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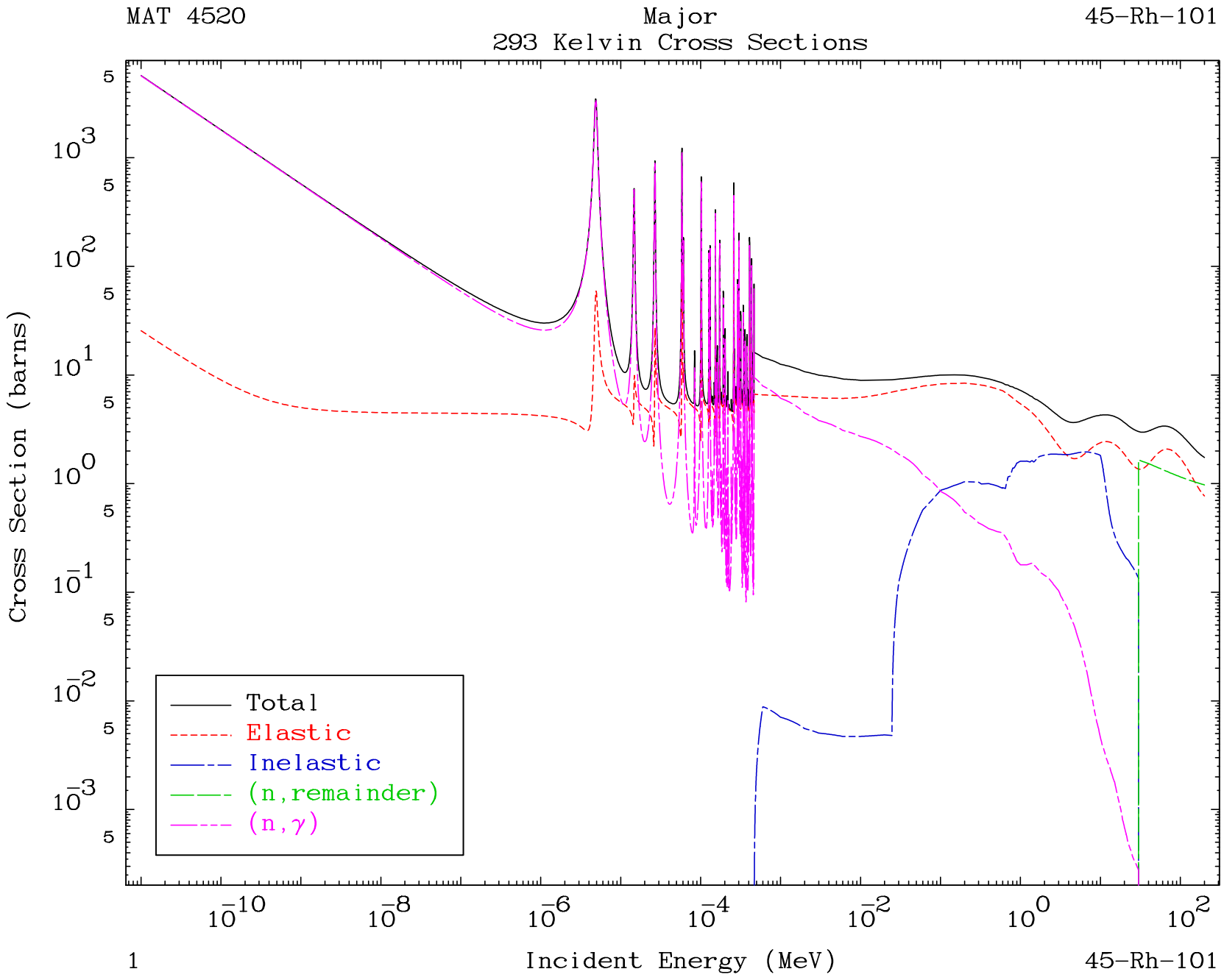
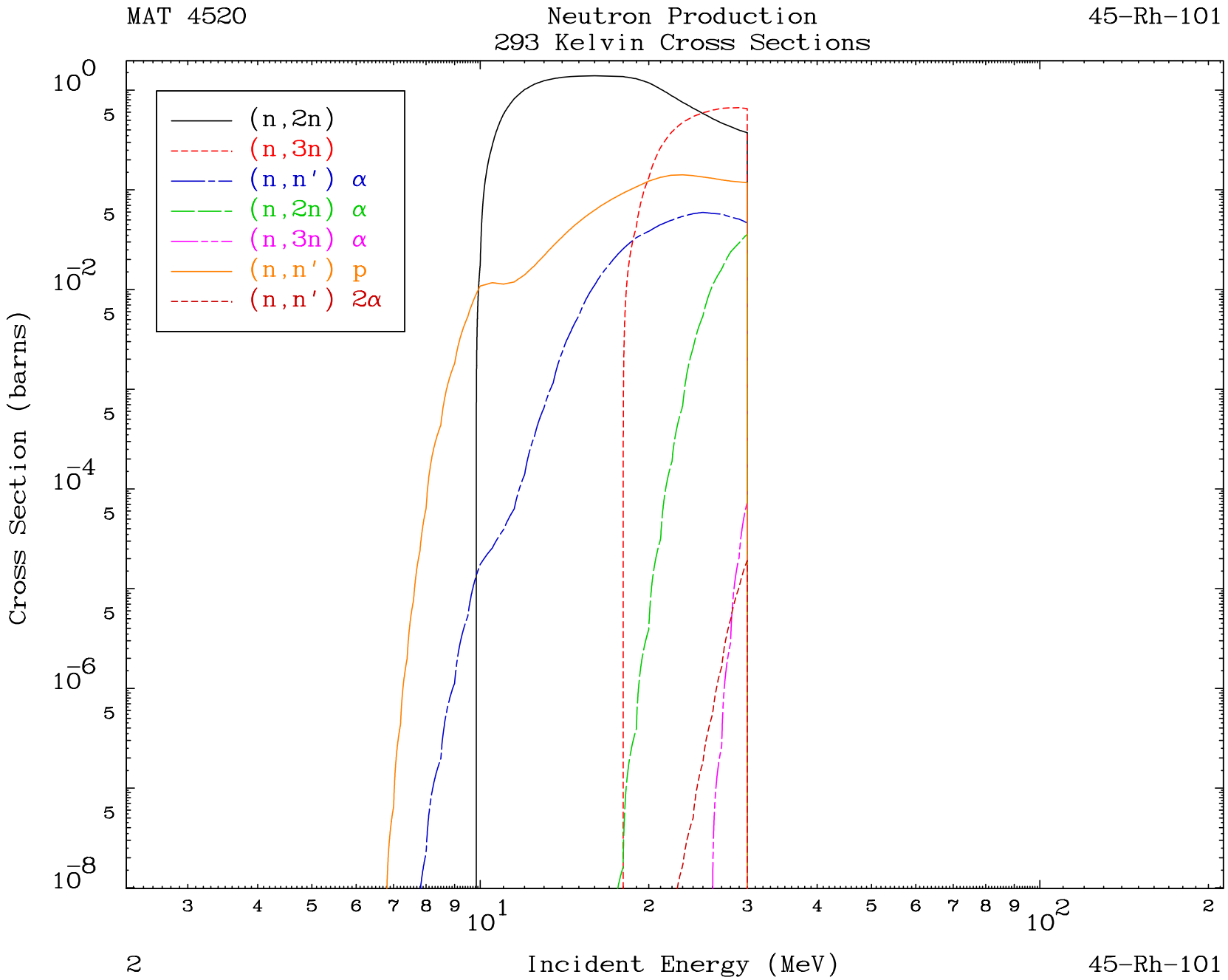
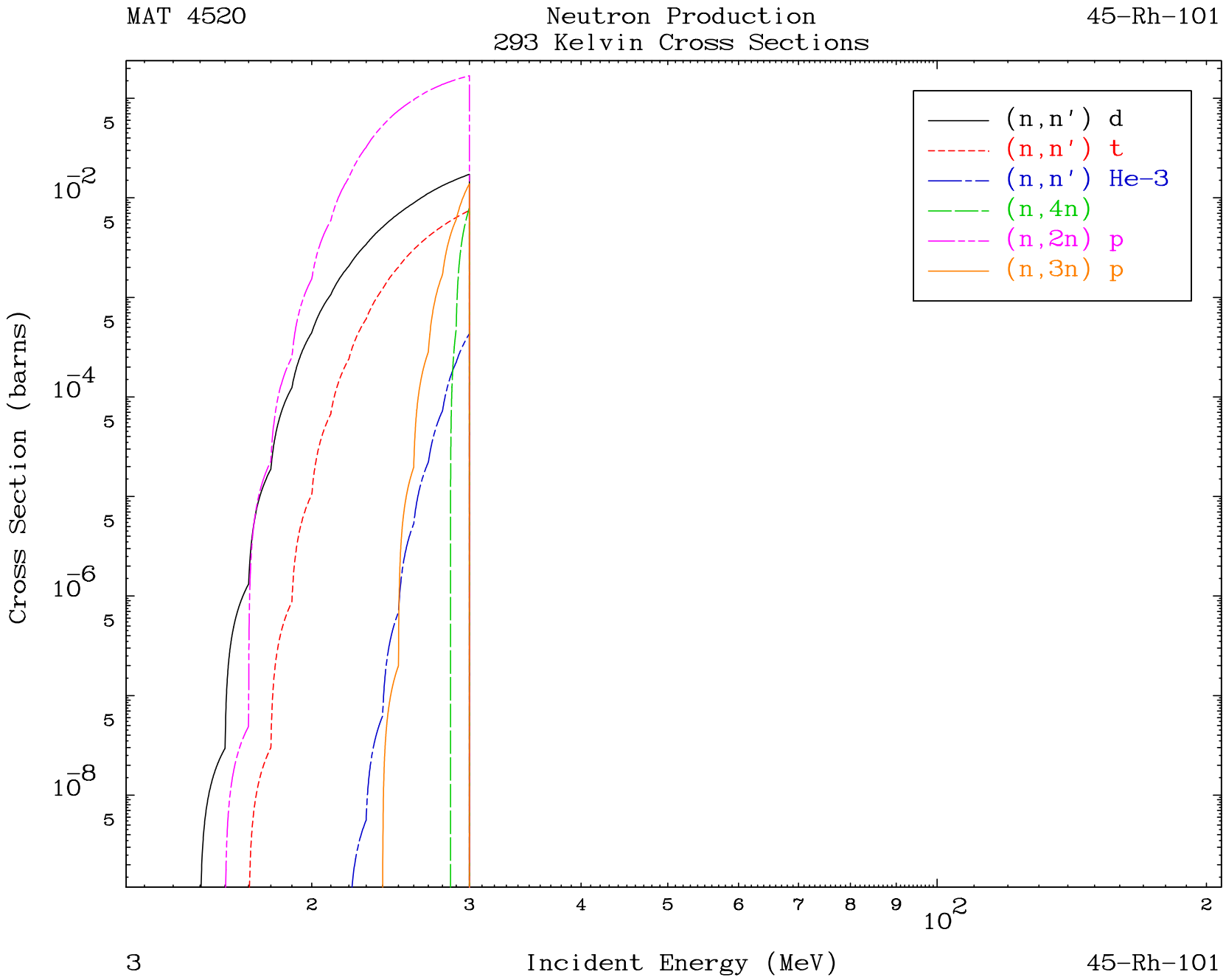
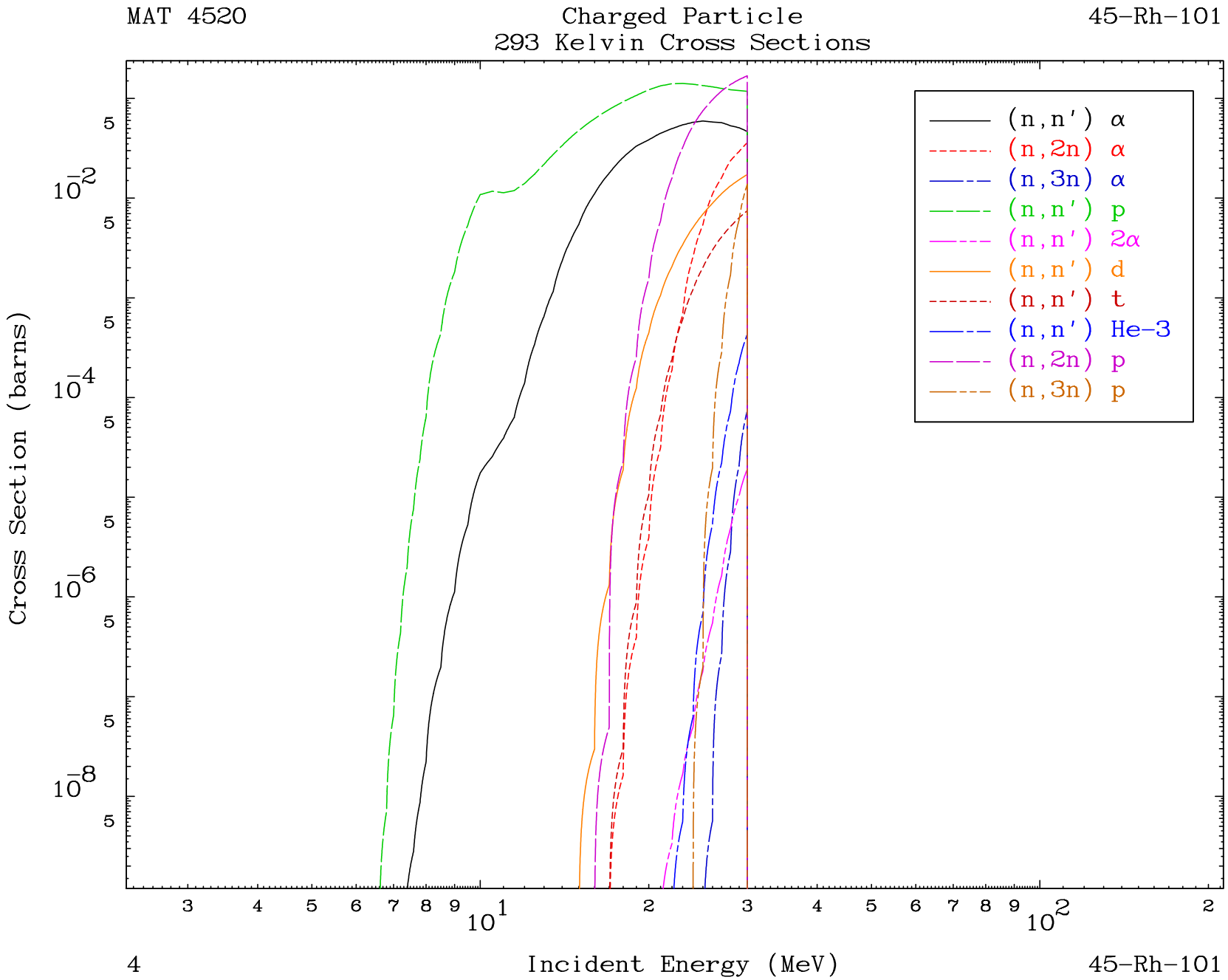
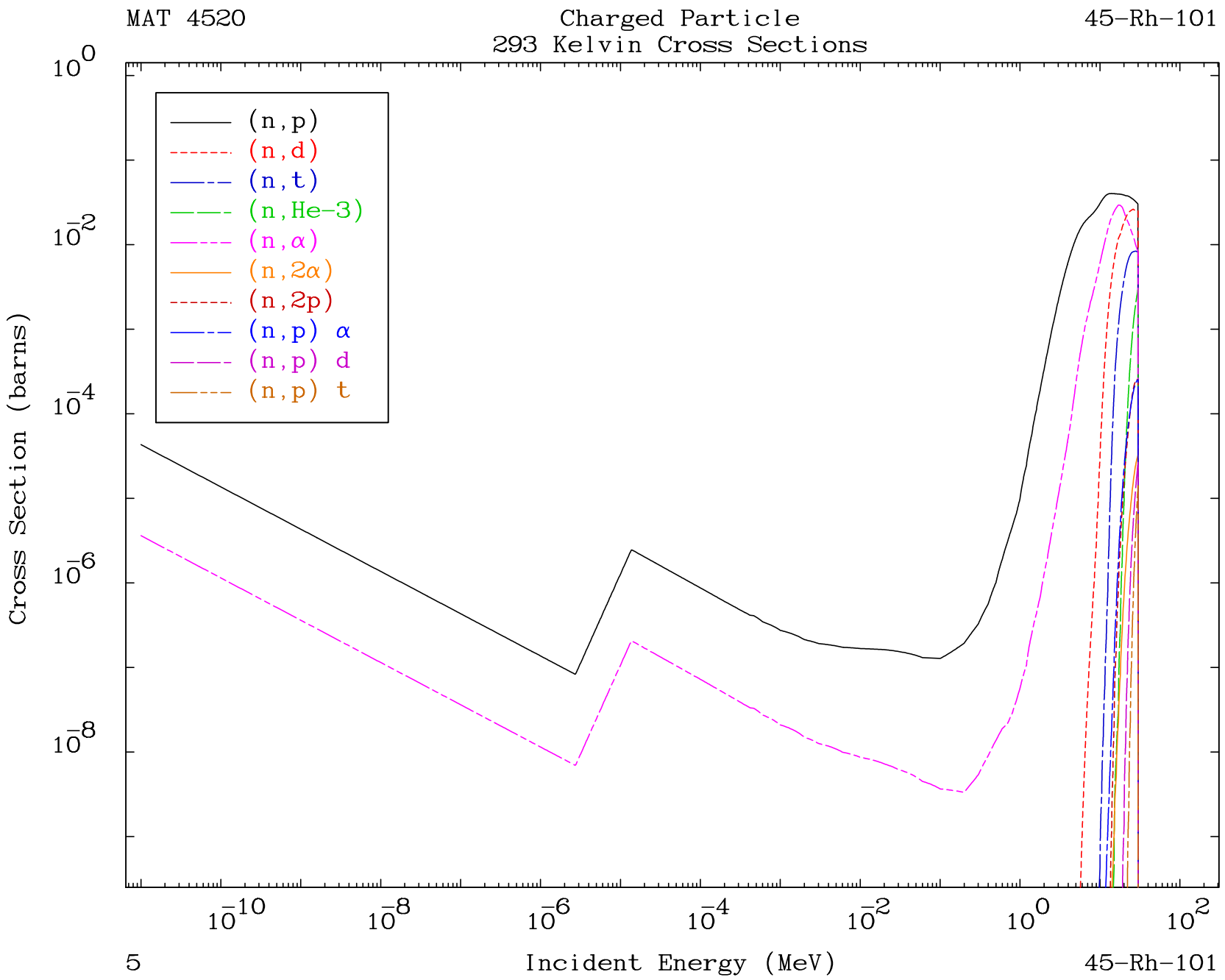
Press Mouse Button to Start

