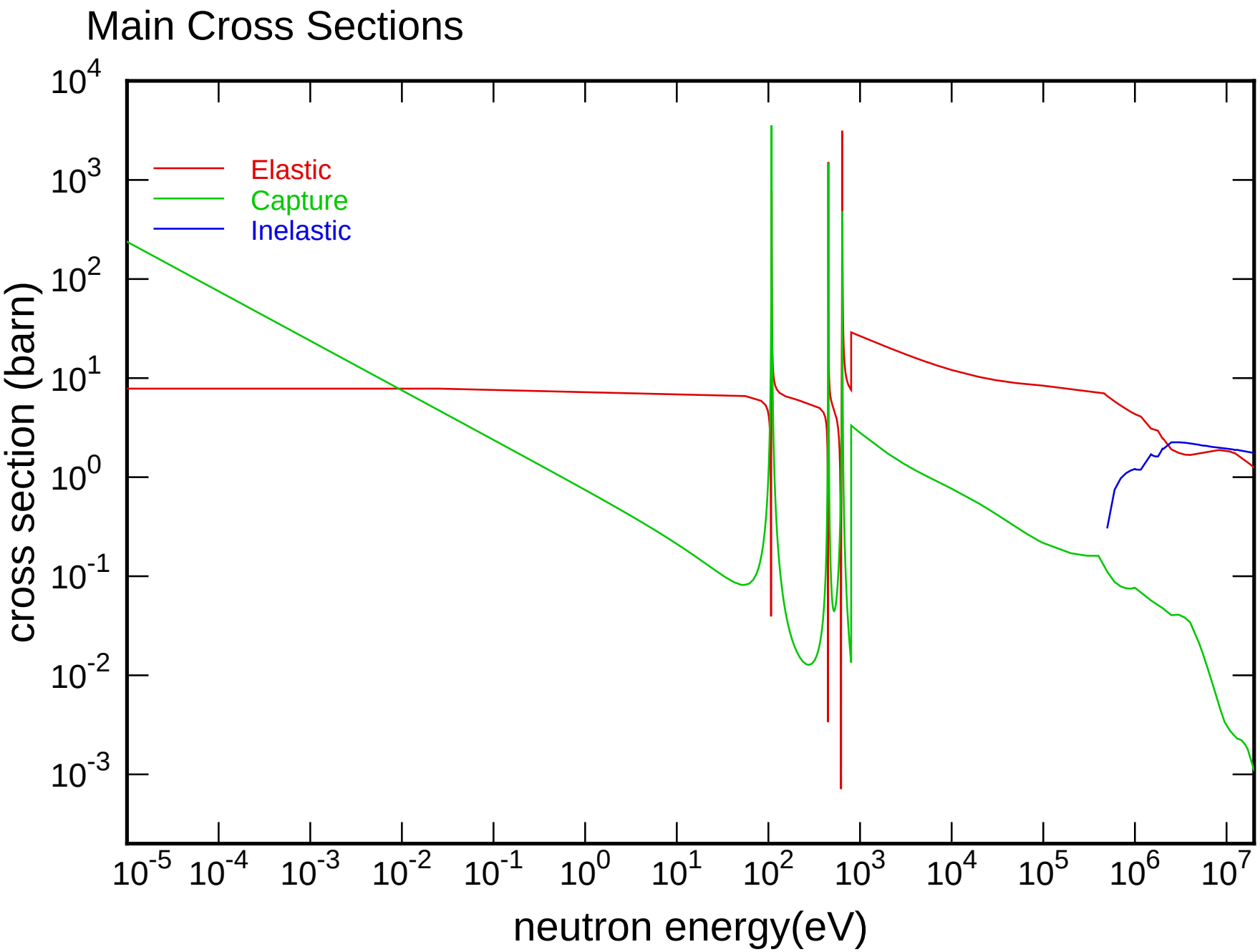
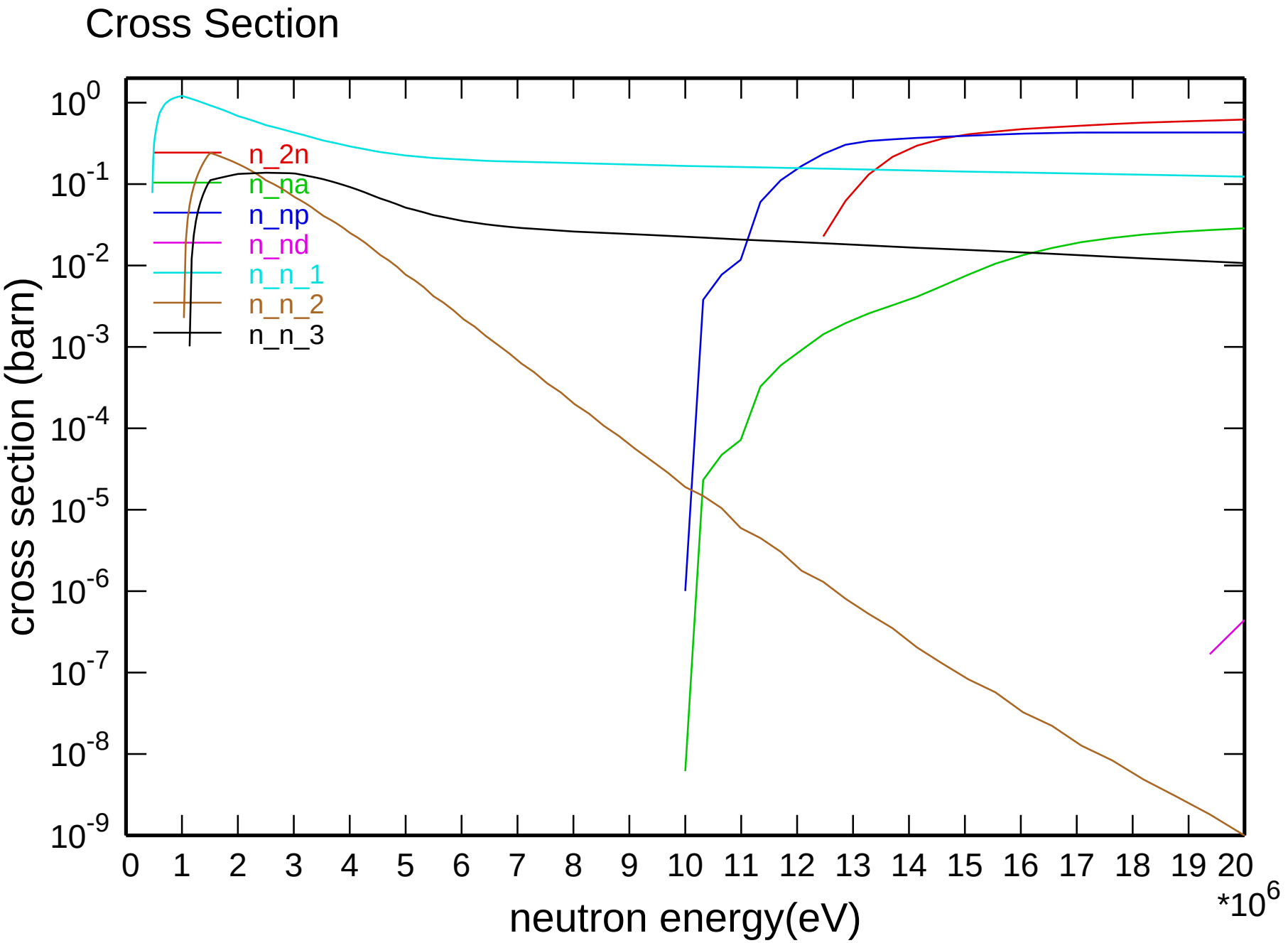
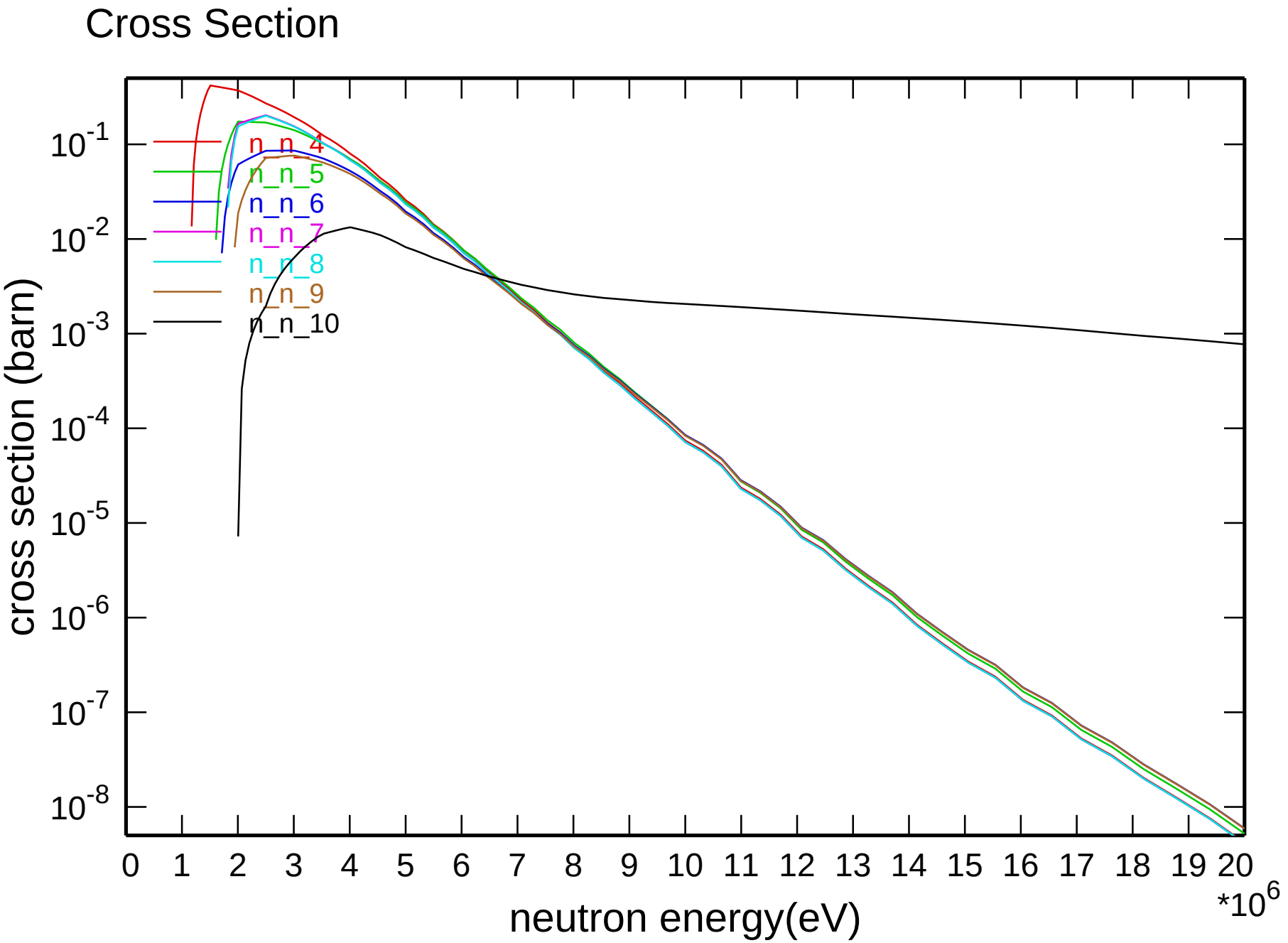
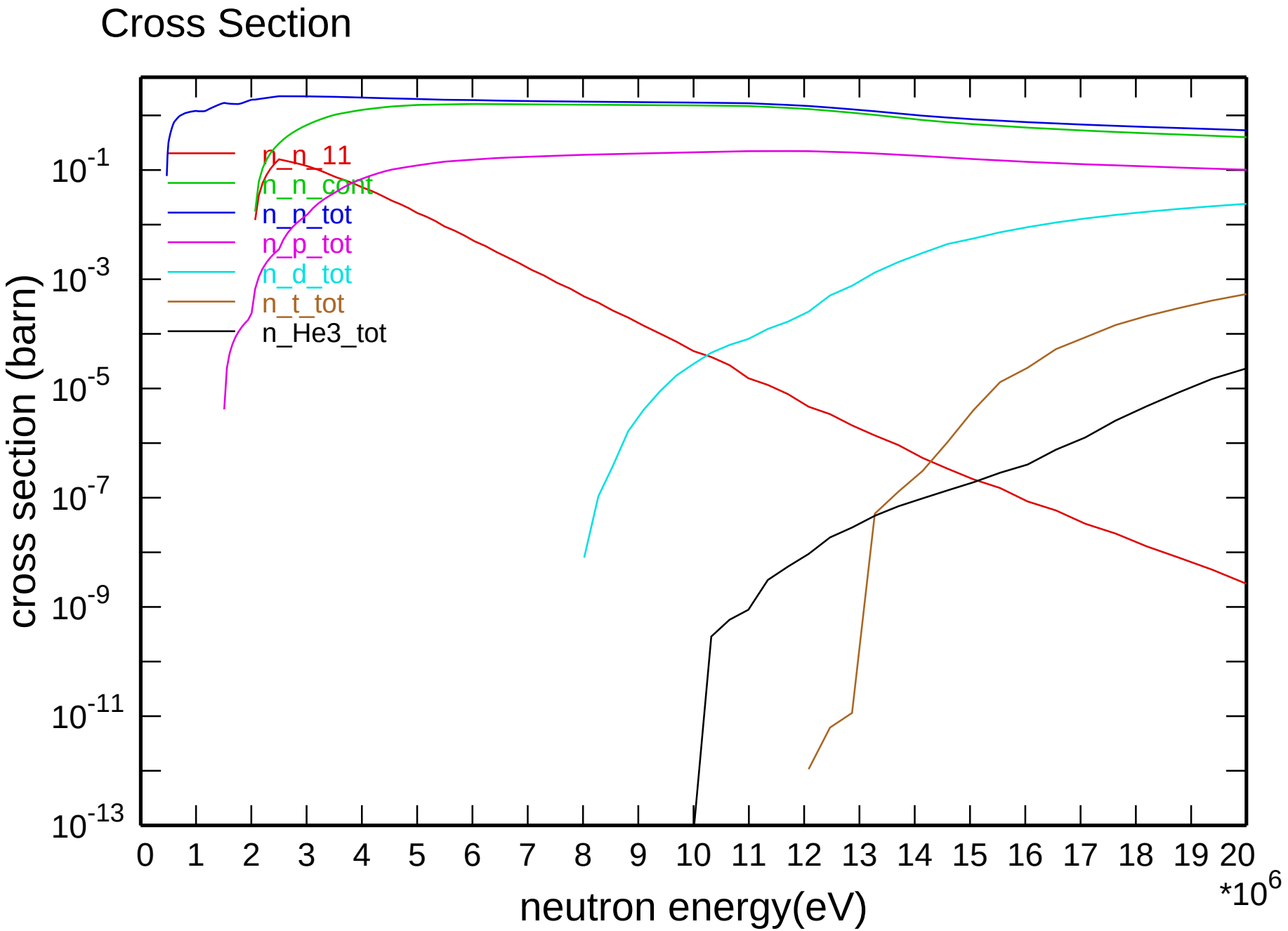
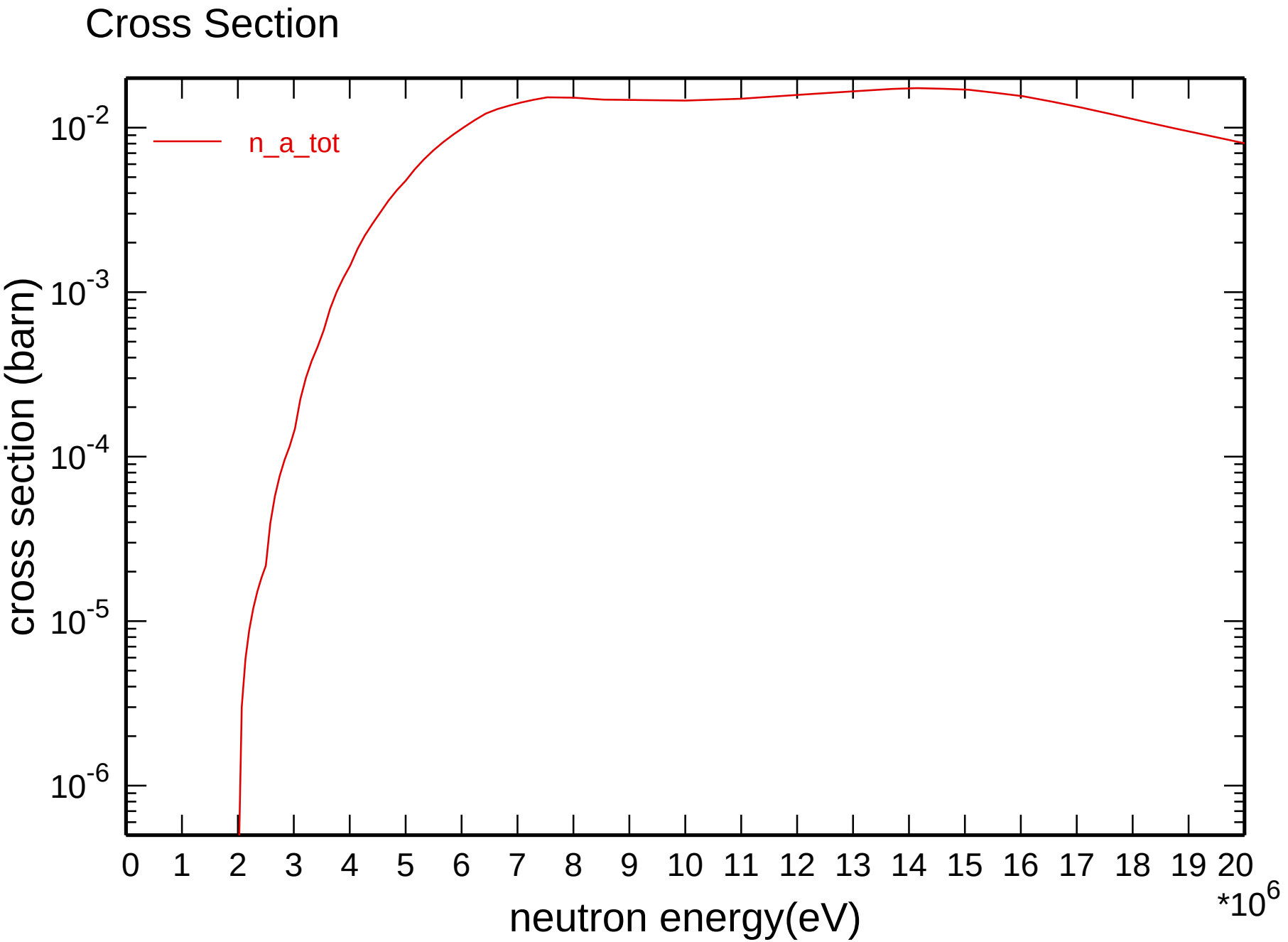
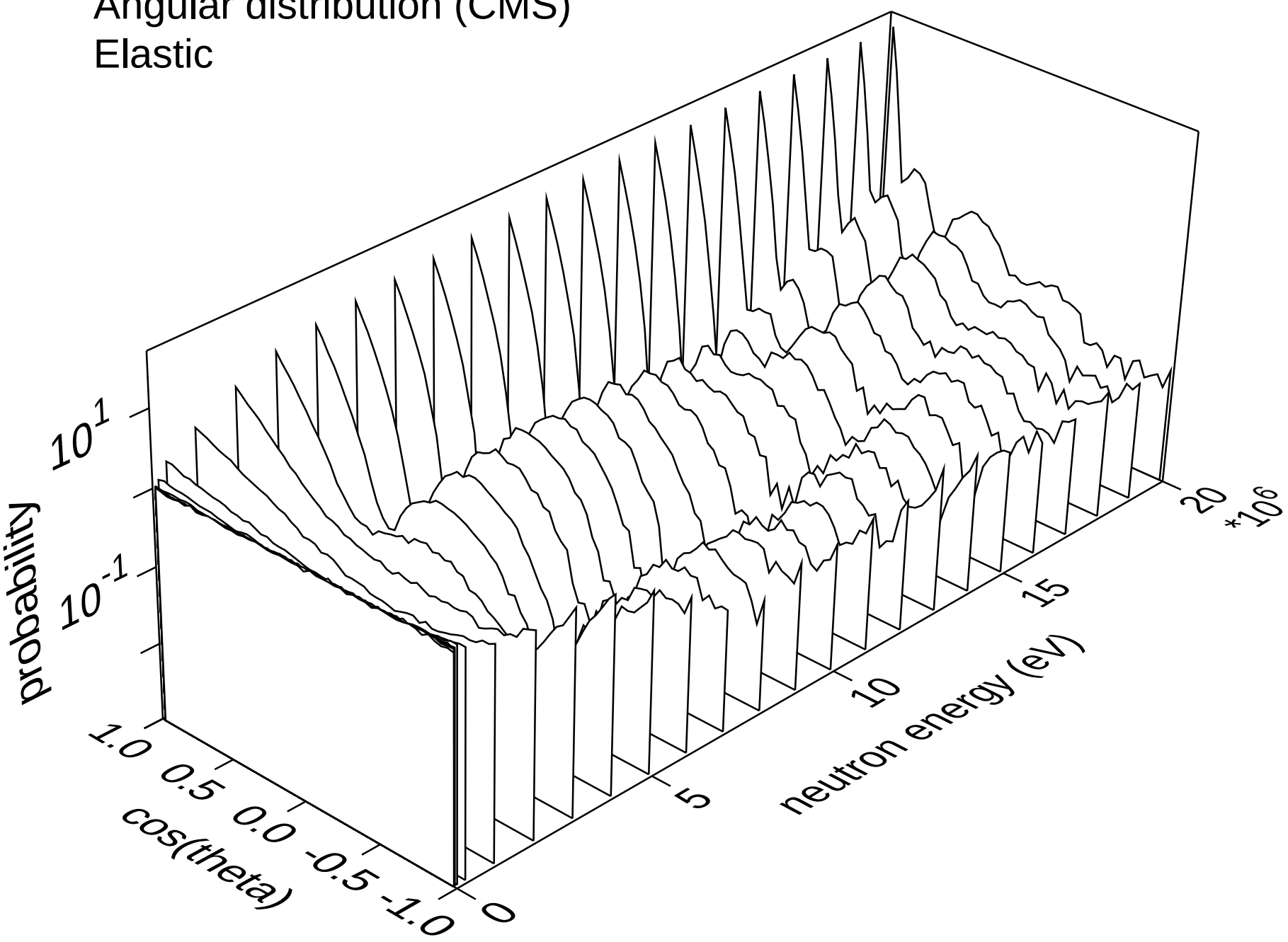

