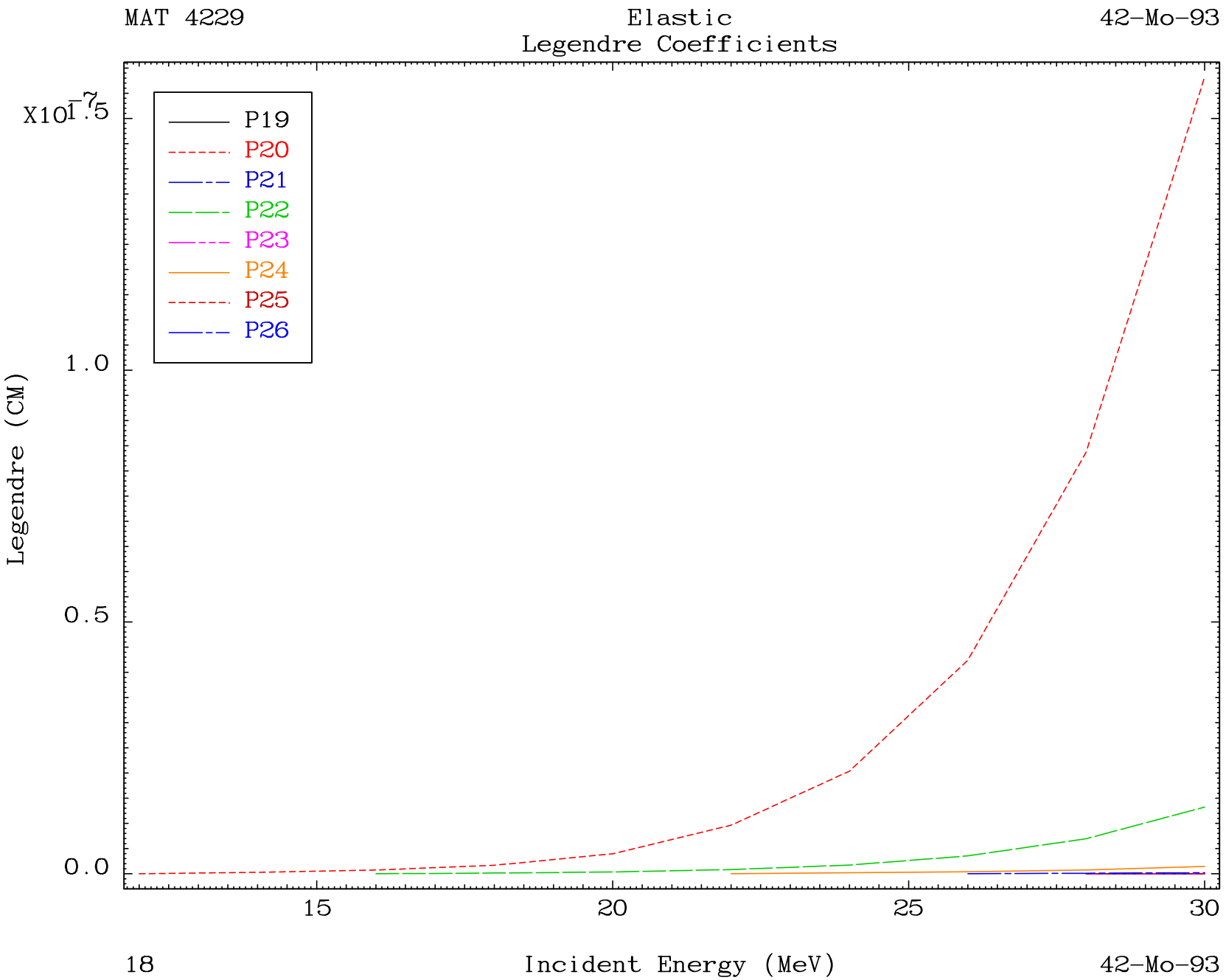

MAT 4229
(n,He3) Levels
293 Kelvin Cross Sections
42-Mo-93
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
13
42-Mo-93

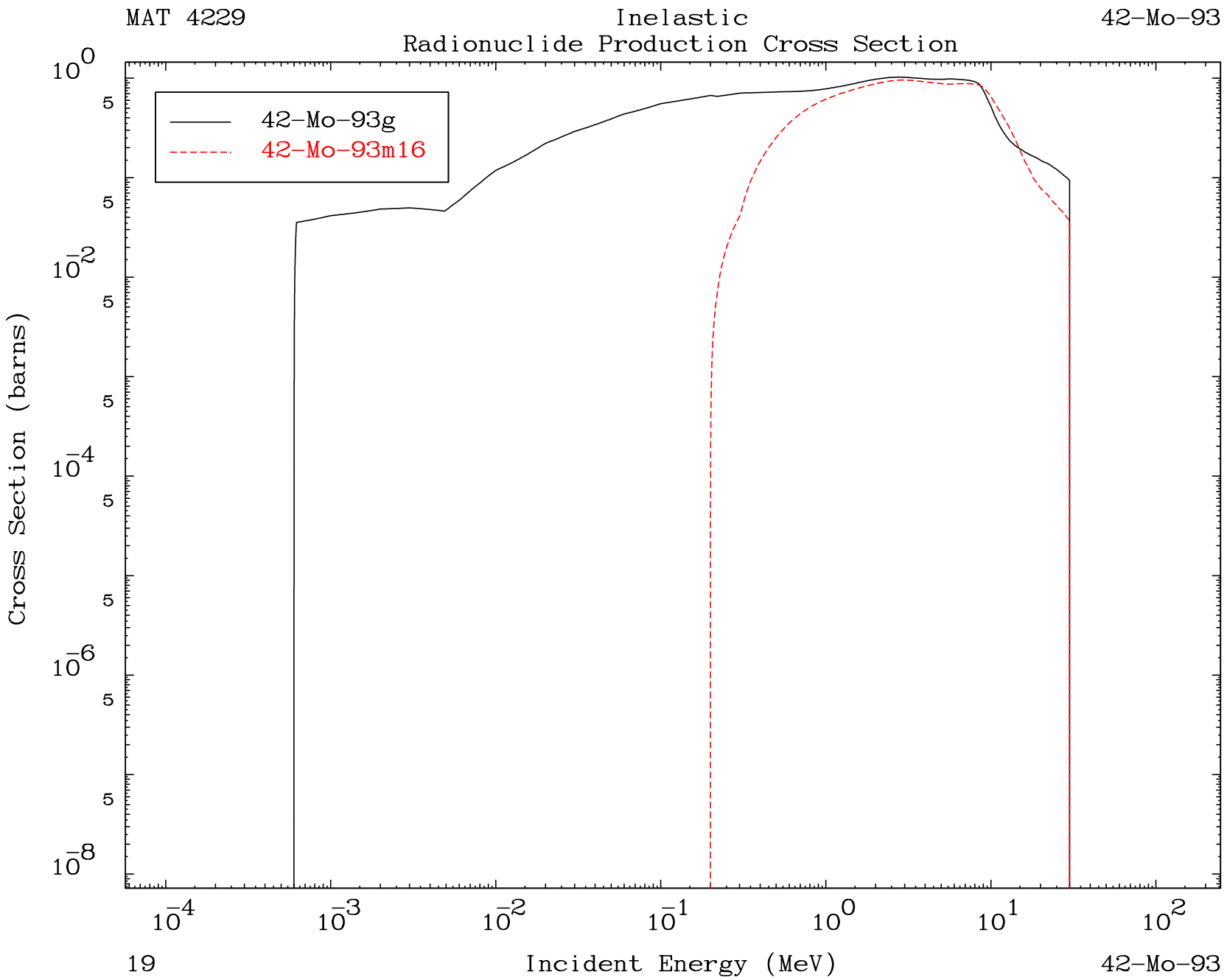

MAT 4229
(n,α) Levels
42-Mo-93
293 Kelvin Cross Sections
Cross Section (barns)
10^0
5
10^-1
5
10^-2
5
10^-3
5
10^-4
(n,α)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
14
Incident Energy (MeV)
42-Mo-93

