

# Path Integral and Phase Space Dynamics of U(1) Quantum Pendulum

*Thursday, 8 December 2022 14:40 (20 minutes)*

We study the time dependent behavior of a quantum pendulum by path-integral and Wigner-Weyl phase space quantum mechanics. In both cases, we encounter a negative sign problem, and propose certain approximation similar to the truncated Wigner approximation, which sheds some light on the sign problem.

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