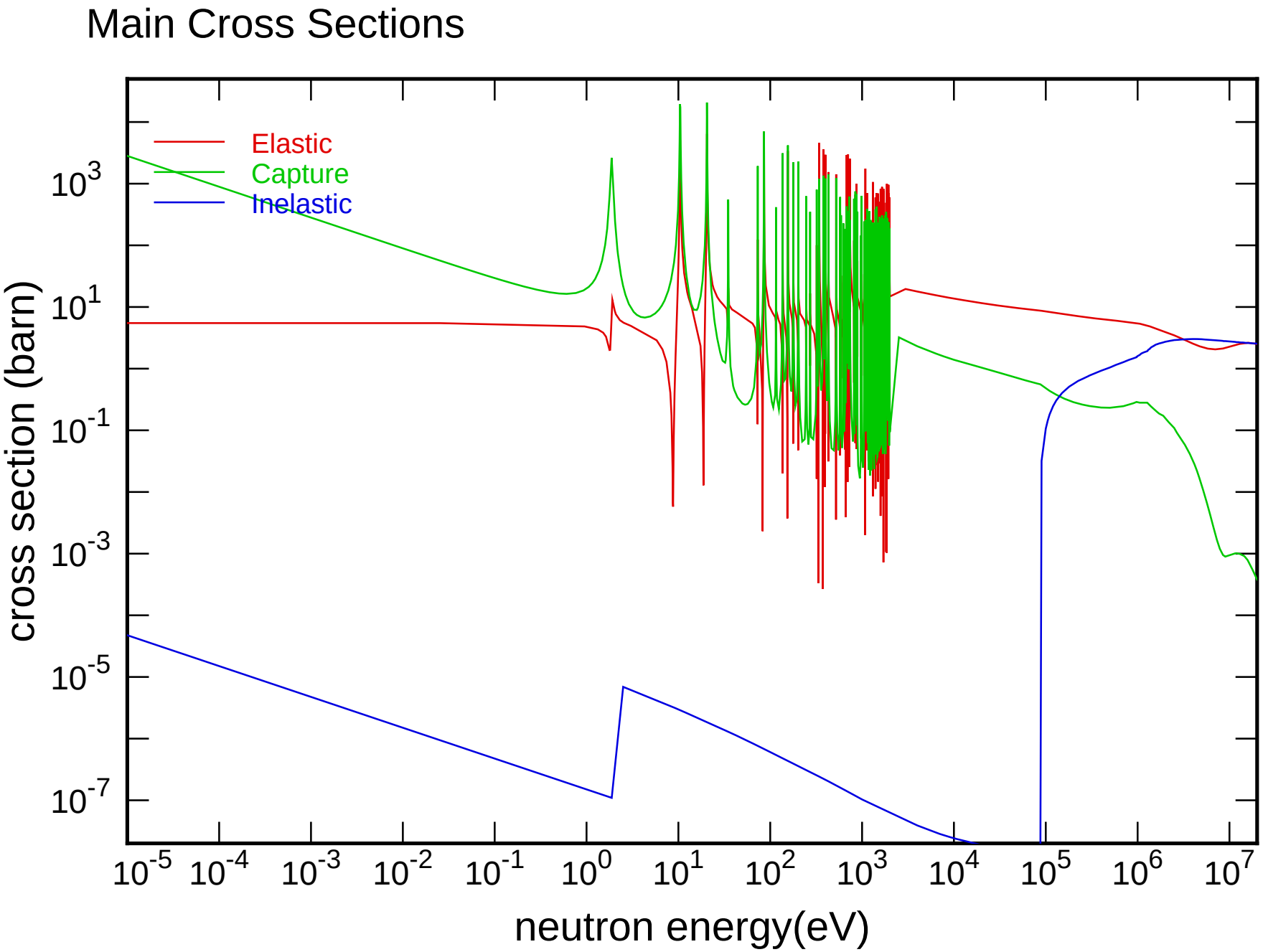
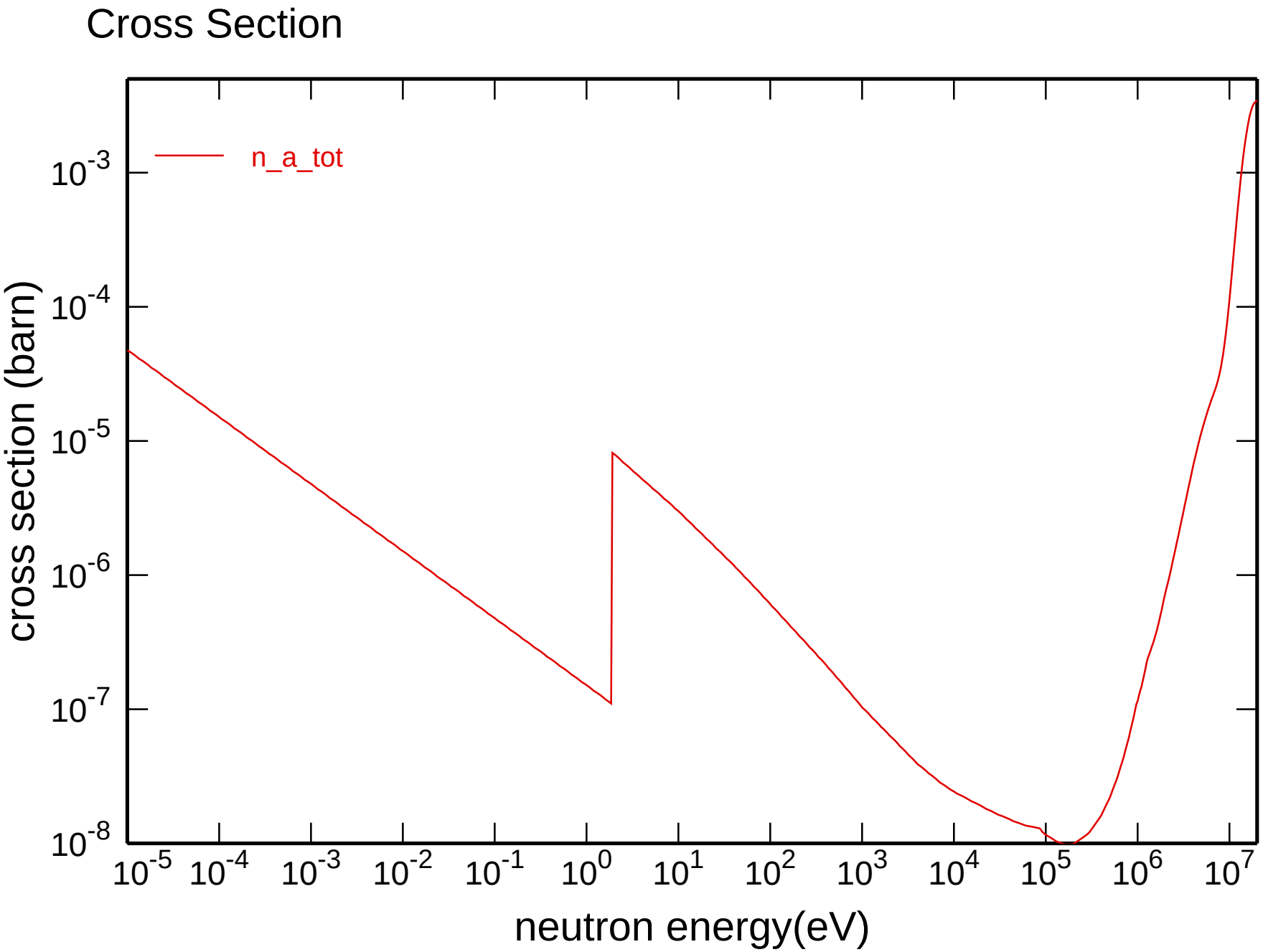
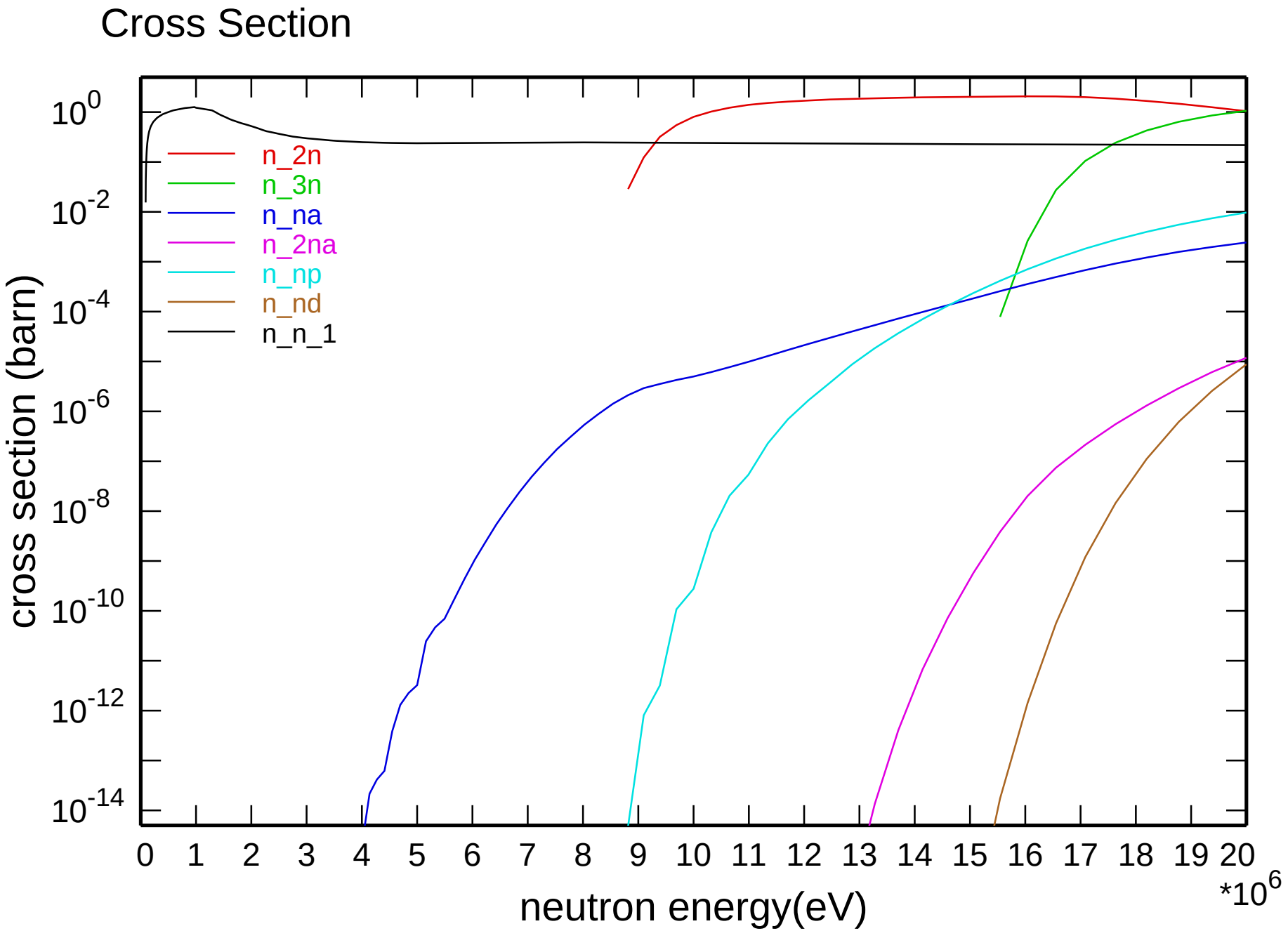
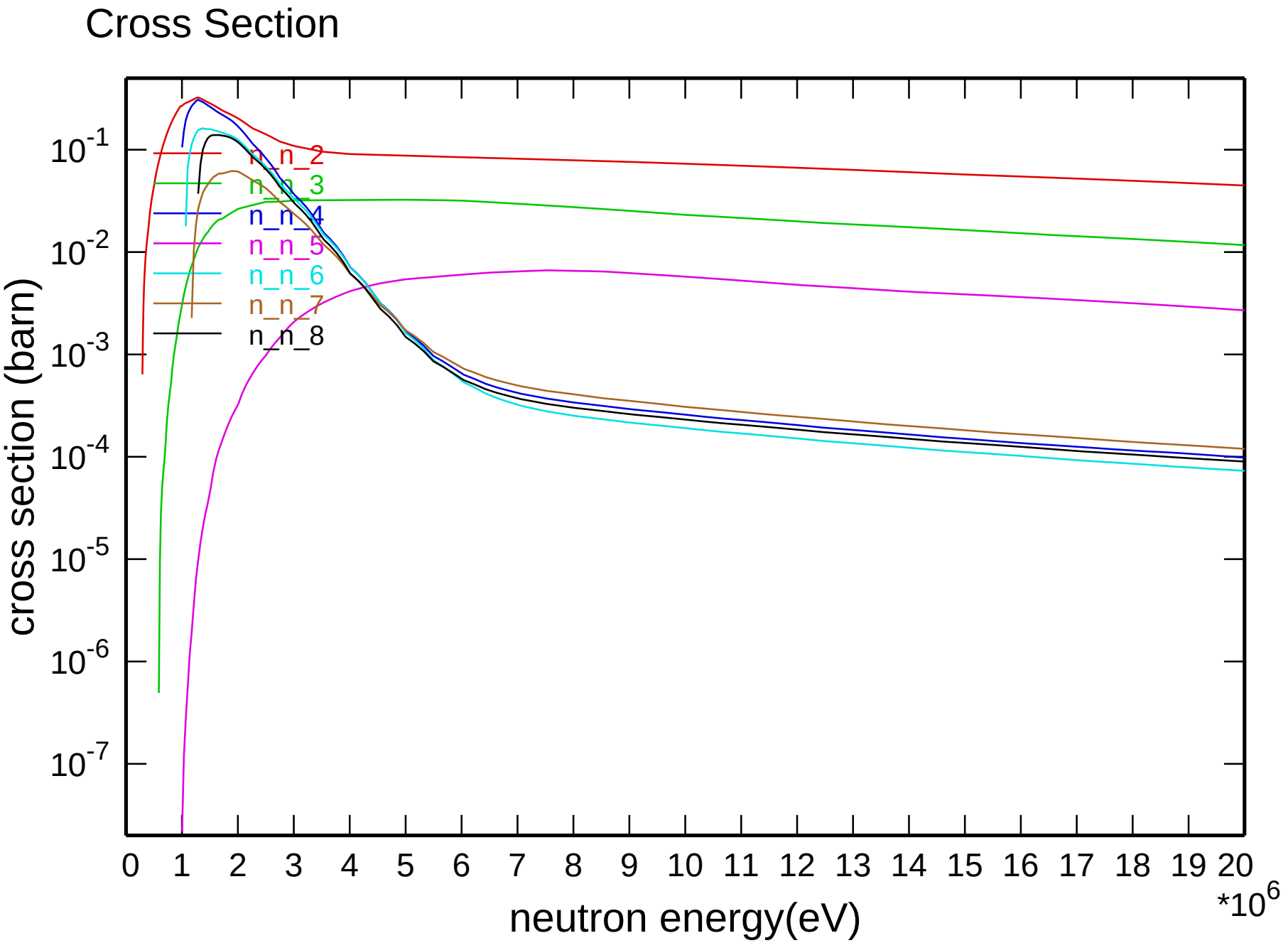
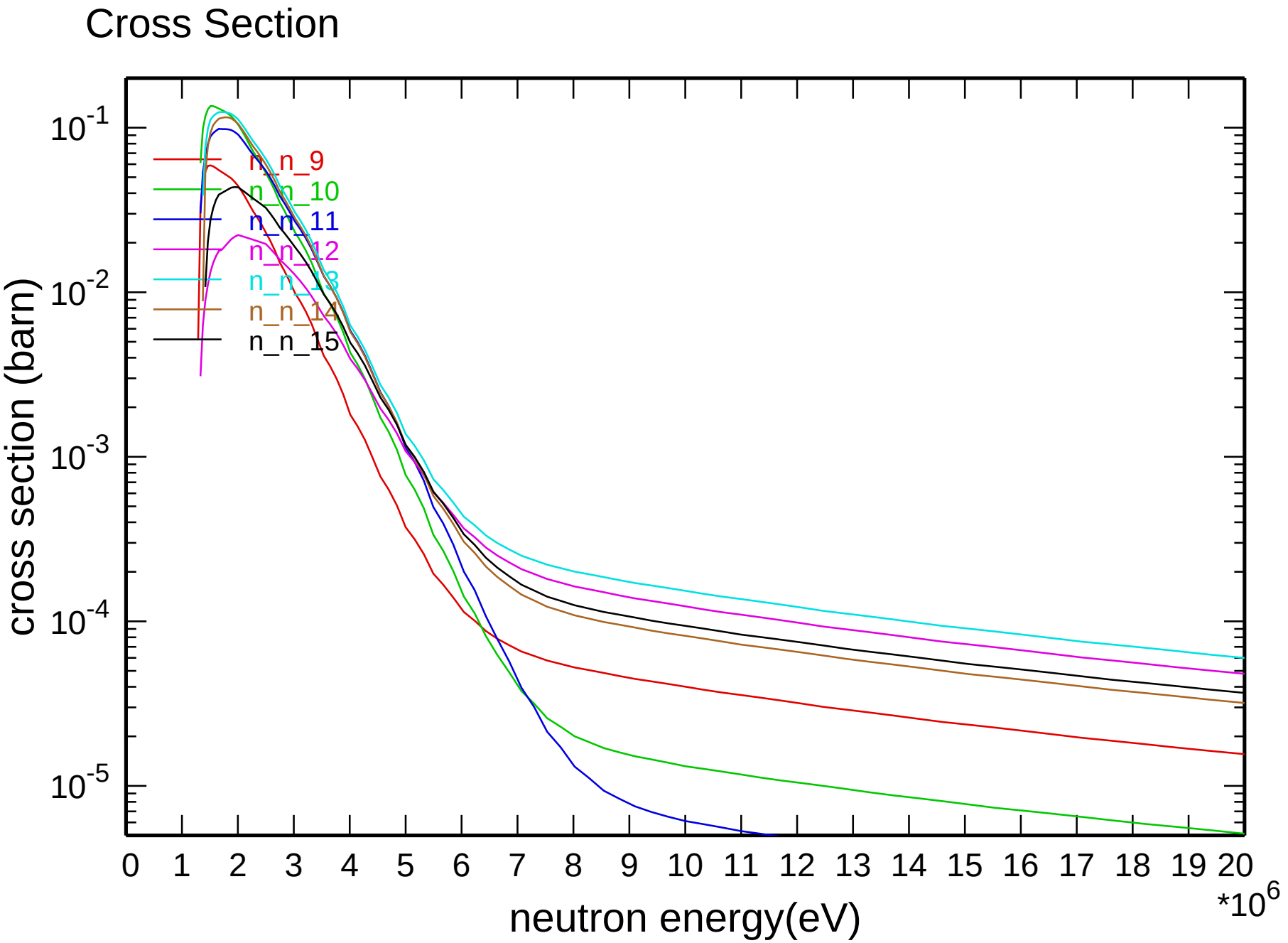
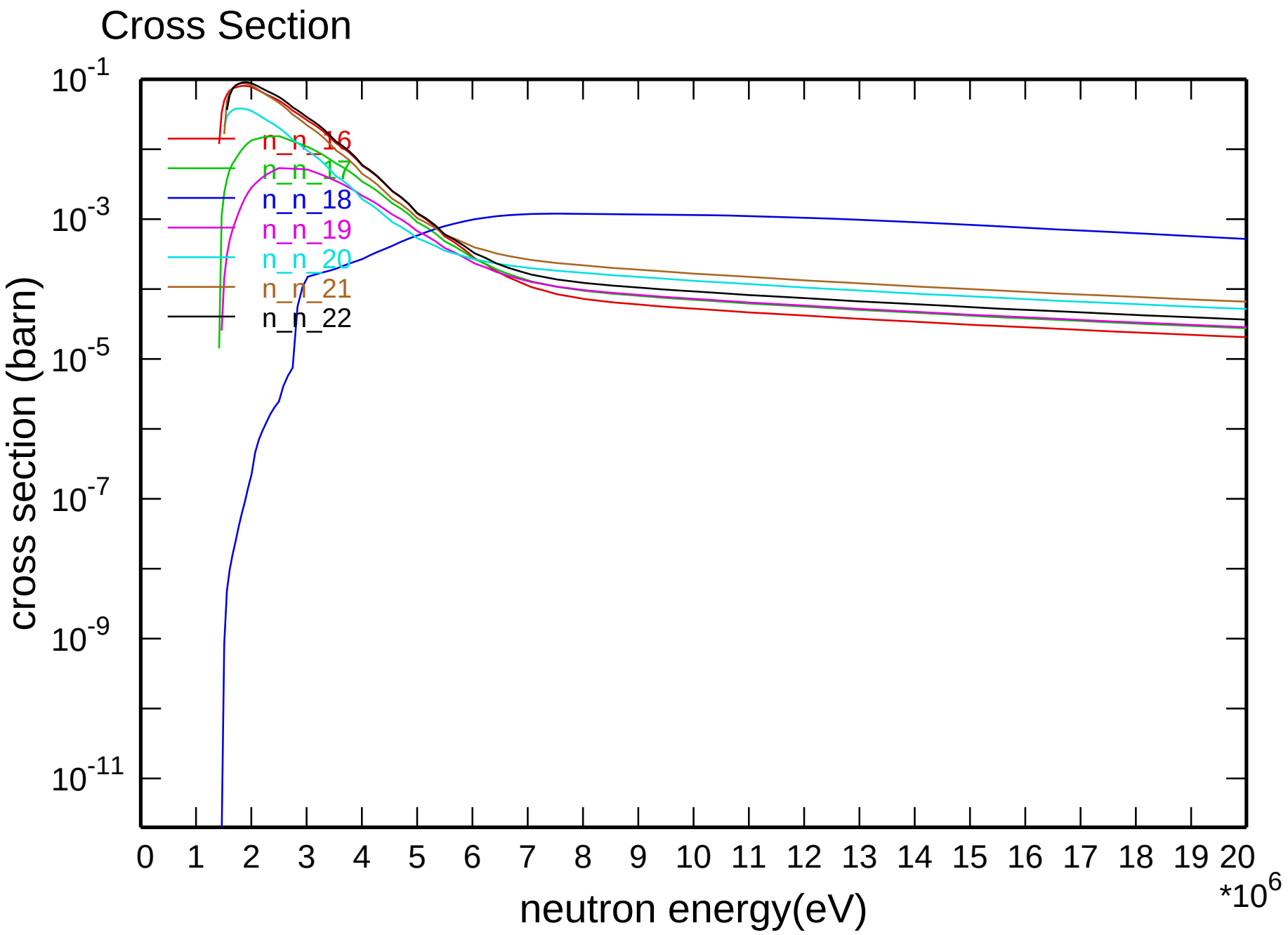

Main Cross Sections
Elastic
Capture
Inelastic
cross section (barn)
10^{3}
10^{1}
10^{-1}
10^{-3}
10^{-5}
10^{-7}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7}
neutron energy(eV)

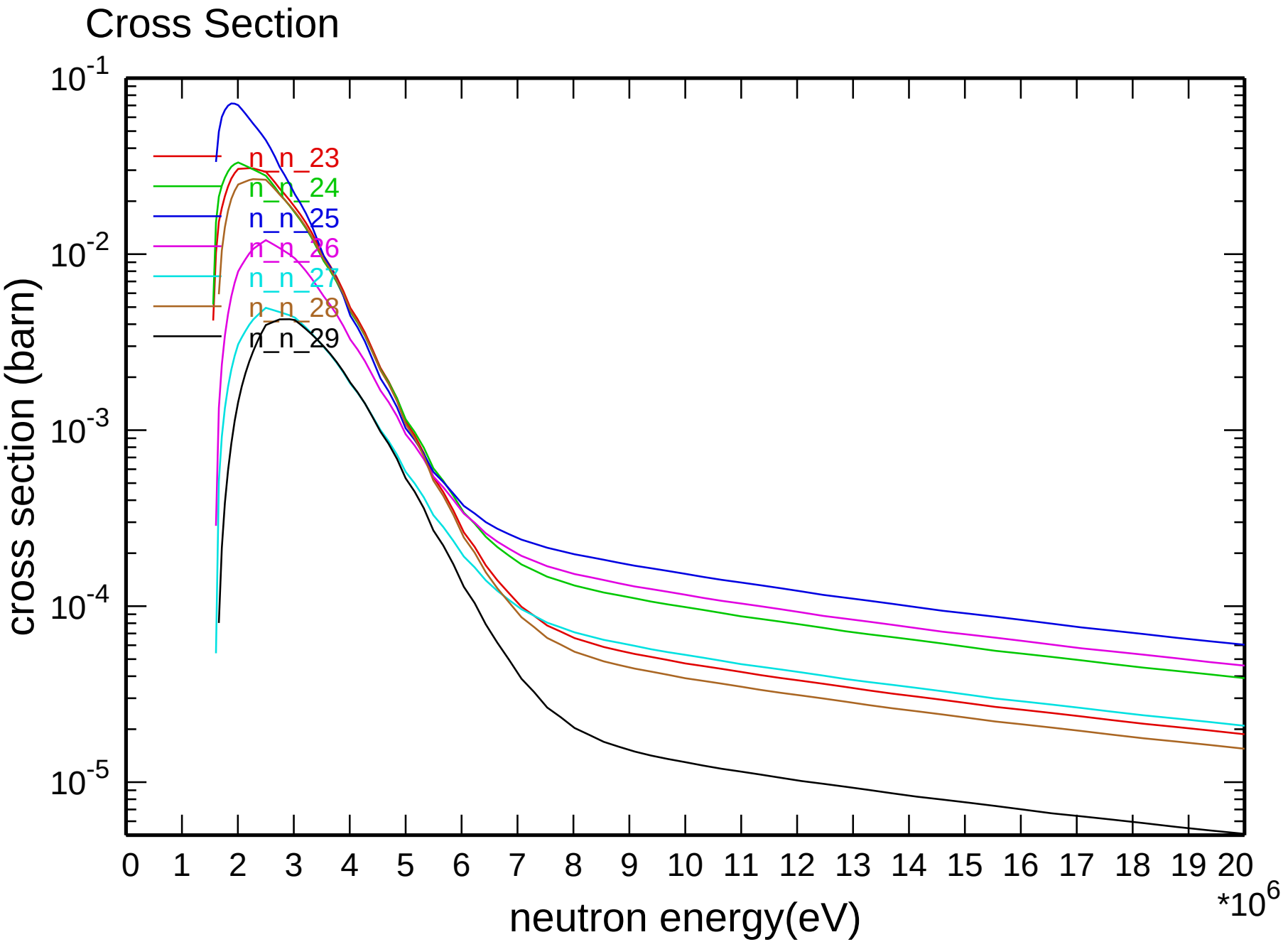

Cross Section
n_a_tot
cross section (barn)
10-3
10-4
10-5
10-6
10-7
10-8
10-5 10-4 10-3 10-2 10-1 100 101 102 103 104 105 106 107
neutron energy(eV)

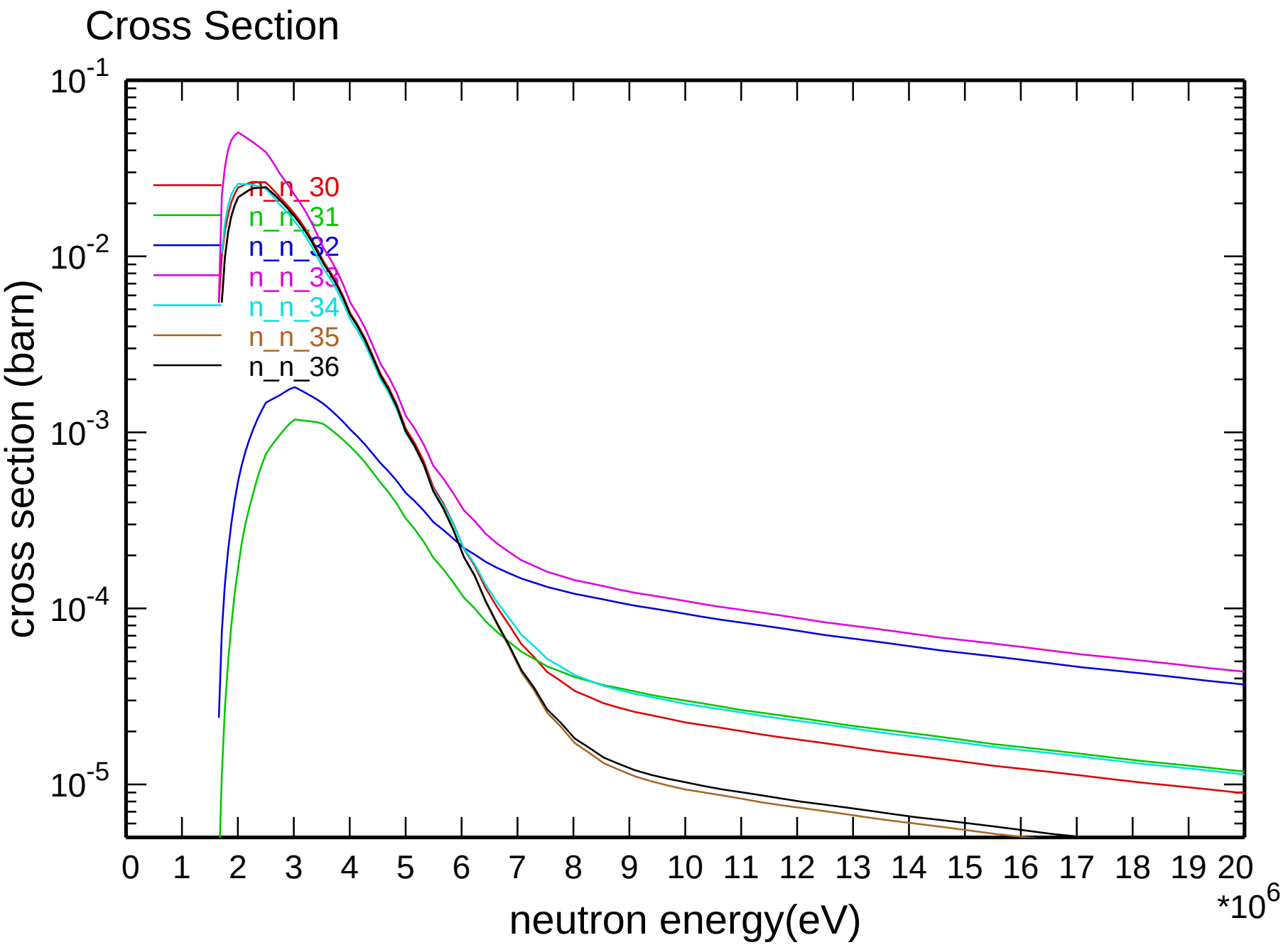

Cross Section
cross section (barn)
neutron energy(eV)
*10^6
n_2n
n_3n
n_na
n_2na
n_np
n_nd
n_n_1
10^0
10^-2
10^-4
10^-6
10^-8
10^-10
10^-12
10^-14
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

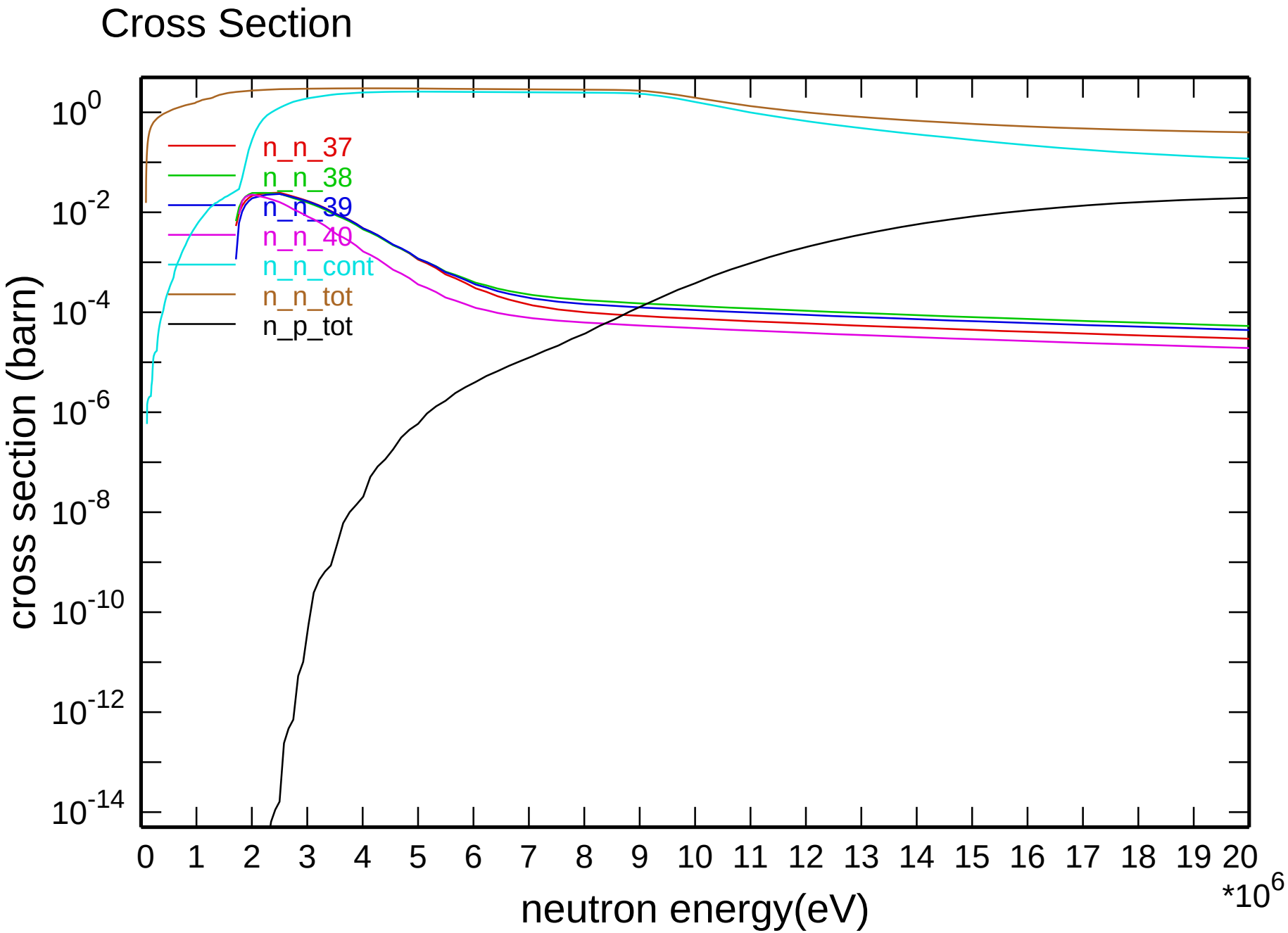

Cross Section
cross section (barn)
neutron energy(eV)
*10^6
n_n_2
n_n_3
n_n_4
n_n_5
n_n_6
n_n_7
n_n_8
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

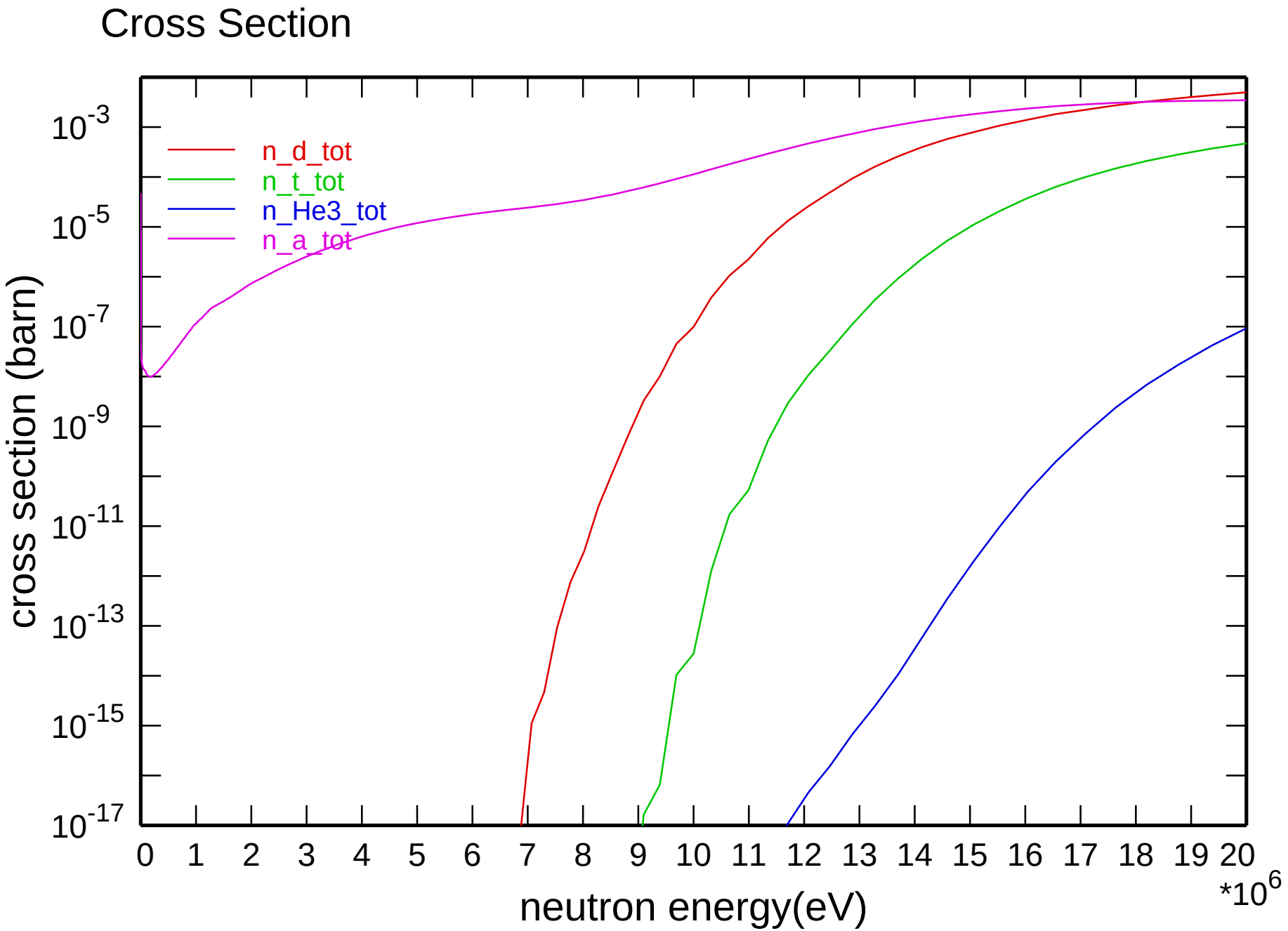

Cross Section
cross section (barn)
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
n_n_9
n_n_10
n_n_11
n_n_12
n_n_13
n_n_14
n_n_15
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
*10^{6}
neutron energy(eV)

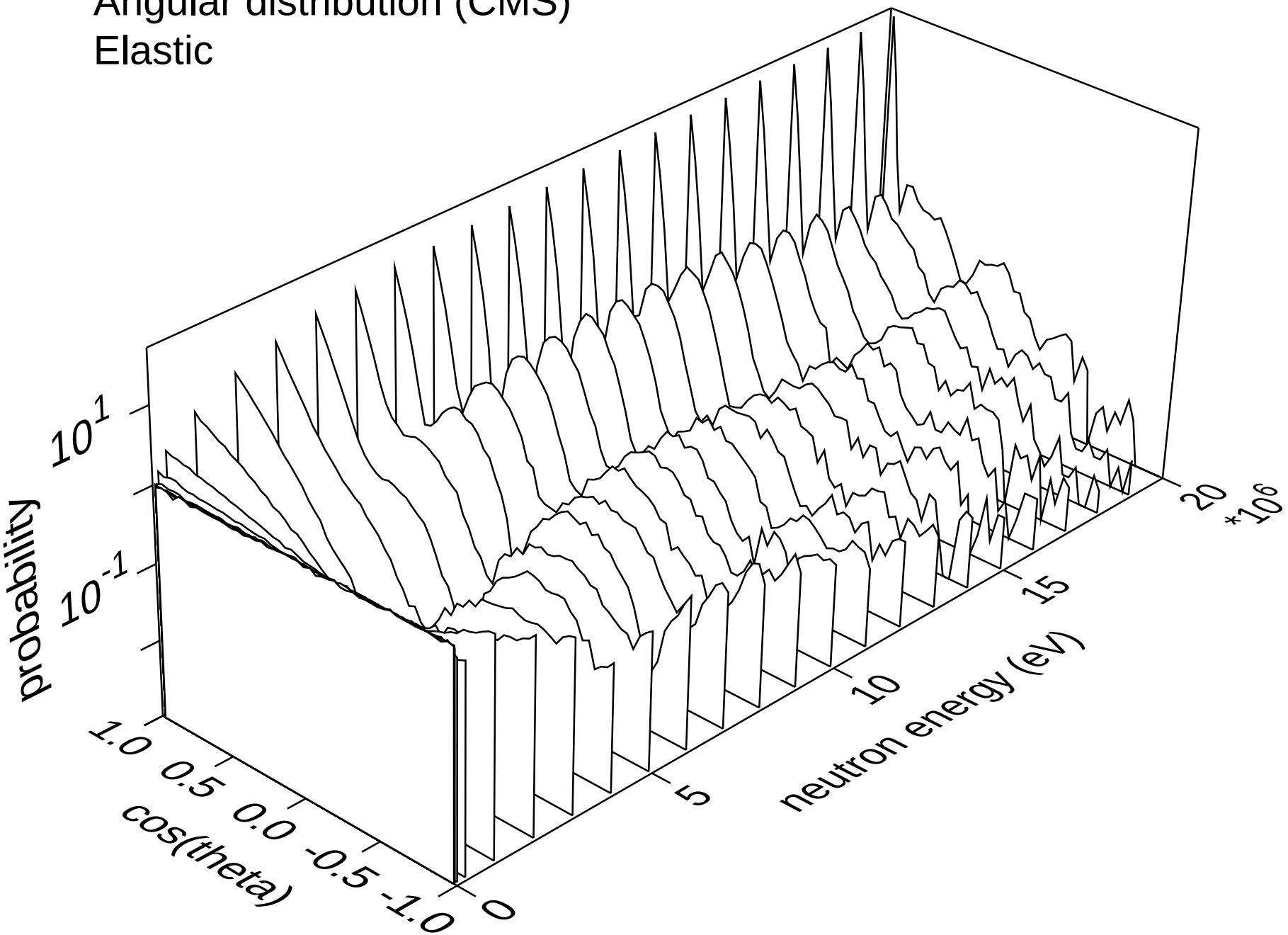

Cross Section
cross section (barn)
neutron energy(eV)
*10^6
n_n_16
n_n_17
n_n_18
n_n_19
n_n_20
n_n_21
n_n_22

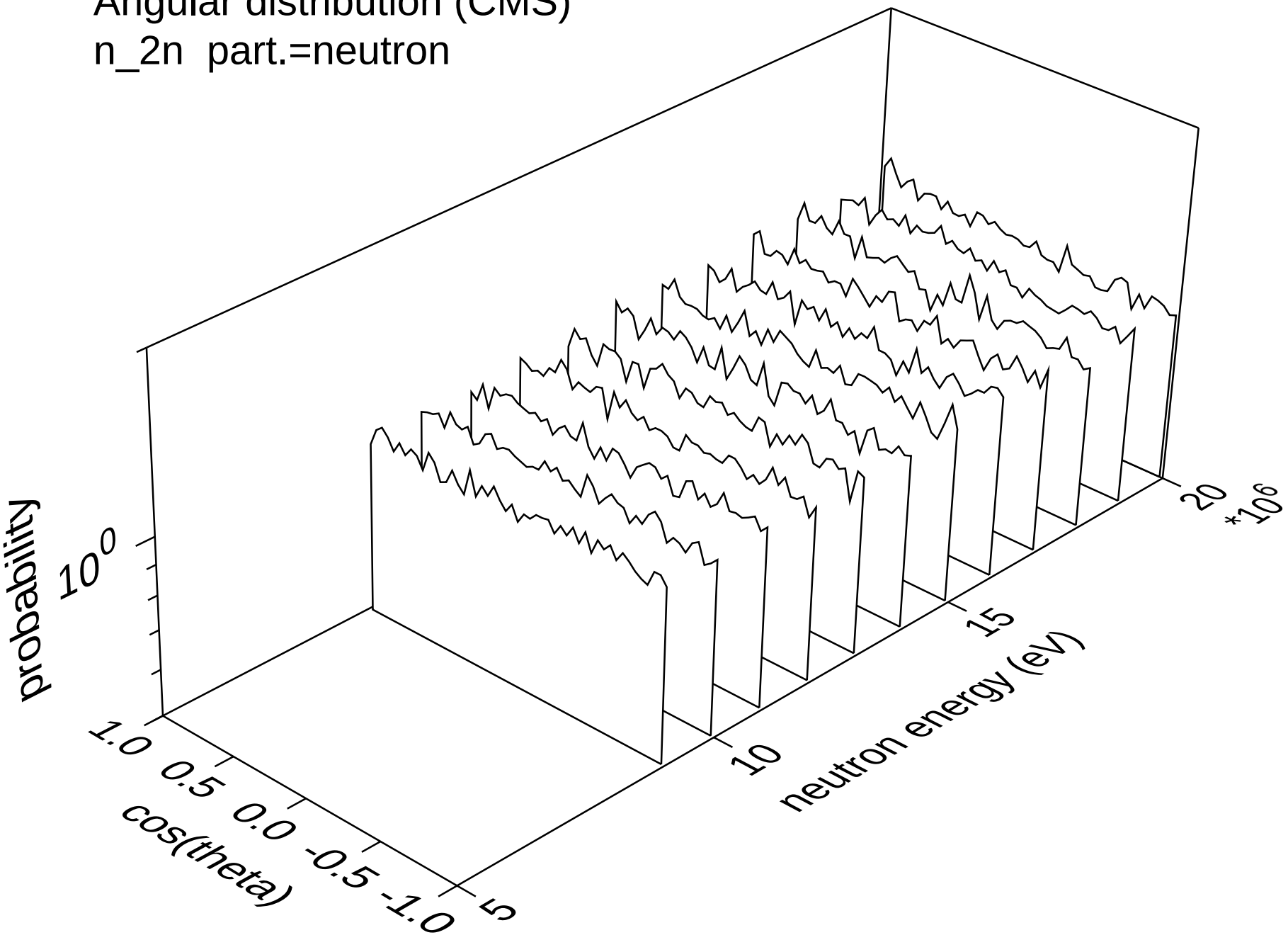

Cross Section
cross section (barn)
neutron energy(eV)
*10^6
n_n_23
n_n_24
n_n_25
n_n_26
n_n_27
n_n_28
n_n_29

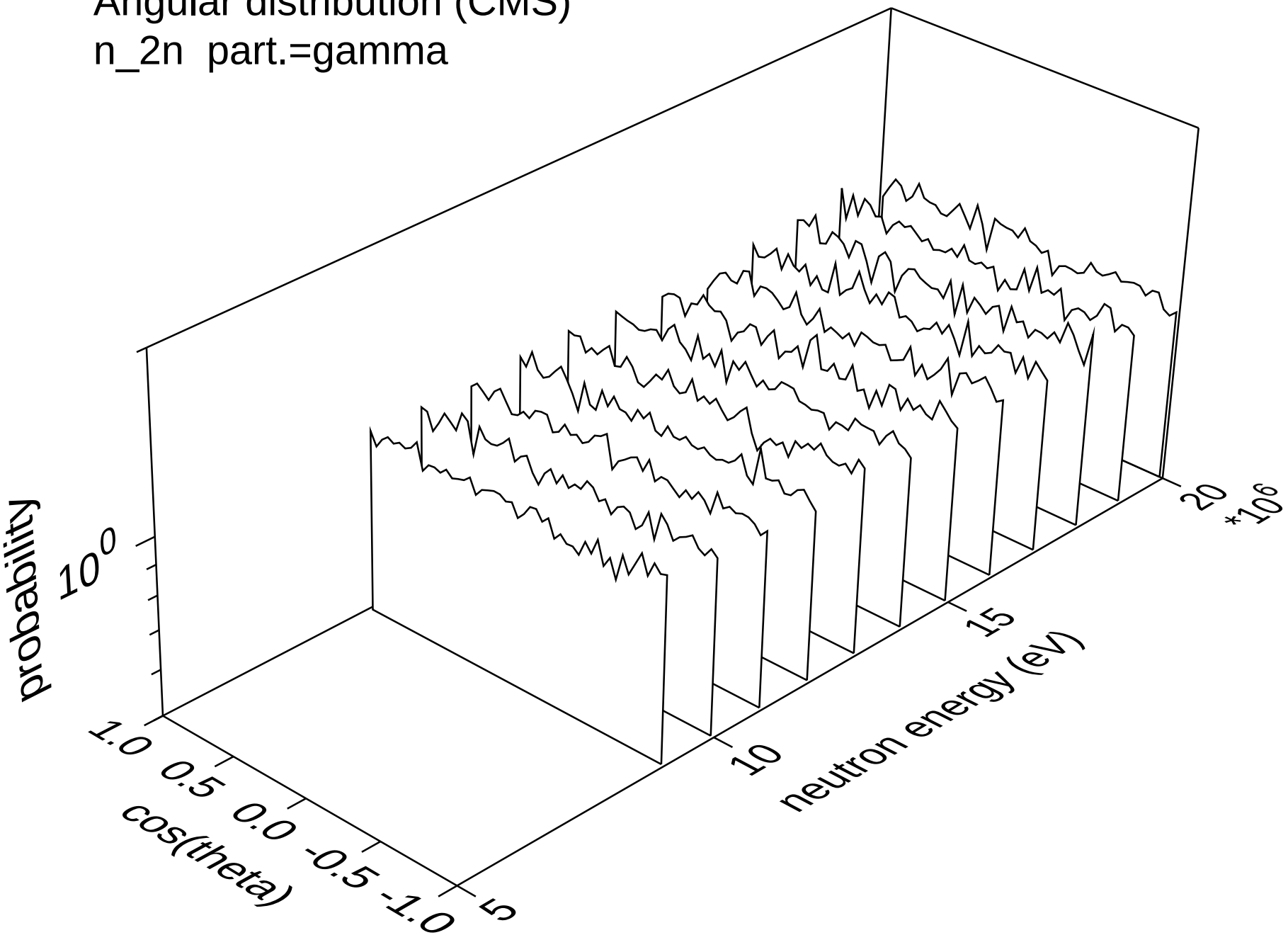

Cross Section
cross section (barn)
neutron energy(eV)
*10^6
n_n_30
n_n_31
n_n_32
n_n_33
n_n_34
n_n_35
n_n_36

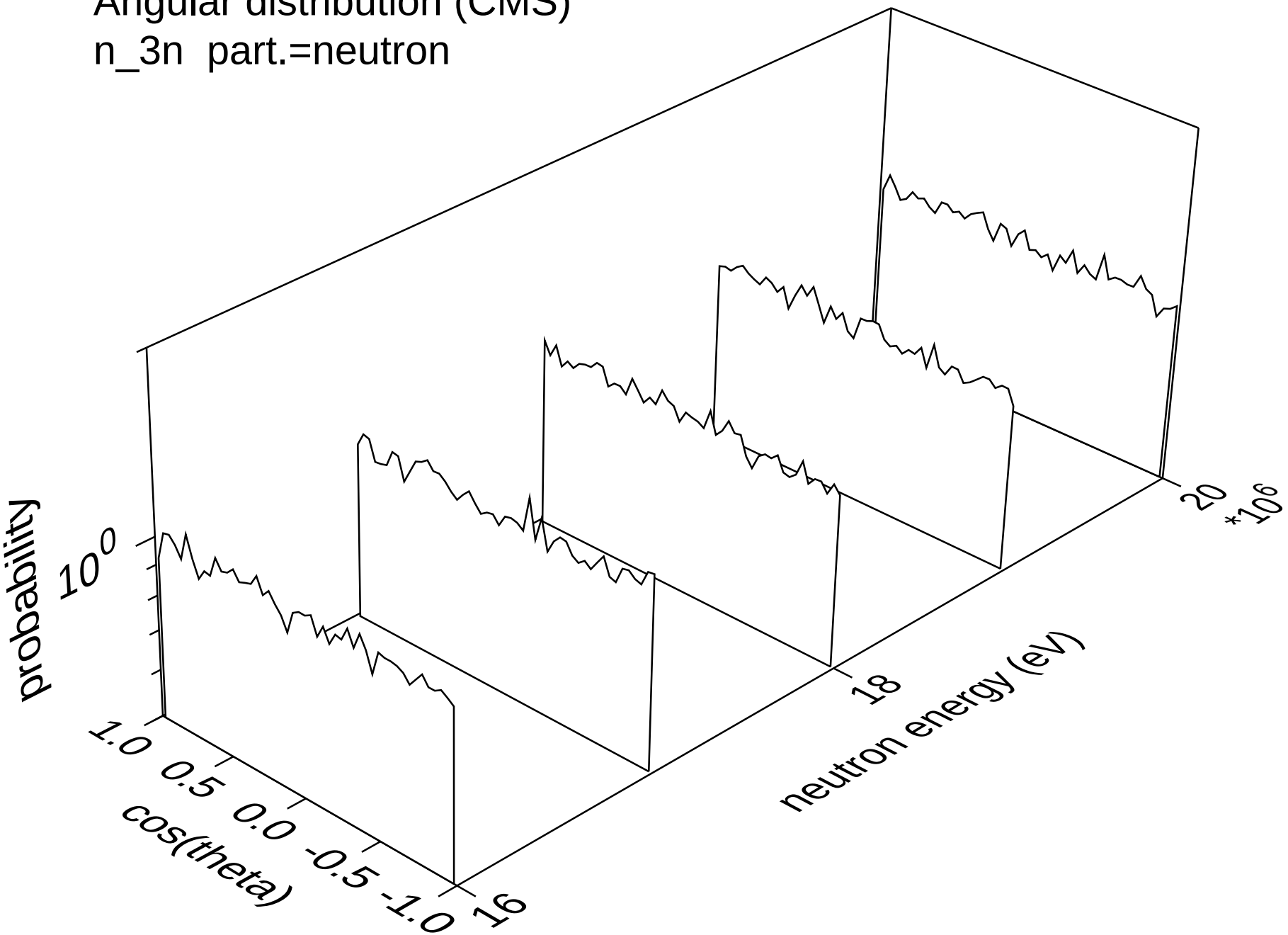

Cross Section
cross section (barn)
neutron energy(eV)
*10^6
n_n_37
n_n_38
n_n_39
n_n_40
n_n_cont
n_n_tot
n_p_tot

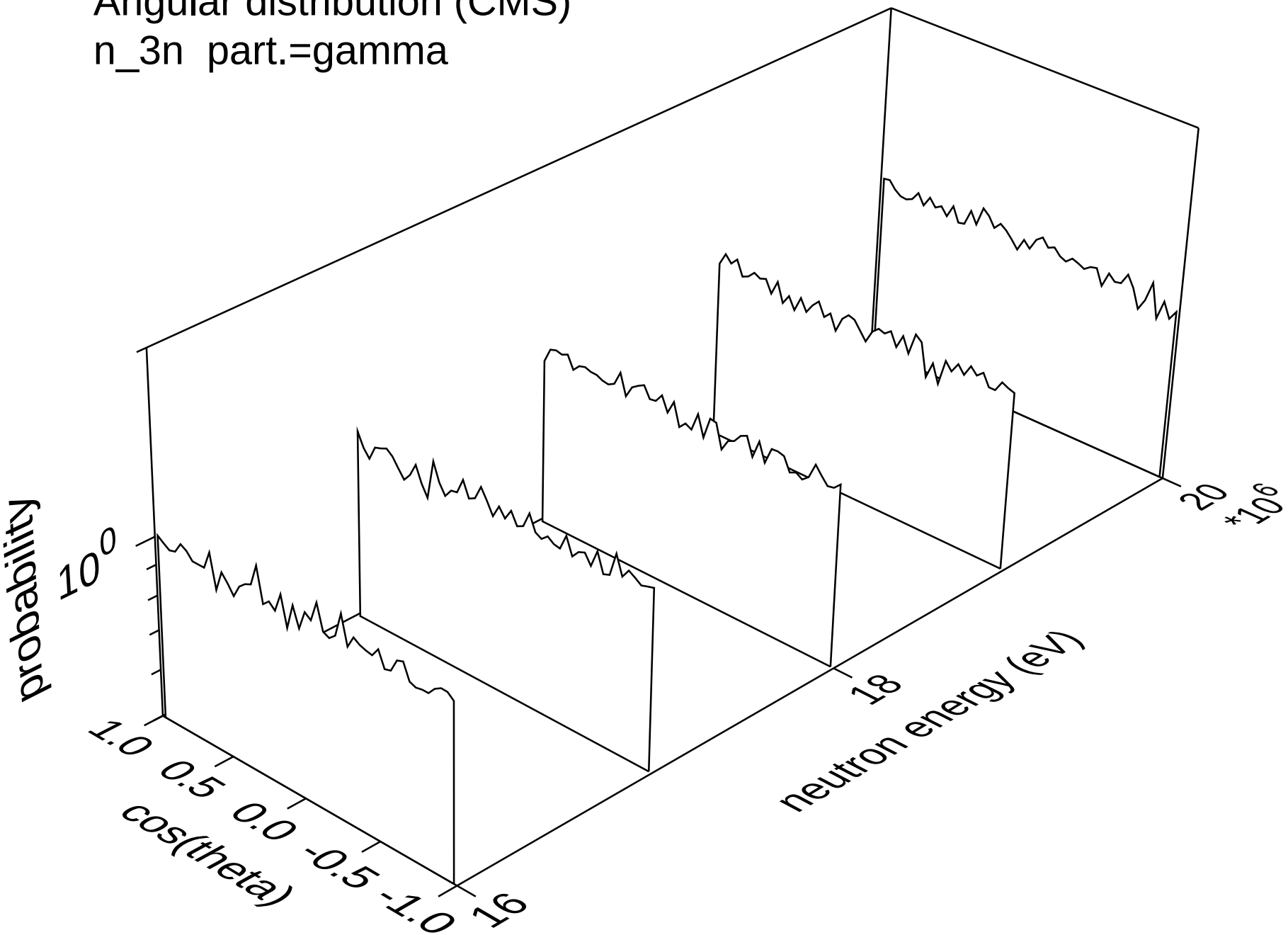

Cross Section
n_d_tot
n_t_tot
n_He3_tot
n_a_tot
cross section (barn)
10-3
10-5
10-7
10-9
10-11
10-13
10-15
10-17
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
*10^6
neutron energy(eV)

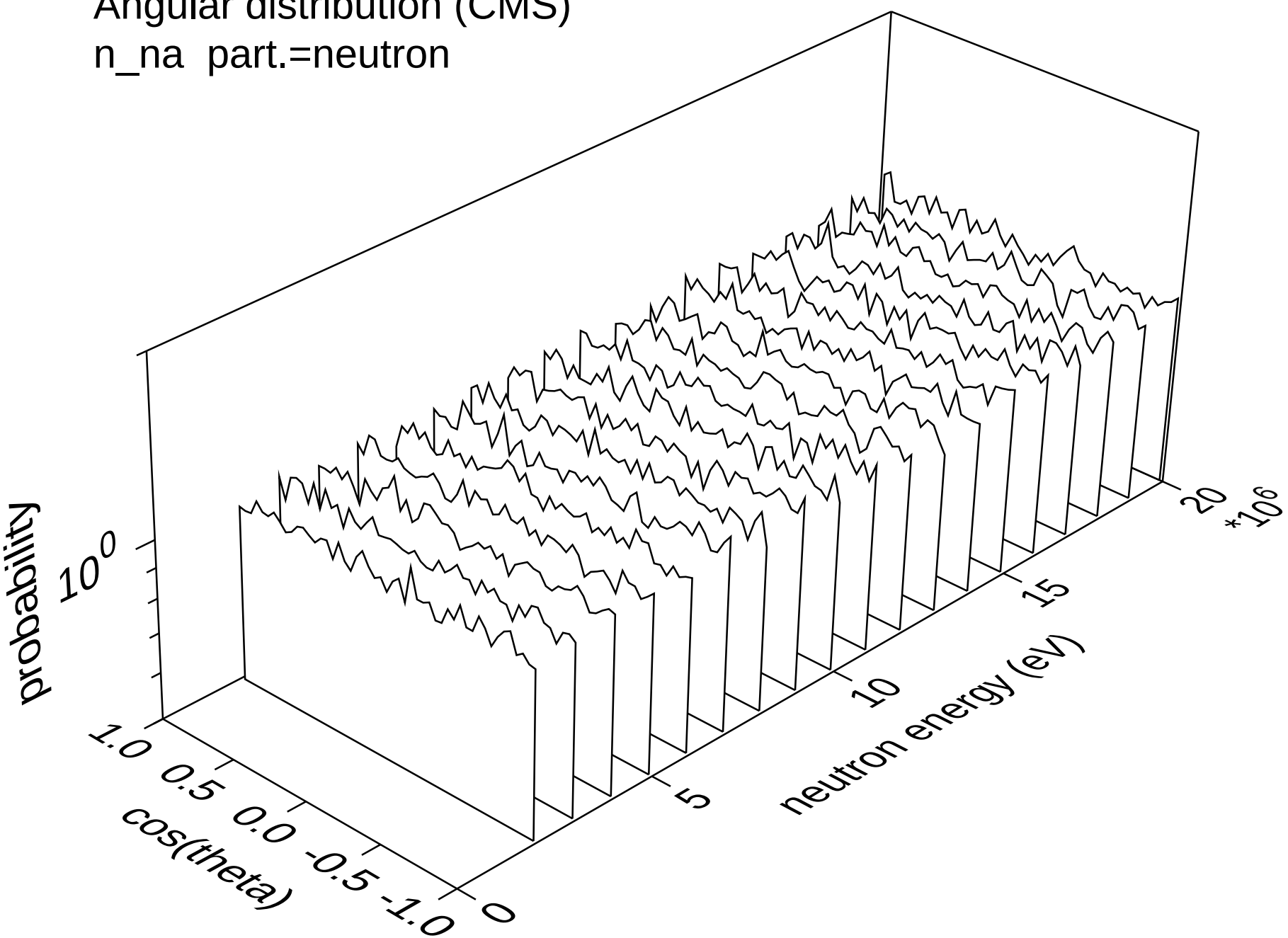

Angular distribution (CMS)
Elastic
probability
10^{1}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

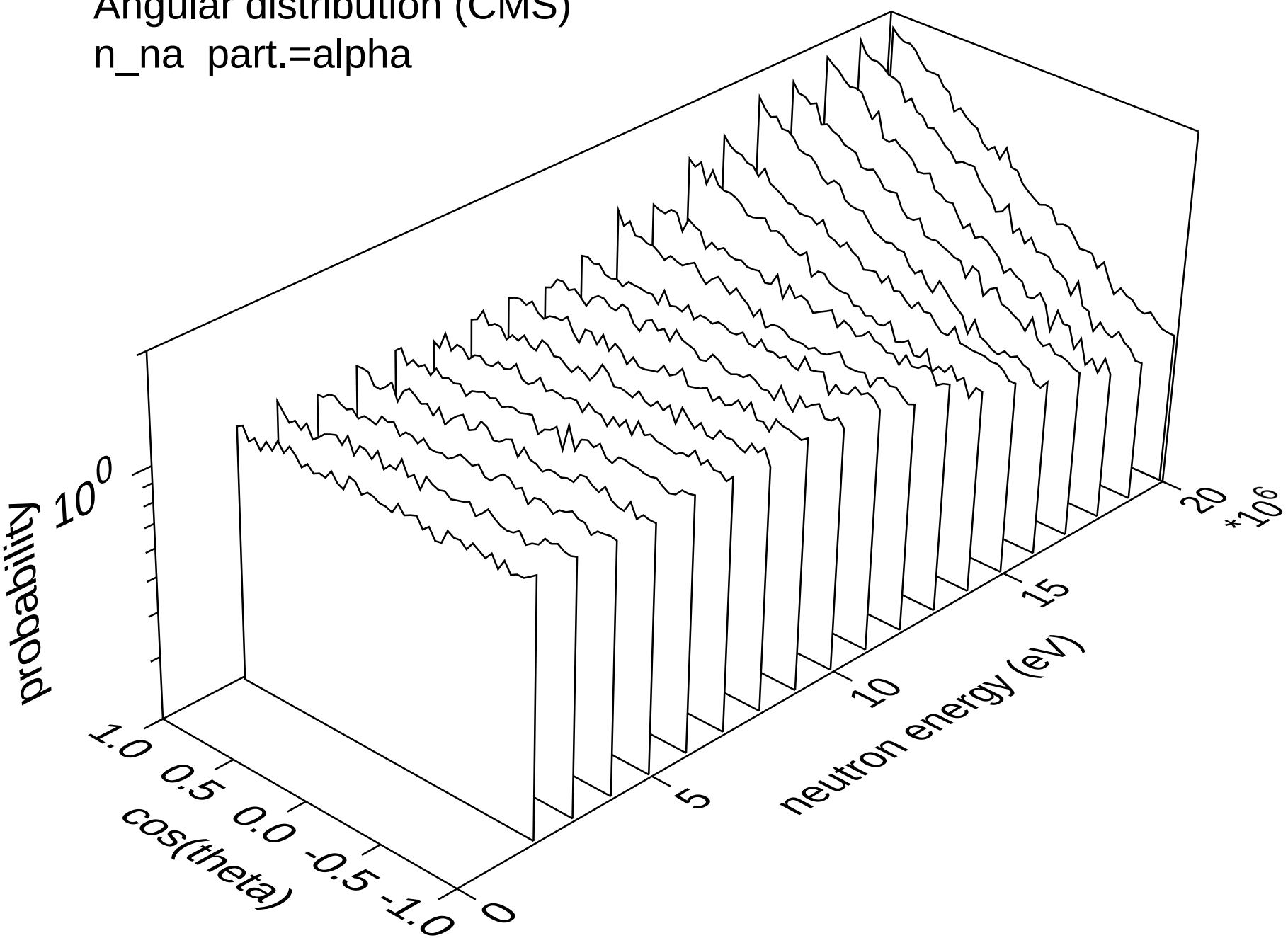

Angular distribution (CMS)
n_2n part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

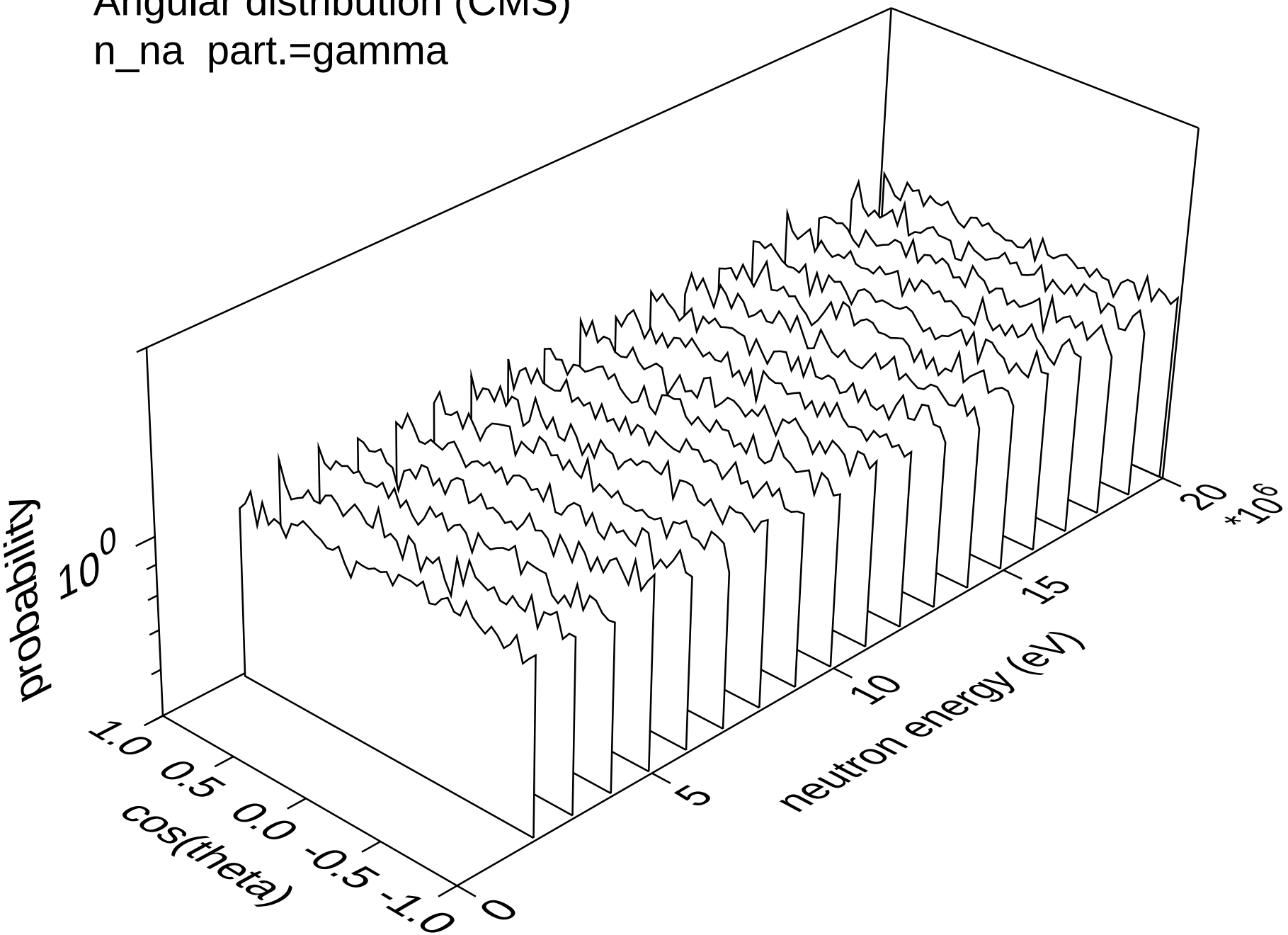

Angular distribution (CMS)
n_2n part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

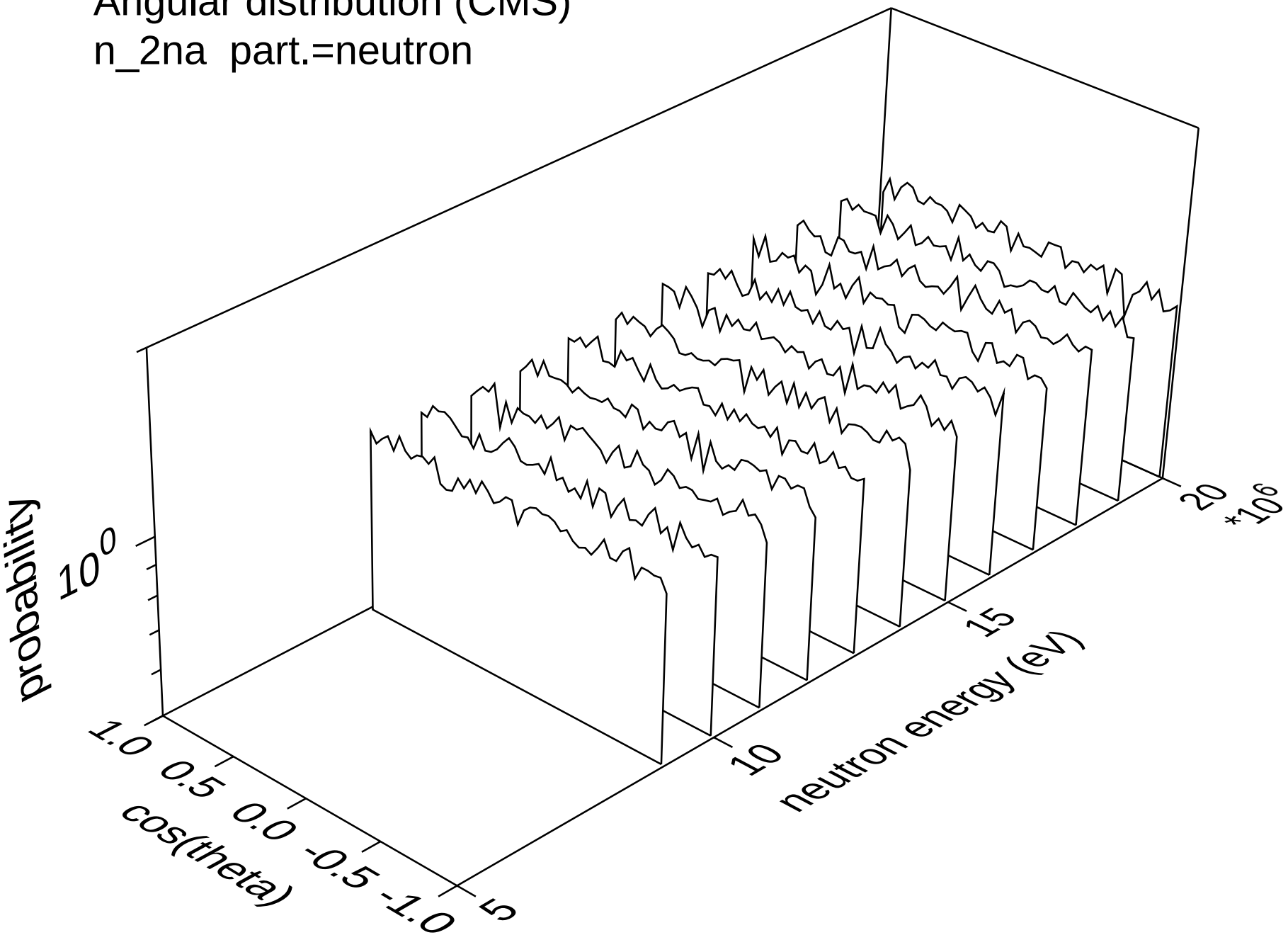

Angular distribution (CMS)
n_3n part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
16
18
20
*10^6
neutron energy (eV)

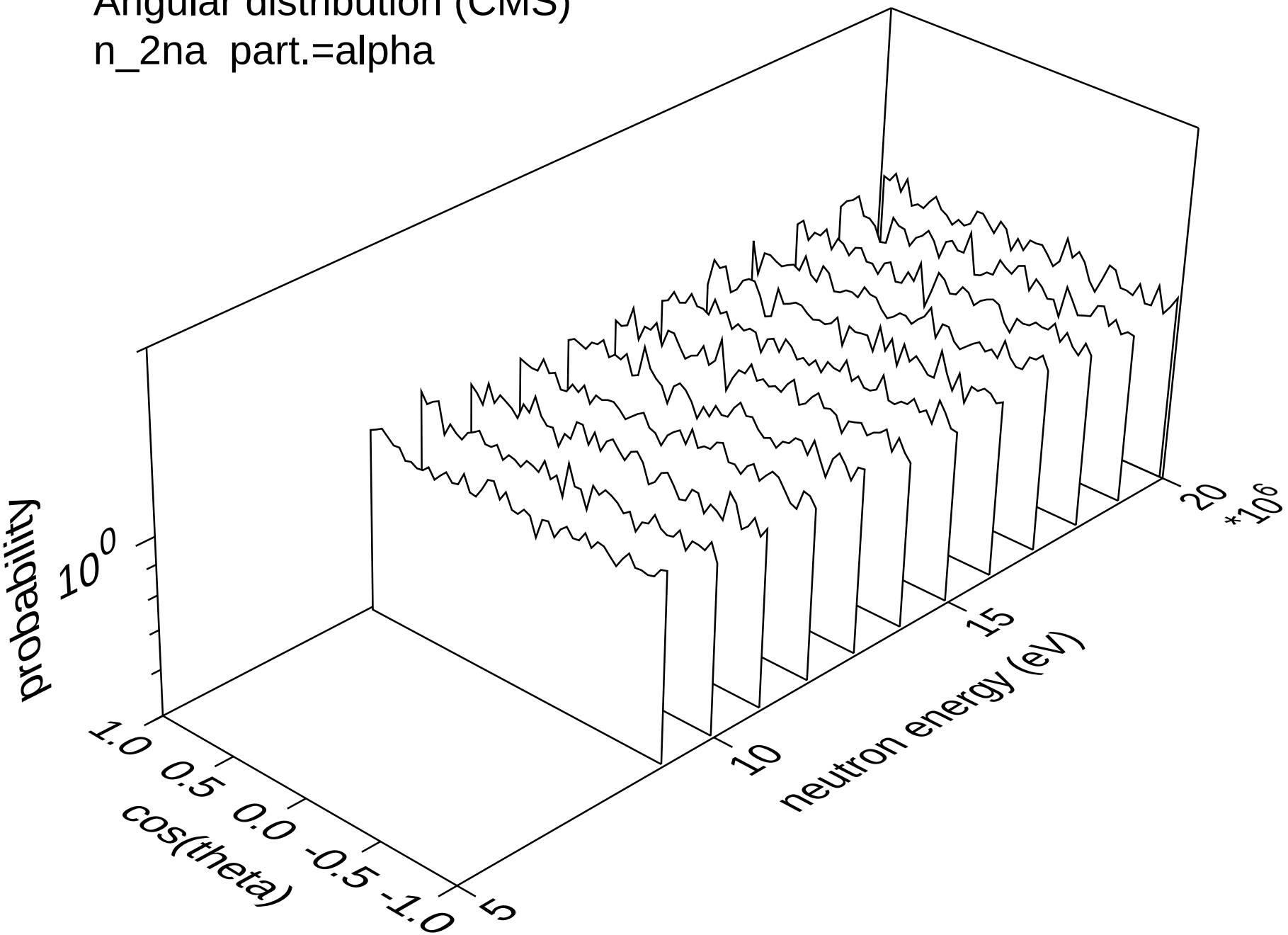

Angular distribution (CMS)
n_3n part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
16
18
20
*10^6
neutron energy (eV)

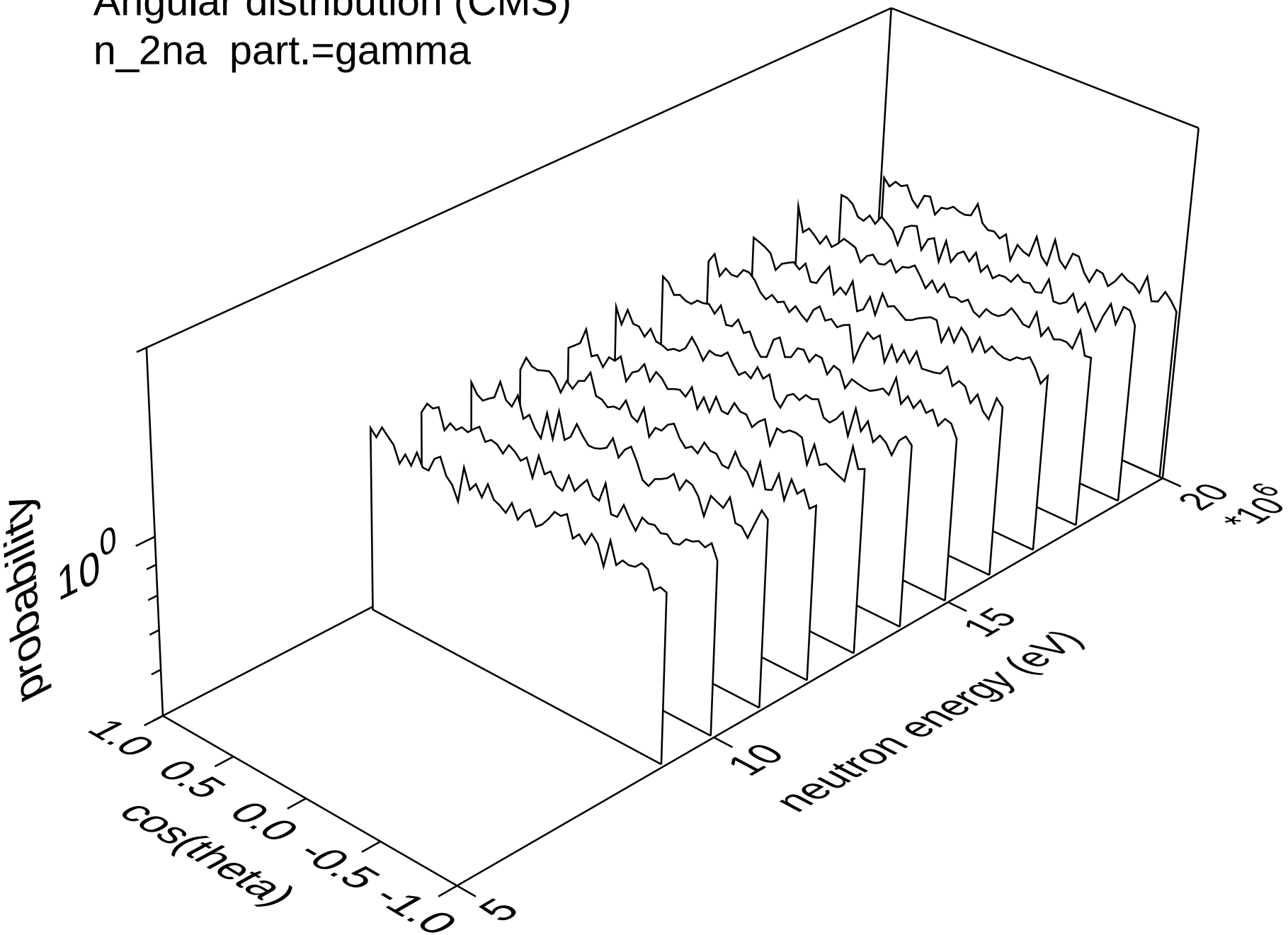

Angular distribution (CMS)
n_na part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

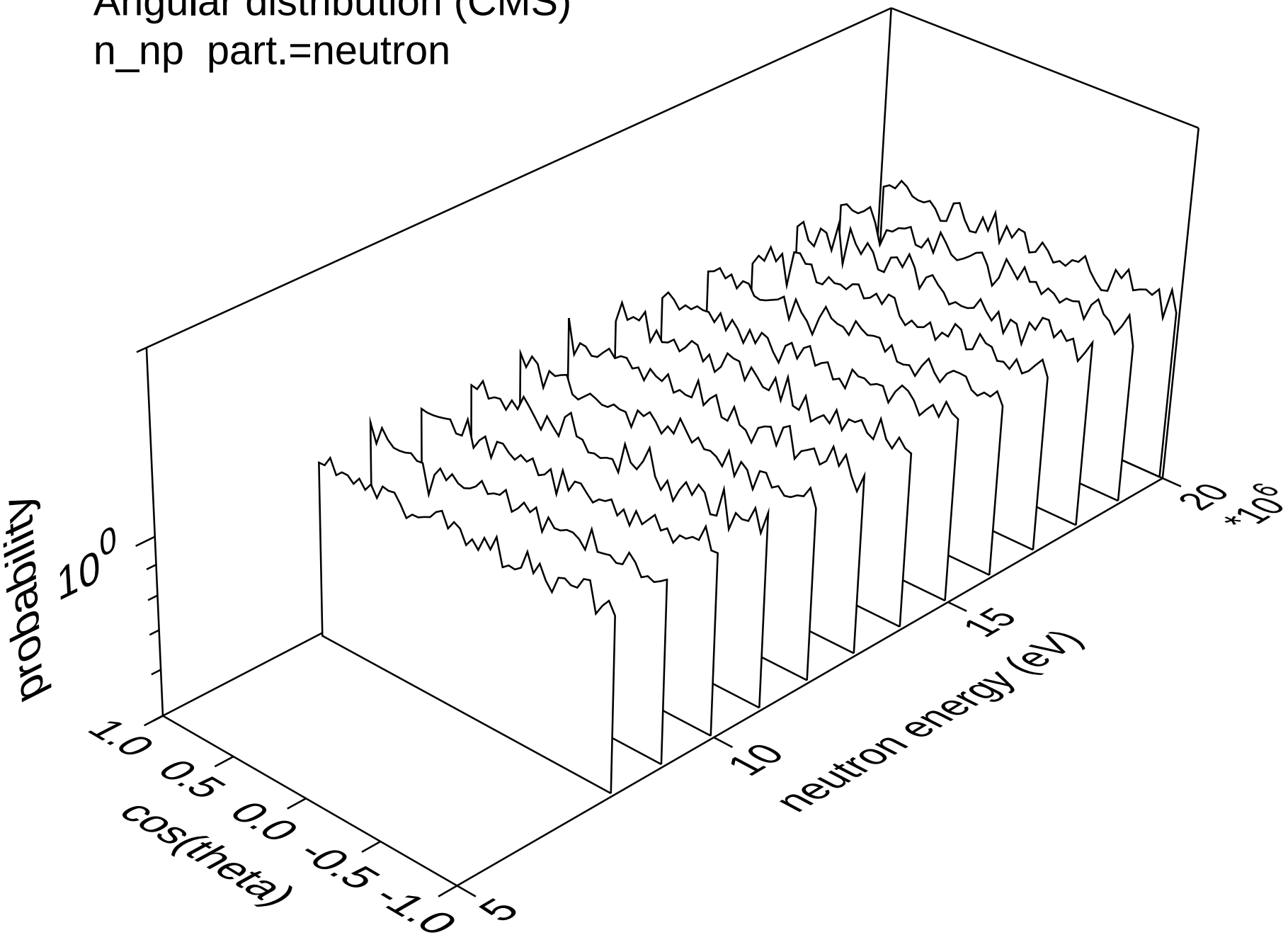

Angular distribution (CMS)
n_na part.=alpha
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

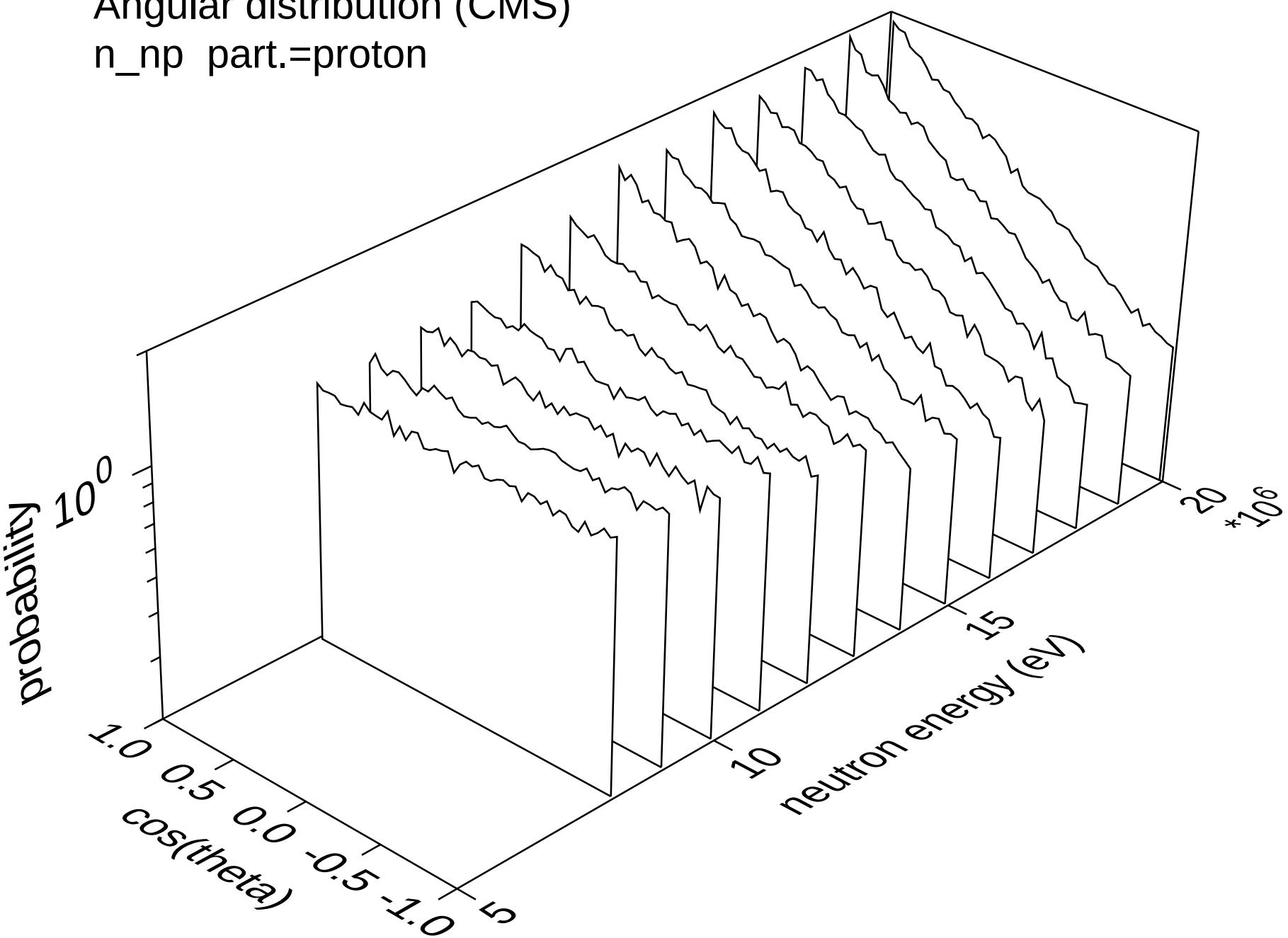

Angular distribution (CMS)
n_na part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

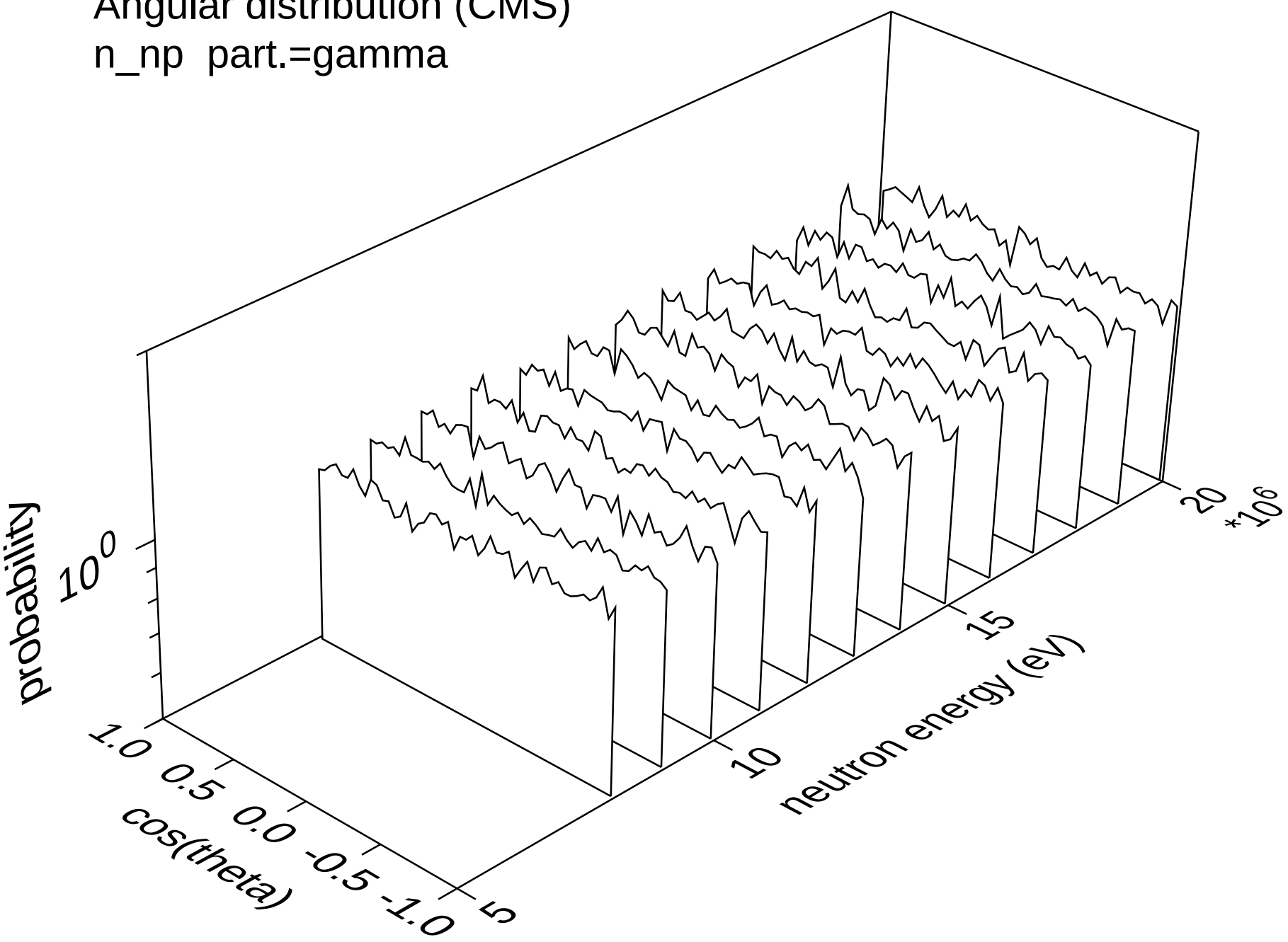

Angular distribution (CMS)
n_2na part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

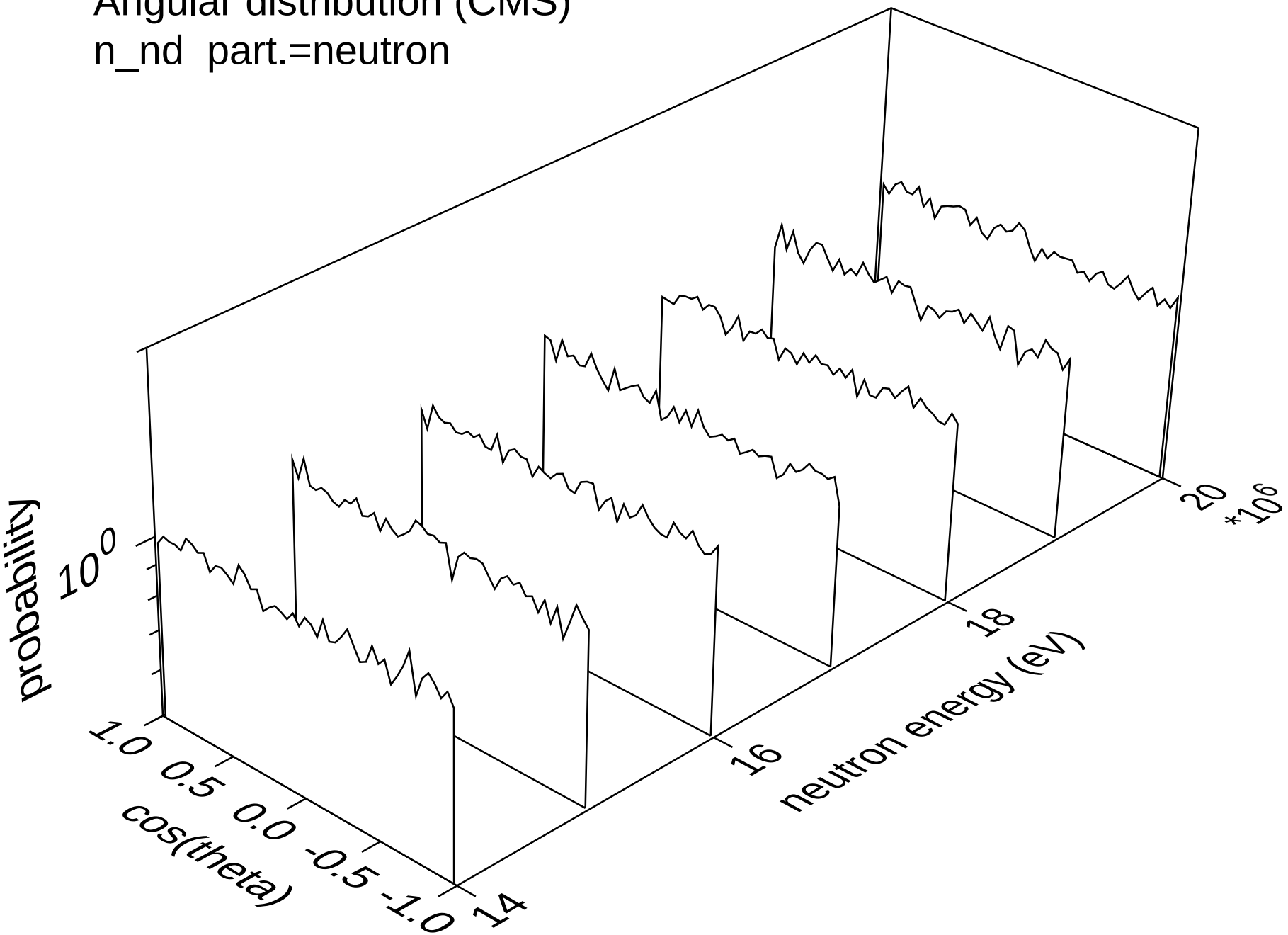

Angular distribution (CMS)
n_2na part.=alpha
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

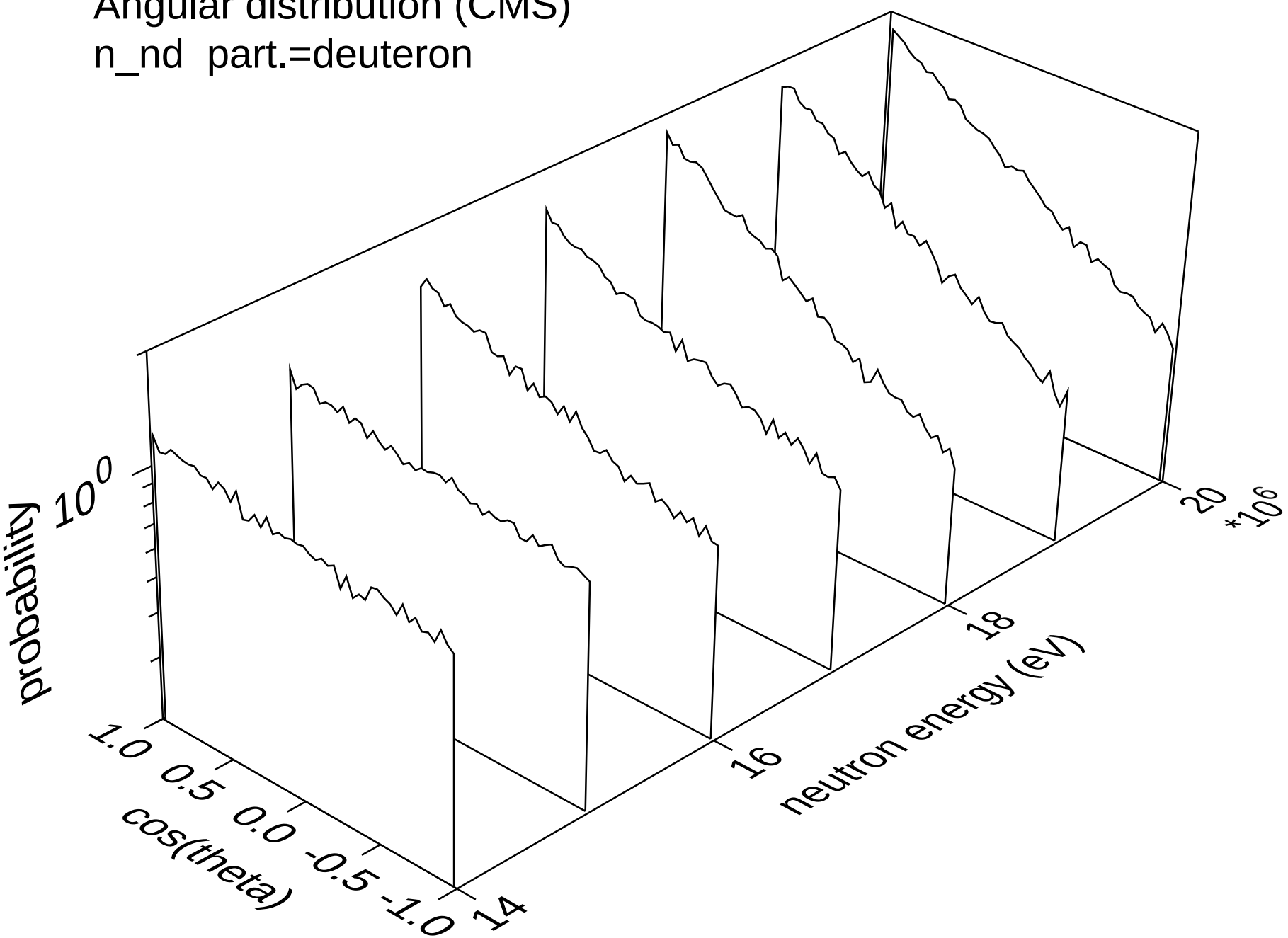

Angular distribution (CMS)
n_2na part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