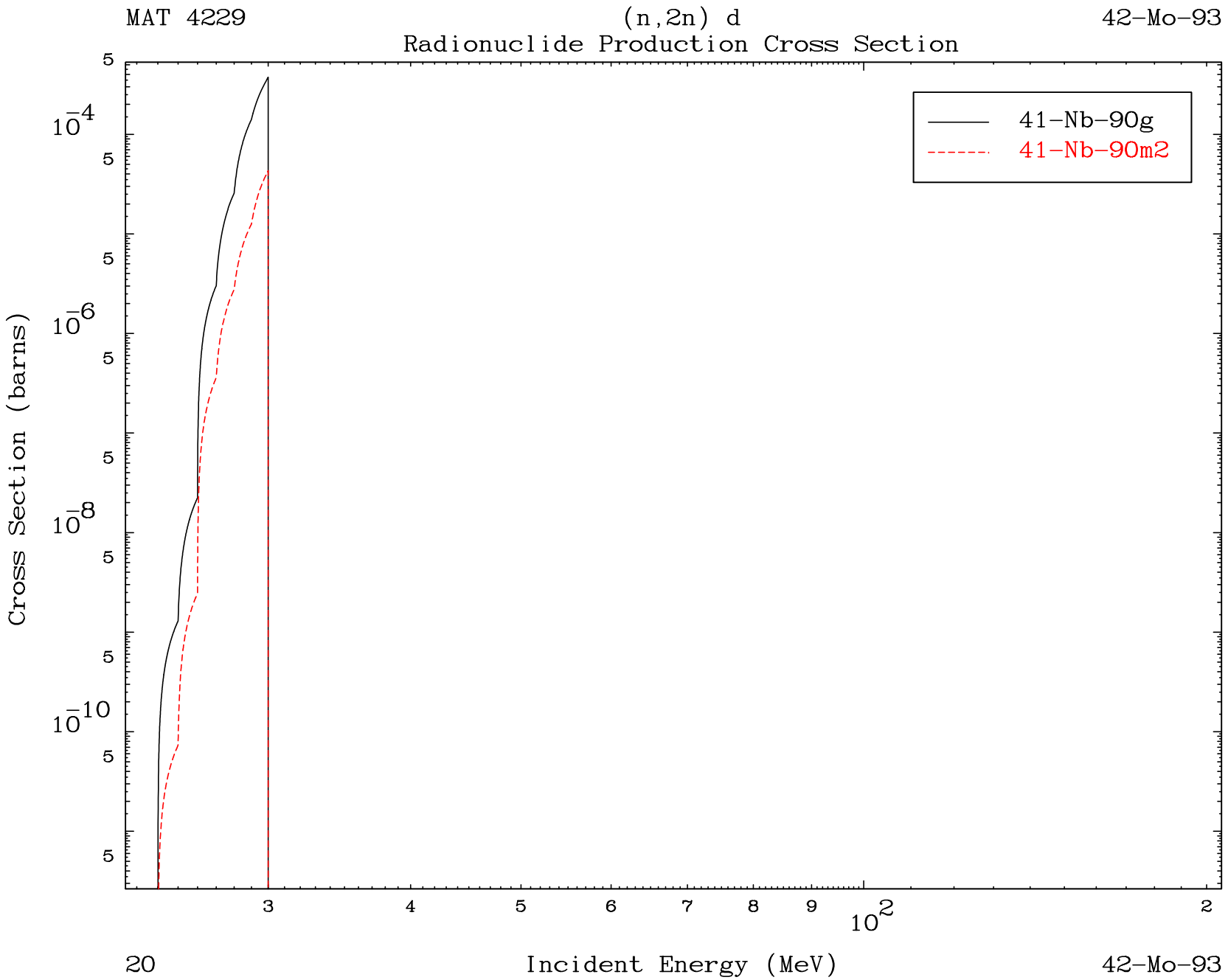

MAT 4229
Energy Release
Parameters
42-Mo-93
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^{16}
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}
15
Incident Energy (MeV)
42-Mo-93

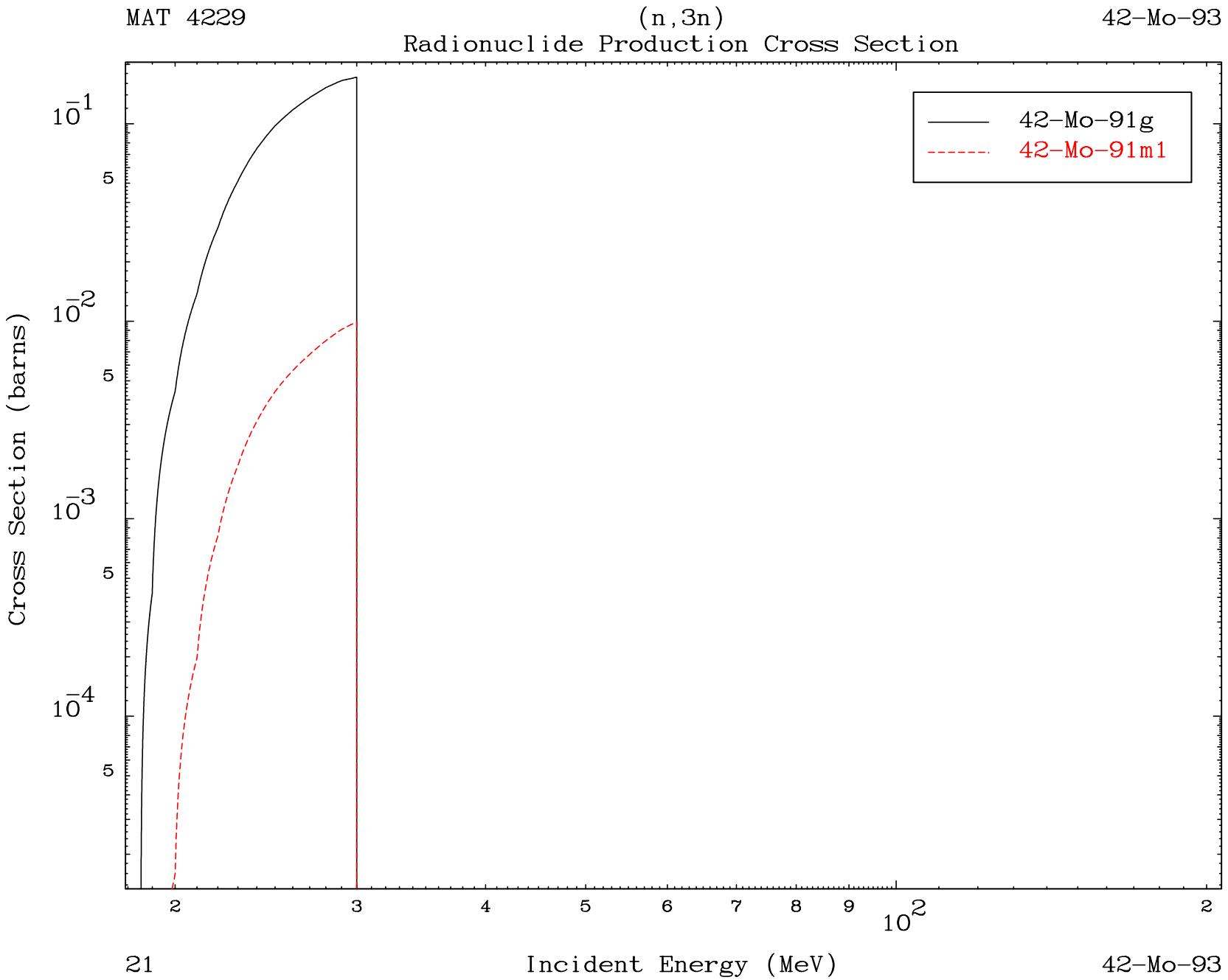

MAT 4229
Elastic
Legendre Coefficients
42-Mo-93
P1
P2
P3
P4
P5
P6
P7
P8
P9
0.10
0.08
0.06
0.04
0.02
0.00
Legendre (CM)
0
10
20
30
16
Incident Energy (MeV)
42-Mo-93

