

# Time of Majorana mode leakage into the region of quantum dots

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Hybrids comprising quantum dots and topological chains are considered as scalable platforms for topological quantum computation. To determine how fast such devices can perform dynamic operations, it is important to evaluate time required for the transfer of quantum state between subsystems. In presentation, the dynamics of electron transfer in the system comprising quantum dots deposited on a s-wave superconductor and tunnel coupled to one end of the topological chain will be analyzed. In particular it will be shown how long it takes for the Majorana zero mode to be induced in the region of quantum dot and how charge transfer properties change over time under abrupt change of model parameters e.g. the gate voltage. The relevant time and energy scales characterizing such dynamics will also be discussed.