

Dynamic Behavior and Quasi-energy Spectrum of Multiband Superlattice Bloch Electrons in Quantum Kicked Potential

OUYANG Bi-Yao,<sup>1</sup> ZHAO Xian-Geng,<sup>1,2</sup> CHEN Shi-Gang<sup>1</sup> and LIU Jie<sup>1</sup>

<sup>1</sup> Institute of Applied Physics and Computational Mathematics, P.O. Box 8009, Beijing 100088, China

<sup>2</sup> CCAST (World Laboratory), P.O. Box 8730, Beijing 100080, China

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Abstract: In this paper, we study the dynamic behavior and quasi-energy spectrum of multiband superlattice Bloch electrons in quantum kicked potential. We show analytically and numerically the avoided crossing and band suppression about the quasi-energy spectrum, the dynamic nonlocalization, and the electron oscillation behavior between two bands.

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Key words: multiband superlattice, quasi-energy spectrum, quantum kicked potential

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