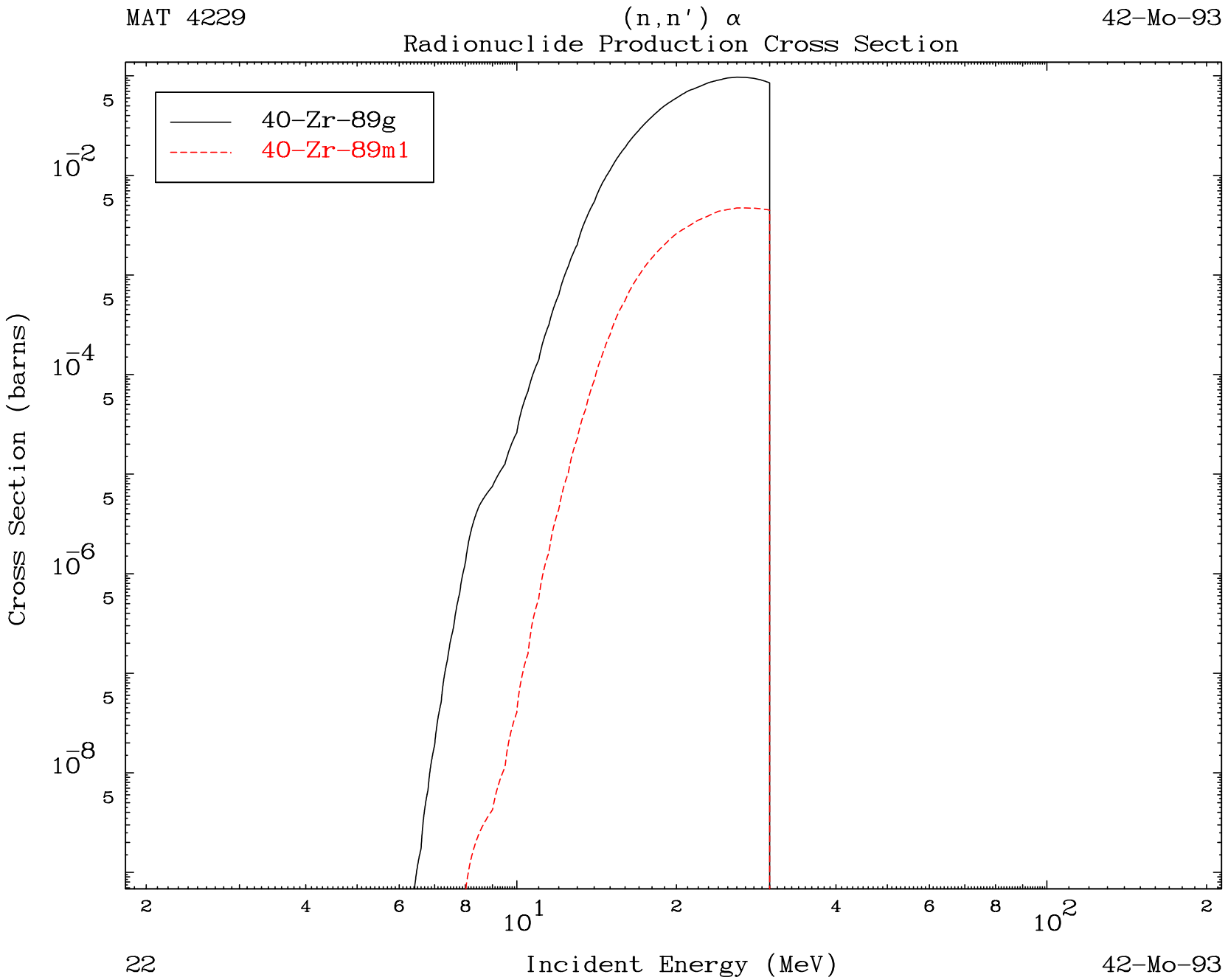

MAT 4229
Elastic
Legendre Coefficients
42-Mo-93
X10^{-4}
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0
1
2
3
4
5
10
15
20
25
30
17
Incident Energy (MeV)
42-Mo-93

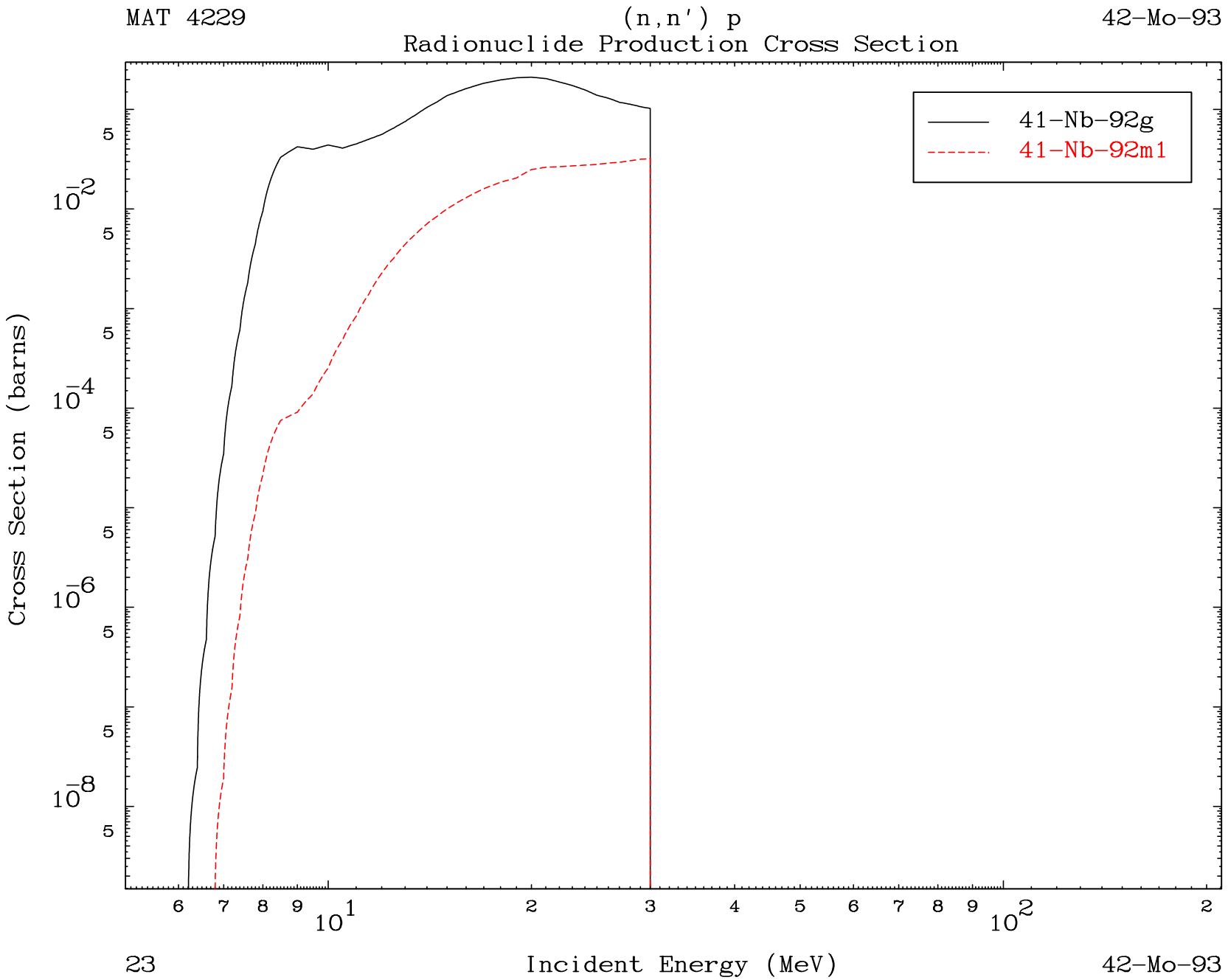

MAT 4229
Elastic
Legendre Coefficients
42-Mo-93
X10-7
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
15
20
25
30
18
Incident Energy (MeV)
42-Mo-93

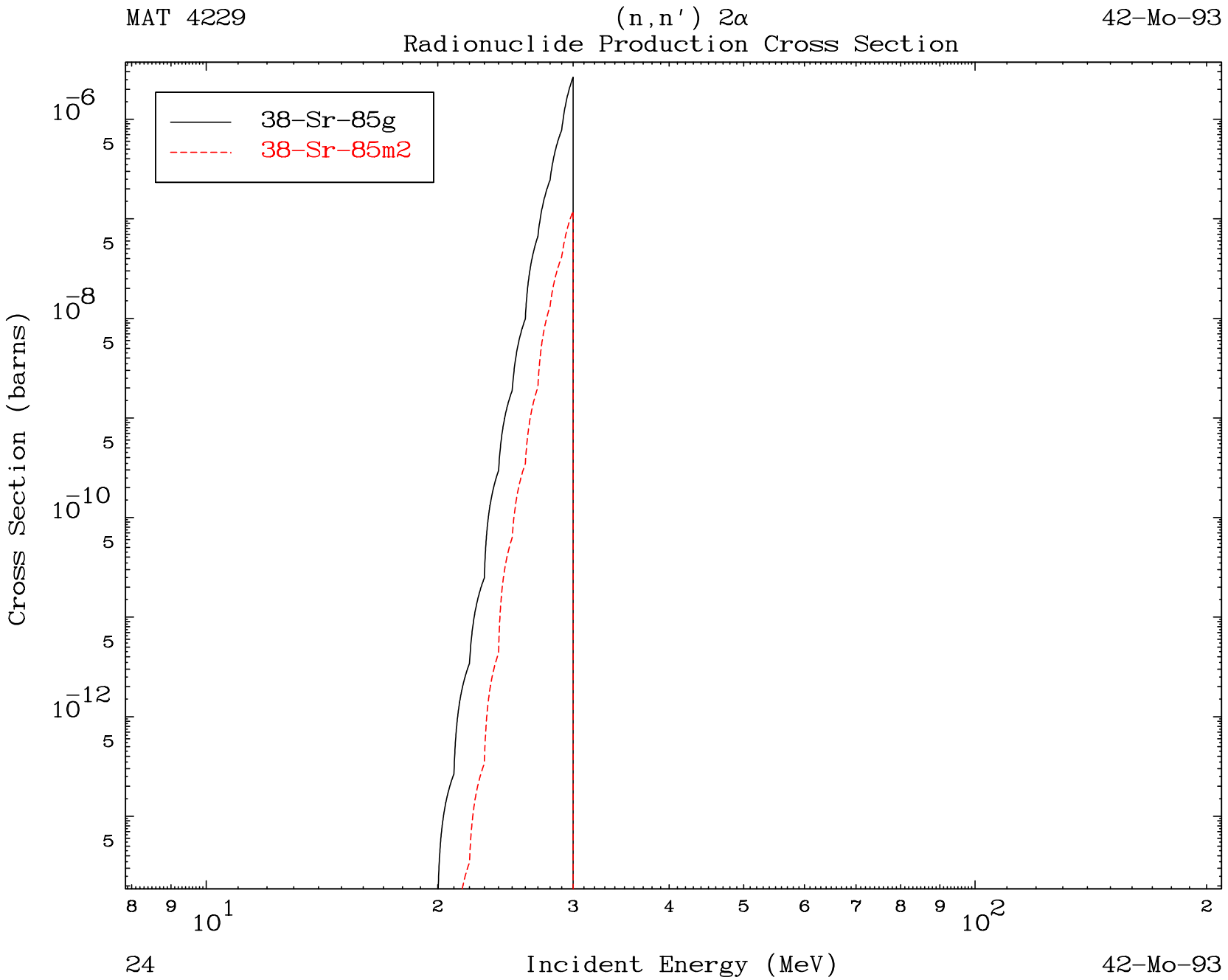

MAT 4229
Inelastic
42-Mo-93
Radionuclide Production Cross Section
42-Mo-93g
42-Mo-93m16
Cross Section (barns)
Incident Energy (MeV)
19
42-Mo-93

