



Семинар  
«МАЛОЧАСТИЧНЫЕ СИСТЕМЫ»  
вторник, 17 сентября 2024 г., 11:00  
аудитория им. Д.И.Блохинцева и Zoom\*

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## Spectral method for solving a time-dependent Schrödinger equation on a non-uniform coordinate grid

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The talk is devoted to the results of the study of methods for numerical solution of a time-dependent Schrodinger equation. The fundamental possibility of the numerical solution of a time-dependent Schrodinger equation for a wave function defined on a non-uniform coordinate grid by the spectral method using the fast Fourier transform algorithm is discussed. The method is based on reducing the non-uniform coordinate grid to a uniform one by a non-linear transformation of coordinates and approximation of the obtained evolution operator using the Lee-Trotter-Suzuki product formula. Algorithms for the numerical solution of the first and second orders are constructed.

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Код доступа: 217901

Адрес подключения:

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