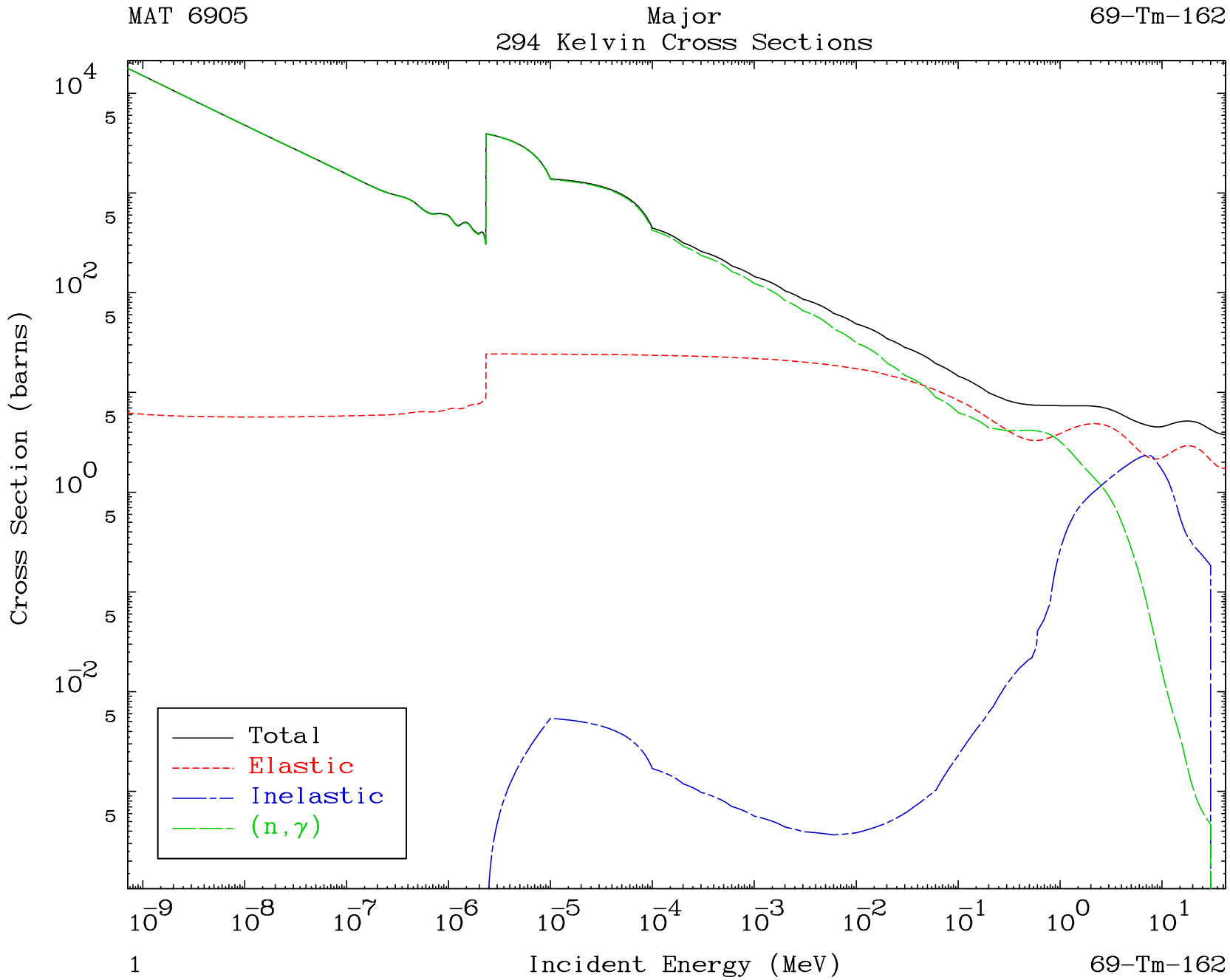
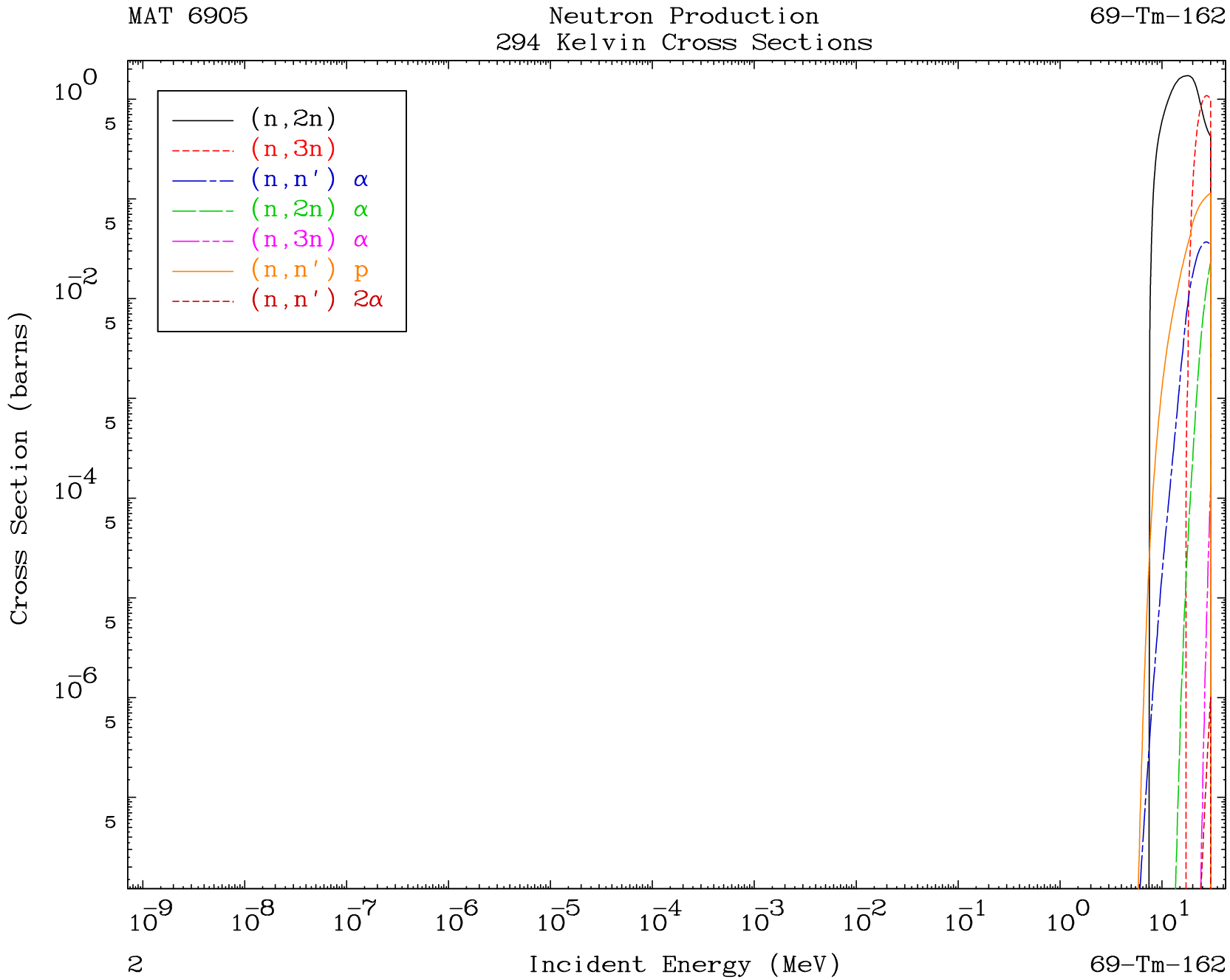
