Quantum Darwinism for mixed-state environment HAITAO
QUAN, MICHAEL ZWOLAK, WOJCIECH ZUREK — We exam quantum dar-
winism when a system is in the presence of a mixed environment, and we find a
general relation between the mutual information for the mixed-state environment
and the change of the entropy of the fraction of the environment. We then look
at a particular solvable model, and we numerically exam the time evolution of the
"mutual information" for large environment. Finally we discuss about the exact
expressions for all entropies and the mutual information at special time.

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