Main Cross Sections
Elastic
Capture
Inelastic
cross section (barn)
neutron energy(eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7

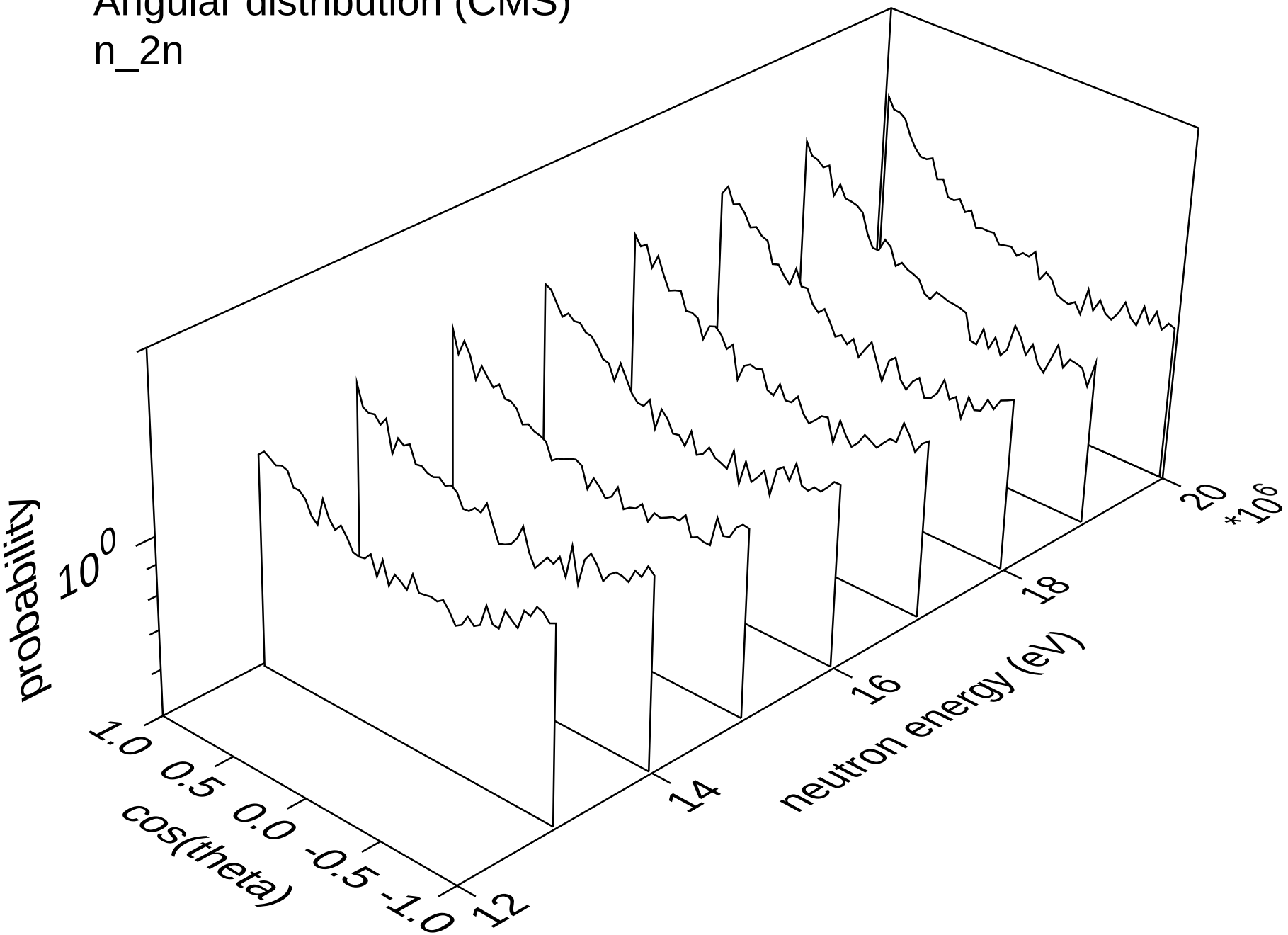

Cross Section
cross section (barn)
neutron energy(eV)
*10^6
n_2n
n_na
n_np
n_nd
n_n_1
n_n_2
n_n_3
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^-8
10^-9
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

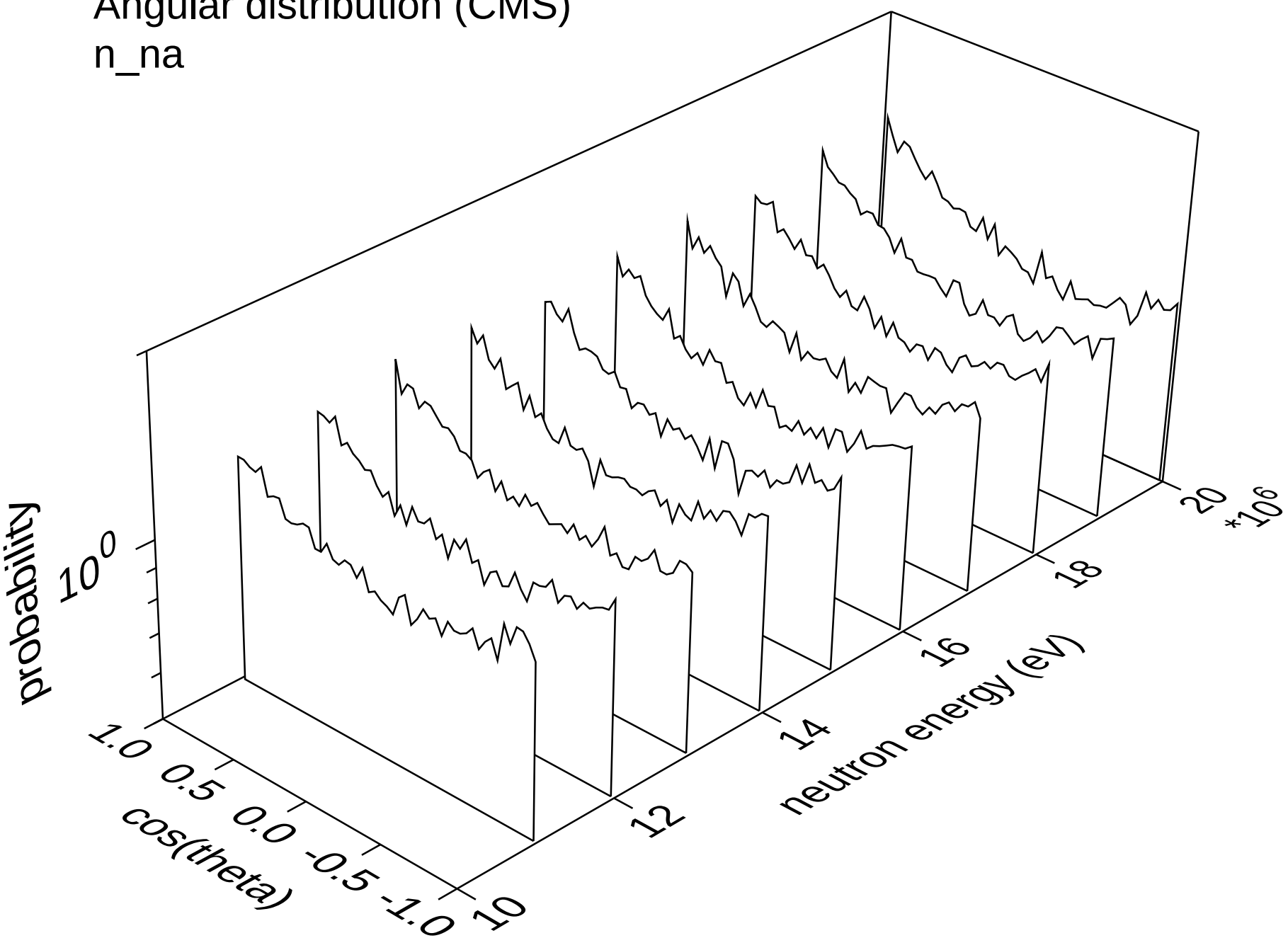

Cross Section
cross section (barn)
neutron energy(eV)
*10^6
n_n_4
n_n_5
n_n_6
n_n_7
n_n_8
n_n_9
n_n_10
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^-8
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

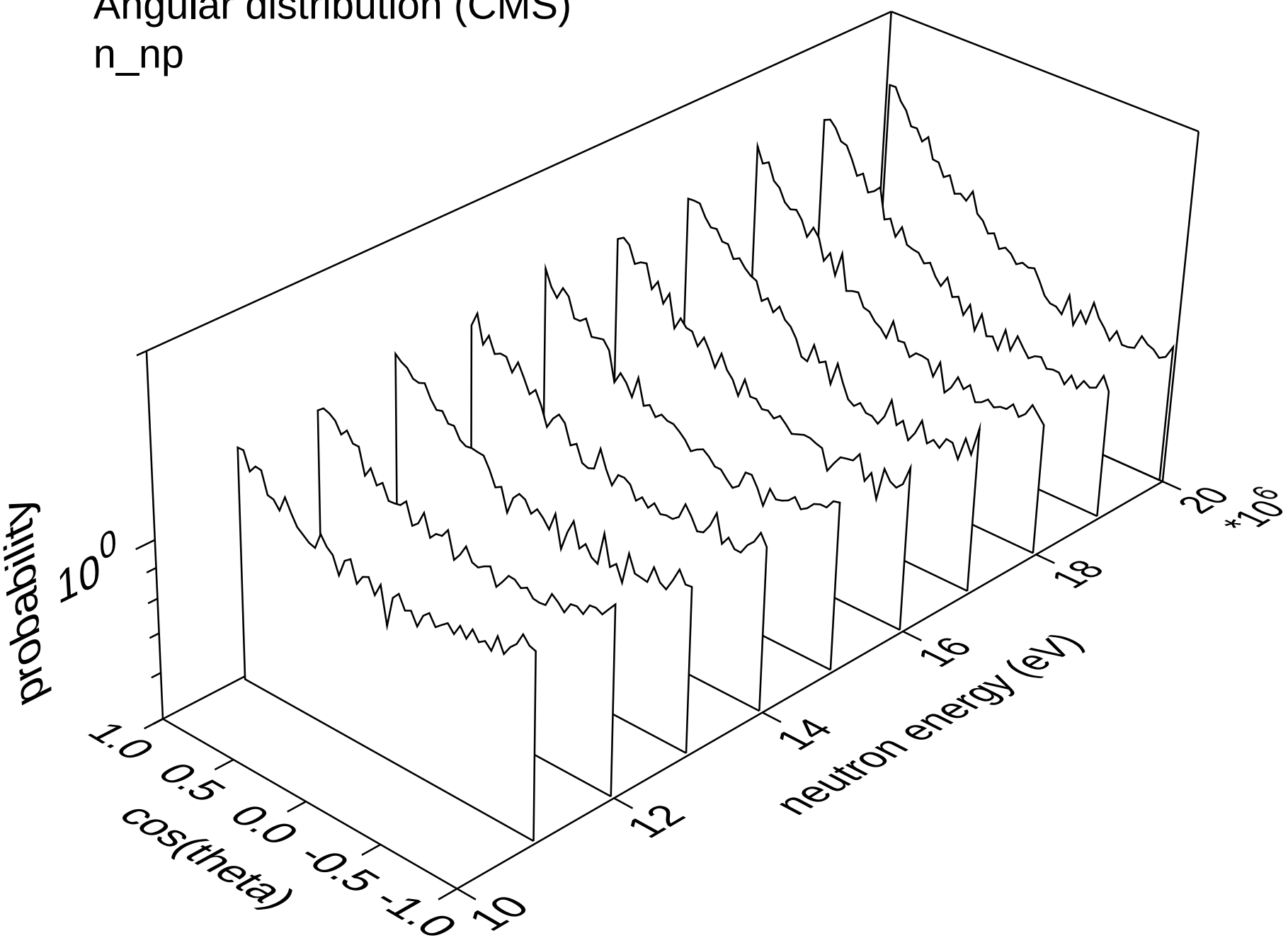

Cross Section
n_n_11
n_n_cont
n_n_tot
n_p_tot
n_d_tot
n_t_tot
n_He3_tot
cross section (barn)
10-1
10-3
10-5
10-7
10-9
10-11
10-13
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
*10^6
neutron energy(eV)

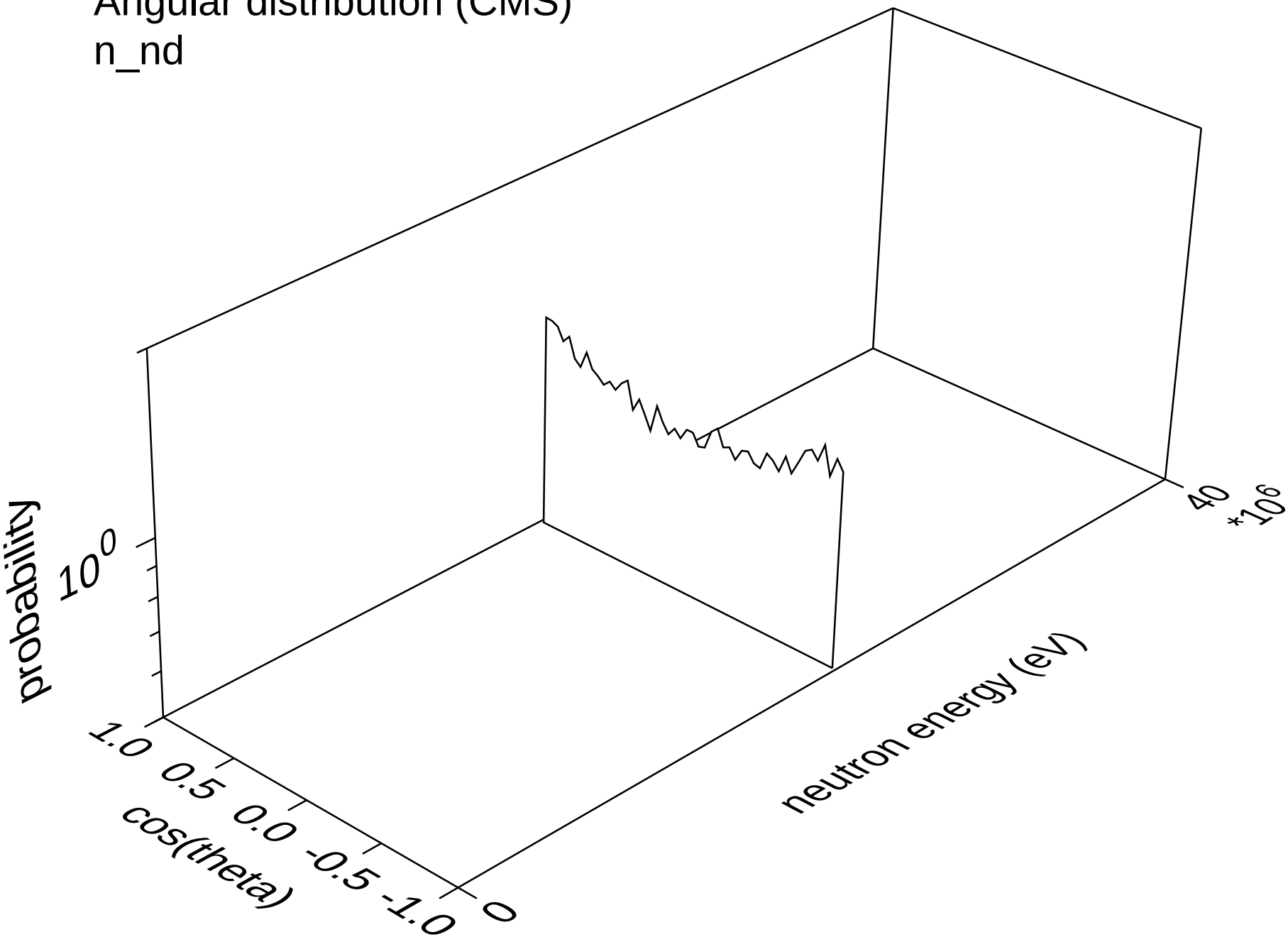

Cross Section
n_a_tot
cross section (barn)
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
*10^{6}
neutron energy(eV)