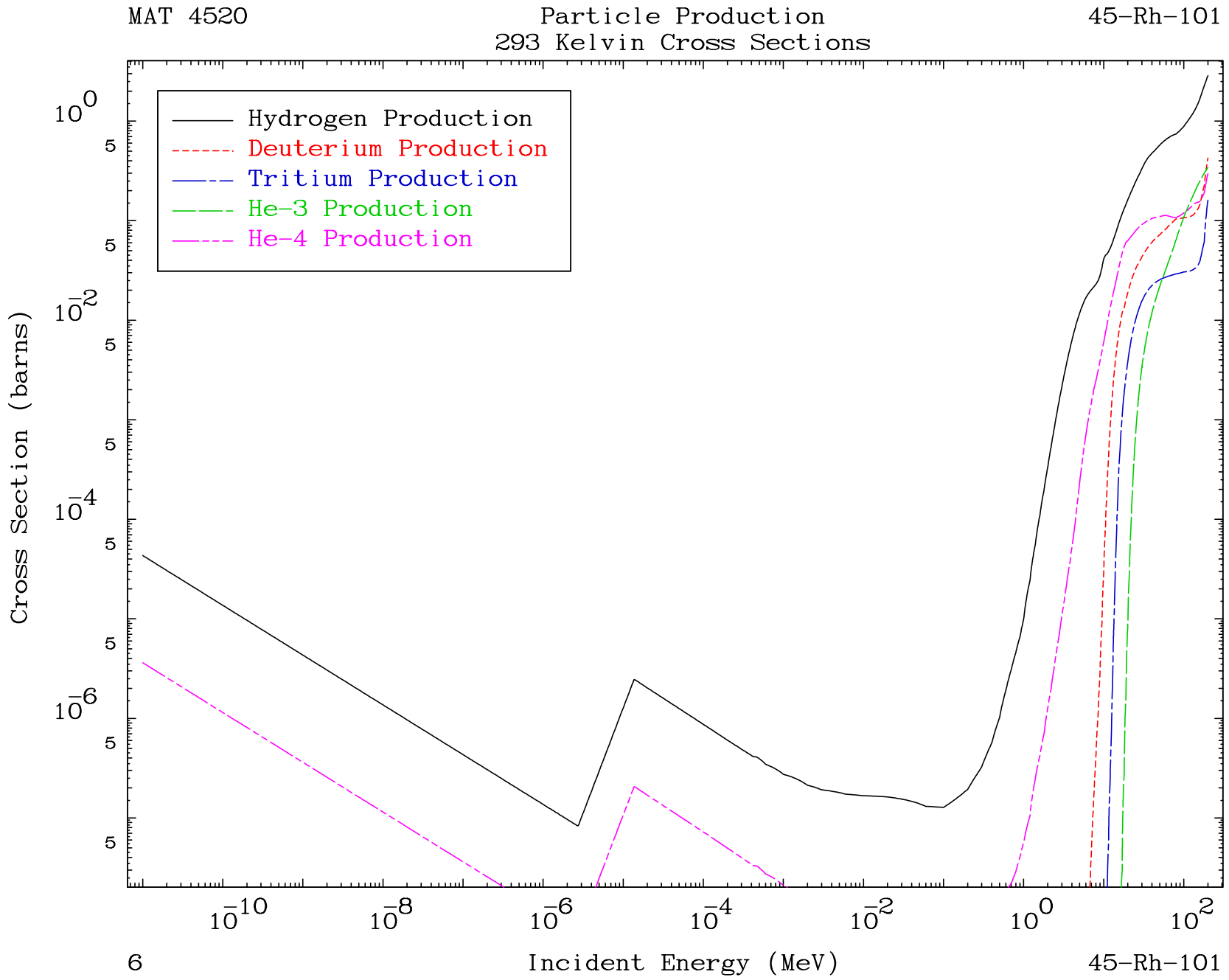

MAT 4520
Major
45-Rh-101
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
45-Rh-101

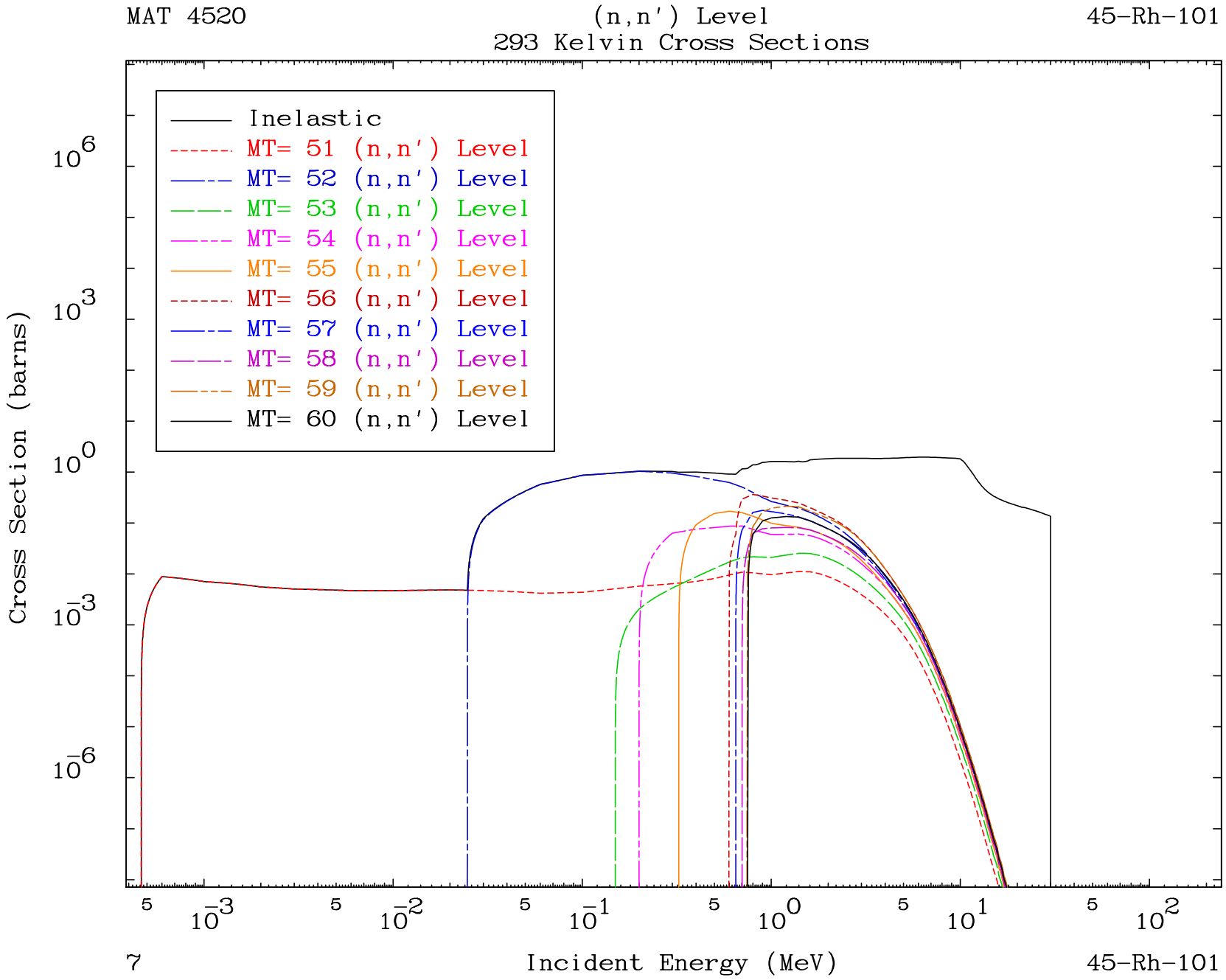

MAT 4520
Neutron Production
293 Kelvin Cross Sections
45-Rh-101
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
45-Rh-101
2

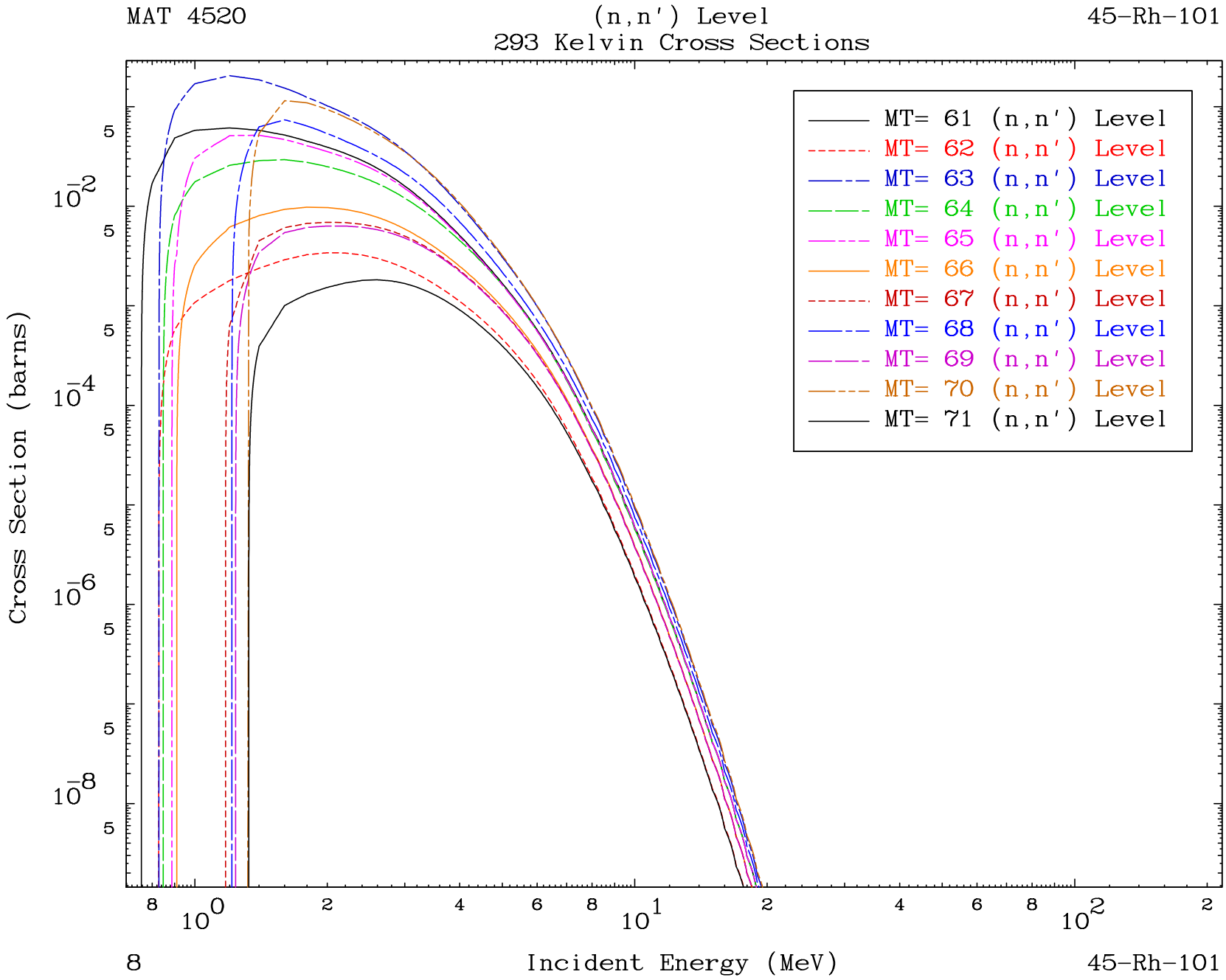

MAT 4520
Neutron Production
293 Kelvin Cross Sections
45-Rh-101
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
10-2
10-4
10-6
10-8
5
2
3
4
5
6
7
8
9
102
Incident Energy (MeV)
3
45-Rh-101