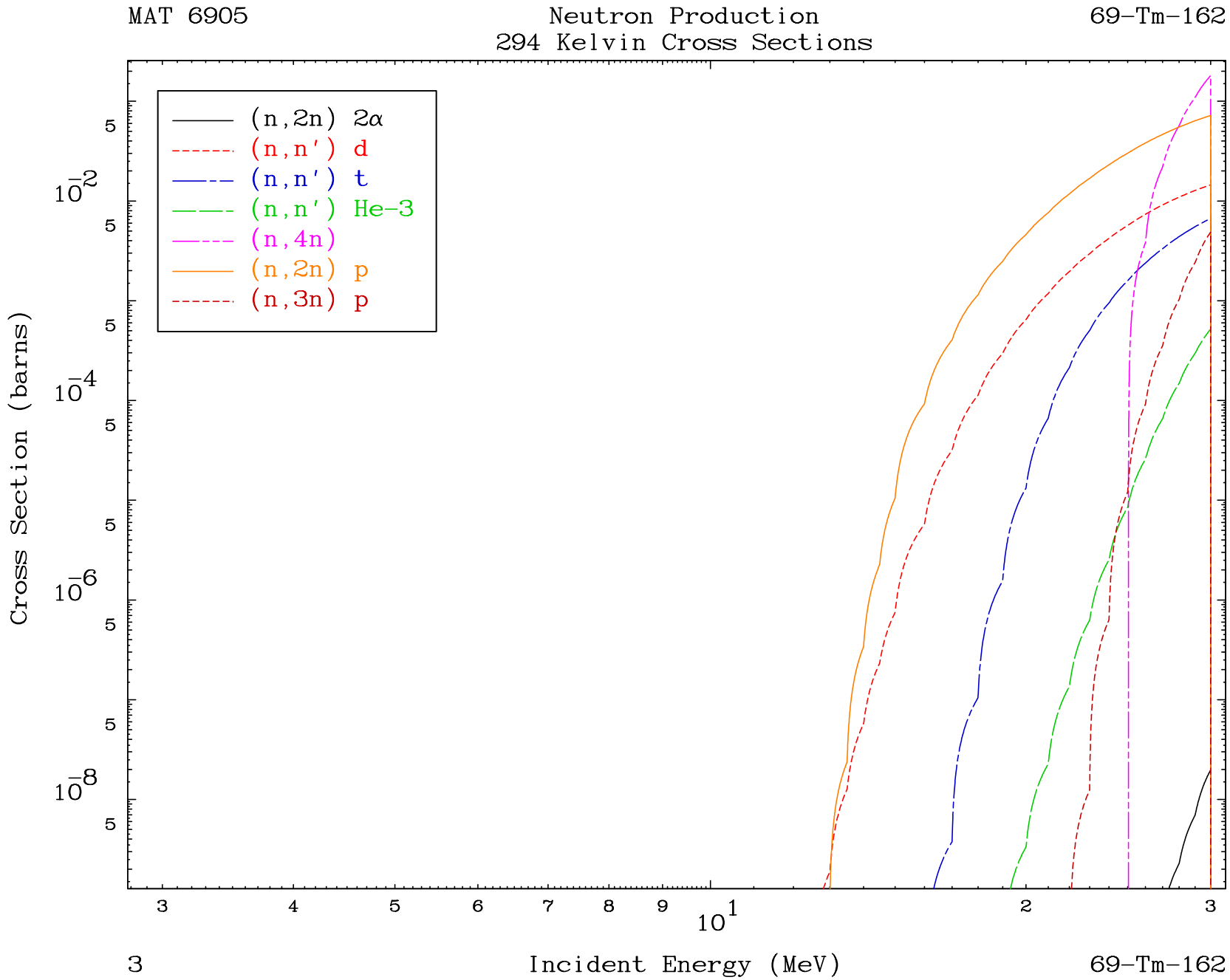