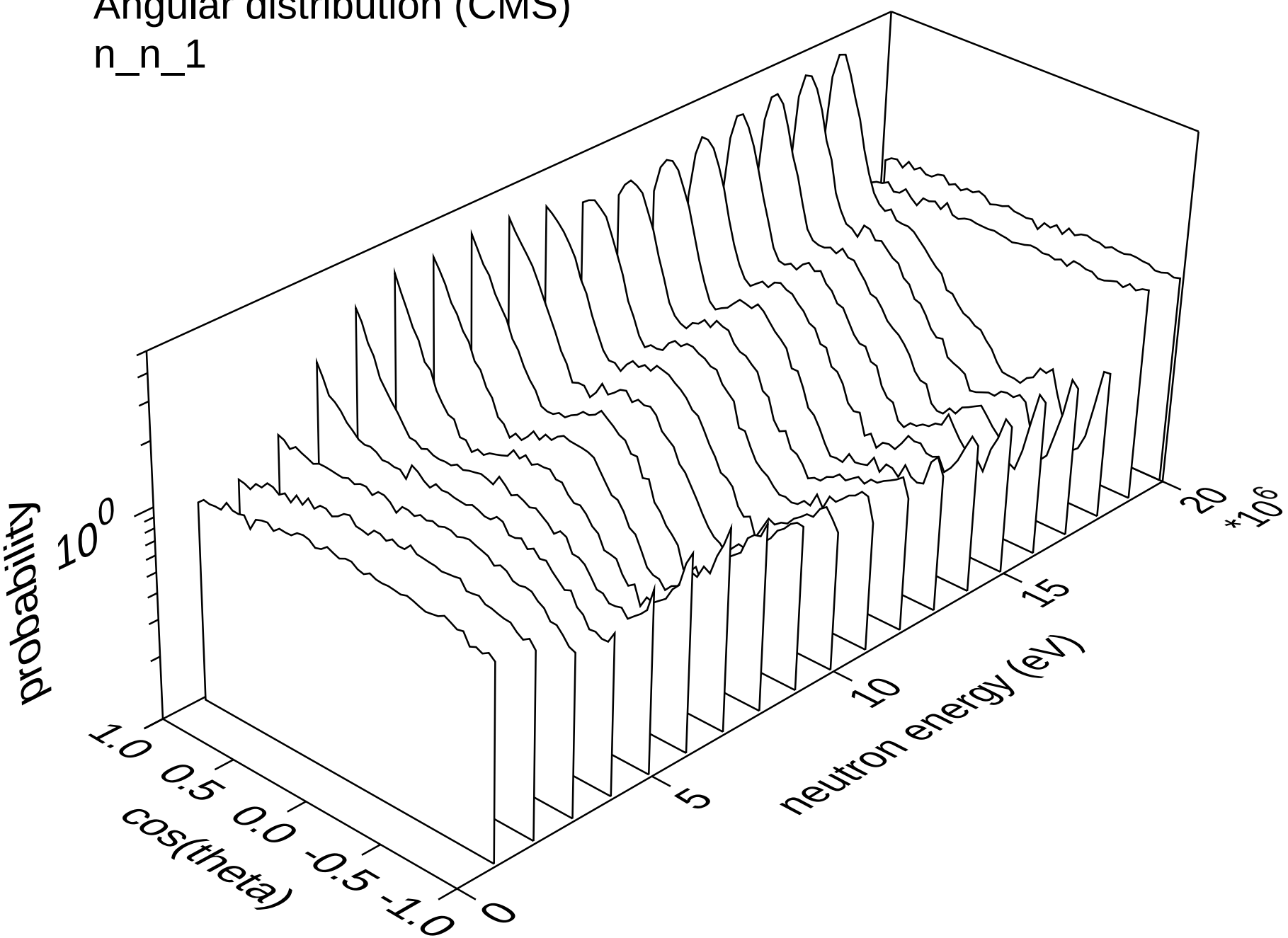

Angular distribution (CMS)
Elastic
probability
10^{1}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

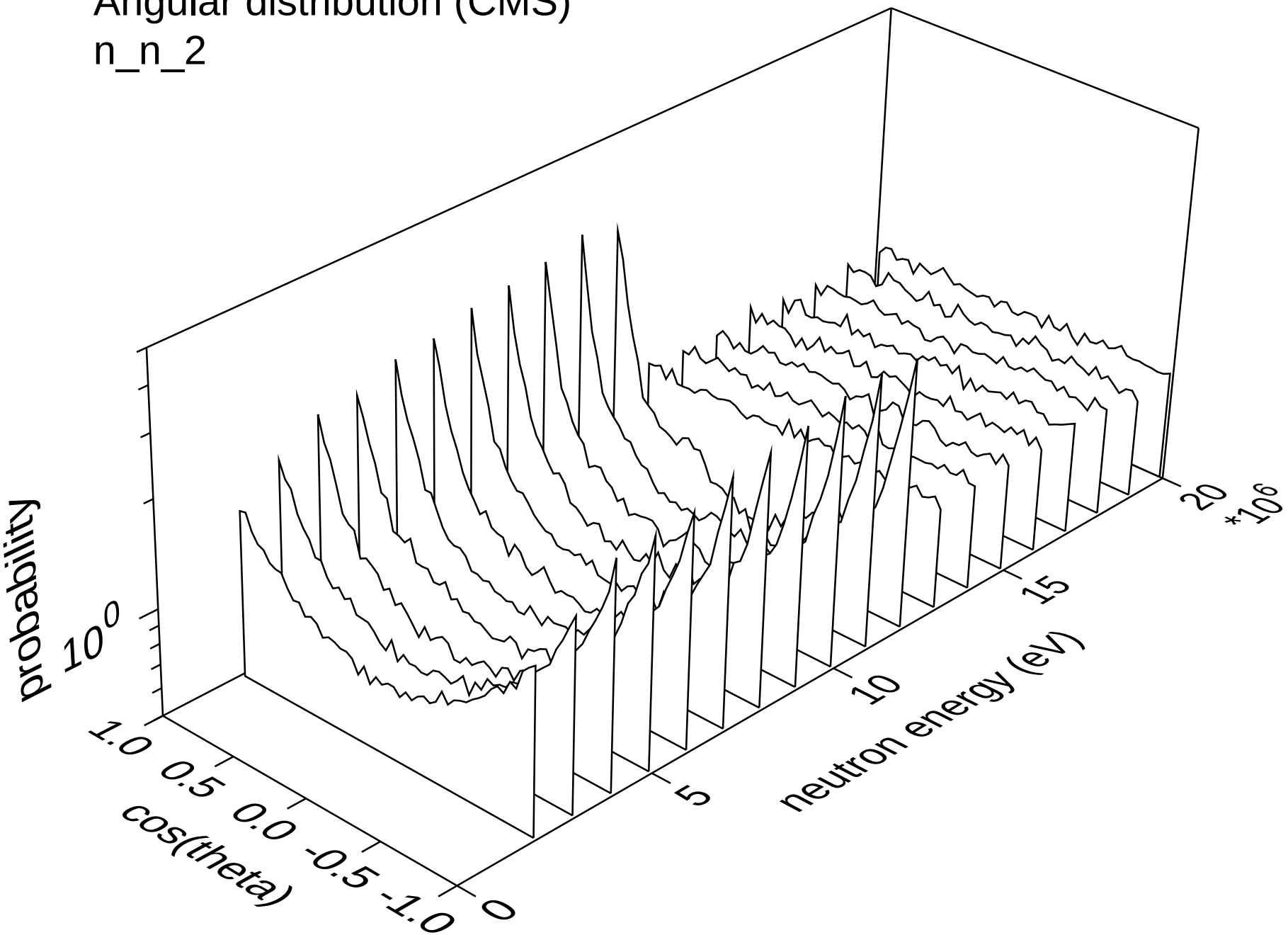

Angular distribution (CMS)
n_2n
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

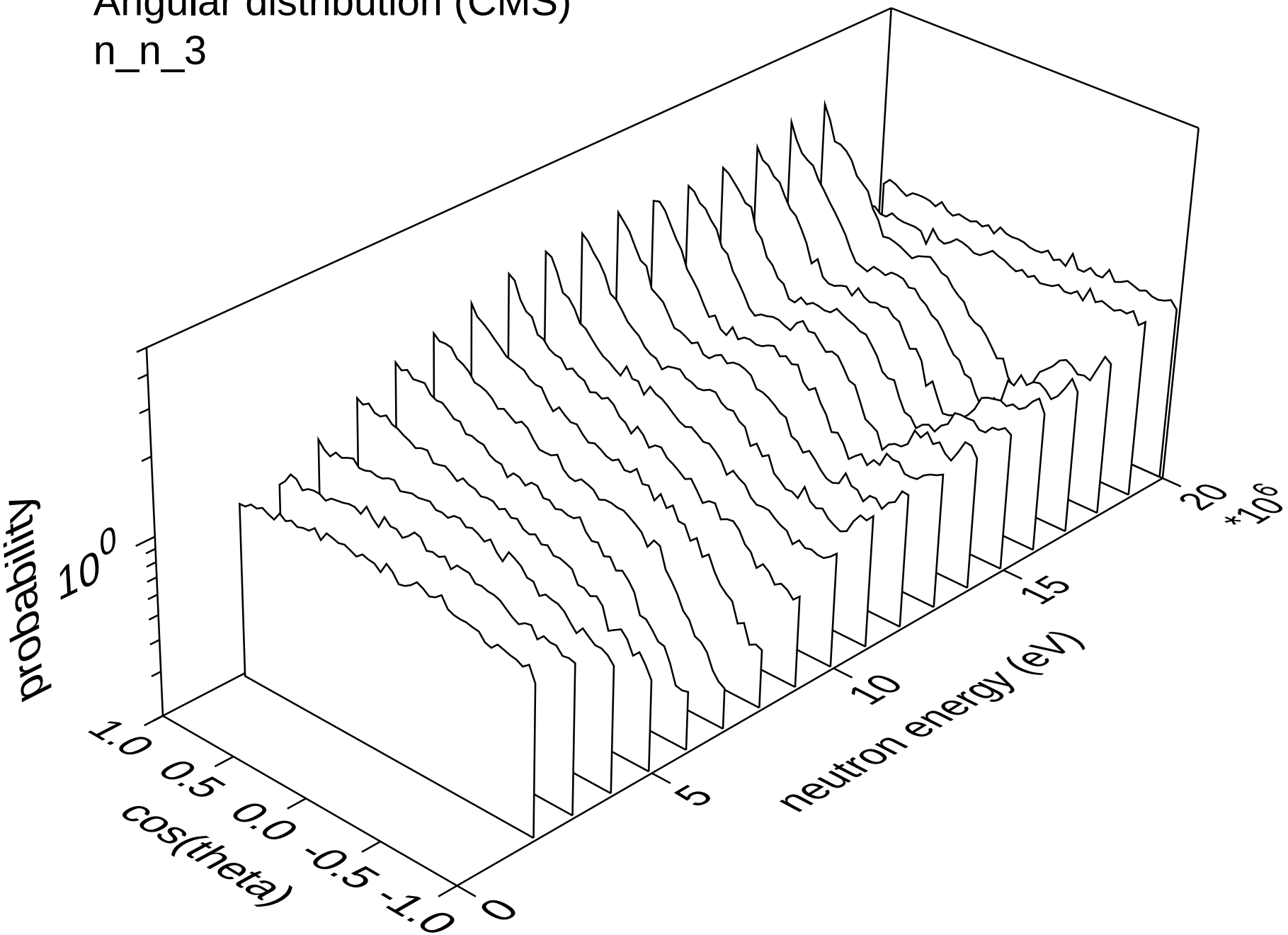

Angular distribution (CMS)
n_na
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
10
12
14
16
18
20
*10^6
neutron energy (eV)

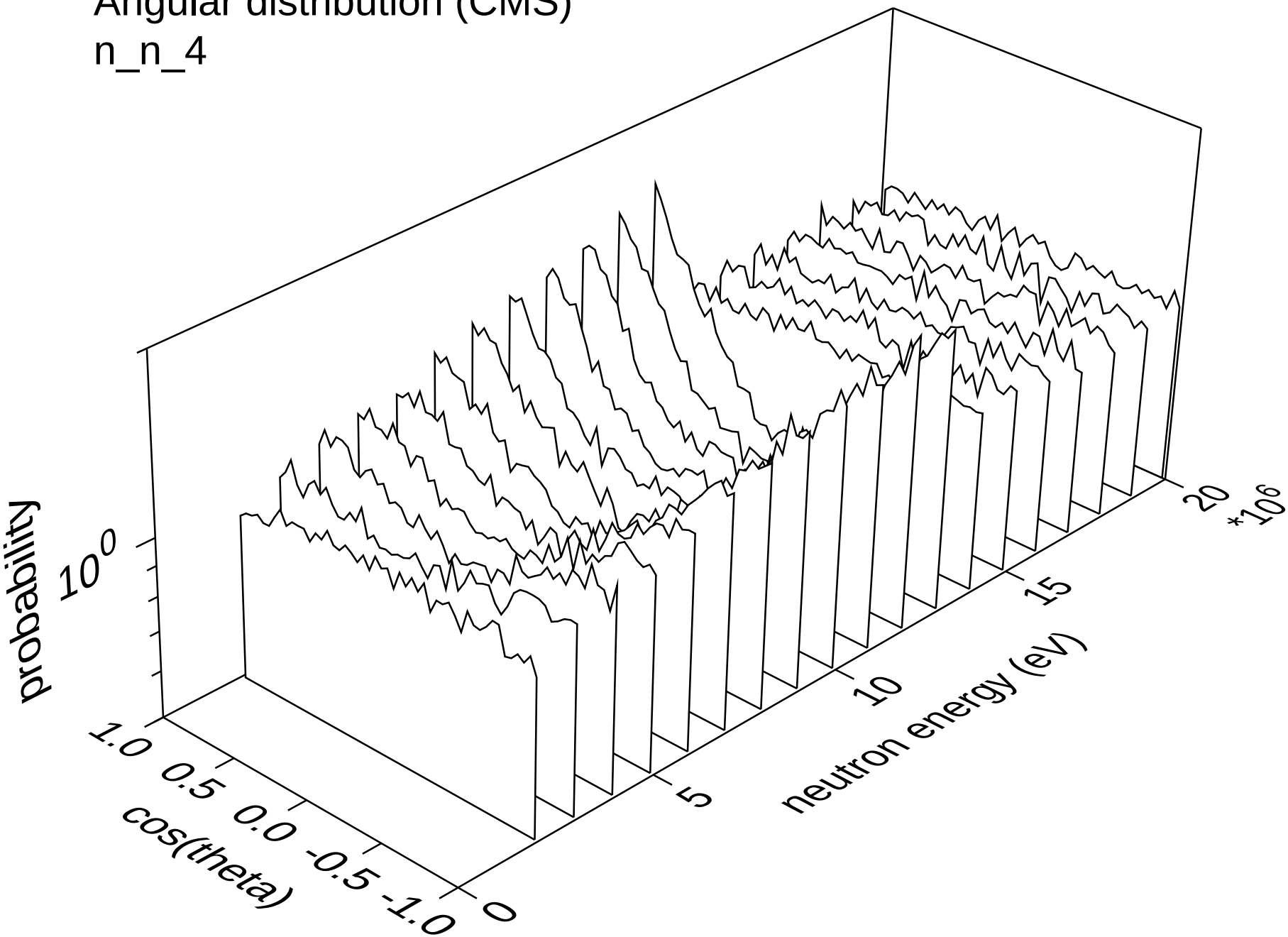

Angular distribution (CMS)
n_np
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
10
12
14
16
18
20
*10^6
neutron energy (eV)

