A new numerical method of particular solutions for one-dimensional time-dependent Schr□odinger equations y

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Abstract
Based on the _nite di_erence scheme in time, the method of particular solutions using the radial basis functions is proposed to solve one-dimensional time-dependent Schr□odinger equations. Two numerical examples with good accuracy are given to validate the proposed method.

Keywords: One-dimensional Schr□odinger equation; Finite di_erence; Particular solutions; Radial basis functions.