

## QUANTUM TELEPORTATION OF ENTANGLED STATES IN THE PRESENCE OF NOISE

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### S u m m a r y

On the basis of a system of four qubits, the influence of white and colored noises in the states of initially prepared entangled qubit pairs on the final state obtained as a result of the entanglement swapping has been considered. The corresponding density matrices are obtained, and the redistribution of fractions for the pure state and white and colored noises is analyzed. Conditions for the entanglement preservation and destruction in the course of the transition from the initial to the final state are determined. A comparison between the von Neumann entropy for the initial and final states of qubits is carried out.