

عنوان مقاله:

Study of virtual annihilation and retardation effects in relativistic two-, four-, and six-body wave equations in scalar QFT

محل انتشار:

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خلاصه مقاله:

The variational method within the Hamiltonian formalism of QFT using Darewych reformulated model has been used for scalar particles and antiparticles interacting through a scalar mediating field. We have investigated the relativistic effects such as virtual annihilation interactions and retardation effects for relativistic two-, four-, and six-body wave equations in scalar QFT. Approximate ground-state solutions have been studied for different strengths of coupling, for both massive and massless mediating fields where the virtual annihilation terms or retardation effects in the wave equations have been included or eliminated.

کلمات کلیدی:

Relativistic Wave equations Bound state Virtual annihilation interactions Retardation effects

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