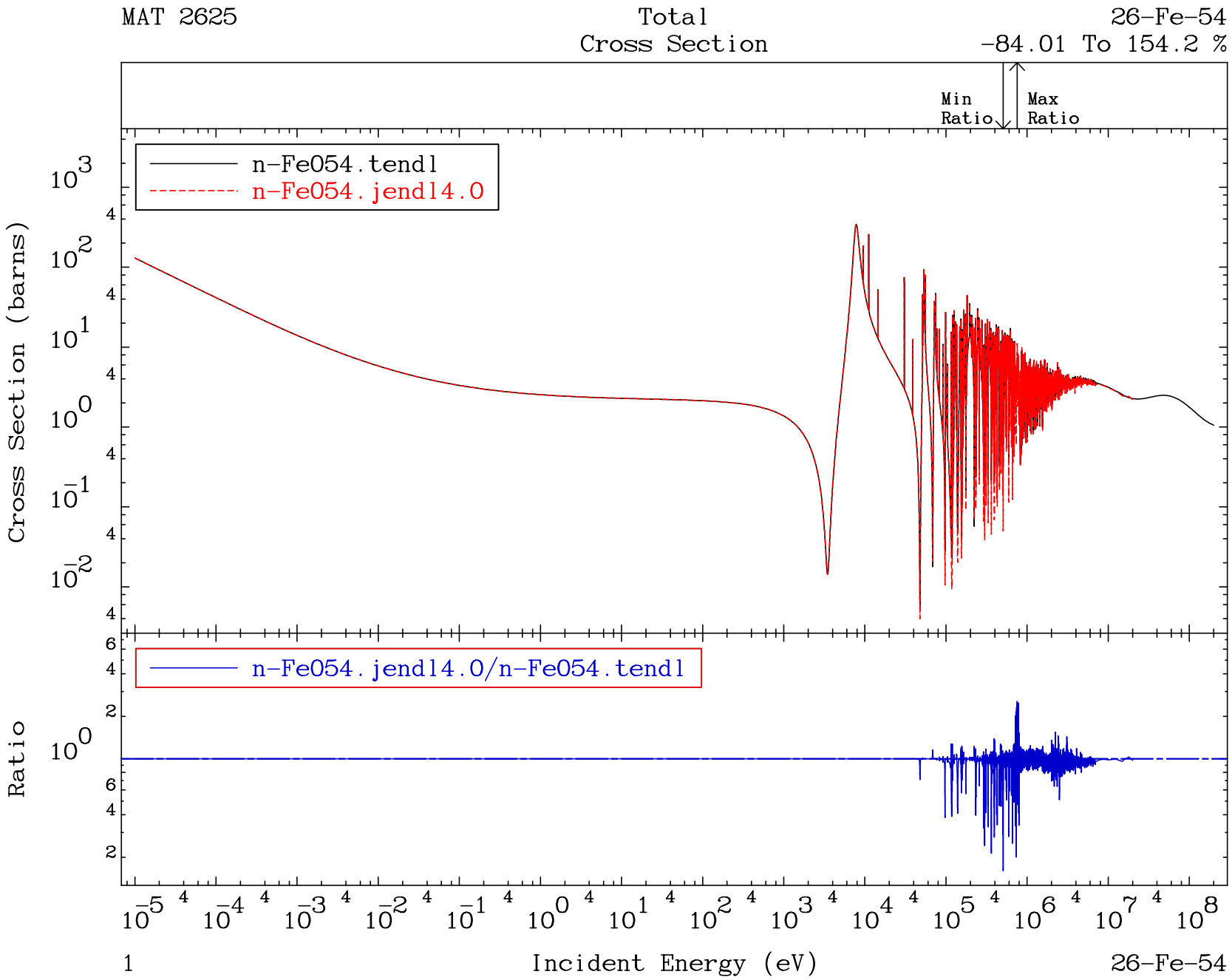
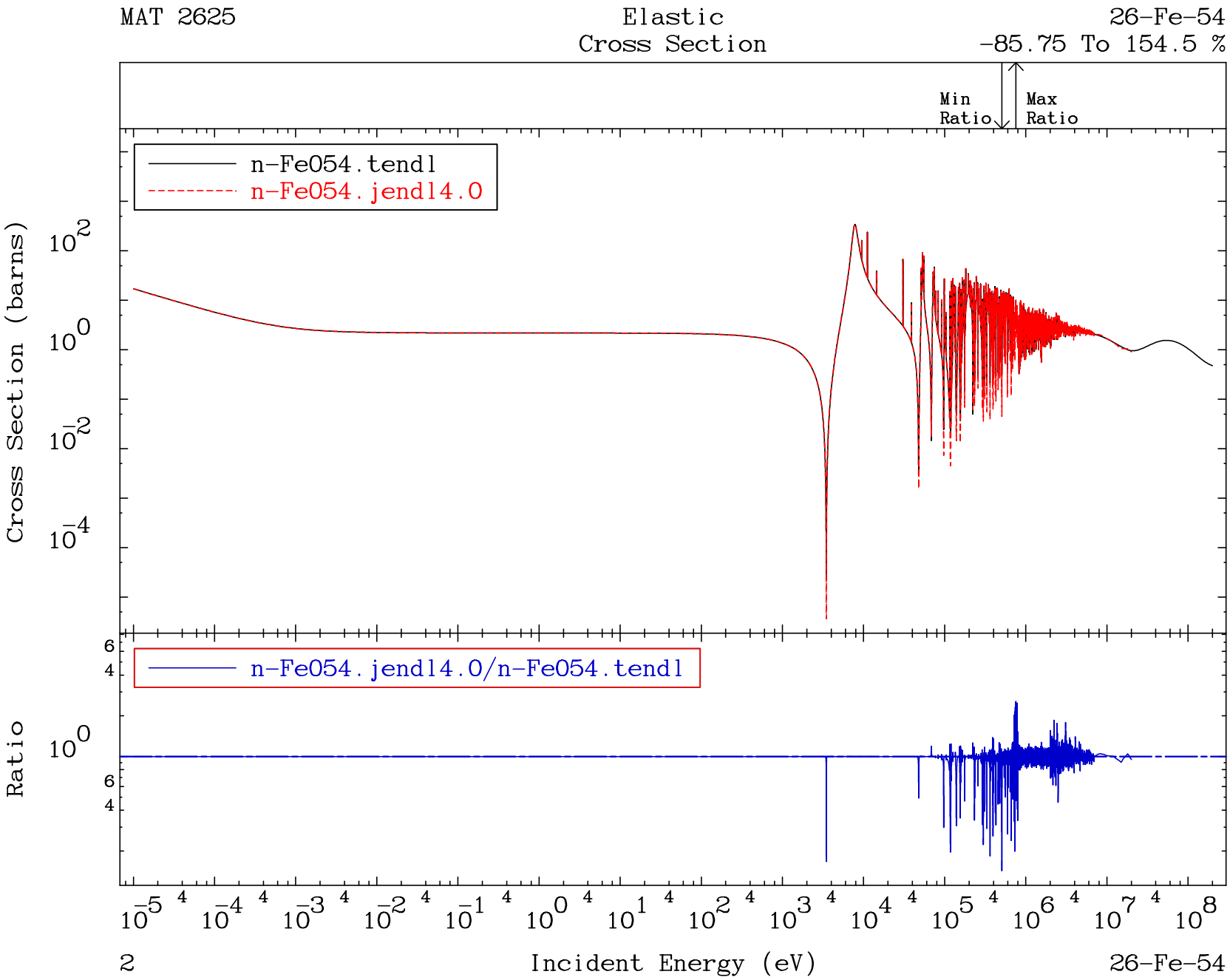
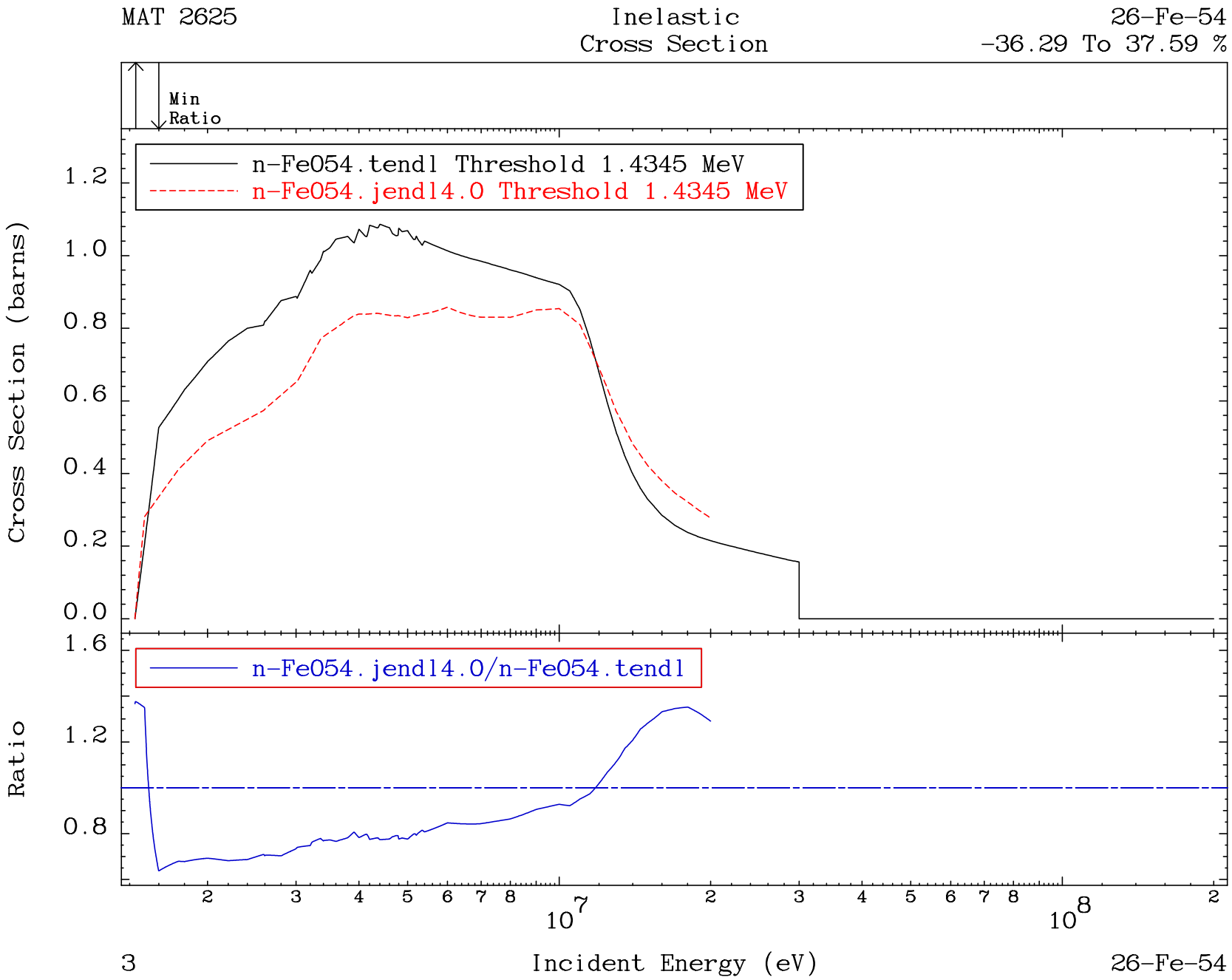
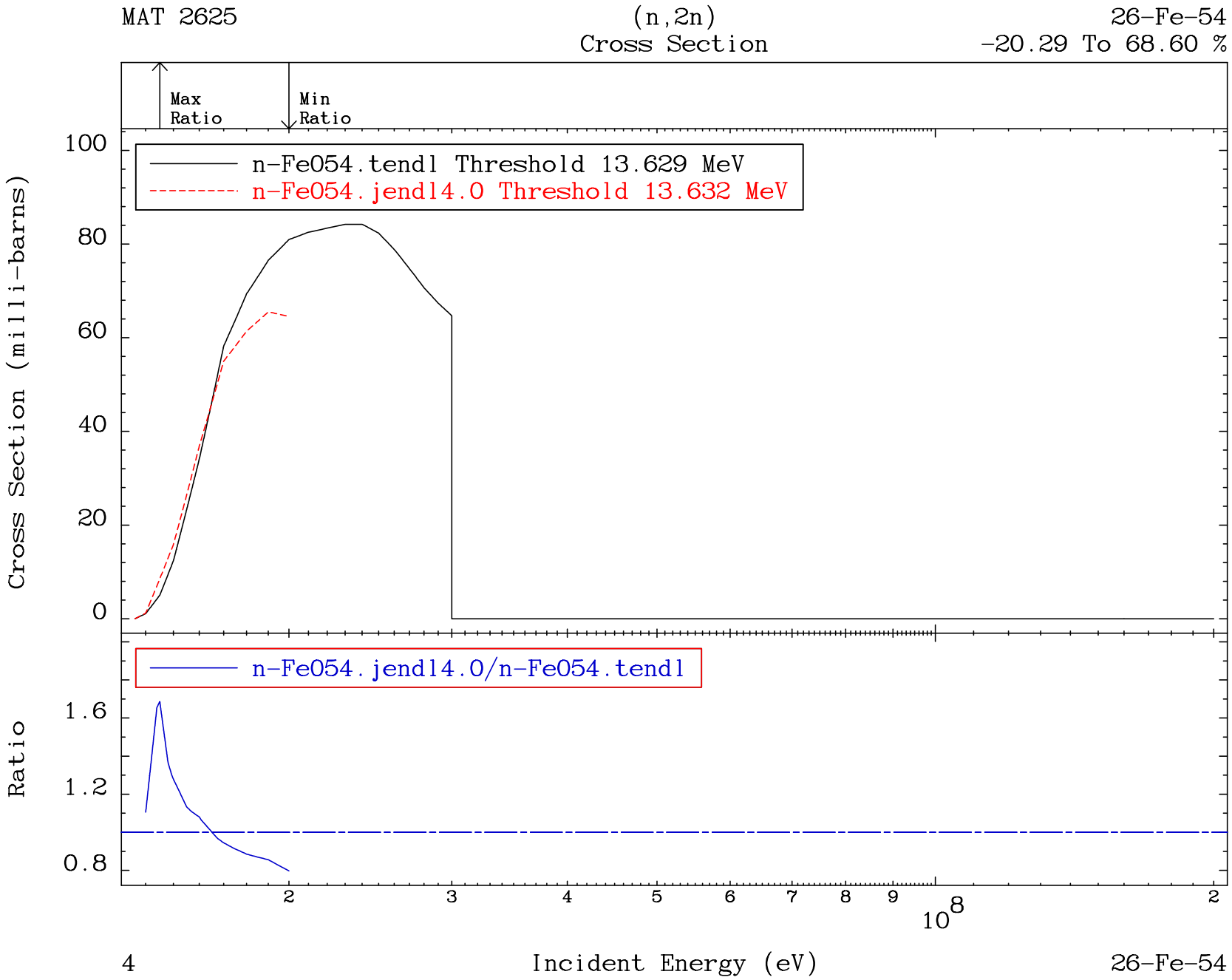
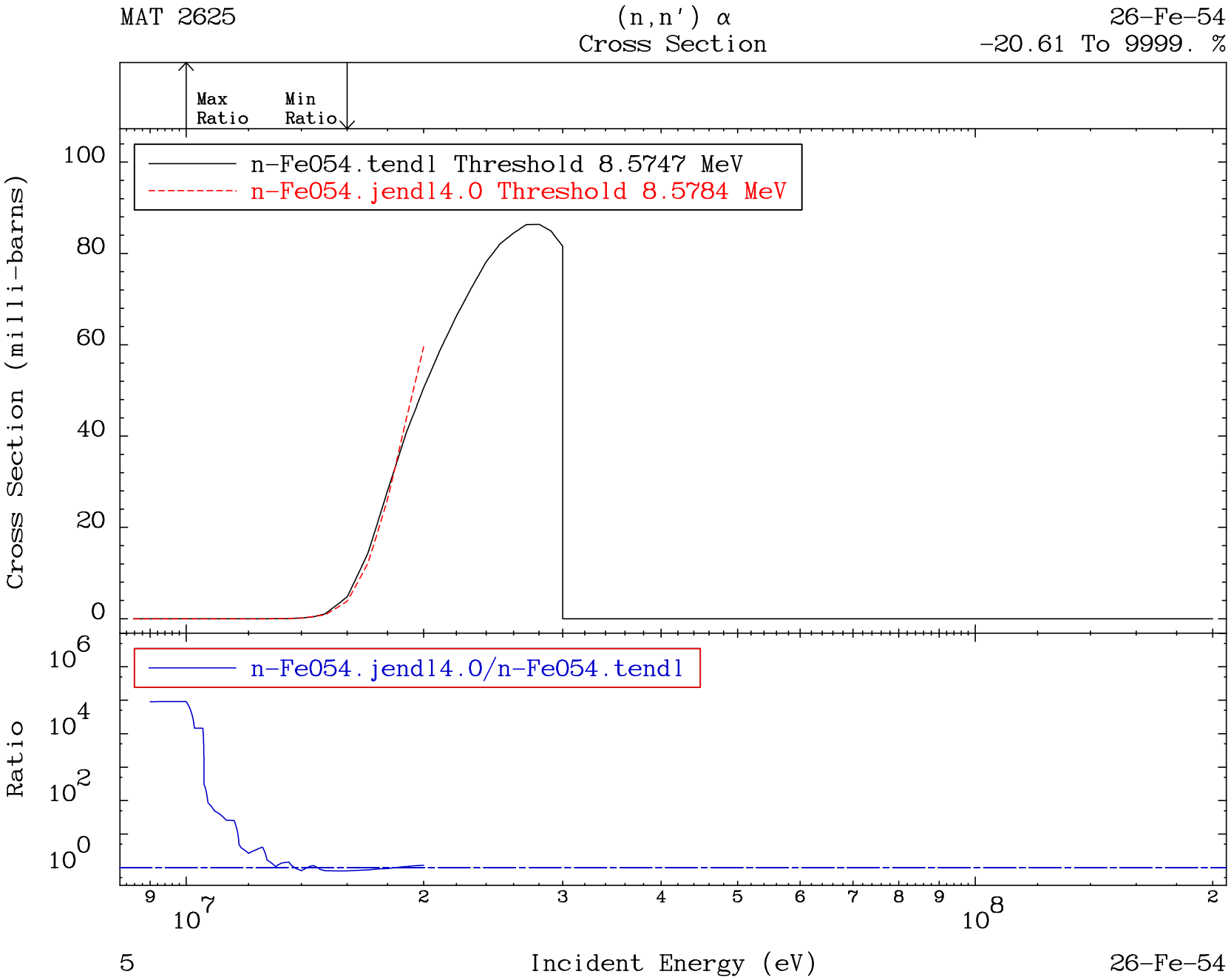
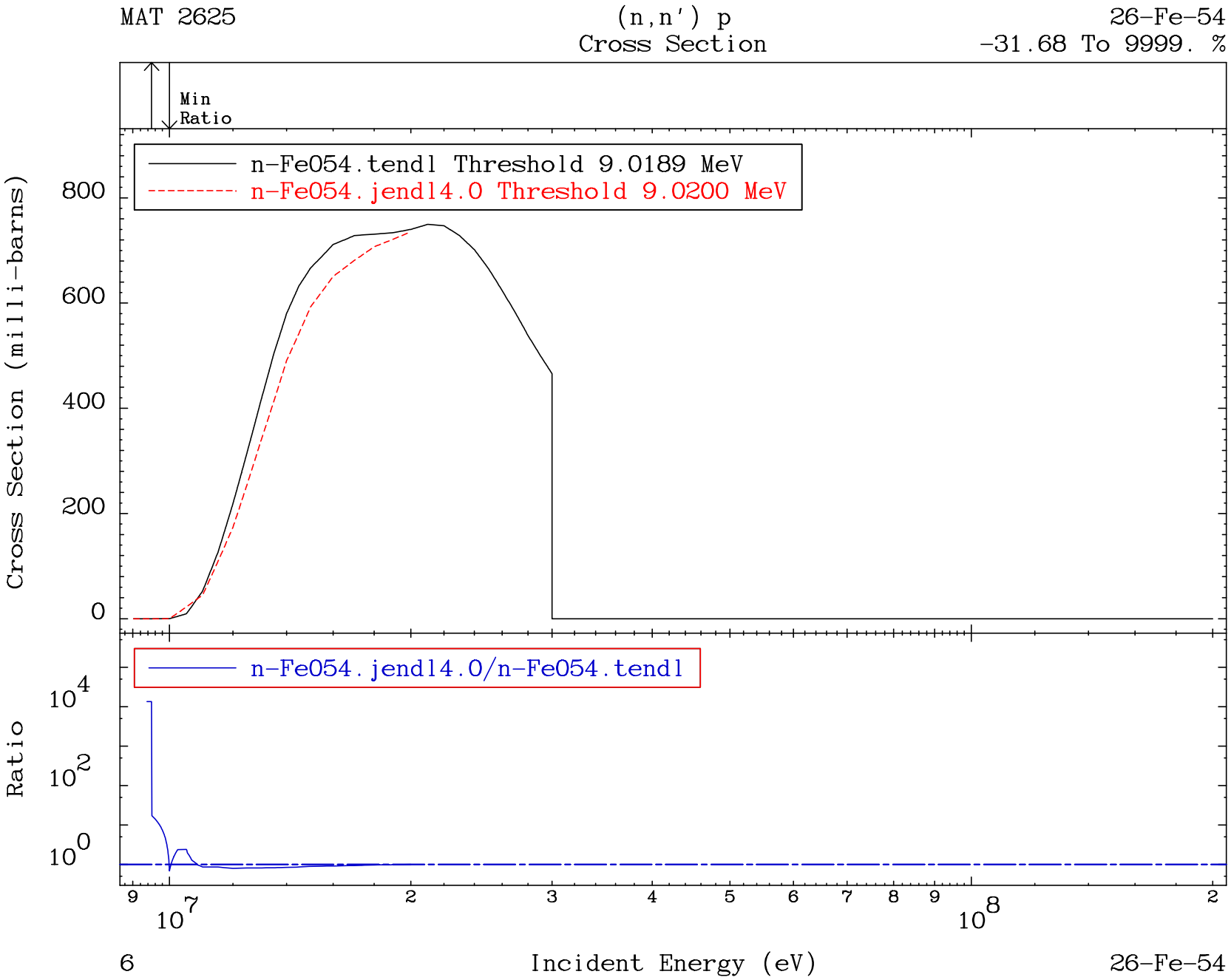