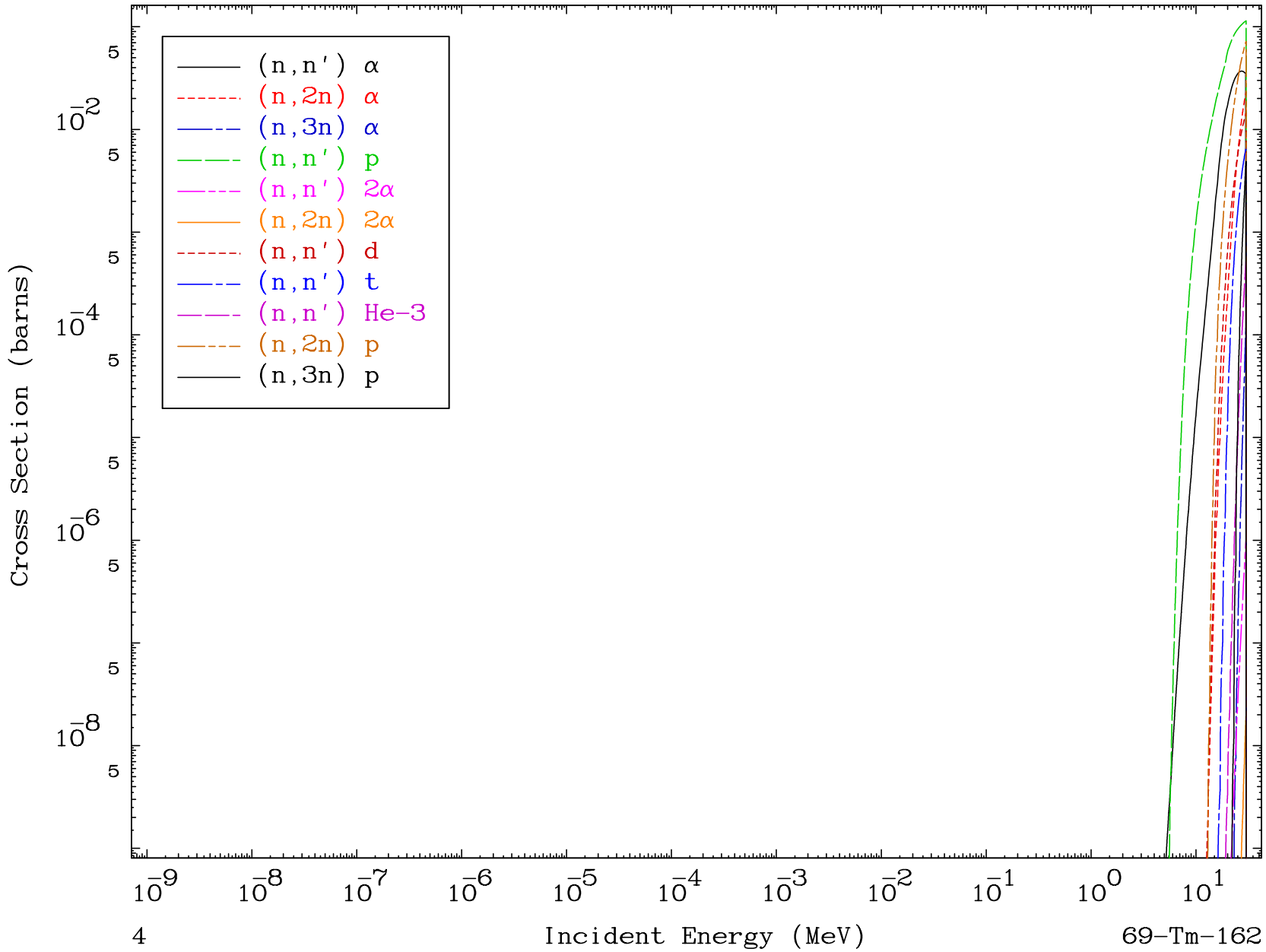
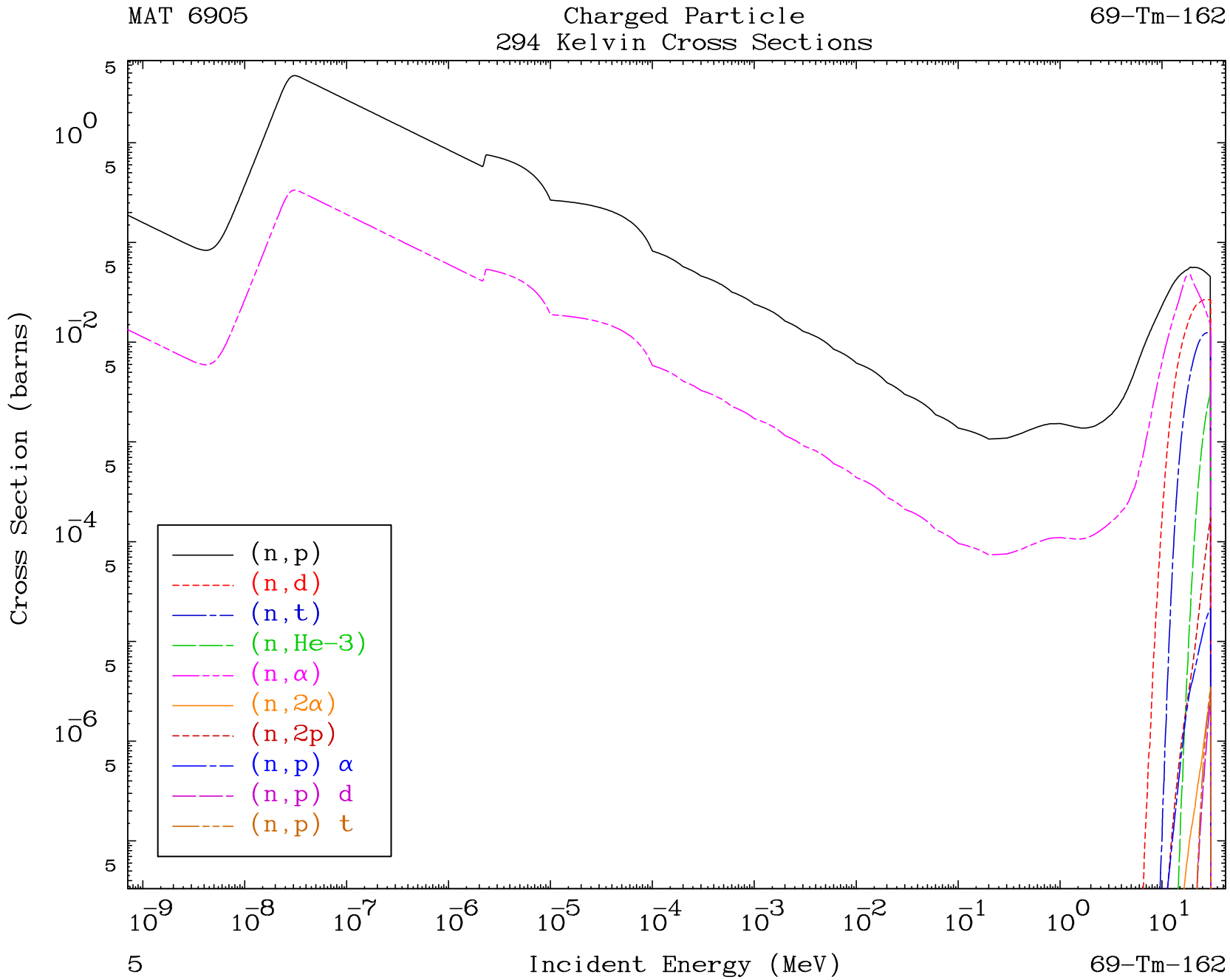

