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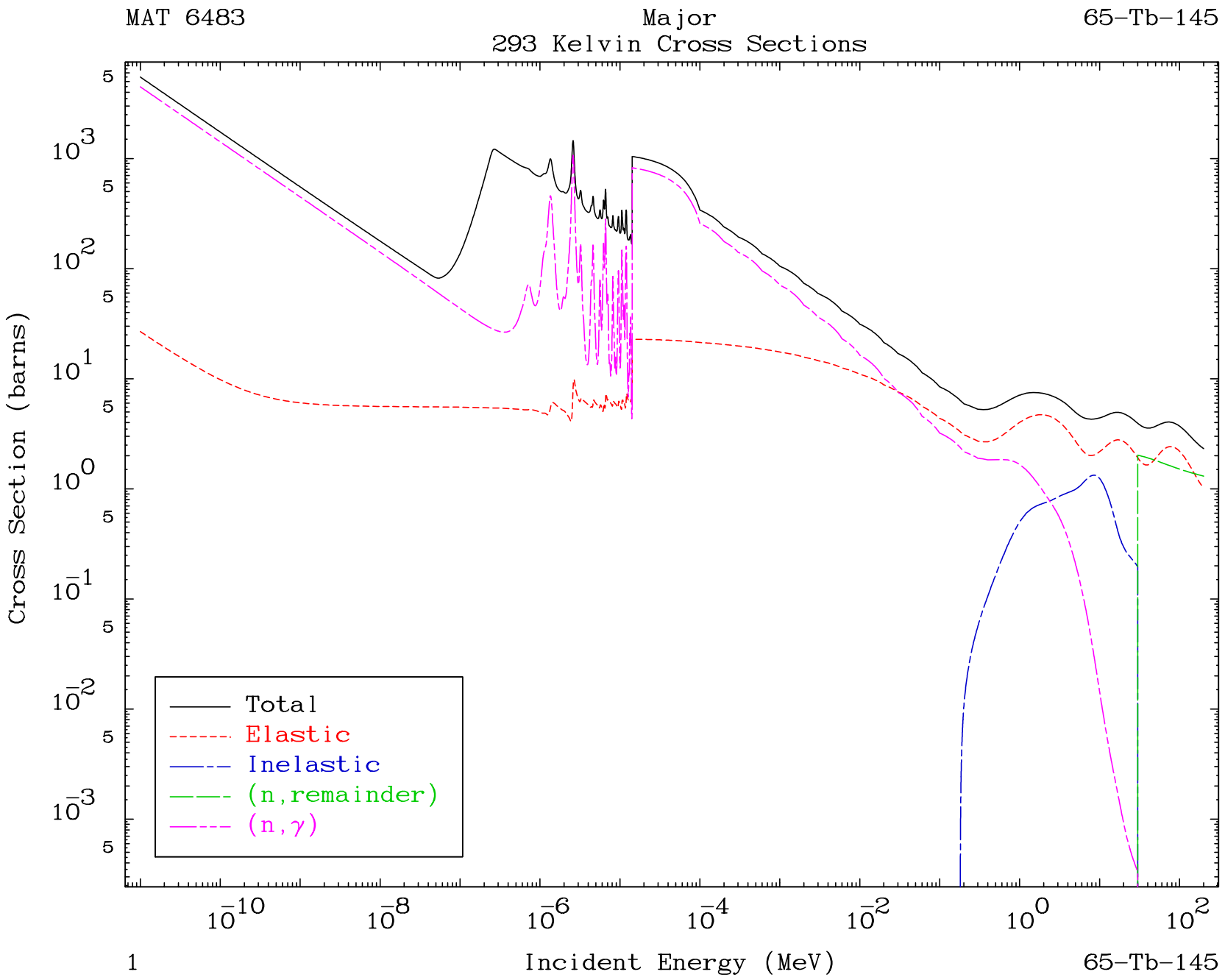
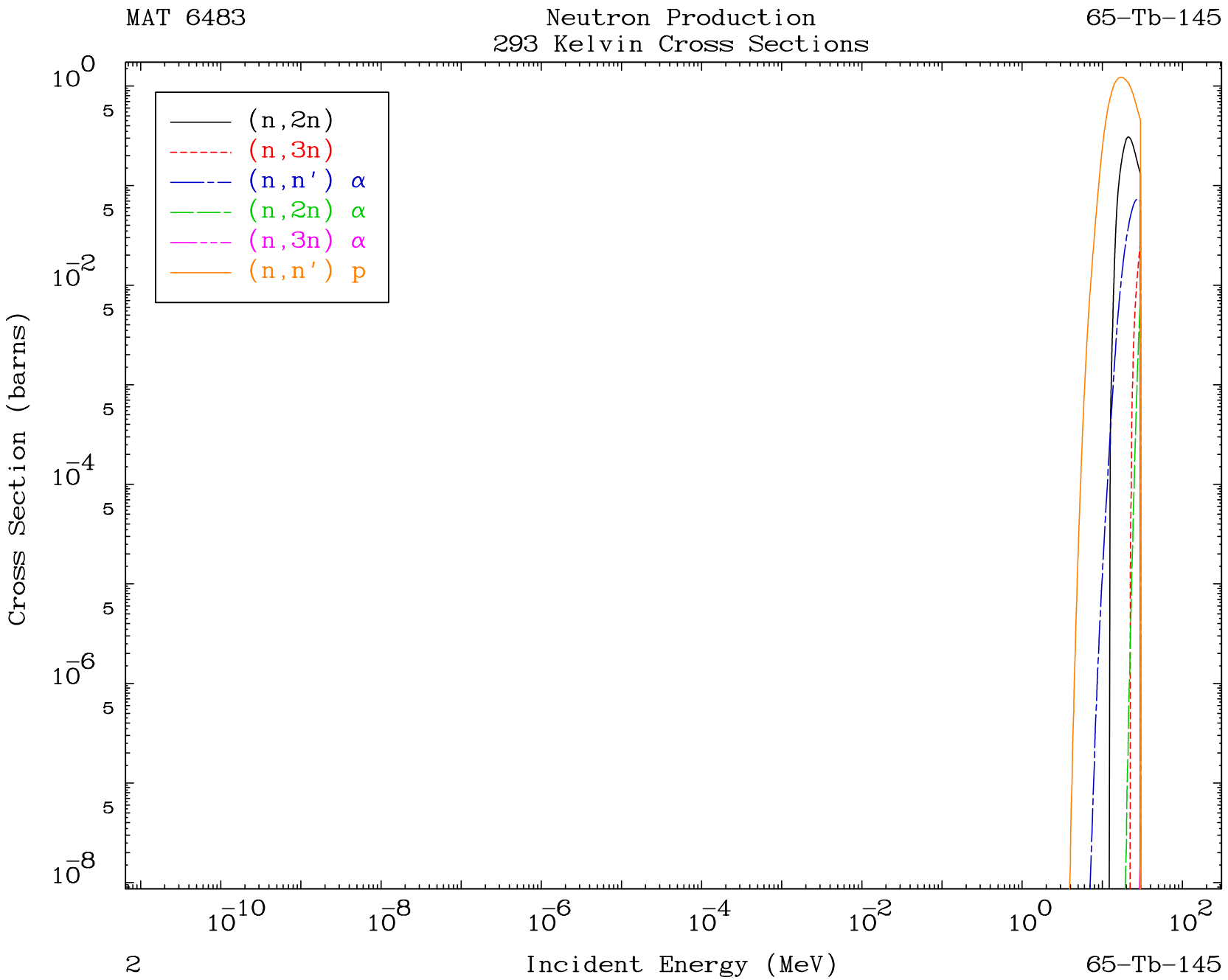
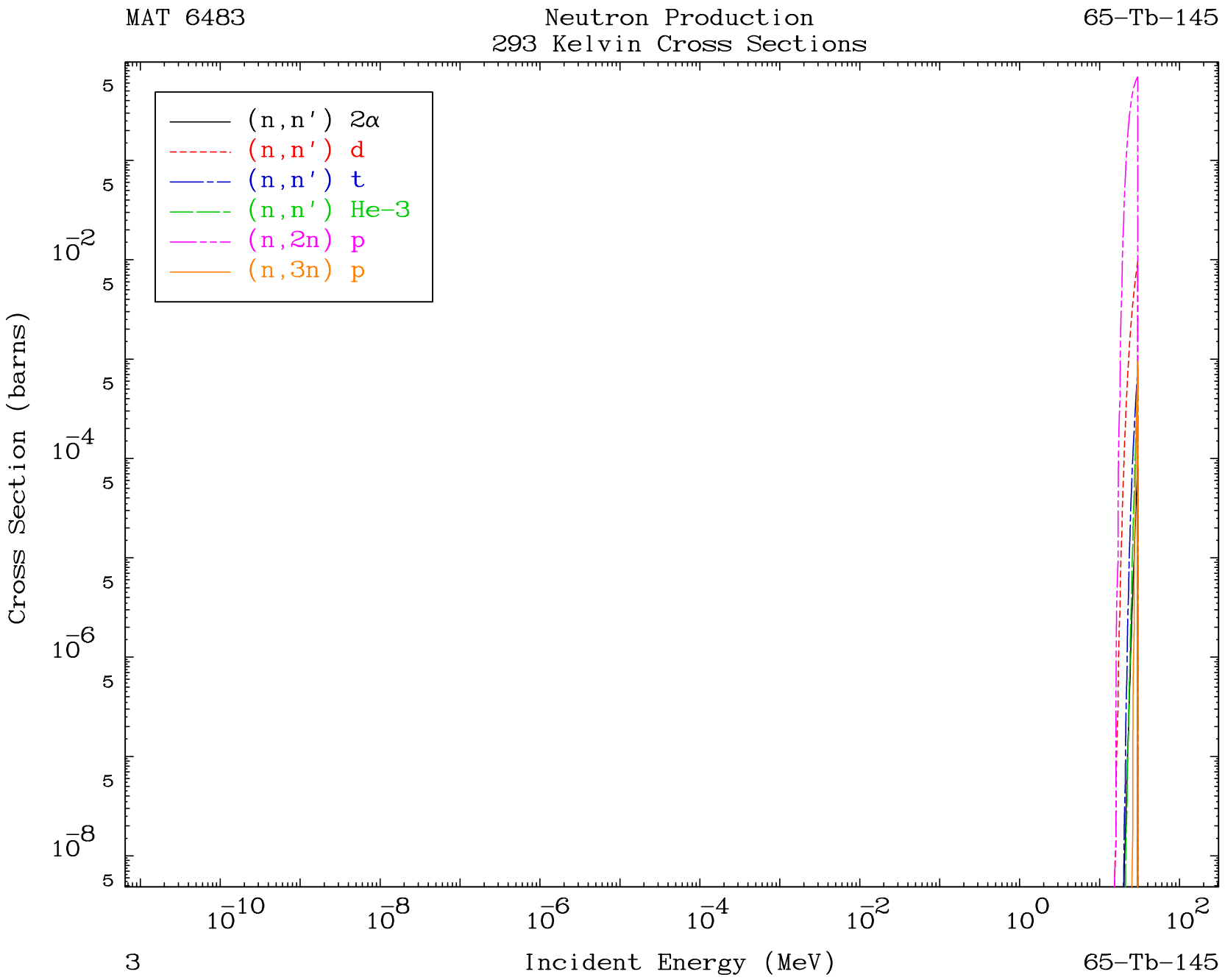
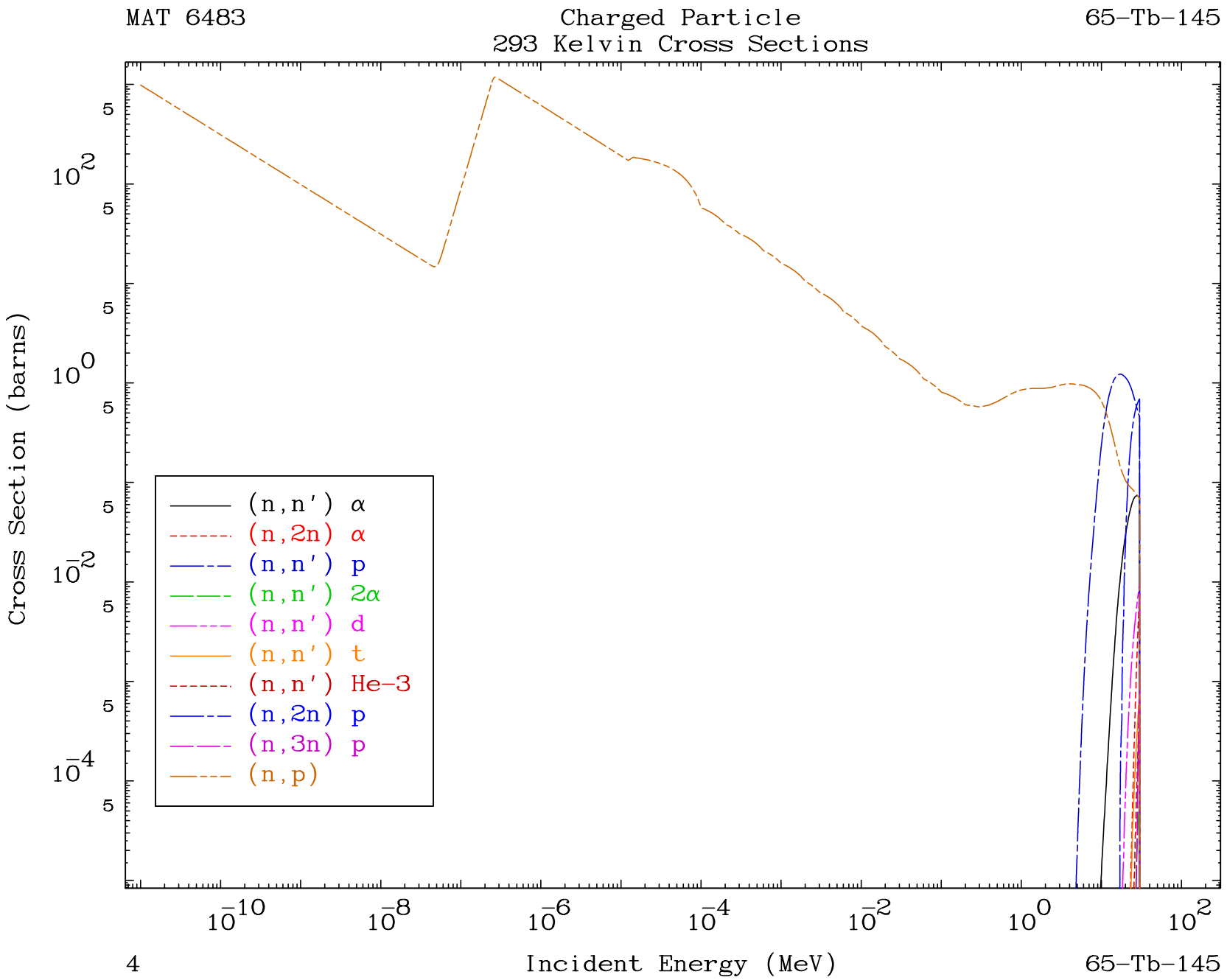
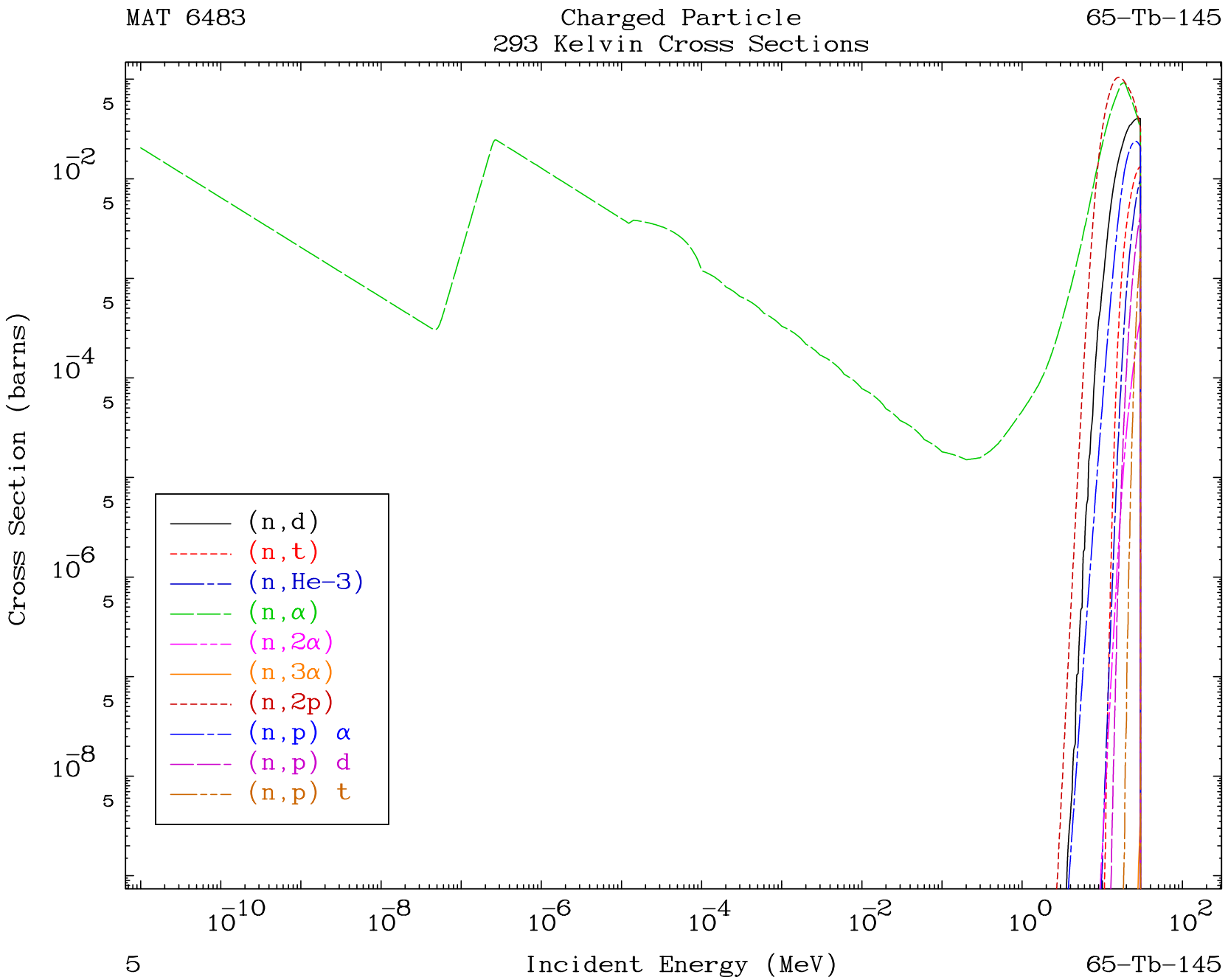
Press Mouse Button to Start