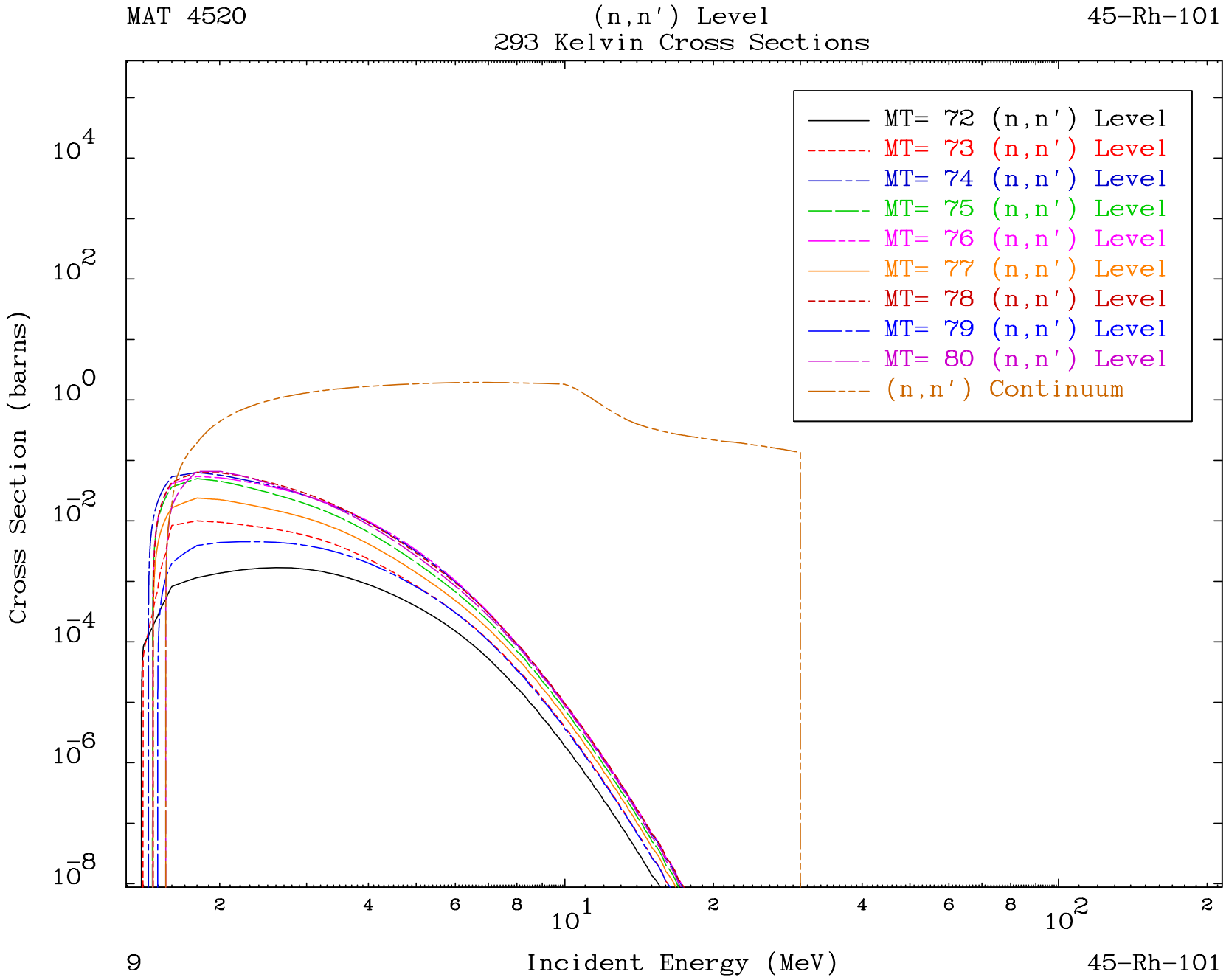

MAT 4520
Charged Particle
293 Kelvin Cross Sections
45-Rh-101
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
4
45-Rh-101

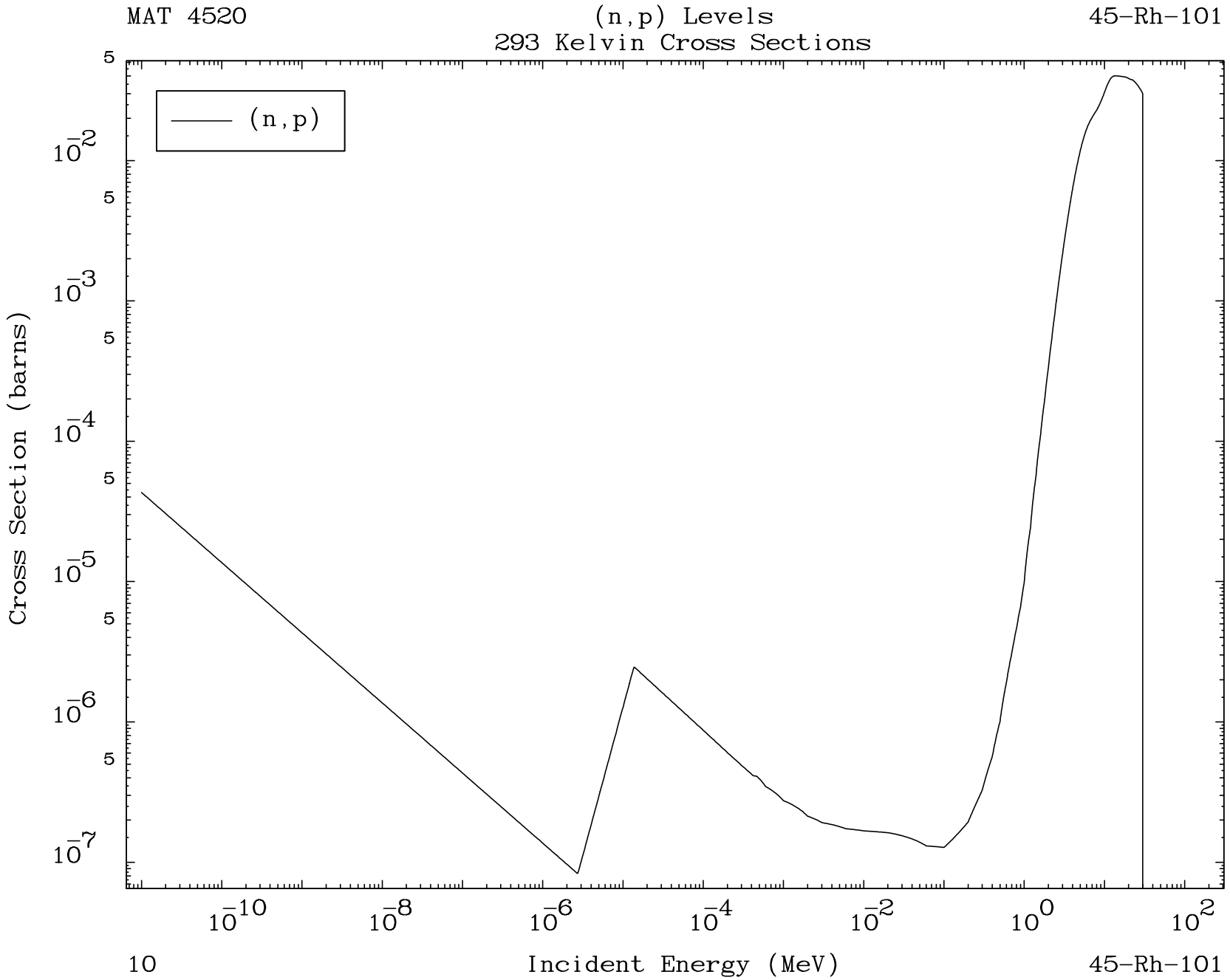

MAT 4520
Charged Particle
293 Kelvin Cross Sections
45-Rh-101
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
Cross Section (barns)
Incident Energy (MeV)
5
45-Rh-101

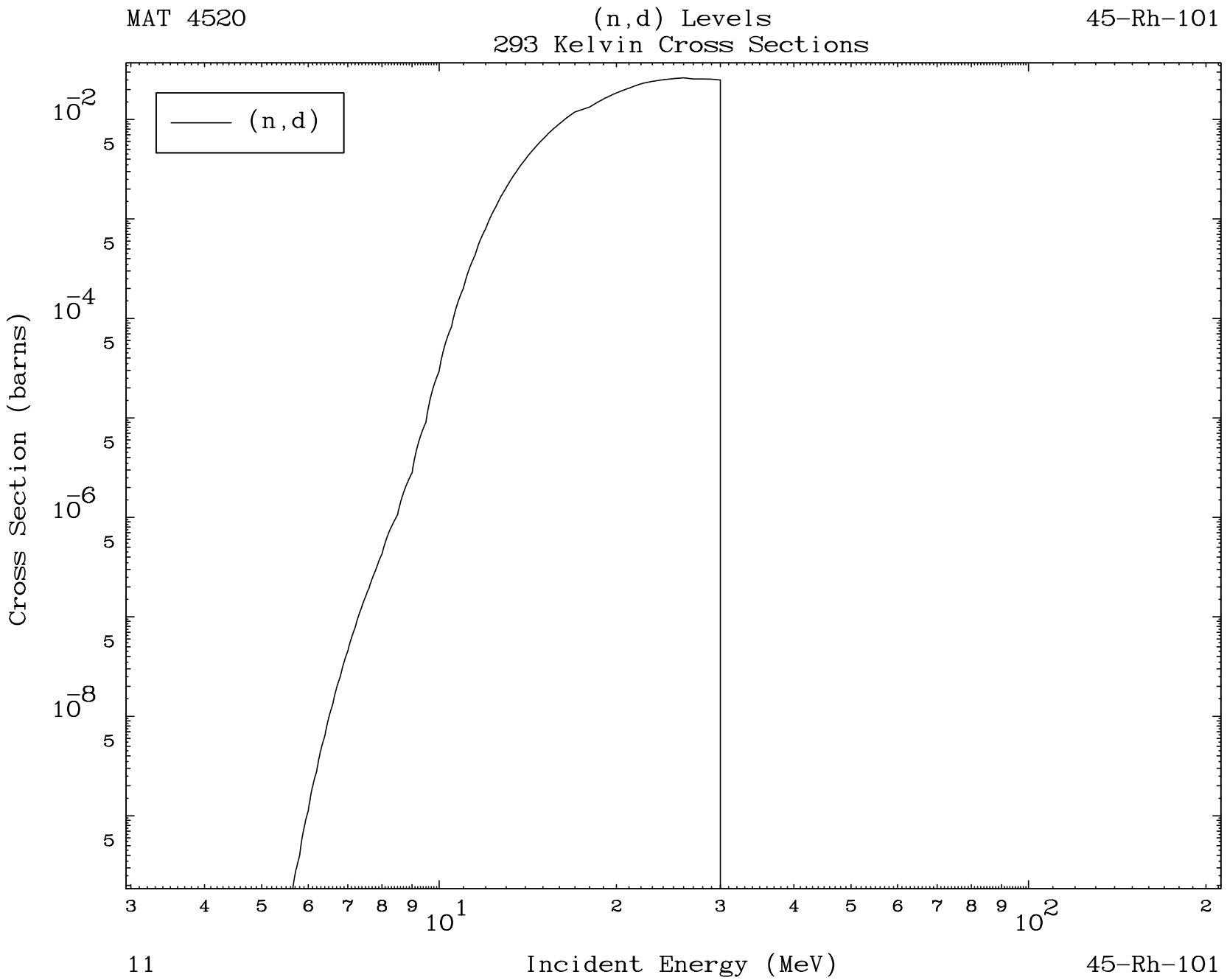

MAT 4520
Particle Production
293 Kelvin Cross Sections
45-Rh-101
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
6
45-Rh-101

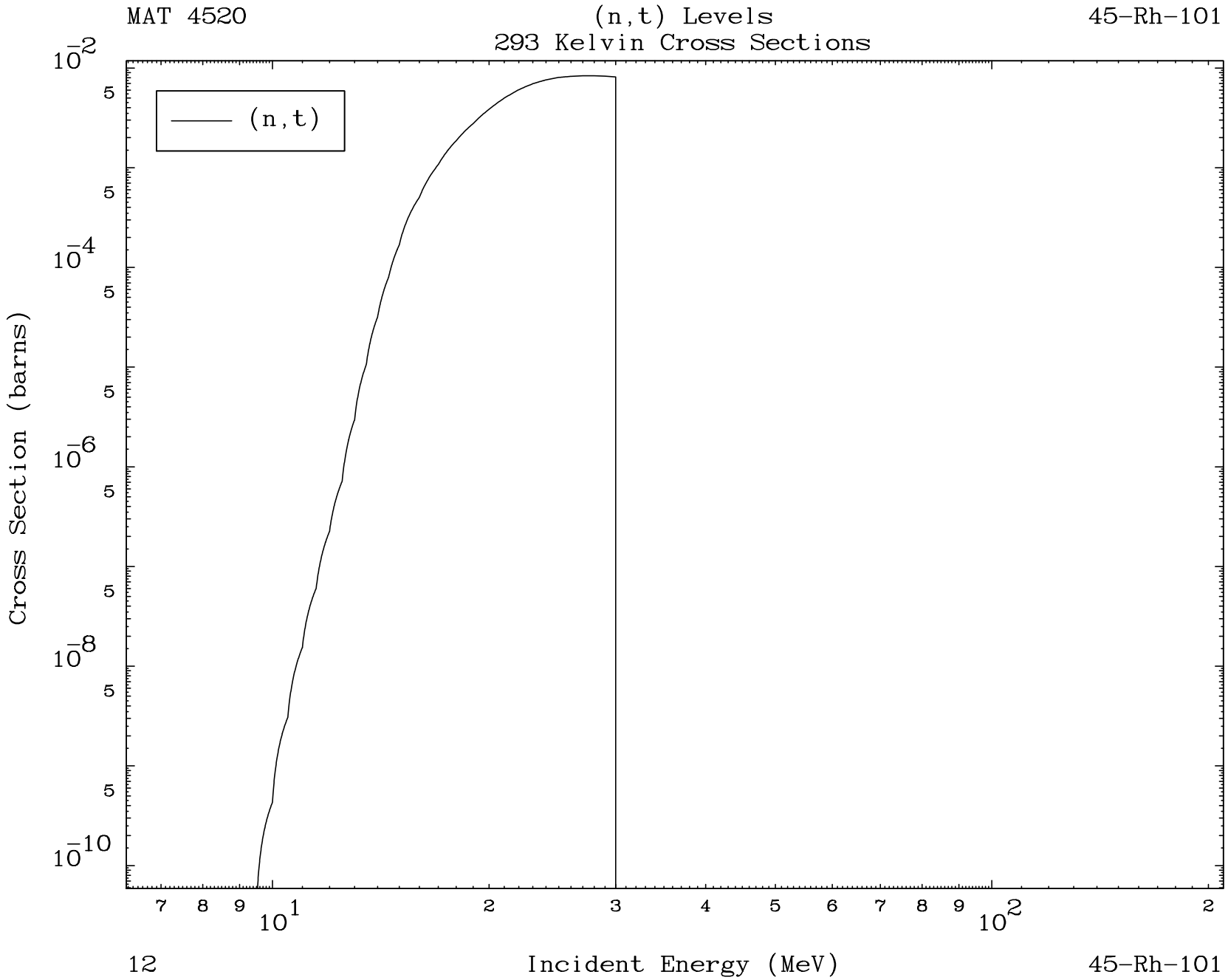

MAT 4520
(n,n') Level
45-Rh-101
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
MT= 60 (n,n') Level
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
5
10^-3
5
10^-2
5
10^-1
5
10^0
5
10^1
5
10^2
Incident Energy (MeV)
7
45-Rh-101

