Ionization of atom exposed to laser field by Bohmian trajectories

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Bohmian trajectories have been used for various purposes, including the numerical simulation of the time–dependent Schrödinger equation and visualization of time-dependent wave function. In this paper some aspects and phenomenon that concerned with atoms and molecules has been discussed, such as stabilization, high harmonic generation (HHG) and ionization, basic on many previous studies and their results. The study has shown that the ionization is one of the dimensional hydrogen atoms. In conclusion, the numerically solving the time dependent Schrödinger equation (TDSE) has affected the laser pulse length, intensity and carrier envelope phase (CEP) on the photoelectron spectra. This study will help us understanding the dynamics of electron during ionization process.

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