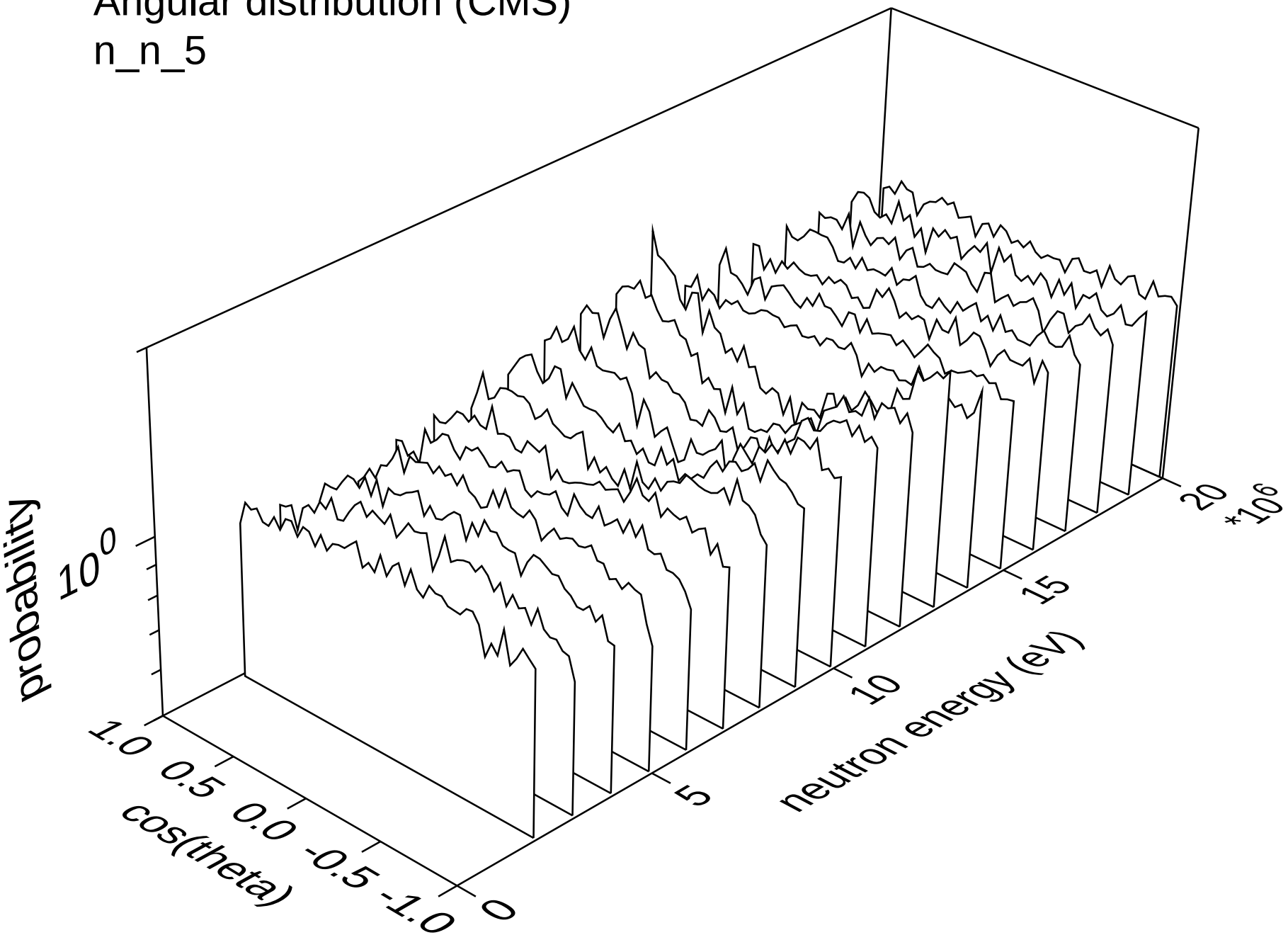

Angular distribution (CMS)
n_nd
probability
10^0
1.0 0.5 0.0 -0.5 -1.0
cos(theta)
0
40
*10^6
neutron energy (eV)

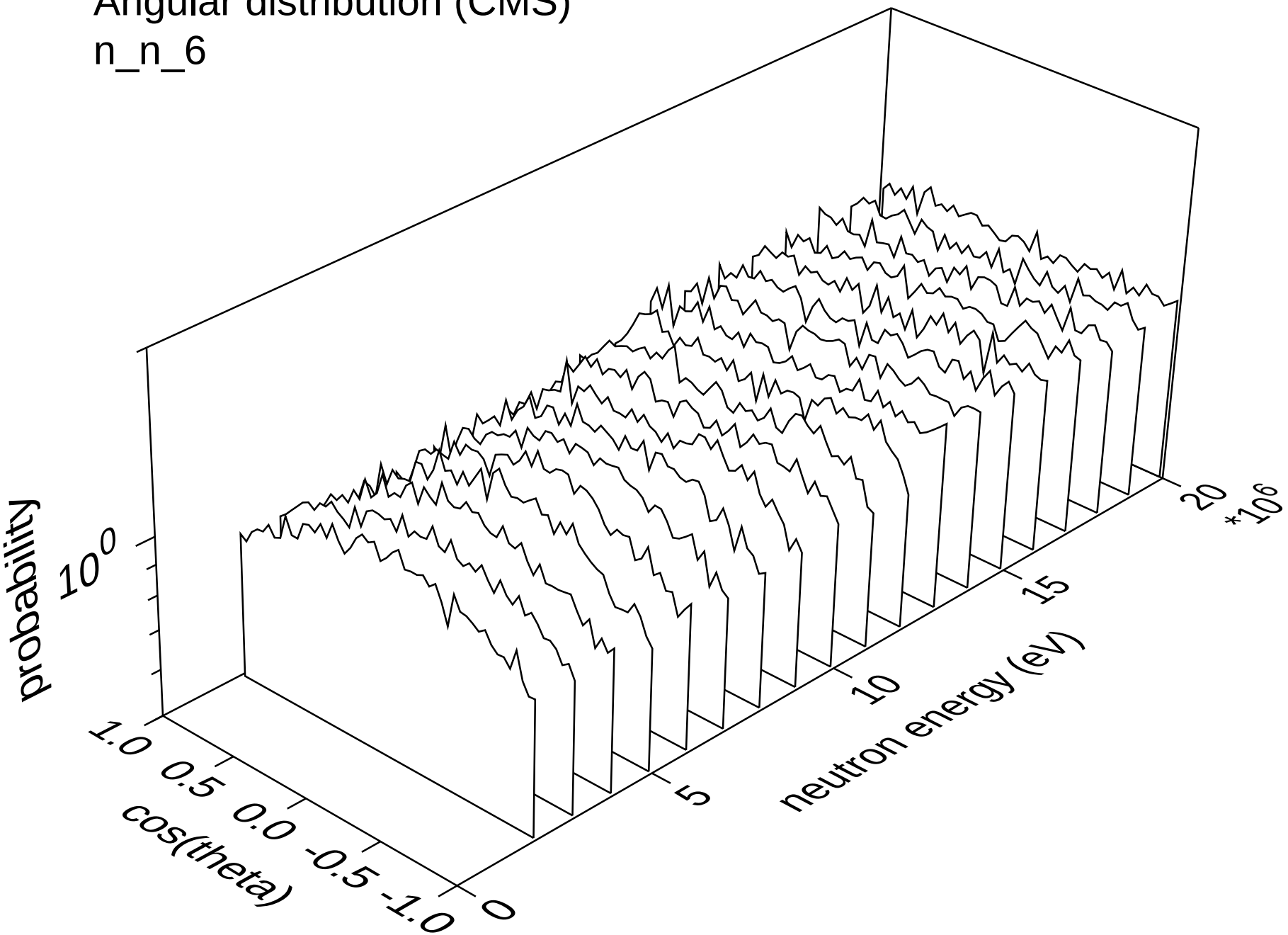

Angular distribution (CMS)
n_n_1
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

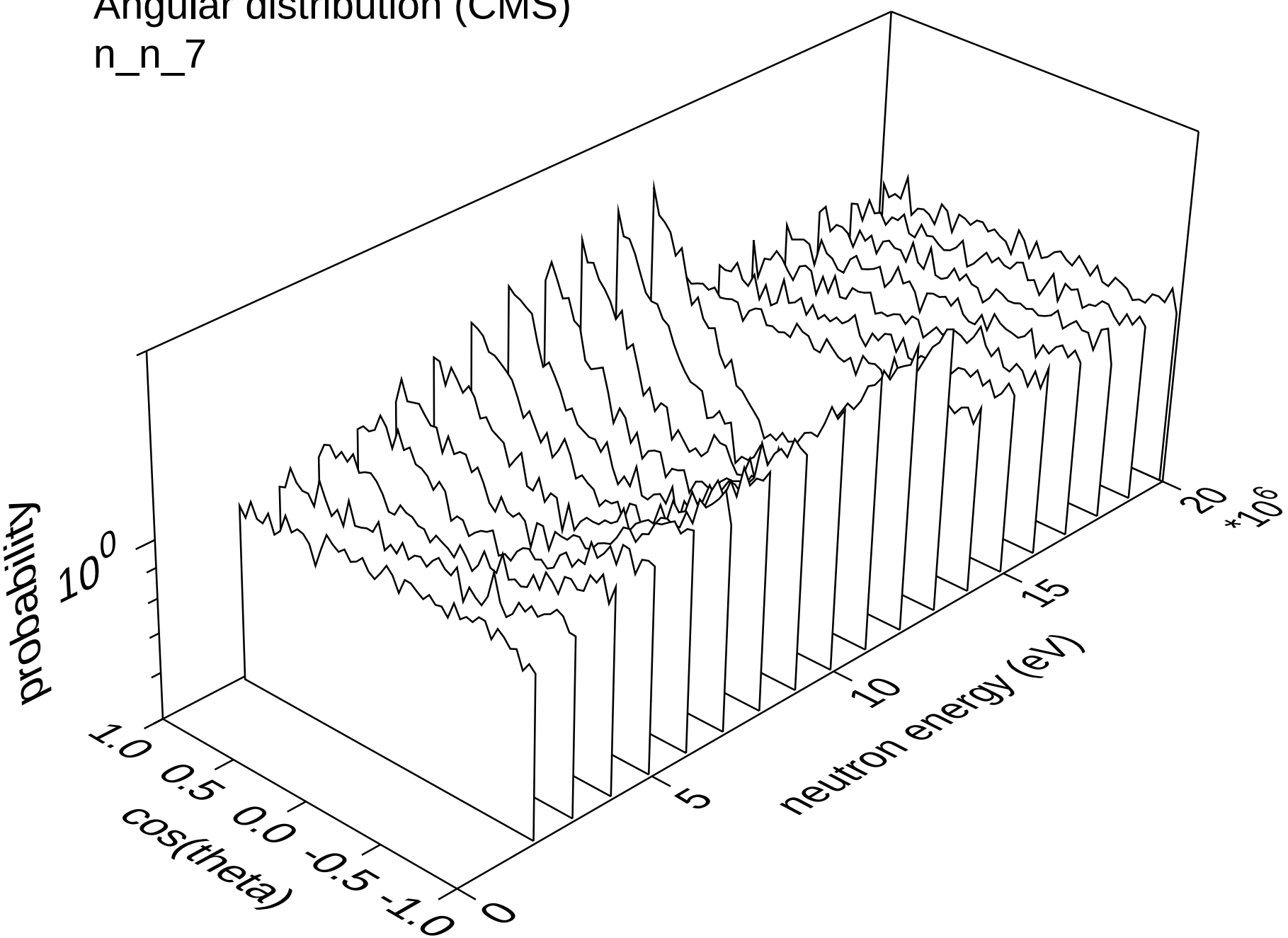

Angular distribution (CMS)
n_n_2
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

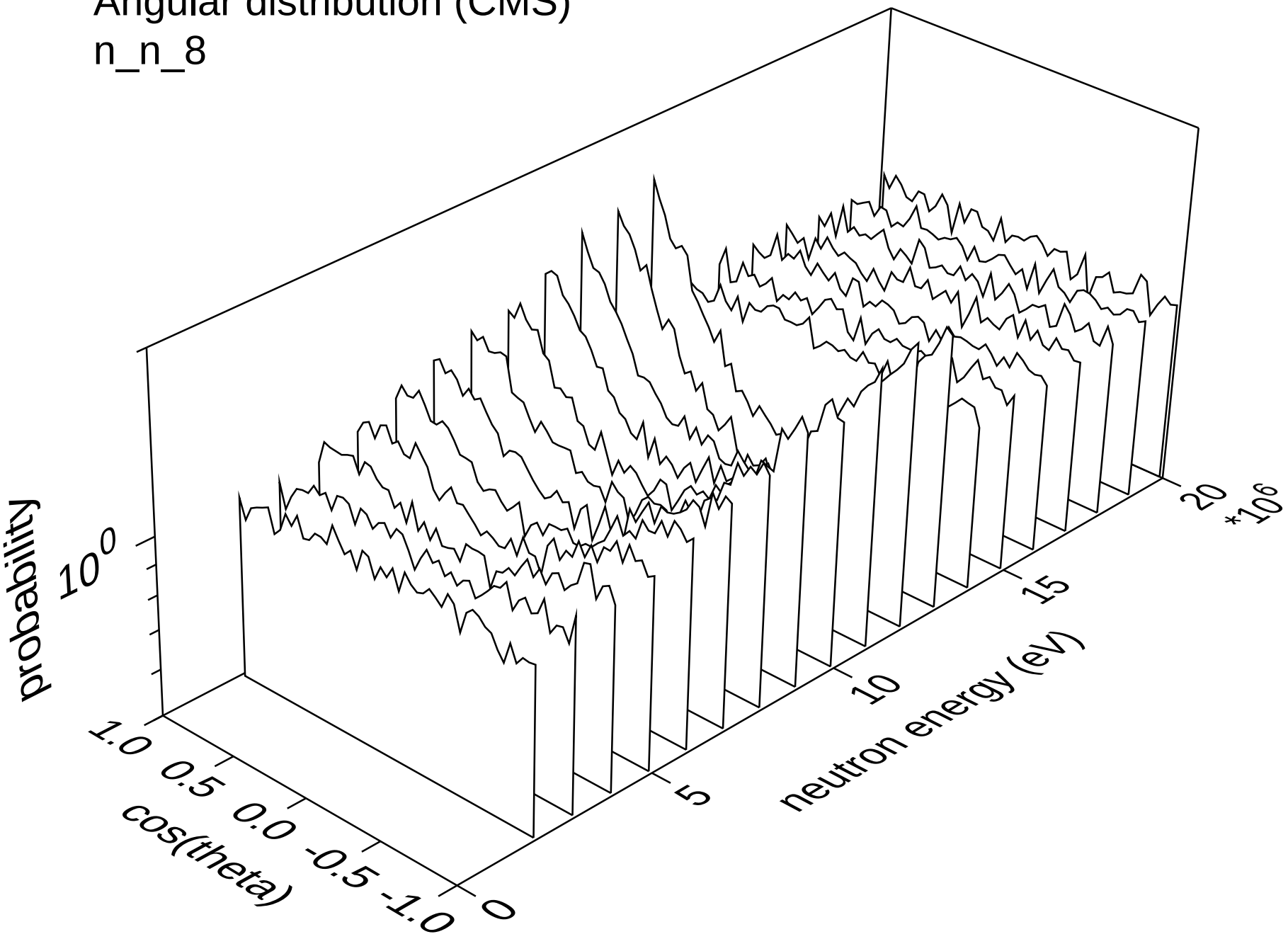

Angular distribution (CMS)
n_n_3
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

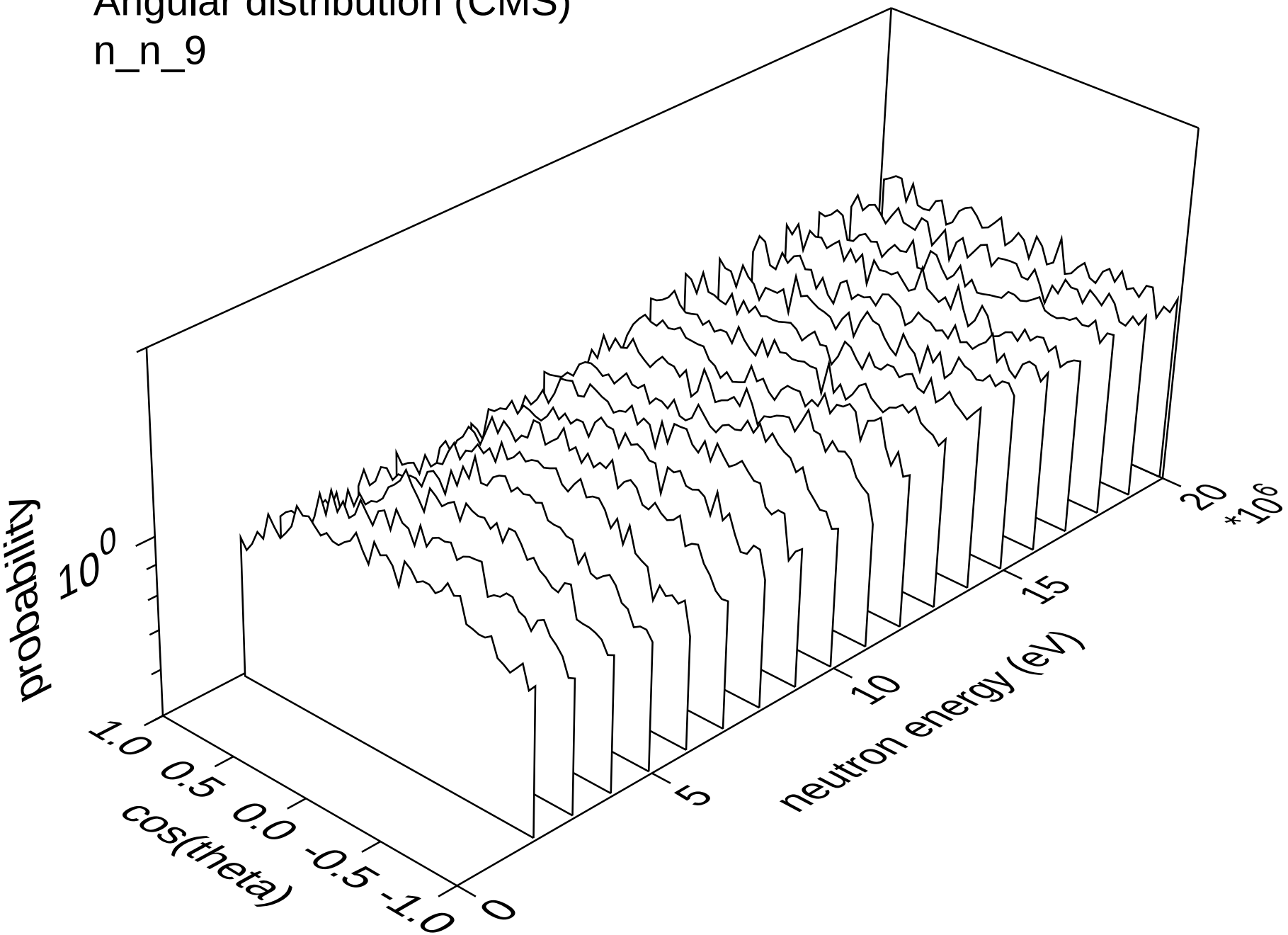

Angular distribution (CMS)
n_n_4
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

