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Separability of Rank-Two Quantum States in C^M\otimes C^N Composite Quantum Systems FEI Shao-Ming, ^{1,2} GAO Xiu-Hong, ¹ WANG Xiao-Hong, ¹ WANG Zhi-Xi, ¹ and WU Ke¹

Abstract: We consider rank-two density matrices ρ supported on an M×N Hilbert space for arbitrary dimensions M and N. Explicit sufficient and necessary conditions for separability of ρ are presented.

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Key words: quantum entanglement, separability, density matrix

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