

Fast-Forward Problem in Asymmetric Double-Well Potential

Authors : Iwan Setiawan, Bobby Eka Gunara, Katshuhiro Nakamura

Abstract : The theory to accelerate system on quantum dynamics has been constructed to get the desired wave function on shorter time. This theory is developed on adiabatic quantum dynamics which any regulation is done on wave function that satisfies Schrödinger equation. We show accelerated manipulation of WFs with the use of a parameter-dependent in asymmetric double-well potential and also when it's influenced by electromagnetic fields.

Keywords : driving potential, Adiabatic Quantum Dynamics, regulation, electromagnetic field

Conference Title : ICNQD 2016 : International Conference on Nonlinear Quantum Dynamics

Conference Location : Istanbul, Türkiye

Conference Dates : April 19-20, 2016