

Electron Transport Through Double-Dot Aharonov-Bohm Interferometer in the Kondo Regime

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(Received: 2003-4-15; Revised:)

Abstract: By applying the slave boson technique, we have studied the electron transport through double-dot Aharonov-Bohm interferometer in the Kondo regime. For the system with symmetric quantum dots, the linear conductance is shown to be enhanced by Kondo effect, but it is suppressed in the deep dot level regime in the presence of nonzero magnetic flux. The Aharonov-Bohm oscillations of the conductance are also investigated.

PACS: 72.15.0m, 73.21-b, 73.40.Gk

Key words: quantum dot, Aharonov-Bohm interferometer, Kondo effect

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