MAT 6905
Major
294 Kelvin Cross Sections
69-Tm-162
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,γ)
1
69-Tm-162

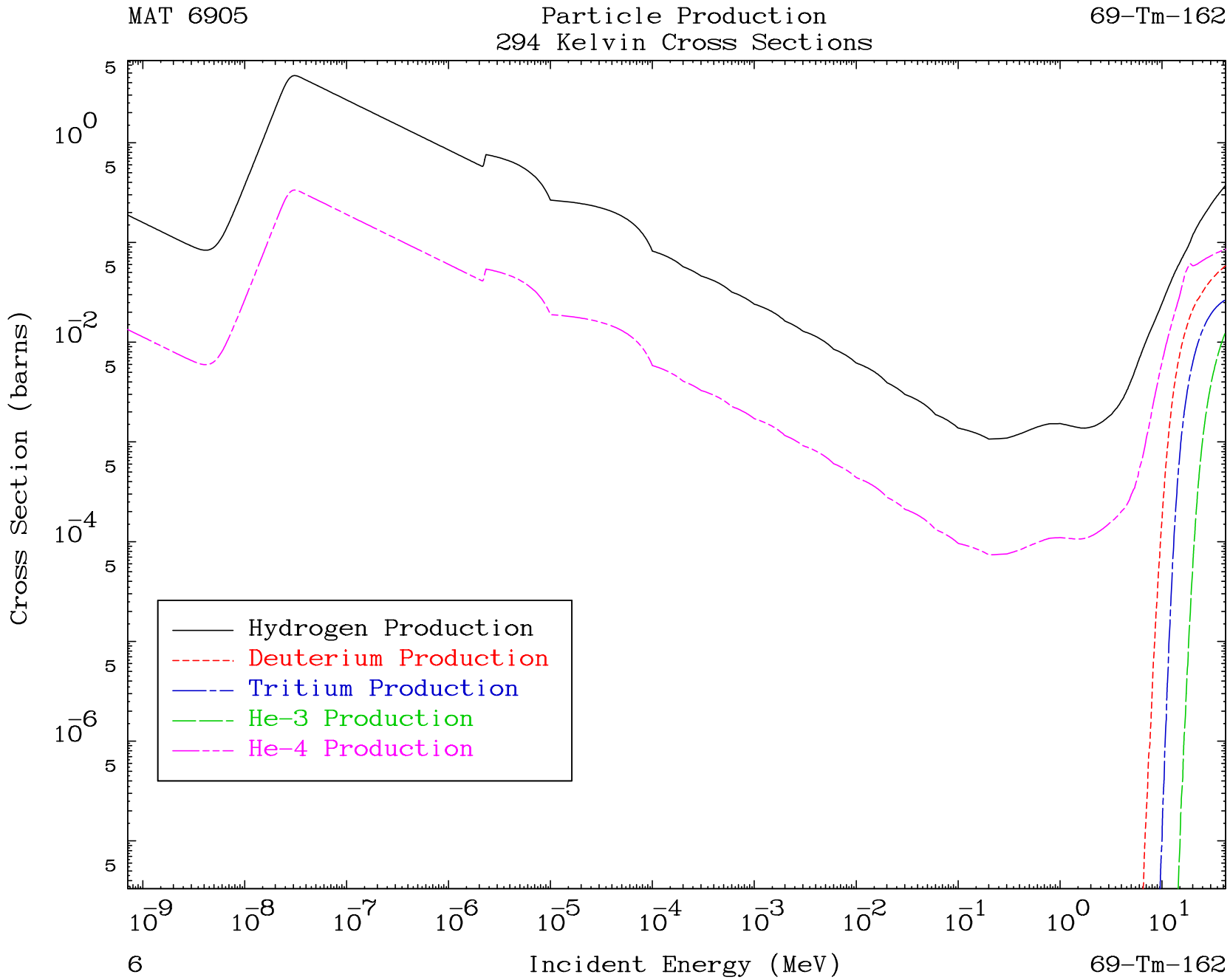

MAT 6905
Neutron Production
294 Kelvin Cross Sections
69-Tm-162
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
69-Tm-162

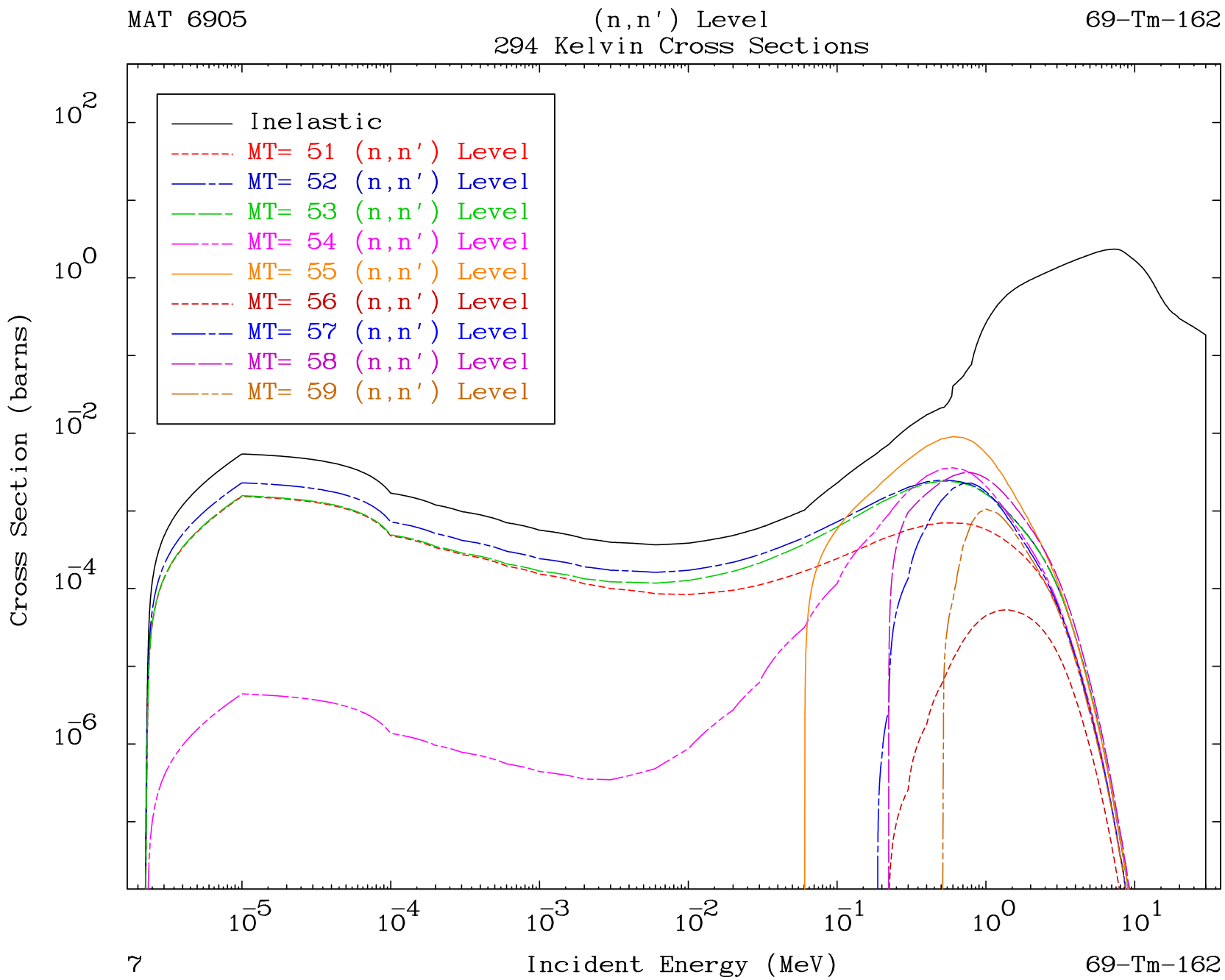

MAT 6905
Neutron Production
294 Kelvin Cross Sections
69-Tm-162
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
69-Tm-162