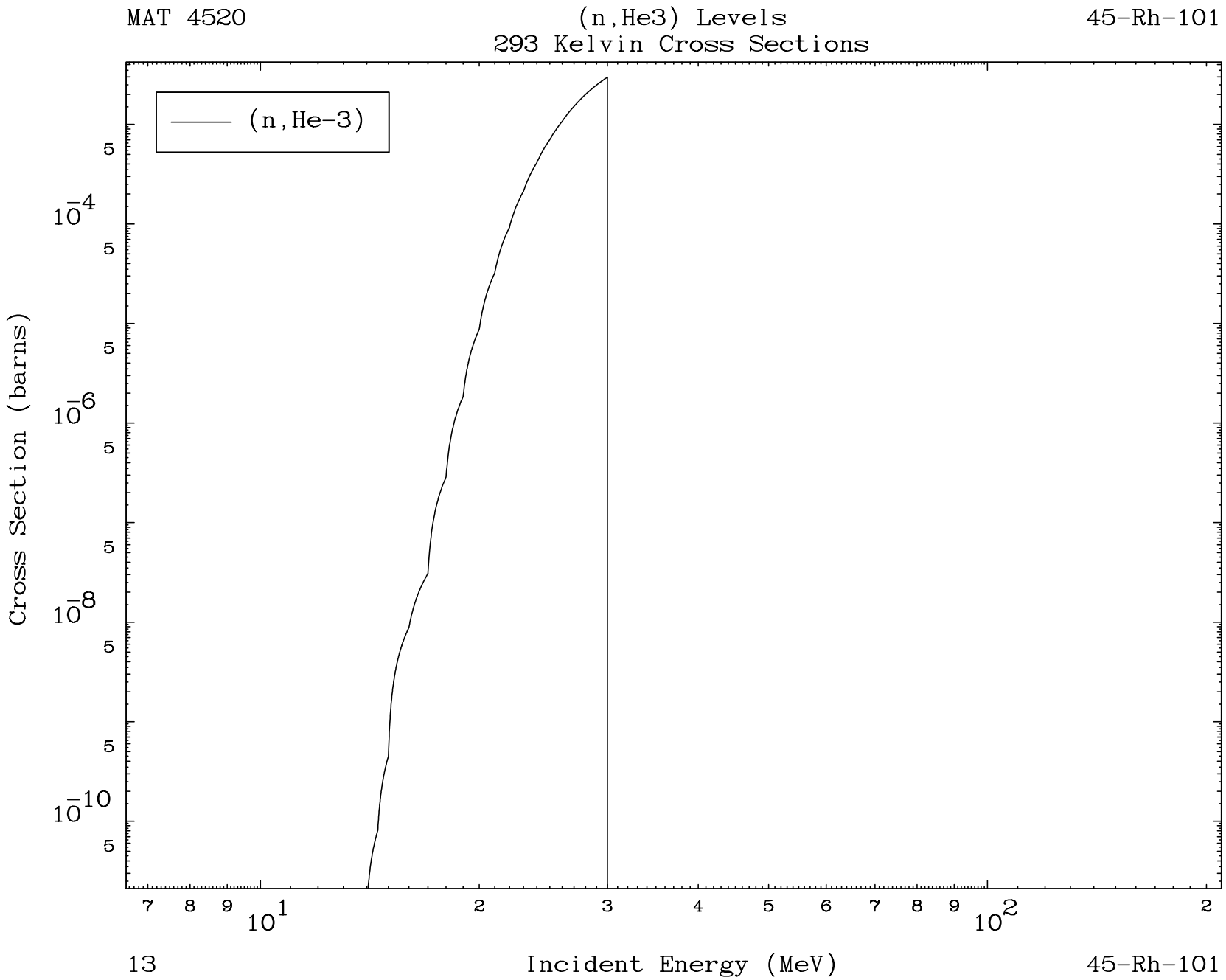

MAT 4520
(n,n') Level
293 Kelvin Cross Sections
45-Rh-101
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
45-Rh-101

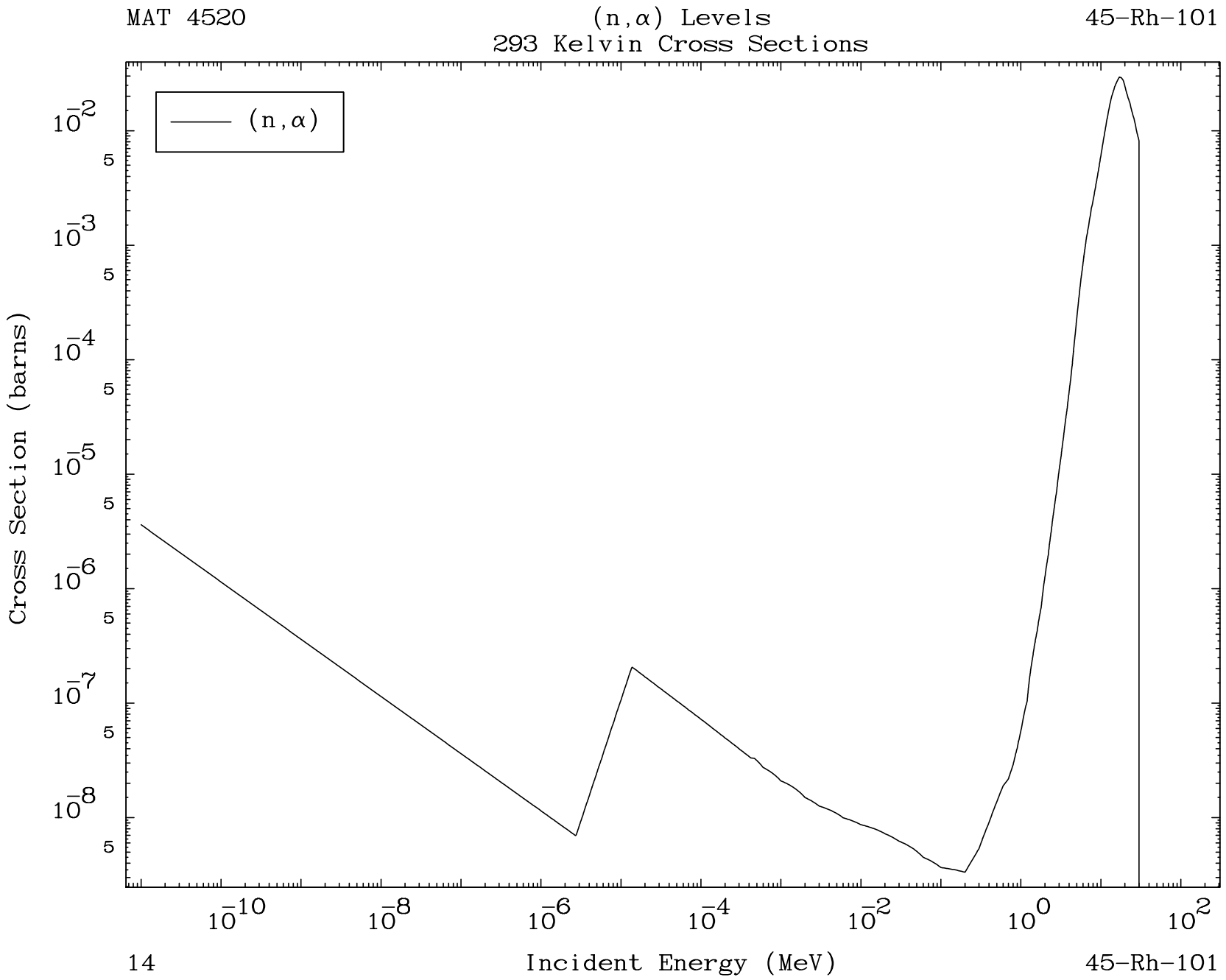

MAT 4520
(n,n') Level
293 Kelvin Cross Sections
45-Rh-101
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
9
45-Rh-101

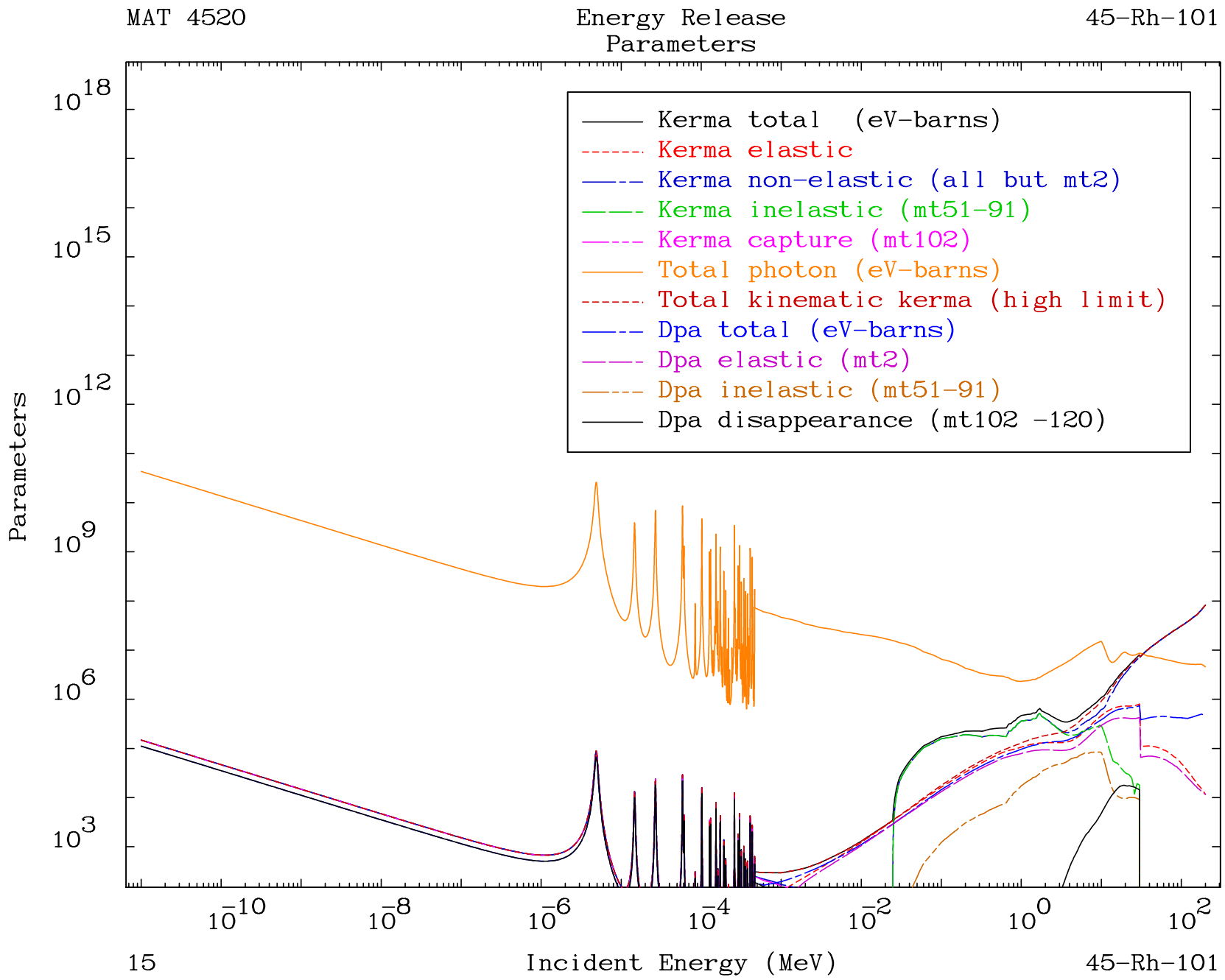

MAT 4520
(n,p) Levels
45-Rh-101
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
10
45-Rh-101

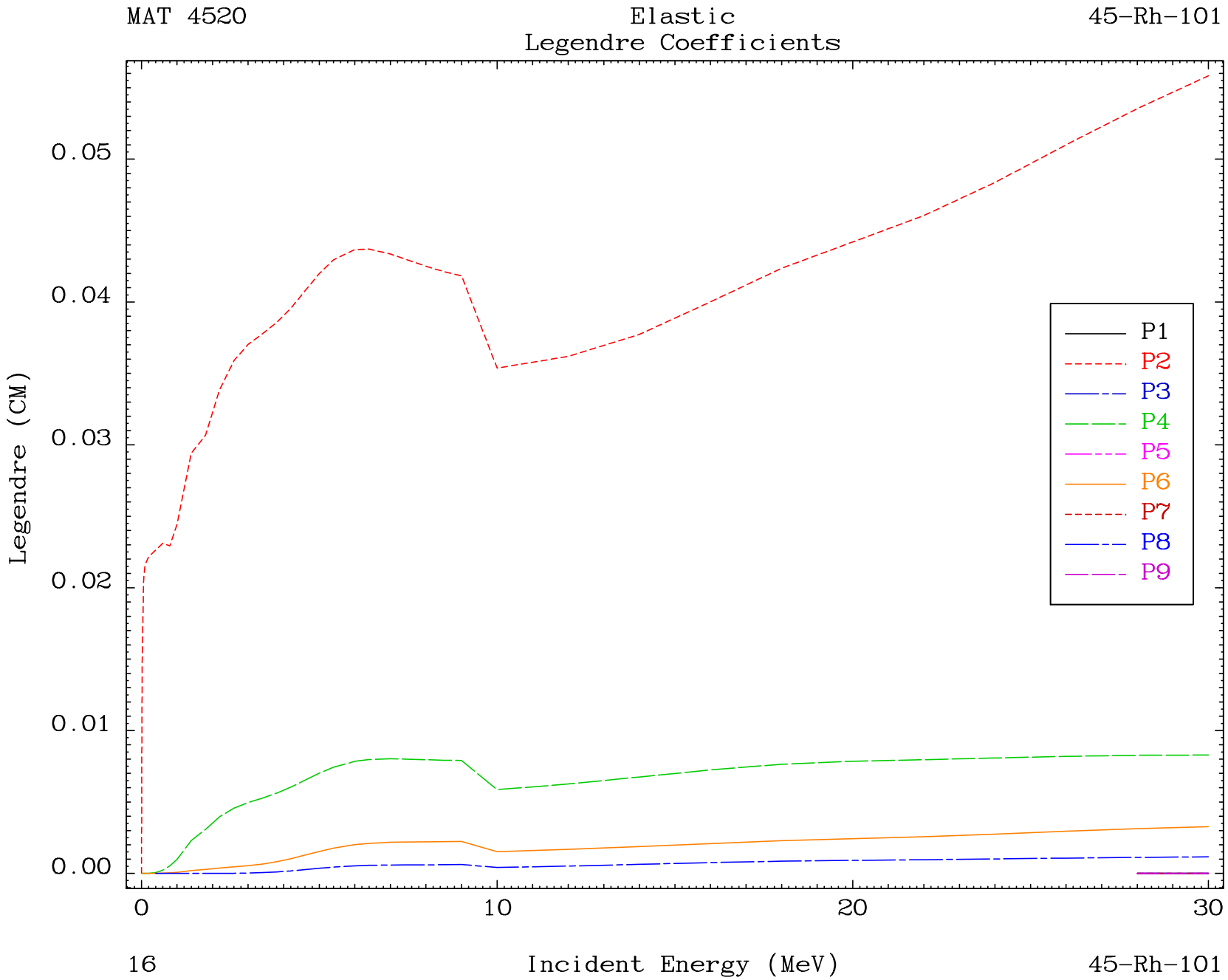

MAT 4520
(n,d) Levels
45-Rh-101
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
3 4 5 6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
11
45-Rh-101