MAT 2625
Total
Cross Section
26-Fe-54
-84.01 To 154.2 %
Min Ratio
Max Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
1
26-Fe-54

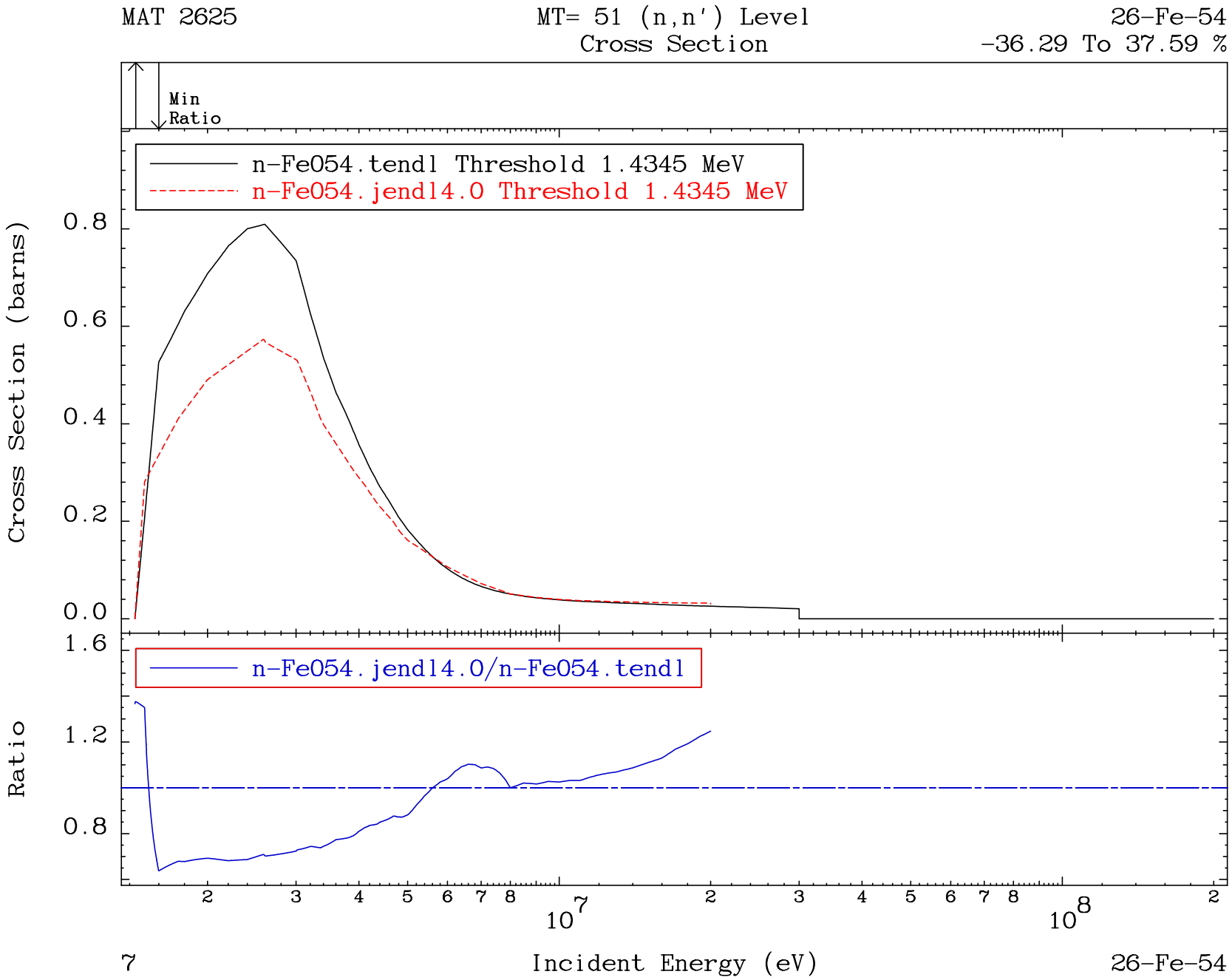

MAT 2625
Elastic
Cross Section
26-Fe-54
-85.75 To 154.5 %
Min Ratio
Max Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
2
26-Fe-54

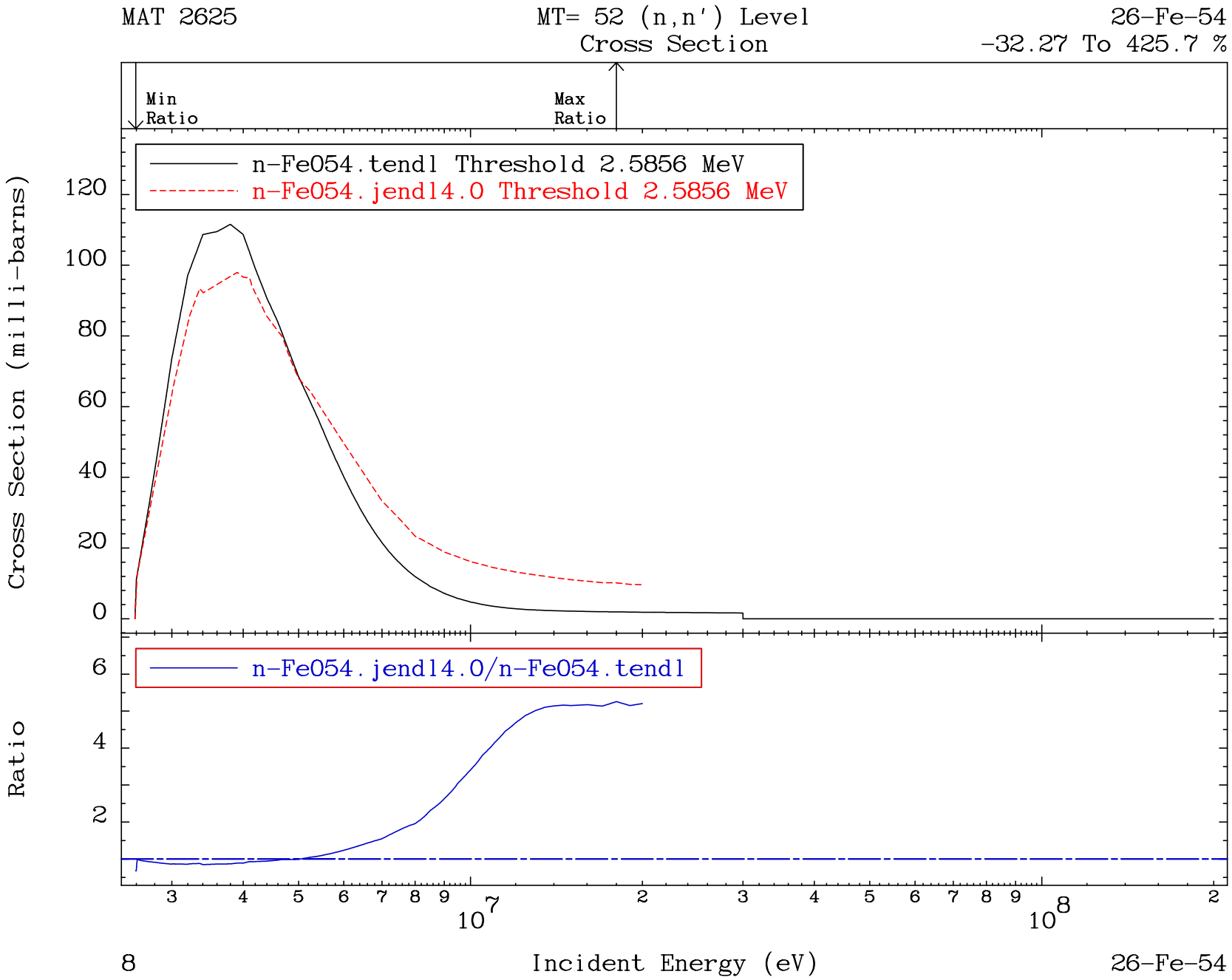

MAT 2625
Inelastic
Cross Section
26-Fe-54
-36.29 To 37.59 %
Min
Ratio
n-Fe054.tendl Threshold 1.4345 MeV
n-Fe054.jendl4.0 Threshold 1.4345 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
26-Fe-54

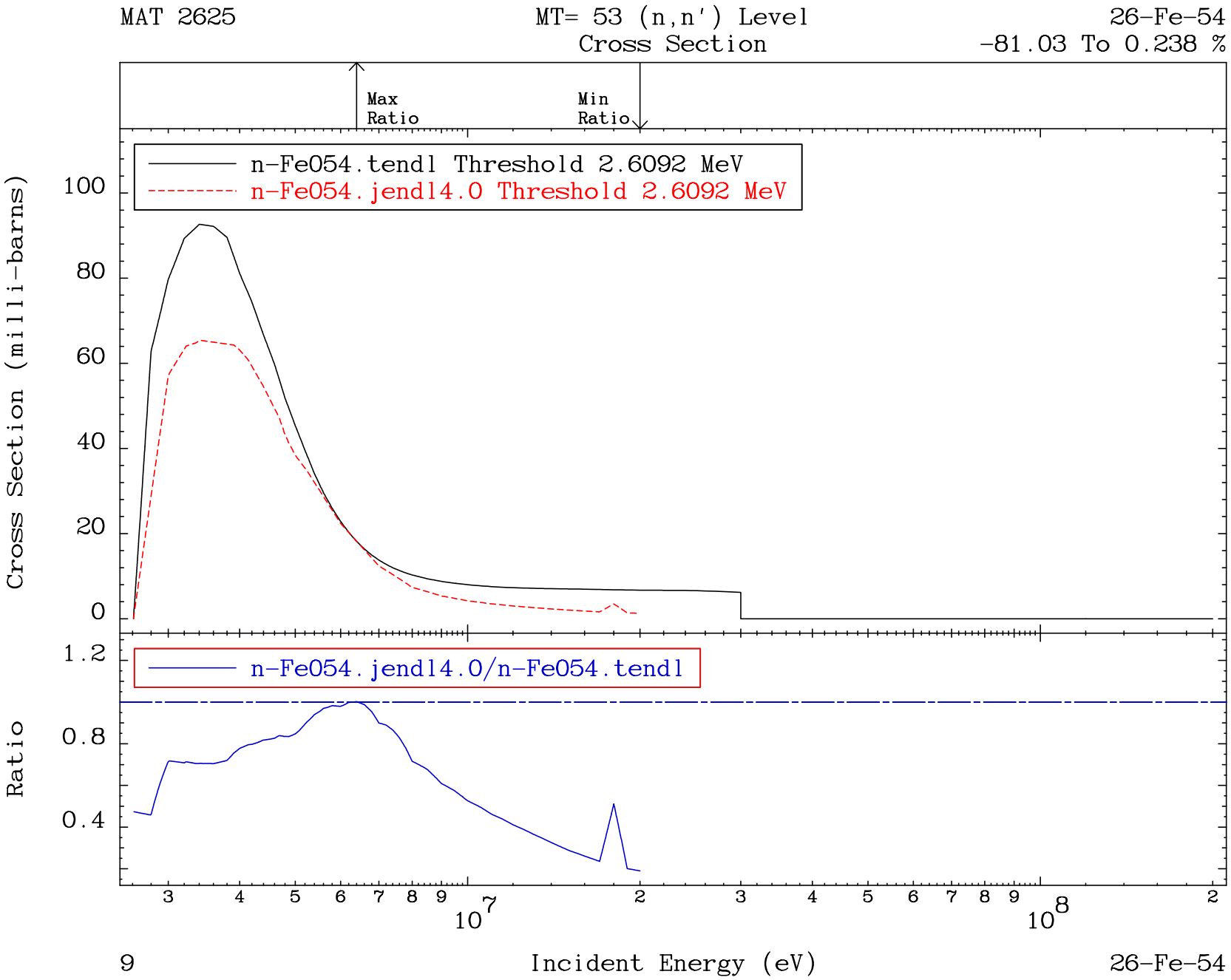

MAT 2625
(n,2n)
Cross Section
26-Fe-54
-20.29 To 68.60 %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 13.629 MeV
n-Fe054.jendl4.0 Threshold 13.632 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
26-Fe-54

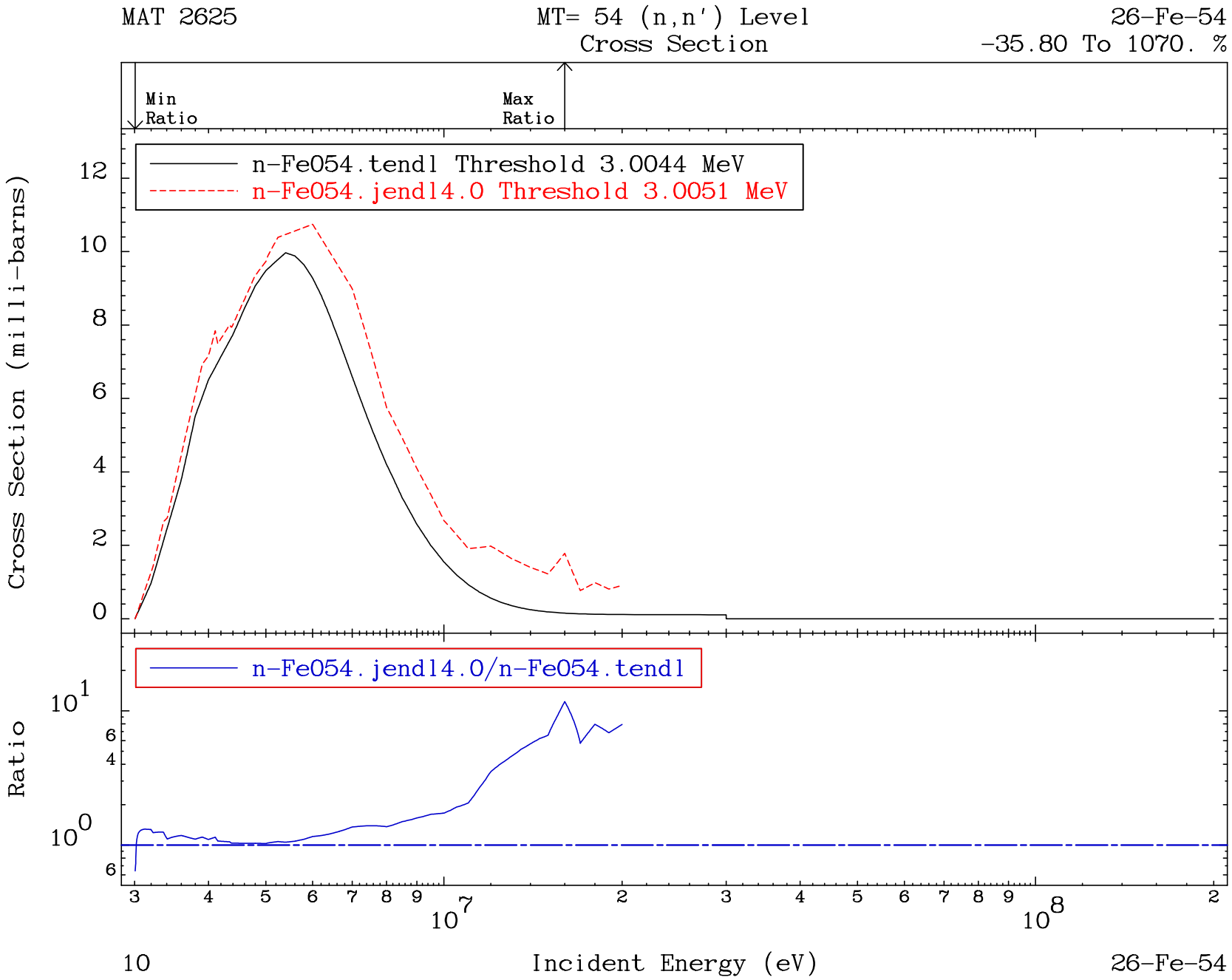

MAT 2625
(n,n') α
Cross Section
26-Fe-54
-20.61 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 8.5747 MeV
n-Fe054.jendl4.0 Threshold 8.5784 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^6
10^4
10^2
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
26-Fe-54

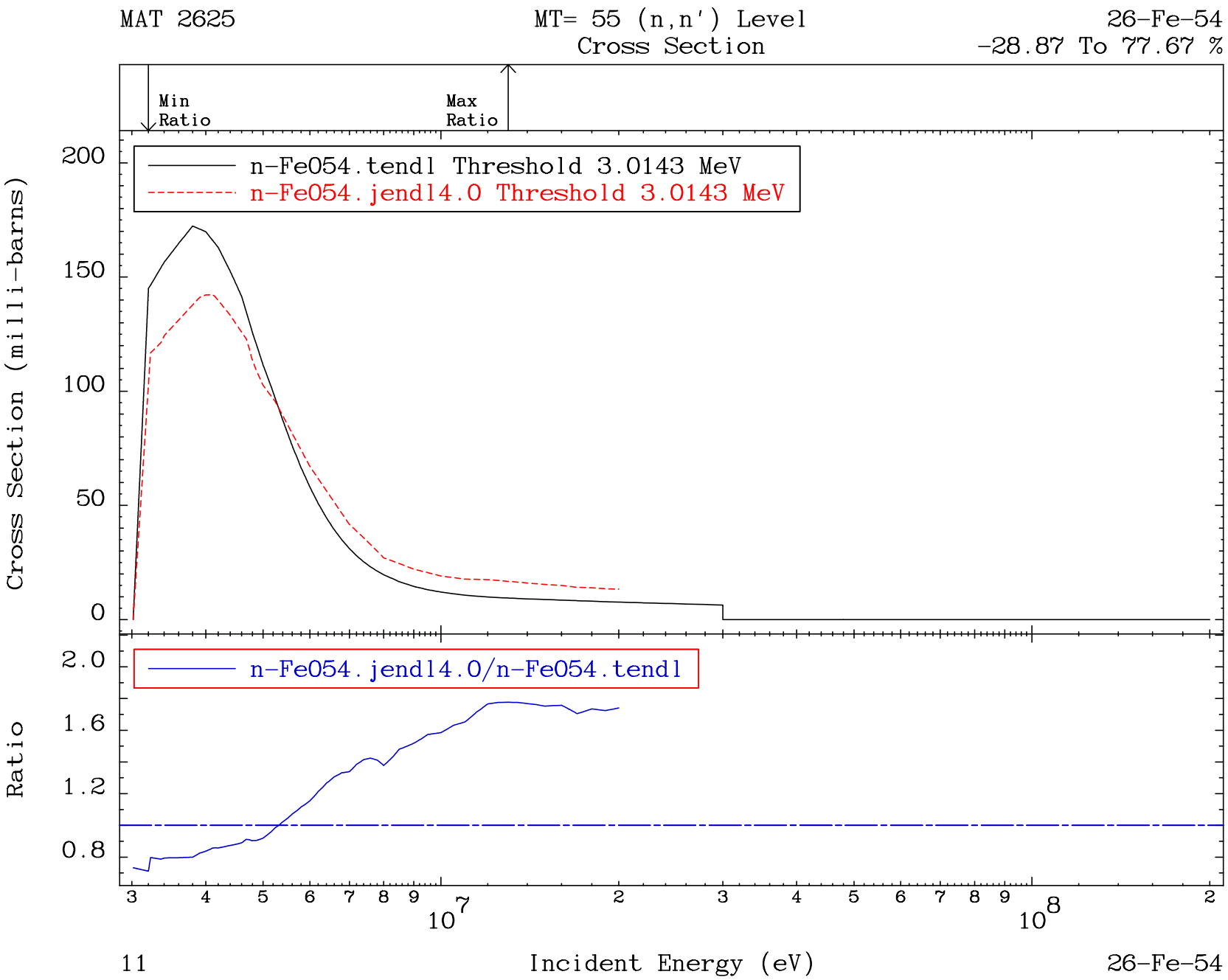

MAT 2625
(n,n') p
Cross Section
26-Fe-54
-31.68 To 9999. %
Min
Ratio
n-Fe054.tendl Threshold 9.0189 MeV
n-Fe054.jendl4.0 Threshold 9.0200 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^4
10^2
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
26-Fe-54