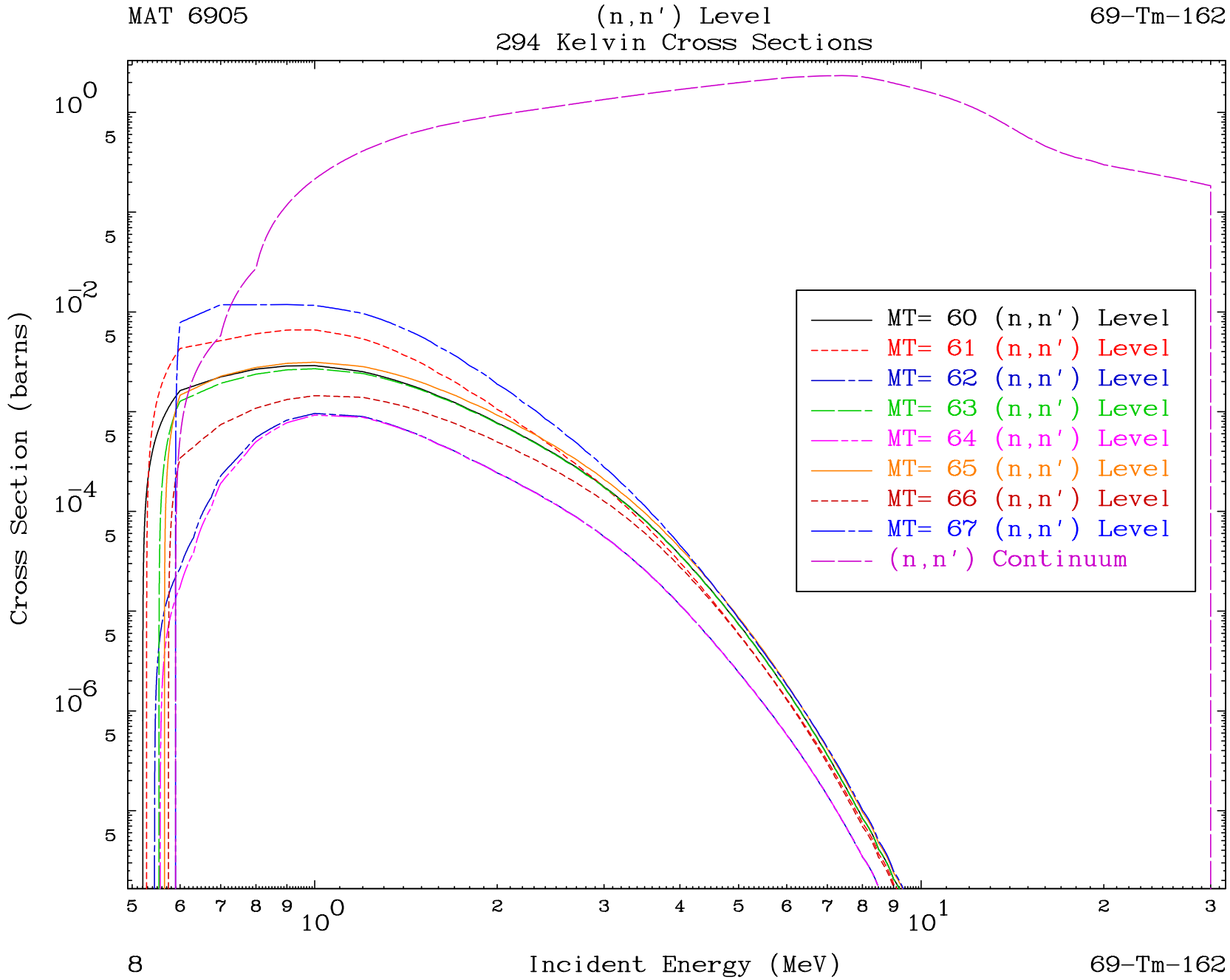
Charged Particle
294 Kelvin Cross Sections



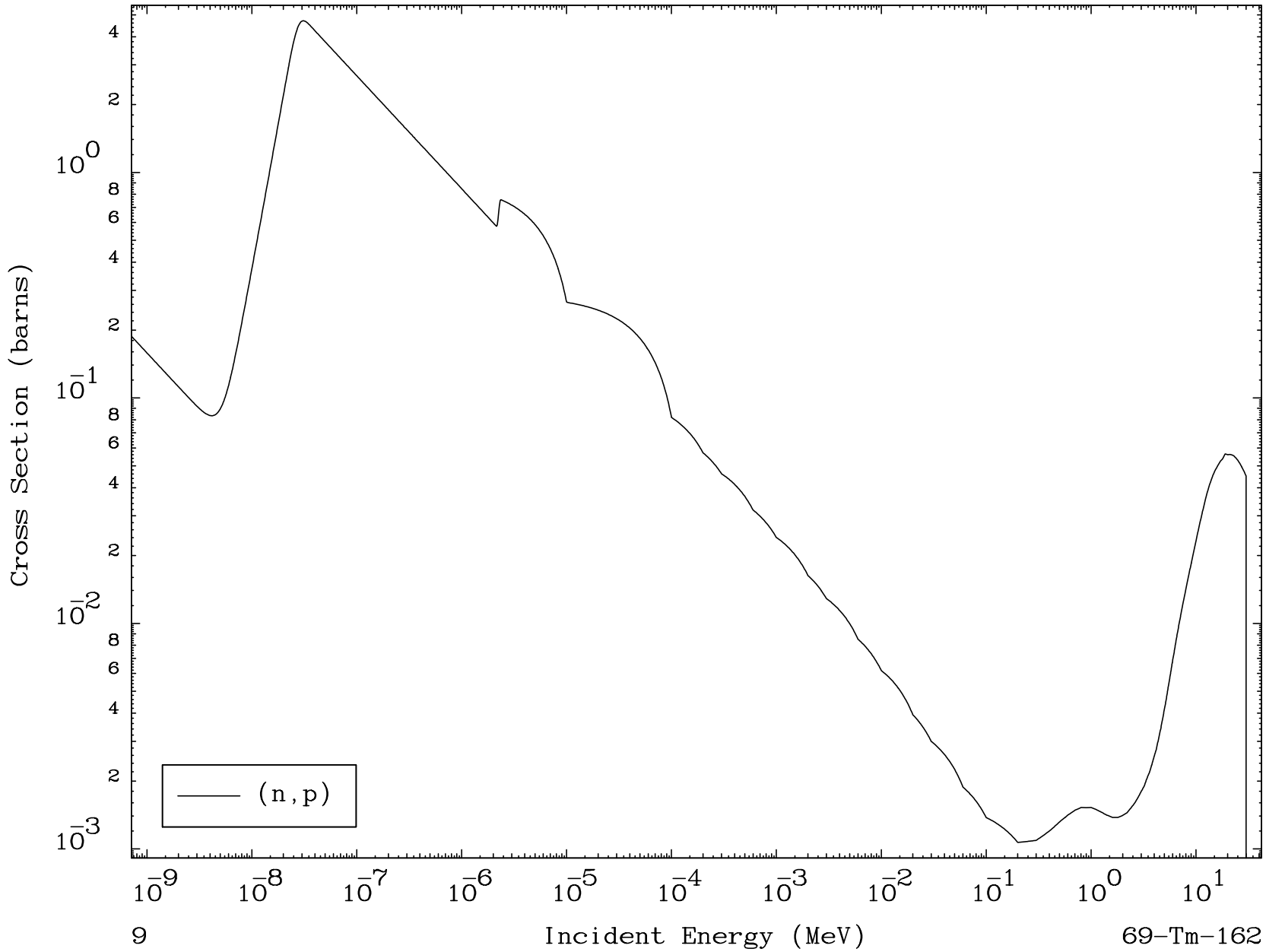

MAT 6905
Charged Particle
294 Kelvin Cross Sections
69-Tm-162
Cross Section (barns)
Incident Energy (MeV)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t

