

Variational principles and methods based on trajectory guided grids of Gaussian Coherent States.

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A hierarchy of variational principles [1], which leads to a number of different recopies for trajectory guided basis sets of Gaussian Coherent States for quantum propagation will be considered. The existing methods will be compared and new results of simulations with the help of Multiconfigurational Ehrenfest Dynamics [2] will be presented.

- [1] D.V. Shalashilin, I.Burghardt, J.Chem.Phys., **129**, 084104 (2008)
- [2] D.V. Shalashilin, J.Chem.Phys., **130**, 244101 (2009)