

A heatmap showing the critical disorder strength W_c as a function of system size N (y-axis, ranging from 8 to 12) and disorder strength W (x-axis, ranging from 0.0 to 7.5). The color scale represents W_c , ranging from 0.0 (blue) to 1.0 (red). The plot is divided into two regions: 'extended' (blue) and 'localized' (red). The transition between the two regions occurs at $W_c = 0.5$. The critical disorder strength W_c increases with system size N and disorder strength W . White triangles mark the transition points for each system size N .