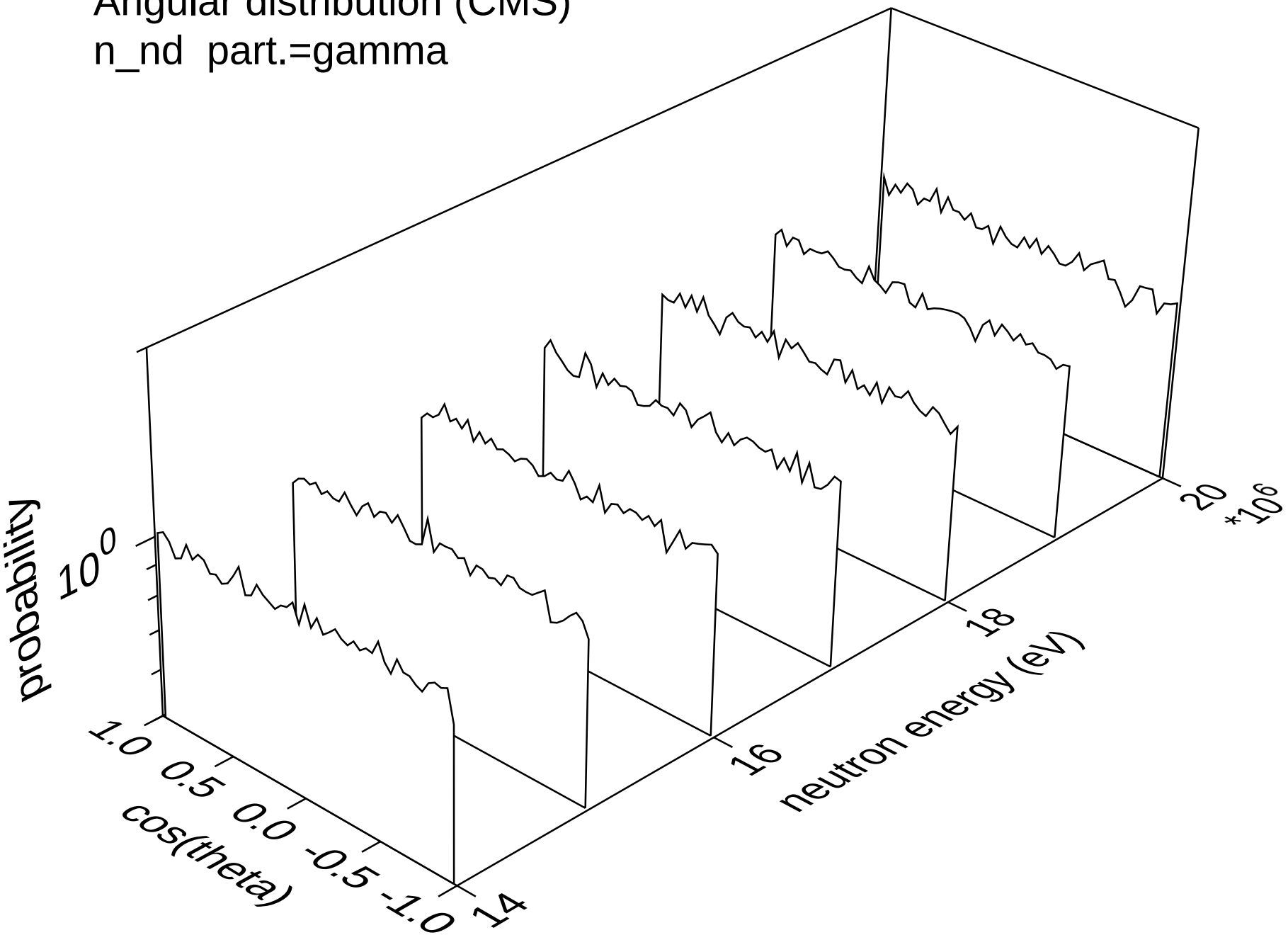

Angular distribution (CMS)
n_np part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

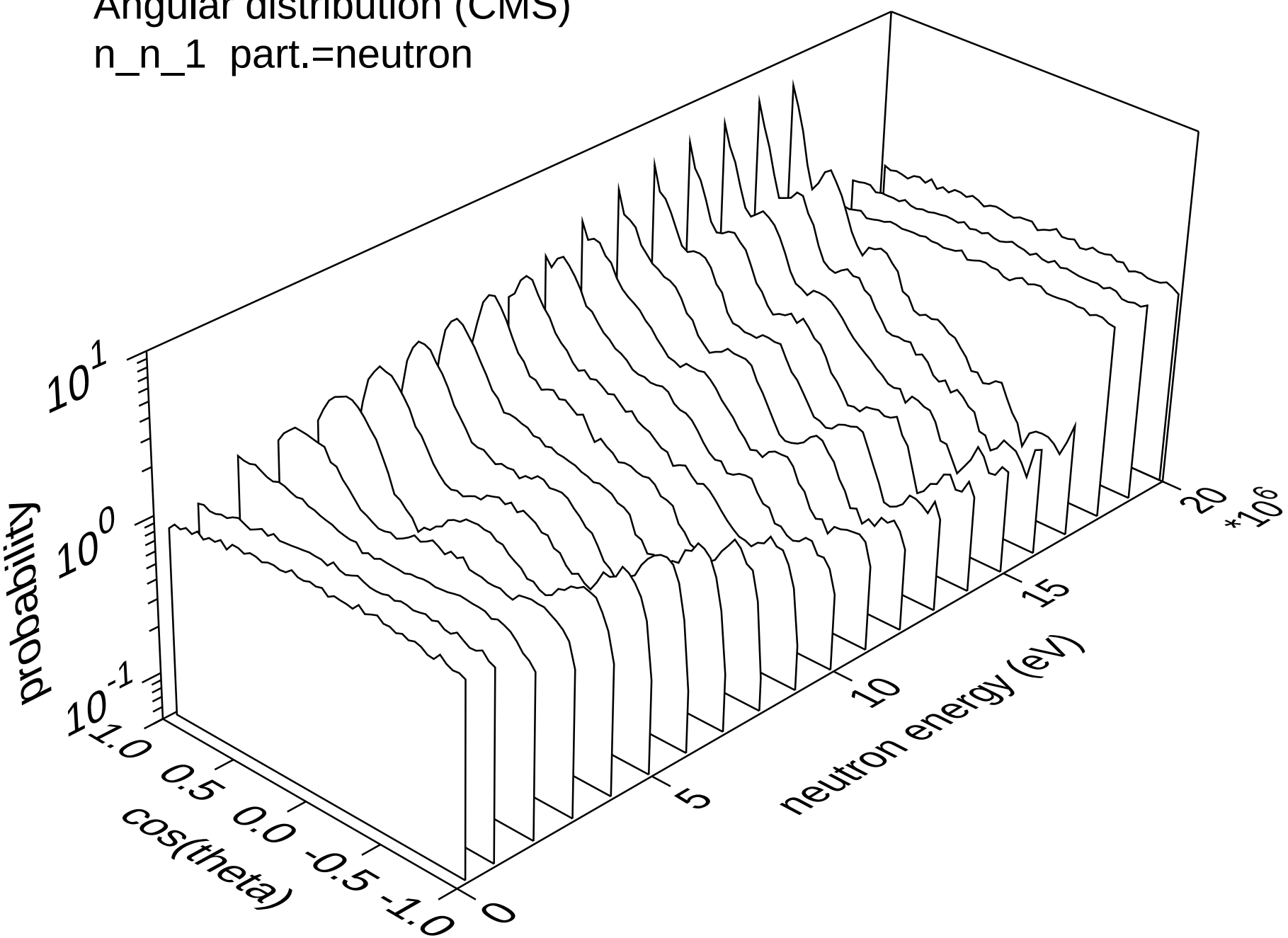

Angular distribution (CMS)
n_np part.=proton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

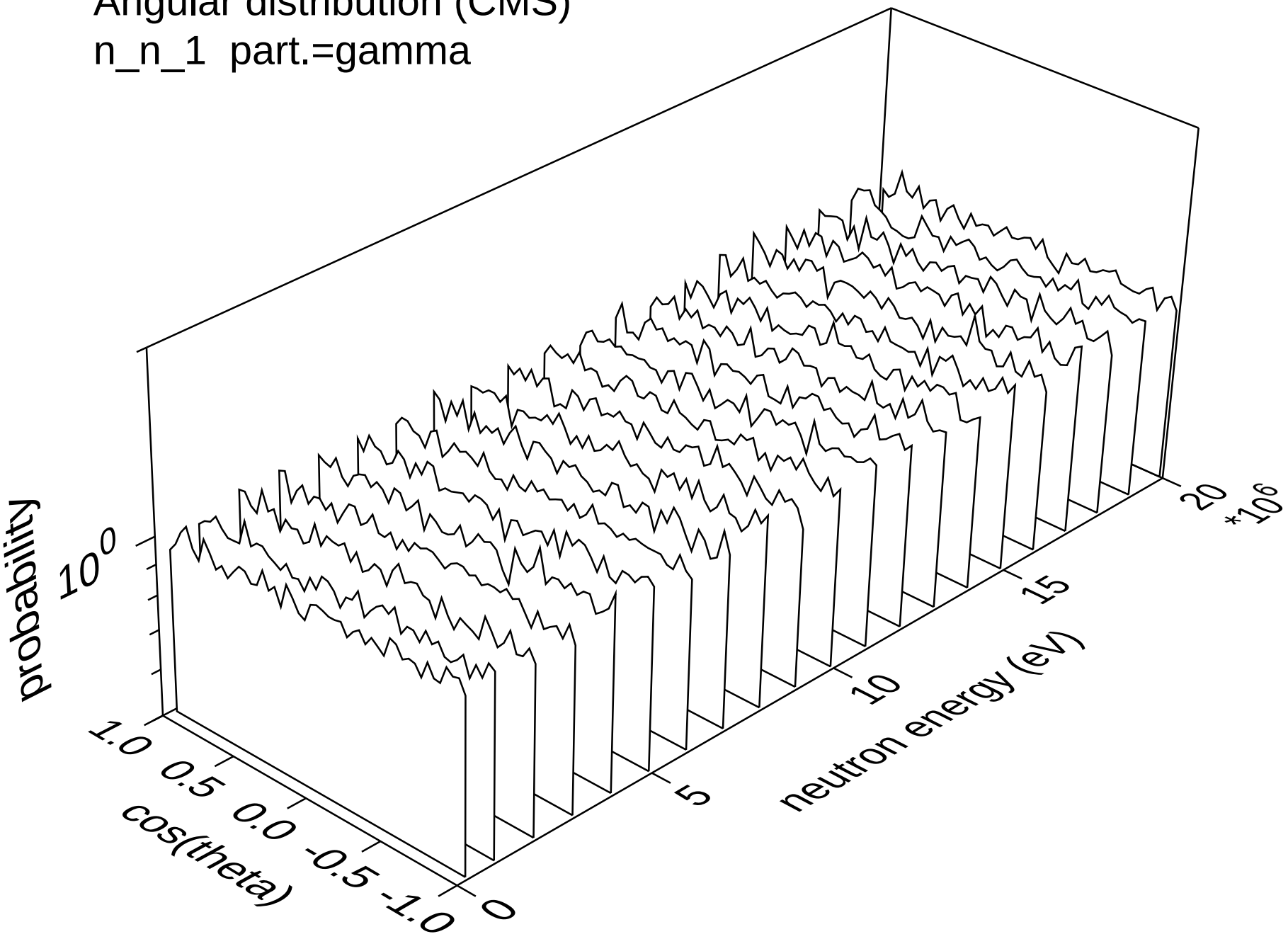

Angular distribution (CMS)
n_np part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

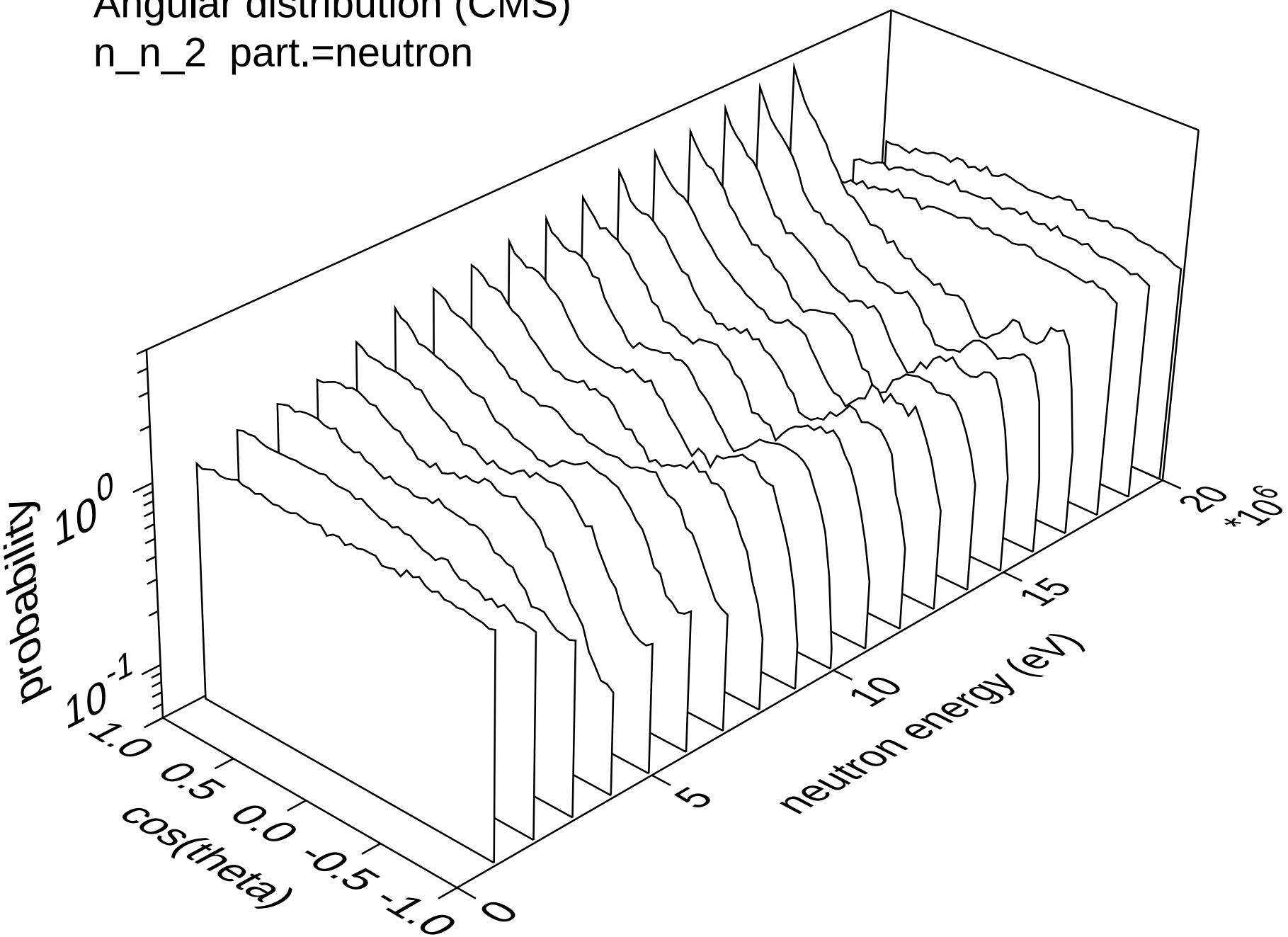

Angular distribution (CMS)
n_nd part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

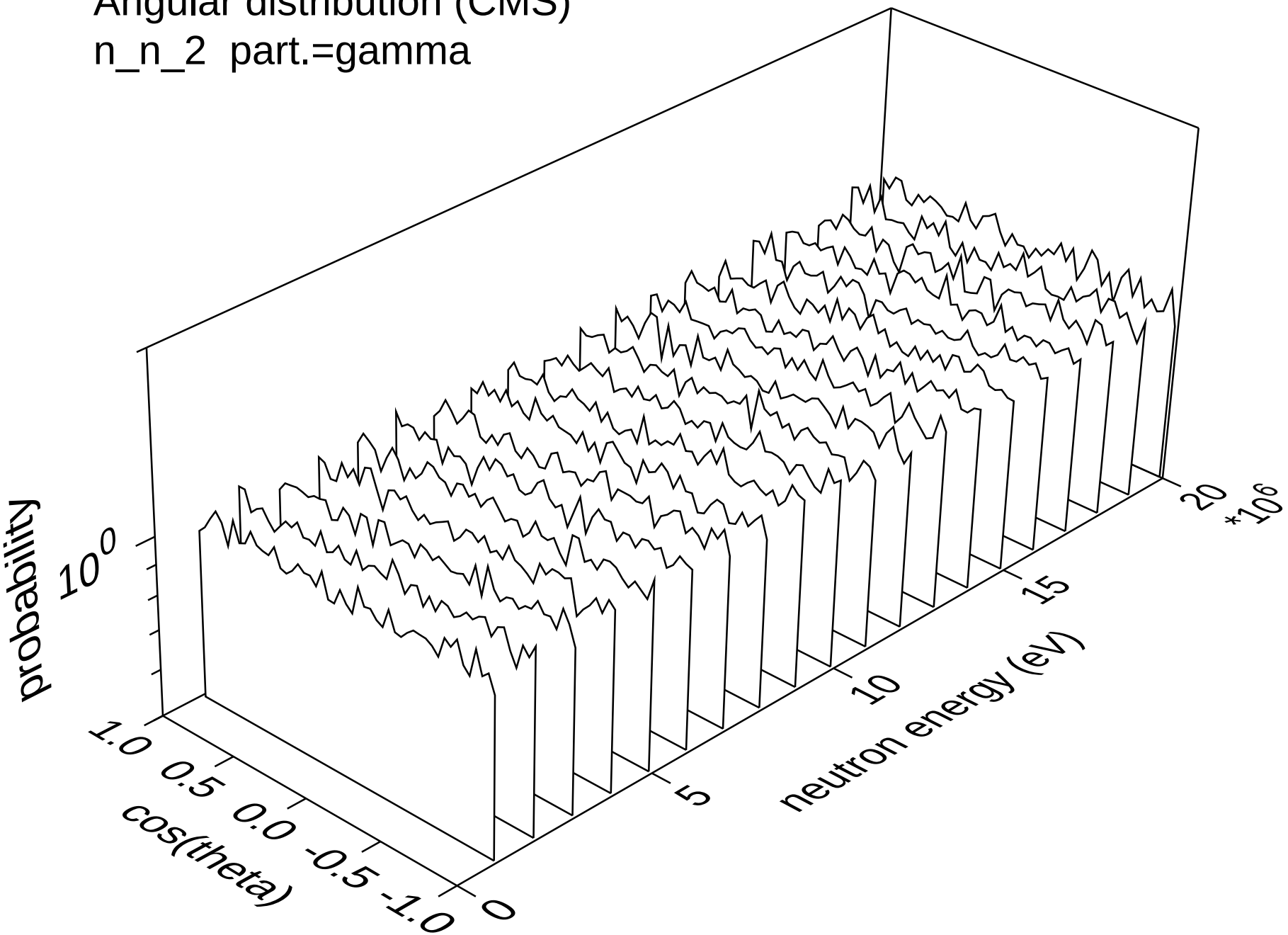

Angular distribution (CMS)
n_nd part.=deuteron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

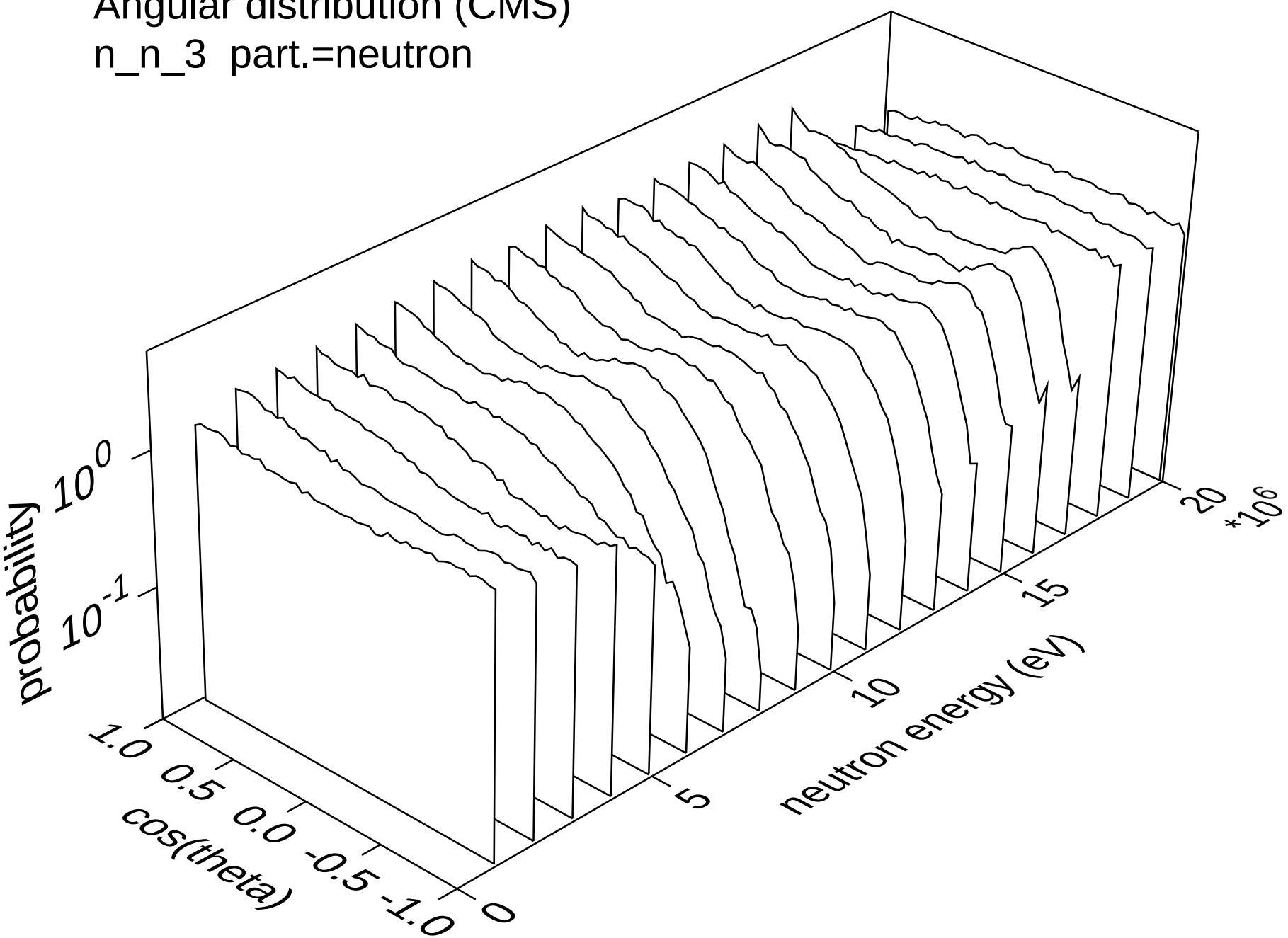

Angular distribution (CMS)
n_nd part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

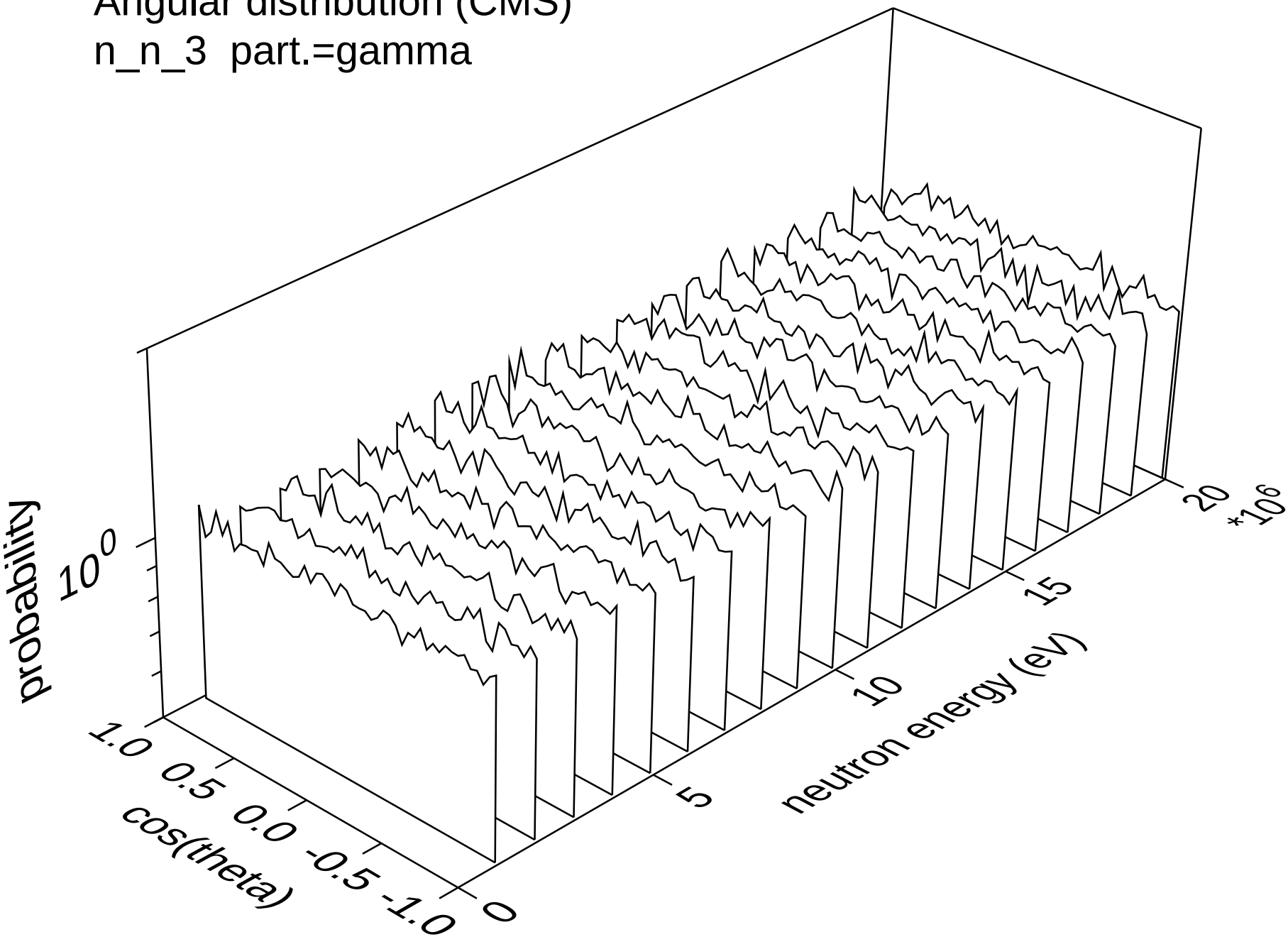

Angular distribution (CMS)
n_n_1 part.=neutron
probability
10^{1}
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

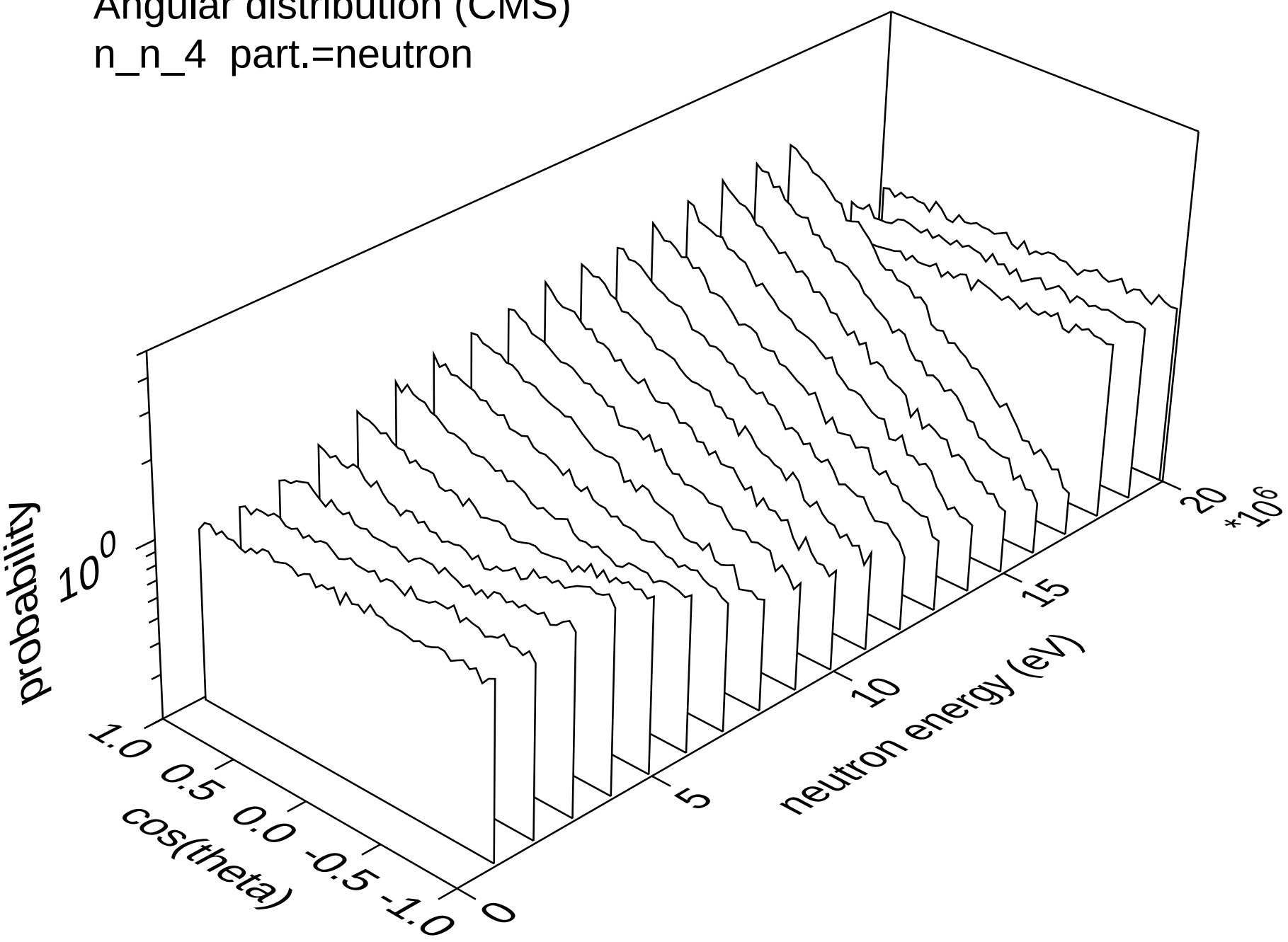

Angular distribution (CMS)
n_n_1 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

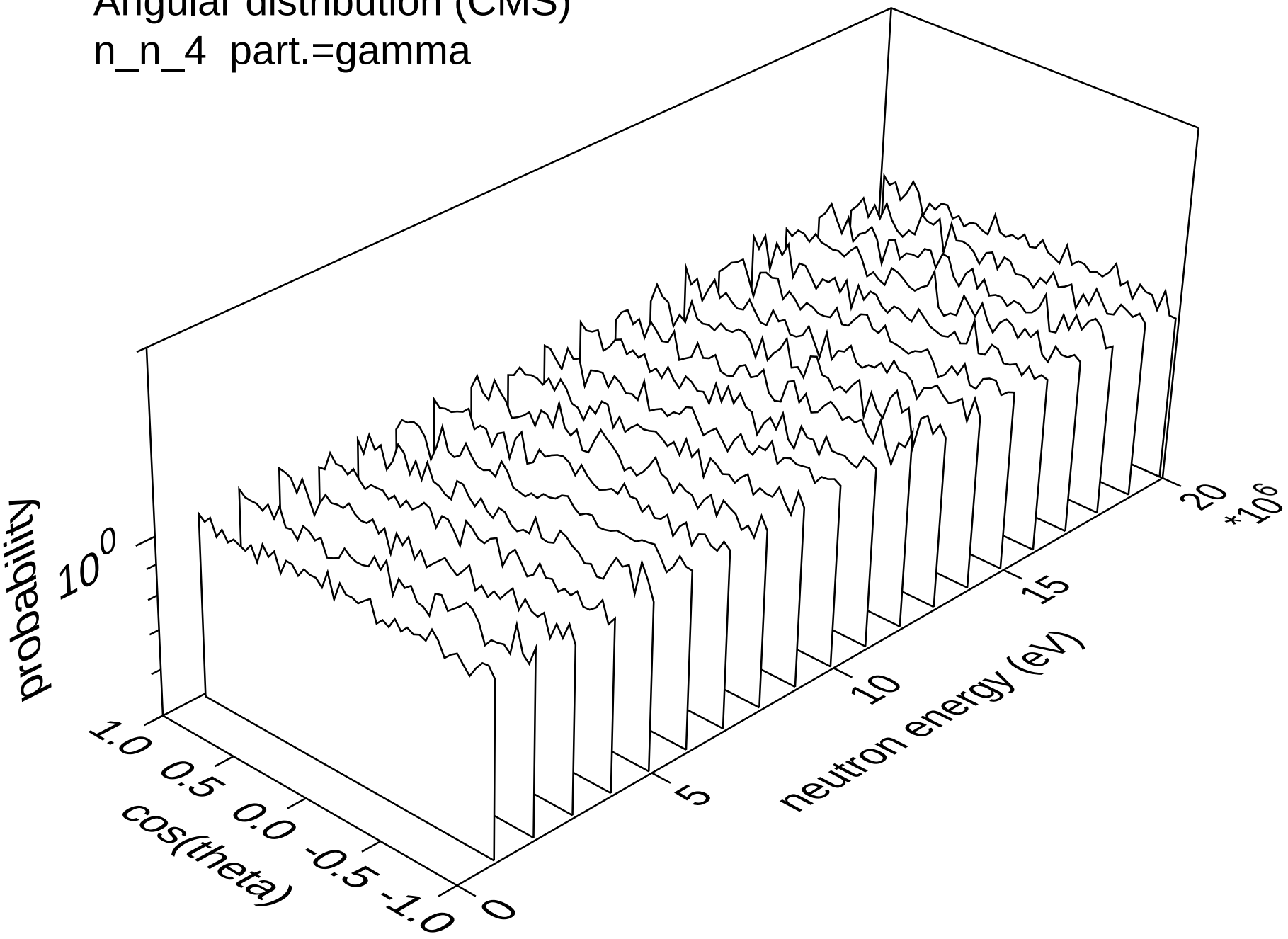

Angular distribution (CMS)
n_n_2 part.=neutron
probability
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

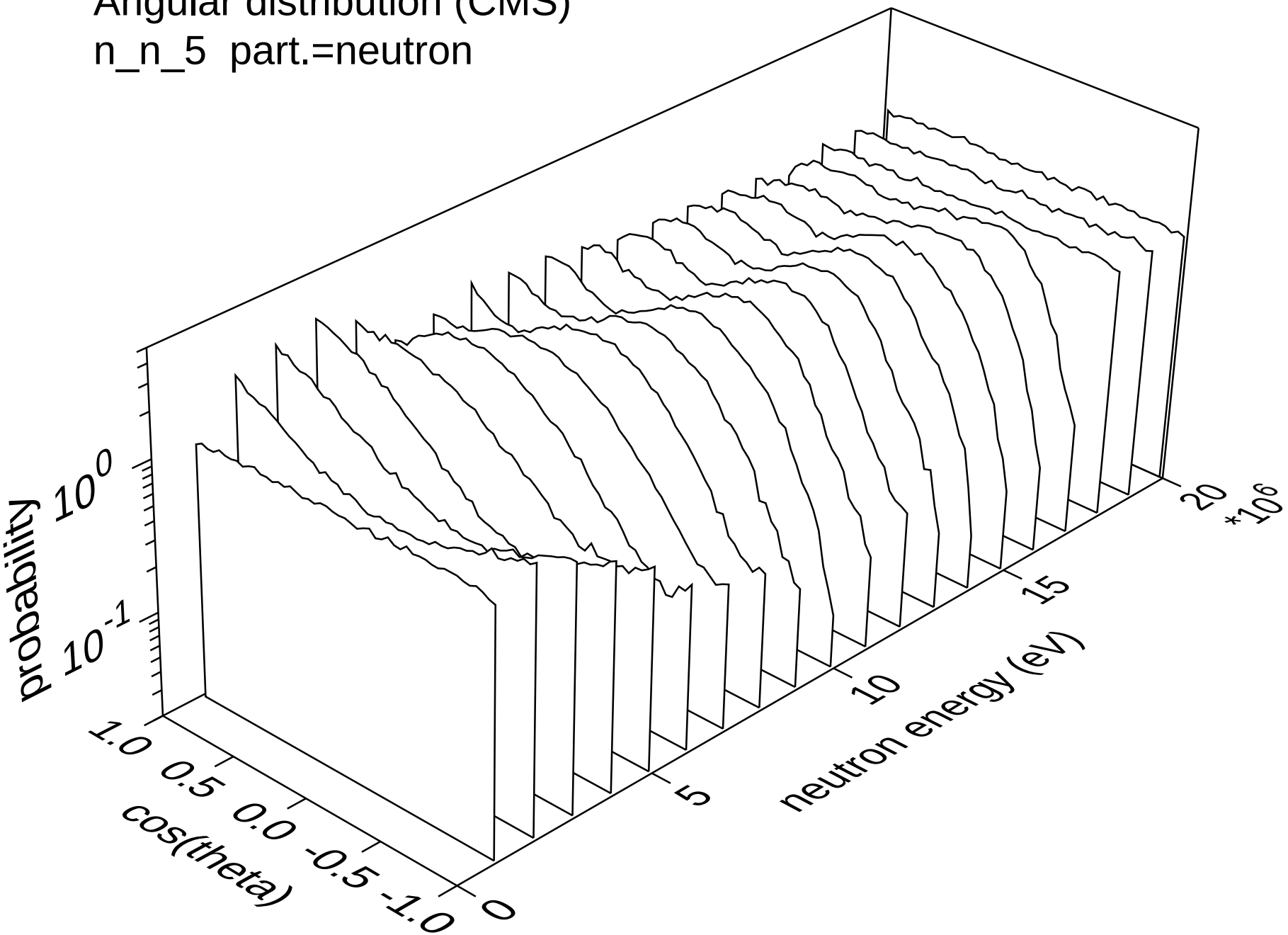

Angular distribution (CMS)
n_n_2 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

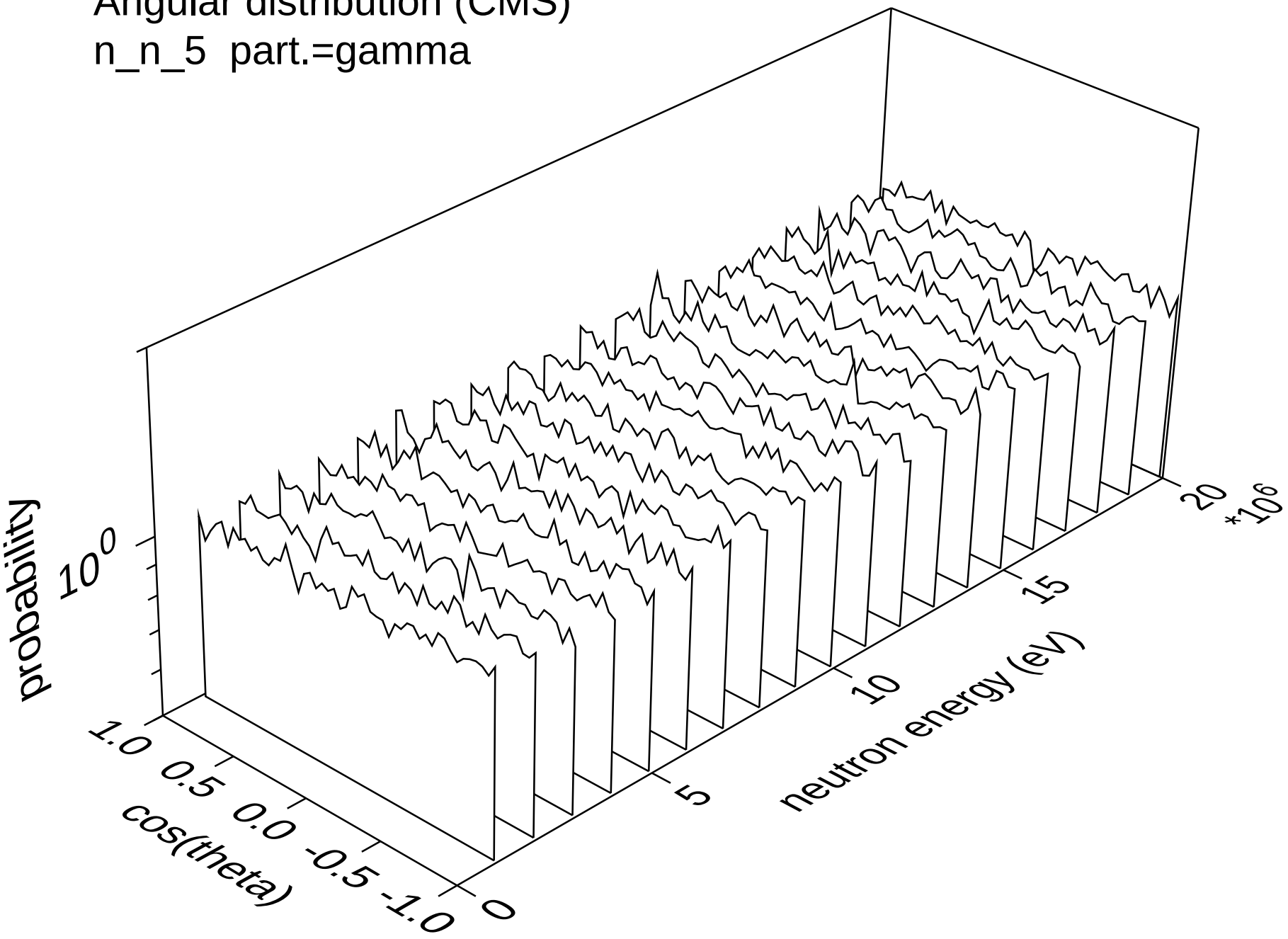

Angular distribution (CMS)
n_n_3 part.=neutron
probability
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

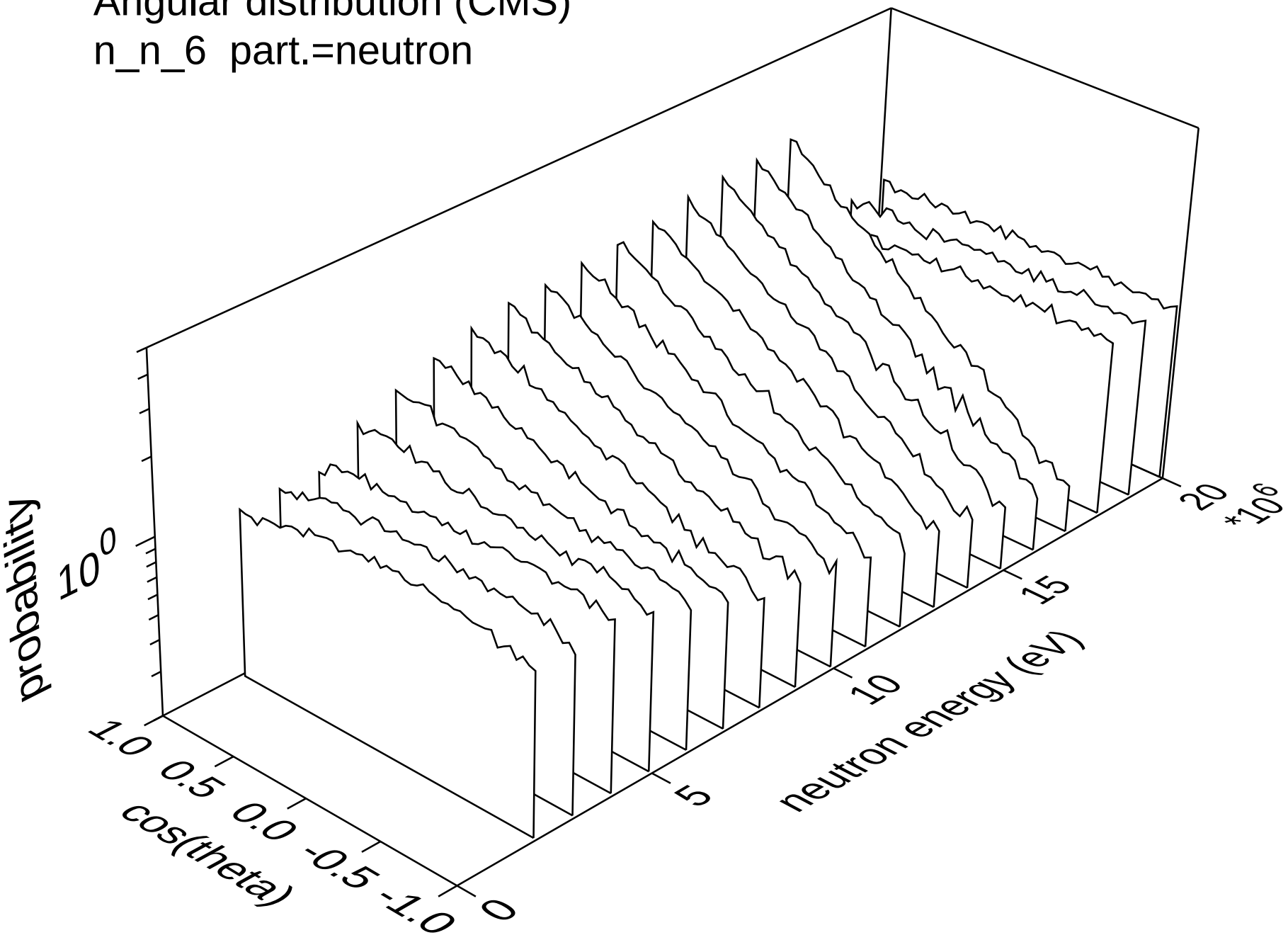

Angular distribution (CMS)
n_n_3 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

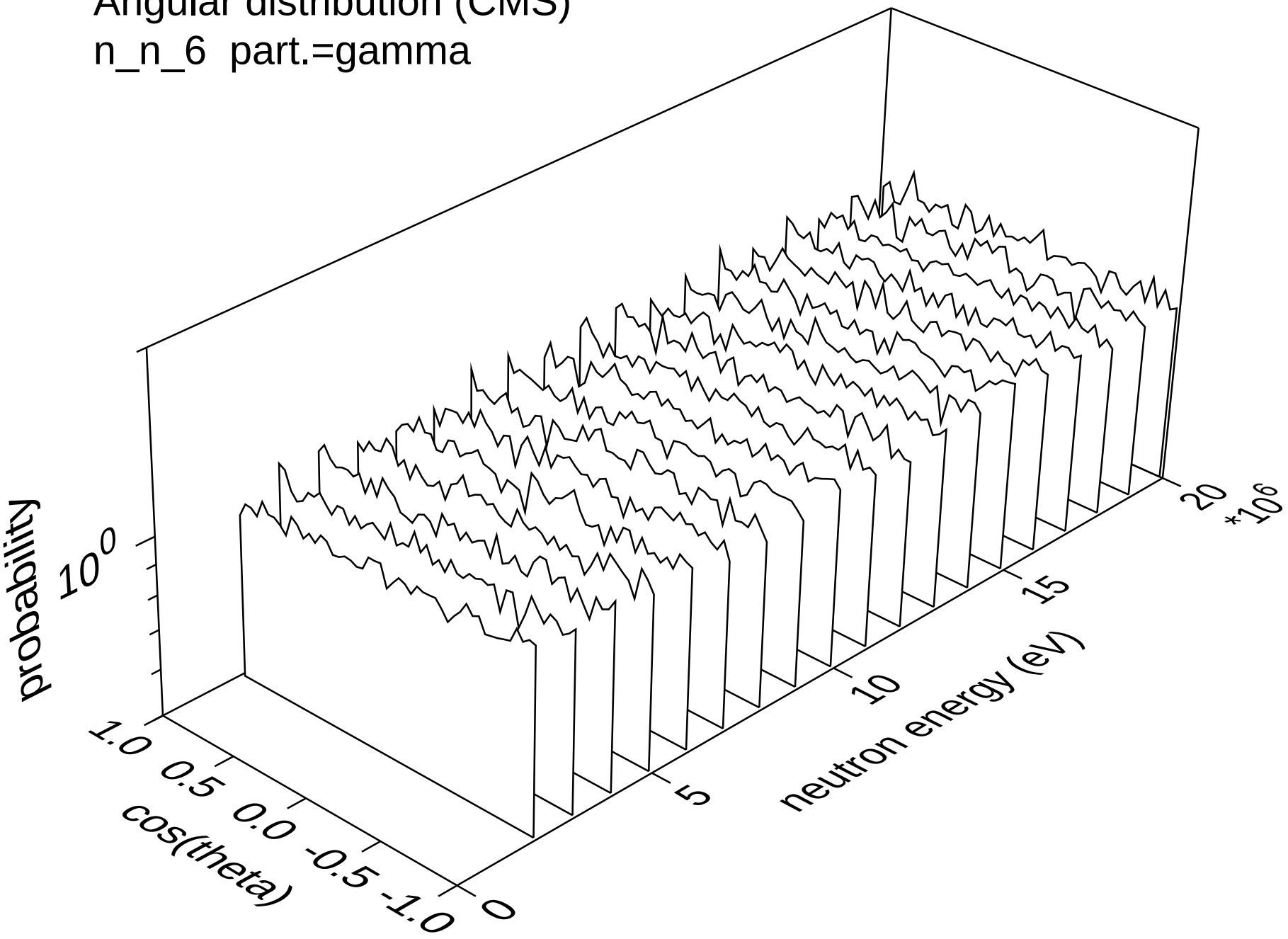

Angular distribution (CMS)
n_n_4 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

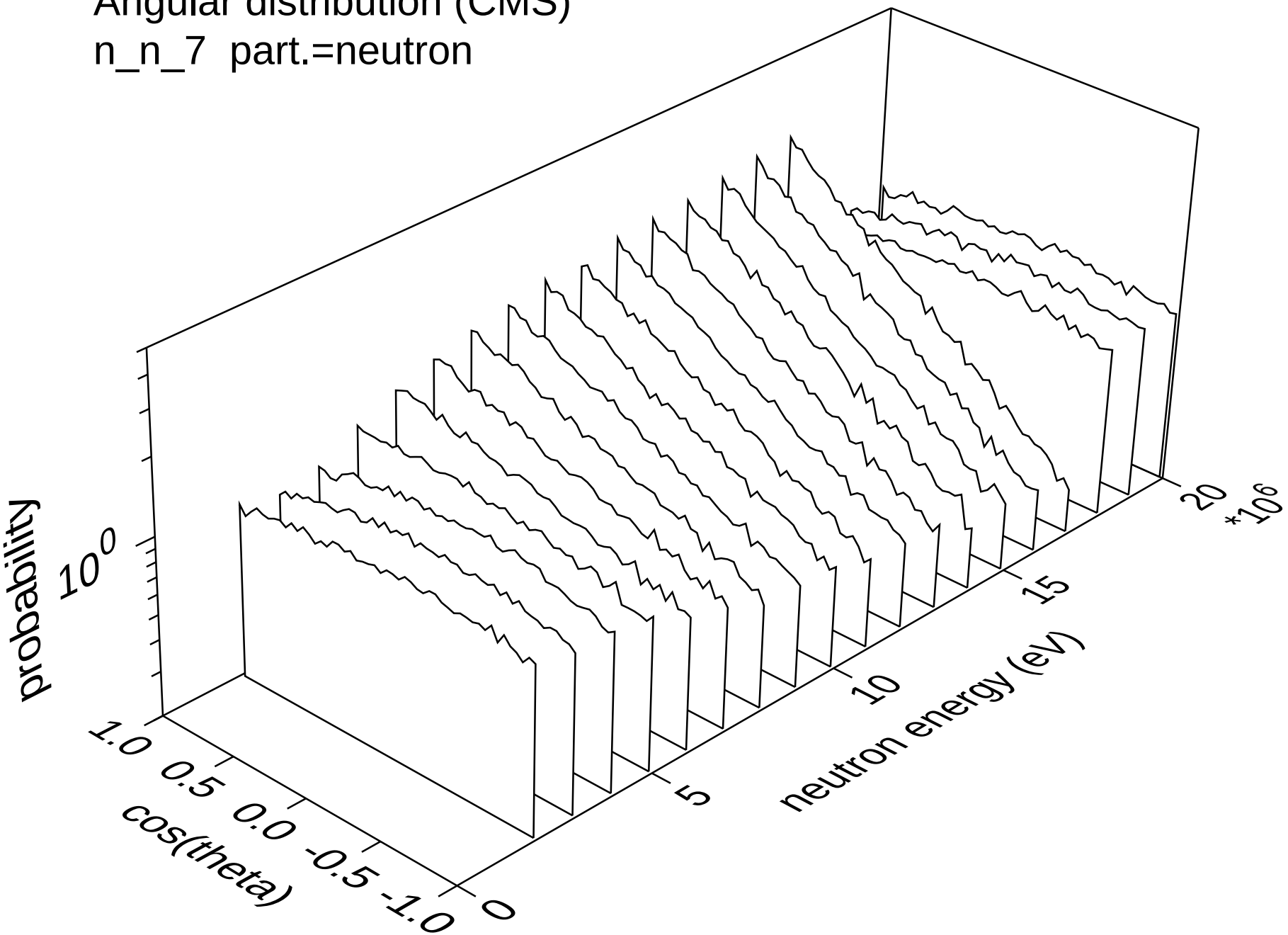

Angular distribution (CMS)
n_n_4 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

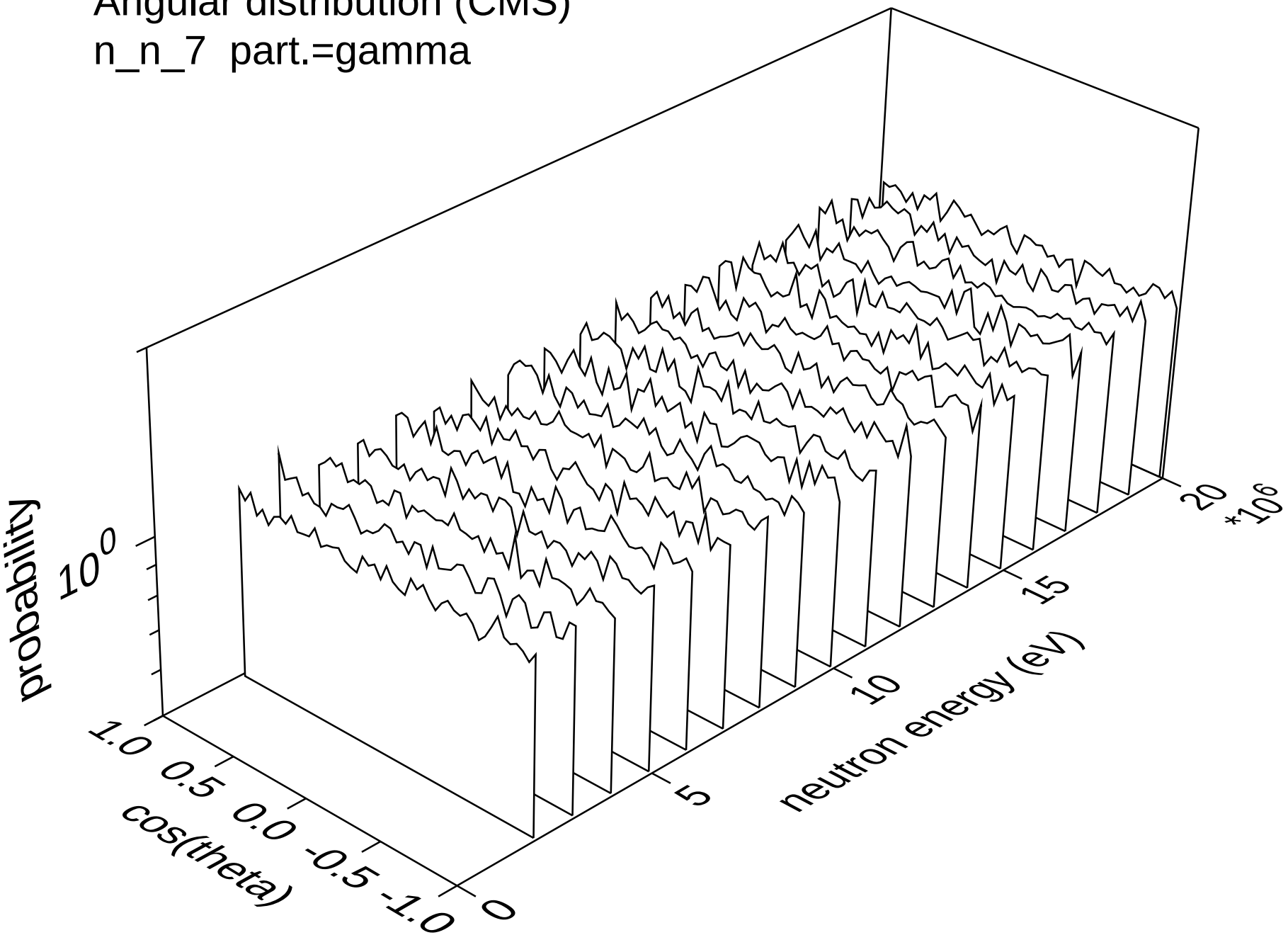

Angular distribution (CMS)
n_n_5 part.=neutron
probability
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

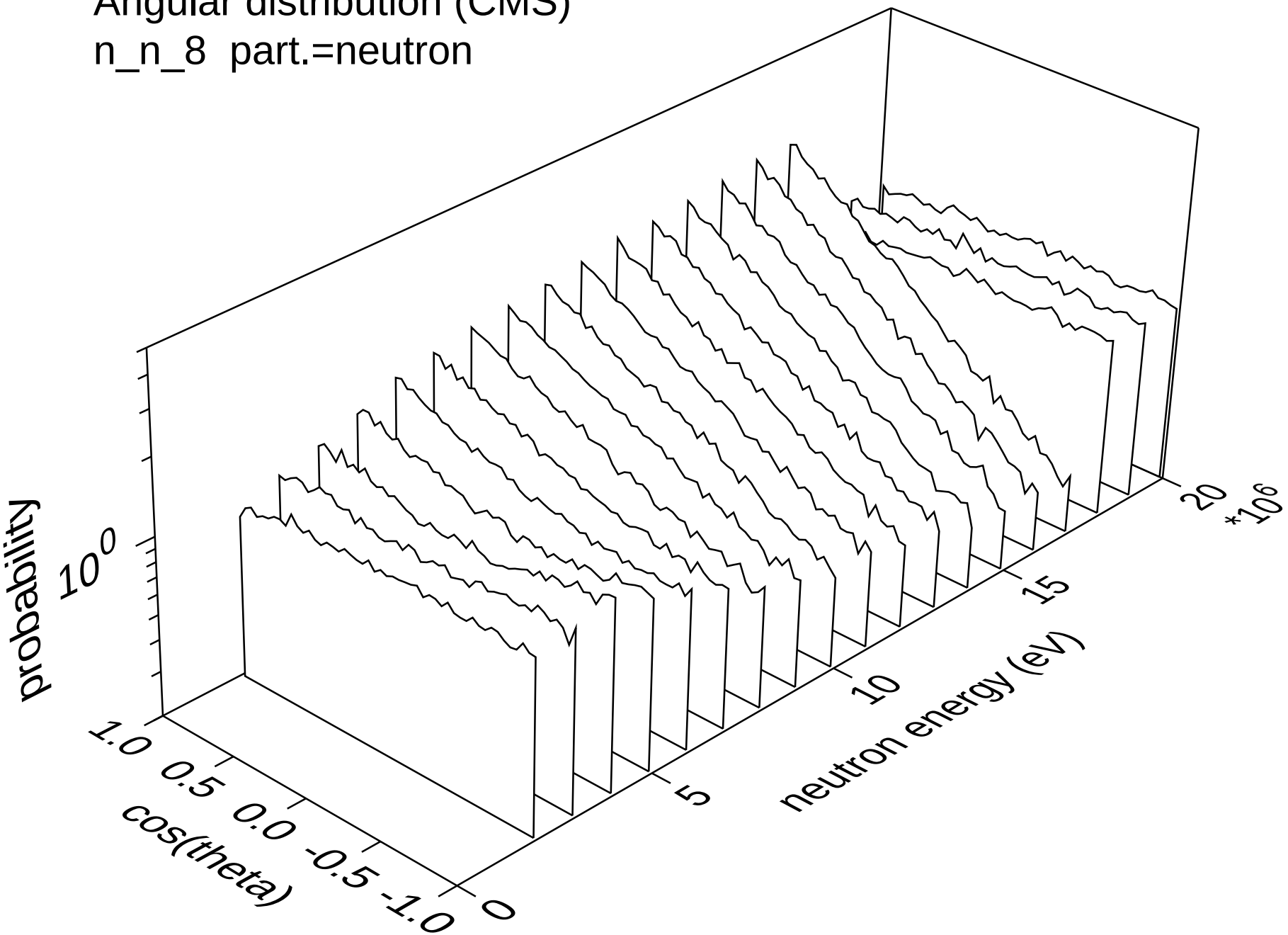

Angular distribution (CMS)
n_n_5 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

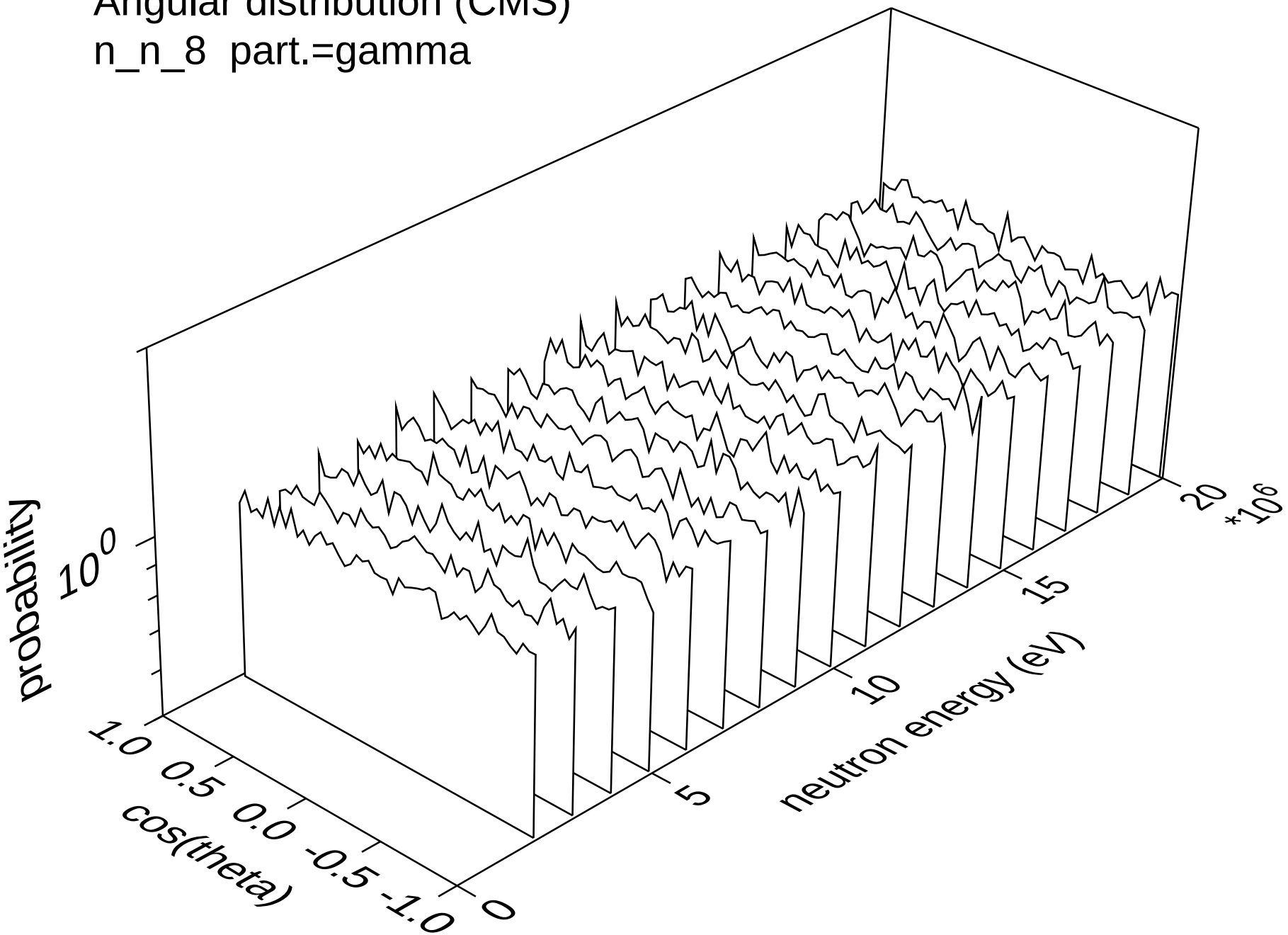

Angular distribution (CMS)
n_n_6 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

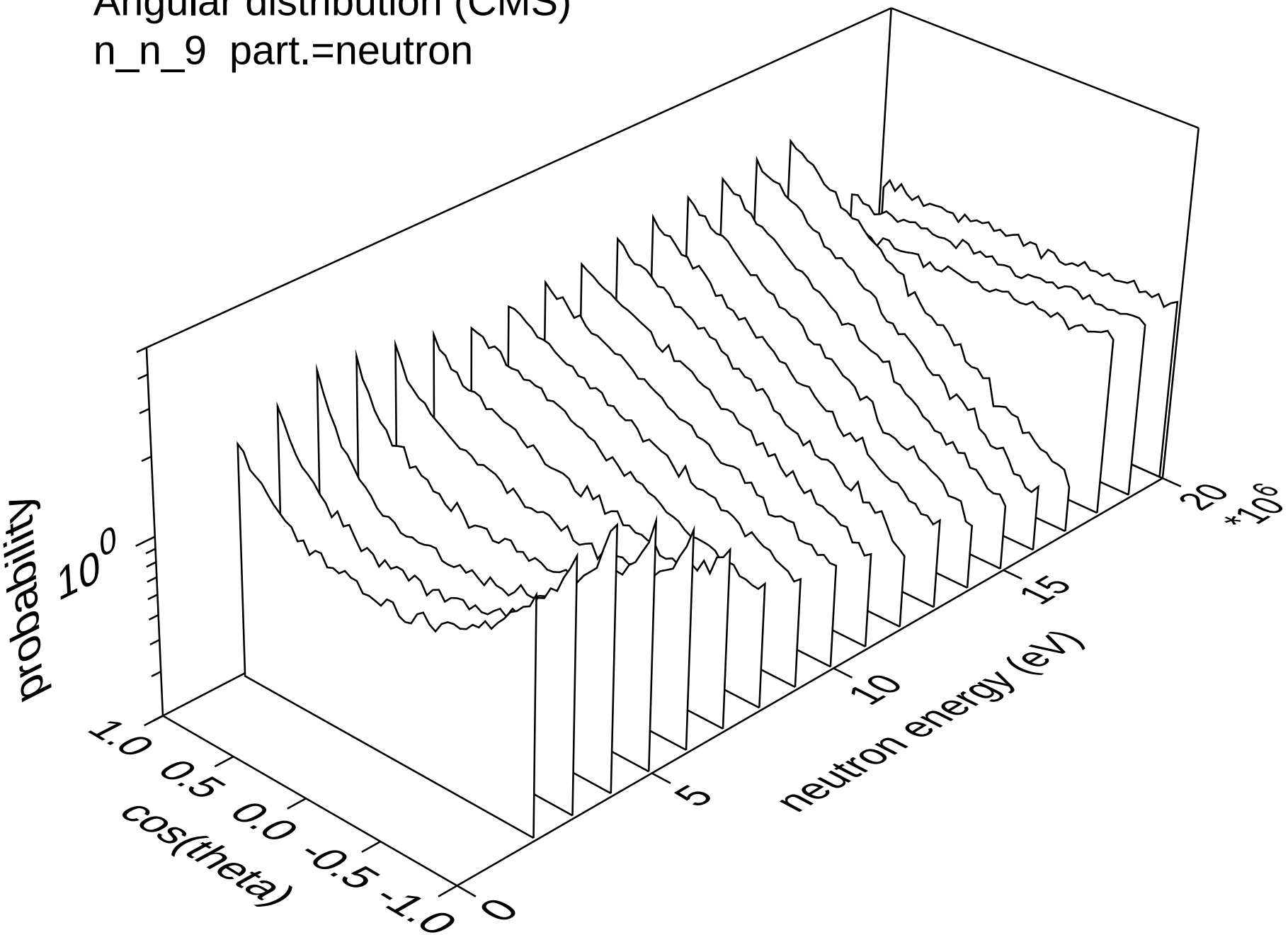

Angular distribution (CMS)
n_n_6 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

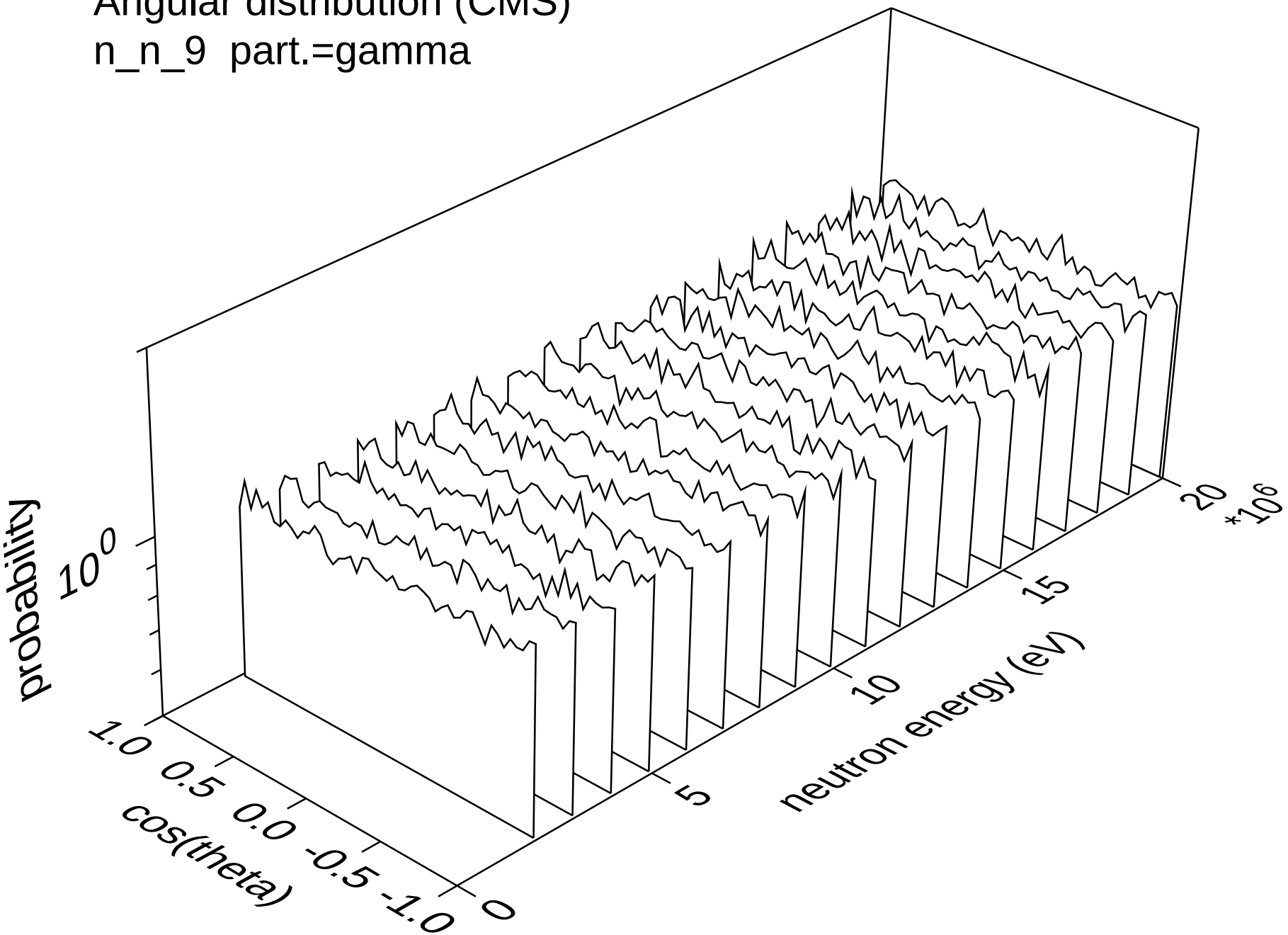

Angular distribution (CMS)
n_n_7 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

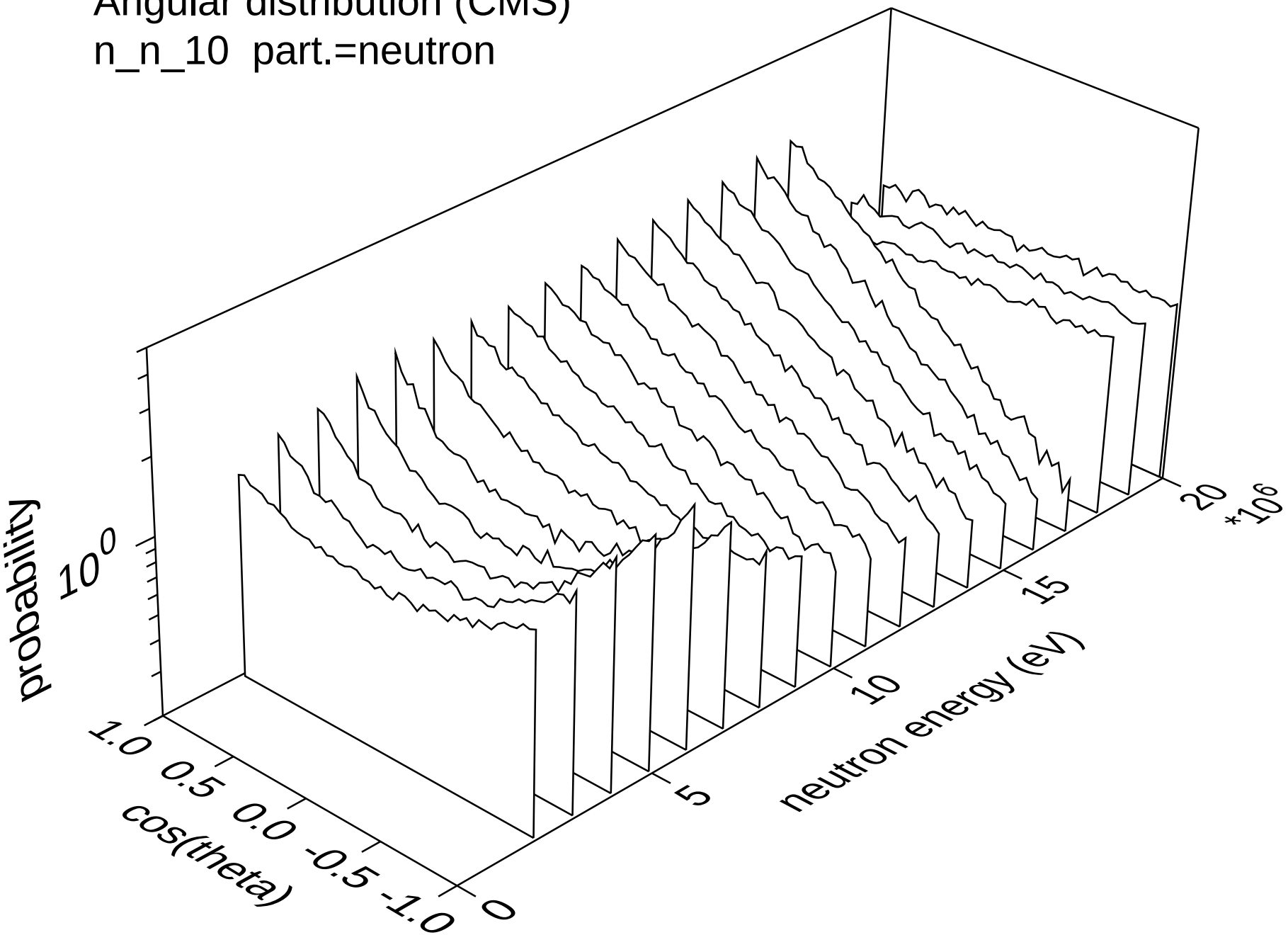

Angular distribution (CMS)
n_n_7 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

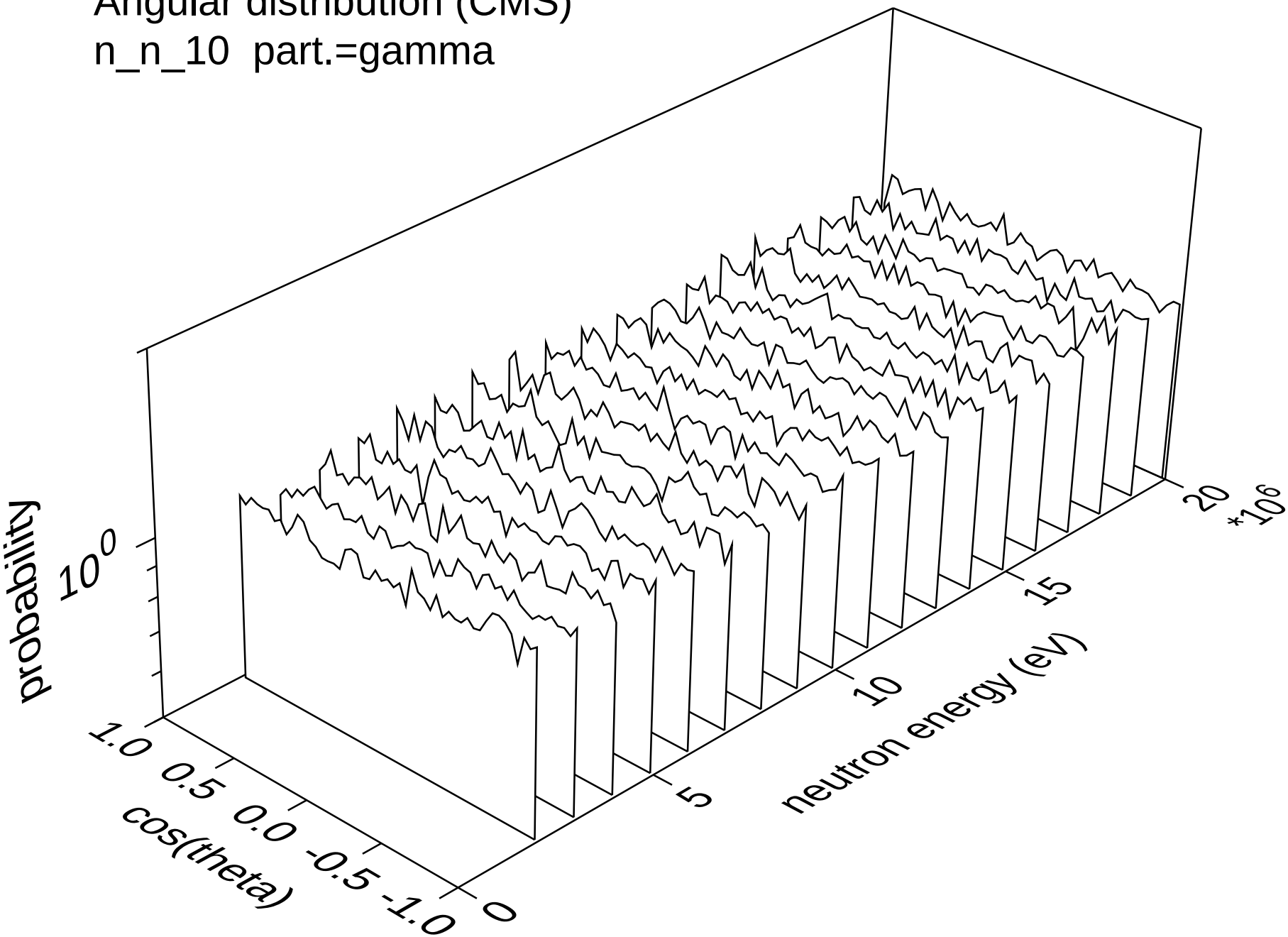

Angular distribution (CMS)
n_n_8 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

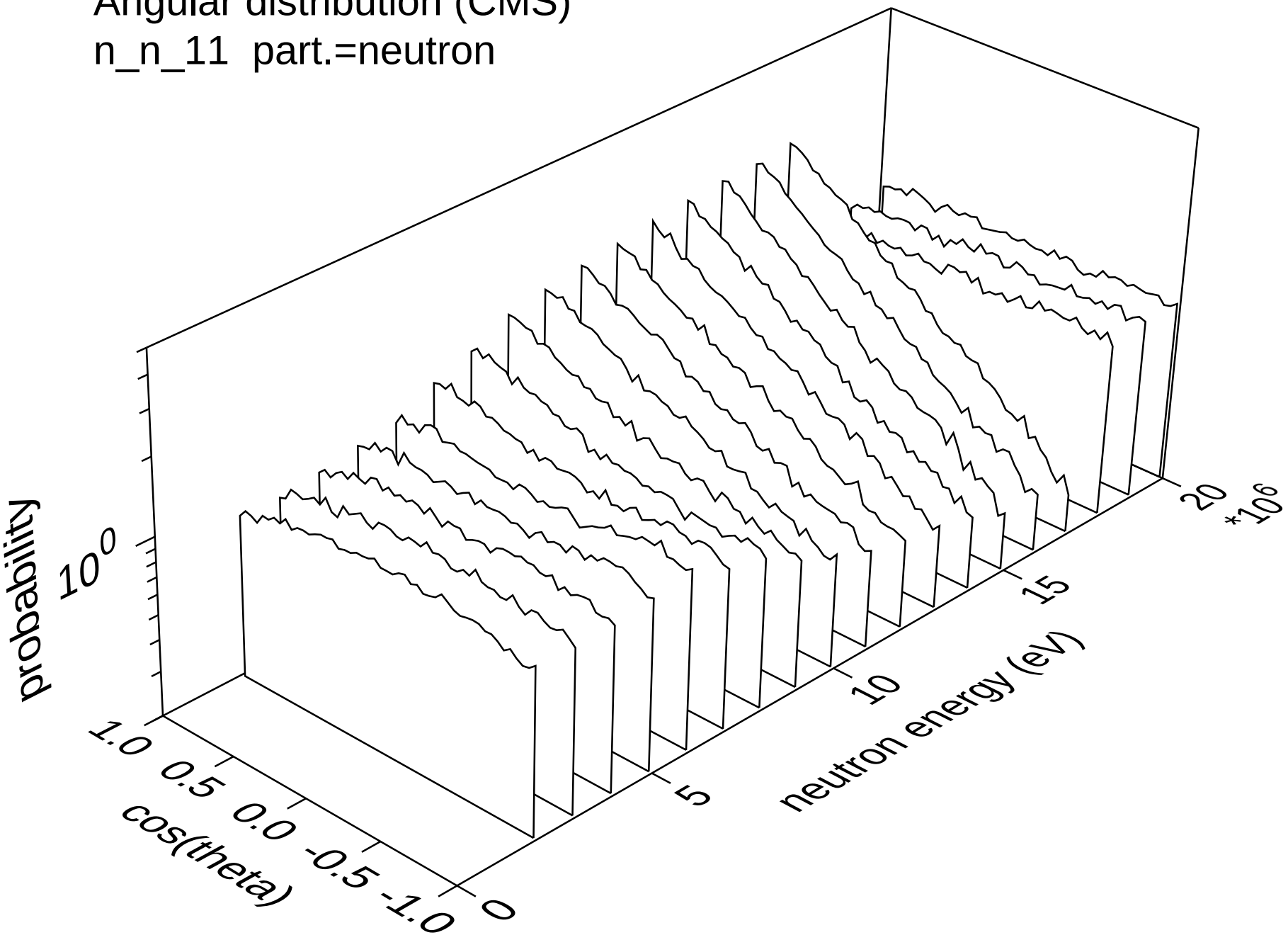

Angular distribution (CMS)
n_n_8 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

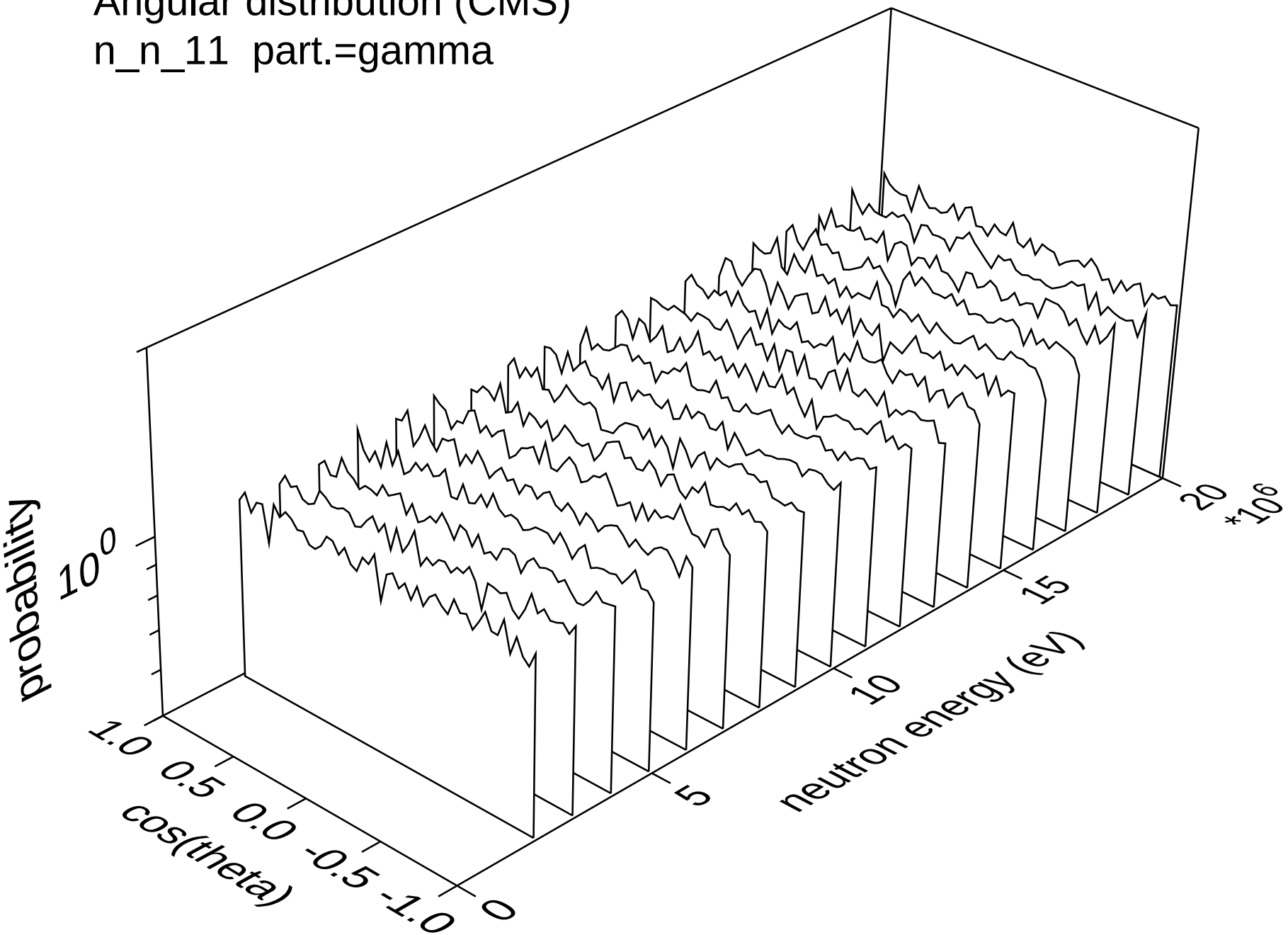

Angular distribution (CMS)
n_n_9 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

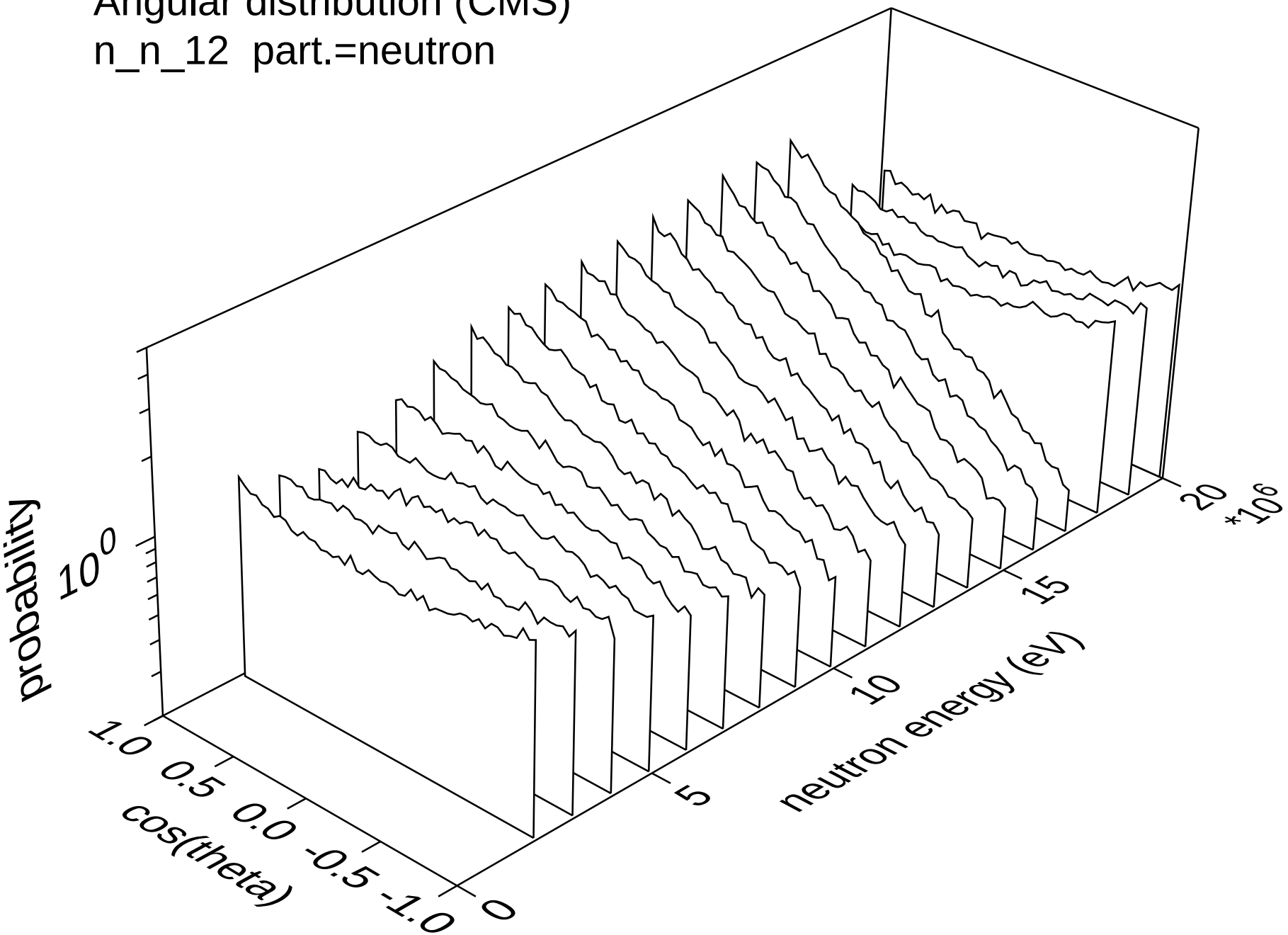

Angular distribution (CMS)
n_n_9 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

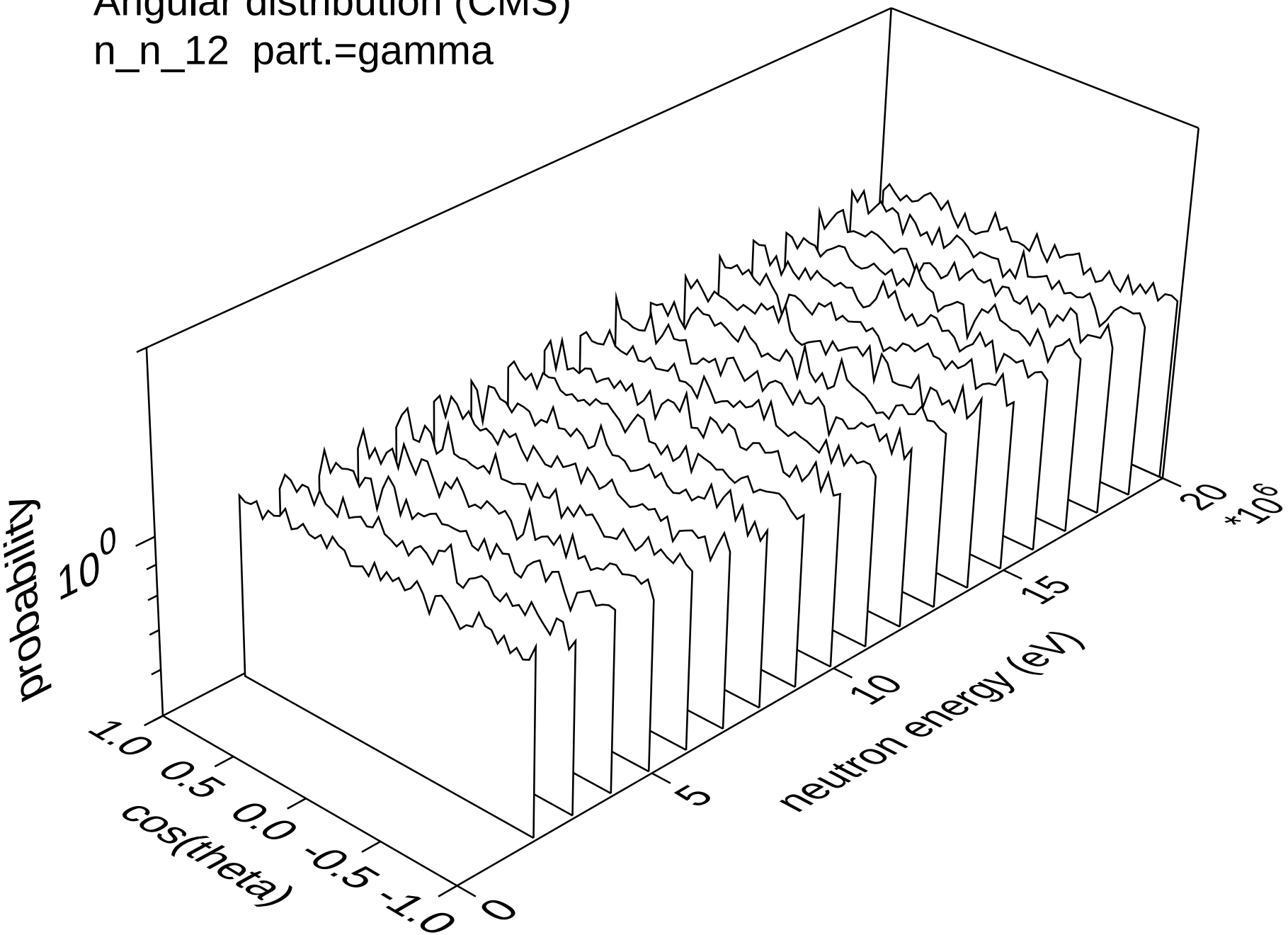

Angular distribution (CMS)
n_n_10 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