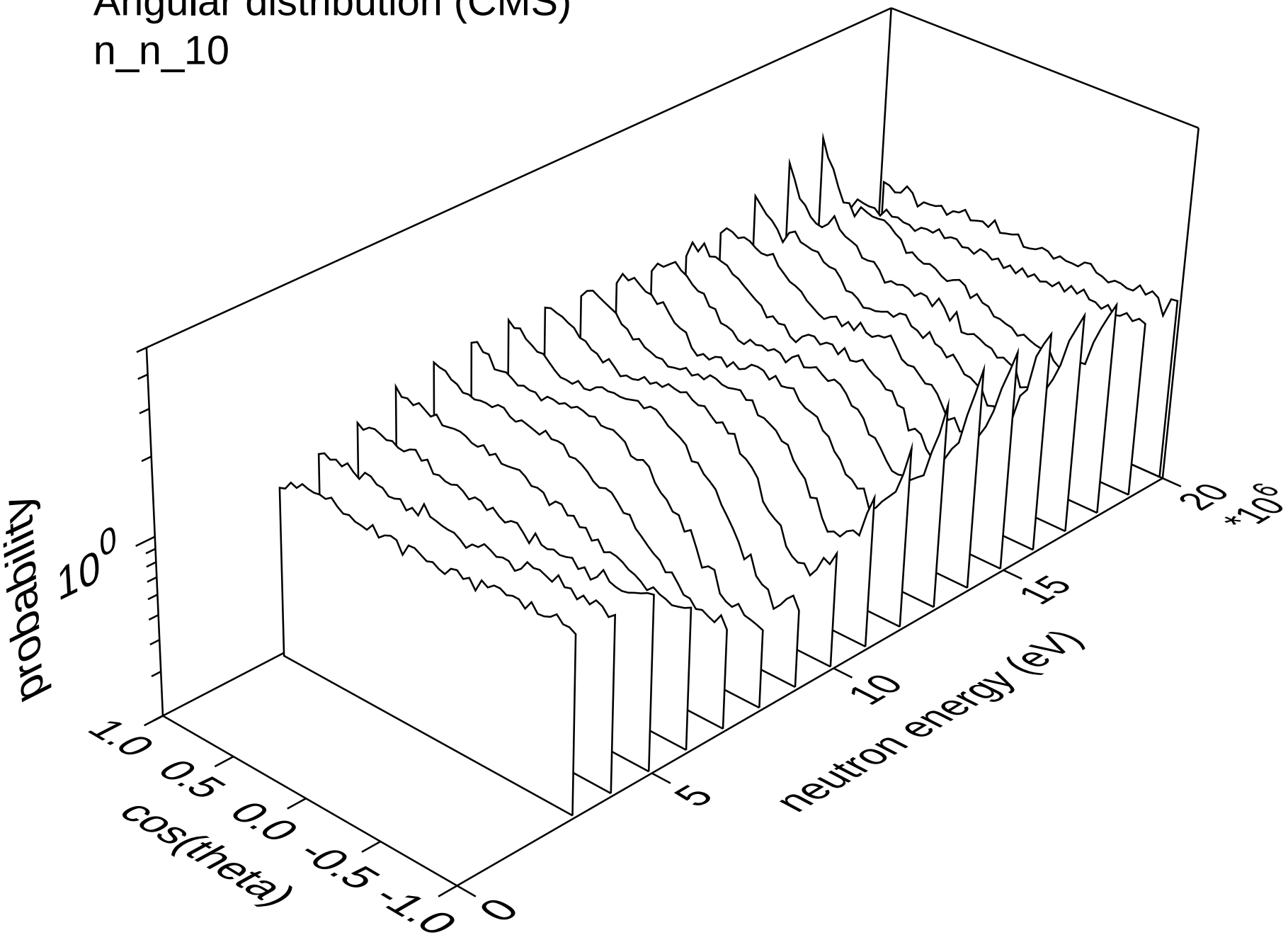

Angular distribution (CMS)
n_n_5
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

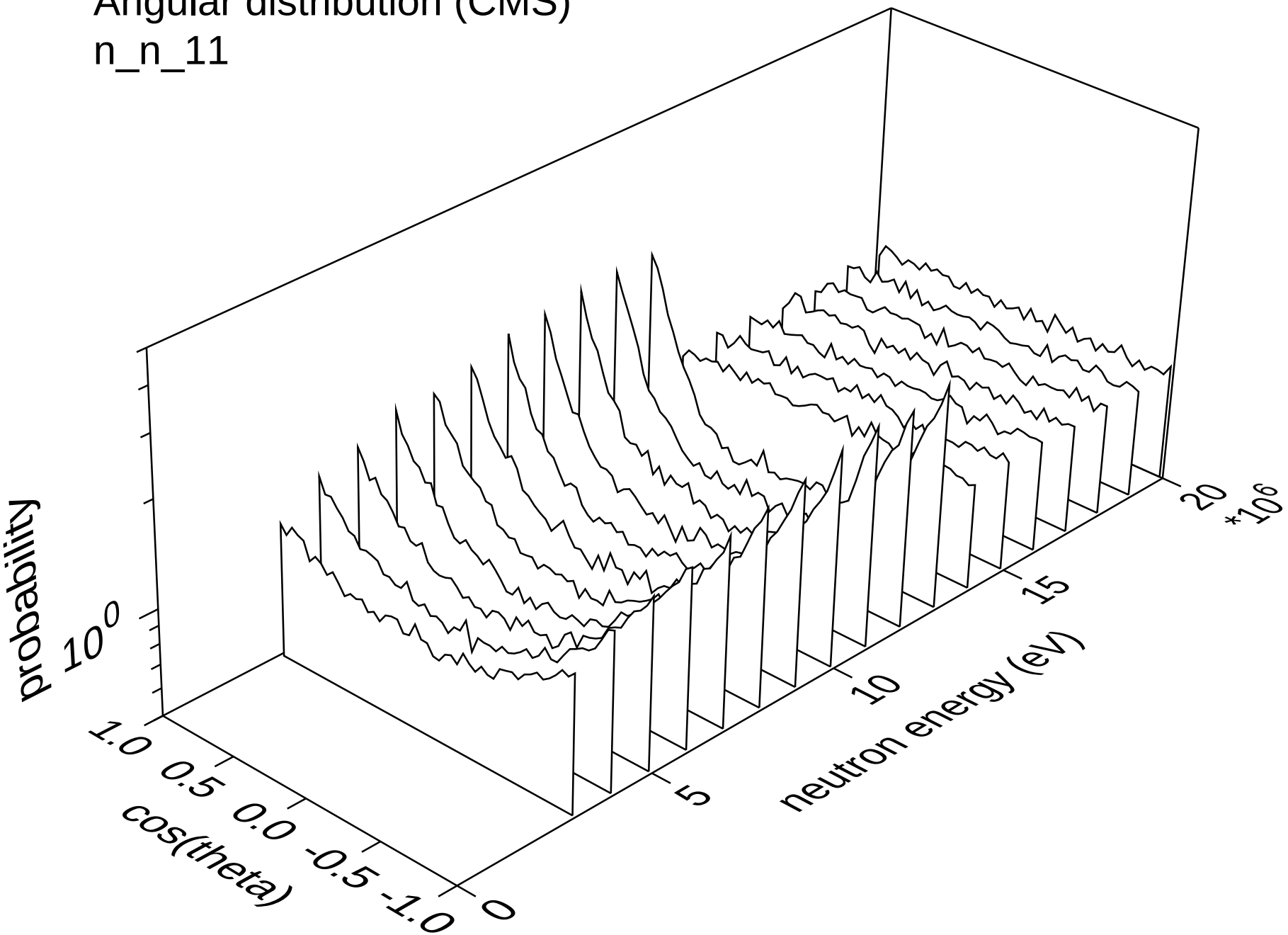

Angular distribution (CMS)
n_n_6
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

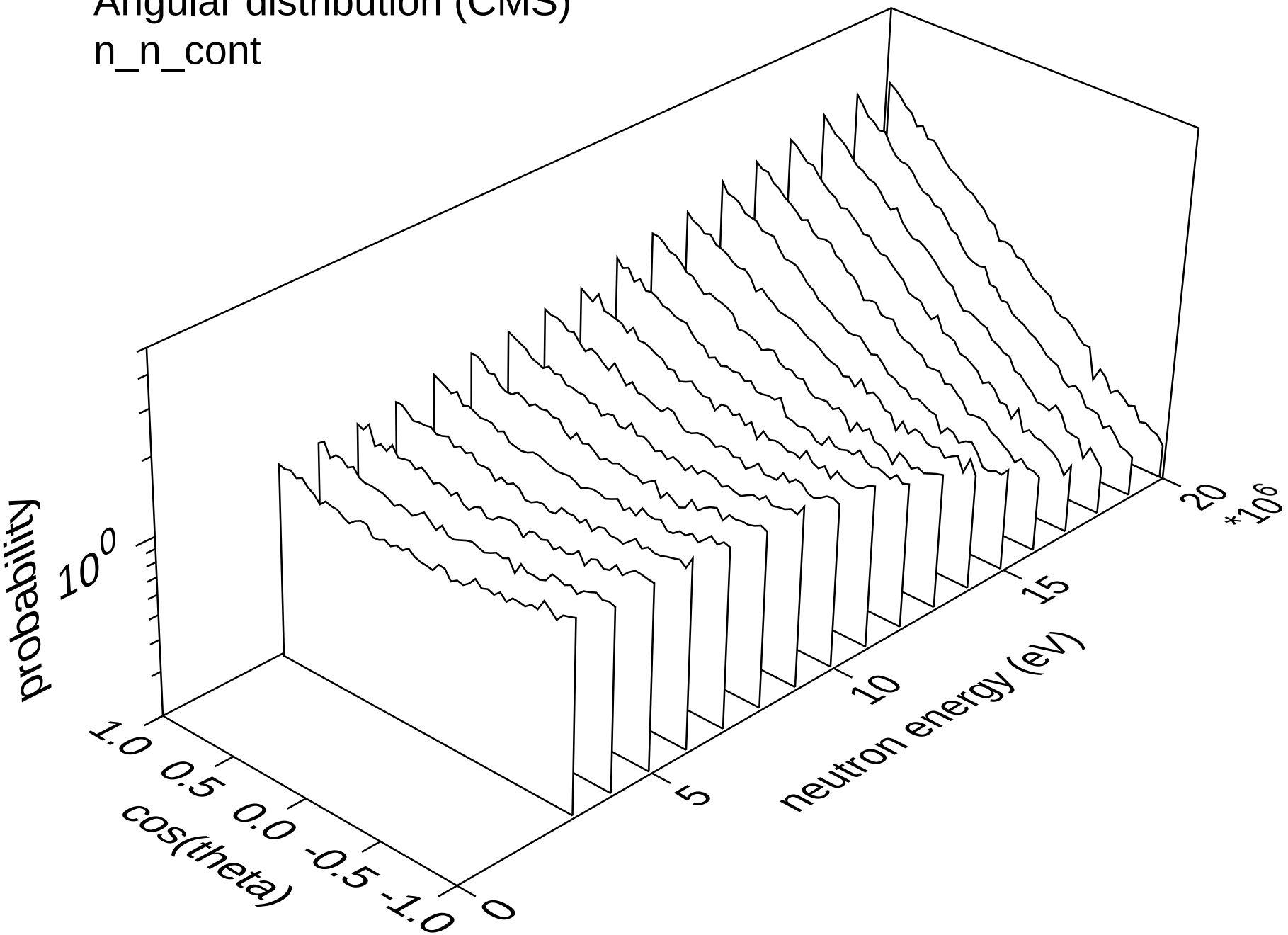

Angular distribution (CMS)
n_n_7
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

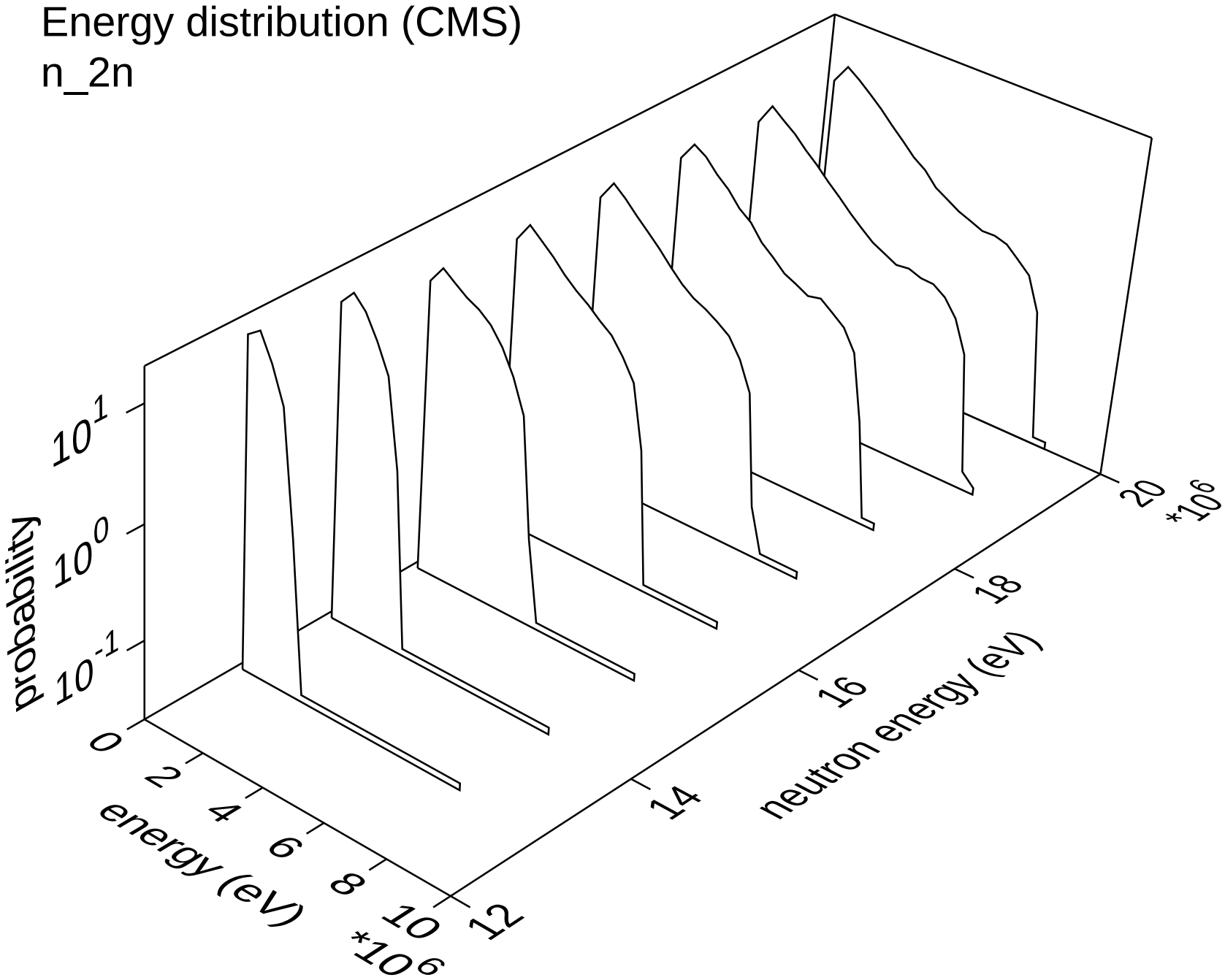

Angular distribution (CMS)
n_n_8
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

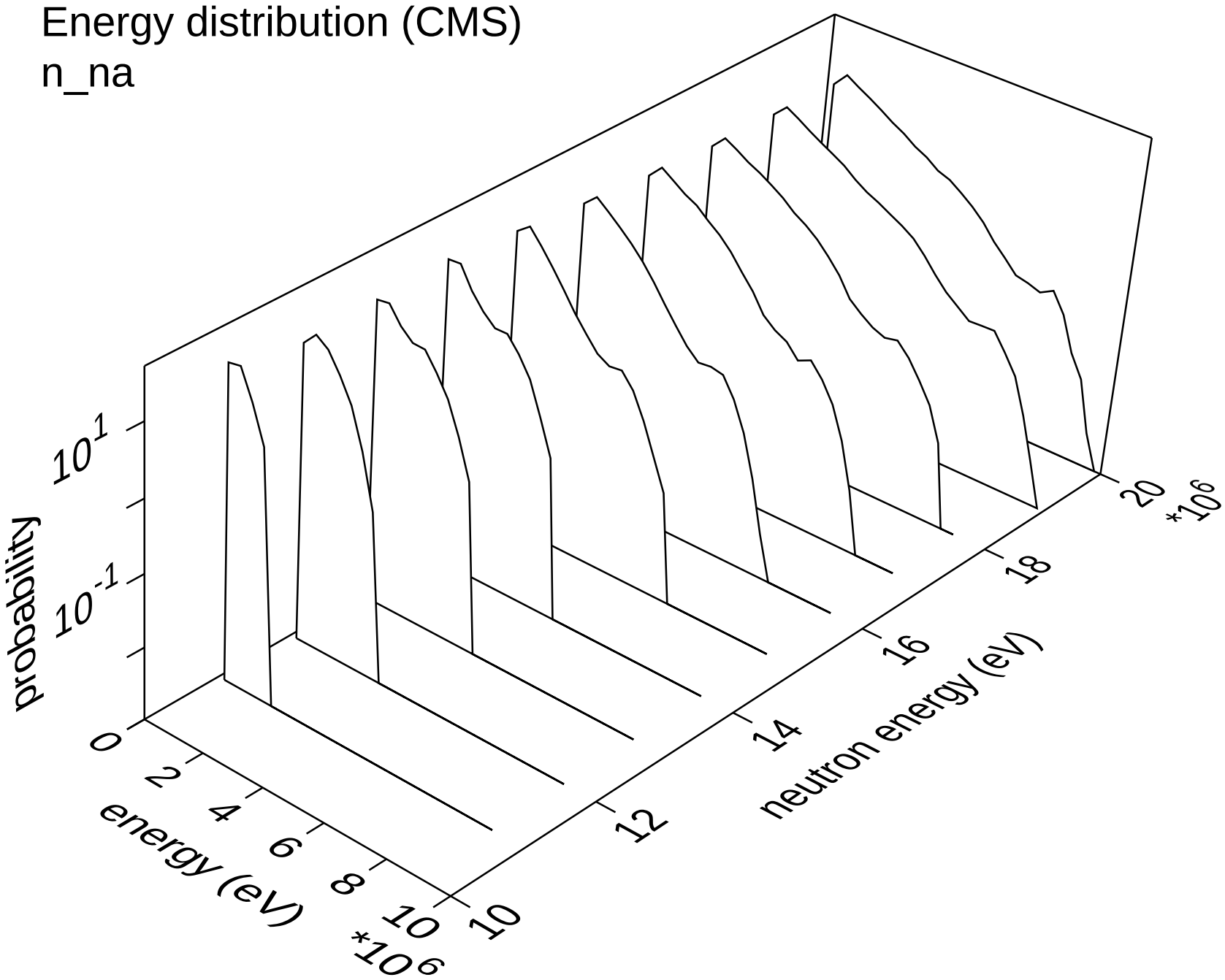

Angular distribution (CMS)
n_n_9
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