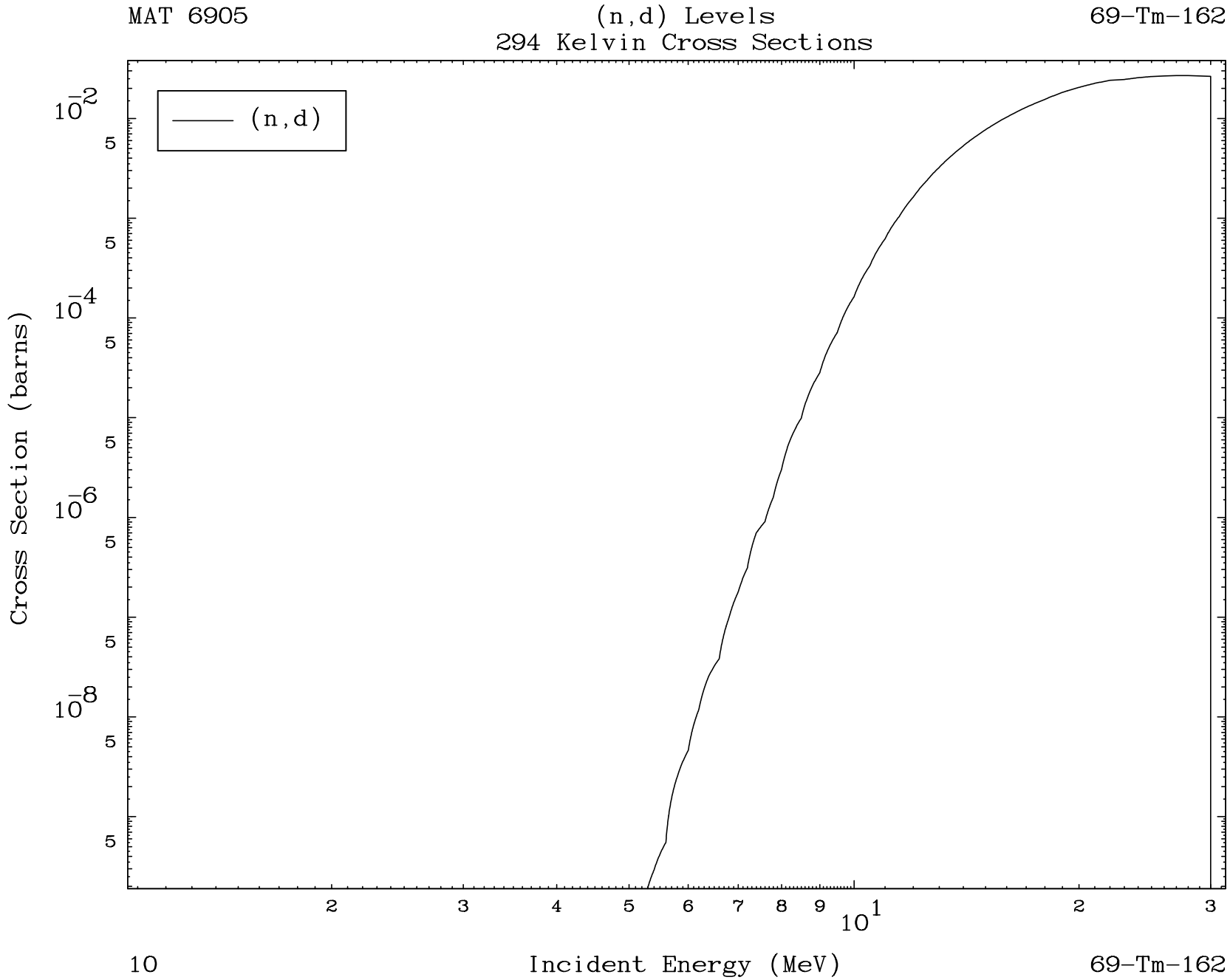

MAT 6905
Particle Production
294 Kelvin Cross Sections
69-Tm-162
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
6
69-Tm-162


MAT 6905
(n,n') Level
294 Kelvin Cross Sections
69-Tm-162
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
Cross Section (barns)
Incident Energy (MeV)
7
69-Tm-162