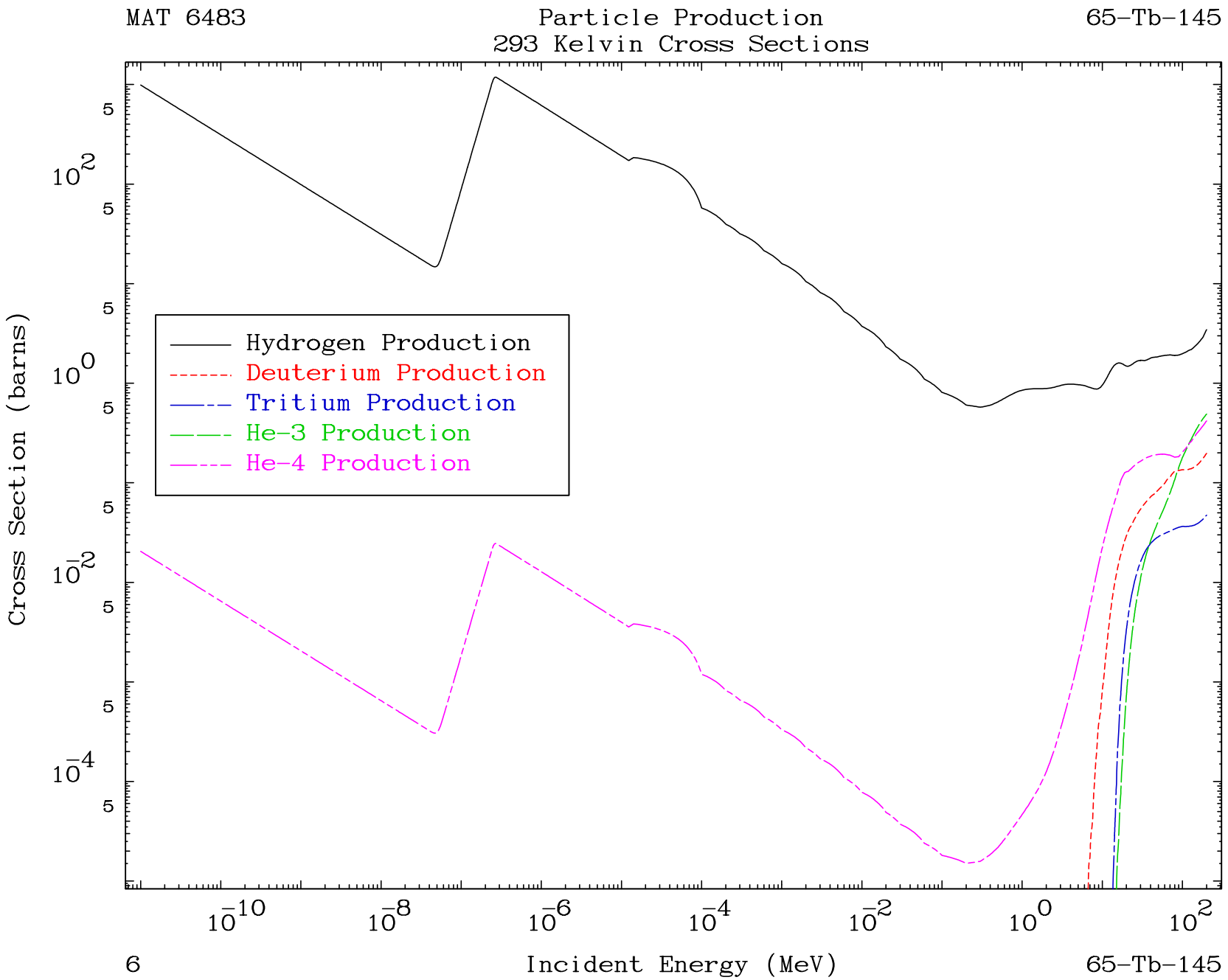

MAT 6483
Major
65-Tb-145
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
65-Tb-145

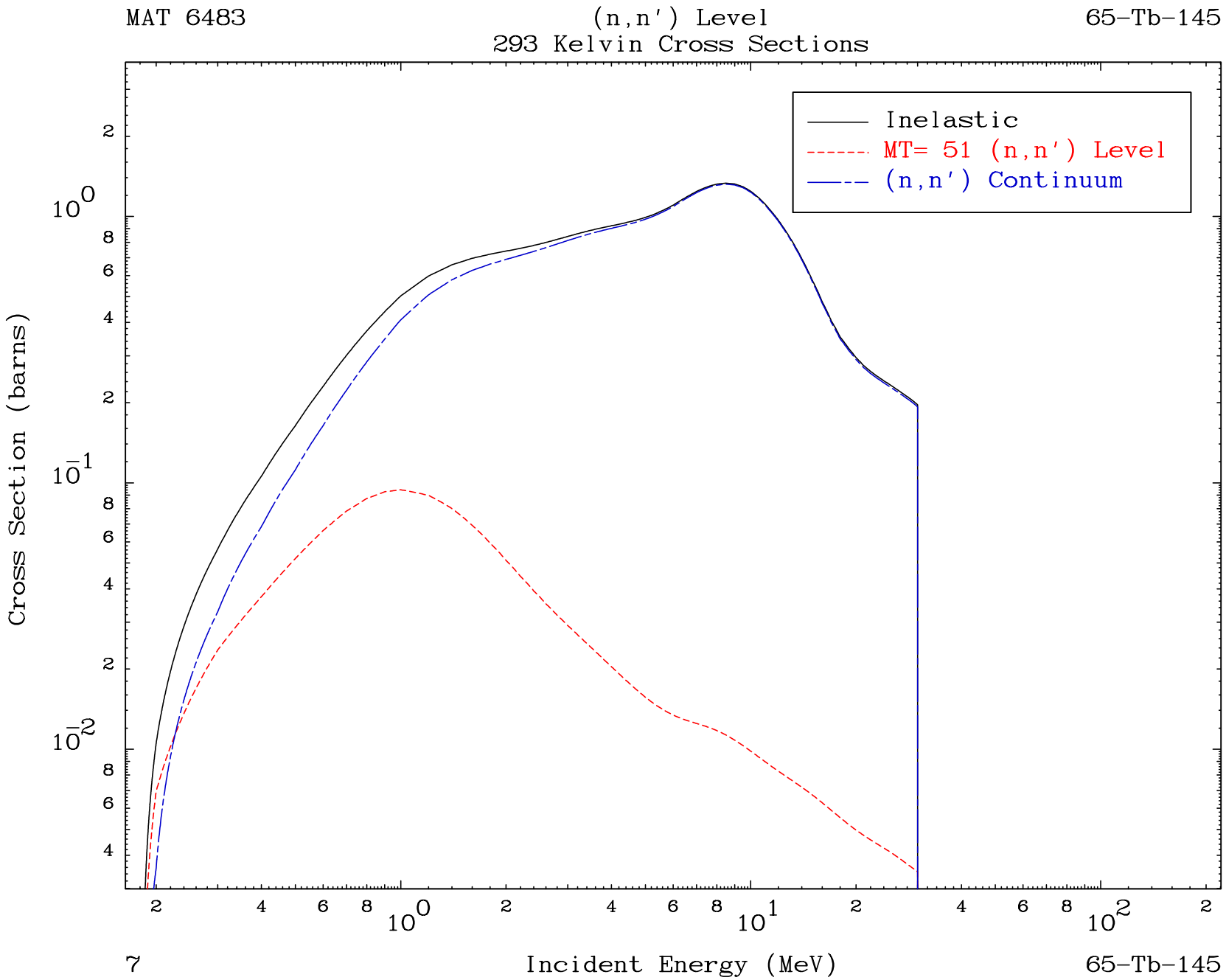

MAT 6483
Neutron Production
293 Kelvin Cross Sections
65-Tb-145
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
Cross Section (barns)
Incident Energy (MeV)
2
65-Tb-145

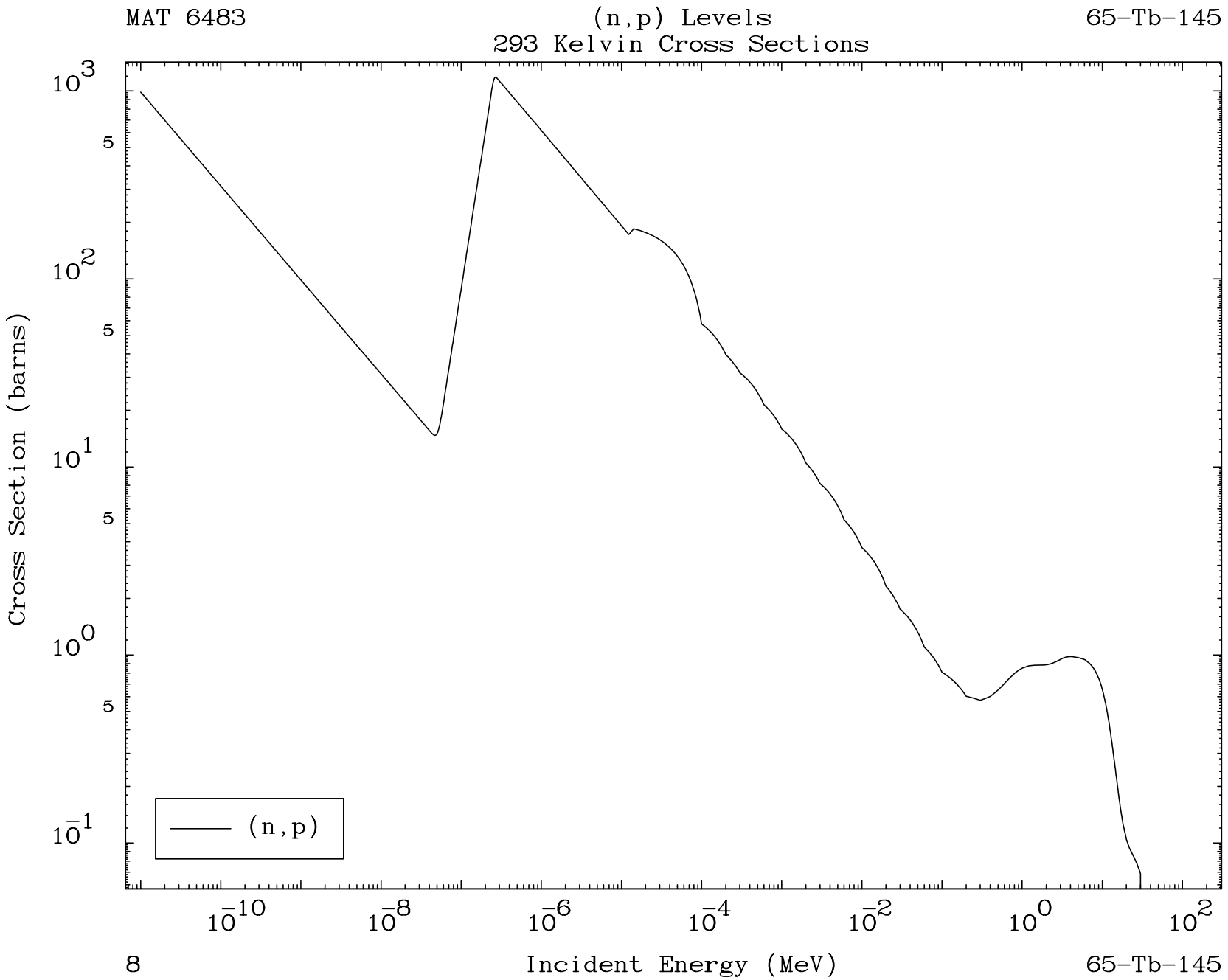

MAT 6483
Neutron Production
293 Kelvin Cross Sections
65-Tb-145
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
65-Tb-145

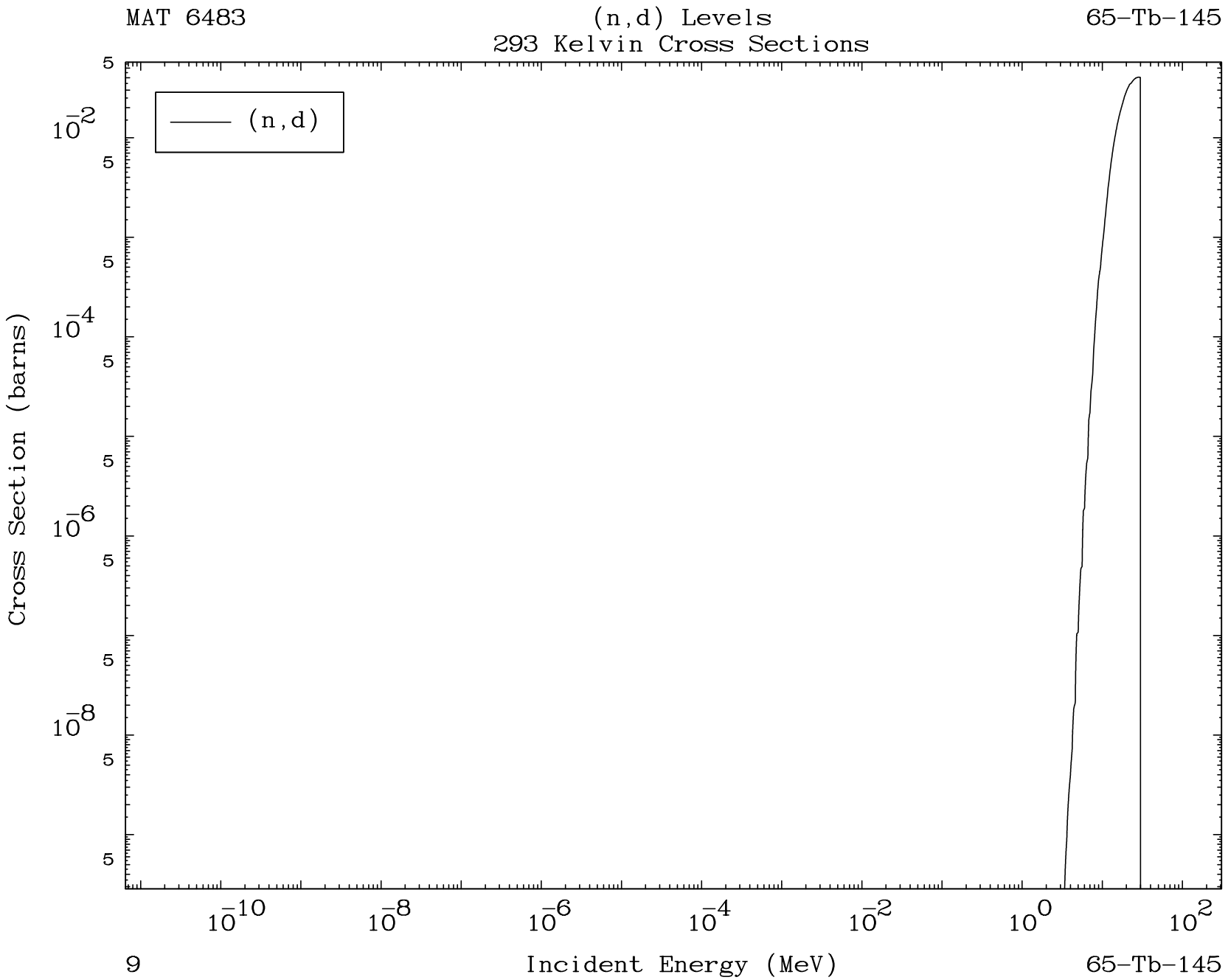

MAT 6483
Charged Particle
293 Kelvin Cross Sections
65-Tb-145
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
4
65-Tb-145

