

Edge mode dynamics of quenched topological wires

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ABSTRACT

The fermionic and Majorana edge mode dynamics of various topological systems are compared, after a sudden global quench of the Hamiltonian parameters takes place. The survival probability of an edge state has different regimes depending on the initial and final points in the phase diagram. The nature of the wave functions and the overlaps between the eigenstates of different points in parameter space determine the various types of behaviors, and the distinction due to the Majorana nature of the excitations plays a lesser role. Periodically driven systems are briefly discussed.