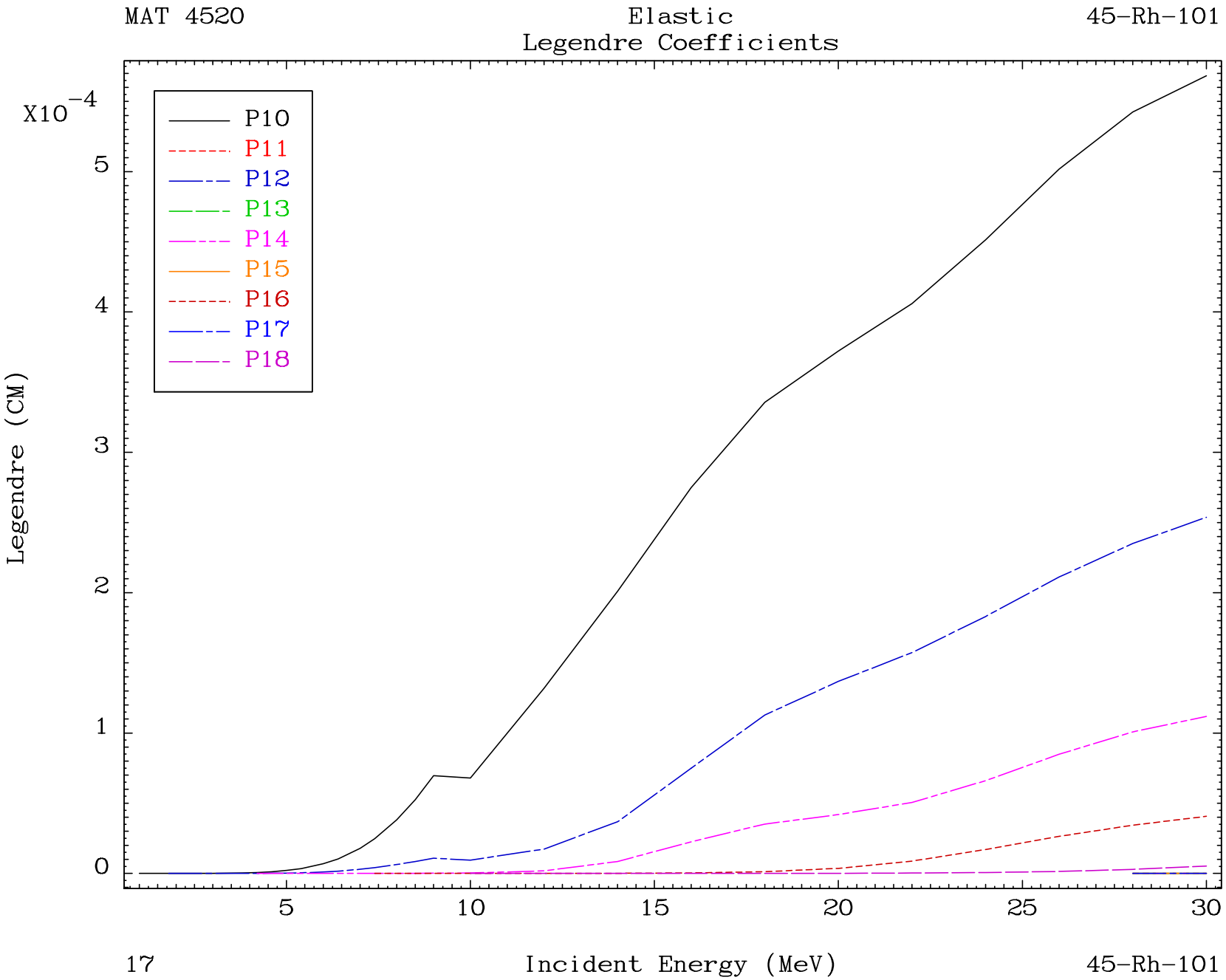

MAT 4520
(n,t) Levels
45-Rh-101
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
12
45-Rh-101

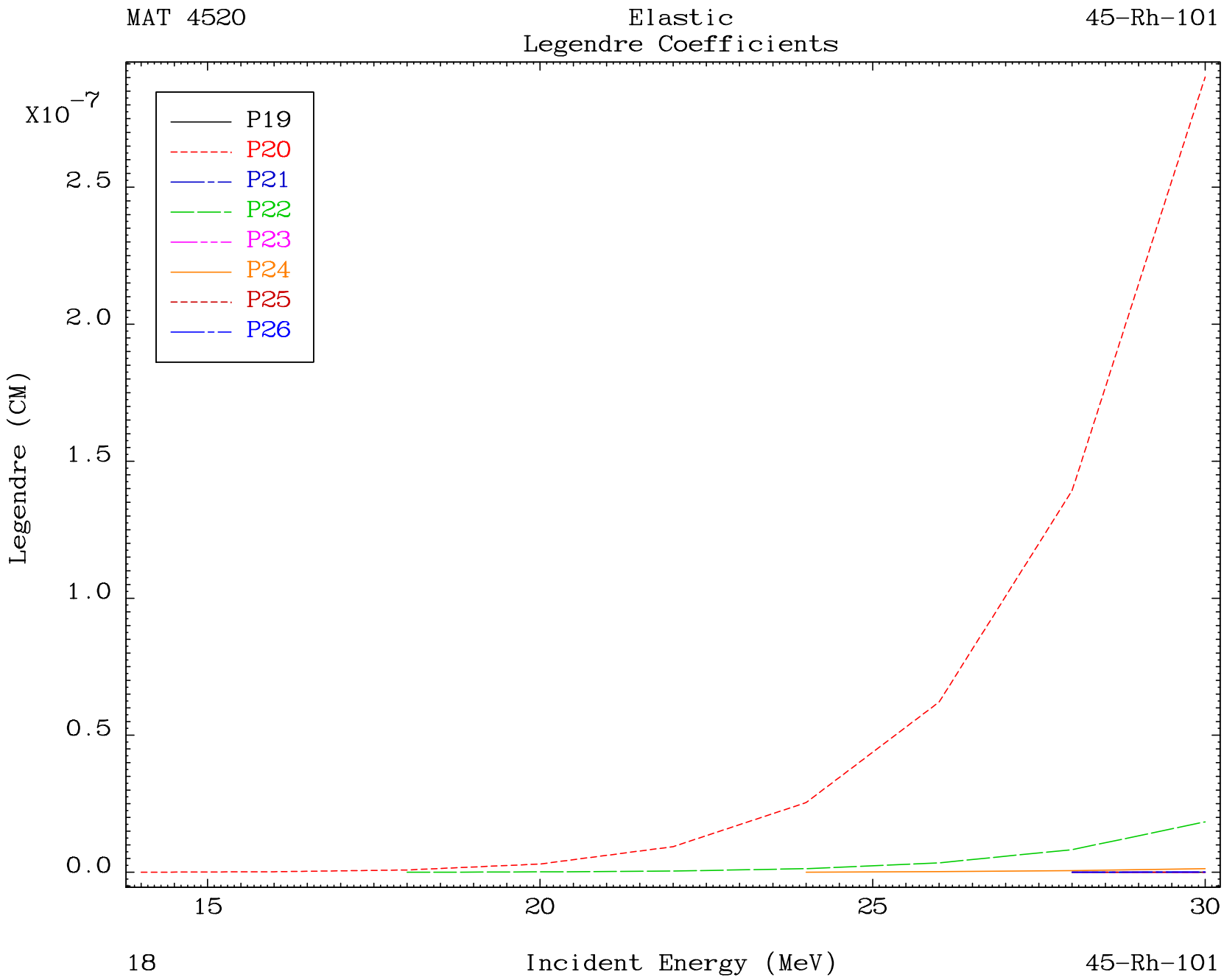

MAT 4520
(n,He3) Levels
45-Rh-101
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
13
Incident Energy (MeV)
45-Rh-101

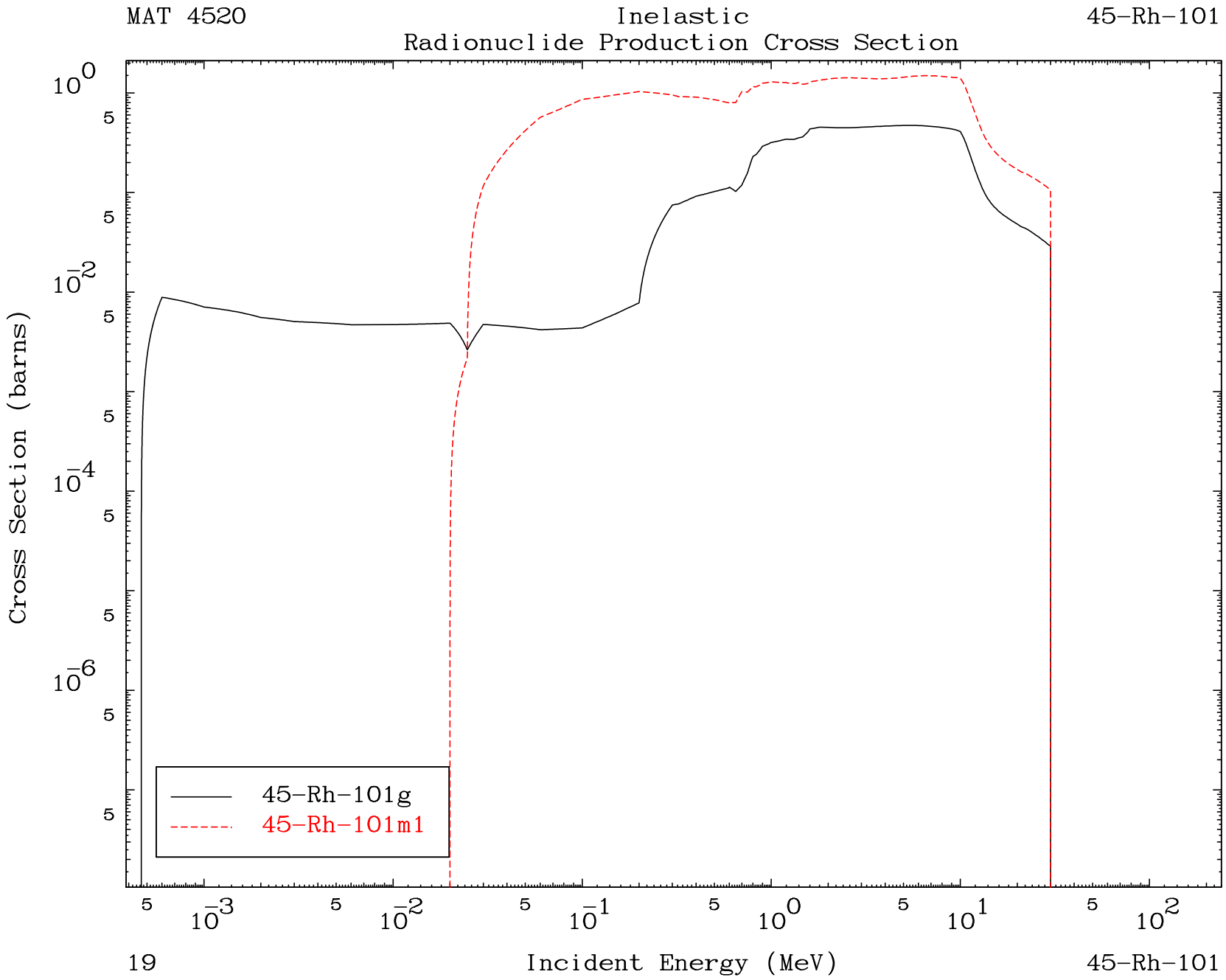

MAT 4520
(n,α) Levels
45-Rh-101
293 Kelvin Cross Sections
(n,α)
Cross Section (barns)
Incident Energy (MeV)
14
45-Rh-101

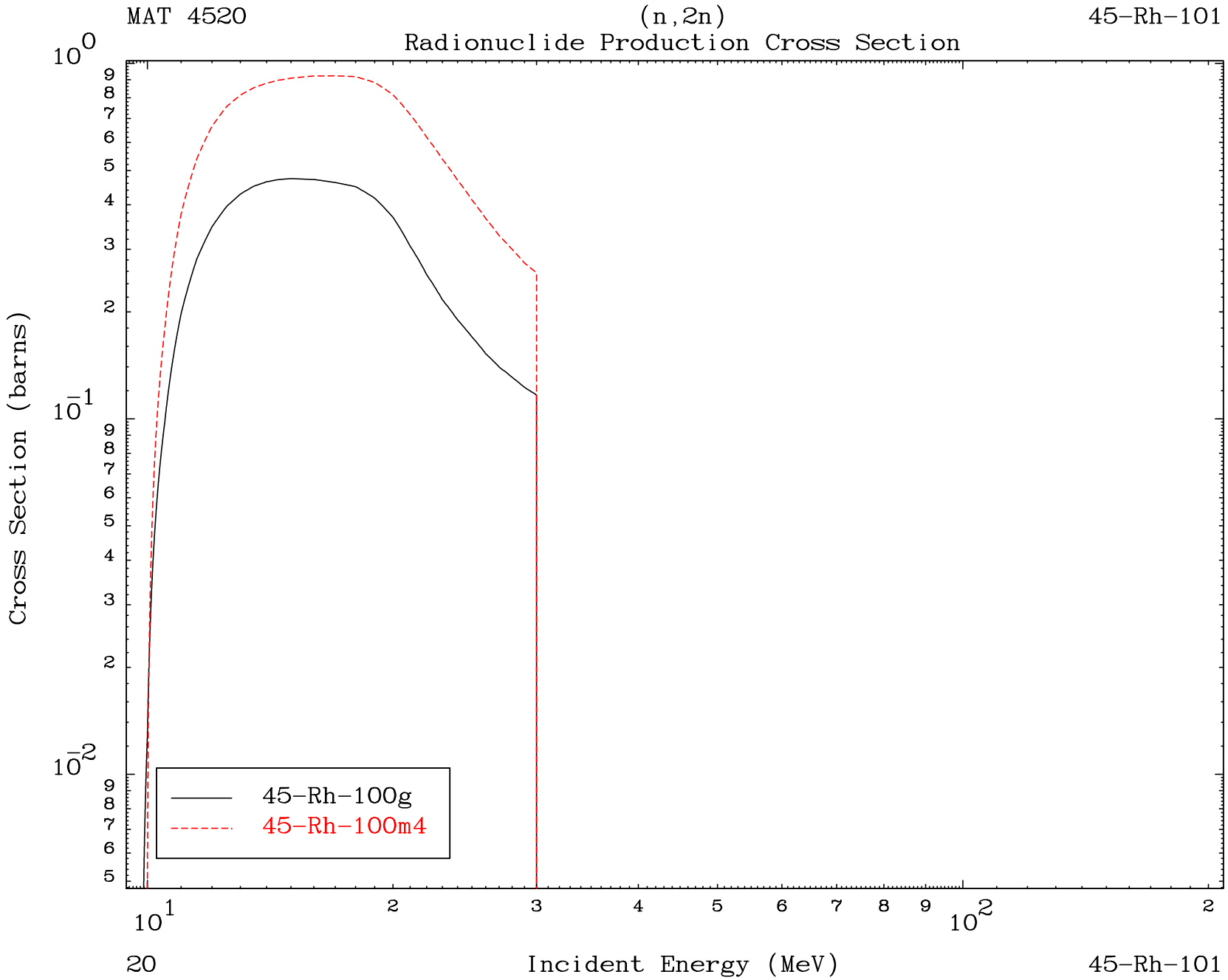

MAT 4520
Energy Release
Parameters
45-Rh-101
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^{18}
10^{15}
10^{12}
10^{9}
10^{6}
10^{3}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
10^{-2}
10^{0}
10^{2}
15
Incident Energy (MeV)
45-Rh-101

