Phase of Two-Component Bose-Einstein Condensates with a Coupling Drive

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Abstract: By using the invariant theory, we study the phases of two-component Bose-Einstein condensates with a coupling drive under the case that the strength of the interatomic interaction in each condensate equals the interspecies interaction. The dynamical and geometric phases are presented respectively. The Aharonov-Anandan phase is also obtained under the cyclical evolution.

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