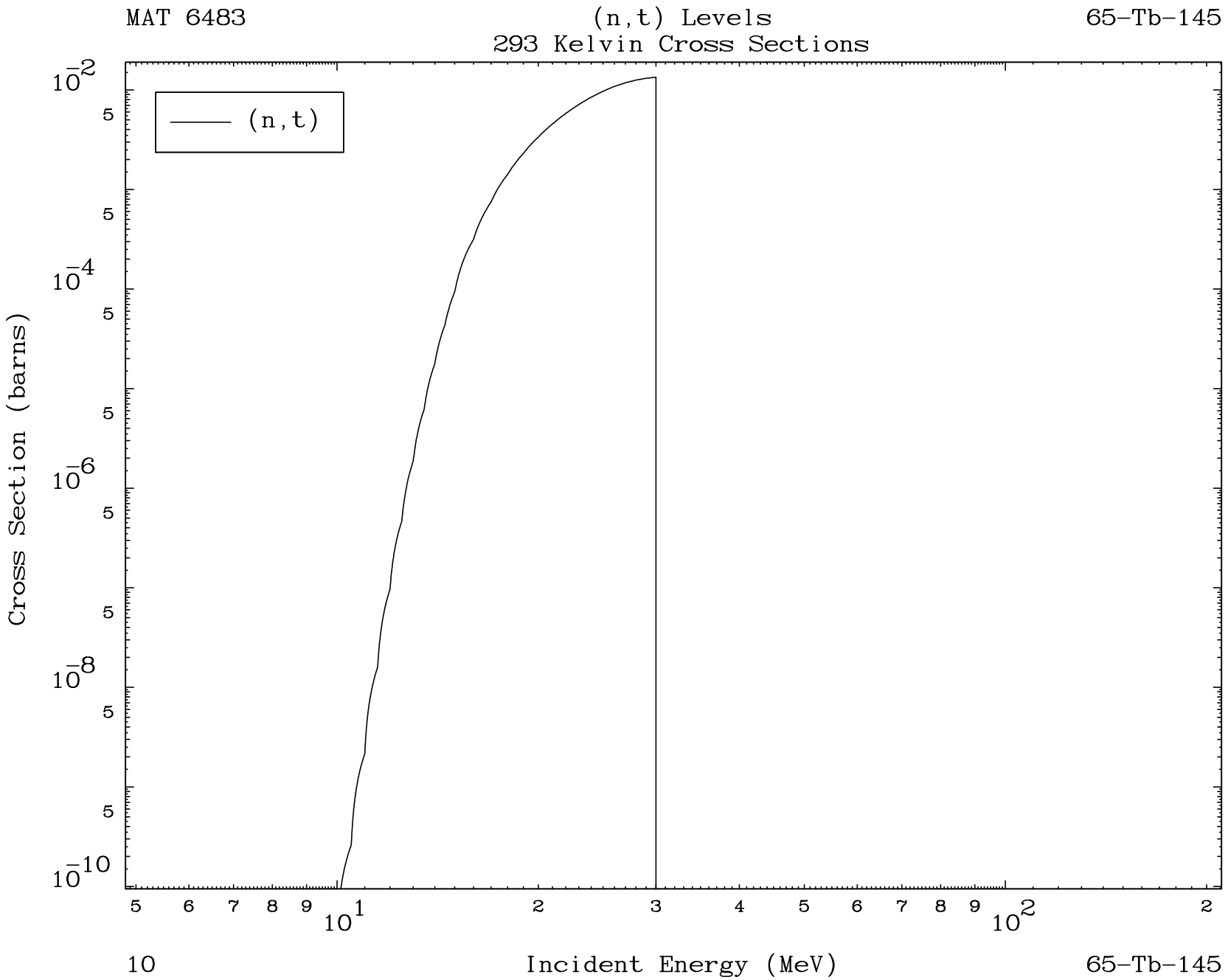

MAT 6483
Charged Particle
293 Kelvin Cross Sections
65-Tb-145
Cross Section (barns)
Incident Energy (MeV)
65-Tb-145
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t

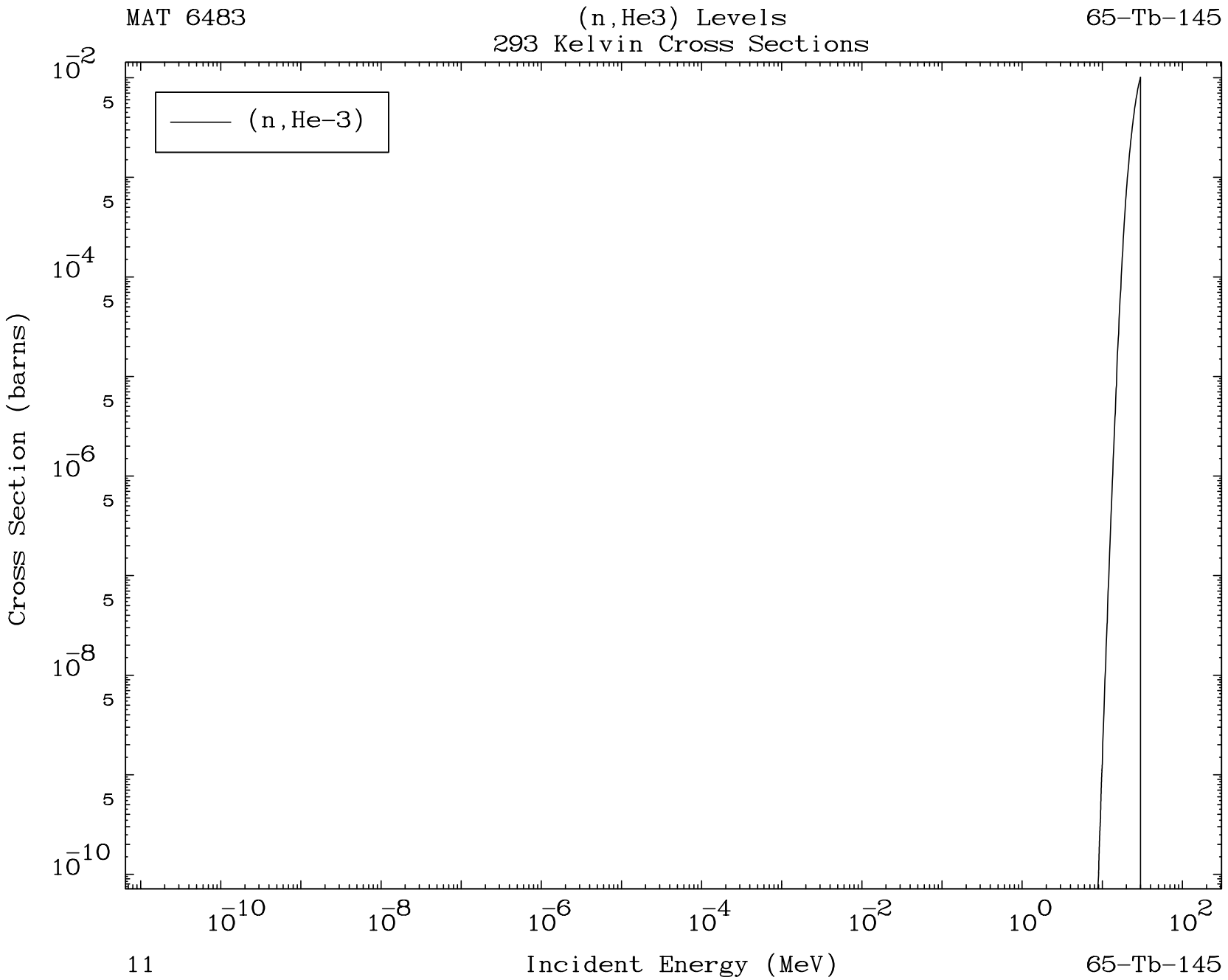

MAT 6483
Particle Production
65-Tb-145
293 Kelvin Cross Sections
Cross Section (barns)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Incident Energy (MeV)
6
65-Tb-145

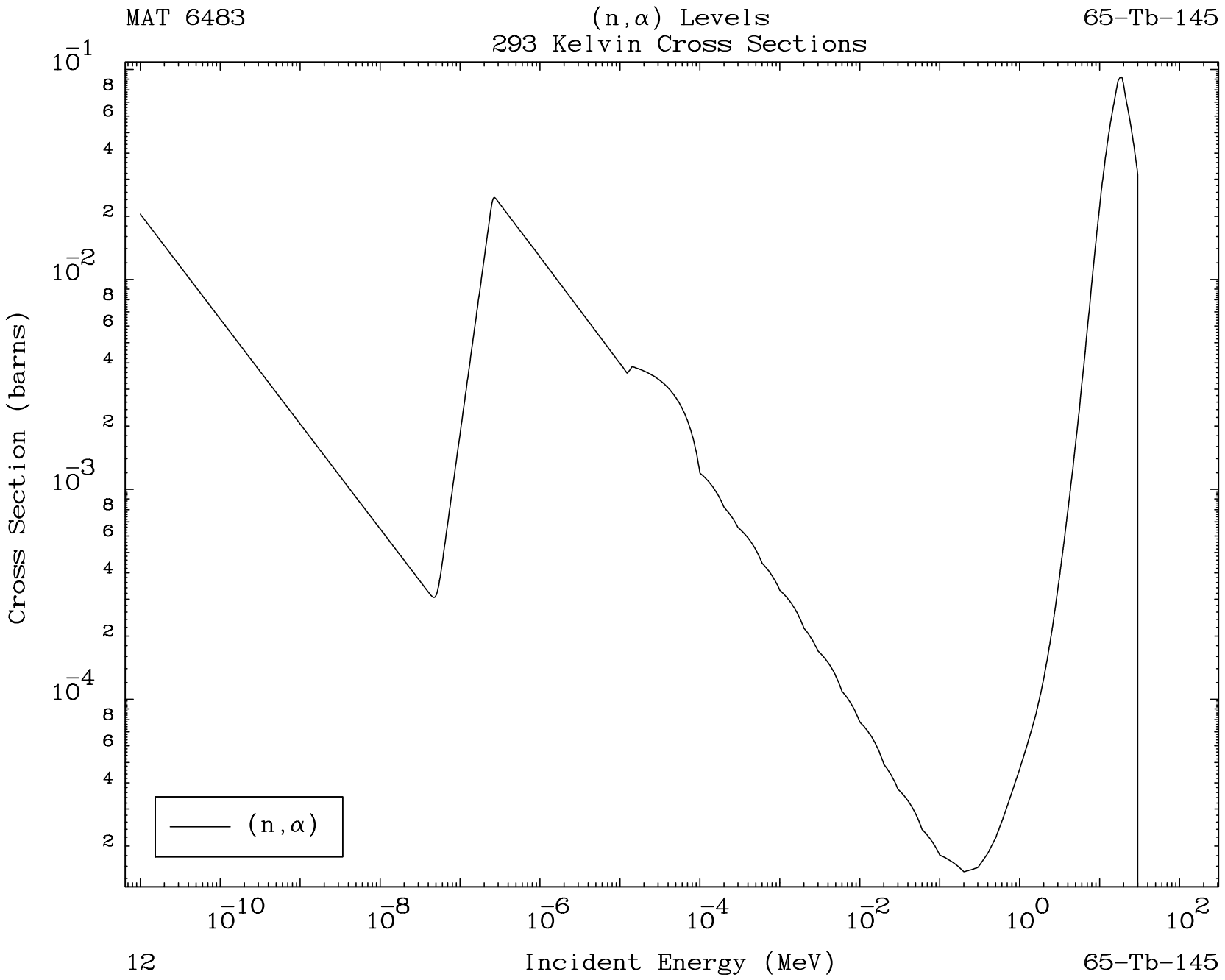

MAT 6483
(n,n') Level
65-Tb-145
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
7
65-Tb-145

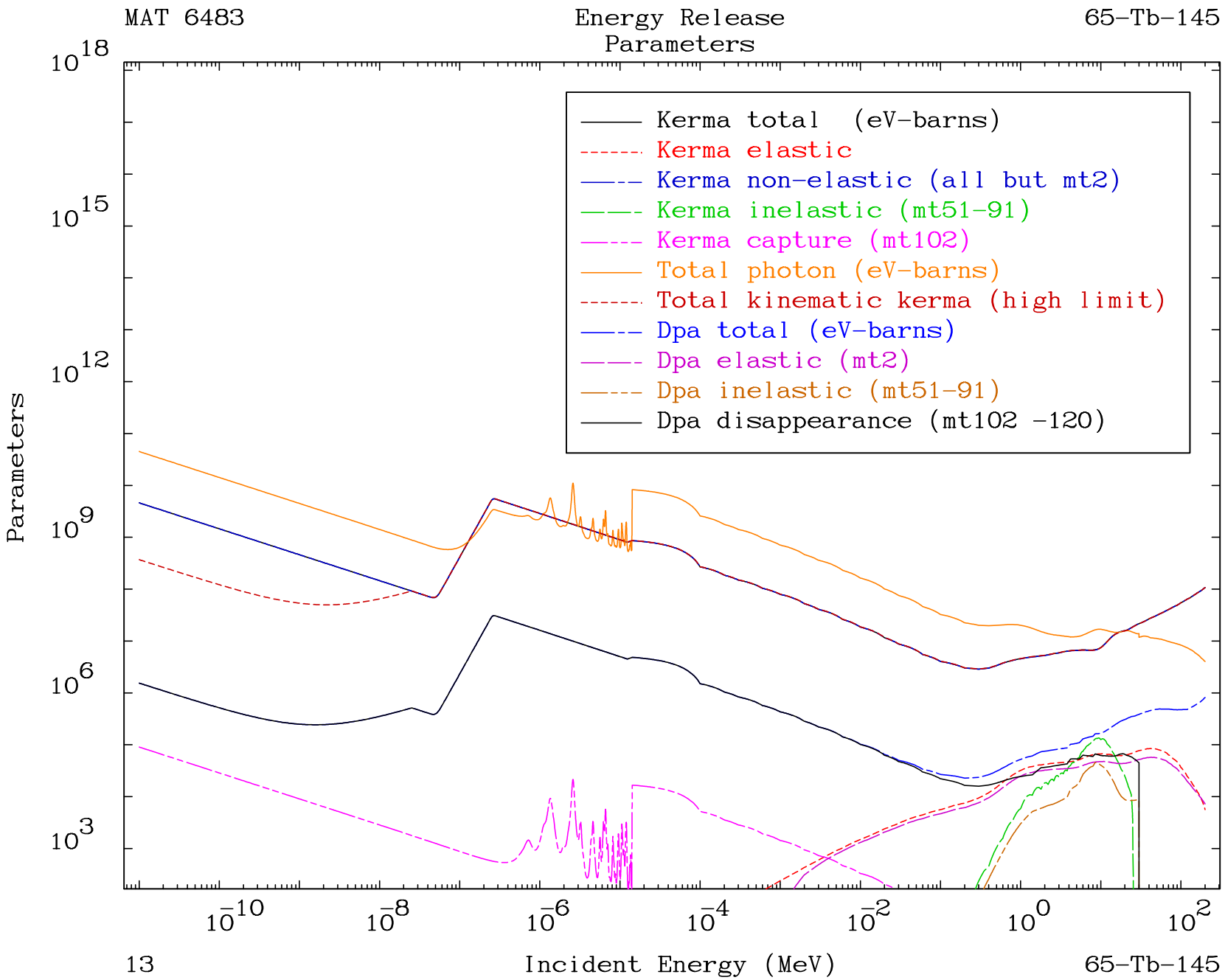

MAT 6483
(n,p) Levels
65-Tb-145
293 Kelvin Cross Sections
Cross Section (barns)
10^3
5
10^2
5
10^1
5
10^0
5
10^-1
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
8
Incident Energy (MeV)
65-Tb-145