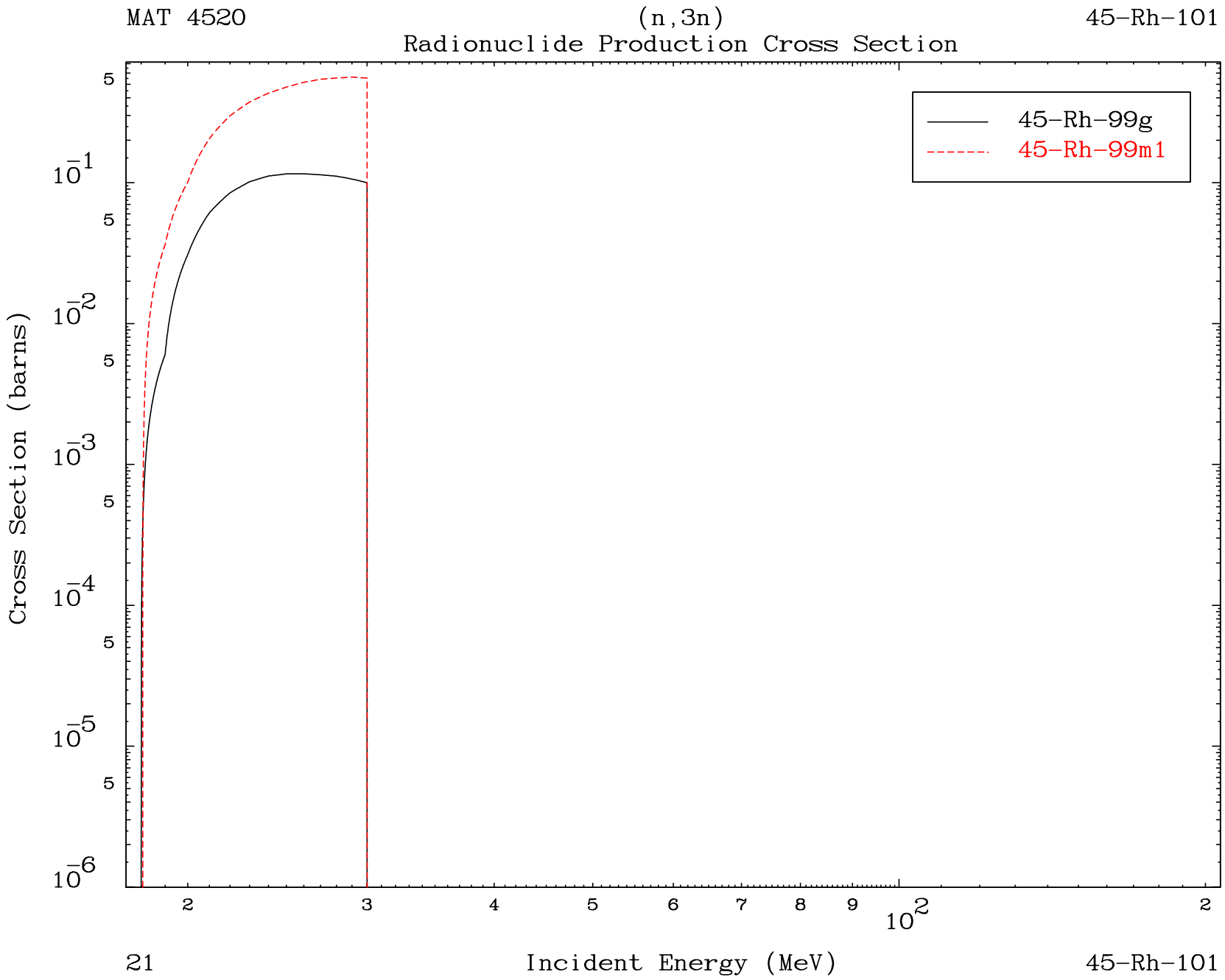

MAT 4520
Elastic
Legendre Coefficients
45-Rh-101
0.05
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
10
20
30
16
Incident Energy (MeV)
45-Rh-101

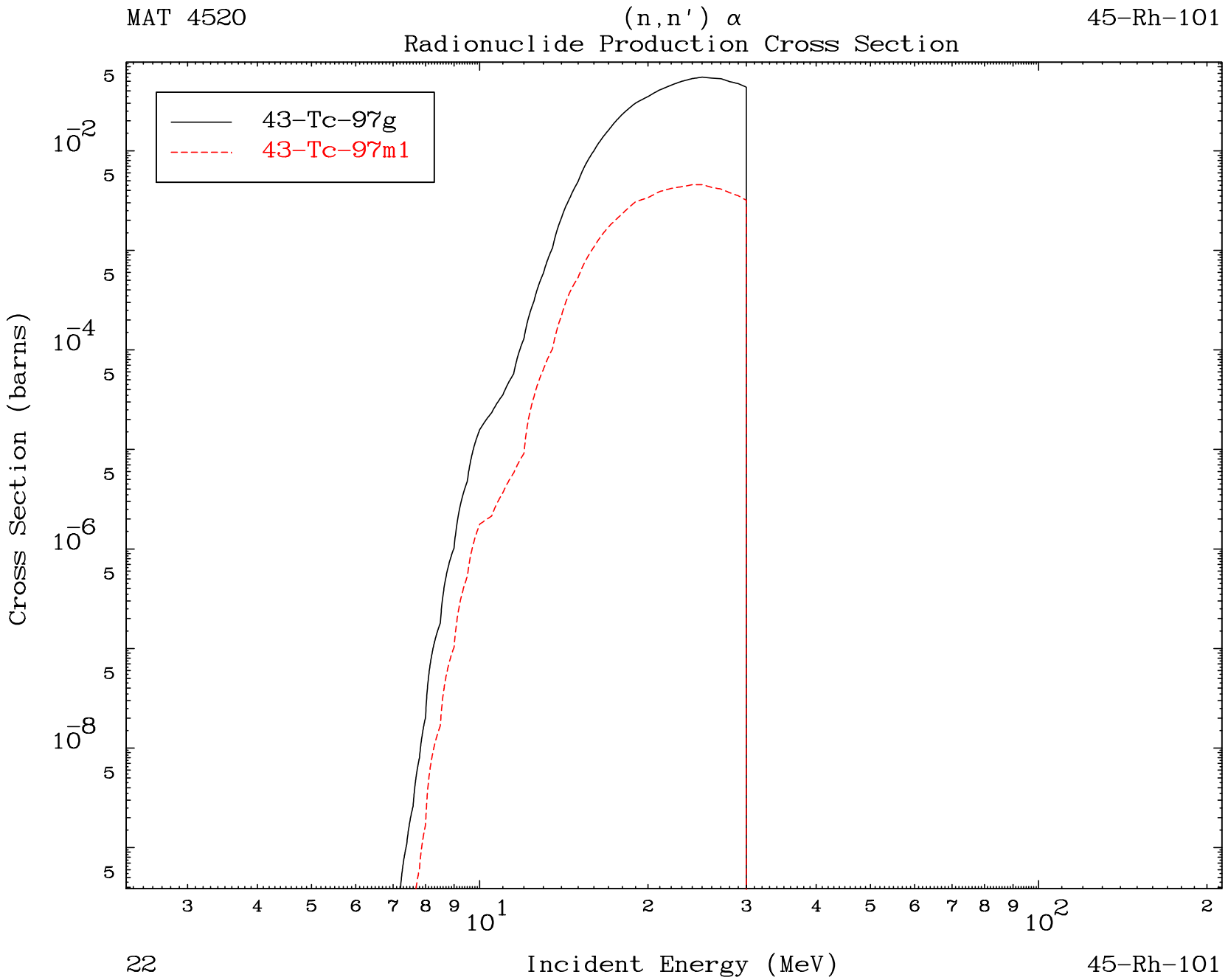

MAT 4520
Elastic
Legendre Coefficients
45-Rh-101
X10^{-4}
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0
1
2
3
4
5
5
10
15
20
25
30
17
Incident Energy (MeV)
45-Rh-101

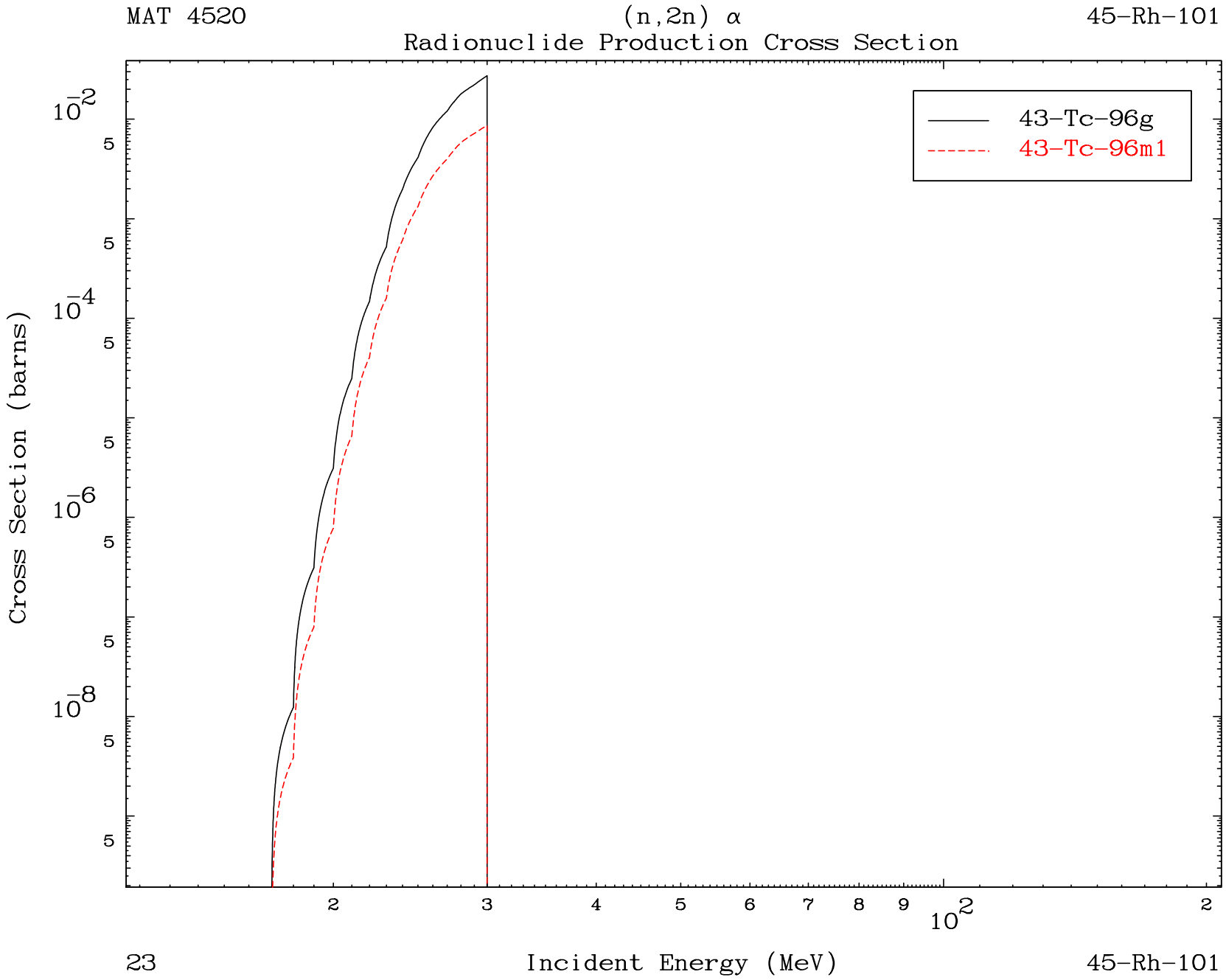

MAT 4520
Elastic
Legendre Coefficients
45-Rh-101
X10 -7
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
15
20
25
30
18
Incident Energy (MeV)
45-Rh-101

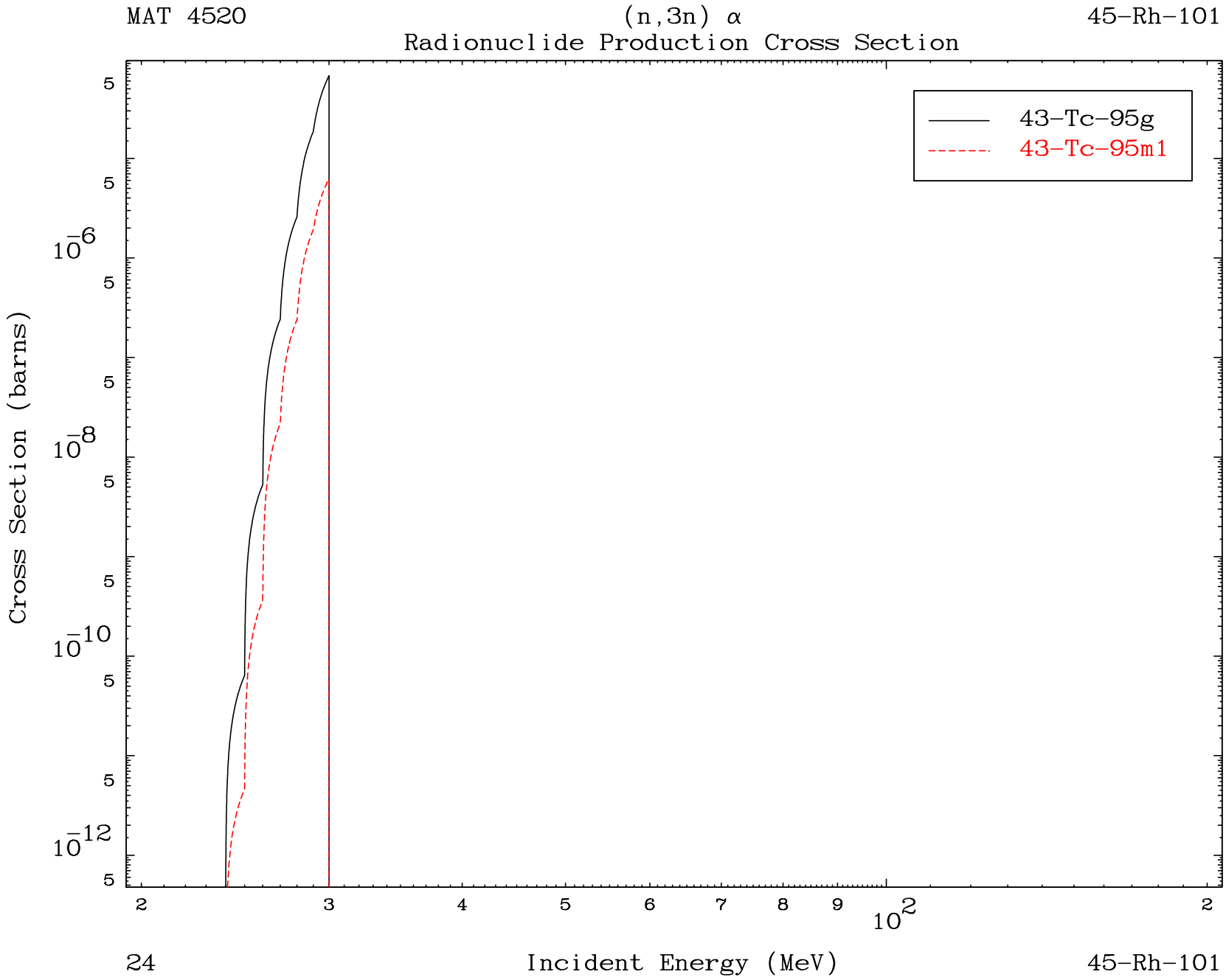

MAT 4520
Inelastic
45-Rh-101
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
5
10^-3
10^-2
10^-1
10^0
10^1
10^2
45-Rh-101g
45-Rh-101m1
19
Incident Energy (MeV)
45-Rh-101