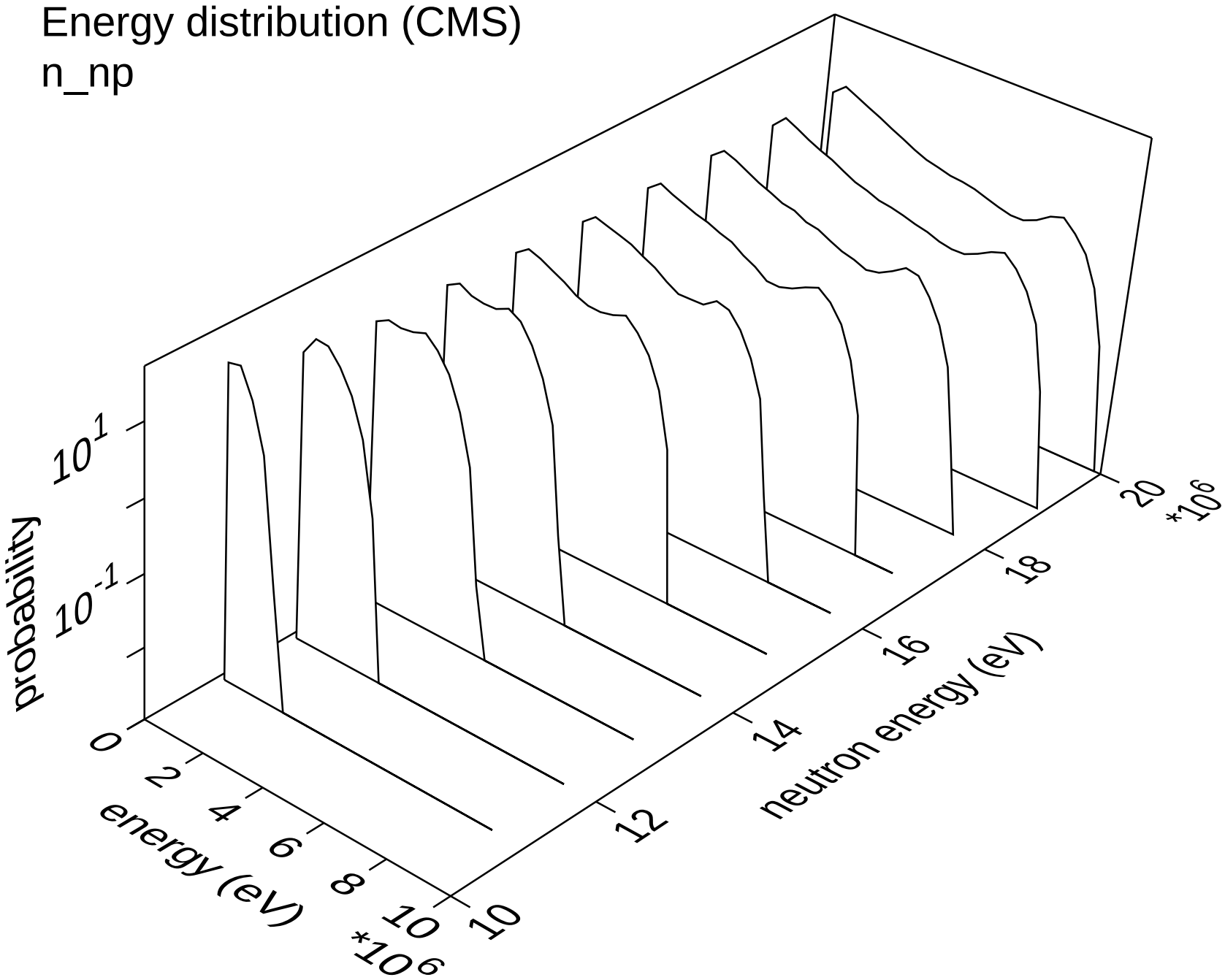

Angular distribution (CMS)
n_n_10
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

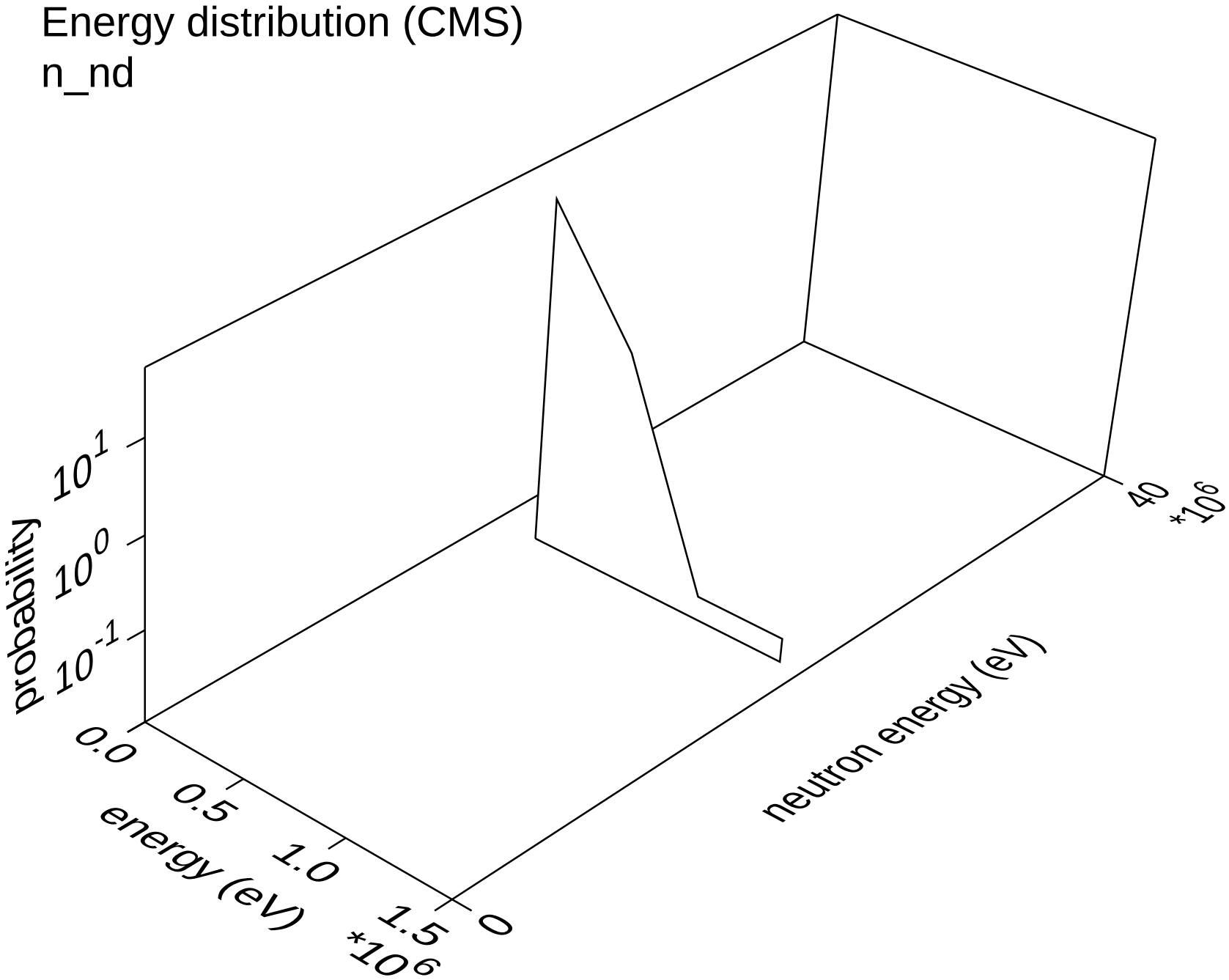

Angular distribution (CMS)
n_n_11
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

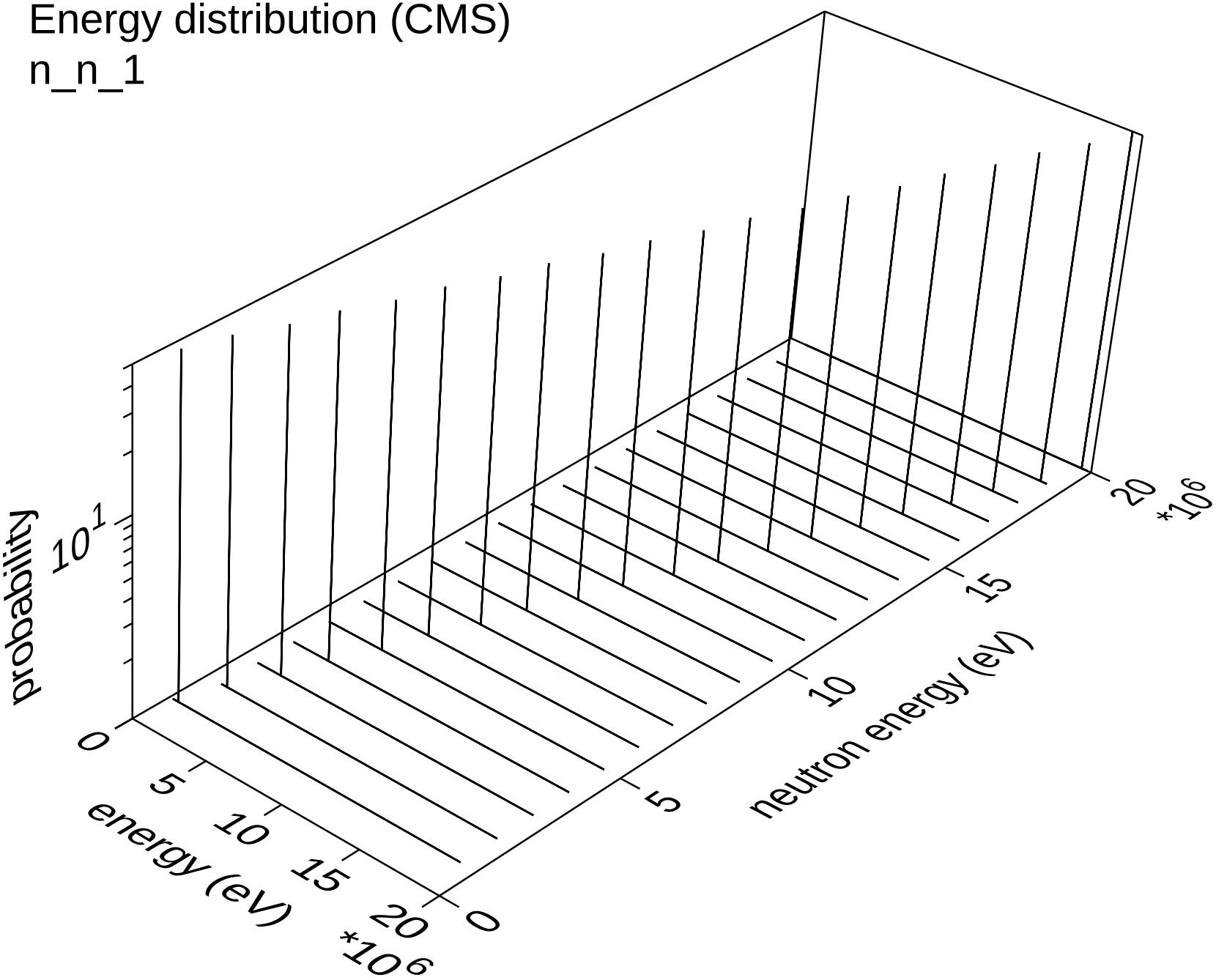

Angular distribution (CMS)
n_n_cont
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

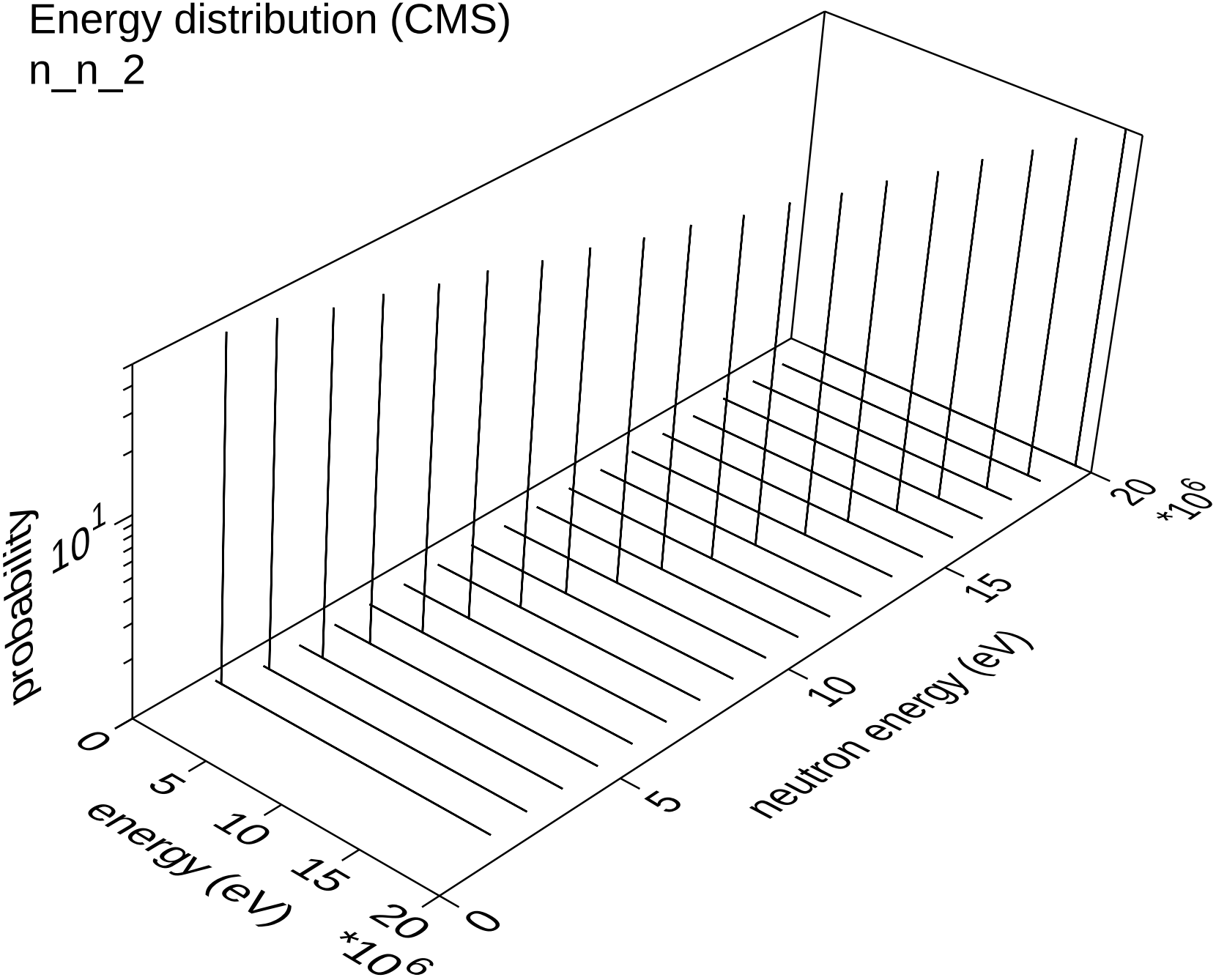

Energy distribution (CMS)
n_2n
probability
10^{1}
10^{0}
10^{-1}
0
2
4
6
8
10
12
energy (eV)
*10^6
14
16
18
20
neutron energy (eV)
*10^6

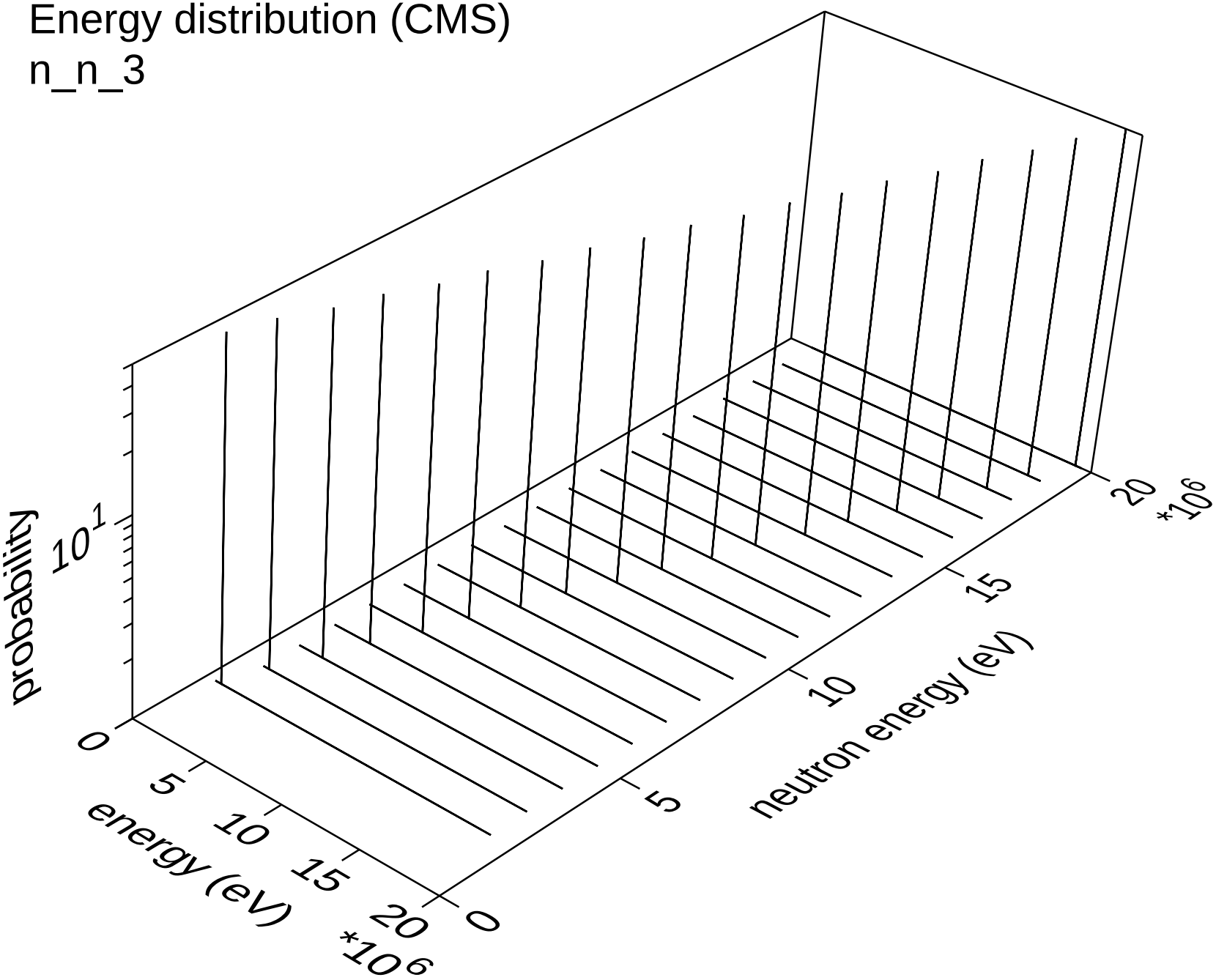

Energy distribution (CMS)
n_na
probability
10^{1}
10^{-1}
0
2
4
6
8
10
*10^6
energy (eV)
10
12
14
16
18
20
*10^6
neutron energy (eV)