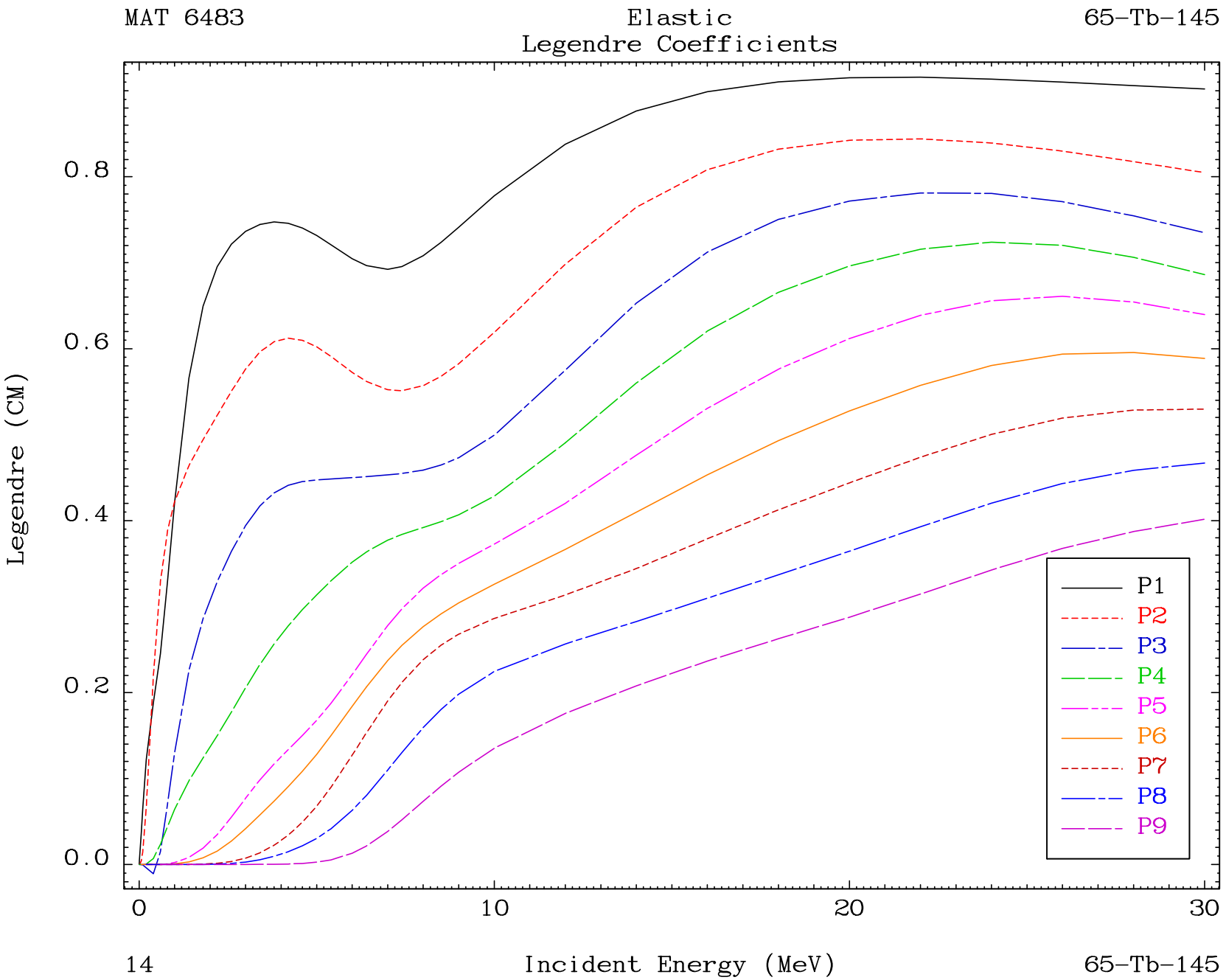

MAT 6483
(n,d) Levels
65-Tb-145
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
9
65-Tb-145

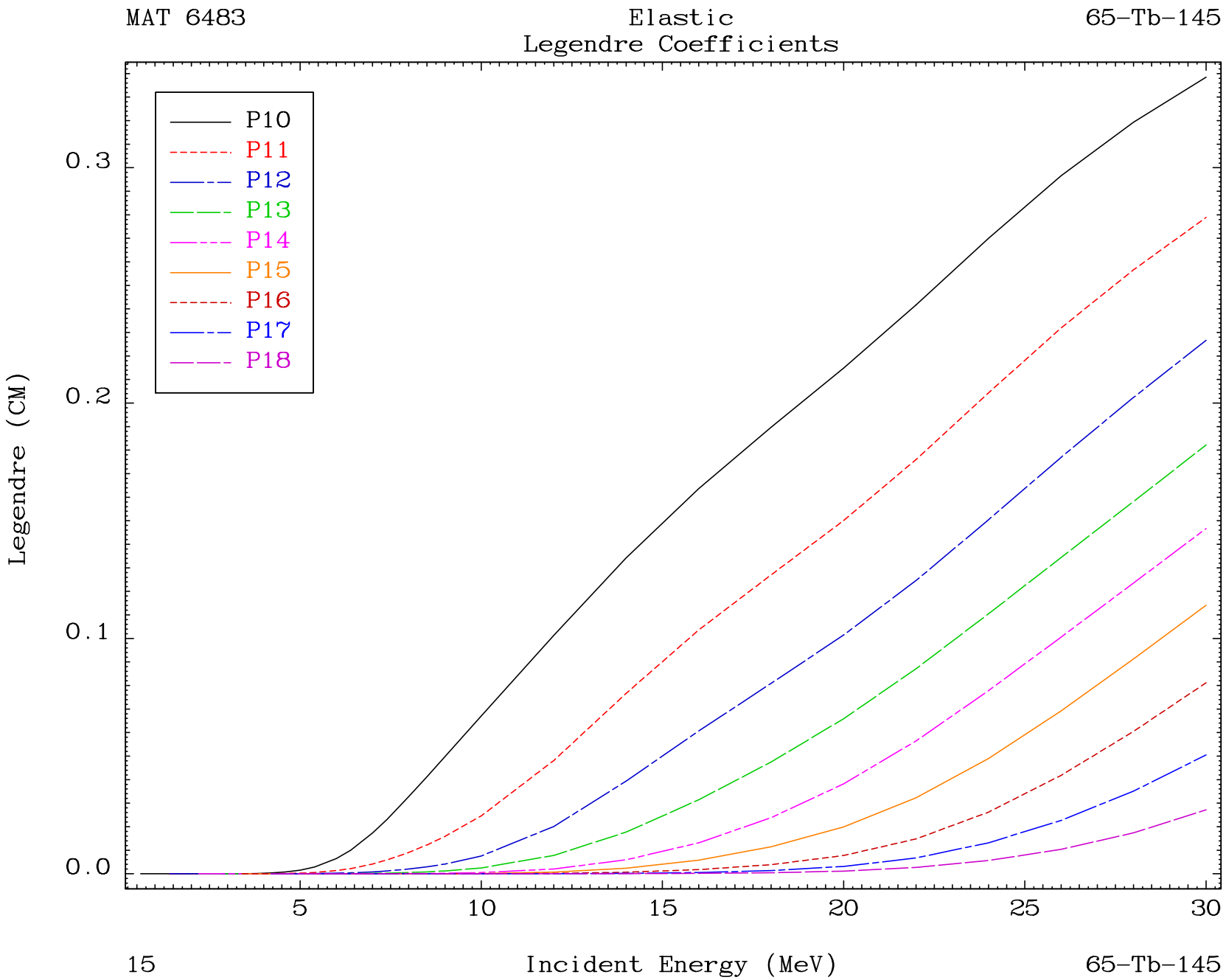

MAT 6483
(n,t) Levels
65-Tb-145
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
65-Tb-145

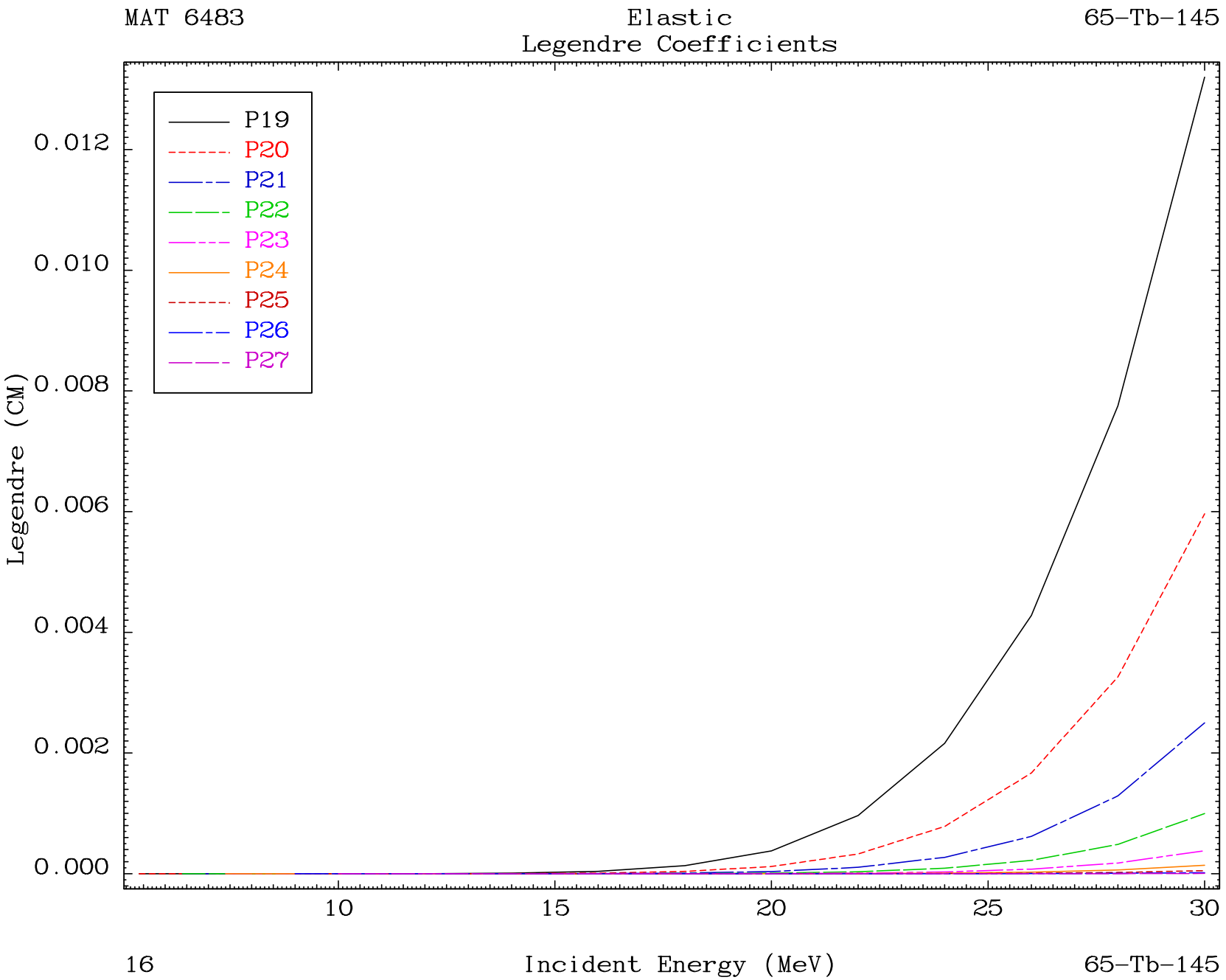

MAT 6483
(n,He3) Levels
65-Tb-145
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
11
65-Tb-145

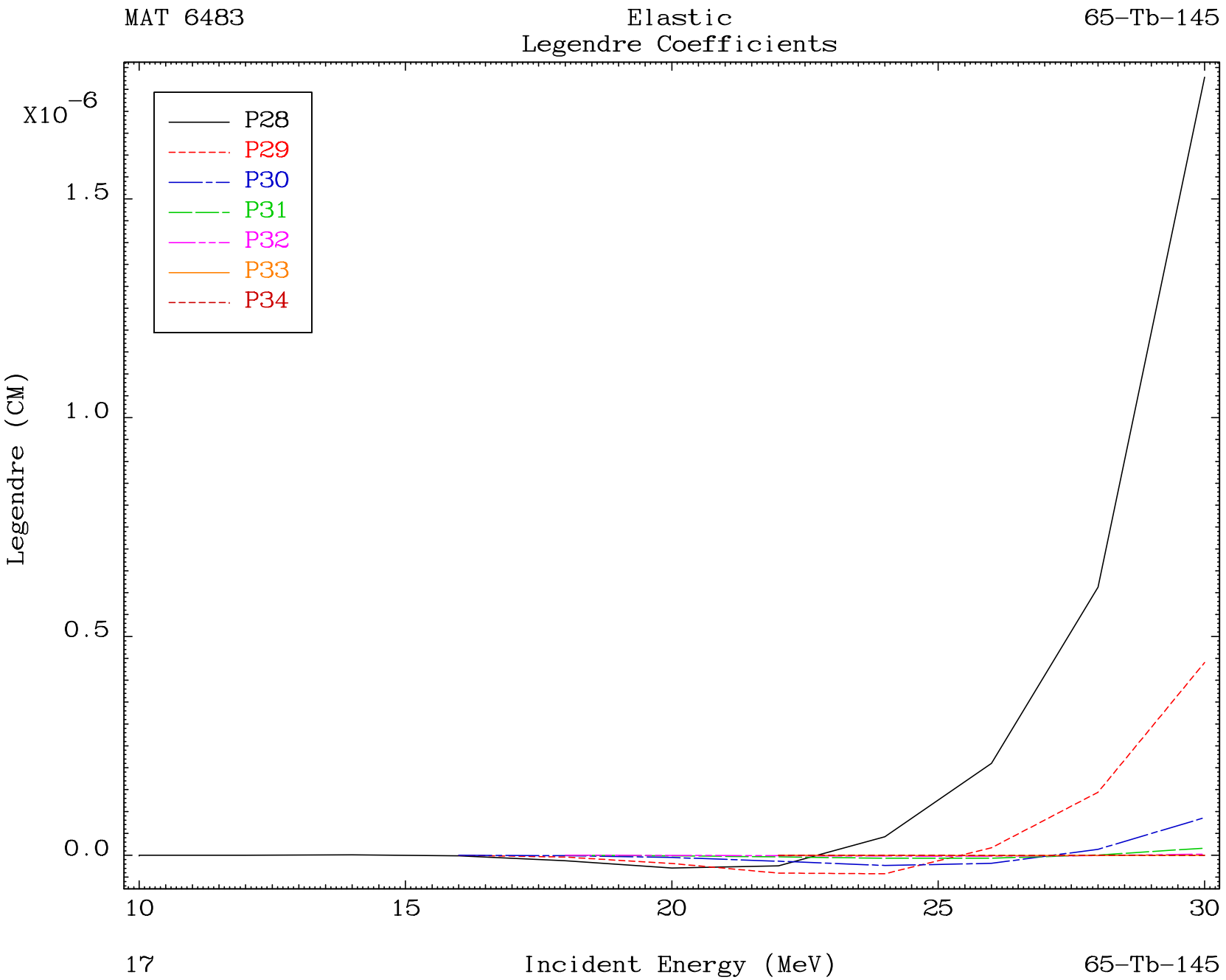

MAT 6483
(n,α) Levels
65-Tb-145
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
(n,α)
12
65-Tb-145

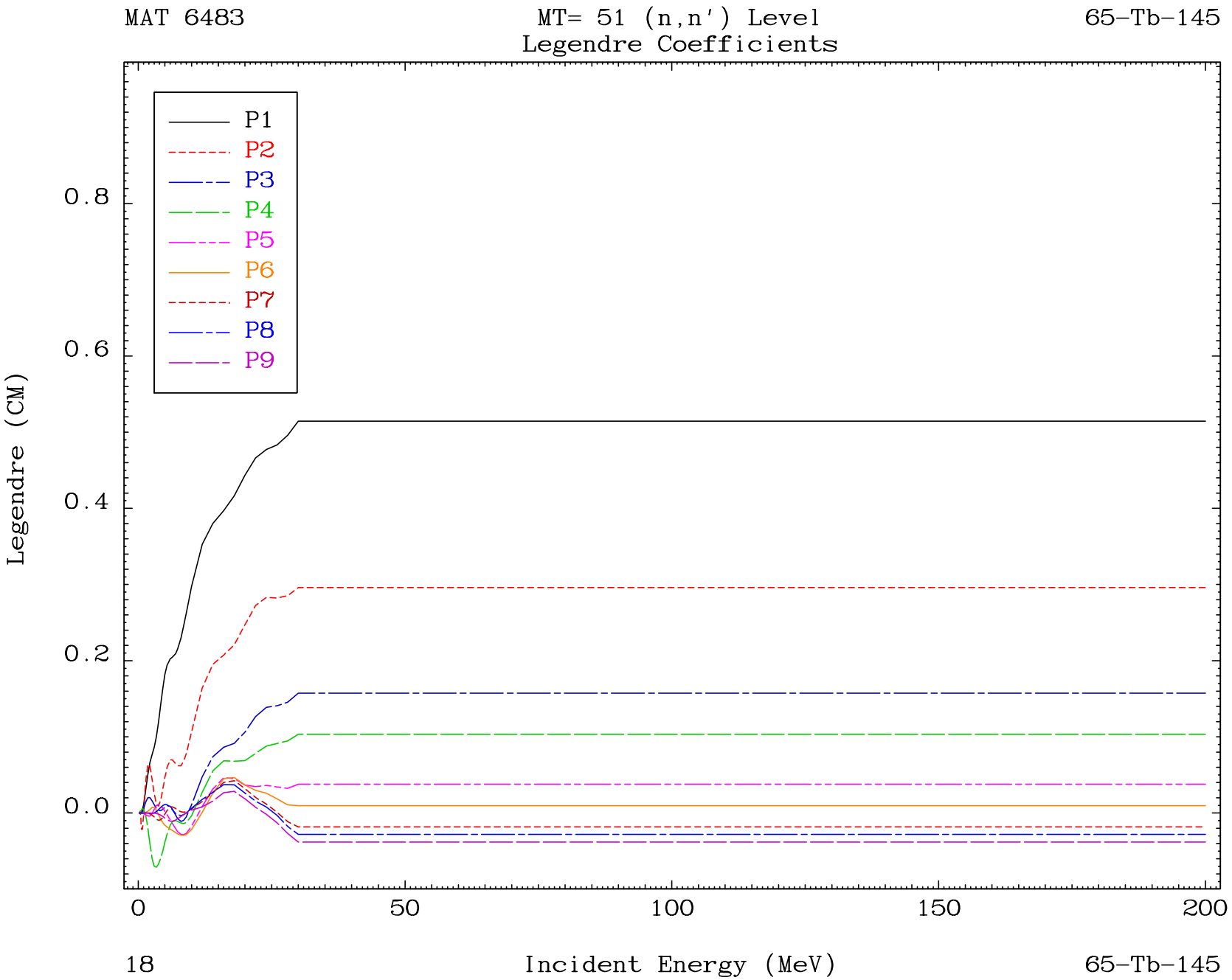

MAT 6483
Energy Release
Parameters
65-Tb-145
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
Incident Energy (MeV)
13
65-Tb-145