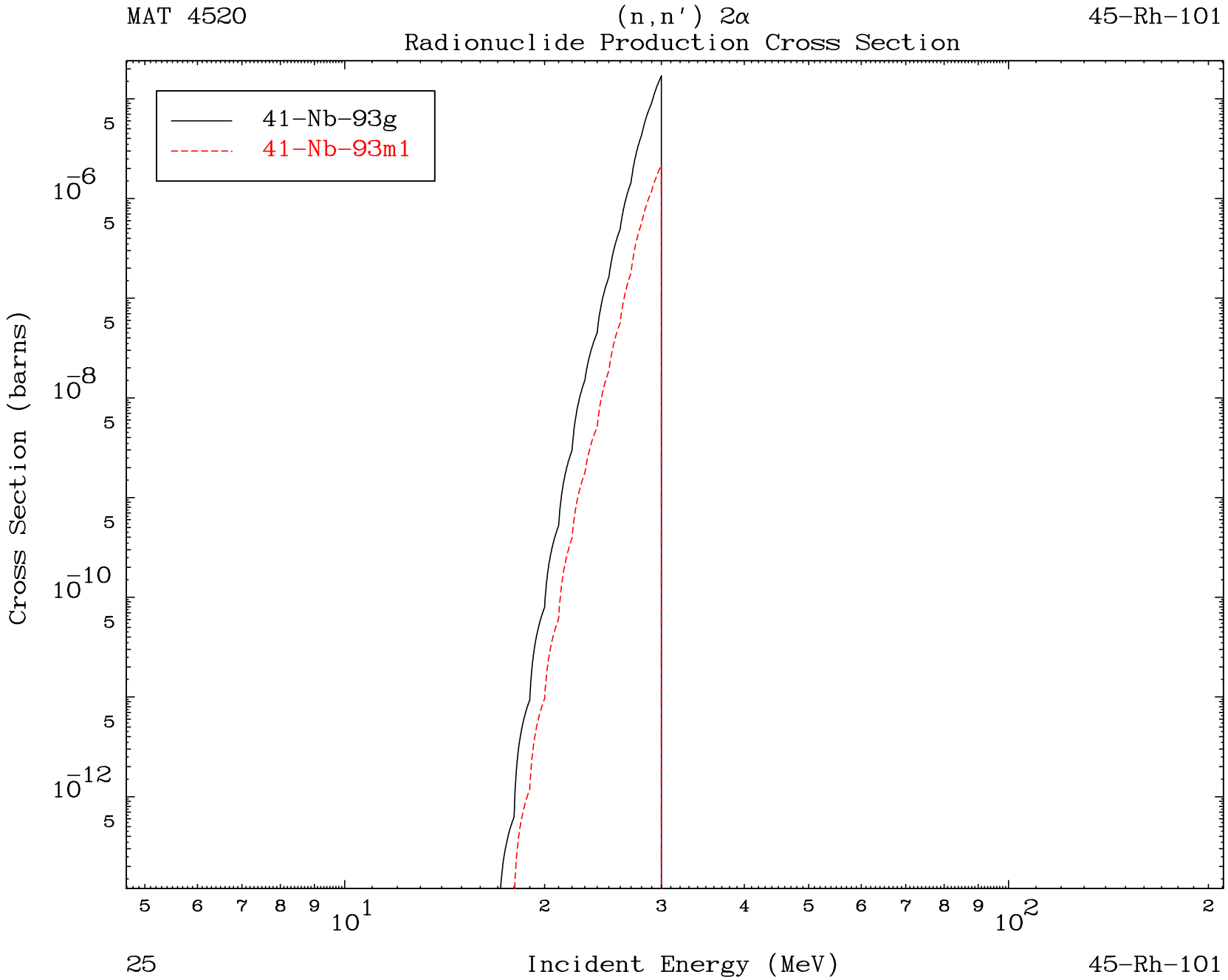

MAT 4520
(n,2n)
45-Rh-101
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
45-Rh-100g
45-Rh-100m4
20
45-Rh-101

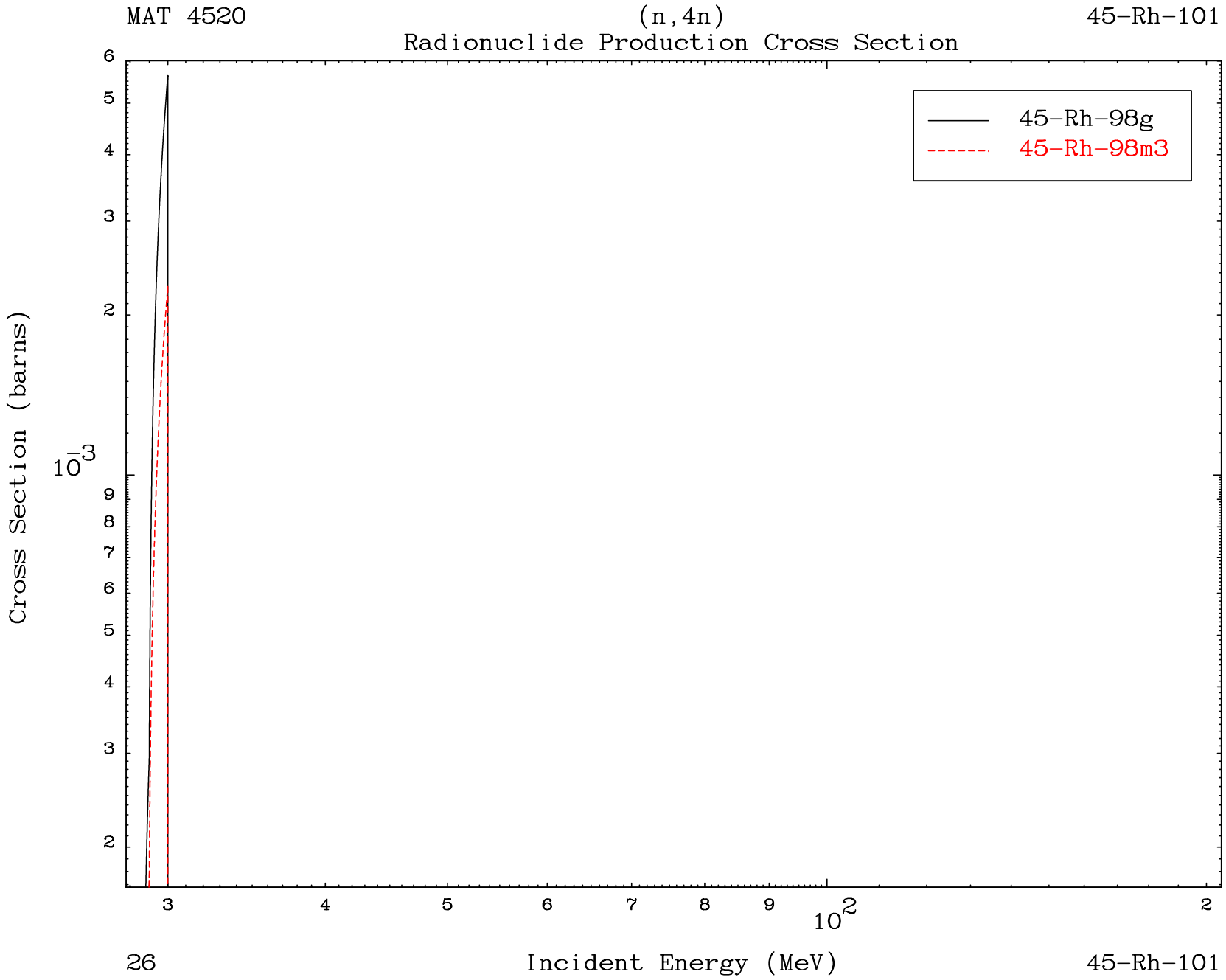

MAT 4520
(n,3n)
45-Rh-101
Radionuclide Production Cross Section
45-Rh-99g
45-Rh-99m1
Cross Section (barns)
Incident Energy (MeV)
21
45-Rh-101

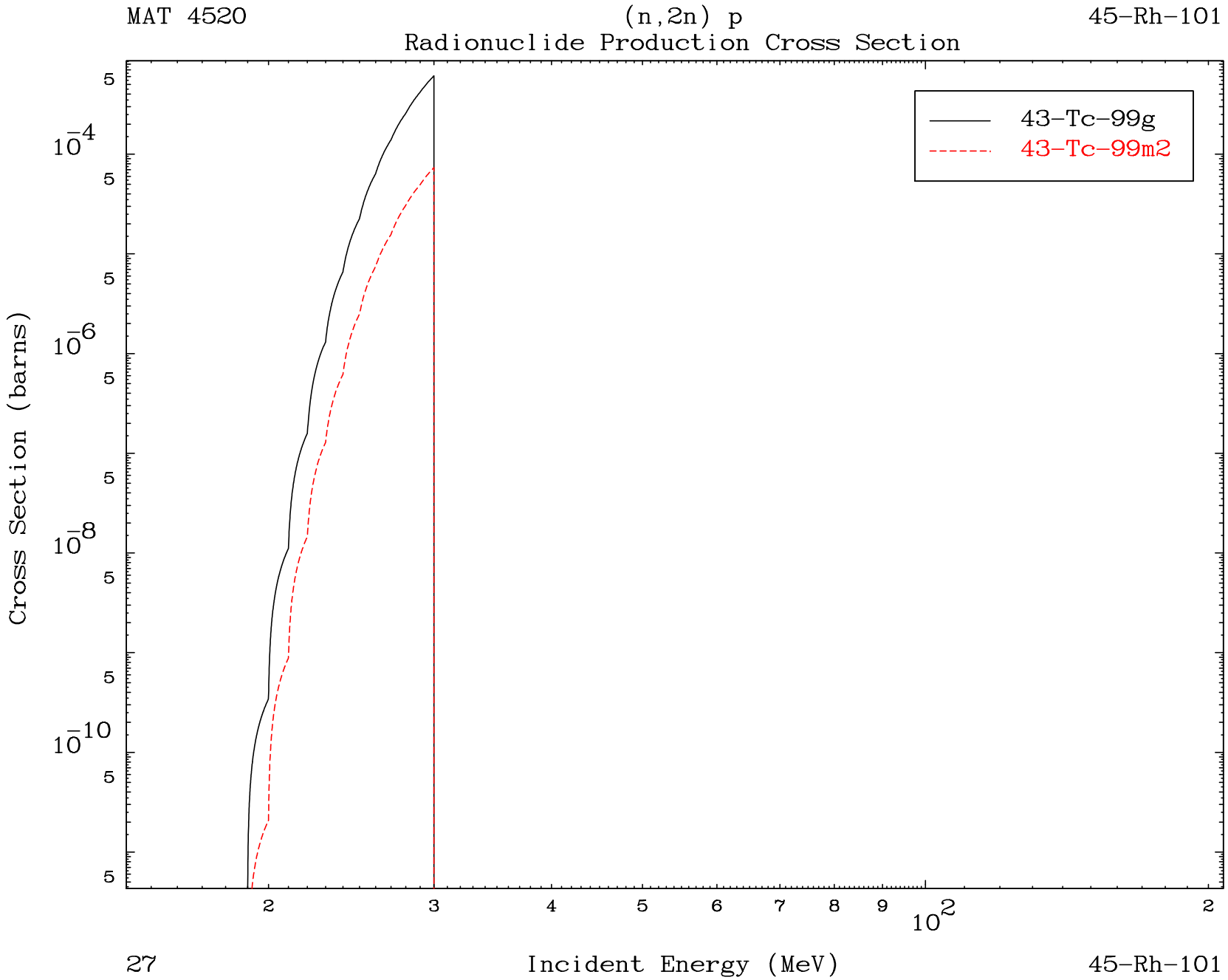

MAT 4520
(n,n') α
45-Rh-101
Radionuclide Production Cross Section
43-Tc-97g
43-Tc-97m1
Cross Section (barns)
Incident Energy (MeV)
22
45-Rh-101