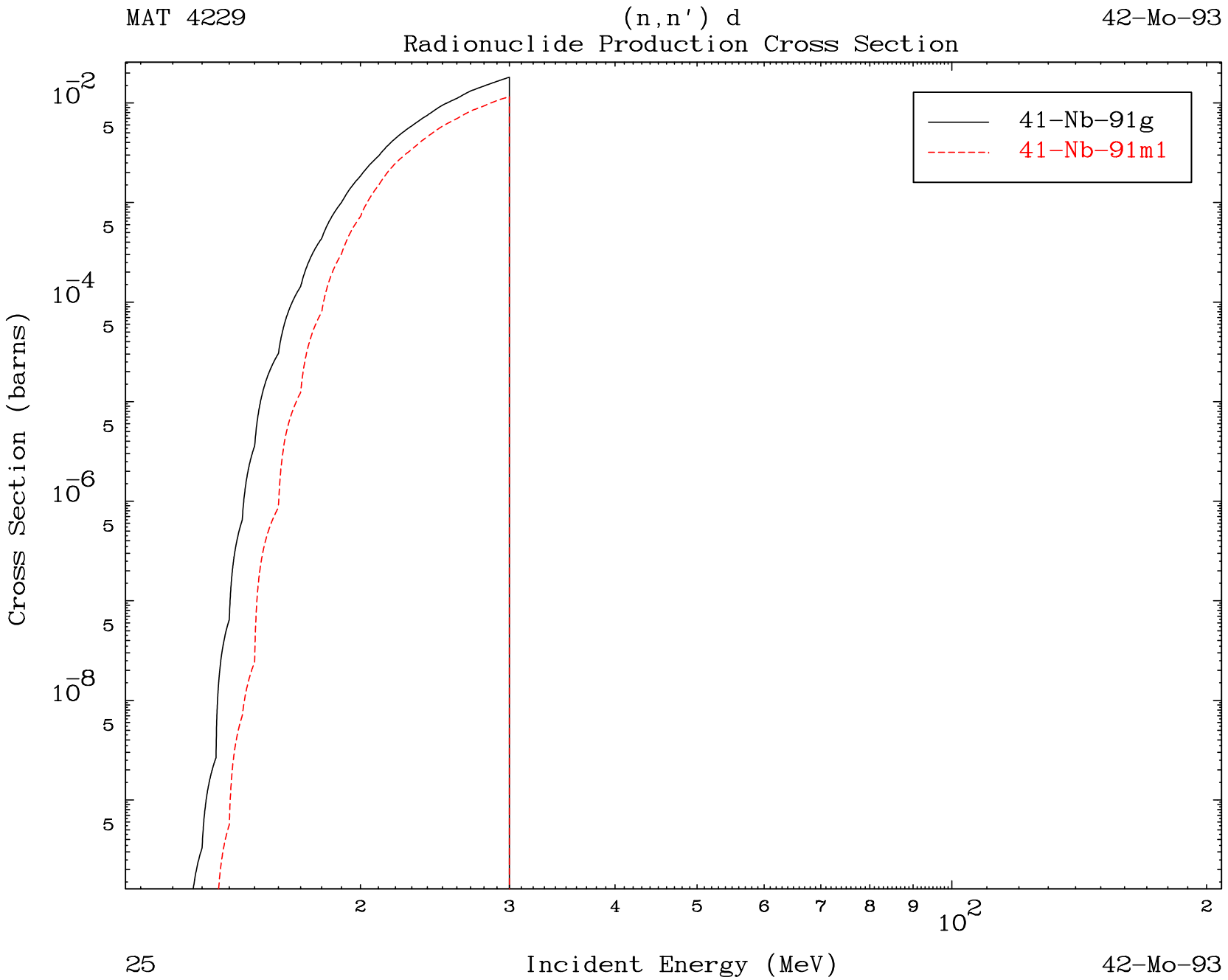

MAT 4229
(n,2n) d
42-Mo-93
Radionuclide Production Cross Section
41-Nb-90g
41-Nb-90m2
Cross Section (barns)
10-4
10-6
10-8
10-10
3
4
5
6
7
8
9
10 2
2
20
Incident Energy (MeV)
42-Mo-93

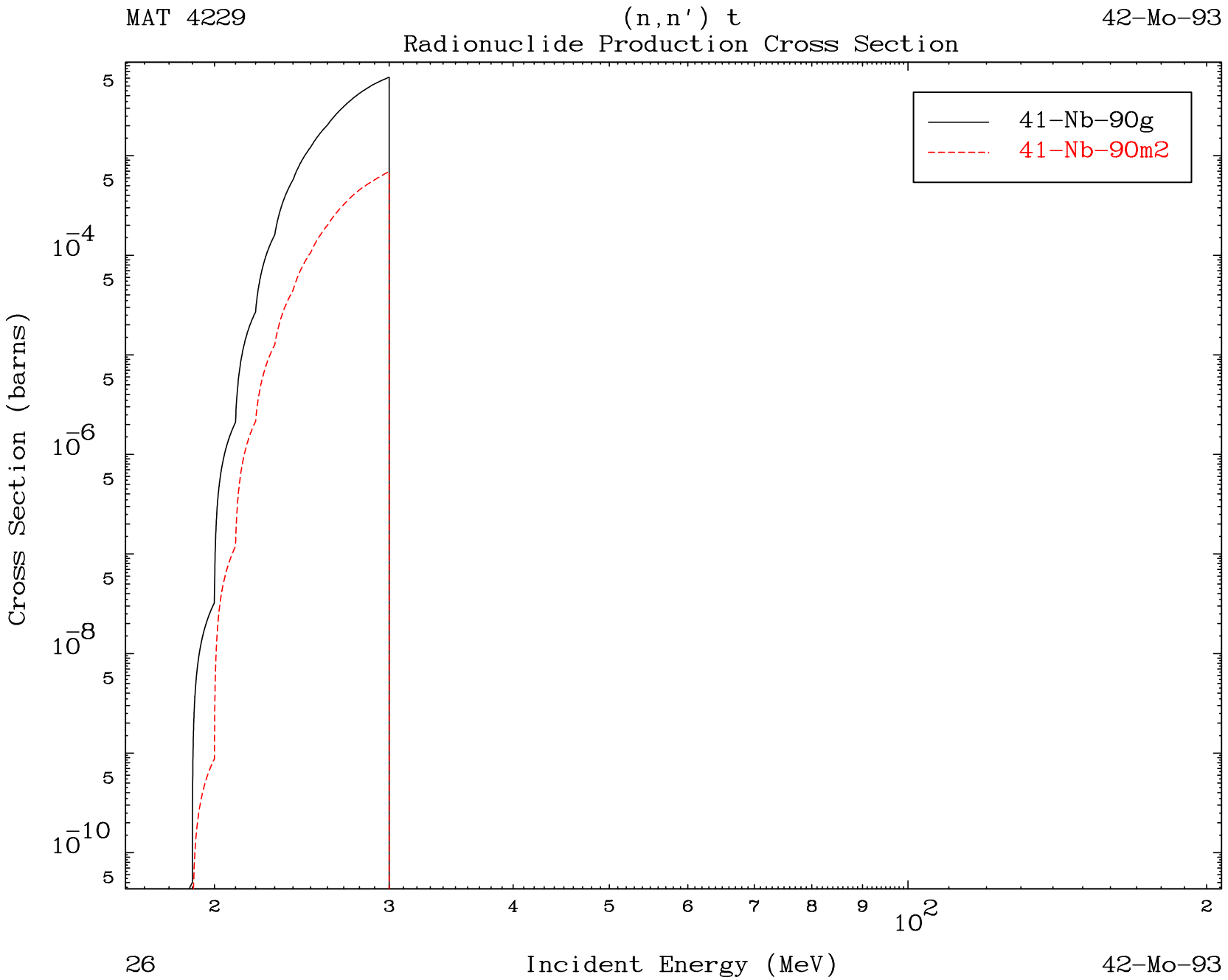

MAT 4229
(n,3n)
42-Mo-93
Radionuclide Production Cross Section
42-Mo-91g
42-Mo-91m1
Cross Section (barns)
10-1
5
10-2
5
10-3
5
10-4
5
2
3
4
5
6
7
8
9
10 2
2
21
Incident Energy (MeV)
42-Mo-93