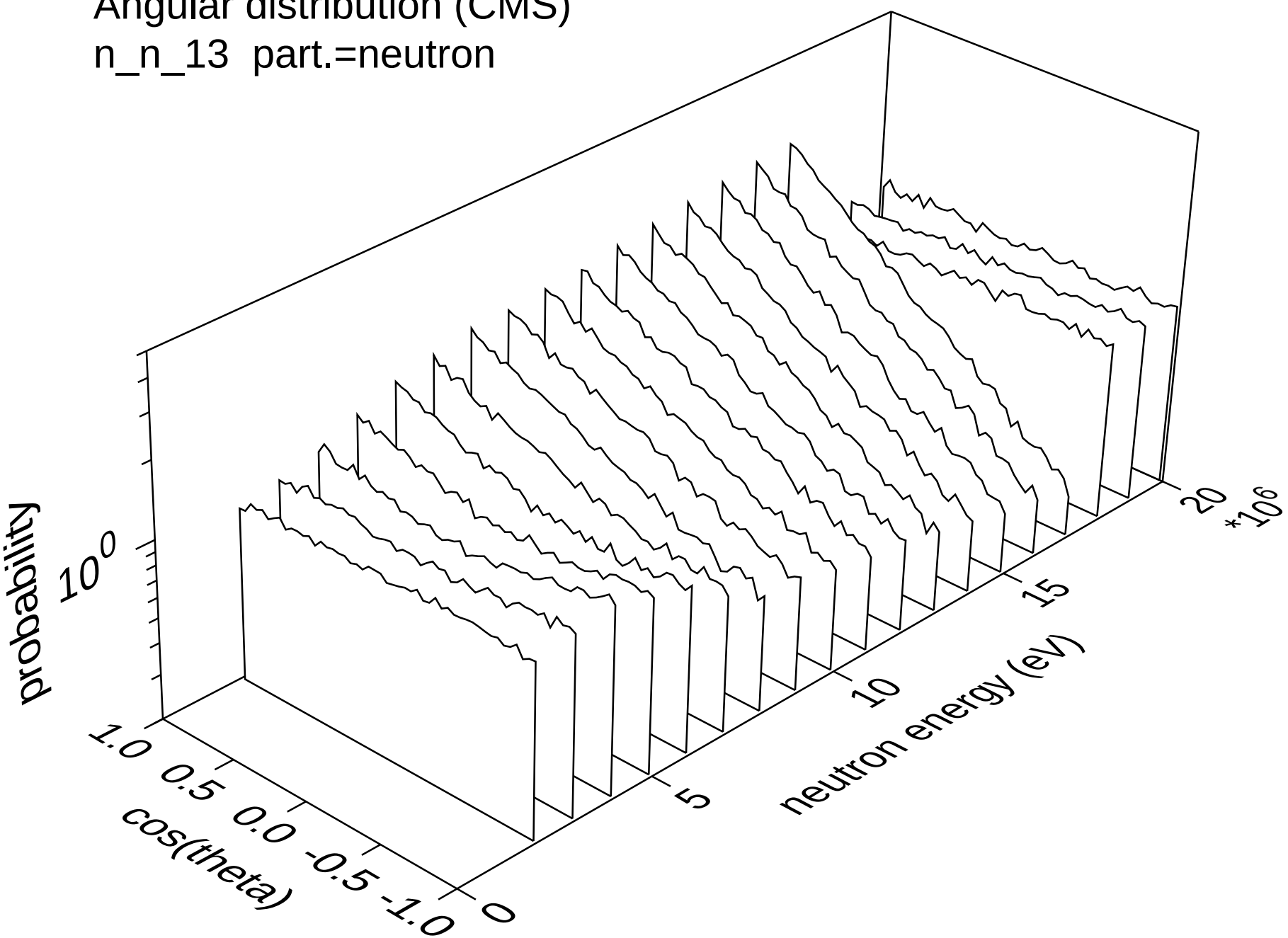

Angular distribution (CMS)
n_n_10 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

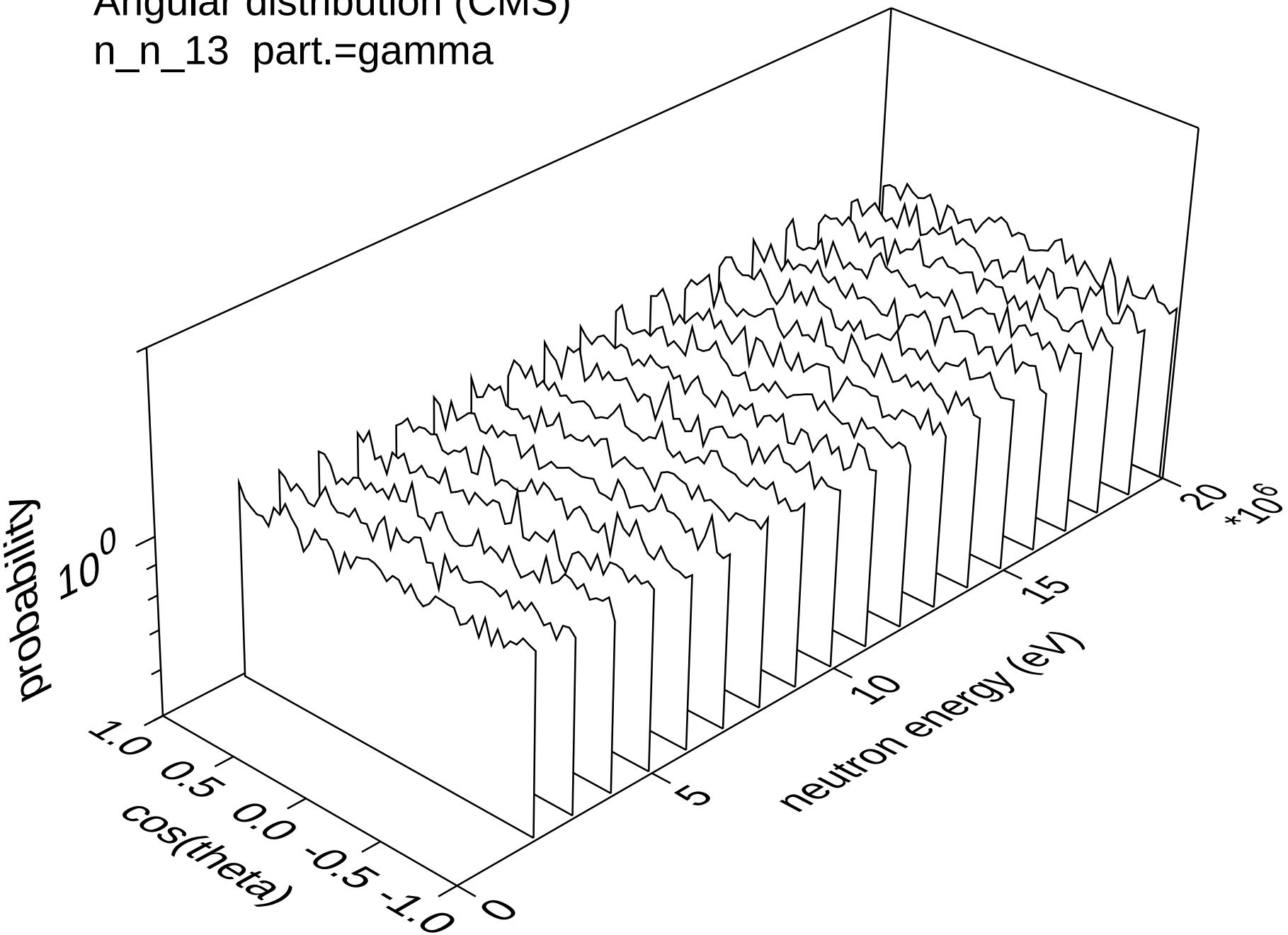

Angular distribution (CMS)
n_n_11 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

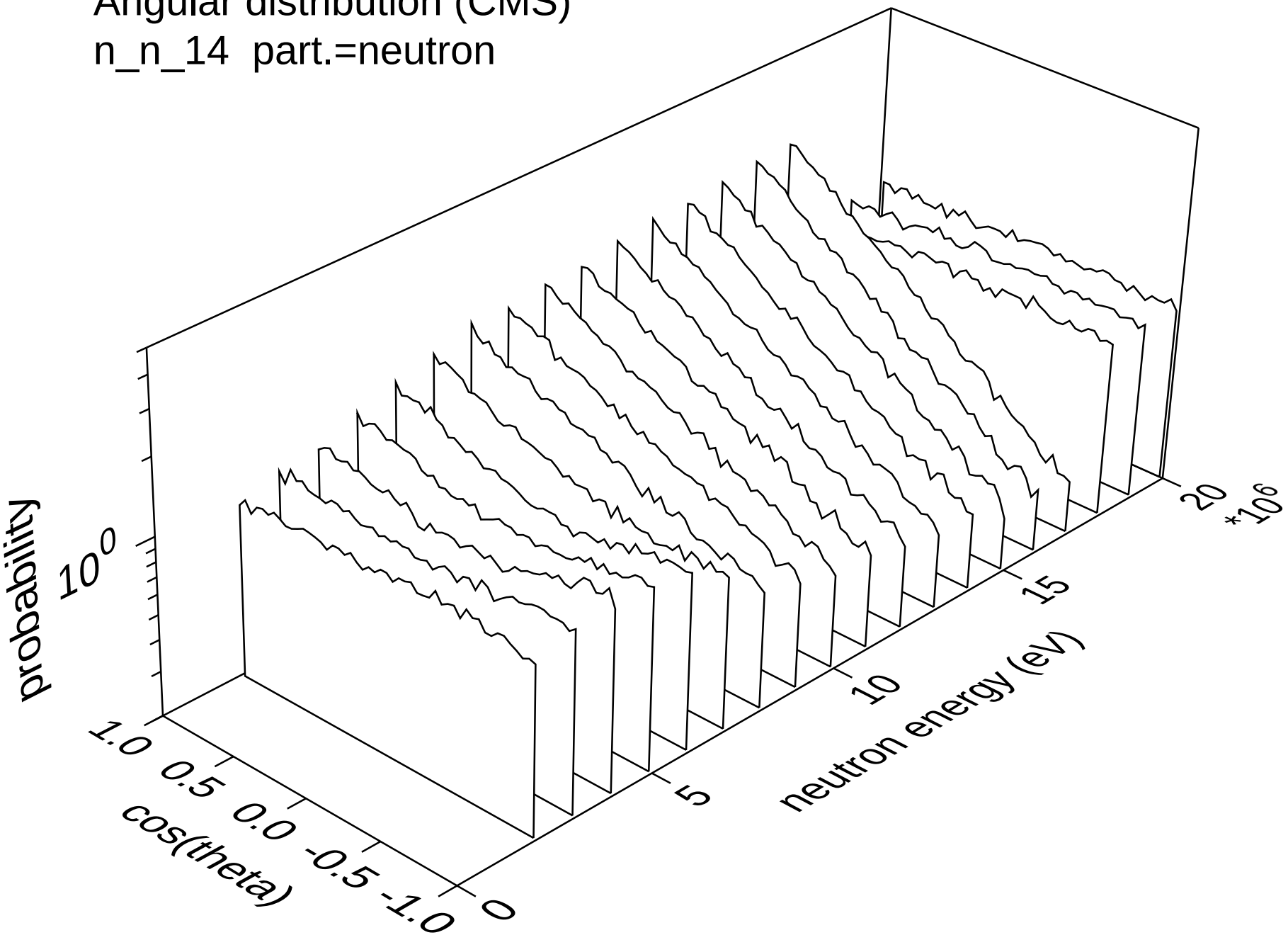

Angular distribution (CMS)
n_n_11 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

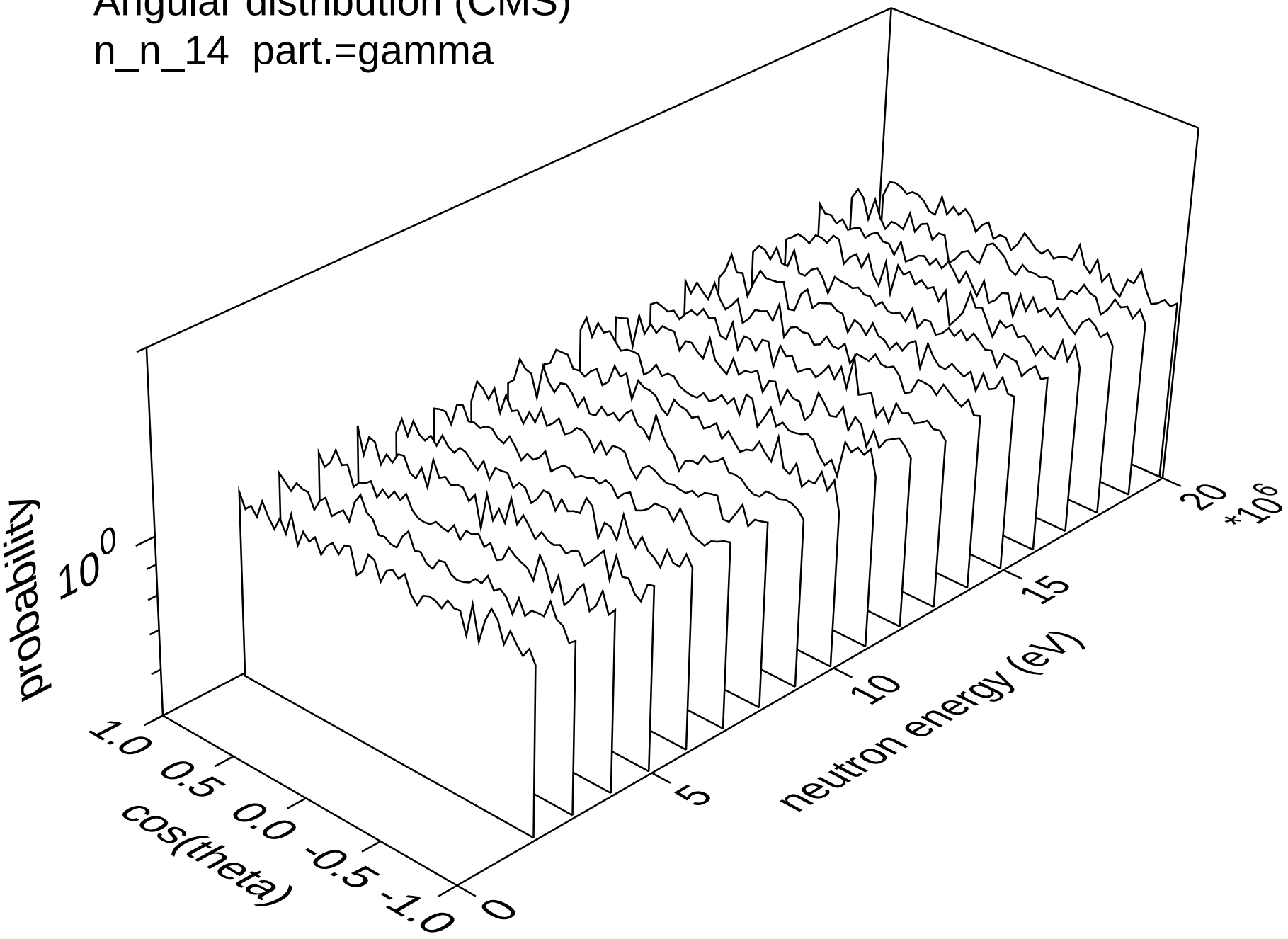

Angular distribution (CMS)
n_n_12 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

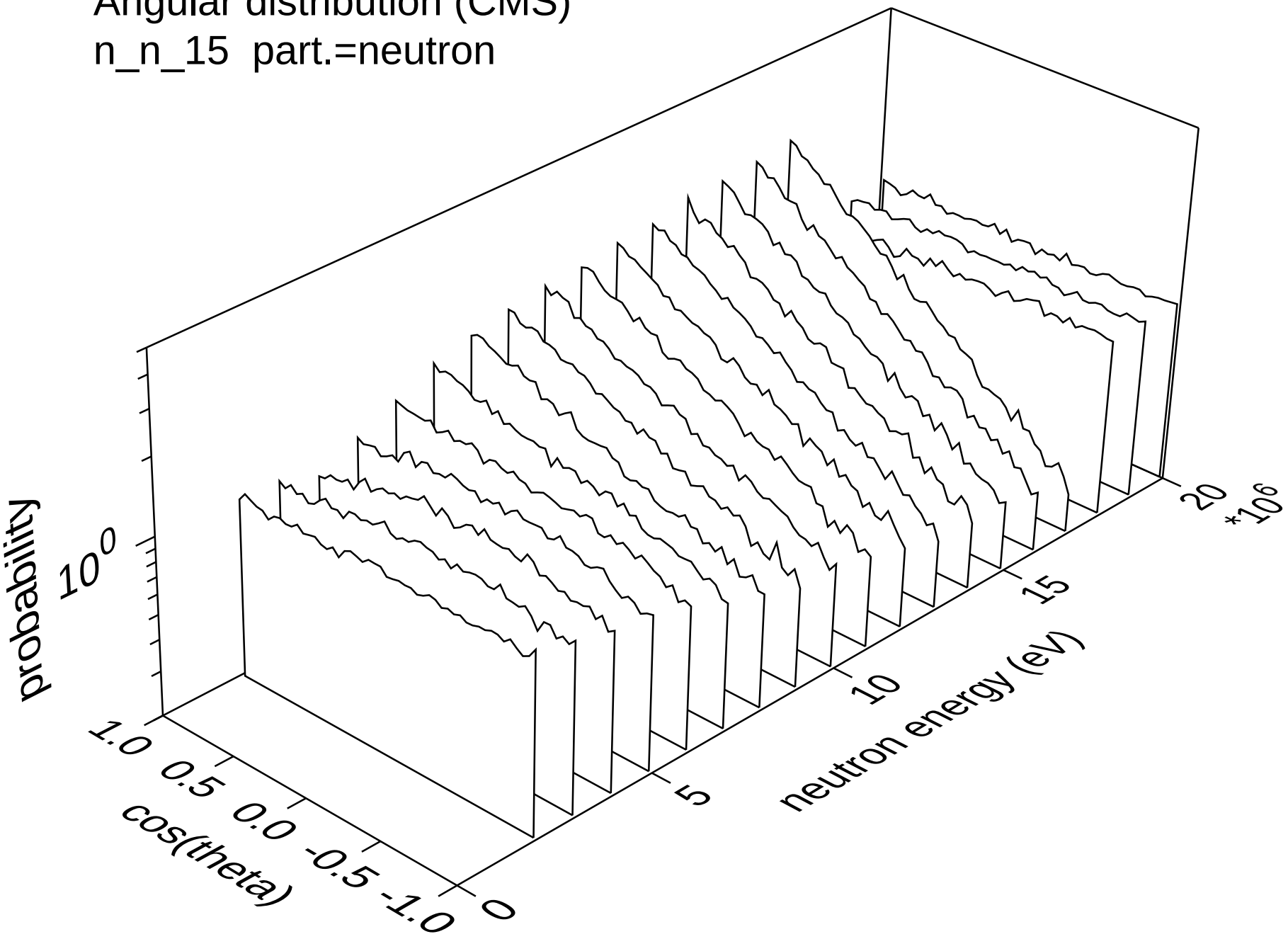

Angular distribution (CMS)
n_n_12 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

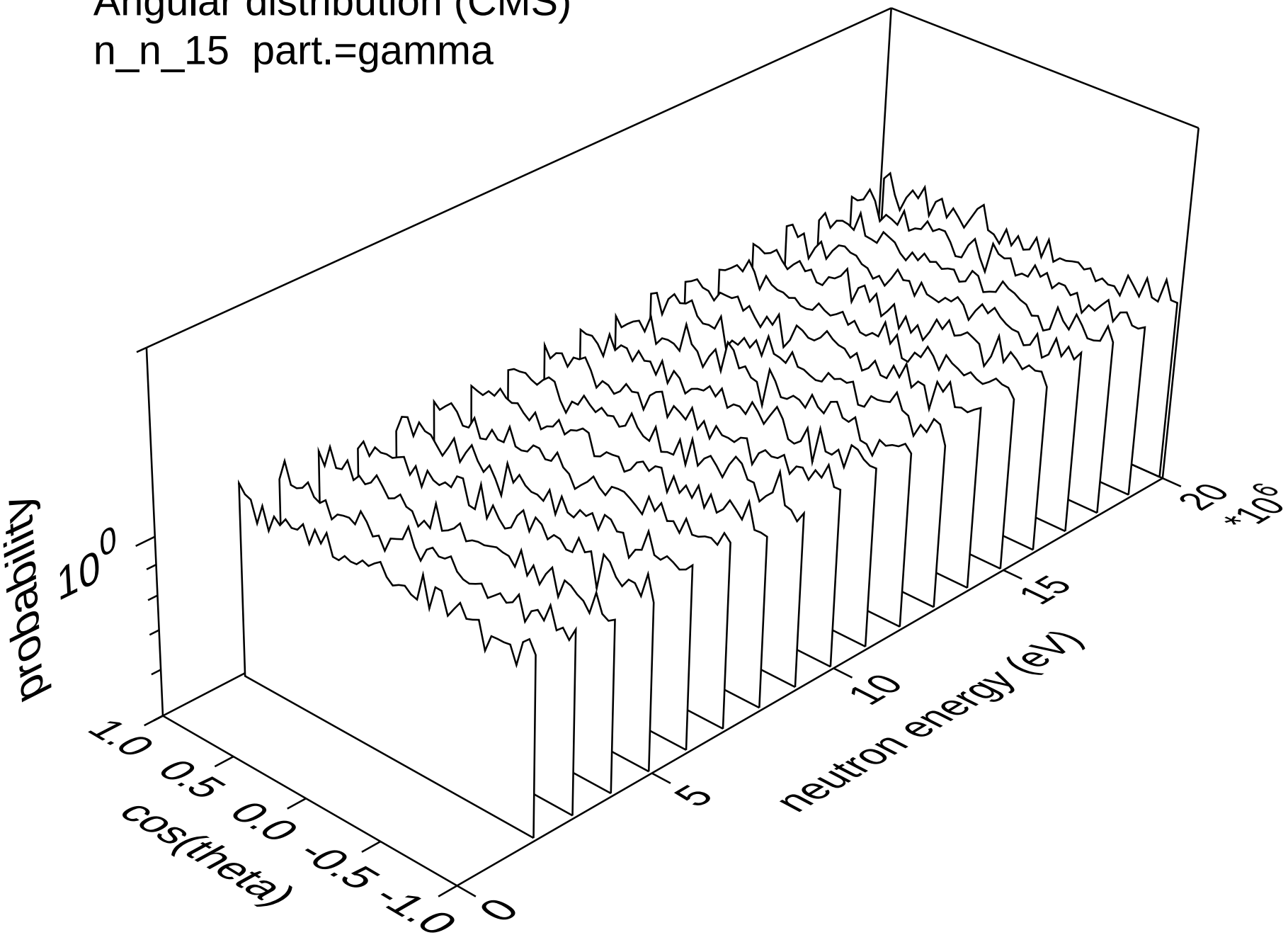

Angular distribution (CMS)
n_n_13 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

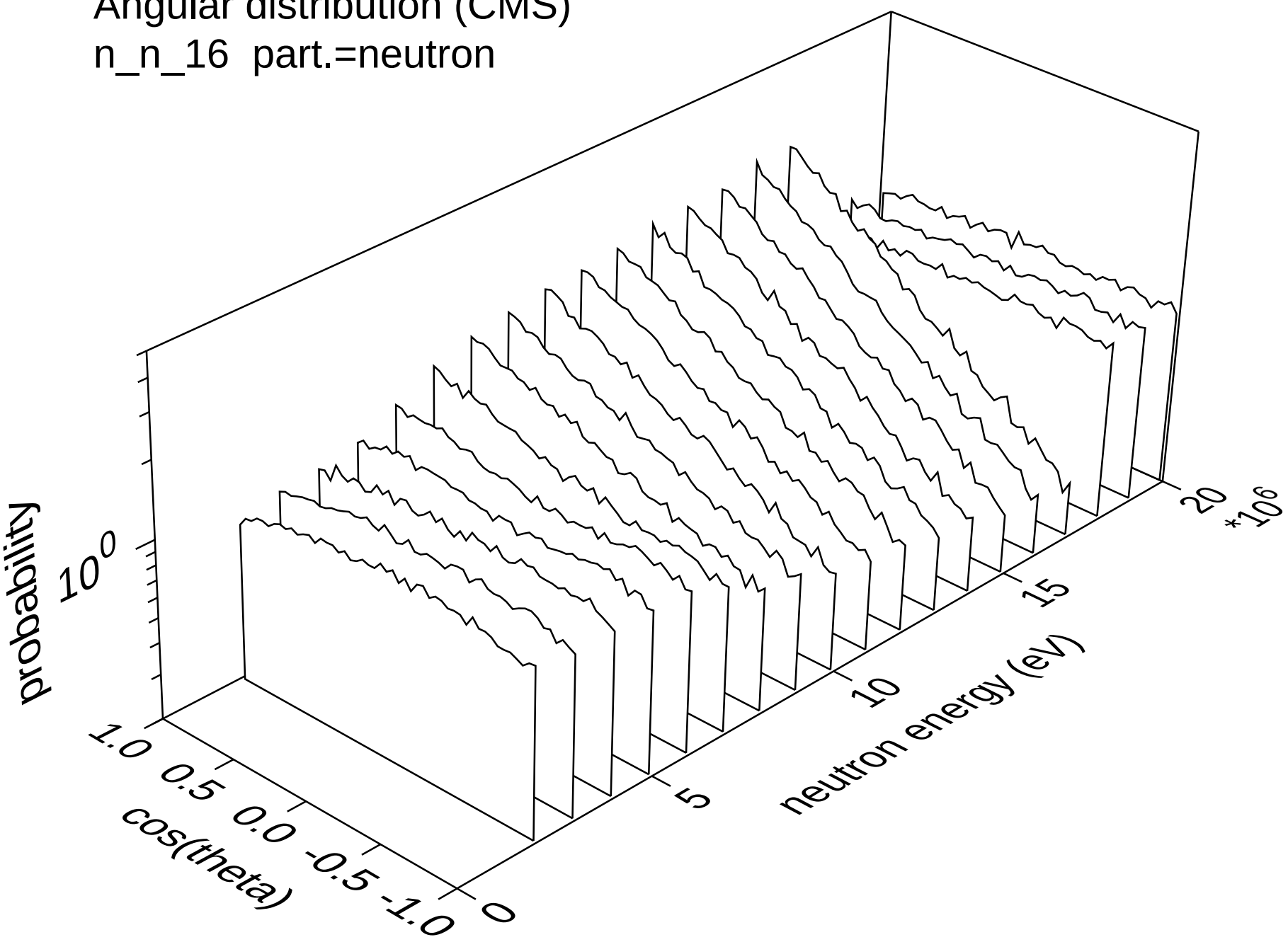

Angular distribution (CMS)
n_n_13 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

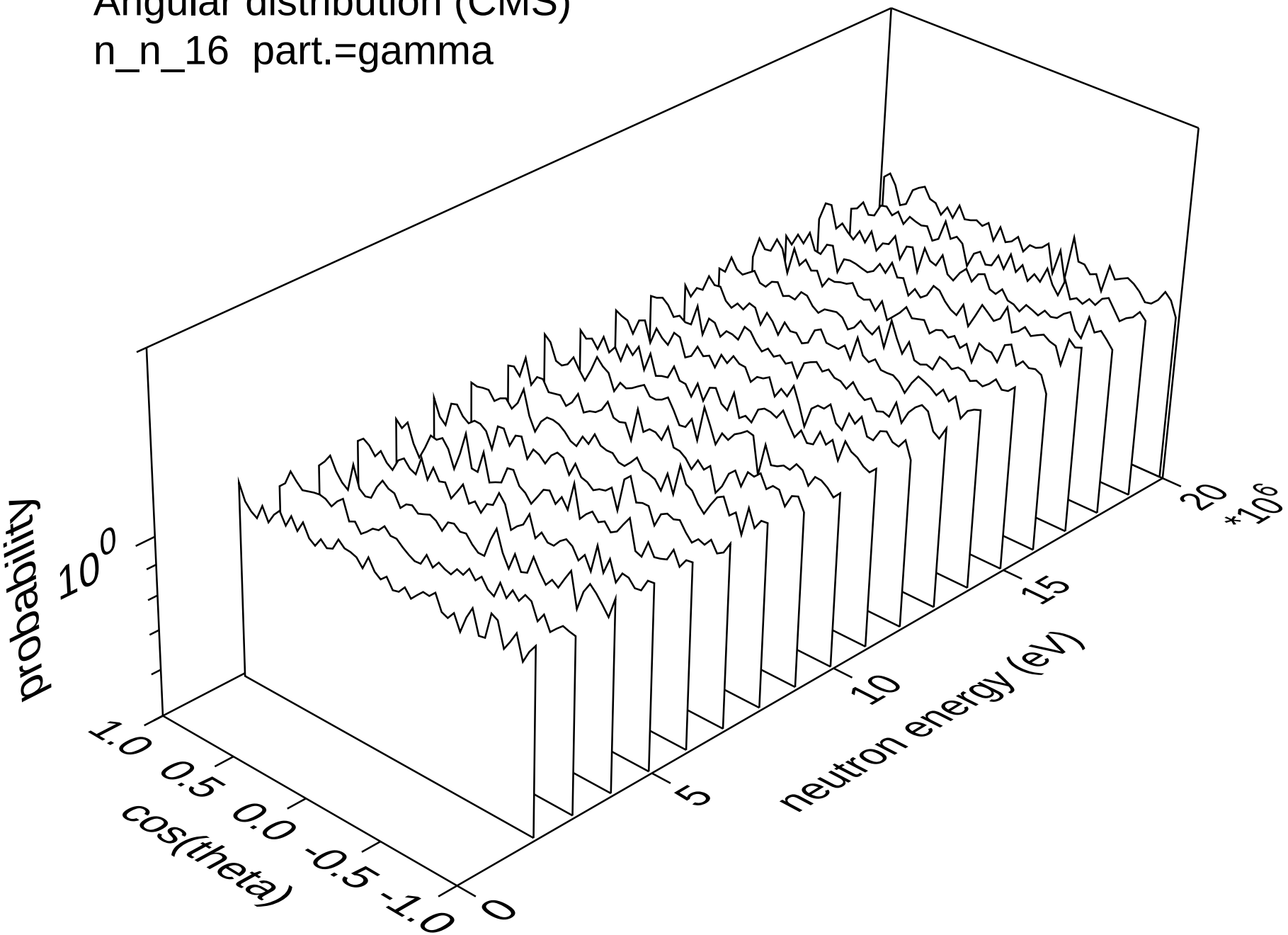

Angular distribution (CMS)
n_n_14 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

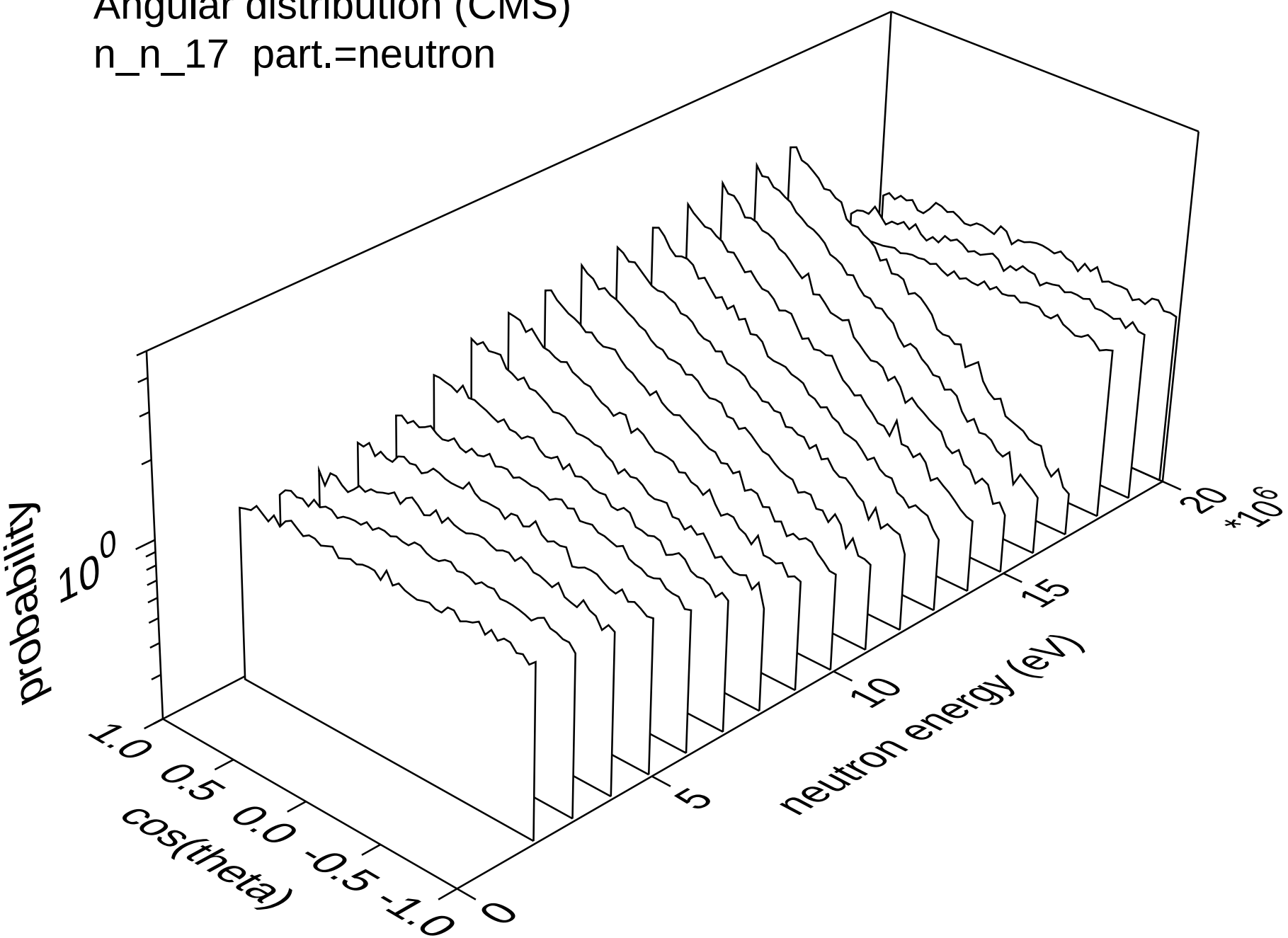

Angular distribution (CMS)
n_n_14 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

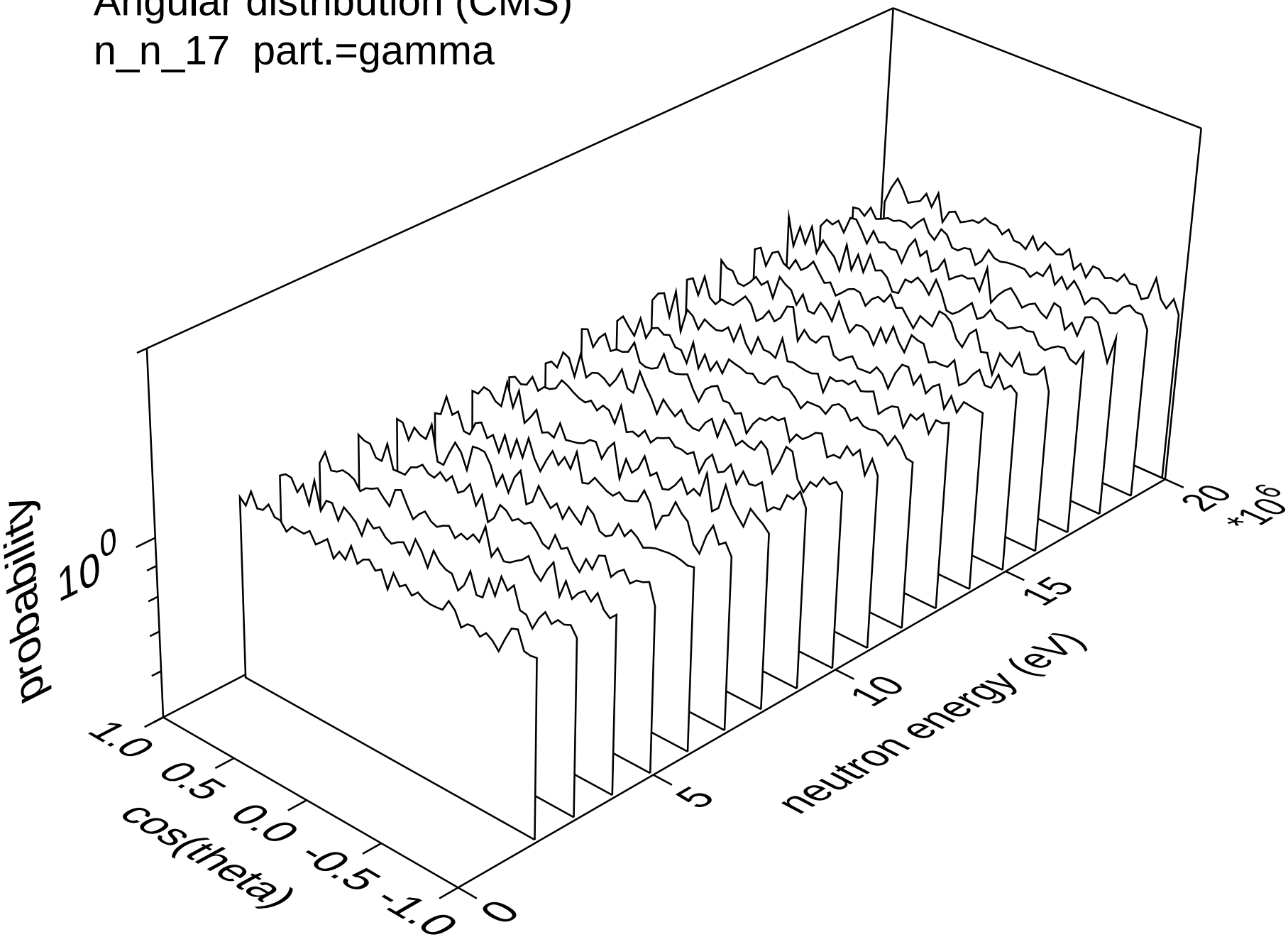

Angular distribution (CMS)
n_n_15 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

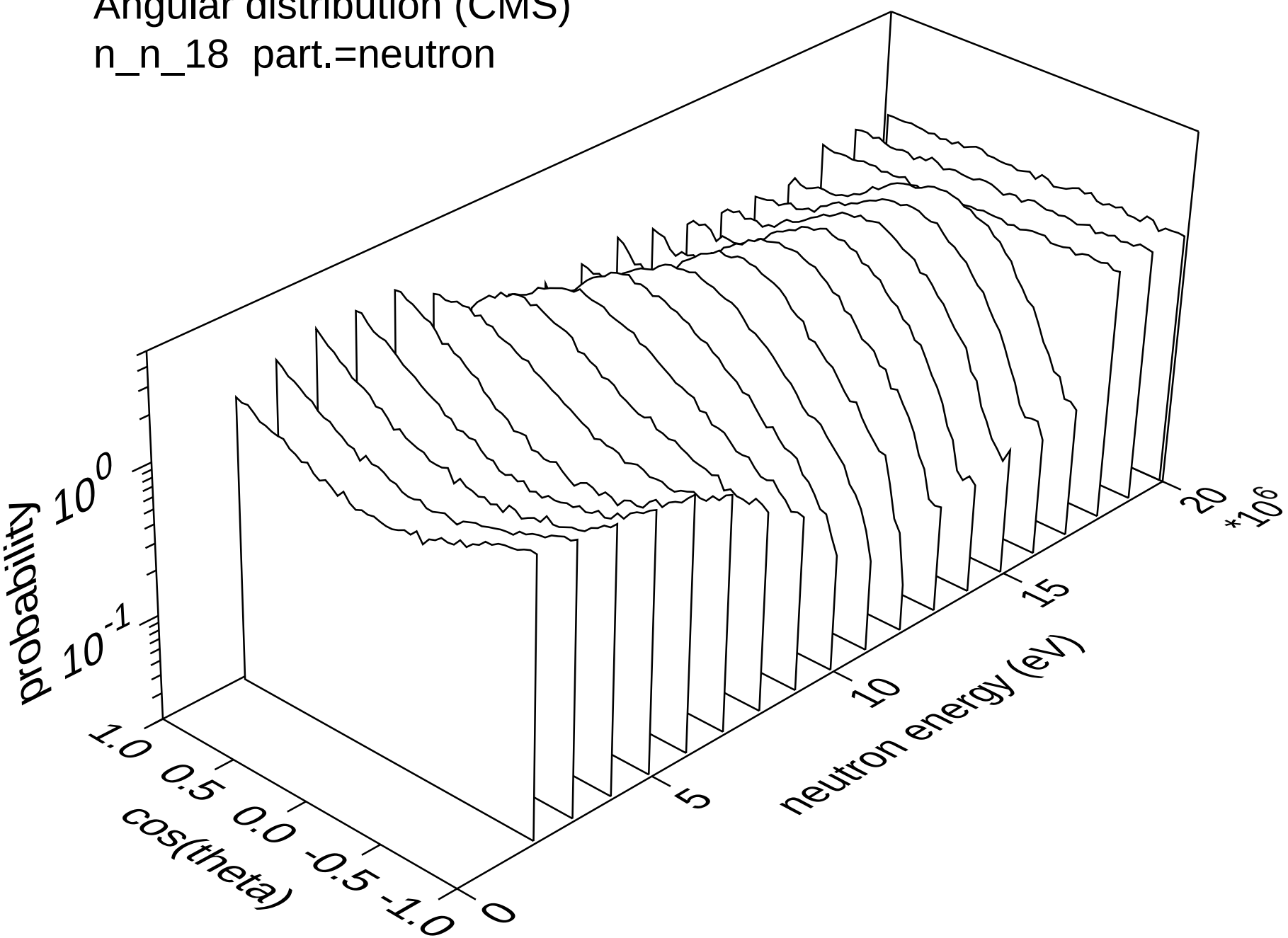

Angular distribution (CMS)
n_n_15 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

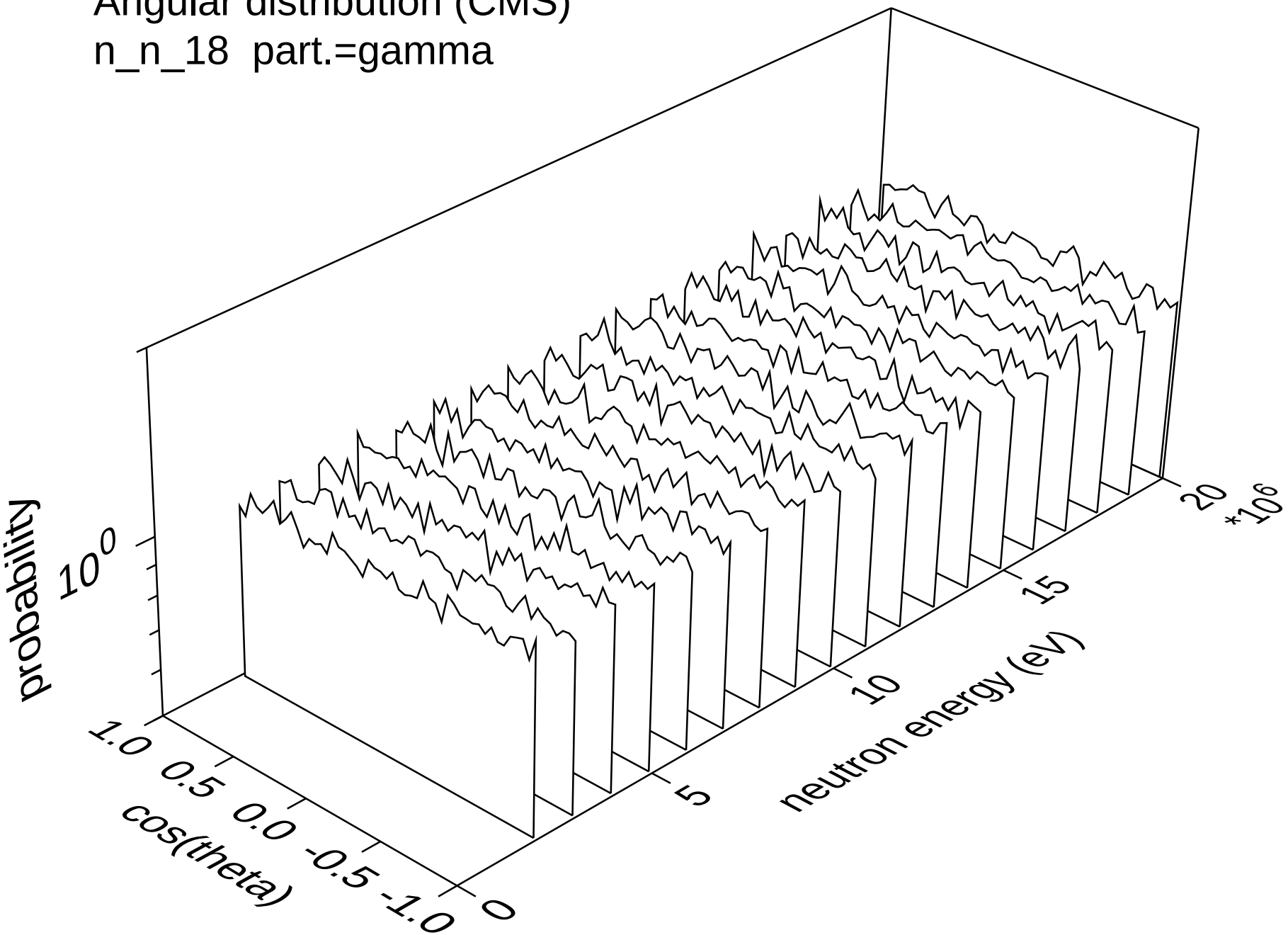

Angular distribution (CMS)
n_n_16 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

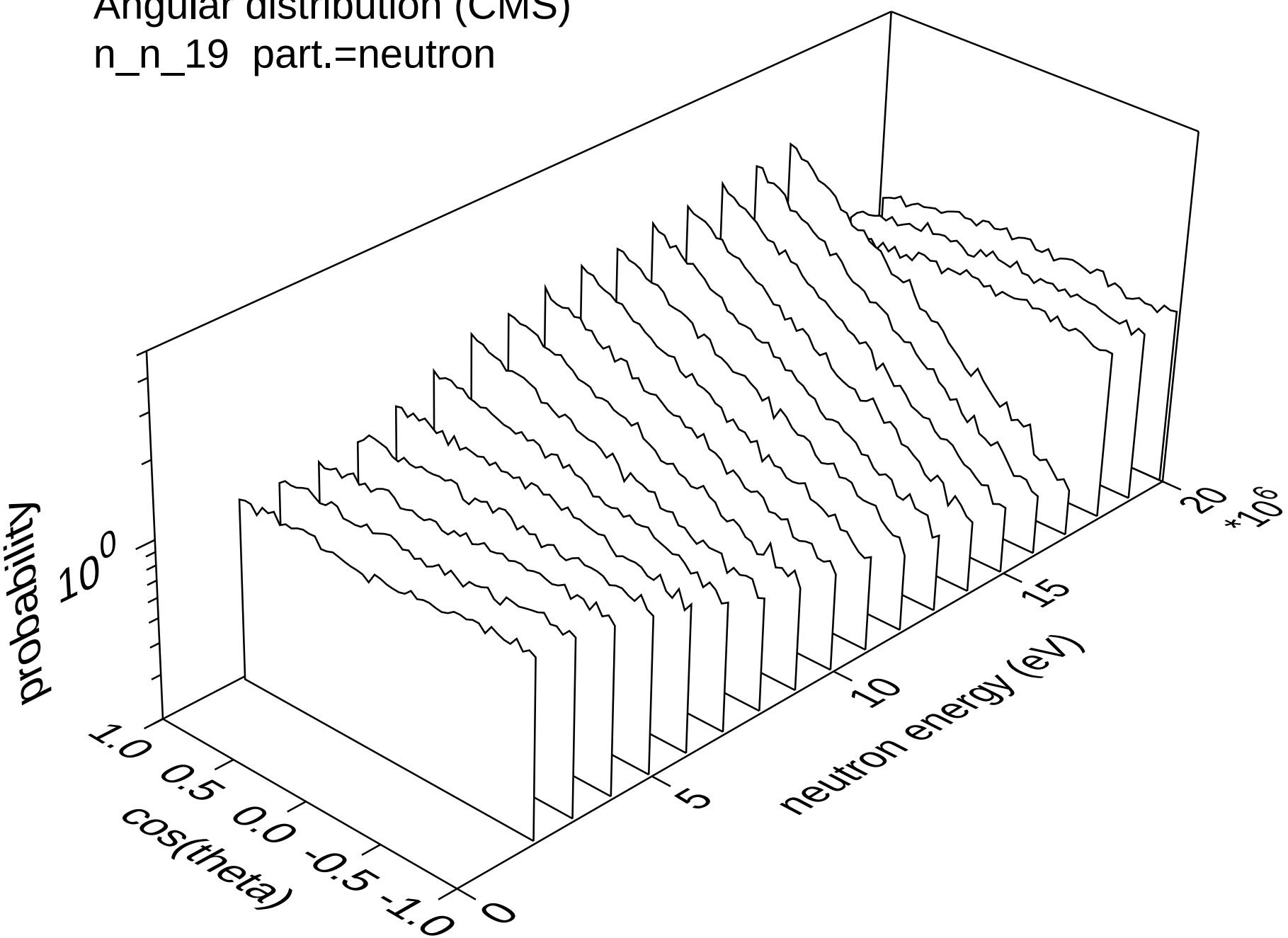

Angular distribution (CMS)
n_n_16 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

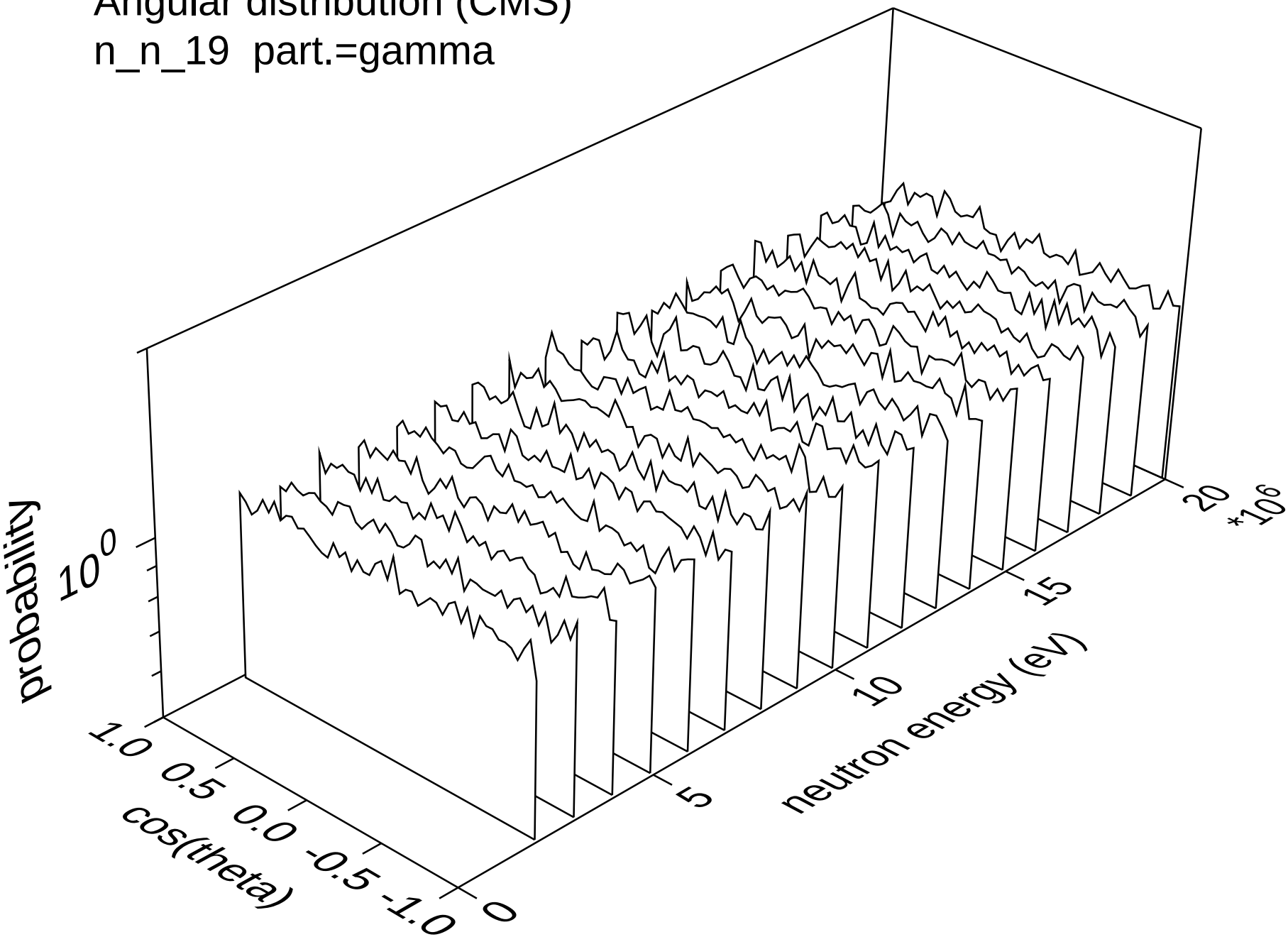

Angular distribution (CMS)
n_n_17 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

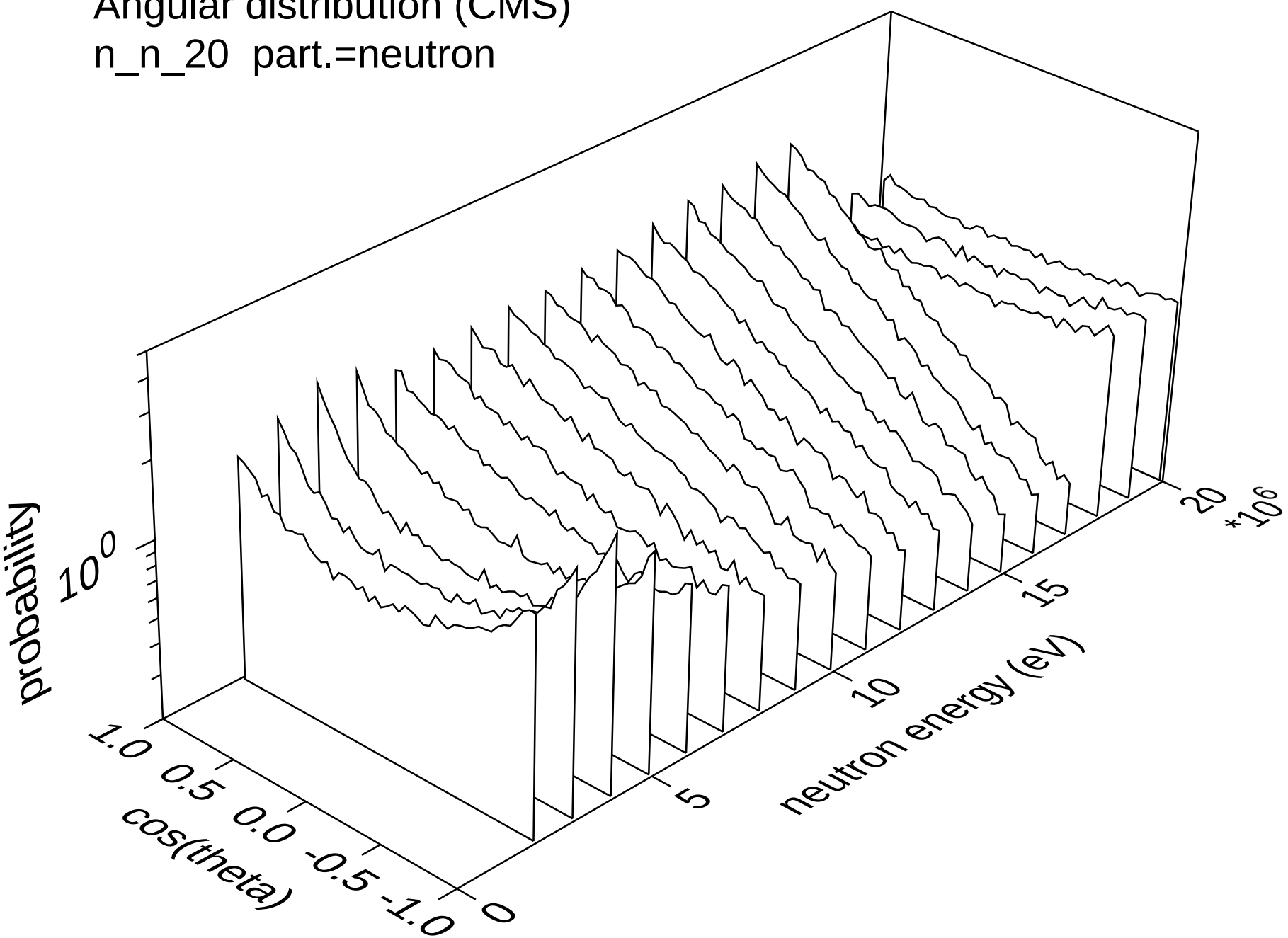

Angular distribution (CMS)
n_n_17 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

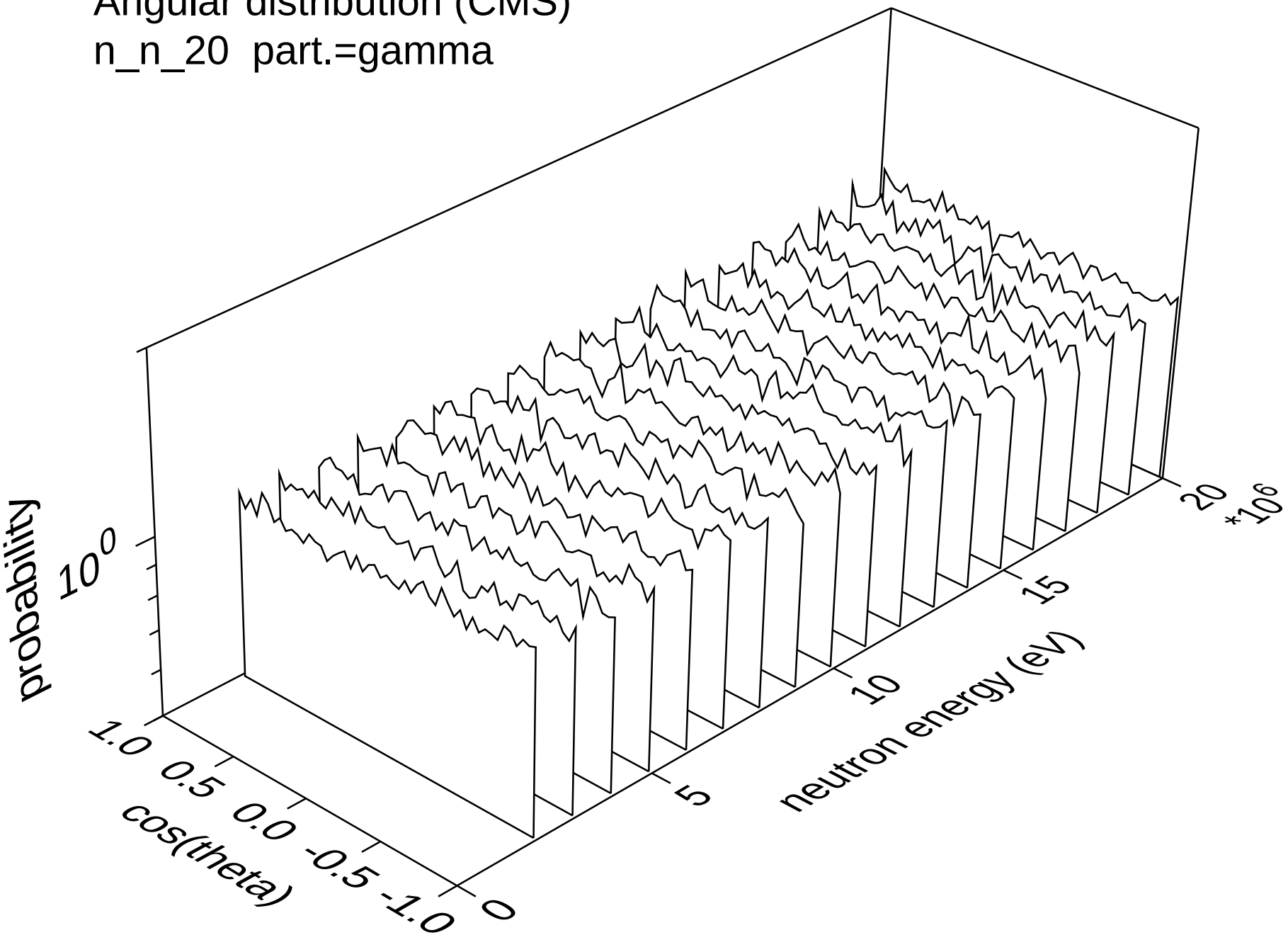

Angular distribution (CMS)
n_n_18 part.=neutron
probability
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

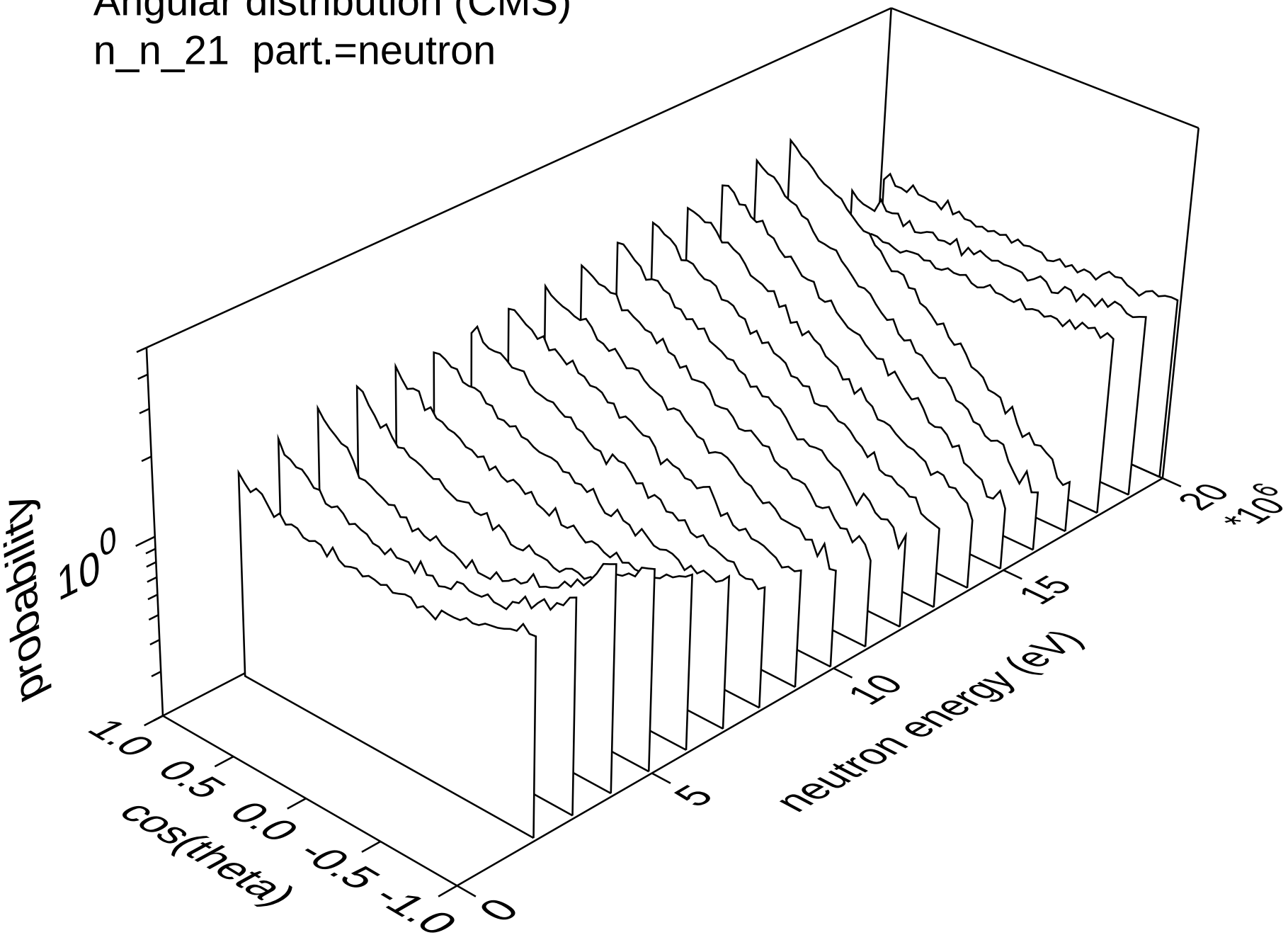

Angular distribution (CMS)
n_n_18 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

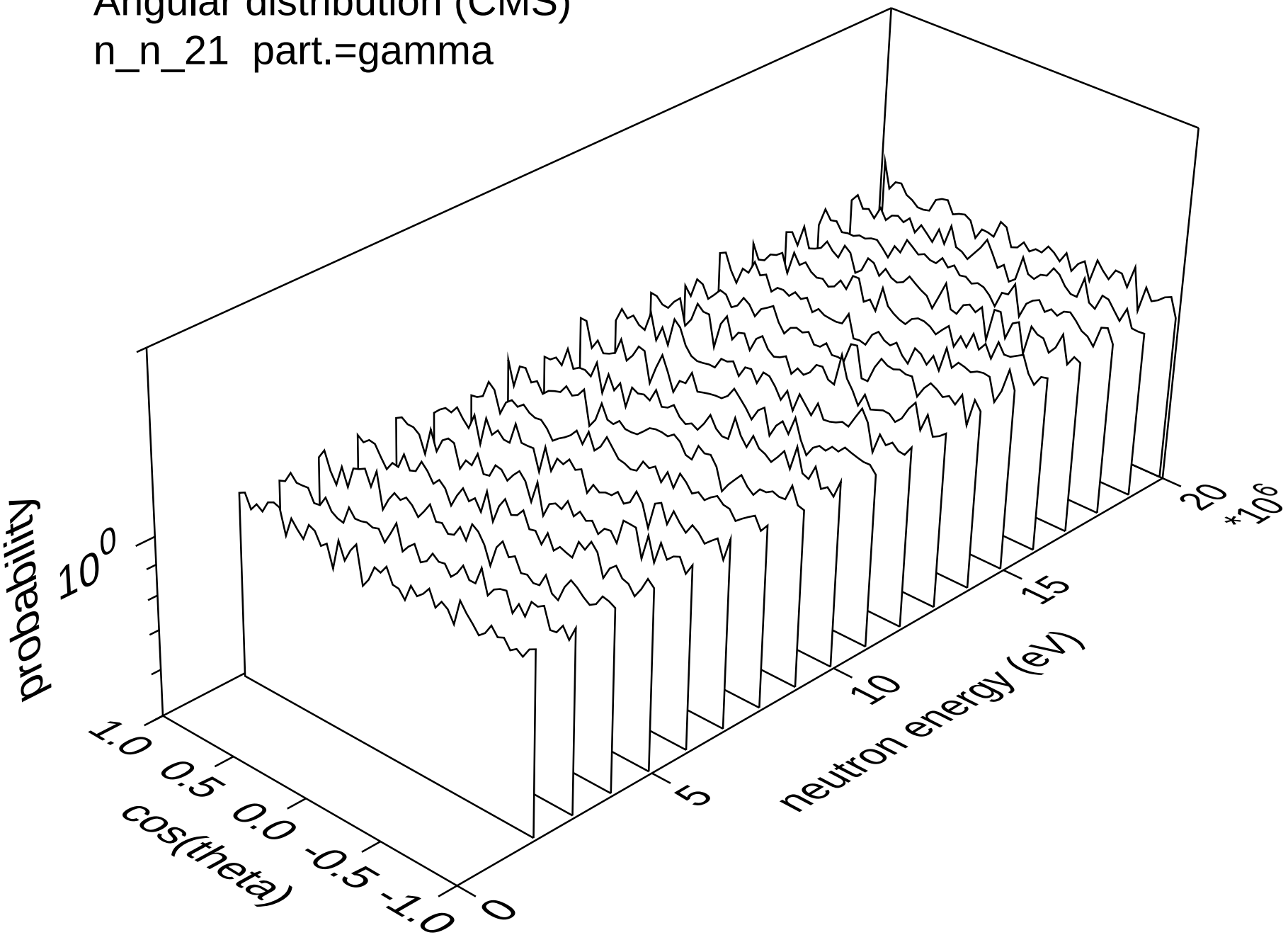

Angular distribution (CMS)
n_n_19 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

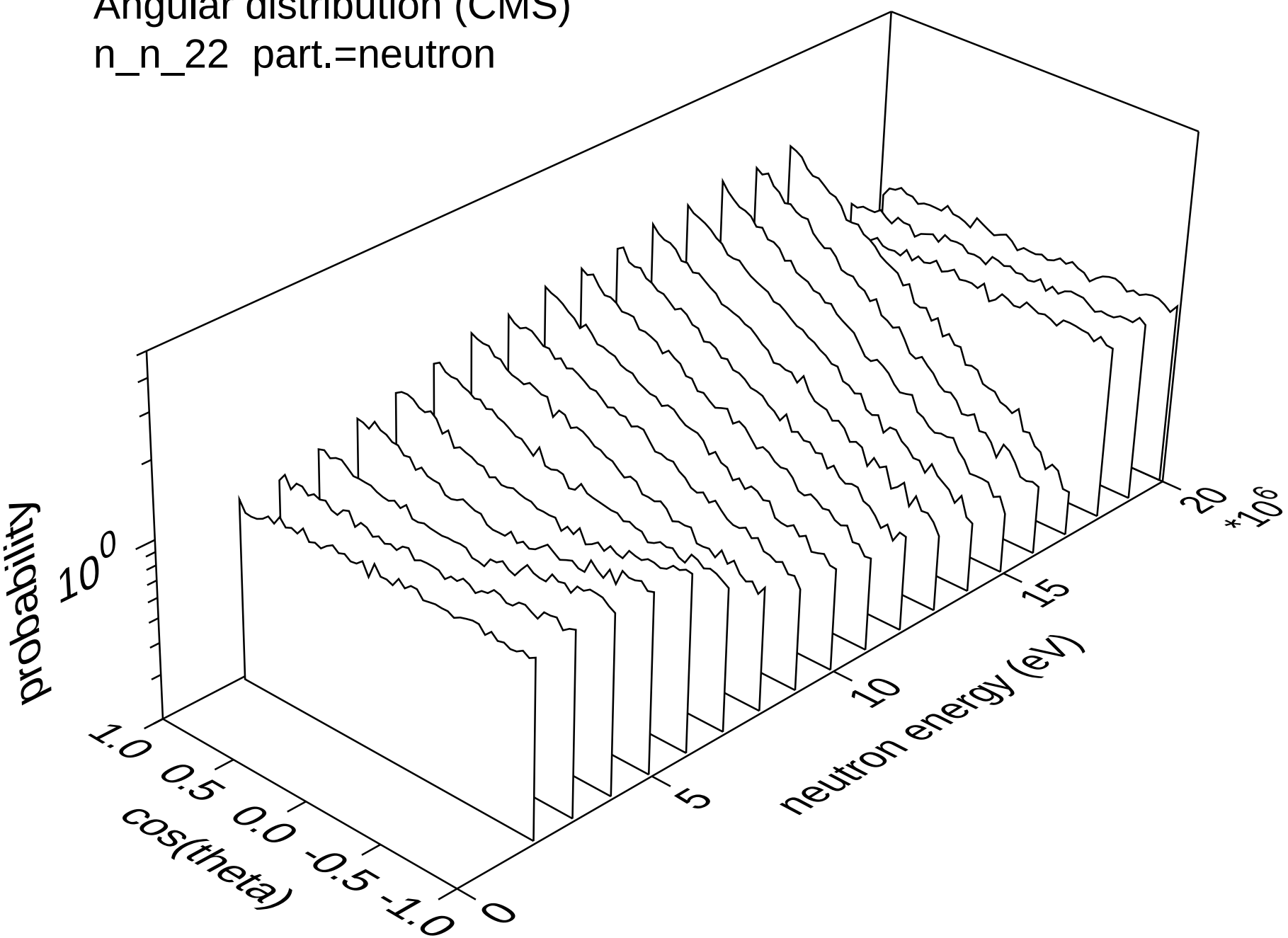

Angular distribution (CMS)
n_n_19 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

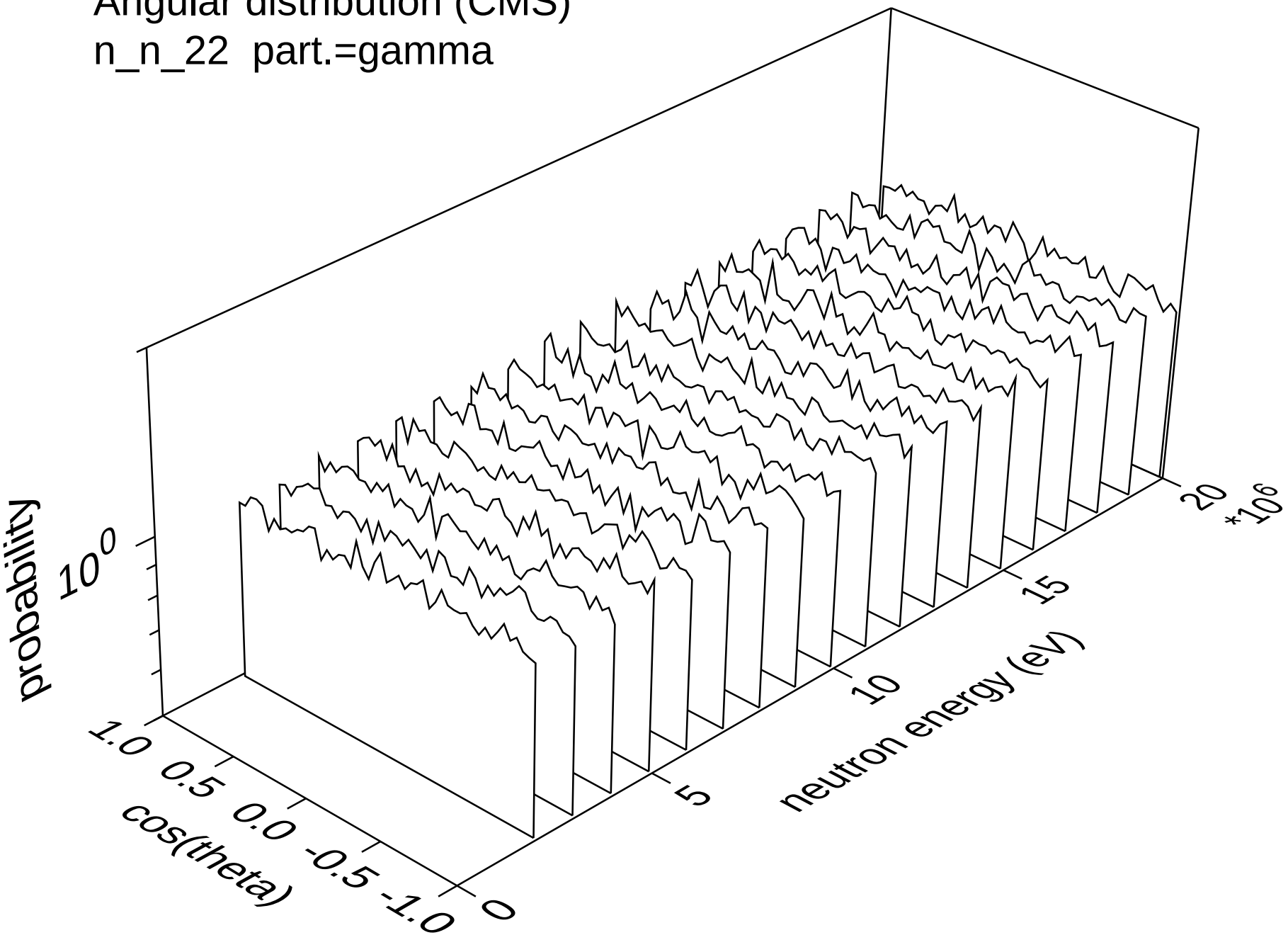

Angular distribution (CMS)
n_n_20 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

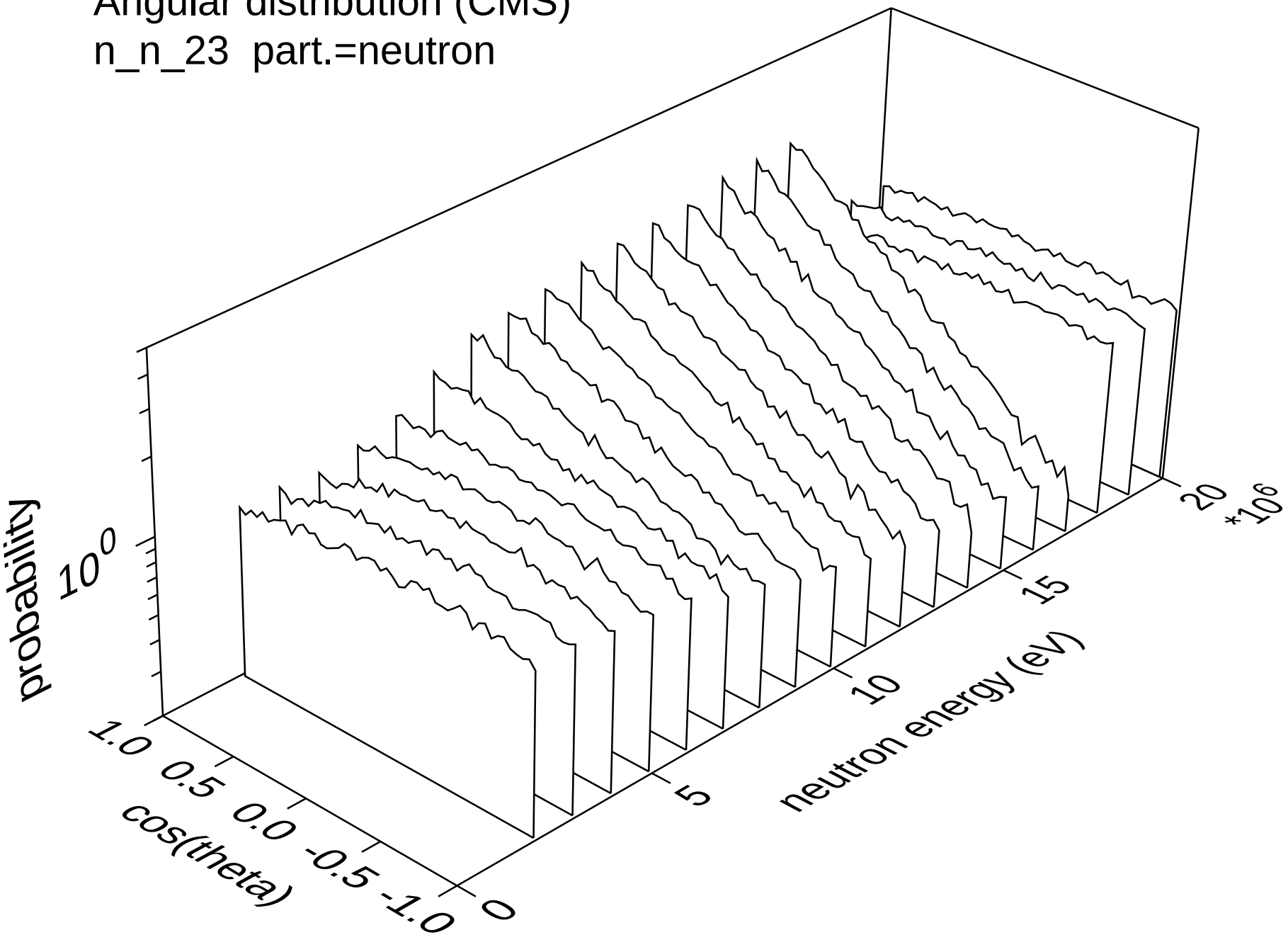

Angular distribution (CMS)
n_n_20 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

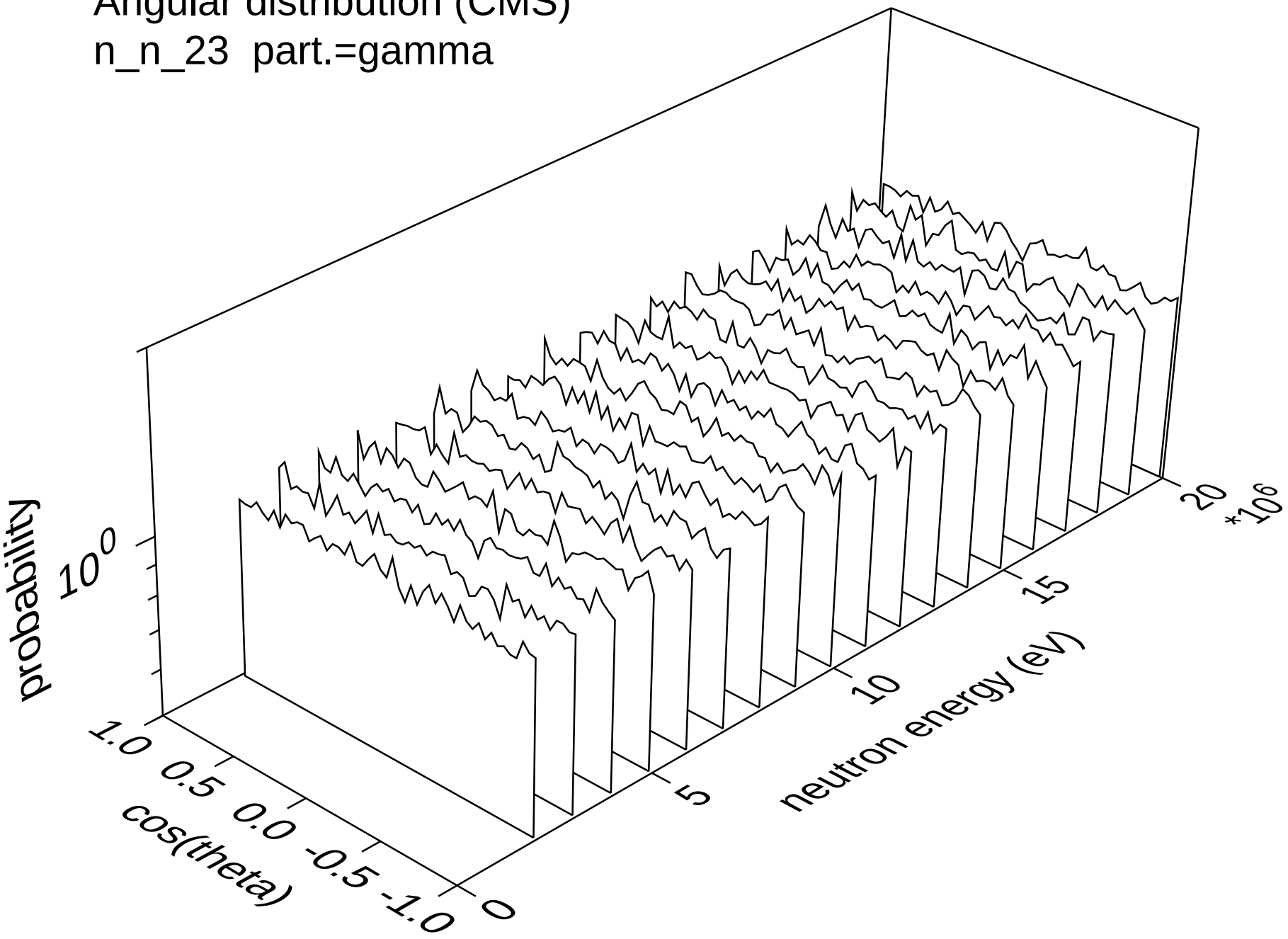

Angular distribution (CMS)
n_n_21 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

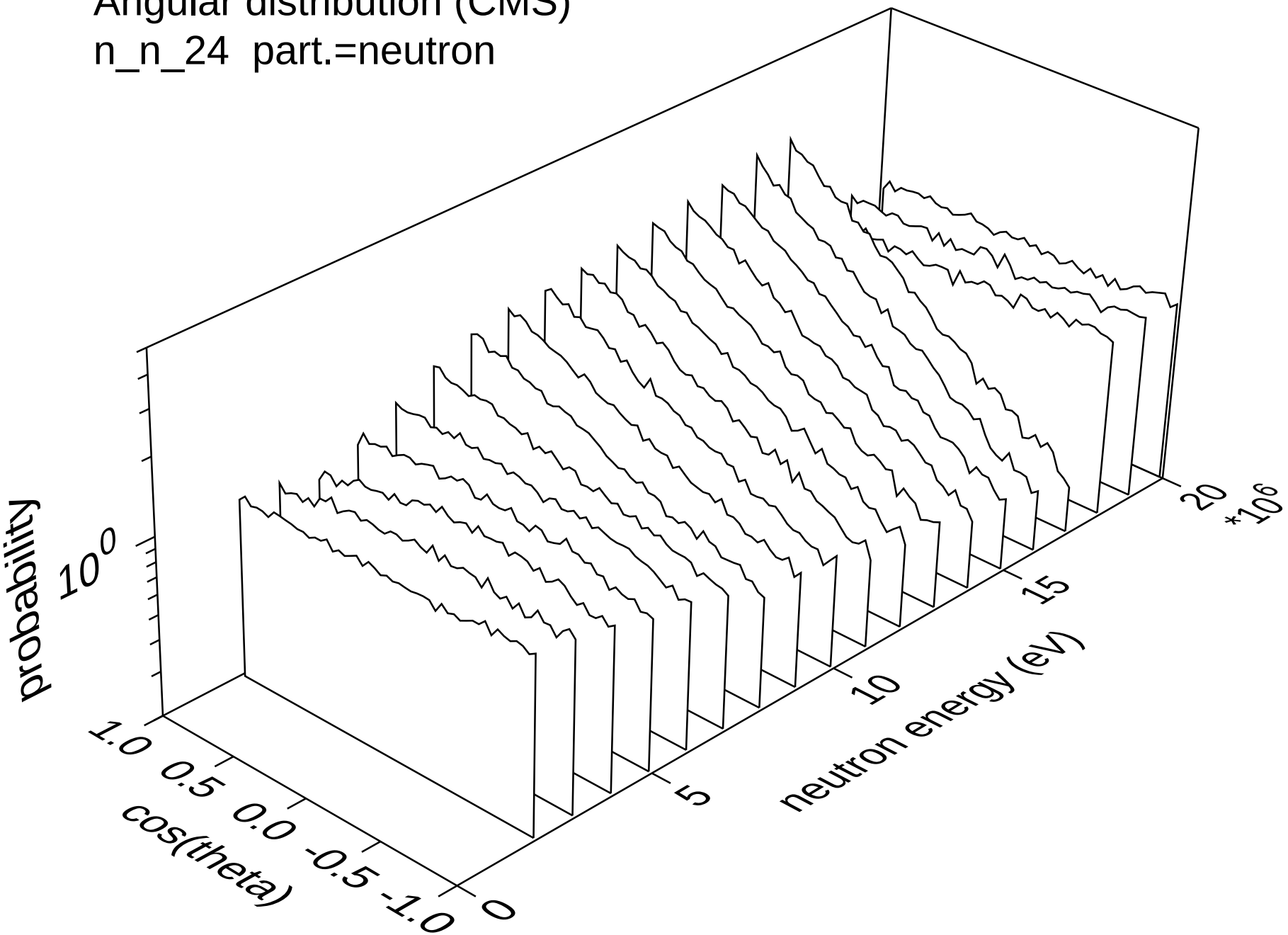

Angular distribution (CMS)
n_n_21 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

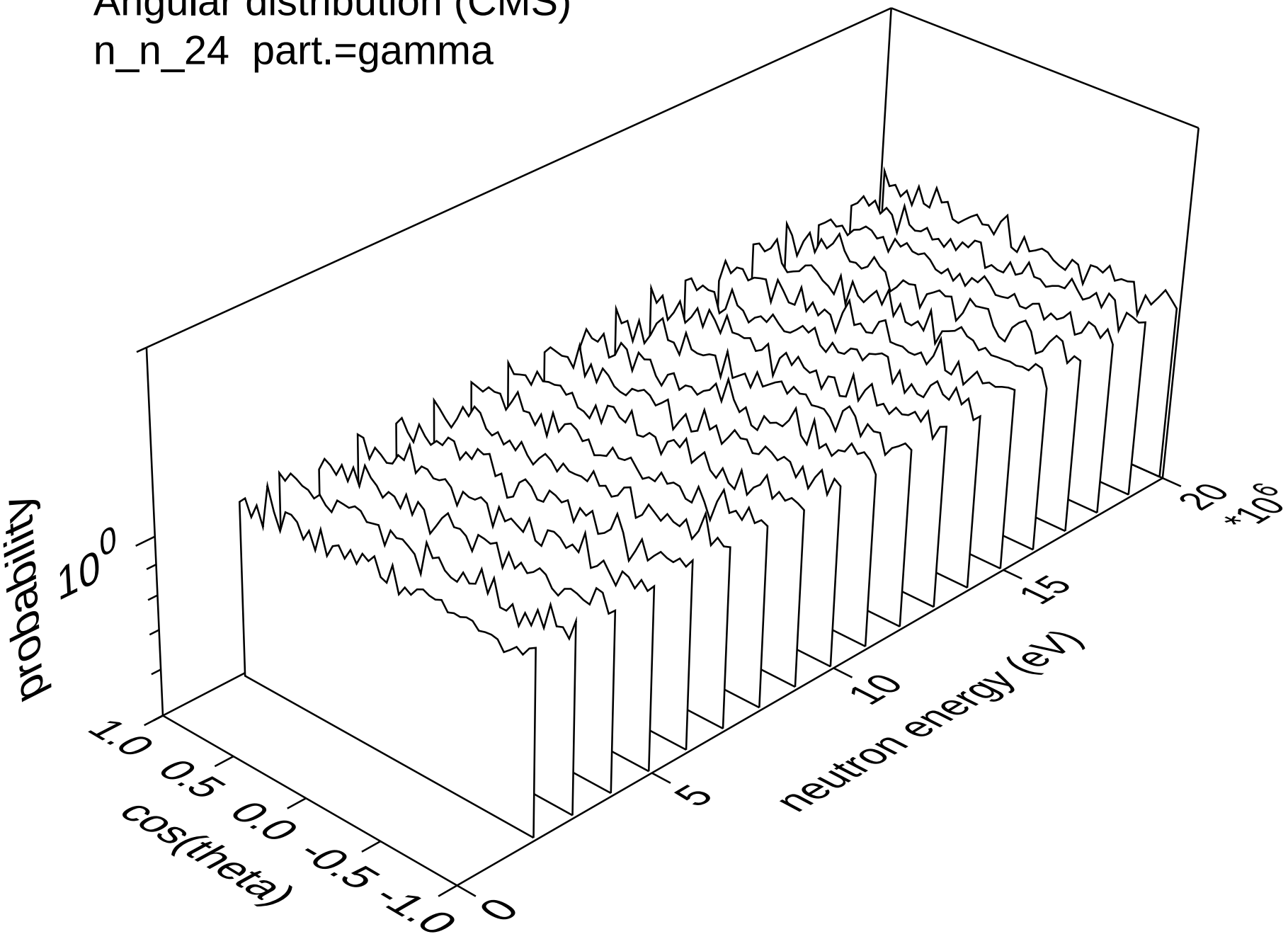

Angular distribution (CMS)
n_n_22 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

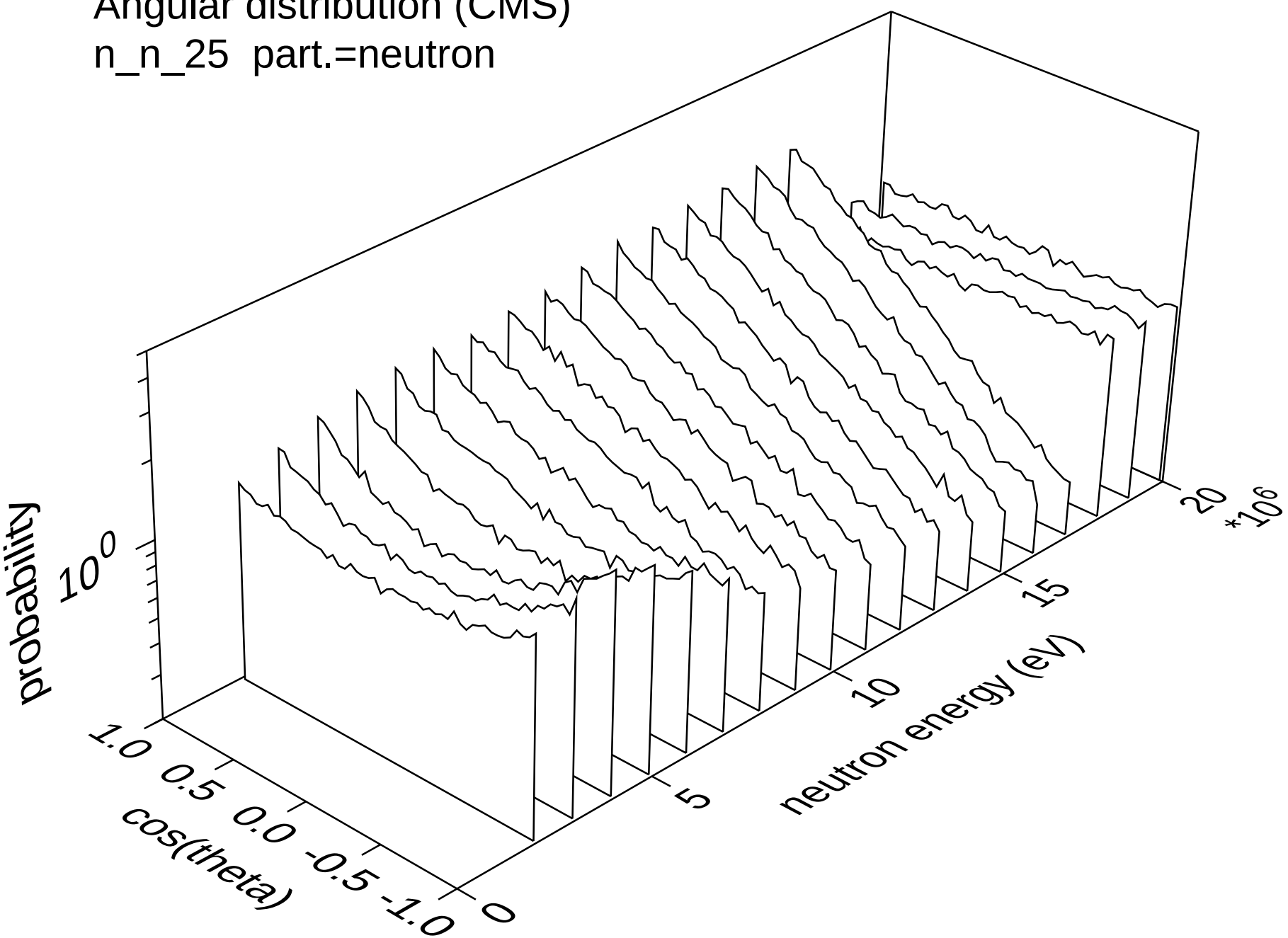

Angular distribution (CMS)
n_n_22 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

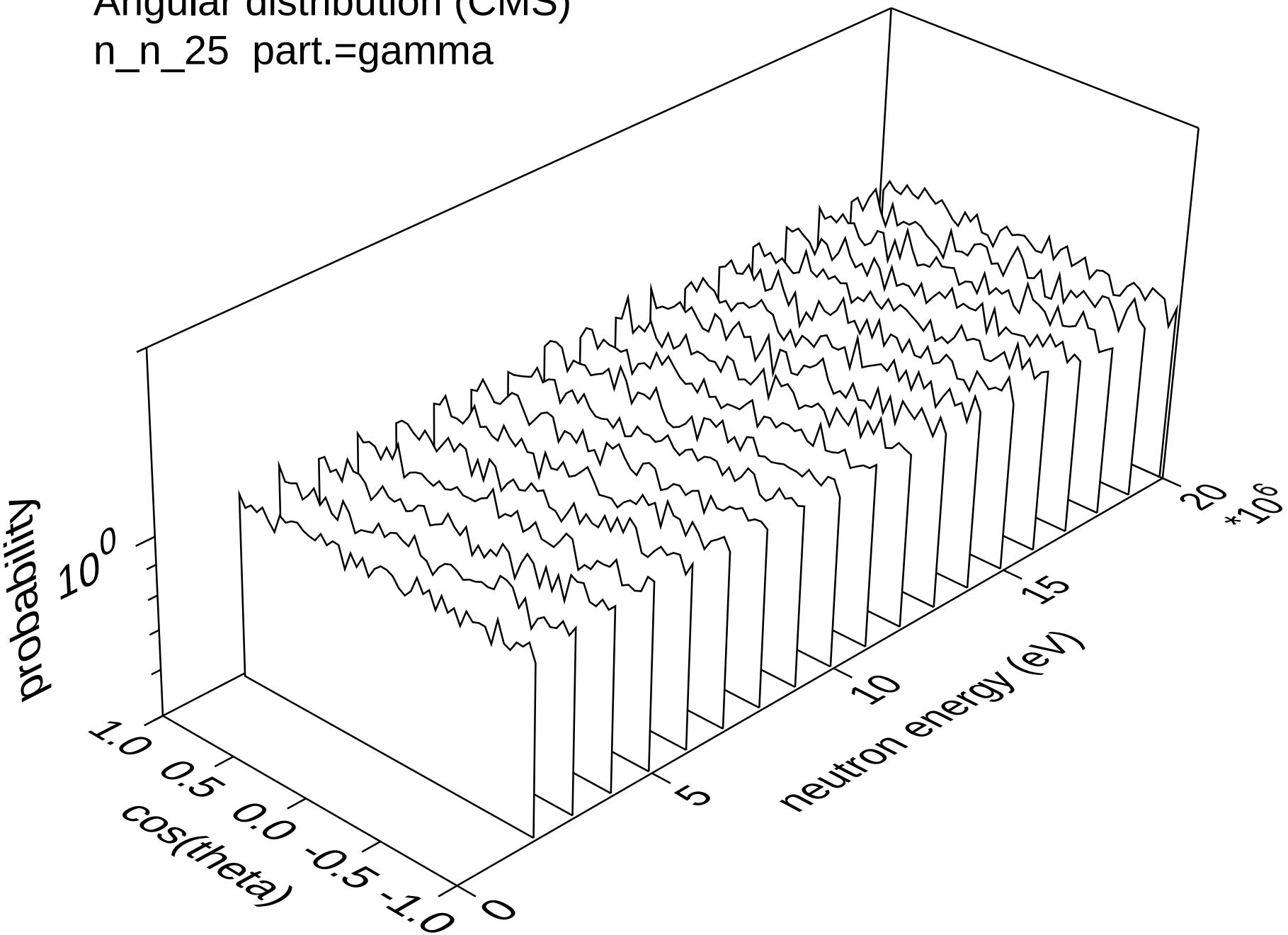

Angular distribution (CMS)
n_n_23 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