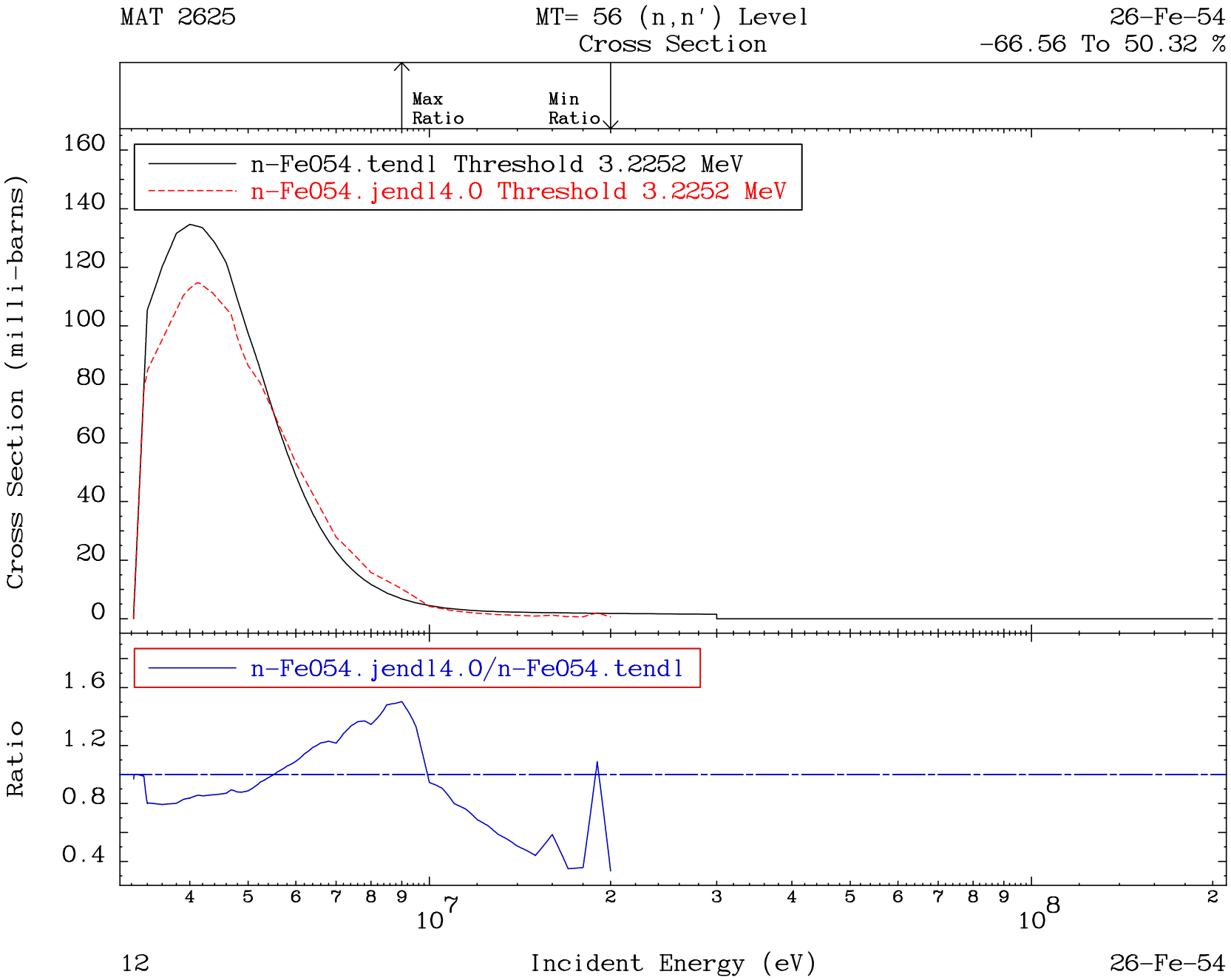

MAT 2625
MT= 51 (n,n') Level
Cross Section
26-Fe-54
-36.29 To 37.59 %
Min
Ratio
n-Fe054.tendl Threshold 1.4345 MeV
n-Fe054.jendl4.0 Threshold 1.4345 MeV
Cross Section (barns)
0.8
0.6
0.4
0.2
0.0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
7
Incident Energy (eV)
26-Fe-54

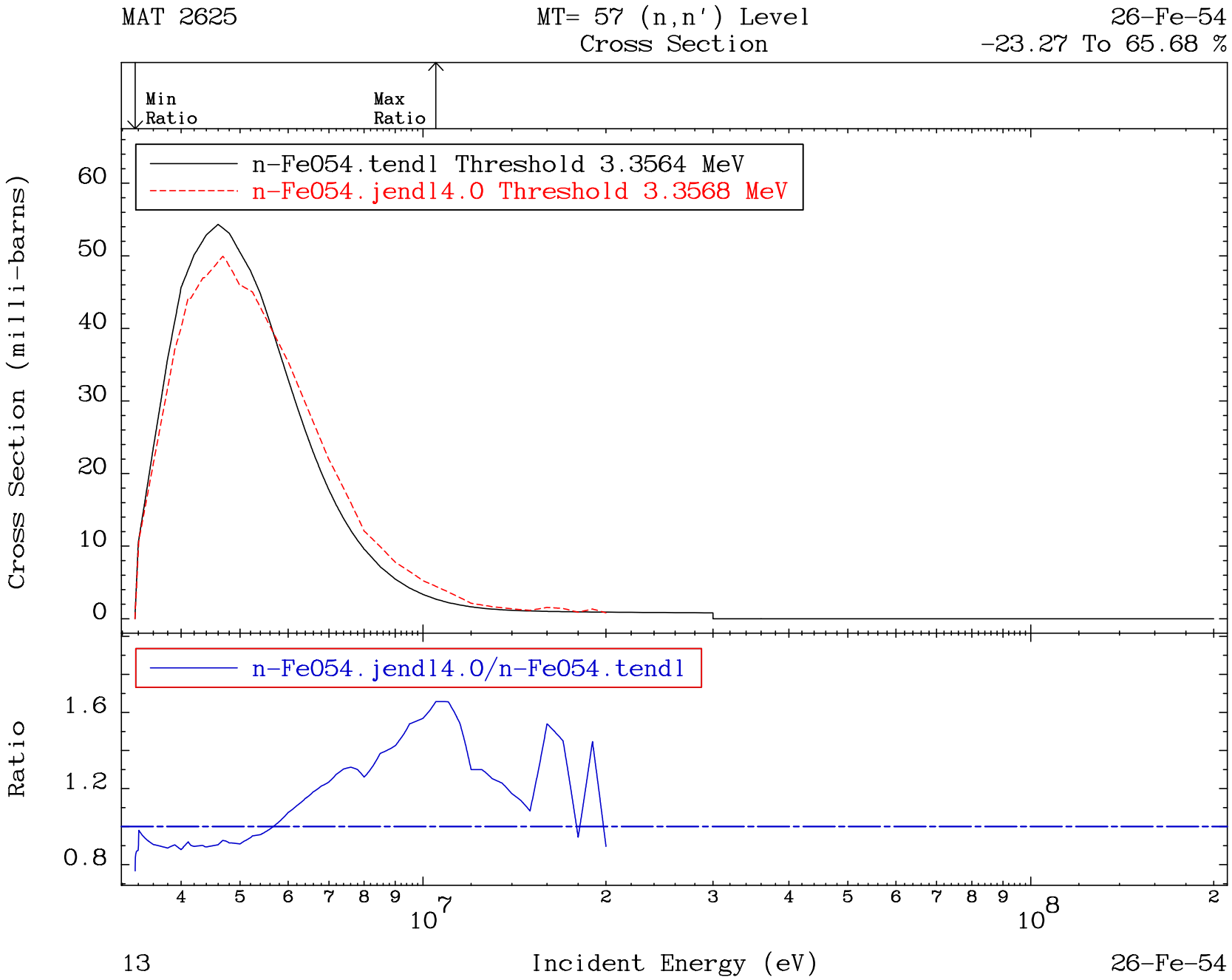

MAT 2625
MT= 52 (n,n') Level
Cross Section
26-Fe-54
-32.27 To 425.7 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 2.5856 MeV
n-Fe054.jendl4.0 Threshold 2.5856 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
6
4
2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
26-Fe-54

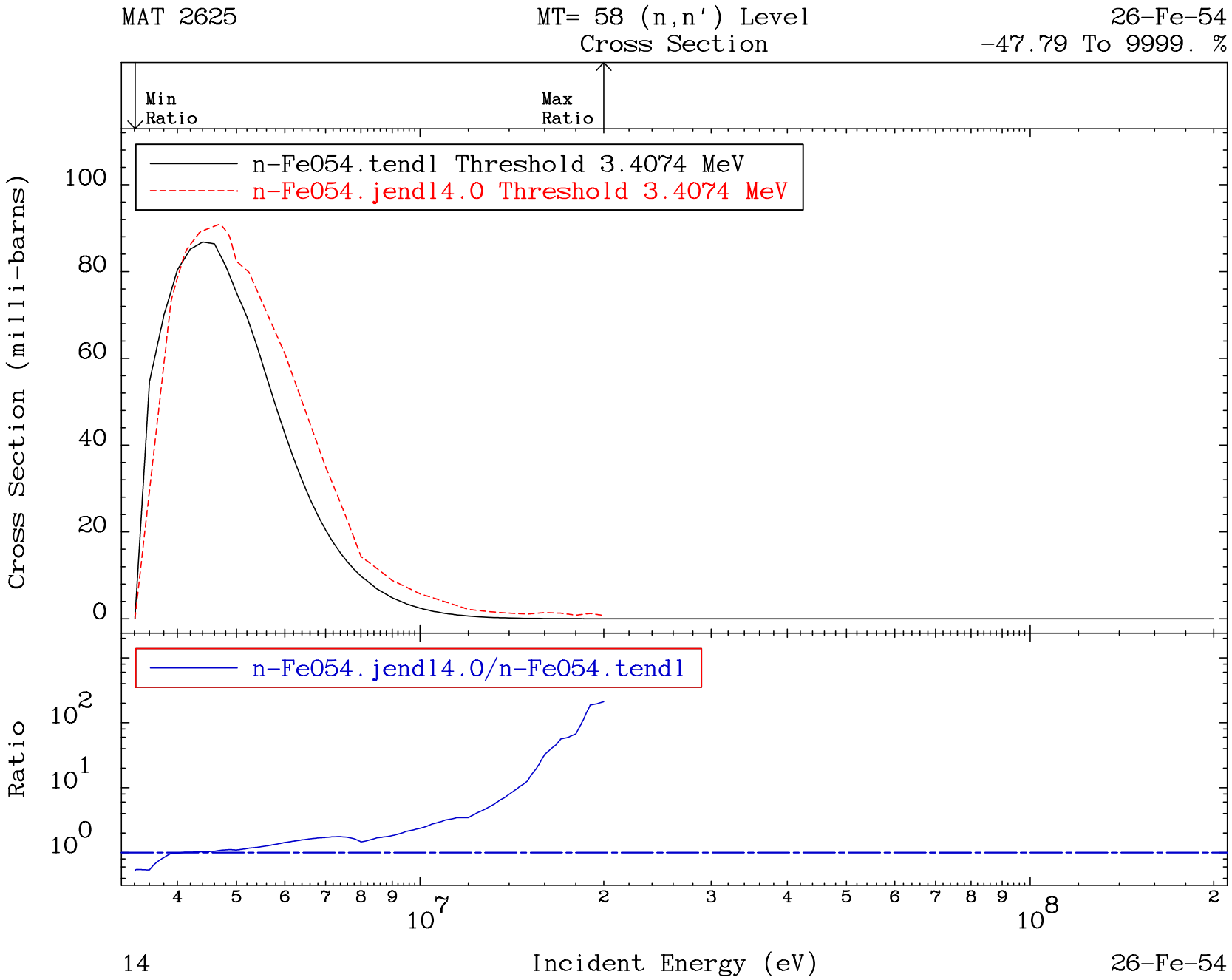

MAT 2625
MT= 53 (n,n') Level
Cross Section
26-Fe-54
-81.03 To 0.238 %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 2.6092 MeV
n-Fe054.jendl4.0 Threshold 2.6092 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
9
Incident Energy (eV)
26-Fe-54

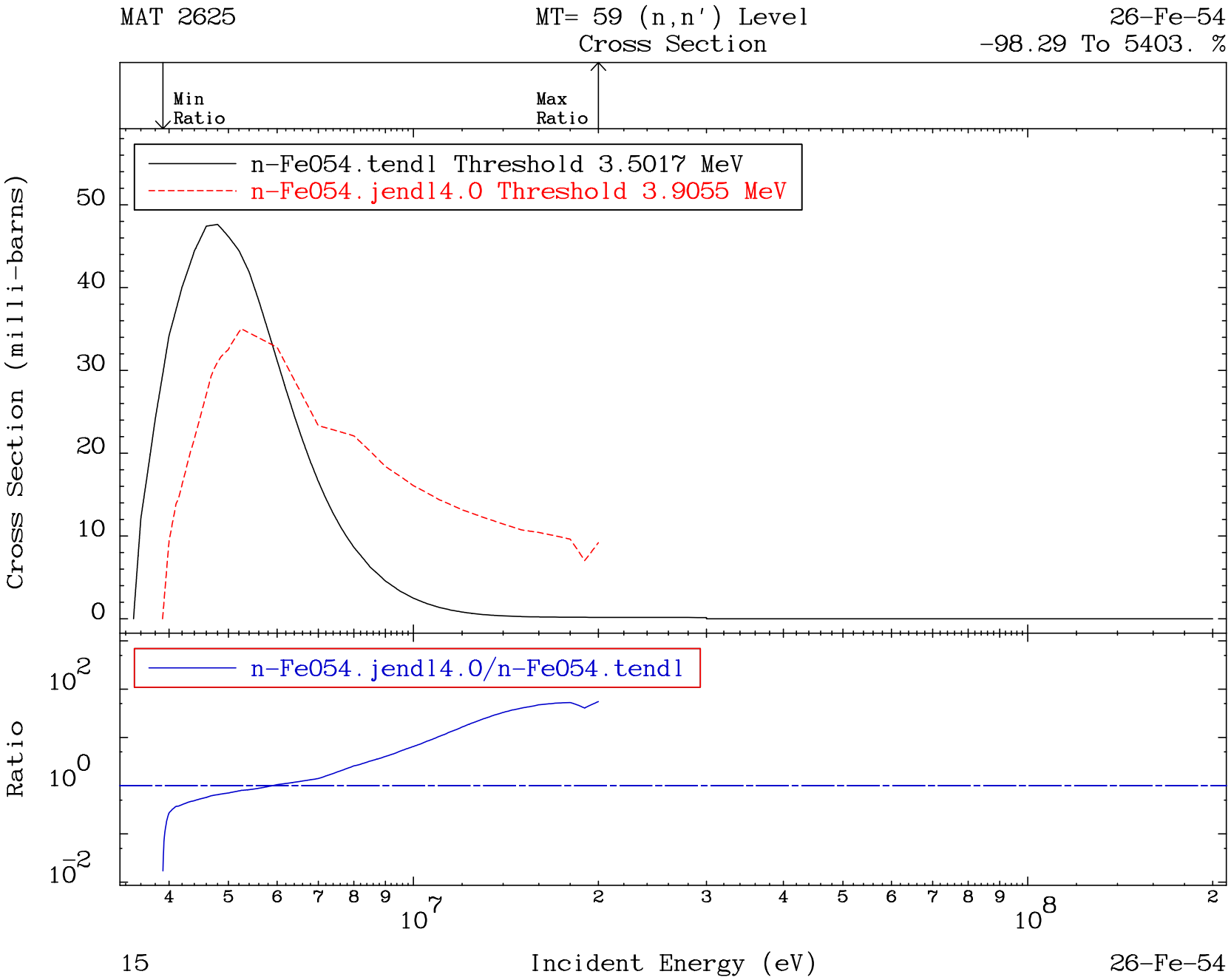

MAT 2625
MT= 54 (n,n') Level
Cross Section
26-Fe-54
-35.80 To 1070. %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 3.0044 MeV
n-Fe054.jendl4.0 Threshold 3.0051 MeV
Cross Section (milli-barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
10
26-Fe-54

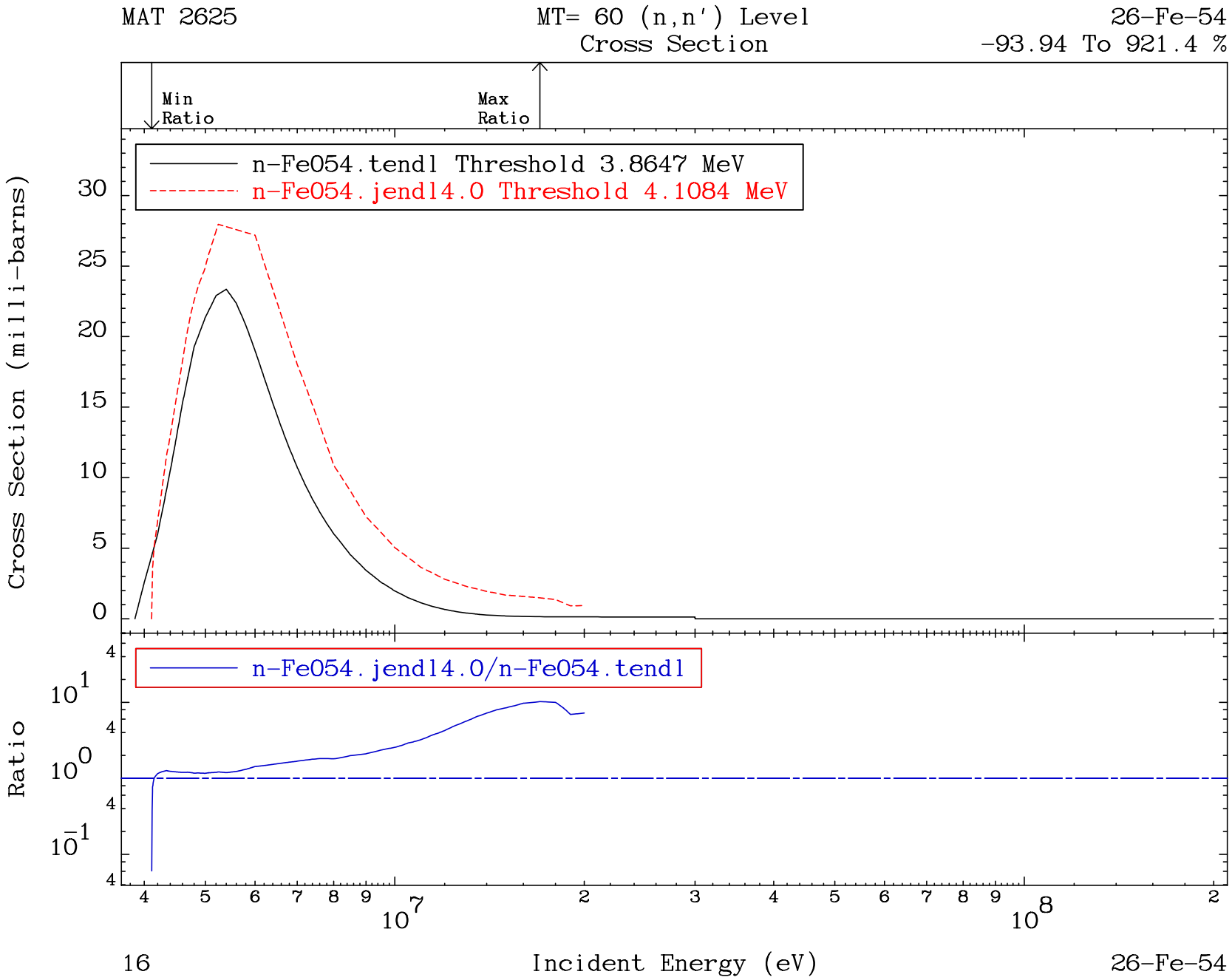

MAT 2625
MT= 55 (n,n') Level
Cross Section
26-Fe-54
-28.87 To 77.67 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 3.0143 MeV
n-Fe054.jendl4.0 Threshold 3.0143 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
2.0
1.6
1.2
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
26-Fe-54