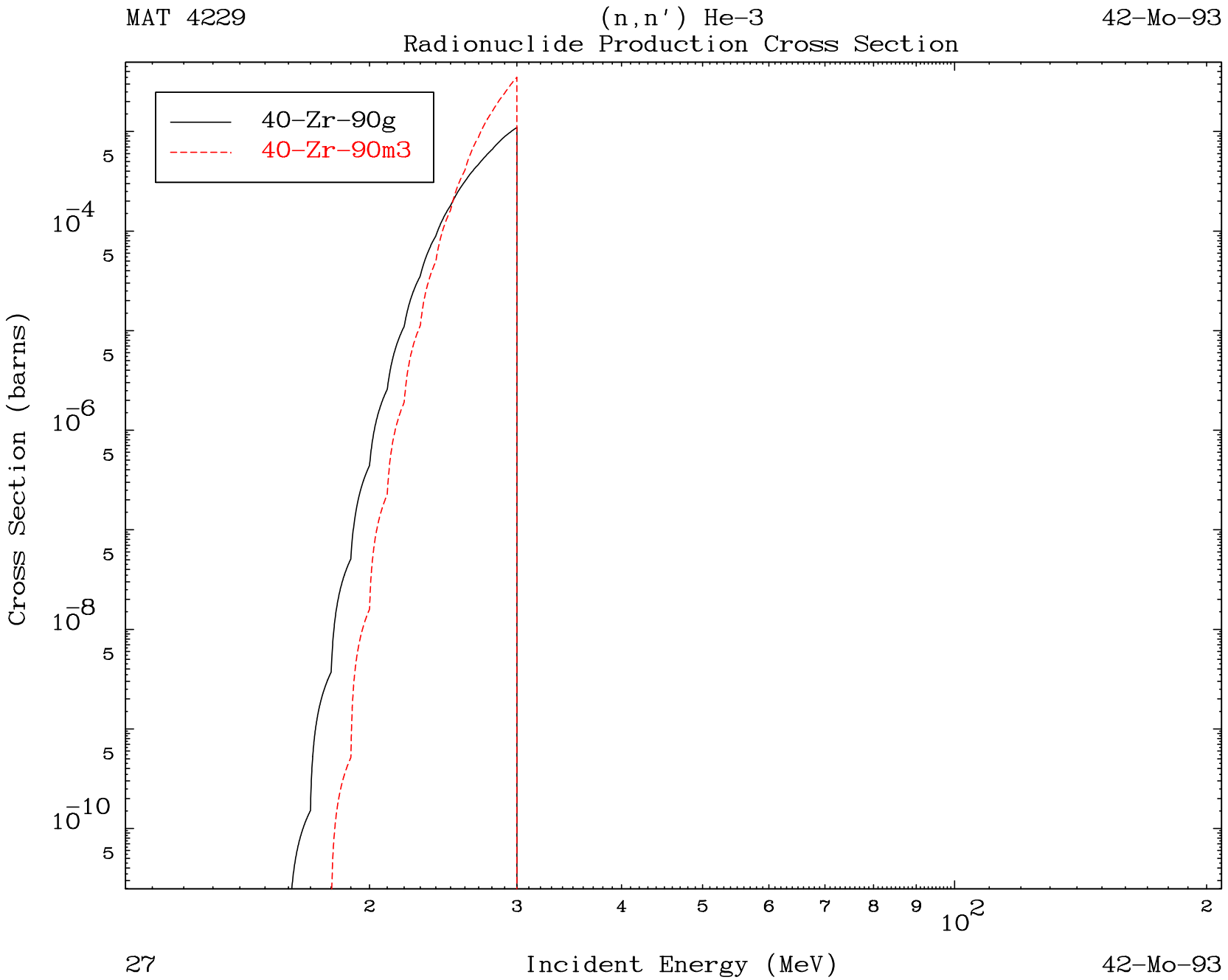

MAT 4229
(n,n') α
42-Mo-93
Radionuclide Production Cross Section
40-Zr-89g
40-Zr-89m1
Cross Section (barns)
10-2
10-4
10-6
10-8
2
4
6
8
10 1
2
4
6
8
10 2
2
22
Incident Energy (MeV)
42-Mo-93

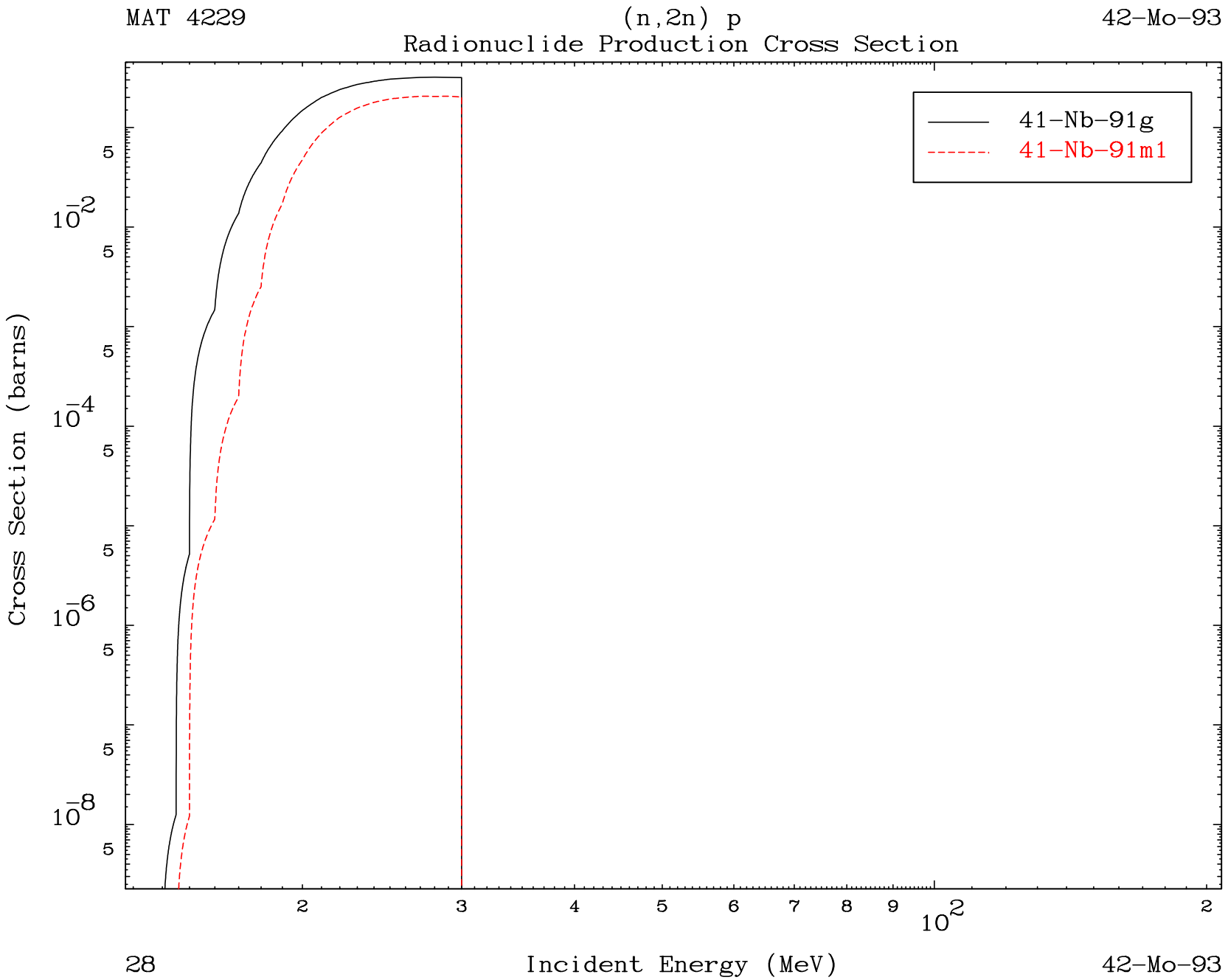

MAT 4229
(n,n') p
42-Mo-93
Radionuclide Production Cross Section
41-Nb-92g
41-Nb-92m1
Cross Section (barns)
10-2
10-4
10-6
10-8
6 7 8 9 10 1 2 3 4 5 6 7 8 9 10 2 2
Incident Energy (MeV)
23
42-Mo-93

