

Entanglement Swapping for Displaced Two-Mode Squeezed States

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Abstract: We discuss the entanglement swapping of two pairs of displaced two-mode squeezed states and find that the squeezing parameter of the outgoing squeezed state is less than that of the original squeezed states. The calculation is greatly simplified by virtue of the natural expression of the two-mode squeezing operator in EPR eigenstate representation. A protocol for such entanglement swapping is proposed.

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Key words: entanglement swapping, squeezed state, EPR eigenstate

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