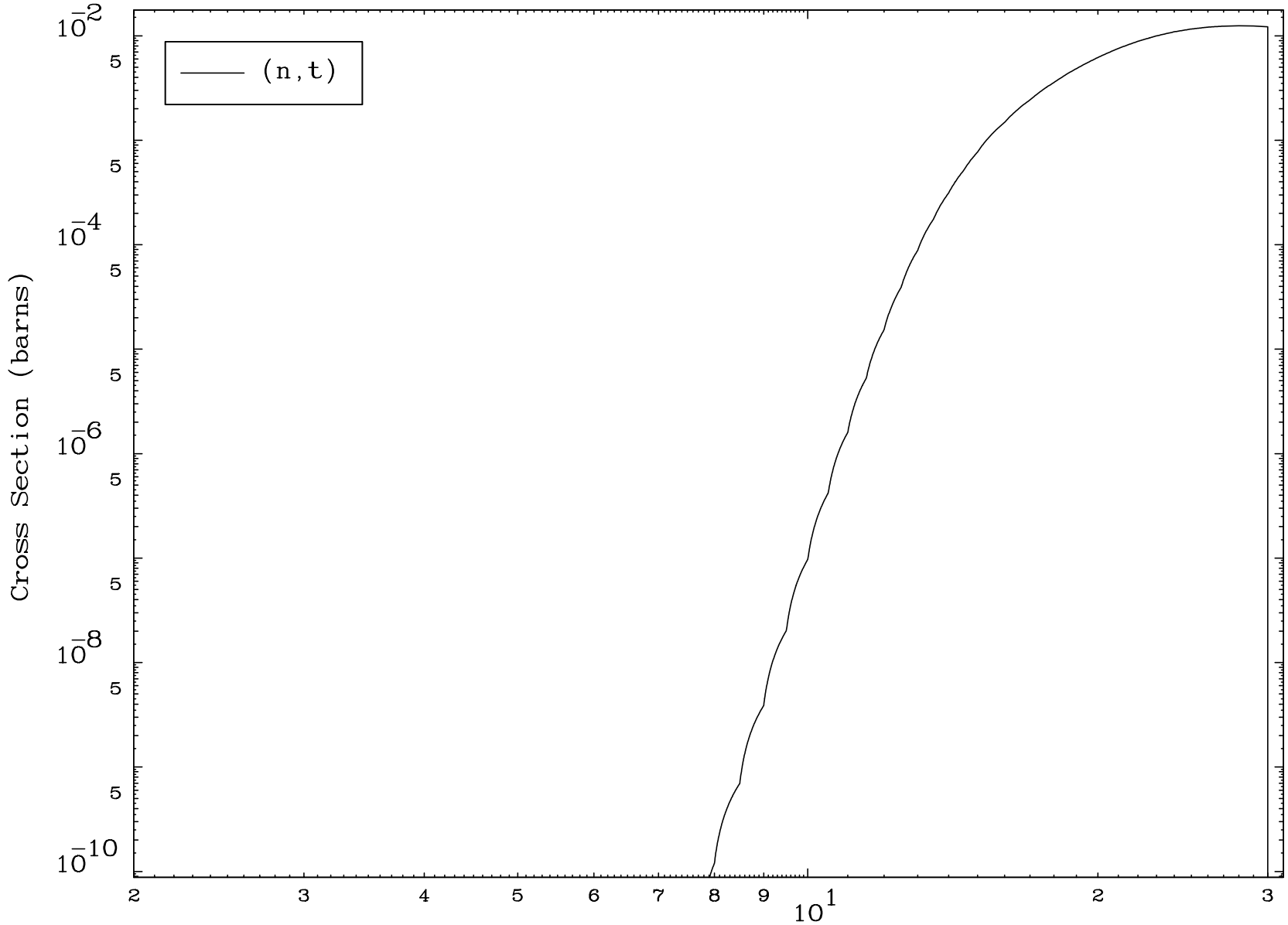

MAT 6905
(n,n') Level
294 Kelvin Cross Sections
69-Tm-162
Cross Section (barns)
Incident Energy (MeV)
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
(n,n') Continuum
8
69-Tm-162

(n,p) Levels
294 Kelvin Cross Sections

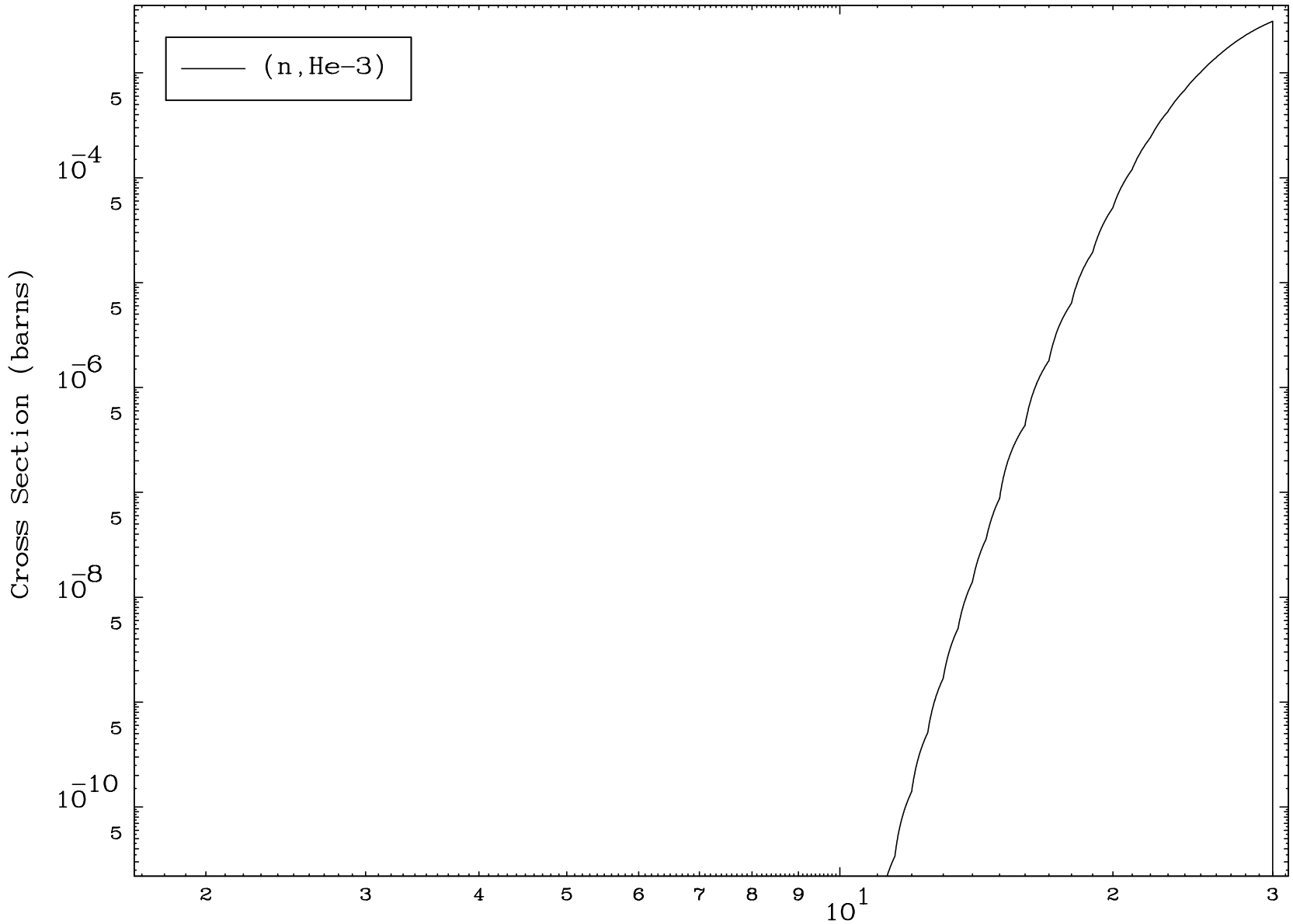



MAT 6905
(n,d) Levels
294 Kelvin Cross Sections
69-Tm-162
(n,d)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
2
3
4
5
6
7
8
9
10^1
2
3
10
Incident Energy (MeV)
69-Tm-162