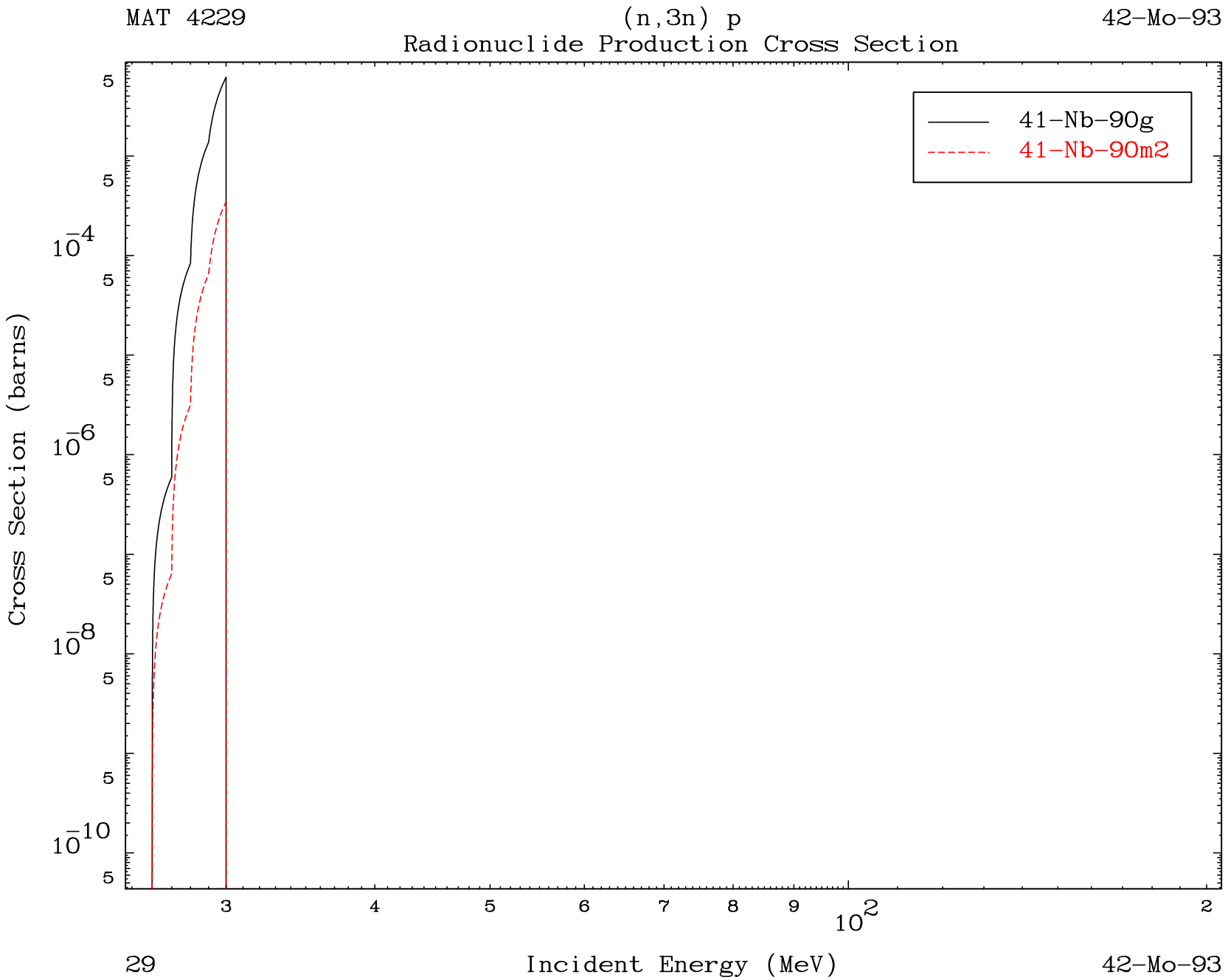

MAT 4229
(n,n') 2α
42-Mo-93
Radionuclide Production Cross Section
38-Sr-85g
38-Sr-85m2
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
24
Incident Energy (MeV)
42-Mo-93

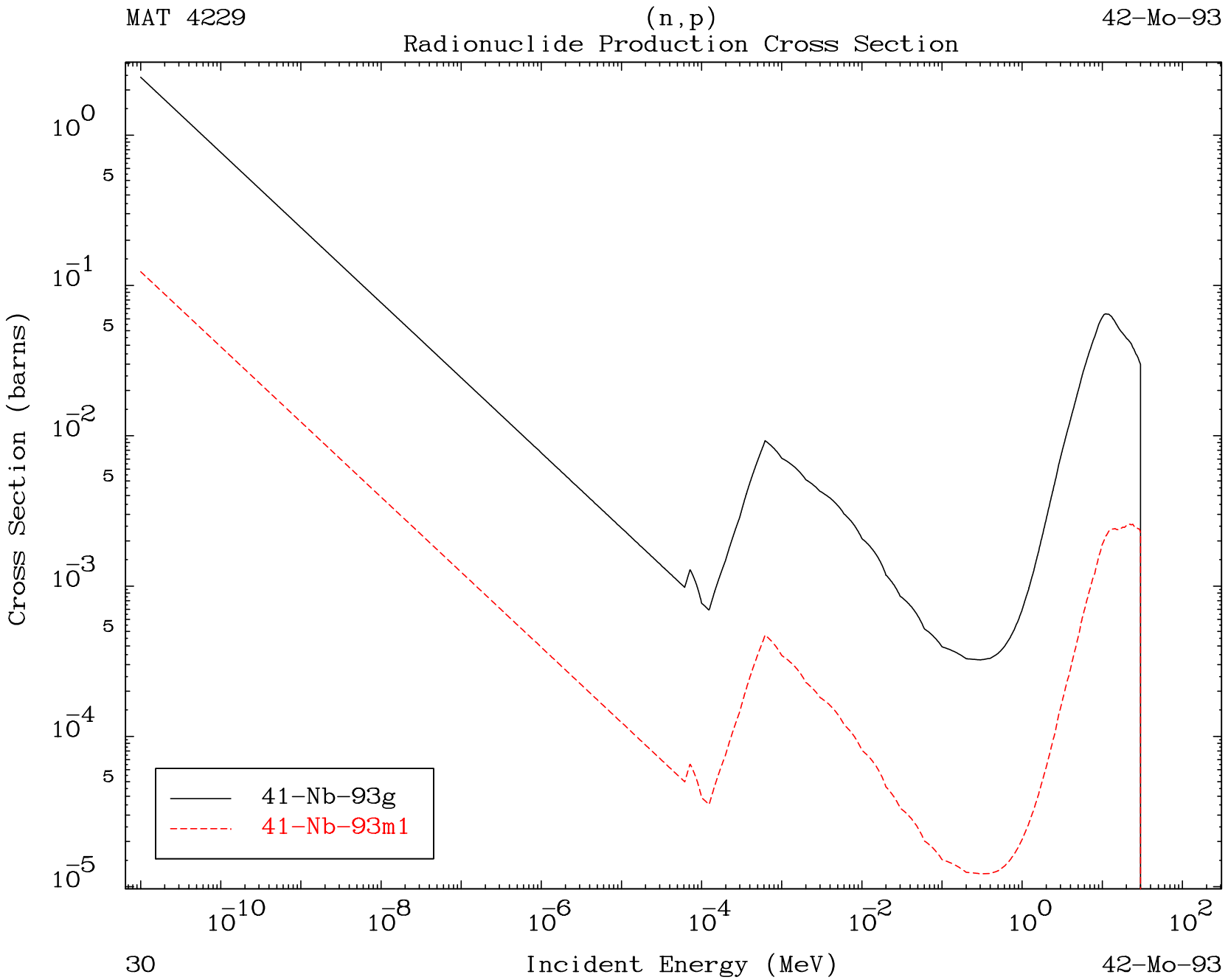

MAT 4229
(n,n') d
42-Mo-93
Radionuclide Production Cross Section
41-Nb-91g
41-Nb-91m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
2
3
4
5
6
7
8
9
10 2
2
25
Incident Energy (MeV)
42-Mo-93

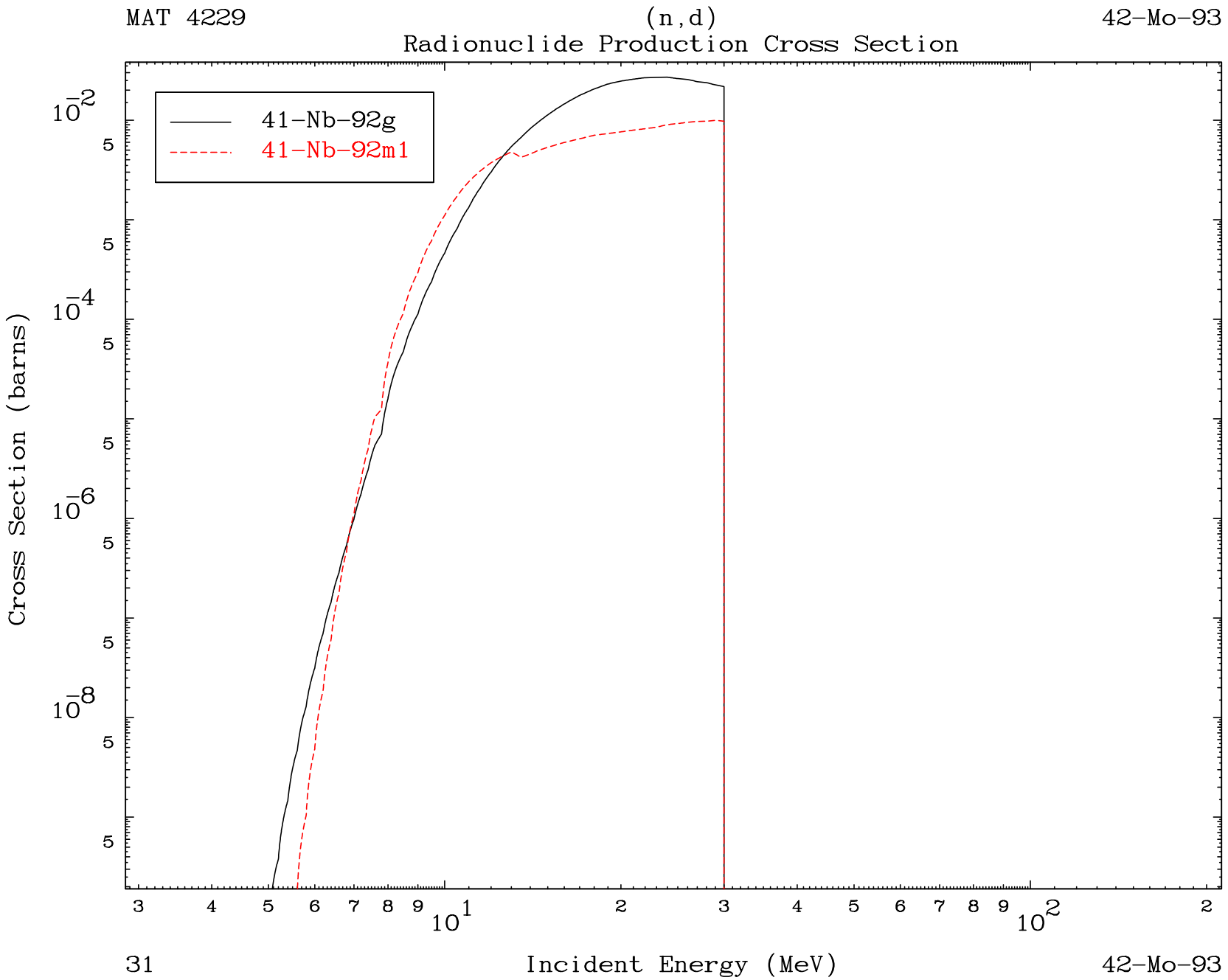

MAT 4229
(n,n') t
42-Mo-93
Radionuclide Production Cross Section
41-Nb-90g
41-Nb-90m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
2
3
4
6
7
8
9
10^2
26
Incident Energy (MeV)
42-Mo-93