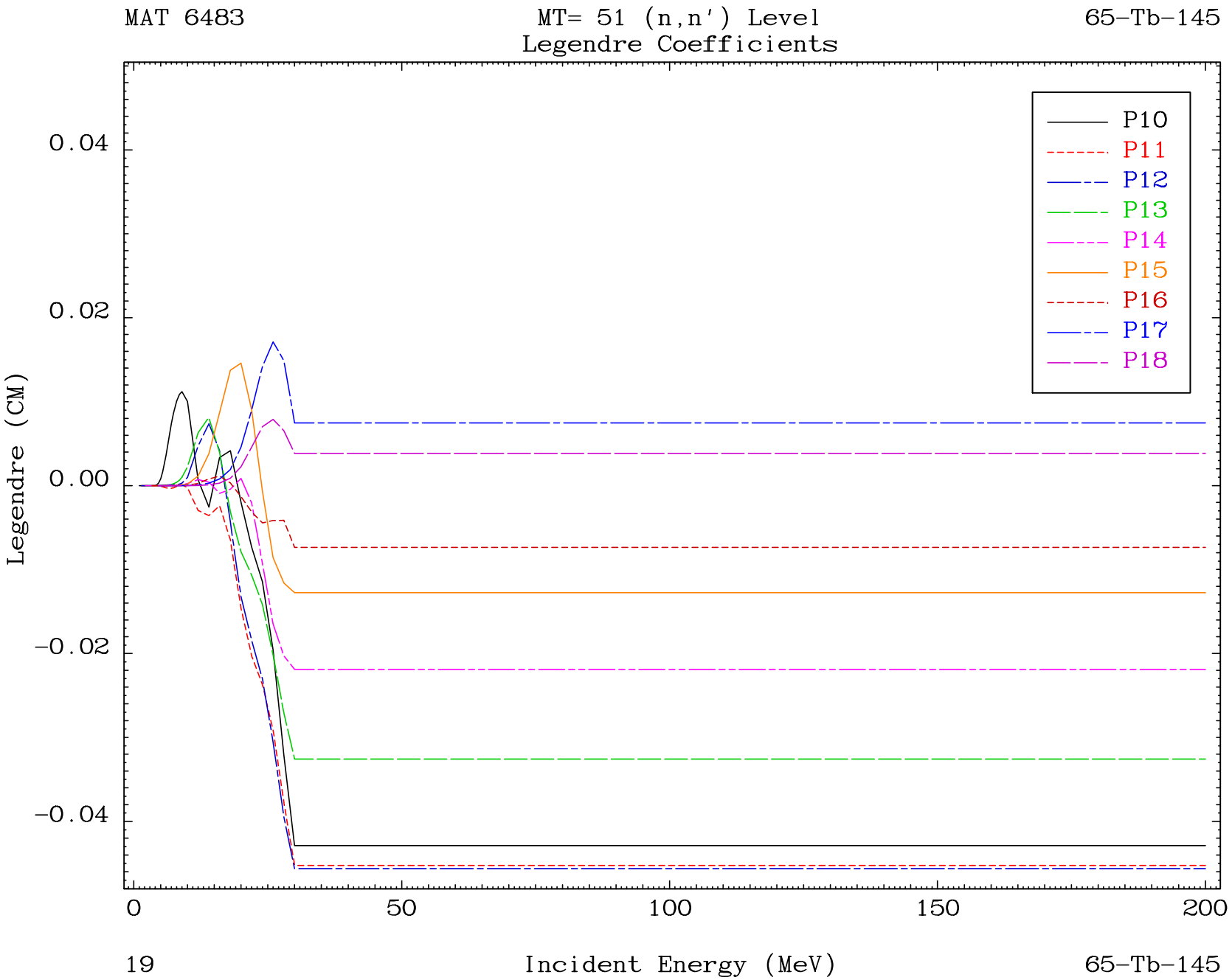

MAT 6483
Elastic
Legendre Coefficients
65-Tb-145
Legendre (CM)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
14
Incident Energy (MeV)
65-Tb-145
P1
P2
P3
P4
P5
P6
P7
P8
P9

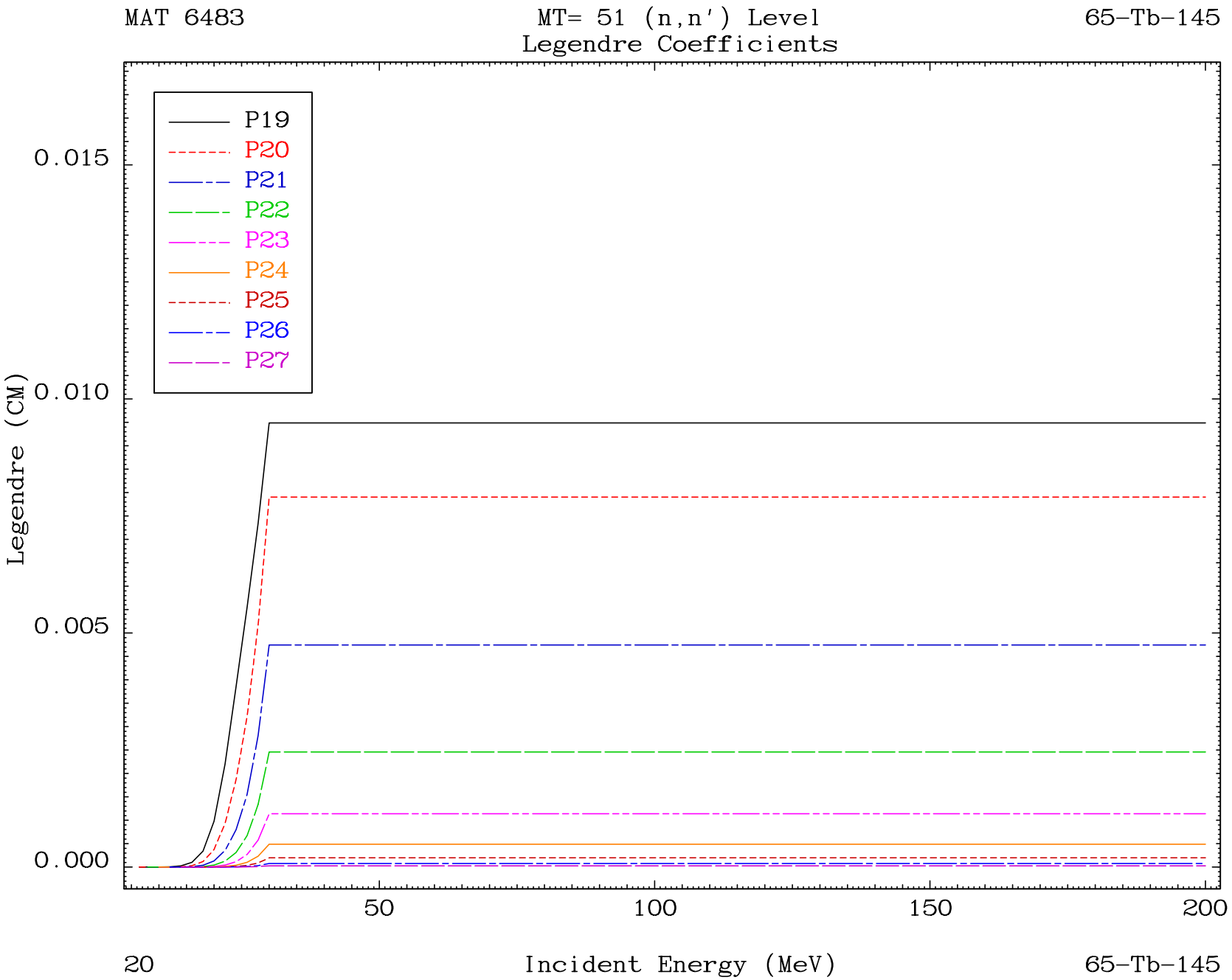

MAT 6483
Elastic
Legendre Coefficients
65-Tb-145
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.0
0.1
0.2
0.3
5
10
15
20
25
30
15
Incident Energy (MeV)
65-Tb-145

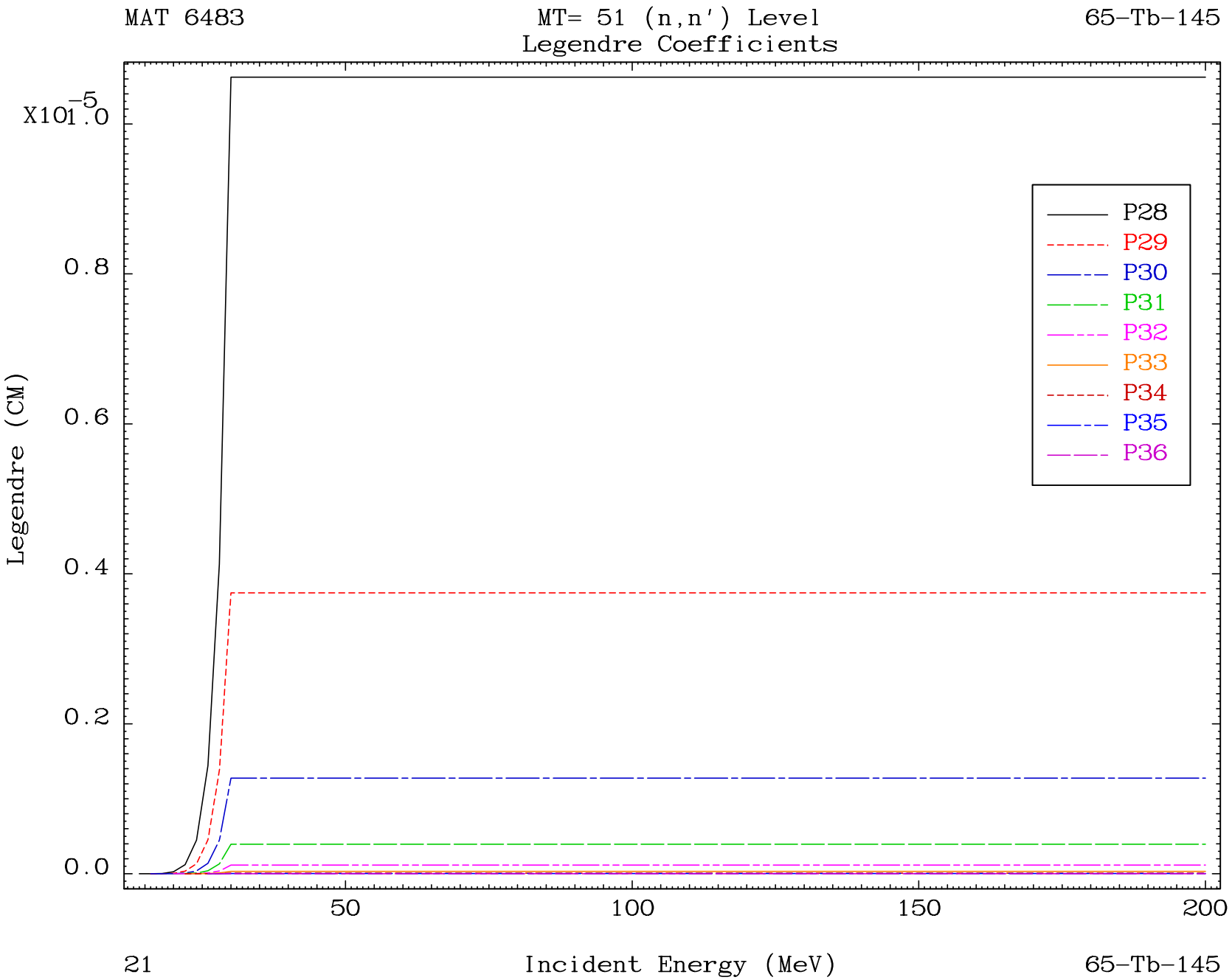

MAT 6483
Elastic
Legendre Coefficients
65-Tb-145
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.012
0.010
0.008
0.006
0.004
0.002
0.000
Legendre (CM)
10
15
20
25
30
16
Incident Energy (MeV)
65-Tb-145

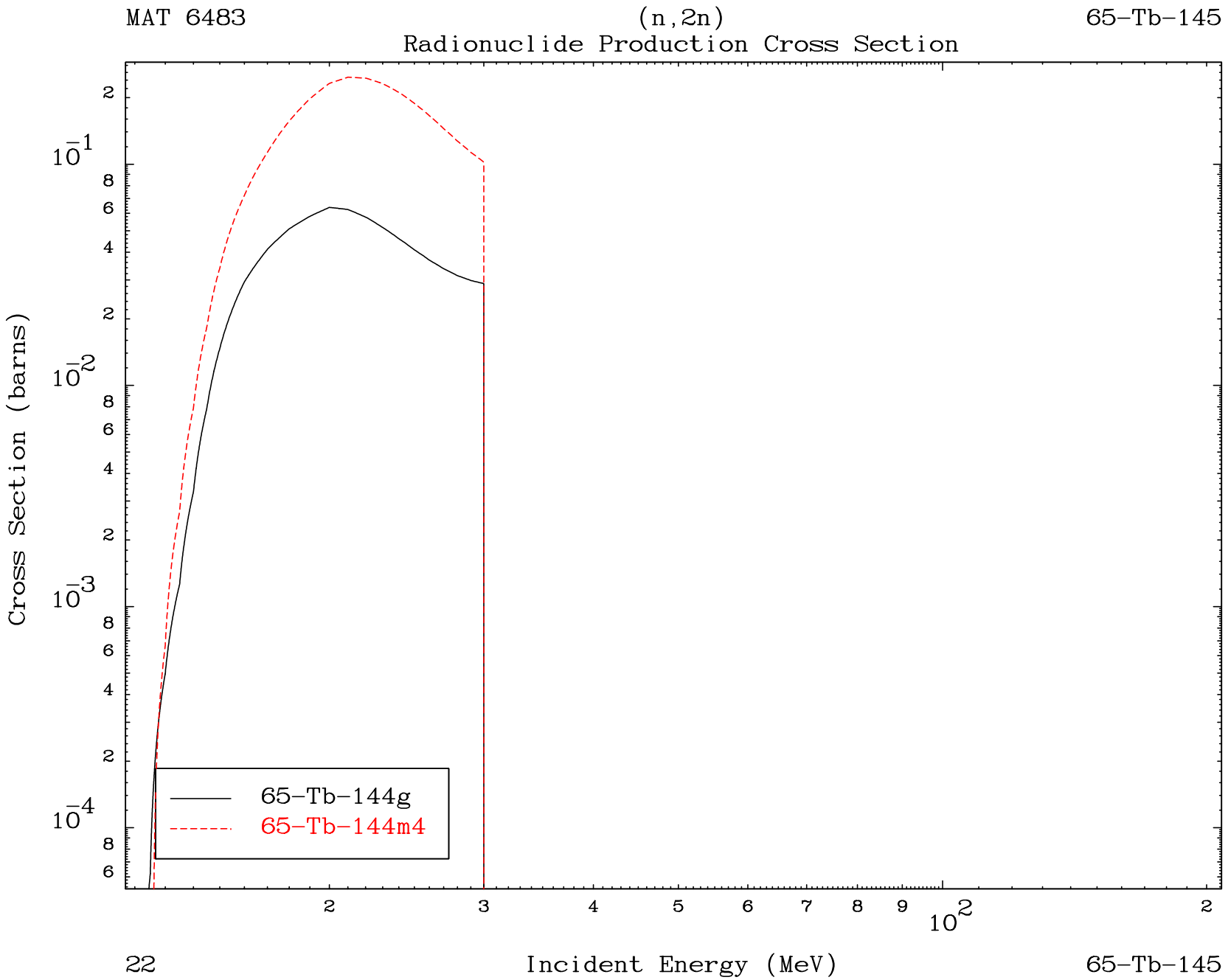

MAT 6483
Elastic
Legendre Coefficients
65-Tb-145
X10 −6
1.5
1.0
0.5
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
10
15
20
25
30
17
Incident Energy (MeV)
65-Tb-145