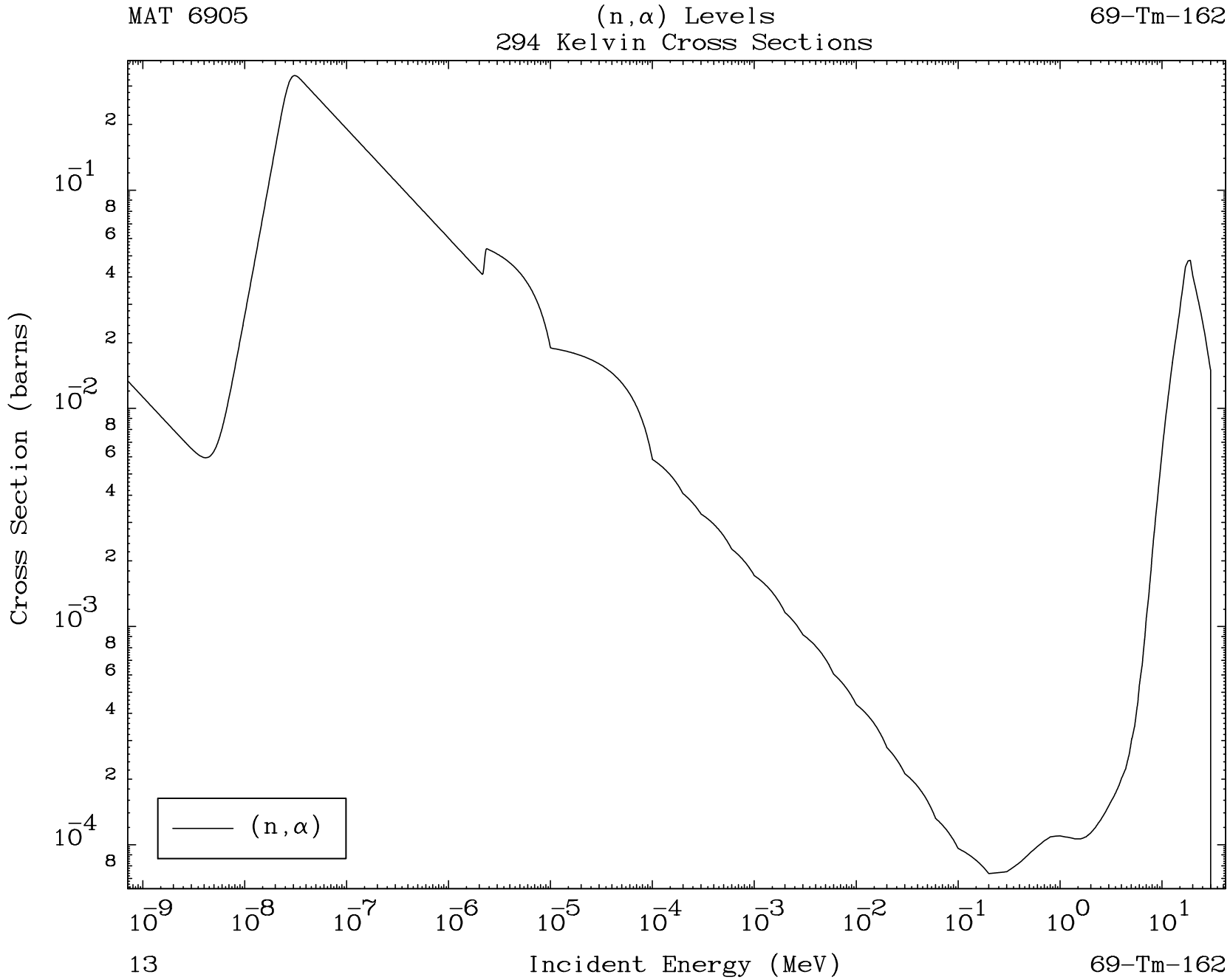
(n,t) Levels
294 Kelvin Cross Sections

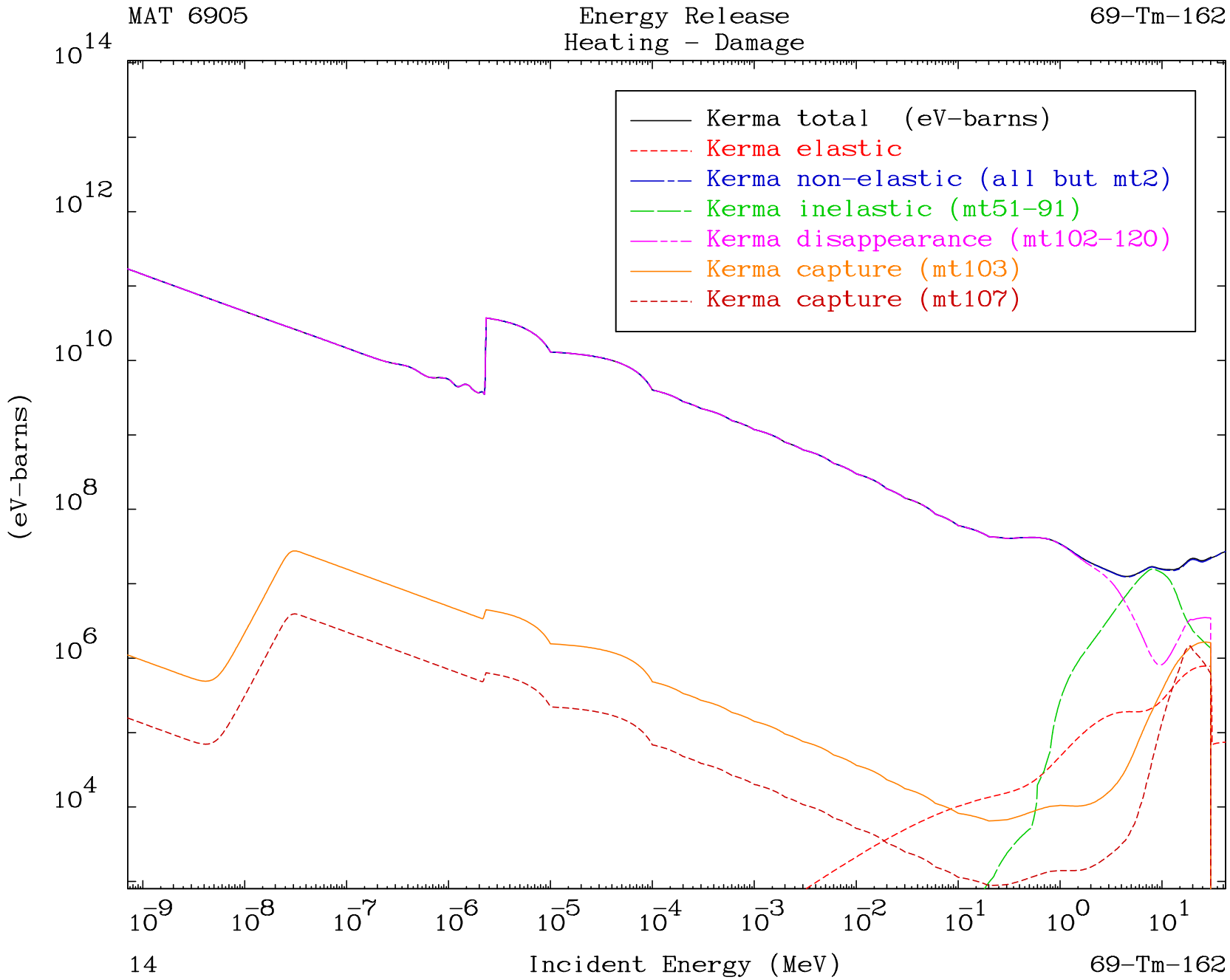


(n,He3) Levels
294 Kelvin Cross Sections



Incident Energy (MeV)


MAT 6905
(n,α) Levels
294 Kelvin Cross Sections
69-Tm-162
Cross Section (barns)
Incident Energy (MeV)
(n,α)
13
69-Tm-162


MAT 6905
Energy Release
Heating - Damage
69-Tm-162
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma disappearance (mt102-120)
Kerma capture (mt103)
Kerma capture (mt107)
(eV-barns)
10^{14}
10^{12}
10^{10}
10^{8}
10^{6}
10^{4}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
10^{-1}
10^{0}
10^{1}
14
Incident Energy (MeV)
69-Tm-162