

## Separability Criteria for Quantum Mixed States

ZHAO Hui and WANG Zhi -Xi

Department of Mathematics, Capital Normal University, Beijing 100037, China

(Received: 2004-1-7; Revised: 2004-2-25)

Abstract: We investigate separability of mixed states in bipartite and multipartite quantum systems. If a quantum state in a bipartite system of arbitrary dimension (or in  $2 \times 2 \times \dots \times 2$  quantum systems) is separable, we show that some quantity in relation to Hermitian matrix is positive.

PACS: 03.67.-a, 89.70.+c,

Key words: separability, density matrix, quantum mixed state

[\[Full text: PDF\]](#)

Close