

Separability of Pure States and Mixed States of the Quantum Network of Two Nodes

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Abstract: This article discusses the separability of the pure states and mixed states of the quantum network of two nodes by means of the criterion of no entanglement in terms of the covariance correlation tensor in quantum network theory, i.e. for a composite system consisting of two nodes. The covariance correlation tensor $M_{jk}(1,2)$ is equal to zero for all possible j and k .

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Key words: covariance correlation tensor in quantum network theory, criterion of no entanglement, pure state, mixed state

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