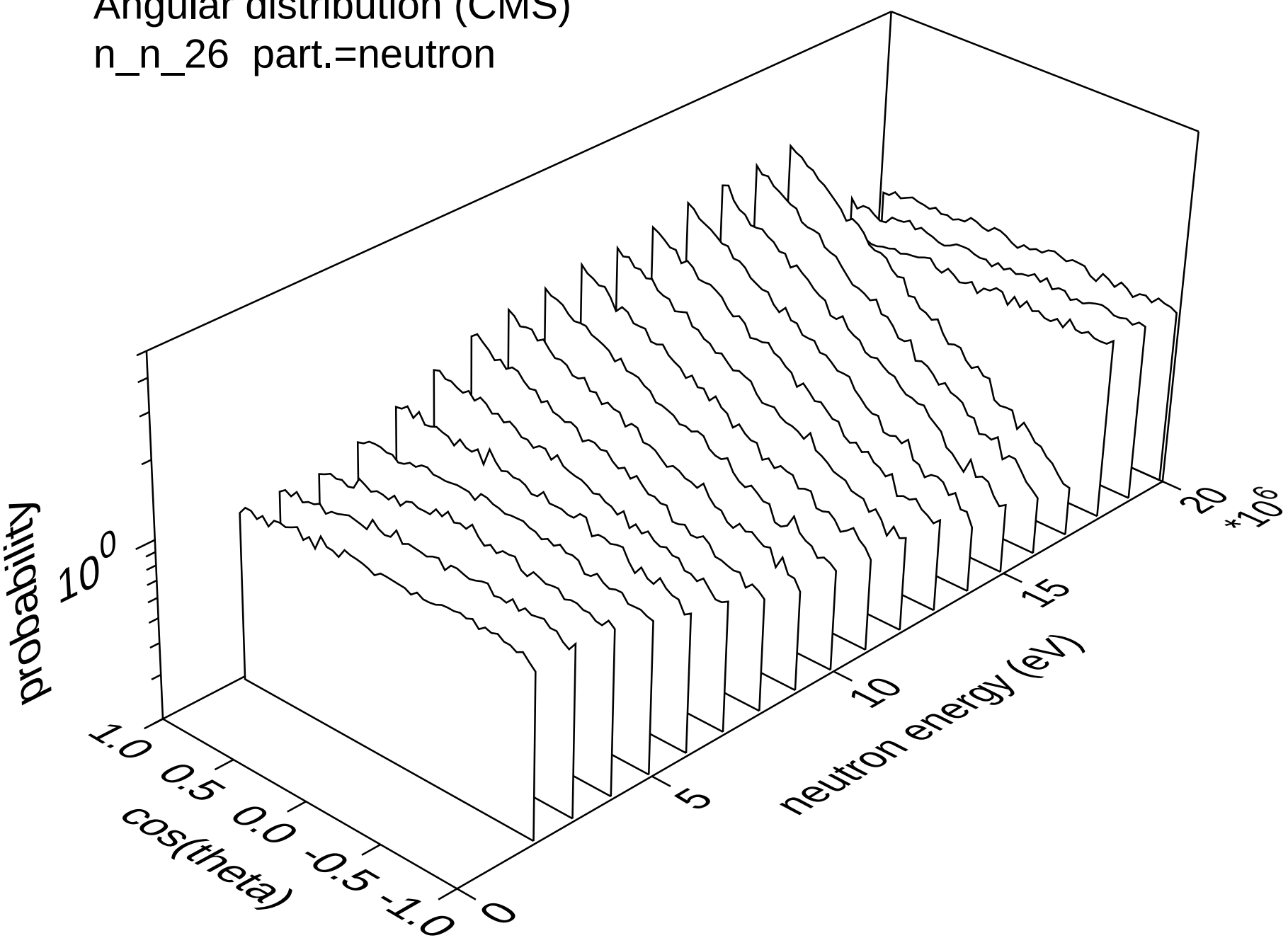

Angular distribution (CMS)
n_n_23 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

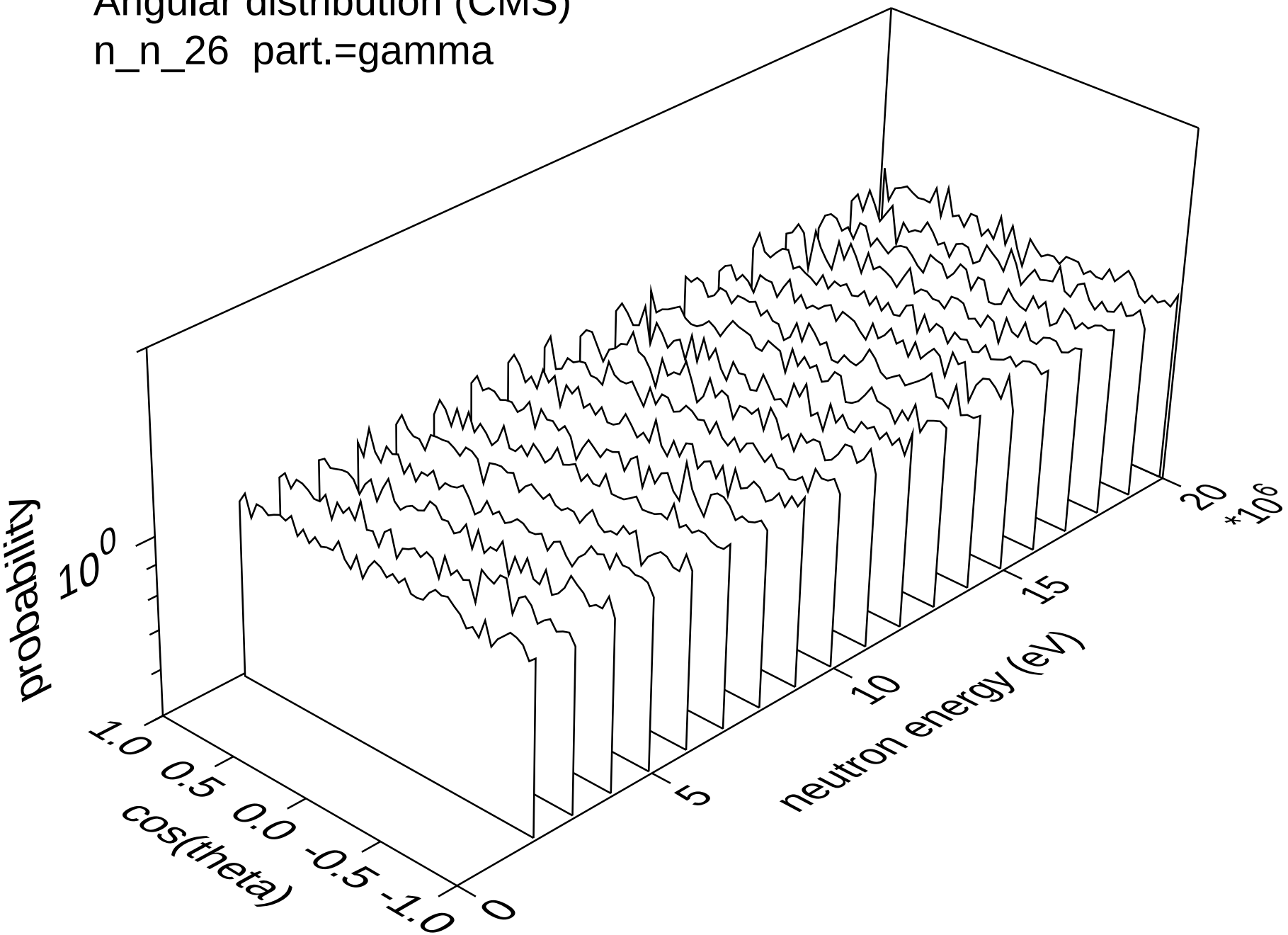

Angular distribution (CMS)
n_n_24 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

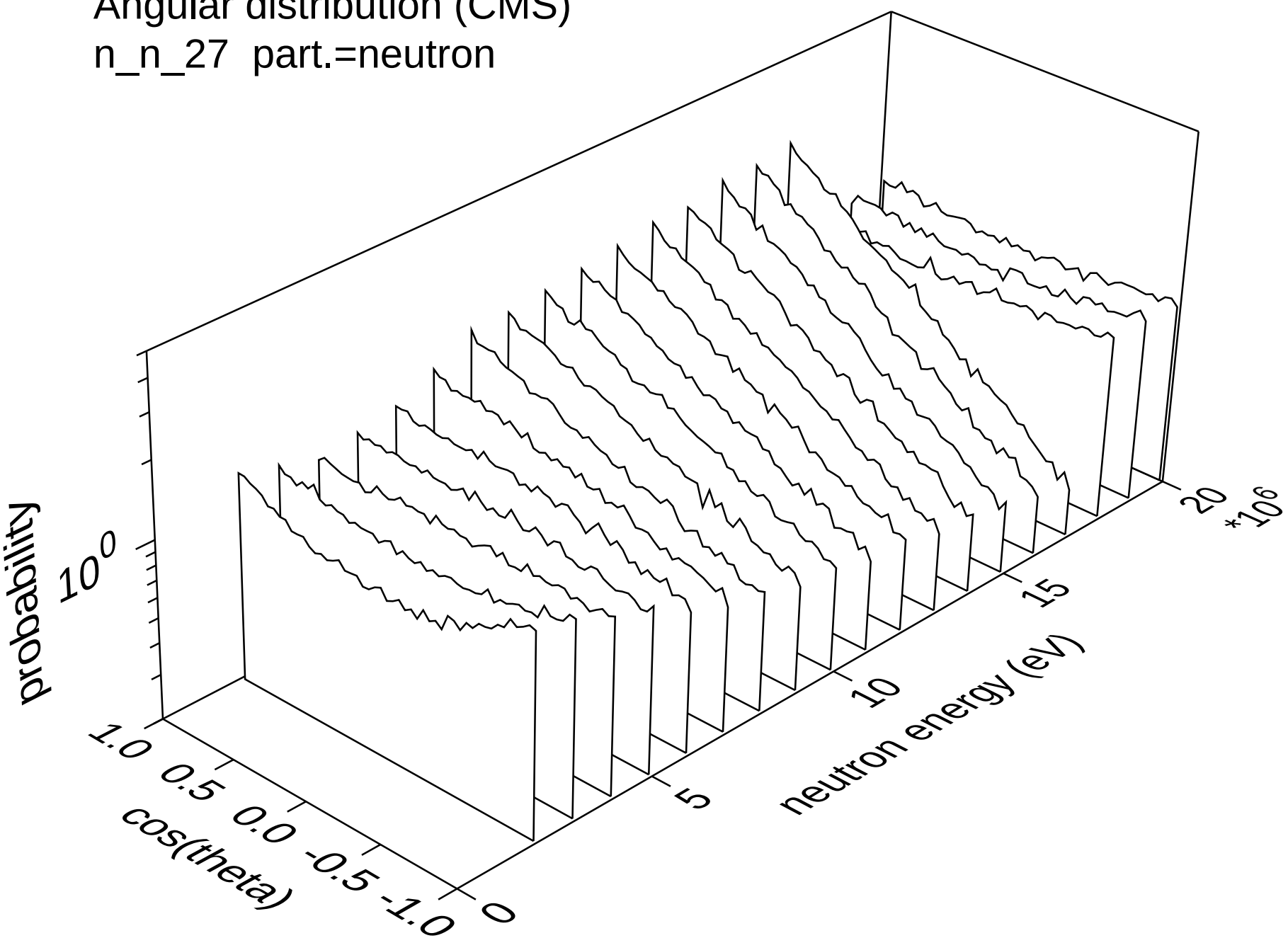

Angular distribution (CMS)
n_n_24 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

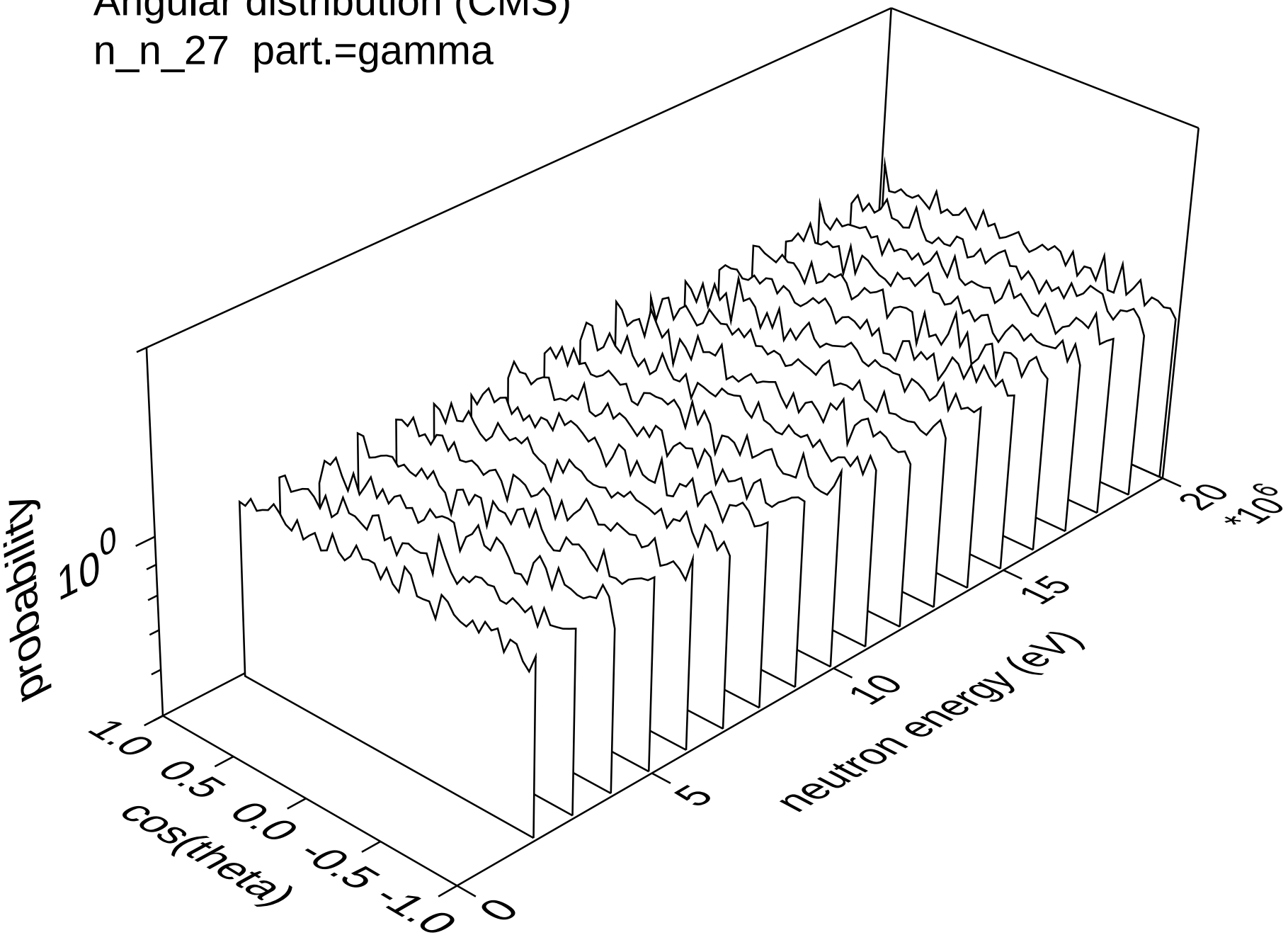

Angular distribution (CMS)
n_n_25 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

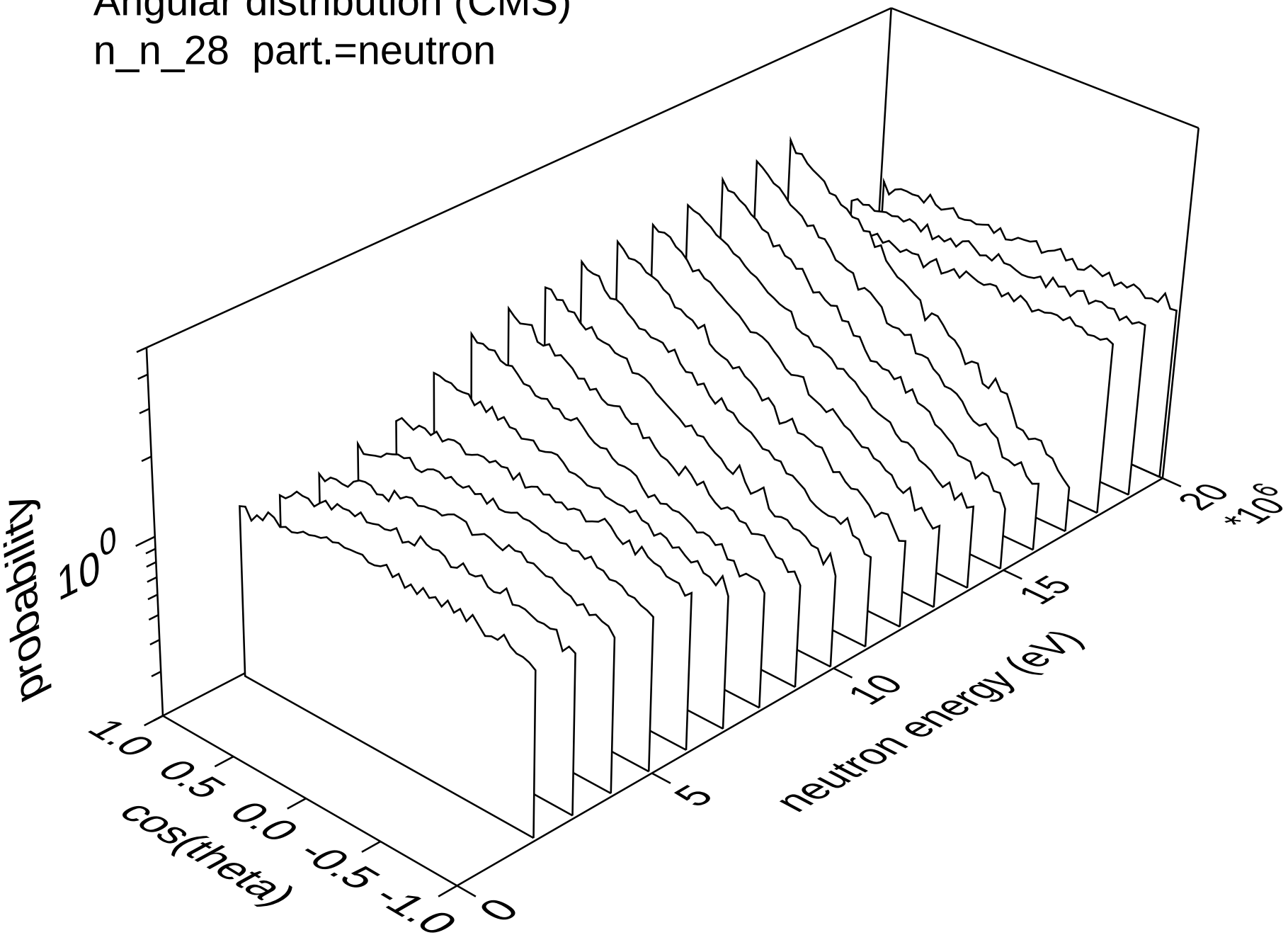

Angular distribution (CMS)
n_n_25 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

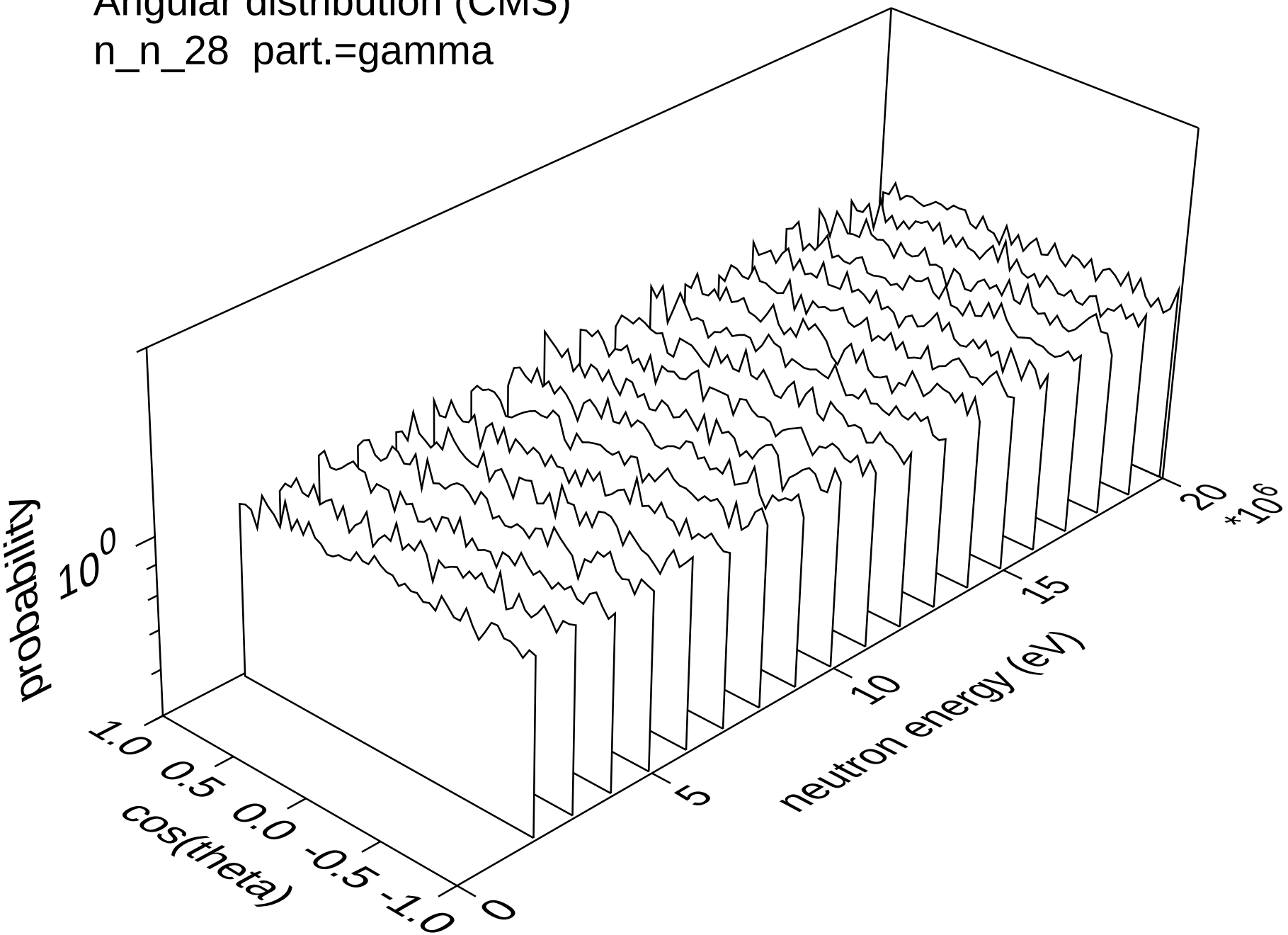

Angular distribution (CMS)
n_n_26 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

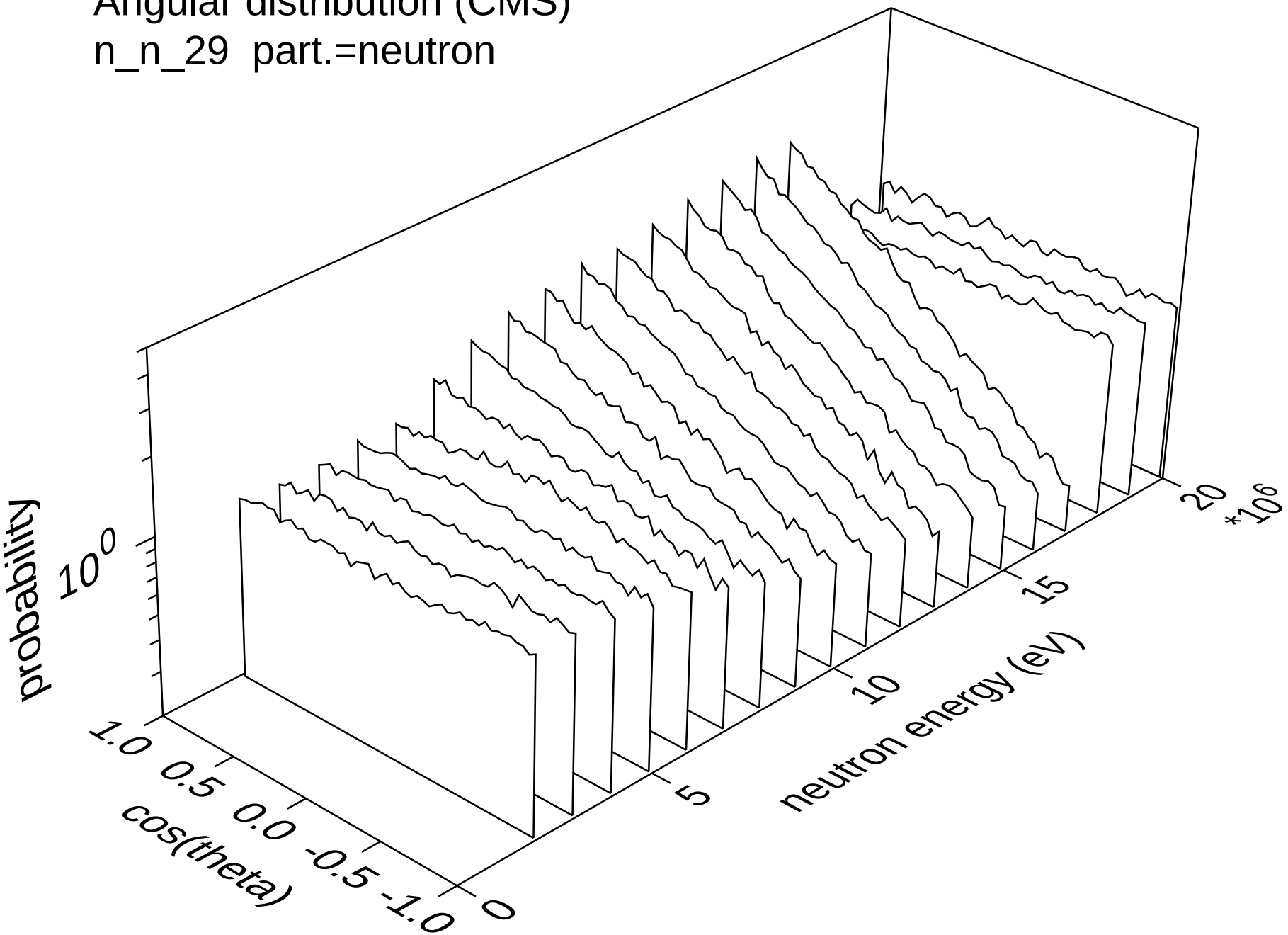

Angular distribution (CMS)
n_n_26 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

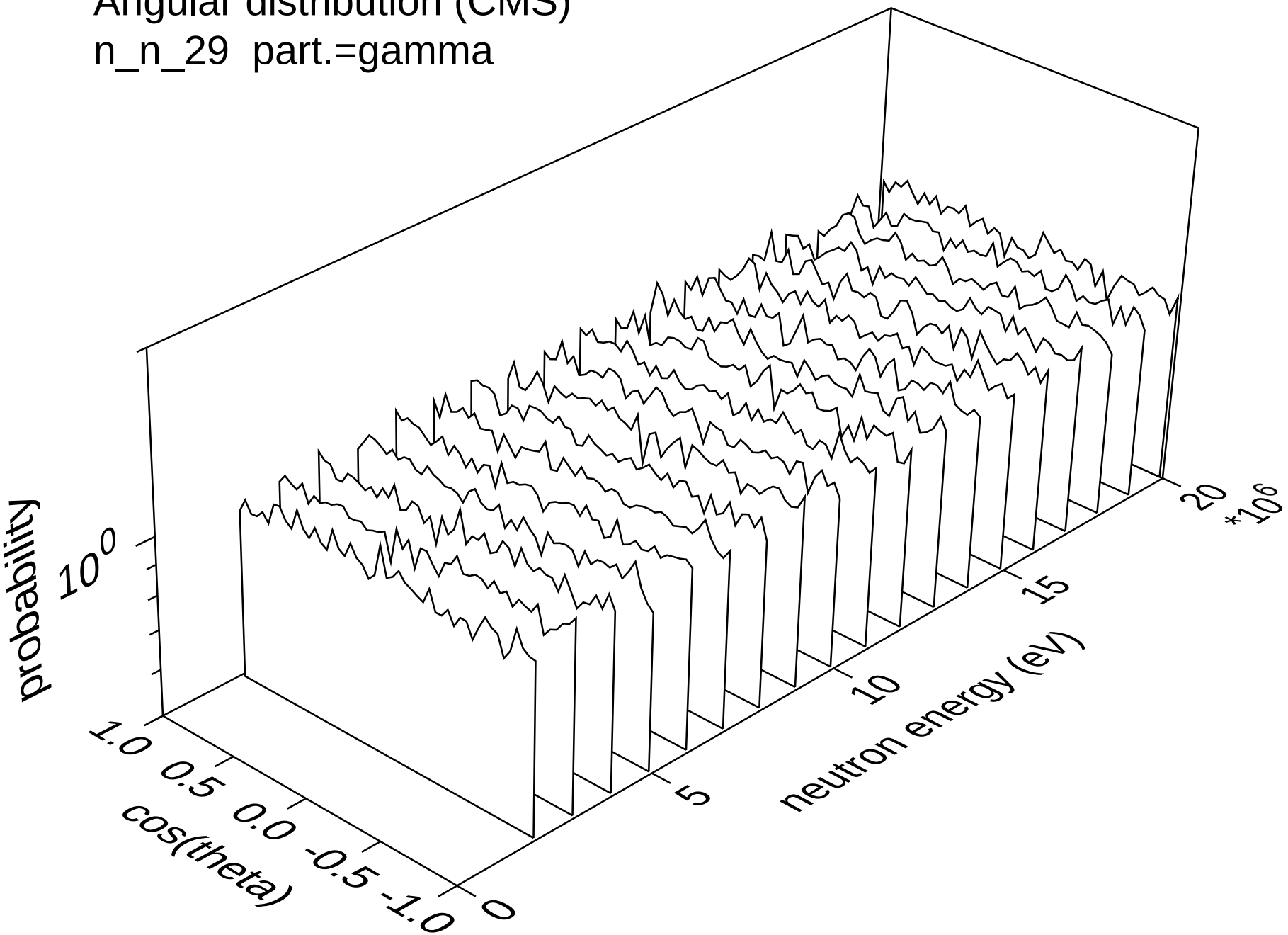

Angular distribution (CMS)
n_n_27 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

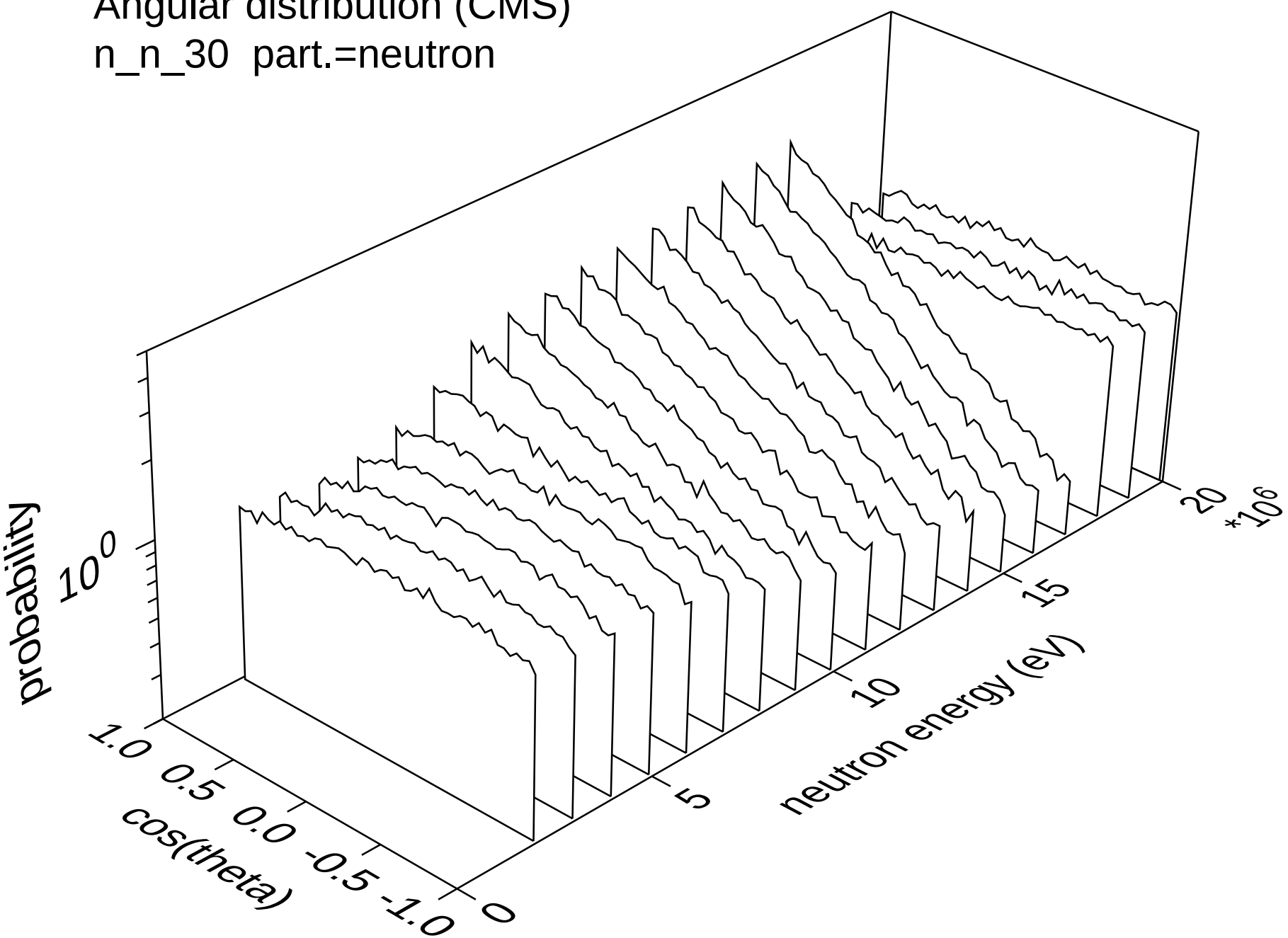

Angular distribution (CMS)
n_n_27 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

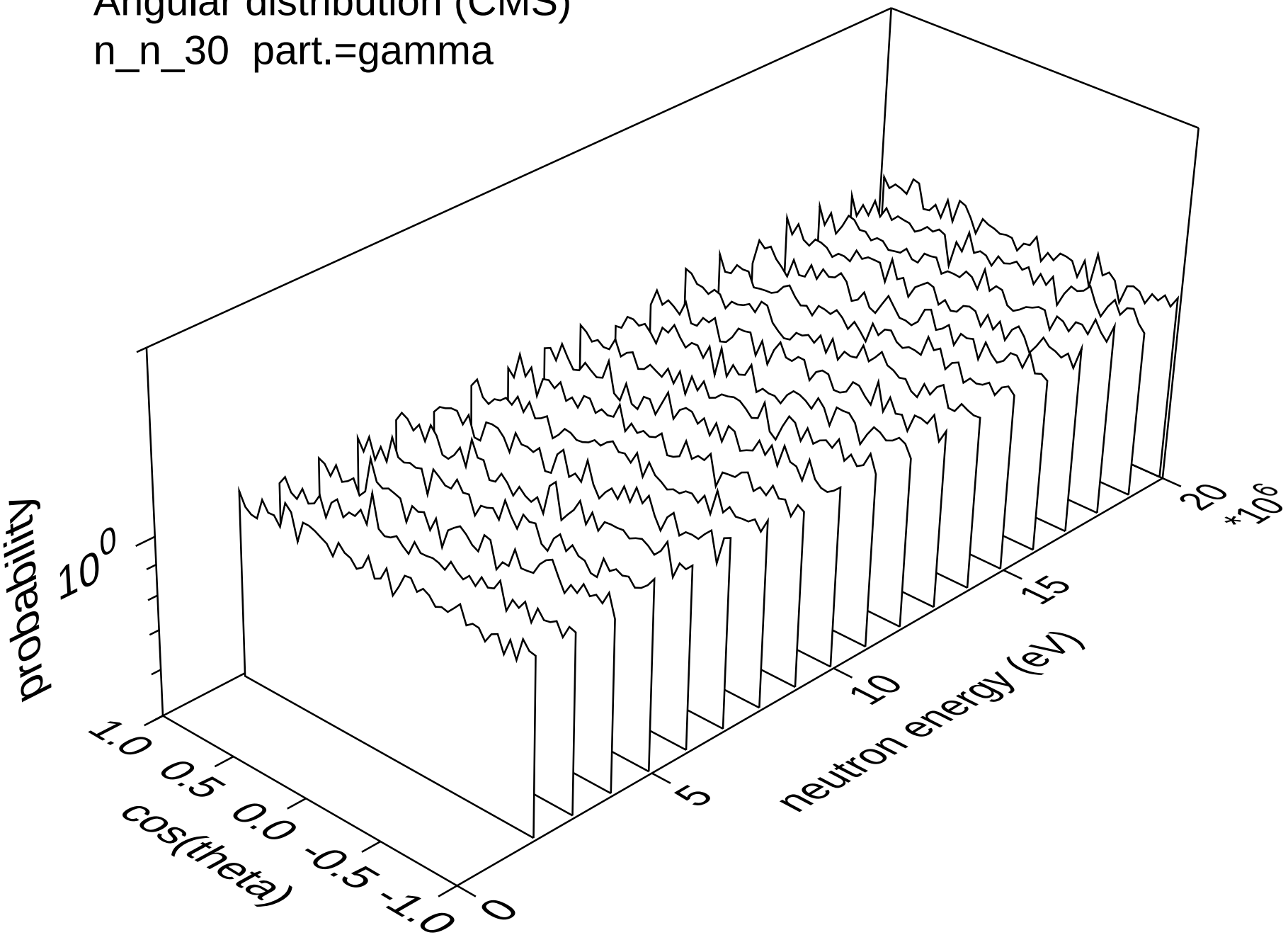

Angular distribution (CMS)
n_n_28 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

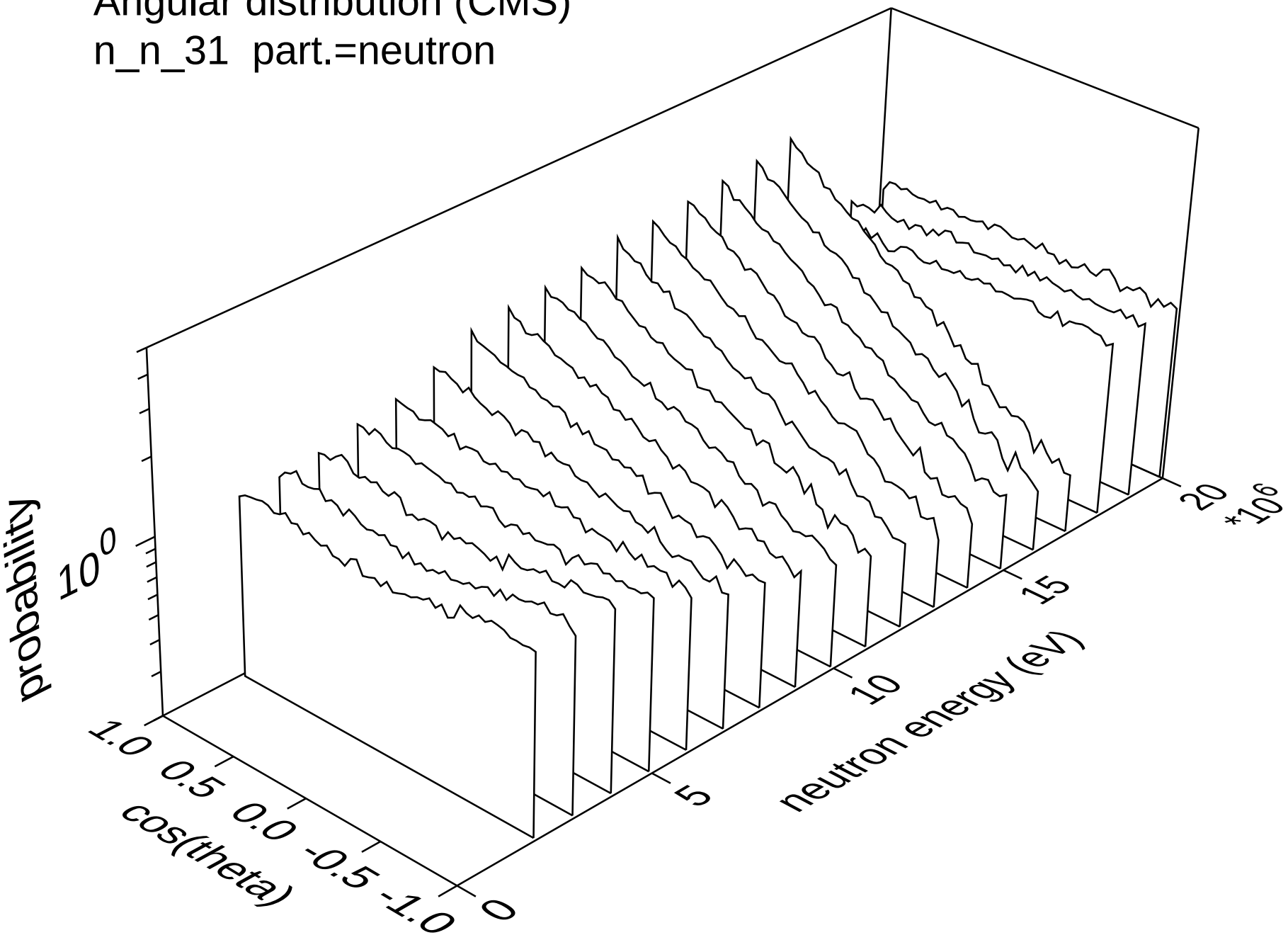

Angular distribution (CMS)
n_n_28 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

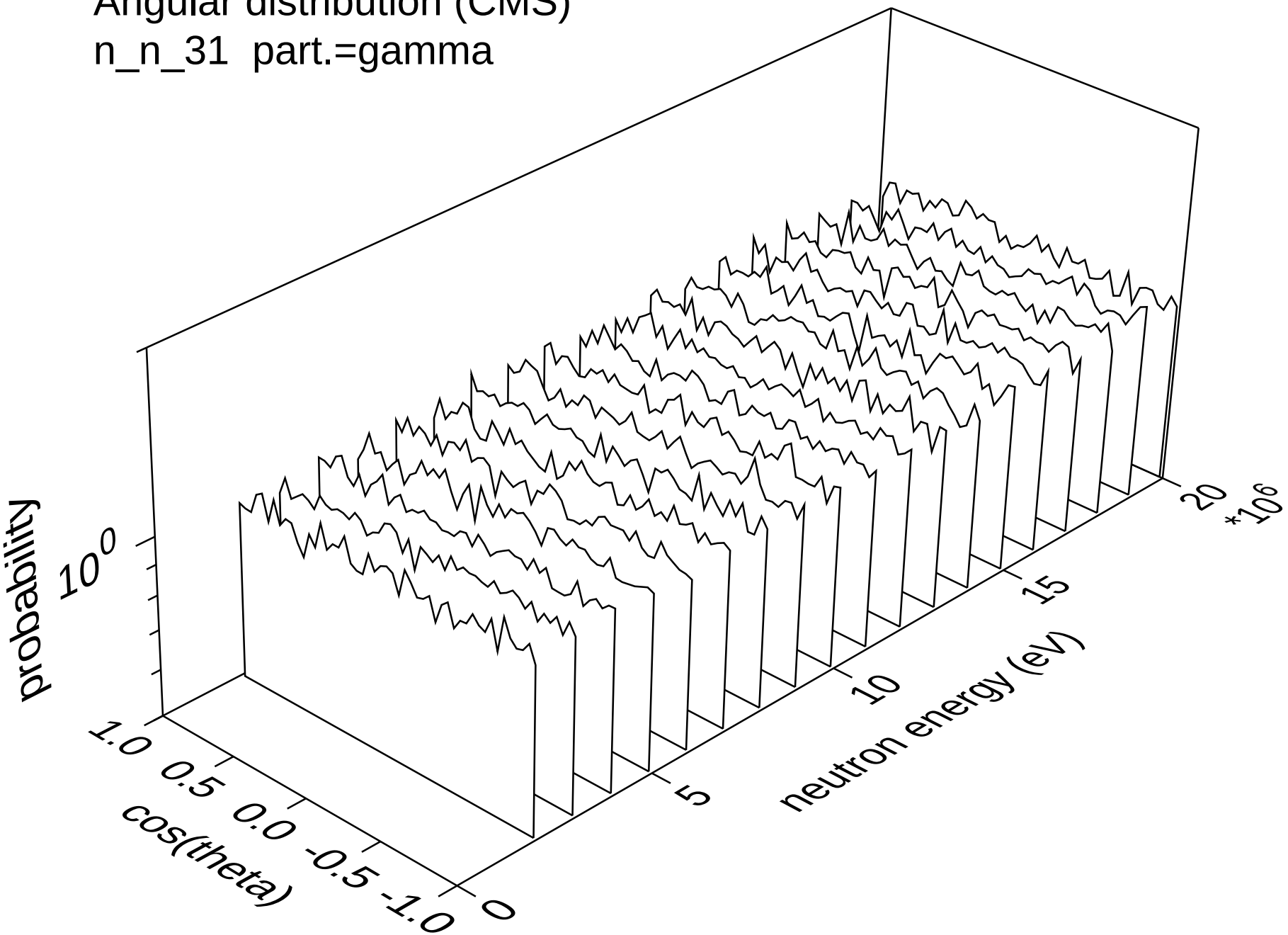

Angular distribution (CMS)
n_n_29 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

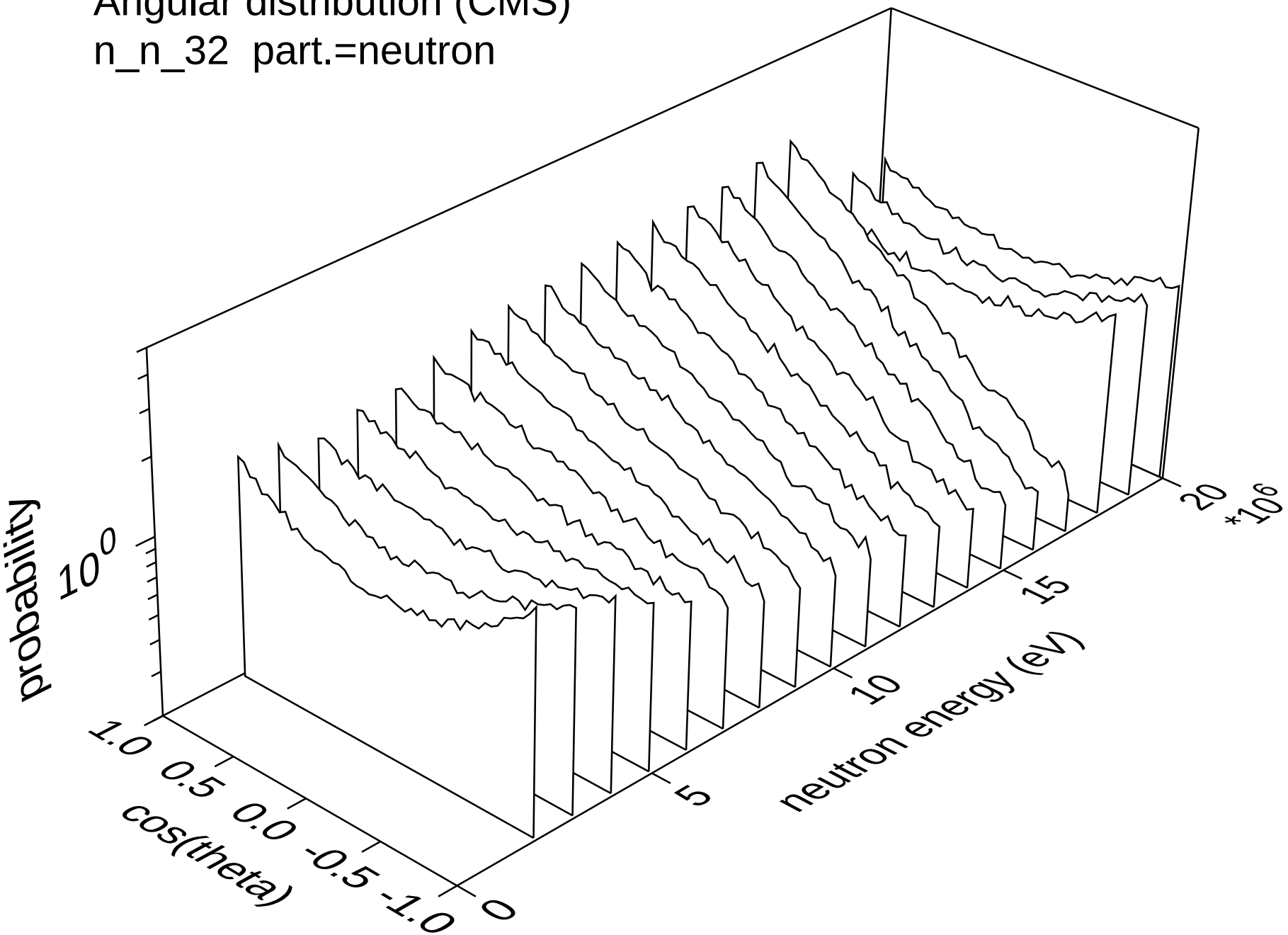

Angular distribution (CMS)
n_n_29 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

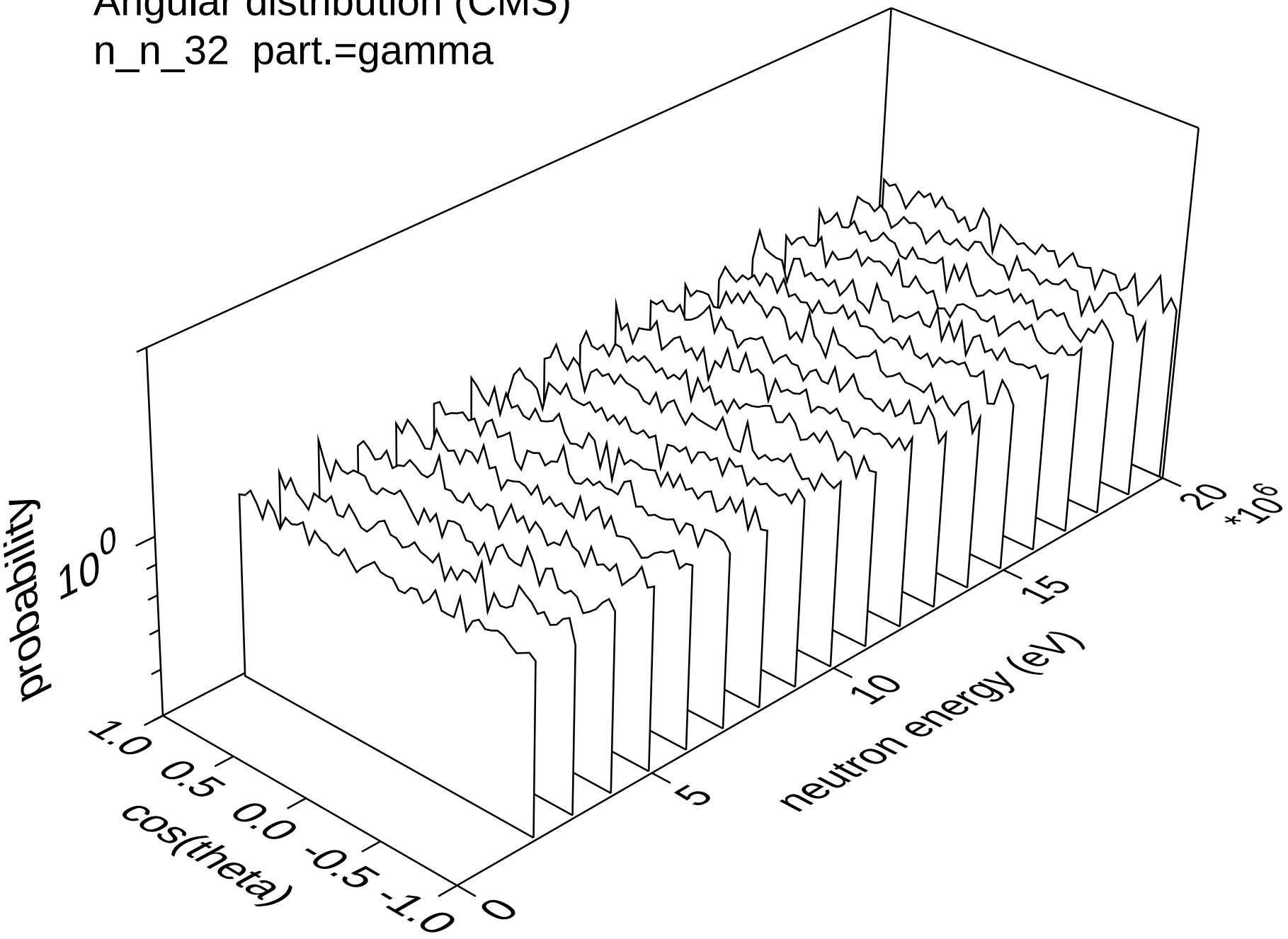

Angular distribution (CMS)
n_n_30 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

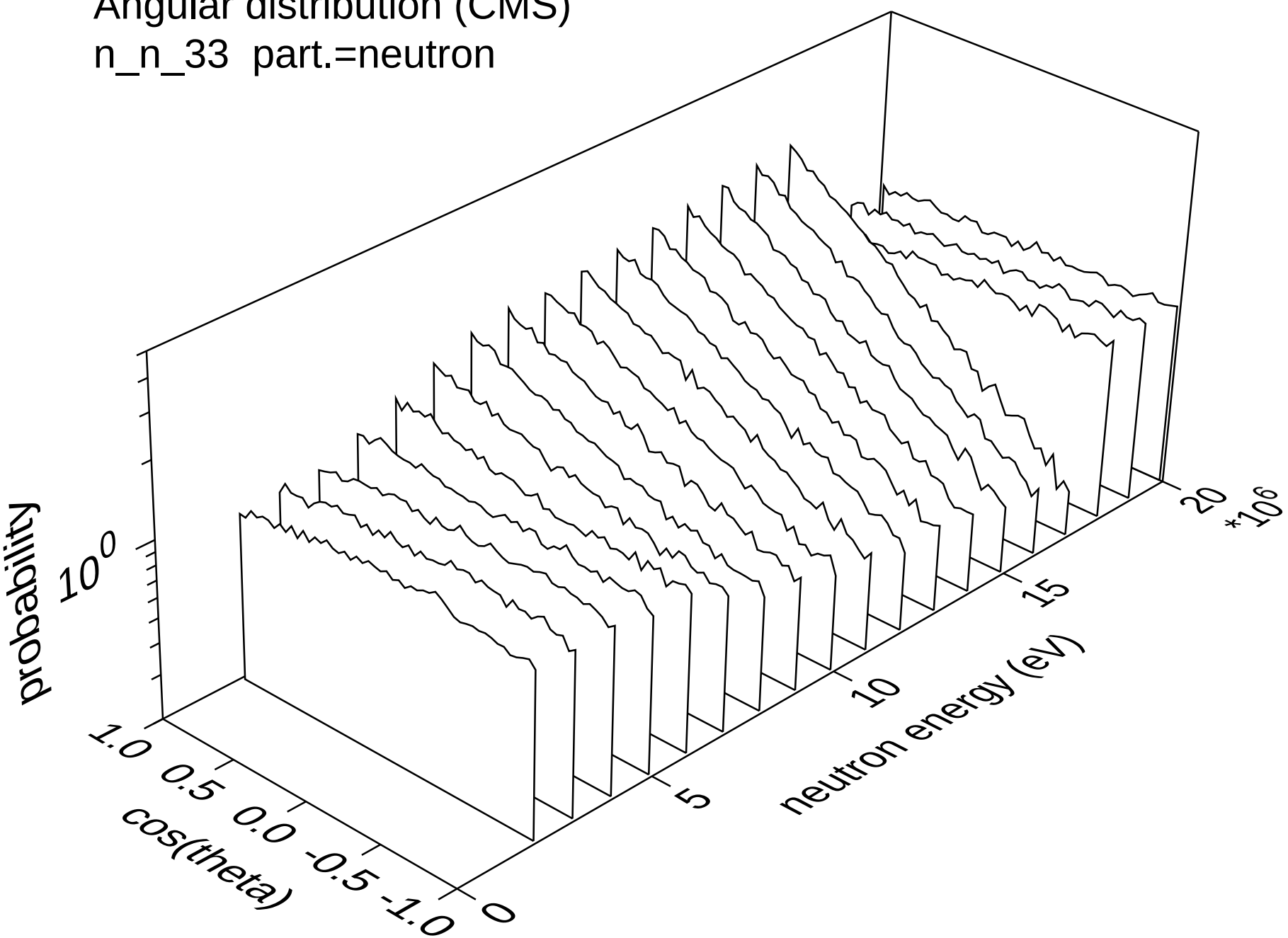

Angular distribution (CMS)
n_n_30 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

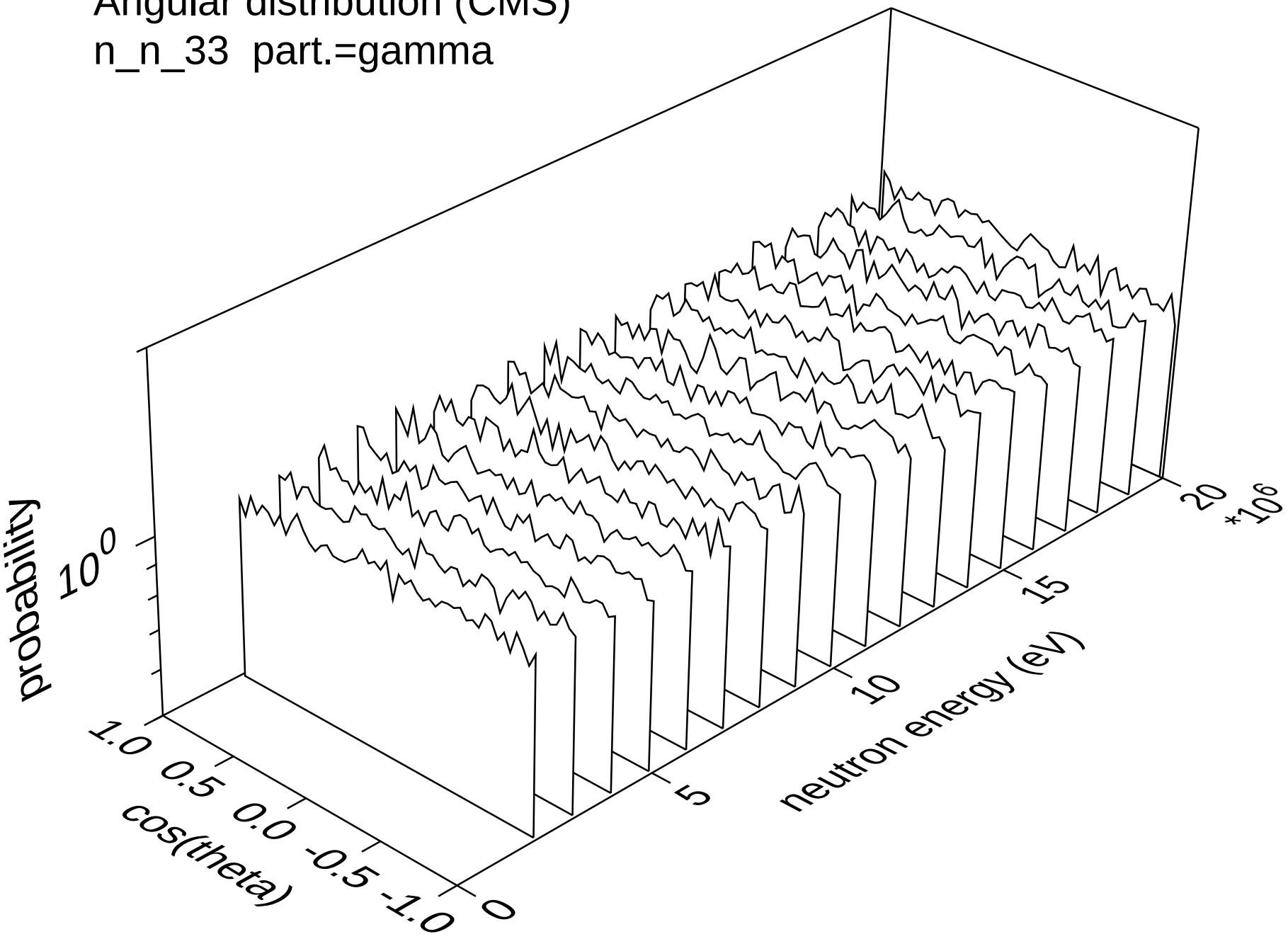

Angular distribution (CMS)
n_n_31 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

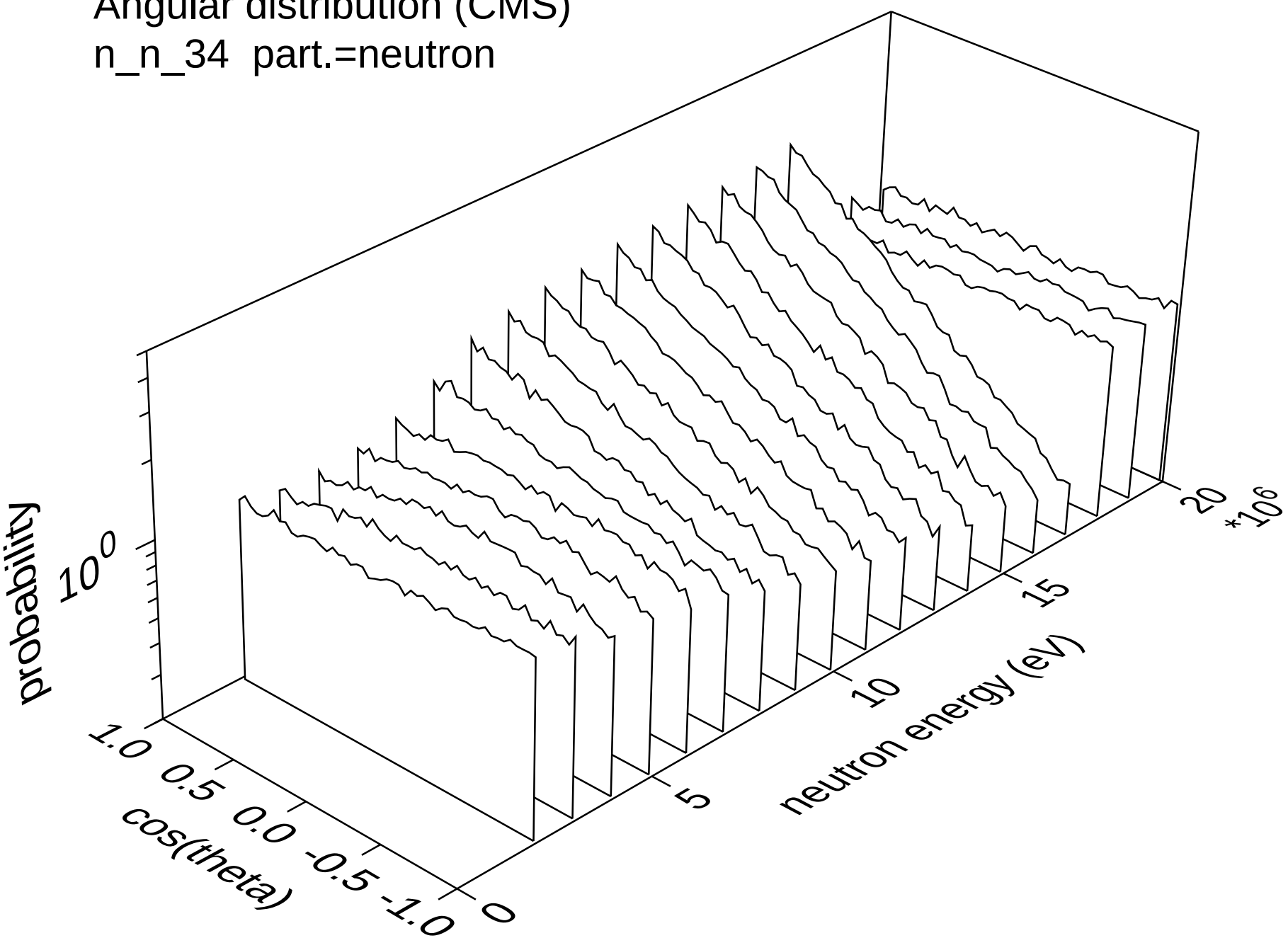

Angular distribution (CMS)
n_n_31 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

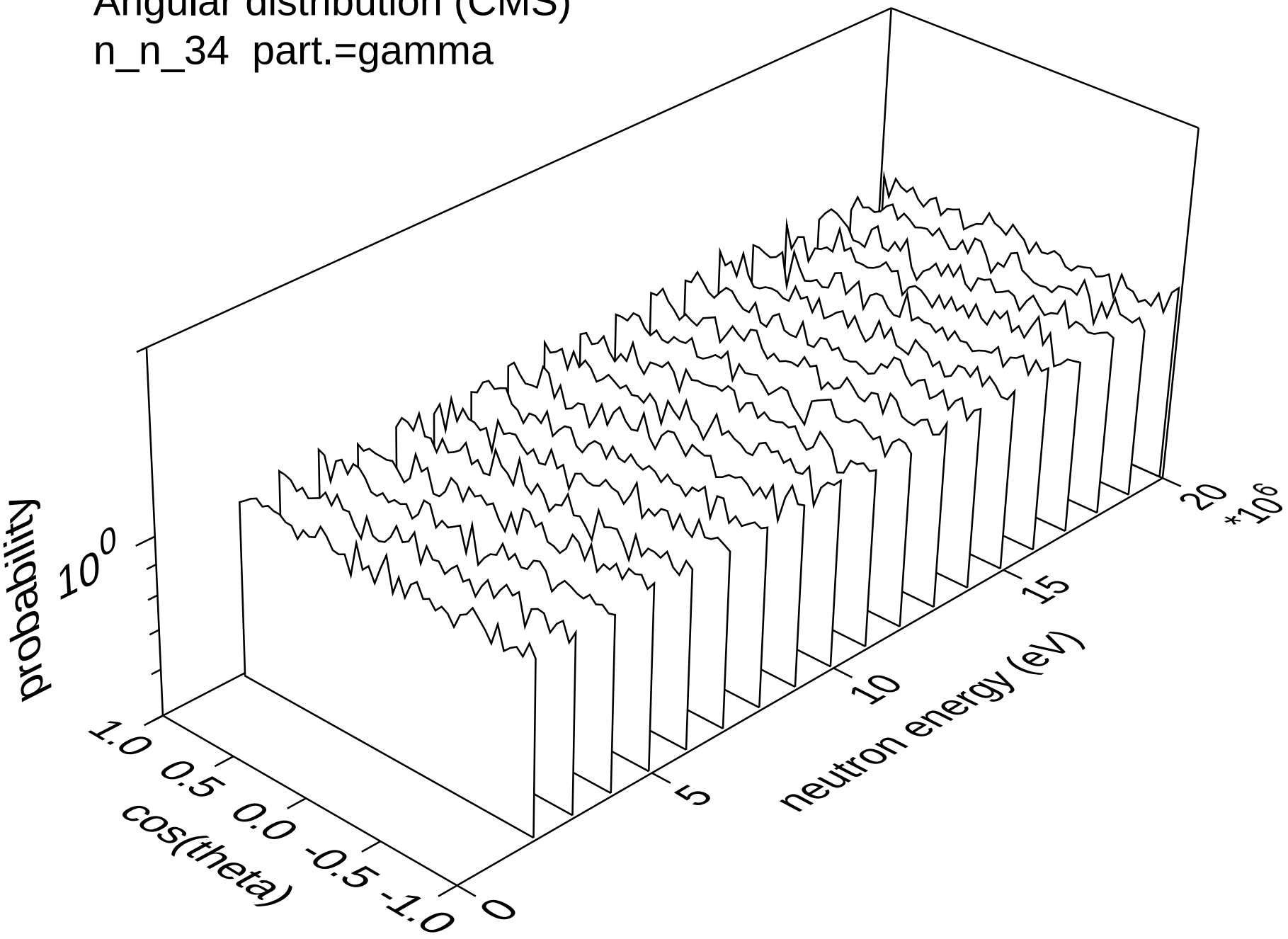

Angular distribution (CMS)
n_n_32 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

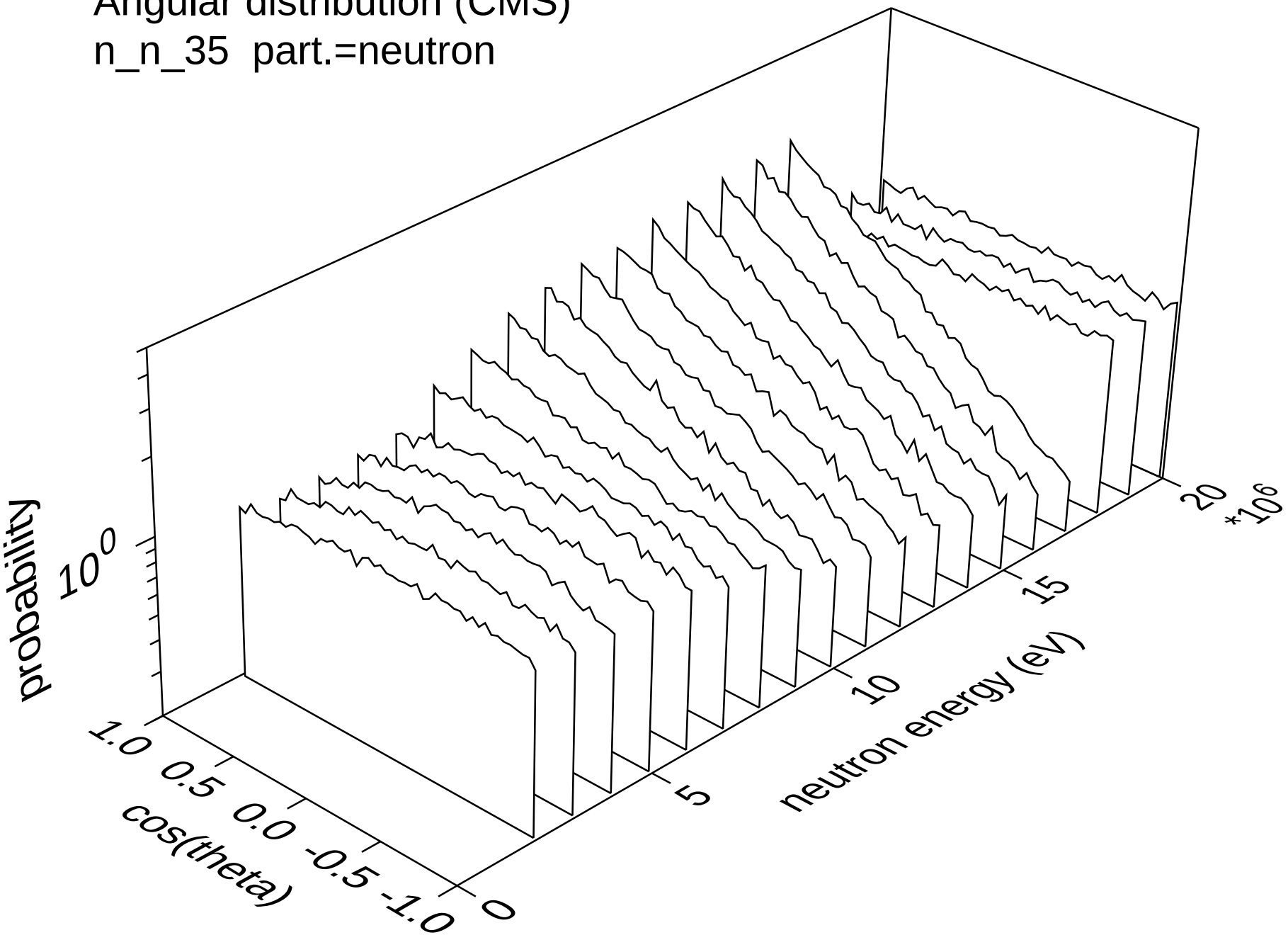

Angular distribution (CMS)
n_n_32 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

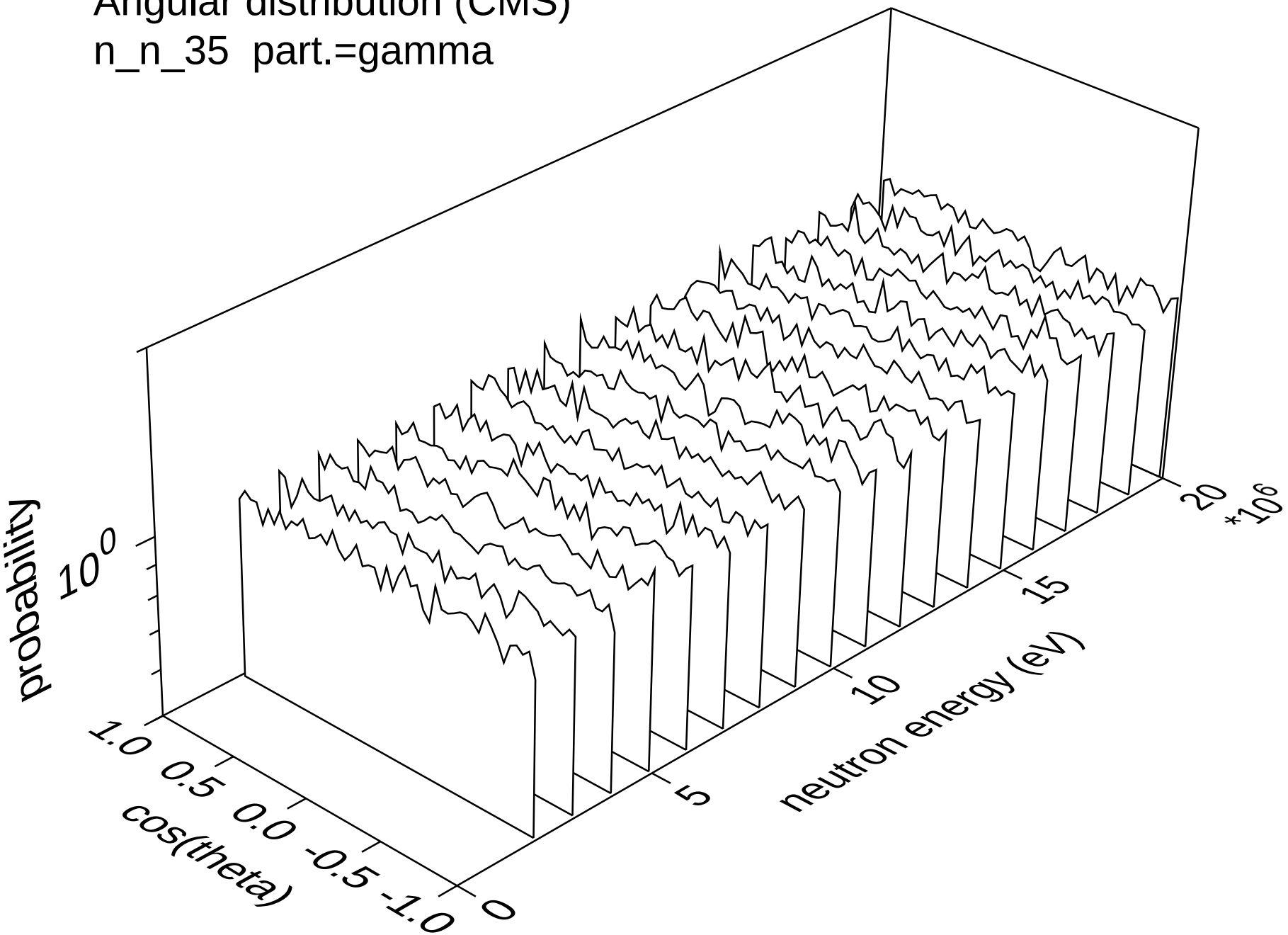

Angular distribution (CMS)
n_n_33 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

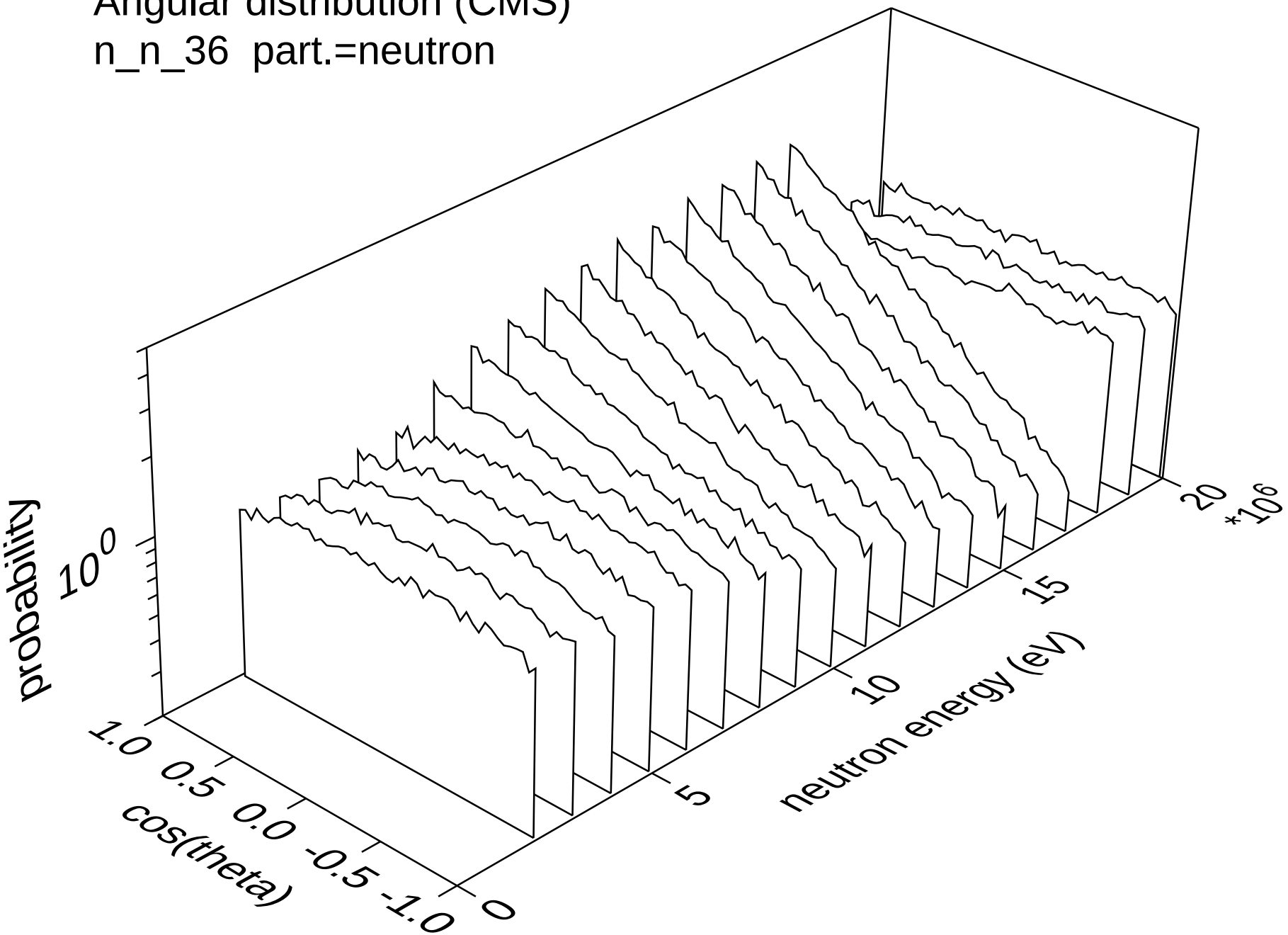

Angular distribution (CMS)
n_n_33 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

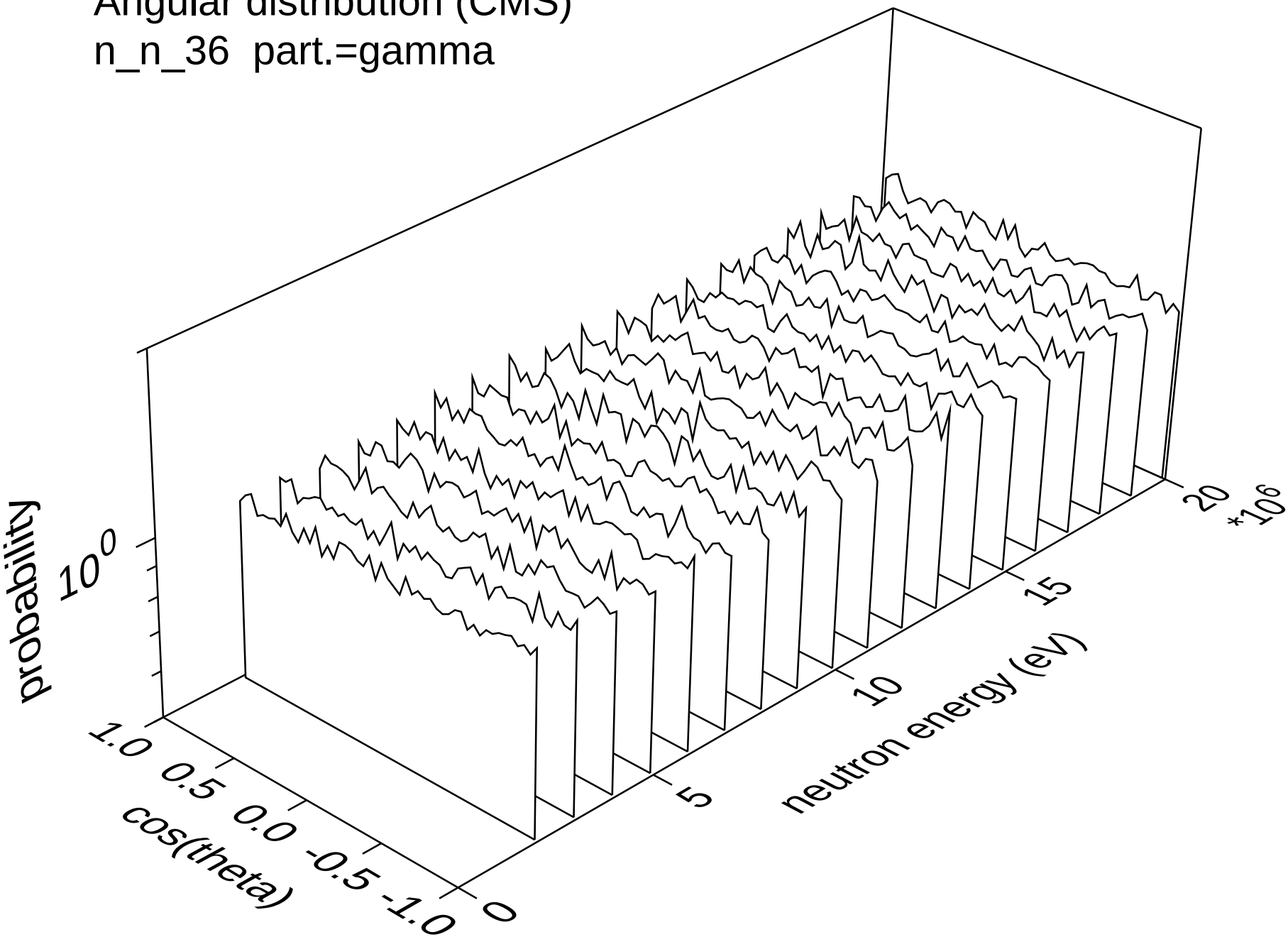

Angular distribution (CMS)
n_n_34 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

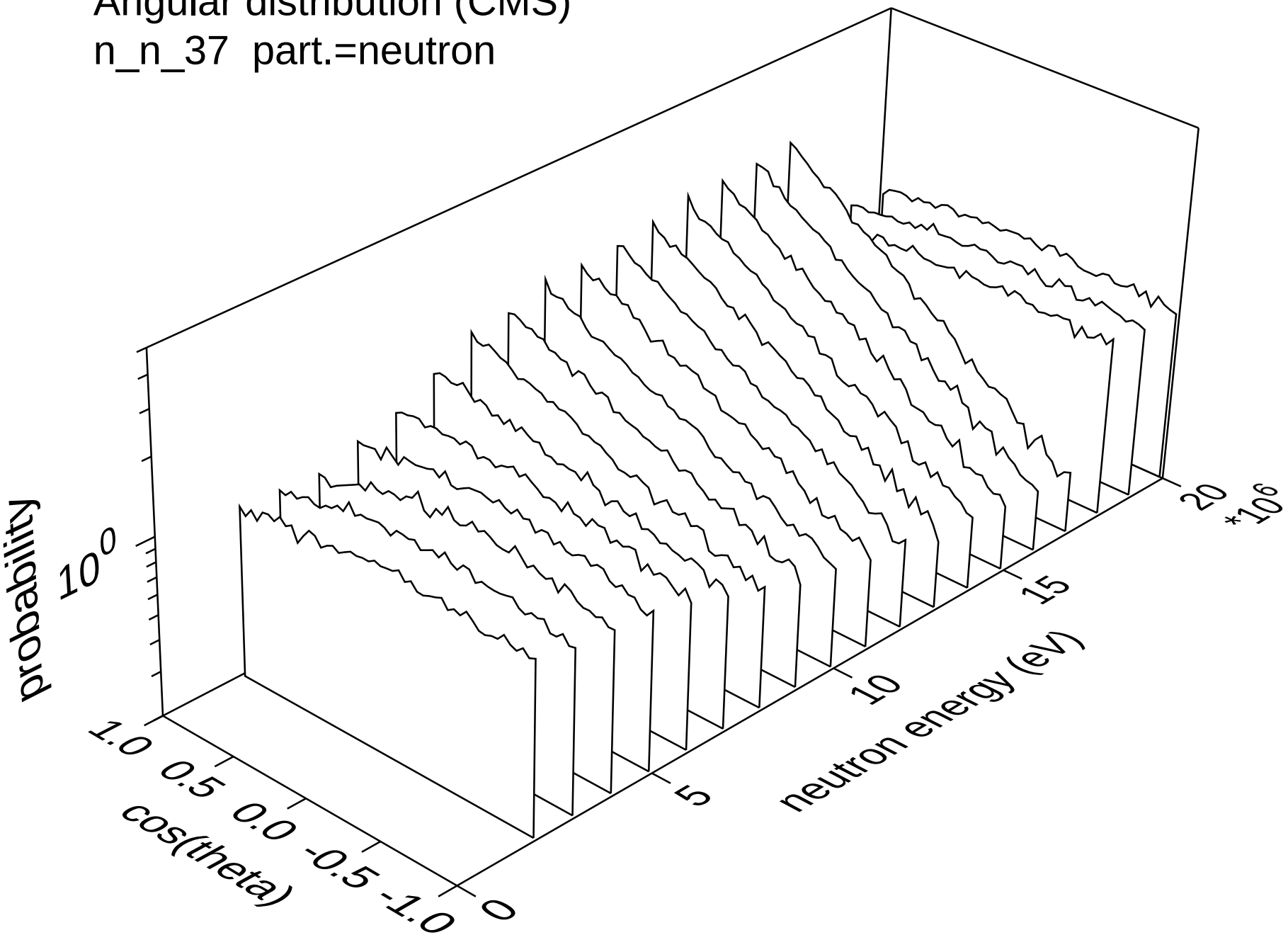

Angular distribution (CMS)
n_n_34 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

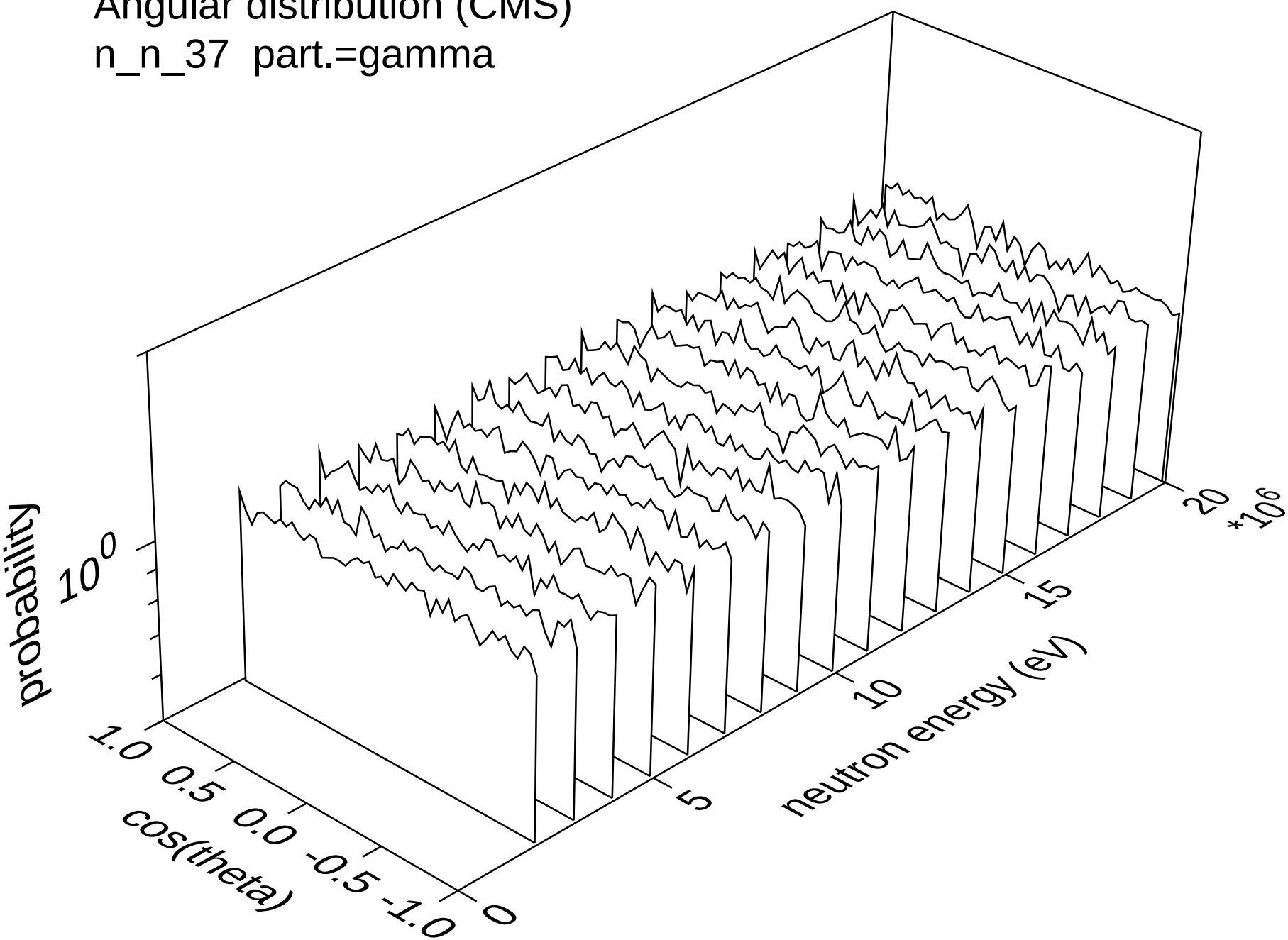

Angular distribution (CMS)
n_n_35 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

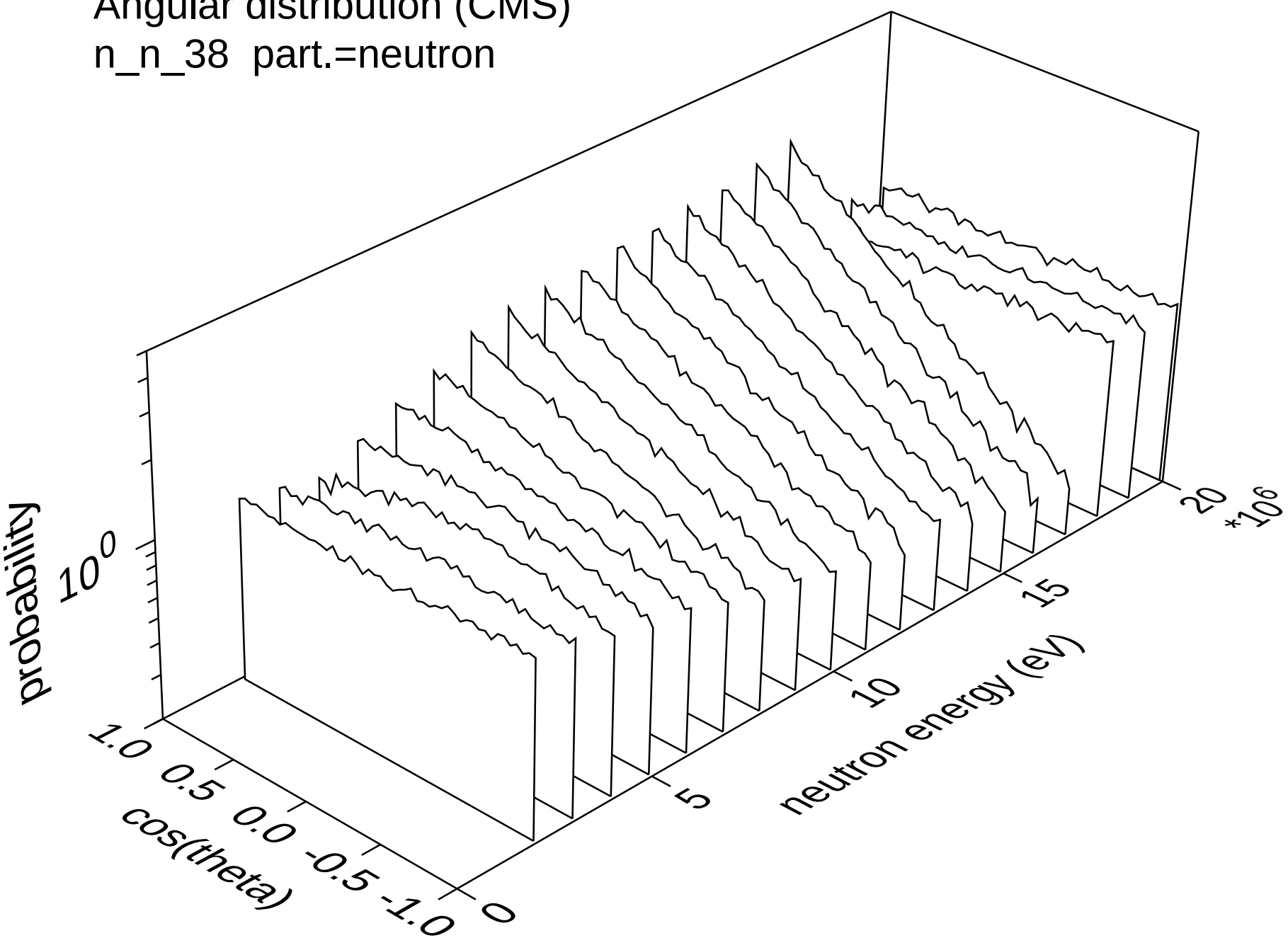

Angular distribution (CMS)
n_n_35 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

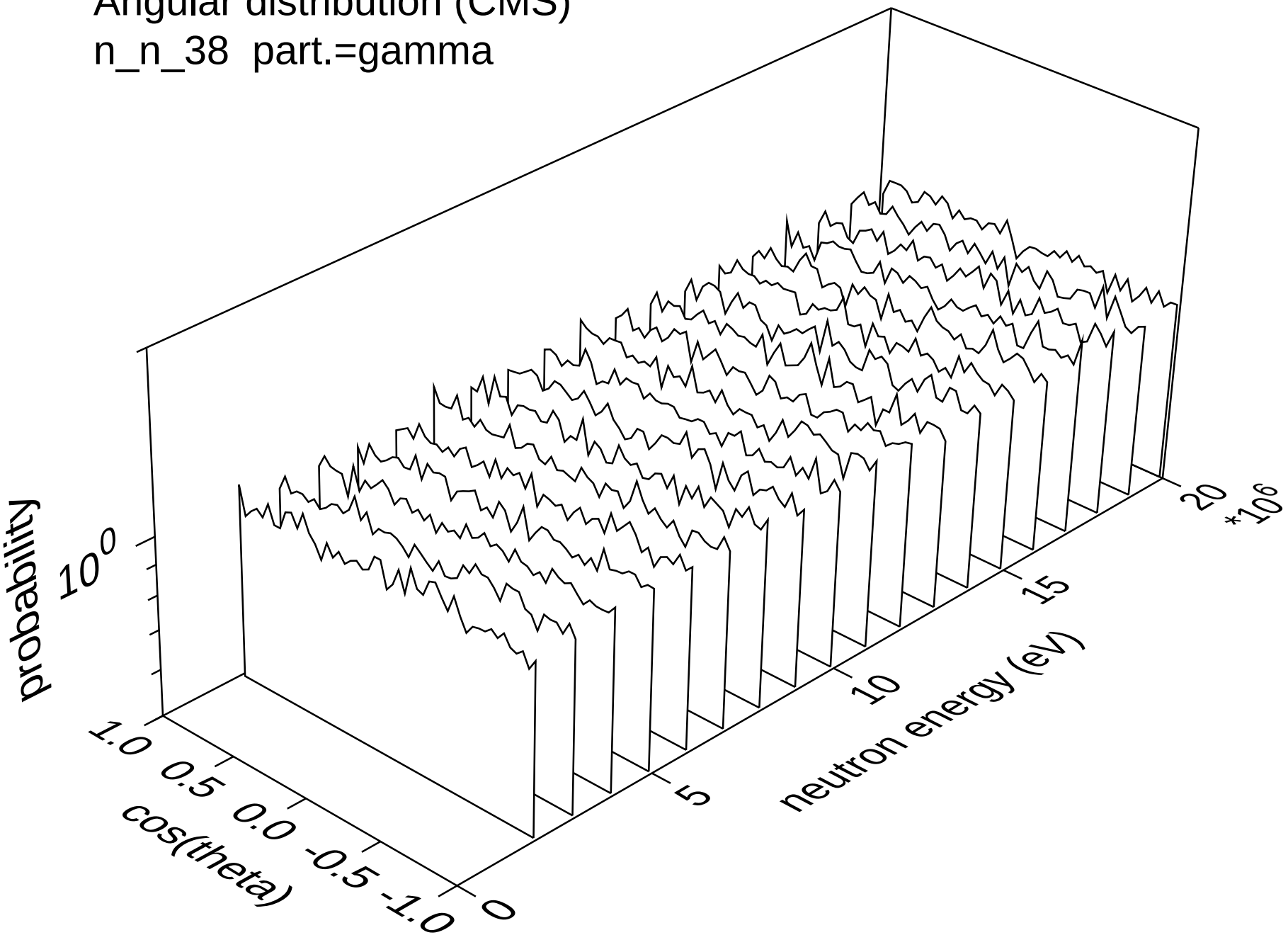

Angular distribution (CMS)
n_n_36 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