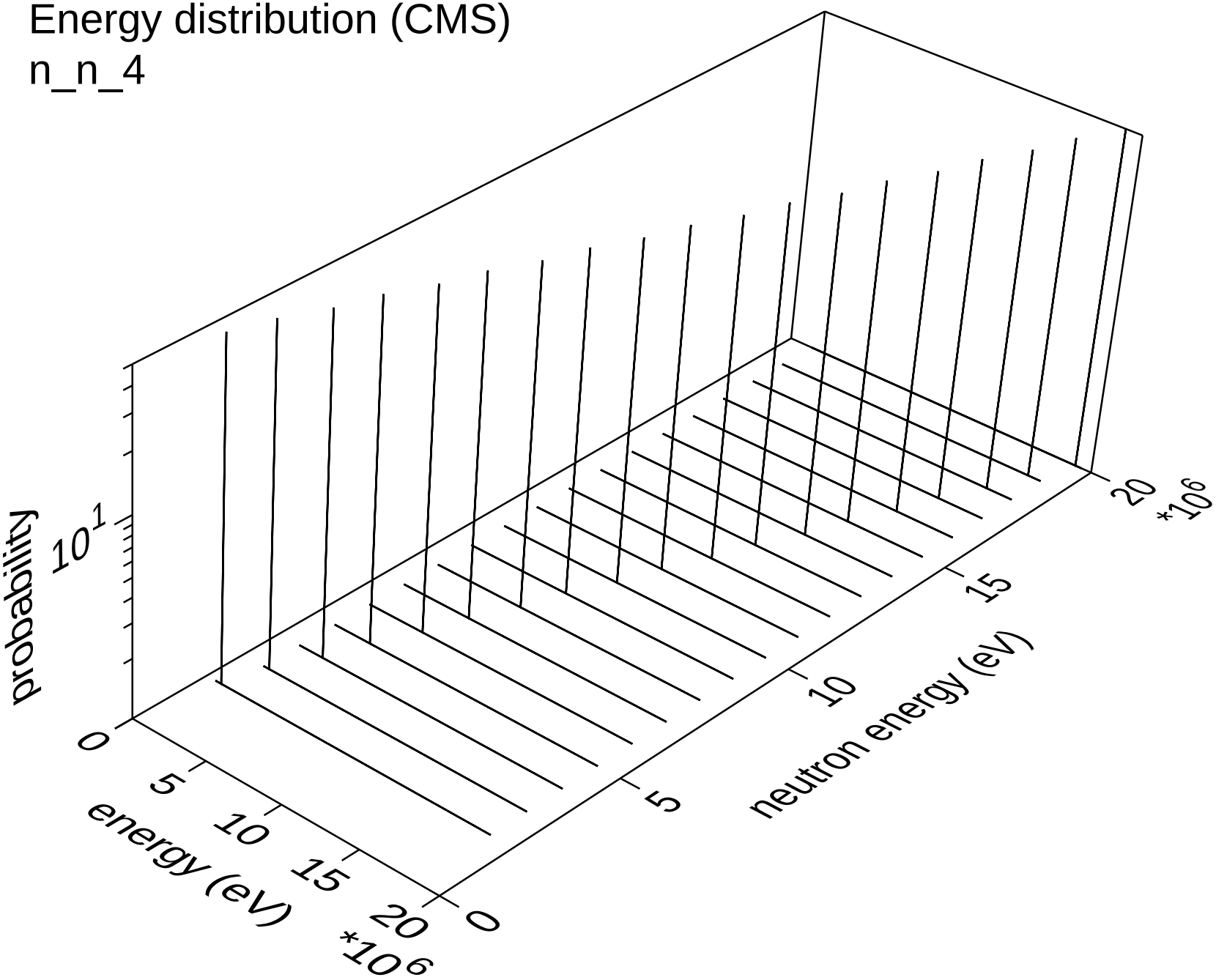

Energy distribution (CMS)
n_np
probability
10^{1}
10^{-1}
0
2
4
6
8
10
*10^6
energy (eV)
10
12
14
16
18
20
*10^6
neutron energy (eV)

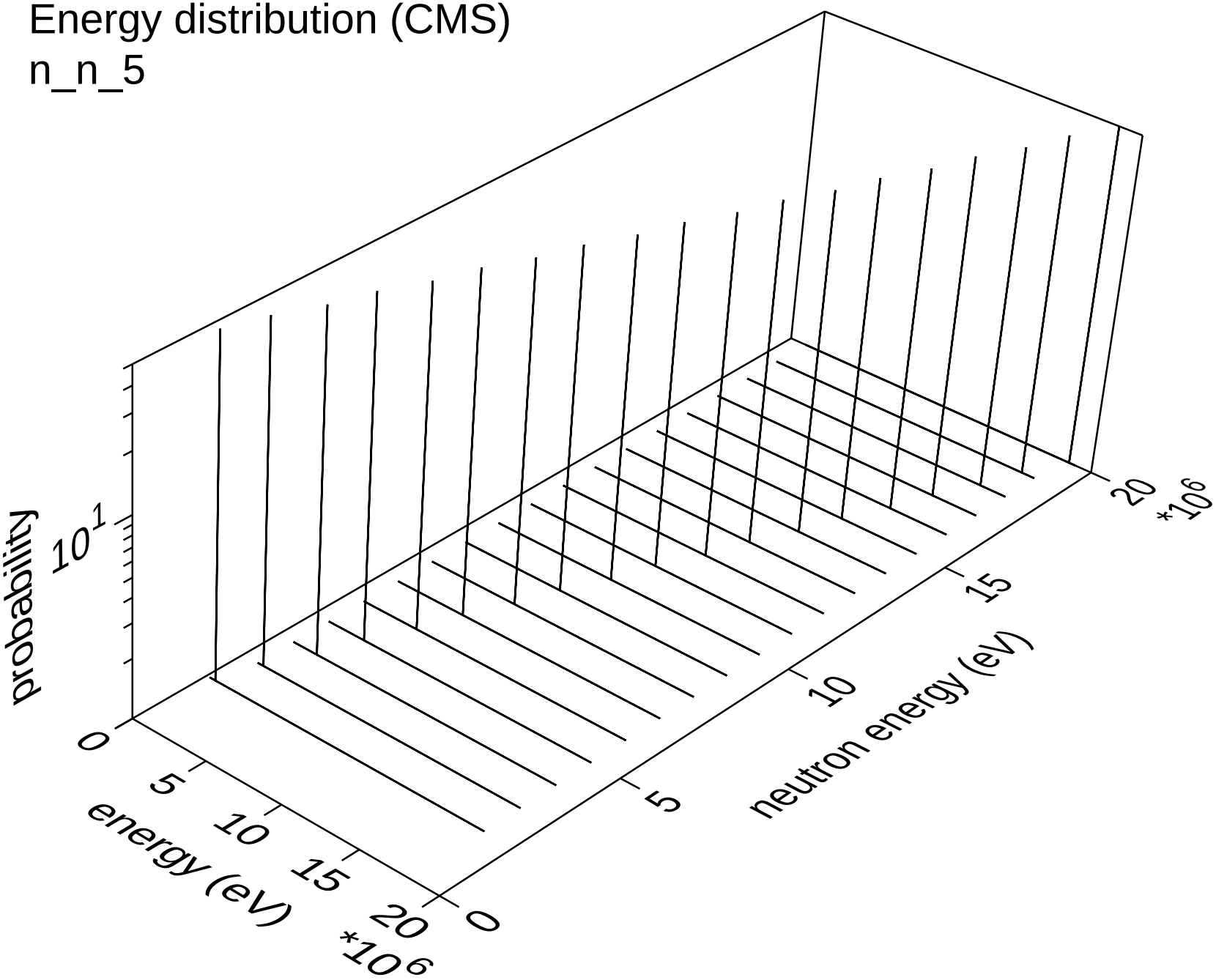

Energy distribution (CMS)
n_nd
probability
10^{1}
10^{0}
10^{-1}
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
40
*10^6
neutron energy (eV)

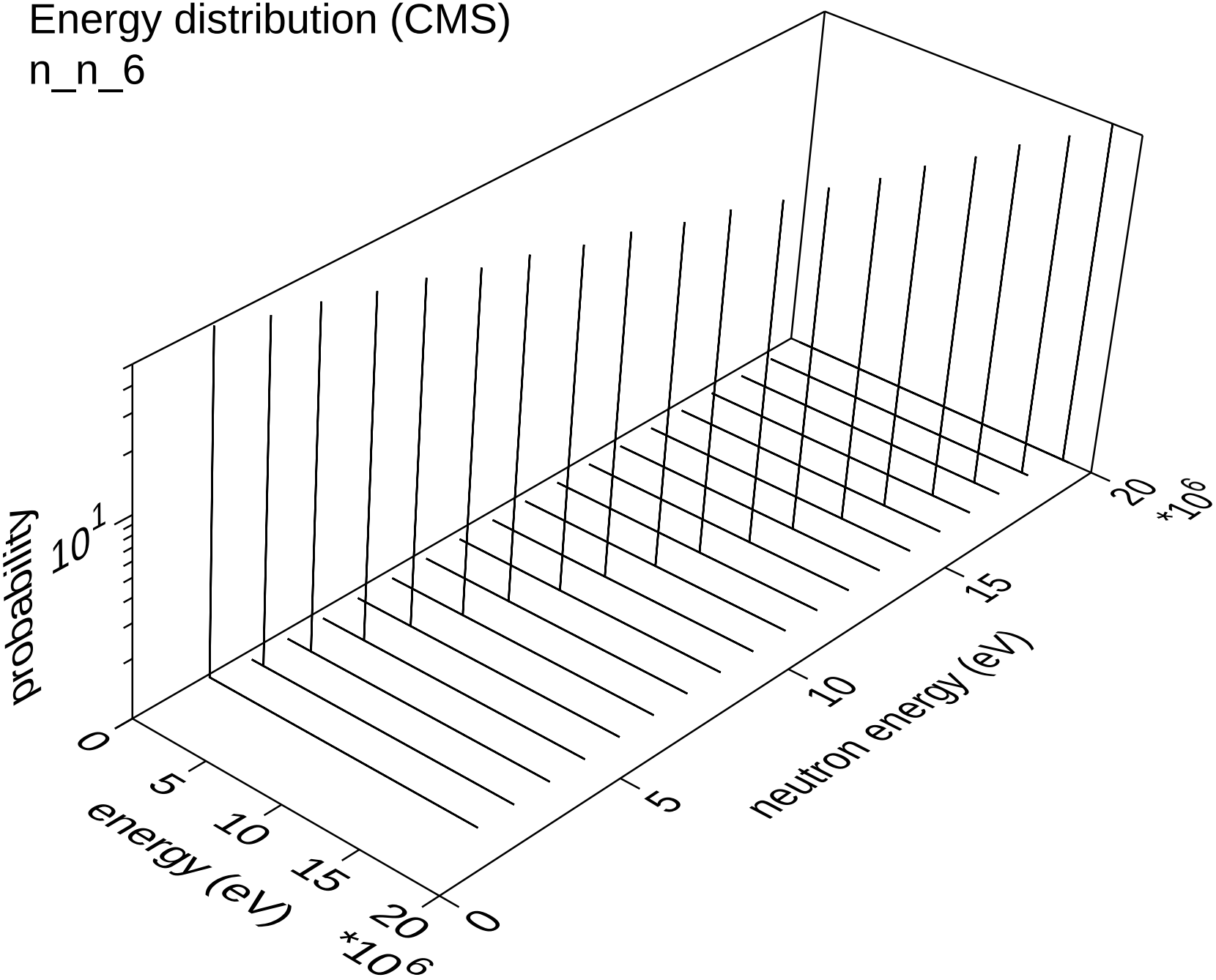

Energy distribution (CMS)
n_n_1
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

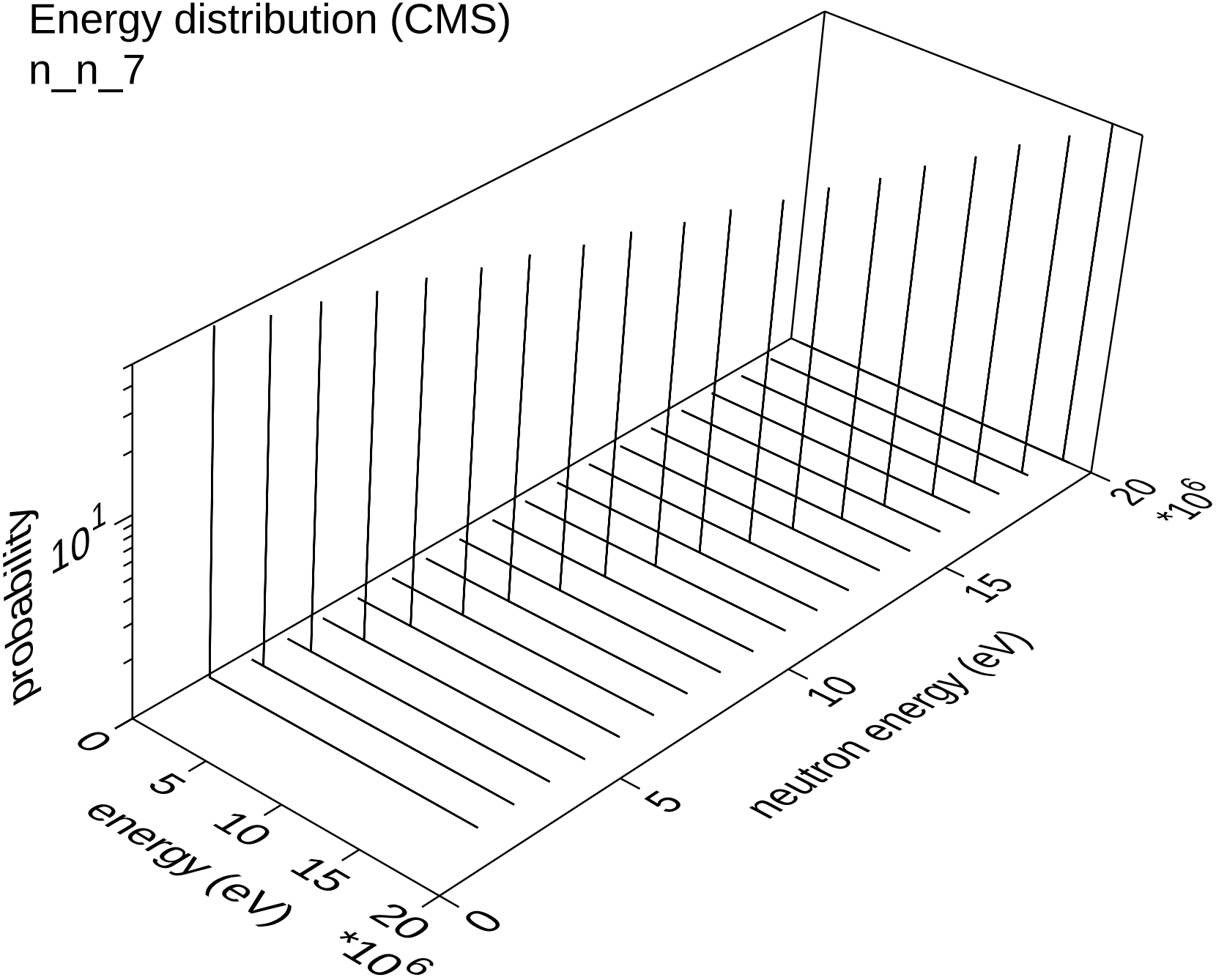

Energy distribution (CMS)
n_n_2
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

