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Simulation tactic on dynamic cluster surface interaction IAT NENG CHAN, Physics Group, University of Macau, SIU-LONG LEI, Mathematics Department, University of Macau — The wave function of time dependent Schrodinger Equation for few surface atoms is simulated to visualize the dynamics of external interaction detail in three dimensions. Instead of finding the solution of continuous variation, step consequence assembled from independent stable moments is used to approach a desired precision as close as possible. The function is plotted in a serious setting of time interval. The graphic distribution shows a similarity as the orbit structures during stable moments. In the computation, the singularity is artificially and logically avoided. Other factors such as spin are not yet considered. For modeling the dynamic interaction, external features such as particles or charges or radiation are integrated as an adjustable environment in the calculation route. Under these stimulations, the change of distribution can be seen and the effects of interaction are imitated roughly. Based on the obtained results, more subjects mainly on the exchanges between the surface states and the incoming factors are under investigated.

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