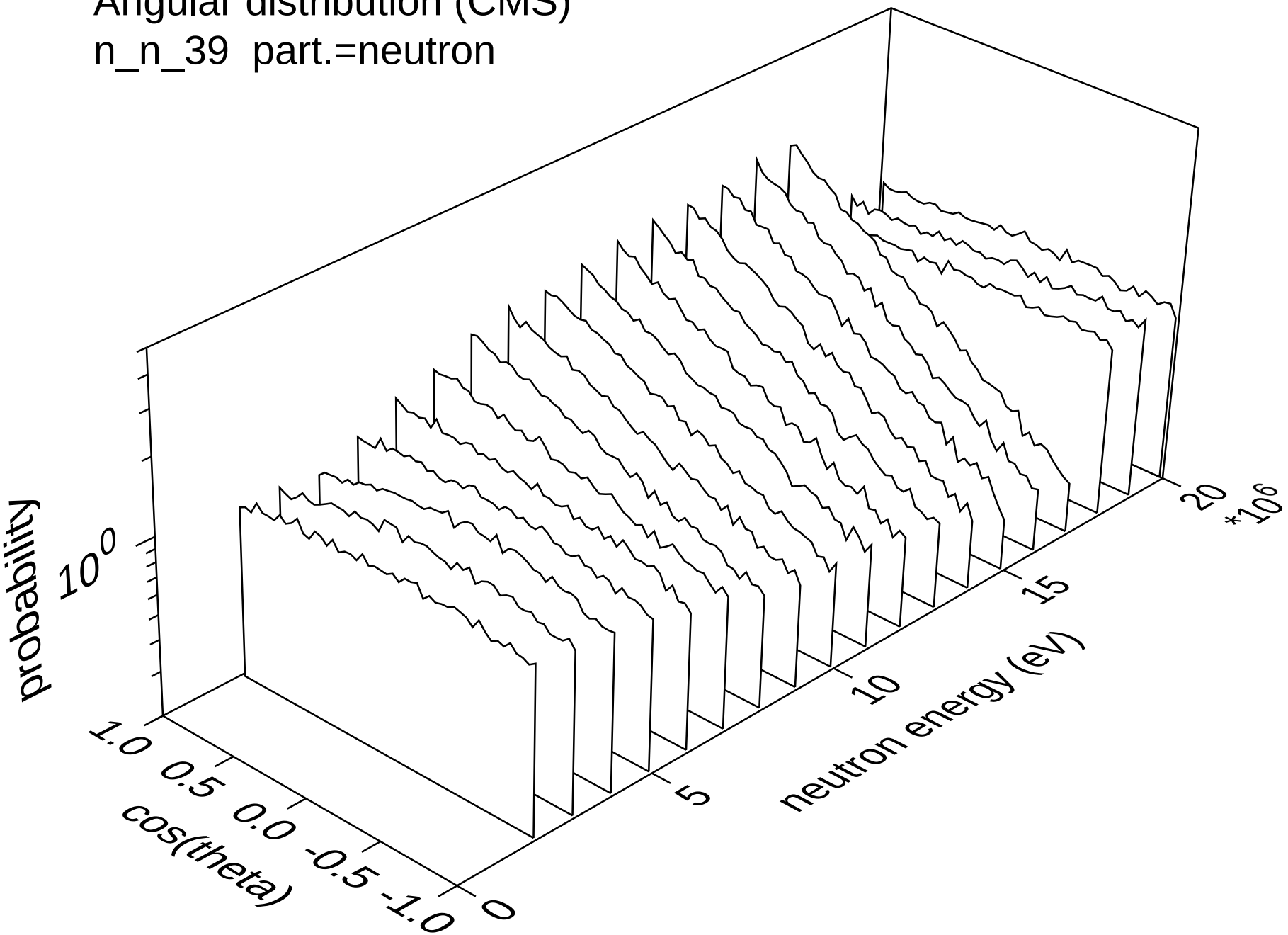

Angular distribution (CMS)
n_n_36 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

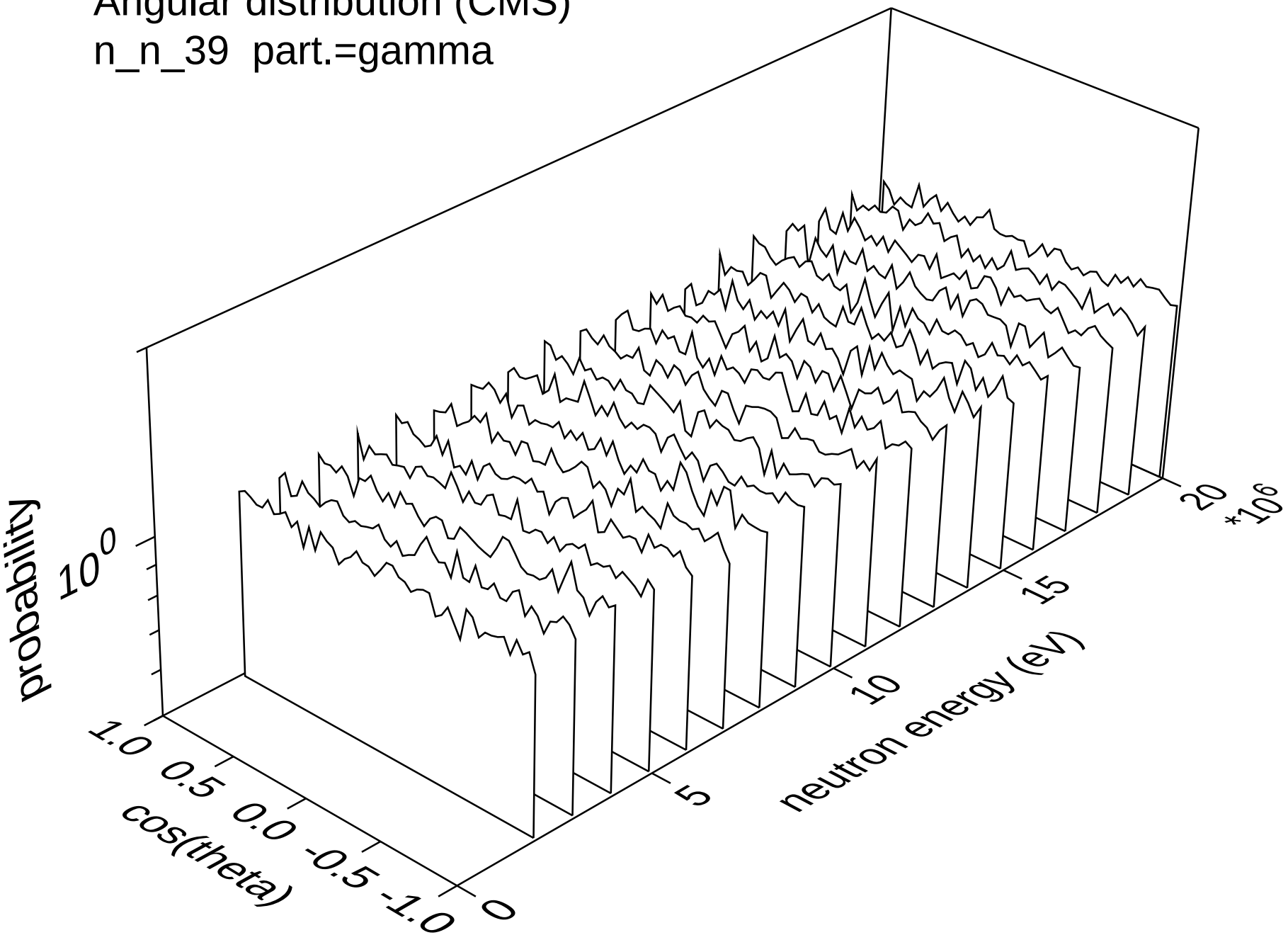

Angular distribution (CMS)
n_n_37 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

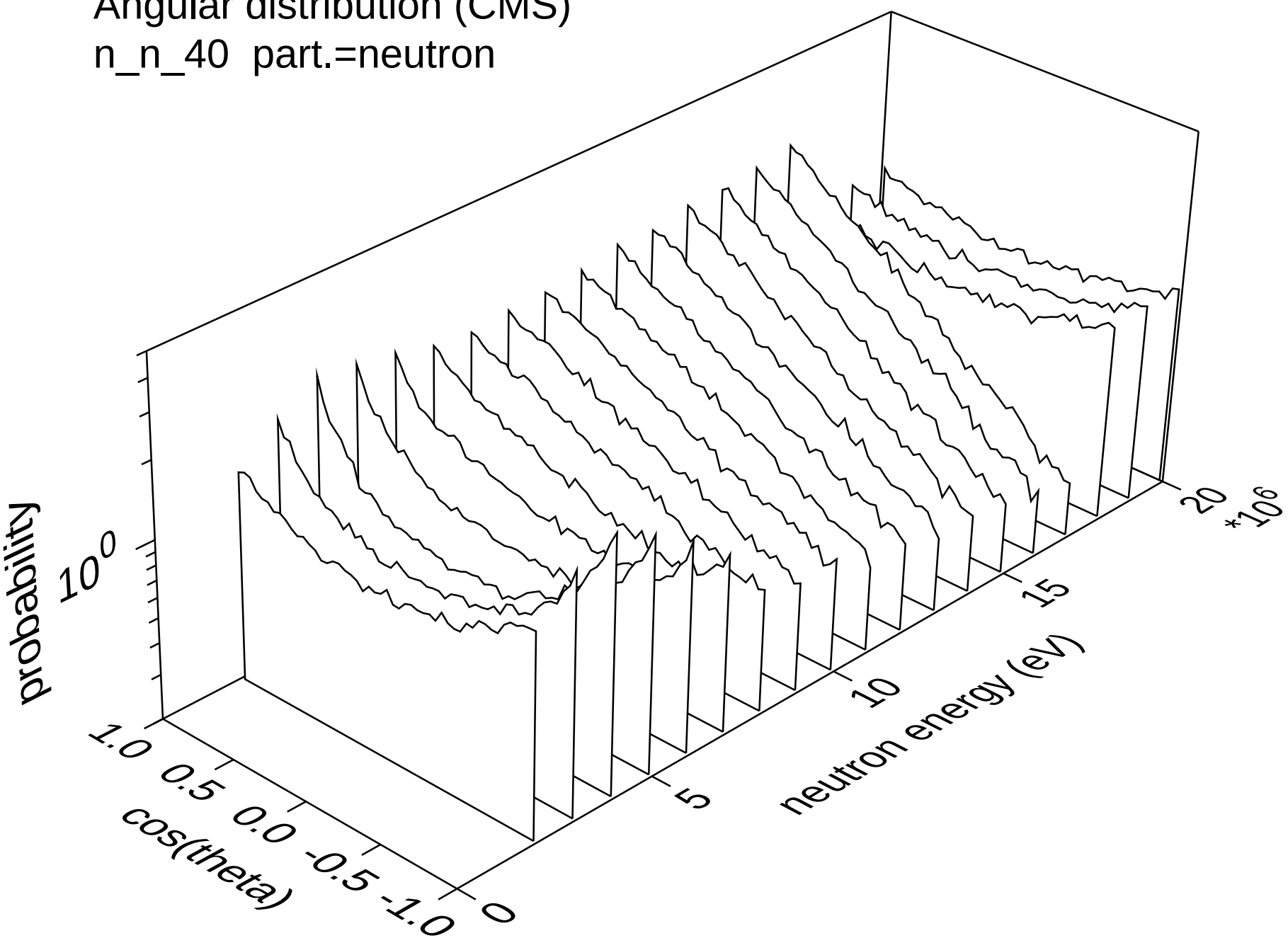

Angular distribution (CMS)
n_n_37 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

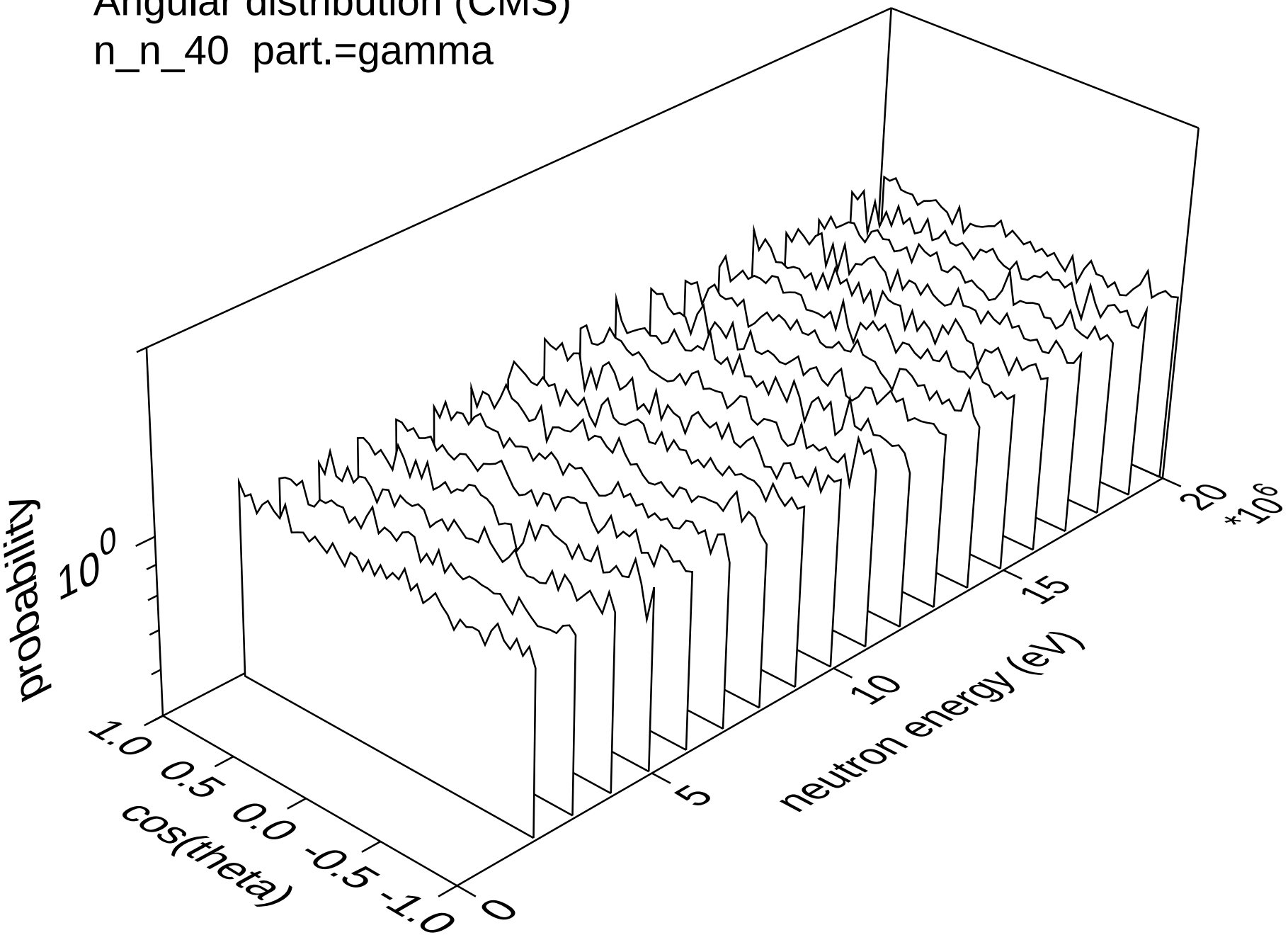

Angular distribution (CMS)
n_n_38 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

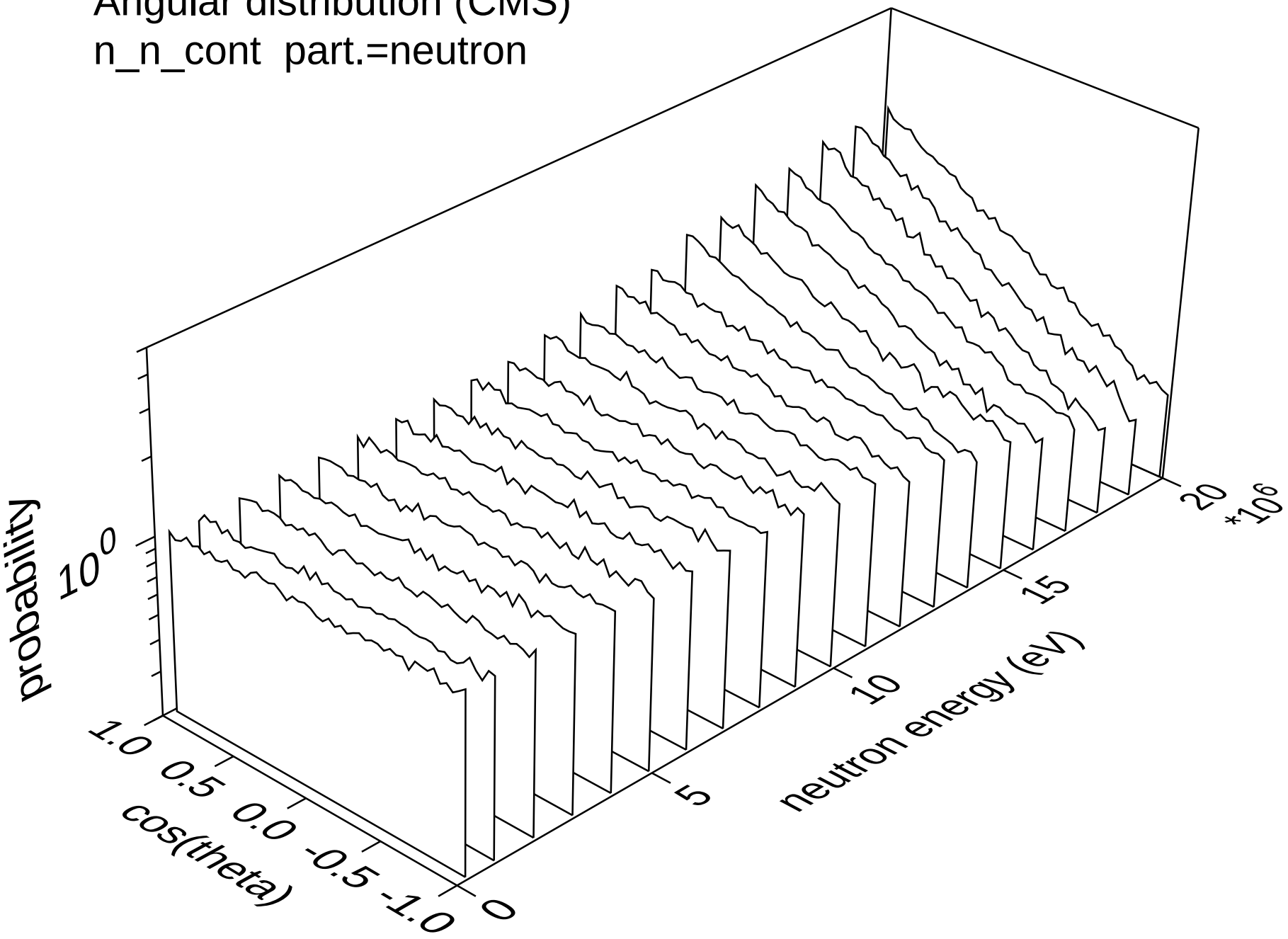

Angular distribution (CMS)
n_n_38 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

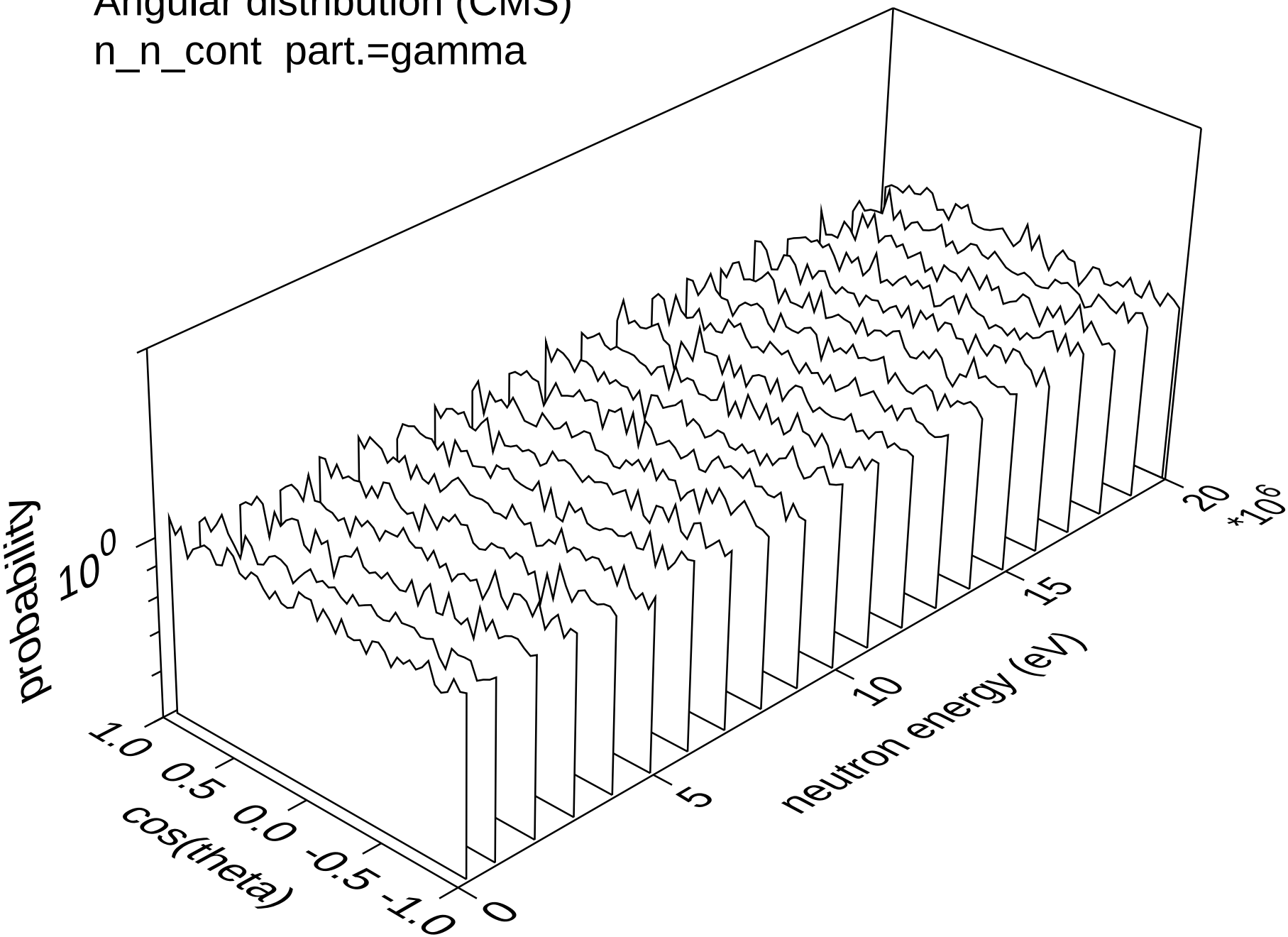

Angular distribution (CMS)
n_n_39 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

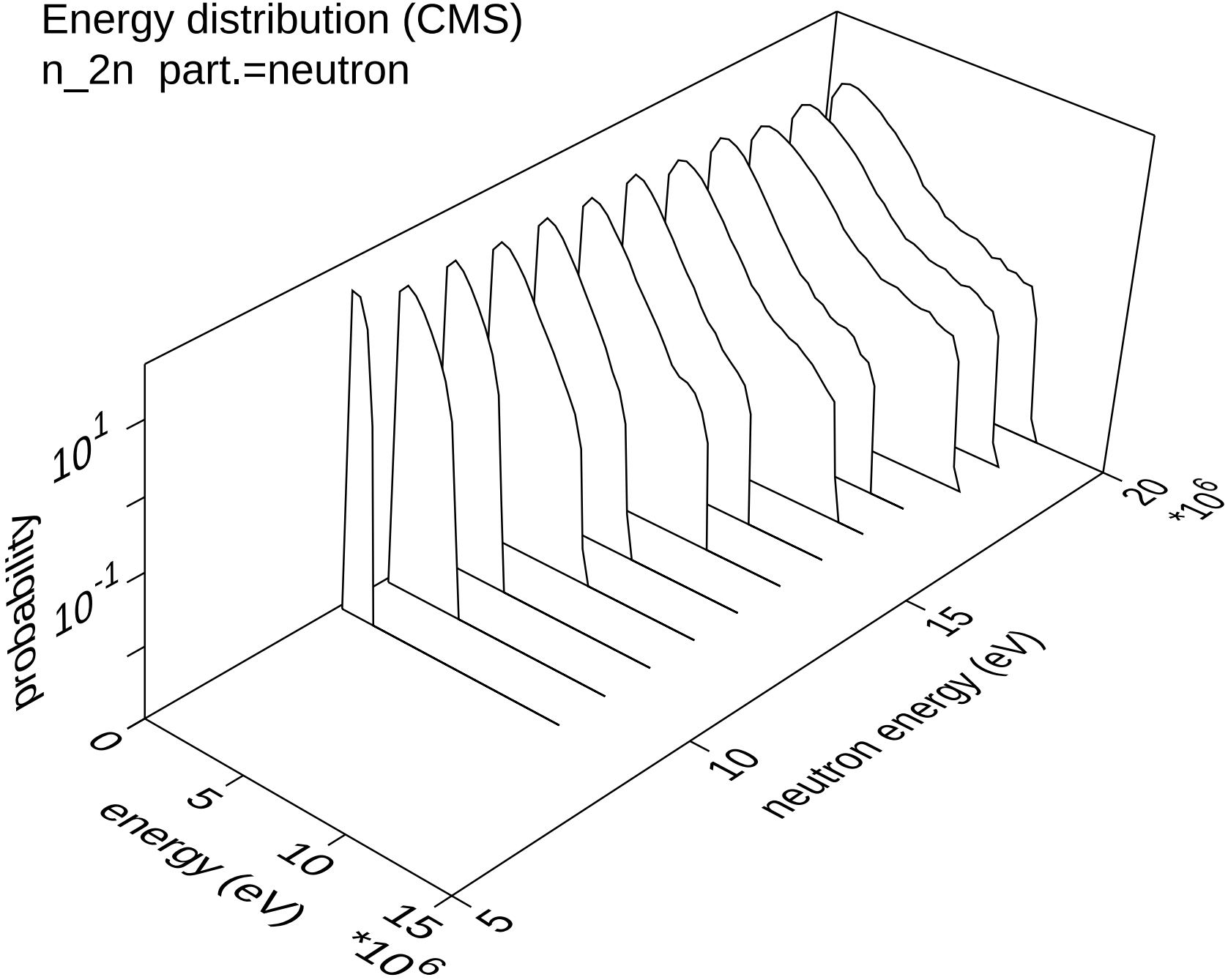

Angular distribution (CMS)
n_n_39 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

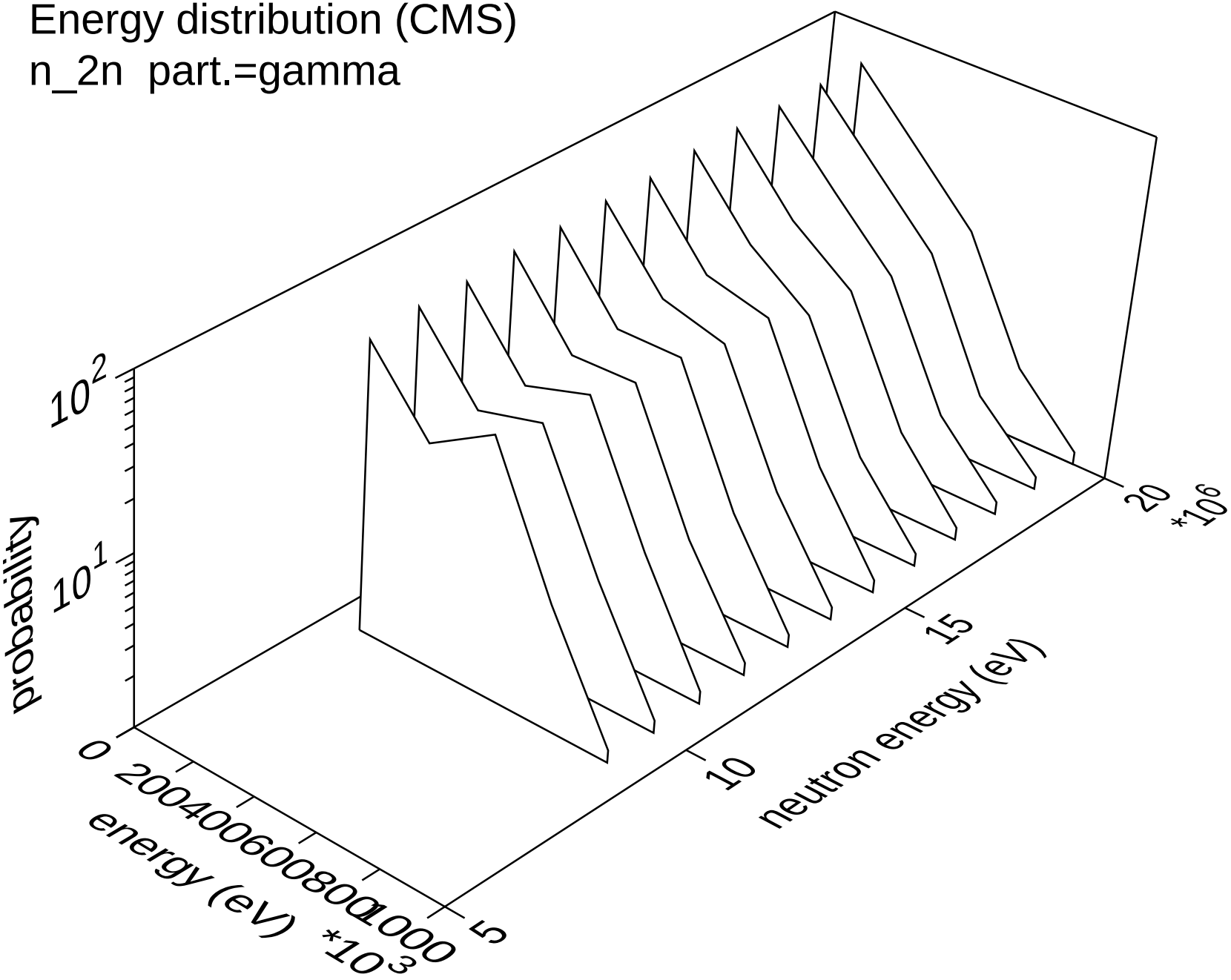

Angular distribution (CMS)
n_n_40 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

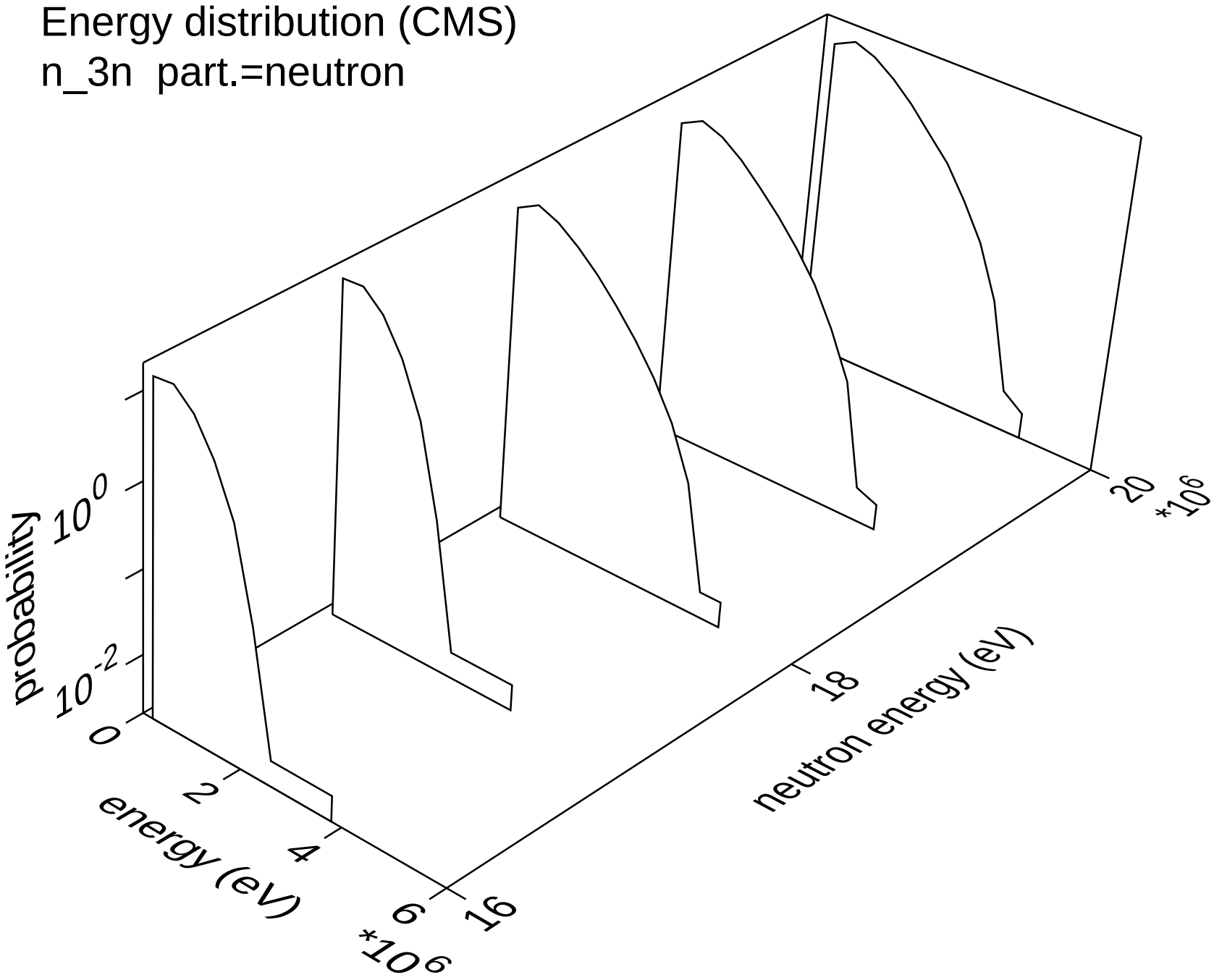

Angular distribution (CMS)
n_n_40 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

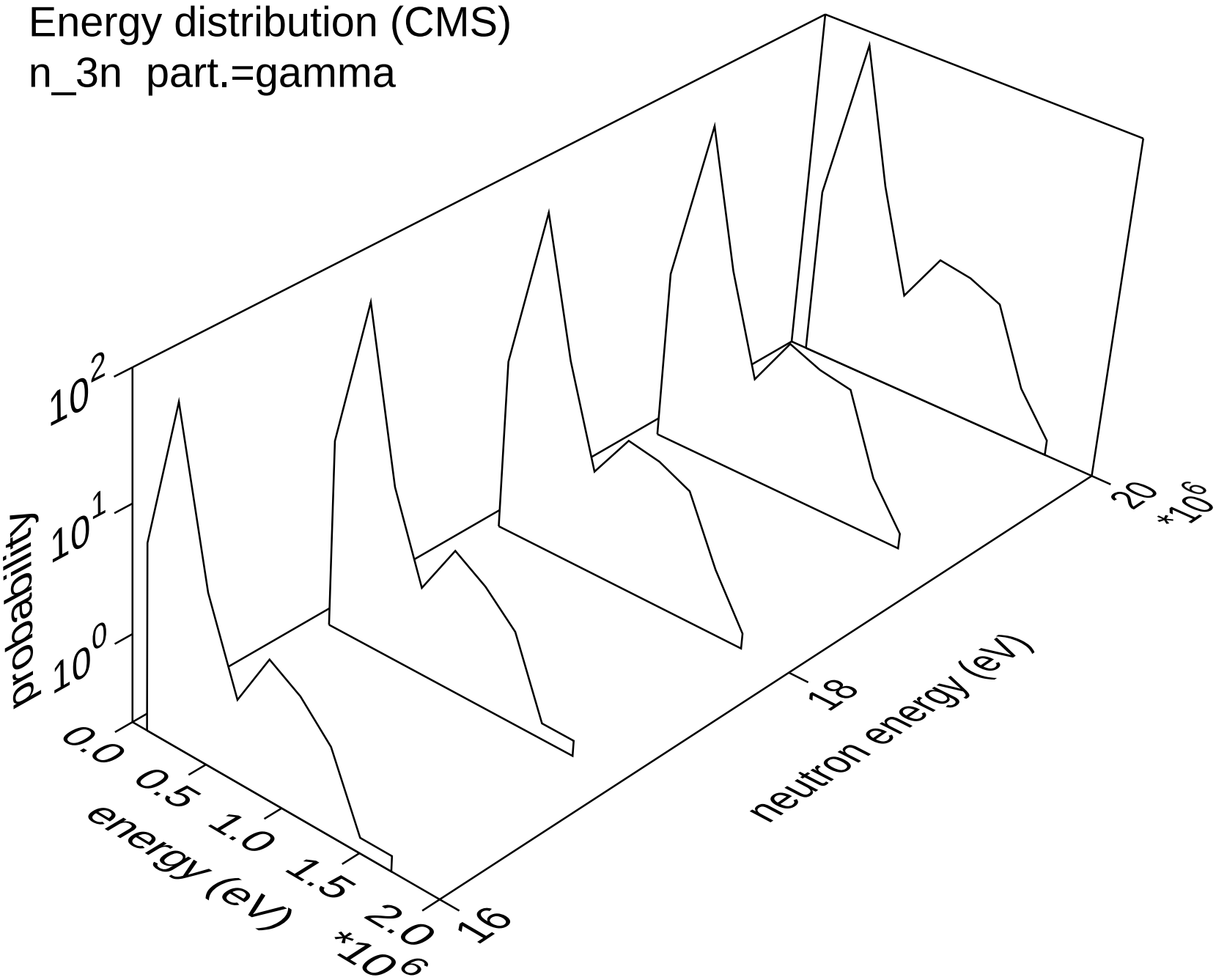

Angular distribution (CMS)
n_n_cont part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

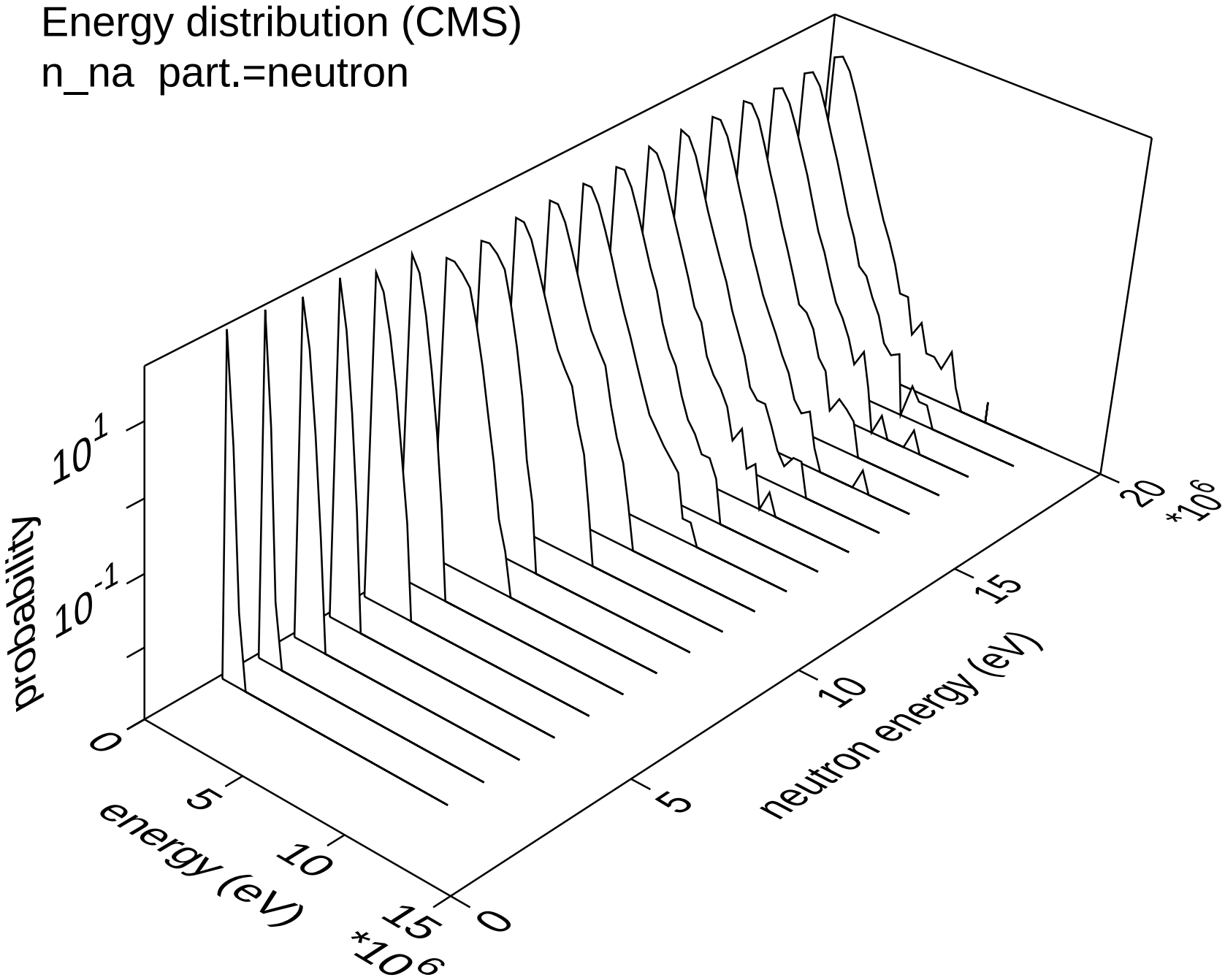

Angular distribution (CMS)
n_n_cont part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

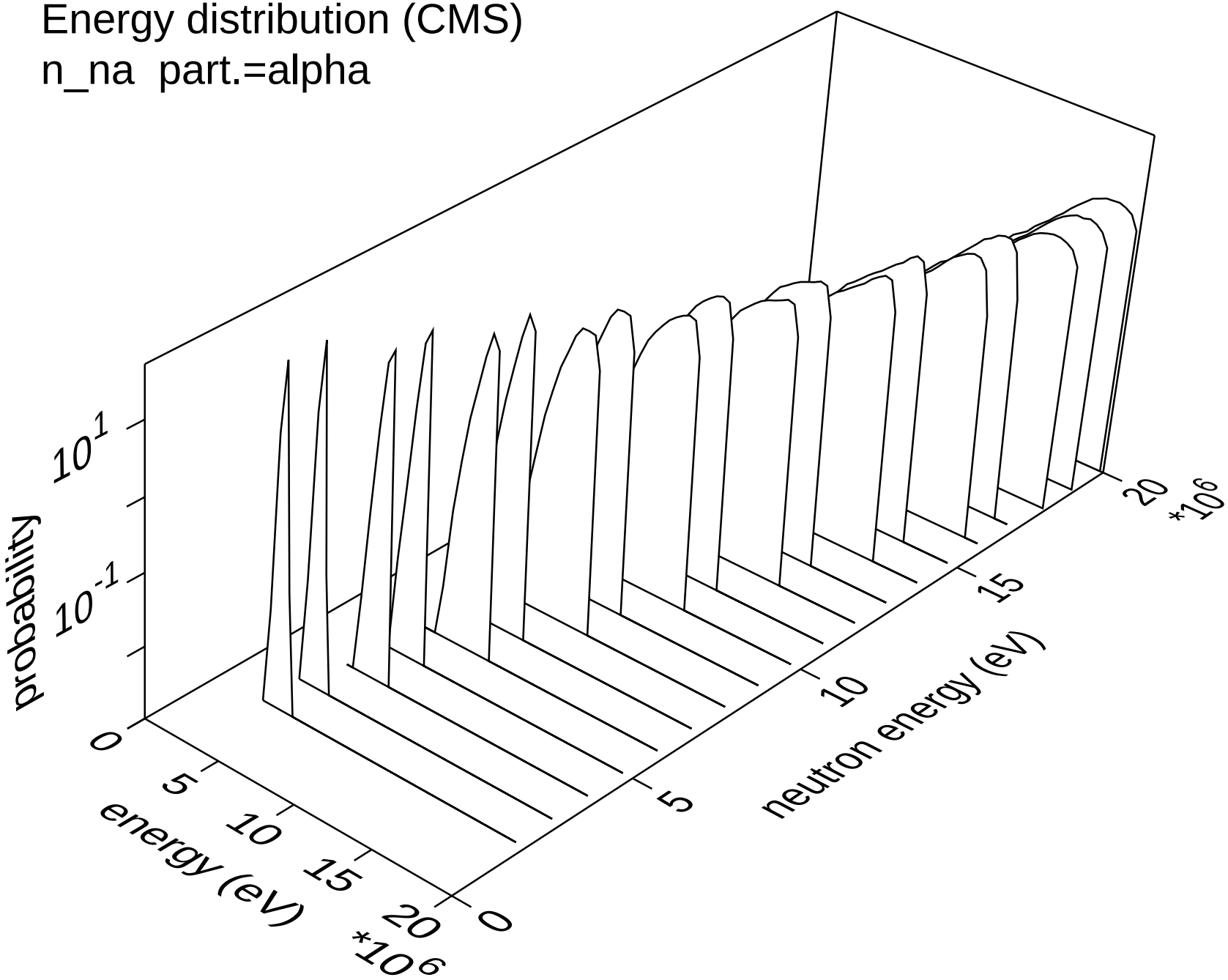

Energy distribution (CMS)
n_2n part.=neutron
probability
10^{1}
10^{-1}
0
5
10
15
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

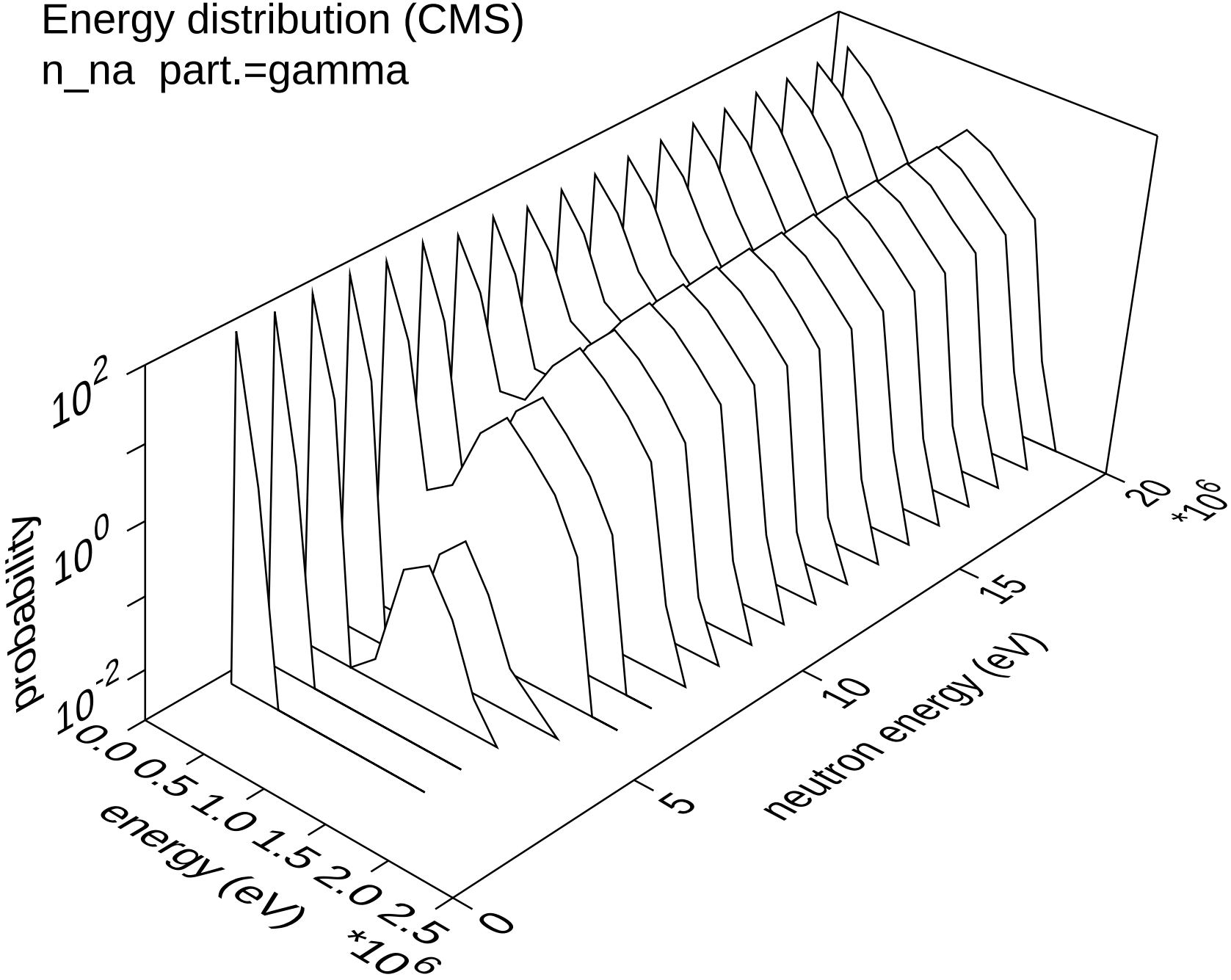

Energy distribution (CMS)
n_2n part.=gamma
probability
10^2
10^1
0
200
400
600
800
1000
energy (eV) *10^3
5
10
15
20
neutron energy (eV) *10^6

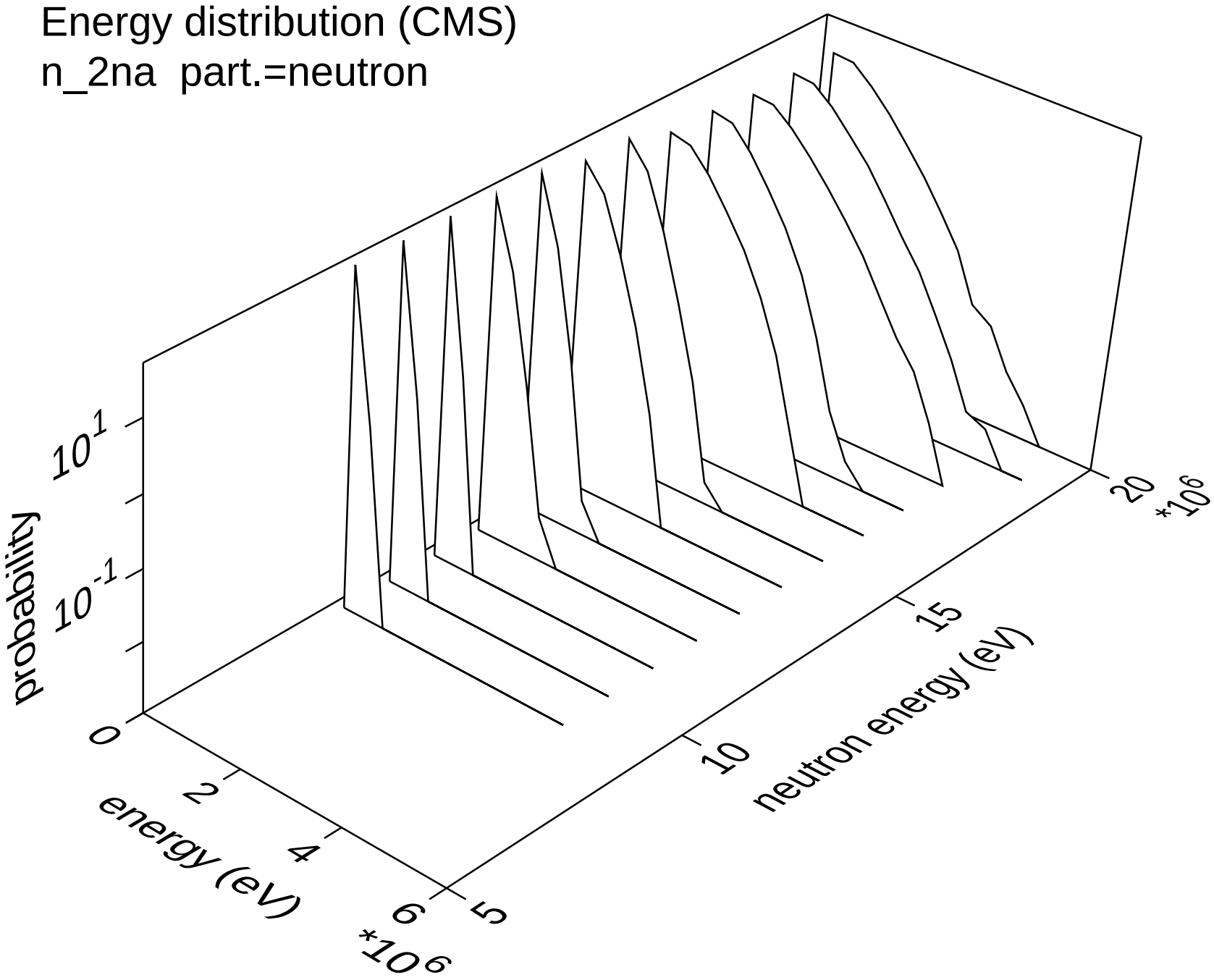

Energy distribution (CMS)
n_3n part.=neutron
probability
10^0
10^{-2}
0
2
4
6
*10^6
energy (eV)
16
18
20
*10^6
neutron energy (eV)

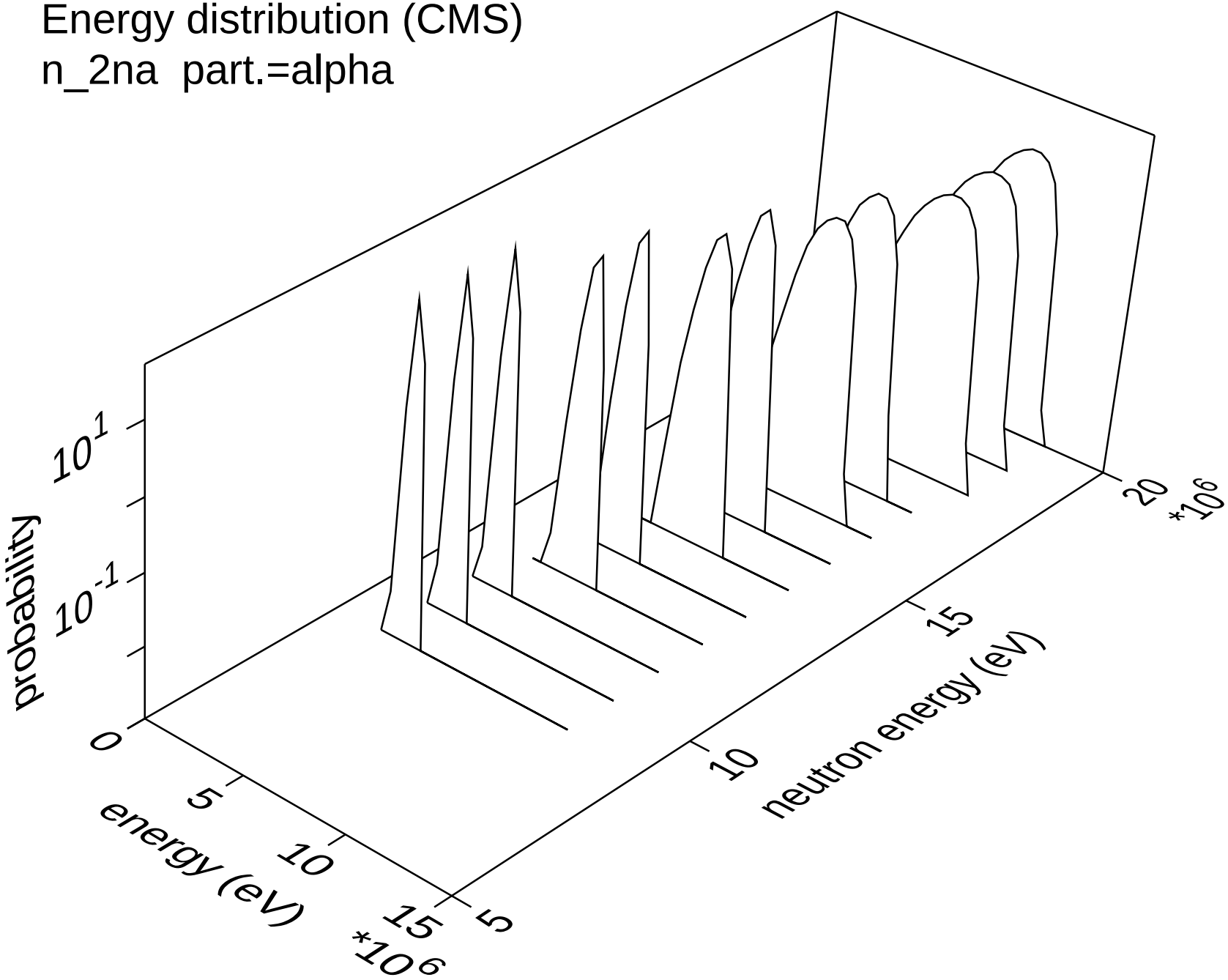

Energy distribution (CMS)
n_3n part.=gamma
probability
10^2
10^1
10^0
0.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
16
18
20
*10^6
neutron energy (eV)

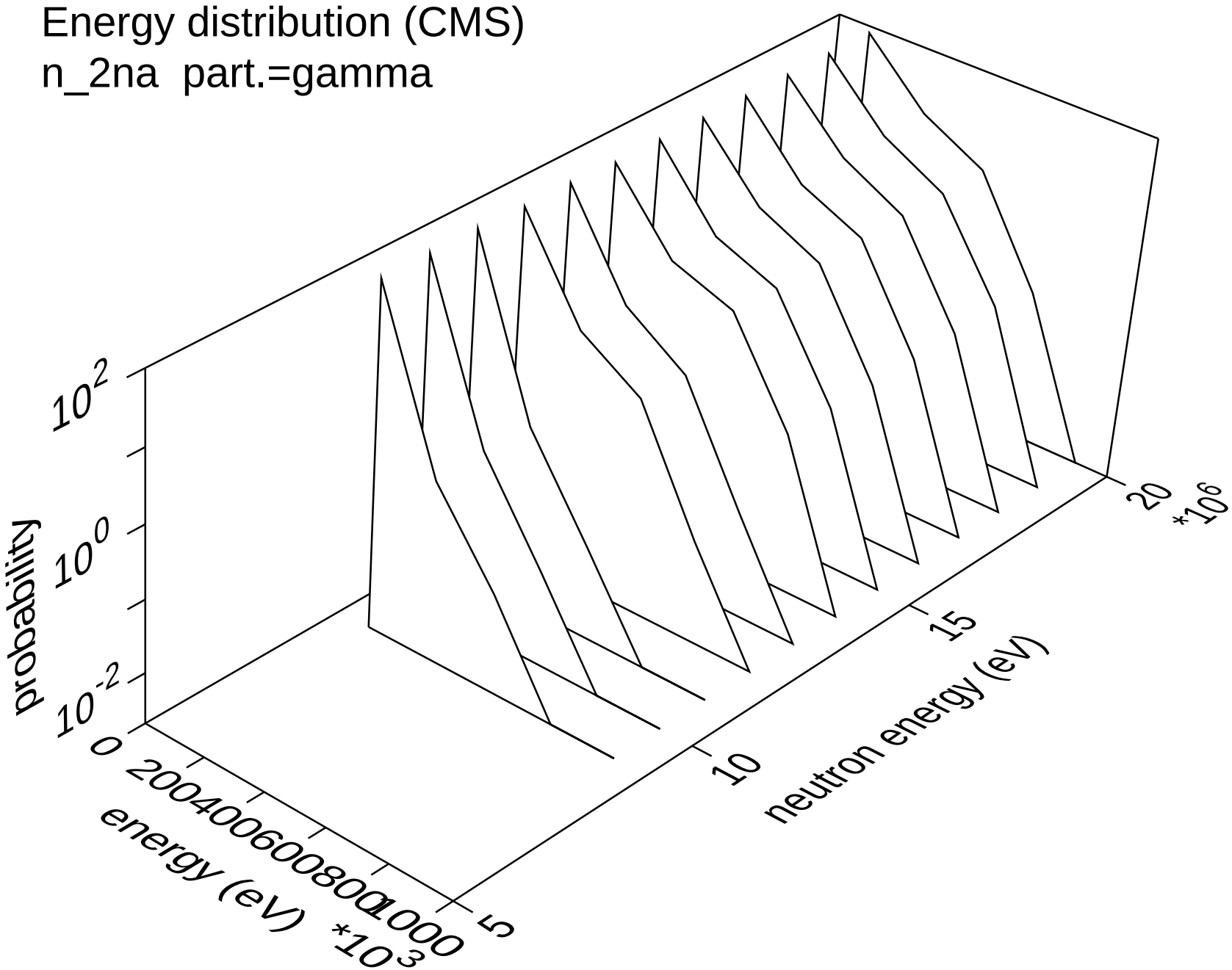

Energy distribution (CMS)
n_na part.=neutron
probability
10^{1}
10^{-1}
0
5
10
15
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

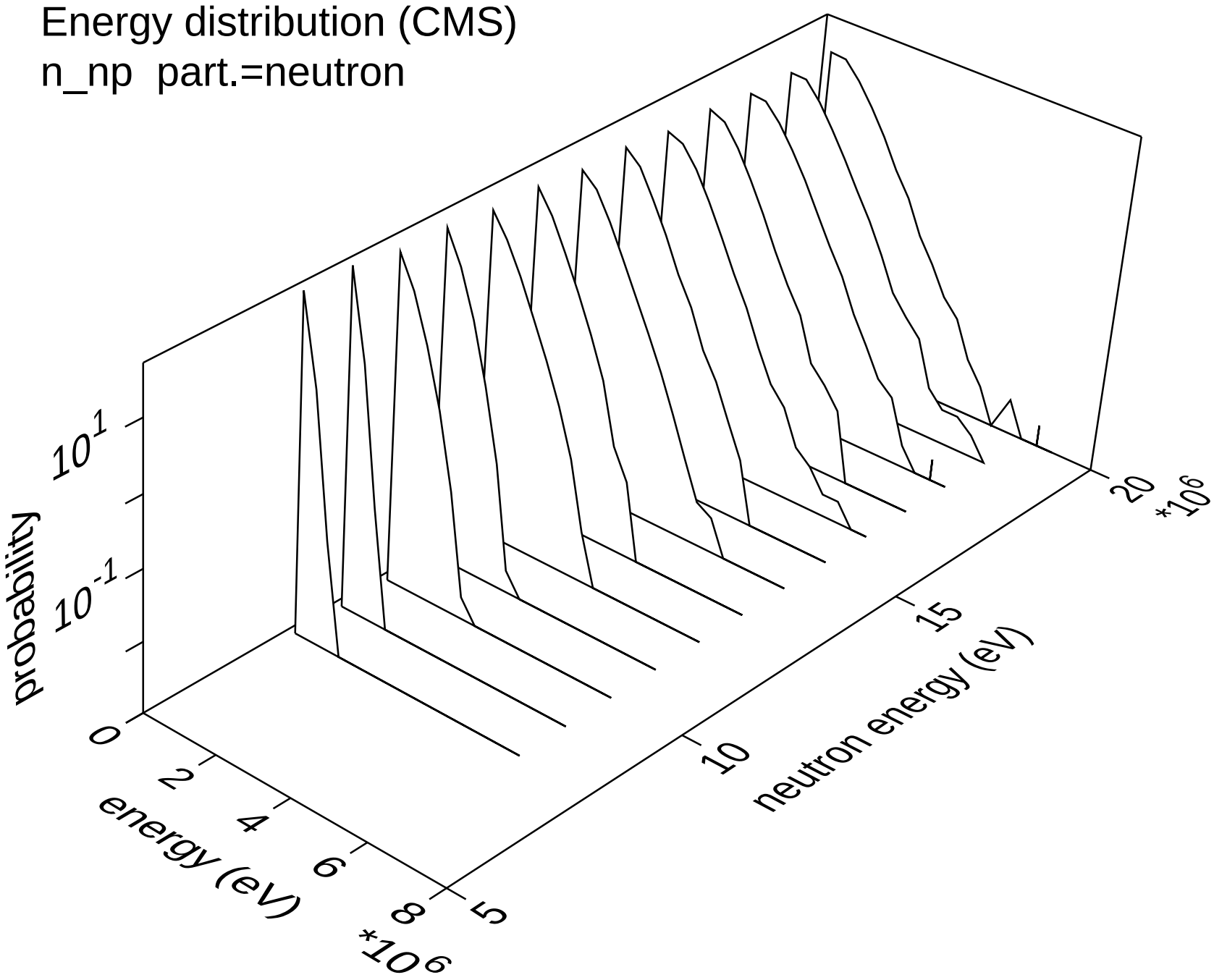

Energy distribution (CMS)
n_na part.=alpha
probability
10^{1}
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

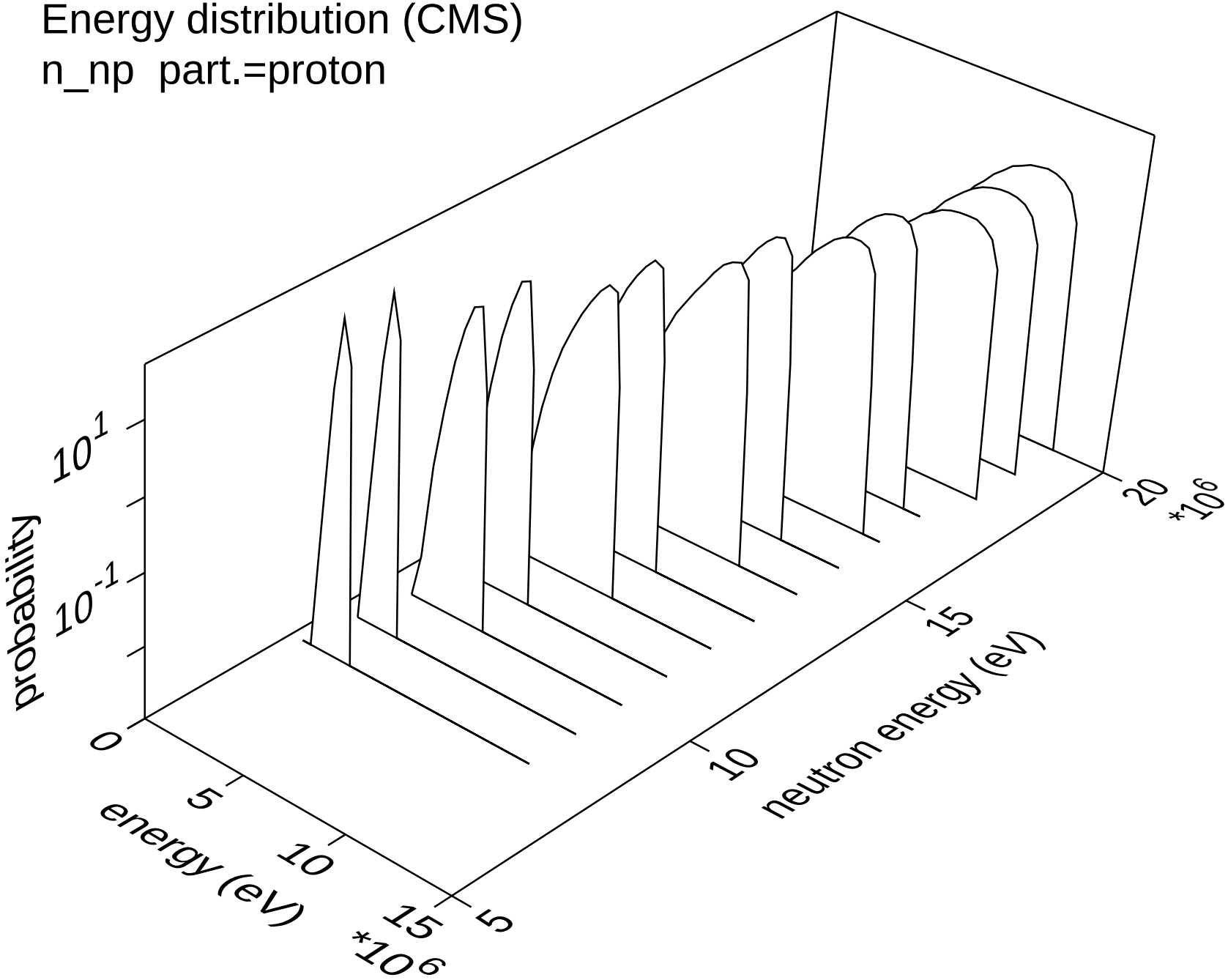

Energy distribution (CMS)
n_na part.=gamma
probability
10^{2}
10^{0}
10^{-2}
0.0 0.5 1.0 1.5 2.0 2.5
energy (eV) *10^6
0
5
10
15
20
*10^6
neutron energy (eV)

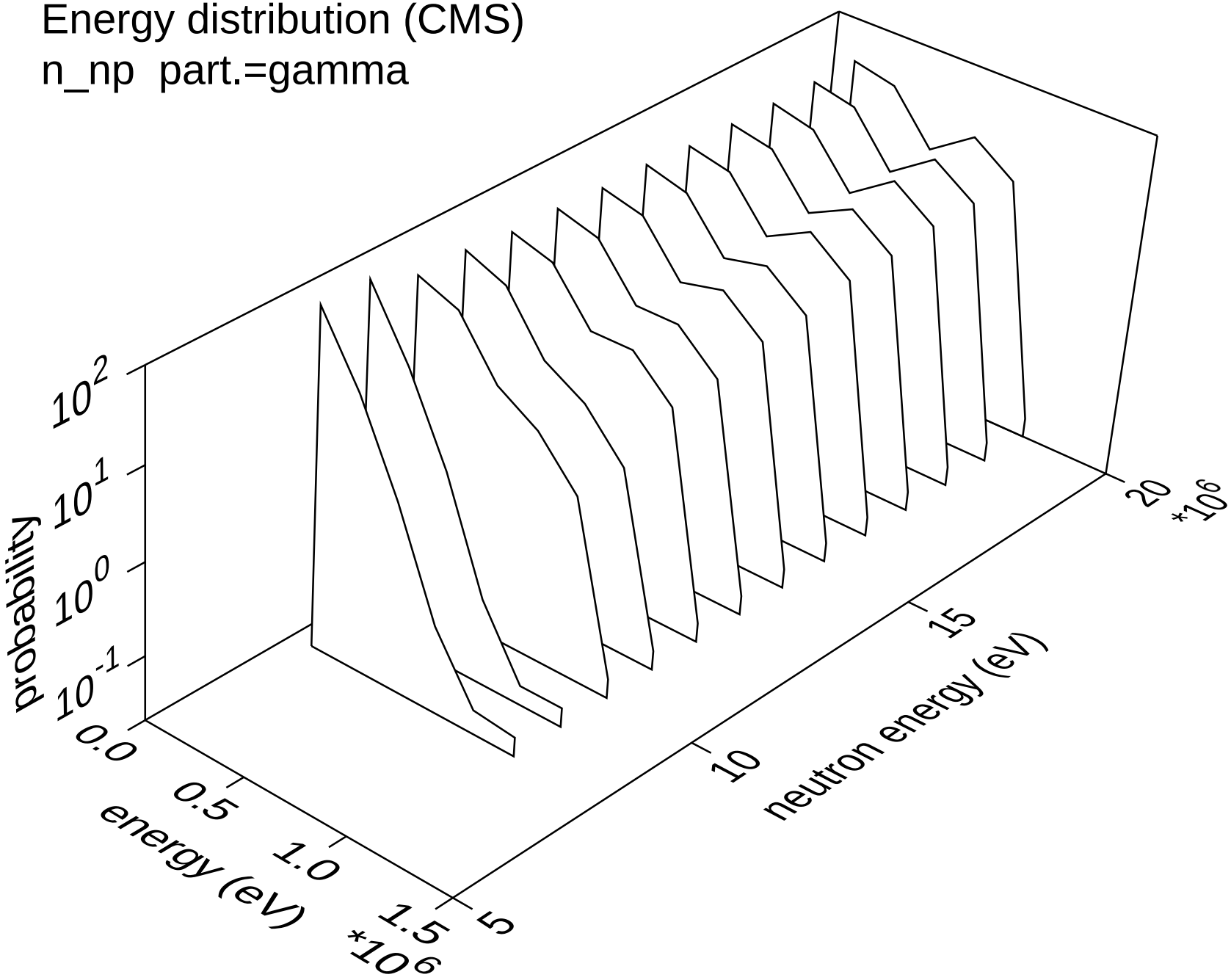

Energy distribution (CMS)
n_2na part.=neutron
probability
10^{1}
10^{-1}
0
2
4
6
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

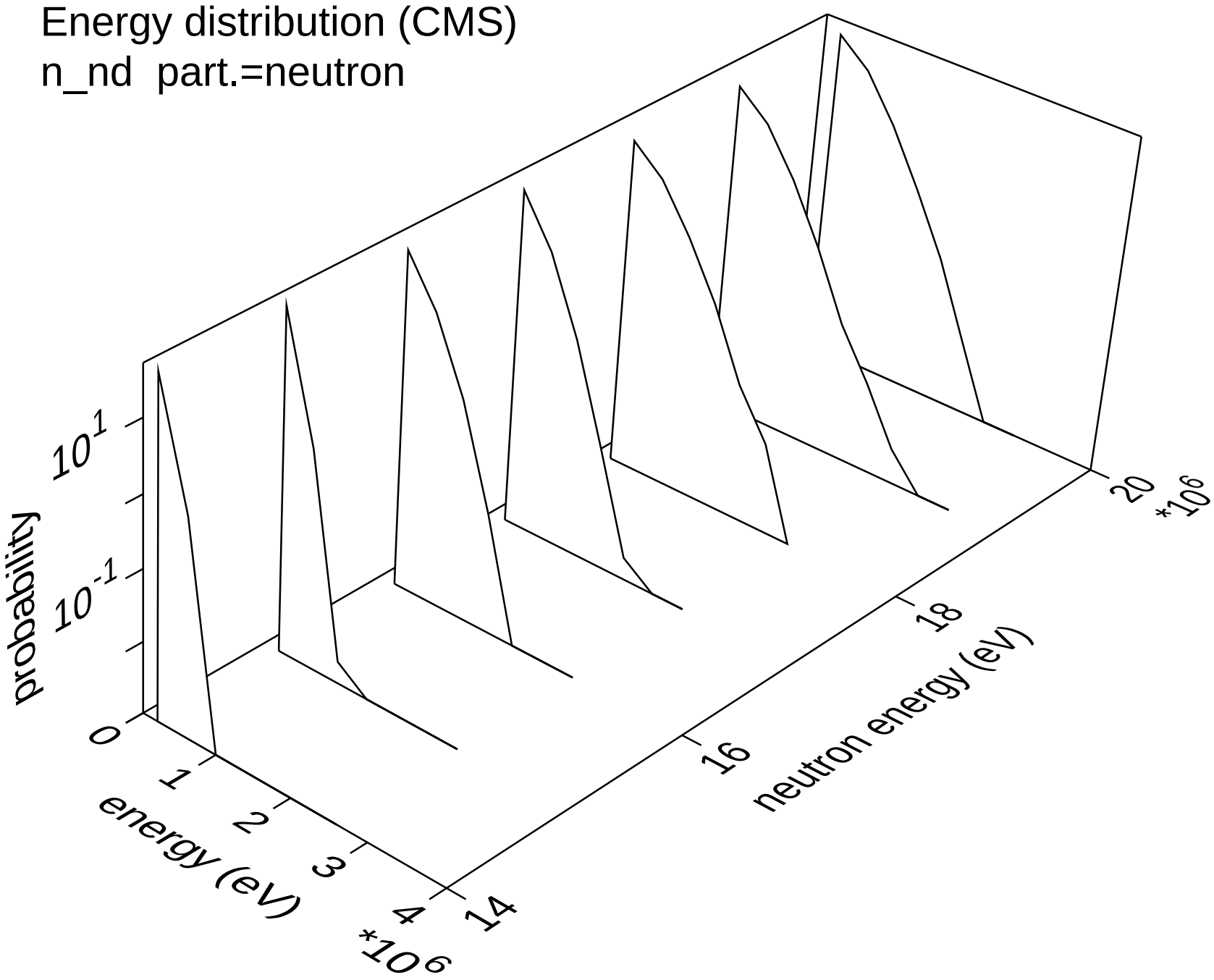

Energy distribution (CMS)
n_2na part.=alpha
probability
10^{1}
10^{-1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

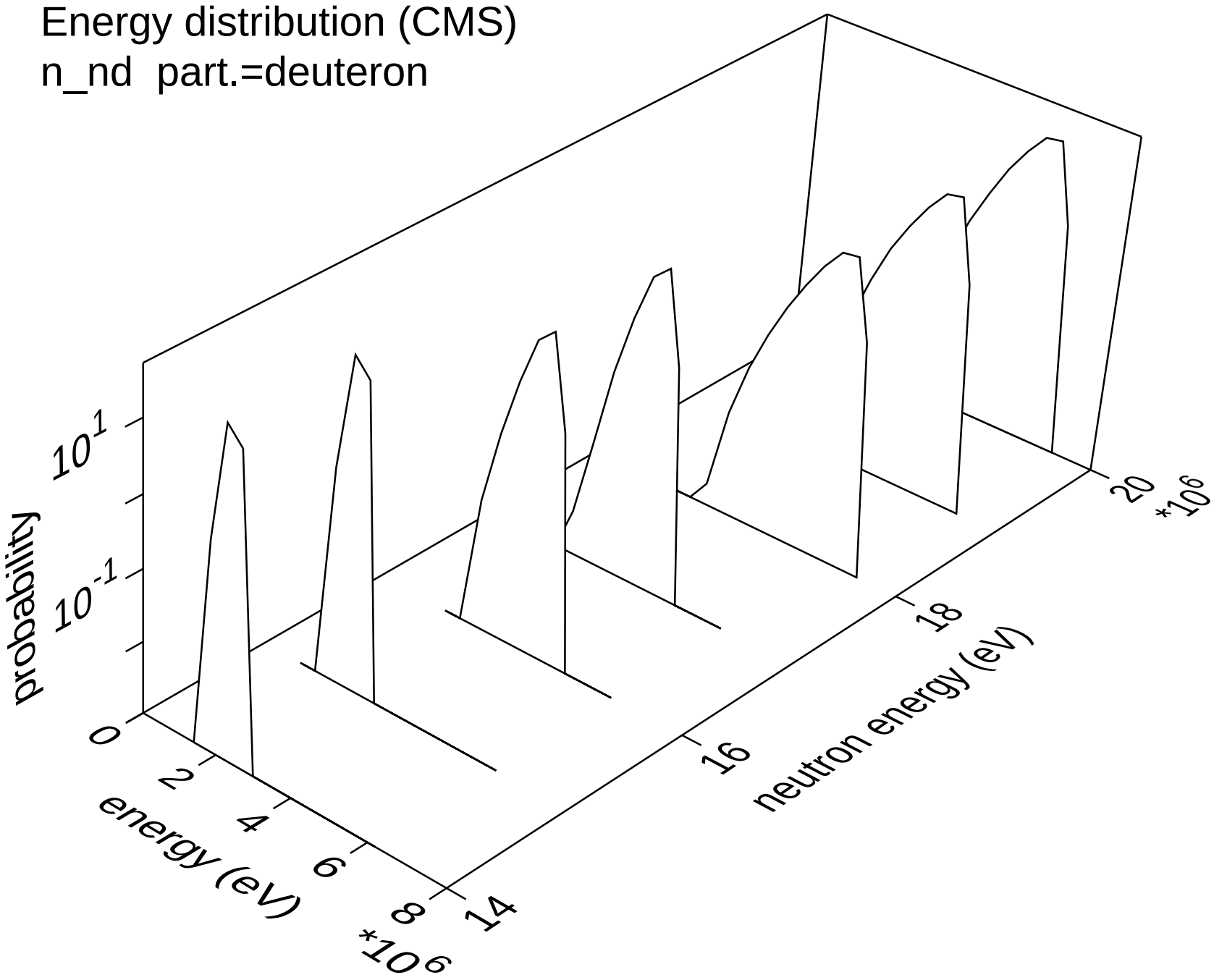

Energy distribution (CMS)
n_2na part.=gamma
probability
10^{2}
10^{0}
10^{-2}
0
200
400
600
800
1000
energy (eV) *10^{3}
5
10
15
20
neutron energy (eV) *10^{6}

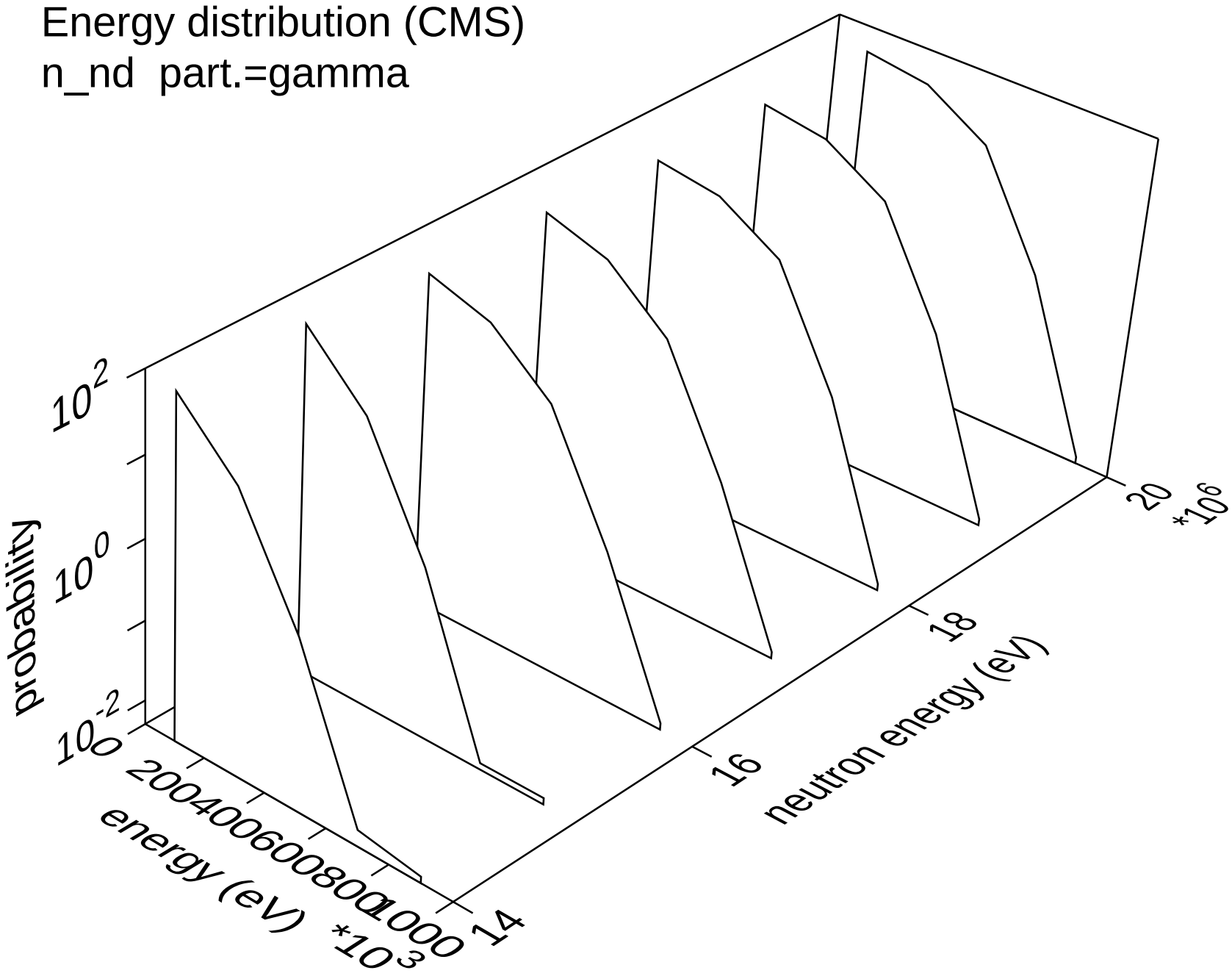

Energy distribution (CMS)
n_np part.=neutron
probability
10^{1}
10^{-1}
0
2
4
6
8
*10 6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

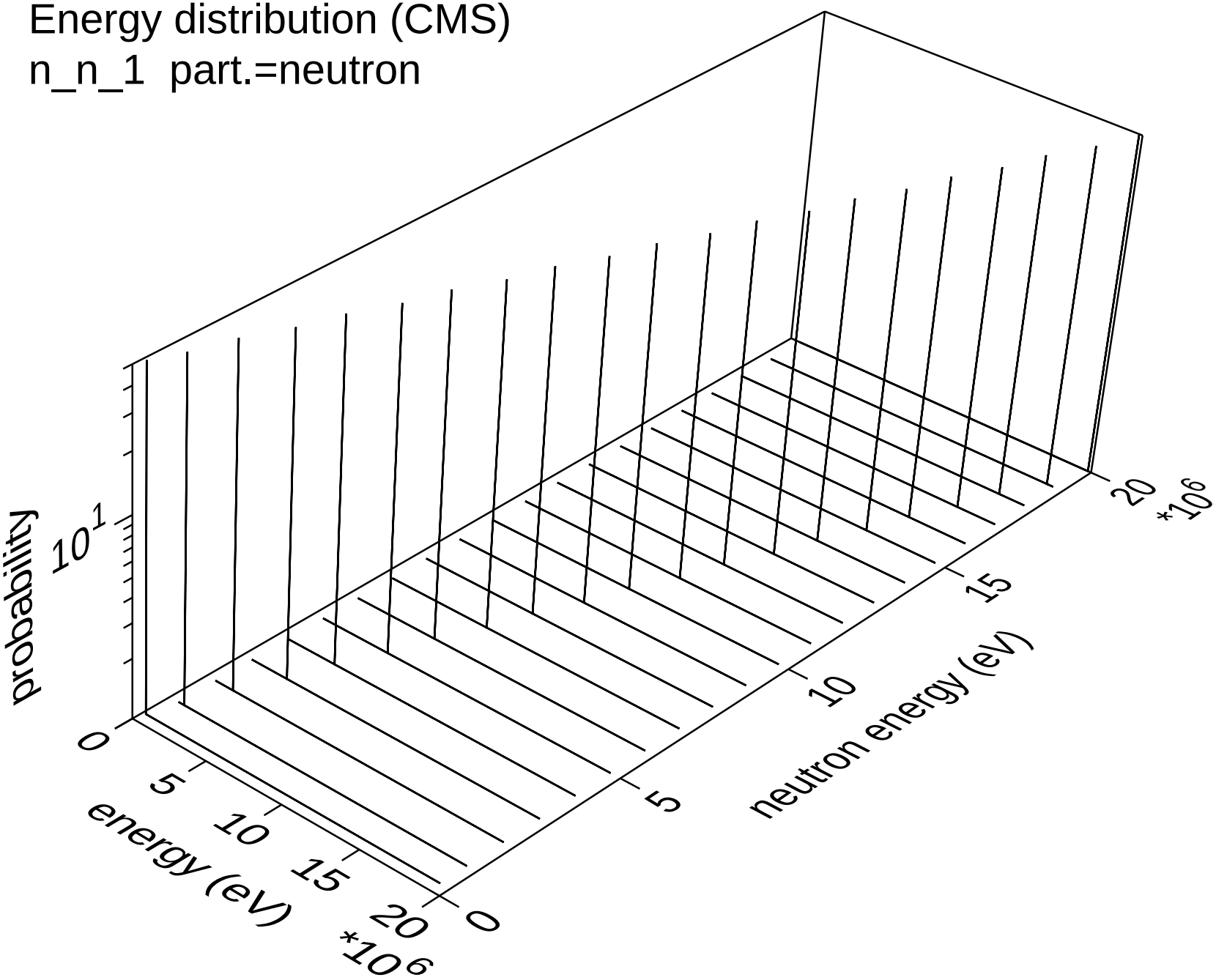

Energy distribution (CMS)
n_np part.=proton
probability
10^{1}
10^{-1}
0
5
10
15
energy (eV)
*10^6
5
10
15
20
neutron energy (eV)
*10^6

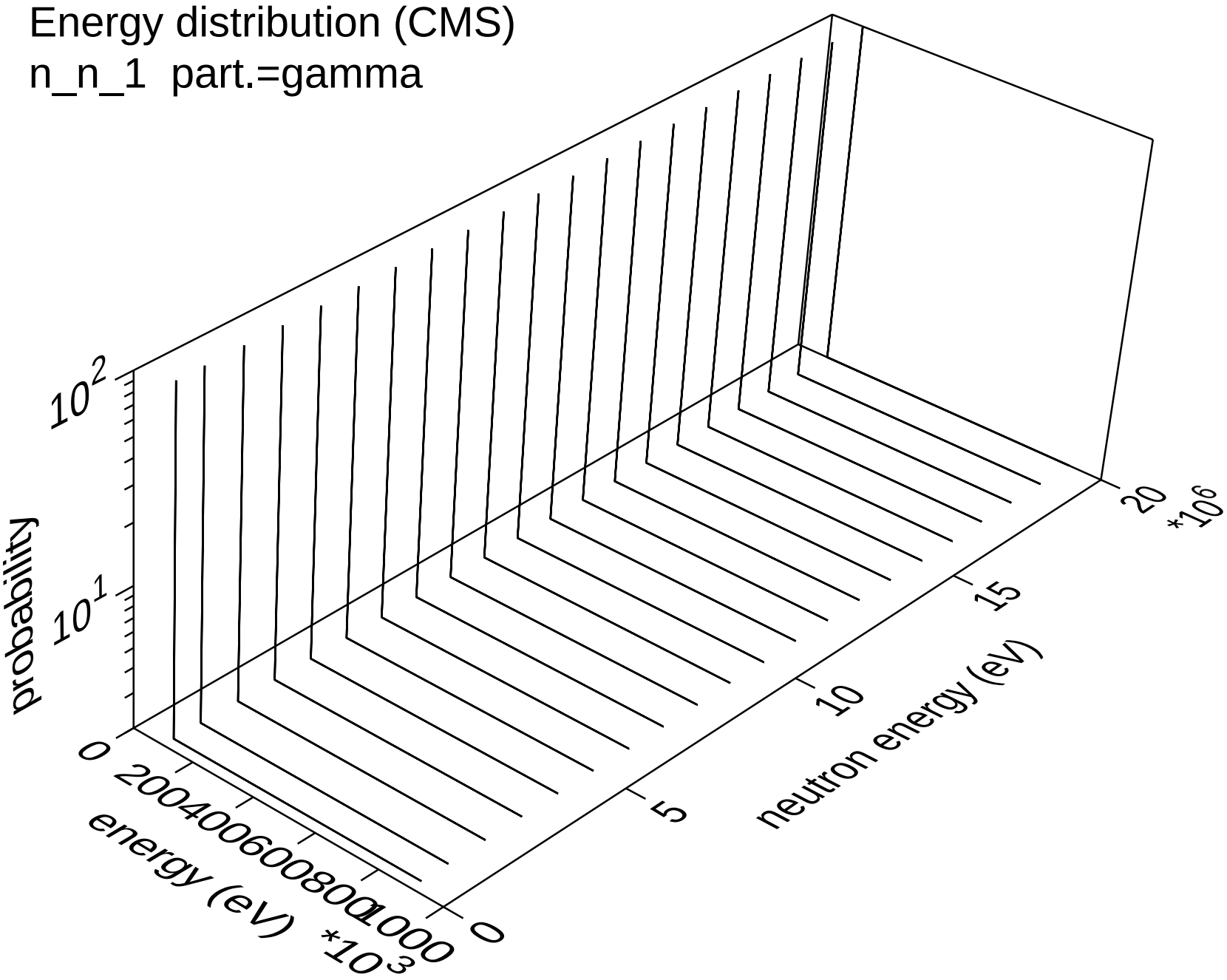

Energy distribution (CMS)
n_np part.=gamma
probability
10^{2}
10^{1}
10^{0}
10^{-1}
0.0
0.5
1.0
1.5
energy (eV)
*10^6
5
10
15
20
neutron energy (eV)
*10^6

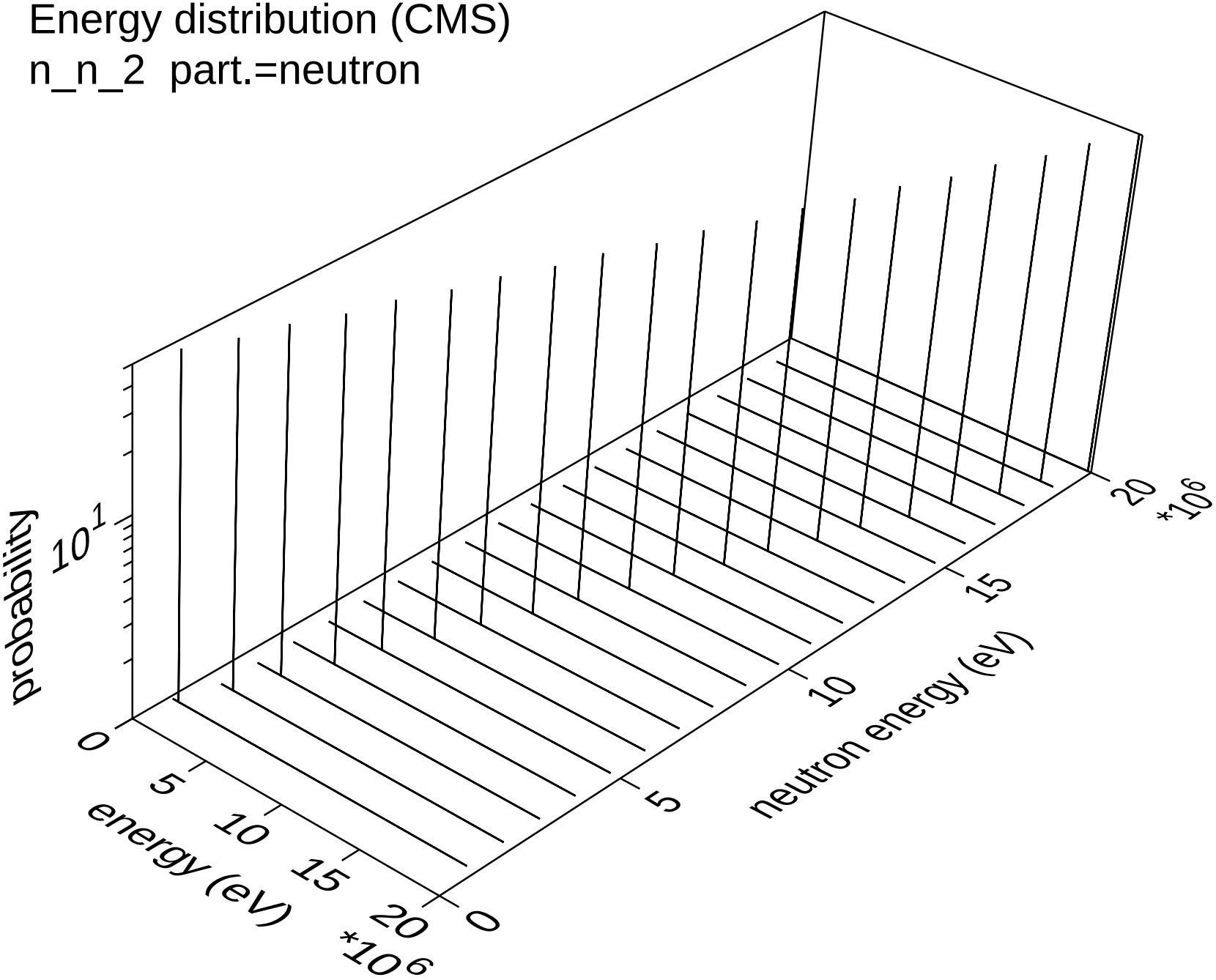

Energy distribution (CMS)
n_nd part.=neutron
probability
10^{1}
10^{-1}
0
1
2
3
4
*10 6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)

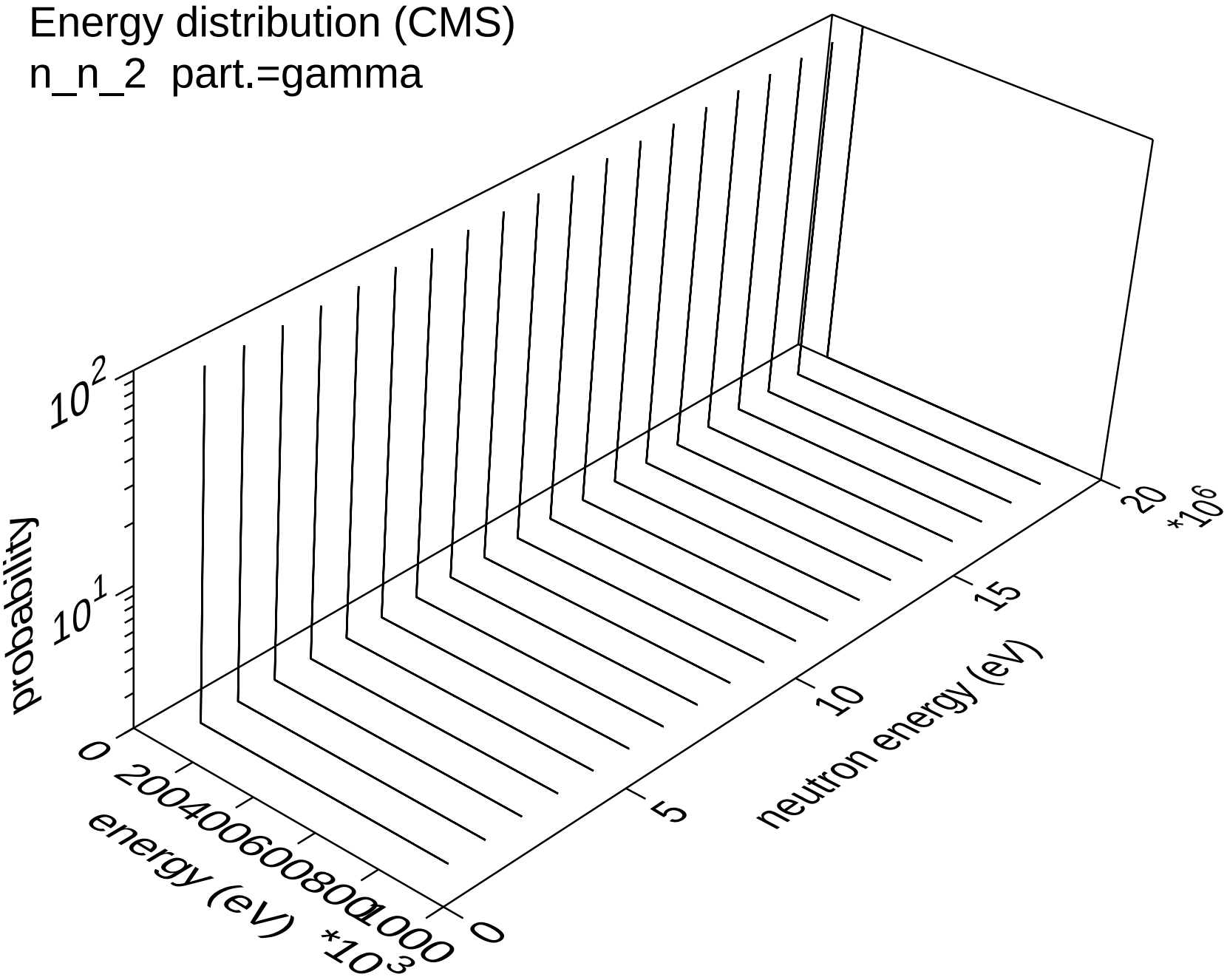

Energy distribution (CMS)
n_nd part.=deuteron
probability
10^{1}
10^{-1}
0
2
4
6
8
*10 6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)

