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Title:	Path Integrals, Spontaneous Localisation, and the Classical Limit
Authors:	Mishra, R. (/jspui/browse?type=author&value=Mishra%2C+R.)
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Abstract:	The measurement problem and the absence of macroscopic superposition are two foundational problems of quantum mechanics today. One possible solution is to consider the Ghirardi–Rimini–Weber (GRW) model of spontaneous localisation. Here, we describe how spontaneous localisation modifies the path integral formulation of density matrix evolution in quantum mechanics. We provide two new pedagogical derivations of the GRW propagator. We then show how the von Neumann equation and the Liouville equation for the density matrix arise in the quantum and classical limit, respectively, from the GRW path integral.
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