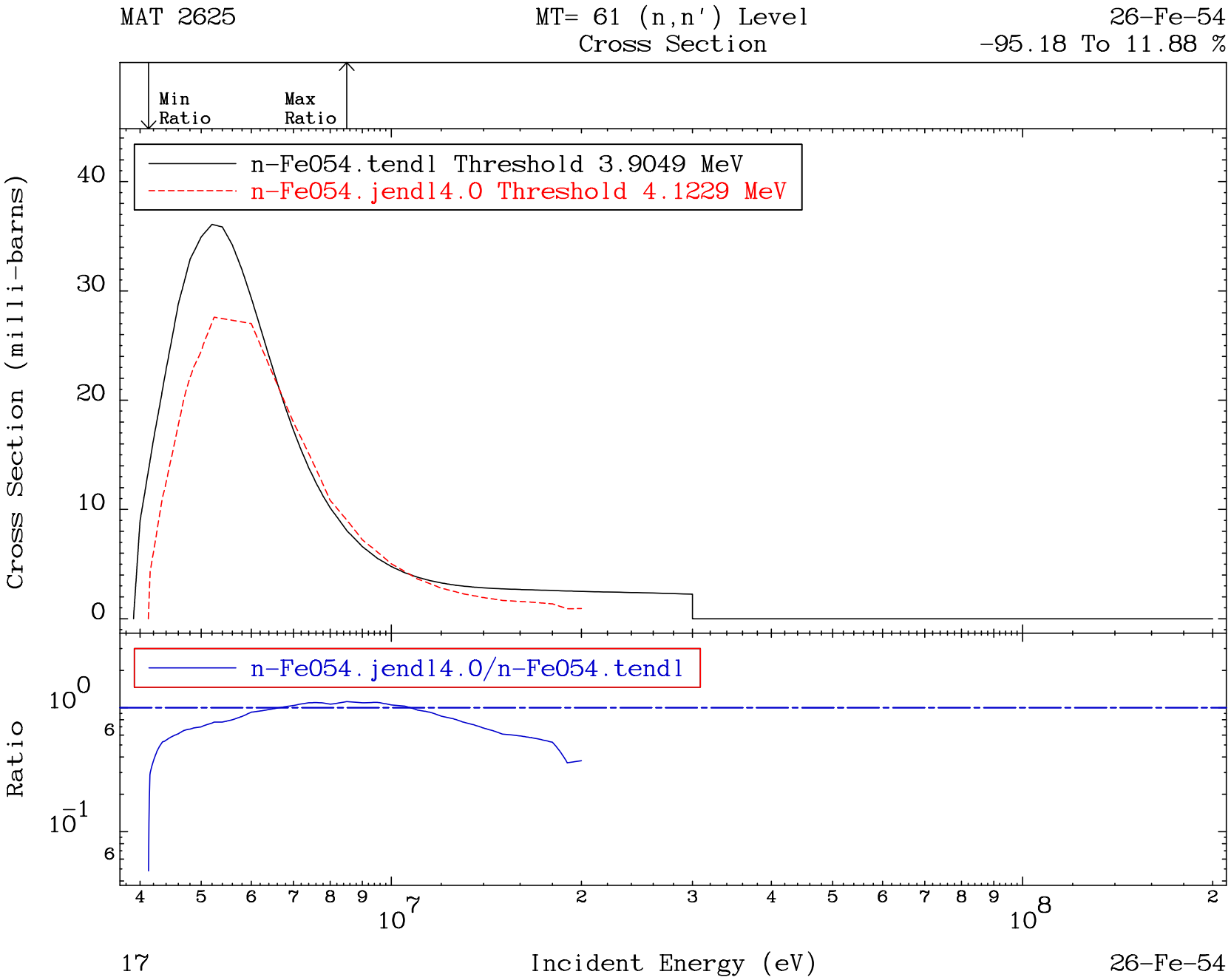

MAT 2625
MT= 56 (n,n') Level
Cross Section
26-Fe-54
-66.56 To 50.32 %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 3.2252 MeV
n-Fe054.jendl4.0 Threshold 3.2252 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
1.6
1.2
0.8
0.4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
12
Incident Energy (eV)
26-Fe-54

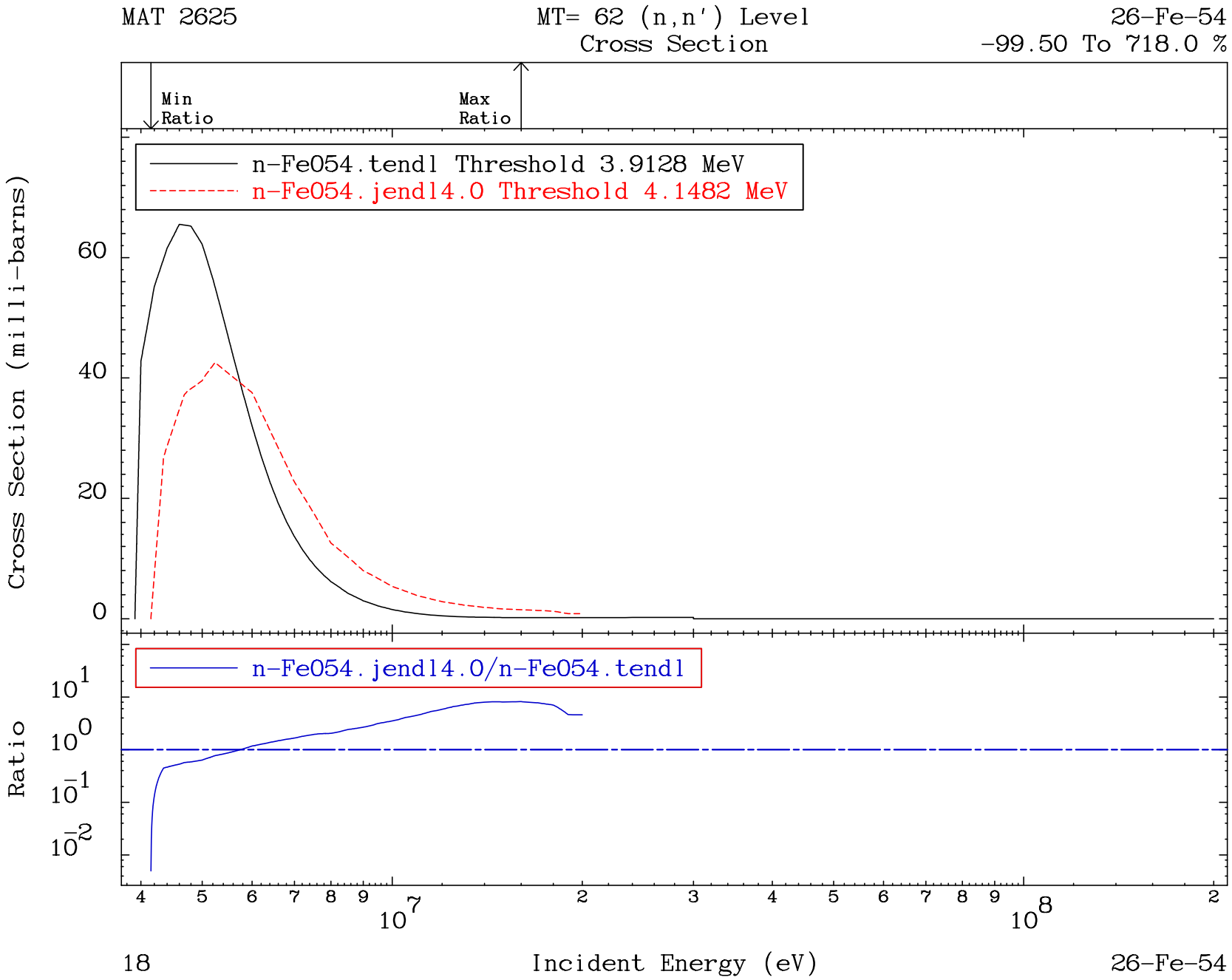

MAT 2625
MT= 57 (n,n') Level
Cross Section
26-Fe-54
-23.27 To 65.68 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 3.3564 MeV
n-Fe054.jendl4.0 Threshold 3.3568 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
1.6
1.2
0.8
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
13
Incident Energy (eV)
26-Fe-54

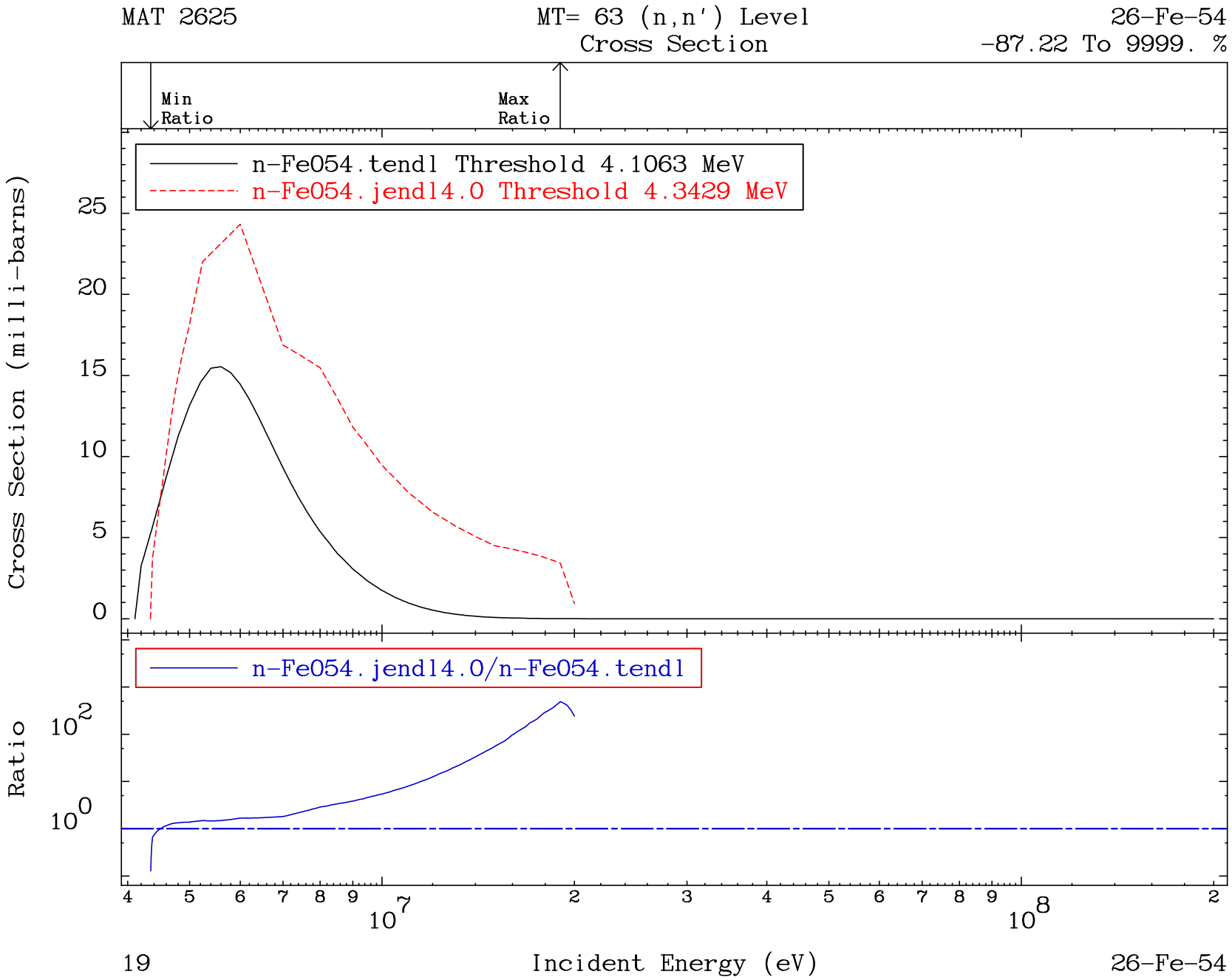

MAT 2625
MT= 58 (n,n') Level
Cross Section
26-Fe-54
-47.79 To 9999. %
Min
Ratio
Max
Ratio
n-Fe054.tendl Threshold 3.4074 MeV
n-Fe054.jendl4.0 Threshold 3.4074 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^2
10^1
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
14
Incident Energy (eV)
26-Fe-54

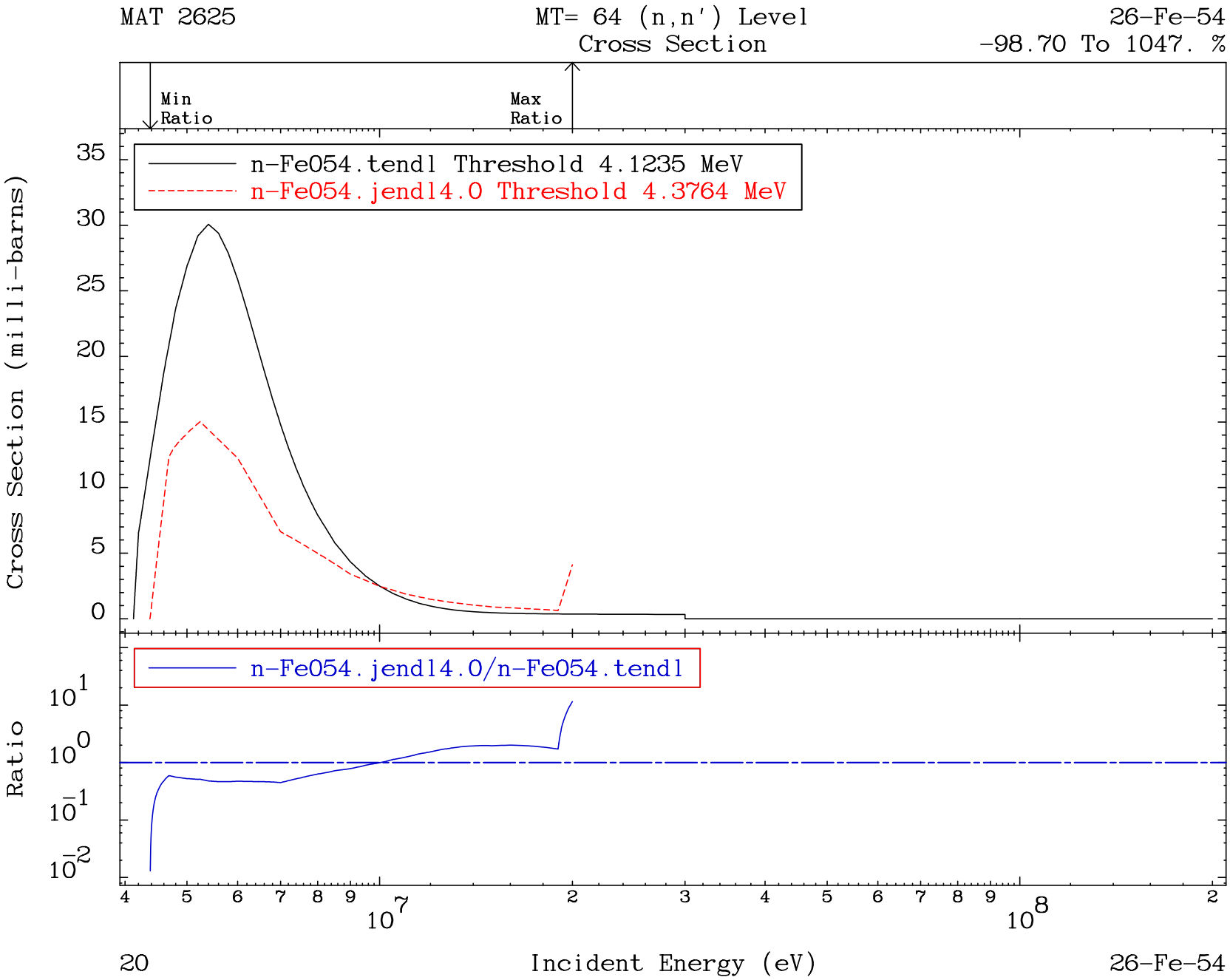

MAT 2625
MT= 59 (n,n') Level
Cross Section
26-Fe-54
-98.29 To 5403. %
Min
Ratio
Max
Ratio
n-Fe054.tendl Threshold 3.5017 MeV
n-Fe054.jendl4.0 Threshold 3.9055 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^2
10^0
10^-2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
15
Incident Energy (eV)
26-Fe-54

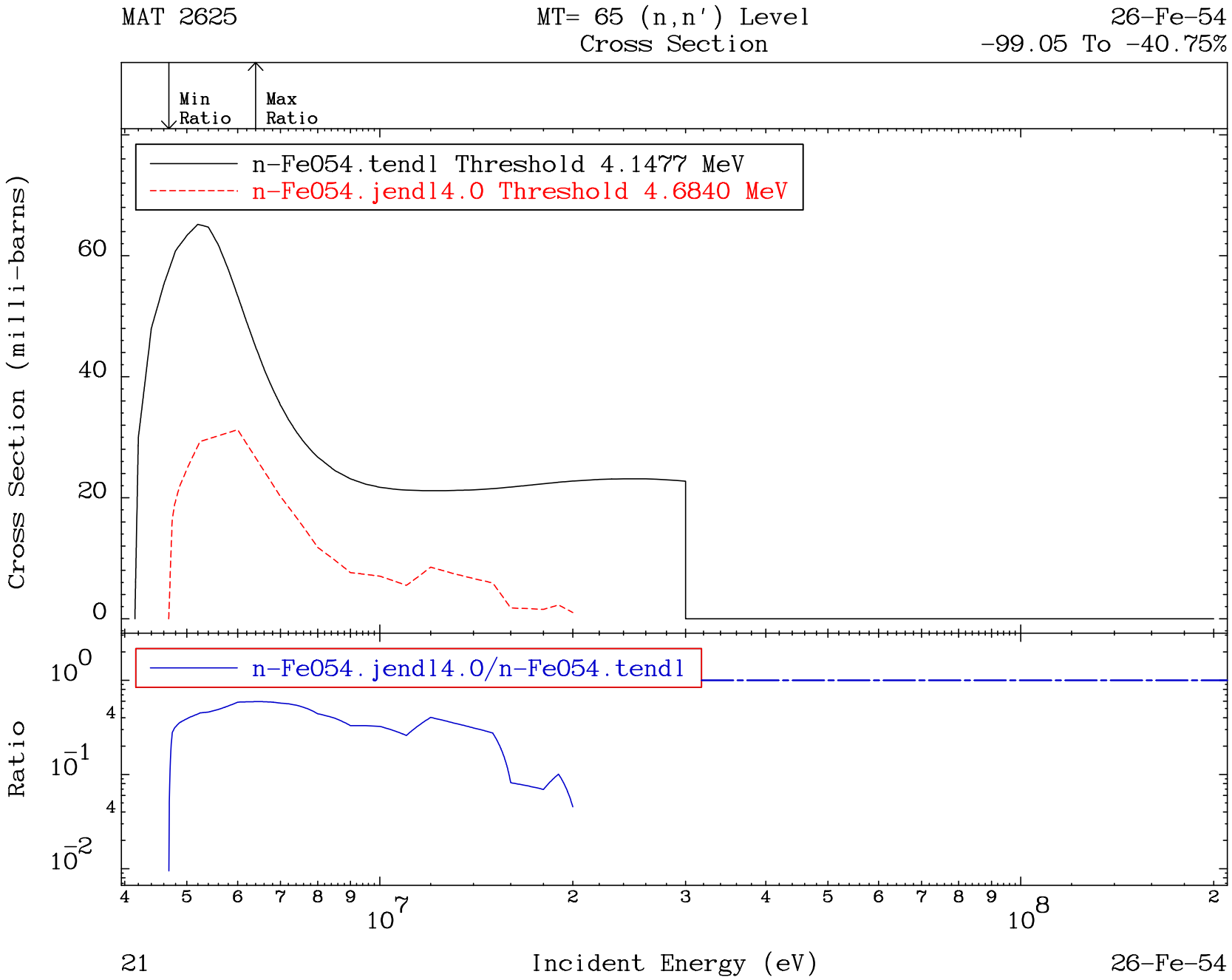

MAT 2625
MT= 60 (n,n') Level
Cross Section
26-Fe-54
-93.94 To 921.4 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 3.8647 MeV
n-Fe054.jendl4.0 Threshold 4.1084 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^1
10^0
10^-1
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
16
Incident Energy (eV)
26-Fe-54

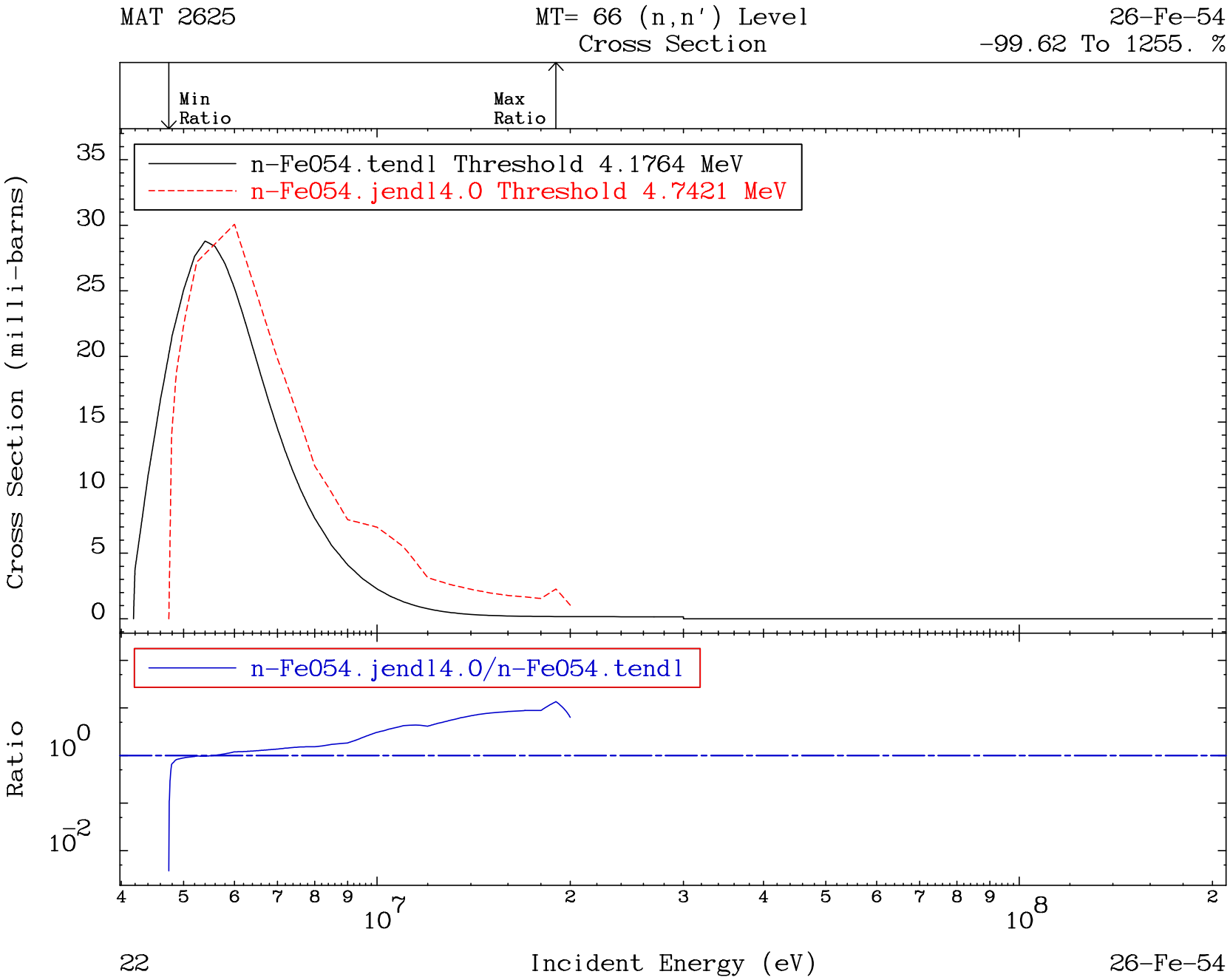

MAT 2625
MT= 61 (n,n') Level
Cross Section
26-Fe-54
-95.18 To 11.88 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 3.9049 MeV
n-Fe054.jendl4.0 Threshold 4.1229 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^0
10^-1
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
17
Incident Energy (eV)
26-Fe-54