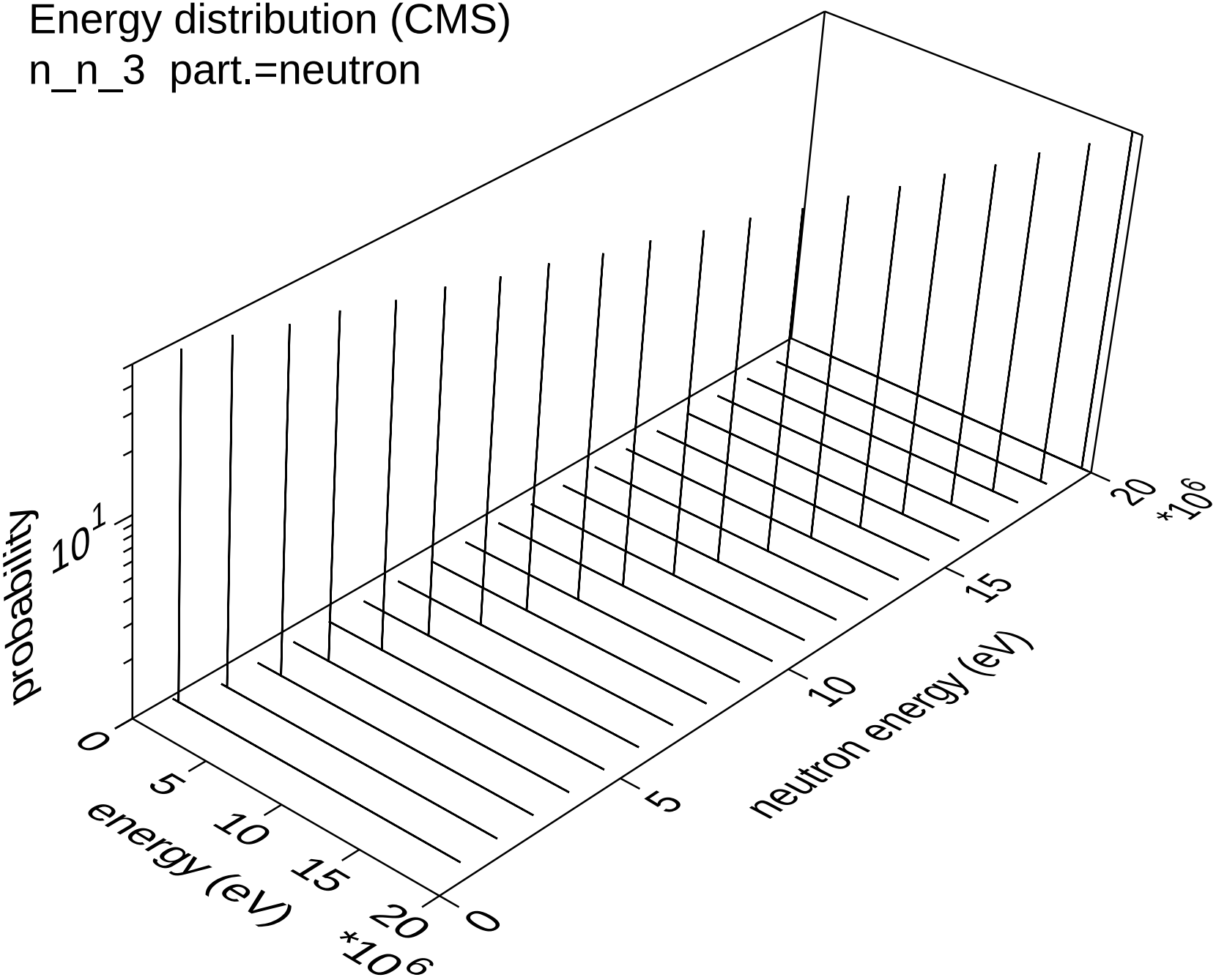

Energy distribution (CMS)
n_nd part.=gamma
probability
10^{2}
10^{0}
10^{-2}
0
200
400
600
800
1000
energy (eV) *10^{3}
14
16
18
20
*10^{6}
neutron energy (eV)

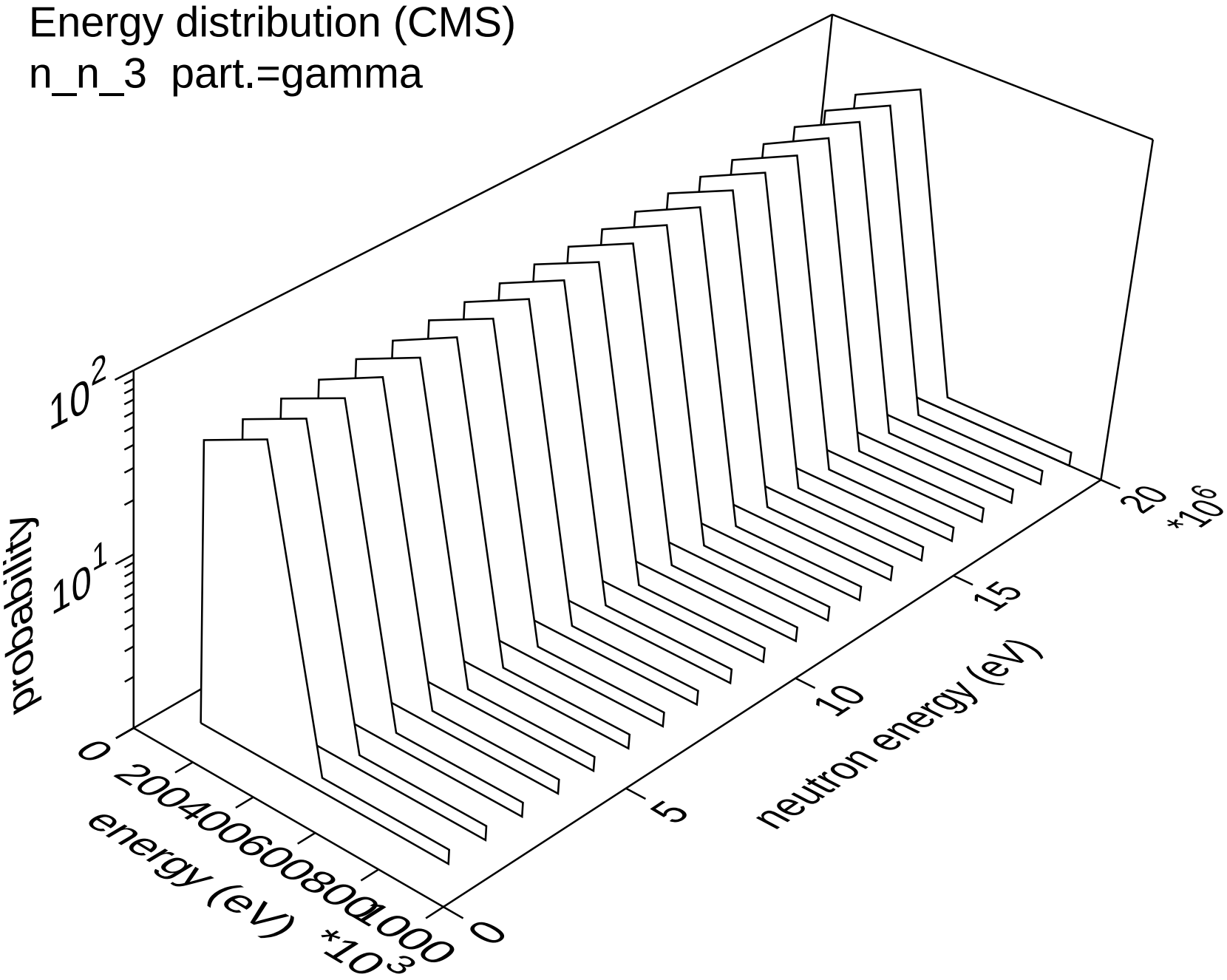

Energy distribution (CMS)
n_n_1 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

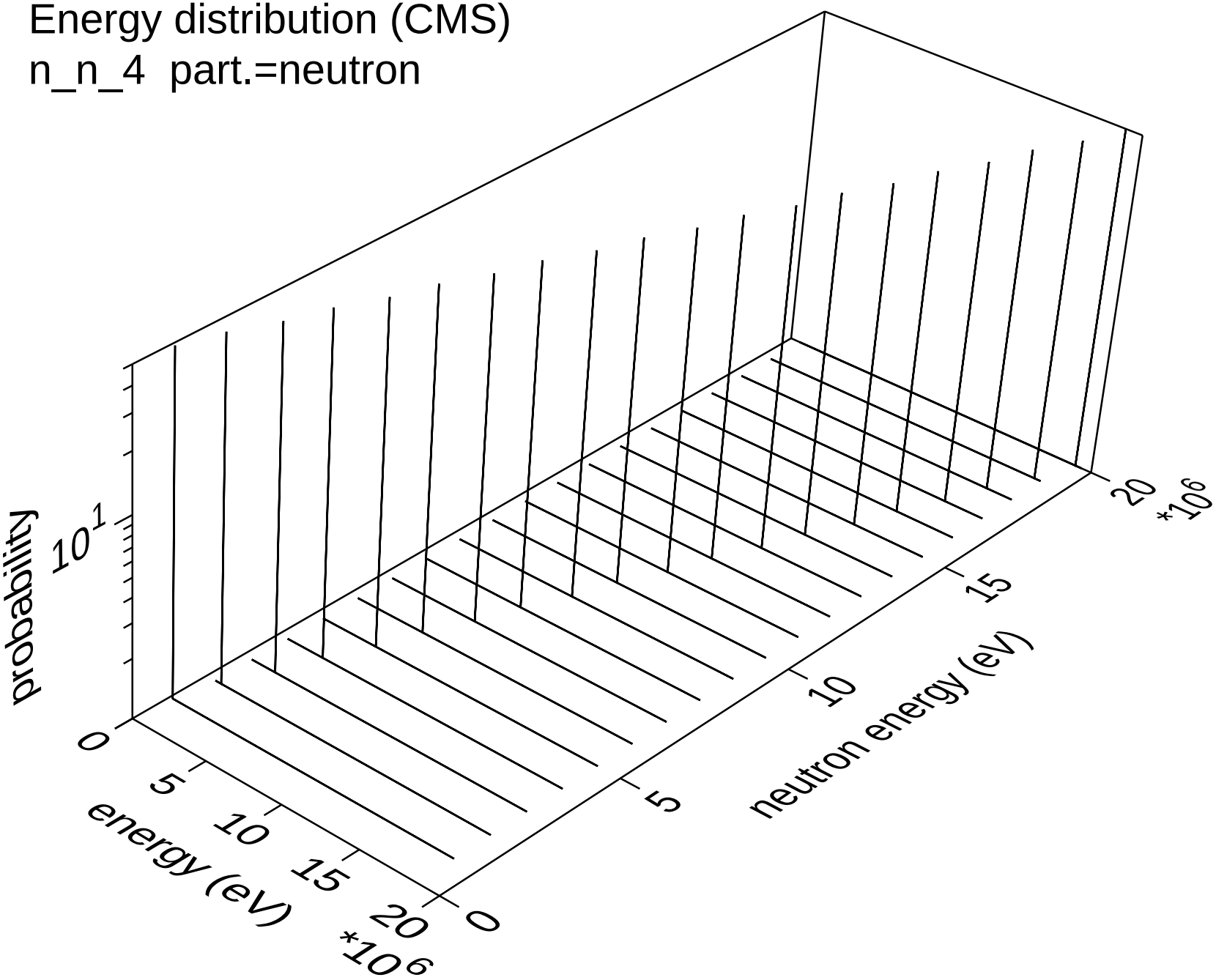

Energy distribution (CMS)
n_n_1 part.=gamma
probability
10^2
10^1
0
200
400
600
800
1000
0
energy (eV) *10^3
5
10
15
20
neutron energy (eV) *10^6

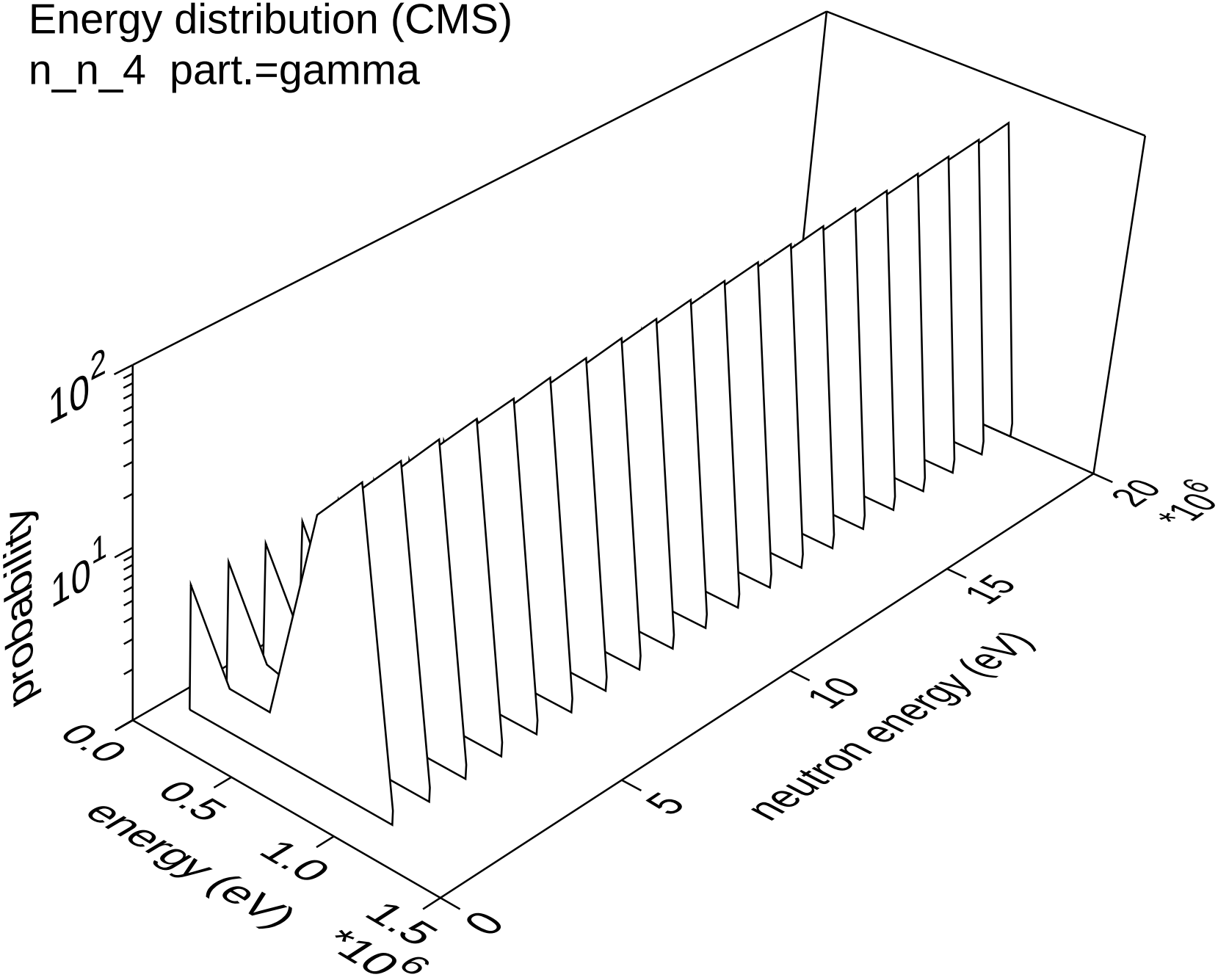

Energy distribution (CMS)
n_n_2 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

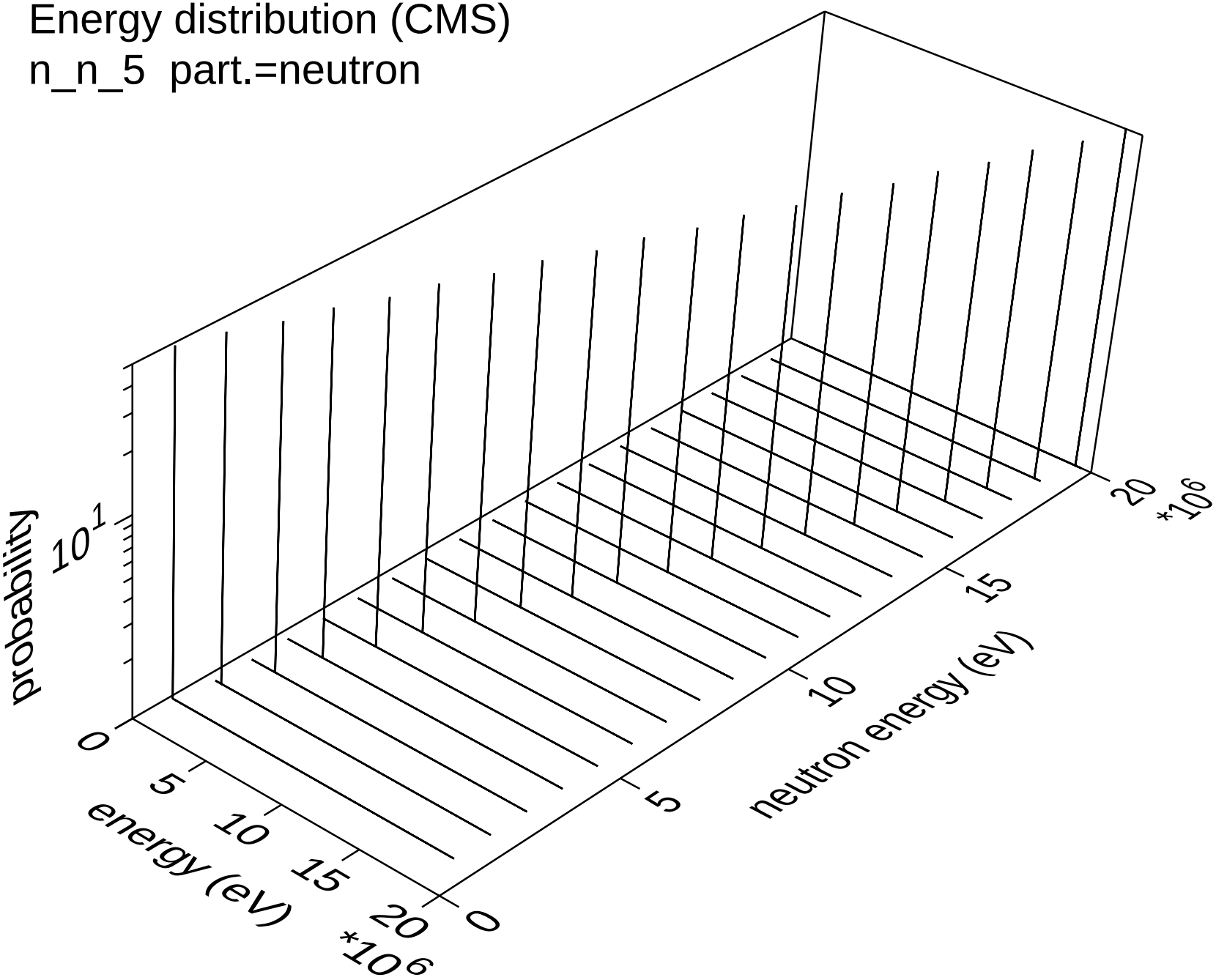

Energy distribution (CMS)
n_n_2 part.=gamma
probability
10^2
10^1
0
200
400
600
800
1000
energy (eV) *10^3
0
5
10
15
20
neutron energy (eV) *10^6

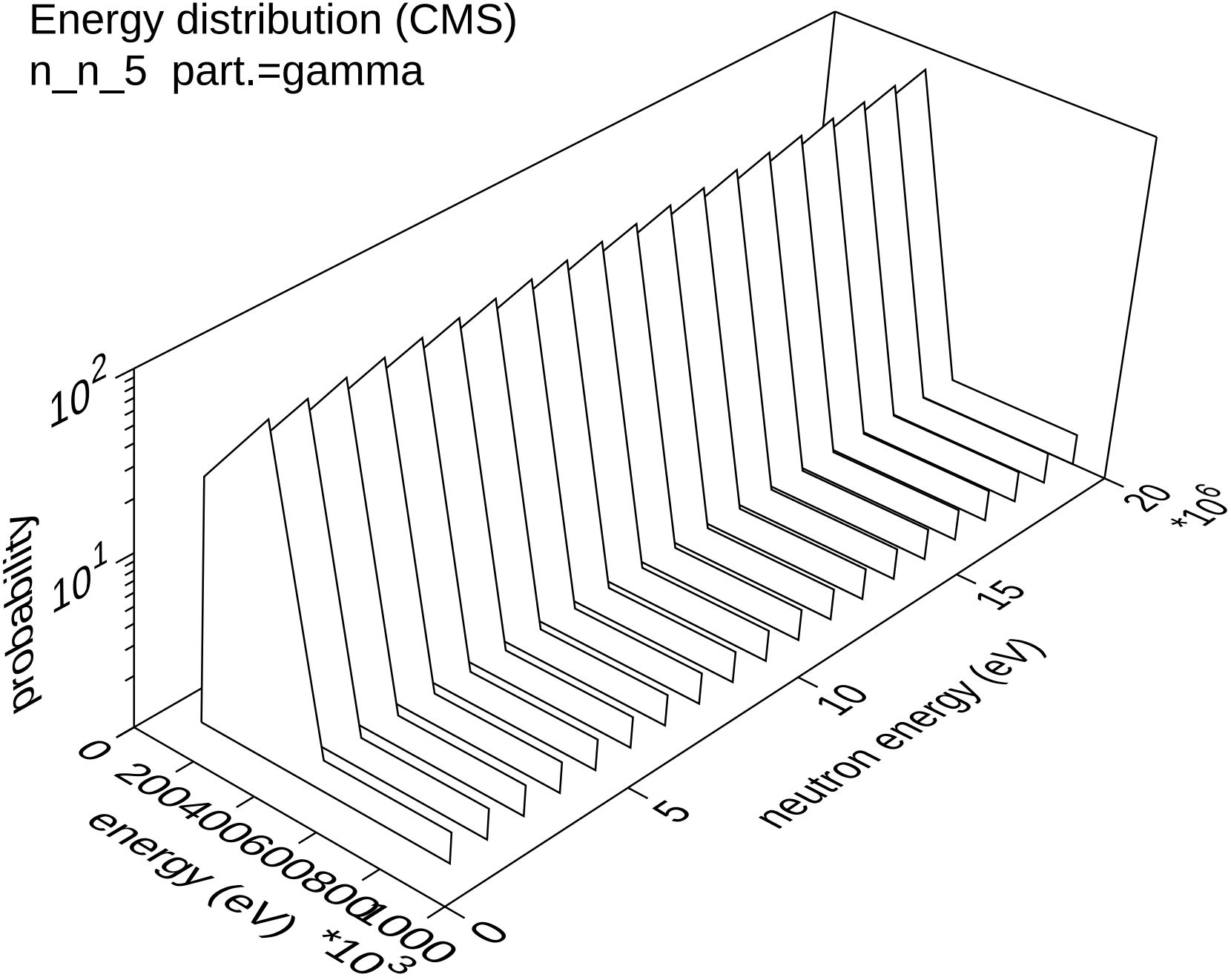

Energy distribution (CMS)
n_n_3 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

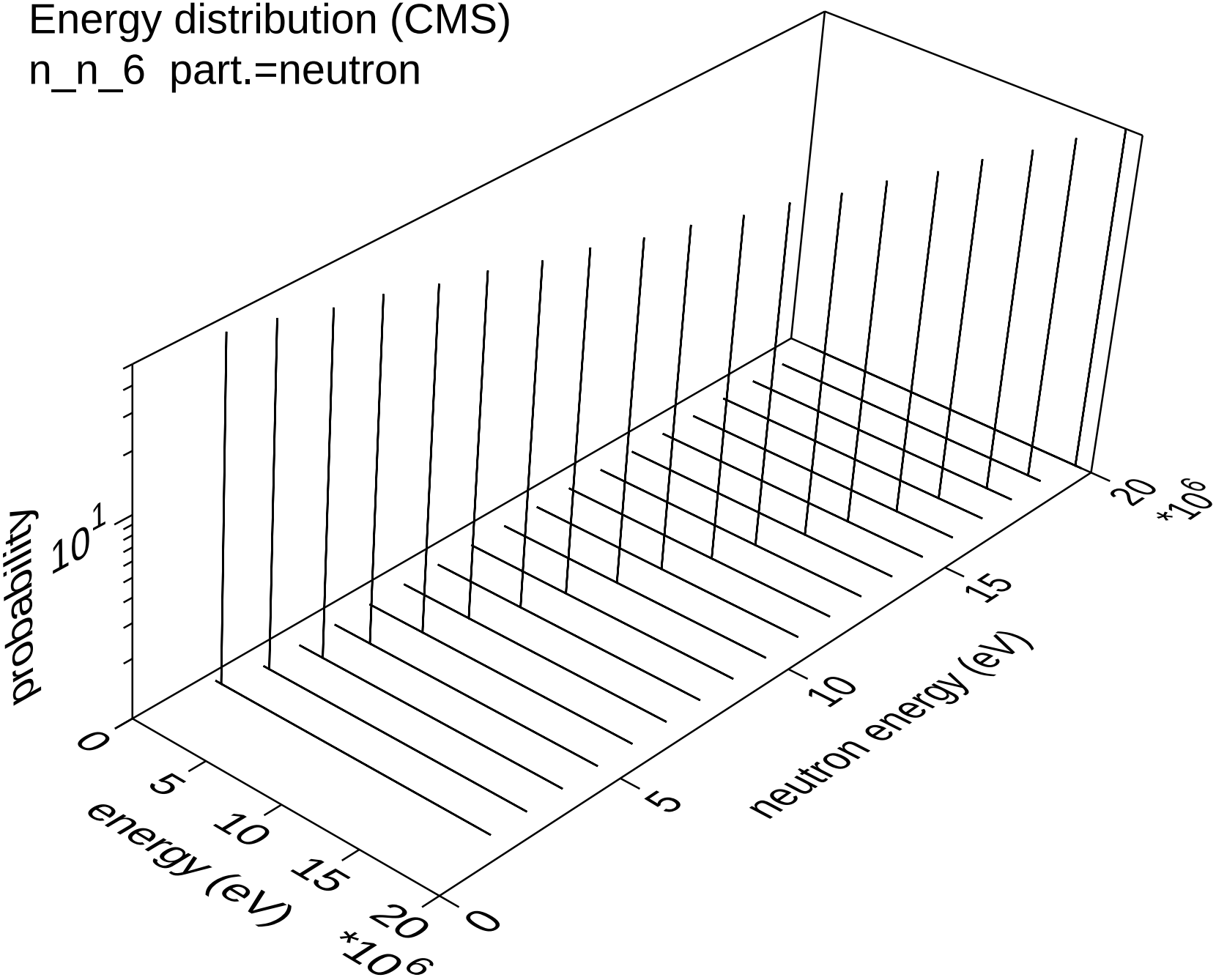

Energy distribution (CMS)
n_n_3 part.=gamma
probability
10^2
10^1
0
200
400
600
800
1000
energy (eV) *10^3
0
5
10
15
20
neutron energy (eV) *10^6

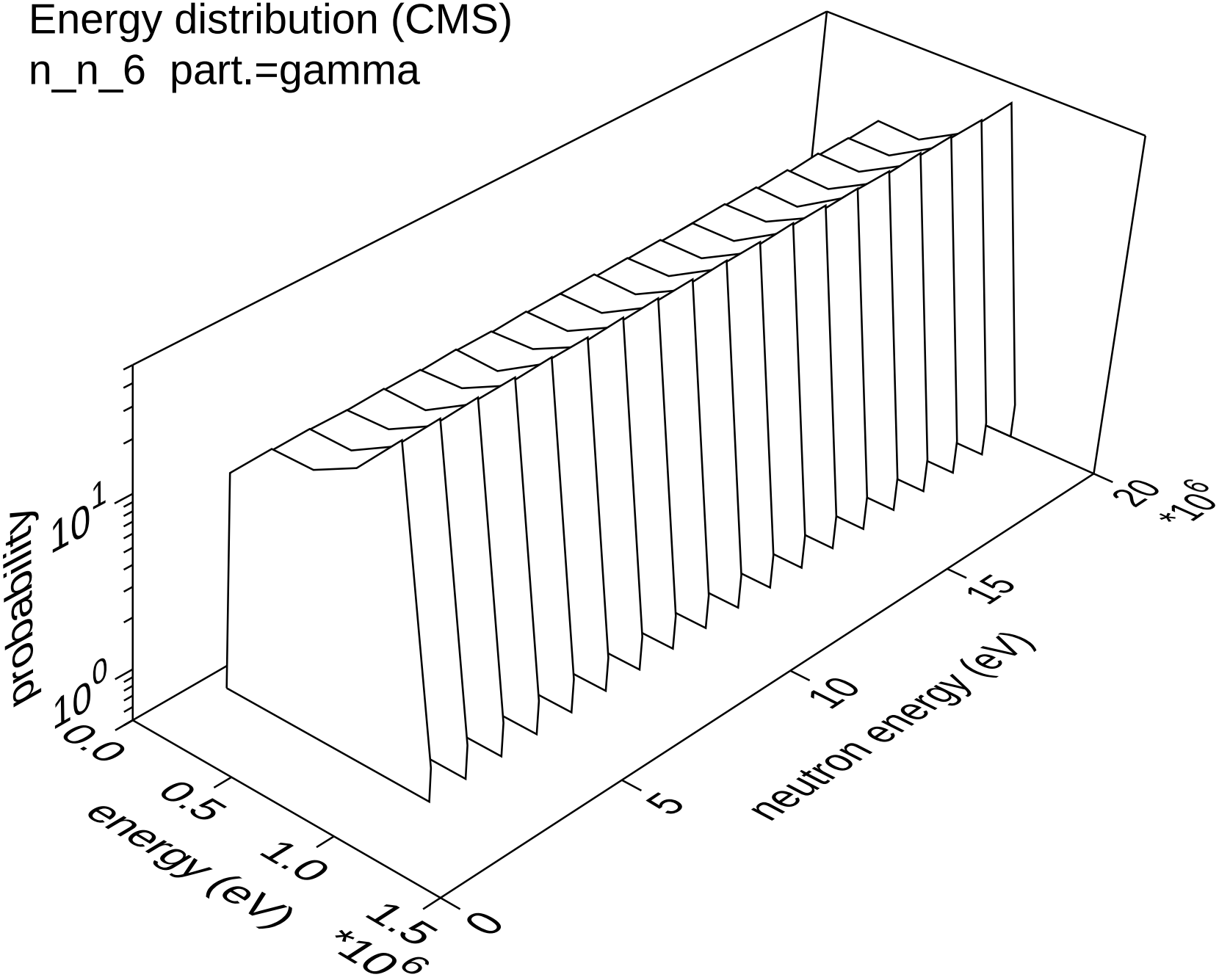

Energy distribution (CMS)
n_n_4 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

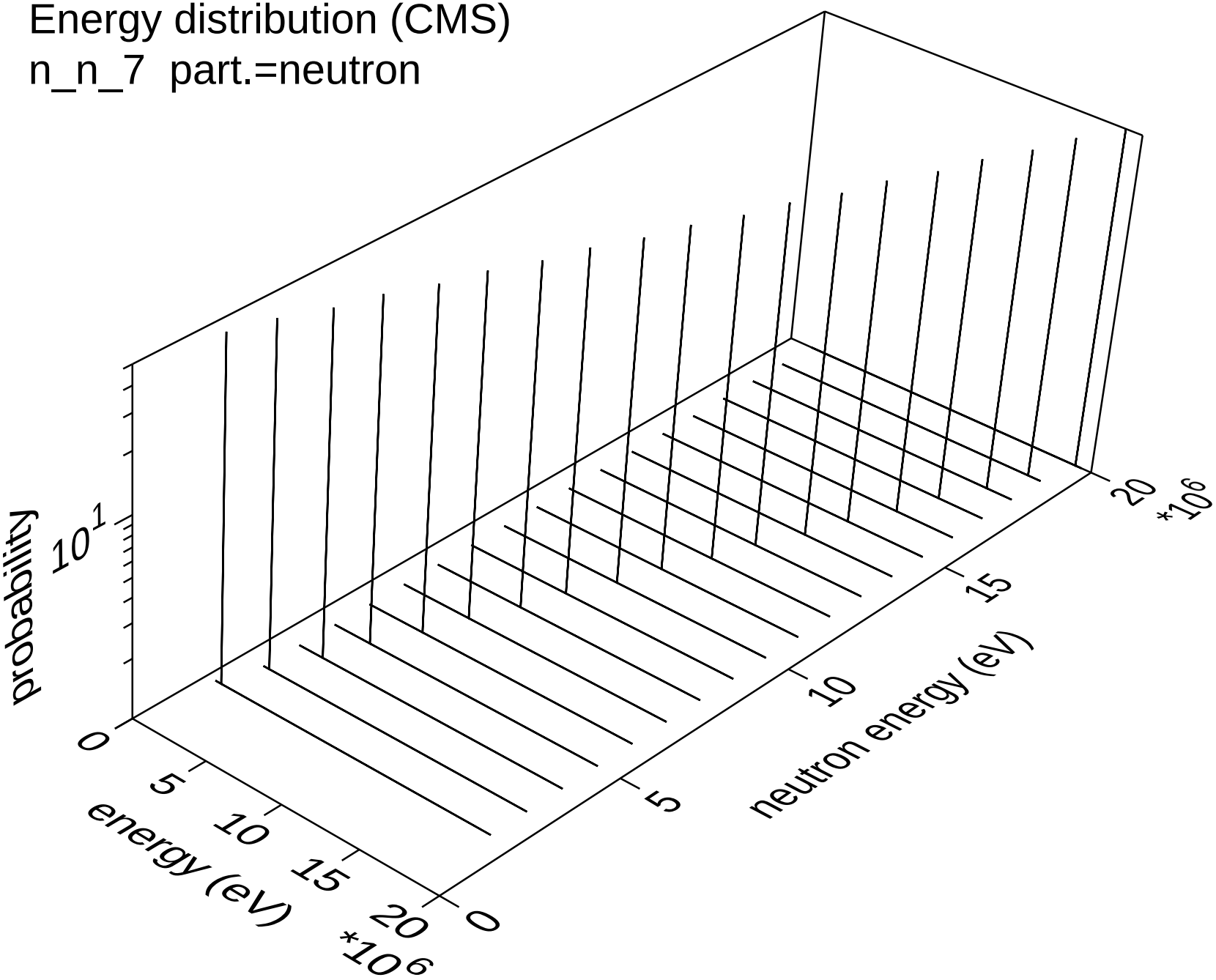

Energy distribution (CMS)
n_n_4 part.=gamma
probability
10^2
10^1
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

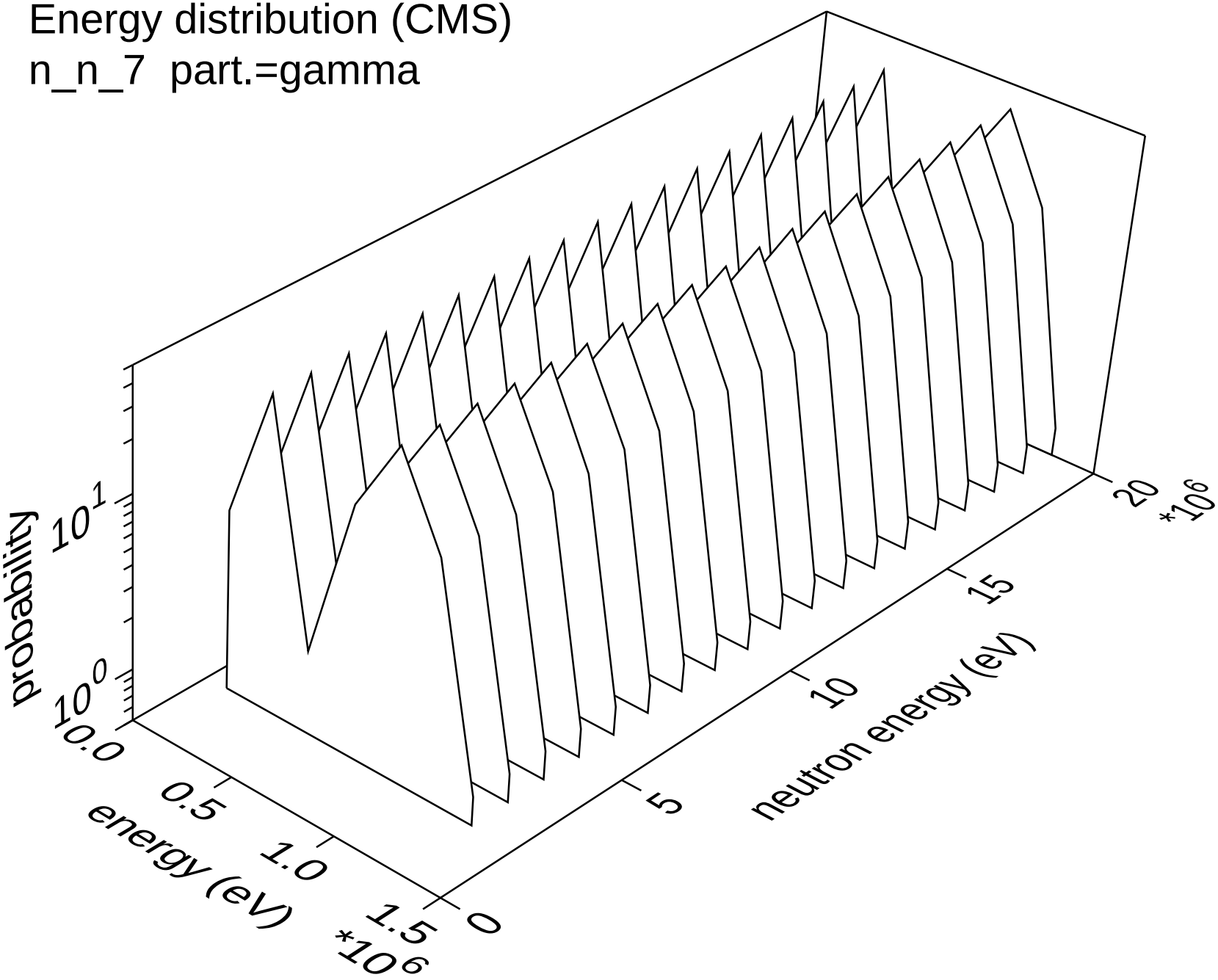

Energy distribution (CMS)
n_n_5 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

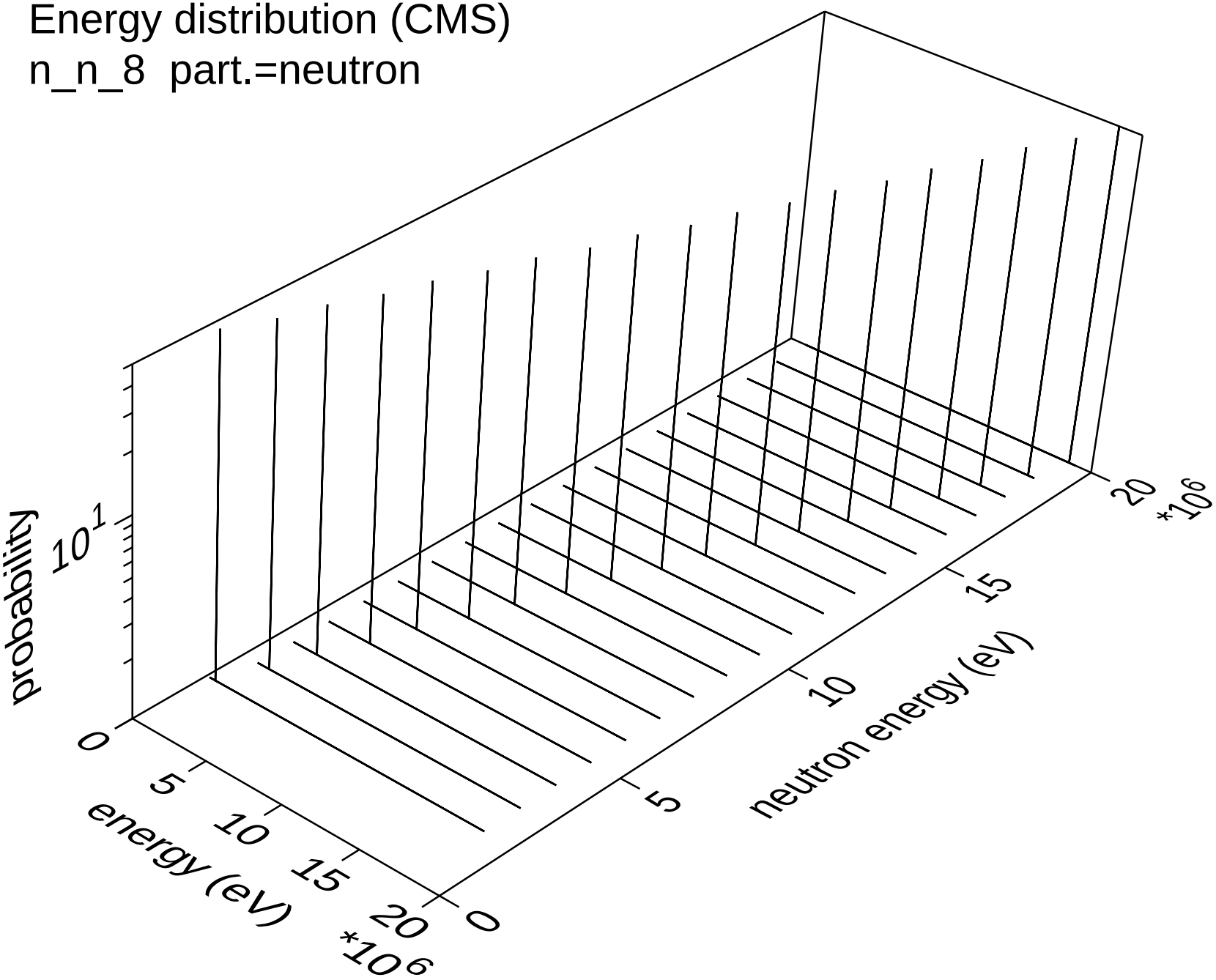

Energy distribution (CMS)
n_n_5 part.=gamma
probability
10^2
10^1
0
200
400
600
800
1000
energy (eV) *10^3
0
5
10
15
20
neutron energy (eV) *10^6

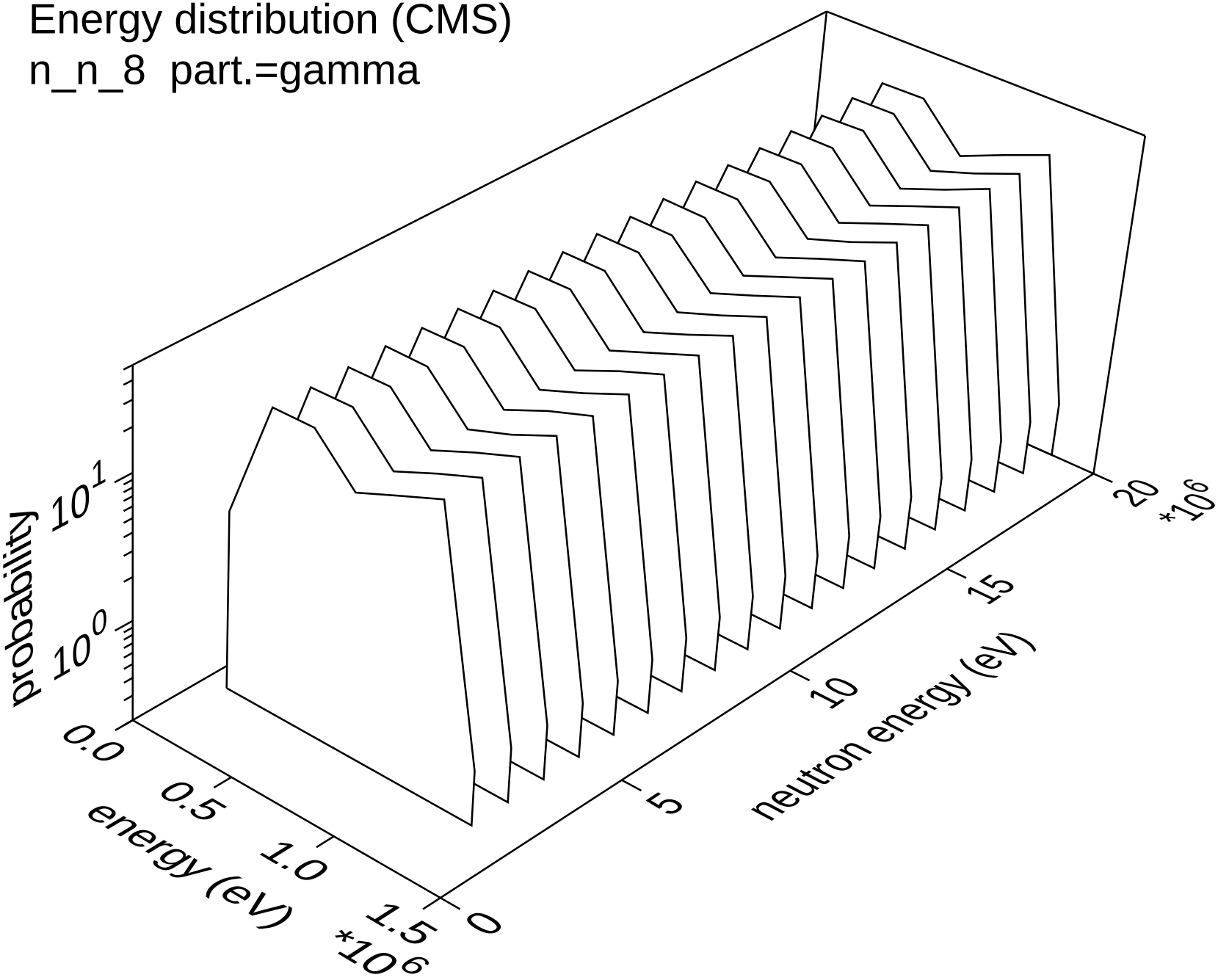

Energy distribution (CMS)
n_n_6 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

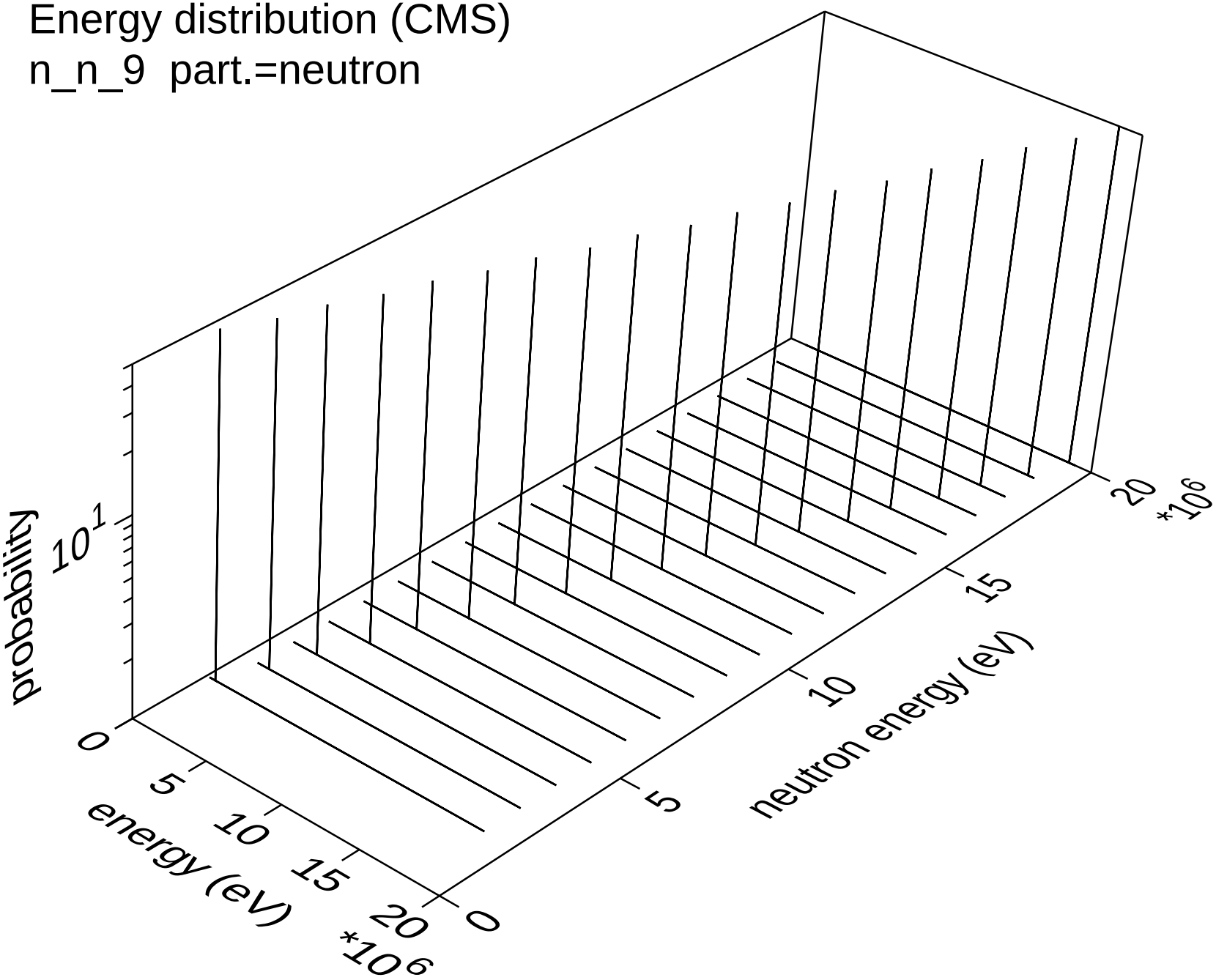

Energy distribution (CMS)
n_n_6 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

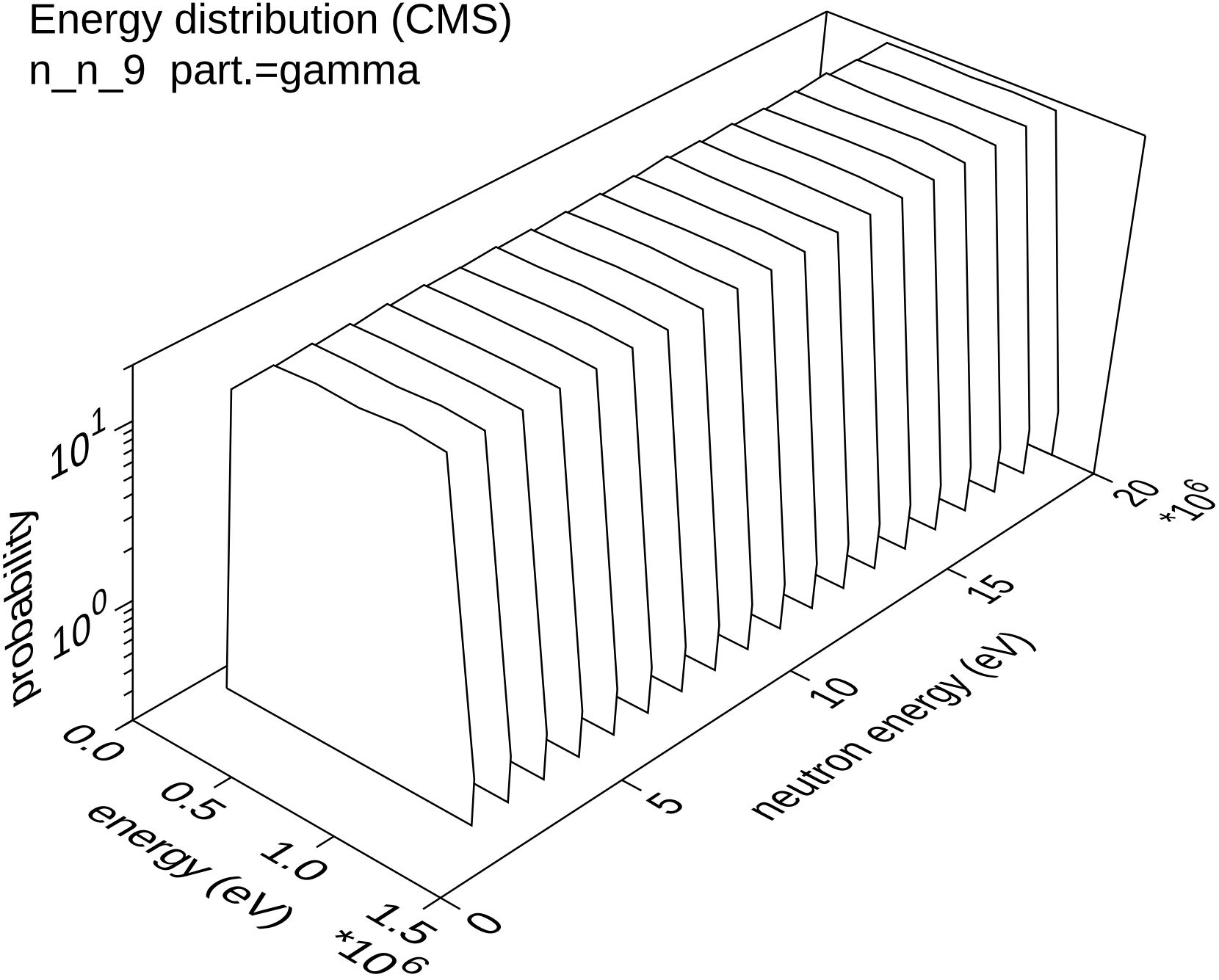

Energy distribution (CMS)
n_n_7 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

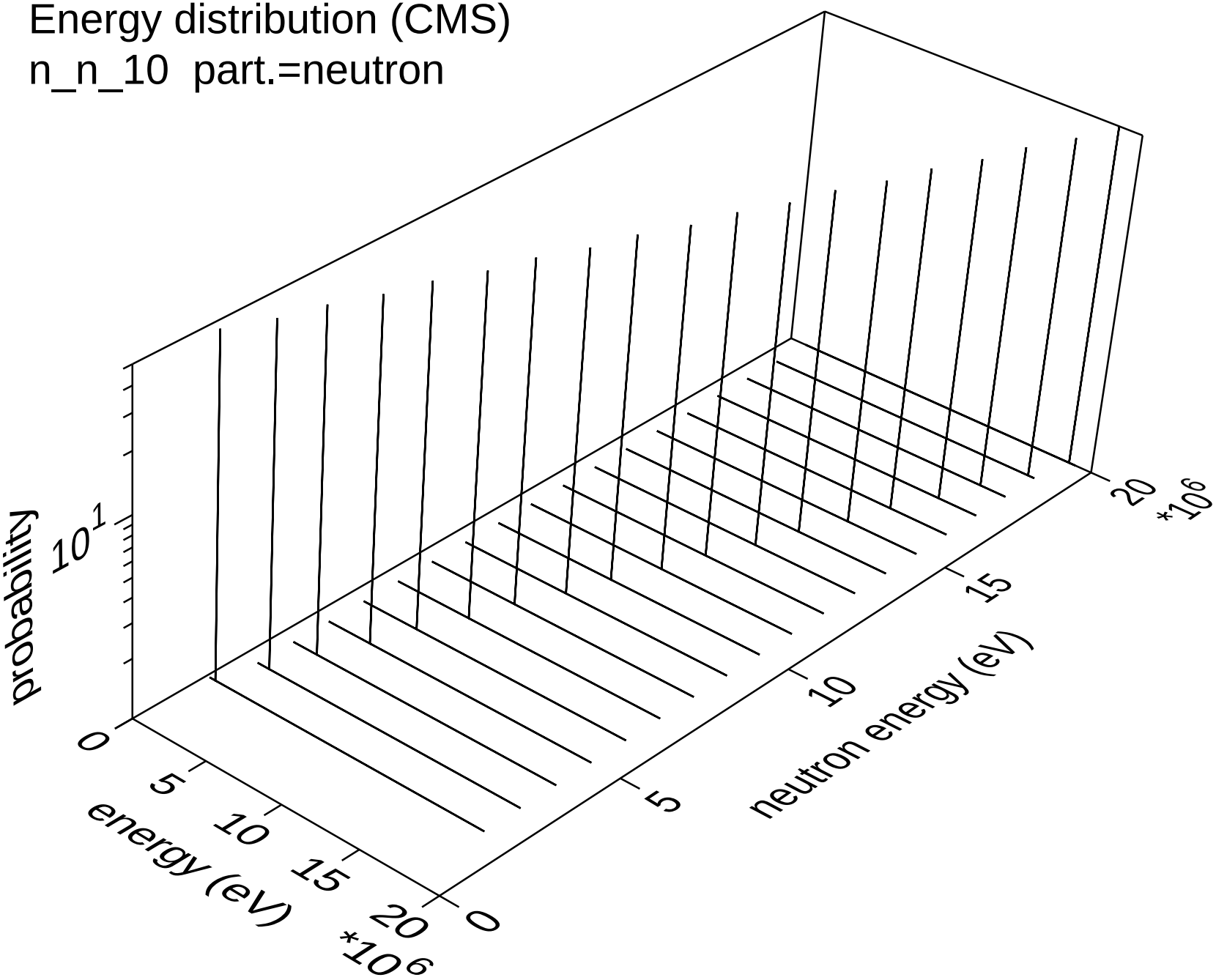

Energy distribution (CMS)
n_n_7 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

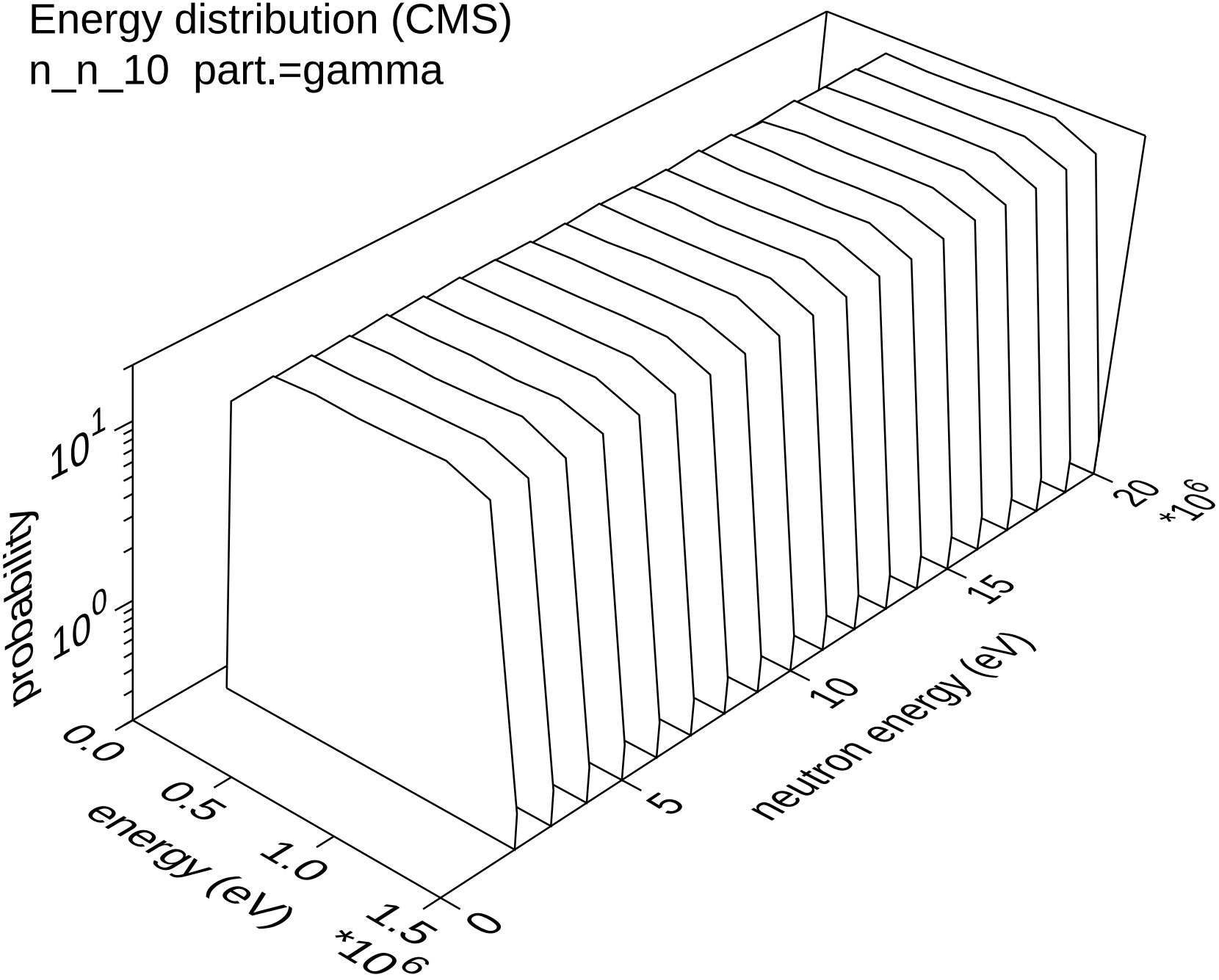

Energy distribution (CMS)
n_n_8 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

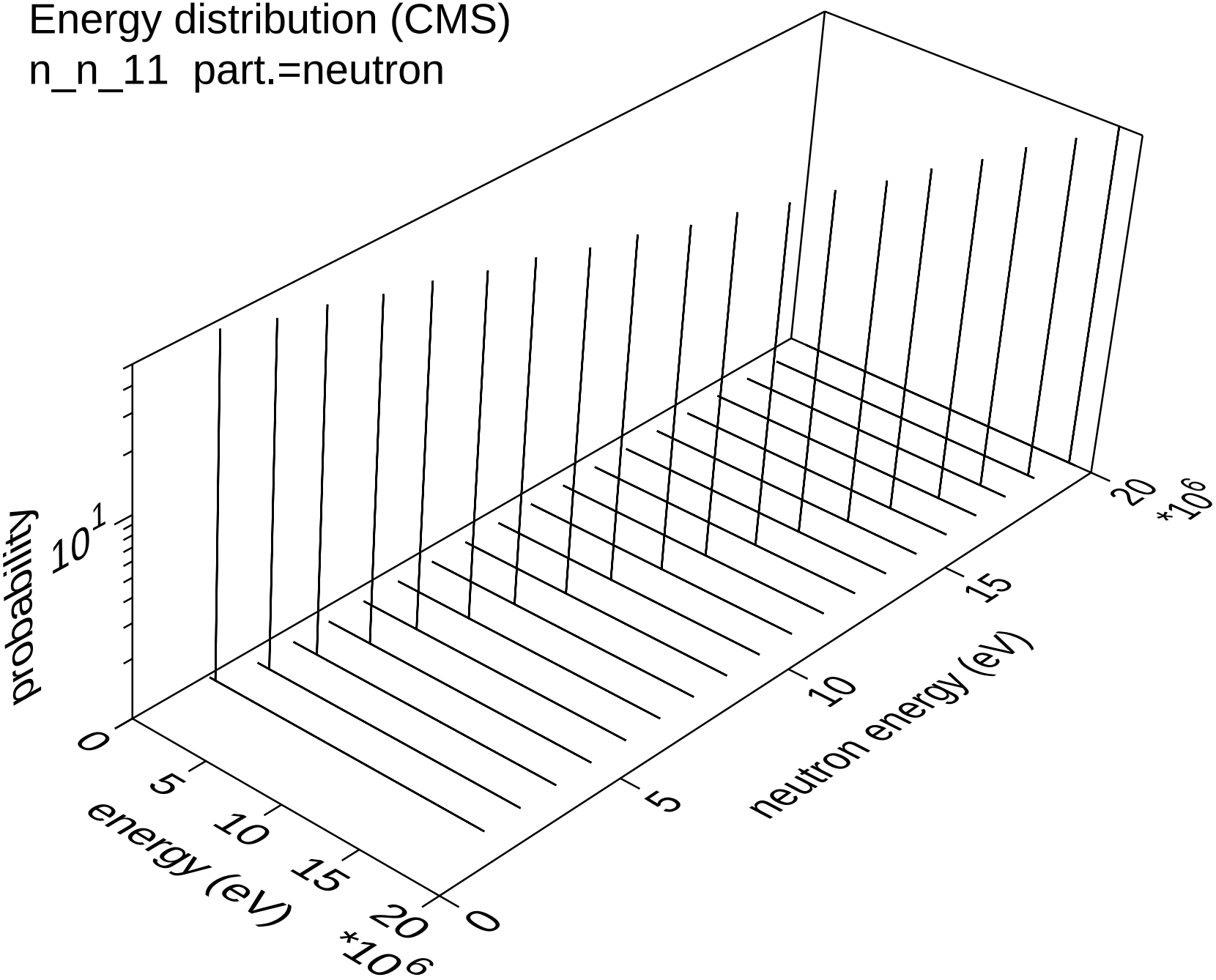

Energy distribution (CMS)
n_n_8 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

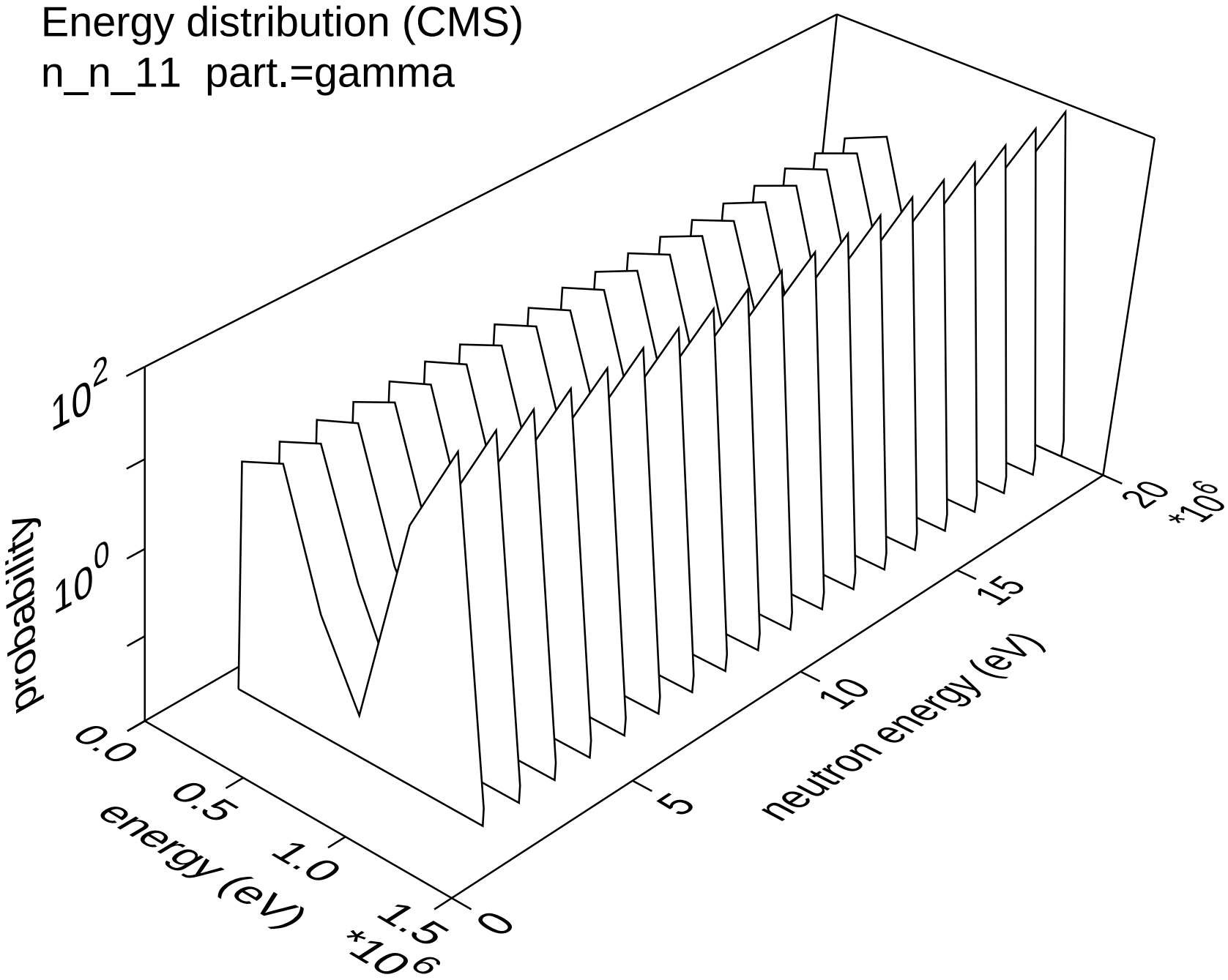

Energy distribution (CMS)
n_n_9 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

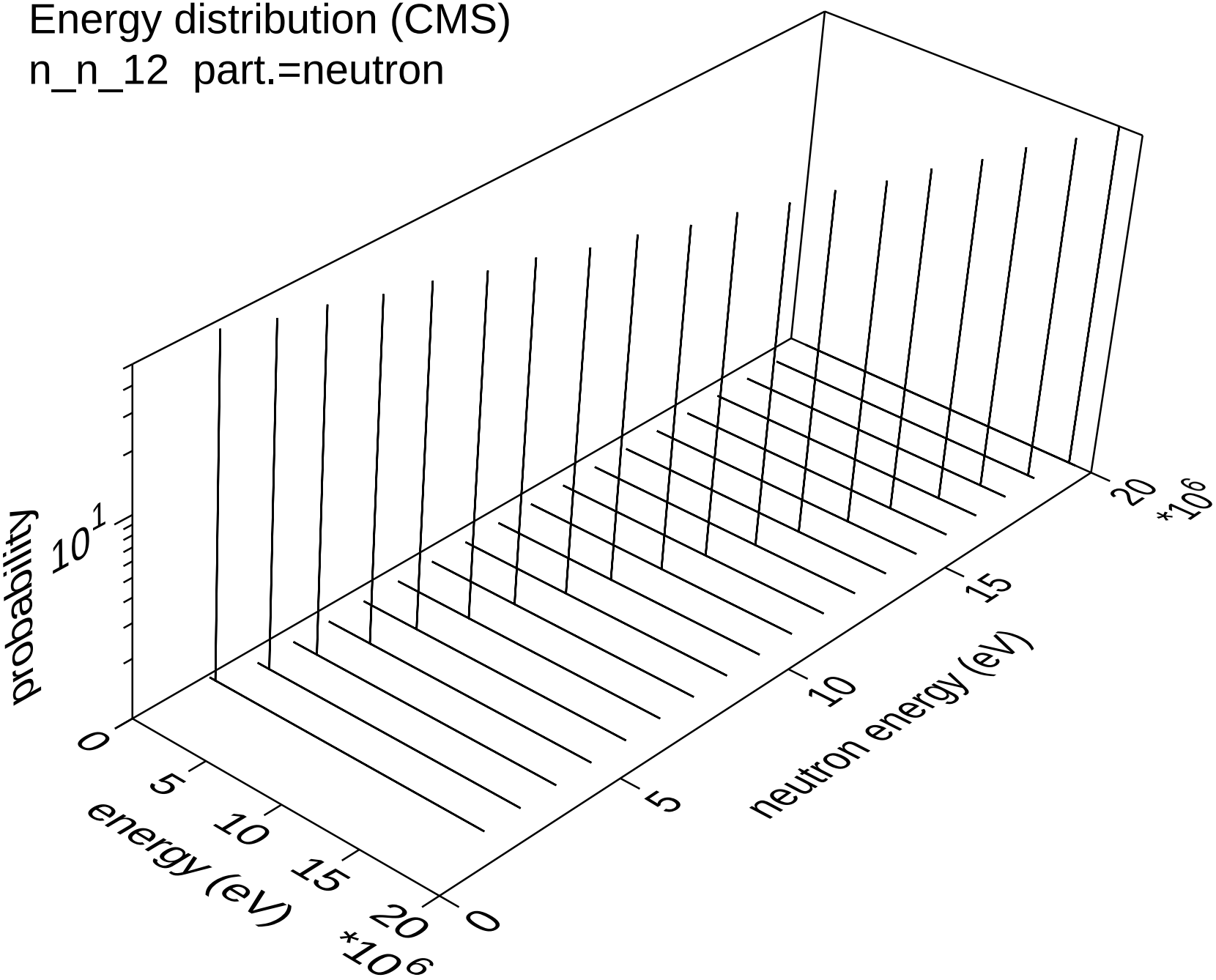

Energy distribution (CMS)
n_n_9 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

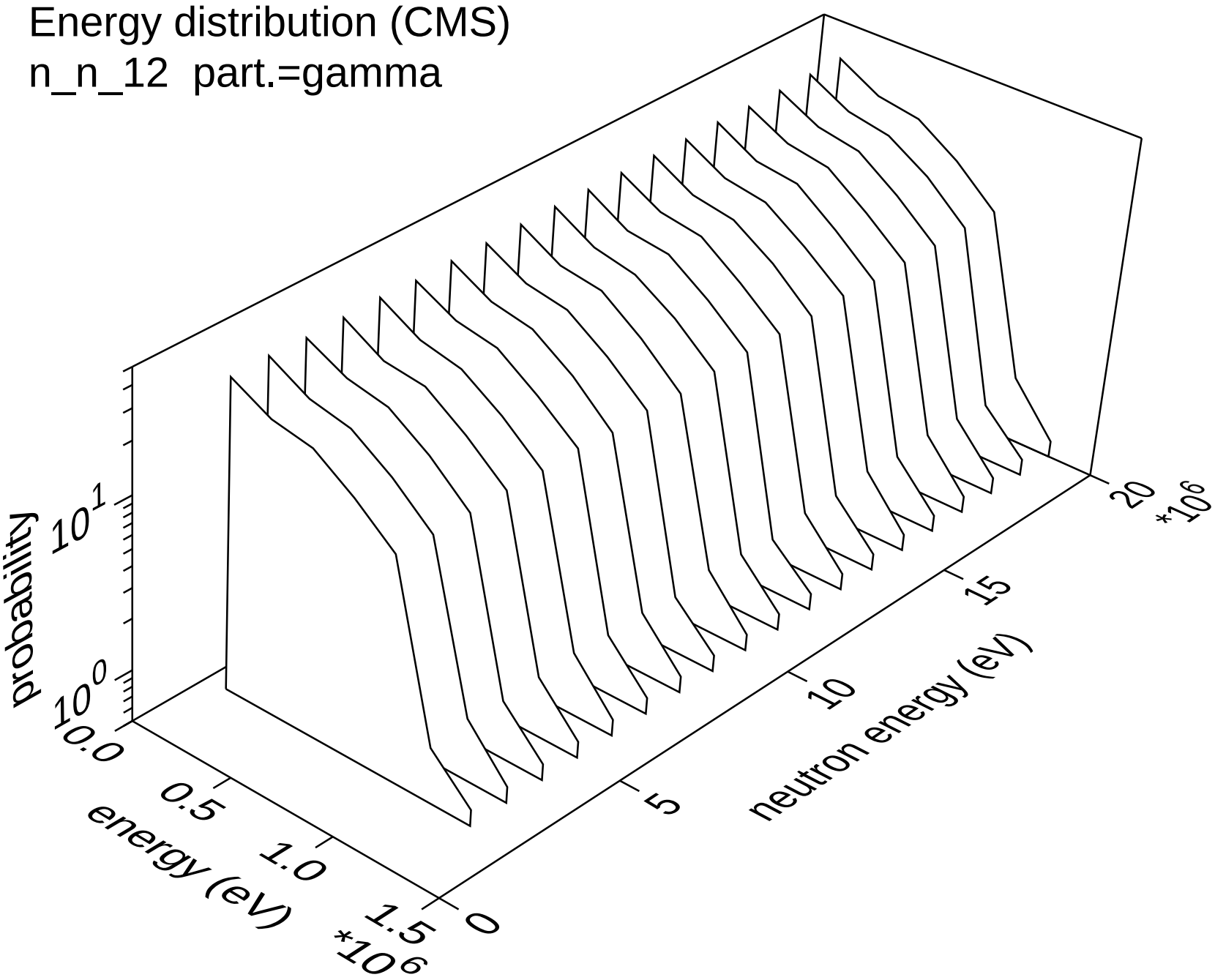

Energy distribution (CMS)
n_n_10 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

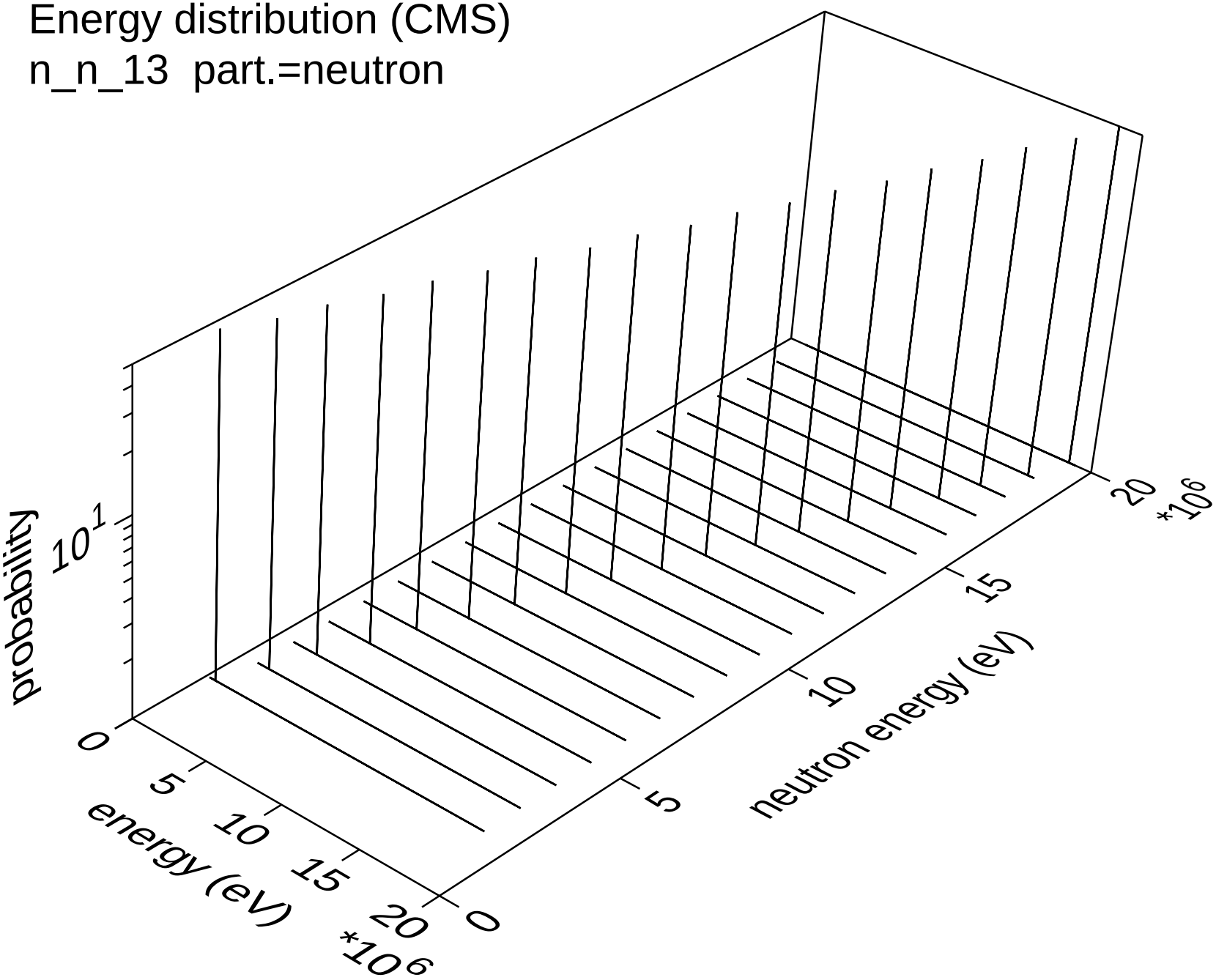

Energy distribution (CMS)
n_n_10 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

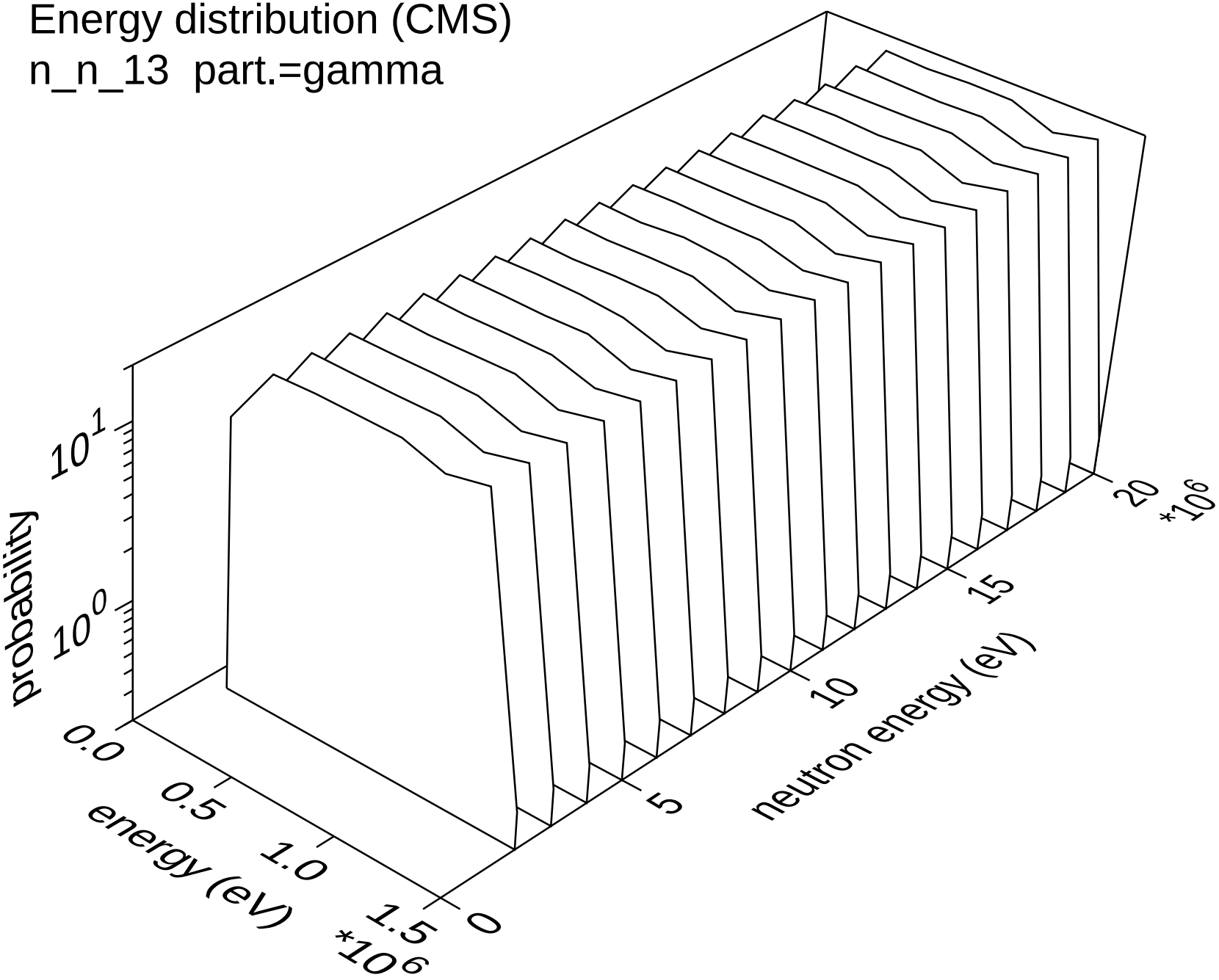

Energy distribution (CMS)
n_n_11 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

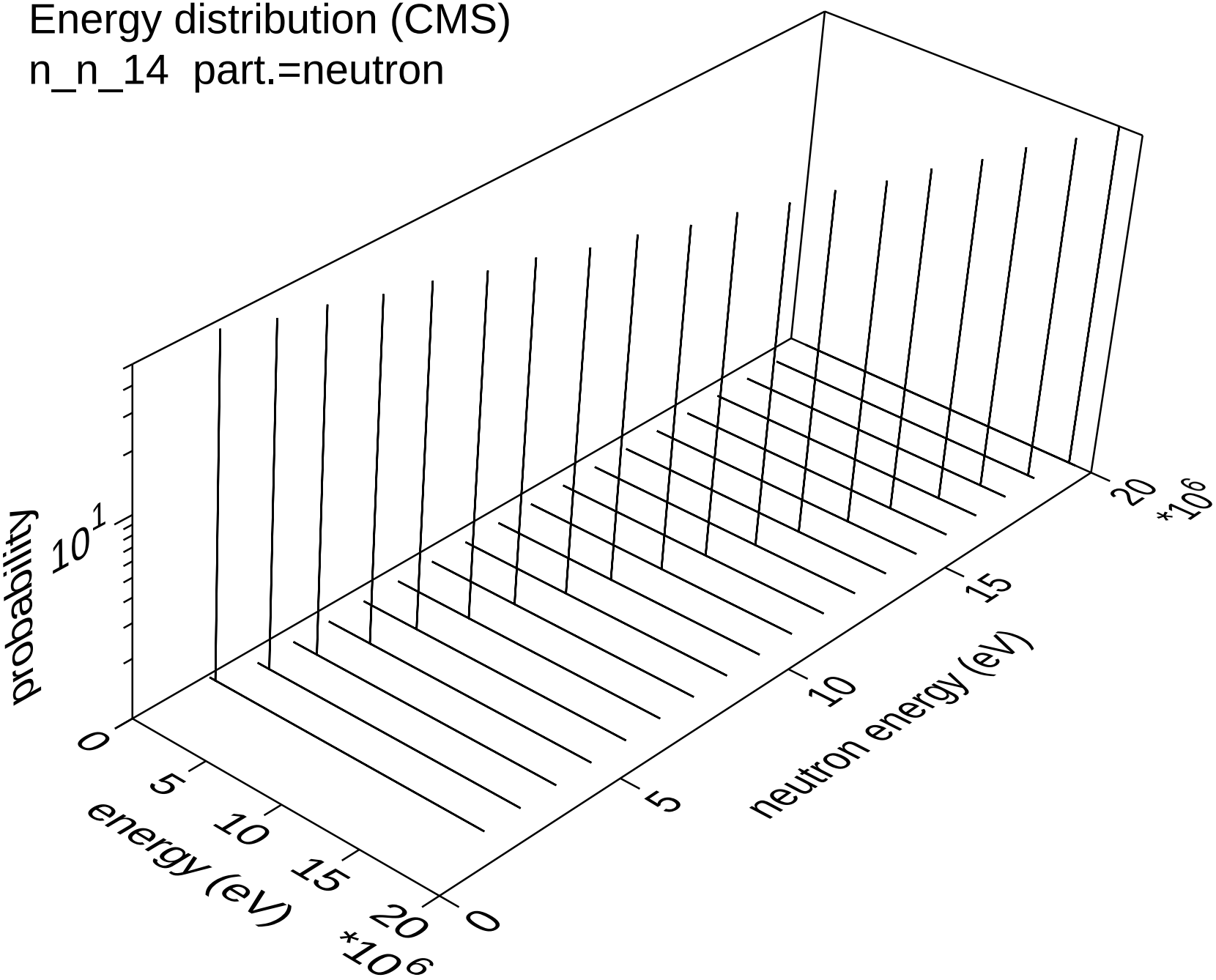

Energy distribution (CMS)
n_n_11 part.=gamma
probability
10^2
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

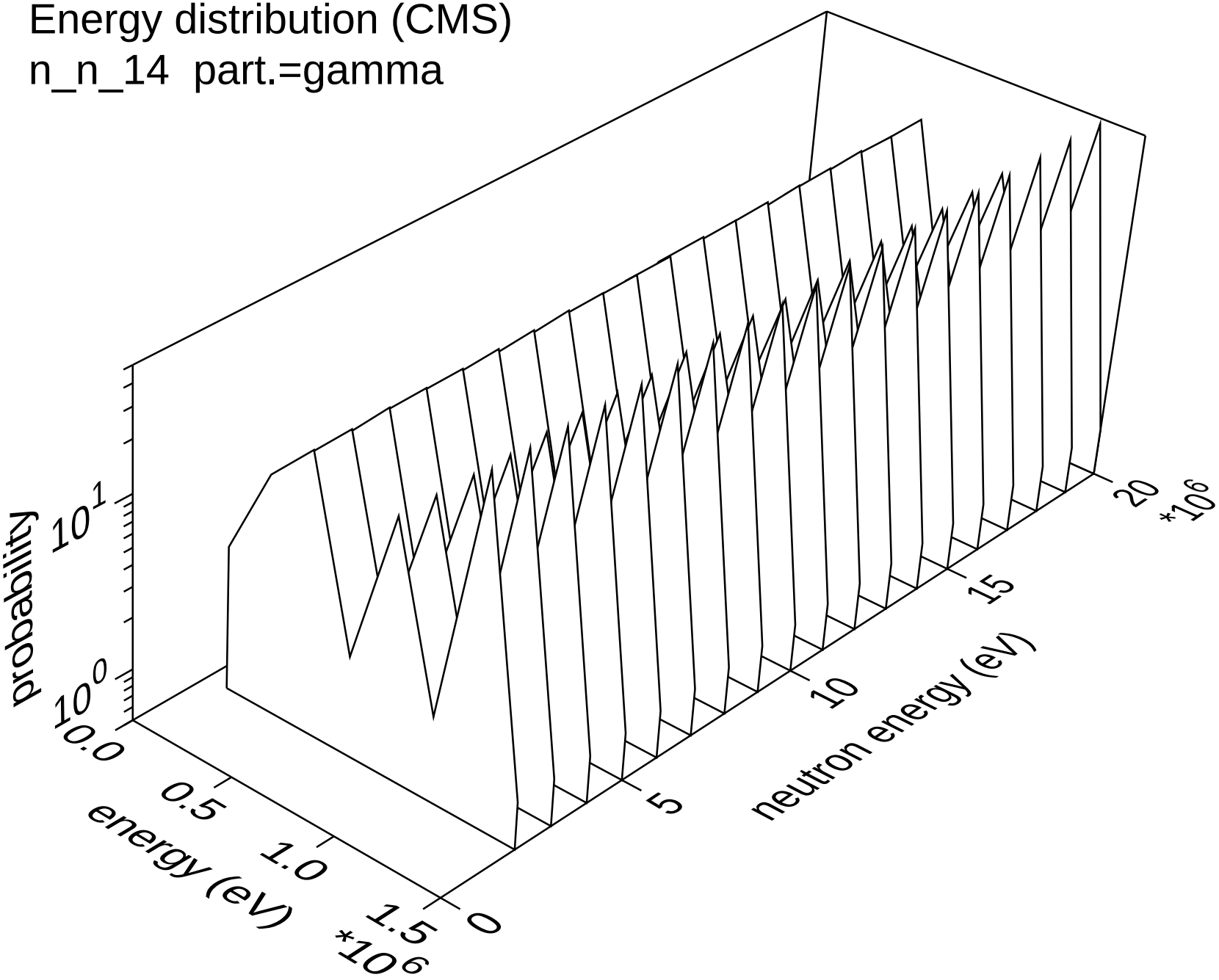

Energy distribution (CMS)
n_n_12 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

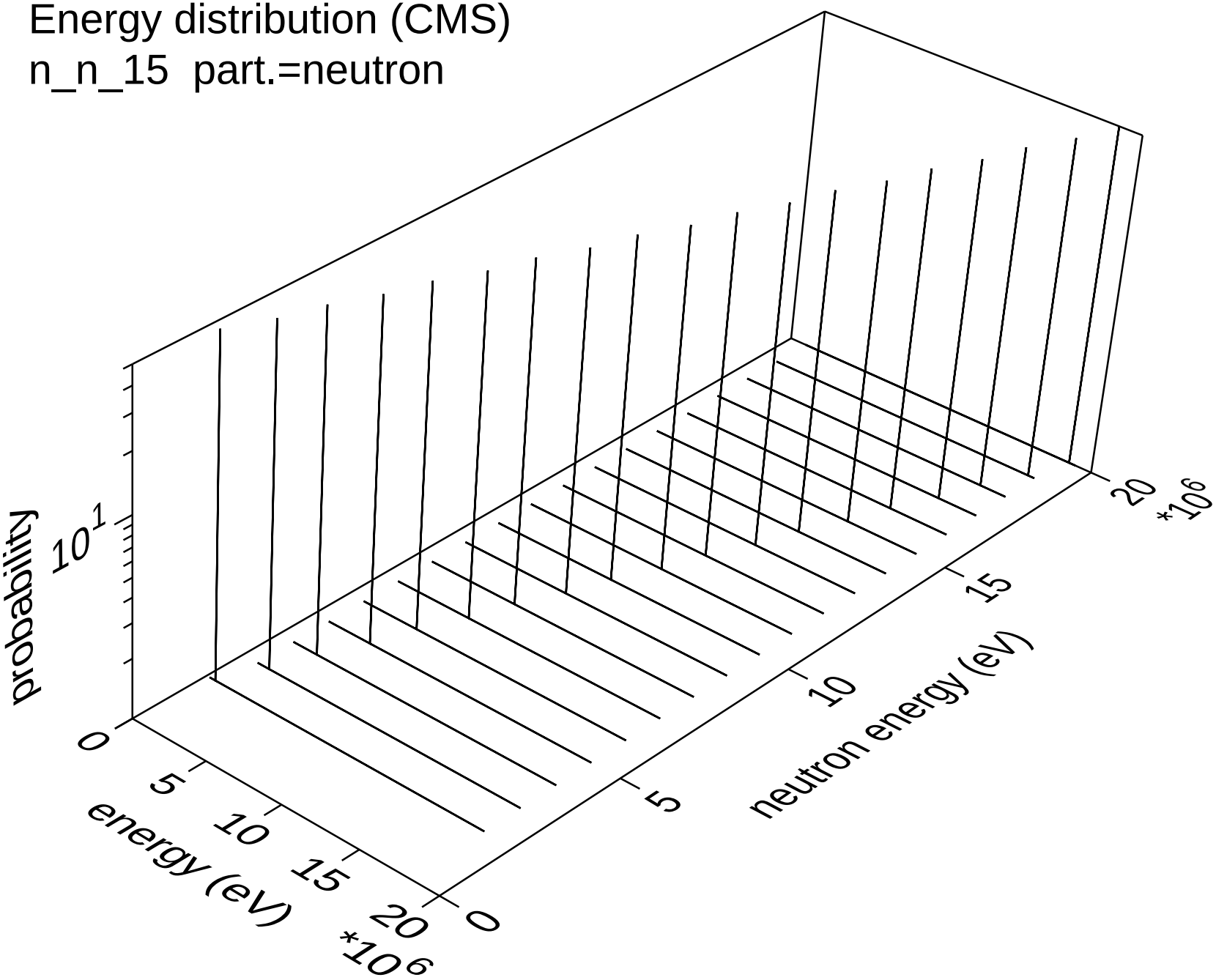

Energy distribution (CMS)
n_n_12 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10 6
energy (eV)
0
5
10
15
20
*10 6
neutron energy (eV)

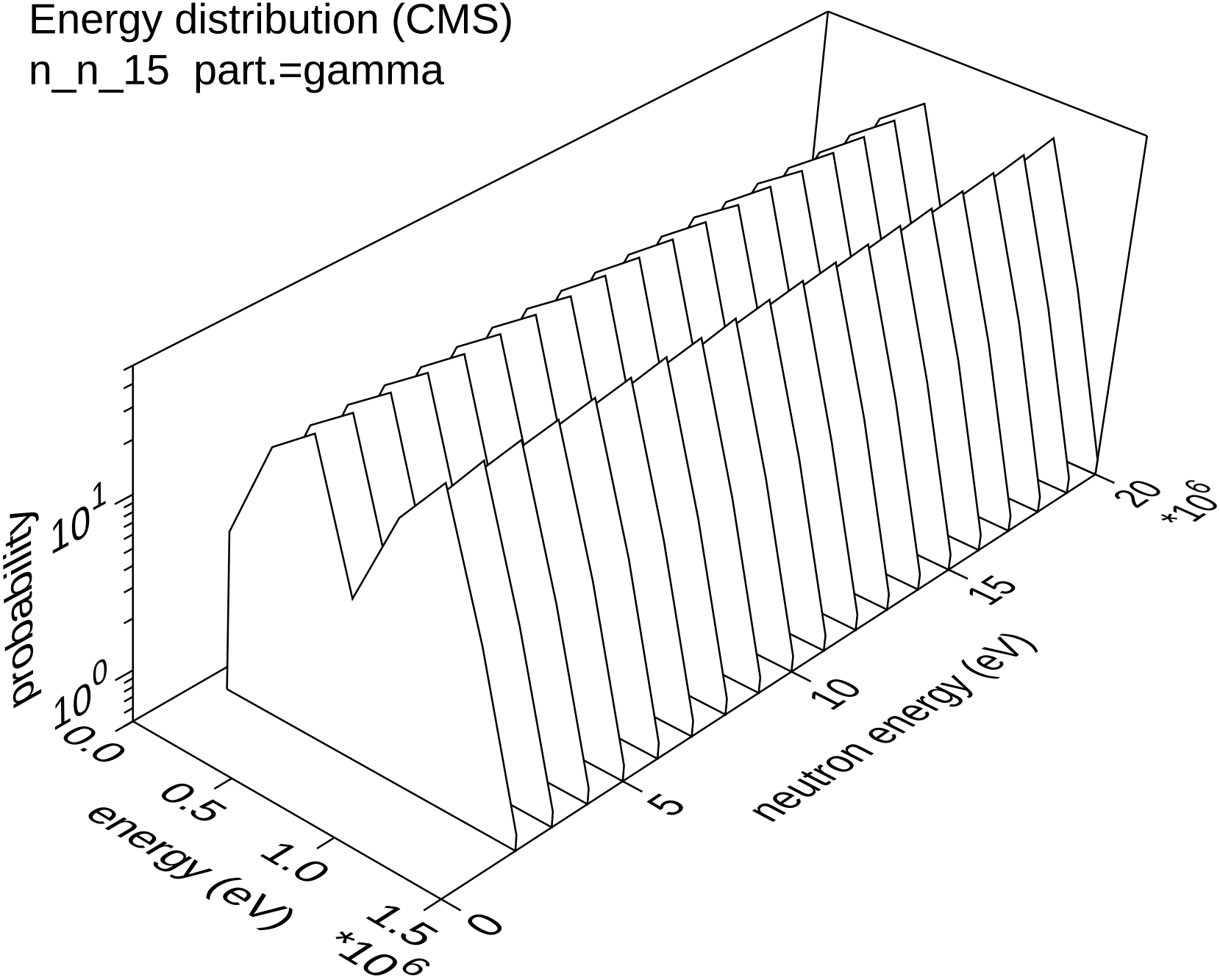

Energy distribution (CMS)
n_n_13 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

