

Path Integration and Quantum Mechanics

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Path integration enjoys a central role in many areas of physics and chemistry. It's impact has been felt in other fields as well including areas like seismology and the modeling of financial markets.

In this set of lectures, I will provide an in-depth introduction to the path integral followed by more specialized topics. Those topics will be selected by some combination of my own interests and those of the audience. I would propose topology and the semi-classical approximation.

L.S. Schulman, *Techniques and Applications of Path Integration*,
(Dover Books on Physics, Dover Publications, 2005)

L.S. Schulman, *A Path Integral for Spin*, Phys. Rev. **176**, 1558 (1968)

L. S. Schulman, SELECTED TOPICS IN PATH INTEGRATION,
in *Lectures in Path Integration: Trieste 1991*,
(World Scientific, Singapore, 1991)