

Quantum Dynamics - Homework

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Data Availability

The source code of this project as well as the example input files are available at the corresponding [Github page](#). There one could also find the example output files and the detailed instructions on how to run and compile the code. The example output files are `gif` animations of the wavepacket propagation that complement the results in [Figure 1](#).

Code Overview

Results and Discussion

Generative AI Usage

In this work, [ChatGPT](#) large language model was used to check grammar and spelling of the main body of text, whilst [Perplexity](#) was utilized for the sake of literature search.

Acknowledgments

This project is based on data and instructions provided by Arjan Berger available at the aforementioned [Github page](#).

References

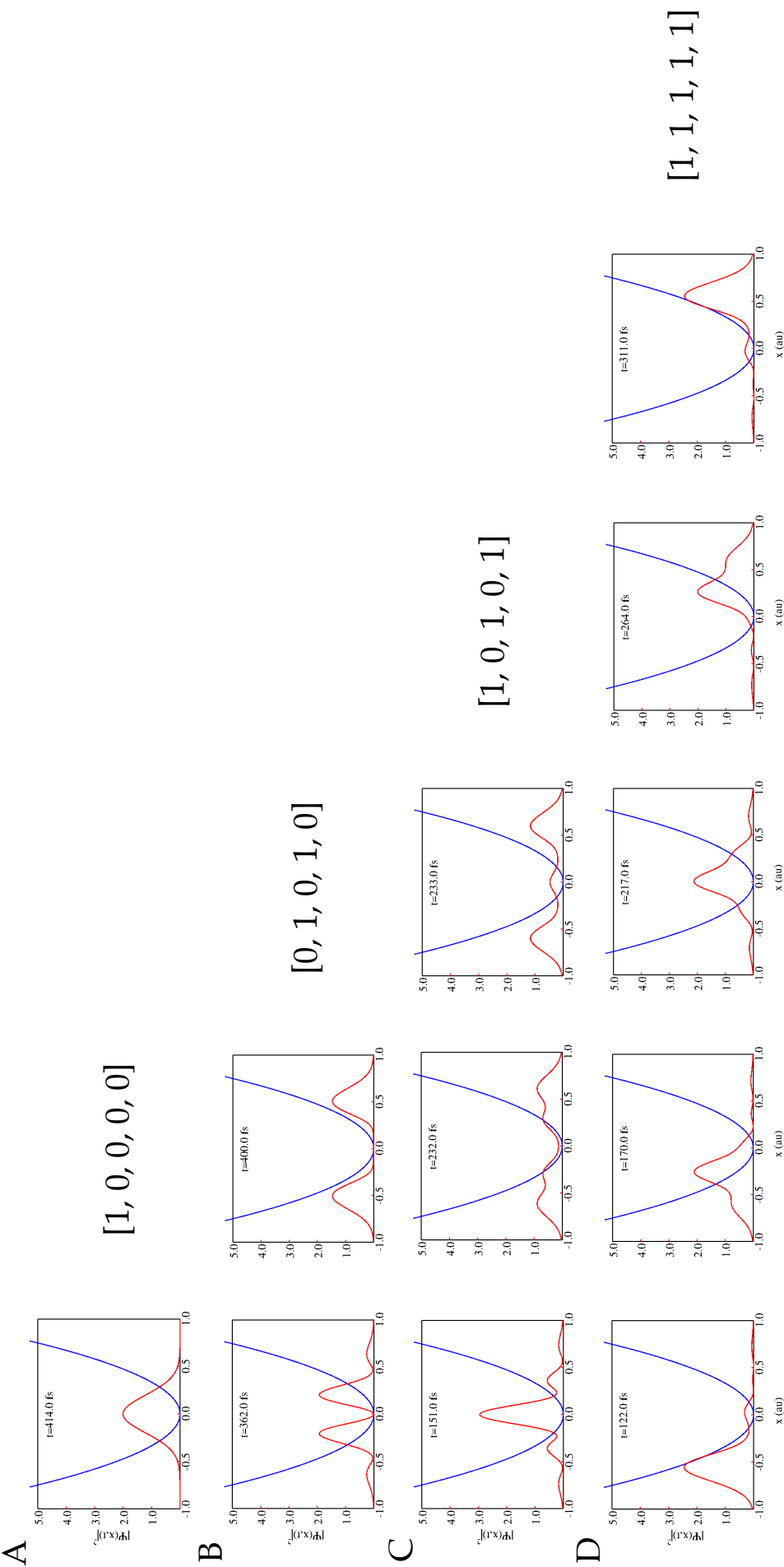


Figure 1: Time evolution of the wavepackets with different number of eigenstates. The wavepackets were propagated using the (A) $[1, 0, 0, 0, 0]$, (B) $[0, 1, 0, 1, 0]$, (C) $[1, 0, 1, 0, 1]$, and (D) $[1, 1, 1, 1, 1]$ coefficients.