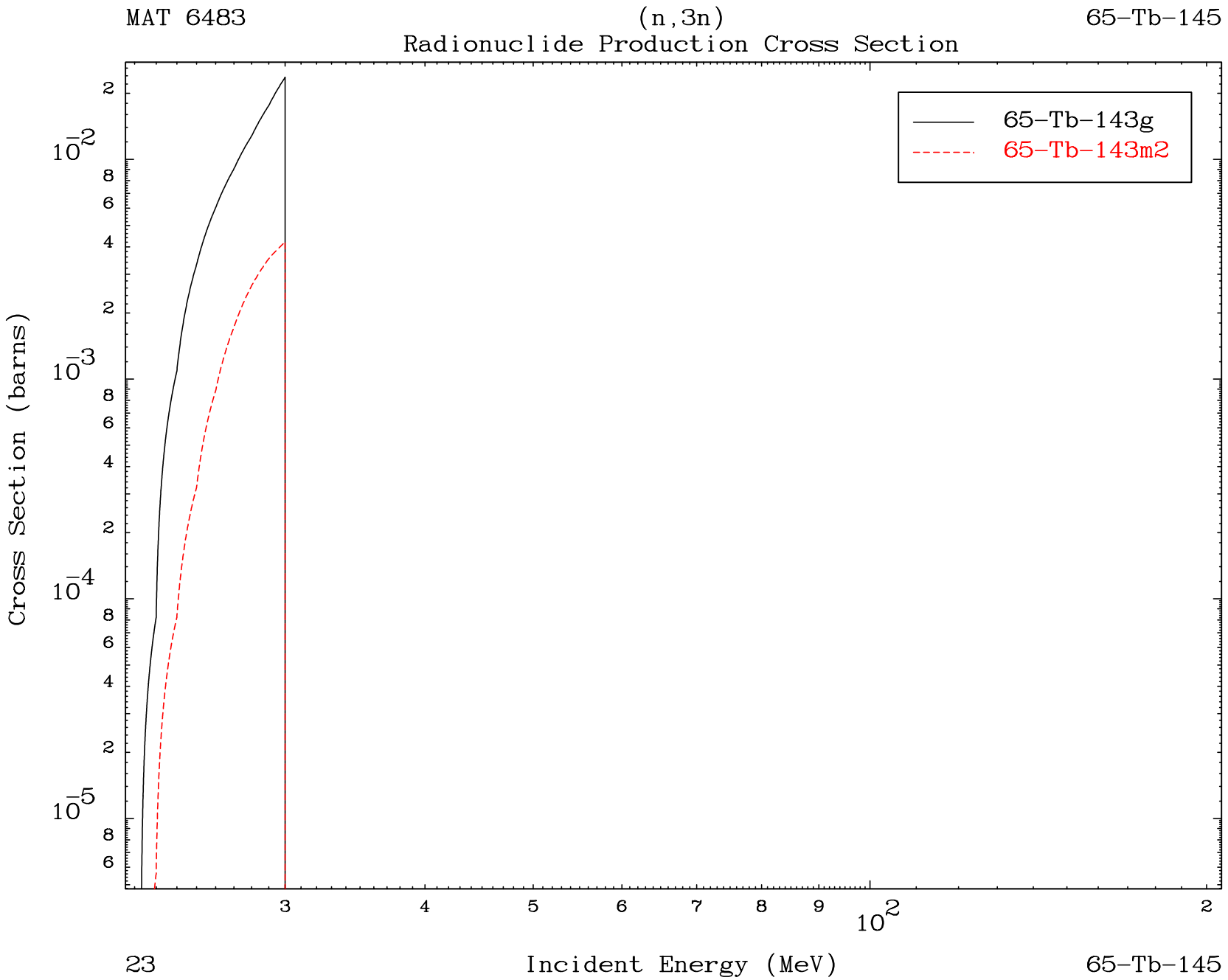

MAT 6483
MT= 51 (n,n') Level
Legendre Coefficients
65-Tb-145
P1
P2
P3
P4
P5
P6
P7
P8
P9
Legendre (CM)
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
18
Incident Energy (MeV)
65-Tb-145

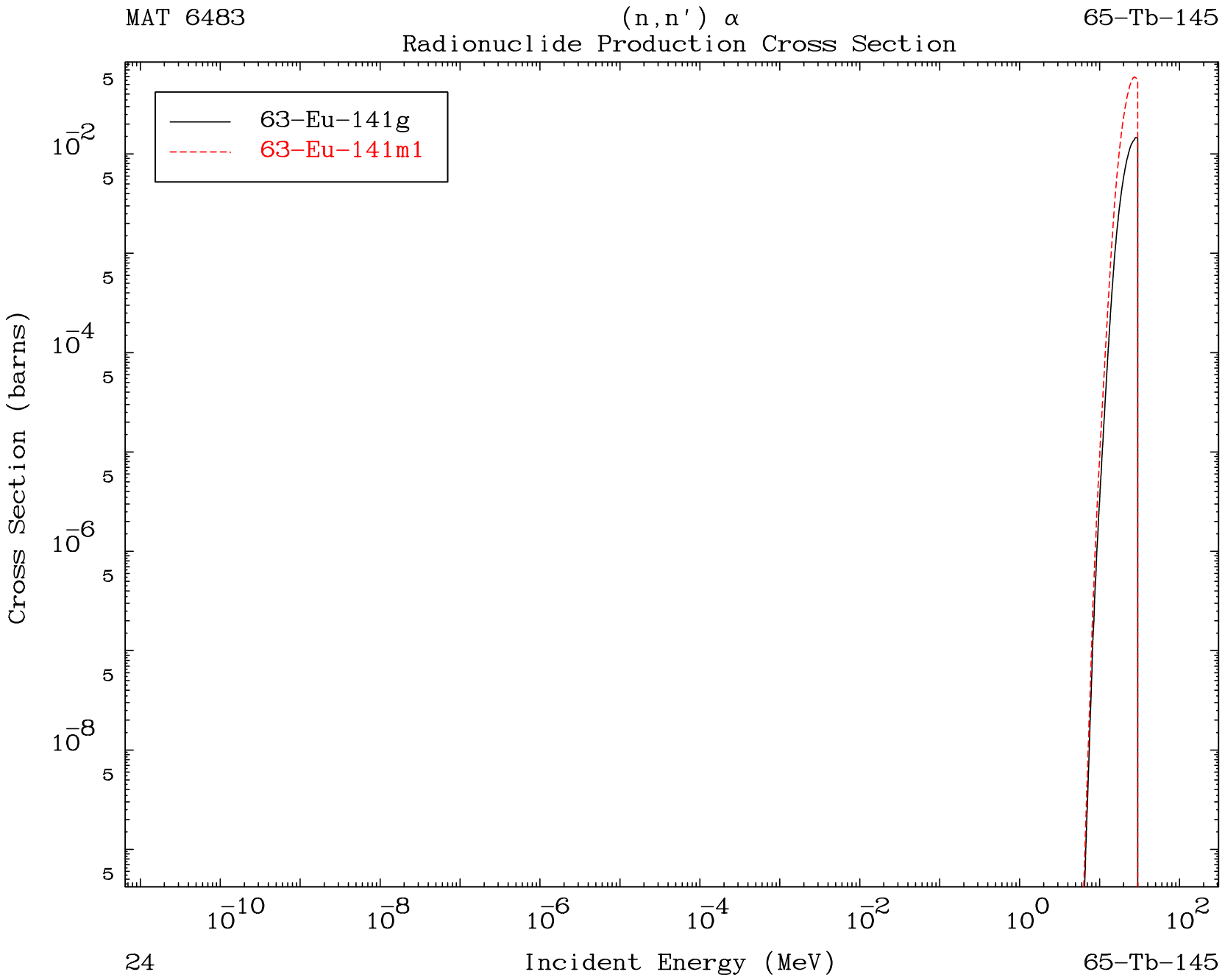

MAT 6483
MT= 51 (n,n') Level
Legendre Coefficients
65-Tb-145
P10
P11
P12
P13
P14
P15
P16
P17
P18
0.04
0.02
0.00
-0.02
-0.04
Legendre (CM)
0
50
100
150
200
19
Incident Energy (MeV)
65-Tb-145

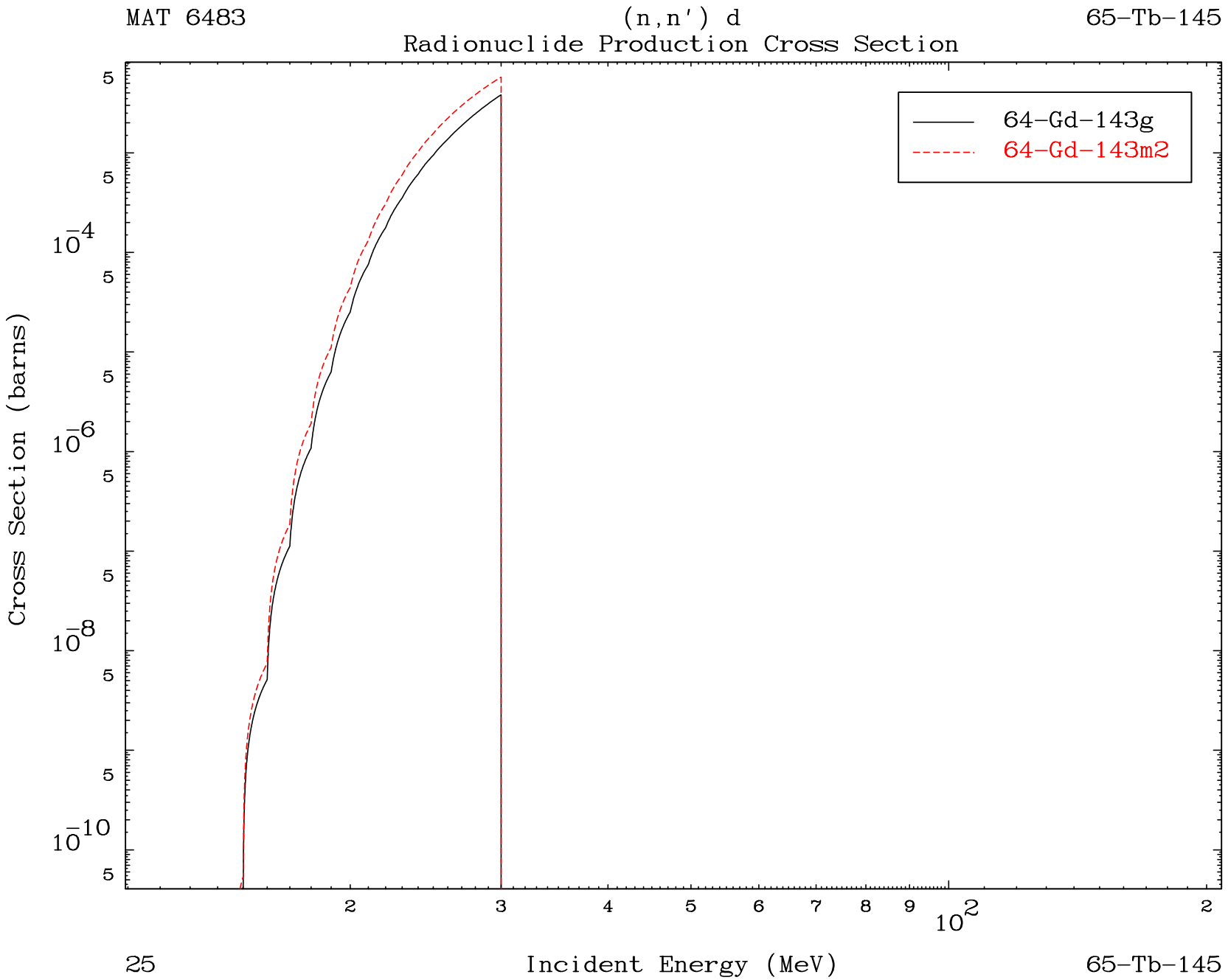

MAT 6483
MT= 51 (n,n') Level
Legendre Coefficients
65-Tb-145
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.015
0.010
0.005
0.000
Legendre (CM)
50
100
150
200
20
Incident Energy (MeV)
65-Tb-145

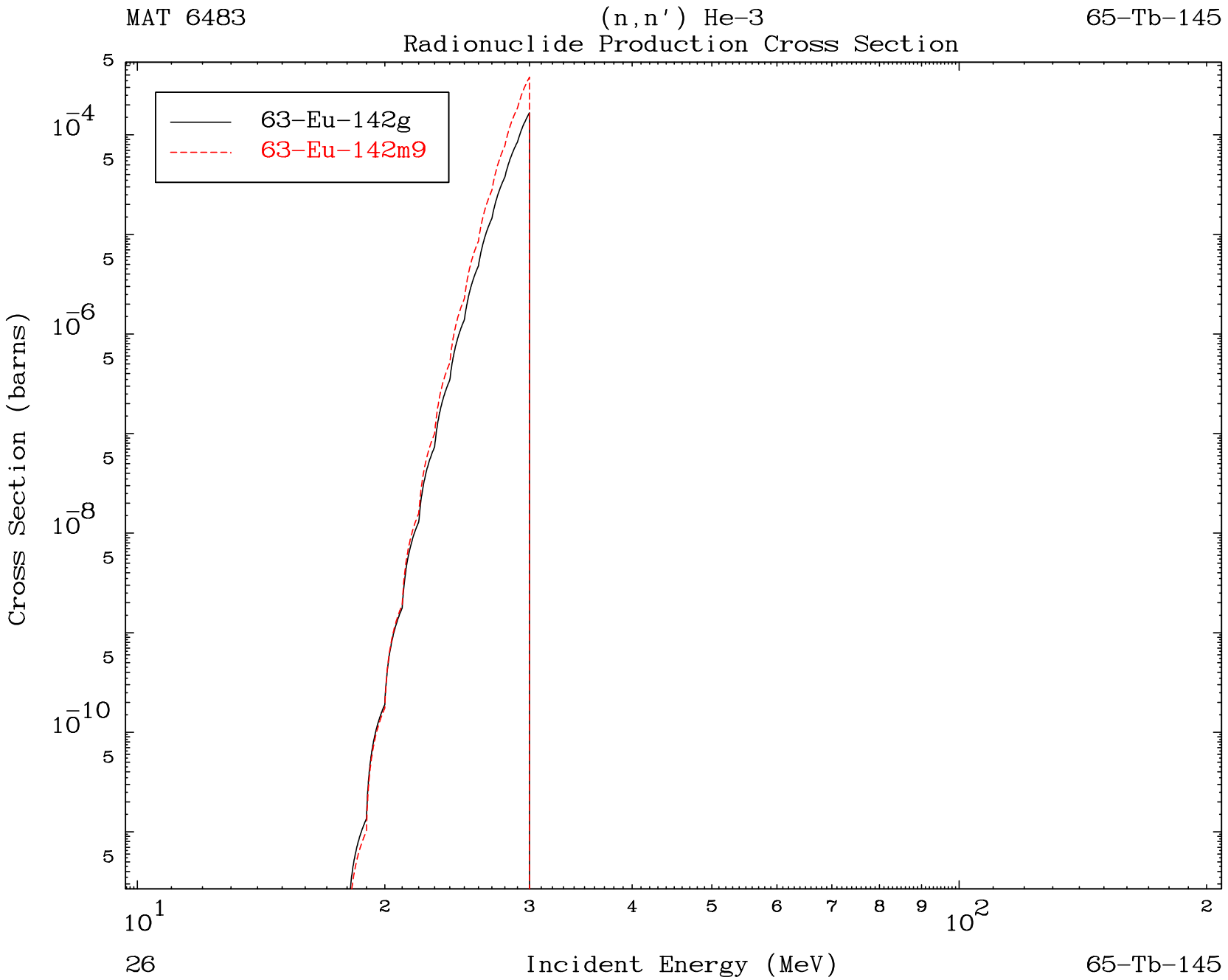

MAT 6483
MT= 51 (n,n') Level
Legendre Coefficients
65-Tb-145
X10^-5
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
21
Incident Energy (MeV)
65-Tb-145

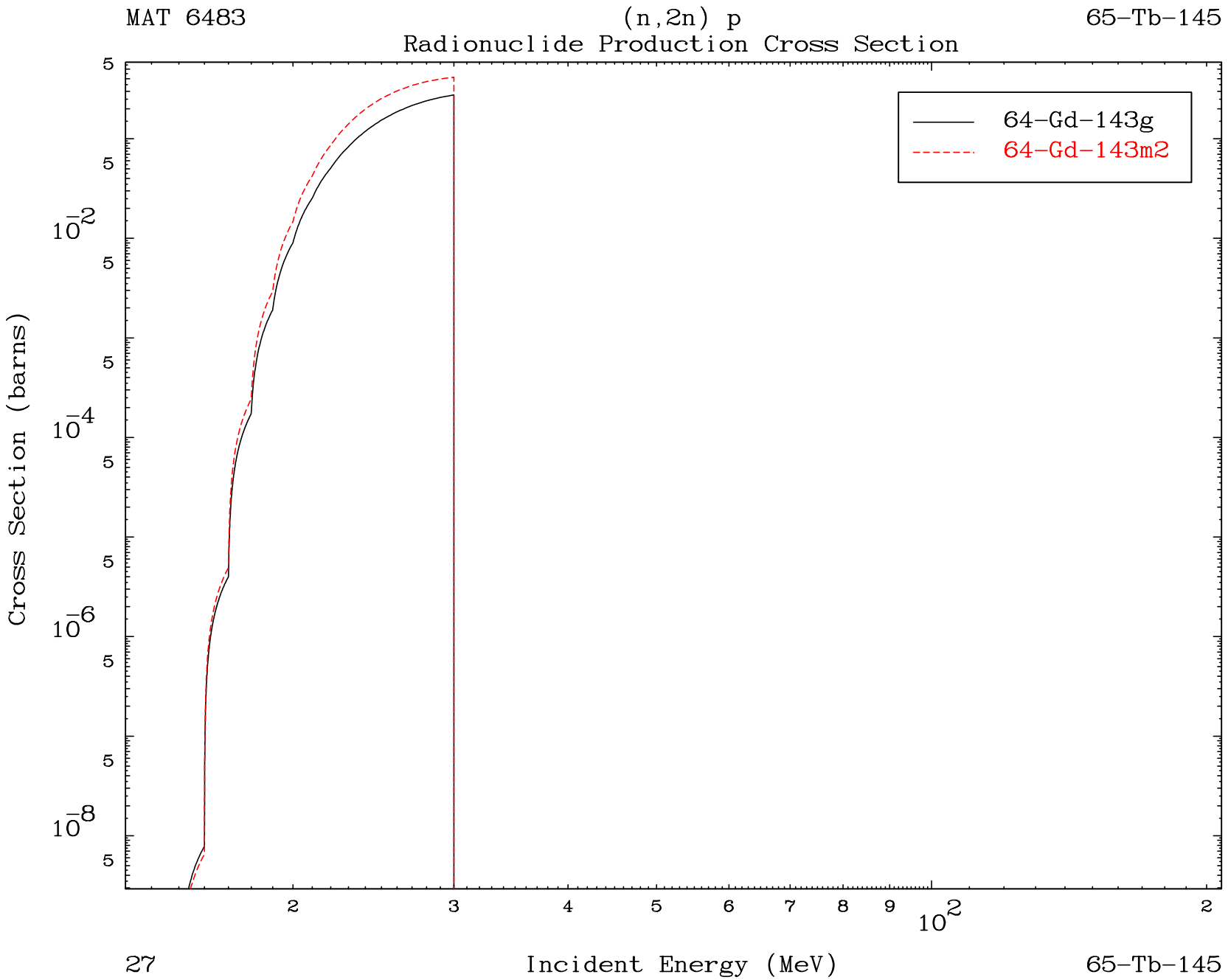

MAT 6483
(n,2n)
65-Tb-145
Radionuclide Production Cross Section
Cross Section (barns)
10-1
10-2
10-3
10-4
2
8
6
4
2
3
4
5
6
7
8
9
10+2
2
65-Tb-144g
65-Tb-144m4
22
Incident Energy (MeV)
65-Tb-145