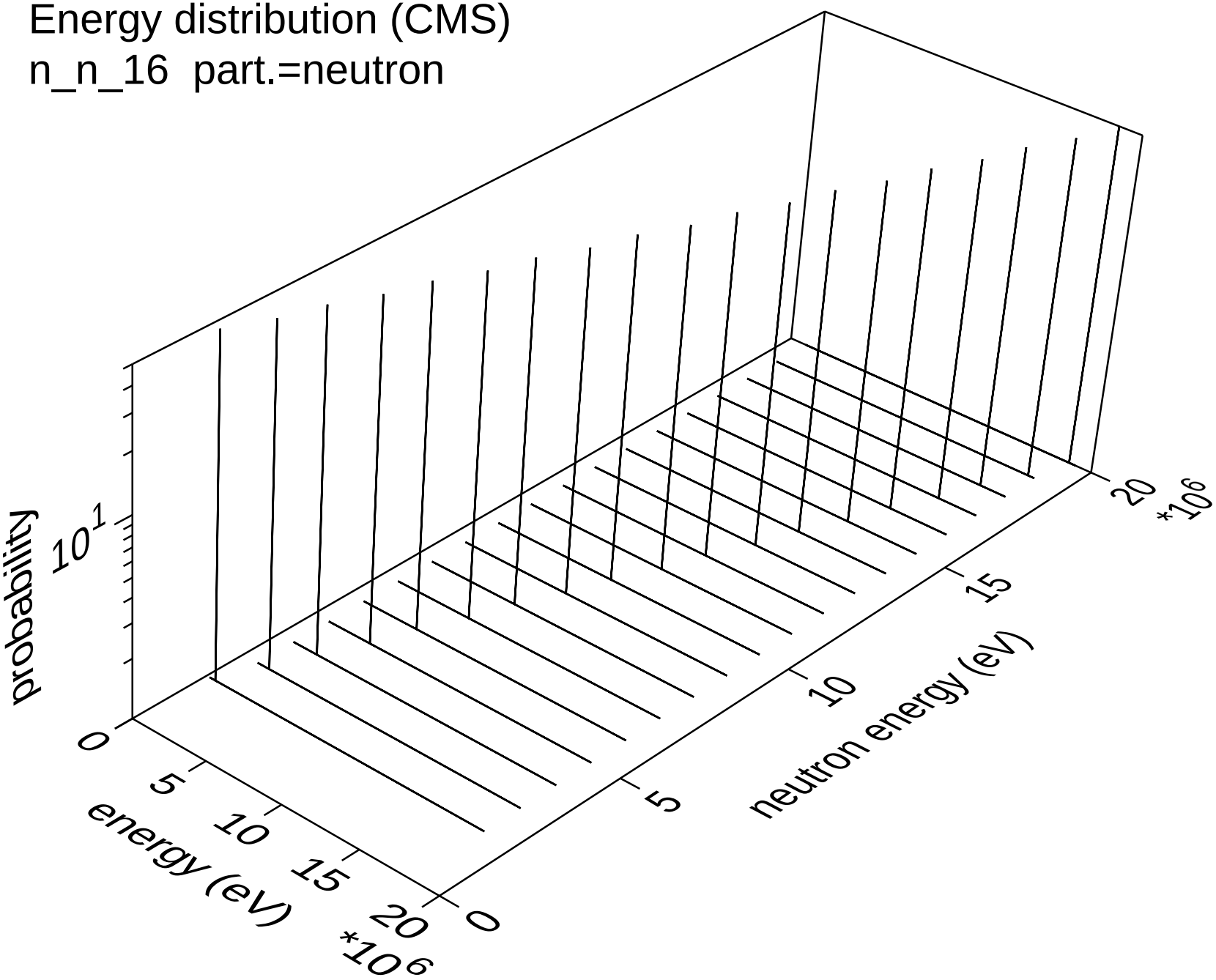

Energy distribution (CMS)
n_n_13 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

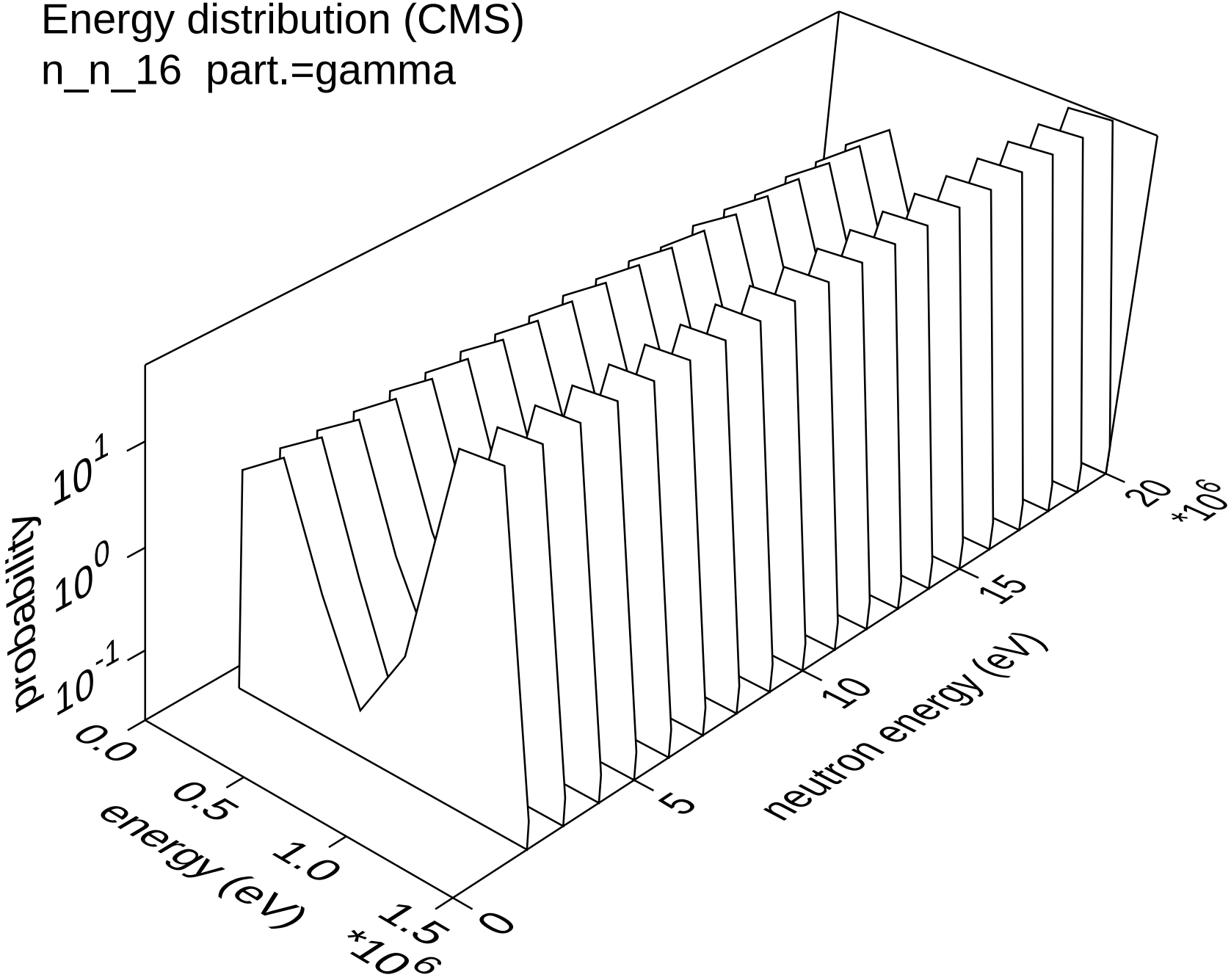

Energy distribution (CMS)
n_n_14 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

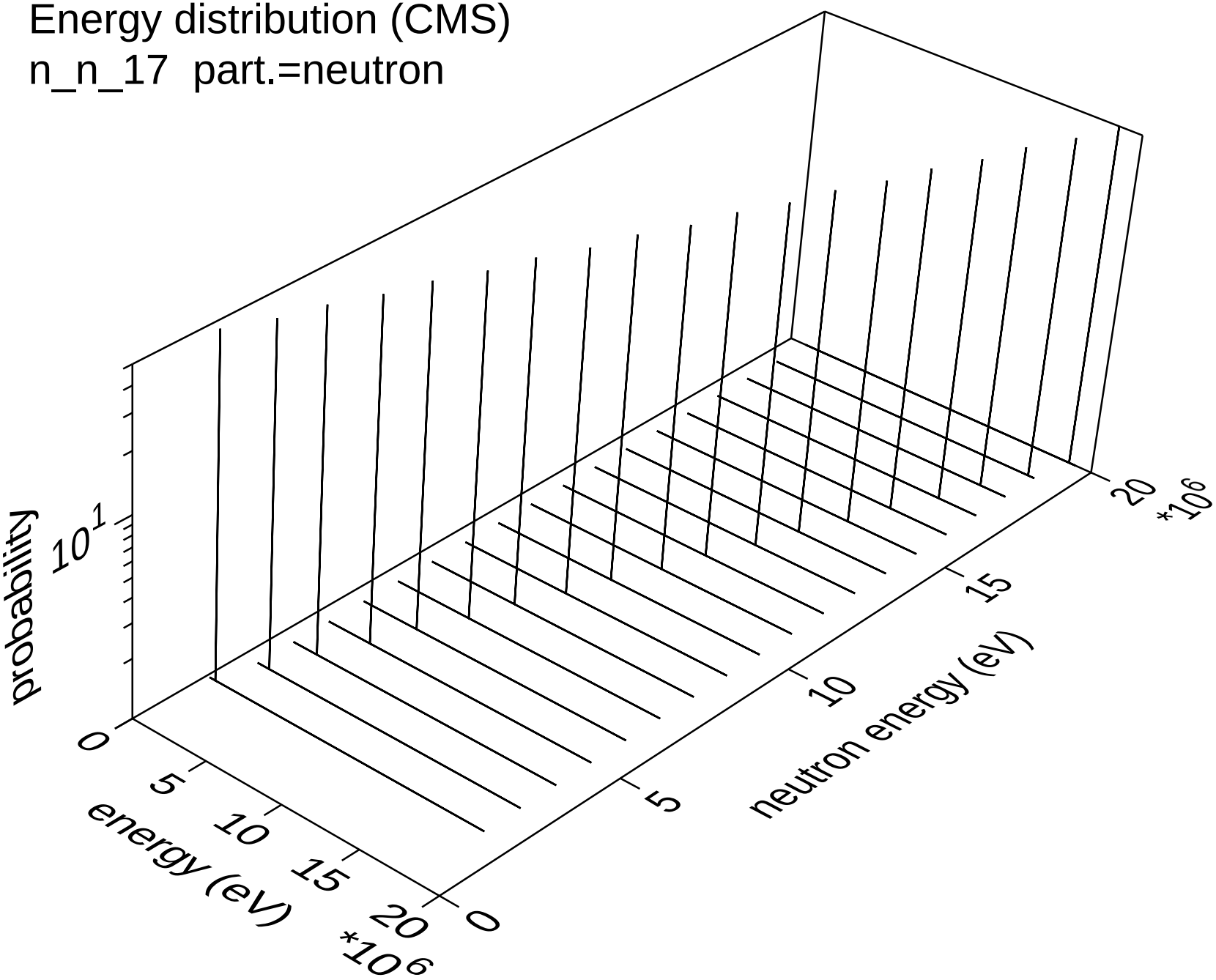

Energy distribution (CMS)
n_n_14 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
0
energy (eV)
*10^6
5
10
15
20
neutron energy (eV)
*10^6

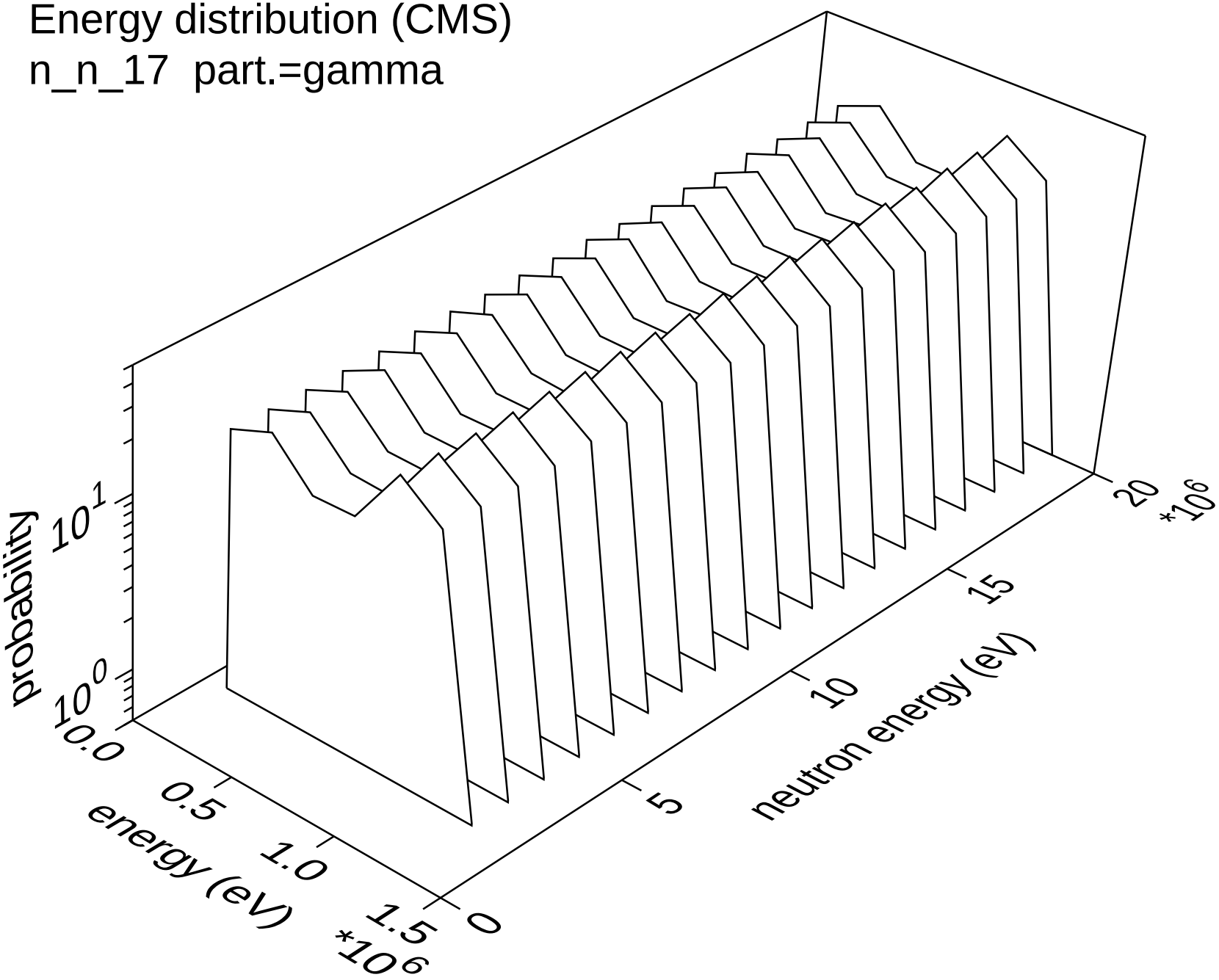

Energy distribution (CMS)
n_n_15 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

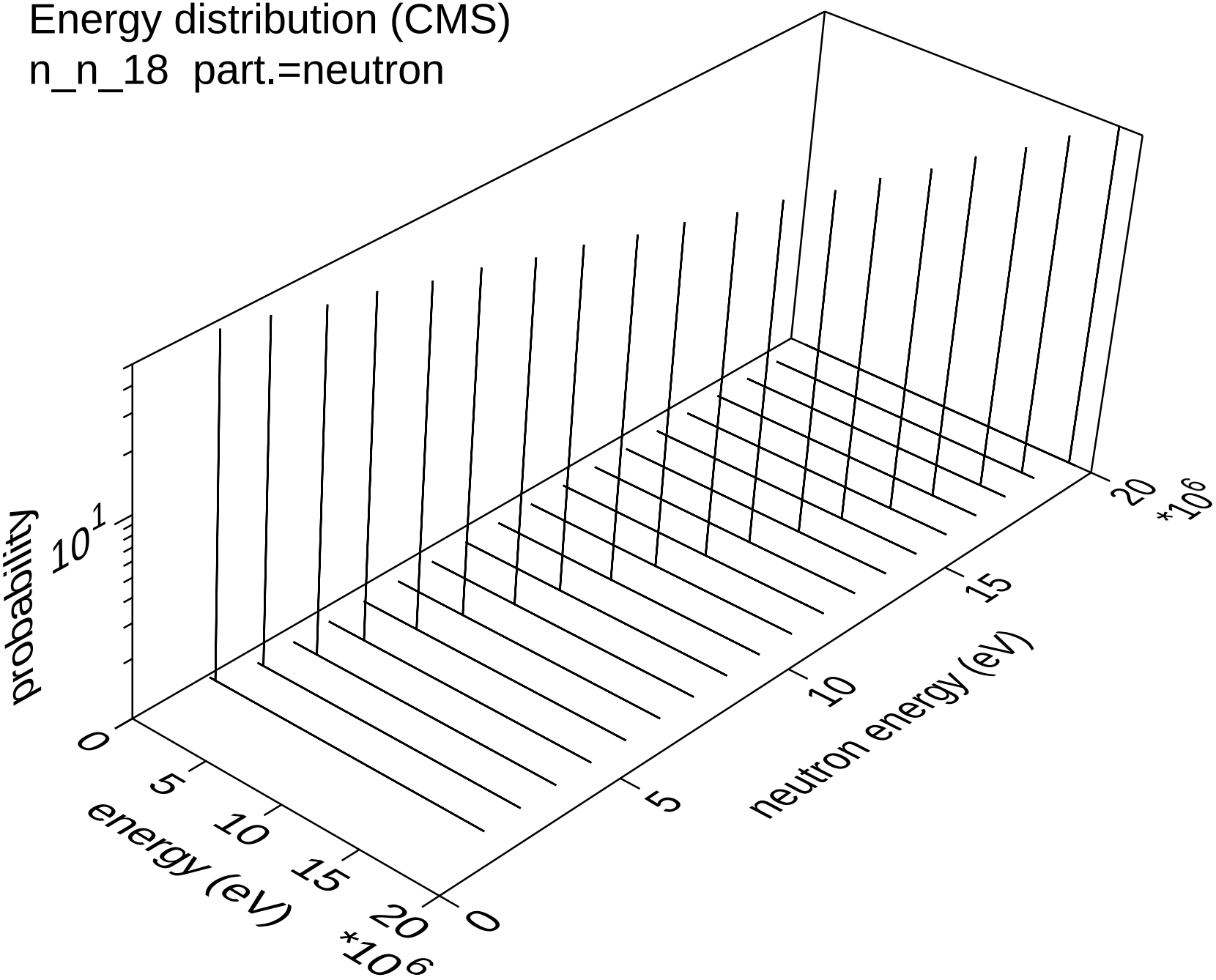

Energy distribution (CMS)
n_n_15 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

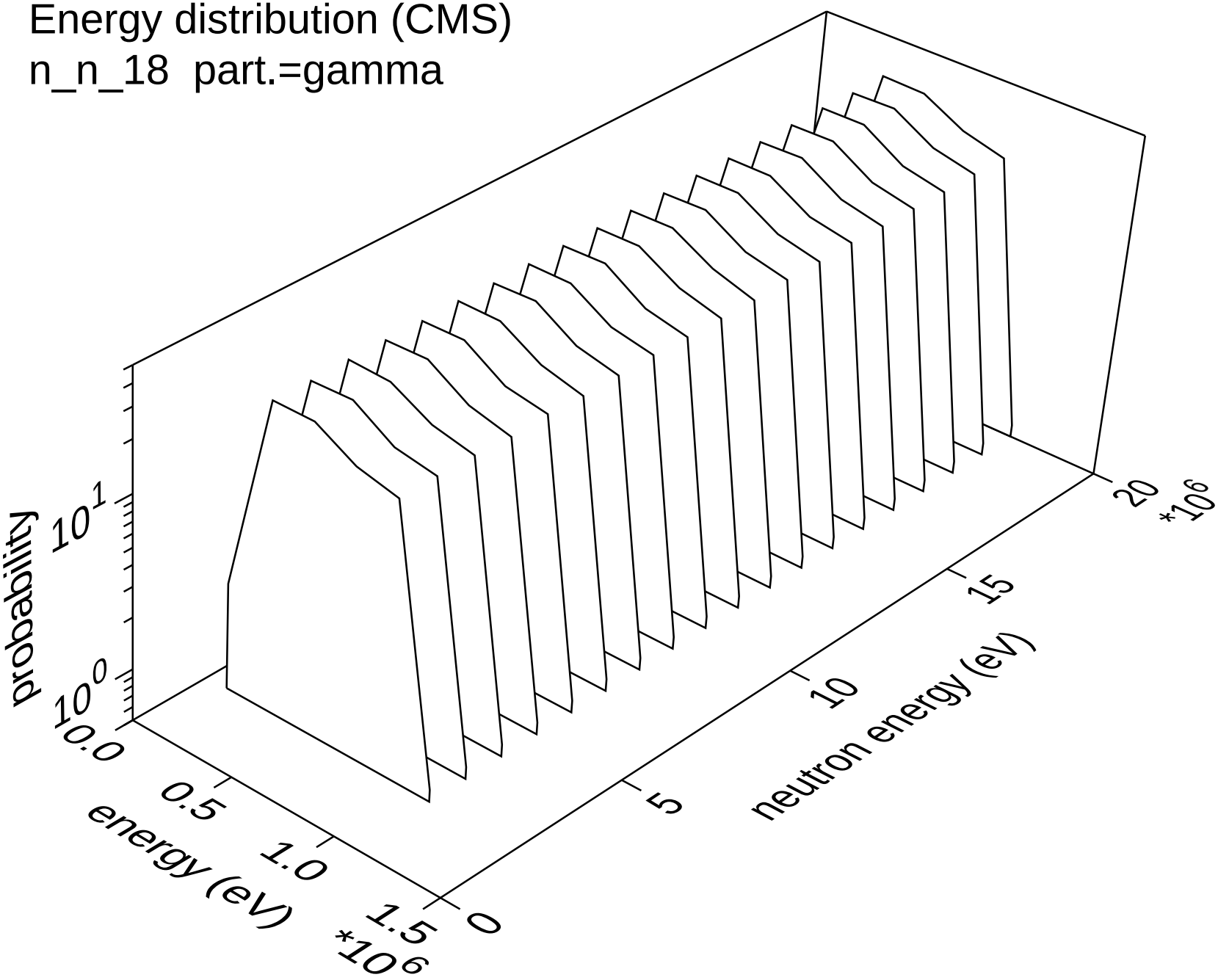

Energy distribution (CMS)
n_n_16 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

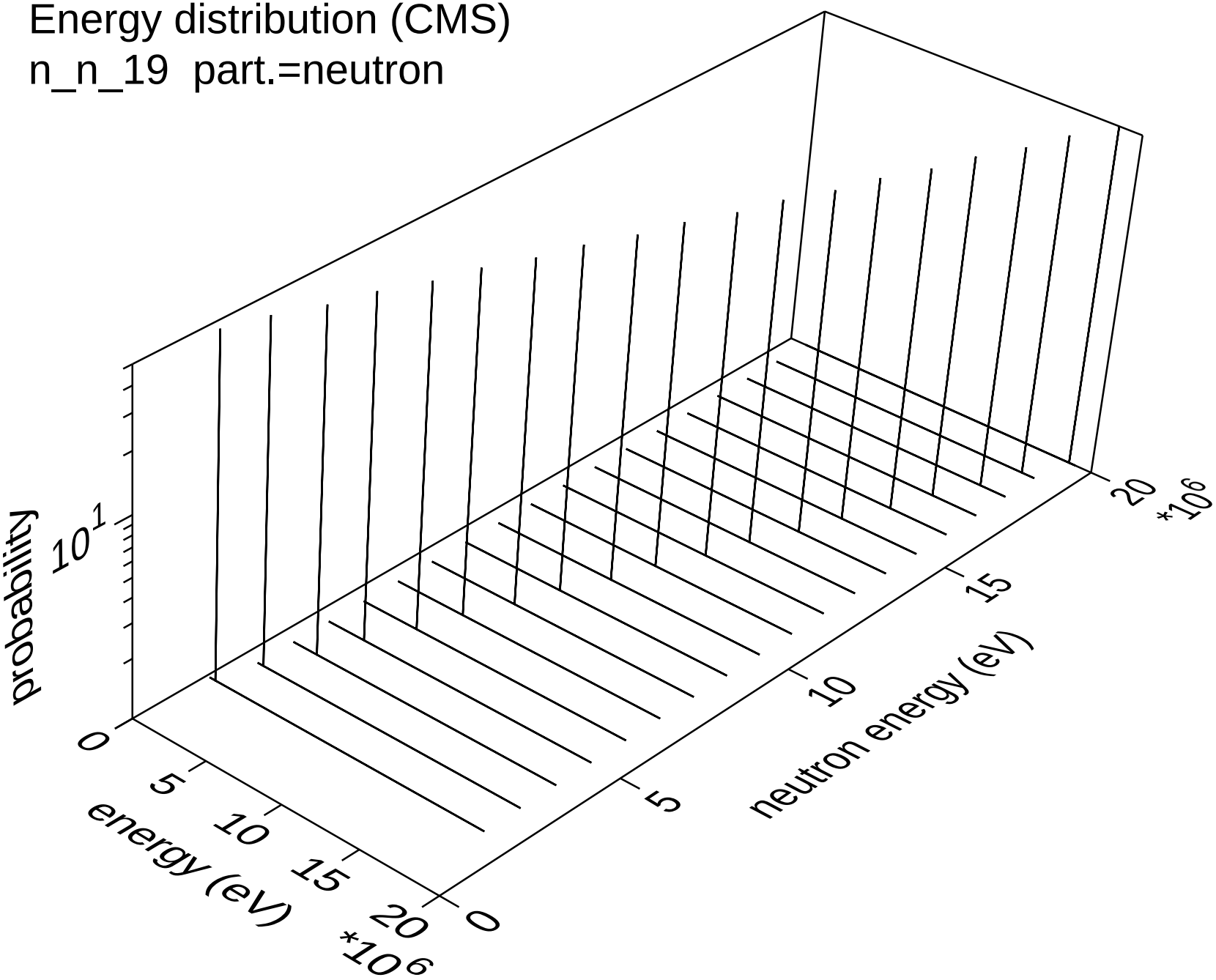

Energy distribution (CMS)
n_n_16 part.=gamma
probability
10^{1}
10^{0}
10^{-1}
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

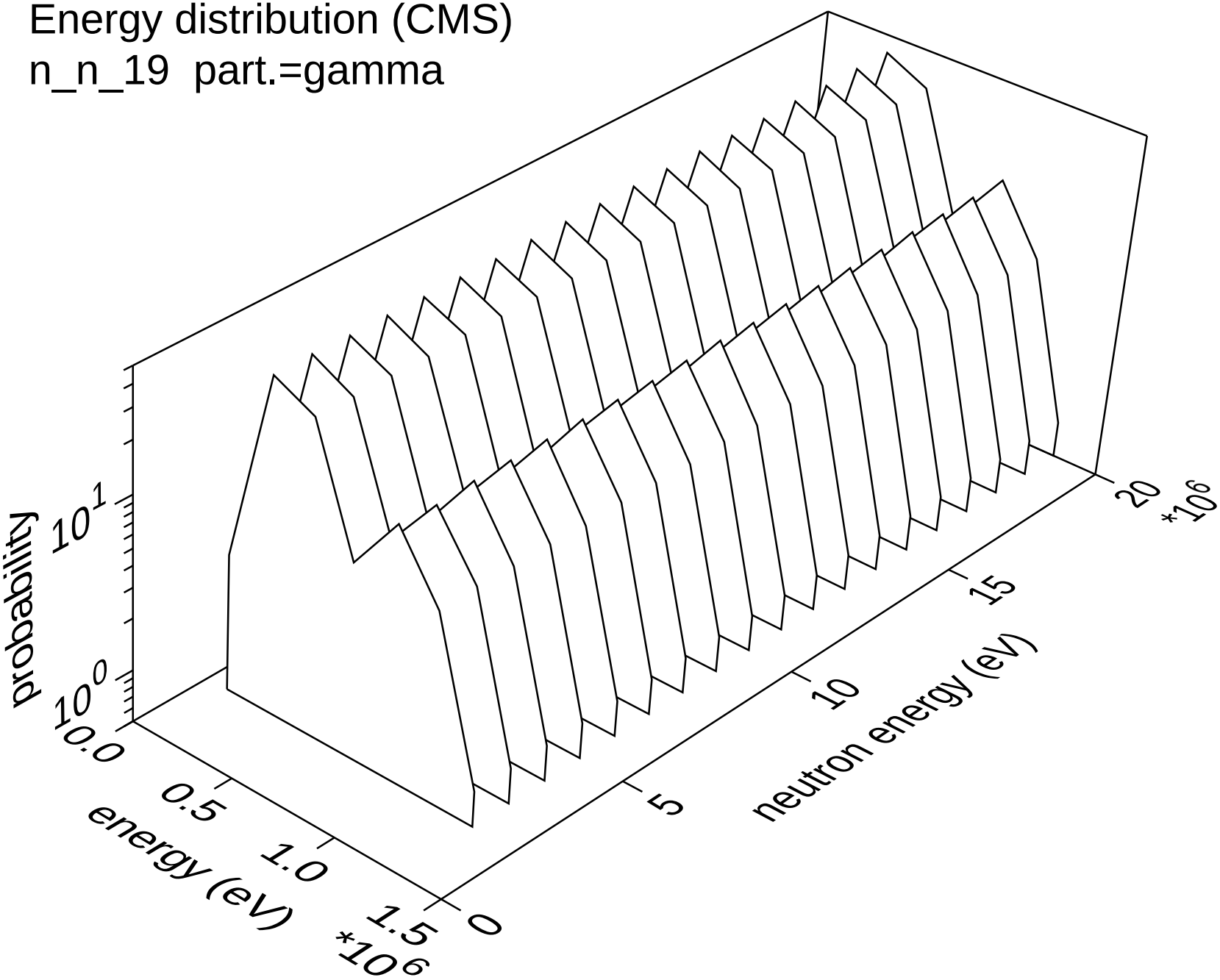

Energy distribution (CMS)
n_n_17 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

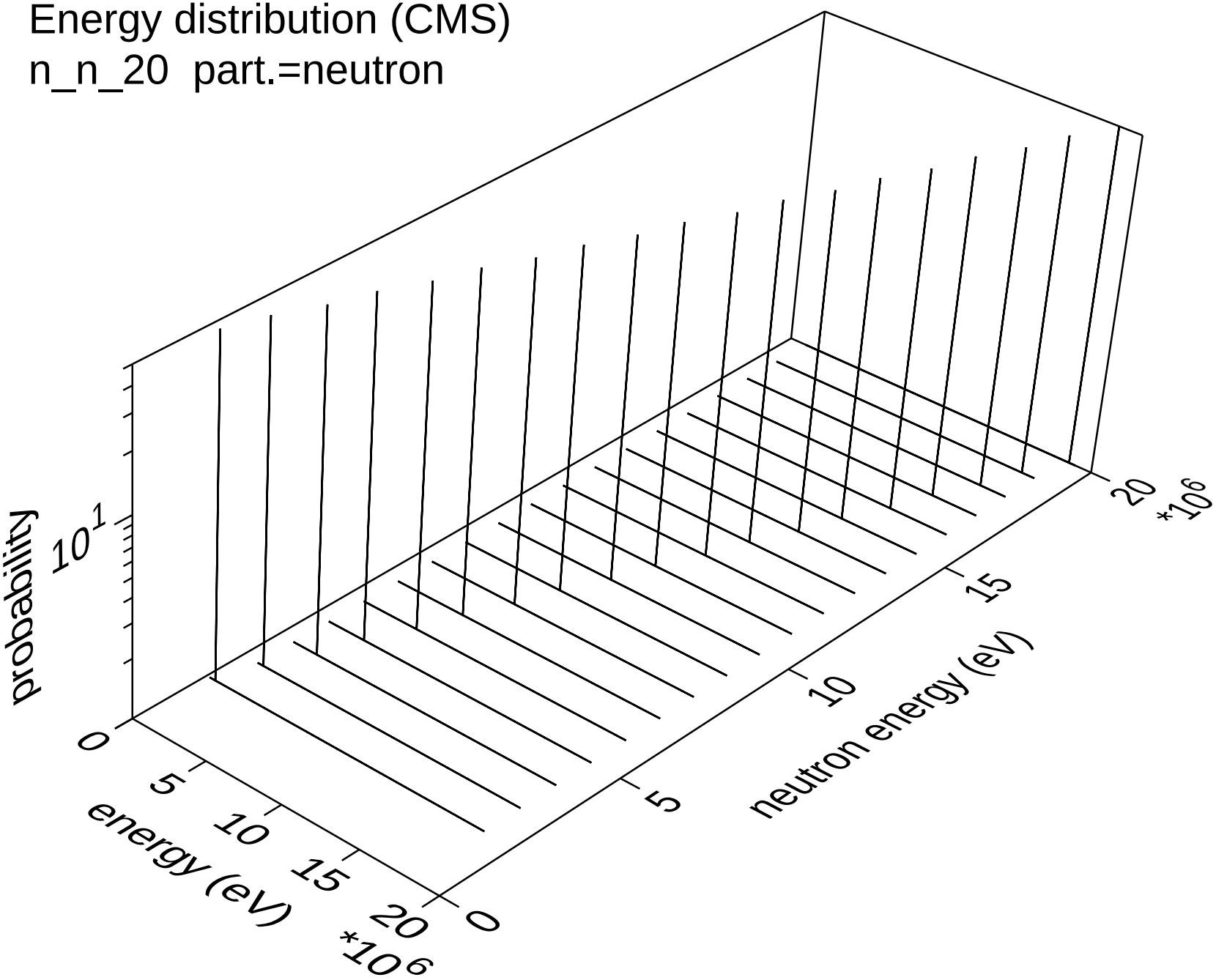

Energy distribution (CMS)
n_n_17 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

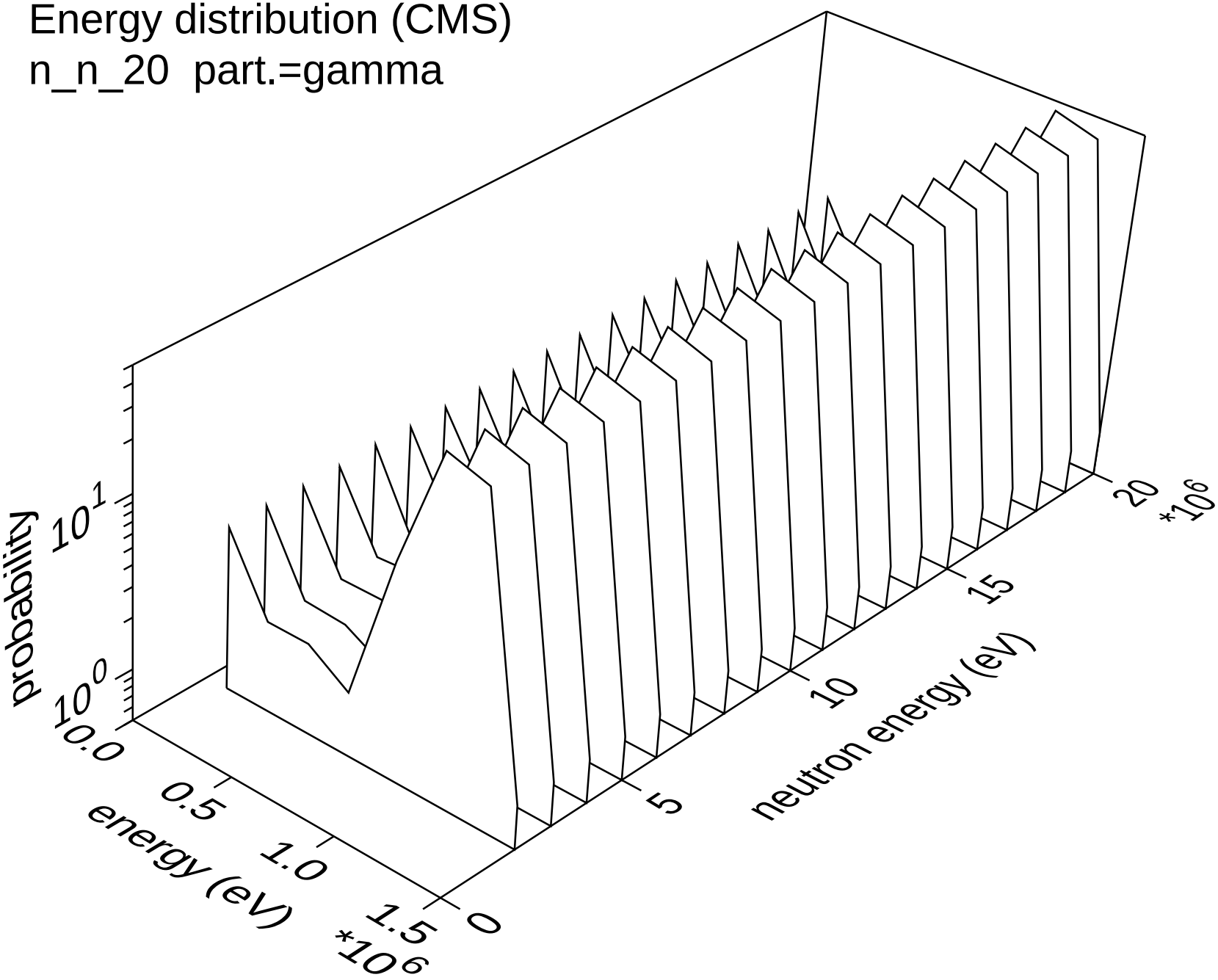

Energy distribution (CMS)
n_n_18 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

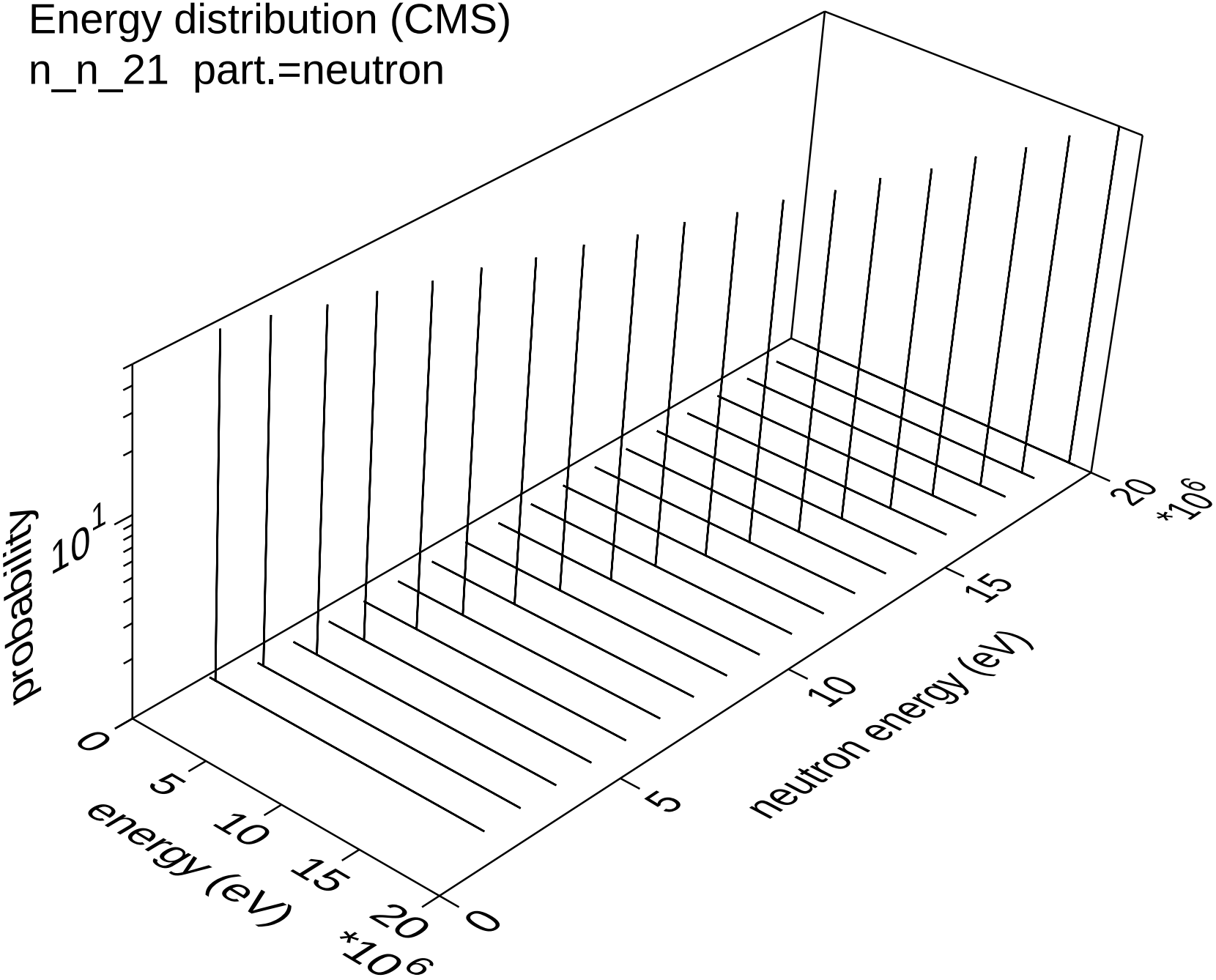

Energy distribution (CMS)
n_n_18 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

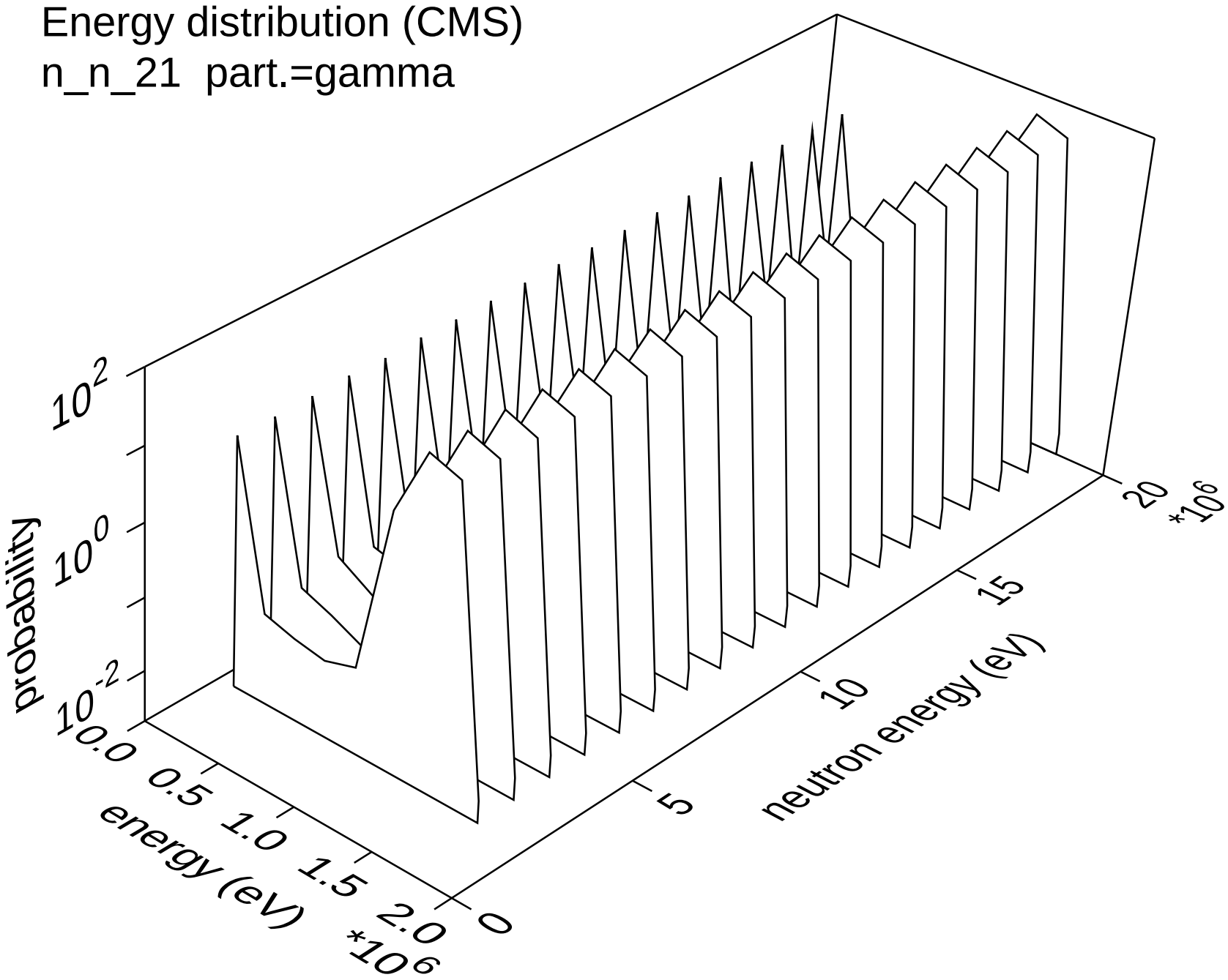

Energy distribution (CMS)
n_n_19 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

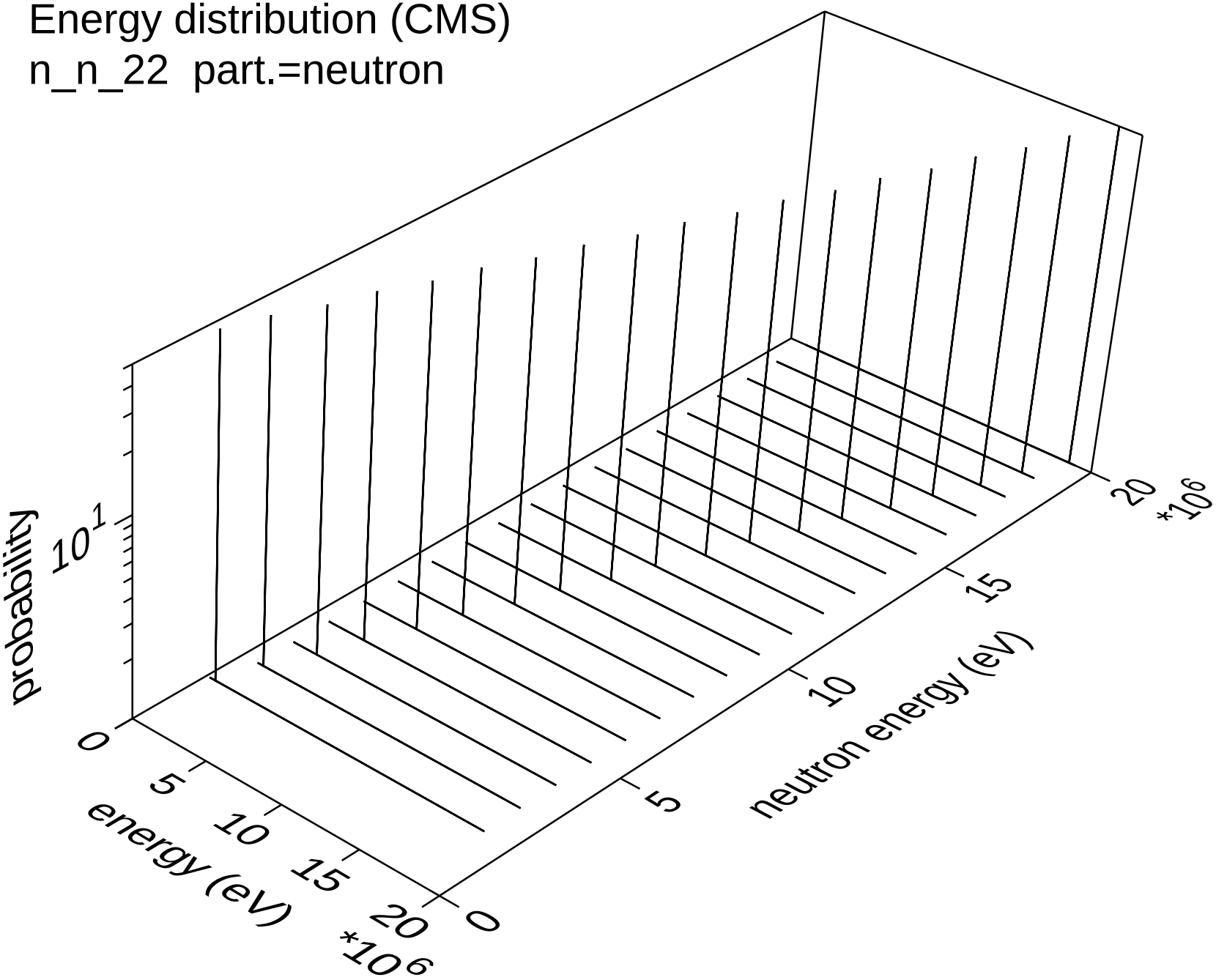

Energy distribution (CMS)
n_n_19 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

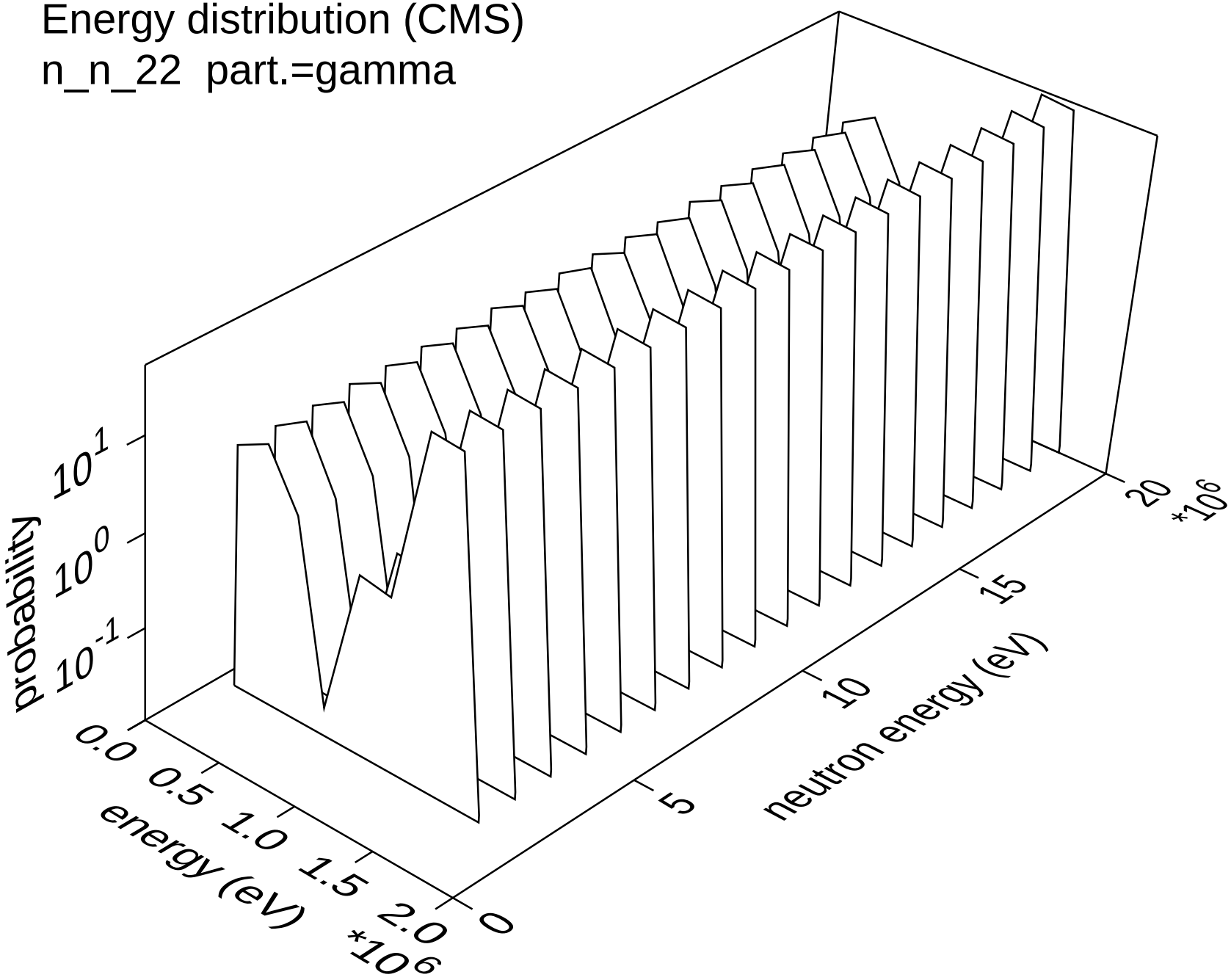

Energy distribution (CMS)
n_n_20 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
20
*10^6
0
5
10
15
20
*10^6
neutron energy (eV)

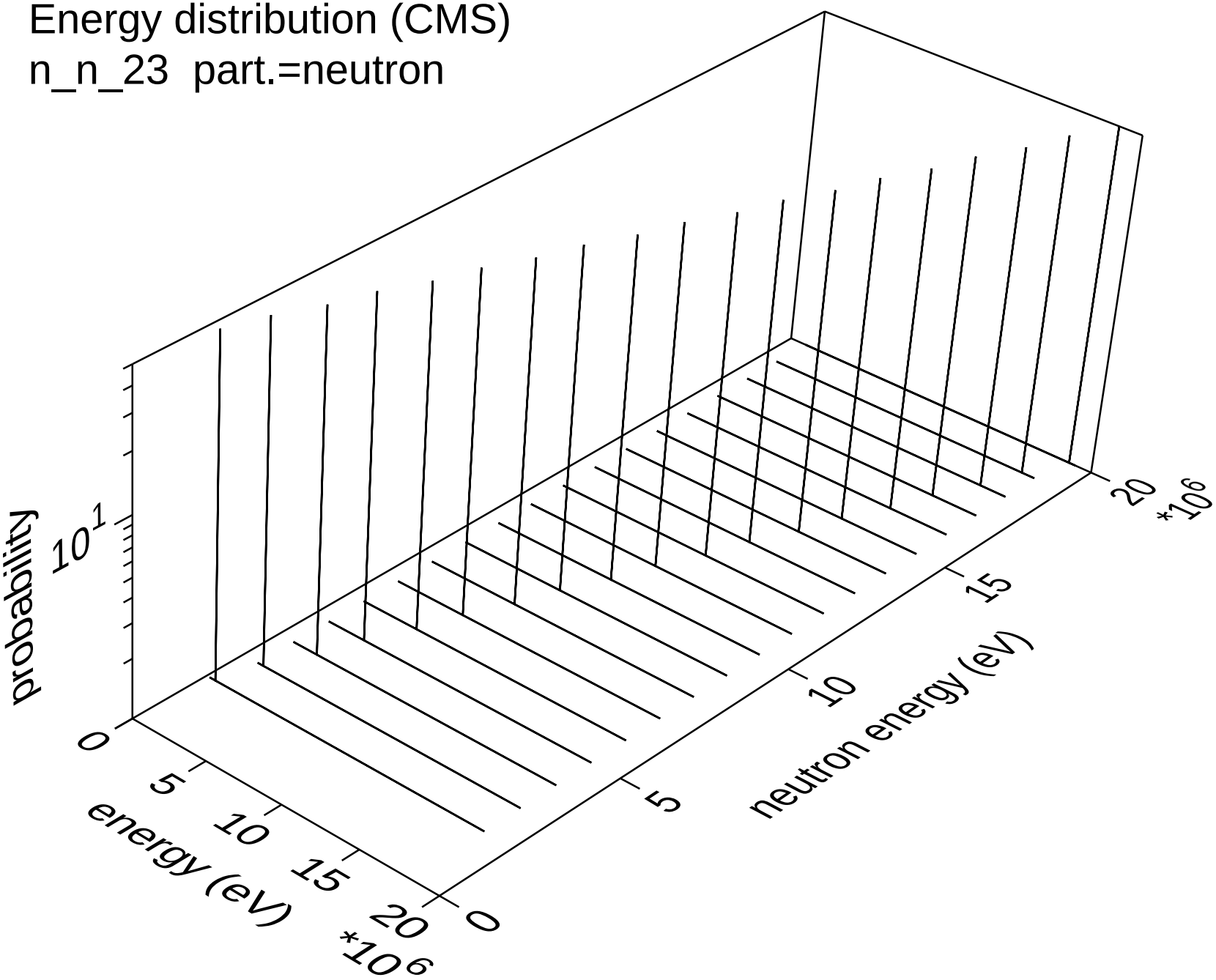

Energy distribution (CMS)
n_n_20 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
0
energy (eV)
*10^6
5
10
15
20
neutron energy (eV)
*10^6

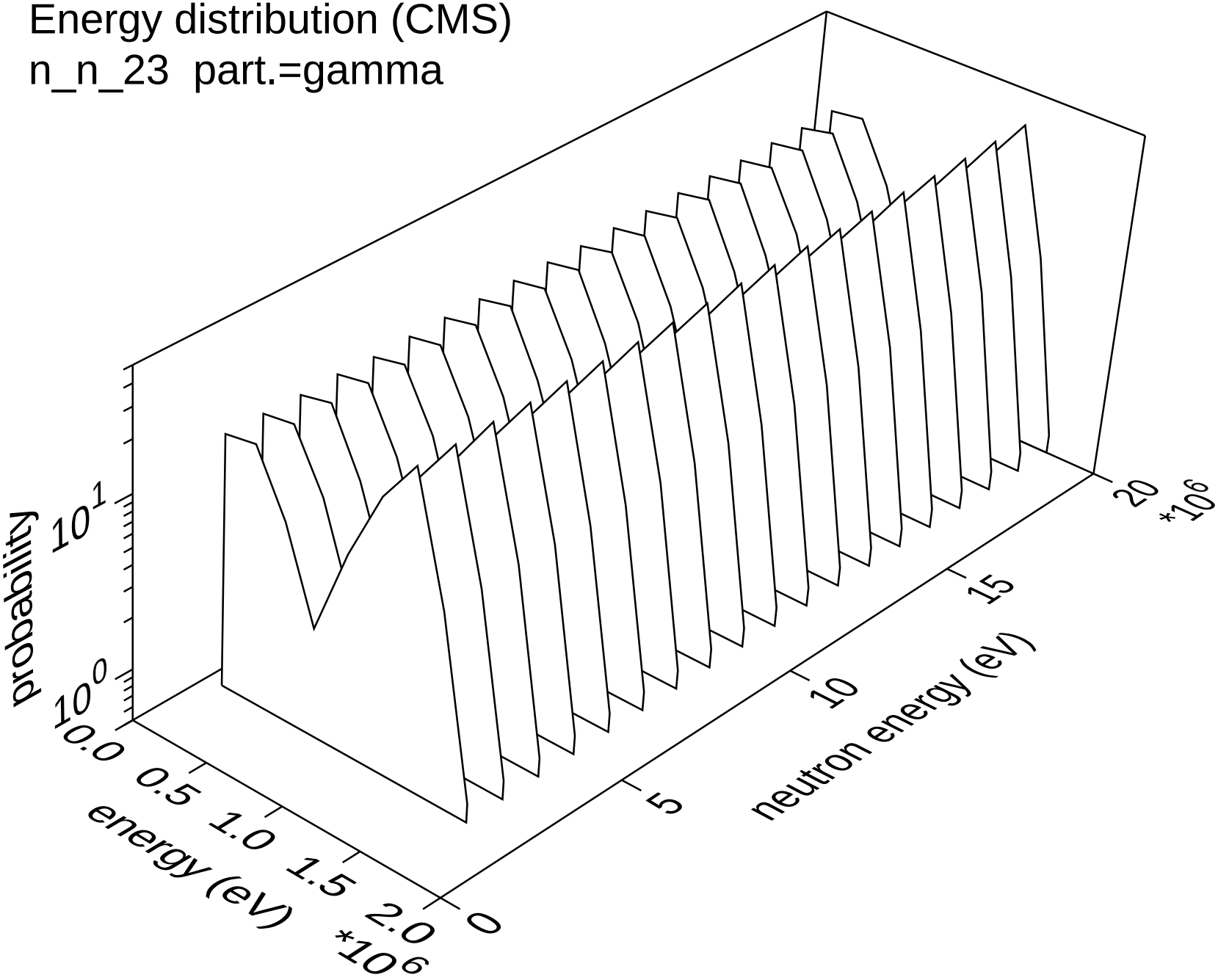

Energy distribution (CMS)
n_n_21 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

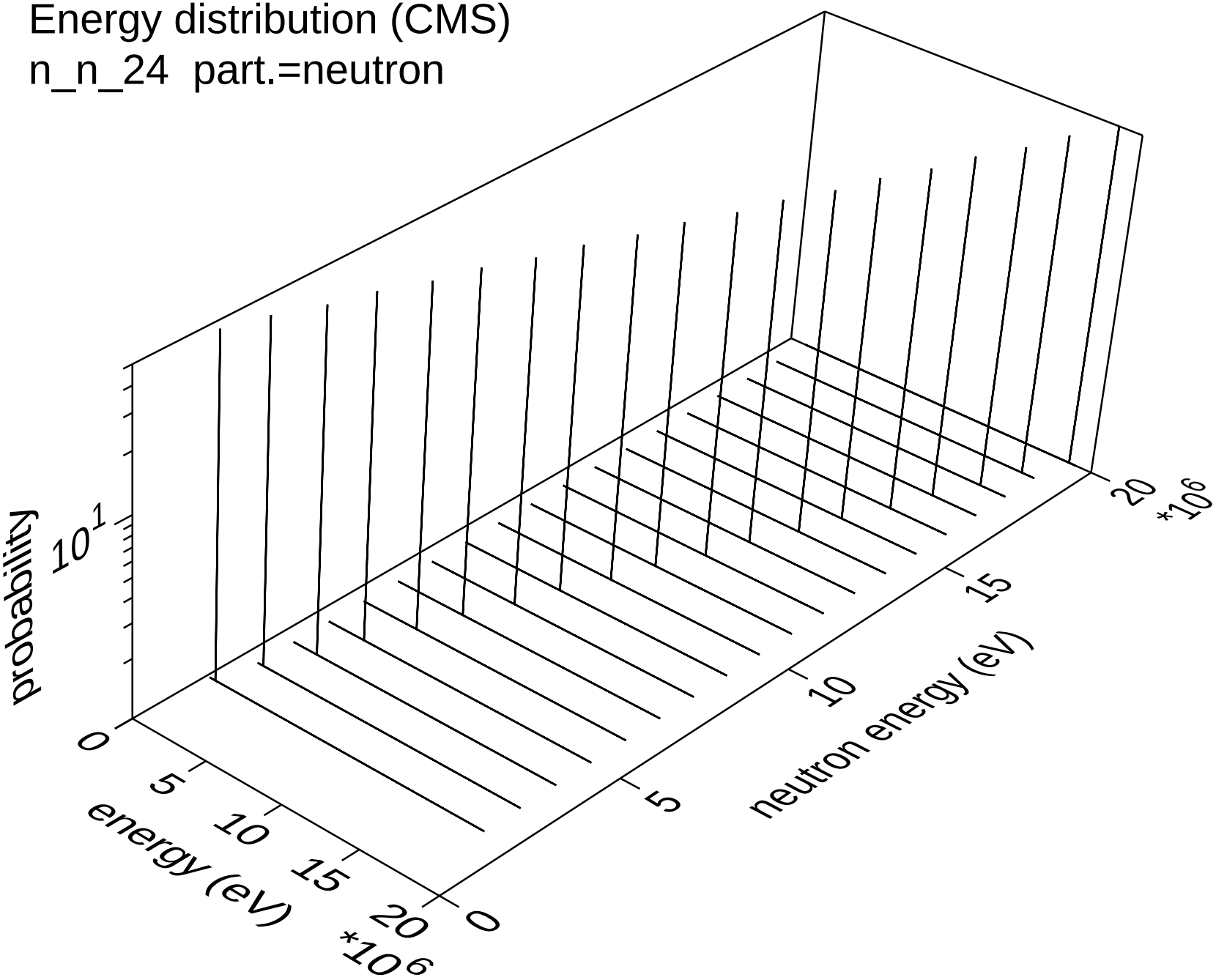

Energy distribution (CMS)
n_n_21 part.=gamma
probability
10^{2}
10^{0}
10^{-2}
0.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

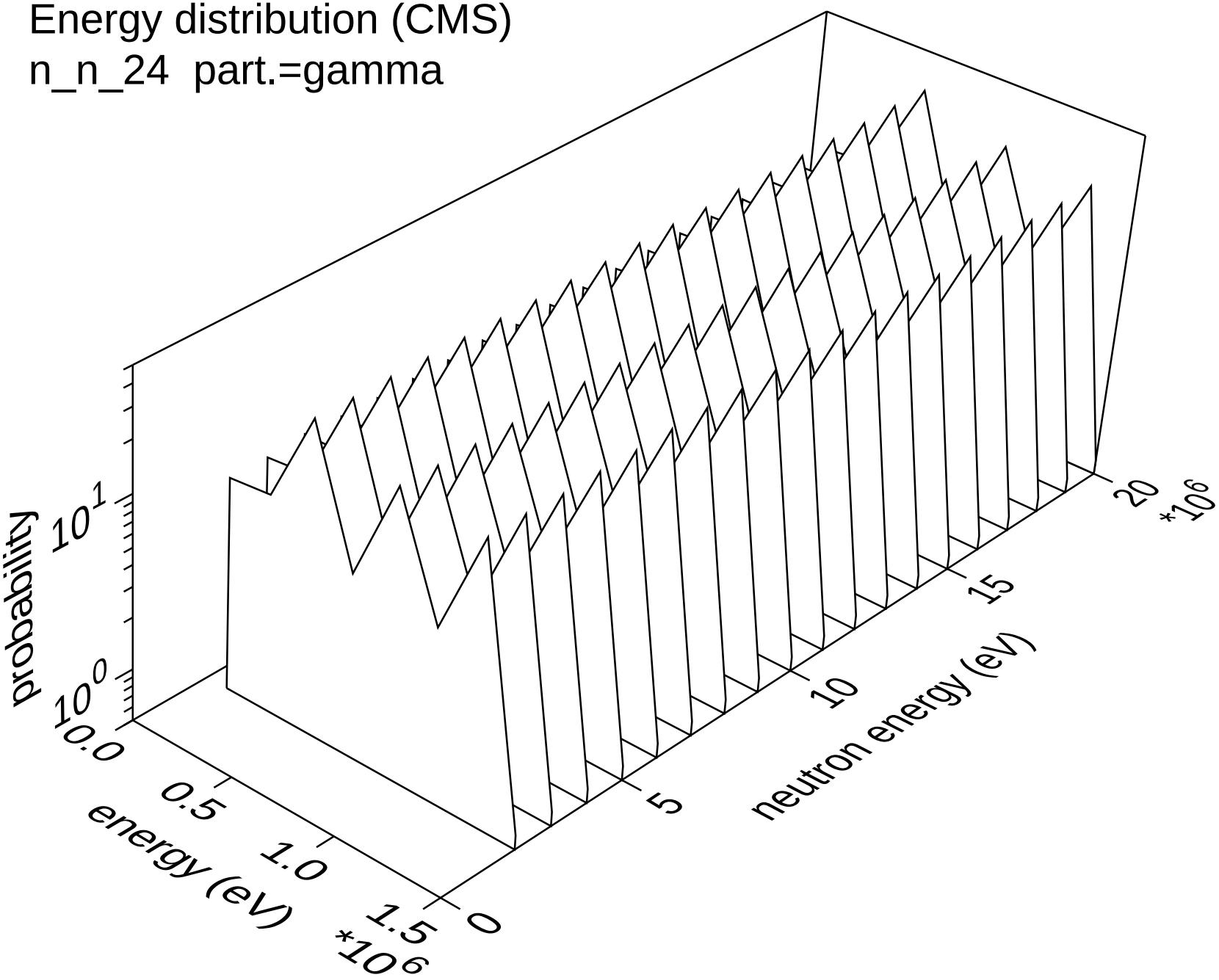

Energy distribution (CMS)
n_n_22 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

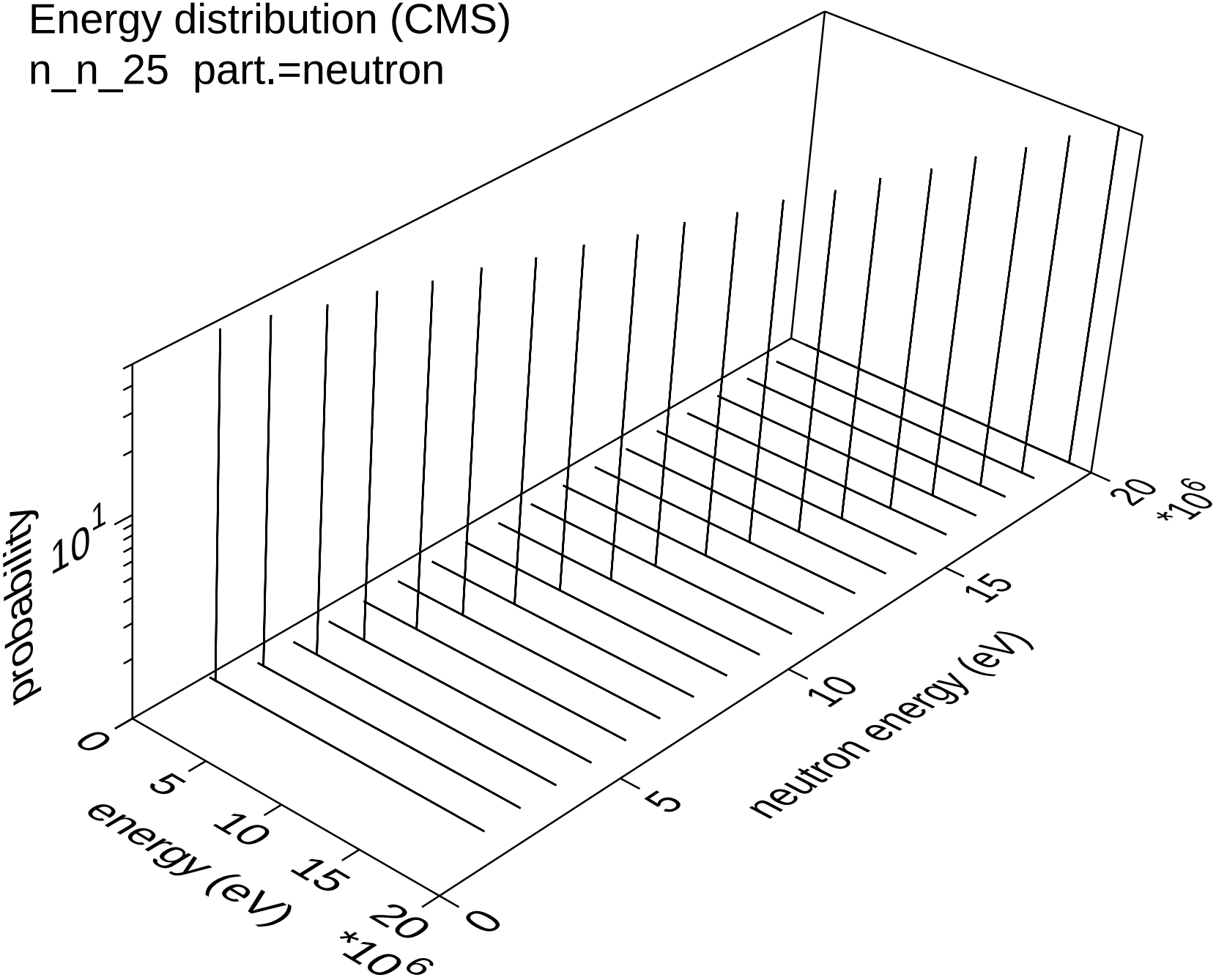

Energy distribution (CMS)
n_n_22 part.=gamma
probability
10^{1}
10^{0}
10^{-1}
0.0
0.5
1.0
1.5
2.0
energy (eV)
*10^6
0
5
10
15
20
neutron energy (eV)
*10^6

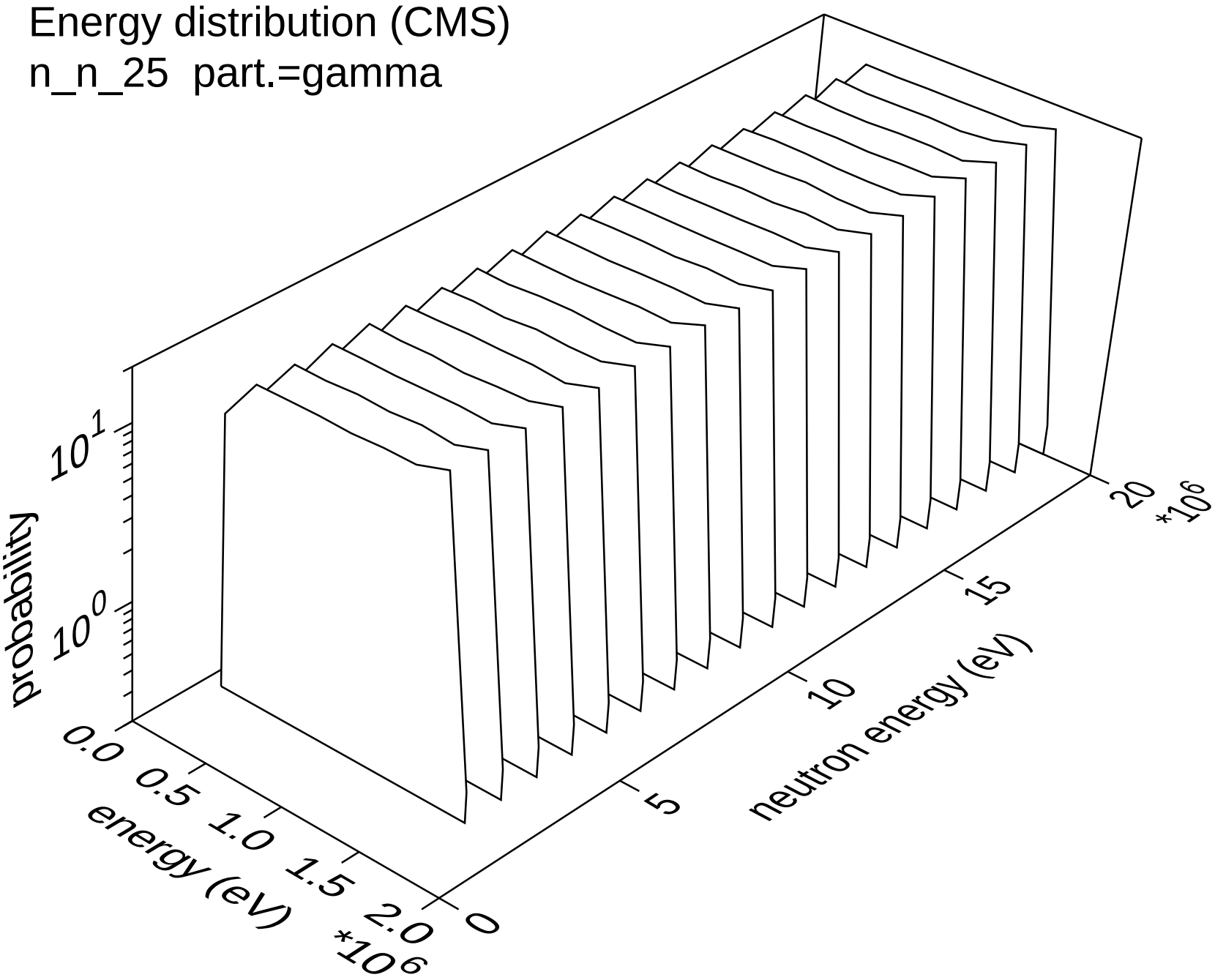

Energy distribution (CMS)
n_n_23 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

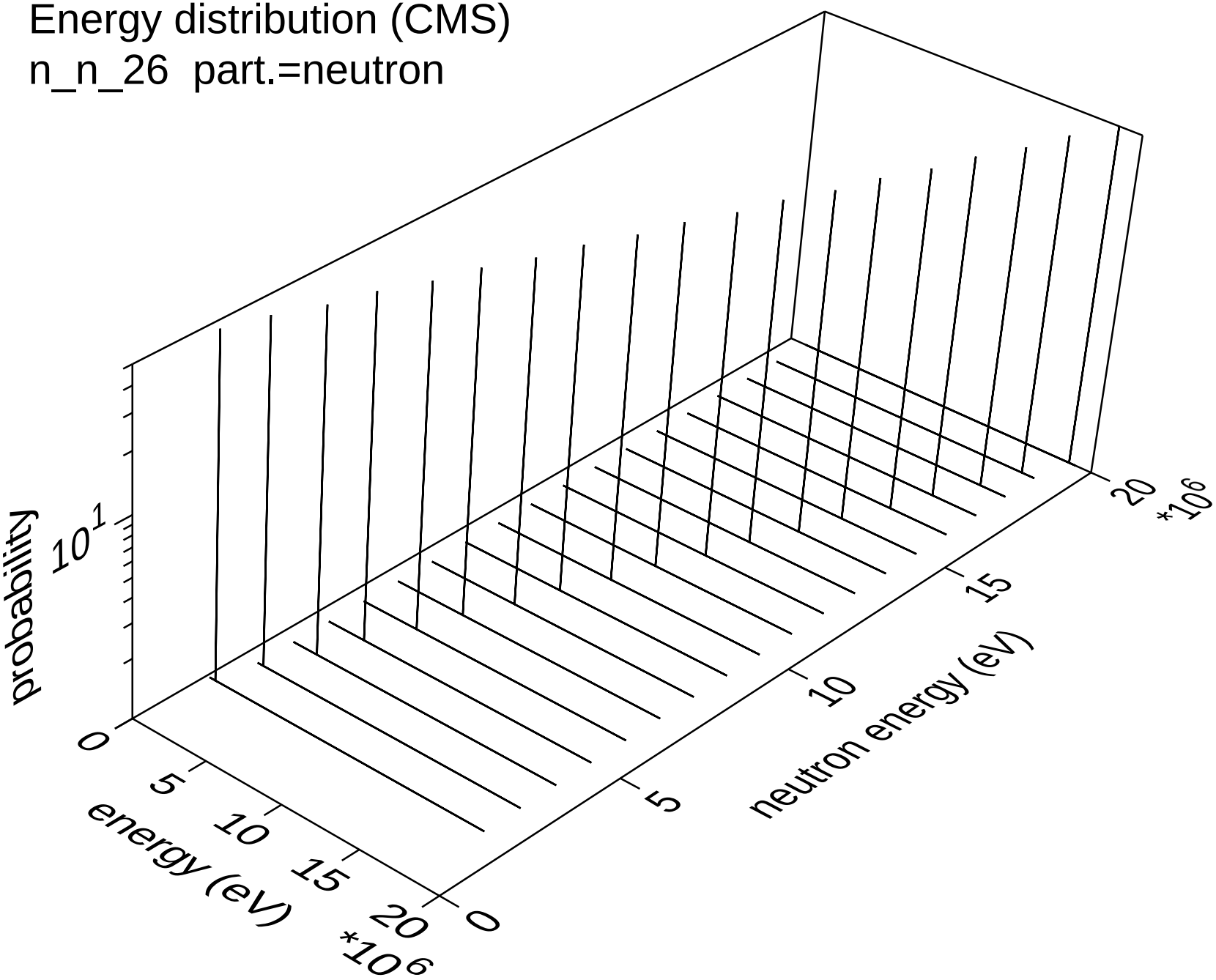

Energy distribution (CMS)
n_n_23 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

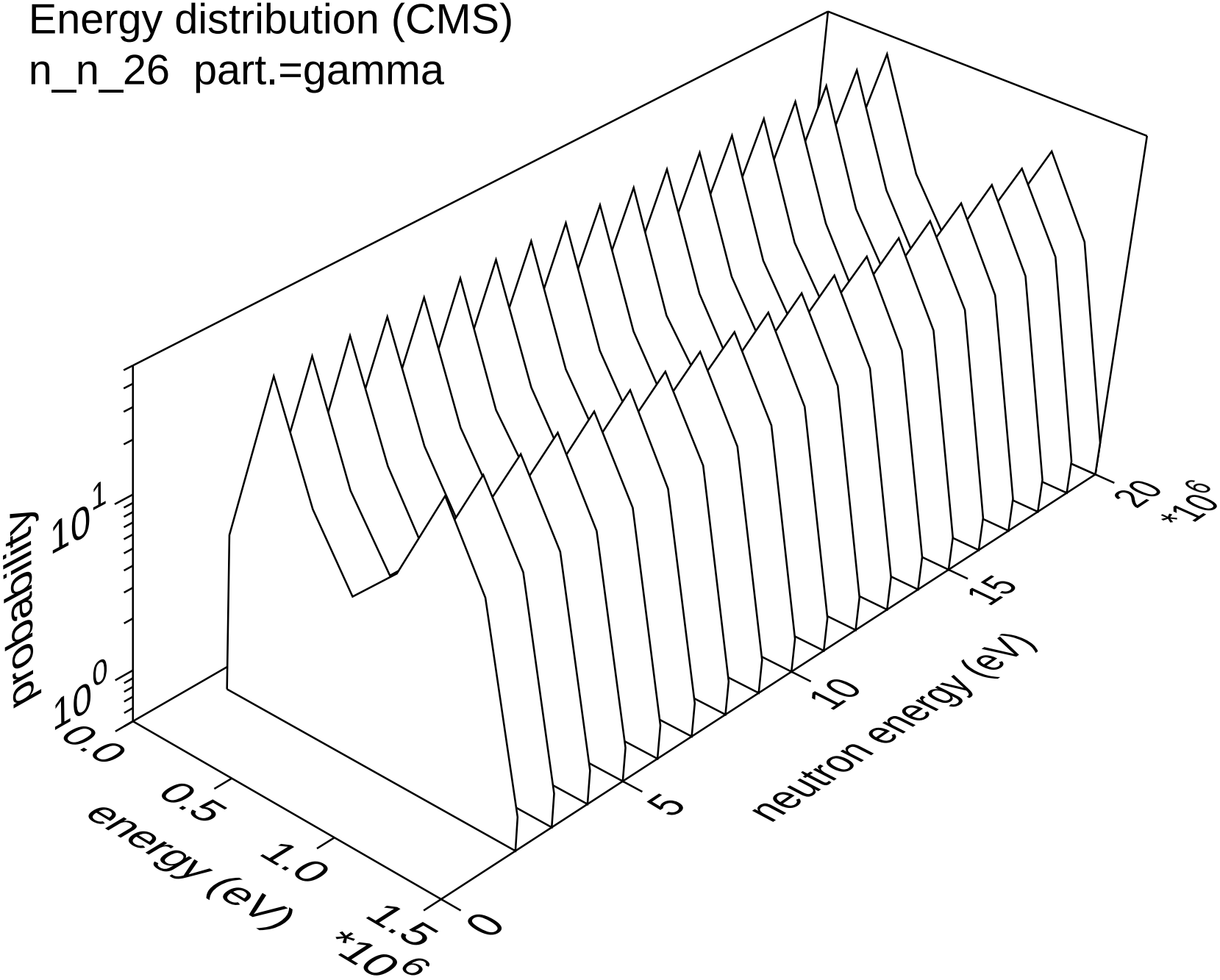

Energy distribution (CMS)
n_n_24 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

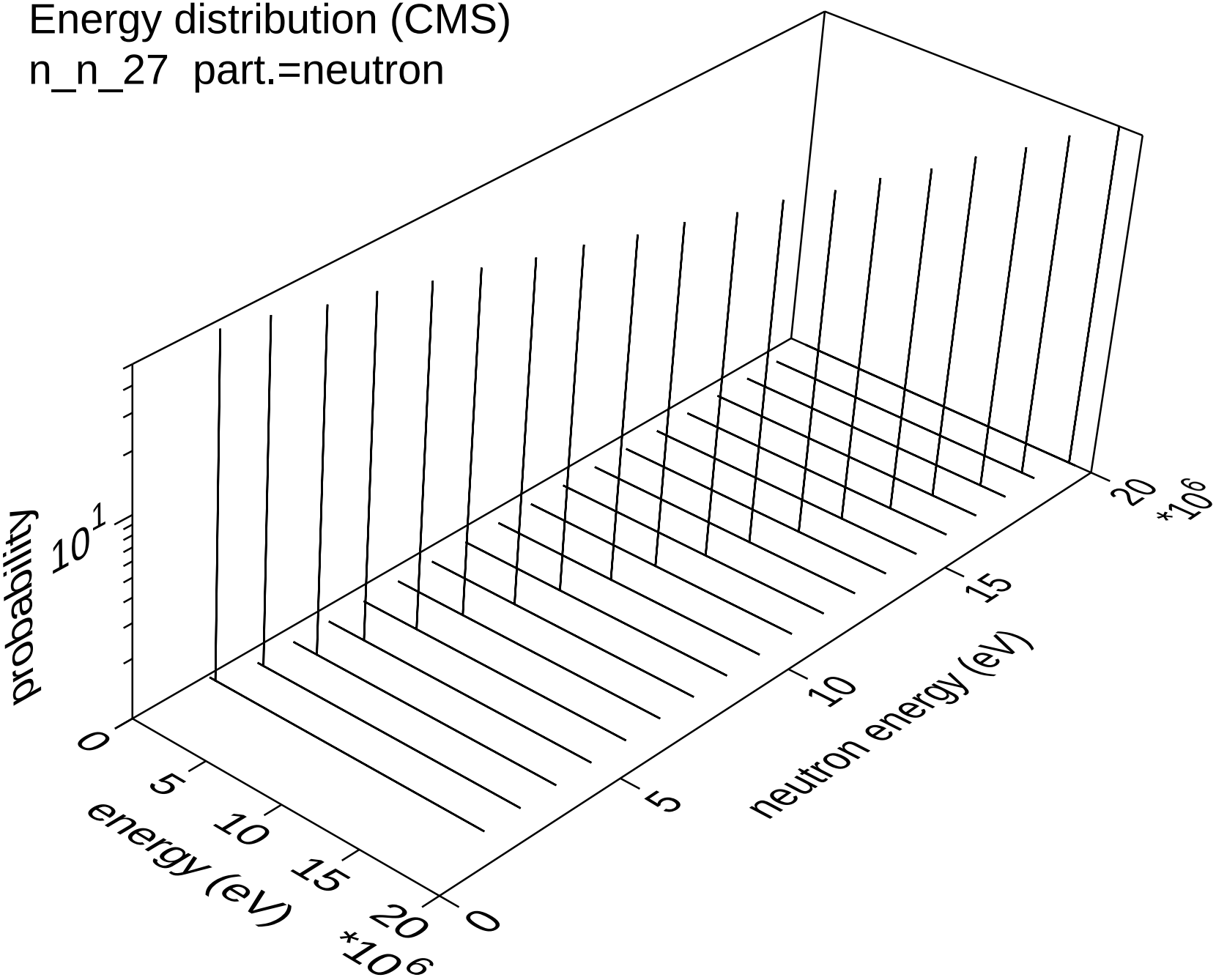

Energy distribution (CMS)
n_n_24 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

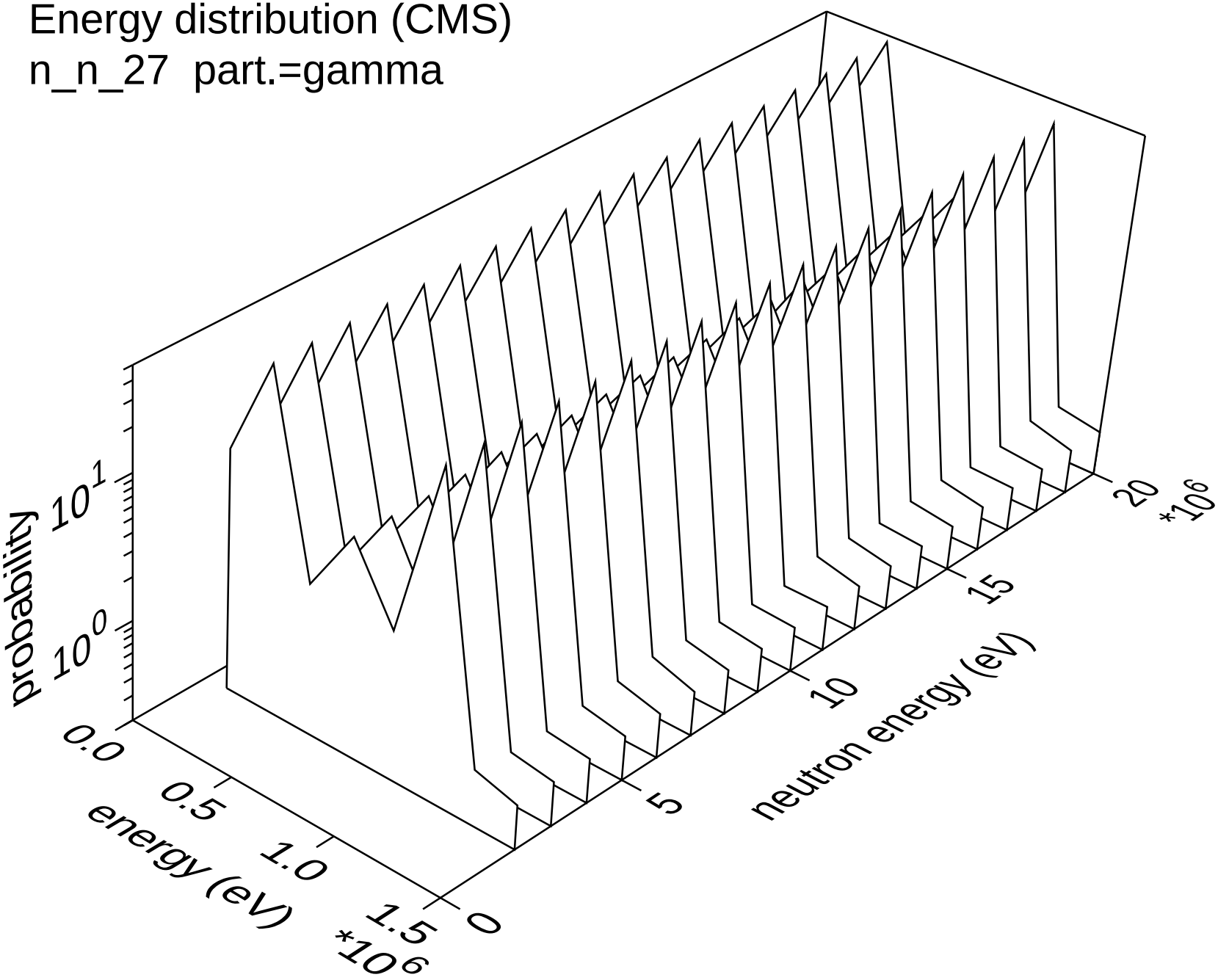

Energy distribution (CMS)
n_n_25 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

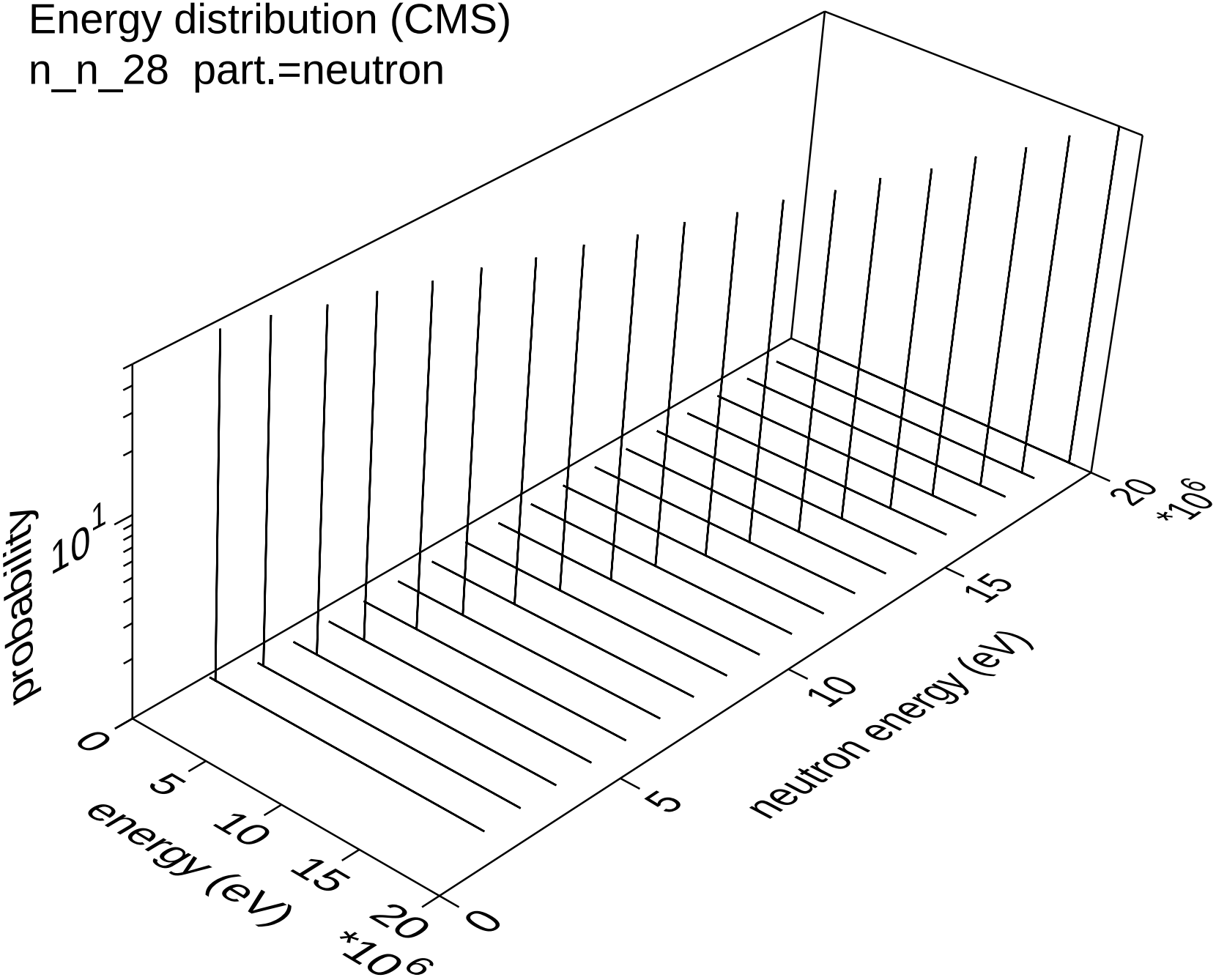

Energy distribution (CMS)
n_n_25 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

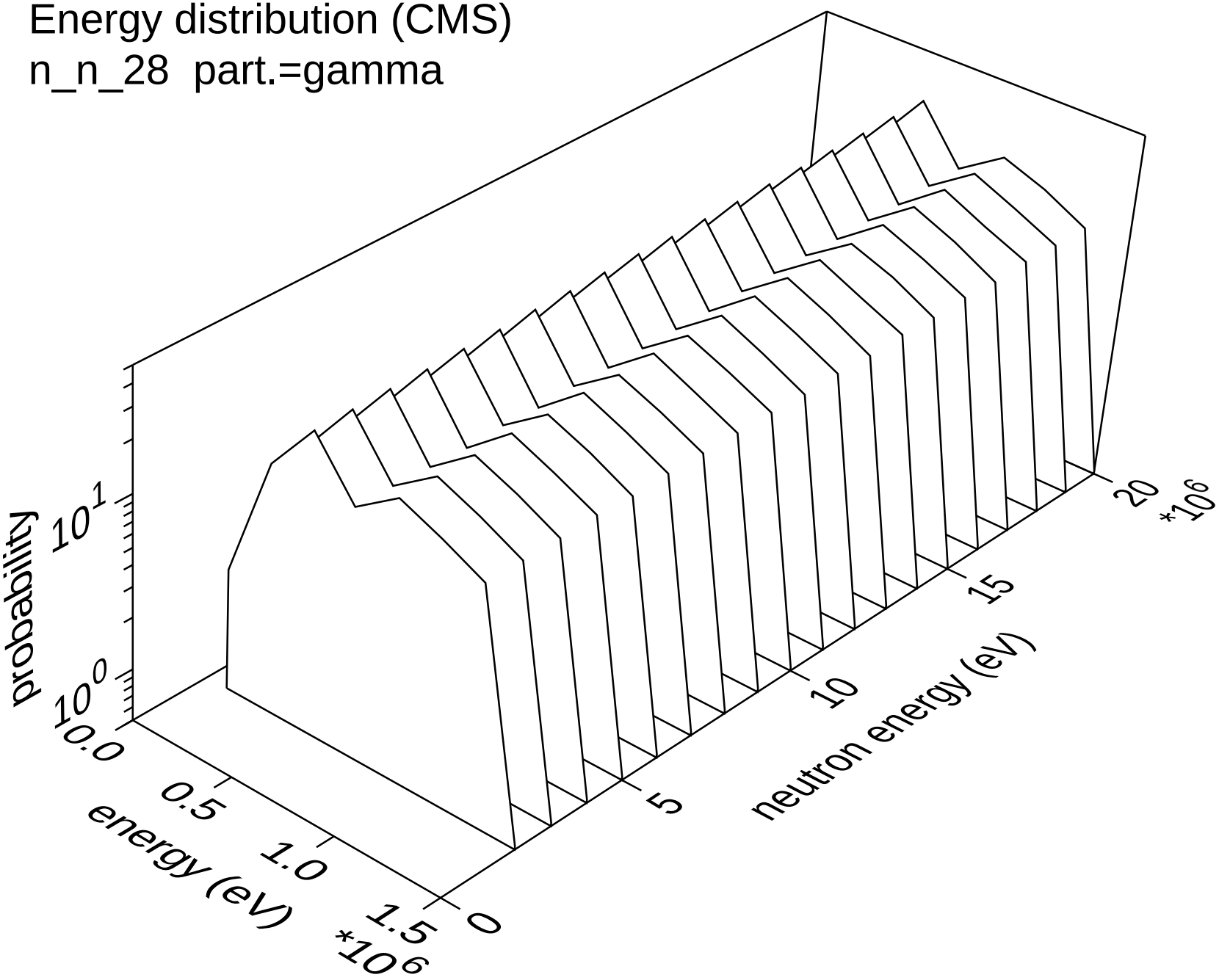

Energy distribution (CMS)
n_n_26 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