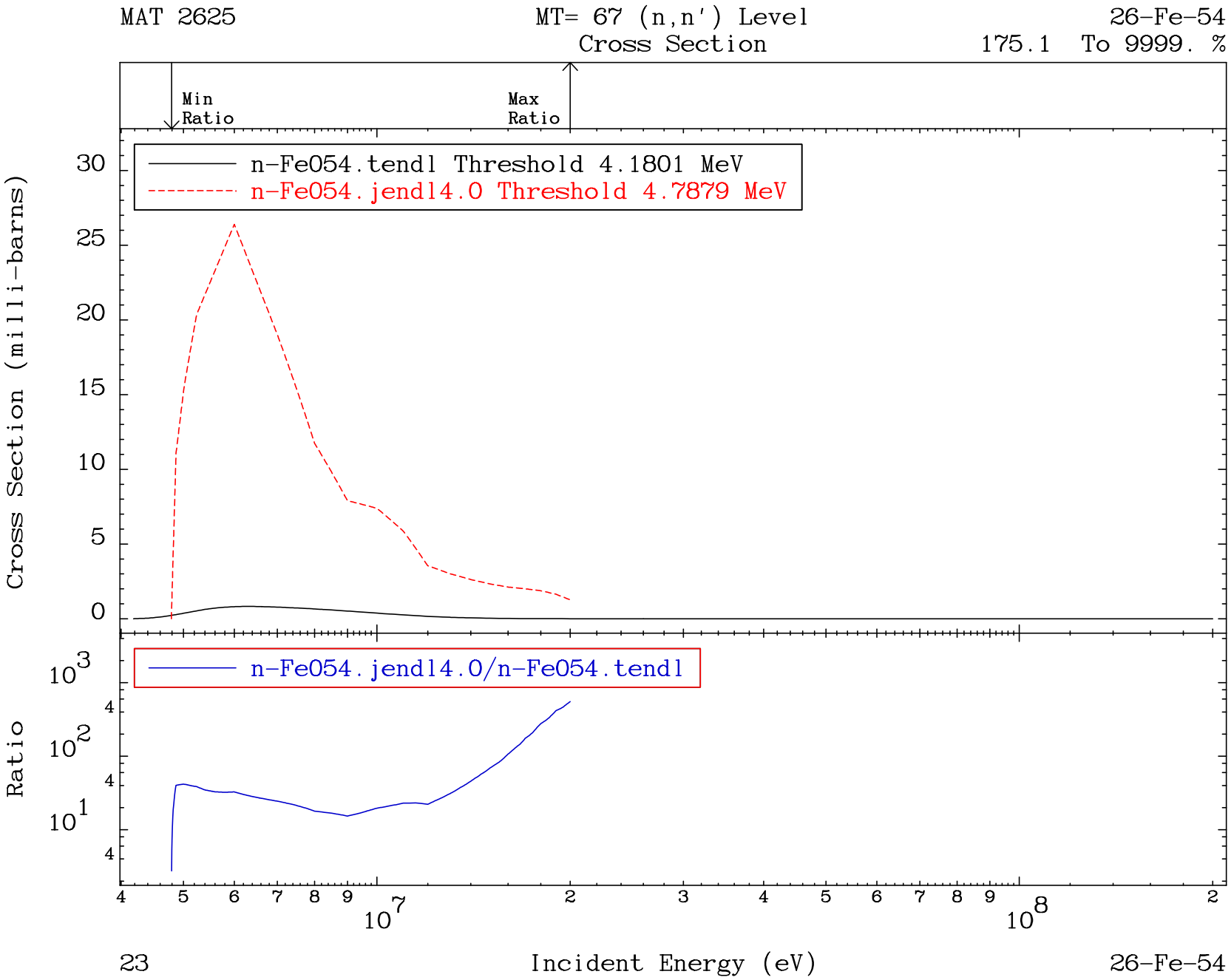

MAT 2625
MT= 62 (n,n') Level
Cross Section
26-Fe-54
-99.50 To 718.0 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 3.9128 MeV
n-Fe054.jendl4.0 Threshold 4.1482 MeV
Cross Section (milli-barns)
60
40
20
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^1
10^0
10^-1
10^-2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
26-Fe-54

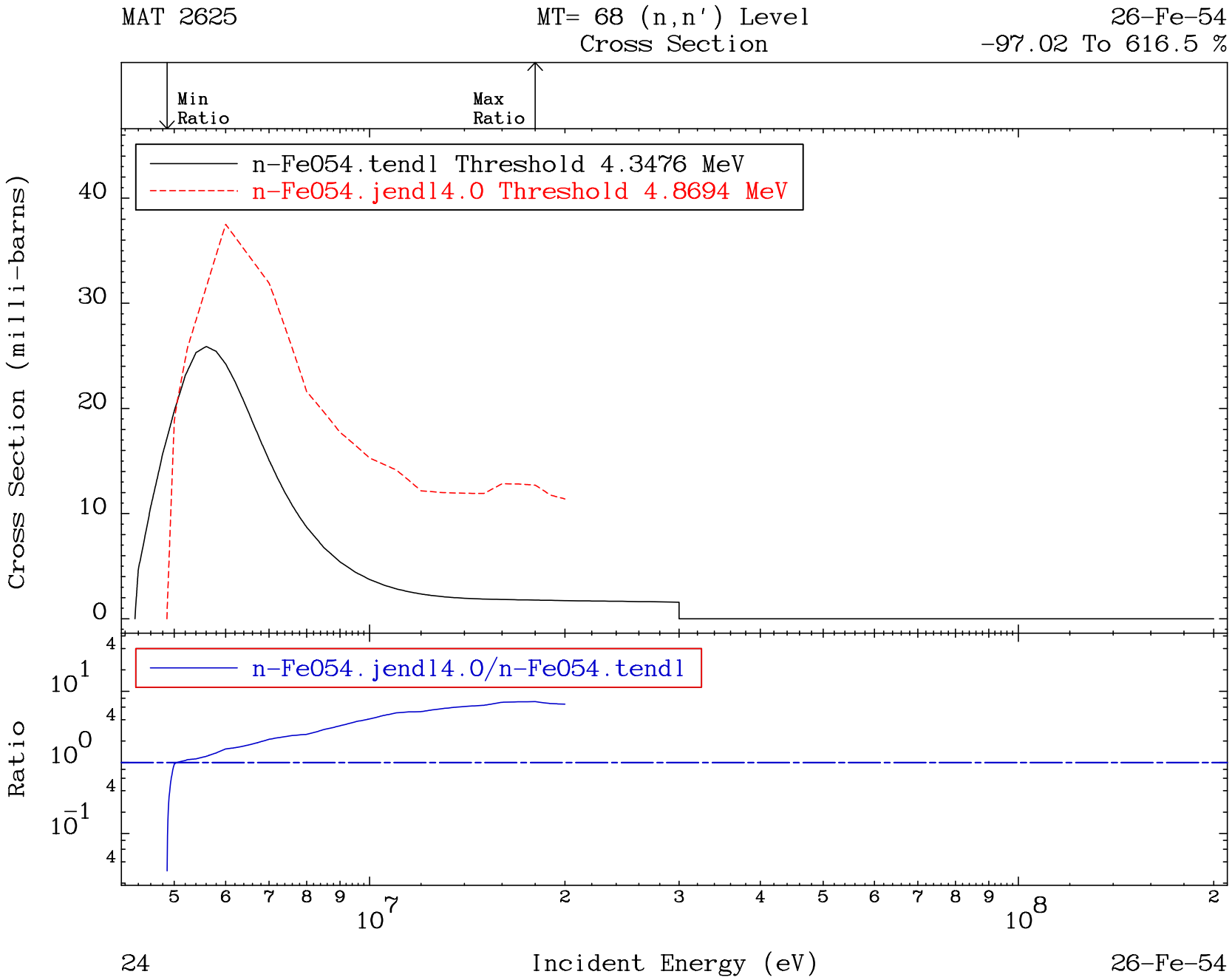

MAT 2625
MT= 63 (n,n') Level
Cross Section
26-Fe-54
-87.22 To 9999. %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 4.1063 MeV
n-Fe054.jendl4.0 Threshold 4.3429 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^2
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
26-Fe-54

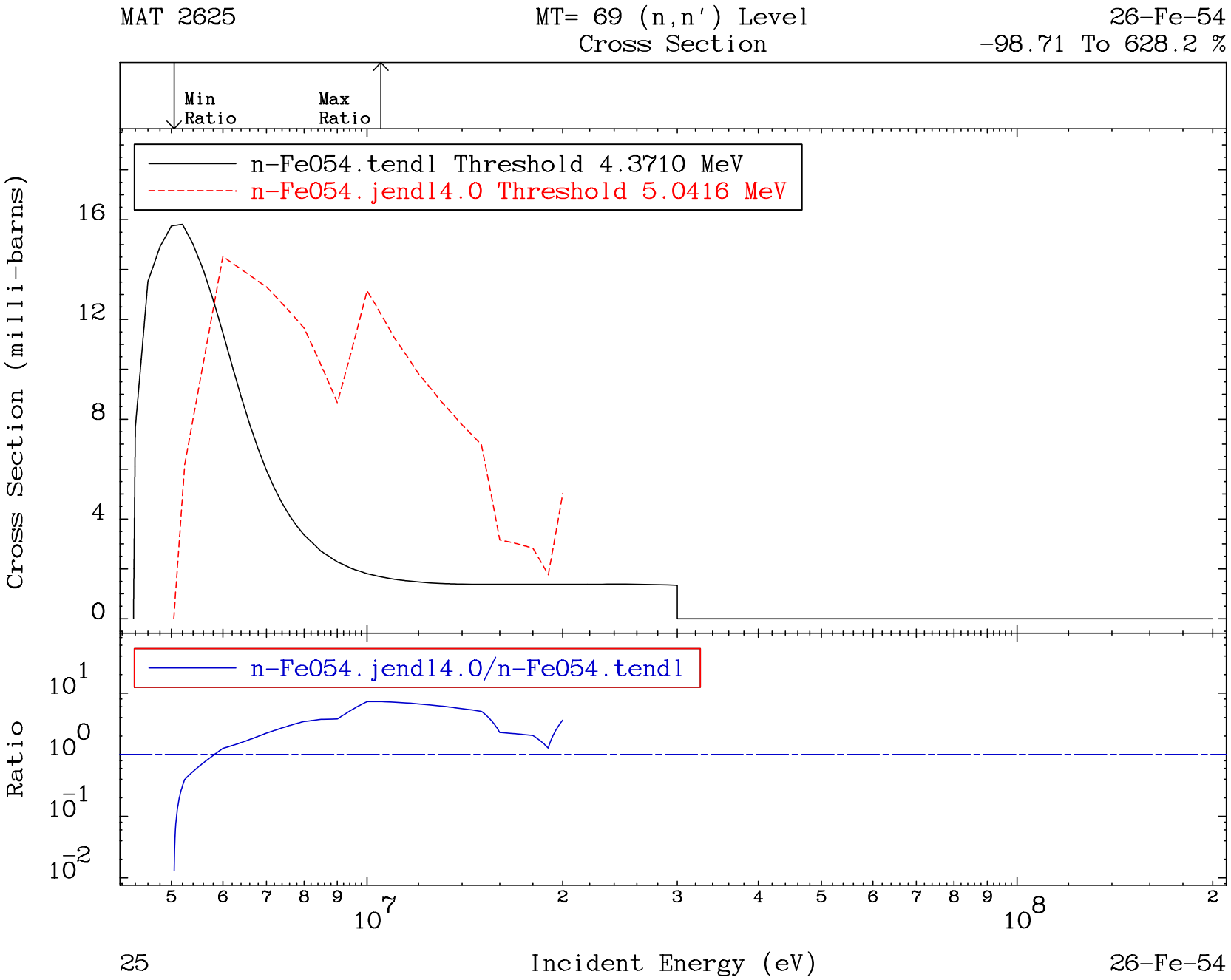

MAT 2625
MT= 64 (n,n') Level
Cross Section
26-Fe-54
-98.70 To 1047. %
Min
Ratio
Max
Ratio
n-Fe054.tendl Threshold 4.1235 MeV
n-Fe054.jendl4.0 Threshold 4.3764 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^1
10^0
10^-1
10^-2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
26-Fe-54

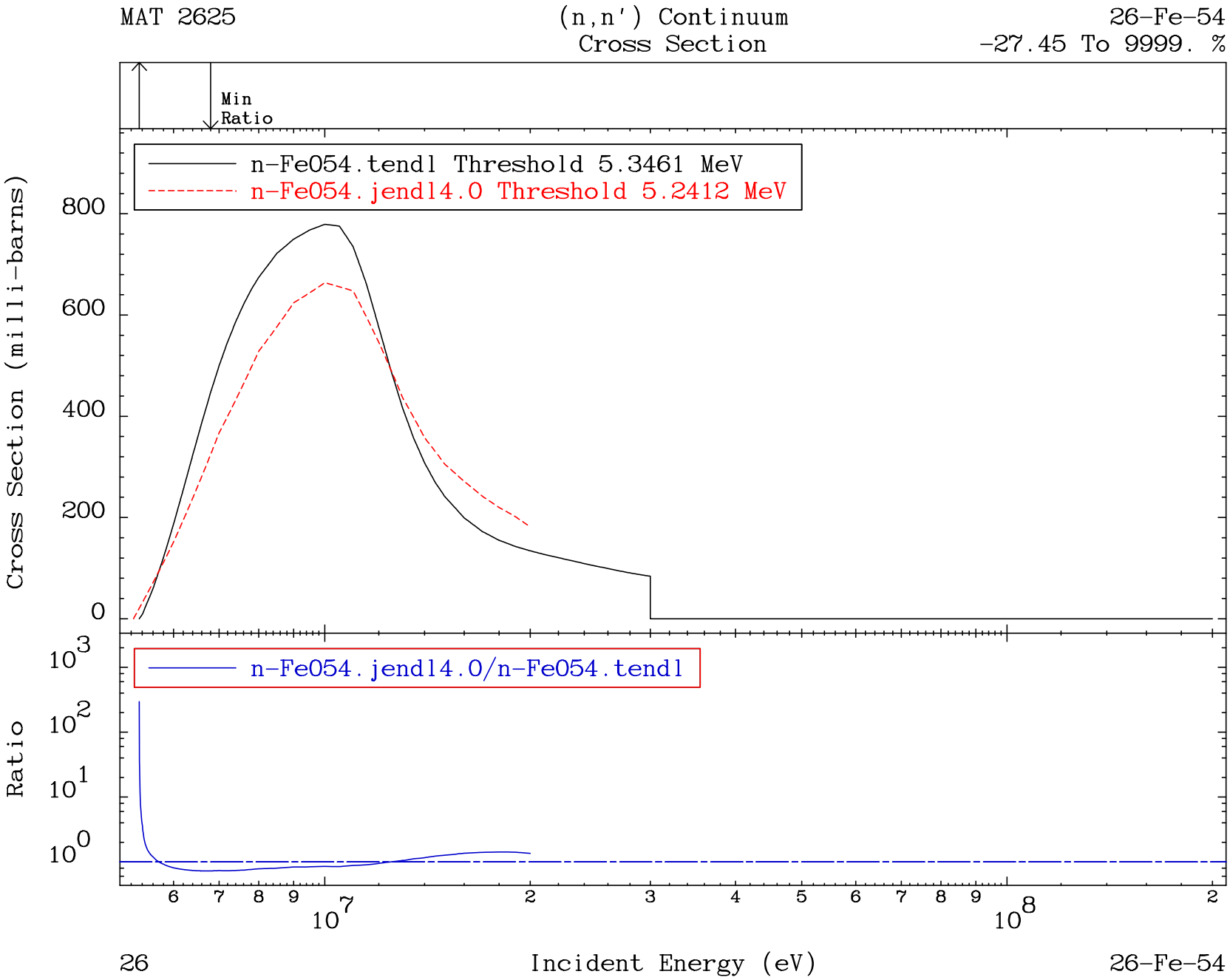

MAT 2625
MT= 65 (n,n') Level
Cross Section
26-Fe-54
-99.05 To -40.75%
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 4.1477 MeV
n-Fe054.jendl4.0 Threshold 4.6840 MeV
Cross Section (milli-barns)
60
40
20
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^0
4
10^-1
4
10^-2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
26-Fe-54

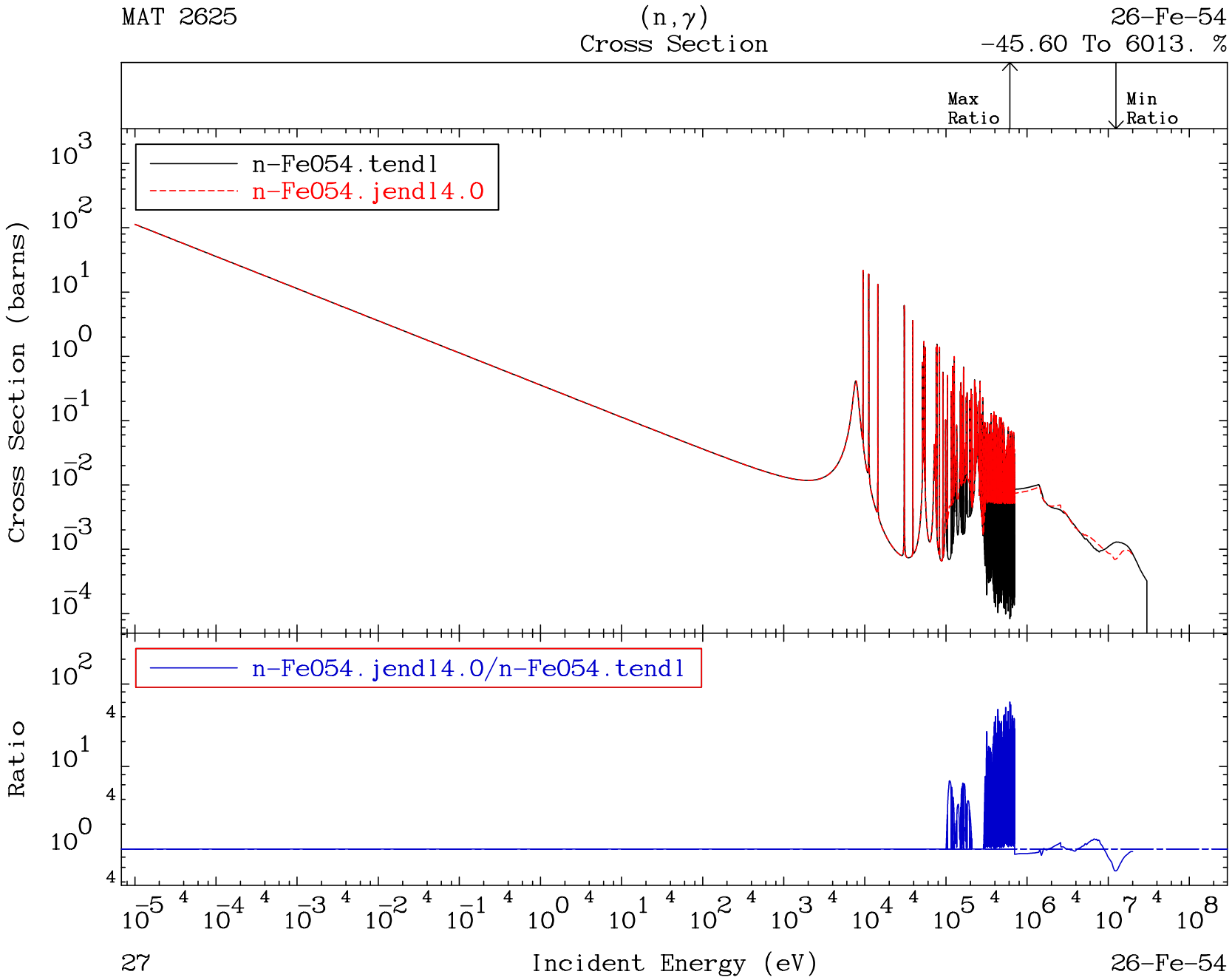

MAT 2625
MT= 66 (n,n') Level
Cross Section
26-Fe-54
-99.62 To 1255. %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 4.1764 MeV
n-Fe054.jendl4.0 Threshold 4.7421 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^0
10^-2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
26-Fe-54