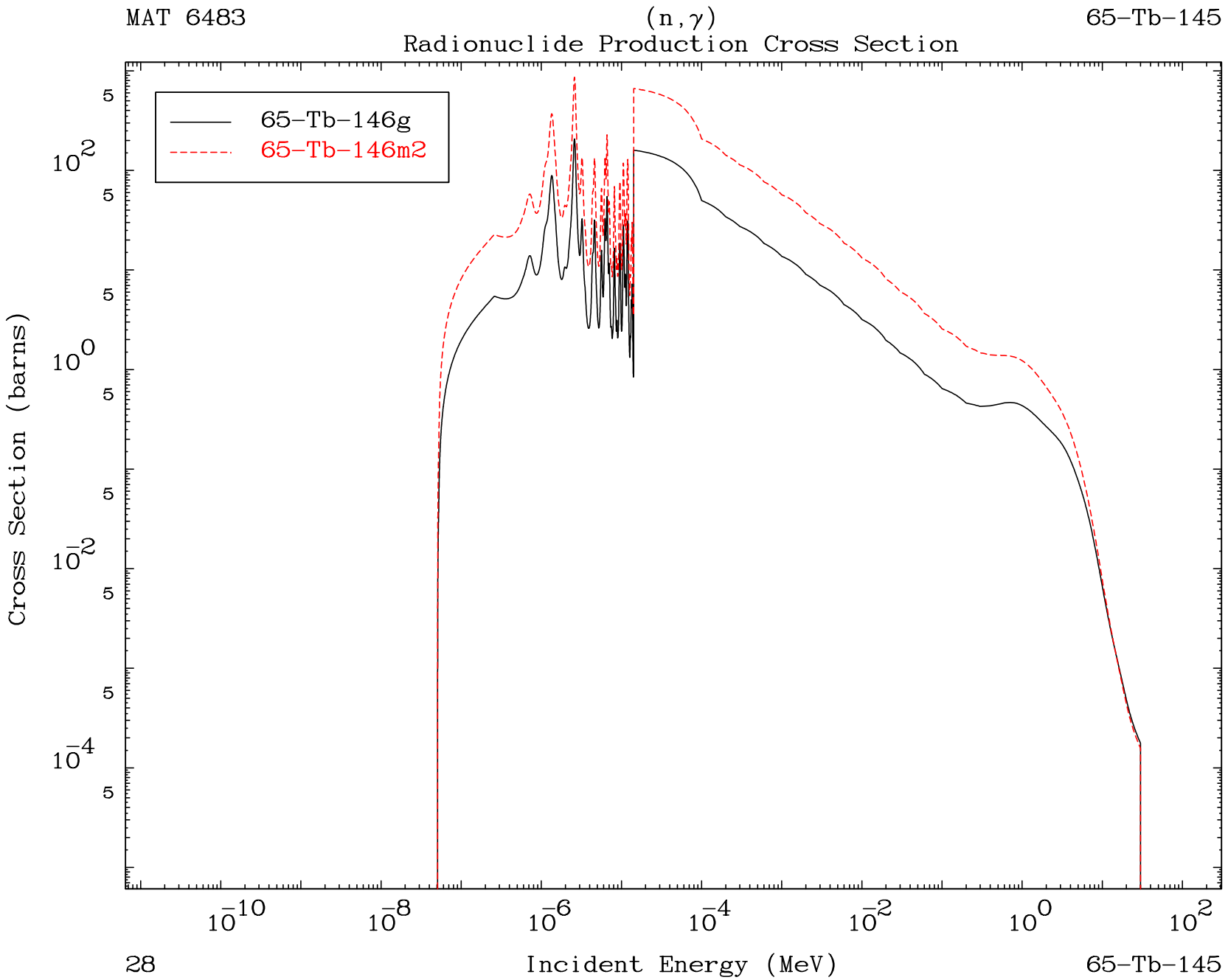

MAT 6483
(n,3n)
65-Tb-145
Radionuclide Production Cross Section
65-Tb-143g
65-Tb-143m2
Cross Section (barns)
Incident Energy (MeV)
23
65-Tb-145

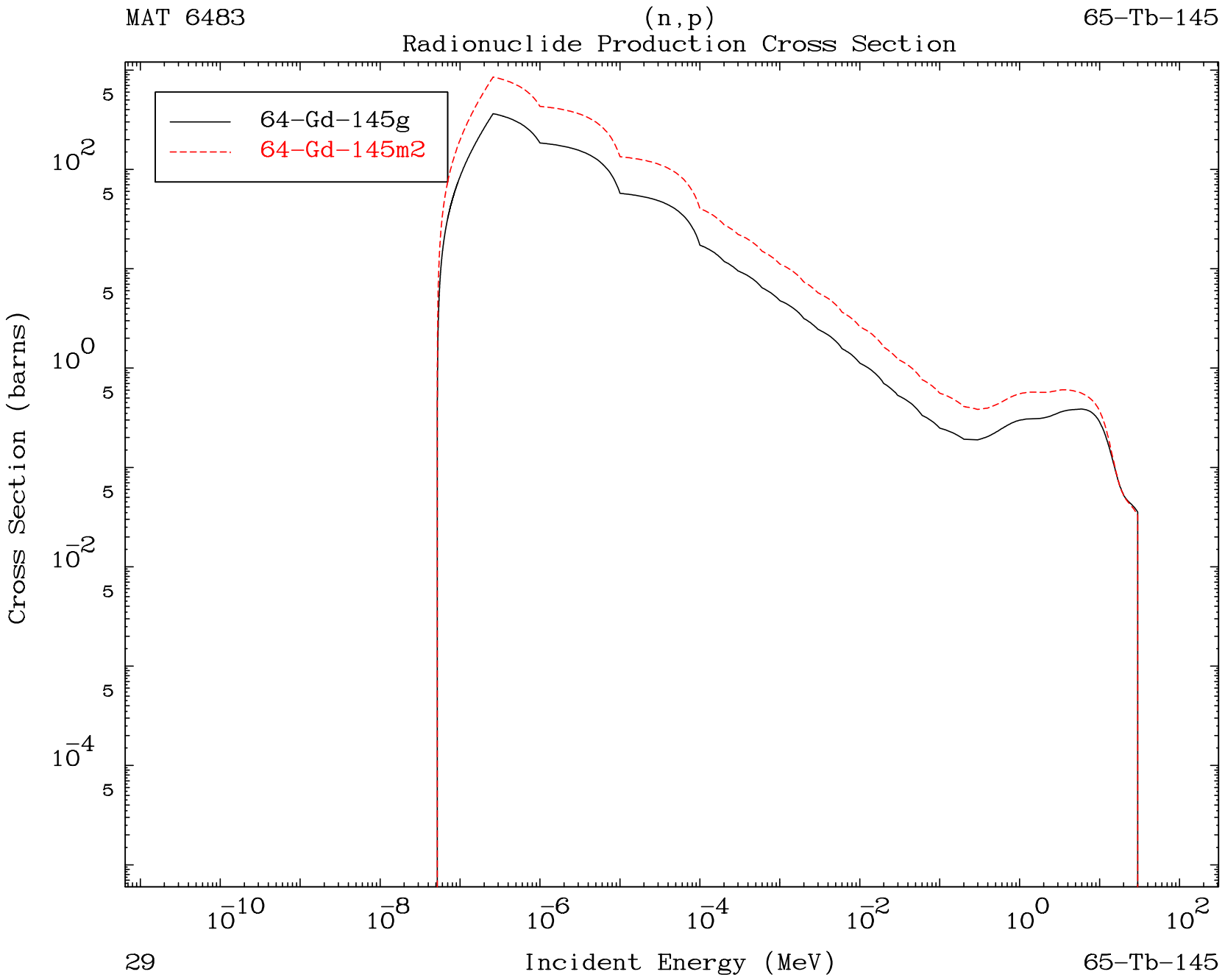

MAT 6483
(n,n') α
65-Tb-145
Radionuclide Production Cross Section
63-Eu-141g
63-Eu-141m1
Cross Section (barns)
Incident Energy (MeV)
24
65-Tb-145

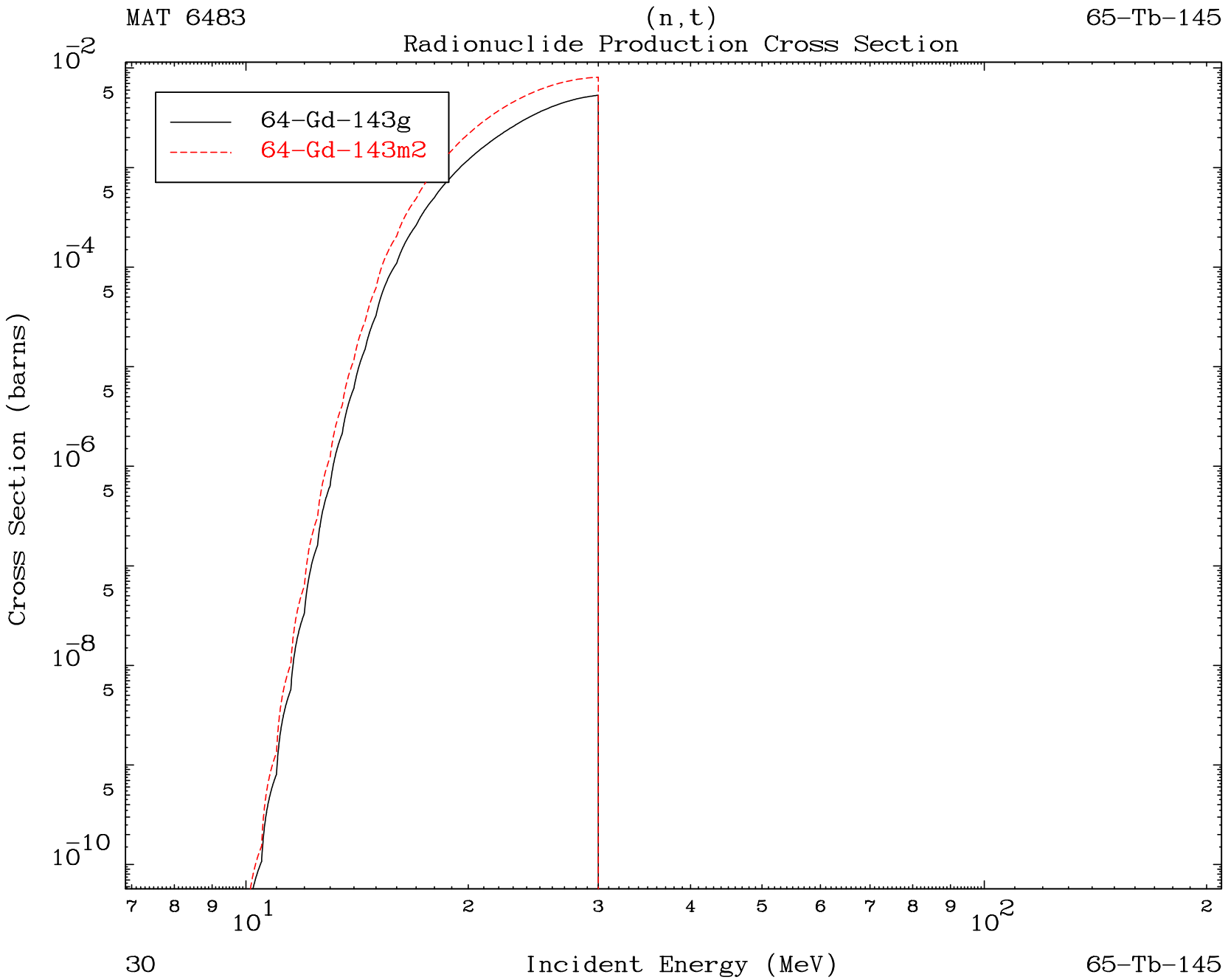

MAT 6483
(n,n') d
65-Tb-145
Radionuclide Production Cross Section
64-Gd-143g
64-Gd-143m2
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
6
7
8
9
10 2
Incident Energy (MeV)
25
65-Tb-145

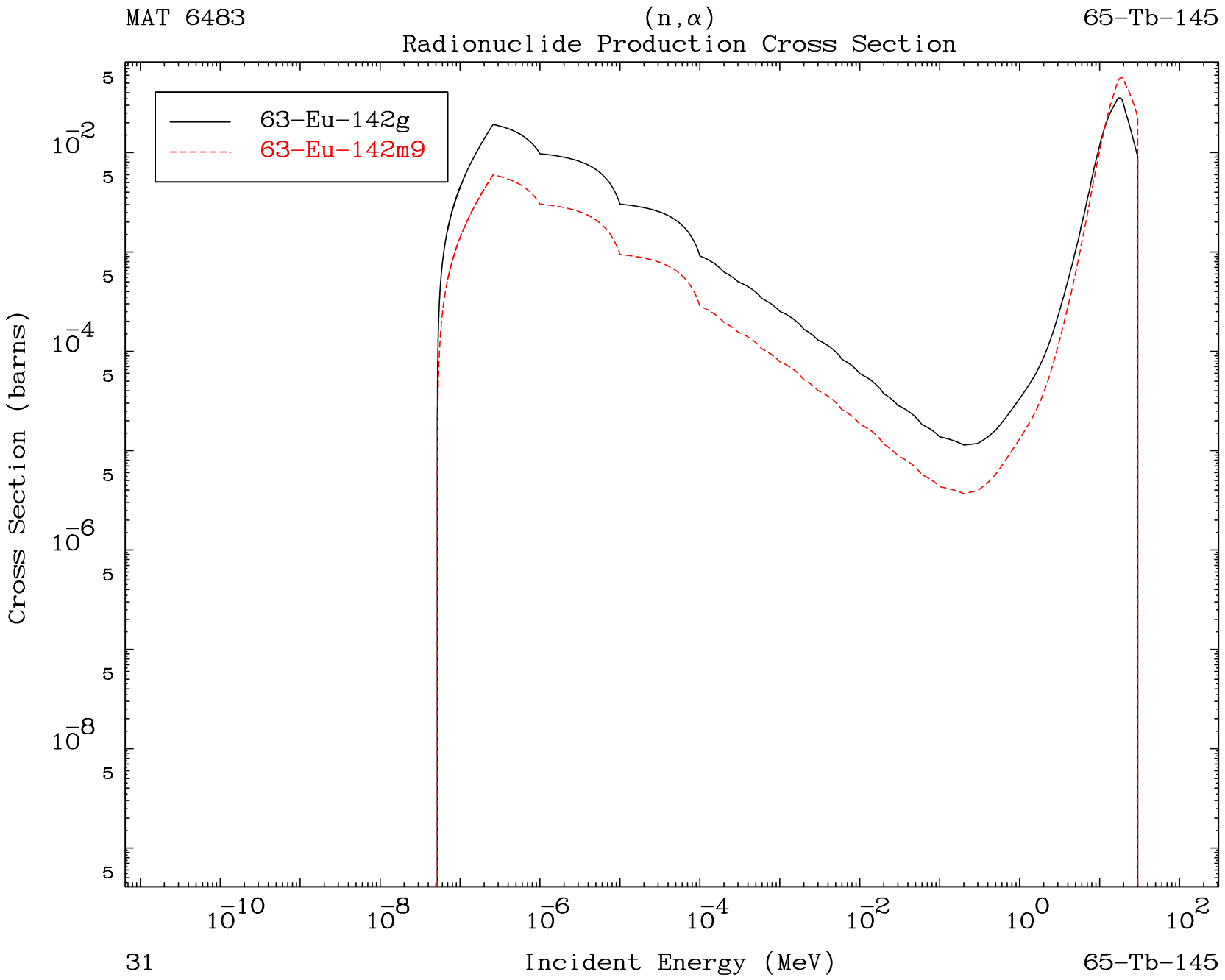

MAT 6483
(n,n') He-3
65-Tb-145
Radionuclide Production Cross Section
63-Eu-142g
63-Eu-142m9
Cross Section (barns)
Incident Energy (MeV)
26
65-Tb-145

