

Angular Momentum Phase State Representation for Quantum Pendulum

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Abstract: To consummate the quantum pendulum theory whose Hamiltonian takes bosonic operator formalism and manifestly exhibits its dynamic behaviour in the entangled state representation, we introduce angular momentum state representation and phase state representation. It turns out that the angular momentum state is the partial wave expansion of the entangled state.

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Key words: angular momentum-phase state representation, quantum pendulum, entangled state

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