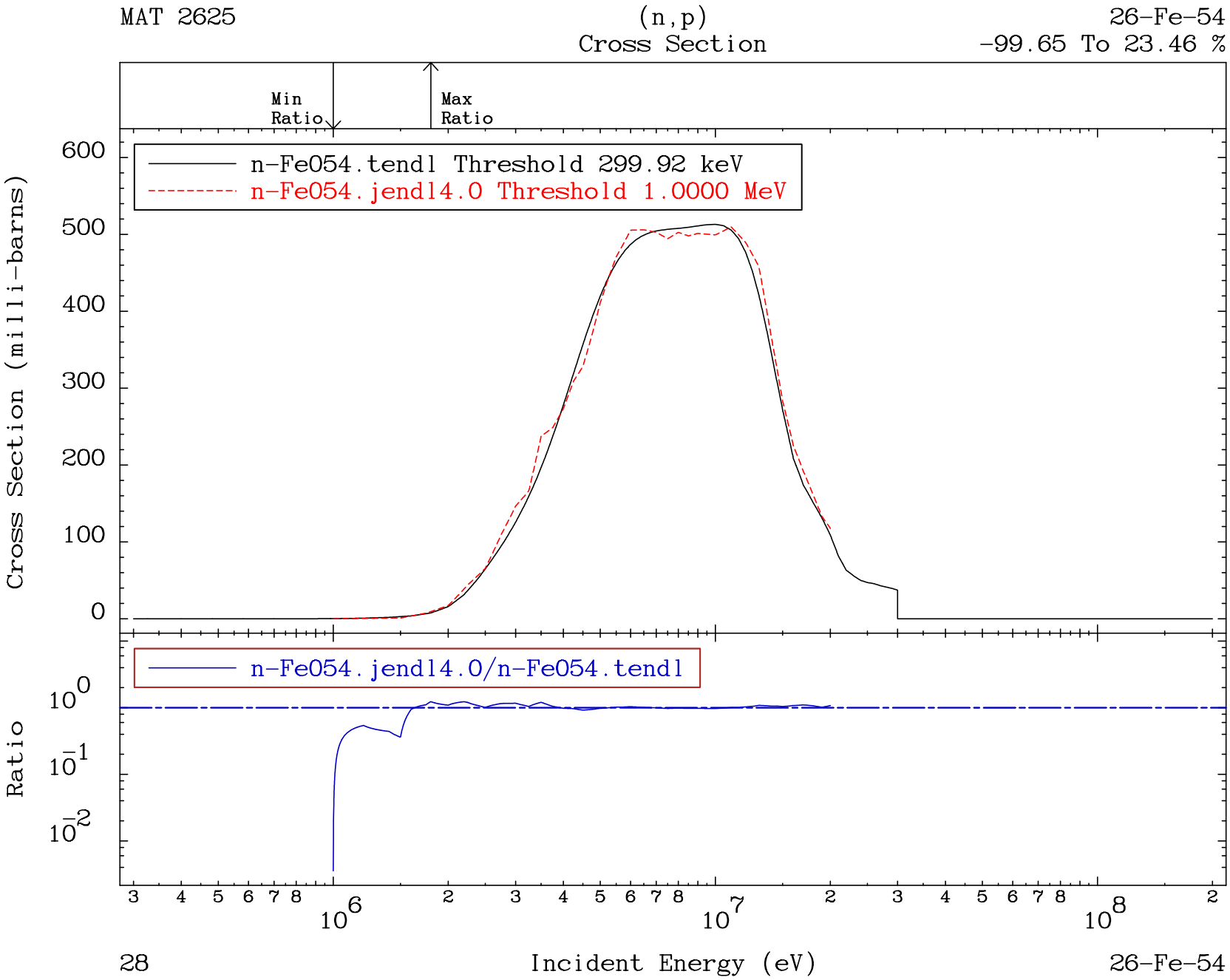

MAT 2625
MT= 67 (n,n') Level
Cross Section
26-Fe-54
175.1 To 9999. %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 4.1801 MeV
n-Fe054.jendl4.0 Threshold 4.7879 MeV
Cross Section (milli-barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
23
26-Fe-54

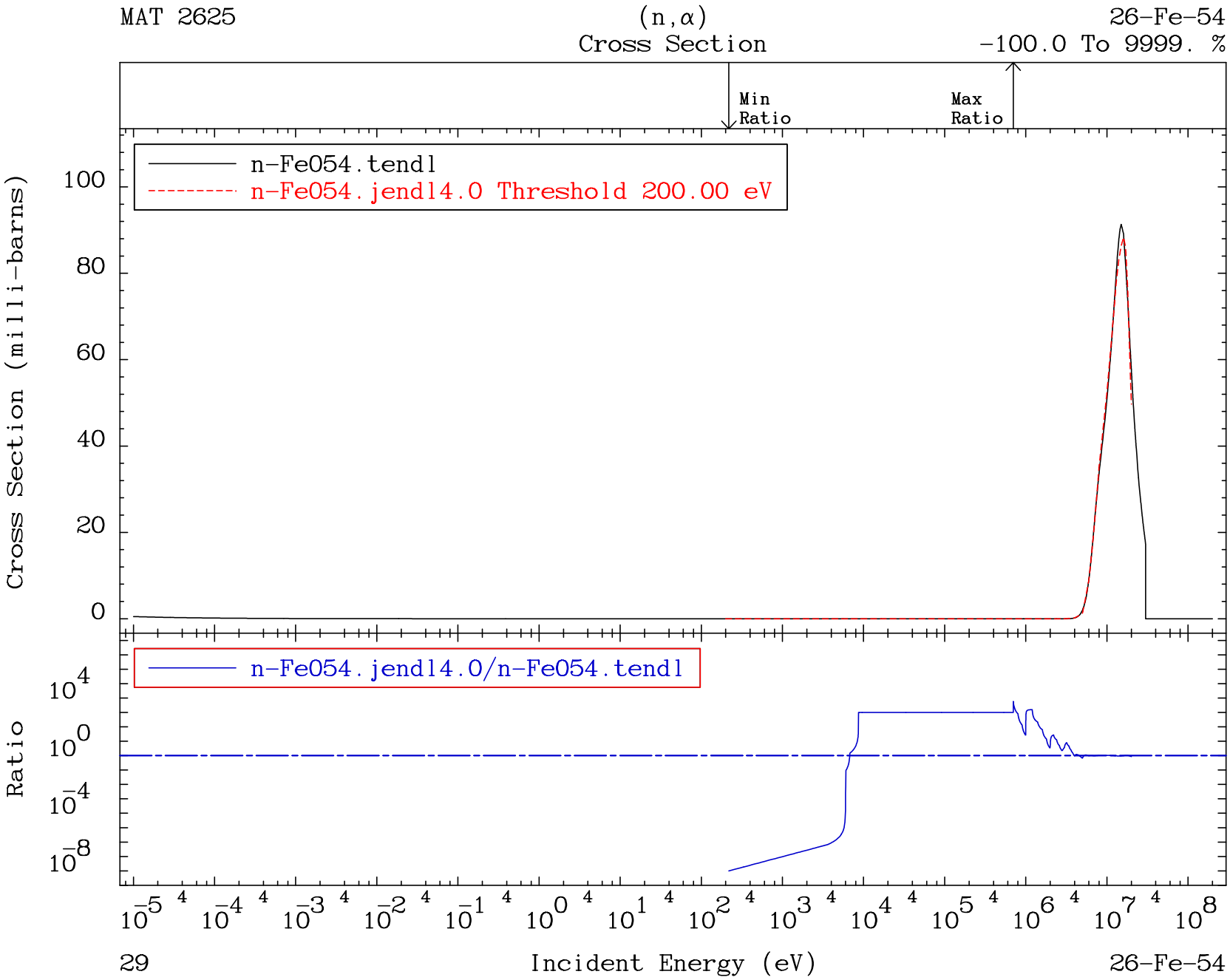

MAT 2625
MT= 68 (n,n') Level
Cross Section
26-Fe-54
-97.02 To 616.5 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 4.3476 MeV
n-Fe054.jendl4.0 Threshold 4.8694 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^1
10^0
10^-1
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
26-Fe-54

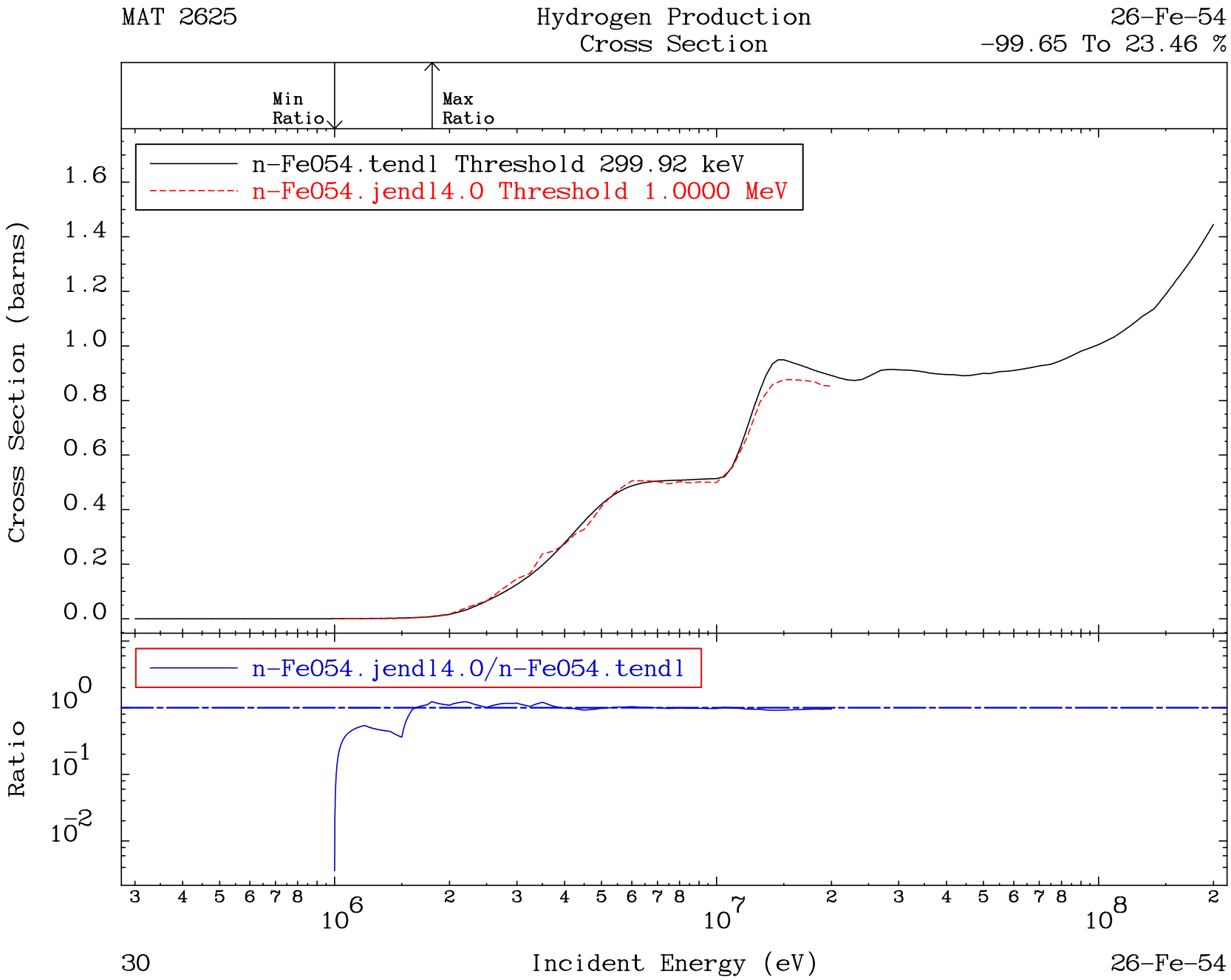

MAT 2625
MT= 69 (n,n') Level
Cross Section
26-Fe-54
-98.71 To 628.2 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 4.3710 MeV
n-Fe054.jendl4.0 Threshold 5.0416 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^1
10^0
10^-1
10^-2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
26-Fe-54

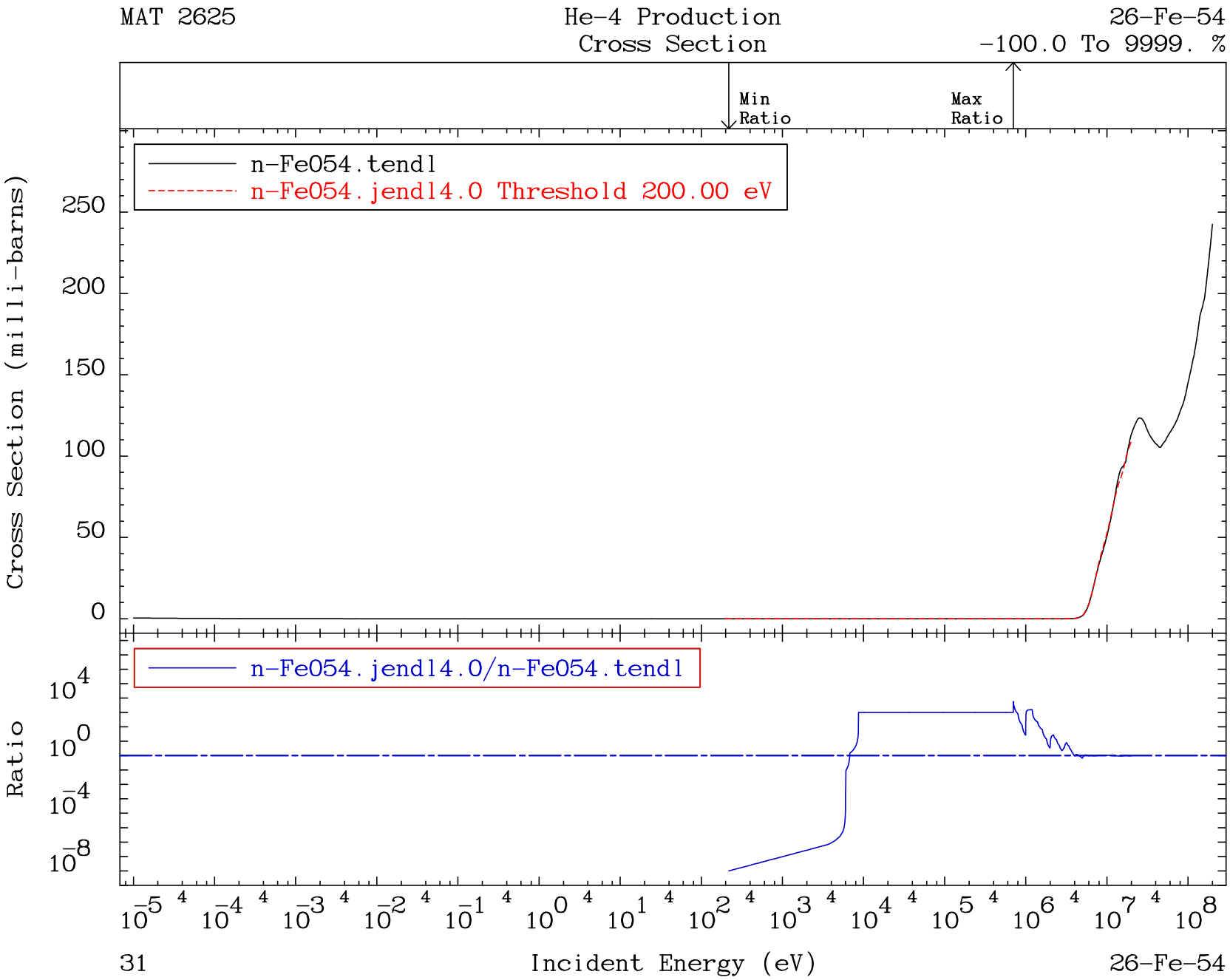

MAT 2625
(n,n') Continuum
Cross Section
26-Fe-54
-27.45 To 9999. %
Min
Ratio
n-Fe054.tendl Threshold 5.3461 MeV
n-Fe054.jendl4.0 Threshold 5.2412 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^3
10^2
10^1
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
26-Fe-54

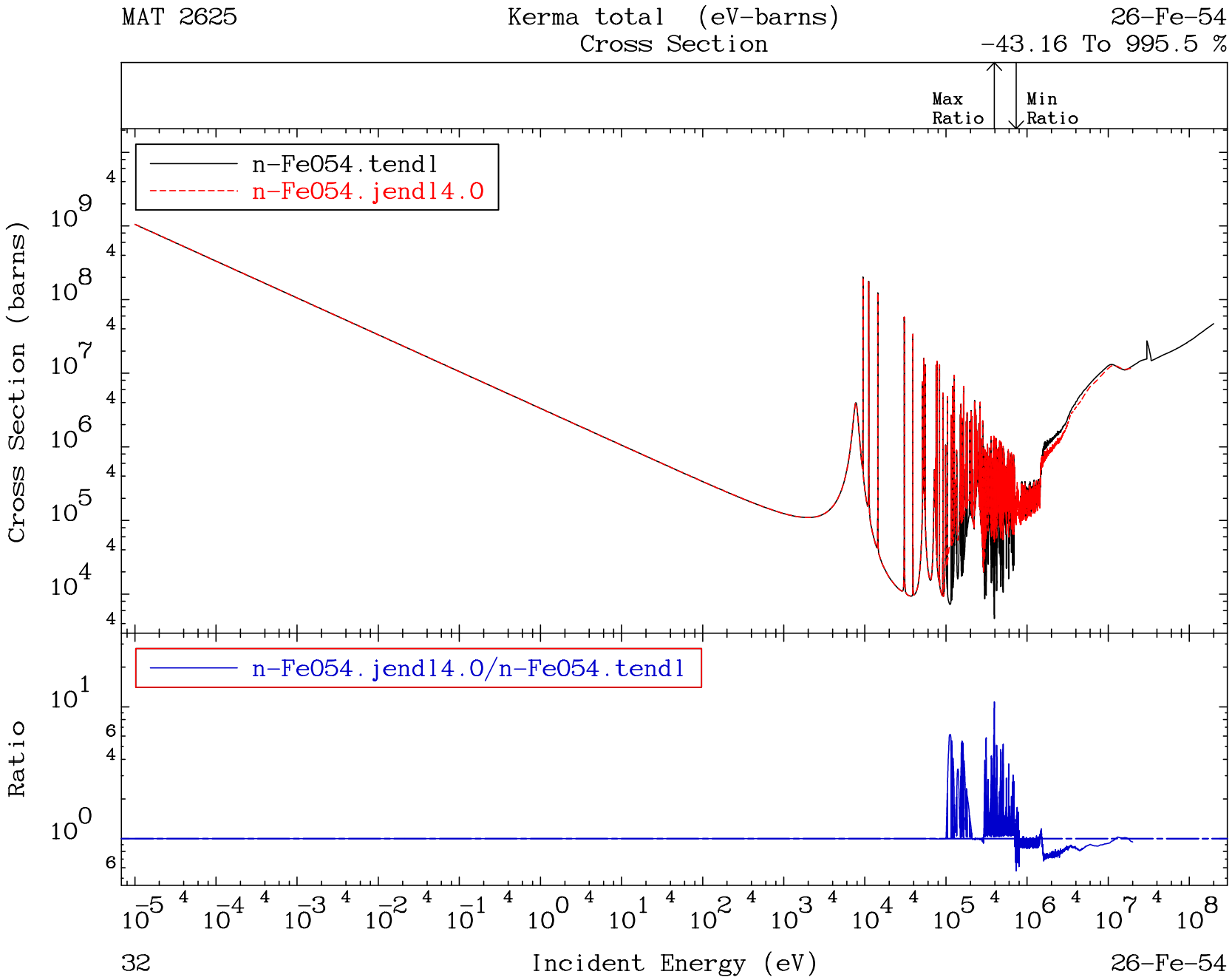

MAT 2625
(n,γ)
Cross Section
26-Fe-54
-45.60 To 6013. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
27
26-Fe-54