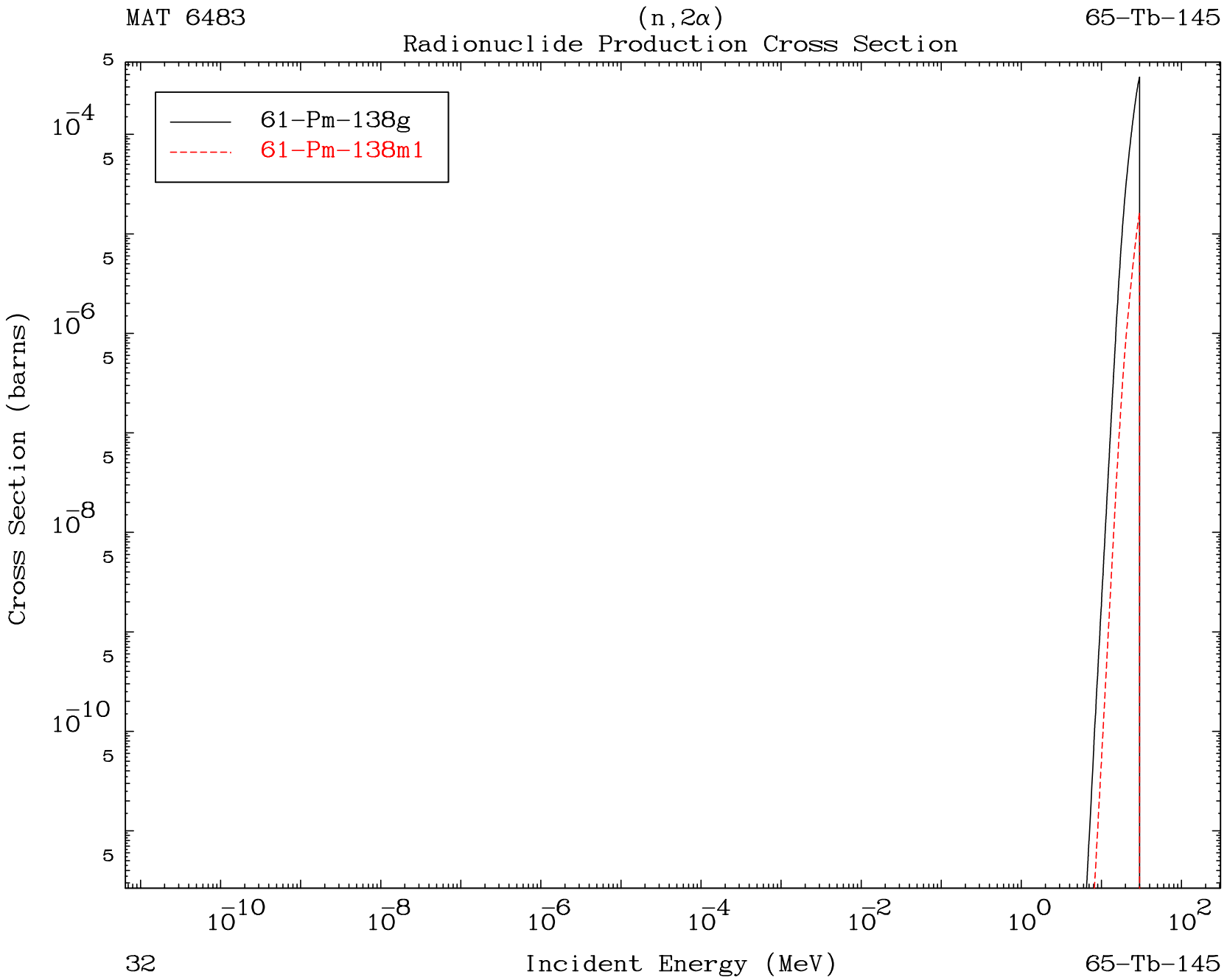

MAT 6483
(n,2n) p
65-Tb-145
Radionuclide Production Cross Section
64-Gd-143g
64-Gd-143m2
Cross Section (barns)
Incident Energy (MeV)
27
65-Tb-145

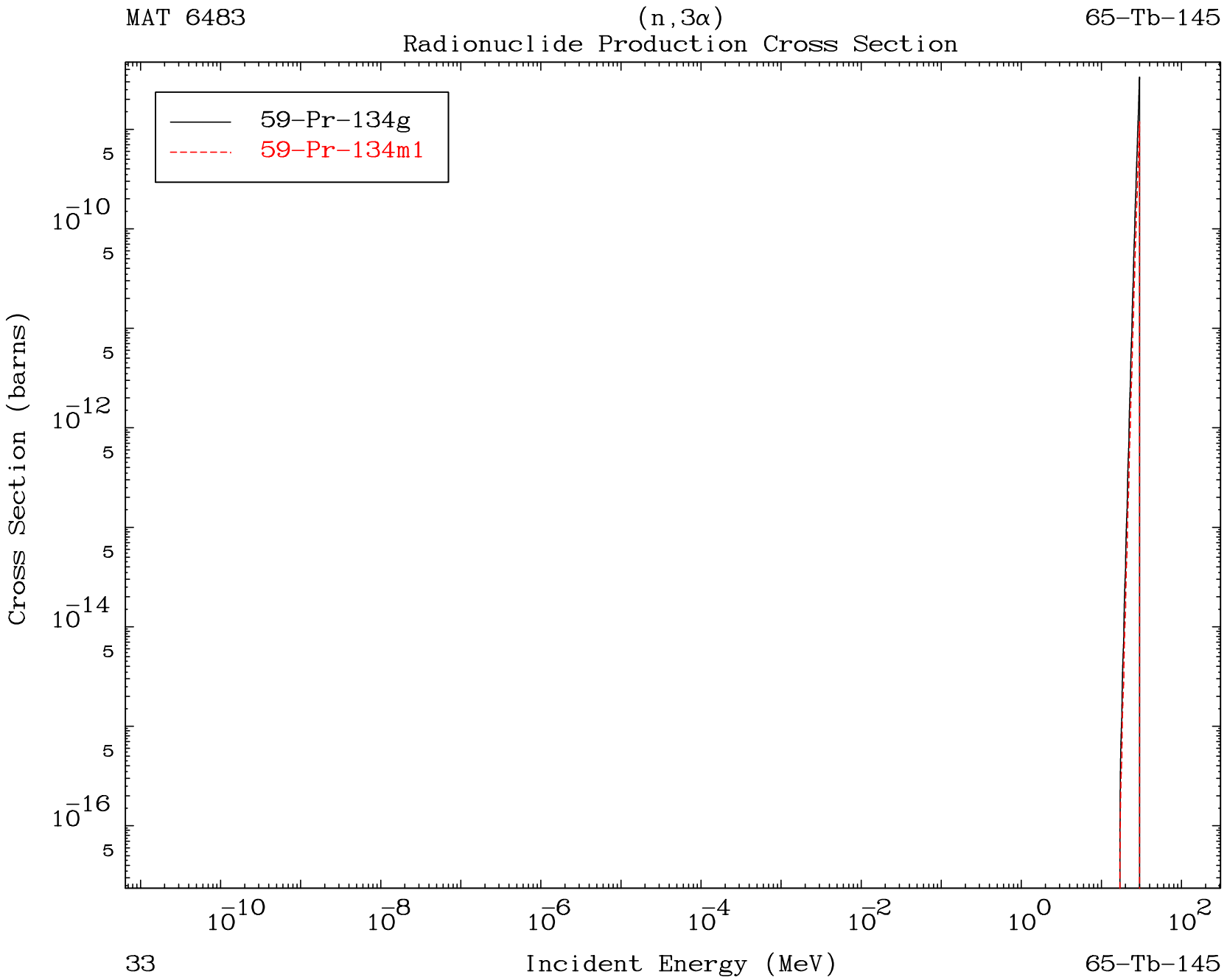

MAT 6483
(n,γ)
65-Tb-145
Radionuclide Production Cross Section
65-Tb-146g
65-Tb-146m2
Cross Section (barns)
Incident Energy (MeV)
28
65-Tb-145

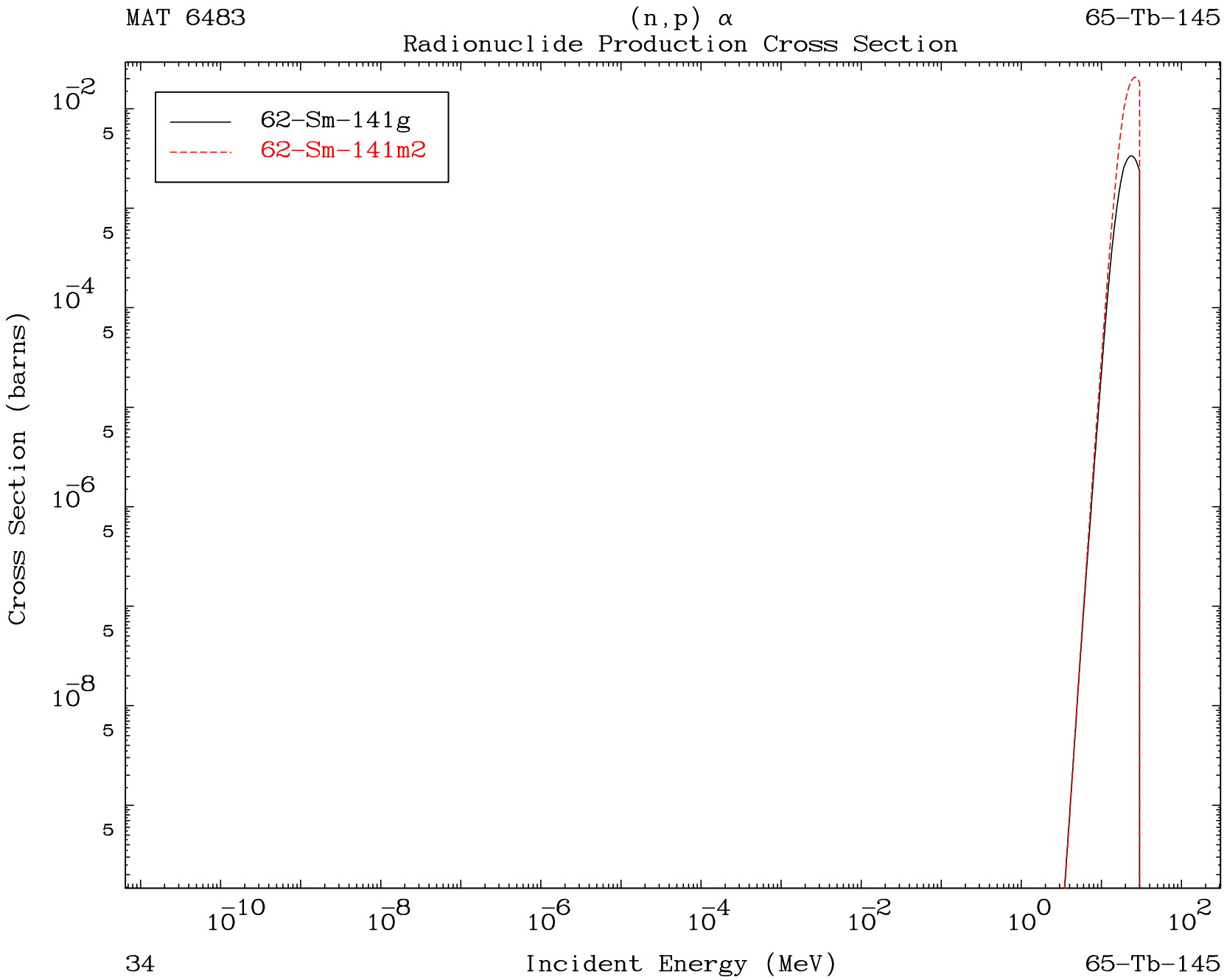

MAT 6483
(n,p)
65-Tb-145
Radionuclide Production Cross Section
64-Gd-145g
64-Gd-145m2
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
29
Incident Energy (MeV)
65-Tb-145

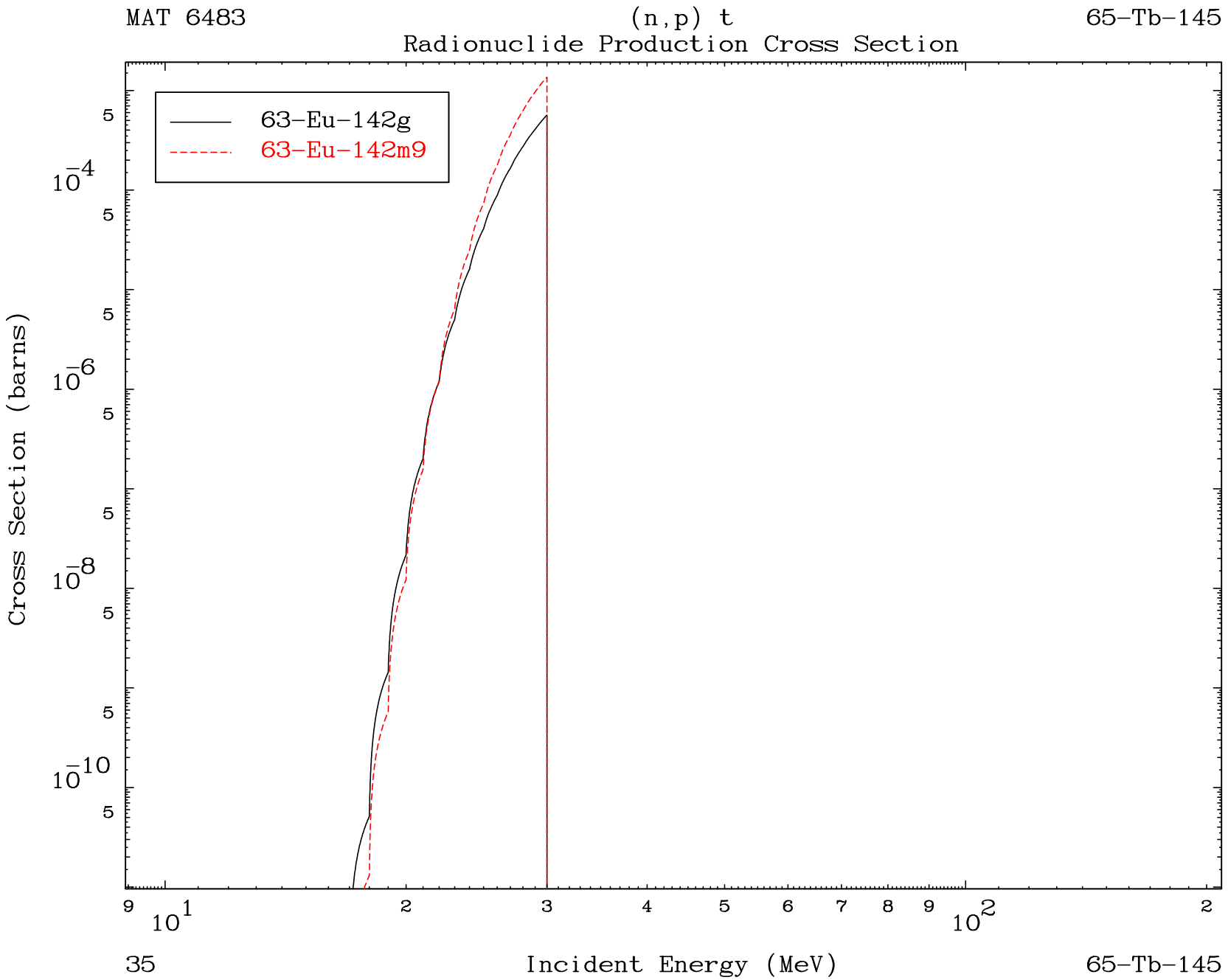

MAT 6483
(n,t)
65-Tb-145
Radionuclide Production Cross Section
64-Gd-143g
64-Gd-143m2
Cross Section (barns)
Incident Energy (MeV)
30
65-Tb-145


MAT 6483
(n,α)
65-Tb-145
Radionuclide Production Cross Section
63-Eu-142g
63-Eu-142m9
Cross Section (barns)
Incident Energy (MeV)
31
65-Tb-145


MAT 6483
(n,2α)
65-Tb-145
Radionuclide Production Cross Section
61-Pm-138g
61-Pm-138m1
Cross Section (barns)
Incident Energy (MeV)
32
65-Tb-145


MAT 6483
(n,3α)
65-Tb-145
Radionuclide Production Cross Section
59-Pr-134g
59-Pr-134m1
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
33
65-Tb-145


MAT 6483
(n,p) α
65-Tb-145
Radionuclide Production Cross Section
62-Sm-141g
62-Sm-141m2
Cross Section (barns)
Incident Energy (MeV)
34
65-Tb-145


MAT 6483
(n,p) t
65-Tb-145
Radionuclide Production Cross Section
63-Eu-142g
63-Eu-142m9
Cross Section (barns)
Incident Energy (MeV)
35
65-Tb-145