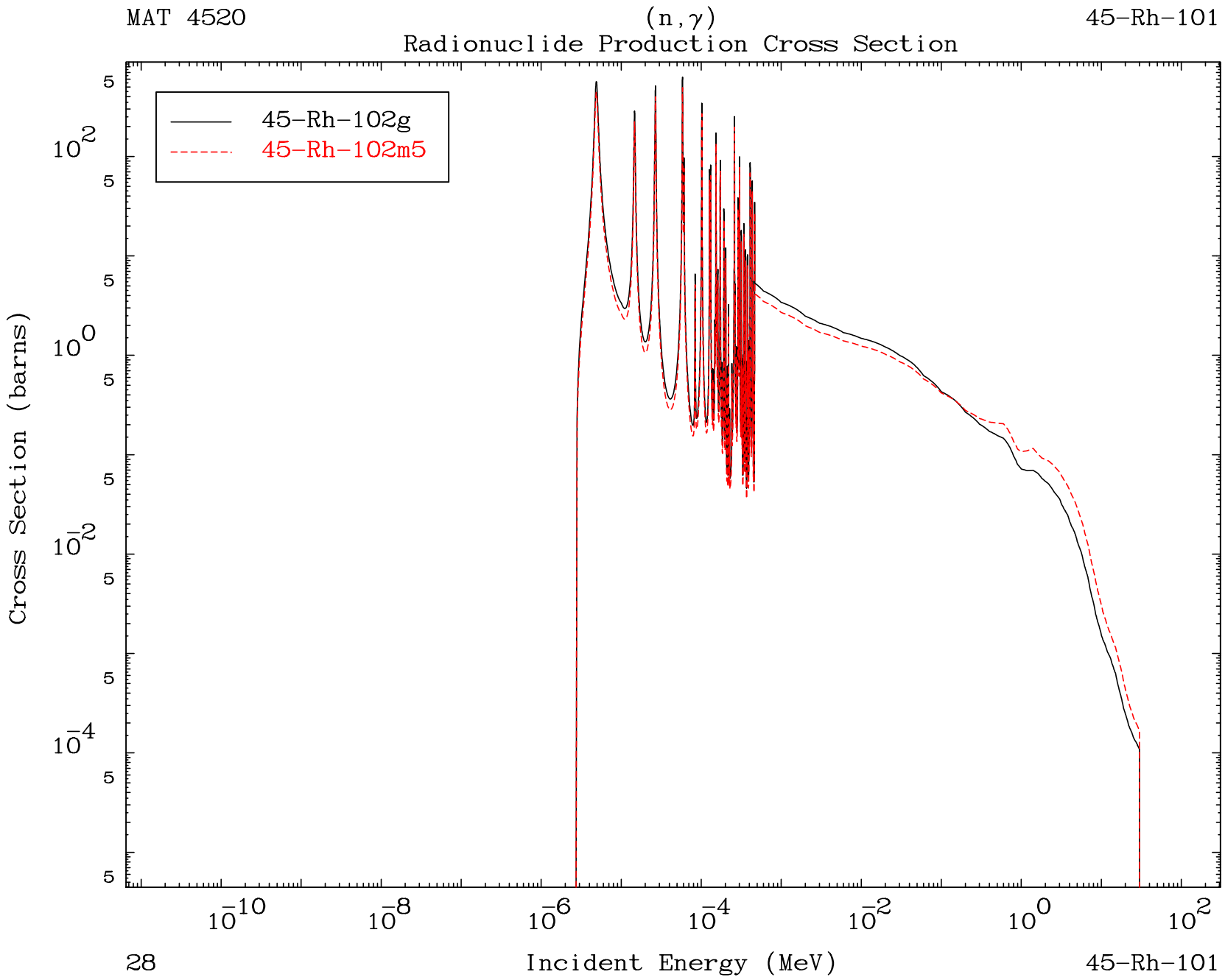

MAT 4520
(n,2n) α
45-Rh-101
Radionuclide Production Cross Section
43-Tc-96g
43-Tc-96m1
Cross Section (barns)
10-2
10-4
10-6
10-8
2
3
4
5
6
7
8
9
10 2
2
23
Incident Energy (MeV)
45-Rh-101

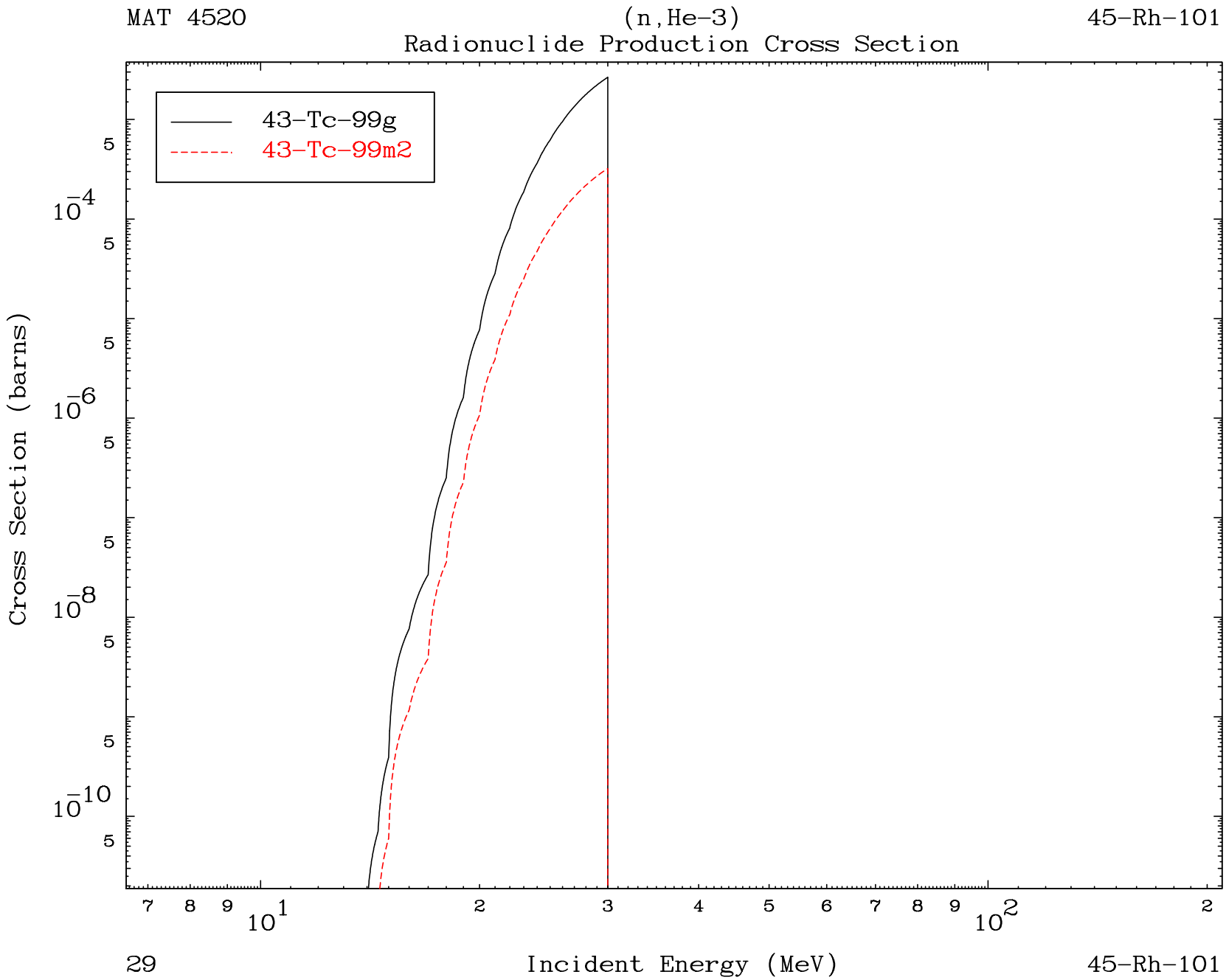

MAT 4520
(n,3n) α
45-Rh-101
Radionuclide Production Cross Section
43-Tc-95g
43-Tc-95m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
5
6
7
8
9
10 2
2
24
Incident Energy (MeV)
45-Rh-101

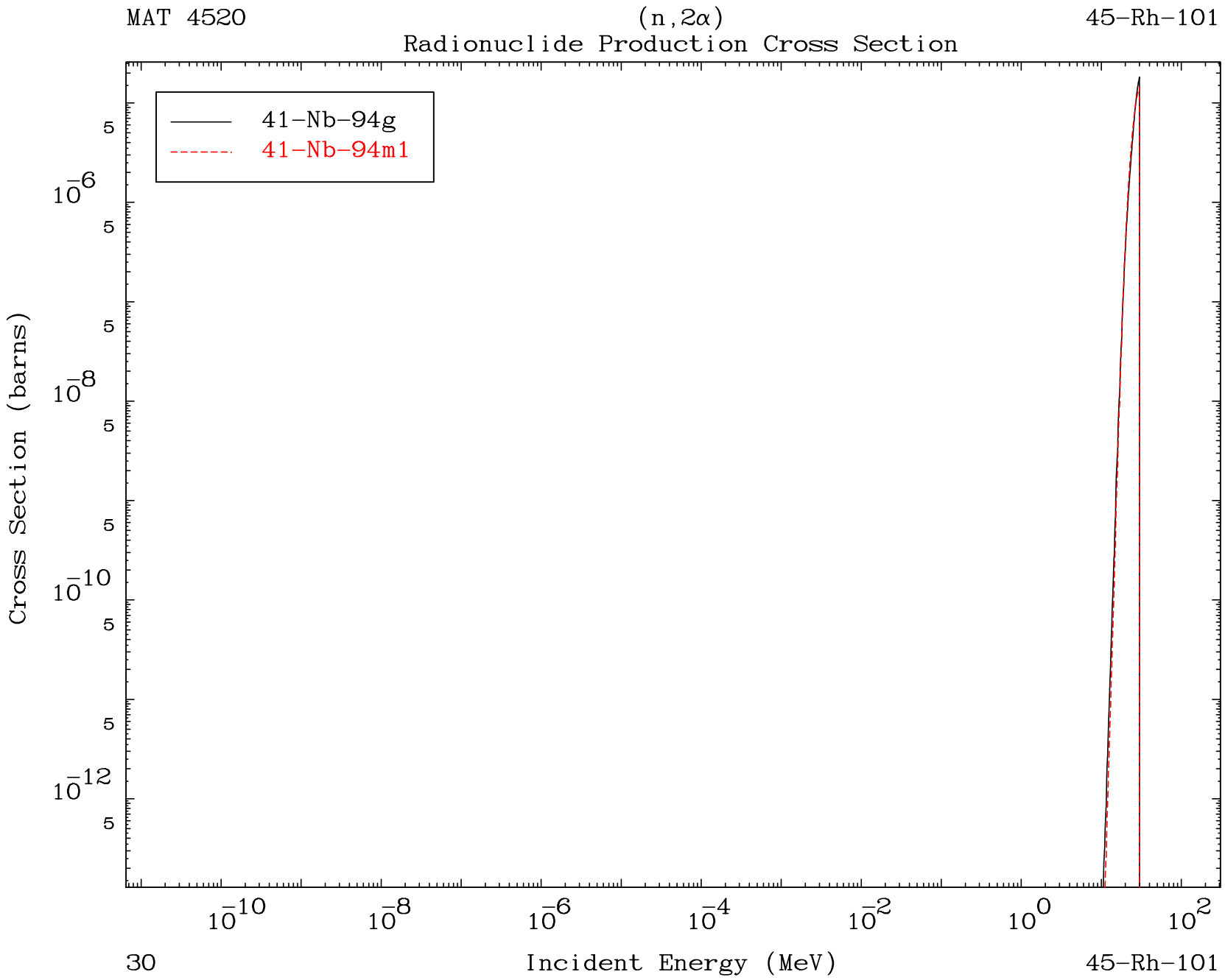

MAT 4520
(n,n') 2α
45-Rh-101
Radionuclide Production Cross Section
41-Nb-93g
41-Nb-93m1
Cross Section (barns)
Incident Energy (MeV)
25
45-Rh-101

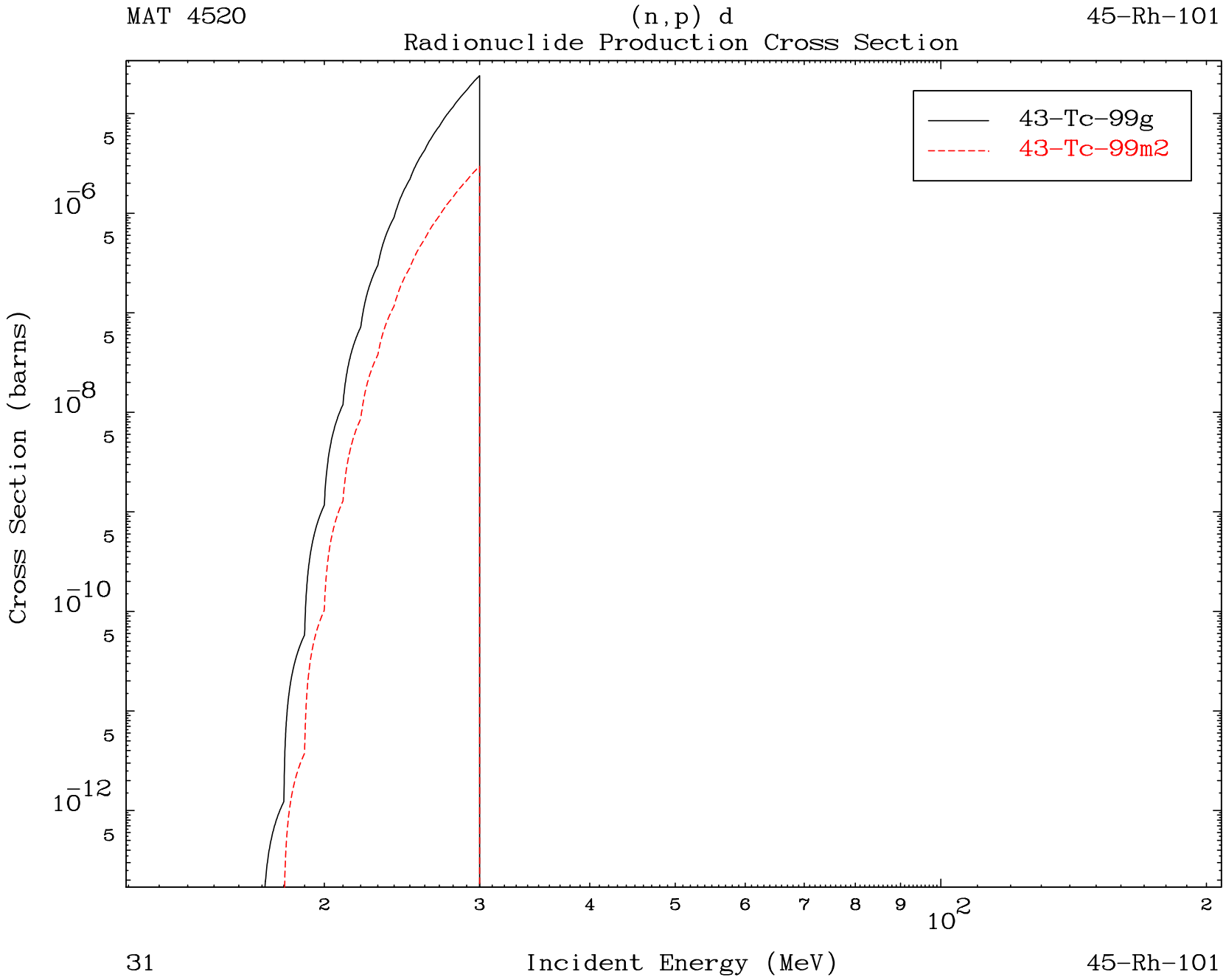

MAT 4520
(n,4n)
45-Rh-101
Radionuclide Production Cross Section
45-Rh-98g
45-Rh-98m3
Cross Section (barns)
10^-3
10^2
Incident Energy (MeV)
26
45-Rh-101


MAT 4520
(n,2n) p
45-Rh-101
Radionuclide Production Cross Section
43-Tc-99g
43-Tc-99m2
Cross Section (barns)
Incident Energy (MeV)
27
45-Rh-101


MAT 4520
(n,γ)
45-Rh-101
Radionuclide Production Cross Section
45-Rh-102g
45-Rh-102m5
Cross Section (barns)
Incident Energy (MeV)
28
45-Rh-101


MAT 4520
(n,He-3)
45-Rh-101
Radionuclide Production Cross Section
43-Tc-99g
43-Tc-99m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
29
45-Rh-101


MAT 4520
(n,2α)
45-Rh-101
Radionuclide Production Cross Section
41-Nb-94g
41-Nb-94m1
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
30
Incident Energy (MeV)
45-Rh-101


MAT 4520
(n,p) d
45-Rh-101
Radionuclide Production Cross Section
43-Tc-99g
43-Tc-99m2
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
6
7
8
9
10 2
Incident Energy (MeV)
31
45-Rh-101