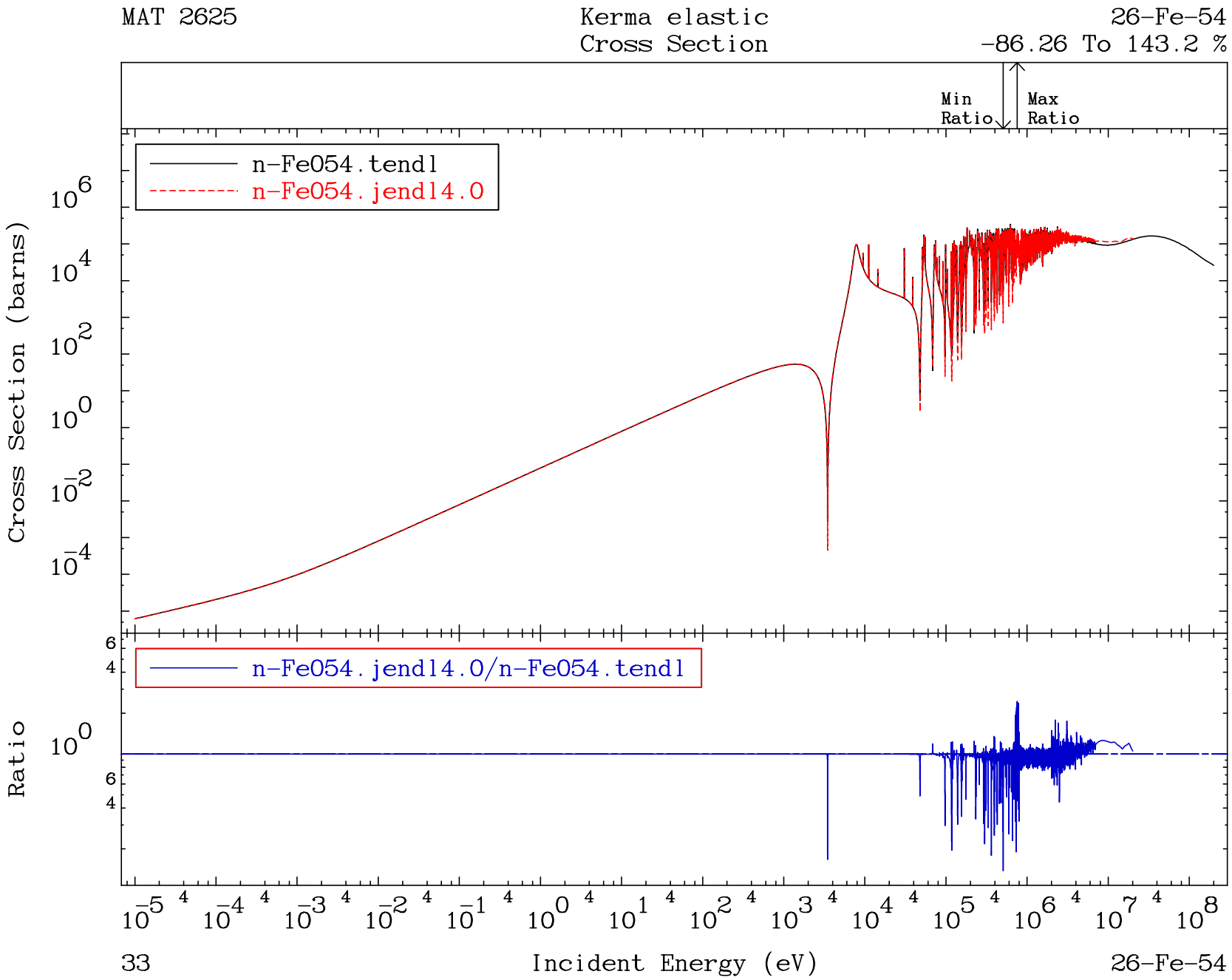

MAT 2625
(n,p)
Cross Section
26-Fe-54
-99.65 To 23.46 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 299.92 keV
n-Fe054.jendl4.0 Threshold 1.0000 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^0
10^-1
10^-2
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
26-Fe-54

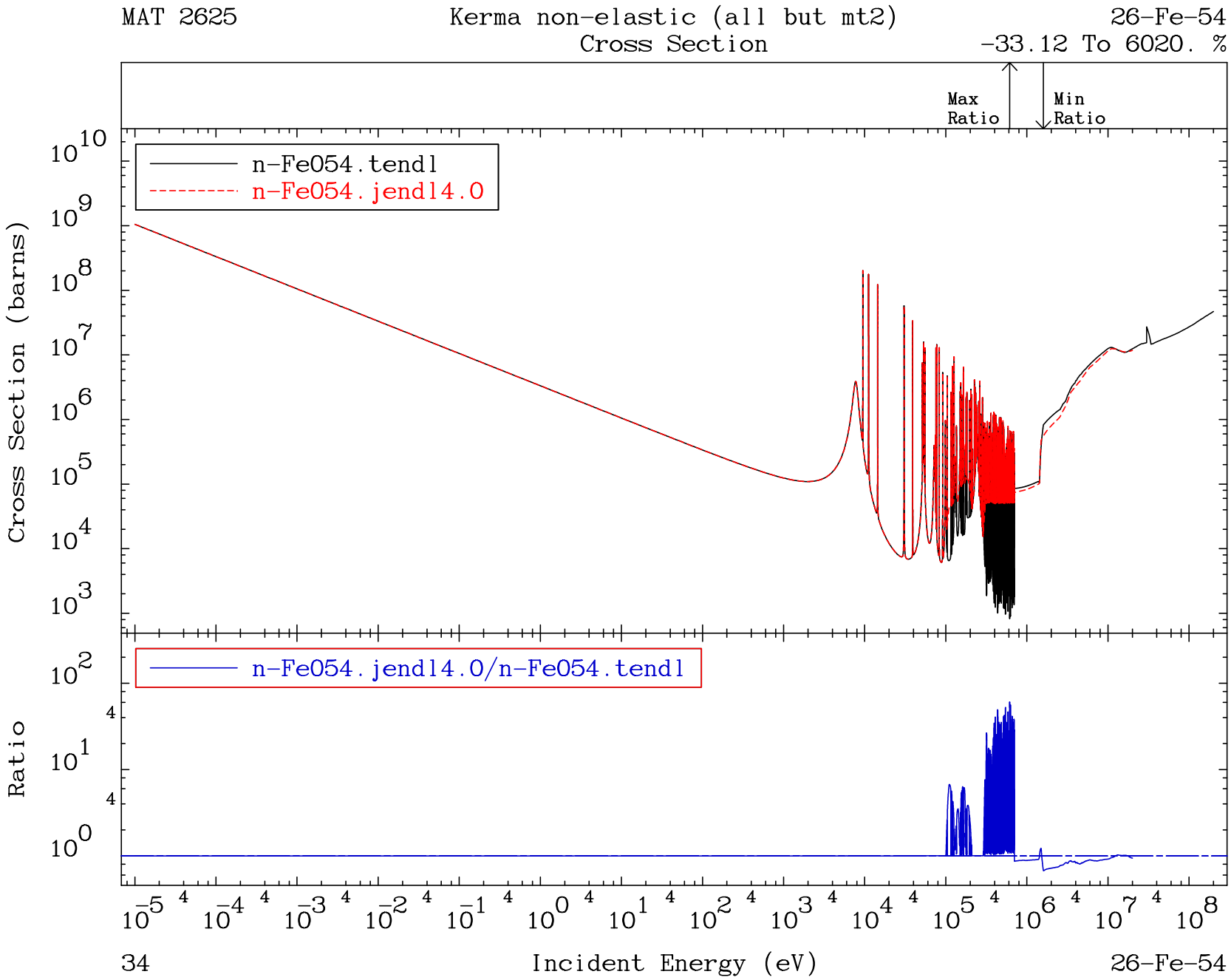

MAT 2625
(n,α)
Cross Section
26-Fe-54
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Fe054.tendl
n-Fe054.jendl4.0 Threshold 200.00 eV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^4
10^0
10^-4
10^-8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
29
Incident Energy (eV)
26-Fe-54

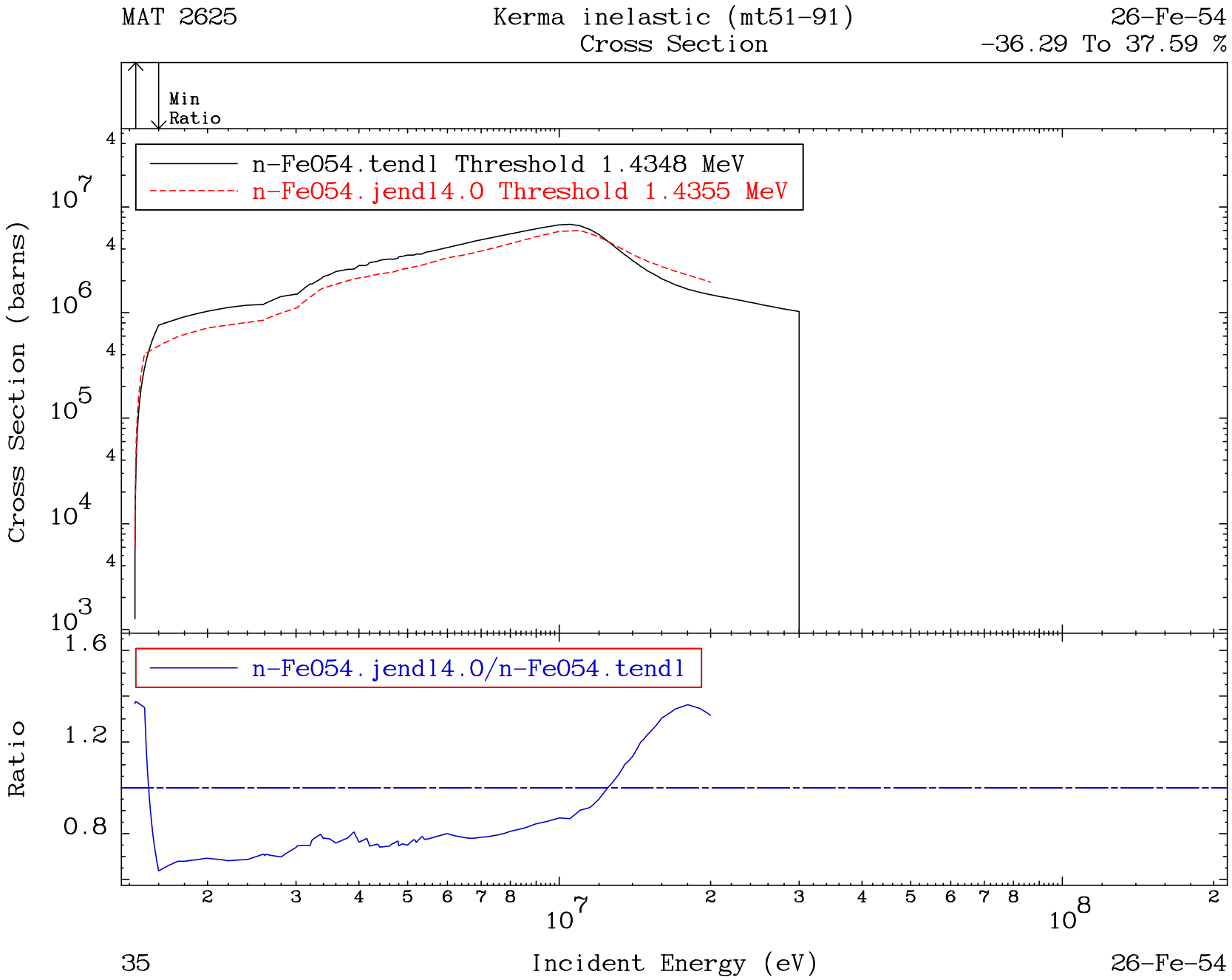

MAT 2625
Hydrogen Production
Cross Section
26-Fe-54
-99.65 To 23.46 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 299.92 keV
n-Fe054.jendl4.0 Threshold 1.0000 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^0
10^-1
10^-2
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
26-Fe-54

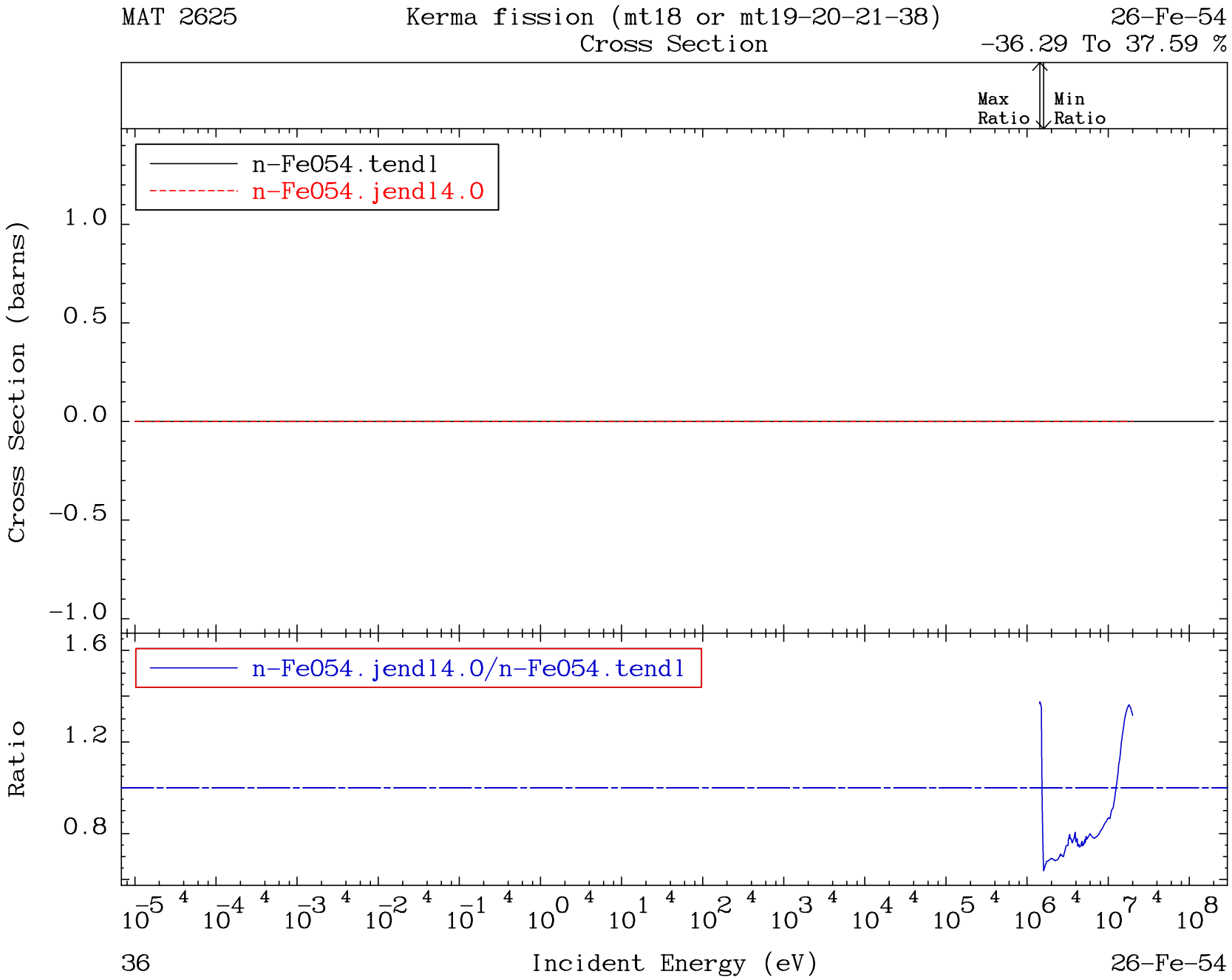

MAT 2625
He-4 Production
Cross Section
26-Fe-54
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Fe054.tendl
n-Fe054.jendl4.0 Threshold 200.00 eV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^4
10^0
10^-4
10^-8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
31
Incident Energy (eV)
26-Fe-54

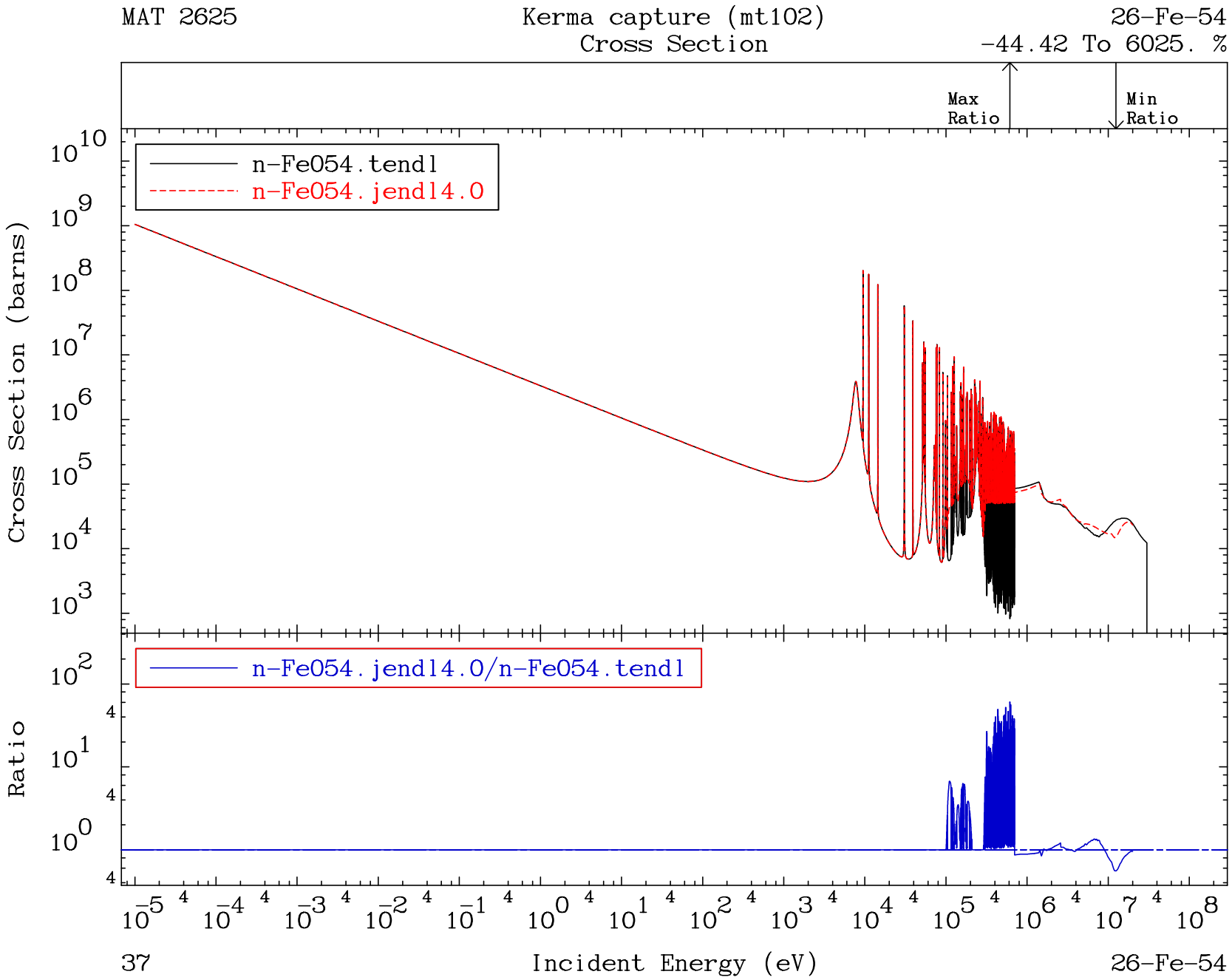

MAT 2625
Kerma total (eV-barns)
Cross Section
26-Fe-54
-43.16 To 995.5 %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
32
26-Fe-54

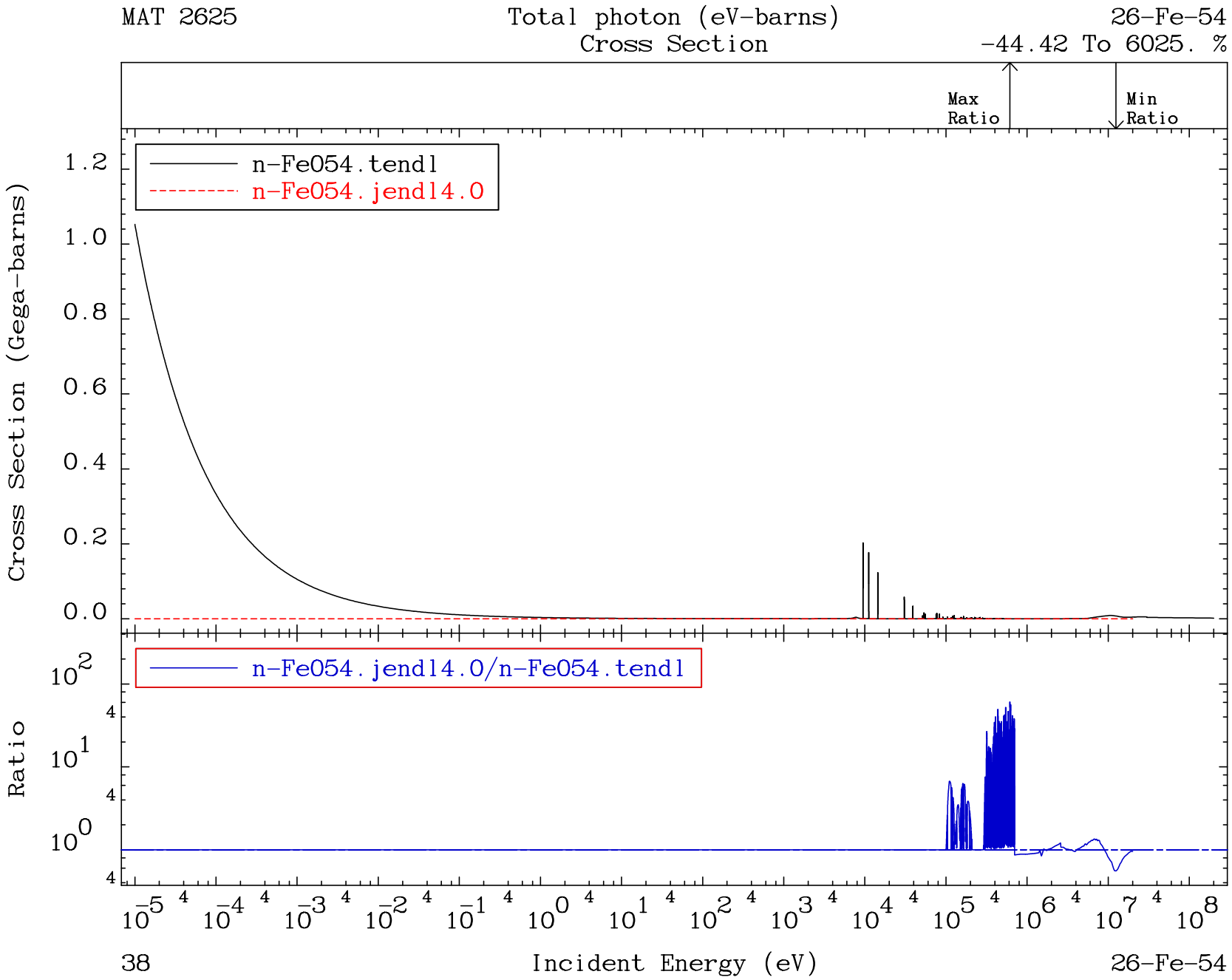

MAT 2625
Kerma elastic
Cross Section
26-Fe-54
-86.26 To 143.2 %
Min Ratio
Max Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
33
26-Fe-54