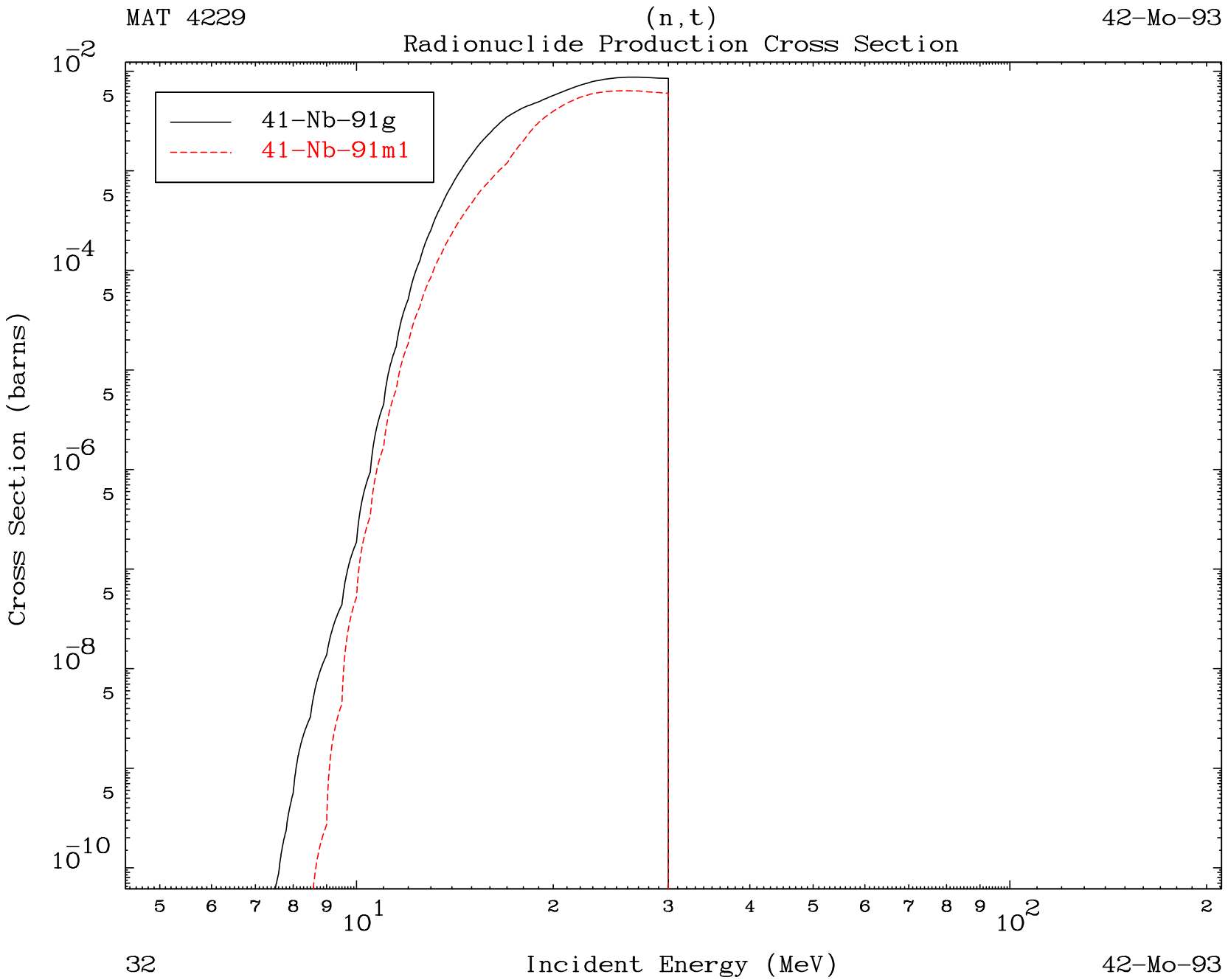

MAT 4229
(n,n') He-3
42-Mo-93
Radionuclide Production Cross Section
40-Zr-90g
40-Zr-90m3
Cross Section (barns)
10-4
10-6
10-8
10-10
2
3
4
5
6
7
8
9
10 2
2
27
Incident Energy (MeV)
42-Mo-93

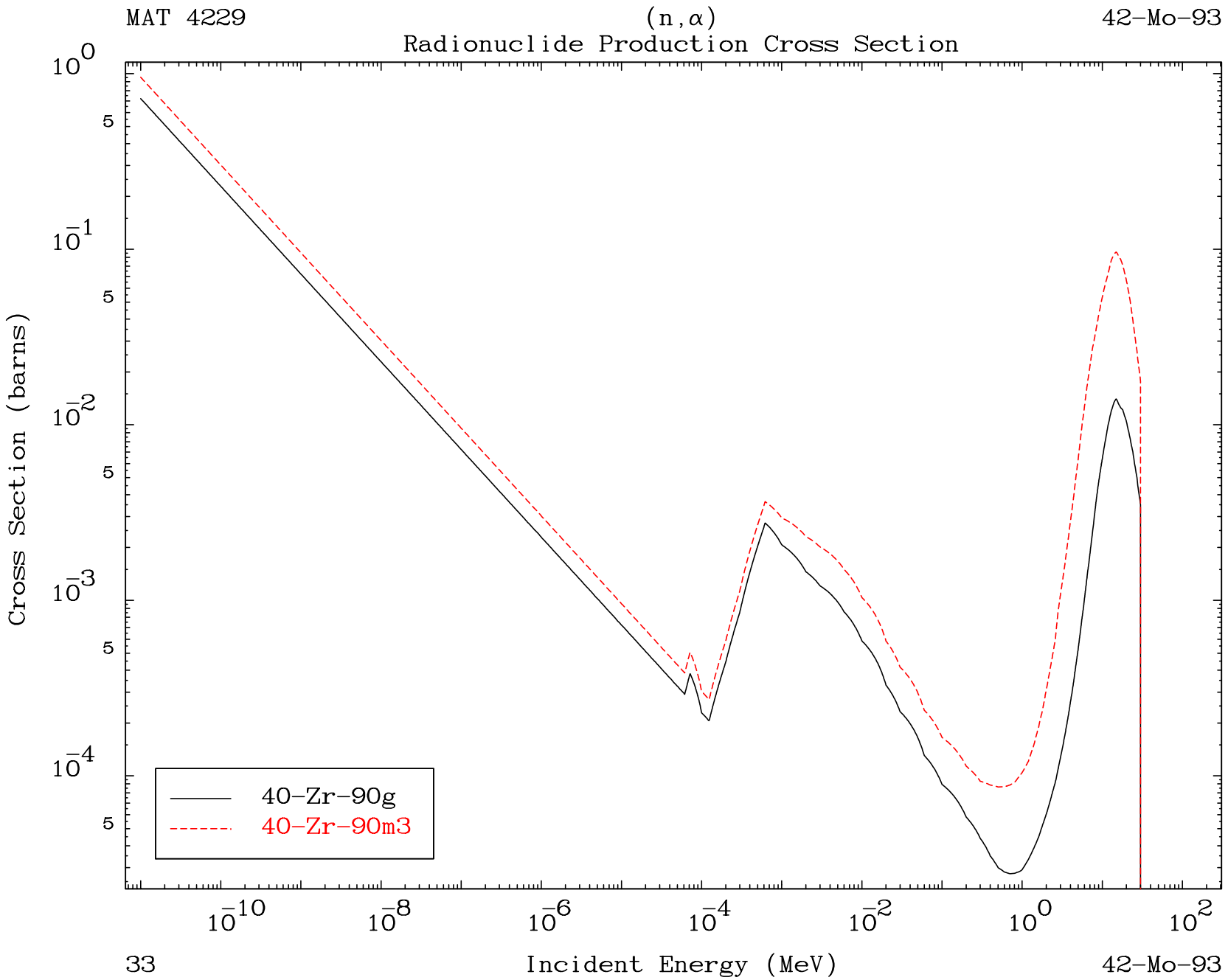

MAT 4229
(n,2n) p
42-Mo-93
Radionuclide Production Cross Section
41-Nb-91g
41-Nb-91m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
2
3
4
5
6
7
8
9
10 2
2
28
Incident Energy (MeV)
42-Mo-93

