

Abstract Submitted
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Trojan wavepackets in quantum mechanics equivalent to classical mechanics MATT KALINSKI, Utah State University — We formulate the theory of wavepackets moving on classical circular orbits in Hydrogen atom in rotating electromagnetic wave within the quantum mechanics equivalent to classical mechanics [1]. Unlike within the true quantum mechanics the wavepackets spreads during the time comparable with the time of full quantum revival within true quantum mechanics. Numerical solutions of the nonlinear Schrodingers equation are provided using non-linear split operator method for this equation.
[1] D. Shay, Phys. Rev A, **13**, 2261 (1976).

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