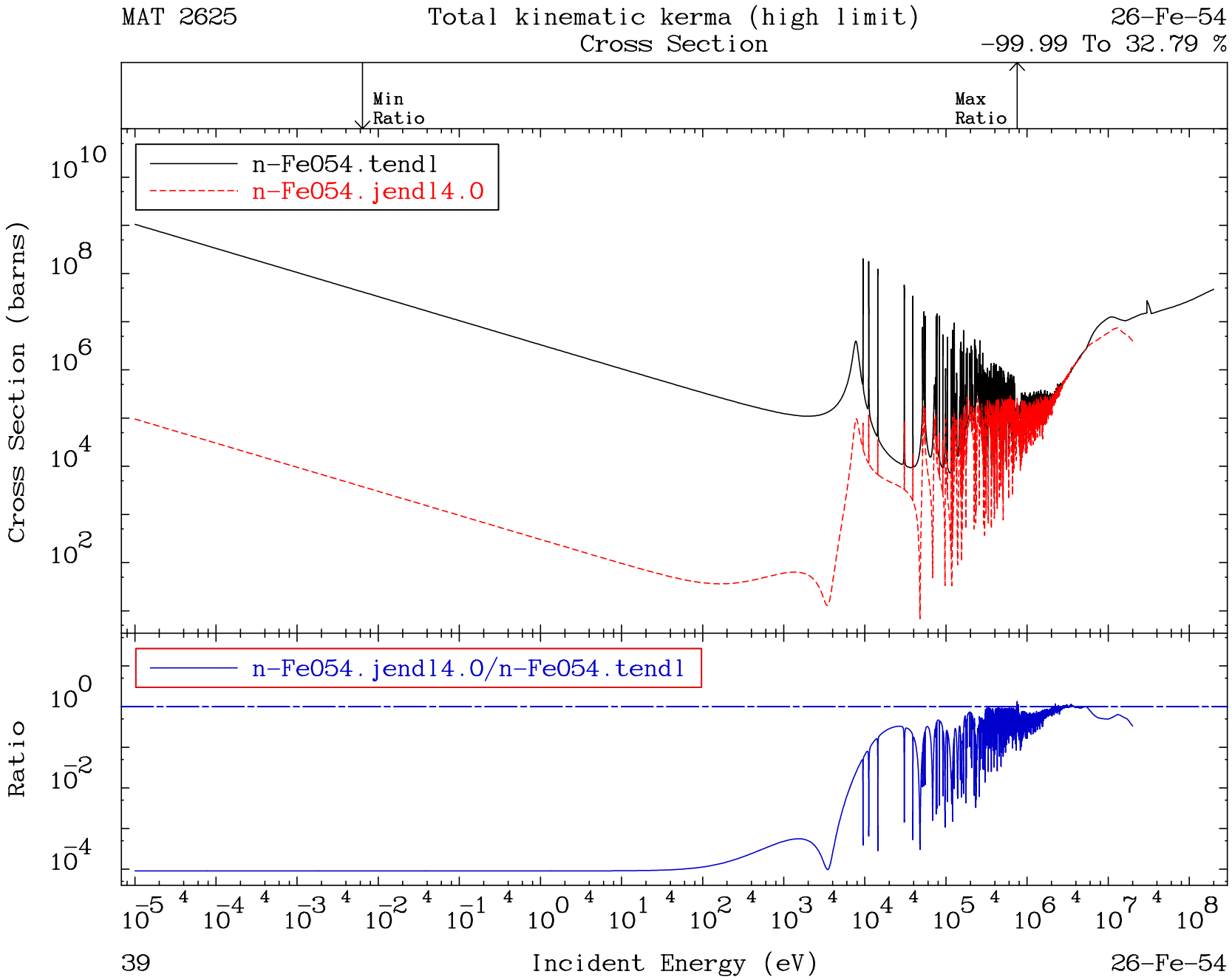

MAT 2625
Kerma non-elastic (all but mt2)
Cross Section
26-Fe-54
-33.12 To 6020. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
34
26-Fe-54

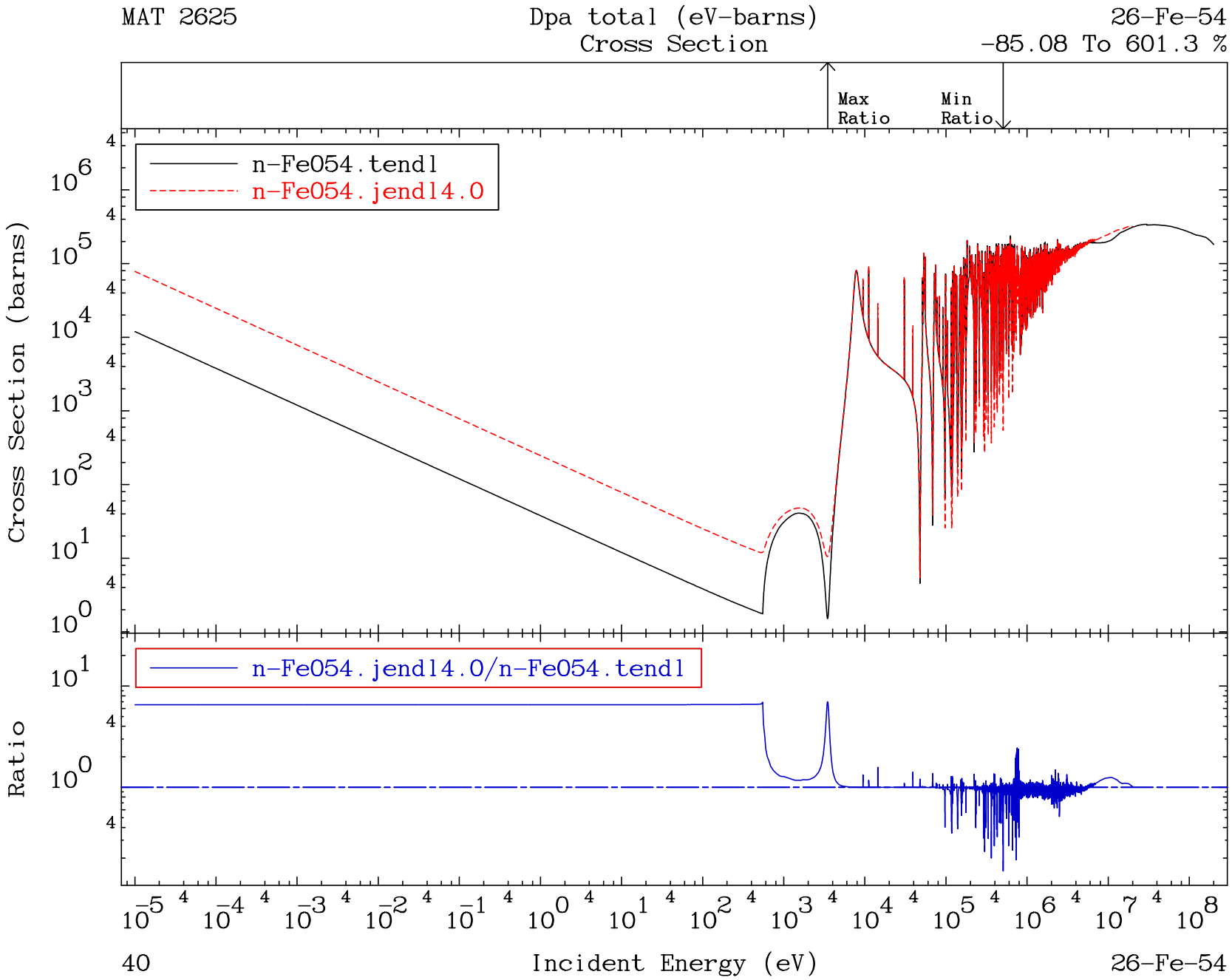

MAT 2625
Kerma inelastic (mt51-91)
Cross Section
26-Fe-54
-36.29 To 37.59 %
Min
Ratio
n-Fe054.tendl Threshold 1.4348 MeV
n-Fe054.jendl4.0 Threshold 1.4355 MeV
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
35
26-Fe-54

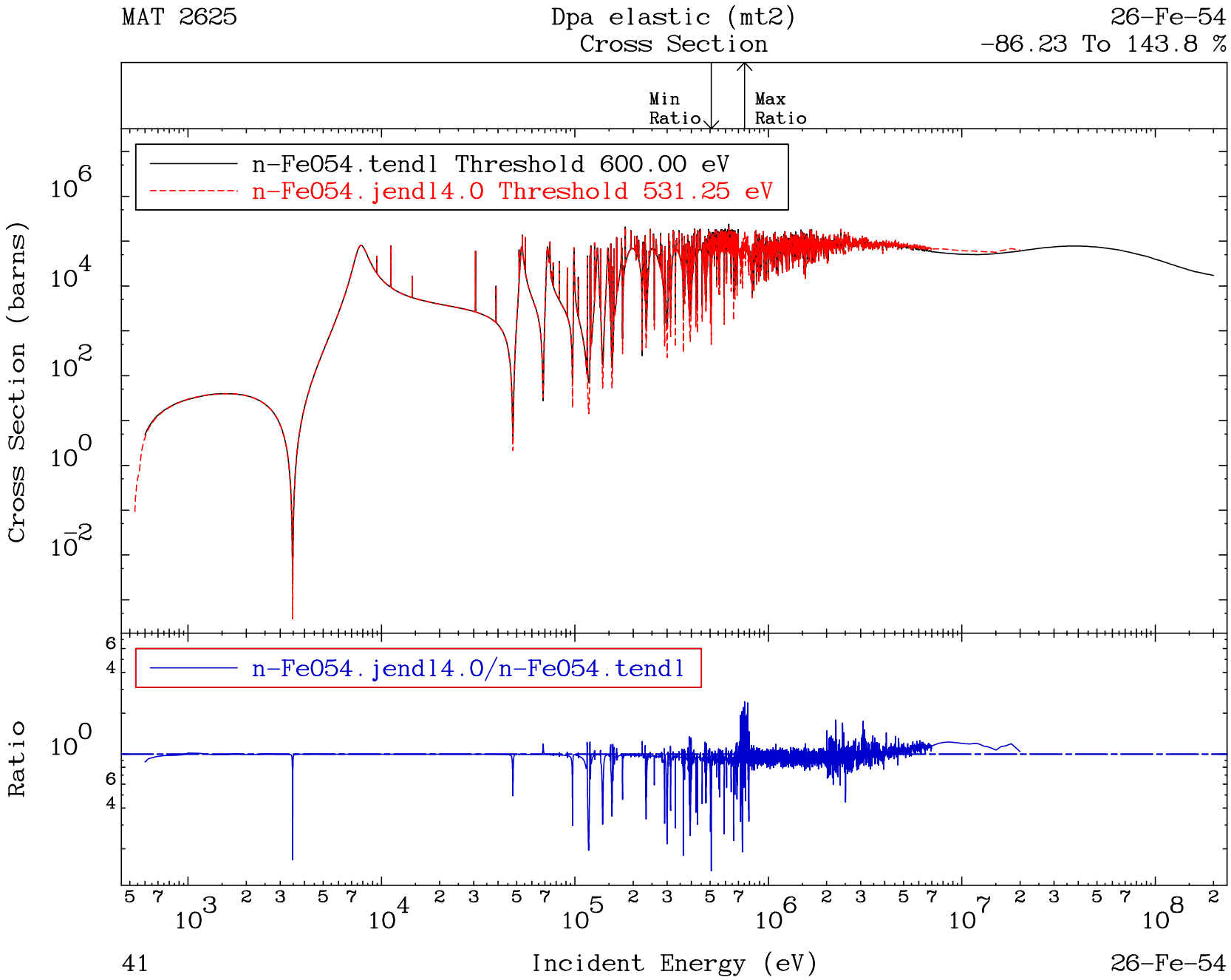

MAT 2625
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
26-Fe-54
-36.29 To 37.59 %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
1.6
1.2
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
36
Incident Energy (eV)
26-Fe-54

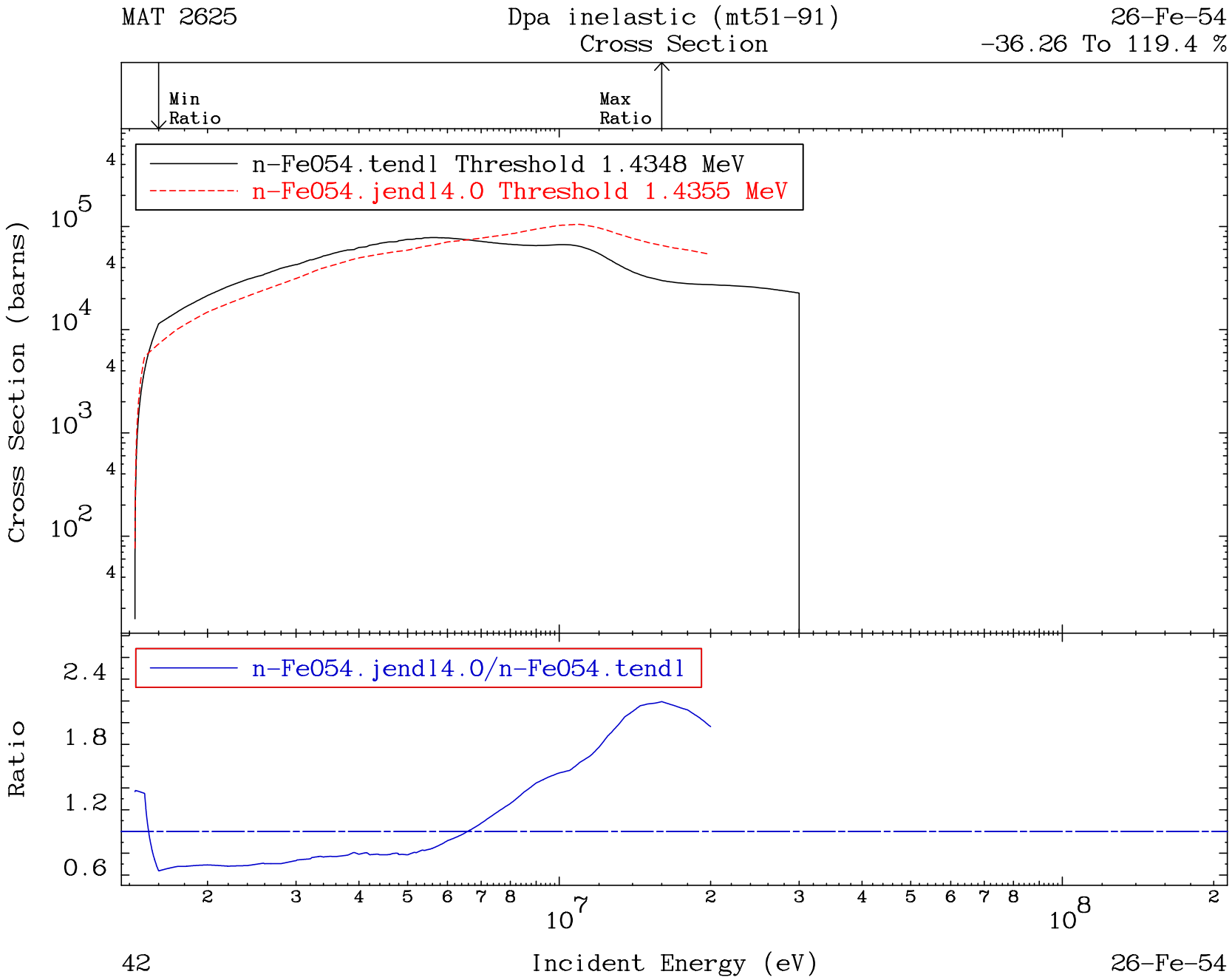

MAT 2625
Kerma capture (mt102)
Cross Section
26-Fe-54
-44.42 To 6025. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
37
26-Fe-54

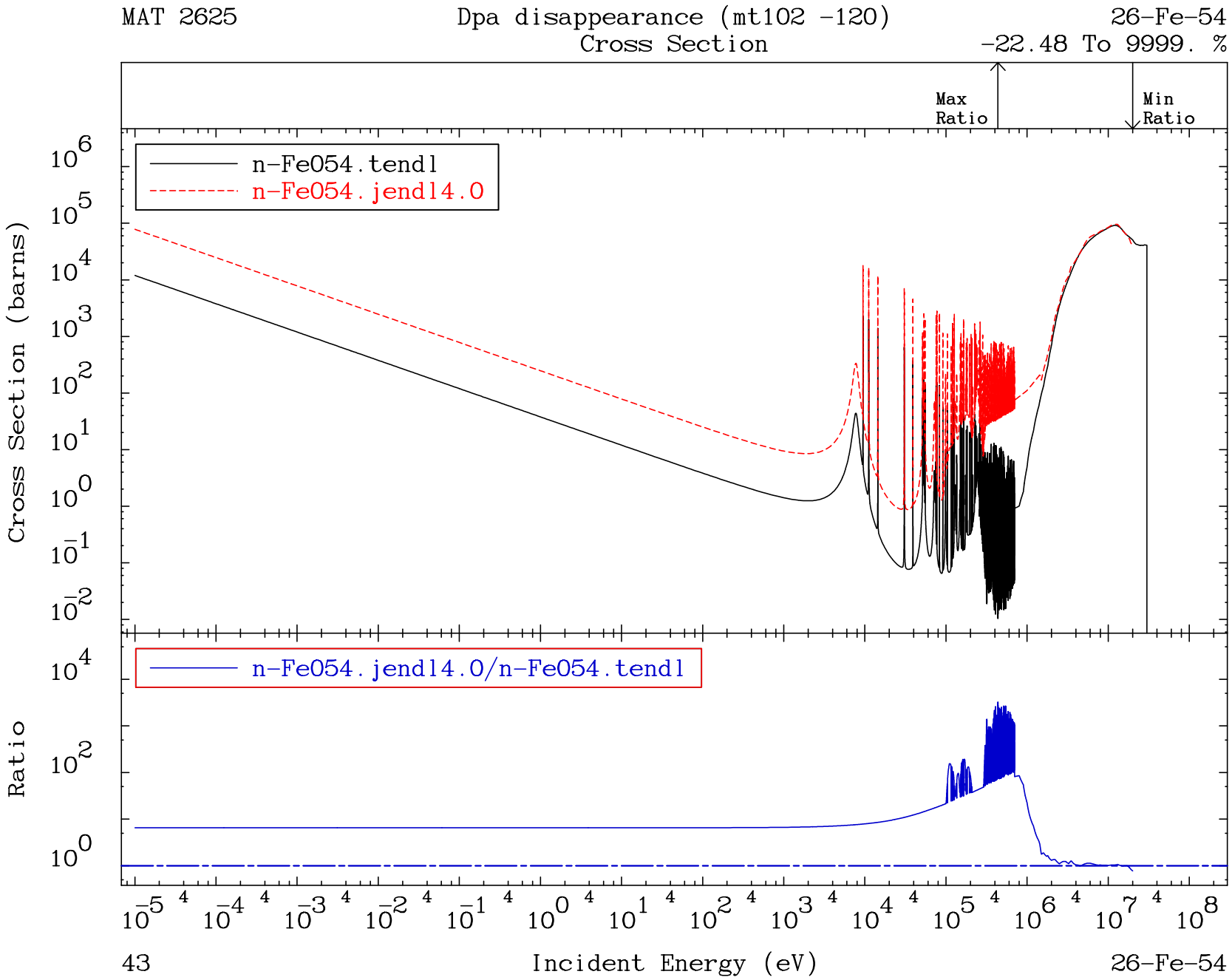

MAT 2625
Total photon (eV-barns)
Cross Section
26-Fe-54
-44.42 To 6025. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (Giga-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
10^2
10^1
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
38
Incident Energy (eV)
26-Fe-54


MAT 2625
Total kinematic kerma (high limit)
Cross Section
26-Fe-54
-99.99 To 32.79 %
Min Ratio
Max Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
39
26-Fe-54


MAT 2625
Dpa total (eV-barns)
Cross Section
26-Fe-54
-85.08 To 601.3 %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
40
26-Fe-54


MAT 2625
Dpa elastic (mt2)
Cross Section
26-Fe-54
-86.23 To 143.8 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 600.00 eV
n-Fe054.jendl4.0 Threshold 531.25 eV
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
41
26-Fe-54


MAT 2625
Dpa inelastic (mt51-91)
Cross Section
26-Fe-54
-36.26 To 119.4 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 1.4348 MeV
n-Fe054.jendl4.0 Threshold 1.4355 MeV
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
42
26-Fe-54


MAT 2625
Dpa disappearance (mt102 -120)
Cross Section
26-Fe-54
-22.48 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.jendl4.0
Cross Section (barns)
n-Fe054.jendl4.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
43
26-Fe-54