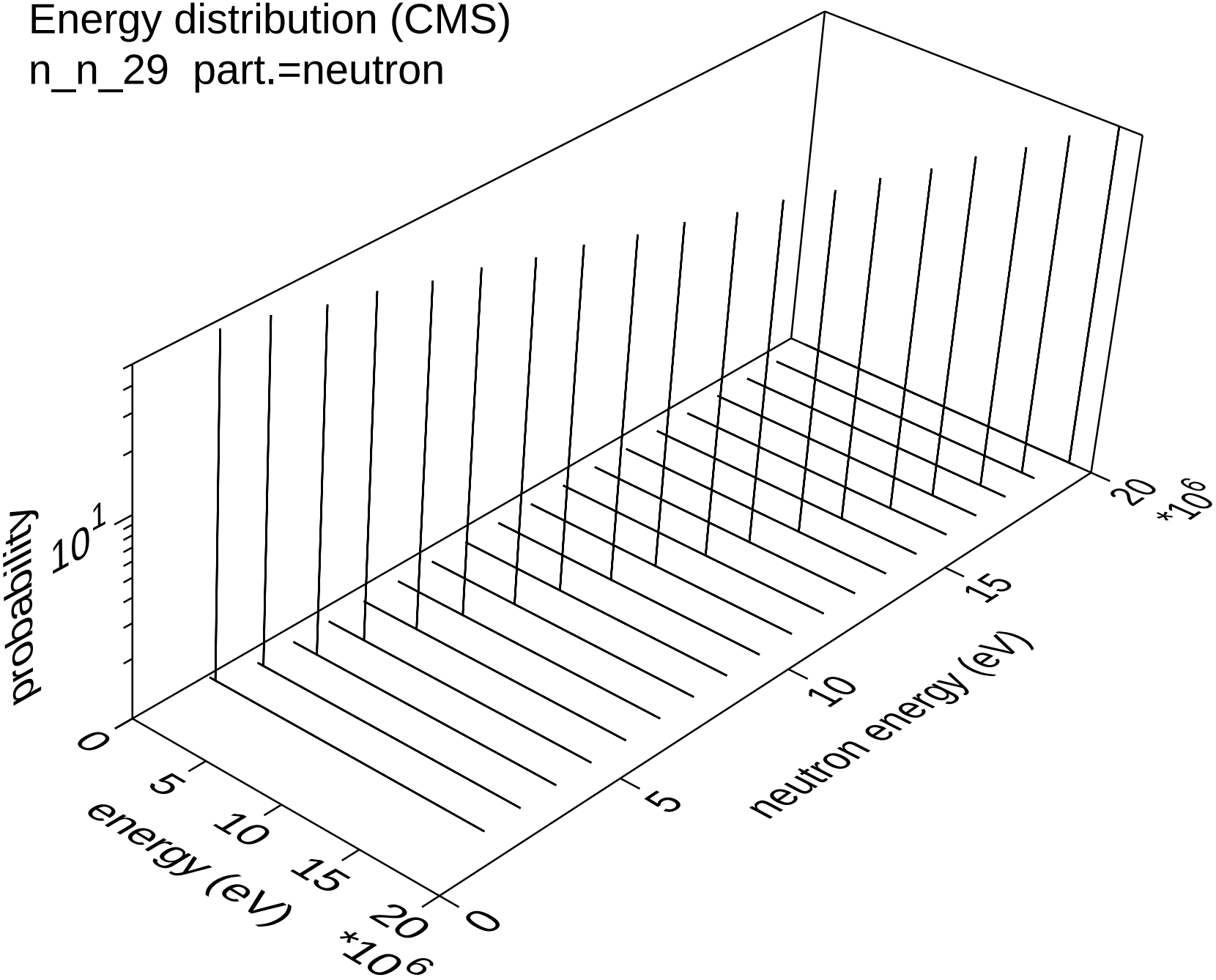

Energy distribution (CMS)
n_n_26 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
0
energy (eV)
*10^6
5
10
15
20
neutron energy (eV)
*10^6

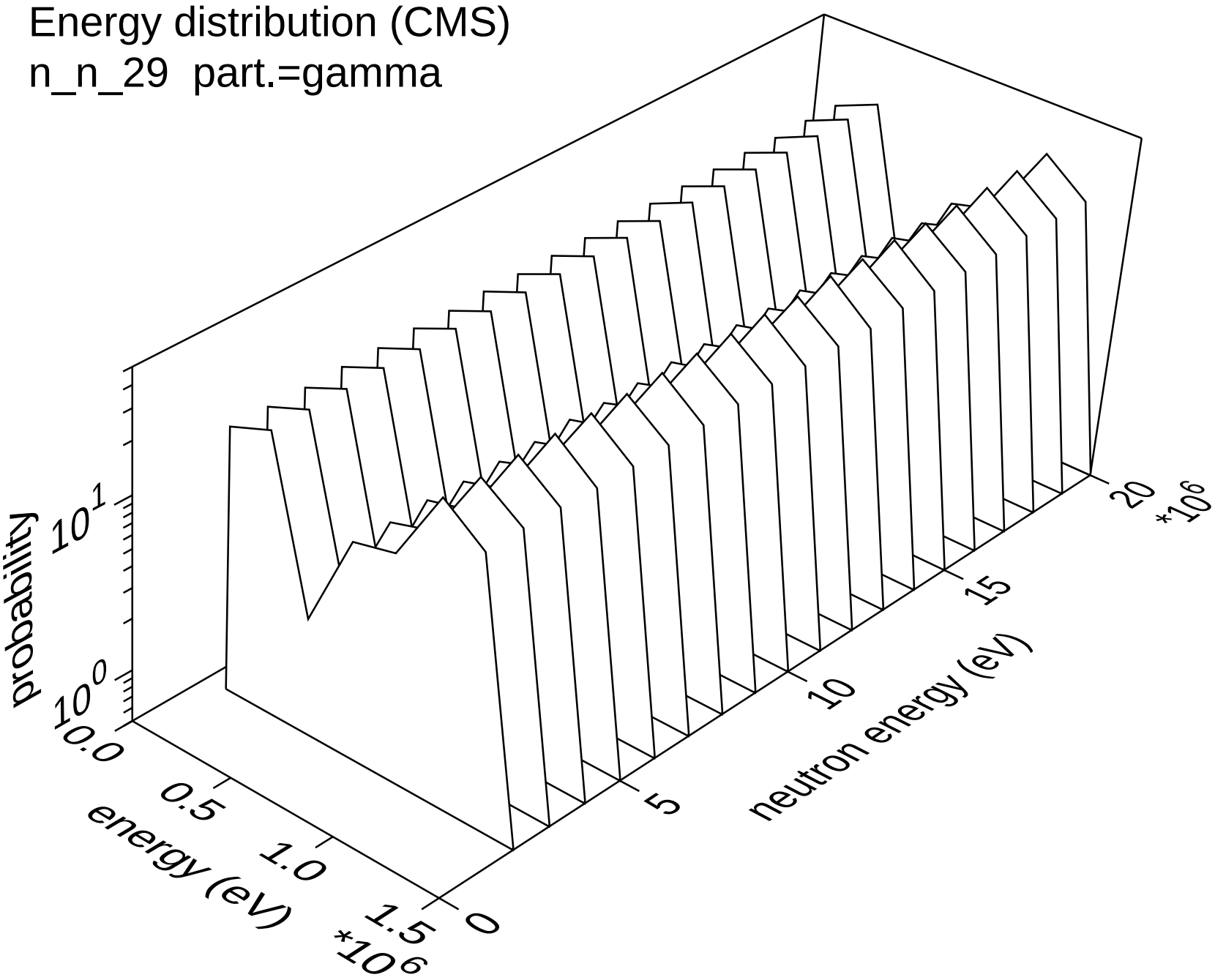

Energy distribution (CMS)
n_n_27 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

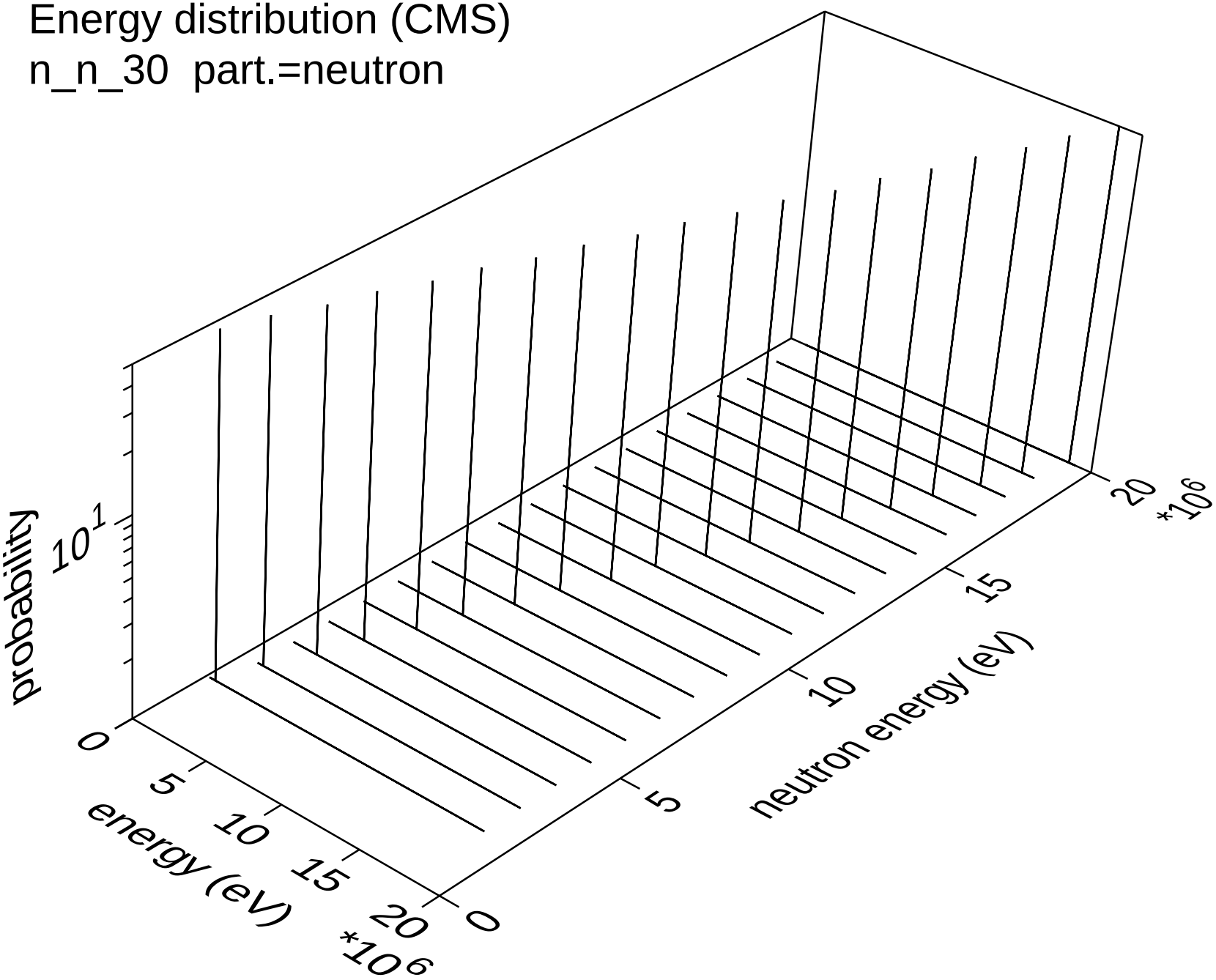

Energy distribution (CMS)
n_n_27 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

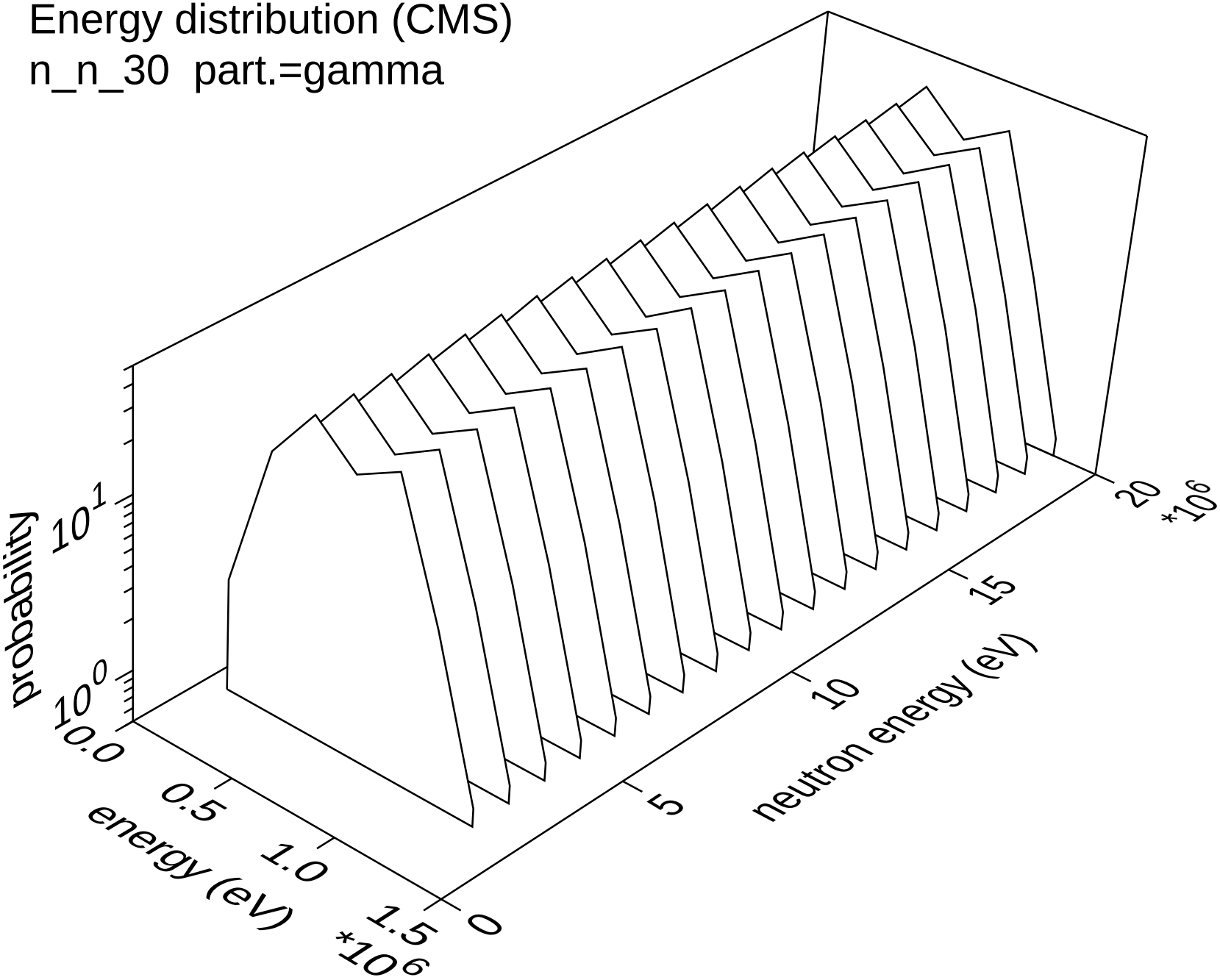

Energy distribution (CMS)
n_n_28 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

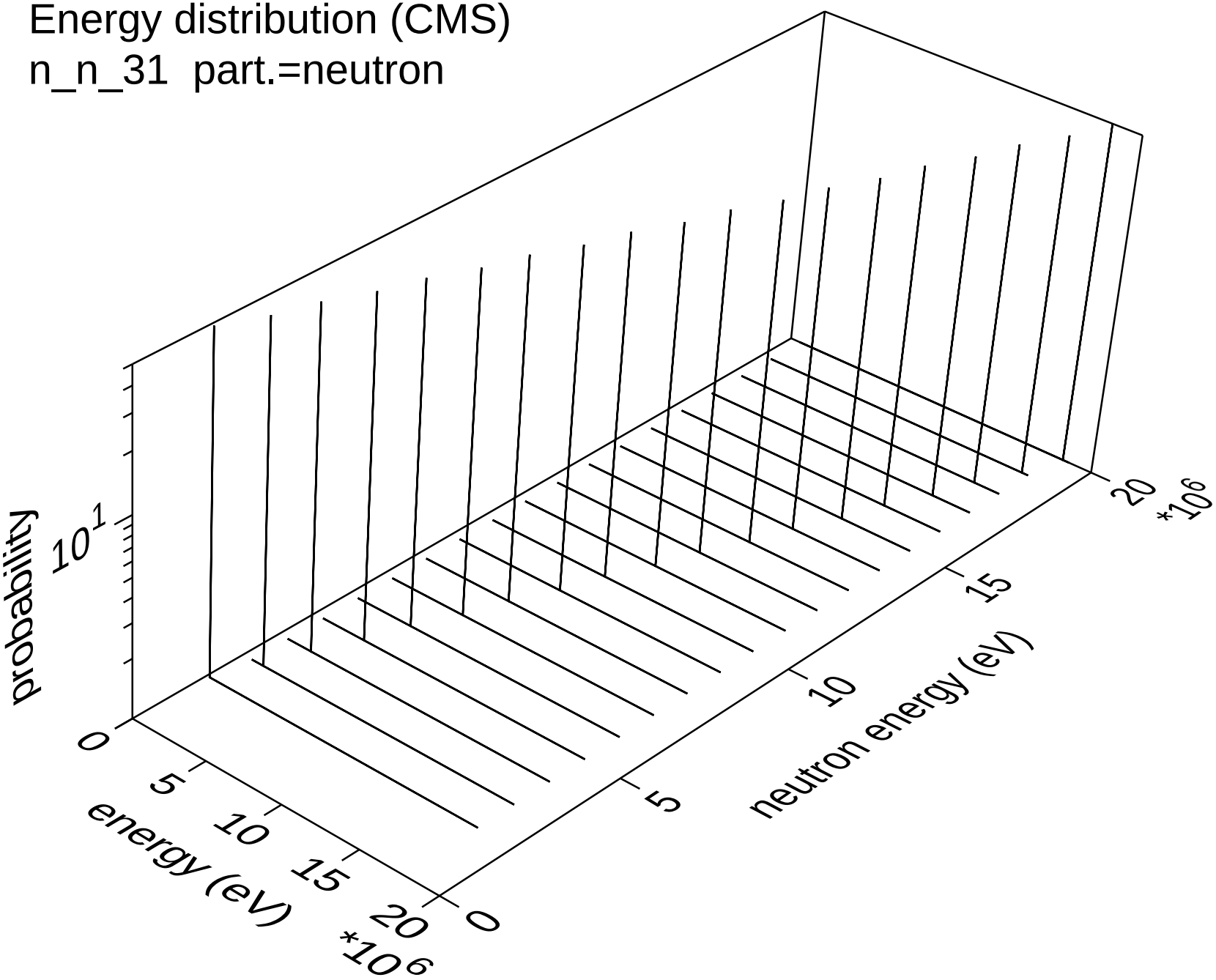

Energy distribution (CMS)
n_n_28 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
0
energy (eV)
*10^6
5
10
15
20
neutron energy (eV)
*10^6

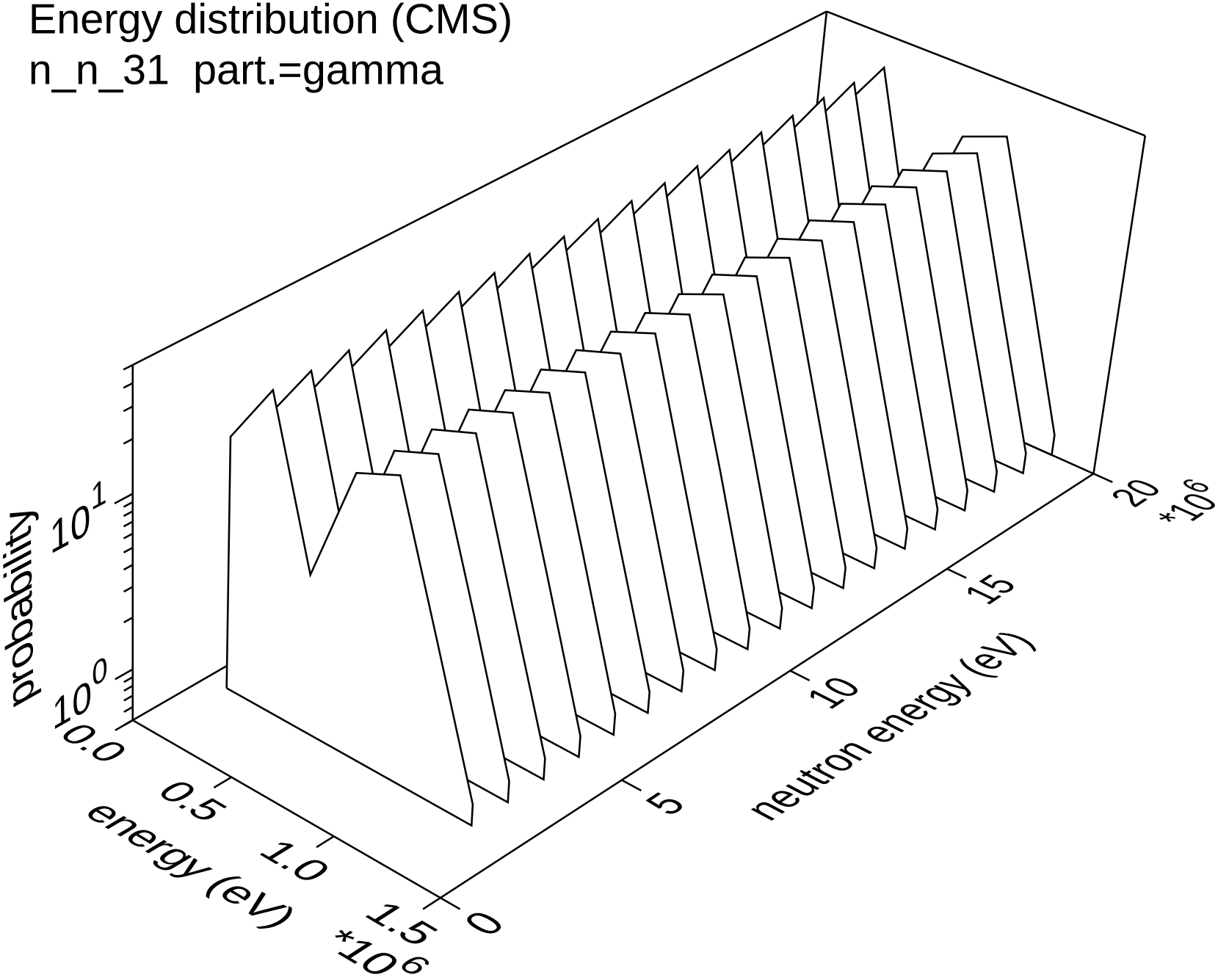

Energy distribution (CMS)
n_n_29 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

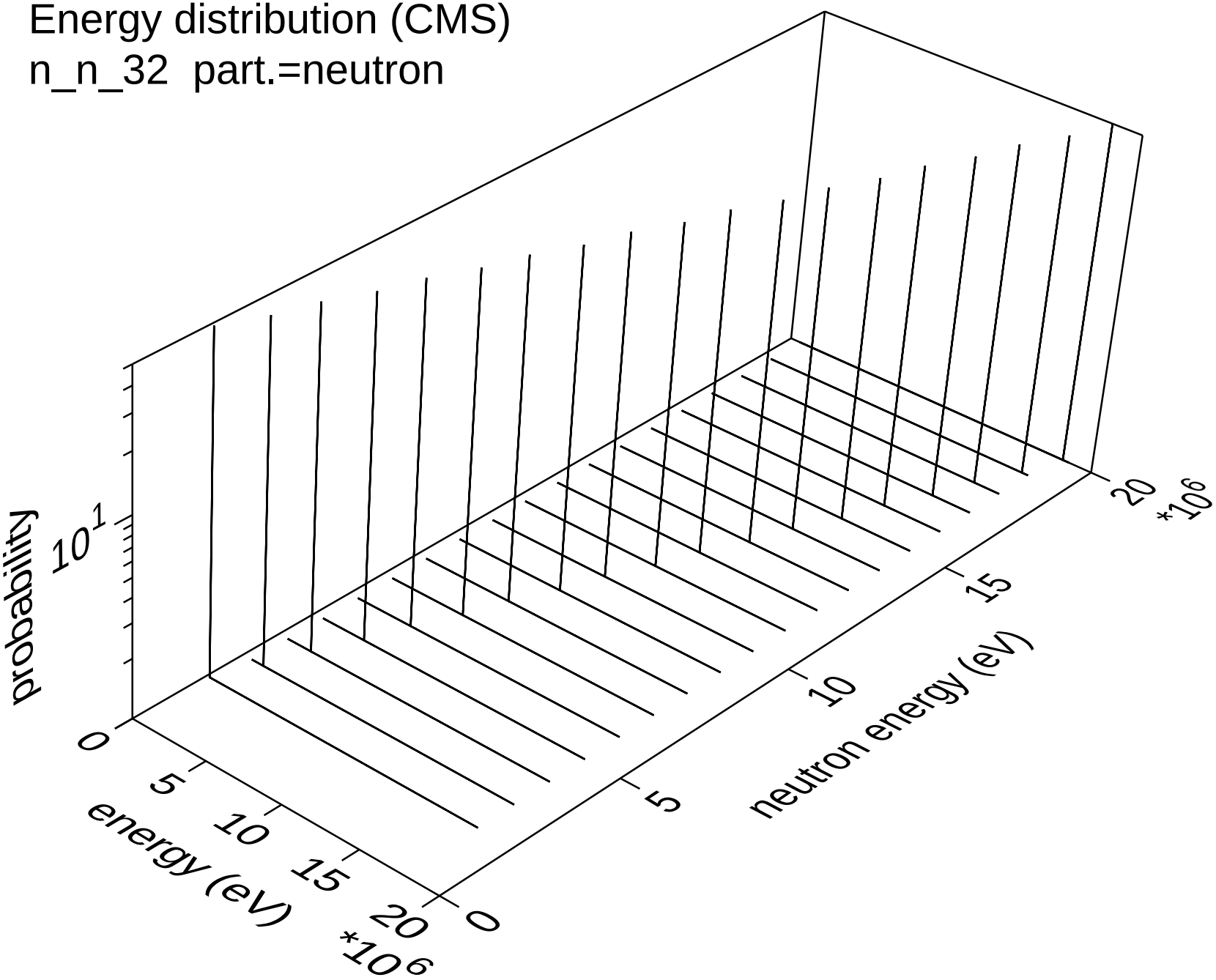

Energy distribution (CMS)
n_n_29 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
0
energy (eV)
*10^6
5
10
15
20
neutron energy (eV)
*10^6

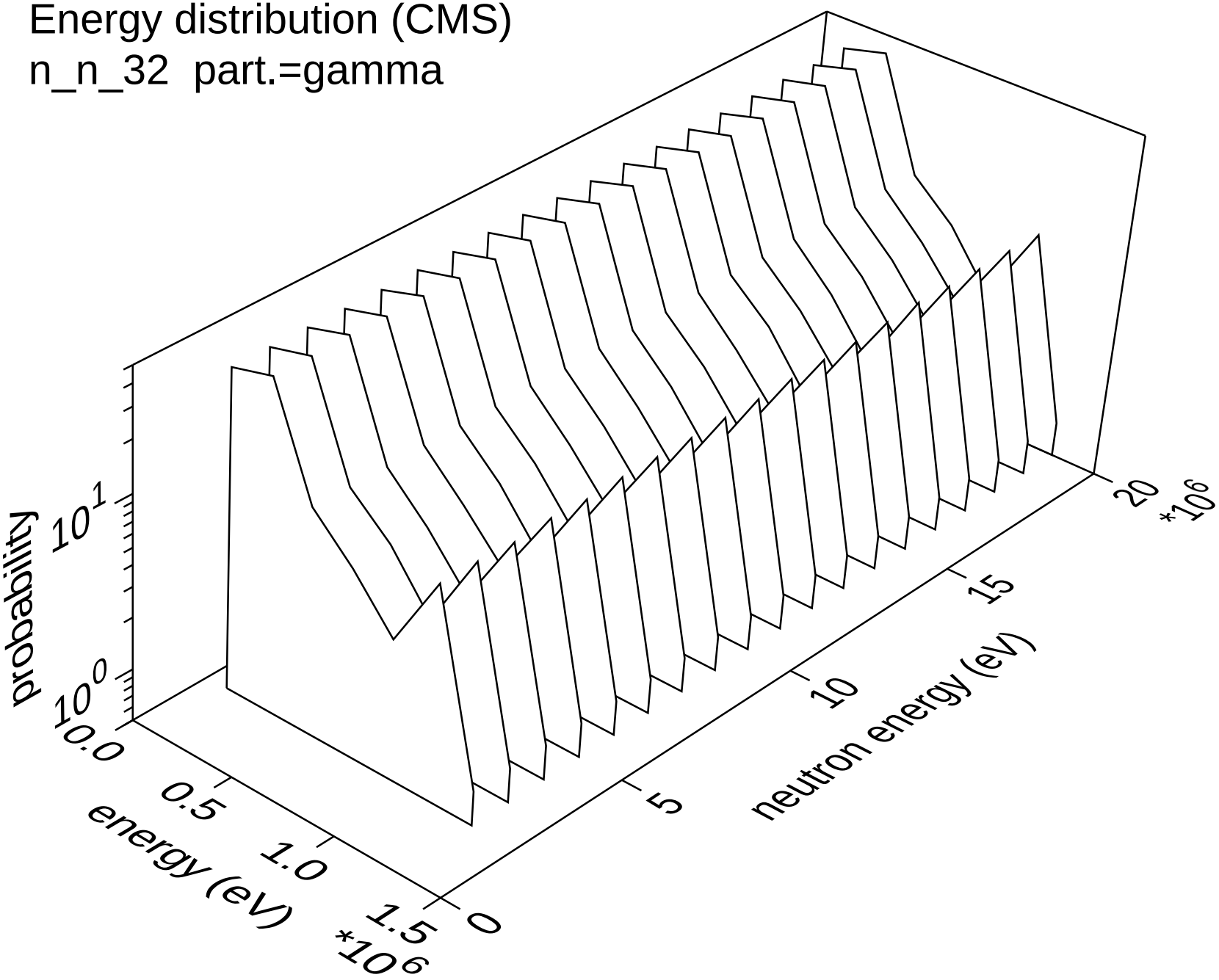

Energy distribution (CMS)
n_n_30 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

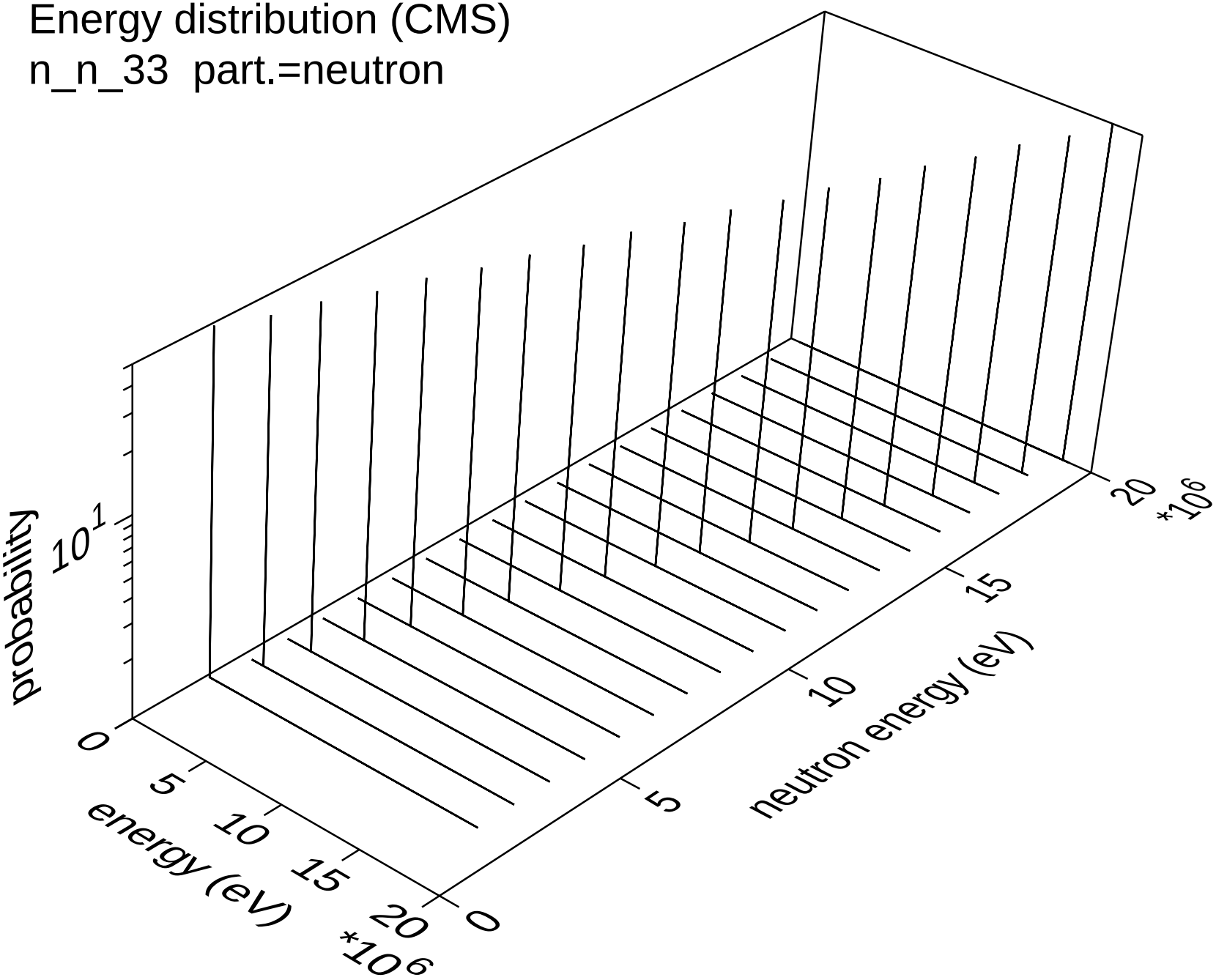

Energy distribution (CMS)
n_n_30 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

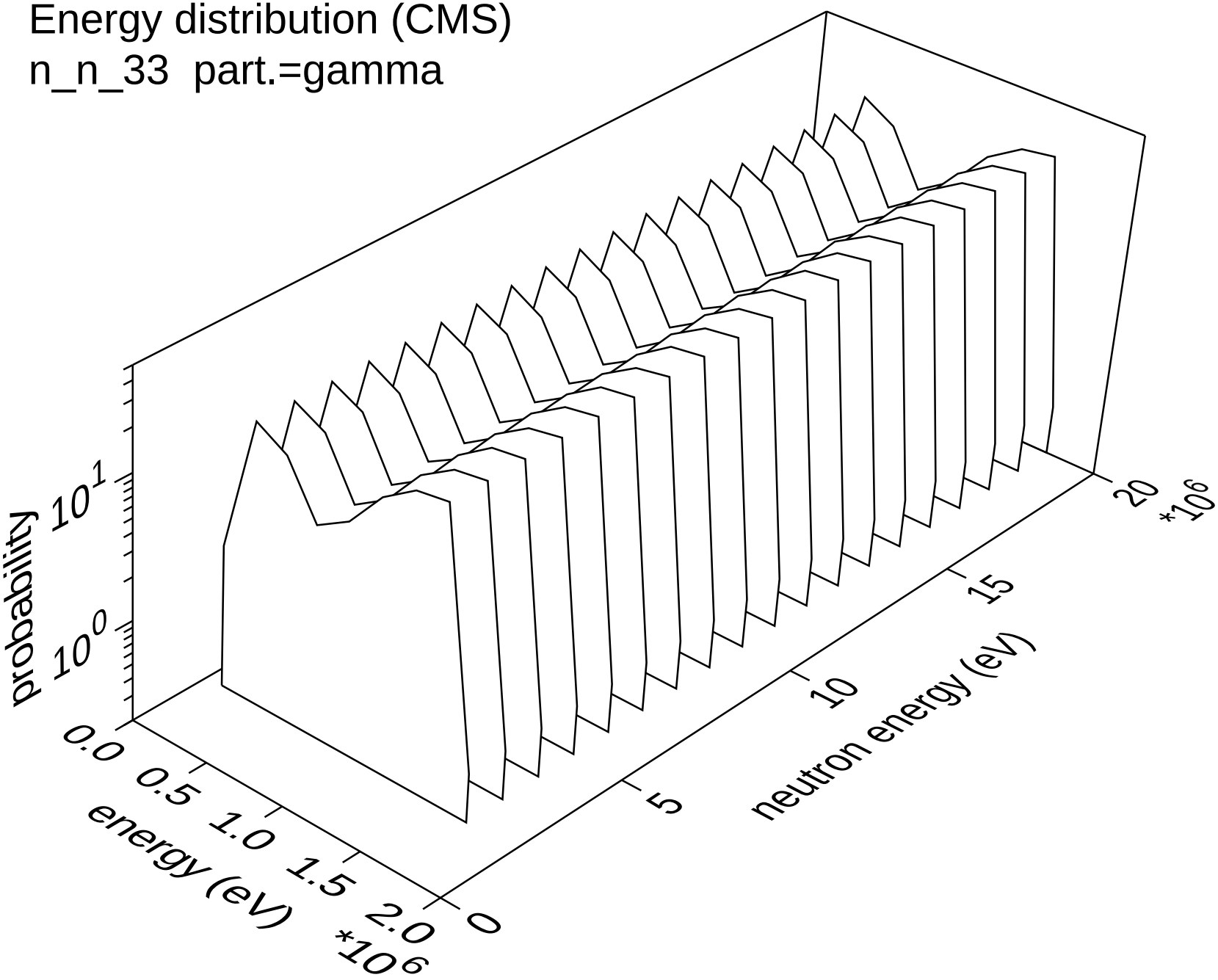

Energy distribution (CMS)
n_n_31 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

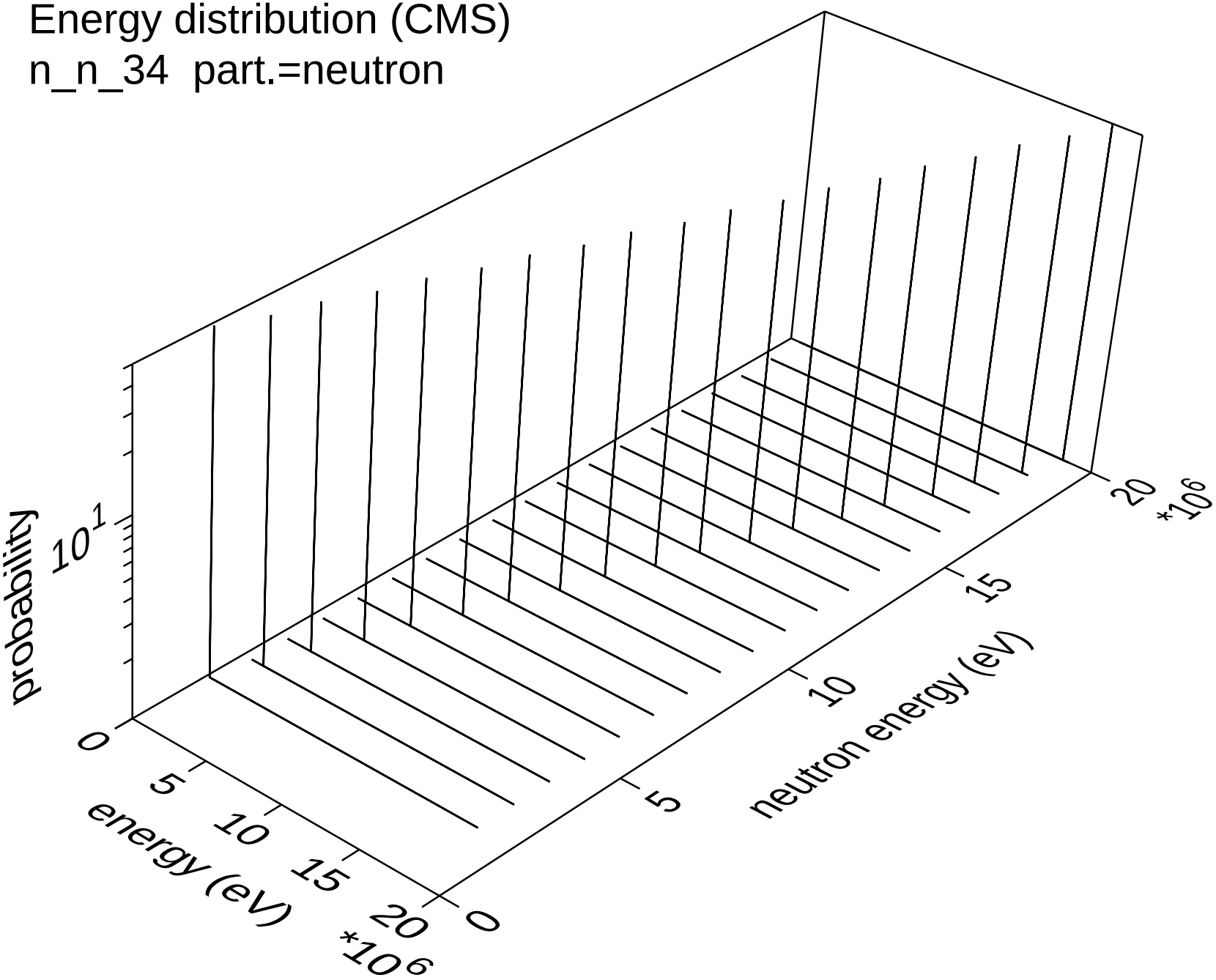

Energy distribution (CMS)
n_n_31 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
0
energy (eV)
*10^6
5
10
15
20
neutron energy (eV)
*10^6

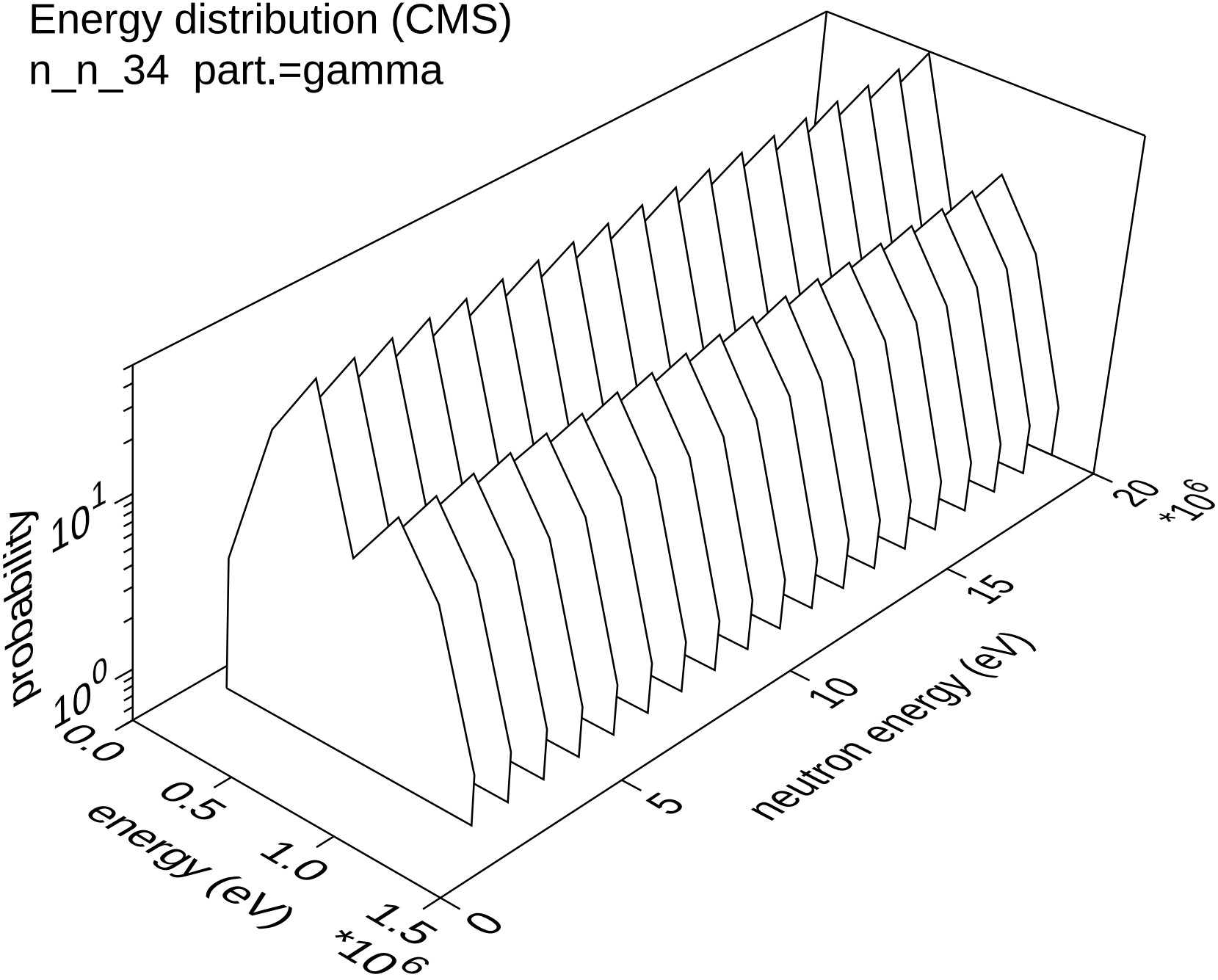

Energy distribution (CMS)
n_n_32 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

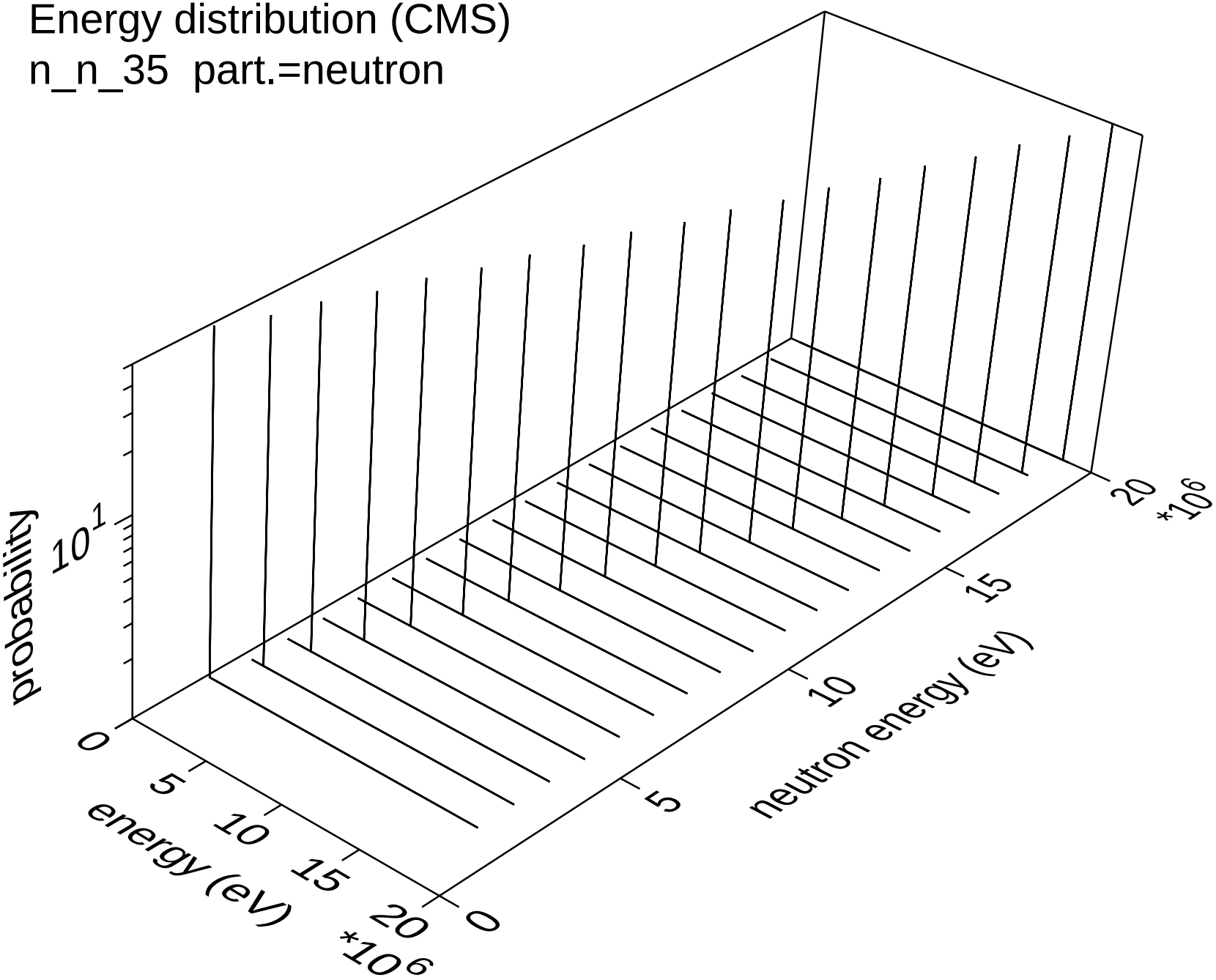

Energy distribution (CMS)
n_n_32 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

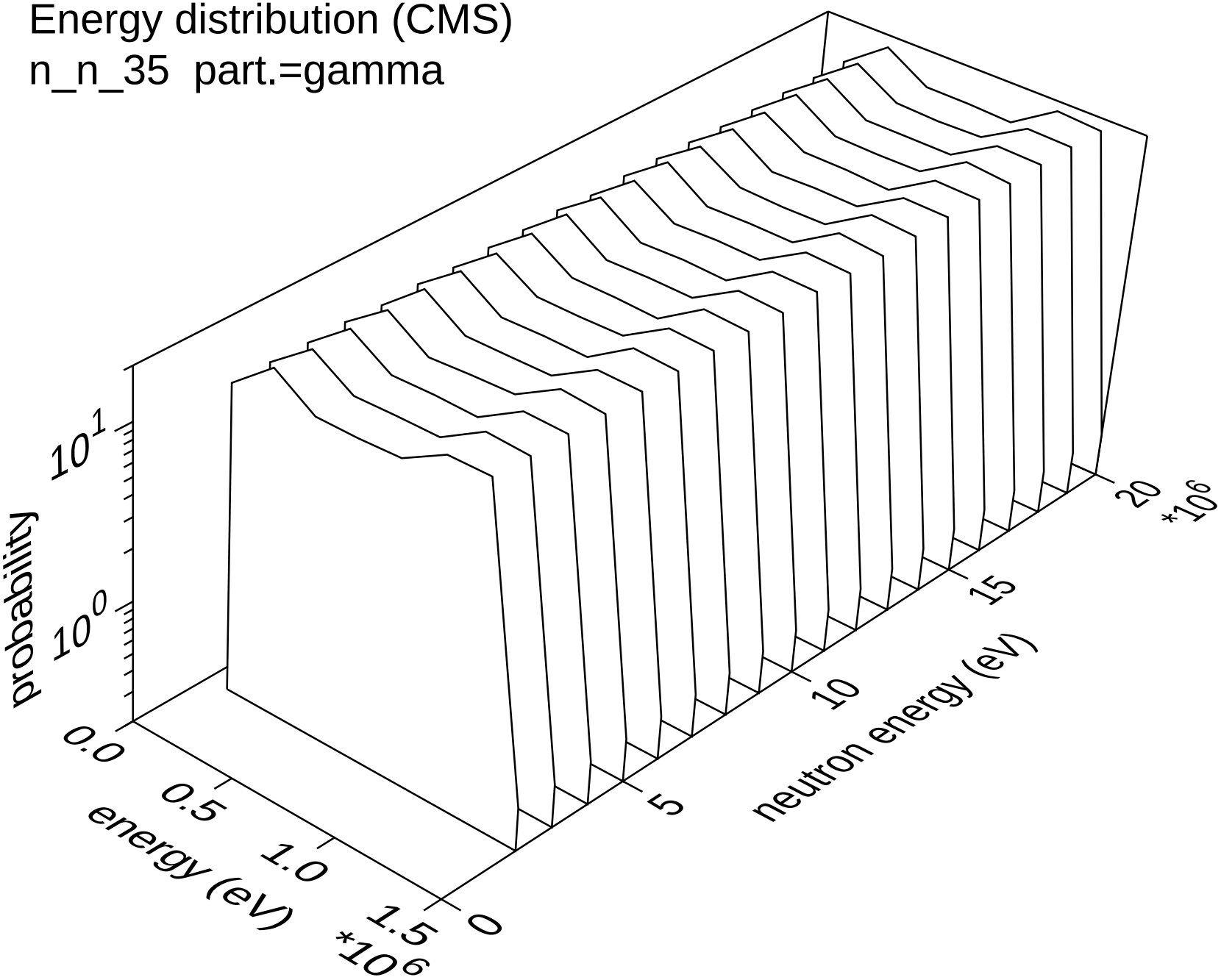

Energy distribution (CMS)
n_n_33 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

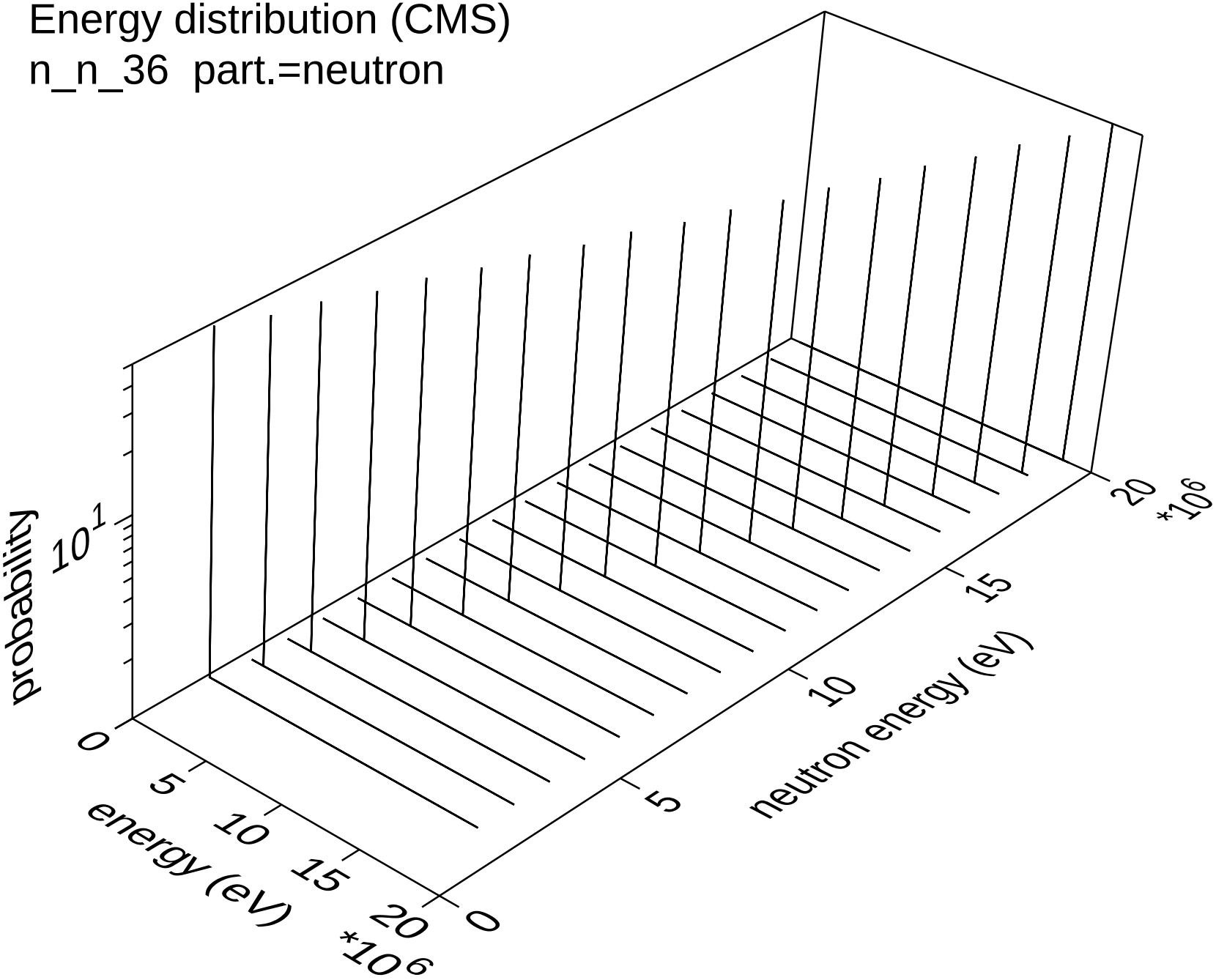

Energy distribution (CMS)
n_n_33 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

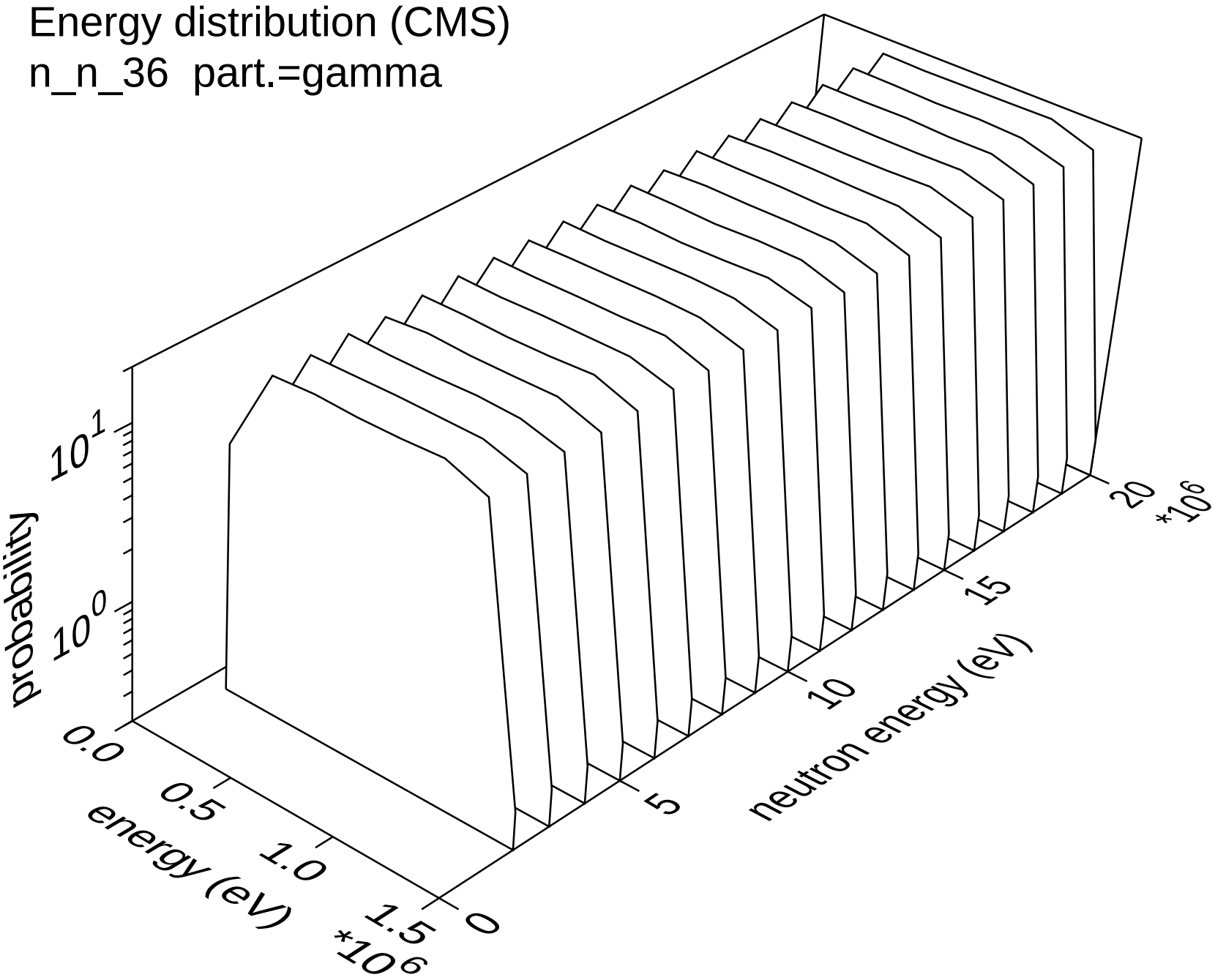

Energy distribution (CMS)
n_n_34 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

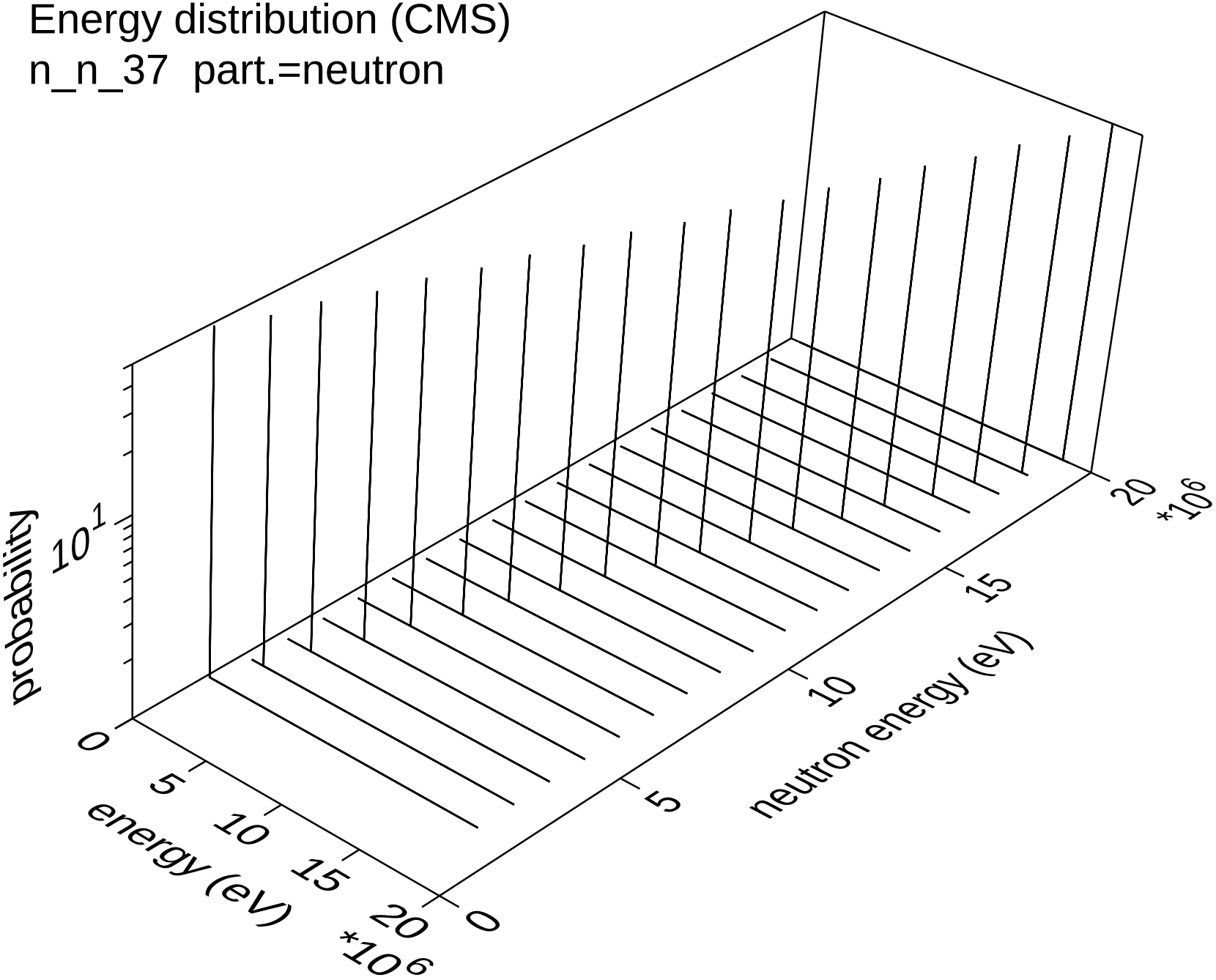

Energy distribution (CMS)
n_n_34 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

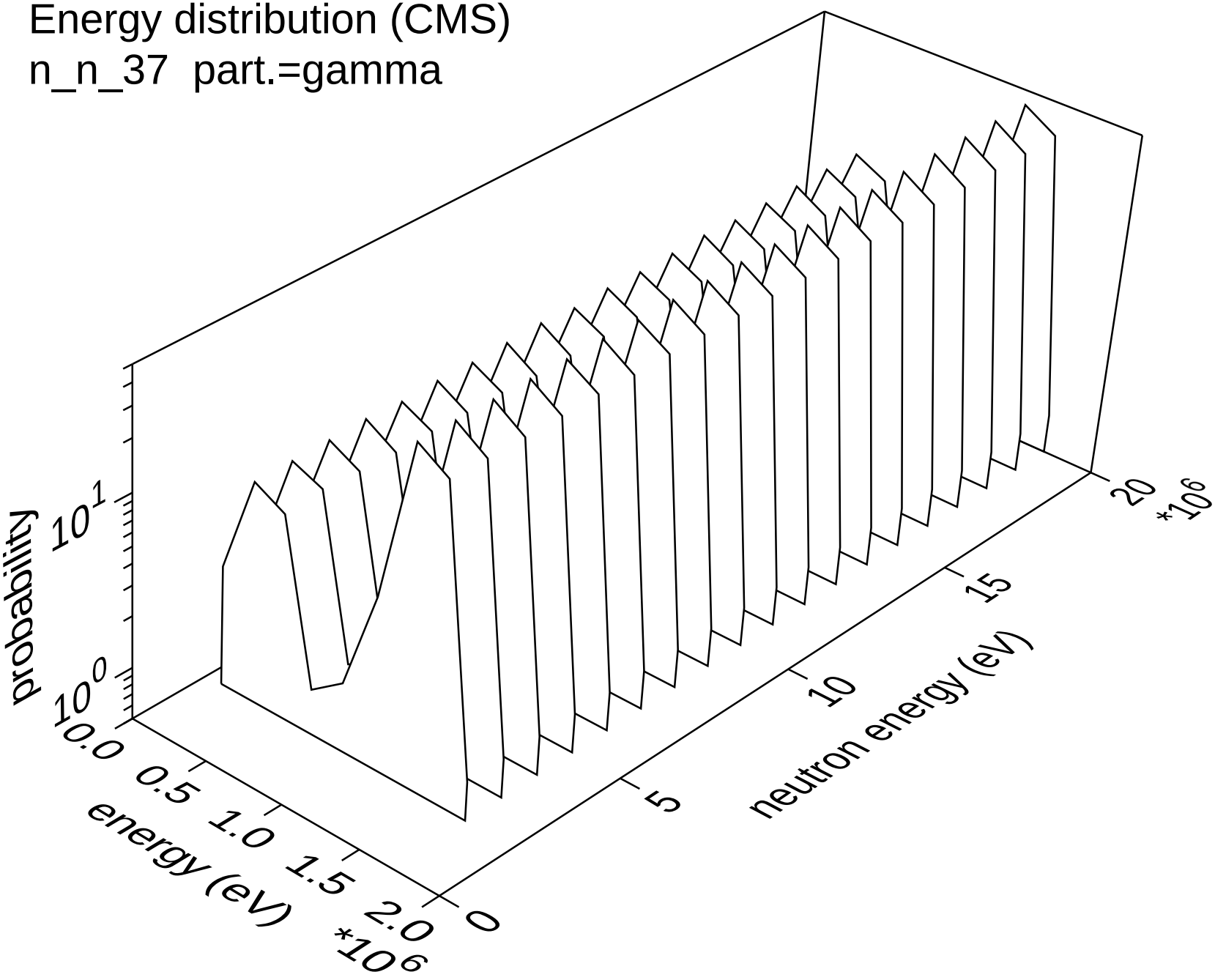

Energy distribution (CMS)
n_n_35 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

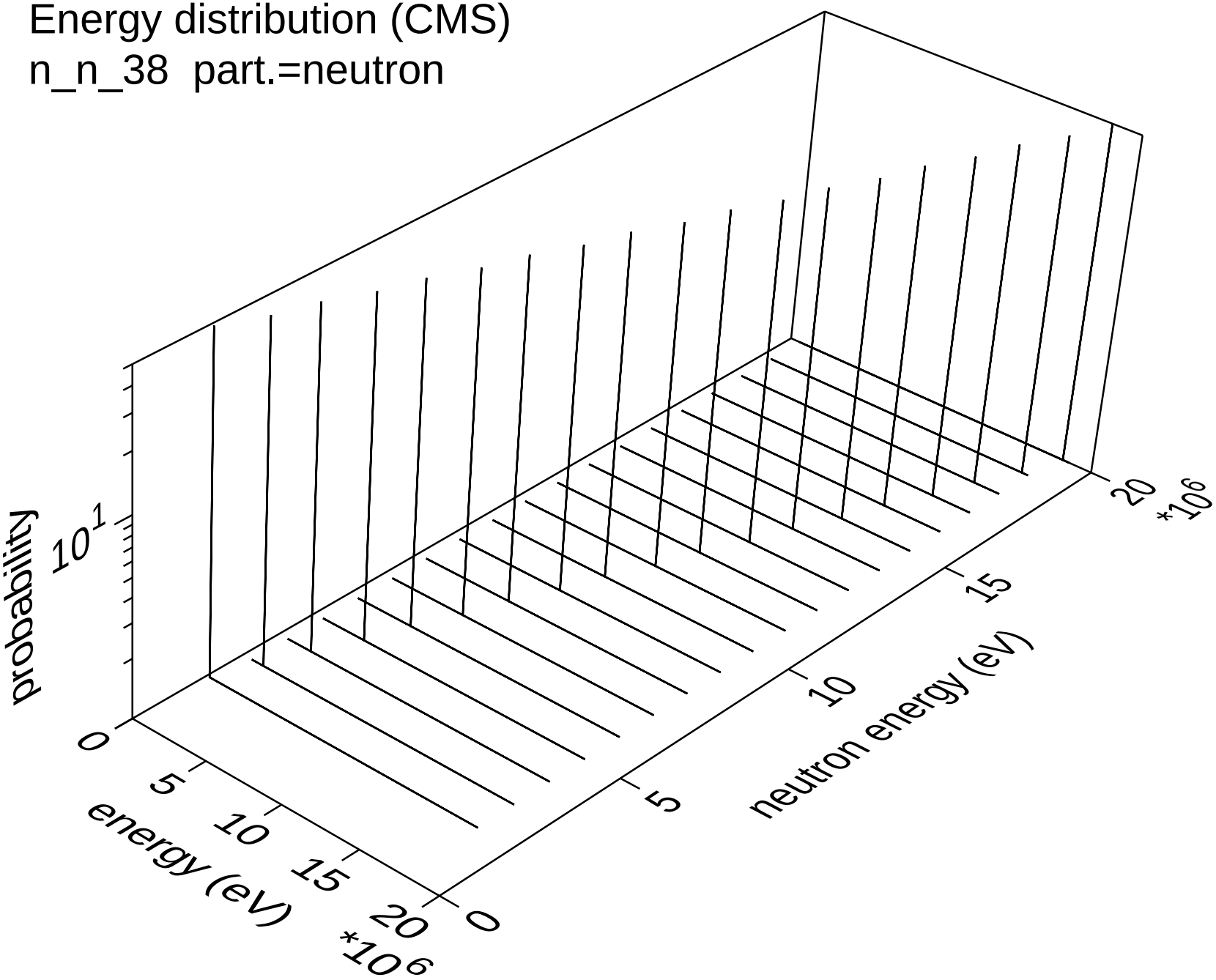

Energy distribution (CMS)
n_n_35 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

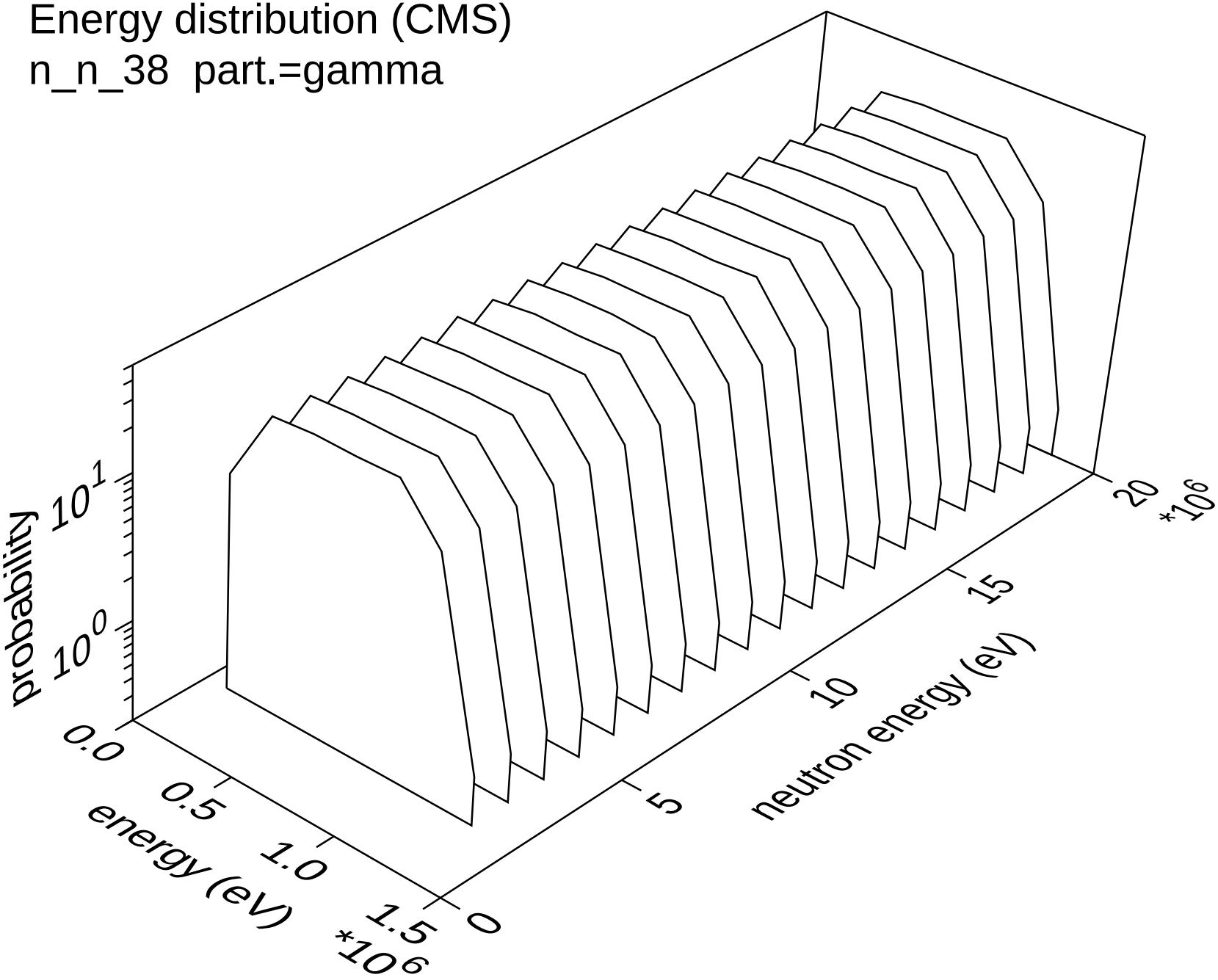

Energy distribution (CMS)
n_n_36 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

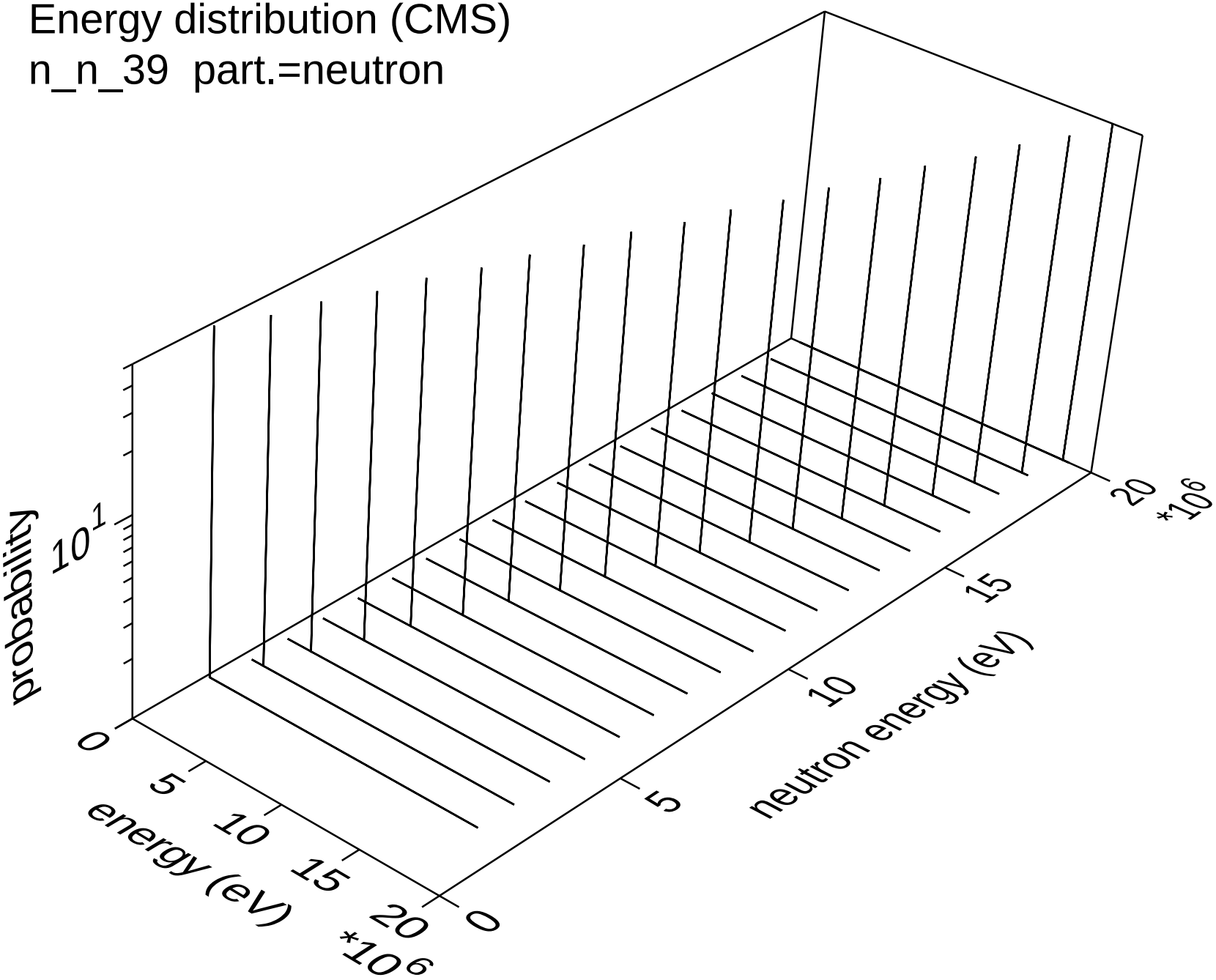

Energy distribution (CMS)
n_n_36 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

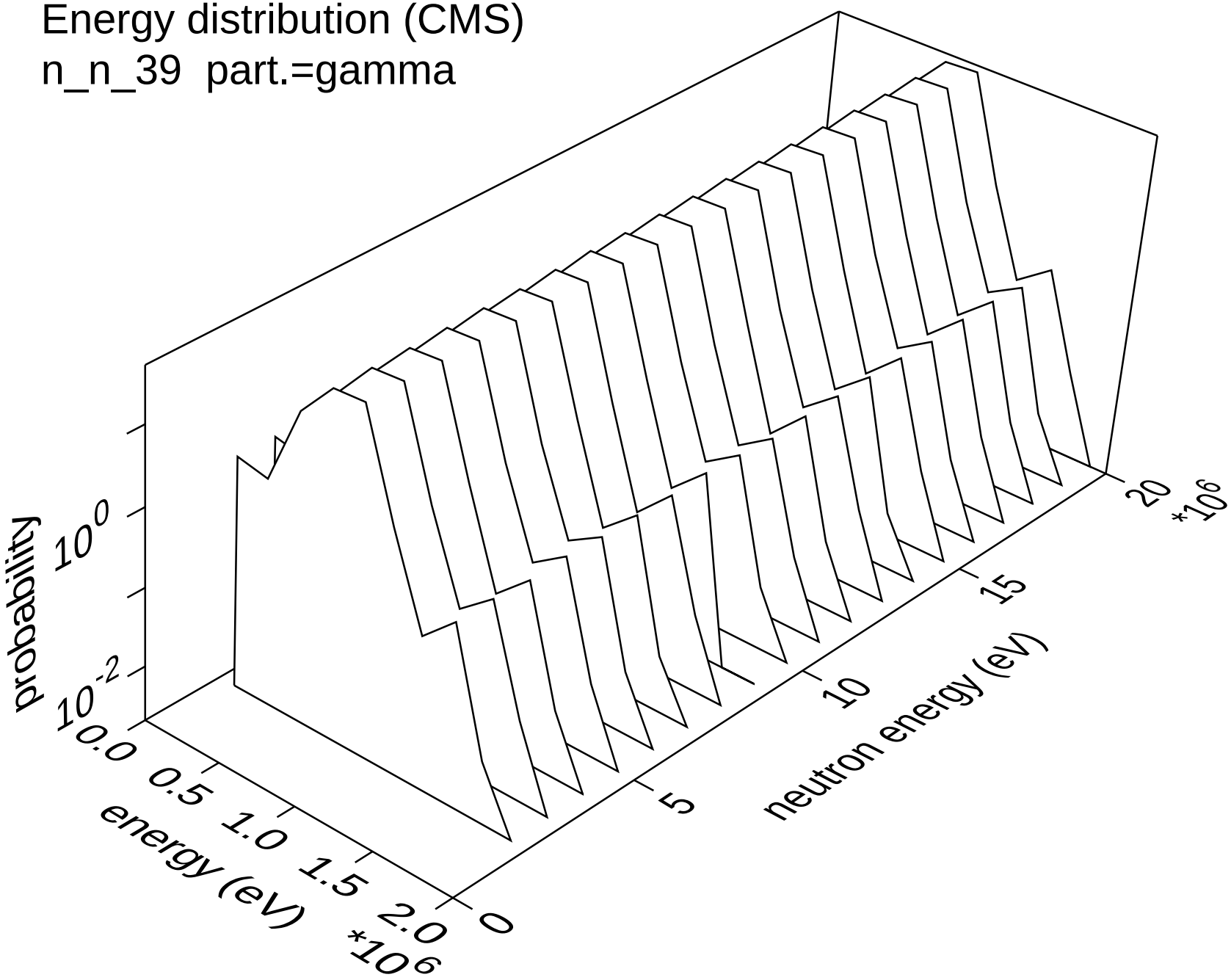

Energy distribution (CMS)
n_n_37 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

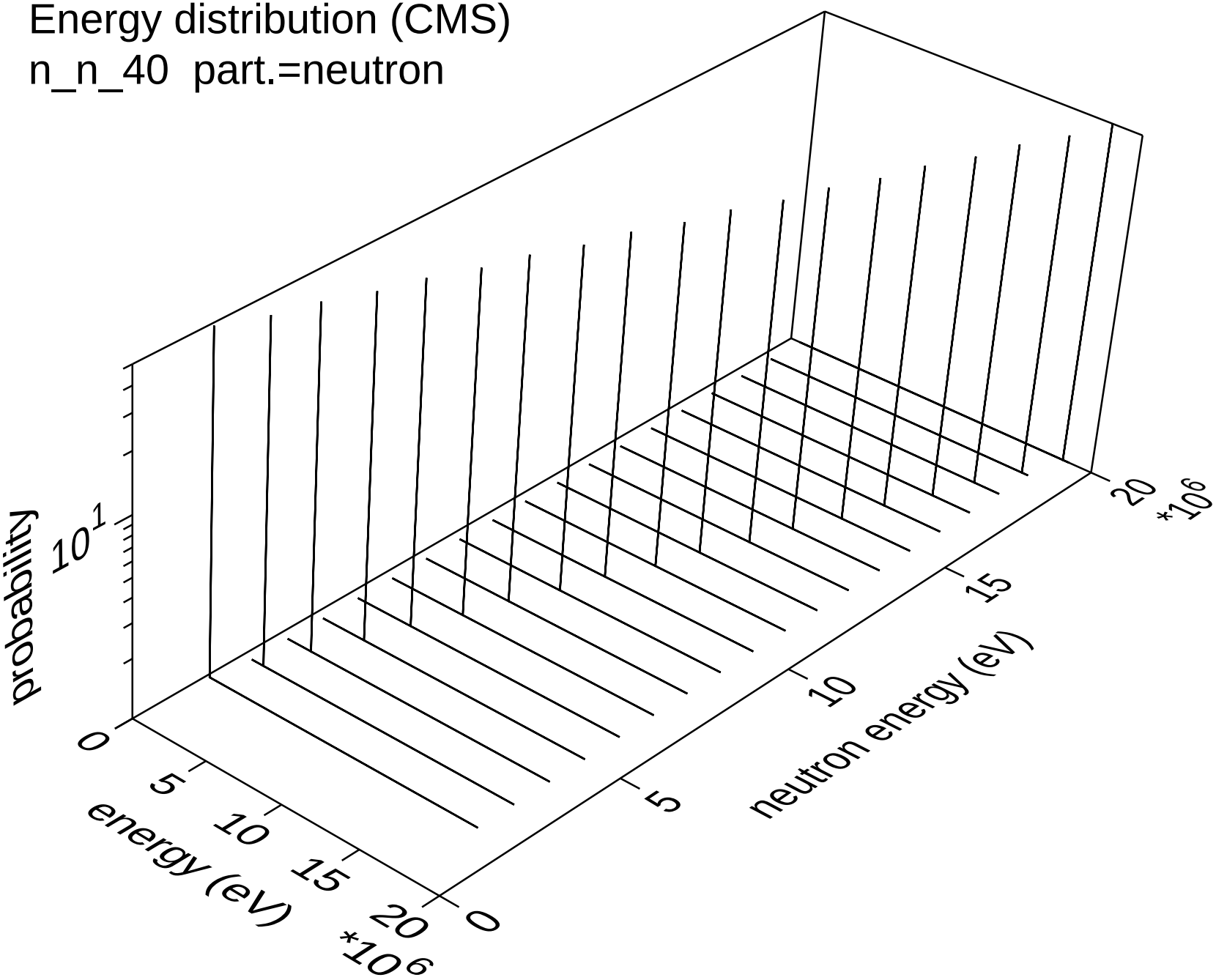

Energy distribution (CMS)
n_n_37 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
2.0
energy (eV)
*10^6
0
5
10
15
20
neutron energy (eV)
*10^6

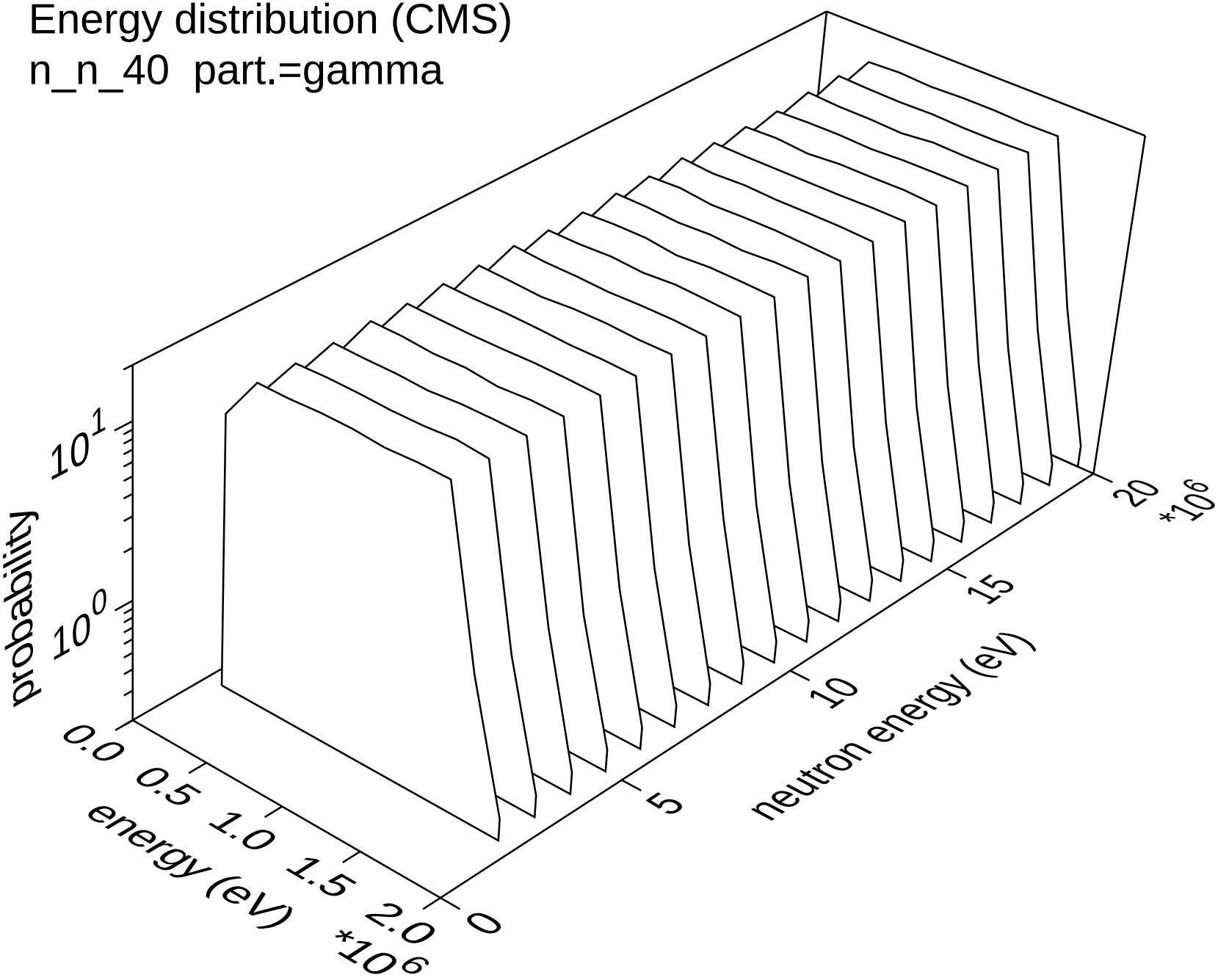

Energy distribution (CMS)
n_n_38 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

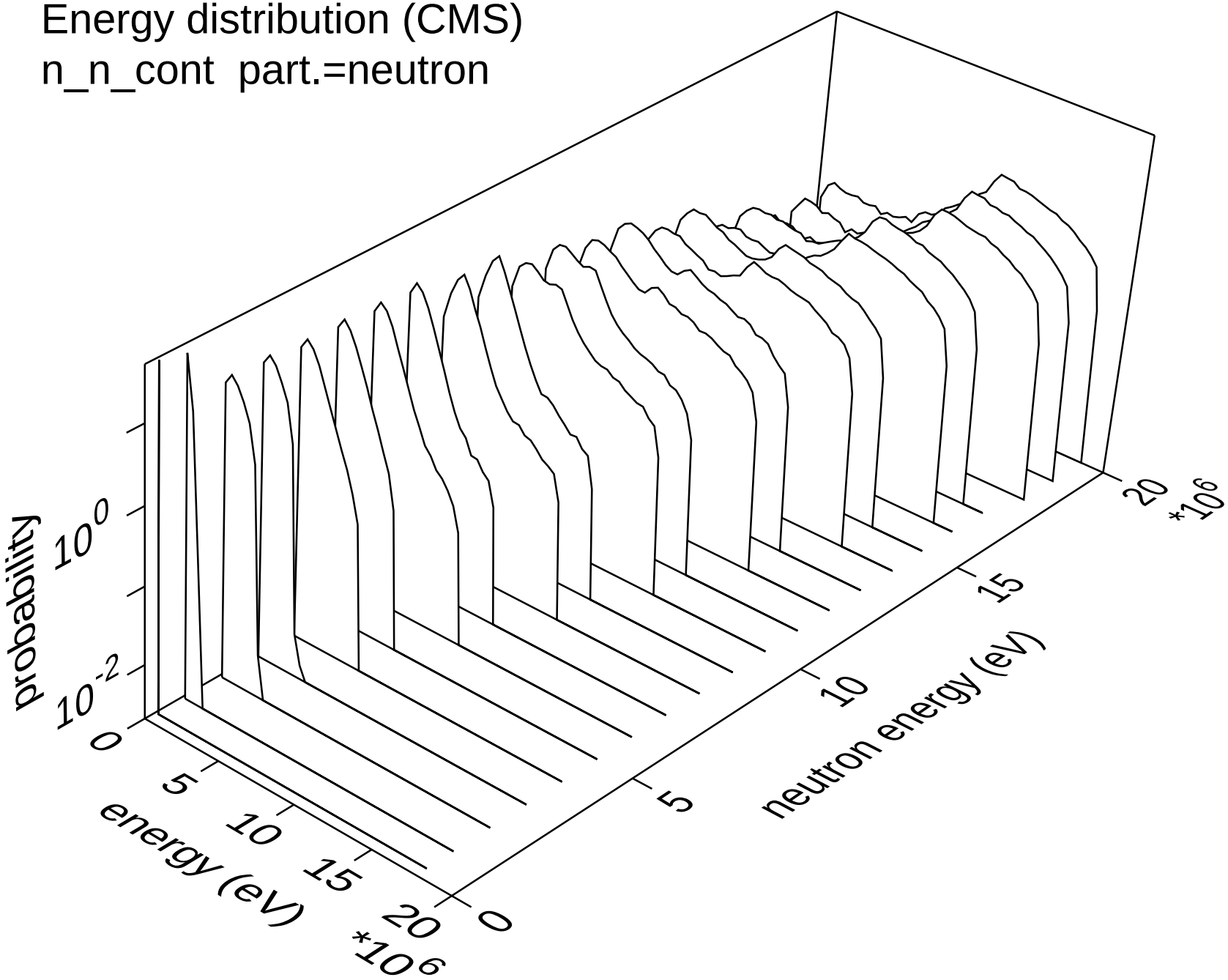

Energy distribution (CMS)
n_n_38 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

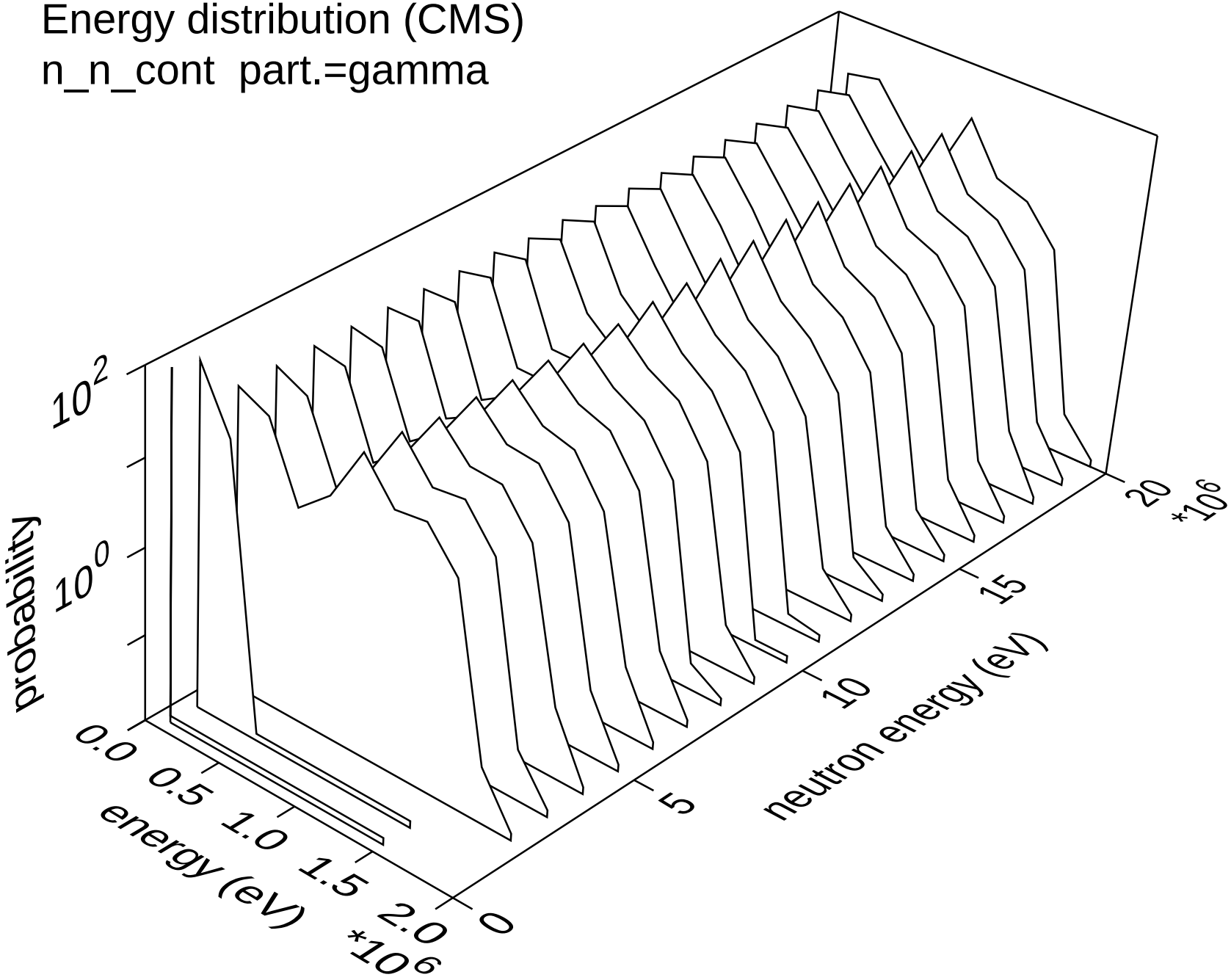

Energy distribution (CMS)
n_n_39 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_n_39 part.=gamma
probability
10^{0}
10^{-2}
0.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_n_40 part.=neutron
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_40 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_n_cont part.=neutron
probability
10^{0}
10^{-2}
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 part.=gamma
probability
10^2
10^0
0.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)