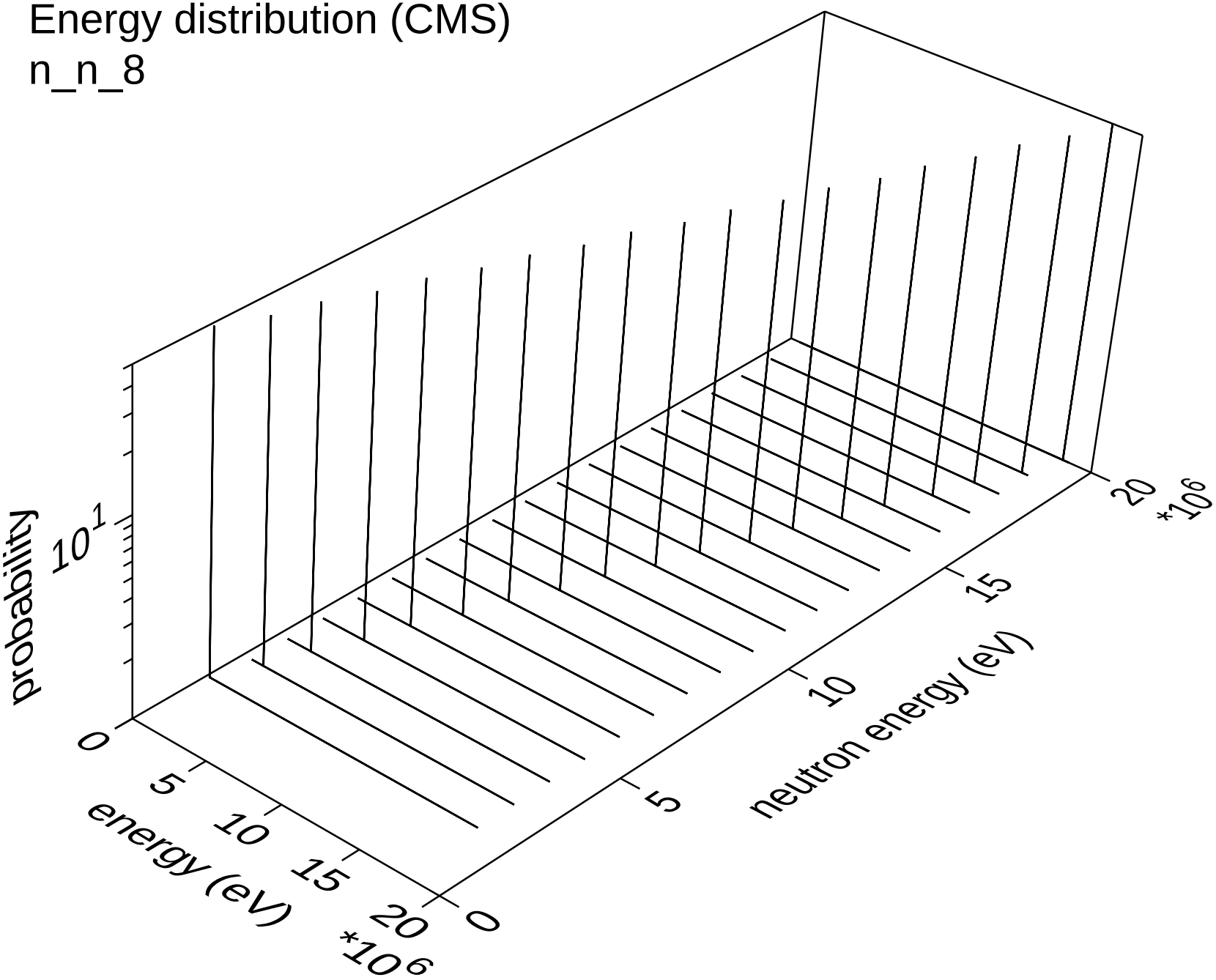

Energy distribution (CMS)
n_n_3
probability
10^{-1}
0
energy (eV)
5
10
15
20
*10^6
0
5
10
15
neutron energy (eV)
20
*10^6

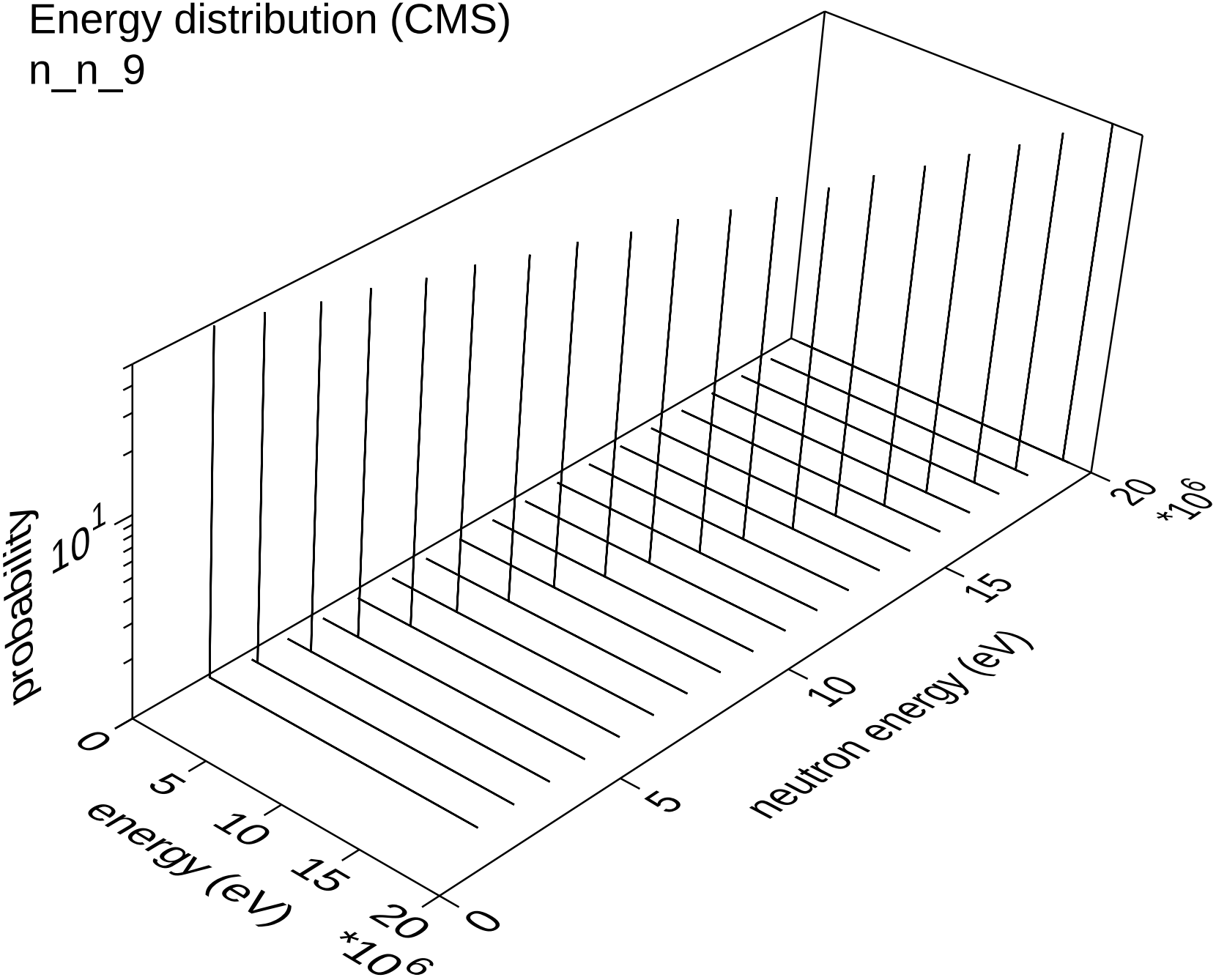

Energy distribution (CMS)
n_n_4
probability
10^{1}
0
energy (eV)
5
10
15
20
*10^6
0
5
10
15
20
*10^6
neutron energy (eV)

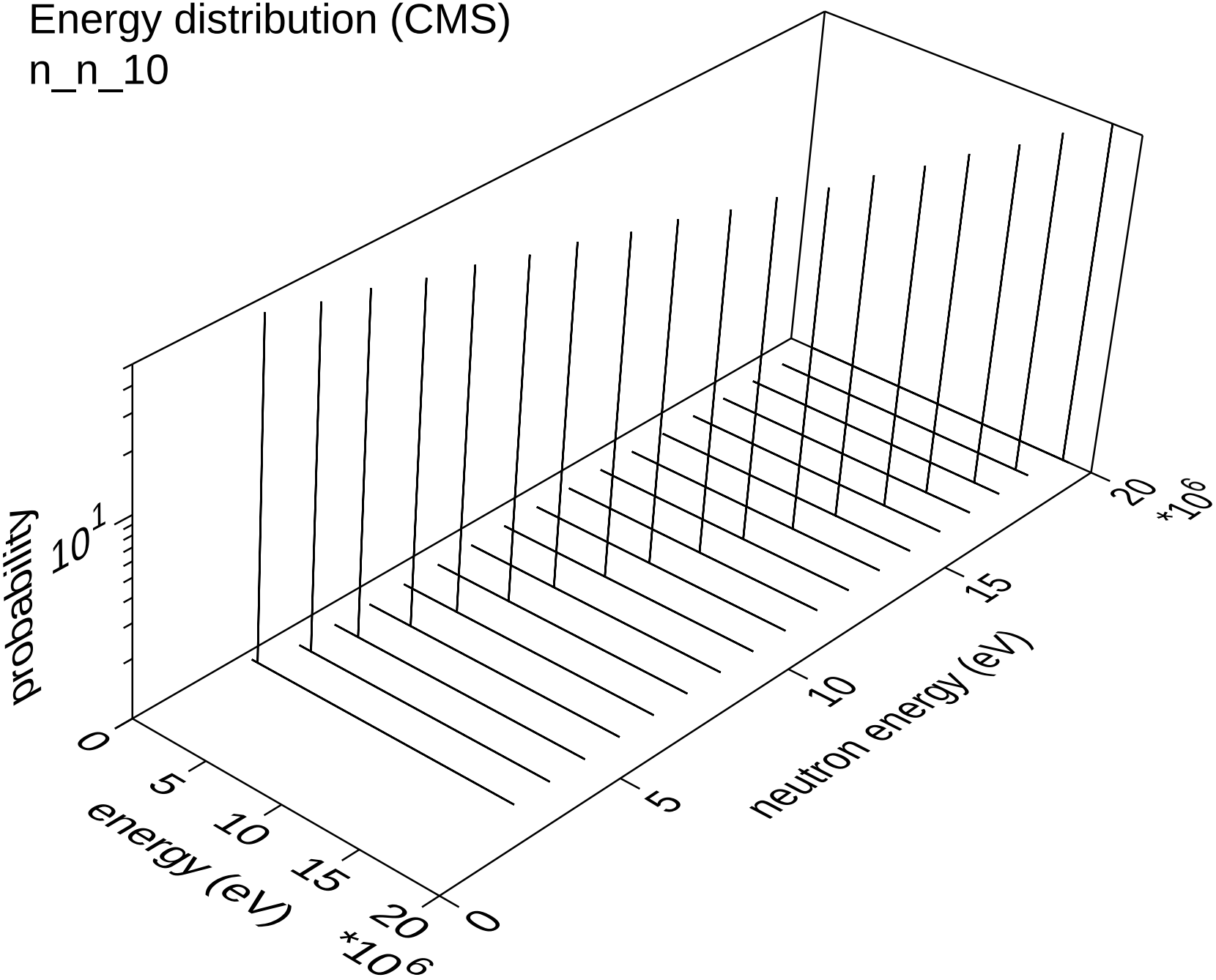

Energy distribution (CMS)
n_n_5
probability
10^{-1}
0
energy (eV)
5
10
15
20
*10^6
0
5
10
15
neutron energy (eV)
20
*10^6

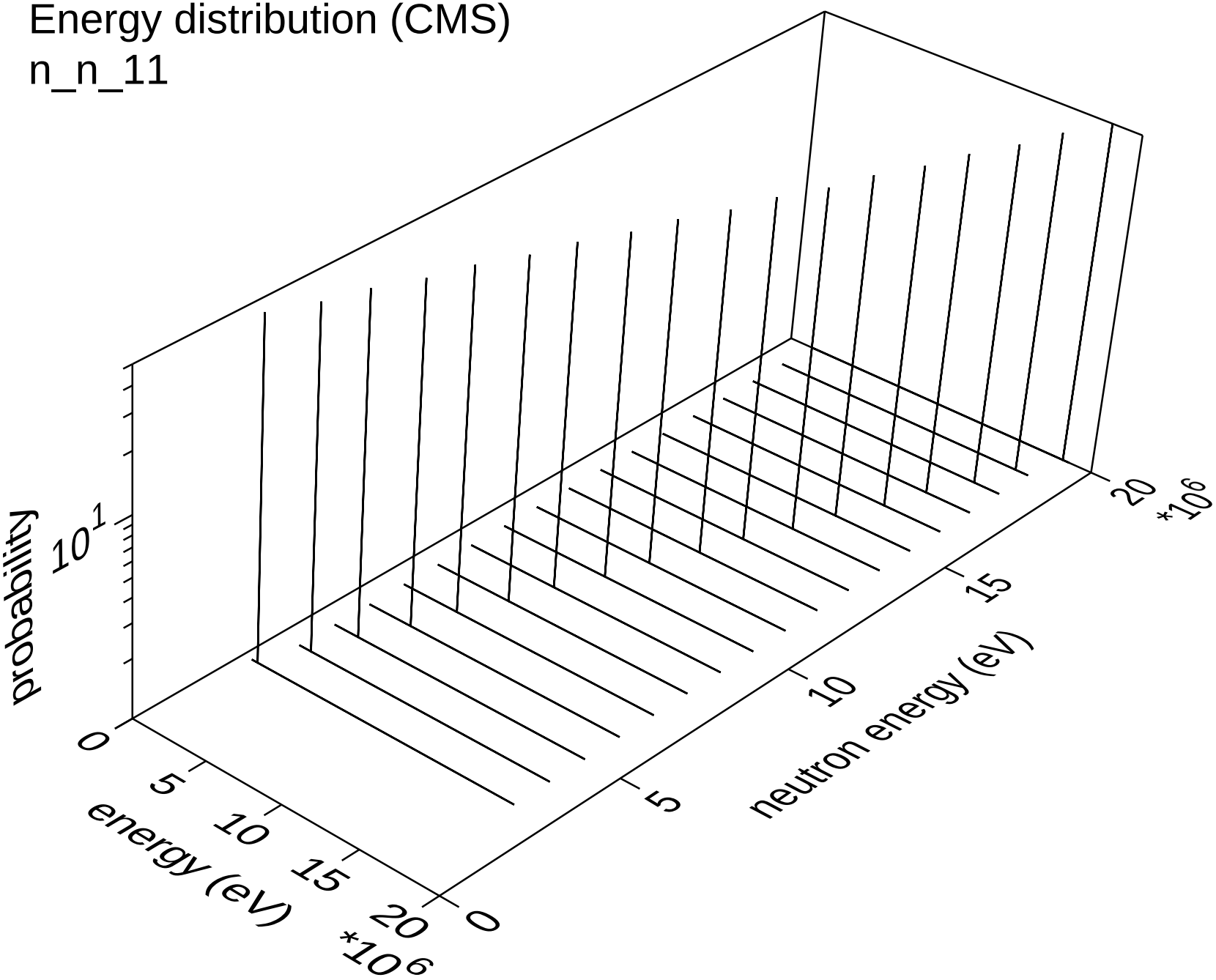

Energy distribution (CMS)
n_n_6
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

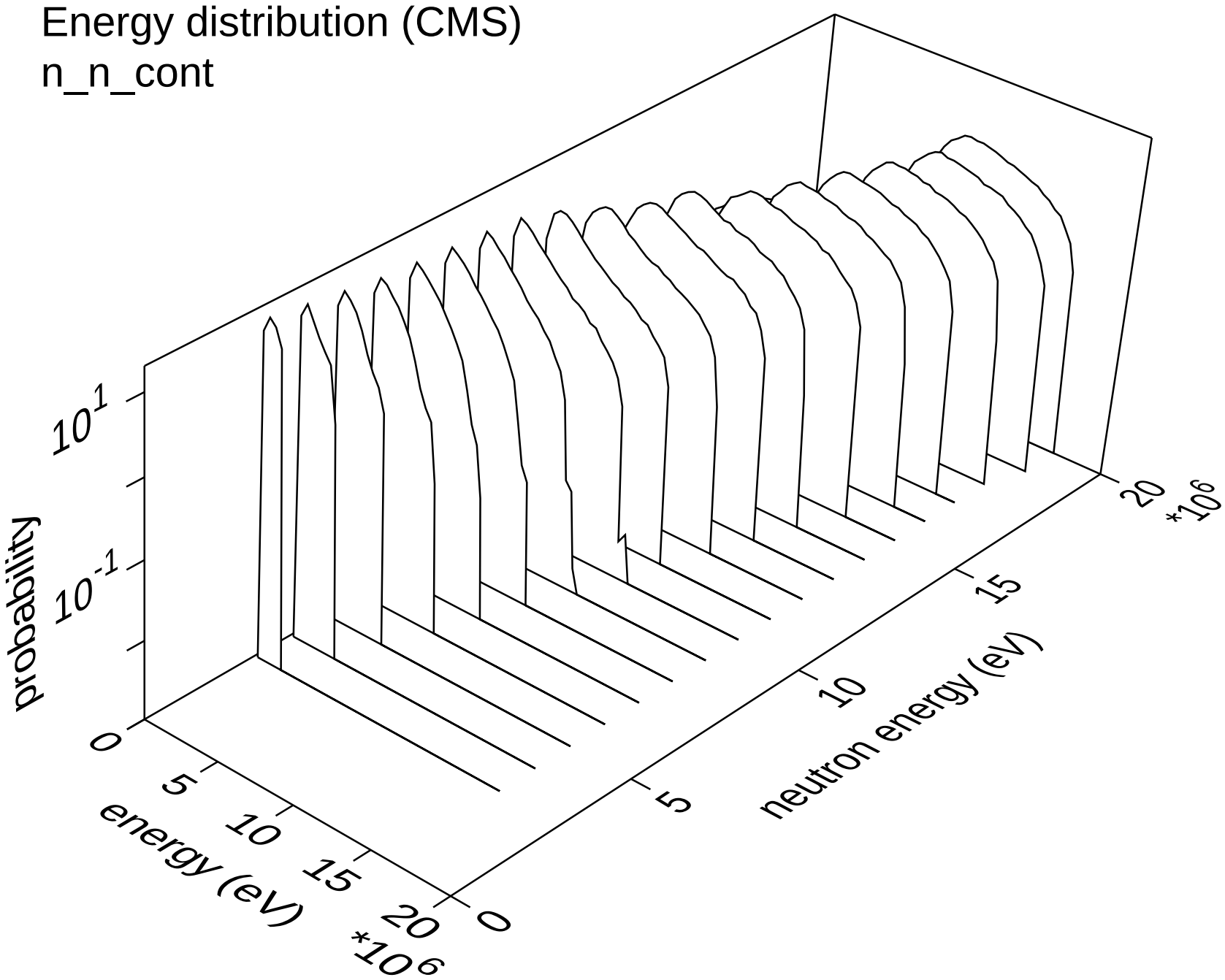

Energy distribution (CMS)
n_n_7
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_n_8
probability
10^{-1}
0
energy (eV)
5
10
15
20
*10^6
0
5
10
15
neutron energy (eV)
20
*10^6


Energy distribution (CMS)
n_n_9
probability
10^{-1}
0
energy (eV)
5
10
15
20
*10^6
0
5
10
15
neutron energy (eV)
20
*10^6


Energy distribution (CMS)
n_n_10
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_n_11
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_n_cont
probability
10^{1}
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)