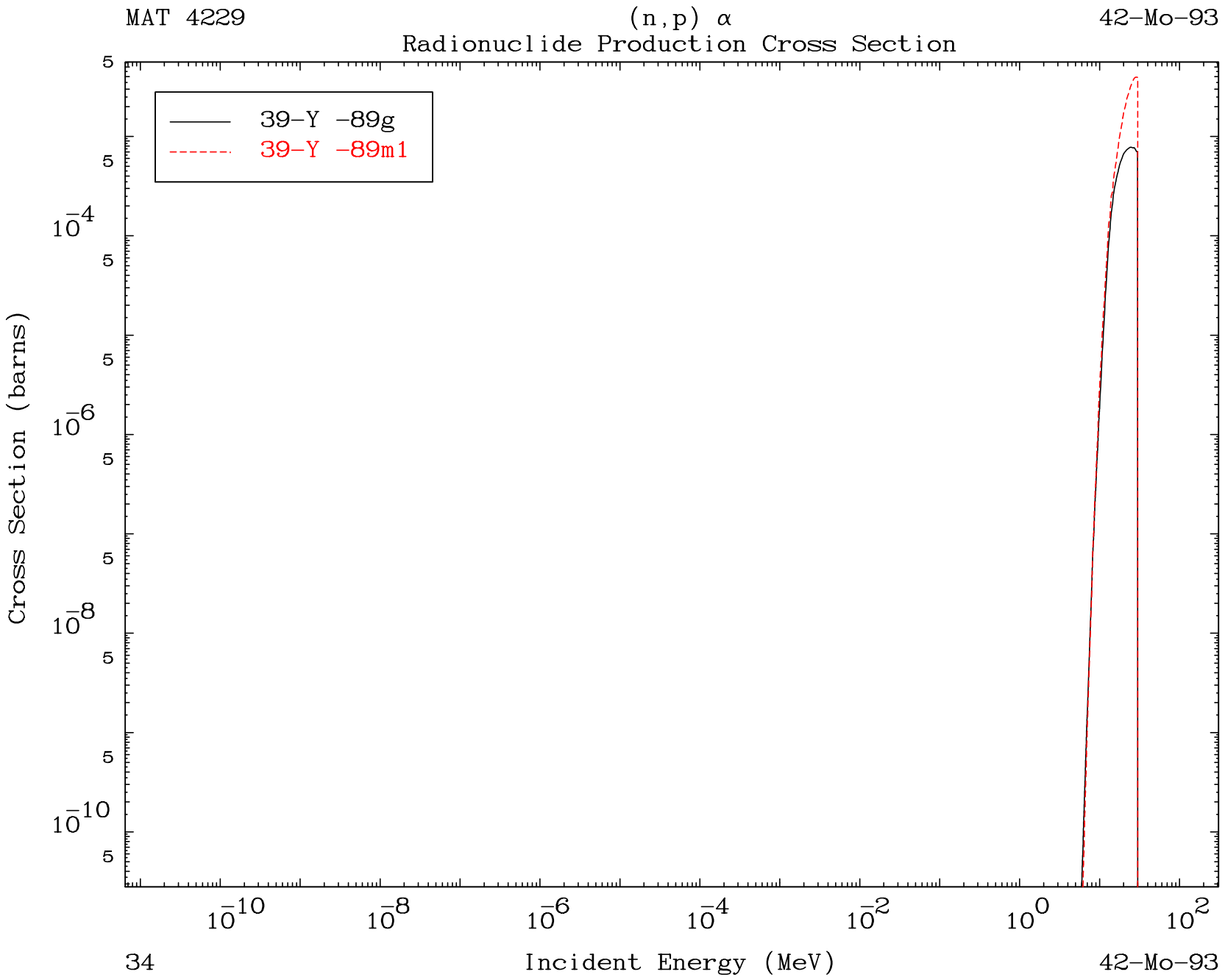

MAT 4229
(n,3n) p
42-Mo-93
Radionuclide Production Cross Section
41-Nb-90g
41-Nb-90m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
3
4
5
6
7
8
9
10^2
2
29
Incident Energy (MeV)
42-Mo-93

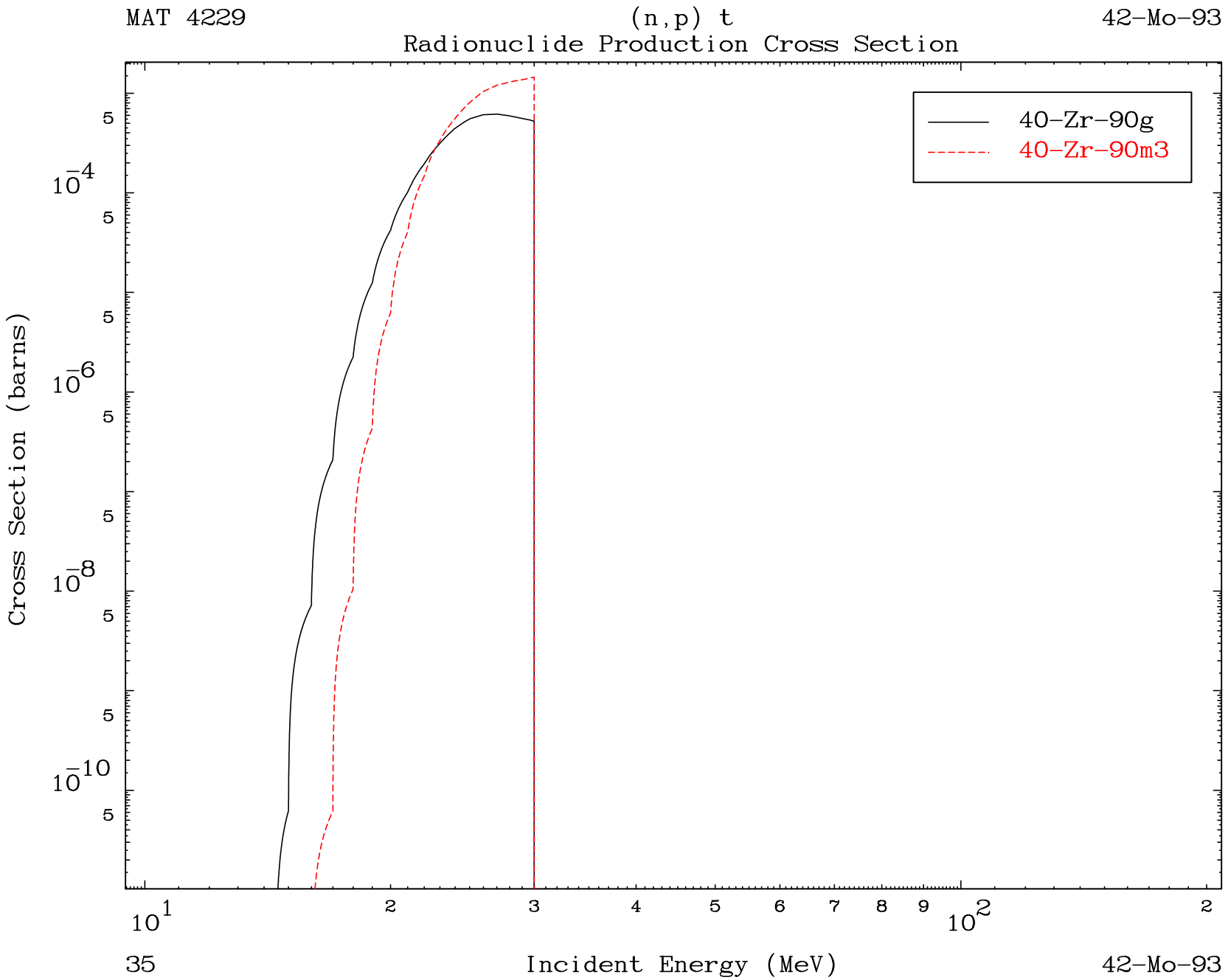

MAT 4229
(n,p)
42-Mo-93
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
41-Nb-93g
41-Nb-93m1
30
42-Mo-93


MAT 4229
(n,d)
42-Mo-93
Radionuclide Production Cross Section
41-Nb-92g
41-Nb-92m1
Cross Section (barns)
Incident Energy (MeV)
31
42-Mo-93


MAT 4229
(n,t)
42-Mo-93
Radionuclide Production Cross Section
41-Nb-91g
41-Nb-91m1
Cross Section (barns)
Incident Energy (MeV)
32
42-Mo-93


MAT 4229
(n,α)
42-Mo-93
Radionuclide Production Cross Section
Cross Section (barns)
10^0
5
10^-1
5
10^-2
5
10^-3
5
10^-4
5
40-Zr-90g
40-Zr-90m3
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
33
Incident Energy (MeV)
42-Mo-93


MAT 4229
(n,p) α
42-Mo-93
Radionuclide Production Cross Section
39-Y -89g
39-Y -89m1
Cross Section (barns)
Incident Energy (MeV)
34
42-Mo-93


MAT 4229
(n,p) t
42-Mo-93
Radionuclide Production Cross Section
40-Zr-90g
40-Zr-90m3
Cross Section (barns)
10-4
10-6
10-8
10-10
5
101
2
3
4
5
6
7
8
9
102
2
35
Incident Energy (MeV)
42-Mo-93